# FCC RADIO TEST REPORT

| | | |
|---|---|---|
| **FCC ID** | : | **HD5-CT30PL1N** |
| **Equipment** | : | **Mobile computer** |
| **Brand Name** | : | **Honeywell** |
| **Model Name** | : | **CT30PL1N** |
| **Applicant** | : | **Honeywell International Inc.**<br>**9680 Old Bailes Road, Fort Mill, SC 29707 USA** |
| **Manufacturer** | : | **Honeywell International Inc.**<br>**9680 Old Bailes Road, Fort Mill, SC 29707 USA** |
| **Standard** | : | **FCC Part 15 Subpart E §15.407** |

**The product was received on Feb. 14, 2022 and testing was performed from Feb. 22, 2022 to Mar. 31, 2022. We, Sporton International Inc. Wensan 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 test results in this report apply exclusively to the tested model / sample. Without written approval from Sporton International Inc. Wensan Laboratory, the test report shall not be reproduced except in full.**

Louis Wu

**Approved by: Louis Wu**

***Sporton International Inc. Wensan Laboratory***
*No.58, Aly. 75, Ln. 564, Wenhua 3rd, Rd., Guishan Dist., Taoyuan City 333010, Taiwan (R.O.C.)*

# Table of Contents

# History of this test report

| Report No. | Version | Description | Issue Date |
|---|---|---|---|
| FR1N0508E | 01 | Initial issue of report | Apr. 18, 2022 |
| FR1N0508E | 02 | 1. Revise antenna information<br>2. Revise description in section 3.4.3 | Apr. 28, 2022 |
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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 | 2.03 dB under the limit at 5470.000 MHz |
| 3.5 | 15.207 | AC Conducted Emission | Pass | 15.88 dB under the limit at 0.692 MHz |
| 3.6 | 15.203<br>15.407(a) | Antenna Requirement | Pass | - |

| **Declaration of Conformity:** |
|---|
| 1. The test results (PASS/FAIL) with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.<br>It's means measurement values may risk exceeding the limit of regulation standards, if measurement uncertainty is include in test results.<br>2. The measurement uncertainty please refer to this report "Uncertainty of Evaluation". |
| **Comments and Explanations:** |
| The product specifications of the EUT presented in the report are declared by the manufacturer who shall take full responsibility for the authenticity. |

**Reviewed by: Wei Chen**

**Report Producer: Vivian Hsu**

# 1 General Description

## 1.1 Product Feature of Equipment Under Test

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

| Product Feature | |
|---|---|
| **HW Version** | v1.0 |
| **SW Version** | OS.11.003-HON.11.003 |
| **Sample** | Scanner S0703 |
| **Antenna Type** | WWAN<br><Ant. 1>: Loop Antenna<br><Ant. 2>: PIFA Antenna<br><Ant. 3>: Monopole Antenna<br>WLAN: PIFA Antenna<br>Bluetooth: PIFA Antenna<br>GPS / Glonass / BDS / Galileo: PIFA Antenna<br>NFC: Loop Antenna |

| Antenna information | | |
|---|---|---|
| **5150 MHz ~ 5250 MHz** | Peak Gain (dBi) | 2.1 |
| **5250 MHz ~ 5350 MHz** | Peak Gain (dBi) | 1.5 |
| **5470 MHz ~ 5725 MHz** | Peak Gain (dBi) | 1.4 |

**Remark:**

1. The EUT's information above is declared by manufacturer. Please refer to Comments and Explanations in report summary.
2. Internal tracking board version is DVT1 and SW PN is 311.C0.00.0838-G-DEBUG.

## 1.2 Modification of EUT

No modifications made to the EUT during the testing.

## 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 333, Taiwan (R.O.C.)<br>TEL: +886-3-327-3456<br>FAX: +886-3-328-4978 |
| **Test Site No.** | **Sporton Site No.** |
| | CO05-HY (TAF Code: 1190) |
| **Remark** | The Conducted Emission test item subcontracted to Sporton International Inc. EMC & Wireless Communications Laboratory. |

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

| | |
|---|---|
| **Test Site** | Sporton International Inc. Wensan Laboratory |
| **Test Site Location** | No.58, Aly. 75, Ln. 564, Wenhua 3rd, Rd., Guishan Dist.,<br>Taoyuan City 333010, Taiwan (R.O.C.)<br>TEL: +886-3-327-0868<br>FAX: +886-3-327-0855 |
| **Test Site No.** | **Sporton Site No.** |
| | TH05-HY, 03CH13-HY |

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

FCC designation No.: TW1190 and TW3786

## 1.4 Applicable Standards

According to the specifications declared by 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 the test items were validated and recorded in accordance with the standards without any modification during the testing.
2. The TAF code is not including all the FCC KDB listed without accreditation.

# 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, the measured emission level of the EUT was maximized by rotating the EUT on a turntable, adjusting the orientation of the EUT and EUT antenna in three orthogonal axis (X: flat, Y: portrait, Z: landscape), and adjusting the measurement antenna orientation, following C63.10 exploratory test procedures and find Y plane as worst plane.

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 |

| Frequency Band | Channel | Freq. (MHz) | Channel | Freq. (MHz) |
|---|---|---|---|---|
| Straddle Channel | 138# | 5690 | 144 | 5720 |
| | 142* | 5710 | | |

**Note:**

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

## 2.2 Test Mode

**The final test modes consider the modulation and the worst data rates as shown in the table below.**

| 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 : Bluetooth Link + WLAN Link + USB Cable (Charging from AC 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 |
| Straddle | | - | - | 144 |

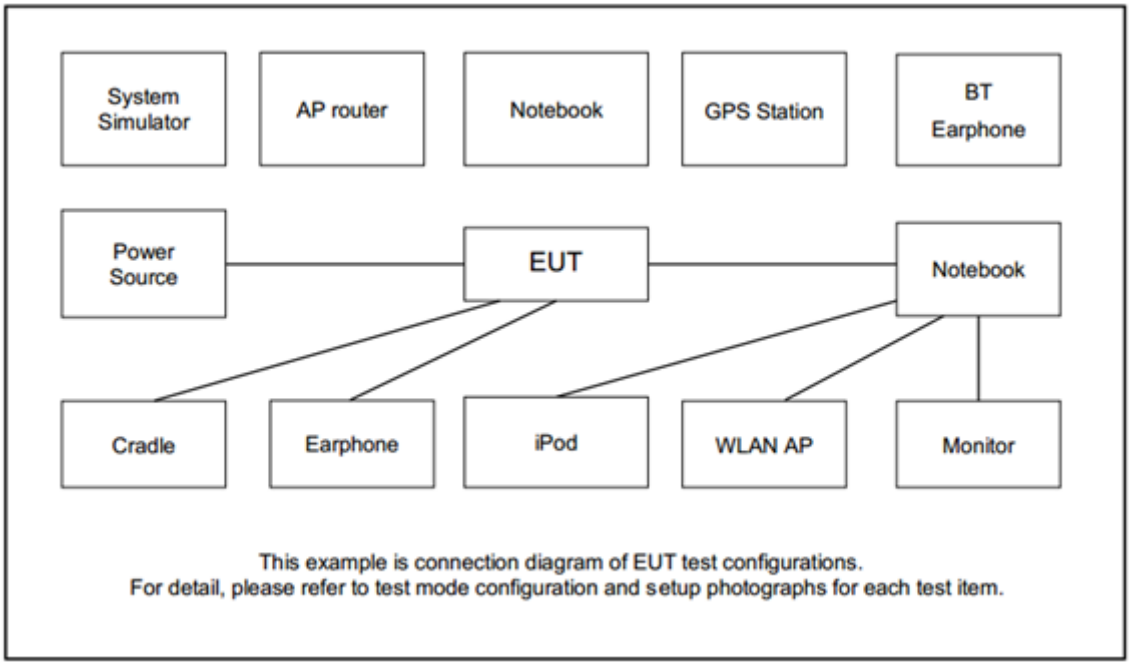
| Ch. # | | Band I：5150-5250 MHz | Band II：5250-5350 MHz | Band III：5470-5725MHz |
|---|---|---|---|---|
| | | 802.11n HT20 | 802.11n HT20 | 802.11n HT20 |
| L | Low | 36 | 52 | 100 |
| M | Middle | 44 | 60 | 116 |
| H | High | 48 | 64 | 140 |
| Straddle | | - | - | 144 |

| 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 |
| Straddle | | - | - | 142 |

| 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 | - |
| H | High | - | - | 122 |
| Straddle | | - | - | 138 |

**Remark:** For radiation spurious emission, the modulation and the data rate picked for testing are determined by the Max. RF conducted power.

## 2.3 Connection Diagram of Test System




## 2.4 Support Unit used in test configuration and system

| Item | Equipment | Brand Name | Model Name | FCC ID | Data Cable | Power Cord |
|---|---|---|---|---|---|---|
| 1. | Bluetooth Earphone | Sony Ericsson | MW600 | PY7DDA-2029 | N/A | N/A |
| 2. | WLAN AP | ASUS | RT-AC66U | MSQ-RTAC66U | N/A | Unshielded, 1.8 m |
| 3. | Notebook | DELL | Latitude 3400 | FCC DoC | N/A | AC I/P: Unshielded, 1.2 m<br>DC O/P: Shielded, 1.8 m |
| 4. | Notebook | Acer | N18Q13 | PD9AX201NG | N/A | AC I/P: Unshielded, 1.2 m<br>DC O/P: Shielded, 1.8 m |
| 5. | USB Cable | N/A | N/A | N/A | N/A | N/A |

## 2.5 EUT Operation Test Setup

The RF test items, utility “QRCT 4.0.00193.0” 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 10 dB 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.

For Straddle Channel, according to KDB 789033 D02 General UNII Test Procedures New Rules v02r01, if the power and PSD of the devices are uniform and comply with the lower limits specified for the U-NII-2 bands, a single measurement over the entire emission bandwidth can be performed to show compliance.

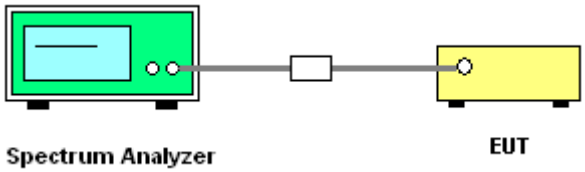
### 3.1.2 Measuring Instruments

Please refer to the measuring equipment list in 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.

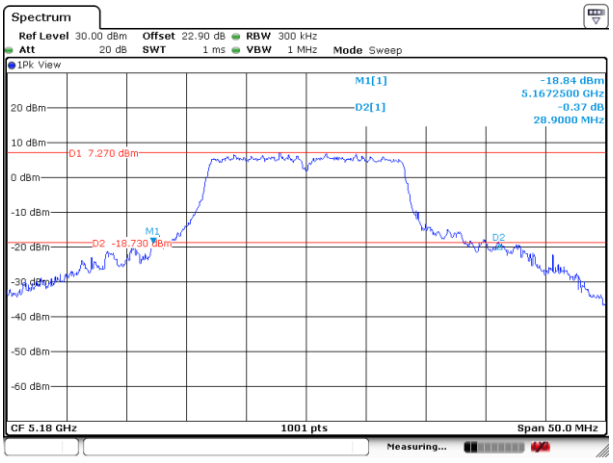
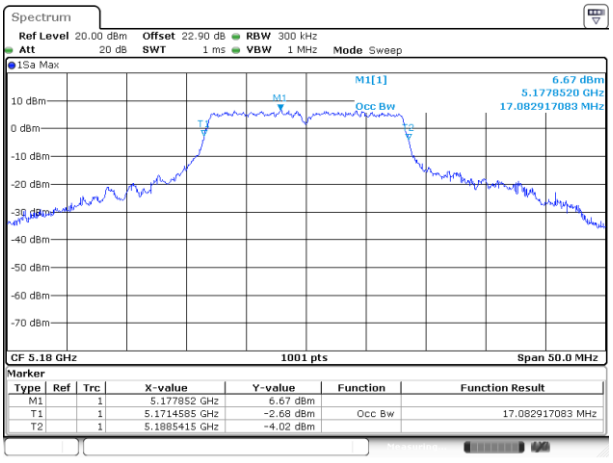
### 3.1.4 Test Setup




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

Please refer to Appendix A.

**<802.11a>**

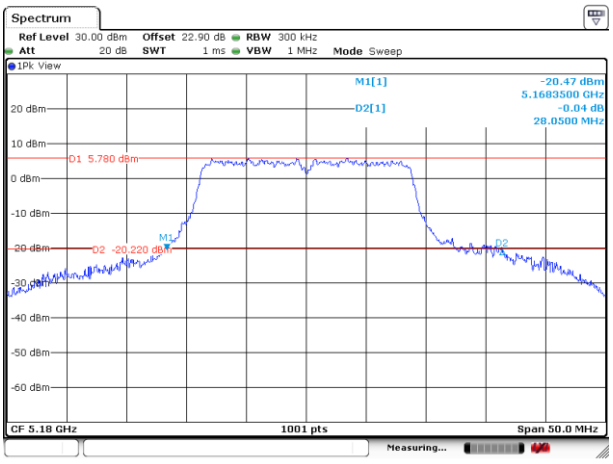
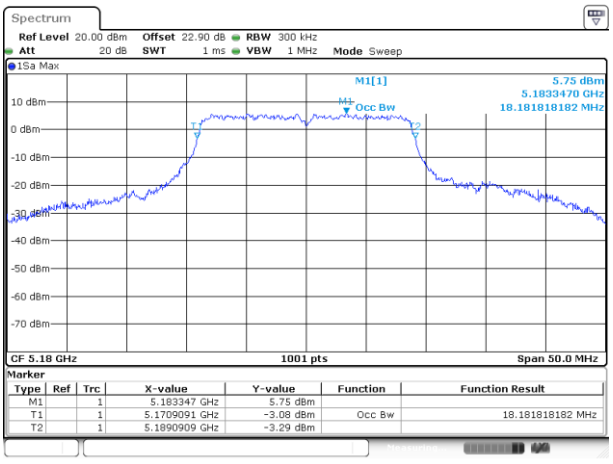
| 26dB Bandwidth | 99% Occupied Bandwidth |
|---|---|
|  |  |





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

**<802.11n HT20>**

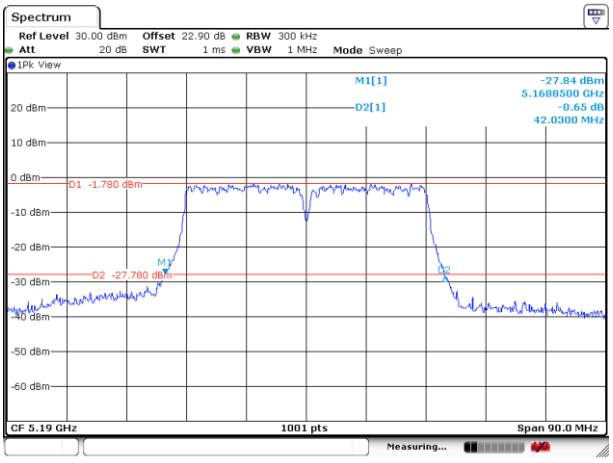
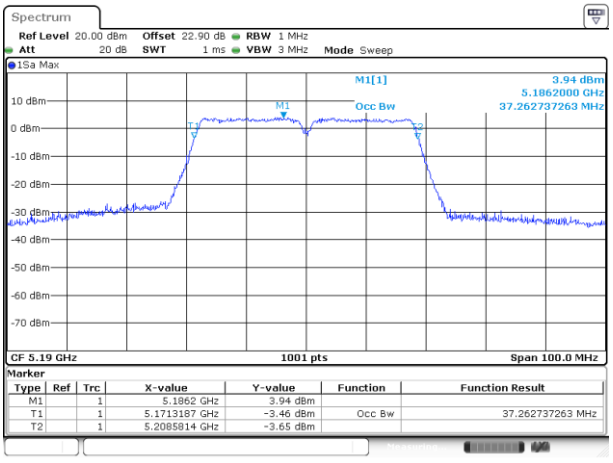
| 26dB Bandwidth | 99% Occupied Bandwidth |
|---|---|
|  |  |





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

**<802.11n HT40>**

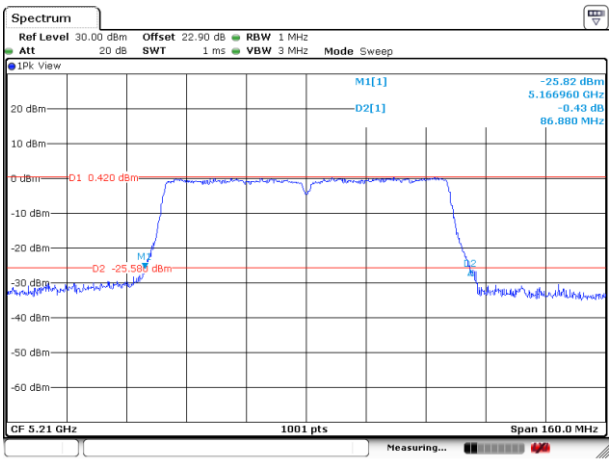
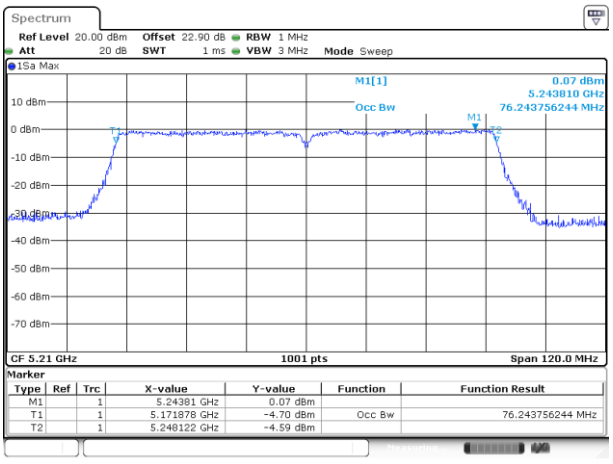
| 26dB Bandwidth | 99% Occupied Bandwidth |
|---|---|
|  |  |





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

**<802.11ac VHT80>**

| 26dB Bandwidth | 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.

For Straddle Channel, according to KDB 789033 D02 General UNII Test Procedures New Rules v02r01, if the power and PSD of the devices are uniform and comply with the lower limits specified for the U-NII-2 bands, a single measurement over the entire emission bandwidth can be performed to show compliance.

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

Please refer to the measuring equipment list in this test report.

### 3.2.3 Test Procedures

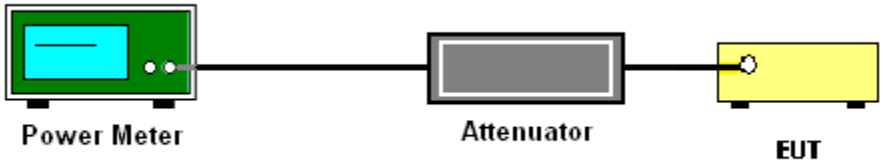
The testing follows Method PM-G of FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01.

Method PM-G (Measurement using a gated 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.

For Straddle Channel, according to KDB 789033 D02 General UNII Test Procedures New Rules v02r01, if the power and PSD of the devices are uniform and comply with the lower limits specified for the U-NII-2 bands, a single measurement over the entire emission bandwidth can be performed to show compliance.

### 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.

For Straddle Channel, according to KDB 789033 D02 General UNII Test Procedures New Rules v02r01, if the power and PSD of the devices are uniform and comply with the lower limits specified for the U-NII-2 bands, a single measurement over the entire emission bandwidth can be performed to show compliance.

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

Please refer to the measuring equipment list in 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.

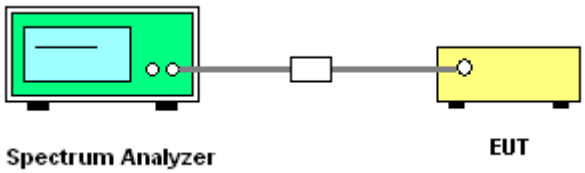
**# Method SA-2 #**

(trace averaging across on and off times of the EUT transmissions, followed by duty cycle correction).

- Measure the duty cycle.
- 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 = auto.
- Detector = RMS
- Trace average at least 100 traces in power averaging mode.
- Add 10 log(1/x), where x is the duty cycle, to the measured power in order to compute the average power during the actual transmission times. For example, add 10 log(1/0.25) = 6 dB if the duty cycle is 25 percent.

1. The RF output of EUT is 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.

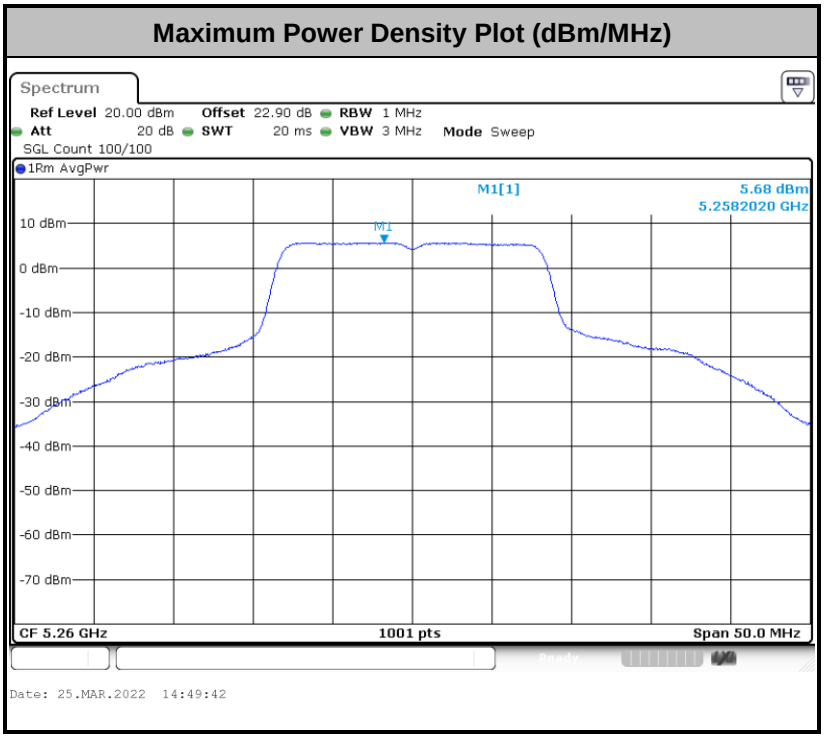
### 3.3.4 Test Setup




### 3.3.5 Test Result of Power Spectral Density

Please refer to Appendix A.

**Maximum Power Density Plot (dBm/MHz)**




**Remark:** The test plot is showing a bin by bin combined result mathematically adds two traces.

## 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 falls 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

Please refer to the measuring equipment list in 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 1000 MHz

- 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 1000 MHz

a) RBW = 1 MHz.

b) VBW ≥ [3 × RBW].

c) Detector = RMS (power averaging), if [span / (# of points in sweep)] ≤ RBW / 2. Satisfying this condition can require increasing the number of points in the sweep or reducing the span. If the condition is not satisfied, then the detector mode shall be set to peak.

d) Averaging type = power (i.e., rms) (As an alternative, the detector and averaging type may be set for linear voltage averaging. Some instruments require linear display mode to use linear voltage averaging. Log or dB averaging shall not be used.)

e) Sweep time = auto.

f) Perform a trace average of at least 100 traces if the transmission is continuous. If the transmission is not continuous, then the number of traces shall be increased by a factor of 1 / *D*, where *D* is the duty cycle. For example, with 50% duty cycle, at least 200 traces shall be averaged. (If a specific emission is demonstrated to be continuous—i.e., 100% duty cycle—then rather than turning ON and OFF with the transmit cycle, at least 100 traces shall be averaged.)

g) If tests are performed with the EUT transmitting at a duty cycle less than 98%, then a correction factor shall be added to the measurement results prior to comparing with the emission limit, to compute the emission level that would have been measured had the test been performed at 100% duty cycle. The correction factor is computed as follows:

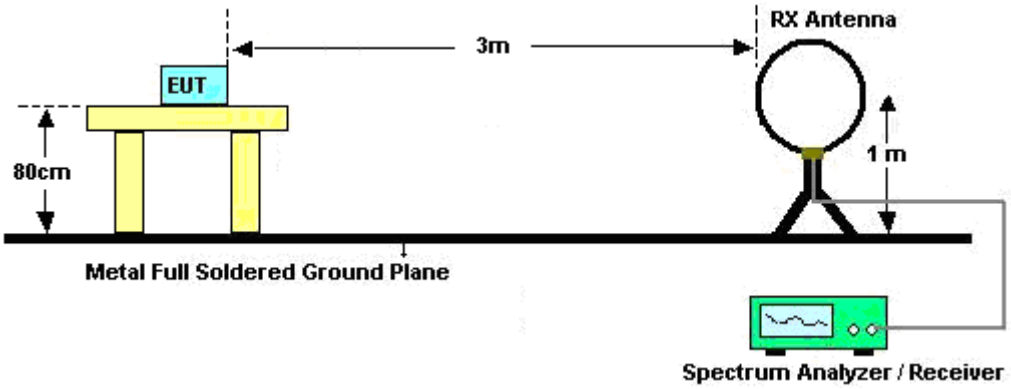
   1) If power averaging (rms) mode was used in the preceding step e), then the correction factor is [10 log (1 / *D*)], where *D* is the duty cycle. For example, if the transmit duty cycle was 50%, then 3 dB shall be added to the measured emission levels.

   2) If a specific emission is demonstrated to be continuous (100% duty cycle) rather than turning ON and OFF with the transmit cycle, then no duty cycle correction is required for that emission.

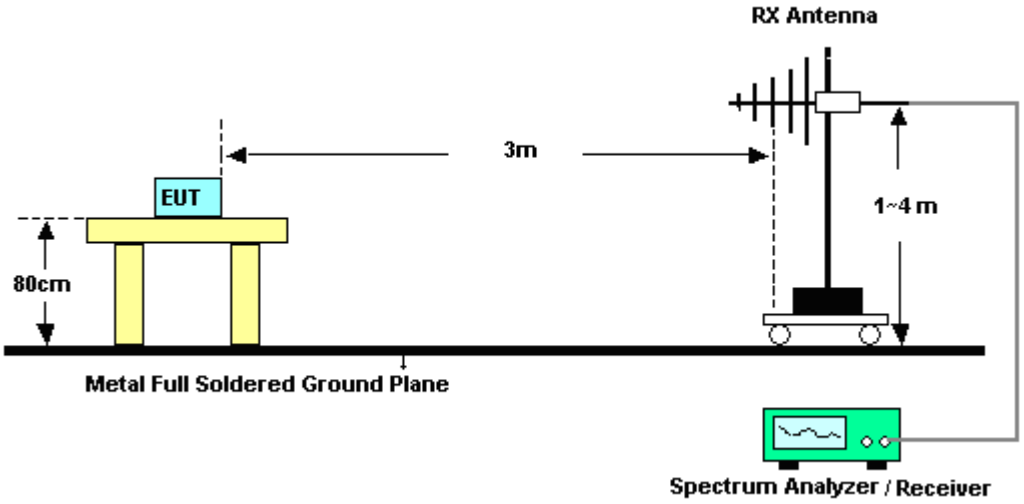
2. The EUT is placed on a turntable with 0.8 meter for frequency below 1 GHz and 1.5 meter for frequency above 1 GHz respectively above ground.
3. The EUT is set 3 meters away from the receiving antenna which is mounted on the top of a variable height antenna tower.
4. The antenna is a broadband antenna 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 is 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. Radiated testing below 1 GHz is performed by adjusting the antenna tower from 1 m to 4 m and by rotating the turn table from 0 degree to 360 degrees to find the peak maximum hold reading. When there is no suspected emission found and the emission level is with at least 6 dB margin against QP limit line, the position is marked as "-".
7. Radiated testing above 1 GHz is performed by adjusting the antenna tower from 1 m to 4 m and by rotating the turn table from 0 degree to 360 degrees to find the peak maximum hold reading for scanning all frequencies. When there is no suspected emission found and the harmonic emission level is with at least 6 dB margin against average limit line, the position is marked as "-".

### 3.4.4 Test Setup

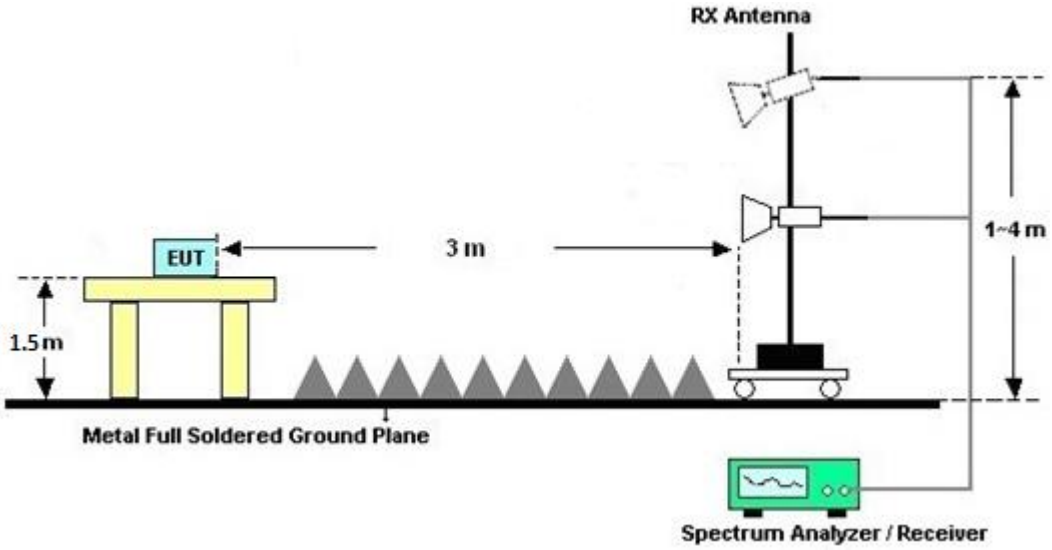
**For radiated emissions below 30MHz**



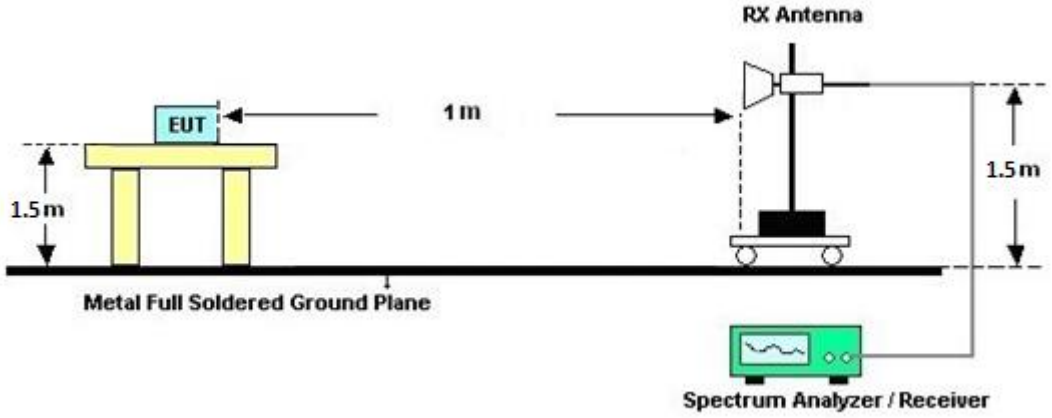
**For radiated emissions from 30MHz to 1GHz**




**For radiated test from 1GHz to 18GHz**



**For radiated test above 18GHz**




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

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

There is adequate comparison measurement 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.

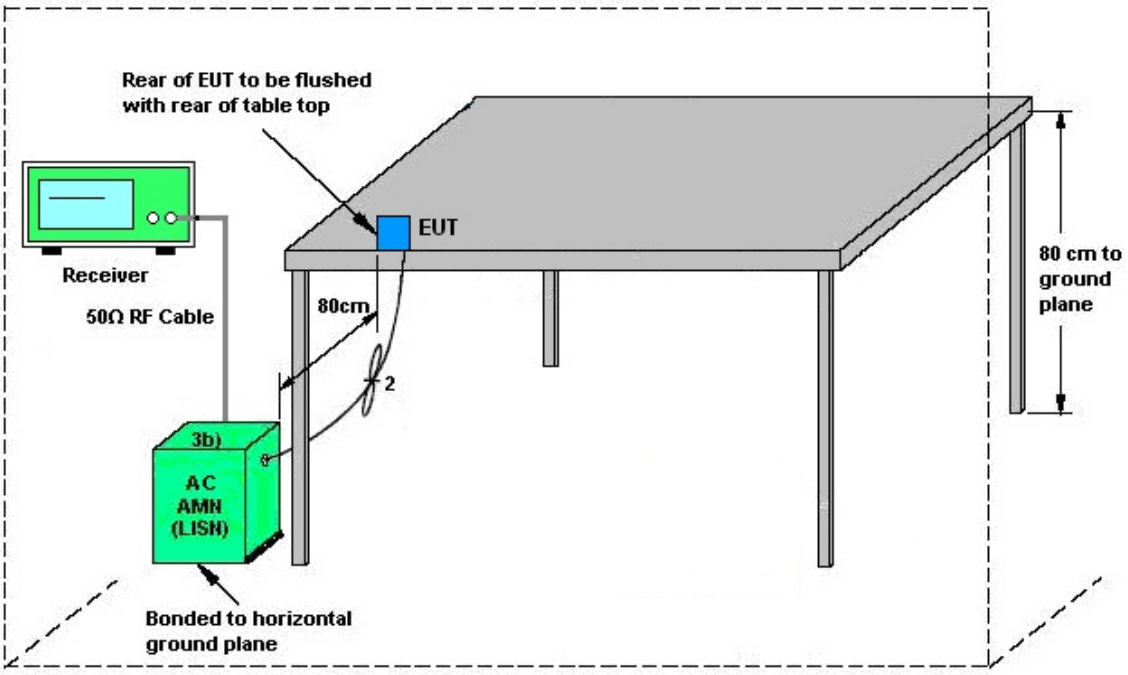
## 3.5.2 Measuring Instruments

Please refer to the measuring equipment list in this test report.

## 3.5.3 Test Procedures

1. The EUT is placed 0.4 meter away from the conducting wall of the shielding room, and is 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 shall be used.
6. Both Line and Neutral shall be tested in order to find out the maximum conducted emission.
7. The frequency range from 150 kHz to 30 MHz is scanned.
8. Set the test-receiver system to Peak Detect Function and specified bandwidth with Maximum Hold Mode.

### 3.5.4 Test Setup




AMN = Artificial mains network (LISN)
AE = Associated equipment
EUT = Equipment under test
ISN = Impedance stabilization network

### 3.5.5 Test Result of AC Conducted Emission

Please refer to Appendix B.

## 3.6 Antenna Requirements

### 3.6.1 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.

### 3.6.2 Antenna Anti-Replacement Construction

An embedded-in antenna design is used.

### 3.6.3 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 | Brand Name | Model No. | Serial No. | Characteristics | Calibration Date | Test Date | Due Date | Remark |
|---|---|---|---|---|---|---|---|---|
| Loop Antenna | Rohde & Schwarz | HFH2-Z2 | 100488 | 9 kHz~30 MHz | Sep. 07, 2021 | Mar. 05, 2022~ Mar. 29, 2022 | Sep. 06, 2022 | Radiation (03CH13-HY) |
| Preamplifier | EMEC | EM18G40G | 060715 | 18GHz~40GHz | Dec. 24, 2021 | Mar. 05, 2022~ Mar. 29, 2022 | Dec. 23, 2022 | Radiation (03CH13-HY) |
| SHF-EHF Horn Antenna | SCHWARZBECK | BBHA9170 | 00993 | 18GHz-40GHz | Nov. 30, 2021 | Mar. 05, 2022~ Mar. 29, 2022 | Nov. 29, 2022 | Radiation (03CH13-HY) |
| Amplifier | SONOMA | 310N | 187282 | 9kHz~1GHz | Dec. 15, 2021 | Mar. 05, 2022~ Mar. 29, 2022 | Dec. 14, 2022 | Radiation (03CH13-HY) |
| Bilog Antenna | TESEQ | CBL 6111D & 00800N1D01N -06 | 40103 & 07 | 30MHz~1GHz | Apr. 28, 2021 | Mar. 05, 2022~ Mar. 29, 2022 | Apr. 27, 2022 | Radiation (03CH13-HY) |
| Horn Antenna | SCHWARZBECK | BBHA 9120 D | 9120D-1241 | 1GHz~18GHz | Jul. 13, 2021 | Mar. 05, 2022~ Mar. 29, 2022 | Jul. 12, 2022 | Radiation (03CH13-HY) |
| Hygrometer | TECPEL | DTM-303B | TP200889 | N/A | Sep. 30, 2021 | Mar. 05, 2022~ Mar. 29, 2022 | Sep. 29, 2022 | Radiation (03CH13-HY) |
| Preamplifier | MITEQ | AMF-7D-0010 1800-30-10P | 1590074 | 1GHz~18GHz | May 18, 2021 | Mar. 05, 2022~ Mar. 29, 2022 | May 17, 2022 | Radiation (03CH13-HY) |
| Preamplifier | Keysight | 83017A | MY53270147 | 1GHz~26.5GHz | Oct. 26, 2021 | Mar. 05, 2022~ Mar. 29, 2022 | Oct. 25, 2022 | Radiation (03CH13-HY) |
| Spectrum Analyzer | Keysight | N9010A | MY55370526 | 10Hz~44GHz | Mar. 18, 2021 | Mar. 05, 2022~ Mar. 16, 2022 | Mar. 17, 2022 | Radiation (03CH13-HY) |
| Signal Analyzer | Keysight | N9010B | MY60240520 | N/A | Dec. 23, 2021 | Mar. 17, 2022~ Mar. 29, 2022 | Dec. 22, 2022 | Radiation (03CH13-HY) |
| Filter | Wainwright | WLK4-1000-1530-8000-40SS | SN12 | 1.53GHz Low Pass Filter | Sep. 14, 2021 | Mar. 05, 2022~ Mar. 29, 2022 | Sep. 13, 2022 | Radiation (03CH13-HY) |
| Filter | Wainwright | WHKX12-2700-3000-18000-60SS | SN2 | 3GHz High Pass Filter | Jul. 12, 2021 | Mar. 05, 2022~ Mar. 29, 2022 | Jul. 11, 2022 | Radiation (03CH13-HY) |
| Filter | Wainwright | WHKX8-5872.5-6750-18000-40ST | SN6 | 6.75GHz High Pass Filter | Jun. 30, 2021 | Mar. 05, 2022~ Mar. 29, 2022 | Jun. 29, 2022 | Radiation (03CH13-HY) |
| RF Cable | HUBER + SUHNER | SUCOFLEX 126E | 0030/126E | 30MHz~18GHz | Feb. 09, 2022 | Mar. 05, 2022~ Mar. 29, 2022 | Feb. 08, 2023 | Radiation (03CH13-HY) |
| RF Cable | HUBER + SUHNER | SUCOFLEX 104 | 804793/4 | 30MHz~18GHz | Feb. 09, 2022 | Mar. 05, 2022~ Mar. 29, 2022 | Feb. 08, 2023 | Radiation (03CH13-HY) |
| RF Cable | HUBER + SUHNER | SUCOFLEX 104 | MY24961/4 | 30MHz~18GHz | Feb. 09, 2022 | Mar. 05, 2022~ Mar. 29, 2022 | Feb. 08, 2023 | Radiation (03CH13-HY) |
| RF Cable | HUBER + SUHNER | SUCOFLEX 104 | MY9837/4PE | 9kHz~30MHz | Mar. 11, 2021 | Mar. 05, 2022~ Mar. 09, 2022 | Mar. 10, 2022 | Radiation (03CH13-HY) |
| RF Cable | HUBER + SUHNER | SUCOFLEX 104 | MY9837/4PE | 9kHz~30MHz | Mar. 10, 2022 | Mar. 10, 2022~ Mar. 29, 2022 | Mar. 09, 2023 | Radiation (03CH13-HY) |
| Controller | EMEC | EM1000 | N/A | Control Turn table & Ant Mast | N/A | Mar. 05, 2022~ Mar. 29, 2022 | N/A | Radiation (03CH13-HY) |
| Antenna Mast | EMEC | AM-BS-4500-B | N/A | 1m~4m | N/A | Mar. 05, 2022~ Mar. 29, 2022 | N/A | Radiation (03CH13-HY) |
| Turn Table | EMEC | TT2000 | N/A | 0~360 Degree | N/A | Mar. 05, 2022~ Mar. 29, 2022 | N/A | Radiation (03CH13-HY) |

| Instrument | Brand Name | Model No. | Serial No. | Characteristics | Calibration Date | Test Date | Due Date | Remark |
|---|---|---|---|---|---|---|---|---|
| Hygrometer | TECPEL | DTM-303A | TP201996 | N/A | Nov. 16, 2021 | Feb. 22, 2022~ Mar. 31, 2022 | Nov. 15, 2022 | Conducted (TH05-HY) |
| Power Meter | DARE | RPR3006W | 15I00041SNO 10 (NO:248) | 10MHz~6GHz | Dec. 29, 2021 | Feb. 22, 2022~ Mar. 31, 2022 | Dec. 28, 2022 | Conducted (TH05-HY) |
| Signal Analyzer | Rohde & Schwarz | FSV40 | 101566 | 10Hz~40GHz | Aug. 30, 2021 | Feb. 22, 2022~ Mar. 31, 2022 | Aug. 29, 2022 | Conducted (TH05-HY) |
| Switch Control Manframe | E-IUSTRUME NT | ETF-1405-0 | EC1900067 (BOX7) | N/A | Aug. 12, 2021 | Feb. 22, 2022~ Mar. 31, 2022 | Aug. 11, 2022 | Conducted (TH05-HY) |
| AC Power Source | ChainTek | APC-1000W | N/A | N/A | N/A | Mar. 10, 2022 | N/A | Conduction (CO05-HY) |
| EMI Test Receiver | Rohde & Schwarz | ESR3 | 102388 | 9kHz~3.6GHz | Dec. 01, 2021 | Mar. 10, 2022 | Nov. 30, 2022 | Conduction (CO05-HY) |
| Hygrometer | Testo | 608-H1 | 34913912 | N/A | Nov. 17, 2021 | Mar. 10, 2022 | Nov. 16, 2022 | Conduction (CO05-HY) |
| LISN | Rohde & Schwarz | ENV216 | 100080 | 9kHz~30MHz | Dec. 03, 2021 | Mar. 10, 2022 | Dec. 02, 2022 | Conduction (CO05-HY) |
| Software | Rohde & Schwarz | EMC32 | N/A | N/A | N/A | Mar. 10, 2022 | N/A | Conduction (CO05-HY) |
| Pulse Limiter | SCHWARZBE CK | VTSD 9561-F N | 00691 | N/A | Jul. 28, 2021 | Mar. 10, 2022 | Jul. 27, 2022 | Conduction (CO05-HY) |
| LISN Cable | MVE | RG-400 | 260260 | N/A | Dec. 30, 2021 | Mar. 10, 2022 | Dec. 29, 2022 | 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))** | **3.1 dB** |

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

| | |
|---|---|
| **Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))** | **6.0 dB** |

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

| | |
|---|---|
| **Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))** | **5.2 dB** |

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

| | |
|---|---|
| **Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))** | **5.9 dB** |

# Appendix A. Test Result of Conducted Test Items

| | | | | |
|---|---|---|---|---|
| Test Engineer: | Ching Chen | Temperature: | 21~25 | °C |
| Test Date: | 2022/2/22-2022/3/31 | Relative Humidity: | 51~54 | % |

Report Number : FR1N0508E

## ***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) | | 99% Bandwidth Power Limit (dBm) | | 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 | 17.08 | - | 28.90 | - | 23.33 | - | 22.33 | - | |
| 11a | 6Mbps | 1 | 44 | 5220 | 21.48 | - | 36.45 | - | 23.98 | - | 23.01 | - | |
| 11a | 6Mbps | 1 | 48 | 5240 | 21.73 | - | 36.65 | - | 23.98 | - | 23.01 | - | |
| HT20 | MCS0 | 1 | 36 | 5180 | 18.18 | - | 28.05 | - | 23.60 | - | 22.60 | - | |
| HT20 | MCS0 | 1 | 44 | 5220 | 23.43 | - | 43.85 | - | 23.98 | - | 23.01 | - | |
| HT20 | MCS0 | 1 | 48 | 5240 | 23.73 | - | 44.00 | - | 23.98 | - | 23.01 | - | |
| HT40 | MCS0 | 1 | 38 | 5190 | 37.26 | - | 42.03 | - | 23.98 | - | 23.01 | - | |
| HT40 | MCS0 | 1 | 46 | 5230 | 46.15 | - | 83.58 | - | 23.98 | - | 23.01 | - | |
| VHT80 | MCS0 | 1 | 42 | 5210 | 76.24 | - | 86.88 | - | 23.98 | - | 23.01 | - | |

Report Number : FR1N0508E

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

| Band I single antenna | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Mod. | Data Rate | NTX | CH. | Freq. (MHz) | Average Conducted Power (dBm) | | Conducted Power Limit (dBm) | | DG (dBi) | | Pass/Fail |
| | | | | | Ant 1 | Ant 2 | Ant 1 | Ant 2 | Ant 1 | Ant 2 | |
| 11a | 6Mbps | 1 | 36 | 5180 | 16.00 | - | 24.00 | - | 2.10 | - | Pass |
| 11a | 6Mbps | 1 | 44 | 5220 | 18.20 | - | 24.00 | - | 2.10 | - | Pass |
| 11a | 6Mbps | 1 | 48 | 5240 | 18.10 | - | 24.00 | - | 2.10 | - | Pass |
| HT20 | MCS0 | 1 | 36 | 5180 | 15.60 | - | 24.00 | - | 2.10 | - | Pass |
| HT20 | MCS0 | 1 | 44 | 5220 | 18.20 | - | 24.00 | - | 2.10 | - | Pass |
| HT20 | MCS0 | 1 | 48 | 5240 | 18.10 | - | 24.00 | - | 2.10 | - | Pass |
| HT40 | MCS0 | 1 | 38 | 5190 | 11.30 | - | 24.00 | - | 2.10 | - | Pass |
| HT40 | MCS0 | 1 | 46 | 5230 | 18.50 | - | 24.00 | - | 2.10 | - | Pass |
| VHT20 | MCS0 | 1 | 36 | 5180 | 15.50 | - | 24.00 | - | 2.10 | - | Pass |
| VHT20 | MCS0 | 1 | 44 | 5220 | 18.10 | - | 24.00 | - | 2.10 | - | Pass |
| VHT20 | MCS0 | 1 | 48 | 5240 | 18.00 | - | 24.00 | - | 2.10 | - | Pass |
| VHT40 | MCS0 | 1 | 38 | 5190 | 11.20 | - | 24.00 | - | 2.10 | - | Pass |
| VHT40 | MCS0 | 1 | 46 | 5230 | 18.40 | - | 24.00 | - | 2.10 | - | Pass |
| VHT80 | MCS0 | 1 | 42 | 5210 | 10.00 | - | 24.00 | - | 2.10 | - | Pass |

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

| Band I single antenna | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mod. | Data Rate | NTX | CH. | Freq. (MHz) | Duty Factor (dB) | | Average Power Density with Duty Factor (dBm/MHz) | | Average PSD Limit (dBm/MHz) | | DG (dBi) | | Pass /Fail |
| | | | | | Ant 1 | Ant 2 | Ant 1 | Ant 2 | Ant 1 | Ant 2 | Ant 1 | Ant 2 | |
| 11a | 6Mbps | 1 | 36 | 5180 | 0.10 | - | 3.43 | - | 11.00 | - | 2.10 | - | Pass |
| 11a | 6Mbps | 1 | 44 | 5220 | 0.10 | - | 5.94 | - | 11.00 | - | 2.10 | - | Pass |
| 11a | 6Mbps | 1 | 48 | 5240 | 0.10 | - | 6.22 | - | 11.00 | - | 2.10 | - | Pass |
| HT20 | MCS0 | 1 | 36 | 5180 | 0.10 | - | 2.68 | - | 11.00 | - | 2.10 | - | Pass |
| HT20 | MCS0 | 1 | 44 | 5220 | 0.10 | - | 5.64 | - | 11.00 | - | 2.10 | - | Pass |
| HT20 | MCS0 | 1 | 48 | 5240 | 0.10 | - | 5.88 | - | 11.00 | - | 2.10 | - | Pass |
| HT40 | MCS0 | 1 | 38 | 5190 | 0.13 | - | -4.74 | - | 11.00 | - | 2.10 | - | Pass |
| HT40 | MCS0 | 1 | 46 | 5230 | 0.13 | - | 2.83 | - | 11.00 | - | 2.10 | - | Pass |
| VHT80 | MCS0 | 1 | 42 | 5210 | 0.36 | - | -8.21 | - | 11.00 | - | 2.10 | - | 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) | | 99% Bandwidth Power Limit (dBm) | | 99% Bandwidth EIRP Limit (dBm) | | 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 | 20.58 | - | 36.30 | - | 23.98 | - | 30.00 | - | 23.98 | - | |
| 11a | 6Mbps | 1 | 60 | 5300 | 21.33 | - | 36.35 | - | 23.98 | - | 30.00 | - | 23.98 | - | |
| 11a | 6Mbps | 1 | 64 | 5320 | 17.38 | - | 30.95 | - | 23.40 | - | 29.40 | - | 23.98 | - | |
| HT20 | MCS0 | 1 | 52 | 5260 | 23.73 | - | 44.15 | - | 23.98 | - | 30.00 | - | 23.98 | - | |
| HT20 | MCS0 | 1 | 60 | 5300 | 23.08 | - | 43.90 | - | 23.98 | - | 30.00 | - | 23.98 | - | |
| HT20 | MCS0 | 1 | 64 | 5320 | 18.53 | - | 33.15 | - | 23.68 | - | 29.68 | - | 23.98 | - | |
| HT40 | MCS0 | 1 | 54 | 5270 | 45.46 | - | 80.42 | - | 23.98 | - | 30.00 | - | 23.98 | - | |
| HT40 | MCS0 | 1 | 62 | 5310 | 37.26 | - | 42.03 | - | 23.98 | - | 30.00 | - | 23.98 | - | |
| VHT80 | MCS0 | 1 | 58 | 5290 | 76.24 | - | 87.20 | - | 23.98 | - | 30.00 | - | 23.98 | - | |

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

| Band II single antenna | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mod. | Data Rate | NTX | CH. | Freq. (MHz) | Average Conducted Power (dBm) | | Conducted Power Limit (dBm) | | DG (dBi) | | EIRP Power Limit (dBm) | Pass/Fail |
| | | | | | Ant 1 | Ant 2 | Ant 1 | Ant 2 | Ant 1 | Ant 2 | | |
| 11a | 6Mbps | 1 | 52 | 5260 | 18.50 | - | 23.98 | - | 1.50 | - | 30 | Pass |
| 11a | 6Mbps | 1 | 60 | 5300 | 18.50 | - | 23.98 | - | 1.50 | - | 30 | Pass |
| 11a | 6Mbps | 1 | 64 | 5320 | 16.40 | - | 23.98 | - | 1.50 | - | 30 | Pass |
| HT20 | MCS0 | 1 | 52 | 5260 | 18.50 | - | 23.98 | - | 1.50 | - | 30 | Pass |
| HT20 | MCS0 | 1 | 60 | 5300 | 18.40 | - | 23.98 | - | 1.50 | - | 30 | Pass |
| HT20 | MCS0 | 1 | 64 | 5320 | 16.60 | - | 23.98 | - | 1.50 | - | 30 | Pass |
| HT40 | MCS0 | 1 | 54 | 5270 | 18.50 | - | 23.98 | - | 1.50 | - | 30 | Pass |
| HT40 | MCS0 | 1 | 62 | 5310 | 13.60 | - | 23.98 | - | 1.50 | - | 30 | Pass |
| VHT20 | MCS0 | 1 | 52 | 5260 | 18.40 | - | 23.98 | - | 1.50 | - | 30 | Pass |
| VHT20 | MCS0 | 1 | 60 | 5300 | 18.30 | - | 23.98 | - | 1.50 | - | 30 | Pass |
| VHT20 | MCS0 | 1 | 64 | 5320 | 16.50 | - | 23.98 | - | 1.50 | - | 30 | Pass |
| VHT40 | MCS0 | 1 | 54 | 5270 | 18.40 | - | 23.98 | - | 1.50 | - | 30 | Pass |
| VHT40 | MCS0 | 1 | 62 | 5310 | 13.50 | - | 23.98 | - | 1.50 | - | 30 | Pass |
| VHT80 | MCS0 | 1 | 58 | 5290 | 13.10 | - | 23.98 | - | 1.50 | - | 30 | Pass |

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

| Band II single antenna | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mod. | Data Rate | NTX | CH. | Freq. (MHz) | Duty Factor (dB) | | Average Power Density with Duty Factor (dBm/MHz) | | Average PSD Limit (dBm/MHz) | | DG (dBi) | | Pass /Fail |
| | | | | | Ant 1 | Ant 2 | Ant 1 | Ant 2 | Ant 1 | Ant 2 | Ant 1 | Ant 2 | |
| 11a | 6Mbps | 1 | 52 | 5260 | 0.10 | - | 5.78 | - | 11.00 | - | 1.50 | - | Pass |
| 11a | 6Mbps | 1 | 60 | 5300 | 0.10 | - | 5.88 | - | 11.00 | - | 1.50 | - | Pass |
| 11a | 6Mbps | 1 | 64 | 5320 | 0.10 | - | 4.03 | - | 11.00 | - | 1.50 | - | Pass |
| HT20 | MCS0 | 1 | 52 | 5260 | 0.10 | - | 5.85 | - | 11.00 | - | 1.50 | - | Pass |
| HT20 | MCS0 | 1 | 60 | 5300 | 0.10 | - | 5.52 | - | 11.00 | - | 1.50 | - | Pass |
| HT20 | MCS0 | 1 | 64 | 5320 | 0.10 | - | 3.70 | - | 11.00 | - | 1.50 | - | Pass |
| HT40 | MCS0 | 1 | 54 | 5270 | 0.13 | - | 2.58 | - | 11.00 | - | 1.50 | - | Pass |
| HT40 | MCS0 | 1 | 62 | 5310 | 0.13 | - | -2.21 | - | 11.00 | - | 1.50 | - | Pass |
| VHT80 | MCS0 | 1 | 58 | 5290 | 0.36 | - | -5.63 | - | 11.00 | - | 1.50 | - | Pass |

Report Number : FR1N0508E

## ***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) | | 99% Bandwidth Power Limit (dBm) | | 99% Bandwidth EIRP Limit (dBm) | | 26dB Bandwidth Power Limit (dBm) | | 6 dB Bandwidth for Straddle Channel (MHz) | |
| | | | | | Ant 1 | Ant 2 | 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 | 20.38 | - | 35.90 | - | 23.98 | - | 30.00 | - | 23.98 | - | ---- | ---- |
| 11a | 6Mbps | 1 | 116 | 5580 | 20.13 | - | 35.85 | - | 23.98 | - | 30.00 | - | 23.98 | - | ---- | ---- |
| 11a | 6Mbps | 1 | 140 | 5700 | 17.93 | - | 31.85 | - | 23.54 | - | 29.54 | - | 23.98 | - | ---- | ---- |
| HT20 | MCS0 | 1 | 100 | 5500 | 21.88 | - | 40.60 | - | 23.98 | - | 30.00 | - | 23.98 | - | ---- | ---- |
| HT20 | MCS0 | 1 | 116 | 5580 | 23.08 | - | 40.80 | - | 23.98 | - | 30.00 | - | 23.98 | - | ---- | ---- |
| HT20 | MCS0 | 1 | 140 | 5700 | 18.53 | - | 30.55 | - | 23.68 | - | 29.68 | - | 23.98 | - | ---- | ---- |
| HT40 | MCS0 | 1 | 102 | 5510 | 37.46 | - | 50.67 | - | 23.98 | - | 30.00 | - | 23.98 | - | ---- | ---- |
| HT40 | MCS0 | 1 | 110 | 5550 | 43.56 | - | 80.20 | - | 23.98 | - | 30.00 | - | 23.98 | - | ---- | ---- |
| HT40 | MCS0 | 1 | 134 | 5670 | 46.95 | - | 84.07 | - | 23.98 | - | 30.00 | - | 23.98 | - | ---- | ---- |
| VHT80 | MCS0 | 1 | 106 | 5530 | 76.24 | - | 86.56 | - | 23.98 | - | 30.00 | - | 23.98 | - | ---- | ---- |
| VHT80 | MCS0 | 1 | 122 | 5610 | 79.12 | - | 189.69 | - | 23.98 | - | 30.00 | - | 23.98 | - | ---- | ---- |

| Band III straddle channel single antenna | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mod. | Data Rate | NTX | CH. | Freq. (MHz) | 99% Bandwidth In U-NII 2C (MHz) | | 26 dB Bandwidth In U-NII 2C (MHz) | | 99% Bandwidth Power Limit (dBm) | | 99% Bandwidth EIRP Limit (dBm) | | 26dB Bandwidth Power Limit (dBm) | | 6 dB Bandwidth for Straddle Channel (MHz) | |
| | | | | | Ant 1 | Ant 2 | Ant 1 | Ant 2 | Ant 1 | Ant 2 | Ant 1 | Ant 2 | Ant 1 | Ant 2 | Ant 1 | Ant 2 |
| 11a | 6Mbps | 1 | 144 | 5720 | 14.69 | - | 22.00 | - | 22.67 | - | 28.67 | - | 23.98 | - | 3.2 | - |
| HT20 | MCS0 | 1 | 144 | 5720 | 15.44 | - | 27.00 | - | 22.89 | - | 28.89 | - | 23.98 | - | 3.8 | - |
| HT40 | MCS0 | 1 | 142 | 5710 | 35.68 | - | 56.35 | - | 23.98 | - | 30.00 | - | 23.98 | - | 3.27 | - |
| VHT80 | MCS0 | 1 | 138 | 5690 | 73.60 | - | 129.46 | - | 23.98 | - | 30.00 | - | 23.98 | - | 2.92 | - |

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

| Band III single antenna | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mod. | Data Rate | NTX | CH. | Freq. (MHz) | Average Conducted Power (dBm) | | Conducted Power Limit (dBm) | | DG (dBi) | | EIRP Power Limit (dBm) | Pass/Fail |
| | | | | | Ant 1 | Ant 2 | Ant 1 | Ant 2 | Ant 1 | Ant 2 | | |
| 11a | 6Mbps | 1 | 100 | 5500 | 18.30 | - | 23.98 | - | 1.40 | - | 30 | Pass |
| 11a | 6Mbps | 1 | 116 | 5580 | 18.10 | - | 23.98 | - | 1.40 | - | 30 | Pass |
| 11a | 6Mbps | 1 | 140 | 5700 | 16.00 | - | 23.98 | - | 1.40 | - | 30 | Pass |
| HT20 | MCS0 | 1 | 100 | 5500 | 18.30 | - | 23.98 | - | 1.40 | - | 30 | Pass |
| HT20 | MCS0 | 1 | 116 | 5580 | 18.40 | - | 23.98 | - | 1.40 | - | 30 | Pass |
| HT20 | MCS0 | 1 | 140 | 5700 | 15.50 | - | 23.98 | - | 1.40 | - | 30 | Pass |
| HT40 | MCS0 | 1 | 102 | 5510 | 15.10 | - | 23.98 | - | 1.40 | - | 30 | Pass |
| HT40 | MCS0 | 1 | 110 | 5550 | 18.30 | - | 23.98 | - | 1.40 | - | 30 | Pass |
| HT40 | MCS0 | 1 | 134 | 5670 | 18.20 | - | 23.98 | - | 1.40 | - | 30 | Pass |
| VHT20 | MCS0 | 1 | 100 | 5500 | 18.20 | - | 23.98 | - | 1.40 | - | 30 | Pass |
| VHT20 | MCS0 | 1 | 116 | 5580 | 18.30 | - | 23.98 | - | 1.40 | - | 30 | Pass |
| VHT20 | MCS0 | 1 | 140 | 5700 | 15.40 | - | 23.98 | - | 1.40 | - | 30 | Pass |
| VHT40 | MCS0 | 1 | 102 | 5510 | 15.00 | - | 23.98 | - | 1.40 | - | 30 | Pass |
| VHT40 | MCS0 | 1 | 110 | 5550 | 18.20 | - | 23.98 | - | 1.40 | - | 30 | Pass |
| VHT40 | MCS0 | 1 | 134 | 5670 | 18.10 | - | 23.98 | - | 1.40 | - | 30 | Pass |
| VHT80 | MCS0 | 1 | 106 | 5530 | 12.60 | - | 23.98 | - | 1.40 | - | 30 | Pass |
| VHT80 | MCS0 | 1 | 122 | 5610 | 18.50 | - | 23.98 | - | 1.40 | - | 30 | Pass |

| Band III straddle channel single antenna | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mod. | Data Rate | NTX | CH. | Freq. (MHz) | Average Conducted Power (dBm) | | Conducted Power Limit (dBm) | | DG (dBi) | | EIRP Power Limit (dBm) | Pass/Fail |
| | | | | | Ant 1 | Ant 2 | Ant 1 | Ant 2 | Ant 1 | Ant 2 | | |
| 11a | 6Mbps | 1 | 144 | 5720 | 18.50 | - | 23.98 | - | 1.40 | - | 30 | Pass |
| HT20 | MCS0 | 1 | 144 | 5720 | 18.50 | - | 23.98 | - | 1.40 | - | 30 | Pass |
| HT40 | MCS0 | 1 | 142 | 5710 | 18.50 | - | 23.98 | - | 1.40 | - | 30 | Pass |
| VHT20 | MCS0 | 1 | 144 | 5720 | 18.40 | - | 23.98 | - | 1.40 | - | 30 | Pass |
| VHT40 | MCS0 | 1 | 142 | 5710 | 18.40 | - | 23.98 | - | 1.40 | - | 30 | Pass |
| VHT80 | MCS0 | 1 | 138 | 5690 | 18.40 | - | 23.98 | - | 1.40 | - | 30 | Pass |

Report Number : FR1N0508E

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

| Band III single antenna | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mod. | Data Rate | NTx | CH. | Freq. (MHz) | Duty Factor (dB) | | Average Power Density with Duty Factor (dBm/MHz) | | Average PSD Limit (dBm/MHz) | | DG (dBi) | | Pass /Fail |
| | | | | | Ant 1 | Ant 2 | Ant 1 | Ant 2 | Ant 1 | Ant 2 | Ant 1 | Ant 2 | |
| 11a | 6Mbps | 1 | 100 | 5500 | 0.10 | - | 5.65 | - | 11.00 | - | 1.40 | - | Pass |
| 11a | 6Mbps | 1 | 116 | 5580 | 0.10 | - | 5.31 | - | 11.00 | - | 1.40 | - | Pass |
| 11a | 6Mbps | 1 | 140 | 5700 | 0.10 | - | 3.29 | - | 11.00 | - | 1.40 | - | Pass |
| HT20 | MCS0 | 1 | 100 | 5500 | 0.10 | - | 5.28 | - | 11.00 | - | 1.40 | - | Pass |
| HT20 | MCS0 | 1 | 116 | 5580 | 0.10 | - | 5.45 | - | 11.00 | - | 1.40 | - | Pass |
| HT20 | MCS0 | 1 | 140 | 5700 | 0.10 | - | 2.40 | - | 11.00 | - | 1.40 | - | Pass |
| HT40 | MCS0 | 1 | 102 | 5510 | 0.13 | - | -0.70 | - | 11.00 | - | 1.40 | - | Pass |
| HT40 | MCS0 | 1 | 110 | 5550 | 0.13 | - | 2.59 | - | 11.00 | - | 1.40 | - | Pass |
| HT40 | MCS0 | 1 | 134 | 5670 | 0.13 | - | 2.23 | - | 11.00 | - | 1.40 | - | Pass |
| VHT80 | MCS0 | 1 | 106 | 5530 | 0.36 | - | -6.24 | - | 11.00 | - | 1.40 | - | Pass |
| VHT80 | MCS0 | 1 | 122 | 5610 | 0.36 | - | -0.11 | - | 11.00 | - | 1.40 | - | Pass |

| Band III straddle channel single antenna | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mod. | Data Rate | NTx | CH. | Freq. (MHz) | Duty Factor (dB) | | Average Power Density (dBm/MHz) | | Average PSD Limit (dBm/MHz) | | DG (dBi) | | Pass /Fail |
| | | | | | Ant 1 | Ant 2 | Ant 1 | Ant 2 | Ant 1 | Ant 2 | Ant 1 | Ant 2 | |
| 11a | 6Mbps | 1 | 144 | 5720 | 0.10 | - | 5.92 | - | 11.00 | - | 1.40 | - | Pass |
| HT20 | MCS0 | 1 | 144 | 5720 | 0.10 | - | 5.61 | - | 11.00 | - | 1.40 | - | Pass |
| HT40 | MCS0 | 1 | 142 | 5710 | 0.13 | - | 2.74 | - | 11.00 | - | 1.40 | - | Pass |
| VHT80 | MCS0 | 1 | 138 | 5690 | 0.36 | - | -0.47 | - | 11.00 | - | 1.40 | - | Pass |

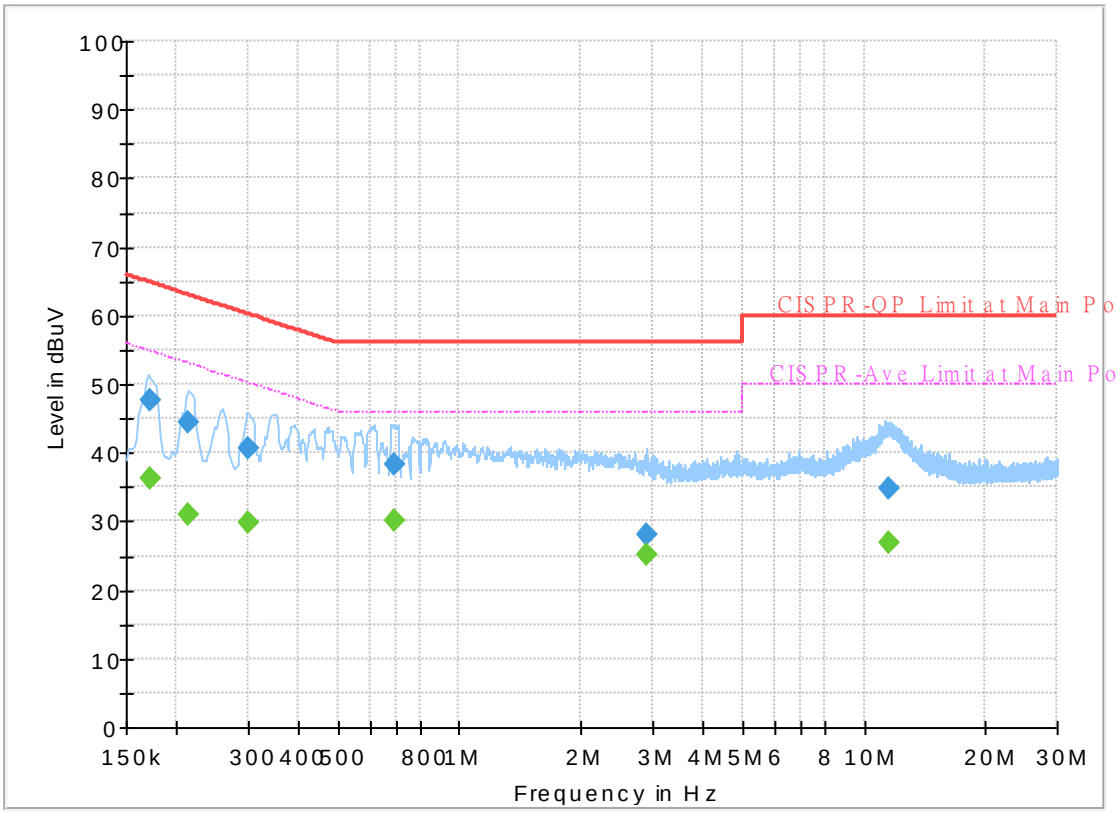
# Appendix B. AC Conducted Emission Test Results

| | | | |
|---|---|---|---|
| **Test Engineer :** | Calvin Wang | **Temperature :** | 23~26℃ |
| | | **Relative Humidity :** | 45~55% |

# EUT Information

| | |
|---|---|
| Report NO : | 1N0508 |
| Test Mode : | Mode 1 |
| Test Voltage : | 120Vac/60Hz |
| Phase : | Line |

Full Spectrum



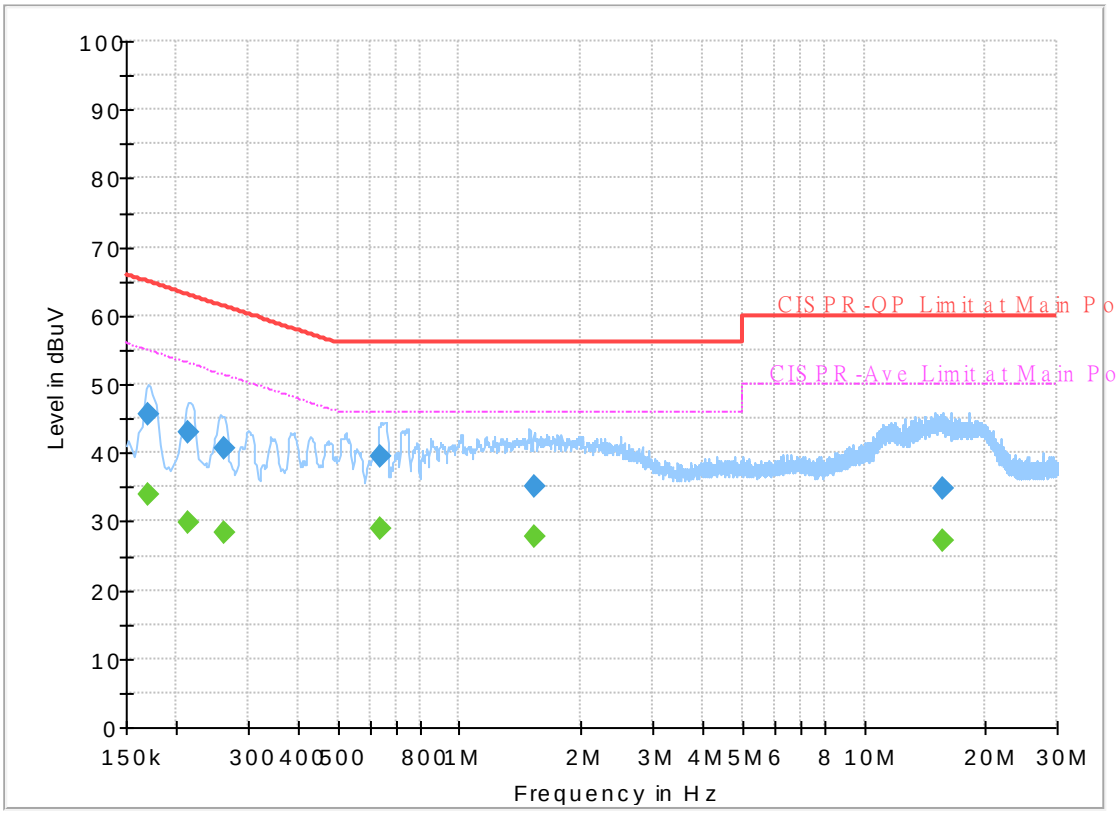

# Final_Result

| Frequency (MHz) | QuasiPeak (dBuV) | CAverage (dBuV) | Limit (dBuV) | Margin (dB) | Line | Filter | Corr. (dB) |
|---|---|---|---|---|---|---|---|
| 0.172500 | --- | 36.32 | 54.84 | 18.52 | L1 | OFF | 19.6 |
| 0.172500 | 47.66 | --- | 64.84 | 17.18 | L1 | OFF | 19.6 |
| 0.213000 | --- | 31.04 | 53.09 | 22.05 | L1 | OFF | 19.6 |
| 0.213000 | 44.49 | --- | 63.09 | 18.60 | L1 | OFF | 19.6 |
| 0.300750 | --- | 29.84 | 50.22 | 20.38 | L1 | OFF | 19.6 |
| 0.300750 | 40.74 | --- | 60.22 | 19.48 | L1 | OFF | 19.6 |
| 0.692250 | --- | 30.12 | 46.00 | 15.88 | L1 | OFF | 19.6 |
| 0.692250 | 38.33 | --- | 56.00 | 17.67 | L1 | OFF | 19.6 |
| 2.904000 | --- | 25.02 | 46.00 | 20.98 | L1 | OFF | 19.7 |
| 2.904000 | 27.97 | --- | 56.00 | 28.03 | L1 | OFF | 19.7 |
| 11.559750 | --- | 26.98 | 50.00 | 23.02 | L1 | OFF | 20.1 |
| 11.559750 | 34.72 | --- | 60.00 | 25.28 | L1 | OFF | 20.1 |

# EUT Information

| | |
|---|---|
| Report NO : | 1N0508 |
| 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) |
|---|---|---|---|---|---|---|---|
| 0.170250 | --- | 33.80 | 54.95 | 21.15 | N | OFF | 19.6 |
| 0.170250 | 45.74 | --- | 64.95 | 19.21 | N | OFF | 19.6 |
| 0.213000 | --- | 29.94 | 53.09 | 23.15 | N | OFF | 19.6 |
| 0.213000 | 43.05 | --- | 63.09 | 20.04 | N | OFF | 19.6 |
| 0.262500 | --- | 28.29 | 51.35 | 23.06 | N | OFF | 19.6 |
| 0.262500 | 40.51 | --- | 61.35 | 20.84 | N | OFF | 19.6 |
| 0.640500 | --- | 28.94 | 46.00 | 17.06 | N | OFF | 19.6 |
| 0.640500 | 39.49 | --- | 56.00 | 16.51 | N | OFF | 19.6 |
| 1.524750 | --- | 27.64 | 46.00 | 18.36 | N | OFF | 19.6 |
| 1.524750 | 35.11 | --- | 56.00 | 20.89 | N | OFF | 19.6 |
| 15.679500 | --- | 27.07 | 50.00 | 22.93 | N | OFF | 20.3 |
| 15.679500 | 34.83 | --- | 60.00 | 25.17 | N | OFF | 20.3 |

# Appendix C. Radiated Spurious Emission

| | | | |
|---|---|---|---|
| **Test Engineer :** | Yuan Lee, Jacky Hong, Wilson Wu and Peter Liao | **Temperature :** | 20~25°C |
| | | **Relative Humidity :** | 40~60% |

**Band 1 - 5150~5250MHz**

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

| 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) |
| 802.11a CH 36 5180MHz | | 5149.76 | 63.92 | -10.08 | 74 | 52.02 | 32.2 | 6.21 | 26.51 | 147 | 7 | P | H |
| | | 5149.76 | 50.85 | -3.15 | 54 | 38.95 | 32.2 | 6.21 | 26.51 | 147 | 7 | A | H |
| | * | 5180 | 105.74 | - | - | 93.93 | 32.08 | 6.25 | 26.52 | 147 | 7 | P | H |
| | * | 5180 | 98.24 | - | - | 86.43 | 32.08 | 6.25 | 26.52 | 147 | 7 | A | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | 5148.46 | 61.19 | -12.81 | 74 | 49.29 | 32.2 | 6.21 | 26.51 | 314 | 33 | P | V |
| | | 5149.5 | 48.7 | -5.3 | 54 | 36.8 | 32.2 | 6.21 | 26.51 | 314 | 33 | A | V |
| | * | 5180 | 103.94 | - | - | 92.13 | 32.08 | 6.25 | 26.52 | 314 | 33 | P | V |
| | * | 5180 | 96.26 | - | - | 84.45 | 32.08 | 6.25 | 26.52 | 314 | 33 | A | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| 802.11a CH 44 5220MHz | | 5009.62 | 53.02 | -20.98 | 74 | 41.59 | 31.86 | 6.06 | 26.49 | 157 | 2 | P | H |
| | | 5115.7 | 43.79 | -10.21 | 54 | 31.99 | 32.13 | 6.18 | 26.51 | 157 | 2 | A | H |
| | * | 5220 | 108.44 | - | - | 96.76 | 31.92 | 6.28 | 26.52 | 157 | 2 | P | H |
| | * | 5220 | 100.79 | - | - | 89.11 | 31.92 | 6.28 | 26.52 | 157 | 2 | A | H |
| | | 5400.64 | 50.78 | -23.22 | 74 | 39.1 | 31.9 | 6.33 | 26.55 | 157 | 2 | P | H |
| | | 5456.36 | 42 | -12 | 54 | 30.26 | 31.93 | 6.36 | 26.55 | 157 | 2 | A | H |
| | | 5128.7 | 53.06 | -20.94 | 74 | 41.22 | 32.16 | 6.19 | 26.51 | 296 | 74 | P | V |
| | | 5074.62 | 43.67 | -10.33 | 54 | 31.94 | 32.1 | 6.13 | 26.5 | 296 | 74 | A | V |
| | * | 5220 | 104.17 | - | - | 92.49 | 31.92 | 6.28 | 26.52 | 296 | 74 | P | V |
| | * | 5220 | 96.43 | - | - | 84.75 | 31.92 | 6.28 | 26.52 | 296 | 74 | A | V |
| | | 5399.24 | 50.69 | -23.31 | 74 | 39.01 | 31.9 | 6.33 | 26.55 | 296 | 74 | P | V |
| | | 5456.92 | 41.94 | -12.06 | 54 | 30.2 | 31.93 | 6.36 | 26.55 | 296 | 74 | A | V |

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **802.11a CH 48 5240MHz** | | 5034.06 | 54.73 | -19.27 | 74 | 43.13 | 32 | 6.09 | 26.49 | 164 | 3 | P | H |
| | | 5080.08 | 43.5 | -10.5 | 54 | 31.76 | 32.1 | 6.14 | 26.5 | 164 | 3 | A | H |
| | * | 5240 | 108.97 | - | - | 97.37 | 31.84 | 6.28 | 26.52 | 164 | 3 | P | H |
| | * | 5240 | 101.15 | - | - | 89.55 | 31.84 | 6.28 | 26.52 | 164 | 3 | A | H |
| | | 5442.92 | 51.36 | -22.64 | 74 | 39.66 | 31.9 | 6.35 | 26.55 | 164 | 3 | P | H |
| | | 5458.32 | 42 | -12 | 54 | 30.26 | 31.93 | 6.36 | 26.55 | 164 | 3 | A | H |
| | | 5033.02 | 53.25 | -20.75 | 74 | 41.65 | 32 | 6.09 | 26.49 | 293 | 76 | P | V |
| | | 5072.8 | 43.57 | -10.43 | 54 | 31.84 | 32.1 | 6.13 | 26.5 | 293 | 76 | A | V |
| | * | 5240 | 104.11 | - | - | 92.51 | 31.84 | 6.28 | 26.52 | 293 | 76 | P | V |
| | * | 5240 | 96.14 | - | - | 84.54 | 31.84 | 6.28 | 26.52 | 293 | 76 | A | V |
| | | 5451.88 | 51.4 | -22.6 | 74 | 39.68 | 31.91 | 6.36 | 26.55 | 293 | 76 | P | V |
| | | 5452.72 | 41.73 | -12.27 | 54 | 30.01 | 31.91 | 6.36 | 26.55 | 293 | 76 | 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 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) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 802.11a CH 36 5180MHz | | 10360 | 47.27 | -20.93 | 68.2 | 54.01 | 39.94 | 9.78 | 56.46 | - | - | P | H |
| | | 15540 | 46.29 | -27.71 | 74 | 50.98 | 39.44 | 12.05 | 56.18 | - | - | P | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | 10360 | 51.28 | -16.92 | 68.2 | 58.02 | 39.94 | 9.78 | 56.46 | 209 | 356 | P | V |
| | | 15540 | 45.88 | -28.12 | 74 | 50.57 | 39.44 | 12.05 | 56.18 | - | - | P | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
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| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |

| 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) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 10440 | 51.13 | -17.07 | 68.2 | 57.55 | 40.22 | 9.82 | 56.46 | 103 | 63 | P | H |
| | | 15660 | 45.37 | -28.63 | 74 | 50.36 | 38.9 | 12.04 | 55.93 | - | - | P | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
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| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| **802.11a CH 44 5220MHz** | | | | | | | | | | | | | H |
| | | 10440 | 52.92 | -15.28 | 68.2 | 59.34 | 40.22 | 9.82 | 56.46 | 226 | 0 | P | V |
| | | 15660 | 46.6 | -27.4 | 74 | 51.59 | 38.9 | 12.04 | 55.93 | - | - | P | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
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| | | | | | | | | | | | | | V |

| 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) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 10480 | 50.97 | -17.23 | 68.2 | 57.24 | 40.34 | 9.85 | 56.46 | 102 | 68 | P | H |
| | | 15720 | 46.35 | -27.65 | 74 | 51.42 | 38.68 | 12.05 | 55.8 | - | - | P | H |
| | | | | | | | | | | | | | H |
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| | | | | | | | | | | | | | H |
| **802.11a CH 48 5240MHz** | | | | | | | | | | | | | H |
| | | 10480 | 53.19 | -15.01 | 68.2 | 59.46 | 40.34 | 9.85 | 56.46 | 218 | 0 | P | V |
| | | 15720 | 47.02 | -26.98 | 74 | 52.09 | 38.68 | 12.05 | 55.8 | - | - | P | V |
| | | | | | | | | | | | | | V |
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| | | | | | | | | | | | | | V |

**Remark**

1. No other spurious found.
2. All results are PASS against Peak and Average limit line.
3. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only.

## Band 1 5150~5250MHz

## WIFI 802.11n HT20 (Band Edge @ 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) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 5146.9 | 62.86 | -11.14 | 74 | 50.97 | 32.19 | 6.21 | 26.51 | 235 | 7 | P | H |
| | | 5149.5 | 51.58 | -2.42 | 54 | 39.68 | 32.2 | 6.21 | 26.51 | 235 | 7 | A | H |
| | * | 5180 | 106.74 | - | - | 94.93 | 32.08 | 6.25 | 26.52 | 235 | 7 | P | H |
| | * | 5180 | 98.95 | - | - | 87.14 | 32.08 | 6.25 | 26.52 | 235 | 7 | A | H |
| 802.11n | | | | | | | | | | | | | H |
| HT20 | | | | | | | | | | | | | H |
| CH 36 | | 5149.24 | 59.67 | -14.33 | 74 | 47.77 | 32.2 | 6.21 | 26.51 | 390 | 37 | P | V |
| 5180MHz | | 5150 | 48.58 | -5.42 | 54 | 36.67 | 32.2 | 6.22 | 26.51 | 390 | 37 | A | V |
| | * | 5180 | 103.97 | - | - | 92.16 | 32.08 | 6.25 | 26.52 | 390 | 37 | P | V |
| | * | 5180 | 96.25 | - | - | 84.44 | 32.08 | 6.25 | 26.52 | 390 | 37 | A | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | 5133.38 | 53.71 | -20.29 | 74 | 41.85 | 32.17 | 6.2 | 26.51 | 231 | 0 | P | H |
| | | 5063.44 | 43.8 | -10.2 | 54 | 32.08 | 32.1 | 6.12 | 26.5 | 231 | 0 | A | H |
| | * | 5220 | 108.29 | - | - | 96.61 | 31.92 | 6.28 | 26.52 | 231 | 0 | P | H |
| | * | 5220 | 100.65 | - | - | 88.97 | 31.92 | 6.28 | 26.52 | 231 | 0 | A | H |
| 802.11n | | 5460 | 52.44 | -21.56 | 74 | 40.69 | 31.94 | 6.36 | 26.55 | 231 | 0 | P | H |
| HT20 | | 5457.2 | 42.25 | -11.75 | 54 | 30.51 | 31.93 | 6.36 | 26.55 | 231 | 0 | A | H |
| CH 44 | | 5005.2 | 53.72 | -20.28 | 74 | 42.32 | 31.83 | 6.06 | 26.49 | 298 | 28 | P | V |
| 5220MHz | | 5007.8 | 43.74 | -10.26 | 54 | 32.32 | 31.85 | 6.06 | 26.49 | 298 | 28 | A | V |
| | * | 5220 | 103.87 | - | - | 92.19 | 31.92 | 6.28 | 26.52 | 298 | 28 | P | V |
| | * | 5220 | 96.29 | - | - | 84.61 | 31.92 | 6.28 | 26.52 | 298 | 28 | A | V |
| | | 5430.88 | 51.21 | -22.79 | 74 | 39.51 | 31.9 | 6.35 | 26.55 | 298 | 28 | P | V |
| | | 5453.28 | 42.26 | -11.74 | 54 | 30.54 | 31.91 | 6.36 | 26.55 | 298 | 28 | A | V |

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 5079.82 | 53.85 | -20.15 | 74 | 42.11 | 32.1 | 6.14 | 26.5 | 219 | 0 | P | H |
| | | 5055.38 | 43.69 | -10.31 | 54 | 31.98 | 32.1 | 6.11 | 26.5 | 219 | 0 | A | H |
| | * | 5240 | 108.38 | - | - | 96.78 | 31.84 | 6.28 | 26.52 | 219 | 0 | P | H |
| | * | 5240 | 100.63 | - | - | 89.03 | 31.84 | 6.28 | 26.52 | 219 | 0 | A | H |
| **802.11n** | | 5408.76 | 51.46 | -22.54 | 74 | 39.78 | 31.9 | 6.33 | 26.55 | 219 | 0 | P | H |
| **HT20** | | 5445.72 | 42.06 | -11.94 | 54 | 30.35 | 31.9 | 6.36 | 26.55 | 219 | 0 | A | H |
| **CH 48** | | 5083.2 | 53.25 | -20.75 | 74 | 41.51 | 32.1 | 6.14 | 26.5 | 309 | 30 | P | V |
| **5240MHz** | | 5055.38 | 43.84 | -10.16 | 54 | 32.13 | 32.1 | 6.11 | 26.5 | 309 | 30 | A | V |
| | * | 5240 | 103.79 | - | - | 92.19 | 31.84 | 6.28 | 26.52 | 309 | 30 | P | V |
| | * | 5240 | 96.18 | - | - | 84.58 | 31.84 | 6.28 | 26.52 | 309 | 30 | A | V |
| | | 5360.6 | 51.08 | -22.92 | 74 | 39.64 | 31.66 | 6.32 | 26.54 | 309 | 30 | P | V |
| | | 5423.6 | 41.85 | -12.15 | 54 | 30.16 | 31.9 | 6.34 | 26.55 | 309 | 30 | 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 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) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 10360 | 50.37 | -17.83 | 68.2 | 57.11 | 39.94 | 9.78 | 56.46 | 101 | 84 | P | H |
| | | 15540 | 46.77 | -27.23 | 74 | 51.46 | 39.44 | 12.05 | 56.18 | - | - | P | H |
| | | | | | | | | | | | | | H |
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| 802.11n | | | | | | | | | | | | | H |
| HT20 | | | | | | | | | | | | | H |
| CH 36 | | 10360 | 51.8 | -16.4 | 68.2 | 58.54 | 39.94 | 9.78 | 56.46 | 235 | 355 | P | V |
| 5180MHz | | 15540 | 46.74 | -27.26 | 74 | 51.43 | 39.44 | 12.05 | 56.18 | - | - | P | V |
| | | | | | | | | | | | | | V |
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| | | | | | | | | | | | | | V |

| 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) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 10440 | 51.26 | -16.94 | 68.2 | 57.68 | 40.22 | 9.82 | 56.46 | 104 | 70 | P | H |
| | | 15660 | 46.27 | -27.73 | 74 | 51.26 | 38.9 | 12.04 | 55.93 | - | - | P | H |
| | | | | | | | | | | | | | H |
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| i802.11n | | | | | | | | | | | | | H |
| HT20 | | | | | | | | | | | | | H |
| CH 44 | | 10440 | 53.96 | -14.24 | 68.2 | 60.38 | 40.22 | 9.82 | 56.46 | 217 | 0 | P | V |
| 5220MHz | | 15660 | 45.84 | -28.16 | 74 | 50.83 | 38.9 | 12.04 | 55.93 | - | - | P | V |
| | | | | | | | | | | | | | V |
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| 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) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 10480 | 49.6 | -18.6 | 68.2 | 55.87 | 40.34 | 9.85 | 56.46 | - | - | P | H |
| | | 15720 | 46.3 | -27.7 | 74 | 51.37 | 38.68 | 12.05 | 55.8 | - | - | P | H |
| | | | | | | | | | | | | | H |
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| 802.11n | | | | | | | | | | | | | H |
| HT20 | | | | | | | | | | | | | H |
| CH 48 | | 10480 | 53.94 | -14.26 | 68.2 | 60.21 | 40.34 | 9.85 | 56.46 | 197 | 357 | P | V |
| 5240MHz | | 15720 | 45.93 | -28.07 | 74 | 51 | 38.68 | 12.05 | 55.8 | - | - | P | V |
| | | | | | | | | | | | | | V |
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**Remark**

1. No other spurious found.
2. All results are PASS against Peak and Average limit line.
3. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only.

## Band 1 5150~5250MHz

## WIFI 802.11n HT40 (Band Edge @ 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) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 802.11n HT40 CH 38 5190MHz | | 5148.72 | 60.86 | -13.14 | 74 | 48.96 | 32.2 | 6.21 | 26.51 | 233 | 6 | P | H |
| | | 5149.76 | 51.9 | -2.1 | 54 | 40 | 32.2 | 6.21 | 26.51 | 233 | 6 | A | H |
| | * | 5190 | 99.65 | - | - | 87.87 | 32.04 | 6.26 | 26.52 | 233 | 6 | P | H |
| | * | 5190 | 92.41 | - | - | 80.63 | 32.04 | 6.26 | 26.52 | 233 | 6 | A | H |
| | | 5454.12 | 51.14 | -22.86 | 74 | 39.41 | 31.92 | 6.36 | 26.55 | 233 | 6 | P | H |
| | | 5435.08 | 41.59 | -12.41 | 54 | 29.89 | 31.9 | 6.35 | 26.55 | 233 | 6 | A | H |
| | | 5149.76 | 55.86 | -18.14 | 74 | 43.96 | 32.2 | 6.21 | 26.51 | 100 | 24 | P | V |
| | | 5150 | 45.99 | -8.01 | 54 | 34.08 | 32.2 | 6.22 | 26.51 | 100 | 24 | A | V |
| | * | 5190 | 92.73 | - | - | 80.95 | 32.04 | 6.26 | 26.52 | 100 | 24 | P | V |
| | * | 5190 | 85.59 | - | - | 73.81 | 32.04 | 6.26 | 26.52 | 100 | 24 | A | V |
| | | 5361.44 | 51.46 | -22.54 | 74 | 40.01 | 31.67 | 6.32 | 26.54 | 100 | 24 | P | V |
| | | 5453 | 41.47 | -12.53 | 54 | 29.75 | 31.91 | 6.36 | 26.55 | 100 | 24 | A | V |
| 802.11n HT40 CH 46 5230MHz | | 5147.94 | 59.43 | -14.57 | 74 | 47.53 | 32.2 | 6.21 | 26.51 | 235 | 0 | P | H |
| | | 5149.76 | 48.57 | -5.43 | 54 | 36.53 | 32.2 | 6.35 | 26.51 | 235 | 0 | A | H |
| | * | 5230 | 105.82 | - | - | 94.18 | 31.88 | 6.28 | 26.52 | 235 | 0 | P | H |
| | * | 5230 | 97.86 | - | - | 86.22 | 31.88 | 6.28 | 26.52 | 235 | 0 | A | H |
| | | 5455.8 | 52.92 | -21.08 | 74 | 41.19 | 31.92 | 6.36 | 26.55 | 235 | 0 | P | H |
| | | 5351.36 | 42.48 | -11.52 | 54 | 30.95 | 31.61 | 6.46 | 26.54 | 235 | 0 | A | H |
| | | 5146.9 | 57.08 | -16.92 | 74 | 45.19 | 32.19 | 6.21 | 26.51 | 305 | 88 | P | V |
| | | 5150 | 47.02 | -6.98 | 54 | 34.97 | 32.2 | 6.36 | 26.51 | 305 | 88 | A | V |
| | * | 5230 | 99.73 | - | - | 88.09 | 31.88 | 6.28 | 26.52 | 305 | 88 | P | V |
| | * | 5230 | 92.12 | - | - | 80.48 | 31.88 | 6.28 | 26.52 | 305 | 88 | A | V |
| | | 5457.76 | 52.37 | -21.63 | 74 | 40.63 | 31.93 | 6.36 | 26.55 | 305 | 88 | P | V |
| | | 5457.48 | 42.07 | -11.93 | 54 | 30.19 | 31.93 | 6.5 | 26.55 | 305 | 88 | 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 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) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 10380 | 46.47 | -21.73 | 68.2 | 53.12 | 40.02 | 9.79 | 56.46 | - | - | P | H |
| | | 15570 | 46.14 | -27.86 | 74 | 50.89 | 39.32 | 12.05 | 56.12 | - | - | P | H |
| | | | | | | | | | | | | | H |
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| 802.11n | | | | | | | | | | | | | H |
| HT40 | | | | | | | | | | | | | H |
| CH 38 | | 10380 | 46.69 | -21.51 | 68.2 | 53.34 | 40.02 | 9.79 | 56.46 | - | - | P | V |
| 5190MHz | | 15570 | 45.62 | -28.38 | 74 | 50.37 | 39.32 | 12.05 | 56.12 | - | - | P | V |
| | | | | | | | | | | | | | V |
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| 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) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 10460 | 47.12 | -21.08 | 68.2 | 53.46 | 40.28 | 9.84 | 56.46 | - | - | P | H |
| | | 15690 | 45.22 | -28.78 | 74 | 50.29 | 38.75 | 12.04 | 55.86 | - | - | P | H |
| | | | | | | | | | | | | | H |
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| 802.11n | | | | | | | | | | | | | H |
| HT40 | | | | | | | | | | | | | H |
| CH 46 | | 10460 | 47.19 | -21.01 | 68.2 | 53.53 | 40.28 | 9.84 | 56.46 | - | - | P | V |
| 5230MHz | | 15690 | 45.14 | -28.86 | 74 | 50.21 | 38.75 | 12.04 | 55.86 | - | - | P | V |
| | | | | | | | | | | | | | V |
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| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |

**Remark**

1. No other spurious found.
2. All results are PASS against Peak and Average limit line.
3. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only.

## Band 1 5150~5250MHz

## WIFI 802.11ac VHT80 (Band Edge @ 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) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 802.11ac VHT80 CH 42 5210MHz | | 5140.92 | 61.31 | -12.69 | 74 | 49.43 | 32.18 | 6.21 | 26.51 | 235 | 7 | P | H |
| | | 5147.68 | 51.39 | -2.61 | 54 | 39.17 | 32.2 | 6.53 | 26.51 | 235 | 7 | A | H |
| | * | 5210 | 95.35 | - | - | 83.64 | 31.96 | 6.27 | 26.52 | 235 | 7 | P | H |
| | * | 5210 | 87.49 | - | - | 75.78 | 31.96 | 6.27 | 26.52 | 235 | 7 | A | H |
| | | 5435.36 | 52.71 | -21.29 | 74 | 41.01 | 31.9 | 6.35 | 26.55 | 235 | 7 | P | H |
| | | 5459.16 | 42.43 | -11.57 | 54 | 30.36 | 31.94 | 6.68 | 26.55 | 235 | 7 | A | H |
| | | 5140.66 | 59.7 | -14.3 | 74 | 47.83 | 32.18 | 6.2 | 26.51 | 315 | 34 | P | V |
| | | 5147.42 | 49.06 | -4.94 | 54 | 36.85 | 32.19 | 6.53 | 26.51 | 315 | 34 | A | V |
| | * | 5210 | 92.25 | - | - | 80.54 | 31.96 | 6.27 | 26.52 | 315 | 34 | P | V |
| | * | 5210 | 84.51 | - | - | 72.8 | 31.96 | 6.27 | 26.52 | 315 | 34 | A | V |
| | | 5453.28 | 51.6 | -22.4 | 74 | 39.88 | 31.91 | 6.36 | 26.55 | 315 | 34 | P | V |
| | | 5456.08 | 42.47 | -11.53 | 54 | 30.42 | 31.92 | 6.68 | 26.55 | 315 | 34 | 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 | 46.27 | -21.93 | 68.2 | 52.76 | 40.16 | 9.81 | 56.46 | - | - | P | H |
| | | 15630 | 46.23 | -27.77 | 74 | 51.12 | 39.05 | 12.05 | 55.99 | - | - | P | H |
| | | | | | | | | | | | | | H |
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| 802.11ac | | | | | | | | | | | | | H |
| VHT80 | | | | | | | | | | | | | H |
| CH 42 | | 10420 | 47.2 | -21 | 68.2 | 53.69 | 40.16 | 9.81 | 56.46 | - | - | P | V |
| 5210MHz | | 15630 | 45.78 | -28.22 | 74 | 50.67 | 39.05 | 12.05 | 55.99 | - | - | P | V |
| | | | | | | | | | | | | | V |
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| | | | | | | | | | | | | | V |

**Remark**

1. No other spurious found.
2. All results are PASS against Peak and Average limit line.
3. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only.

## Band 2 - 5250~5350MHz

## WIFI 802.11a (Band Edge @ 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) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 802.11a CH 52 5260MHz | | 5072.76 | 53.88 | -20.12 | 74 | 42.15 | 32.1 | 6.13 | 26.5 | 156 | 2 | P | H |
| | | 5074.12 | 43.67 | -10.33 | 54 | 31.94 | 32.1 | 6.13 | 26.5 | 156 | 2 | A | H |
| | * | 5260 | 108.5 | - | - | 96.96 | 31.78 | 6.29 | 26.53 | 156 | 2 | P | H |
| | * | 5260 | 100.44 | - | - | 88.9 | 31.78 | 6.29 | 26.53 | 156 | 2 | A | H |
| | | 5400.72 | 50.69 | -23.31 | 74 | 39.01 | 31.9 | 6.33 | 26.55 | 156 | 2 | P | H |
| | | 5435.76 | 41.62 | -12.38 | 54 | 29.92 | 31.9 | 6.35 | 26.55 | 156 | 2 | A | H |
| | | 5112.54 | 53.53 | -20.47 | 74 | 41.74 | 32.13 | 6.17 | 26.51 | 293 | 76 | P | V |
| | | 5043.18 | 43.39 | -10.61 | 54 | 31.73 | 32.06 | 6.1 | 26.5 | 293 | 76 | A | V |
| | * | 5260 | 103.45 | - | - | 91.91 | 31.78 | 6.29 | 26.53 | 293 | 76 | P | V |
| | * | 5260 | 95.83 | - | - | 84.29 | 31.78 | 6.29 | 26.53 | 293 | 76 | A | V |
| | | 5430.72 | 50.45 | -23.55 | 74 | 38.75 | 31.9 | 6.35 | 26.55 | 293 | 76 | P | V |
| | | 5457.84 | 41.79 | -12.21 | 54 | 30.05 | 31.93 | 6.36 | 26.55 | 293 | 76 | A | V |
| 802.11a CH 60 5300MHz | | 5059.16 | 54.44 | -19.56 | 74 | 42.72 | 32.1 | 6.12 | 26.5 | 150 | 2 | P | H |
| | | 5105.4 | 43.39 | -10.61 | 54 | 31.61 | 32.11 | 6.17 | 26.5 | 150 | 2 | A | H |
| | * | 5300 | 108.83 | - | - | 97.36 | 31.7 | 6.3 | 26.53 | 150 | 2 | P | H |
| | * | 5300 | 100.61 | - | - | 89.14 | 31.7 | 6.3 | 26.53 | 150 | 2 | A | H |
| | | 5351.76 | 54.21 | -19.79 | 74 | 42.82 | 31.61 | 6.32 | 26.54 | 150 | 2 | P | H |
| | | 5350.08 | 45.33 | -8.67 | 54 | 33.95 | 31.6 | 6.32 | 26.54 | 150 | 2 | A | H |
| | | 5051.34 | 53.24 | -20.76 | 74 | 41.53 | 32.1 | 6.11 | 26.5 | 300 | 75 | P | V |
| | | 5036.72 | 43.4 | -10.6 | 54 | 31.79 | 32.02 | 6.09 | 26.5 | 300 | 75 | A | V |
| | * | 5300 | 102.8 | - | - | 91.33 | 31.7 | 6.3 | 26.53 | 300 | 75 | P | V |
| | * | 5300 | 95.13 | - | - | 83.66 | 31.7 | 6.3 | 26.53 | 300 | 75 | A | V |
| | | 5354.16 | 51.13 | -22.87 | 74 | 39.73 | 31.62 | 6.32 | 26.54 | 300 | 75 | P | V |
| | | 5351.28 | 41.84 | -12.16 | 54 | 30.45 | 31.61 | 6.32 | 26.54 | 300 | 75 | A | V |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **802.11a CH 64 5320MHz** | * | 5320 | 106.25 | - | - | 94.81 | 31.66 | 6.31 | 26.53 | 218 | 7 | P | H |
| | * | 5320 | 98.48 | - | - | 87.04 | 31.66 | 6.31 | 26.53 | 218 | 7 | A | H |
| | | 5352.8 | 62.76 | -11.24 | 74 | 51.36 | 31.62 | 6.32 | 26.54 | 218 | 7 | P | H |
| | | 5350.24 | 51.33 | -2.67 | 54 | 39.95 | 31.6 | 6.32 | 26.54 | 218 | 7 | A | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | * | 5320 | 102.33 | - | - | 90.89 | 31.66 | 6.31 | 26.53 | 400 | 59 | P | V |
| | * | 5320 | 94.56 | - | - | 83.12 | 31.66 | 6.31 | 26.53 | 400 | 59 | A | V |
| | | 5352.64 | 59.37 | -14.63 | 74 | 47.97 | 31.62 | 6.32 | 26.54 | 400 | 59 | P | V |
| | | 5350.56 | 48.51 | -5.49 | 54 | 37.13 | 31.6 | 6.32 | 26.54 | 400 | 59 | 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 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) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 802.11a CH 52 5260MHz | | 10520 | 47.87 | -20.33 | 68.2 | 54.07 | 40.36 | 9.87 | 56.43 | - | - | P | H |
| | | 15780 | 45.87 | -28.13 | 74 | 50.88 | 38.62 | 12.04 | 55.67 | - | - | P | H |
| | | | | | | | | | | | | | H |
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| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | 10520 | 53.07 | -15.13 | 68.2 | 59.27 | 40.36 | 9.87 | 56.43 | 198 | 354 | P | V |
| | | 15780 | 46.24 | -27.76 | 74 | 51.25 | 38.62 | 12.04 | 55.67 | - | - | P | V |
| | | | | | | | | | | | | | V |
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| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |

| 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) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 10600 | 47.59 | -26.41 | 74 | 53.79 | 40.2 | 9.92 | 56.32 | - | - | P | H |
| | | 15900 | 46.59 | -27.41 | 74 | 51.27 | 38.7 | 12.03 | 55.41 | - | - | P | H |
| | | | | | | | | | | | | | H |
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| | | | | | | | | | | | | | H |
| i802.11a CH 60 5300MHz | | | | | | | | | | | | | H |
| | | 10600 | 51.19 | -22.81 | 74 | 57.39 | 40.2 | 9.92 | 56.32 | 191 | 356 | P | V |
| | | 10600 | 41.05 | -12.95 | 54 | 47.25 | 40.2 | 9.92 | 56.32 | 191 | 356 | A | V |
| | | 15900 | 47.75 | -26.25 | 74 | 52.43 | 38.7 | 12.03 | 55.41 | - | - | P | V |
| | | | | | | | | | | | | | V |
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| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |

| 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) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 10640 | 49.55 | -24.45 | 74 | 55.56 | 40.32 | 9.94 | 56.27 | 245 | 336 | P | H |
| | | 10640 | 39.81 | -14.19 | 54 | 45.82 | 40.32 | 9.94 | 56.27 | 245 | 336 | A | H |
| | | 15960 | 45.53 | -28.47 | 74 | 50.27 | 38.52 | 12.03 | 55.29 | - | - | P | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
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| | | | | | | | | | | | | | H |
| **802.11a CH 64 5320MHz** | | | | | | | | | | | | | H |
| | | 10640 | 50.54 | -23.46 | 74 | 56.55 | 40.32 | 9.94 | 56.27 | 207 | 355 | P | V |
| | | 10640 | 40.37 | -13.63 | 54 | 46.38 | 40.32 | 9.94 | 56.27 | 207 | 355 | A | V |
| | | 15960 | 46.76 | -27.24 | 74 | 51.5 | 38.52 | 12.03 | 55.29 | - | - | P | V |
| | | | | | | | | | | | | | V |
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| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |

**Remark**

1. No other spurious found.
2. All results are PASS against Peak and Average limit line.
3. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only.

## Band 2 5250~5350MHz

## WIFI 802.11n HT20 (Band Edge @ 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) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 5092.48 | 53.18 | -20.82 | 74 | 41.43 | 32.1 | 6.15 | 26.5 | 240 | 5 | P | H |
| | | 5071.06 | 43.9 | -10.1 | 54 | 32.17 | 32.1 | 6.13 | 26.5 | 240 | 5 | A | H |
| | * | 5260 | 109.02 | - | - | 97.48 | 31.78 | 6.29 | 26.53 | 240 | 5 | P | H |
| | * | 5260 | 101.12 | - | - | 89.58 | 31.78 | 6.29 | 26.53 | 240 | 5 | A | H |
| 802.11n | | 5458.32 | 51.04 | -22.96 | 74 | 39.3 | 31.93 | 6.36 | 26.55 | 240 | 5 | P | H |
| HT20 | | 5456.4 | 42.06 | -11.94 | 54 | 30.32 | 31.93 | 6.36 | 26.55 | 240 | 5 | A | H |
| CH 52 | | 5074.8 | 54.26 | -19.74 | 74 | 42.53 | 32.1 | 6.13 | 26.5 | 382 | 32 | P | V |
| 5260MHz | | 5056.78 | 43.38 | -10.62 | 54 | 31.67 | 32.1 | 6.11 | 26.5 | 382 | 32 | A | V |
| | * | 5260 | 104.84 | - | - | 93.3 | 31.78 | 6.29 | 26.53 | 382 | 32 | P | V |
| | * | 5260 | 97.18 | - | - | 85.64 | 31.78 | 6.29 | 26.53 | 382 | 32 | A | V |
| | | 5428.08 | 50.86 | -23.14 | 74 | 39.16 | 31.9 | 6.35 | 26.55 | 382 | 32 | P | V |
| | | 5452.56 | 42.04 | -11.96 | 54 | 30.32 | 31.91 | 6.36 | 26.55 | 382 | 32 | A | V |
| | | 5082.28 | 53.41 | -20.59 | 74 | 41.67 | 32.1 | 6.14 | 26.5 | 228 | 0 | P | H |
| | | 5094.52 | 43.61 | -10.39 | 54 | 31.86 | 32.1 | 6.15 | 26.5 | 228 | 0 | A | H |
| | * | 5300 | 108.21 | - | - | 96.74 | 31.7 | 6.3 | 26.53 | 228 | 0 | P | H |
| | * | 5300 | 100.35 | - | - | 88.88 | 31.7 | 6.3 | 26.53 | 228 | 0 | A | H |
| 802.11n | | 5350.32 | 59.13 | -14.87 | 74 | 47.75 | 31.6 | 6.32 | 26.54 | 228 | 0 | P | H |
| HT20 | | 5350.8 | 45.5 | -8.5 | 54 | 34.12 | 31.6 | 6.32 | 26.54 | 228 | 0 | A | H |
| CH 60 | | 5074.8 | 53.04 | -20.96 | 74 | 41.31 | 32.1 | 6.13 | 26.5 | 394 | 29 | P | V |
| 5300MHz | | 5064.26 | 43.45 | -10.55 | 54 | 31.73 | 32.1 | 6.12 | 26.5 | 394 | 29 | A | V |
| | * | 5300 | 103.64 | - | - | 92.17 | 31.7 | 6.3 | 26.53 | 394 | 29 | P | V |
| | * | 5300 | 96.12 | - | - | 84.65 | 31.7 | 6.3 | 26.53 | 394 | 29 | A | V |
| | | 5354.64 | 53.89 | -20.11 | 74 | 42.48 | 31.63 | 6.32 | 26.54 | 394 | 29 | P | V |
| | | 5350.08 | 43.21 | -10.79 | 54 | 31.83 | 31.6 | 6.32 | 26.54 | 394 | 29 | A | V |

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | * | 5320 | 106.26 | - | - | 94.82 | 31.66 | 6.31 | 26.53 | 218 | 6 | P | H |
| | * | 5320 | 98.38 | - | - | 86.94 | 31.66 | 6.31 | 26.53 | 218 | 6 | A | H |
| | | 5350.24 | 62.39 | -11.61 | 74 | 51.01 | 31.6 | 6.32 | 26.54 | 218 | 6 | P | H |
| | | 5350.24 | 51.34 | -2.66 | 54 | 39.96 | 31.6 | 6.32 | 26.54 | 218 | 6 | A | H |
| **802.11n** | | | | | | | | | | | | | H |
| **HT20** | | | | | | | | | | | | | H |
| **CH 64** | * | 5320 | 103.29 | - | - | 91.85 | 31.66 | 6.31 | 26.53 | 308 | 36 | P | V |
| **5320MHz** | * | 5320 | 95.45 | - | - | 84.01 | 31.66 | 6.31 | 26.53 | 308 | 36 | A | V |
| | | 5351.04 | 59.95 | -14.05 | 74 | 48.56 | 31.61 | 6.32 | 26.54 | 308 | 36 | P | V |
| | | 5350.08 | 47.68 | -6.32 | 54 | 36.3 | 31.6 | 6.32 | 26.54 | 308 | 36 | 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 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) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 10520 | 50.97 | -17.23 | 68.2 | 57.17 | 40.36 | 9.87 | 56.43 | 103 | 73 | P | H |
| | | 15780 | 46.45 | -27.55 | 74 | 51.46 | 38.62 | 12.04 | 55.67 | - | - | P | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
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| 802.11n | | | | | | | | | | | | | H |
| HT20 | | | | | | | | | | | | | H |
| CH 52 | | 10520 | 52.42 | -15.78 | 68.2 | 58.62 | 40.36 | 9.87 | 56.43 | 203 | 354 | P | V |
| 5260MHz | | 15780 | 46.87 | -27.13 | 74 | 51.88 | 38.62 | 12.04 | 55.67 | - | - | P | V |
| | | | | | | | | | | | | | V |
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| | | | | | | | | | | | | | V |

| 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) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 10600 | 50.01 | -23.99 | 74 | 56.21 | 40.2 | 9.92 | 56.32 | 163 | 47 | P | H |
| | | 10600 | 39.89 | -14.11 | 54 | 46.09 | 40.2 | 9.92 | 56.32 | 163 | 47 | A | H |
| | | 15900 | 46.6 | -27.4 | 74 | 51.28 | 38.7 | 12.03 | 55.41 | - | - | P | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
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| 802.11n | | | | | | | | | | | | | H |
| HT20 | | | | | | | | | | | | | H |
| CH 60 | | 10600 | 50.91 | -23.09 | 74 | 57.11 | 40.2 | 9.92 | 56.32 | 206 | 356 | P | V |
| 5300MHz | | 10600 | 41.67 | -12.33 | 54 | 47.87 | 40.2 | 9.92 | 56.32 | 206 | 356 | A | V |
| | | 15900 | 46.34 | -27.66 | 74 | 51.02 | 38.7 | 12.03 | 55.41 | - | - | P | V |
| | | | | | | | | | | | | | V |
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| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |

| 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) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 10640 | 49.69 | -24.31 | 74 | 55.7 | 40.32 | 9.94 | 56.27 | 245 | 332 | P | H |
| | | 10640 | 39.73 | -14.27 | 54 | 45.74 | 40.32 | 9.94 | 56.27 | 245 | 332 | A | H |
| | | 15960 | 46.14 | -27.86 | 74 | 50.88 | 38.52 | 12.03 | 55.29 | - | - | P | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
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| 802.11n | | | | | | | | | | | | | H |
| HT20 | | | | | | | | | | | | | H |
| CH 64 | | 10640 | 50.96 | -23.04 | 74 | 56.97 | 40.32 | 9.94 | 56.27 | 202 | 355 | P | V |
| 5320MHz | | 10640 | 40.28 | -13.72 | 54 | 46.29 | 40.32 | 9.94 | 56.27 | 202 | 355 | A | V |
| | | 15960 | 45.92 | -28.08 | 74 | 50.66 | 38.52 | 12.03 | 55.29 | - | - | P | V |
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**Remark**

1. No other spurious found.
2. All results are PASS against Peak and Average limit line.
3. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only.

## Band 2 5250~5350MHz

## WIFI 802.11n HT40 (Band Edge @ 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) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 802.11n HT40 CH 54 5270MHz | | 5076.5 | 53.15 | -20.85 | 74 | 41.42 | 32.1 | 6.13 | 26.5 | 216 | 7 | P | H |
| | | 5148.58 | 43.41 | -10.59 | 54 | 31.51 | 32.2 | 6.21 | 26.51 | 216 | 7 | A | H |
| | * | 5270 | 105.96 | - | - | 94.44 | 31.76 | 6.29 | 26.53 | 216 | 7 | P | H |
| | * | 5270 | 98.7 | - | - | 87.18 | 31.76 | 6.29 | 26.53 | 216 | 7 | A | H |
| | | 5355.6 | 56.97 | -17.03 | 74 | 45.56 | 31.63 | 6.32 | 26.54 | 216 | 7 | P | H |
| | | 5351.28 | 47.57 | -6.43 | 54 | 36.18 | 31.61 | 6.32 | 26.54 | 216 | 7 | A | H |
| | | 5119.34 | 52.47 | -21.53 | 74 | 40.66 | 32.14 | 6.18 | 26.51 | 398 | 40 | P | V |
| | | 5149.6 | 43.37 | -10.63 | 54 | 31.47 | 32.2 | 6.21 | 26.51 | 398 | 40 | A | V |
| | * | 5270 | 103.09 | - | - | 91.57 | 31.76 | 6.29 | 26.53 | 398 | 40 | P | V |
| | * | 5270 | 95.72 | - | - | 84.2 | 31.76 | 6.29 | 26.53 | 398 | 40 | A | V |
| | | 5350.08 | 53.13 | -20.87 | 74 | 41.75 | 31.6 | 6.32 | 26.54 | 398 | 40 | P | V |
| | | 5351.04 | 44.4 | -9.6 | 54 | 33.01 | 31.61 | 6.32 | 26.54 | 398 | 40 | A | V |
| 802.11n HT40 CH 62 5310MHz | | 5071.4 | 52.94 | -21.06 | 74 | 41.21 | 32.1 | 6.13 | 26.5 | 214 | 4 | P | H |
| | | 5132.6 | 42.95 | -11.05 | 54 | 31.09 | 32.17 | 6.2 | 26.51 | 214 | 4 | A | H |
| | * | 5310 | 99.95 | - | - | 88.5 | 31.68 | 6.3 | 26.53 | 214 | 4 | P | H |
| | * | 5310 | 92.68 | - | - | 81.23 | 31.68 | 6.3 | 26.53 | 214 | 4 | A | H |
| | | 5350.8 | 61.06 | -12.94 | 74 | 49.68 | 31.6 | 6.32 | 26.54 | 214 | 4 | P | H |
| | | 5351.28 | 50.99 | -3.01 | 54 | 39.6 | 31.61 | 6.32 | 26.54 | 214 | 4 | A | H |
| | | 5143.48 | 52.16 | -21.84 | 74 | 40.27 | 32.19 | 6.21 | 26.51 | 393 | 42 | P | V |
| | | 5065.62 | 43.02 | -10.98 | 54 | 31.3 | 32.1 | 6.12 | 26.5 | 393 | 42 | A | V |
| | * | 5310 | 97.98 | - | - | 86.53 | 31.68 | 6.3 | 26.53 | 393 | 42 | P | V |
| | * | 5310 | 91 | - | - | 79.55 | 31.68 | 6.3 | 26.53 | 393 | 42 | A | V |
| | | 5354.64 | 56.85 | -17.15 | 74 | 45.44 | 31.63 | 6.32 | 26.54 | 393 | 42 | P | V |
| | | 5350.8 | 47.96 | -6.04 | 54 | 36.58 | 31.6 | 6.32 | 26.54 | 393 | 42 | 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 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) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 10540 | 49.83 | -18.37 | 68.2 | 56.03 | 40.32 | 9.88 | 56.4 | 104 | 74 | P | H |
| | | 15810 | 46.25 | -27.75 | 74 | 51.21 | 38.61 | 12.04 | 55.61 | - | - | P | H |
| | | | | | | | | | | | | | H |
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| 802.11n | | | | | | | | | | | | | H |
| HT40 | | | | | | | | | | | | | H |
| CH 54 | | 10540 | 50.45 | -17.75 | 68.2 | 56.65 | 40.32 | 9.88 | 56.4 | 203 | 355 | P | V |
| 5270MHz | | 15810 | 46.61 | -27.39 | 74 | 51.57 | 38.61 | 12.04 | 55.61 | - | - | P | V |
| | | | | | | | | | | | | | V |
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| 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) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 10620 | 47.85 | -26.15 | 74 | 53.95 | 40.26 | 9.93 | 56.29 | - | - | P | H |
| | | 15930 | 44.09 | -29.91 | 74 | 48.79 | 38.61 | 12.04 | 55.35 | - | - | P | H |
| | | | | | | | | | | | | | H |
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| 802.11n | | | | | | | | | | | | | H |
| HT40 | | | | | | | | | | | | | H |
| CH 62 | | 10620 | 47.28 | -26.72 | 74 | 53.38 | 40.26 | 9.93 | 56.29 | - | - | P | V |
| 5310MHz | | 15930 | 44.44 | -29.56 | 74 | 49.14 | 38.61 | 12.04 | 55.35 | - | - | P | V |
| | | | | | | | | | | | | | V |
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**Remark**

1. No other spurious found.
2. All results are PASS against Peak and Average limit line.
3. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only.

## Band 2 5250~5350MHz

## WIFI 802.11ac VHT80 (Band Edge @ 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) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 802.11ac VHT80 CH 58 5290MHz | | 5137.02 | 52.83 | -21.17 | 74 | 40.97 | 32.17 | 6.2 | 26.51 | 211 | 6 | P | H |
| | | 5143.82 | 43.87 | -10.13 | 54 | 31.98 | 32.19 | 6.21 | 26.51 | 211 | 6 | A | H |
| | * | 5290 | 97.42 | - | - | 85.93 | 31.72 | 6.3 | 26.53 | 211 | 6 | P | H |
| | * | 5290 | 89.94 | - | - | 78.45 | 31.72 | 6.3 | 26.53 | 211 | 6 | A | H |
| | | 5351.76 | 63.42 | -10.58 | 74 | 52.03 | 31.61 | 6.32 | 26.54 | 211 | 6 | P | H |
| | | 5350.56 | 51.5 | -2.5 | 54 | 40.12 | 31.6 | 6.32 | 26.54 | 211 | 6 | A | H |
| | | 5089.08 | 53 | -21 | 74 | 41.25 | 32.1 | 6.15 | 26.5 | 381 | 41 | P | V |
| | | 5139.4 | 43.03 | -10.97 | 54 | 31.16 | 32.18 | 6.2 | 26.51 | 381 | 41 | A | V |
| | * | 5290 | 94.94 | - | - | 83.45 | 31.72 | 6.3 | 26.53 | 381 | 41 | P | V |
| | * | 5290 | 87.76 | - | - | 76.27 | 31.72 | 6.3 | 26.53 | 381 | 41 | A | V |
| | | 5351.76 | 60.24 | -13.76 | 74 | 48.85 | 31.61 | 6.32 | 26.54 | 381 | 41 | P | V |
| | | 5353.44 | 48.38 | -5.62 | 54 | 36.98 | 31.62 | 6.32 | 26.54 | 381 | 41 | 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 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) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 10580 | 47.2 | -21 | 68.2 | 53.4 | 40.24 | 9.91 | 56.35 | - | - | P | H |
| | | 15870 | 44.74 | -29.26 | 74 | 49.52 | 38.67 | 12.03 | 55.48 | - | - | P | H |
| | | | | | | | | | | | | | H |
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| 802.11ac | | | | | | | | | | | | | H |
| VHT80 | | | | | | | | | | | | | H |
| CH 58 | | 10580 | 46.67 | -21.53 | 68.2 | 52.87 | 40.24 | 9.91 | 56.35 | - | - | P | V |
| 5290MHz | | 15870 | 45.37 | -28.63 | 74 | 50.15 | 38.67 | 12.03 | 55.48 | - | - | P | V |
| | | | | | | | | | | | | | V |
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**Remark**

1. No other spurious found.
2. All results are PASS against Peak and Average limit line.
3. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only.

## Band 3 - 5470~5725MHz

## WIFI 802.11a (Band Edge @ 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) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 802.11a CH 100 5500MHz | | 5460.08 | 61.91 | -6.29 | 68.2 | 50.16 | 31.94 | 6.36 | 26.55 | 175 | 357 | P | H |
| | | 5470 | 66.17 | -2.03 | 68.2 | 54.38 | 31.98 | 6.37 | 26.56 | 175 | 357 | P | H |
| | | 5459.76 | 48.83 | -5.17 | 54 | 37.08 | 31.94 | 6.36 | 26.55 | 175 | 357 | A | H |
| | * | 5500 | 110.62 | - | - | 98.69 | 32.1 | 6.39 | 26.56 | 175 | 357 | P | H |
| | * | 5500 | 102.71 | - | - | 90.78 | 32.1 | 6.39 | 26.56 | 175 | 357 | A | H |
| | | | | | | | | | | | | | H |
| | | 5458.16 | 55.18 | -18.82 | 74 | 43.44 | 31.93 | 6.36 | 26.55 | 100 | 16 | P | V |
| | | 5468.72 | 62.62 | -5.58 | 68.2 | 50.84 | 31.97 | 6.37 | 26.56 | 100 | 16 | P | V |
| | | 5458.96 | 46.2 | -7.8 | 54 | 34.45 | 31.94 | 6.36 | 26.55 | 100 | 16 | A | V |
| | * | 5500 | 106.8 | - | - | 94.87 | 32.1 | 6.39 | 26.56 | 100 | 16 | P | V |
| | * | 5500 | 98.97 | - | - | 87.04 | 32.1 | 6.39 | 26.56 | 100 | 16 | A | V |
| | | | | | | | | | | | | | V |
| 802.11a CH 116 5580MHz | | 5416.96 | 51.16 | -22.84 | 74 | 39.47 | 31.9 | 6.34 | 26.55 | 192 | 323 | P | H |
| | | 5460.64 | 51.95 | -16.25 | 68.2 | 40.2 | 31.94 | 6.36 | 26.55 | 192 | 323 | P | H |
| | | 5432.08 | 41.87 | -12.13 | 54 | 30.17 | 31.9 | 6.35 | 26.55 | 192 | 323 | A | H |
| | * | 5580 | 107.31 | - | - | 95.47 | 32 | 6.43 | 26.59 | 192 | 323 | P | H |
| | * | 5580 | 99.79 | - | - | 87.95 | 32 | 6.43 | 26.59 | 192 | 323 | A | H |
| | | 5741.69 | 53.34 | -14.86 | 68.2 | 41.07 | 32.37 | 6.56 | 26.66 | 192 | 323 | P | H |
| | | 5413.36 | 51.25 | -22.75 | 74 | 39.56 | 31.9 | 6.34 | 26.55 | 100 | 17 | P | V |
| | | 5459.92 | 51.14 | -22.86 | 74 | 39.39 | 31.94 | 6.36 | 26.55 | 100 | 17 | P | V |
| | | 5456.08 | 41.73 | -12.27 | 54 | 30 | 31.92 | 6.36 | 26.55 | 100 | 17 | A | V |
| | * | 5580 | 106.17 | - | - | 94.33 | 32 | 6.43 | 26.59 | 100 | 17 | P | V |
| | * | 5580 | 98.43 | - | - | 86.59 | 32 | 6.43 | 26.59 | 100 | 17 | A | V |
| | | 5765 | 52.04 | -16.16 | 68.2 | 39.73 | 32.4 | 6.58 | 26.67 | 100 | 17 | P | V |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 802.11a CH 140 5700MHz | * | 5700 | 104.89 | - | - | 92.8 | 32.2 | 6.53 | 26.64 | 168 | 326 | P | H |
| | * | 5700 | 97.19 | - | - | 85.1 | 32.2 | 6.53 | 26.64 | 168 | 326 | A | H |
| | | 5725.08 | 64.97 | -3.23 | 68.2 | 52.77 | 32.3 | 6.55 | 26.65 | 168 | 326 | P | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | * | 5700 | 104.79 | - | - | 92.7 | 32.2 | 6.53 | 26.64 | 237 | 276 | P | V |
| | * | 5700 | 97.15 | - | - | 85.06 | 32.2 | 6.53 | 26.64 | 237 | 276 | A | V |
| | | 5725.32 | 64.96 | -3.24 | 68.2 | 52.76 | 32.3 | 6.55 | 26.65 | 237 | 276 | 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 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) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 11000 | 48.88 | -25.12 | 74 | 53.79 | 40.7 | 10.16 | 55.77 | 197 | 147 | P | H |
| | | 11000 | 35.14 | -18.86 | 54 | 40.05 | 40.7 | 10.16 | 55.77 | 197 | 147 | A | H |
| | | 16500 | 45.07 | -23.13 | 68.2 | 48.17 | 39.9 | 12.31 | 55.31 | - | - | P | H |
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| | | | | | | | | | | | | | H |
| 802.11a CH 100 5500MHz | | 11000 | 48.76 | -25.24 | 74 | 53.67 | 40.7 | 10.16 | 55.77 | 100 | 353 | P | V |
| | | 11000 | 37.13 | -16.87 | 54 | 42.04 | 40.7 | 10.16 | 55.77 | 100 | 353 | A | V |
| | | 16500 | 45.03 | -23.17 | 68.2 | 48.13 | 39.9 | 12.31 | 55.31 | - | - | P | V |
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| 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) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 11160 | 47.22 | -26.78 | 74 | 52.81 | 39.96 | 10.22 | 55.77 | - | - | P | H |
| | | 16740 | 45.28 | -22.92 | 68.2 | 48.1 | 40.26 | 12.45 | 55.53 | - | - | P | H |
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| 802.11a CH 116 5580MHz | | | | | | | | | | | | | H |
| | | 11160 | 47.59 | -26.41 | 74 | 53.18 | 39.96 | 10.22 | 55.77 | - | - | P | V |
| | | 16740 | 45.71 | -22.49 | 68.2 | 48.53 | 40.26 | 12.45 | 55.53 | - | - | P | V |
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| 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) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 802.11a CH 140 5700MHz | | 11400 | 47.49 | -26.51 | 74 | 53.04 | 39.9 | 10.33 | 55.78 | - | - | P | H |
| | | 17100 | 47.01 | -21.19 | 68.2 | 49.85 | 40.4 | 12.71 | 55.95 | - | - | P | H |
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| | | | | | | | | | | | | | H |
| | | 11400 | 47.35 | -26.65 | 74 | 52.9 | 39.9 | 10.33 | 55.78 | - | - | P | V |
| | | 17100 | 45.96 | -22.24 | 68.2 | 48.8 | 40.4 | 12.71 | 55.95 | - | - | P | V |
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**Remark**

1. No other spurious found.
2. All results are PASS against Peak and Average limit line.
3. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only.

## Band 3 - 5470~5725MHz

## WIFI 802.11n HT20 (Band Edge @ 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) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 5457.2 | 61.59 | -12.41 | 74 | 49.85 | 31.93 | 6.36 | 26.55 | 220 | 6 | P | H |
| | | 5468.4 | 64.98 | -3.22 | 68.2 | 53.2 | 31.97 | 6.37 | 26.56 | 220 | 6 | P | H |
| | | 5459.92 | 48.81 | -5.19 | 54 | 37.06 | 31.94 | 6.36 | 26.55 | 220 | 6 | A | H |
| | * | 5500 | 107.32 | - | - | 95.39 | 32.1 | 6.39 | 26.56 | 220 | 6 | P | H |
| 802.11n | * | 5500 | 99.72 | - | - | 87.79 | 32.1 | 6.39 | 26.56 | 220 | 6 | A | H |
| HT20 | | | | | | | | | | | | | H |
| CH 100 | | 5455.92 | 56.21 | -17.79 | 74 | 44.48 | 31.92 | 6.36 | 26.55 | 100 | 6 | P | V |
| 5500MHz | | 5466.48 | 59.12 | -9.08 | 68.2 | 47.34 | 31.97 | 6.37 | 26.56 | 100 | 6 | P | V |
| | | 5460 | 44.43 | -9.57 | 54 | 32.68 | 31.94 | 6.36 | 26.55 | 100 | 6 | A | V |
| | * | 5500 | 103 | - | - | 91.07 | 32.1 | 6.39 | 26.56 | 100 | 6 | P | V |
| | * | 5500 | 95.33 | - | - | 83.4 | 32.1 | 6.39 | 26.56 | 100 | 6 | A | V |
| | | | | | | | | | | | | | V |
| | | 5377.36 | 51.28 | -22.72 | 74 | 39.74 | 31.76 | 6.32 | 26.54 | 204 | 0 | P | H |
| | | 5464.72 | 51.51 | -16.69 | 68.2 | 39.74 | 31.96 | 6.37 | 26.56 | 204 | 0 | P | H |
| | | 5452.24 | 42.16 | -11.84 | 54 | 30.44 | 31.91 | 6.36 | 26.55 | 204 | 0 | A | H |
| | * | 5580 | 107.74 | - | - | 95.9 | 32 | 6.43 | 26.59 | 204 | 0 | P | H |
| 802.11n | * | 5580 | 99.57 | - | - | 87.73 | 32 | 6.43 | 26.59 | 204 | 0 | A | H |
| HT20 | | 5749.88 | 52.61 | -15.59 | 68.2 | 40.3 | 32.4 | 6.57 | 26.66 | 204 | 0 | P | H |
| CH 116 | | 5453.44 | 51.1 | -22.9 | 74 | 39.38 | 31.91 | 6.36 | 26.55 | 100 | 18 | P | V |
| 5580MHz | | 5469.52 | 51.39 | -16.81 | 68.2 | 39.6 | 31.98 | 6.37 | 26.56 | 100 | 18 | P | V |
| | | 5432.08 | 41.82 | -12.18 | 54 | 30.12 | 31.9 | 6.35 | 26.55 | 100 | 18 | A | V |
| | * | 5580 | 106.77 | - | - | 94.93 | 32 | 6.43 | 26.59 | 100 | 18 | P | V |
| | * | 5580 | 99.08 | - | - | 87.24 | 32 | 6.43 | 26.59 | 100 | 18 | A | V |
| | | 5752.4 | 52.49 | -15.71 | 68.2 | 40.18 | 32.4 | 6.57 | 26.66 | 100 | 18 | P | V |

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | * | 5700 | 102.4 | - | - | 90.31 | 32.2 | 6.53 | 26.64 | 184 | 4 | P | H |
| | * | 5700 | 94.72 | - | - | 82.63 | 32.2 | 6.53 | 26.64 | 184 | 4 | A | H |
| | | 5725.24 | 65.3 | -2.9 | 68.2 | 53.1 | 32.3 | 6.55 | 26.65 | 184 | 4 | P | H |
| | | | | | | | | | | | | | H |
| **802.11n** | | | | | | | | | | | | | H |
| **HT20** | | | | | | | | | | | | | H |
| **CH 140** | * | 5700 | 100.88 | - | - | 88.79 | 32.2 | 6.53 | 26.64 | 100 | 24 | P | V |
| **5700MHz** | * | 5700 | 93.08 | - | - | 80.99 | 32.2 | 6.53 | 26.64 | 100 | 24 | A | V |
| | | 5725 | 61.99 | -6.21 | 68.2 | 49.79 | 32.3 | 6.55 | 26.65 | 100 | 24 | P | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |

**Remark**

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

## Band 3 - 5470~5725MHz

## WIFI 802.11n HT20 (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) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 11000 | 47.97 | -26.03 | 74 | 52.88 | 40.7 | 10.16 | 55.77 | - | - | P | H |
| | | 16500 | 44.85 | -23.35 | 68.2 | 47.95 | 39.9 | 12.31 | 55.31 | - | - | P | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
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| 802.11n | | | | | | | | | | | | | H |
| HT20 | | | | | | | | | | | | | H |
| CH 100 | | 11000 | 49.78 | -24.22 | 74 | 54.69 | 40.7 | 10.16 | 55.77 | 100 | 353 | P | V |
| 5500MHz | | 11000 | 38.22 | -15.78 | 54 | 43.13 | 40.7 | 10.16 | 55.77 | 100 | 353 | A | V |
| | | 16500 | 45.03 | -23.17 | 68.2 | 48.13 | 39.9 | 12.31 | 55.31 | - | - | P | V |
| | | | | | | | | | | | | | V |
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| | | | | | | | | | | | | | V |

| 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) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 11160 | 47.44 | -26.56 | 74 | 53.03 | 39.96 | 10.22 | 55.77 | - | - | P | H |
| | | 16740 | 47.37 | -20.83 | 68.2 | 50.19 | 40.26 | 12.45 | 55.53 | - | - | P | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
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| 802.11n | | | | | | | | | | | | | H |
| HT20 | | | | | | | | | | | | | H |
| CH 116 | | 11160 | 47.94 | -26.06 | 74 | 53.53 | 39.96 | 10.22 | 55.77 | - | - | P | V |
| 5580MHz | | 16740 | 46.94 | -21.26 | 68.2 | 49.76 | 40.26 | 12.45 | 55.53 | - | - | P | V |
| | | | | | | | | | | | | | V |
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| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |

| 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) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 11400 | 47.38 | -26.62 | 74 | 52.93 | 39.9 | 10.33 | 55.78 | - | - | P | H |
| | | 17100 | 47.08 | -21.12 | 68.2 | 49.92 | 40.4 | 12.71 | 55.95 | - | - | P | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
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| 802.11n | | | | | | | | | | | | | H |
| HT20 | | | | | | | | | | | | | H |
| CH 140 | | 11400 | 46.89 | -27.11 | 74 | 52.44 | 39.9 | 10.33 | 55.78 | - | - | P | V |
| 5700MHz | | 17100 | 46.11 | -22.09 | 68.2 | 48.95 | 40.4 | 12.71 | 55.95 | - | - | P | V |
| | | | | | | | | | | | | | V |
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| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |

**Remark**

1. No other spurious found.
2. All results are PASS against Peak and Average limit line.
3. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only.

## Band 3 - 5470~5725MHz

## WIFI 802.11n HT40 (Band Edge @ 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) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 5459.68 | 59.82 | -14.18 | 74 | 48.07 | 31.94 | 6.36 | 26.55 | 159 | 317 | P | H |
| | | 5469.04 | 65.1 | -3.1 | 68.2 | 53.31 | 31.98 | 6.37 | 26.56 | 159 | 317 | P | H |
| | | 5459.68 | 49.63 | -4.37 | 54 | 37.88 | 31.94 | 6.36 | 26.55 | 159 | 317 | A | H |
| | * | 5510 | 102.1 | - | - | 90.19 | 32.08 | 6.39 | 26.56 | 159 | 317 | P | H |
| 802.11n | * | 5510 | 94.97 | - | - | 83.06 | 32.08 | 6.39 | 26.56 | 159 | 317 | A | H |
| HT40 | | 5738.225 | 52.1 | -16.1 | 68.2 | 39.85 | 32.35 | 6.56 | 26.66 | 159 | 317 | P | H |
| CH 102 | | 5458.96 | 58.44 | -15.56 | 74 | 46.69 | 31.94 | 6.36 | 26.55 | 400 | 282 | P | V |
| 5510MHz | | 5468.32 | 64.35 | -3.85 | 68.2 | 52.57 | 31.97 | 6.37 | 26.56 | 400 | 282 | P | V |
| | | 5460 | 47.24 | -6.76 | 54 | 35.49 | 31.94 | 6.36 | 26.55 | 400 | 282 | A | V |
| | * | 5510 | 100.18 | - | - | 88.27 | 32.08 | 6.39 | 26.56 | 400 | 282 | P | V |
| | * | 5510 | 93.07 | - | - | 81.16 | 32.08 | 6.39 | 26.56 | 400 | 282 | A | V |
| | | 5746.73 | 51.57 | -16.63 | 68.2 | 39.28 | 32.39 | 6.56 | 26.66 | 400 | 282 | P | V |
| | | 5456.8 | 53.38 | -20.62 | 74 | 41.64 | 31.93 | 6.36 | 26.55 | 218 | 7 | P | H |
| | | 5469.52 | 55.11 | -13.09 | 68.2 | 43.32 | 31.98 | 6.37 | 26.56 | 218 | 7 | P | H |
| | | 5458.72 | 44.5 | -9.5 | 54 | 32.76 | 31.93 | 6.36 | 26.55 | 218 | 7 | A | H |
| | * | 5550 | 105.23 | - | - | 93.4 | 32 | 6.41 | 26.58 | 218 | 7 | P | H |
| 802.11n | * | 5550 | 97.47 | - | - | 85.64 | 32 | 6.41 | 26.58 | 218 | 7 | A | H |
| HT40 | | 5754.92 | 52.9 | -15.3 | 68.2 | 40.59 | 32.4 | 6.57 | 26.66 | 218 | 7 | P | H |
| CH 110 | | 5423.92 | 52.67 | -21.33 | 74 | 40.98 | 31.9 | 6.34 | 26.55 | 100 | 17 | P | V |
| 5550MHz | | 5468.08 | 53.01 | -15.19 | 68.2 | 41.23 | 31.97 | 6.37 | 26.56 | 100 | 17 | P | V |
| | | 5456.56 | 43.14 | -10.86 | 54 | 31.4 | 31.93 | 6.36 | 26.55 | 100 | 17 | A | V |
| | * | 5550 | 104.21 | - | - | 92.38 | 32 | 6.41 | 26.58 | 100 | 17 | P | V |
| | * | 5550 | 96.13 | - | - | 84.3 | 32 | 6.41 | 26.58 | 100 | 17 | A | V |
| | | 5761.535 | 52 | -16.2 | 68.2 | 39.68 | 32.4 | 6.58 | 26.66 | 100 | 17 | P | V |

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 5434 | 52.98 | -21.02 | 74 | 41.28 | 31.9 | 6.35 | 26.55 | 207 | 7 | P | H |
| | | 5462.7 | 51 | -17.2 | 68.2 | 39.24 | 31.95 | 6.36 | 26.55 | 207 | 7 | P | H |
| | | 5454.65 | 42.16 | -11.84 | 54 | 30.43 | 31.92 | 6.36 | 26.55 | 207 | 7 | A | H |
| | * | 5670 | 104.04 | - | - | 92.15 | 32.02 | 6.5 | 26.63 | 207 | 7 | P | H |
| **802.11n** | * | 5670 | 96.46 | - | - | 84.57 | 32.02 | 6.5 | 26.63 | 207 | 7 | A | H |
| **HT40** | | 5725.625 | 65.29 | -2.91 | 68.2 | 53.09 | 32.3 | 6.55 | 26.65 | 207 | 7 | P | H |
| **CH 134** | | 5434 | 51.69 | -22.31 | 74 | 39.99 | 31.9 | 6.35 | 26.55 | 101 | 19 | P | V |
| **5670MHz** | | 5467.95 | 51.25 | -16.95 | 68.2 | 39.47 | 31.97 | 6.37 | 26.56 | 101 | 19 | P | V |
| | | 5452.55 | 41.94 | -12.06 | 54 | 30.22 | 31.91 | 6.36 | 26.55 | 101 | 19 | A | V |
| | * | 5670 | 103.17 | - | - | 91.28 | 32.02 | 6.5 | 26.63 | 101 | 19 | P | V |
| | * | 5670 | 95.74 | - | - | 83.85 | 32.02 | 6.5 | 26.63 | 101 | 19 | A | V |
| | | 5727.515 | 63.15 | -5.05 | 68.2 | 50.94 | 32.31 | 6.55 | 26.65 | 101 | 19 | 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 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) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 11020 | 48.49 | -25.51 | 74 | 53.5 | 40.6 | 10.16 | 55.77 | 200 | 122 | P | H |
| | | 11020 | 35.33 | -18.67 | 54 | 40.34 | 40.6 | 10.16 | 55.77 | 200 | 122 | A | H |
| | | 16530 | 44.47 | -23.73 | 68.2 | 47.61 | 39.87 | 12.33 | 55.34 | - | - | P | H |
| | | | | | | | | | | | | | H |
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| | | | | | | | | | | | | | H |
| 802.11n | | | | | | | | | | | | | H |
| HT40 | | | | | | | | | | | | | H |
| CH 102 | | 11020 | 47.99 | -26.01 | 74 | 53 | 40.6 | 10.16 | 55.77 | - | - | P | V |
| 5510MHz | | 16530 | 45.01 | -23.19 | 68.2 | 48.15 | 39.87 | 12.33 | 55.34 | - | - | P | V |
| | | | | | | | | | | | | | V |
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| | | | | | | | | | | | | | V |

| 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) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 11100 | 47.46 | -26.54 | 74 | 52.83 | 40.2 | 10.2 | 55.77 | - | - | P | H |
| | | 16650 | 45.97 | -22.23 | 68.2 | 49.07 | 39.95 | 12.4 | 55.45 | - | - | P | H |
| | | | | | | | | | | | | | H |
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| 802.11n | | | | | | | | | | | | | H |
| HT40 | | | | | | | | | | | | | H |
| CH 110 | | 11100 | 47.62 | -26.38 | 74 | 52.99 | 40.2 | 10.2 | 55.77 | - | - | P | V |
| 5550MHz | | 16650 | 47.04 | -21.16 | 68.2 | 50.14 | 39.95 | 12.4 | 55.45 | - | - | P | V |
| | | | | | | | | | | | | | V |
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| | | | | | | | | | | | | | V |

| 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) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 11340 | 47.91 | -26.09 | 74 | 53.6 | 39.78 | 10.31 | 55.78 | - | - | P | H |
| | | 17010 | 47.7 | -20.5 | 68.2 | 50.39 | 40.49 | 12.61 | 55.79 | - | - | P | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
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| i802.11n | | | | | | | | | | | | | H |
| HT40 | | | | | | | | | | | | | H |
| CH 134 | | 11340 | 47.4 | -26.6 | 74 | 53.09 | 39.78 | 10.31 | 55.78 | - | - | P | V |
| 5670MHz | | 17010 | 47.36 | -20.84 | 68.2 | 50.05 | 40.49 | 12.61 | 55.79 | - | - | P | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
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| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |

**Remark**

1. No other spurious found.
2. All results are PASS against Peak and Average limit line.
3. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only.

## Band 3 - 5470~5725MHz

## WIFI 802.11ac VHT80 (Band Edge @ 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) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 5459.92 | 62.63 | -11.37 | 74 | 50.88 | 31.94 | 6.36 | 26.55 | 162 | 320 | P | H |
| | | 5463.28 | 61.67 | -6.53 | 68.2 | 49.91 | 31.95 | 6.36 | 26.55 | 162 | 320 | P | H |
| | | 5458.24 | 51.88 | -2.12 | 54 | 40.14 | 31.93 | 6.36 | 26.55 | 162 | 320 | A | H |
| | * | 5530 | 96.76 | - | - | 84.89 | 32.04 | 6.4 | 26.57 | 162 | 320 | P | H |
| 802.11ac | * | 5530 | 89.76 | - | - | 77.89 | 32.04 | 6.4 | 26.57 | 162 | 320 | A | H |
| VHT80 | | 5738.225 | 52.27 | -15.93 | 68.2 | 40.02 | 32.35 | 6.56 | 26.66 | 162 | 320 | P | H |
| CH 106 | | 5457.52 | 58 | -16 | 74 | 46.26 | 31.93 | 6.36 | 26.55 | 302 | 295 | P | V |
| 5530MHz | | 5460.64 | 59.84 | -8.36 | 68.2 | 48.09 | 31.94 | 6.36 | 26.55 | 302 | 295 | P | V |
| | | 5459.92 | 50 | -4 | 54 | 38.25 | 31.94 | 6.36 | 26.55 | 302 | 295 | A | V |
| | * | 5530 | 94.83 | - | - | 82.96 | 32.04 | 6.4 | 26.57 | 302 | 295 | P | V |
| | * | 5530 | 87.65 | - | - | 75.78 | 32.04 | 6.4 | 26.57 | 302 | 295 | A | V |
| | | 5725.94 | 51.97 | -16.23 | 68.2 | 39.77 | 32.3 | 6.55 | 26.65 | 302 | 295 | P | V |
| | | 5459.9 | 55.78 | -18.22 | 74 | 44.03 | 31.94 | 6.36 | 26.55 | 156 | 319 | P | H |
| | | 5460.6 | 57.01 | -11.19 | 68.2 | 45.26 | 31.94 | 6.36 | 26.55 | 156 | 319 | P | H |
| | | 5458.85 | 46.88 | -7.12 | 54 | 35.13 | 31.94 | 6.36 | 26.55 | 156 | 319 | A | H |
| | * | 5610 | 102.98 | - | - | 91.15 | 31.98 | 6.45 | 26.6 | 156 | 319 | P | H |
| 802.11ac | * | 5610 | 94.89 | - | - | 83.06 | 31.98 | 6.45 | 26.6 | 156 | 319 | A | H |
| VHT80 | | 5728.145 | 62.35 | -5.85 | 68.2 | 50.14 | 32.31 | 6.55 | 26.65 | 156 | 319 | P | H |
| CH 122 | | 5382.2 | 51.78 | -22.22 | 74 | 40.21 | 31.79 | 6.32 | 26.54 | 232 | 280 | P | V |
| 5610MHz | | 5470 | 54.18 | -14.02 | 68.2 | 42.39 | 31.98 | 6.37 | 26.56 | 232 | 280 | P | V |
| | | 5459.2 | 44.57 | -9.43 | 54 | 32.82 | 31.94 | 6.36 | 26.55 | 232 | 280 | A | V |
| | * | 5610 | 102.62 | - | - | 90.79 | 31.98 | 6.45 | 26.6 | 232 | 280 | P | V |
| | * | 5610 | 94.39 | - | - | 82.56 | 31.98 | 6.45 | 26.6 | 232 | 280 | A | V |
| | | 5727.515 | 61.84 | -6.36 | 68.2 | 49.63 | 32.31 | 6.55 | 26.65 | 232 | 280 | 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 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) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 11060 | 47.72 | -26.28 | 74 | 52.91 | 40.4 | 10.18 | 55.77 | - | - | P | H |
| | | 16590 | 46.39 | -21.81 | 68.2 | 49.61 | 39.81 | 12.36 | 55.39 | - | - | P | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| 802.11ac | | | | | | | | | | | | | H |
| VHT80 | | | | | | | | | | | | | H |
| CH 106 | | 11060 | 47.87 | -26.13 | 74 | 53.06 | 40.4 | 10.18 | 55.77 | - | - | P | V |
| 5530MHz | | 16590 | 47.35 | -20.85 | 68.2 | 50.57 | 39.81 | 12.36 | 55.39 | - | - | P | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |

| 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) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 11220 | 48.99 | -25.01 | 74 | 54.73 | 39.78 | 10.25 | 55.77 | 205 | 0 | P | H |
| | | 11220 | 38.83 | -15.17 | 54 | 44.57 | 39.78 | 10.25 | 55.77 | 205 | 0 | A | H |
| | | 16830 | 46.89 | -21.31 | 68.2 | 49.47 | 40.53 | 12.5 | 55.61 | - | - | P | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| 802.11ac | | | | | | | | | | | | | H |
| VHT80 | | | | | | | | | | | | | H |
| CH 122 | | 11220 | 49.02 | -24.98 | 74 | 54.76 | 39.78 | 10.25 | 55.77 | 115 | 359 | P | V |
| 5610MHz | | 11220 | 38.89 | -15.11 | 54 | 44.63 | 39.78 | 10.25 | 55.77 | 115 | 359 | A | V |
| | | 16830 | 46.96 | -21.24 | 68.2 | 49.54 | 40.53 | 12.5 | 55.61 | - | - | P | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |

**Remark**

1. No other spurious found.
2. All results are PASS against Peak and Average limit line.
3. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only.

## Band 3 - Straddle Channel

## WIFI 802.11a (Harmonic @ 3m)

| 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) |
| 802.11a CH 144 5720MHz | | 11440 | 48.99 | -25.01 | 74 | 54.4 | 40.02 | 10.35 | 55.78 | 201 | 0 | P | H |
| | | 11440 | 39.23 | -14.77 | 54 | 44.64 | 40.02 | 10.35 | 55.78 | 201 | 0 | A | H |
| | | 17160 | 48.18 | -20.02 | 68.2 | 51 | 40.46 | 12.78 | 56.06 | - | - | P | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | 11440 | 49.13 | -24.87 | 74 | 54.54 | 40.02 | 10.35 | 55.78 | 248 | 18 | P | V |
| | | 11440 | 39.55 | -14.45 | 54 | 44.96 | 40.02 | 10.35 | 55.78 | 248 | 18 | A | V |
| | | 17160 | 48.35 | -19.85 | 68.2 | 51.17 | 40.46 | 12.78 | 56.06 | - | - | P | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |

**Remark**

1. No other spurious found.
2. All results are PASS against Peak and Average limit line.
3. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only.

## Band 3 - Straddle Channel

## WIFI 802.11n HT20 (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) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 11440 | 49.51 | -24.49 | 74 | 54.92 | 40.02 | 10.35 | 55.78 | 196 | 0 | P | H |
| | | 11440 | 39.2 | -14.8 | 54 | 44.61 | 40.02 | 10.35 | 55.78 | 196 | 0 | A | H |
| | | 17160 | 47.67 | -20.53 | 68.2 | 50.49 | 40.46 | 12.78 | 56.06 | - | - | P | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| 802.11n HT20 CH 144 5720MHz | | | | | | | | | | | | | H |
| | | 11440 | 49.74 | -24.26 | 74 | 55.15 | 40.02 | 10.35 | 55.78 | 253 | 23 | P | V |
| | | 11440 | 39.27 | -14.73 | 54 | 44.68 | 40.02 | 10.35 | 55.78 | 253 | 23 | A | V |
| | | 17160 | 47.59 | -20.61 | 68.2 | 50.41 | 40.46 | 12.78 | 56.06 | - | - | P | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |

**Remark**

1. No other spurious found.
2. All results are PASS against Peak and Average limit line.
3. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only.

## Band 3 - Straddle Channel

## WIFI 802.11n HT40 (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) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 11420 | 48.71 | -25.29 | 74 | 54.19 | 39.96 | 10.34 | 55.78 | 192 | 1 | P | H |
| | | 11420 | 38.39 | -15.61 | 54 | 43.87 | 39.96 | 10.34 | 55.78 | 192 | 1 | A | H |
| | | 17130 | 47.62 | -20.58 | 68.2 | 50.46 | 40.43 | 12.74 | 56.01 | - | - | P | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| 802.11n | | | | | | | | | | | | | H |
| HT40 | | | | | | | | | | | | | H |
| CH 142 | | 11420 | 48.54 | -25.46 | 74 | 54.02 | 39.96 | 10.34 | 55.78 | 323 | 351 | P | V |
| 5710MHz | | 11420 | 38.23 | -15.77 | 54 | 43.71 | 39.96 | 10.34 | 55.78 | 323 | 351 | A | V |
| | | 17130 | 47.98 | -20.22 | 68.2 | 50.82 | 40.43 | 12.74 | 56.01 | - | - | P | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |

**Remark**

1. No other spurious found.
2. All results are PASS against Peak and Average limit line.
3. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only.

## Band 3 - Straddle Channel

## 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) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 11380 | 48.33 | -25.67 | 74 | 53.93 | 39.86 | 10.32 | 55.78 | 207 | 2 | P | H |
| | | 11380 | 38.48 | -15.52 | 54 | 44.08 | 39.86 | 10.32 | 55.78 | 207 | 2 | A | H |
| | | 17070 | 47.7 | -20.5 | 68.2 | 50.49 | 40.43 | 12.68 | 55.9 | - | - | P | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| 802.11ac | | | | | | | | | | | | | H |
| VHT80 | | | | | | | | | | | | | H |
| CH 138 | | 11380 | 48.05 | -25.95 | 74 | 53.65 | 39.86 | 10.32 | 55.78 | 208 | 338 | P | V |
| 5690MHz | | 11380 | 38.18 | -15.82 | 54 | 43.78 | 39.86 | 10.32 | 55.78 | 208 | 338 | A | V |
| | | 17070 | 47.67 | -20.53 | 68.2 | 50.46 | 40.43 | 12.68 | 55.9 | - | - | P | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |

**Remark**

1. No other spurious found.
2. All results are PASS against Peak and Average limit line.
3. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only.

## Emission below 1GHz

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

| 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) |
| 802.11n HT40 LF | | 30 | 21.41 | -18.59 | 40 | 28.46 | 24.57 | 0.72 | 32.34 | - | - | P | H |
| | | 124.09 | 26.19 | -17.31 | 43.5 | 39.79 | 17.56 | 1.14 | 32.3 | - | - | P | H |
| | | 213.33 | 23.17 | -20.33 | 43.5 | 39.15 | 14.88 | 1.39 | 32.25 | - | - | P | H |
| | | 314.21 | 29.16 | -16.84 | 46 | 40.32 | 19.37 | 1.63 | 32.16 | - | - | P | H |
| | | 754.59 | 29.02 | -16.98 | 46 | 31.15 | 27.69 | 2.33 | 32.15 | - | - | P | H |
| | | 956.35 | 33.21 | -12.79 | 46 | 31.08 | 30.62 | 2.57 | 31.06 | - | - | P | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | 30 | 21.86 | -18.14 | 40 | 28.91 | 24.57 | 0.72 | 32.34 | - | - | P | V |
| | | 107.6 | 25.33 | -18.17 | 43.5 | 39.92 | 16.65 | 1.08 | 32.32 | - | - | P | V |
| | | 120.21 | 29.62 | -13.88 | 43.5 | 43.29 | 17.5 | 1.13 | 32.3 | - | - | P | V |
| | | 183.26 | 24.57 | -18.93 | 43.5 | 40.75 | 14.82 | 1.27 | 32.27 | - | - | P | V |
| | | 630.43 | 27.12 | -18.88 | 46 | 31.24 | 25.88 | 2.23 | 32.23 | - | - | P | V |
| | | 956.35 | 32.55 | -13.45 | 46 | 30.42 | 30.62 | 2.57 | 31.06 | - | - | P | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |

**Remark**

1. No other spurious found.
2. All results are PASS against limit line.
3. The emission position marked as “-” means no suspected emission found and emission level has at least 6dB margin against limit or emission is noise floor only.

**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) |
| 802.11a CH 36 5180MHz | | 5150 | 55.45 | -18.55 | 74 | 54.51 | 32.22 | 4.58 | 35.86 | 103 | 308 | P | H |
| | | 5150 | 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 @ 5150MHz:**

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)

1. Path Loss(dB) = Cable loss(dB) + Filter loss(dB) + Attenuator loss(dB)+Duty factor
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 Average Limit @ 5150MHz:**

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

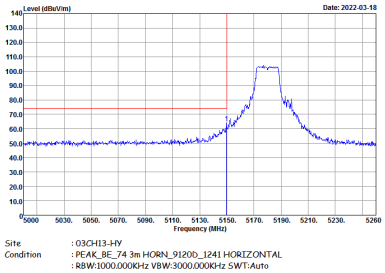
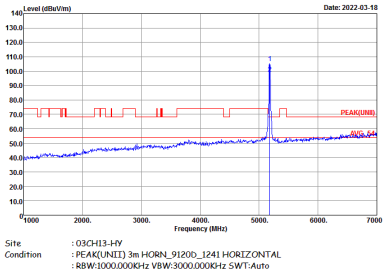
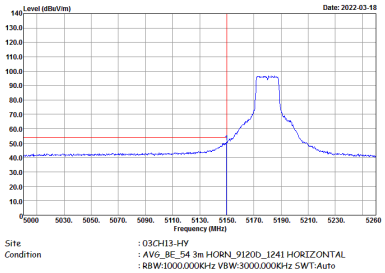
| | | | |
|---|---|---|---|
| **Test Engineer :** | Yuan Lee, Jacky Hong, Wilson Wu and Peter Liao | **Temperature :** | 20~25°C |
| | | **Relative Humidity :** | 40~60% |

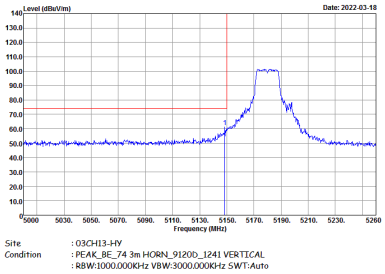
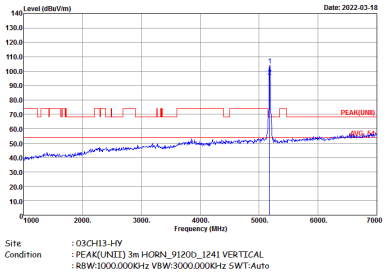
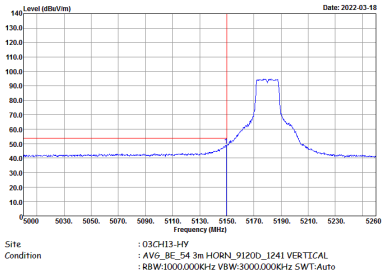
## Note symbol

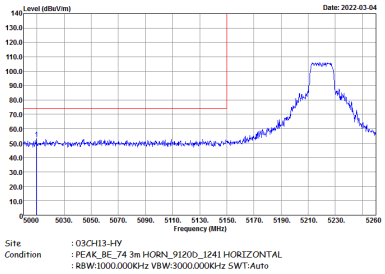
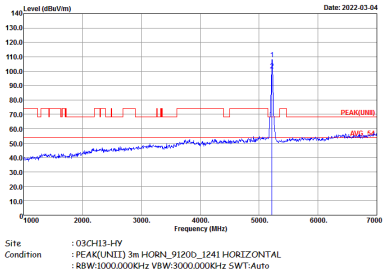
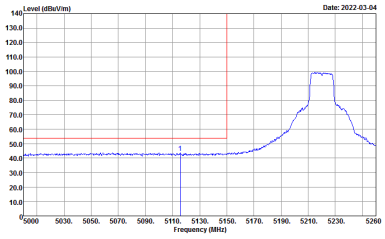
| | |
|---|---|
| -L | **Low channel location** |
| -R | **High channel location** |

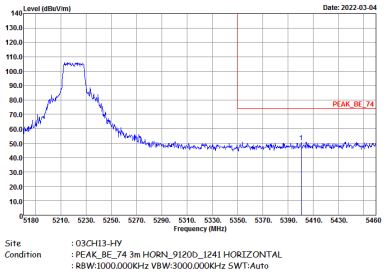
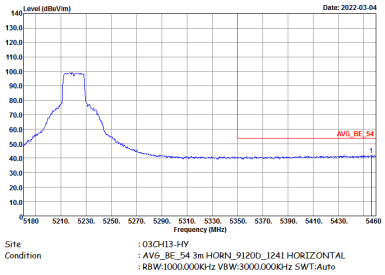
## Band 1 - 5150~5250MHz

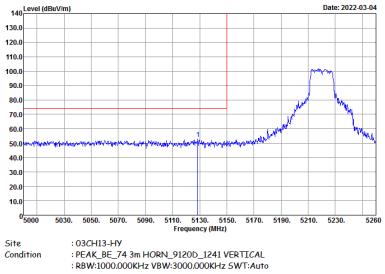
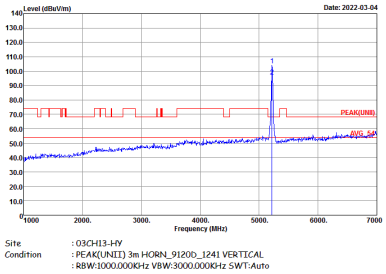
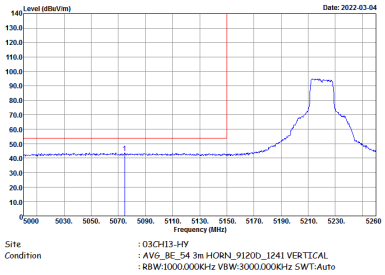
## WIFI 802.11a (Band Edge @ 3m)

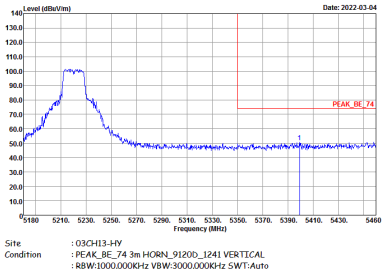
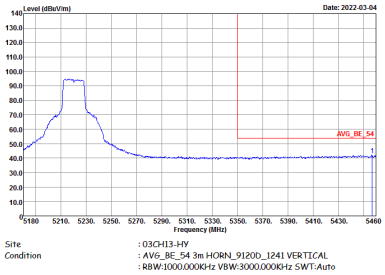
| WIFI | Band 1 5150~5250MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11a CH36 5180MHz | |
| 1 | Horizontal | Fundamental |
| Peak |  |  |
| Avg. |  | Left blank |

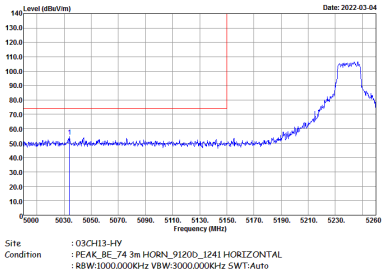
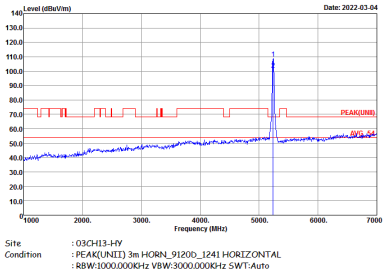
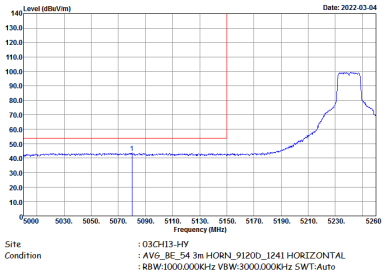
| WIFI | Band 1 5150~5250MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11a CH36 5180MHz | |
| 1 | Vertical | Fundamental |
| Peak |  |  |
| Avg. |  | Left blank |

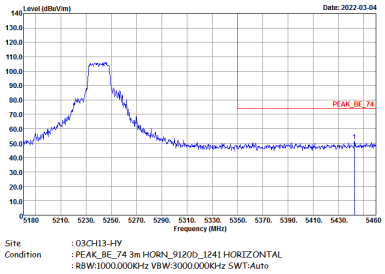
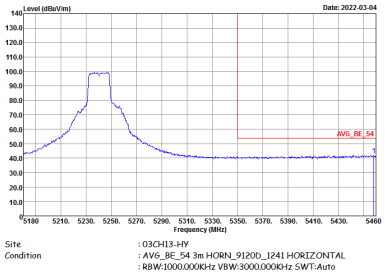
| WIFI | Band 1 5150~5250MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11a CH44 5220MHz - L | |
| 1 | Horizontal | Fundamental |
| Peak |  <br>Site : 03CH13-HY<br>Condition : PEAK_BE_74 3m HORN_9120D_1241 HORIZONTAL<br>: RBW:1000.000KHz VBW:3000.000KHz SWT:Auto |  <br>Site : 03CH13-HY<br>Condition : PEAK(UNII) 3m HORN_9120D_1241 HORIZONTAL<br>: RBW:1000.000KHz VBW:3000.000KHz SWT:Auto |
| Avg. |  <br>Site : 03CH13-HY<br>Condition : AVG_BE_54 3m HORN_9120D_1241 HORIZONTAL<br>: RBW:1000.000KHz VBW:3000.000KHz SWT:Auto | Left blank |

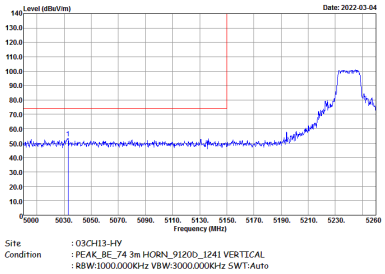
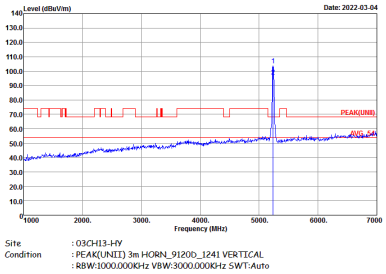
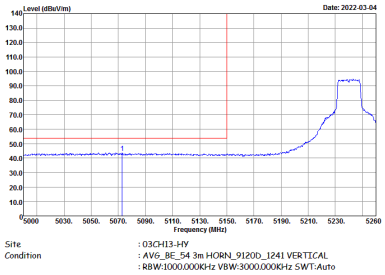
| WIFI | Band 1 5150~5250MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11a CH44 5220MHz - R | |
| 1 | Horizontal | Fundamental |
| Peak |  | Left blank |
| Avg. |  | Left blank |

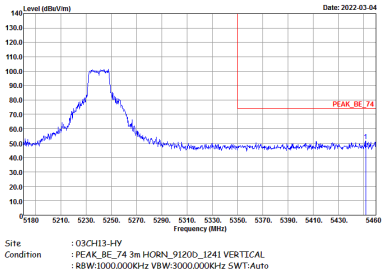
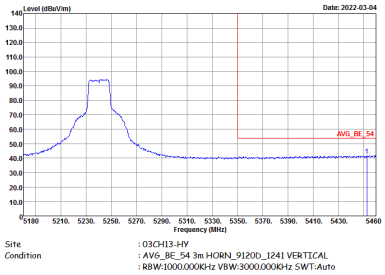
| WIFI | Band 1 5150~5250MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11a CH44 5220MHz - L | |
| 1 | Vertical | Fundamental |
| Peak |  |  |
| Avg. |  | Left blank |

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

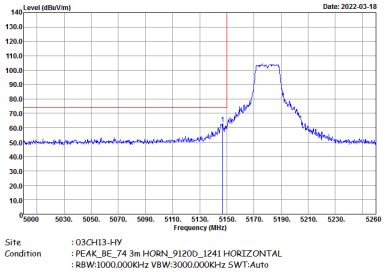
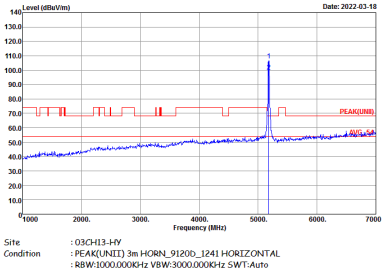
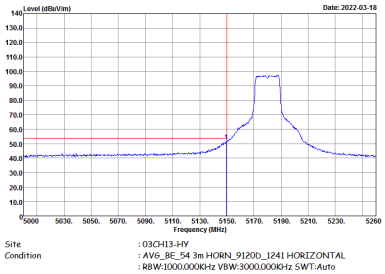
| WIFI | Band 1 5150~5250MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11a CH48 5240MHz - L | |
| 1 | Horizontal | Fundamental |
| Peak |  |  |
| Avg. |  | Left blank |

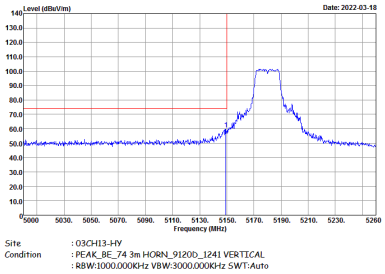
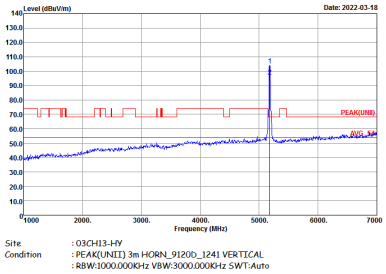
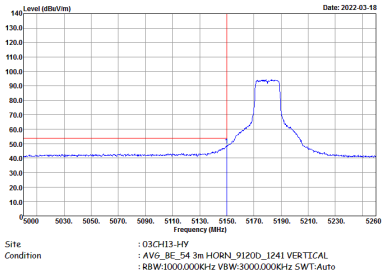
| WIFI | Band 1 5150~5250MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11a CH48 5240MHz - R | |
| 1 | Horizontal | Fundamental |
| Peak |  | Left blank |
| Avg. |  | Left blank |

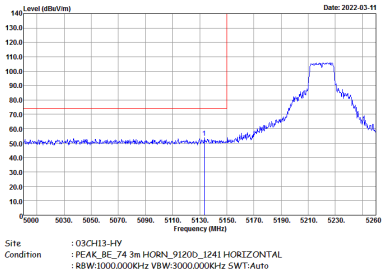
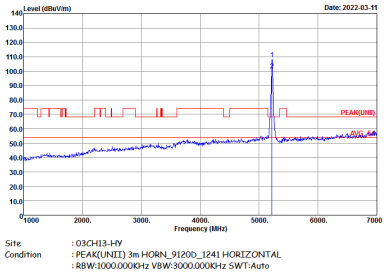
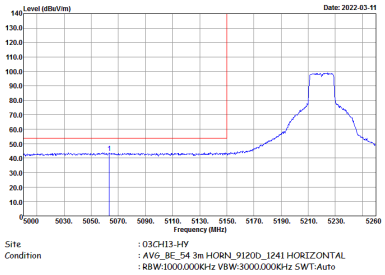
| WIFI | Band 1 5150~5250MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11a CH48 5240MHz - L | |
| 1 | Vertical | Fundamental |
| Peak |  |  |
| Avg. |  | Left blank |

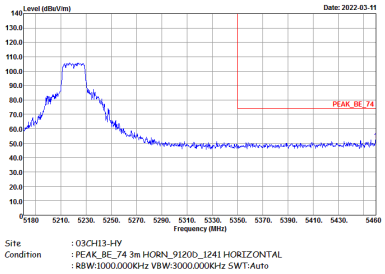
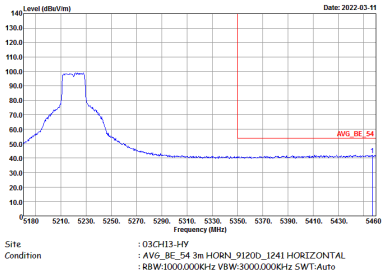
| WIFI | Band 1 5150~5250MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11a CH48 5240MHz - R | |
| 1 | Vertical | Fundamental |
| Peak |  | Left blank |
| Avg. |  | Left blank |

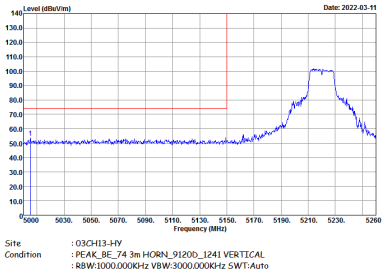
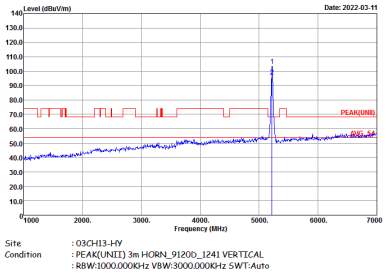
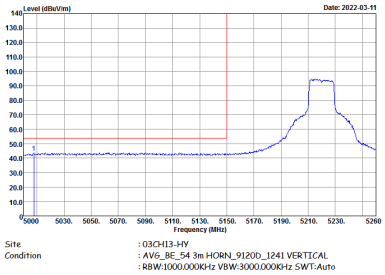
## Band 1 5150~5250MHz
## WIFI 802.11n HT20 (Band Edge @ 3m)

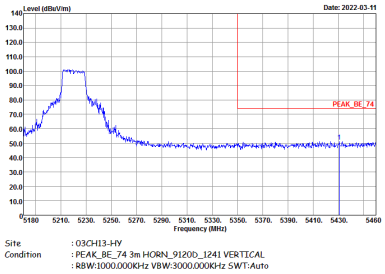
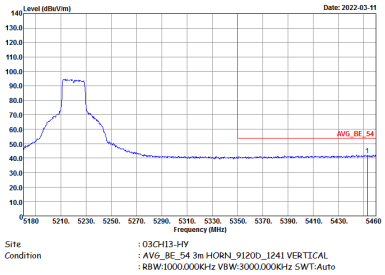
| WIFI | Band 1 5150~5250MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11n HT20 CH36 5180MHz | |
| 1 | Horizontal | Fundamental |
| Peak |  |  |
| Avg. |  | Left blank |

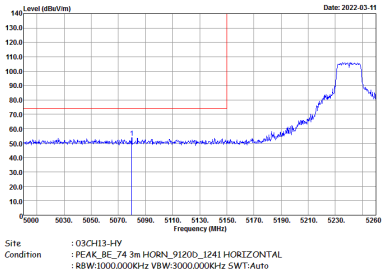
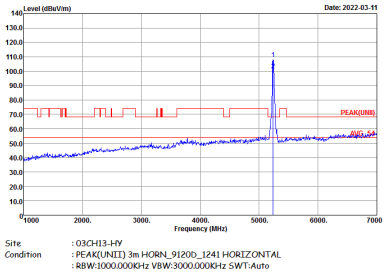
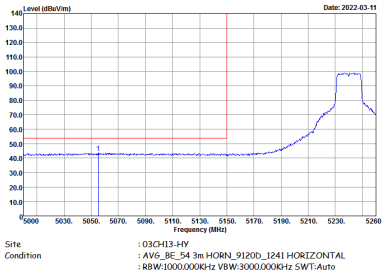
| WIFI | Band 1 5150~5250MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11n HT20 CH36 5180MHz | |
| 1 | Vertical | Fundamental |
| Peak |  |  |
| Avg. |  | Left blank |

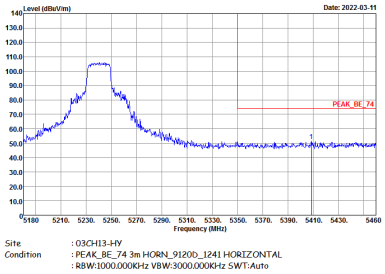
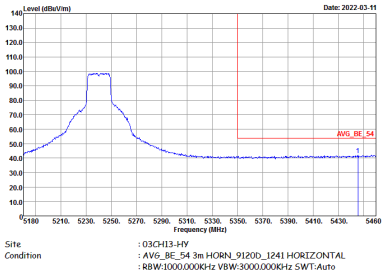
| WIFI | Band 1 5150~5250MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11n HT20 CH44 5220MHz - L | |
| 1 | Horizontal | Fundamental |
| Peak |  |  |
| Avg. |  | Left blank |

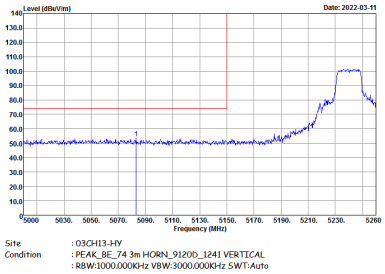
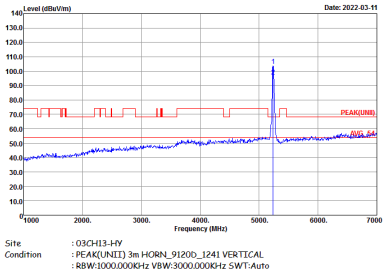
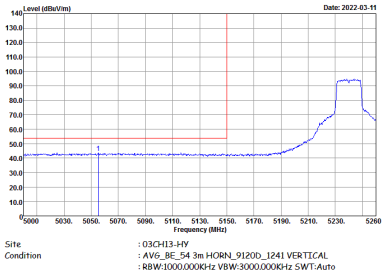
| WIFI | Band 1 5150~5250MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11n HT20 CH44 5220MHz - R | |
| 1 | Horizontal | Fundamental |
| Peak |  | Left blank |
| Avg. |  | Left blank |

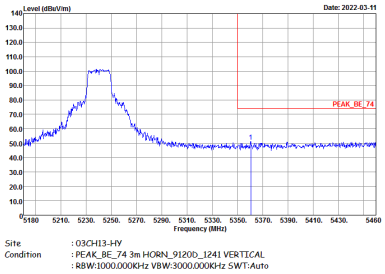
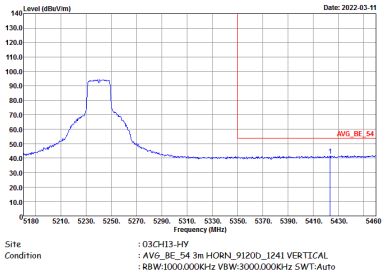
| WIFI | Band 1 5150~5250MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11n HT20 CH44 5220MHz - L | |
| 1 | Vertical | Fundamental |
| Peak |  |  |
| Avg. |  | Left blank |

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

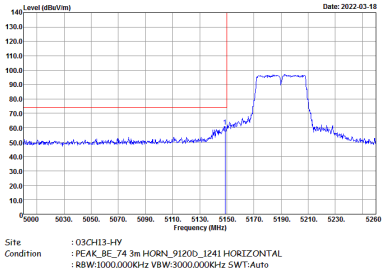
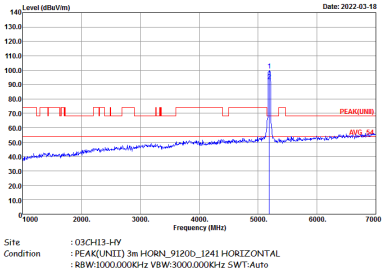
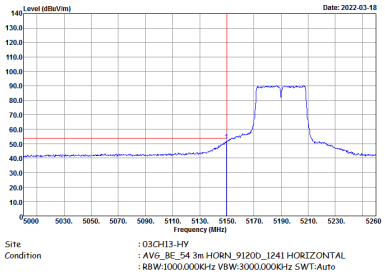
| WIFI | Band 1 5150~5250MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11n HT20 CH48 5240MHz - L | |
| 1 | Horizontal | Fundamental |
| Peak |  |  |
| Avg. |  | Left blank |

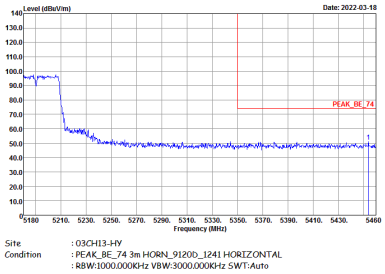
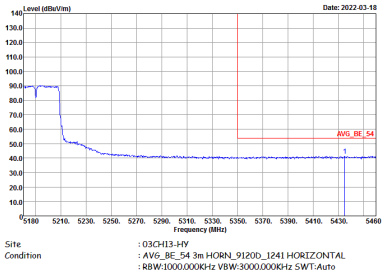
| WIFI | Band 1 5150~5250MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11n HT20 CH48 5240MHz - R | |
| 1 | Horizontal | Fundamental |
| Peak |  | Left blank |
| Avg. |  | Left blank |

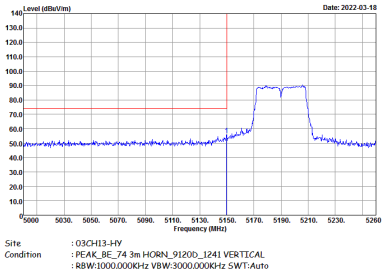
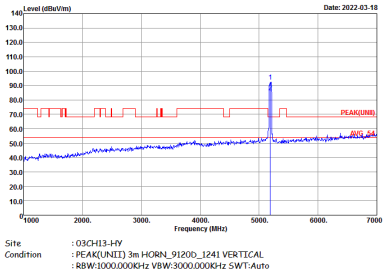
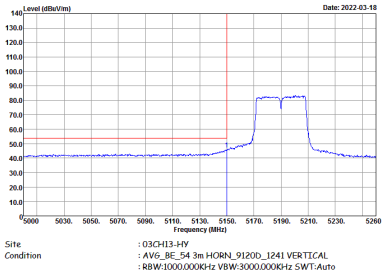
| WIFI | Band 1 5150~5250MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11n HT20 CH48 5240MHz - L | |
| 1 | Vertical | Fundamental |
| Peak |  |  |
| Avg. |  | Left blank |

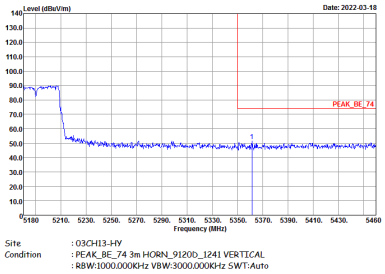
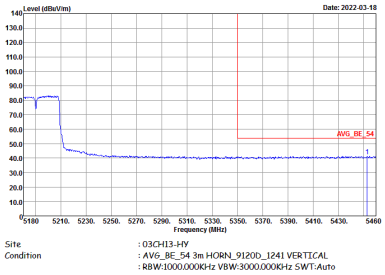
| WIFI | Band 1 5150~5250MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11n HT20 CH48 5240MHz - R | |
| 1 | Vertical | Fundamental |
| Peak |  | Left blank |
| Avg. |  | Left blank |

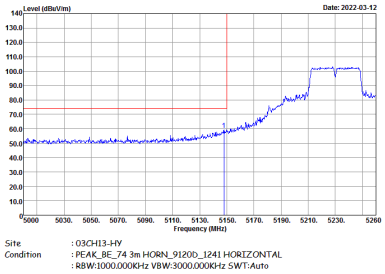
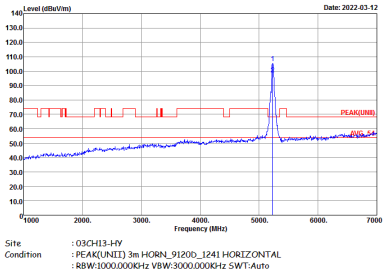
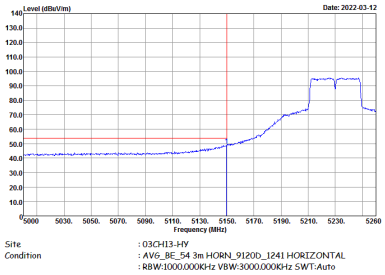
## Band 1 5150~5250MHz
## WIFI 802.11n HT40 (Band Edge @ 3m)

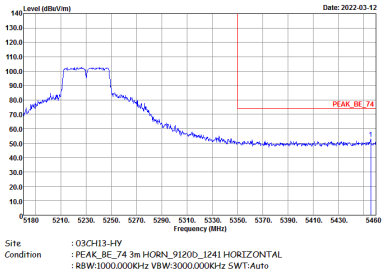
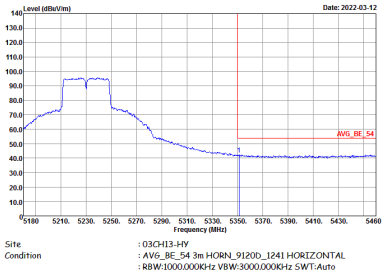
| WIFI | Band 1 5150~5250MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11n HT40 CH38 5190MHz - L | |
| 1 | Horizontal | Fundamental |
| Peak |  |  |
| Avg. |  | Left blank |

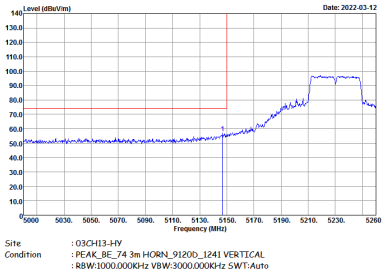
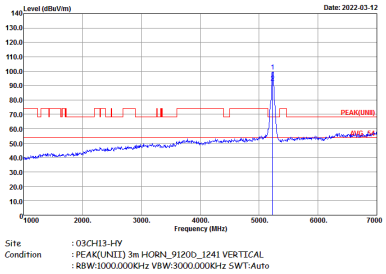
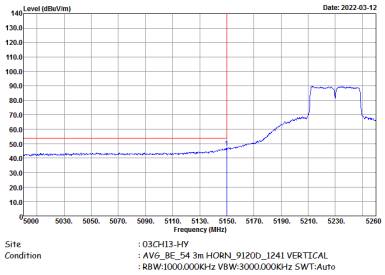
| WIFI | Band 1 5150~5250MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11n HT40 CH38 5190MHz - R | |
| 1 | Horizontal | Fundamental |
| Peak |  | Left blank |
| Avg. |  | Left blank |

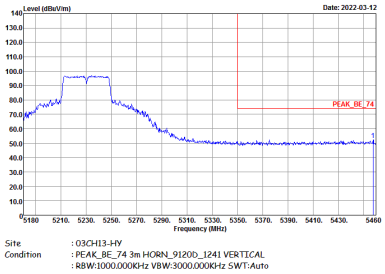
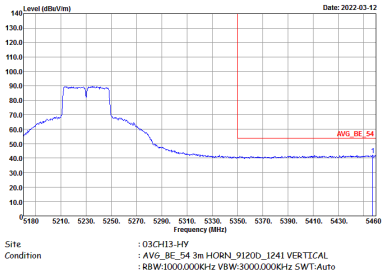
| WIFI | Band 1 5150~5250MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11n HT40 CH38 5190MHz - L | |
| 1 | Vertical | Fundamental |
| Peak |  |  |
| Avg. |  | Left blank |

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

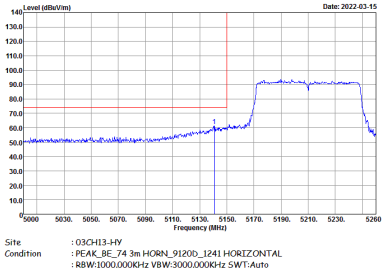
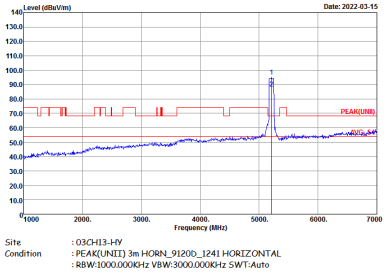
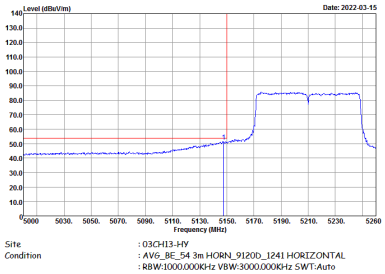
| WIFI | Band 1 5150~5250MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11n HT40 CH46 5230MHz - L | |
| 1 | Horizontal | Fundamental |
| Peak |  |  |
| Avg. |  | Left blank |

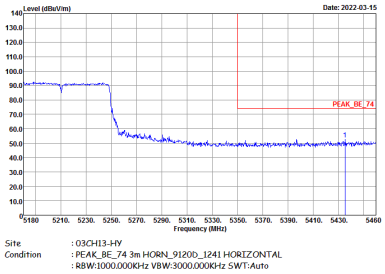
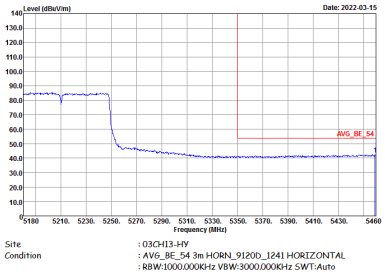
| WIFI | Band 1 5150~5250MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11n HT40 CH46 5230MHz - R | |
| 1 | Horizontal | Fundamental |
| Peak |  | Left blank |
| Avg. |  | Left blank |

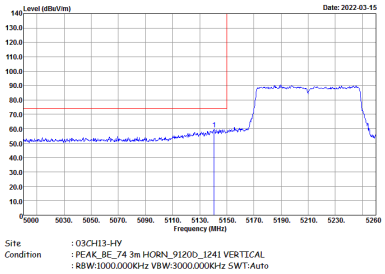
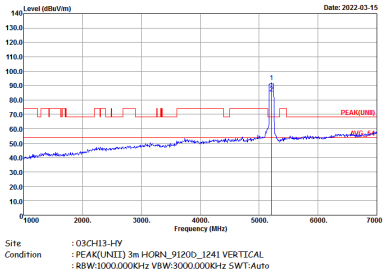
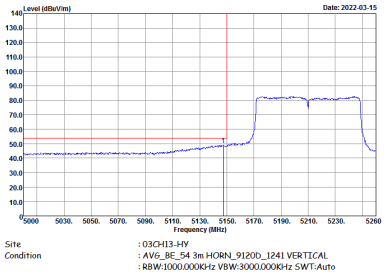
| WIFI | Band 1 5150~5250MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11n HT40 CH46 5230MHz - L | |
| 1 | Vertical | Fundamental |
| Peak |  |  |
| Avg. |  | Left blank |

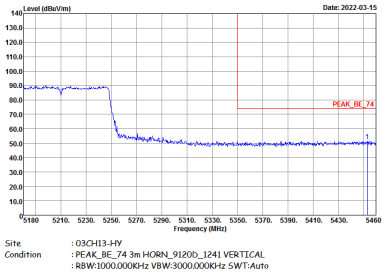
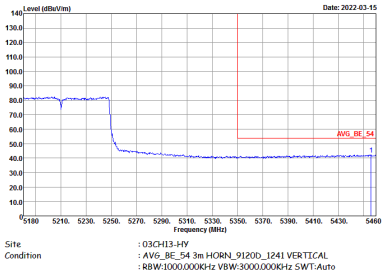
| WIFI | Band 1 5150~5250MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11n HT40 CH46 5230MHz - R | |
| 1 | Vertical | Fundamental |
| Peak |  | Left blank |
| Avg. |  | Left blank |

## Band 1 5150~5250MHz
## WIFI 802.11ac VHT80 (Band Edge @ 3m)

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

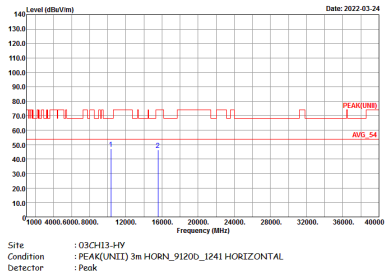
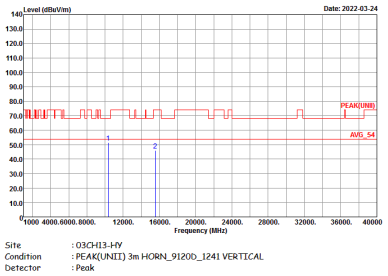
| WIFI | Band 1 5150~5250MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11ac VHT80 CH42 5210MHz - R | |
| 1 | Horizontal | Fundamental |
| Peak |  | Left blank |
| Avg. |  | Left blank |

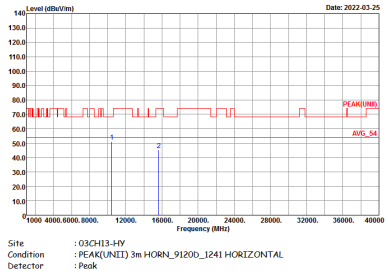
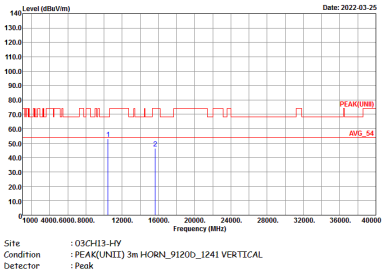
| WIFI | Band 1 5150~5250MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11ac VHT80 CH42 5210MHz - L | |
| 1 | Vertical | Fundamental |
| Peak |  |  |
| Avg. |  | Left blank |

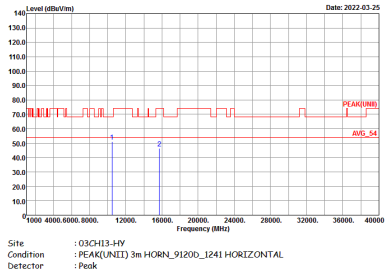
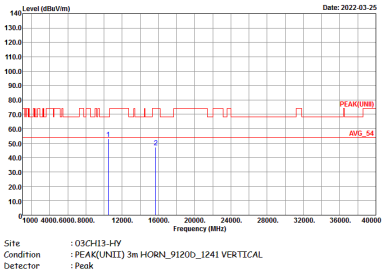
| WIFI | Band 1 5150~5250MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11ac VHT80 CH42 5210MHz - R | |
| 1 | Vertical | Fundamental |
| Peak |  | Left blank |
| Avg. |  | Left blank |

## Band 1 - 5150~5250MHz

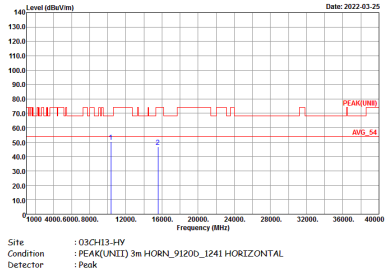
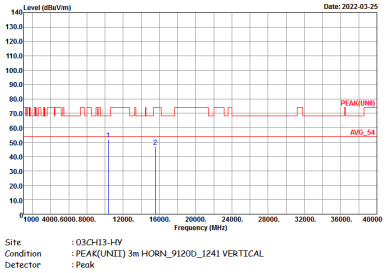
## WIFI 802.11a (Harmonic @ 3m)

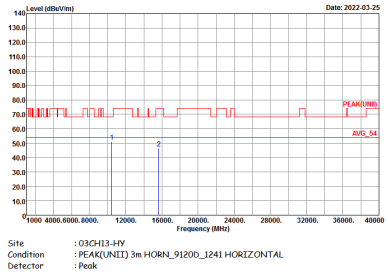
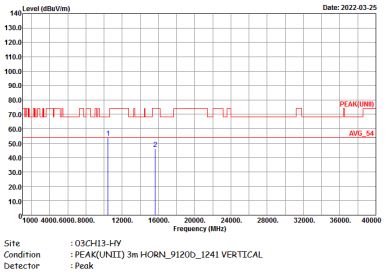
| WIFI | Band 1 5150~5250MHz Harmonic @ 3m | |
|---|---|---|
| ANT | 802.11a CH36 5180MHz | |
| 1 | Horizontal | Vertical |
| Peak<br>Avg. |  |  |

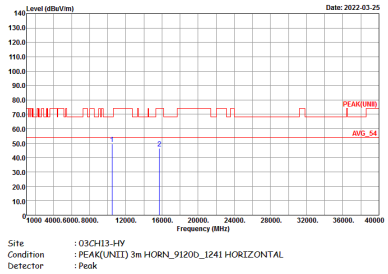
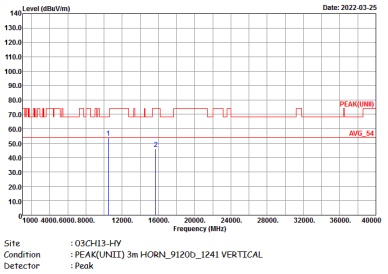
| WIFI | Band 1 5150~5250MHz Harmonic @ 3m | |
|---|---|---|
| ANT | 802.11a CH44 5220MHz | |
| 1 | Horizontal | Vertical |
| Peak<br>Avg. |  |  |

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

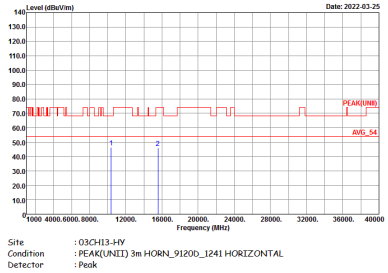
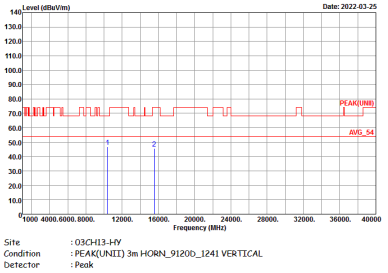
## Band 1 5150~5250MHz
## WIFI 802.11n HT20 (Harmonic @ 3m)

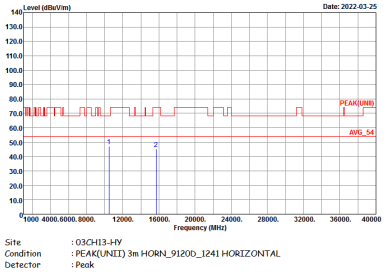
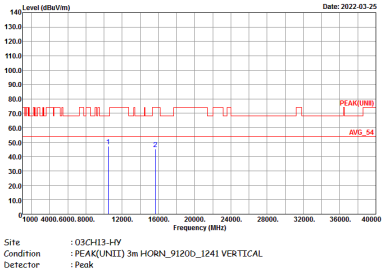
| WIFI | Band 1 5150~5250MHz Harmonic @ 3m | |
|---|---|---|
| ANT | 802.11n HT20 CH36 5180MHz | |
| 1 | Horizontal | Vertical |
| Peak<br>Avg. |  |  |

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

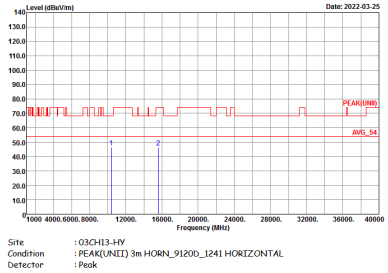
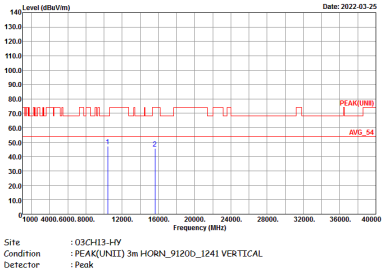
| WIFI | Band 1 5150~5250MHz Harmonic @ 3m | |
|---|---|---|
| ANT | 802.11n HT20 CH48 5240MHz | |
| 1 | Horizontal | Vertical |
| Peak<br>Avg. |  |  |

## Band 1 5150~5250MHz
## WIFI 802.11n HT40 (Harmonic @ 3m)

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

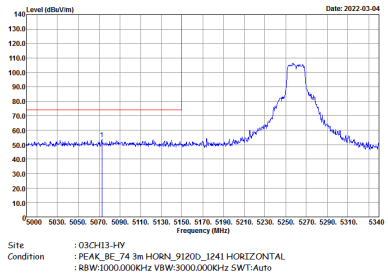
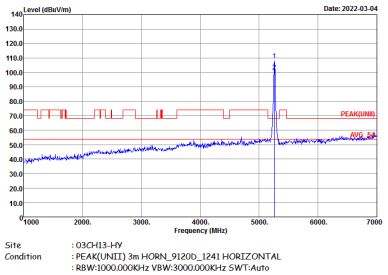
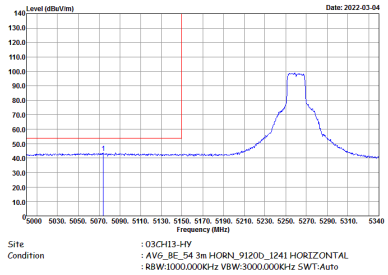
| WIFI | Band 1 5150~5250MHz Harmonic @ 3m | |
|---|---|---|
| ANT | 802.11n HT40 CH46 5230MHz | |
| 1 | Horizontal | Vertical |
| Peak<br>Avg. |  |  |

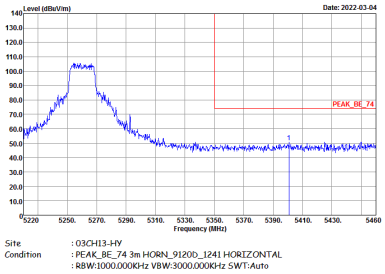
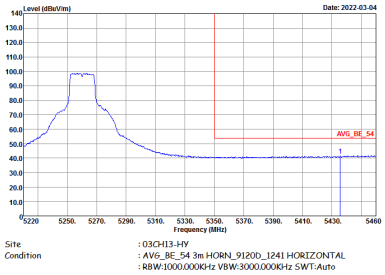
## Band 1 5150~5250MHz
## WIFI 802.11ac VHT80 (Harmonic @ 3m)

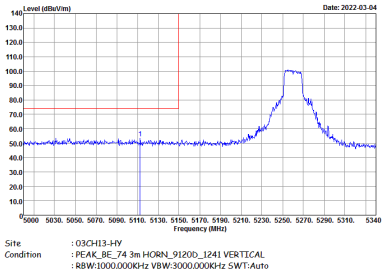
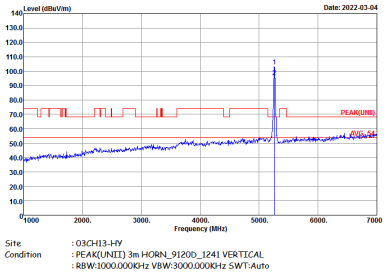
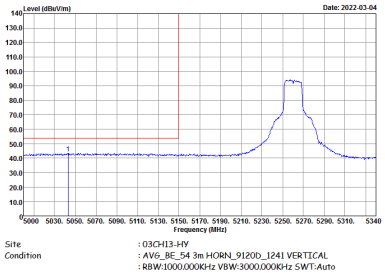
| WIFI | Band 1 5150~5250MHz Harmonic @ 3m | |
|---|---|---|
| ANT | 802.11ac VHT80 CH42 5210MHz | |
| 1 | Horizontal | Vertical |
| Peak<br>Avg. |  |  |

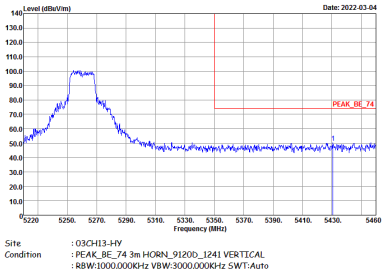
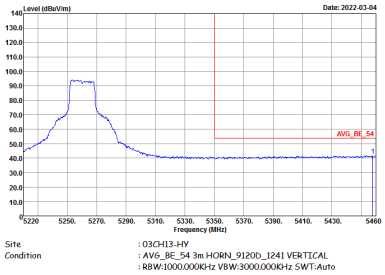
## Band 2 - 5250~5350MHz

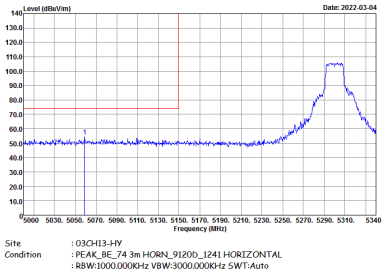
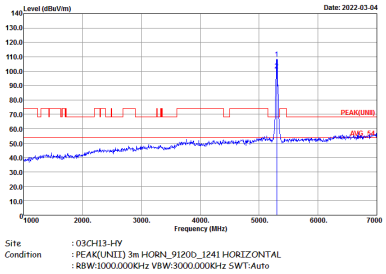
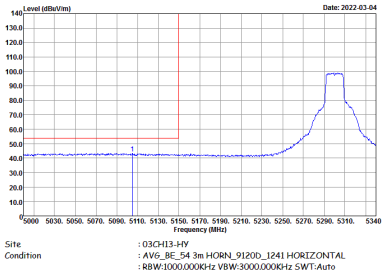
## WIFI 802.11a (Band Edge @ 3m)

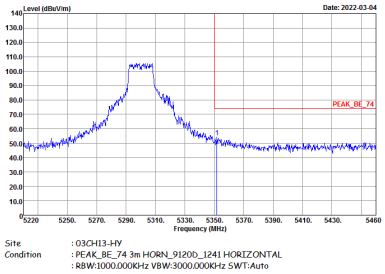
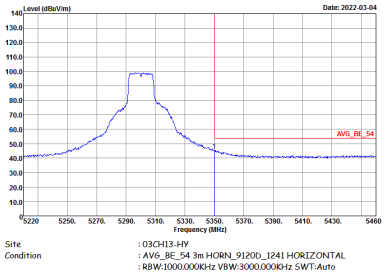
| WIFI | Band 2 5250~5350MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11a CH52 5260MHz - L | |
| 1 | Horizontal | Fundamental |
| Peak |  |  |
| Avg. |  | Left blank |

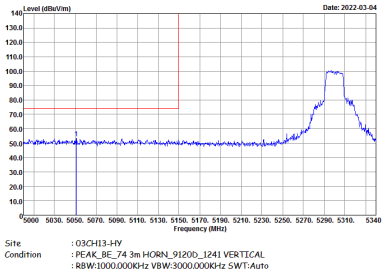
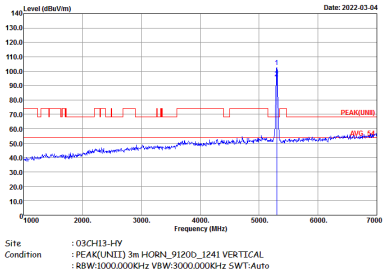
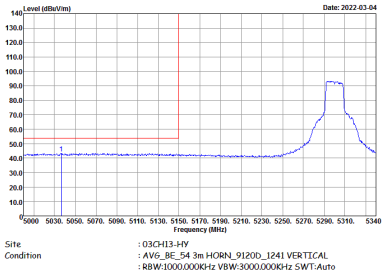
| WIFI | Band 2 5250~5350MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11a CH52 5260MHz - R | |
| 1 | Horizontal | Fundamental |
| Peak |  | Left blank |
| Avg. |  | Left blank |

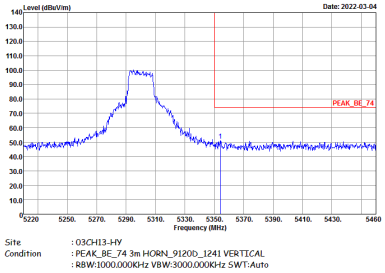
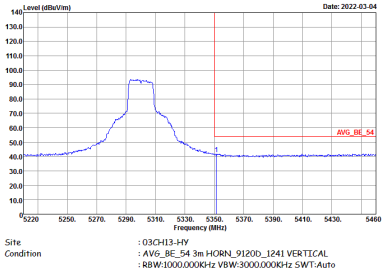
| WIFI | Band 2 5250~5350MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11a CH52 5260MHz - L | |
| 1 | Vertical | Fundamental |
| Peak |  |  |
| Avg. |  | Left blank |

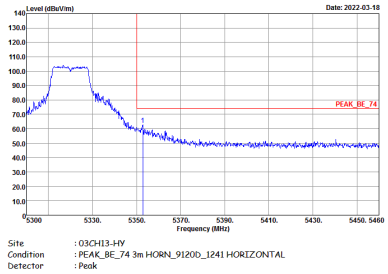
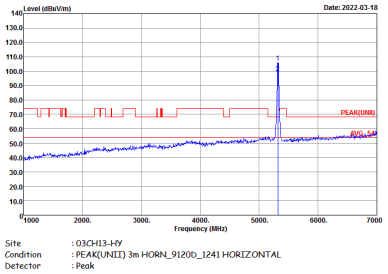
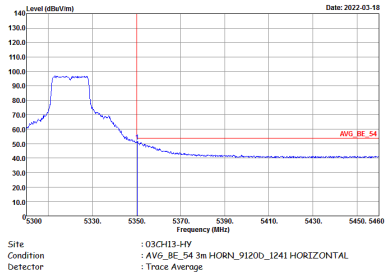
| WIFI | Band 2 5250~5350MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11a CH52 5260MHz - R | |
| 1 | Vertical | Fundamental |
| Peak |  | Left blank |
| Avg. |  | Left blank |

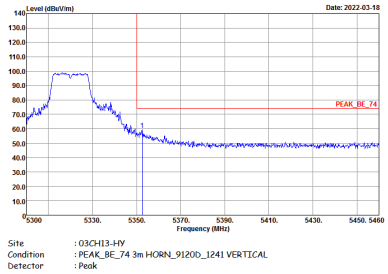
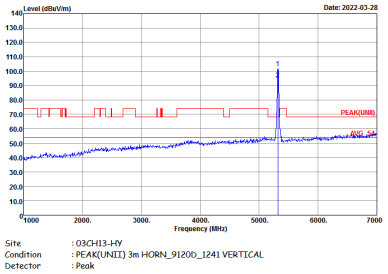
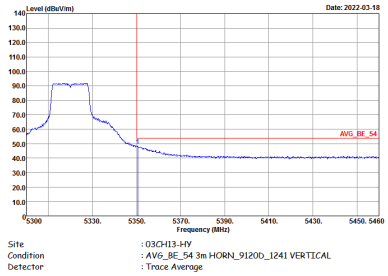
| WIFI | Band 2 5250~5350MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11a CH60 5300MHz - L | |
| 1 | Horizontal | Fundamental |
| Peak |  |  |
| Avg. |  | Left blank |

| WIFI | Band 2 5250~5350MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11a CH60 5300MHz - R | |
| 1 | Horizontal | Fundamental |
| Peak |  | Left blank |
| Avg. |  | Left blank |

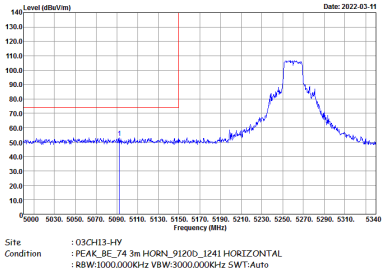
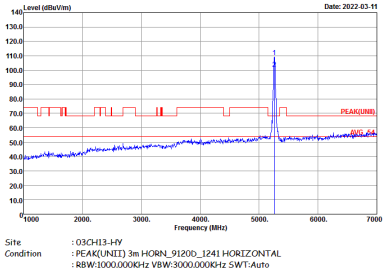
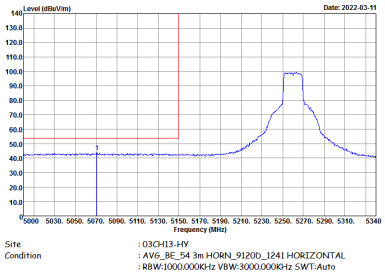
| WIFI | Band 2 5250~5350MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11a CH60 5300MHz - L | |
| 1 | Vertical | Fundamental |
| Peak |  |  |
| Avg. |  | Left blank |

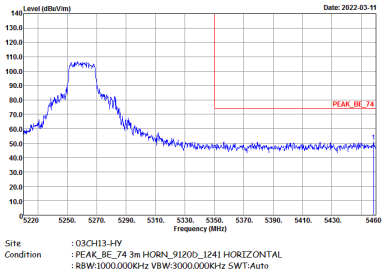
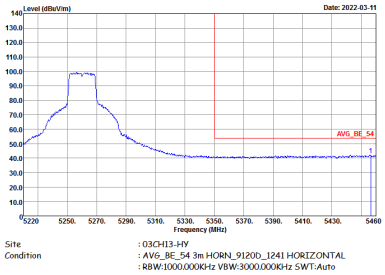
| WIFI | Band 2 5250~5350MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11a CH60 5300MHz - R | |
| 1 | Vertical | Fundamental |
| Peak |  | Left blank |
| Avg. |  | Left blank |

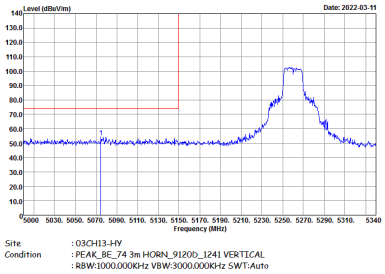
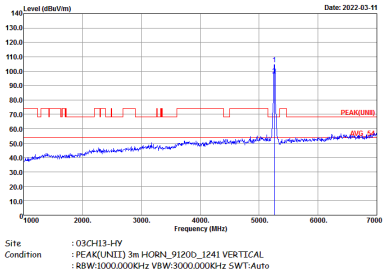
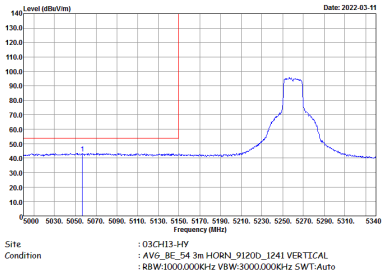
| WIFI | Band 2 5250~5350MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11a CH64 5320MHz | |
| 1 | Horizontal | Fundamental |
| Peak |  |  |
| Avg. |  | Left blank |

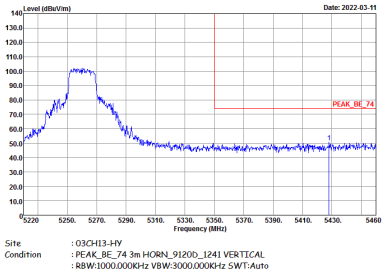
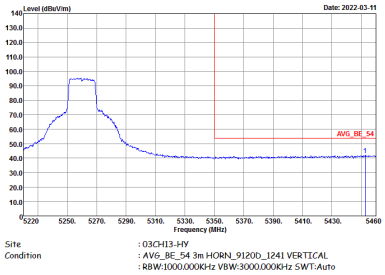
| WIFI | Band 2 5250~5350MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11a CH64 5320MHz | |
| 1 | Vertical | Fundamental |
| Peak |  |  |
| Avg. |  | Left blank |

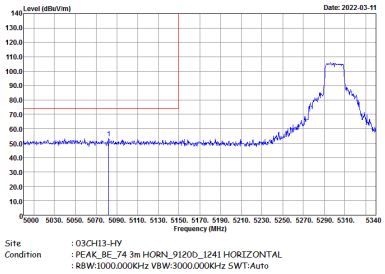
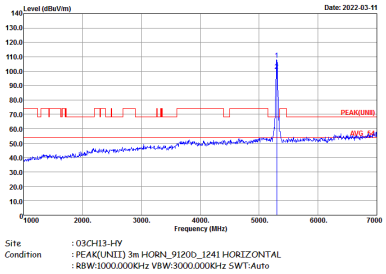
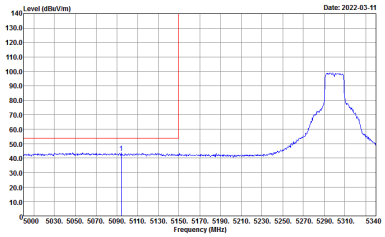
## Band 2 5250~5350MHz
## WIFI 802.11n HT20 (Band Edge @ 3m)

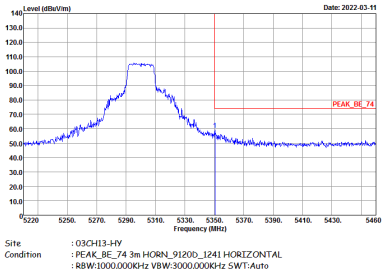
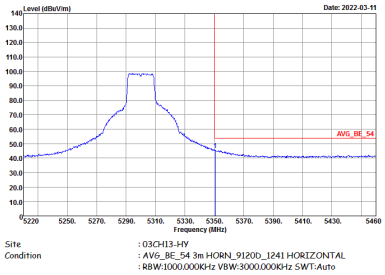
| WIFI | Band 2 5250~5350MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11n HT20 CH52 5260MHz - L | |
| 1 | Horizontal | Fundamental |
| Peak |  |  |
| Avg. |  | Left blank |

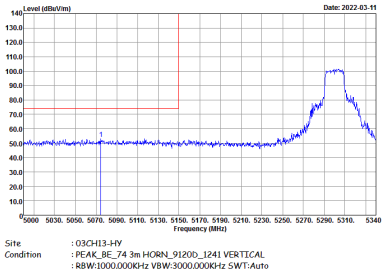
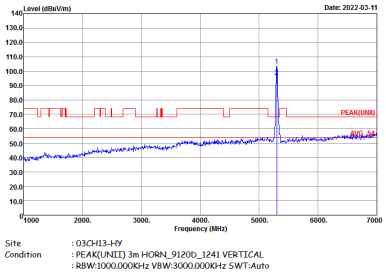
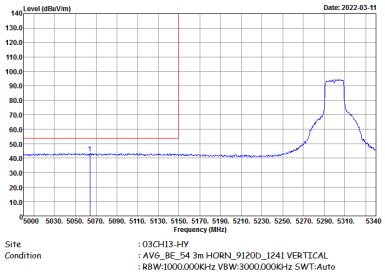
| WIFI | Band 2 5250~5350MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11n HT20 CH52 5260MHz - R | |
| 1 | Horizontal | Fundamental |
| Peak |  | Left blank |
| Avg. |  | Left blank |

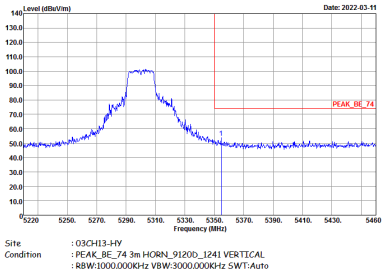
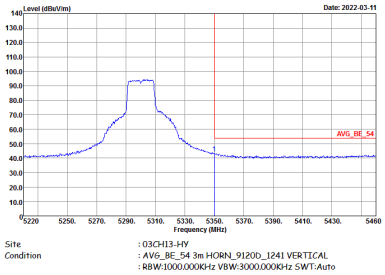
| WIFI | Band 2 5250~5350MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11n HT20 CH52 5260MHz - L | |
| 1 | Vertical | Fundamental |
| Peak |  |  |
| Avg. |  | Left blank |

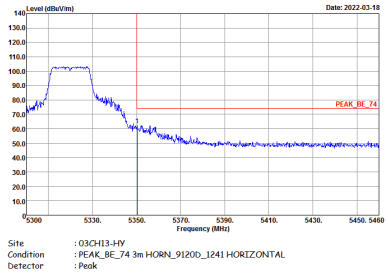
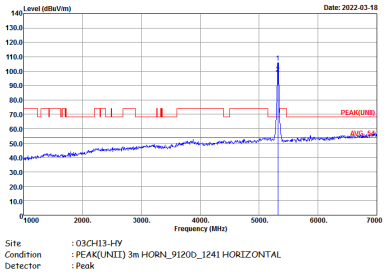
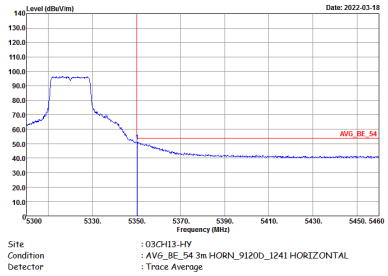
| WIFI | Band 2 5250~5350MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11n HT20 CH52 5260MHz - R | |
| 1 | Vertical | Fundamental |
| Peak |  | Left blank |
| Avg. |  | Left blank |

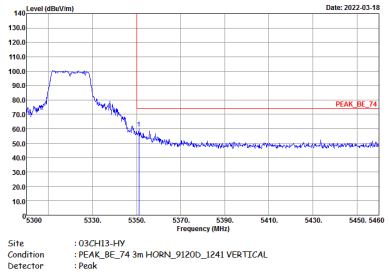
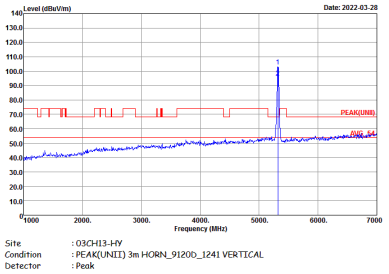
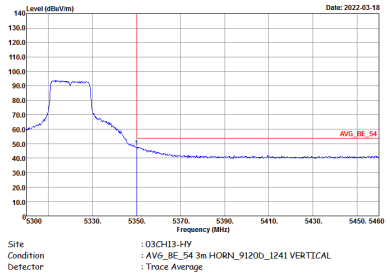
| WIFI | Band 2 5250~5350MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11n HT20 CH60 5300MHz - L | |
| 1 | Horizontal | Fundamental |
| Peak |  <br>Site : 03CH13-HY<br>Condition : PEAK_BE_74 3m HORN_9120D_1241 HORIZONTAL<br>: RBW:1000.000KHz VBW:3000.000KHz SWT:Auto |  <br>Site : 03CH13-HY<br>Condition : PEAK(UNII) 3m HORN_9120D_1241 HORIZONTAL<br>: RBW:1000.000KHz VBW:3000.000KHz SWT:Auto |
| Avg. |  <br>Site : 03CH13-HY<br>Condition : AVG_BE_54 3m HORN_9120D_1241 HORIZONTAL<br>: RBW:1000.000KHz VBW:3000.000KHz SWT:Auto | Left blank |

| WIFI | Band 2 5250~5350MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11n HT20 CH60 5300MHz - R | |
| 1 | Horizontal | Vertical |
| Peak |  | Left blank |
| Avg. |  | Left blank |

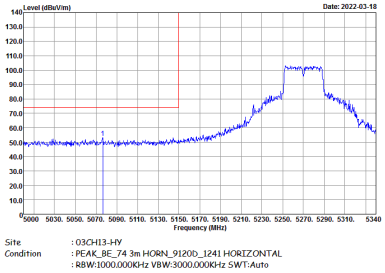
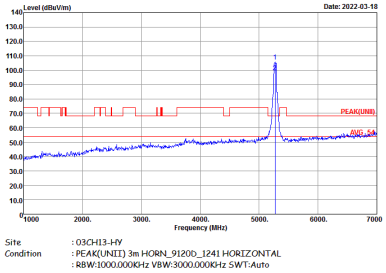
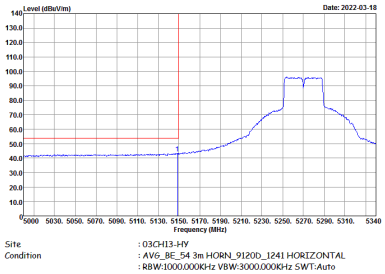
| WIFI | Band 2 5250~5350MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11n HT20 CH60 5300MHz - L | |
| 1 | Vertical | Fundamental |
| Peak |  |  |
| Avg. |  | Left blank |

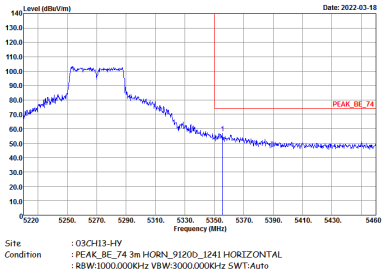
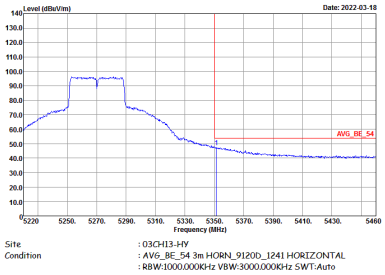
| WIFI | Band 2 5250~5350MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11n HT20 CH60 5300MHz - R | |
| 1 | Vertical | Fundamental |
| Peak |  | Left blank |
| Avg. |  | Left blank |

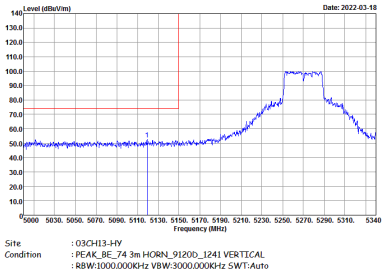
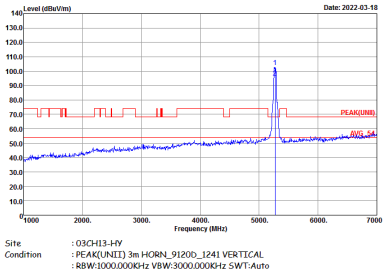
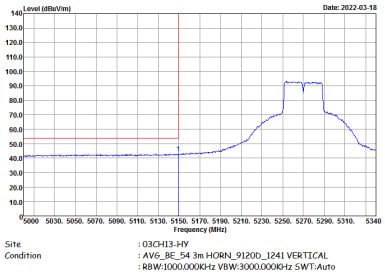
| WIFI | Band 2 5250~5350MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11n HT20 CH64 5320MHz | |
| 1 | Horizontal | Fundamental |
| Peak |  |  |
| Avg. |  | Left blank |

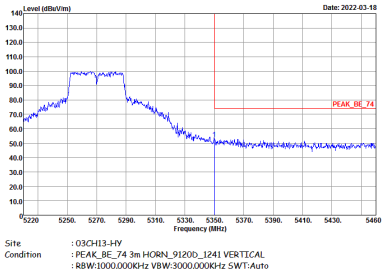
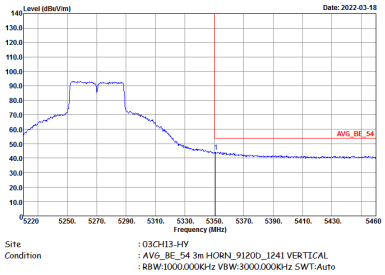
| WIFI | Band 2 5250~5350MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11n HT20 CH64 5320MHz | |
| 1 | Vertical | Fundamental |
| Peak |  |  |
| Avg. |  | Left blank |

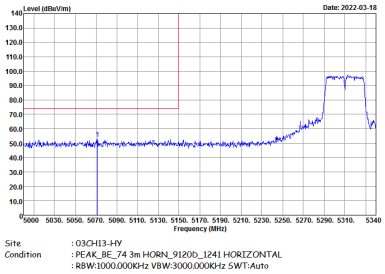
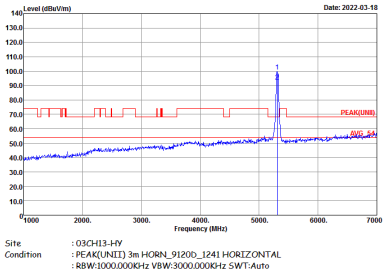
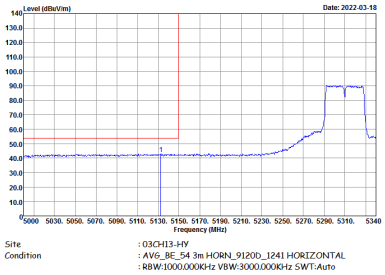
## Band 2 5250~5350MHz
## WIFI 802.11n HT40 (Band Edge @ 3m)

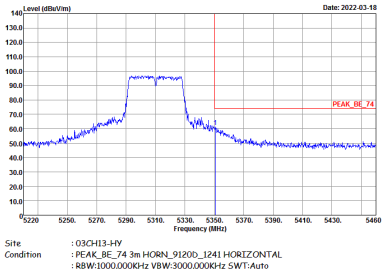
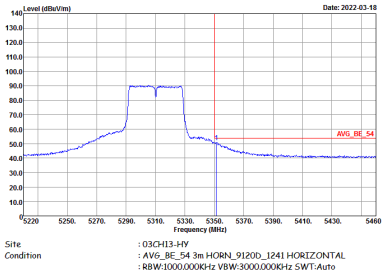
| WIFI | Band 2 5250~5350MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11n HT40 CH54 5270MHz - L | |
| 1 | Horizontal | Fundamental |
| Peak |  |  |
| Avg. |  | Left blank |

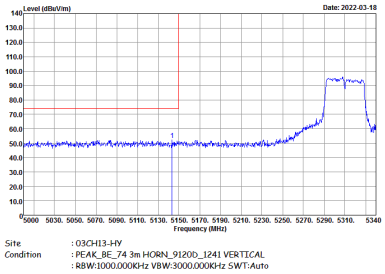
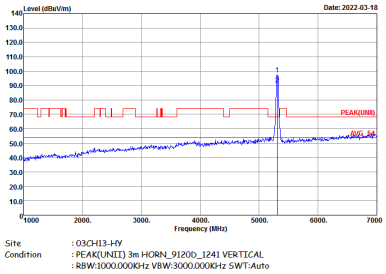
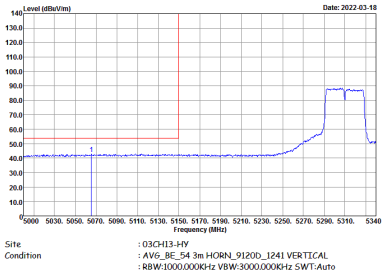
| WIFI | Band 2 5250~5350MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11n HT40 CH54 5270MHz - R | |
| 1 | Horizontal | Fundamental |
| Peak |  | Left blank |
| Avg. |  | Left blank |

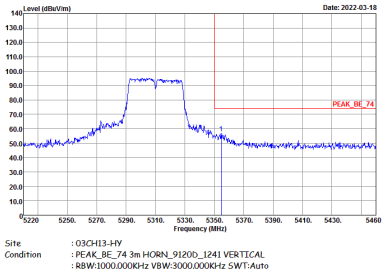
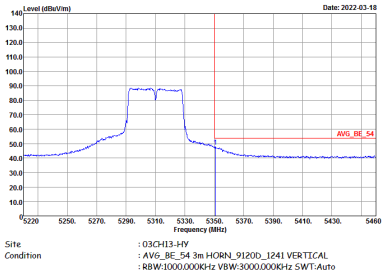
| WIFI | Band 2 5250~5350MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11n HT40 CH54 5270MHz - L | |
| 1 | Vertical | Vertical |
| Peak |  |  |
| Avg. |  | Left blank |

| WIFI | Band 2 5250~5350MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11n HT40 CH54 5270MHz - R | |
| 1 | Vertical | Vertical |
| Peak |  | Left blank |
| Avg. |  | Left blank |

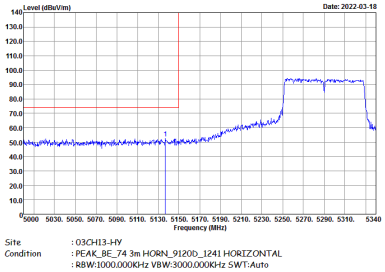
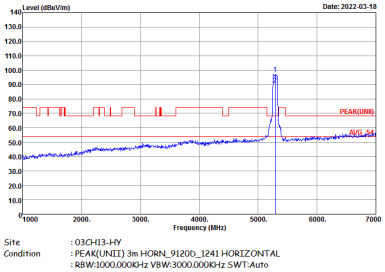
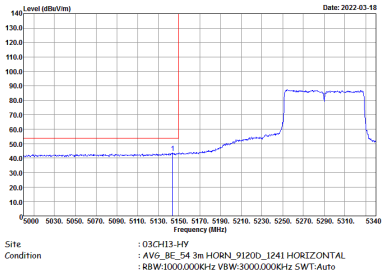
| WIFI | Band 2 5250~5350MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11n HT40 CH62 5310MHz - L | |
| 1 | Horizontal | Fundamental |
| Peak |  |  |
| Avg. |  | Left blank |

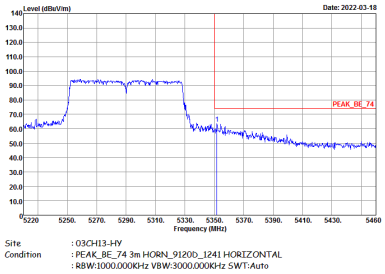
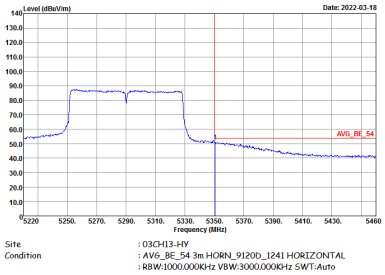
| WIFI | Band 2 5250~5350MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11n HT40 CH62 5310MHz - R | |
| 1 | Horizontal | Fundamental |
| Peak |  | Left blank |
| Avg. |  | Left blank |

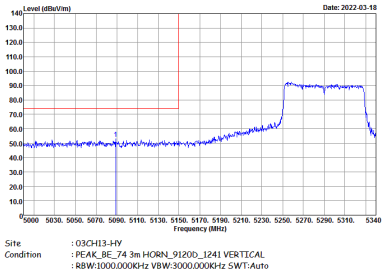
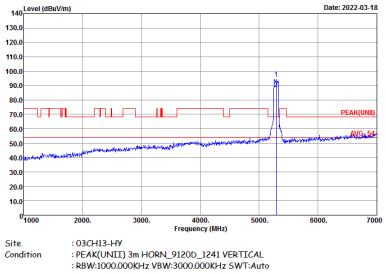
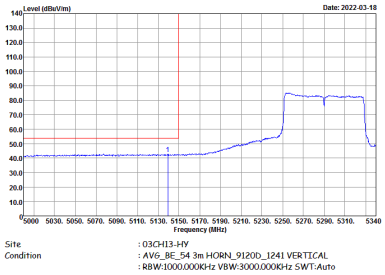
| WIFI | Band 2 5250~5350MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11n HT40 CH62 5310MHz - L | |
| 1 | Vertical | Fundamental |
| Peak |  |  |
| Avg. |  | Left blank |

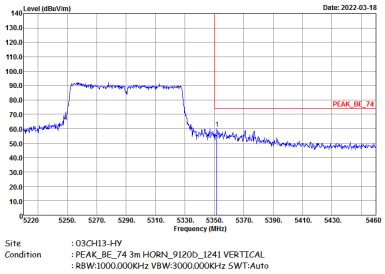
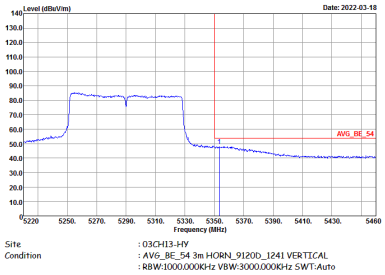
| WIFI | Band 2 5250~5350MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11n HT40 CH62 5310MHz - R | |
| 1 | Vertical | Fundamental |
| Peak |  | Left blank |
| Avg. |  | Left blank |

## Band 2 5250~5350MHz
## WIFI 802.11ac VHT80 (Band Edge @ 3m)

| WIFI | Band 2 5250~5350MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11ac VHT80 CH58 5290MHz - L | |
| 1 | Horizontal | Fundamental |
| Peak |  |  |
| Avg. |  | Left blank |

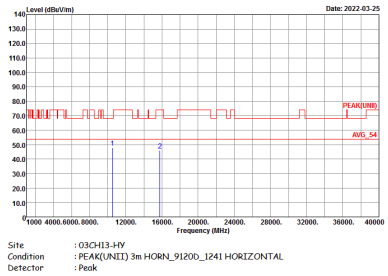
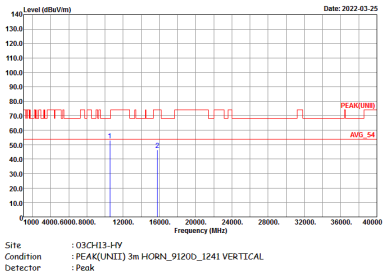
| WIFI | Band 2 5250~5350MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11ac VHT80 CH58 5290MHz - R | |
| 1 | Horizontal | Fundamental |
| Peak |  | Left blank |
| Avg. |  | Left blank |

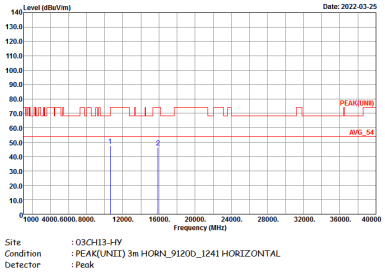
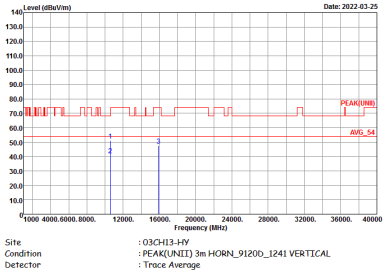
| WIFI | Band 2 5250~5350MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11ac VHT80 CH58 5290MHz - L | |
| 1 | Vertical | Fundamental |
| Peak |  |  |
| Avg. |  | Left blank |

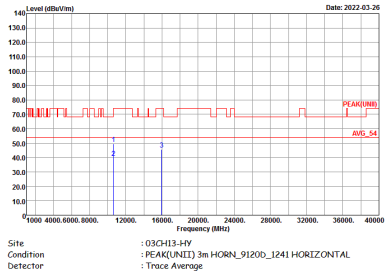
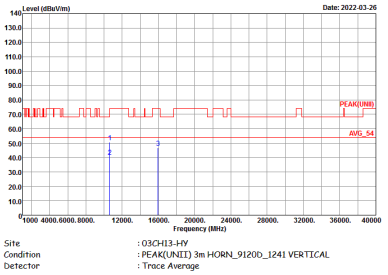
| WIFI | Band 2 5250~5350MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11ac VHT80 CH58 5290MHz - R | |
| 1 | Vertical | Fundamental |
| Peak |  | Left blank |
| Avg. |  | Left blank |

## Band 2 - 5250~5350MHz

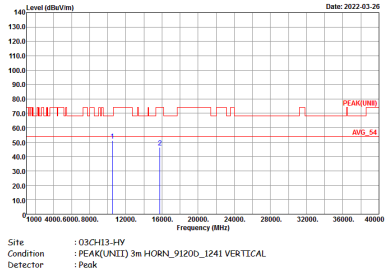
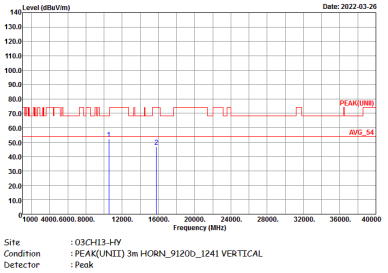
## WIFI 802.11a (Harmonic @ 3m)

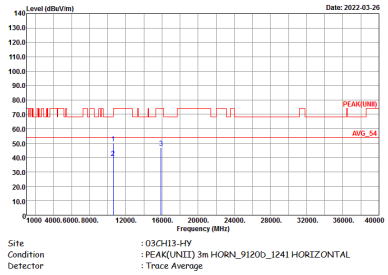
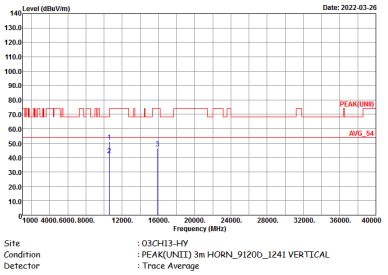
| WIFI | Band 2 5250~5350MHz Harmonic @ 3m | |
|---|---|---|
| ANT | 802.11a CH52 5260MHz | |
| 1 | Horizontal | Vertical |
| Peak<br>Avg. |  |  |

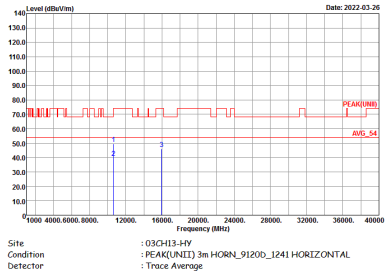
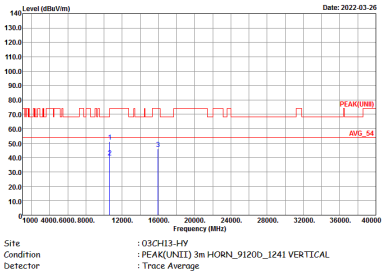
| WIFI | Band 2 5250~5350MHz Harmonic @ 3m | |
|---|---|---|
| ANT | 802.11a CH60 5300MHz | |
| 1 | Horizontal | Vertical |
| Peak<br>Avg. |  |  |

| WIFI | Band 2 5250~5350MHz Harmonic @ 3m | |
|---|---|---|
| ANT | 802.11a CH64 5320MHz | |
| 1 | Horizontal | Vertical |
| Peak<br>Avg. |  |  |

## Band 2 5250~5350MHz
## WIFI 802.11n HT20 (Harmonic @ 3m)

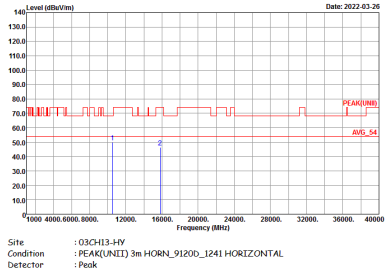
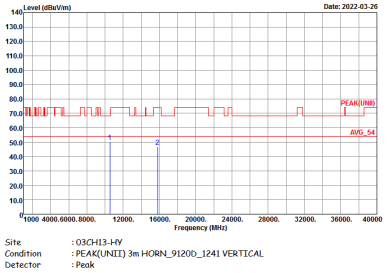
| WIFI | Band 2 5250~5350MHz Harmonic @ 3m | |
|---|---|---|
| ANT | 802.11n HT20 CH52 5260MHz | |
| 1 | Horizontal | Vertical |
| Peak<br>Avg. |  |  |

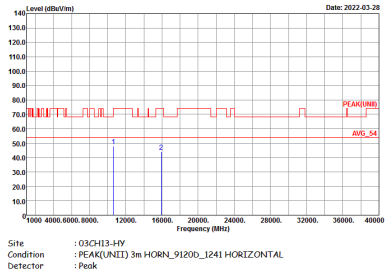
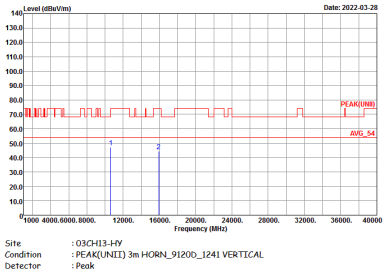
| WIFI | Band 2 5250~5350MHz Harmonic @ 3m | |
|---|---|---|
| ANT | 802.11n HT20 CH60 5300MHz | |
| 1 | Horizontal | Vertical |
| Peak<br>Avg. |  |  |

| WIFI | Band 2 5250~5350MHz Harmonic @ 3m | |
|---|---|---|
| ANT | 802.11n HT20 CH64 5320MHz | |
| 1 | Horizontal | Vertical |
| Peak<br>Avg. |  |  |

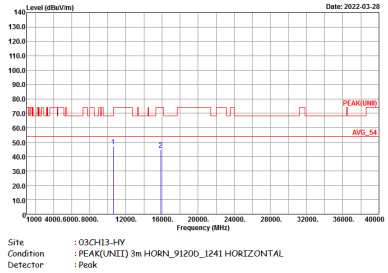
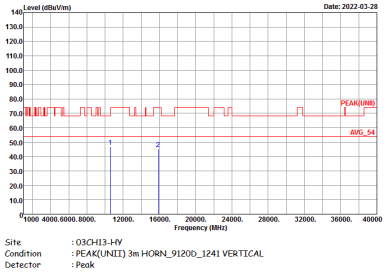
## Band 2 5250~5350MHz

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

| WIFI | Band 2 5250~5350MHz Harmonic @ 3m | |
|---|---|---|
| ANT | 802.11n HT40 CH54 5270MHz | |
| 1 | Horizontal | Vertical |
| Peak<br>Avg. |  |  |

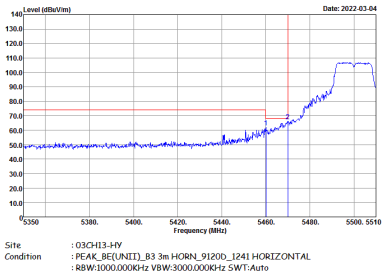
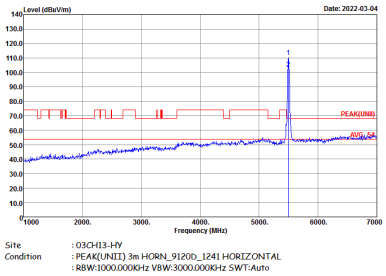
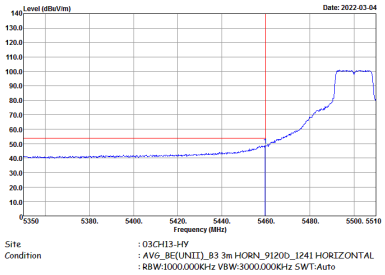
| WIFI | Band 2 5250~5350MHz Harmonic @ 3m | |
|---|---|---|
| ANT | 802.11n HT40 CH62 5310MHz | |
| 1 | Horizontal | Vertical |
| Peak<br>Avg. |  |  |

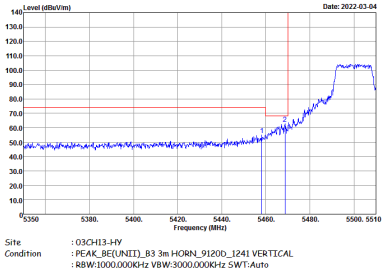
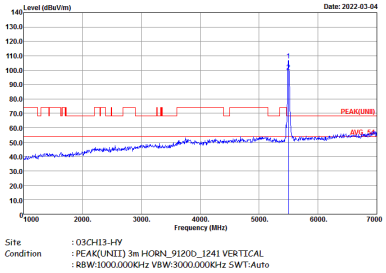
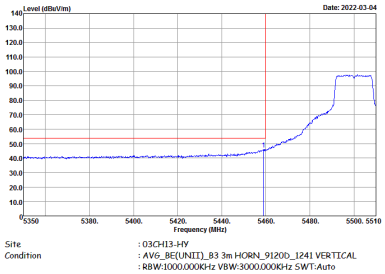
## Band 2 5250~5350MHz
## WIFI 802.11ac VHT80 (Harmonic @ 3m)

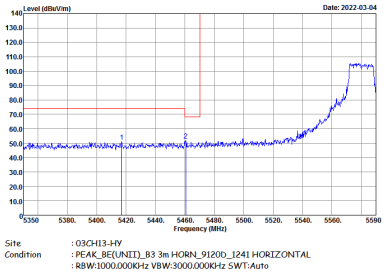
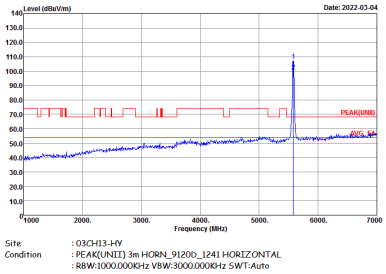
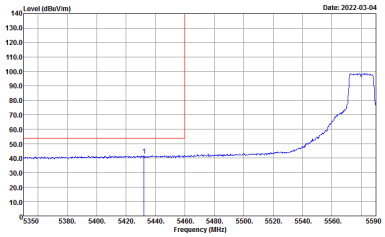
| WIFI | Band 2 5250~5350MHz Harmonic @ 3m | |
|---|---|---|
| ANT | 802.11ac VHT80 CH58 5290MHz | |
| 1 | Horizontal | Vertical |
| Peak<br>Avg. |  |  |

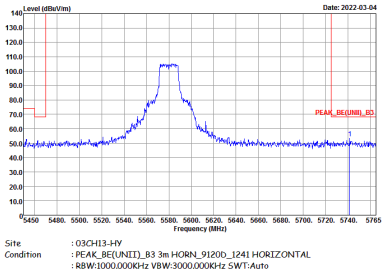
## Band 3 - 5470~5725MHz

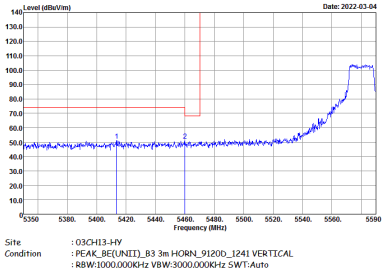
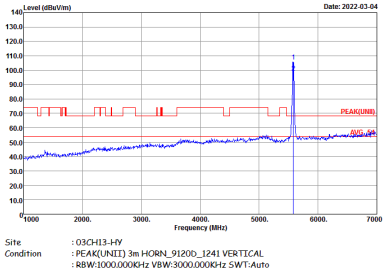
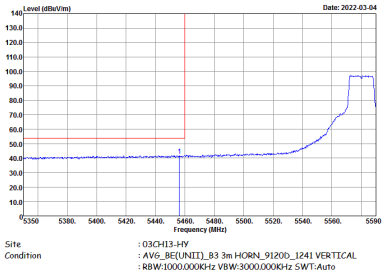
## WIFI 802.11a (Band Edge @ 3m)

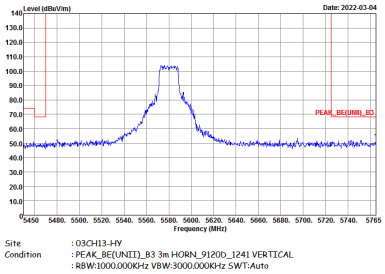
| WIFI | Band 3 5470~5725MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11a CH100 5500MHz | |
| 1 | Horizontal | Fundamental |
| Peak |  |  |
| Avg. |  | Left blank |

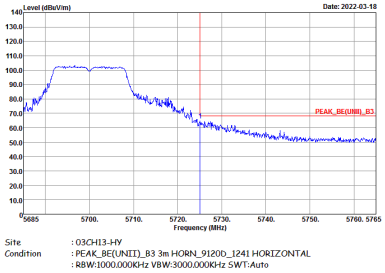
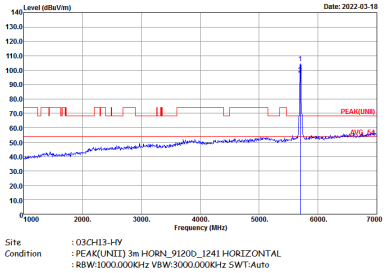
| WIFI | Band 3 5470~5725MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11a CH100 5500MHz | |
| 1 | Vertical | Fundamental |
| Peak |  |  |
| Avg. |  | Left blank |

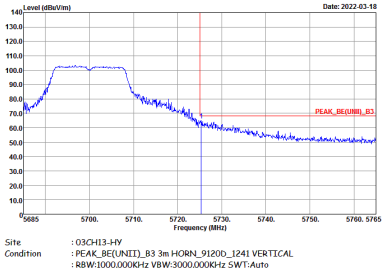
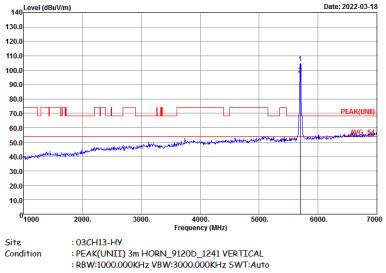
| WIFI | Band 3 5470~5725MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11a CH116 5580MHz - L | |
| 1 | Horizontal | Fundamental |
| Peak |  <br>Site : 03CH13-HY<br>Condition : PEAK_BE(UNII)_B3 3m HORN_9120D_1241 HORIZONTAL<br>: RBW:1000.000KHz VBW:3000.000KHz SWT:Auto |  <br>Site : 03CH13-HY<br>Condition : PEAK(UNII) 3m HORN_9120D_1241 HORIZONTAL<br>: RBW:1000.000KHz VBW:3000.000KHz SWT:Auto |
| Avg. |  <br>Site : 03CH13-HY<br>Condition : AVG_BE(UNII)_B3 3m HORN_9120D_1241 HORIZONTAL<br>: RBW:1000.000KHz VBW:3000.000KHz SWT:Auto | Left blank |

| WIFI | Band 3 5470~5725MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11a CH116 5580MHz - R | |
| 1 | Horizontal | Fundamental |
| Peak |  | Left blank |

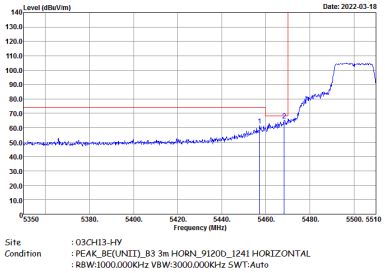
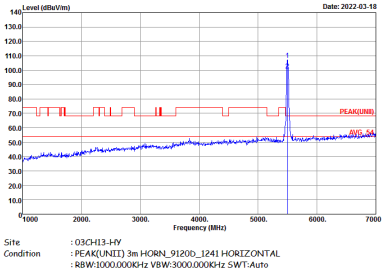
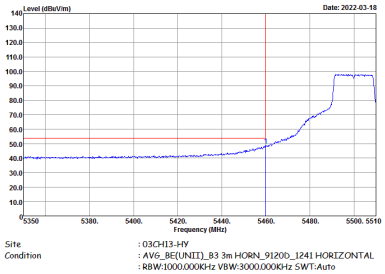
| WIFI | Band 3 5470~5725MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11a CH116 5580MHz - L | |
| 1 | Vertical | Fundamental |
| Peak |  |  |
| Avg. |  | Left blank |

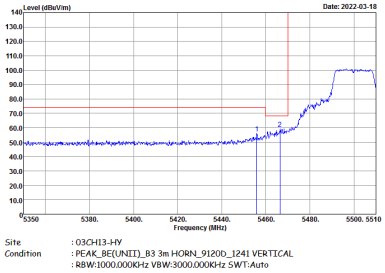
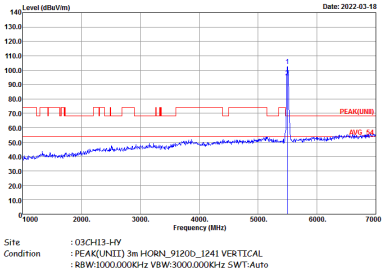
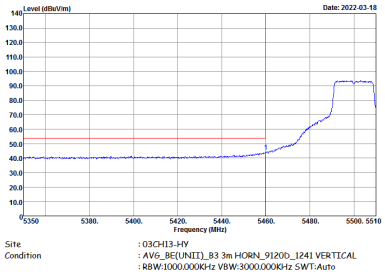
| WIFI | Band 3 5470~5725MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11a CH116 5580MHz - R | |
| 1 | Vertical | Fundamental |
| Peak |  | Left blank |

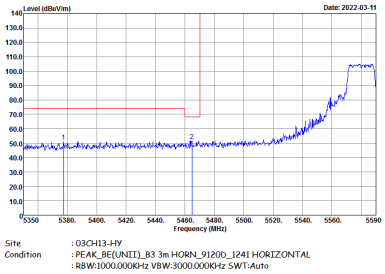
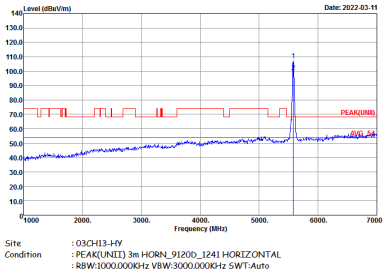
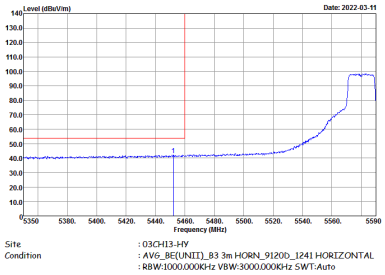
| WIFI | Band 3 5470~5725MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11a CH140 5700MHz | |
| 1 | Horizontal | Fundamental |
| Peak |  |  |

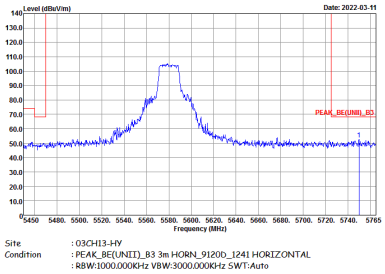
| WIFI | Band 3 5470~5725MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11a CH140 5700MHz | |
| 1 | Vertical | Fundamental |
| Peak |  |  |

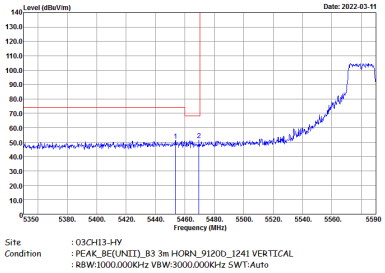
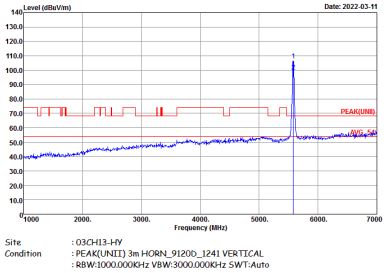
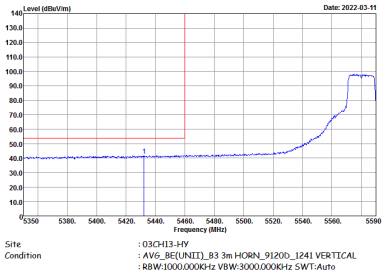
## Band 3 5470~5725MHz
## WIFI 802.11n HT20 (Band Edge @ 3m)

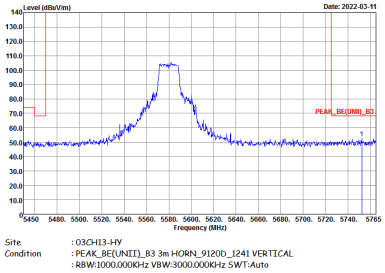
| WIFI | Band 3 5470~5725MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11n HT20 CH100 5500MHz | |
| 1 | Horizontal | Fundamental |
| Peak |  |  |
| Avg. |  | Left blank |

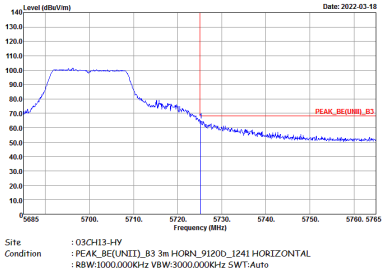
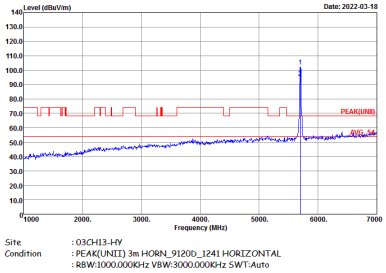
| WIFI | Band 3 5470~5725MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11n HT20 CH100 5500MHz | |
| 1 | Vertical | Fundamental |
| Peak |  |  |
| Avg. |  | Left blank |

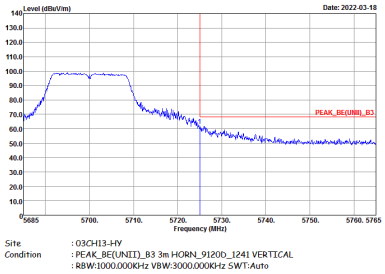
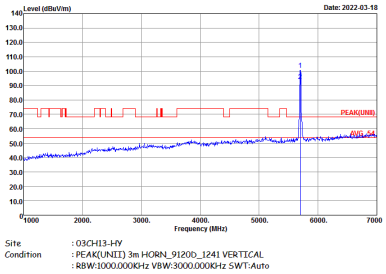
| WIFI | Band 3 5470~5725MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11n HT20 CH116 5580MHz - L | |
| 1 | Horizontal | Fundamental |
| Peak |  |  |
| Avg. |  | Left blank |

| WIFI | Band 3 5470~5725MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11n HT20 CH116 5580MHz - R | |
| 1 | Horizontal | Fundamental |
| Peak |  | Left blank |

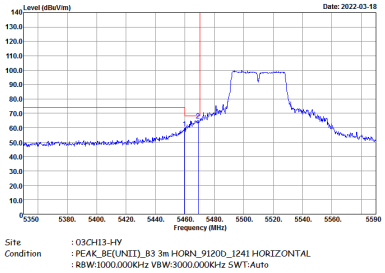
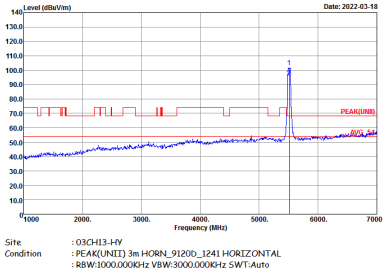
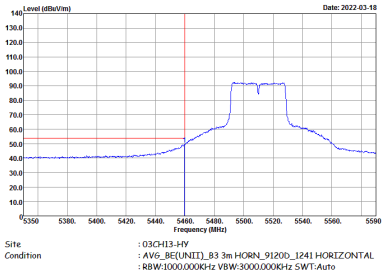
| WIFI | Band 3 5470~5725MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11n HT20 CH116 5580MHz - L | |
| 1 | Vertical | Fundamental |
| Peak |  |  |
| Avg. |  | Left blank |

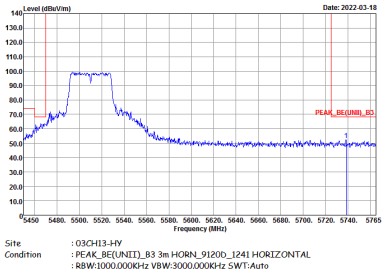
| WIFI | Band 3 5470~5725MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11n HT20 CH116 5580MHz - R | |
| 1 | Vertical | Fundamental |
| Peak |  | Left blank |

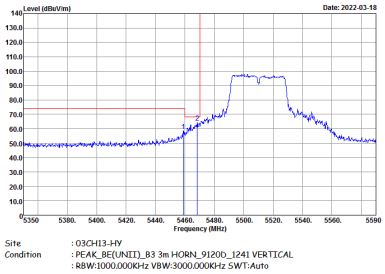
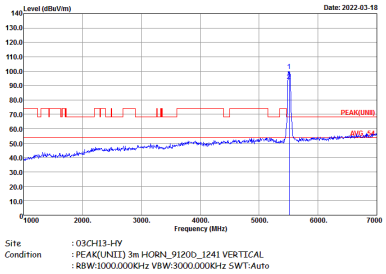
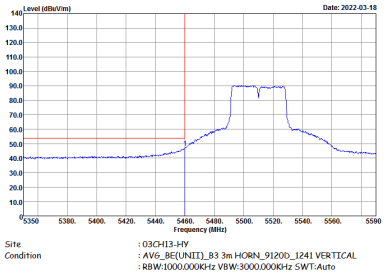
| WIFI | Band 3 5470~5725MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11n HT20 CH140 5700MHz | |
| 1 | Horizontal | Fundamental |
| Peak |  |  |

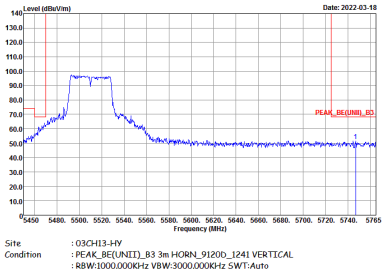
| WIFI | Band 3 5470~5725MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11n HT20 CH140 5700MHz | |
| 1 | Vertical | Fundamental |
| Peak. |  |  |

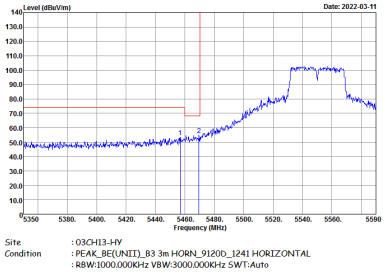
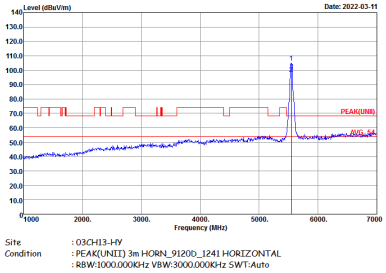
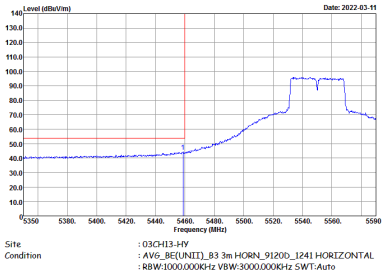
## Band 3 5470~5725MHz
## WIFI 802.11n HT40 (Band Edge @ 3m)

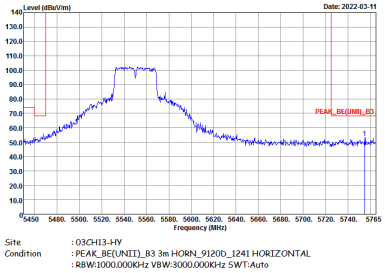
| WIFI | Band 3 5470~5725MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11n HT40 CH102 5510MHz - L | |
| 1 | Horizontal | Fundamental |
| Peak |  |  |
| Avg. |  | Left blank |

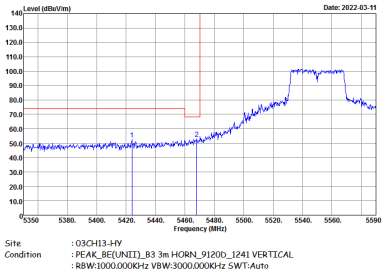
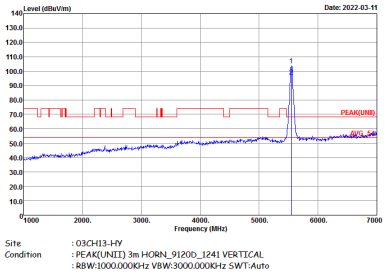
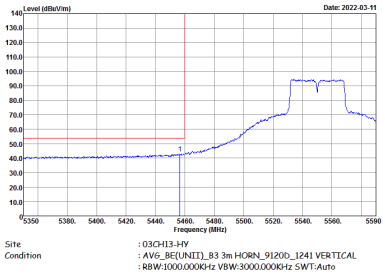
| WIFI | Band 3 5470~5725MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11n HT40 CH102 5510MHz - R | |
| 1 | Horizontal | Fundamental |
| Peak |  | Left blank |

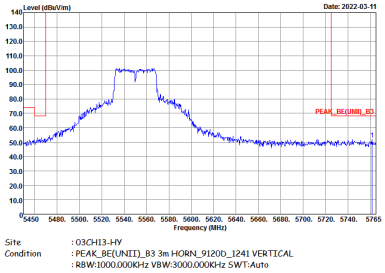
| WIFI | Band 3 5470~5725MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11n HT40 CH102 5510MHz - L | |
| 1 | Vertical | Fundamental |
| Peak |  |  |
| Avg. |  | Left blank |

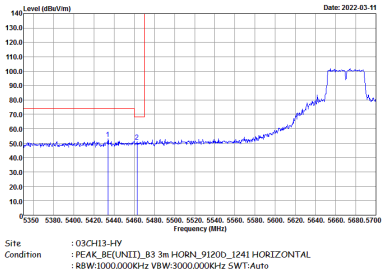
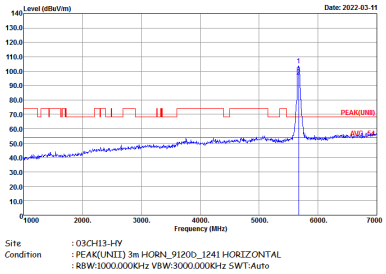
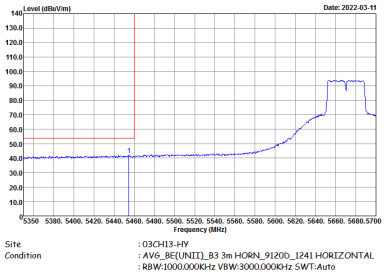
| WIFI | Band 3 5470~5725MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11n HT40 CH102 5510MHz - R | |
| 1 | Vertical | Fundamental |
| Peak |  | Left blank |

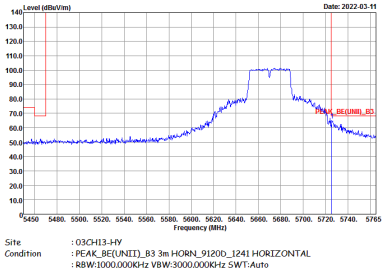
| WIFI | Band 3 5470~5725MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11n HT40 CH110 5550MHz - L | |
| 1 | Horizontal | Fundamental |
| Peak |  |  |
| Avg. |  | Left blank |

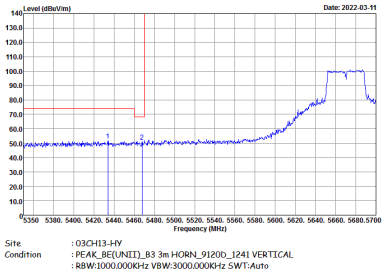
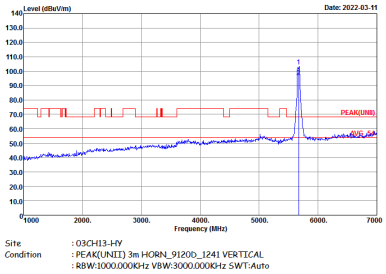
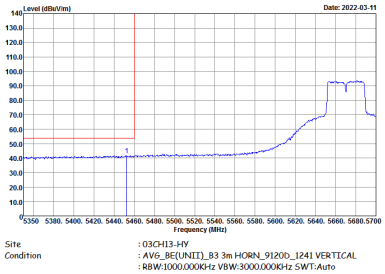
| WIFI | Band 3 5470~5725MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11n HT40 CH110 5550MHz - R | |
| 1 | Horizontal | Fundamental |
| Peak |  <br>Site : 03CH13-HY<br>Condition : PEAK_BE(UNII)_B3 3m HORN_9120D_1241 HORIZONTAL<br>: RBW:1000.000KHz VBW:3000.000KHz SWT:Auto | Left blank |

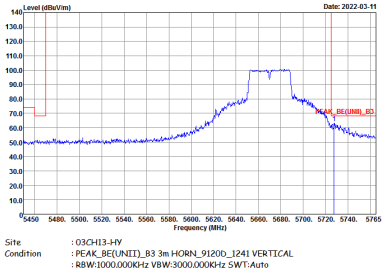
| WIFI | Band 3 5470~5725MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11n HT40 CH110 5550MHz - L | |
| 1 | Vertical | Fundamental |
| Peak |  |  |
| Avg. |  | Left blank |

| WIFI | Band 3 5470~5725MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11n HT40 CH110 5550MHz - R | |
| 1 | Vertical | Fundamental |
| Peak |  | Left blank |

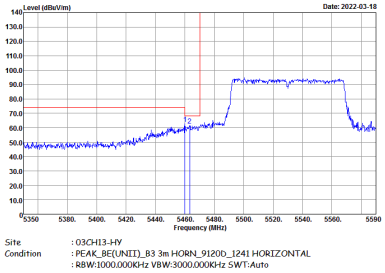
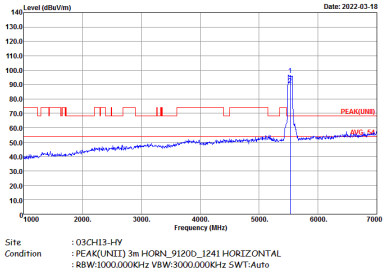
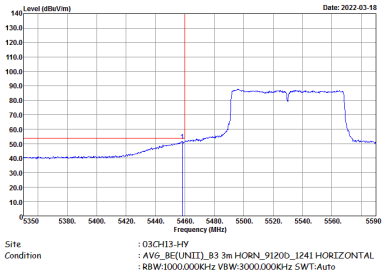
| WIFI | Band 3 5470~5725MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11n HT40 CH134 5670MHz - L | |
| 1 | Horizontal | Fundamental |
| Peak |  |  |
| Avg. |  | Left blank |

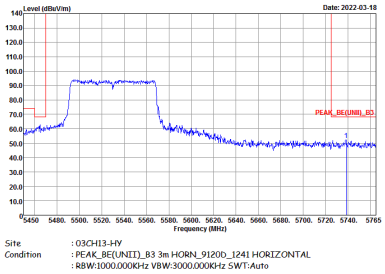
| WIFI | Band 3 5470~5725MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11n HT40 CH134 5670MHz - R | |
| 1 | Horizontal | Fundamental |
| Peak |  <br>Site : 03CH13-HY<br>Condition : PEAK_BE(UNII)_B3 3m HORN_9120D_1241 HORIZONTAL<br>: RBW:1000.000KHz VBW:3000.000KHz SWT:Auto | Left blank |

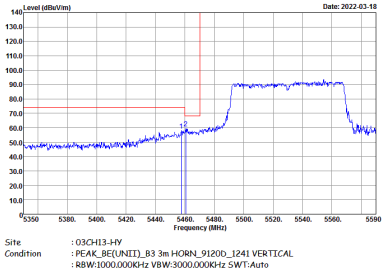
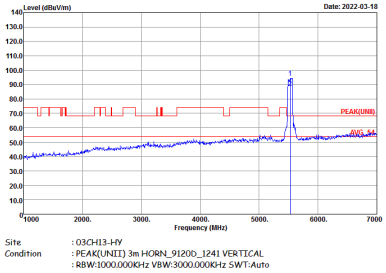
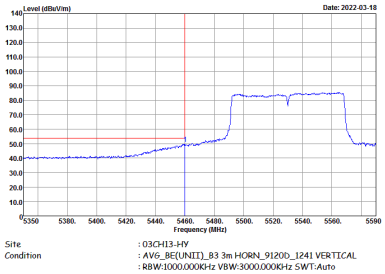
| WIFI | Band 3 5470~5725MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11n HT40 CH134 5670MHz - L | |
| 1 | Vertical | Fundamental |
| Peak |  |  |
| Avg. |  | Left blank |

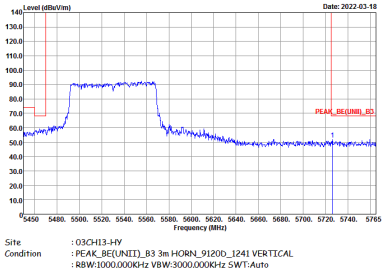
| WIFI | Band 3 5470~5725MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11n HT40 CH134 5670MHz - R | |
| 1 | Vertical | Fundamental |
| Peak |  <br>Site : 03CH13-HY<br>Condition : PEAK_BE(UNII)_B3 3m HORN_9120D_1241 VERTICAL<br>: RBW:1000.000KHz VBW:3000.000KHz SWT:Auto | Left blank |

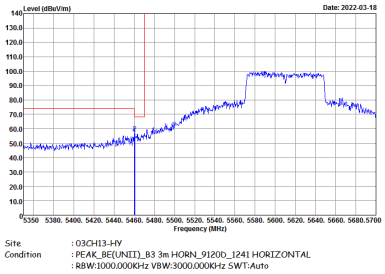
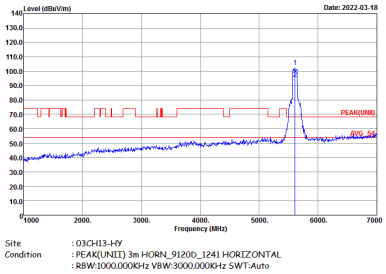
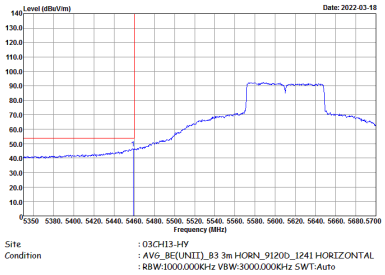
## Band 3 5470~5725MHz
## WIFI 802.11ac VHT80 (Band Edge @ 3m)

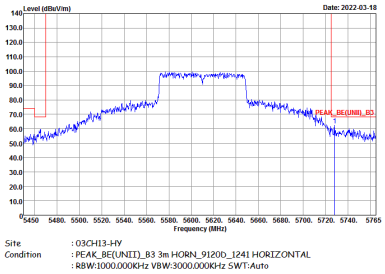
| WIFI | Band 3 5470~5725MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11ac VHT80 CH106 5530MHz - L | |
| 1 | Horizontal | Fundamental |
| Peak |  |  |
| Avg. |  | Left blank |

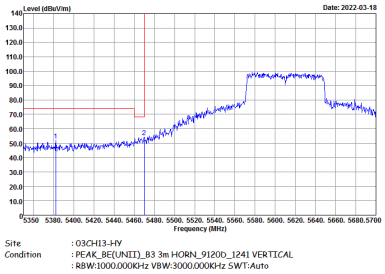
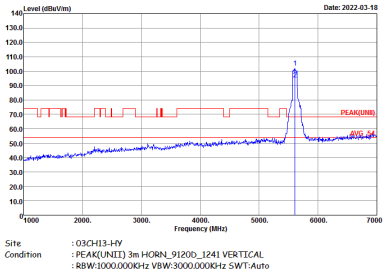
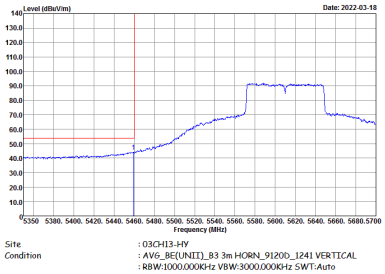
| WIFI | Band 3 5470~5725MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11ac VHT80 CH106 5530MHz - R | |
| 1 | Horizontal | Fundamental |
| Peak |  | Left blank |

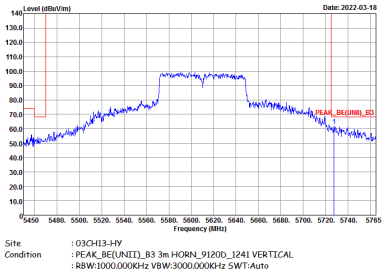
| WIFI | Band 3 5470~5725MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11ac VHT80 CH106 5530MHz - L | |
| 1 | Vertical | Fundamental |
| Peak |  |  |
| Avg. |  | Left blank |

| WIFI | Band 3 5470~5725MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11ac VHT80 CH106 5530MHz - R | |
| 1 | Vertical | Fundamental |
| Peak |  | Left blank |

| WIFI | Band 3 5470~5725MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11ac VHT80 CH122 5610MHz - L | |
| 1 | Horizontal | Fundamental |
| Peak |  |  |
| Avg. |  | Left blank |

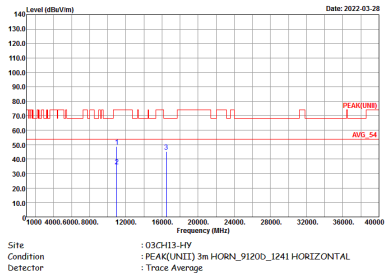
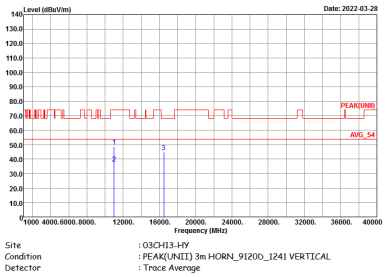
| WIFI | Band 3 5470~5725MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11ac VHT80 CH122 5610MHz - R | |
| 1 | Horizontal | Fundamental |
| Peak |  <br>Site : 03CH13-HY<br>Condition : PEAK_BE(UNII)_B3 3m HORN_9120D_1241 HORIZONTAL<br>: RBW:1000.000KHz VBW:3000.000KHz SWT:Auto | Left blank |

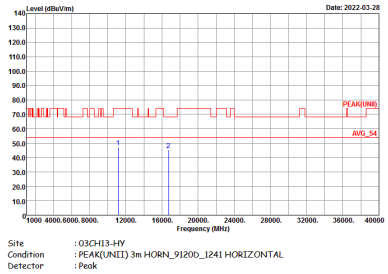
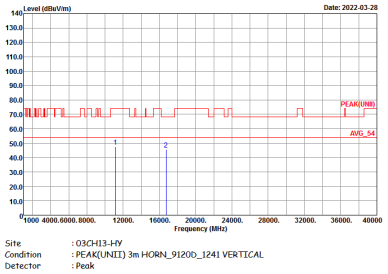
| WIFI | Band 3 5470~5725MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11ac VHT80 CH122 5610MHz - L | |
| 1 | Vertical | Fundamental |
| Peak |  |  |
| Avg. |  | Left blank |

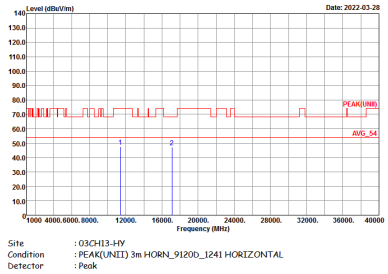
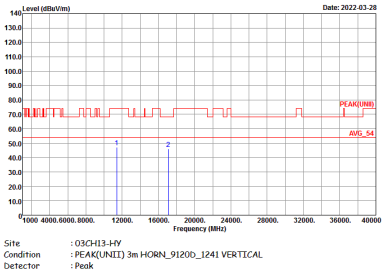
| WIFI | Band 3 5470~5725MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11ac VHT80 CH122 5610MHz - R | |
| 1 | Vertical | Fundamental |
| Peak |  <br>Site : 03CH13-HY<br>Condition : PEAK_BE(UNII)_B3 3m HORN_9120D_1241 VERTICAL<br>: RBW:1000.000KHz VBW:3000.000KHz SWT:Auto | Left blank |

## Band 3 - 5470~5725MHz

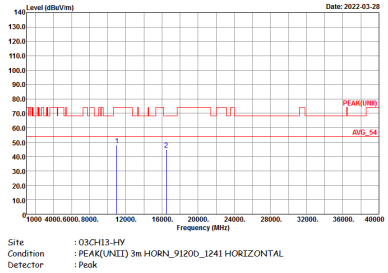
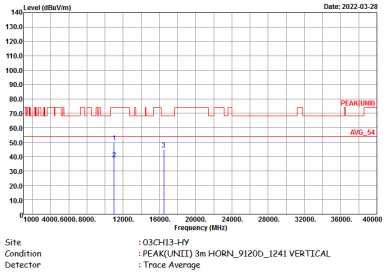
## WIFI 802.11a (Harmonic @ 3m)

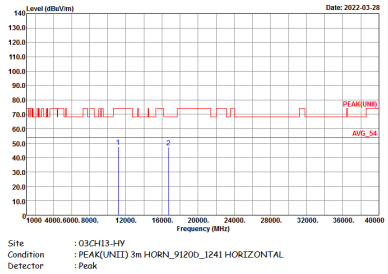
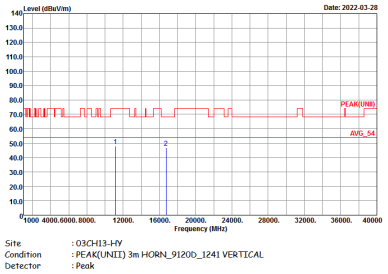
| WIFI | Band 3 5470~5725MHz Harmonic @ 3m | |
|---|---|---|
| ANT | 802.11a CH100 5500MHz | |
| 1 | Horizontal | Vertical |
| Peak<br>Avg. |  |  |

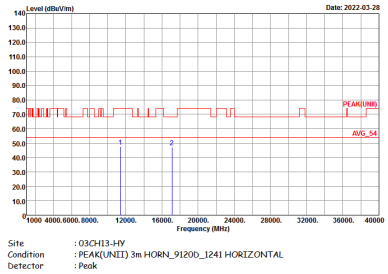
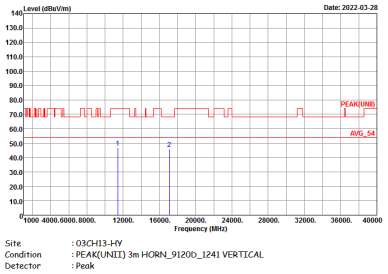
| WIFI | Band 3 5470~5725MHz Harmonic @ 3m | |
|---|---|---|
| ANT | 802.11a CH116 5580MHz | |
| 1 | Horizontal | Vertical |
| Peak<br>Avg. |  |  |

| WIFI | Band 3 5470~5725MHz Harmonic @ 3m | |
|---|---|---|
| ANT | 802.11a CH140 5700MHz | |
| 1 | Horizontal | Vertical |
| Peak<br>Avg. |  |  |

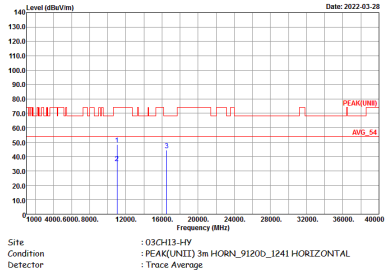
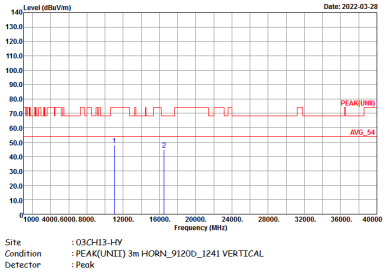
## Band 3 5470~5725MHz
## WIFI 802.11n HT20 (Harmonic @ 3m)

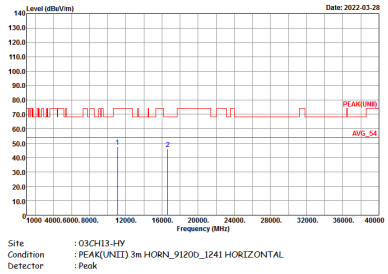
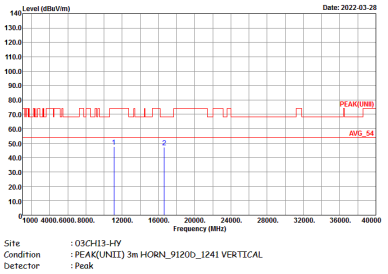
| WIFI | Band 3 5470~5725MHz Harmonic @ 3m | |
|---|---|---|
| ANT | 802.11n HT20 CH100 5500MHz | |
| 1 | Horizontal | Vertical |
| Peak<br>Avg. |  |  |

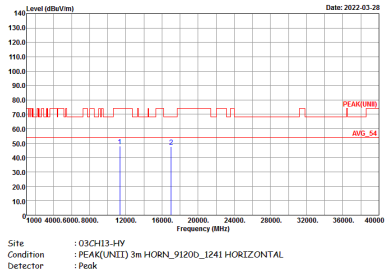
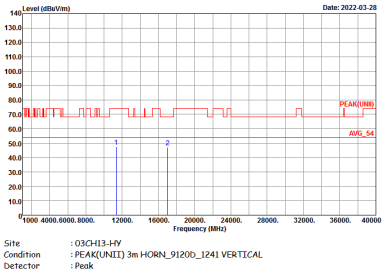
| WIFI | Band 3 5470~5725MHz Harmonic @ 3m | |
|---|---|---|
| ANT | 802.11n HT20 CH116 5580MHz | |
| 1 | Horizontal | Vertical |
| Peak<br>Avg. |  |  |

| WIFI | Band 3 5470~5725MHz Harmonic @ 3m | |
|---|---|---|
| ANT | 802.11n HT20 CH140 5700MHz | |
| 1 | Horizontal | Vertical |
| Peak<br>Avg. |  |  |

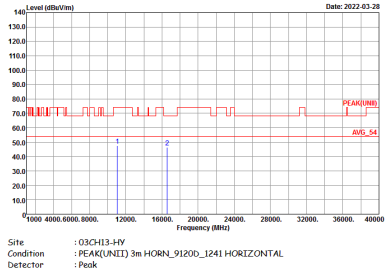
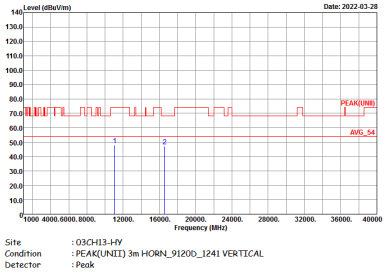
## Band 3 5470~5725MHz
## WIFI 802.11n HT40 (Harmonic @ 3m)

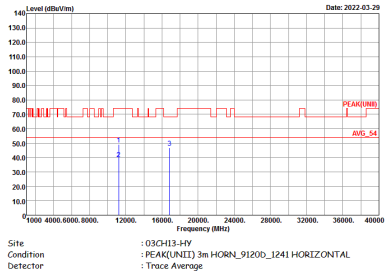
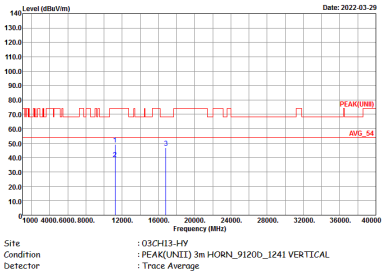
| WIFI | Band 3 5470~5725MHz Harmonic @ 3m | |
|---|---|---|
| ANT | 802.11n HT40 CH102 5510MHz | |
| 1 | Horizontal | Vertical |
| Peak<br>Avg. |  |  |

| WIFI | Band 3 5470~5725MHz Harmonic @ 3m | |
|---|---|---|
| ANT | 802.11n HT40 CH110 5550MHz | |
| 1 | Horizontal | Vertical |
| Peak<br>Avg. |  |  |

| WIFI | Band 3 5470~5725MHz Harmonic @ 3m | |
|---|---|---|
| ANT | 802.11n HT40 CH134 5670MHz | |
| 1 | Horizontal | Vertical |
| Peak<br>Avg. |  |  |

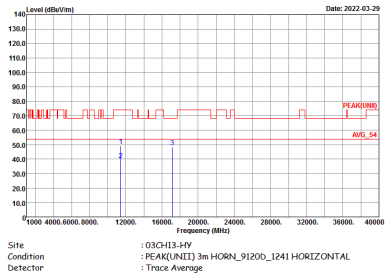
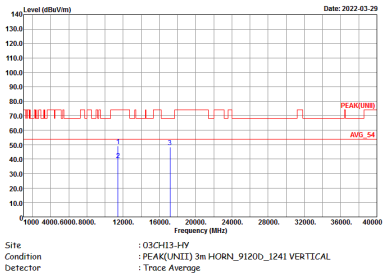
## Band 3 5470~5725MHz
## WIFI 802.11ac VHT80 (Harmonic @ 3m)

| WIFI | Band 3 5470~5725MHz Harmonic @ 3m | |
|---|---|---|
| ANT | 802.11ac VHT80 CH106 5530MHz | |
| 1 | Horizontal | Vertical |
| Peak<br>Avg. |  |  |

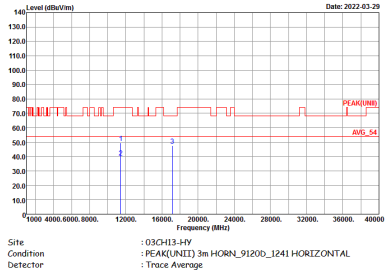
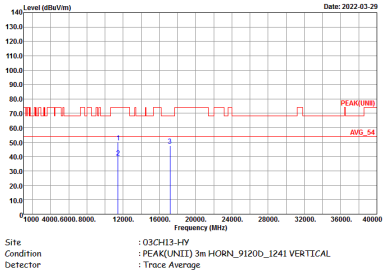
| WIFI | Band 3 5470~5725MHz Harmonic @ 3m | |
|---|---|---|
| ANT | 802.11ac VHT80 CH122 5610MHz | |
| 1 | Horizontal | Vertical |
| Peak<br>Avg. |  |  |

## Band 3 - Straddle Channel

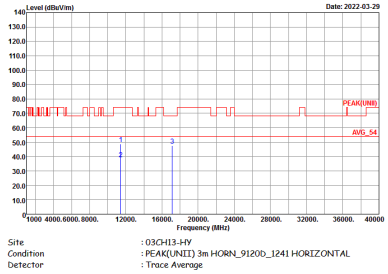
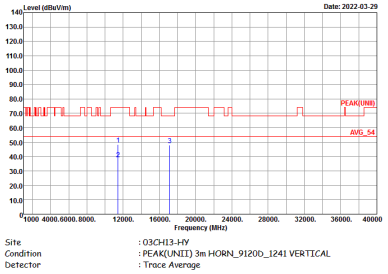
## WIFI 802.11a (Harmonic @ 3m)

| WIFI | Band 3 Straddle Channel Harmonic @ 3m | |
|---|---|---|
| ANT | 802.11a CH144 5720MHz | |
| 1 | Horizontal | Vertical |
| Peak<br>Avg. |  |  |

## Band 3 – Straddle Channel
## WIFI 802.11n HT20 (Harmonic @ 3m)

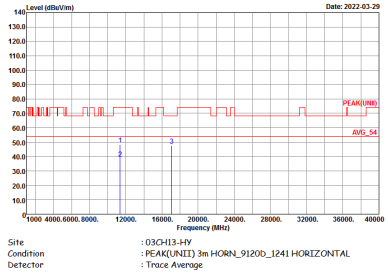
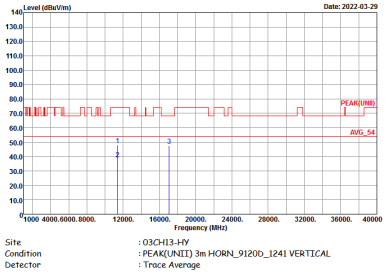
| WIFI | Band 3 Straddle Channel Harmonic @ 3m | |
|---|---|---|
| ANT | 802.11n HT20 CH144 5720MHz | |
| 1 | Horizontal | Vertical |
| Peak<br>Avg. |  |  |

## Band 3 – Straddle Channel
## WIFI 802.11n HT40 (Harmonic @ 3m)

| WIFI | Band 3 Straddle Channel Harmonic @ 3m | |
|---|---|---|
| ANT | 802.11n HT40 CH142 5710MHz | |
| 1 | Horizontal | Vertical |
| Peak<br>Avg. |  |  |

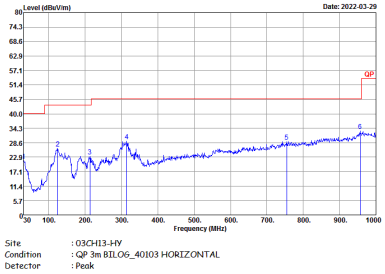
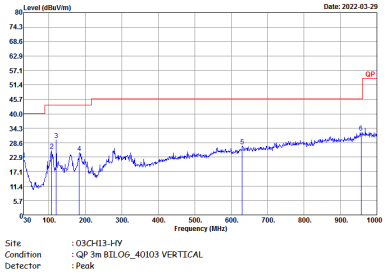
## Band 3 – Straddle Channel

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

| WIFI | Band 3 Straddle Channel Harmonic @ 3m | |
|---|---|---|
| ANT | 802.11ac VHT80 CH138 5690MHz | |
| 1 | Horizontal | Vertical |
| Peak<br>Avg. |  |  |

## Emission below 1GHz

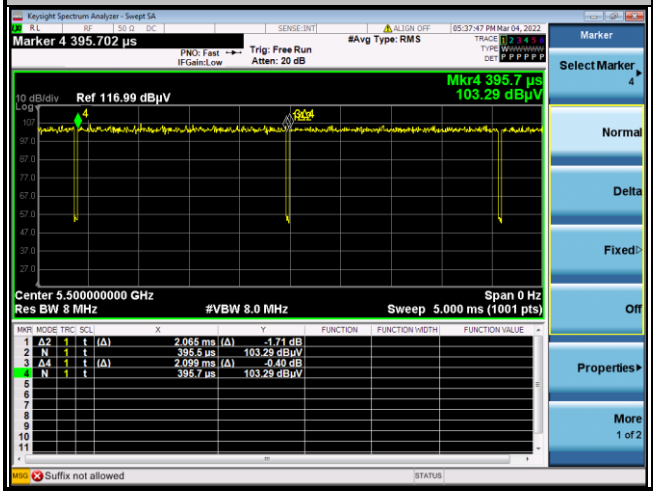
## 5GHz WIFI 802.11n HT40 (LF)

| WIFI | 5GHz WIFI | |
|---|---|---|
| ANT | 802.11n HT40 LF | |
| 1 | Horizontal | Vertical |
| QP / Peak |  |  |

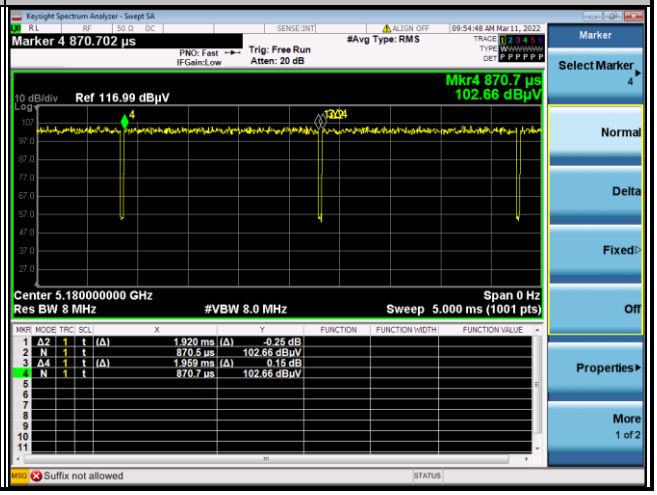
# Appendix E. Duty Cycle Plots

| Band | Duty Cycle(%) | T(us) | 1/T(kHz) | VBW Setting |
|---|---|---|---|---|
| 802.11a | 98.38 | - | - | 10Hz |
| 5GHz 802.11n HT20 | 98.21 | - | - | 10Hz |
| 5GHz 802.11n HT40 | 96.94 | 950 | 1.05 | 3kHz |
| 5GHz 802.11ac VHT80 | 92.80 | 464 | 2.16 | 3kHz |

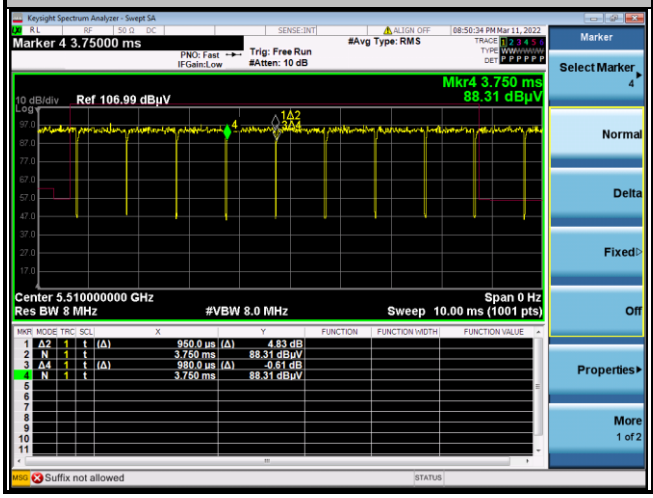
**802.11a**




**802.11n HT20**




**802.11n HT40**




**802.11ac VHT80**