# FCC RADIO TEST REPORT

| | | |
|---|---|---|
| **FCC ID** | : | **APYHRO00285** |
| **Equipment** | : | **Smart phone** |
| **Brand Name** | : | **SHARP** |
| **Applicant** | : | **SHARP CORPORATION**<br>**2-13-1, HACHIHONMATSU-IIDA, HIGASHI-HIROSHIMA-SHI,**<br>**HIROSHIMA PREFECTURE 739-0192, JAPAN** |
| **Manufacturer** | : | **SHARP CORPORATION**<br>**1 Takumi-Cho, Sakai-Ku, Sakai-Shi, Osaka 590-8522, Japan** |
| **Standard** | : | **FCC Part 15 Subpart E §15.407** |

**The product was received on May 04, 2020 and testing was started from May 08, 2020 and completed on May 29, 2020. We, SPORTON INTERNATIONAL INC., EMC & Wireless Communications Laboratory, would like to declare that the tested sample has been evaluated in accordance with the test procedures and has been in compliance with the applicable technical standards.**

**The report must not be used by the client to claim product certification, approval, or endorsement by TAF or any agency of government.**

**The test results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory, the test report shall not be reproduced except in full.**

Louis Wu

**Approved by: Louis Wu**

***SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory***
*No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.)*

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# History of this test report

| Report No. | Version | Description | Issued Date |
|---|---|---|---|
| FR021246-01D | 01 | Initial issue of report | Jun. 01, 2020 |
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# Summary of Test Result

| Report Clause | Ref Std. Clause | Test Items | Result (PASS/FAIL) | Remark |
|---|---|---|---|---|
| 3.1 | 15.403(i) | 26dB Bandwidth | Pass | - |
| 3.1 | 2.1049 | 99% Occupied Bandwidth | Reporting only | - |
| 3.2 | 15.407(a) | Maximum Conducted Output Power | Pass | - |
| 3.3 | 15.407(a) | Power Spectral Density | Pass | - |
| 3.4 | 15.407(b) | Unwanted Emissions | Pass | Under limit 3.73 dB at 5459.680 MHz |
| 3.5 | 15.207 | AC Conducted Emission | Pass | Under limit 11.02 dB at 0.501 MHz |
| 3.6 | 15.407(c) | Automatically Discontinue Transmission | Pass | - |
| 3.7 | 15.203<br>15.407(a) | Antenna Requirement | Pass | - |

| **Declaration of Conformity:** |
|---|
| The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers. |
| **Comments and Explanations:** |
| The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification. |

**Reviewed by: Wii Chang**

**Report Producer: Dara Chiu**

# 1 General Description

## 1.1 Product Feature of Equipment Under Test

GSM/WCDMA/LTE, Bluetooth, Wi-Fi 2.4GHz 802.11b/g/n, Wi-Fi 5GHz 802.11a/n/ac, and GNSS

| Product Specification subjective to this standard | |
|---|---|
| **Antenna Type** | WWAN: PIFA Antenna<br>WLAN: PIFA Antenna<br>Bluetooth: PIFA Antenna<br>GPS/Glonass/BDS: PIFA Antenna |

## 1.2 Modification of EUT

No modifications are made to the EUT during all test items.

## 1.3 Testing Location

| | | |
|---|---|---|
| **Test Site** | SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory | |
| **Test Site Location** | No.52, Huaya 1st Rd., Guishan Dist.,<br>Taoyuan City, Taiwan (R.O.C.)<br>TEL: +886-3-327-3456<br>FAX: +886-3-328-4978 | |
| **Test Site No.** | **Sporton Site No.** | |
| | TH05-HY | CO05-HY |

**Note:** The test site complies with ANSI C63.4 2014 requirement.

| | |
|---|---|
| **Test Site** | SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory |
| **Test Site Location** | No.58, Aly. 75, Ln. 564, Wenhua 3rd, Rd., Guishan Dist.,<br>Taoyuan City, Taiwan (R.O.C.)<br>TEL: +886-3-327-0868<br>FAX: +886-3-327-0855 |
| **Test Site No.** | **Sporton Site No.** |
| | 03CH15-HY |

**Note:** The test site complies with ANSI C63.4 2014 requirement.

FCC designation No.: TW1190 and TW0007

## 1.4 Applicable Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- FCC Part 15 Subpart E
- FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01.
- FCC KDB 414788 D01 Radiated Test Site v01r01.
- ANSI C63.10-2013

**Remark:**

1. All test items were verified and recorded according to the standards and without any deviation during the test.
2. The TAF code is not including all the FCC KDB listed without accreditation.
3. This EUT has also been tested and complied with the requirements of FCC Part 15, Subpart B, recorded in a separate test report.

# 2 Test Configuration of Equipment Under Test

a. The EUT has been associated with peripherals and configuration operated in a manner tended to maximize its emission characteristics in a typical application. Frequency range investigated: conduction emission (150 kHz to 30 MHz), radiation emission (9 kHz to the 10th harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower). For radiated measurement, pre-scanned in three orthogonal panels, X, Y, Z. The worst cases (Y plane) were recorded in this report.

b. AC power line Conducted Emission was tested under maximum output power.

## 2.1 Carrier Frequency and Channel

| Frequency Band | Channel | Freq. (MHz) | Channel | Freq. (MHz) |
|---|---|---|---|---|
| 5150-5250 MHz Band 1 (U-NII-1) | 36 | 5180 | 44 | 5220 |
| | 38* | 5190 | 46* | 5230 |
| | 40 | 5200 | 48 | 5240 |
| | 42# | 5210 | | |

| Frequency Band | Channel | Freq. (MHz) | Channel | Freq. (MHz) |
|---|---|---|---|---|
| 5250-5350 MHz Band 2 (U-NII-2A) | 52 | 5260 | 60 | 5300 |
| | 54* | 5270 | 62* | 5310 |
| | 56 | 5280 | 64 | 5320 |
| | 58# | 5290 | | |

| Frequency Band | Channel | Freq. (MHz) | Channel | Freq. (MHz) |
|---|---|---|---|---|
| 5470-5725 MHz Band 3 (U-NII-2C) | 100 | 5500 | 112 | 5560 |
| | 102* | 5510 | 116 | 5580 |
| | 104 | 5520 | 132 | 5660 |
| | 106# | 5530 | 134* | 5670 |
| | 108 | 5540 | 136 | 5680 |
| | 110* | 5550 | 140 | 5700 |

| Frequency Band | Channel | Freq. (MHz) | Channel | Freq. (MHz) |
|---|---|---|---|---|
| TDWR Channel | 118* | 5590 | 124 | 5620 |
| | 120 | 5600 | 126* | 5630 |
| | 122# | 5610 | 128 | 5640 |

**Note:**

1. The above Frequency and Channel in "*" were 802.11n HT40 and 802.11ac VHT40.
2. The above Frequency and Channel in "#" were 802.11ac VHT80.

## 2.2 Test Mode

**Final test modes are considering the modulation and worse data rates as below table.**

| Modulation | Data Rate |
|---|---|
| **802.11a** | **6 Mbps** |
| **802.11n HT20** | **MCS0** |
| **802.11n HT40** | **MCS0** |
| **802.11ac VHT20 (Covered by HT20)** | **MCS0** |
| **802.11ac VHT40 (Covered by HT40)** | **MCS0** |
| **802.11ac VHT80** | **MCS0** |

| Test Cases | |
|---|---|
| **AC Conducted Emission** | Mode 1 : WCDMA Band V Idle + Bluetooth Link + WLAN (5GHz) Link + Camera (Rear) + SD Card + Earphone + USB Cable (Charging from Adapter) |

| Ch. # | | Band I：5150-5250 MHz | Band II：5250-5350 MHz | Band III：5470-5725MHz |
|---|---|---|---|---|
| | | 802.11a | 802.11a | 802.11a |
| L | Low | 36 | 52 | 100 |
| M | Middle | 44 | 60 | 116 |
| H | High | 48 | 64 | 140 |

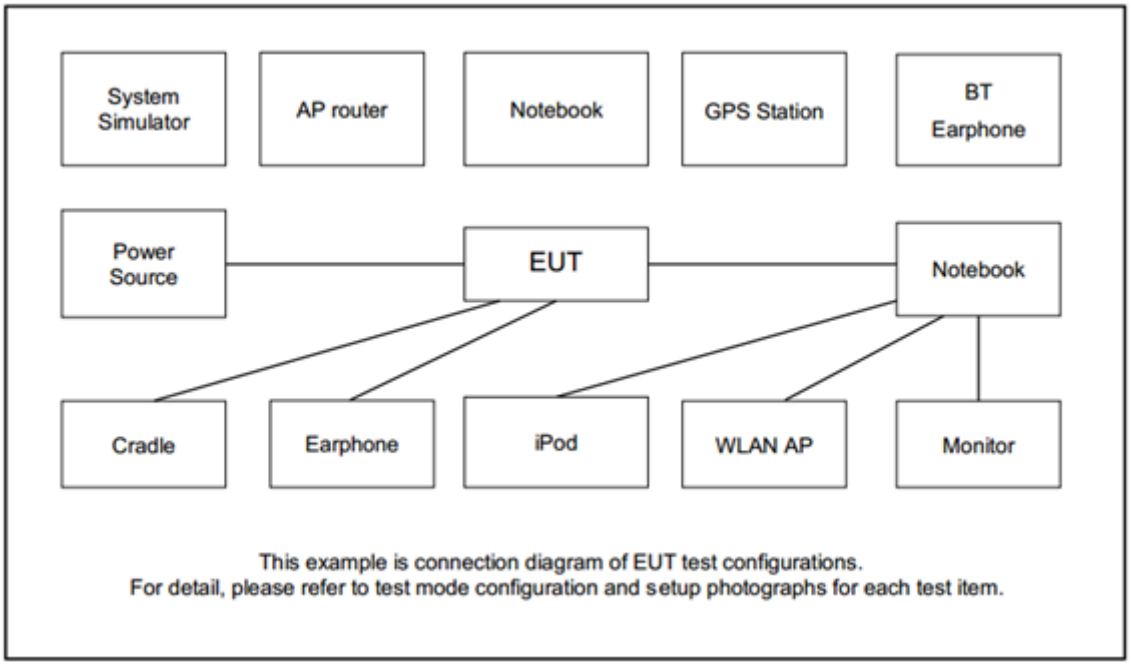
| Ch. # | | Band I：5150-5250 MHz | Band II：5250-5350 MHz | Band III：5470-5725MHz |
|---|---|---|---|---|
| | | 802.11n HT20 | 802.11n HT20 | 802.11n HT20 |
| L | Low | 36 | 52 | 100 |
| M | Middle | 44 | 60 | 116 |
| H | High | 48 | 64 | 140 |

| Ch. # | | Band I：5150-5250 MHz | Band II：5250-5350 MHz | Band III：5470-5725MHz |
|---|---|---|---|---|
| | | 802.11n HT40 | 802.11n HT40 | 802.11n HT40 |
| L | Low | 38 | 54 | 102 |
| M | Middle | - | - | 110 |
| H | High | 46 | 62 | 134 |

| Ch. # | | Band I：5150-5250 MHz | Band II：5250-5350 MHz | Band III：5470-5725MHz |
|---|---|---|---|---|
| | | 802.11ac VHT80 | 802.11ac VHT80 | 802.11ac VHT80 |
| L | Low | - | - | 106 |
| M | Middle | 42 | 58 | 122 |
| H | High | - | - | - |

**Remark:** For radiation spurious emission, the final modulation and the worst data rate was reference the max RF conducted power.

## 2.3 Connection Diagram of Test System




## 2.4 Support Unit used in test configuration and system

| Item | Equipment | Trade Name | Model Name | FCC ID | Data Cable | Power Cord |
|---|---|---|---|---|---|---|
| 1. | System Simulator | Anritsu | MT8820C | N/A | N/A | Unshielded,1.8m |
| 2. | Bluetooth Earphone | SonyErricsson | MW600 | PY700A2029 | N/A | N/A |
| 3. | WLAN AP | ASUS | RT-AC66U | MSQ-RTAC66U | N/A | Unshielded,1.8m |
| 4. | Notebook | DELL | Latitude 3400 | FCC DoC | N/A | AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m |
| 5. | SD Card | SanDisk | MicroSD HC | FCC DoC | N/A | N/A |
| 6. | iPod Earphone | Apple | N/A | Verification | Unshielded, 1.0m | N/A |
| 7. | AC Adapter | DVE | DSA-10PFL-05 FUS 050200 a | N/A | N/A | N/A |

## 2.5 EUT Operation Test Setup

The RF test items, utility “QRCT v3.0.303.0” was installed in Notebook which was programmed in order to make the EUT get into the engineering modes to provide channel selection, power level, data rate and the application type and for continuous transmitting signals.

## 2.6 Measurement Results Explanation Example

**For all conducted test items:**

The offset level is set in the spectrum analyzer to compensate the RF cable loss and attenuator factor between EUT conducted output port and spectrum analyzer. With the offset compensation, the spectrum analyzer reading level is exactly the EUT RF output level.

Example :

The spectrum analyzer offset is derived from RF cable loss and attenuator factor.

*Offset = RF cable loss + attenuator factor.*

Following shows an offset computation example with cable loss 4.2 dB and 10dB attenuator.

*Offset(dB) = RF cable loss(dB) + attenuator factor(dB).*

= 4.2 + 10 = 14.2 (dB)

# 3 Test Result

## 3.1 26dB & 99% Occupied Bandwidth Measurement

### 3.1.1 Description of 26dB & 99% Occupied Bandwidth

This section is for reporting purpose only.

There is no restriction limits for bandwidth.

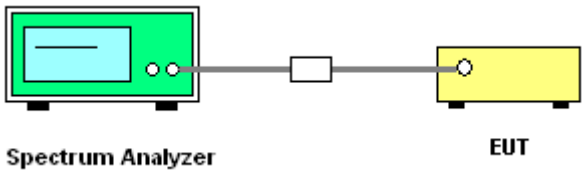
### 3.1.2 Measuring Instruments

See list of measuring equipment of this test report.

### 3.1.3 Test Procedures

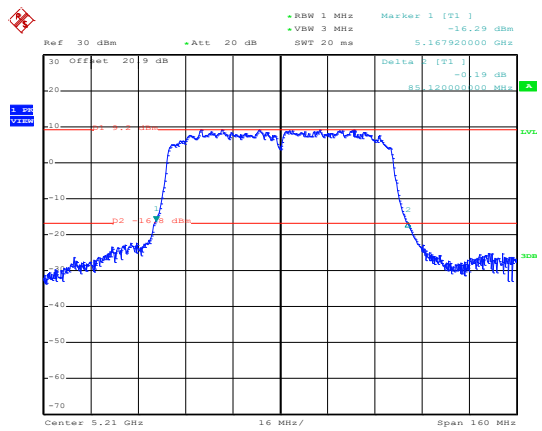
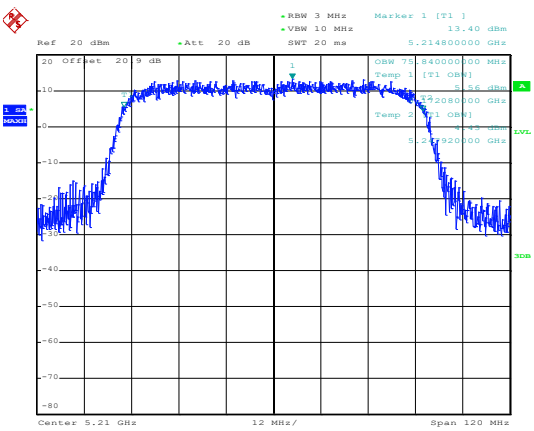
1. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01. Section C) Emission bandwidth
2. Set RBW = approximately 1% of the emission bandwidth.
3. Set the VBW > RBW.
4. Detector = Peak.
5. Trace mode = max hold
6. Measure the maximum width of the emission that is 26 dB down from the peak of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.
7. For 99% Bandwidth Measurement, the spectrum analyzer's resolution bandwidth (RBW) is set 1-5% of the emission bandwidth and set the Video bandwidth (VBW) ≥ 3 * RBW.
8. Measure and record the results in the test report.

### 3.1.4 Test Setup




### 3.1.5 Test Result of 26dB & 99% Occupied Bandwidth

Please refer to Appendix A.

| Maximum 26dB Bandwidth | Maximum 99% Occupied Bandwidth |
|---|---|
|  |  |

**Note:** The occupied channel bandwidth is maintained within the band of operation for all of the modulations.

# 3.2 Maximum Conducted Output Power Measurement

## 3.2.1 Limit of Maximum Conducted Output Power

**<FCC 14-30 CFR 15.407>**

**For the 5.15–5.25 GHz bands:**

■ For mobile and portable client devices in the 5.15–5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW. For an indoor access point operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W.

**For the 5.25–5.725 GHz bands:**

■ The maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or 11 dBm 10 log B, where B is the 26 dB emission bandwidth in megahertz.

If transmitting antennas of directional gain greater than 6 dBi are used, the peak output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

Note that U-NII-2 band, devices with a maximum e.i.r.p. greater than 500 mW shall implement TPC in order to have the capability to operate at least 6 dB below the maximum permitted e.i.r.p. of 1 W.

## 3.2.2 Measuring Instruments

See list of measuring equipment of this test report.

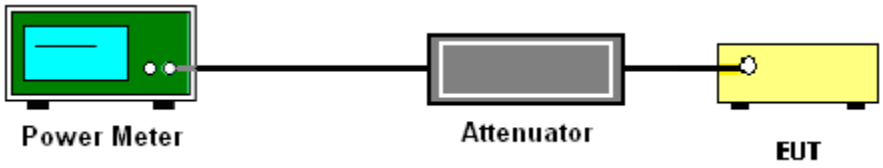
### 3.2.3 Test Procedures

The testing follows Method PM-G of FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01.

Method PM-G (Measurement using an RF average power meter):

1. Measurement is performed using a wideband RF power meter.
2. The EUT is configured to transmit at its maximum power control level.
3. Measure the average power of the transmitter
4. Since the measurement is made only during the ON time of the transmitter, no duty cycle correction factor is required.

### 3.2.4 Test Setup




### 3.2.5 Test Result of Maximum Conducted Output Power

Please refer to Appendix A.

# 3.3 Power Spectral Density Measurement

## 3.3.1 Limit of Power Spectral Density

**<FCC 14-30 CFR 15.407>**

**For the 5.15–5.25 GHz bands:**

For mobile and portable client devices in the 5.15–5.25 GHz band, the maximum power spectral density shall not exceed 11 dBm in any 1.0 MHz band. For an indoor access point operating in the band 5.15-5.25 GHz, the maximum power spectral density shall not exceed 17 dBm in any 1.0 MHz band.

**For the 5.25–5.725 GHz bands:**

The maximum power spectral density shall not exceed 11 dBm in any 1.0 MHz band.

If transmitting antennas of directional gain greater than 6 dBi are used, the peak output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

## 3.3.2 Measuring Instruments

See list of measuring equipment of this test report.

## 3.3.3 Test Procedures

The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01.

Section F) Maximum power spectral density.

**# Method SA-3 #**

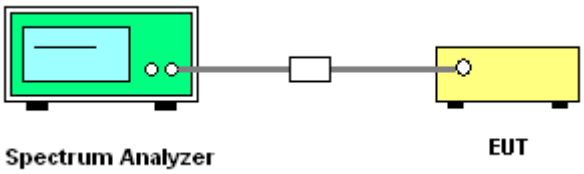
(power averaging (rms) detection with max hold):

- Set span to encompass the entire emission bandwidth (EBW) of the signal.
- Set RBW = 1 MHz.
- Set VBW ≥ 3 MHz
- Number of points in sweep ≥ 2 Span / RBW.
- Sweep time ≤ (number of points in sweep) × T, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.
- Detector = power averaging (rms).
- Trace mode = max hold.

Allow max hold to run for at least 60 seconds, or longer as needed to allow the trace to stabilize.

1. The RF output of EUT was connected to the spectrum analyzer by a low loss cable.
2. Each plot has already offset with cable loss, and attenuator loss. Measure the PPSD and record it.

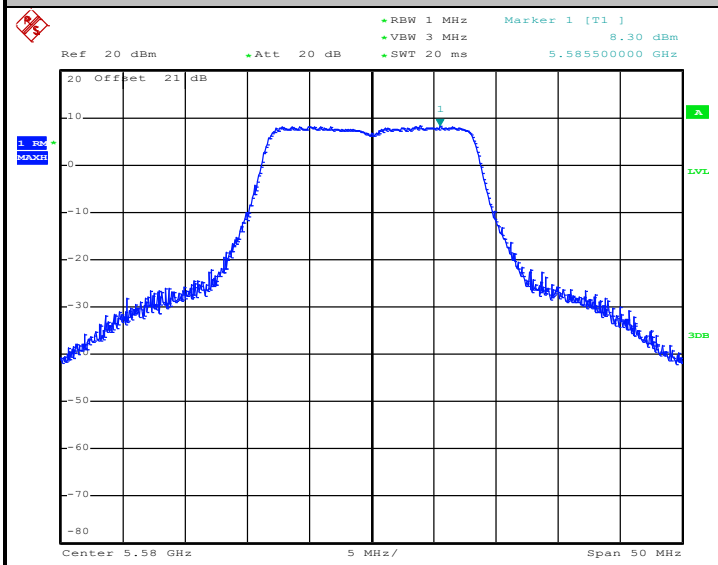
### 3.3.4 Test Setup




### 3.3.5 Test Result of Power Spectral Density

Please refer to Appendix A.

**Worst Case Power Density (dBm/MHz)**



## 3.4 Unwanted Emissions Measurement

This section is to measure unwanted emissions through radiated measurement for band edge spurious emissions and out of band emissions measurement.

### 3.4.1 Limit of Unwanted Emissions

(1) For transmitters operating in the 5150-5250 MHz band: all emissions outside of the 5150-5350 MHz band shall not exceed an EIRP of –27dBm/MHz.

For transmitters operating in the 5250-5350 MHz band: all emissions outside of the 5150-5350 MHz band shall not exceed an EIRP of -27 dBm/MHz. Devices operating in the 5250-5350 MHz band that generate emissions in the 5150-5250 MHz band must meet all applicable technical requirements for operation in the 5150-5250 MHz band (including indoor use) or alternatively meet an out-of-band emission EIRP limit of -27 dBm/MHz in the 5150-5250 MHz band.

For transmitters operating in the 5470-5600 MHz and 5650-5725MHz band: all emissions outside of the 5470-5600 MHz and 5650-5725MHz band shall not exceed an EIRP of -27 dBm/MHz.

(2) Unwanted spurious emissions fallen in restricted bands shall comply with the general field strength limits as below table:

| Frequency (MHz) | Field Strength (microvolts/meter) | Measurement Distance (meters) |
|---|---|---|
| 0.009 – 0.490 | 2400/F(kHz) | 300 |
| 0.490 – 1.705 | 24000/F(kHz) | 30 |
| 1.705 – 30.0 | 30 | 30 |
| 30 – 88 | 100 | 3 |
| 88 – 216 | 150 | 3 |
| 216 - 960 | 200 | 3 |
| Above 960 | 500 | 3 |

**Note:** The following formula is used to convert the EIRP to field strength.

$$E=\frac{1000000\sqrt{30P}}{3}$$ μV/m, where P is the eirp (Watts)

| EIRP (dBm) | Field Strength at 3m (dBμV/m) |
|---|---|
| - 27 | 68.3 |

(3) KDB789033 D02 v02r01 G)2)c)

(i) Sections 15.407(b)(1-3) specifies the unwanted emissions limit for the U-NII-1 and U-NII-2 bands. As specified, emissions above 1000 MHz that are outside of the restricted bands are subject to a peak emission limit of −27 dBm/MHz.

(ii) Section 15.407(b)(4) specifies the unwanted emissions limit for the U-NII-3 band. A band emissions mask is specified in Section 15.407(b)(4)(i). The emission limits are based on the use of a peak detector.

### 3.4.2 Measuring Instruments

See list of measuring equipment of this test report.

### 3.4.3 Test Procedures

1. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01. Section G) Unwanted emissions measurement.

   (1) Procedure for Unwanted Emissions Measurements Below 1000MHz

   - RBW = 120 kHz
   - VBW = 300 kHz
   - Detector = Peak
   - Trace mode = max hold

   (2) Procedure for Peak Unwanted Emissions Measurements Above 1000 MHz

   - RBW = 1 MHz
   - VBW ≥ 3 MHz
   - Detector = Peak
   - Sweep time = auto
   - Trace mode = max hold

   (3) Procedures for Average Unwanted Emissions Measurements Above 1000MHz

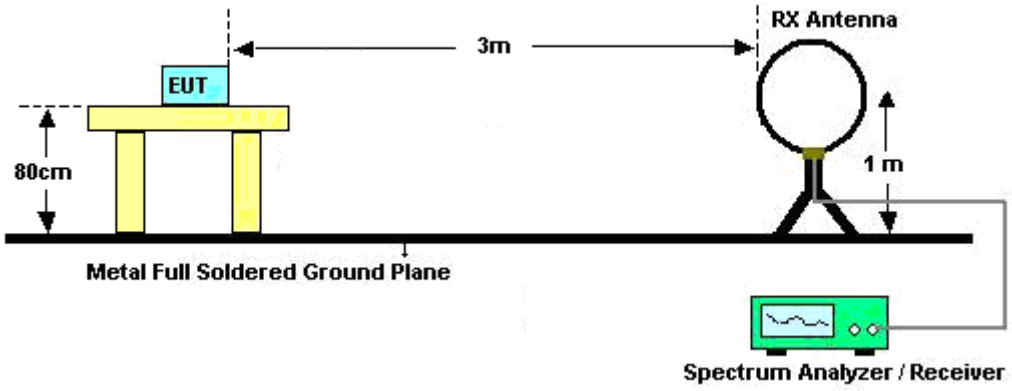
   - RBW = 1 MHz
   - VBW = 10 Hz, when duty cycle is no less than 98 percent.
   - VBW ≥ 1/T, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.

2. The EUT was placed on a turntable with 0.8 meter for frequency below 1GHz and 1.5 meter for frequency above 1GHz respectively above ground.
3. The EUT was set 3 meters from the interference receiving antenna which was mounted on the top of a variable height antenna tower.
4. The antenna is a broadband antenna and its height is adjusted between one meter and four meters above ground to find the maximum value of the field strength for both horizontal polarization and vertical polarization of the antenna.

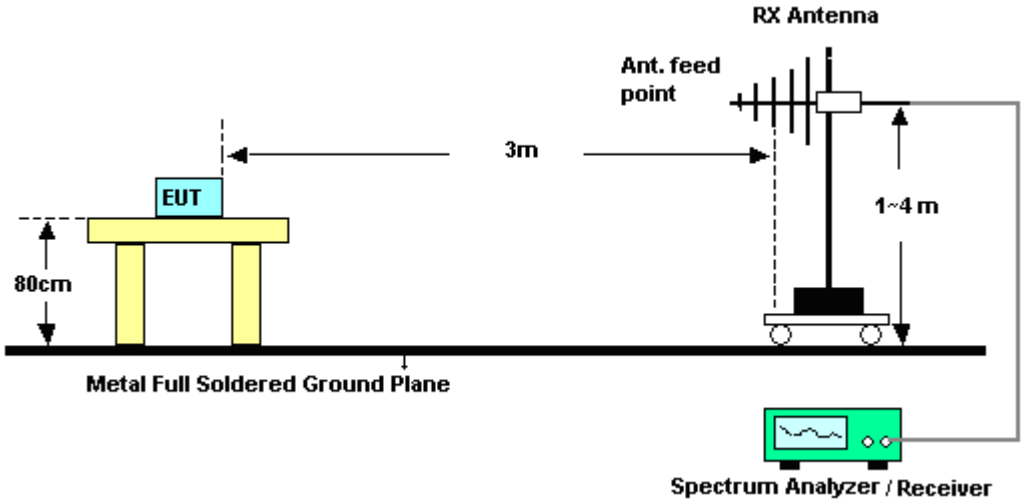
5. For each suspected emission, the EUT was arranged to its worst case and then adjust the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading.
6. For testing below 1GHz, if the emission level of the EUT in peak mode was 3 dB lower than the limit specified, then peak values of EUT will be reported, otherwise, the emissions will be repeated one by one using the CISPR quasi-peak method and reported.
7. For testing above 1GHz, the emission level of the EUT in peak mode was 20dB lower than average limit (that means the emission level in average mode also complies with the limit in average mode), then peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.

## 3.4.4 Test Setup

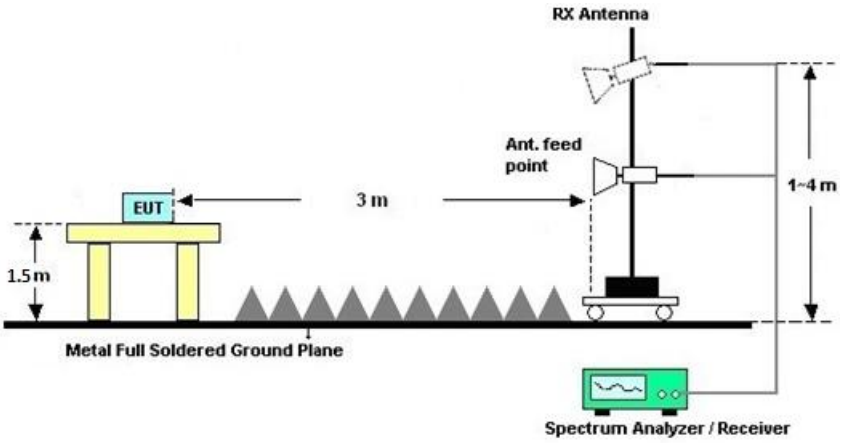
**For radiated emissions below 30MHz**




**For radiated emissions from 30MHz to 1GHz**



**For radiated emissions above 1GHz**




### 3.4.5 Test Results of Radiated Spurious Emissions (9 kHz ~ 30 MHz)

The low frequency, which started from 9 kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit line was not reported.

There is a comparison data of both open-field test site and alternative test site - semi-Anechoic chamber according to 414788 D01 Radiated Test Site v01r01, and the result came out very similar.

### 3.4.6 Test Result of Radiated Spurious at Band Edges

Please refer to Appendix C and D.

### 3.4.7 Duty Cycle

Please refer to Appendix E.

### 3.4.8 Test Result of Radiated Spurious Emissions (30MHz ~ 10th Harmonic)

Please refer to Appendix C and D.

# 3.5 AC Conducted Emission Measurement

## 3.5.1 Limit of AC Conducted Emission

For equipment that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits in the following table.

| Frequency of emission (MHz) | Conducted limit (dBμV) | |
|---|---|---|
| | Quasi-peak | Average |
| 0.15-0.5 | 66 to 56* | 56 to 46* |
| 0.5-5 | 56 | 46 |
| 5-30 | 60 | 50 |

*Decreases with the logarithm of the frequency.

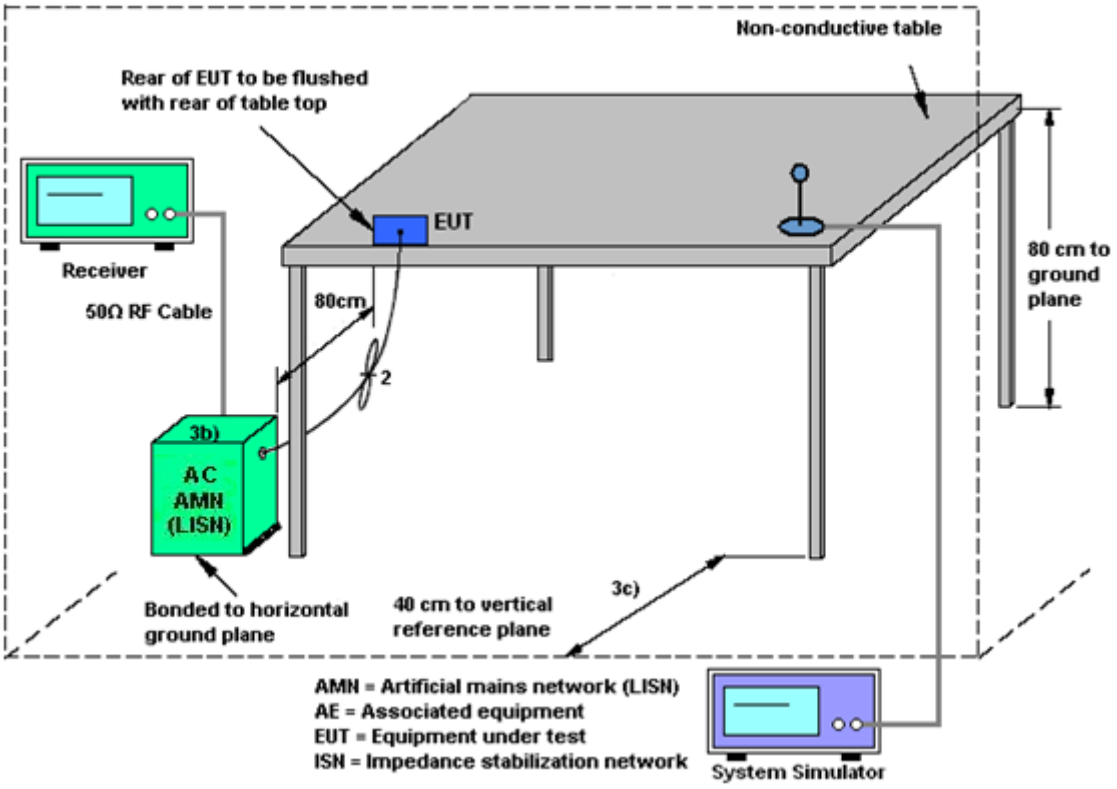
## 3.5.2 Measuring Instruments

See list of measuring equipment of this test report.

## 3.5.3 Test Procedures

1. The EUT was placed 0.4 meter from the conducting wall of the shielding room was kept at least 80 centimeters from any other grounded conducting surface.
2. Connect EUT to the power mains through a line impedance stabilization network (LISN).
3. All the support units are connecting to the other LISN.
4. The LISN provides 50 ohm coupling impedance for the measuring instrument.
5. The FCC states that a 50 ohm, 50 microhenry LISN should be used.
6. Both sides of AC line were checked for maximum conducted interference.
7. The frequency range from 150 kHz to 30 MHz was searched.
8. Set the test-receiver system to Peak Detect Function and specified bandwidth with Maximum Hold Mode.

### 3.5.4 Test Setup




### 3.5.5 Test Result of AC Conducted Emission

Please refer to Appendix B.

# 3.6 Automatically Discontinue Transmission

## 3.6.1 Limit of Automatically Discontinue Transmission

The device shall automatically discontinue transmission in case of either absence of information to transmit or operational failure. These provisions are not intended to preclude the transmission of control or signaling information or the use of repetitive codes used by certain digital technologies to complete frame or burst intervals. Applicants shall include in their application for equipment authorization to describe how this requirement is met.

## 3.6.2 Measuring Instruments

See list of measuring equipment of this test report.

## 3.6.3 Test Result of Automatically Discontinue Transmission

While the EUT is not transmitting any information, the EUT can automatically discontinue transmission and become standby mode for power saving. The EUT can detect the controlling signal of ACK message transmitting from remote device and verify whether it shall resend or discontinue transmission.

# 3.7 Antenna Requirements

## 3.7.1 Standard Applicable

If transmitting antenna directional gain is greater than 6 dBi, both the peak transmit power and the peak power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

## 3.7.2 Antenna Anti-Replacement Construction

An embedded-in antenna design is used.

## 3.7.3 Antenna Gain

The antenna peak gain of EUT is less than 6 dBi. Therefore, it is not necessary to reduce maximum peak output power limit.

# 4 List of Measuring Equipment

| Instrument | Manufacturer | Model No. | Serial No. | Characteristics | Calibration Date | Test Date | Due Date | Remark |
|---|---|---|---|---|---|---|---|---|
| Hygrometer | Testo | 608-H2 | 41410069 | N/A | Jun. 17, 2019 | May 08, 2020~ May 29, 2020 | Jun. 16, 2020 | Conducted (TH05-HY) |
| Power Sensor | DARE | RPR3006W | 17I00015SNO 36 | 10MHz~6GHz | Jan. 22, 2020 | May 08, 2020~ May 29, 2020 | Jan. 21, 2021 | Conducted (TH05-HY) |
| Spectrum Analyzer | Rohde & Schwarz | FSP40 | 100055 | 9kHz-40GHz | Aug. 14, 2019 | May 08, 2020~ May 29, 2020 | Aug. 13, 2020 | Conducted (TH05-HY) |
| Switch Control Manframe | Burgeon | ETF-1405-0 | EC1900067 | N/A | Aug. 15, 2019 | May 08, 2020~ May 29, 2020 | Aug. 14, 2020 | Conducted (TH05-HY) |
| Loop Antenna | Rohde & Schwarz | HFH2-Z2 | 100488 | 9 kHz~30 MHz | Jan. 09, 2020 | May 23, 2020~ May 27, 2020 | Jan. 08, 2021 | Radiation (03CH15-HY) |
| Bilog Antenna | TESEQ | CBL6111D&00 800N1D01N-0 6 | 41912&05 | 30MHz to 1GHz | Feb. 09, 2020 | May 23, 2020~ May 27, 2020 | Feb. 08, 2021 | Radiation (03CH15-HY) |
| Horn Antenna | SCHWARZBE CK | BBHA 9120 D | 9120D-1620 | 1-18GHz | Jul. 31, 2019 | May 23, 2020~ May 27, 2020 | Jul. 30, 2020 | Radiation (03CH15-HY) |
| SHF-EHF Horn Antenna | SCHWARZBE CK | BBHA 9170 | BBHA917058 4 | 18GHz- 40GHz | Dec. 10, 2019 | May 23, 2020~ May 27, 2020 | Dec. 09, 2020 | Radiation (03CH15-HY) |
| Amplifier | SONOMA | 310N | 363440 | 9kHz~1GHz | Dec. 27, 2019 | May 23, 2020~ May 27, 2020 | Dec. 26, 2020 | Radiation (03CH15-HY) |
| Preamplifier | Jet-Power | JPA0118-55-30 3 | 17100018000 55006 | 1GHz~18GHz | May 07, 2020 | May 23, 2020~ May 27, 2020 | May 06, 2021 | Radiation (03CH15-HY) |
| Preamplifier | Keysight | 83017A | MY53270195 | 1GHz~26.5GHz | Aug. 23, 2019 | May 23, 2020~ May 27, 2020 | Aug. 22, 2020 | Radiation (03CH15-HY) |
| Preamplifier | EMEC | EM18G40G | 060715 | 18GHz ~ 40GHz | Dec. 13, 2019 | May 23, 2020~ May 27, 2020 | Dec. 12, 2020 | Radiation (03CH15-HY) |
| EMI Test Receiver | Keysight | N9038A(MXE) | MY54130085 | 20MHz~8.4GHz | Nov. 01, 2019 | May 23, 2020~ May 27, 2020 | Oct. 31, 2020 | Radiation (03CH15-HY |
| Spectrum Analyzer | Agilent | E4446A | MY50180136 | 3Hz~44GHz | May 04, 2020 | May 23, 2020~ May 27, 2020 | May 03, 2021 | Radiation (03CH15-HY) |
| Antenna Mast | ChainTek | MBS-520-1 | N/A | 1m~4m | N/A | May 23, 2020~ May 27, 2020 | N/A | Radiation (03CH15-HY) |
| Turn Table | ChainTek | T-200-S-1 | N/A | 0~360 Degree | N/A | May 23, 2020~ May 27, 2020 | N/A | Radiation (03CH15-HY) |
| Software | Audix | E3 6.2009-8-24(k5 ) | RK-000451 | N/A | N/A | May 23, 2020~ May 27, 2020 | N/A | Radiation (03CH15-HY) |
| RF Cable | HUBER + SUHNER | SUCOFLEX 104 | MY36980/4 | 30M-18G | Apr. 14, 2020 | May 23, 2020~ May 27, 2020 | Apr. 13, 2021 | Radiation (03CH15-HY) |
| RF Cable | HUBER + SUHNER | SUCOFLEX 104 | MY9838/4PE | 30M-18G | Apr. 14, 2020 | May 23, 2020~ May 27, 2020 | Apr. 13, 2021 | Radiation (03CH15-HY) |
| RF Cable | HUBER + SUHNER | SUCOFLEX 104 | MY37710/4 | 30M~18GHz | Apr. 17, 2020 | May 23, 2020~ May 27, 2020 | Apr. 16, 2021 | Radiation (03CH15-HY) |
| RF Cable | HUBER + SUHNER | SUCOFLEX 102 | 505134/2 | 30MHz-40GHz | Feb. 25, 2020 | May 23, 2020~ May 27, 2020 | Feb. 24, 2021 | Radiation (03CH15-HY) |
| RF Cable | HUBER + SUHNER | SUCOFLEX 102 | 800740/2 | 30MHz-40GHz | Feb. 25, 2020 | May 23, 2020~ May 27, 2020 | Feb. 24, 2021 | Radiation (03CH15-HY) |
| Filter | Wainwright | WLK4-1000-15 30-8000-40SS | SN4 | 1.53G Low Pass | Jul. 04, 2019 | May 23, 2020~ May 27, 2020 | Jul. 03, 2020 | Radiation (03CH15-HY) |
| Filter | Wainwright | WHKX8-5872. 5-6750-18000- 40ST | SN6 | 6.75GHz High Pass Filter | Jul. 02, 2019 | May 23, 2020~ May 27, 2020 | Jul. 01, 2020 | Radiation (03CH15-HY) |

| Instrument | Manufacturer | Model No. | Serial No. | Characteristics | Calibration Date | Test Date | Due Date | Remark |
|---|---|---|---|---|---|---|---|---|
| AC Power Source | ChainTek | APC-1000W | N/A | N/A | N/A | May 13, 2020~ May 19, 2020 | N/A | Conduction (CO05-HY) |
| EMI Test Receiver | Rohde & Schwarz | ESR3 | 102388 | 9kHz~3.6GHz | Nov. 15, 2019 | May 13, 2020~ May 19, 2020 | Nov. 14, 2020 | Conduction (CO05-HY) |
| Hygrometer | Testo | 608-H1 | 34913912 | N/A | Nov. 07, 2019 | May 13, 2020~ May 19, 2020 | Nov. 06, 2020 | Conduction (CO05-HY) |
| LISN | Rohde & Schwarz | ENV216 | 100081 | 9kHz~30MHz | Nov. 15, 2019 | May 13, 2020~ May 19, 2020 | Nov. 14, 2020 | Conduction (CO05-HY) |
| Software | Rohde & Schwarz | EMC32 V10.30 | N/A | N/A | N/A | May 13, 2020~ May 19, 2020 | N/A | Conduction (CO05-HY) |
| LF Cable | HUBER + SUHNER | RG-214/U | LF01 | N/A | Jan. 02, 2020 | May 13, 2020~ May 19, 2020 | Jan. 01, 2021 | Conduction (CO05-HY) |
| Pulse Limiter | Rohde & Schwarz | ESH3-Z2 | 100851 | N/A | Jan. 02, 2020 | May 13, 2020~ May 19, 2020 | Jan. 01, 2021 | Conduction (CO05-HY) |

# 5 Uncertainty of Evaluation

**Uncertainty of Conducted Emission Measurement (150kHz ~ 30MHz)**

| | |
|---|---|
| **Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))** | **2.3** |

**Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)**

| | |
|---|---|
| **Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))** | **5.0** |

**Uncertainty of Radiated Emission Measurement (1000 MHz ~ 18000 MHz)**

| | |
|---|---|
| **Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))** | **5.4** |

**Uncertainty of Radiated Emission Measurement (18000 MHz ~ 40000 MHz)**

| | |
|---|---|
| **Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))** | **5.0** |

# Appendix A. Test Result of Conducted Test Items

| | | | | |
|---|---|---|---|---|
| Test Engineer: | Jacob Yu | Temperature: | 20.1~22.3 | °C |
| Test Date: | 2020/5/8-2020/5/29 | Relative Humidity: | 45.7~58.8 | % |

***TEST RESULTS DATA***
***26dB and 99% OBW***

| Band I single antenna | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mod. | Data Rate | NTX | CH. | Freq. (MHz) | 99% Bandwidth (MHz) | | 26 dB Bandwidth (MHz) | | IC 99% Bandwidth Power Limit (dBm) | | IC 99% Bandwidth EIRP Limit (dBm) | | | Note |
| | | | | | Ant 1 | Ant 2 | Ant 1 | Ant 2 | Ant 1 | Ant 2 | Ant 1 | Ant 2 | | |
| 11a | 6Mbps | 1 | 36 | 5180 | 17.00 | - | 23.70 | - | - | | 22.30 | - | | |
| 11a | 6Mbps | 1 | 44 | 5220 | 17.15 | - | 26.00 | - | - | | 22.34 | - | | |
| 11a | 6Mbps | 1 | 48 | 5240 | 17.00 | - | 24.55 | - | - | | 22.30 | - | | |
| HT20 | MCS0 | 1 | 36 | 5180 | 18.15 | - | 33.80 | - | - | | 22.59 | - | | |
| HT20 | MCS0 | 1 | 44 | 5220 | 18.05 | - | 25.85 | - | - | | 22.56 | - | | |
| HT20 | MCS0 | 1 | 48 | 5240 | 18.05 | - | 24.00 | - | - | | 22.56 | - | | |
| HT40 | MCS0 | 1 | 38 | 5190 | 36.50 | - | 46.26 | - | - | | 23.01 | - | | |
| HT40 | MCS0 | 1 | 46 | 5230 | 36.50 | - | 44.64 | - | - | | 23.01 | - | | |
| VHT80 | MCS0 | 1 | 42 | 5210 | 75.84 | - | 85.12 | - | - | | 23.01 | - | | |

## *TEST RESULTS DATA*
## *Average Power Table*

| FCC Band I single antenna | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mod. | Data Rate | NTX | CH. | Freq. (MHz) | Average Conducted Power (dBm) | | | FCC Conducted Power Limit (dBm) | | DG (dBi) | | | Pass/Fail |
| | | | | | Ant 1 | Ant 2 | SUM | Ant 1 | Ant 2 | Ant 1 | Ant 2 | | |
| 11a | 6Mbps | 1 | 36 | 5180 | 18.60 | - | | 24.00 | - | 5.70 | - | | Pass |
| 11a | 6Mbps | 1 | 44 | 5220 | 19.00 | - | | 24.00 | - | 5.70 | - | | Pass |
| 11a | 6Mbps | 1 | 48 | 5240 | 18.60 | - | | 24.00 | - | 5.70 | - | | Pass |
| HT20 | MCS0 | 1 | 36 | 5180 | 18.90 | - | | 24.00 | - | 5.70 | - | | Pass |
| HT20 | MCS0 | 1 | 44 | 5220 | 19.00 | - | | 24.00 | - | 5.70 | - | | Pass |
| HT20 | MCS0 | 1 | 48 | 5240 | 18.70 | - | | 24.00 | - | 5.70 | - | | Pass |
| HT40 | MCS0 | 1 | 38 | 5190 | 19.00 | - | | 24.00 | - | 5.70 | - | | Pass |
| HT40 | MCS0 | 1 | 46 | 5230 | 18.90 | - | | 24.00 | - | 5.70 | - | | Pass |
| VHT20 | MCS0 | 1 | 36 | 5180 | 18.80 | - | | 24.00 | - | 5.70 | - | | Pass |
| VHT20 | MCS0 | 1 | 44 | 5220 | 18.90 | - | | 24.00 | - | 5.70 | - | | Pass |
| VHT20 | MCS0 | 1 | 48 | 5240 | 18.50 | - | | 24.00 | - | 5.70 | - | | Pass |
| VHT40 | MCS0 | 1 | 38 | 5190 | 18.90 | - | | 24.00 | - | 5.70 | - | | Pass |
| VHT40 | MCS0 | 1 | 46 | 5230 | 18.80 | - | | 24.00 | - | 5.70 | - | | Pass |
| VHT80 | MCS0 | 1 | 42 | 5210 | 18.40 | - | | 24.00 | - | 5.70 | - | | Pass |

## *TEST RESULTS DATA*
## *Power Spectral Density*

| FCC Band I single antenna | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mod. | Data Rate | NTX | CH. | Freq. (MHz) | Average Power Density (dBm/MHz) | | | Average PSD Limit (dBm/MHz) | | DG (dBi) | | | Pass /Fail |
| | | | | | Ant 1 | Ant 2 | SUM | Ant 1 | Ant 2 | Ant 1 | Ant 2 | | |
| 11a | 6Mbps | 1 | 36 | 5180 | 7.33 | - | | 11.00 | - | 5.70 | - | | Pass |
| 11a | 6Mbps | 1 | 44 | 5220 | 7.37 | - | | 11.00 | - | 5.70 | - | | Pass |
| 11a | 6Mbps | 1 | 48 | 5240 | 7.64 | - | | 11.00 | - | 5.70 | - | | Pass |
| HT20 | MCS0 | 1 | 36 | 5180 | 7.90 | - | | 11.00 | - | 5.70 | - | | Pass |
| HT20 | MCS0 | 1 | 44 | 5220 | 6.75 | - | | 11.00 | - | 5.70 | - | | Pass |
| HT20 | MCS0 | 1 | 48 | 5240 | 7.21 | - | | 11.00 | - | 5.70 | - | | Pass |
| HT40 | MCS0 | 1 | 38 | 5190 | 4.78 | - | | 11.00 | - | 5.70 | - | | Pass |
| HT40 | MCS0 | 1 | 46 | 5230 | 4.85 | - | | 11.00 | - | 5.70 | - | | Pass |
| VHT80 | MCS0 | 1 | 42 | 5210 | 1.80 | - | | 11.00 | - | 5.70 | - | | Pass |

***TEST RESULTS DATA***
***26dB and 99% OBW***

| Band II single antenna | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mod. | Data Rate | NTX | CH. | Freq. (MHz) | 99% Bandwidth (MHz) | | 26 dB Bandwidth (MHz) | | IC 99% Bandwidth Power Limit (dBm) | | IC 99% Bandwidth EIRP Limit (dBm) | | FCC 26dB Bandwidth Power Limit (dBm) | | Note |
| | | | | | Ant 1 | Ant 2 | Ant 1 | Ant 2 | Ant 1 | Ant 2 | Ant 1 | Ant 2 | Ant 1 | Ant 2 | |
| 11a | 6Mbps | 1 | 52 | 5260 | 16.95 | - | 23.65 | - | 23.29 | - | 29.29 | - | 23.98 | - | |
| 11a | 6Mbps | 1 | 60 | 5300 | 16.95 | - | 24.20 | - | 23.29 | - | 29.29 | - | 23.98 | - | |
| 11a | 6Mbps | 1 | 64 | 5320 | 17.15 | - | 24.00 | - | 23.34 | - | 29.34 | - | 23.98 | - | |
| HT20 | MCS0 | 1 | 52 | 5260 | 18.05 | - | 28.00 | - | 23.56 | - | 29.56 | - | 23.98 | - | |
| HT20 | MCS0 | 1 | 60 | 5300 | 18.10 | - | 26.95 | - | 23.58 | - | 29.58 | - | 23.98 | - | |
| HT20 | MCS0 | 1 | 64 | 5320 | 18.10 | - | 31.35 | - | 23.58 | - | 29.58 | - | 23.98 | - | |
| HT40 | MCS0 | 1 | 54 | 5270 | 36.50 | - | 46.89 | - | 23.98 | - | 30.00 | - | 23.98 | - | |
| HT40 | MCS0 | 1 | 62 | 5310 | 36.50 | - | 45.36 | - | 23.98 | - | 30.00 | - | 23.98 | - | |
| VHT80 | MCS0 | 1 | 58 | 5290 | 75.84 | - | 84.80 | - | 23.98 | - | 30.00 | - | 23.98 | - | |

## ***TEST RESULTS DATA***
## ***Average Power Table***

| FCC Band II single antenna | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mod. | Data Rate | NTX | CH. | Freq. (MHz) | Average Conducted Power (dBm) | | | FCC Conducted Power Limit (dBm) | | DG (dBi) | | EIRP Power Limit (dBm) | Pass/Fail |
| | | | | | Ant 1 | Ant 2 | SUM | Ant 1 | Ant 2 | Ant 1 | Ant 2 | | |
| 11a | 6Mbps | 1 | 52 | 5260 | 18.60 | - | | 23.44 | - | 6.54 | - | 26.99 | Pass |
| 11a | 6Mbps | 1 | 60 | 5300 | 19.00 | - | | 23.44 | - | 6.54 | - | 26.99 | Pass |
| 11a | 6Mbps | 1 | 64 | 5320 | 18.70 | - | | 23.44 | - | 6.54 | - | 26.99 | Pass |
| HT20 | MCS0 | 1 | 52 | 5260 | 18.70 | - | | 23.44 | - | 6.54 | - | 26.99 | Pass |
| HT20 | MCS0 | 1 | 60 | 5300 | 19.00 | - | | 23.44 | - | 6.54 | - | 26.99 | Pass |
| HT20 | MCS0 | 1 | 64 | 5320 | 18.80 | - | | 23.44 | - | 6.54 | - | 26.99 | Pass |
| HT40 | MCS0 | 1 | 54 | 5270 | 19.00 | - | | 23.44 | - | 6.54 | - | 26.99 | Pass |
| HT40 | MCS0 | 1 | 62 | 5310 | 19.00 | - | | 23.44 | - | 6.54 | - | 26.99 | Pass |
| VHT20 | MCS0 | 1 | 52 | 5260 | 18.60 | - | | 23.44 | - | 6.54 | - | 26.99 | Pass |
| VHT20 | MCS0 | 1 | 60 | 5300 | 19.00 | - | | 23.44 | - | 6.54 | - | 26.99 | Pass |
| VHT20 | MCS0 | 1 | 64 | 5320 | 18.70 | - | | 23.44 | - | 6.54 | - | 26.99 | Pass |
| VHT40 | MCS0 | 1 | 54 | 5270 | 18.90 | - | | 23.44 | - | 6.54 | - | 26.99 | Pass |
| VHT40 | MCS0 | 1 | 62 | 5310 | 18.90 | - | | 23.44 | - | 6.54 | - | 26.99 | Pass |
| VHT80 | MCS0 | 1 | 58 | 5290 | 18.40 | - | | 23.44 | - | 6.54 | - | 26.99 | Pass |

## *TEST RESULTS DATA*
## *Power Spectral Density*

| Band II single antenna | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mod. | Data Rate | NTX | CH. | Freq. (MHz) | Average Power Density (dBm/MHz) | | | Average PSD Limit (dBm/MHz) | | DG (dBi) | | | Pass /Fail |
| | | | | | Ant 1 | Ant 2 | SUM | Ant 1 | Ant 2 | Ant 1 | Ant 2 | | |
| 11a | 6Mbps | 1 | 52 | 5260 | 8.00 | - | | 10.46 | - | 6.54 | - | | Pass |
| 11a | 6Mbps | 1 | 60 | 5300 | 7.57 | - | | 10.46 | - | 6.54 | - | | Pass |
| 11a | 6Mbps | 1 | 64 | 5320 | 7.78 | - | | 10.46 | - | 6.54 | - | | Pass |
| HT20 | MCS0 | 1 | 52 | 5260 | 8.17 | - | | 10.46 | - | 6.54 | - | | Pass |
| HT20 | MCS0 | 1 | 60 | 5300 | 7.82 | - | | 10.46 | - | 6.54 | - | | Pass |
| HT20 | MCS0 | 1 | 64 | 5320 | 8.28 | - | | 10.46 | - | 6.54 | - | | Pass |
| HT40 | MCS0 | 1 | 54 | 5270 | 5.17 | - | | 10.46 | - | 6.54 | - | | Pass |
| HT40 | MCS0 | 1 | 62 | 5310 | 4.97 | - | | 10.46 | - | 6.54 | - | | Pass |
| VHT80 | MCS0 | 1 | 58 | 5290 | 1.87 | - | | 10.46 | - | 6.54 | - | | Pass |

***TEST RESULTS DATA***
***26dB and 99% OBW***

| Band III single antenna | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mod. | Data Rate | NTX | CH. | Freq. (MHz) | 99% Bandwidth In U-NII 2C (MHz) | | 26 dB Bandwidth In U-NII 2C (MHz) | | IC 99% Bandwidth Power Limit (dBm) | | IC 99% Bandwidth EIRP Limit (dBm) | | FCC 26dB Bandwidth Power Limit (dBm) | |
| | | | | | Ant 1 | Ant 2 | Ant 1 | Ant 2 | Ant 1 | Ant 2 | Ant 1 | Ant 2 | Ant 1 | Ant 2 |
| 11a | 6Mbps | 1 | 100 | 5500 | 17.05 | - | 25.45 | - | 23.32 | - | 29.32 | - | 23.98 | - |
| 11a | 6Mbps | 1 | 116 | 5580 | 17.00 | - | 25.90 | - | 23.30 | - | 29.30 | - | 23.98 | - |
| 11a | 6Mbps | 1 | 140 | 5700 | 17.00 | - | 27.60 | - | 23.30 | - | 29.30 | - | 23.98 | - |
| HT20 | MCS0 | 1 | 100 | 5500 | 18.05 | - | 31.30 | - | 23.56 | - | 29.56 | - | 23.98 | - |
| HT20 | MCS0 | 1 | 116 | 5580 | 18.05 | - | 24.05 | - | 23.56 | - | 29.56 | - | 23.98 | - |
| HT20 | MCS0 | 1 | 140 | 5700 | 18.05 | - | 33.10 | - | 23.56 | - | 29.56 | - | 23.98 | - |
| HT40 | MCS0 | 1 | 102 | 5510 | 36.40 | - | 45.18 | - | 23.98 | - | 30.00 | - | 23.98 | - |
| HT40 | MCS0 | 1 | 110 | 5550 | 36.60 | - | 51.48 | - | 23.98 | - | 30.00 | - | 23.98 | - |
| HT40 | MCS0 | 1 | 134 | 5670 | 36.50 | - | 46.17 | - | 23.98 | - | 30.00 | - | 23.98 | - |
| VHT80 | MCS0 | 1 | 106 | 5530 | 75.84 | - | 84.16 | - | 23.98 | - | 30.00 | - | 23.98 | - |
| VHT80 | MCS0 | 1 | 122 | 5610 | 75.72 | - | 84.16 | - | 23.98 | - | 30.00 | - | 23.98 | - |

## ***TEST RESULTS DATA***
## ***Average Power Table***

| FCC Band III single antenna | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mod. | Data Rate | NTX | CH. | Freq. (MHz) | Average Conducted Power (dBm) | | | FCC Conducted Power Limit (dBm) | | DG (dBi) | | EIRP Power Limit (dBm) | Pass/Fail |
| | | | | | Ant 1 | Ant 2 | SUM | Ant 1 | Ant 2 | Ant 1 | Ant 2 | | |
| 11a | 6Mbps | 1 | 100 | 5500 | 18.90 | - | | 23.27 | - | 6.71 | - | 26.99 | Pass |
| 11a | 6Mbps | 1 | 116 | 5580 | 18.80 | - | | 23.27 | - | 6.71 | - | 26.99 | Pass |
| 11a | 6Mbps | 1 | 140 | 5700 | 18.20 | - | | 23.27 | - | 6.71 | - | 26.99 | Pass |
| HT20 | MCS0 | 1 | 100 | 5500 | 18.90 | - | | 23.27 | - | 6.71 | - | 26.99 | Pass |
| HT20 | MCS0 | 1 | 116 | 5580 | 18.80 | - | | 23.27 | - | 6.71 | - | 26.99 | Pass |
| HT20 | MCS0 | 1 | 140 | 5700 | 18.60 | - | | 23.27 | - | 6.71 | - | 26.99 | Pass |
| HT40 | MCS0 | 1 | 102 | 5510 | 17.50 | - | | 23.27 | - | 6.71 | - | 26.99 | Pass |
| HT40 | MCS0 | 1 | 110 | 5550 | 18.70 | - | | 23.27 | - | 6.71 | - | 26.99 | Pass |
| HT40 | MCS0 | 1 | 134 | 5670 | 18.60 | - | | 23.27 | - | 6.71 | - | 26.99 | Pass |
| VHT20 | MCS0 | 1 | 100 | 5500 | 18.80 | - | | 23.27 | - | 6.71 | - | 26.99 | Pass |
| VHT20 | MCS0 | 1 | 116 | 5580 | 18.70 | - | | 23.27 | - | 6.71 | - | 26.99 | Pass |
| VHT20 | MCS0 | 1 | 140 | 5700 | 18.50 | - | | 23.27 | - | 6.71 | - | 26.99 | Pass |
| VHT40 | MCS0 | 1 | 102 | 5510 | 17.40 | - | | 23.27 | - | 6.71 | - | 26.99 | Pass |
| VHT40 | MCS0 | 1 | 110 | 5550 | 18.60 | - | | 23.27 | - | 6.71 | - | 26.99 | Pass |
| VHT40 | MCS0 | 1 | 134 | 5670 | 18.50 | - | | 23.27 | - | 6.71 | - | 26.99 | Pass |
| VHT80 | MCS0 | 1 | 106 | 5530 | 17.50 | - | | 23.27 | - | 6.71 | - | 26.99 | Pass |
| VHT80 | MCS0 | 1 | 122 | 5610 | 18.70 | - | | 23.27 | - | 6.71 | - | 26.99 | Pass |

## *TEST RESULTS DATA*
## *Power Spectral Density*

| Band III single antenna | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mod. | Data Rate | NTX | CH. | Freq. (MHz) | Average Power Density (dBm/MHz) | | | Average PSD Limit (dBm/MHz) | | DG (dBi) | | | Pass /Fail |
| | | | | | Ant 1 | Ant 2 | SUM | Ant 1 | Ant 2 | Ant 1 | Ant 2 | | |
| 11a | 6Mbps | 1 | 100 | 5500 | 8.22 | - | | 10.29 | - | 6.71 | - | | Pass |
| 11a | 6Mbps | 1 | 116 | 5580 | 8.30 | - | | 10.29 | - | 6.71 | - | | Pass |
| 11a | 6Mbps | 1 | 140 | 5700 | 7.25 | - | | 10.29 | - | 6.71 | - | | Pass |
| HT20 | MCS0 | 1 | 100 | 5500 | 7.34 | - | | 10.29 | - | 6.71 | - | | Pass |
| HT20 | MCS0 | 1 | 116 | 5580 | 7.26 | - | | 10.29 | - | 6.71 | - | | Pass |
| HT20 | MCS0 | 1 | 140 | 5700 | 6.82 | - | | 10.29 | - | 6.71 | - | | Pass |
| HT40 | MCS0 | 1 | 102 | 5510 | 3.17 | - | | 10.29 | - | 6.71 | - | | Pass |
| HT40 | MCS0 | 1 | 110 | 5550 | 5.36 | - | | 10.29 | - | 6.71 | - | | Pass |
| HT40 | MCS0 | 1 | 134 | 5670 | 4.99 | - | | 10.29 | - | 6.71 | - | | Pass |
| VHT80 | MCS0 | 1 | 106 | 5530 | 0.86 | - | | 10.29 | - | 6.71 | - | | Pass |
| VHT80 | MCS0 | 1 | 122 | 5610 | 2.61 | - | | 10.29 | - | 6.71 | - | | Pass |

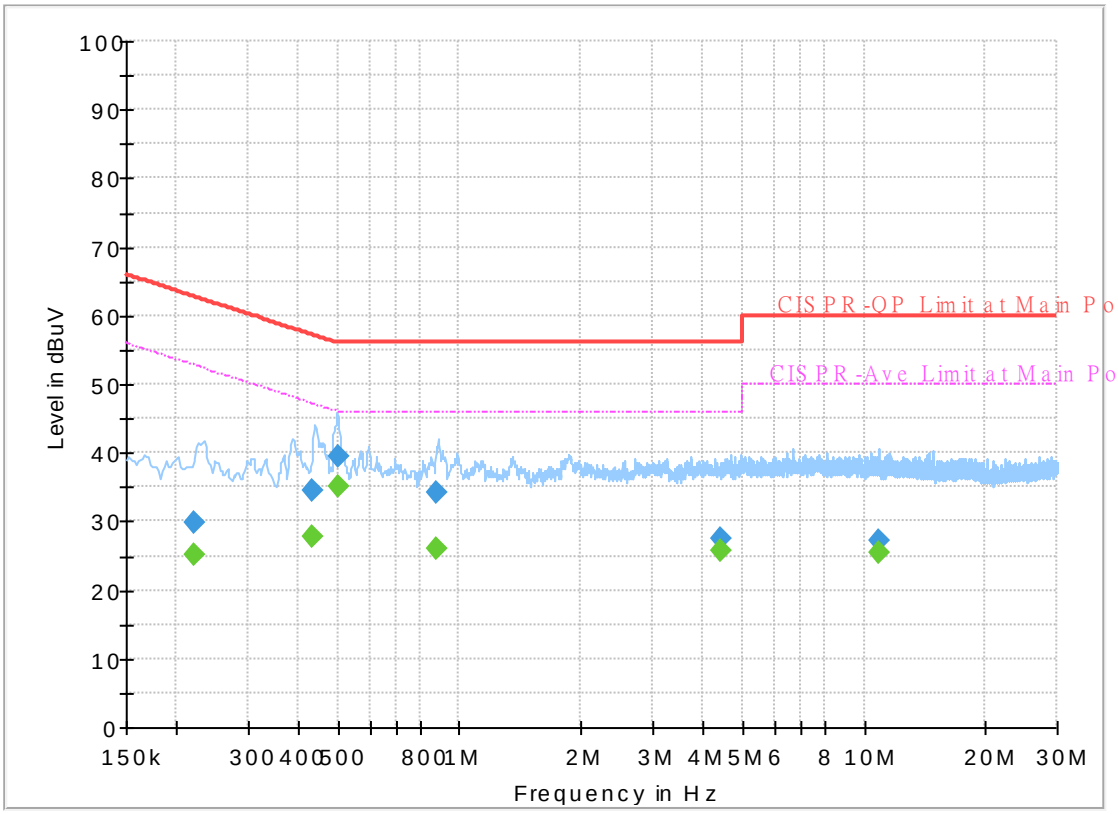
# Appendix B. AC Conducted Emission Test Results

| | | | |
|---|---|---|---|
| **Test Engineer :** | Howard Huang | **Temperature :** | 21~26℃ |
| | | **Relative Humidity :** | 38~42% |

# EUT Information

| | |
|---|---|
| Report NO : | 021246-01 |
| Test Mode : | Mode 1 |
| Test Voltage : | 120Vac/60Hz |
| Phase : | Line |

Full Spectrum



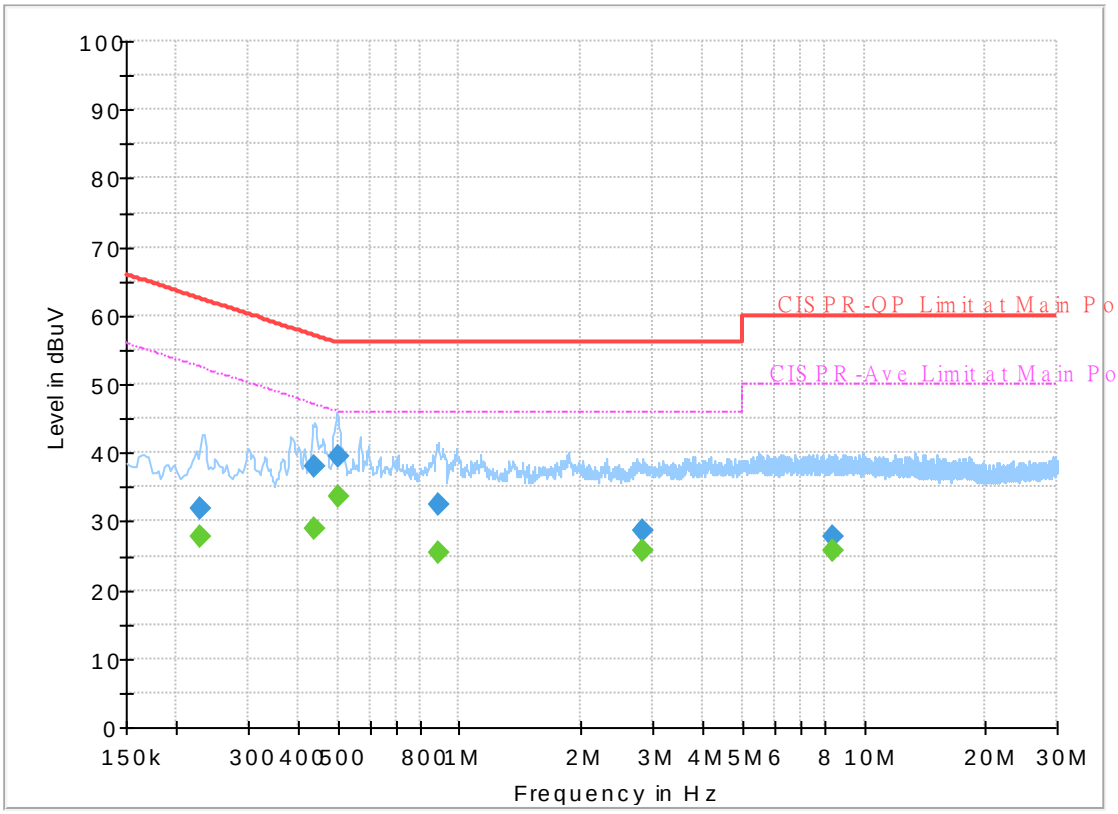

# Final_Result

| Frequency (MHz) | QuasiPeak (dBuV) | CAverage (dBuV) | Limit (dBuV) | Margin (dB) | Line | Filter | Corr. (dB) |
|---|---|---|---|---|---|---|---|
| 0.222000 | --- | 25.27 | 52.74 | 27.47 | L1 | OFF | 19.6 |
| 0.222000 | 29.87 | --- | 62.74 | 32.87 | L1 | OFF | 19.6 |
| 0.433500 | --- | 27.90 | 47.19 | 19.29 | L1 | OFF | 19.6 |
| 0.433500 | 34.64 | --- | 57.19 | 22.55 | L1 | OFF | 19.6 |
| 0.501000 | --- | 34.98 | 46.00 | 11.02 | L1 | OFF | 19.6 |
| 0.501000 | 39.50 | --- | 56.00 | 16.50 | L1 | OFF | 19.6 |
| 0.880890 | --- | 25.89 | 46.00 | 20.11 | L1 | OFF | 19.6 |
| 0.880890 | 34.28 | --- | 56.00 | 21.72 | L1 | OFF | 19.6 |
| 4.447770 | --- | 25.59 | 46.00 | 20.41 | L1 | OFF | 19.8 |
| 4.447770 | 27.46 | --- | 56.00 | 28.54 | L1 | OFF | 19.8 |
| 10.916250 | --- | 25.46 | 50.00 | 24.54 | L1 | OFF | 20.1 |
| 10.916250 | 27.16 | --- | 60.00 | 32.84 | L1 | OFF | 20.1 |

# EUT Information

| | |
|---|---|
| Report NO : | 021246-01 |
| Test Mode : | Mode 1 |
| Test Voltage : | 120Vac/60Hz |
| Phase : | Neutral |

Full Spectrum




# Final_Result

| Frequency (MHz) | QuasiPeak (dBuV) | CAverage (dBuV) | Limit (dBuV) | Margin (dB) | Line | Filter | Corr. (dB) |
|---|---|---|---|---|---|---|---|
| 0.228750 | --- | 27.84 | 52.50 | 24.66 | N | OFF | 19.6 |
| 0.228750 | 31.98 | --- | 62.50 | 30.52 | N | OFF | 19.6 |
| 0.435750 | --- | 29.03 | 47.14 | 18.11 | N | OFF | 19.6 |
| 0.435750 | 38.16 | --- | 57.14 | 18.98 | N | OFF | 19.6 |
| 0.499200 | --- | 33.65 | 46.01 | 12.36 | N | OFF | 19.6 |
| 0.499200 | 39.58 | --- | 56.01 | 16.43 | N | OFF | 19.6 |
| 0.890250 | --- | 25.43 | 46.00 | 20.57 | N | OFF | 19.6 |
| 0.890250 | 32.41 | --- | 56.00 | 23.59 | N | OFF | 19.6 |
| 2.845500 | --- | 25.78 | 46.00 | 20.22 | N | OFF | 19.7 |
| 2.845500 | 28.62 | --- | 56.00 | 27.38 | N | OFF | 19.7 |
| 8.335320 | --- | 25.73 | 50.00 | 24.27 | N | OFF | 20.0 |
| 8.335320 | 27.75 | --- | 60.00 | 32.25 | N | OFF | 20.0 |

# Appendix C. Radiated Spurious Emission

| | | | |
|---|---|---|---|
| **Test Engineer :** | Leo Lee, Mancy Chou, and Bigshow Wang | **Temperature :** | 24.3~24.7°C |
| | | **Relative Humidity :** | 55~61% |

**Band 1 - 5150~5250MHz**

**WIFI 802.11a (Band Edge @ 3m)**

| WIFI | Note | Frequency | Level | Over Limit | Limit Line | Read Level | Antenna Factor | Path Loss | Preamp Factor | Ant Pos | Table Pos | Peak Avg. | Pol. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | ( MHz ) | ( dBµV/m ) | ( dB ) | ( dBµV/m ) | (dBµV) | ( dB/m ) | ( dB ) | ( dB ) | ( cm ) | ( deg ) | (P/A) | (H/V) |
| 802.11a CH 36 5180MHz | | 5148.46 | 53.4 | -20.6 | 74 | 41.24 | 32.1 | 10.49 | 30.43 | 284 | 318 | P | H |
| | | 5127.92 | 43 | -11 | 54 | 30.91 | 32.06 | 10.46 | 30.43 | 284 | 318 | A | H |
| | * | 5180 | 103.33 | - | - | 91.3 | 31.92 | 10.54 | 30.43 | 284 | 318 | P | H |
| | * | 5180 | 94.67 | - | - | 82.64 | 31.92 | 10.54 | 30.43 | 284 | 318 | A | H |
| | | | | | | | | | | | | | H |
| | | 5059.8 | 52.14 | -21.86 | 74 | 40.29 | 31.92 | 10.36 | 30.43 | 400 | 54 | P | V |
| | | 5127.92 | 41.3 | -12.7 | 54 | 29.21 | 32.06 | 10.46 | 30.43 | 400 | 54 | A | V |
| | * | 5180 | 100.31 | - | - | 88.28 | 31.92 | 10.54 | 30.43 | 400 | 54 | P | V |
| | * | 5180 | 92.46 | - | - | 80.43 | 31.92 | 10.54 | 30.43 | 400 | 54 | A | V |
| | | | | | | | | | | | | | V |
| 802.11a CH 44 5220MHz | | 5107.12 | 52.41 | -21.59 | 74 | 40.4 | 32.01 | 10.43 | 30.43 | 243 | 316 | P | H |
| | | 5117.26 | 41.08 | -12.92 | 54 | 29.03 | 32.03 | 10.45 | 30.43 | 243 | 316 | A | H |
| | * | 5220 | 105.56 | - | - | 93.73 | 31.68 | 10.58 | 30.43 | 243 | 316 | P | H |
| | * | 5220 | 97.35 | - | - | 85.52 | 31.68 | 10.58 | 30.43 | 243 | 316 | A | H |
| | | 5457.48 | 51.72 | -22.28 | 74 | 39.68 | 31.74 | 10.73 | 30.43 | 243 | 316 | P | H |
| | | 5457.48 | 40.96 | -13.04 | 54 | 28.92 | 31.74 | 10.73 | 30.43 | 243 | 316 | A | H |
| | | 5089.18 | 52.52 | -21.48 | 74 | 40.56 | 31.98 | 10.41 | 30.43 | 400 | 27 | P | V |
| | | 5109.72 | 41.1 | -12.9 | 54 | 29.07 | 32.02 | 10.44 | 30.43 | 400 | 27 | A | V |
| | * | 5220 | 101.81 | - | - | 89.98 | 31.68 | 10.58 | 30.43 | 400 | 27 | P | V |
| | * | 5220 | 93.5 | - | - | 81.67 | 31.68 | 10.58 | 30.43 | 400 | 27 | A | V |
| | | 5413.52 | 52.19 | -21.81 | 74 | 40.24 | 31.7 | 10.68 | 30.43 | 400 | 27 | P | V |
| | | 5459.44 | 40.96 | -13.04 | 54 | 28.9 | 31.76 | 10.73 | 30.43 | 400 | 27 | A | V |

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **802.11a CH 48 5240MHz** | | 5103.22 | 52.29 | -21.71 | 74 | 40.28 | 32.01 | 10.43 | 30.43 | 258 | 314 | P | H |
| | | 5107.64 | 41.1 | -12.9 | 54 | 29.08 | 32.02 | 10.43 | 30.43 | 258 | 314 | A | H |
| | * | 5240 | 104.84 | - | - | 93.12 | 31.56 | 10.59 | 30.43 | 258 | 314 | P | H |
| | * | 5240 | 96.46 | - | - | 84.74 | 31.56 | 10.59 | 30.43 | 258 | 314 | A | H |
| | | 5439 | 52.18 | -21.82 | 74 | 40.2 | 31.7 | 10.71 | 30.43 | 258 | 314 | P | H |
| | | 5458.32 | 40.89 | -13.11 | 54 | 28.84 | 31.75 | 10.73 | 30.43 | 258 | 314 | A | H |
| | | 5116.48 | 52.41 | -21.59 | 74 | 40.36 | 32.03 | 10.45 | 30.43 | 397 | 19 | P | V |
| | | 5108.16 | 41.1 | -12.9 | 54 | 29.08 | 32.02 | 10.43 | 30.43 | 397 | 19 | A | V |
| | * | 5240 | 101.26 | - | - | 89.54 | 31.56 | 10.59 | 30.43 | 397 | 19 | P | V |
| | * | 5240 | 92.93 | - | - | 81.21 | 31.56 | 10.59 | 30.43 | 397 | 19 | A | V |
| | | 5425 | 52.08 | -21.92 | 74 | 40.12 | 31.7 | 10.69 | 30.43 | 397 | 19 | P | V |
| | | 5459.44 | 40.96 | -13.04 | 54 | 28.9 | 31.76 | 10.73 | 30.43 | 397 | 19 | A | V |
| Remark | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. | | | | | | | | | | | | |

## Band 1 5150~5250MHz

## WIFI 802.11a (Harmonic @ 3m)

| WIFI | Note | Frequency ( MHz ) | Level ( dBµV/m ) | Over Limit ( dB ) | Limit Line ( dBµV/m ) | Read Level (dBµV) | Antenna Factor ( dB/m ) | Path Loss ( dB ) | Preamp Factor ( dB ) | Ant Pos ( cm ) | Table Pos ( deg ) | Peak Avg. (P/A) | Pol. (H/V) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 802.11a CH 36 5180MHz | | 10360 | 49.06 | -19.14 | 68.2 | 55.8 | 39.9 | 14.26 | 60.9 | 100 | 0 | P | H |
| | | 15540 | 47.5 | -26.5 | 74 | 54.92 | 38 | 17.29 | 62.71 | 100 | 0 | P | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | 10360 | 48.43 | -19.77 | 68.2 | 55.17 | 39.9 | 14.26 | 60.9 | 100 | 0 | P | V |
| | | 15540 | 47.27 | -26.73 | 74 | 54.69 | 38 | 17.29 | 62.71 | 100 | 0 | P | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| 802.11a CH 44 5220MHz | | 10440 | 48.39 | -19.81 | 68.2 | 55.01 | 40.1 | 14.3 | 61.02 | 100 | 0 | P | H |
| | | 15660 | 47.27 | -26.73 | 74 | 54.43 | 37.58 | 17.39 | 62.13 | 100 | 0 | P | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | 10440 | 49.5 | -18.7 | 68.2 | 56.12 | 40.1 | 14.3 | 61.02 | 100 | 0 | P | V |
| | | 15660 | 46.54 | -27.46 | 74 | 53.7 | 37.58 | 17.39 | 62.13 | 100 | 0 | P | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| 802.11a CH 48 5240MHz | | 10480 | 48.78 | -19.42 | 68.2 | 55.44 | 40.1 | 14.31 | 61.07 | 100 | 0 | P | H |
| | | 15720 | 47.33 | -26.67 | 74 | 54.29 | 37.46 | 17.42 | 61.84 | 100 | 0 | P | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | 10480 | 48.76 | -19.44 | 68.2 | 55.42 | 40.1 | 14.31 | 61.07 | 100 | 0 | P | V |
| | | 15720 | 46.73 | -27.27 | 74 | 53.69 | 37.46 | 17.42 | 61.84 | 100 | 0 | P | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| Remark | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. | | | | | | | | | | | | |

## Band 1 5150~5250MHz

## WIFI 802.11n HT20 (Band Edge @ 3m)

| WIFI | Note | Frequency ( MHz ) | Level ( dBμV/m ) | Over Limit ( dB ) | Limit Line ( dBμV/m ) | Read Level (dBμV) | Antenna Factor ( dB/m ) | Path Loss ( dB ) | Preamp Factor ( dB ) | Ant Pos ( cm ) | Table Pos ( deg ) | Peak Avg. (P/A) | Pol. (H/V) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 5128.44 | 52.71 | -21.29 | 74 | 40.62 | 32.06 | 10.46 | 30.43 | 233 | 318 | P | H |
| | | 5128.44 | 43.45 | -10.55 | 54 | 31.36 | 32.06 | 10.46 | 30.43 | 233 | 318 | A | H |
| | * | 5180 | 103.67 | - | - | 91.64 | 31.92 | 10.54 | 30.43 | 233 | 318 | P | H |
| | * | 5180 | 95.06 | - | - | 83.03 | 31.92 | 10.54 | 30.43 | 233 | 318 | A | H |
| 802.11n | | | | | | | | | | | | | H |
| HT20 | | | | | | | | | | | | | H |
| CH 36 | | 5104 | 52.69 | -21.31 | 74 | 40.68 | 32.01 | 10.43 | 30.43 | 400 | 53 | P | V |
| 5180MHz | | 5128.7 | 41.37 | -12.63 | 54 | 29.28 | 32.06 | 10.46 | 30.43 | 400 | 53 | A | V |
| | * | 5180 | 100.28 | - | - | 88.25 | 31.92 | 10.54 | 30.43 | 400 | 53 | P | V |
| | * | 5180 | 92.28 | - | - | 80.25 | 31.92 | 10.54 | 30.43 | 400 | 53 | A | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | 5075.92 | 51.99 | -22.01 | 74 | 40.08 | 31.95 | 10.39 | 30.43 | 217 | 328 | P | H |
| | | 5132.34 | 41.09 | -12.91 | 54 | 28.99 | 32.06 | 10.47 | 30.43 | 217 | 328 | A | H |
| | * | 5220 | 105.47 | - | - | 93.64 | 31.68 | 10.58 | 30.43 | 217 | 328 | P | H |
| | * | 5220 | 97.41 | - | - | 85.58 | 31.68 | 10.58 | 30.43 | 217 | 328 | A | H |
| 802.11n | | 5448.8 | 51.91 | -22.09 | 74 | 39.92 | 31.7 | 10.72 | 30.43 | 217 | 328 | P | H |
| HT20 | | 5459.16 | 40.99 | -13.01 | 54 | 28.94 | 31.75 | 10.73 | 30.43 | 217 | 328 | A | H |
| CH 44 | | 5121.42 | 52.22 | -21.78 | 74 | 40.16 | 32.04 | 10.45 | 30.43 | 397 | 20 | P | V |
| 5220MHz | | 5108.42 | 41.12 | -12.88 | 54 | 29.1 | 32.02 | 10.43 | 30.43 | 397 | 20 | A | V |
| | * | 5220 | 102.37 | - | - | 90.54 | 31.68 | 10.58 | 30.43 | 397 | 20 | P | V |
| | * | 5220 | 93.7 | - | - | 81.87 | 31.68 | 10.58 | 30.43 | 397 | 20 | A | V |
| | | 5425.28 | 52.62 | -21.38 | 74 | 40.66 | 31.7 | 10.69 | 30.43 | 397 | 20 | P | V |
| | | 5459.44 | 40.99 | -13.01 | 54 | 28.93 | 31.76 | 10.73 | 30.43 | 397 | 20 | A | V |

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 5109.2 | 52.74 | -21.26 | 74 | 40.72 | 32.02 | 10.43 | 30.43 | 203 | 328 | P | H |
| | | 5111.8 | 41.07 | -12.93 | 54 | 29.04 | 32.02 | 10.44 | 30.43 | 203 | 328 | A | H |
| | * | 5240 | 105.13 | - | - | 93.41 | 31.56 | 10.59 | 30.43 | 203 | 328 | P | H |
| | * | 5240 | 96.21 | - | - | 84.49 | 31.56 | 10.59 | 30.43 | 203 | 328 | A | H |
| **802.11n** | | 5373.76 | 52.69 | -21.31 | 74 | 40.93 | 31.54 | 10.65 | 30.43 | 203 | 328 | P | H |
| **HT20** | | 5458.88 | 41.01 | -12.99 | 54 | 28.96 | 31.75 | 10.73 | 30.43 | 203 | 328 | A | H |
| **CH 48** | | 5125.84 | 52.25 | -21.75 | 74 | 40.17 | 32.05 | 10.46 | 30.43 | 397 | 20 | P | V |
| **5240MHz** | | 5110.76 | 41.09 | -12.91 | 54 | 29.06 | 32.02 | 10.44 | 30.43 | 397 | 20 | A | V |
| | * | 5240 | 100.69 | - | - | 88.97 | 31.56 | 10.59 | 30.43 | 397 | 20 | P | V |
| | * | 5240 | 92.46 | - | - | 80.74 | 31.56 | 10.59 | 30.43 | 397 | 20 | A | V |
| | | 5457.2 | 51.82 | -22.18 | 74 | 39.78 | 31.74 | 10.73 | 30.43 | 397 | 20 | P | V |
| | | 5459.44 | 40.94 | -13.06 | 54 | 28.88 | 31.76 | 10.73 | 30.43 | 397 | 20 | A | V |
| **Remark** | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. | | | | | | | | | | | | |

## Band 1 5150~5250MHz

## WIFI 802.11n HT20 (Harmonic @ 3m)

| WIFI | Note | Frequency ( MHz ) | Level ( dBμV/m ) | Over Limit ( dB ) | Limit Line ( dBμV/m ) | Read Level (dBμV) | Antenna Factor ( dB/m ) | Path Loss ( dB ) | Preamp Factor ( dB ) | Ant Pos ( cm ) | Table Pos ( deg ) | Peak Avg. (P/A) | Pol. (H/V) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 10360 | 48.27 | -19.93 | 68.2 | 55.01 | 39.9 | 14.26 | 60.9 | 100 | 0 | P | H |
| | | 15540 | 46.55 | -27.45 | 74 | 53.97 | 38 | 17.29 | 62.71 | 100 | 0 | P | H |
| 802.11n | | | | | | | | | | | | | H |
| HT20 | | | | | | | | | | | | | H |
| CH 36 | | 10360 | 47.94 | -20.26 | 68.2 | 54.68 | 39.9 | 14.26 | 60.9 | 100 | 0 | P | V |
| 5180MHz | | 15540 | 46.79 | -27.21 | 74 | 54.21 | 38 | 17.29 | 62.71 | 100 | 0 | P | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | 10440 | 48.53 | -19.67 | 68.2 | 55.15 | 40.1 | 14.3 | 61.02 | 100 | 0 | P | H |
| | | 15660 | 46.91 | -27.09 | 74 | 54.07 | 37.58 | 17.39 | 62.13 | 100 | 0 | P | H |
| 802.11n | | | | | | | | | | | | | H |
| HT20 | | | | | | | | | | | | | H |
| CH 44 | | 10440 | 48.62 | -19.58 | 68.2 | 55.24 | 40.1 | 14.3 | 61.02 | 100 | 0 | P | V |
| 5220MHz | | 15660 | 46.8 | -27.2 | 74 | 53.96 | 37.58 | 17.39 | 62.13 | 100 | 0 | P | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | 10480 | 48.88 | -19.32 | 68.2 | 55.54 | 40.1 | 14.31 | 61.07 | 100 | 0 | P | H |
| | | 15720 | 46.87 | -27.13 | 74 | 53.83 | 37.46 | 17.42 | 61.84 | 100 | 0 | P | H |
| 802.11n | | | | | | | | | | | | | H |
| HT20 | | | | | | | | | | | | | H |
| CH 48 | | 10480 | 48.72 | -19.48 | 68.2 | 55.38 | 40.1 | 14.31 | 61.07 | 100 | 0 | P | V |
| 5240MHz | | 15720 | 47.62 | -26.38 | 74 | 54.58 | 37.46 | 17.42 | 61.84 | 100 | 0 | P | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| Remark | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. | | | | | | | | | | | | |

## Band 1 5150~5250MHz

## WIFI 802.11n HT40 (Band Edge @ 3m)

| WIFI | Note | Frequency ( MHz ) | Level ( dBμV/m ) | Over Limit ( dB ) | Limit Line ( dBμV/m ) | Read Level (dBμV) | Antenna Factor ( dB/m ) | Path Loss ( dB ) | Preamp Factor ( dB ) | Ant Pos ( cm ) | Table Pos ( deg ) | Peak Avg. (P/A) | Pol. (H/V) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 802.11n HT40 CH 38 5190MHz | | 5146.38 | 62.17 | -11.83 | 74 | 50.02 | 32.09 | 10.49 | 30.43 | 170 | 330 | P | H |
| | | 5150 | 49.45 | -4.55 | 54 | 37.29 | 32.1 | 10.49 | 30.43 | 170 | 330 | A | H |
| | * | 5190 | 103.33 | - | - | 91.35 | 31.86 | 10.55 | 30.43 | 170 | 330 | P | H |
| | * | 5190 | 94.22 | - | - | 82.24 | 31.86 | 10.55 | 30.43 | 170 | 330 | A | H |
| | | 5409.6 | 52.28 | -21.72 | 74 | 40.34 | 31.7 | 10.67 | 30.43 | 170 | 330 | P | H |
| | | 5431.44 | 40.97 | -13.03 | 54 | 29 | 31.7 | 10.7 | 30.43 | 170 | 330 | P | H |
| | | 5149.24 | 58.95 | -15.05 | 74 | 46.79 | 32.1 | 10.49 | 30.43 | 213 | 42 | P | V |
| | | 5150 | 47.12 | -6.88 | 54 | 34.96 | 32.1 | 10.49 | 30.43 | 213 | 42 | A | V |
| | * | 5190 | 100.01 | - | - | 88.03 | 31.86 | 10.55 | 30.43 | 213 | 42 | P | V |
| | * | 5190 | 90.64 | - | - | 78.66 | 31.86 | 10.55 | 30.43 | 213 | 42 | A | V |
| | | 5424.44 | 51.67 | -22.33 | 74 | 39.71 | 31.7 | 10.69 | 30.43 | 213 | 42 | P | V |
| | | 5459.44 | 41.01 | -12.99 | 54 | 28.95 | 31.76 | 10.73 | 30.43 | 213 | 42 | A | V |
| 802.11n HT40 CH 46 5230MHz | | 5011.96 | 52.58 | -21.42 | 74 | 40.97 | 31.75 | 10.29 | 30.43 | 150 | 334 | P | H |
| | | 5127.4 | 42 | -12 | 54 | 29.92 | 32.05 | 10.46 | 30.43 | 150 | 334 | A | H |
| | * | 5230 | 103.06 | - | - | 91.29 | 31.62 | 10.58 | 30.43 | 150 | 334 | P | H |
| | * | 5230 | 94.63 | - | - | 82.86 | 31.62 | 10.58 | 30.43 | 150 | 334 | A | H |
| | | 5373.2 | 51.58 | -22.42 | 74 | 39.82 | 31.54 | 10.65 | 30.43 | 150 | 334 | P | H |
| | | 5460 | 41 | -13 | 54 | 28.94 | 31.76 | 10.73 | 30.43 | 150 | 334 | A | H |
| | | 5055.38 | 51.94 | -22.06 | 74 | 40.1 | 31.91 | 10.36 | 30.43 | 200 | 43 | P | V |
| | | 5127.4 | 41.51 | -12.49 | 54 | 29.43 | 32.05 | 10.46 | 30.43 | 200 | 43 | A | V |
| | * | 5230 | 100.52 | - | - | 88.75 | 31.62 | 10.58 | 30.43 | 200 | 43 | P | V |
| | * | 5230 | 90.55 | - | - | 78.78 | 31.62 | 10.58 | 30.43 | 200 | 43 | A | V |
| | | 5368.44 | 51.54 | -22.46 | 74 | 39.81 | 31.51 | 10.65 | 30.43 | 200 | 43 | P | V |
| | | 5458.88 | 41 | -13 | 54 | 28.95 | 31.75 | 10.73 | 30.43 | 200 | 43 | A | V |
| Remark | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. | | | | | | | | | | | | |

## Band 1 5150~5250MHz

## WIFI 802.11n HT40 (Harmonic @ 3m)

| WIFI | Note | Frequency ( MHz ) | Level ( dBµV/m ) | Over Limit ( dB ) | Limit Line ( dBµV/m ) | Read Level (dBµV) | Antenna Factor ( dB/m ) | Path Loss ( dB ) | Preamp Factor ( dB ) | Ant Pos ( cm ) | Table Pos ( deg ) | Peak Avg. (P/A) | Pol. (H/V) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 10380 | 47.82 | -20.38 | 68.2 | 54.48 | 40 | 14.27 | 60.93 | 100 | 0 | P | H |
| | | 15570 | 48.16 | -25.84 | 74 | 55.55 | 37.85 | 17.32 | 62.56 | 100 | 0 | P | H |
| 802.11n | | | | | | | | | | | | | H |
| HT40 | | | | | | | | | | | | | H |
| CH 38 | | 10380 | 48.42 | -19.78 | 68.2 | 55.08 | 40 | 14.27 | 60.93 | 100 | 0 | P | V |
| 5190MHz | | 15570 | 47.21 | -26.79 | 74 | 54.6 | 37.85 | 17.32 | 62.56 | 100 | 0 | P | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | 10460 | 49.05 | -19.15 | 68.2 | 55.69 | 40.1 | 14.3 | 61.04 | 100 | 0 | P | H |
| | | 15690 | 46.98 | -27.02 | 74 | 54.04 | 37.52 | 17.41 | 61.99 | 100 | 0 | P | H |
| 802.11n | | | | | | | | | | | | | H |
| HT40 | | | | | | | | | | | | | H |
| CH 46 | | 10460 | 48.39 | -19.81 | 68.2 | 55.03 | 40.1 | 14.3 | 61.04 | 100 | 0 | P | V |
| 5230MHz | | 15690 | 48.45 | -25.55 | 74 | 55.51 | 37.52 | 17.41 | 61.99 | 100 | 0 | P | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |

**Remark**

1. No other spurious found.
2. All results are PASS against Peak and Average limit line.

## Band 1 5150~5250MHz

## WIFI 802.11ac VHT80 (Band Edge @ 3m)

| WIFI | Note | Frequency ( MHz ) | Level ( dBµV/m ) | Over Limit ( dB ) | Limit Line ( dBµV/m ) | Read Level (dBµV) | Antenna Factor ( dB/m ) | Path Loss ( dB ) | Preamp Factor ( dB ) | Ant Pos ( cm ) | Table Pos ( deg ) | Peak Avg. (P/A) | Pol. (H/V) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 802.11ac VHT80 CH 42 5210MHz | | 5140.14 | 56.61 | -17.39 | 74 | 44.48 | 32.08 | 10.48 | 30.43 | 297 | 308 | P | H |
| | | 5149.5 | 49.74 | -4.26 | 54 | 37.58 | 32.1 | 10.49 | 30.43 | 297 | 308 | A | H |
| | * | 5210 | 96.59 | - | - | 84.71 | 31.74 | 10.57 | 30.43 | 297 | 308 | P | H |
| | * | 5210 | 89.7 | - | - | 77.82 | 31.74 | 10.57 | 30.43 | 297 | 308 | A | H |
| | | 5392.8 | 51.63 | -22.37 | 74 | 39.74 | 31.66 | 10.66 | 30.43 | 297 | 308 | P | H |
| | | 5425.84 | 44.09 | -9.91 | 54 | 32.13 | 31.7 | 10.69 | 30.43 | 297 | 308 | A | H |
| | | 5150.02 | 55.47 | -94.53 | 150 | 43.31 | 32.1 | 10.49 | 30.43 | 251 | 164 | P | V |
| | | 5149.5 | 48.9 | -5.1 | 54 | 36.74 | 32.1 | 10.49 | 30.43 | 251 | 164 | A | V |
| | * | 5210 | 94.92 | - | - | 83.04 | 31.74 | 10.57 | 30.43 | 251 | 164 | P | V |
| | * | 5210 | 87.67 | - | - | 75.79 | 31.74 | 10.57 | 30.43 | 251 | 164 | A | V |
| | | 5403.44 | 51.55 | -22.45 | 74 | 39.61 | 31.7 | 10.67 | 30.43 | 251 | 164 | P | V |
| | | 5436.76 | 44.05 | -9.95 | 54 | 32.08 | 31.7 | 10.7 | 30.43 | 251 | 164 | A | V |
| Remark | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. | | | | | | | | | | | | |

## Band 1 5150~5250MHz

## WIFI 802.11ac VHT80 (Harmonic @ 3m)

| WIFI Ant. 1 | Note | Frequency ( MHz ) | Level ( dBµV/m ) | Over Limit ( dB ) | Limit Line ( dBµV/m ) | Read Level (dBµV) | Antenna Factor ( dB/m ) | Path Loss ( dB ) | Preamp Factor ( dB ) | Ant Pos ( cm ) | Table Pos ( deg ) | Peak Avg. (P/A) | Pol. (H/V) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 10420 | 48.21 | -19.99 | 68.2 | 54.82 | 40.1 | 14.28 | 60.99 | 100 | 0 | P | H |
| | | 15630 | 48.31 | -25.69 | 74 | 55.59 | 37.64 | 17.36 | 62.28 | 100 | 0 | P | H |
| 802.11ac | | | | | | | | | | | | | H |
| VHT80 | | | | | | | | | | | | | H |
| CH 42 | | 10420 | 48.17 | -20.03 | 68.2 | 54.78 | 40.1 | 14.28 | 60.99 | 100 | 0 | P | V |
| 5210MHz | | 15630 | 47.55 | -26.45 | 74 | 54.83 | 37.64 | 17.36 | 62.28 | 100 | 0 | P | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |

**Remark**

1. No other spurious found.
2. All results are PASS against Peak and Average limit line.

## Band 2 - 5250~5350MHz

## WIFI 802.11a (Band Edge @ 3m)

| WIFI | Note | Frequency | Level | Over | Limit | Read | Antenna | Path | Preamp | Ant | Table | Peak | Pol. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Limit | Line | Level | Factor | Loss | Factor | Pos | Pos | Avg. | |
| | | ( MHz ) | ( dBμV/m ) | ( dB ) | ( dBμV/m ) | (dBμV) | ( dB/m ) | ( dB ) | ( dB ) | ( cm ) | ( deg ) | (P/A) | (H/V) |
| 802.11a CH 52 5260MHz | | 5123.76 | 51.93 | -22.07 | 74 | 39.85 | 32.05 | 10.46 | 30.43 | 253 | 316 | P | H |
| | | 5109.14 | 41.08 | -12.92 | 54 | 29.06 | 32.02 | 10.43 | 30.43 | 253 | 316 | A | H |
| | * | 5260 | 105.48 | - | - | 93.83 | 31.48 | 10.6 | 30.43 | 253 | 316 | P | H |
| | * | 5260 | 97.05 | - | - | 85.4 | 31.48 | 10.6 | 30.43 | 253 | 316 | A | H |
| | | 5388 | 51.85 | -22.15 | 74 | 39.99 | 31.63 | 10.66 | 30.43 | 253 | 316 | P | H |
| | | 5459.04 | 41.03 | -12.97 | 54 | 28.98 | 31.75 | 10.73 | 30.43 | 253 | 316 | A | H |
| | | 5085.68 | 51.51 | -22.49 | 74 | 39.57 | 31.97 | 10.4 | 30.43 | 350 | 40 | P | V |
| | | 5109.48 | 41.08 | -12.92 | 54 | 29.06 | 32.02 | 10.43 | 30.43 | 350 | 40 | A | V |
| | * | 5260 | 101.39 | - | - | 89.74 | 31.48 | 10.6 | 30.43 | 350 | 40 | P | V |
| | * | 5260 | 93.19 | - | - | 81.54 | 31.48 | 10.6 | 30.43 | 350 | 40 | A | V |
| | | 5402.64 | 51.35 | -22.65 | 74 | 39.42 | 31.7 | 10.66 | 30.43 | 350 | 40 | P | V |
| | | 5458.08 | 40.92 | -13.08 | 54 | 28.87 | 31.75 | 10.73 | 30.43 | 350 | 40 | A | V |
| 802.11a CH 60 5300MHz | | 5048.62 | 51.54 | -22.46 | 74 | 39.73 | 31.89 | 10.35 | 30.43 | 235 | 311 | P | H |
| | | 5107.78 | 41.08 | -12.92 | 54 | 29.06 | 32.02 | 10.43 | 30.43 | 235 | 311 | A | H |
| | * | 5300 | 106.26 | - | - | 94.68 | 31.4 | 10.61 | 30.43 | 235 | 311 | P | H |
| | * | 5300 | 98.5 | - | - | 86.92 | 31.4 | 10.61 | 30.43 | 235 | 311 | A | H |
| | | 5352.48 | 54.32 | -19.68 | 74 | 42.7 | 31.41 | 10.64 | 30.43 | 235 | 311 | P | H |
| | | 5352.24 | 45.91 | -8.09 | 54 | 34.29 | 31.41 | 10.64 | 30.43 | 235 | 311 | A | H |
| | | 5084.32 | 51.65 | -22.35 | 74 | 39.71 | 31.97 | 10.4 | 30.43 | 385 | 34 | P | V |
| | | 5105.74 | 41.07 | -12.93 | 54 | 29.06 | 32.01 | 10.43 | 30.43 | 385 | 34 | A | V |
| | * | 5300 | 102.61 | - | - | 91.03 | 31.4 | 10.61 | 30.43 | 385 | 34 | P | V |
| | * | 5300 | 94.31 | - | - | 82.73 | 31.4 | 10.61 | 30.43 | 385 | 34 | A | V |
| | | 5441.76 | 52.77 | -21.23 | 74 | 40.79 | 31.7 | 10.71 | 30.43 | 385 | 34 | P | V |
| | | 5352.24 | 42.27 | -11.73 | 54 | 30.65 | 31.41 | 10.64 | 30.43 | 385 | 34 | A | V |

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 802.11a CH 64 5320MHz | * | 5320 | 105.9 | - | - | 94.31 | 31.4 | 10.62 | 30.43 | 249 | 311 | P | H |
| | * | 5320 | 97.88 | - | - | 86.29 | 31.4 | 10.62 | 30.43 | 249 | 311 | A | H |
| | | 5372.48 | 54.2 | -19.8 | 74 | 42.45 | 31.53 | 10.65 | 30.43 | 249 | 311 | P | H |
| | | 5372.32 | 45.06 | -8.94 | 54 | 33.31 | 31.53 | 10.65 | 30.43 | 249 | 311 | A | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | * | 5320 | 101.3 | - | - | 89.71 | 31.4 | 10.62 | 30.43 | 364 | 33 | P | V |
| | * | 5320 | 93.12 | - | - | 81.53 | 31.4 | 10.62 | 30.43 | 364 | 33 | A | V |
| | | 5389.6 | 52.11 | -21.89 | 74 | 40.24 | 31.64 | 10.66 | 30.43 | 364 | 33 | P | V |
| | | 5372.32 | 42.02 | -11.98 | 54 | 30.27 | 31.53 | 10.65 | 30.43 | 364 | 33 | A | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| **Remark** | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. | | | | | | | | | | | | |

## Band 2 5250~5350MHz

## WIFI 802.11a (Harmonic @ 3m)

| WIFI | Note | Frequency ( MHz ) | Level ( dBµV/m ) | Over Limit ( dB ) | Limit Line ( dBµV/m ) | Read Level (dBµV) | Antenna Factor ( dB/m ) | Path Loss ( dB ) | Preamp Factor ( dB ) | Ant Pos ( cm ) | Table Pos ( deg ) | Peak Avg. (P/A) | Pol. (H/V) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 802.11a CH 52 5260MHz | | 10520 | 48.28 | -19.92 | 68.2 | 54.96 | 40.12 | 14.3 | 61.1 | 100 | 0 | P | H |
| | | 15780 | 46.88 | -27.12 | 74 | 53.65 | 37.34 | 17.45 | 61.56 | 100 | 0 | P | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | 10520 | 47.9 | -20.3 | 68.2 | 54.58 | 40.12 | 14.3 | 61.1 | 100 | 0 | P | V |
| | | 15780 | 46.77 | -27.23 | 74 | 53.54 | 37.34 | 17.45 | 61.56 | 100 | 0 | P | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| 802.11a CH 60 5300MHz | | 10600 | 49.2 | -24.8 | 74 | 55.82 | 40.2 | 14.28 | 61.1 | 100 | 0 | P | H |
| | | 15900 | 47.1 | -26.9 | 74 | 53.76 | 36.8 | 17.52 | 60.98 | 100 | 0 | P | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | 10600 | 48.59 | -25.41 | 74 | 55.21 | 40.2 | 14.28 | 61.1 | 100 | 0 | P | V |
| | | 15900 | 45.68 | -28.32 | 74 | 52.34 | 36.8 | 17.52 | 60.98 | 100 | 0 | P | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| 802.11a CH 64 5320MHz | | 10640 | 49.6 | -24.4 | 74 | 56.28 | 40.16 | 14.26 | 61.1 | 100 | 0 | P | H |
| | | 15960 | 46.44 | -27.56 | 74 | 52.76 | 36.92 | 17.45 | 60.69 | 100 | 0 | P | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | 10640 | 49.05 | -24.95 | 74 | 55.73 | 40.16 | 14.26 | 61.1 | 100 | 0 | P | V |
| | | 15960 | 45.85 | -28.15 | 74 | 52.17 | 36.92 | 17.45 | 60.69 | 100 | 0 | P | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| Remark | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. | | | | | | | | | | | | |

## Band 2 5250~5350MHz

## WIFI 802.11n HT20 (Band Edge @ 3m)

| WIFI | Note | Frequency ( MHz ) | Level ( dBμV/m ) | Over Limit ( dB ) | Limit Line ( dBμV/m ) | Read Level (dBμV) | Antenna Factor ( dB/m ) | Path Loss ( dB ) | Preamp Factor ( dB ) | Ant Pos ( cm ) | Table Pos ( deg ) | Peak Avg. (P/A) | Pol. (H/V) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 802.11n HT20 CH 52 5260MHz | | 5139.06 | 51.98 | -22.02 | 74 | 39.85 | 32.08 | 10.48 | 30.43 | 252 | 316 | P | H |
| | | 5111.18 | 41.09 | -12.91 | 54 | 29.06 | 32.02 | 10.44 | 30.43 | 252 | 316 | A | H |
| | * | 5260 | 105 | - | - | 93.35 | 31.48 | 10.6 | 30.43 | 252 | 316 | P | H |
| | * | 5260 | 96.68 | - | - | 85.03 | 31.48 | 10.6 | 30.43 | 252 | 316 | A | H |
| | | 5351.04 | 52.7 | -21.3 | 74 | 41.08 | 31.41 | 10.64 | 30.43 | 252 | 316 | P | H |
| | | 5459.76 | 41 | -13 | 54 | 28.94 | 31.76 | 10.73 | 30.43 | 252 | 316 | A | H |
| | | 5148.58 | 52.13 | -21.87 | 74 | 39.97 | 32.1 | 10.49 | 30.43 | 371 | 42 | P | V |
| | | 5108.8 | 41.09 | -12.91 | 54 | 29.07 | 32.02 | 10.43 | 30.43 | 371 | 42 | A | V |
| | * | 5260 | 101.16 | - | - | 89.51 | 31.48 | 10.6 | 30.43 | 371 | 42 | P | V |
| | * | 5260 | 93 | - | - | 81.35 | 31.48 | 10.6 | 30.43 | 371 | 42 | A | V |
| | | 5423.52 | 51.37 | -22.63 | 74 | 39.41 | 31.7 | 10.69 | 30.43 | 371 | 42 | P | V |
| | | 5459.28 | 40.96 | -13.04 | 54 | 28.9 | 31.76 | 10.73 | 30.43 | 371 | 42 | A | V |
| 802.11n HT20 CH 60 5300MHz | | 5076.16 | 52.15 | -21.85 | 74 | 40.24 | 31.95 | 10.39 | 30.43 | 260 | 300 | P | H |
| | | 5108.46 | 41.1 | -12.9 | 54 | 29.08 | 32.02 | 10.43 | 30.43 | 260 | 300 | A | H |
| | * | 5300 | 106.53 | - | - | 94.95 | 31.4 | 10.61 | 30.43 | 260 | 300 | P | H |
| | * | 5300 | 98.45 | - | - | 86.87 | 31.4 | 10.61 | 30.43 | 260 | 300 | A | H |
| | | 5351.76 | 54.9 | -19.1 | 74 | 43.28 | 31.41 | 10.64 | 30.43 | 260 | 300 | P | H |
| | | 5351.76 | 46.16 | -7.84 | 54 | 34.54 | 31.41 | 10.64 | 30.43 | 260 | 300 | A | H |
| | | 5048.62 | 51.8 | -22.2 | 74 | 39.99 | 31.89 | 10.35 | 30.43 | 330 | 41 | P | V |
| | | 5106.76 | 41.1 | -12.9 | 54 | 29.09 | 32.01 | 10.43 | 30.43 | 330 | 41 | A | V |
| | * | 5300 | 102.2 | - | - | 90.62 | 31.4 | 10.61 | 30.43 | 330 | 41 | P | V |
| | * | 5300 | 93.93 | - | - | 82.35 | 31.4 | 10.61 | 30.43 | 330 | 41 | A | V |
| | | 5351.52 | 52.53 | -21.47 | 74 | 40.91 | 31.41 | 10.64 | 30.43 | 330 | 41 | P | V |
| | | 5351.76 | 42.91 | -11.09 | 54 | 31.29 | 31.41 | 10.64 | 30.43 | 330 | 41 | A | V |

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | * | 5320 | 105.49 | - | - | 93.9 | 31.4 | 10.62 | 30.43 | 248 | 312 | P | H |
| | * | 5320 | 97.51 | - | - | 85.92 | 31.4 | 10.62 | 30.43 | 248 | 312 | A | H |
| | | 5350.56 | 54.01 | -19.99 | 74 | 42.4 | 31.4 | 10.64 | 30.43 | 248 | 312 | P | H |
| | | 5371.68 | 45.58 | -8.42 | 54 | 33.83 | 31.53 | 10.65 | 30.43 | 248 | 312 | A | H |
| **802.11n** | | | | | | | | | | | | | H |
| **HT20** | | | | | | | | | | | | | H |
| **CH 64** | * | 5320 | 101.43 | - | - | 89.84 | 31.4 | 10.62 | 30.43 | 383 | 33 | P | V |
| **5320MHz** | * | 5320 | 92.98 | - | - | 81.39 | 31.4 | 10.62 | 30.43 | 383 | 33 | A | V |
| | | 5372.32 | 51.91 | -22.09 | 74 | 40.16 | 31.53 | 10.65 | 30.43 | 383 | 33 | P | V |
| | | 5371.68 | 41.94 | -12.06 | 54 | 30.19 | 31.53 | 10.65 | 30.43 | 383 | 33 | A | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |

| | |
|---|---|
| **Remark** | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |

## Band 2 5250~5350MHz

## WIFI 802.11n HT20 (Harmonic @ 3m)

| WIFI | Note | Frequency ( MHz ) | Level ( dBμV/m ) | Over Limit ( dB ) | Limit Line ( dBμV/m ) | Read Level (dBμV) | Antenna Factor ( dB/m ) | Path Loss ( dB ) | Preamp Factor ( dB ) | Ant Pos ( cm ) | Table Pos ( deg ) | Peak Avg. (P/A) | Pol. (H/V) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 10520 | 47.59 | -20.61 | 68.2 | 54.27 | 40.12 | 14.3 | 61.1 | 100 | 0 | P | H |
| | | 15780 | 46.68 | -27.32 | 74 | 53.45 | 37.34 | 17.45 | 61.56 | 100 | 0 | P | H |
| 802.11n | | | | | | | | | | | | | H |
| HT20 | | | | | | | | | | | | | H |
| CH 52 | | 10520 | 47.88 | -20.32 | 68.2 | 54.56 | 40.12 | 14.3 | 61.1 | 100 | 0 | P | V |
| 5260MHz | | 15780 | 46.78 | -27.22 | 74 | 53.55 | 37.34 | 17.45 | 61.56 | 100 | 0 | P | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | 10600 | 49.95 | -24.05 | 74 | 56.57 | 40.2 | 14.28 | 61.1 | 100 | 0 | P | H |
| | | 15900 | 46.65 | -27.35 | 74 | 53.31 | 36.8 | 17.52 | 60.98 | 100 | 0 | P | H |
| 802.11n | | | | | | | | | | | | | H |
| HT20 | | | | | | | | | | | | | H |
| CH 60 | | 10600 | 48.13 | -25.87 | 74 | 54.75 | 40.2 | 14.28 | 61.1 | 100 | 0 | P | V |
| 5300MHz | | 15900 | 46.61 | -27.39 | 74 | 53.27 | 36.8 | 17.52 | 60.98 | 100 | 0 | P | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | 10640 | 49.32 | -24.68 | 74 | 56 | 40.16 | 14.26 | 61.1 | 100 | 0 | P | H |
| | | 15960 | 46.47 | -27.53 | 74 | 52.79 | 36.92 | 17.45 | 60.69 | 100 | 0 | P | H |
| 802.11n | | | | | | | | | | | | | H |
| HT20 | | | | | | | | | | | | | H |
| CH 64 | | 10640 | 48.83 | -25.17 | 74 | 55.51 | 40.16 | 14.26 | 61.1 | 100 | 0 | P | V |
| 5320MHz | | 15960 | 46.19 | -27.81 | 74 | 52.51 | 36.92 | 17.45 | 60.69 | 100 | 0 | P | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| Remark | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. | | | | | | | | | | | | |

## Band 2 5250~5350MHz

## WIFI 802.11n HT40 (Band Edge @ 3m)

| WIFI | Note | Frequency ( MHz ) | Level ( dBμV/m ) | Over Limit ( dB ) | Limit Line ( dBμV/m ) | Read Level (dBμV) | Antenna Factor ( dB/m ) | Path Loss ( dB ) | Preamp Factor ( dB ) | Ant Pos ( cm ) | Table Pos ( deg ) | Peak Avg. (P/A) | Pol. (H/V) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 802.11n HT40 CH 54 5270MHz | | 5103.7 | 51.35 | -22.65 | 74 | 39.34 | 32.01 | 10.43 | 30.43 | 265 | 302 | P | H |
| | | 5135.32 | 41.1 | -12.9 | 54 | 28.99 | 32.07 | 10.47 | 30.43 | 265 | 302 | A | H |
| | * | 5270 | 103.68 | - | - | 92.05 | 31.46 | 10.6 | 30.43 | 265 | 302 | P | H |
| | * | 5270 | 95.1 | - | - | 83.47 | 31.46 | 10.6 | 30.43 | 265 | 302 | A | H |
| | | 5453.04 | 52.89 | -21.11 | 74 | 40.88 | 31.72 | 10.72 | 30.43 | 265 | 302 | P | H |
| | | 5372.4 | 42.81 | -11.19 | 54 | 31.06 | 31.53 | 10.65 | 30.43 | 265 | 302 | A | H |
| | | 5066.98 | 51.79 | -22.21 | 74 | 39.92 | 31.93 | 10.37 | 30.43 | 367 | 40 | P | V |
| | | 5107.1 | 41.08 | -12.92 | 54 | 29.07 | 32.01 | 10.43 | 30.43 | 367 | 40 | A | V |
| | * | 5270 | 98.38 | - | - | 86.75 | 31.46 | 10.6 | 30.43 | 367 | 40 | P | V |
| | * | 5270 | 90.8 | - | - | 79.17 | 31.46 | 10.6 | 30.43 | 367 | 40 | A | V |
| | | 5422.32 | 51.89 | -22.11 | 74 | 39.93 | 31.7 | 10.69 | 30.43 | 367 | 40 | P | V |
| | | 5372.64 | 41.06 | -12.94 | 54 | 29.3 | 31.54 | 10.65 | 30.43 | 367 | 40 | A | V |
| 802.11n HT40 CH 62 5310MHz | | 5121.38 | 52.09 | -21.91 | 74 | 40.03 | 32.04 | 10.45 | 30.43 | 247 | 312 | P | H |
| | | 5114.58 | 41.08 | -12.92 | 54 | 29.04 | 32.03 | 10.44 | 30.43 | 247 | 312 | A | H |
| | * | 5310 | 103.51 | - | - | 91.92 | 31.4 | 10.62 | 30.43 | 247 | 312 | P | H |
| | * | 5310 | 95.43 | - | - | 83.84 | 31.4 | 10.62 | 30.43 | 247 | 312 | A | H |
| | | 5350.08 | 63.62 | -10.38 | 74 | 52.01 | 31.4 | 10.64 | 30.43 | 247 | 312 | P | H |
| | | 5350.08 | 47.13 | -6.87 | 54 | 35.52 | 31.4 | 10.64 | 30.43 | 247 | 312 | A | H |
| | | 5139.74 | 53.07 | -20.93 | 74 | 40.94 | 32.08 | 10.48 | 30.43 | 386 | 32 | P | V |
| | | 5108.46 | 41.12 | -12.88 | 54 | 29.1 | 32.02 | 10.43 | 30.43 | 386 | 32 | A | V |
| | * | 5310 | 99.09 | - | - | 87.5 | 31.4 | 10.62 | 30.43 | 386 | 32 | P | V |
| | * | 5310 | 91.99 | - | - | 80.4 | 31.4 | 10.62 | 30.43 | 386 | 32 | A | V |
| | | 5350.32 | 59.2 | -14.8 | 74 | 47.59 | 31.4 | 10.64 | 30.43 | 386 | 32 | P | V |
| | | 5350.08 | 43.01 | -10.99 | 54 | 31.4 | 31.4 | 10.64 | 30.43 | 386 | 32 | A | V |
| Remark | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. | | | | | | | | | | | | |

## Band 2 5250~5350MHz

## WIFI 802.11n HT40 (Harmonic @ 3m)

| WIFI | Note | Frequency ( MHz ) | Level ( dBµV/m ) | Over Limit ( dB ) | Limit Line ( dBµV/m ) | Read Level (dBµV) | Antenna Factor ( dB/m ) | Path Loss ( dB ) | Preamp Factor ( dB ) | Ant Pos ( cm ) | Table Pos ( deg ) | Peak Avg. (P/A) | Pol. (H/V) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 10540 | 48.1 | -20.1 | 68.2 | 54.76 | 40.14 | 14.3 | 61.1 | 100 | 0 | P | H |
| | | 15810 | 47.13 | -26.87 | 74 | 53.82 | 37.25 | 17.47 | 61.41 | 100 | 0 | P | H |
| 802.11n | | | | | | | | | | | | | H |
| HT40 | | | | | | | | | | | | | H |
| CH 54 | | 10540 | 48.05 | -20.15 | 68.2 | 54.71 | 40.14 | 14.3 | 61.1 | 100 | 0 | P | V |
| 5270MHz | | 15810 | 46.6 | -27.4 | 74 | 53.29 | 37.25 | 17.47 | 61.41 | 100 | 0 | P | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | 10620 | 48.99 | -25.01 | 74 | 55.64 | 40.18 | 14.27 | 61.1 | 100 | 0 | P | H |
| | | 15930 | 46.57 | -27.43 | 74 | 53.06 | 36.86 | 17.49 | 60.84 | 100 | 0 | P | H |
| 802.11n | | | | | | | | | | | | | H |
| HT40 | | | | | | | | | | | | | H |
| CH 62 | | 10620 | 48.71 | -25.29 | 74 | 55.36 | 40.18 | 14.27 | 61.1 | 100 | 0 | P | V |
| 5310MHz | | 15930 | 45.87 | -28.13 | 74 | 52.36 | 36.86 | 17.49 | 60.84 | 100 | 0 | P | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| Remark | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. | | | | | | | | | | | | |

## Band 2 5250~5350MHz

## WIFI 802.11ac VHT80 (Band Edge @ 3m)

| WIFI | Note | Frequency ( MHz ) | Level ( dBµV/m ) | Over Limit ( dB ) | Limit Line ( dBµV/m ) | Read Level (dBµV) | Antenna Factor ( dB/m ) | Path Loss ( dB ) | Preamp Factor ( dB ) | Ant Pos ( cm ) | Table Pos ( deg ) | Peak Avg. (P/A) | Pol. (H/V) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 802.11ac VHT80 CH 58 5290MHz | | 5118.32 | 52.04 | -21.96 | 74 | 39.98 | 32.04 | 10.45 | 30.43 | 210 | 307 | P | H |
| | | 5114.92 | 44.35 | -9.65 | 54 | 32.31 | 32.03 | 10.44 | 30.43 | 210 | 307 | A | H |
| | * | 5290 | 98.57 | - | - | 86.97 | 31.42 | 10.61 | 30.43 | 210 | 307 | P | H |
| | * | 5290 | 91.47 | - | - | 79.87 | 31.42 | 10.61 | 30.43 | 210 | 307 | A | H |
| | | 5368.32 | 60.22 | -13.78 | 74 | 48.49 | 31.51 | 10.65 | 30.43 | 210 | 307 | P | H |
| | | 5356.32 | 49.34 | -4.66 | 54 | 37.69 | 31.44 | 10.64 | 30.43 | 210 | 307 | A | H |
| | | 5082.96 | 51.5 | -22.5 | 74 | 39.56 | 31.97 | 10.4 | 30.43 | 164 | 348 | P | V |
| | | 5110.84 | 44.55 | -9.45 | 54 | 32.52 | 32.02 | 10.44 | 30.43 | 164 | 348 | A | V |
| | * | 5290 | 95.57 | - | - | 83.97 | 31.42 | 10.61 | 30.43 | 164 | 348 | P | V |
| | * | 5290 | 88.4 | - | - | 76.8 | 31.42 | 10.61 | 30.43 | 164 | 348 | A | V |
| | | 5368.08 | 55.87 | -18.13 | 74 | 44.14 | 31.51 | 10.65 | 30.43 | 164 | 348 | P | V |
| | | 5350.8 | 46.07 | -7.93 | 54 | 34.46 | 31.4 | 10.64 | 30.43 | 164 | 348 | A | V |
| Remark | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. | | | | | | | | | | | | |

## Band 2 5250~5350MHz

## WIFI 802.11ac VHT80 (Harmonic @ 3m)

| WIFI | Note | Frequency ( MHz ) | Level ( dBμV/m ) | Over Limit ( dB ) | Limit Line ( dBμV/m ) | Read Level (dBμV) | Antenna Factor ( dB/m ) | Path Loss ( dB ) | Preamp Factor ( dB ) | Ant Pos ( cm ) | Table Pos ( deg ) | Peak Avg. (P/A) | Pol. (H/V) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 10580 | 49.27 | -18.93 | 68.2 | 55.9 | 40.18 | 14.29 | 61.1 | 100 | 0 | P | H |
| | | 15870 | 47.52 | -26.48 | 74 | 54.18 | 36.95 | 17.51 | 61.12 | 100 | 0 | P | H |
| 802.11ac | | | | | | | | | | | | | H |
| VHT80 | | | | | | | | | | | | | H |
| CH 58 | | 10580 | 47.76 | -20.44 | 68.2 | 54.39 | 40.18 | 14.29 | 61.1 | 100 | 0 | P | V |
| 5290MHz | | 15870 | 46.86 | -27.14 | 74 | 53.52 | 36.95 | 17.51 | 61.12 | 100 | 0 | P | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| Remark | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. | | | | | | | | | | | | |

## Band 3 - 5470~5725MHz

## WIFI 802.11a (Band Edge @ 3m)

| WIFI | Note | Frequency | Level | Over | Limit | Read | Antenna | Path | Preamp | Ant | Table | Peak | Pol. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Limit | Line | Level | Factor | Loss | Factor | Pos | Pos | Avg. | |
| | | ( MHz ) | ( dBμV/m ) | ( dB ) | ( dBμV/m ) | (dBμV) | ( dB/m ) | ( dB ) | ( dB ) | ( cm ) | ( deg ) | (P/A) | (H/V) |
| 802.11a CH 100 5500MHz | | 5447.76 | 54.61 | -19.39 | 74 | 42.62 | 31.7 | 10.72 | 30.43 | 196 | 307 | P | H |
| | | 5469.2 | 63.59 | -4.61 | 68.2 | 51.46 | 31.82 | 10.74 | 30.43 | 196 | 307 | P | H |
| | | 5447.92 | 46.21 | -7.79 | 54 | 34.22 | 31.7 | 10.72 | 30.43 | 196 | 307 | A | H |
| | * | 5500 | 109.79 | - | - | 97.44 | 32 | 10.78 | 30.43 | 196 | 307 | P | H |
| | * | 5500 | 100.57 | - | - | 88.22 | 32 | 10.78 | 30.43 | 196 | 307 | A | H |
| | | | | | | | | | | | | | H |
| | | 5447.44 | 53.58 | -20.42 | 74 | 41.59 | 31.7 | 10.72 | 30.43 | 251 | 72 | P | V |
| | | 5469.2 | 57.66 | -10.54 | 68.2 | 45.53 | 31.82 | 10.74 | 30.43 | 251 | 72 | P | V |
| | | 5447.92 | 44.46 | -9.54 | 54 | 32.47 | 31.7 | 10.72 | 30.43 | 251 | 72 | A | V |
| | * | 5500 | 106.68 | - | - | 94.33 | 32 | 10.78 | 30.43 | 251 | 72 | P | V |
| | * | 5500 | 97.81 | - | - | 85.46 | 32 | 10.78 | 30.43 | 251 | 72 | A | V |
| | | | | | | | | | | | | | V |
| 802.11a CH 116 5580MHz | | 5455.6 | 52.17 | -21.83 | 74 | 40.14 | 31.73 | 10.73 | 30.43 | 224 | 312 | P | H |
| | | 5468.32 | 53.14 | -15.06 | 68.2 | 41.02 | 31.81 | 10.74 | 30.43 | 224 | 312 | P | H |
| | | 5458 | 41.23 | -12.77 | 54 | 29.18 | 31.75 | 10.73 | 30.43 | 224 | 312 | A | H |
| | * | 5580 | 109.82 | - | - | 97.57 | 31.86 | 10.87 | 30.48 | 224 | 312 | P | H |
| | * | 5580 | 101.12 | - | - | 88.87 | 31.86 | 10.87 | 30.48 | 224 | 312 | A | H |
| | | 5754.92 | 51.39 | -16.81 | 68.2 | 39.1 | 32.02 | 10.86 | 30.59 | 224 | 312 | P | H |
| | | 5350.96 | 52.07 | -21.93 | 74 | 40.45 | 31.41 | 10.64 | 30.43 | 149 | 50 | P | V |
| | | 5466.64 | 51.73 | -16.47 | 68.2 | 39.62 | 31.8 | 10.74 | 30.43 | 149 | 50 | P | V |
| | | 5458 | 41.12 | -12.88 | 54 | 29.07 | 31.75 | 10.73 | 30.43 | 149 | 50 | A | V |
| | * | 5580 | 105 | - | - | 92.75 | 31.86 | 10.87 | 30.48 | 149 | 50 | P | V |
| | * | 5580 | 96.58 | - | - | 84.33 | 31.86 | 10.87 | 30.48 | 149 | 50 | A | V |
| | | 5726.57 | 51.96 | -16.24 | 68.2 | 39.66 | 32 | 10.87 | 30.57 | 149 | 50 | P | V |

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 802.11a CH 140 5700MHz | * | 5700 | 108.07 | - | - | 95.75 | 32 | 10.87 | 30.55 | 213 | 300 | P | H |
| | * | 5700 | 99.29 | - | - | 86.97 | 32 | 10.87 | 30.55 | 213 | 300 | A | H |
| | | 5725.64 | 59.32 | -8.88 | 68.2 | 47.02 | 32 | 10.87 | 30.57 | 213 | 300 | P | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | * | 5700 | 103.62 | - | - | 91.3 | 32 | 10.87 | 30.55 | 126 | 49 | P | V |
| | * | 5700 | 94.82 | - | - | 82.5 | 32 | 10.87 | 30.55 | 126 | 49 | A | V |
| | | 5726.68 | 56.6 | -11.6 | 68.2 | 44.3 | 32 | 10.87 | 30.57 | 126 | 49 | P | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| **Remark** | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. | | | | | | | | | | | | |

## Band 3 - 5470~5725MHz

## WIFI 802.11a (Harmonic @ 3m)

| WIFI | Note | Frequency ( MHz ) | Level ( dBµV/m ) | Over Limit ( dB ) | Limit Line ( dBµV/m ) | Read Level (dBµV) | Antenna Factor ( dB/m ) | Path Loss ( dB ) | Preamp Factor ( dB ) | Ant Pos ( cm ) | Table Pos ( deg ) | Peak Avg. (P/A) | Pol. (H/V) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 802.11a CH 100 5500MHz | | 11000 | 49.39 | -24.61 | 74 | 55.67 | 40.6 | 14.22 | 61.1 | 100 | 0 | P | H |
| | | 16500 | 48.56 | -19.64 | 68.2 | 51.38 | 38.8 | 17.78 | 59.4 | 100 | 0 | P | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | 11000 | 49.61 | -24.39 | 74 | 55.89 | 40.6 | 14.22 | 61.1 | 100 | 0 | P | V |
| | | 16500 | 48.04 | -20.16 | 68.2 | 50.86 | 38.8 | 17.78 | 59.4 | 100 | 0 | P | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| 802.11a CH 116 5580MHz | | 11160 | 48.91 | -25.09 | 74 | 55.23 | 40.22 | 14.5 | 61.04 | 100 | 0 | P | H |
| | | 16740 | 51.32 | -16.88 | 68.2 | 52.4 | 39.98 | 18.2 | 59.26 | 100 | 0 | P | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | 11160 | 49.34 | -24.66 | 74 | 55.66 | 40.22 | 14.5 | 61.04 | 100 | 0 | P | V |
| | | 16740 | 49.66 | -18.54 | 68.2 | 50.74 | 39.98 | 18.2 | 59.26 | 100 | 0 | P | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| 802.11a CH 140 5700MHz | | 11400 | 49.85 | -24.15 | 74 | 55.62 | 40.3 | 14.87 | 60.94 | 100 | 0 | P | H |
| | | 17100 | 51.52 | -16.68 | 68.2 | 51.19 | 40.8 | 18.51 | 58.98 | 100 | 0 | P | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | 11400 | 49.88 | -24.12 | 74 | 55.65 | 40.3 | 14.87 | 60.94 | 100 | 0 | P | V |
| | | 17100 | 50.5 | -17.7 | 68.2 | 50.17 | 40.8 | 18.51 | 58.98 | 100 | 0 | P | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| **Remark** | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. | | | | | | | | | | | | |

## Band 3 - 5470~5725MHz

## WIFI 802.11n HT20 (Band Edge @ 3m)

| WIFI | Note | Frequency ( MHz ) | Level ( dBµV/m ) | Over Limit ( dB ) | Limit Line ( dBµV/m ) | Read Level (dBµV) | Antenna Factor ( dB/m ) | Path Loss ( dB ) | Preamp Factor ( dB ) | Ant Pos ( cm ) | Table Pos ( deg ) | Peak Avg. (P/A) | Pol. (H/V) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 5447.92 | 55.95 | -18.05 | 74 | 43.96 | 31.7 | 10.72 | 30.43 | 219 | 309 | P | H |
| | | 5466.8 | 61.97 | -6.23 | 68.2 | 49.86 | 31.8 | 10.74 | 30.43 | 219 | 309 | P | H |
| | | 5448.4 | 47.41 | -6.59 | 54 | 35.42 | 31.7 | 10.72 | 30.43 | 219 | 309 | A | H |
| | * | 5500 | 108.71 | - | - | 96.36 | 32 | 10.78 | 30.43 | 219 | 309 | P | H |
| 802.11n | * | 5500 | 100.65 | - | - | 88.3 | 32 | 10.78 | 30.43 | 219 | 309 | A | H |
| HT20 | | | | | | | | | | | | | H |
| CH 100 | | 5447.76 | 53.16 | -20.84 | 74 | 41.17 | 31.7 | 10.72 | 30.43 | 149 | 68 | P | V |
| 5500MHz | | 5467.28 | 58.66 | -9.54 | 68.2 | 46.55 | 31.8 | 10.74 | 30.43 | 149 | 68 | P | V |
| | | 5448.4 | 43.68 | -10.32 | 54 | 31.69 | 31.7 | 10.72 | 30.43 | 149 | 68 | A | V |
| | * | 5500 | 104.59 | - | - | 92.24 | 32 | 10.78 | 30.43 | 149 | 68 | P | V |
| | * | 5500 | 95.95 | - | - | 83.6 | 32 | 10.78 | 30.43 | 149 | 68 | A | V |
| | | | | | | | | | | | | | V |
| | | 5385.04 | 52.2 | -21.8 | 74 | 40.37 | 31.61 | 10.65 | 30.43 | 214 | 313 | P | H |
| | | 5465.68 | 50.84 | -17.36 | 68.2 | 38.74 | 31.79 | 10.74 | 30.43 | 214 | 313 | P | H |
| | | 5459.44 | 41.27 | -12.73 | 54 | 29.21 | 31.76 | 10.73 | 30.43 | 214 | 313 | A | H |
| | * | 5580 | 109.94 | - | - | 97.69 | 31.86 | 10.87 | 30.48 | 214 | 313 | P | H |
| 802.11n | * | 5580 | 101.09 | - | - | 88.84 | 31.86 | 10.87 | 30.48 | 214 | 313 | A | H |
| HT20 | | 5760.59 | 51.73 | -16.47 | 68.2 | 39.42 | 32.04 | 10.86 | 30.59 | 214 | 313 | P | H |
| CH 116 | | 5384.08 | 51.6 | -22.4 | 74 | 39.78 | 31.6 | 10.65 | 30.43 | 144 | 40 | P | V |
| 5580MHz | | 5464.48 | 51.3 | -16.9 | 68.2 | 39.2 | 31.79 | 10.74 | 30.43 | 144 | 40 | P | V |
| | | 5458.48 | 41.16 | -12.84 | 54 | 29.11 | 31.75 | 10.73 | 30.43 | 144 | 40 | A | V |
| | * | 5580 | 104.9 | - | - | 92.65 | 31.86 | 10.87 | 30.48 | 144 | 40 | P | V |
| | * | 5580 | 96.15 | - | - | 83.9 | 31.86 | 10.87 | 30.48 | 144 | 40 | A | V |
| | | 5740.115 | 51.94 | -16.26 | 68.2 | 39.66 | 32 | 10.86 | 30.58 | 144 | 40 | P | V |

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | * | 5700 | 107.45 | - | - | 95.13 | 32 | 10.87 | 30.55 | 219 | 311 | P | H |
| | * | 5700 | 99.09 | - | - | 86.77 | 32 | 10.87 | 30.55 | 219 | 311 | A | H |
| | | 5725.24 | 61.68 | -6.52 | 68.2 | 49.38 | 32 | 10.87 | 30.57 | 219 | 311 | P | H |
| | | | | | | | | | | | | | H |
| **802.11n** | | | | | | | | | | | | | H |
| **HT20** | | | | | | | | | | | | | H |
| **CH 140** | * | 5700 | 102.39 | - | - | 90.07 | 32 | 10.87 | 30.55 | 141 | 44 | P | V |
| **5700MHz** | * | 5700 | 94.16 | - | - | 81.84 | 32 | 10.87 | 30.55 | 141 | 44 | A | V |
| | | 5725.16 | 56.27 | -11.93 | 68.2 | 43.97 | 32 | 10.87 | 30.57 | 141 | 44 | P | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |

| | |
|---|---|
| **Remark** | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |

## Band 3 - 5470~5725MHz

## WIFI 802.11n HT20 (Harmonic @ 3m)

| WIFI | Note | Frequency ( MHz ) | Level ( dBµV/m ) | Over Limit ( dB ) | Limit Line ( dBµV/m ) | Read Level (dBµV) | Antenna Factor ( dB/m ) | Path Loss ( dB ) | Preamp Factor ( dB ) | Ant Pos ( cm ) | Table Pos ( deg ) | Peak Avg. (P/A) | Pol. (H/V) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 11000 | 49.88 | -24.12 | 74 | 56.16 | 40.6 | 14.22 | 61.1 | 100 | 0 | P | H |
| | | 16500 | 48.75 | -19.45 | 68.2 | 51.57 | 38.8 | 17.78 | 59.4 | 100 | 0 | P | H |
| 802.11n | | | | | | | | | | | | | H |
| HT20 | | | | | | | | | | | | | H |
| CH 100 | | 11000 | 49.65 | -24.35 | 74 | 55.93 | 40.6 | 14.22 | 61.1 | 100 | 0 | P | V |
| 5500MHz | | 16500 | 48.92 | -19.28 | 68.2 | 51.74 | 38.8 | 17.78 | 59.4 | 100 | 0 | P | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | 11160 | 49.16 | -24.84 | 74 | 55.48 | 40.22 | 14.5 | 61.04 | 100 | 0 | P | H |
| | | 16740 | 50.6 | -17.6 | 68.2 | 51.68 | 39.98 | 18.2 | 59.26 | 100 | 0 | P | H |
| 802.11n | | | | | | | | | | | | | H |
| HT20 | | | | | | | | | | | | | H |
| CH 116 | | 11160 | 48.69 | -25.31 | 74 | 55.01 | 40.22 | 14.5 | 61.04 | 100 | 0 | P | V |
| 5580MHz | | 16740 | 50.86 | -17.34 | 68.2 | 51.94 | 39.98 | 18.2 | 59.26 | 100 | 0 | P | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | 11400 | 48.74 | -25.26 | 74 | 54.51 | 40.3 | 14.87 | 60.94 | 100 | 0 | P | H |
| | | 17100 | 51.23 | -16.97 | 68.2 | 50.9 | 40.8 | 18.51 | 58.98 | 100 | 0 | P | H |
| 802.11n | | | | | | | | | | | | | H |
| HT20 | | | | | | | | | | | | | H |
| CH 140 | | 11400 | 49.22 | -24.78 | 74 | 54.99 | 40.3 | 14.87 | 60.94 | 100 | 0 | P | V |
| 5700MHz | | 17100 | 51.54 | -16.66 | 68.2 | 51.21 | 40.8 | 18.51 | 58.98 | 100 | 0 | P | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| Remark | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. | | | | | | | | | | | | |

## Band 3 - 5470~5725MHz

## WIFI 802.11n HT40 (Band Edge @ 3m)

| WIFI | Note | Frequency ( MHz ) | Level ( dBµV/m ) | Over Limit ( dB ) | Limit Line ( dBµV/m ) | Read Level ( dBµV ) | Antenna Factor ( dB/m ) | Path Loss ( dB ) | Preamp Factor ( dB ) | Ant Pos ( cm ) | Table Pos ( deg ) | Peak Avg. (P/A) | Pol. (H/V) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 5448.88 | 57.39 | -16.61 | 74 | 45.4 | 31.7 | 10.72 | 30.43 | 207 | 325 | P | H |
| | | 5469.04 | 61.8 | -6.4 | 68.2 | 49.68 | 31.81 | 10.74 | 30.43 | 207 | 325 | P | H |
| | | 5459.92 | 43.59 | -10.41 | 54 | 31.53 | 31.76 | 10.73 | 30.43 | 207 | 325 | A | H |
| | * | 5510 | 105.03 | - | - | 92.72 | 31.96 | 10.79 | 30.44 | 207 | 325 | P | H |
| 802.11n | * | 5510 | 96.86 | - | - | 84.55 | 31.96 | 10.79 | 30.44 | 207 | 325 | A | H |
| HT40 | | 5728.46 | 51.89 | -16.31 | 68.2 | 39.59 | 32 | 10.87 | 30.57 | 207 | 325 | P | H |
| CH 102 | | 5432.32 | 53.24 | -20.76 | 74 | 41.27 | 31.7 | 10.7 | 30.43 | 248 | 77 | P | V |
| 5510MHz | | 5469.28 | 58.67 | -9.53 | 68.2 | 46.54 | 31.82 | 10.74 | 30.43 | 248 | 77 | P | V |
| | | 5459.92 | 41.64 | -12.36 | 54 | 29.58 | 31.76 | 10.73 | 30.43 | 248 | 77 | A | V |
| | * | 5510 | 100.4 | - | - | 88.09 | 31.96 | 10.79 | 30.44 | 248 | 77 | P | V |
| | * | 5510 | 91.8 | - | - | 79.49 | 31.96 | 10.79 | 30.44 | 248 | 77 | A | V |
| | | 5746.415 | 51.89 | -16.31 | 68.2 | 39.61 | 32 | 10.86 | 30.58 | 248 | 77 | P | V |
| | | 5446.72 | 52.69 | -21.31 | 74 | 40.7 | 31.7 | 10.72 | 30.43 | 239 | 309 | P | H |
| | | 5467.6 | 53.54 | -14.66 | 68.2 | 41.42 | 31.81 | 10.74 | 30.43 | 239 | 309 | P | H |
| | | 5447.44 | 43.76 | -10.24 | 54 | 31.77 | 31.7 | 10.72 | 30.43 | 239 | 309 | A | H |
| | * | 5550 | 106.24 | - | - | 94.06 | 31.8 | 10.84 | 30.46 | 239 | 309 | P | H |
| 802.11n | * | 5550 | 97.65 | - | - | 85.47 | 31.8 | 10.84 | 30.46 | 239 | 309 | A | H |
| HT40 | | 5726.57 | 51.14 | -17.06 | 68.2 | 38.84 | 32 | 10.87 | 30.57 | 239 | 309 | P | H |
| CH 110 | | 5436.16 | 52.01 | -21.99 | 74 | 40.04 | 31.7 | 10.7 | 30.43 | 246 | 76 | P | V |
| 5550MHz | | 5466.16 | 52.15 | -16.05 | 68.2 | 40.04 | 31.8 | 10.74 | 30.43 | 246 | 76 | P | V |
| | | 5447.44 | 41.71 | -12.29 | 54 | 29.72 | 31.7 | 10.72 | 30.43 | 246 | 76 | A | V |
| | * | 5550 | 101.82 | - | - | 89.64 | 31.8 | 10.84 | 30.46 | 246 | 76 | P | V |
| | * | 5550 | 92.68 | - | - | 80.5 | 31.8 | 10.84 | 30.46 | 246 | 76 | A | V |
| | | 5731.295 | 52.63 | -15.57 | 68.2 | 40.33 | 32 | 10.87 | 30.57 | 246 | 76 | P | V |

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 5428.4 | 51.11 | -22.89 | 74 | 39.15 | 31.7 | 10.69 | 30.43 | 245 | 307 | P | H |
| | | 5463.4 | 50.48 | -17.72 | 68.2 | 38.39 | 31.78 | 10.74 | 30.43 | 245 | 307 | P | H |
| | | 5459.55 | 41.21 | -12.79 | 54 | 29.15 | 31.76 | 10.73 | 30.43 | 245 | 307 | A | H |
| | * | 5670 | 105.91 | - | - | 93.69 | 31.88 | 10.88 | 30.54 | 245 | 307 | P | H |
| **802.11n** | * | 5670 | 97.37 | - | - | 85.15 | 31.88 | 10.88 | 30.54 | 245 | 307 | A | H |
| **HT40** | | 5736.125 | 53.5 | -14.7 | 68.2 | 41.21 | 32 | 10.87 | 30.58 | 245 | 307 | P | H |
| **CH 134** | | 5403.2 | 51.44 | -22.56 | 74 | 39.51 | 31.7 | 10.66 | 30.43 | 150 | 39 | P | V |
| **5670MHz** | | 5465.15 | 50.6 | -17.6 | 68.2 | 38.5 | 31.79 | 10.74 | 30.43 | 150 | 39 | P | V |
| | | 5459.55 | 41.19 | -12.81 | 54 | 29.13 | 31.76 | 10.73 | 30.43 | 150 | 39 | A | V |
| | * | 5670 | 102.43 | - | - | 90.21 | 31.88 | 10.88 | 30.54 | 150 | 39 | P | V |
| | * | 5670 | 92.96 | - | - | 80.74 | 31.88 | 10.88 | 30.54 | 150 | 39 | A | V |
| | | 5726.15 | 52.02 | -16.18 | 68.2 | 39.72 | 32 | 10.87 | 30.57 | 150 | 39 | P | V |
| **Remark** | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. | | | | | | | | | | | | |

## Band 3 - 5470~5725MHz

## WIFI 802.11n HT40 (Harmonic @ 3m)

| WIFI | Note | Frequency ( MHz ) | Level ( dBµV/m ) | Over Limit ( dB ) | Limit Line ( dBµV/m ) | Read Level ( dBµV ) | Antenna Factor ( dB/m ) | Path Loss ( dB ) | Preamp Factor ( dB ) | Ant Pos ( cm ) | Table Pos ( deg ) | Peak Avg. (P/A) | Pol. (H/V) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 11020 | 49.5 | -24.5 | 74 | 55.78 | 40.56 | 14.25 | 61.09 | 100 | 0 | P | H |
| | | 16530 | 48.75 | -19.45 | 68.2 | 51.47 | 38.83 | 17.83 | 59.38 | 100 | 0 | P | H |
| 802.11n | | | | | | | | | | | | | H |
| HT40 | | | | | | | | | | | | | H |
| CH 102 | | 11020 | 49.96 | -24.04 | 74 | 56.24 | 40.56 | 14.25 | 61.09 | 100 | 0 | P | V |
| 5510MHz | | 16530 | 48.99 | -19.21 | 68.2 | 51.71 | 38.83 | 17.83 | 59.38 | 100 | 0 | P | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | 11100 | 48.41 | -25.59 | 74 | 54.74 | 40.4 | 14.33 | 61.06 | 100 | 0 | P | H |
| | | 16650 | 49.24 | -18.96 | 68.2 | 51.17 | 39.3 | 18.08 | 59.31 | 100 | 0 | P | H |
| 802.11n | | | | | | | | | | | | | H |
| HT40 | | | | | | | | | | | | | H |
| CH 110 | | 11100 | 48.77 | -25.23 | 74 | 55.1 | 40.4 | 14.33 | 61.06 | 100 | 0 | P | V |
| 5550MHz | | 16650 | 49.34 | -18.86 | 68.2 | 51.27 | 39.3 | 18.08 | 59.31 | 100 | 0 | P | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | 11340 | 48.5 | -25.5 | 74 | 54.4 | 40.18 | 14.88 | 60.96 | 100 | 0 | P | H |
| | | 17010 | 51.58 | -16.62 | 68.2 | 51.62 | 40.62 | 18.43 | 59.09 | 100 | 0 | P | H |
| 802.11n | | | | | | | | | | | | | H |
| HT40 | | | | | | | | | | | | | H |
| CH 134 | | 11340 | 48.96 | -25.04 | 74 | 54.86 | 40.18 | 14.88 | 60.96 | 100 | 0 | P | V |
| 5670MHz | | 17010 | 50.96 | -17.24 | 68.2 | 51 | 40.62 | 18.43 | 59.09 | 100 | 0 | P | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| Remark | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. | | | | | | | | | | | | |

## Band 3 - 5470~5725MHz

## WIFI 802.11ac VHT80 (Band Edge @ 3m)

| WIFI | Note | Frequency ( MHz ) | Level ( dBµV/m ) | Over Limit ( dB ) | Limit Line ( dBµV/m ) | Read Level (dBµV) | Antenna Factor ( dB/m ) | Path Loss ( dB ) | Preamp Factor ( dB ) | Ant Pos ( cm ) | Table Pos ( deg ) | Peak Avg. (P/A) | Pol. (H/V) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 802.11ac VHT80 CH 106 5530MHz | | 5456.56 | 58.87 | -15.13 | 74 | 46.83 | 31.74 | 10.73 | 30.43 | 203 | 307 | P | H |
| | | 5468.8 | 61.64 | -6.56 | 68.2 | 49.52 | 31.81 | 10.74 | 30.43 | 203 | 307 | P | H |
| | | 5459.68 | 50.27 | -3.73 | 54 | 38.21 | 31.76 | 10.73 | 30.43 | 203 | 307 | A | H |
| | * | 5530 | 102.23 | - | - | 89.99 | 31.88 | 10.81 | 30.45 | 203 | 307 | P | H |
| | * | 5530 | 95.3 | - | - | 83.06 | 31.88 | 10.81 | 30.45 | 203 | 307 | A | H |
| | | 5764.685 | 51.32 | -16.88 | 68.2 | 38.99 | 32.06 | 10.86 | 30.59 | 203 | 307 | P | H |
| | | 5451.52 | 52.82 | -21.18 | 74 | 40.82 | 31.71 | 10.72 | 30.43 | 189 | 347 | P | V |
| | | 5467.12 | 54.93 | -13.27 | 68.2 | 42.82 | 31.8 | 10.74 | 30.43 | 189 | 347 | P | V |
| | | 5458 | 45.78 | -8.22 | 54 | 33.73 | 31.75 | 10.73 | 30.43 | 189 | 347 | A | V |
| | * | 5530 | 95.15 | - | - | 82.91 | 31.88 | 10.81 | 30.45 | 189 | 347 | P | V |
| | * | 5530 | 88.16 | - | - | 75.92 | 31.88 | 10.81 | 30.45 | 189 | 347 | A | V |
| | | 5764.685 | 51.62 | -16.58 | 68.2 | 39.29 | 32.06 | 10.86 | 30.59 | 189 | 347 | P | V |
| 802.11ac VHT80 CH 122 5610MHz | | 5459.44 | 52.62 | -21.38 | 74 | 40.56 | 31.76 | 10.73 | 30.43 | 200 | 309 | P | H |
| | | 5463.04 | 51.47 | -16.73 | 68.2 | 39.38 | 31.78 | 10.74 | 30.43 | 200 | 309 | P | H |
| | | 5449.84 | 44.41 | -9.59 | 54 | 32.42 | 31.7 | 10.72 | 30.43 | 200 | 309 | A | H |
| | * | 5610 | 103.99 | - | - | 91.72 | 31.88 | 10.89 | 30.5 | 200 | 309 | P | H |
| | * | 5610 | 97.12 | - | - | 84.85 | 31.88 | 10.89 | 30.5 | 200 | 309 | A | H |
| | | 5731.61 | 51.28 | -16.92 | 68.2 | 38.98 | 32 | 10.87 | 30.57 | 200 | 309 | P | H |
| | | 5447.68 | 50.76 | -23.24 | 74 | 38.77 | 31.7 | 10.72 | 30.43 | 215 | 333 | P | V |
| | | 5466.64 | 50.7 | -17.5 | 68.2 | 38.59 | 31.8 | 10.74 | 30.43 | 215 | 333 | P | V |
| | | 5458.96 | 44.29 | -9.71 | 54 | 32.24 | 31.75 | 10.73 | 30.43 | 215 | 333 | A | V |
| | * | 5610 | 97.39 | - | - | 85.12 | 31.88 | 10.89 | 30.5 | 215 | 333 | P | V |
| | * | 5610 | 90.76 | - | - | 78.49 | 31.88 | 10.89 | 30.5 | 215 | 333 | A | V |
| | | 5726.885 | 51.47 | -16.73 | 68.2 | 39.17 | 32 | 10.87 | 30.57 | 215 | 333 | P | V |
| Remark | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. | | | | | | | | | | | | |

## Band 3 5470~5725MHz

## WIFI 802.11ac VHT80 (Harmonic @ 3m)

| WIFI | Note | Frequency ( MHz ) | Level ( dBμV/m ) | Over Limit ( dB ) | Limit Line ( dBμV/m ) | Read Level (dBμV) | Antenna Factor ( dB/m ) | Path Loss ( dB ) | Preamp Factor ( dB ) | Ant Pos ( cm ) | Table Pos ( deg ) | Peak Avg. (P/A) | Pol. (H/V) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 11060 | 49.64 | -24.36 | 74 | 55.95 | 40.48 | 14.29 | 61.08 | 100 | 0 | P | H |
| | | 16590 | 49.34 | -18.86 | 68.2 | 51.85 | 38.89 | 17.95 | 59.35 | 100 | 0 | P | H |
| 802.11ac | | | | | | | | | | | | | H |
| VHT80 | | | | | | | | | | | | | H |
| CH 106 | | 11060 | 49.6 | -24.4 | 74 | 55.91 | 40.48 | 14.29 | 61.08 | 100 | 0 | P | V |
| 5530MHz | | 16590 | 48.89 | -19.31 | 68.2 | 51.4 | 38.89 | 17.95 | 59.35 | 100 | 0 | P | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | 11220 | 49.04 | -24.96 | 74 | 55.28 | 40.1 | 14.67 | 61.01 | 100 | 0 | P | H |
| | | 16830 | 50.65 | -17.55 | 68.2 | 51.25 | 40.34 | 18.26 | 59.2 | 100 | 0 | P | H |
| 802.11ac | | | | | | | | | | | | | H |
| VHT80 | | | | | | | | | | | | | H |
| CH 122 | | 11220 | 48.88 | -25.12 | 74 | 55.12 | 40.1 | 14.67 | 61.01 | 100 | 0 | P | V |
| 5610MHz | | 16830 | 51.78 | -16.42 | 68.2 | 52.38 | 40.34 | 18.26 | 59.2 | 100 | 0 | P | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| Remark | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. | | | | | | | | | | | | |

## Emission below 1GHz

## WIFI 802.11n ac80 (LF @ 3m)

| WIFI | Note | Frequency | Level | Over | Limit | Read | Antenna | Path | Preamp | Ant | Table | Peak | Pol. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Limit | Line | Level | Factor | Loss | Factor | Pos | Pos | Avg. | |
| | | ( MHz ) | ( dBµV/m ) | ( dB ) | ( dBµV/m ) | (dBµV) | ( dB/m ) | ( dB ) | ( dB ) | ( cm ) | ( deg ) | (P/A) | (H/V) |
| 802.11n ac80 LF | | 39.7 | 19.34 | -20.66 | 40 | 31.4 | 19.53 | 0.75 | 32.34 | - | - | P | H |
| | | 102.75 | 21.3 | -22.2 | 43.5 | 35.79 | 16.49 | 1.31 | 32.29 | - | - | P | H |
| | | 349.13 | 26.23 | -19.77 | 46 | 36.04 | 20.11 | 2.52 | 32.44 | - | - | P | H |
| | | 665.35 | 29.22 | -16.78 | 46 | 32.12 | 26.03 | 3.58 | 32.51 | - | - | P | H |
| | | 746.83 | 33.19 | -12.81 | 46 | 34.18 | 27.66 | 3.81 | 32.46 | 100 | 0 | P | H |
| | | 903.97 | 33.17 | -12.83 | 46 | 32.16 | 28.62 | 4.29 | 31.9 | - | - | P | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | 36.79 | 22.48 | -17.52 | 40 | 33.28 | 20.82 | 0.71 | 32.33 | - | - | P | V |
| | | 81.41 | 20.69 | -19.31 | 40 | 38.16 | 13.82 | 1.19 | 32.48 | - | - | P | V |
| | | 116.33 | 19.98 | -23.52 | 43.5 | 33.51 | 17.49 | 1.38 | 32.4 | - | - | P | V |
| | | 575.14 | 28.68 | -17.32 | 46 | 32.1 | 25.74 | 3.31 | 32.47 | - | - | P | V |
| | | 746.83 | 37.05 | -8.95 | 46 | 38.04 | 27.66 | 3.81 | 32.46 | 100 | 0 | P | V |
| | | 914.64 | 34.11 | -11.89 | 46 | 32.65 | 28.87 | 4.32 | 31.73 | - | - | P | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| **Remark** | 1. No other spurious found.<br>2. All results are PASS against limit line. | | | | | | | | | | | | |

## Note symbol

| | |
|---|---|
| * | **Fundamental Frequency** which can be ignored. However, the level of any unwanted emissions shall not exceed the level of the fundamental frequency. |
| ! | Test result is **over limit** line. |
| P/A | **P**eak or **A**verage |
| H/V | **H**orizontal or **V**ertical |

## A calculation example for radiated spurious emission is shown as below:

| WIFI | Note | Frequency | Level | Over | Limit | Read | Antenna | Path | Preamp | Ant | Table | Peak | Pol. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ant. | | | | Limit | Line | Level | Factor | Loss | Factor | Pos | Pos | Avg. | |
| 1 | | ( MHz ) | ( dBμV/m ) | ( dB ) | ( dBμV/m ) | ( dBμV ) | ( dB/m ) | ( dB ) | ( dB ) | ( cm ) | ( deg ) | (P/A) | (H/V) |
| 802.11b CH 01 2412MHz | | 2390 | 55.45 | -18.55 | 74 | 54.51 | 32.22 | 4.58 | 35.86 | 103 | 308 | P | H |
| | | 2390 | 43.54 | -10.46 | 54 | 42.6 | 32.22 | 4.58 | 35.86 | 103 | 308 | A | H |

1. Path Loss(dB) = Cable loss(dB) + Filter loss(dB) + Attenuator loss(dB)
2. Level(dBμV/m) = Antenna Factor(dB/m) + Path Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)
3. Over Limit(dB) = Level(dBμV/m) – Limit Line(dBμV/m)

**For Peak Limit @ 2390MHz:**

1. Level(dBμV/m)

= Antenna Factor(dB/m) + Path Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)

= 32.22(dB/m) + 4.58(dB) + 54.51(dBμV) – 35.86 (dB)

= 55.45 (dBμV/m)

2. Over Limit(dB)

= Level(dBμV/m) – Limit Line(dBμV/m)

= 55.45(dBμV/m) – 74(dBμV/m)

= -18.55(dB)

**For Average Limit @ 2390MHz:**

1. Level(dBμV/m)

= Antenna Factor(dB/m) + Path Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)

= 32.22(dB/m) + 4.58(dB) + 42.6(dBμV) – 35.86 (dB)

= 43.54 (dBμV/m)

2. Over Limit(dB) = Level(dBμV/m) – Limit Line(dBμV/m)

= 43.54(dBμV/m) – 54(dBμV/m)

= -10.46(dB)

**Both peak and average measured complies with the limit line, so test result is "PASS".**

# Appendix D. Radiated Spurious Emission Plots

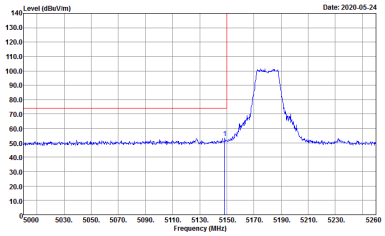
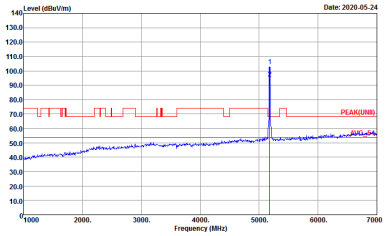
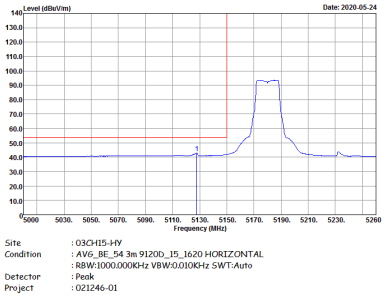
| | | | |
|---|---|---|---|
| **Test Engineer :** | Leo Lee, Mancy Chou, and Bigshow Wang | **Temperature :** | 24.3~24.7°C |
| | | **Relative Humidity :** | 55~61% |

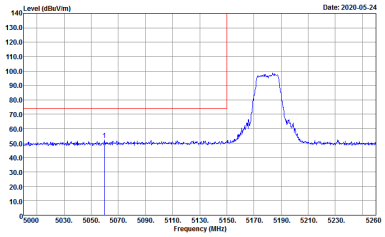
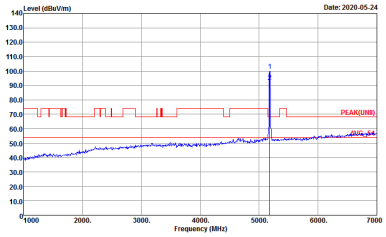
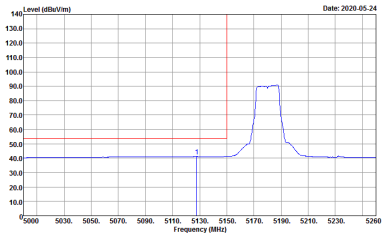
**Note symbol**

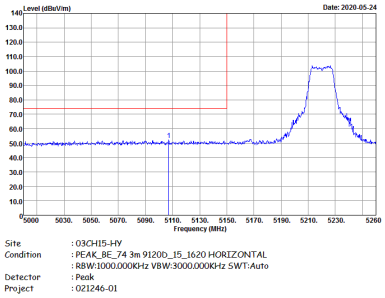
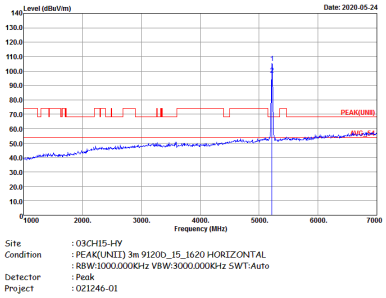
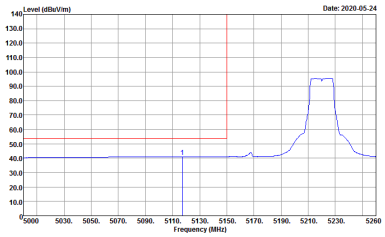
| | |
|---|---|
| -L | **Low channel location** |
| -R | **High channel location** |

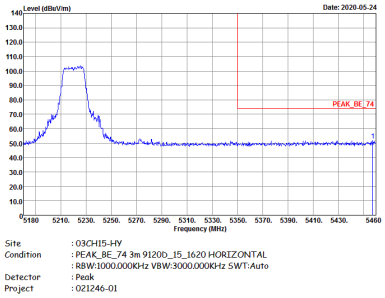
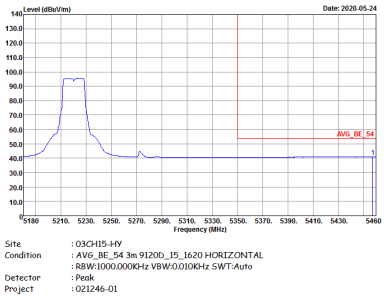
## Band 1 - 5150~5250MHz

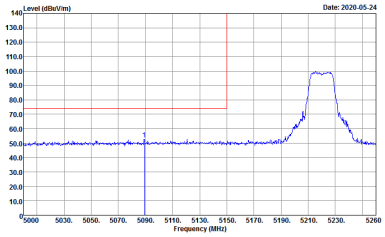
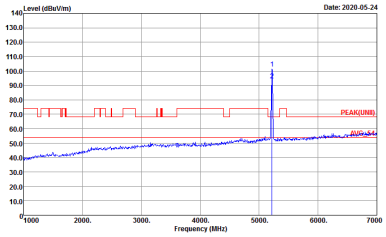
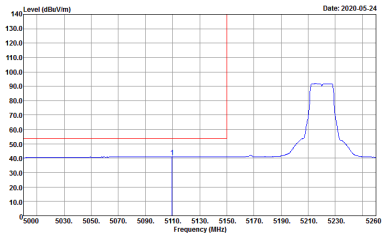
## WIFI 802.11a (Band Edge @ 3m)

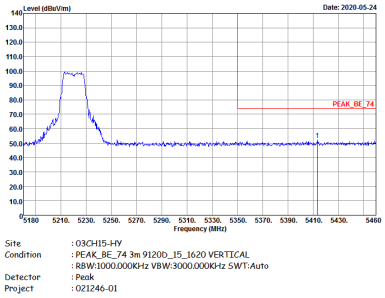
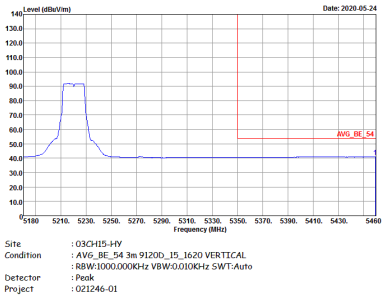
| WIFI | Band 1 5150~5250MHz Band Edge @ 3m | |
|---|---|---|
| | 802.11a CH36 5180MHz | |
| | Horizontal | Fundamental |
| Peak |  |  |
| Avg. |  | Left blank |

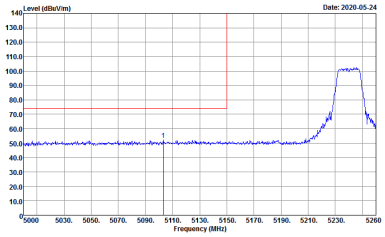
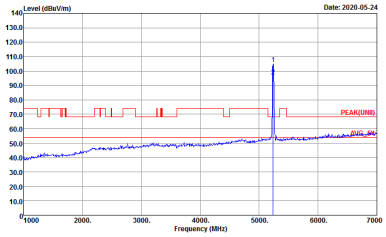
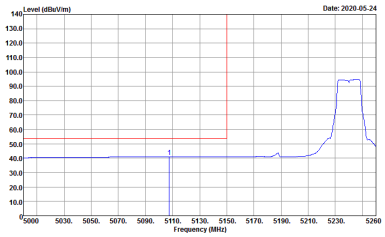
| WIFI | Band 1 5150~5250MHz Band Edge @ 3m | |
|---|---|---|
| | 802.11a CH36 5180MHz | |
| | Vertical | Fundamental |
| Peak |  <br>Site : 03CH15-HY<br>Condition : PEAK_BE_74 3m 9120D_15_1620 VERTICAL<br>: RBW:1000.000KHz VBW:3000.000KHz SWT:Auto<br>Detector : Peak<br>Project : 021246-01 |  <br>Site : 03CH15-HY<br>Condition : PEAK(UNII) 3m 9120D_15_1620 VERTICAL<br>: RBW:1000.000KHz VBW:3000.000KHz SWT:Auto<br>Detector : Peak<br>Project : 021246-01 |
| Avg. |  <br>Site : 03CH15-HY<br>Condition : AVG_BE_54 3m 9120D_15_1620 VERTICAL<br>: RBW:1000.000KHz VBW:0.010KHz SWT:Auto<br>Detector : Peak<br>Project : 021246-01 | Left blank |

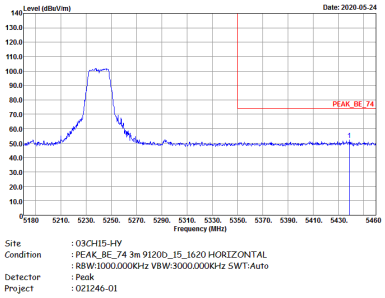
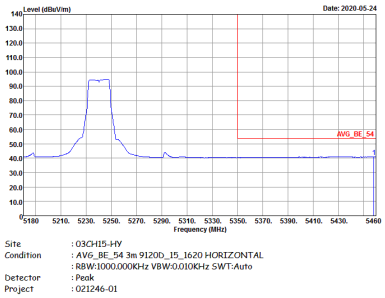
| WIFI | Band 1 5150~5250MHz Band Edge @ 3m | |
|---|---|---|
| | 802.11a CH44 5220MHz - L | |
| | Horizontal | Fundamental |
| Peak |  <br>Site : 03CH15-HY<br>Condition : PEAK_BE_74 3m 9120D_15_1620 HORIZONTAL<br>: RBW:1000.000KHz VBW:3000.000KHz SWT:Auto<br>Detector : Peak<br>Project : 021246-01 |  <br>Site : 03CH15-HY<br>Condition : PEAK(UNII) 3m 9120D_15_1620 HORIZONTAL<br>: RBW:1000.000KHz VBW:3000.000KHz SWT:Auto<br>Detector : Peak<br>Project : 021246-01 |
| Avg. |  <br>Site : 03CH15-HY<br>Condition : AVG_BE_54 3m 9120D_15_1620 HORIZONTAL<br>: RBW:1000.000KHz VBW:0.010KHz SWT:Auto<br>Detector : Peak<br>Project : 021246-01 | Left blank |

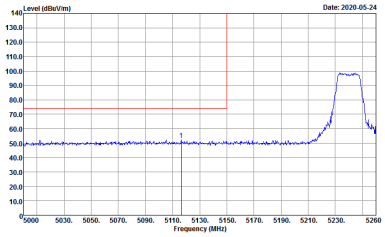
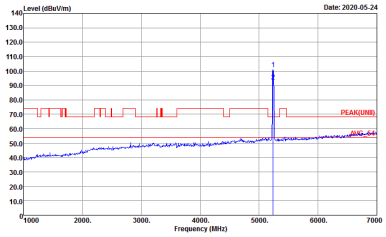
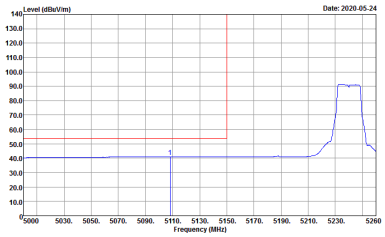
| WIFI | Band 1 5150~5250MHz Band Edge @ 3m | |
|---|---|---|
| | 802.11a CH44 5220MHz - R | |
| | Horizontal | Fundamental |
| Peak |  | Left blank |
| Avg. |  | Left blank |

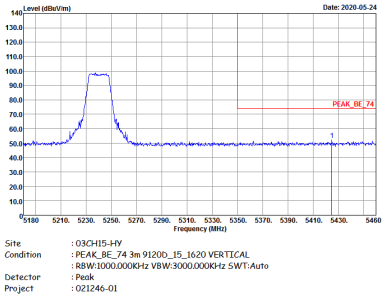
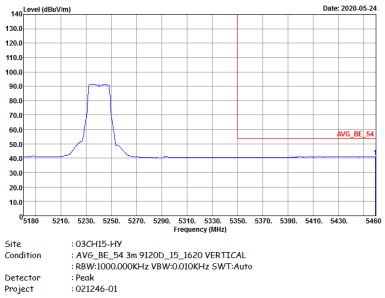
| WIFI | Band 1 5150~5250MHz Band Edge @ 3m | |
|---|---|---|
| | 802.11a CH44 5220MHz - L | |
| | Vertical | Fundamental |
| Peak |  <br>Site : 03CH15-HY<br>Condition : PEAK_BE_74 3m 9120D_15_1620 VERTICAL<br>: RBW:1000.000KHz VBW:3000.000KHz SWT:Auto<br>Detector : Peak<br>Project : 021246-01 |  <br>Site : 03CH15-HY<br>Condition : PEAK(UNII) 3m 9120D_15_1620 VERTICAL<br>: RBW:1000.000KHz VBW:3000.000KHz SWT:Auto<br>Detector : Peak<br>Project : 021246-01 |
| Avg. |  <br>Site : 03CH15-HY<br>Condition : AVG_BE_54 3m 9120D_15_1620 VERTICAL<br>: RBW:1000.000KHz VBW:0.010KHz SWT:Auto<br>Detector : Peak<br>Project : 021246-01 | Left blank |

| WIFI | Band 1 5150~5250MHz Band Edge @ 3m | |
|---|---|---|
| | 802.11a CH44 5220MHz - R | |
| | Vertical | Fundamental |
| Peak |  | Left blank |
| Avg. |  | Left blank |

| WIFI | Band 1 5150~5250MHz Band Edge @ 3m | |
|---|---|---|
| | 802.11a CH48 5240MHz - L | |
| | Horizontal | Fundamental |
| Peak |  <br>Site : 03CH15-HY<br>Condition : PEAK_BE_74 3m 9120D_15_1620 HORIZONTAL<br>: RBW:1000.000KHz VBW:3000.000KHz SWT:Auto<br>Detector : Peak<br>Project : 021246-01 |  <br>Site : 03CH15-HY<br>Condition : PEAK(UNII) 3m 9120D_15_1620 HORIZONTAL<br>: RBW:1000.000KHz VBW:3000.000KHz SWT:Auto<br>Detector : Peak<br>Project : 021246-01 |
| Avg. |  <br>Site : 03CH15-HY<br>Condition : AVG_BE_54 3m 9120D_15_1620 HORIZONTAL<br>: RBW:1000.000KHz VBW:0.010KHz SWT:Auto<br>Detector : Peak<br>Project : 021246-01 | Left blank |

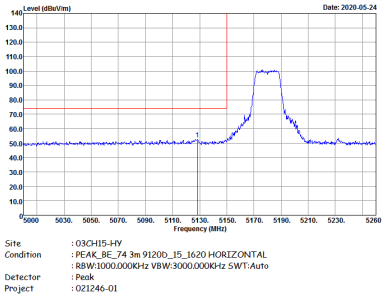
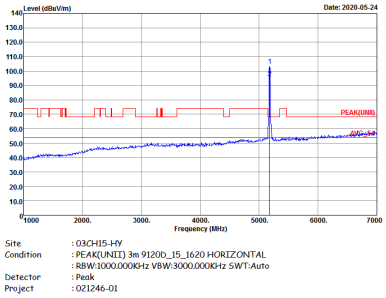
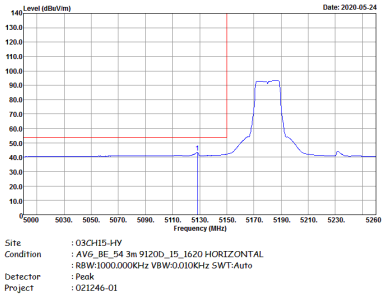
| WIFI | Band 1 5150~5250MHz Band Edge @ 3m | |
|---|---|---|
| | 802.11a CH48 5240MHz - R | |
| | Horizontal | Fundamental |
| Peak |  | Left blank |
| Avg. |  | Left blank |

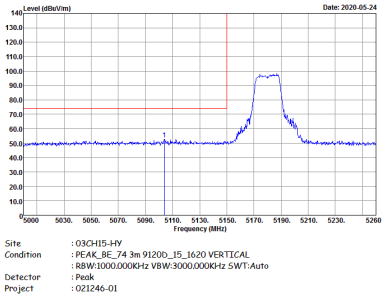
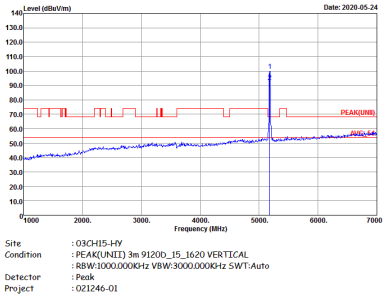
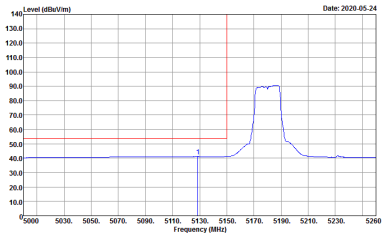
| WIFI | Band 1 5150~5250MHz Band Edge @ 3m | |
|---|---|---|
| | 802.11a CH48 5240MHz - L | |
| | Vertical | Fundamental |
| Peak |  <br>Site : 03CH15-HY<br>Condition : PEAK_BE_74 3m 9120D_15_1620 VERTICAL<br>: RBW:1000.000KHz VBW:3000.000KHz SWT:Auto<br>Detector : Peak<br>Project : 021246-01 |  <br>Site : 03CH15-HY<br>Condition : PEAK(UNII) 3m 9120D_15_1620 VERTICAL<br>: RBW:1000.000KHz VBW:3000.000KHz SWT:Auto<br>Detector : Peak<br>Project : 021246-01 |
| Avg. |  <br>Site : 03CH15-HY<br>Condition : AVG_BE_54 3m 9120D_15_1620 VERTICAL<br>: RBW:1000.000KHz VBW:0.010KHz SWT:Auto<br>Detector : Peak<br>Project : 021246-01 | Left blank |

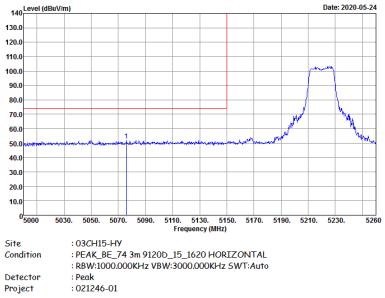
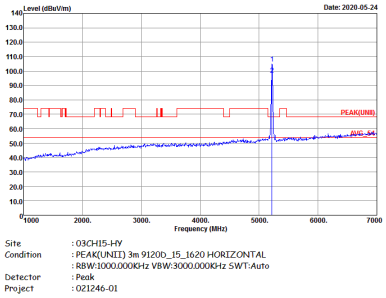
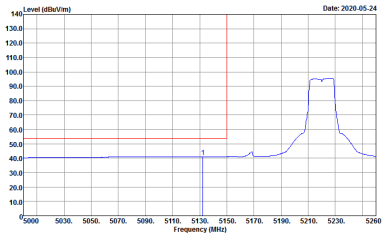
| WIFI | Band 1 5150~5250MHz Band Edge @ 3m | |
|---|---|---|
| | 802.11a CH48 5240MHz - R | |
| | Vertical | Fundamental |
| Peak |  | Left blank |
| Avg. |  | Left blank |

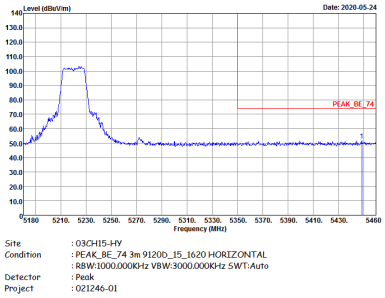
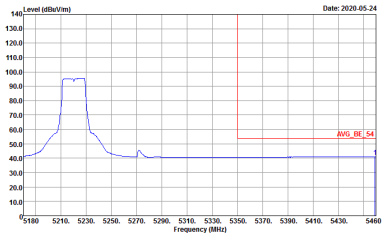
## Band 1 5150~5250MHz

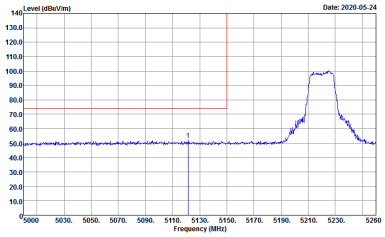
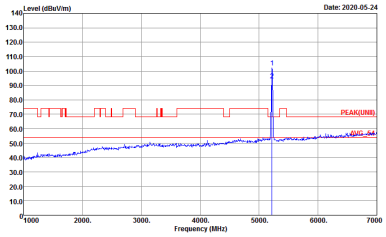
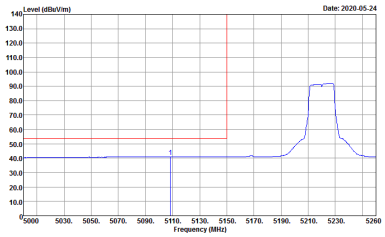
## WIFI 802.11n HT20 (Band Edge @ 3m)

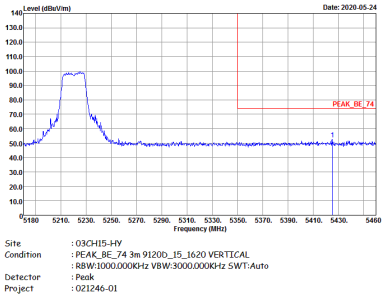
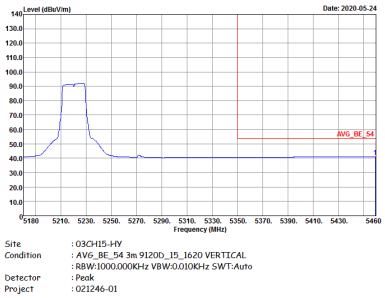
| WIFI | Band 1 5150~5250MHz Band Edge @ 3m | |
|---|---|---|
| | 802.11n HT20 CH36 5180MHz | |
| | Horizontal | Fundamental |
| Peak |  |  |
| Avg. |  | Left blank |

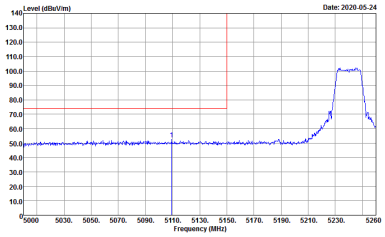
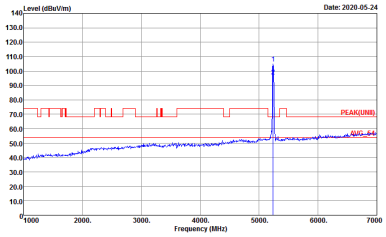
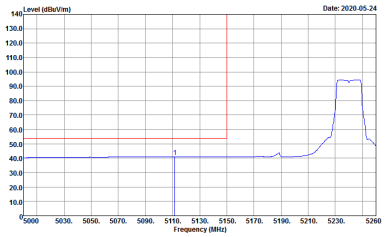
| WIFI | Band 1 5150~5250MHz Band Edge @ 3m | |
|---|---|---|
| | 802.11n HT20 CH36 5180MHz | |
| | Vertical | Fundamental |
| Peak |  <br>Site : 03CH15-HY<br>Condition : PEAK_BE_74 3m 9120D_15_1620 VERTICAL<br>: RBW:1000.000KHz VBW:3000.000KHz SWT:Auto<br>Detector : Peak<br>Project : 021246-01 |  <br>Site : 03CH15-HY<br>Condition : PEAK(UNII) 3m 9120D_15_1620 VERTICAL<br>: RBW:1000.000KHz VBW:3000.000KHz SWT:Auto<br>Detector : Peak<br>Project : 021246-01 |
| Avg. |  <br>Site : 03CH15-HY<br>Condition : AVG_BE_54 3m 9120D_15_1620 VERTICAL<br>: RBW:1000.000KHz VBW:0.010KHz SWT:Auto<br>Detector : Peak<br>Project : 021246-01 | Left blank |

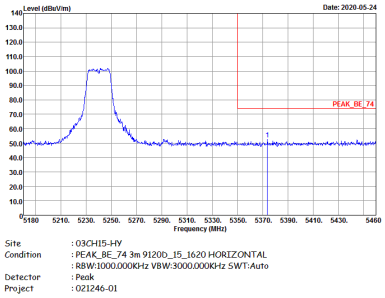
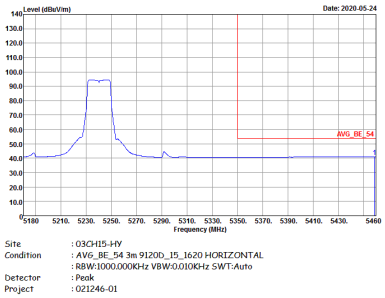
| WIFI | Band 1 5150~5250MHz Band Edge @ 3m | |
|---|---|---|
| | 802.11n HT20 CH44 5220MHz - L | |
| | Horizontal | Fundamental |
| Peak |  <br>Site : 03CH15-HY<br>Condition : PEAK_BE_74 3m 9120D_15_1620 HORIZONTAL<br>: RBW:1000.000KHz VBW:3000.000KHz SWT:Auto<br>Detector : Peak<br>Project : 021246-01 |  <br>Site : 03CH15-HY<br>Condition : PEAK(UNII) 3m 9120D_15_1620 HORIZONTAL<br>: RBW:1000.000KHz VBW:3000.000KHz SWT:Auto<br>Detector : Peak<br>Project : 021246-01 |
| Avg. |  <br>Site : 03CH15-HY<br>Condition : AVG_BE_54 3m 9120D_15_1620 HORIZONTAL<br>: RBW:1000.000KHz VBW:0.010KHz SWT:Auto<br>Detector : Peak<br>Project : 021246-01 | Left blank |

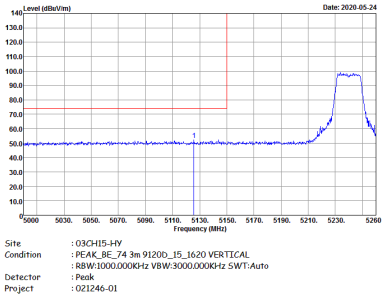
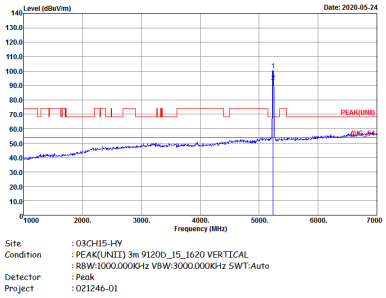
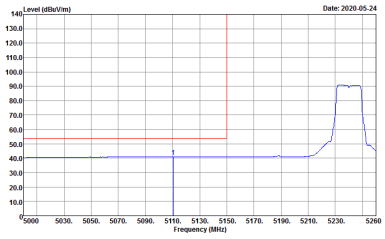
| WIFI | Band 1 5150~5250MHz Band Edge @ 3m | |
|---|---|---|
| | 802.11n HT20 CH44 5220MHz - R | |
| | Horizontal | Fundamental |
| Peak |  <br>Site : 03CH15-HV<br>Condition : PEAK_BE_74 3m 9120D_15_1620 HORIZONTAL<br>: RBW:1000.000KHz VBW:3000.000KHz SWT:Auto<br>Detector : Peak<br>Project : 021246-01 | Left blank |
| Avg. |  <br>Site : 03CH15-HV<br>Condition : AVG_BE_54 3m 9120D_15_1620 HORIZONTAL<br>: RBW:1000.000KHz VBW:0.010KHz SWT:Auto<br>Detector : Peak<br>Project : 021246-01 | Left blank |

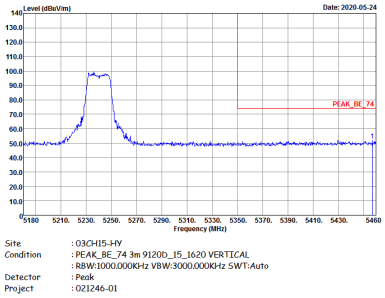
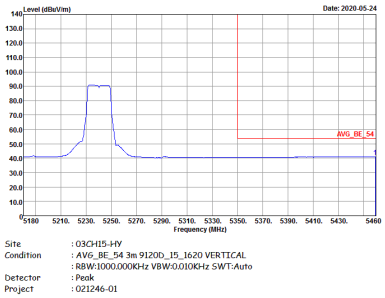
| WIFI | Band 1 5150~5250MHz Band Edge @ 3m | |
|---|---|---|
| | 802.11n HT20 CH44 5220MHz - L | |
| | Vertical | Fundamental |
| Peak |  <br>Site : 03CH15-HY<br>Condition : PEAK_BE_74 3m 9120D_15_1620 VERTICAL<br>: RBW:1000.000KHz VBW:3000.000KHz SWT:Auto<br>Detector : Peak<br>Project : 021246-01 |  <br>Site : 03CH15-HY<br>Condition : PEAK(UNII) 3m 9120D_15_1620 VERTICAL<br>: RBW:1000.000KHz VBW:3000.000KHz SWT:Auto<br>Detector : Peak<br>Project : 021246-01 |
| Avg. |  <br>Site : 03CH15-HY<br>Condition : AVG_BE_54 3m 9120D_15_1620 VERTICAL<br>: RBW:1000.000KHz VBW:0.010KHz SWT:Auto<br>Detector : Peak<br>Project : 021246-01 | Left blank |

| WIFI | Band 1 5150~5250MHz Band Edge @ 3m | |
|---|---|---|
| | 802.11n HT20 CH44 5220MHz - R | |
| | Vertical | Fundamental |
| Peak |  | Left blank |
| Avg. |  | Left blank |

| WIFI | Band 1 5150~5250MHz Band Edge @ 3m | |
|---|---|---|
| | 802.11n HT20 CH48 5240MHz - L | |
| | Horizontal | Fundamental |
| Peak |  <br>Site : 03CH15-HY<br>Condition : PEAK_BE_74 3m 9120D_15_1620 HORIZONTAL<br>: RBW:1000.000KHz VBW:3000.000KHz SWT:Auto<br>Detector : Peak<br>Project : 021246-01 |  <br>Site : 03CH15-HY<br>Condition : PEAK(UNII) 3m 9120D_15_1620 HORIZONTAL<br>: RBW:1000.000KHz VBW:3000.000KHz SWT:Auto<br>Detector : Peak<br>Project : 021246-01 |
| Avg. |  <br>Site : 03CH15-HY<br>Condition : AVG_BE_54 3m 9120D_15_1620 HORIZONTAL<br>: RBW:1000.000KHz VBW:0.010KHz SWT:Auto<br>Detector : Peak<br>Project : 021246-01 | Left blank |

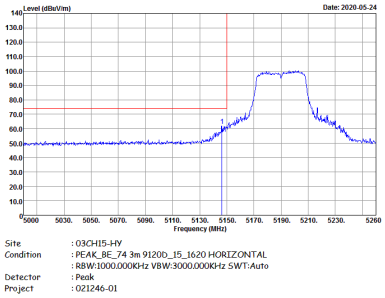
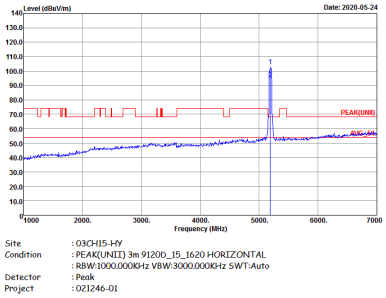
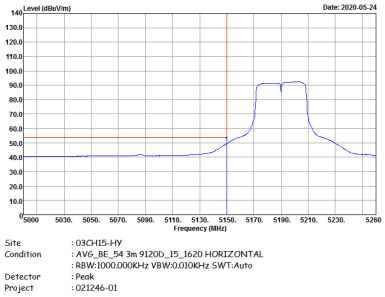
| WIFI | Band 1 5150~5250MHz Band Edge @ 3m | |
|---|---|---|
| | 802.11n HT20 CH48 5240MHz - R | |
| | Horizontal | Fundamental |
| Peak |  | Left blank |
| Avg. |  | Left blank |

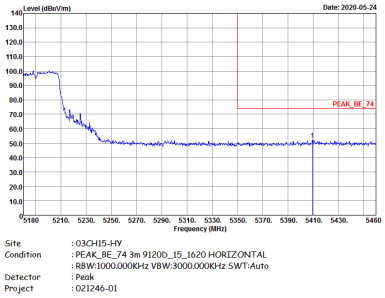
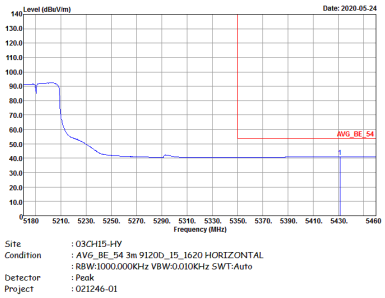
| WIFI | Band 1 5150~5250MHz Band Edge @ 3m | |
|---|---|---|
| | 802.11n HT20 CH48 5240MHz - L | |
| | Vertical | Fundamental |
| Peak |  <br>Site : 03CH15-HY<br>Condition : PEAK_BE_74 3m 9120D_15_1620 VERTICAL<br>: RBW:1000.000KHz VBW:3000.000KHz SWT:Auto<br>Detector : Peak<br>Project : 021246-01 |  <br>Site : 03CH15-HY<br>Condition : PEAK(UNII) 3m 9120D_15_1620 VERTICAL<br>: RBW:1000.000KHz VBW:3000.000KHz SWT:Auto<br>Detector : Peak<br>Project : 021246-01 |
| Avg. |  <br>Site : 03CH15-HY<br>Condition : AVG_BE_54 3m 9120D_15_1620 VERTICAL<br>: RBW:1000.000KHz VBW:0.010KHz SWT:Auto<br>Detector : Peak<br>Project : 021246-01 | Left blank |

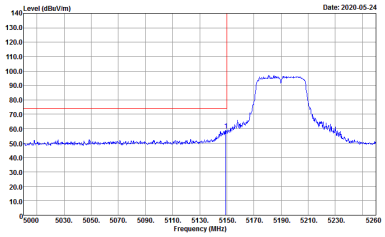
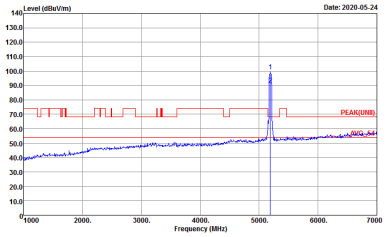
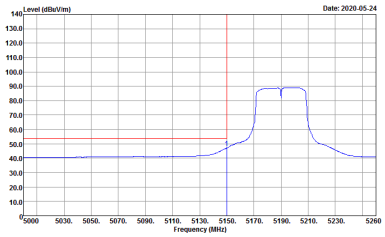
| WIFI | Band 1 5150~5250MHz Band Edge @ 3m | |
|---|---|---|
| | 802.11n HT20 CH48 5240MHz - R | |
| | Vertical | Fundamental |
| Peak |  | Left blank |
| Avg. |  | Left blank |

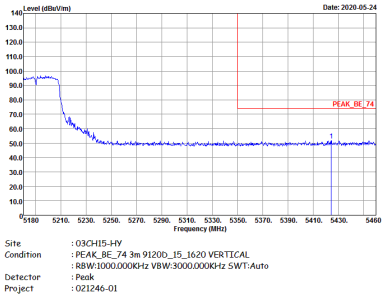
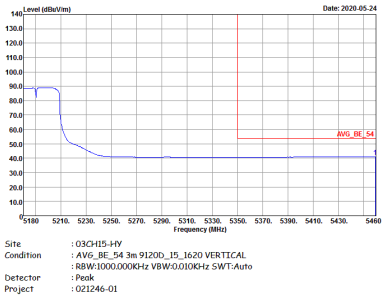
## Band 1 5150~5250MHz

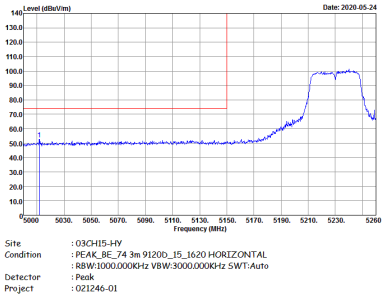
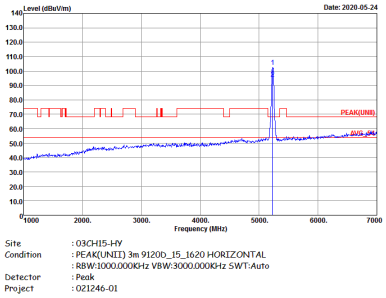
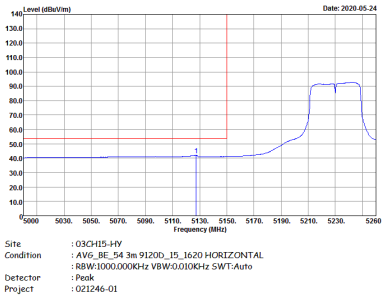
## WIFI 802.11n HT40 (Band Edge @ 3m)

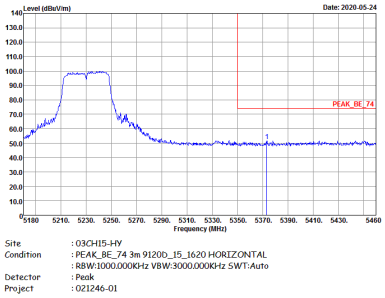
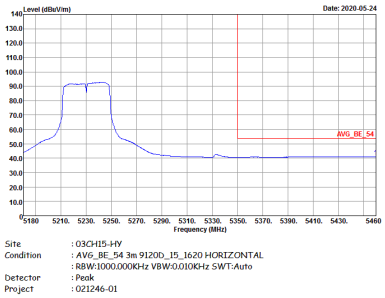
| WIFI | Band 1 5150~5250MHz Band Edge @ 3m | |
|---|---|---|
| | 802.11n HT40 CH38 5190MHz - L | |
| | Horizontal | Fundamental |
| Peak |  |  |
| Avg. |  | Left blank |

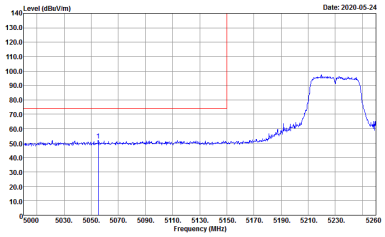
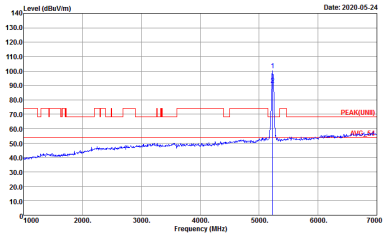
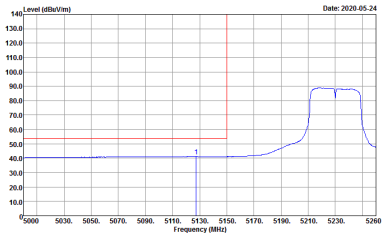
| WIFI | Band 1 5150~5250MHz Band Edge @ 3m | |
|---|---|---|
| | 802.11n HT40 CH38 5190MHz - R | |
| | Horizontal | Fundamental |
| Peak |  | Left blank |
| Avg. |  | Left blank |

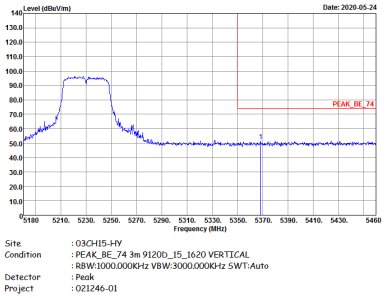
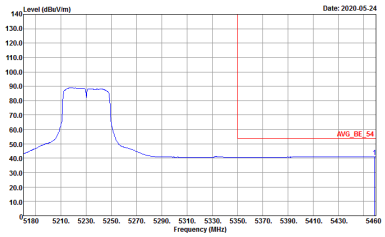
| WIFI | Band 1 5150~5250MHz Band Edge @ 3m | |
|---|---|---|
| | 802.11n HT40 CH38 5190MHz - L | |
| | Vertical | Fundamental |
| Peak |  <br>Site : 03CH15-HY<br>Condition : PEAK_BE_74 3m 9120D_15_1620 VERTICAL<br>: RBW:1000.000KHz VBW:3000.000KHz SWT:Auto<br>Detector : Peak<br>Project : 021246-01 |  <br>Site : 03CH15-HY<br>Condition : PEAK(UNII) 3m 9120D_15_1620 VERTICAL<br>: RBW:1000.000KHz VBW:3000.000KHz SWT:Auto<br>Detector : Peak<br>Project : 021246-01 |
| Avg. |  <br>Site : 03CH15-HY<br>Condition : AVG_BE_54 3m 9120D_15_1620 VERTICAL<br>: RBW:1000.000KHz VBW:0.010KHz SWT:Auto<br>Detector : Peak<br>Project : 021246-01 | Left blank |

| WIFI | Band 1 5150~5250MHz Band Edge @ 3m | |
|---|---|---|
| | 802.11n HT40 CH38 5190MHz - R | |
| | Vertical | Fundamental |
| Peak |  | Left blank |
| Avg. |  | Left blank |

| WIFI | Band 1 5150~5250MHz Band Edge @ 3m | |
|---|---|---|
| | 802.11n HT40 CH46 5230MHz - L | |
| | Horizontal | Fundamental |
| Peak |  |  |
| Avg. |  | Left blank |

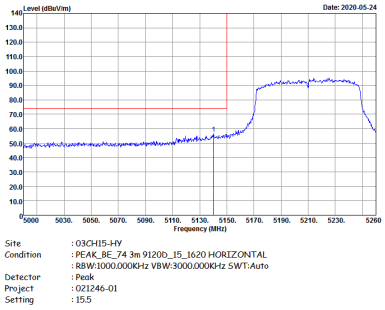
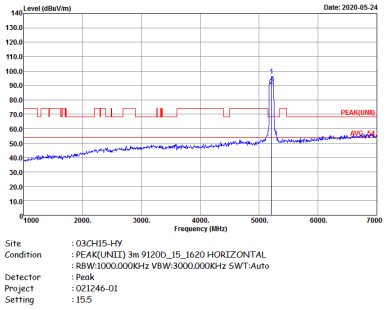
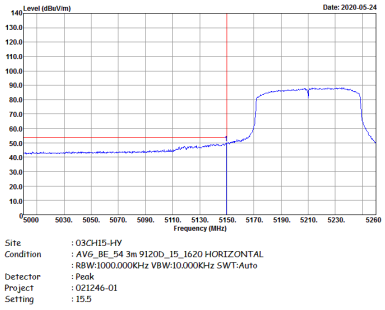
| WIFI | Band 1 5150~5250MHz Band Edge @ 3m | |
|---|---|---|
| | 802.11n HT40 CH46 5230MHz - R | |
| | Horizontal | Fundamental |
| Peak |  | Left blank |
| Avg. |  | Left blank |

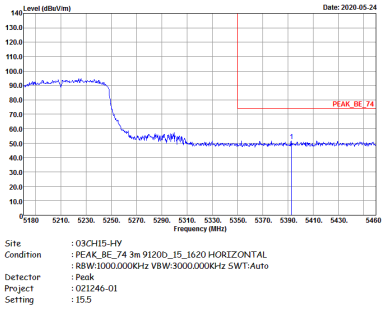
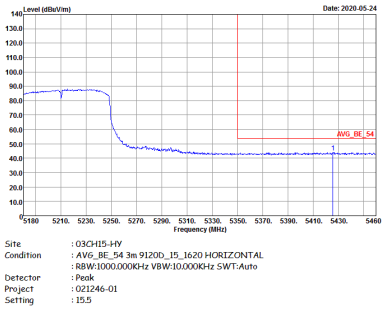
| WIFI | Band 1 5150~5250MHz Band Edge @ 3m | |
|---|---|---|
| | 802.11n HT40 CH46 5230MHz - L | |
| | Vertical | Fundamental |
| Peak |  <br>Site : 03CH15-HY<br>Condition : PEAK_BE_74 3m 9120D_15_1620 VERTICAL<br>: RBW:1000.000KHz VBW:3000.000KHz SWT:Auto<br>Detector : Peak<br>Project : 021246-01 |  <br>Site : 03CH15-HY<br>Condition : PEAK(UNII) 3m 9120D_15_1620 VERTICAL<br>: RBW:1000.000KHz VBW:3000.000KHz SWT:Auto<br>Detector : Peak<br>Project : 021246-01 |
| Avg. |  <br>Site : 03CH15-HY<br>Condition : AVG_BE_54 3m 9120D_15_1620 VERTICAL<br>: RBW:1000.000KHz VBW:0.010KHz SWT:Auto<br>Detector : Peak<br>Project : 021246-01 | Left blank |

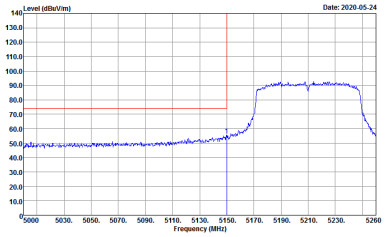
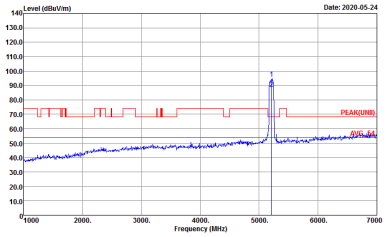
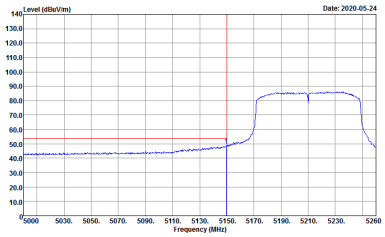
| WIFI | Band 1 5150~5250MHz Band Edge @ 3m | |
|---|---|---|
| | 802.11n HT40 CH46 5230MHz - R | |
| | Vertical | Fundamental |
| Peak |  <br>Site : 03CH15-HY<br>Condition : PEAK_BE_74 3m 9120D_15_1620 VERTICAL<br>: RBW:1000.000KHz VBW:3000.000KHz SWT:Auto<br>Detector : Peak<br>Project : 021246-01 | Left blank |
| Avg. |  <br>Site : 03CH15-HY<br>Condition : AVG_BE_54 3m 9120D_15_1620 VERTICAL<br>: RBW:1000.000KHz VBW:0.010KHz SWT:Auto<br>Detector : Peak<br>Project : 021246-01 | Left blank |

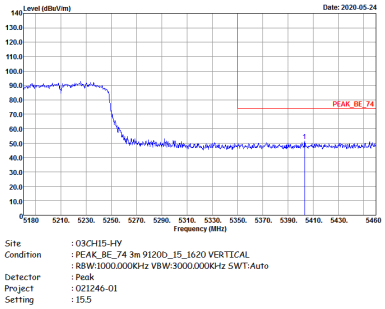
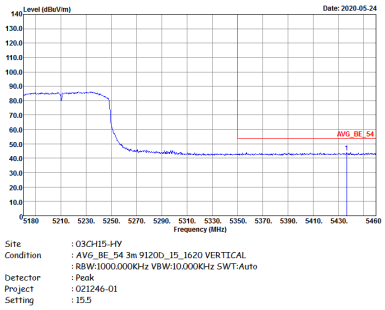
## Band 1 5150~5250MHz

## WIFI 802.11ac VHT80 (Band Edge @ 3m)

| WIFI | Band 1 5150~5250MHz Band Edge @ 3m | |
|---|---|---|
| | 802.11ac VHT80 CH42 5210MHz - L | |
| | Horizontal | Fundamental |
| Peak |  |  |
| Avg. |  | Left blank |

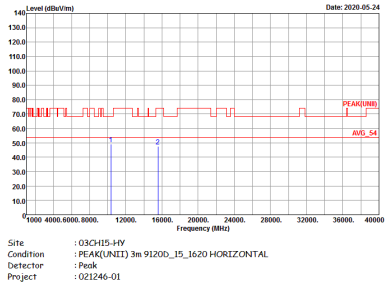
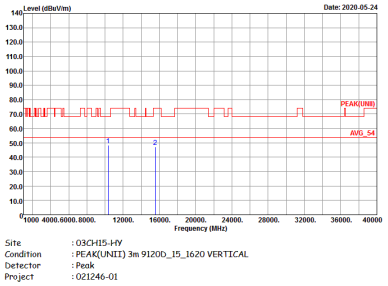
| WIFI | Band 1 5150~5250MHz Band Edge @ 3m | |
|---|---|---|
| | 802.11ac VHT80 CH42 5210MHz - R | |
| | Horizontal | Fundamental |
| Peak |  <br>Site : 03CH15-HV<br>Condition : PEAK_BE_74 3m 9120D_15_1620 HORIZONTAL<br>: RBW:1000.000KHz VBW:3000.000KHz SWT:Auto<br>Detector : Peak<br>Project : 021246-01<br>Setting : 15.5 | Left blank |
| Avg. |  <br>Site : 03CH15-HV<br>Condition : AVG_BE_54 3m 9120D_15_1620 HORIZONTAL<br>: RBW:1000.000KHz VBW:10.000KHz SWT:Auto<br>Detector : Peak<br>Project : 021246-01<br>Setting : 15.5 | Left blank |

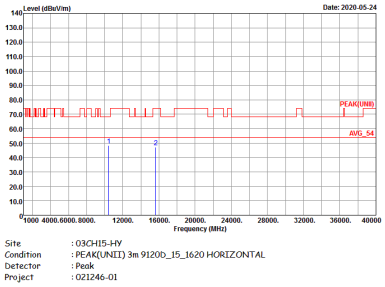
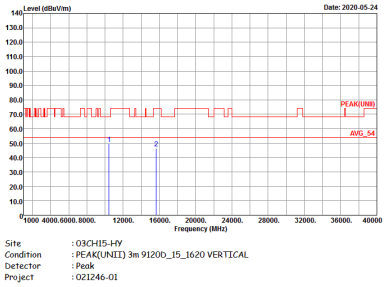
| WIFI | Band 1 5150~5250MHz Band Edge @ 3m | |
|---|---|---|
| | 802.11ac VHT80 CH42 5210MHz - L | |
| | Vertical | Fundamental |
| Peak |  <br>Site : 03CH15-HY<br>Condition : PEAK_BE_74 3m 9120D_15_1620 VERTICAL<br>: RBW:1000.000KHz VBW:3000.000KHz SWT:Auto<br>Detector : Peak<br>Project : 021246-01<br>Setting : 15.5 |  <br>Site : 03CH15-HY<br>Condition : PEAK(UNII) 3m 9120D_15_1620 VERTICAL<br>: RBW:1000.000KHz VBW:3000.000KHz SWT:Auto<br>Detector : Peak<br>Project : 021246-01<br>Setting : 15.5 |
| Avg. |  <br>Site : 03CH15-HY<br>Condition : AVG_BE_54 3m 9120D_15_1620 VERTICAL<br>: RBW:1000.000KHz VBW:10.000KHz SWT:Auto<br>Detector : Peak<br>Project : 021246-01<br>Setting : 15.5 | Left blank |

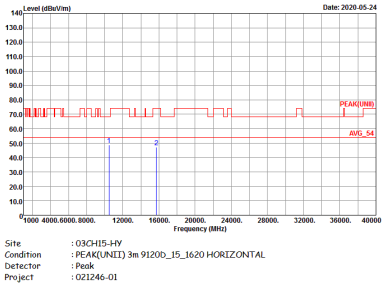
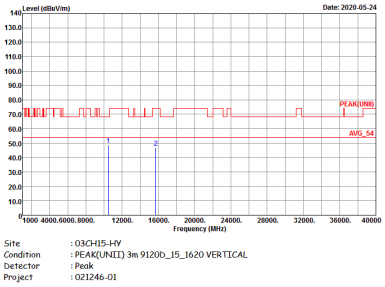
| WIFI | Band 1 5150~5250MHz Band Edge @ 3m | |
|---|---|---|
| | 802.11ac VHT80 CH42 5210MHz - R | |
| | Vertical | Fundamental |
| Peak |  <br>Site : 03CH15-HV<br>Condition : PEAK_BE_74 3m 9120D_15_1620 VERTICAL<br>: RBW:1000.000KHz VBW:3000.000KHz SWT:Auto<br>Detector : Peak<br>Project : 021246-01<br>Setting : 15.5 | Left blank |
| Avg. |  <br>Site : 03CH15-HV<br>Condition : AVG_BE_54 3m 9120D_15_1620 VERTICAL<br>: RBW:1000.000KHz VBW:10.000KHz SWT:Auto<br>Detector : Peak<br>Project : 021246-01<br>Setting : 15.5 | Left blank |

## Band 1 - 5150~5250MHz

## WIFI 802.11a (Harmonic @ 3m)

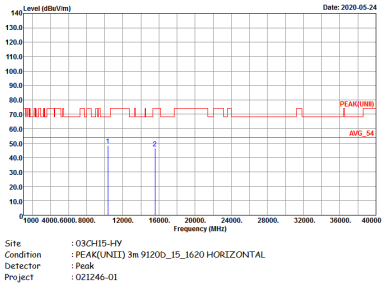
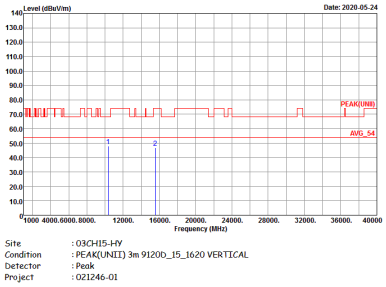
| WIFI | Band 1 5150~5250MHz Harmonic @ 3m | |
|---|---|---|
| | 802.11a CH36 5180MHz | |
| | Horizontal | Vertical |
| Peak<br>Avg. |  |  |

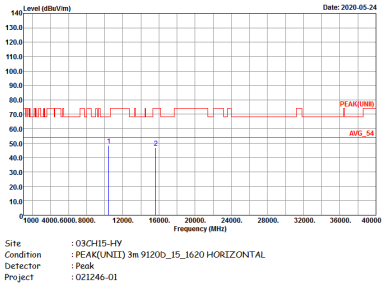
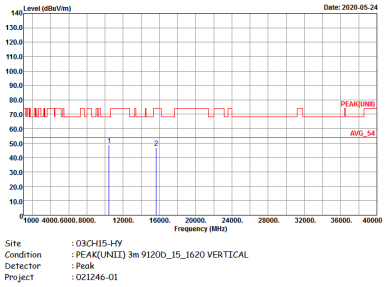
| WIFI | Band 1 5150~5250MHz Harmonic @ 3m | |
|---|---|---|
| | 802.11a CH44 5220MHz | |
| | Horizontal | Vertical |
| Peak<br>Avg. |  |  |

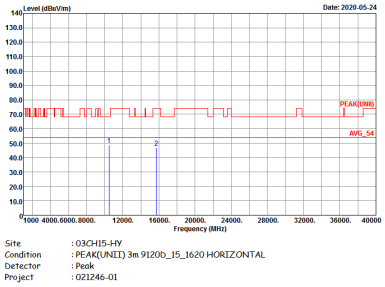
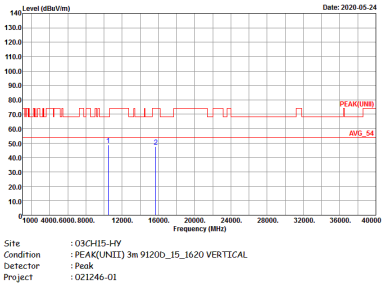
| WIFI | Band 1 5150~5250MHz Harmonic @ 3m | |
|---|---|---|
| | 802.11a CH48 5240MHz | |
| | Horizontal | Vertical |
| Peak<br>Avg. |  |  |

## Band 1 5150~5250MHz

## WIFI 802.11n HT20 (Harmonic @ 3m)

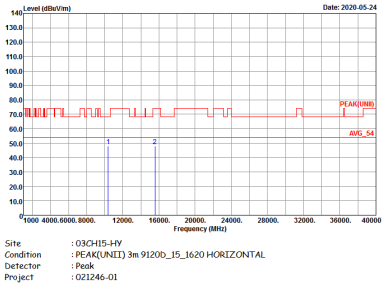
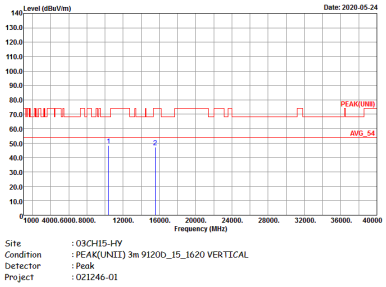
| WIFI | Band 1 5150~5250MHz Harmonic @ 3m | |
|---|---|---|
| | 802.11n HT20 CH36 5180MHz | |
| | Horizontal | Vertical |
| Peak<br>Avg. |  |  |

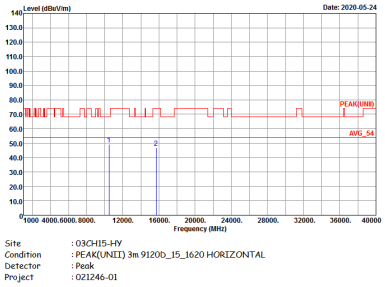
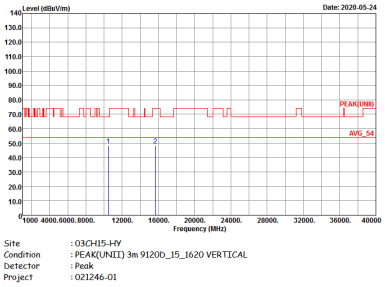
| WIFI | Band 1 5150~5250MHz Harmonic @ 3m | |
|---|---|---|
| | 802.11n HT20 CH44 5220MHz | |
| | Horizontal | Vertical |
| Peak<br>Avg. |  |  |

| WIFI | Band 1 5150~5250MHz Harmonic @ 3m | |
|---|---|---|
| | 802.11n HT20 CH48 5240MHz | |
| | Horizontal | Vertical |
| Peak<br>Avg. |  |  |

## Band 1 5150~5250MHz

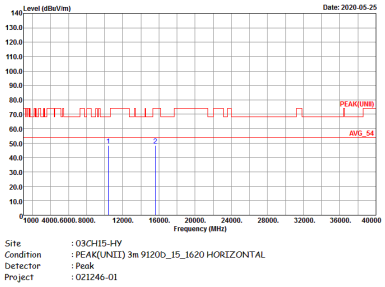
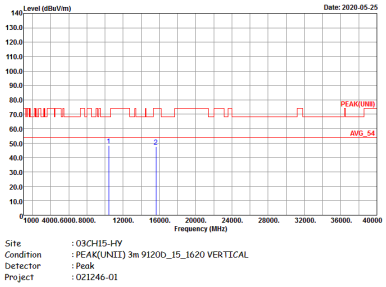
## WIFI 802.11n HT40 (Harmonic @ 3m)

| WIFI | Band 1 5150~5250MHz Harmonic @ 3m | |
|---|---|---|
| | 802.11n HT40 CH38 5190MHz | |
| | Horizontal | Vertical |
| Peak<br>Avg. |  |  |

| WIFI | Band 1 5150~5250MHz Harmonic @ 3m | |
|---|---|---|
| ANT | 802.11n HT40 CH46 5230MHz | |
| 1 | Horizontal | Vertical |
| Peak<br>Avg. |  <br><br>Site : 03CH15-HY<br>Condition : PEAK(UNII) 3m 9120D_15_1620 HORIZONTAL<br>Detector : Peak<br>Project : 021246-01 |  <br><br>Site : 03CH15-HY<br>Condition : PEAK(UNII) 3m 9120D_15_1620 VERTICAL<br>Detector : Peak<br>Project : 021246-01 |

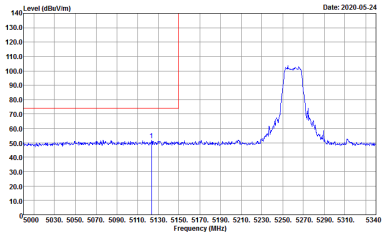
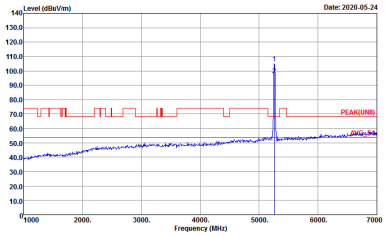
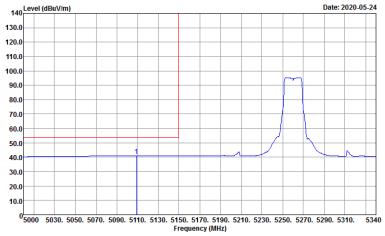
## Band 1 5150~5250MHz

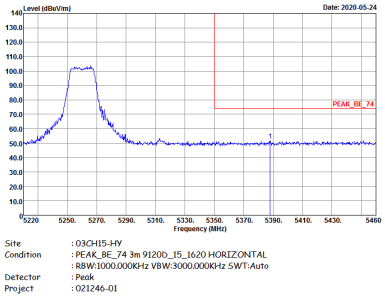
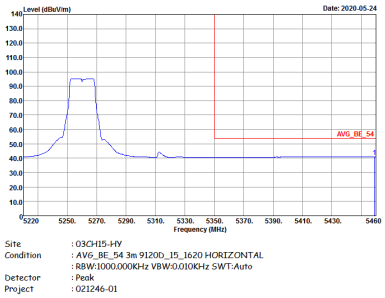
## WIFI 802.11ac VHT80 (Harmonic @ 3m)

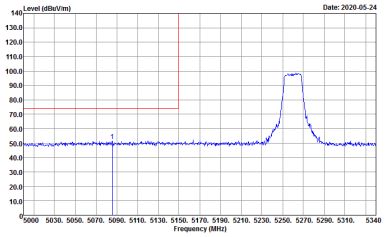
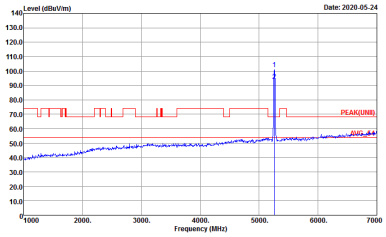
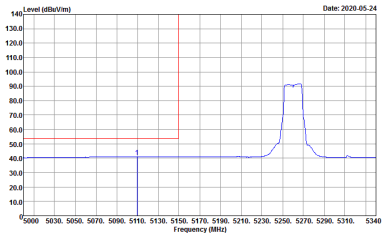
| WIFI | Band 1 5150~5250MHz Harmonic @ 3m | |
|---|---|---|
| | 802.11ac VHT80 CH42 5210MHz | |
| | Horizontal | Vertical |
| Peak<br>Avg. |  |  |

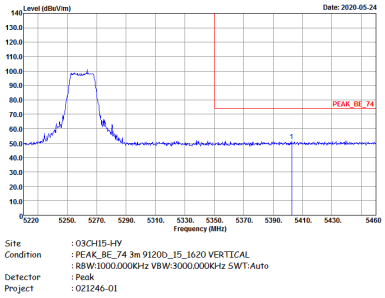
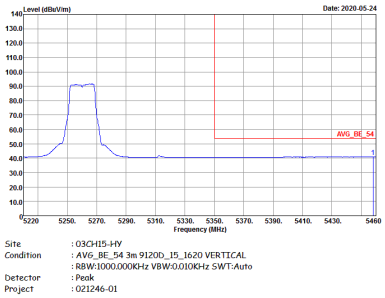
## Band 2 - 5250~5350MHz

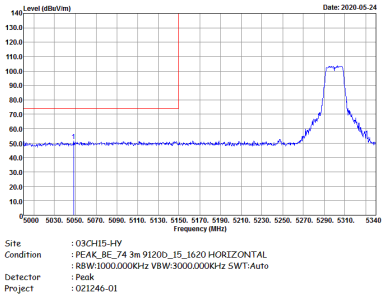
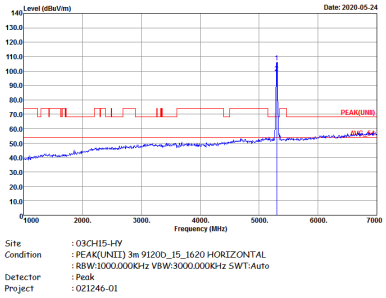
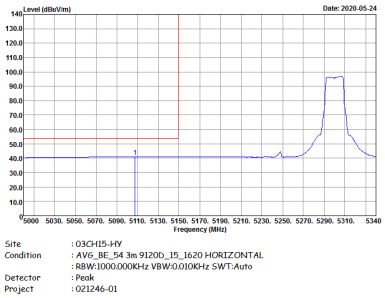
## WIFI 802.11a (Band Edge @ 3m)

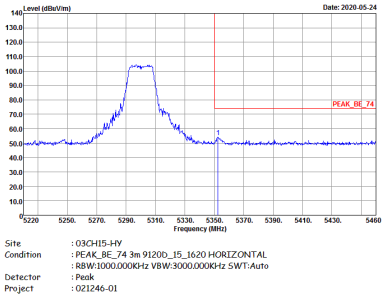
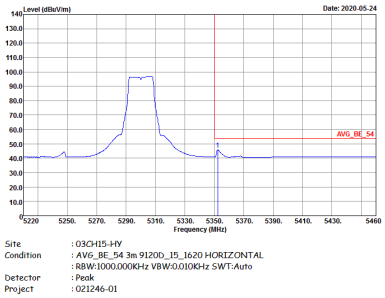
| WIFI | Band 2 5250~5350MHz Band Edge @ 3m | |
|---|---|---|
| | 802.11a CH52 5260MHz - L | |
| | Horizontal | Fundamental |
| Peak |  |  |
| Avg. |  | Left blank |

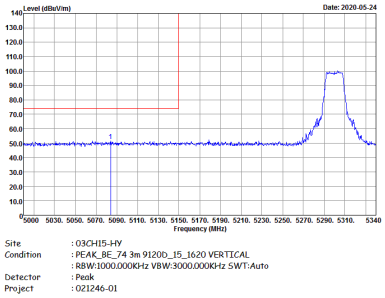
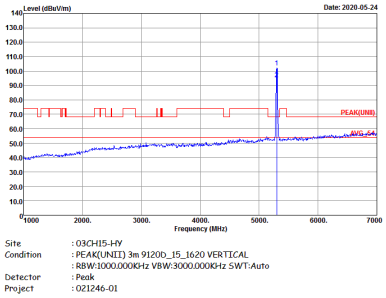
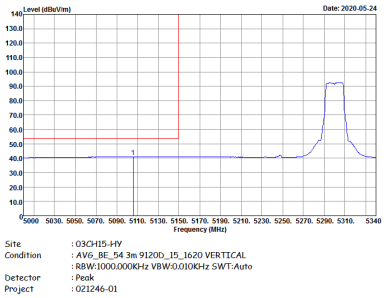
| WIFI | Band 2 5250~5350MHz Band Edge @ 3m | |
|---|---|---|
| | 802.11a CH52 5260MHz - R | |
| | Horizontal | Fundamental |
| Peak |  | Left blank |
| Avg. |  | Left blank |

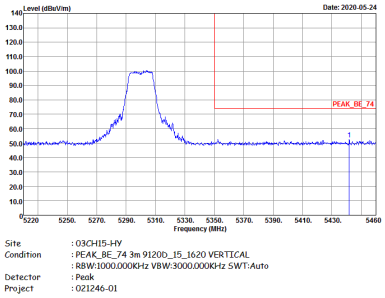
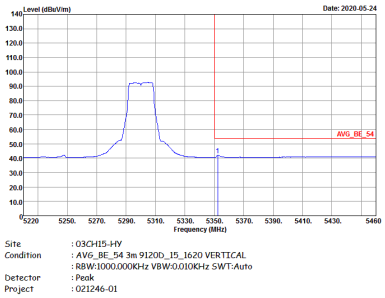
| WIFI | Band 2 5250~5350MHz Band Edge @ 3m | |
|---|---|---|
| | 802.11a CH52 5260MHz - L | |
| | Vertical | Fundamental |
| Peak |  <br>Site : 03CH15-HY<br>Condition : PEAK_BE_74 3m 9120D_15_1620 VERTICAL<br>: RBW:1000.000KHz VBW:3000.000KHz SWT:Auto<br>Detector : Peak<br>Project : 021246-01 |  <br>Site : 03CH15-HY<br>Condition : PEAK(UNII) 3m 9120D_15_1620 VERTICAL<br>: RBW:1000.000KHz VBW:3000.000KHz SWT:Auto<br>Detector : Peak<br>Project : 021246-01 |
| Avg. |  <br>Site : 03CH15-HY<br>Condition : AVG_BE_54 3m 9120D_15_1620 VERTICAL<br>: RBW:1000.000KHz VBW:0.010KHz SWT:Auto<br>Detector : Peak<br>Project : 021246-01 | Left blank |

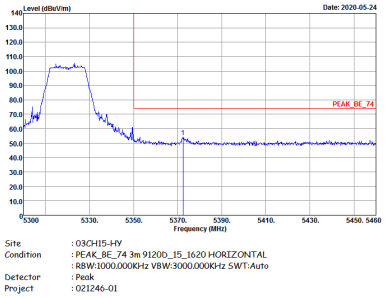
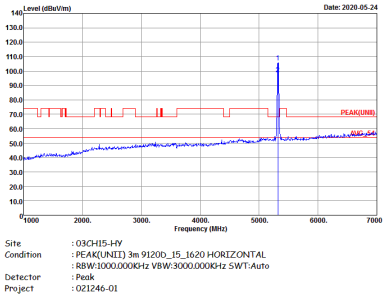
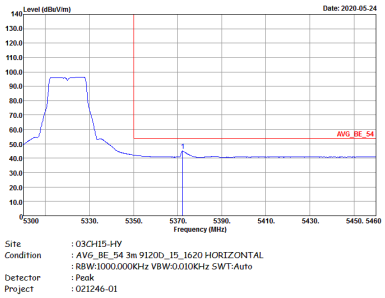
| WIFI | Band 2 5250~5350MHz Band Edge @ 3m | |
|---|---|---|
| | 802.11a CH52 5260MHz - R | |
| | Vertical | Fundamental |
| Peak |  | Left blank |
| Avg. |  | Left blank |

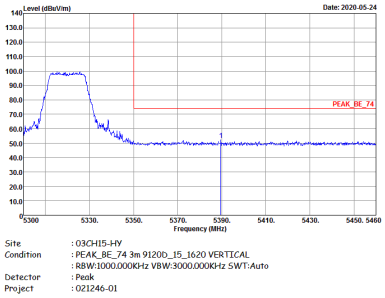
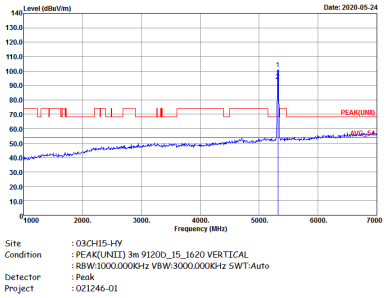
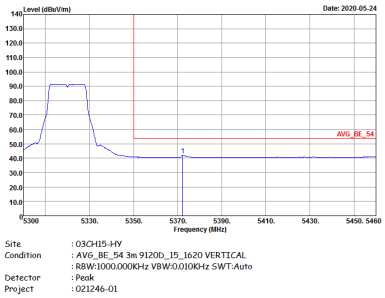
| WIFI | Band 2 5250~5350MHz Band Edge @ 3m | |
|---|---|---|
| | 802.11a CH60 5300MHz - L | |
| | Horizontal | Fundamental |
| Peak |  |  |
| Avg. |  | Left blank |

| WIFI | Band 2 5250~5350MHz Band Edge @ 3m | |
|---|---|---|
| | 802.11a CH60 5300MHz - R | |
| | Horizontal | Fundamental |
| Peak |  | Left blank |
| Avg. |  | Left blank |

| WIFI | Band 2 5250~5350MHz Band Edge @ 3m | |
|---|---|---|
| | 802.11a CH60 5300MHz - L | |
| | Vertical | Fundamental |
| Peak |  |  |
| Avg. |  | Left blank |

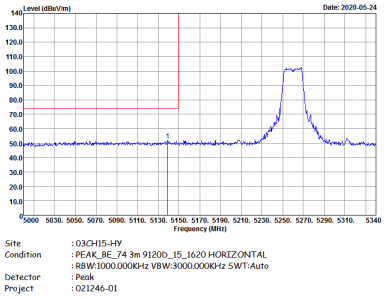
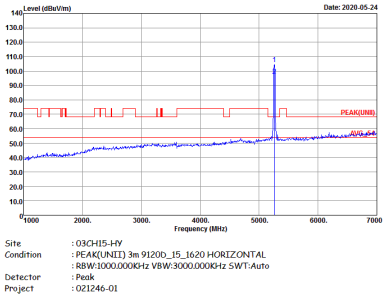
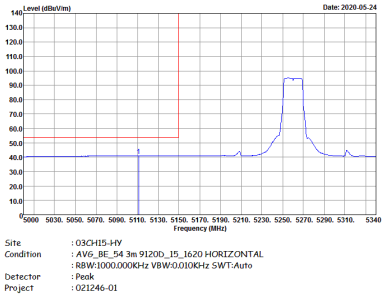
| WIFI | Band 2 5250~5350MHz Band Edge @ 3m | |
|---|---|---|
| | 802.11a CH60 5300MHz - R | |
| | Vertical | Fundamental |
| Peak |  | Left blank |
| Avg. |  | Left blank |

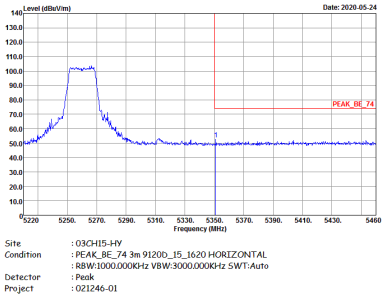
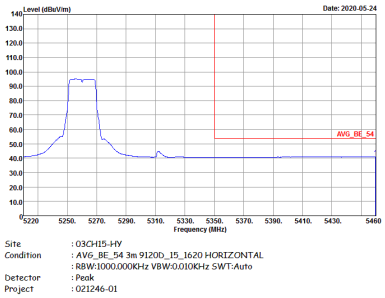
| WIFI | Band 2 5250~5350MHz Band Edge @ 3m | |
|---|---|---|
| | 802.11a CH64 5320MHz | |
| | Horizontal | Fundamental |
| Peak |  |  |
| Avg. |  | Left blank |

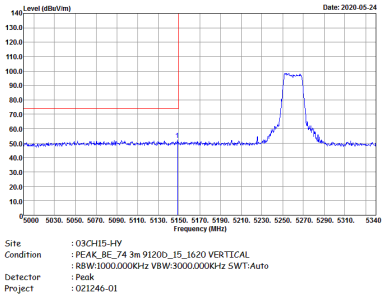
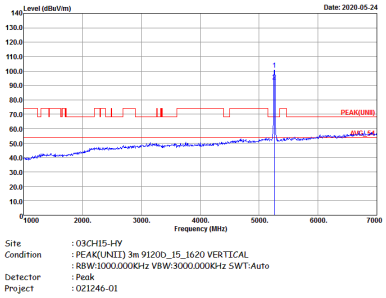
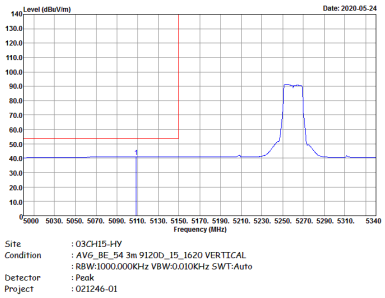
| WIFI | Band 2 5250~5350MHz Band Edge @ 3m | |
|---|---|---|
| | 802.11a CH64 5320MHz | |
| | Vertical | Fundamental |
| Peak |  |  |
| Avg. |  | Left blank |

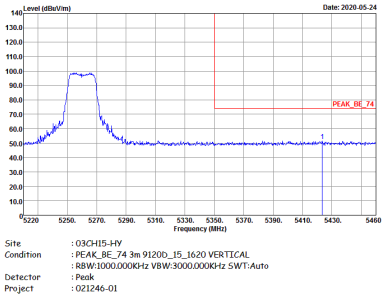
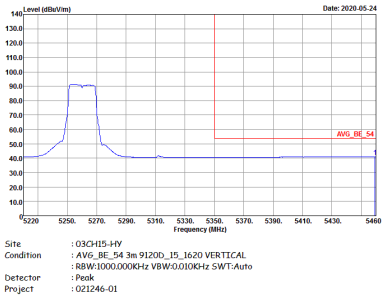
## Band 2 5250~5350MHz

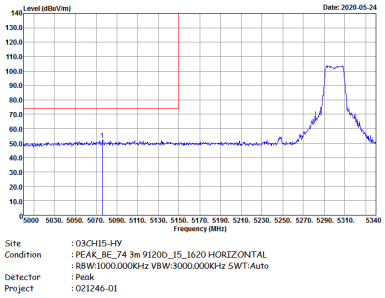
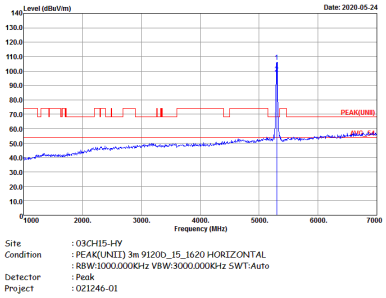
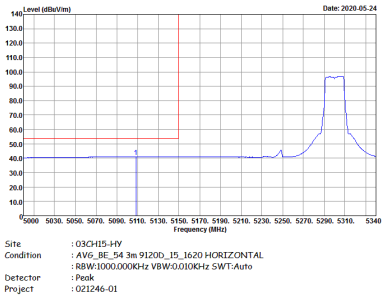
## WIFI 802.11n HT20 (Band Edge @ 3m)

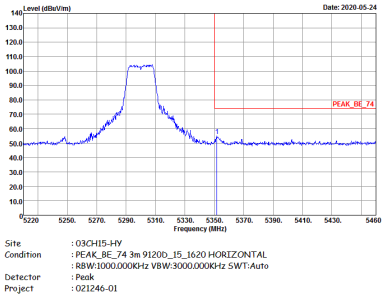
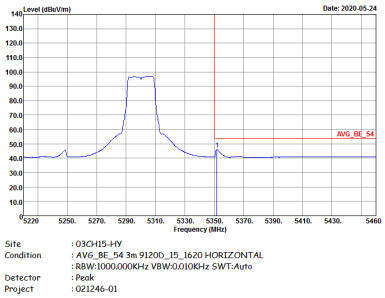
| WIFI | Band 2 5250~5350MHz Band Edge @ 3m | |
|---|---|---|
| | 802.11n HT20 CH52 5260MHz - L | |
| | Horizontal | Fundamental |
| Peak |  |  |
| Avg. |  | Left blank |

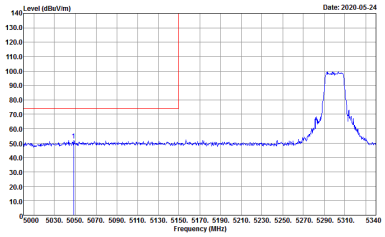
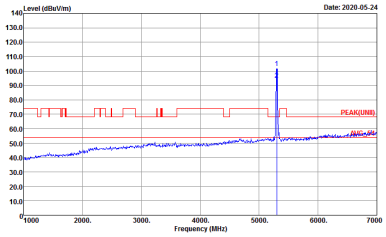
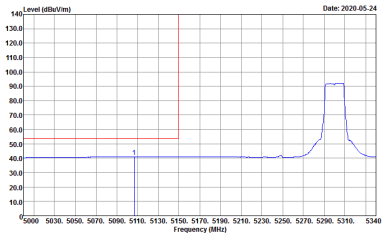
| WIFI | Band 2 5250~5350MHz Band Edge @ 3m | |
|---|---|---|
| | 802.11n HT20 CH52 5260MHz - R | |
| | Horizontal | Fundamental |
| Peak |  | Left blank |
| Avg. |  | Left blank |

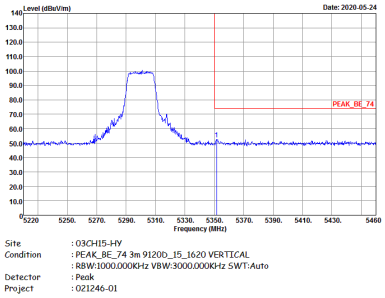
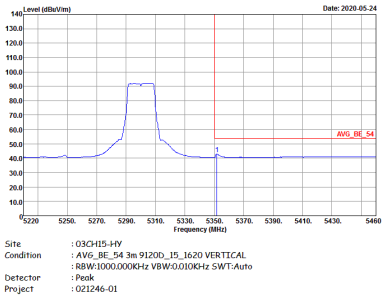
| WIFI | Band 2 5250~5350MHz Band Edge @ 3m | |
|---|---|---|
| | 802.11n HT20 CH52 5260MHz - L | |
| | Vertical | Fundamental |
| Peak |  |  |
| Avg. |  | Left blank |

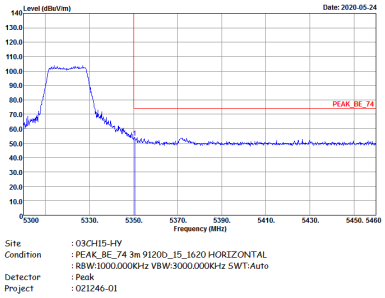
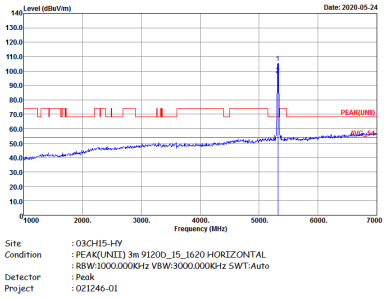
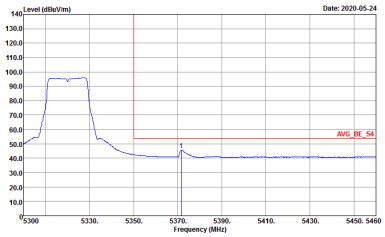
| WIFI | Band 2 5250~5350MHz Band Edge @ 3m | |
|---|---|---|
| | 802.11n HT20 CH52 5260MHz - R | |
| | Vertical | Fundamental |
| Peak |  | Left blank |
| Avg. |  | Left blank |

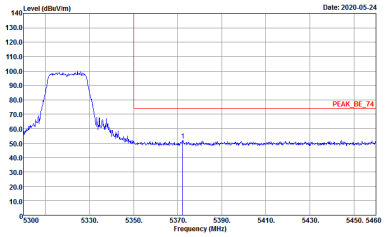
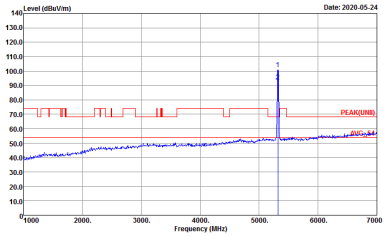
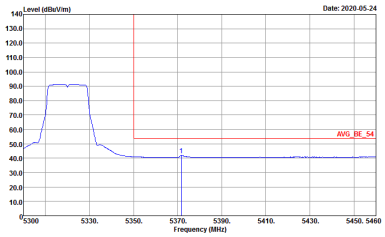
| WIFI | Band 2 5250~5350MHz Band Edge @ 3m | |
|---|---|---|
| | 802.11n HT20 CH60 5300MHz - L | |
| | Horizontal | Fundamental |
| Peak |  |  |
| Avg. |  | Left blank |

| WIFI | Band 2 5250~5350MHz Band Edge @ 3m | |
|---|---|---|
| | 802.11n HT20 CH60 5300MHz - R | |
| | Horizontal | Vertical |
| Peak |  | Left blank |
| Avg. |  | Left blank |

| WIFI | Band 2 5250~5350MHz Band Edge @ 3m | |
|---|---|---|
| | 802.11n HT20 CH60 5300MHz - L | |
| | Vertical | Fundamental |
| Peak |  <br>Site : 03CH15-HY<br>Condition : PEAK_BE_74 3m 9120D_15_1620 VERTICAL<br>: RBW:1000.000KHz VBW:3000.000KHz SWT:Auto<br>Detector : Peak<br>Project : 021246-01 |  <br>Site : 03CH15-HY<br>Condition : PEAK(UNII) 3m 9120D_15_1620 VERTICAL<br>: RBW:1000.000KHz VBW:3000.000KHz SWT:Auto<br>Detector : Peak<br>Project : 021246-01 |
| Avg. |  <br>Site : 03CH15-HY<br>Condition : AVG_BE_54 3m 9120D_15_1620 VERTICAL<br>: RBW:1000.000KHz VBW:0.010KHz SWT:Auto<br>Detector : Peak<br>Project : 021246-01 | Left blank |

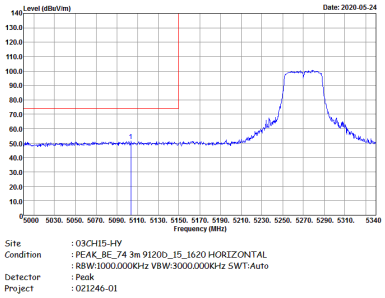
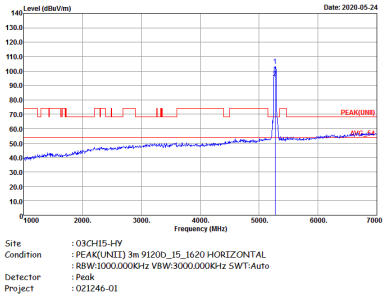
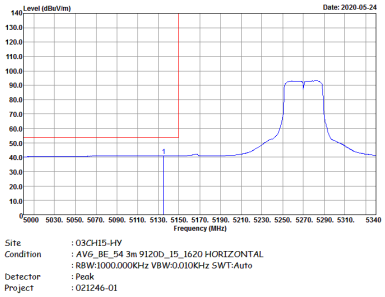
| WIFI | Band 2 5250~5350MHz Band Edge @ 3m | |
|---|---|---|
| | 802.11n HT20 CH60 5300MHz - R | |
| | Vertical | Fundamental |
| Peak |  | Left blank |
| Avg. |  | Left blank |

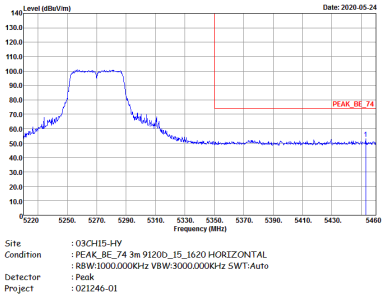
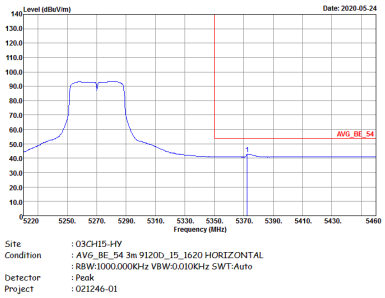
| WIFI | Band 2 5250~5350MHz Band Edge @ 3m | |
|---|---|---|
| | 802.11n HT20 CH64 5320MHz | |
| | Horizontal | Fundamental |
| Peak |  <br>Site : 03CH15-HY<br>Condition : PEAK_BE_74 3m 9120D_15_1620 HORIZONTAL<br>: RBW:1000.000KHz VBW:3000.000KHz SWT:Auto<br>Detector : Peak<br>Project : 021246-01 |  <br>Site : 03CH15-HY<br>Condition : PEAK(UNII) 3m 9120D_15_1620 HORIZONTAL<br>: RBW:1000.000KHz VBW:3000.000KHz SWT:Auto<br>Detector : Peak<br>Project : 021246-01 |
| Avg. |  <br>Site : 03CH15-HY<br>Condition : AVG_BE_54 3m 9120D_15_1620 HORIZONTAL<br>: RBW:1000.000KHz VBW:0.010KHz SWT:Auto<br>Detector : Peak<br>Project : 021246-01 | Left blank |

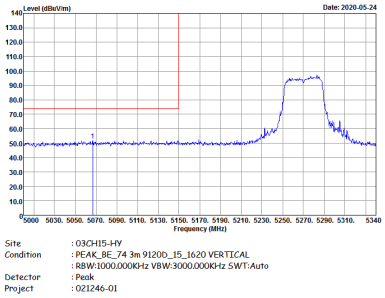
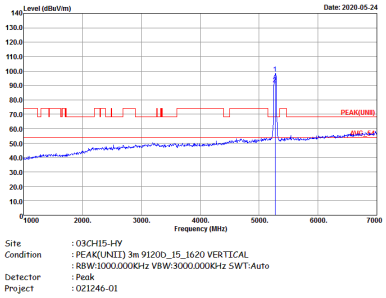
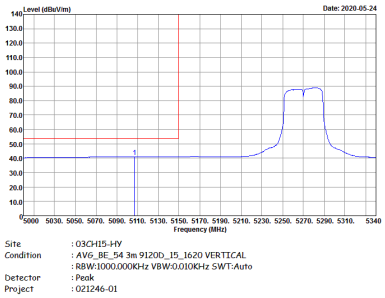
| WIFI | Band 2 5250~5350MHz Band Edge @ 3m | |
|---|---|---|
| | 802.11n HT20 CH64 5320MHz | |
| | Vertical | Fundamental |
| Peak |  <br>Site : 03CH15-HY<br>Condition : PEAK_BE_74 3m 9120D_15_1620 VERTICAL<br>: RBW:1000.000KHz VBW:3000.000KHz SWT:Auto<br>Detector : Peak<br>Project : 021246-01 |  <br>Site : 03CH15-HY<br>Condition : PEAK(UNII) 3m 9120D_15_1620 VERTICAL<br>: RBW:1000.000KHz VBW:3000.000KHz SWT:Auto<br>Detector : Peak<br>Project : 021246-01 |
| Avg. |  <br>Site : 03CH15-HY<br>Condition : AVG_BE_54 3m 9120D_15_1620 VERTICAL<br>: RBW:1000.000KHz VBW:0.010KHz SWT:Auto<br>Detector : Peak<br>Project : 021246-01 | Left blank |

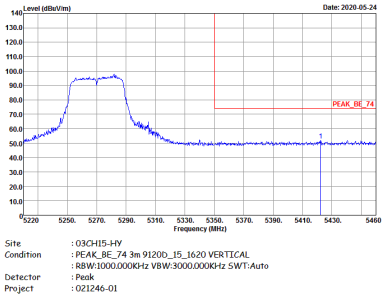
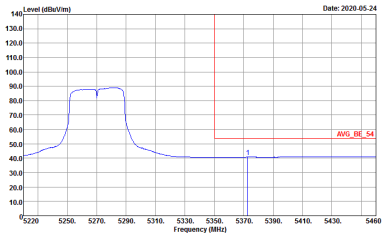
## Band 2 5250~5350MHz

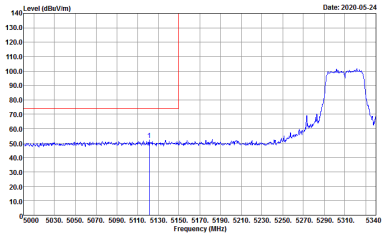
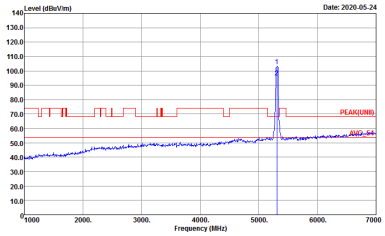
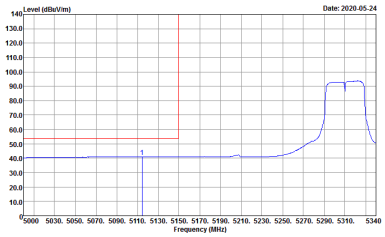
## WIFI 802.11n HT40 (Band Edge @ 3m)

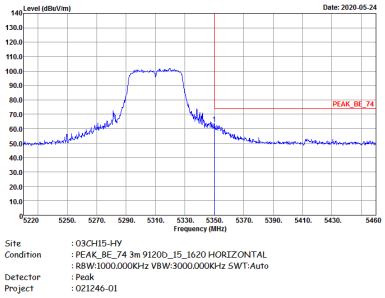
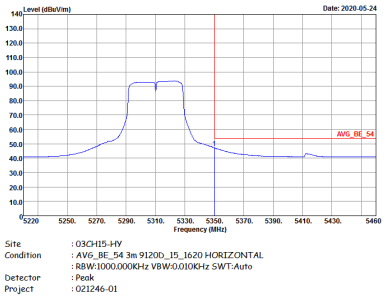
| WIFI | Band 2 5250~5350MHz Band Edge @ 3m | |
|---|---|---|
| | 802.11n HT40 CH54 5270MHz - L | |
| | Horizontal | Fundamental |
| Peak |  |  |
| Avg. |  | Left blank |

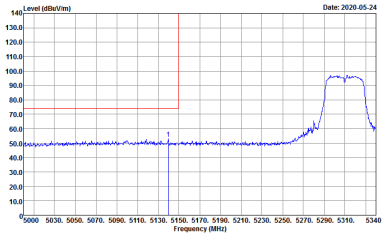
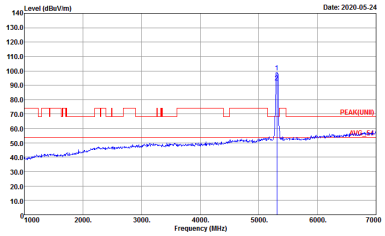
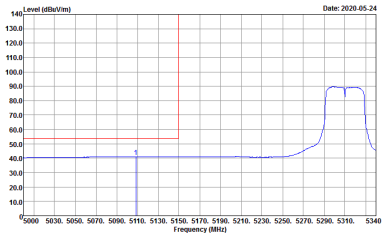
| WIFI | Band 2 5250~5350MHz Band Edge @ 3m | |
|---|---|---|
| | 802.11n HT40 CH54 5270 MHz - R | |
| | Horizontal | Fundamental |
| Peak |  | Left blank |
| Avg. |  | Left blank |

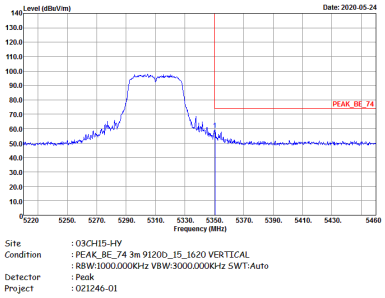
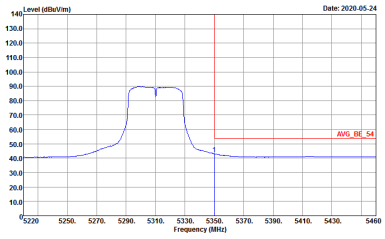
| WIFI | Band 2 5250~5350MHz Band Edge @ 3m | |
|---|---|---|
| | 802.11n HT40 CH54 5270 MHz - L | |
| | Vertical | Vertical |
| Peak |  |  |
| Avg. |  | Left blank |

| WIFI | Band 2 5250~5350MHz Band Edge @ 3m | |
|---|---|---|
| | 802.11n HT40 CH54 5270 MHz - R | |
| | Vertical | Vertical |
| Peak |  <br>Site : 03CH15-HV<br>Condition : PEAK_BE_74 3m 9120D_15_1620 VERTICAL<br>: RBW:1000.000KHz VBW:3000.000KHz SWT:Auto<br>Detector : Peak<br>Project : 021246-01 | Left blank |
| Avg. |  <br>Site : 03CH15-HV<br>Condition : AVG_BE_54 3m 9120D_15_1620 VERTICAL<br>: RBW:1000.000KHz VBW:0.010KHz SWT:Auto<br>Detector : Peak<br>Project : 021246-01 | Left blank |

| WIFI | Band 2 5250~5350MHz Band Edge @ 3m | |
|---|---|---|
| | 802.11n HT40 CH62 5310 MHz - L | |
| | Horizontal | Fundamental |
| Peak |  <br>Site : 03CH15-HY<br>Condition : PEAK_BE_74 3m 9120D_15_1620 HORIZONTAL<br>: RBW:1000.000KHz VBW:3000.000KHz SWT:Auto<br>Detector : Peak<br>Project : 021246-01 |  <br>Site : 03CH15-HY<br>Condition : PEAK(UNII) 3m 9120D_15_1620 HORIZONTAL<br>: RBW:1000.000KHz VBW:3000.000KHz SWT:Auto<br>Detector : Peak<br>Project : 021246-01 |
| Avg. |  <br>Site : 03CH15-HY<br>Condition : AVG_BE_54 3m 9120D_15_1620 HORIZONTAL<br>: RBW:1000.000KHz VBW:0.010KHz SWT:Auto<br>Detector : Peak<br>Project : 021246-01 | Left blank |

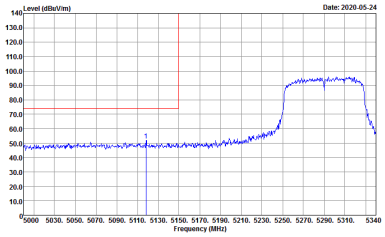
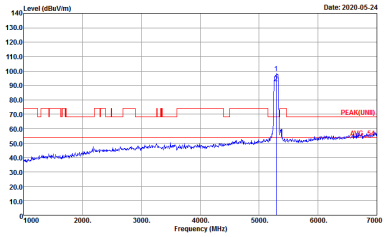
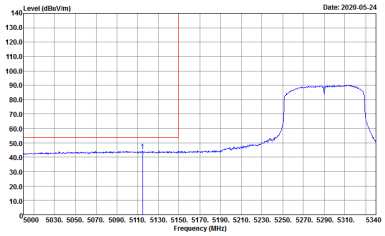
| WIFI | Band 2 5250~5350MHz Band Edge @ 3m | |
|---|---|---|
| | 802.11n HT40 CH62 5310 MHz - R | |
| | Horizontal | Fundamental |
| Peak |  <br>Site : 03CH15-HV<br>Condition : PEAK_BE_74 3m 9120D_15_1620 HORIZONTAL<br>: RBW:1000.000KHz VBW:3000.000KHz SWT:Auto<br>Detector : Peak<br>Project : 021246-01 | Left blank |
| Avg. |  <br>Site : 03CH15-HV<br>Condition : AVG_BE_54 3m 9120D_15_1620 HORIZONTAL<br>: RBW:1000.000KHz VBW:0.010KHz SWT:Auto<br>Detector : Peak<br>Project : 021246-01 | Left blank |

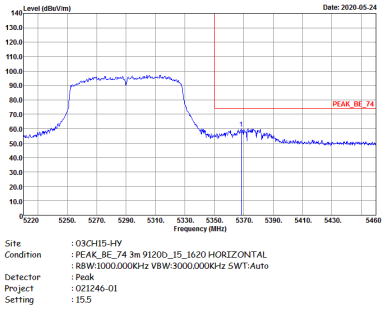
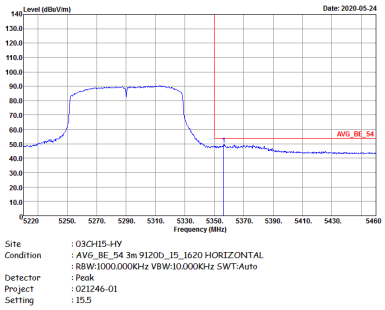
| WIFI | Band 2 5250~5350MHz Band Edge @ 3m | |
|---|---|---|
| | 802.11n HT40 CH62 5310 MHz - L | |
| | Vertical | Fundamental |
| Peak |  <br>Site : 03CH15-HY<br>Condition : PEAK_BE_74 3m 9120D_15_1620 VERTICAL<br>: RBW:1000.000KHz VBW:3000.000KHz SWT:Auto<br>Detector : Peak<br>Project : 021246-01 |  <br>Site : 03CH15-HY<br>Condition : PEAK(UNII) 3m 9120D_15_1620 VERTICAL<br>: RBW:1000.000KHz VBW:3000.000KHz SWT:Auto<br>Detector : Peak<br>Project : 021246-01 |
| Avg. |  <br>Site : 03CH15-HY<br>Condition : AVG_BE_54 3m 9120D_15_1620 VERTICAL<br>: RBW:1000.000KHz VBW:0.010KHz SWT:Auto<br>Detector : Peak<br>Project : 021246-01 | Left blank |

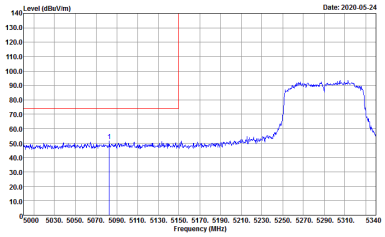
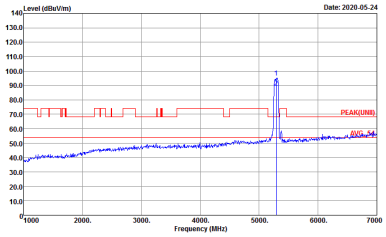
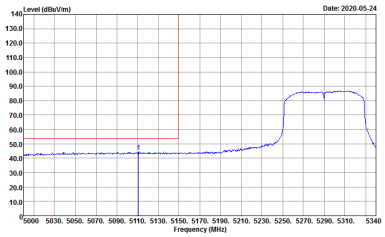
| WIFI | Band 2 5250~5350MHz Band Edge @ 3m | |
|---|---|---|
| | 802.11n HT40 CH62 5310 MHz - R | |
| | Vertical | Fundamental |
| Peak |  <br>Site : 03CH15-HV<br>Condition : PEAK_BE_74 3m 9120D_15_1620 VERTICAL<br>: RBW:1000.000KHz VBW:3000.000KHz SWT:Auto<br>Detector : Peak<br>Project : 021246-01 | Left blank |
| Avg. |  <br>Site : 03CH15-HV<br>Condition : AVG_BE_54 3m 9120D_15_1620 VERTICAL<br>: RBW:1000.000KHz VBW:0.010KHz SWT:Auto<br>Detector : Peak<br>Project : 021246-01 | Left blank |

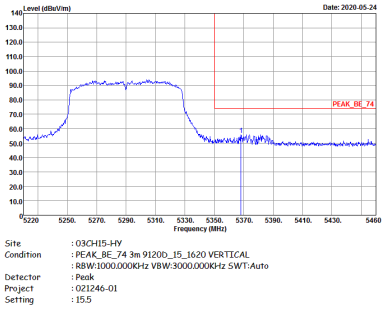
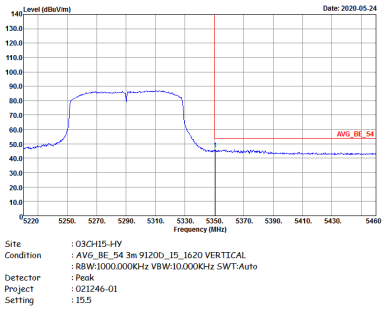
## Band 2 5250~5350MHz

## WIFI 802.11ac VHT80 (Band Edge @ 3m)

| WIFI | Band 2 5250~5350MHz Band Edge @ 3m | |
|---|---|---|
| | 802.11ac VHT80 CH58 5290MHz - L | |
| | Horizontal | Fundamental |
| Peak |  |  |
| Avg. |  | Left blank |

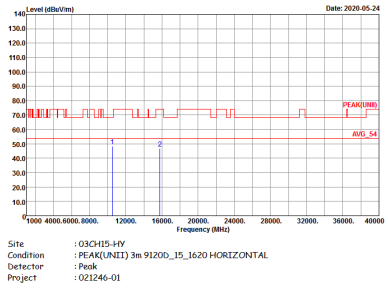
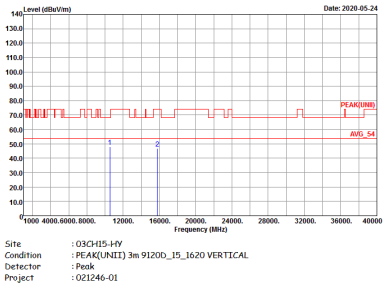
| WIFI | Band 2 5250~5350MHz Band Edge @ 3m | |
|---|---|---|
| | 802.11ac VHT80 CH58 5290MHz - R | |
| | Horizontal | Fundamental |
| Peak |  | Left blank |
| Avg. |  | Left blank |

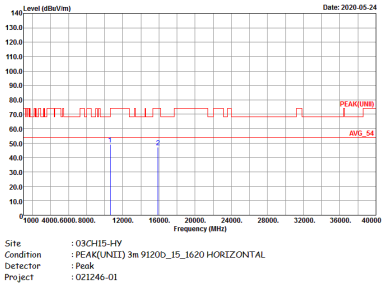
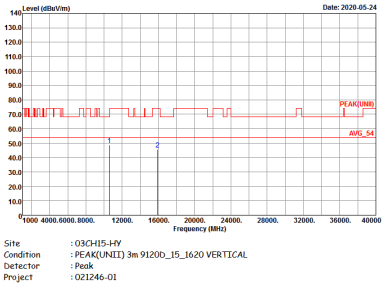
| WIFI | Band 2 5250~5350MHz Band Edge @ 3m | |
|---|---|---|
| | 802.11ac VHT80 CH58 5290MHz - L | |
| | Vertical | Fundamental |
| Peak |  <br>Site : 03CH15-HY<br>Condition : PEAK_BE_74 3m 9120D_15_1620 VERTICAL<br>: RBW:1000.000KHz VBW:3000.000KHz SWT:Auto<br>Detector : Peak<br>Project : 021246-01<br>Setting : 15.5 |  <br>Site : 03CH15-HY<br>Condition : PEAK(UNII) 3m 9120D_15_1620 VERTICAL<br>: RBW:1000.000KHz VBW:3000.000KHz SWT:Auto<br>Detector : Peak<br>Project : 021246-01<br>Setting : 15.5 |
| Avg. |  <br>Site : 03CH15-HY<br>Condition : AVG_BE_54 3m 9120D_15_1620 VERTICAL<br>: RBW:1000.000KHz VBW:10.000KHz SWT:Auto<br>Detector : Peak<br>Project : 021246-01<br>Setting : 15.5 | Left blank |

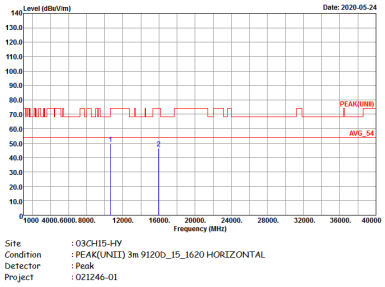
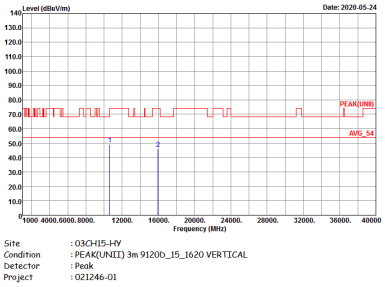
| WIFI | Band 2 5250~5350MHz Band Edge @ 3m | |
|---|---|---|
| | 802.11ac VHT80 CH58 5290MHz - R | |
| | Vertical | Fundamental |
| Peak |  <br>Site : 03CH15-HV<br>Condition : PEAK_BE_74 3m 9120D_15_1620 VERTICAL<br>: RBW:1000.000KHz VBW:3000.000KHz SWT:Auto<br>Detector : Peak<br>Project : 021246-01<br>Setting : 15.5 | Left blank |
| Avg. |  <br>Site : 03CH15-HV<br>Condition : AVG_BE_54 3m 9120D_15_1620 VERTICAL<br>: RBW:1000.000KHz VBW:10.000KHz SWT:Auto<br>Detector : Peak<br>Project : 021246-01<br>Setting : 15.5 | Left blank |

## Band 2 - 5250~5350MHz

## WIFI 802.11a (Harmonic @ 3m)

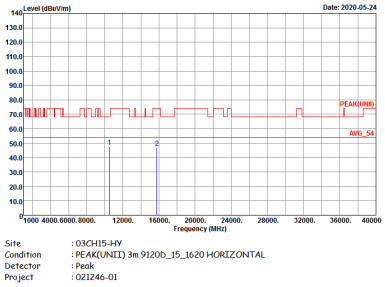
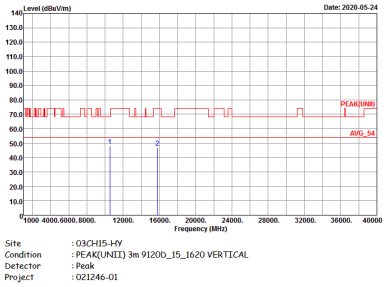
| WIFI | Band 2 5250~5350MHz Harmonic @ 3m | |
|---|---|---|
| | 802.11a CH52 5260MHz | |
| | Horizontal | Vertical |
| Peak<br>Avg. |  |  |

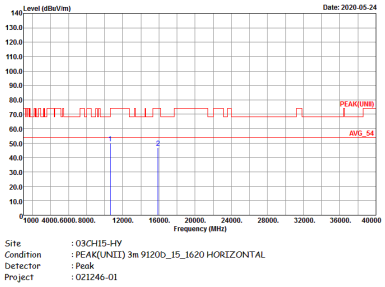
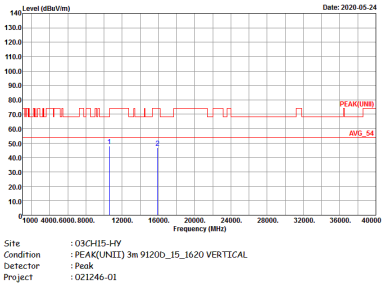
| WIFI | Band 2 5250~5350MHz Harmonic @ 3m | |
|---|---|---|
| | 802.11a CH60 5300MHz | |
| | Horizontal | Vertical |
| Peak<br>Avg. |  |  |

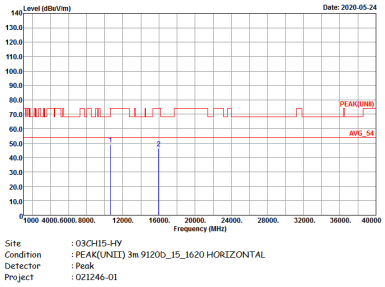
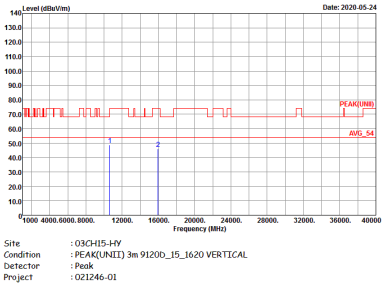
| WIFI | Band 2 5250~5350MHz Harmonic @ 3m | |
|---|---|---|
| | 802.11a CH64 5320MHz | |
| | Horizontal | Vertical |
| Peak<br>Avg. |  |  |

## Band 2 5250~5350MHz

## WIFI 802.11n HT20 (Harmonic @ 3m)

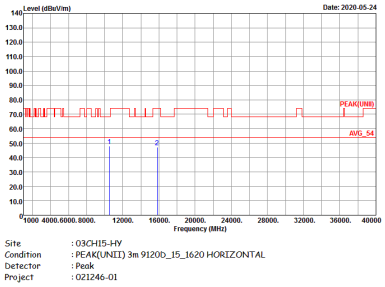
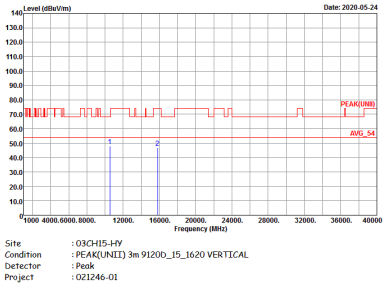
| WIFI | Band 2 5250~5350MHz Harmonic @ 3m | |
|---|---|---|
| | 802.11n HT20 CH52 5260MHz | |
| | Horizontal | Vertical |
| Peak<br>Avg. |  |  |

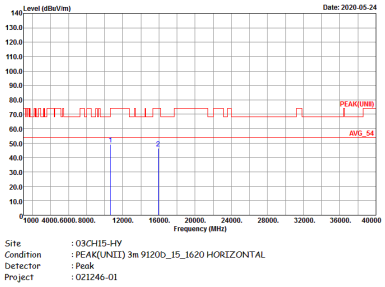
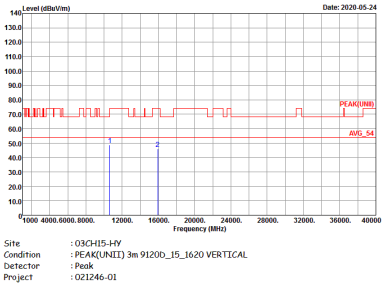
| WIFI | Band 2 5250~5350MHz Harmonic @ 3m | |
|---|---|---|
| | 802.11n HT20 CH60 5300MHz | |
| | Horizontal | Vertical |
| Peak<br>Avg. |  |  |

| WIFI | Band 2 5250~5350MHz Harmonic @ 3m | |
|---|---|---|
| | 802.11n HT20 CH64 5320MHz | |
| | Horizontal | Vertical |
| Peak<br>Avg. |  |  |

## Band 2 5250~5350MHz

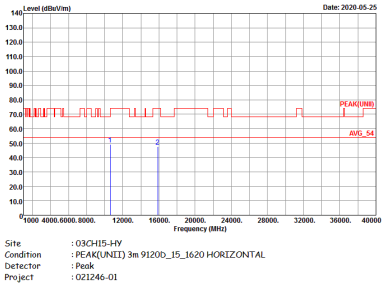
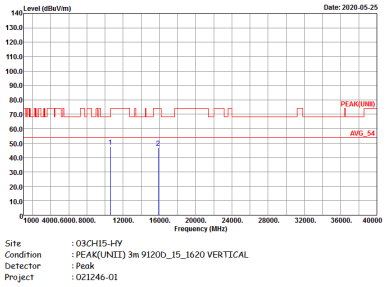
## WIFI 802.11n HT40 (Harmonic @ 3m)

| WIFI | Band 2 5250~5350MHz Harmonic @ 3m | |
|---|---|---|
| | 802.11n HT40 CH54 5270 | |
| | Horizontal | Vertical |
| Peak<br>Avg. |  |  |

| WIFI | Band 2 5250~5350MHz Harmonic @ 3m | |
|---|---|---|
| | 802.11n HT40 CH62 5310 | |
| | Horizontal | Vertical |
| Peak<br>Avg. |  |  |

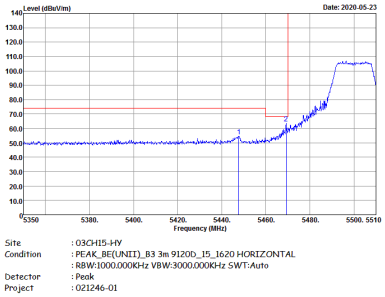
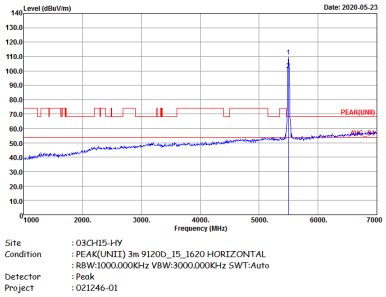
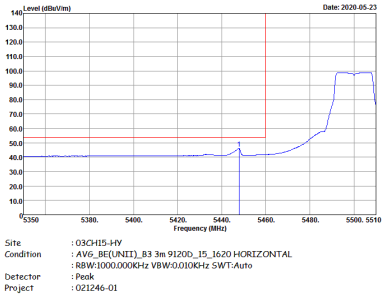
## Band 2 5250~5350MHz

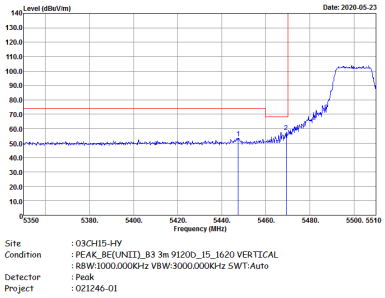
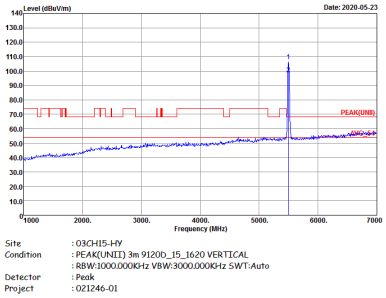
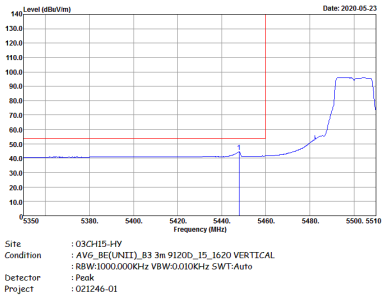
## WIFI 802.11ac VHT80 (Harmonic @ 3m)

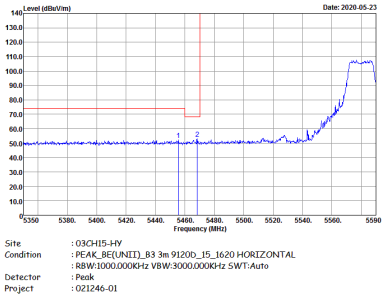
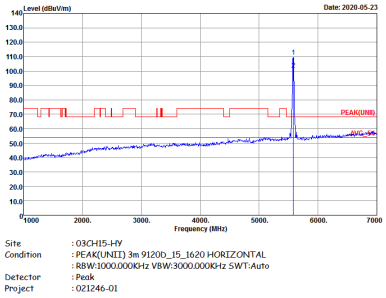
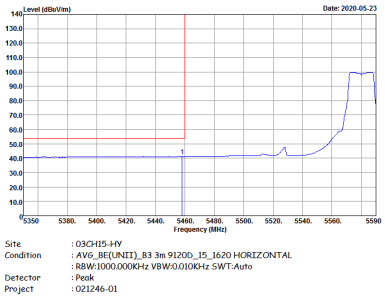
| WIFI | Band 2 5250~5350MHz Harmonic @ 3m | |
|---|---|---|
| | 802.11ac VHT80 CH58 5290MHz | |
| | Horizontal | Vertical |
| Peak<br>Avg. |  |  |

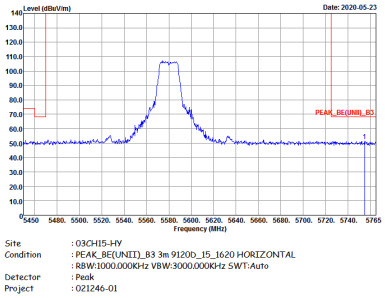
## Band 3 - 5470~5725MHz

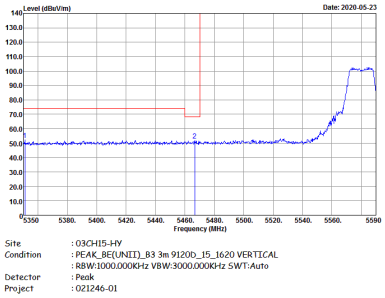
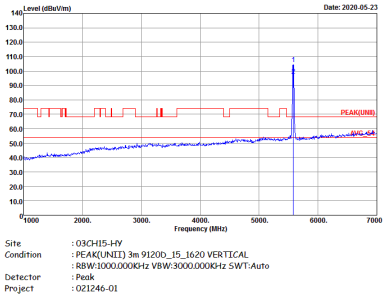
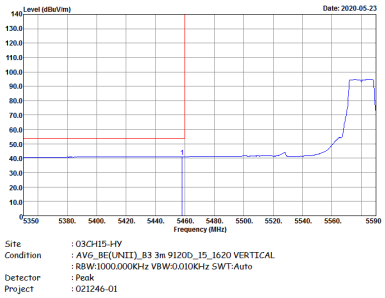
## WIFI 802.11a (Band Edge @ 3m)

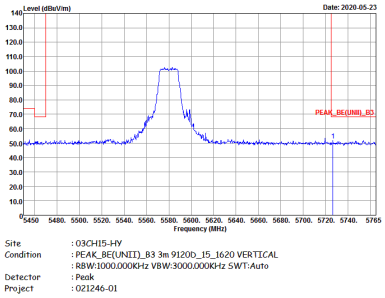
| WIFI | Band 3 5470~5725MHz Band Edge @ 3m | |
|---|---|---|
| | 802.11a CH100 5500MHz | |
| | Horizontal | Fundamental |
| Peak |  |  |
| Avg. |  | Left blank |

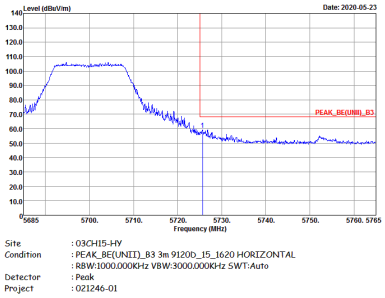
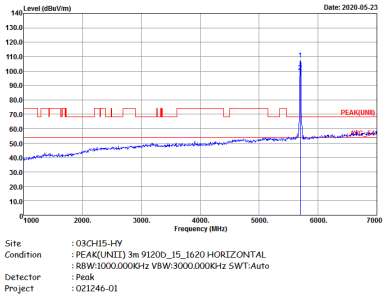
| WIFI | Band 3 5470~5725MHz Band Edge @ 3m | |
|---|---|---|
| | 802.11a CH100 5500MHz | |
| | Vertical | Fundamental |
| Peak |  |  |
| Avg. |  | Left blank |

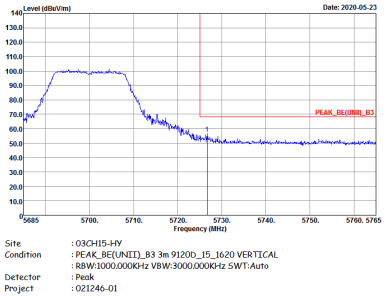
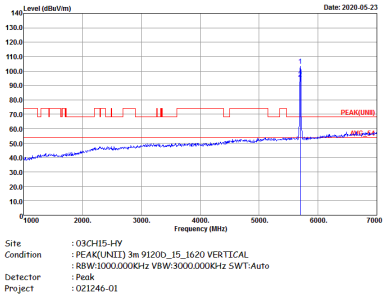
| WIFI | Band 3 5470~5725MHz Band Edge @ 3m | |
|---|---|---|
| | 802.11a CH116 5580MHz - L | |
| | Horizontal | Fundamental |
| Peak |  |  |
| Avg. |  | Left blank |

| WIFI | Band 3 5470~5725MHz Band Edge @ 3m | |
|---|---|---|
| | 802.11a CH116 5580MHz - R | |
| | Horizontal | Fundamental |
| Peak |  <br>Site : 03CH15-HY<br>Condition : PEAK_BE(UNII)_B3 3m 9120D_15_1620 HORIZONTAL<br>: RBW:1000.000KHz VBW:3000.000KHz SWT:Auto<br>Detector : Peak<br>Project : 021246-01 | Left blank |

| WIFI | Band 3 5470~5725MHz Band Edge @ 3m | |
|---|---|---|
| | 802.11a CH116 5580MHz - L | |
| | Vertical | Fundamental |
| Peak |  |  |
| Avg. |  | Left blank |

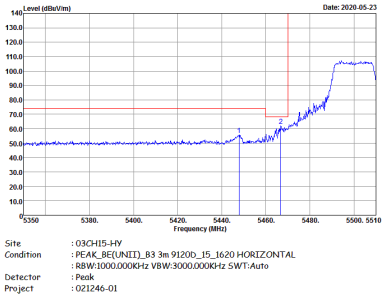
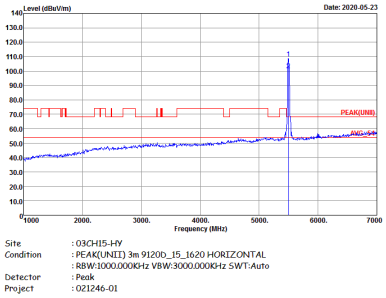
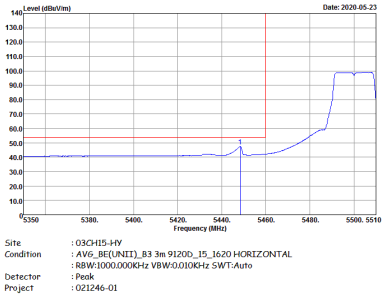
| WIFI | Band 3 5470~5725MHz Band Edge @ 3m | |
|---|---|---|
| | 802.11a CH116 5580MHz - R | |
| | Vertical | Fundamental |
| Peak |  <br>Site : 03CH15-HY<br>Condition : PEAK_BE(UNII)_B3 3m 9120D_15_1620 VERTICAL<br>: RBW:1000.000KHz VBW:3000.000KHz SWT:Auto<br>Detector : Peak<br>Project : 021246-01 | Left blank |

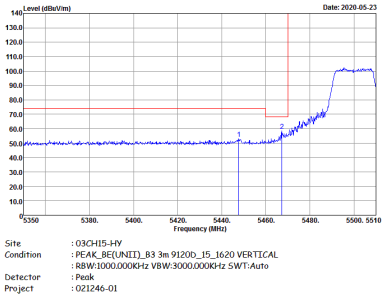
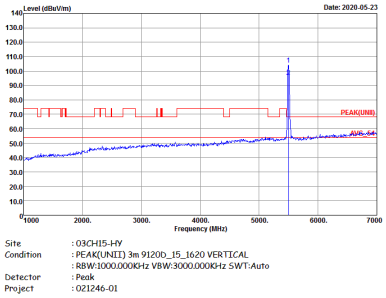
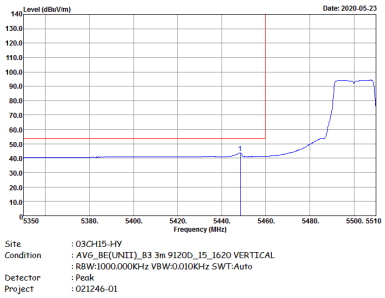
| WIFI | Band 3 5470~5725MHz Band Edge @ 3m | |
|---|---|---|
| | 802.11a CH140 5700MHz | |
| | Horizontal | Fundamental |
| Peak |  |  |

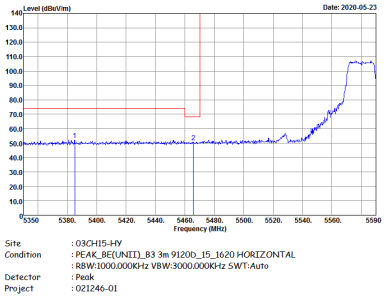
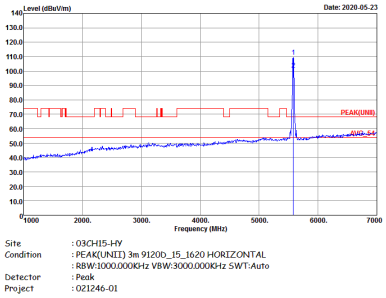
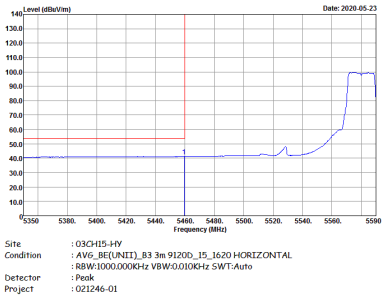
| WIFI | Band 3 5470~5725MHz Band Edge @ 3m | |
|---|---|---|
| | 802.11a CH140 5700MHz | |
| | Vertical | Fundamental |
| Peak |  |  |

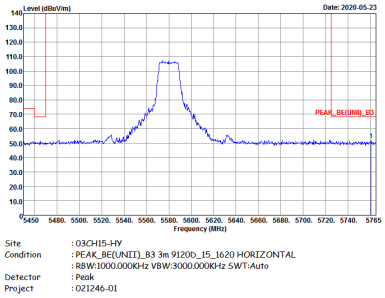
## Band 3 5470~5725MHz

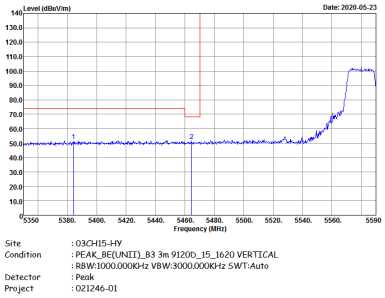
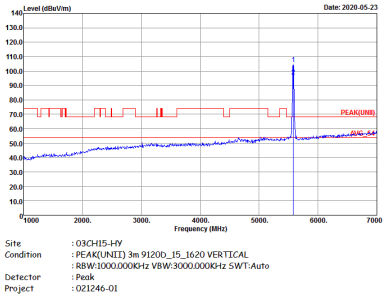
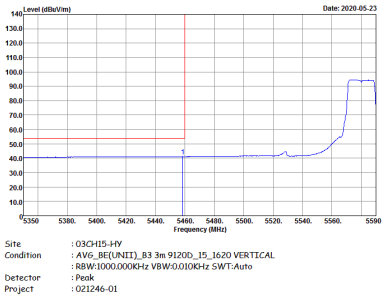
## WIFI 802.11n HT20 (Band Edge @ 3m)

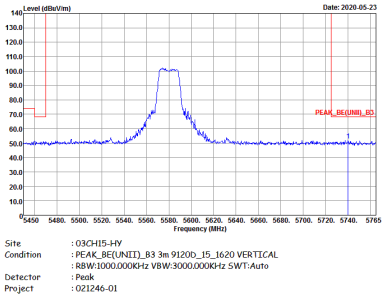
| WIFI | Band 3 5470~5725MHz Band Edge @ 3m | |
|---|---|---|
| | 802.11n HT20 CH100 5500MHz | |
| | Horizontal | Fundamental |
| Peak |  |  |
| Avg. |  | Left blank |

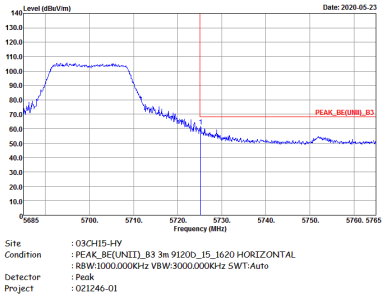
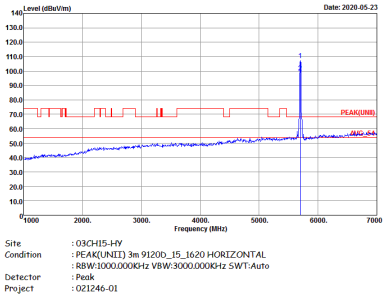
| WIFI | Band 3 5470~5725MHz Band Edge @ 3m | |
|---|---|---|
| | 802.11n HT20 CH100 5500MHz | |
| | Vertical | Fundamental |
| Peak |  |  |
| Avg. |  | Left blank |

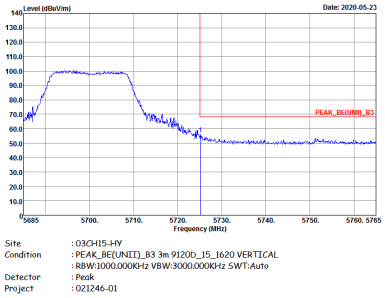
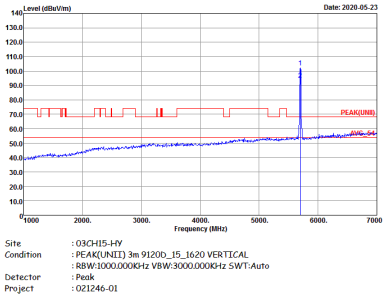
| WIFI | Band 3 5470~5725MHz Band Edge @ 3m | |
|---|---|---|
| | 802.11n HT20 CH116 5580MHz - L | |
| | Horizontal | Fundamental |
| Peak |  |  |
| Avg. |  | Left blank |

| WIFI | Band 3 5470~5725MHz Band Edge @ 3m | |
|---|---|---|
| | 802.11n HT20 CH116 5580MHz - R | |
| | Horizontal | Fundamental |
| Peak |  | Left blank |

| WIFI | Band 3 5470~5725MHz Band Edge @ 3m | |
|---|---|---|
| | 802.11n HT20 CH116 5580MHz - L | |
| | Vertical | Fundamental |
| Peak |  |  |
| Avg. |  | Left blank |

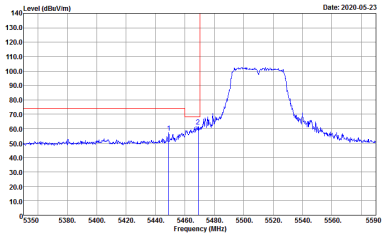
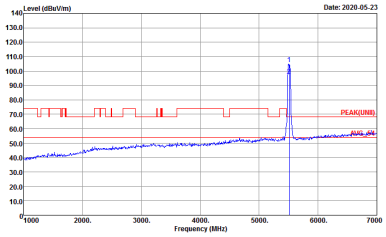
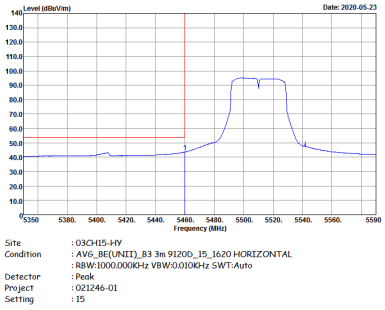
| WIFI | Band 3 5470~5725MHz Band Edge @ 3m | |
|---|---|---|
| | 802.11n HT20 CH116 5580MHz - R | |
| | Vertical | Fundamental |
| Peak |  | Left blank |

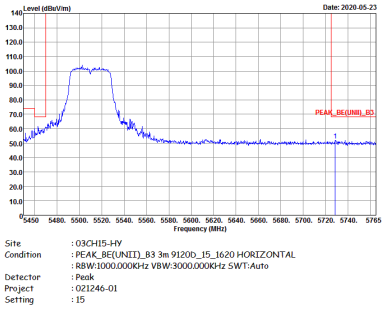
| WIFI | Band 3 5470~5725MHz Band Edge @ 3m | |
|---|---|---|
| | 802.11n HT20 CH140 5700MHz | |
| | Horizontal | Fundamental |
| Peak |  |  |

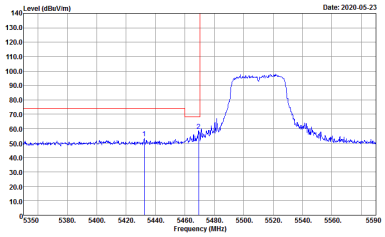
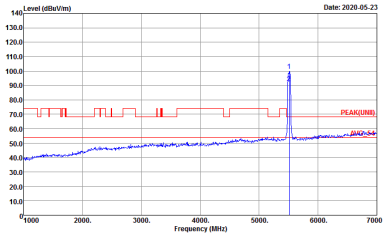
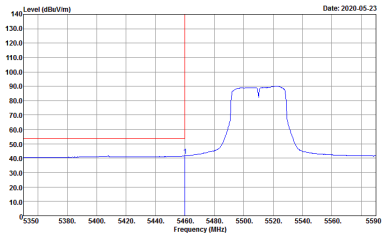
| WIFI | Band 3 5470~5725MHz Band Edge @ 3m | |
|---|---|---|
| | 802.11n HT20 CH140 5700MHz | |
| | Vertical | Fundamental |
| Peak. |  |  |

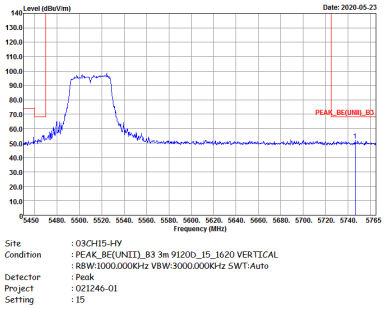
## Band 3 5470~5725MHz

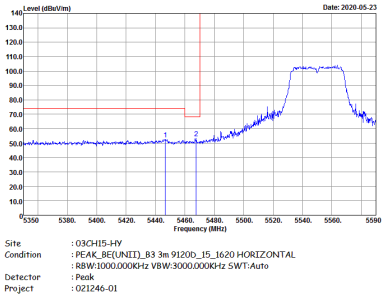
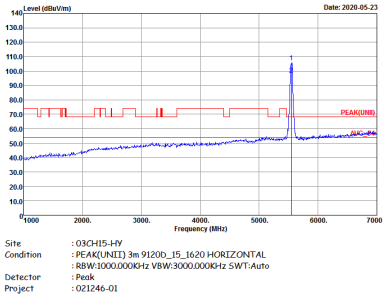
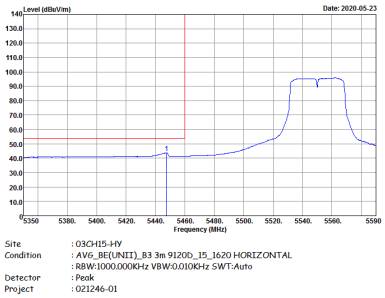
## WIFI 802.11n HT40 (Band Edge @ 3m)

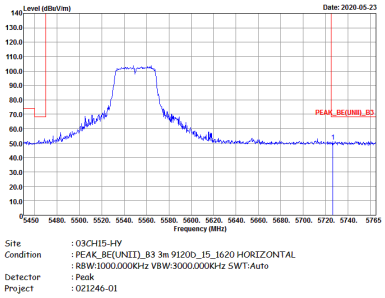
| WIFI | Band 3 5470~5725MHz Band Edge @ 3m | |
|---|---|---|
| | 802.11n HT40 CH102 5510MHz - L | |
| | Horizontal | Fundamental |
| Peak |  |  |
| Avg. |  | Left blank |

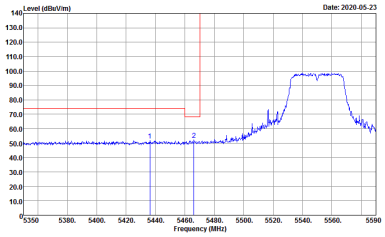
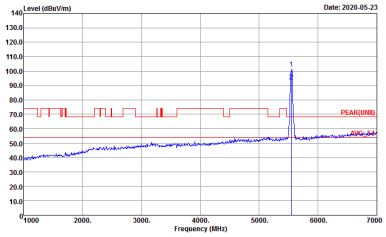
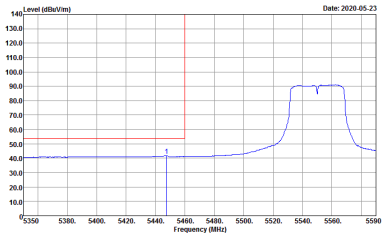
| WIFI | Band 3 5470~5725MHz Band Edge @ 3m | |
|---|---|---|
| | 802.11n HT40 CH102 5510MHz - R | |
| | Horizontal | Fundamental |
| Peak |  | Left blank |

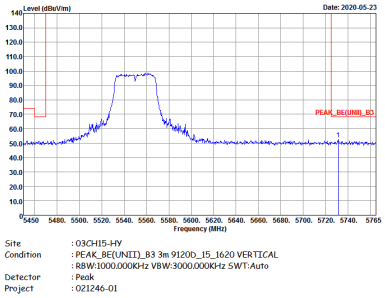
| WIFI | Band 3 5470~5725MHz Band Edge @ 3m | |
|---|---|---|
| | 802.11n HT40 CH102 5510MHz - L | |
| | Vertical | Fundamental |
| Peak |  <br>Site : 03CH15-HY<br>Condition : PEAK_BE(UNII)_B3 3m 9120D_15_1620 VERTICAL<br>: RBW:1000.000KHz VBW:3000.000KHz SWT:Auto<br>Detector : Peak<br>Project : 021246-01<br>Setting : 15 |  <br>Site : 03CH15-HY<br>Condition : PEAK(UNII) 3m 9120D_15_1620 VERTICAL<br>: RBW:1000.000KHz VBW:3000.000KHz SWT:Auto<br>Detector : Peak<br>Project : 021246-01<br>Setting : 15 |
| Avg. |  <br>Site : 03CH15-HY<br>Condition : AVG_BE(UNII)_B3 3m 9120D_15_1620 VERTICAL<br>: RBW:1000.000KHz VBW:0.010KHz SWT:Auto<br>Detector : Peak<br>Project : 021246-01<br>Setting : 15 | Left blank |

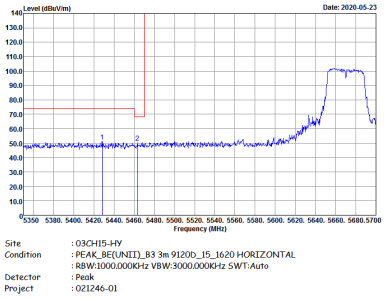
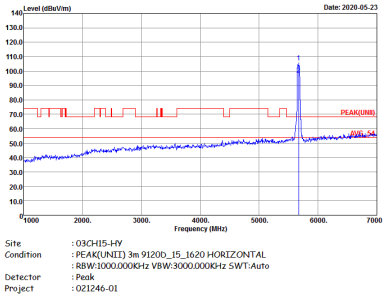
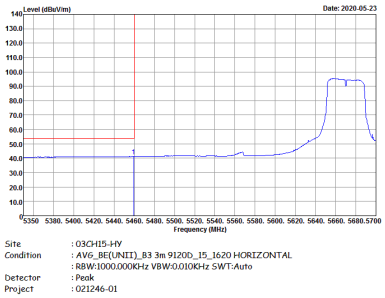
| WIFI | Band 3 5470~5725MHz Band Edge @ 3m | |
|---|---|---|
| | 802.11n HT40 CH102 5510MHz - R | |
| | Vertical | Fundamental |
| Peak |  | Left blank |

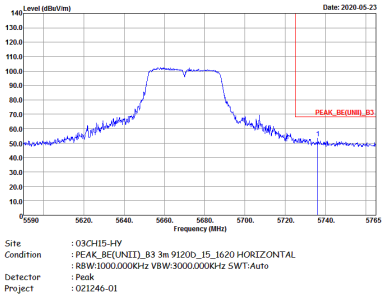
| WIFI | Band 3 5470~5725MHz Band Edge @ 3m | |
|---|---|---|
| | 802.11n HT40 CH110 5550MHz - L | |
| | Horizontal | Fundamental |
| Peak |  |  |
| Avg. |  | Left blank |

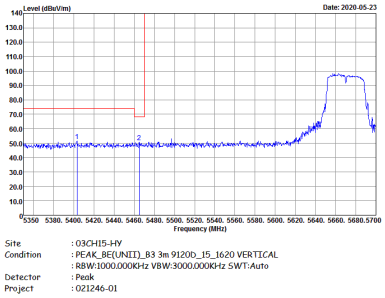
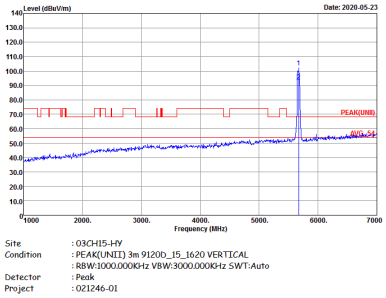
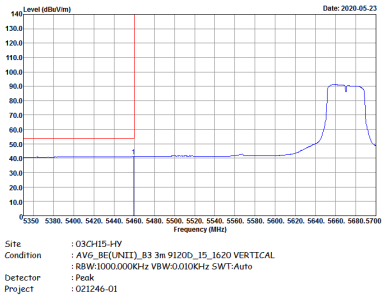
| WIFI | Band 3 5470~5725MHz Band Edge @ 3m | |
|---|---|---|
| | 802.11n HT40 CH110 5550MHz - R | |
| | Horizontal | Fundamental |
| Peak |  | Left blank |

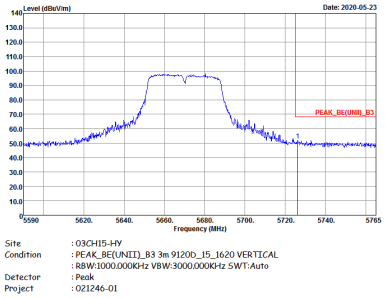
| WIFI | Band 3 5470~5725MHz Band Edge @ 3m | |
|---|---|---|
| | 802.11n HT40 CH110 5550MHz - L | |
| | Vertical | Fundamental |
| Peak |  <br>Site : 03CH15-HY<br>Condition : PEAK_BE(UNII)_B3 3m 9120D_15_1620 VERTICAL<br>: RBW:1000.000KHz VBW:3000.000KHz SWT:Auto<br>Detector : Peak<br>Project : 021246-01 |  <br>Site : 03CH15-HY<br>Condition : PEAK(UNII) 3m 9120D_15_1620 VERTICAL<br>: RBW:1000.000KHz VBW:3000.000KHz SWT:Auto<br>Detector : Peak<br>Project : 021246-01 |
| Avg. |  <br>Site : 03CH15-HY<br>Condition : AVG_BE(UNII)_B3 3m 9120D_15_1620 VERTICAL<br>: RBW:1000.000KHz VBW:0.010KHz SWT:Auto<br>Detector : Peak<br>Project : 021246-01 | Left blank |

| WIFI | Band 3 5470~5725MHz Band Edge @ 3m | |
|---|---|---|
| | 802.11n HT40 CH110 5550MHz - R | |
| | Vertical | Fundamental |
| Peak |  | Left blank |

| WIFI | Band 3 5470~5725MHz Band Edge @ 3m | |
|---|---|---|
| | 802.11n HT40 CH134 5670MHz - L | |
| | Horizontal | Fundamental |
| Peak |  |  |
| Avg. |  | Left blank |

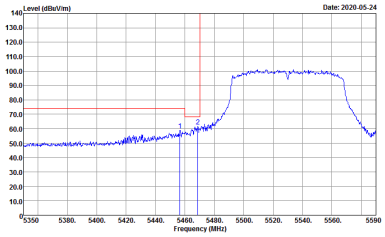
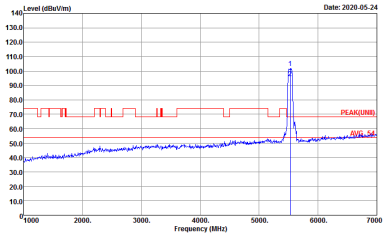
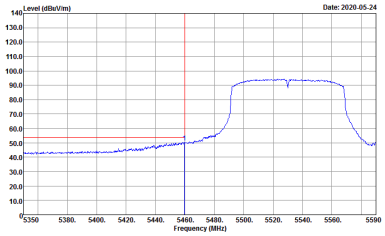
| WIFI | Band 3 5470~5725MHz Band Edge @ 3m | |
|---|---|---|
| | 802.11n HT40 CH134 5670MHz - R | |
| | Horizontal | Fundamental |
| Peak |  | Left blank |

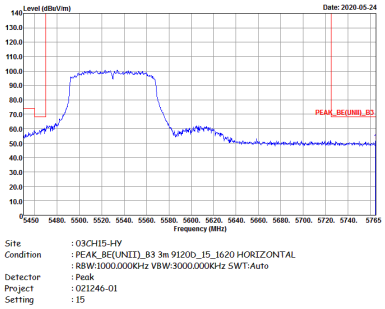
| WIFI | Band 3 5470~5725MHz Band Edge @ 3m | |
|---|---|---|
| | 802.11n HT40 CH134 5670MHz - L | |
| | Vertical | Fundamental |
| Peak |  |  |
| Avg. |  | Left blank |

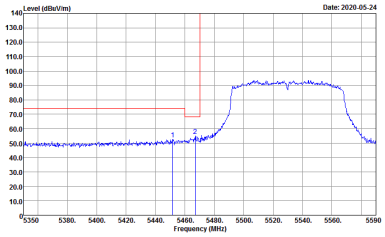
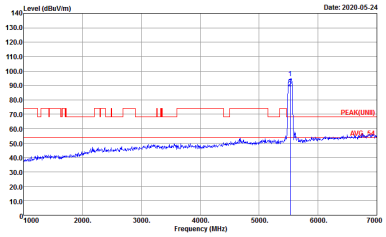
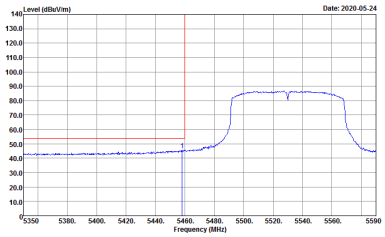
| WIFI | Band 3 5470~5725MHz Band Edge @ 3m | |
|---|---|---|
| | 802.11n HT40 CH134 5670MHz - R | |
| | Vertical | Fundamental |
| Peak |  | Left blank |

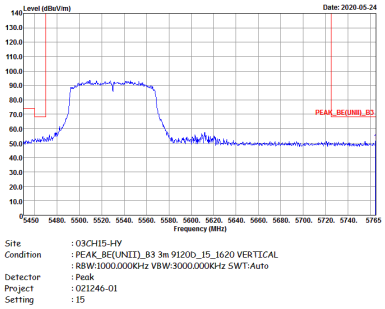
## Band 3 5470~5725MHz

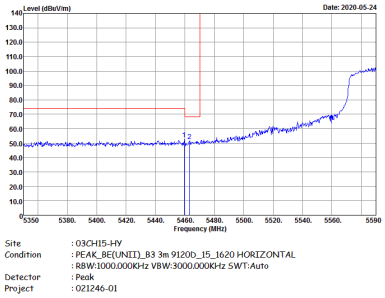
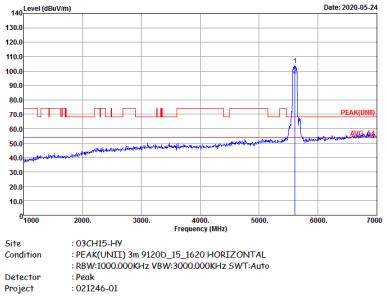
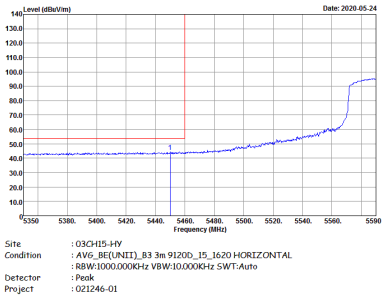
## WIFI 802.11ac VHT80 (Band Edge @ 3m)

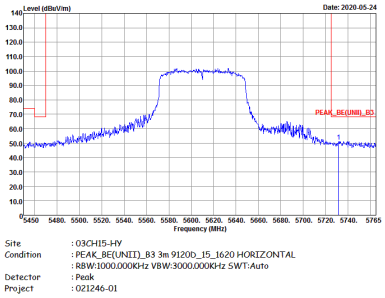
| WIFI | Band 3 5470~5725MHz Band Edge @ 3m | |
|---|---|---|
| | 802.11ac VHT80 CH106 5530MHz - L | |
| | Horizontal | Fundamental |
| Peak |  |  |
| Avg. |  | Left blank |

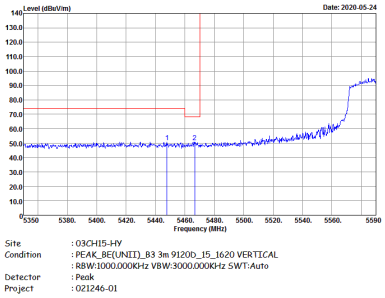
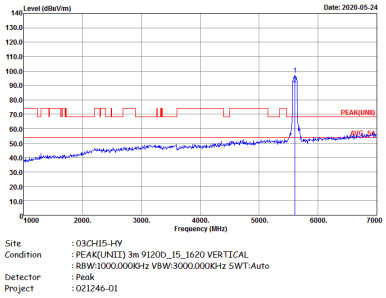
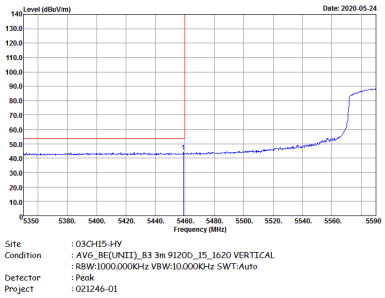
| WIFI | Band 3 5470~5725MHz Band Edge @ 3m | |
|---|---|---|
| | 802.11ac VHT80 CH106 5530MHz - R | |
| | Horizontal | Fundamental |
| Peak |  <br>Site : 03CH15-HY<br>Condition : PEAK_BE(UNII)_B3 3m 9120D_15_1620 HORIZONTAL<br>: RBW:1000.000KHz VBW:3000.000KHz SWT:Auto<br>Detector : Peak<br>Project : 021246-01<br>Setting : 15 | Left blank |

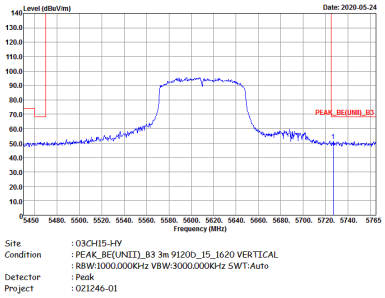
| WIFI | Band 3 5470~5725MHz Band Edge @ 3m | |
|---|---|---|
| | 802.11ac VHT80 CH106 5530MHz - L | |
| | Vertical | Fundamental |
| Peak |  <br>Site : 03CH15-HY<br>Condition : PEAK_BE(UNII)_83 3m 9120D_15_1620 VERTICAL<br>: RBW:1000.000KHz VBW:3000.000KHz SWT:Auto<br>Detector : Peak<br>Project : 021246-01<br>Setting : 15 |  <br>Site : 03CH15-HY<br>Condition : PEAK(UNII) 3m 9120D_15_1620 VERTICAL<br>: RBW:1000.000KHz VBW:3000.000KHz SWT:Auto<br>Detector : Peak<br>Project : 021246-01<br>Setting : 15 |
| Avg. |  <br>Site : 03CH15-HY<br>Condition : AVG_BE(UNII)_83 3m 9120D_15_1620 VERTICAL<br>: RBW:1000.000KHz VBW:10.000KHz SWT:Auto<br>Detector : Peak<br>Project : 021246-01<br>Setting : 15 | Left blank |

| WIFI | Band 3 5470~5725MHz Band Edge @ 3m | |
|---|---|---|
| | 802.11ac VHT80 CH106 5530MHz - R | |
| | Vertical | Fundamental |
| Peak |  | Left blank |

| WIFI | Band 3 5470~5725MHz Band Edge @ 3m | |
|---|---|---|
| | 802.11ac VHT80 CH122 5610MHz - L | |
| | Horizontal | Fundamental |
| Peak |  |  |
| Avg. |  | Left blank |

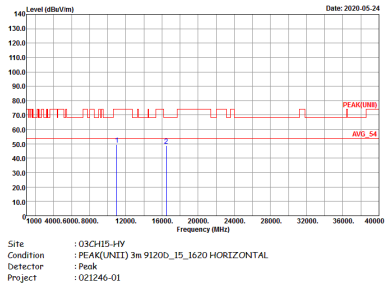
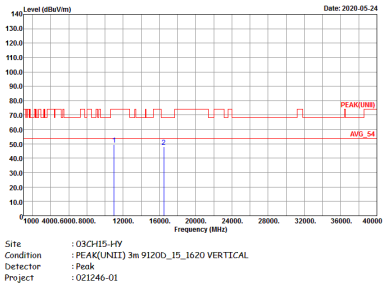
| WIFI | Band 3 5470~5725MHz Band Edge @ 3m | |
|---|---|---|
| | 802.11ac VHT80 CH122 5610MHz - R | |
| | Horizontal | Fundamental |
| Peak |  | Left blank |

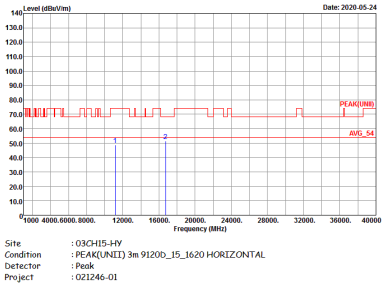
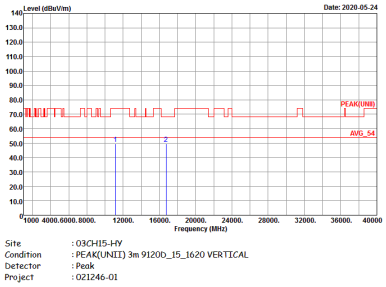
| WIFI | Band 3 5470~5725MHz Band Edge @ 3m | |
|---|---|---|
| | 802.11ac VHT80 CH122 5610MHz - L | |
| | Vertical | Fundamental |
| Peak |  |  |
| Avg. |  | Left blank |

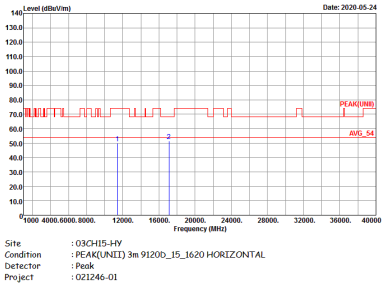
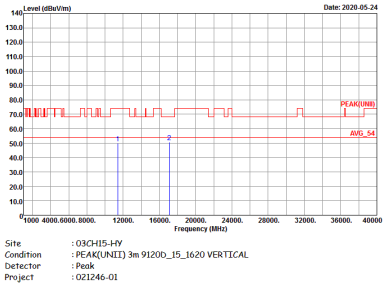
| WIFI | Band 3 5470~5725MHz Band Edge @ 3m | |
|---|---|---|
| | 802.11ac VHT80 CH122 5610MHz - R | |
| | Vertical | Fundamental |
| Peak |  | Left blank |

## Band 3 - 5470~5725MHz

## WIFI 802.11a (Harmonic @ 3m)

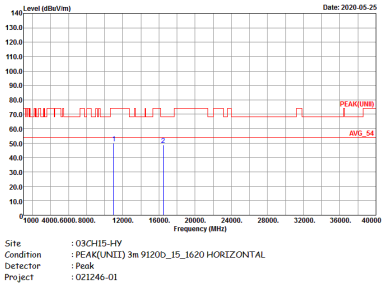
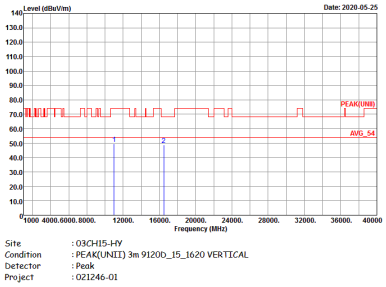
| WIFI | Band 3 5470~5725MHz Harmonic @ 3m | |
|---|---|---|
| | 802.11a CH100 5500MHz | |
| | Horizontal | Vertical |
| Peak<br>Avg. |  |  |

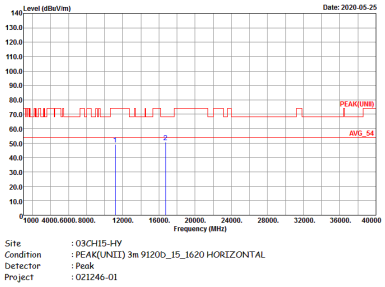
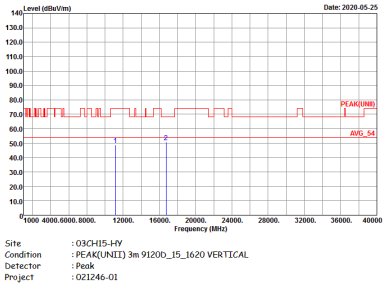
| WIFI | Band 3 5470~5725MHz Harmonic @ 3m | |
|---|---|---|
| | 802.11a CH116 5580MHz | |
| | Horizontal | Vertical |
| Peak<br>Avg. |  |  |

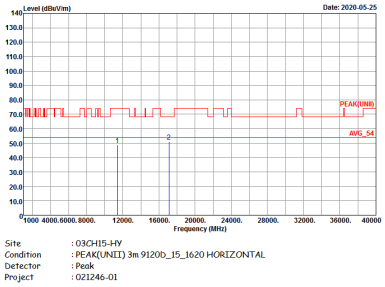
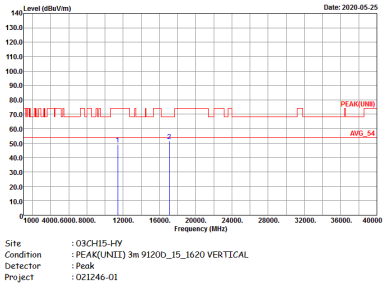
| WIFI | Band 3 5470~5725MHz Harmonic @ 3m | |
|---|---|---|
| | 802.11a CH140 5700MHz | |
| | Horizontal | Vertical |
| Peak<br>Avg. |  |  |

## Band 3 5470~5725MHz

## WIFI 802.11n HT20 (Harmonic @ 3m)

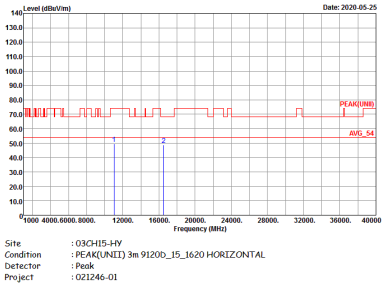
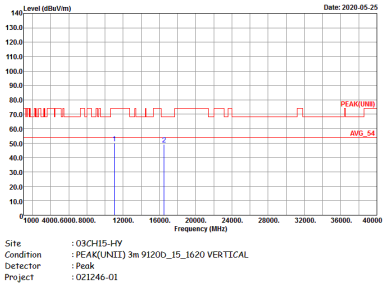
| WIFI | Band 3 5470~5725MHz Harmonic @ 3m | |
|---|---|---|
| | 802.11n HT20 CH100 5500MHz | |
| | Horizontal | Vertical |
| Peak<br>Avg. |  |  |

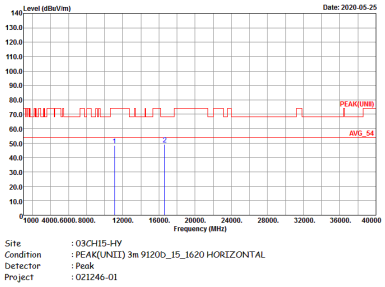
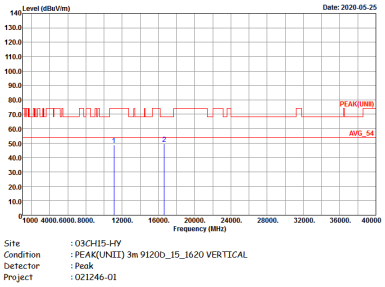
| WIFI | Band 3 5470~5725MHz Harmonic @ 3m | |
|---|---|---|
| | 802.11n HT20 CH116 5580MHz | |
| | Horizontal | Vertical |
| Peak<br>Avg. |  |  |

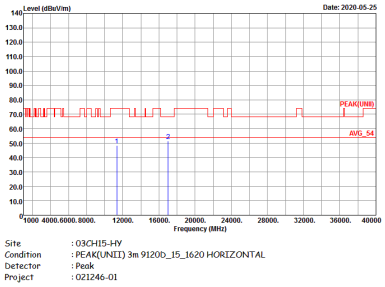
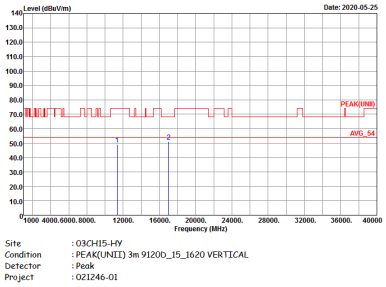
| WIFI | Band 3 5470~5725MHz Harmonic @ 3m | |
|---|---|---|
| | 802.11n HT20 CH140 5700MHz | |
| | Horizontal | Vertical |
| Peak<br>Avg. |  |  |

## Band 3 5470~5725MHz

## WIFI 802.11n HT40 (Harmonic @ 3m)

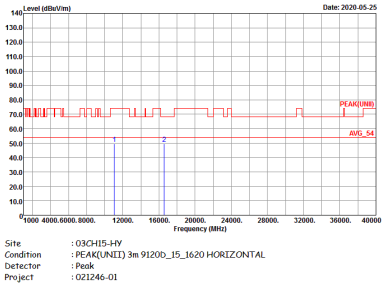
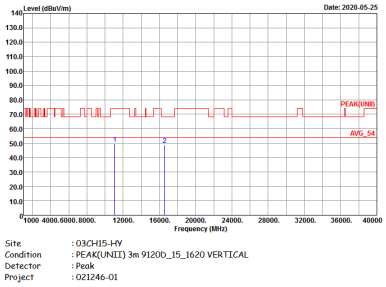
| WIFI | Band 3 5470~5725MHz Harmonic @ 3m | |
|---|---|---|
| | 802.11n HT40 CH102 5510MHz | |
| | Horizontal | Vertical |
| Peak<br>Avg. |  |  |

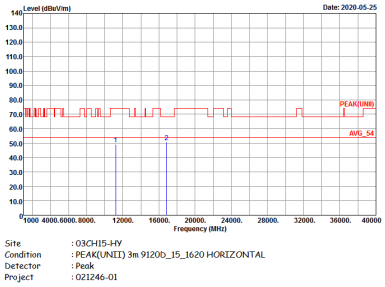
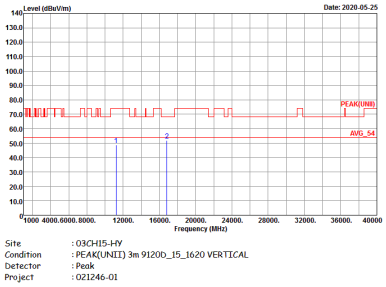
| WIFI | Band 3 5470~5725MHz Harmonic @ 3m | |
|---|---|---|
| | 802.11n HT40 CH110 5550MHz | |
| | Horizontal | Vertical |
| Peak<br>Avg. |  |  |

| WIFI | Band 3 5470~5725MHz Harmonic @ 3m | |
|---|---|---|
| | 802.11n HT40 CH134 5670MHz | |
| | Horizontal | Vertical |
| Peak<br>Avg. |  |  |

## Band 3 5470~5725MHz

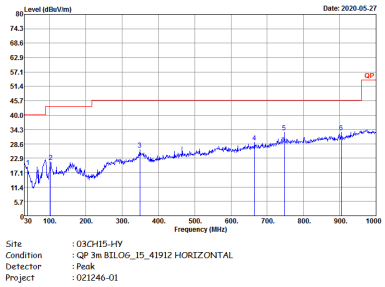
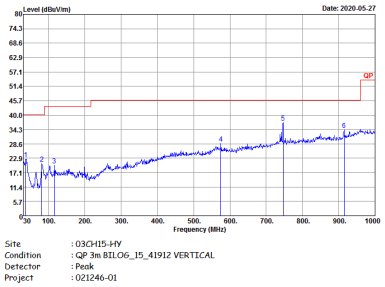
## WIFI 802.11ac VHT80 (Harmonic @ 3m)

| WIFI | Band 3 5470~5725MHz Harmonic @ 3m | |
|---|---|---|
| | 802.11ac VHT80 CH106 5530MHz | |
| | Horizontal | Vertical |
| Peak<br>Avg. |  |  |

| WIFI | Band 3 5470~5725MHz Harmonic @ 3m | |
|---|---|---|
| | 802.11ac VHT80 CH122 5610MHz | |
| | Horizontal | Vertical |
| Peak<br>Avg. |  |  |

## Emission below 1GHz

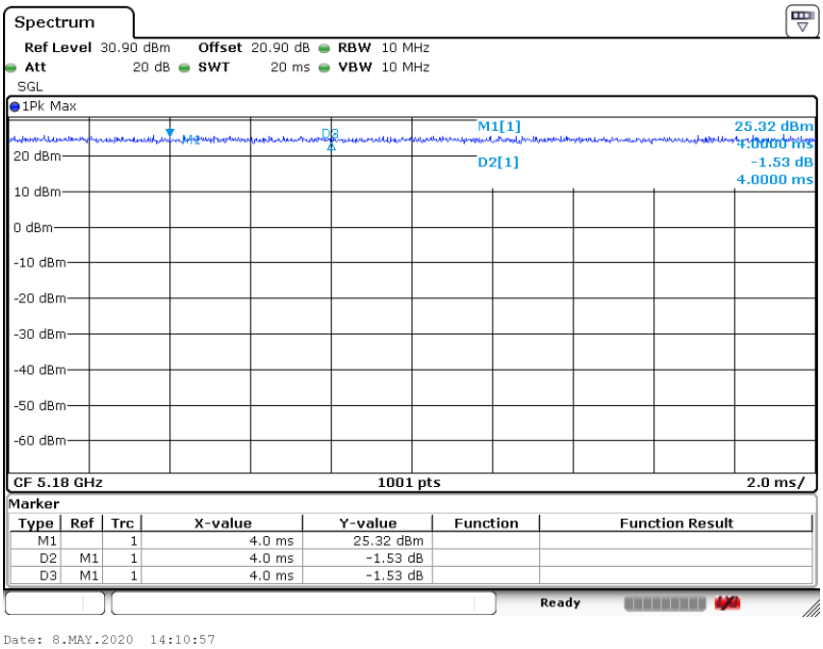
## 5GHz WIFI 802.11ac VHT80 (LF)

| WIFI | 5GHz WIFI | |
|---|---|---|
| | 802.11ac VHT80 LF | |
| | Horizontal | Vertical |
| QP / Peak |  |  |

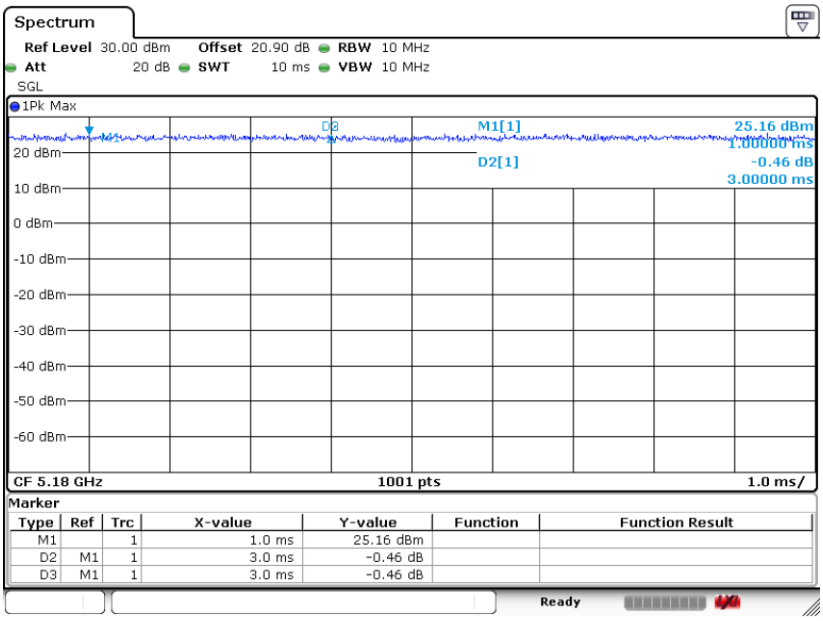
# Appendix E. Duty Cycle Plots

| Band | Duty Cycle(%) | T(us) | 1/T(kHz) | VBW Setting | Duty Factor(dB) |
|---|---|---|---|---|---|
| 802.11a | 100.00 | - | - | 10Hz | 0.00 |
| 5GHz 802.11n HT20 | 100.00 | - | - | 10Hz | 0.00 |
| 5GHz 802.11n HT40 | 100.00 | - | - | 10Hz | 0.00 |
| 5GHz 802.11ac VHT80 | 86.27 | 248 | 4.03 | 10kHz | 0.64 |

**802.11a**

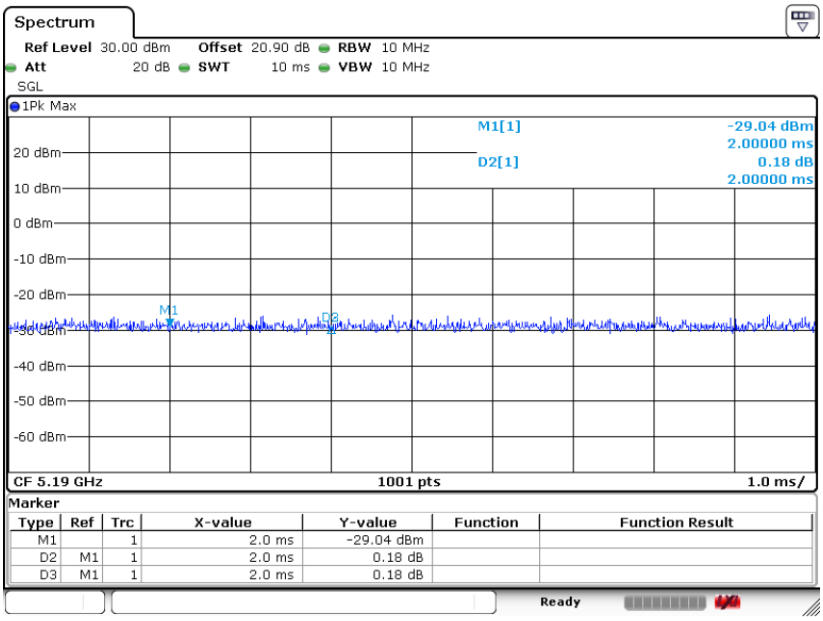


### 802.11n HT20



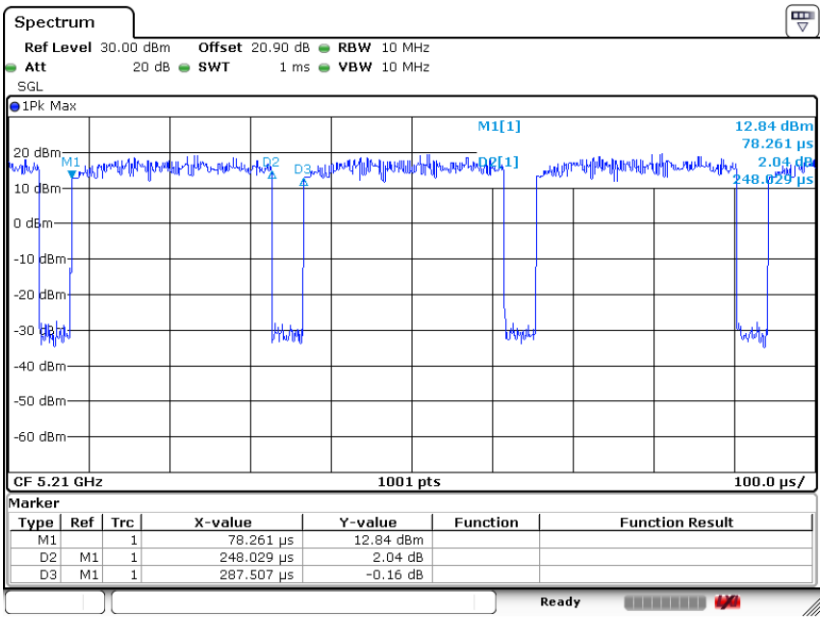

Date: 8.MAY.2020 14:15:24

### 802.11n HT40




Date: 8.MAY.2020 14:19:30

**802.11ac VHT80**




Date: 8.MAY.2020 17:14:28