



FCC PART 15 TEST REPORT No. I22Z61716-IOT04

for

TCL Communication Ltd.

GSM/UMTS/LTE mobile phone

T607DL, T430V, T430M

With

FCC ID: 2ACCJH167

Hardware Version: 04

Software Version: UH3F

Issued Date: 2022-10-21

Note:

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

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.

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REPORT HISTORY

Report Number	Revision	Description	Issue Date
I22Z61716-IOT04	Rev.0	1st edition	2022-10-21

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1. TEST LATORATORY

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,
P. R. China100191

1.3. Testing Environment

Normal Temperature: 15-35°C

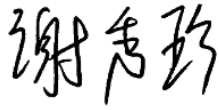
Relative Humidity: 20-75%

1.4. Project date

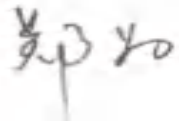
Testing Start Date: 2022-08-31

Testing End Date: 2022-10-17

1.5. Signature



Xie Xiuzhen
(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.
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Country: China
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2.2 Manufacturer Information

Company Name: TCL Communication Ltd.
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Country: China
Contact: Annie Jiang
Email: nianxiang.jiang@tcl.com
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	T607DL, T430V, T430M
FCC ID	2ACCJH167
WLAN Frequency Band	ISM Bands: -5150MHz~5250MHz -5250MHz~5350MHz -5470MHz~5725MHz
Type of modulation	OFDM
Antenna	Integral Antenna
Voltage	3.85V

3.2. Internal Identification of EUT used during the test

EUT ID*	SN or IMEI	HW Version	SW Version
EUT1	/	04	UH3F
EUT2	/	04	UH3F
EUT3	016324000010799	04	UH3F
EUT4	016324000011193	04	UH3F

*EUT ID: is used to identify the test sample in the lab internally.
 EUT2 is used for Conduction test, EUT1 is used for Radiation test.
 EUT3 and EUT4 is used for maximum peak output power.

3.3. Internal Identification of AE used during the test

AE ID*	Description	Type	SN
AE1	Dummy battery	/	/
AE2	Battery1	/	/
AE3	Battery2	/	/
AE4	USB Cable	/	/
AE5	USB Cable	/	/
AE6	Charger1	/	/

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

AE1

Model	TLi028C7
Manufacturer	NINGBO VEKEN BATTERY CO., LTD.
Capacity	min2880mAh/type 3000mAh
Nominal Voltage	3.85V

AE2

Model /
Manufacturer /
Capacity /
Nominal Voltage /

AE3

Model TLi028C1
Manufacturer Shenzhen BYD Lithium Battery Company Limited
Capacity min2880mAh/type 3000mAh
Nominal Voltage 3.85V

AE4

Model CDA0000123C1
Manufacturer Juwei
Length of cable /

AE5

Model CDA0000123C2
Manufacturer Shenghua
Length of cable /

AE6

Model UC13US
Manufacturer PUAN
Length of cable /

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 has Bluetooth (EDR)function.

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	2018
ANSI C63.10	Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz	2013
UNII: KDB 789033 D02	General U-NII Test Procedures New Rules v02r01	2017-12

5. LABORATORY ENVIRONMENT

Conducted RF performance testing is performed in shielding room.

EMC performance testing is performed in Semi-anechoic chamber.

6. 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	/	BR
Occupied 26dB Bandwidth	15.403	/	BR
Band edge compliance (Radiated)	15.209	/	BR
Transmitter spurious emissions (Radiated)	15.407	/	BR
AC Powerline Conducted Emission (150kHz- 30MHz)	15.407	/	BR
Frequency Stability	15.407	/	BR
99% Occupied bandwidth	/	/	BR
Transmit Power Control	15.407	/	BR

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
BR	Re-use test data from basic model report.
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/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.

The Equipment Under Test (EUT) model T607DL, T430V, T430M (FCC ID: 2ACCJH167) is variant products of T430W (FCC ID: 2ACCJH167), according to the declaration of changes provided by the applicant and FCC KDB publication 178919 D01, the maximum output power had been tested ,other the test results are derived from test report No.I22Z61676-IOT02.

For detail differences between two models please refer the Declaration of Changes document.

6.3. Test Conditions

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

Temperature	26°C
Voltage	3.85V
Humidity	44%

7. TEST 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	2023-05-15
2	LISN	ENV216	101200	Rohde & Schwarz	1 year	2023-06-29
3	Test Receiver	ESCI	100344	Rohde & Schwarz	1 year	2023-03-21
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	103023	R&S	1 year	2022-10-28
2	BiLog Antenna	VULB 9163	1223	SCHWARZBECK	1 year	2023-07-25
3	Dual-Ridge Waveguide Horn Antenna	3115	00167250	ETS-Lindgren	1 year	2023-06-20
4	Dual-Ridge Waveguide Horn Antenna	3116	2661	ETS-Lindgren	1 year	2023-02-08

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
$30\text{MHz} \leq f \leq 1\text{GHz}$	5.15
$1\text{GHz} \leq f \leq 18\text{GHz}$	5.54
$18\text{GHz} \leq f \leq 40\text{GHz}$	5.26

8.6 AC Power-line Conducted Emission

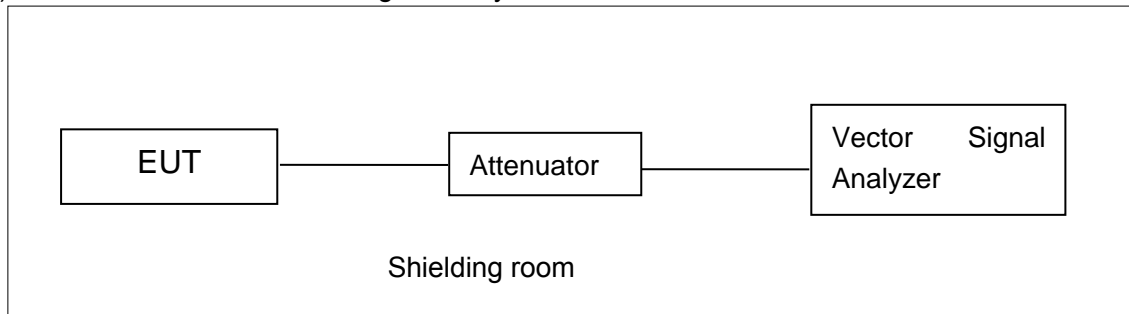
Measurement Uncertainty : 3.08dB,k=2

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

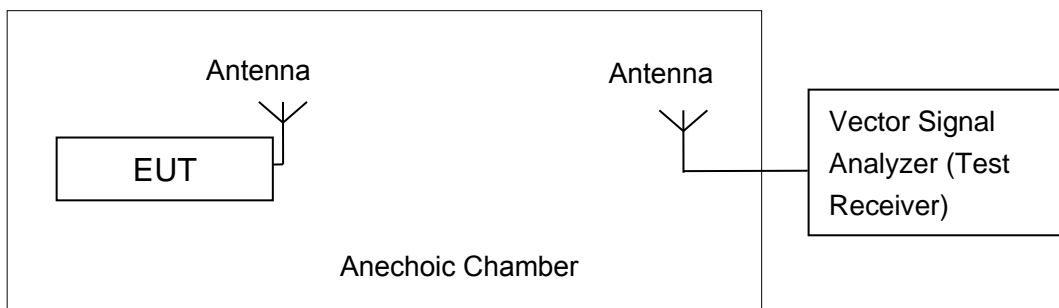


A.1.2. Radiated Emission Measurements

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 = 10Hz;



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	17.39	/	/	/	/	/	/	/
	5200MHz	17.25	/	/	/	/	/	/	/
	5240MHz	16.47	/	/	/	/	/	/	/
	5260MHz	16.42	/	/	/	/	/	/	/
	5280MHz	16.84	/	/	/	/	/	/	/
	5320MHz	17.58	/	/	/	/	/	/	/
	5500MHz	17.62	/	/	/	/	/	/	/
	5580MHz	17.89	/	/	/	/	/	/	/
	5700MHz	16.99	/	/	/	/	/	/	/
	5720MHz	17.22	/	/	/	/	/	/	/

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	16.84	/	/	/	/	/	/	/
	5200MHz	16.78	/	/	/	/	/	/	/
	5240MHz	16.14	/	/	/	/	/	/	/
	5260MHz	16.01	/	/	/	/	/	/	/
	5280MHz	16.92	/	/	/	/	/	/	/
	5320MHz	17.25	/	/	/	/	/	/	/
	5500MHz	16.96	/	/	/	/	/	/	/
	5580MHz	17.56	/	/	/	/	/	/	/
	5700MHz	16.57	/	/	/	/	/	/	/
	5720MHz	16.99	/	/	/	/	/	/	/

The data rate MCS0 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	16.28	/	/	/	/	/	/	/	/
	5200MHz	16.04	/	/	/	/	/	/	/	/
	5240MHz	16.48	/	/	/	/	/	/	/	/
	5260MHz	16.02	/	/	/	/	/	/	/	/
	5280MHz	16.12	/	/	/	/	/	/	/	/
	5320MHz	16.48	/	/	/	/	/	/	/	/
	5500MHz	16.30	/	/	/	/	/	/	/	/
	5580MHz	16.60	/	/	/	/	/	/	/	/
	5700MHz	16.52	/	/	/	/	/	/	/	/
	5720MHz	16.72	/	/	/	/	/	/	/	/

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

802.11n-HT40 mode

Mode	Frequency	Test Result (dBm)							
		Data Rate							
		MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7
802.11n (HT40)	5190MHz	15.65	/	/	/	/	/	/	/
	5230MHz	15.95	/	/	/	/	/	/	/
	5270MHz	15.44	/	/	/	/	/	/	/
	5310MHz	16.37	/	/	/	/	/	/	/
	5510MHz	15.87	/	/	/	/	/	/	/
	5550MHz	16.27	/	/	/	/	/	/	/
	5670MHz	15.21	/	/	/	/	/	/	/
	5710MHz	16.51	/	/	/	/	/	/	/

The data rate MCS0 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	14.83	/	/	/	/	/	/	/	/	/
	5230MHz	15.08	/	/	/	/	/	/	/	/	/
	5270MHz	14.51	/	/	/	/	/	/	/	/	/
	5310MHz	15.33	/	/	/	/	/	/	/	/	/
	5510MHz	15.64	/	/	/	/	/	/	/	/	/
	5550MHz	15.29	/	/	/	/	/	/	/	/	/
	5670MHz	14.30	/	/	/	/	/	/	/	/	/
5710MHz	15.48	/	/	/	/	/	/	/	/	/	

The data rate MCS0 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	14.52	/	/	/	/	/	/	/	/	/
	5290MHz	13.63	/	/	/	/	/	/	/	/	/
	5530MHz	14.75	/	/	/	/	/	/	/	/	/
	5610MHz	14.91	/	/	/	/	/	/	/	/	/
	5690MHz	14.38	/	/	/	/	/	/	/	/	/

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

The duty cycle of all mode are 100%

Conclusion: PASS

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	6.46	P
	5200 MHz	6.64	P
	5240 MHz	6.50	P
	5260 MHz	6.66	P
	5280 MHz	6.54	P
	5320 MHz	7.01	P
	5500 MHz	7.63	P
	5580 MHz	7.51	P
	5700 MHz	6.85	
	5720 MHz	7.42	P
802.11n HT20	5180 MHz	5.85	P
	5200 MHz	6.26	P
	5240 MHz	6.10	P
	5260 MHz	5.89	P
	5280 MHz	6.23	P
	5320 MHz	7.15	P
	5500 MHz	7.31	P
	5580 MHz	7.21	P
	5700 MHz	6.52	
	5720 MHz	6.99	P
802.11n HT40	5190 MHz	2.48	P
	5230 MHz	1.77	P
	5270 MHz	2.29	P
	5310 MHz	2.86	P
	5510 MHz	3.64	P
	5550 MHz	3.52	P
	5670 MHz	2.15	
	5710 MHz	2.84	P
802.11ac HT80	5210MHz	-2.52	P
	5290MHz	-2.51	P
	5530MHz	-1.77	P

	5610MHz	-1.61	
	5690MHz	-3.17	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
802.11a	5180 MHz	Fig.1	20.45	P
	5200 MHz	Fig.2	21.20	P
	5240 MHz	Fig.3	20.45	P
	5260 MHz	Fig.4	20.55	P
	5280 MHz	Fig.5	21.10	P
	5320 MHz	Fig.6	20.40	P
	5500 MHz	Fig.7	21.30	P
	5580 MHz	Fig.8	22.00	P
	5700 MHz	Fig.9	23.65	
	5720 MHz	Fig.10	29.15	P
802.11n HT20	5180 MHz	Fig.11	21.05	P
	5200 MHz	Fig.12	22.10	P
	5240 MHz	Fig.13	21.10	P
	5260 MHz	Fig.14	20.80	P
	5280 MHz	Fig.15	20.90	P
	5320 MHz	Fig.16	20.95	P
	5500 MHz	Fig.17	22.40	P
	5580 MHz	Fig.18	21.80	P
	5700 MHz	Fig.19	27.55	
	5720 MHz	Fig.20	28.05	P
802.11n HT40	5190 MHz	Fig.21	40.88	P
	5230 MHz	Fig.22	40.88	P
	5270 MHz	Fig.23	40.80	P
	5310 MHz	Fig.24	40.72	P
	5510 MHz	Fig.25	40.72	P

	5550 MHz	Fig.26	40.88	P
	5670 MHz	Fig.27	40.96	
	5710 MHz	Fig.28	40.72	P
802.11ac HT80	5210MHz	Fig.29	81.44	P
	5290MHz	Fig.30	81.44	P
	5530MHz	Fig.31	81.28	P
	5610MHz	Fig.32	81.44	
	5690MHz	Fig.33	81.28	P

Conclusion: PASS
Test graphs as below:

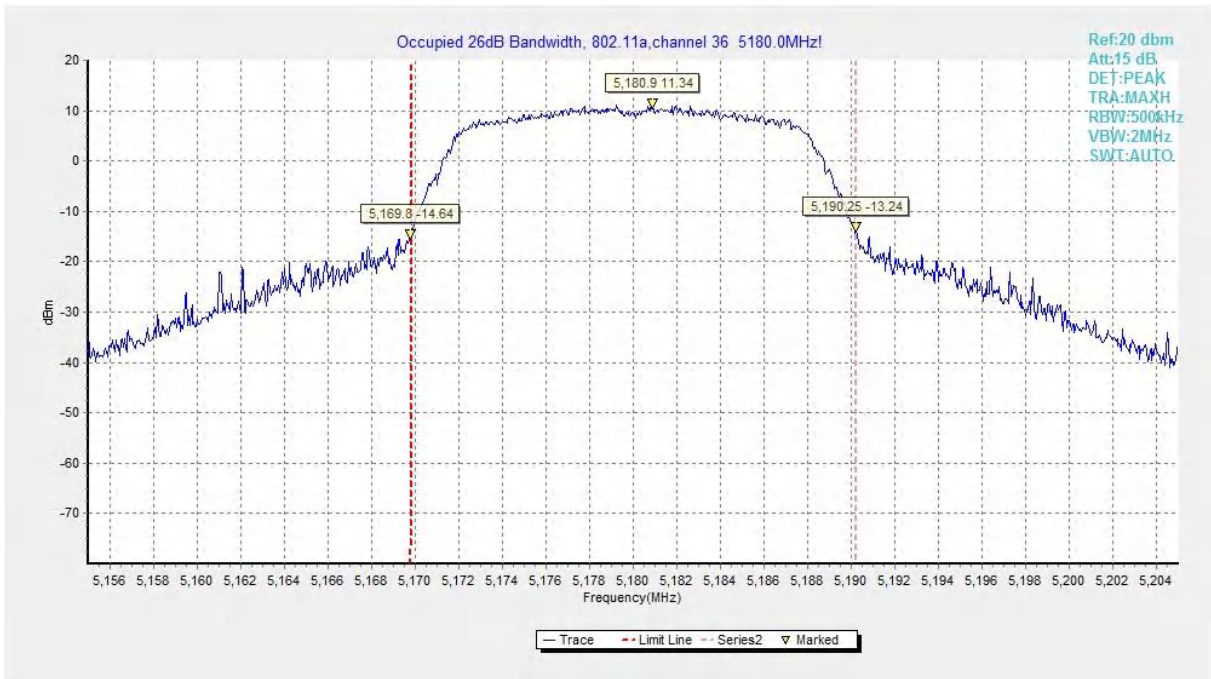


Fig.1 Occupied 26dB Bandwidth (802.11a, 5180MHz)

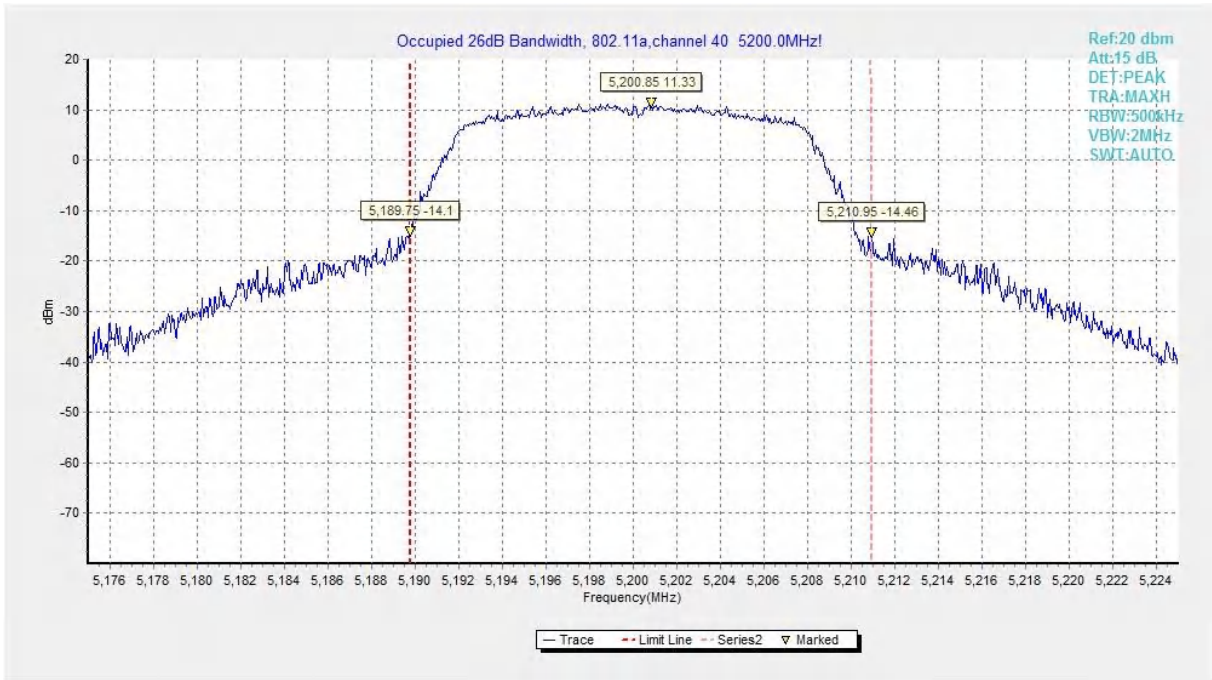


Fig.2 Occupied 26dB Bandwidth (802.11a, 5200MHz)

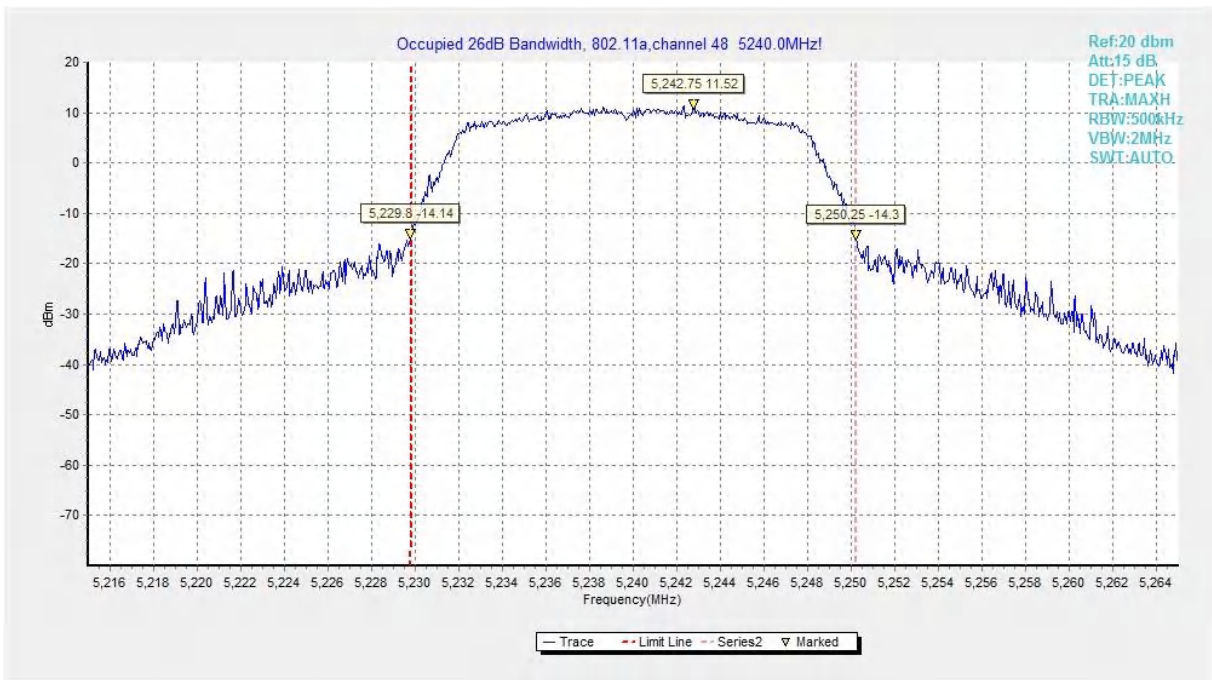


Fig.3 Occupied 26dB Bandwidth (802.11a, 5240MHz)

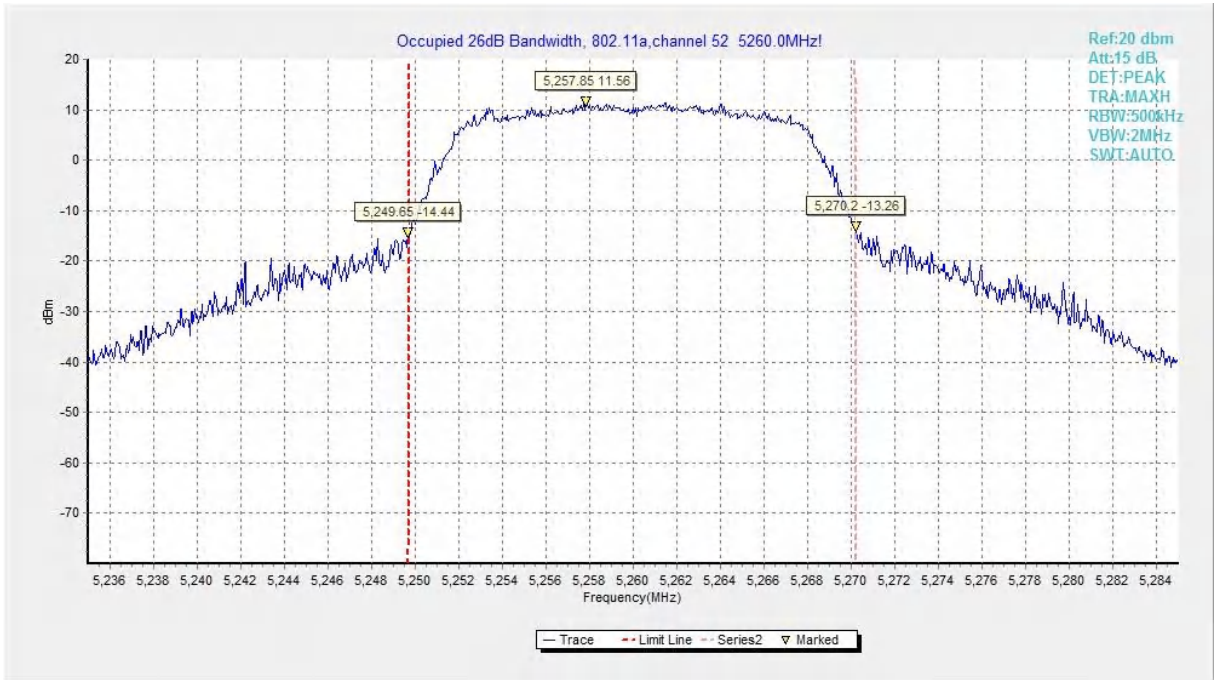


Fig.4 Occupied 26dB Bandwidth (802.11a, 5260MHz)

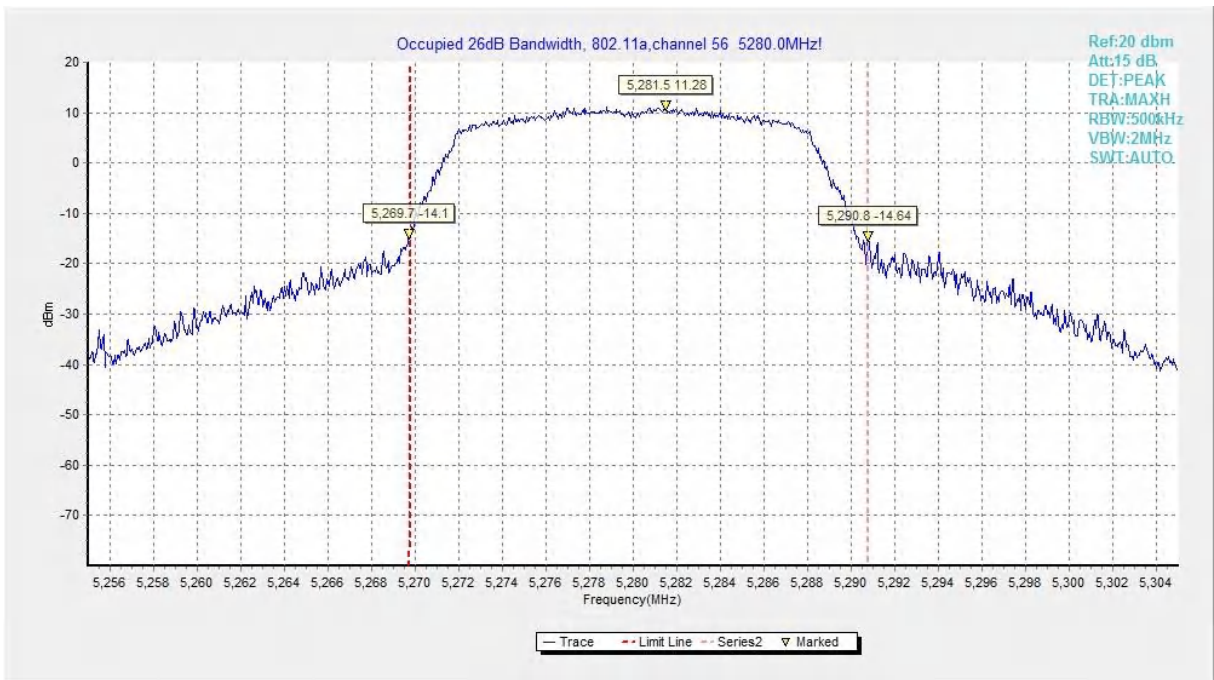


Fig.5 Occupied 26dB Bandwidth (802.11a, 5280MHz)

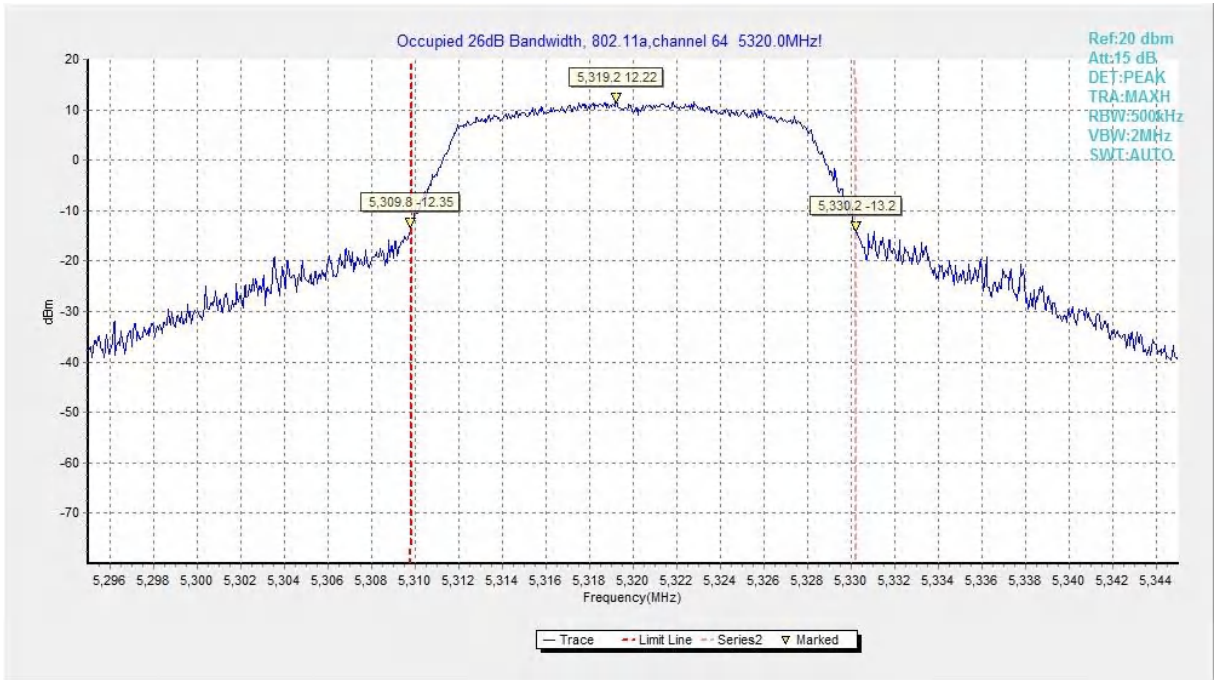


Fig.6 Occupied 26dB Bandwidth (802.11a, 5320MHz)

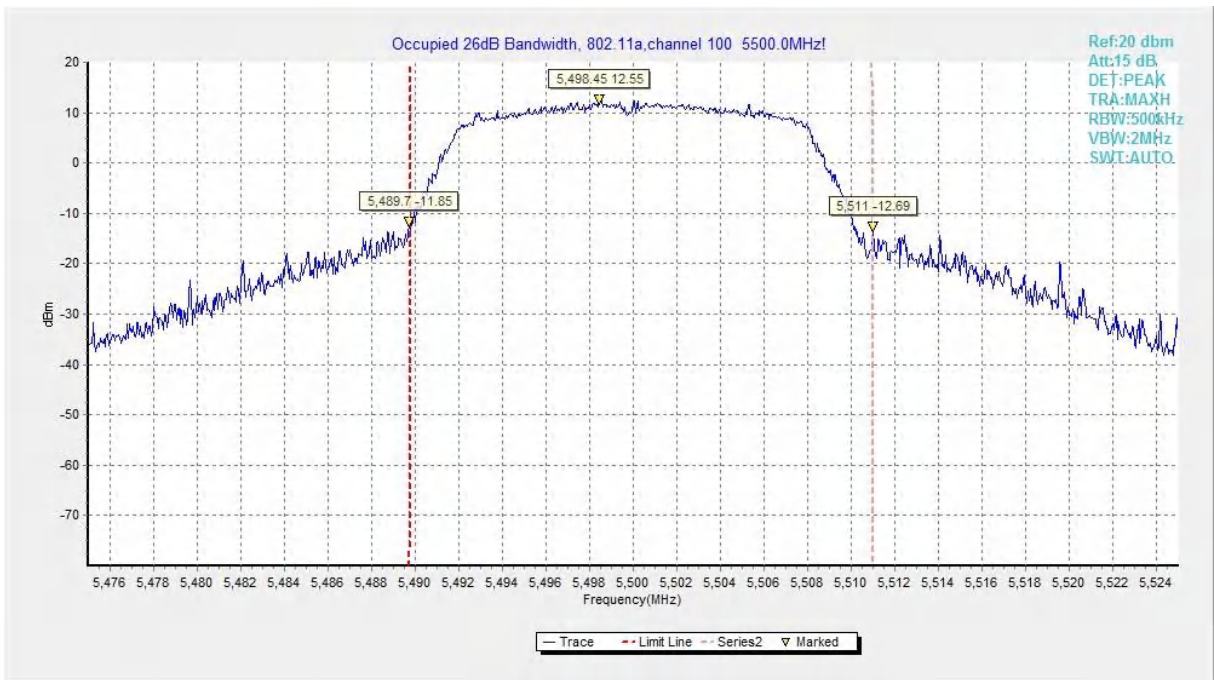


Fig.7 Occupied 26dB Bandwidth (802.11a, 5500MHz)

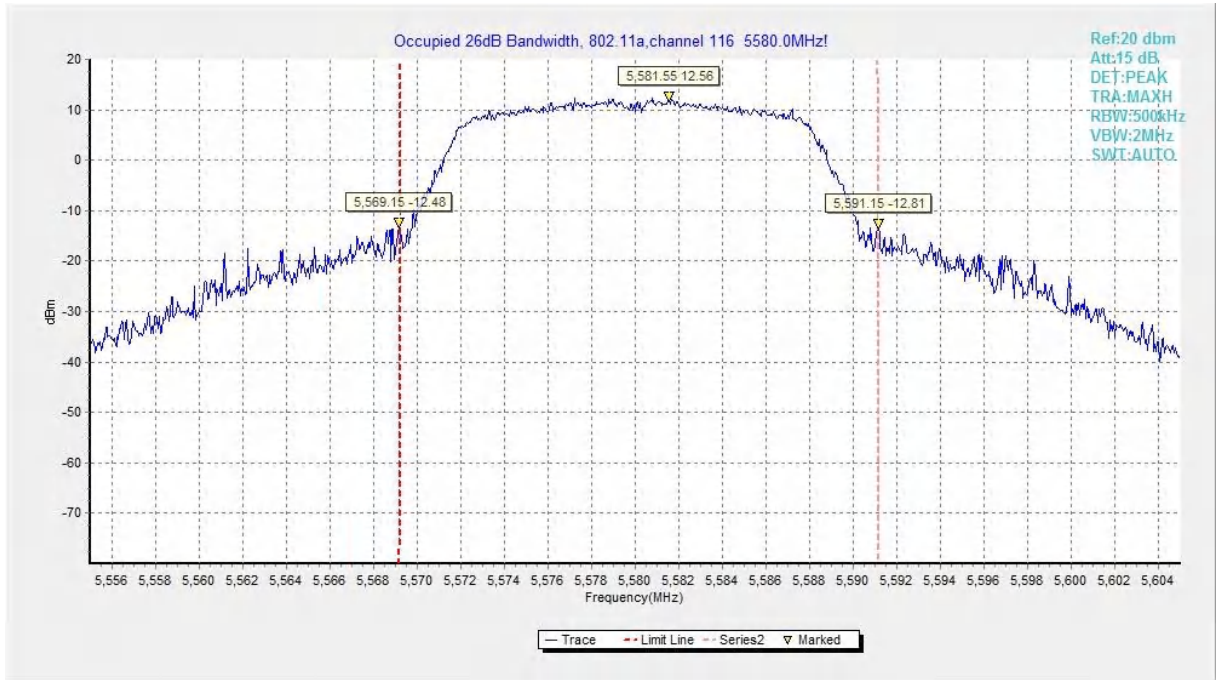


Fig.8 Occupied 26dB Bandwidth (802.11a, 5580MHz)

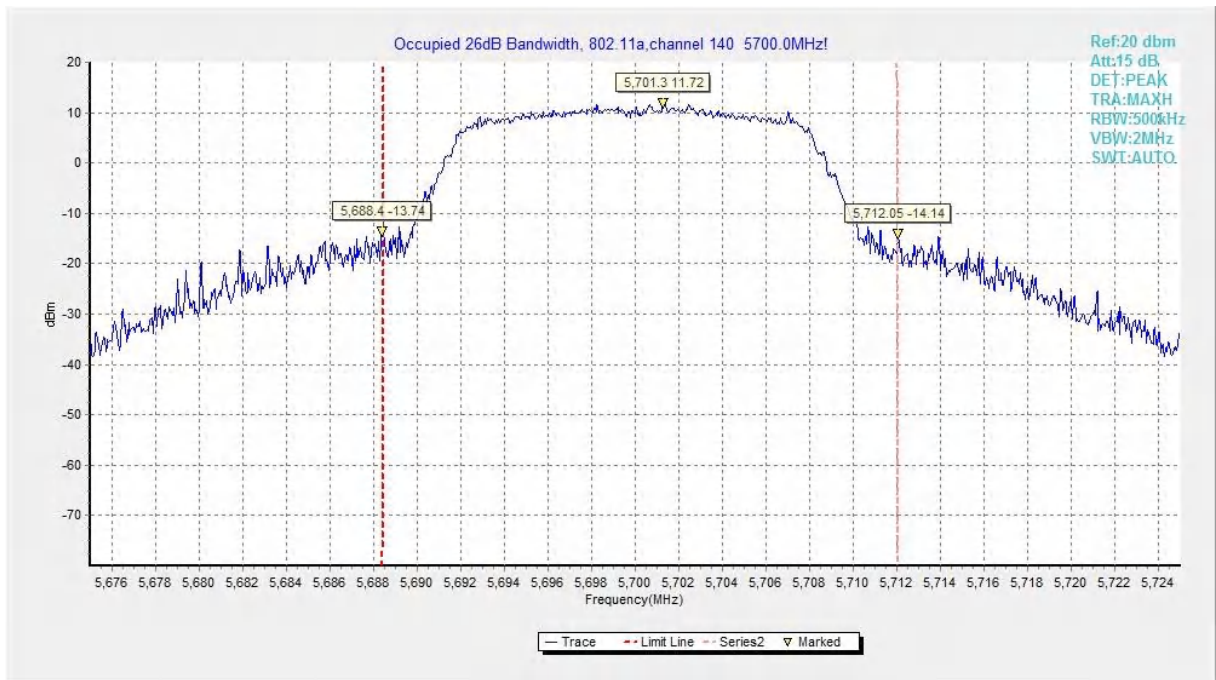


Fig.9 Occupied 26dB Bandwidth (802.11a, 5700MHz)

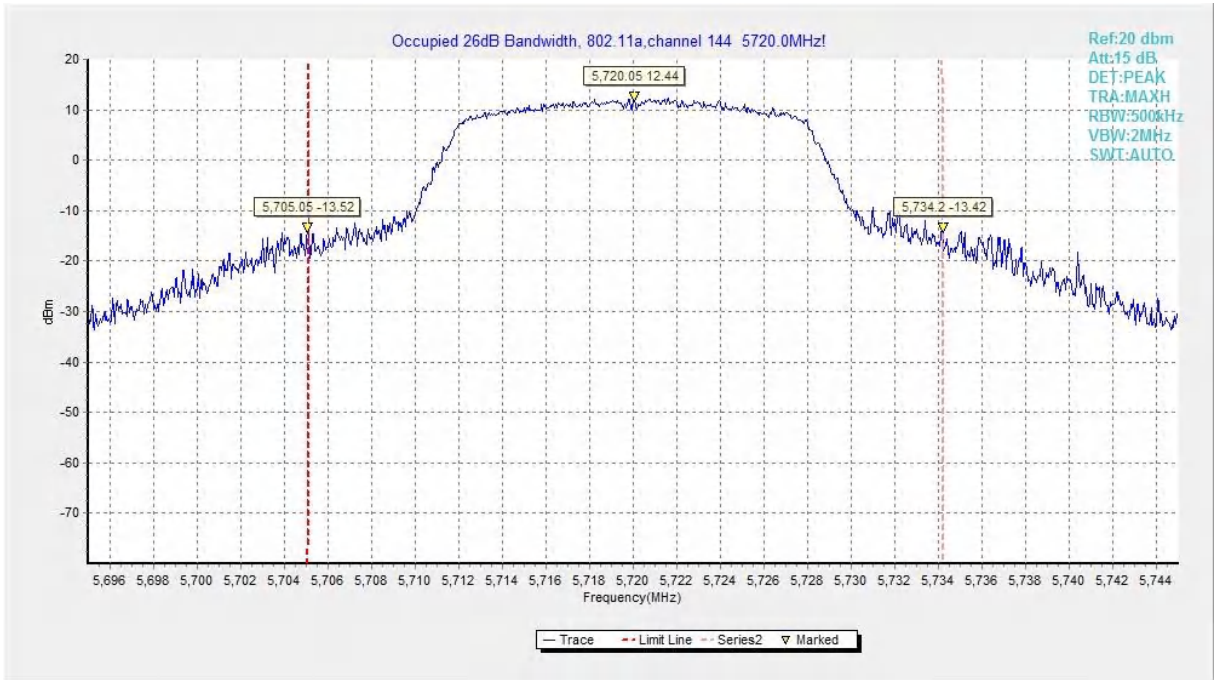


Fig.10 Occupied 26dB Bandwidth (802.11a, 5720MHz)

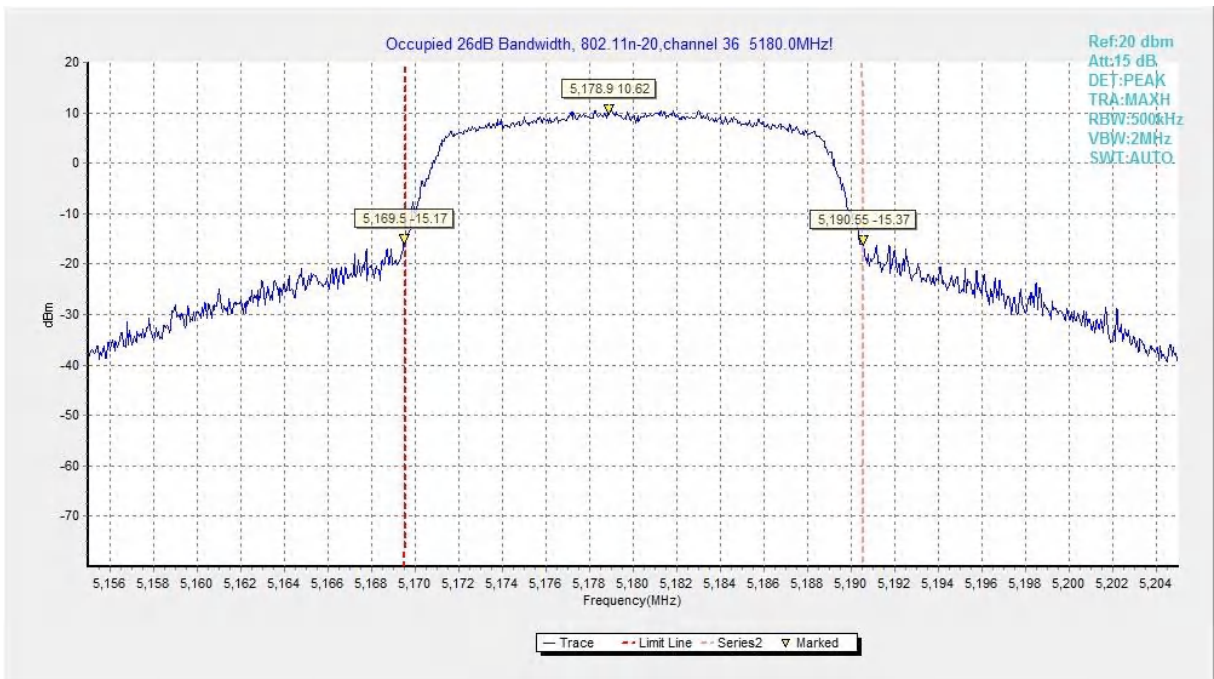


Fig.11 Occupied 26dB Bandwidth (802.11n-HT20, 5180MHz)

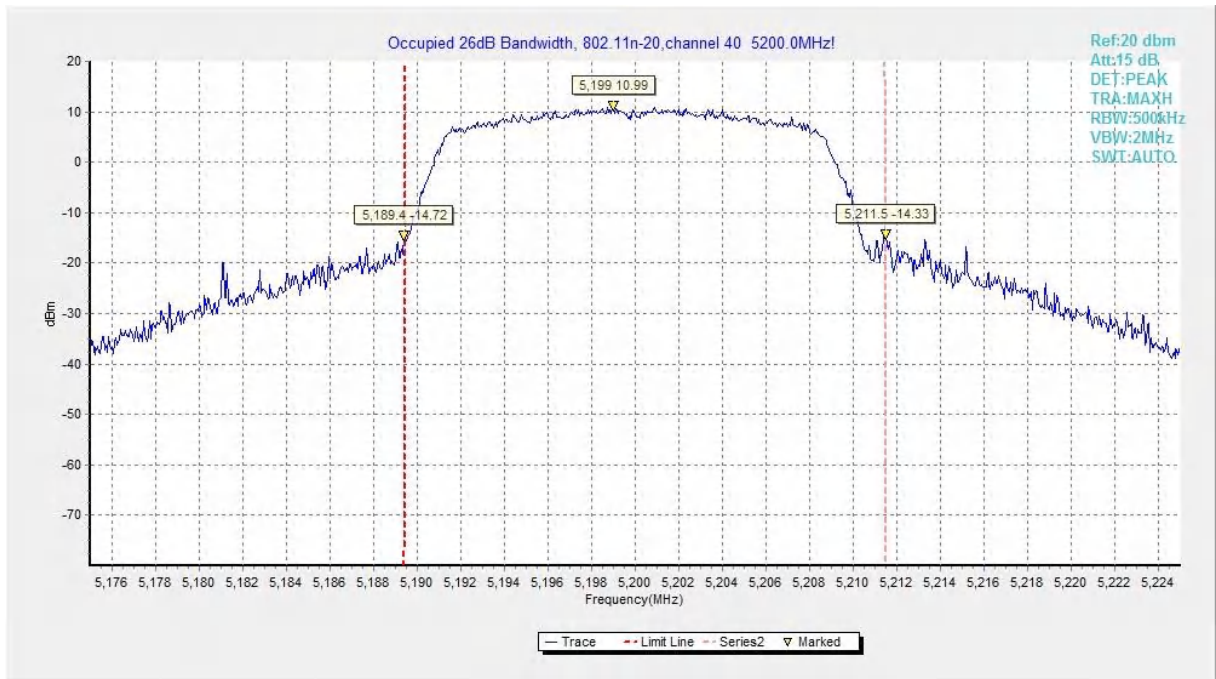


Fig.12 Occupied 26dB Bandwidth (802.11n-HT20, 5200MHz)

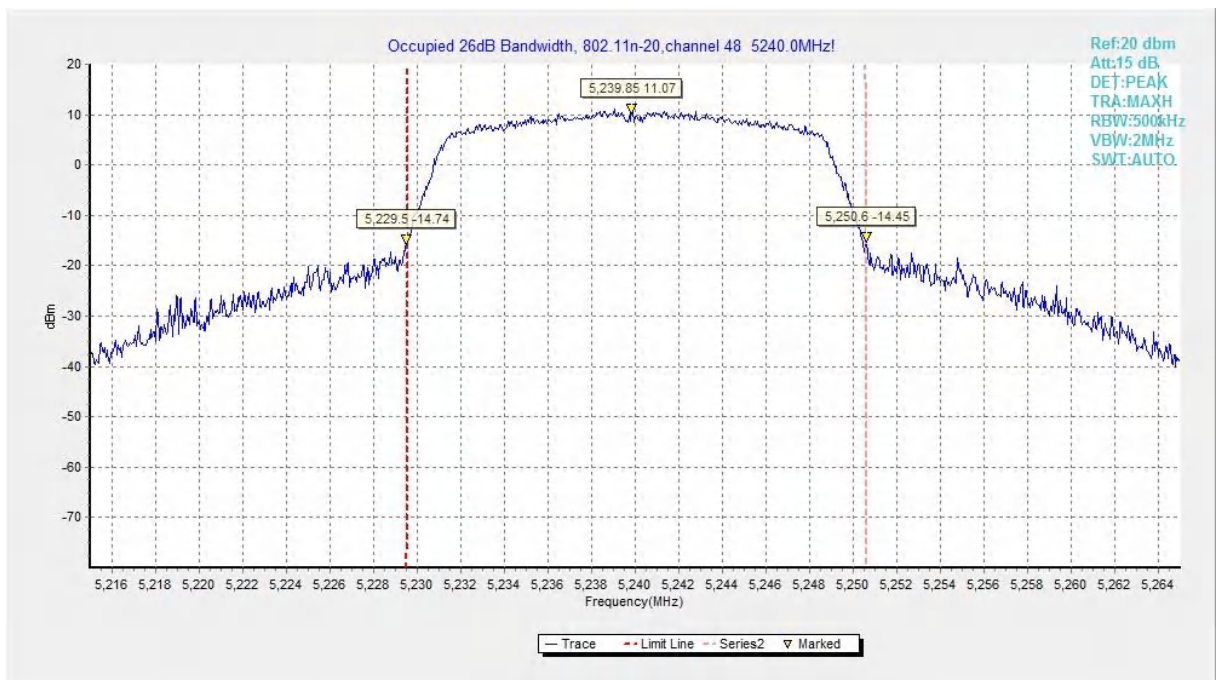


Fig.13 Occupied 26dB Bandwidth (802.11n-HT20, 5240MHz)

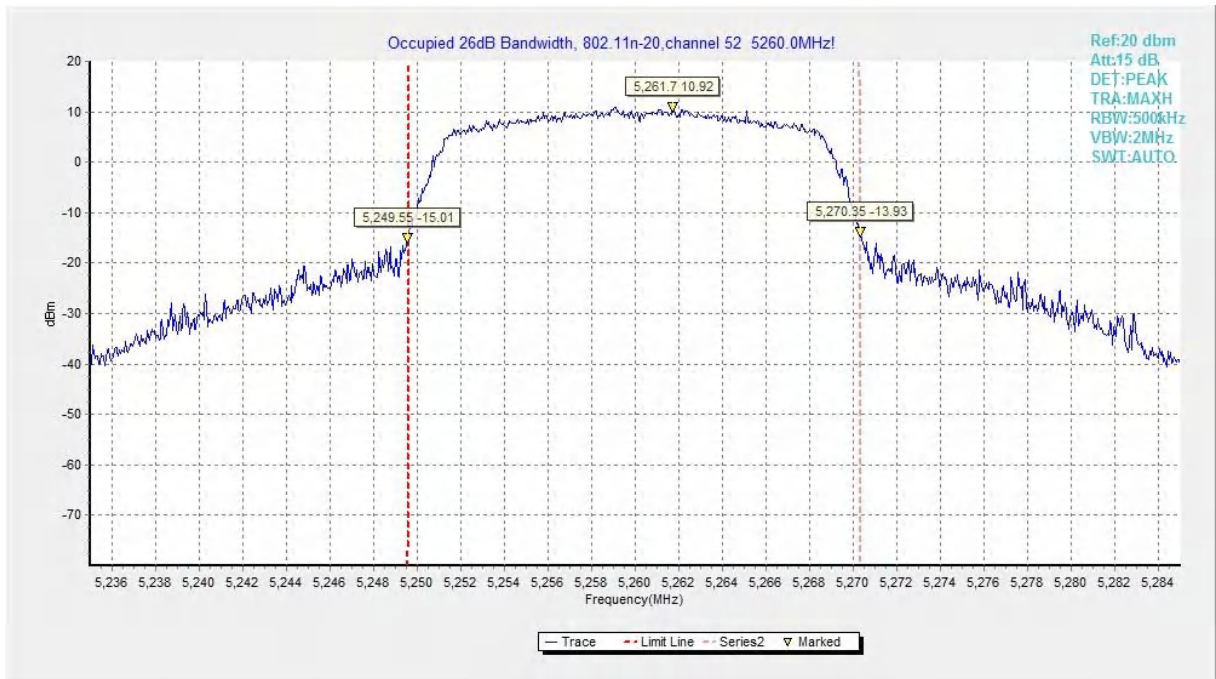


Fig.14 Occupied 26dB Bandwidth (802.11n-HT20, 5260MHz)

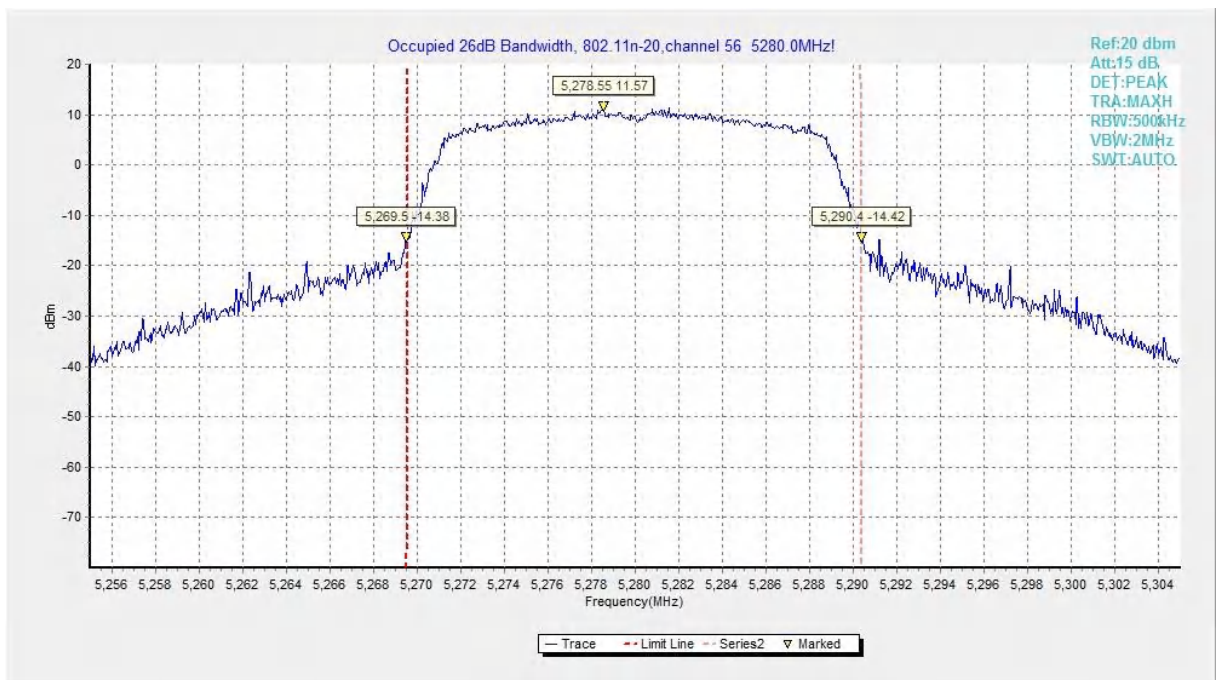


Fig.15 Occupied 26dB Bandwidth (802.11n-HT20, 5280MHz)

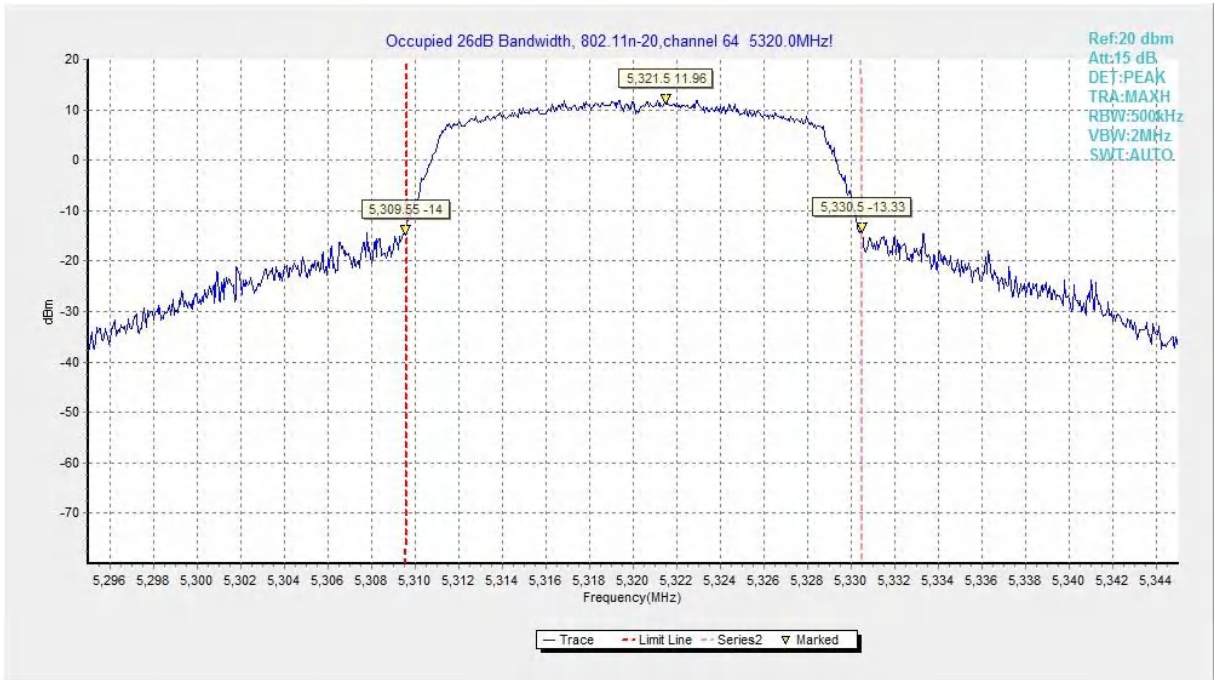


Fig.16 Occupied 26dB Bandwidth (802.11n-HT20, 5320MHz)

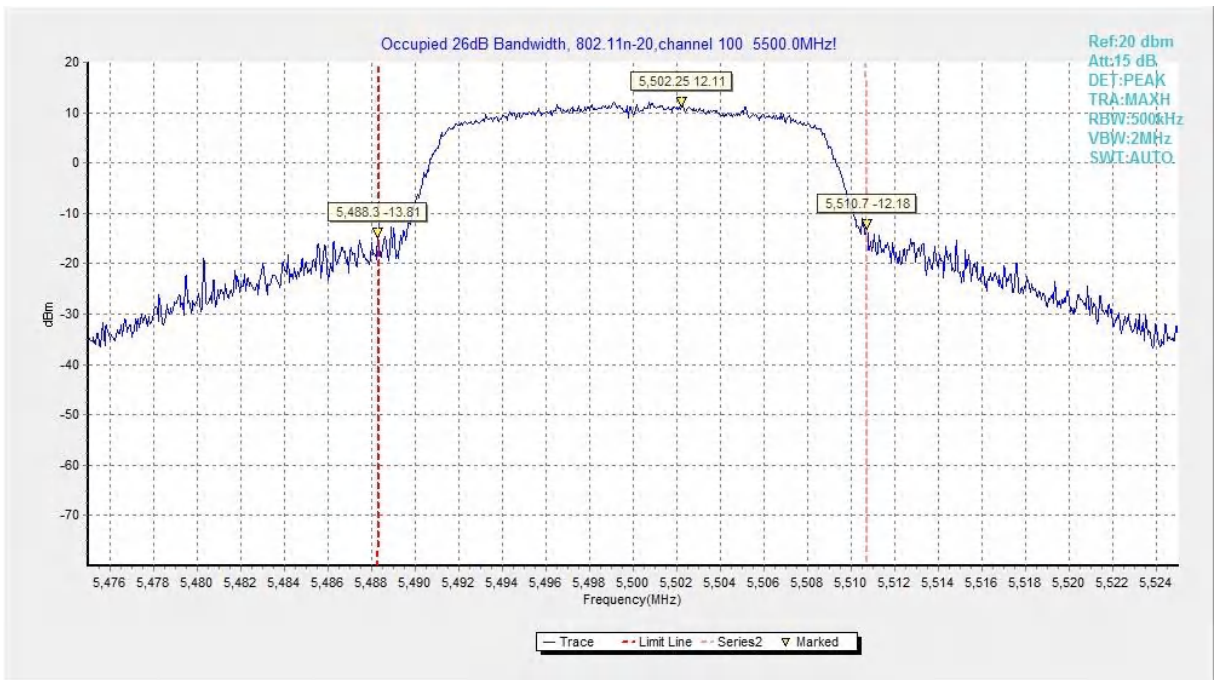


Fig.17 Occupied 26dB Bandwidth (802.11n-HT20, 5500MHz)

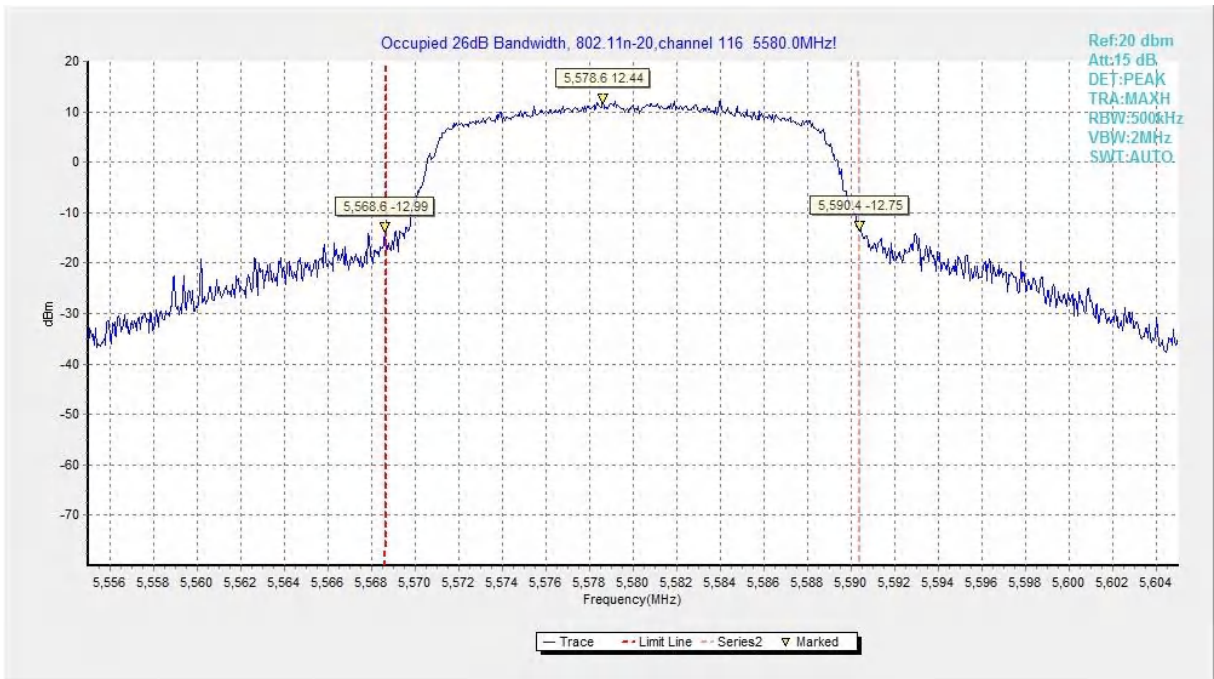


Fig.18 Occupied 26dB Bandwidth (802. 11n-HT20, 5580MHz)

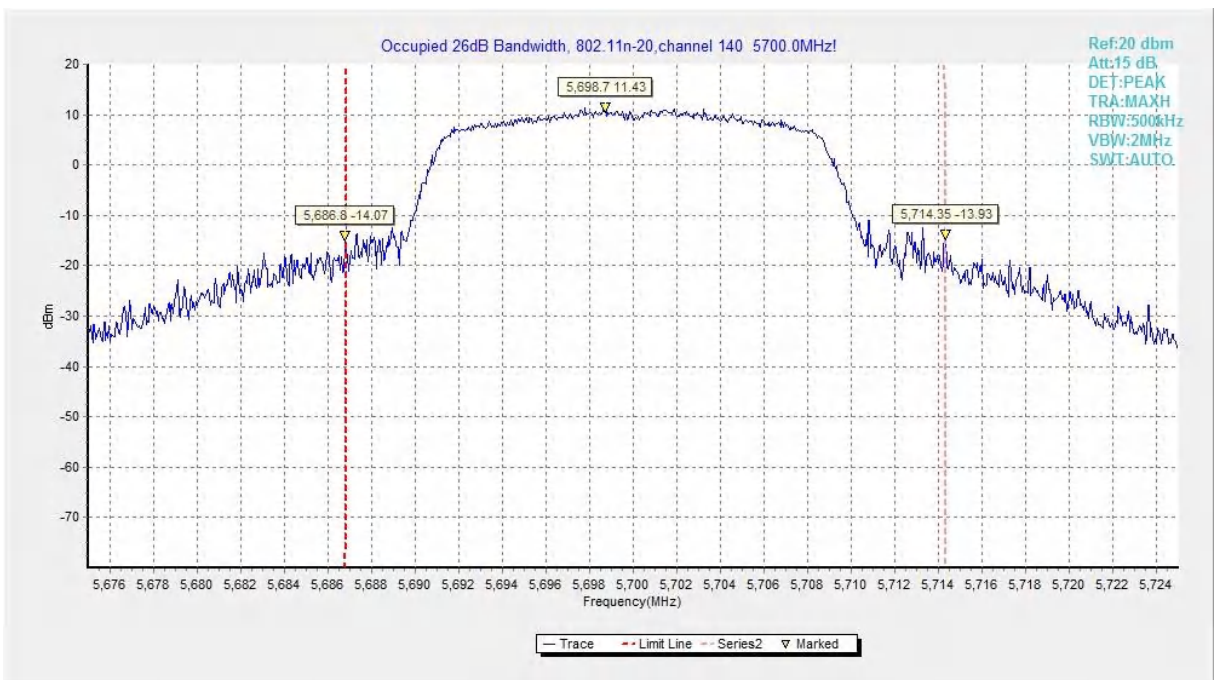


Fig.19 Occupied 26dB Bandwidth (802. 11n-HT20, 5700MHz)

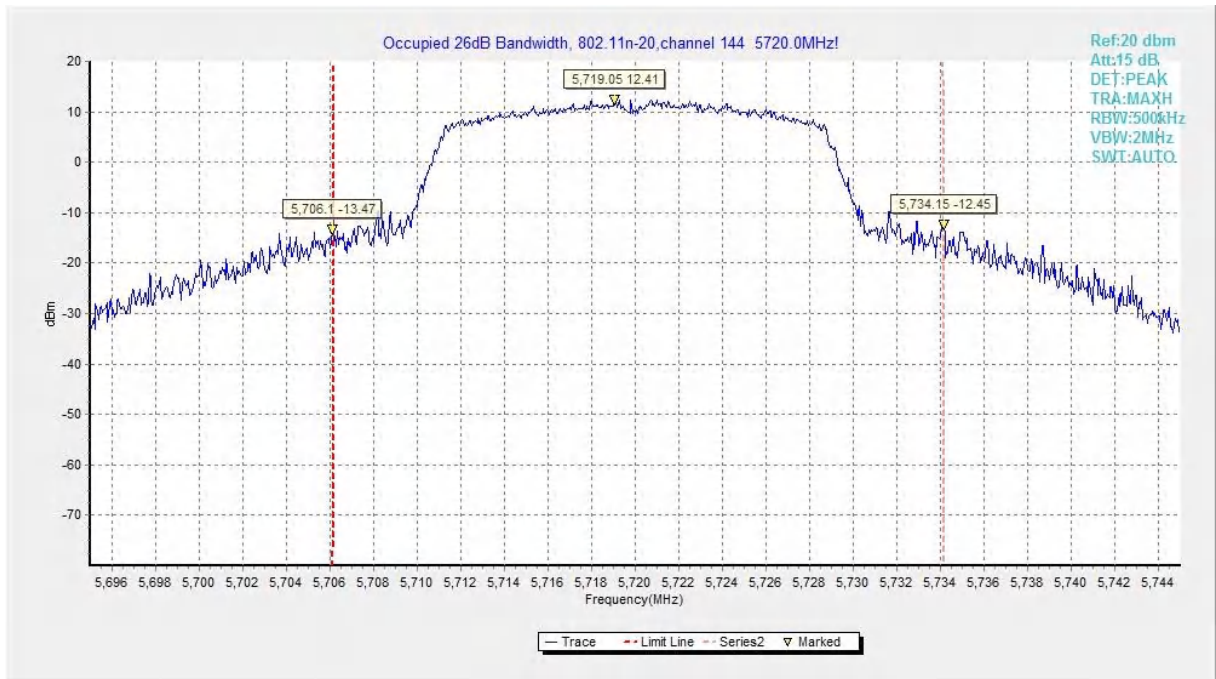


Fig.20 Occupied 26dB Bandwidth (802.11n-HT20, 5720MHz)

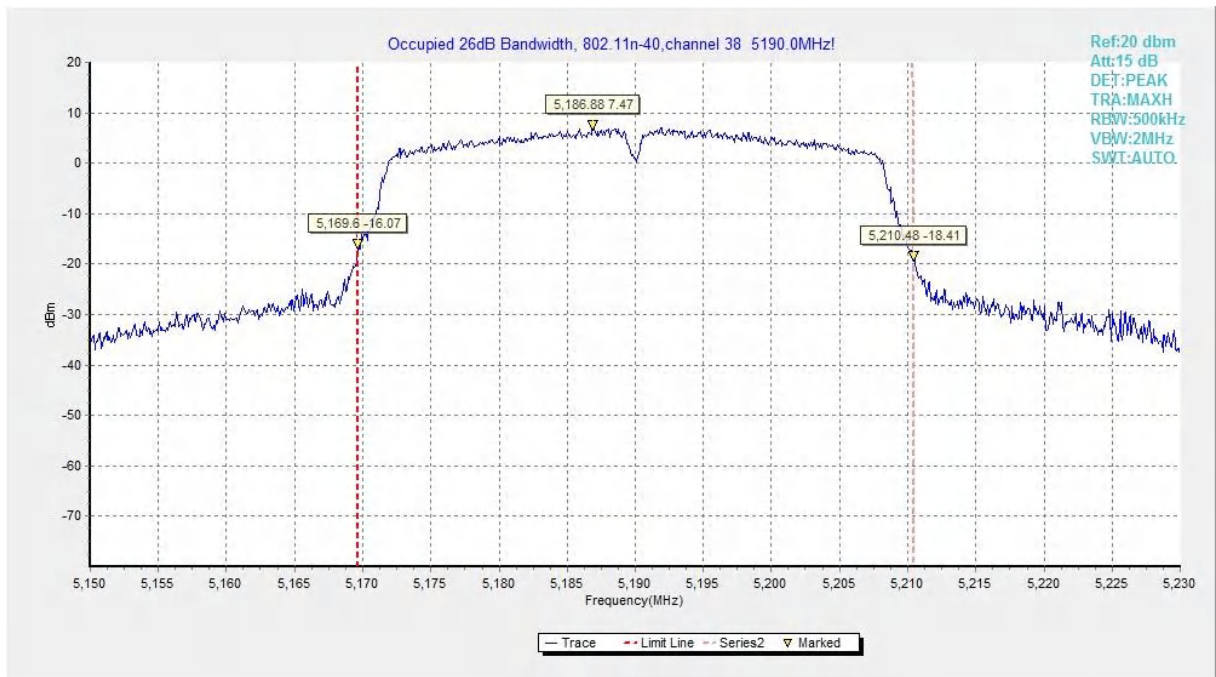


Fig.21 Occupied 26dB Bandwidth (802.11n-HT40, 5190MHz)

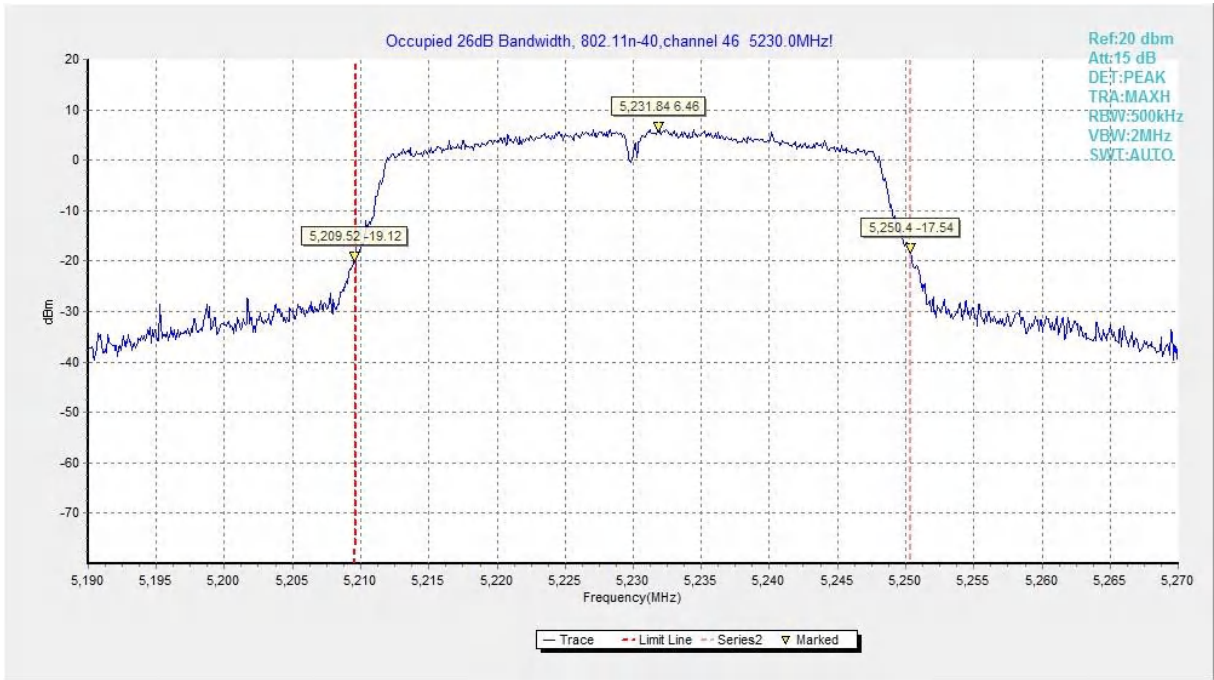


Fig.22 Occupied 26dB Bandwidth (802.11n-HT40, 5230MHz)

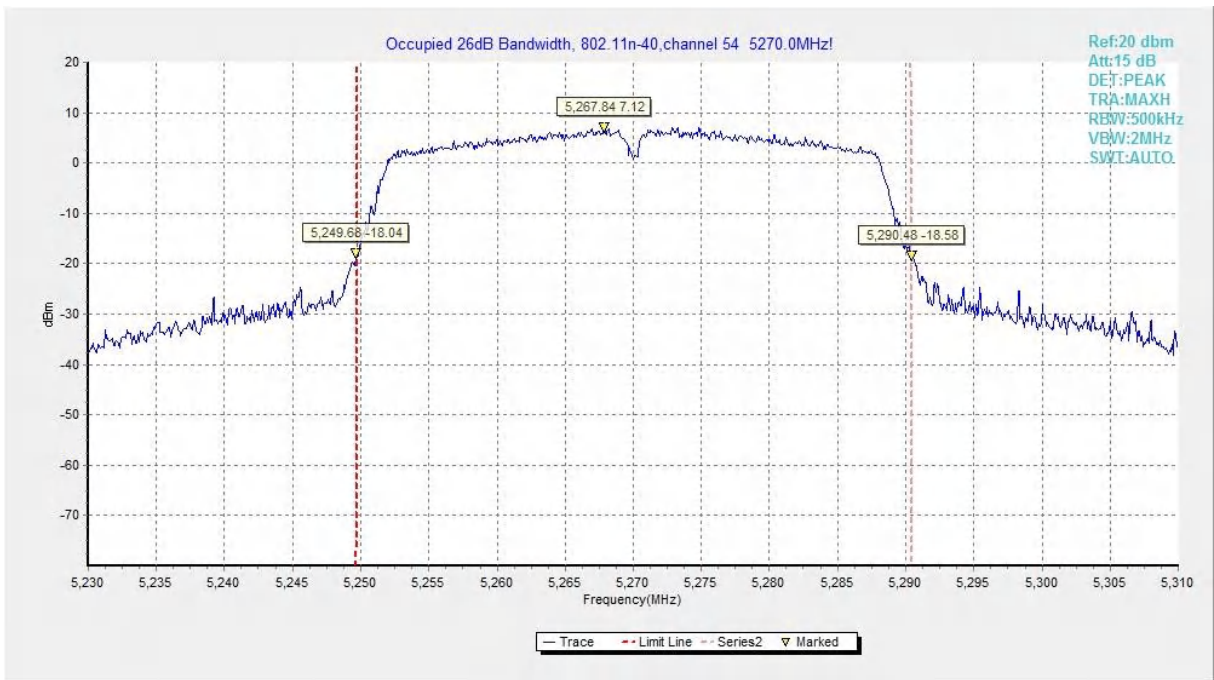


Fig.23 Occupied 26dB Bandwidth (802.11n-HT40, 5270MHz)

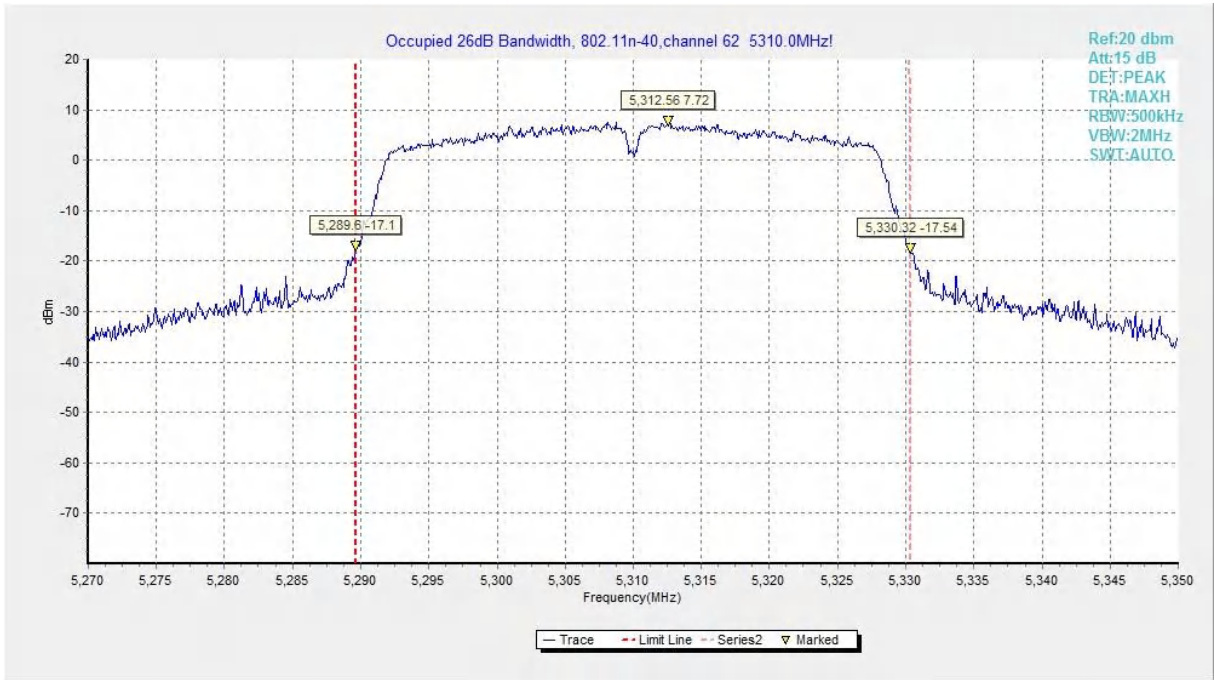


Fig.24 Occupied 26dB Bandwidth (802.11n-HT40, 5310MHz)

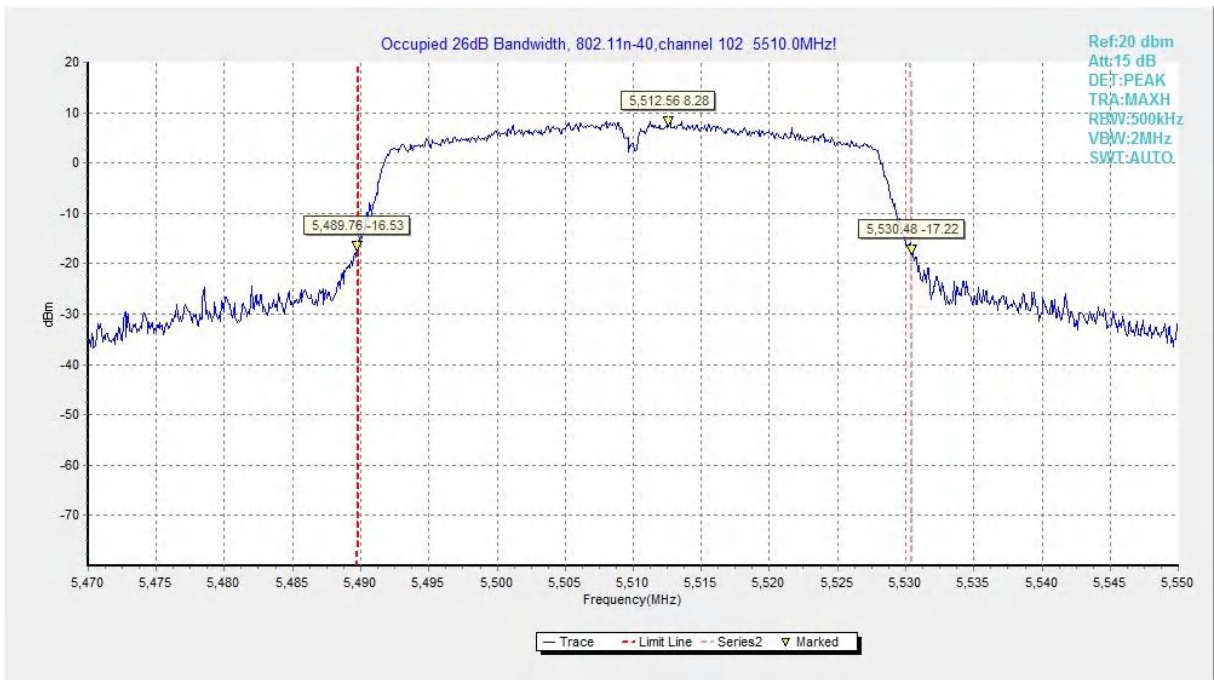


Fig.25 Occupied 26dB Bandwidth (802.11n-HT40, 5510MHz)

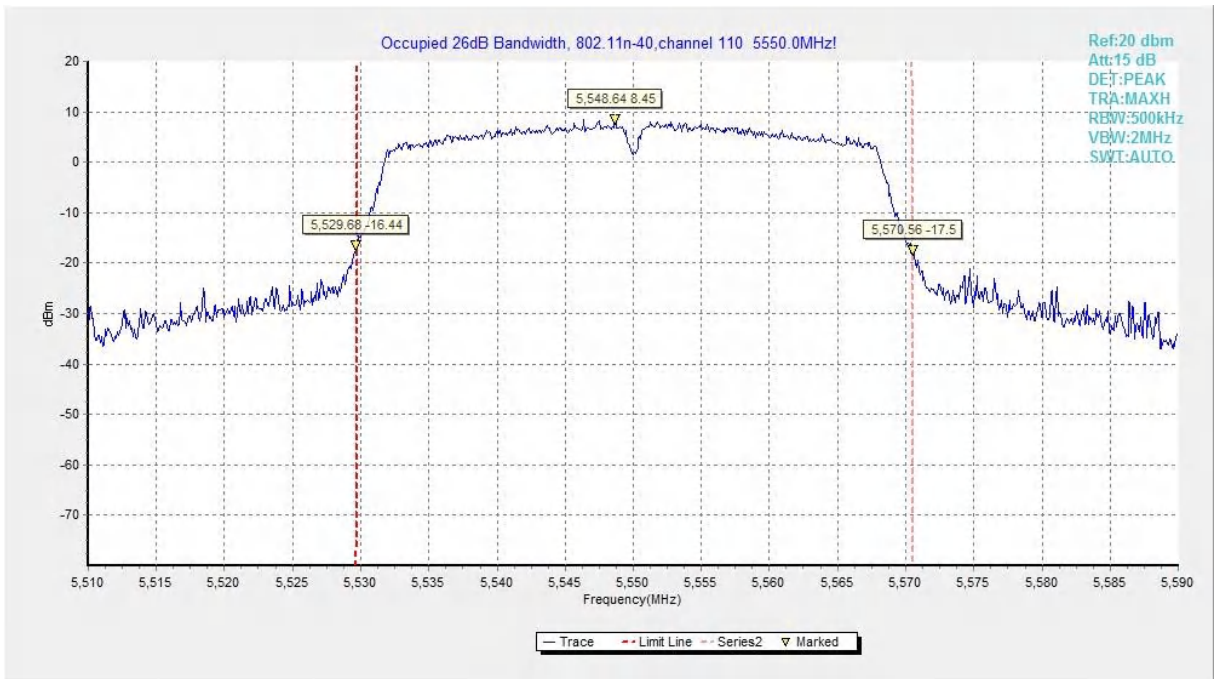


Fig.26 Occupied 26dB Bandwidth (802. 11n-HT40, 5550MHz)

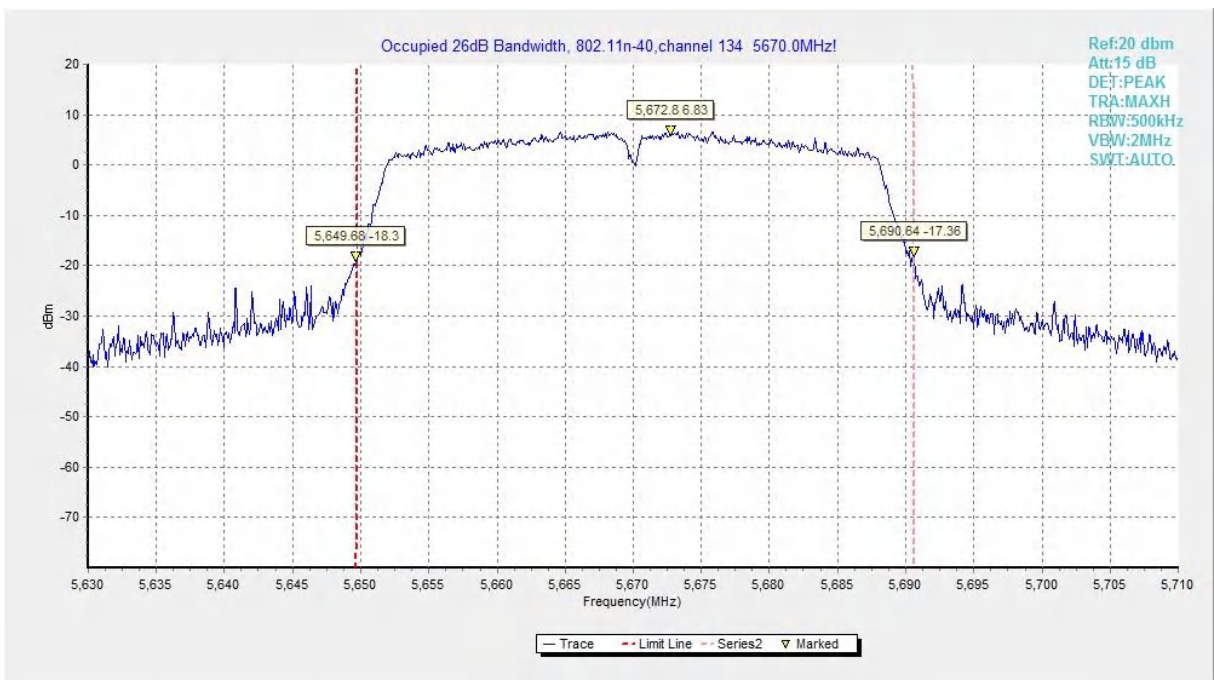


Fig.27 Occupied 26dB Bandwidth (802. 11n-HT40, 5670MHz)

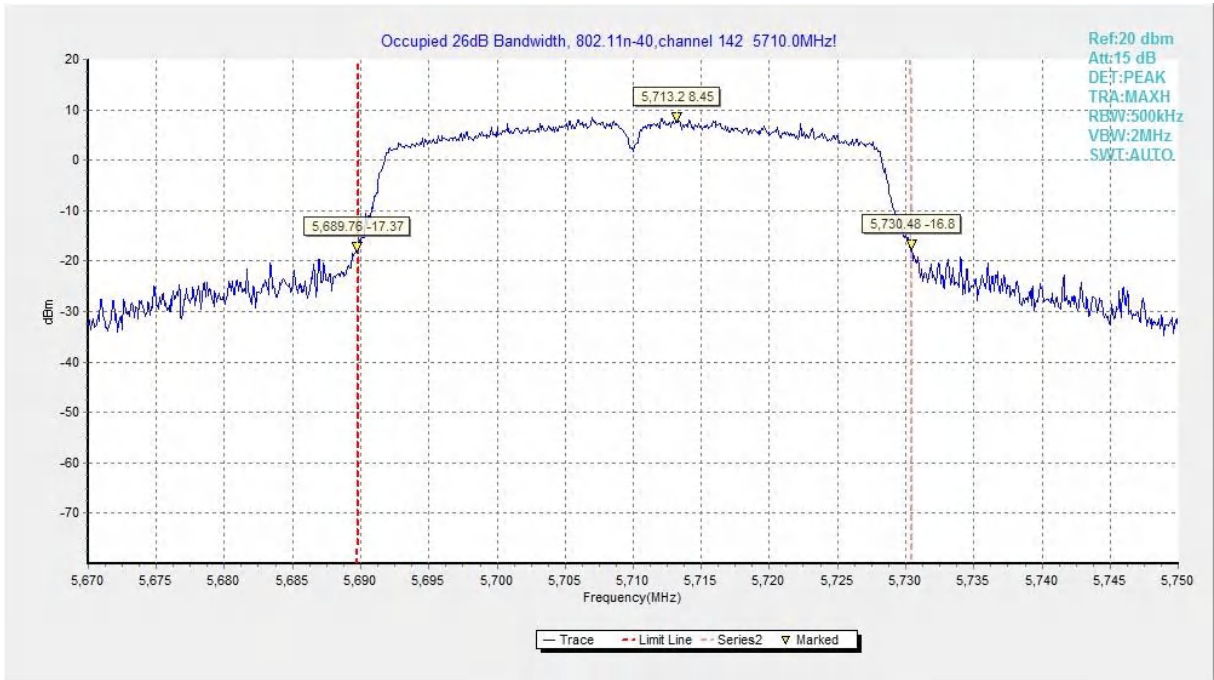


Fig.28 Occupied 26dB Bandwidth (802.11n-HT40, 5710MHz)

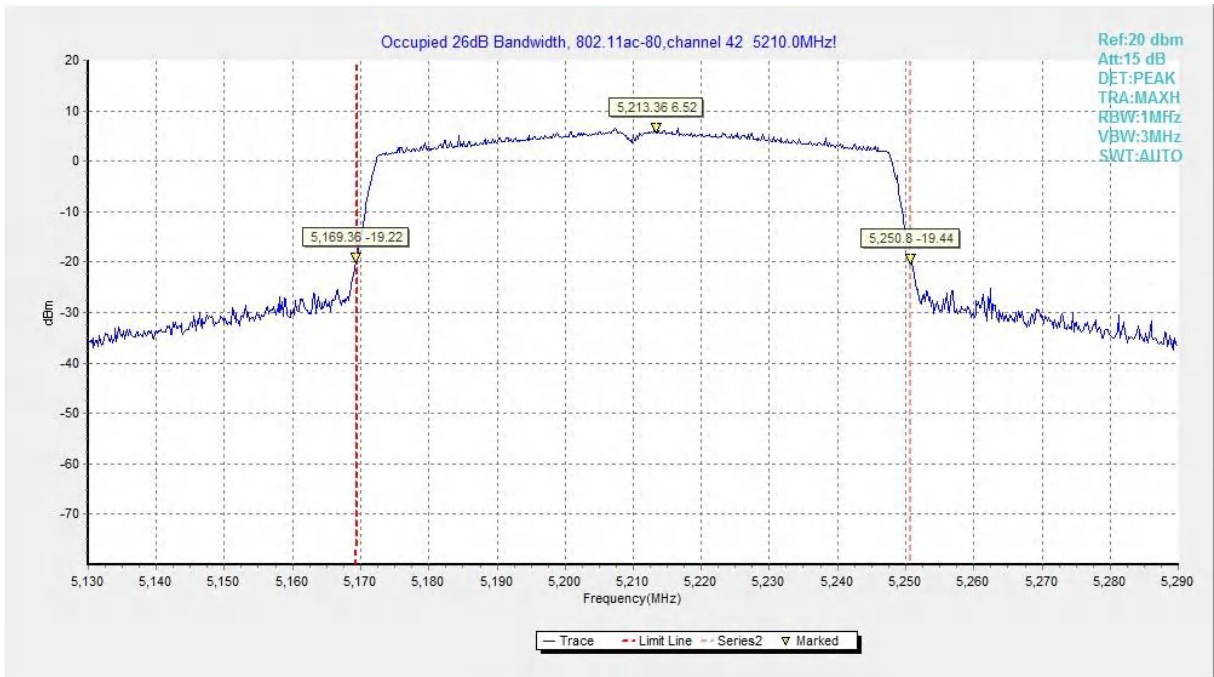


Fig.29 Occupied 26dB Bandwidth (802.11ac-HT80, 5210MHz)

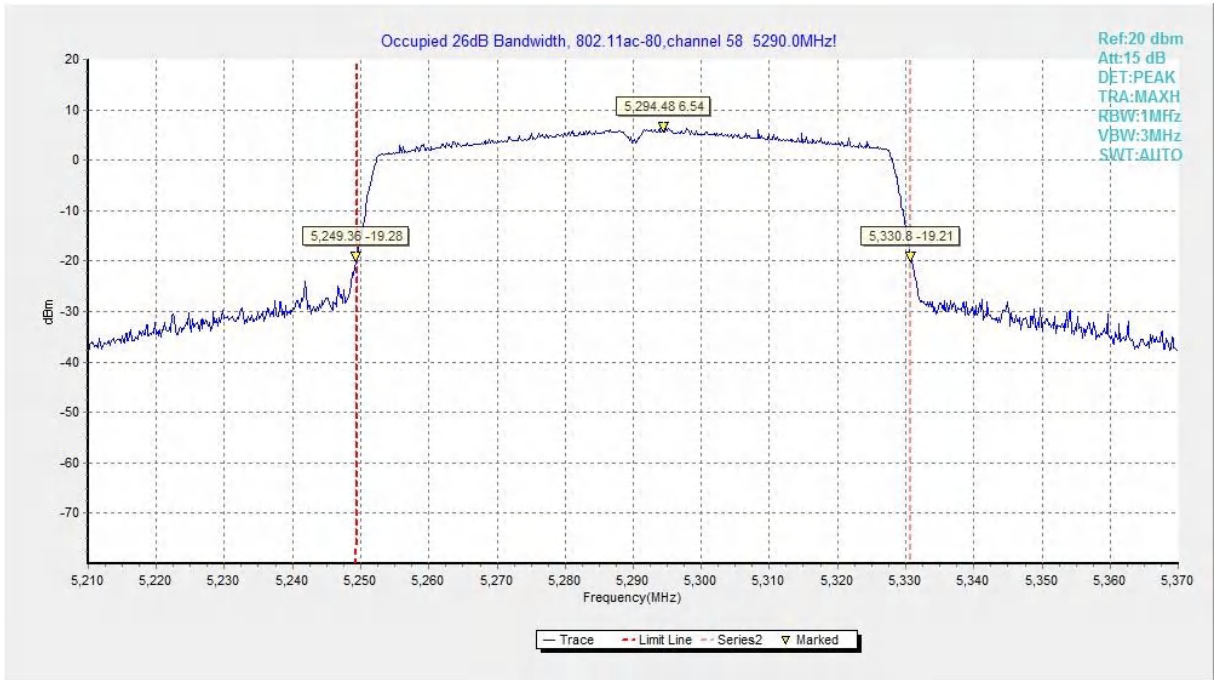


Fig.30 Occupied 26dB Bandwidth (802. 11ac-HT80, 5290MHz)

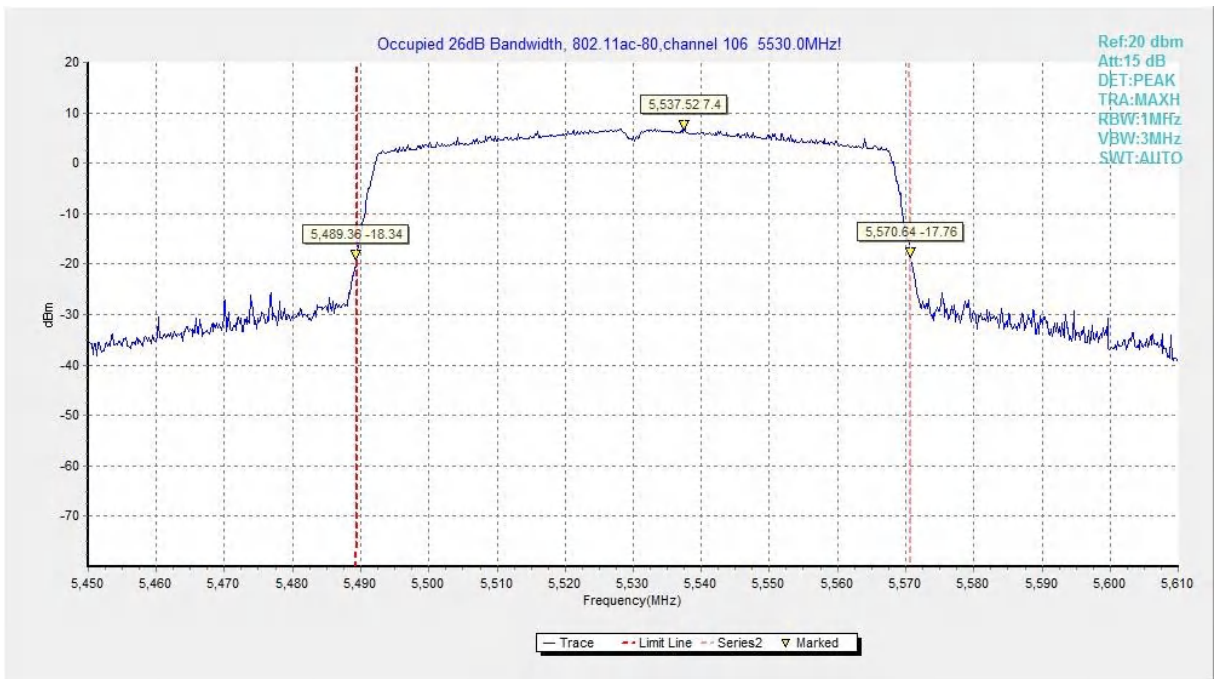


Fig.31 Occupied 26dB Bandwidth (802. 11ac-HT80, 5530MHz)

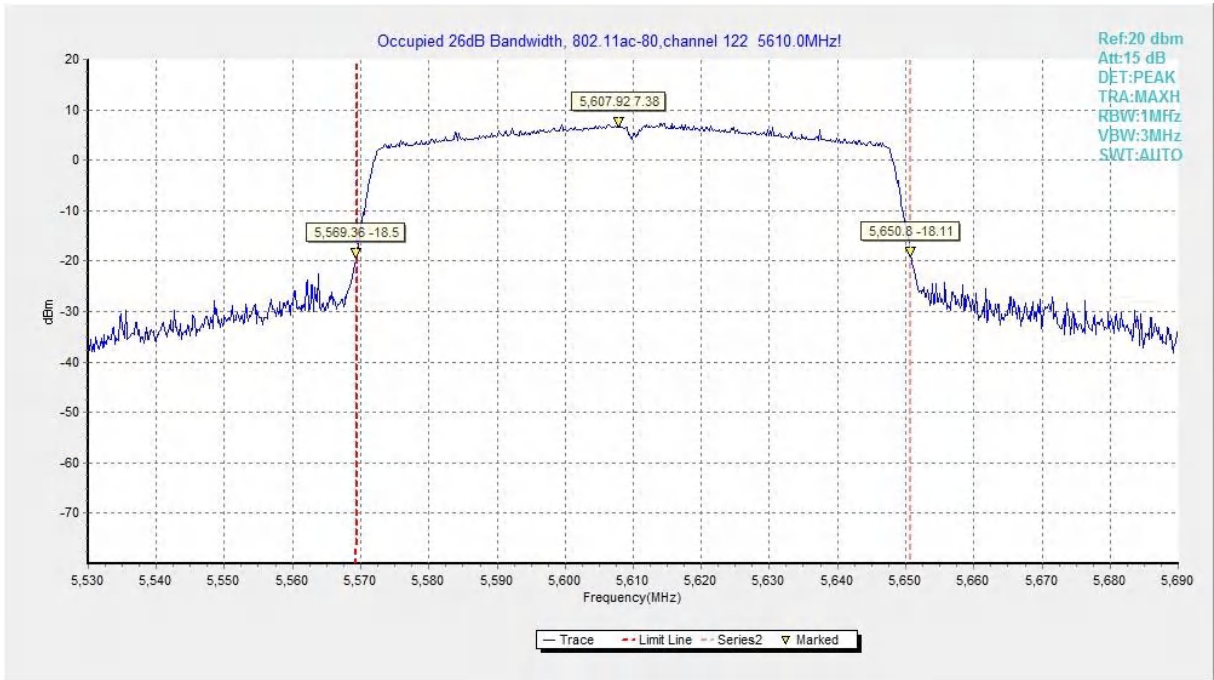


Fig.32 Occupied 26dB Bandwidth (802. 11ac-HT80, 5610MHz)

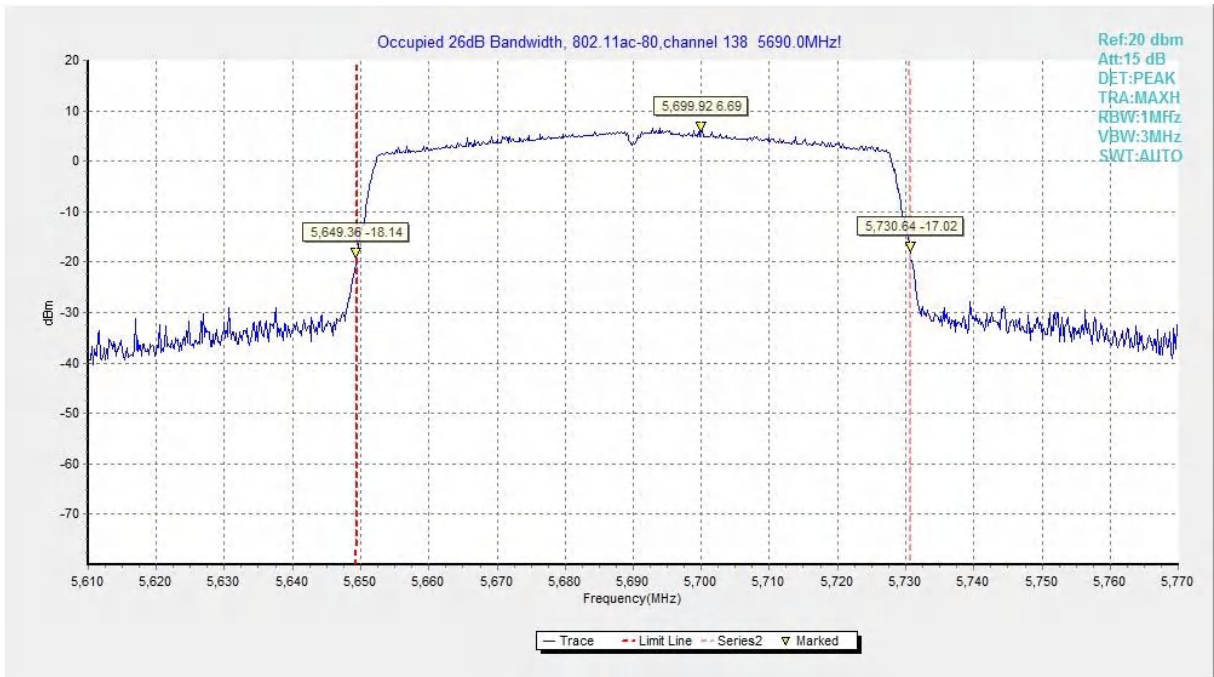


Fig.33 Occupied 26dB Bandwidth (802. 11ac-HT80, 5690MHz)

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	Frequency	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

802.11ac HT20	5180 MHz	Fig.42	P
	5320 MHz	Fig.43	P
	5500 MHz	Fig.44	P
	5700 MHz	Fig.45	P

802.11n HT40	5190 MHz	Fig.46	P
	5310 MHz	Fig.47	P
	5510 MHz	Fig.48	P
	5670 MHz	Fig.49	P

802.11ac HT40	5190 MHz	Fig.50	P
	5310 MHz	Fig.51	P
	5510 MHz	Fig.52	P
	5670 MHz	Fig.53	P

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

Conclusion: PASS

Test graphs as below:

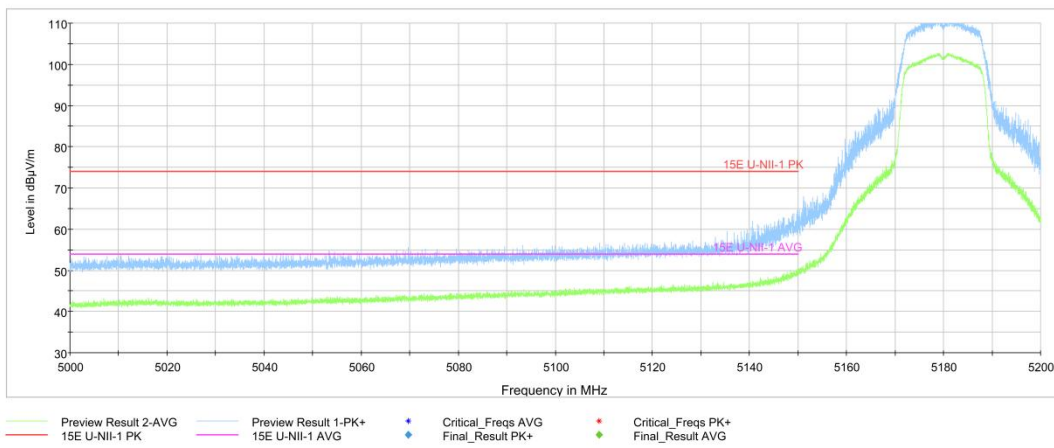


Fig.34 Band Edges (802.11a, 5180MHz)

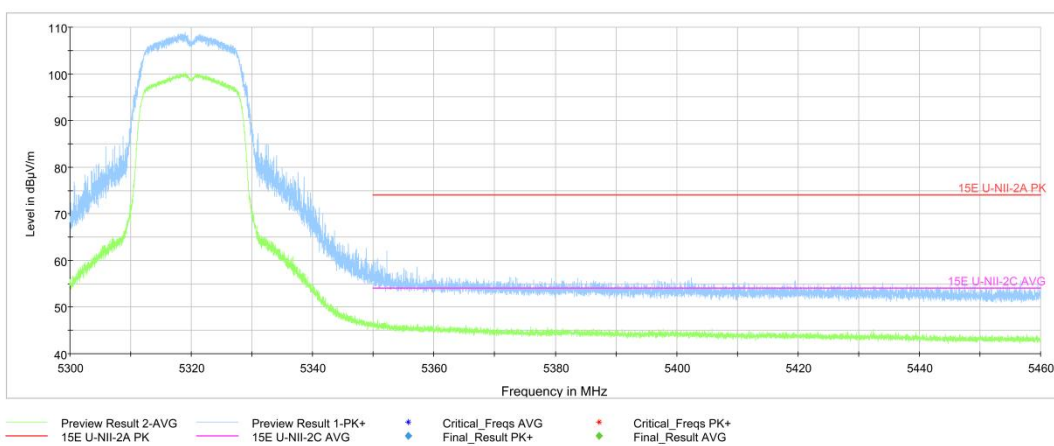


Fig.35 Band Edges (802.11a, 5320MHz)

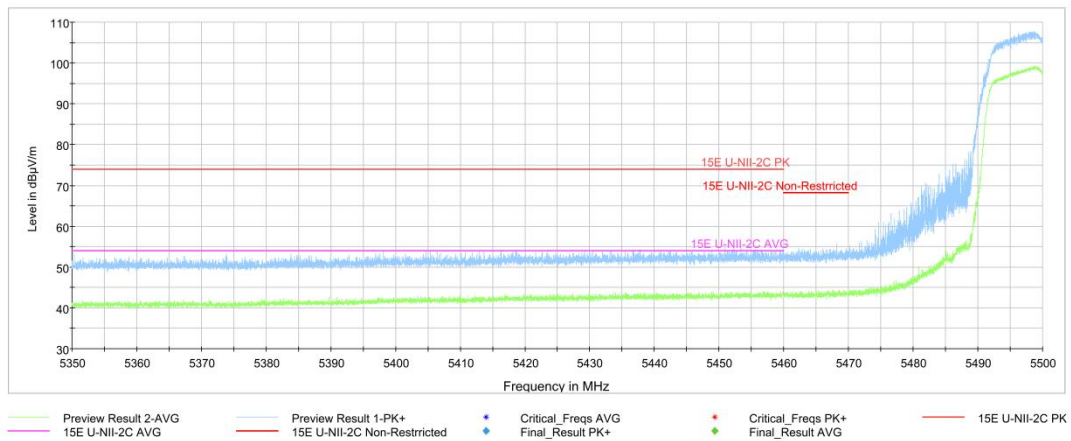


Fig.36 Band Edges (802.11a, 5500MHz)

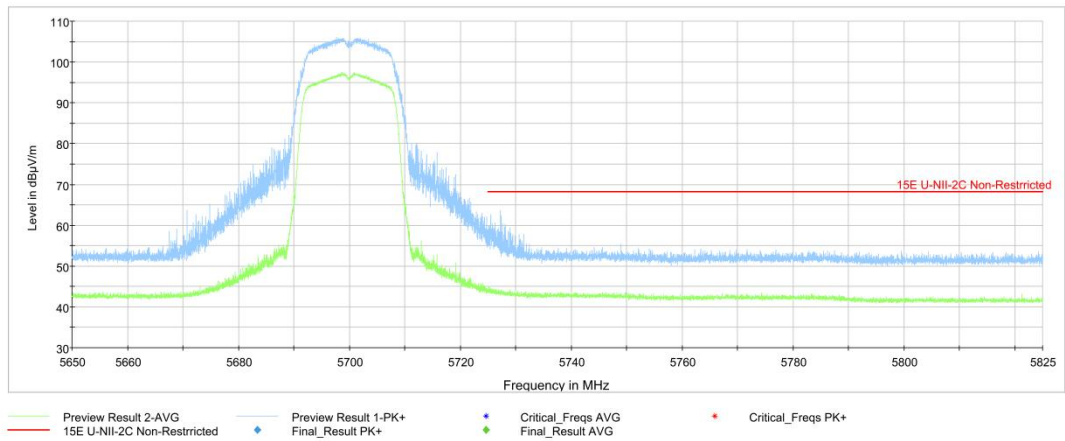


Fig.37 Band Edges (802.11a, 5700MHz)

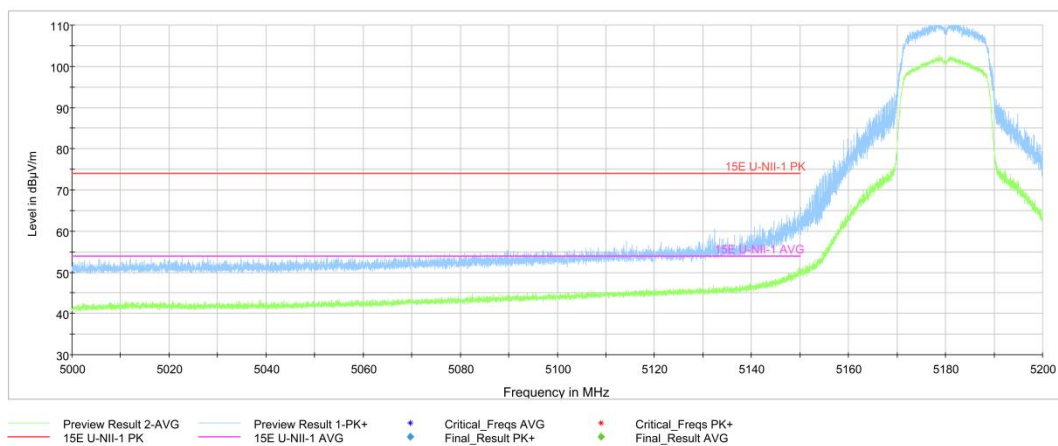


Fig.38 Band Edges (802.11n-HT20, 5180MHz)

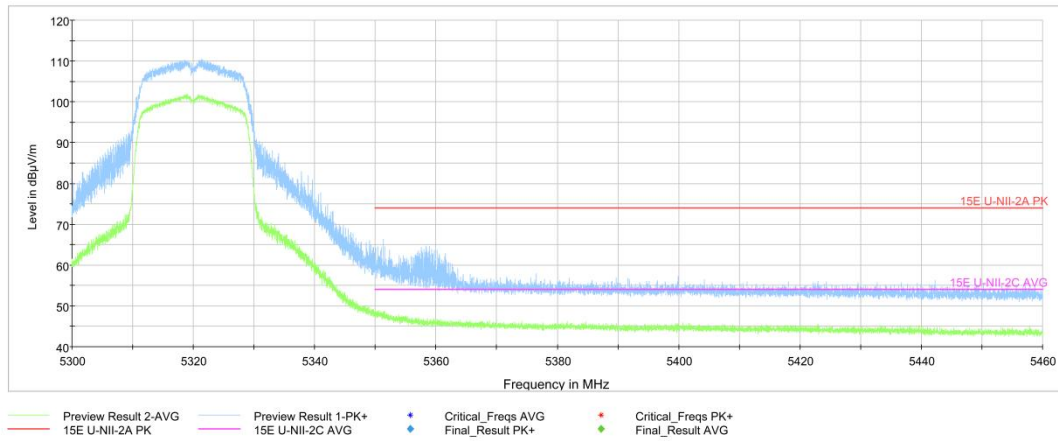


Fig.39 Band Edges (802.11n-HT20, 5320MHz)

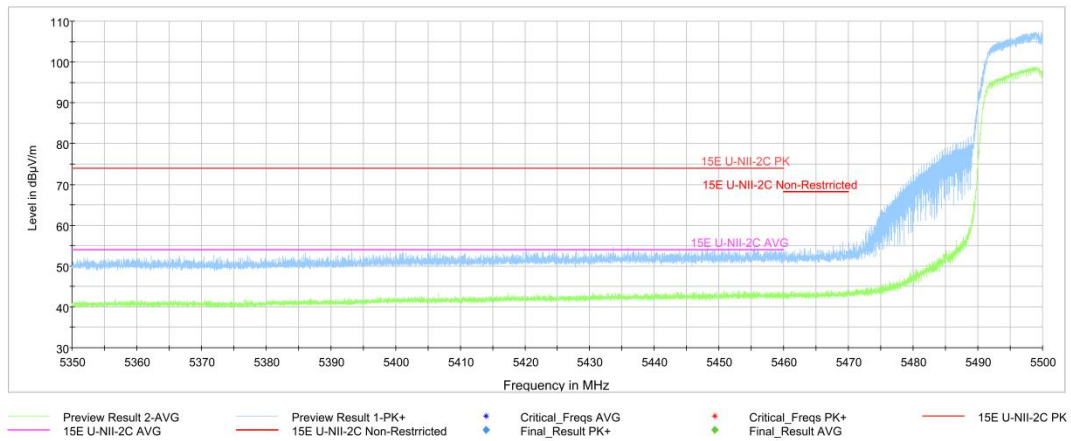


Fig.40 Band Edges (802.11n-HT20, 5500MHz)

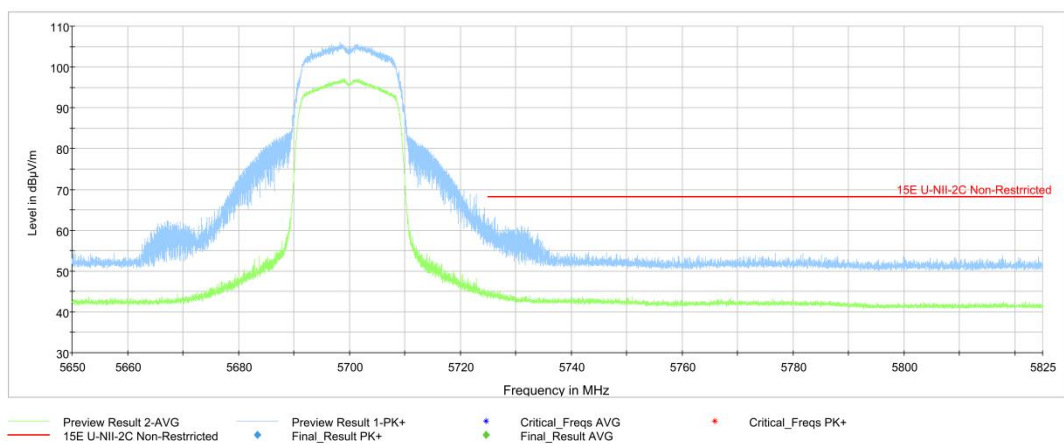


Fig.41 Band Edges (802.11n-HT20, 5700MHz)

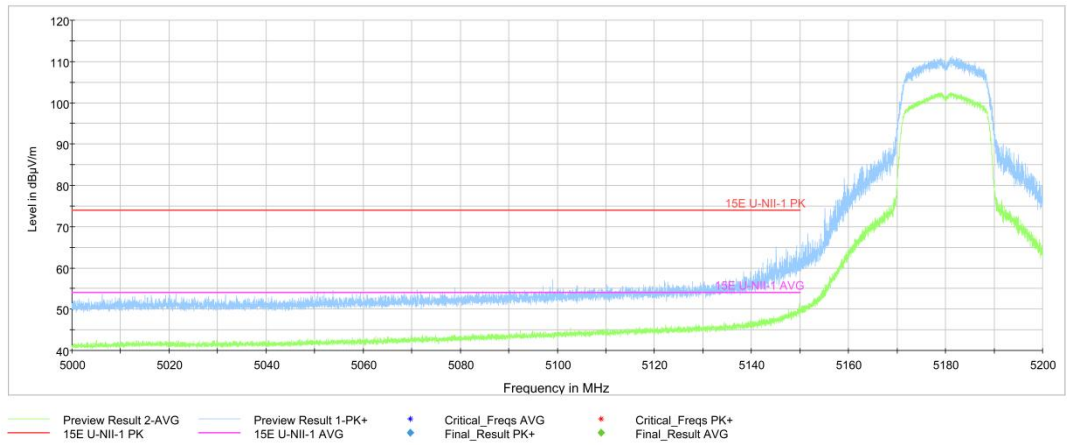


Fig.42 Band Edges (802.11ac-HT20, 5180MHz)

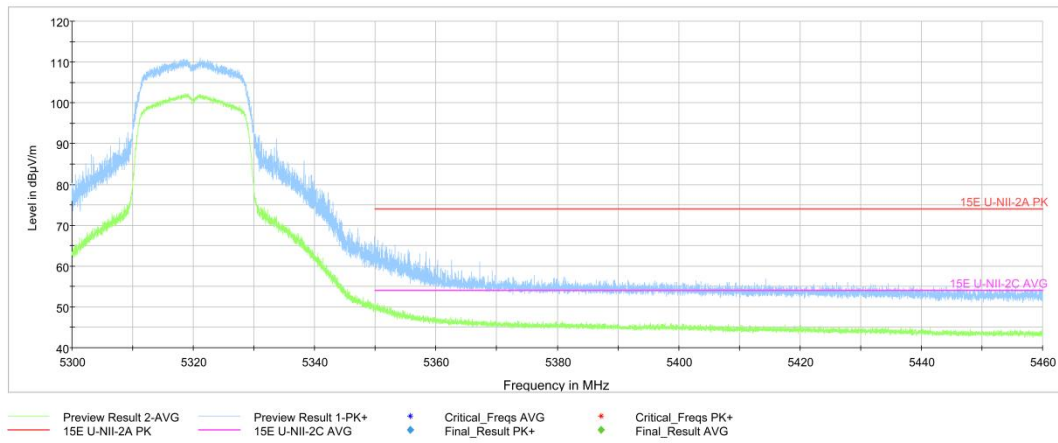


Fig.43 Band Edges (802.11ac-HT20, 5320MHz)

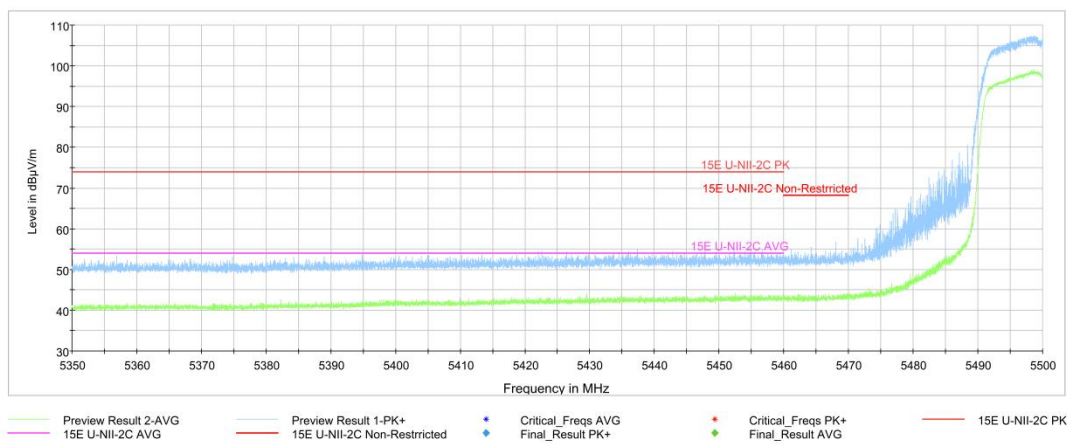


Fig.44 Band Edges (802.11ac-HT20, 5500MHz)

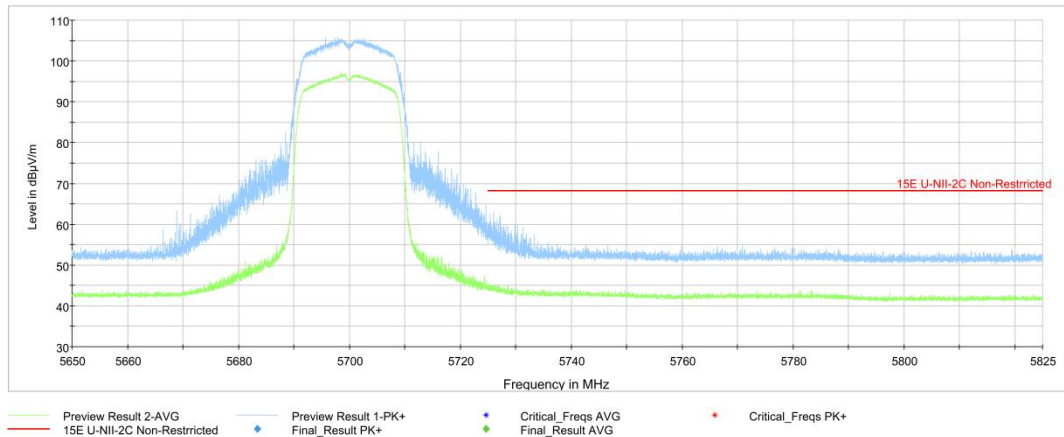


Fig.45 Band Edges (802.11ac-HT20, 5700MHz)

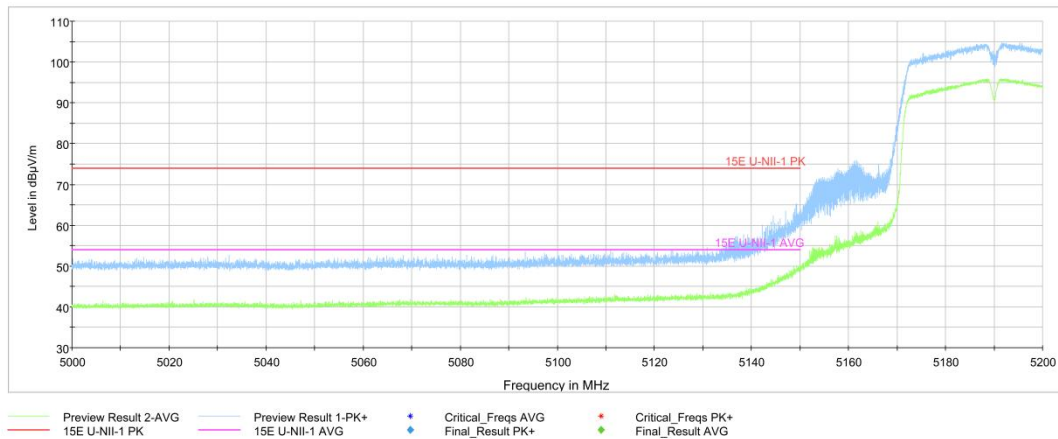


Fig.46 Band Edges (802.11n-HT40, 5190MHz)

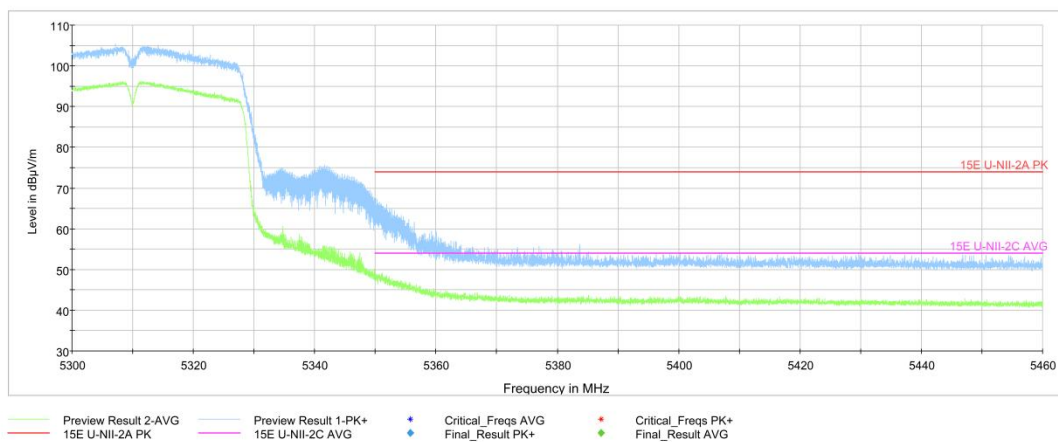


Fig.47 Band Edges (802.11n-HT40, 5310MHz)

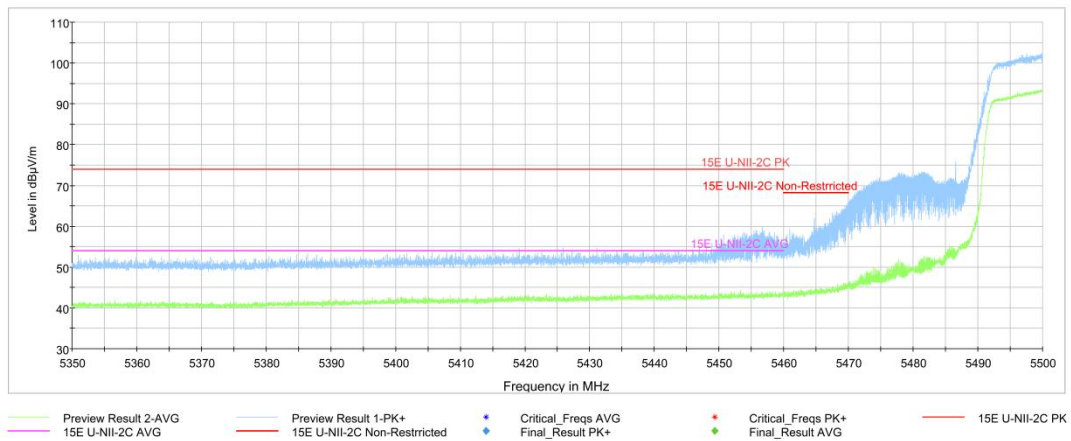


Fig.48 Band Edges (802.11n-HT40, 5510MHz)

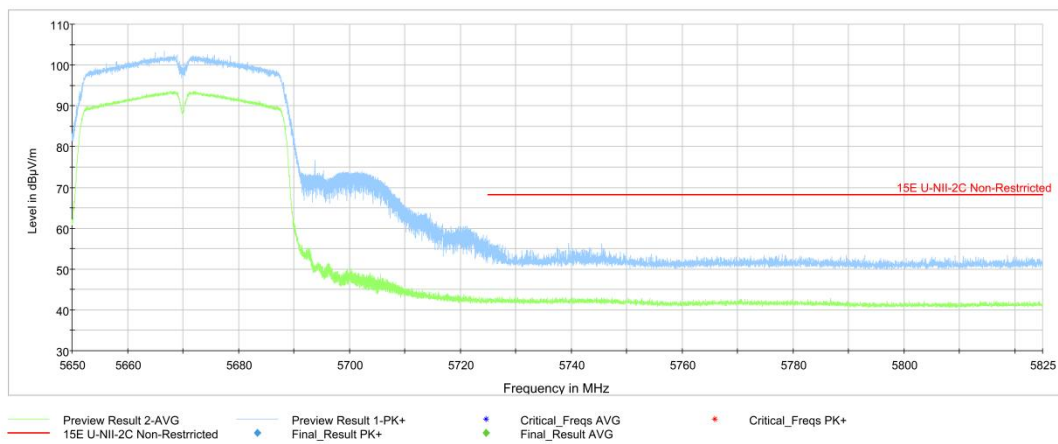


Fig.49 Band Edges (802.11n-HT40, 5670MHz)

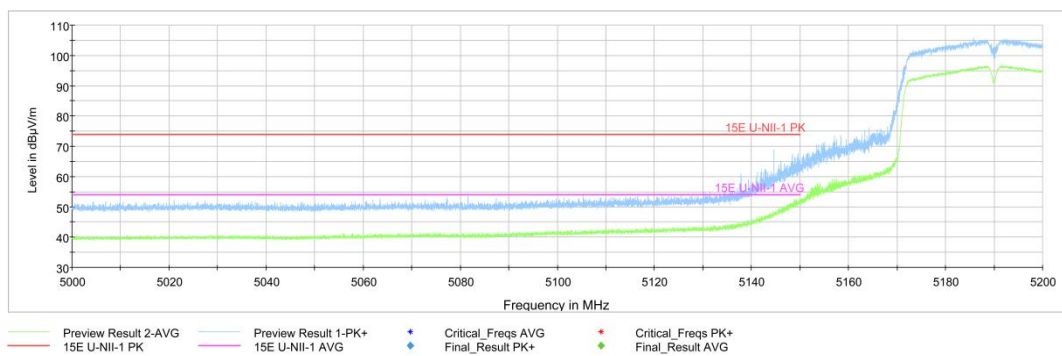


Fig.50 Band Edges (802.11ac-HT40, 5190MHz)

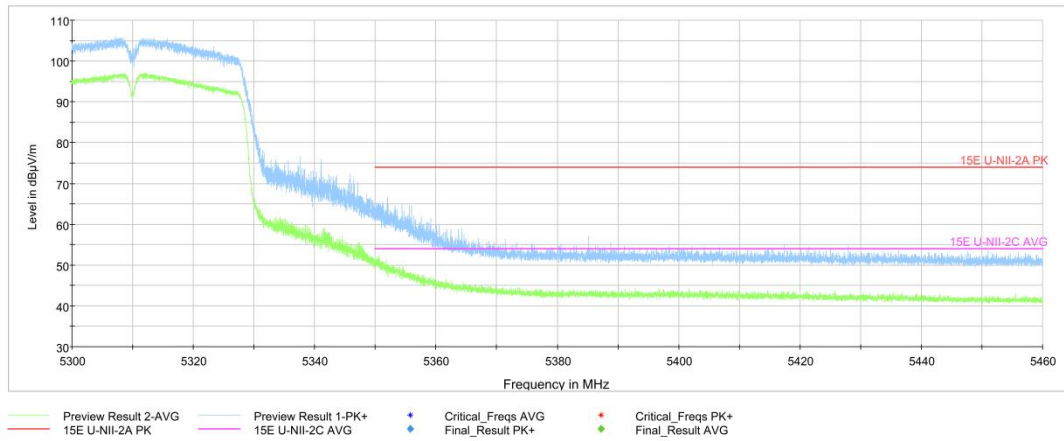


Fig.51 Band Edges (802.11ac-HT40, 5310MHz)

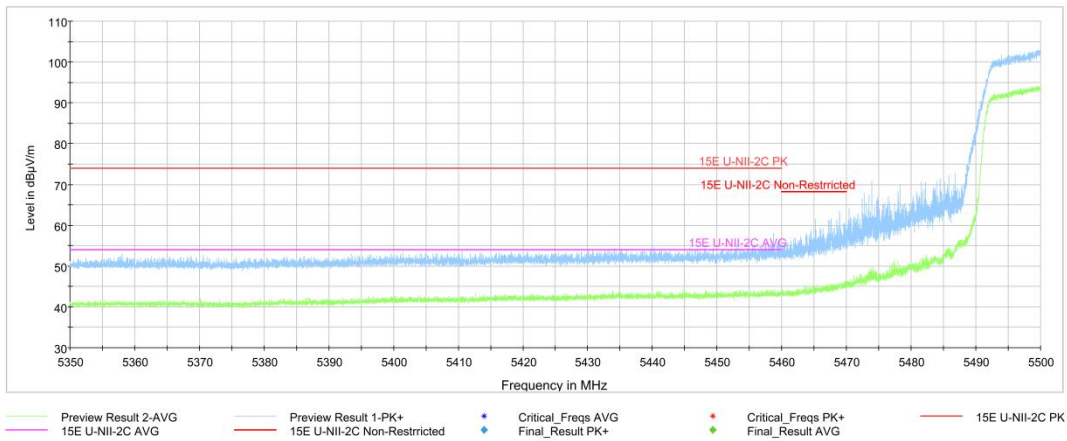


Fig.52 Band Edges (802.11ac-HT40, 5510MHz)

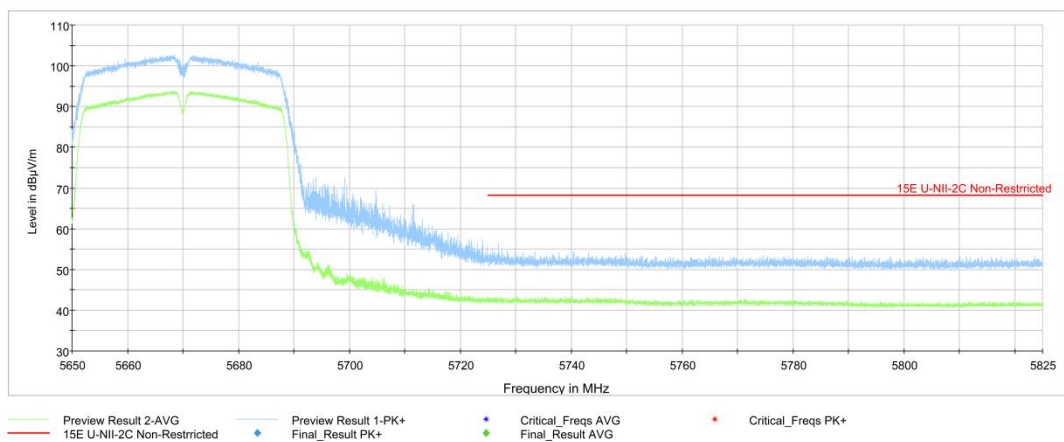


Fig.53 Band Edges (802.11ac-HT40, 5670MHz)

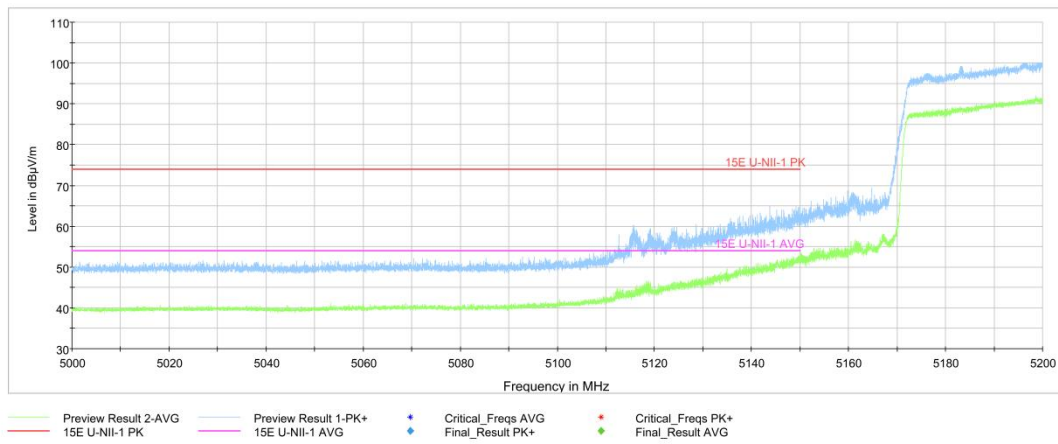


Fig.54 Band Edges (802.11ac-HT80, 5210MHz)

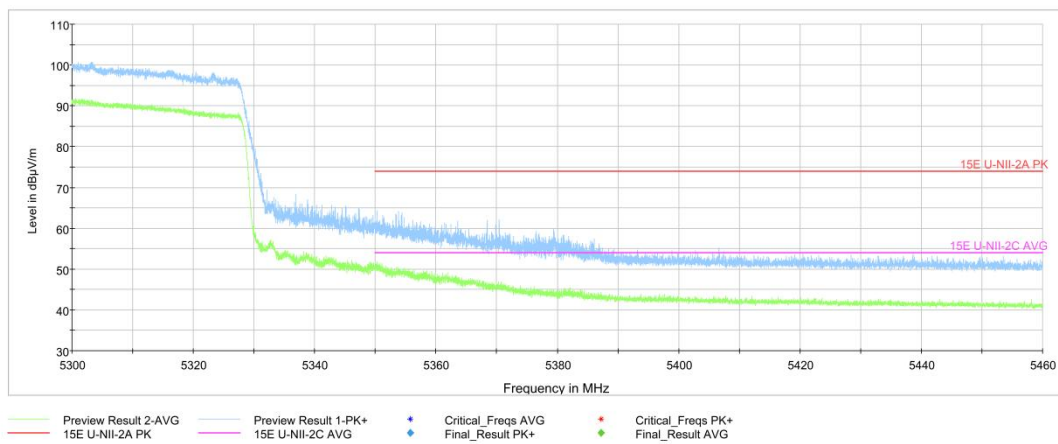


Fig.55 Band Edges (802.11ac-HT80, 5290MHz)

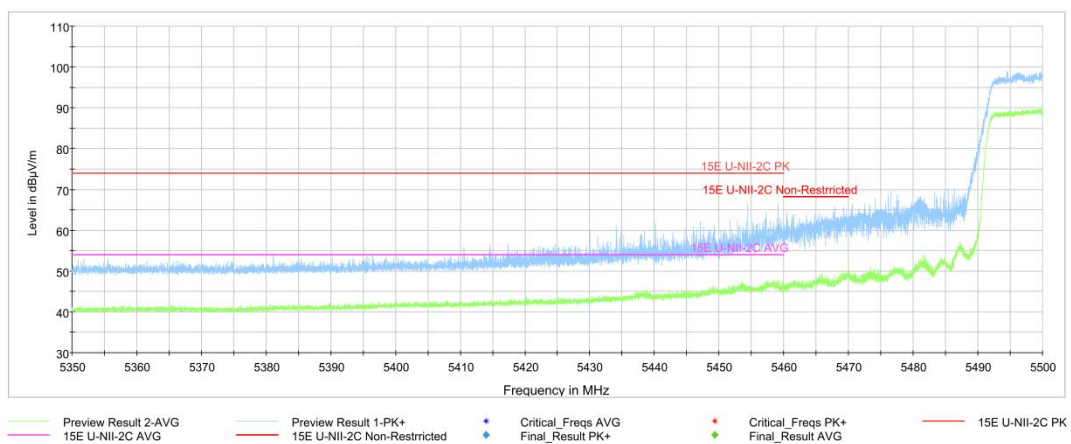


Fig.56 Band Edges (802.11ac-HT80, 5530MHz)

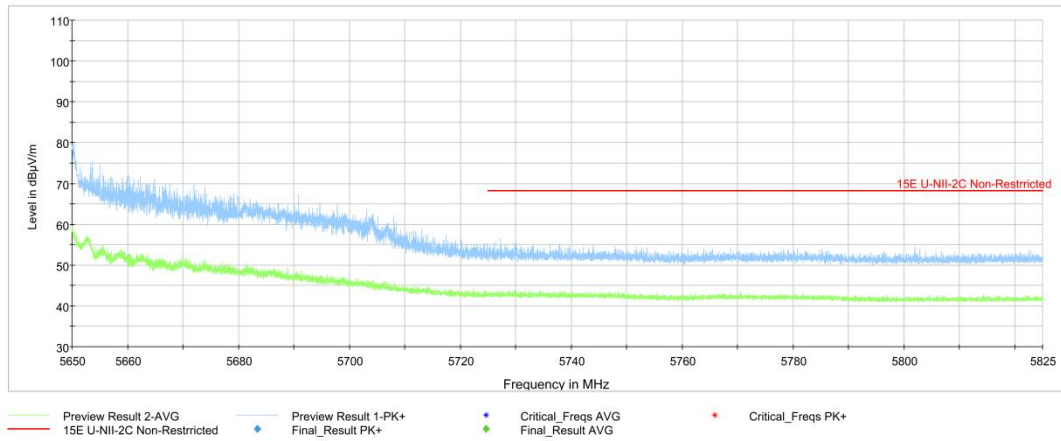


Fig.57 Band Edges (802.11ac-HT80, 5610MHz)

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

Measurement Results:

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:

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

Average
82.11a

Channel 36

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
17929.05	39.47	-25.50	46.66	18.31	54.00	14.53	V
17900.45	39.41	-25.50	46.66	18.25	54.00	14.59	V
13279.35	36.87	-29.67	39.55	26.99	54.00	17.13	V
13271.65	36.65	-29.67	39.55	26.77	54.00	17.35	H
5149.70	50.27	-27.61	33.67	44.21	54.00	3.73	H
5148.50	50.03	-27.61	33.67	43.97	54.00	3.97	H

Channel 40

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
17956.00	39.39	-25.50	46.66	18.23	54.00	14.61	H
17894.95	39.18	-25.50	46.66	18.02	54.00	14.82	V
14480.55	36.45	-28.59	42.46	22.58	54.00	17.55	V
13303.00	36.37	-29.49	39.71	26.15	54.00	17.63	H
10931.95	36.09	-32.82	38.70	30.21	54.00	17.91	H
10860.45	35.82	-32.33	38.59	29.56	54.00	18.18	V

Channel 48

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
17903.75	39.48	-25.50	46.66	18.32	54.00	14.52	H
17970.85	39.48	-25.50	46.66	18.32	54.00	14.52	V
14491.55	36.61	-28.59	42.46	22.74	54.00	17.39	H
14499.25	36.54	-28.59	42.46	22.67	54.00	17.46	H
10936.35	36.08	-32.82	38.70	30.20	54.00	17.92	H
10749.35	35.90	-32.77	38.49	30.18	54.00	18.10	H

Channel 52

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
17894.40	39.56	-25.50	46.66	18.40	54.00	14.44	H
17893.30	39.25	-25.50	46.66	18.09	54.00	14.75	V
13300.80	37.00	-29.49	39.71	26.78	54.00	17.00	V
14499.25	36.84	-28.59	42.46	22.97	54.00	17.16	H
10637.15	36.08	-32.76	38.38	30.46	54.00	17.92	V
11525.40	36.02	-32.26	38.84	29.45	54.00	17.98	V

Channel 56

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
17895.50	39.49	-25.50	46.66	18.33	54.00	14.51	V
17883.95	39.32	-25.50	46.66	18.16	54.00	14.68	V
13271.65	36.91	-29.67	39.55	27.03	54.00	17.09	H
13283.75	36.62	-29.67	39.55	26.74	54.00	17.38	H
10661.35	35.86	-32.76	38.38	30.24	54.00	18.14	V
10938.00	35.78	-32.82	38.70	29.90	54.00	18.22	H

Channel 64

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
17919.70	39.46	-25.50	46.66	18.30	54.00	14.54	H
17881.75	39.43	-25.50	46.66	18.27	54.00	14.57	H
14499.80	36.85	-28.59	42.46	22.98	54.00	17.15	V
14492.65	36.64	-28.59	42.46	22.77	54.00	17.36	V
5350.70	47.30	-27.43	34.01	40.72	54.00	6.70	H
5352.19	46.79	-27.43	34.01	40.21	54.00	7.21	H

Channel 100

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
17984.60	40.78	-25.50	46.66	19.62	54.00	13.22	V
17980.20	40.60	-25.50	46.66	19.44	54.00	13.40	V
13327.20	37.70	-29.49	39.71	27.48	54.00	16.30	H
13323.35	37.66	-29.49	39.71	27.44	54.00	16.34	H
5459.52	44.11	-27.18	34.17	37.12	54.00	9.89	H
5456.76	44.02	-27.18	34.17	37.03	54.00	9.98	H

Channel 120

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
17959.85	41.01	-25.50	46.66	19.85	54.00	12.99	H
17947.75	40.99	-25.50	46.66	19.83	54.00	13.01	H
14485.50	37.90	-28.59	42.46	24.03	54.00	16.10	V
14494.85	37.71	-28.59	42.46	23.84	54.00	16.29	H
11822.95	36.58	-31.85	39.05	29.38	54.00	17.42	V
11859.80	36.50	-31.85	39.05	29.30	54.00	17.50	H

Channel 140

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
17979.65	41.10	-25.50	46.66	19.94	54.00	12.90	H
17952.15	40.85	-25.50	46.66	19.69	54.00	13.15	H
13327.20	37.60	-29.49	39.71	27.38	54.00	16.40	H
14498.70	37.56	-28.59	42.46	23.69	54.00	16.44	V
11857.05	36.38	-31.85	39.05	29.18	54.00	17.62	H
11868.60	36.32	-31.85	39.05	29.12	54.00	17.68	V

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Channel 36

Frequency (MHz)	Meas. Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
17891.10	39.04	-25.50	46.66	17.88	54.00	14.96	V
17877.35	39.01	-25.50	46.66	17.85	54.00	14.99	H
14489.90	37.02	-28.59	42.46	23.15	54.00	16.98	V
13347.55	36.24	-29.49	39.71	26.02	54.00	17.76	V
5149.76	51.33	-27.61	33.67	45.27	54.00	2.67	H
5149.90	50.96	-27.61	33.67	44.90	54.00	3.04	H

Channel 40

Frequency (MHz)	Meas. Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
17940.05	39.45	-25.50	46.66	18.29	54.00	14.55	H
17909.80	39.31	-25.50	46.66	18.15	54.00	14.69	V
13292.00	36.64	-29.49	39.71	26.42	54.00	17.36	V
14492.65	36.59	-28.59	42.46	22.72	54.00	17.41	V
11467.10	36.18	-32.26	38.84	29.61	54.00	17.82	H
10873.10	35.92	-32.33	38.59	29.66	54.00	18.08	V

Channel 48

Frequency (MHz)	Meas. Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
17798.70	39.24	-25.50	46.66	18.08	54.00	14.76	V
17791.00	39.17	-25.50	46.66	18.01	54.00	14.83	H
13298.05	36.59	-29.49	39.71	26.37	54.00	17.41	V
14497.60	36.40	-28.59	42.46	22.53	54.00	17.60	H
10751.55	36.06	-32.77	38.49	30.34	54.00	17.94	H
10637.15	35.93	-32.76	38.38	30.31	54.00	18.07	V

Channel 52

Frequency (MHz)	Meas. Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
17911.45	39.67	-25.50	46.66	18.51	54.00	14.33	H
17914.20	39.50	-25.50	46.66	18.34	54.00	14.50	V
13295.30	37.00	-29.49	39.71	26.78	54.00	17.00	H
14488.80	36.77	-28.59	42.46	22.90	54.00	17.23	H
10863.75	36.41	-32.33	38.59	30.15	54.00	17.59	H
11940.65	36.39	-31.48	39.09	28.78	54.00	17.61	H

Channel 56

Frequency (MHz)	Meas. Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
17897.70	39.48	-25.50	46.66	18.32	54.00	14.52	H
17782.75	39.43	-25.50	46.66	18.27	54.00	14.57	H
13297.50	36.95	-29.49	39.71	26.73	54.00	17.05	V
13261.75	36.75	-29.67	39.55	26.87	54.00	17.25	V
10873.65	36.13	-32.33	38.59	29.87	54.00	17.87	V
10650.35	36.05	-32.76	38.38	30.43	54.00	17.95	V

Channel 64

Frequency (MHz)	Meas. Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
17894.95	39.49	-25.50	46.66	18.33	54.00	14.51	H
17908.15	39.35	-25.50	46.66	18.19	54.00	14.65	H
14489.90	36.80	-28.59	42.46	22.93	54.00	17.20	H
13290.90	36.74	-29.67	39.55	26.86	54.00	17.26	H
5350.00	49.00	-27.43	34.01	42.42	54.00	5.00	H
5350.61	48.92	-27.43	34.01	42.34	54.00	5.08	H

Channel 100

Frequency (MHz)	Meas. Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
17928.50	40.79	-25.50	46.66	19.63	54.00	13.21	H
17927.95	40.72	-25.50	46.66	19.56	54.00	13.28	H
13322.25	37.74	-29.49	39.71	27.52	54.00	16.26	V
14498.15	37.63	-28.59	42.46	23.76	54.00	16.37	H
5453.11	44.03	-27.18	34.17	37.04	54.00	9.97	H
5455.39	43.93	-27.18	34.17	36.94	54.00	10.07	H

Channel 120

Frequency (MHz)	Meas. Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
17803.10	41.04	-25.50	46.66	19.88	54.00	12.96	H
17936.20	40.97	-25.50	46.66	19.81	54.00	13.03	H
13298.05	37.84	-29.49	39.71	27.62	54.00	16.16	H
13261.75	37.74	-29.67	39.55	27.86	54.00	16.26	V
11882.90	36.45	-31.85	39.05	29.25	54.00	17.55	H
10861.55	36.41	-32.33	38.59	30.15	54.00	17.59	V

Channel 140

Frequency (MHz)	Meas. Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
17953.80	41.03	-25.50	46.66	19.87	54.00	12.97	H
17962.05	40.81	-25.50	46.66	19.65	54.00	13.19	H
14493.75	37.66	-28.59	42.46	23.79	54.00	16.34	H
13307.40	37.59	-29.49	39.71	27.37	54.00	16.41	H
11879.05	36.40	-31.85	39.05	29.20	54.00	17.60	V
11793.25	36.37	-31.99	38.98	29.38	54.00	17.63	V

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Channel 38

Frequency (MHz)	Meas. Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
17905.40	39.53	-25.50	46.66	18.37	54.00	14.47	H
17872.95	39.46	-25.50	46.66	18.30	54.00	14.54	V
14497.05	36.63	-28.59	42.46	22.76	54.00	17.37	V
13273.85	36.59	-29.67	39.55	26.71	54.00	17.41	V
5150.00	50.19	-27.61	33.67	44.13	54.00	3.81	H
5149.32	50.13	-27.61	33.67	44.07	54.00	3.87	H

Channel 46

Frequency (MHz)	Meas. Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
17902.10	39.61	-25.50	46.66	18.45	54.00	14.39	H
17899.35	39.55	-25.50	46.66	18.39	54.00	14.45	H
13274.95	36.99	-29.67	39.55	27.11	54.00	17.01	V
14478.35	36.96	-28.59	42.46	23.09	54.00	17.04	V
10868.70	35.95	-32.33	38.59	29.69	54.00	18.05	V
10961.65	35.89	-32.82	38.70	30.01	54.00	18.11	H

Channel 54

Frequency (MHz)	Meas. Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
17948.85	39.86	-25.50	46.66	18.70	54.00	14.14	V
17930.70	39.42	-25.50	46.66	18.26	54.00	14.58	H
13285.95	36.64	-29.67	39.55	26.76	54.00	17.36	V
13266.15	36.58	-29.67	39.55	26.70	54.00	17.42	V
11869.15	35.91	-31.85	39.05	28.71	54.00	18.09	H
11541.35	35.86	-32.26	38.84	29.29	54.00	18.14	V

Channel 62

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
17785.50	39.54	-25.50	46.66	18.38	54.00	14.46	V
17893.30	39.30	-25.50	46.66	18.14	54.00	14.70	V
13276.60	36.77	-29.67	39.55	26.89	54.00	17.23	H
13293.65	36.77	-29.49	39.71	26.55	54.00	17.23	H
5350.54	48.88	-27.43	34.01	42.30	54.00	5.12	H
5350.13	48.86	-27.43	34.01	42.28	54.00	5.14	H

Channel 102

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
17967.55	41.09	-25.50	46.66	19.93	54.00	12.91	V
17916.40	40.92	-25.50	46.66	19.76	54.00	13.08	V
14482.20	38.04	-28.59	42.46	24.17	54.00	15.96	H
13336.00	37.67	-29.49	39.71	27.45	54.00	16.33	H
5453.32	44.41	-27.18	34.17	37.42	54.00	9.59	H
5458.35	44.12	-27.18	34.17	37.13	54.00	9.88	H

Channel 118

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
17974.70	41.18	-25.50	46.66	20.02	54.00	12.82	H
17898.25	40.99	-25.50	46.66	19.83	54.00	13.01	H
13333.80	37.60	-29.49	39.71	27.38	54.00	16.40	V
13307.95	37.54	-29.49	39.71	27.32	54.00	16.46	H
11872.45	36.49	-31.85	39.05	29.29	54.00	17.51	V
11846.05	36.43	-31.85	39.05	29.23	54.00	17.57	V

Channel 134

Frequency (MHz)	Meas. Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
17914.20	40.85	-25.50	46.66	19.69	54.00	13.15	V
17948.30	40.68	-25.50	46.66	19.52	54.00	13.32	H
13329.95	37.69	-29.49	39.71	27.47	54.00	16.31	V
13324.45	37.59	-29.49	39.71	27.37	54.00	16.41	H
11793.25	36.65	-31.99	38.98	29.66	54.00	17.35	V
11868.05	36.55	-31.85	39.05	29.35	54.00	17.45	V

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Channel 36

Frequency (MHz)	Meas. Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
17903.75	39.58	-25.50	46.66	18.42	54.00	14.42	H
17903.20	38.86	-25.50	46.66	17.70	54.00	15.14	V
14488.25	36.58	-28.59	42.46	22.71	54.00	17.42	H
14478.90	36.56	-28.59	42.46	22.69	54.00	17.44	H
5149.94	51.34	-27.61	33.67	45.28	54.00	2.66	H
5149.82	50.40	-27.61	33.67	44.34	54.00	3.60	H

Channel 40

Frequency (MHz)	Meas. Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
17923.00	39.22	-25.50	46.66	18.06	54.00	14.78	V
17909.25	39.16	-25.50	46.66	18.00	54.00	14.84	V
13294.75	36.70	-29.49	39.71	26.48	54.00	17.30	H
13283.20	36.40	-29.67	39.55	26.52	54.00	17.60	V
11457.20	36.36	-32.26	38.84	29.79	54.00	17.64	V
11602.95	35.78	-32.31	38.91	29.19	54.00	18.22	V

Channel 48

Frequency (MHz)	Meas. Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
17882.30	39.33	-25.50	46.66	18.17	54.00	14.67	V
17916.95	39.30	-25.50	46.66	18.14	54.00	14.70	V
13272.20	36.71	-29.67	39.55	26.83	54.00	17.29	H
13298.05	36.59	-29.49	39.71	26.37	54.00	17.41	H
11398.90	35.98	-32.42	38.79	29.61	54.00	18.02	H
10859.35	35.86	-32.33	38.59	29.60	54.00	18.14	V

Channel 52

Frequency (MHz)	Meas. Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
17904.30	40.06	-25.50	46.66	18.90	54.00	13.94	H
17905.95	39.92	-25.50	46.66	18.76	54.00	14.08	H
13272.75	36.97	-29.67	39.55	27.09	54.00	17.03	V
13290.90	36.92	-29.67	39.55	27.04	54.00	17.08	V
10964.95	36.39	-32.82	38.70	30.51	54.00	17.61	V
10956.15	35.97	-32.82	38.70	30.09	54.00	18.03	V

Channel 56

Frequency (MHz)	Meas. Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
17920.25	39.76	-25.50	46.66	18.60	54.00	14.24	H
17880.65	39.54	-25.50	46.66	18.38	54.00	14.46	V
14498.70	36.76	-28.59	42.46	22.89	54.00	17.24	H
13294.20	36.66	-29.49	39.71	26.44	54.00	17.34	H
10753.75	36.05	-32.77	38.49	30.33	54.00	17.95	V
11411.00	35.77	-32.42	38.79	29.40	54.00	18.23	H

Channel 64

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
17899.90	40.08	-25.50	46.66	18.92	54.00	13.92	V
17892.20	39.69	-25.50	46.66	18.53	54.00	14.31	H
14483.85	36.76	-28.59	42.46	22.89	54.00	17.24	H
14495.95	36.63	-28.59	42.46	22.76	54.00	17.37	H
5350.38	51.01	-27.43	34.01	44.43	54.00	2.99	H
5350.02	50.71	-27.43	34.01	44.13	54.00	3.29	H

Channel 100

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
17993.95	40.95	-25.50	46.66	19.79	54.00	13.05	V
17924.10	40.79	-25.50	46.66	19.63	54.00	13.21	H
14499.80	37.86	-28.59	42.46	23.99	54.00	16.14	V
13333.80	37.75	-29.49	39.71	27.53	54.00	16.25	H
5452.54	44.20	-27.18	34.17	37.21	54.00	9.80	H
5429.49	44.04	-27.18	34.17	37.05	54.00	9.96	H

Channel 120

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
17950.50	40.86	-25.50	46.66	19.70	54.00	13.14	H
17917.50	40.73	-25.50	46.66	19.57	54.00	13.27	H
13309.05	37.74	-29.49	39.71	27.52	54.00	16.26	V
13334.35	37.68	-29.49	39.71	27.46	54.00	16.32	V
11889.50	36.44	-31.85	39.05	29.24	54.00	17.56	H
10858.80	36.41	-32.33	38.59	30.15	54.00	17.59	V

Channel 140

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
17997.25	40.98	-25.50	46.66	19.82	54.00	13.02	V
17979.10	40.77	-25.50	46.66	19.61	54.00	13.23	V
14493.75	37.96	-28.59	42.46	24.09	54.00	16.04	H
14494.85	37.82	-28.59	42.46	23.95	54.00	16.18	V
11870.80	36.45	-31.85	39.05	29.25	54.00	17.55	H
11885.10	36.42	-31.85	39.05	29.22	54.00	17.58	H

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Channel 38

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
17972.50	39.43	-25.50	46.66	18.27	54.00	14.57	V
17913.10	39.41	-25.50	46.66	18.25	54.00	14.59	H
13291.45	36.89	-29.49	39.71	26.67	54.00	17.11	V
13275.50	36.72	-29.67	39.55	26.84	54.00	17.28	H
5149.98	53.06	-27.61	33.67	47.00	54.00	0.94	H
5149.26	52.68	-27.61	33.67	46.62	54.00	1.32	H

Channel 46

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
17909.25	39.44	-25.50	46.66	18.28	54.00	14.56	V
17900.45	39.40	-25.50	46.66	18.24	54.00	14.60	H
13261.75	37.08	-29.67	39.55	27.20	54.00	16.92	H
13257.35	36.50	-29.67	39.55	26.62	54.00	17.50	H
10857.70	35.98	-32.33	38.59	29.72	54.00	18.02	H
11935.70	35.84	-31.48	39.09	28.23	54.00	18.16	V

Channel 54

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
17896.05	39.71	-25.50	46.66	18.55	54.00	14.29	H
17920.80	39.52	-25.50	46.66	18.36	54.00	14.48	V
13284.30	36.81	-29.67	39.55	26.93	54.00	17.19	V
13295.30	36.68	-29.49	39.71	26.46	54.00	17.32	H
11390.10	36.31	-32.42	38.79	29.94	54.00	17.69	H
10881.35	35.90	-32.33	38.59	29.64	54.00	18.10	V

Channel 62

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
17890.55	39.97	-25.50	46.66	18.81	54.00	14.03	H
17905.40	39.71	-25.50	46.66	18.55	54.00	14.29	H
14497.05	36.88	-28.59	42.46	23.01	54.00	17.12	V
14498.70	36.87	-28.59	42.46	23.00	54.00	17.13	V
5350.59	52.41	-27.43	34.01	45.83	54.00	1.59	H
5350.32	51.93	-27.43	34.01	45.35	54.00	2.07	H

Channel 102

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
17936.20	40.73	-25.50	46.66	19.57	54.00	13.27	V
17992.30	40.69	-25.50	46.66	19.53	54.00	13.31	V
13323.90	37.72	-29.49	39.71	27.50	54.00	16.28	V
13255.70	37.54	-29.67	39.55	27.66	54.00	16.46	H
5459.05	44.16	-27.18	34.17	37.17	54.00	9.84	H
5448.22	44.14	-27.18	34.17	37.15	54.00	9.86	H

Channel 118

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
17936.75	41.11	-25.50	46.66	19.95	54.00	12.89	V
17935.10	40.89	-25.50	46.66	19.73	54.00	13.11	H
13323.90	37.51	-29.49	39.71	27.29	54.00	16.49	V
13346.45	37.47	-29.49	39.71	27.25	54.00	16.53	V
11845.50	36.39	-31.85	39.05	29.19	54.00	17.61	V
11894.45	36.30	-31.85	39.05	29.10	54.00	17.70	H

Channel 134

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
17951.60	40.83	-25.50	46.66	19.67	54.00	13.17	V
17913.65	40.82	-25.50	46.66	19.66	54.00	13.18	H
13334.35	37.85	-29.49	39.71	27.63	54.00	16.15	V
13343.70	37.77	-29.49	39.71	27.55	54.00	16.23	V
11854.85	36.46	-31.85	39.05	29.26	54.00	17.54	V
11781.70	36.41	-31.99	38.98	29.42	54.00	17.59	V

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Channel 42

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
17947.20	40.80	-25.50	46.66	19.64	54.00	13.20	V
17957.10	40.72	-25.50	46.66	19.56	54.00	13.28	H
13323.35	37.67	-29.49	39.71	27.45	54.00	16.33	V
14485.50	37.62	-28.59	42.46	23.75	54.00	16.38	V
5149.90	52.83	-27.61	33.67	46.77	54.00	1.17	H
5149.60	52.68	-27.61	33.67	46.62	54.00	1.32	H

Channel 58

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
17945.00	40.99	-25.50	46.66	19.83	54.00	13.01	H
17972.50	40.81	-25.50	46.66	19.65	54.00	13.19	V
13295.85	37.60	-29.49	39.71	27.38	54.00	16.40	V
13325.55	37.59	-29.49	39.71	27.37	54.00	16.41	H
5350.30	51.81	-27.43	34.01	45.23	54.00	2.19	H
5350.78	51.46	-27.43	34.01	44.88	54.00	2.54	H

Channel 106

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
17912.00	40.82	-25.50	46.66	19.66	54.00	13.18	H
17946.10	40.69	-25.50	46.66	19.53	54.00	13.31	V
13333.80	37.60	-29.49	39.71	27.38	54.00	16.40	H
13259.00	37.56	-29.67	39.55	27.68	54.00	16.44	V
5458.63	47.82	-27.18	34.17	40.83	54.00	6.18	H
5458.56	47.68	-27.18	34.17	40.69	54.00	6.32	H

Channel 122

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
17964.80	41.06	-25.50	46.66	19.90	54.00	12.94	H
17958.20	40.95	-25.50	46.66	19.79	54.00	13.05	V
13279.35	38.03	-29.67	39.55	28.15	54.00	15.97	V
13367.90	37.65	-29.49	39.71	27.43	54.00	16.35	H
11817.45	36.30	-31.85	39.05	29.10	54.00	17.70	V
11888.40	36.29	-31.85	39.05	29.09	54.00	17.71	V

Peak
82.11a

Channel 36

Frequency (MHz)	Meas. Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
17451.65	50.51	-26.85	45.25	32.11	68.20	17.69	V
17541.85	50.35	-26.85	45.25	31.95	68.20	17.85	V
14677.45	49.11	-27.29	41.90	34.50	68.20	19.09	H
13895.90	48.34	-29.51	41.30	36.55	68.20	19.86	H
5149.90	64.65	-27.61	33.67	58.59	74.00	9.35	H
5150.00	63.91	-27.61	33.67	57.85	74.00	10.09	H

Channel 40

Frequency (MHz)	Meas. Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
17634.80	50.12	-25.74	45.95	29.91	68.20	18.08	H
16815.85	49.48	-26.62	41.49	34.61	68.20	18.72	H
13943.20	47.87	-29.51	41.30	36.08	68.20	20.33	H
13816.70	47.83	-29.10	40.86	36.06	68.20	20.37	H
10976.50	46.80	-32.82	38.70	40.92	74.00	27.20	H
10607.45	46.35	-32.76	38.38	40.73	74.00	27.65	V

Channel 48

Frequency (MHz)	Meas. Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
16774.05	50.99	-26.62	41.49	36.12	68.20	17.21	V
17223.95	50.66	-25.95	44.35	32.25	68.20	17.54	V
13913.50	48.93	-29.51	41.30	37.14	68.20	19.27	V
14555.90	48.07	-27.29	41.90	33.46	68.20	20.13	H
10081.10	47.15	-33.45	38.13	42.47	68.20	21.05	H
11439.05	46.60	-32.42	38.79	40.23	74.00	27.40	H

Channel 52

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
17626.55	50.60	-25.74	45.95	30.39	68.20	17.60	V
17457.15	50.41	-26.85	45.25	32.01	68.20	17.79	V
14553.70	48.29	-27.29	41.90	33.68	68.20	19.91	H
13716.60	48.22	-29.10	40.86	36.45	68.20	19.98	V
10581.05	47.01	-32.76	38.38	41.39	68.20	21.19	V
10857.15	46.86	-32.33	38.59	40.60	74.00	27.14	H

Channel 56

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
17234.40	50.40	-25.95	44.35	31.99	68.20	17.80	V
17694.75	50.35	-25.74	45.95	30.14	68.20	17.85	H
14703.30	48.35	-28.32	41.35	35.33	68.20	19.85	H
14180.25	48.01	-28.99	42.00	34.99	68.20	20.19	V
11529.80	47.07	-32.26	38.84	40.50	74.00	26.93	V
10459.50	46.95	-33.22	38.19	41.98	68.20	21.25	H

Channel 64

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
17448.90	50.33	-26.85	45.25	31.93	68.20	17.87	V
16948.40	50.05	-26.32	42.36	34.00	68.20	18.15	H
13928.90	48.47	-29.51	41.30	36.68	68.20	19.73	H
13911.85	47.87	-29.51	41.30	36.08	68.20	20.33	H
5352.21	62.10	-27.43	34.01	55.52	74.00	11.90	H
5350.74	60.35	-27.43	34.01	53.77	74.00	13.65	H

Channel 100

Frequency (MHz)	Meas. Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
17452.75	52.77	-26.85	45.25	34.37	68.20	15.43	H
17321.30	52.20	-25.95	44.35	33.79	68.20	16.00	H
13914.05	49.67	-29.51	41.30	37.88	68.20	18.53	V
13787.55	49.59	-29.10	40.86	37.82	68.20	18.61	V
5450.89	54.94	-27.18	34.17	47.95	74.00	19.06	H
5468.20	55.65	-27.18	34.17	48.66	68.20	12.55	H

Channel 120

Frequency (MHz)	Meas. Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
17912.00	53.01	-25.50	46.66	31.85	74.00	20.99	H
17045.20	52.16	-26.60	43.36	35.40	68.20	16.04	V
13684.15	49.83	-29.50	40.43	38.90	68.20	18.37	V
13839.80	49.75	-29.51	41.30	37.96	68.20	18.45	H
11890.05	47.04	-31.85	39.05	39.84	74.00	26.96	H
11402.20	46.80	-32.42	38.79	40.43	74.00	27.20	H

Channel 140

Frequency (MHz)	Meas. Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
17231.65	52.50	-25.95	44.35	34.09	68.20	15.70	H
17083.70	52.04	-26.60	43.36	35.28	68.20	16.16	V
14714.85	49.80	-28.32	41.35	36.78	68.20	18.40	H
13734.20	49.77	-29.10	40.86	38.00	68.20	18.43	H
5727.23	63.59	-27.07	34.31	56.35	68.20	4.61	H
5725.46	62.66	-27.07	34.31	55.42	68.20	5.54	H

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Channel 36

Frequency (MHz)	Meas. Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
17449.45	51.10	-26.85	45.25	32.70	68.20	17.10	H
17882.85	49.93	-25.50	46.66	28.77	74.00	24.07	H
14629.60	47.80	-27.29	41.90	33.19	68.20	20.40	V
13914.60	47.71	-29.51	41.30	35.92	68.20	20.49	H
5148.94	64.78	-27.61	33.67	58.72	74.00	9.22	H
5149.70	64.37	-27.61	33.67	58.31	74.00	9.63	H

Channel 40

Frequency (MHz)	Meas. Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
16811.45	50.04	-26.62	41.49	35.17	68.20	18.16	H
16775.70	49.83	-26.62	41.49	34.96	68.20	18.37	H
14590.55	48.40	-27.29	41.90	33.79	68.20	19.80	H
14591.65	48.36	-27.29	41.90	33.75	68.20	19.84	H
11934.60	46.86	-31.48	39.09	39.25	74.00	27.14	V
10866.50	46.57	-32.33	38.59	40.31	74.00	27.43	V

Channel 48

Frequency (MHz)	Meas. Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
17447.80	50.03	-26.85	45.25	31.63	68.20	18.17	V
16851.05	50.01	-26.62	41.49	35.14	68.20	18.19	H
14605.95	48.88	-27.29	41.90	34.27	68.20	19.32	H
14533.35	48.23	-28.59	42.46	34.36	68.20	19.97	H
10629.45	46.48	-32.76	38.38	40.86	74.00	27.52	V
7287.65	46.41	-35.00	36.55	44.86	74.00	27.59	H

Channel 52

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
17918.05	50.73	-25.50	46.66	29.57	74.00	23.27	V
17458.25	50.70	-26.85	45.25	32.30	68.20	17.50	H
14609.25	49.05	-27.29	41.90	34.44	68.20	19.15	V
14722.55	47.81	-28.32	41.35	34.79	68.20	20.39	H
10881.35	47.63	-32.33	38.59	41.37	74.00	26.37	H
10896.20	46.99	-32.82	38.70	41.11	74.00	27.01	V

Channel 56

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
17156.30	50.97	-26.60	43.36	34.21	68.20	17.23	H
16978.65	50.35	-26.32	42.36	34.30	68.20	17.85	H
14683.50	48.60	-28.32	41.35	35.58	68.20	19.60	H
14621.90	48.23	-27.29	41.90	33.62	68.20	19.97	V
10874.20	47.08	-32.33	38.59	40.82	74.00	26.92	V
10641.55	46.47	-32.76	38.38	40.85	74.00	27.53	H

Channel 64

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
16852.70	51.02	-26.62	41.49	36.15	68.20	17.18	H
17468.70	50.65	-26.85	45.25	32.25	68.20	17.55	V
13917.90	48.66	-29.51	41.30	36.87	68.20	19.54	V
13945.40	48.40	-29.51	41.30	36.61	68.20	19.80	H
5351.33	66.36	-27.43	34.01	59.78	74.00	7.64	H
5358.90	64.71	-27.43	34.01	58.13	74.00	9.29	H

Channel 100

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
16977.55	53.24	-26.32	42.36	37.19	68.20	14.96	H
17139.80	52.13	-26.60	43.36	35.37	68.20	16.07	H
14504.75	49.58	-28.59	42.46	35.71	68.20	18.62	H
14580.65	49.54	-27.29	41.90	34.93	68.20	18.66	V
5448.22	55.12	-27.18	34.17	48.13	74.00	18.88	H
5469.13	55.80	-27.18	34.17	48.81	68.20	12.40	H

Channel 120

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
17849.85	51.85	-25.50	46.66	30.69	74.00	22.15	V
17313.05	51.79	-25.95	44.35	33.38	68.20	16.41	V
14675.80	49.72	-27.29	41.90	35.11	68.20	18.48	H
13815.05	49.48	-29.10	40.86	37.71	68.20	18.72	V
11561.70	47.90	-32.26	38.84	41.33	74.00	26.10	V
11742.10	47.22	-31.99	38.98	40.23	74.00	26.78	V

Channel 140

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
17912.55	52.56	-25.50	46.66	31.40	74.00	21.44	H
17555.60	52.08	-26.85	45.25	33.68	68.20	16.12	H
13656.65	50.72	-29.50	40.43	39.79	68.20	17.48	V
13752.35	49.42	-29.10	40.86	37.65	68.20	18.78	H
5726.30	63.37	-27.07	34.31	56.13	68.20	4.83	H
5725.01	63.08	-27.07	34.31	55.84	68.20	5.12	H

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Channel 38

Frequency (MHz)	Meas. Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
17458.25	50.61	-26.85	45.25	32.21	68.20	17.59	V
16860.95	50.52	-26.62	41.49	35.65	68.20	17.68	H
14689.55	48.67	-28.32	41.35	35.65	68.20	19.53	H
13939.35	48.63	-29.51	41.30	36.84	68.20	19.57	V
5149.34	65.43	-27.61	33.67	59.37	74.00	8.57	H
5149.24	65.19	-27.61	33.67	59.13	74.00	8.81	H

Channel 46

Frequency (MHz)	Meas. Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
17648.55	50.61	-25.74	45.95	30.40	68.20	17.59	V
17627.10	50.35	-25.74	45.95	30.14	68.20	17.85	H
14596.60	49.05	-27.29	41.90	34.44	68.20	19.15	V
14669.75	48.49	-27.29	41.90	33.88	68.20	19.71	H
11532.55	46.59	-32.26	38.84	40.02	74.00	27.41	H
10486.45	46.31	-32.99	38.27	41.02	68.20	21.89	H

Channel 54

Frequency (MHz)	Meas. Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
17446.70	51.30	-26.85	45.25	32.90	68.20	16.90	H
17336.70	51.00	-25.95	44.35	32.59	68.20	17.20	H
13748.50	48.37	-29.10	40.86	36.60	68.20	19.83	V
13817.25	48.16	-29.10	40.86	36.39	68.20	20.04	H
9000.35	47.15	-33.28	38.19	42.24	74.00	26.85	H
10564.55	46.86	-32.99	38.27	41.57	68.20	21.34	H

Channel 62

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
17434.05	50.64	-26.85	45.25	32.24	68.20	17.56	V
17051.80	50.43	-26.60	43.36	33.67	68.20	17.77	V
13905.80	48.86	-29.51	41.30	37.07	68.20	19.34	H
13915.15	48.77	-29.51	41.30	36.98	68.20	19.43	H
5350.08	67.58	-27.43	34.01	61.00	74.00	6.42	H
5350.30	67.25	-27.43	34.01	60.67	74.00	6.75	H

Channel 102

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
17947.75	52.14	-25.50	46.66	30.98	74.00	21.86	H
17343.85	51.81	-25.95	44.35	33.40	68.20	16.39	V
13666.55	49.81	-29.50	40.43	38.88	68.20	18.39	H
14231.95	49.32	-28.99	42.00	36.30	68.20	18.88	H
5456.62	59.94	-27.18	34.17	52.95	74.00	14.06	H
5469.85	65.68	-27.18	34.17	58.69	68.20	2.52	H

Channel 118

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
17936.75	52.38	-25.50	46.66	31.22	74.00	21.62	H
17560.00	52.36	-26.85	45.25	33.96	68.20	15.84	H
13672.60	49.92	-29.50	40.43	38.99	68.20	18.28	V
13727.60	49.40	-29.10	40.86	37.63	68.20	18.80	V
11778.40	47.71	-31.99	38.98	40.72	74.00	26.29	H
11890.60	46.80	-31.85	39.05	39.60	74.00	27.20	H

Channel 134

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
16955.55	51.91	-26.32	42.36	35.86	68.20	16.29	V
17039.15	51.81	-26.32	42.36	35.76	68.20	16.39	V
13600.55	49.72	-29.50	40.43	38.79	68.20	18.48	H
13782.60	49.58	-29.10	40.86	37.81	68.20	18.62	V
5725.30	57.15	-27.07	34.31	49.91	68.20	11.05	H
5725.22	56.50	-27.07	34.31	49.26	68.20	11.70	H

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Channel 36

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
17337.25	50.27	-25.95	44.35	31.86	68.20	17.93	V
16838.95	49.80	-26.62	41.49	34.93	68.20	18.40	H
13583.50	48.65	-29.50	40.43	37.72	68.20	19.55	H
14578.45	48.11	-27.29	41.90	33.50	68.20	20.09	H
5149.28	65.43	-27.61	33.67	59.37	74.00	8.57	H
5145.12	65.05	-27.61	33.67	58.99	74.00	8.95	H

Channel 40

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
17228.90	50.51	-25.95	44.35	32.10	68.20	17.69	V
16947.85	50.29	-26.32	42.36	34.24	68.20	17.91	V
13831.00	49.27	-29.51	41.30	37.48	68.20	18.93	H
13943.20	48.09	-29.51	41.30	36.30	68.20	20.11	V
10636.05	46.82	-32.76	38.38	41.20	74.00	27.18	V
11880.15	46.45	-31.85	39.05	39.25	74.00	27.55	H

Channel 48

Frequency (MHz)	Meas. Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
16944.00	50.88	-26.32	42.36	34.83	68.20	17.32	V
16955.00	50.30	-26.32	42.36	34.25	68.20	17.90	V
13919.00	49.47	-29.51	41.30	37.68	68.20	18.73	H
14623.55	48.23	-27.29	41.90	33.62	68.20	19.97	V
10883.00	46.95	-32.33	38.59	40.69	74.00	27.05	H
11906.00	46.72	-31.85	39.05	39.52	74.00	27.28	V

Channel 52

Frequency (MHz)	Meas. Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
17610.05	50.84	-25.74	45.95	30.63	68.20	17.36	H
16945.65	50.81	-26.32	42.36	34.76	68.20	17.39	H
13780.95	49.58	-29.10	40.86	37.81	68.20	18.62	H
13785.90	48.56	-29.10	40.86	36.79	68.20	19.64	H
9996.40	46.64	-33.63	38.11	42.16	68.20	21.56	H
10733.40	46.26	-32.77	38.49	40.54	74.00	27.74	V

Channel 56

Frequency (MHz)	Meas. Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
16977.00	51.22	-26.32	42.36	35.17	68.20	16.98	H
17602.35	50.08	-25.74	45.95	29.87	68.20	18.12	H
13899.75	48.11	-29.51	41.30	36.32	68.20	20.09	H
13940.45	48.09	-29.51	41.30	36.30	68.20	20.11	V
10740.00	46.65	-32.77	38.49	40.93	74.00	27.35	H
10138.30	46.53	-33.45	38.13	41.85	68.20	21.67	H

Channel 64

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
17127.70	50.57	-26.60	43.36	33.81	68.20	17.63	H
17644.70	50.52	-25.74	45.95	30.31	68.20	17.68	H
14691.20	48.97	-28.32	41.35	35.95	68.20	19.23	H
13923.95	48.09	-29.51	41.30	36.30	68.20	20.11	H
5350.37	66.40	-27.43	34.01	59.82	74.00	7.60	H
5350.02	65.86	-27.43	34.01	59.28	74.00	8.14	H

Channel 100

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
17920.25	51.77	-25.50	46.66	30.61	74.00	22.23	H
16912.65	51.63	-26.32	42.36	35.58	68.20	16.57	V
14564.70	49.93	-27.29	41.90	35.32	68.20	18.27	V
13686.35	49.67	-29.50	40.43	38.74	68.20	18.53	V
5437.36	55.09	-27.18	34.17	48.10	74.00	18.91	H
5468.07	56.75	-27.18	34.17	49.76	68.20	11.45	V

Channel 120

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
17057.85	51.83	-26.60	43.36	35.07	68.20	16.37	V
17074.35	51.69	-26.60	43.36	34.93	68.20	16.51	H
13686.35	49.77	-29.50	40.43	38.84	68.20	18.43	H
13744.65	49.56	-29.10	40.86	37.79	68.20	18.64	V
11792.70	47.54	-31.99	38.98	40.55	74.00	26.46	H
11438.50	47.34	-32.42	38.79	40.97	74.00	26.66	H

Channel 140

Frequency (MHz)	Meas. Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
17060.60	51.89	-26.60	43.36	35.13	68.20	16.31	H
17206.90	51.88	-26.60	43.36	35.12	68.20	16.32	H
14591.65	50.04	-27.29	41.90	35.43	68.20	18.16	H
13672.60	49.44	-29.50	40.43	38.51	68.20	18.76	V
5726.02	62.91	-27.07	34.31	55.67	68.20	5.29	H
5725.37	62.49	-27.07	34.31	55.25	68.20	5.71	V

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Channel 38

Frequency (MHz)	Meas. Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
17764.60	50.29	-25.50	46.66	29.13	74.00	23.71	H
17036.40	50.17	-26.32	42.36	34.12	68.20	18.03	H
14581.20	49.40	-27.29	41.90	34.79	68.20	18.80	V
14691.75	48.12	-28.32	41.35	35.10	68.20	20.08	V
5144.68	68.83	-27.61	33.67	62.77	74.00	5.17	H
5149.54	67.72	-27.61	33.67	61.66	74.00	6.28	H

Channel 46

Frequency (MHz)	Meas. Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
16836.75	50.96	-26.62	41.49	36.09	68.20	17.24	H
16974.25	50.52	-26.32	42.36	34.47	68.20	17.68	V
14087.85	48.12	-29.44	41.66	35.90	68.20	20.08	H
13892.05	47.92	-29.51	41.30	36.13	68.20	20.28	H
10845.60	47.52	-32.33	38.59	41.26	74.00	26.48	V
10708.10	47.03	-32.77	38.49	41.31	74.00	26.97	H

Channel 54

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
16935.75	50.65	-26.32	42.36	34.60	68.20	17.55	V
16972.60	50.35	-26.32	42.36	34.30	68.20	17.85	V
14218.20	48.00	-28.99	42.00	34.98	68.20	20.20	H
13942.10	47.99	-29.51	41.30	36.20	68.20	20.21	V
10870.35	46.89	-32.33	38.59	40.63	74.00	27.11	V
11404.40	46.21	-32.42	38.79	39.84	74.00	27.79	H

Channel 62

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
17978.55	50.70	-25.50	46.66	29.54	74.00	23.30	H
17350.45	50.24	-25.95	44.35	31.83	68.20	17.96	H
13906.35	49.79	-29.51	41.30	38.00	68.20	18.41	V
14237.45	48.88	-28.99	42.00	35.86	68.20	19.32	V
5351.95	66.78	-27.43	34.01	60.20	74.00	7.22	H
5351.18	65.60	-27.43	34.01	59.02	74.00	8.40	H

Channel 102

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
17140.35	52.28	-26.60	43.36	35.52	68.20	15.92	H
17316.90	52.19	-25.95	44.35	33.78	68.20	16.01	H
13691.30	49.39	-29.50	40.43	38.46	68.20	18.81	H
13771.60	49.08	-29.10	40.86	37.31	68.20	19.12	H
5458.74	58.06	-27.18	34.17	51.07	74.00	15.94	H
5468.97	63.53	-27.18	34.17	56.54	68.20	4.67	H

Channel 118

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
17049.05	52.23	-26.60	43.36	35.47	68.20	15.97	H
17445.60	52.13	-26.85	45.25	33.73	68.20	16.07	H
13799.10	49.62	-29.10	40.86	37.85	68.20	18.58	V
13577.45	49.23	-29.50	40.43	38.30	68.20	18.97	H
10859.35	47.43	-32.33	38.59	41.17	74.00	26.57	H
11794.90	47.38	-31.99	38.98	40.39	74.00	26.62	V

Channel 134

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
17523.15	51.93	-26.85	45.25	33.53	68.20	16.27	H
17993.95	51.30	-25.50	46.66	30.14	74.00	22.70	H
14561.95	50.25	-27.29	41.90	35.64	68.20	17.95	V
14138.45	50.23	-28.99	42.00	37.21	68.20	17.97	V
5726.86	56.58	-27.07	34.31	49.34	68.20	11.62	H
5725.79	55.32	-27.07	34.31	48.08	68.20	12.88	H

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Channel 42

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
17613.90	51.98	-25.74	45.95	31.77	68.20	16.22	H
17077.65	51.41	-26.60	43.36	34.65	68.20	16.79	V
13757.85	49.30	-29.10	40.86	37.53	68.20	18.90	H
14121.40	49.16	-28.99	42.00	36.14	68.20	19.04	V
5143.84	65.09	-27.61	33.67	59.03	74.00	8.91	H
5149.20	64.78	-27.61	33.67	58.72	74.00	9.22	H

Channel 58

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
17897.15	52.53	-25.50	46.66	31.37	74.00	21.47	V
17798.15	51.70	-25.50	46.66	30.54	74.00	22.30	H
13756.75	49.97	-29.10	40.86	38.20	68.20	18.23	H
13898.65	49.77	-29.51	41.30	37.98	68.20	18.43	V
5350.30	64.37	-27.43	34.01	57.79	74.00	9.63	H
5353.86	64.15	-27.43	34.01	57.57	74.00	9.85	H

Channel 106

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
17983.50	51.95	-25.50	46.66	30.79	74.00	22.05	H
17658.45	51.41	-25.74	45.95	31.20	68.20	16.79	H
13648.95	49.63	-29.50	40.43	38.70	68.20	18.57	H
14619.70	49.54	-27.29	41.90	34.93	68.20	18.66	V
5454.43	66.61	-27.18	34.17	59.62	74.00	7.39	H
5467.87	65.93	-27.18	34.17	58.94	68.20	2.27	H

Channel 122

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
17950.50	51.70	-25.50	46.66	30.54	74.00	22.30	V
17457.70	51.69	-26.85	45.25	33.29	68.20	16.51	H
13722.10	49.73	-29.10	40.86	37.96	68.20	18.47	V
14133.50	49.58	-28.99	42.00	36.56	68.20	18.62	H
5727.26	56.56	-27.07	34.31	49.32	68.20	11.64	H
5726.41	55.74	-27.07	34.31	48.50	68.20	12.46	H

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

Test Condition:

Voltage (V)	Frequency (Hz)
110	60

Measurement uncertainty:

Expanded measurement uncertainty for this test item is U =3.08dB, 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		
		11a mode	Idle	
0.15 to 0.5	66 to 56	Fig.58	Fig.59	P
0.5 to 5	56			
5 to 30	60			

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

WLAN (Average Limit)

Frequency range (MHz)	Average Limit (dB μ V)	Result (dB μ V)		Conclusion
		With charger		
		11a mode	Idle	
0.15 to 0.5	56 to 46	Fig.58	Fig.59	P
0.5 to 5	46			
5 to 30	50			

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

Conclusion: PASS

Test graphs as below:

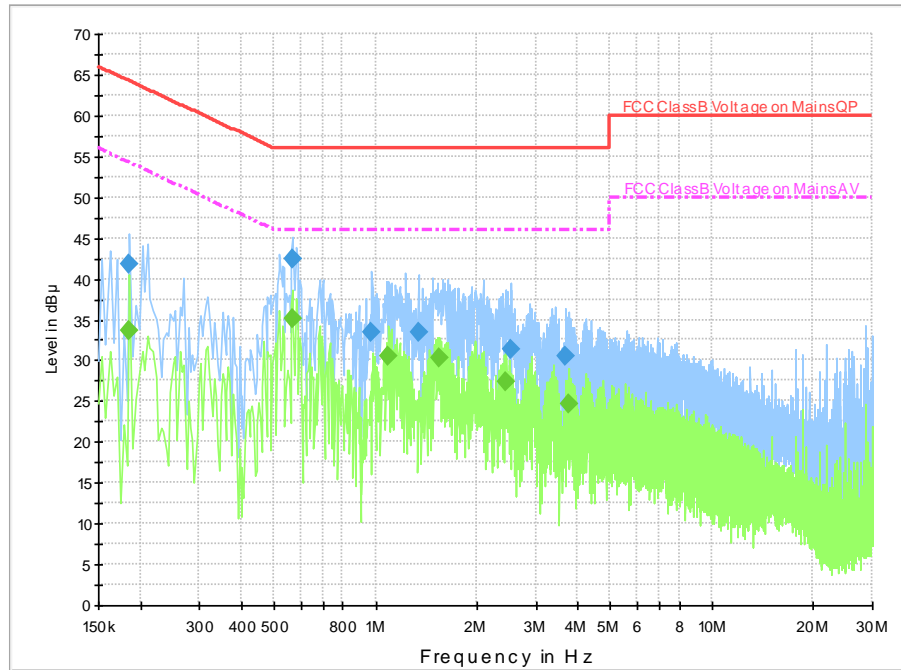


Fig.58 Conducted Emission(802.11a, Ch36, TX)

Measurement Result 1:

Frequency (MHz)	QuasiPeak (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.186000	41.8	2000.0	9.000	On	N	19.7	22.4	64.2
0.566000	42.4	2000.0	9.000	On	L1	19.7	13.6	56.0
0.974000	33.4	2000.0	9.000	On	L1	19.7	22.6	56.0
1.338000	33.4	2000.0	9.000	On	L1	19.6	22.6	56.0
2.526000	31.4	2000.0	9.000	On	N	19.6	24.6	56.0
3.686000	30.6	2000.0	9.000	On	L1	19.6	25.4	56.0

Measurement Result 2:

Frequency (MHz)	Average (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.186000	33.7	2000.0	9.000	On	N	19.7	20.5	54.2
0.566000	35.2	2000.0	9.000	On	L1	19.7	10.8	46.0
1.094000	30.6	2000.0	9.000	On	L1	19.6	15.4	46.0
1.546000	30.3	2000.0	9.000	On	L1	19.6	15.7	46.0
2.454000	27.3	2000.0	9.000	On	L1	19.6	18.7	46.0
3.758000	24.7	2000.0	9.000	On	L1	19.6	21.3	46.0

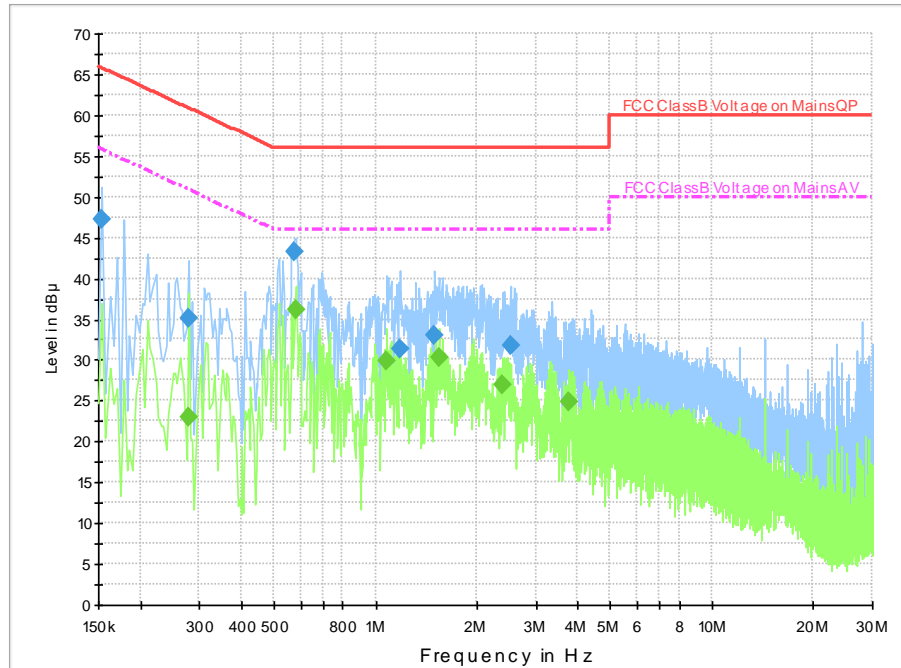


Fig.59 Conducted Emission(802.11a, IDLE)

Measurement Result 1:

Frequency (MHz)	QuasiPeak (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.154000	47.2	2000.0	9.000	On	N	19.9	18.5	65.8
0.278000	35.0	2000.0	9.000	On	L1	19.7	25.9	60.9
0.574000	43.2	2000.0	9.000	On	L1	19.7	12.8	56.0
1.182000	31.3	2000.0	9.000	On	N	19.6	24.7	56.0
1.502000	32.9	2000.0	9.000	On	N	19.6	23.1	56.0
2.514000	31.8	2000.0	9.000	On	N	19.6	24.2	56.0

Measurement Result 2:

Frequency (MHz)	Average (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.278000	23.0	2000.0	9.000	On	L1	19.7	27.9	50.9
0.578000	36.1	2000.0	9.000	On	L1	19.7	9.9	46.0
1.078000	29.9	2000.0	9.000	On	L1	19.7	16.1	46.0
1.546000	30.3	2000.0	9.000	On	L1	19.6	15.7	46.0
2.394000	27.0	2000.0	9.000	On	L1	19.6	19.0	46.0
3.758000	24.8	2000.0	9.000	On	L1	19.6	21.2	46.0

A.8. 99% Occupied bandwidth

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

- a) The instrument center frequency is set to the nominal EUT channel center frequency. The frequency span for the spectrum analyzer shall be between 1.5 times and 5.0 times the OBW.
- b) The nominal IF filter bandwidth (3 dB RBW) shall be in the range of 1% to 5% of the OBW, and VBW shall be approximately three times the RBW, unless otherwise specified by the applicable requirement.
- c) Set the reference level of the instrument as required, keeping the signal from exceeding the maximum input mixer level for linear operation. In general, the peak of the spectral envelope shall be more than $[10 \log (OBW/RBW)]$ below the reference level. Specific guidance is given in 4.1.5.2.
- d) Step a) through step c) might require iteration to adjust within the specified range.
- e) Video averaging is not permitted. Where practical, a sample detection and single sweep mode shall be used. Otherwise, peak detection and max hold mode (until the trace stabilizes) shall be used.
- f) Use the 99% power bandwidth function of the instrument (if available) and report the measured bandwidth.
- g) If the instrument does not have a 99% power bandwidth function, then the trace data points are recovered and directly summed in linear power terms. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5% 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	17.14	P
	5200 MHz	Fig.61	17.17	P
	5240 MHz	Fig.62	17.15	P
802.11n HT20	5180 MHz	Fig.63	18.06	P
	5200 MHz	Fig.64	17.99	P
	5240 MHz	Fig.65	18.09	P
802.11n HT40	5190 MHz	Fig.66	36.10	P
	5230 MHz	Fig.67	36.10	P
802.11ac HT80	5210 MHz	Fig.68	75.22	P

Conclusion: PASS
Test graphs as below:

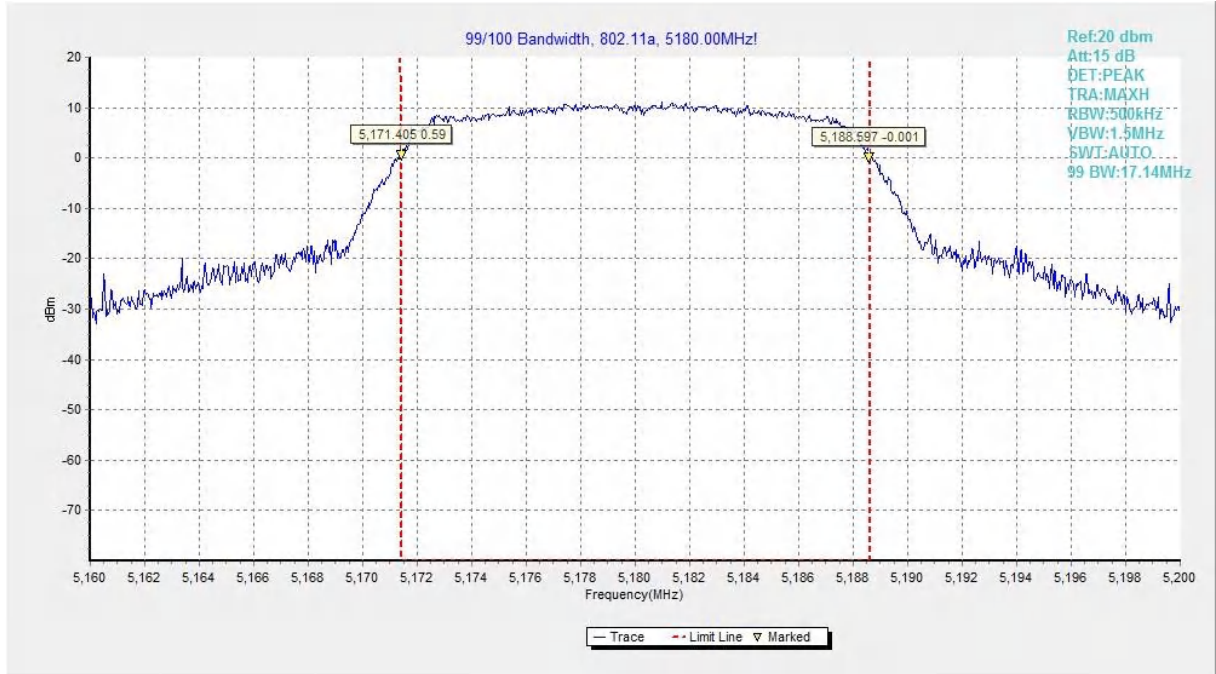


Fig.60 99% Occupied bandwidth (802.11a, 5180MHz)

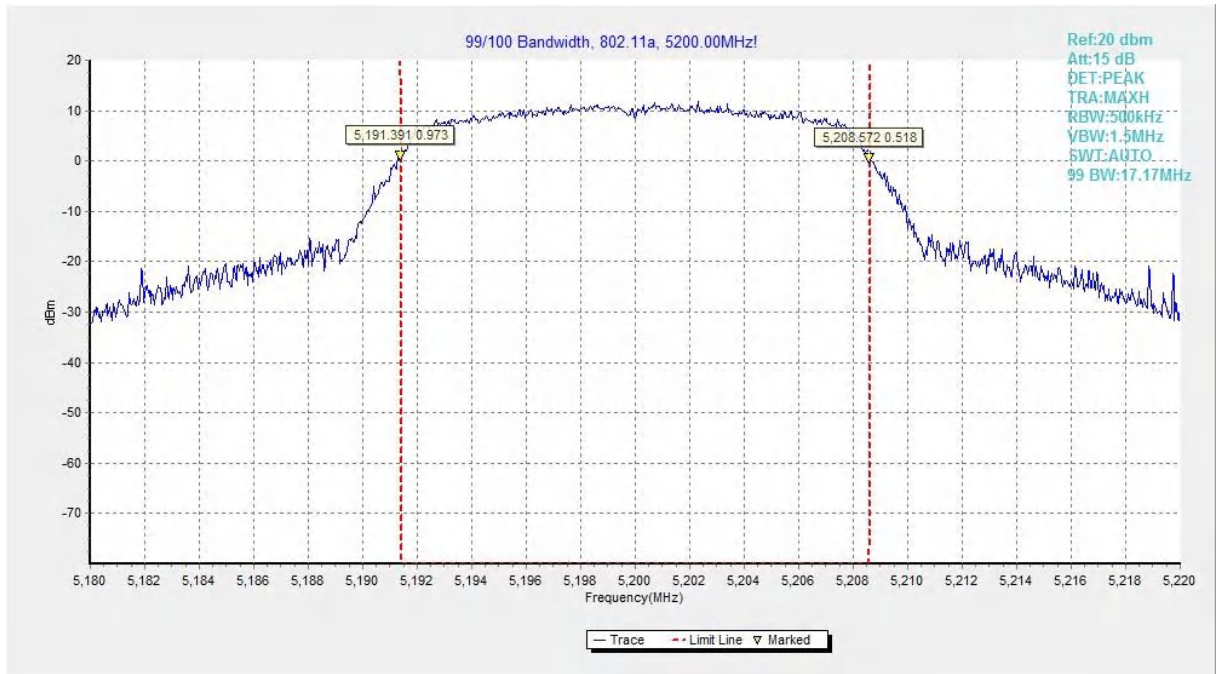


Fig.61 99% Occupied bandwidth (802.11a, 5200MHz)

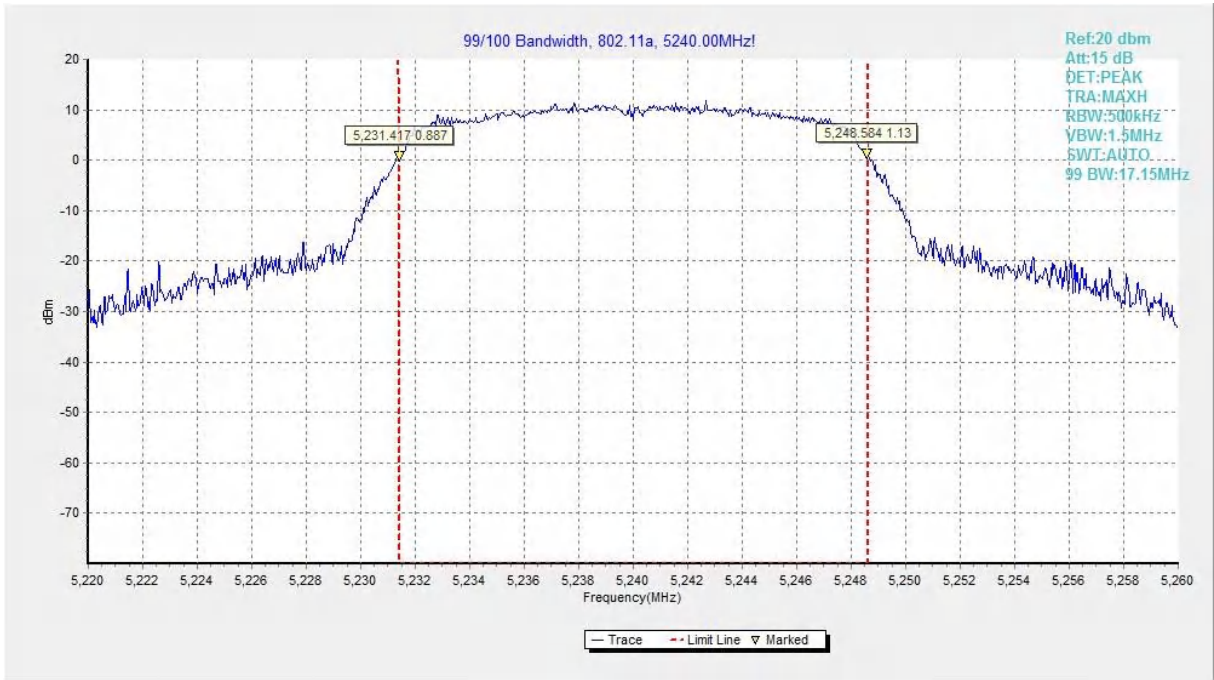


Fig.62 99% Occupied bandwidth (802.11a, 5240MHz)

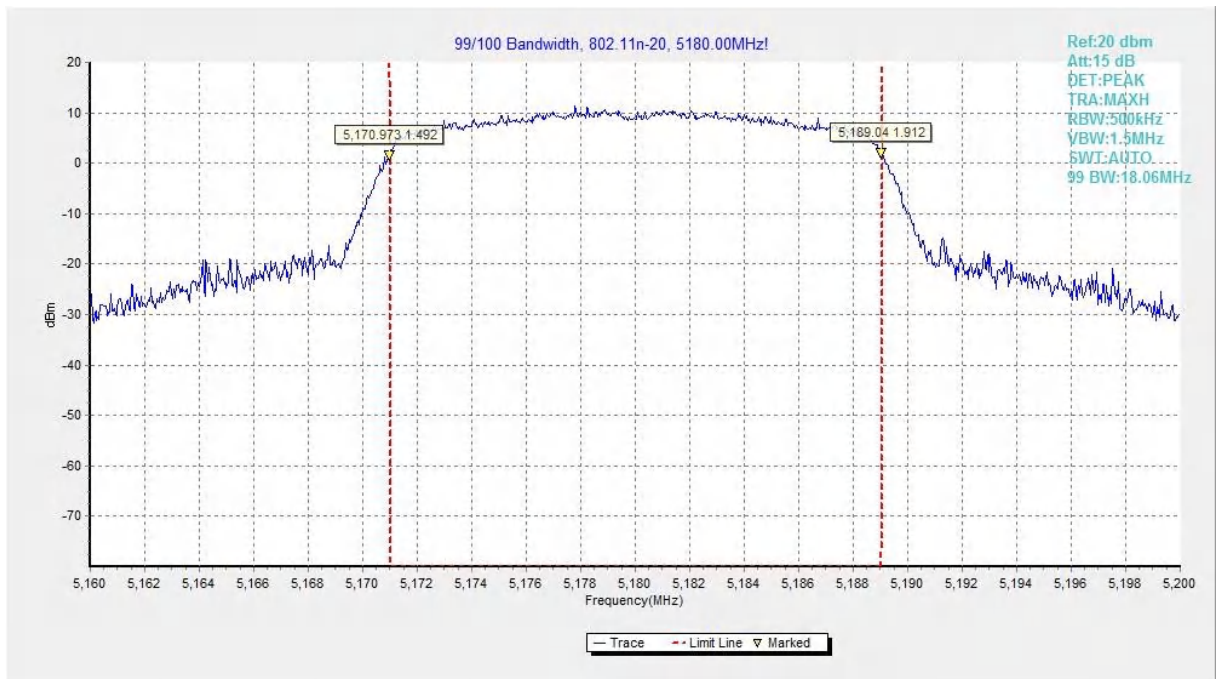


Fig.63 99% Occupied bandwidth (802.11n-HT20, 5180MHz)

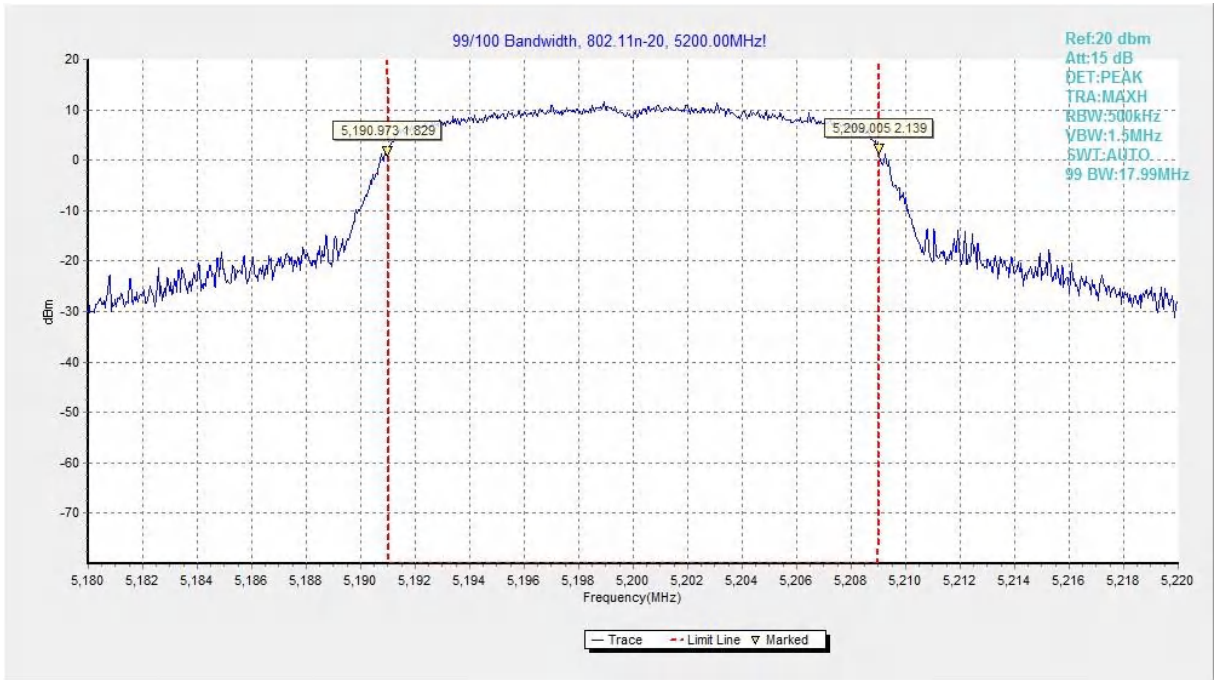


Fig.64 99% Occupied bandwidth (802.11n-HT20, 5200MHz)

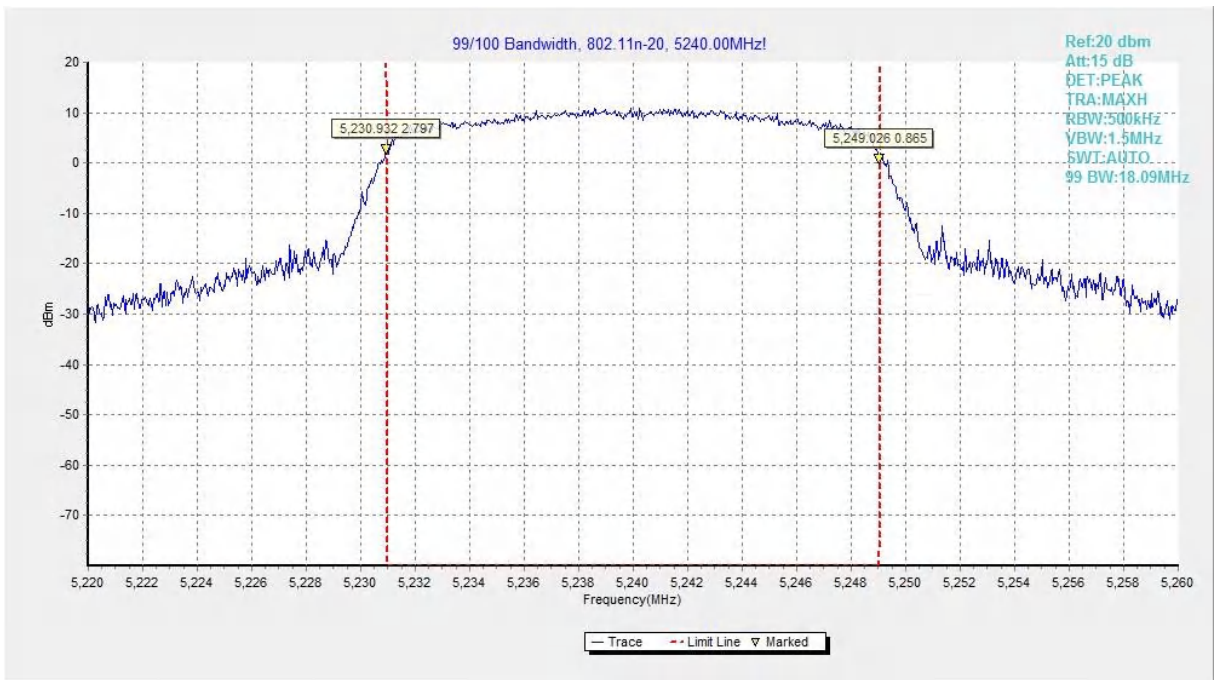


Fig.65 99% Occupied bandwidth (802.11n-HT20, 5240MHz)

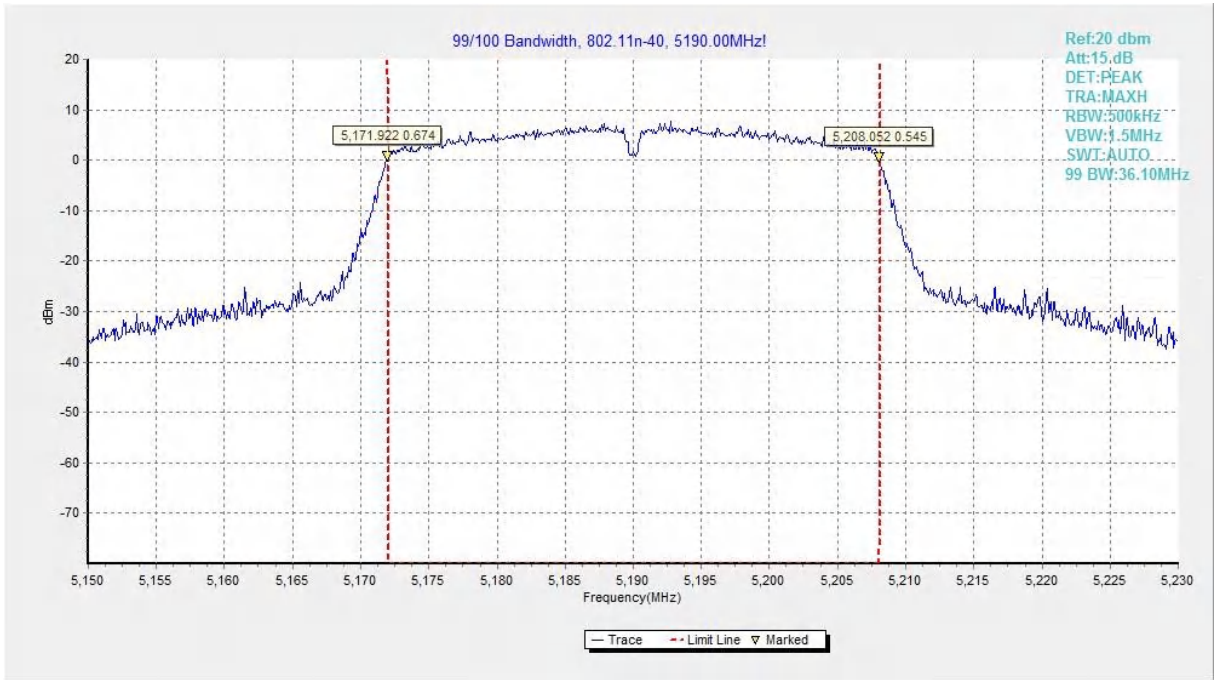


Fig.66 99% Occupied bandwidth (802.11n-HT40, 5190MHz)

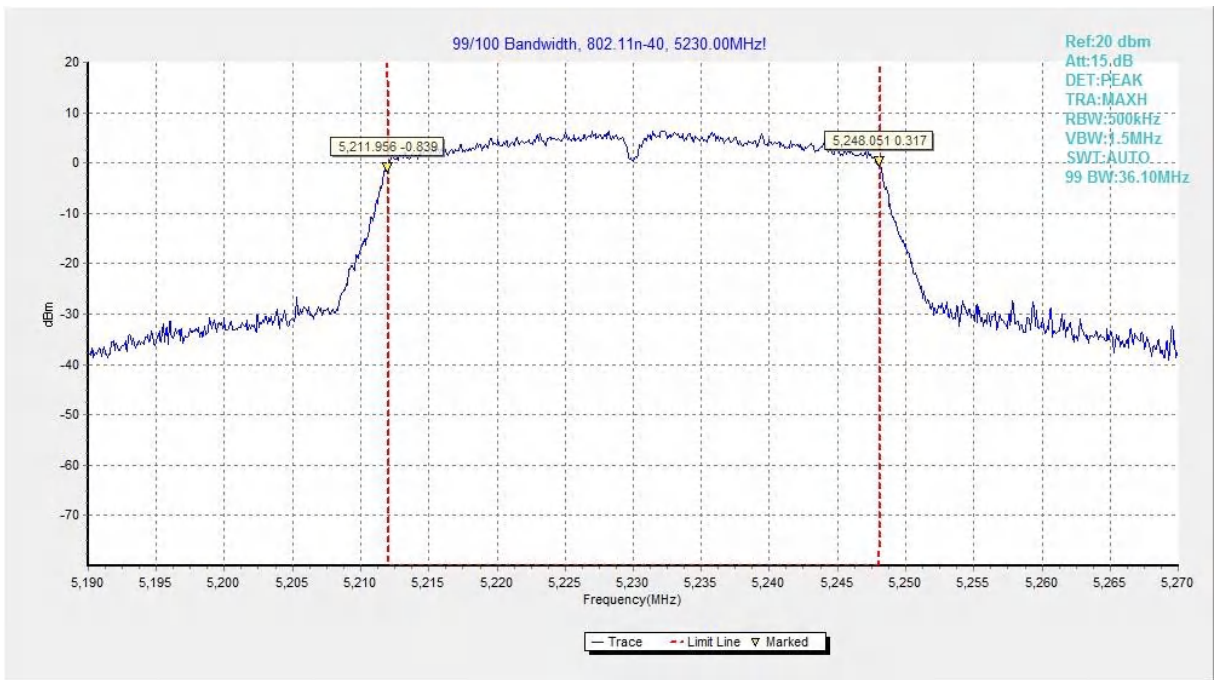


Fig.67 99% Occupied bandwidth (802.11n-HT40, 5230MHz)

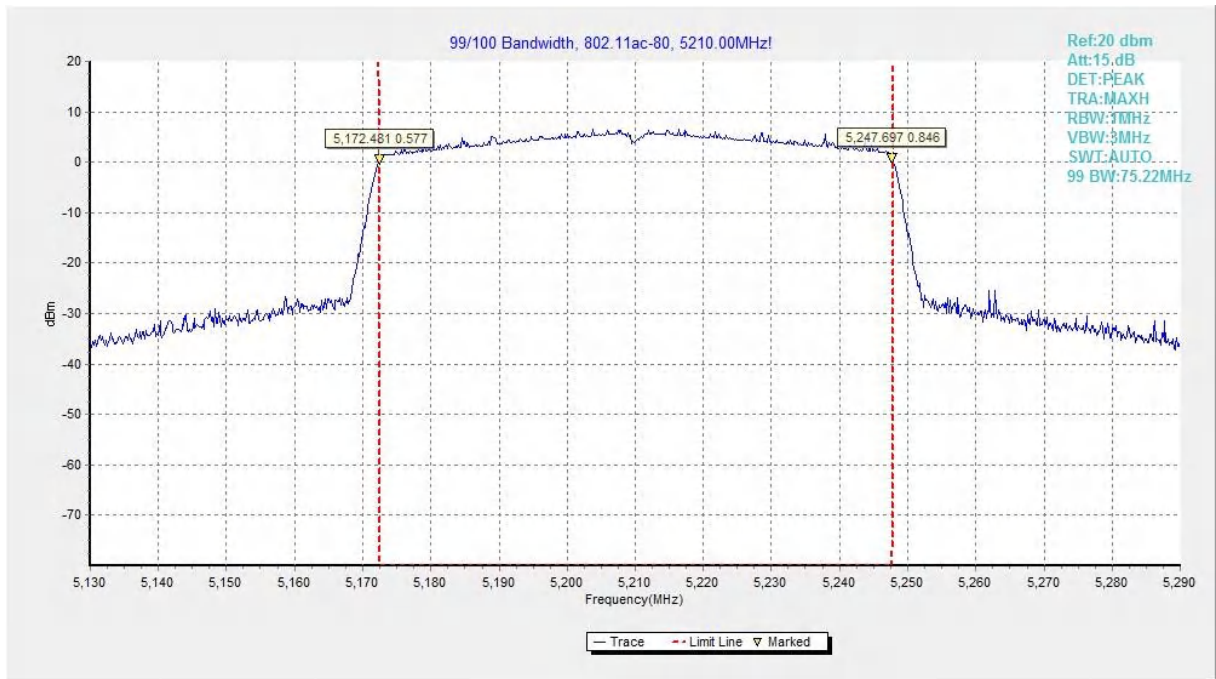


Fig.68 99% Occupied bandwidth (802.11ac-HT80, 5210MHz)

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 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>  	
<hr/> Certificate of Accreditation to ISO/IEC 17025:2017 <hr/>	
NVLAP LAB CODE: 600118-0	
Telecommunication Technology Labs, CAICT Beijing China	
<i>is accredited by the National Voluntary Laboratory Accreditation Program for specific services, listed on the Scope of Accreditation, for:</i>	
Electromagnetic Compatibility & Telecommunications	
<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>	
2022-10-01 through 2023-09-30 <i>Effective Dates</i>	 For the National Voluntary Laboratory Accreditation Program

*** END OF REPORT BODY ***