FCC PART 15
TEST REPORT
No.I17Z61036-IOT06

for

TCL Communication Ltd.

GSM Quad-band/HSPA-UMTS Six-band/LTE 19-band mobile phone

BBD100-1

With

FCC ID: 2ACCJN019

Hardware Version: 04

Software Version: AAN966

Issued Date: 2017-09-04

TESTING
NVLAP LAB CODE 600118-0

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

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REPORT HISTORY

Report Number	Revision	Description	Issue Date
I17Z61036-IOT06	Rev.0	1st edition	2017-09-04

CONTENTS

1. TEST LATORATORY

1.1. TestingLocation

Conducted testing Location: CTTL(huayuan North Road)

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

Radiated testing Location: CTTL(BDA)

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

1.2. TestingEnvironment

Normal Temperature: 15-35□

Extreme Temperature: -10/+55℃

Relative Humidity: 20-75%

1.3. Project data

Testing Start Date: 2017-06-29

Testing End Date: 2017-08-24

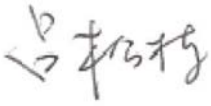
1.4. Signature

Jiang Xue

(Prepared this test report)

Zheng Wei

(Reviewed this test report)



Lv Songdong

(Approved this test report)

2. CLIENT INFORMATION

2.1. Applicant Information

Company Name:	TCL Communication Ltd.
Address:	5F, C building, No. 232, Liang Jing Road ZhangJiang High-Tech Park, Pudong Area Shanghai, P.R. China. 201203
City:	Shanghai
Postal Code:	201203
Country:	China
Telephone:	0086-21-31363544
Fax:	0086-21-61460602

2.2. Manufacturer Information

Company Name:	TCL Communication Ltd.
Address:	5F, C building, No. 232, Liang Jing Road ZhangJiang High-Tech Park, Pudong Area Shanghai, P.R. China. 201203
City:	Shanghai
Postal Code:	201203
Country:	China
Telephone:	0086-21-31363544
Fax:	0086-21-61460602

3. EQUIPMENT UNDER TEST (EUT) AND ANCILLARYEQUIPMENT(AE)

3.1. About EUT

Description	GSM Quad-band/HSPA-UMTS Six-band/LTE 19-band mobile phone
Model name	BBD100-1
FCC ID	2ACCJN019
IC ID	/
WLAN Frequency Range	ISM Bands: -5150MHz~5350MHz -5470MHz~5725MHz
Type of modulation	OFDM
Antenna	Integral Antenna
Voltage	3.8VDC by Battery

Note: Photographs of EUT are shown in ANNEX C of this test report. Components list, please refer to documents of the manufacturer.

3.2. Internal Identification of EUT used during the test

EUT ID*	SN or IMEI	HW Version	SW Version
EUT1	/	04	AAN966
EUT2	/	04	AAN966

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

3.3. Internal Identification of AE used during the test

AE ID*	Description	SN
AE1	Battery	/
AE2	Charger	17TCT-CH-0976
AE4	USB Cable	17TCT-DC-0133

AE1

Model	TLp038B1
Manufacturer	BYD
Capacitance	3860 mAh
Nominal voltage	3.85V

AE2

Model	QC10US
Manufacturer	BYD
Length of cable	/

AE4

Model	CDA0000113CF

Manufacturer	LUXSHARE
Length of cable	60cm

*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 Quad-band/HSPA-UMTS Six-band/LTE 19-band mobile phone with integrated antennaand inbuilt battery.
It has Bluetooth (EDR)function.
It consists of normal options: travel charger, USB cable and Phone.
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	2016
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	Guidelines for Compliance Testing of Unlicensed National Information Infrastructure (U-NII) Devices - Part 15, Subpart E	2014-06

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**
Power Spectral Density	15.407	/	**P**
Occupied 26dB Bandwidth	15.403	/	**P**
Band edge compliance	15.209	/	**P**
Transmitter spurious emissions radiated	15.407	/	**P**
Spurious emissions radiated < 30 MHz	15.407	/	**P**
Spurious emissions conducted < 30 MHz	15.407	/	**P**
Frequency Stability	15.407	/	**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/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.

This model is a variant product which market name is BBD100-2; and all the test results have been tested from BBD100-2.

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℃
Voltage	3.8V
Humidity	44%

7. TEST EQUIPMENTS UTILIZED

Conducted test system

No.	Equipment	Model	Serial Number	Manufacturer	Calibration date	Calibration Due date
1	Vector Signal Analyzer	FSQ40	200089	Rohde & Schwarz	2017-06-02	2018-06-01
2	LISN	ENV216	101200	Rohde & Schwarz	2017-08-04	2018-08-03
3	Test Receiver	ESCI	100344	Rohde & Schwarz	2017-03-16	2018-03-15
4	Shielding Room	S81	/	ETS-Lindgren	/	/

Radiated emission test system

No.	Equipment	Model	Serial Number	Manufacturer	Calibration Period	Calibration Due date
1	Test Receiver	ESCI 7	100948	Rohde & Schwarz	2017-07-26	2018-07-25
3	BiLog Antenna	VULB9163	235	Schwarzbeck	2016-05-09	2019-05-10
4	Dual-Ridge Waveguide Horn Antenna	3115	6914	EMCO	2014-12-16	2017-12-15
5	Vector Signal Analyzer	FSV	101047	Rohde & Schwarz	2017-07-23	2018-07-22

8. Measurement Uncertainty

8.1. Transmitter Output Power

Measurement Uncertainty: 0.339dB,k=1.96

8.2. Peak Power Spectral Density

Measurement Uncertainty: 0.705dBm/MHz,k=1.96

8.3. Occupied Channel Bandwidth

Measurement Uncertainty: 60.80Hz,k=1.96

8.4. Band Edges Compliance

Measurement Uncertainty : 0.62dBm,k=1.96

8.5. Spurious Emissions

Conducted (k=1.96)

Frequency Range	Uncertainty(dBm)
30MHz ≤ f ≤ 2GHz	1.22
2GHz ≤ f ≤3.6GHz	1.22
3.6GHz ≤ f ≤8GHz	1.22
8GHz ≤ f ≤12.75GHz	1.51
12.75GHz ≤ f ≤26GHz	1.51
26GHz ≤ f ≤40GHz	1.59

Radiated (k=2)

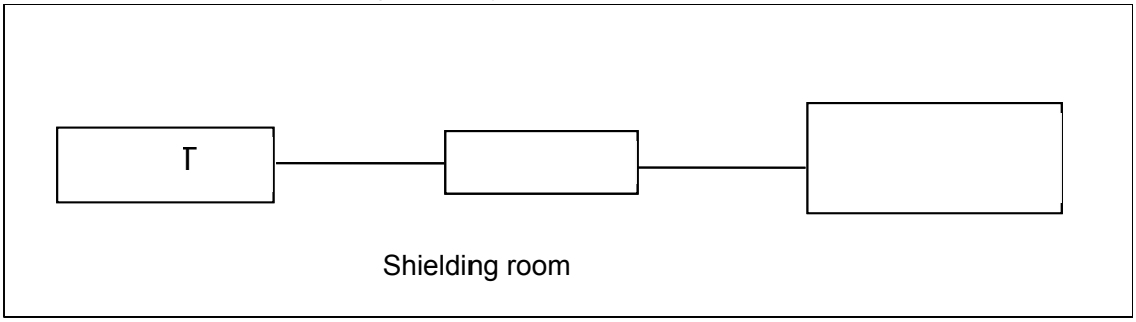
Frequency Range	Uncertainty(dBm)
30MHz ≤ f ≤ 1GHz	4.86
1GHz ≤ f ≤18GHz	5.26
18GHz ≤ f ≤40GHz	5.28

ANNEX A: MEASUREMENT RESULTS

A.1. Measurement Method

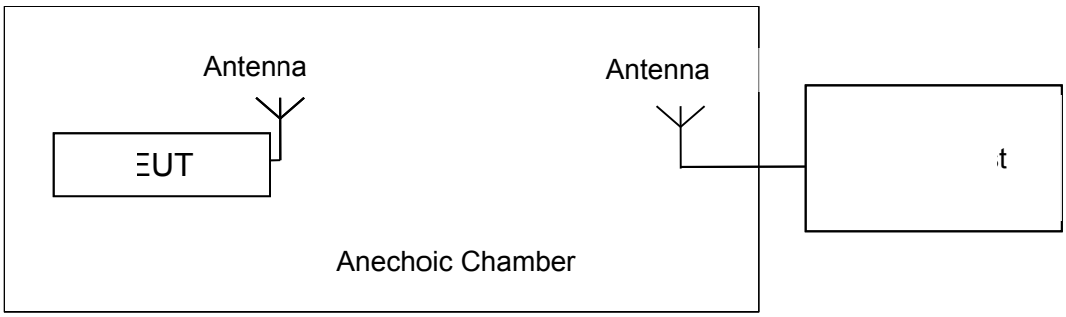
A.1.1. Conducted Measurements

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 measurementmethod SA-1 is made according to KDB 789033

Measurement Results:

802.11a mode

Mode	Channel	Test Result (dBm)							
		Data Rate (Mbps)							
		6	9	12	18	24	36	48	54
802.11a	5180MHz (Ch36)	13.85	13.82	13.75	13.60	13.43	13.21	12.94	12.81
	5200MHz (Ch40)	13.58	/	/	/	/	/	/	/
	5240MHz(Ch48)	13.78	/	/	/	/	/	/	/
	5260MHz(Ch52)	13.56	/	/	/	/	/	/	/
	5280MHz(Ch56)	13.48	/	/	/	/	/	/	/
	5320MHz(Ch64)	13.58	/	/	/	/	/	/	/
	5500MHz(Ch100)	13.15	/	/	/	/	/	/	/
	5580MHz(Ch116)	12.98	/	/	/	/	/	/	/
	5700MHz(Ch140)	11.78	/	/	/	/	/	/	/

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

802.11n-HT20 mode

Mode	Channel	Test Result (dBm)							
		Data Rate							
		MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7
802.11n (HT20)	5180MHz (Ch36)	12.89	12.74	12.63	12.41	12.17	11.91	11.82	11.68
	5200MHz (Ch40)	12.73	/	/	/	/	/	/	/
	5240MHz(Ch48)	12.86	/	/	/	/	/	/	/
	5260MHz(Ch52)	12.75	/	/	/	/	/	/	/
	5280MHz(Ch56)	12.65	/	/	/	/	/	/	/
	5320MHz(Ch64)	12.76	/	/	/	/	/	/	/
	5500MHz(Ch100)	12.32	/	/	/	/	/	/	/
	5580MHz(Ch116)	12.21	/	/	/	/	/	/	/
	5700MHz(Ch140)	10.87	/	/	/	/	/	/	/

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

802.11ac-HT20 mode

Mode	Channel	Test Result (dBm)							
		Data Rate							
		MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7
802.11ac (HT20)	5180MHz (Ch36)	11.39	10.78	10.33	9.88	8.24	7.89	7.62	6.49
	5200MHz (Ch40)	11.27	/	/	/	/	/	/	/
	5240MHz(Ch48)	11.38	/	/	/	/	/	/	/
	5260MHz(Ch52)	11.26	/	/	/	/	/	/	/
	5280MHz(Ch56)	11.16	/	/	/	/	/	/	/
	5320MHz(Ch64)	11.29	/	/	/	/	/	/	/
	5500MHz(Ch100)	10.79	/	/	/	/	/	/	/
	5580MHz(Ch116)	10.68	/	/	/	/	/	/	/
	5700MHz(Ch140)	9.39	/	/	/	/	/	/	/

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

802.11n-HT40 mode

Mode	Channel	Test Result (dBm)							
		Data Rate							
		MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7
802.11n (HT40)	5190MHz (Ch38)	10.98	11.69	11.42	11.16	10.72	10.37	10.21	10.05
	5230MHz(Ch46)	/	11.31	/	/	/	/	/	/
	5270MHz(Ch54)	/	11.22	/	/	/	/	/	/
	5310MHz(Ch62)	/	10.56	/	/	/	/	/	/
	5510MHz(Ch102)	/	11.21	/	/	/	/	/	/
	5550MHz(Ch110)	/	11.39	/	/	/	/	/	/
	5670MHz(Ch134)	/	10.75	/	/	/	/	/	/

The data rate MCS1 is selected as worse condition, and the following cases are performed with this condition.

802.11ac-HT40 mode

Mode	Channel	Test Result (dBm)							
		Data Rate							
		MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7
802.11ac (HT40)	5190MHz (Ch38)	8.96	8.13	8.49	7.92	7.29	6.87	5.72	4.62
	5230MHz(Ch46)	8.57	/	/	/	/	/	/	/
	5270MHz(Ch54)	8.49	/	/	/	/	/	/	/
	5310MHz(Ch62)	7.87	/	/	/	/	/	/	/
	5510MHz(Ch102)	8.52	/	/	/	/	/	/	/
	5550MHz(Ch110)	8.68	/	/	/	/	/	/	/
	5670MHz(Ch134)	8.11	/	/	/	/	/	/	/

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

this condition.

802.11ac-HT80 mode

Mode	Channel	Test Result (dBm)							
		Data Rate							
		MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7
802.11ac (HT80)	5210MHz(Ch42)	7.73	6.56	6.92	6.37	5.75	5.53	4.32	3.39
	5290MHz(Ch58)	7.20	/	/	/	/	/	/	/
	5530MHz(Ch106)	7.39	/	/	/	/	/	/	/
	5610MHz(Ch122)	7.39	/	/	/	/	/	/	/

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

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 SA-1 is made according to KDB 789033

Measurement Results:

Mode	Channel	Power Spectral Density (dBm/MHz)	Conclusion
802.11a	5180 MHz	3.69	P
	5200 MHz	3.62	P
	5240 MHz	4.03	P
	5260 MHz	4.01	P
	5280 MHz	3.73	P
	5320 MHz	3.84	P
	5500 MHz	3.60	P
	5580 MHz	3.38	P
	5700 MHz	2.68	P
802.11n HT20	5180 MHz	2.71	P
	5200 MHz	2.72	P
	5240 MHz	2.76	P
	5260 MHz	2.67	P
	5280 MHz	2.69	P
	5320 MHz	2.66	P
	5500 MHz	2.40	P
	5580 MHz	2.49	P
	5700 MHz	1.65	P
802.11ac HT20	5180 MHz	1.72	P
	5200 MHz	1.74	P
	5240 MHz	1.97	P
	5260 MHz	1.75	P
	5280 MHz	1.75	P
	5320 MHz	1.71	P
	5500 MHz	1.75	P
	5580 MHz	1.57	P
	5700 MHz	0.65	P
802.11n HT40	5190 MHz	-0.48	P
	5230 MHz	-0.54	P
	5270 MHz	-0.8	P
	5310 MHz	-1.7	P

	5510 MHz	-0.14	P
	5550 MHz	-0.63	P
	5670 MHz	-0.74	P
802.11ac HT40	5190 MHz	-2.55	P
	5230 MHz	-2.96	P
	5270 MHz	-2.93	P
	5310 MHz	-3.54	P
	5510 MHz	-2.13	P
	5550 MHz	-2.57	P
	5670 MHz	-2.44	P
802.11ac HT80	5210MHz	-5.37	P
	5290MHz	-5.73	P
	5530MHz	-4.72	P
	5610MHz	-5.57	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	Channel	Occupied 26dB Bandwidth (MHz)		conclusion
802.11a	5180 MHz	Fig.1	34.25	P
	5200 MHz	Fig.2	34.80	P
	5240 MHz	Fig.3	32.70	P
	5260 MHz	Fig.4	32.00	P
	5280 MHz	Fig.5	31.15	P
	5320 MHz	Fig.6	36.15	P
	5500 MHz	Fig.7	30.30	P
	5580 MHz	Fig.8	28.10	P
	5700 MHz	Fig.9	24.10	P
802.11n HT20	5180 MHz	Fig.10	29.45	P
	5200 MHz	Fig.11	26.35	P
	5240 MHz	Fig.12	25.90	P
	5260 MHz	Fig.13	27.60	P
	5280 MHz	Fig.14	26.40	P
	5320 MHz	Fig.15	31.00	P
	5500 MHz	Fig.16	24.10	P
	5580 MHz	Fig.17	24.85	P
	5700 MHz	Fig.18	24.05	P
802.11ac HT20	5180 MHz	Fig.19	24.45	P
	5200 MHz	Fig.20	24.25	P
	5240 MHz	Fig.21	24.00	P
	5260 MHz	Fig.22	24.20	P
	5280 MHz	Fig.23	23.95	P
	5320 MHz	Fig.24	28.95	P
	5500 MHz	Fig.25	23.95	P
	5580 MHz	Fig.26	23.75	P
	5700 MHz	Fig.27	23.55	P

802.11n	5190 MHz	Fig.28	44.56	P

HT40	5230 MHz	Fig.29	43.36	P
	5270 MHz	Fig.30	43.52	P
	5310 MHz	Fig.31	43.92	P
	5510 MHz	Fig.32	43.92	P
	5550 MHz	Fig.33	44.08	P
	5670 MHz	Fig.34	43.60	P

802.11ac HT40	5190 MHz	Fig.35	44.64	P
	5230 MHz	Fig.36	44.24	P
	5270 MHz	Fig.37	44.48	P
	5310 MHz	Fig.38	44.24	P
	5510 MHz	Fig.39	44.48	P
	5550 MHz	Fig.40	44.48	P
	5670 MHz	Fig.41	44.24	P

802.11ac HT80	5210MHz	Fig.42	86.40	P
	5290MHz	Fig.43	85.92	P
	5530MHz	Fig.44	86.24	P
	5610MHz	Fig.45	86.08	P

Conclusion: PASS

Test graphs as below:

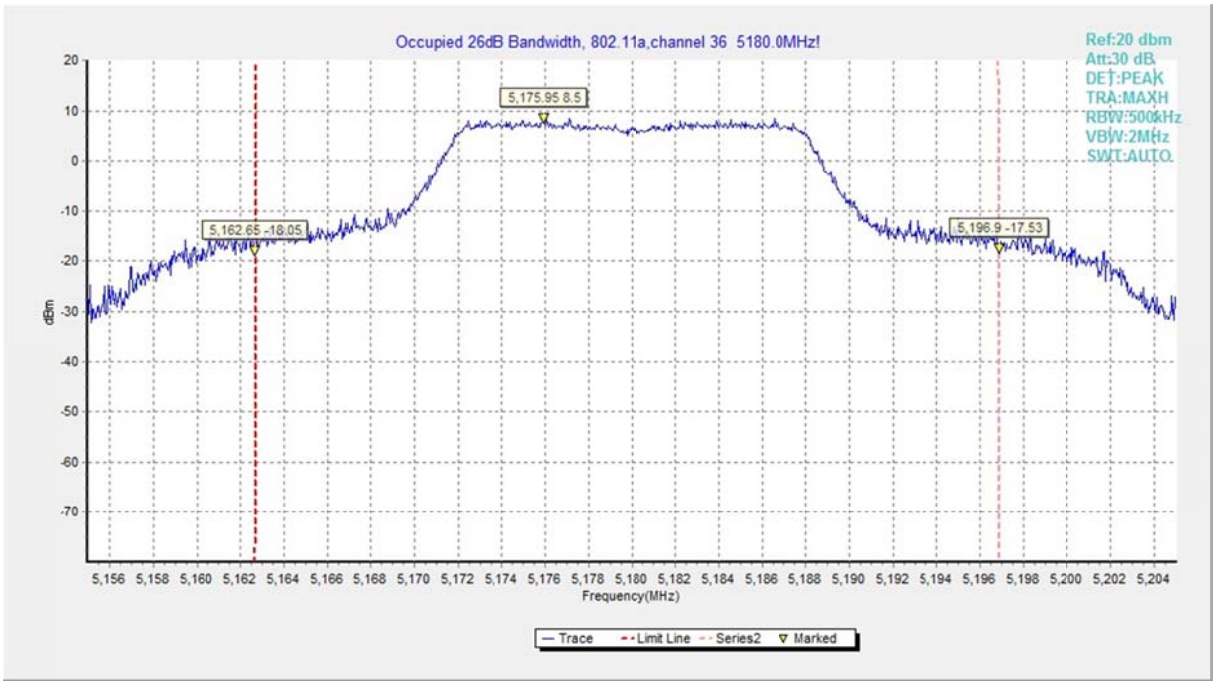


Fig. 1 Occupied 26dB Bandwidth (802.11a, 5180MHz)

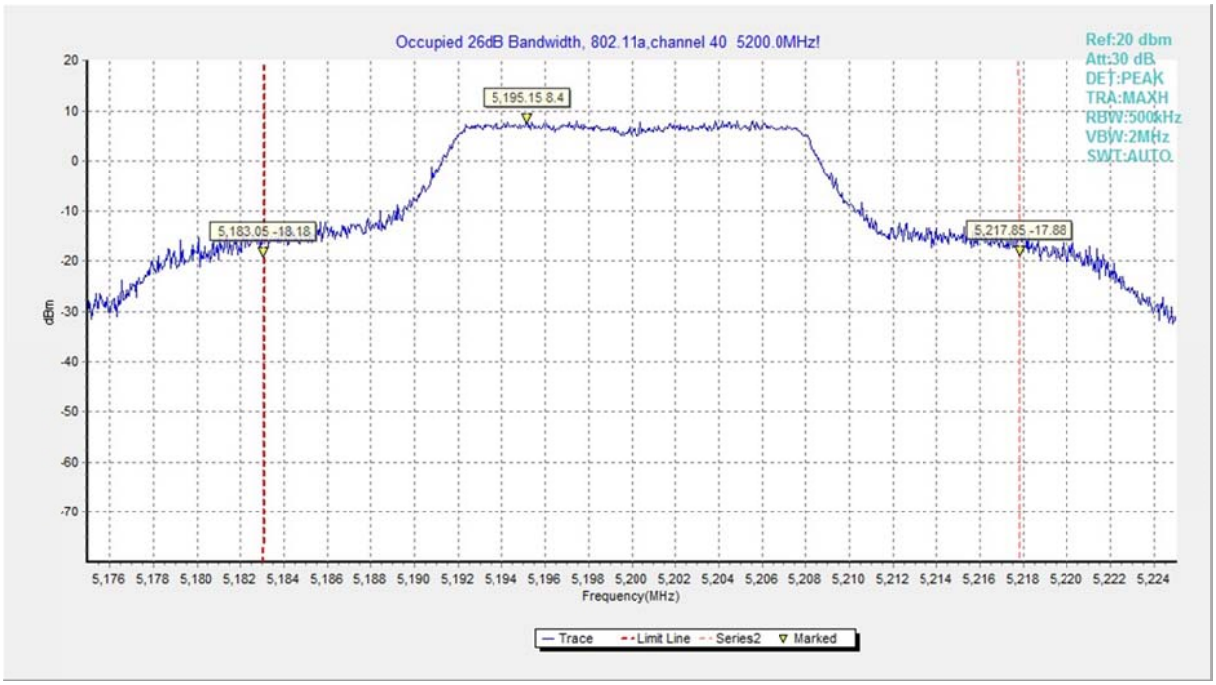


Fig. 2 Occupied 26dB Bandwidth (802.11a, 5200MHz)

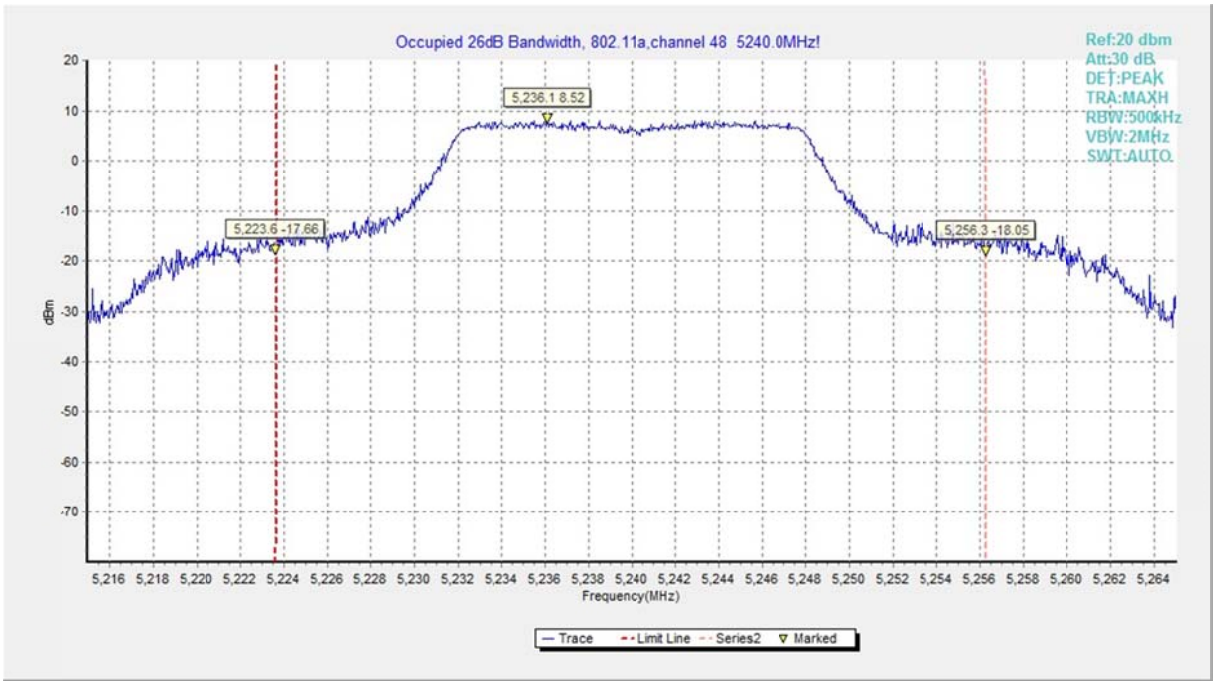


Fig. 3 Occupied 26dB Bandwidth (802.11a, 5240MHz)

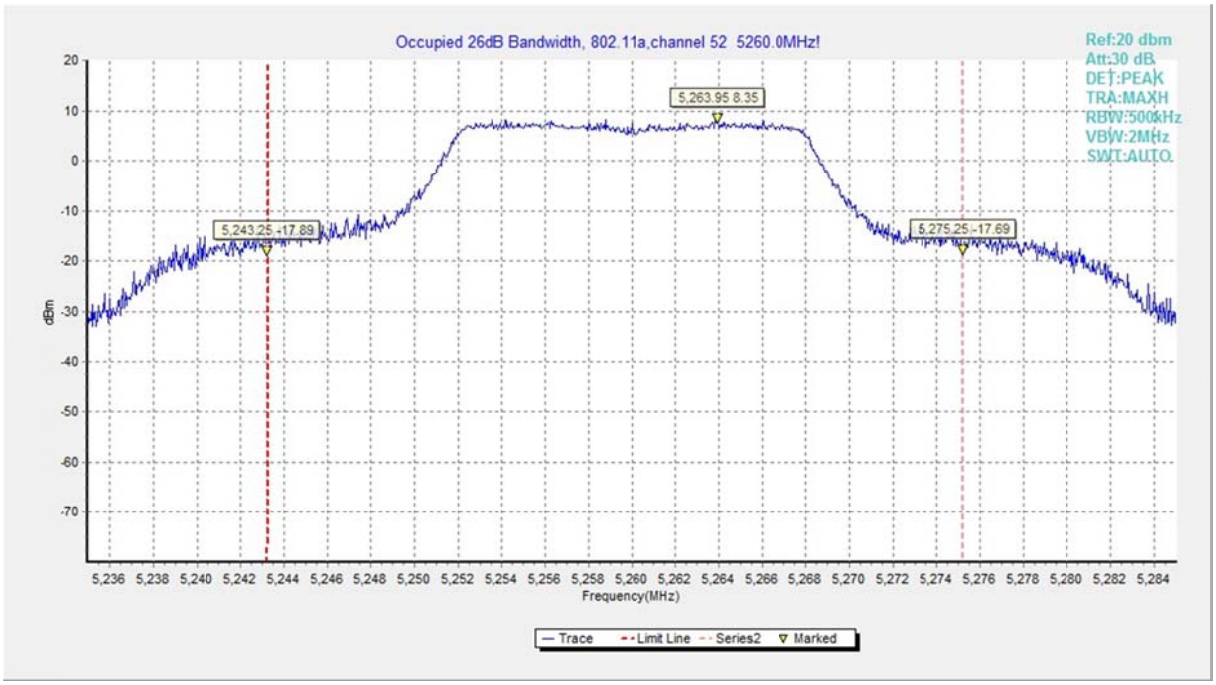


Fig. 4 Occupied 26dB Bandwidth (802.11a, 5260MHz)

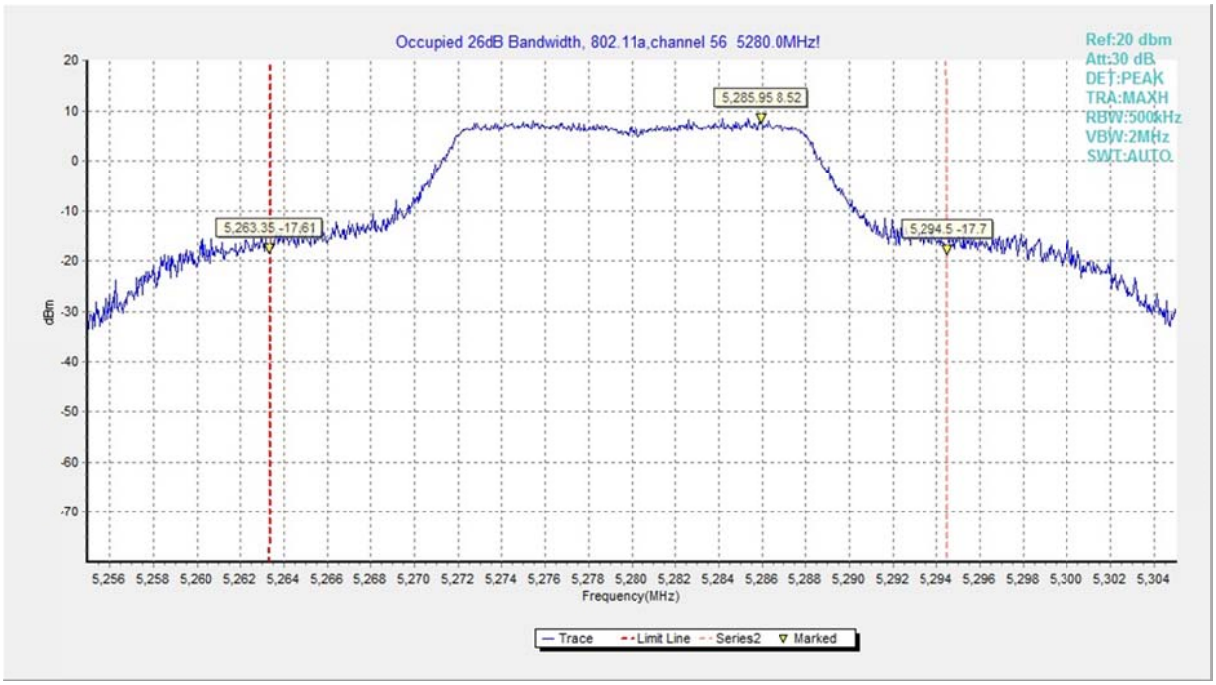


Fig. 5 Occupied 26dB Bandwidth (802.11a, 5280MHz)

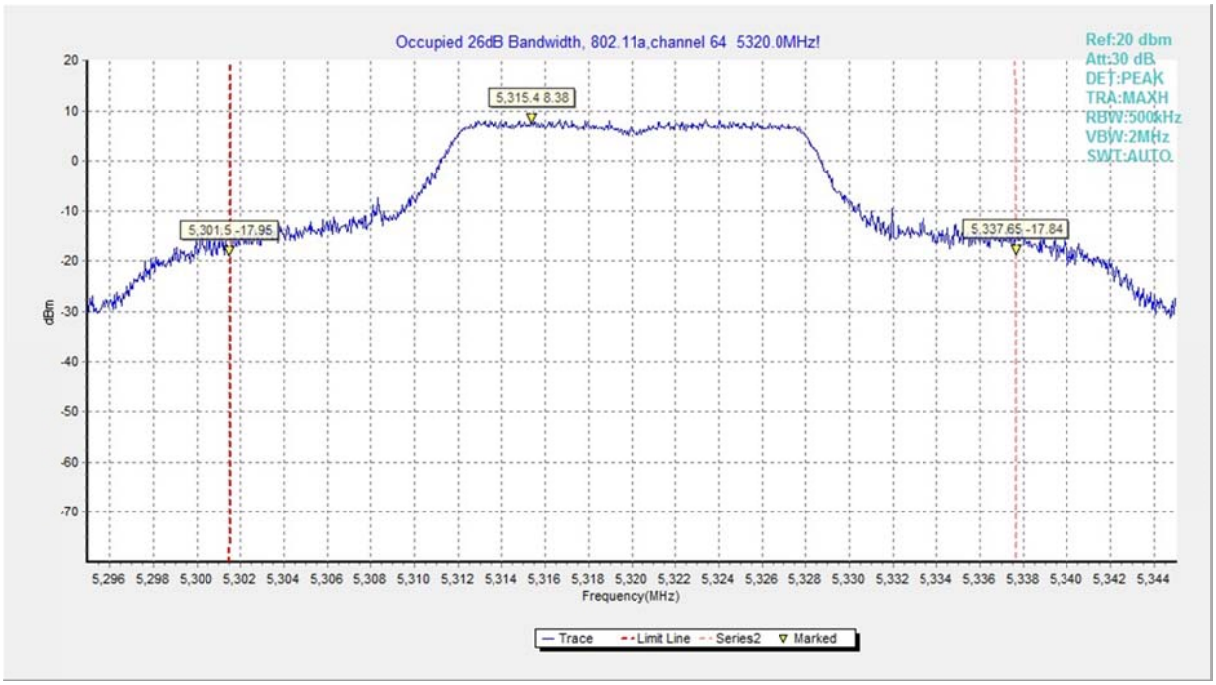


Fig. 6 Occupied 26dB Bandwidth (802.11a, 5320MHz)

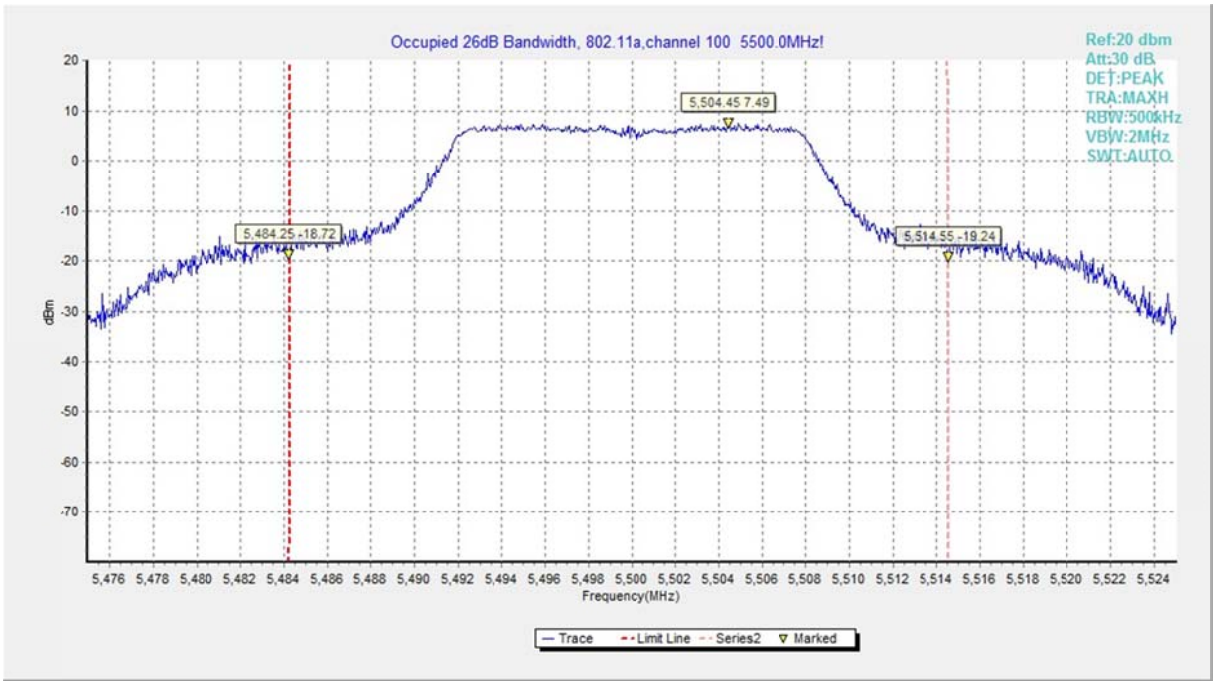


Fig. 7 Occupied 26dB Bandwidth (802.11a, 5500MHz)

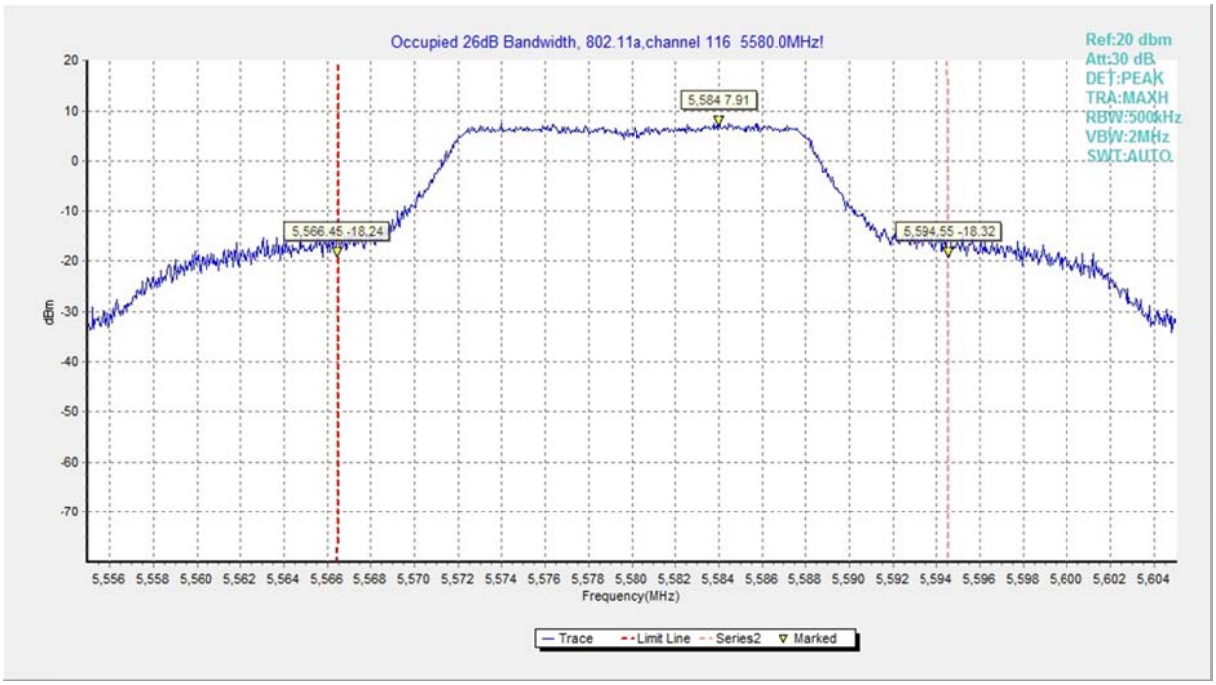


Fig. 8 Occupied 26dB Bandwidth (802.11a, 5580MHz)

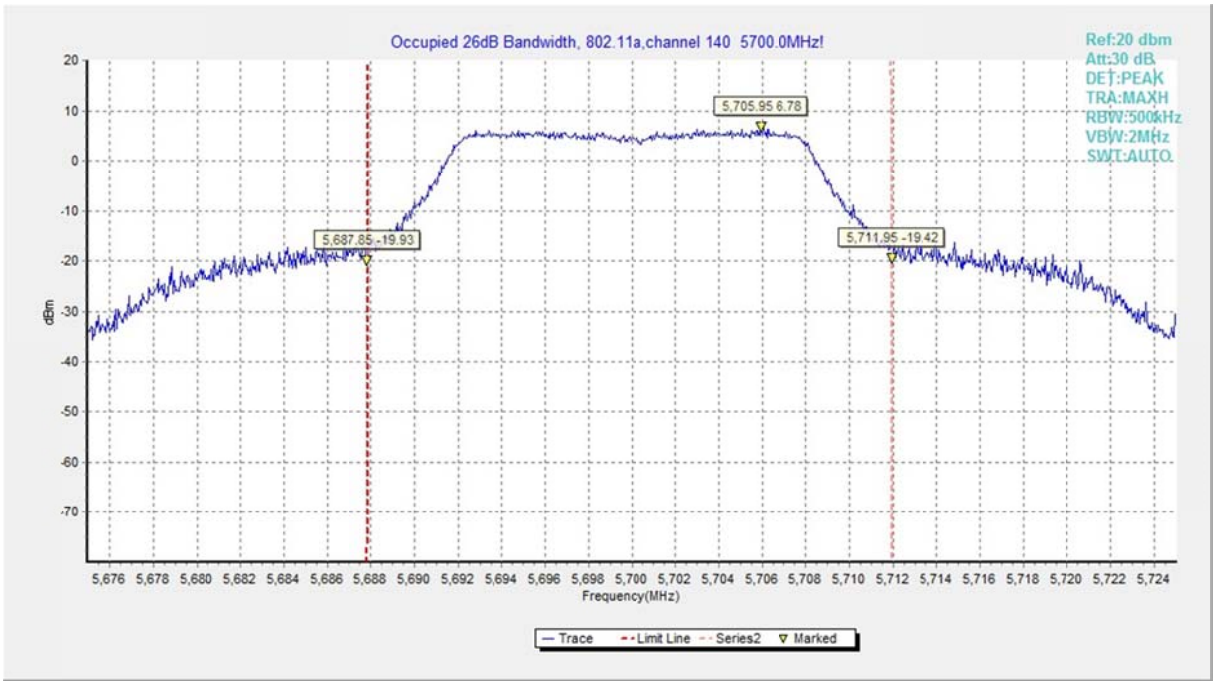


Fig. 9 Occupied 26dB Bandwidth (802.11a, 5700MHz)

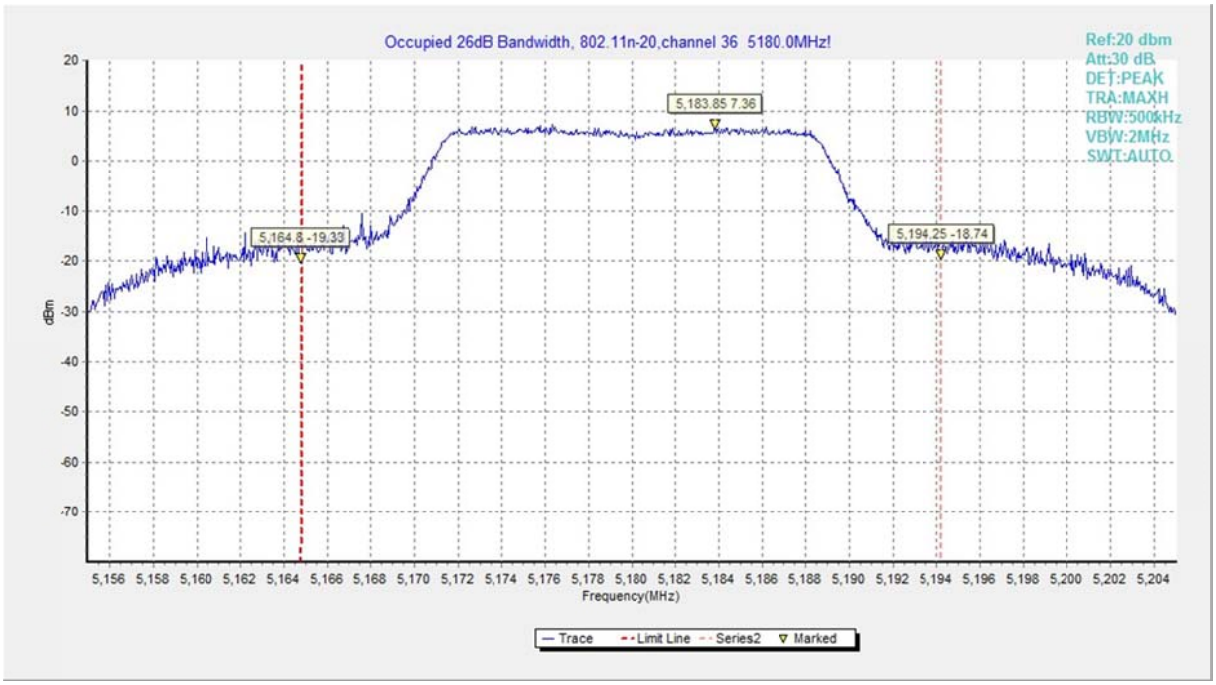


Fig. 10 Occupied 26dB Bandwidth (802.11n-HT20, 5180MHz)

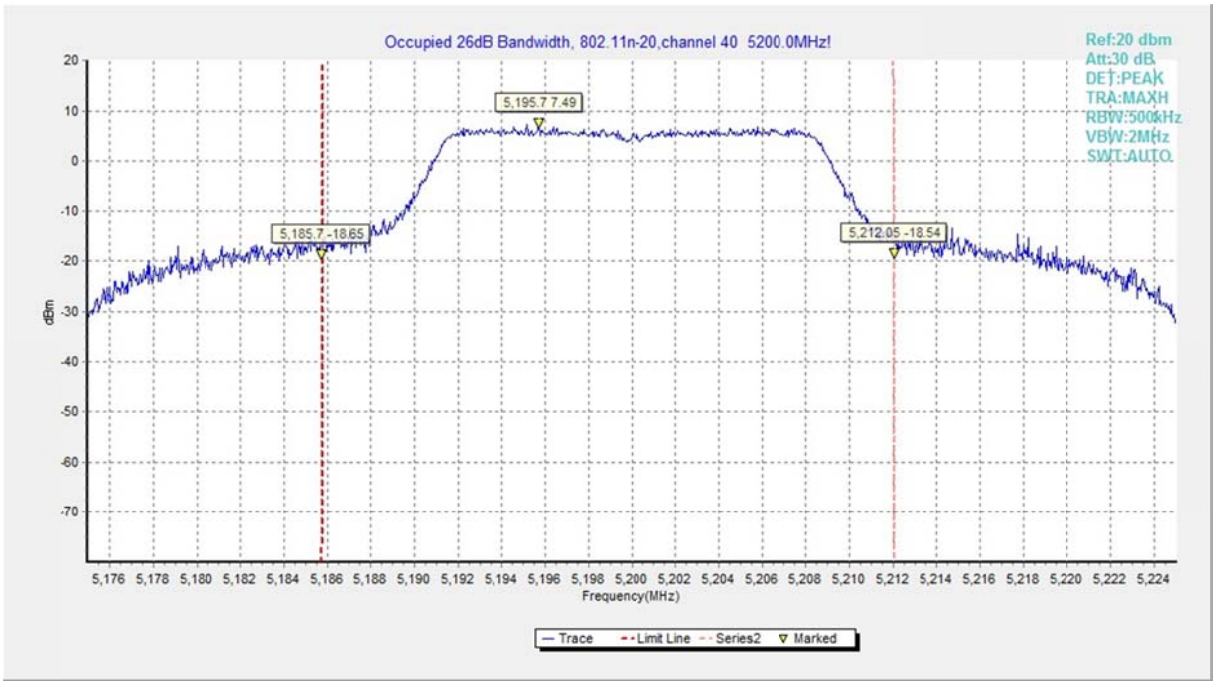


Fig. 11 Occupied 26dB Bandwidth (802.11n-HT20, 5200MHz)

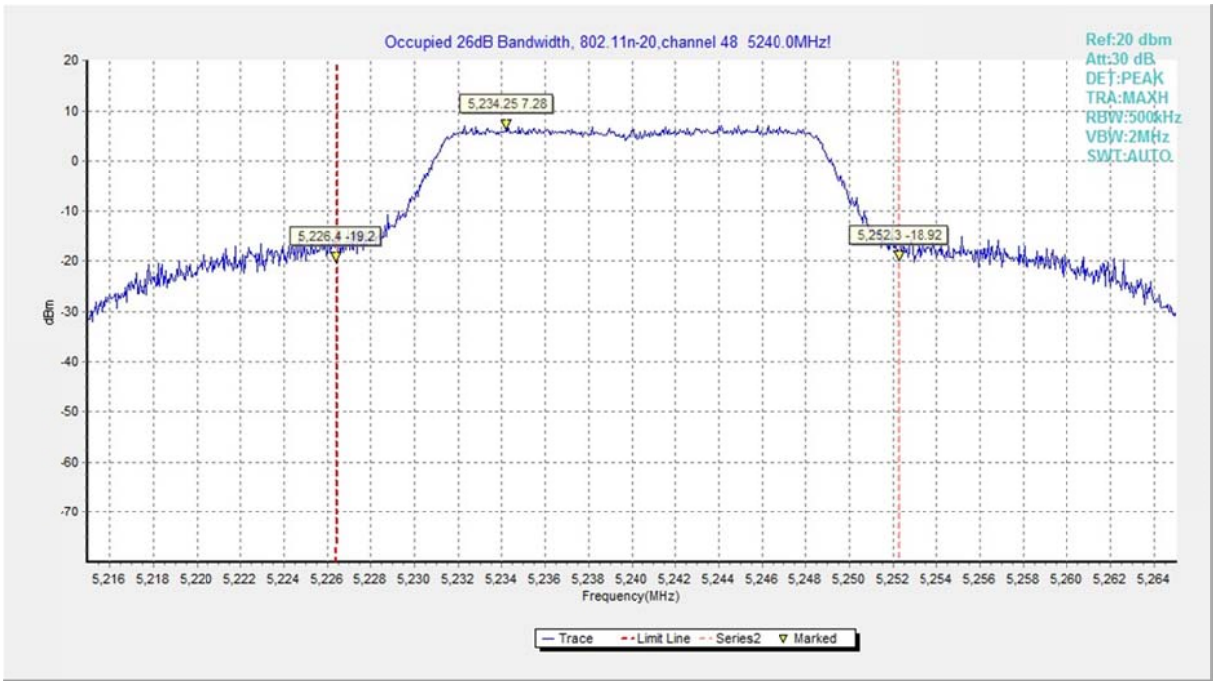


Fig. 12 Occupied 26dB Bandwidth (802.11n-HT20, 5240MHz)

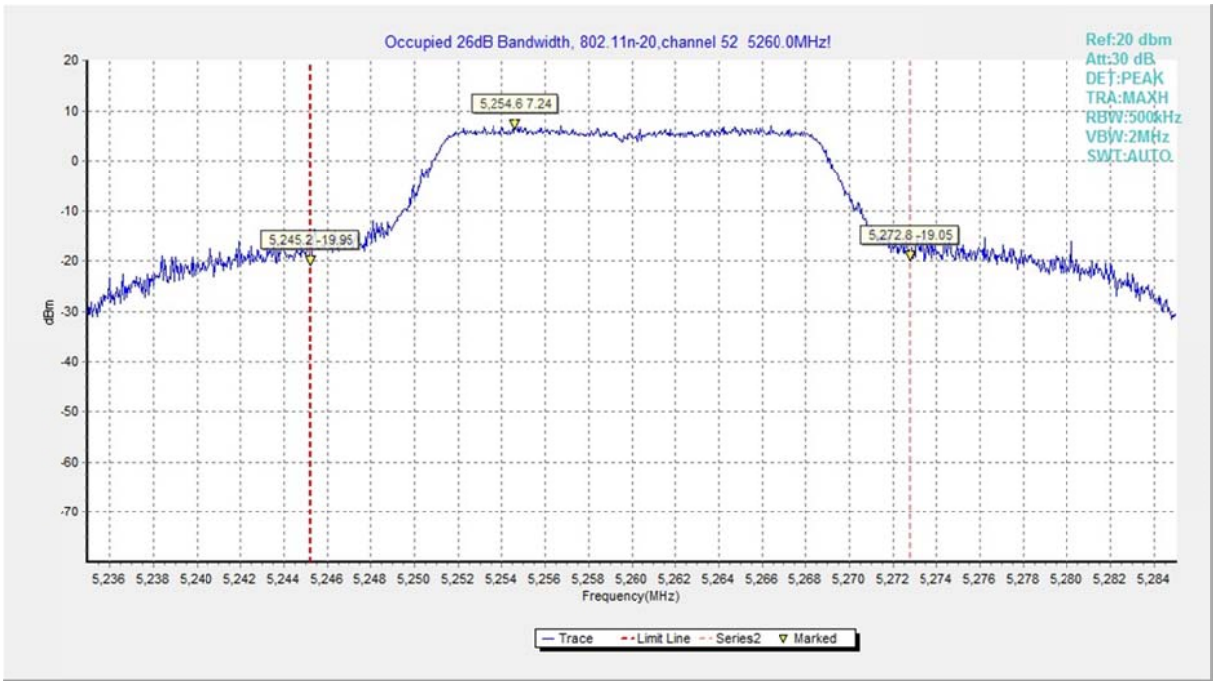


Fig. 13 Occupied 26dB Bandwidth (802.11n-HT20, 5260MHz)

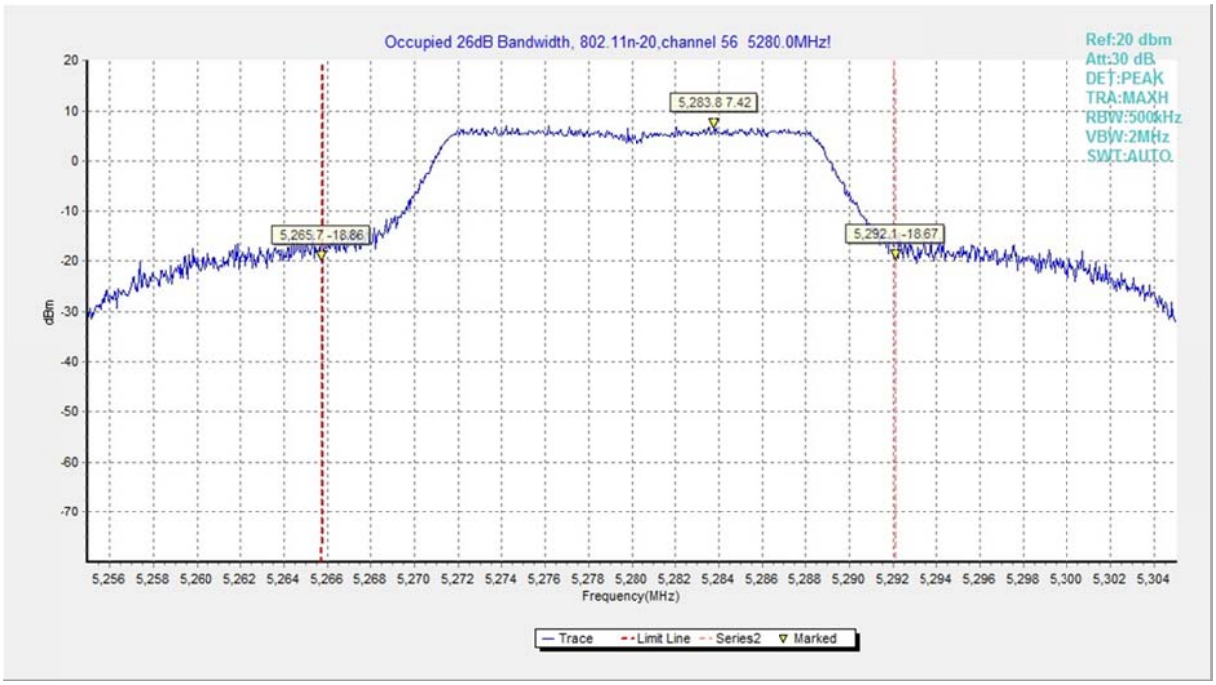


Fig. 14 Occupied 26dB Bandwidth (802.11n-HT20, 5280MHz)

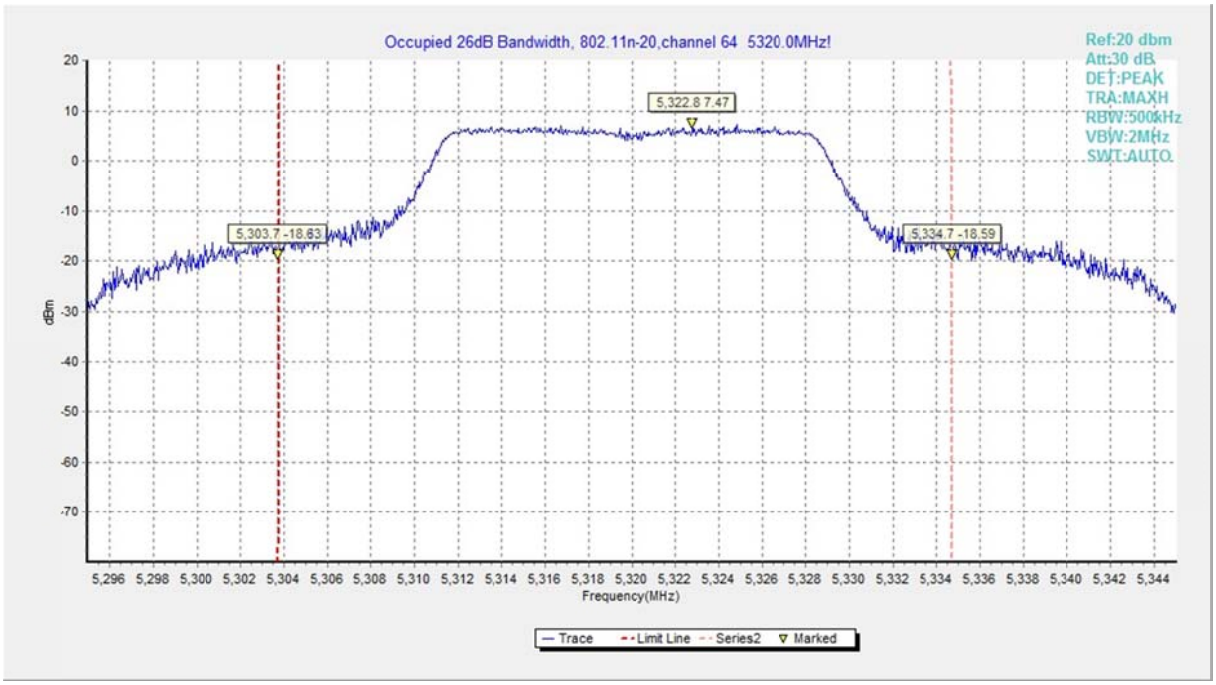


Fig. 15 Occupied 26dB Bandwidth (802.11n-HT20, 5320MHz)

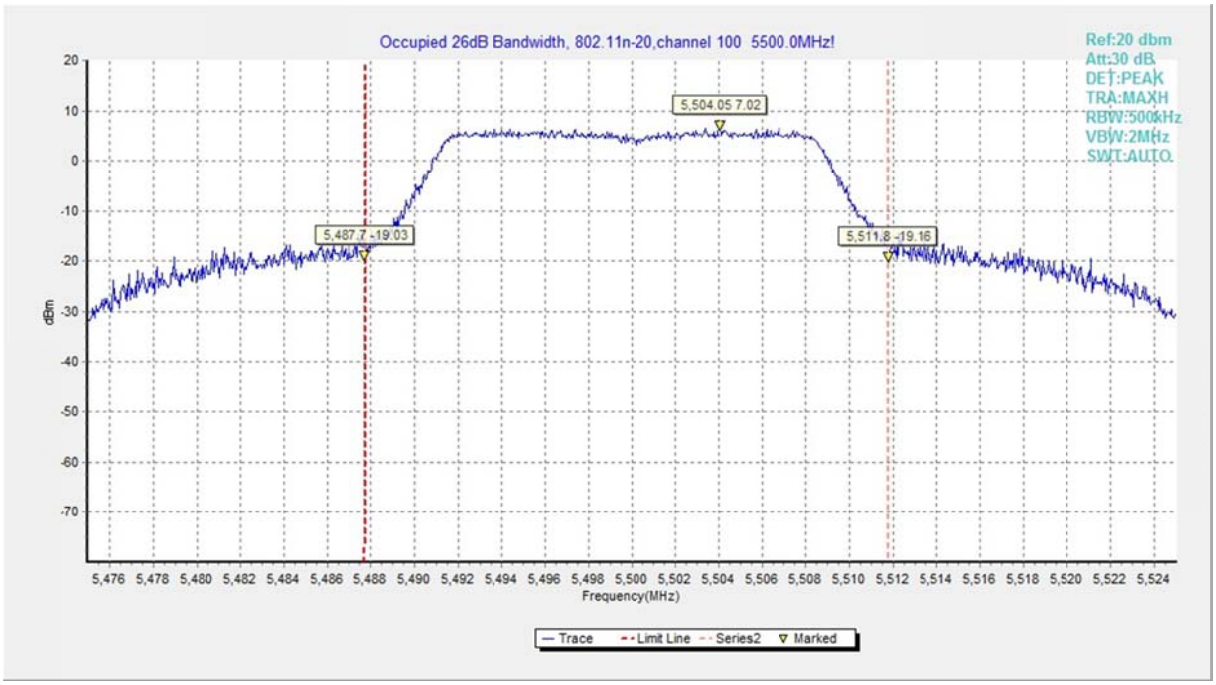


Fig. 16 Occupied 26dB Bandwidth (802. 11n-HT20, 5500MHz)

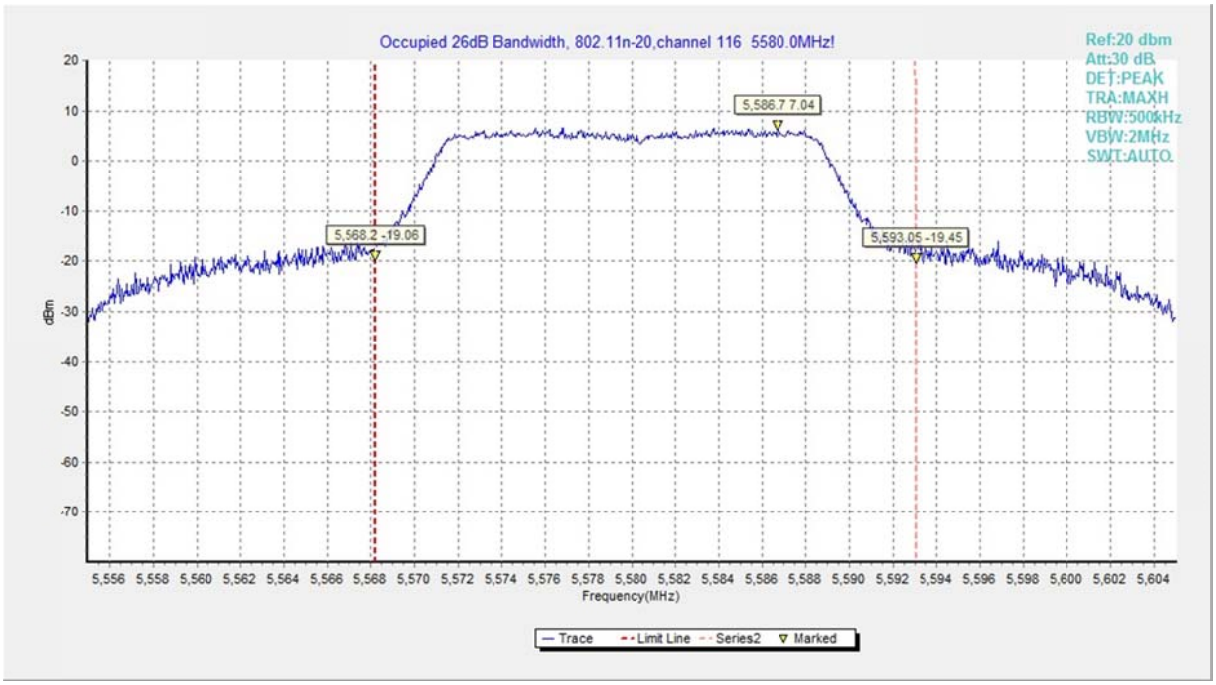


Fig. 17 Occupied 26dB Bandwidth (802. 11n-HT20, 5580MHz)

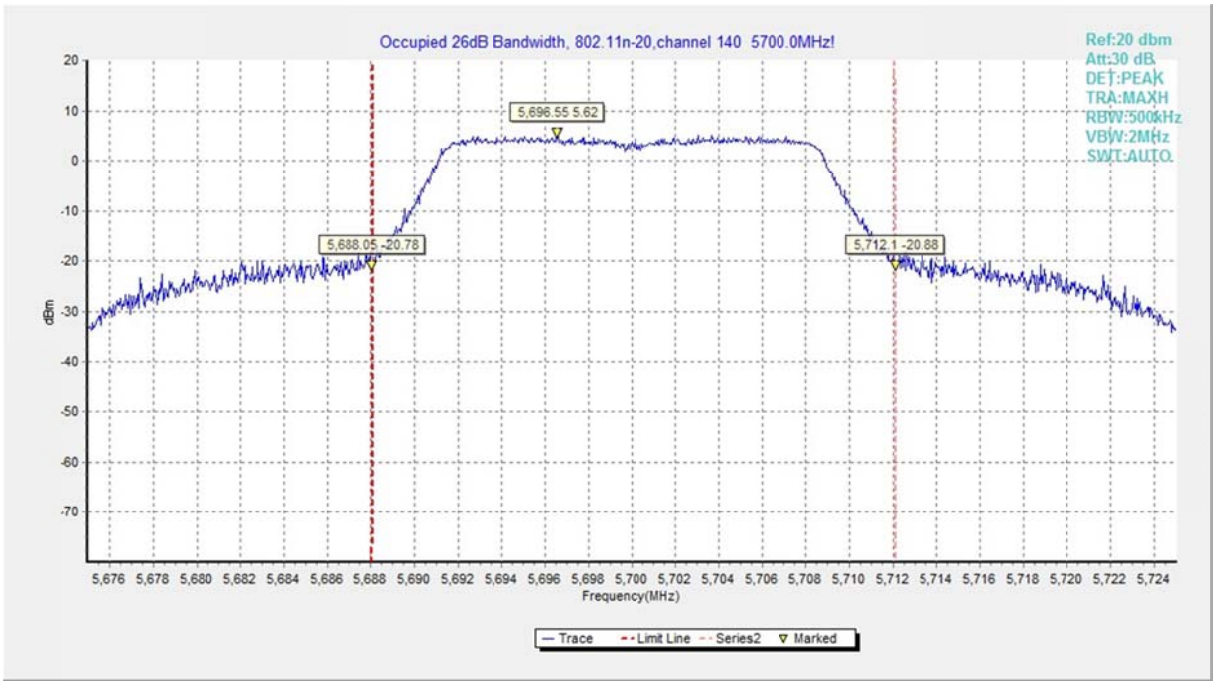


Fig. 18 Occupied 26dB Bandwidth (802. 11n-HT20, 5700MHz)

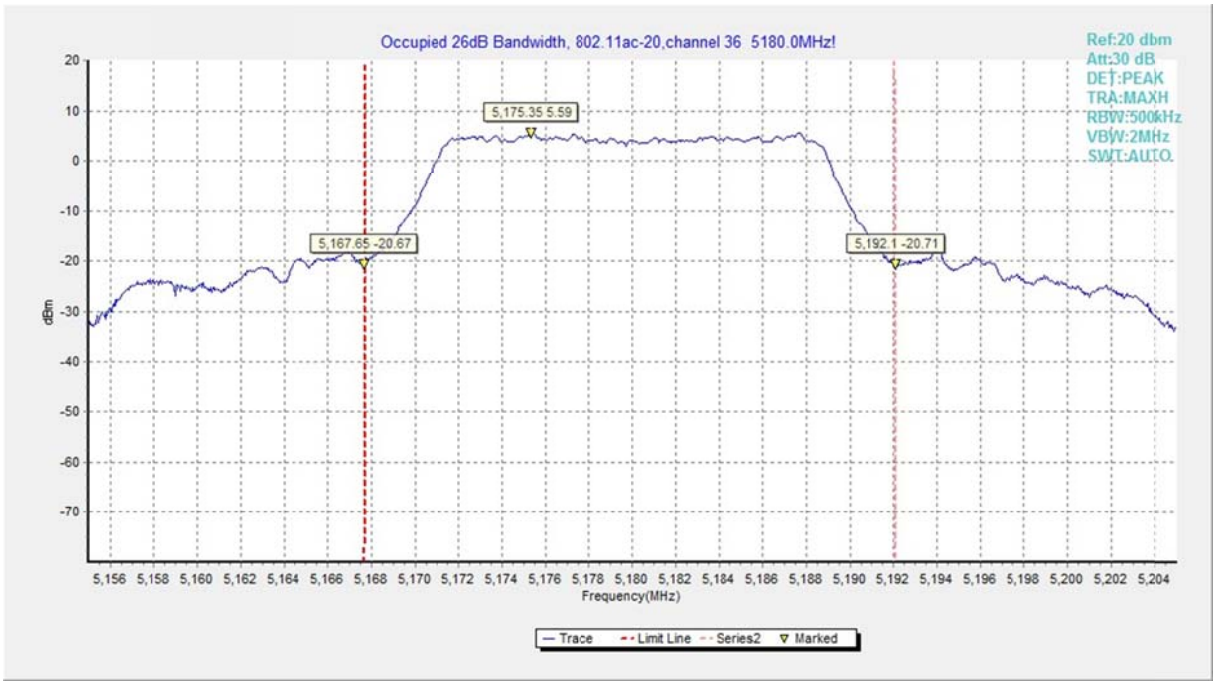


Fig. 19 Occupied 26dB Bandwidth (802.11ac-HT20, 5180MHz)

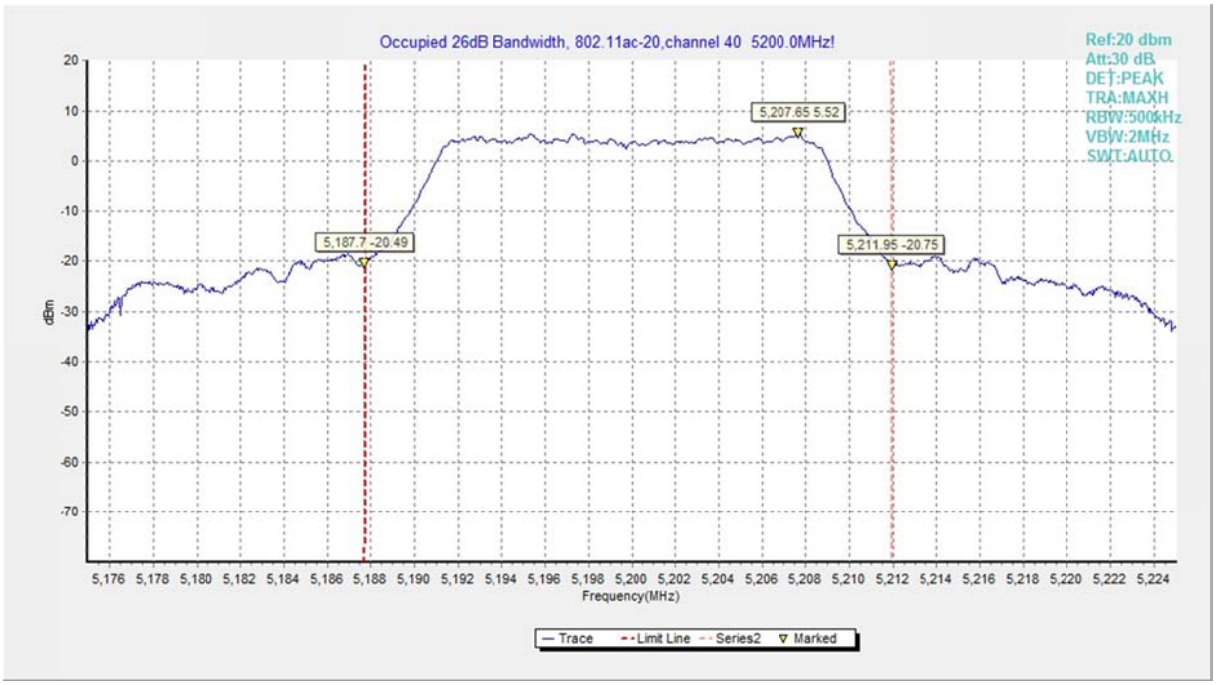


Fig. 20 Occupied 26dB Bandwidth (802.11ac-HT20, 5200MHz)

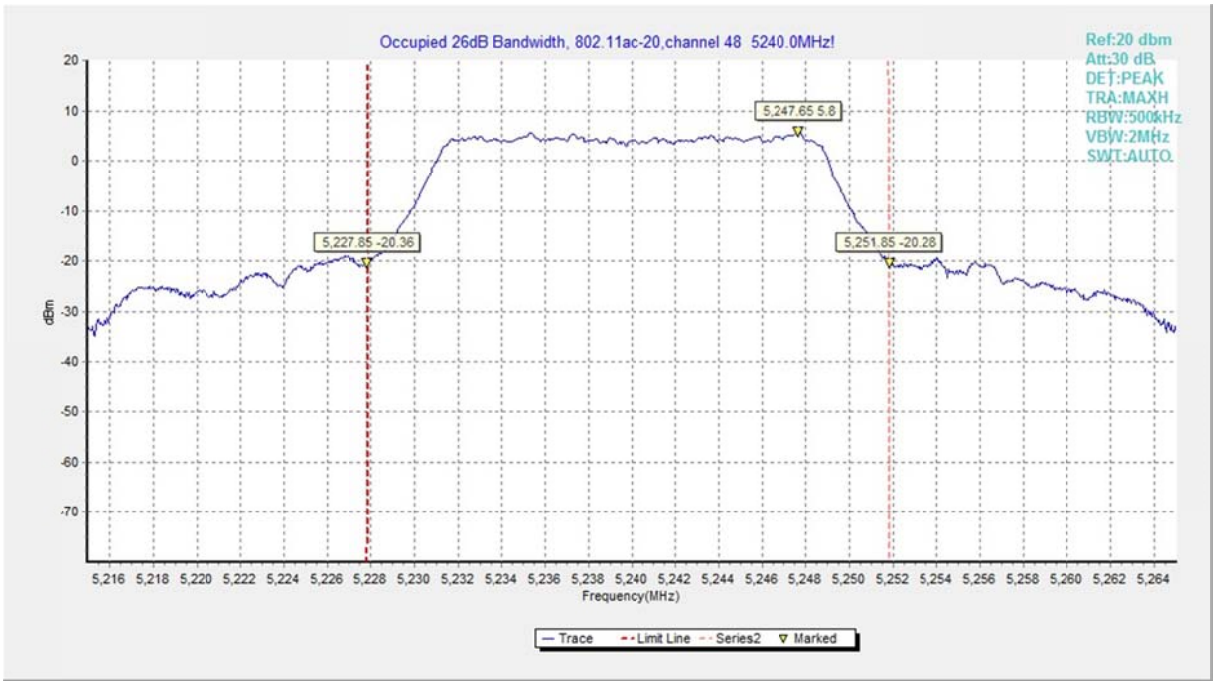


Fig. 21 Occupied 26dB Bandwidth (802.11ac-HT20, 5240MHz)

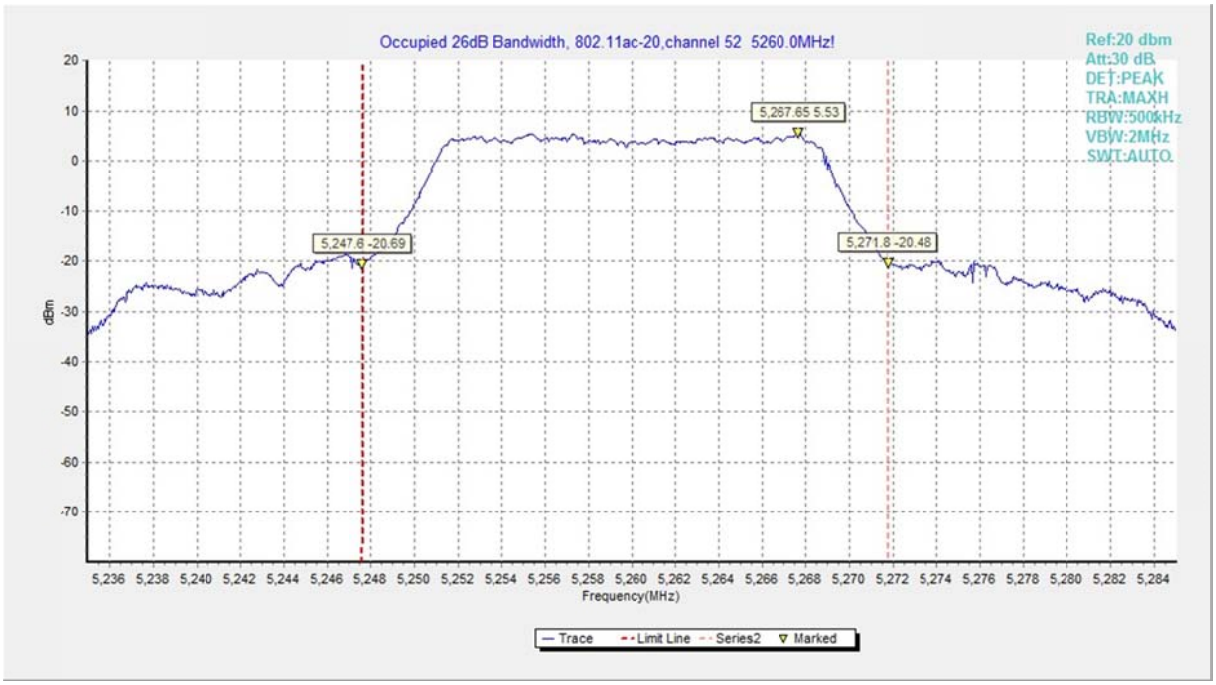


Fig. 22 Occupied 26dB Bandwidth (802.11ac-HT20, 5260MHz)

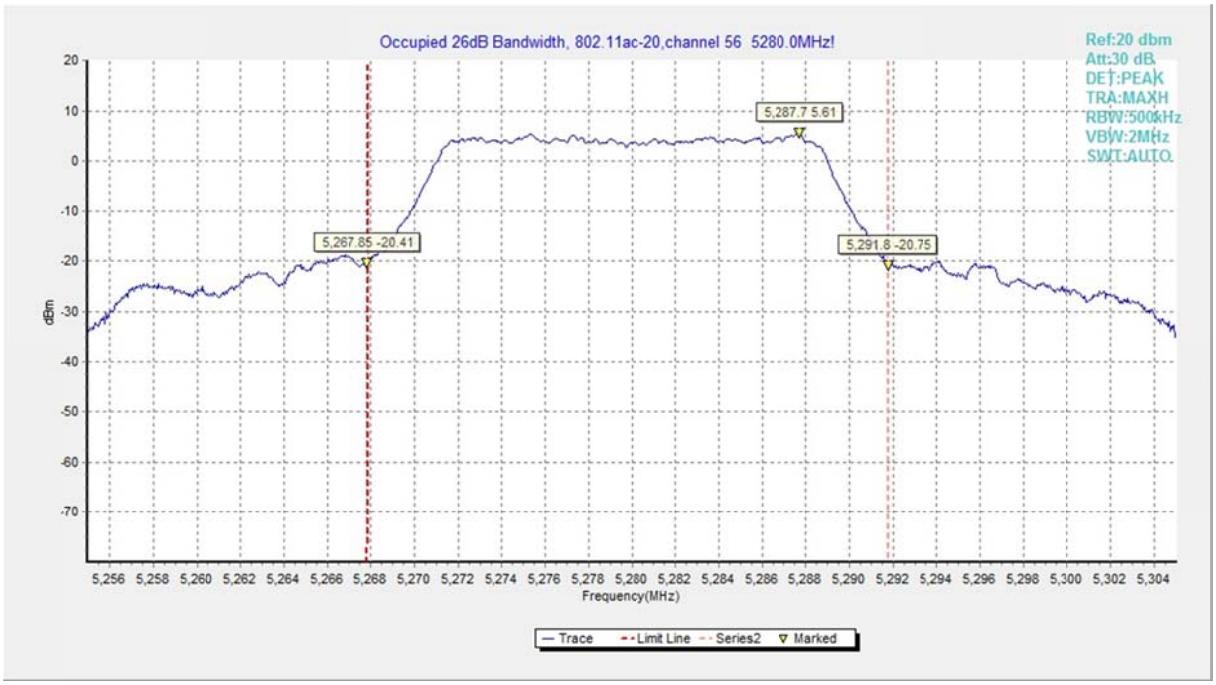


Fig. 23 Occupied 26dB Bandwidth (802.11ac-HT20, 5280MHz)

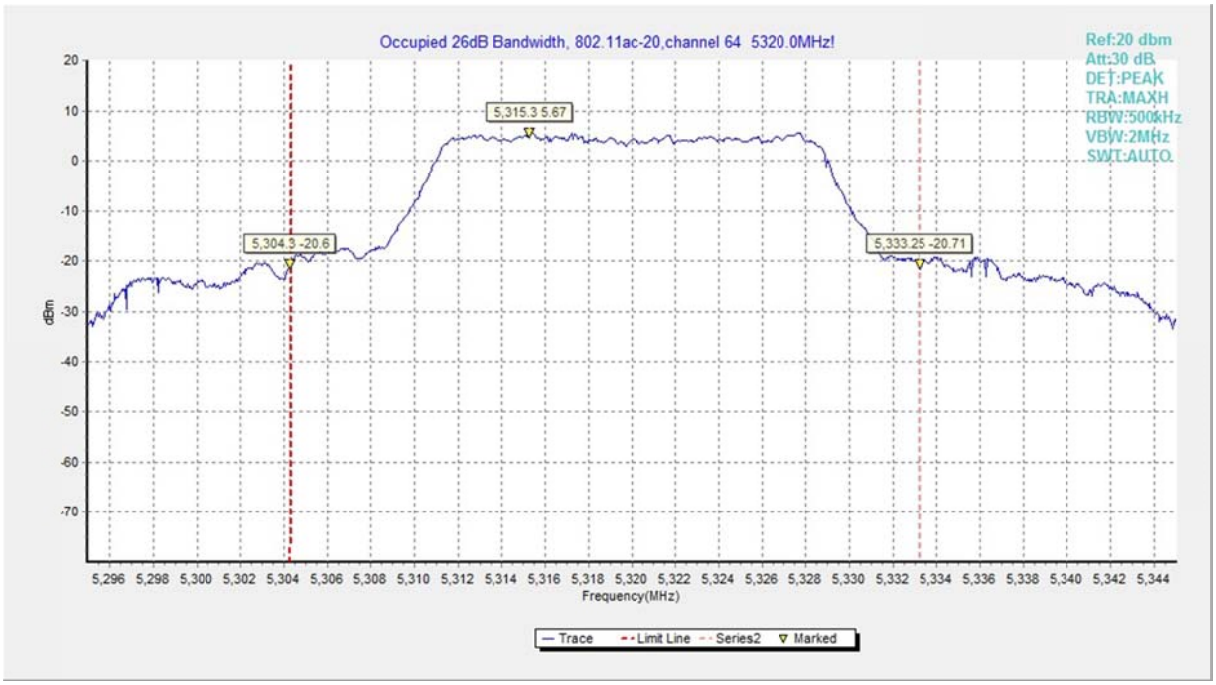


Fig. 24 Occupied 26dB Bandwidth (802.11ac-HT20, 5320MHz)

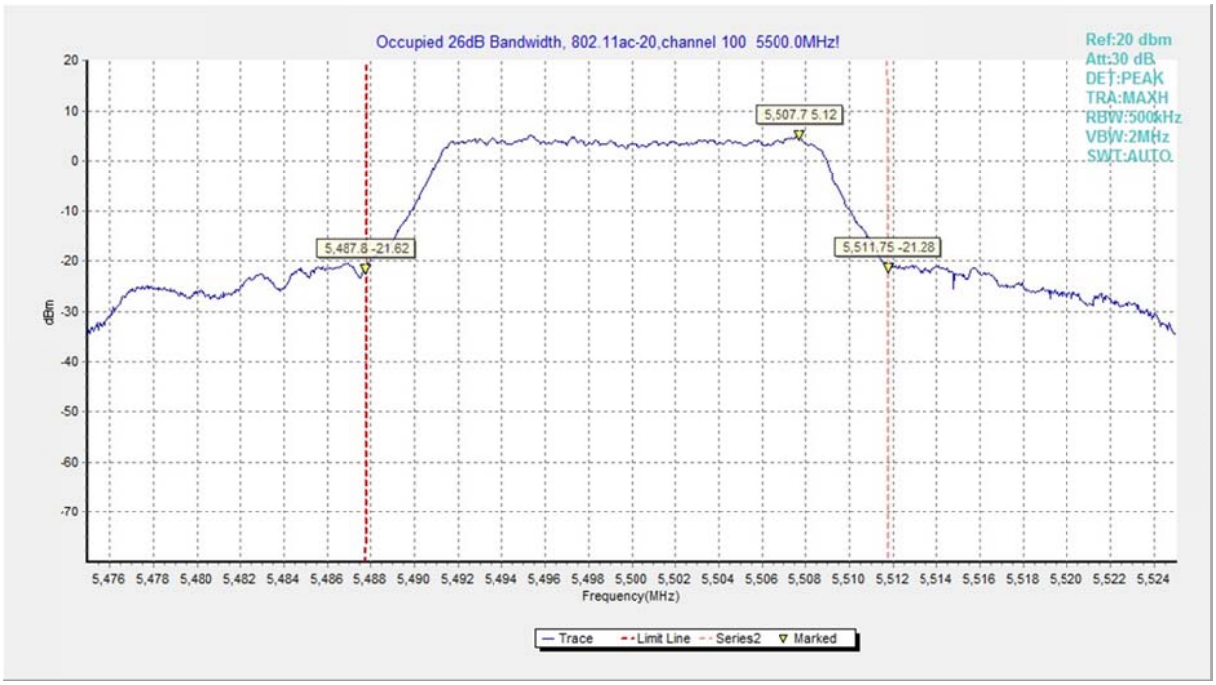


Fig. 25 Occupied 26dB Bandwidth (802. 11ac-HT20, 5500MHz)

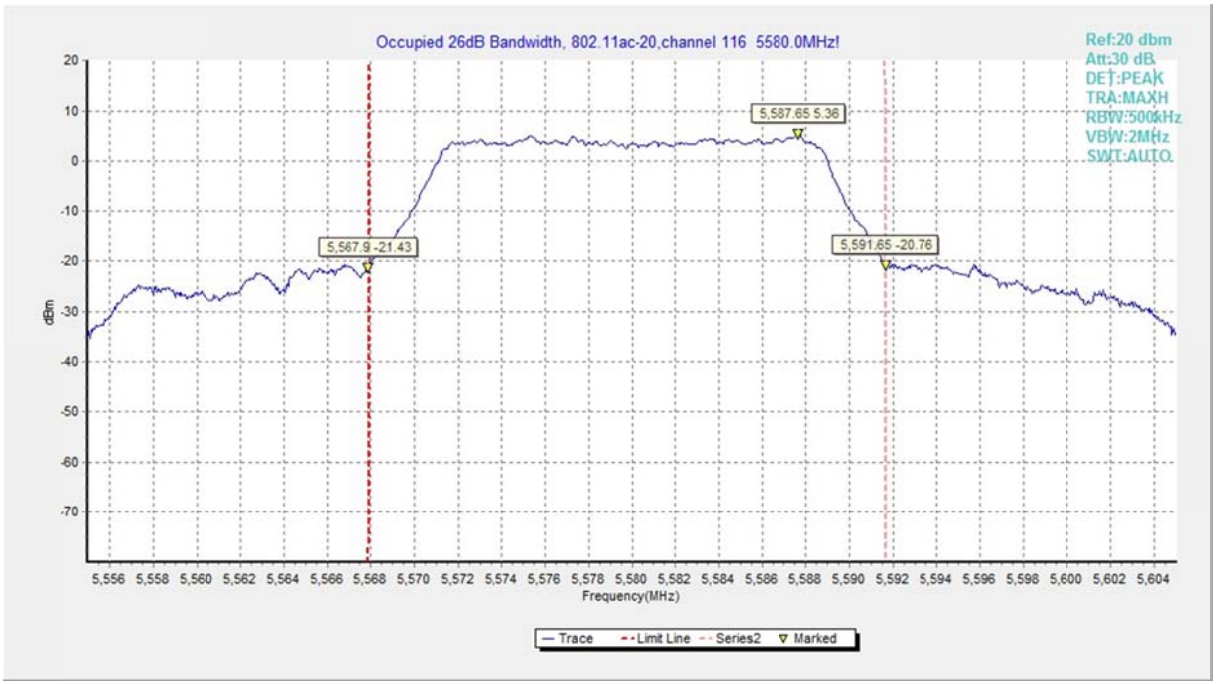


Fig. 26 Occupied 26dB Bandwidth (802. 11ac-HT20, 5580MHz)

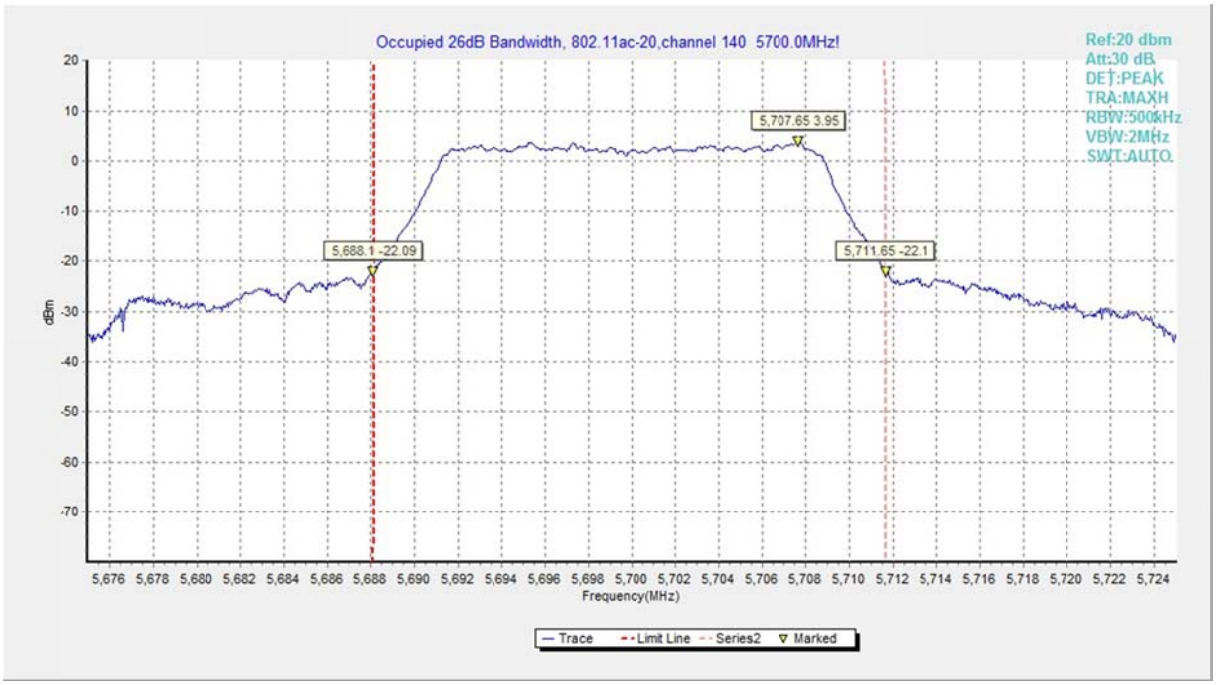


Fig. 27 Occupied 26dB Bandwidth (802. 11ac-HT20, 5700MHz)

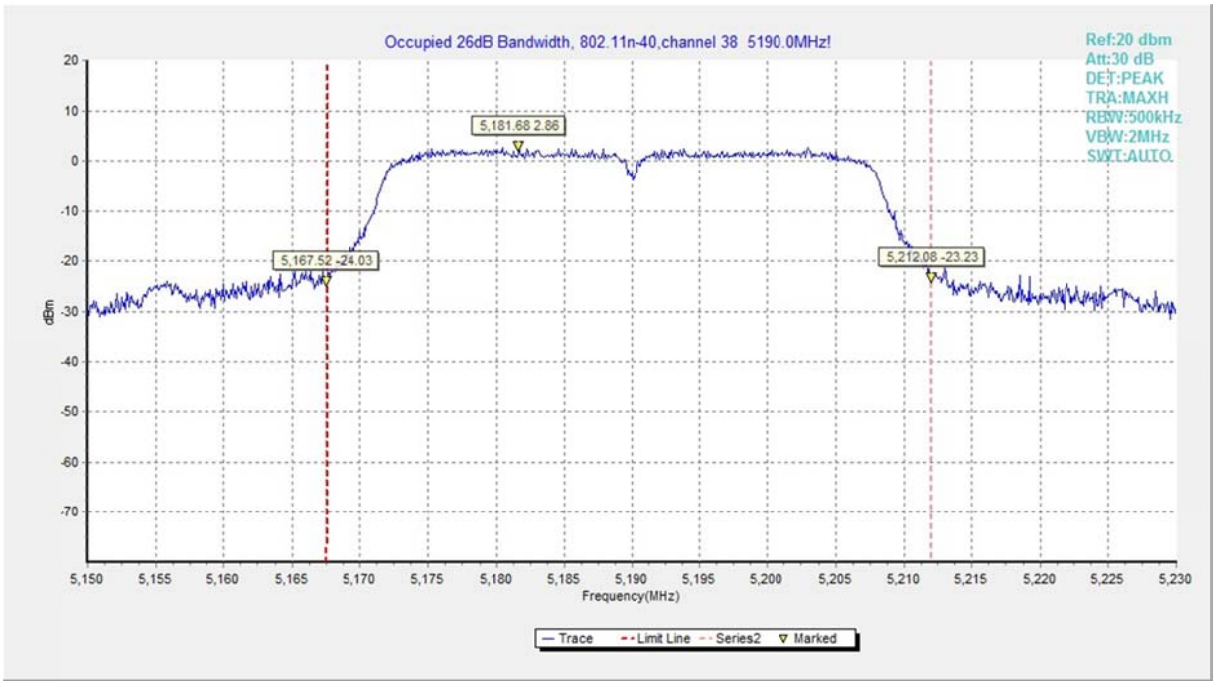


Fig. 28 Occupied 26dB Bandwidth (802.11n-HT40, 5190MHz)

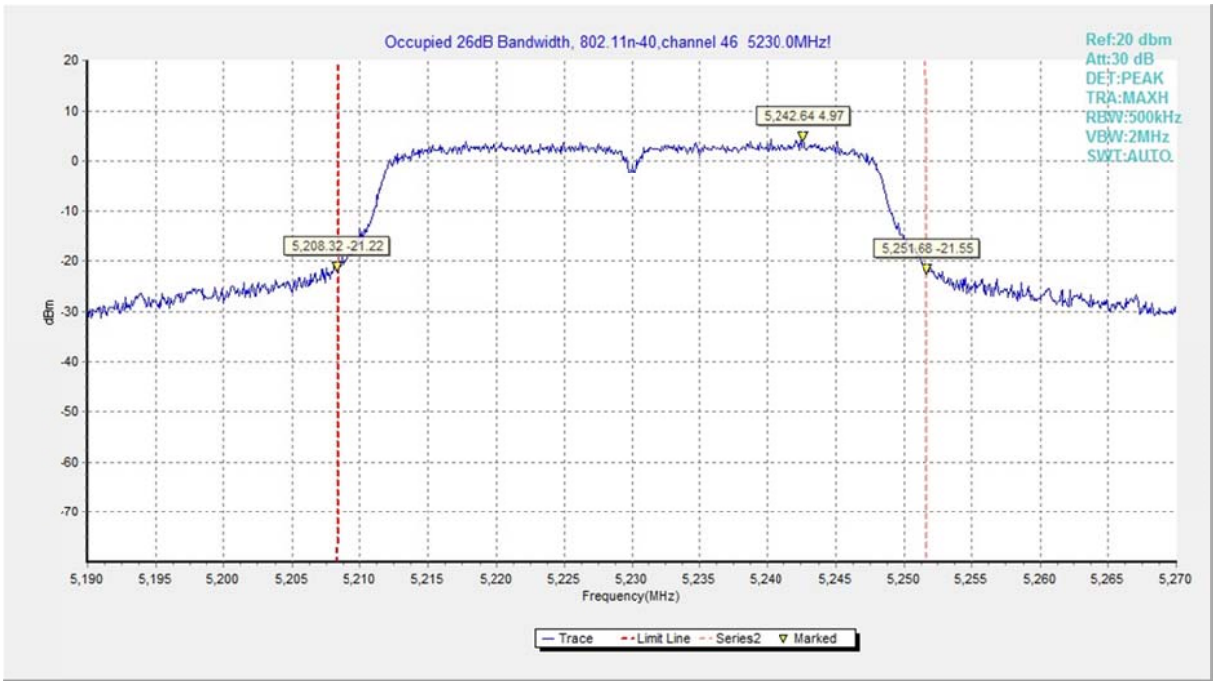


Fig. 29 Occupied 26dB Bandwidth (802.11n-HT40, 5230MHz)

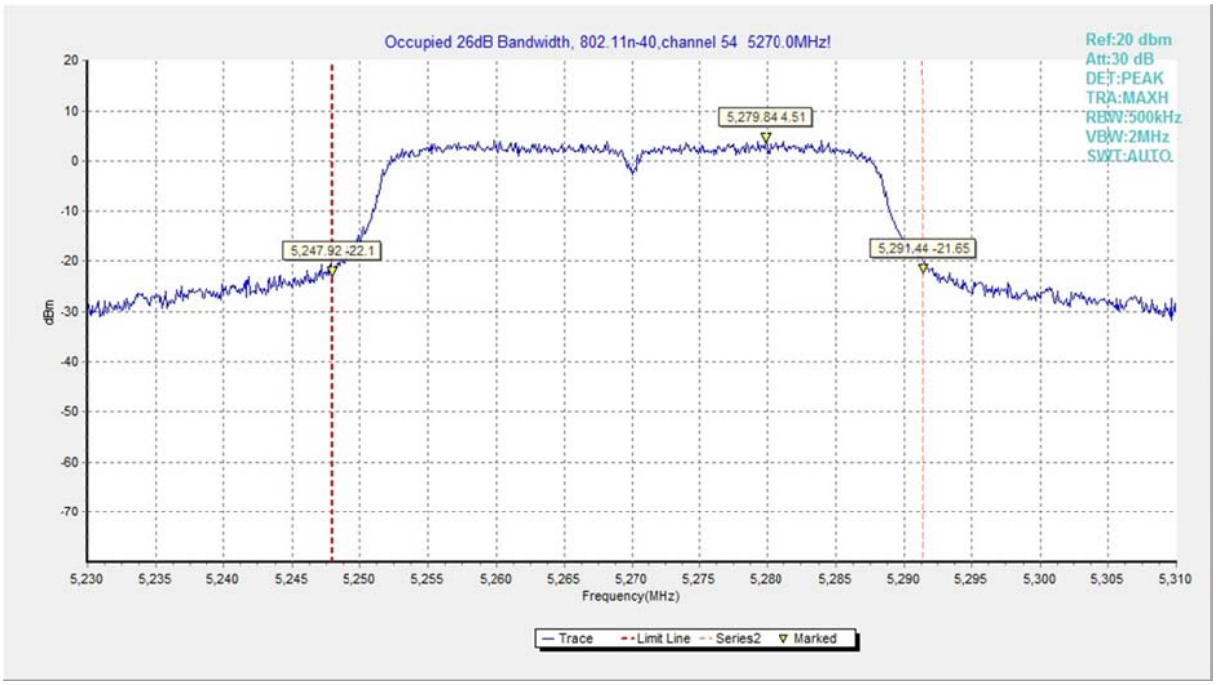


Fig. 30 Occupied 26dB Bandwidth (802.11n-HT40, 5270MHz)

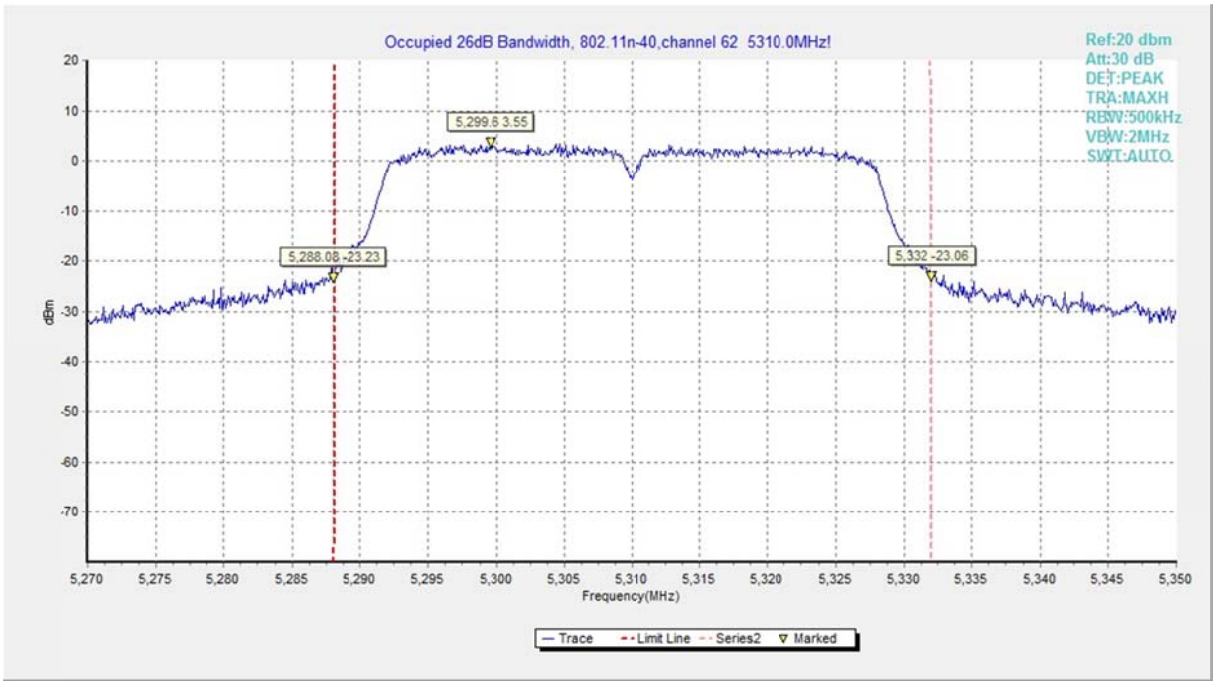


Fig. 31 Occupied 26dB Bandwidth (802.11n-HT40, 5310MHz)

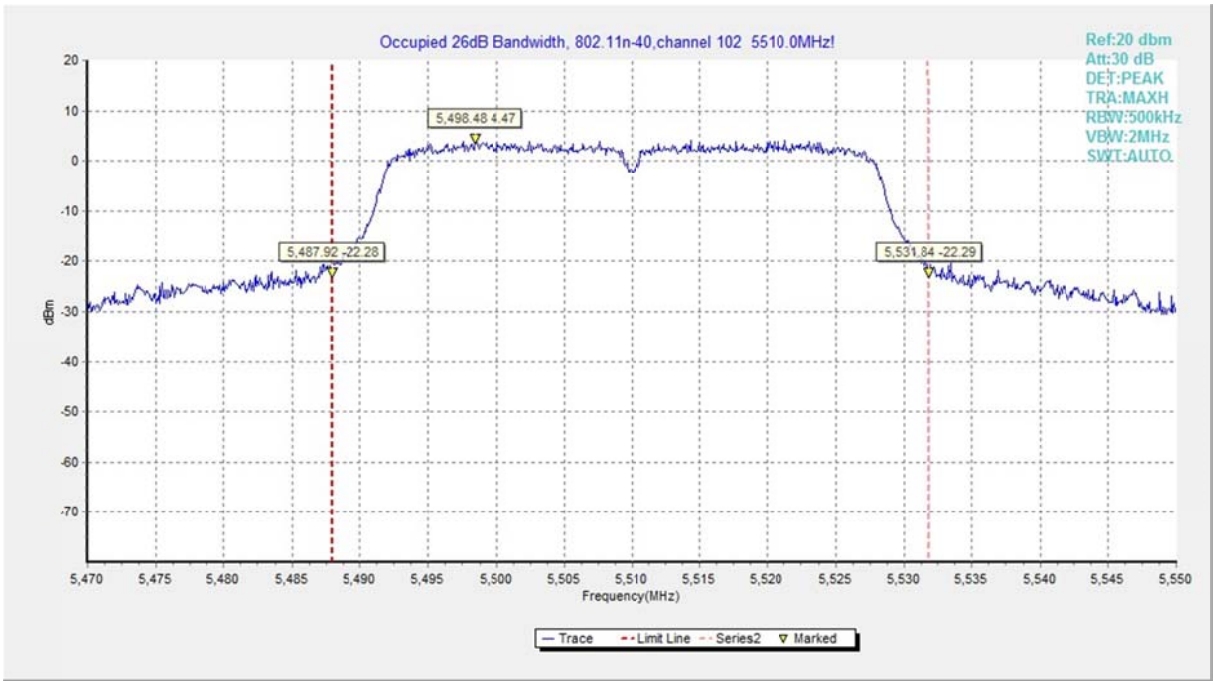


Fig. 32 Occupied 26dB Bandwidth (802. 11n-HT40, 5510MHz)

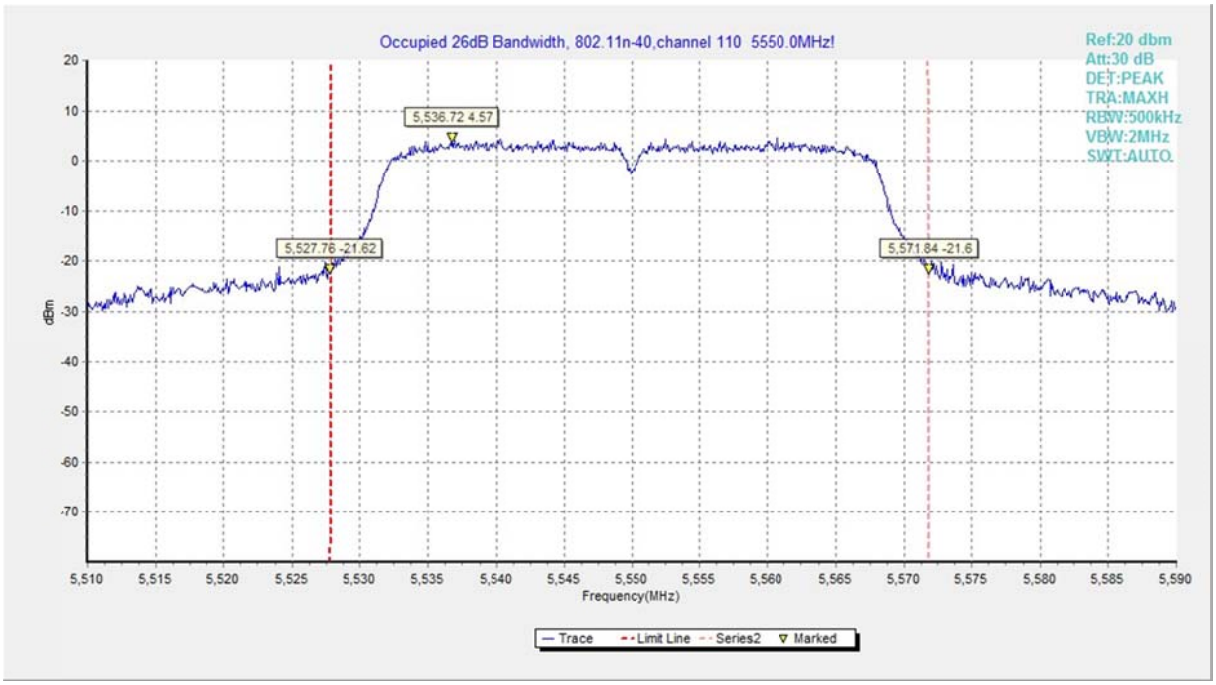


Fig. 33 Occupied 26dB Bandwidth (802. 11n-HT40, 5550MHz)

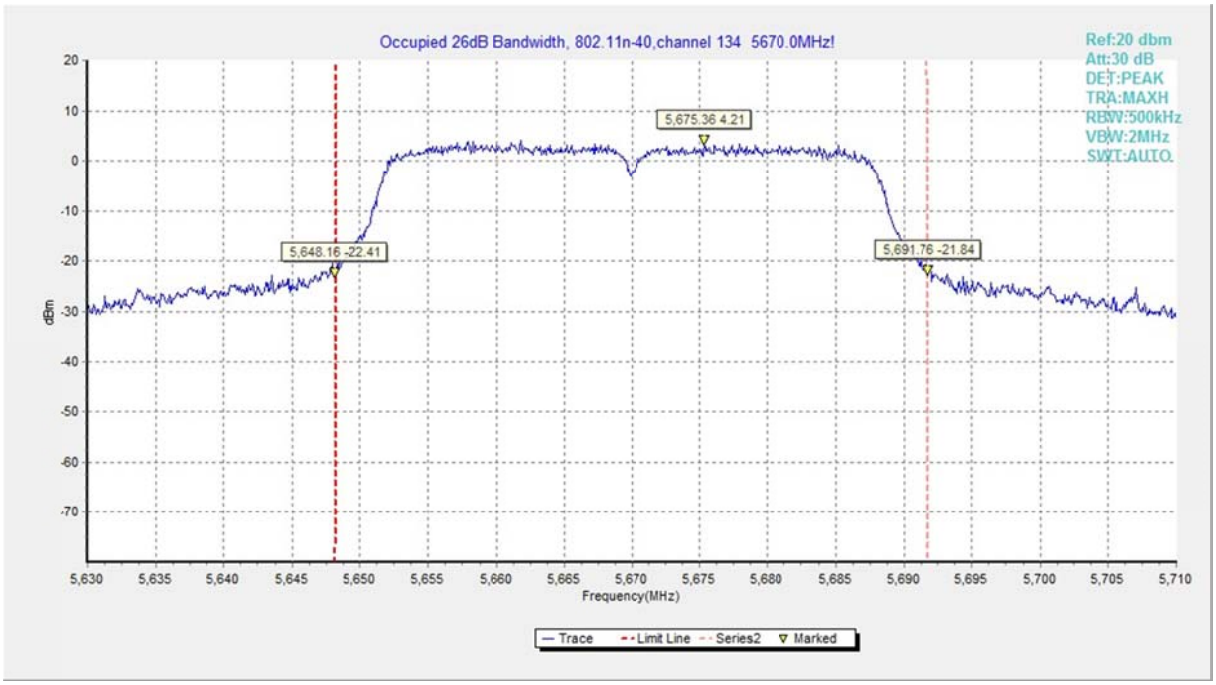


Fig. 34 Occupied 26dB Bandwidth (802. 11n-HT40, 5670MHz)

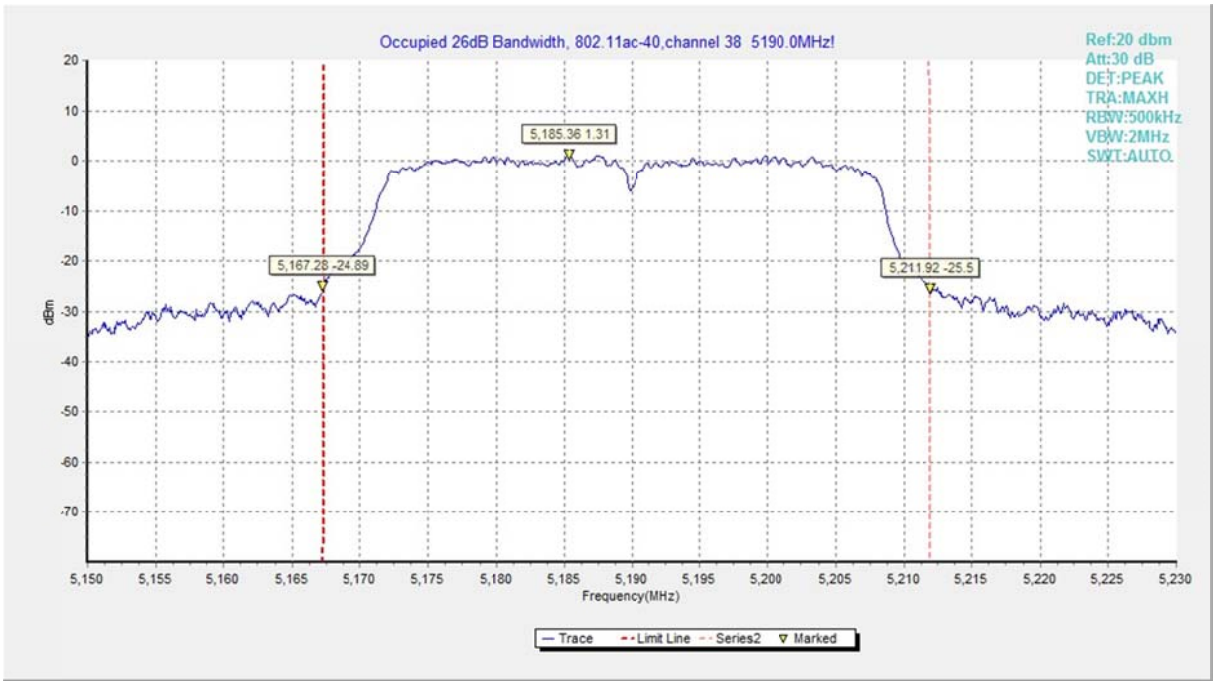


Fig. 35 Occupied 26dB Bandwidth (802.11ac-HT40, 5190MHz)

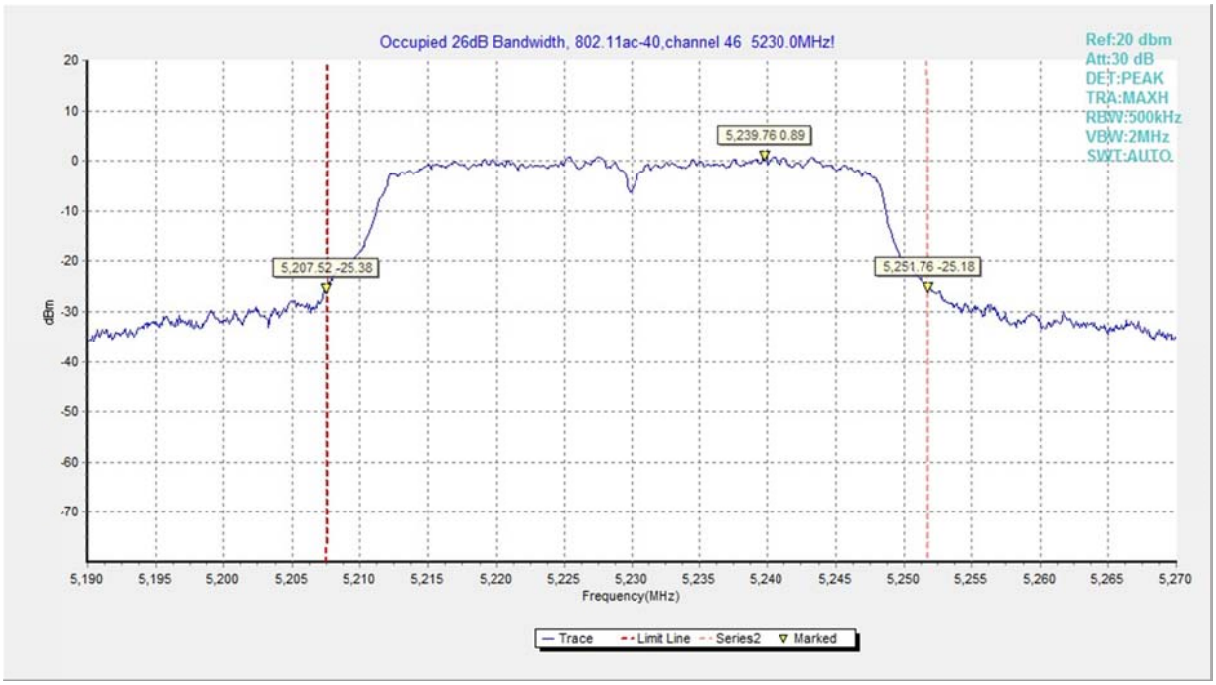


Fig. 36 Occupied 26dB Bandwidth (802.11ac-HT40, 5230MHz)

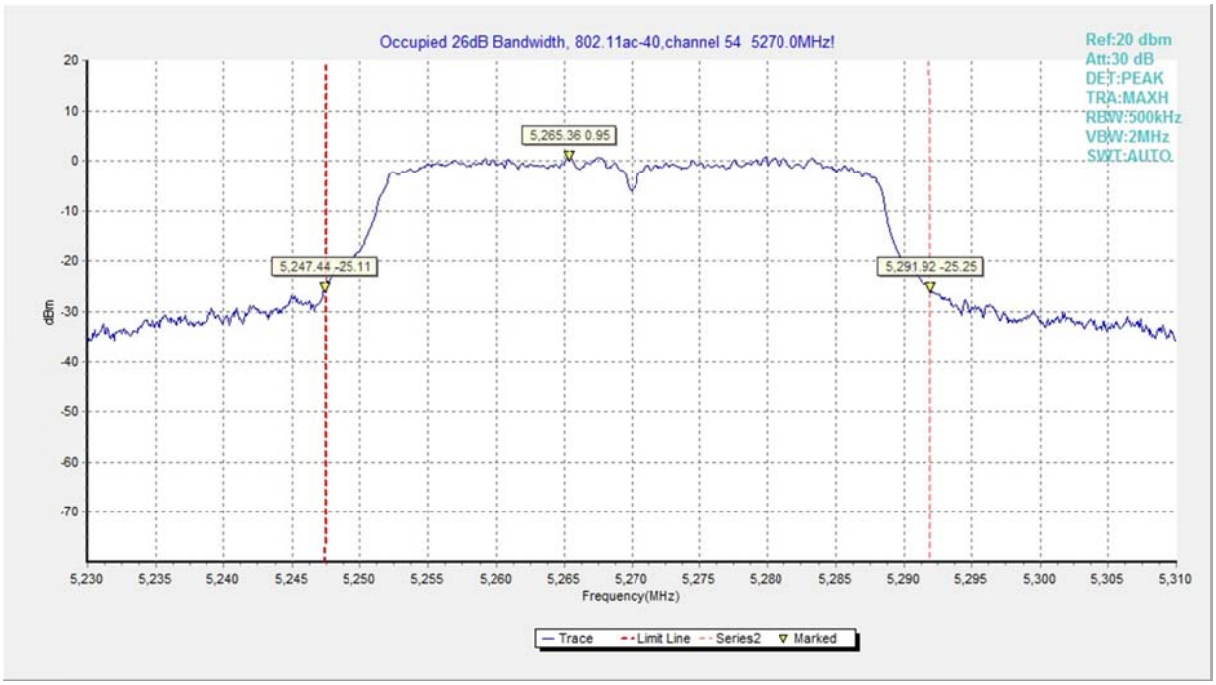


Fig. 37 Occupied 26dB Bandwidth (802.11ac-HT40, 5270MHz)

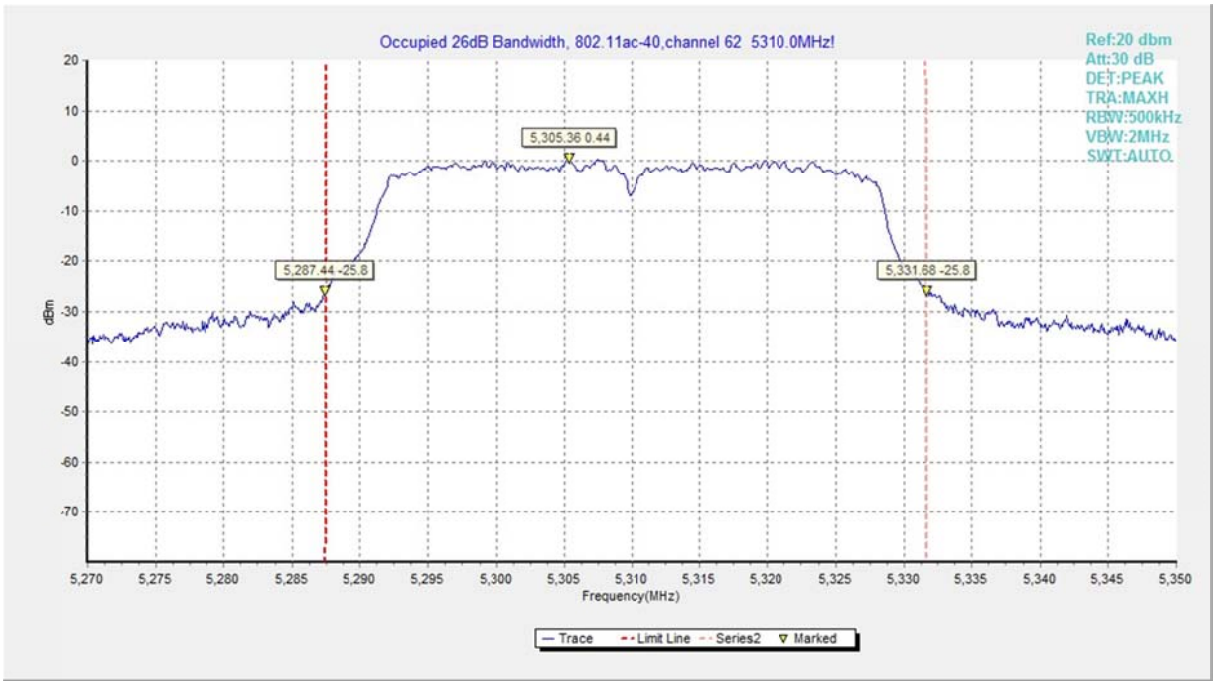


Fig. 38 Occupied 26dB Bandwidth (802.11ac-HT40, 5310MHz)

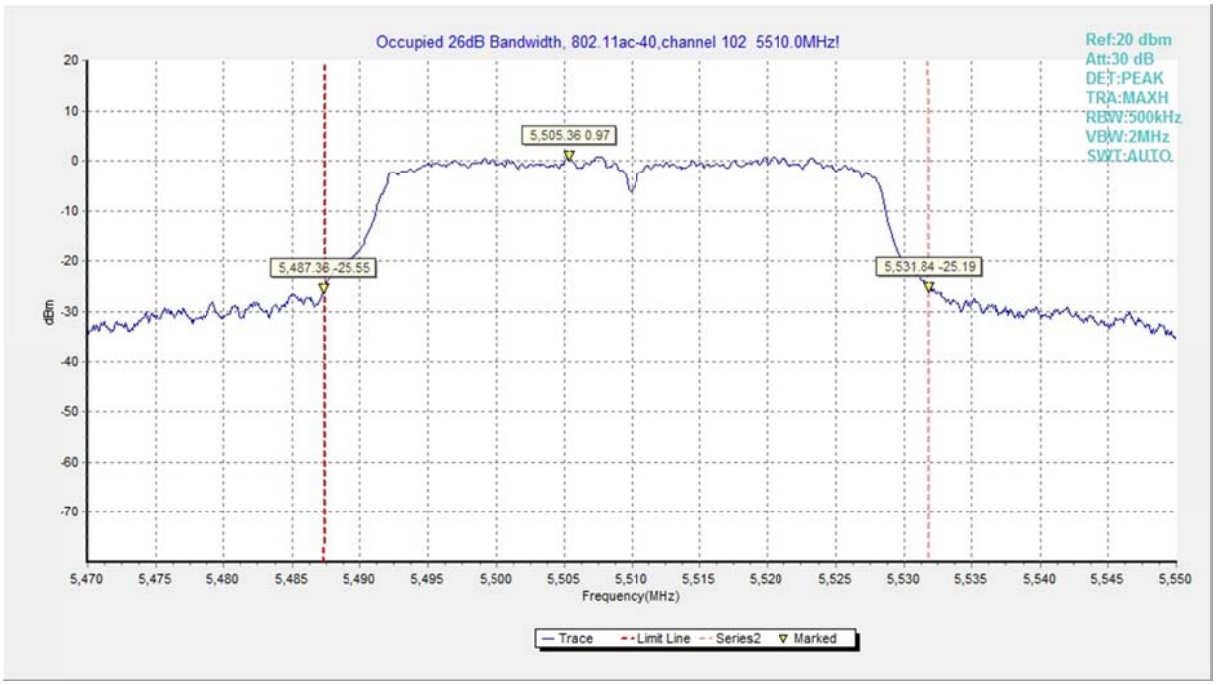


Fig. 39 Occupied 26dB Bandwidth (802. 11ac-HT40, 5510MHz)

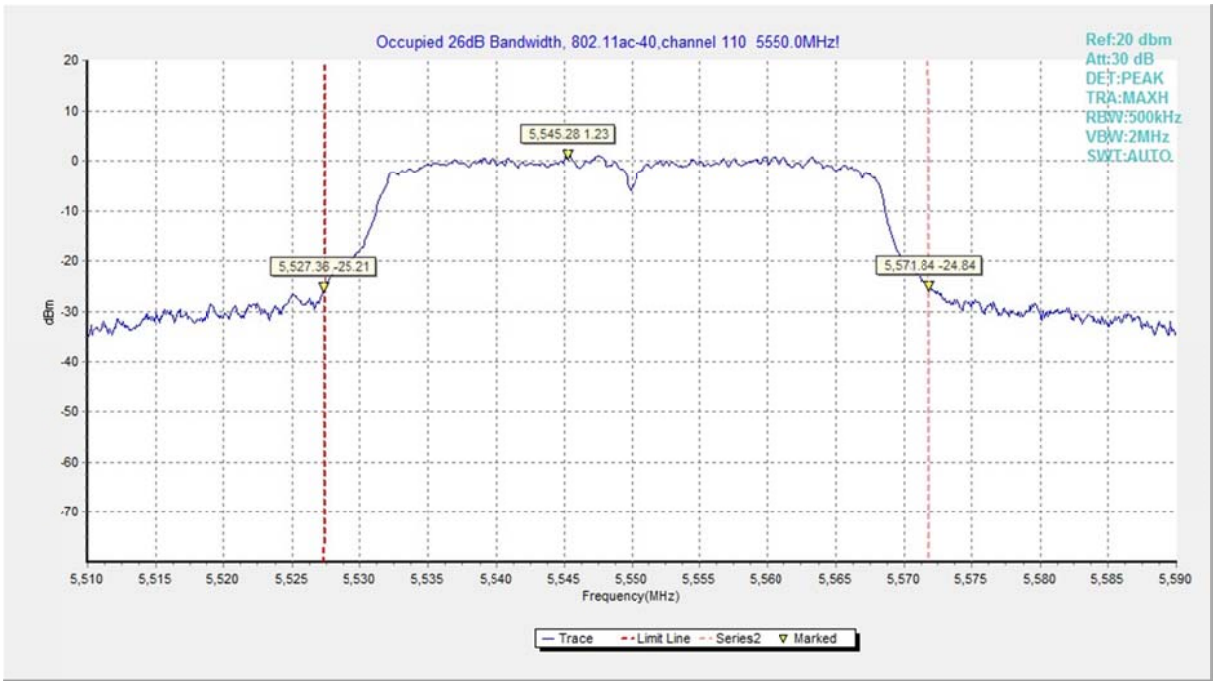


Fig. 40 Occupied 26dB Bandwidth (802. 11ac-HT40, 5550MHz)

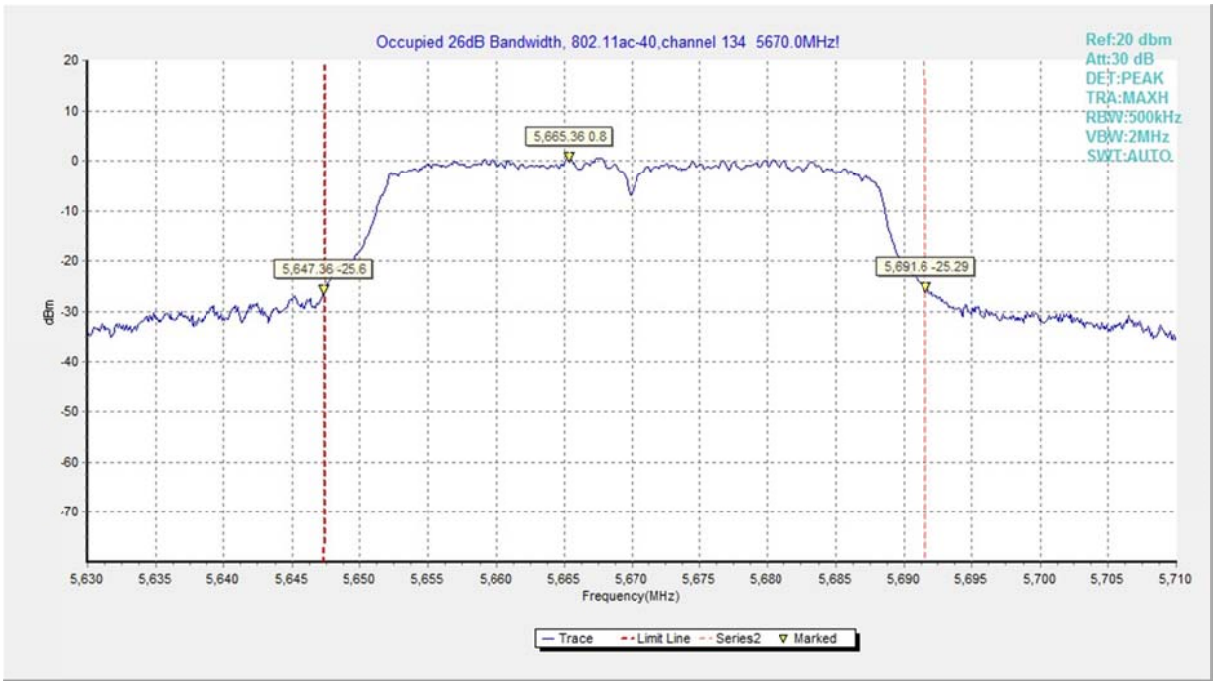


Fig. 41 Occupied 26dB Bandwidth (802. 11ac-HT40, 5670MHz)

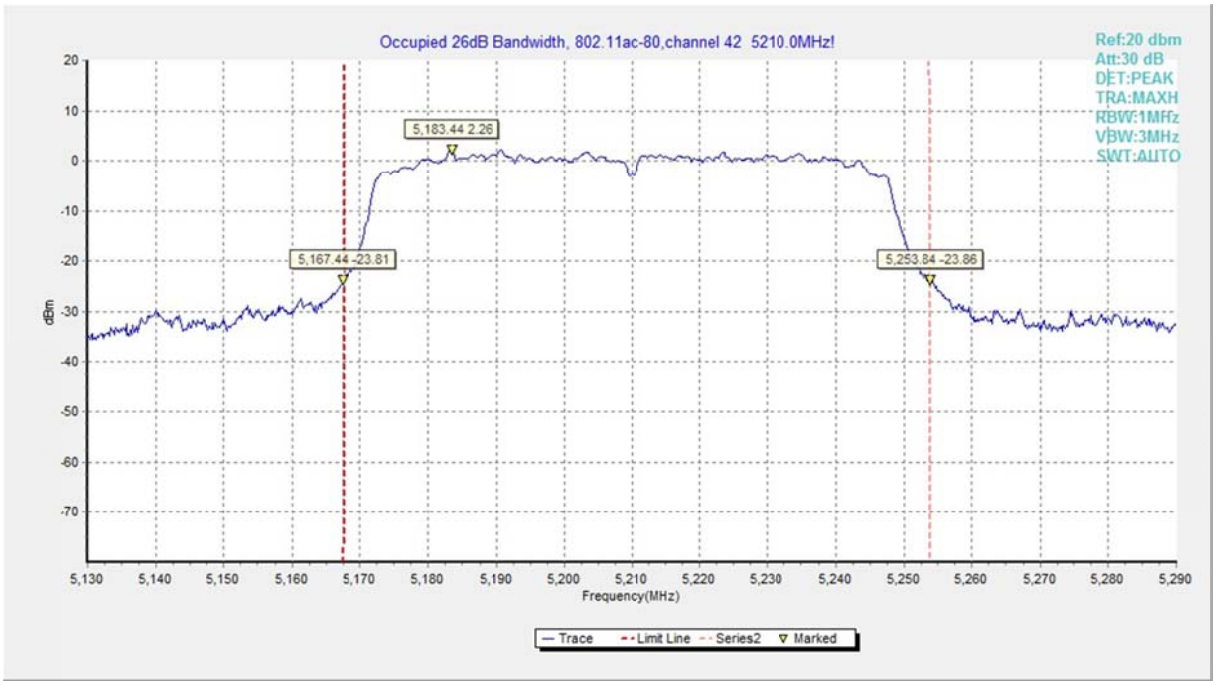


Fig. 42 Occupied 26dB Bandwidth (802. 11ac-HT80, 5210MHz)

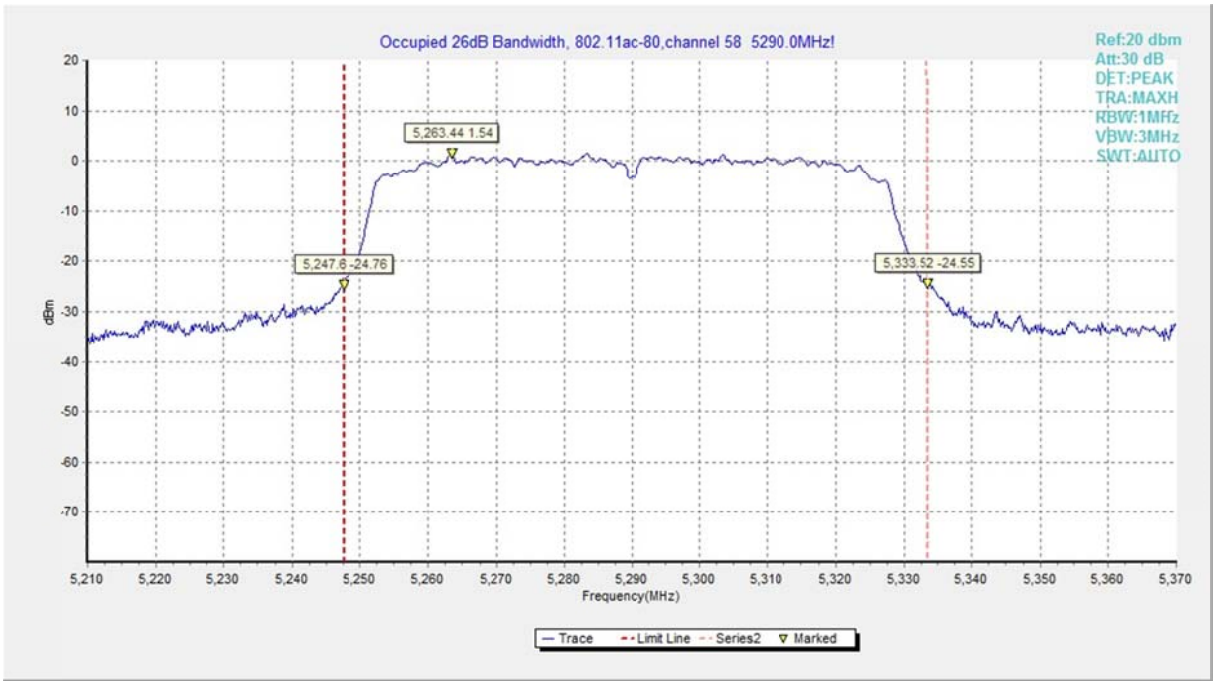


Fig. 43 Occupied 26dB Bandwidth (802. 11ac-HT80, 5290MHz)

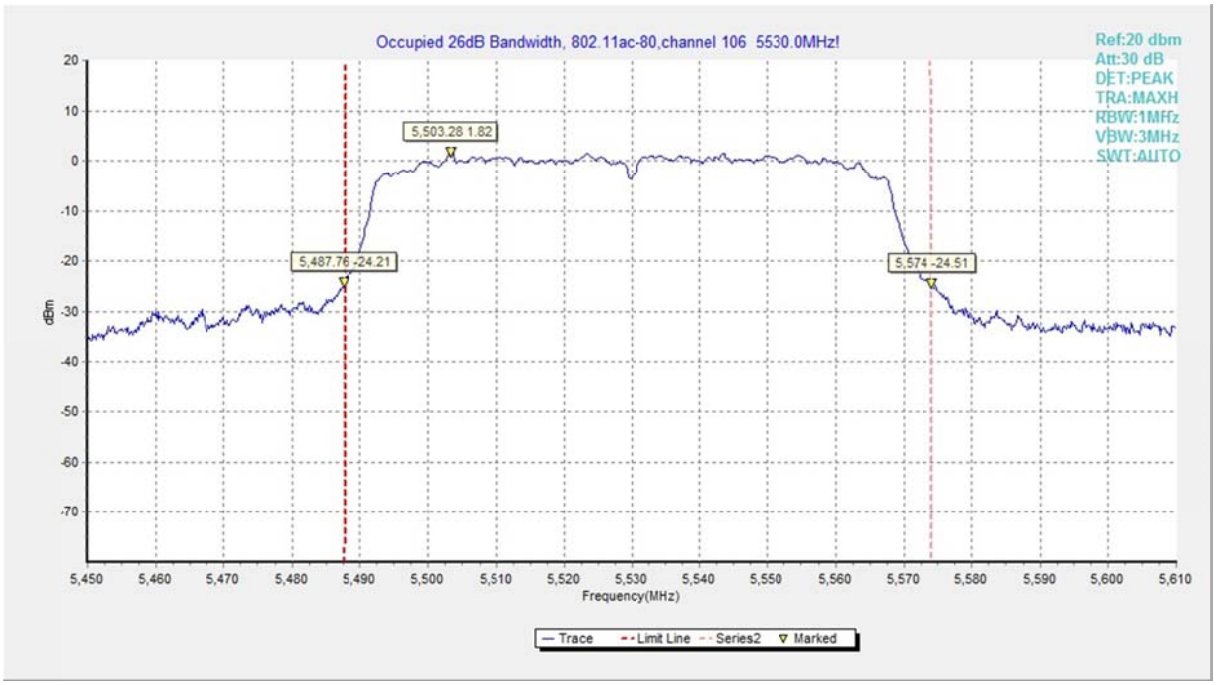


Fig. 44 Occupied 26dB Bandwidth (802. 11ac-HT80, 5530MHz)

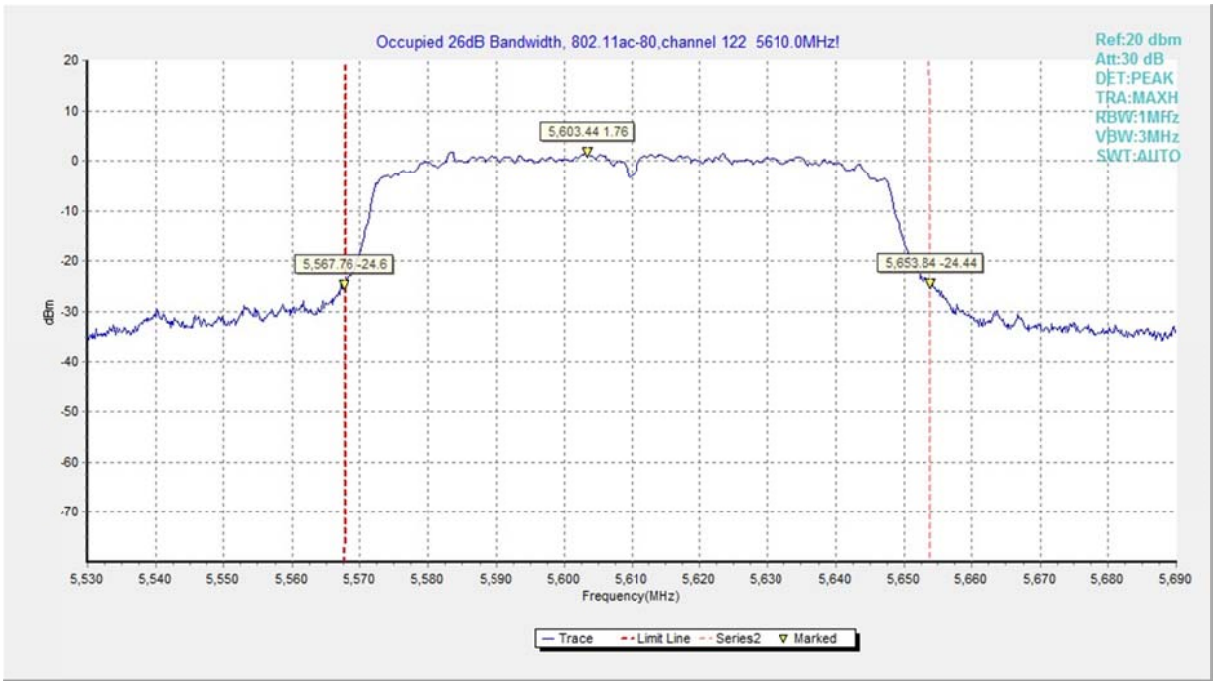


Fig. 45 Occupied 26dB Bandwidth (802. 11ac-HT80, 5610MHz)

A.5. Band Edges Compliance

A5.1 Band Edges - Radiated

Measurement Limit:

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

The measurement is made according to KDB 789033

In addition, radiated emissions which fall in the restricted bands, as defined in § 15.205(a), must also comply with the radiated emission limits specified in § 15.209(a) (see § 15.205(c)).

Measurement Uncertainty:

Measurement Uncertainty	0.75dB

Measurement Result:

Mode	Channel	Test Results	Conclusion
802.11a	5180 MHz	Fig.46	P
	5320 MHz	Fig.47	P
	5500 MHz	Fig.48	P
	5700 MHz	Fig.49	P
802.11n HT20	5180 MHz	Fig.50	P
	5320 MHz	Fig.51	P
	5500 MHz	Fig.52	P
	5700 MHz	Fig.53	P
802.11n HT40	5190 MHz	Fig.54	P
	5310 MHz	Fig.55	P
	5510 MHz	Fig.56	P
	5670 MHz	Fig.57	P
802.11ac HT20	5180 MHz	Fig.58	P
	5320 MHz	Fig.59	P
	5500 MHz	Fig.60	P
	5700 MHz	Fig.61	P
802.11ac HT40	5190 MHz	Fig.62	P
	5310 MHz	Fig.63	P
	5510 MHz	Fig.64	P
	5670 MHz	Fig.65	P
802.11ac HT80	5210 MHz	Fig.66	P
	5290 MHz	Fig.67	P
	5530 MHz	Fig.68	P

Conclusion: PASS

Test graphs as below:

RE - Power-5.125GHz-5.175GHz

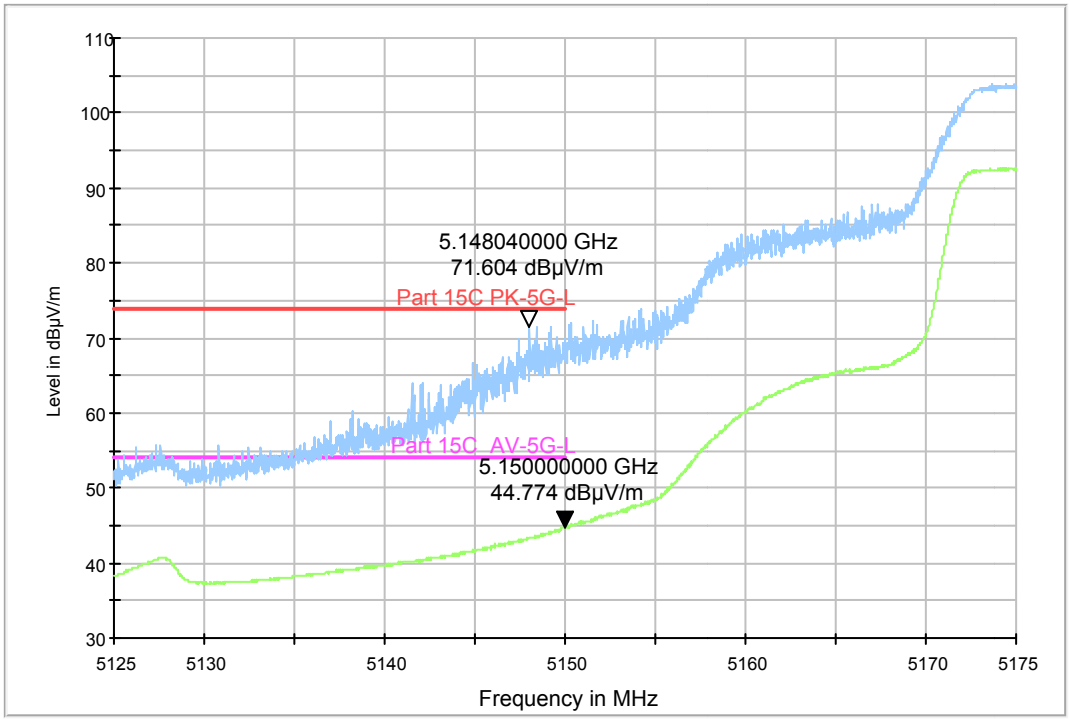


Fig. 46 Band Edges (802.11a, 5180MHz)

RE - Power-5.325GHz-5.375GHz

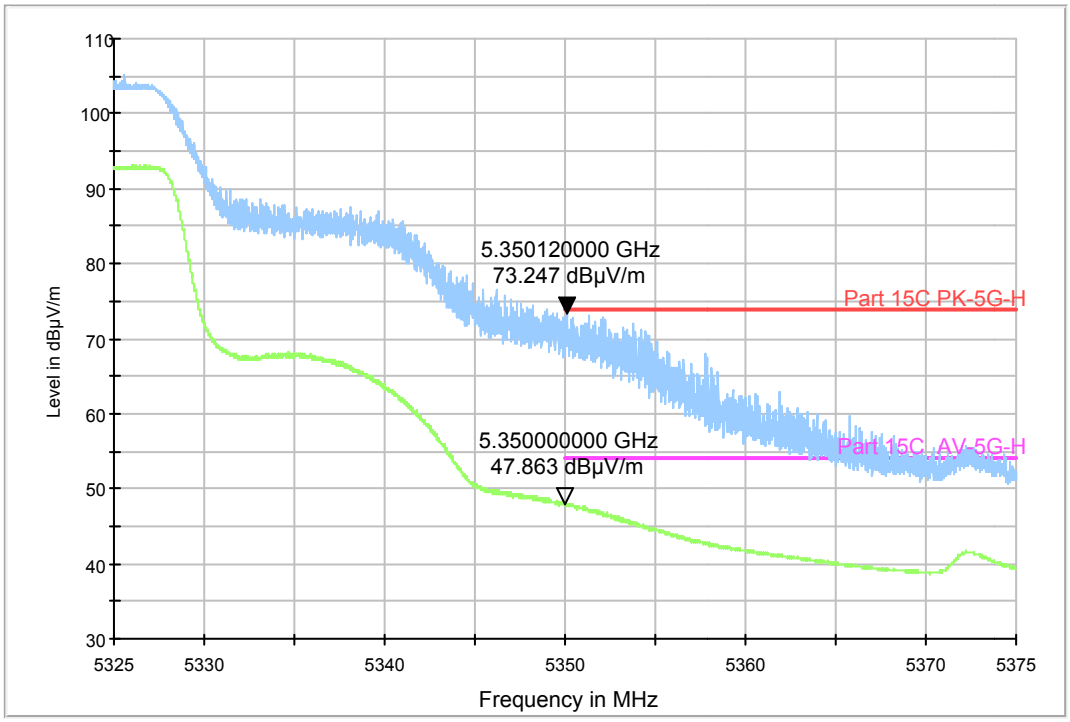


Fig. 47 Band Edges (802.11a, 5320MHz)

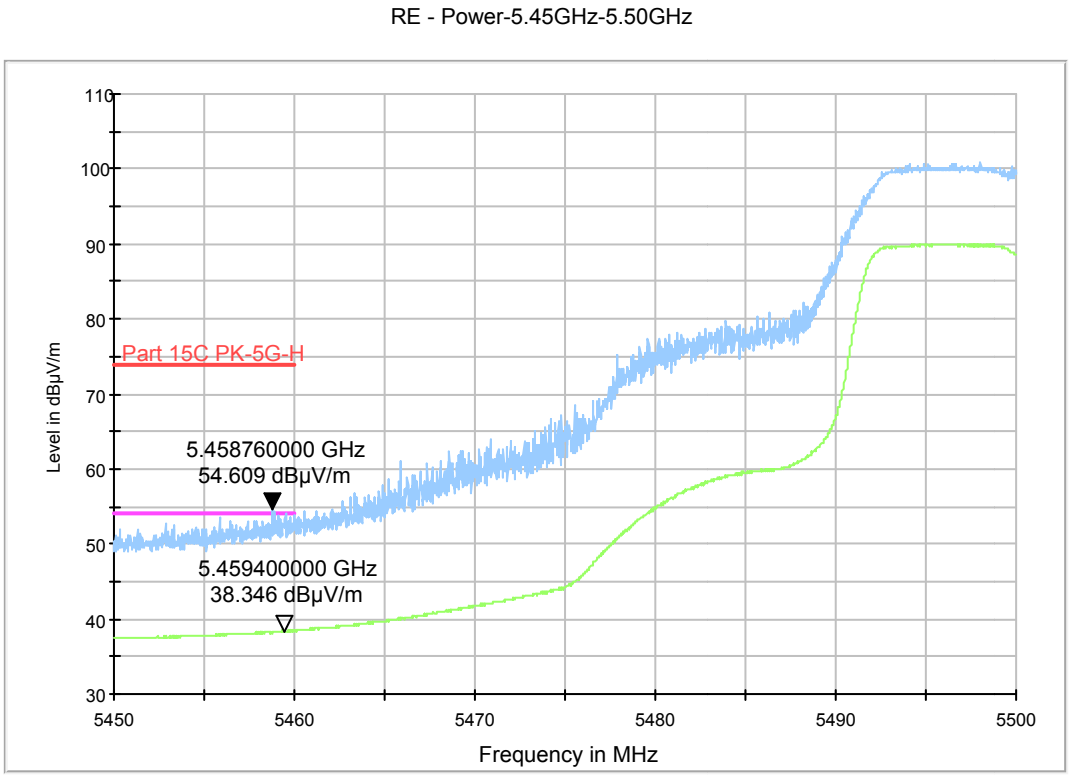


Fig. 48 Band Edges (802.11a, 5500MHz)

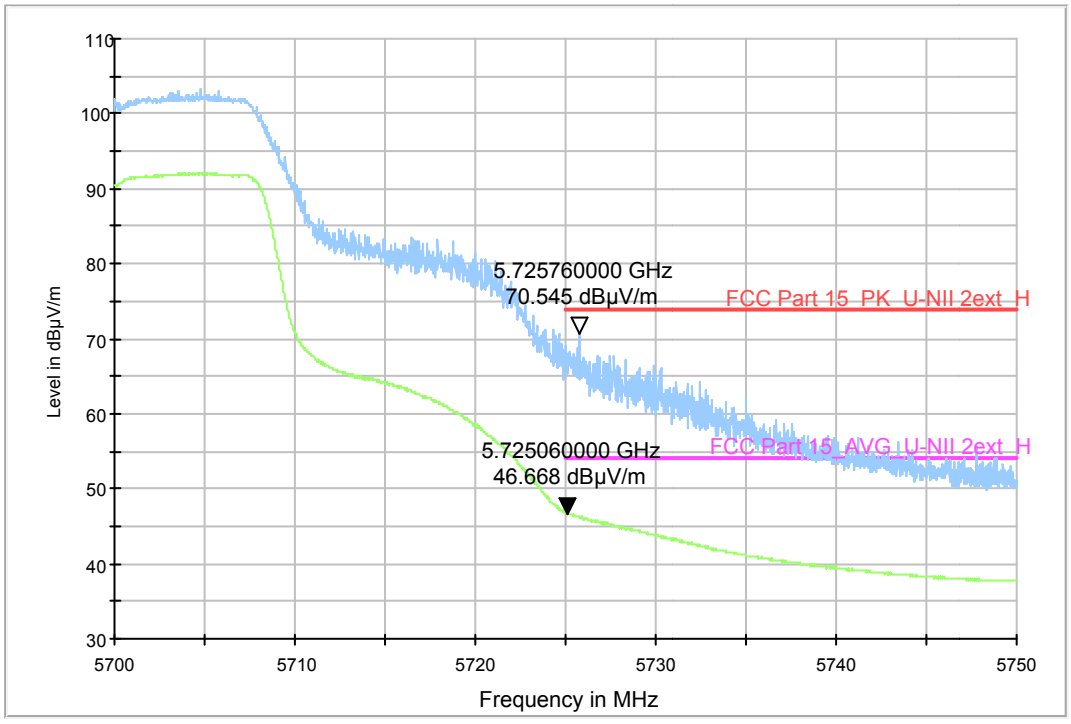


Fig. 49 Band Edges (802.11a, 5700MHz)

RE - Power-5.125GHz-5.175GHz

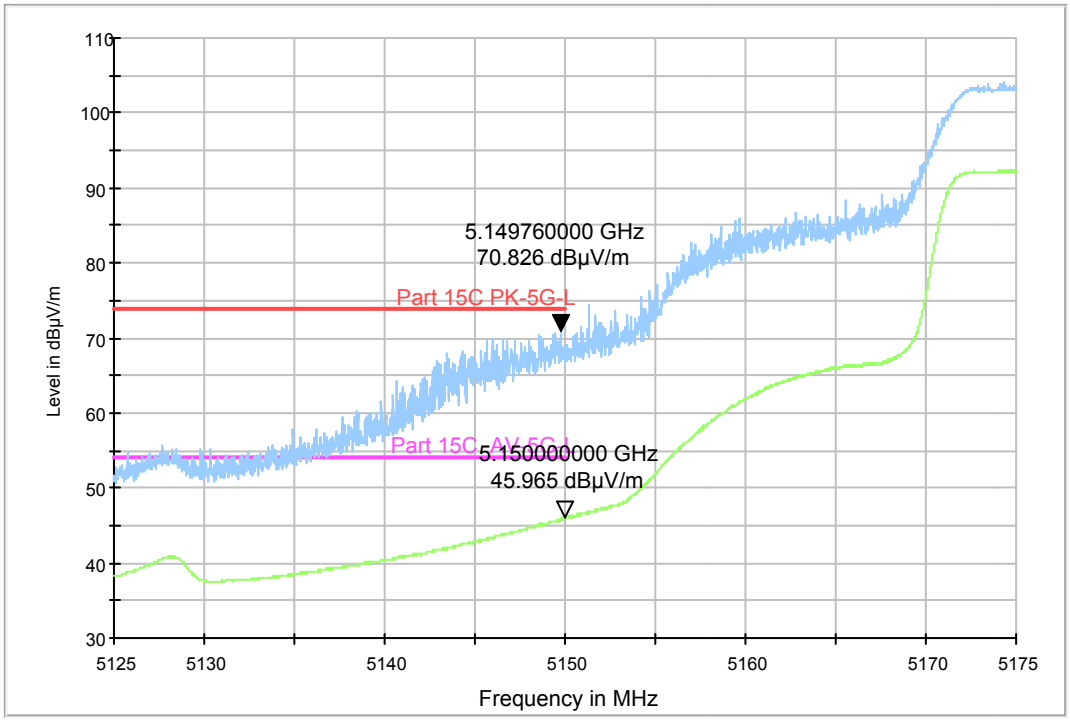


Fig. 50 Band Edges (802.11n-HT20, 5180MHz)

RE - Power-5.325GHz-5.375GHz

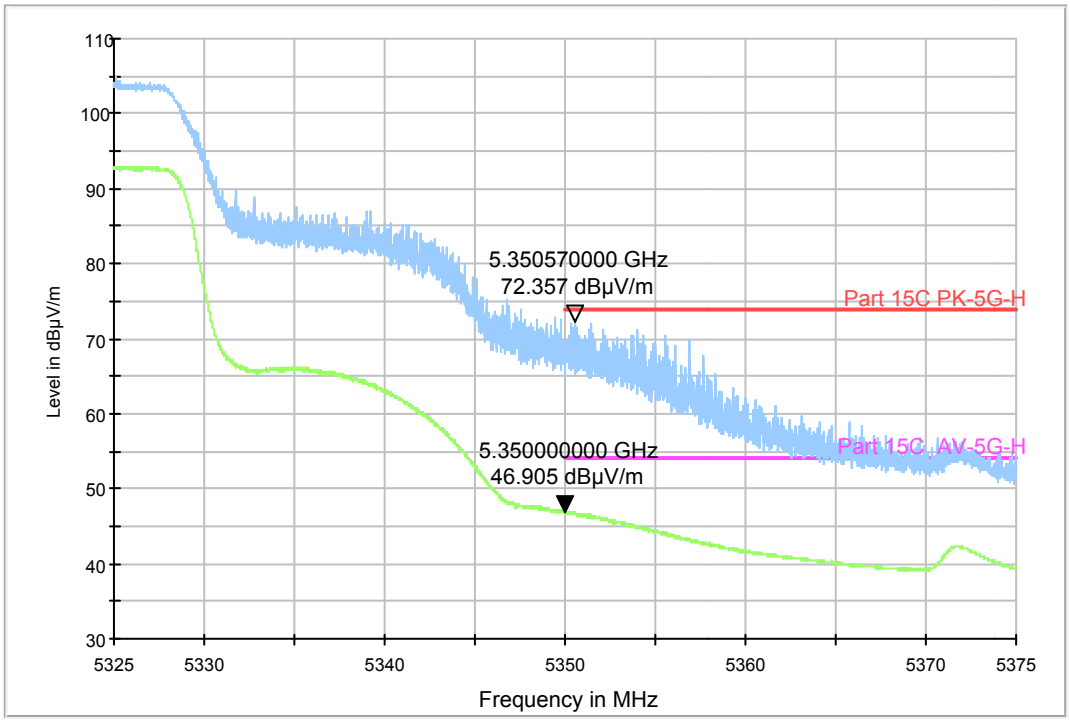


Fig. 51 Band Edges (802.11n-HT20, 5320MHz)

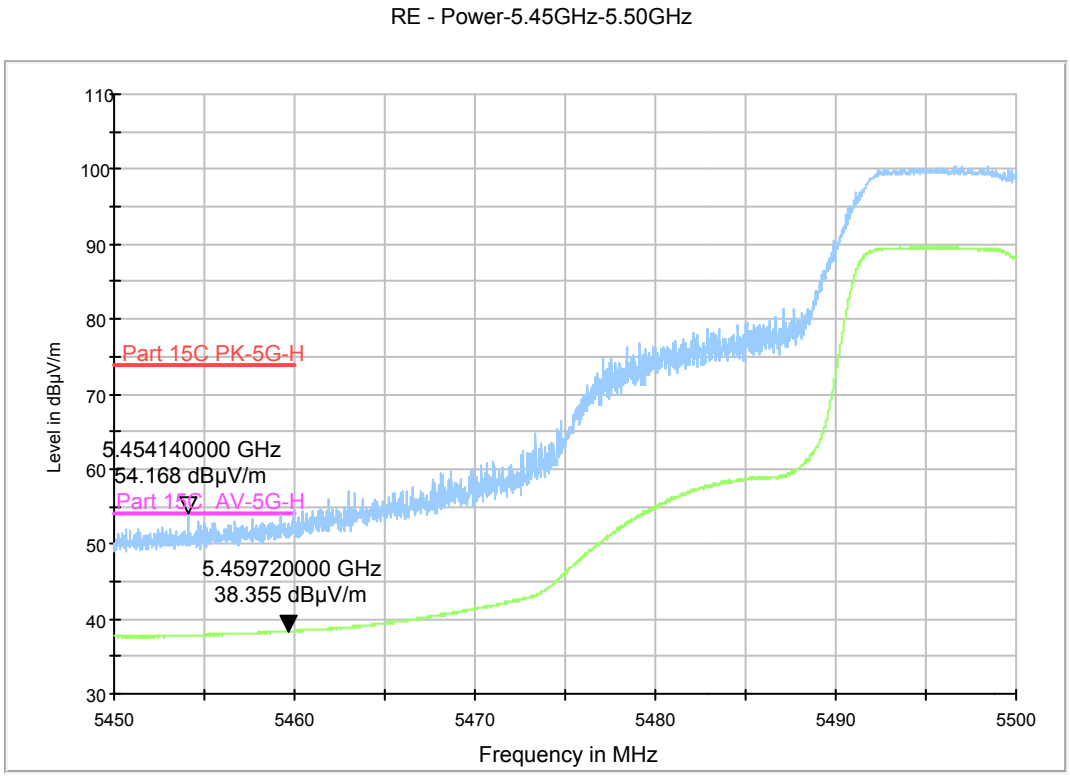


Fig. 52 Band Edges (802.11n-HT20, 5500MHz)

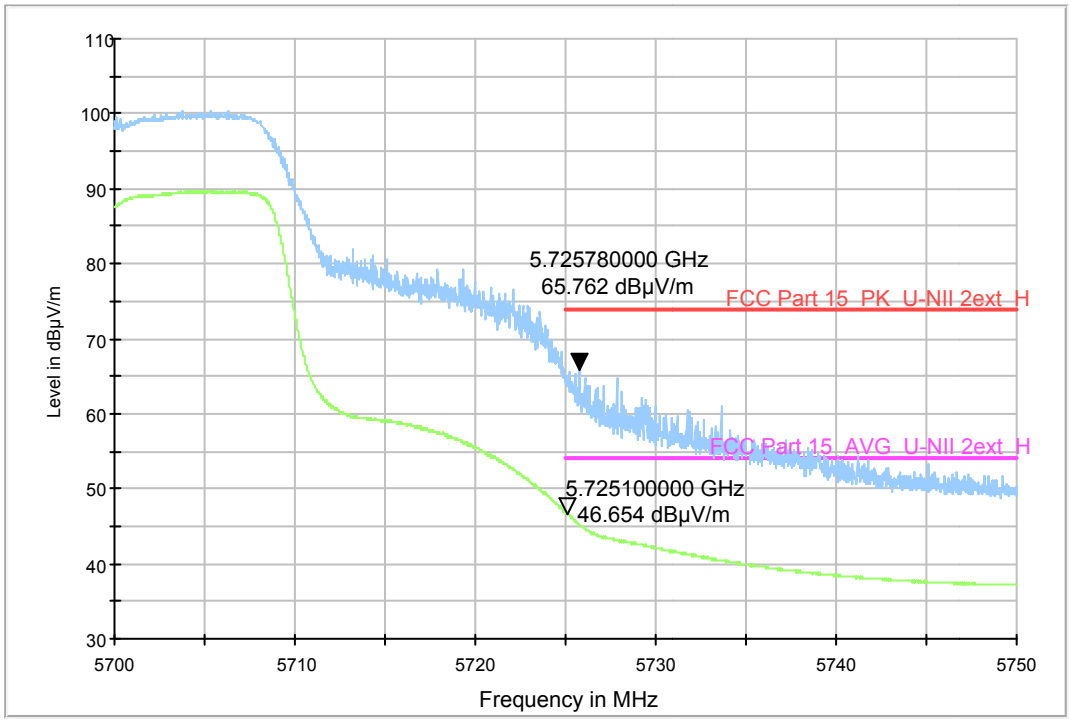


Fig. 53 Band Edges (802.11n-HT20, 5700MHz)

RE - Power-5.125GHz-5.175GHz

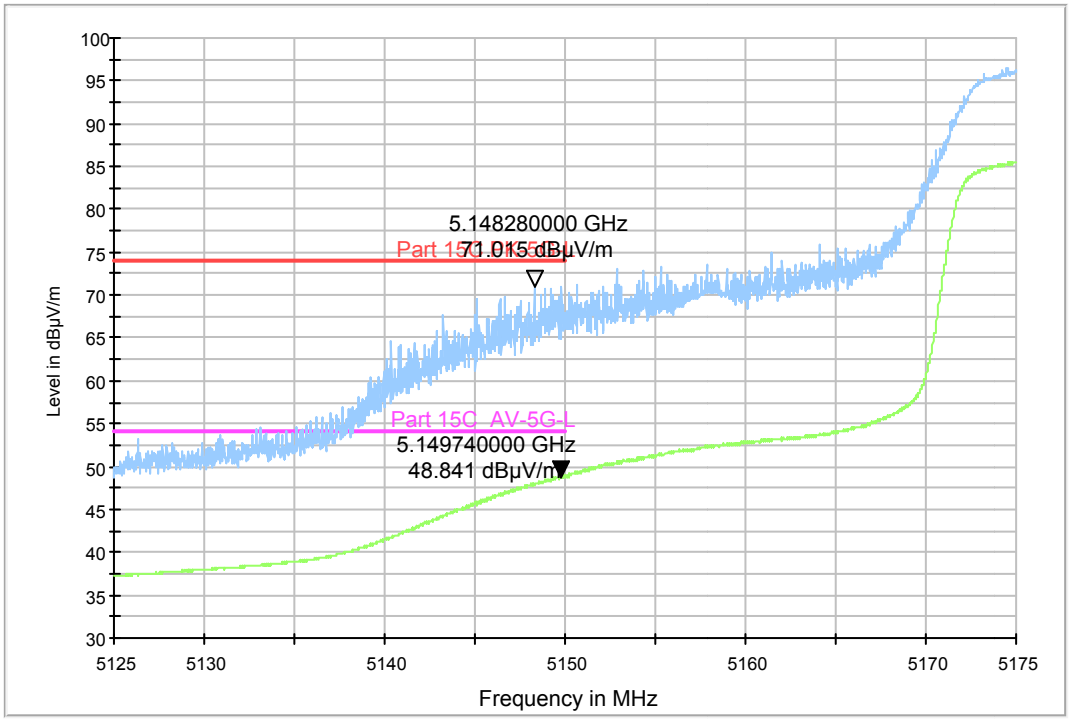


Fig. 54 Band Edges (802.11n-HT40, 5190MHz)

RE - Power-5.325GHz-5.375GHz

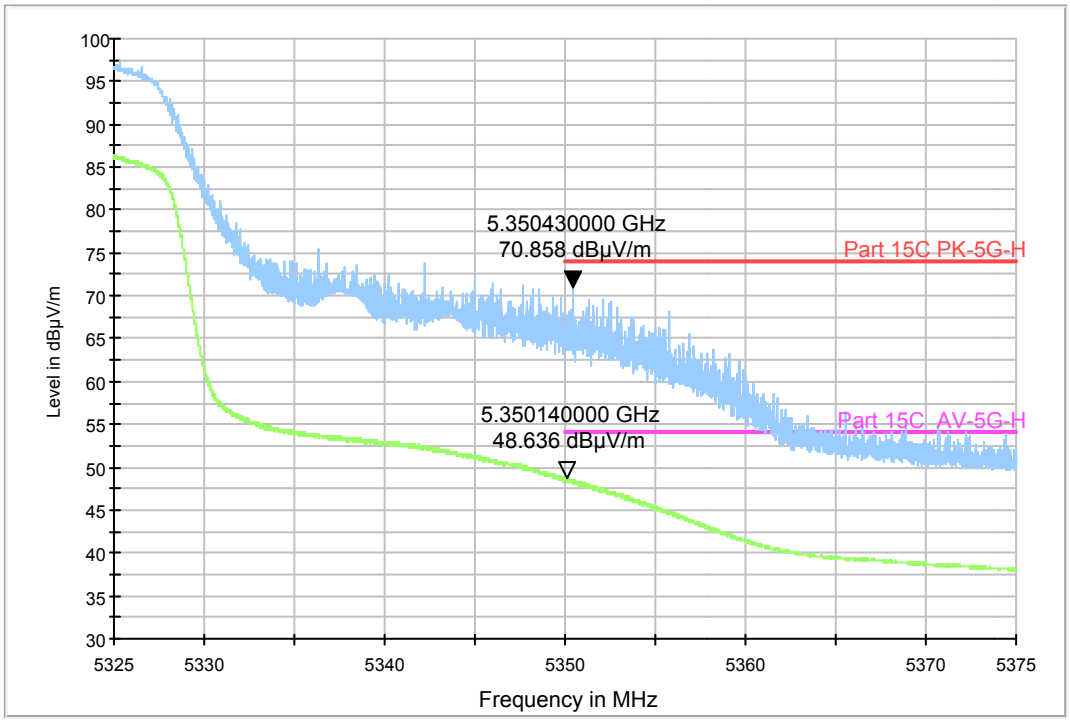


Fig. 55 Band Edges (802.11n-HT40, 5310MHz)

RE - Power-5.45GHz-5.50GHz

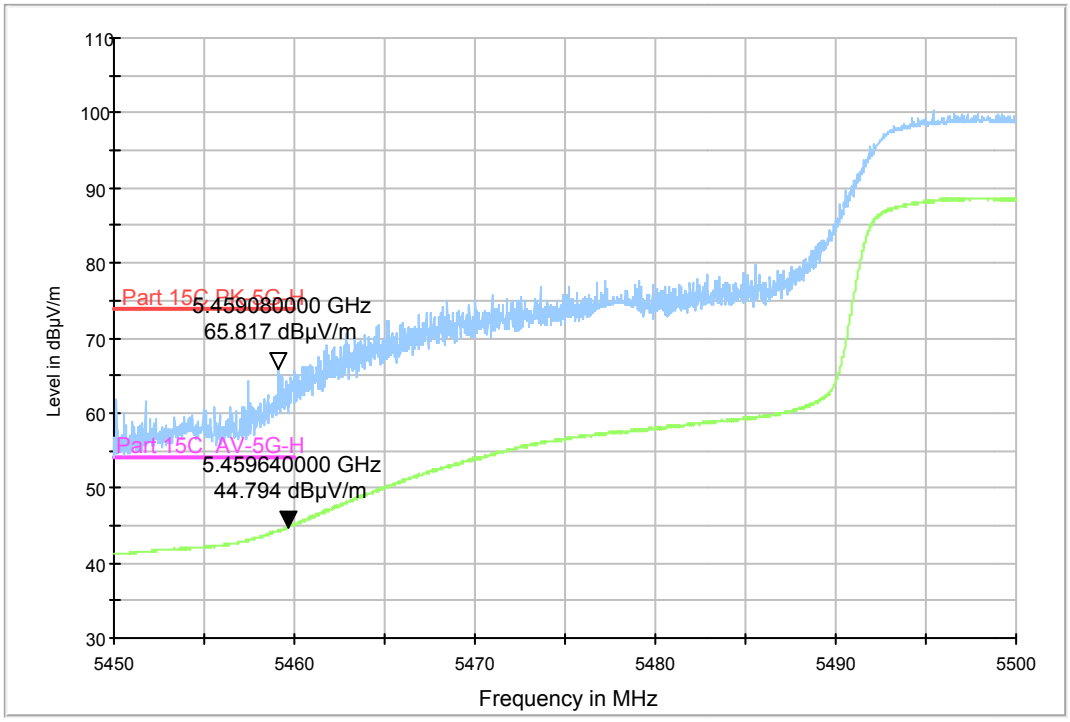


Fig. 56 Band Edges (802.11n-HT40, 5510MHz)

RE - Power-5.70GHz-5.75GHz

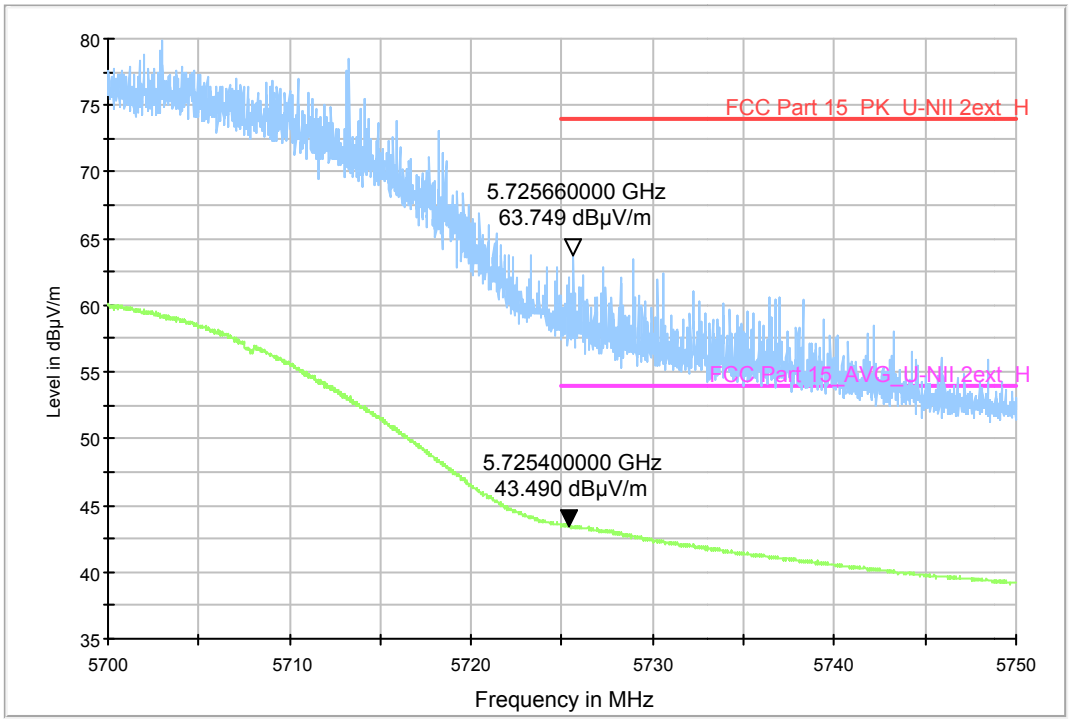


Fig. 57 Band Edges (802.11n-HT40, 5670MHz)

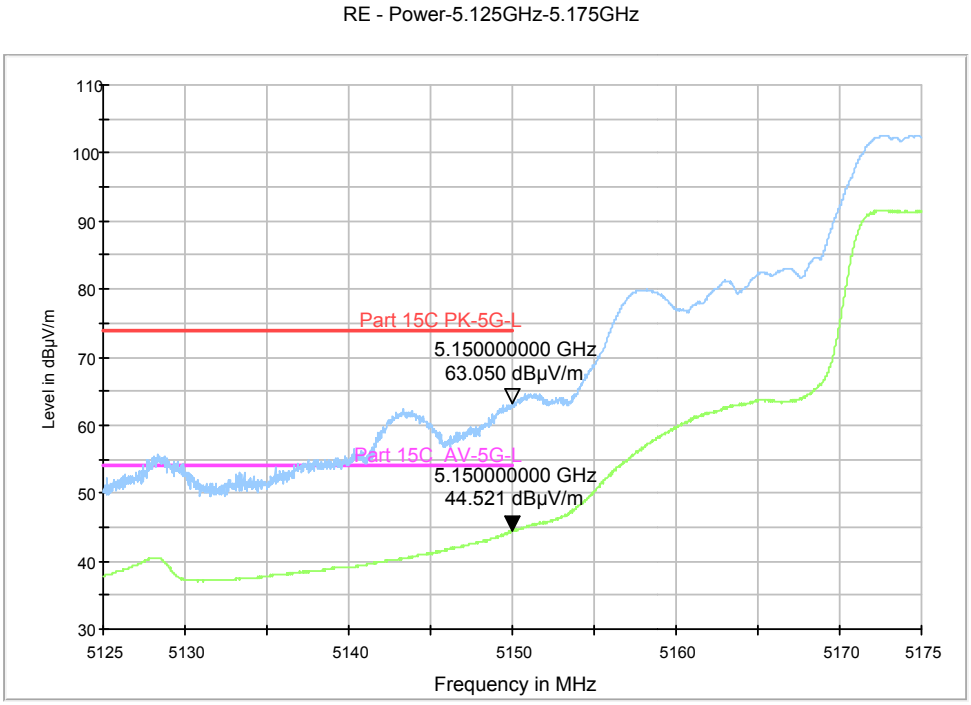


Fig. 58 Band Edges (802.11ac-HT20, 5180MHz)

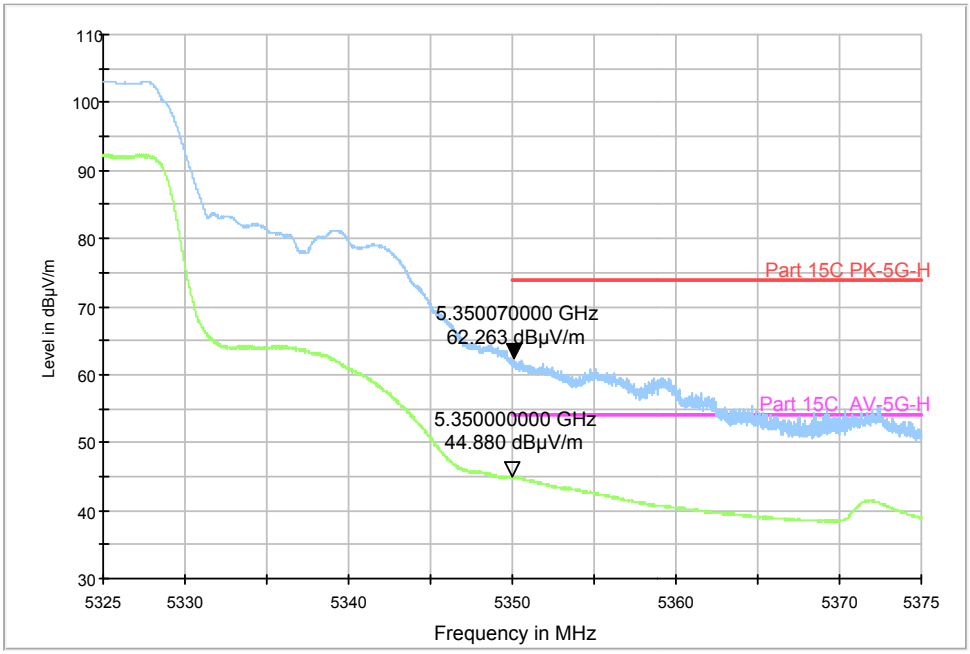


Fig. 59 Band Edges (802.11ac-HT20, 5320MHz)

RE - Power-5.45GHz-5.50GHz

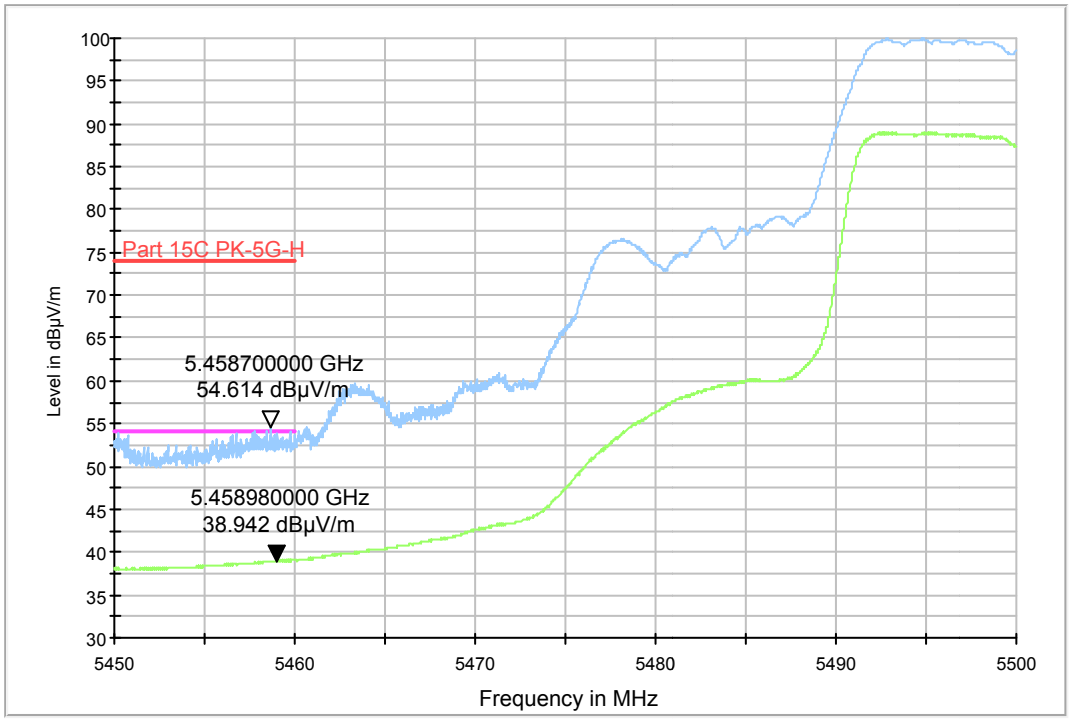


Fig. 60 Band Edges (802.11ac-HT20, 5500MHz)

RE - Power-5.70GHz-5.75GHz

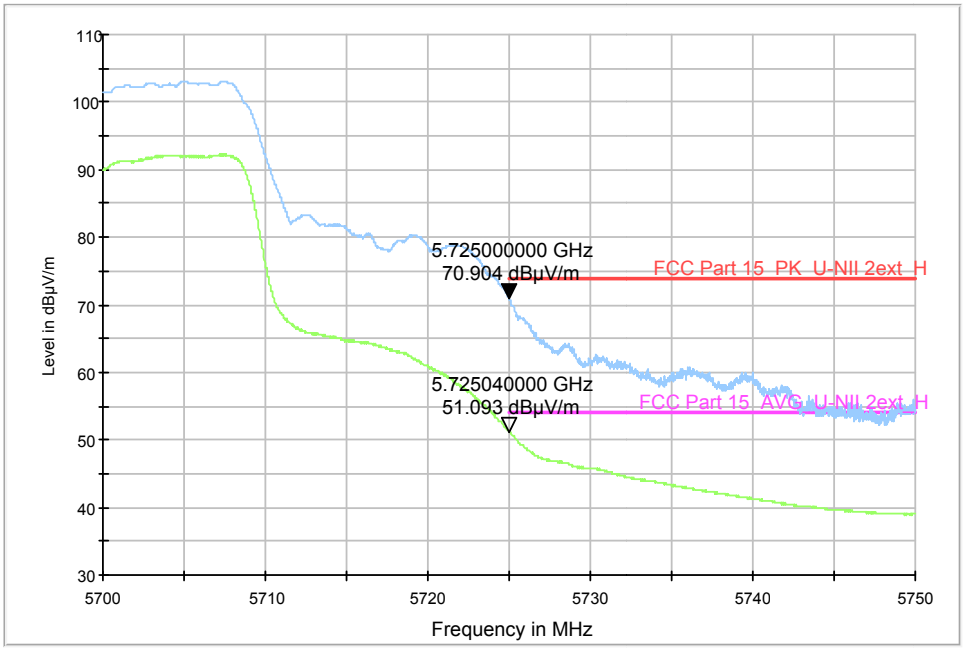


Fig. 61 Band Edges (802.11ac-HT20, 5700MHz)

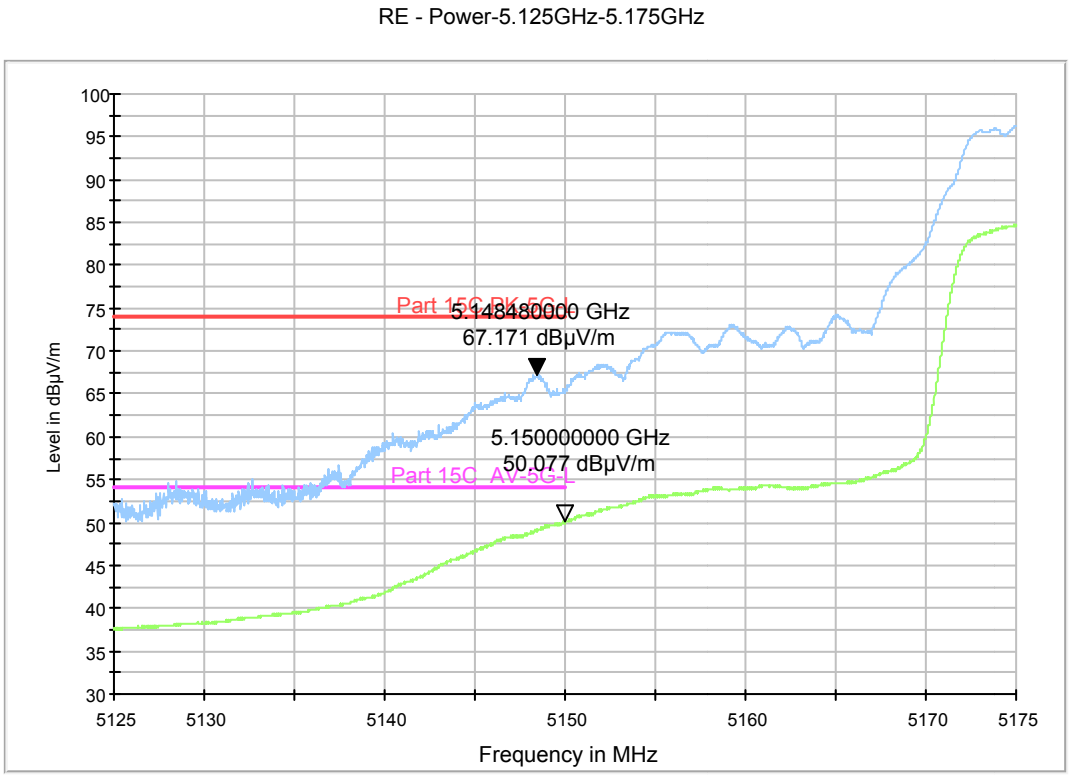


Fig. 62 Band Edges (802.11ac-HT40, 5190MHz)

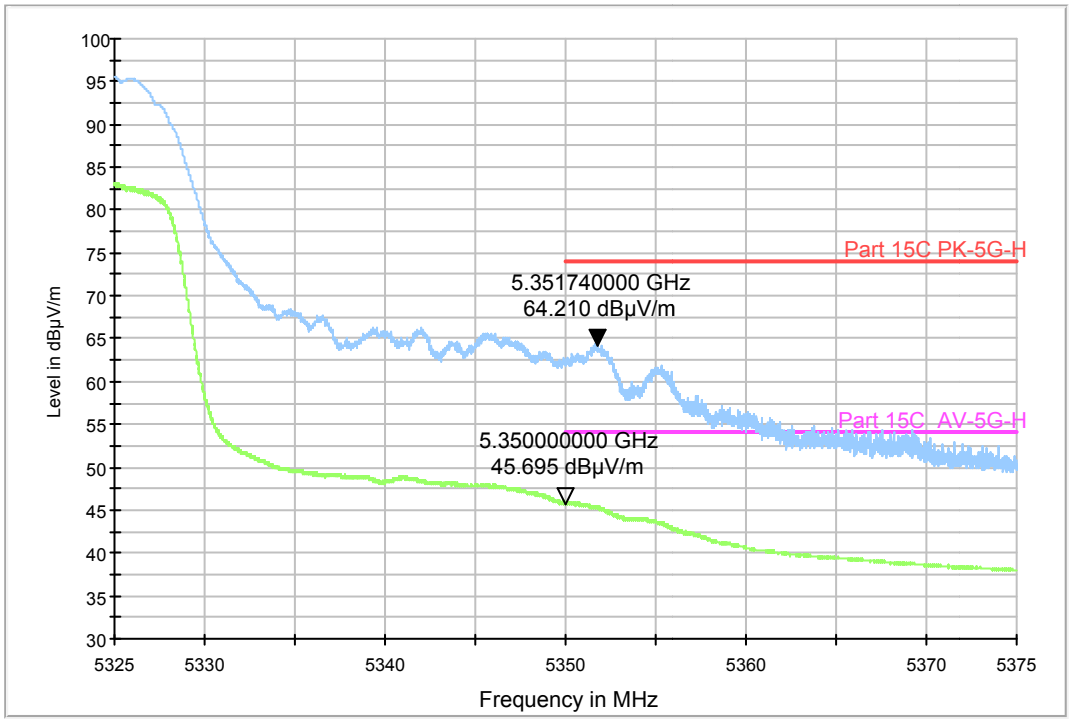


Fig. 63 Band Edges (802.11ac-HT40, 5310MHz)

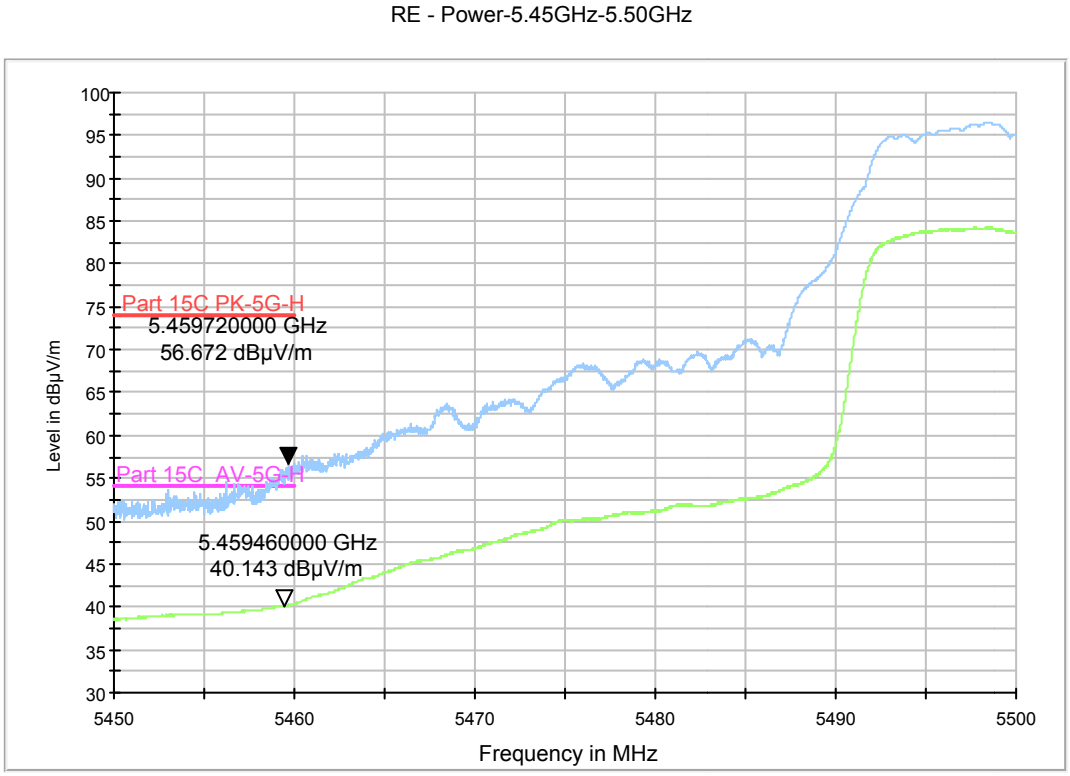


Fig. 64 Band Edges (802.11ac-HT40, 5510MHz)

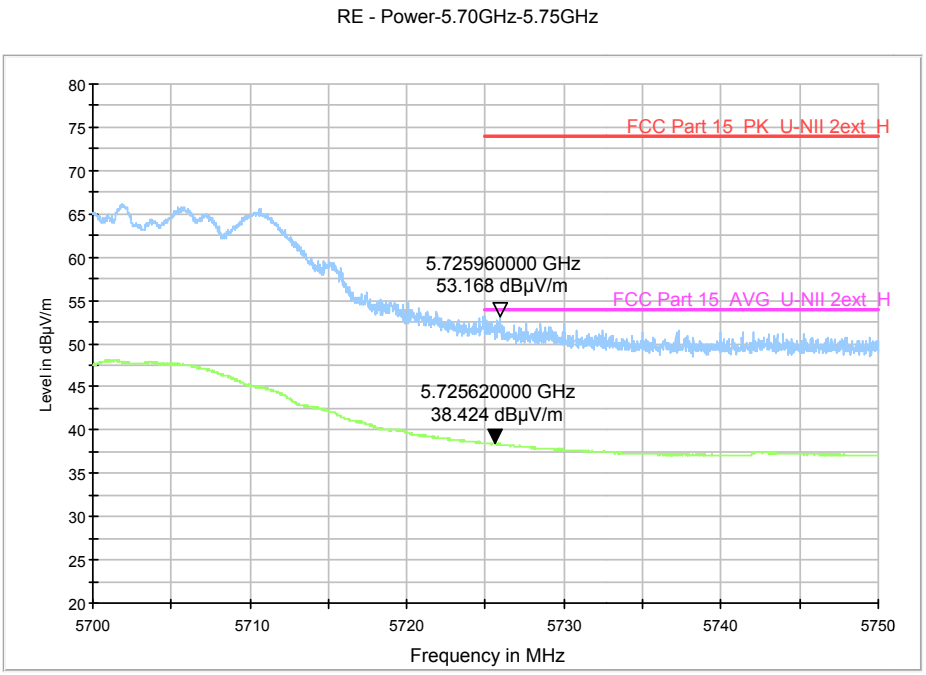


Fig. 65 Band Edges (802.11ac-HT40, 5670MHz)

RE - Power-5.125GHz-5.175GHz

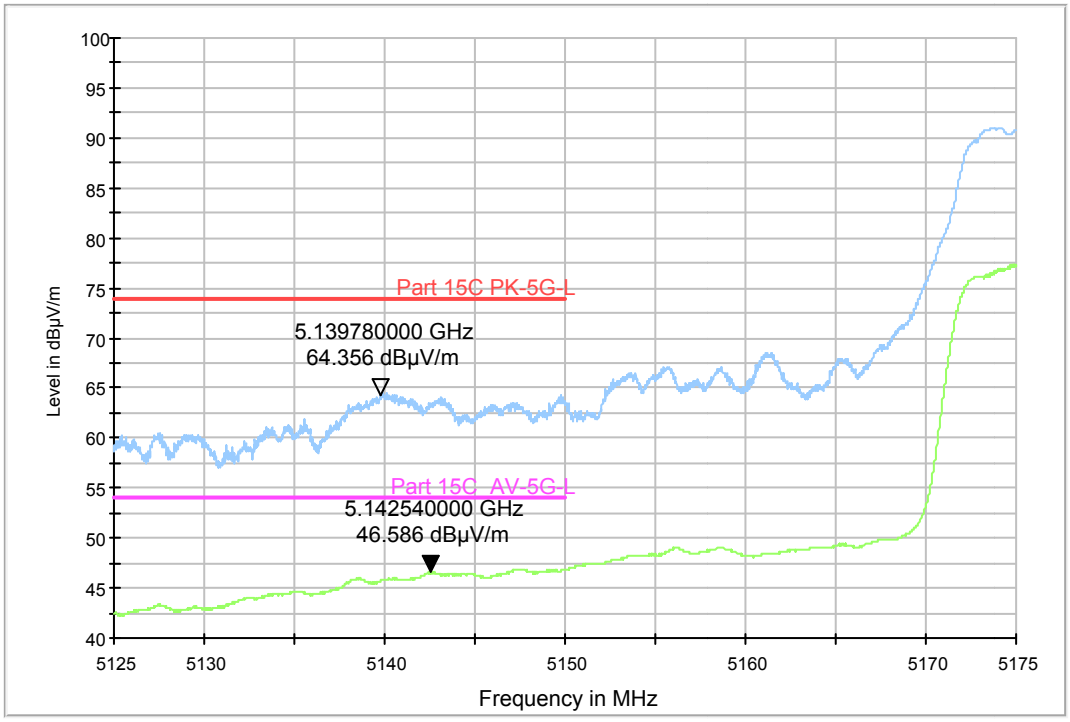


Fig. 66 Band Edges (802.11ac-HT80, 5210MHz)

RE - Power-5.325GHz-5.375GHz

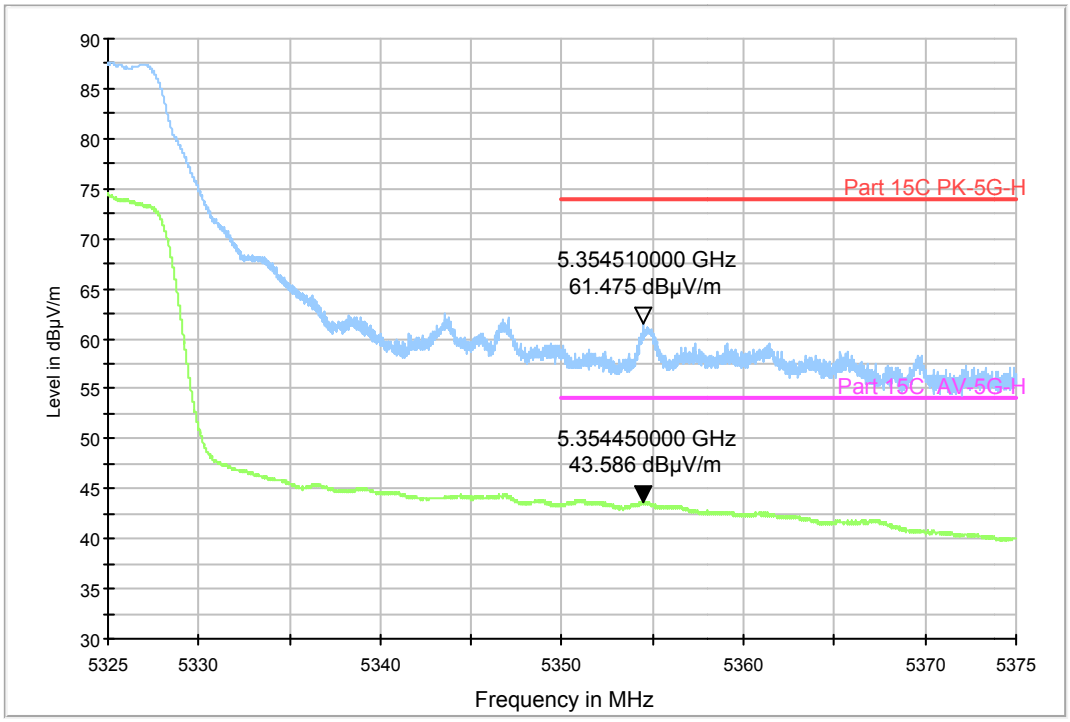


Fig. 67 Band Edges (802.11ac-HT80, 5290MHz)

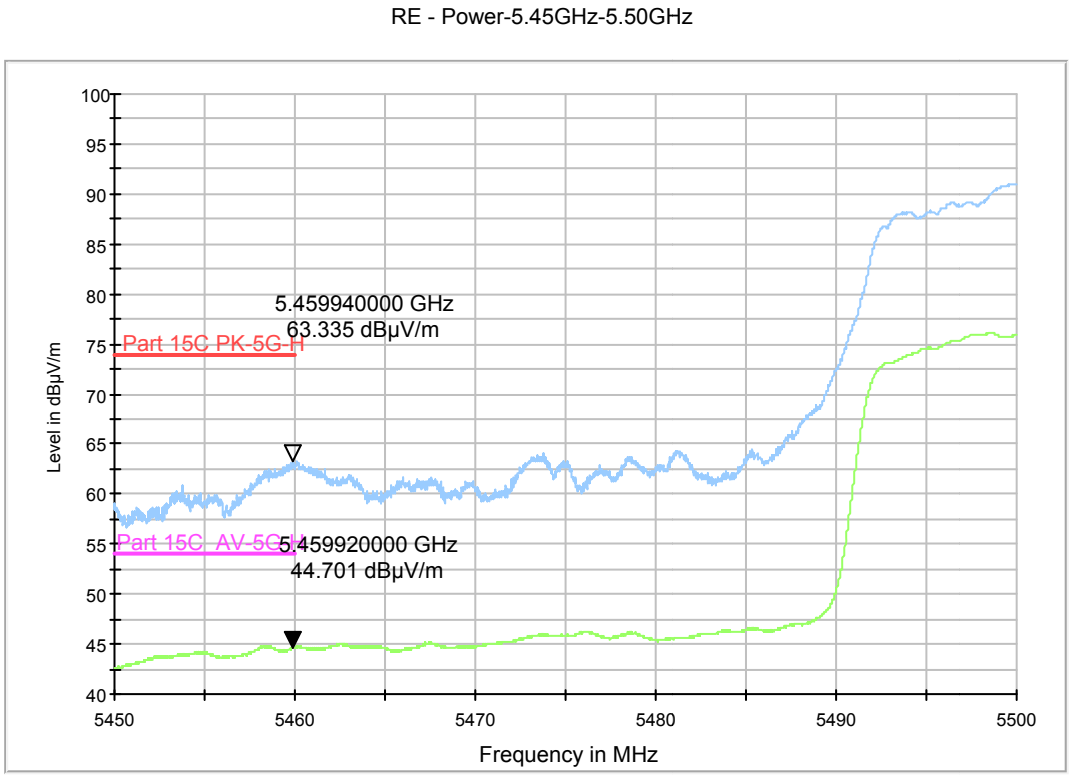


Fig. 68 Band Edges (802.11ac-HT80, 5530MHz)

A.6. Transmitter Spurious Emission

Measurement Limit:

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

The measurement is made according to KDB 789033

In addition, radiated emissions which fall in the restricted bands, as defined in § 15.205(a), must also comply with the radiated emission limits specified in § 15.209(a) (see § 15.205(c)).

Limit in restricted band:

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

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

Measurement Results:

Note:

A "reference path loss" is established and the A_{Rpl} is the attenuation of “reference path loss”, and including the gain of receive antenna, the gain of the preamplifier, the cable loss.

P_{Mea} is the field strength recorded from the instrument.

The measurement results are obtained as described below:

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

AVERAGE Results:

802.11a

Channel 36

Frequency (MHz)	Meas. Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
5127.600	39.7	-33.2	34.4	38.41	54.0	14.3	H
5149.800	42.7	-32.9	34.4	41.15	54.0	11.3	H
10360.500	33.9	-29.8	37.9	25.75	54.0	20.1	H
15540.400	36.6	-26.3	40.1	22.81	54.0	17.4	H
17740.400	39.1	-24.1	41.0	22.24	54.0	14.9	H
17809.700	40.1	-23.0	41.0	22.15	54.0	13.9	H

Channel 40

Frequency (MHz)	Meas. Result	Cable loss	Antenna Factor	Receiver Reading	Limit (dBμV/m)	Margin (dB)	Antenna Pol.

	(dBμV/m)	(dB)	(dB/m)	(dBμV)			(H/V)
5147.700	40.0	-33.0	34.4	38.51	54.0	14.0	H
5252.400	39.4	-32.4	34.4	37.43	54.0	14.6	H
10399.000	35.0	-29.6	38.0	26.69	54.0	19.0	H
15599.800	37.4	-26.4	40.1	23.57	54.0	16.6	H
17742.600	39.0	-24.1	41.0	22.13	54.0	15.0	H
17810.800	40.1	-23.0	41.0	22.21	54.0	13.9	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)
5187.600	40.6	-32.4	34.4	38.59	54.0	13.4	H
5292.600	39.0	-32.1	34.5	36.66	54.0	15.0	H
10480.400	33.2	-30.7	38.1	25.74	54.0	20.8	H
15719.700	36.1	-26.4	40.2	22.32	54.0	17.9	H
17725.000	38.9	-24.4	41.0	22.27	54.0	15.1	H
17809.700	40.2	-23.0	41.0	22.20	54.0	13.8	H

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)
5207.600	40.8	-32.5	34.4	38.90	54.0	13.2	H
5312.800	38.7	-32.0	34.5	36.19	54.0	15.3	H
10520.000	33.3	-30.9	38.1	26.13	54.0	20.7	H
15780.200	35.9	-26.3	40.2	21.97	54.0	18.1	H
17737.100	39.3	-24.2	41.0	22.44	54.0	14.7	H
17808.600	40.3	-23.0	41.0	22.36	54.0	13.7	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)
5227.600	40.6	-32.5	34.4	38.72	54.0	13.4	H
5332.400	39.4	-31.9	34.5	36.74	54.0	14.6	H
10559.600	35.6	-30.2	38.1	27.62	54.0	18.4	H
15839.600	37.0	-26.2	40.3	22.94	54.0	17.0	H
17734.900	39.2	-24.2	41.0	22.43	54.0	14.8	H
17811.900	40.5	-23.0	41.0	22.55	54.0	13.5	H

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)
5355.200	42.6	-31.9	34.6	39.95	54.0	11.4	H
5372.400	40.3	-32.0	34.6	37.74	54.0	13.7	H
10639.900	34.7	-29.3	38.2	25.83	54.0	19.3	H
15959.500	37.0	-25.8	40.5	22.41	54.0	17.0	H
17738.200	39.3	-24.2	41.0	22.41	54.0	14.7	H
17808.600	40.4	-23.0	41.0	22.42	54.0	13.6	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)
5447.625	39.4	-32.0	34.7	36.67	54.0	14.6	H
5553.246	38.2	-32.5	34.8	35.95	54.0	15.8	H
10999.600	34.5	-30.2	38.2	26.48	54.0	19.5	H
16499.600	37.4	-26.0	41.1	22.23	54.0	16.6	H
17725.000	39.1	-24.4	41.0	22.46	54.0	14.9	H
17808.600	40.4	-23.0	41.0	22.45	54.0	13.6	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)
5547.613	41.5	-32.5	34.8	39.23	54.0	12.5	H
5652.483	42.8	-32.5	34.9	40.47	54.0	11.2	H
11199.800	35.0	-30.1	38.4	26.73	54.0	19.0	H
16799.900	37.6	-26.2	41.5	22.26	54.0	16.4	H
17729.400	39.2	-24.3	41.0	22.48	54.0	14.8	H
17809.700	40.3	-23.0	41.0	22.34	54.0	13.7	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)
5725.230	46.2	-33.0	34.9	44.27	54.0	7.8	H
5726.340	45.3	-33.0	34.9	43.41	54.0	8.7	H
11400.000	35.9	-30.2	38.6	27.58	54.0	18.1	H
17100.200	38.1	-25.5	41.3	22.28	54.0	15.9	H
17738.200	39.3	-24.2	41.0	22.49	54.0	14.7	H
17803.100	40.2	-23.1	41.0	22.39	54.0	13.8	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)
5128.200	39.6	-33.2	34.4	38.28	54.0	14.5	H
5149.800	43.5	-32.9	34.4	42.02	54.0	10.5	H
15359.400	34.8	-26.6	40.0	21.40	54.0	19.2	H
15540.400	36.9	-26.3	40.1	23.07	54.0	17.1	H
17731.600	39.1	-24.3	41.0	22.32	54.0	14.9	H
17810.800	40.1	-23.0	41.0	22.18	54.0	13.9	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)
5148.300	39.9	-33.0	34.4	38.46	54.0	14.1	H
5251.800	40.3	-32.4	34.4	38.29	54.0	13.7	H
10400.100	34.8	-29.6	38.0	26.44	54.0	19.2	H
15599.800	36.8	-26.4	40.1	23.05	54.0	17.2	H
17738.200	39.2	-24.2	41.0	22.38	54.0	14.8	H
17810.800	40.2	-23.0	41.0	22.27	54.0	13.8	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)
5188.200	41.9	-32.4	34.4	39.96	54.0	12.1	H
5291.700	40.3	-32.1	34.5	37.94	54.0	13.7	H
10480.400	33.7	-30.7	38.1	26.24	54.0	20.3	H
15719.700	36.1	-26.4	40.2	22.30	54.0	17.9	H
17737.100	39.2	-24.2	41.0	22.32	54.0	14.8	H
17813.000	40.1	-23.0	40.9	22.19	54.0	13.9	H

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)
5208.604	42.8	-32.5	34.4	40.89	54.0	11.2	H
5312.456	44.9	-32.0	34.5	42.36	54.0	9.1	H
10520.000	34.5	-30.9	38.1	27.29	54.0	19.5	H
15780.200	36.2	-26.3	40.2	22.28	54.0	17.8	H
17733.800	39.2	-24.2	41.0	22.43	54.0	14.8	H
17808.600	40.4	-23.0	41.0	22.44	54.0	13.6	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)
5228.320	39.2	-32.5	34.4	37.28	54.0	14.8	H
5332.450	40.6	-31.9	34.5	37.92	54.0	13.4	H
10559.600	34.7	-30.2	38.1	26.73	54.0	19.3	H
15839.600	36.9	-26.2	40.3	22.84	54.0	17.1	H
17736.000	39.2	-24.2	41.0	22.43	54.0	14.8	H
17807.500	40.3	-23.0	41.0	22.42	54.0	13.7	H

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)
5350.000	44.2	-31.9	34.6	41.53	54.0	9.8	H
5372.000	41.0	-32.0	34.6	38.35	54.0	13.0	H
10639.900	35.0	-29.3	38.2	26.16	54.0	19.0	H
15959.500	37.0	-25.8	40.5	22.36	54.0	17.0	H
17737.100	39.2	-24.2	41.0	22.41	54.0	14.8	H
17807.500	40.4	-23.0	41.0	22.43	54.0	13.6	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)
5449.231	38.0	-32.0	34.7	35.28	54.0	16.0	H
5458.620	37.6	-32.0	34.7	34.85	54.0	16.4	H
10999.600	34.6	-30.2	38.2	26.58	54.0	19.4	H
16499.600	37.3	-26.0	41.1	22.18	54.0	16.7	H
17726.100	39.0	-24.4	41.0	22.37	54.0	15.0	H
17799.800	40.2	-23.2	41.0	22.35	54.0	13.8	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)
5546.860	41.0	-32.5	34.8	38.71	54.0	13.0	H
5653.480	41.8	-32.5	34.9	39.44	54.0	12.2	H
11199.800	34.7	-30.1	38.4	26.37	54.0	19.3	H
16799.900	37.6	-26.2	41.5	22.27	54.0	16.4	H
17729.400	39.2	-24.3	41.0	22.48	54.0	14.8	H
17810.800	40.4	-23.0	41.0	22.48	54.0	13.6	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)
5728.569	43.2	-33.0	34.9	41.29	54.0	10.8	H
5726.438	44.8	-33.0	34.9	42.88	54.0	9.2	H
11400.000	34.7	-30.2	38.6	26.36	54.0	19.3	H
17100.200	38.2	-25.5	41.3	22.32	54.0	15.8	H
17727.200	39.2	-24.3	41.0	22.48	54.0	14.8	H
17809.700	40.3	-23.0	41.0	22.38	54.0	13.7	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)
5148.892	45.4	-33.0	34.4	43.88	54.0	8.6	H
5146.814	44.5	-33.0	34.4	43.00	54.0	9.5	H
10380.300	34.9	-29.7	38.0	26.61	54.0	19.1	H
15570.100	36.7	-26.3	40.1	22.89	54.0	17.3	H
17737.100	39.1	-24.2	41.0	22.27	54.0	14.9	H
17805.300	40.2	-23.1	41.0	22.32	54.0	13.8	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)
5126.430	37.5	-33.2	34.4	36.23	54.0	16.5	H
5332.452	38.1	-31.9	34.5	35.44	54.0	15.9	H
10459.500	34.4	-30.4	38.1	26.75	54.0	19.6	H
15690.000	36.5	-26.4	40.2	22.70	54.0	17.5	H
17729.400	39.1	-24.3	41.0	22.37	54.0	14.9	H
17810.800	40.3	-23.0	41.0	22.32	54.0	13.7	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)
5166.345	37.4	-32.7	34.4	35.66	54.0	16.6	H
5372.846	37.4	-32.0	34.6	34.79	54.0	16.6	H
10539.800	34.9	-30.5	38.1	27.27	54.0	19.1	H
15809.900	36.6	-26.3	40.3	22.62	54.0	17.4	H
17737.100	39.3	-24.2	41.0	22.47	54.0	14.7	H
17809.700	40.4	-23.0	41.0	22.41	54.0	13.6	H

Channel 62

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)
5350.560	44.6	-31.9	34.6	41.91	54.0	9.4	H
5354.426	42.6	-31.9	34.6	39.89	54.0	11.4	H
10620.100	35.5	-29.2	38.1	26.48	54.0	18.5	H
15929.800	36.8	-25.9	40.4	22.25	54.0	17.2	H
17734.900	39.3	-24.2	41.0	22.47	54.0	14.7	H
17807.500	40.4	-23.0	41.0	22.44	54.0	13.6	H

Channel 102

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)
5450.423	38.4	-32.0	34.7	35.69	54.0	15.6	H
5459.680	38.9	-32.0	34.7	36.24	54.0	15.1	H
11020.000	34.9	-30.4	38.2	27.04	54.0	19.1	H
16530.000	37.5	-26.0	41.1	22.28	54.0	16.5	H
17809.704	40.4	-23.0	41.0	22.47	54.0	13.6	H
17903.245	38.9	-24.3	40.9	22.28	54.0	15.1	H

Channel 118

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)
5486.803	36.7	-32.2	34.8	34.08	54.0	17.3	H
5692.426	38.9	-32.7	34.9	36.65	54.0	15.1	H
11180.000	35.0	-30.0	38.3	26.68	54.0	19.0	H
16770.000	37.4	-26.2	41.5	22.08	54.0	16.7	H
17738.200	39.3	-24.2	41.0	22.45	54.0	14.7	H
17827.306	39.9	-23.2	40.9	22.25	54.0	14.1	H

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)
5727.482	39.0	-33.0	34.9	37.06	54.0	15.0	H
5729.658	38.9	-33.0	34.9	36.98	54.0	15.1	H
11340.000	34.9	-30.3	38.5	26.68	54.0	19.1	H
17010.000	38.3	-25.6	41.4	22.48	54.0	15.7	H
17836.124	39.5	-23.4	40.9	21.87	54.0	14.6	H
17789.903	39.7	-23.3	41.0	22.09	54.0	14.3	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)
5128.200	39.4	-33.2	34.4	38.13	54.0	14.6	H
5149.800	43.0	-32.9	34.4	41.53	54.0	11.0	H
10360.500	35.3	-29.8	37.9	27.21	54.0	18.7	H
15540.400	37.1	-26.3	40.1	23.27	54.0	16.9	H
17739.300	39.2	-24.1	41.0	22.29	54.0	14.8	H
17804.200	40.1	-23.1	41.0	22.26	54.0	13.9	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)
5148.600	39.4	-33.0	34.4	37.95	54.0	14.6	H
5251.800	39.9	-32.4	34.4	37.90	54.0	14.1	H
10400.100	35.8	-29.6	38.0	27.48	54.0	18.2	H
15599.800	37.0	-26.4	40.1	23.26	54.0	17.0	H
17733.800	39.1	-24.2	41.0	22.34	54.0	14.9	H
17809.700	40.2	-23.0	41.0	22.26	54.0	13.8	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)
5188.500	40.4	-32.4	34.4	38.42	54.0	13.6	H
5291.700	39.4	-32.1	34.5	37.00	54.0	14.6	H
10479.300	35.8	-30.6	38.1	28.39	54.0	18.2	H
15719.700	36.7	-26.4	40.2	22.89	54.0	17.3	H
17725.000	39.0	-24.4	41.0	22.33	54.0	15.0	H
17816.300	40.0	-23.1	40.9	22.10	54.0	14.0	H

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)
5208.632	40.7	-32.5	34.4	38.79	54.0	13.3	H
5312.462	42.7	-32.0	34.5	40.21	54.0	11.3	H
10520.000	33.5	-30.9	38.1	26.27	54.0	20.5	H
15780.200	35.9	-26.3	40.2	22.03	54.0	18.1	H
17736.000	39.3	-24.2	41.0	22.46	54.0	14.7	H
17808.600	40.3	-23.0	41.0	22.39	54.0	13.7	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)
5228.022	40.1	-32.5	34.4	38.22	54.0	13.9	H
5331.625	42.6	-31.9	34.5	39.91	54.0	11.4	H
10559.600	34.6	-30.2	38.1	26.60	54.0	19.4	H
15839.600	36.9	-26.2	40.3	22.85	54.0	17.1	H
17738.200	39.3	-24.2	41.0	22.41	54.0	14.7	H
17809.700	40.4	-23.0	41.0	22.45	54.0	13.6	H

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)
5350.000	43.2	-31.9	34.6	40.49	54.0	10.8	H
5371.600	40.3	-32.0	34.6	37.66	54.0	13.7	H
10639.900	34.8	-29.3	38.2	25.96	54.0	19.2	H
15959.500	37.0	-25.8	40.5	22.38	54.0	17.0	H
17736.000	39.3	-24.2	41.0	22.47	54.0	14.7	H
17808.600	40.4	-23.0	41.0	22.44	54.0	13.6	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)
5451.234	39.9	-32.0	34.7	37.15	54.0	14.1	H
5459.683	40.2	-32.0	34.7	37.52	54.0	13.8	H
10999.600	34.3	-30.2	38.2	26.30	54.0	19.7	H
16499.600	37.4	-26.0	41.1	22.27	54.0	16.6	H
17725.000	39.1	-24.4	41.0	22.43	54.0	14.9	H
17797.600	40.1	-23.2	41.0	22.36	54.0	13.9	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)
5651.623	43.3	-32.5	34.9	41.01	54.0	10.7	H
5549.628	42.1	-32.5	34.8	39.82	54.0	11.9	H
11199.800	34.6	-30.1	38.4	26.34	54.0	19.4	H
16799.900	37.6	-26.2	41.5	22.29	54.0	16.4	H
17739.300	39.3	-24.1	41.0	22.40	54.0	14.7	H
17808.600	40.4	-23.0	41.0	22.42	54.0	13.6	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)
5733.623	42.4	-33.0	34.9	40.46	54.0	11.6	H
5751.623	41.6	-32.9	34.9	39.55	54.0	12.4	H
11400.000	34.8	-30.2	38.6	26.42	54.0	19.2	H
17100.200	38.1	-25.5	41.3	22.29	54.0	15.9	H
17736.000	39.3	-24.2	41.0	22.52	54.0	14.7	H
17803.100	40.4	-23.1	41.0	22.52	54.0	13.6	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)
5146.500	43.7	-33.0	34.4	42.26	54.0	10.3	H
5149.800	45.4	-32.9	34.4	43.89	54.0	8.6	H
10380.300	35.0	-29.7	38.0	26.71	54.0	19.0	H
15570.100	36.8	-26.3	40.1	23.02	54.0	17.2	H
17731.600	39.1	-24.3	41.0	22.31	54.0	14.9	H
17809.700	40.3	-23.0	41.0	22.30	54.0	13.7	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)
5159.700	36.5	-32.8	34.4	34.85	54.0	17.5	H
5291.100	37.1	-32.1	34.5	34.77	54.0	16.9	H
10459.500	33.6	-30.4	38.1	25.88	54.0	20.4	H
15690.000	36.3	-26.4	40.2	22.54	54.0	17.7	H
17728.300	39.1	-24.3	41.0	22.37	54.0	14.9	H
17817.400	40.0	-23.1	40.9	22.15	54.0	14.0	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)
5167.231	38.8	-32.7	34.4	37.06	54.0	15.2	H
5363.670	39.0	-31.9	34.6	36.35	54.0	15.0	H
10540.900	34.0	-30.5	38.1	26.44	54.0	20.0	H
15809.900	36.5	-26.3	40.3	22.60	54.0	17.5	H
17734.900	39.3	-24.2	41.0	22.49	54.0	14.7	H
17799.800	40.2	-23.2	41.0	22.35	54.0	13.8	H

Channel 62

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)
5355.200	41.5	-31.9	34.6	38.79	54.0	12.5	H
5361.200	39.0	-31.9	34.6	36.36	54.0	15.0	H
10620.100	36.8	-29.2	38.1	27.80	54.0	17.2	H
15929.800	36.9	-25.9	40.4	22.43	54.0	17.1	H
17739.200	39.3	-24.1	41.0	22.43	54.0	14.7	H
17809.700	40.4	-23.0	41.0	22.45	54.0	13.6	H

Channel 102

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)
5451.658	37.9	-32.0	34.7	35.14	54.0	16.1	H
5458.697	38.4	-32.0	34.7	35.71	54.0	15.6	H
11020.000	34.8	-30.4	38.2	27.02	54.0	19.2	H
16530.000	37.6	-26.0	41.1	22.43	54.0	16.4	H
17729.458	39.2	-24.3	41.0	22.46	54.0	14.8	H
17899.942	39.1	-24.2	40.9	22.42	54.0	14.9	H

Channel 118

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)
5507.623	37.0	-32.3	34.8	34.49	54.0	17.0	H
5692.843	38.2	-32.7	34.9	36.04	54.0	15.8	H
11180.000	34.9	-30.0	38.3	26.57	54.0	19.1	H
16770.000	37.4	-26.2	41.5	22.08	54.0	16.6	H
17718.453	39.2	-24.5	41.0	22.71	54.0	14.8	H
17896.549	39.1	-24.2	40.9	22.41	54.0	14.9	H

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)
5726.230	38.8	-33.0	34.9	36.92	54.0	15.2	H
5727.623	38.0	-33.0	34.9	36.09	54.0	16.0	H
11340.000	34.7	-30.3	38.5	26.43	54.0	19.3	H
17010.000	38.1	-25.6	41.4	22.34	54.0	15.9	H
17732.528	39.2	-24.3	41.0	22.43	54.0	14.8	H
17890.488	39.0	-24.1	40.9	22.20	54.0	15.0	H

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Channel 42

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)
5149.623	39.9	-32.9	34.4	38.41	54.0	14.1	H
5142.420	39.8	-33.0	34.4	38.39	54.0	14.2	H
10419.900	36.1	-29.8	38.0	27.84	54.0	17.9	H
15629.500	35.5	-26.4	40.2	21.67	54.0	18.5	H
17733.800	38.8	-24.2	41.0	22.04	54.0	15.2	H
17802.000	39.8	-23.1	41.0	21.95	54.0	14.2	H

Channel 58

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)
5350.980	39.5	-31.9	34.6	36.79	54.0	14.5	H
5356.426	39.5	-31.9	34.6	36.80	54.0	14.5	H
10579.400	36.7	-29.8	38.1	28.35	54.0	17.3	H
15870.400	36.1	-26.1	40.3	21.86	54.0	17.9	H
17725.000	38.5	-24.4	41.0	21.86	54.0	15.5	H
17811.900	39.6	-23.0	41.0	21.66	54.0	14.4	H

Channel 106

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)
5458.403	38.4	-32.0	34.7	35.65	54.0	15.6	H
5455.216	38.2	-32.0	34.7	35.46	54.0	15.8	H
11059.000	34.3	-30.6	38.2	26.68	54.0	19.7	H
16589.800	36.6	-25.9	41.2	21.28	54.0	17.4	H
17737.100	38.7	-24.2	41.0	21.87	54.0	15.3	H
17807.500	39.8	-23.0	41.0	21.86	54.0	14.2	H

PEAK Results:

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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)
5148.040	71.6	-33.0	34.4	70.13	74.0	2.4	H
5149.200	71.5	-32.9	34.4	69.96	74.0	2.5	H
10360.200	46.8	-29.8	37.9	38.64	74.0	27.2	H
15540.000	48.3	-26.3	40.1	34.51	74.0	25.7	V
17808.000	53.1	-23.0	41.0	35.18	74.0	20.9	H
17830.200	52.9	-23.3	40.9	35.21	74.0	21.1	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)
5147.200	52.8	-33.0	34.4	51.30	74.0	21.2	H
5252.200	50.8	-32.4	34.4	48.77	74.0	23.2	H
10399.800	46.8	-29.6	38.0	38.41	74.0	27.2	H
15599.400	50.6	-26.4	40.1	36.78	74.0	23.4	H
17797.200	52.4	-23.2	41.0	34.59	74.0	21.6	H
17808.600	52.5	-23.0	41.0	34.55	74.0	21.5	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)
5187.600	52.3	-32.4	34.4	50.36	74.0	21.7	H
5292.400	50.6	-32.1	34.5	48.27	74.0	23.4	H
10480.200	46.1	-30.7	38.1	38.66	74.0	27.9	V
15720.000	48.7	-26.4	40.2	34.89	74.0	25.3	V
17031.000	52.7	-25.6	41.4	36.92	74.0	21.3	H
17803.200	53.0	-23.1	41.0	35.17	74.0	21.0	H

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)
5207.400	52.9	-32.5	34.4	50.96	74.0	21.1	H
5307.200	51.8	-32.0	34.5	49.35	74.0	22.2	H
10519.800	45.5	-30.9	38.1	38.35	74.0	28.5	V
15780.000	47.6	-26.3	40.2	33.72	74.0	26.4	H
17449.200	52.5	-25.2	41.2	36.51	74.0	21.5	H
17803.800	53.1	-23.1	41.0	35.26	74.0	20.9	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)
5227.800	53.2	-32.5	34.4	51.33	74.0	20.8	H
5331.800	52.5	-31.9	34.5	49.85	74.0	21.5	H
10560.600	47.7	-30.1	38.1	39.76	74.0	26.3	V
15838.800	50.7	-26.2	40.3	36.63	74.0	23.3	H
17791.800	53.4	-23.3	41.0	35.69	74.0	20.6	V
17803.200	53.2	-23.1	41.0	35.29	74.0	20.8	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)
5350.120	73.2	-31.9	34.6	70.55	74.0	0.8	H
5351.350	73.0	-31.9	34.6	70.33	74.0	1.0	H
10639.800	47.8	-29.3	38.2	38.95	74.0	26.2	H
15960.600	50.3	-25.8	40.5	35.62	74.0	23.7	V
16945.200	52.7	-25.7	41.4	36.97	74.0	21.3	V
17790.600	53.0	-23.3	41.0	35.29	74.0	21.0	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)
5455.842	53.7	-32.0	34.7	50.93	74.0	20.3	H
5458.760	54.6	-32.0	34.7	51.90	74.0	19.4	H
10999.800	46.5	-30.2	38.2	38.43	74.0	27.6	V
16500.000	48.2	-26.0	41.1	33.03	74.0	25.8	H
16952.400	52.5	-25.7	41.4	36.75	74.0	21.5	V
17824.800	53.1	-23.2	40.9	35.37	74.0	20.9	V

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)
5219.423	50.5	-32.5	34.4	48.55	74.0	23.5	H
5934.260	50.6	-31.8	35.2	47.25	74.0	23.4	H
11200.200	45.8	-30.1	38.4	37.54	74.0	28.2	V
16800.000	48.4	-26.2	41.5	33.07	74.0	25.6	H
17784.600	53.4	-23.4	41.0	35.80	74.0	20.6	V
17816.400	53.2	-23.1	40.9	35.36	74.0	20.8	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)
5725.760	70.5	-33.0	34.9	68.62	74.0	3.5	H
5725.040	69.2	-33.0	34.9	67.27	74.0	4.8	H
11400.000	46.8	-30.2	38.6	38.44	74.0	27.2	H
17100.000	50.0	-25.5	41.3	34.12	74.0	24.0	H
17727.000	52.6	-24.3	41.0	35.88	74.0	21.4	H
17802.600	53.4	-23.1	41.0	35.55	74.0	20.6	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)
5148.520	70.5	-33.0	34.4	69.00	74.0	3.5	H
5149.760	70.8	-32.9	34.4	69.33	74.0	3.2	H
10360.200	47.5	-29.8	37.9	39.34	74.0	26.5	V
15540.000	48.0	-26.3	40.1	34.19	74.0	26.0	H
17812.200	52.8	-23.0	40.9	34.90	74.0	21.2	V
17883.000	53.0	-24.0	40.9	36.12	74.0	21.0	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)
5148.200	52.0	-33.0	34.4	50.50	74.0	22.0	H
5251.600	51.8	-32.4	34.4	49.80	74.0	22.2	H
10400.400	49.0	-29.6	38.0	40.65	74.0	25.0	V
15600.000	47.7	-26.4	40.1	33.95	74.0	26.3	H
17779.800	53.5	-23.5	41.0	35.98	74.0	20.5	V
17826.600	54.0	-23.2	40.9	36.30	74.0	20.0	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)
5187.600	54.0	-32.4	34.4	52.00	74.0	20.0	H
5292.000	52.2	-32.1	34.5	49.82	74.0	21.8	H
10480.200	44.8	-30.7	38.1	37.41	74.0	29.2	H
15720.000	48.0	-26.4	40.2	34.17	74.0	26.0	V
17794.800	52.7	-23.2	41.0	34.93	74.0	21.3	V
17814.000	53.2	-23.1	40.9	35.30	74.0	20.8	H

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)
5160.678	49.2	-32.8	34.4	47.59	74.0	24.8	H
5339.860	51.1	-31.8	34.5	48.40	74.0	22.9	H
10519.800	47.0	-30.9	38.1	39.84	74.0	27.0	H
15775.200	50.1	-26.3	40.2	36.24	74.0	23.9	V
17815.200	53.1	-23.1	40.9	35.21	74.0	20.9	H
17819.400	53.7	-23.1	40.9	35.89	74.0	20.3	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)
4818.023	49.8	-32.8	34.5	48.13	74.0	24.2	H
5441.823	50.7	-32.0	34.7	47.96	74.0	23.3	H
10560.000	48.1	-30.2	38.1	40.14	74.0	25.9	H
15840.000	48.6	-26.2	40.3	34.50	74.0	25.4	H
17567.400	51.9	-25.6	41.1	36.40	74.0	22.1	V
17803.800	54.0	-23.1	41.0	36.15	74.0	20.0	H

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)
5350.570	72.4	-31.9	34.6	69.66	74.0	1.6	H
5351.420	72.0	-31.9	34.6	69.29	74.0	2.0	H
10639.800	47.2	-29.3	38.2	38.38	74.0	26.8	V
15960.000	48.9	-25.8	40.5	34.27	74.0	25.1	V
17811.600	53.2	-23.0	41.0	35.26	74.0	20.8	H
17839.800	53.0	-23.4	40.9	35.47	74.0	21.0	V

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)
5454.145	54.2	-32.0	34.7	51.44	74.0	19.8	H
5459.226	53.7	-32.0	34.7	51.02	74.0	20.3	H
10999.800	45.8	-30.2	38.2	37.74	74.0	28.2	V
16500.000	48.3	-26.0	41.1	33.12	74.0	25.8	H
17553.600	53.0	-25.6	41.2	37.40	74.0	21.0	V
17805.600	53.2	-23.1	41.0	35.34	74.0	20.8	V

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)
5548.623	53.4	-32.5	34.8	51.10	74.0	20.6	H
5659.214	52.4	-32.5	34.9	50.08	74.0	21.6	H
11200.200	46.7	-30.1	38.4	38.42	74.0	27.3	V
16800.000	48.9	-26.2	41.5	33.57	74.0	25.1	V
17796.000	52.7	-23.2	41.0	34.98	74.0	21.3	H
17818.200	52.7	-23.1	40.9	34.89	74.0	21.3	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)
5725.780	65.8	-33.0	34.9	63.84	74.0	8.2	H
5727.840	64.9	-33.0	34.9	62.97	74.0	9.1	V
11400.000	46.1	-30.2	38.6	37.70	74.0	27.9	H
17100.000	49.4	-25.5	41.3	33.59	74.0	24.6	H
17789.400	53.5	-23.3	41.0	35.86	74.0	20.5	H
17797.200	52.7	-23.2	41.0	34.97	74.0	21.3	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)
5146.703	69.7	-33.0	34.4	68.23	74.0	4.3	H
5148.285	71.0	-33.0	34.4	69.54	74.0	3.0	H
10380.600	48.5	-29.7	38.0	40.23	74.0	25.5	V
15570.000	47.5	-26.3	40.1	33.71	74.0	26.5	V
16953.000	52.0	-25.7	41.4	36.19	74.0	22.0	V
17795.400	52.5	-23.2	41.0	34.78	74.0	21.5	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)
5138.890	55.3	-33.1	34.4	53.91	74.0	18.7	H
5325.246	55.8	-31.9	34.5	53.18	74.0	18.2	H
10459.800	45.6	-30.4	38.1	37.87	74.0	28.4	V
15690.000	48.6	-26.4	40.2	34.81	74.0	25.4	V
17440.200	51.8	-25.3	41.2	35.86	74.0	22.2	V
17812.800	52.5	-23.0	40.9	34.59	74.0	21.5	V

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)
5179.560	52.5	-32.5	34.4	50.59	74.0	21.5	H
5354.658	52.6	-31.9	34.6	49.91	74.0	21.4	H
10539.600	48.4	-30.5	38.1	40.86	74.0	25.6	H
15790.800	50.5	-26.3	40.2	36.62	74.0	23.5	V
17794.200	54.0	-23.2	41.0	36.25	74.0	20.0	H
17802.600	53.0	-23.1	41.0	35.11	74.0	21.0	V

Channel 62

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)
5350.436	70.9	-31.9	34.6	68.16	74.0	3.1	H
5351.340	69.6	-31.9	34.6	66.96	74.0	4.4	H
10621.200	48.5	-29.2	38.1	39.49	74.0	25.5	V
15930.600	48.3	-25.9	40.4	33.83	74.0	25.7	V
17772.600	52.9	-23.6	41.0	35.55	74.0	21.1	H
17831.400	53.6	-23.3	40.9	35.91	74.0	20.4	V

Channel 102

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)
5459.080	65.8	-32.0	34.7	63.11	74.0	8.2	H
5457.423	64.3	-32.0	34.7	61.55	74.0	9.7	H
11020.000	48.4	-30.4	38.2	40.59	74.0	25.6	V
16530.000	51.8	-26.0	41.1	36.62	74.0	22.2	H
17718.235	52.8	-24.5	41.0	36.26	74.0	21.2	H
17825.406	53.4	-23.2	40.9	35.67	74.0	20.6	H

Channel 118

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)
5499.856	53.7	-32.3	34.8	51.13	74.0	20.3	H
5692.614	53.0	-32.7	34.9	50.78	74.0	21.0	H
11180.000	48.6	-30.0	38.3	40.23	74.0	25.4	V
16770.000	50.4	-26.2	41.5	35.12	74.0	23.6	H
17778.602	52.3	-23.5	41.0	34.85	74.0	21.7	V
17884.806	52.4	-24.0	40.9	35.53	74.0	21.6	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)
5725.660	63.7	-33.0	34.9	61.83	74.0	10.3	H
5728.892	63.5	-33.0	34.9	61.58	74.0	10.5	H
11340.000	48.6	-30.3	38.5	40.37	74.0	25.4	H
17010.000	49.6	-25.6	41.4	33.79	74.0	24.4	V
17794.200	54.0	-23.2	41.0	36.23	74.0	20.0	V
17934.601	52.3	-24.7	40.9	36.13	74.0	21.7	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)
5143.360	62.3	-33.0	34.4	60.84	74.0	11.7	V
5150.000	63.1	-32.9	34.4	61.55	74.0	11.0	H
10359.600	47.5	-29.8	37.9	39.42	74.0	26.5	V
15540.000	48.7	-26.3	40.1	34.95	74.0	25.3	H
17783.400	53.2	-23.4	41.0	35.67	74.0	20.8	H
17929.200	52.3	-24.6	40.9	36.03	74.0	21.7	V

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)
5149.200	53.4	-32.9	34.4	51.96	74.0	20.6	H
5252.200	52.5	-32.4	34.4	50.53	74.0	21.5	V
10399.800	47.9	-29.6	38.0	39.53	74.0	26.1	H
15594.000	50.2	-26.4	40.1	36.46	74.0	23.8	V
17823.000	52.9	-23.2	40.9	35.13	74.0	21.1	V
17931.600	52.5	-24.6	40.9	36.32	74.0	21.5	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)
5188.800	53.9	-32.4	34.4	51.92	74.0	20.1	H
5292.000	52.5	-32.1	34.5	50.18	74.0	21.5	V
10480.200	45.1	-30.7	38.1	37.66	74.0	28.9	V
15718.800	54.9	-26.4	40.2	41.08	74.0	19.1	V
16966.800	52.5	-25.6	41.4	36.72	74.0	21.5	V
17811.600	53.3	-23.0	41.0	35.33	74.0	20.7	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)
5198.234	50.5	-32.5	34.4	48.55	74.0	23.5	H
5435.623	50.3	-32.0	34.7	47.61	74.0	23.7	H
10520.400	44.8	-30.9	38.1	37.63	74.0	29.2	H
15780.000	51.9	-26.3	40.2	38.03	74.0	22.1	V
16930.200	52.5	-25.7	41.4	36.80	74.0	21.5	H
17800.800	54.0	-23.1	41.0	36.20	74.0	20.0	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)
4947.245	49.5	-33.3	34.5	48.31	74.0	24.5	H
6576.428	52.0	-32.2	36.1	48.07	74.0	22.0	H
10562.400	47.9	-30.1	38.1	39.88	74.0	26.1	V
15836.400	53.2	-26.2	40.3	39.13	74.0	20.8	H
17725.800	52.2	-24.4	41.0	35.54	74.0	21.8	H
17803.800	53.9	-23.1	41.0	36.05	74.0	20.1	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)
5350.070	62.3	-31.9	34.6	59.57	74.0	11.7	H
5350.610	62.1	-31.9	34.6	59.43	74.0	11.9	H
10639.800	48.2	-29.3	38.2	39.32	74.0	25.8	H
10963.000	50.8	-29.8	38.2	42.42	74.0	23.2	H
17791.200	53.2	-23.3	41.0	35.56	74.0	20.8	H
17815.200	53.0	-23.1	40.9	35.13	74.0	21.0	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)
5456.743	53.9	-32.0	34.7	51.15	74.0	20.1	H
5458.710	54.6	-32.0	34.7	51.90	74.0	19.4	H
10999.800	46.6	-30.2	38.2	38.54	74.0	27.4	V
16500.000	48.5	-26.0	41.1	33.40	74.0	25.5	V
17769.500	53.3	-23.6	41.0	35.98	74.0	20.7	V
17806.200	54.2	-23.0	41.0	36.24	74.0	19.8	V

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)
5478.230	50.3	-32.1	34.8	47.63	74.0	23.7	H
5842.860	50.9	-32.2	35.1	48.04	74.0	23.1	H
11200.200	46.0	-30.1	38.4	37.76	74.0	28.0	H
16800.000	48.9	-26.2	41.5	33.55	74.0	25.1	H
17812.800	53.4	-23.0	40.9	35.48	74.0	20.6	H
17864.400	52.5	-23.7	40.9	35.33	74.0	21.5	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)
5725.023	70.9	-33.0	34.9	68.98	74.0	3.1	H
5725.129	70.3	-33.0	34.9	68.38	74.0	3.7	H
11400.000	45.7	-30.2	38.6	37.35	74.0	28.3	V
17100.000	49.0	-25.5	41.3	33.11	74.0	25.0	V
17794.800	53.1	-23.2	41.0	35.34	74.0	20.9	V
17822.400	53.4	-23.2	40.9	35.61	74.0	20.6	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)
5148.480	67.2	-33.0	34.4	65.69	74.0	6.8	H
5150.000	65.4	-32.9	34.4	63.93	74.0	8.6	H
10380.000	47.7	-29.7	38.0	39.43	74.0	26.3	H
15570.000	49.2	-26.3	40.1	35.44	74.0	24.8	V
17796.000	53.9	-23.2	41.0	36.12	74.0	20.1	V
17820.600	53.4	-23.1	40.9	35.56	74.0	20.6	V

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)
5154.200	50.6	-32.9	34.4	49.06	74.0	23.4	H
5292.200	50.8	-32.1	34.5	48.45	74.0	23.2	H
10459.800	45.5	-30.4	38.1	37.76	74.0	28.5	V
15690.000	48.8	-26.4	40.2	34.96	74.0	25.2	H
16950.000	52.1	-25.7	41.4	36.32	74.0	21.9	V
17819.400	52.5	-23.1	40.9	34.70	74.0	21.5	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)
5163.023	50.2	-32.8	34.4	48.56	74.0	23.8	H
5377.800	50.6	-32.0	34.6	48.03	74.0	23.4	H
10540.200	46.1	-30.5	38.1	38.52	74.0	27.9	V
15811.800	50.2	-26.3	40.3	36.24	74.0	23.8	H
17800.800	52.8	-23.1	41.0	34.96	74.0	21.2	V
17820.600	52.6	-23.1	40.9	34.80	74.0	21.4	V

Channel 62

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)
5350.380	63.3	-31.9	34.6	60.64	74.0	10.7	H
5351.740	64.2	-31.9	34.6	61.52	74.0	9.8	H
10620.000	48.7	-29.2	38.1	39.70	74.0	25.3	H
15931.800	51.4	-25.9	40.4	36.92	74.0	22.6	V
17803.800	53.2	-23.1	41.0	35.33	74.0	20.8	V
17823.000	53.3	-23.2	40.9	35.50	74.0	20.7	H

Channel 102

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)
5459.723	56.7	-32.0	34.7	53.97	74.0	17.3	V
5459.265	56.0	-32.0	34.7	53.28	74.0	18.0	H
11020.000	45.7	-30.4	38.2	37.84	74.0	28.3	V
16530.000	48.9	-26.0	41.1	33.66	74.0	25.2	H
17786.054	52.8	-23.4	41.0	35.21	74.0	21.2	V
17811.903	54.8	-23.0	41.0	36.86	74.0	19.2	V

Channel 118

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)
5374.235	50.1	-32.0	34.6	47.51	74.0	23.9	V
5677.805	52.5	-32.5	34.9	50.13	74.0	21.5	H
11180.000	47.2	-30.0	38.3	38.88	74.0	26.8	V
16770.000	50.2	-26.2	41.5	34.97	74.0	23.8	H
17818.823	53.2	-23.1	40.9	35.39	74.0	20.8	H
17849.423	52.5	-23.5	40.9	35.08	74.0	21.5	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)
5599.235	50.5	-32.6	34.8	48.32	74.0	23.5	V
5765.348	51.6	-32.8	34.9	49.49	74.0	22.4	H
11340.000	47.5	-30.3	38.5	39.27	74.0	26.5	H
17010.000	49.9	-25.6	41.4	34.07	74.0	24.1	V
17725.203	52.6	-24.4	41.0	35.94	74.0	21.4	V
17820.643	51.9	-23.1	40.9	34.14	74.0	22.1	H

802.11ac-HT80

Channel 42

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)
5139.782	64.4	-33.1	34.4	62.99	74.0	9.6	H
5140.543	64.3	-33.1	34.4	62.97	74.0	9.7	H
10419.900	47.1	-29.8	38.0	38.92	74.0	26.9	H
15630.050	46.7	-26.4	40.2	32.90	74.0	27.3	V
17738.200	52.3	-24.2	41.0	35.44	74.0	21.7	V
17803.650	52.5	-23.1	41.0	34.62	74.0	21.5	V

Channel 58

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)
5354.940	60.7	-31.9	34.6	58.06	74.0	13.3	V
5354.510	61.5	-31.9	34.6	58.80	74.0	12.5	H
10579.950	47.4	-29.8	38.1	39.01	74.0	26.6	H
15869.850	47.3	-26.1	40.3	33.03	74.0	26.7	V
17464.300	52.0	-25.2	41.2	36.00	74.0	22.0	V
17807.500	52.3	-23.0	41.0	34.40	74.0	21.7	H

Channel 106

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)
5459.943	63.3	-32.0	34.7	60.63	74.0	10.7	V
5459.562	62.8	-32.0	34.7	60.05	74.0	11.2	H
11060.100	45.8	-30.6	38.2	38.13	74.0	28.2	H
16589.800	47.8	-25.9	41.2	32.45	74.0	26.2	H
17797.050	52.7	-23.2	41.0	34.94	74.0	21.3	H
17813.000	52.8	-23.0	40.9	34.93	74.0	21.2	V

Conclusion: PASS

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

Test Condition:

Voltage（V）	Frequency（Hz）
110	60

Measurement uncertainty:

Expanded measurement uncertainty for this test item is U =3.2dB, k=2.

Measurement Result and limit:

WLAN (Quasi-peak Limit)

Frequency range (MHz)	Quasi-peak Limit (dBμV)	Result (dBμV)		Conclusion
		With charger		
		11a mode	Idle	
0.15 to 0.5	66 to 56	Fig.69	Fig.70	P
0.5 to 5	56			
5 to 30	60			
NOTE: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.				

WLAN (Average Limit)

Frequency range (MHz)	Average Limit (dBμV)	Result (dBμV)		Conclusion
		With charger		
		11a mode	Idle	
0.15 to 0.5	56 to 46	Fig.69	Fig.70	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:

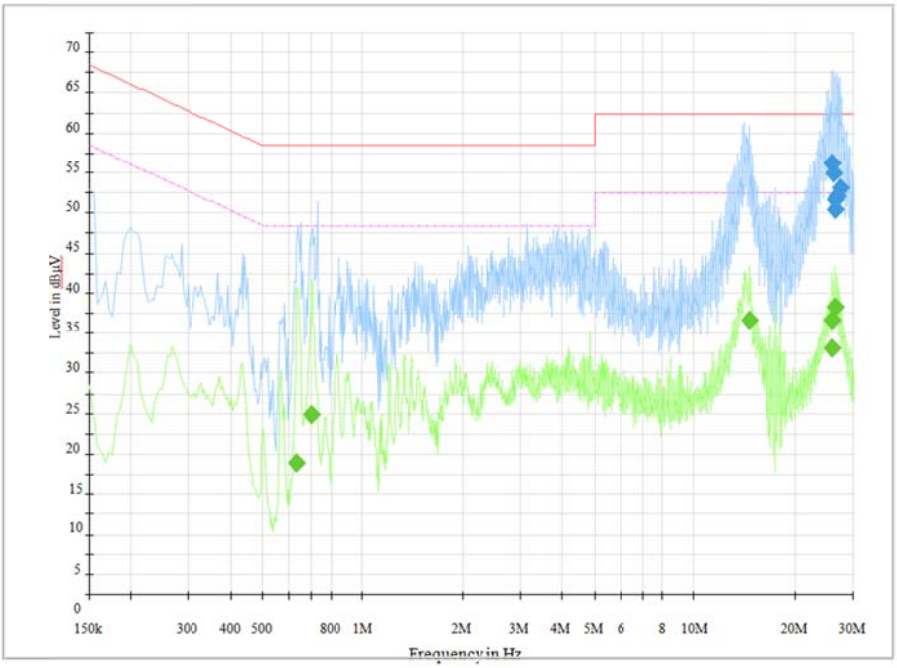

Fig. 69 Conducted Emission(802.11a, Ch40, TX)

Final Result 1

Frequency (MHz)	QuasiPeak (dBµV)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
25.764000	53.8	GND	L1	11.4	6.2	60.0
26.236500	52.5	GND	L1	11.4	7.5	60.0
26.493000	49.1	GND	L1	11.4	10.9	60.0
26.560500	47.9	GND	N	11.1	12.1	60.0
26.772000	49.5	GND	L1	11.4	10.5	60.0
27.402000	50.6	GND	L1	11.4	9.4	60.0

Final Result 2

Frequency (MHz)	Average (dBµV)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.631500	16.5	GND	L1	10.2	29.5	46.0
0.699000	22.5	GND	L1	10.2	23.5	46.0
14.577000	34.1	GND	L1	10.8	15.9	50.0
25.845000	30.6	GND	L1	11.4	19.4	50.0
25.980000	34.1	GND	L1	11.4	15.9	50.0
26.493000	35.8	GND	L1	11.4	14.2	50.0

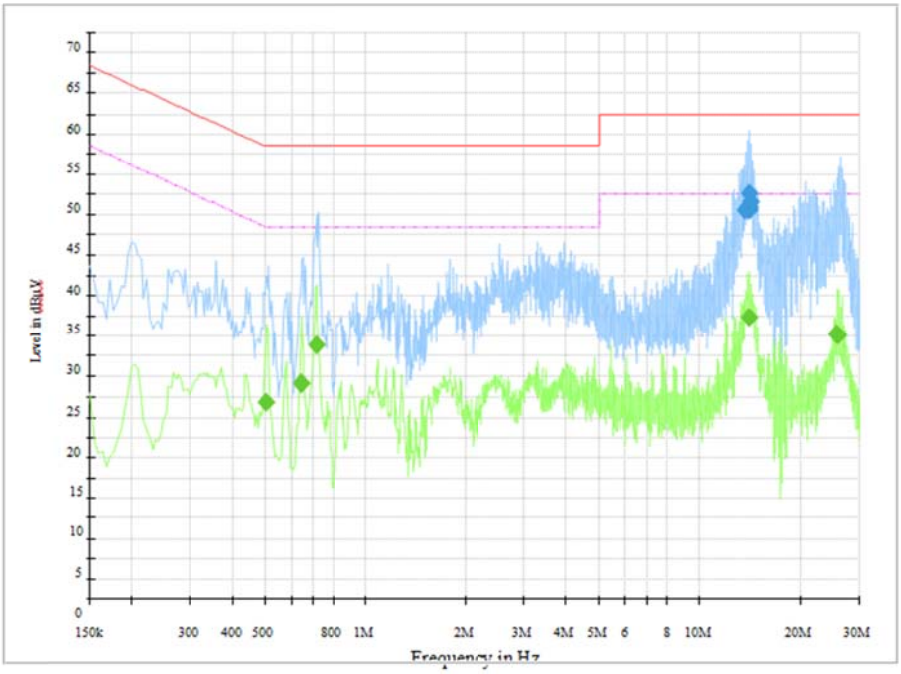

Fig. 70 Conducted Emission(802.11a, IDLE)

Final Result 1

Frequency (MHz)	QuasiPeak (dBµV)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
13.785000	47.9	GND	L1	10.8	12.1	60.0
13.870500	48.3	GND	L1	10.8	11.7	60.0
14.001000	48.5	GND	L1	10.8	11.5	60.0
14.077500	48.1	GND	L1	10.8	11.9	60.0
14.127000	50.0	GND	L1	10.8	10.0	60.0
14.181000	49.0	GND	L1	10.8	11.0	60.0

Final Result 2

Frequency (MHz)	Average (dBµV)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.505500	24.3	GND	L1	10.2	21.7	46.0
0.640500	26.5	GND	L1	10.2	19.5	46.0
0.712500	31.4	GND	L1	10.2	14.6	46.0
14.068500	34.8	GND	L1	10.8	15.2	50.0
25.989000	32.7	GND	L1	11.4	17.3	50.0
26.056500	32.4	GND	L1	11.4	17.6	50.0

A.8. 99% Occupied bandwidth

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

a) The instrument center frequency is set to the nominal EUT channel center frequency. The frequency span for the spectrum analyzer shall be between 1.5 times and 5.0 times the OBW.

b) The nominal IF filter bandwidth (3 dB RBW) shall be in the range of 1% to 5% of the OBW, and VBW shall be approximately three times the RBW, unless otherwise specified by the applicable requirement.

c) Set the reference level of the instrument as required, keeping the signal from exceeding the maximum input mixer level for linear operation. In general, the peak of the spectral envelope shall be more than [10 log (OBW/RBW)] below the reference level. Specific guidance is given in 4.1.5.2.

d) Step a) through step c) might require iteration to adjust within the specified range.

e) Video averaging is not permitted. Where practical, a sample detection and single sweep mode shall be used. Otherwise, peak detection and max hold mode (until the trace stabilizes) shall be used.

f) Use the 99% power bandwidth function of the instrument (if available) and report the measured bandwidth.

g) If the instrument does not have a 99% power bandwidth function, then the trace data points are recovered and directly summed in linear power terms. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5% ofthe total is reached; that frequency is recorded as the lower frequency. The process is repeated until 99.5% of the total is reached; that frequency is recorded as the upper frequency. The 99% power bandwidth is the difference between these two frequencies.

h) The occupied bandwidth shall be reported by providing plot(s) of the measuring instrument display; the plot axes and the scale units per division shall be clearly labeled. Tabular data may be reported in addition to the plot(s).

Measurement Uncertainty:

Measurement Uncertainty	60.80Hz

Measurement Result:

Mode	Channel	99% Occupied bandwidth (MHz)		conclusion
802.11a	5180 MHz	**Fig. 71**	18.16	P
	5200 MHz	**Fig. 72**	18.40	P
	5240 MHz	**Fig. 73**	18.20	P
802.11n HT20	5180 MHz	**Fig. 74**	18.72	P
	5200 MHz	**Fig. 75**	18.84	P
	5240 MHz	**Fig. 76**	18.72	P
802.11ac HT20	5180 MHz	**Fig. 77**	18.88	P
	5200 MHz	**Fig. 78**	19.04	P
	5240 MHz	**Fig. 79**	18.92	P
802.11n HT40	5190 MHz	**Fig. 80**	36.56	P
	5230 MHz	**Fig. 81**	36.48	P
802.11ac	5190 MHz	**Fig. 82**	36.48	P

HT40	5230 MHz	**Fig. 83**	36.48	P
802.11ac HT80	5210 MHz	**Fig. 84**	75.36	P

Conclusion: PASS

Test graphs as below:

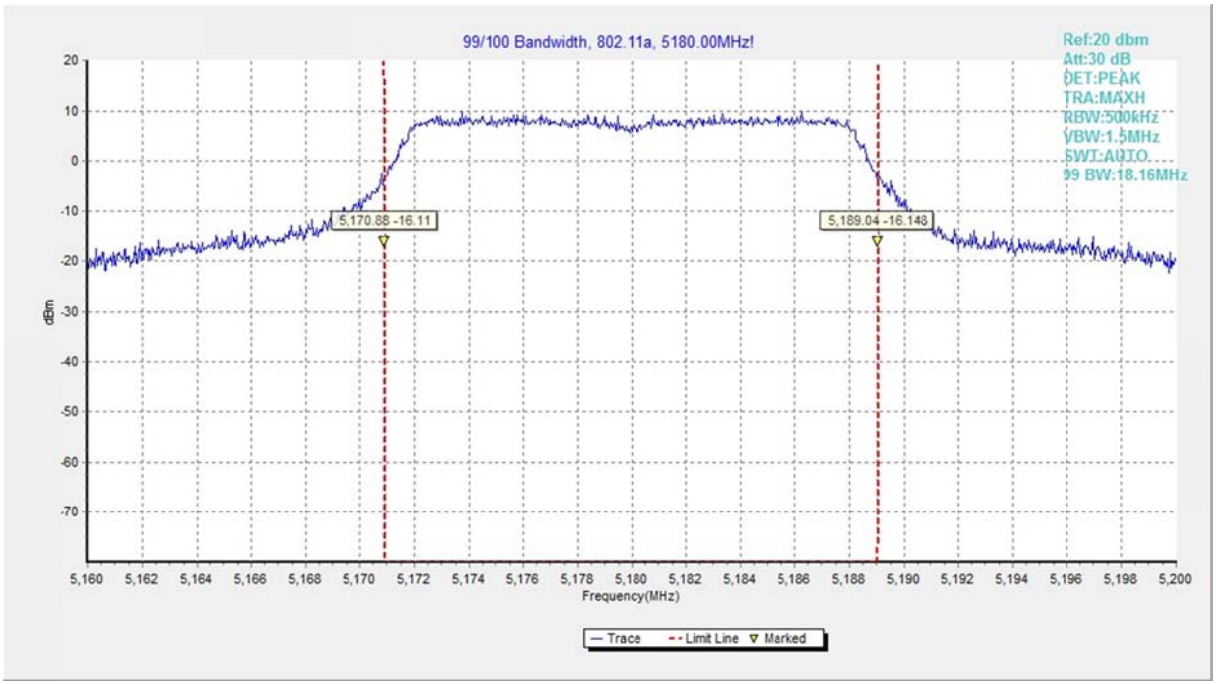

Fig. 71 99% Occupied bandwidth (802.11a, 5180MHz)

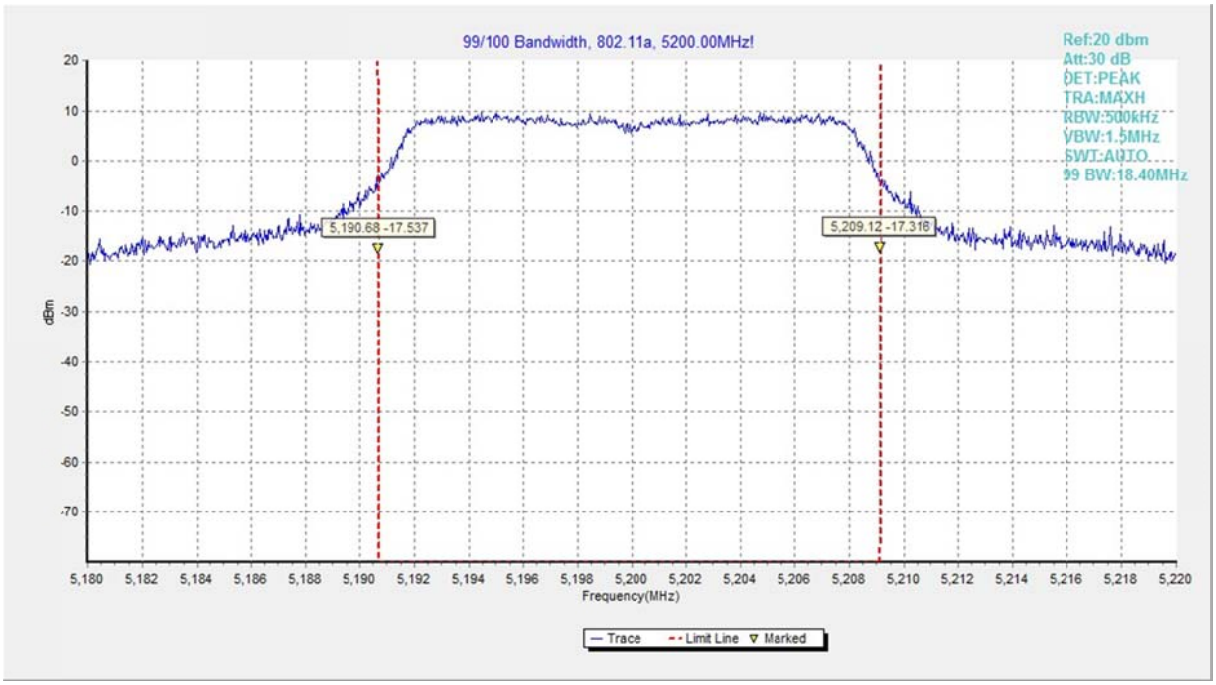

Fig. 72 99% Occupied bandwidth (802.11a, 5200MHz)

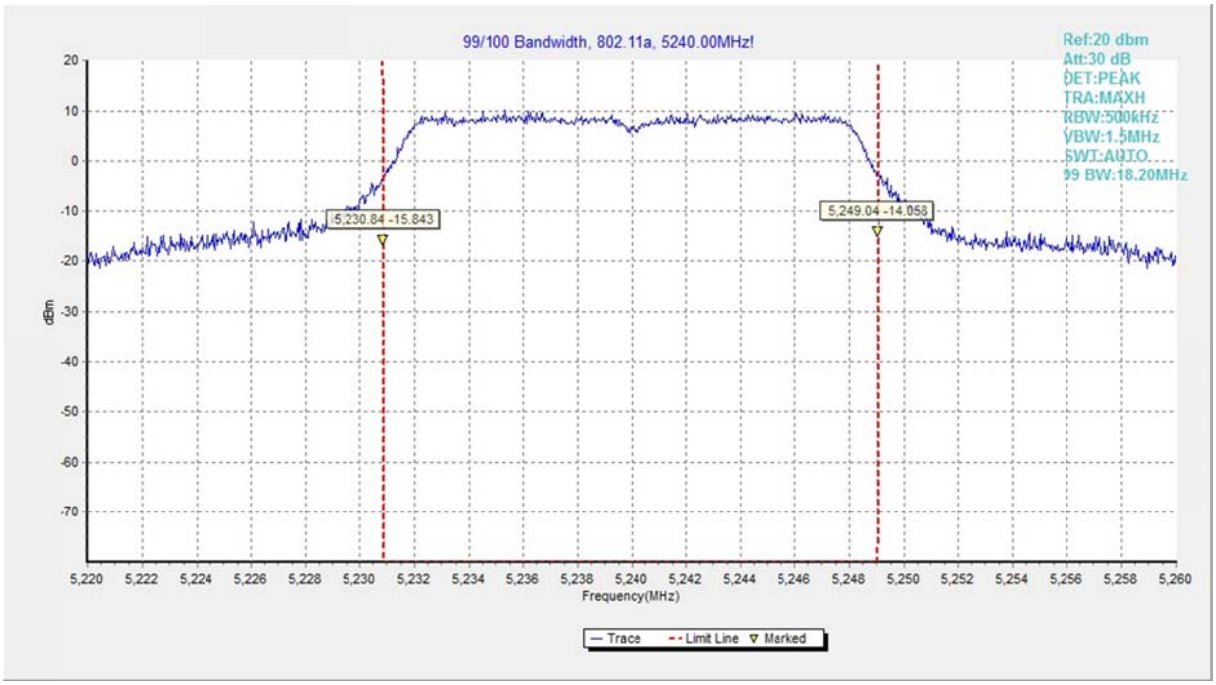

Fig. 73 99% Occupied bandwidth (802.11a, 5240MHz)

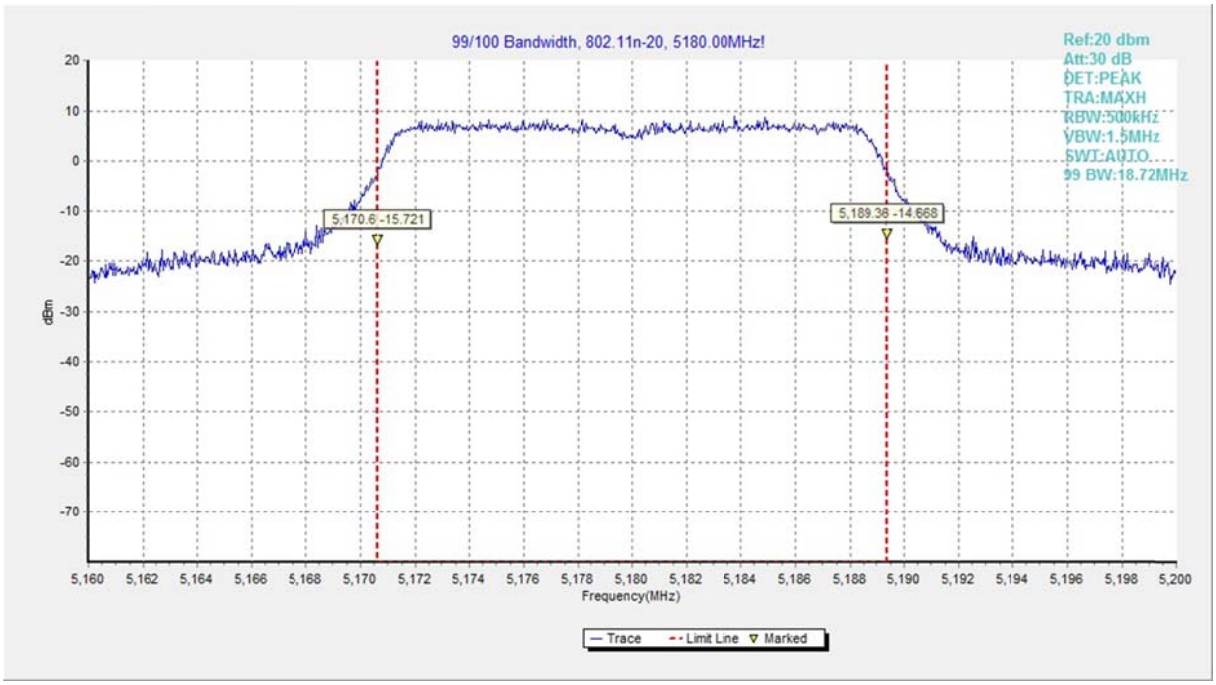

Fig. 74 99% Occupied bandwidth (802.11n-HT20, 5180MHz)

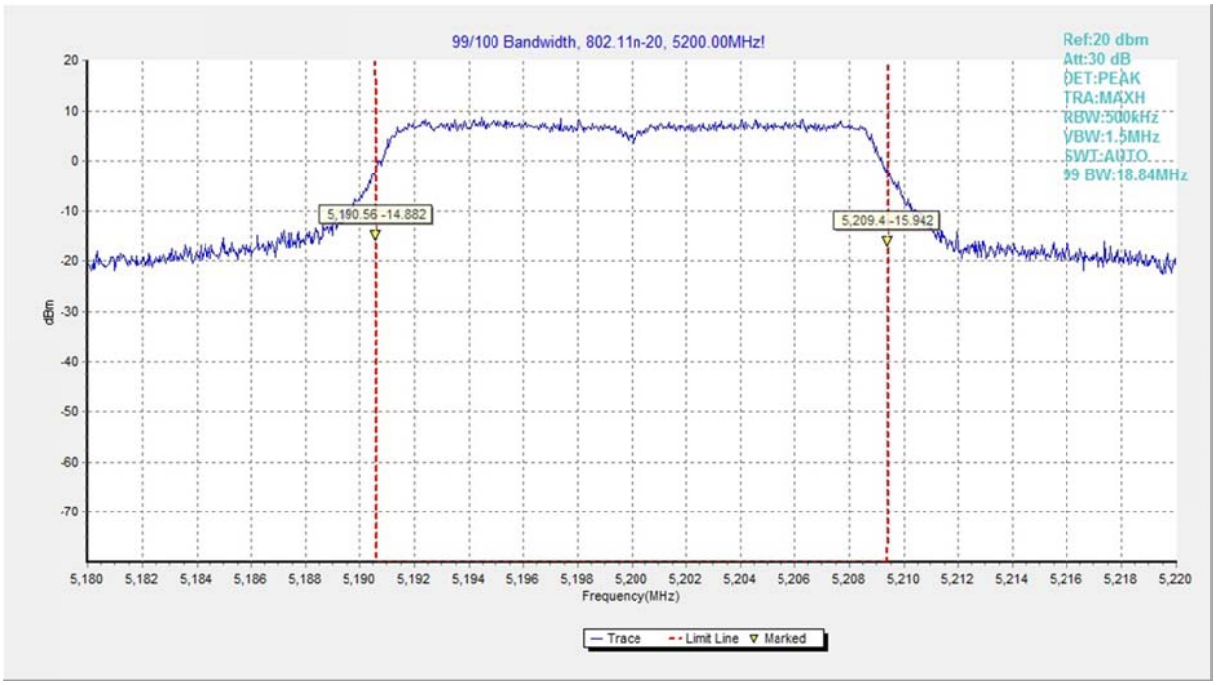

Fig. 75 99% Occupied bandwidth (802.11n-HT20, 5200MHz)

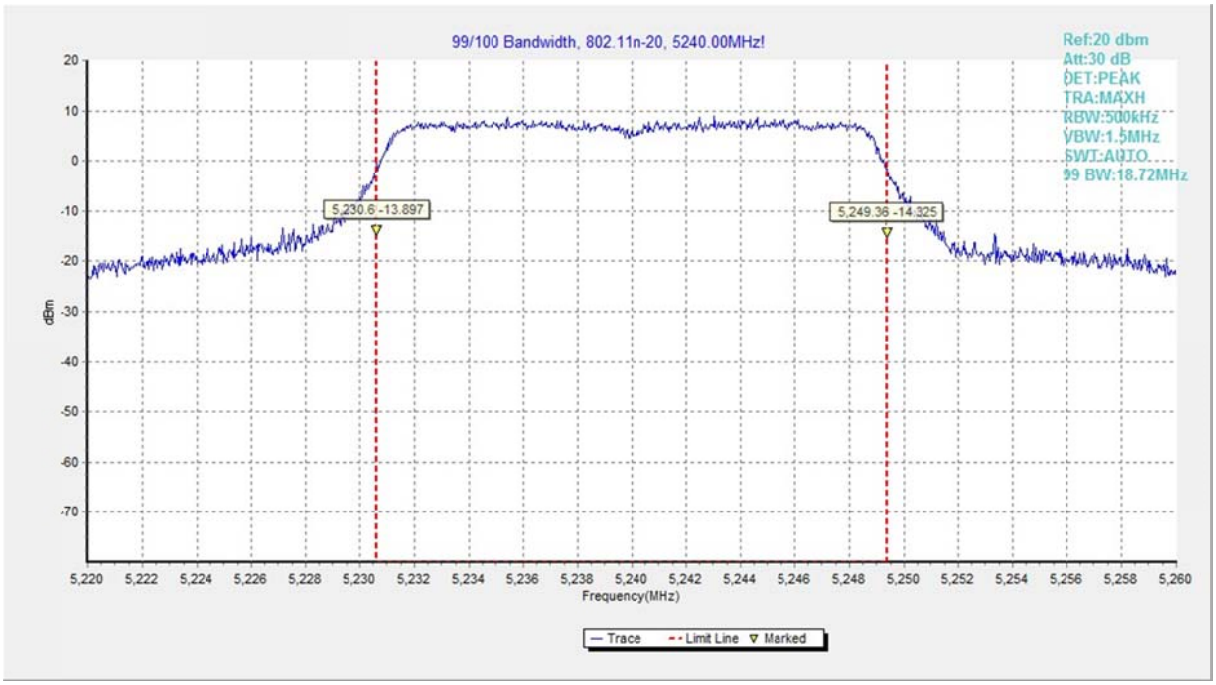

Fig. 76 99% Occupied bandwidth (802.11n-HT20, 5240MHz)

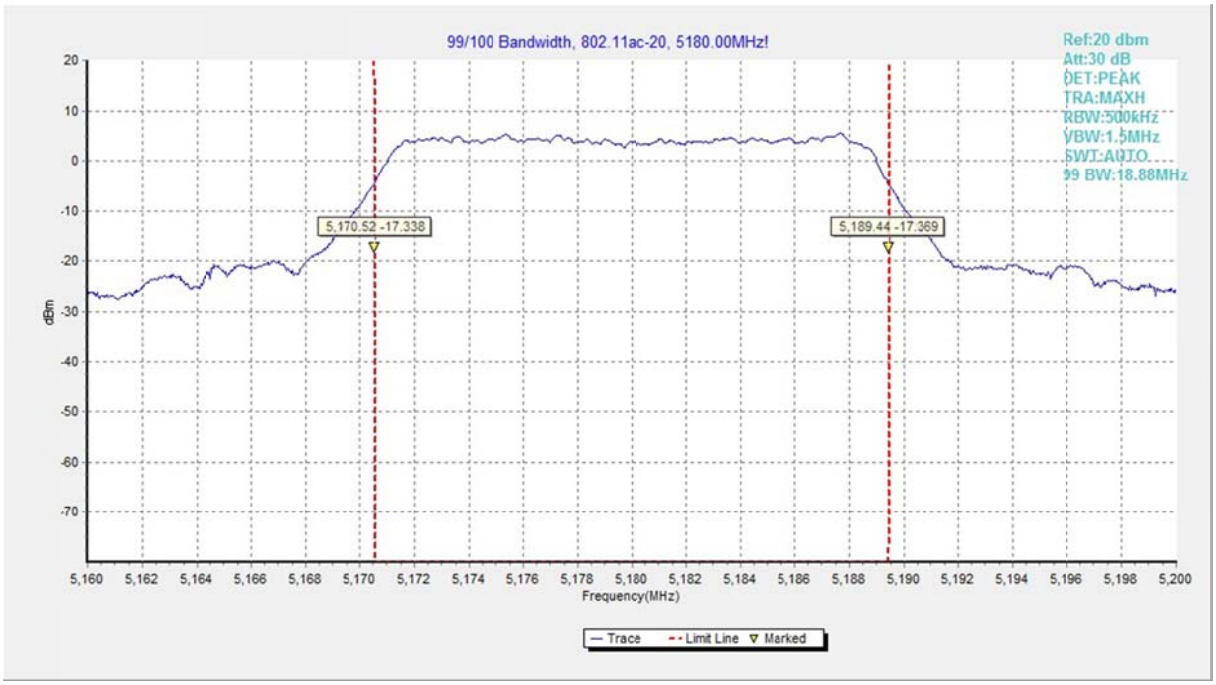

Fig. 77 99% Occupied bandwidth (802.11ac-HT20, 5180MHz)

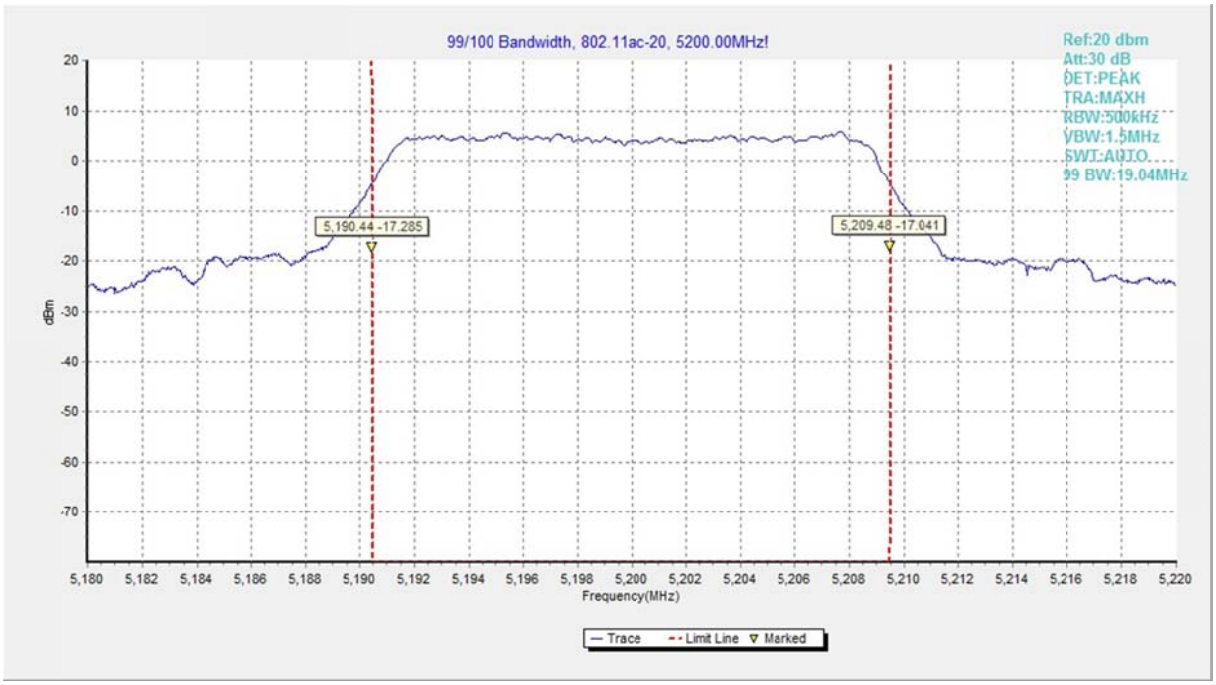

Fig. 78 99% Occupied bandwidth (802.11ac-HT20, 5200MHz)