FCC RADIO TEST REPORT

FCC ID	:	**HLZRXMG1**
Equipment	:	**Notebook Computer**
Brand Name	:	**ACER**
Model Name	:	**N20C7**
Applicant	:	**Acer Incorporated** **8F,. No. 88, Sec. 1, Xintai 5th Rd., Xizhi, New Taipei City 22181, Taiwan (R.O.C)**
Manufacturer	:	**Acer Incorporated** **8F,. No. 88, Sec. 1, Xintai 5th Rd., Xizhi, New Taipei City 22181, Taiwan (R.O.C)**
Standard	:	**FCC Part 15 Subpart E §15.407**

The product was received on Jul. 01, 2020 and testing was started from Jul. 25, 2020 and completed on Aug. 22, 2020. We, SPORTON INTERNATIONAL INC., EMC & Wireless Communications Laboratory, would like to declare that the tested sample has been evaluated in accordance with the test procedures and has been in compliance with the applicable technical standards.

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

Louis Wu

Approved by: Louis Wu

SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory

No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.)

Table of Contents

History of this test report

Report No.	Version	Description	Issued Date
FR070206D	01	Initial issue of report	Sep. 30, 2020

Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
3.1	15.403(i)	26dB Bandwidth	Pass	-
3.1	2.1049	99% Occupied Bandwidth	Reporting only	-
3.2	15.407(a)	Maximum Conducted Output Power	Pass	-
3.3	15.407(a)	Power Spectral Density	Pass	-
3.4	15.407(b)	Unwanted Emissions	Pass	Under limit 6.31 dB at 5352.000 MHz
3.5	15.207	AC Conducted Emission	Pass	Under limit 12.61 dB at 4.964 MHz
3.6	15.407(c)	Automatically Discontinue Transmission	Pass	-
3.7	15.203 15.407(a)	Antenna Requirement	Pass	-

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

Reviewed by: Wii Chang

Report Producer: Ruby Zou

1 General Description

1.1 Product Feature of Equipment Under Test

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

Product Specification subjective to this standard	
Antenna Type	WWAN <Ant. 0>: PIFA Antenna <Ant. 2>: PIFA Antenna WLAN <Main>: PIFA Antenna <Aux.>: PIFA Antenna Bluetooth: PIFA Antenna GPS/Glonass/BDS/Galileo: Couple Antenna

Antenna Information			
Antenna 1 (NB Mode)	**Antenna Type**	PIFA Antenna	PIFA Antenna
	Part number	DC33002GL00 (81ELAU15.G14)	DC33002GL10 (81ELAU15.G15)
	Peak gain (dbi)	Main Antenna：	Aux Antenna：
		WLAN (5GHz Band1): -0.68 WLAN (5GHz Band2): -0.68 WLAN (5GHz Band3): -2.08	WLAN (5GHz Band1): -1.48 WLAN (5GHz Band2): -1.48 WLAN (5GHz Band3): -2.06
Antenna 2 (TB Mode)	**Antenna Type**	PIFA Antenna	PIFA Antenna
	Part number	DC33002GL00 (81ELAU15.G14)	DC33002GL10 (81ELAU15.G15)
	Peak gain (dbi)	Main Antenna：	Aux Antenna：
		WLAN (5GHz Band1): 0.47 WLAN (5GHz Band2): -0.42 WLAN (5GHz Band3): -1.33	WLAN (5GHz Band1): 0.32 WLAN (5GHz Band2): 0.32 WLAN (5GHz Band3): 0.44

Remark: All the tests were performed with Antenna 2.

1.2 Modification of EUT

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

1.3 Testing Location

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

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

Test Site	SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory
Test Site Location	No.58, Aly. 75, Ln. 564, Wenhua 3rd, Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.) TEL: +886-3-327-0868 FAX: +886-3-327-0855
Test Site No.	**Sporton Site No.**
	03CH13-HY

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

FCC designation No.: TW1190 and TW0007

1.4 Applicable Standards

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

- FCC Part 15 Subpart E
- FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01.
- FCC KDB 414788 D01 Radiated Test Site v01r01.
- FCC KDB 662911 D01 Multiple Transmitter Output v02r01.
- ANSI C63.10-2013

Remark:

1. All test items were verified and recorded according to the standards and without any deviation during the test.
2. The TAF code is not including all the FCC KDB listed without accreditation.

2 Test Configuration of Equipment Under Test

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

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

2.1 Carrier Frequency and Channel

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

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

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

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

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

Note:

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

2.2 Test Mode

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

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

Test Cases	
AC Conducted Emission	Mode 1 : Bluetooth Link + WLAN (5GHz) Link + Hard Disk (Load) + Earphone + 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

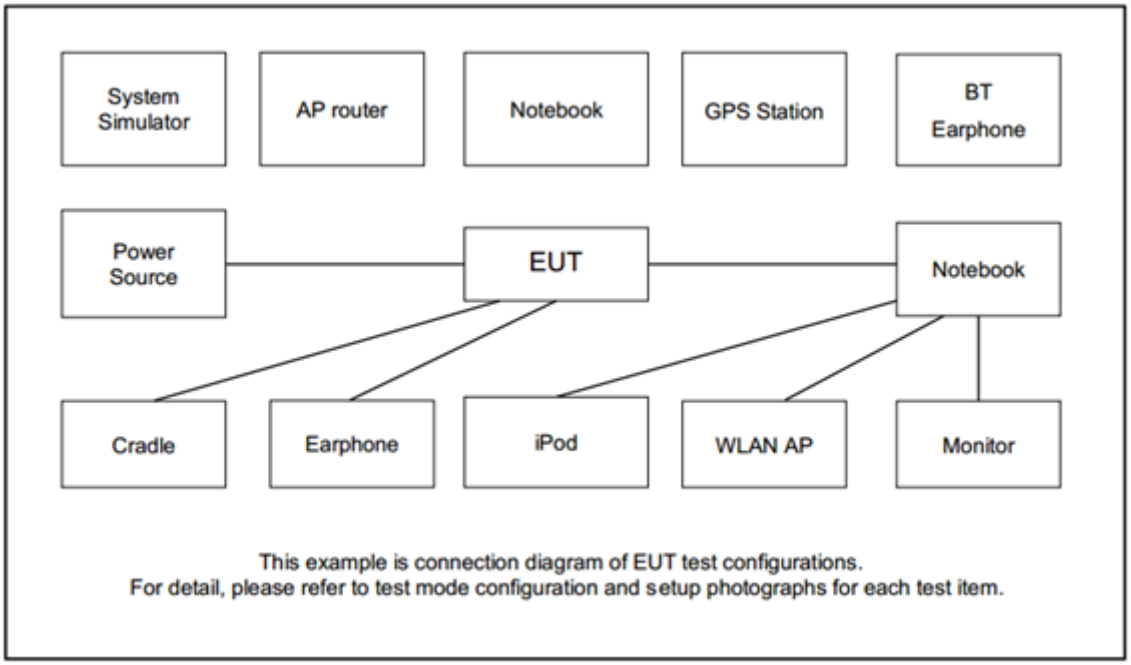
Ch. #		Band I：5150-5250 MHz	Band II：5250-5350 MHz	Band III：5470-5725MHz
		802.11n HT20	802.11n HT20	802.11n HT20
L	Low	36	52	100
M	Middle	44	60	116
H	High	48	64	140
Straddle		-	-	144

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	122
H	High	-	-	-
Straddle		-	-	138

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

2.3 Connection Diagram of Test System



2.4 Support Unit used in test configuration and system

Item	Equipment	Brand Name	Model Name	FCC ID	Data Cable	Power Cord
1.	Bluetooth Earphone	Sony Ericsson	MW600	PY7DDA-2029	N/A	N/A
2.	Earphone	SONY	MH750	N/A	N/A	N/A
3.	WLAN AP	ASUS	RT-AC66U	MSQ-RTAC66U	N/A	Unshielded, 1.8 m
4.	iPod Earphone	Apple	N/A	Verification	Unshielded, 1.0 m	N/A
5.	Hard Disk	Lenovo	F310S	FCC DoC	Shielded, 1.0m	N/A

2.5 EUT Operation Test Setup

The RF test items, utility “QRCT V4.0.00156.0” was installed in EUT which was programmed in order to make the EUT get into the engineering modes to provide channel selection, power level, data rate and the application type and for continuous transmitting signals.

2.6 Measurement Results Explanation Example

For all conducted test items:

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

Example :

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

Offset = RF cable loss + attenuator factor.

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

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

= 4.2 + 10 = 14.2 (dB)

3 Test Result

3.1 26dB & 99% Occupied Bandwidth Measurement

3.1.1 Description of 26dB & 99% Occupied Bandwidth

This section is for reporting purpose only.

There is no restriction limits for bandwidth.

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

See list of measuring equipment of this test report.

3.1.3 Test Procedures

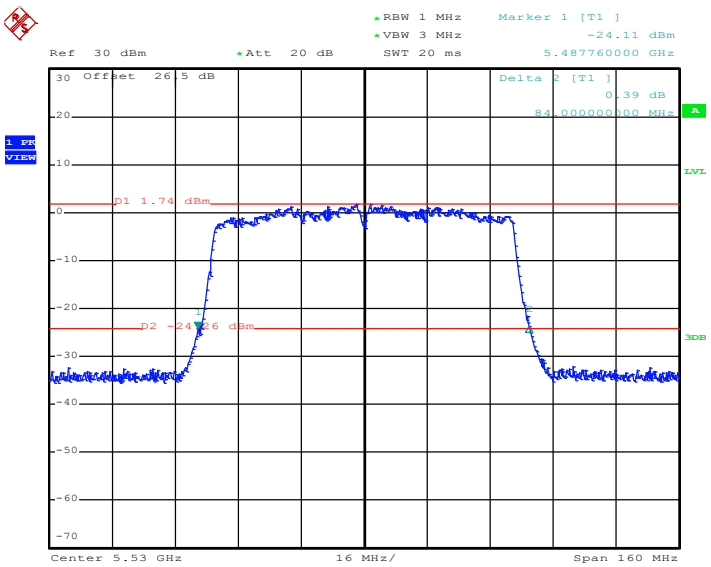
1. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01. Section C) Emission bandwidth
2. Set RBW = approximately 1% of the emission bandwidth.
3. Set the VBW > RBW.
4. Detector = Peak.
5. Trace mode = max hold
6. Measure the maximum width of the emission that is 26 dB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

3.1.4 Test Setup

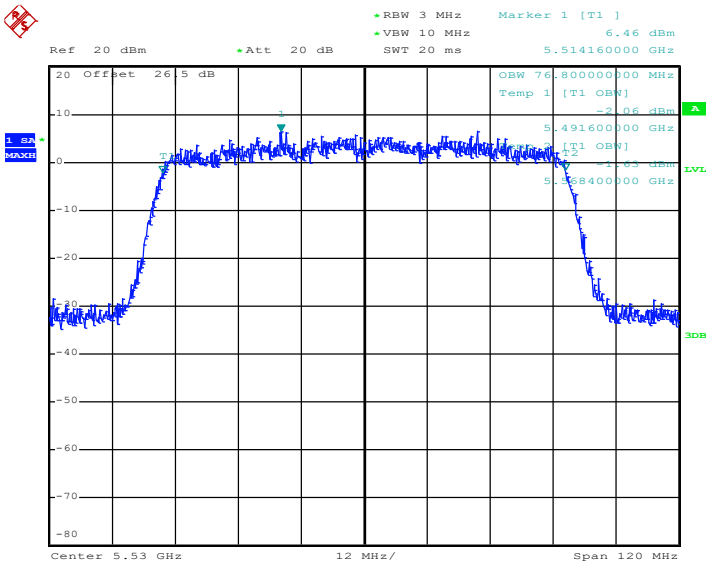
3.1.5 Test Result of 26dB & 99% Occupied Bandwidth

Please refer to Appendix A.

Maximum 26dB Bandwidth



Maximum 99% Occupied Bandwidth



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

3.2 Maximum Conducted Output Power Measurement

3.2.1 Limit of Maximum Conducted Output Power

<FCC 14-30 CFR 15.407>

For the 5.15–5.25 GHz bands:

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

For the 5.25–5.725 GHz bands:

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

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

See list of measuring equipment of this test report.

3.2.3 Test Procedures

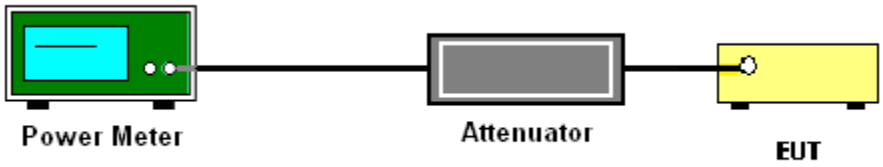
The testing follows Method PM-G of FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01.

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

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

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

See list of measuring equipment of this test report.

3.3.3 Test Procedures

The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01. Section F) Maximum power spectral density.

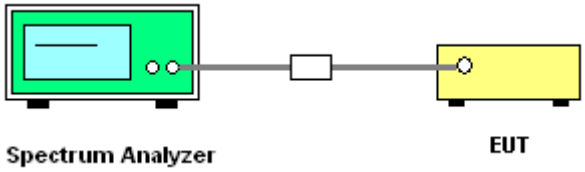
 # Method SA-3 #

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

- Set span to encompass the entire emission bandwidth (EBW) of the signal.
- Set RBW = 1 MHz.
- Set VBW ≥ 3 MHz
- Number of points in sweep ≥ 2 Span / RBW.
- Sweep time ≤ (number of points in sweep) × T, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.
- Detector = power averaging (rms).
- Trace mode = max hold.
- Allow max hold to run for at least 60 seconds, or longer as needed to allow the trace to stabilize.

1. The RF output of EUT was connected to the spectrum analyzer by a low loss cable.
2. Each plot has already offset with cable loss, and attenuator loss. Measure the PPSD and record it.
3. For MIMO mode, calculation method follows FCC KDB 662911 D01 Multiple Transmitter Output v02r01.
   Method (a): Measure and sum the spectra across the outputs.
   The total final Power Spectral Density is from a device with 2 transmitter outputs. The spectrum measurements of the individual outputs are all performed with the same span and number of points; the spectrum value in the first spectral bin of output 1 is summed with that in the first spectral bin of output 2 to obtain the value for the first frequency bin of the summed spectrum.

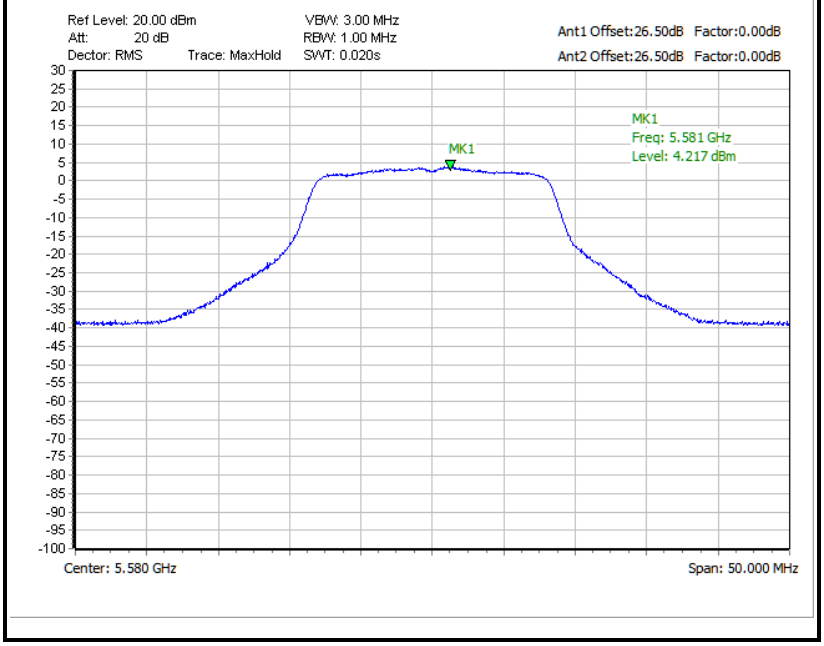
3.3.4 Test Setup



3.3.5 Test Result of Power Spectral Density

Please refer to Appendix A.

Worst Case Power Density (dBm/MHz)



3.4 Unwanted Emissions Measurement

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

3.4.1 Limit of Unwanted Emissions

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

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

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

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

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

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

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

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

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

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

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

3.4.2 Measuring Instruments

See list of measuring equipment of this test report.

3.4.3 Test Procedures

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

Section G) Unwanted emissions measurement.

(1) Procedure for Unwanted Emissions Measurements Below 1000MHz

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

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

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

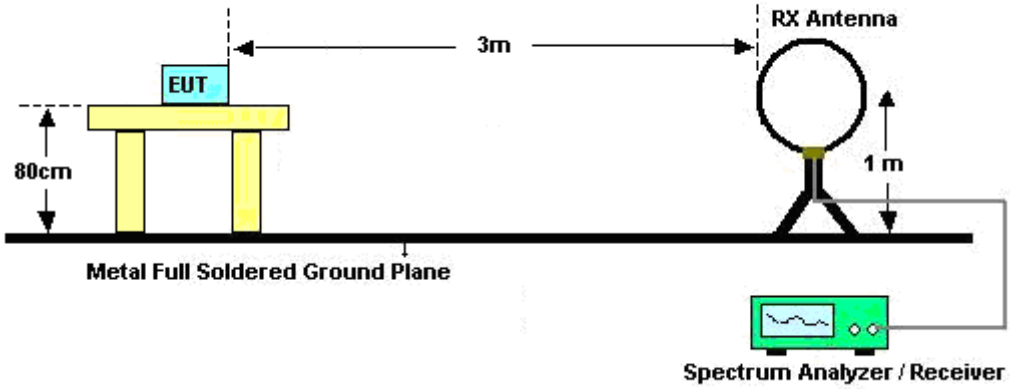
(3) Procedures for Average Unwanted Emissions Measurements Above 1000MHz

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

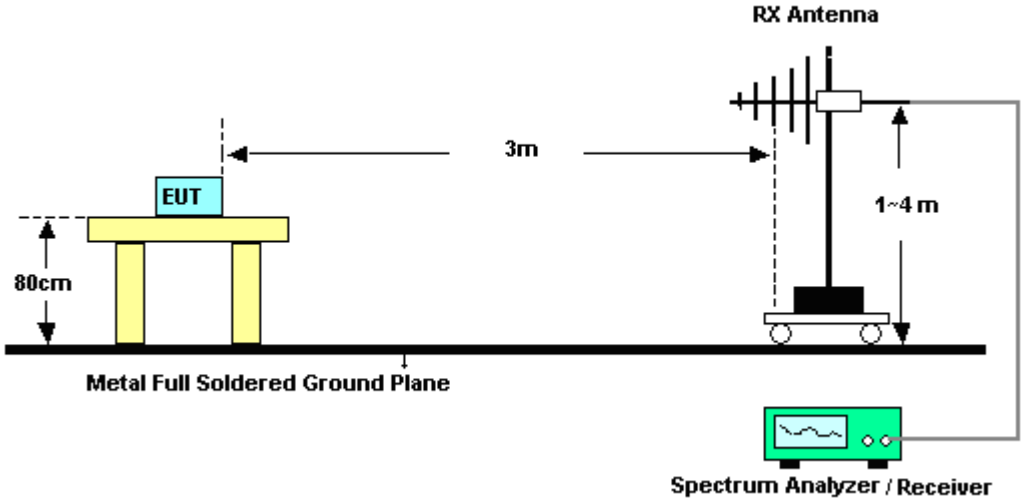
2. The EUT was placed on a turntable with 0.8 meter for frequency below 1GHz and 1.5 meter for frequency above 1GHz respectively above ground.
3. The EUT was set 3 meters from the interference receiving antenna which was mounted on the top of a variable height antenna tower.
4. The antenna is a broadband antenna and its height is adjusted between one meter and four meters above ground to find the maximum value of the field strength for both horizontal polarization and vertical polarization of the antenna.
5. For each suspected emission, the EUT was arranged to its worst case and then adjust the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading.
6. For testing below 1GHz, if the emission level of the EUT in peak mode was 3 dB lower than the limit specified, then peak values of EUT will be reported, otherwise, the emissions will be repeated one by one using the CISPR quasi-peak method and reported.
7. For testing above 1GHz, the emission level of the EUT in peak mode was 20dB lower than average limit (that means the emission level in average mode also complies with the limit in average mode), then peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.

3.4.4 Test Setup

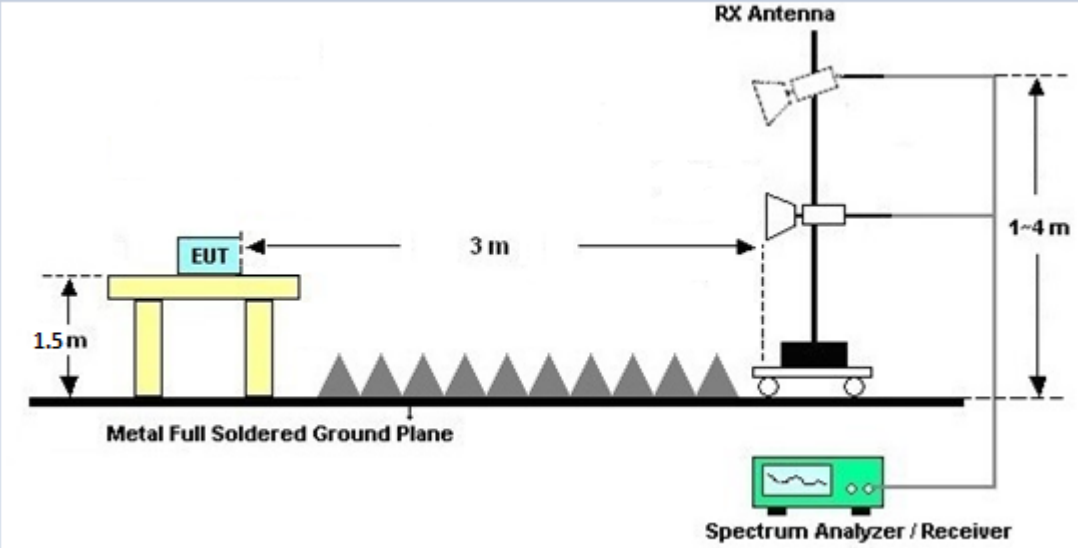
For radiated emissions below 30MHz



For radiated emissions from 30MHz to 1GHz



For radiated emissions above 1GHz



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

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

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

3.4.6 Test Result of Radiated Spurious at Band Edges

Please refer to Appendix C and D.

3.4.7 Duty Cycle

Please refer to Appendix E.

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

Please refer to Appendix C and D.

3.5 AC Conducted Emission Measurement

3.5.1 Limit of AC Conducted Emission

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

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

*Decreases with the logarithm of the frequency.

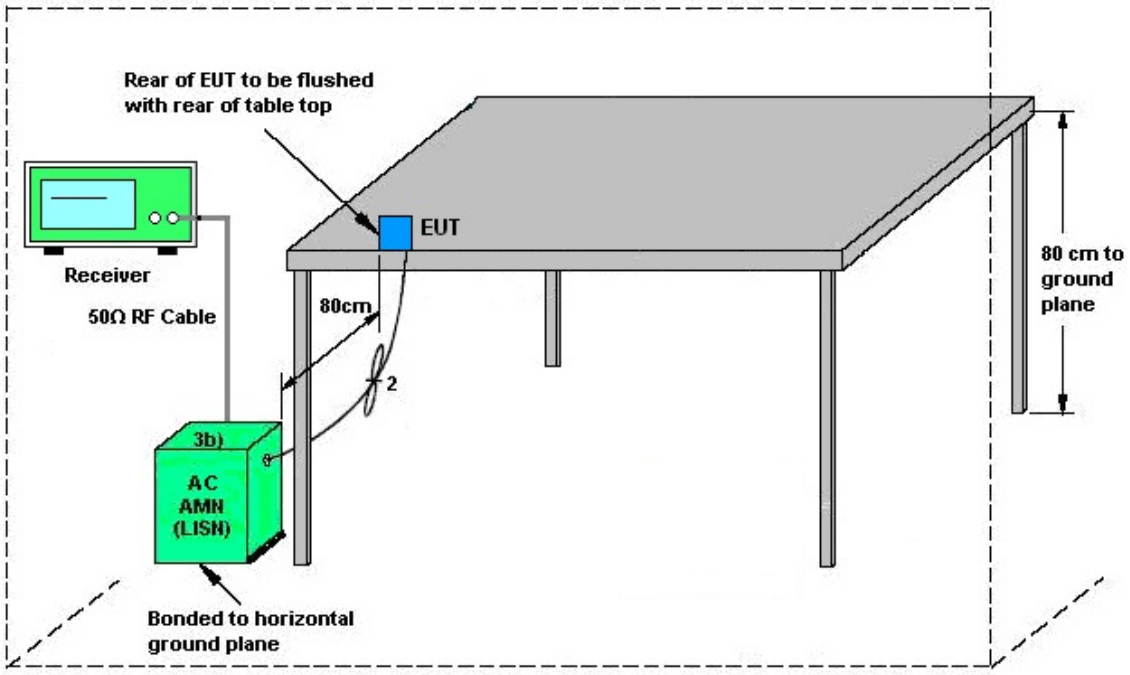
3.5.2 Measuring Instruments

See list of measuring equipment of this test report.

3.5.3 Test Procedures

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

3.5.4 Test Setup



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 Automatically Discontinue Transmission

3.6.1 Limit of Automatically Discontinue Transmission

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

3.6.2 Measuring Instruments

See list of measuring equipment of this test report.

3.6.3 Test Result of Automatically Discontinue Transmission

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

3.7 Antenna Requirements

3.7.1 Standard Applicable

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

3.7.2 Antenna Anti-Replacement Construction

An embedded-in antenna design is used.

3.7.3 Antenna Gain

<CDD Modes >

FCC KDB 662911 D01 Multiple Transmitter Output v02r01

For CDD transmissions, directional gain is calculated as

Directional gain = GANT + Array Gain, where Array Gain is as follows.

For power spectral density (PSD) measurements on all devices,

Array Gain = 10 log(NANT/NSS=1) dB.

For power measurements on IEEE 802.11 devices,

Array Gain = 0 dB (i.e., no array gain) for NANT ≤ 4.

Directional gain may be calculated by using the formulas applicable to equal gain antennas with GANT set equal to the gain of the antenna having the highest gain;

The EUT supports CDD mode.

For power, the directional gain GANT is set equal to the antenna having the highest gain, i.e., F)2)f)i).

For PSD, the directional gain calculation is following F)2)f)ii) of KDB 662911 D01 v02r01.

The power and PSD limit should be modified if the directional gain of EUT is over 6 dBi,

The directional gain “DG” is calculated as following table.

<CDD Modes>

	Ant. 1 (dBi)	Ant. 2 (dBi)	DG for Power (dBi)	DG for PSD (dBi)	Power Limit Reduction (dB)	PSD Limit Reduction (dB)
Band I	0.47	0.32	0.47	3.41	0.00	0.00
Band II	-0.42	0.32	0.32	2.97	0.00	0.00
Band III	-1.33	0.44	0.44	2.61	0.00	0.00

Power limit reduction = Composite gain – 6dBi, (min = 0)

PSD limit reduction = Composite gain + PSD Array gain – 6dBi, (min = 0)

4 List of Measuring Equipment

Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Hygrometer	Testo	608-H1	34893241	N/A	Mar. 02, 2020	Jul. 25, 2020~ Aug. 22, 2020	Mar. 01, 2021	Conducted (TH05-HY)
Power Sensor	DARE	RPR3006W	16I00054SNO10	10MHz~6GHz	Dec. 23, 2019	Jul. 25, 2020~ Aug. 22, 2020	Dec. 22, 2020	Conducted (TH05-HY)
Spectrum Analyzer	Rohde & Schwarz	FSP40	100055	9kHz-40GHz	Dec. 30, 2019	Jul. 25, 2020~ Aug. 22, 2020	Dec. 29, 2020	Conducted (TH05-HY)
Switch Control Manframe	EM Electronics	EMSW18SE	SW200302	N/A	Mar. 17, 2020	Jul. 25, 2020~ Aug. 22, 2020	Mar. 16, 2021	Conducted (TH05-HY)
AC Power Source	ChainTek	APC-1000W	N/A	N/A	N/A	Jul. 27, 2020	N/A	Conduction (CO05-HY)
EMI Test Receiver	Rohde & Schwarz	ESR3	102388	9kHz~3.6GHz	Nov. 15, 2019	Jul. 27, 2020	Nov. 14, 2020	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100081	9kHz~30MHz	Nov. 15, 2019	Jul. 27, 2020	Nov. 14, 2020	Conduction (CO05-HY)
Software	Rohde & Schwarz	EMC32 V10.30	N/A	N/A	N/A	Jul. 27, 2020	N/A	Conduction (CO05-HY)
LF Cable	HUBER + SUHNER	RG-214/U	LF01	N/A	Jan. 02, 2020	Jul. 27, 2020	Jan. 01, 2021	Conduction (CO05-HY)
Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100851	N/A	Jan. 02, 2020	Jul. 27, 2020	Jan. 01, 2021	Conduction (CO05-HY)
Loop Antenna	Rohde & Schwarz	HFH2-Z2	100488	9 kHz~30 MHz	Jan. 09, 2020	Jul. 31, 2020~ Aug. 18, 2020	Jan. 08, 2021	Radiation (03CH13-HY)
Horn Antenna	SCHWARZBECK	BBHA 9120 D	9120D-1212	1GHz ~ 18GHz	May 20, 2020	Jul. 31, 2020~ Aug. 18, 2020	May 19, 2021	Radiation (03CH13-HY)
Bilog Antenna	TESEQ	CBL 6111D&00800N1D01N-06	40103&07	30MHz to 1GHz	Apr. 29, 2020	Jul. 31, 2020~ Aug. 18, 2020	Apr. 28, 2021	Radiation (03CH13-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170584	18GHz- 40GHz	Dec. 10, 2019	Jul. 31, 2020~ Aug. 18, 2020	Dec. 09, 2020	Radiation (03CH13-HY)
Preamplifier	Keysight	83017A	MY53270147	1GHz~26.5GHz	Oct. 28, 2019	Jul. 31, 2020~ Aug. 18, 2020	Oct. 27, 2020	Radiation (03CH13-HY)
Preamplifier	MITEQ	AMF-7D-00101800-30-10P	1590074	1GHz~18GHz	May 19, 2020	Jul. 31, 2020~ Aug. 18, 2020	May 18, 2021	Radiation (03CH13-HY)
Amplifier	Sonoma-Instrument	310 N	187282	9KHz~1GHz	Dec. 17, 2019	Jul. 31, 2020~ Aug. 18, 2020	Dec. 16, 2020	Radiation (03CH13-HY)
Preamplifier	EMEC	EM18G40G	060715	18GHz ~ 40GHz	Dec. 13, 2019	Jul. 31, 2020~ Aug. 18, 2020	Dec. 12, 2020	Radiation (03CH13-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY9837/4PE	9kHz-30MHz	Mar. 12, 2020	Jul. 31, 2020~ Aug. 18, 2020	Mar. 11, 2021	Radiation (03CH13-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 126E	0030/126E	30M-18G	Feb. 12, 2020	Jul. 31, 2020~ Aug. 18, 2020	Feb. 11, 2021	Radiation (03CH13-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	804793/4	30M-18G	Feb. 12, 2020	Jul. 31, 2020~ Aug. 18, 2020	Feb. 11, 2021	Radiation (03CH13-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY24961/4	30M-18G	Feb. 12, 2020	Jul. 31, 2020~ Aug. 18, 2020	Feb. 11, 2021	Radiation (03CH13-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	MY2859/2	30M~40GHz	Mar. 12, 2020	Jul. 31, 2020~ Aug. 18, 2020	Mar. 11, 2021	Radiation (03CH13-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	MY4274/2	30M~40GHz	Mar. 12, 2020	Jul. 31, 2020~ Aug. 18, 2020	Mar. 11, 2021	Radiation (03CH13-HY)

Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Spectrum Analyzer	Keysight	N9010A	MY54200485	10Hz~44GHz	Feb. 10, 2020	Jul. 31, 2020~ Aug. 18, 2020	Feb. 09, 2021	Radiation (03CH13-HY)
Controller	EMEC	EM1000	N/A	Control Turn table & Ant Mast	N/A	Jul. 31, 2020~ Aug. 18, 2020	N/A	Radiation (03CH13-HY)
Antenna Mast	EMEC	AM-BS-4500-B	N/A	1m~4m	N/A	Jul. 31, 2020~ Aug. 18, 2020	N/A	Radiation (03CH13-HY)
Turn Table	EMEC	TT2000	N/A	0~360 Degree	N/A	Jul. 31, 2020~ Aug. 18, 2020	N/A	Radiation (03CH13-HY)
Software	AUDIX	E3 6.2009-8-24c	RK-001124	N/A	N/A	Jul. 31, 2020~ Aug. 18, 2020	N/A	Radiation (03CH13-HY)
EMI Test Receiver	Keysight	N9038A (MXE)	MY54130085	20Hz ~ 8.4GHz	Nov. 01, 2019	Jul. 31, 2020~ Aug. 18, 2020	Oct. 31, 2020	Radiation (03CH13-HY)
Filter	Wainwright	WHKX8-5872.5-6750-18000-40ST	SN6	6.75GHz High Pass Filter	Mar. 12, 2020	Jul. 31, 2020~ Aug. 18, 2020	Mar. 11, 2021	Radiation (03CH13-HY)
Filter	Wainwright	WLK4-1000-1530-8000-40SS	SN12	1.53GHz Low Pass Filter	Sep. 16, 2019	Jul. 31, 2020~ Aug. 18, 2020	Sep. 15, 2020	Radiation (03CH13-HY)

5 Uncertainty of Evaluation

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

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

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**4.8**

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**5.1**

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**4.8**

Appendix A. Test Result of Conducted Test Items

Test Engineer:	MINA LIU/JunYu	Temperature:	24.1~24.3	°C
Test Date:	2020/7/25~2020/8/22	Relative Humidity:	53.4~53.7	%

TEST RESULTS DATA
26dB and 99% OBW

Band I MIMO														
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	99% Bandwidth (MHz)		26 dB Bandwidth (MHz)		IC 99% Bandwidth Power Limit (dBm)		IC 99% Bandwidth EIRP Limit (dBm)			Note
					Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2		
11a	6Mbps	2	36	5180	16.65	16.65	23.85	24.35	-		22.21			
11a	6Mbps	2	44	5220	16.75	16.60	24.40	24.50	-		22.20			
11a	6Mbps	2	48	5240	16.70	16.65	24.45	23.50	-		22.21			
HT20	MCS0	2	36	5180	17.80	17.85	24.70	25.10	-		22.50			
HT20	MCS0	2	44	5220	18.00	17.85	26.15	25.40	-		22.52			
HT20	MCS0	2	48	5240	17.70	17.85	25.20	25.70	-		22.48			
HT40	MCS0	2	38	5190	36.50	36.50	41.94	42.30	-		23.01			
HT40	MCS0	2	46	5230	36.60	36.60	41.70	41.94	-		23.01			
VHT80	MCS0	2	42	5210	76.32	76.56	82.26	83.04	-		23.01			

Report Number : FR070206D

TEST RESULTS DATA
Average Power Table

FCC Band I MIMO												
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)		Pass/Fail
					Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2	
11a	6Mbps	2	36	5180	9.90	9.50	12.71	24.00		0.47		Pass
11a	6Mbps	2	44	5220	9.80	9.40	12.61	24.00		0.47		Pass
11a	6Mbps	2	48	5240	9.90	9.50	12.71	24.00		0.47		Pass
HT20	MCS0	2	36	5180	9.80	9.50	12.66	24.00		0.47		Pass
HT20	MCS0	2	44	5220	9.90	9.50	12.71	24.00		0.47		Pass
HT20	MCS0	2	48	5240	9.70	9.60	12.66	24.00		0.47		Pass
HT40	MCS0	2	38	5190	9.80	9.90	12.86	24.00		0.47		Pass
HT40	MCS0	2	46	5230	9.90	9.50	12.71	24.00		0.47		Pass
VHT20	MCS0	2	36	5180	9.90	9.50	12.71	24.00		0.47		Pass
VHT20	MCS0	2	44	5220	9.90	9.80	12.86	24.00		0.47		Pass
VHT20	MCS0	2	48	5240	9.90	9.60	12.76	24.00		0.47		Pass
VHT40	MCS0	2	38	5190	9.70	9.30	12.51	24.00		0.47		Pass
VHT40	MCS0	2	46	5230	9.90	9.50	12.71	24.00		0.47		Pass
VHT80	MCS0	2	42	5210	9.90	9.50	12.71	24.00		0.47		Pass

Report Number : FR070206D

TEST RESULTS DATA
Power Spectral Density

FCC Band I MIMO												
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Average Power Density (dBm/MHz)			Average PSD Limit (dBm/MHz)		DG (dBi)		Pass /Fail
					Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2	
11a	6Mbps	2	36	5180			3.38	11.00		3.41		Pass
11a	6Mbps	2	44	5220			3.26	11.00		3.41		Pass
11a	6Mbps	2	48	5240			2.97	11.00		3.41		Pass
HT20	MCS0	2	36	5180			3.36	11.00		3.41		Pass
HT20	MCS0	2	44	5220			3.85	11.00		3.41		Pass
HT20	MCS0	2	48	5240			3.72	11.00		3.41		Pass
HT40	MCS0	2	38	5190			-0.85	11.00		3.41		Pass
HT40	MCS0	2	46	5230			-0.54	11.00		3.41		Pass
VHT80	MCS0	2	42	5210			-3.32	11.00		3.41		Pass

TEST RESULTS DATA
26dB and 99% OBW

Band II MIMO															
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	99% Bandwidth (MHz)		26 dB Bandwidth (MHz)		IC 99% Bandwidth Power Limit (dBm)		IC 99% Bandwidth EIRP Limit (dBm)		FCC 26dB Bandwidth Power Limit (dBm)		Note
					Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	
11a	6Mbps	2	52	5260	16.70	16.65	24.50	23.96	23.21		29.21		23.98		
11a	6Mbps	2	60	5300	16.65	16.60	24.05	23.90	23.20		29.20		23.98		
11a	6Mbps	2	64	5320	16.70	16.70	24.00	24.40	23.23		29.23		23.98		
HT20	MCS0	2	52	5260	17.75	17.85	24.95	24.70	23.49		29.49		23.98		
HT20	MCS0	2	60	5300	17.80	17.80	25.55	24.95	23.50		29.50		23.98		
HT20	MCS0	2	64	5320	17.80	17.90	25.10	24.85	23.50		29.50		23.98		
HT40	MCS0	2	54	5270	36.50	36.50	41.76	41.76	23.98		30.00		23.98		
HT40	MCS0	2	62	5310	36.60	36.70	41.67	41.94	23.98		30.00		23.98		
VHT80	MCS0	2	58	5290	76.32	76.44	82.88	83.38	23.98		30.00		23.98		

TEST RESULTS DATA
Average Power Table

FCC Band II MIMO													
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)		EIRP Power Limit (dBm)	Pass/Fail
					Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2		
11a	6Mbps	2	52	5260	9.90	9.50	12.71	23.98		0.32		30	Pass
11a	6Mbps	2	60	5300	9.90	9.50	12.71	23.98		0.32		30	Pass
11a	6Mbps	2	64	5320	9.80	9.50	12.66	23.98		0.32		30	Pass
HT20	MCS0	2	52	5260	9.50	9.50	12.51	23.98		0.32		30	Pass
HT20	MCS0	2	60	5300	9.90	9.70	12.81	23.98		0.32		30	Pass
HT20	MCS0	2	64	5320	9.90	9.60	12.76	23.98		0.32		30	Pass
HT40	MCS0	2	54	5270	9.90	9.50	12.71	23.98		0.32		30	Pass
HT40	MCS0	2	62	5310	9.80	9.40	12.61	23.98		0.32		30	Pass
VHT20	MCS0	2	52	5260	9.90	9.80	12.86	23.98		0.32		30	Pass
VHT20	MCS0	2	60	5300	9.80	9.70	12.76	23.98		0.32		30	Pass
VHT20	MCS0	2	64	5320	9.90	9.70	12.81	23.98		0.32		30	Pass
VHT40	MCS0	2	54	5270	9.90	9.30	12.62	23.98		0.32		30	Pass
VHT40	MCS0	2	62	5310	9.90	9.40	12.67	23.98		0.32		30	Pass
VHT80	MCS0	2	58	5290	9.90	9.70	12.81	23.98		0.32		30	Pass

TEST RESULTS DATA
Power Spectral Density

Band II MIMO												
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Average Power Density (dBm/MHz)			Average PSD Limit (dBm/MHz)		DG (dBi)		Pass /Fail
					Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2	
11a	6Mbps	2	52	5260			3.10	11.00		2.97		Pass
11a	6Mbps	2	60	5300			3.54	11.00		2.97		Pass
11a	6Mbps	2	64	5320			3.78	11.00		2.97		Pass
HT20	MCS0	2	52	5260			3.20	11.00		2.97		Pass
HT20	MCS0	2	60	5300			4.13	11.00		2.97		Pass
HT20	MCS0	2	64	5320			3.91	11.00		2.97		Pass
HT40	MCS0	2	54	5270			-1.04	11.00		2.97		Pass
HT40	MCS0	2	62	5310			-0.38	11.00		2.97		Pass
VHT80	MCS0	2	58	5290			-2.77	11.00		2.97		Pass

Report Number : FR070206D

TEST RESULTS DATA
26dB and 99% OBW

Band III MIMO																
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	99% Bandwidth In U-NII 2C (MHz)		26 dB Bandwidth In U-NII 2C (MHz)		IC 99% Bandwidth Power Limit (dBm)		IC 99% Bandwidth EIRP Limit (dBm)		FCC 26dB Bandwidth Power Limit (dBm)		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	2	100	5500	16.75	16.65	24.30	24.30	23.21		29.21		23.98		----	----
11a	6Mbps	2	116	5580	16.65	16.65	24.40	23.85	23.21		29.21		23.98		----	----
11a	6Mbps	2	140	5700	16.60	16.65	24.66	24.65	23.20		29.20		23.98		----	----
HT20	MCS0	2	100	5500	17.95	17.80	25.10	24.75	23.50		29.50		23.98		----	----
HT20	MCS0	2	116	5580	17.85	17.85	25.75	24.95	23.52		29.52		23.98		----	----
HT20	MCS0	2	140	5700	17.90	17.85	26.00	25.80	23.52		29.52		23.98		----	----
HT40	MCS0	2	102	5510	36.50	36.60	41.85	42.12	23.98		30.00		23.98		----	----
HT40	MCS0	2	110	5550	36.60	36.60	41.94	42.03	23.98		30.00		23.98		----	----
HT40	MCS0	2	134	5670	36.60	36.60	41.94	42.03	23.98		30.00		23.98		----	----
VHT80	MCS0	2	106	5530	76.80	76.56	84.00	82.72	23.98		30.00		23.98		----	----
VHT80	MCS0	2	122	5610	76.80	76.68	84.00	83.20	23.98		30.00		23.98		----	----

Band III straddle channel MIMO																
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	99% Bandwidth In U-NII 2C (MHz)		26 dB Bandwidth In U-NII 2C (MHz)		IC 99% Bandwidth Power Limit (dBm)		IC 99% Bandwidth EIRP Limit (dBm)		FCC 26dB Bandwidth Power Limit (dBm)		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	2	144	5720	13.30	13.35	16.70	17.05	22.24		28.24		23.23		2.9	2.55
HT20	MCS0	2	144	5720	13.90	13.90	17.45	17.50	22.43		28.43		23.42		2.6	3.15
HT40	MCS0	2	142	5710	33.30	33.20	35.70	35.79	23.98		30.00		23.98		2.82	2.82
VHT80	MCS0	2	138	5690	73.28	73.40	76.44	76.60	23.98		30.00		23.98		2.6	2.6

Report Number : FR070206D

TEST RESULTS DATA
Average Power Table

FCC Band III MIMO													
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)		EIRP Power Limit (dBm)	Pass/Fail
					Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2		
11a	6Mbps	2	100	5500	9.80	9.50	12.66	23.98		0.44		30	Pass
11a	6Mbps	2	116	5580	9.90	9.50	12.71	23.98		0.44		30	Pass
11a	6Mbps	2	140	5700	9.90	9.30	12.62	23.98		0.44		30	Pass
HT20	MCS0	2	100	5500	9.90	9.80	12.86	23.98		0.44		30	Pass
HT20	MCS0	2	116	5580	9.90	9.50	12.71	23.98		0.44		30	Pass
HT20	MCS0	2	140	5700	9.80	9.50	12.66	23.98		0.44		30	Pass
HT40	MCS0	2	102	5510	9.90	9.50	12.71	23.98		0.44		30	Pass
HT40	MCS0	2	110	5550	9.60	9.60	12.61	23.98		0.44		30	Pass
HT40	MCS0	2	134	5670	9.90	9.50	12.71	23.98		0.44		30	Pass
VHT20	MCS0	2	100	5500	9.90	9.60	12.76	23.98		0.44		30	Pass
VHT20	MCS0	2	116	5580	9.90	9.50	12.71	23.98		0.44		30	Pass
VHT20	MCS0	2	140	5700	9.90	9.60	12.76	23.98		0.44		30	Pass
VHT40	MCS0	2	102	5510	9.80	9.50	12.66	23.98		0.44		30	Pass
VHT40	MCS0	2	110	5550	9.90	9.60	12.76	23.98		0.44		30	Pass
VHT40	MCS0	2	134	5670	9.80	9.30	12.57	23.98		0.44		30	Pass
VHT80	MCS0	2	106	5530	9.60	9.50	12.56	23.98		0.44		30	Pass
VHT80	MCS0	2	122	5610	9.60	9.70	12.66	23.98		0.44		30	Pass

FCC Band III straddle channel MIMO													
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)		EIRP Power Limit (dBm)	Pass/Fail
					Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2		
11a	6Mbps	2	144	5720	9.70	9.40	12.56	23.23		0.44		30	Pass
HT20	MCS0	2	144	5720	9.70	9.50	12.61	23.42		0.44		30	Pass
HT40	MCS0	2	142	5710	9.90	9.60	12.76	23.98		0.44		30	Pass
VHT20	MCS0	2	144	5720	9.80	9.50	12.66	23.98		0.44		30	Pass
VHT40	MCS0	2	142	5710	9.80	9.20	12.52	23.98		0.44		30	Pass
VHT80	MCS0	2	138	5690	9.90	9.50	12.71	23.98		0.44		30	Pass

TEST RESULTS DATA
Power Spectral Density

Band III MIMO													
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Average Power Density (dBm/MHz)			Average PSD Limit (dBm/MHz)		DG (dBi)			Pass /Fail
					Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2		
11a	6Mbps	2	100	5500			3.40	11.00		2.61			Pass
11a	6Mbps	2	116	5580			4.22	11.00		2.61			Pass
11a	6Mbps	2	140	5700			3.40	11.00		2.61			Pass
HT20	MCS0	2	100	5500			3.59	11.00		2.61			Pass
HT20	MCS0	2	116	5580			4.01	11.00		2.61			Pass
HT20	MCS0	2	140	5700			3.40	11.00		2.61			Pass
HT40	MCS0	2	102	5510			-1.26	11.00		2.61			Pass
HT40	MCS0	2	110	5550			-0.67	11.00		2.61			Pass
HT40	MCS0	2	134	5670			-0.27	11.00		2.61			Pass
VHT80	MCS0	2	106	5530			-2.48	11.00		2.61			Pass
VHT80	MCS0	2	122	5610			-2.49	11.00		2.61			Pass

Band III straddle channel MIMO													
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Average Power Density (dBm/MHz)			Average PSD Limit (dBm/MHz)		DG (dBi)			Pass /Fail
					Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2		
11a	6Mbps	2	144	5720			3.48	11.00		2.61			Pass
HT20	MCS0	2	144	5720			3.13	11.00		2.61			Pass
HT40	MCS0	2	142	5710			-0.35	11.00		2.61			Pass
VHT80	MCS0	2	138	5690			-2.27	11.00		2.61			Pass

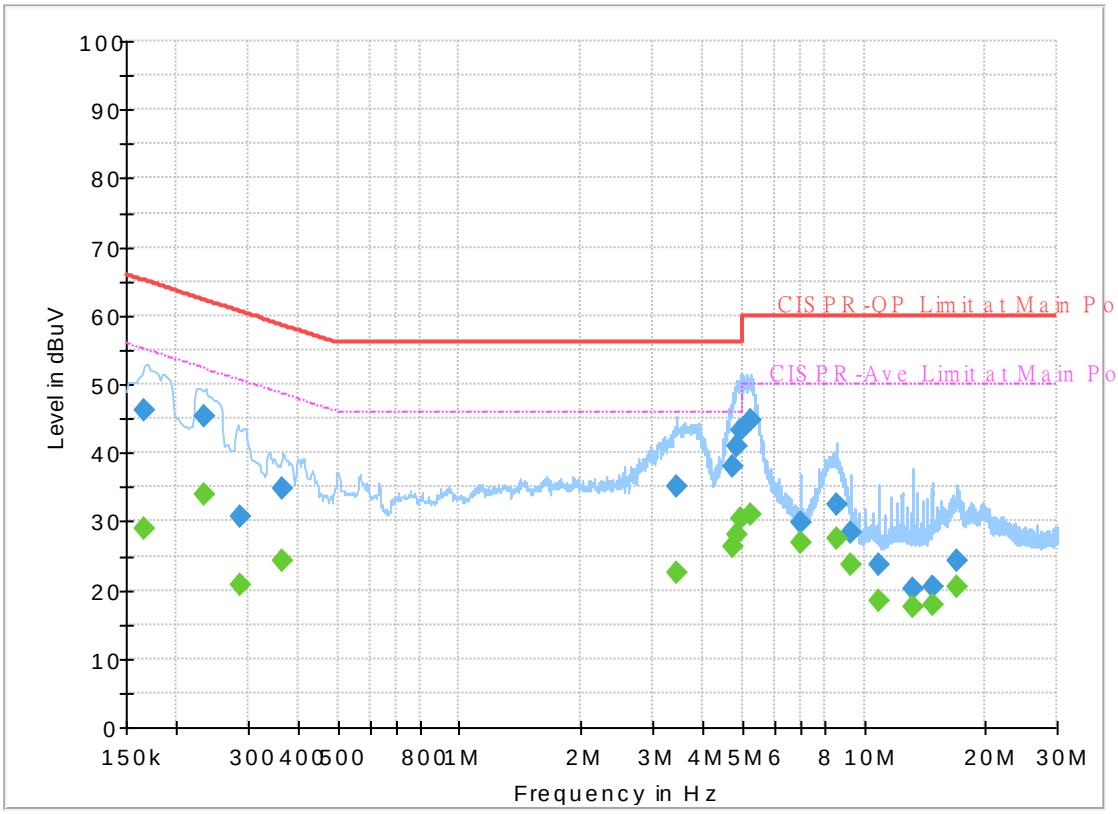
Appendix B. AC Conducted Emission Test Results

Test Engineer :	Tom Lee	**Temperature :**	23~25℃
		Relative Humidity :	42~0%

EUT Information

Report NO :	070206
Test Mode :	Mode 1
Test Voltage :	120Vac/60Hz
Phase :	Line

Full Spectrum



Final_Result

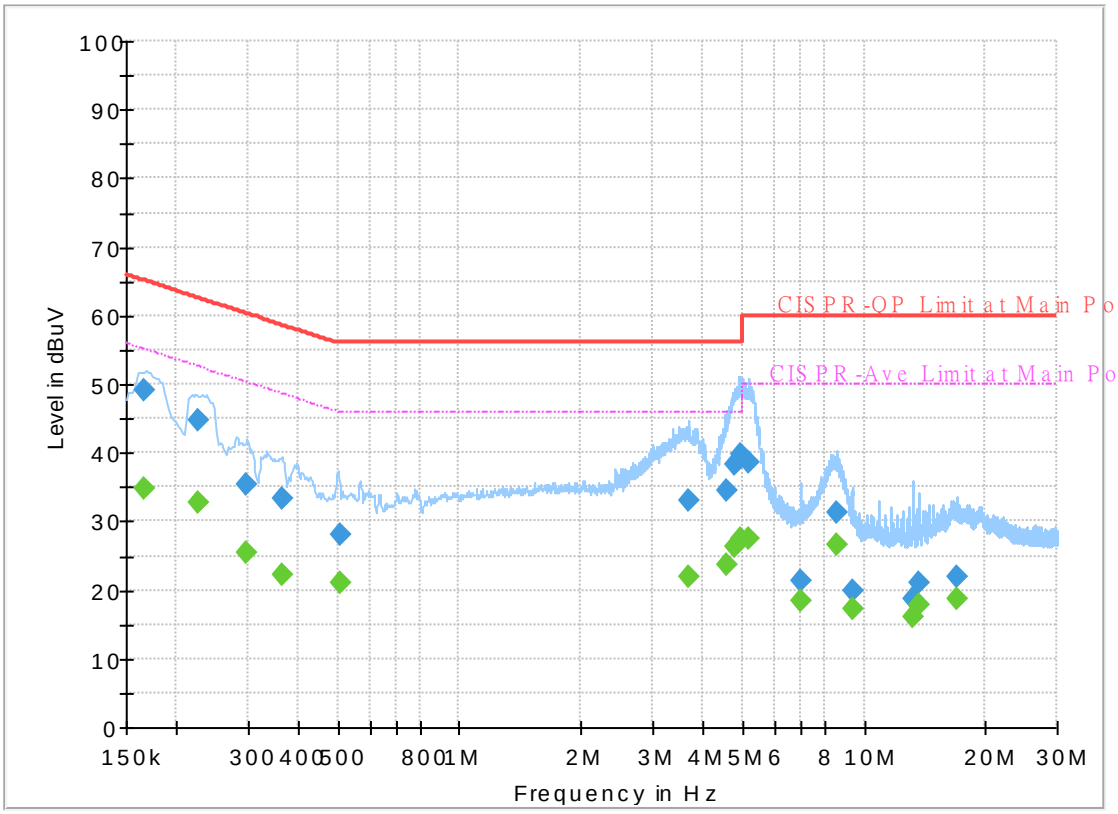
Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.165750	46.07	---	65.17	19.10	L1	OFF	19.5
0.165750	---	28.93	55.17	26.24	L1	OFF	19.5
0.234780	45.41	---	62.28	16.87	L1	OFF	19.5
0.234780	---	33.78	52.28	18.50	L1	OFF	19.5
0.286440	30.83	---	60.63	29.80	L1	OFF	19.5
0.286440	---	20.63	50.63	30.00	L1	OFF	19.5
0.366450	34.72	---	58.58	23.86	L1	OFF	19.5
0.366450	---	24.21	48.58	24.37	L1	OFF	19.5
3.437250	35.11	---	56.00	20.89	L1	OFF	19.6
3.437250	---	22.37	46.00	23.63	L1	OFF	19.6
4.711560	37.89	---	56.00	18.11	L1	OFF	19.6
4.711560	---	26.44	46.00	19.56	L1	OFF	19.6
4.823250	40.98	---	56.00	15.02	L1	OFF	19.6
4.823250	---	28.17	46.00	17.83	L1	OFF	19.6
4.963650	43.39	---	56.00	12.61	L1	OFF	19.6
4.963650	---	30.34	46.00	15.66	L1	OFF	19.6
5.270100	44.67	---	60.00	15.33	L1	OFF	19.6
5.270100	---	31.13	50.00	18.87	L1	OFF	19.6
6.978750	29.93	---	60.00	30.07	L1	OFF	19.7
6.978750	---	26.78	50.00	23.22	L1	OFF	19.7
8.523780	32.53	---	60.00	27.47	L1	OFF	19.8

8.523780	---	27.49	50.00	22.51	L1	OFF	19.8
9.305250	28.50	---	60.00	31.50	L1	OFF	19.8
9.305250	---	23.56	50.00	26.44	L1	OFF	19.8
10.857750	23.73	---	60.00	36.27	L1	OFF	19.8
10.857750	---	18.44	50.00	31.56	L1	OFF	19.8
13.170750	20.07	---	60.00	39.93	L1	OFF	19.8
13.170750	---	17.48	50.00	32.52	L1	OFF	19.8
14.718750	20.61	---	60.00	39.39	L1	OFF	19.8
14.718750	---	17.74	50.00	32.26	L1	OFF	19.8
17.049750	24.29	---	60.00	35.71	L1	OFF	19.8
17.049750	---	20.38	50.00	29.62	L1	OFF	19.8

EUT Information

Report NO :	070206
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)
0.165750	---	34.81	55.17	20.36	N	OFF	19.5
0.165750	49.25	---	65.17	15.92	N	OFF	19.5
0.226500	---	32.84	52.58	19.74	N	OFF	19.5
0.226500	44.74	---	62.58	17.84	N	OFF	19.5
0.297330	---	25.51	50.32	24.81	N	OFF	19.5
0.297330	35.46	---	60.32	24.86	N	OFF	19.5
0.363750	---	22.25	48.64	26.39	N	OFF	19.5
0.363750	33.48	---	58.64	25.16	N	OFF	19.5
0.505500	---	21.14	46.00	24.86	N	OFF	19.5
0.505500	28.15	---	56.00	27.85	N	OFF	19.5
3.669720	---	22.05	46.00	23.95	N	OFF	19.6
3.669720	33.18	---	56.00	22.82	N	OFF	19.6
4.587000	---	23.56	46.00	22.44	N	OFF	19.6
4.587000	34.43	---	56.00	21.57	N	OFF	19.6
4.774380	---	26.28	46.00	19.72	N	OFF	19.7
4.774380	38.44	---	56.00	17.56	N	OFF	19.7
4.973910	---	27.54	46.00	18.46	N	OFF	19.7
4.973910	39.67	---	56.00	16.33	N	OFF	19.7
5.207820	---	27.38	50.00	22.62	N	OFF	19.7
5.207820	38.55	---	60.00	21.45	N	OFF	19.7
6.999000	---	18.40	50.00	31.60	N	OFF	19.7

6.999000	21.38	---	60.00	38.62	N	OFF	19.7
8.556000	---	26.68	50.00	23.32	N	OFF	19.8
8.556000	31.43	---	60.00	28.57	N	OFF	19.8
9.332160	---	17.18	50.00	32.82	N	OFF	19.8
9.332160	19.85	---	60.00	40.15	N	OFF	19.8
13.229250	---	16.13	50.00	33.87	N	OFF	19.9
13.229250	18.57	---	60.00	41.43	N	OFF	19.9
13.618050	---	17.74	50.00	32.26	N	OFF	19.9
13.618050	21.00	---	60.00	39.00	N	OFF	19.9
16.955610	---	18.77	50.00	31.23	N	OFF	19.9
16.955610	22.01	---	60.00	37.99	N	OFF	19.9

Appendix C. Radiated Spurious Emission

Test Engineer :	Daniel Lee, Jacky Hong and Wilson Wu	Temperature :	21.5 ~ 23.5°C
		Relative Humidity :	49.5 ~ 55.5%

Band 1 - 5150~5250MHz

WIFI 802.11a (Band Edge @ 3m)

WIFI Ant.	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
1+2		(MHz)	(dBµV/m)	(dB)	(dBµV/m)	(dBµV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11a CH 36 5180MHz		5096.2	52.63	-21.37	74	41.4	31.88	6.06	26.71	100	250	P	H
		5146.64	42.53	-11.47	54	31.27	31.9	6.06	26.7	100	250	A	H
	*	5180	107.26	-	-	96.23	31.66	6.07	26.7	100	250	P	H
	*	5180	99.3	-	-	88.27	31.66	6.07	26.7	100	250	A	H
													H
													H
		5039	52.65	-21.35	74	41.68	31.63	6.05	26.71	100	277	P	V
		5103.48	42.17	-11.83	54	30.92	31.9	6.06	26.71	100	277	A	V
	*	5180	100.03	-	-	89	31.66	6.07	26.7	100	277	P	V
	*	5180	92.46	-	-	81.43	31.66	6.07	26.7	100	277	A	V
													V
													V
802.11a CH 44 5220MHz		5107.9	51.79	-22.21	74	40.54	31.9	6.06	26.71	106	252	P	H
		5078.78	43.3	-10.7	54	32.13	31.82	6.06	26.71	106	252	A	H
	*	5220	106.05	-	-	95.24	31.42	6.09	26.7	106	252	P	H
	*	5220	98.59	-	-	87.78	31.42	6.09	26.7	106	252	A	H
		5419.96	50.95	-23.05	74	39.91	31.48	6.25	26.69	106	252	P	H
		5452.72	42.45	-11.55	54	31.27	31.61	6.26	26.69	106	252	A	H
		5052.78	53.49	-20.51	74	42.43	31.71	6.06	26.71	349	348	P	V
		5099.06	43.23	-10.77	54	31.98	31.9	6.06	26.71	349	348	A	V
	*	5220	101.02	-	-	90.21	31.42	6.09	26.7	349	348	P	V
	*	5220	93.72	-	-	82.91	31.42	6.09	26.7	349	348	A	V
		5436.48	49.5	-24.5	74	38.39	31.55	6.25	26.69	349	348	P	V
		5452.44	41.93	-12.07	54	30.75	31.61	6.26	26.69	349	348	A	V

802.11a CH 48 5240MHz		5077.22	51.91	-22.09	74	40.75	31.81	6.06	26.71	102	249	P	H
		5119.6	43.33	-10.67	54	32.08	31.9	6.06	26.71	102	249	A	H
	*	5240	105.4	-	-	94.66	31.34	6.1	26.7	102	249	P	H
	*	5240	98.47	-	-	87.73	31.34	6.1	26.7	102	249	A	H
		5446.28	50.86	-23.14	74	39.71	31.59	6.25	26.69	102	249	P	H
		5454.68	42.3	-11.7	54	31.11	31.62	6.26	26.69	102	249	A	H
		5076.96	51.49	-22.51	74	40.33	31.81	6.06	26.71	368	348	P	V
		5105.56	43.18	-10.82	54	31.93	31.9	6.06	26.71	368	348	A	V
	*	5240	100.83	-	-	90.09	31.34	6.1	26.7	368	348	P	V
	*	5240	93.71	-	-	82.97	31.34	6.1	26.7	368	348	A	V
		5379.92	50.54	-23.46	74	39.65	31.36	6.22	26.69	368	348	P	V
		5460	42.04	-11.96	54	30.83	31.64	6.26	26.69	368	348	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 1 5150~5250MHz

WIFI 802.11a (Harmonic @ 3m)

WIFI Ant. 1+2	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	45.97	-22.23	68.2	53.22	39.38	9.88	56.51	100	0	P	H
		15540	45.67	-28.33	74	50.75	38.28	12.48	55.84	100	0	P	H
													H
													H
		10360	46.88	-21.32	68.2	54.13	39.38	9.88	56.51	100	0	P	V
		15540	46.88	-27.12	74	51.96	38.28	12.48	55.84	100	0	P	V
													V
													V
802.11a CH 44 5220MHz		10440	47.11	-21.09	68.2	54.07	39.58	9.92	56.46	100	0	P	H
		15660	44.46	-29.54	74	49.87	37.86	12.51	55.78	100	0	P	H
													H
													H
		10440	46.91	-21.29	68.2	53.87	39.58	9.92	56.46	100	0	P	V
		15660	44.88	-29.12	74	50.29	37.86	12.51	55.78	100	0	P	V
													V
													V
802.11a CH 48 5240MHz		10480	47.56	-20.64	68.2	54.39	39.66	9.94	56.43	100	0	P	H
		15720	45.64	-28.36	74	50.99	37.88	12.52	55.75	100	0	P	H
													H
													H
		10480	47.53	-20.67	68.2	54.36	39.66	9.94	56.43	100	0	P	V
		15720	44.75	-29.25	74	50.1	37.88	12.52	55.75	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 1 5150~5250MHz

WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI Ant. 1+2	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)
		5096.72	53.6	-20.4	74	42.36	31.89	6.06	26.71	111	251	P	H
		5147.68	42.63	-11.37	54	31.37	31.9	6.06	26.7	111	251	A	H
	*	5180	107.32	-	-	96.29	31.66	6.07	26.7	111	251	P	H
	*	5180	99.5	-	-	88.47	31.66	6.07	26.7	111	251	A	H
802.11n													H
HT20													H
CH 36		5135.46	52.29	-21.71	74	41.03	31.9	6.06	26.7	352	352	P	V
5180MHz		5100.1	42.28	-11.72	54	31.03	31.9	6.06	26.71	352	352	A	V
	*	5180	101.25	-	-	90.22	31.66	6.07	26.7	352	352	P	V
	*	5180	93.59	-	-	82.56	31.66	6.07	26.7	352	352	A	V
													V
													V
		5096.46	51.61	-22.39	74	40.37	31.89	6.06	26.71	128	255	P	H
		5102.96	42.3	-11.7	54	31.05	31.9	6.06	26.71	128	255	A	H
	*	5220	106.69	-	-	95.88	31.42	6.09	26.7	128	255	P	H
	*	5220	99.55	-	-	88.74	31.42	6.09	26.7	128	255	A	H
802.11n		5363.96	51.03	-22.97	74	40.19	31.33	6.21	26.7	128	255	P	H
HT20		5452.72	41.78	-12.22	54	30.6	31.61	6.26	26.69	128	255	A	H
CH 44		5077.22	52.21	-21.79	74	41.05	31.81	6.06	26.71	368	351	P	V
5220MHz		5072.8	42.27	-11.73	54	31.13	31.79	6.06	26.71	368	351	A	V
	*	5220	100.48	-	-	89.67	31.42	6.09	26.7	368	351	P	V
	*	5220	92.95	-	-	82.14	31.42	6.09	26.7	368	351	A	V
		5452.16	51.69	-22.31	74	40.51	31.61	6.26	26.69	368	351	P	V
		5460	41.22	-12.78	54	30.01	31.64	6.26	26.69	368	351	A	V

		5101.14	52.8	-21.2	74	41.55	31.9	6.06	26.71	100	252	P	H
		5103.74	42.31	-11.69	54	31.06	31.9	6.06	26.71	100	252	A	H
	*	5240	107.36	-	-	96.62	31.34	6.1	26.7	100	252	P	H
	*	5240	99.2	-	-	88.46	31.34	6.1	26.7	100	252	A	H
802.11n		5456.08	51.76	-22.24	74	40.57	31.62	6.26	26.69	100	252	P	H
HT20		5452.72	41.68	-12.32	54	30.5	31.61	6.26	26.69	100	252	A	H
CH 48		5057.98	52.05	-21.95	74	40.97	31.73	6.06	26.71	350	339	P	V
5240MHz		5098.8	42.26	-11.74	54	31.01	31.9	6.06	26.71	350	339	A	V
	*	5240	100.81	-	-	90.07	31.34	6.1	26.7	350	339	P	V
	*	5240	93.12	-	-	82.38	31.34	6.1	26.7	350	339	A	V
		5451.6	50.58	-23.42	74	39.4	31.61	6.26	26.69	350	339	P	V
		5459.72	41.17	-12.83	54	29.96	31.64	6.26	26.69	350	339	A	V

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

Band 1 5150~5250MHz

WIFI 802.11n HT20 (Harmonic @ 3m)

WIFI Ant. 1+2	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	45.99	-22.21	68.2	53.24	39.38	9.88	56.51	100	0	P	H
		15540	46.27	-27.73	74	51.35	38.28	12.48	55.84	100	0	P	H
802.11n													H
HT20													H
CH 36		10360	46.58	-21.62	68.2	53.83	39.38	9.88	56.51	100	0	P	V
5180MHz		15540	44.79	-29.21	74	49.87	38.28	12.48	55.84	100	0	P	V
													V
													V
		10440	47.08	-21.12	68.2	54.04	39.58	9.92	56.46	100	0	P	H
		15660	44.32	-29.68	74	49.73	37.86	12.51	55.78	100	0	P	H
802.11n													H
HT20													H
CH 44		10440	46.81	-21.39	68.2	53.77	39.58	9.92	56.46	100	0	P	V
5220MHz		15660	44.49	-29.51	74	49.9	37.86	12.51	55.78	100	0	P	V
													V
													V
		10480	47.13	-21.07	68.2	53.96	39.66	9.94	56.43	100	0	P	H
		15720	45.21	-28.79	74	50.56	37.88	12.52	55.75	100	0	P	H
802.11n													H
HT20													H
CH 48		10480	47.09	-21.11	68.2	53.92	39.66	9.94	56.43	100	0	P	V
5240MHz		15720	45.11	-28.89	74	50.46	37.88	12.52	55.75	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 1 5150~5250MHz

WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI Ant. 1+2	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)
		5149.76	52.65	-21.35	74	41.39	31.9	6.06	26.7	100	256	P	H
		5149.5	45.85	-8.15	54	34.59	31.9	6.06	26.7	100	256	A	H
	*	5190	104.68	-	-	93.73	31.58	6.07	26.7	100	256	P	H
	*	5190	97.43	-	-	86.48	31.58	6.07	26.7	100	256	A	H
802.11n		5367.04	49.99	-24.01	74	39.15	31.33	6.21	26.7	100	256	P	H
HT40		5459.72	42.96	-11.04	54	31.75	31.64	6.26	26.69	100	256	A	H
CH 38		5011.44	52.28	-21.72	74	41.47	31.47	6.05	26.71	372	349	P	V
5190MHz		5144.04	44.03	-9.97	54	32.77	31.9	6.06	26.7	372	349	A	V
	*	5190	99.54	-	-	88.59	31.58	6.07	26.7	372	349	P	V
	*	5190	92.14	-	-	81.19	31.58	6.07	26.7	372	349	A	V
		5438.16	50.55	-23.45	74	39.44	31.55	6.25	26.69	372	349	P	V
		5457.76	42.74	-11.26	54	31.54	31.63	6.26	26.69	372	349	A	V
		5015.08	52.2	-21.8	74	41.37	31.49	6.05	26.71	100	255	P	H
		5051.22	44.19	-9.81	54	33.14	31.7	6.06	26.71	100	255	A	H
	*	5230	103.68	-	-	92.9	31.38	6.1	26.7	100	255	P	H
	*	5230	96.39	-	-	85.61	31.38	6.1	26.7	100	255	A	H
802.11n		5452.72	50.51	-23.49	74	39.33	31.61	6.26	26.69	100	255	P	H
HT40		5433.68	43.12	-10.88	54	32.03	31.53	6.25	26.69	100	255	A	H
CH 46		5017.68	51.57	-22.43	74	40.72	31.51	6.05	26.71	372	348	P	V
5230MHz		5067.6	44.11	-9.89	54	32.99	31.77	6.06	26.71	372	348	A	V
	*	5230	97.42	-	-	86.64	31.38	6.1	26.7	372	348	P	V
	*	5230	90.3	-	-	79.52	31.38	6.1	26.7	372	348	A	V
		5436.48	50.15	-23.85	74	39.04	31.55	6.25	26.69	372	348	P	V
		5456.08	42.53	-11.47	54	31.34	31.62	6.26	26.69	372	348	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 1 5150~5250MHz

WIFI 802.11n HT40 (Harmonic @ 3m)

WIFI Ant. 1+2	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	45.7	-22.5	68.2	52.86	39.44	9.89	56.49	100	0	P	H
		15570	45.76	-28.24	74	51.07	38.04	12.48	55.83	100	0	P	H
802.11n													H
HT40													H
CH 38		10380	45.77	-22.43	68.2	52.93	39.44	9.89	56.49	100	0	P	V
5190MHz		15570	44.72	-29.28	74	50.03	38.04	12.48	55.83	100	0	P	V
													V
													V
		10460	46.42	-21.78	68.2	53.31	39.62	9.93	56.44	100	0	P	H
		15690	44.24	-29.76	74	49.6	37.89	12.51	55.76	100	0	P	H
802.11n													H
HT40													H
CH 46		10460	46.71	-21.49	68.2	53.6	39.62	9.93	56.44	100	0	P	V
5230MHz		15690	44.6	-29.4	74	49.96	37.89	12.51	55.76	100	0	P	V
													V
													V

Remark

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

Band 1 5150~5250MHz

WIFI 802.11ac VHT80 (Band Edge @ 3m)

WIFI Ant. 1+2	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		5146.9	54.71	-19.29	74	43.45	31.9	6.06	26.7	100	254	P	H
		5150	47.65	-6.35	54	36.38	31.9	6.07	26.7	100	254	A	H
	*	5210	100.94	-	-	90.1	31.46	6.08	26.7	100	254	P	H
	*	5210	93.72	-	-	82.88	31.46	6.08	26.7	100	254	A	H
		5406.8	51.27	-22.73	74	40.29	31.43	6.24	26.69	100	254	P	H
		5459.72	43.01	-10.99	54	31.8	31.64	6.26	26.69	100	254	A	H
		5011.18	52.66	-21.34	74	41.85	31.47	6.05	26.71	290	174	P	V
		5149.76	44.22	-9.78	54	32.96	31.9	6.06	26.7	290	174	A	V
	*	5210	96.74	-	-	85.9	31.46	6.08	26.7	290	174	P	V
	*	5210	89.71	-	-	78.87	31.46	6.08	26.7	290	174	A	V
		5366.2	50.35	-23.65	74	39.51	31.33	6.21	26.7	290	174	P	V
		5454.12	42.77	-11.23	54	31.58	31.62	6.26	26.69	290	174	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 1 5150~5250MHz

WIFI 802.11ac VHT80 (Harmonic @ 3m)

WIFI Ant. 1+2	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	46.83	-21.37	68.2	53.85	39.54	9.91	56.47	100	0	P	H
		15630	43.84	-30.16	74	49.31	37.83	12.5	55.8	100	0	P	H
802.11ac													H
VHT80													H
CH 42		10420	47.14	-21.06	68.2	54.16	39.54	9.91	56.47	100	0	P	V
5210MHz		15630	44.38	-29.62	74	49.85	37.83	12.5	55.8	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 2 - 5250~5350MHz

WIFI 802.11a (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1+2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11a CH 52 5260MHz		5103.36	52.24	-21.76	74	40.99	31.9	6.06	26.71	110	253	P	H
		5095.54	43.26	-10.74	54	32.03	31.88	6.06	26.71	110	253	A	H
	*	5260	105.41	-	-	94.69	31.3	6.12	26.7	110	253	P	H
	*	5260	98.52	-	-	87.8	31.3	6.12	26.7	110	253	A	H
		5442.48	51.74	-22.26	74	40.61	31.57	6.25	26.69	110	253	P	H
		5452.56	42.29	-11.71	54	31.11	31.61	6.26	26.69	110	253	A	H
		5087.72	53.17	-20.83	74	41.97	31.85	6.06	26.71	381	349	P	V
		5100.3	43.22	-10.78	54	31.97	31.9	6.06	26.71	381	349	A	V
	*	5260	102.46	-	-	91.74	31.3	6.12	26.7	381	349	P	V
	*	5260	95.1	-	-	84.38	31.3	6.12	26.7	381	349	A	V
		5427.6	50.71	-23.29	74	39.64	31.51	6.25	26.69	381	349	P	V
		5453.04	41.99	-12.01	54	30.81	31.61	6.26	26.69	381	349	A	V
802.11a CH 60 5300MHz		5041.14	52.32	-21.68	74	41.33	31.65	6.05	26.71	102	252	P	H
		5077.52	43.23	-10.77	54	32.07	31.81	6.06	26.71	102	252	A	H
	*	5300	106.59	-	-	95.84	31.3	6.15	26.7	102	252	P	H
	*	5300	98.79	-	-	88.04	31.3	6.15	26.7	102	252	A	H
		5354.88	51.46	-22.54	74	40.65	31.31	6.2	26.7	102	252	P	H
		5354.16	42.76	-11.24	54	31.95	31.31	6.2	26.7	102	252	A	H
		5074.46	52.02	-21.98	74	40.87	31.8	6.06	26.71	377	349	P	V
		5081.26	43.21	-10.79	54	32.03	31.83	6.06	26.71	377	349	A	V
	*	5300	102.8	-	-	92.05	31.3	6.15	26.7	377	349	P	V
	*	5300	95.19	-	-	84.44	31.3	6.15	26.7	377	349	A	V
		5457.12	51.23	-22.77	74	40.03	31.63	6.26	26.69	377	349	P	V
		5452.8	42.14	-11.86	54	30.96	31.61	6.26	26.69	377	349	A	V

802.11a CH 64 5320MHz	*	5320	107.17	-	-	96.4	31.3	6.17	26.7	132	251	P	H
	*	5320	99.57	-	-	88.8	31.3	6.17	26.7	132	251	A	H
		5351.68	52.41	-21.59	74	41.61	31.3	6.2	26.7	132	251	P	H
		5352.96	42.55	-11.45	54	31.74	31.31	6.2	26.7	132	251	A	H
													H
													H
	*	5320	100.77	-	-	90	31.3	6.17	26.7	100	277	P	V
	*	5320	93.37	-	-	82.6	31.3	6.17	26.7	100	277	A	V
		5425.6	50.94	-23.06	74	39.88	31.5	6.25	26.69	100	277	P	V
		5453.12	41.43	-12.57	54	30.25	31.61	6.26	26.69	100	277	A	V
													V
													V

Remark

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

Band 2 5250~5350MHz

WIFI 802.11a (Harmonic @ 3m)

WIFI Ant. 1+2	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	47.31	-20.89	68.2	54.11	39.66	9.95	56.41	100	0	P	H
		15780	45.7	-28.3	74	51.06	37.82	12.54	55.72	100	0	P	H
													H
													H
		10520	47.18	-21.02	68.2	53.98	39.66	9.95	56.41	100	0	P	V
		15780	44.85	-29.15	74	50.21	37.82	12.54	55.72	100	0	P	V
													V
													V
802.11a CH 60 5300MHz		10600	46.47	-27.53	74	53.34	39.5	9.99	56.36	100	0	P	H
		15900	45.07	-28.93	74	50.56	37.6	12.57	55.66	100	0	P	H
													H
													H
		10600	47	-27	74	53.87	39.5	9.99	56.36	100	0	P	V
		15900	45.25	-28.75	74	50.74	37.6	12.57	55.66	100	0	P	V
													V
													V
802.11a CH 64 5320MHz		10640	46.51	-27.49	74	53.23	39.62	10	56.34	100	0	P	H
		15960	44.61	-29.39	74	50	37.66	12.58	55.63	100	0	P	H
													H
													H
		10640	46.64	-27.36	74	53.36	39.62	10	56.34	100	0	P	V
		15960	45.03	-28.97	74	50.42	37.66	12.58	55.63	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 2 5250~5350MHz

WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI Ant. 1+2	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)
		5087.04	53.37	-20.63	74	42.17	31.85	6.06	26.71	121	255	P	H
		5092.14	42.29	-11.71	54	31.07	31.87	6.06	26.71	121	255	A	H
	*	5260	106.81	-	-	96.09	31.3	6.12	26.7	121	255	P	H
	*	5260	99.72	-	-	89	31.3	6.12	26.7	121	255	A	H
802.11n		5370.48	51.62	-22.38	74	40.77	31.34	6.21	26.7	121	255	P	H
HT20		5452.8	41.84	-12.16	54	30.66	31.61	6.26	26.69	121	255	A	H
CH 52		5058.48	51.75	-22.25	74	40.67	31.73	6.06	26.71	363	351	P	V
5260MHz		5091.46	42.27	-11.73	54	31.05	31.87	6.06	26.71	363	351	A	V
	*	5260	101.12	-	-	90.4	31.3	6.12	26.7	363	351	P	V
	*	5260	93.75	-	-	83.03	31.3	6.12	26.7	363	351	A	V
		5431.68	51.53	-22.47	74	40.44	31.53	6.25	26.69	363	351	P	V
		5459.04	41.2	-12.8	54	29.99	31.64	6.26	26.69	363	351	A	V
		5033.32	52.3	-21.7	74	41.36	31.6	6.05	26.71	130	251	P	H
		5070.72	42.28	-11.72	54	31.15	31.78	6.06	26.71	130	251	A	H
	*	5300	108.28	-	-	97.53	31.3	6.15	26.7	130	251	P	H
	*	5300	100.48	-	-	89.73	31.3	6.15	26.7	130	251	A	H
802.11n		5439.36	51.04	-22.96	74	39.92	31.56	6.25	26.69	130	251	P	H
HT20		5350.8	42.21	-11.79	54	31.41	31.3	6.2	26.7	130	251	A	H
CH 60		5144.5	52.93	-21.07	74	41.67	31.9	6.06	26.7	378	349	P	V
5300MHz		5092.82	42.24	-11.76	54	31.02	31.87	6.06	26.71	378	349	A	V
	*	5300	102.8	-	-	92.05	31.3	6.15	26.7	378	349	P	V
	*	5300	95.1	-	-	84.35	31.3	6.15	26.7	378	349	A	V
		5371.68	50.5	-23.5	74	39.64	31.34	6.22	26.7	378	349	P	V
		5452.56	41.18	-12.82	54	30	31.61	6.26	26.69	378	349	A	V

	*	5320	105.67	-	-	94.9	31.3	6.17	26.7	118	251	P	H
	*	5320	98.17	-	-	87.4	31.3	6.17	26.7	118	251	A	H
		5360.64	51.21	-22.79	74	40.38	31.32	6.21	26.7	118	251	P	H
		5352	47.69	-6.31	54	36.89	31.3	6.2	26.7	118	251	A	H
802.11n													H
HT20													H
CH 64	*	5320	101.77	-	-	91	31.3	6.17	26.7	398	347	P	V
5320MHz	*	5320	93.87	-	-	83.1	31.3	6.17	26.7	398	347	A	V
		5457.92	50.72	-23.28	74	39.52	31.63	6.26	26.69	398	347	P	V
		5459.04	41.22	-12.78	54	30.01	31.64	6.26	26.69	398	347	A	V
													V
													V

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

Band 2 5250~5350MHz

WIFI 802.11n HT20 (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		10520	47.48	-20.72	68.2	54.28	39.66	9.95	56.41	100	0	P	H
		15780	45.71	-28.29	74	51.07	37.82	12.54	55.72	100	0	P	H
802.11n													H
HT20													H
CH 52		10520	46.96	-21.24	68.2	53.76	39.66	9.95	56.41	100	0	P	V
5260MHz		15780	46.14	-27.86	74	51.5	37.82	12.54	55.72	100	0	P	V
													V
													V
		10600	46.71	-27.29	74	53.58	39.5	9.99	56.36	100	0	P	H
		15900	46.73	-27.27	74	52.22	37.6	12.57	55.66	100	0	P	H
802.11n													H
HT20													H
CH 60		10600	46.49	-27.51	74	53.36	39.5	9.99	56.36	100	0	P	V
5300MHz		15900	44.88	-29.12	74	50.37	37.6	12.57	55.66	100	0	P	V
													V
													V
		10640	46.92	-27.08	74	53.64	39.62	10	56.34	100	0	P	H
		15960	44.41	-29.59	74	49.8	37.66	12.58	55.63	100	0	P	H
802.11n													H
HT20													H
CH 64		10640	46.64	-27.36	74	53.36	39.62	10	56.34	100	0	P	V
5320MHz		15960	44.63	-29.37	74	50.02	37.66	12.58	55.63	100	0	P	V
													V
													V

Remark

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

Band 2 5250~5350MHz

WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI Ant. 1+2	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		5115.94	52.59	-21.41	74	41.34	31.9	6.06	26.71	100	255	P	H
		5090.78	44.28	-9.72	54	33.07	31.86	6.06	26.71	100	255	A	H
	*	5270	103.97	-	-	93.24	31.3	6.13	26.7	100	255	P	H
	*	5270	96.84	-	-	86.11	31.3	6.13	26.7	100	255	A	H
		5457.6	51.27	-22.73	74	40.07	31.63	6.26	26.69	100	255	P	H
		5353.44	42.95	-11.05	54	32.14	31.31	6.2	26.7	100	255	A	H
		5087.04	52.29	-21.71	74	41.09	31.85	6.06	26.71	381	350	P	V
		5099.28	43.96	-10.04	54	32.71	31.9	6.06	26.71	381	350	A	V
	*	5270	98.39	-	-	87.66	31.3	6.13	26.7	381	350	P	V
	*	5270	91.01	-	-	80.28	31.3	6.13	26.7	381	350	A	V
		5443.92	50.46	-23.54	74	39.32	31.58	6.25	26.69	381	350	P	V
		5450.64	42.64	-11.36	54	31.47	31.6	6.26	26.69	381	350	A	V
802.11n HT40 CH 62 5310MHz		5056.78	52.67	-21.33	74	41.59	31.73	6.06	26.71	100	255	P	H
		5099.96	44.18	-9.82	54	32.93	31.9	6.06	26.71	100	255	A	H
	*	5310	103.42	-	-	92.66	31.3	6.16	26.7	100	255	P	H
	*	5310	96.18	-	-	85.42	31.3	6.16	26.7	100	255	A	H
		5399.04	50.98	-23.02	74	40.03	31.4	6.24	26.69	100	255	P	H
		5356.8	43.94	-10.06	54	33.13	31.31	6.2	26.7	100	255	A	H
		5052.7	52.06	-21.94	74	41	31.71	6.06	26.71	398	349	P	V
		5108.12	44.18	-9.82	54	32.93	31.9	6.06	26.71	398	349	A	V
	*	5310	97.1	-	-	86.34	31.3	6.16	26.7	398	349	P	V
	*	5310	90.33	-	-	79.57	31.3	6.16	26.7	398	349	A	V
		5443.44	50.85	-23.15	74	39.72	31.57	6.25	26.69	398	349	P	V
		5453.04	42.52	-11.48	54	31.34	31.61	6.26	26.69	398	349	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 2 5250~5350MHz

WIFI 802.11n HT40 (Harmonic @ 3m)

WIFI Ant. 1+2	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	46.11	-22.09	68.2	52.93	39.62	9.96	56.4	100	0	P	H
		15810	44.28	-29.72	74	49.66	37.78	12.55	55.71	100	0	P	H
802.11n													H
HT40													H
CH 54		10540	46	-22.2	68.2	52.82	39.62	9.96	56.4	100	0	P	V
5270MHz		15810	43.61	-30.39	74	48.99	37.78	12.55	55.71	100	0	P	V
													V
													V
		10620	46.88	-27.12	74	53.68	39.56	9.99	56.35	100	0	P	H
		15930	45.9	-28.1	74	51.34	37.63	12.58	55.65	100	0	P	H
802.11n													H
HT40													H
CH 62		10620	46.57	-27.43	74	53.37	39.56	9.99	56.35	100	0	P	V
5310MHz		15930	45.7	-28.3	74	51.14	37.63	12.58	55.65	100	0	P	V
													V
													V

Remark

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

Band 2 5250~5350MHz

WIFI 802.11ac VHT80 (Band Edge @ 3m)

WIFI Ant. 1+2	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		5069.36	53.02	-20.98	74	41.89	31.78	6.06	26.71	137	252	P	H
		5074.12	44.19	-9.81	54	33.04	31.8	6.06	26.71	137	252	A	H
	*	5290	101.65	-	-	90.9	31.3	6.15	26.7	137	252	P	H
	*	5290	93.95	-	-	83.2	31.3	6.15	26.7	137	252	A	H
		5353.2	55.45	-18.55	74	44.64	31.31	6.2	26.7	137	252	P	H
		5355.84	47.68	-6.32	54	36.87	31.31	6.2	26.7	137	252	A	H
		5064.94	52.42	-21.58	74	41.31	31.76	6.06	26.71	100	299	P	V
		5088.06	44.07	-9.93	54	32.87	31.85	6.06	26.71	100	299	A	V
	*	5290	94.75	-	-	84	31.3	6.15	26.7	100	299	P	V
	*	5290	87.45	-	-	76.7	31.3	6.15	26.7	100	299	A	V
		5450.4	51.27	-22.73	74	40.1	31.6	6.26	26.69	100	299	P	V
		5352.96	43.02	-10.98	54	32.21	31.31	6.2	26.7	100	299	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 2 5250~5350MHz

WIFI 802.11ac VHT80 (Harmonic @ 3m)

WIFI Ant. 1+2	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	46.71	-21.49	68.2	53.56	39.54	9.98	56.37	100	0	P	H
		15870	45.83	-28.17	74	51.28	37.66	12.56	55.67	100	0	P	H
802.11ac													H
VHT80													H
CH 58		10580	47.22	-20.98	68.2	54.07	39.54	9.98	56.37	100	0	P	V
5290MHz		15870	45.82	-28.18	74	51.27	37.66	12.56	55.67	100	0	P	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 802.11a (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+2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11a CH 100 5500MHz		5452.4	52.16	-21.84	74	40.98	31.61	6.26	26.69	100	254	P	H
		5465.68	52.56	-15.64	68.2	41.33	31.66	6.26	26.69	100	254	P	H
		5459.92	42.44	-11.56	54	31.23	31.64	6.26	26.69	100	254	A	H
	*	5500	105.68	-	-	94.3	31.8	6.27	26.69	100	254	P	H
	*	5500	98.68	-	-	87.3	31.8	6.27	26.69	100	254	A	H
													H
		5456.56	50.25	-23.75	74	39.05	31.63	6.26	26.69	100	277	P	V
		5465.68	50.42	-17.78	68.2	39.19	31.66	6.26	26.69	100	277	P	V
		5460	41.7	-12.3	54	30.49	31.64	6.26	26.69	100	277	A	V
	*	5500	102.78	-	-	91.4	31.8	6.27	26.69	100	277	P	V
	*	5500	95.38	-	-	84	31.8	6.27	26.69	100	277	A	V
													V
802.11a CH 116 5580MHz		5454.4	50.67	-23.33	74	39.48	31.62	6.26	26.69	131	261	P	H
		5468.8	50.58	-17.62	68.2	39.33	31.68	6.26	26.69	131	261	P	H
		5452.48	42.28	-11.72	54	31.1	31.61	6.26	26.69	131	261	A	H
	*	5580	106.24	-	-	95.01	31.7	6.29	26.76	131	261	P	H
	*	5580	98.71	-	-	87.48	31.7	6.29	26.76	131	261	A	H
		5755.235	50.78	-17.42	68.2	39.1	32.1	6.49	26.91	131	261	P	H
		5450.32	50.39	-23.61	74	39.22	31.6	6.26	26.69	363	328	P	V
		5468.56	49.66	-18.54	68.2	38.42	31.67	6.26	26.69	363	328	P	V
		5458.96	42.05	-11.95	54	30.84	31.64	6.26	26.69	363	328	A	V
	*	5580	100.92	-	-	89.69	31.7	6.29	26.76	363	328	P	V
	*	5580	93.4	-	-	82.17	31.7	6.29	26.76	363	328	A	V
		5753.03	50.81	-17.39	68.2	39.14	32.1	6.48	26.91	363	328	P	V

802.11a CH 140 5700MHz	*	5700	106.85	-	-	95.5	31.8	6.42	26.87	152	252	P	H
	*	5700	99.95	-	-	88.6	31.8	6.42	26.87	152	252	A	H
		5726.76	54.76	-13.44	68.2	43.24	31.96	6.45	26.89	152	252	P	H
													H
													H
													H
	*	5700	102.48	-	-	91.13	31.8	6.42	26.87	100	279	P	V
	*	5700	94.9	-	-	83.55	31.8	6.42	26.87	100	279	A	V
		5737	53.49	-14.71	68.2	41.91	32.02	6.46	26.9	100	279	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 802.11a (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 100 5500MHz		11000	47.25	-26.75	74	53.13	40.1	10.15	56.13	100	0	P	H
		16500	46.84	-21.36	68.2	49.98	39.5	12.77	55.41	100	0	P	H
													H
													H
		11000	47.87	-26.13	74	53.75	40.1	10.15	56.13	100	0	P	V
		16500	47.06	-21.14	68.2	50.2	39.5	12.77	55.41	100	0	P	V
													V
													V
802.11a CH 116 5580MHz		11160	46.89	-27.11	74	52.94	39.72	10.25	56.02	100	0	P	H
		16740	48.15	-20.05	68.2	50.83	40.08	12.85	55.61	100	0	P	H
													H
													H
		11160	46.82	-27.18	74	52.87	39.72	10.25	56.02	100	0	P	V
		16740	48	-20.2	68.2	50.68	40.08	12.85	55.61	100	0	P	V
													V
													V
802.11a CH 140 5700MHz		11400	47.15	-26.85	74	52.62	40	10.39	55.86	100	0	P	H
		17100	49	-19.2	68.2	52.22	39.8	13.01	56.03	100	0	P	H
													H
													H
		11400	46.79	-27.21	74	52.26	40	10.39	55.86	100	0	P	V
		17100	47.6	-20.6	68.2	50.82	39.8	13.01	56.03	100	0	P	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 (Band Edge @ 3m)

WIFI Ant. 1+2	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)
		5411.6	51.64	-22.36	74	40.64	31.45	6.24	26.69	224	256	P	H
		5467.12	51.37	-16.83	68.2	40.13	31.67	6.26	26.69	224	256	P	H
		5459.44	42.32	-11.68	54	31.11	31.64	6.26	26.69	224	256	A	H
	*	5500	106.18	-	-	94.8	31.8	6.27	26.69	224	256	P	H
802.11n	*	5500	98.58	-	-	87.2	31.8	6.27	26.69	224	256	A	H
HT20													H
CH 100		5354.8	50.39	-23.61	74	39.58	31.31	6.2	26.7	391	353	P	V
5500MHz		5460.88	49.92	-18.28	68.2	38.71	31.64	6.26	26.69	391	353	P	V
		5453.04	41.43	-12.57	54	30.25	31.61	6.26	26.69	391	353	A	V
	*	5500	101.18	-	-	89.8	31.8	6.27	26.69	391	353	P	V
	*	5500	93.31	-	-	81.93	31.8	6.27	26.69	391	353	A	V
													V
		5434.48	50.28	-23.72	74	39.18	31.54	6.25	26.69	119	257	P	H
		5467.36	50.53	-17.67	68.2	39.29	31.67	6.26	26.69	119	257	P	H
		5452.96	41.42	-12.58	54	30.24	31.61	6.26	26.69	119	257	A	H
	*	5580	105.93	-	-	94.7	31.7	6.29	26.76	119	257	P	H
802.11n	*	5580	97.63	-	-	86.4	31.7	6.29	26.76	119	257	A	H
HT20		5753.345	52.28	-15.92	68.2	40.61	32.1	6.48	26.91	119	257	P	H
CH 116		5392.24	50.25	-23.75	74	39.33	31.38	6.23	26.69	398	353	P	V
5580MHz		5466.16	50.4	-17.8	68.2	39.17	31.66	6.26	26.69	398	353	P	V
		5459.92	41.05	-12.95	54	29.84	31.64	6.26	26.69	398	353	A	V
	*	5580	101.63	-	-	90.4	31.7	6.29	26.76	398	353	P	V
	*	5580	93.83	-	-	82.6	31.7	6.29	26.76	398	353	A	V
		5726.255	50.88	-17.32	68.2	39.36	31.96	6.45	26.89	398	353	P	V

	*	5700	106.79	-	-	95.44	31.8	6.42	26.87	154	252	P	H
	*	5700	99.01	-	-	87.66	31.8	6.42	26.87	154	252	A	H
		5760.04	54.06	-14.14	68.2	42.39	32.1	6.49	26.92	154	252	P	H
													H
802.11n													H
HT20													H
CH 140	*	5700	99.05	-	-	87.7	31.8	6.42	26.87	100	286	P	V
5700MHz	*	5700	91.25	-	-	79.9	31.8	6.42	26.87	100	286	A	V
		5750.44	52.46	-15.74	68.2	40.79	32.1	6.48	26.91	100	286	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+2	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	46.71	-27.29	74	52.59	40.1	10.15	56.13	100	0	P	H
		16500	46.94	-21.26	68.2	50.08	39.5	12.77	55.41	100	0	P	H
802.11n													H
HT20													H
CH 100		11000	46.74	-27.26	74	52.62	40.1	10.15	56.13	100	0	P	V
5500MHz		16500	46.14	-22.06	68.2	49.28	39.5	12.77	55.41	100	0	P	V
													V
													V
		11160	47.06	-26.94	74	53.11	39.72	10.25	56.02	100	0	P	H
		16740	47.96	-20.24	68.2	50.64	40.08	12.85	55.61	100	0	P	H
802.11n													H
HT20													H
CH 116		11160	46.02	-27.98	74	52.07	39.72	10.25	56.02	100	0	P	V
5580MHz		16740	47.82	-20.38	68.2	50.5	40.08	12.85	55.61	100	0	P	V
													V
													V
		11400	46.94	-27.06	74	52.41	40	10.39	55.86	100	0	P	H
		17100	48.07	-20.13	68.2	51.29	39.8	13.01	56.03	100	0	P	H
802.11n													H
HT20													H
CH 140		11400	47.15	-26.85	74	52.62	40	10.39	55.86	100	0	P	V
5700MHz		17100	48.56	-19.64	68.2	51.78	39.8	13.01	56.03	100	0	P	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 HT40 (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		5447.44	51.98	-22.02	74	40.83	31.59	6.25	26.69	120	261	P	H
		5461.6	51.7	-16.5	68.2	40.48	31.65	6.26	26.69	120	261	P	H
		5452.96	43.75	-10.25	54	32.57	31.61	6.26	26.69	120	261	A	H
	*	5510	103.96	-	-	92.61	31.78	6.27	26.7	120	261	P	H
802.11n	*	5510	96.03	-	-	84.68	31.78	6.27	26.7	120	261	A	H
HT40		5763.74	51.66	-16.54	68.2	39.98	32.1	6.5	26.92	120	261	P	H
CH 102		5444.32	50.93	-23.07	74	39.79	31.58	6.25	26.69	100	281	P	V
5510MHz		5468.32	50.73	-17.47	68.2	39.49	31.67	6.26	26.69	100	281	P	V
		5455.36	43.06	-10.94	54	31.87	31.62	6.26	26.69	100	281	A	V
	*	5510	100.38	-	-	89.03	31.78	6.27	26.7	100	281	P	V
	*	5510	92.74	-	-	81.39	31.78	6.27	26.7	100	281	A	V
		5743.265	52.69	-15.51	68.2	41.06	32.06	6.47	26.9	100	281	P	V
		5411.68	50.92	-23.08	74	39.92	31.45	6.24	26.69	119	260	P	H
		5465.68	51.65	-16.55	68.2	40.42	31.66	6.26	26.69	119	260	P	H
		5452.72	42.92	-11.08	54	31.74	31.61	6.26	26.69	119	260	A	H
	*	5550	105.47	-	-	94.22	31.7	6.28	26.73	119	260	P	H
802.11n	*	5550	97.09	-	-	85.84	31.7	6.28	26.73	119	260	A	H
HT40		5742.32	52.81	-15.39	68.2	41.19	32.05	6.47	26.9	119	260	P	H
CH 110		5440	51.5	-22.5	74	40.38	31.56	6.25	26.69	100	270	P	V
5550MHz		5463.76	50.25	-17.95	68.2	39.02	31.66	6.26	26.69	100	270	P	V
		5459.44	42.83	-11.17	54	31.62	31.64	6.26	26.69	100	270	A	V
	*	5550	101.89	-	-	90.64	31.7	6.28	26.73	100	270	P	V
	*	5550	93.59	-	-	82.34	31.7	6.28	26.73	100	270	A	V
		5742.95	51.87	-16.33	68.2	40.24	32.06	6.47	26.9	100	270	P	V

		5409.5	50.2	-23.8	74	39.21	31.44	6.24	26.69	139	258	P	H
		5464.1	49.72	-18.48	68.2	38.49	31.66	6.26	26.69	139	258	P	H
		5459.2	42.73	-11.27	54	31.52	31.64	6.26	26.69	139	258	A	H
	*	5670	103.83	-	-	92.55	31.74	6.38	26.84	139	258	P	H
802.11n	*	5670	96.72	-	-	85.44	31.74	6.38	26.84	139	258	A	H
HT40		5756.81	51.7	-16.5	68.2	40.03	32.1	6.49	26.92	139	258	P	H
CH 134		5447.65	50.42	-23.58	74	39.27	31.59	6.25	26.69	243	333	P	V
5670MHz		5467.95	50.2	-18	68.2	38.96	31.67	6.26	26.69	243	333	P	V
		5437.85	42.52	-11.48	54	31.41	31.55	6.25	26.69	243	333	A	V
	*	5670	99.9	-	-	88.62	31.74	6.38	26.84	243	333	P	V
	*	5670	92.79	-	-	81.51	31.74	6.38	26.84	243	333	A	V
		5736.965	52.23	-15.97	68.2	40.65	32.02	6.46	26.9	243	333	P	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 HT40 (Harmonic @ 3m)

WIFI Ant. 1+2	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	45.67	-28.33	74	51.57	40.06	10.16	56.12	100	0	P	H
		16530	46.89	-21.31	68.2	50.11	39.44	12.78	55.44	100	0	P	H
802.11n													H
HT40													H
CH 102		11020	46.57	-27.43	74	52.47	40.06	10.16	56.12	100	0	P	V
5510MHz		16530	46.35	-21.85	68.2	49.57	39.44	12.78	55.44	100	0	P	V
													V
													V
		11100	46.91	-27.09	74	52.86	39.9	10.21	56.06	100	0	P	H
		16650	46.91	-21.29	68.2	49.98	39.65	12.82	55.54	100	0	P	H
802.11n													H
HT40													H
CH 110		11100	45.94	-28.06	74	51.89	39.9	10.21	56.06	100	0	P	V
5550MHz		16650	46.9	-21.3	68.2	49.97	39.65	12.82	55.54	100	0	P	V
													V
													V
		11340	46.64	-27.36	74	52.37	39.82	10.35	55.9	100	0	P	H
		17010	47.33	-20.87	68.2	50.34	39.89	12.95	55.85	100	0	P	H
802.11n													H
HT40													H
CH 134		11340	46.52	-27.48	74	52.25	39.82	10.35	55.9	100	0	P	V
5670MHz		17010	49.3	-18.9	68.2	52.31	39.89	12.95	55.85	100	0	P	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 802.11ac VHT80 (Band Edge @ 3m)

WIFI Ant. 1+2	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)
		5452.96	52.48	-21.52	74	41.3	31.61	6.26	26.69	115	255	P	H
		5465.92	53.93	-14.27	68.2	42.7	31.66	6.26	26.69	115	255	P	H
		5447.2	44.23	-9.77	54	33.08	31.59	6.25	26.69	115	255	A	H
	*	5530	102.15	-	-	90.85	31.74	6.28	26.72	115	255	P	H
802.11ac	*	5530	93.83	-	-	82.53	31.74	6.28	26.72	115	255	A	H
VHT80		5746.1	51.66	-16.54	68.2	40.01	32.08	6.48	26.91	115	255	P	H
CH 106		5449.12	52.44	-21.56	74	41.28	31.6	6.25	26.69	100	271	P	V
5530MHz		5460.88	51.54	-16.66	68.2	40.33	31.64	6.26	26.69	100	271	P	V
		5453.68	43.32	-10.68	54	32.14	31.61	6.26	26.69	100	271	A	V
	*	5530	98.39	-	-	87.09	31.74	6.28	26.72	100	271	P	V
	*	5530	90.6	-	-	79.3	31.74	6.28	26.72	100	271	A	V
		5753.975	51.13	-17.07	68.2	39.46	32.1	6.48	26.91	100	271	P	V
		5450.56	51.69	-22.31	74	40.52	31.6	6.26	26.69	136	254	P	H
		5461.84	50.14	-18.06	68.2	38.92	31.65	6.26	26.69	136	254	P	H
		5459.68	42.67	-11.33	54	31.46	31.64	6.26	26.69	136	254	A	H
	*	5610	102.44	-	-	91.22	31.7	6.31	26.79	136	254	P	H
802.11ac	*	5610	94.57	-	-	83.35	31.7	6.31	26.79	136	254	A	H
VHT80		5734.445	51.53	-16.67	68.2	39.96	32.01	6.46	26.9	136	254	P	H
CH 122		5442.88	50.16	-23.84	74	39.03	31.57	6.25	26.69	100	269	P	V
5610MHz		5462.08	50.16	-18.04	68.2	38.94	31.65	6.26	26.69	100	269	P	V
		5456.08	42.69	-11.31	54	31.5	31.62	6.26	26.69	100	269	A	V
	*	5610	98.53	-	-	87.31	31.7	6.31	26.79	100	269	P	V
	*	5610	90.55	-	-	79.33	31.7	6.31	26.79	100	269	A	V
		5761.22	50.4	-17.8	68.2	38.73	32.1	6.49	26.92	100	269	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 5470~5725MHz

WIFI 802.11ac VHT80 (Harmonic @ 3m)

WIFI Ant. 1+2	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	47.01	-26.99	74	52.93	39.98	10.19	56.09	100	0	P	H
		16590	44.89	-23.31	68.2	48.26	39.32	12.8	55.49	100	0	P	H
802.11ac													H
VHT80													H
CH 106		11060	47.68	-26.32	74	53.6	39.98	10.19	56.09	100	0	P	V
5530MHz		16590	44.47	-23.73	68.2	47.84	39.32	12.8	55.49	100	0	P	V
													V
													V
		11220	47.61	-26.39	74	53.69	39.62	10.28	55.98	100	0	P	H
		16830	47.27	-20.93	68.2	50.02	40.05	12.89	55.69	100	0	P	H
802.11ac													H
VHT80													H
CH 122		11220	46.73	-27.27	74	52.81	39.62	10.28	55.98	100	0	P	V
5610MHz		16830	47.06	-21.14	68.2	49.81	40.05	12.89	55.69	100	0	P	V
													V
													V

Remark

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

Band 3 - Straddle Channel

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+2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11a CH 144 5720MHz		5455.3	50.26	-23.74	74	39.07	31.62	6.26	26.69	101	256	P	H
		5469.34	49.24	-18.96	68.2	37.99	31.68	6.26	26.69	101	256	P	H
		5452.96	42.11	-11.89	54	30.93	31.61	6.26	26.69	101	256	A	H
	*	5720	105.02	-	-	93.54	31.92	6.44	26.88	101	256	P	H
	*	5720	97.65	-	-	86.17	31.92	6.44	26.88	101	256	A	H
		5869.75	52.87	-15.33	68.2	41.01	32.34	6.54	27.02	101	256	P	H
		5408.11	50.43	-23.57	74	39.45	31.43	6.24	26.69	345	330	P	V
		5465.44	49.51	-18.69	68.2	38.28	31.66	6.26	26.69	345	330	P	V
		5449.84	41.77	-12.23	54	30.61	31.6	6.25	26.69	345	330	A	V
	*	5720	102.49	-	-	91.01	31.92	6.44	26.88	345	330	P	V
	*	5720	94.98	-	-	83.5	31.92	6.44	26.88	345	330	A	V
		5911.75	51.58	-16.62	68.2	39.64	32.45	6.54	27.05	345	330	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 - Straddle Channel

WIFI 802.11a (Harmonic @ 3m)

WIFI Ant. 1+2	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 144 5720MHz		11440	46.93	-27.07	74	52.36	40	10.4	55.83	100	0	P	H
		17160	47.81	-20.39	68.2	51.19	39.74	13.04	56.16	100	0	P	H
													H
													H
		11440	46.94	-27.06	74	52.37	40	10.4	55.83	100	0	P	V
		17160	47.59	-20.61	68.2	50.97	39.74	13.04	56.16	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 - Straddle Channel

WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 144 5720MHz		5451.79	50.61	-23.39	74	39.43	31.61	6.26	26.69	152	252	P	H
		5467	50.9	-17.3	68.2	39.66	31.67	6.26	26.69	152	252	P	H
		5459.59	41.23	-12.77	54	30.02	31.64	6.26	26.69	152	252	A	H
	*	5720	105.78	-	-	94.3	31.92	6.44	26.88	152	252	P	H
	*	5720	97.68	-	-	86.2	31.92	6.44	26.88	152	252	A	H
		5948	52.19	-16.01	68.2	40.14	32.59	6.54	27.08	152	252	P	H
		5410.06	50.62	-23.38	74	39.63	31.44	6.24	26.69	100	286	P	V
		5465.83	49.74	-18.46	68.2	38.51	31.66	6.26	26.69	100	286	P	V
		5459.98	41.14	-12.86	54	29.93	31.64	6.26	26.69	100	286	A	V
	*	5720	99.43	-	-	87.95	31.92	6.44	26.88	100	286	P	V
	*	5720	91.62	-	-	80.14	31.92	6.44	26.88	100	286	A	V
		5910.25	51.7	-16.5	68.2	39.77	32.44	6.54	27.05	100	286	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 - Straddle Channel

WIFI 802.11n HT20 (Harmonic @ 3m)

WIFI Ant. 1+2	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	47.11	-26.89	74	52.54	40	10.4	55.83	100	0	P	H
		17160	48.48	-19.72	68.2	51.86	39.74	13.04	56.16	100	0	P	H
802.11n													H
HT20													H
CH 144		11440	46.6	-27.4	74	52.03	40	10.4	55.83	100	0	P	V
5720MHz		17160	47.86	-20.34	68.2	51.24	39.74	13.04	56.16	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 - Straddle Channel

WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI Ant. 1+2	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 142 5710MHz		5451.79	51.2	-22.8	74	40.02	31.61	6.26	26.69	100	256	P	H
		5466.61	50.74	-17.46	68.2	39.5	31.67	6.26	26.69	100	256	P	H
		5456.86	42.52	-11.48	54	31.32	31.63	6.26	26.69	100	256	A	H
	*	5710	102.09	-	-	90.67	31.86	6.43	26.87	100	256	P	H
	*	5710	94.92	-	-	83.5	31.86	6.43	26.87	100	256	A	H
		5856.75	51.57	-16.63	68.2	39.72	32.31	6.54	27	100	256	P	H
		5447.5	49.9	-24.1	74	38.75	31.59	6.25	26.69	237	333	P	V
		5461.54	49.18	-19.02	68.2	37.96	31.65	6.26	26.69	237	333	P	V
		5455.3	42.32	-11.68	54	31.13	31.62	6.26	26.69	237	333	A	V
	*	5710	99.05	-	-	87.63	31.86	6.43	26.87	237	333	P	V
	*	5710	91.92	-	-	80.5	31.86	6.43	26.87	237	333	A	V
		5860	51.92	-16.28	68.2	40.07	32.32	6.54	27.01	237	333	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 - Straddle Channel

WIFI 802.11n HT40 (Harmonic @ 3m)

WIFI Ant. 1+2	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	46.9	-27.1	74	52.35	40	10.39	55.84	100	0	P	H
		17130	46.34	-21.86	68.2	49.64	39.77	13.03	56.1	100	0	P	H
802.11n													H
HT40													H
CH 142		11420	47.4	-26.6	74	52.85	40	10.39	55.84	100	0	P	V
5710MHz		17130	46.72	-21.48	68.2	50.02	39.77	13.03	56.1	100	0	P	V
													V
													V

Remark

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

Band 3 - Straddle Channel

WIFI 802.11ac VHT80 (Band Edge @ 3m)

WIFI Ant. 1+2	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 138 5690MHz		5452.96	50.64	-23.36	74	39.46	31.61	6.26	26.69	159	251	P	H
		5468.56	49.66	-18.54	68.2	38.42	31.67	6.26	26.69	159	251	P	H
		5440.09	42.58	-11.42	54	31.46	31.56	6.25	26.69	159	251	A	H
	*	5690	102	-	-	90.67	31.78	6.41	26.86	159	251	P	H
	*	5690	94.2	-	-	82.87	31.78	6.41	26.86	159	251	A	H
		5884.3	53.07	-15.13	68.2	41.19	32.37	6.54	27.03	159	251	P	H
		5430.73	50.57	-23.43	74	39.49	31.52	6.25	26.69	100	272	P	V
		5461.15	49.95	-18.25	68.2	38.74	31.64	6.26	26.69	100	272	P	V
		5456.86	42.49	-11.51	54	31.29	31.63	6.26	26.69	100	272	A	V
	*	5690	97.81	-	-	86.48	31.78	6.41	26.86	100	272	P	V
	*	5690	90.19	-	-	78.86	31.78	6.41	26.86	100	272	A	V
		5948.5	51.9	-16.3	68.2	39.85	32.59	6.54	27.08	100	272	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 - Straddle Channel

WIFI 802.11ac VHT80 (Harmonic @ 3m)

WIFI Ant. 1+2	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	47	-27	74	52.55	39.94	10.38	55.87	100	0	P	H
		17070	47.89	-20.31	68.2	51.04	39.83	12.99	55.97	100	0	P	H
802.11ac													H
VHT80													H
CH 138		11380	46.79	-27.21	74	52.34	39.94	10.38	55.87	100	0	P	V
5690MHz		17070	47.93	-20.27	68.2	51.08	39.83	12.99	55.97	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Emission below 1GHz

WIFI 802.11n HT20 (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+2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11n HT20 LF		72.68	27.04	-12.96	40	45.74	12.78	0.74	32.22	-	-	P	H
		116.33	35.76	-7.74	43.5	49.51	17.45	0.94	32.14	100	0	P	H
		191.02	26.53	-16.97	43.5	42.72	14.86	1.24	32.29	-	-	P	H
		262.8	28.69	-17.31	46	39.61	19.79	1.4	32.11	-	-	P	H
		306.45	29.88	-16.12	46	41.01	19.34	1.5	31.97	-	-	P	H
		913.67	35.45	-10.55	46	35.32	28.91	2.68	31.46	-	-	P	H
													H
													H
													H
													H
													H
													H
		32.91	27.32	-12.68	40	35.81	23.25	0.5	32.24	-	-	P	V
		64.92	28.39	-11.61	40	47.89	12.06	0.7	32.26	100	0	P	V
		72.68	28.08	-11.92	40	46.78	12.78	0.74	32.22	-	-	P	V
		91.11	27.55	-15.95	43.5	43.87	15.04	0.79	32.15	-	-	P	V
		305.48	27.31	-18.69	46	38.45	19.33	1.5	31.97	-	-	P	V
		951.5	32.74	-13.26	46	30.46	30.57	2.69	30.98	-	-	P	V
													V
													V
													V
													V
													V
													V

Remark

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

Note symbol

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

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

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1+2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11b CH 01 2412MHz		2390	55.45	-18.55	74	54.51	32.22	4.58	35.86	103	308	P	H
		2390	43.54	-10.46	54	42.6	32.22	4.58	35.86	103	308	A	H

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

For Peak Limit @ 2390MHz:

1. Level(dBμV/m)

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

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

= 55.45 (dBμV/m)

2. Over Limit(dB)

= Level(dBμV/m) – Limit Line(dBμV/m)

= 55.45(dBμV/m) – 74(dBμV/m)

= -18.55(dB)

For Average Limit @ 2390MHz:

1. Level(dBμV/m)

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

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

= 43.54 (dBμV/m)

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

= 43.54(dBμV/m) – 54(dBμV/m)

= -10.46(dB)

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

Appendix D. Radiated Spurious Emission

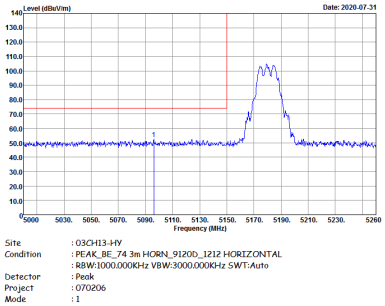
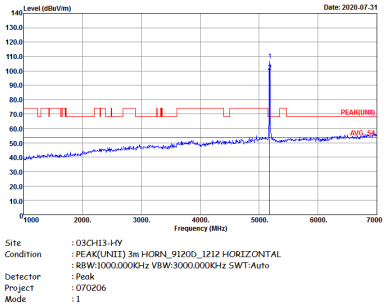
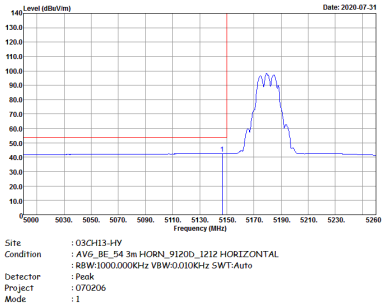
Test Engineer :	Daniel Lee, Jacky Hong and Wilson Wu	**Temperature :**	21.5 ~ 23.5°C
		Relative Humidity :	49.5 ~ 55.5%

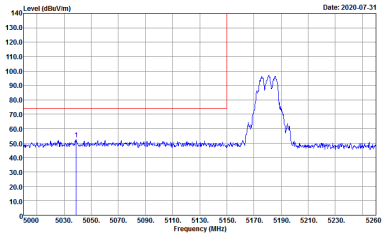
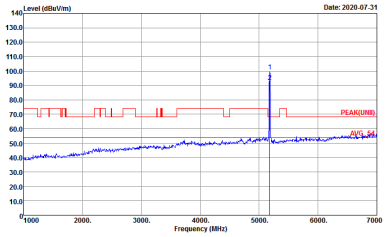
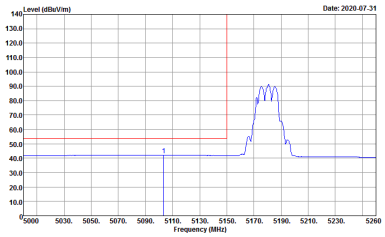
Note symbol

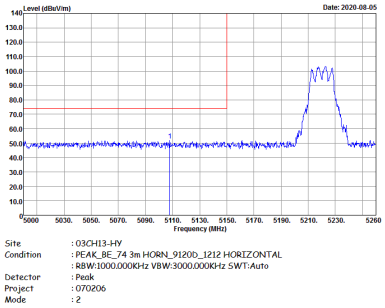
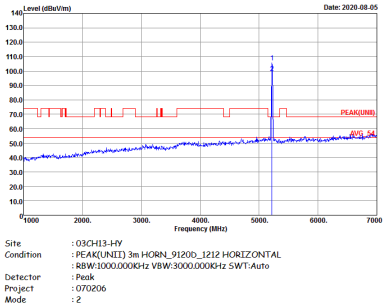
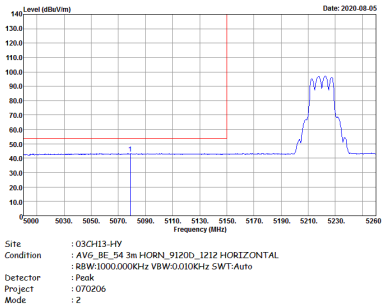
-L	**Low channel location**
-R	**High channel location**

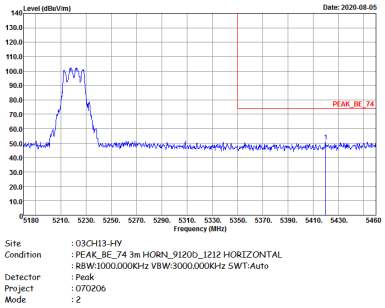
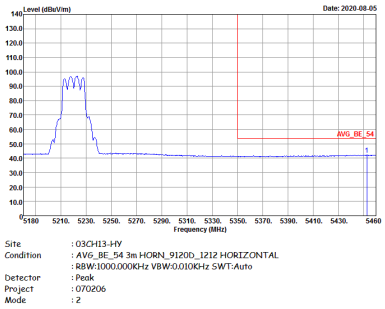
Band 1 - 5150~5250MHz

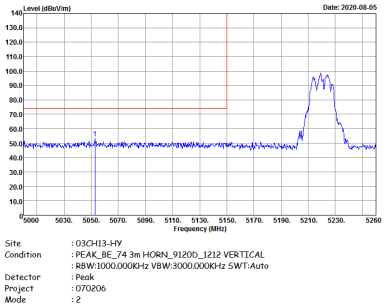
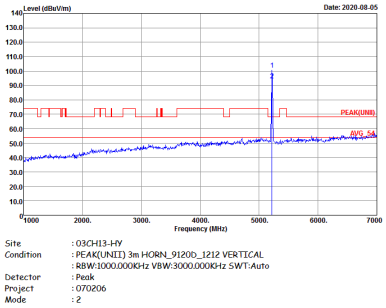
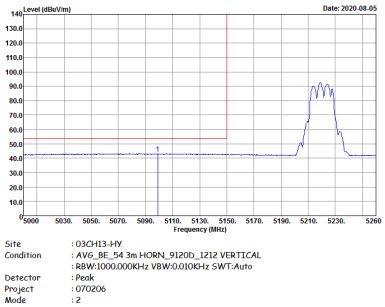
WIFI 802.11a (Band Edge @ 3m)

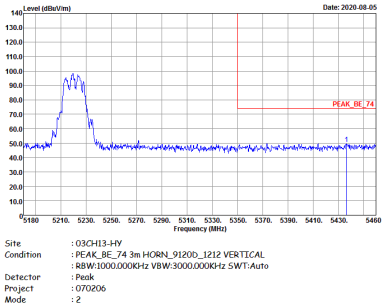
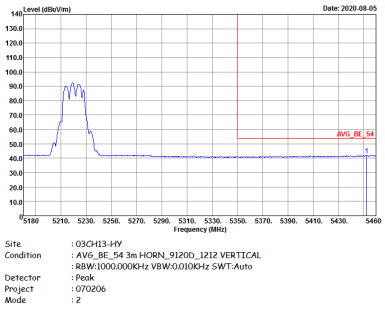
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH36 5180MHz	
1+2	Horizontal	Fundamental
Peak		
Avg.		Left blank

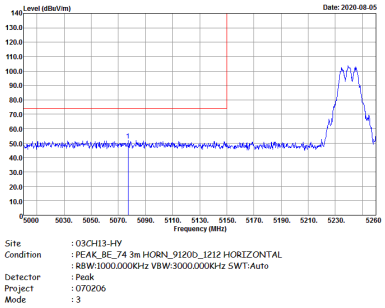
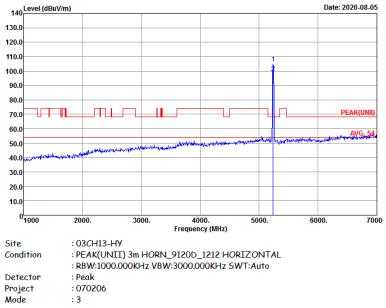
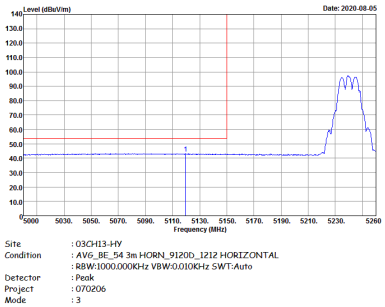
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH36 5180MHz	
1+2	Vertical	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE_74 3m HORN_9120D_1212 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 070206 Mode : 1	 Site : 03CH13-HY Condition : PEAK(UNII) 3m HORN_9120D_1212 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 070206 Mode : 1
Avg.	 Site : 03CH13-HY Condition : AVG_BE_54 3m HORN_9120D_1212 VERTICAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak Project : 070206 Mode : 1	Left blank

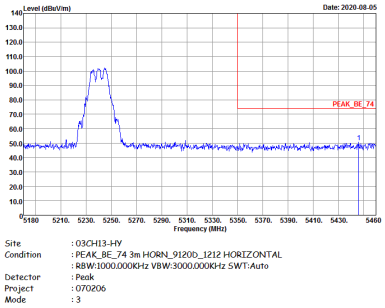
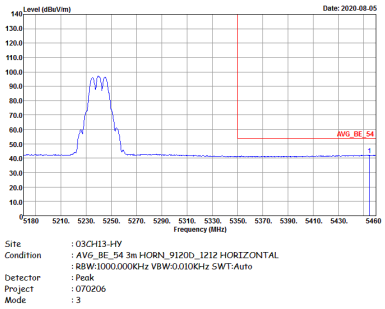
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH44 5220MHz - L	
1+2	Horizontal	Fundamental
Peak		
Avg.		Left blank

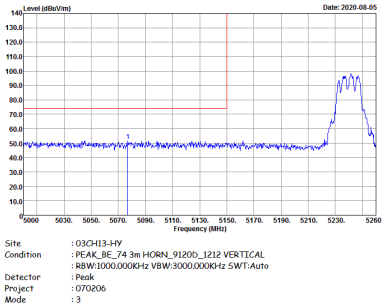
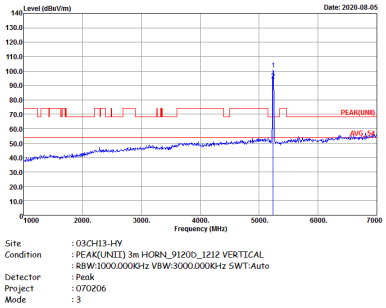
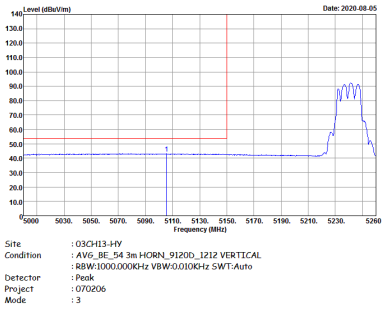
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH44 5220MHz - R	
1+2	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

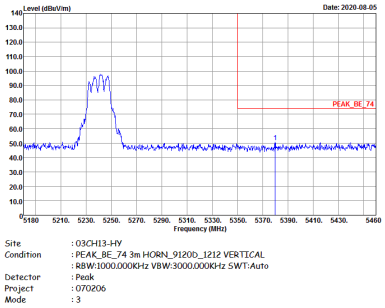
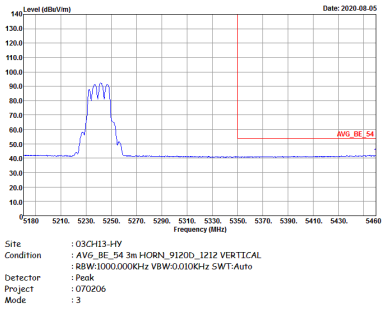
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH44 5220MHz - L	
1+2	Vertical	Fundamental
Peak		
Avg.		Left blank

WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH44 5220MHz - R	
1+2	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

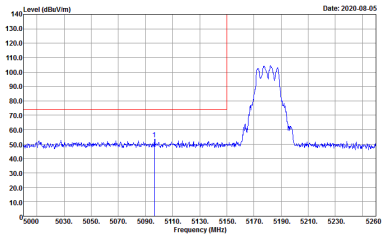
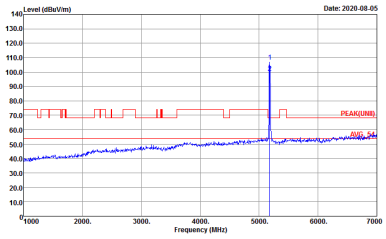
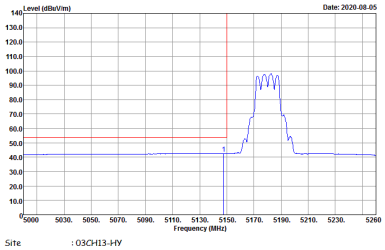
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH48 5240MHz - L	
1+2	Horizontal	Fundamental
Peak		
Avg.		Left blank

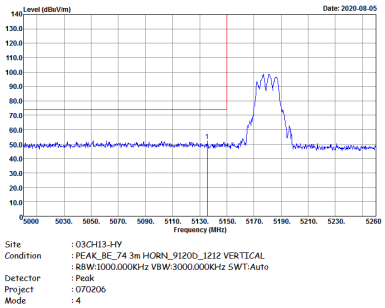
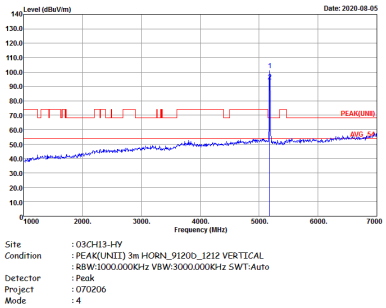
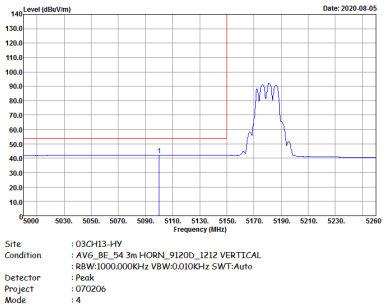
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH48 5240MHz - R	
1+2	Horizontal	Fundamental
Peak	 Site : 03CH13-HV Condition : PEAK_BE_74 3m HORN_9120D_1212 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 070206 Mode : 3	Left blank
Avg.	 Site : 03CH13-HV Condition : AVG_BE_54 3m HORN_9120D_1212 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak Project : 070206 Mode : 3	Left blank

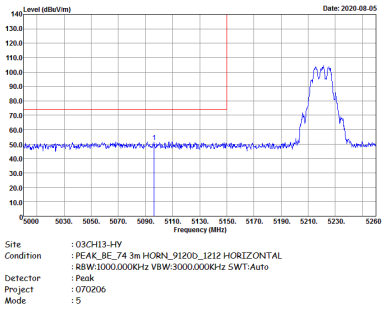
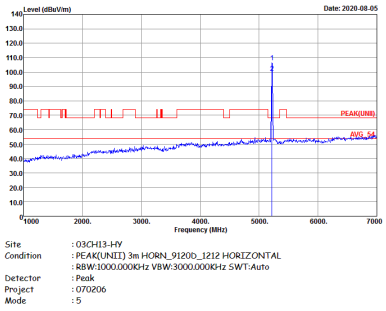
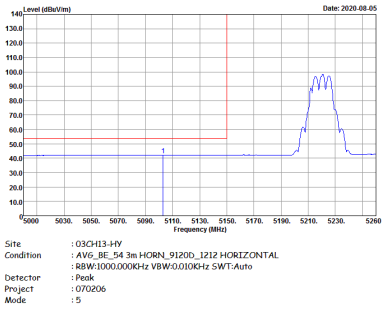
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH48 5240MHz - L	
1+2	Vertical	Fundamental
Peak		
Avg.		Left blank

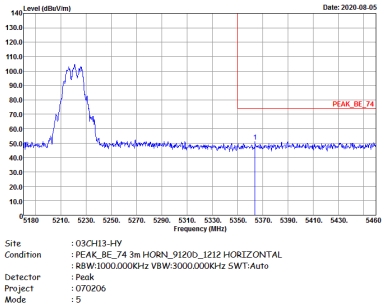
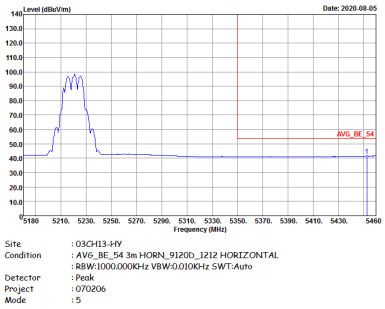
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH48 5240MHz - R	
1+2	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

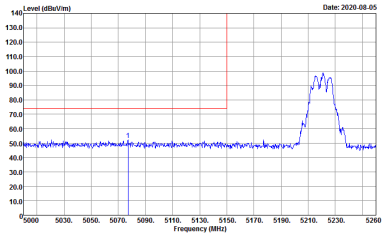
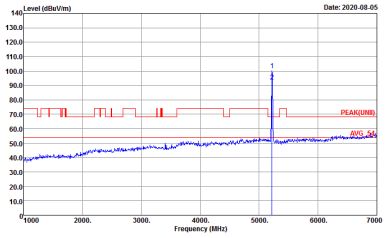
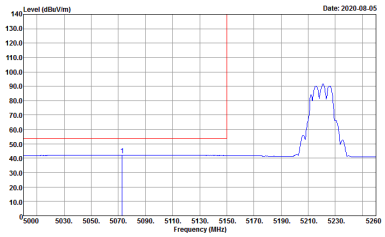
Band 1 5150~5250MHz
WIFI 802.11n HT20 (Band Edge @ 3m)

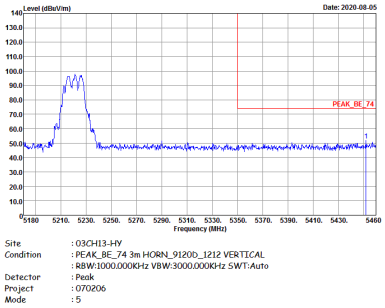
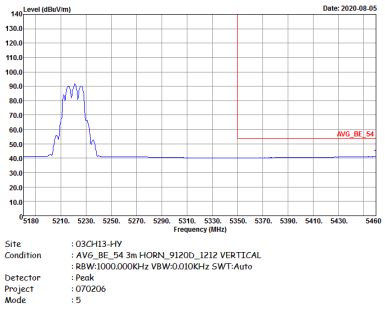
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH36 5180MHz	
1+2	Horizontal	Fundamental
Peak		
Avg.		Left blank

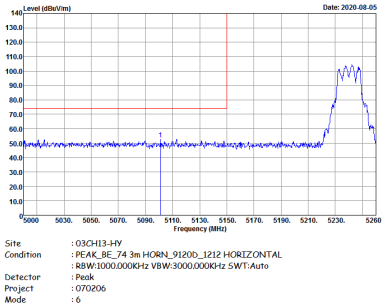
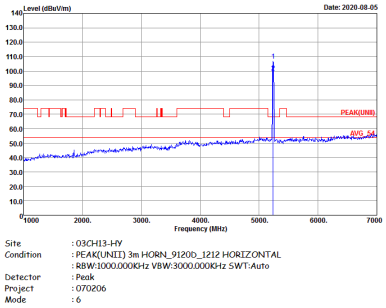
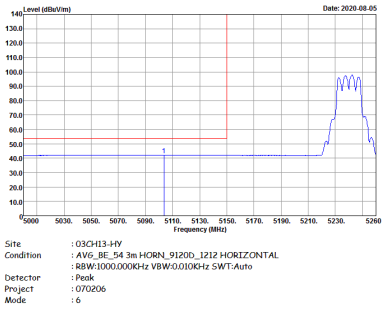
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH36 5180MHz	
1+2	Vertical	Fundamental
Peak		
Avg.		Left blank

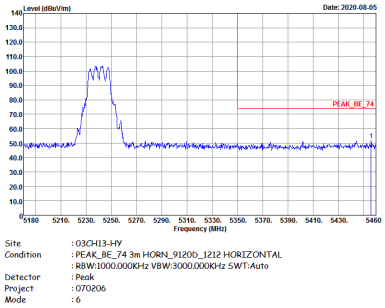
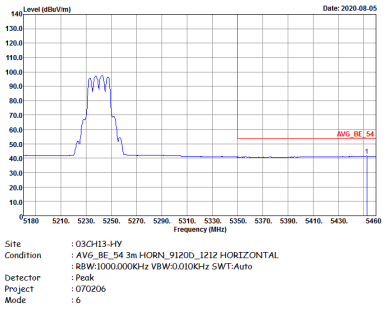
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH44 5220MHz - L	
1+2	Horizontal	Fundamental
Peak		
Avg.		Left blank

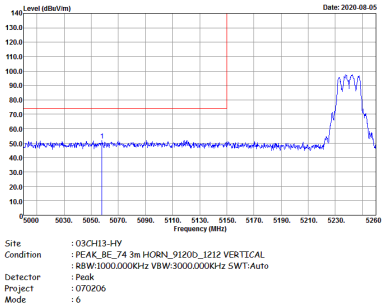
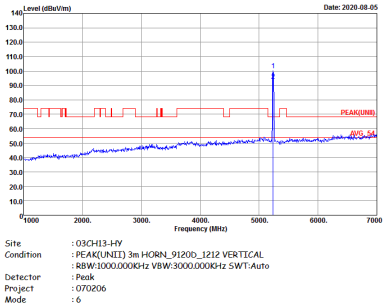
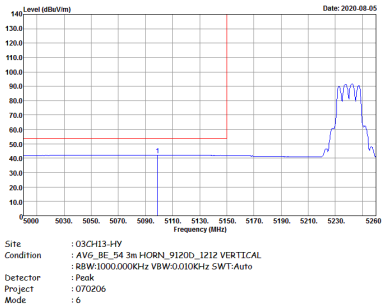
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH44 5220MHz - R	
1+2	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

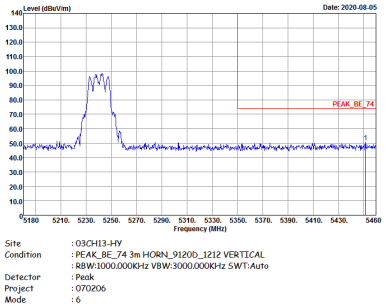
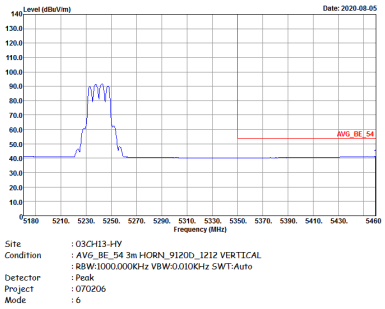
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH44 5220MHz - L	
1+2	Vertical	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE_74 3m HORN_9120D_1212 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 070206 Mode : 5	 Site : 03CH13-HY Condition : PEAK(UNII) 3m HORN_9120D_1212 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 070206 Mode : 5
Avg.	 Site : 03CH13-HY Condition : AVG_BE_54 3m HORN_9120D_1212 VERTICAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak Project : 070206 Mode : 5	Left blank

WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH44 5220MHz - R	
1+2	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

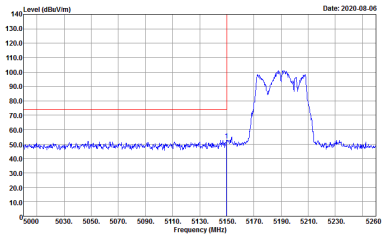
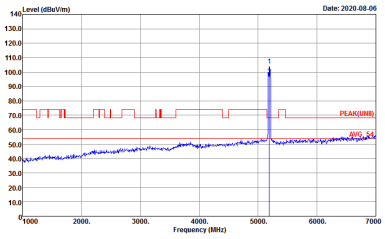
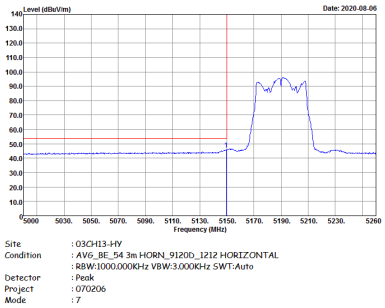
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH48 5240MHz - L	
1+2	Horizontal	Fundamental
Peak		
Avg.		Left blank

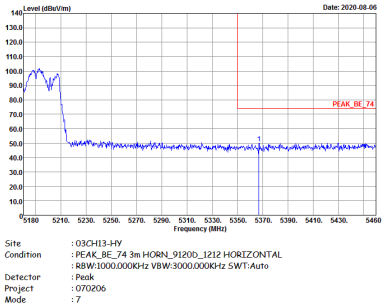
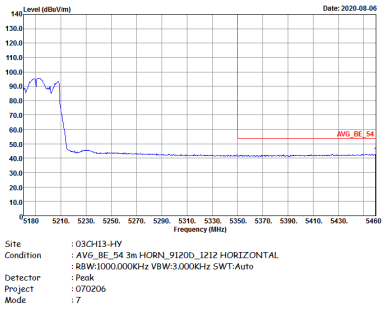
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH48 5240MHz - R	
1+2	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

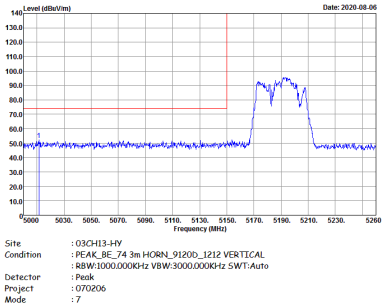
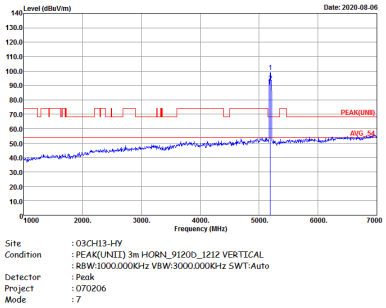
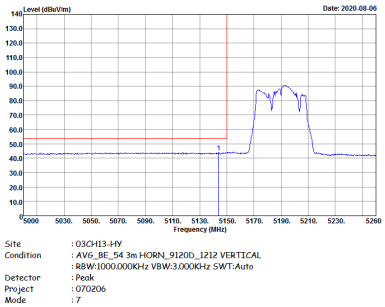
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH48 5240MHz - L	
1+2	Vertical	Fundamental
Peak		
Avg.		Left blank

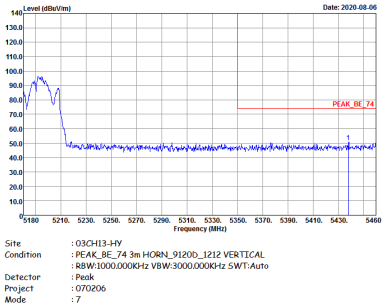
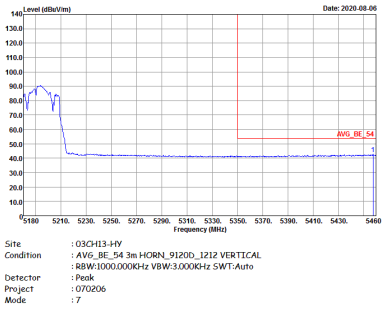
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH48 5240MHz - R	
1+2	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

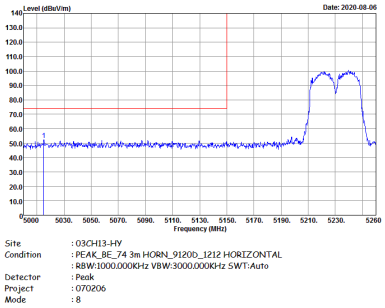
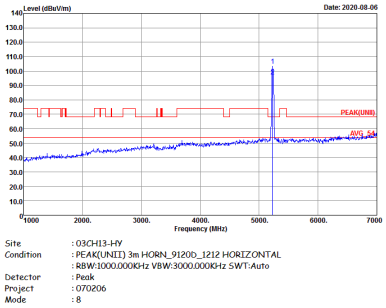
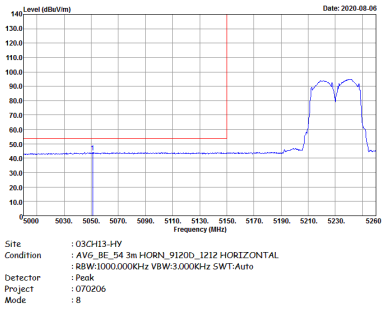
Band 1 5150~5250MHz
WIFI 802.11n HT40 (Band Edge @ 3m)

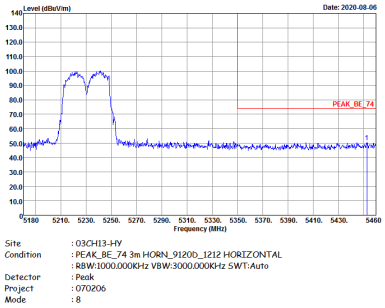
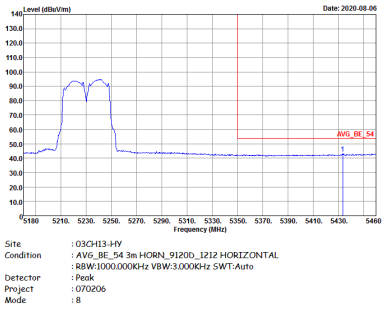
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH38 5190MHz - L	
1+2	Horizontal	Fundamental
Peak		
Avg.		Left blank

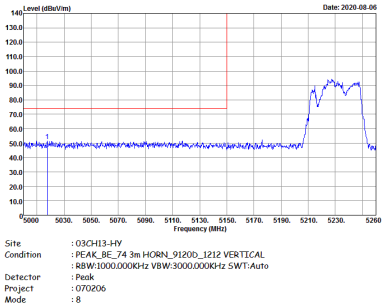
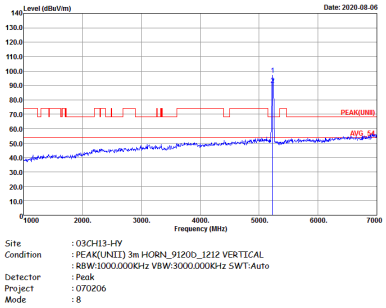
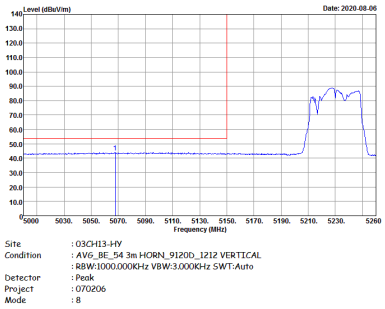
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH38 5190MHz - R	
1+2	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

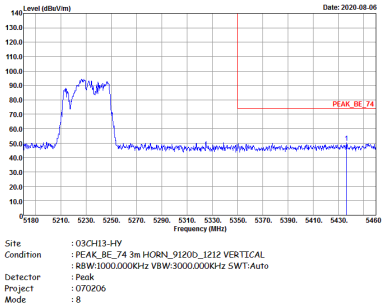
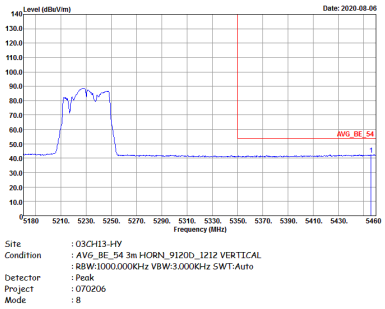
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH38 5190MHz - L	
1+2	Vertical	Fundamental
Peak		
Avg.		Left blank

WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH38 5190MHz - R	
1+2	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

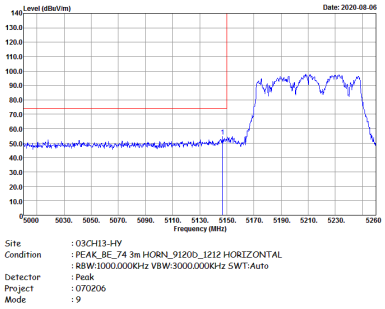
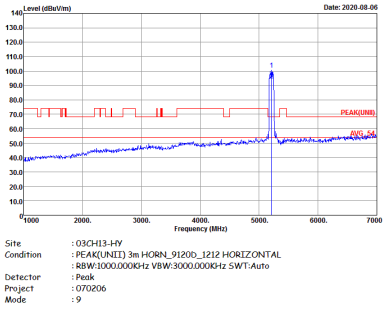
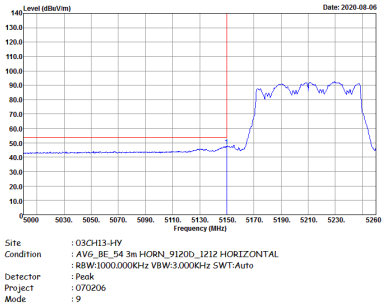
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH46 5230MHz - L	
1+2	Horizontal	Fundamental
Peak		
Avg.		Left blank

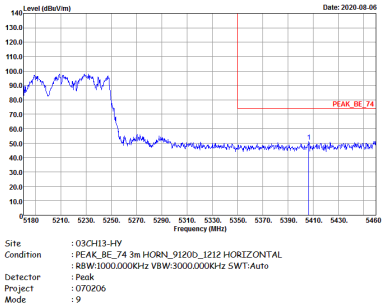
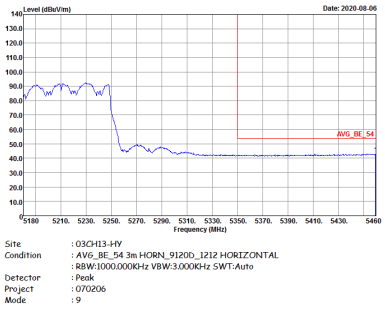
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH46 5230MHz - R	
1+2	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

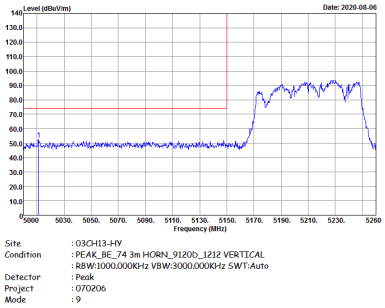
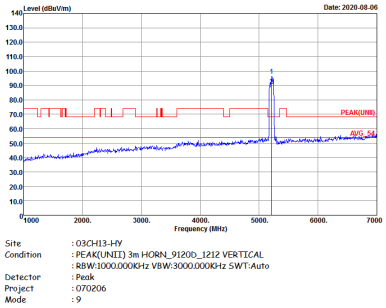
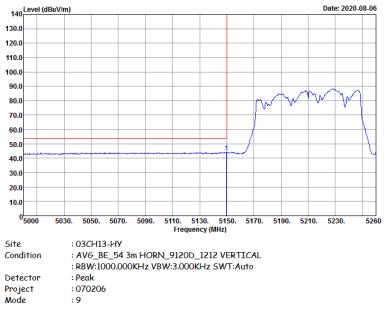
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH46 5230MHz - L	
1+2	Vertical	Fundamental
Peak		
Avg.		Left blank

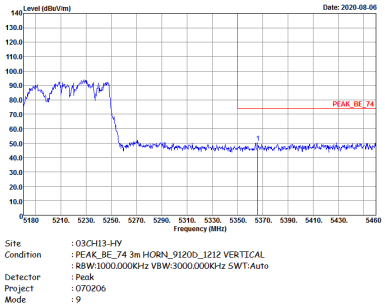
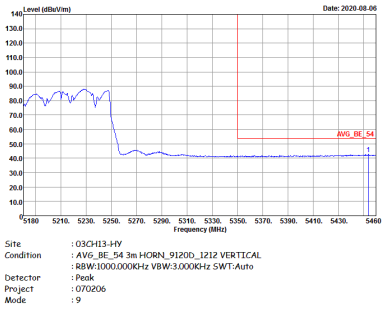
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH46 5230MHz - R	
1+2	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

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+2	Horizontal	Fundamental
Peak		
Avg.		Left blank

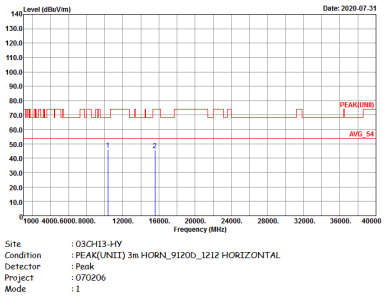
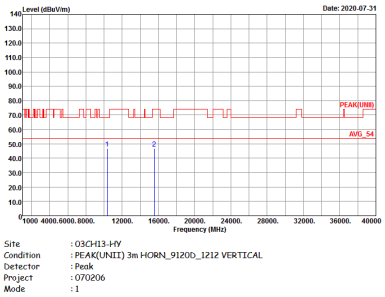
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH42 5210MHz - R	
1+2	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

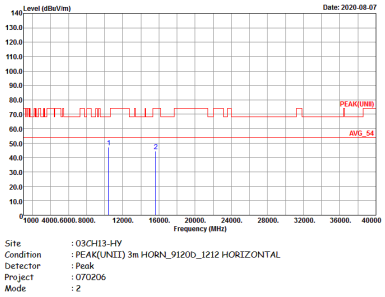
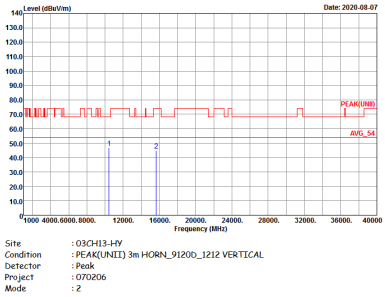
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH42 5210MHz - L	
1+2	Vertical	Fundamental
Peak		
Avg.		Left blank

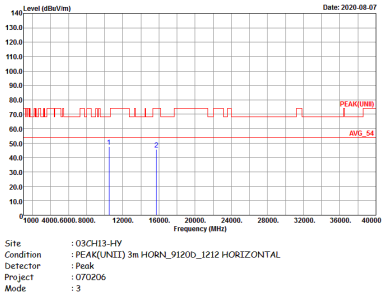
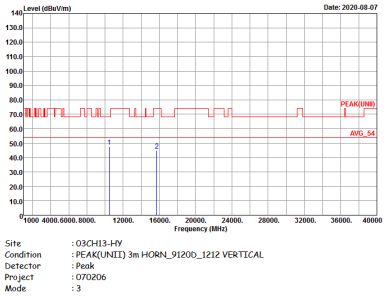
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH42 5210MHz - R	
1+2	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

Band 1 - 5150~5250MHz

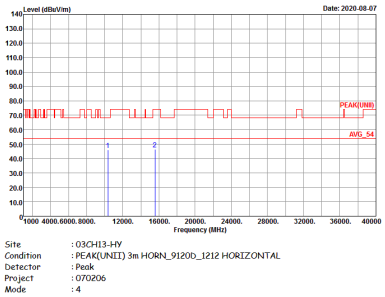
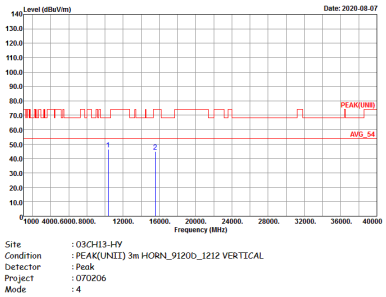
WIFI 802.11a (Harmonic @ 3m)

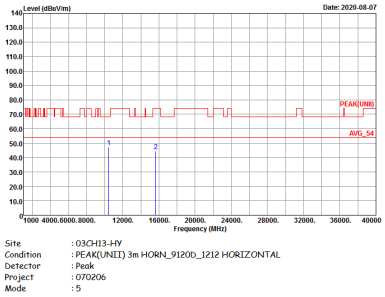
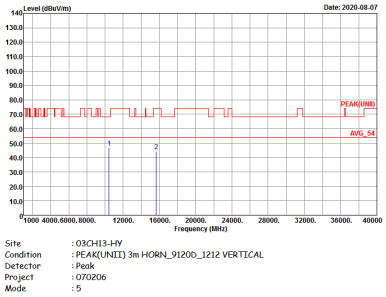
WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11a CH36 5180MHz	
1+2	Horizontal	Vertical
Peak Avg.		

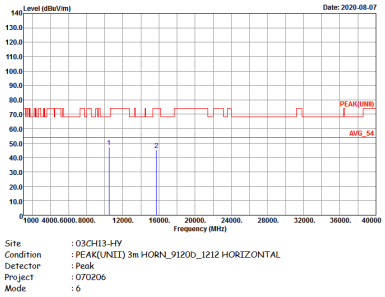
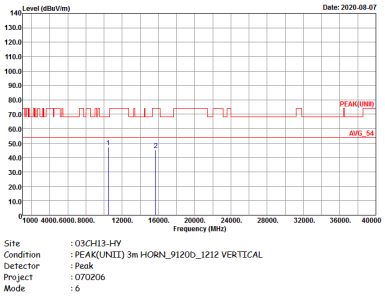
WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11a CH44 5220MHz	
1+2	Horizontal	Vertical
Peak Avg.	 Site : 03CH13-HY Condition : PEAK(UNII) 3m HORN_9120D_1212 HORIZONTAL Detector : Peak Project : 070206 Mode : 2	 Site : 03CH13-HY Condition : PEAK(UNII) 3m HORN_9120D_1212 VERTICAL Detector : Peak Project : 070206 Mode : 2

WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11a CH48 5240MHz	
1+2	Horizontal	Vertical
Peak Avg.		

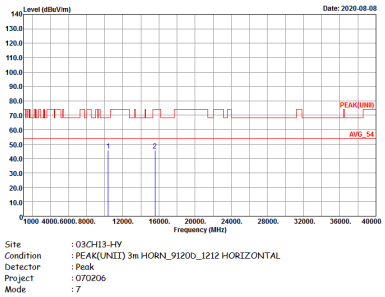
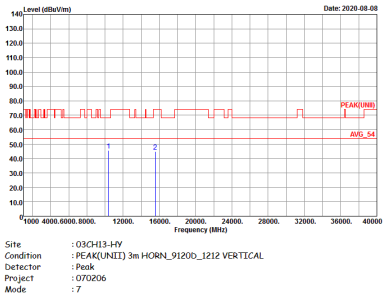
Band 1 5150~5250MHz
WIFI 802.11n HT20 (Harmonic @ 3m)

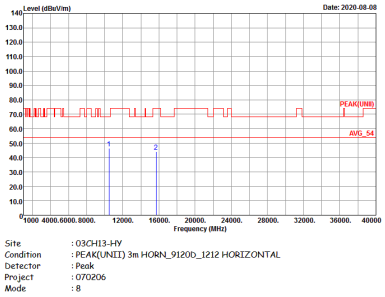
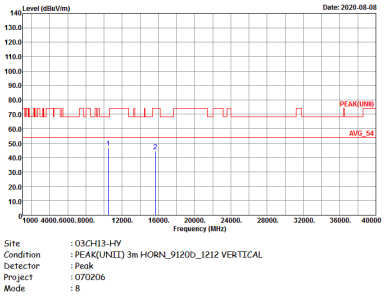
WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11n HT20 CH36 5180MHz	
1+2	Horizontal	Vertical
Peak Avg.		

WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11n HT20 CH44 5220MHz	
1+2	Horizontal	Vertical
Peak Avg.		

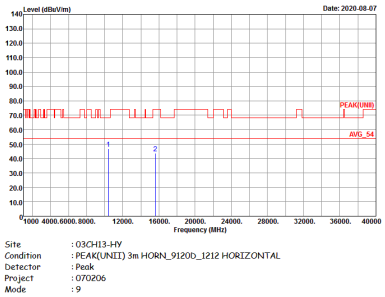
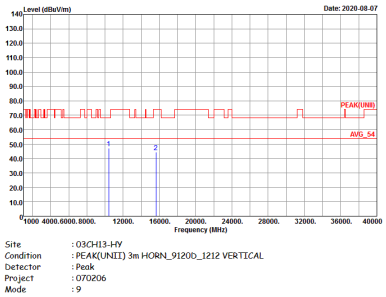
WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11n HT20 CH48 5240MHz	
1+2	Horizontal	Vertical
Peak Avg.		

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

WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11n HT40 CH38 5190MHz	
1+2	Horizontal	Vertical
Peak Avg.		

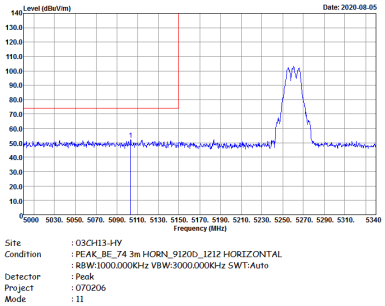
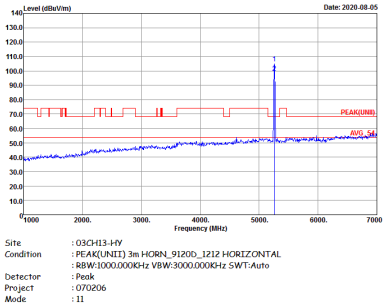
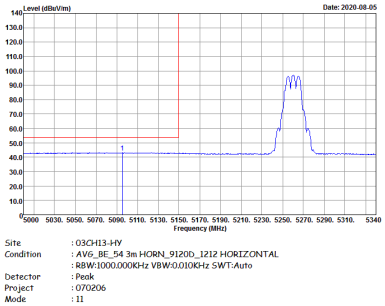
WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11n HT40 CH46 5230MHz	
1+2	Horizontal	Vertical
Peak Avg.	 Site : 03CH13-HY Condition : PEAK(UNII) 3m HORN_9120D_1212 HORIZONTAL Detector : Peak Project : 070206 Mode : 8	 Site : 03CH13-HY Condition : PEAK(UNII) 3m HORN_9120D_1212 VERTICAL Detector : Peak Project : 070206 Mode : 8

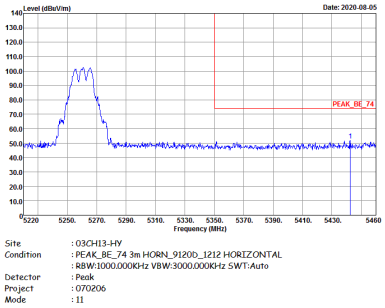
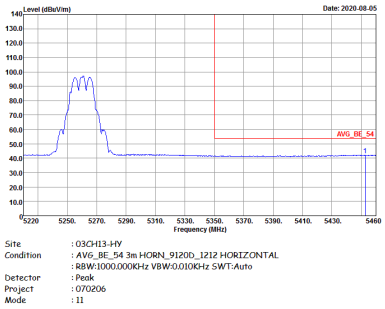
Band 1 5150~5250MHz
WIFI 802.11ac VHT80 (Harmonic @ 3m)

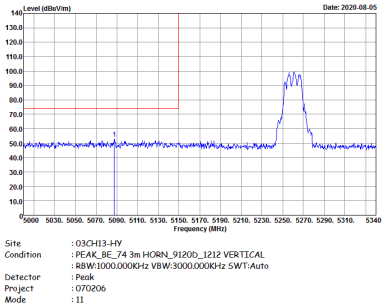
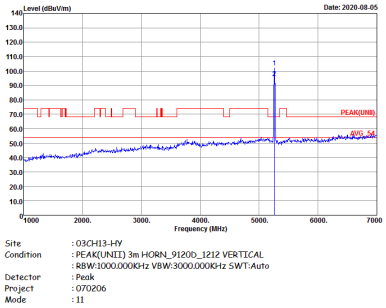
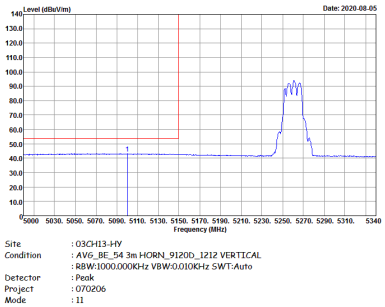
WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11ac VHT80 CH42 5210MHz	
1+2	Horizontal	Vertical
Peak Avg.		

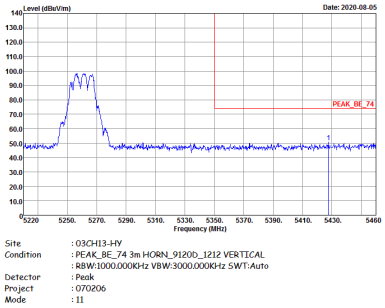
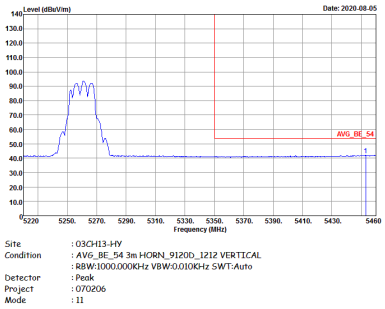
Band 2 - 5250~5350MHz

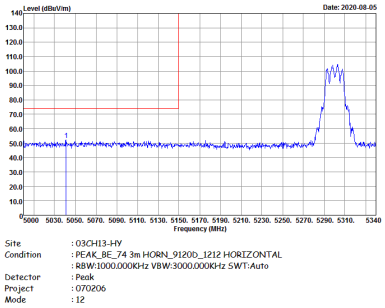
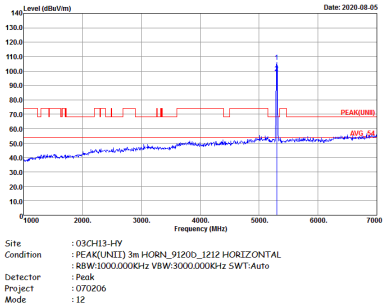
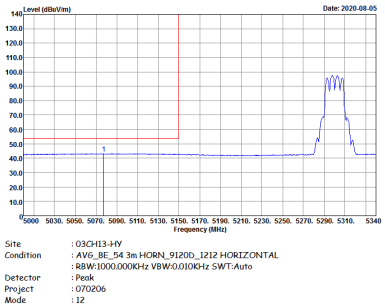
WIFI 802.11a (Band Edge @ 3m)

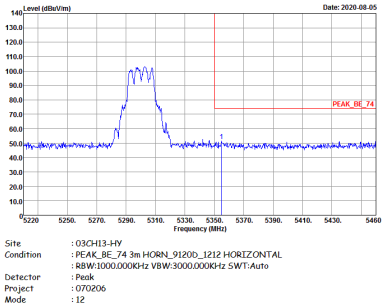
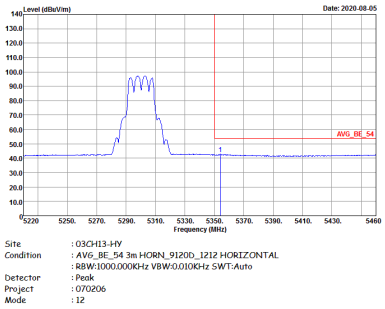
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH52 5260MHz - L	
1+2	Horizontal	Fundamental
Peak		
Avg.		Left blank

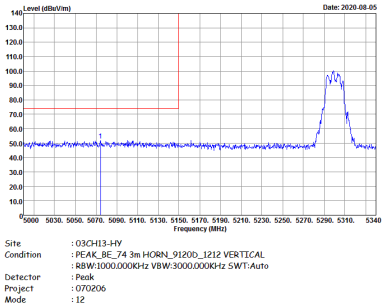
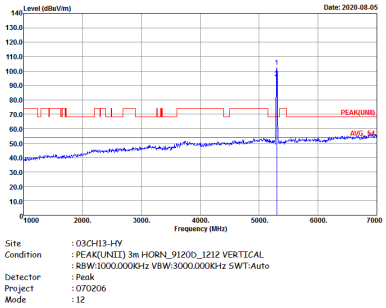
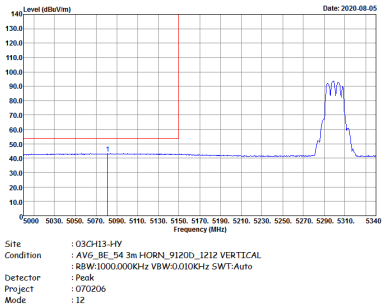
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH52 5260MHz - R	
1+2	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

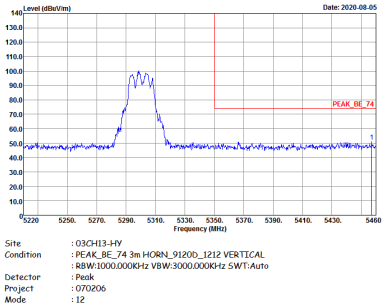
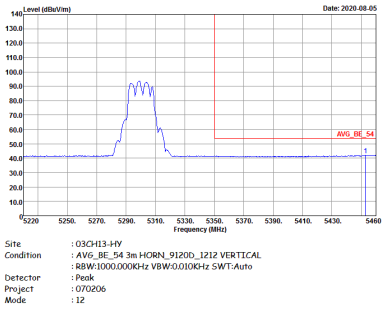
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH52 5260MHz - L	
1+2	Vertical	Fundamental
Peak		
Avg.		Left blank

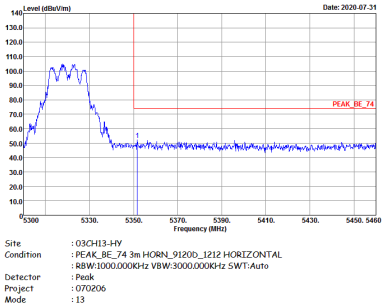
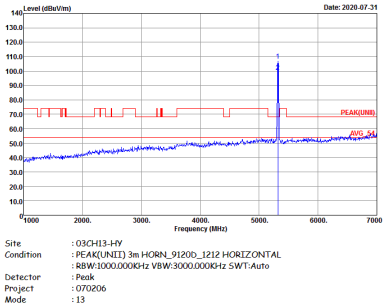
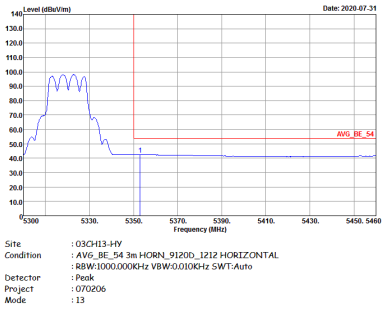
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH52 5260MHz - R	
1+2	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

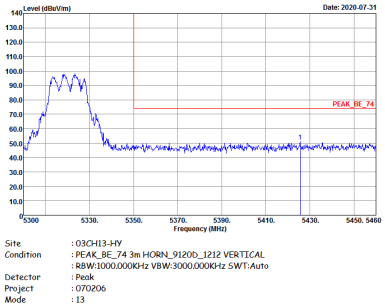
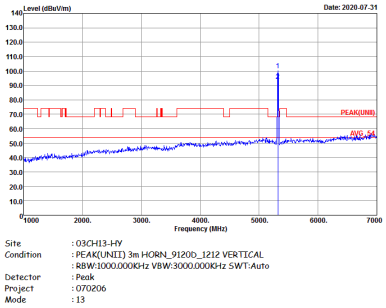
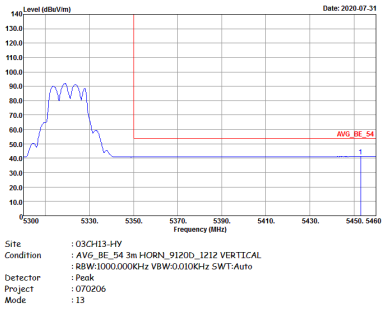
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH60 5300MHz - L	
1+2	Horizontal	Fundamental
Peak		
Avg.		Left blank

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

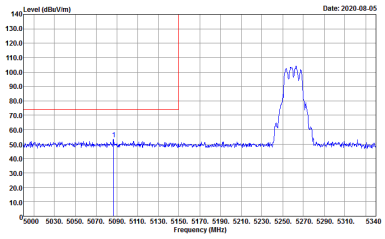
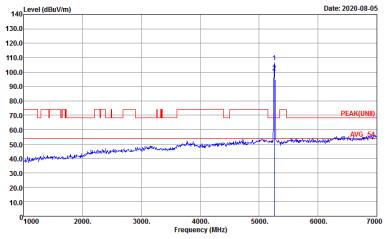
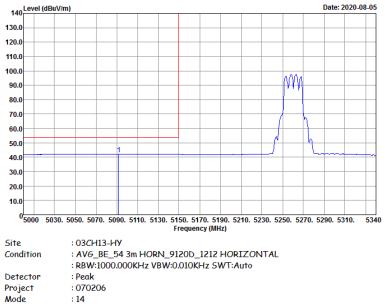
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH60 5300MHz - L	
1+2	Vertical	Fundamental
Peak		
Avg.		Left blank

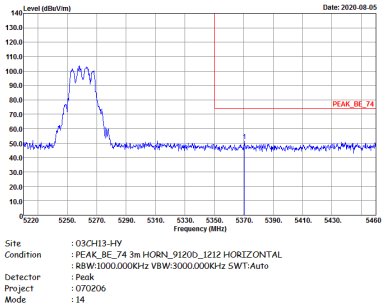
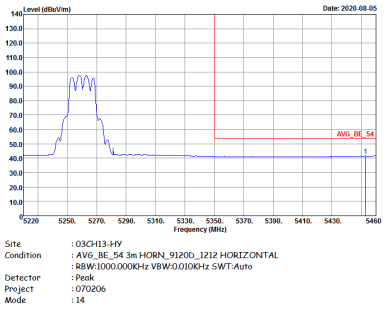
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH60 5300MHz - R	
1+2	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

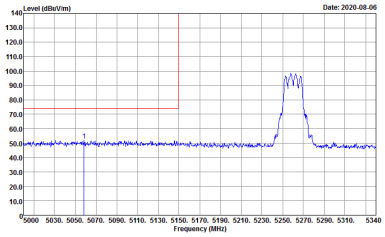
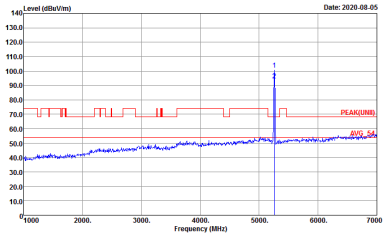
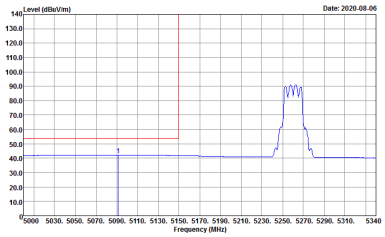
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH64 5320MHz	
1+2	Horizontal	Fundamental
Peak		
Avg.		Left blank

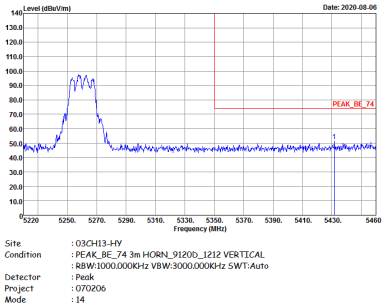
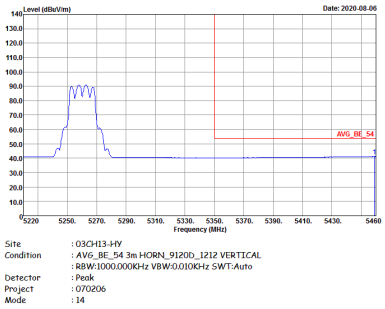
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH64 5320MHz	
1+2	Vertical	Fundamental
Peak		
Avg.		Left blank

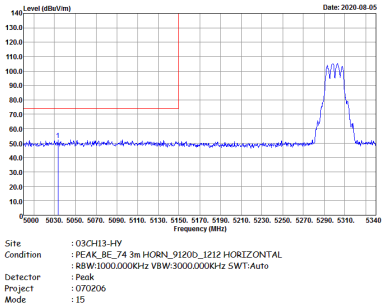
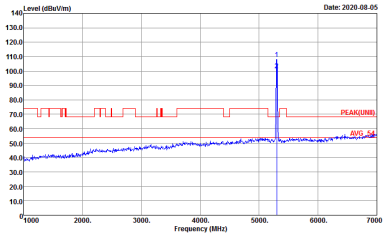
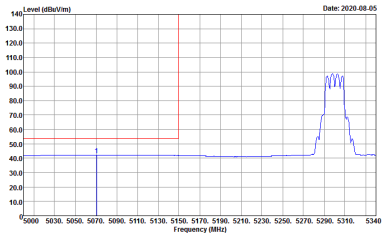
Band 2 5250~5350MHz
WIFI 802.11n HT20 (Band Edge @ 3m)

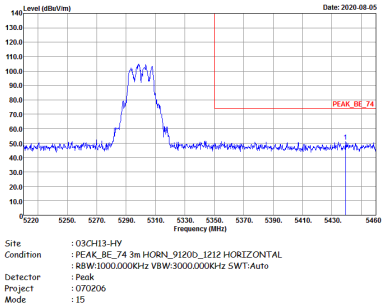
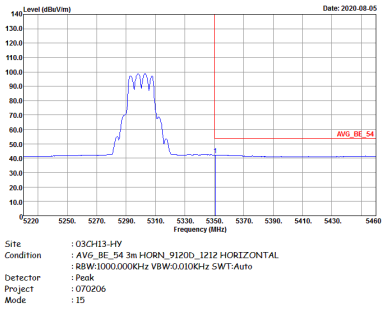
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH52 5260MHz - L	
1+2	Horizontal	Fundamental
Peak		
Avg.		Left blank

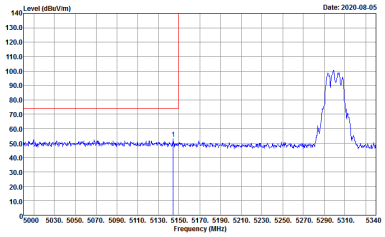
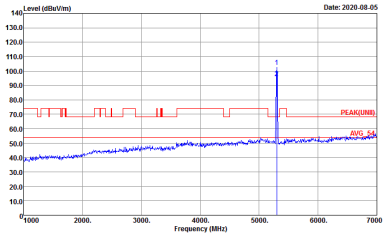
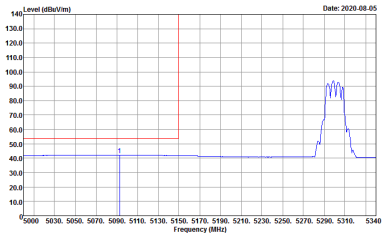
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH52 5260MHz - R	
1+2	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

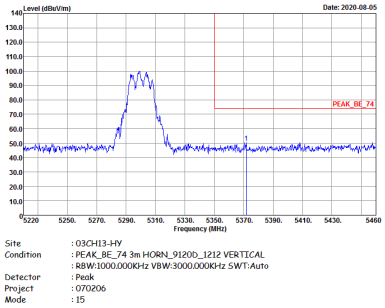
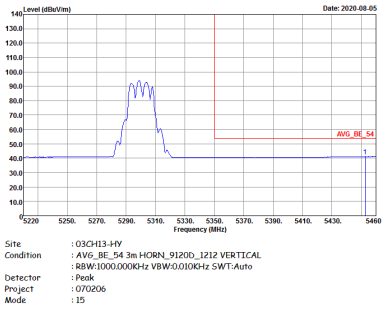
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH52 5260MHz - L	
1+2	Vertical	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE_74 3m HORN_9120D_1212 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 070206 Mode : 14	 Site : 03CH13-HY Condition : PEAK(UNII) 3m HORN_9120D_1212 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 070206 Mode : 14
Avg.	 Site : 03CH13-HY Condition : AVG_BE_54 3m HORN_9120D_1212 VERTICAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak Project : 070206 Mode : 14	Left blank

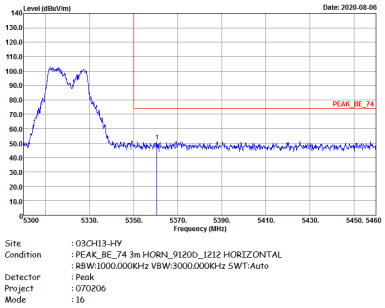
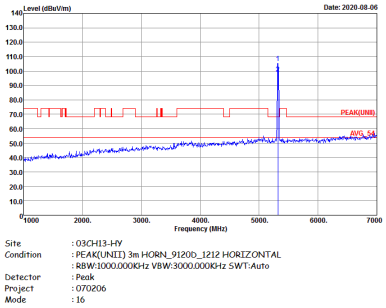
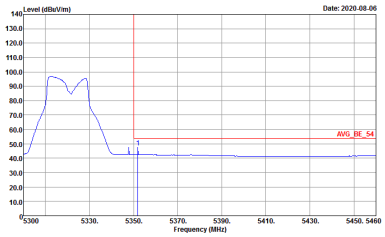
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH52 5260MHz - R	
1+2	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

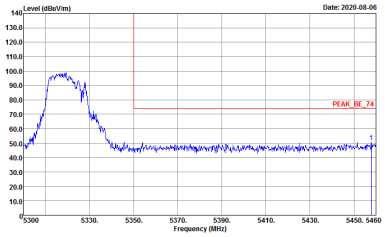
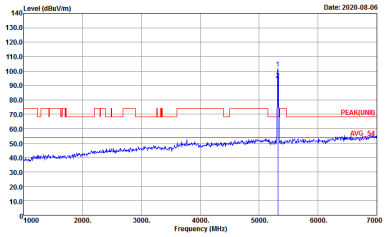
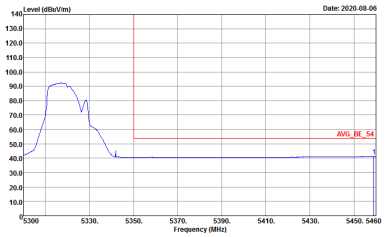
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH60 5300MHz - L	
1+2	Horizontal	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE_74 3m HORN_9120D_1212 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 070206 Mode : 15	 Site : 03CH13-HY Condition : PEAK(UNII) 3m HORN_9120D_1212 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 070206 Mode : 15
Avg.	 Site : 03CH13-HY Condition : AVG_BE_54 3m HORN_9120D_1212 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak Project : 070206 Mode : 15	Left blank

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

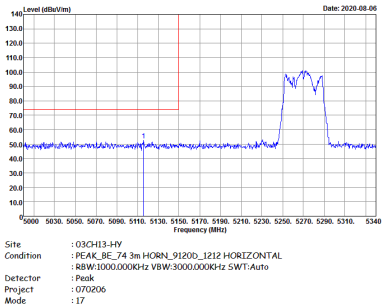
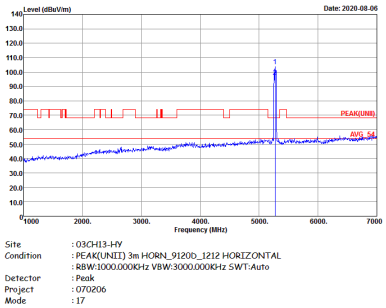
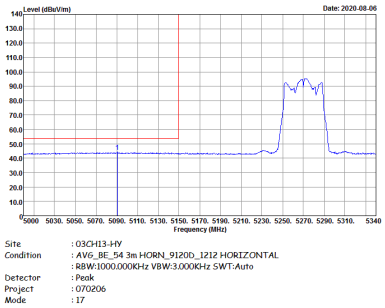
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH60 5300MHz - L	
1+2	Vertical	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE_74 3m HORN_9120D_1212 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 070206 Mode : 15	 Site : 03CH13-HY Condition : PEAK(UNII) 3m HORN_9120D_1212 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 070206 Mode : 15
Avg.	 Site : 03CH13-HY Condition : AVG_BE_54 3m HORN_9120D_1212 VERTICAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak Project : 070206 Mode : 15	Left blank

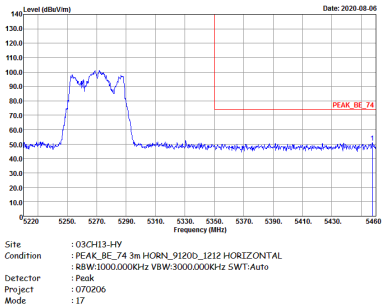
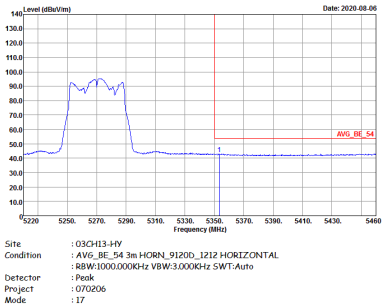
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH60 5300MHz - R	
1+2	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

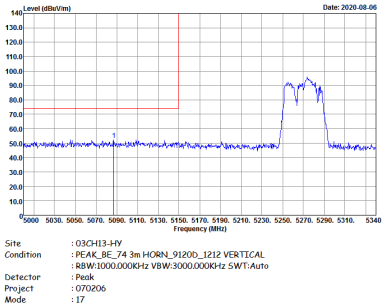
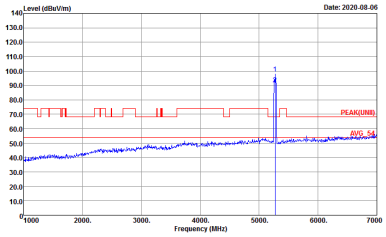
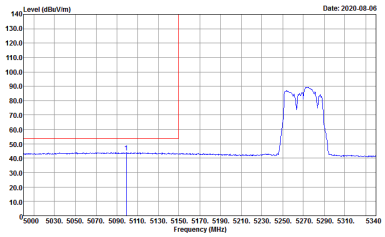
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH64 5320MHz	
1+2	Horizontal	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE_74 3m HORN_9120D_1212 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 070206 Mode : 16	 Site : 03CH13-HY Condition : PEAK(UNII) 3m HORN_9120D_1212 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 070206 Mode : 16
Avg.	 Site : 03CH13-HY Condition : AVG_BE_54 3m HORN_9120D_1212 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak Project : 070206 Mode : 16	Left blank

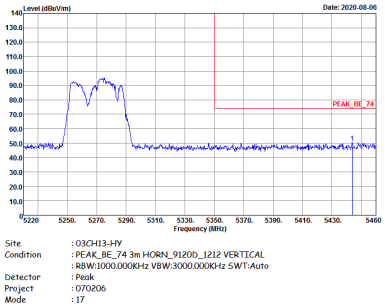
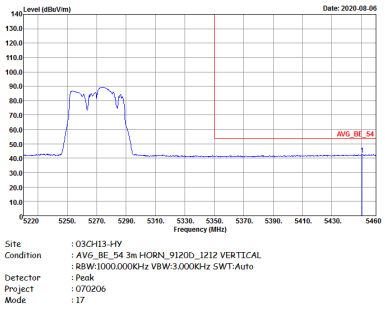
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH64 5320MHz	
1+2	Vertical	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE_74 3m HORN_9120D_1212 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 070206 Mode : 16	 Site : 03CH13-HY Condition : PEAK(UNII) 3m HORN_9120D_1212 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 070206 Mode : 16
Avg.	 Site : 03CH13-HY Condition : AVG_BE_54 3m HORN_9120D_1212 VERTICAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak Project : 070206 Mode : 16	Left blank

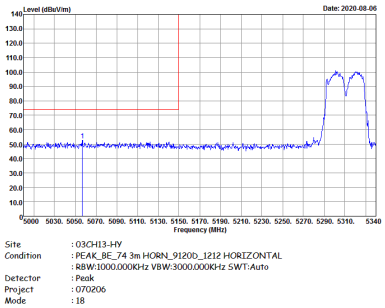
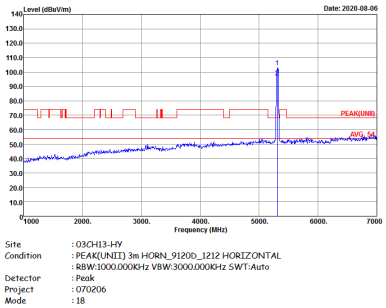
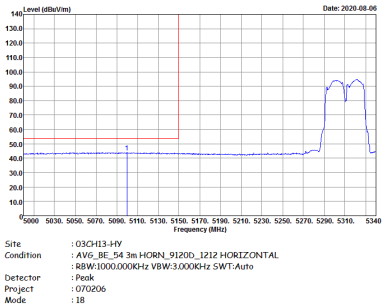
Band 2 5250~5350MHz
WIFI 802.11n HT40 (Band Edge @ 3m)

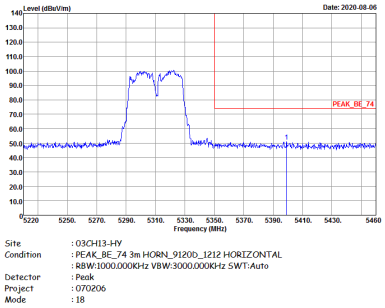
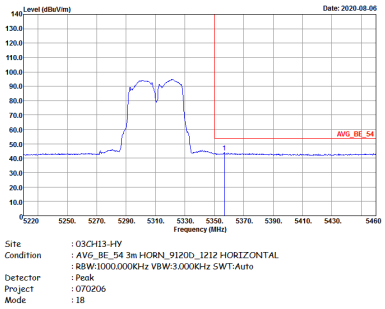
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT40 CH54 5270 - L	
1+2	Horizontal	Fundamental
Peak		
Avg.		Left blank

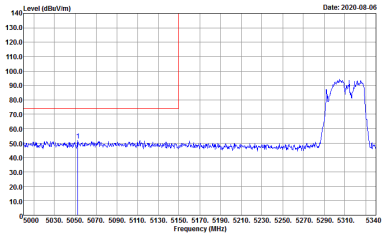
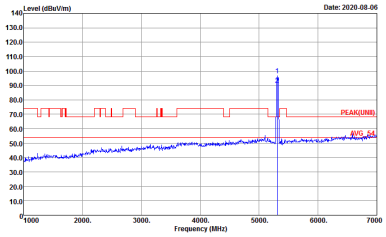
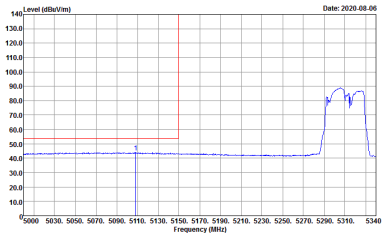
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT40 CH54 5270 - R	
1+2	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

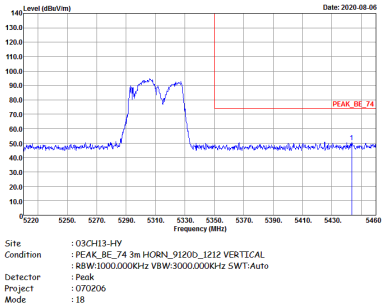
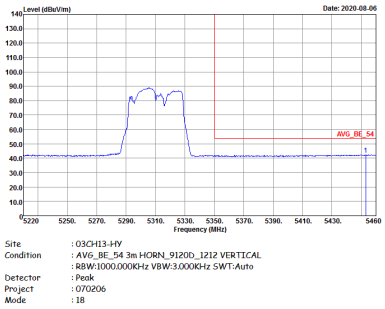
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT40 CH54 5270 - L	
1+2	Vertical	Vertical
Peak	 Site : 03CH13-HY Condition : PEAK_BE_74 3m HORN_9120D_1212 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 070206 Mode : 17	 Site : 03CH13-HY Condition : PEAK(UNII) 3m HORN_9120D_1212 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 070206 Mode : 17
Avg.	 Site : 03CH13-HY Condition : AVG_BE_54 3m HORN_9120D_1212 VERTICAL : RBW:1000.000KHz VBW:3.000KHz SWT:Auto Detector : Peak Project : 070206 Mode : 17	Left blank

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

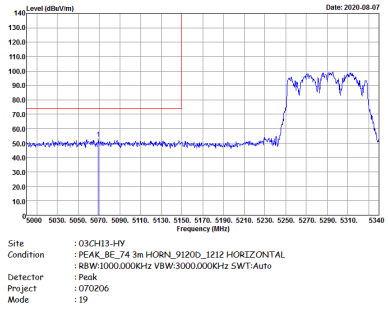
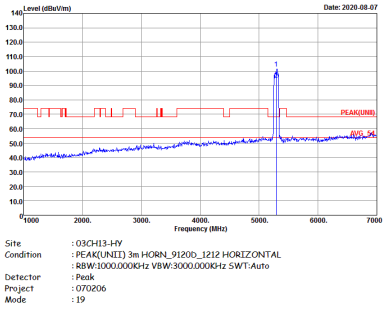
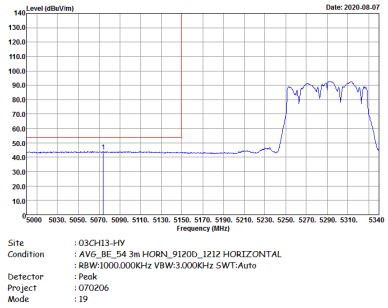
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT40 CH62 5310 - L	
1+2	Horizontal	Fundamental
Peak		
Avg.		Left blank

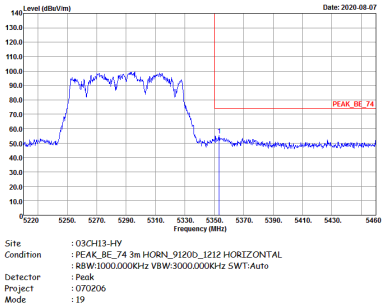
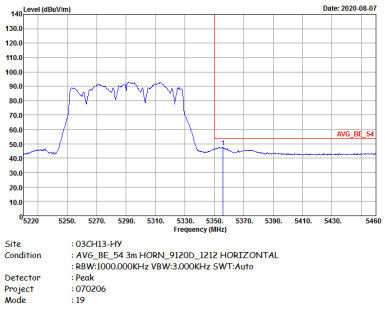
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT40 CH62 5310 - R	
1+2	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

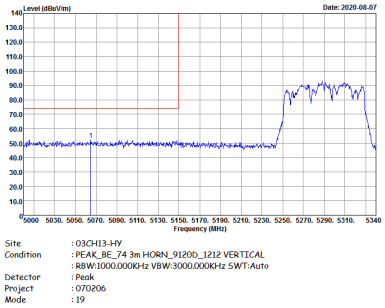
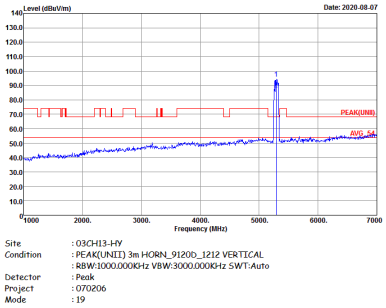
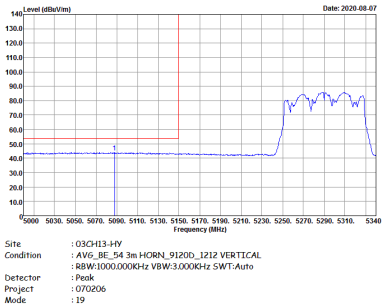
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT40 CH62 5310 - L	
1+2	Vertical	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE_74 3m HORN_9120D_1212 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 070206 Mode : 18	 Site : 03CH13-HY Condition : PEAK(UNII) 3m HORN_9120D_1212 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 070206 Mode : 18
Avg.	 Site : 03CH13-HY Condition : AVG_BE_54 3m HORN_9120D_1212 VERTICAL : RBW:1000.000KHz VBW:3.000KHz SWT:Auto Detector : Peak Project : 070206 Mode : 18	Left blank

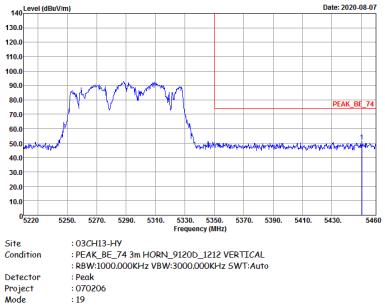
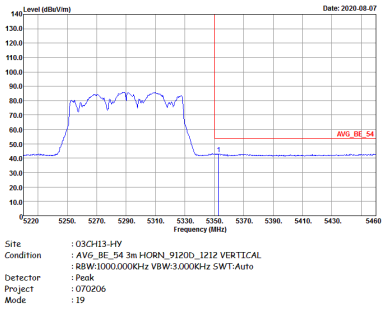
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT40 CH62 5310 - R	
1+2	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

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+2	Horizontal	Fundamental
Peak		
Avg.		Left blank

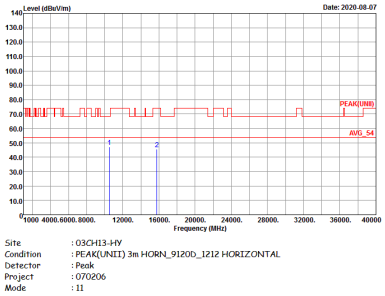
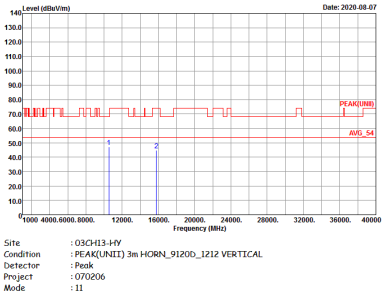
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH58 5290MHz - R	
1+2	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

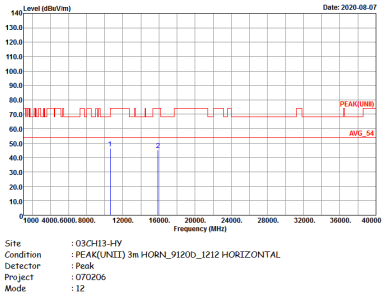
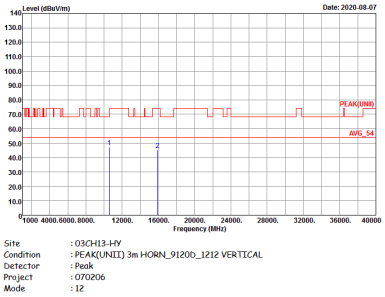
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH58 5290MHz - L	
1+2	Vertical	Fundamental
Peak		
Avg.		Left blank

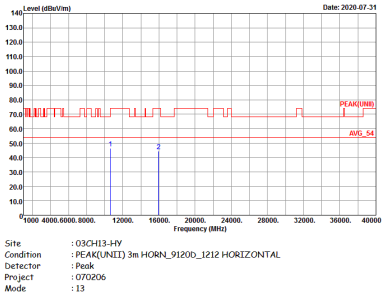
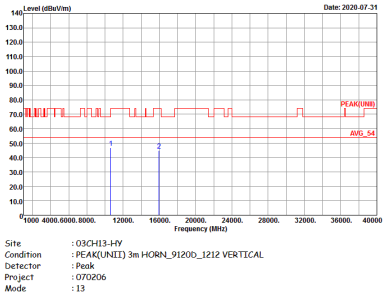
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH58 5290MHz - R	
1+2	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

Band 2 - 5250~5350MHz

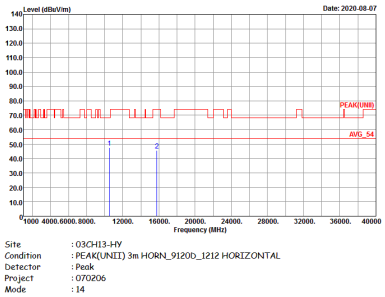
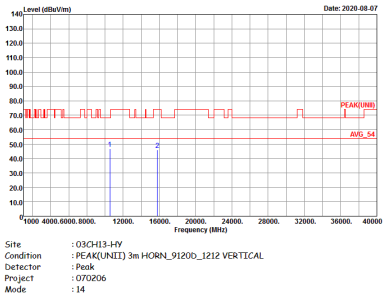
WIFI 802.11a (Harmonic @ 3m)

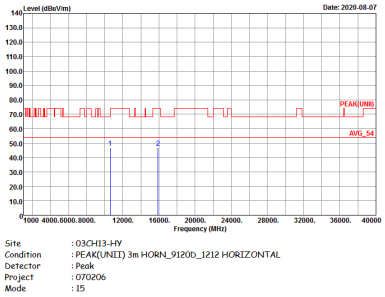
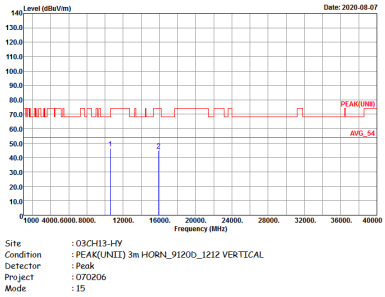
WIFI	Band 2 5250~5350MHz Harmonic @ 3m	
ANT	802.11a CH52 5260MHz	
1+2	Horizontal	Vertical
Peak Avg.		

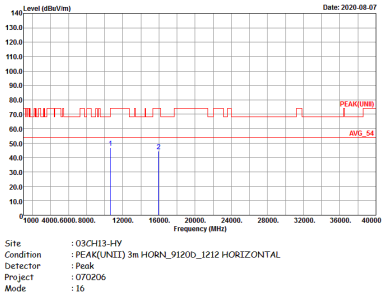
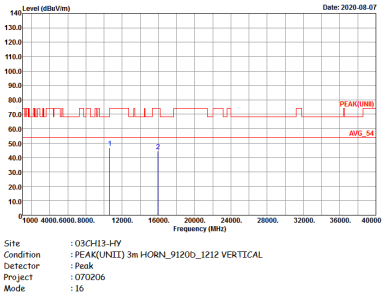
WIFI	Band 2 5250~5350MHz Harmonic @ 3m	
ANT	802.11a CH60 5300MHz	
1+2	Horizontal	Vertical
Peak Avg.		

WIFI	Band 2 5250~5350MHz Harmonic @ 3m	
ANT	802.11a CH64 5320MHz	
1+2	Horizontal	Vertical
Peak Avg.	 Site : 03CH13-HY Condition : PEAK(UNII) 3m HORN_9120D_1212 HORIZONTAL Detector : Peak Project : 070206 Mode : 13	 Site : 03CH13-HY Condition : PEAK(UNII) 3m HORN_9120D_1212 VERTICAL Detector : Peak Project : 070206 Mode : 13

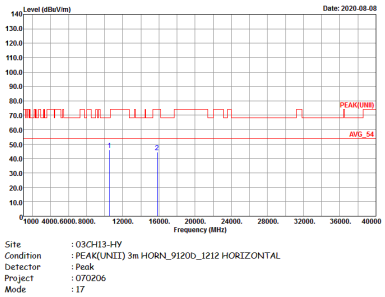
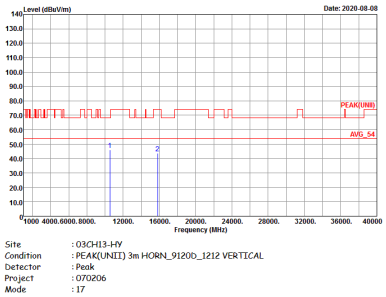
Band 2 5250~5350MHz
WIFI 802.11n HT20 (Harmonic @ 3m)

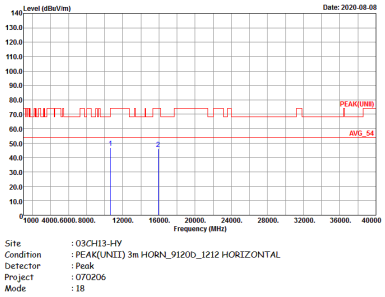
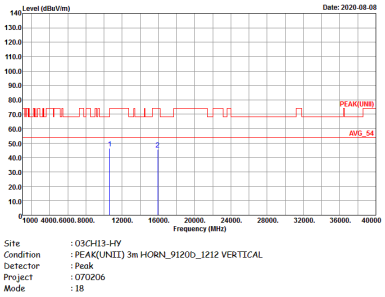
WIFI	Band 2 5250~5350MHz Harmonic @ 3m	
ANT	802.11n HT20 CH52 5260MHz	
1+2	Horizontal	Vertical
Peak Avg.		

WIFI	Band 2 5250~5350MHz Harmonic @ 3m	
ANT	802.11n HT20 CH60 5300MHz	
1+2	Horizontal	Vertical
Peak Avg.	 Site : 03CH13-HY Condition : PEAK(UNII) 3m HORN_9120D_1212 HORIZONTAL Detector : Peak Project : 070206 Mode : 15	 Site : 03CH13-HY Condition : PEAK(UNII) 3m HORN_9120D_1212 VERTICAL Detector : Peak Project : 070206 Mode : 15

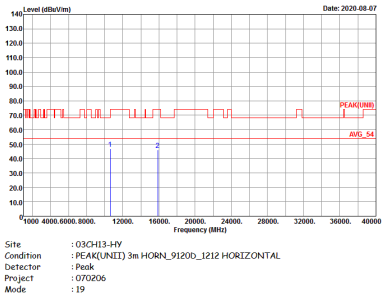
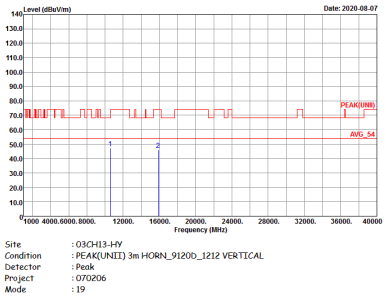
WIFI	Band 2 5250~5350MHz Harmonic @ 3m	
ANT	802.11n HT20 CH64 5320MHz	
1+2	Horizontal	Vertical
Peak Avg.		

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

WIFI	Band 2 5250~5350MHz Harmonic @ 3m	
ANT	802.11n HT40 CH54 5270	
1+2	Horizontal	Vertical
Peak Avg.		

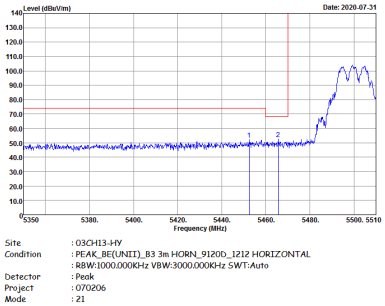
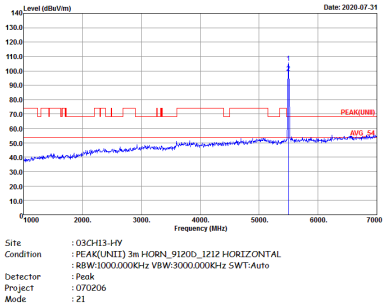
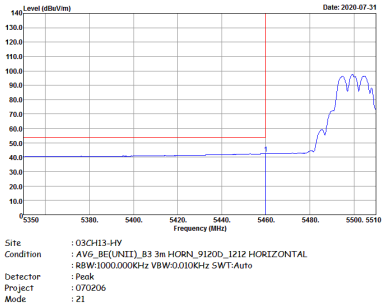
WIFI	Band 2 5250~5350MHz Harmonic @ 3m	
ANT	802.11n HT40 CH62 5310	
1+2	Horizontal	Vertical
Peak Avg.		

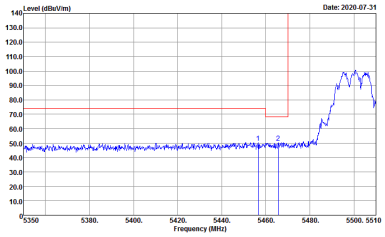
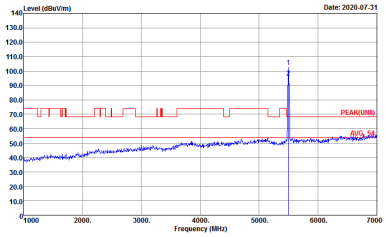
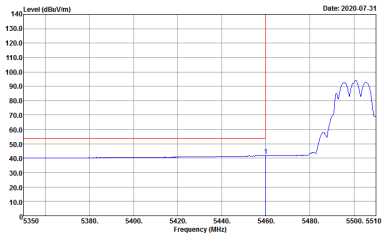
Band 2 5250~5350MHz
WIFI 802.11ac VHT80 (Harmonic @ 3m)

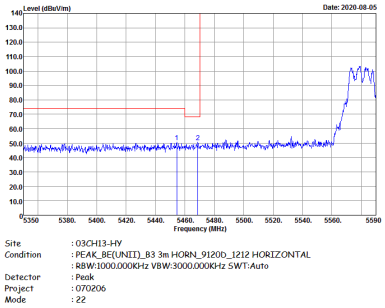
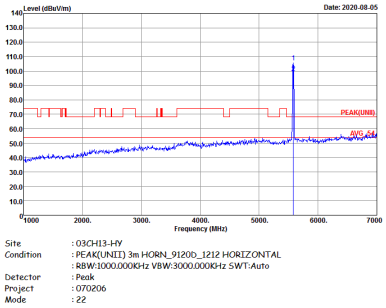
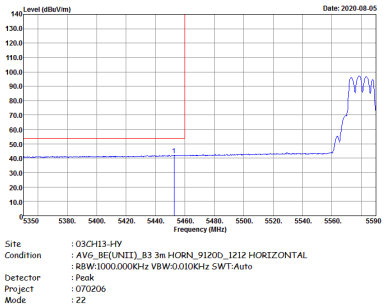
WIFI	Band 2 5250~5350MHz Harmonic @ 3m	
ANT	802.11ac VHT80 CH58 5290MHz	
1+2	Horizontal	Vertical
Peak Avg.		

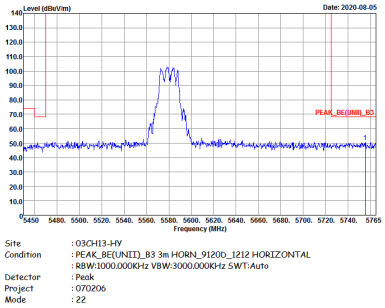
Band 3 - 5470~5725MHz

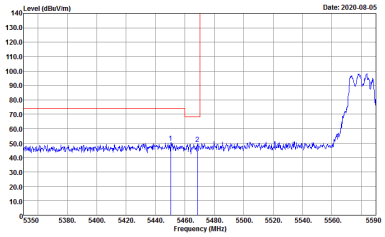
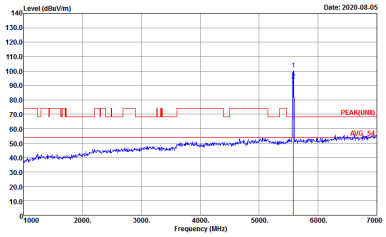
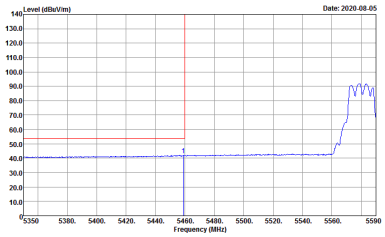
WIFI 802.11a (Band Edge @ 3m)

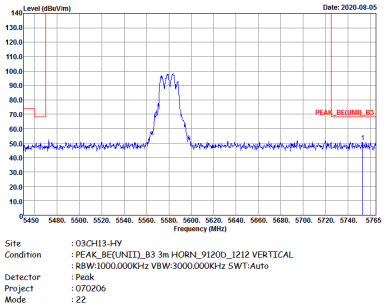
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH100 5500MHz	
1+2	Horizontal	Fundamental
Peak		
Avg.		Left blank

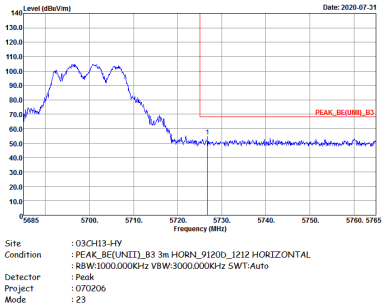
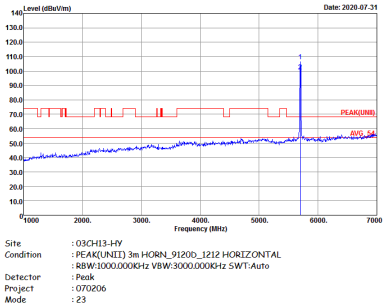
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH100 5500MHz	
1+2	Vertical	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE(UNII)_B3 3m HORN_9120D_1212 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 070206 Mode : 21	 Site : 03CH13-HY Condition : PEAK(UNII) 3m HORN_9120D_1212 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 070206 Mode : 21
Avg.	 Site : 03CH13-HY Condition : AVG_BE(UNII)_B3 3m HORN_9120D_1212 VERTICAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak Project : 070206 Mode : 21	Left blank

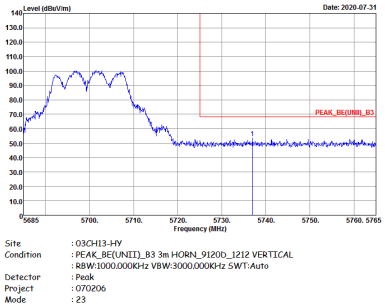
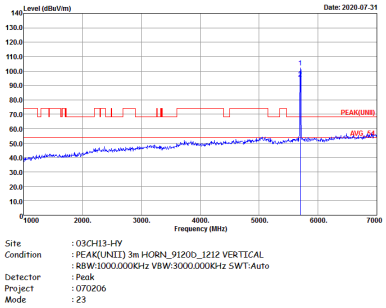
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH116 5580MHz - L	
1+2	Horizontal	Fundamental
Peak		
Avg.		Left blank

WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH116 5580MHz - R	
1+2	Horizontal	Fundamental
Peak		Left blank

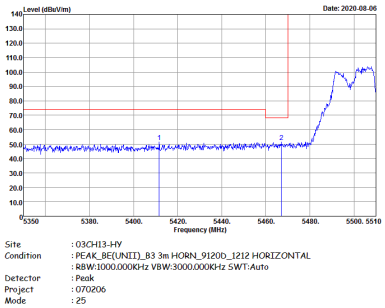
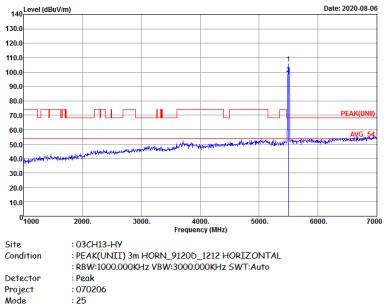
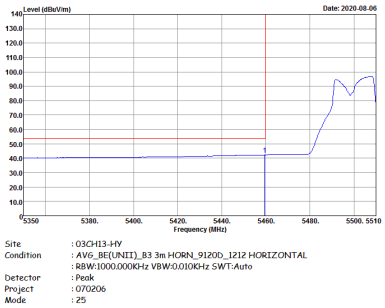
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH116 5580MHz - L	
1+2	Vertical	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE(UNII)_B3 3m HORN_9120D_1212 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 070206 Mode : 22	 Site : 03CH13-HY Condition : PEAK(UNII) 3m HORN_9120D_1212 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 070206 Mode : 22
Avg.	 Site : 03CH13-HY Condition : AVG_BE(UNII)_B3 3m HORN_9120D_1212 VERTICAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak Project : 070206 Mode : 22	Left blank

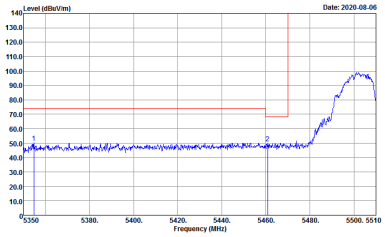
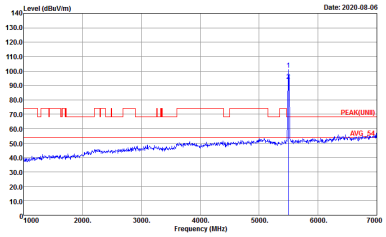
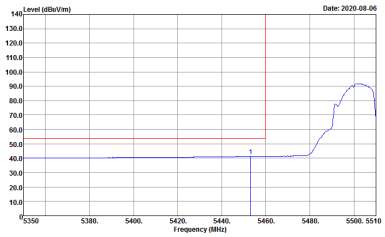
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH116 5580MHz - R	
1+2	Vertical	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE(UNII)_B3 3m HORN_9120D_1212 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 070206 Mode : 22	Left blank

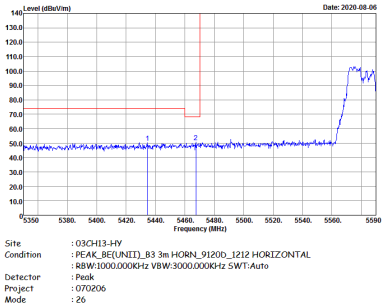
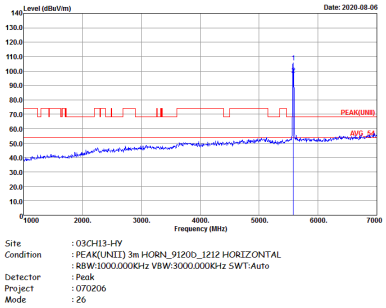
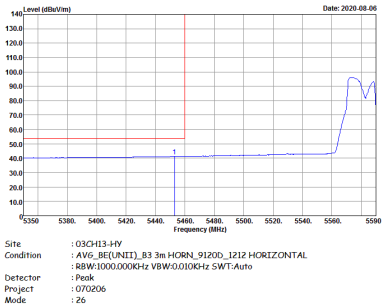
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH140 5700MHz	
1+2	Horizontal	Fundamental
Peak		

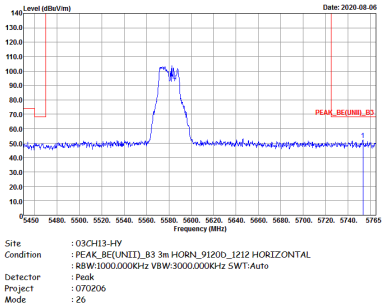
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH140 5700MHz	
1+2	Vertical	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE(UNII)_B3 3m HORN_9120D_1212 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 070206 Mode : 23	 Site : 03CH13-HY Condition : PEAK(UNII) 3m HORN_9120D_1212 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 070206 Mode : 23

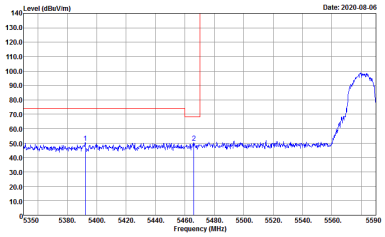
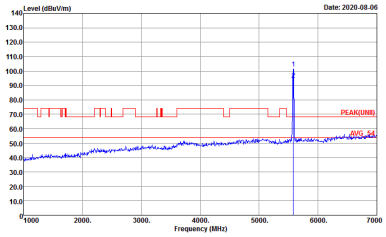
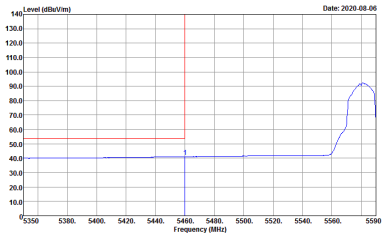
Band 3 5470~5725MHz
WIFI 802.11n HT20 (Band Edge @ 3m)

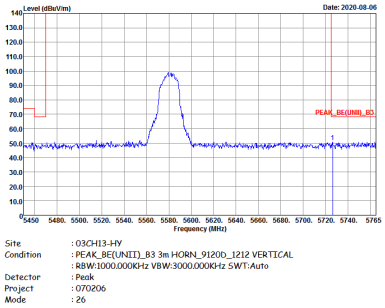
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT20 CH100 5500MHz	
1+2	Horizontal	Fundamental
Peak		
Avg.		Left blank

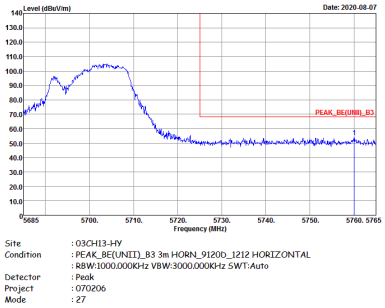
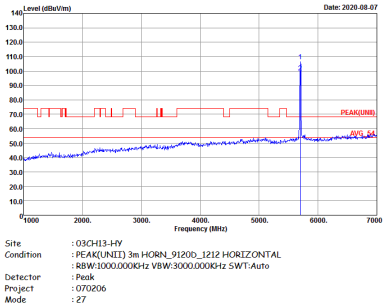
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT20 CH100 5500MHz	
1+2	Vertical	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE(UNII)_B3 3m HORN_9120D_1212 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 070206 Mode : 25	 Site : 03CH13-HY Condition : PEAK(UNII) 3m HORN_9120D_1212 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 070206 Mode : 25
Avg.	 Site : 03CH13-HY Condition : AVG_BE(UNII)_B3 3m HORN_9120D_1212 VERTICAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak Project : 070206 Mode : 25	Left blank

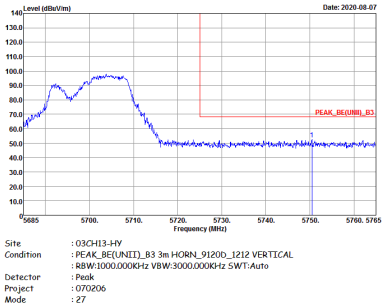
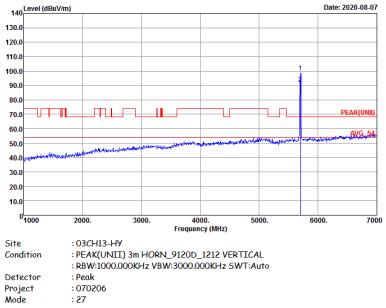
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT20 CH116 5580MHz - L	
1+2	Horizontal	Fundamental
Peak		
Avg.		Left blank

WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT20 CH116 5580MHz - R	
1+2	Horizontal	Fundamental
Peak		Left blank

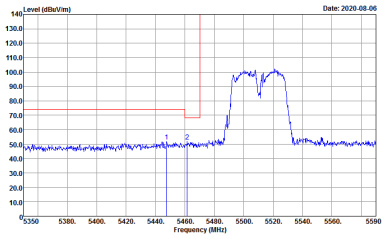
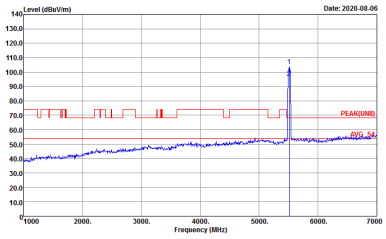
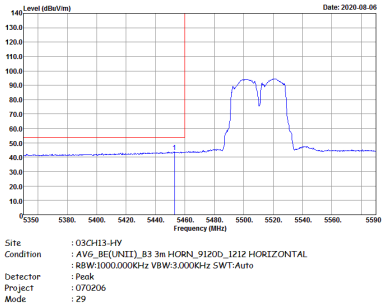
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT20 CH116 5580MHz - L	
1+2	Vertical	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE(UNII)_B3 3m HORN_9120D_1212 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 070206 Mode : 26	 Site : 03CH13-HY Condition : PEAK(UNII) 3m HORN_9120D_1212 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 070206 Mode : 26
Avg.	 Site : 03CH13-HY Condition : AVG_BE(UNII)_B3 3m HORN_9120D_1212 VERTICAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak Project : 070206 Mode : 26	Left blank

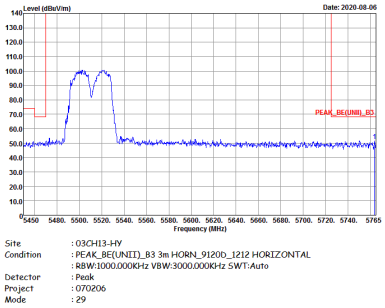
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT20 CH116 5580MHz - R	
1+2	Vertical	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE(UNII)_B3 3m HORN_9120D_1212 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 070206 Mode : 26	Left blank

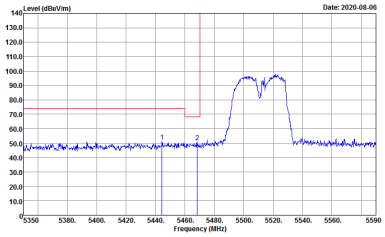
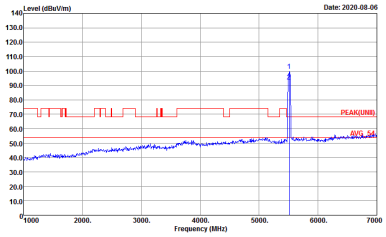
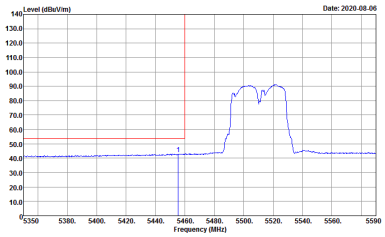
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT20 CH140 5700MHz	
1+2	Horizontal	Fundamental
Peak		

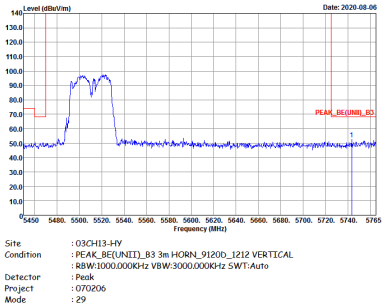
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT20 CH140 5700MHz	
1+2	Vertical	Fundamental
Peak.		

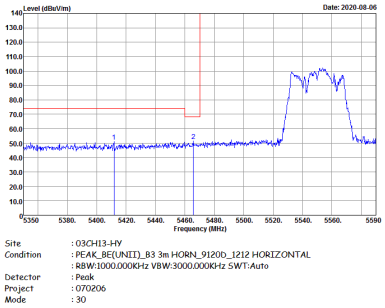
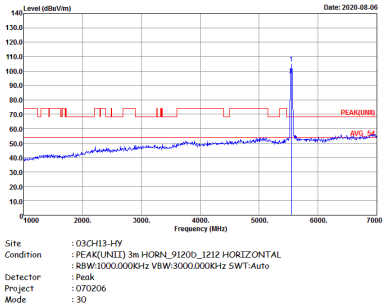
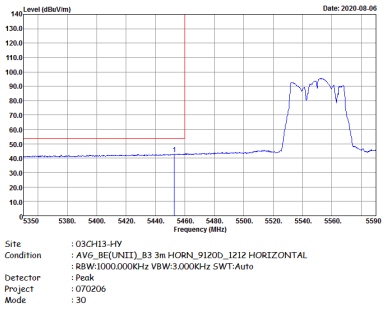
Band 3 5470~5725MHz
WIFI 802.11n HT40 (Band Edge @ 3m)

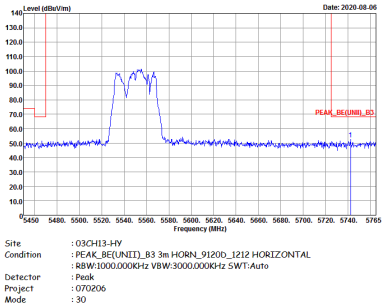
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH102 5510MHz - L	
1+2	Horizontal	Fundamental
Peak		
Avg.		Left blank

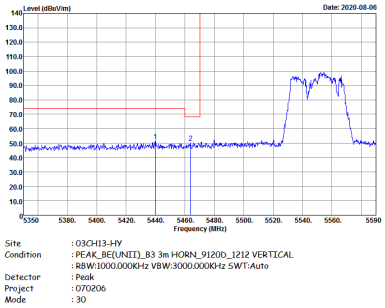
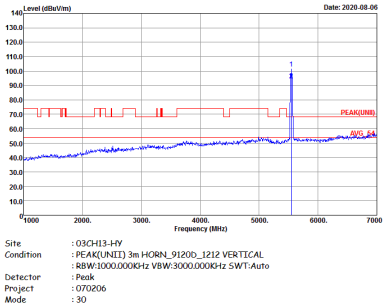
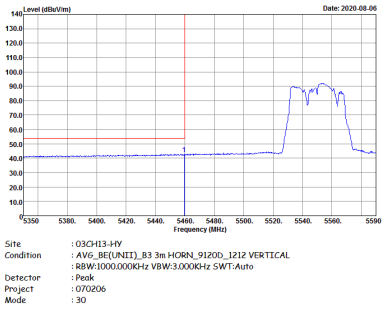
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH102 5510MHz - R	
1+2	Horizontal	Fundamental
Peak		Left blank

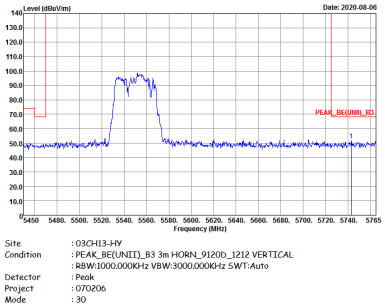
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH102 5510MHz - L	
1+2	Vertical	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE(UNII)_B3 3m HORN_9120D_1212 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 070206 Mode : 29	 Site : 03CH13-HY Condition : PEAK(UNII) 3m HORN_9120D_1212 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 070206 Mode : 29
Avg.	 Site : 03CH13-HY Condition : AVG_BE(UNII)_B3 3m HORN_9120D_1212 VERTICAL : RBW:1000.000KHz VBW:3.000KHz SWT:Auto Detector : Peak Project : 070206 Mode : 29	Left blank

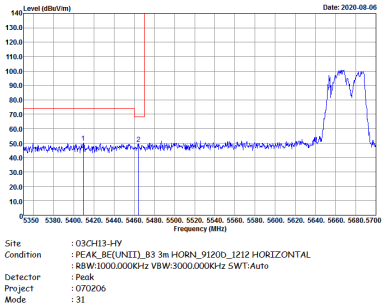
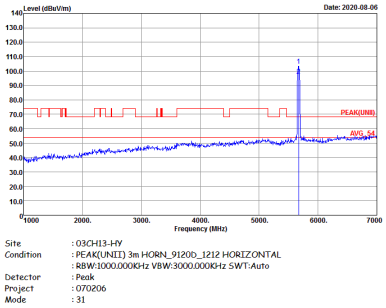
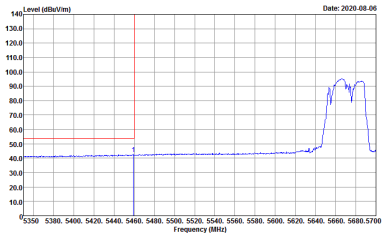
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH102 5510MHz - R	
1+2	Vertical	Fundamental
Peak		Left blank

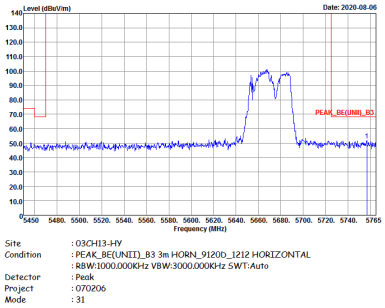
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH110 5550MHz - L	
1+2	Horizontal	Fundamental
Peak		
Avg.		Left blank

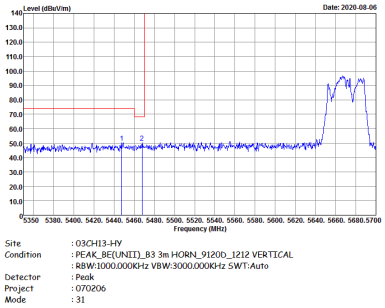
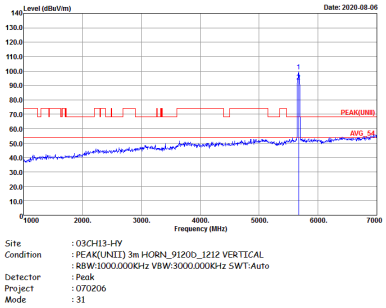
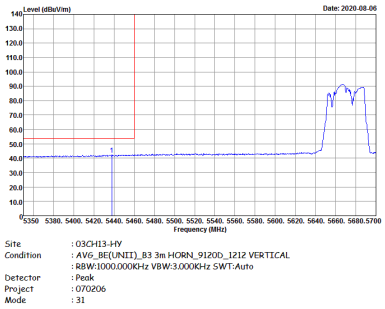
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH110 5550MHz - R	
1+2	Horizontal	Fundamental
Peak		Left blank

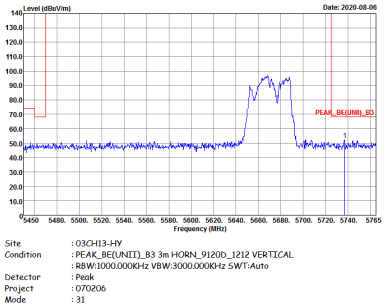
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH110 5550MHz - L	
1+2	Vertical	Fundamental
Peak		
Avg.		Left blank

WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH110 5550MHz - R	
1+2	Vertical	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE(UNII)_B3 3m HORN_9120D_1212 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 070206 Mode : 30	Left blank

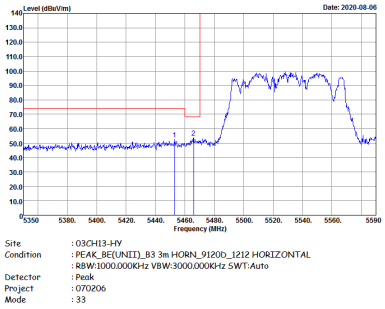
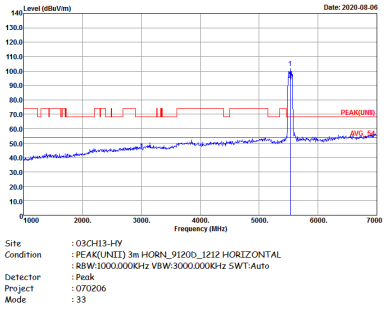
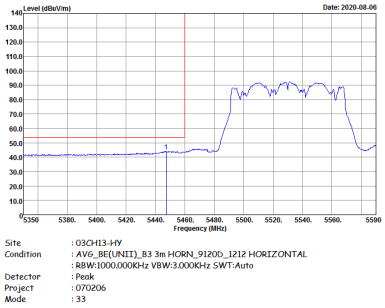
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH134 5670MHz - L	
1+2	Horizontal	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE(UNII)_B3 3m HORN_9120D_1212 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 070206 Mode : 31	 Site : 03CH13-HY Condition : PEAK(UNII) 3m HORN_9120D_1212 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 070206 Mode : 31
Avg.	 Site : 03CH13-HY Condition : AVG_BE(UNII)_B3 3m HORN_9120D_1212 HORIZONTAL : RBW:1000.000KHz VBW:3.000KHz SWT:Auto Detector : Peak Project : 070206 Mode : 31	Left blank

WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH134 5670MHz - R	
1+2	Horizontal	Fundamental
Peak		Left blank

WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH134 5670MHz - L	
1+2	Vertical	Fundamental
Peak		
Avg.		Left blank

WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH134 5670MHz - R	
1+2	Vertical	Fundamental
Peak		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+2	Horizontal	Fundamental
Peak		
Avg.		Left blank