# Shenzhen Academy of Information and Communications Technology

# FCC PART 15C
# TEST REPORT
# No. B17N01624-RLAN

**for**

**Roam Data Inc.**

**POS Tablet**

**Moby/M70**

**with**

**Hardware Version: 9888C**

**Software Version: M70**

**FCC ID: 2ABY6-M70**

**Issued Date: 2017-11-27**

**Designation Number: CN1210**

**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 SAICT.

**Test Laboratory:**

Shenzhen Academy of Information and Communications Technology

Building G, Shenzhen International Innovation Center, No.1006 Shennan Road, Futian District, Shenzhen, Guangdong, P. R. China 518026.

Tel: +86(0)755-33322000, Fax: +86(0)755-33322001, Email:yewu@caict.ac.cn.www.cszit.com

*©Copyright. All rights reserved by SAICT*

# REPORT HISTORY

| Report Number | Revision | Description | Issue Date |
|---|---|---|---|
| B17N01624-RLAN | Rev.0 | 1st edition | 2017-11-27 |

*©Copyright. All rights reserved by SAICT*

# CONTENTS

**CONTENTS** ..... 3

**1. TEST LATORATORY** ..... 7

1.1. TESTING LOCATION ..... 7
1.2. TESTING ENVIRONMENT ..... 7
1.3. PROJECT DATA ..... 7
1.4. SIGNATURE ..... 7

**2. CLIENT INFORMATION** ..... 8

2.1. APPLICANT INFORMATION ..... 8
2.2. MANUFACTURER INFORMATION ..... 8

**3. EQUIPMENT UNDER TEST (EUT) AND ANCILLARY EQUIPMENT (AE)** ..... 9

3.1. ABOUT EUT ..... 9
3.2. INTERNAL IDENTIFICATION OF EUT ..... 9
3.3. INTERNAL IDENTIFICATION OF AE ..... 9
3.4. GENERAL DESCRIPTION ..... 9

**4. REFERENCE DOCUMENTS** ..... 10

4.1. DOCUMENTS SUPPLIED BY APPLICANT ..... 10
4.2. REFERENCE DOCUMENTS FOR TESTING ..... 10

**5. SUMMARY OF TEST RESULTS** ..... 11

5.1. SUMMARY OF TEST RESULTS ..... 11
5.2. STATEMENTS ..... 11
5.3. TERMS USED IN THE RESULT TABLE ..... 11

**6. TEST EQUIPMENTS UTILIZED** ..... 12

**ANNEX A: MEASUREMENT RESULTS** ..... 13

A.1. MEASUREMENT METHOD ..... 13
A.2. MAXIMUM OUTPUT POWER ..... 14
A.3. PEAK POWER SPECTRAL DENSITY (CONDUCTED) ..... 17
A.4. OCCUPIED 26DB BANDWIDTH(CONDUCTED) ..... 19
FIG. 1 OCCUPIED 26DB BANDWIDTH (802.11N-HT20, 5180MHZ) ..... 20
FIG. 2 OCCUPIED 26DB BANDWIDTH (802.11N-HT20, 5200MHZ) ..... 20
FIG. 3 OCCUPIED 26DB BANDWIDTH (802.11N-HT20, 5240MHZ) ..... 21
FIG. 4 OCCUPIED 26DB BANDWIDTH (802.11N-HT20, 5260MHZ) ..... 21
FIG. 5 OCCUPIED 26DB BANDWIDTH (802.11N-HT20, 5280MHZ) ..... 22
FIG. 6 OCCUPIED 26DB BANDWIDTH (802.11N-HT20, 5320MHZ) ..... 22
FIG. 7 OCCUPIED 26DB BANDWIDTH (802. 11N-HT20, 5500MHZ) ..... 23
FIG. 8 OCCUPIED 26DB BANDWIDTH (802. 11N-HT20, 5600MHZ) ..... 23
FIG. 9 OCCUPIED 26DB BANDWIDTH (802. 11N-HT20, 5700MHZ) ..... 24
FIG. 10 OCCUPIED 26DB BANDWIDTH (802.11N-HT40, 5190MHZ) ..... 24

*©Copyright. All rights reserved by SAICT*

FIG. 11 OCCUPIED 26DB BANDWIDTH (802.11N-HT40, 5230MHZ)..... 25
FIG. 12 OCCUPIED 26DB BANDWIDTH (802.11N-HT40, 5270MHZ)..... 25
FIG. 13 OCCUPIED 26DB BANDWIDTH (802.11N-HT40, 5310MHZ)..... 26
FIG. 14 OCCUPIED 26DB BANDWIDTH (802. 11N-HT40, 5510MHZ)..... 26
FIG. 15 OCCUPIED 26DB BANDWIDTH (802. 11N-HT40, 5590MHZ)..... 27
FIG. 16 OCCUPIED 26DB BANDWIDTH (802. 11N-HT40, 5670MHZ)..... 27
FIG. 17 OCCUPIED 26DB BANDWIDTH (802. 11AC-VHT80, 5210MHZ)..... 28
FIG. 18 OCCUPIED 26DB BANDWIDTH (802. 11AC-VHT80, 5290MHZ)..... 28
FIG. 19 OCCUPIED 26DB BANDWIDTH (802. 11AC-VHT80, 5530MHZ)..... 29
FIG. 20 OCCUPIED 26DB BANDWIDTH (802. 11AC-VHT80, 5610MHZ)..... 29
A.5. OCCUPIED 6DB BANDWIDTH(CONDUCTED)..... 30
FIG. 21 OCCUPIED 6DB BANDWIDTH (802.11N-HT20, 5745MHZ)..... 30
FIG. 22 OCCUPIED 6DB BANDWIDTH (802.11N-HT20, 5785MHZ)..... 31
FIG. 23 OCCUPIED 6DB BANDWIDTH (802.11N-HT20, 5825MHZ)..... 31
FIG. 24 OCCUPIED 6DB BANDWIDTH (802.11N-HT40, 5755MHZ)..... 32
FIG. 25 OCCUPIED 6DB BANDWIDTH (802.11N-HT40, 5795MHZ)..... 32
FIG. 26 OCCUPIED 6DB BANDWIDTH (802.11AC-VHT80, 5775MHZ)..... 33
A.6. 99% OCCUPIED BANDWIDTH(CONDUCTED) ..... 34
FIG. 27 99% OCCUPIED BANDWIDTH (802.11N-HT20, 5180MHZ) ..... 35
FIG. 28 99% OCCUPIED BANDWIDTH (802.11N-HT20, 5200MHZ) ..... 35
FIG. 29 99% OCCUPIED BANDWIDTH (802.11N-HT20, 5240MHZ) ..... 36
FIG. 30 99% OCCUPIED BANDWIDTH (802.11N-HT20, 5260MHZ) ..... 36
FIG. 31 99% OCCUPIED BANDWIDTH (802.11N-HT20, 5280MHZ) ..... 37
FIG. 32 99% OCCUPIED BANDWIDTH (802.11N-HT20, 5320MHZ) ..... 37
FIG. 33 99% OCCUPIED BANDWIDTH (802. 11N-HT20, 5500MHZ) ..... 38
FIG. 34 99% OCCUPIED BANDWIDTH (802. 11N-HT20, 5600MHZ) ..... 38
FIG. 35 99% OCCUPIED BANDWIDTH (802. 11N-HT20, 5700MHZ) ..... 39
FIG. 36 99% OCCUPIED BANDWIDTH (802.11N-HT40, 5190MHZ) ..... 39
FIG. 37 99% OCCUPIED BANDWIDTH (802.11N-HT40, 5230MHZ) ..... 40
FIG. 38 99% OCCUPIED BANDWIDTH (802.11N-HT40, 5270MHZ) ..... 40
FIG. 39 99% OCCUPIED BANDWIDTH (802.11N-HT40, 5310MHZ) ..... 41
FIG. 40 99% OCCUPIED BANDWIDTH (802. 11N-HT40, 5510MHZ) ..... 41
FIG. 41 99% OCCUPIED BANDWIDTH (802. 11N-HT40, 5590MHZ) ..... 42
FIG. 42 99% OCCUPIED BANDWIDTH (802. 11N-HT40, 5670MHZ) ..... 42
FIG. 43 99% OCCUPIED BANDWIDTH (802. 11AC-VHT80, 5210MHZ) ..... 43
FIG. 44 99% OCCUPIED BANDWIDTH (802. 11AC-VHT80, 5290MHZ) ..... 43
FIG. 45 99% OCCUPIED BANDWIDTH (802. 11AC-VHT80, 5530MHZ) ..... 44
FIG. 46 99% OCCUPIED BANDWIDTH (802. 11AC-VHT80, 5610MHZ) ..... 44
A.7. BAND EDGES COMPLIANCE ..... 45
FIG. 47 BAND EDGES (802.11A, CH36 5180MHZ) ..... 46
FIG. 48 BAND EDGES (802.11A, CH64 5320MHZ) ..... 46
FIG. 49 BAND EDGES (802.11A, CH100 5500MHZ) ..... 47
FIG. 50 BAND EDGES (802.11A, CH140 5700MHZ) ..... 47
FIG. 51 BAND EDGES (802.11A, CH149 5745MHZ) ..... 48

*©Copyright. All rights reserved by SAICT*

FIG. 52 BAND EDGES (802.11A, CH165 5825MHZ) ..... 48
FIG. 53 BAND EDGES (802.11N-HT40, CH38 5190MHZ) ..... 49
FIG. 54 BAND EDGES (802.11N-HT40, CH62 5310MHZ) ..... 49
FIG. 55 BAND EDGES (802.11N-HT40, CH102 5510MHZ) ..... 50
FIG. 56 BAND EDGES (802.11N-HT40, CH134 5670MHZ) ..... 50
FIG. 57 BAND EDGES (802.11N-HT40, CH151 5755MHZ) ..... 51
FIG. 58 BAND EDGES (802.11N-HT40, CH159 5795MHZ) ..... 51
FIG. 59 BAND EDGES (802.11AC-VHT80, CH42 5210MHZ) ..... 52
FIG. 60 BAND EDGES (802.11AC-VHT80, CH58 5290MHZ) ..... 52
FIG. 61 BAND EDGES (802.11AC-VHT80, CH106 5530MHZ) ..... 53
FIG. 62 BAND EDGES (802.11AC-VHT80, 5775MHZ) ..... 53
A.8. TRANSMITTER SPURIOUS EMISSION ..... 54
FIG. 63 TRANSMITTER SPURIOUS EMISSION (802.11N-HT20, 5180MHZ) ..... 55
FIG. 64 TRANSMITTER SPURIOUS EMISSION (802.11N-HT20, 5200MHZ) ..... 56
FIG. 65 TRANSMITTER SPURIOUS EMISSION (802.11N-HT20, 5240MHZ) ..... 56
FIG. 66 TRANSMITTER SPURIOUS EMISSION (802.11N-HT20, 5260MHZ) ..... 57
FIG. 67 TRANSMITTER SPURIOUS EMISSION (802.11N-HT20, 5280MHZ) ..... 57
FIG. 68 TRANSMITTER SPURIOUS EMISSION (802.11N-HT20, 5320MHZ) ..... 58
FIG. 69 TRANSMITTER SPURIOUS EMISSION (802. 11N-HT20, 5500MHZ) ..... 58
FIG. 70 TRANSMITTER SPURIOUS EMISSION (802. 11N-HT20, 5600MHZ) ..... 59
FIG. 71 TRANSMITTER SPURIOUS EMISSION (802. 11N-HT20, 5700MHZ) ..... 59
FIG. 72 TRANSMITTER SPURIOUS EMISSION (802. 11N-HT20, 5745MHZ) ..... 60
FIG. 73 TRANSMITTER SPURIOUS EMISSION (802. 11N-HT20, 5785MHZ) ..... 60
FIG. 74 TRANSMITTER SPURIOUS EMISSION (802. 11N-HT20, 5825MHZ) ..... 61
FIG. 75 TRANSMITTER SPURIOUS EMISSION (802.11N-HT40, 5190MHZ) ..... 61
FIG. 76 TRANSMITTER SPURIOUS EMISSION (802.11N-HT40, 5230MHZ) ..... 62
FIG. 77 TRANSMITTER SPURIOUS EMISSION (802.11N-HT40, 5270MHZ) ..... 62
FIG. 78 TRANSMITTER SPURIOUS EMISSION (802.11N-HT40, 5310MHZ) ..... 63
FIG. 79 TRANSMITTER SPURIOUS EMISSION (802. 11N-HT40, 5510MHZ) ..... 63
FIG. 80 TRANSMITTER SPURIOUS EMISSION (802. 11N-HT40, 5590MHZ) ..... 64
FIG. 81 TRANSMITTER SPURIOUS EMISSION (802. 11N-HT40, 5670MHZ) ..... 64
FIG. 82 TRANSMITTER SPURIOUS EMISSION (802. 11N-HT40, 5755MHZ) ..... 65
FIG. 83 TRANSMITTER SPURIOUS EMISSION (802. 11N-HT40, 5795MHZ) ..... 65
FIG. 84 TRANSMITTER SPURIOUS EMISSION (802. 11AC-VHT80, 5210MHZ) ..... 66
FIG. 85 TRANSMITTER SPURIOUS EMISSION (802. 11AC-VHT80, 5290MHZ) ..... 66
FIG. 86 TRANSMITTER SPURIOUS EMISSION (802. 11AC-VHT80, 5530MHZ) ..... 67
FIG. 87 TRANSMITTER SPURIOUS EMISSION (802. 11AC-VHT80, 5610MHZ) ..... 67
FIG. 88 TRANSMITTER SPURIOUS EMISSION (802. 11AC-VHT80, 5775MHZ) ..... 68
FIG. 89 TRANSMITTER SPURIOUS EMISSION (ALL CHANNEL, 30MHZ~1GHZ) ..... 68
FIG. 90 TRANSMITTER SPURIOUS EMISSION (ALL CHANNEL, 18GHZ~26.5GHZ) ..... 69
FIG. 91 TRANSMITTER SPURIOUS EMISSION (ALL CHANNEL, 26.5GHZ~40GHZ) ..... 69
A.9. RADIATED SPURIOUS EMISSIONS < 30MHZ ..... 75
FIG. 92 RADIATED SPURIOUS EMISSION (ALL CHANNEL, 9 KHZ ~30 MHZ) ..... 75
A.10. AC POWER LINE CONDUCTED EMISSION ..... 76

*©Copyright. All rights reserved by SAICT*

FIG. 93 AC POWERLINE CONDUCTED EMISSION (802.11N, AE1, 120V) ..... 77
FIG. 94 AC POWERLINE CONDUCTED EMISSION (IDLE, AE1, 120V) ..... 78
A.10. FREQUENCY STABILITY ..... 79
A.11. POWER CONTROL ..... 79

*©Copyright. All rights reserved by SAICT*

# 1. TEST LATORATORY

## 1.1. Testing Location

| | |
|---|---|
| Location: | Shenzhen Academy of Information and Communications Technology |
| Address: | Building G, Shenzhen International Innovation Center, No.1006 Shennan Road, Futian District, Shenzhen, Guangdong Province ,China |
| Postal Code: | 518026 |
| Telephone: | +86(0)755-33322000 |
| Fax: | +86(0)755-33322001 |

## 1.2. Testing Environment

| | |
|---|---|
| Normal Temperature: | 15-35℃ |
| Relative Humidity: | 20-75% |

## 1.3. Project data

| | |
|---|---|
| Testing Start Date: | 2017-11-06 |
| Testing End Date: | 2017-11-24 |

## 1.4. Signature

An Ran
**(Prepared this test report)**

Tang Weisheng
**(Reviewed this test report)**

Zhang Bojun
**(Approved this test report)**

*©Copyright. All rights reserved by SAICT*

# 2. CLIENT INFORMATION

## 2.1. Applicant Information

| | |
|---|---|
| Company Name: | Roam Data Inc. |
| Address: | 101 Federal Street, Suite 700, Boston, MA 02110 USA |
| Contact Person | Christopher Rotsaert |
| Telephone: | 857-350-7418 |
| Fax: | / |
| E-Mail | christopher.rotsaert@ingenico.com |

## 2.2. Manufacturer Information

| | |
|---|---|
| Company Name: | Roam Data Inc. |
| Address: | 101 Federal Street, Suite 700, Boston, MA 02110 USA |
| Contact Person | Christopher Rotsaert |
| Telephone: | 857-350-7418 |
| Fax: | / |
| E-Mail | christopher.rotsaert@ingenico.com |

*©Copyright. All rights reserved by SAICT*

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

## 3.1. About EUT

| | |
|---|---|
| Description | POS Tablet |
| Model Name | Moby/M70 |
| Market Name | / |
| RLAN Frequency Range | ISM Bands: -5150MHz~5250MHz<br>-5250MHz~5350MHz<br>-5470MHz~5725MHz<br>-5725MHz~5850MHz |
| RLAN Protocol | IEEE 802.11a,802.11n-HT20/40,802.11ac-VHT20/40/80 |
| Type of modulation | OFDM |
| Antenna Type | Integrated |
| Antenna Gain | 2.1dBi |
| Power Supply | 3.7V DC by Battery |
| FCC ID | 2ABY6-M70 |

Note: Components list, please refer to documents of the manufacturer

## 3.2. Internal Identification of EUT

| EUT ID* | IMEI | HW Version | SW Version | Receive Date |
|---|---|---|---|---|
| EUT1 | / | 9888C | M70 | 2017-10-26 |

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

## 3.3. Internal Identification of AE

| AE ID* | Description | Mode | Manufacturer |
|---|---|---|---|
| AE1 | Adapter | / | / |
| AE2 | Battery | / | / |

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

## 3.4. General Description

The Equipment under Test (EUT) is a model of Tablet with integrated antenna and inbuilt battery.
It consists of normal options: travel charger, USB cable.
Manual and specifications of the EUT were provided to fulfil the test.
Samples undergoing test were selected by the client.

*©Copyright. All rights reserved by SAICT*

# 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.

| Reference | Title | Version |
|---|---|---|
| FCC Part15 | FCC CFR 47,Part 15,Subpart C<br>FCC CFR 47,Part 15,Subpart E | 2016 |
| ANSI C63.10 | American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices | 2013 |

Note: DFS is a separate report.

*©Copyright. All rights reserved by SAICT*

# 5. SUMMARY OF TEST RESULTS

## 5.1. Summary of Test Results

| No. | Test cases | Sub-clause of Part15E | Verdict |
|---|---|---|---|
| 0 | Maximum Output Power | 15.407(a) | **P** |
| 1 | Power Spectral Density | 15.407(a) | **P** |
| 2 | Occupied 26dB Bandwidth | 15.407(a) | **P** |
| 3 | Occupied 6dB Bandwidth | 15.407(e) | **P** |
| 4 | 99% Occupied Bandwidth | 15.407 | **P** |
| 5 | Band edge compliance | 15.407 | **P** |
| 6 | Radiated Spurious Emissions | 15.407 | **P** |
| 7 | AC Power line Conducted | 15.207 | **P** |
| 8 | Frequency Stability | 15.407 | **P** |
| 9 | Transmit Power Control | 15.407 | **NA** |

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

## 5.2. Statements

CTTL has evaluated the test cases requested by the applicant/manufacturer as listed in section 5.1 of this report, for the EUT specified in section 3, according to the standards or reference documents listed in section 4.2

## 5.3. Terms used in the result table

Terms used in Verdict column

| | |
|---|---|
| P | Pass |
| NA | Not Available |
| F | Fail |

Abbreviations

| | |
|---|---|
| AC | Alternating Current |
| AFH | Adaptive Frequency Hopping |
| BW | Band Width |
| E.I.R.P. | equivalent isotropic radiated power |
| ISM | Industrial, Scientific and Medical |
| R&TTE | Radio and Telecommunications Terminal Equipment |
| RF | Radio Frequency |
| Tx | Transmitter |

*©Copyright. All rights reserved by SAICT*

# 6. TEST EQUIPMENTS UTILIZED

### Conducted test system

| No. | Equipment | Model | Serial Number | Manufacturer | Calibration Due date | Calibration Period |
|---|---|---|---|---|---|---|
| 1 | Vector Signal Analyzer | FSV40 | 100903 | Rohde & Schwarz | 2018-01-18 | 1 year |
| 2 | Power Sensor | U2021XA | MY55430013 | Agilent | 2018-01-18 | 1 year |

### Radiated test system

| NO. | Equipment | Model | Serial Number | Manufacturer | Calibration Due date | Calibration Period |
|---|---|---|---|---|---|---|
| 1 | LISN | ESH2-Z5 | 100196 | Rohde & Schwarz | 2018-01-05 | 1 year |
| 2 | Test Receiver | ESCI | 100702 | Rohde & Schwarz | 2018-06-25 | 1 year |
| 3 | Loop Antenna | HLA6120 | 35779 | TESEQ | 2019-05-02 | 3 years |
| 4 | BiLog Antenna | VULB9163 | 9163 329 | Schwarzbeck | 2020-02-27 | 3 years |
| 5 | Horn Antenna | 3117 | 00066585 | ETS-Lindgren | 2019-03-05 | 3 years |
| 6 | Test Receiver | ESR7 | 101676 | Rohde & Schwarz | 2018-11-29 | 1 year |
| 7 | Spectrum Analyser | FSV40 | 101192 | Rohde & Schwarz | 2018-05-22 | 1 year |
| 8 | Chamber | FACT5-2.0 | 4166 | ETS-Lindgren | 2018-05-13 | 3 years |
| 9 | Antenna | 3160-09 | LM4214/ 00118383 | ETS-Lindgren | 2018-07-14 | 3 years |

### Test software

| No. | Equipment | Manufacturer | Version |
|---|---|---|---|
| 1 | TechMgr Software | CAICT | 2.1.1 |
| 2 | EMC32 | Rohde & Schwarz | 8.53.0 |
| 3 | EMC32 | Rohde & Schwarz | 10.01.00 |

EUT is MTK engineering software provided by the customer to control the transmitting signal.

### Anechoic chamber

Fully anechoic chamber by ETS-Lindgren

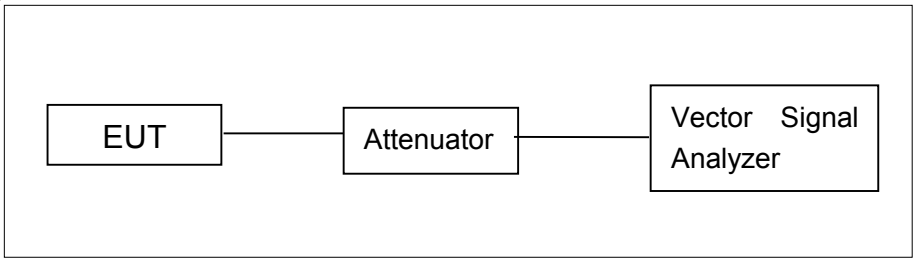
*©Copyright. All rights reserved by SAICT*

# ANNEX A: MEASUREMENT RESULTS

## A.1. Measurement Method

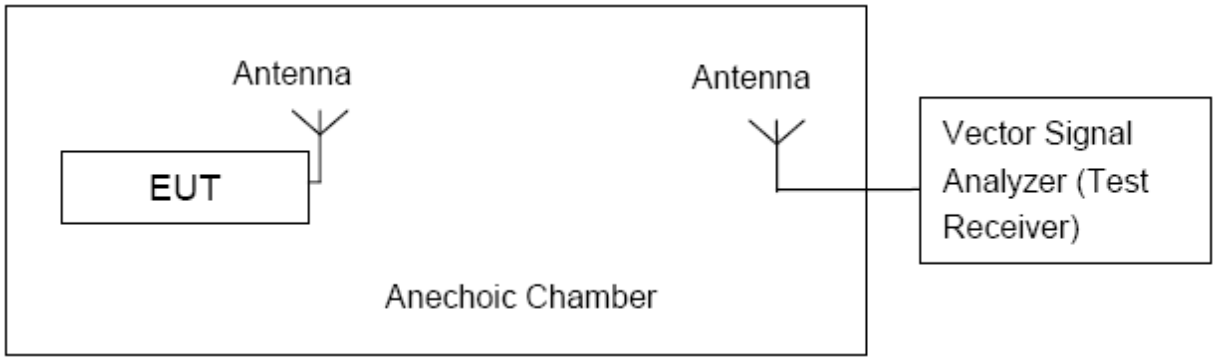
**Conducted Measurements**

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.




**Radiated Emission Measurements**

In the case of radiated emission, the used settings are as follows:
Sweep frequency from 30 MHz to 1 GHz, RBW = 100 KHz, VBW = 300 KHz;
Sweep frequency from 1 GHz to 26 GHz, RBW = 1 MHz, VBW = 10 Hz;




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.

*©Copyright. All rights reserved by SAICT*

## A.2. Maximum output Power

**Measurement Limit and Method:**

| Standard | Frequency (MHz) | Limit (dBm) |
|---|---|---|
| FCC CRF Part 15.407(a) | 5150MHz~5250MHz | 24 |
| | 5250MHz~5350MHz | 24 or 11+10logB |
| | 5470MHz~5725MHz | 24 or 11+10logB |
| | 5725MHz~5850MHz | 30 |

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

**Measurement of method :See ANSI C63.10-2013-Clause 12.3.3.2**

Method PM-G is a measurement using a gated RF average power meter.

Measurements may be performed using a wideband gated RF power meter provided that the gate parameters are adjusted such that the power is measured only when the EUT is transmitting at its maximum power control level. Because the measurement is made only during the ON time of the transmitter, no duty cycle correction factor is required.

**Measurement Results:**

| U–NII Band | Mode | Channel | Frequency (MHz) | Data Rate | Average power (dBm) | Conclusion |
|---|---|---|---|---|---|---|
| 5.2GHz Band (UNII-1) | 802.11a | CH 36 | 5180 | 6Mbps | 12.95 | **P** |
| | | CH 40 | 5200 | | 12.86 | **P** |
| | | CH 48 | 5240 | | 12.89 | **P** |
| | 802.11n-HT20 | CH 36 | 5180 | MCS0 | 12.67 | **P** |
| | | CH 40 | 5200 | | 12.56 | **P** |
| | | CH 48 | 5240 | | 12.52 | **P** |
| | 802.11n-HT40 | CH 38 | 5190 | MCS0 | 12.32 | **P** |
| | | CH 46 | 5230 | | 12.25 | **P** |
| | 802.11ac-VHT20 | CH 36 | 5180 | MCS0 | 12.46 | **P** |
| | | CH 40 | 5200 | | 12.42 | **P** |
| | | CH 48 | 5240 | | 12.55 | **P** |
| | 802.11ac-VHT40 | CH 38 | 5190 | MCS0 | 12.17 | **P** |
| | | CH 46 | 5230 | | 12.21 | **P** |
| | 802.11ac-VHT80 | CH 42 | 5210 | MCS0 | 11.85 | **P** |

*©Copyright. All rights reserved by SAICT*

| U–NII Band | Mode | Channel | Frequency (MHz) | Data Rate | Average power (dBm) | Conclusion |
|---|---|---|---|---|---|---|
| 5.3GHz Band (UNII-2A) | 802.11a | CH 52 | 5260 | 6Mbps | 12.76 | P |
| | | CH 56 | 5280 | | 12.83 | P |
| | | CH 64 | 5320 | | 12.85 | P |
| | 802.11n-HT20 | CH 52 | 5260 | MCS0 | 12.45 | P |
| | | CH 56 | 5280 | | 12.39 | P |
| | | CH 64 | 5320 | | 12.45 | P |
| | 802.11n-HT40 | CH 54 | 5270 | MCS0 | 12.21 | P |
| | | CH 62 | 5310 | | 12.15 | P |
| | 802.11ac-VHT20 | CH 52 | 5260 | MCS0 | 12.36 | P |
| | | CH 56 | 5280 | | 12.41 | P |
| | | CH 64 | 5320 | | 12.34 | P |
| | 802.11ac-VHT40 | CH 54 | 5270 | MCS0 | 12.10 | P |
| | | CH 62 | 5310 | | 12.18 | P |
| | 802.11ac-VHT80 | CH 58 | 5290 | MCS0 | 11.78 | P |

| U–NII Band | Mode | Channel | Frequency (MHz) | Data Rate | Average power (dBm) | Conclusion |
|---|---|---|---|---|---|---|
| 5.5GHz Band (UNII-2C) | 802.11a | CH 100 | 5500 | 6Mbps | 12.76 | P |
| | | CH 116 | 5580 | | 12.67 | P |
| | | CH 140 | 5700 | | 12.72 | P |
| | 802.11n-HT20 | CH 100 | 5500 | MCS0 | 12.23 | P |
| | | CH 116 | 5580 | | 12.15 | P |
| | | CH 140 | 5700 | | 12.27 | P |
| | 802.11n-HT40 | CH 102 | 5510 | MCS0 | 12.05 | P |
| | | CH 110 | 5550 | | 12.03 | P |
| | | CH 134 | 5670 | | 11.74 | P |
| | 802.11ac-VHT20 | CH 100 | 5500 | MCS0 | 12.25 | P |
| | | CH 116 | 5580 | | 12.04 | P |
| | | CH 140 | 5700 | | 12.14 | P |
| | 802.11ac-VHT40 | CH 102 | 5510 | MCS0 | 12.02 | P |
| | | CH 110 | 5550 | | 11.92 | P |
| | | CH 134 | 5670 | | 11.87 | P |
| | 802.11ac-VHT80 | CH 106 | 5530 | MCS0 | 11.78 | P |
| | | CH 122 | 5610 | | 11.65 | P |
| | | CH 138 | 5690 | | 11.58 | P |

*©Copyright. All rights reserved by SAICT*

| U–NII Band | Mode | Channel | Frequency (MHz) | Data Rate | Average power (dBm) | Conclusion |
|---|---|---|---|---|---|---|
| 5.8GHz Band (UNII-3) | 802.11a | CH 149 | 5745 | 6Mbps | 12.63 | P |
| | | CH 157 | 5785 | | 12.65 | P |
| | | CH 165 | 5825 | | 12.73 | P |
| | 802.11n-HT20 | CH 149 | 5745 | MCS0 | 12.35 | P |
| | | CH 157 | 5785 | | 12.15 | P |
| | | CH 165 | 5825 | | 12.26 | P |
| | 802.11n-HT40 | CH 151 | 5755 | MCS0 | 12.02 | P |
| | | CH 159 | 5795 | | 11.93 | P |
| | 802.11ac-VHT20 | CH 149 | 5745 | MCS0 | 12.11 | P |
| | | CH 157 | 5785 | | 12.34 | P |
| | | CH 165 | 5825 | | 12.21 | P |
| | 802.11ac-VHT40 | CH 151 | 5755 | MCS0 | 11.96 | P |
| | | CH 159 | 5795 | | 11.89 | P |
| | 802.11ac-VHT80 | CH 155 | 5775 | MCS0 | 11.66 | P |

**Note:**

Worst-case data rates as provided by the client were: 6Mbps (802.11a), MCS0 (802.11n/ac).

802.11a，802.11n-HT40 and 802.11ac-VHT80 modes are selected as the worst-case

The following cases and test graphs are performed with this condition.

The EUT was programmed to be in continuously transmitting mode and the transmit duty cycle is not less than 98%.

*©Copyright. All rights reserved by SAICT*

## A.3. Peak Power Spectral Density (conducted)

**Measurement Limit:**

| Standard | Frequency (MHz) | Limit |
|---|---|---|
| FCC CRF Part 15.407(a) | 5150MHz~5250MHz | 11dBm/MHz |
| | 5250MHz~5350MHz | 11dBm/MHz |
| | 5470MHz~5725MHz | 11dBm/MHz |
| | 5725MHz~5850MHz | 30dBm/500KHz |

The PPSD measurement method SA-1 is made according to KDB 789033.

**Measurement Results:**

| Mode | Channel | Power Spectral Density (dBm/MHz) | Conclusion |
|---|---|---|---|
| 802.11n HT20 | 5180MHz(Ch36) | 6.10 | **P** |
| | 5200MHz(Ch40) | 6.29 | **P** |
| | 5240MHz(Ch48) | 6.39 | **P** |
| | 5260MHz(Ch52) | 6.89 | **P** |
| | 5280MHz(Ch56) | 6.32 | **P** |
| | 5320MHz(Ch64) | 6.43 | **P** |
| | 5500MHz(Ch100) | 5.91 | **P** |
| | 5580MHz(Ch116) | 5.84 | **P** |
| | 5700MHz(Ch140) | 5.35 | **P** |

| Mode | Channel | Power Spectral Density (dBm/MHz) | Conclusion |
|---|---|---|---|
| 802.11n HT40 | 5190MHz(Ch38) | 2.72 | **P** |
| | 5230MHz(Ch46) | 3.06 | **P** |
| | 5270MHz(Ch54) | 2.49 | **P** |
| | 5310MHz(Ch62) | 2.49 | **P** |
| | 5510MHz(Ch102) | 2.65 | **P** |
| | 5550MHz(Ch110) | 2.06 | **P** |
| | 5670MHz(Ch134) | 2.91 | **P** |

| Mode | Channel | Power Spectral Density (dBm/MHz) | Conclusion |
|---|---|---|---|
| 802.11ac VHT80 | 5210MHz(Ch42) | -1.11 | **P** |
| | 5290MHz(Ch58) | -1.74 | **P** |
| | 5530MHz(Ch106) | -1.86 | **P** |
| | 5610MHz(Ch122) | -1.95 | **P** |

*©Copyright. All rights reserved by SAICT*

5.8GHz Band (UNII-3)

| U–NII Band | Mode | Channel | Frequency (MHz) | Power Spectral Density (dBm/500kHz) | Conclusion |
|---|---|---|---|---|---|
| 5.8GHz Band (UNII-3) | 802.11a | CH 149 | 5745 | 7.84 | **P** |
| | | CH 157 | 5785 | 7.91 | **P** |
| | | CH 165 | 5825 | 8.29 | **P** |
| | 802.11n-HT40 | CH 151 | 5755 | 4.90 | **P** |
| | | CH 159 | 5795 | 4.32 | **P** |
| | 802.11ac-VHT80 | CH 155 | 5775 | 1.69 | **P** |

**Conclusion: PASS**

*©Copyright. All rights reserved by SAICT*

## A.4. Occupied 26dB Bandwidth(conducted)

**Measurement Limit:**

| Standard | Limit (MHz) |
|---|---|
| FCC 47 CFR Part 15.403 (i) | / |

The measurement is made according to KDB 789033

**Measurement Result:**

| Mode | Channel | Occupied 26dB Bandwidth( MHz) | | Conclusion |
|---|---|---|---|---|
| 802.11a | 5180MHz(Ch36) | Fig.1 | 23.10 | **P** |
| | 5200MHz(Ch40) | Fig.2 | 23.50 | **P** |
| | 5240MHz(Ch48) | Fig.3 | 22.95 | **P** |
| | 5260MHz(Ch52) | Fig.4 | 23.85 | **P** |
| | 5280MHz(Ch56) | Fig.5 | 23.45 | **P** |
| | 5320MHz(Ch64) | Fig.6 | 23.35 | **P** |
| | 5500MHz(Ch100) | Fig.7 | 23.35 | **P** |
| | 5580MHz(Ch116) | Fig.8 | 23.29 | **P** |
| | 5700MHz(Ch140) | Fig.9 | 25.20 | **P** |
| 802.11n HT40 | 5190MHz(Ch38) | Fig.10 | 44.08 | **P** |
| | 5230MHz(Ch46) | Fig.11 | 43.92 | **P** |
| | 5270MHz(Ch54) | Fig.12 | 44.56 | **P** |
| | 5310MHz(Ch62) | Fig.13 | 44.48 | **P** |
| | 5510MHz(Ch102) | Fig.14 | 44.48 | **P** |
| | 5550MHz(Ch110) | Fig.15 | 44.32 | **P** |
| | 5670MHz(Ch134) | Fig.16 | 43.44 | **P** |
| 802.11 ac VHT80 | 5210MHz(Ch42) | Fig.17 | 85.12 | **P** |
| | 5290MHz(Ch58) | Fig.18 | 85.44 | **P** |
| | 5530MHz(Ch106) | Fig.19 | 84.64 | **P** |
| | 5610MHz(Ch122) | Fig.20 | 85.44 | **P** |

**Conclusion: PASS**

**Test graphs as below:**

*©Copyright. All rights reserved by SAICT*

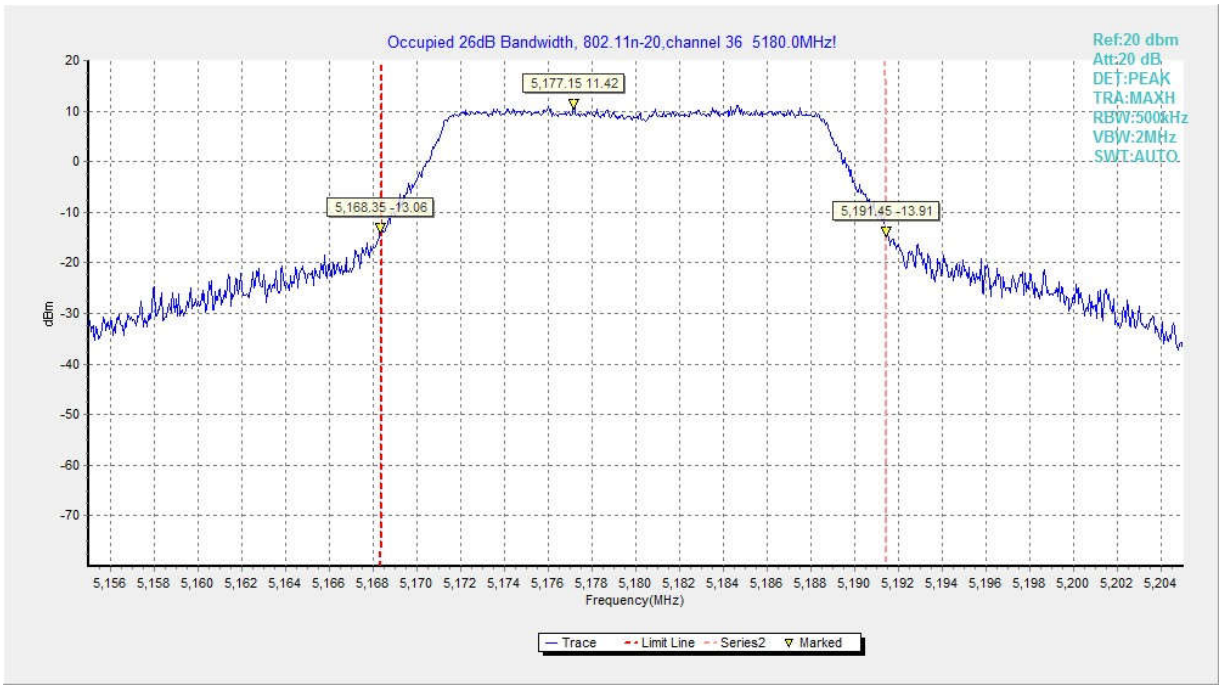



**Fig. 1 Occupied 26dB Bandwidth (802.11n-HT20, 5180MHz)**

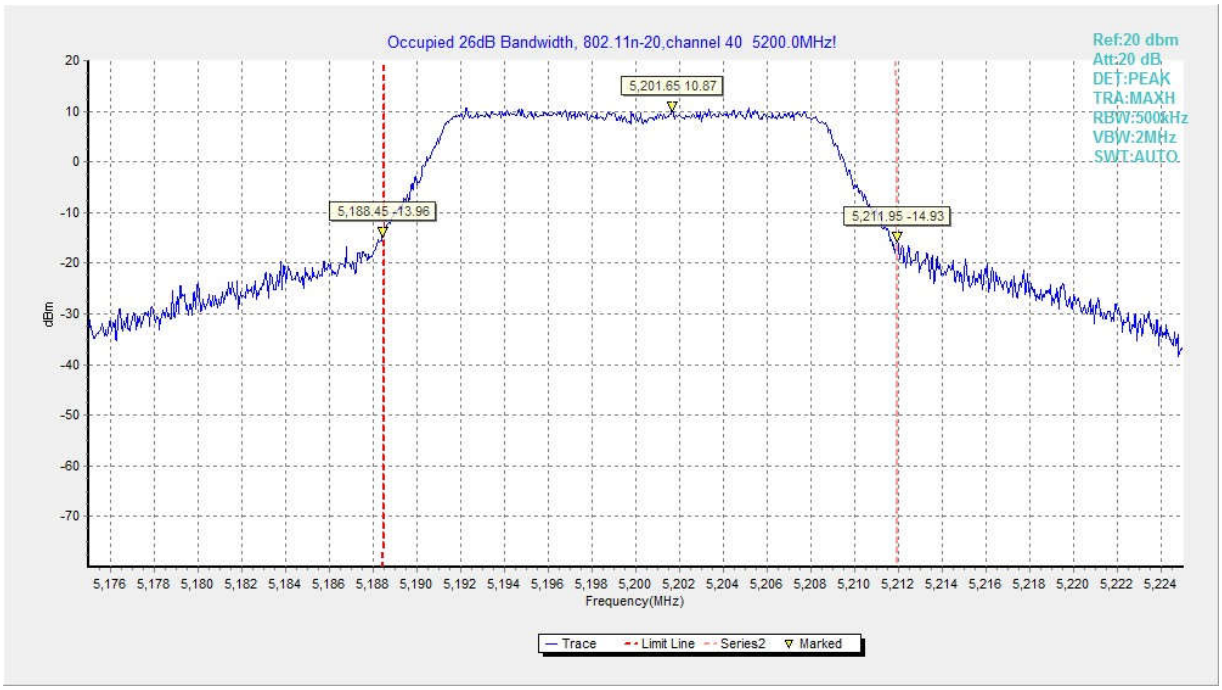



**Fig. 2 Occupied 26dB Bandwidth (802.11n-HT20, 5200MHz)**

*©Copyright. All rights reserved by SAICT*

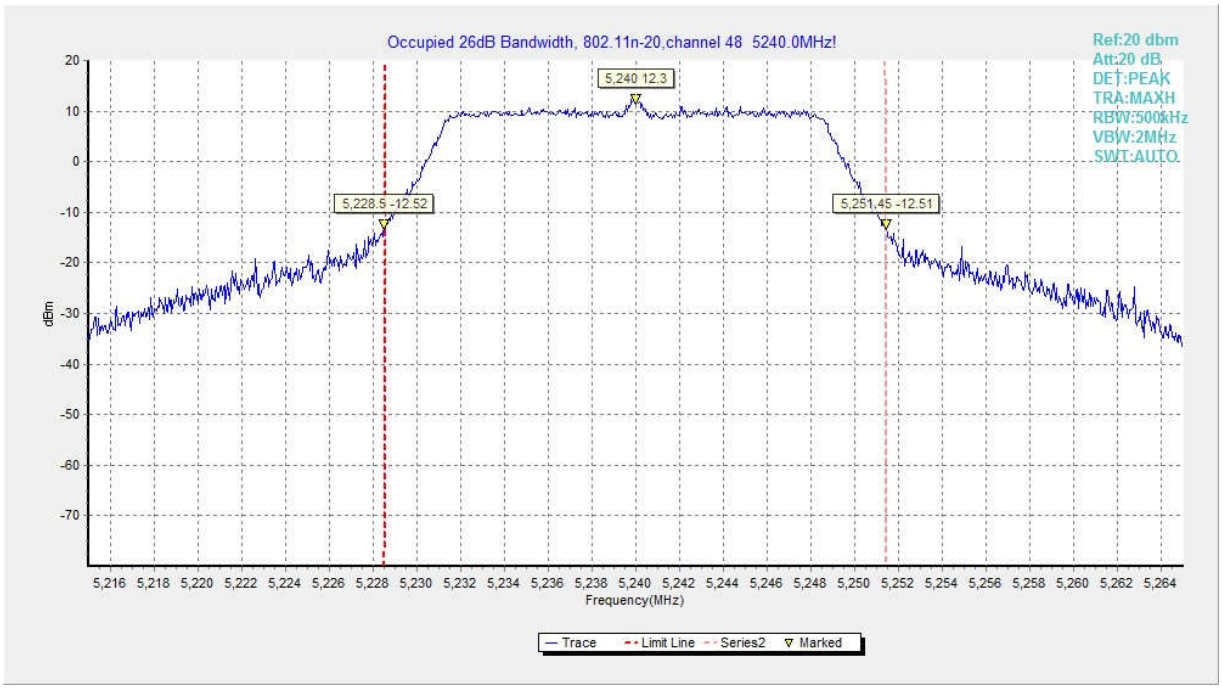



**Fig. 3 Occupied 26dB Bandwidth (802.11n-HT20, 5240MHz)**

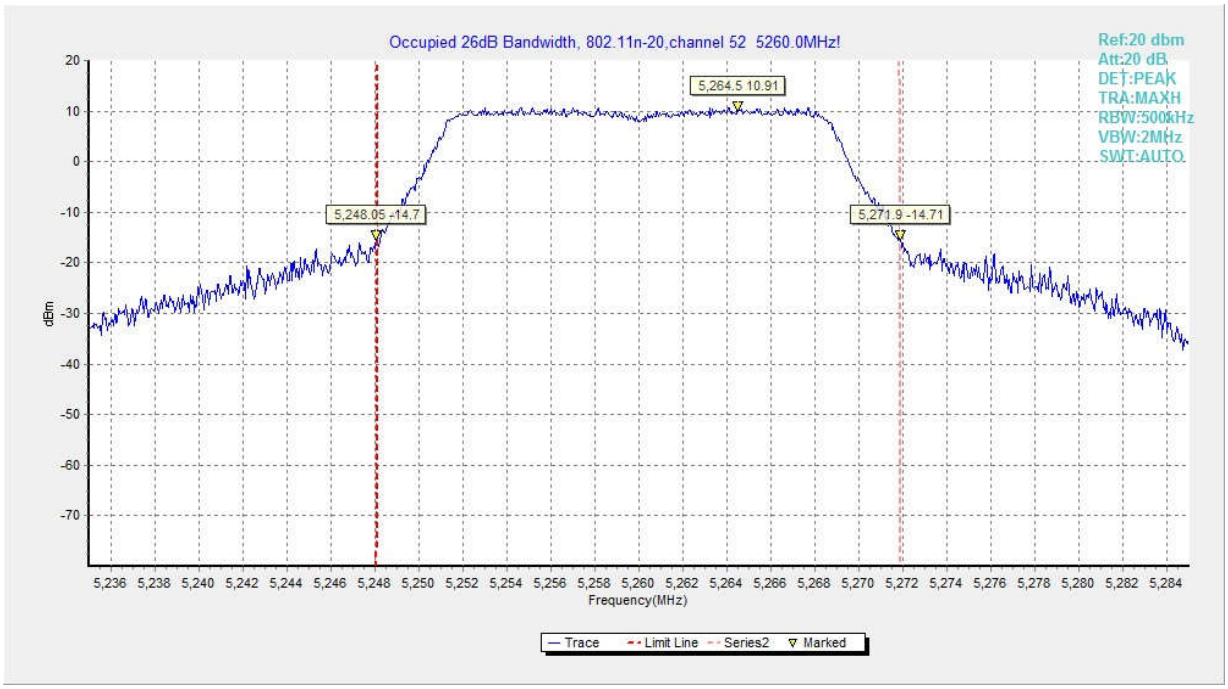



**Fig. 4 Occupied 26dB Bandwidth (802.11n-HT20, 5260MHz)**

*©Copyright. All rights reserved by SAICT*

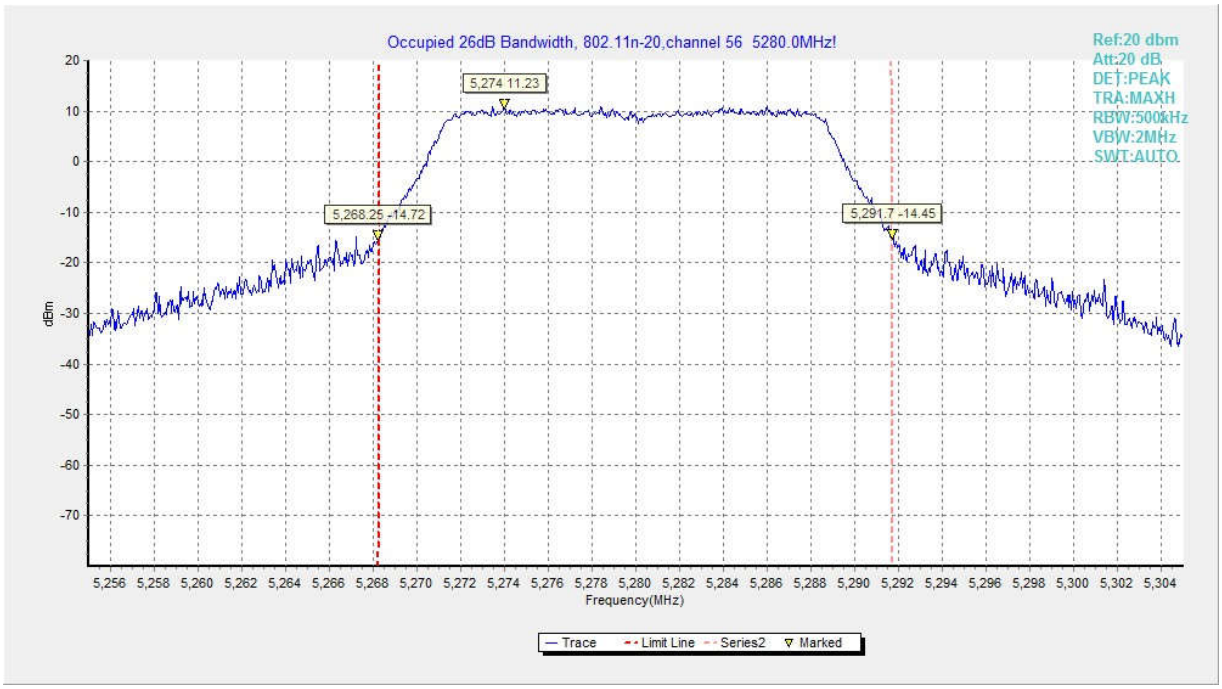



**Fig. 5 Occupied 26dB Bandwidth (802.11n-HT20, 5280MHz)**

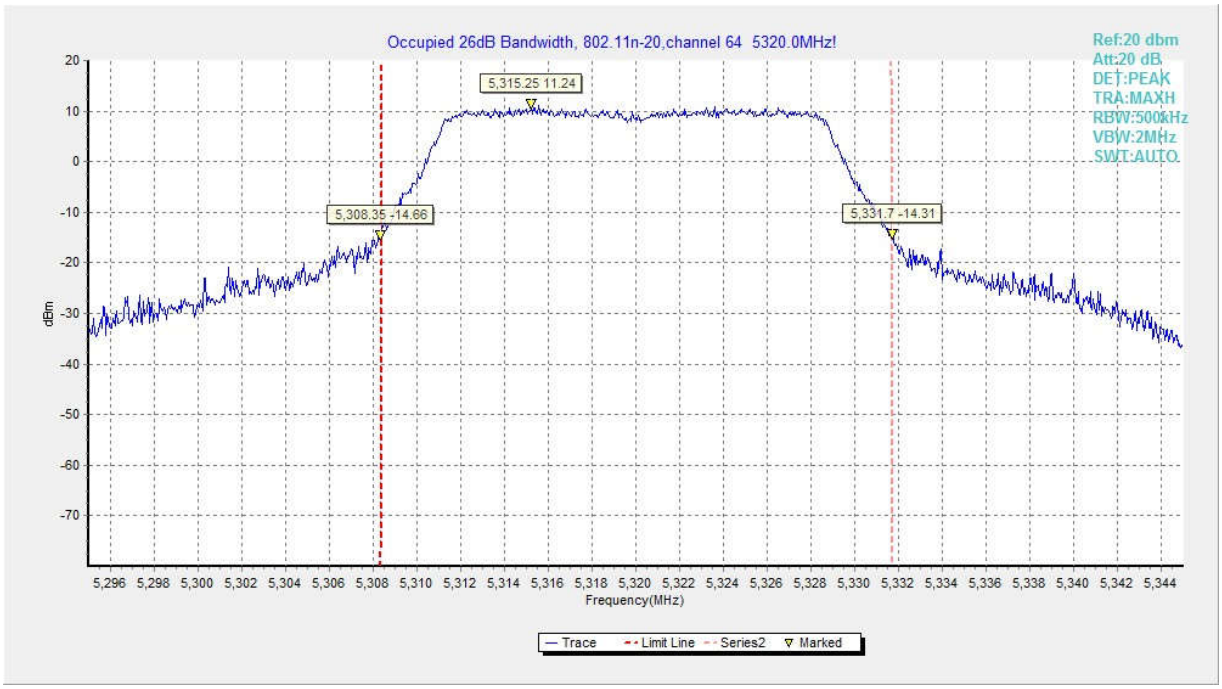



**Fig. 6 Occupied 26dB Bandwidth (802.11n-HT20, 5320MHz)**

*©Copyright. All rights reserved by SAICT*

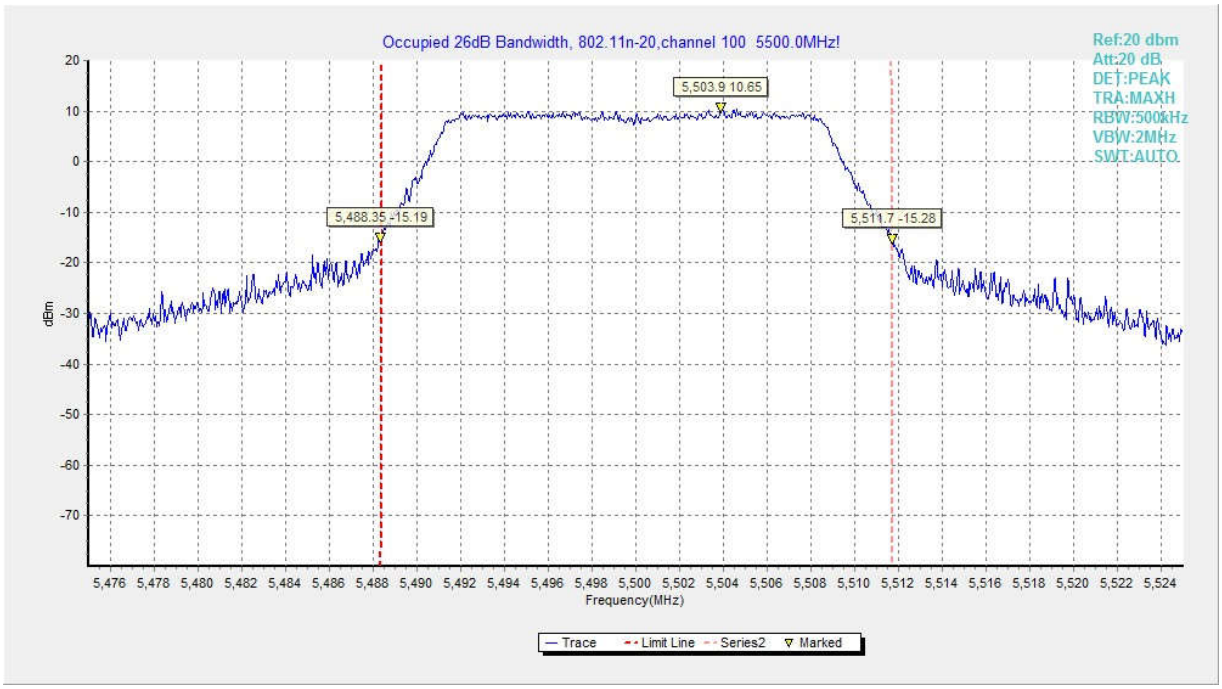



**Fig. 7 Occupied 26dB Bandwidth (802. 11n-HT20, 5500MHz)**

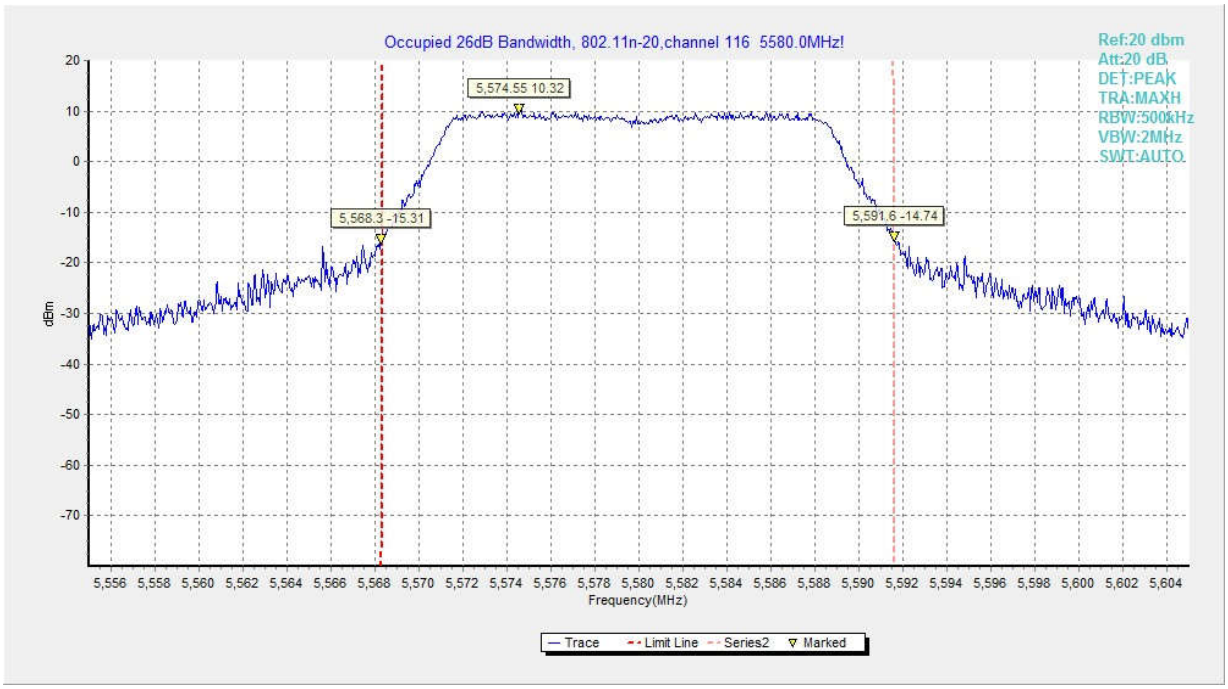



**Fig. 8 Occupied 26dB Bandwidth (802. 11n-HT20, 5600MHz)**

*©Copyright. All rights reserved by SAICT*

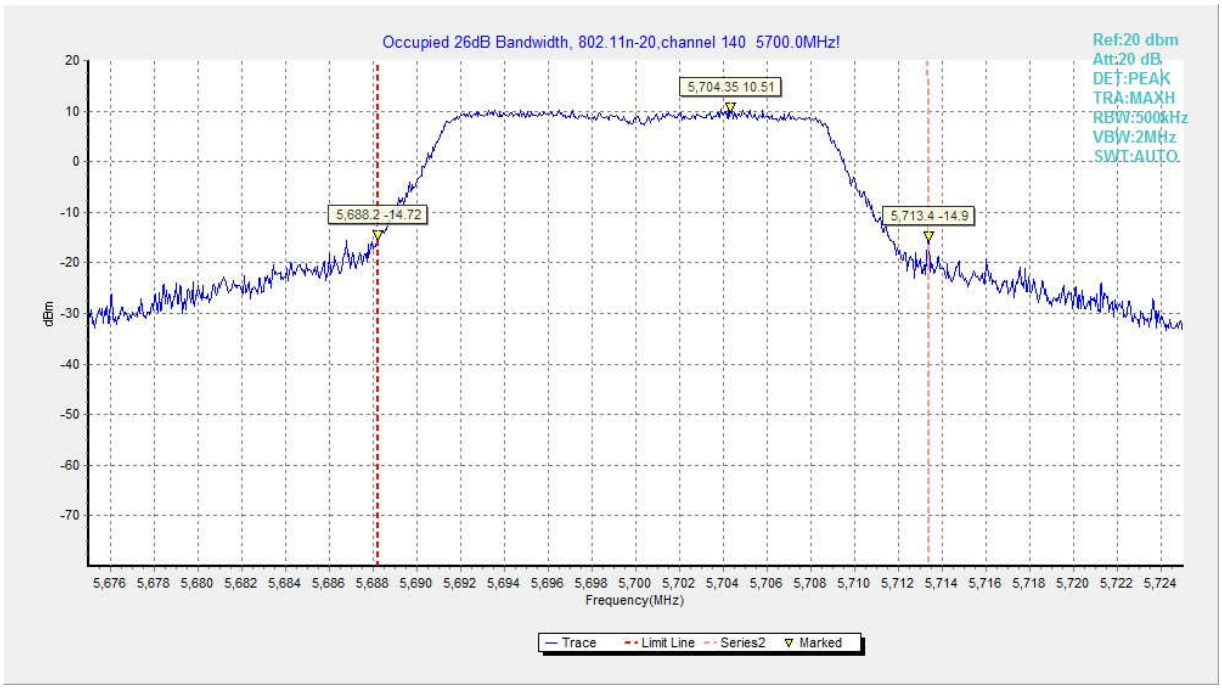



**Fig. 9 Occupied 26dB Bandwidth (802. 11n-HT20, 5700MHz)**

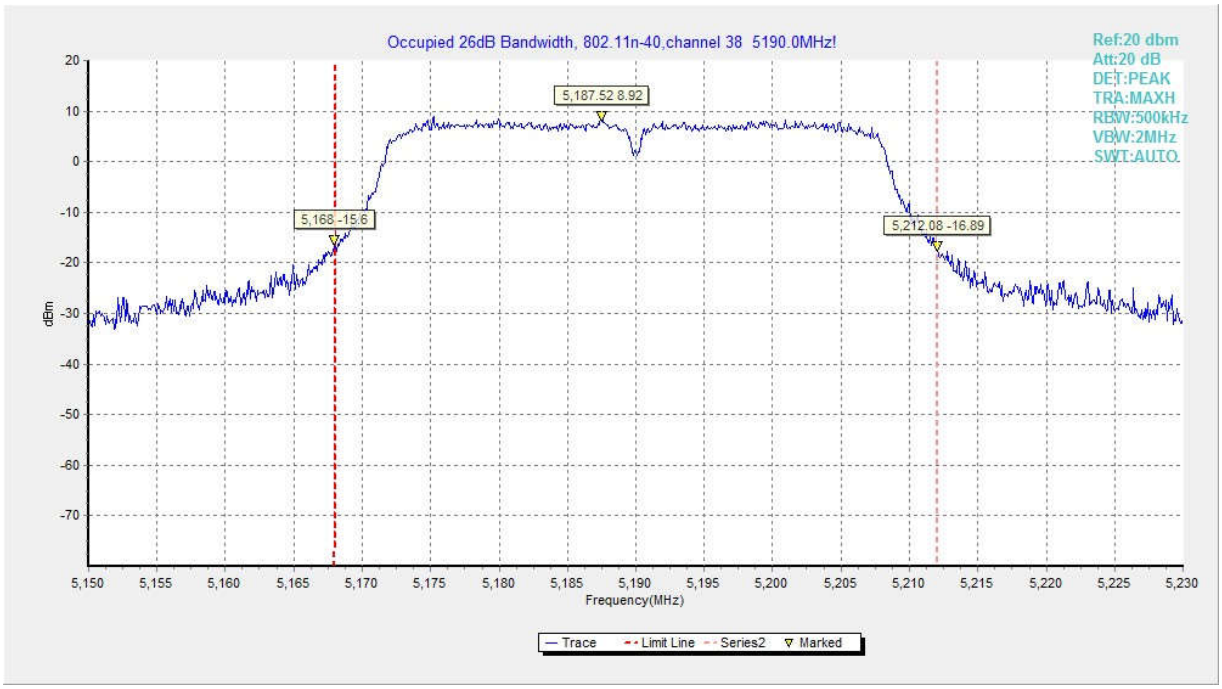



**Fig. 10 Occupied 26dB Bandwidth (802.11n-HT40, 5190MHz)**

*©Copyright. All rights reserved by SAICT*

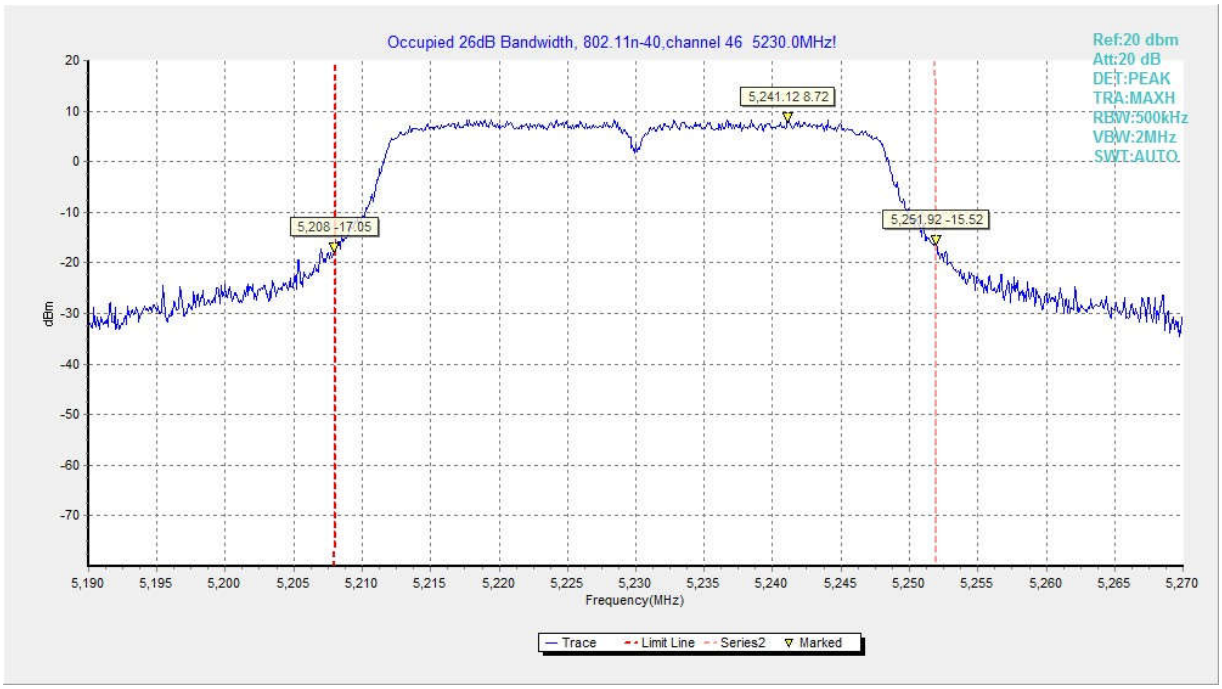



**Fig. 11 Occupied 26dB Bandwidth (802.11n-HT40, 5230MHz)**

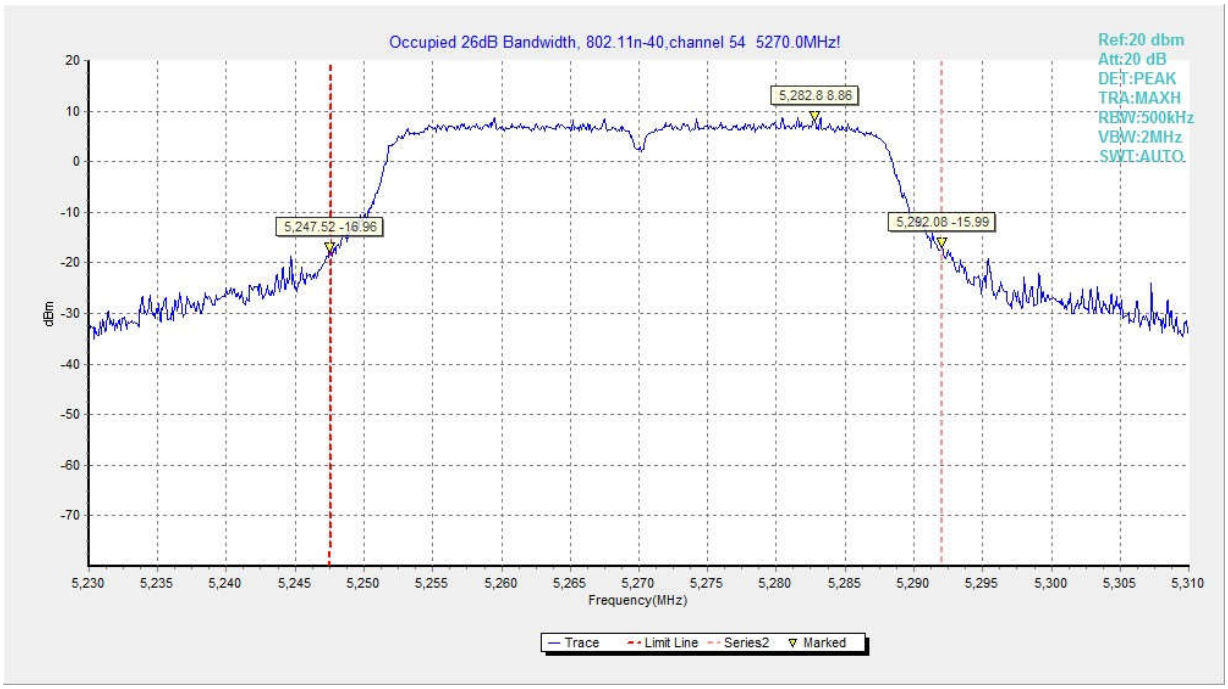



**Fig. 12 Occupied 26dB Bandwidth (802.11n-HT40, 5270MHz)**

*©Copyright. All rights reserved by SAICT*

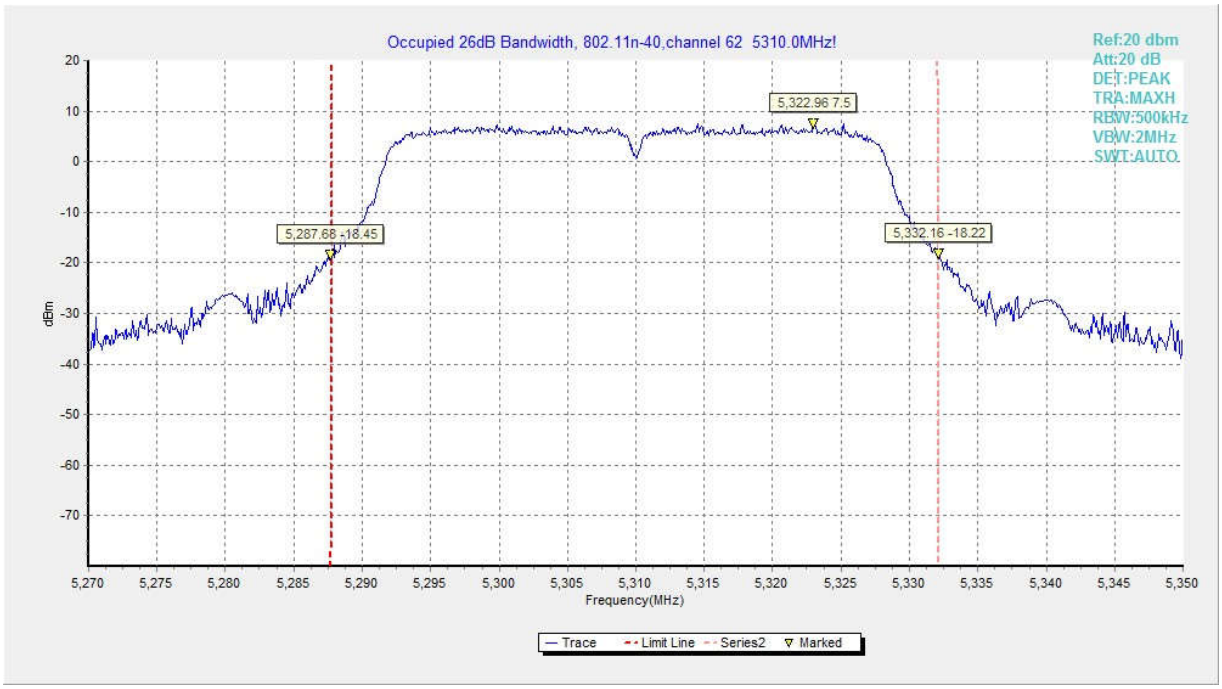



**Fig. 13 Occupied 26dB Bandwidth (802.11n-HT40, 5310MHz)**

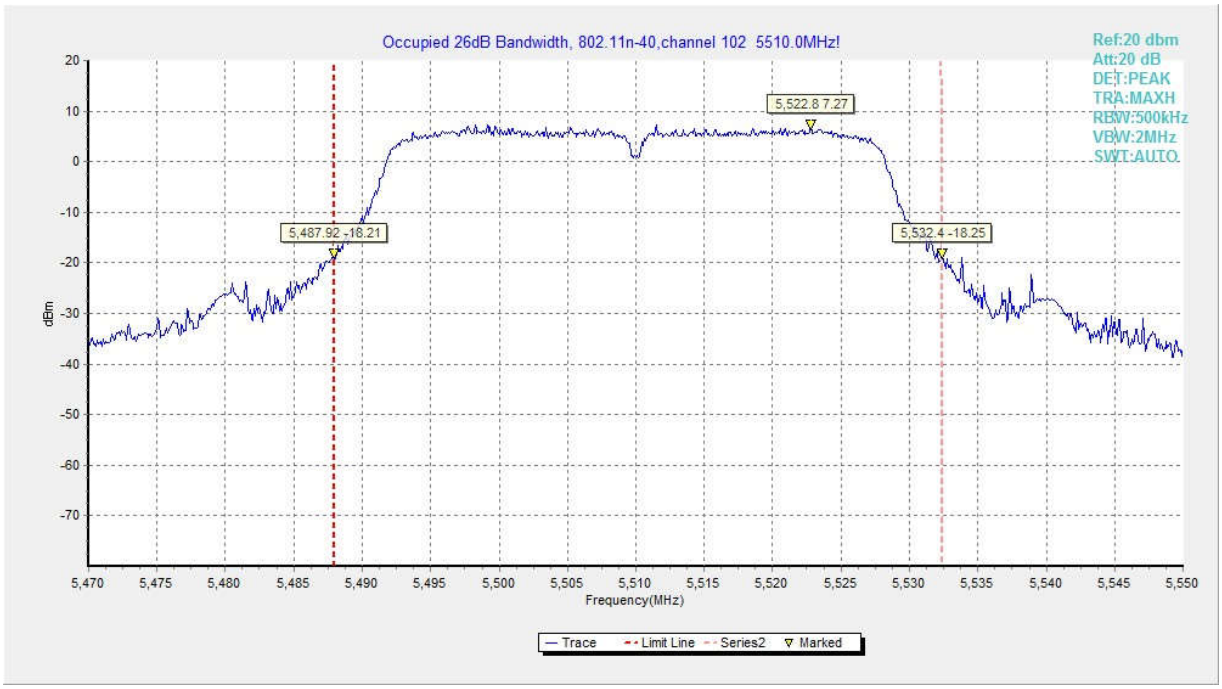



**Fig. 14 Occupied 26dB Bandwidth (802. 11n-HT40, 5510MHz)**

©Copyright. All rights reserved by SAICT

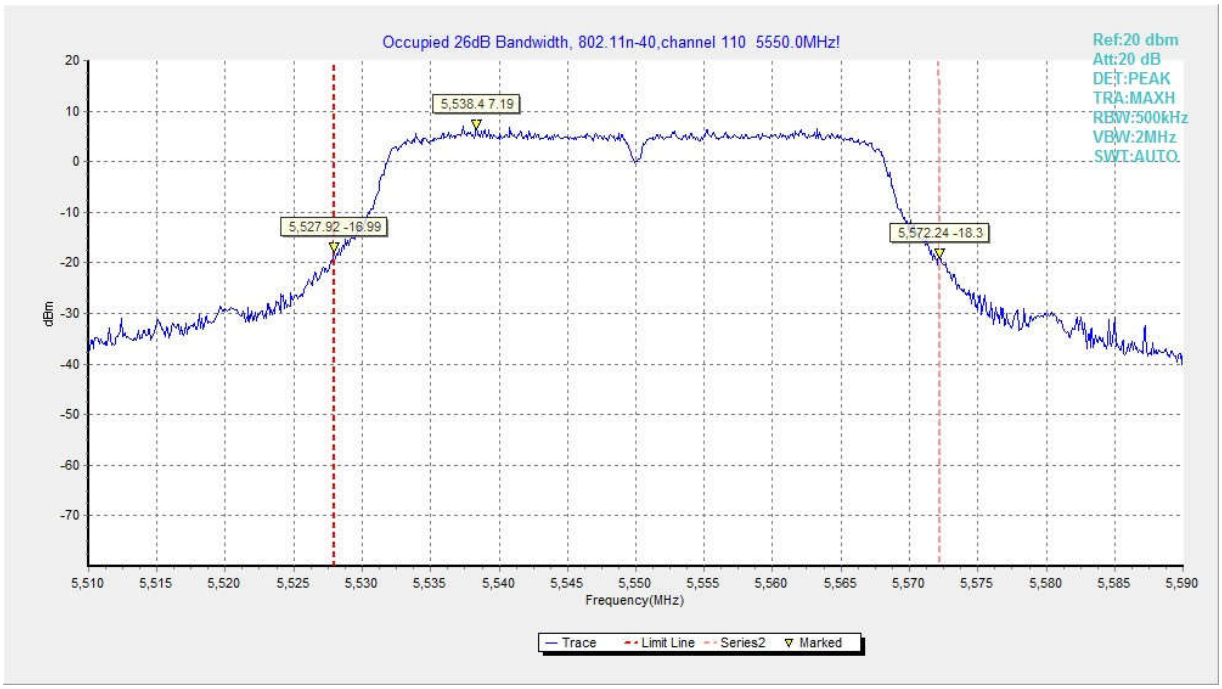



**Fig. 15 Occupied 26dB Bandwidth (802. 11n-HT40, 5590MHz)**

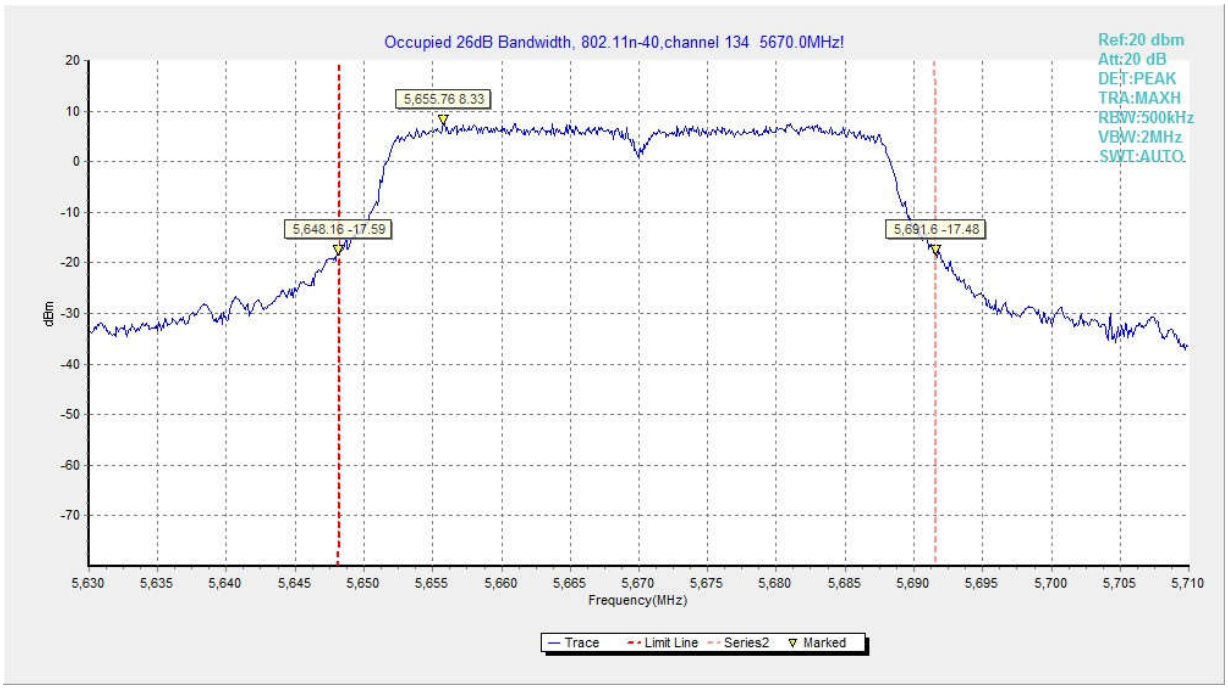



**Fig. 16 Occupied 26dB Bandwidth (802. 11n-HT40, 5670MHz)**

©Copyright. All rights reserved by SAICT

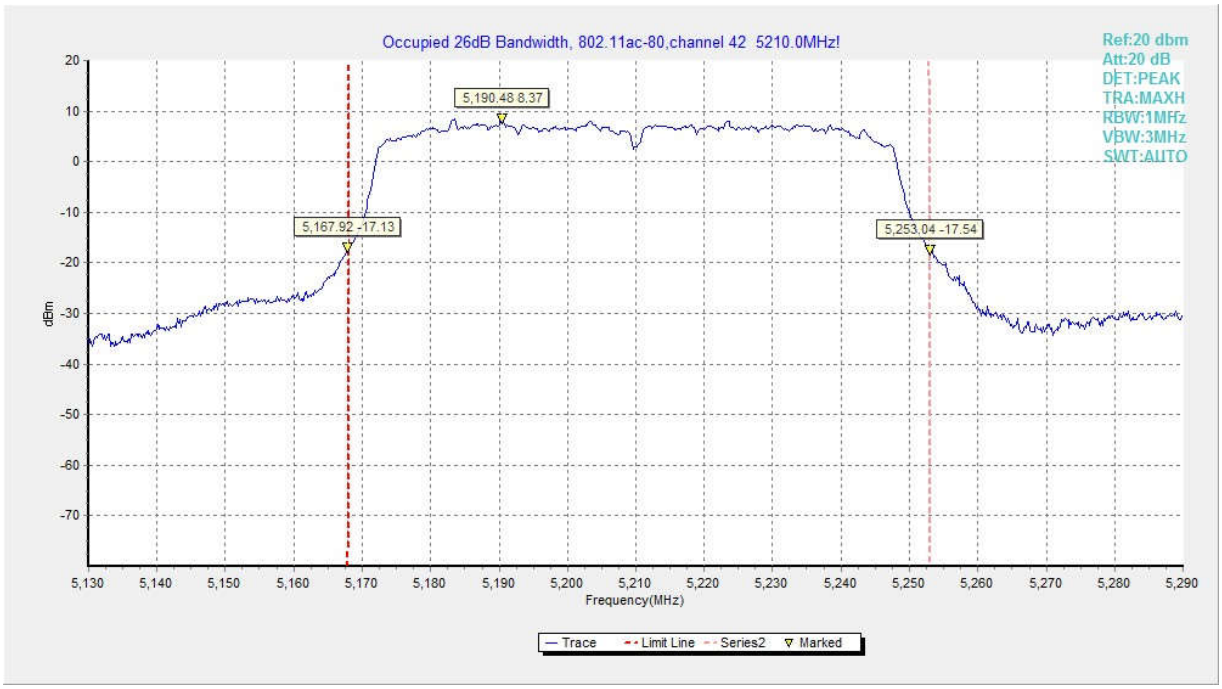



**Fig. 17 Occupied 26dB Bandwidth (802. 11ac-VHT80, 5210MHz)**

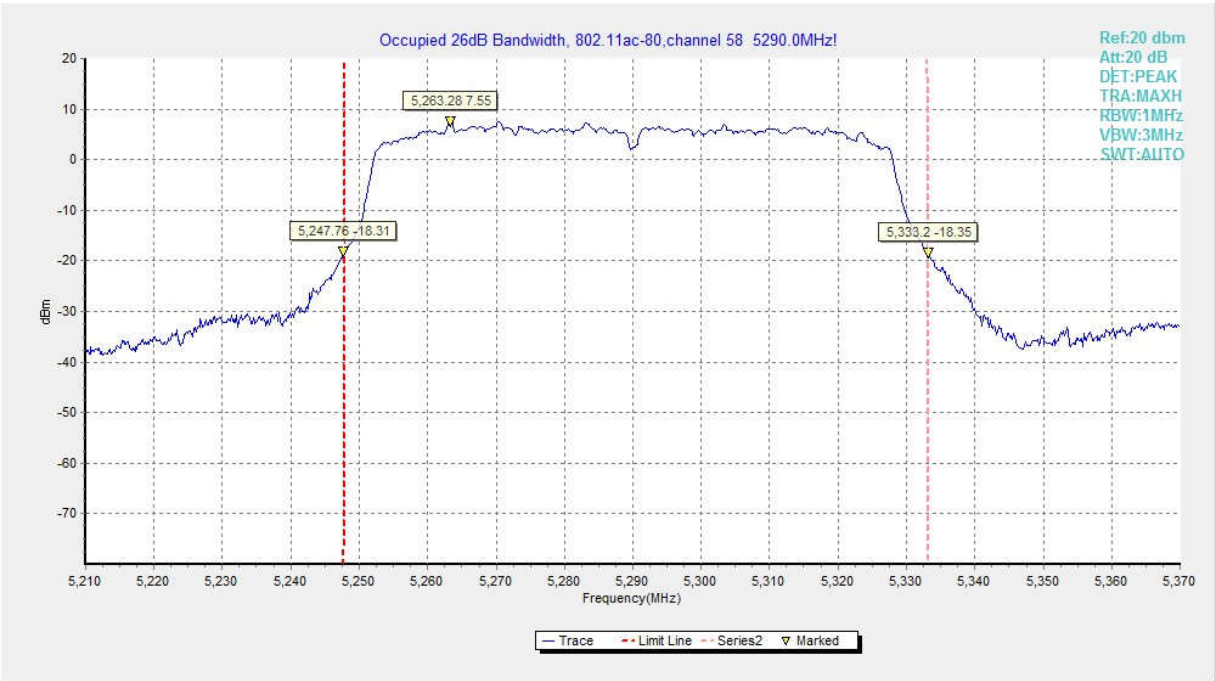



**Fig. 18 Occupied 26dB Bandwidth (802. 11ac-VHT80, 5290MHz)**

*©Copyright. All rights reserved by SAICT*

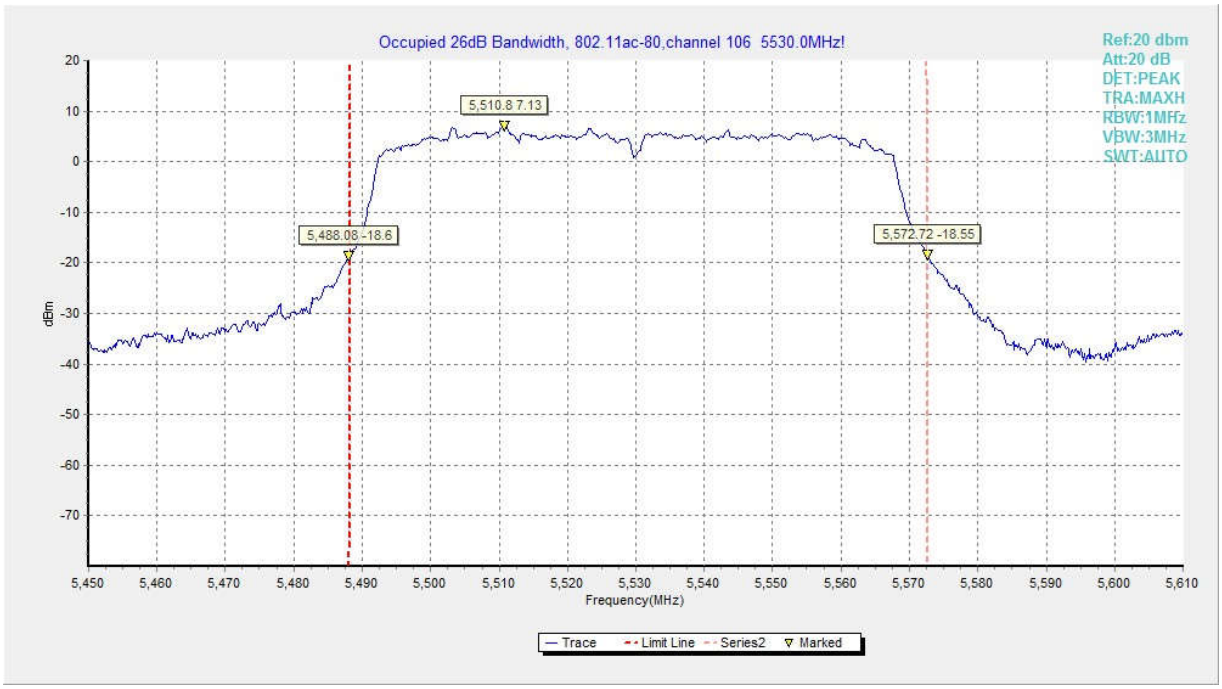



**Fig. 19 Occupied 26dB Bandwidth (802. 11ac-VHT80, 5530MHz)**

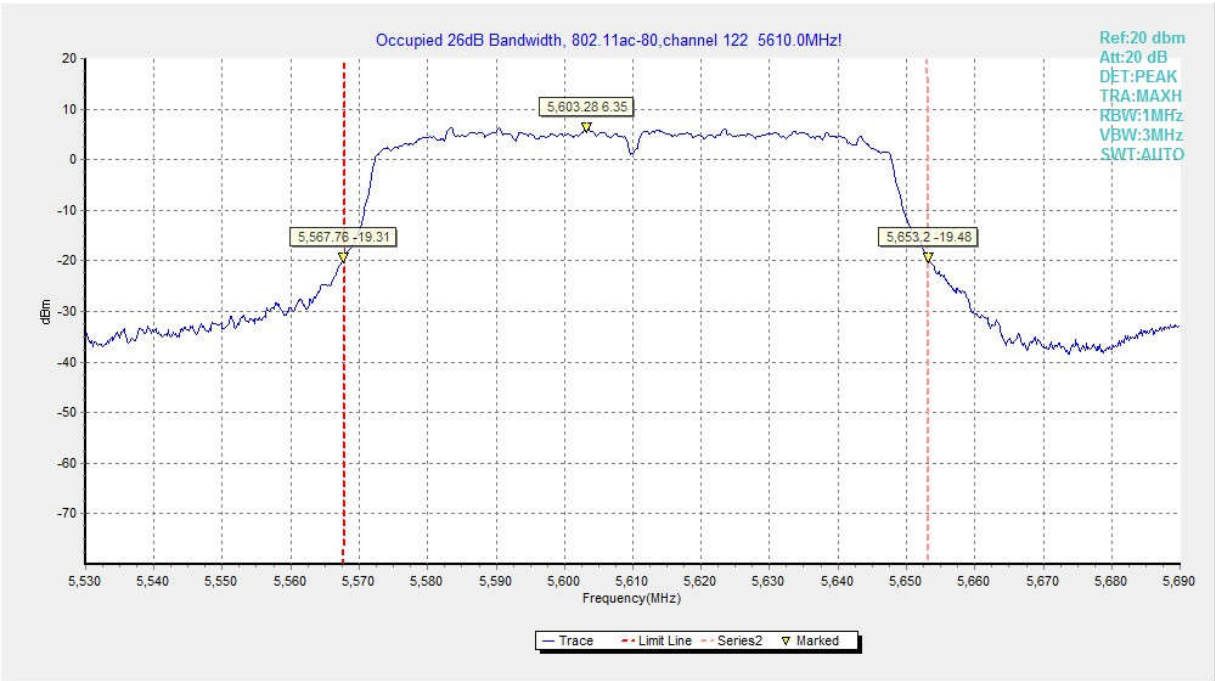



**Fig. 20 Occupied 26dB Bandwidth (802. 11ac-VHT80, 5610MHz)**

*©Copyright. All rights reserved by SAICT*

## A.5. Occupied 6dB Bandwidth(conducted)

**Measurement Limit:**

| Standard | Limit (MHz) |
|---|---|
| FCC 47 CFR Part 15.407 (e) | ≥0.5 |

The measurement is made according to KDB 789033

**Measurement Result:**

| Mode | Channel | Occupied 6dB Bandwidth( MHz) | | Conclusion |
|---|---|---|---|---|
| 802.11a | 5745MHz(Ch149) | Fig.21 | 17.60 | **P** |
| | 5785MHz(Ch157) | Fig.22 | 17.55 | **P** |
| | 5825MHz(Ch165) | Fig.23 | 17.60 | **P** |
| 802.11n HT40 | 5755MHz(Ch151) | Fig.24 | 35.44 | **P** |
| | 5795MHz(Ch159) | Fig.25 | 35.52 | **P** |
| 802.11ac VHT80 | 5775MHz(Ch155) | Fig.26 | 75.20 | **P** |

**Conclusion: PASS**

**Test graphs as below:**

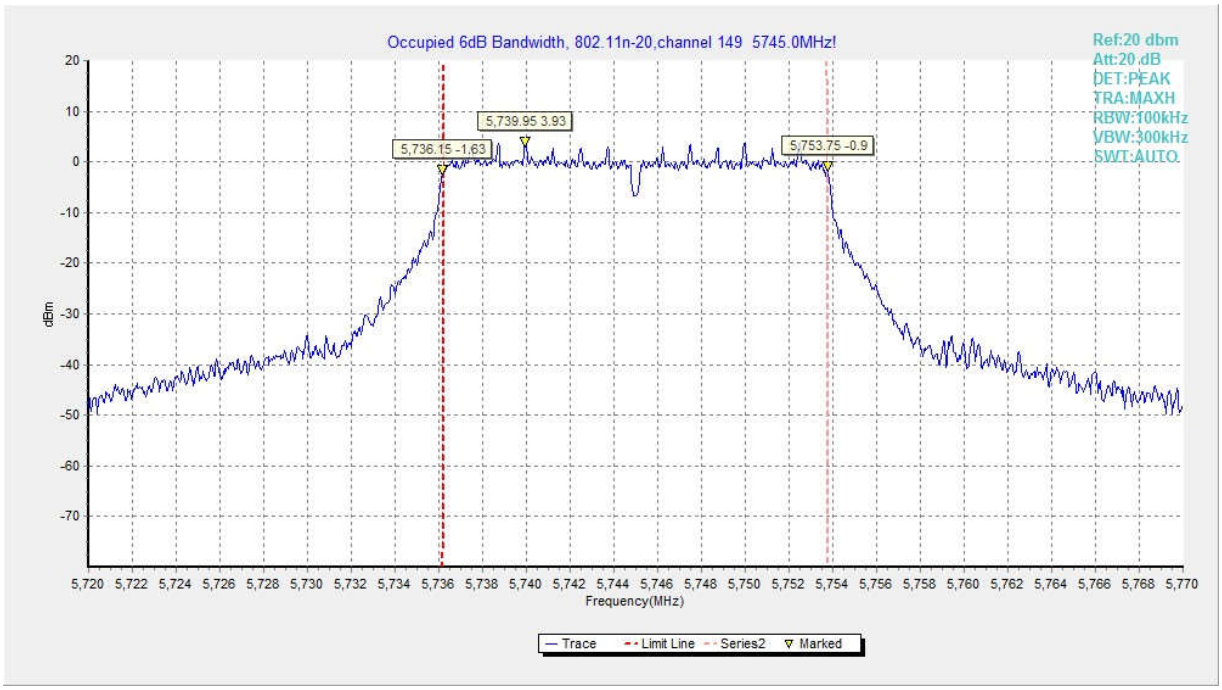



**Fig. 21 Occupied 6dB Bandwidth (802.11n-HT20, 5745MHz)**

©Copyright. All rights reserved by SAICT

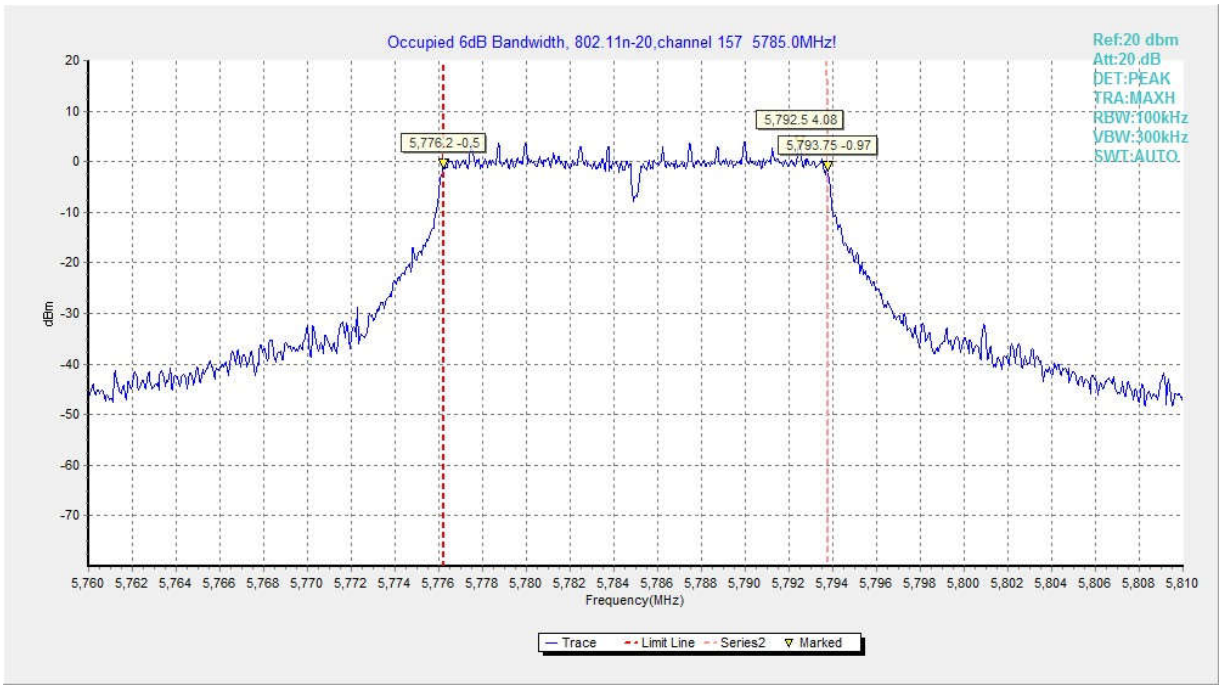



**Fig. 22 Occupied 6dB Bandwidth (802.11n-HT20, 5785MHz)**

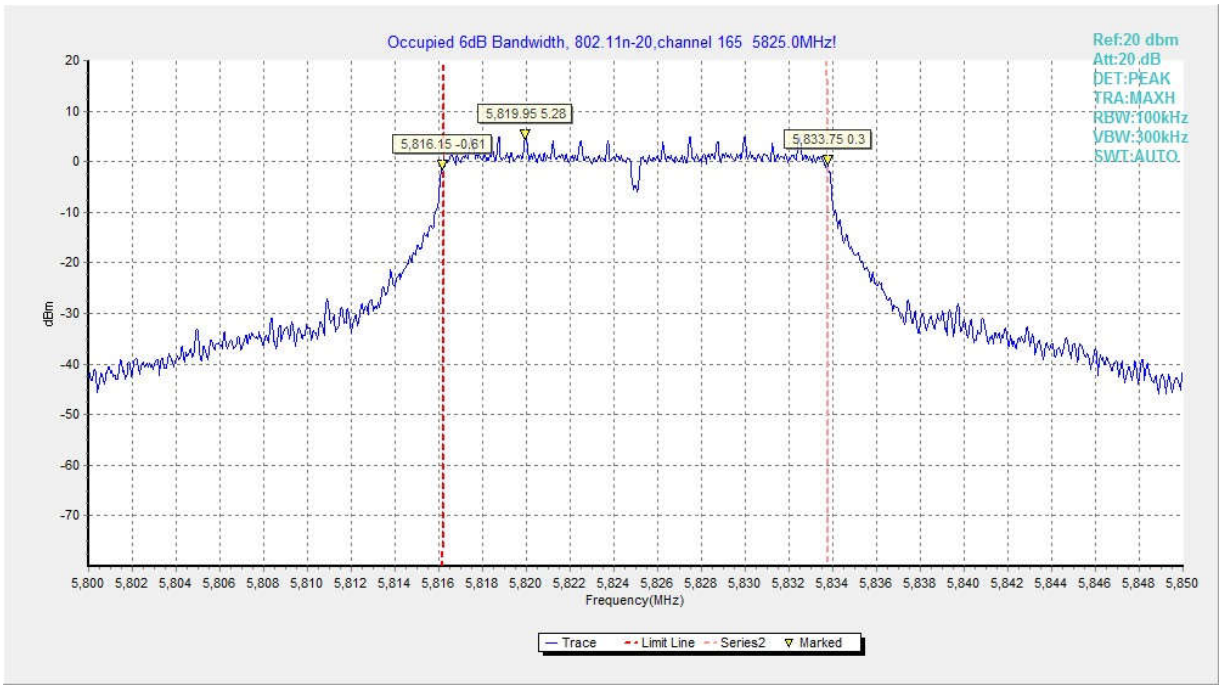



**Fig. 23 Occupied 6dB Bandwidth (802.11n-HT20, 5825MHz)**

*©Copyright. All rights reserved by SAICT*

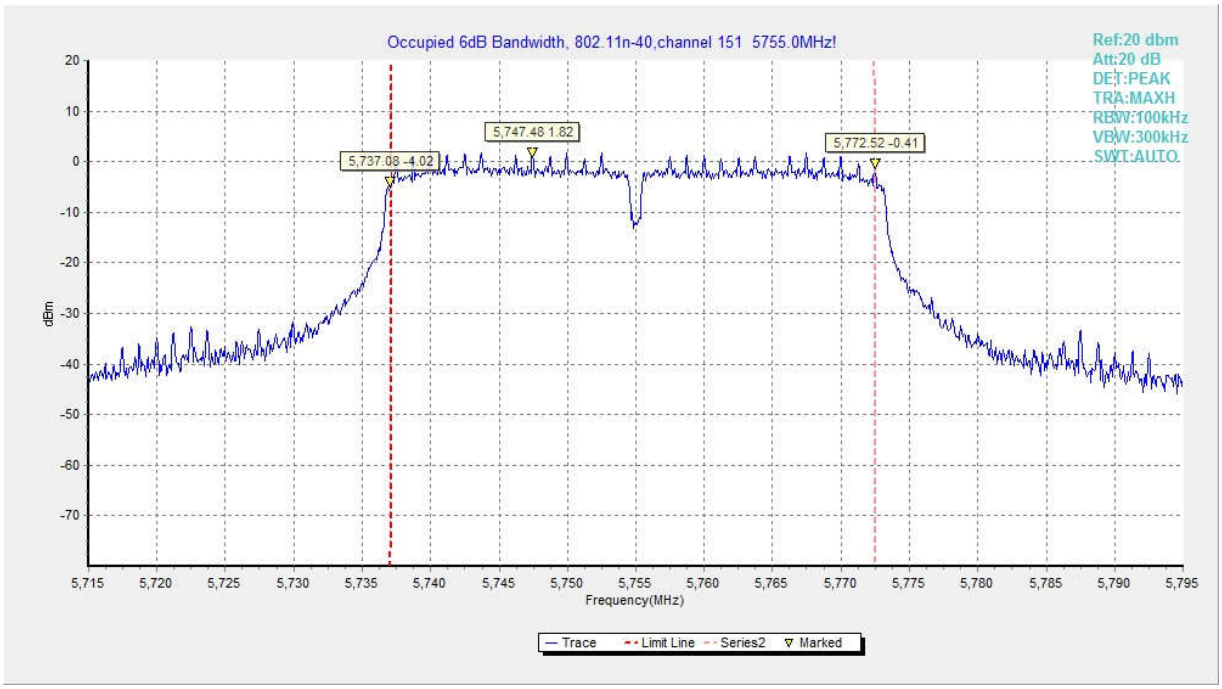



**Fig. 24 Occupied 6dB Bandwidth (802.11n-HT40, 5755MHz)**

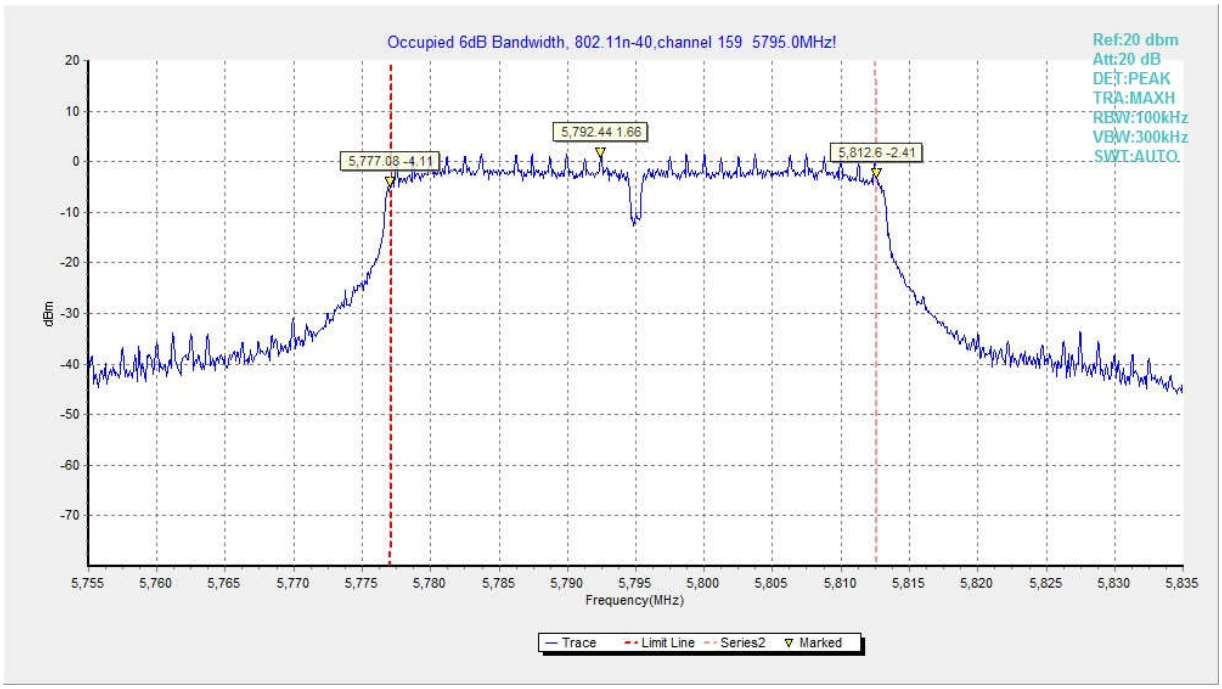



**Fig. 25 Occupied 6dB Bandwidth (802.11n-HT40, 5795MHz)**

*©Copyright. All rights reserved by SAICT*

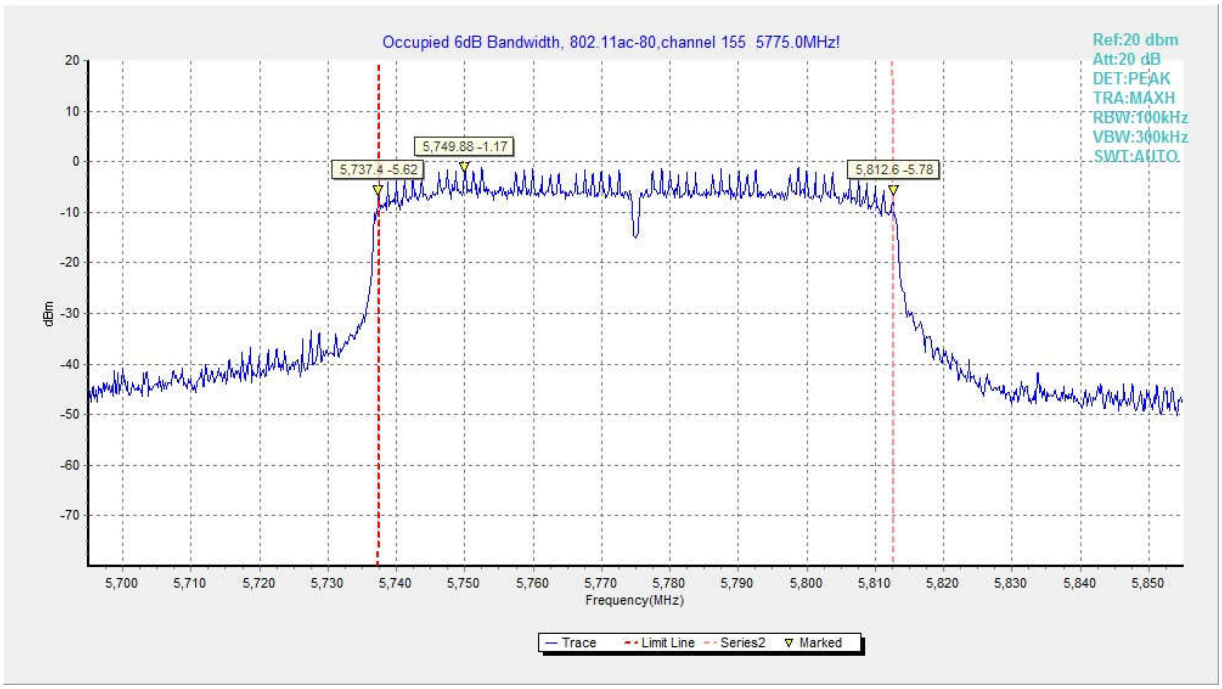



**Fig. 26 Occupied 6dB Bandwidth (802.11ac-VHT80, 5775MHz)**

*©Copyright. All rights reserved by SAICT*

## A.6. 99% Occupied Bandwidth(conducted)

**Measurement Limit:**

| Standard | Limit (MHz) |
|---|---|
| FCC 47 CFR Part 15.403 | / |

The measurement is made according to KDB 789033

**Measurement Result:**

| Mode | Channel | 99% Occupied Bandwidth(MHz) | | Conclusion |
|---|---|---|---|---|
| 802.11a | 5180MHz(Ch36) | Fig.27 | 18.78 | **P** |
| | 5200MHz(Ch40) | Fig.28 | 18.78 | **P** |
| | 5240MHz(Ch48) | Fig.29 | 18.70 | **P** |
| | 5260MHz(Ch52) | Fig.30 | 18.78 | **P** |
| | 5280MHz(Ch56) | Fig.31 | 18.82 | **P** |
| | 5320MHz(Ch64) | Fig.32 | 18.82 | **P** |
| | 5500MHz(Ch100) | Fig.33 | 18.74 | **P** |
| | 5580MHz(Ch116) | Fig.34 | 18.78 | **P** |
| | 5700MHz(Ch140) | Fig.35 | 18.78 | **P** |
| 802.11n HT40 | 5190MHz(Ch38) | Fig.36 | 36.44 | **P** |
| | 5230MHz(Ch46) | Fig.37 | 36.44 | **P** |
| | 5270MHz(Ch54) | Fig.38 | 36.44 | **P** |
| | 5310MHz(Ch62) | Fig.39 | 36.44 | **P** |
| | 5510MHz(Ch102) | Fig.40 | 36.44 | **P** |
| | 5550MHz(Ch110) | Fig.41 | 36.44 | **P** |
| | 5670MHz(Ch134) | Fig.42 | 36.28 | **P** |
| 802.11 ac VHT80 | 5210MHz(Ch42) | Fig.43 | 74.97 | **P** |
| | 5290MHz(Ch58) | Fig.44 | 74.97 | **P** |
| | 5530MHz(Ch106) | Fig.45 | 74.97 | **P** |
| | 5610MHz(Ch122) | Fig.46 | 74.97 | **P** |

**Conclusion: PASS**

**Test graphs as below:**

*©Copyright. All rights reserved by SAICT*

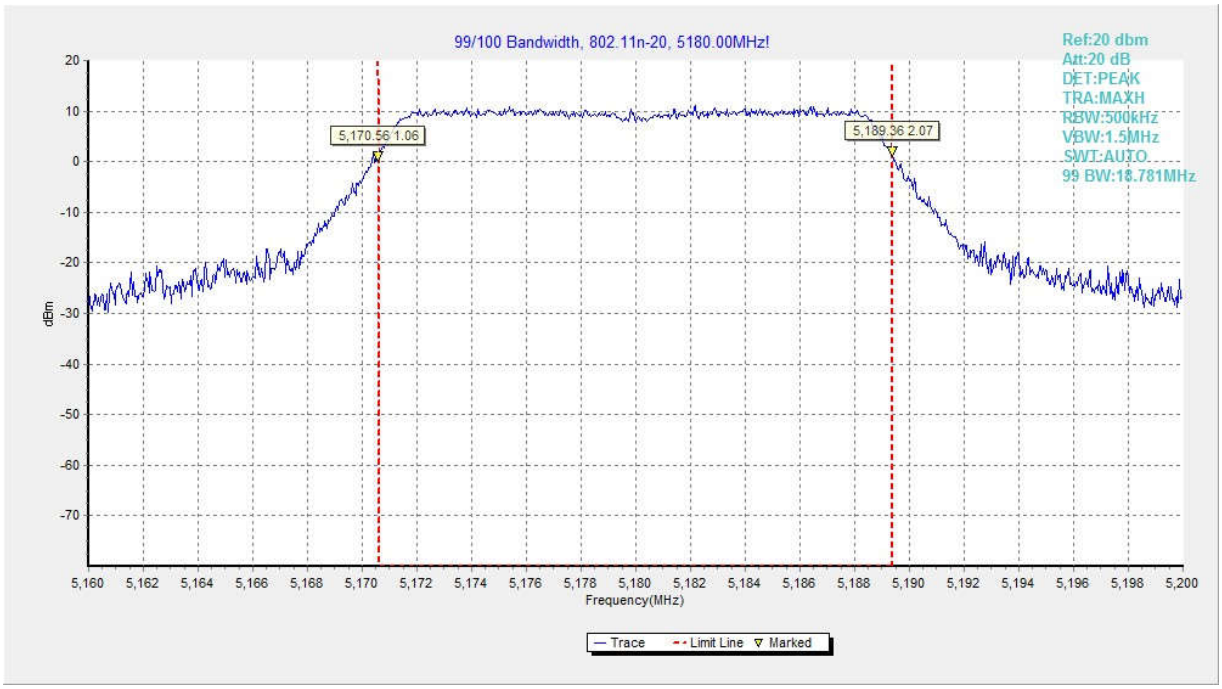



**Fig. 27 99% Occupied Bandwidth (802.11n-HT20, 5180MHz)**

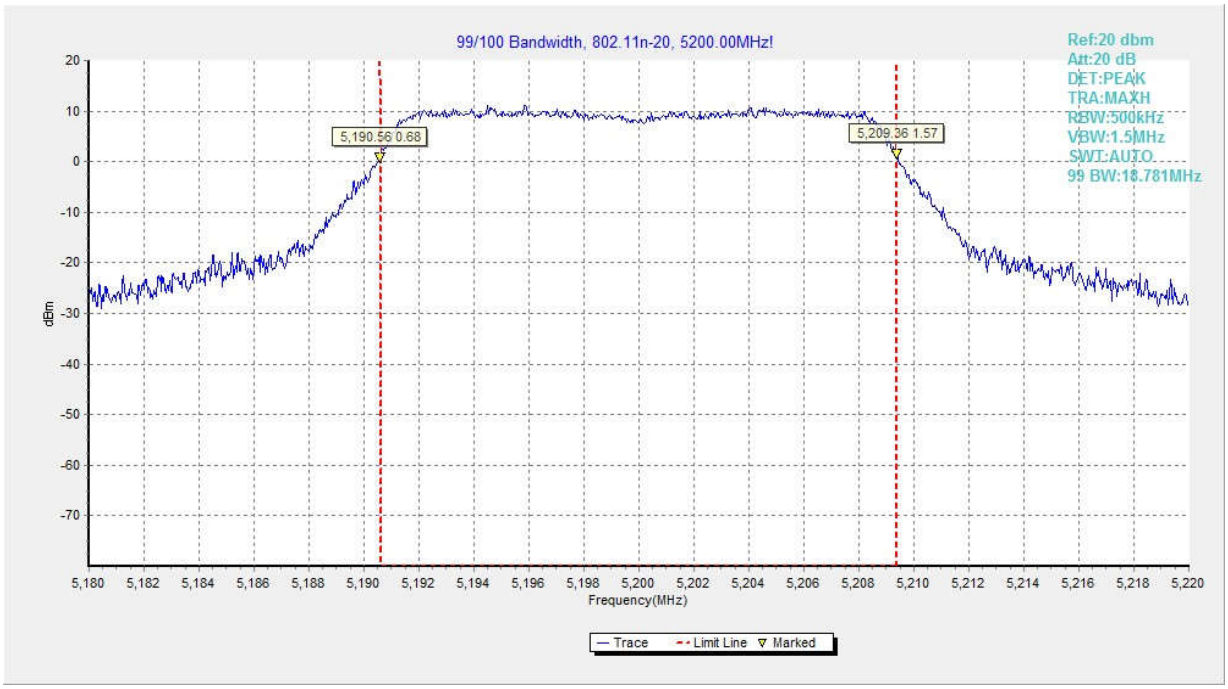



**Fig. 28 99% Occupied Bandwidth (802.11n-HT20, 5200MHz)**

*©Copyright. All rights reserved by SAICT*

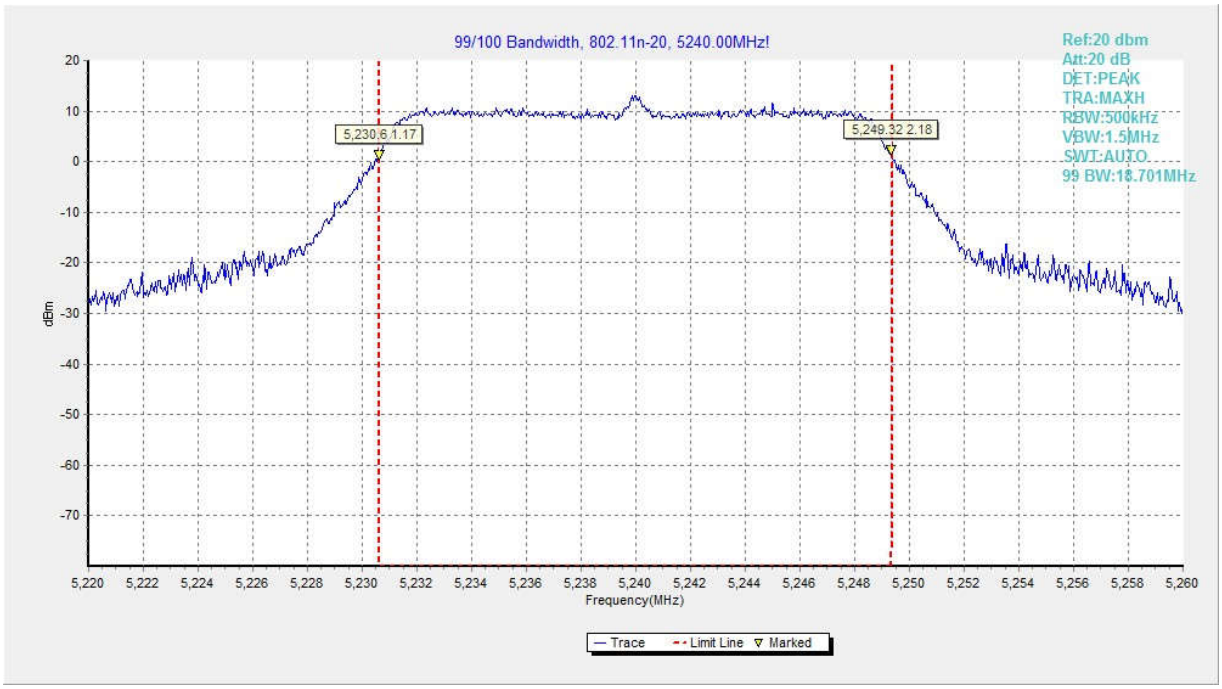



**Fig. 29 99% Occupied Bandwidth (802.11n-HT20, 5240MHz)**

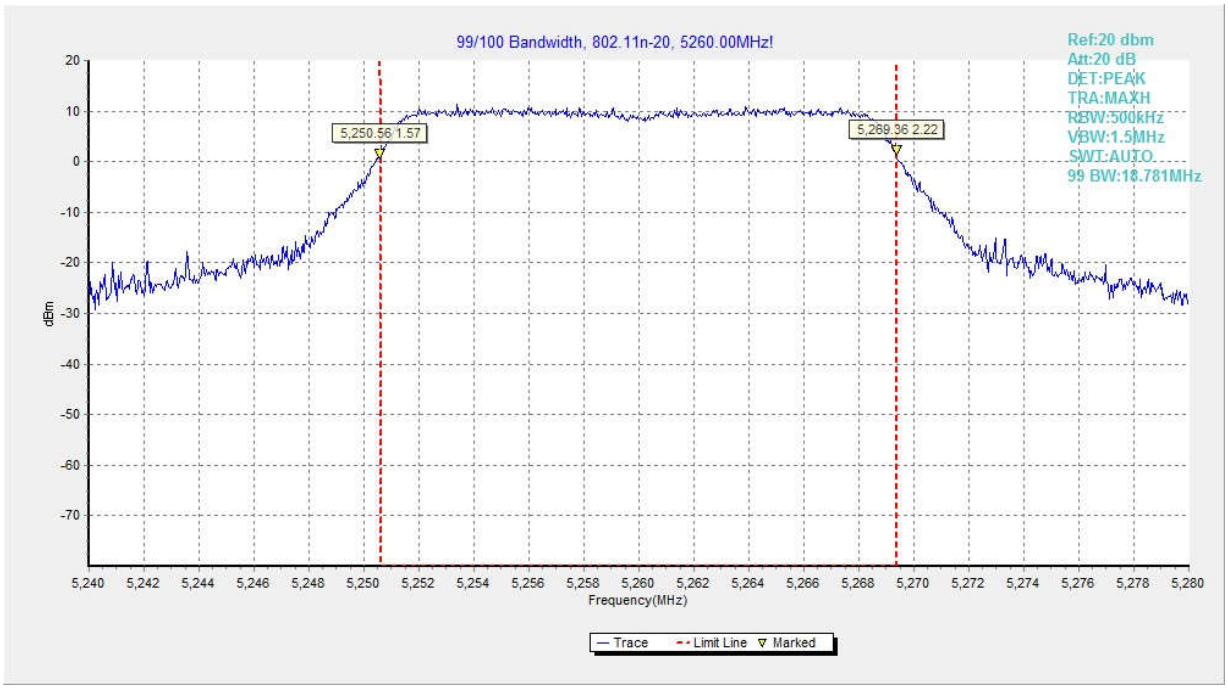



**Fig. 30 99% Occupied Bandwidth (802.11n-HT20, 5260MHz)**

*©Copyright. All rights reserved by SAICT*

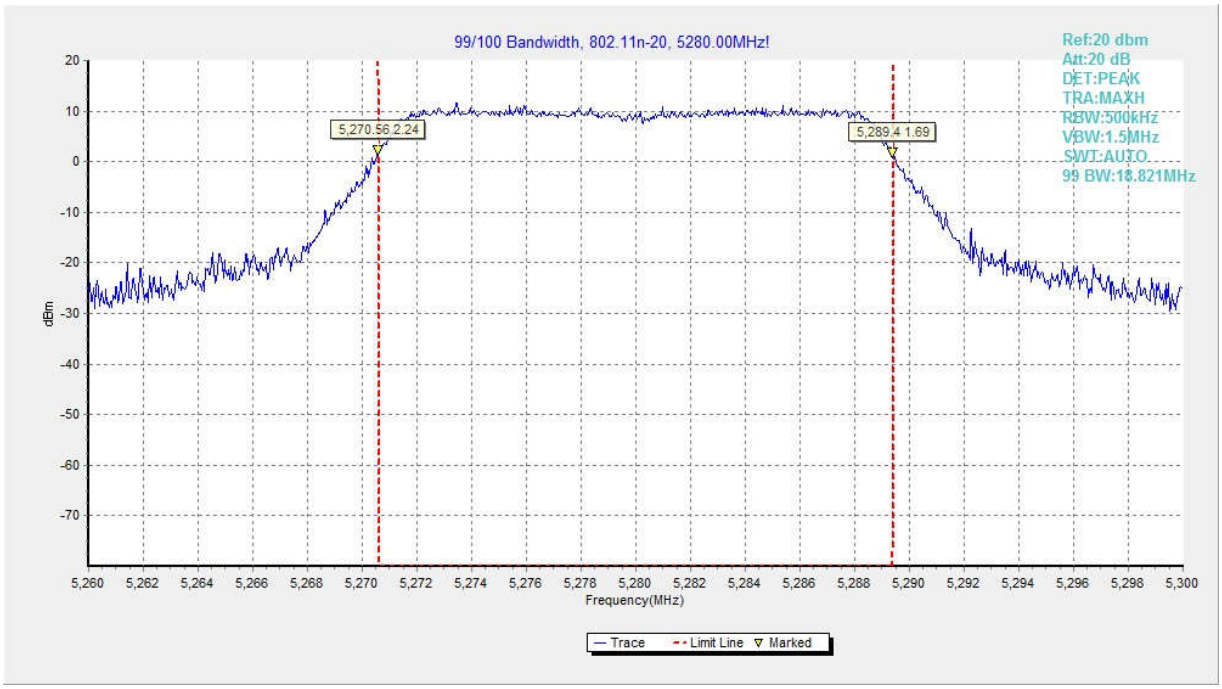



**Fig. 31 99% Occupied Bandwidth (802.11n-HT20, 5280MHz)**

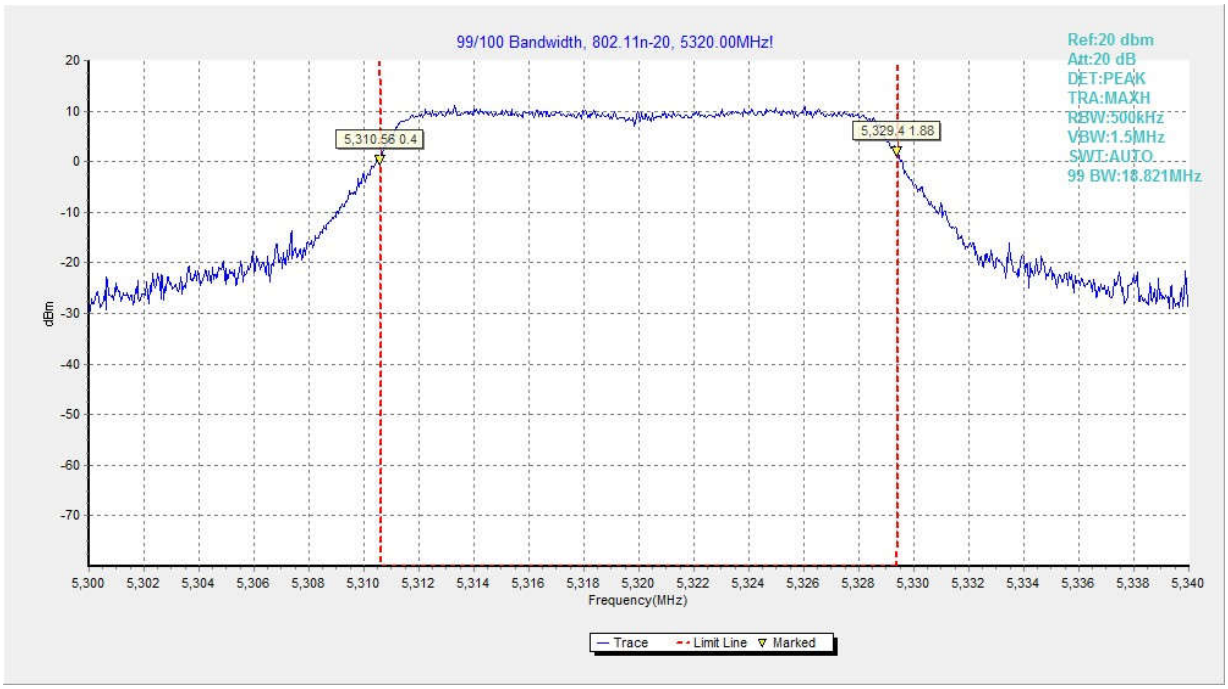



**Fig. 32 99% Occupied Bandwidth (802.11n-HT20, 5320MHz)**

*©Copyright. All rights reserved by SAICT*

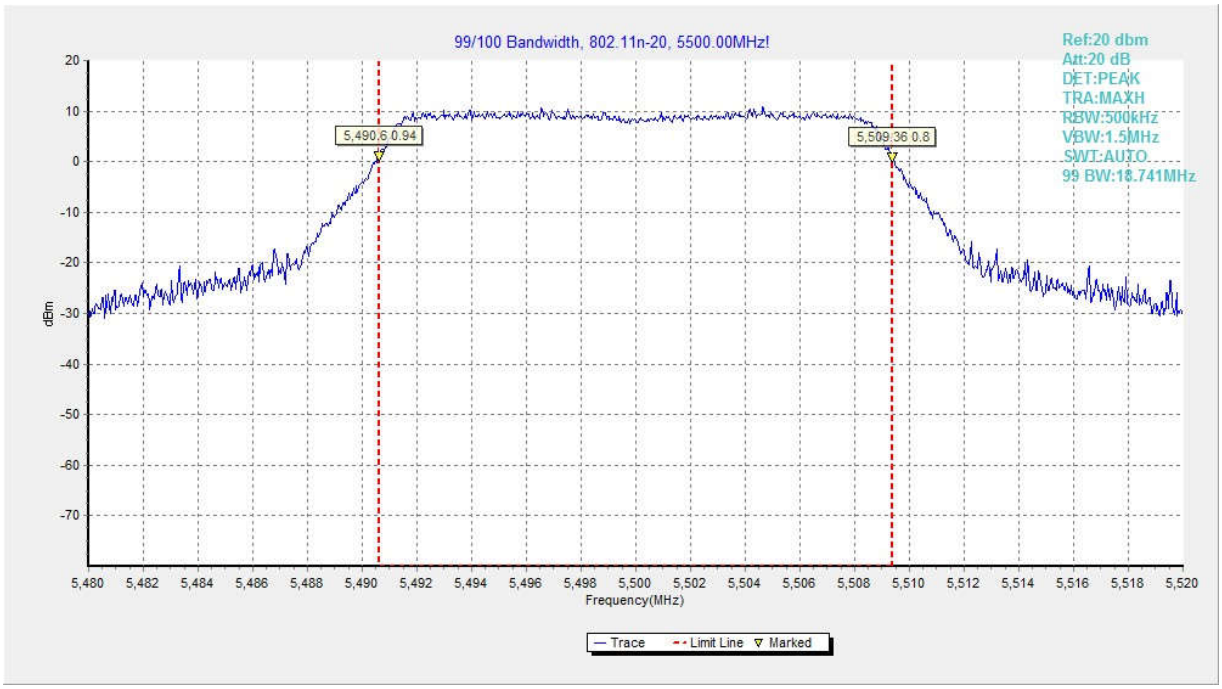



**Fig. 33 99% Occupied Bandwidth (802. 11n-HT20, 5500MHz)**

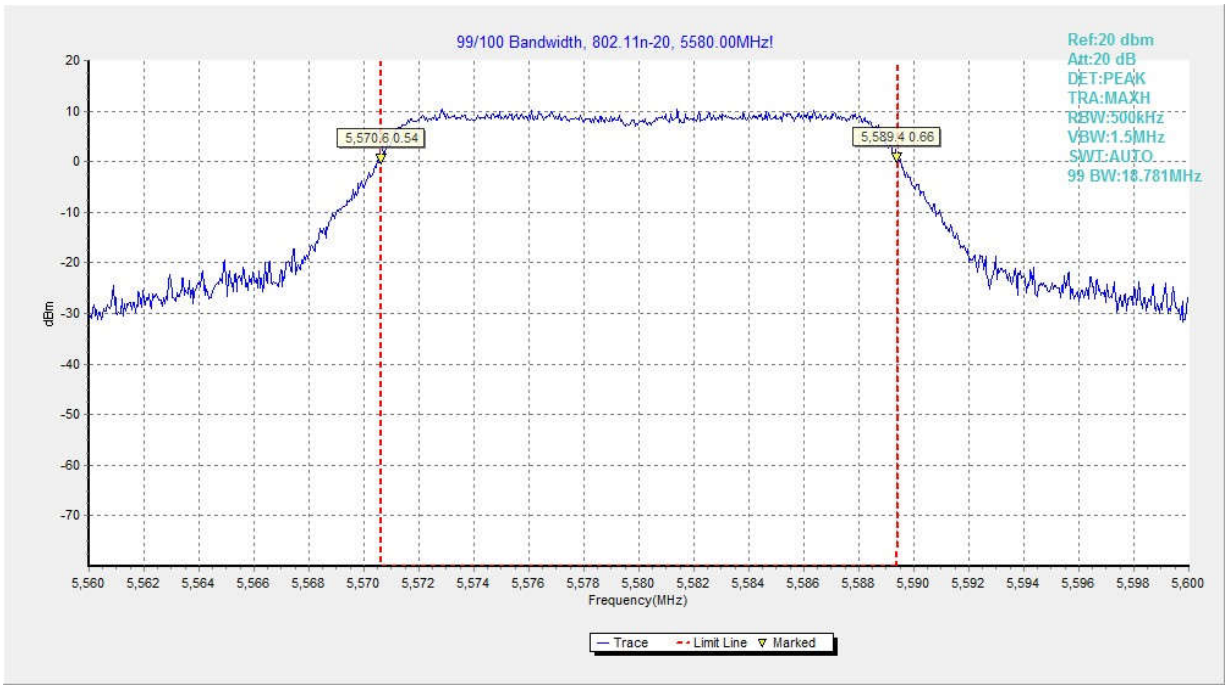



**Fig. 34 99% Occupied Bandwidth (802. 11n-HT20, 5600MHz)**

*©Copyright. All rights reserved by SAICT*

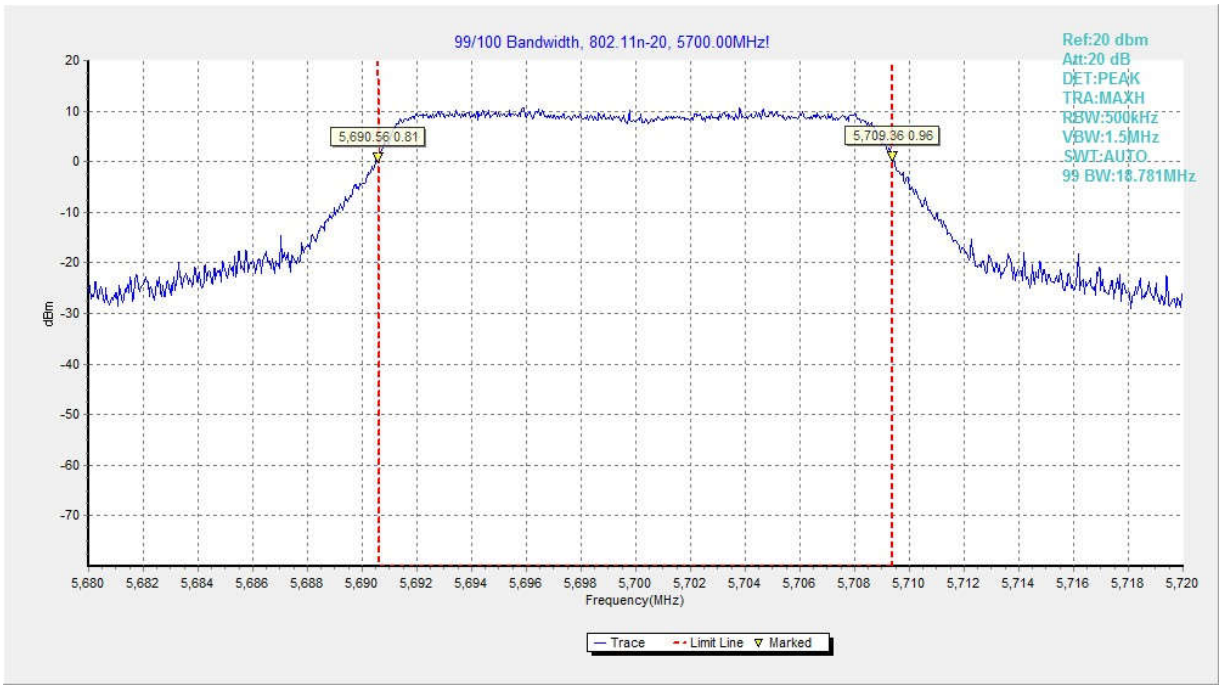



**Fig. 35 99% Occupied Bandwidth (802. 11n-HT20, 5700MHz)**

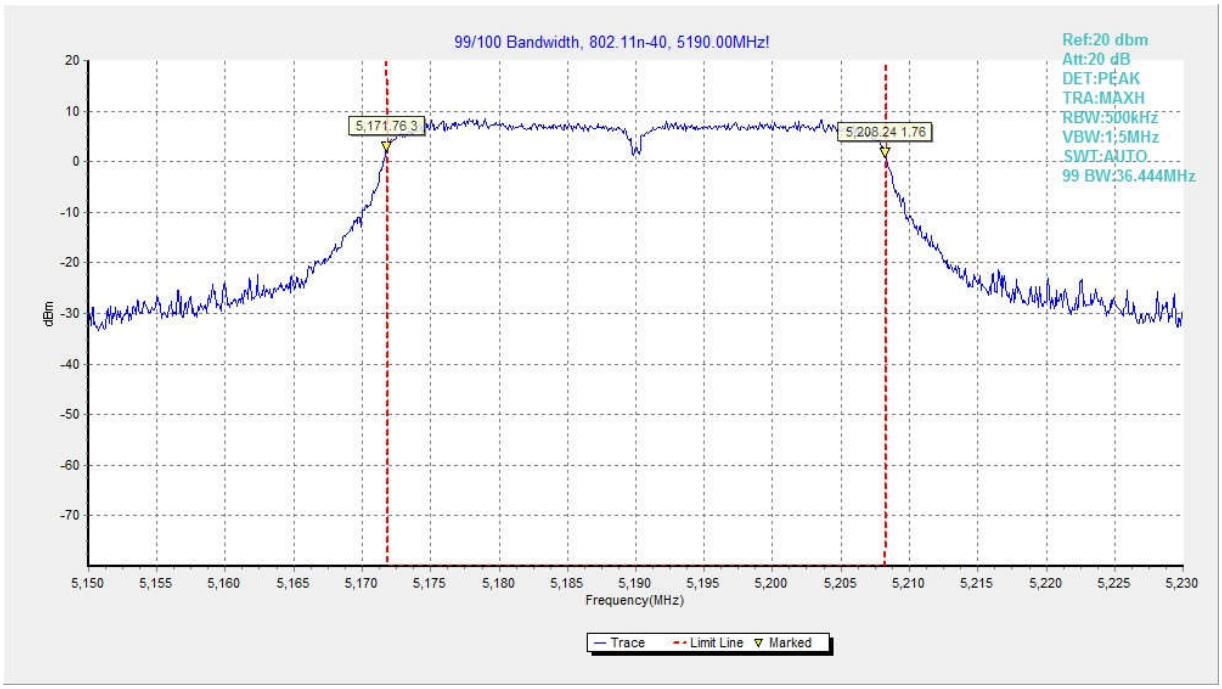



**Fig. 36 99% Occupied Bandwidth (802.11n-HT40, 5190MHz)**

*©Copyright. All rights reserved by SAICT*

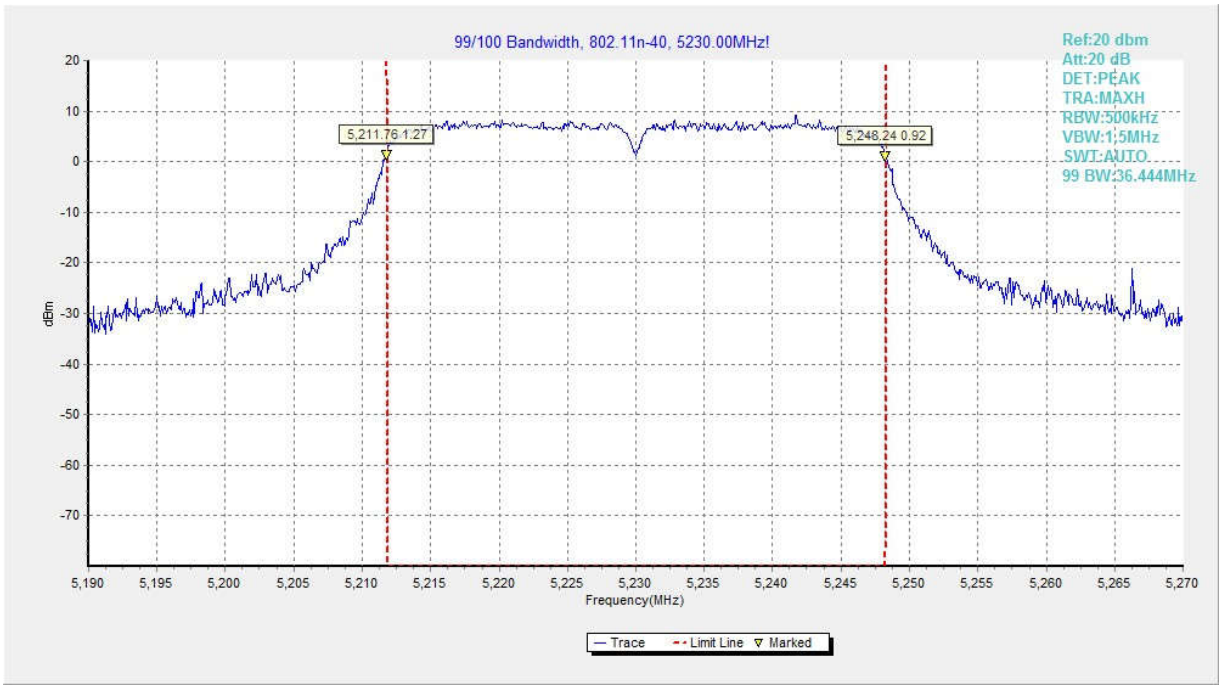



**Fig. 37 99% Occupied Bandwidth (802.11n-HT40, 5230MHz)**

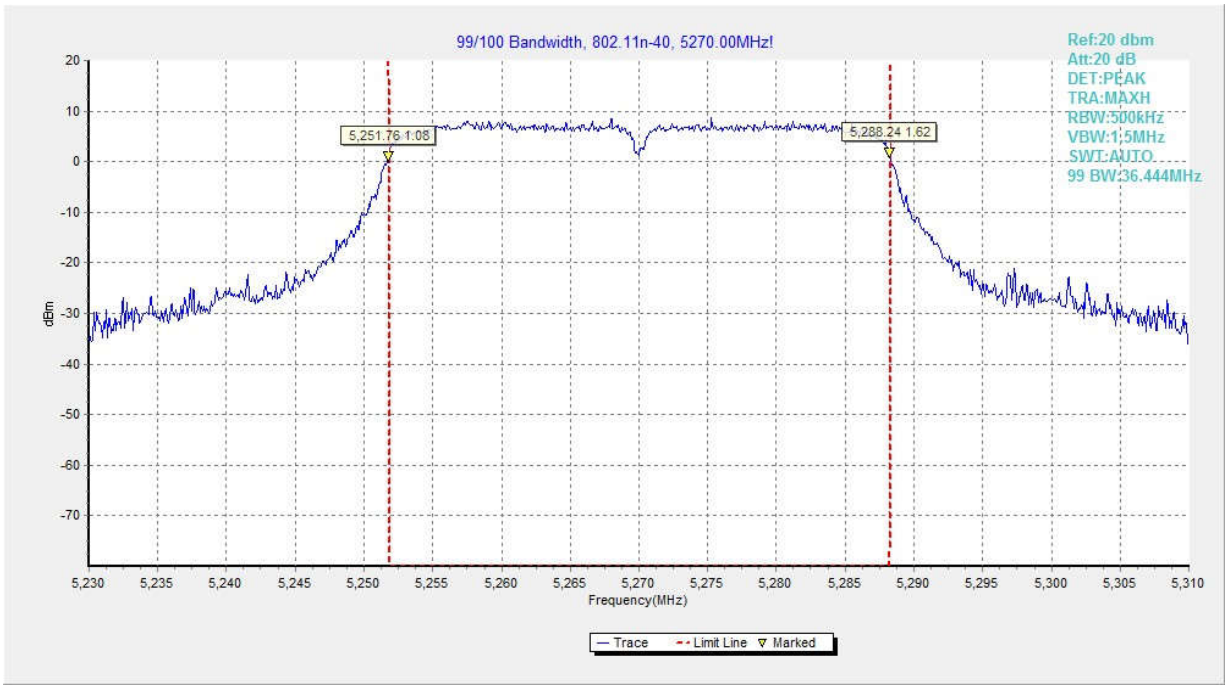



**Fig. 38 99% Occupied Bandwidth (802.11n-HT40, 5270MHz)**

*©Copyright. All rights reserved by SAICT*

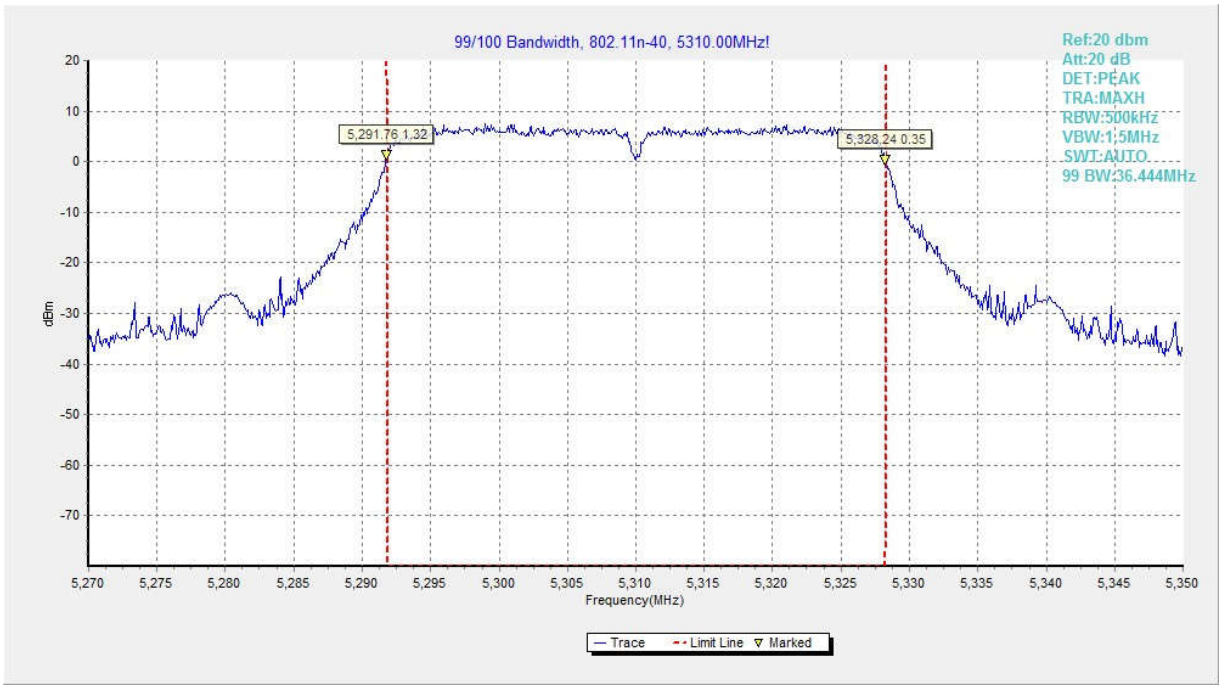



**Fig. 39 99% Occupied Bandwidth (802.11n-HT40, 5310MHz)**

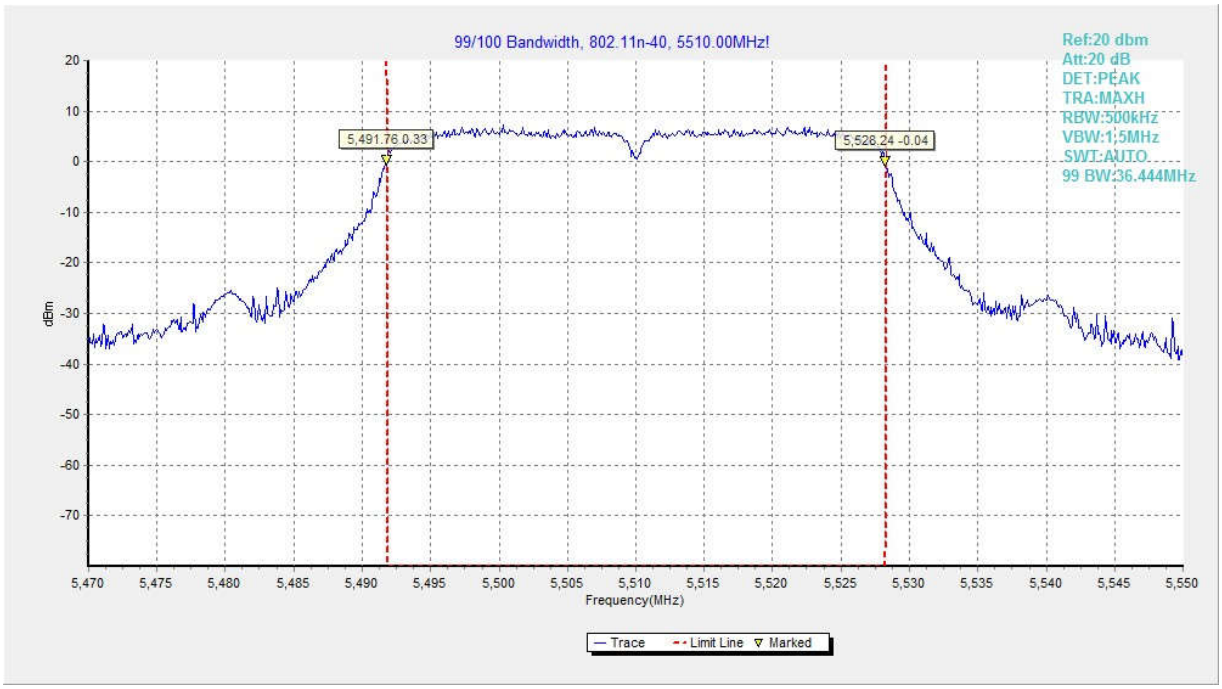



**Fig. 40 99% Occupied Bandwidth (802. 11n-HT40, 5510MHz)**

*©Copyright. All rights reserved by SAICT*

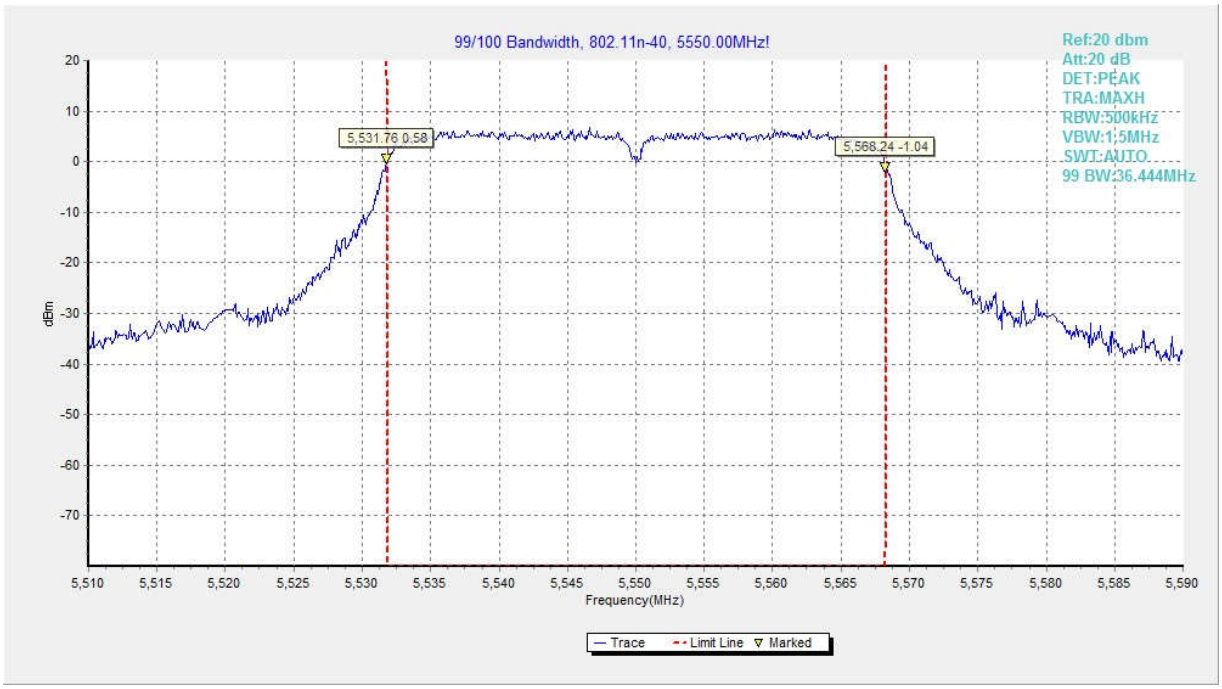



**Fig. 41 99% Occupied Bandwidth (802. 11n-HT40, 5590MHz)**

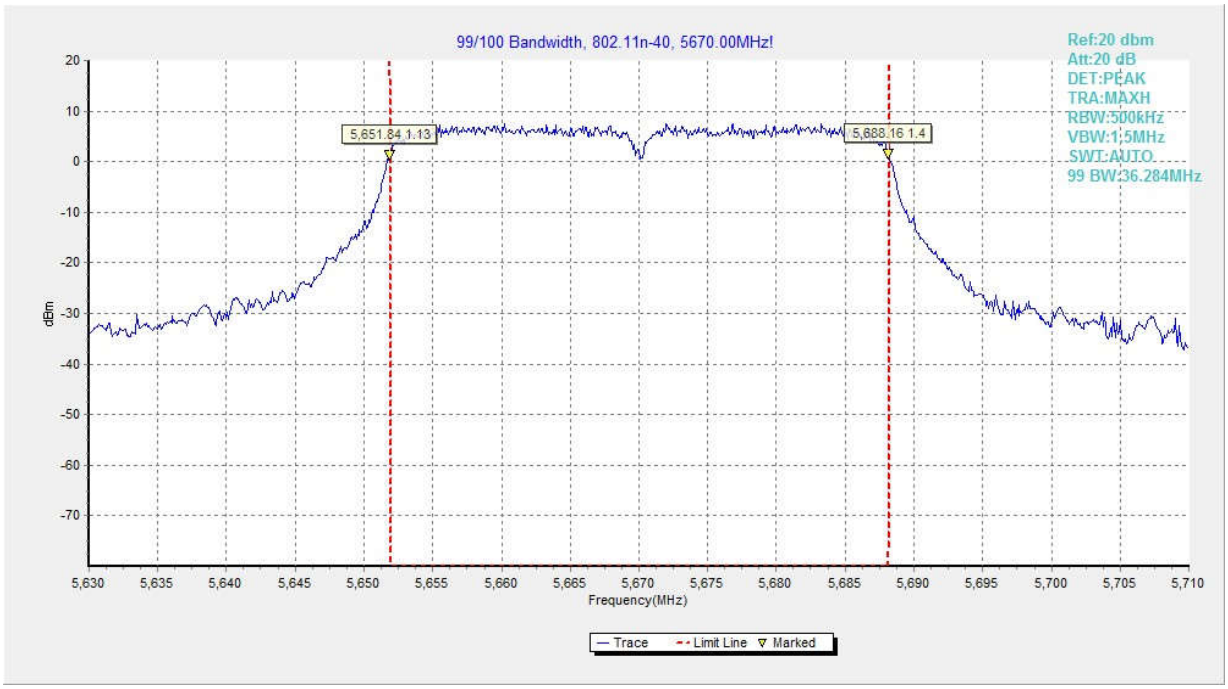



**Fig. 42 99% Occupied Bandwidth (802. 11n-HT40, 5670MHz)**

*©Copyright. All rights reserved by SAICT*

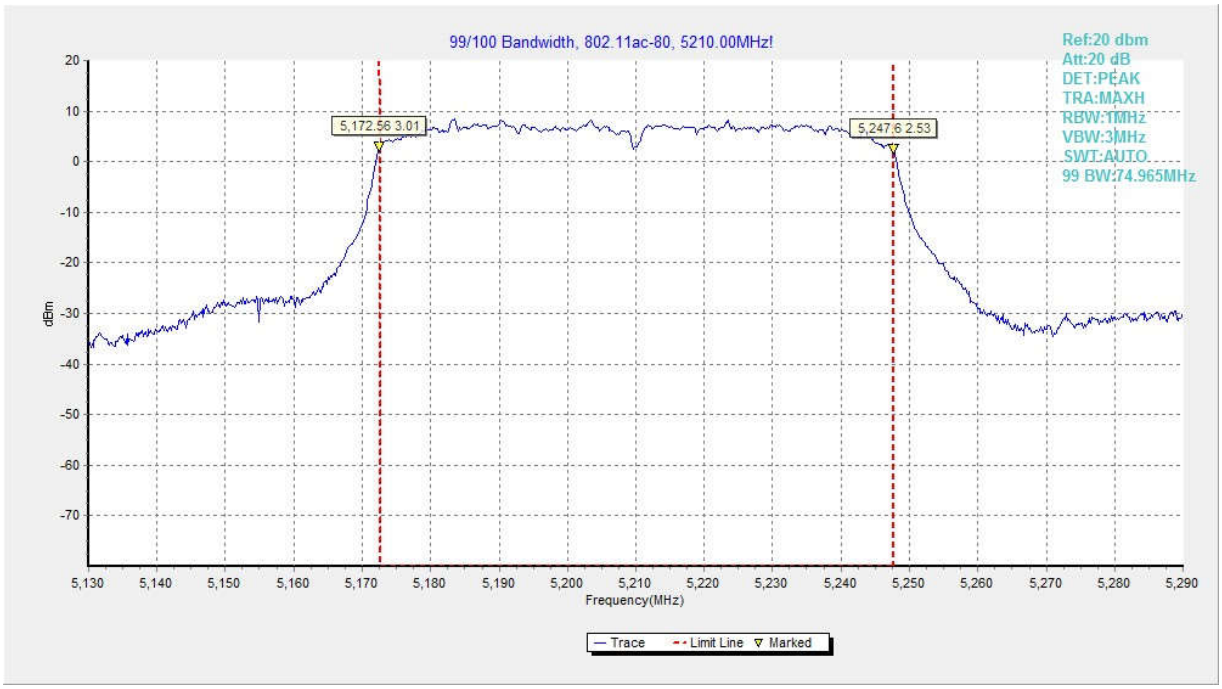



**Fig. 43 99% Occupied Bandwidth (802. 11ac-VHT80, 5210MHz)**

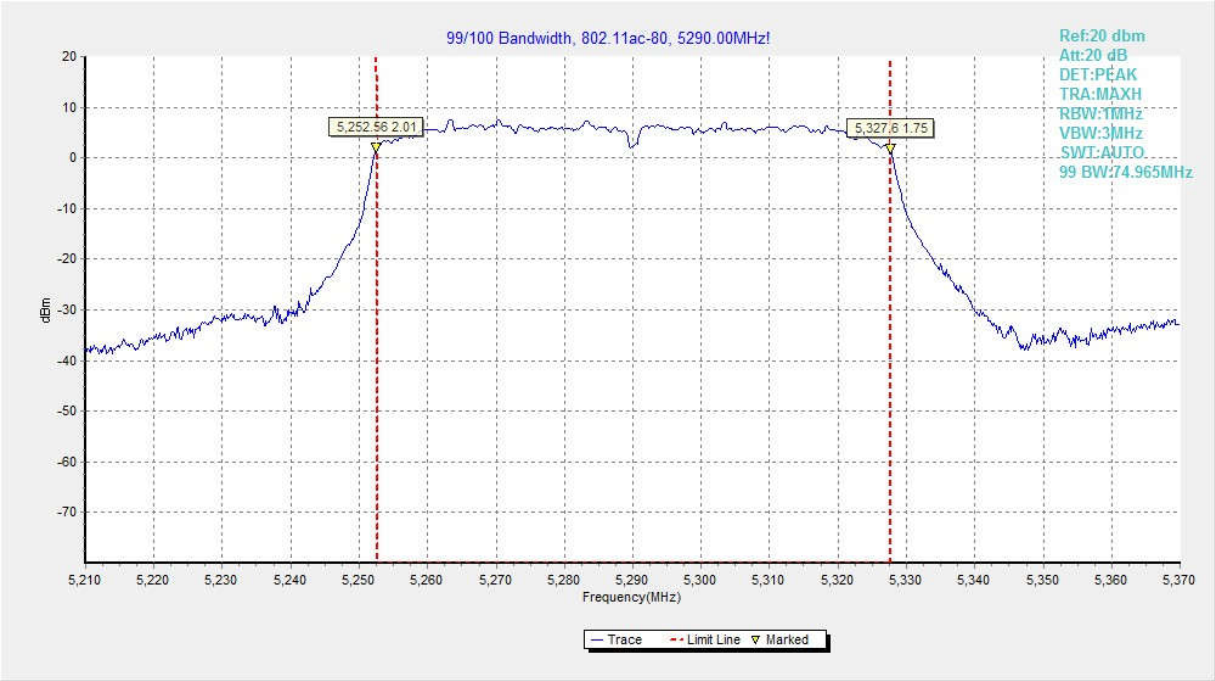



**Fig. 44 99% Occupied Bandwidth (802. 11ac-VHT80, 5290MHz)**

*©Copyright. All rights reserved by SAICT*

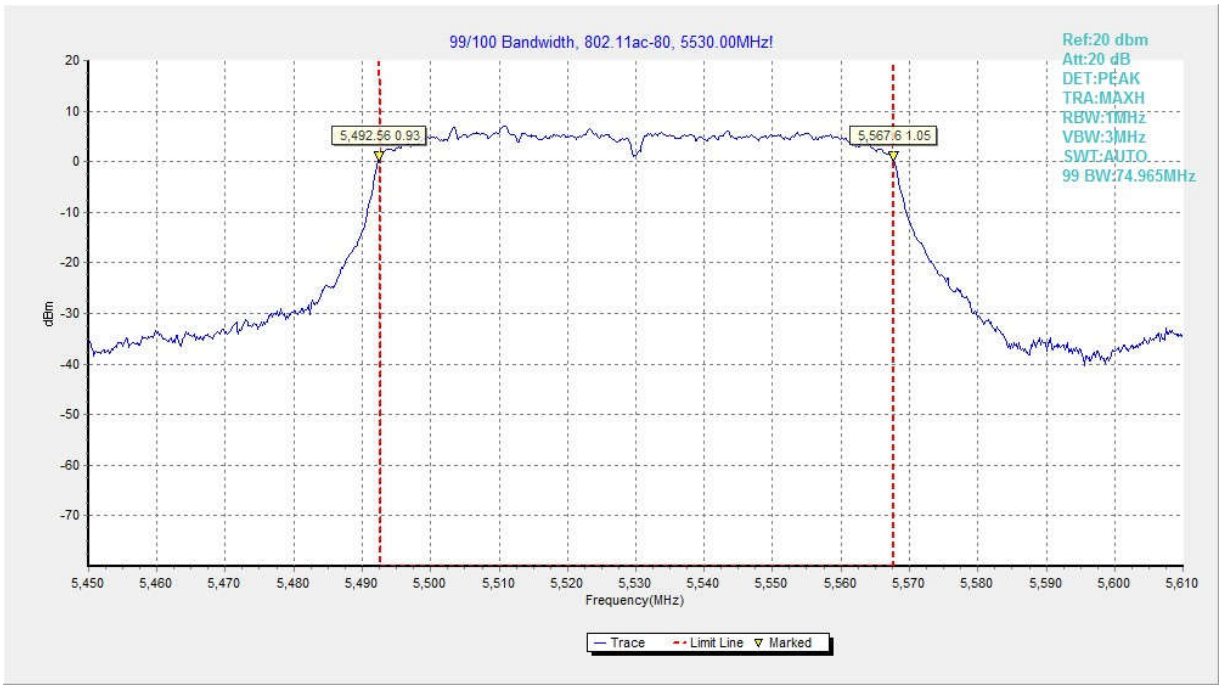



**Fig. 45 99% Occupied Bandwidth (802. 11ac-VHT80, 5530MHz)**

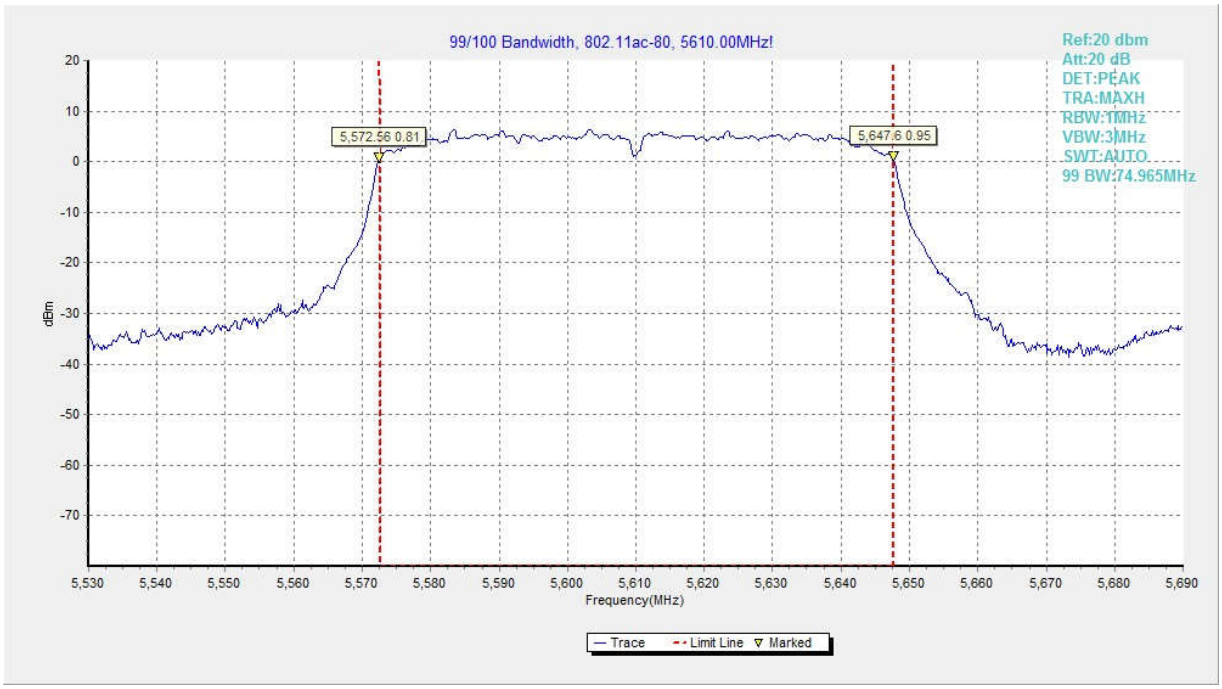



**Fig. 46 99% Occupied Bandwidth (802. 11ac-VHT80, 5610MHz)**

*©Copyright. All rights reserved by SAICT*

## A.7. Band Edges Compliance

**Measurement Limit:**

| Standard | Limit (dBuV/m) | |
|---|---|---|
| FCC 47 CFR Part 15.209 | Peak | 74 |
| | Average | 54 |

The measurement is made according to KDB 789033

**Measurement Result:**

| Mode | Channel | Test Results | Conclusion |
|---|---|---|---|
| 802.11a | 5180 MHz(CH36) | Fig.47 | **P** |
| | 5320 MHz(CH64) | Fig.48 | **P** |
| | 5500 MHz(CH100) | Fig.49 | **P** |
| | 5700 MHz(CH140) | Fig.50 | **P** |
| | 5745 MHz(CH149) | Fig.51 | **P** |
| | 5825 MHz(CH165) | Fig.52 | **P** |
| 802.11n HT40 | 5190 MHz(CH38) | Fig.53 | **P** |
| | 5310 MHz(CH62) | Fig.54 | **P** |
| | 5510 MHz(CH102) | Fig.55 | **P** |
| | 5670 MHz(CH134) | Fig.56 | **P** |
| | 5755 MHz(CH151) | Fig.57 | **P** |
| | 5795 MHz(CH159) | Fig.58 | **P** |
| 802.11ac VHT80 | 5210 MHz(CH42) | Fig.59 | **P** |
| | 5290 MHz(CH58) | Fig.60 | **P** |
| | 5530 MHz(CH106) | Fig.61 | **P** |
| | 5775 MHz(CH155) | Fig.62 | **P** |

**Conclusion: PASS**

**Test graphs as below:**

*©Copyright. All rights reserved by SAICT*

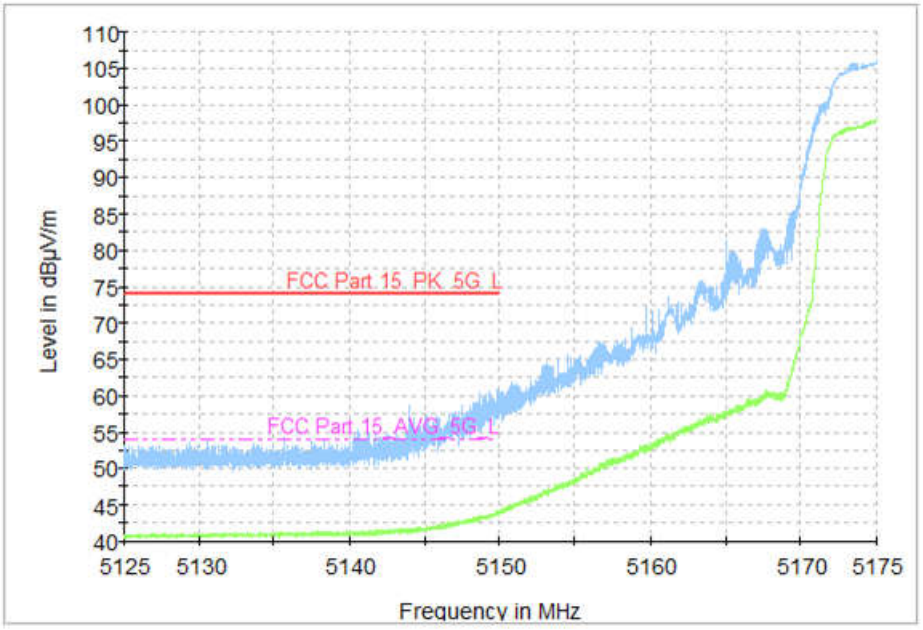



**Fig. 47 Band Edges (802.11a, CH36 5180MHz)**

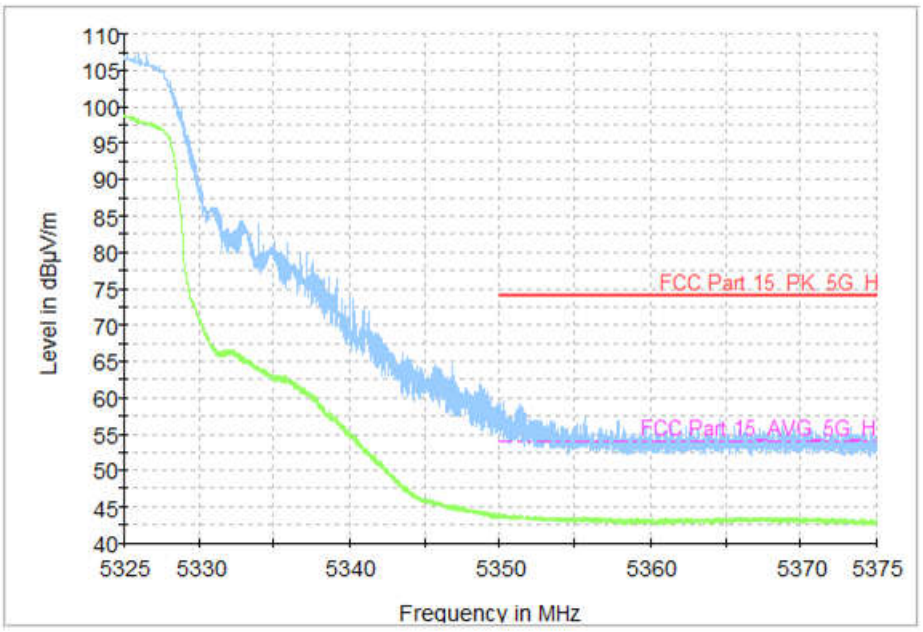



**Fig. 48 Band Edges (802.11a, CH64 5320MHz)**

*©Copyright. All rights reserved by SAICT*

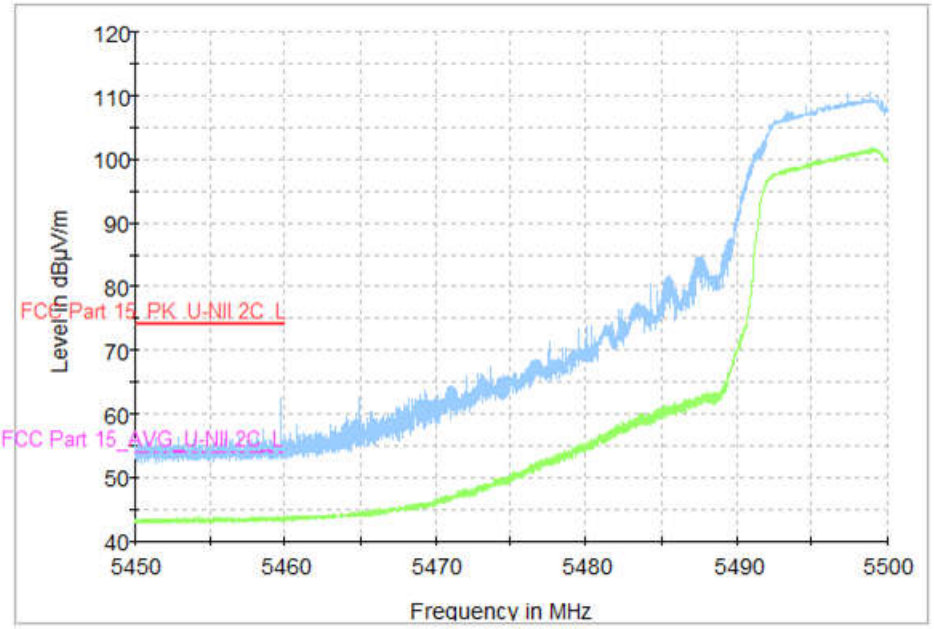



**Fig. 49 Band Edges (802.11a, CH100 5500MHz)**

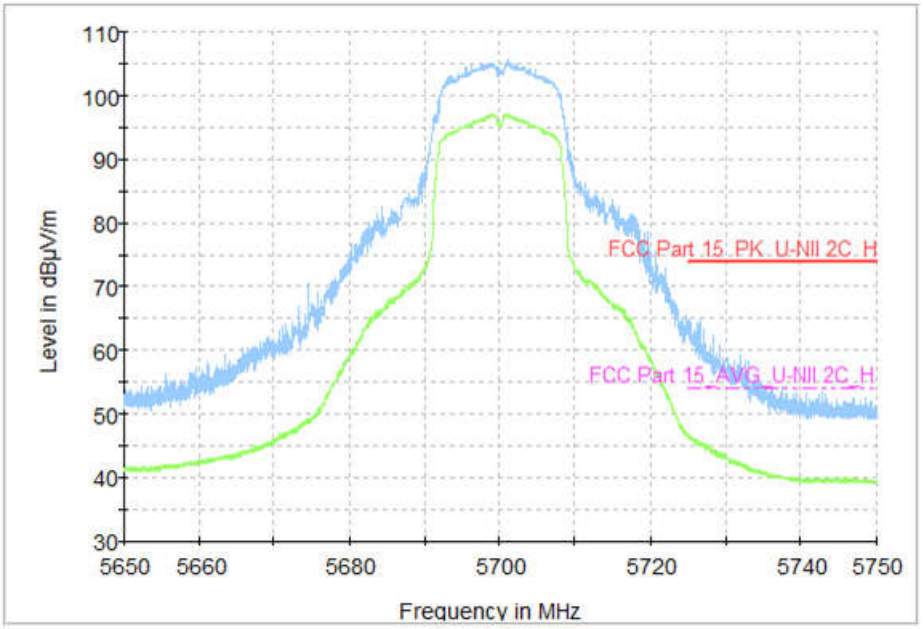



**Fig. 50 Band Edges (802.11a, CH140 5700MHz)**

*©Copyright. All rights reserved by SAICT*

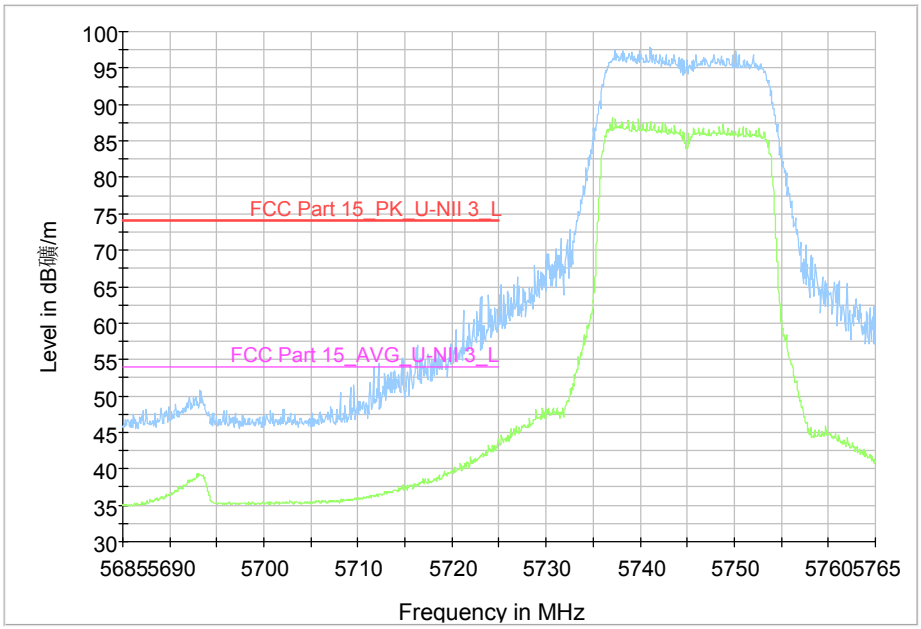



**Fig. 51 Band Edges (802.11a, CH149 5745MHz)**

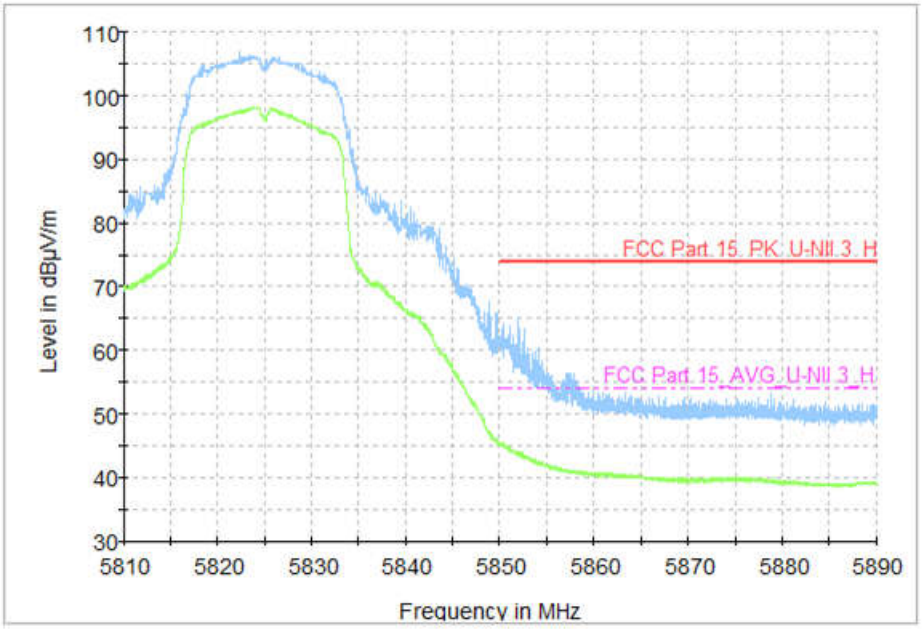



**Fig. 52 Band Edges (802.11a, CH165 5825MHz)**

©Copyright. All rights reserved by SAICT

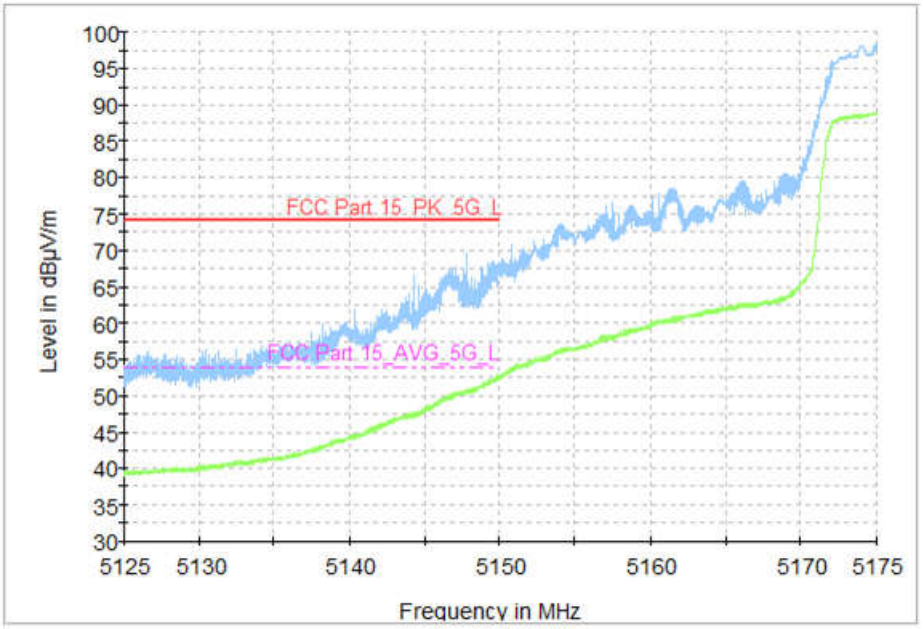



**Fig. 53 Band Edges (802.11n-HT40, CH38 5190MHz)**

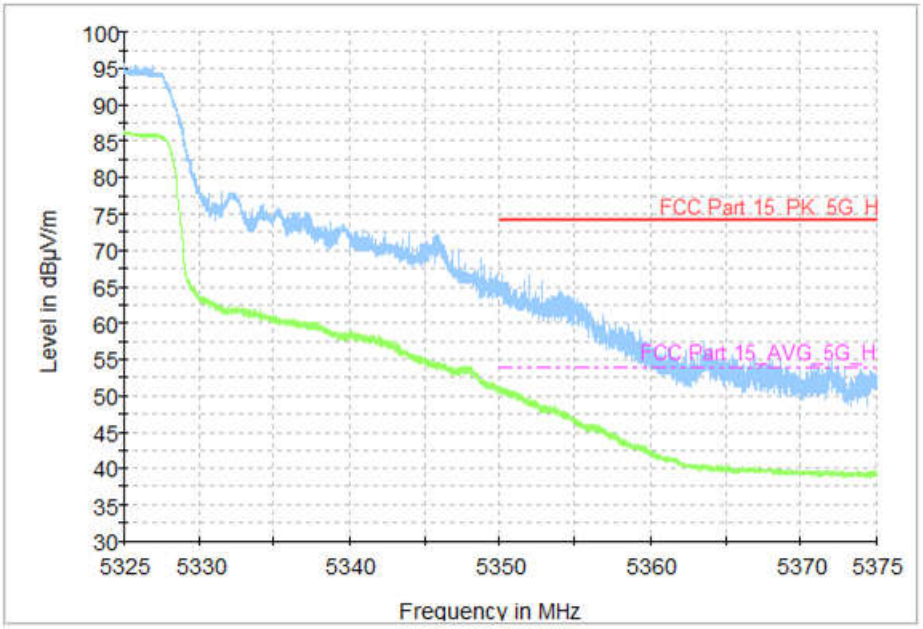



**Fig. 54 Band Edges (802.11n-HT40, CH62 5310MHz)**

*©Copyright. All rights reserved by SAICT*

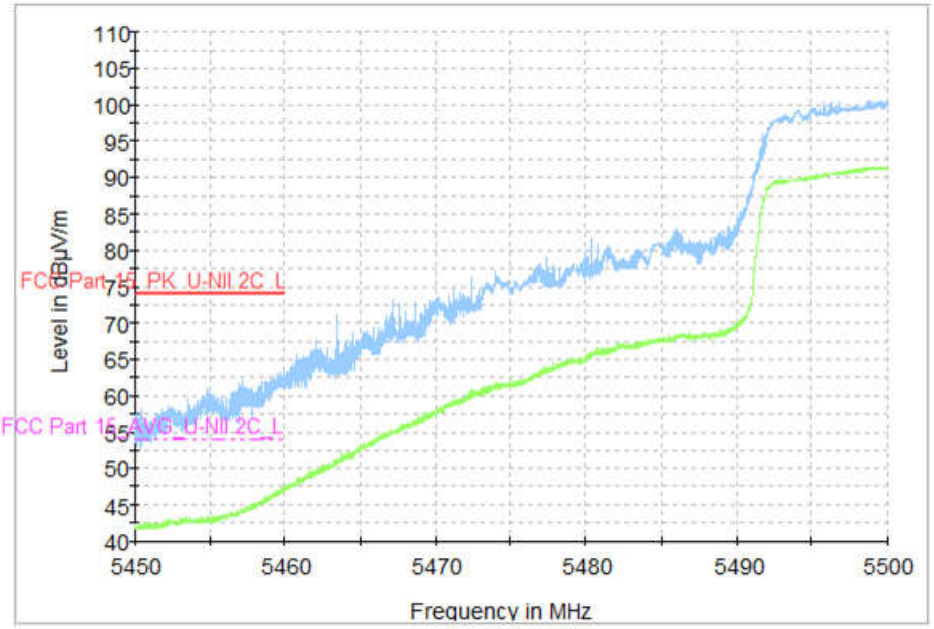



**Fig. 55 Band Edges (802.11n-HT40, CH102 5510MHz)**

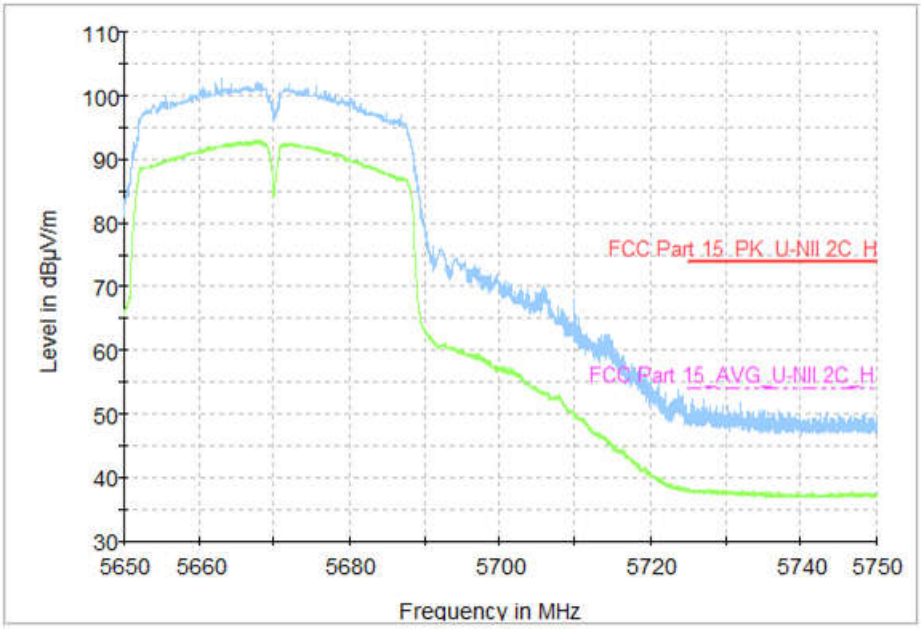



**Fig. 56 Band Edges (802.11n-HT40, CH134 5670MHz)**

*©Copyright. All rights reserved by SAICT*

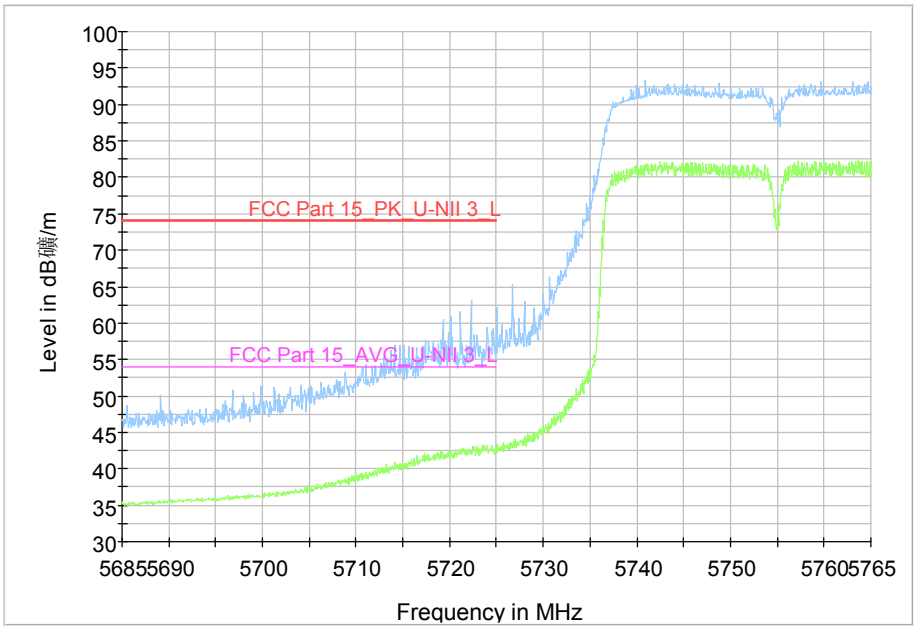



**Fig. 57 Band Edges (802.11n-HT40, CH151 5755MHz)**

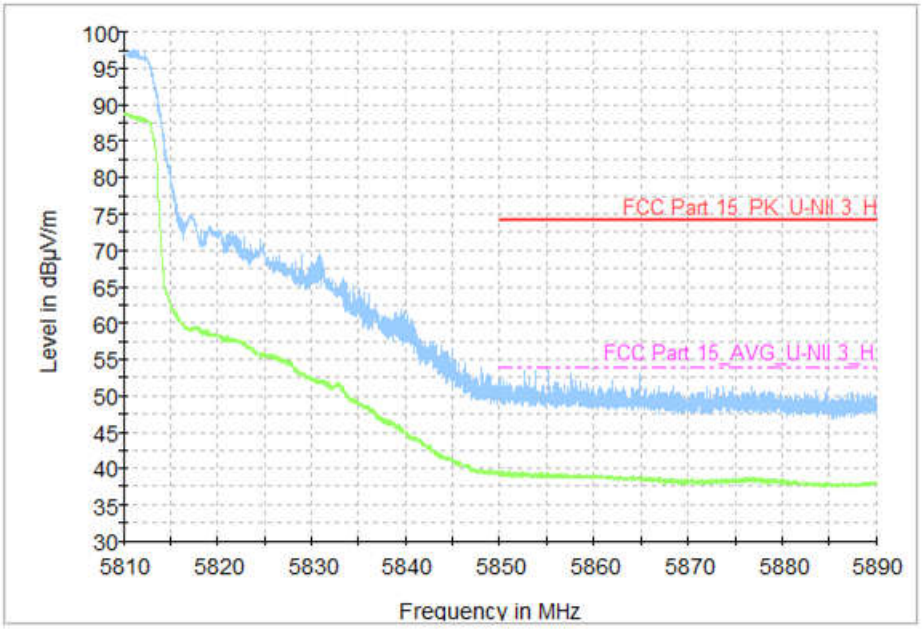



**Fig. 58 Band Edges (802.11n-HT40, CH159 5795MHz)**

©Copyright. All rights reserved by SAICT

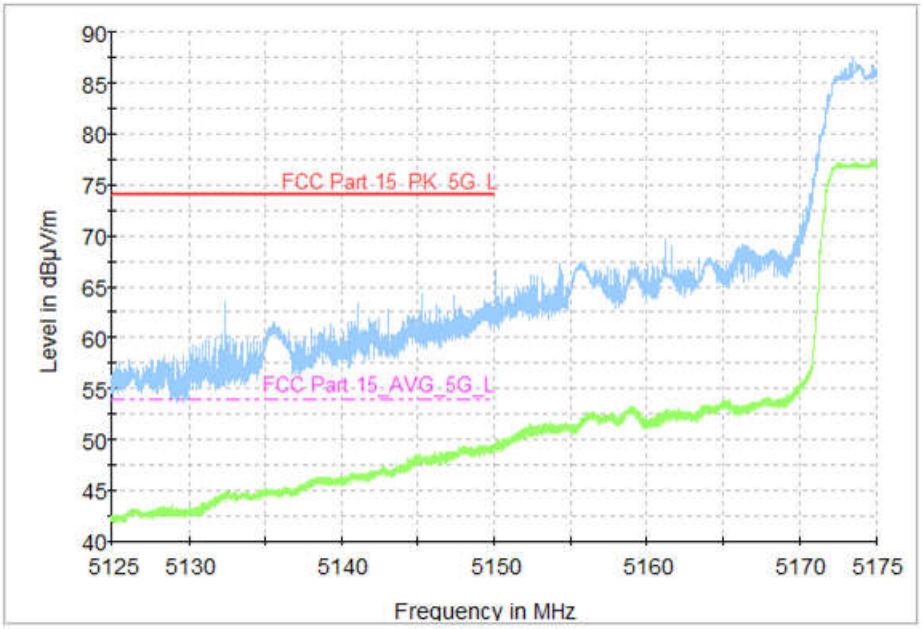



**Fig. 59 Band Edges (802.11ac-VHT80, CH42 5210MHz)**

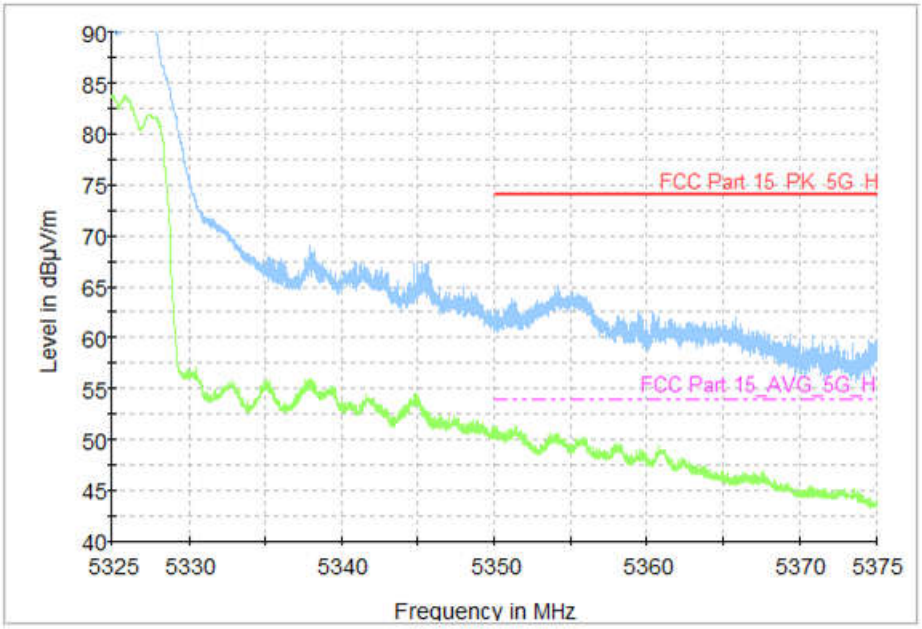



**Fig. 60 Band Edges (802.11ac-VHT80, CH58 5290MHz)**

*©Copyright. All rights reserved by SAICT*

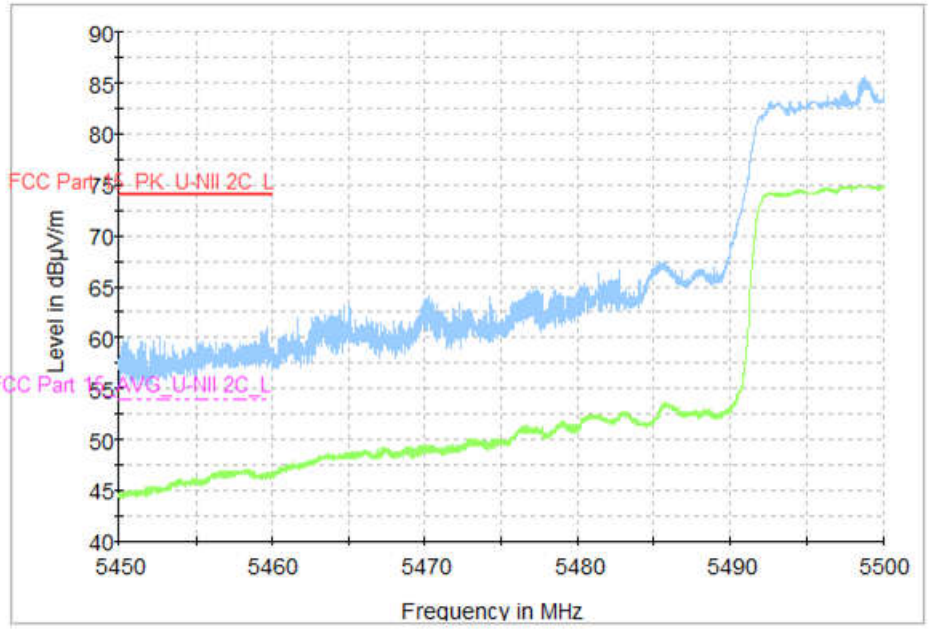



**Fig. 61 Band Edges (802.11ac-VHT80, CH106 5530MHz)**

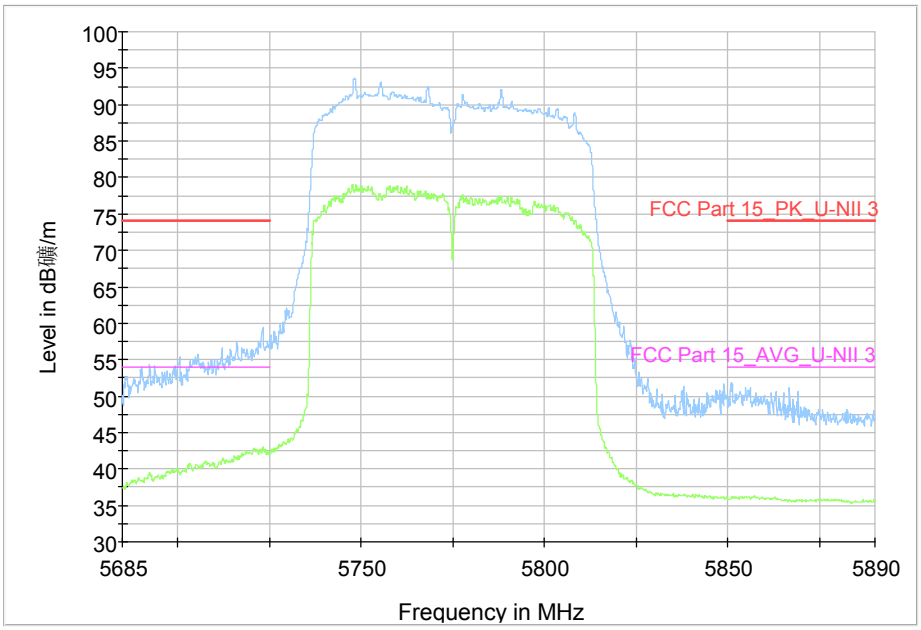



**Fig. 62 Band Edges (802.11ac-VHT80, 5775MHz)**

*©Copyright. All rights reserved by SAICT*

## A.8. Transmitter Spurious Emission

**Measurement Limit:**

| Standard | Limit (dBm/MHz) |
|---|---|
| FCC 47 CFR Part 15.407 | < -27 |

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 Result:**

| Mode | Channel | Frequency Range | Test Results | Conclusion |
|---|---|---|---|---|
| 802.11a | 5180MHz(Ch36) | 1 GHz ~18 GHz | Fig.63 | **P** |
| | 5200MHz(Ch40) | 1 GHz ~18 GHz | Fig.64 | **P** |
| | 5240MHz(Ch48) | 1 GHz ~18 GHz | Fig.65 | **P** |
| | 5260MHz(Ch52) | 1 GHz ~18 GHz | Fig.66 | **P** |
| | 5280MHz(Ch56) | 1 GHz ~18 GHz | Fig.67 | **P** |
| | 5320MHz(Ch64) | 1 GHz ~18 GHz | Fig.68 | **P** |
| | 5500MHz(Ch100) | 1 GHz ~18 GHz | Fig.69 | **P** |
| | 5580MHz(Ch116) | 1 GHz ~18 GHz | Fig.70 | **P** |
| | 5700MHz(Ch140) | 1 GHz ~18 GHz | Fig.71 | **P** |
| | 5745MHz(Ch149) | 1 GHz ~18 GHz | Fig.72 | **P** |
| | 5785MHz(Ch157) | 1 GHz ~18 GHz | Fig.73 | **P** |
| | 5825MHz(Ch165) | 1 GHz ~18 GHz | Fig.74 | **P** |
| 802.11n HT40 | 5190MHz(Ch38) | 1 GHz ~18 GHz | Fig.75 | **P** |
| | 5230MHz(Ch46) | 1 GHz ~18 GHz | Fig.76 | **P** |
| | 5270MHz(Ch54) | 1 GHz ~18 GHz | Fig.77 | **P** |
| | 5310MHz(Ch62) | 1 GHz ~18 GHz | Fig.78 | **P** |
| | 5510MHz(Ch102) | 1 GHz ~18 GHz | Fig.79 | **P** |
| | 5550MHz(Ch110) | 1 GHz ~18 GHz | Fig.80 | **P** |
| | 5670MHz(Ch134) | 1 GHz ~18 GHz | Fig.81 | **P** |
| | 5755MHz(Ch151) | 1 GHz ~18 GHz | Fig.82 | **P** |
| | 5795MHz(Ch159) | 1 GHz ~18 GHz | Fig.83 | **P** |

*©Copyright. All rights reserved by SAICT*

| | | | | |
|---|---|---|---|---|
| 802.11ac VHT80 | 5210MHz(Ch42) | 1 GHz ~18 GHz | Fig.84 | **P** |
| | 5290MHz(Ch58) | 1 GHz ~18 GHz | Fig.85 | **P** |
| | 5530MHz(Ch106) | 1 GHz ~18 GHz | Fig.86 | **P** |
| | 5610MHz(Ch122) | 1 GHz ~18 GHz | Fig.87 | **P** |
| | 5775MHz(Ch155) | 1 GHz ~18 GHz | Fig.88 | **P** |
| All channels | | 30 MHz ~1 GHz | Fig.89 | **P** |
| | | 18 GHz ~26.5 GHz | Fig.90 | **P** |
| | | 26.5GHz~40GHz | Fig.91 | **P** |

**Conclusion: PASS**

**Test graphs as below:**

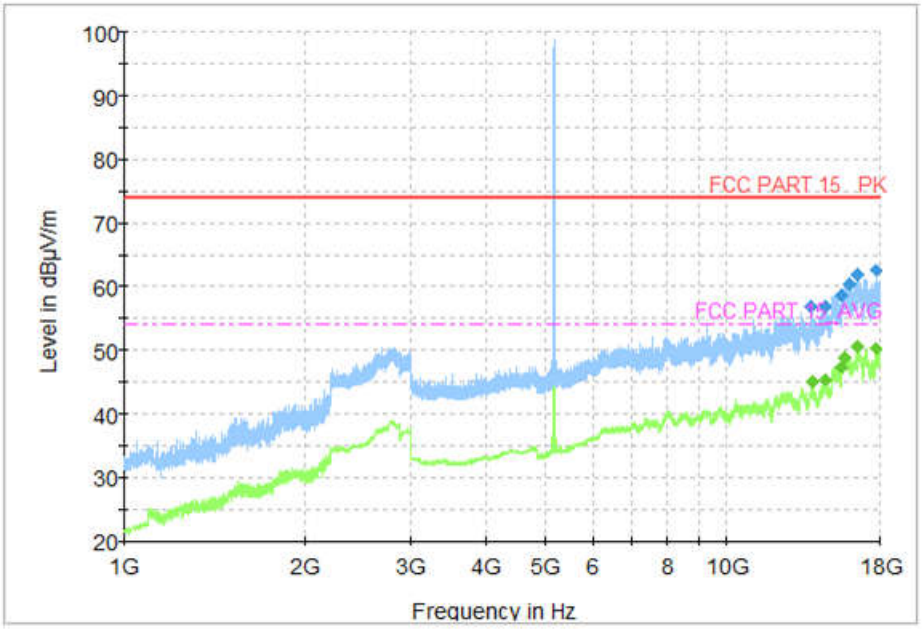



**Fig. 63 Transmitter Spurious Emission (802.11n-HT20, 5180MHz)**

©Copyright. All rights reserved by SAICT

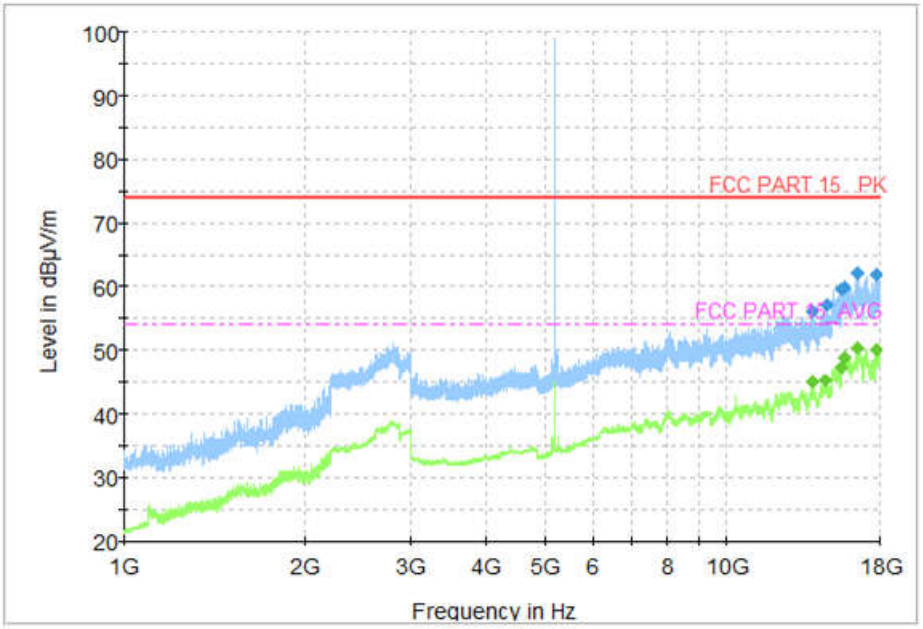



**Fig. 64 Transmitter Spurious Emission (802.11n-HT20, 5200MHz)**

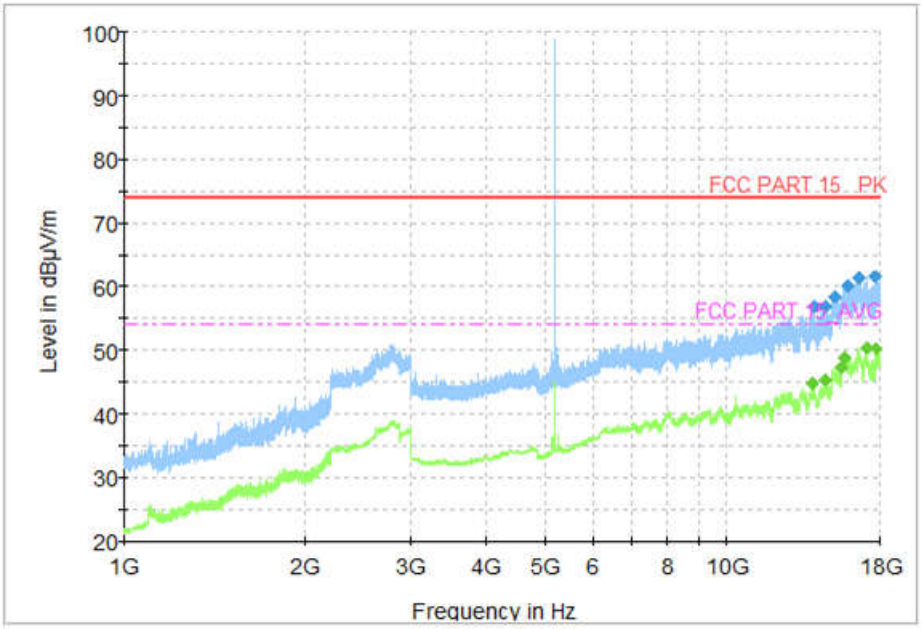



**Fig. 65 Transmitter Spurious Emission (802.11n-HT20, 5240MHz)**

*©Copyright. All rights reserved by SAICT*

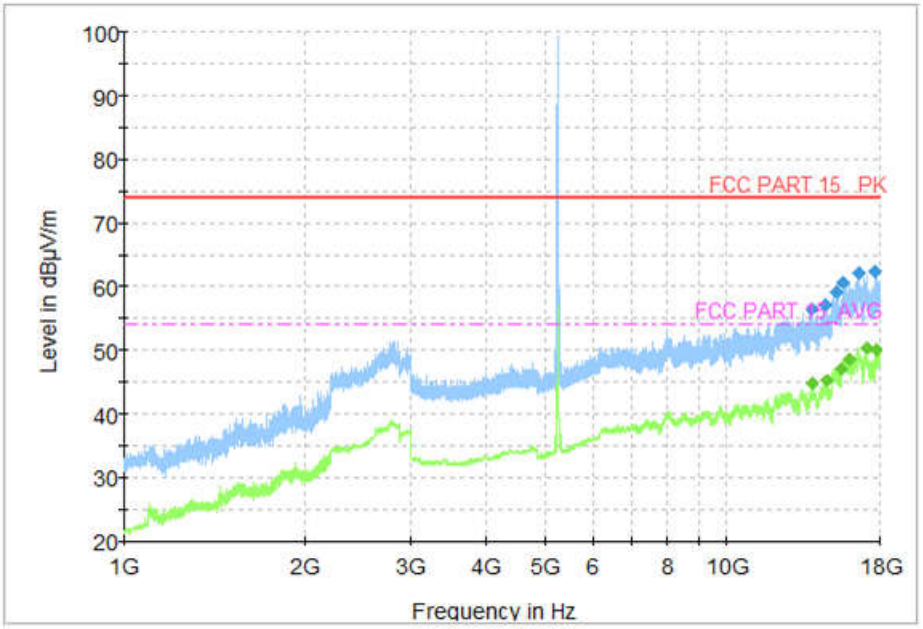



**Fig. 66 Transmitter Spurious Emission (802.11n-HT20, 5260MHz)**

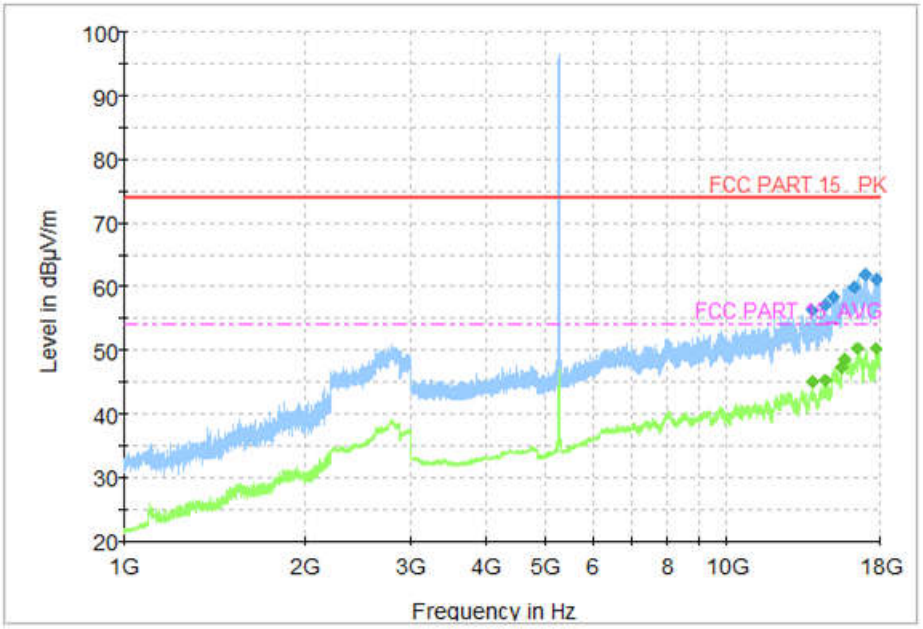



**Fig. 67 Transmitter Spurious Emission (802.11n-HT20, 5280MHz)**

*©Copyright. All rights reserved by SAICT*

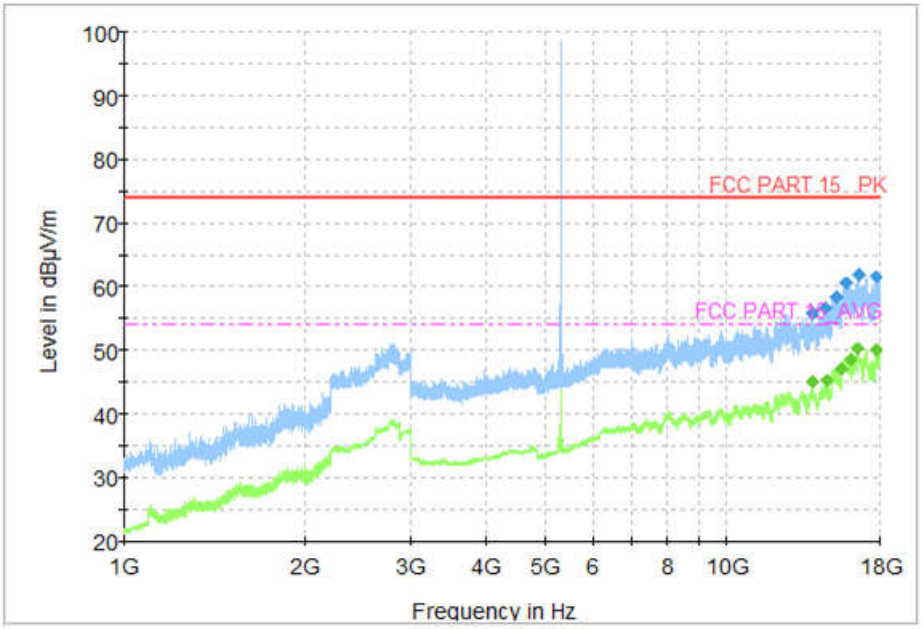



**Fig. 68 Transmitter Spurious Emission (802.11n-HT20, 5320MHz)**

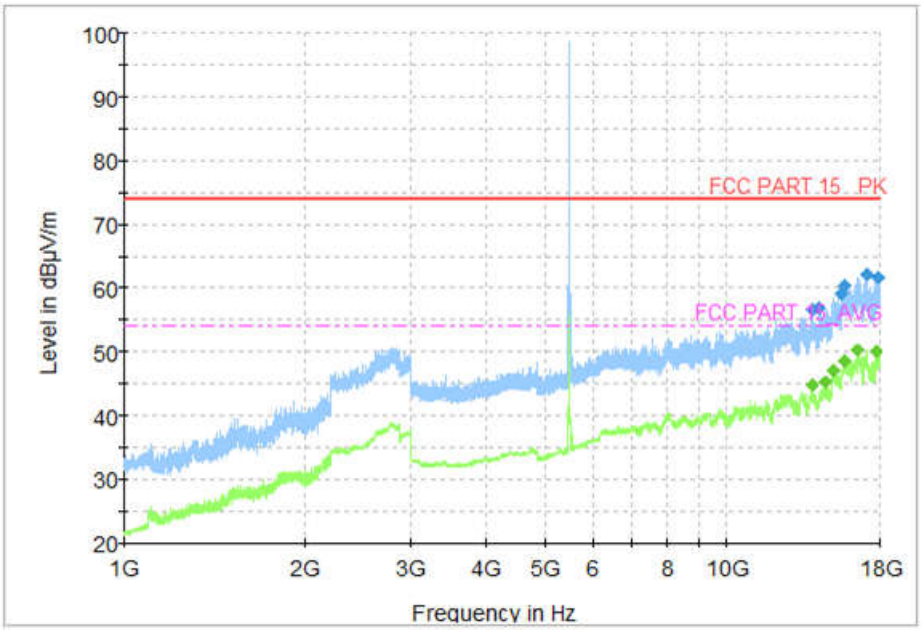



**Fig. 69 Transmitter Spurious Emission (802. 11n-HT20, 5500MHz)**

*©Copyright. All rights reserved by SAICT*

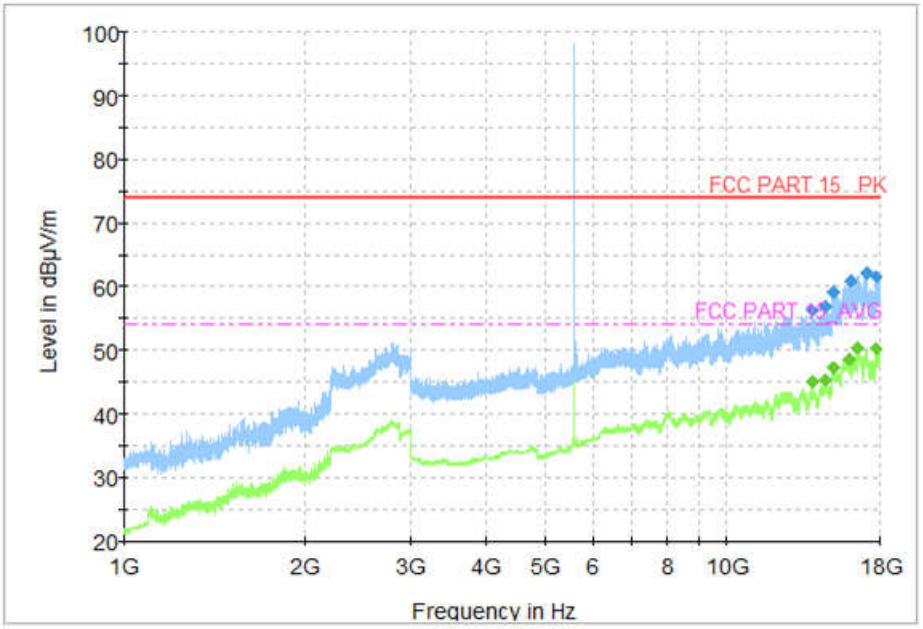



**Fig. 70 Transmitter Spurious Emission (802. 11n-HT20, 5600MHz)**

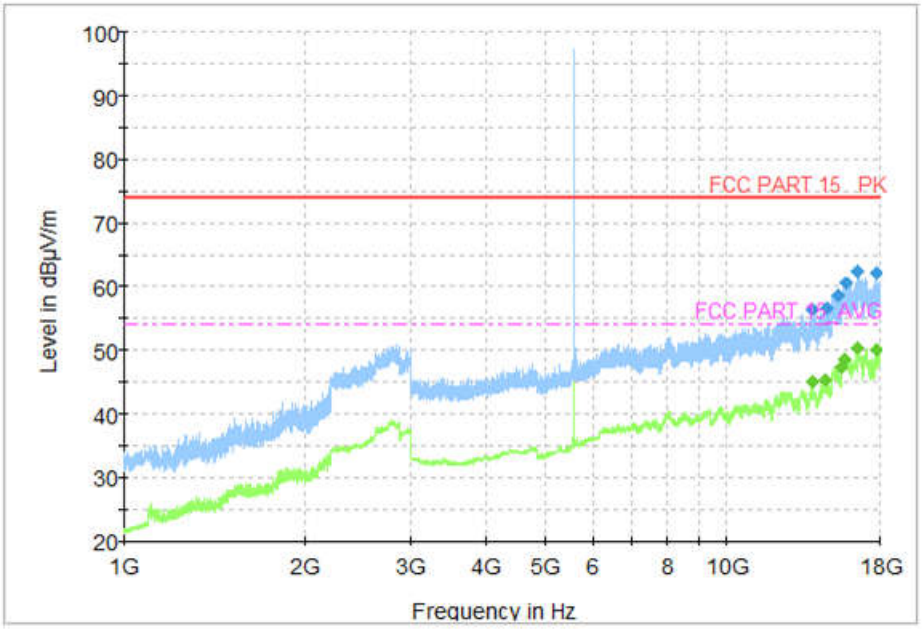



**Fig. 71 Transmitter Spurious Emission (802. 11n-HT20, 5700MHz)**

*©Copyright. All rights reserved by SAICT*

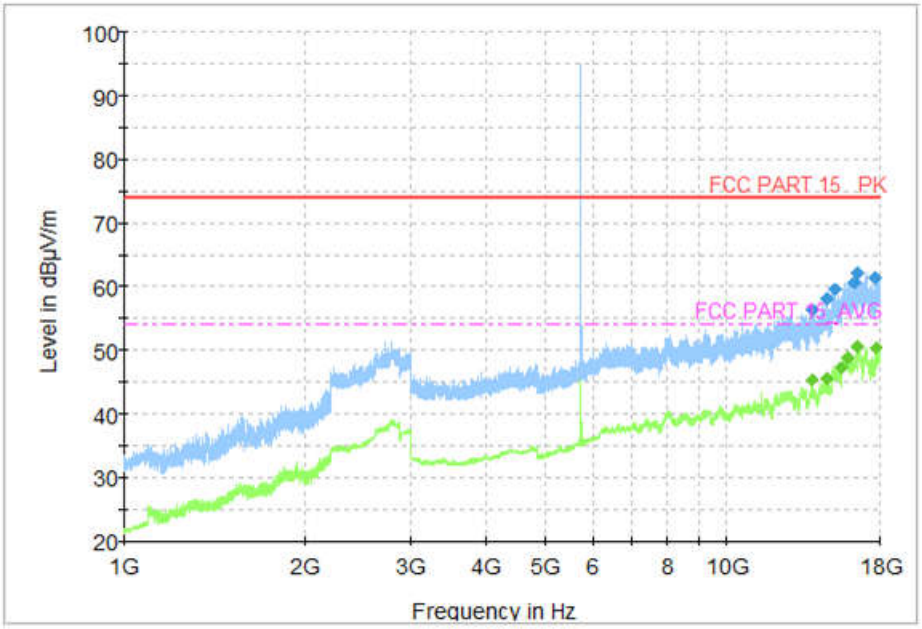



**Fig. 72 Transmitter Spurious Emission (802. 11n-HT20, 5745MHz)**

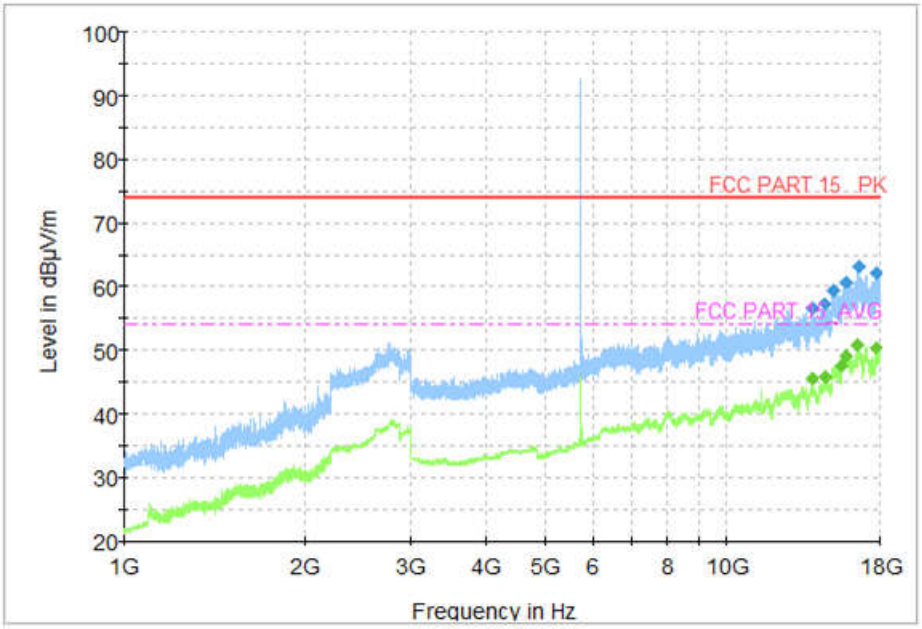



**Fig. 73 Transmitter Spurious Emission (802. 11n-HT20, 5785MHz)**

*©Copyright. All rights reserved by SAICT*

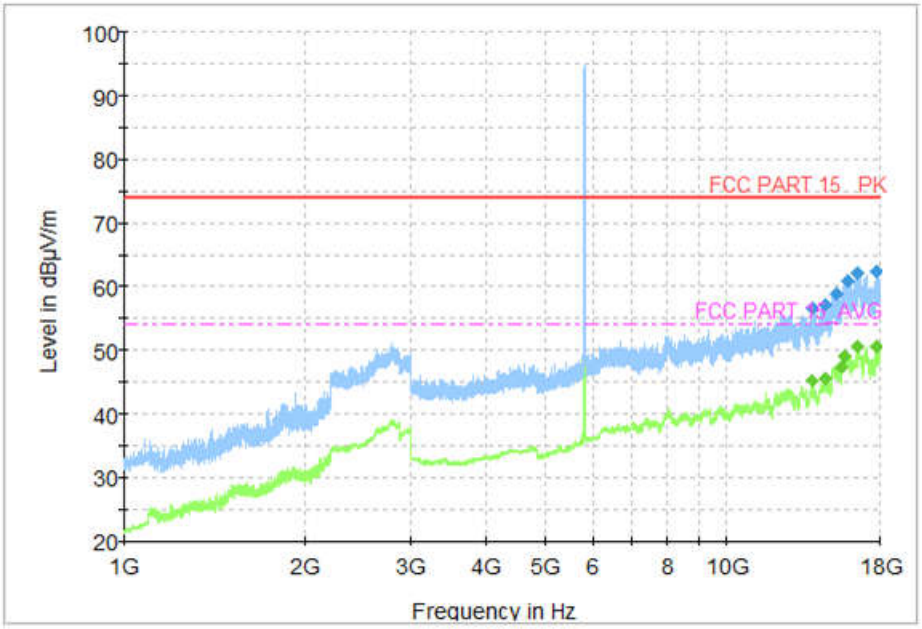



**Fig. 74 Transmitter Spurious Emission (802. 11n-HT20, 5825MHz)**

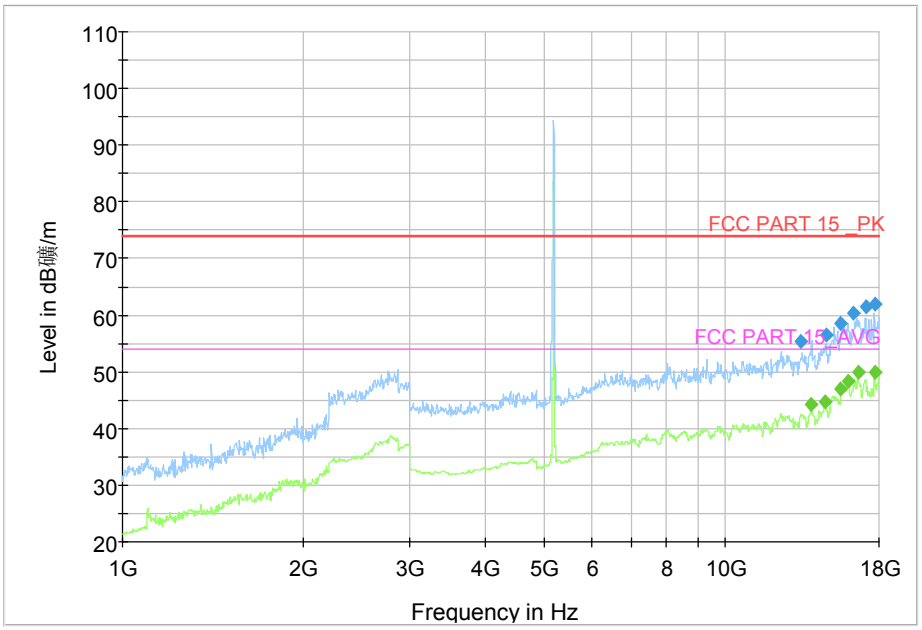



**Fig. 75 Transmitter Spurious Emission (802.11n-HT40, 5190MHz)**

*©Copyright. All rights reserved by SAICT*

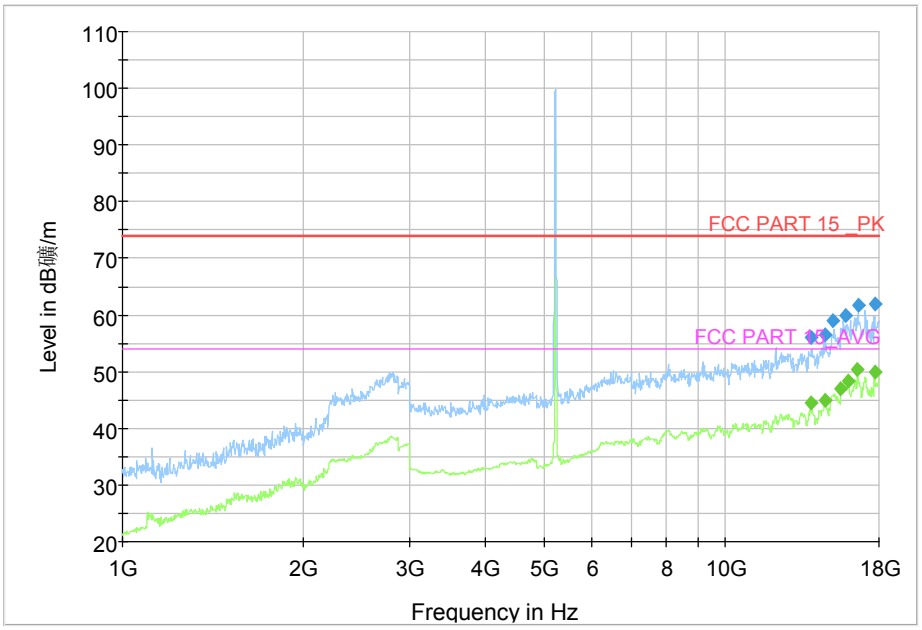



**Fig. 76 Transmitter Spurious Emission (802.11n-HT40, 5230MHz)**

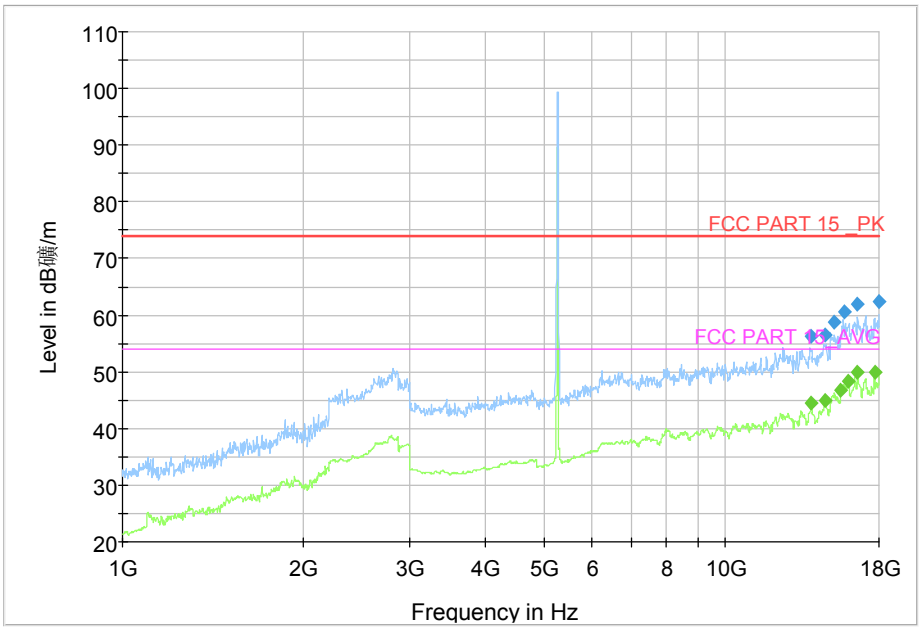



**Fig. 77 Transmitter Spurious Emission (802.11n-HT40, 5270MHz)**

*©Copyright. All rights reserved by SAICT*

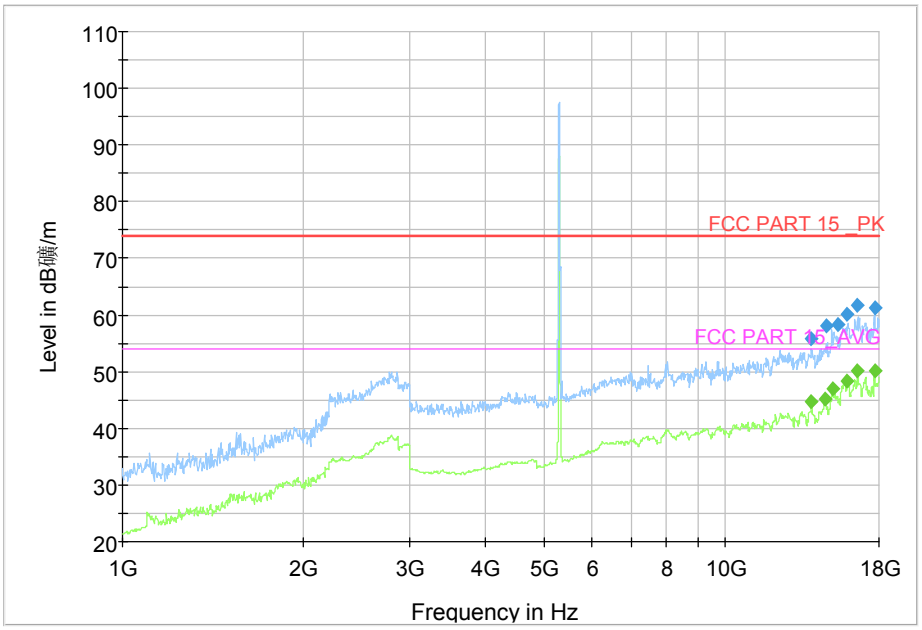



**Fig. 78 Transmitter Spurious Emission (802.11n-HT40, 5310MHz)**

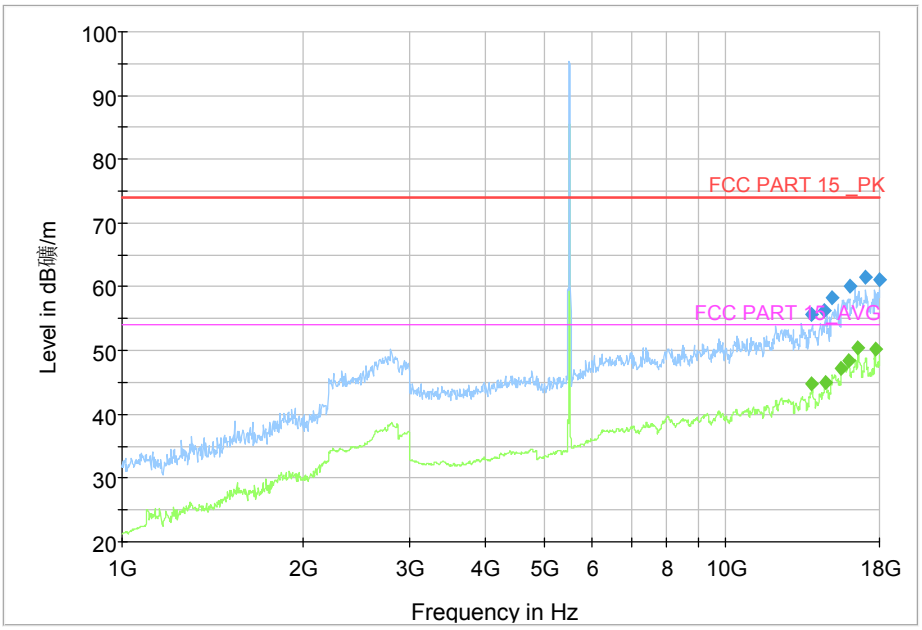



**Fig. 79 Transmitter Spurious Emission (802. 11n-HT40, 5510MHz)**

*©Copyright. All rights reserved by SAICT*

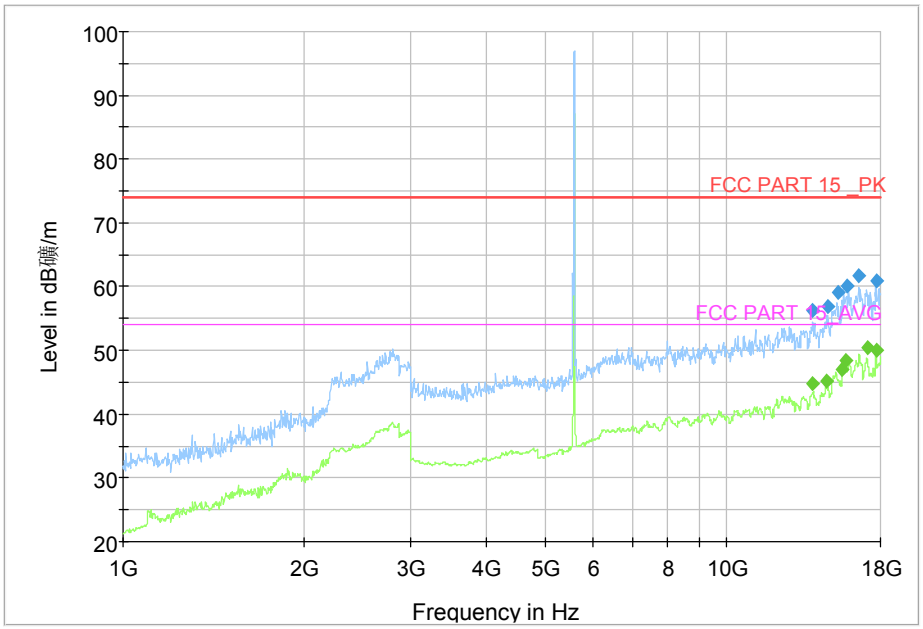



**Fig. 80 Transmitter Spurious Emission (802. 11n-HT40, 5590MHz)**

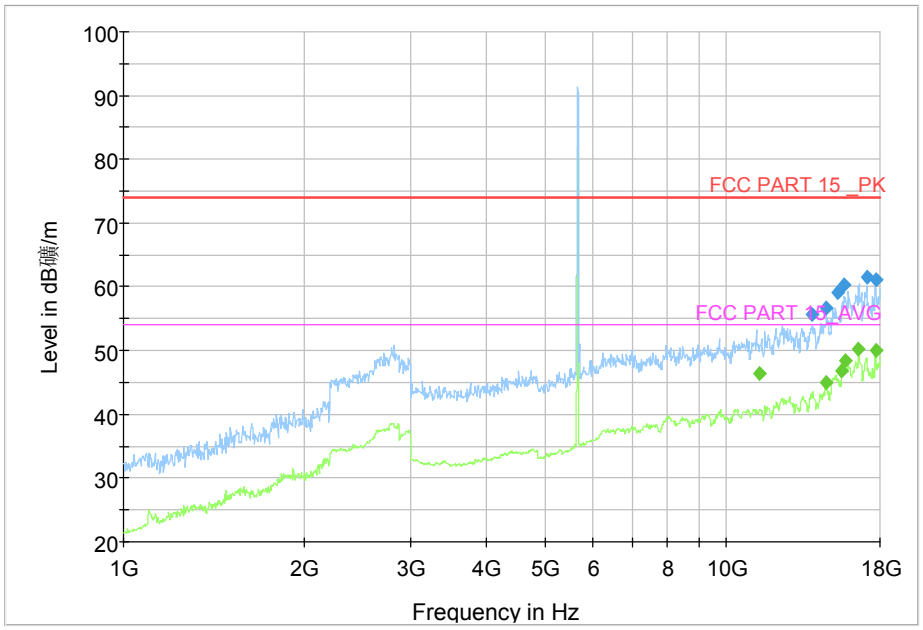



**Fig. 81 Transmitter Spurious Emission (802. 11n-HT40, 5670MHz)**

*©Copyright. All rights reserved by SAICT*

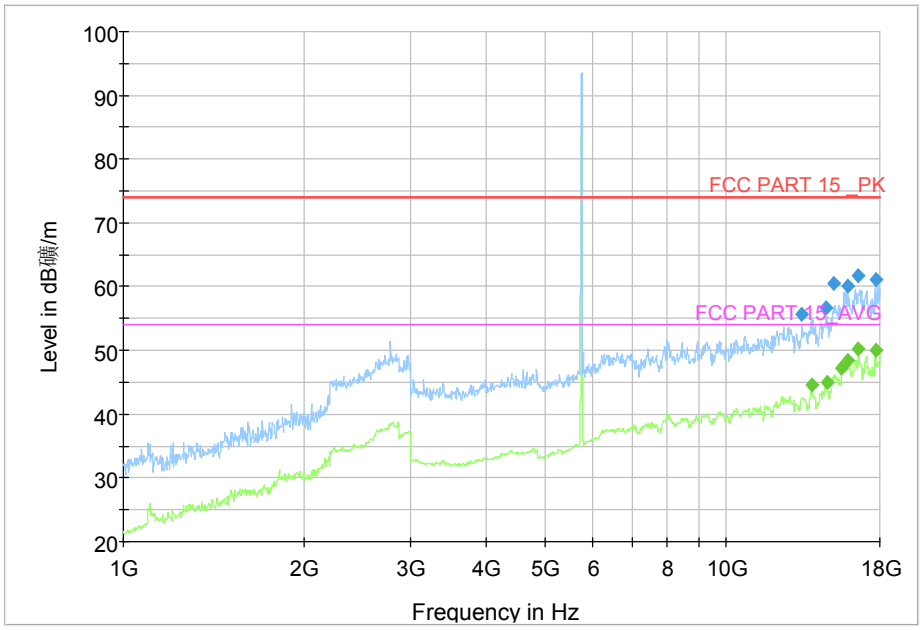



**Fig. 82 Transmitter Spurious Emission (802. 11n-HT40, 5755MHz)**

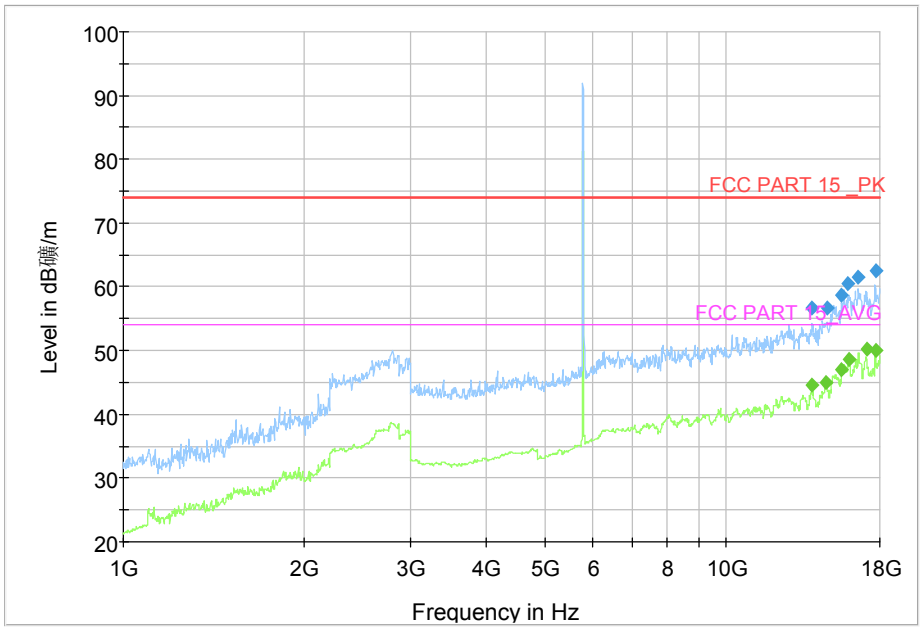



**Fig. 83 Transmitter Spurious Emission (802. 11n-HT40, 5795MHz)**

*©Copyright. All rights reserved by SAICT*

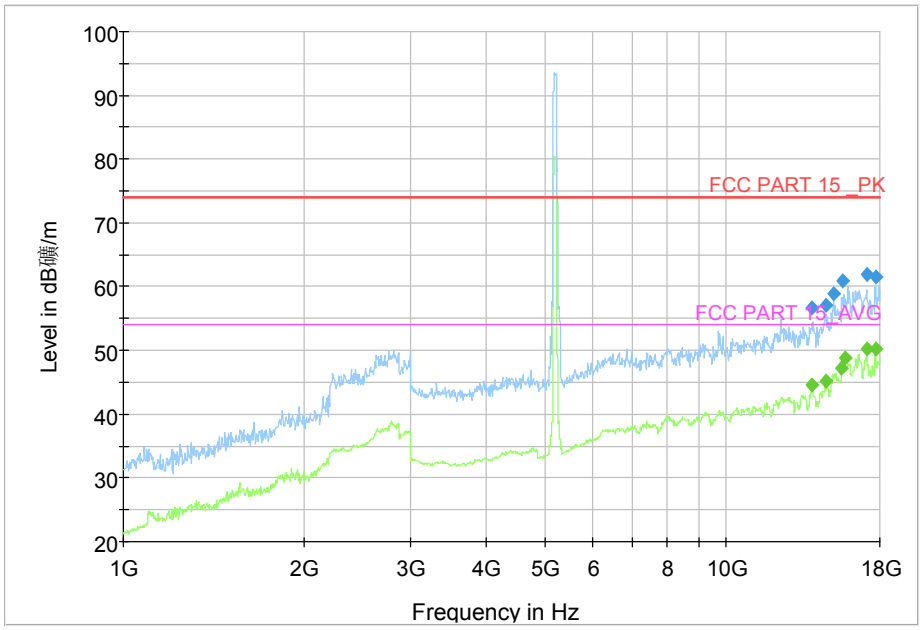



**Fig. 84 Transmitter Spurious Emission (802. 11ac-VHT80, 5210MHz)**

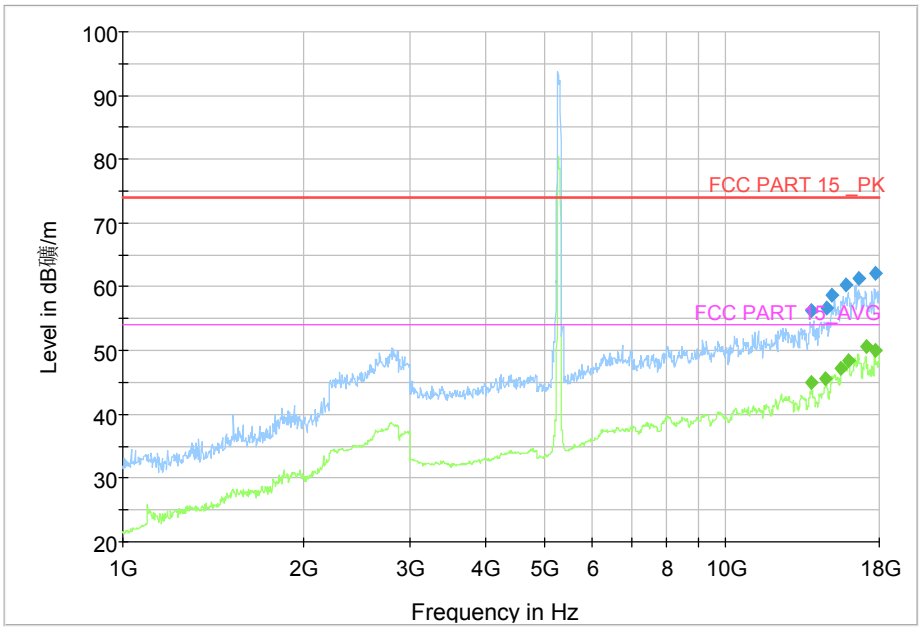



**Fig. 85 Transmitter Spurious Emission (802. 11ac-VHT80, 5290MHz)**

©Copyright. All rights reserved by SAICT

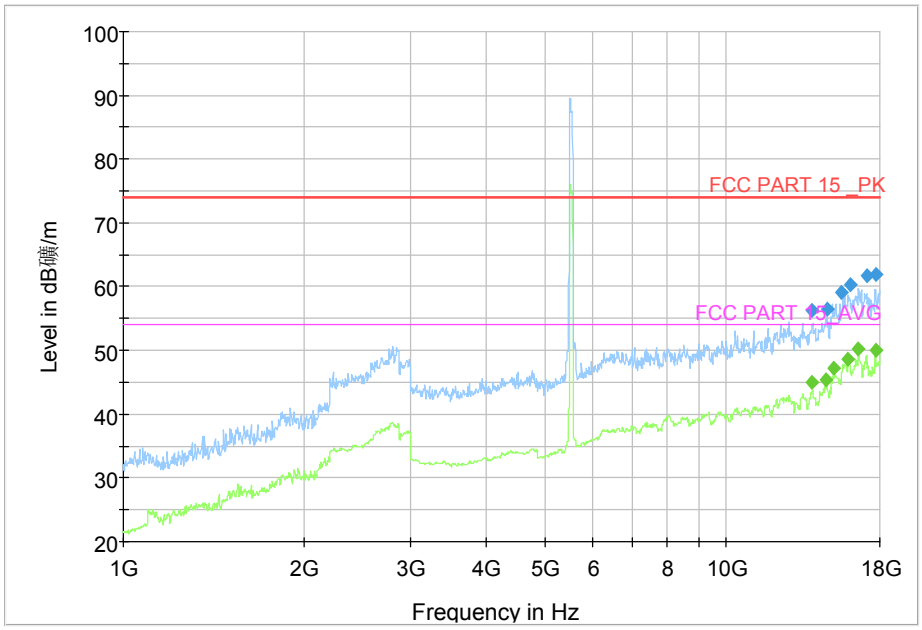



**Fig. 86 Transmitter Spurious Emission (802. 11ac-VHT80, 5530MHz)**

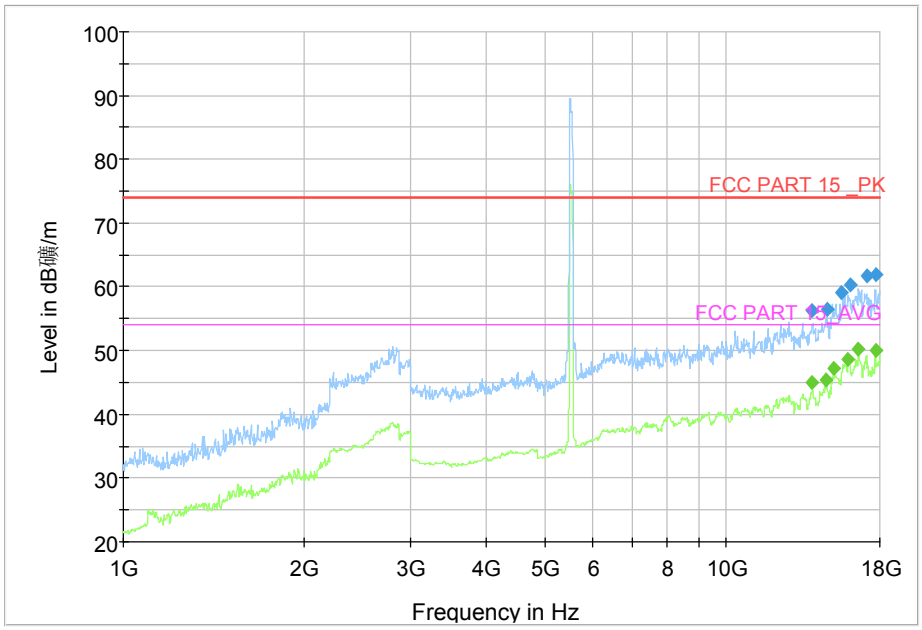



**Fig. 87 Transmitter Spurious Emission (802. 11ac-VHT80, 5610MHz)**

*©Copyright. All rights reserved by SAICT*

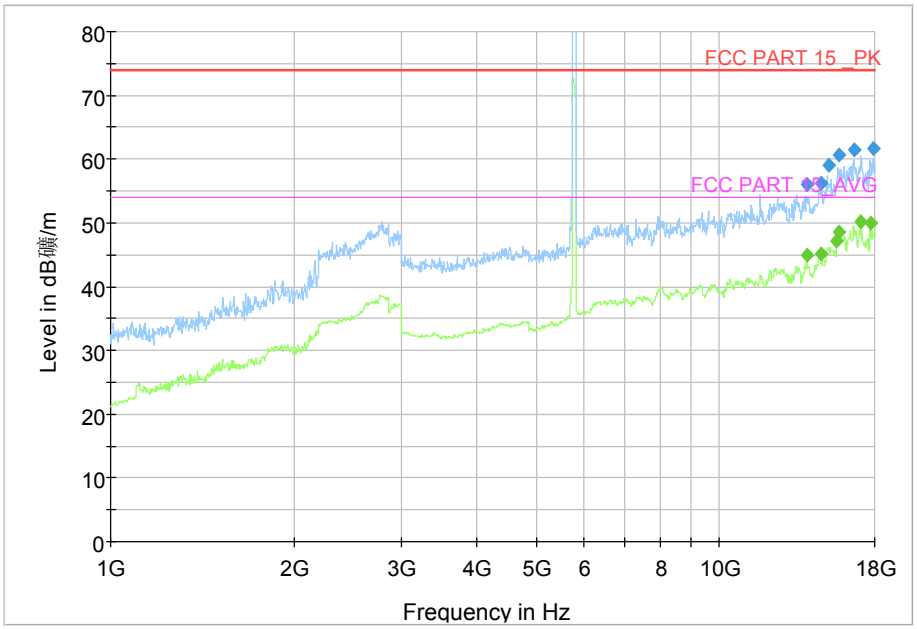



**Fig. 88 Transmitter Spurious Emission (802. 11ac-VHT80, 5775MHz)**

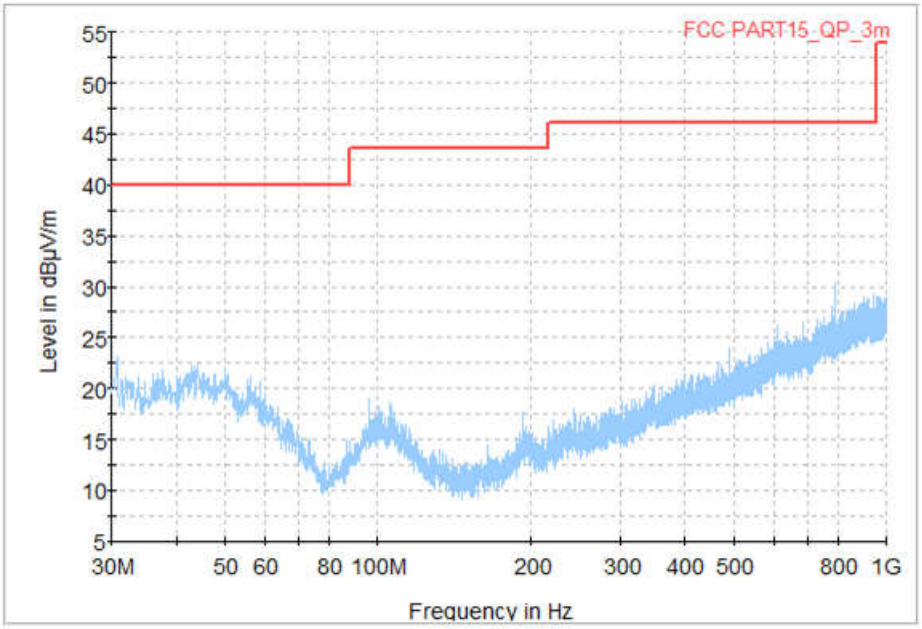



**Fig. 89 Transmitter Spurious Emission (All channel, 30MHz~1GHz)**

*©Copyright. All rights reserved by SAICT*

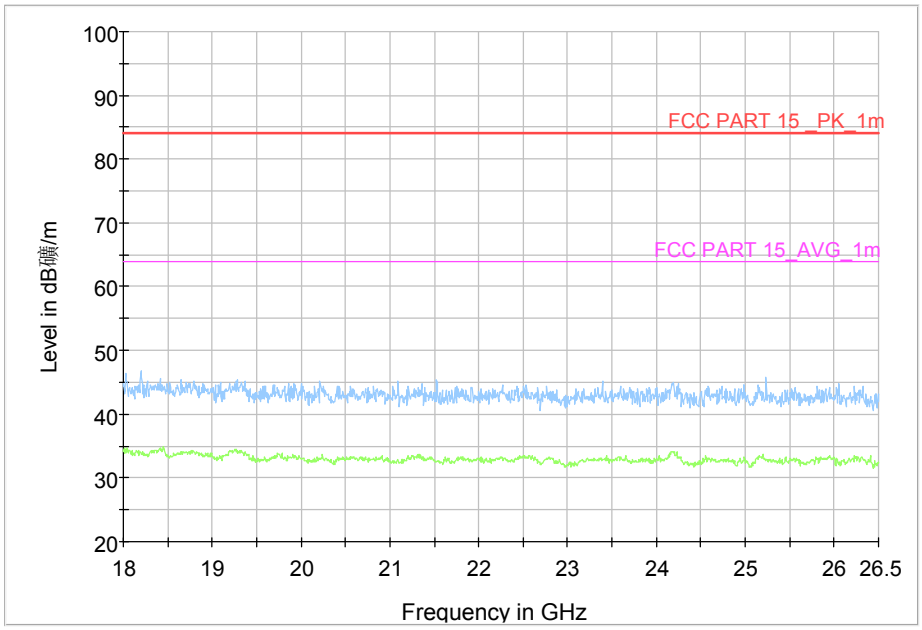



**Fig. 90 Transmitter Spurious Emission (All channel, 18GHz~26.5GHz)**

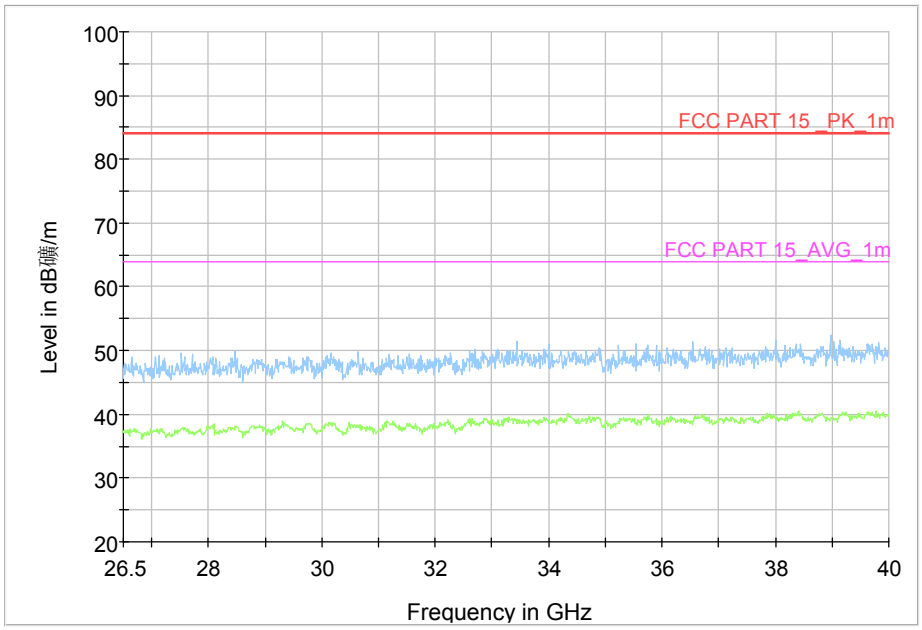



**Fig. 91 Transmitter Spurious Emission (All channel, 26.5GHz~40GHz)**

*©Copyright. All rights reserved by SAICT*

**Worst Case Result**

**802.11a CH36**

| Frequency (MHz) | Max Peak (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Pol | Corr. (dB) |
|---|---|---|---|---|---|
| 13908.000000 | 54.76 | 74.00 | 19.24 | H | 21.0 |
| 14619.500000 | 55.28 | 74.00 | 18.72 | H | 21.7 |
| 15040.500000 | 59.94 | 74.00 | 14.06 | H | 22.5 |
| 15646.000000 | 61.39 | 74.00 | 12.61 | H | 23.7 |
| 17113.000000 | 62.10 | 74.00 | 11.90 | H | 26.2 |
| 17707.500000 | 61.69 | 74.00 | 12.31 | H | 27.6 |

| Frequency (MHz) | Max Peak (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Pol | Corr. (dB) |
|---|---|---|---|---|---|
| 7137.000000 | 43.24 | 54.00 | 10.76 | V | 13.1 |
| 14642.500000 | 43.35 | 54.00 | 10.65 | V | 21.3 |
| 15575.000000 | 48.10 | 54.00 | 5.90 | V | 23.7 |
| 15939.000000 | 49.46 | 54.00 | 4.54 | V | 24.9 |
| 16583.000000 | 50.31 | 54.00 | 3.69 | V | 26.4 |
| 17708.500000 | 49.99 | 54.00 | 4.01 | H | 27.6 |

**802.11a CH64**

| Frequency (MHz) | Max Peak (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Pol | Corr. (dB) |
|---|---|---|---|---|---|
| 13895.000000 | 54.10 | 74.00 | 19.90 | V | 20.3 |
| 14608.000000 | 55.19 | 74.00 | 18.81 | V | 21.4 |
| 15006.500000 | 59.53 | 74.00 | 14.47 | V | 22.4 |
| 15928.500000 | 61.53 | 74.00 | 12.47 | H | 24.8 |
| 17140.500000 | 61.82 | 74.00 | 12.18 | V | 26.7 |
| 17878.500000 | 61.57 | 74.00 | 12.43 | V | 28.0 |

| Frequency (MHz) | Max Peak (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Pol | Corr. (dB) |
|---|---|---|---|---|---|
| 13911.000000 | 42.82 | 54.00 | 11.18 | V | 21.1 |
| 14660.000000 | 43.45 | 54.00 | 10.55 | V | 21.3 |
| 15574.500000 | 48.14 | 54.00 | 5.86 | V | 23.7 |
| 15925.000000 | 49.43 | 54.00 | 4.57 | H | 24.7 |
| 16589.000000 | 50.45 | 54.00 | 3.55 | V | 26.3 |
| 17717.000000 | 50.06 | 54.00 | 3.94 | V | 27.7 |

*©Copyright. All rights reserved by SAICT*

**802.11a CH100**

| Frequency (MHz) | Max Peak (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Pol | Corr. (dB) |
|---|---|---|---|---|---|
| 13403.000000 | 54.40 | 74.00 | 19.60 | V | 19.8 |
| 14651.000000 | 55.17 | 74.00 | 18.83 | H | 21.2 |
| 15523.000000 | 60.15 | 74.00 | 13.85 | V | 22.9 |
| 15943.000000 | 61.25 | 74.00 | 12.75 | V | 24.9 |
| 16583.000000 | 61.99 | 74.00 | 12.01 | V | 26.4 |
| 17717.000000 | 62.61 | 74.00 | 11.39 | H | 27.7 |

| Frequency (MHz) | Max Peak (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Pol | Corr. (dB) |
|---|---|---|---|---|---|
| 7136.500000 | 43.18 | 54.00 | 10.82 | V | 13.1 |
| 14646.500000 | 43.46 | 54.00 | 10.54 | V | 21.3 |
| 15571.000000 | 48.03 | 54.00 | 5.97 | V | 23.6 |
| 15935.000000 | 49.44 | 54.00 | 4.56 | V | 24.9 |
| 16596.000000 | 50.46 | 54.00 | 3.54 | H | 26.3 |
| 17705.000000 | 50.35 | 54.00 | 3.65 | H | 27.6 |

**802.11a CH165**

| Frequency (MHz) | Max Peak (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Pol | Corr. (dB) |
|---|---|---|---|---|---|
| 12346.500000 | 55.35 | 74.00 | 18.65 | H | 19.3 |
| 14674.500000 | 56.34 | 74.00 | 17.66 | V | 21.3 |
| 15553.000000 | 60.57 | 74.00 | 13.43 | H | 23.3 |
| 16241.000000 | 61.82 | 74.00 | 12.18 | H | 25.1 |
| 17113.500000 | 63.10 | 74.00 | 10.90 | V | 26.2 |
| 17693.000000 | 62.19 | 74.00 | 11.81 | H | 27.0 |

| Frequency (MHz) | Max Peak (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Pol | Corr. (dB) |
|---|---|---|---|---|---|
| 13911.000000 | 44.24 | 54.00 | 9.76 | V | 21.1 |
| 14681.000000 | 44.66 | 54.00 | 9.34 | V | 21.5 |
| 15568.500000 | 48.67 | 54.00 | 5.33 | H | 23.5 |
| 15966.500000 | 50.00 | 54.00 | 4.00 | H | 25.5 |
| 16584.000000 | 50.90 | 54.00 | 3.10 | H | 26.4 |
| 17714.000000 | 50.68 | 54.00 | 3.32 | H | 27.7 |

*©Copyright. All rights reserved by SAICT*

**802.11n HT40 CH38**

| Frequency (MHz) | Max Peak (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Pol | Corr. (dB) |
|---|---|---|---|---|---|
| 13916.000000 | 54.43 | 74.00 | 19.57 | H | 20.7 |
| 14668.000000 | 55.18 | 74.00 | 18.82 | V | 21.3 |
| 15469.500000 | 60.32 | 74.00 | 13.68 | V | 23.0 |
| 16034.000000 | 61.70 | 74.00 | 12.30 | V | 24.8 |
| 16627.000000 | 61.96 | 74.00 | 12.04 | V | 26.1 |
| 17711.000000 | 61.82 | 74.00 | 12.18 | H | 27.7 |

| Frequency (MHz) | Max Peak (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Pol | Corr. (dB) |
|---|---|---|---|---|---|
| 13911.000000 | 43.34 | 54.00 | 10.66 | H | 21.1 |
| 14663.500000 | 43.64 | 54.00 | 10.36 | V | 21.3 |
| 15574.000000 | 48.22 | 54.00 | 5.78 | H | 23.7 |
| 15925.000000 | 49.63 | 54.00 | 4.37 | H | 24.7 |
| 16593.500000 | 50.45 | 54.00 | 3.55 | V | 26.3 |
| 17711.000000 | 50.08 | 54.00 | 3.92 | V | 27.7 |

**802.11n HT40 CH54**

| Frequency (MHz) | Max Peak (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Pol | Corr. (dB) |
|---|---|---|---|---|---|
| 13907.500000 | 54.63 | 74.00 | 19.37 | V | 21.0 |
| 14365.000000 | 56.15 | 74.00 | 17.85 | V | 21.1 |
| 15576.000000 | 59.54 | 74.00 | 14.46 | H | 23.8 |
| 15967.500000 | 61.77 | 74.00 | 12.23 | V | 25.6 |
| 17106.500000 | 62.14 | 74.00 | 11.86 | V | 25.9 |
| 17715.500000 | 61.98 | 74.00 | 12.02 | H | 27.7 |

| Frequency (MHz) | Max Peak (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Pol | Corr. (dB) |
|---|---|---|---|---|---|
| 2379.000000 | 43.14 | 54.00 | 10.86 | V | 10.7 |
| 14681.000000 | 43.78 | 54.00 | 10.22 | V | 21.5 |
| 15571.500000 | 48.31 | 54.00 | 5.69 | V | 23.6 |
| 15926.000000 | 49.55 | 54.00 | 4.45 | H | 24.7 |
| 16589.000000 | 50.66 | 54.00 | 3.34 | V | 26.3 |
| 17707.500000 | 50.14 | 54.00 | 3.86 | V | 27.6 |

*©Copyright. All rights reserved by SAICT*

**802.11n HT40 CH102**

| Frequency (MHz) | Max Peak (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Pol | Corr. (dB) |
|---|---|---|---|---|---|
| 13905.500000 | 54.29 | 74.00 | 19.71 | H | 20.9 |
| 14361.000000 | 55.36 | 74.00 | 18.64 | H | 21.3 |
| 15324.500000 | 59.98 | 74.00 | 14.02 | V | 22.7 |
| 15939.000000 | 61.88 | 74.00 | 12.12 | V | 24.9 |
| 16661.500000 | 62.32 | 74.00 | 11.68 | V | 25.5 |
| 17720.000000 | 61.81 | 74.00 | 12.19 | V | 27.7 |

| Frequency (MHz) | Max Peak (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Pol | Corr. (dB) |
|---|---|---|---|---|---|
| 2379.000000 | 43.99 | 54.00 | 10.01 | V | 10.7 |
| 14670.500000 | 43.73 | 54.00 | 10.27 | V | 21.3 |
| 15574.500000 | 48.34 | 54.00 | 5.66 | H | 23.7 |
| 15929.000000 | 49.53 | 54.00 | 4.47 | V | 24.8 |
| 17109.500000 | 50.53 | 54.00 | 3.47 | V | 26.2 |
| 17714.500000 | 50.16 | 54.00 | 3.84 | V | 27.7 |

**802.11n HT40 CH151**

| Frequency (MHz) | Max Peak (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Pol | Corr. (dB) |
|---|---|---|---|---|---|
| 13910.500000 | 54.32 | 74.00 | 19.68 | H | 21.1 |
| 14670.500000 | 55.93 | 74.00 | 18.07 | H | 21.3 |
| 15554.500000 | 59.83 | 74.00 | 14.17 | V | 23.3 |
| 15962.000000 | 61.64 | 74.00 | 12.36 | H | 25.4 |
| 17116.000000 | 62.12 | 74.00 | 11.88 | V | 26.2 |
| 17703.000000 | 61.93 | 74.00 | 12.07 | V | 27.5 |

| Frequency (MHz) | Max Peak (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Pol | Corr. (dB) |
|---|---|---|---|---|---|
| 13911.500000 | 43.03 | 54.00 | 10.97 | H | 21.0 |
| 14645.500000 | 43.63 | 54.00 | 10.37 | V | 21.3 |
| 15574.000000 | 48.24 | 54.00 | 5.76 | V | 23.7 |
| 15939.000000 | 49.71 | 54.00 | 4.29 | H | 24.9 |
| 16585.000000 | 50.47 | 54.00 | 3.53 | V | 26.4 |
| 17705.500000 | 50.15 | 54.00 | 3.85 | V | 27.6 |

*©Copyright. All rights reserved by SAICT*

**802.11ac VHT80 CH42**

| Frequency (MHz) | Max Peak (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Pol | Corr. (dB) |
|---|---|---|---|---|---|
| 13958.500000 | 54.80 | 74.00 | 19.20 | V | 20.0 |
| 14589.500000 | 55.49 | 74.00 | 18.51 | V | 21.3 |
| 15576.500000 | 60.91 | 74.00 | 13.09 | H | 23.8 |
| 15969.500000 | 61.16 | 74.00 | 12.84 | H | 25.6 |
| 16595.500000 | 62.38 | 74.00 | 11.62 | V | 26.3 |
| 17994.500000 | 61.67 | 74.00 | 12.33 | H | 27.5 |

| Frequency (MHz) | Max Peak (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Pol | Corr. (dB) |
|---|---|---|---|---|---|
| 13910.500000 | 43.15 | 54.00 | 10.85 | H | 21.1 |
| 14685.000000 | 43.68 | 54.00 | 10.32 | V | 21.5 |
| 15573.500000 | 48.25 | 54.00 | 5.75 | V | 23.7 |
| 15935.500000 | 49.80 | 54.00 | 4.20 | V | 24.9 |
| 16593.000000 | 50.60 | 54.00 | 3.40 | V | 26.3 |
| 17712.000000 | 50.29 | 54.00 | 3.71 | H | 27.7 |

**802.11ac VHT80 CH106**

| Frequency (MHz) | Max Peak (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Pol | Corr. (dB) |
|---|---|---|---|---|---|
| 12306.500000 | 54.92 | 74.00 | 19.08 | V | 18.9 |
| 14624.500000 | 55.57 | 74.00 | 18.43 | V | 21.6 |
| 15529.500000 | 60.38 | 74.00 | 13.62 | H | 23.0 |
| 15669.500000 | 61.31 | 74.00 | 12.69 | H | 23.5 |
| 16592.500000 | 62.08 | 74.00 | 11.92 | H | 26.3 |
| 17882.000000 | 61.90 | 74.00 | 12.10 | H | 28.1 |

| Frequency (MHz) | Max Peak (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Pol | Corr. (dB) |
|---|---|---|---|---|---|
| 13910.500000 | 43.12 | 54.00 | 10.88 | H | 21.1 |
| 14688.000000 | 43.81 | 54.00 | 10.19 | H | 21.6 |
| 15570.500000 | 48.32 | 54.00 | 5.68 | H | 23.6 |
| 15939.000000 | 49.65 | 54.00 | 4.35 | V | 24.9 |
| 16596.500000 | 50.52 | 54.00 | 3.48 | V | 26.3 |
| 17705.500000 | 50.19 | 54.00 | 3.81 | H | 27.6 |

**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

*©Copyright. All rights reserved by SAICT*

## A.9. Radiated Spurious Emissions < 30MHz

**Measurement Limit (15.209, 9kHz-30MHz):**

| Frequency (MHz) | Field strength (μV/m) | Measurement distance (m) |
|---|---|---|
| 0.009 - 0.490 | 2400/F(kHz) | 300 |
| 0.490 – 1.705 | 24000/F(kHz) | 30 |
| 1.705 – 30.0 | 30 | 30 |

The measurement is made according to KDB 789033.

Note: The measurement distance during the test is 3m. The limit used in plots recalculated based on the extrapolation factor of 40 dB/decade.

**Measurement Result(Worst case):**

| Mode | Frequency Range | Test Results | Conclusion |
|---|---|---|---|
| All Channel | 9 kHz ~30 MHz | Fig.92 | P |

**Conclusion: PASS**

**Test graphs as below:**

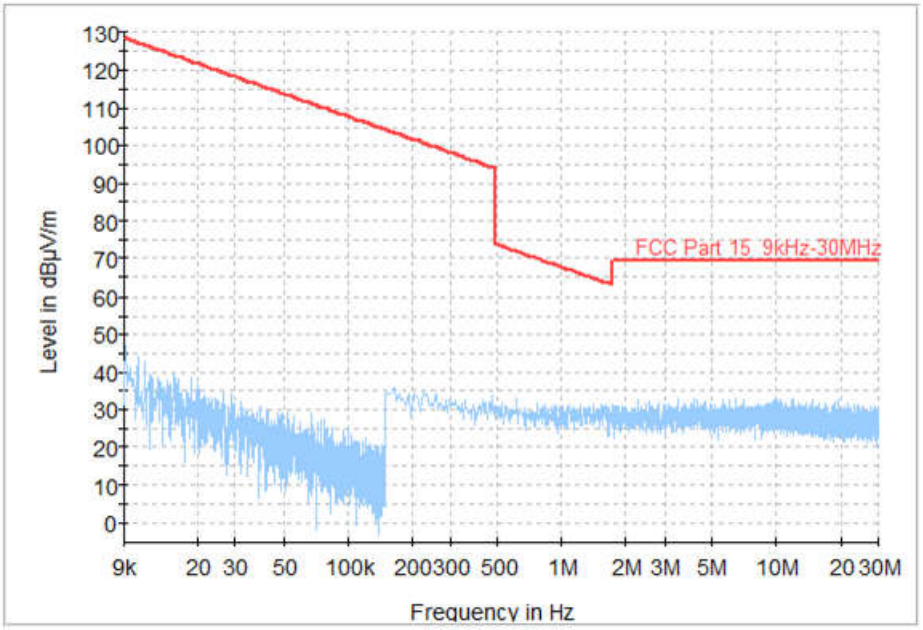



**Fig. 92 Radiated Spurious Emission (All Channel, 9 kHz ~30 MHz)**

*©Copyright. All rights reserved by SAICT*

## A.10. AC Power Line Conducted Emission

**Test Condition:**

| Voltage（V） | Frequency（Hz） |
|---|---|
| 120 | 60 |

**Measurement Result and limit:**

RLAN (Quasi-peak Limit)-AE1

| Frequency range (MHz) | Quasi-peak Limit (dBμV) | Result (dBμV) | | Conclusion |
|---|---|---|---|---|
| | | Traffic | Idle | |
| 0.15 to 0.5 | 66 to 56 | Fig.93 | Fig.94 | 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. | | | | |

RLAN (Average Limit)-AE1

| Frequency range (MHz) | Average-peak Limit (dBμV) | Result (dBμV) | | Conclusion |
|---|---|---|---|---|
| | | Traffic | Idle | |
| 0.15 to 0.5 | 56 to 46 | Fig 93 | Fig 94 | 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. | | | | |

**Note:** The measurement results include the L1 and N measurements.

**Conclusion: PASS**

**Test graphs as below:**

*©Copyright. All rights reserved by SAICT*

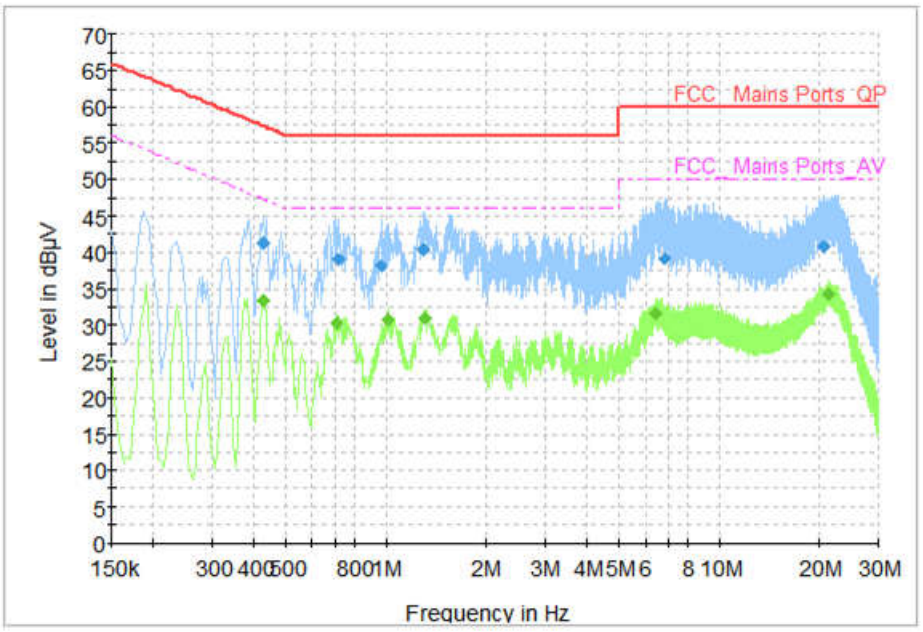



**Fig. 93 AC Powerline Conducted Emission (802.11n, AE1, 120V)**

**Measurement Result: Quasi Peak**

| Frequency (MHz) | Quasi Peak (dBµV) | PE | Line | Corr. (dB) | Margin (dB) | Limit (dBµV) |
|---|---|---|---|---|---|---|
| 0.426000 | 41.26 | 57.33 | 16.08 | N | ON | 9.7 |
| 0.718000 | 38.97 | 56.00 | 17.03 | N | ON | 9.7 |
| 0.962000 | 38.09 | 56.00 | 17.91 | N | ON | 9.7 |
| 1.294000 | 40.35 | 56.00 | 15.65 | N | ON | 9.7 |
| 6.846000 | 39.17 | 60.00 | 20.83 | N | ON | 9.8 |
| 20.442000 | 40.68 | 60.00 | 19.32 | N | ON | 10.4 |

**Measurement Result: Average**

| Frequency (MHz) | Average (dBµV) | PE | Line | Corr. (dB) | Margin (dB) | Limit (dBµV) |
|---|---|---|---|---|---|---|
| 0.426000 | 33.30 | 47.33 | 14.03 | N | ON | 9.7 |
| 0.710000 | 30.25 | 46.00 | 15.75 | N | ON | 9.7 |
| 1.010000 | 30.76 | 46.00 | 15.24 | N | ON | 9.7 |
| 1.302000 | 31.10 | 46.00 | 14.90 | N | ON | 9.7 |
| 6.398000 | 31.52 | 50.00 | 18.48 | N | ON | 9.8 |
| 21.206000 | 34.27 | 50.00 | 15.73 | N | ON | 10.4 |

*©Copyright. All rights reserved by SAICT*

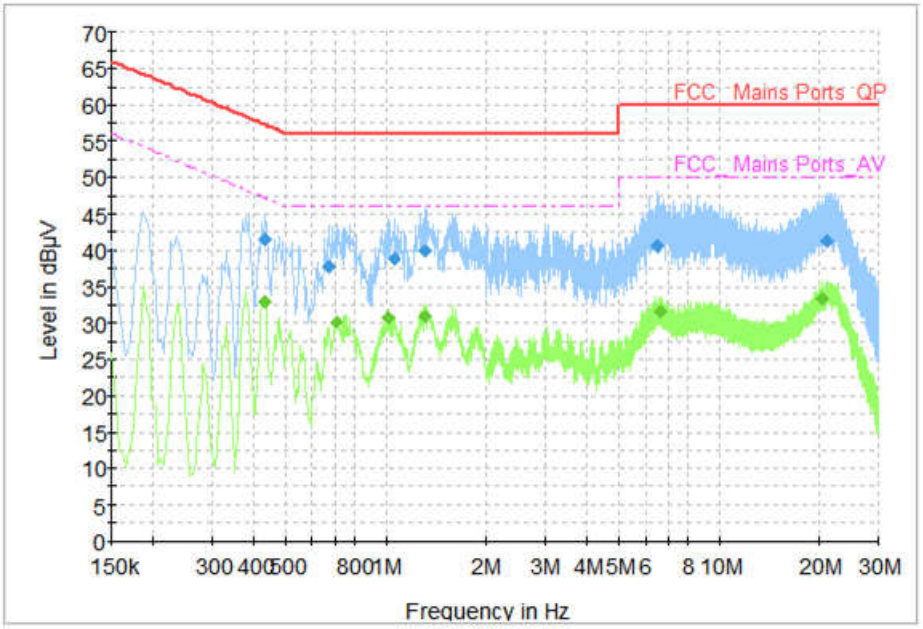



**Fig. 94 AC Powerline Conducted Emission (Idle, AE1, 120V)**

**Measurement Result: Quasi Peak**

| Frequency (MHz) | QuasiPeak (dBµV) | PE | Line | Corr. (dB) | Margin (dB) | Limit (dBµV) |
|---|---|---|---|---|---|---|
| 0.430000 | 41.45 | 57.25 | 15.81 | N | ON | 9.7 |
| 0.670000 | 37.65 | 56.00 | 18.35 | N | ON | 9.7 |
| 1.058000 | 38.86 | 56.00 | 17.14 | N | ON | 9.7 |
| 1.306000 | 39.84 | 56.00 | 16.16 | N | ON | 9.7 |
| 6.494000 | 40.59 | 60.00 | 19.41 | N | ON | 9.8 |
| 21.102000 | 41.33 | 60.00 | 18.67 | N | ON | 10.4 |

**Measurement Result: Average**

| Frequency (MHz) | Average (dBµV) | PE | Line | Corr. (dB) | Margin (dB) | Limit (dBµV) |
|---|---|---|---|---|---|---|
| 0.430000 | 32.95 | 47.25 | 14.30 | N | ON | 9.7 |
| 0.706000 | 30.21 | 46.00 | 15.79 | N | ON | 9.7 |
| 1.014000 | 30.75 | 46.00 | 15.25 | N | ON | 9.7 |
| 1.306000 | 30.87 | 46.00 | 15.13 | N | ON | 9.7 |
| 6.674000 | 31.64 | 50.00 | 18.36 | N | ON | 9.8 |
| 20.330000 | 33.24 | 50.00 | 16.76 | N | ON | 10.4 |

*©Copyright. All rights reserved by SAICT*

## A.10. Frequency Stability

Manufacturers ensured the EUT meet the requirement of frequency stability, such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the user's manual.

**Measurement Result:**

| Mode | Channel | Condition | | Frequency | Conclusion |
|---|---|---|---|---|---|
| 802.11a | 5180 MHz (CH36) | T nom | V nom | 5179.9823 | **P** |
| | | T max | V nom | 5179.9742 | **P** |
| | | T min | V nom | 5179.9734 | **P** |
| | | T nom | V max | 5179.9883 | **P** |
| | | T nom | V min | 5179.9734 | **P** |
| 802.11n HT40 | 5550 MHz (CH110) | T nom | V nom | 5549.9153 | **P** |
| | | T max | V nom | 5549.9573 | **P** |
| | | T min | V nom | 5549.9734 | **P** |
| | | T nom | V max | 5549.9674 | **P** |
| | | T nom | V min | 5549.9667 | **P** |
| 802.11ac VHT80 | 5690 MHz (CH138) | T nom | V nom | 5689.9883 | **P** |
| | | T max | V nom | 5689.9684 | **P** |
| | | T min | V nom | 5689.9765 | **P** |
| | | T nom | V max | 5689.9773 | **P** |
| | | T nom | V min | 5689.9678 | **P** |

## A.11. Power control

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

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

*©Copyright. All rights reserved by SAICT*