FCC RADIO TEST REPORT

FCC ID	:	**2ARIW-2778**
Equipment	:	**Digital Media Receiver**
Model Name	:	**C78MP8**
Applicant	:	**L Laury LLC** **3340 Peachtree Rd, Suite 1800** **Atlanta, Georgia, 30326**
Standard	:	**FCC Part 15 Subpart E §15.407**

The product was completed on Feb. 21, 2019. We, SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory, would like to declare that the tested sample has been evaluated in accordance with the test procedures and has been in compliance with the applicable technical standards.

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

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

Jones Tsai

Approved by: Jones Tsai

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

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History of this test report

Report No.	Version	Description	Issued Date
FR8O2938-01D	01	Initial issue of report	Mar. 14, 2019

Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)
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
3.5	15.207	AC Conducted Emission	Pass
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: Natasha Hsieh

1 General Description

1.1 Product Feature of Equipment Under Test

Product Feature	
Equipment	Digital Media Receiver
Model Name	C78MP8
FCC ID	2ARIW-2778
EUT supports Radios application	WLAN 11b/g/n HT20 WLAN 11a/n HT20/HT40 WLAN 11ac VHT20/VHT40/VHT80 Bluetooth BR/EDR/LE

1.2 Product Specification of Equipment Under Test

Standards-related Product Specification	
Tx/Rx Frequency Range	5180 MHz ~ 5240 MHz 5260 MHz ~ 5320 MHz 5500 MHz ~ 5720 MHz
Maximum Output Power to Antenna	**<5180 MHz ~ 5240 MHz>** 802.11a : 18.00 dBm / 0.0631 W 802.11n HT20 : 18.00 dBm / 0.0631 W 802.11n HT40 : 18.40 dBm / 0.0692 W 802.11ac VHT20 : 17.90 dBm / 0.0617 W 802.11ac VHT40 : 18.20 dBm / 0.0661 W 802.11ac VHT80 : 14.90 dBm / 0.0309 W **<5260 MHz ~ 5320 MHz>** 802.11a : 18.30 dBm / 0.0676 W 802.11n HT20 : 18.20 dBm / 0.0661 W 802.11n HT40 : 18.30 dBm / 0.0676 W 802.11ac VHT20 : 18.10 dBm / 0.0646 W 802.11ac VHT40 : 18.10 dBm / 0.0646 W 802.11ac VHT80 : 15.80 dBm / 0.0380 W **<5500 MHz ~ 5720 MHz >** 802.11a : 18.30 dBm / 0.0676 W 802.11n HT20 : 18.20 dBm / 0.0661 W 802.11n HT40 : 18.50 dBm / 0.0708 W 802.11ac VHT20 : 18.10 dBm / 0.0646 W 802.11ac VHT40 : 18.30 dBm / 0.0676 W 802.11ac VHT80 : 17.90 dBm / 0.0617 W

Standards-related Product Specification	
99% Occupied Bandwidth	**<5180 MHz ~ 5240 MHz>** 802.11a : 16.80 MHz 802.11 n HT20 : 17.90 MHz 802.11 n HT40 : 36.60 MHz 802.11 ac VHT80 : 77.04 MHz **<5260 MHz ~ 5320 MHz>** 802.11a : 16.75 MHz 802.11 n HT20 : 17.80 MHz 802.11 n HT40 : 36.60 MHz 802.11 ac VHT80 : 77.16 MHz **<5500 MHz ~ 5720 MHz >** 802.11a : 16.80 MHz 802.11 n HT20 : 17.90 MHz 802.11 n HT40 : 36.80 MHz 802.11 ac VHT80 : 77.40 MHz
Antenna Type / Gain	**<5180 MHz ~ 5240 MHz>** Printed Inverted-F Antenna with gain 3.50 dBi **<5260 MHz ~ 5320 MHz>** Printed Inverted-F Antenna with gain 3.50 dBi **<5500 MHz ~ 5720 MHz >** Printed Inverted-F Antenna with gain 4.00 dBi
Type of Modulation	802.11a/n : OFDM (BPSK / QPSK / 16QAM / 64QAM) 802.11ac : OFDM (BPSK/QPSK/16QAM/64QAM/256QAM)

1.3 Modification of EUT

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

1.4 Testing Location

Test Site	SPORTON INTERNATIONAL INC.	
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.
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.**
	03CH16-HY

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

FCC Designation No. TW1190 and TW0007

1.5 Applicable Standards

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

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

Remark:

1. All test items were verified and recorded according to the standards and without any deviation during the test.
2. This EUT has also been tested and complied with the requirements of FCC Part 15, Subpart B, recorded in a separate test report.

2 Test Configuration of Equipment Under Test

a. The EUT has been associated with peripherals and configuration operated in a manner tended to maximize its emission characteristics in a typical application. Frequency range investigated: conduction emission (150 kHz to 30 MHz), radiation emission (9 kHz to the 10th harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower).

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 ： WLAN (5GHz) Link + Play News + Speaker + Charging from Adapter

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

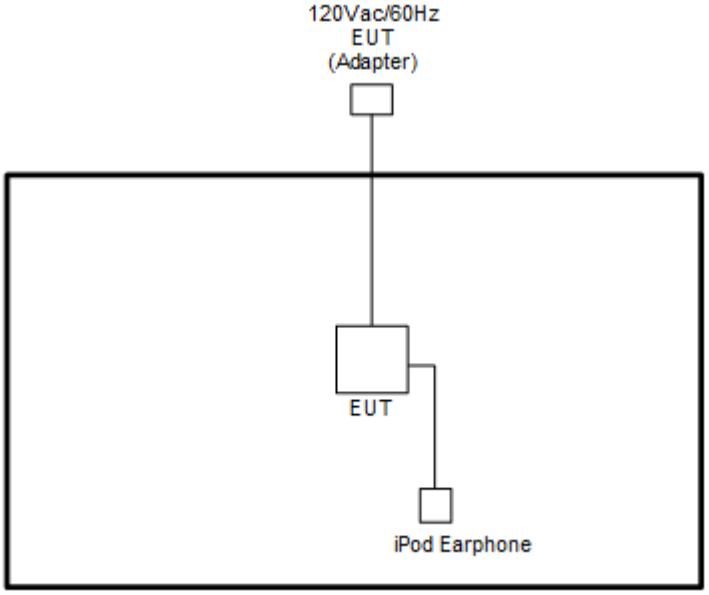
Ch. #		Band I：5150-5250 MHz	Band II：5250-5350 MHz	Band III：5470-5725MHz
		802.11n HT20	802.11n HT20	802.11n HT20
L	Low	36	52	100
M	Middle	44	60	116
H	High	48	64	140
Straddle		-	-	144

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

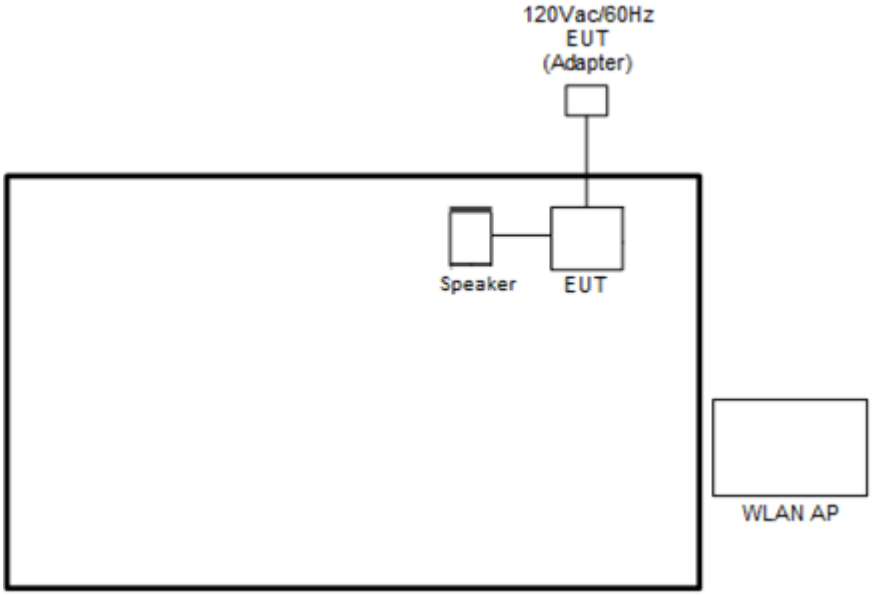
Ch. #		Band I：5150-5250 MHz	Band II：5250-5350 MHz	Band III：5470-5725MHz
		802.11ac VHT80	802.11ac VHT80	802.11ac VHT80
L	Low	-	-	106
M	Middle	42	58	122
H	High	-	-	-
Straddle		-	-	138

2.3 Connection Diagram of Test System

<WLAN Tx Mode>



<AC Conducted Emission Mode>



2.4 Support Unit used in test configuration and system

Item	Equipment	Trade Name	Model Name	FCC ID	Data Cable	Power Cord
1.	WLAN AP	ASUS	RT-AC66U	MSQ-RTAC66U	N/A	Unshielded, 1.8 m
2.	iPod Earphone	Apple	N/A	Verification	Unshielded, 1.0 m	N/A

2.5 EUT Operation Test Setup

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

2.6 Measurement Results Explanation Example

For all conducted test items:

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

Example :

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

Offset = RF cable loss + attenuator factor.

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

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

= 4.2 + 10 = 14.2 (dB)

3 Test Result

3.1 26dB & 99% Occupied Bandwidth Measurement

3.1.1 Description of 26dB & 99% Occupied Bandwidth

This section is for reporting purpose only.

There is no restriction limits for bandwidth.

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.

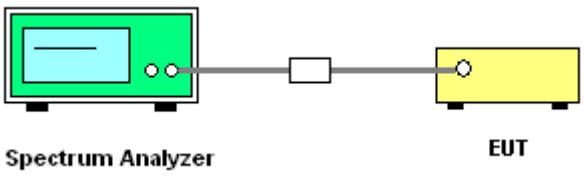
3.1.2 Measuring Instruments

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.

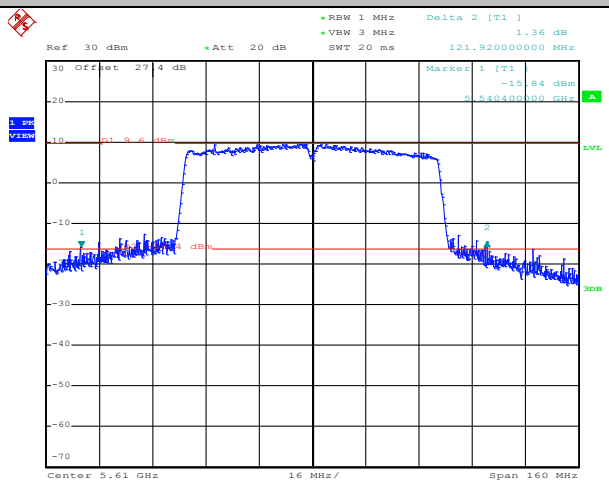
3.1.4 Test Setup



3.1.5 Test Result of 26dB & 99% Occupied Bandwidth

Please refer to Appendix A.

Maximum 26dB Bandwidth



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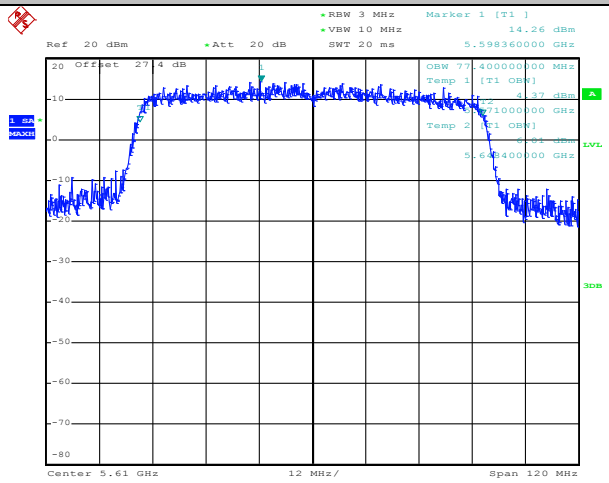
Maximum 99% Occupied Bandwidth



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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

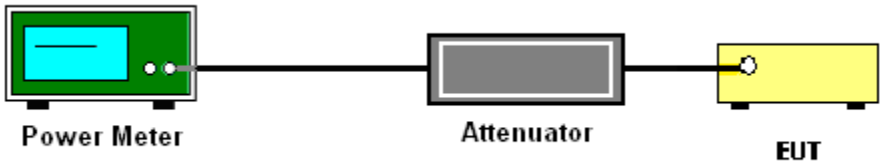
The testing follows Method PM of FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01.

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

1. Measurement is performed using a wideband RF power meter.
2. The EUT is configured to transmit continuously with a consistent duty cycle at its maximum power control level.
3. Measure the average power of the transmitter, and the average power is corrected with duty factor, 10 log(1/x), where x is the duty cycle.

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.

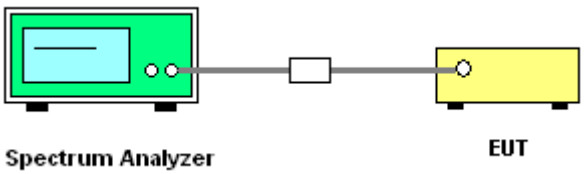
 # Method SA-2 #

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

- Measure the duty cycle.
- Set span to encompass the entire emission bandwidth (EBW) of the signal.
- Set RBW = 1 MHz.
- Set VBW ≥ 3 MHz.
- Number of points in sweep ≥ 2 Span / RBW.
- Sweep time = auto.
- Detector = RMS
- Trace average at least 100 traces in power averaging mode.
- Add 10 log(1/x), where x is the duty cycle, to the measured power in order to compute the average power during the actual transmission times. For example, add 10 log(1/0.25) = 6 dB if the duty cycle is 25 percent.

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

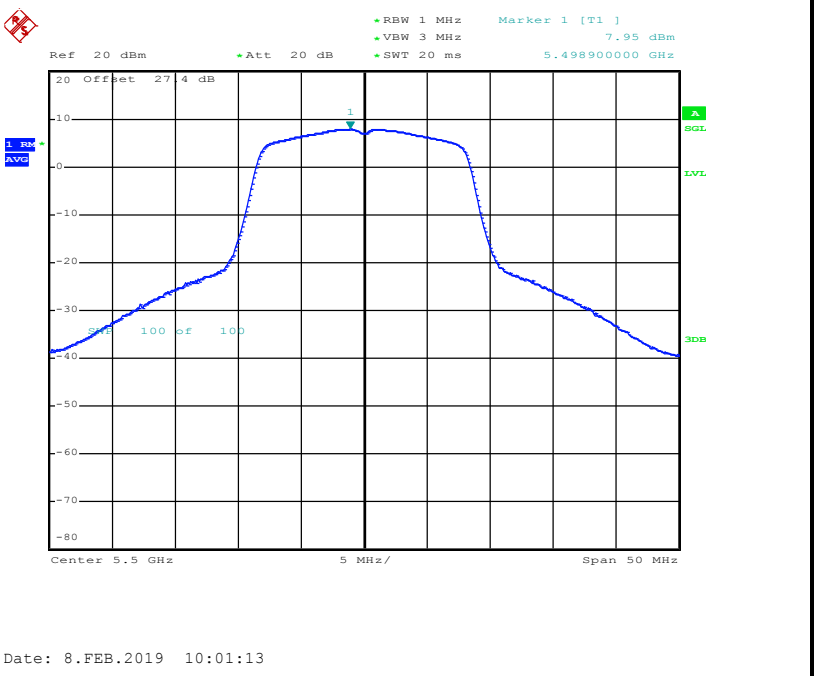
3.3.4 Test Setup



3.3.5 Test Result of Power Spectral Density

Please refer to Appendix A.

Worst Case Power Density (dBm/MHz)



Note: Average Power Density (dB) = Measured value+ Duty Factor

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) Section 15.407(b)(1) to (b)(3) specify the unwanted emission limits 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.[3]

(ii) Section 15.407(b)(4) specifies the unwanted emission limit for the U-NII-3 band. A band emissions mask is specified in Section 15.407(b)(4)(i). The emission limits are in terms of a Peak detector. An alternative to the band emissions mask is specified in Section 15.407(b)(4)(ii). The alternative limits are based on the highest antenna gain specified in the filing. There are also marketing and importation restrictions for the devices using the alternative limit.[4]

Note 3: An out-of-band emission that complies with both the average and peak limits of Section 15.209 is not required to satisfy the -27 dBm/MHz peak emission limit.

Note 4: Only devices with antenna gains of 10 dBi or less may be approved using the emission limits specified in Section 15.247(d) till March 2, 2018; all other devices operating in this band must use the mask specified in Section 15.407(b)(4)(i).

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

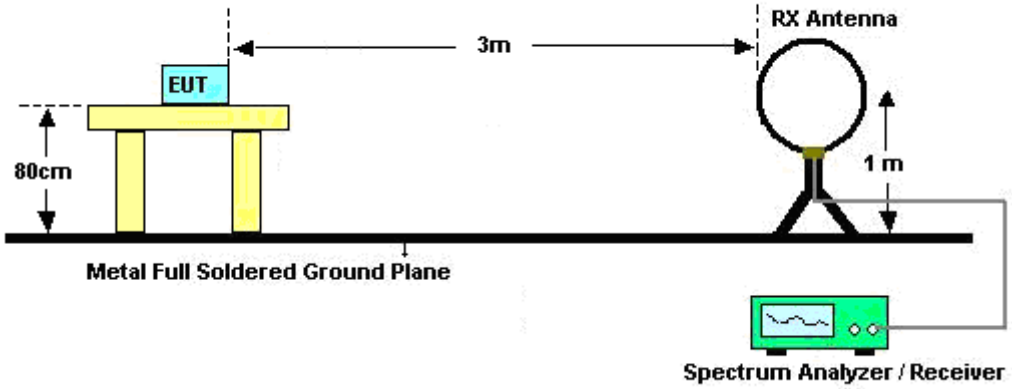
(3) Procedures for Average Unwanted Emissions Measurements Above 1000MHz

- 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.

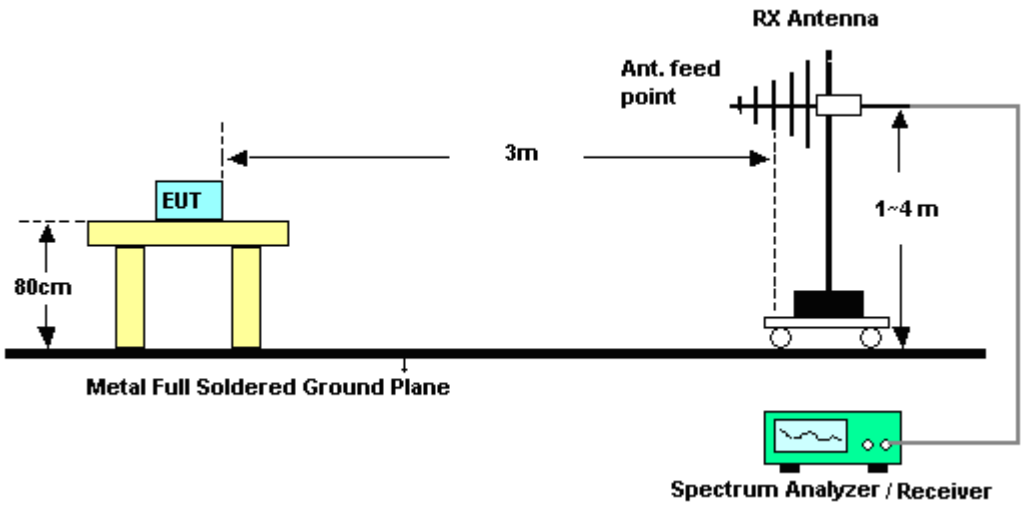
2. The EUT was placed on a turntable with 0.8 meter for frequency below 1GHz and 1.5 meter for frequency above 1GHz respectively above ground.
3. The EUT was set 3 meters from the interference receiving antenna which was mounted on the top of a variable height antenna tower.
4. The antenna is a broadband 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

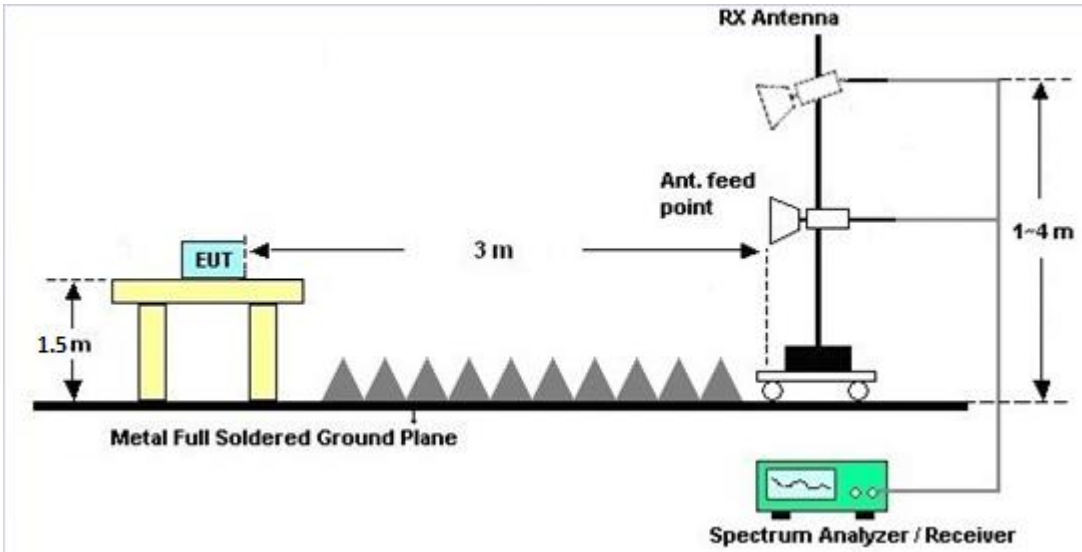
For radiated emissions below 30MHz



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.

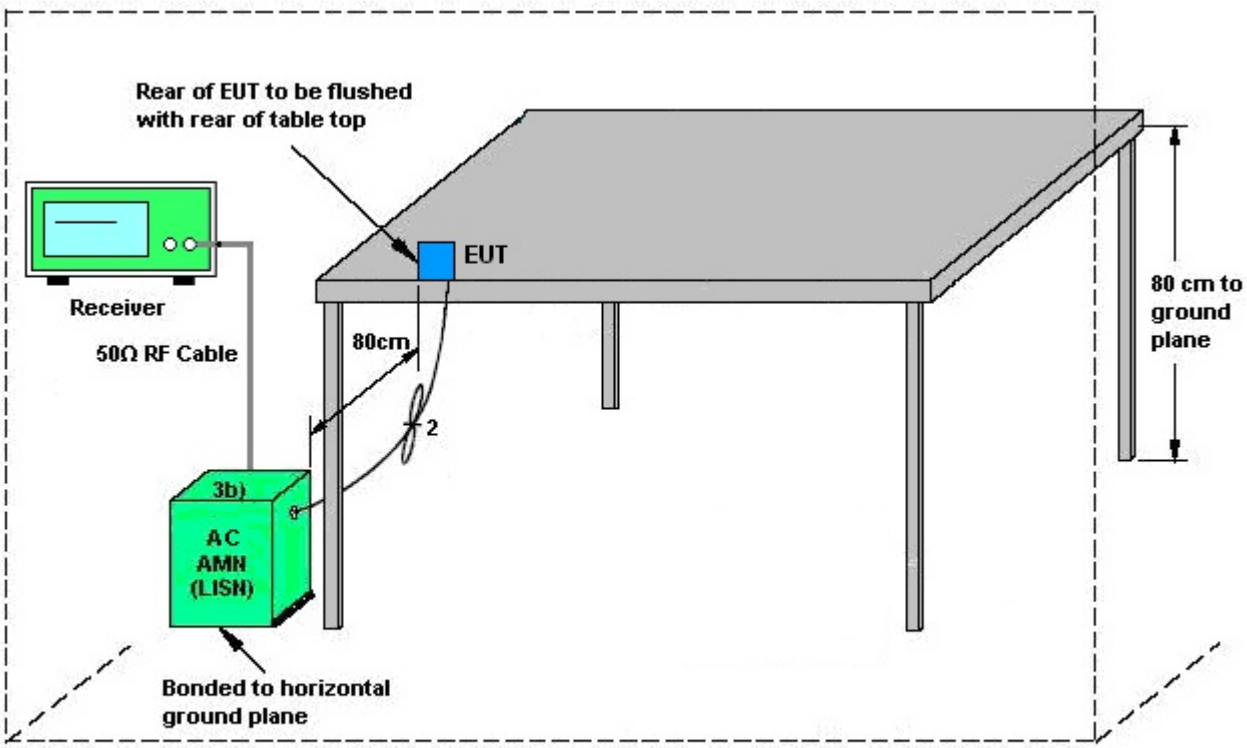
3.5.2 Measuring Instruments

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

EUT is verified this characteristic during the function check of normal sample associated with an access point:

A. Information start: make EUT supply information to the access point.

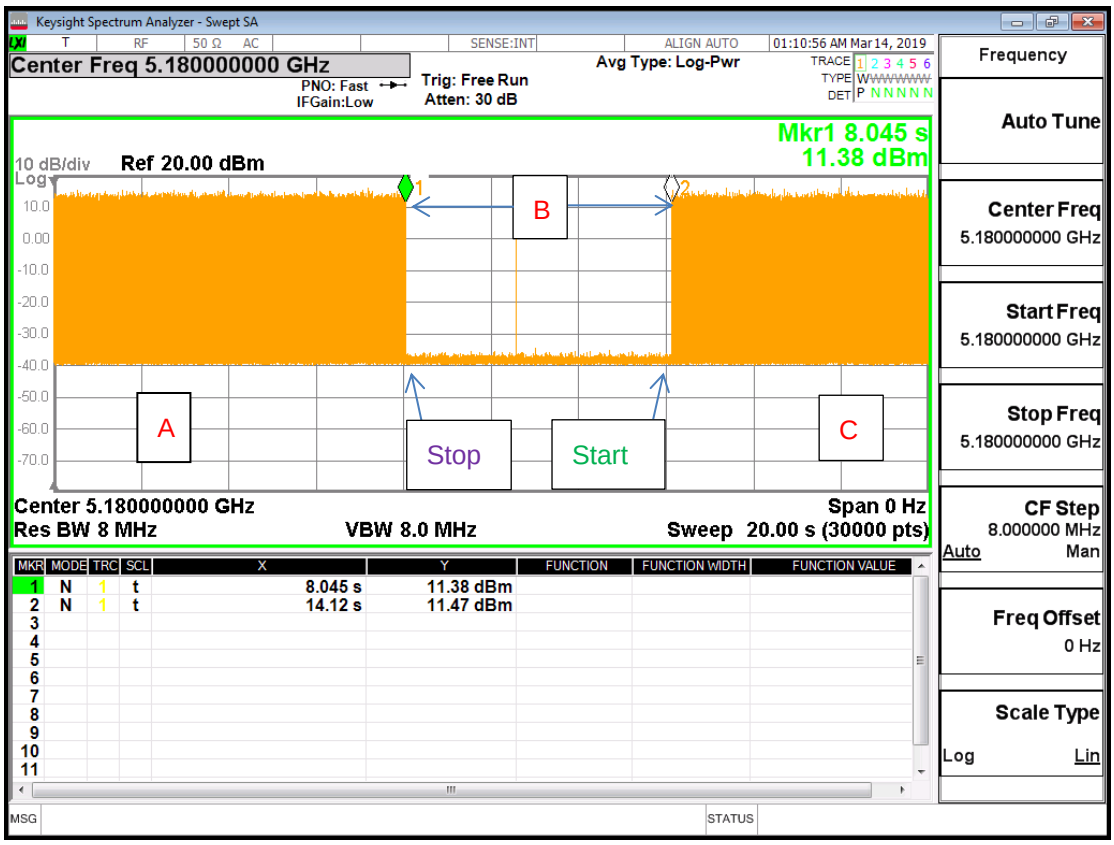
B. Information stop: stop supplying information to the access point.

While the EUT is not transmitting any information, the EUT can automatically discontinue transmission and become standby mode for power saving.

C. Information start: make EUT supply information to the access point again.

The EUT can detect the controlling signal of ACK message transmitting from remote device and verify whether it shall resend or discontinue transmission.

5180MHz



Note : The control / signalling information during the period B is precluded.

3.7 Antenna Requirements

3.7.1 Standard Applicable

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

3.7.2 Antenna Anti-Replacement Construction

An embedded-in antenna design is used.

3.7.3 Antenna Gain

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

4 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Power Sensor	DARE	RadiPower	15I00041SNO09	10MHz~6GHz	May 07, 2018	Jan. 29, 2019~ Feb. 08, 2019	May 06, 2019	Conducted (TH05-HY)
Spectrum Analyzer	Rohde & Schwarz	FSP40	100057	9kHz-40GHz	Nov. 21, 2018	Jan. 29, 2019~ Feb. 08, 2019	Nov. 20, 2019	Conducted (TH05-HY)
Switch Box & RF Cable	Burgeon	ETF-058	EC1300484	N/A	Apr. 17, 2018	Jan. 29, 2019~ Feb. 08, 2019	Apr. 16, 2019	Conducted (TH05-HY)
AC Power Source	ChainTek	APC-1000W	N/A	N/A	N/A	Feb. 14, 2019	N/A	Conduction (CO05-HY)
EMI Test Receiver	Rohde & Schwarz	ESR3	102388	9KHz~3.6GHz	Nov. 12, 2018	Feb. 14, 2019	Nov. 11, 2019	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100080	9kHz~30MHz	Nov. 14, 2018	Feb. 14, 2019	Nov. 13, 2019	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100081	9kHz~30MHz	Nov. 09, 2018	Feb. 14, 2019	Nov. 08, 2019	Conduction (CO05-HY)
Software	Rohde & Schwarz	EMC32 V10.30	N/A	N/A	N/A	Feb. 14, 2019	N/A	Conduction (CO05-HY)
RF Cable	HUBER + SUHNER	RG 214/U	1358175	9kHz~30MHz	Sep. 14, 2018	Feb. 14, 2019	Sep. 13, 2019	Conduction (CO05-HY)
Pulse Limiter	SCHWARZBECK	VTSD 9561-F N	9561-F N00373	9kHz-200MHz	Nov. 08, 2018	Feb. 14, 2019	Nov. 07, 2019	Conduction (CO05-HY)
Loop Antenna	Rohde & Schwarz	HFH2-Z2	100315	9 kHz~30 MHz	Nov. 23, 2017	Jan. 30, 2019 ~ Feb. 21, 2019	Nov. 22, 2019	Radiation (03CH16-HY)
Bilog Antenna	TESEQ	CBL6111D &00802N1D01N-06	47020&06	30MHz to 1GHz	Oct. 13, 2018	Jan. 30, 2019 ~ Feb. 21, 2019	Oct. 12, 2019	Radiation (03CH16-HY)
Horn Antenna	SCHWARZBECK	BBHA 9120D	9120D-1522	1G~18GHz	Sep. 07, 2018	Jan. 30, 2019 ~ Feb. 21, 2019	Sep. 06, 2019	Radiation (03CH16-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170576	18GHz ~ 40GHz	May 08, 2018	Jan. 30, 2019 ~ Feb. 21, 2019	May 07, 2019	Radiation (03CH16-HY)
EMI Test Receiver	Keysight	N9038A (MXE)	MY57290111	3Hz~26.5GHz	Nov. 29, 2018	Jan. 30, 2019 ~ Feb. 21, 2019	Nov. 28, 2019	Radiation (03CH16-HY)
Spectrum Analyzer	Agilent	N9010A	MY53470118	10Hz~44GHz	Apr. 17, 2018	Jan. 30, 2019 ~ Feb. 21, 2019	Apr. 16, 2019	Radiation (03CH16-HY)
Amplifier	SONOMA	310N	371607	9kHz~1000MHz	Oct.02. 2018	Jan. 30, 2019 ~ Feb. 21, 2019	Oct.01. 2019	Radiation (03CH16-HY)
Preamplifier	Jet-Power	JPA0118-55-303	17100018 00054001	1GHz~18GHz	Apr. 16, 2018	Jan. 30, 2019 ~ Feb. 21, 2019	Apr. 15, 2019	Radiation (03CH16-HY)
Preamplifier	Keysight	83017A	MY53270264	1GHz~26.5GHz	Dec.12.2018	Jan. 30, 2019 ~ Feb. 21, 2019	Dec.11.2019	Radiation (03CH16-HY)
Amplifier	MITEQ	TTA1840-35-HG	1871923	18GHz~40GHz, VSWR : 2.5:1 max	Jul. 16, 2018	Jan. 30, 2019 ~ Feb. 21, 2019	Jul. 15, 2019	Radiation (03CH16-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 126E	0058/126E	30M-18G	Mar. 14, 2018	Jan. 30, 2019 ~ Feb. 21, 2019	Mar. 13, 2019	Radiation (03CH16-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY15539/4	30M-18G	Mar. 14, 2018	Jan. 30, 2019 ~ Feb. 21, 2019	Mar. 13, 2019	Radiation (03CH16-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY36979/4	30M~18GHz	Mar. 14, 2018	Jan. 30, 2019 ~ Feb. 21, 2019	Mar. 13, 2019	Radiation (03CH16-HY)
Software	Audix	E3 6.2009-8-24	RK-001136	N/A	N/A	Jan. 30, 2019 ~ Feb. 21, 2019	N/A	Radiation (03CH16-HY)

5 Uncertainty of Evaluation

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	2.2

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	4.9

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	5.8

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	3.9

Appendix A. Test Result of Conducted Test Items

Test Engineer:	Richard Qiu / Luffy Lin	Temperature:	21~25	°C
Test Date:	2019/1/29~2/8	Relative Humidity:	51~54	%

TEST RESULTS DATA
26dB and 99% OBW

Band I														
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 0	Ant 1	Ant 0	Ant 1	Ant 0	Ant 1	Ant 0	Ant 1		
11a	6Mbps	1	36	5180	-	16.75	-	27.10	-		-	22.24		
11a	6Mbps	1	44	5220	-	16.70	-	27.55	-		-	22.23		
11a	6Mbps	1	48	5240	-	16.80	-	28.30	-		-	22.25		
HT20	MCS0	1	36	5180	-	17.90	-	34.15	-		-	22.53		
HT20	MCS0	1	44	5220	-	17.75	-	32.50	-		-	22.49		
HT20	MCS0	1	48	5240	-	17.85	-	30.28	-		-	22.52		
HT40	MCS0	1	38	5190	-	36.40	-	45.36	-		-	23.01		
HT40	MCS0	1	46	5230	-	36.60	-	64.41	-		-	23.01		
VHT80	MCS0	1	42	5210	-	77.04	-	81.92	-		-	23.01		

TEST RESULTS DATA
Average Power Table

FCC Band I												
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Average Conducted Power (dBm)		FCC Conducted Power Limit (dBm)		DG (dBi)			Pass/Fail
					Ant 0	Ant 1	Ant 0	Ant 1	Ant 0	Ant 1		
11a	6Mbps	1	36	5180	-	17.80	-	24.00	-	3.50		Pass
11a	6Mbps	1	44	5220	-	18.00	-	24.00	-	3.50		Pass
11a	6Mbps	1	48	5240	-	18.00	-	24.00	-	3.50		Pass
HT20	MCS0	1	36	5180	-	17.80	-	24.00	-	3.50		Pass
HT20	MCS0	1	44	5220	-	18.00	-	24.00	-	3.50		Pass
HT20	MCS0	1	48	5240	-	18.00	-	24.00	-	3.50		Pass
HT40	MCS0	1	38	5190	-	15.50	-	24.00	-	3.50		Pass
HT40	MCS0	1	46	5230	-	18.40	-	24.00	-	3.50		Pass
VHT20	MCS0	1	36	5180	-	17.70	-	24.00	-	3.50		Pass
VHT20	MCS0	1	44	5220	-	17.90	-	24.00	-	3.50		Pass
VHT20	MCS0	1	48	5240	-	17.90	-	24.00	-	3.50		Pass
VHT40	MCS0	1	38	5190	-	15.40	-	24.00	-	3.50		Pass
VHT40	MCS0	1	46	5230	-	18.20	-	24.00	-	3.50		Pass
VHT80	MCS0	1	42	5210	-	14.90	-	24.00	-	3.50		Pass

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TEST RESULTS DATA
Power Spectral Density

FCC Band I														
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Duty Factor (dB)		Average Power Density (dBm/MHz)		Average PSD Limit (dBm/MHz)		DG (dBi)			Pass /Fail
					Ant 0	Ant 1	Ant 0	Ant 1	Ant 0	Ant 1	Ant 0	Ant 1		
11a	6Mbps	1	36	5180	-	0.00	-	7.00	-	11.00	-	3.50		Pass
11a	6Mbps	1	44	5220	-	0.00	-	7.25	-	11.00	-	3.50		Pass
11a	6Mbps	1	48	5240	-	0.00	-	7.30	-	11.00	-	3.50		Pass
HT20	MCS0	1	36	5180	-	0.00	-	6.88	-	11.00	-	3.50		Pass
HT20	MCS0	1	44	5220	-	0.00	-	7.19	-	11.00	-	3.50		Pass
HT20	MCS0	1	48	5240	-	0.00	-	7.24	-	11.00	-	3.50		Pass
HT40	MCS0	1	38	5190	-	0.00	-	1.31	-	11.00	-	3.50		Pass
HT40	MCS0	1	46	5230	-	0.00	-	4.07	-	11.00	-	3.50		Pass
VHT80	MCS0	1	42	5210	-	0.00	-	-2.69	-	11.00	-	3.50		Pass

TEST RESULTS DATA
26dB and 99% OBW

Band II															
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 0	Ant 1	Ant 0	Ant 1	Ant 0	Ant 1	Ant 0	Ant 1	Ant 0	Ant 1	
11a	6Mbps	1	52	5260	-	16.70	-	30.05	-	23.23	-	29.23	-	23.98	
11a	6Mbps	1	60	5300	-	16.75	-	32.30	-	23.24	-	29.24	-	23.98	
11a	6Mbps	1	64	5320	-	16.75	-	30.20	-	23.24	-	29.24	-	23.98	
HT20	MCS0	1	52	5260	-	17.80	-	34.85	-	23.50	-	29.50	-	23.98	
HT20	MCS0	1	60	5300	-	17.80	-	33.45	-	23.50	-	29.50	-	23.98	
HT20	MCS0	1	64	5320	-	17.75	-	30.35	-	23.49	-	29.49	-	23.98	
HT40	MCS0	1	54	5270	-	36.60	-	61.56	-	23.98	-	30.00	-	23.98	
HT40	MCS0	1	62	5310	-	36.50	-	46.62	-	23.98	-	30.00	-	23.98	
VHT80	MCS0	1	58	5290	-	77.16	-	81.92	-	23.98	-	30.00	-	23.98	

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TEST RESULTS DATA
Average Power Table

FCC Band II													
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 0	Ant 1	SUM	Ant 0	Ant 1	Ant 0	Ant 1		
11a	6Mbps	1	52	5260	-	18.20		-	23.98	-	3.50	26.99	Pass
11a	6Mbps	1	60	5300	-	18.20		-	23.98	-	3.50	26.99	Pass
11a	6Mbps	1	64	5320	-	18.30		-	23.98	-	3.50	26.99	Pass
HT20	MCS0	1	52	5260	-	18.10		-	23.98	-	3.50	26.99	Pass
HT20	MCS0	1	60	5300	-	18.20		-	23.98	-	3.50	26.99	Pass
HT20	MCS0	1	64	5320	-	18.20		-	23.98	-	3.50	26.99	Pass
HT40	MCS0	1	54	5270	-	18.30		-	23.98	-	3.50	26.99	Pass
HT40	MCS0	1	62	5310	-	16.70		-	23.98	-	3.50	26.99	Pass
VHT20	MCS0	1	52	5260	-	18.00		-	23.98	-	3.50	26.99	Pass
VHT20	MCS0	1	60	5300	-	18.10		-	23.98	-	3.50	26.99	Pass
VHT20	MCS0	1	64	5320	-	18.10		-	23.98	-	3.50	26.99	Pass
VHT40	MCS0	1	54	5270	-	18.10		-	23.98	-	3.50	26.99	Pass
VHT40	MCS0	1	62	5310	-	16.60		-	23.98	-	3.50	26.99	Pass
VHT80	MCS0	1	58	5290	-	15.80		-	23.98	-	3.50	26.99	Pass

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TEST RESULTS DATA
Power Spectral Density

Band II														
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Duty Factor (dB)		Average Power Density (dBm/MHz)		Average PSD Limit (dBm/MHz)		DG (dBi)			Pass /Fail
					Ant 0	Ant 1	Ant 0	Ant 1	Ant 0	Ant 1	Ant 0	Ant 1		
11a	6Mbps	1	52	5260	-	0.00	-	7.36	-	11.00	-	3.50		Pass
11a	6Mbps	1	60	5300	-	0.00	-	7.38	-	11.00	-	3.50		Pass
11a	6Mbps	1	64	5320	-	0.00	-	7.54	-	11.00	-	3.50		Pass
HT20	MCS0	1	52	5260	-	0.00	-	7.25	-	11.00	-	3.50		Pass
HT20	MCS0	1	60	5300	-	0.00	-	7.31	-	11.00	-	3.50		Pass
HT20	MCS0	1	64	5320	-	0.00	-	7.26	-	11.00	-	3.50		Pass
HT40	MCS0	1	54	5270	-	0.00	-	4.17	-	11.00	-	3.50		Pass
HT40	MCS0	1	62	5310	-	0.00	-	2.71	-	11.00	-	3.50		Pass
VHT80	MCS0	1	58	5290	-	0.00	-	-1.45	-	11.00	-	3.50		Pass

TEST RESULTS DATA
26dB and 99% OBW

Band III																
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 0	Ant 1	Ant 0	Ant 1	Ant 0	Ant 1	Ant 0	Ant 1	Ant 0	Ant 1	Ant 0	Ant 1
11a	6Mbps	1	100	5500	-	16.70	-	32.80	-	23.23	-	29.23	-	23.98	----	----
11a	6Mbps	1	116	5580	-	16.80	-	28.28	-	23.25	-	29.25	-	23.98	----	----
11a	6Mbps	1	140	5700	-	16.80	-	31.65	-	23.25	-	29.25	-	23.98	----	----
11a	6Mbps	1	144	5720	-	13.45	-	33.35	-	22.29	-	28.29	-	23.98	-	----
HT20	MCS0	1	100	5500	-	17.85	-	32.10	-	23.52	-	29.52	-	23.98	----	----
HT20	MCS0	1	116	5580	-	17.85	-	32.50	-	23.52	-	29.52	-	23.98	----	----
HT20	MCS0	1	140	5700	-	17.90	-	33.25	-	23.53	-	29.53	-	23.98	----	----
HT20	MCS0	1	144	5720	-	14.00	-	35.70	-	22.46	-	28.46	-	23.98	-	----
HT40	MCS0	1	102	5510	-	36.50	-	59.92	-	23.98	-	30.00	-	23.98	----	----
HT40	MCS0	1	110	5550	-	36.60	-	53.95	-	23.98	-	30.00	-	23.98	----	----
HT40	MCS0	1	134	5670	-	36.80	-	69.09	-	23.98	-	30.00	-	23.98	----	----
HT40	MCS0	1	142	5710	-	33.50	-	65.15	-	23.98	-	30.00	-	23.98	-	----
VHT80	MCS0	1	106	5530	-	77.28	-	81.60	-	23.98	-	30.00	-	23.98	----	----
VHT80	MCS0	1	122	5610	-	77.40	-	121.92	-	23.98	-	30.00	-	23.98	----	----
VHT80	MCS0	1	138	5690	-	73.88	-	121.80	-	23.98	-	30.00	-	23.98	-	----

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TEST RESULTS DATA
Average Power Table

FCC Band III												
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 0	Ant 1	Ant 0	Ant 1	Ant 0	Ant 1		
11a	6Mbps	1	100	5500	-	18.30	-	23.98	-	4.00	26.99	Pass
11a	6Mbps	1	116	5580	-	18.10	-	23.98	-	4.00	26.99	Pass
11a	6Mbps	1	140	5700	-	17.80	-	23.98	-	4.00	26.99	Pass
11a	6Mbps	1	144	5720	-	18.00	-	23.98	-	4.00	26.99	Pass
HT20	MCS0	1	100	5500	-	18.20	-	23.98	-	4.00	26.99	Pass
HT20	MCS0	1	116	5580	-	18.10	-	23.98	-	4.00	26.99	Pass
HT20	MCS0	1	140	5700	-	17.90	-	23.98	-	4.00	26.99	Pass
HT20	MCS0	1	144	5720	-	17.90	-	23.98	-	4.00	26.99	Pass
HT40	MCS0	1	102	5510	-	17.20	-	23.98	-	4.00	26.99	Pass
HT40	MCS0	1	110	5550	-	18.50	-	23.98	-	4.00	26.99	Pass
HT40	MCS0	1	134	5670	-	18.30	-	23.98	-	4.00	26.99	Pass
HT40	MCS0	1	142	5710	-	18.10	-	23.98	-	4.00	26.99	Pass
VHT20	MCS0	1	100	5500	-	18.10	-	23.98	-	4.00	26.99	Pass
VHT20	MCS0	1	116	5580	-	18.00	-	23.98	-	4.00	26.99	Pass
VHT20	MCS0	1	140	5700	-	17.80	-	23.98	-	4.00	26.99	Pass
VHT20	MCS0	1	144	5720	-	17.80	-	23.98	-	4.00	26.99	Pass
VHT40	MCS0	1	102	5510	-	17.10	-	23.98	-	4.00	26.99	Pass
VHT40	MCS0	1	110	5550	-	18.30	-	23.98	-	4.00	26.99	Pass
VHT40	MCS0	1	134	5670	-	18.10	-	23.98	-	4.00	26.99	Pass
VHT40	MCS0	1	142	5710	-	17.90	-	23.98	-	4.00	26.99	Pass
VHT80	MCS0	1	106	5530	-	16.10	-	23.98	-	4.00	26.99	Pass
VHT80	MCS0	1	122	5610	-	17.90	-	23.98	-	4.00	26.99	Pass
VHT80	MCS0	1	138	5690	-	17.90	-	23.98	-	4.00	26.99	Pass

Report Number : FR8O2938-01D

TEST RESULTS DATA
Power Spectral Density

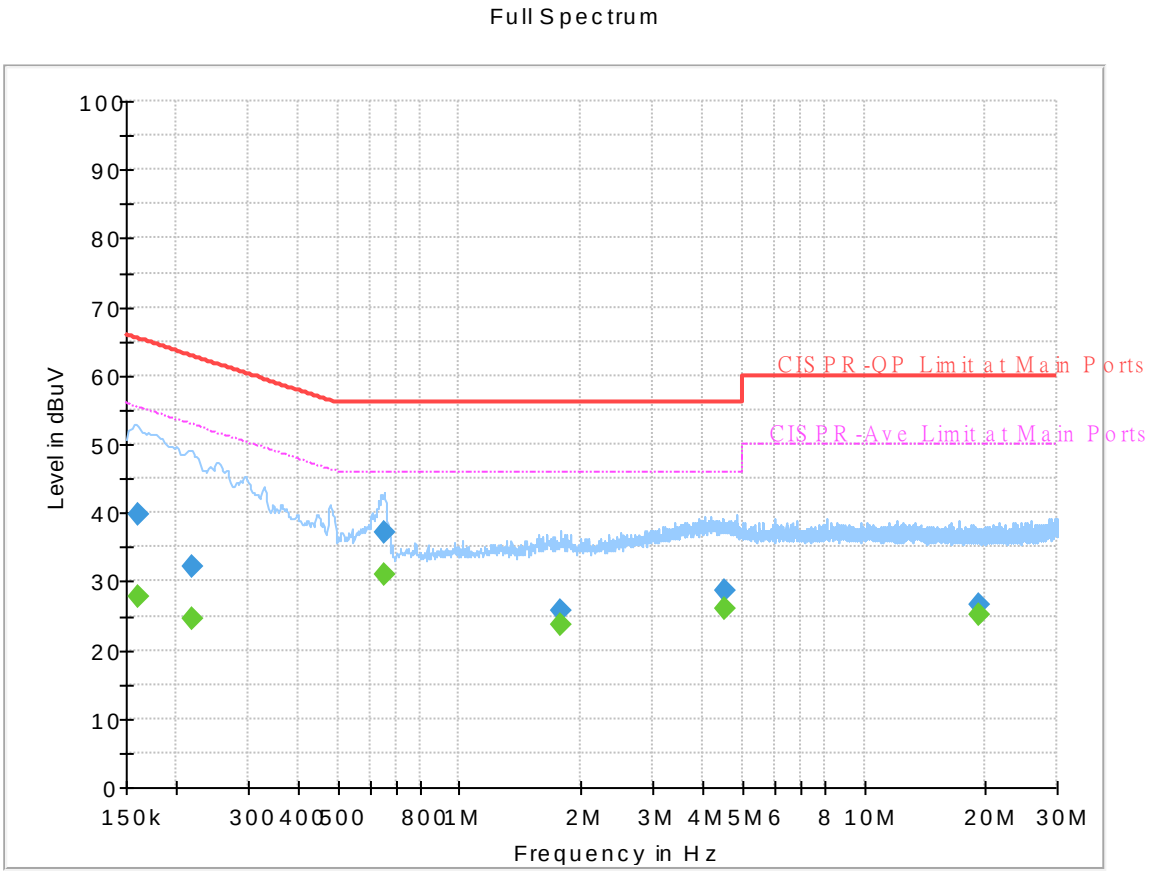
Band III														
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Duty Factor (dB)		Average Power Density (dBm/MHz)		Average PSD Limit (dBm/MHz)		DG (dBi)			Pass /Fail
					Ant 0	Ant 1	Ant 0	Ant 1	Ant 0	Ant 1	Ant 0	Ant 1		
11a	6Mbps	1	100	5500	-	0.00	-	7.95	-	11.00	-	4.00		Pass
11a	6Mbps	1	116	5580	-	0.00	-	7.67	-	11.00	-	4.00		Pass
11a	6Mbps	1	140	5700	-	0.00	-	7.08	-	11.00	-	4.00		Pass
11a	6Mbps	1	144	5720	-	0.00	-	7.16	-	11.00	-	4.00		Pass
HT20	MCS0	1	100	5500	-	0.00	-	7.81	-	11.00	-	4.00		Pass
HT20	MCS0	1	116	5580	-	0.00	-	7.80	-	11.00	-	4.00		Pass
HT20	MCS0	1	140	5700	-	0.00	-	6.87	-	11.00	-	4.00		Pass
HT20	MCS0	1	144	5720	-	0.00	-	6.79	-	11.00	-	4.00		Pass
HT40	MCS0	1	102	5510	-	0.00	-	3.65	-	11.00	-	4.00		Pass
HT40	MCS0	1	110	5550	-	0.00	-	4.53	-	11.00	-	4.00		Pass
HT40	MCS0	1	134	5670	-	0.00	-	4.01	-	11.00	-	4.00		Pass
HT40	MCS0	1	142	5710	-	0.00	-	3.74	-	11.00	-	4.00		Pass
VHT80	MCS0	1	106	5530	-	0.00	-	-0.86	-	11.00	-	4.00		Pass
VHT80	MCS0	1	122	5610	-	0.00	-	0.83	-	11.00	-	4.00		Pass
VHT80	MCS0	1	138	5690	-	0.00	-	0.28	-	11.00	-	4.00		Pass

Appendix B. AC Conducted Emission Test Results

Test Engineer :	Jimmy Chang	**Temperature :**	24~26℃
		Relative Humidity :	50~53%

EUT Information

Report NO :	8O2938-01
Test Mode :	Mode 1
Test Voltage :	120Vac/60Hz
Phase :	Line

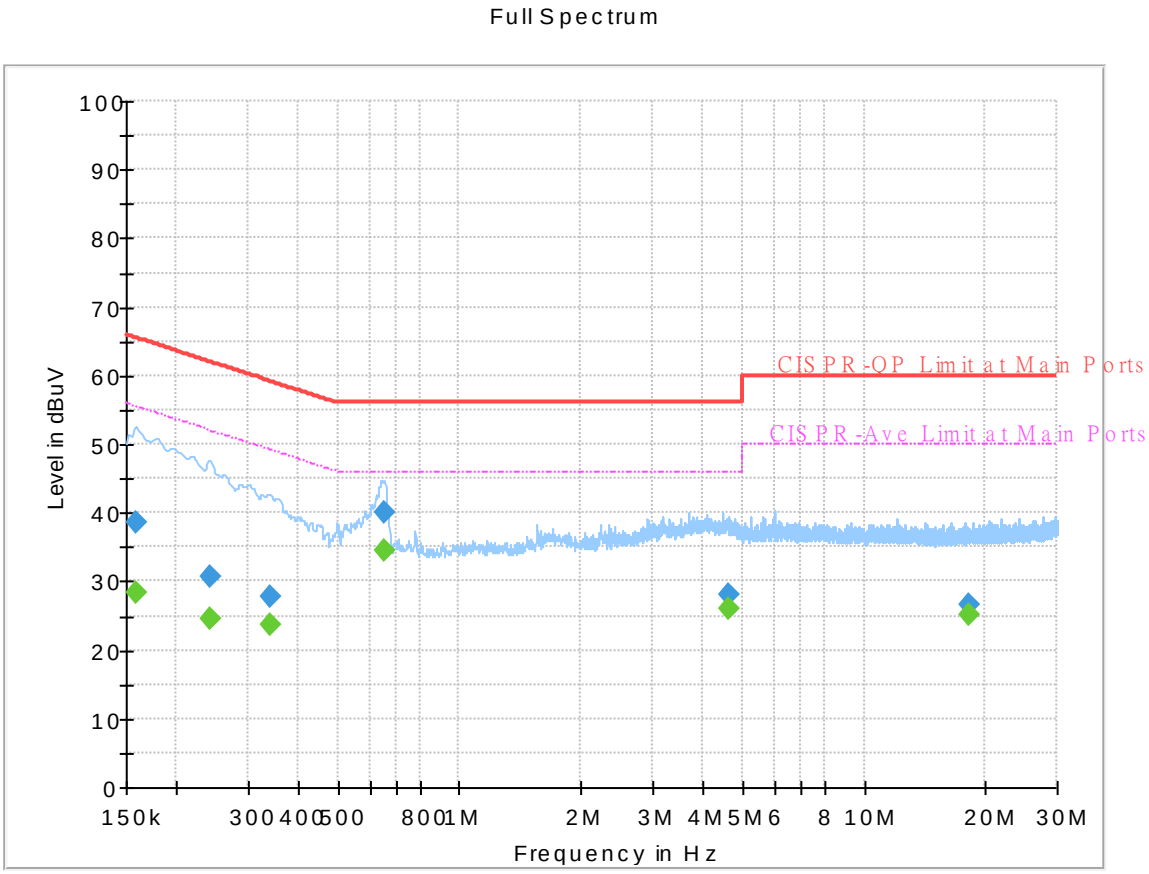


Final_Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.161250	39.62	---	65.40	25.78	L1	OFF	19.5
0.161250	---	27.66	55.40	27.74	L1	OFF	19.5
0.217500	32.03	---	62.91	30.88	L1	OFF	19.5
0.217500	---	24.66	52.91	28.25	L1	OFF	19.5
0.651750	37.08	---	56.00	18.92	L1	OFF	19.6
0.651750	---	30.99	46.00	15.01	L1	OFF	19.6
1.779000	25.66	---	56.00	30.34	L1	OFF	19.6
1.779000	---	23.62	46.00	22.38	L1	OFF	19.6
4.535250	28.58	---	56.00	27.42	L1	OFF	19.7
4.535250	---	26.11	46.00	19.89	L1	OFF	19.7
19.322250	26.61	---	60.00	33.39	L1	OFF	20.2
19.322250	---	25.12	50.00	24.88	L1	OFF	20.2

EUT Information

Report NO :	8O2938-01
Test Mode :	Mode 1
Test Voltage :	120Vac/60Hz
Phase :	Neutral



Final_Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.159000	38.55	---	65.52	26.97	N	OFF	19.5
0.159000	---	28.45	55.52	27.07	N	OFF	19.5
0.242250	30.74	---	62.02	31.28	N	OFF	19.5
0.242250	---	24.45	52.02	27.57	N	OFF	19.5
0.339000	27.73	---	59.23	31.50	N	OFF	19.5
0.339000	---	23.74	49.23	25.49	N	OFF	19.5
0.649500	40.06	---	56.00	15.94	N	OFF	19.6
0.649500	---	34.39	46.00	11.61	N	OFF	19.6
4.620750	28.16	---	56.00	27.84	N	OFF	19.7
4.620750	---	26.03	46.00	19.97	N	OFF	19.7
18.132000	26.75	---	60.00	33.25	N	OFF	20.2
18.132000	---	25.20	50.00	24.80	N	OFF	20.2

Appendix C. Radiated Spurious Emission

Test Engineer :	Caster Liao, Jacky Hung, Andy Yang, and Lewis Ho	Temperature :	22~25°C
		Relative Humidity :	50~54%

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		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11a CH 36 5180MHz		5147.42	60.74	-13.26	74	45.28	31.63	13.21	29.38	266	252	P	H
		5150	47.82	-6.18	54	32.37	31.63	13.2	29.38	266	252	A	H
	*	5180	110.55	-	-	95.17	31.64	13.13	29.39	266	252	P	H
	*	5180	103.33	-	-	87.95	31.64	13.13	29.39	266	252	A	H
		5148.2	62.19	-11.81	74	46.74	31.63	13.2	29.38	325	55	P	V
		5150	49.62	-4.38	54	34.17	31.63	13.2	29.38	325	55	A	V
	*	5180	113.46	-	-	98.08	31.64	13.13	29.39	325	55	P	V
	*	5180	105.51	-	-	90.13	31.64	13.13	29.39	325	55	A	V
802.11a CH 44 5220MHz		5130.78	57.29	-16.71	74	41.79	31.63	13.25	29.38	254	257	P	H
		5135.98	45.58	-8.42	54	30.1	31.63	13.23	29.38	254	257	A	H
	*	5220	111.25	-	-	95.93	31.64	13.07	29.39	254	257	P	H
	*	5220	104.04	-	-	88.72	31.64	13.07	29.39	254	257	A	H
		5386.36	55.98	-18.02	74	40.76	31.68	12.96	29.42	254	257	P	H
		5350.24	43.87	-10.13	54	28.63	31.67	12.98	29.41	254	257	A	H
		5139.1	58.87	-15.13	74	43.39	31.63	13.23	29.38	287	46	P	V
		5148.98	46.63	-7.37	54	31.18	31.63	13.2	29.38	287	46	A	V
	*	5220	113.83	-	-	98.51	31.64	13.07	29.39	287	46	P	V
	*	5220	105.89	-	-	90.57	31.64	13.07	29.39	287	46	A	V
		5350.8	55.94	-18.06	74	40.7	31.67	12.98	29.41	287	46	P	V
		5351.08	43.77	-10.23	54	28.53	31.67	12.98	29.41	287	46	A	V

802.11a CH 48 5240MHz		5125.84	56.24	-17.76	74	40.73	31.63	13.26	29.38	260	255	P	H
		5138.32	44.97	-9.03	54	29.49	31.63	13.23	29.38	260	255	A	H
	*	5240	112.18	-	-	96.87	31.65	13.05	29.39	260	255	P	H
	*	5240	104.23	-	-	88.92	31.65	13.05	29.39	260	255	A	H
		5398.96	55.38	-18.62	74	40.17	31.68	12.95	29.42	260	255	P	H
		5352.2	43.51	-10.49	54	28.27	31.67	12.98	29.41	260	255	A	H
		5133.38	57.94	-16.06	74	42.45	31.63	13.24	29.38	286	46	P	V
		5149.76	46.07	-7.93	54	30.62	31.63	13.2	29.38	286	46	A	V
	*	5240	113.1	-	-	97.79	31.65	13.05	29.39	286	46	P	V
	*	5240	105.57	-	-	90.26	31.65	13.05	29.39	286	46	A	V
		5350	55.52	-18.48	74	40.28	31.67	12.98	29.41	286	46	P	V
		5352.2	43.96	-10.04	54	28.72	31.67	12.98	29.41	286	46	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	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	45.69	-22.51	68.2	49.53	39.48	17.48	60.8	100	0	P	H
		15540	44.2	-29.8	74	45.57	37.89	21.51	60.77	100	0	P	H
		10360	45.55	-22.65	68.2	49.39	39.48	17.48	60.8	100	0	P	V
		15540	43.71	-30.29	74	45.08	37.89	21.51	60.77	100	0	P	V
802.11a CH 44 5220MHz		10440	45.12	-23.08	68.2	48.89	39.6	17.55	60.92	100	0	P	H
		15660	43.22	-30.78	74	44.81	37.55	21.53	60.67	100	0	P	H
		10440	45.29	-22.91	68.2	49.06	39.6	17.55	60.92	100	0	P	V
		15660	43.23	-30.77	74	44.82	37.55	21.53	60.67	100	0	P	V
802.11a CH 48 5240MHz		10480	46.37	-21.83	68.2	50.09	39.67	17.58	60.97	100	0	P	H
		15720	44.14	-29.86	74	45.84	37.38	21.54	60.62	100	0	P	H
		10480	45.8	-22.4	68.2	49.52	39.67	17.58	60.97	100	0	P	V
		15720	43.89	-30.11	74	45.59	37.38	21.54	60.62	100	0	P	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	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 36 5180MHz		5149.5	62.42	-11.58	74	46.97	31.63	13.2	29.38	259	254	P	H
		5150	49.8	-4.2	54	34.35	31.63	13.2	29.38	259	254	A	H
	*	5180	110.93	-	-	95.55	31.64	13.13	29.39	259	254	P	H
	*	5180	103.59	-	-	88.21	31.64	13.13	29.39	259	254	A	H
		5148.46	63.98	-10.02	74	48.53	31.63	13.2	29.38	287	49	P	V
		5150	51.07	-2.93	54	35.62	31.63	13.2	29.38	287	49	A	V
	*	5180	112.55	-	-	97.17	31.64	13.13	29.39	287	49	P	V
	*	5180	105.19	-	-	89.81	31.64	13.13	29.39	287	49	A	V
802.11n HT20 CH 44 5220MHz		5149.24	57.65	-16.35	74	42.2	31.63	13.2	29.38	270	265	P	H
		5149.24	45.32	-8.68	54	29.87	31.63	13.2	29.38	270	265	A	H
	*	5220	111.36	-	-	96.04	31.64	13.07	29.39	270	265	P	H
	*	5220	103.55	-	-	88.23	31.64	13.07	29.39	270	265	A	H
		5453.84	54.64	-19.36	74	39.24	31.69	13.14	29.43	270	265	P	H
		5350	43.67	-10.33	54	28.43	31.67	12.98	29.41	270	265	A	H
		5131.82	57.49	-16.51	74	42	31.63	13.24	29.38	287	41	P	V
		5148.46	46.07	-7.93	54	30.62	31.63	13.2	29.38	287	41	A	V
	*	5220	112.74	-	-	97.42	31.64	13.07	29.39	287	41	P	V
	*	5220	105.4	-	-	90.08	31.64	13.07	29.39	287	41	A	V
		5355.56	54.92	-19.08	74	39.68	31.67	12.98	29.41	287	41	P	V
		5350.24	43.58	-10.42	54	28.34	31.67	12.98	29.41	287	41	A	V

802.11n HT20 CH 48 5240MHz		5139.88	56.85	-17.15	74	41.38	31.63	13.22	29.38	262	264	P	H
		5146.9	44.89	-9.11	54	29.43	31.63	13.21	29.38	262	264	A	H
	*	5240	111.95	-	-	96.64	31.65	13.05	29.39	262	264	P	H
	*	5240	104.11	-	-	88.8	31.65	13.05	29.39	262	264	A	H
		5350.52	55.45	-18.55	74	40.21	31.67	12.98	29.41	262	264	P	H
		5351.64	44.05	-9.95	54	28.81	31.67	12.98	29.41	262	264	A	H
		5114.4	57.75	-16.25	74	42.21	31.62	13.29	29.37	282	51	P	V
		5148.46	46.29	-7.71	54	30.84	31.63	13.2	29.38	282	51	A	V
	*	5240	112.8	-	-	97.49	31.65	13.05	29.39	282	51	P	V
	*	5240	105.54	-	-	90.23	31.65	13.05	29.39	282	51	A	V
		5418.84	54.33	-19.67	74	39.05	31.68	13.02	29.42	282	51	P	V
		5351.36	43.87	-10.13	54	28.63	31.67	12.98	29.41	282	51	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	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		10360	46.17	-22.03	68.2	50.01	39.48	17.48	60.8	100	0	P	H
HT20		15540	43.61	-30.39	74	44.98	37.89	21.51	60.77	100	0	P	H
CH 36		10360	45.17	-23.03	68.2	49.01	39.48	17.48	60.8	100	0	P	V
5180MHz		15540	44.4	-29.6	74	45.77	37.89	21.51	60.77	100	0	P	V
802.11n		10440	45.93	-22.27	68.2	49.7	39.6	17.55	60.92	100	0	P	H
HT20		15660	43.54	-30.46	74	45.13	37.55	21.53	60.67	100	0	P	H
CH 44		10440	45.66	-22.54	68.2	49.43	39.6	17.55	60.92	100	0	P	V
5220MHz		15660	43.55	-30.45	74	45.14	37.55	21.53	60.67	100	0	P	V
802.11n		10480	46.07	-22.13	68.2	49.79	39.67	17.58	60.97	100	0	P	H
HT20		15720	43.87	-30.13	74	45.57	37.38	21.54	60.62	100	0	P	H
CH 48		10480	46.89	-21.31	68.2	50.61	39.67	17.58	60.97	100	0	P	V
5240MHz		15720	43.77	-30.23	74	45.47	37.38	21.54	60.62	100	0	P	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	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 CH 38 5190MHz		5149.76	67.38	-6.62	74	51.93	31.63	13.2	29.38	255	254	P	H
		5150	51.25	-2.75	54	35.8	31.63	13.2	29.38	255	254	A	H
	*	5190	105.98	-	-	90.63	31.64	13.1	29.39	255	254	P	H
	*	5190	98.51	-	-	83.16	31.64	13.1	29.39	255	254	A	H
		5371.8	55.4	-18.6	74	40.17	31.67	12.97	29.41	255	254	P	H
		5350.24	42.6	-11.4	54	27.36	31.67	12.98	29.41	255	254	A	H
		5149.76	67.74	-6.26	74	52.29	31.63	13.2	29.38	285	48	P	V
		5150	52.46	-1.54	54	37.01	31.63	13.2	29.38	285	48	A	V
	*	5190	107.9	-	-	92.55	31.64	13.1	29.39	285	48	P	V
	*	5190	100	-	-	84.65	31.64	13.1	29.39	285	48	A	V
		5388.6	54.96	-19.04	74	39.74	31.68	12.96	29.42	285	48	P	V
		5350.24	42.75	-11.25	54	27.51	31.67	12.98	29.41	285	48	A	V
802.11n HT40 CH 46 5230MHz		5132.34	57.04	-16.96	74	41.55	31.63	13.24	29.38	262	263	P	H
		5150	45.52	-8.48	54	30.07	31.63	13.2	29.38	262	263	A	H
	*	5230	108.45	-	-	93.13	31.65	13.06	29.39	262	263	P	H
	*	5230	100.49	-	-	85.17	31.65	13.06	29.39	262	263	A	H
		5350.24	55.54	-18.46	74	40.3	31.67	12.98	29.41	262	263	P	H
		5350	43.87	-10.13	54	28.63	31.67	12.98	29.41	262	263	A	H
		5148.72	58.55	-15.45	74	43.1	31.63	13.2	29.38	282	47	P	V
		5150	47.32	-6.68	54	31.87	31.63	13.2	29.38	282	47	A	V
	*	5230	110.7	-	-	95.38	31.65	13.06	29.39	282	47	P	V
	*	5230	102.42	-	-	87.1	31.65	13.06	29.39	282	47	A	V
		5411	55.48	-18.52	74	40.23	31.68	12.99	29.42	282	47	P	V
		5350.52	43.96	-10.04	54	28.72	31.67	12.98	29.41	282	47	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	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		10380	45.76	-22.44	68.2	49.58	39.51	17.5	60.83	100	0	P	H
HT40		15570	44.56	-29.44	74	45.98	37.8	21.52	60.74	100	0	P	H
CH 38		10380	46.28	-21.92	68.2	50.1	39.51	17.5	60.83	100	0	P	V
5190MHz		15570	43.98	-30.02	74	45.4	37.8	21.52	60.74	100	0	P	V
802.11n		10460	46.43	-21.77	68.2	50.17	39.64	17.56	60.94	100	0	P	H
HT40		15690	44.19	-29.81	74	45.83	37.47	21.54	60.65	100	0	P	H
CH 46		10460	47.16	-21.04	68.2	50.9	39.64	17.56	60.94	100	0	P	V
5230MHz		15690	44.7	-29.3	74	46.34	37.47	21.54	60.65	100	0	P	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	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		5147.42	62.28	-11.72	74	46.82	31.63	13.21	29.38	264	301	P	H
		5150	52.21	-1.79	54	36.76	31.63	13.2	29.38	264	301	A	H
	*	5210	102.25	-	-	86.93	31.64	13.07	29.39	264	301	P	H
	*	5210	94.34	-	-	79.02	31.64	13.07	29.39	264	301	A	H
		5417.72	53.44	-20.56	74	38.17	31.68	13.01	29.42	264	301	P	H
		5350.52	42.22	-11.78	54	26.98	31.67	12.98	29.41	264	301	A	H
		5138.84	68.66	-5.34	74	53.18	31.63	13.23	29.38	293	41	P	V
		5149.5	53.3	-0.7	54	37.85	31.63	13.2	29.38	293	41	A	V
	*	5210	105.08	-	-	89.76	31.64	13.07	29.39	293	41	P	V
	*	5210	95.53	-	-	80.21	31.64	13.07	29.39	293	41	A	V
		5360.04	53.66	-20.34	74	38.42	31.67	12.98	29.41	293	41	P	V
		5350.24	42.69	-11.31	54	27.45	31.67	12.98	29.41	293	41	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	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		10520	45.68	-22.52	68.2	49.37	39.72	17.61	61.02	100	0	P	H
VHT80		15780	44.3	-29.7	74	46.1	37.22	21.56	60.58	100	0	P	H
CH 42		10520	45.07	-23.13	68.2	48.76	39.72	17.61	61.02	100	0	P	V
5210MHz		15780	44.12	-29.88	74	45.92	37.22	21.56	60.58	100	0	P	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 Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 52 5260MHz		5075.82	54.58	-19.42	74	38.95	31.62	13.38	29.37	266	264	P	H
		5148.24	43.86	-10.14	54	28.41	31.63	13.2	29.38	266	264	A	H
	*	5260	111.89	-	-	96.6	31.65	13.04	29.4	266	264	P	H
	*	5260	104.1	-	-	88.81	31.65	13.04	29.4	266	264	A	H
		5378.64	54.23	-19.77	74	39.01	31.68	12.96	29.42	266	264	P	H
		5350.56	44.09	-9.91	54	28.85	31.67	12.98	29.41	266	264	A	H
		5127.16	56.43	-17.57	74	40.93	31.63	13.25	29.38	371	57	P	V
		5139.74	45.27	-8.73	54	29.8	31.63	13.22	29.38	371	57	A	V
	*	5260	112.63	-	-	97.34	31.65	13.04	29.4	371	57	P	V
	*	5260	104.52	-	-	89.23	31.65	13.04	29.4	371	57	A	V
		5396.88	54.79	-19.21	74	39.58	31.68	12.95	29.42	371	57	P	V
		5350.08	43.79	-10.21	54	28.55	31.67	12.98	29.41	371	57	A	V
802.11a CH 60 5300MHz		5043.86	54.32	-19.68	74	38.63	31.61	13.45	29.37	260	265	P	H
		5136.34	43.25	-10.75	54	27.77	31.63	13.23	29.38	260	265	A	H
	*	5300	113.53	-	-	98.26	31.66	13.01	29.4	260	265	P	H
	*	5300	105.4	-	-	90.13	31.66	13.01	29.4	260	265	A	H
		5381.76	55.24	-18.76	74	40.02	31.68	12.96	29.42	260	265	P	H
		5350.08	45.45	-8.55	54	30.21	31.67	12.98	29.41	260	265	A	H
		5149.6	55.79	-18.21	74	40.34	31.63	13.2	29.38	348	56	P	V
		5149.94	44.53	-9.47	54	29.08	31.63	13.2	29.38	348	56	A	V
	*	5300	112.96	-	-	97.69	31.66	13.01	29.4	348	56	P	V
	*	5300	104.8	-	-	89.53	31.66	13.01	29.4	348	56	A	V
		5422.56	54.93	-19.07	74	39.64	31.68	13.03	29.42	348	56	P	V
		5350.08	44.89	-9.11	54	29.65	31.67	12.98	29.41	348	56	A	V

802.11a CH 64 5320MHz	*	5320	113.48	-	-	98.22	31.66	13	29.4	246	263	P	H
	*	5320	105.25	-	-	89.99	31.66	13	29.4	246	263	A	H
		5350.24	60.8	-13.2	74	45.56	31.67	12.98	29.41	246	263	P	H
		5350.08	49.48	-4.52	54	34.24	31.67	12.98	29.41	246	263	A	H
	*	5320	112.6	-	-	97.34	31.66	13	29.4	327	58	P	V
	*	5320	104.88	-	-	89.62	31.66	13	29.4	327	58	A	V
		5352	60.98	-13.02	74	45.74	31.67	12.98	29.41	327	58	P	V
		5350.08	48.51	-5.49	54	33.27	31.67	12.98	29.41	327	58	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 2 5250~5350MHz

WIFI 802.11a (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 52 5260MHz		10520	45.65	-22.55	68.2	49.34	39.72	17.61	61.02	100	0	P	H
		15780	44.1	-29.9	74	45.9	37.22	21.56	60.58	100	0	P	H
		10520	45.7	-22.5	68.2	49.39	39.72	17.61	61.02	100	0	P	V
		15780	43.34	-30.66	74	45.14	37.22	21.56	60.58	100	0	P	V
802.11a CH 60 5300MHz		10600	46.17	-27.83	74	49.79	39.8	17.68	61.1	100	0	P	H
		15900	42.96	-31.04	74	44.98	36.88	21.58	60.48	100	0	P	H
		10600	46.37	-27.63	74	49.99	39.8	17.68	61.1	100	0	P	V
		15900	43.4	-30.6	74	45.42	36.88	21.58	60.48	100	0	P	V
802.11a CH 64 5320MHz		10640	46.7	-27.3	74	50.3	39.84	17.7	61.14	100	0	P	H
		15960	43.01	-30.99	74	45.14	36.71	21.59	60.43	100	0	P	H
		10640	46.16	-27.84	74	49.76	39.84	17.7	61.14	100	0	P	V
		15960	43.29	-30.71	74	45.42	36.71	21.59	60.43	100	0	P	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	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 52 5260MHz		5143.14	54.12	-19.88	74	38.65	31.63	13.22	29.38	255	263	P	H
		5148.58	44.15	-9.85	54	28.7	31.63	13.2	29.38	255	263	A	H
	*	5260	112.66	-	-	97.37	31.65	13.04	29.4	255	263	P	H
	*	5260	104.21	-	-	88.92	31.65	13.04	29.4	255	263	A	H
		5355.36	54.82	-19.18	74	39.58	31.67	12.98	29.41	255	263	P	H
		5351.28	44.66	-9.34	54	29.42	31.67	12.98	29.41	255	263	A	H
		5148.24	56.1	-17.9	74	40.65	31.63	13.2	29.38	284	44	P	V
		5148.58	45.43	-8.57	54	29.98	31.63	13.2	29.38	284	44	A	V
	*	5260	113.97	-	-	98.68	31.65	13.04	29.4	284	44	P	V
	*	5260	105.1	-	-	89.81	31.65	13.04	29.4	284	44	A	V
		5408.4	54.39	-19.61	74	39.15	31.68	12.98	29.42	284	44	P	V
		5350.32	44.36	-9.64	54	29.12	31.67	12.98	29.41	284	44	A	V
802.11n HT20 CH 60 5300MHz		5056.1	54.31	-19.69	74	38.64	31.61	13.43	29.37	258	264	P	H
		5149.26	43.3	-10.7	54	27.85	31.63	13.2	29.38	258	264	A	H
	*	5300	113.96	-	-	98.69	31.66	13.01	29.4	258	264	P	H
	*	5300	105.16	-	-	89.89	31.66	13.01	29.4	258	264	A	H
		5355.12	56.21	-17.79	74	40.97	31.67	12.98	29.41	258	264	P	H
		5350.08	45.49	-8.51	54	30.25	31.67	12.98	29.41	258	264	A	H
		5115.26	54.19	-19.81	74	38.66	31.62	13.28	29.37	296	42	P	V
		5149.6	44.54	-9.46	54	29.09	31.63	13.2	29.38	296	42	A	V
	*	5300	113.55	-	-	98.28	31.66	13.01	29.4	296	42	P	V
	*	5300	104.73	-	-	89.46	31.66	13.01	29.4	296	42	A	V
		5452.08	55.3	-18.7	74	39.91	31.69	13.13	29.43	296	42	P	V
		5350.08	45.14	-8.86	54	29.9	31.67	12.98	29.41	296	42	A	V

802.11n HT20 CH 64 5320MHz	*	5320	112.91	-	-	97.65	31.66	13	29.4	272	267	P	H
	*	5320	104.8	-	-	89.54	31.66	13	29.4	272	267	A	H
		5351.52	60.71	-13.29	74	45.47	31.67	12.98	29.41	272	267	P	H
		5350.08	50	-4	54	34.76	31.67	12.98	29.41	272	267	A	H
	*	5320	112.84	-	-	97.58	31.66	13	29.4	283	42	P	V
	*	5320	104.12	-	-	88.86	31.66	13	29.4	283	42	A	V
		5351.52	61.96	-12.04	74	46.72	31.67	12.98	29.41	283	42	P	V
		5350.08	49.25	-4.75	54	34.01	31.67	12.98	29.41	283	42	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 HT20 (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 52 5260MHz		10520	46.42	-21.78	68.2	50.11	39.72	17.61	61.02	100	0	P	H
		15780	43.65	-30.35	74	45.45	37.22	21.56	60.58	100	0	P	H
		10520	46.38	-21.82	68.2	50.07	39.72	17.61	61.02	100	0	P	V
		15780	44.58	-29.42	74	46.38	37.22	21.56	60.58	100	0	P	V
802.11n HT20 CH 60 5300MHz		10600	46.62	-27.38	74	50.24	39.8	17.68	61.1	100	0	P	H
		15900	43.92	-30.08	74	45.94	36.88	21.58	60.48	100	0	P	H
		10600	46.43	-27.57	74	50.05	39.8	17.68	61.1	100	0	P	V
		15900	42.84	-31.16	74	44.86	36.88	21.58	60.48	100	0	P	V
802.11n HT20 CH 64 5320MHz		10640	48.53	-25.47	74	52.13	39.84	17.7	61.14	100	0	P	H
		15960	43.59	-30.41	74	45.72	36.71	21.59	60.43	100	0	P	H
		10640	56.03	-17.97	74	59.63	39.84	17.7	61.14	213	299	P	V
		10640	45.48	-8.52	54	49.08	39.84	17.7	61.14	213	299	A	V
		15960	45.8	-28.2	74	47.93	36.71	21.59	60.43	100	0	P	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	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		5109.48	54.52	-19.48	74	38.97	31.62	13.3	29.37	263	264	P	H
		5149.6	43.82	-10.18	54	28.37	31.63	13.2	29.38	263	264	A	H
	*	5270	109.99	-	-	94.71	31.65	13.03	29.4	263	264	P	H
	*	5270	101.44	-	-	86.16	31.65	13.03	29.4	263	264	A	H
		5352.24	55.8	-18.2	74	40.56	31.67	12.98	29.41	263	264	P	H
		5350.32	45.03	-8.97	54	29.79	31.67	12.98	29.41	263	264	A	H
		5088.4	55.02	-18.98	74	39.42	31.62	13.35	29.37	351	54	P	V
		5149.94	45.44	-8.56	54	29.99	31.63	13.2	29.38	351	54	A	V
	*	5270	110.19	-	-	94.91	31.65	13.03	29.4	351	54	P	V
	*	5270	101.61	-	-	86.33	31.65	13.03	29.4	351	54	A	V
		5367.12	55.47	-18.53	74	40.24	31.67	12.97	29.41	351	54	P	V
		5350.32	44.86	-9.14	54	29.62	31.67	12.98	29.41	351	54	A	V
802.11n HT40 CH 62 5310MHz		5093.84	54.67	-19.33	74	39.09	31.62	13.33	29.37	268	266	P	H
		5146.2	43.04	-10.96	54	27.58	31.63	13.21	29.38	268	266	A	H
	*	5310	108.69	-	-	93.42	31.66	13.01	29.4	268	266	P	H
	*	5310	100.04	-	-	84.77	31.66	13.01	29.4	268	266	A	H
		5350.8	65.98	-8.02	74	50.74	31.67	12.98	29.41	268	266	P	H
		5350.08	53.45	-0.55	54	38.21	31.67	12.98	29.41	268	266	A	H
		5119	54.89	-19.11	74	39.38	31.62	13.27	29.38	344	55	P	V
		5149.26	43.95	-10.05	54	28.5	31.63	13.2	29.38	344	55	A	V
	*	5310	108.75	-	-	93.48	31.66	13.01	29.4	344	55	P	V
	*	5310	99.76	-	-	84.49	31.66	13.01	29.4	344	55	A	V
		5353.2	66.05	-7.95	74	50.81	31.67	12.98	29.41	344	55	P	V
		5350.08	53.05	-0.95	54	37.81	31.67	12.98	29.41	344	55	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	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		10540	46.79	-21.41	68.2	50.46	39.74	17.63	61.04	100	0	P	H
		15810	43.76	-30.24	74	45.61	37.13	21.57	60.55	100	0	P	H
		10540	47.4	-20.8	68.2	51.07	39.74	17.63	61.04	100	0	P	V
		15810	43.71	-30.29	74	45.56	37.13	21.57	60.55	100	0	P	V
802.11n HT40 CH 62 5310MHz		10620	46.94	-27.06	74	50.55	39.82	17.69	61.12	100	0	P	H
		15930	42.64	-31.36	74	44.71	36.8	21.59	60.46	100	0	P	H
		10620	47.54	-26.46	74	51.15	39.82	17.69	61.12	100	0	P	V
		15930	42.76	-31.24	74	44.83	36.8	21.59	60.46	100	0	P	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	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		5105.4	54.27	-19.73	74	38.71	31.62	13.31	29.37	263	265	P	H
		5149.6	43.6	-10.4	54	28.15	31.63	13.2	29.38	263	265	A	H
	*	5290	103.92	-	-	88.64	31.66	13.02	29.4	263	265	P	H
	*	5290	95.76	-	-	80.48	31.66	13.02	29.4	263	265	A	H
		5353.68	65.89	-8.11	74	50.65	31.67	12.98	29.41	263	265	P	H
		5350.08	51.57	-2.43	54	36.33	31.67	12.98	29.41	263	265	A	H
		5075.14	54.95	-19.05	74	39.32	31.62	13.38	29.37	348	54	P	V
		5149.94	44.66	-9.34	54	29.21	31.63	13.2	29.38	348	54	A	V
	*	5290	103.62	-	-	88.34	31.66	13.02	29.4	348	54	P	V
	*	5290	95.66	-	-	80.38	31.66	13.02	29.4	348	54	A	V
		5354.64	66.22	-7.78	74	50.98	31.67	12.98	29.41	348	54	P	V
		5350.32	50.83	-3.17	54	35.59	31.67	12.98	29.41	348	54	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	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		10580	46.55	-21.65	68.2	50.19	39.78	17.66	61.08	100	0	P	H
VHT80		15870	43.24	-30.76	74	45.2	36.96	21.58	60.5	100	0	P	H
CH 58		10580	46.6	-21.6	68.2	50.24	39.78	17.66	61.08	100	0	P	V
5290MHz		15870	43.67	-30.33	74	45.63	36.96	21.58	60.5	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 - 5470~5725MHz

WIFI 802.11a (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		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11a CH 100 5500MHz		5359.12	55.58	-18.42	74	40.34	31.67	12.98	29.41	267	278	P	H
		5469.2	61.05	-7.15	68.2	45.59	31.69	13.2	29.43	267	278	P	H
		5459.44	45.5	-8.5	54	30.08	31.69	13.16	29.43	267	278	A	H
	*	5500	110.52	-	-	94.94	31.7	13.31	29.43	267	278	P	H
	*	5500	102.59	-	-	87.01	31.7	13.31	29.43	267	278	A	H
		5456.4	57.65	-16.35	74	42.24	31.69	13.15	29.43	325	58	P	V
		5469.68	62.76	-5.44	68.2	47.3	31.69	13.2	29.43	325	58	P	V
		5460	46.96	-7.04	54	31.54	31.69	13.16	29.43	325	58	A	V
	*	5500	112.98	-	-	97.4	31.7	13.31	29.43	325	58	P	V
	*	5500	104.84	-	-	89.26	31.7	13.31	29.43	325	58	A	V
802.11a CH 116 5580MHz		5459.44	54.68	-19.32	74	39.26	31.69	13.16	29.43	252	281	P	H
		5465.44	54.57	-13.63	68.2	39.13	31.69	13.18	29.43	252	281	P	H
		5459.92	43.61	-10.39	54	28.19	31.69	13.16	29.43	252	281	A	H
	*	5580	112.67	-	-	96.73	31.83	13.59	29.48	252	281	P	H
	*	5580	104.81	-	-	88.87	31.83	13.59	29.48	252	281	A	H
		5731.295	55.01	-13.19	68.2	38.49	32.07	14.01	29.56	252	281	P	H
		5458.24	54.59	-19.41	74	39.17	31.69	13.16	29.43	330	57	P	V
		5465.2	54.93	-13.27	68.2	39.49	31.69	13.18	29.43	330	57	P	V
		5459.92	44.57	-9.43	54	29.15	31.69	13.16	29.43	330	57	A	V
	*	5580	113.02	-	-	97.08	31.83	13.59	29.48	330	57	P	V
	*	5580	105.09	-	-	89.15	31.83	13.59	29.48	330	57	A	V
		5726.255	55.15	-13.05	68.2	38.63	32.06	14	29.54	330	57	P	V

802.11a CH 140 5700MHz	*	5700	113.71	-	-	97.29	32.02	13.93	29.53	265	285	P	H
	*	5700	105.9	-	-	89.48	32.02	13.93	29.53	265	285	A	H
		5726.44	66.37	-1.83	68.2	49.85	32.06	14	29.54	265	285	P	H
	*	5700	111.07	-	-	94.65	32.02	13.93	29.53	335	48	P	V
	*	5700	104.95	-	-	88.53	32.02	13.93	29.53	335	48	A	V
		5725.16	63.8	-4.4	68.2	47.28	32.06	14	29.54	335	48	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 - 5470~5725MHz

WIFI 802.11a (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 100 5500MHz		11000	49.69	-24.31	74	53	40.2	17.99	61.5	100	0	P	H
		16500	45.45	-22.75	68.2	43.97	38.9	22.28	59.7	100	0	P	H
		11000	51.77	-22.23	74	55.08	40.2	17.99	61.5	213	285	P	V
		11000	44.68	-9.32	54	47.99	40.2	17.99	61.5	213	285	A	V
		16500	45.71	-22.49	68.2	44.23	38.9	22.28	59.7	100	0	P	V
802.11a CH 116 5580MHz		11160	54.97	-19.03	74	58.22	40.1	18.12	61.47	235	176	P	H
		11160	45.65	-8.35	54	48.9	40.1	18.12	61.47	235	176	A	H
		16740	47.06	-21.14	68.2	43.78	39.76	22.6	59.08	100	0	P	H
		11160	57.03	-16.97	74	60.28	40.1	18.12	61.47	100	0	P	V
		11160	47.09	-6.91	54	50.34	40.1	18.12	61.47	227	14	A	V
		16740	46.56	-21.64	68.2	43.28	39.76	22.6	59.08	100	0	P	V
802.11a CH 140 5700MHz		11400	55.17	-18.83	74	58.33	39.96	18.3	61.42	211	211	P	H
		11400	46.03	-7.97	54	49.19	39.96	18.3	61.42	211	211	A	H
		17100	47.63	-20.57	68.2	41.6	41.08	23.09	58.14	100	0	P	H
		11400	62.46	-11.54	74	65.62	39.96	18.3	61.42	215	16	P	V
		11400	52.22	-1.78	54	55.38	39.96	18.3	61.42	215	16	A	V
		17100	48.16	-20.04	68.2	42.13	41.08	23.09	58.14	100	0	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 HT20 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 100 5500MHz		5444.72	56.25	-17.75	74	40.87	31.69	13.11	29.42	269	271	P	H
		5469.68	60.83	-7.37	68.2	45.37	31.69	13.2	29.43	269	271	P	H
		5460	45.81	-8.19	54	30.39	31.69	13.16	29.43	269	271	A	H
	*	5500	112.06	-	-	96.48	31.7	13.31	29.43	269	271	P	H
	*	5500	103.79	-	-	88.21	31.7	13.31	29.43	269	271	A	H
		5459.76	56.5	-17.5	74	41.08	31.69	13.16	29.43	360	61	P	V
		5466.96	63.56	-4.64	68.2	48.11	31.69	13.19	29.43	360	61	P	V
		5460	46.26	-7.74	54	30.84	31.69	13.16	29.43	360	61	A	V
	*	5500	112.88	-	-	97.3	31.7	13.31	29.43	360	61	P	V
	*	5500	104.69	-	-	89.11	31.7	13.31	29.43	360	61	A	V
802.11n HT20 CH 116 5580MHz		5431.36	54.19	-19.81	74	38.86	31.69	13.06	29.42	276	283	P	H
		5465.2	53.55	-14.65	68.2	38.11	31.69	13.18	29.43	276	283	P	H
		5459.92	43.22	-10.78	54	27.8	31.69	13.16	29.43	276	283	A	H
	*	5580	111.84	-	-	95.9	31.83	13.59	29.48	276	283	P	H
	*	5580	103.91	-	-	87.97	31.83	13.59	29.48	276	283	A	H
		5756.18	54.59	-13.61	68.2	37.97	32.11	14.08	29.57	276	283	P	H
		5423.2	54.17	-19.83	74	38.88	31.68	13.03	29.42	347	60	P	V
		5467.6	55.1	-13.1	68.2	39.65	31.69	13.19	29.43	347	60	P	V
		5459.92	43.92	-10.08	54	28.5	31.69	13.16	29.43	347	60	A	V
	*	5580	112.79	-	-	96.85	31.83	13.59	29.48	347	60	P	V
	*	5580	105.11	-	-	89.17	31.83	13.59	29.48	347	60	A	V
		5744.525	54.82	-13.38	68.2	38.24	32.09	14.05	29.56	347	60	P	V

802.11n HT20 CH 140 5700MHz	*	5700	114.41	-	-	97.99	32.02	13.93	29.53	265	288	P	H
	*	5700	106.25	-	-	89.83	32.02	13.93	29.53	265	288	A	H
		5727	67.44	-0.76	68.2	50.92	32.06	14	29.54	265	288	P	H
	*	5700	111.34	-	-	94.92	32.02	13.93	29.53	389	56	P	V
	*	5700	102.99	-	-	86.57	32.02	13.93	29.53	389	56	A	V
		5725.08	64.23	-3.97	68.2	47.71	32.06	14	29.54	389	56	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 HT20 (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 100 5500MHz		11000	48.67	-25.33	74	51.98	40.2	17.99	61.5	100	0	P	H
		16500	45.15	-23.05	68.2	43.67	38.9	22.28	59.7	100	0	P	H
		11000	54.8	-19.2	74	58.11	40.2	17.99	61.5	244	115	P	V
		11000	45.34	-8.66	54	48.65	40.2	17.99	61.5	244	115	A	V
		16500	45.41	-22.79	68.2	43.93	38.9	22.28	59.7	100	0	P	V
802.11n HT20 CH 116 5580MHz		11158	49.94	-24.06	74	53.19	40.11	18.11	61.47	100	0	P	H
		16740	46.98	-21.22	68.2	43.7	39.76	22.6	59.08	100	0	P	H
		11160	56.56	-17.44	74	59.81	40.1	18.12	61.47	225	14	P	V
		11160	45.06	-8.94	54	48.31	40.1	18.12	61.47	225	14	A	V
		16740	46.95	-21.25	68.2	43.67	39.76	22.6	59.08	100	0	P	V
802.11n HT20 CH 140 5700MHz		11400	54.63	-19.37	74	57.79	39.96	18.3	61.42	400	175	P	H
		11400	45.28	-8.72	54	48.44	39.96	18.3	61.42	400	175	A	H
		17100	47.6	-20.6	68.2	41.57	41.08	23.09	58.14	100	0	P	H
		11400	61.65	-12.35	74	64.81	39.96	18.3	61.42	223	15	P	V
		11400	50.88	-3.12	54	54.04	39.96	18.3	61.42	223	15	A	V
		17100	47.3	-20.9	68.2	41.27	41.08	23.09	58.14	100	0	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 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 CH 102 5510MHz		5455.12	60.05	-13.95	74	44.64	31.69	13.15	29.43	266	276	P	H
		5469.28	66.88	-1.32	68.2	51.42	31.69	13.2	29.43	266	276	P	H
		5459.68	50.19	-3.81	54	34.77	31.69	13.16	29.43	266	276	P	H
	*	5510	107.45	-	-	91.83	31.72	13.34	29.44	266	276	P	H
	*	5510	99.41	-	-	83.79	31.72	13.34	29.44	266	276	A	H
		5753.975	55.97	-12.23	68.2	39.34	32.11	14.08	29.56	266	276	P	H
		5459.92	60.75	-13.25	74	45.33	31.69	13.16	29.43	270	57	P	V
		5469.52	67.1	-1.1	68.2	51.64	31.69	13.2	29.43	270	57	P	V
		5459.92	50.47	-3.53	54	35.05	31.69	13.16	29.43	270	57	A	V
	*	5510	108	-	-	92.38	31.72	13.34	29.44	270	57	P	V
	*	5510	99.95	-	-	84.33	31.72	13.34	29.44	270	57	A	V
		5754.605	54.56	-13.64	68.2	37.93	32.11	14.08	29.56	270	57	P	V
802.11n HT40 CH 110 5550MHz		5418.16	55.35	-18.65	74	40.08	31.68	13.01	29.42	258	278	P	H
		5464.24	56.23	-11.97	68.2	40.79	31.69	13.18	29.43	258	278	P	H
		5459.92	44.8	-9.2	54	29.38	31.69	13.16	29.43	258	278	A	H
	*	5550	109.54	-	-	93.73	31.78	13.48	29.45	258	278	P	H
	*	5550	101.04	-	-	85.23	31.78	13.48	29.45	258	278	A	H
		5756.81	55.48	-12.72	68.2	38.86	32.11	14.08	29.57	258	278	P	H
		5429.44	55.64	-18.36	74	40.32	31.69	13.05	29.42	393	52	P	V
		5466.16	56.47	-11.73	68.2	41.03	31.69	13.18	29.43	393	52	P	V
		5459.92	45.29	-8.71	54	29.87	31.69	13.16	29.43	393	52	A	V
	*	5550	110.81	-	-	95	31.78	13.48	29.45	393	52	P	V
	*	5550	102.11	-	-	86.3	31.78	13.48	29.45	393	52	A	V
		5743.265	54.92	-13.28	68.2	38.34	32.09	14.05	29.56	393	52	P	V

802.11n HT40 CH 134 5670MHz		5458.85	54.16	-19.84	74	38.74	31.69	13.16	29.43	273	287	P	H
		5467.25	52.35	-15.85	68.2	36.9	31.69	13.19	29.43	273	287	P	H
		5459.2	42.74	-11.26	54	27.32	31.69	13.16	29.43	273	287	A	H
	*	5670	110.47	-	-	94.17	31.97	13.85	29.52	273	287	P	H
	*	5670	102.68	-	-	86.38	31.97	13.85	29.52	273	287	A	H
		5725.625	67.13	-1.07	68.2	50.61	32.06	14	29.54	273	287	P	H
		5380.8	54.76	-19.24	74	39.54	31.68	12.96	29.42	399	56	P	V
		5463.75	54.06	-14.14	68.2	38.62	31.69	13.18	29.43	399	56	P	V
		5456.05	42.85	-11.15	54	27.44	31.69	13.15	29.43	399	56	A	V
	*	5670	108.83	-	-	92.53	31.97	13.85	29.52	399	56	P	V
	*	5670	100.38	-	-	84.08	31.97	13.85	29.52	399	56	A	V
		5727.725	60.86	-7.34	68.2	44.34	32.06	14	29.54	399	56	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	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 102 5510MHz		11020	47.48	-26.52	74	50.79	40.19	18	61.5	100	0	P	H
		16530	44.8	-23.4	68.2	43.09	39.01	22.32	59.62	100	0	P	H
		11020	49.35	-24.65	74	52.66	40.19	18	61.5	100	0	P	V
		16530	46.02	-22.18	68.2	44.31	39.01	22.32	59.62	100	0	P	V
802.11n HT40 CH 110 5550MHz		11100	48.74	-25.26	74	52.01	40.14	18.07	61.48	100	0	P	H
		16650	46.55	-21.65	68.2	43.94	39.44	22.48	59.31	100	0	P	H
		11100	54.36	-19.64	74	57.63	40.14	18.07	61.48	274	112	P	V
		11100	43.44	-10.56	54	46.71	40.14	18.07	61.48	274	112	A	V
		16650	45.82	-22.38	68.2	43.21	39.44	22.48	59.31	100	0	P	V
802.11n HT40 CH 134 5670MHz		11340	53.64	-20.36	74	56.81	40	18.26	61.43	210	266	P	H
		11340	42.02	-11.98	54	45.19	40	18.26	61.43	210	266	A	H
		17010	47.94	-20.26	68.2	42.61	40.74	22.96	58.37	100	0	P	H
		11340	58.38	-15.62	74	61.55	40	18.26	61.43	232	17	P	V
		11340	47.67	-6.33	54	50.84	40	18.26	61.43	232	17	A	V
		17010	47.9	-20.3	68.2	42.57	40.74	22.96	58.37	100	0	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 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80 CH 106 5530MHz		5453.2	63.45	-10.55	74	48.05	31.69	13.14	29.43	259	276	P	H
		5464.96	66.73	-1.47	68.2	51.29	31.69	13.18	29.43	259	276	P	H
		5459.92	52.04	-1.96	54	36.62	31.69	13.16	29.43	259	276	A	H
	*	5530	103.19	-	-	87.48	31.75	13.41	29.45	259	276	P	H
	*	5530	94.19	-	-	78.48	31.75	13.41	29.45	259	276	A	H
		5755.55	54.02	-14.18	68.2	37.39	32.11	14.08	29.56	259	276	P	H
		5457.04	64.52	-9.48	74	49.11	31.69	13.15	29.43	340	61	P	V
		5466.4	67.46	-0.74	68.2	52.01	31.69	13.19	29.43	340	61	P	V
		5459.92	52.46	-1.54	54	37.04	31.69	13.16	29.43	340	61	A	V
	*	5530	105.15	-	-	89.44	31.75	13.41	29.45	340	61	P	V
	*	5530	96.03	-	-	80.32	31.75	13.41	29.45	340	61	A	V
		5733.5	54.58	-13.62	68.2	38.05	32.07	14.02	29.56	340	61	P	V
802.11ac VHT80 CH 122 5610MHz		5453.6	53.88	-20.12	74	38.48	31.69	13.14	29.43	248	288	P	H
		5468.65	53.12	-15.08	68.2	37.67	31.69	13.19	29.43	248	288	P	H
		5459.9	43.78	-10.22	54	28.36	31.69	13.16	29.43	248	288	A	H
	*	5610	106.64	-	-	90.56	31.88	13.69	29.49	248	288	P	H
	*	5610	98.15	-	-	82.07	31.88	13.69	29.49	248	288	A	H
		5727.55	61.1	-7.1	68.2	44.58	32.06	14	29.54	248	288	P	H
		5459.55	55.69	-18.31	74	40.27	31.69	13.16	29.43	384	52	P	V
		5464.8	55.21	-12.99	68.2	39.77	31.69	13.18	29.43	384	52	P	V
		5459.9	45.1	-8.9	54	29.68	31.69	13.16	29.43	384	52	A	V
	*	5610	106.6	-	-	90.52	31.88	13.69	29.49	384	52	P	V
	*	5610	97.69	-	-	81.61	31.88	13.69	29.49	384	52	A	V
		5726.675	58.9	-9.3	68.2	42.38	32.06	14	29.54	384	52	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	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		11060	46.41	-27.59	74	49.71	40.16	18.03	61.49	100	0	P	H
VHT80		16590	45.18	-23.02	68.2	43.04	39.22	22.39	59.47	100	0	P	H
CH 106		11060	47.16	-26.84	74	50.46	40.16	18.03	61.49	100	0	P	V
5530MHz		16590	45.86	-22.34	68.2	43.72	39.22	22.39	59.47	100	0	P	V
802.11ac		11220	47.97	-26.03	74	51.2	40.07	18.16	61.46	100	0	P	H
VHT80		16830	46.44	-21.76	68.2	42.47	40.09	22.72	58.84	100	0	P	H
CH 122		11220	48.98	-25.02	74	52.21	40.07	18.16	61.46	100	0	P	V
5610MHz		16830	46.39	-21.81	68.2	42.42	40.09	22.72	58.84	100	0	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 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 144 5720MHz		5451.4	53.23	-20.77	74	37.84	31.69	13.13	29.43	252	288	P	H
		5466.22	52.03	-16.17	68.2	36.58	31.69	13.19	29.43	252	288	P	H
		5458.42	42.13	-11.87	54	26.71	31.69	13.16	29.43	252	288	A	H
	*	5720	113.39	-	-	96.9	32.05	13.98	29.54	252	288	P	H
	*	5720	105.73	-	-	89.24	32.05	13.98	29.54	252	288	A	H
		5870.5	55.99	-12.21	68.2	39.36	32.29	13.96	29.62	252	288	P	H
		5450.23	53.54	-20.46	74	38.15	31.69	13.13	29.43	330	54	P	V
		5468.56	53.53	-14.67	68.2	38.08	31.69	13.19	29.43	330	54	P	V
		5457.64	42.4	-11.6	54	26.99	31.69	13.15	29.43	330	54	A	V
	*	5720	111.26	-	-	94.77	32.05	13.98	29.54	330	54	P	V
	*	5720	103.26	-	-	86.77	32.05	13.98	29.54	330	54	A	V
		5944.5	55.09	-13.11	68.2	38.62	32.41	13.72	29.66	330	54	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	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	56.73	-17.27	74	59.87	39.94	18.33	61.41	400	154	P	H
		11440	47.04	-6.96	54	50.18	39.94	18.33	61.41	400	154	A	H
		17160	47.63	-20.57	68.2	41.14	41.31	23.16	57.98	100	0	P	H
		11440	61.38	-12.62	74	64.52	39.94	18.33	61.41	288	15	P	V
		11440	52.01	-1.99	54	55.15	39.94	18.33	61.41	288	15	A	V
		17160	48.1	-20.1	68.2	41.61	41.31	23.16	57.98	100	0	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 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 144 5720MHz		5432.29	53.7	-20.3	74	38.37	31.69	13.06	29.42	266	289	P	H
		5467.78	53.05	-15.15	68.2	37.6	31.69	13.19	29.43	266	289	P	H
		5453.74	42.1	-11.9	54	26.7	31.69	13.14	29.43	266	289	A	H
	*	5720	114.1	-	-	97.61	32.05	13.98	29.54	266	289	P	H
	*	5720	105.87	-	-	89.38	32.05	13.98	29.54	266	289	A	H
		5909.5	55.59	-12.61	68.2	39.04	32.36	13.83	29.64	266	289	P	H
		5381.2	53.81	-20.19	74	38.59	31.68	12.96	29.42	349	55	P	V
		5468.56	52.47	-15.73	68.2	37.02	31.69	13.19	29.43	349	55	P	V
		5459.59	42.41	-11.59	54	26.99	31.69	13.16	29.43	349	55	A	V
	*	5720	110.95	-	-	94.46	32.05	13.98	29.54	349	55	P	V
	*	5720	102.67	-	-	86.18	32.05	13.98	29.54	349	55	A	V
		5891.5	55.77	-12.43	68.2	39.18	32.33	13.89	29.63	349	55	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	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		11440	55.22	-18.78	74	58.36	39.94	18.33	61.41	234	262	P	H
		11440	43.62	-10.38	54	46.76	39.94	18.33	61.41	234	262	A	H
		17160	48.03	-20.17	68.2	41.54	41.31	23.16	57.98	100	0	P	H
		11440	62.31	-11.69	74	65.45	39.94	18.33	61.41	230	16	P	V
		11440	50.64	-3.36	54	53.78	39.94	18.33	61.41	230	16	A	V
		17160	48.8	-19.4	68.2	42.31	41.31	23.16	57.98	100	0	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 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 CH 142 5710MHz		5385.1	53.64	-20.36	74	38.42	31.68	12.96	29.42	262	290	P	H
		5468.95	53.98	-14.22	68.2	38.53	31.69	13.19	29.43	262	290	P	H
		5459.59	42.32	-11.68	54	26.9	31.69	13.16	29.43	262	290	A	H
	*	5710	111.17	-	-	94.71	32.04	13.96	29.54	262	290	P	H
	*	5710	102.79	-	-	86.33	32.04	13.96	29.54	262	290	A	H
		5887.5	56.47	-11.73	68.2	39.87	32.32	13.91	29.63	262	290	P	H
		5406.55	54.03	-19.97	74	38.8	31.68	12.97	29.42	388	58	P	V
		5463.49	53.85	-14.35	68.2	38.41	31.69	13.18	29.43	388	58	P	V
		5459.2	42.69	-11.31	54	27.27	31.69	13.16	29.43	388	58	A	V
	*	5710	108.46	-	-	92	32.04	13.96	29.54	388	58	P	V
	*	5710	100.1	-	-	83.64	32.04	13.96	29.54	388	58	A	V
		5912	55.46	-12.74	68.2	38.92	32.36	13.82	29.64	388	58	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	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		11420	52.34	-21.66	74	55.49	39.95	18.32	61.42	244	265	P	H
		11420	41.58	-12.42	54	44.73	39.95	18.32	61.42	244	265	A	H
		17130	48.23	-19.97	68.2	41.98	41.19	23.12	58.06	100	0	P	H
		11420	57.98	-16.02	74	61.13	39.95	18.32	61.42	242	17	P	V
		11420	46.84	-7.16	54	49.99	39.95	18.32	61.42	242	17	A	V
		17130	47.43	-20.77	68.2	41.18	41.19	23.12	58.06	100	0	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 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80 CH 138 5690MHz		5414.35	53.24	-20.76	74	37.98	31.68	13	29.42	256	290	P	H
		5463.1	53.95	-14.25	68.2	38.52	31.69	13.17	29.43	256	290	P	H
		5457.64	42.46	-11.54	54	27.05	31.69	13.15	29.43	256	290	A	H
	*	5690	107.91	-	-	91.54	32	13.9	29.53	256	290	P	H
	*	5690	99.64	-	-	83.27	32	13.9	29.53	256	290	A	H
		5853	56.13	-12.07	68.2	39.45	32.26	14.02	29.6	256	290	P	H
		5410.06	53.61	-20.39	74	38.36	31.68	12.99	29.42	373	50	P	V
		5467	53.13	-15.07	68.2	37.68	31.69	13.19	29.43	373	50	P	V
		5458.81	42.77	-11.23	54	27.35	31.69	13.16	29.43	373	50	A	V
	*	5690	105.62	-	-	89.25	32	13.9	29.53	373	50	P	V
	*	5690	97.28	-	-	80.91	32	13.9	29.53	373	50	A	V
		5863.25	55.69	-12.51	68.2	39.04	32.28	13.99	29.62	373	50	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	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		11380	48.77	-25.23	74	51.93	39.97	18.29	61.42	100	0	P	H
		17070	46.78	-21.42	68.2	40.98	40.97	23.05	58.22	100	0	P	H
		11380	55	-19	74	58.16	39.97	18.29	61.42	252	18	P	V
		11380	44.24	-9.76	54	47.4	39.97	18.29	61.42	252	18	A	V
		17070	47.76	-20.44	68.2	41.96	40.97	23.05	58.22	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Emission below 1GHz

WIFI 802.11n HT40 (LF @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 LF		73.74	18.45	-21.55	40	36.83	13.07	0.95	32.4	-	-	P	H
		115.59	22.44	-21.06	43.5	36.12	17.52	1.17	32.37	-	-	P	H
		156.36	24.77	-18.73	43.5	38.22	17.38	1.53	32.36	-	-	P	H
		493.9	27.46	-18.54	46	32.51	24.25	3.28	32.58	-	-	P	H
		682.2	28.54	-17.46	46	30.6	26.42	4.08	32.56	-	-	P	H
		861.4	31.58	-14.42	46	30.16	28.77	4.66	32.01	100	0	P	H
		48.63	24.51	-15.49	40	40.24	15.9	0.8	32.43	-	-	P	V
		120.72	23.04	-20.46	43.5	36.48	17.73	1.2	32.37	-	-	P	V
		177.96	23.91	-19.59	43.5	39.11	15.53	1.62	32.35	-	-	P	V
		470.1	31.05	-14.95	46	36.66	23.74	3.21	32.56	100	0	P	V
		613.6	28.12	-17.88	46	31.15	25.74	3.89	32.66	-	-	P	V
		776	30.24	-15.76	46	30.29	27.91	4.44	32.4	-	-	P	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.	
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

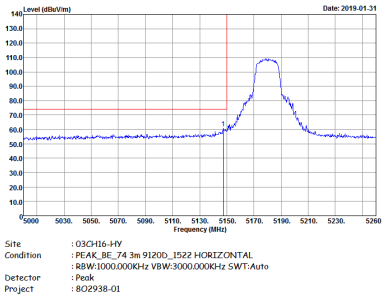
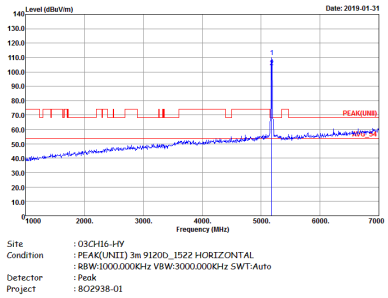
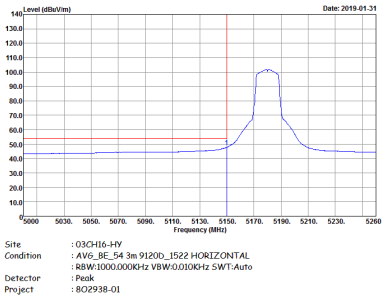
Test Engineer :	Caster Liao, Jacky Hung, Andy Yang, and Lewis Ho	**Temperature :**	22~25°C
		Relative Humidity :	50~54%

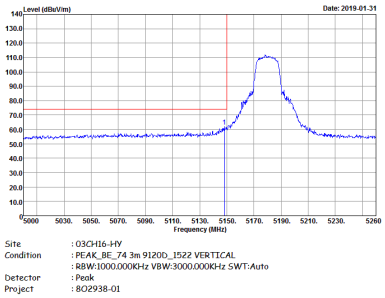
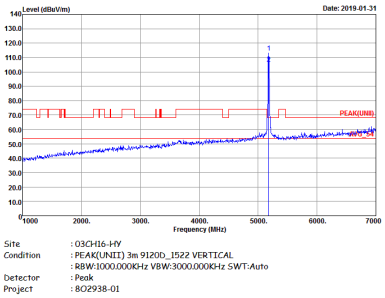
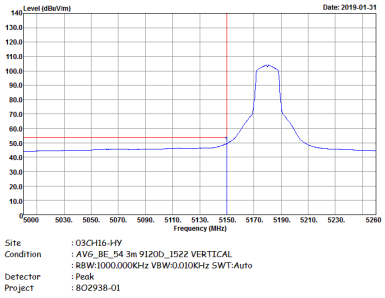
Note symbol

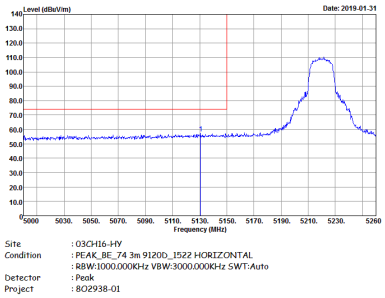
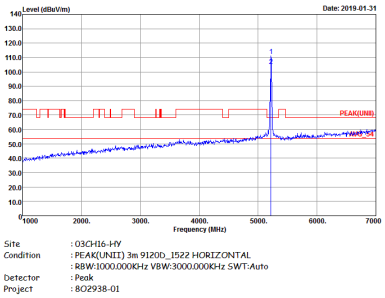
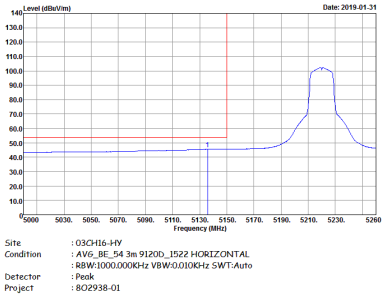
-L	**Low channel location**
-R	**High channel location**

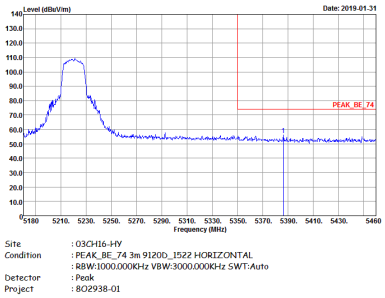
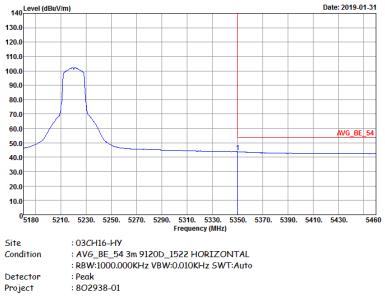
Band 1 - 5150~5250MHz

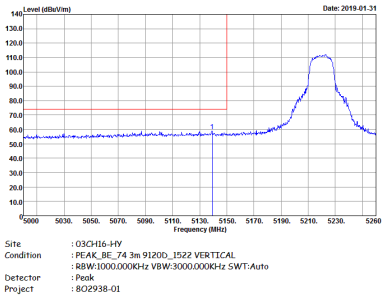
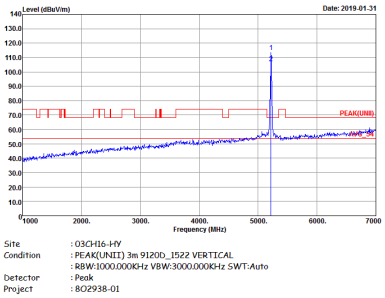
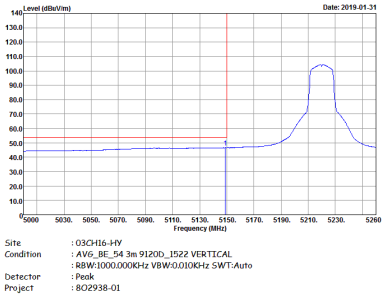
WIFI 802.11a (Band Edge @ 3m)

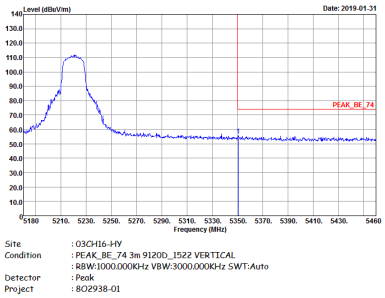
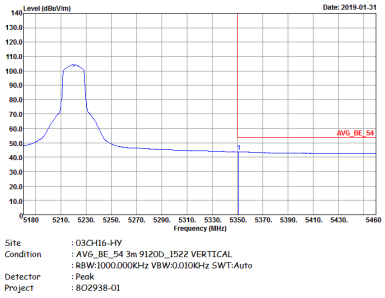
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH36 5180MHz	
1	Horizontal	Fundamental
Peak		
Avg.		Left blank

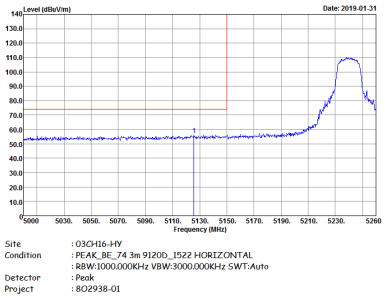
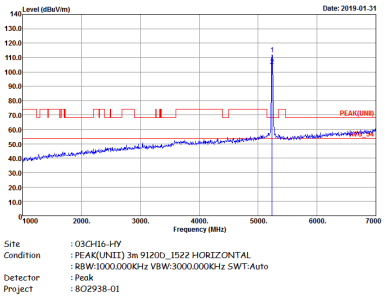
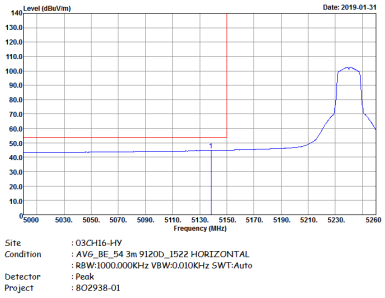
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH36 5180MHz	
1	Vertical	Fundamental
Peak		
Avg.		Left blank

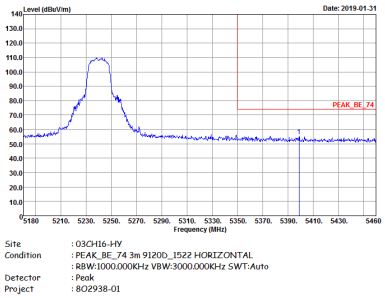
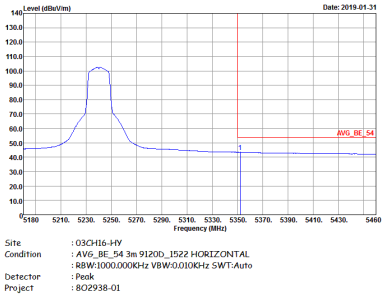
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH44 5220MHz - L	
1	Horizontal	Fundamental
Peak		
Avg.		Left blank

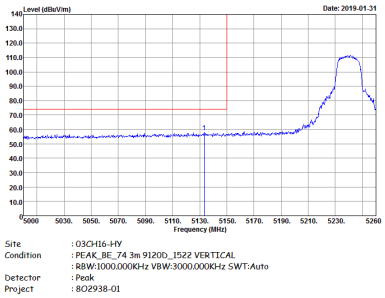
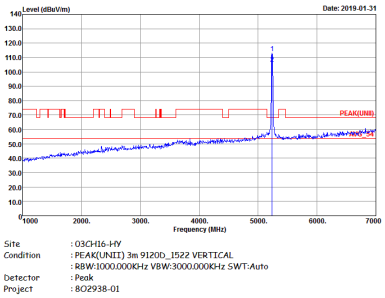
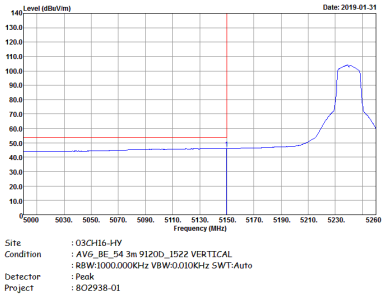
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH44 5220MHz - R	
1	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

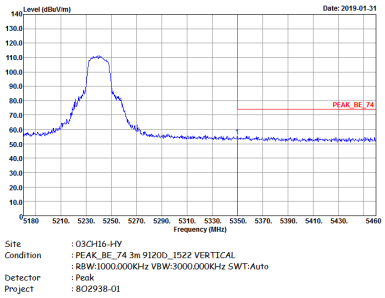
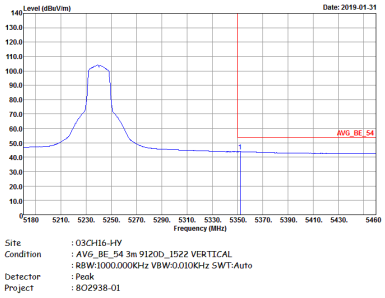
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH44 5220MHz - L	
1	Vertical	Fundamental
Peak		
Avg.		Left blank

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

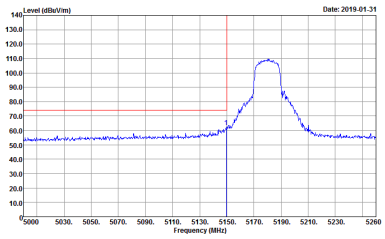
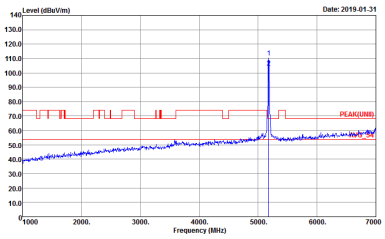
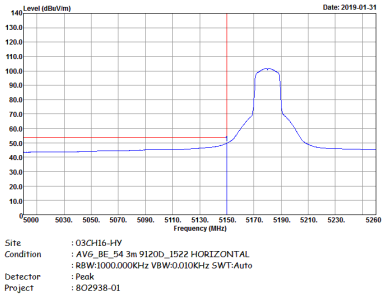
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH48 5240MHz - L	
1	Horizontal	Fundamental
Peak		
Avg.		Left blank

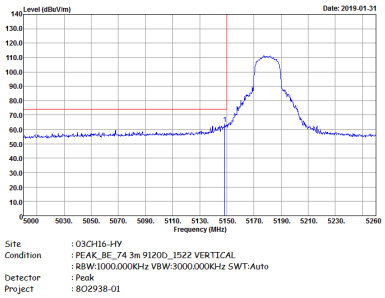
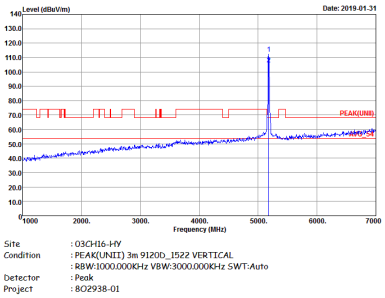
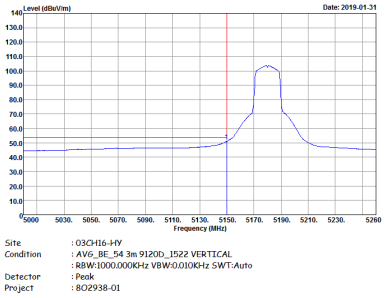
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH48 5240MHz - R	
1	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

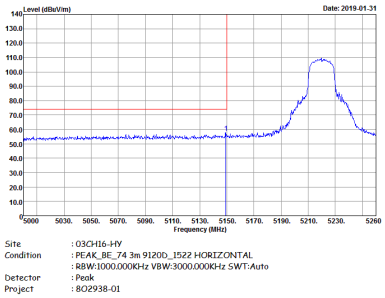
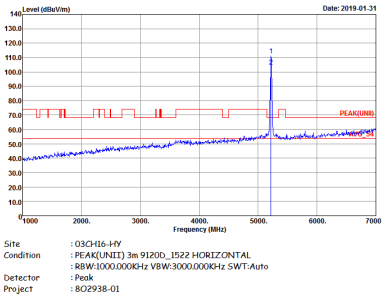
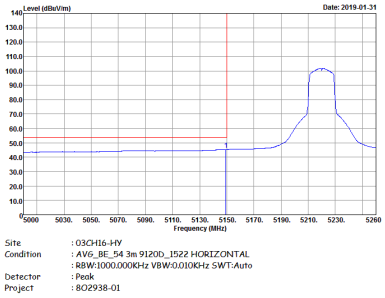
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH48 5240MHz - L	
1	Vertical	Fundamental
Peak		
Avg.		Left blank

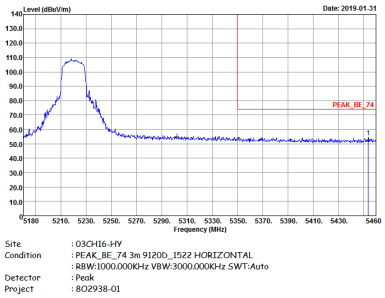
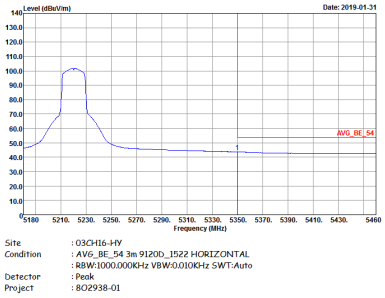
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH48 5240MHz - R	
1	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

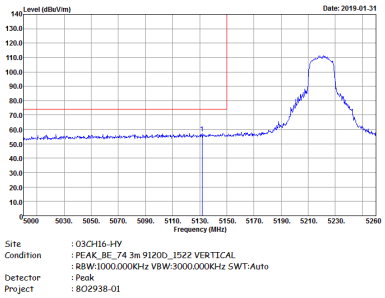
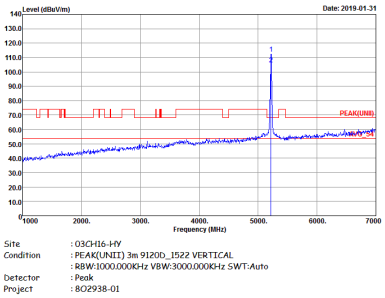
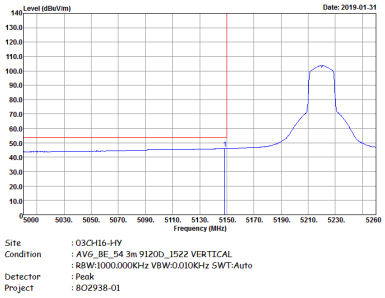
Band 1 5150~5250MHz
WIFI 802.11n HT20 (Band Edge @ 3m)

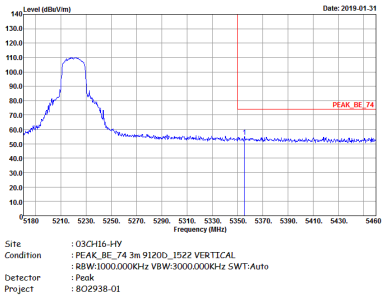
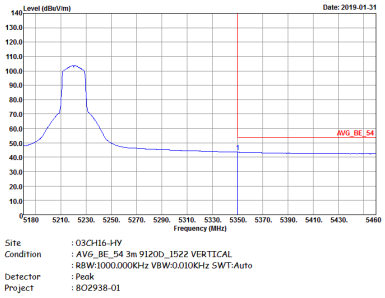
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH36 5180MHz	
1	Horizontal	Fundamental
Peak		
Avg.		Left blank

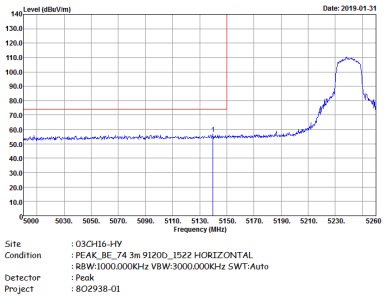
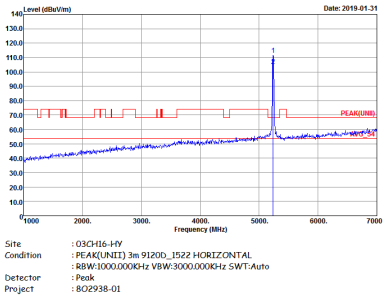
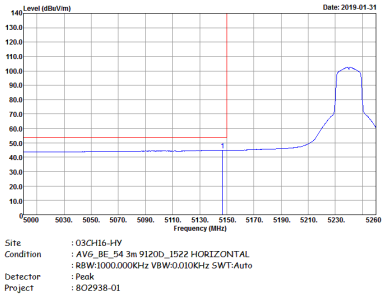
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH36 5180MHz	
1	Vertical	Fundamental
Peak		
Avg.		Left blank

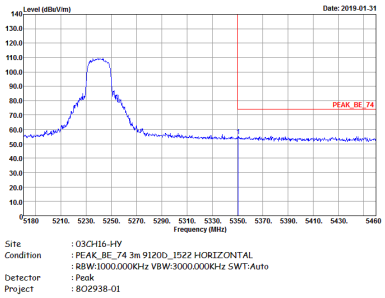
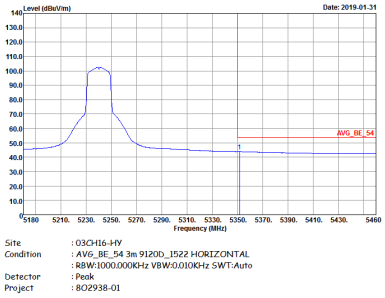
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH44 5220MHz - L	
1	Horizontal	Fundamental
Peak		
Avg.		Left blank

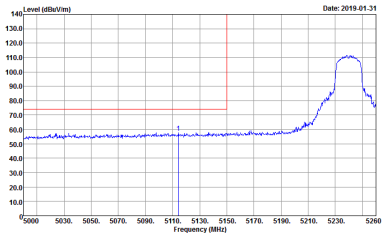
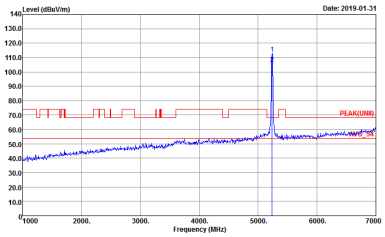
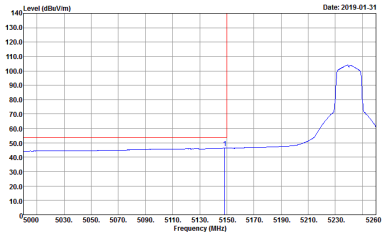
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH44 5220MHz - R	
1	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

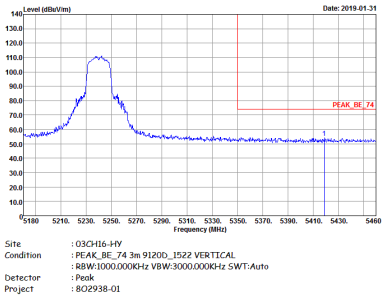
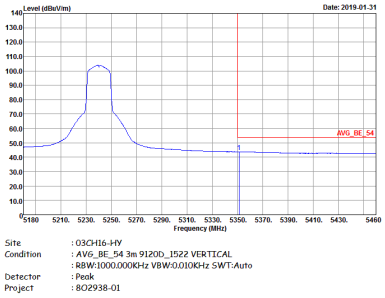
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH44 5220MHz - L	
1	Vertical	Fundamental
Peak		
Avg.		Left blank

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

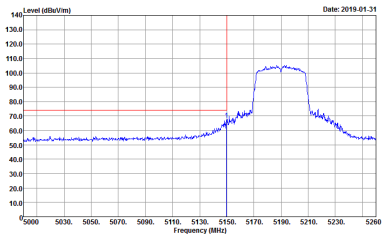
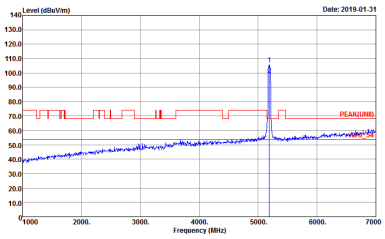
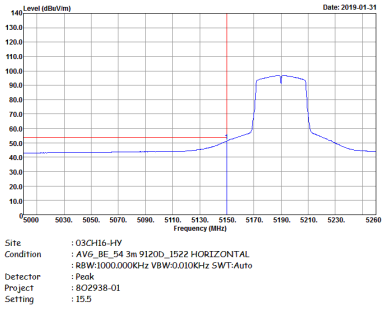
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH48 5240MHz - L	
1	Horizontal	Fundamental
Peak		
Avg.		Left blank

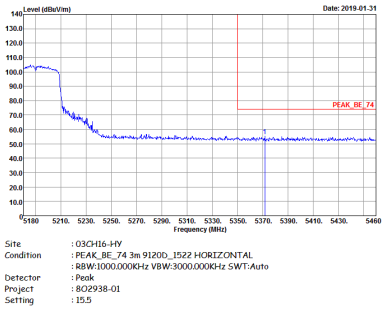
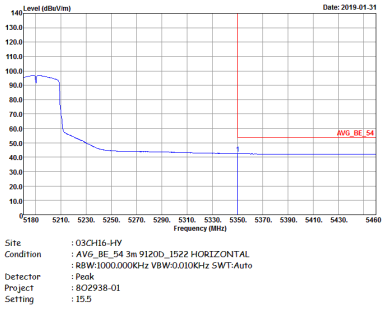
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH48 5240MHz - R	
1	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

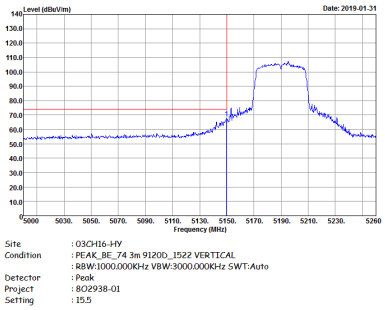
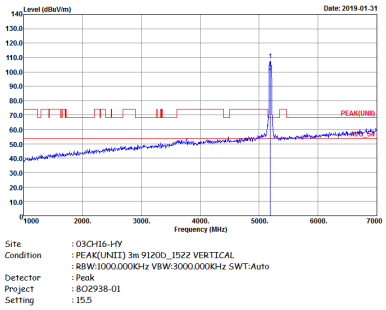
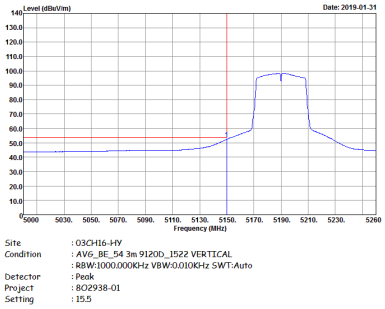
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH48 5240MHz - L	
1	Vertical	Fundamental
Peak	 Site : 03CH16-HY Condition : PEAK_BE_74 3m 9120D_1522 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 8O2938-01	 Site : 03CH16-HY Condition : PEAK(UNII) 3m 9120D_1522 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 8O2938-01
Avg.	 Site : 03CH16-HY Condition : AVG_BE_54 3m 9120D_1522 VERTICAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak Project : 8O2938-01	Left blank

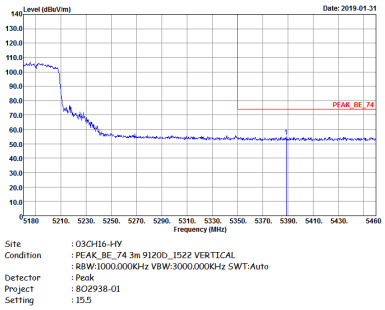
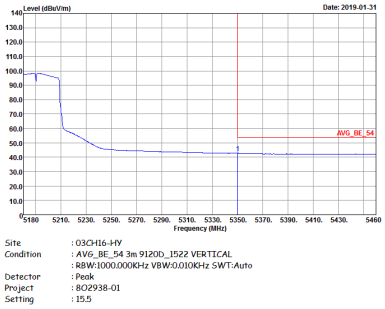
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH48 5240MHz - R	
1	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

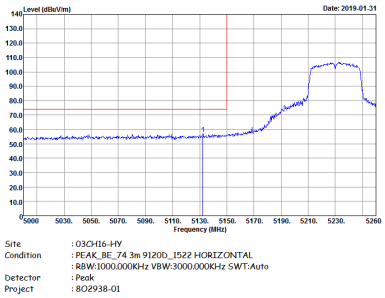
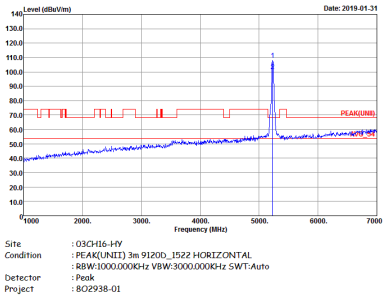
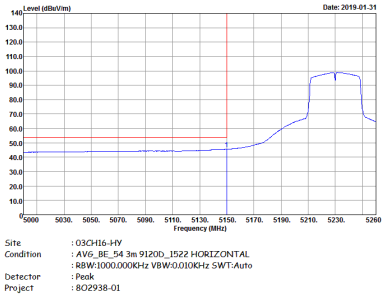
Band 1 5150~5250MHz
WIFI 802.11n HT40 (Band Edge @ 3m)

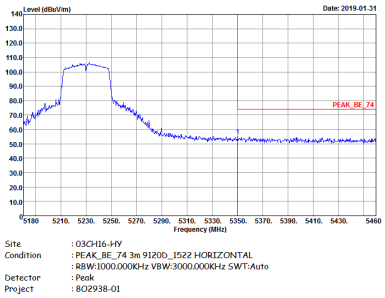
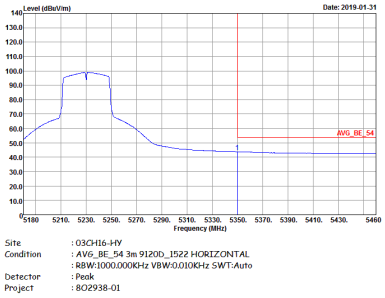
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH38 5190MHz - L	
1	Horizontal	Fundamental
Peak		
Avg.		Left blank

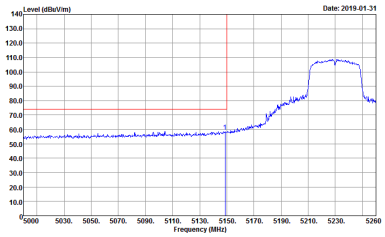
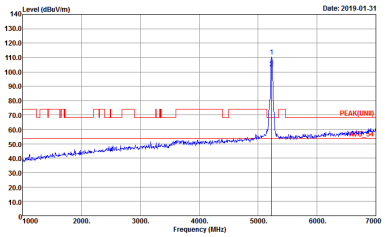
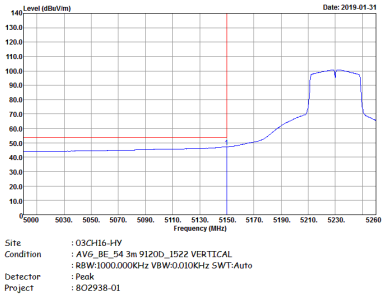
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH38 5190MHz - R	
1	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

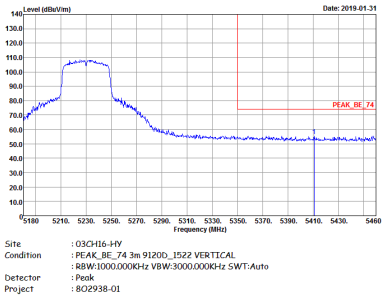
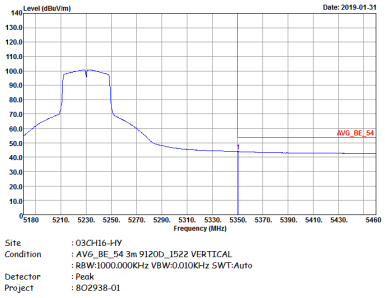
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH38 5190MHz - L	
1	Vertical	Fundamental
Peak		
Avg.		Left blank

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

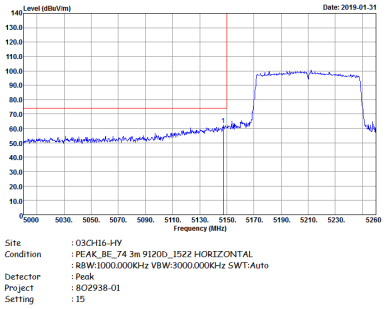
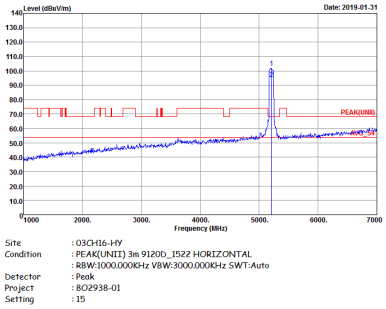
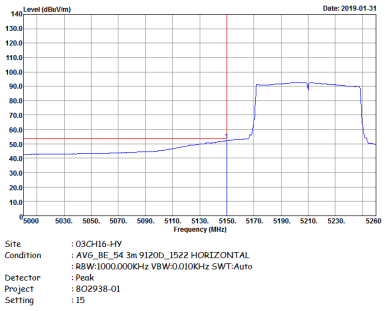
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH46 5230MHz - L	
1	Horizontal	Fundamental
Peak		
Avg.		Left blank

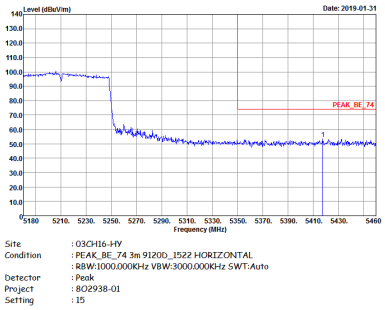
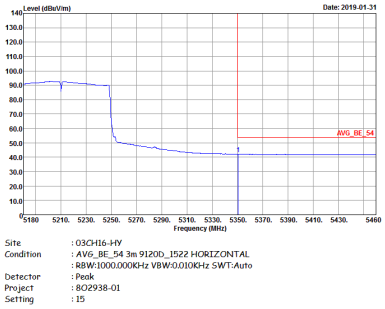
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH46 5230MHz - R	
1	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

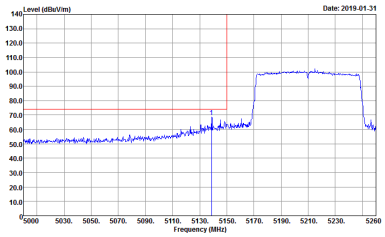
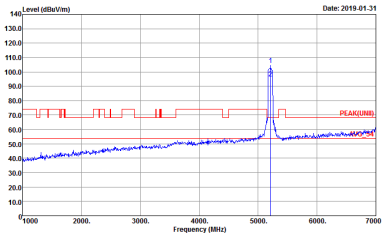
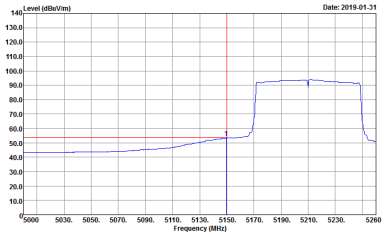
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH46 5230MHz - L	
1	Vertical	Fundamental
Peak		
Avg.		Left blank

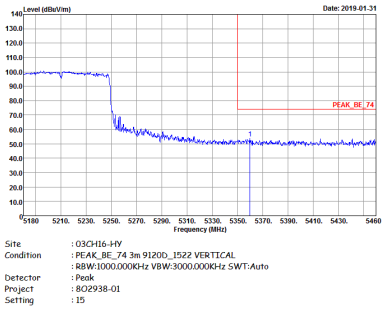
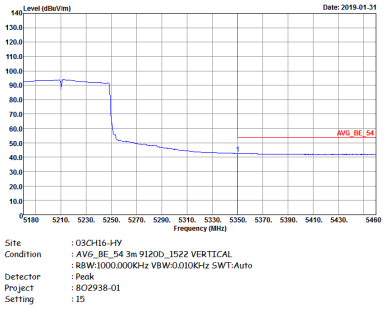
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH46 5230MHz - R	
1	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

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

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

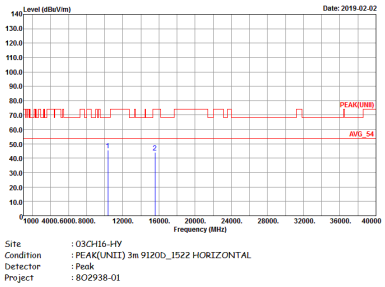
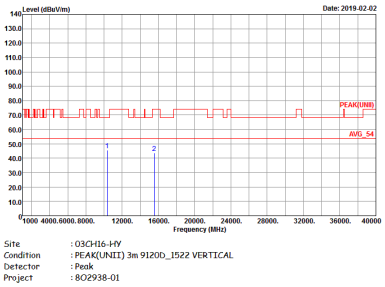
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH42 5210MHz - R	
1	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

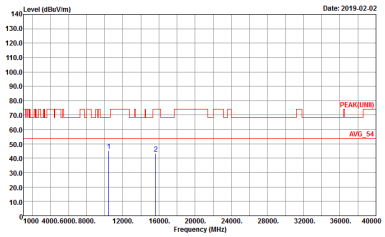
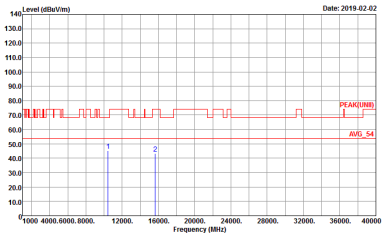
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH42 5210MHz - L	
1	Vertical	Fundamental
Peak	 Site : 03CH16-HY Condition : PEAK_BE_74 3m 9120D_1522 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 8O2938-01 Setting : 15	 Site : 03CH16-HY Condition : PEAK(UNII) 3m 9120D_1522 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 8O2938-01 Setting : 15
Avg.	 Site : 03CH16-HY Condition : AVG_BE_54 3m 9120D_1522 VERTICAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak Project : 8O2938-01 Setting : 15	Left blank

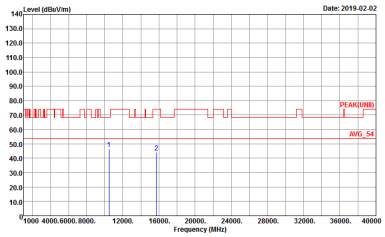
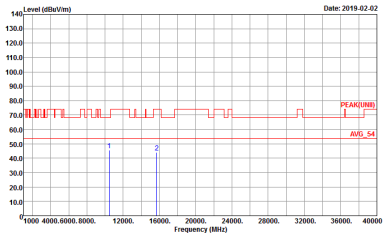
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH42 5210MHz - R	
1	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

Band 1 - 5150~5250MHz

WIFI 802.11a (Harmonic @ 3m)

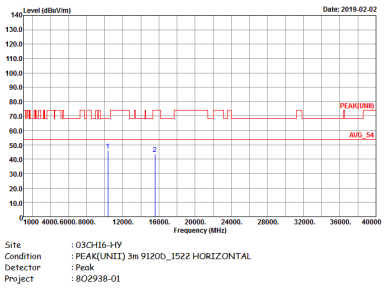
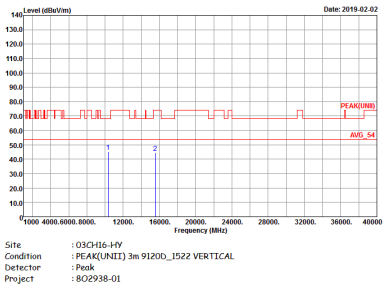
WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11a CH36 5180MHz	
1	Horizontal	Vertical
Peak Avg.	 Site : 03CH16-HY Condition : PEAK(UNII) 3m 9120D_1522 HORIZONTAL Detector : Peak Project : 8O2938-01	 Site : 03CH16-HY Condition : PEAK(UNII) 3m 9120D_1522 VERTICAL Detector : Peak Project : 8O2938-01

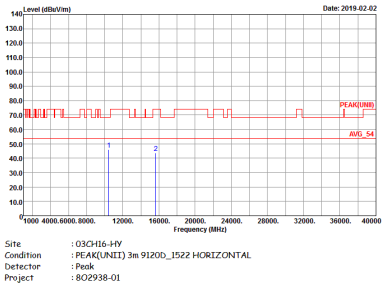
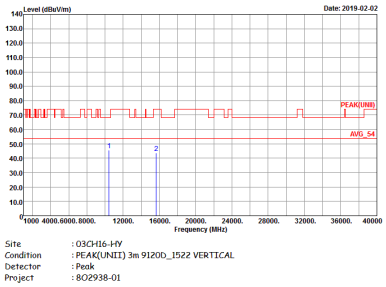
WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11a CH44 5220MHz	
1	Horizontal	Vertical
Peak Avg.	 Site : 03CH16-HY Condition : PEAK(UNII) 3m 9120D_1522 HORIZONTAL Detector : Peak Project : 8O2938-01	 Site : 03CH16-HY Condition : PEAK(UNII) 3m 9120D_1522 VERTICAL Detector : Peak Project : 8O2938-01

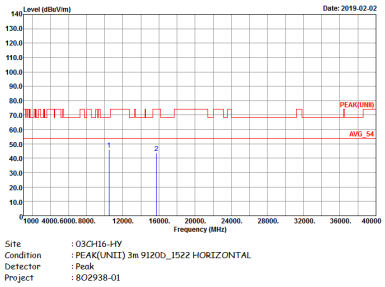
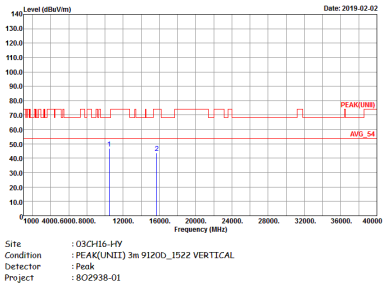
WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11a CH48 5240MHz	
1	Horizontal	Vertical
Peak Avg.	 Site : 03CH16-HY Condition : PEAK(UNII) 3m 9120D_1522 HORIZONTAL Detector : Peak Project : 8O2938-01	 Site : 03CH16-HY Condition : PEAK(UNII) 3m 9120D_1522 VERTICAL Detector : Peak Project : 8O2938-01

Band 1 5150~5250MHz

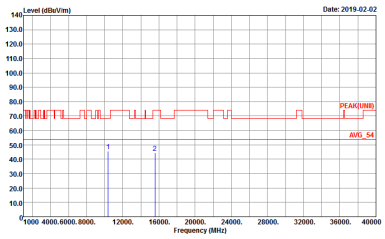
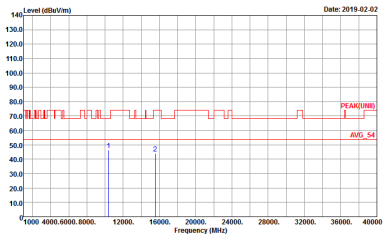
WIFI 802.11n HT20 (Harmonic @ 3m)

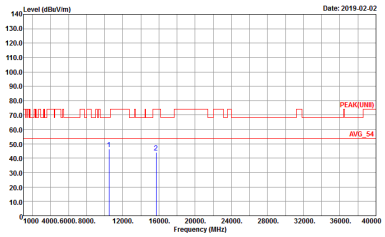
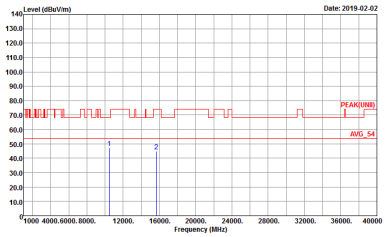
WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11n HT20 CH36 5180MHz	
1	Horizontal	Vertical
Peak Avg.		

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

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

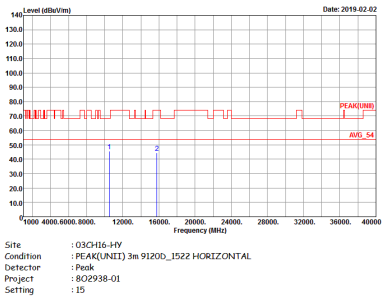
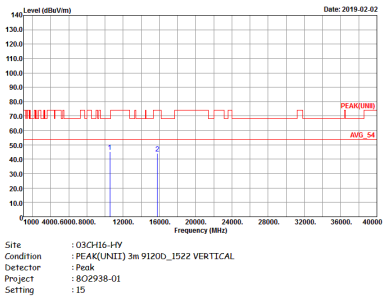
Band 1 5150~5250MHz
WIFI 802.11n HT40 (Harmonic @ 3m)

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

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

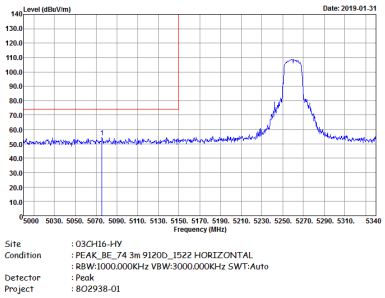
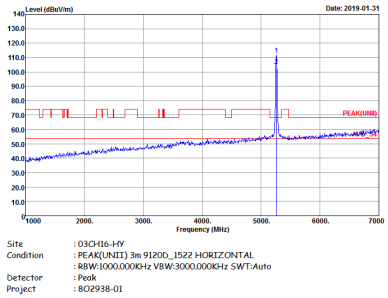
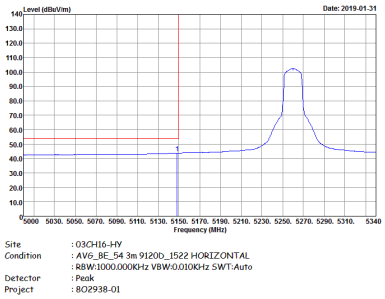
Band 1 5150~5250MHz

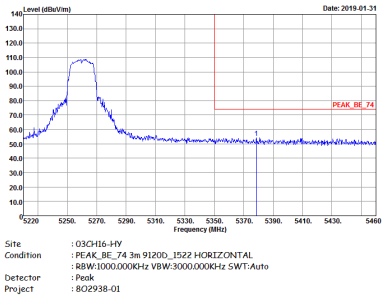
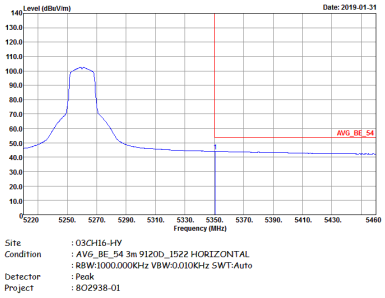
WIFI 802.11ac VHT80 (Harmonic @ 3m)

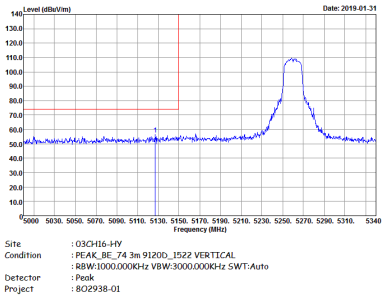
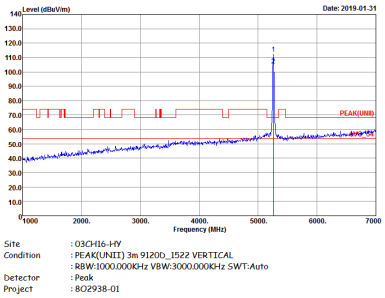
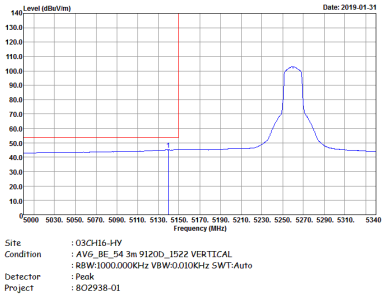
WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11ac VHT80 CH42 5210MHz	
1	Horizontal	Vertical
Peak Avg.		

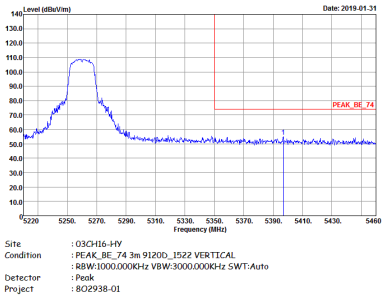
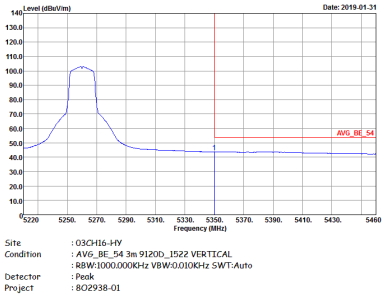
Band 2 - 5250~5350MHz

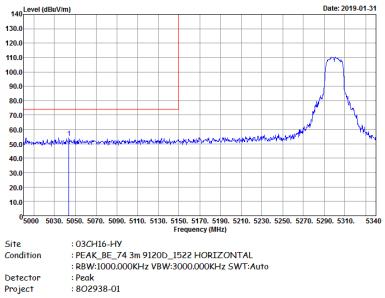
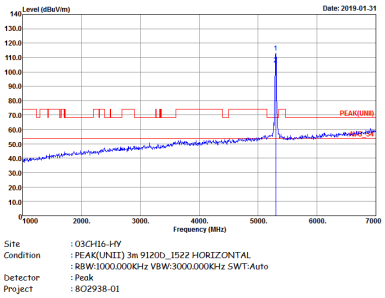
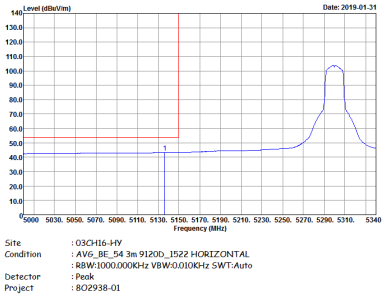
WIFI 802.11a (Band Edge @ 3m)

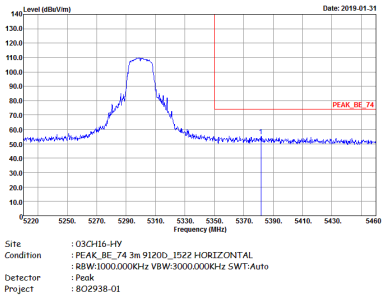
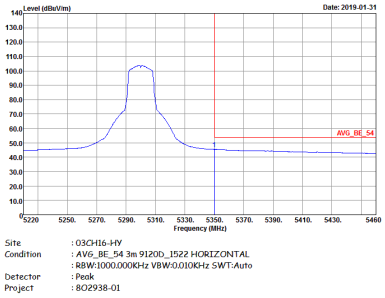
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH52 5260MHz - L	
1	Horizontal	Fundamental
Peak		
Avg.		Left blank

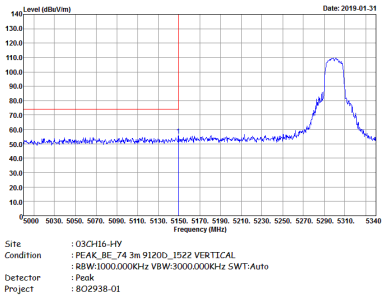
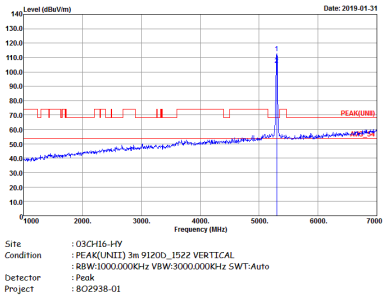
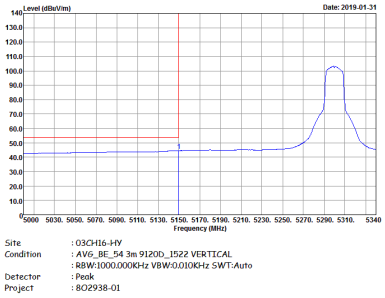
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH52 5260MHz - R	
1	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

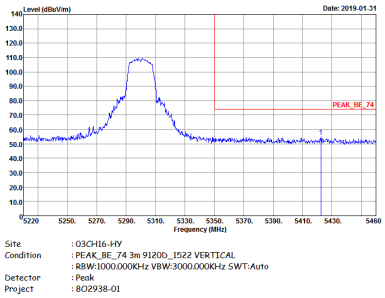
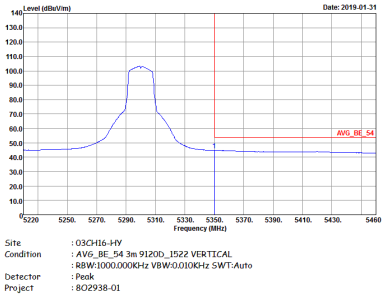
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH52 5260MHz - L	
1	Vertical	Fundamental
Peak		
Avg.		Left blank

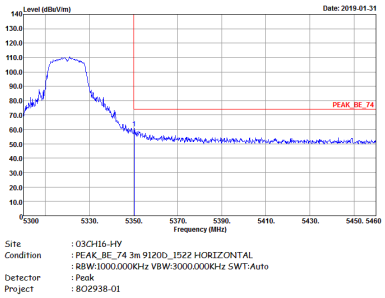
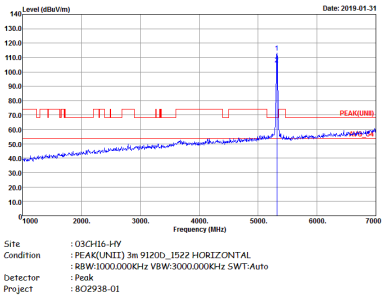
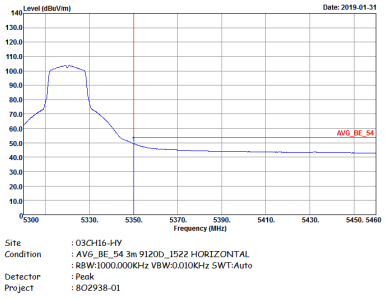
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH52 5260MHz - R	
1	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

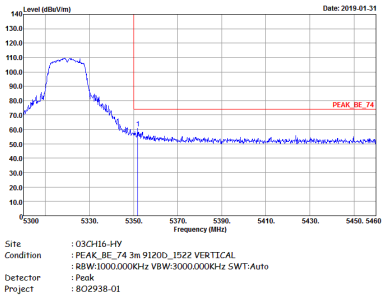
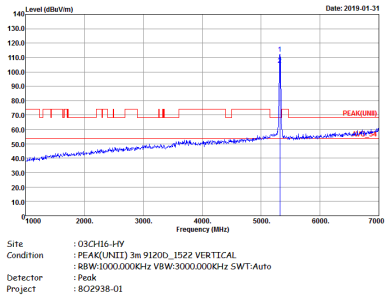
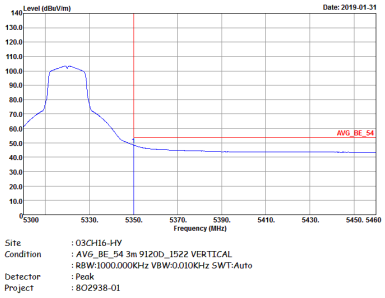
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH60 5300MHz - L	
1	Horizontal	Fundamental
Peak		
Avg.		Left blank

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

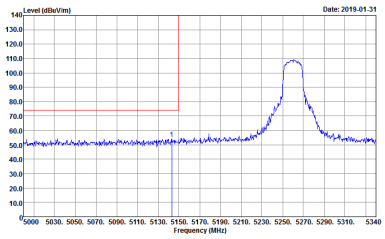
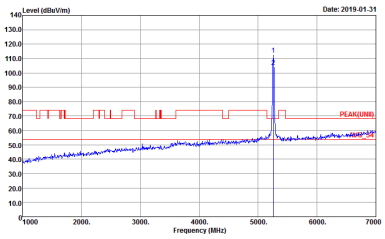
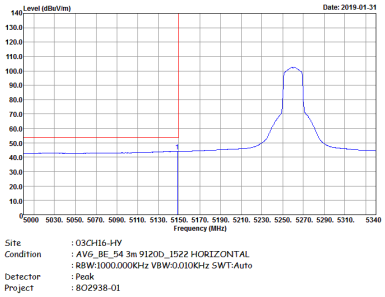
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH60 5300MHz - L	
1	Vertical	Fundamental
Peak		
Avg.		Left blank

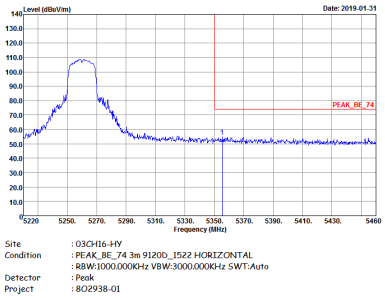
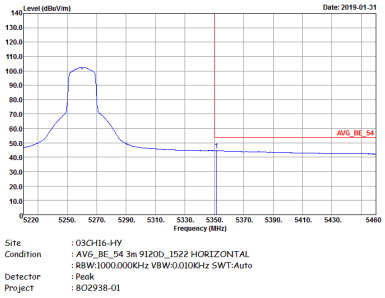
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH60 5300MHz - R	
1	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

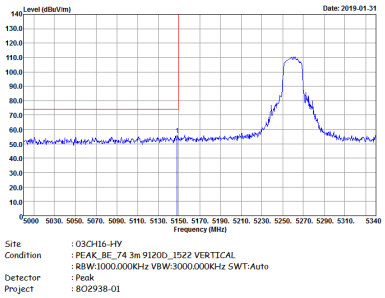
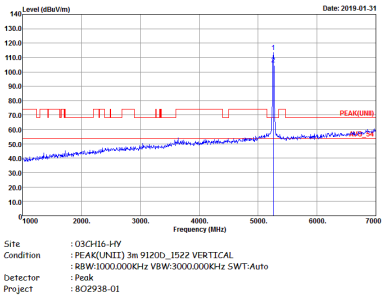
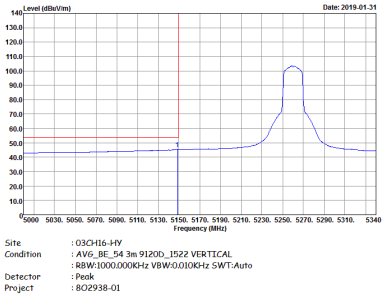
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH64 5320MHz	
1	Horizontal	Fundamental
Peak		
Avg.		Left blank

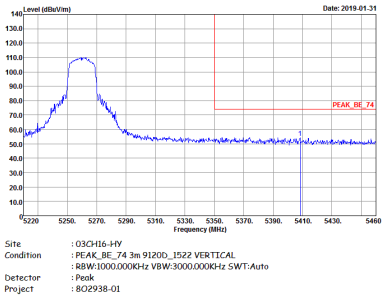
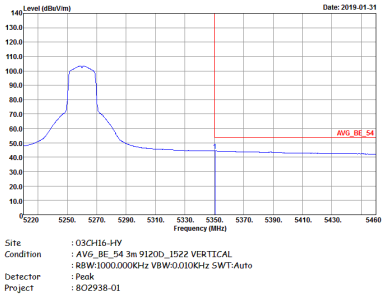
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH64 5320MHz	
1	Vertical	Fundamental
Peak		
Avg.		Left blank

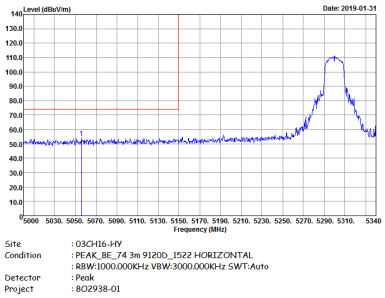
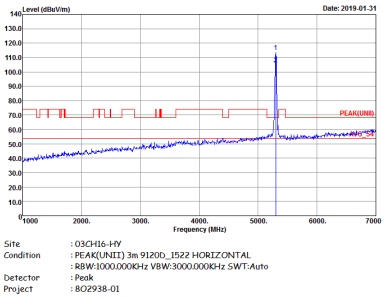
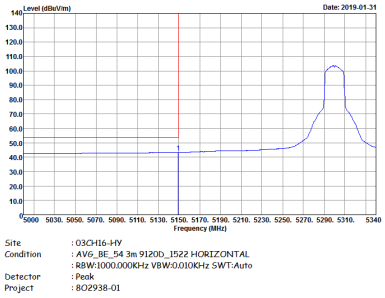
Band 2 5250~5350MHz
WIFI 802.11n HT20 (Band Edge @ 3m)

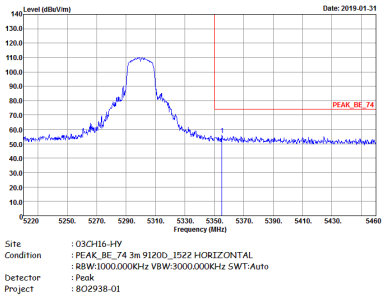
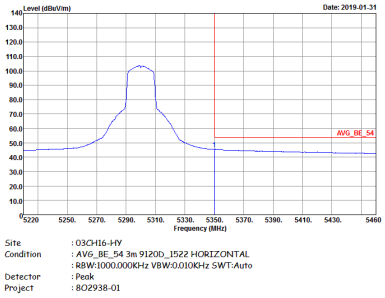
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH52 5260MHz - L	
1	Horizontal	Fundamental
Peak		
Avg.		Left blank

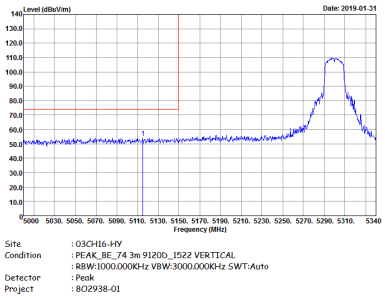
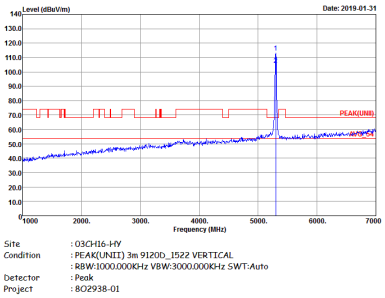
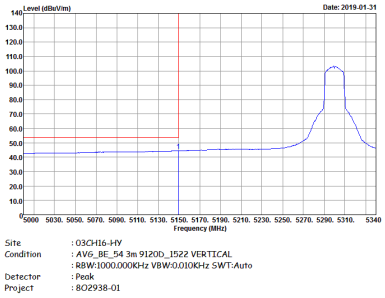
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH52 5260MHz - R	
1	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

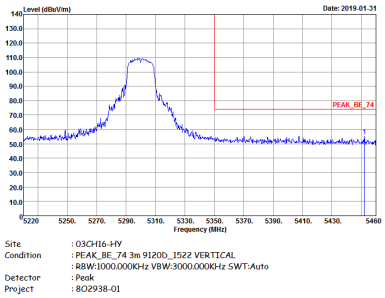
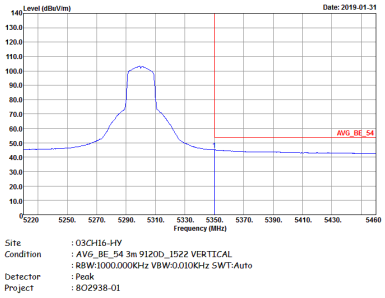
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH52 5260MHz - L	
1	Vertical	Fundamental
Peak		
Avg.		Left blank

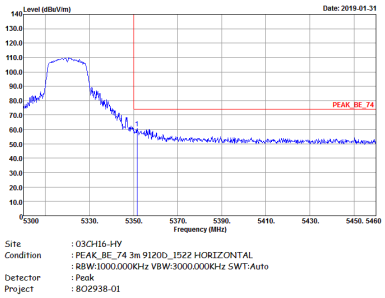
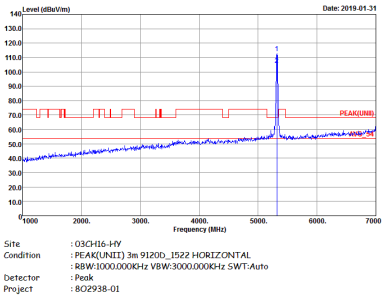
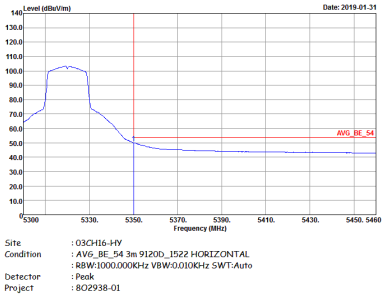
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH52 5260MHz - R	
1	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

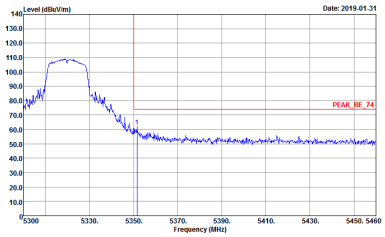
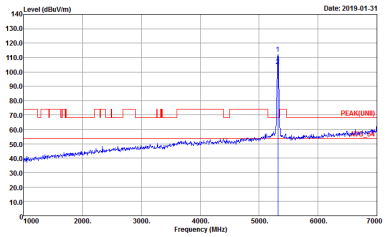
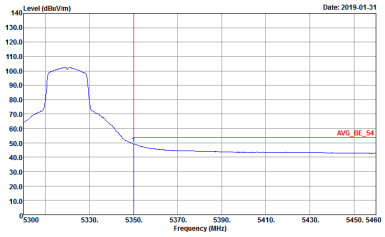
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH60 5300MHz - L	
1	Horizontal	Fundamental
Peak		
Avg.		Left blank

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

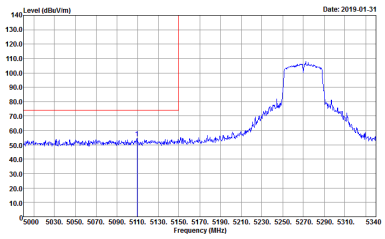
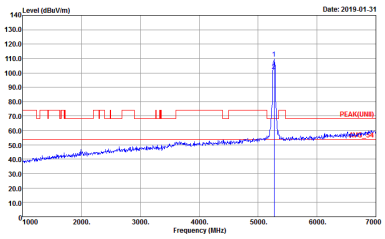
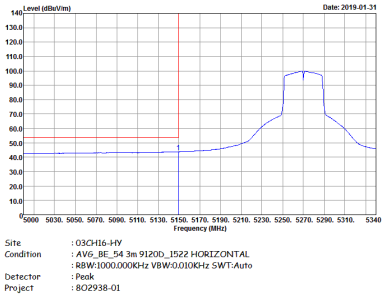
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH60 5300MHz - L	
1	Vertical	Fundamental
Peak		
Avg.		Left blank

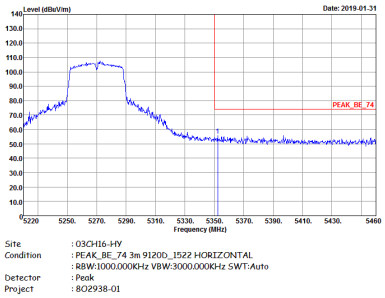
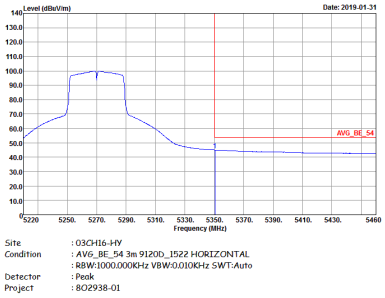
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH60 5300MHz - R	
1	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

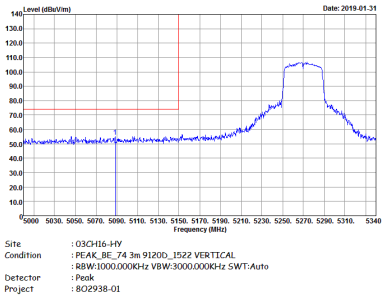
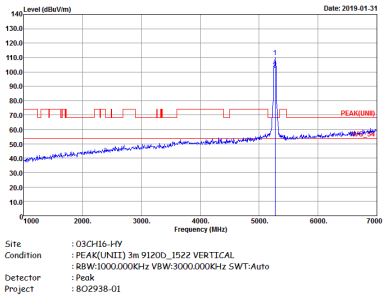
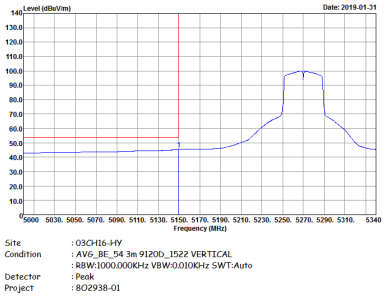
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH64 5320MHz	
1	Horizontal	Fundamental
Peak		
Avg.		Left blank

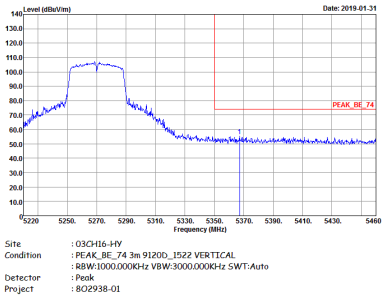
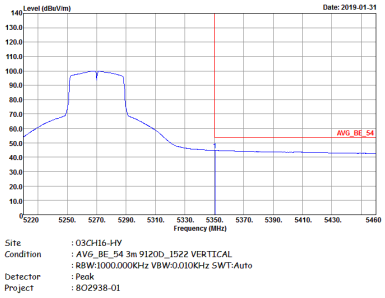
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH64 5320MHz	
1	Vertical	Fundamental
Peak	 Site : 03CH16-HY Condition : PEAK_BE_74 3m 9120D_1522 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 8O2938-01	 Site : 03CH16-HY Condition : PEAK(UNII) 3m 9120D_1522 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 8O2938-01
Avg.	 Site : 03CH16-HY Condition : AVG_BE_54 3m 9120D_1522 VERTICAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak Project : 8O2938-01	Left blank

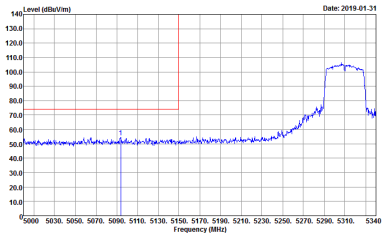
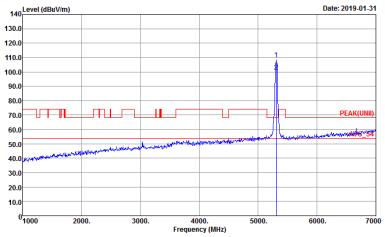
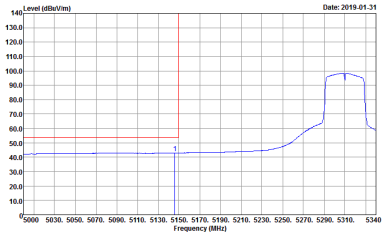
Band 2 5250~5350MHz
WIFI 802.11n HT40 (Band Edge @ 3m)

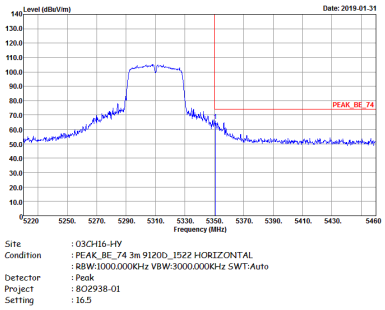
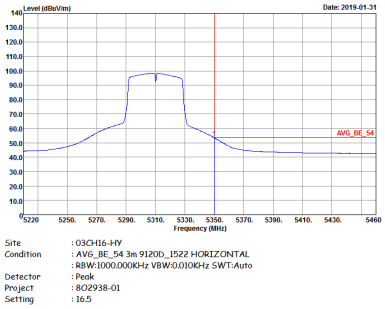
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT40 CH54 5270 - L	
1	Horizontal	Fundamental
Peak		
Avg.		Left blank

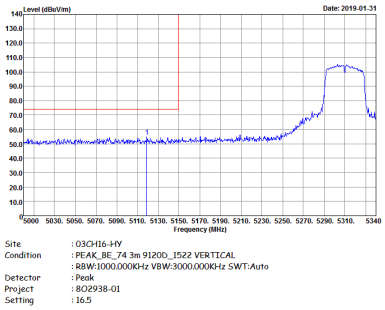
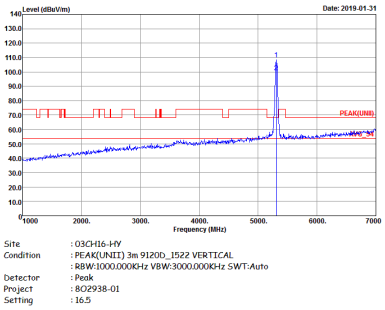
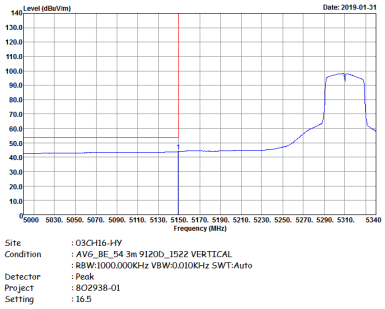
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT40 CH54 5270 - R	
1	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

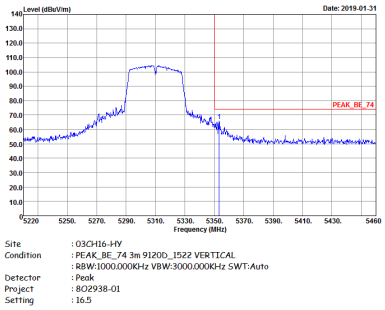
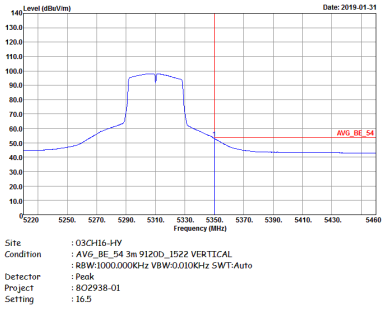
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT40 CH54 5270 - L	
1	Vertical	Vertical
Peak		
Avg.		Left blank

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

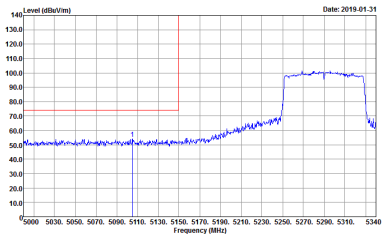
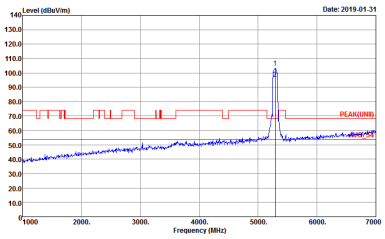
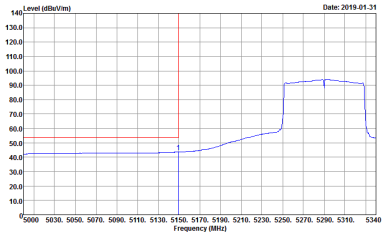
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT40 CH62 5310 - L	
1	Horizontal	Fundamental
Peak	 Site : 03CH16-HY Condition : PEAK_BE_74 3m 9120D_1522 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 8O2938-01 Setting : 16.5	 Site : 03CH16-HY Condition : PEAK(UNII) 3m 9120D_1522 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 8O2938-01 Setting : 16.5
Avg.	 Site : 03CH16-HY Condition : AVG_BE_54 3m 9120D_1522 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak Project : 8O2938-01 Setting : 16.5	Left blank

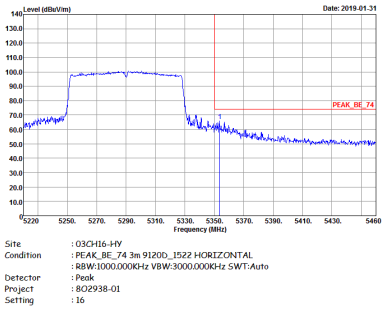
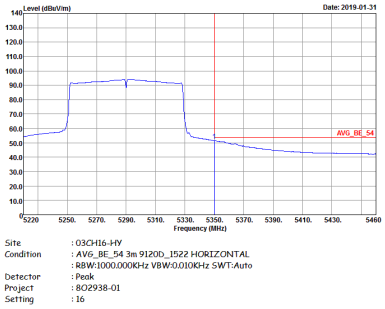
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT40 CH62 5310 - R	
1	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

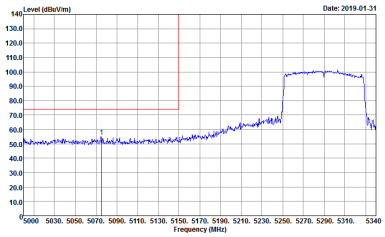
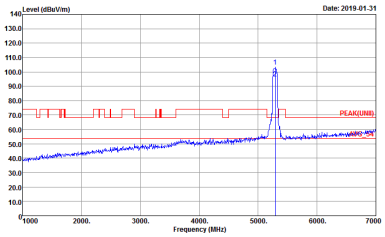
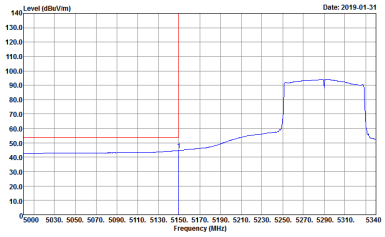
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT40 CH62 5310 - L	
1	Vertical	Fundamental
Peak		
Avg.		Left blank

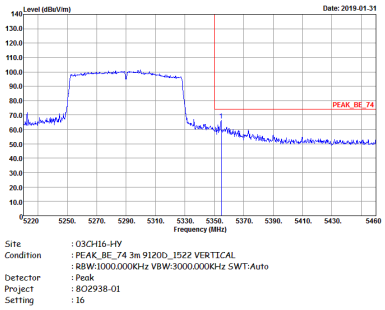
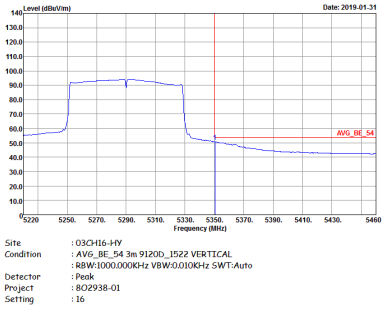
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT40 CH62 5310 - R	
1	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

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

WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH58 5290MHz - L	
1	Horizontal	Fundamental
Peak	 Site : 03CH16-HY Condition : PEAK_BE_74 3m 9120D_1522 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 8O2938-01 Setting : 16	 Site : 03CH16-HY Condition : PEAK(UNII) 3m 9120D_1522 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 8O2938-01 Setting : 16
Avg.	 Site : 03CH16-HY Condition : AVG_BE_54 3m 9120D_1522 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak Project : 8O2938-01 Setting : 16	Left blank

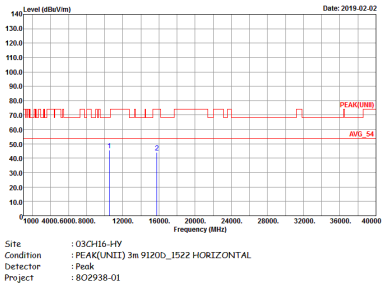
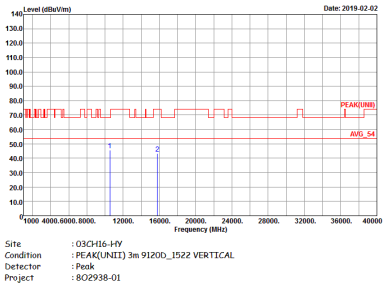
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH58 5290MHz - R	
1	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

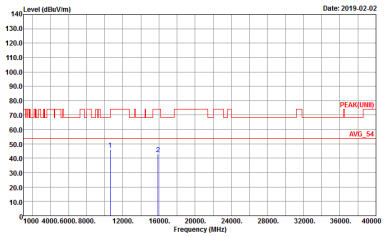
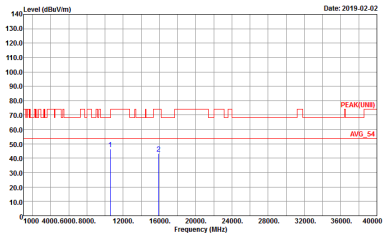
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH58 5290MHz - L	
1	Vertical	Fundamental
Peak	 Site : 03CH16-HY Condition : PEAK_BE_74 3m 9120D_1522 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 8O2938-01 Setting : 16	 Site : 03CH16-HY Condition : PEAK(UNII) 3m 9120D_1522 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 8O2938-01 Setting : 16
Avg.	 Site : 03CH16-HY Condition : AVG_BE_54 3m 9120D_1522 VERTICAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak Project : 8O2938-01 Setting : 16	Left blank

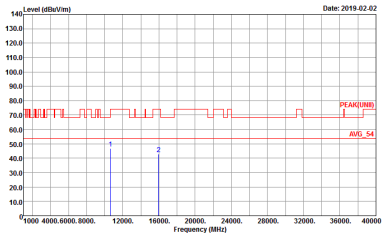
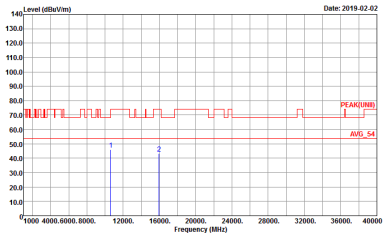
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH58 5290MHz - R	
1	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

Band 2 - 5250~5350MHz

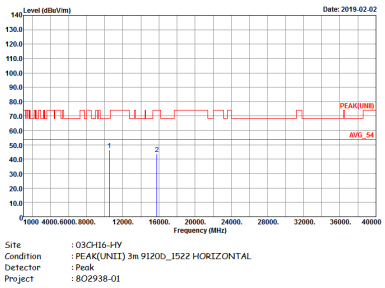
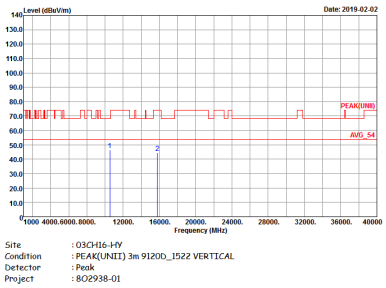
WIFI 802.11a (Harmonic @ 3m)

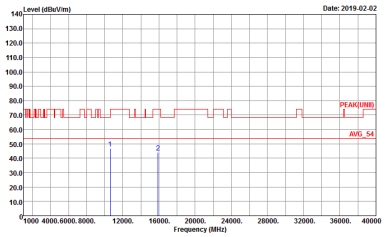
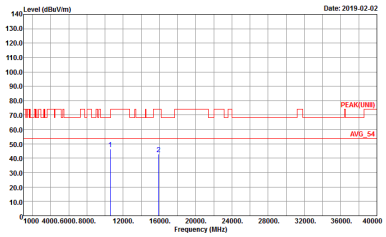
WIFI	Band 2 5250~5350MHz Harmonic @ 3m	
ANT	802.11a CH52 5260MHz	
1	Horizontal	Vertical
Peak Avg.		

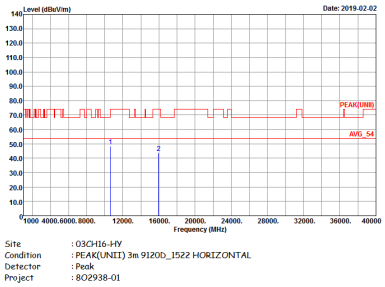
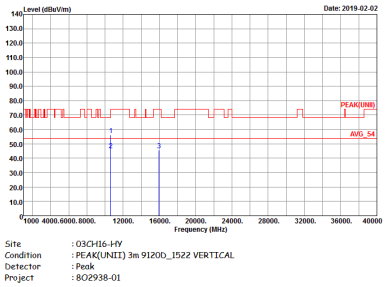
WIFI	Band 2 5250~5350MHz Harmonic @ 3m	
ANT	802.11a CH60 5300MHz	
1	Horizontal	Vertical
Peak Avg.		

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

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

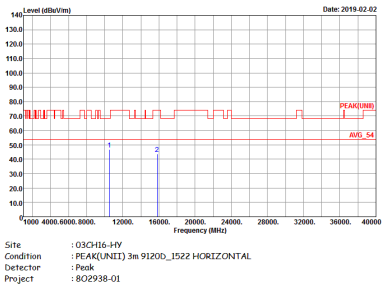
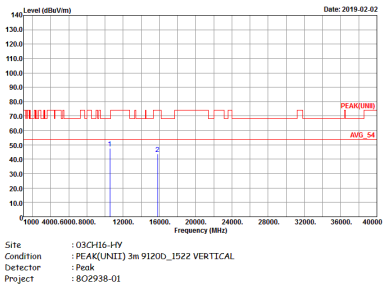
WIFI	Band 2 5250~5350MHz Harmonic @ 3m	
ANT	802.11n HT20 CH52 5260MHz	
1	Horizontal	Vertical
Peak Avg.		

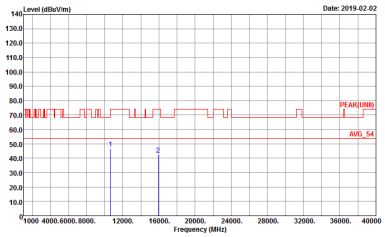
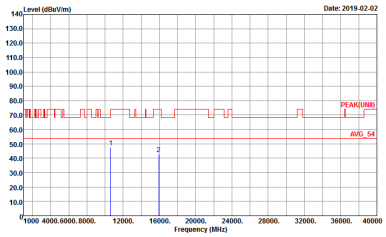
WIFI	Band 2 5250~5350MHz Harmonic @ 3m	
ANT	802.11n HT20 CH60 5300MHz	
1	Horizontal	Vertical
Peak Avg.	 Site : 03CH16-HY Condition : PEAK(UNII) 3m 9120D_1522 HORIZONTAL Detector : Peak Project : 8O2938-01	 Site : 03CH16-HY Condition : PEAK(UNII) 3m 9120D_1522 VERTICAL Detector : Peak Project : 8O2938-01

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

Band 2 5250~5350MHz

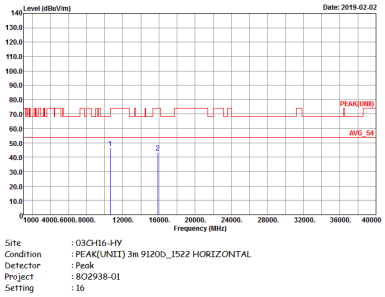
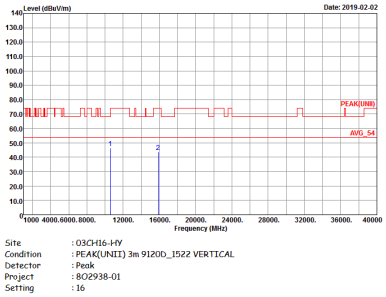
WIFI 802.11n HT40 (Harmonic @ 3m)

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

WIFI	Band 2 5250~5350MHz Harmonic @ 3m	
ANT	802.11n HT40 CH62 5310	
1	Horizontal	Vertical
Peak Avg.	 Site : 03CH16-HY Condition : PEAK(UNII) 3m 9120D_1522 HORIZONTAL Detector : Peak Project : 8O2938-01 Setting : 16.5	 Site : 03CH16-HY Condition : PEAK(UNII) 3m 9120D_1522 VERTICAL Detector : Peak Project : 8O2938-01 Setting : 16.5

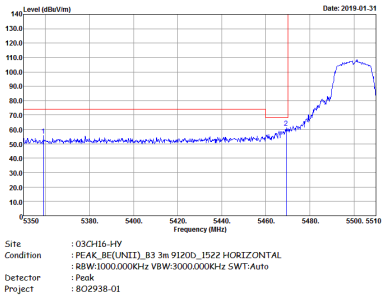
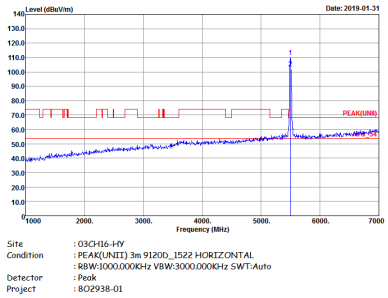
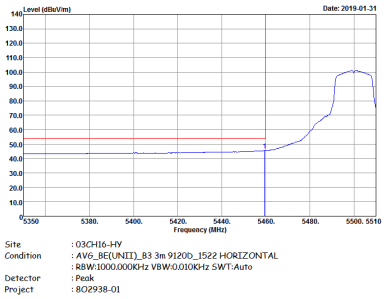
Band 2 5250~5350MHz

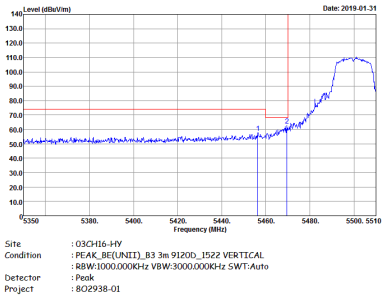
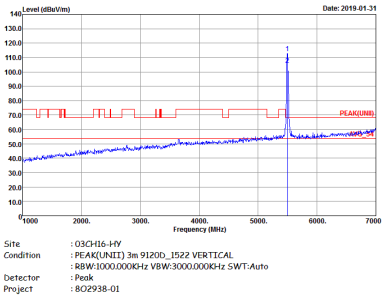
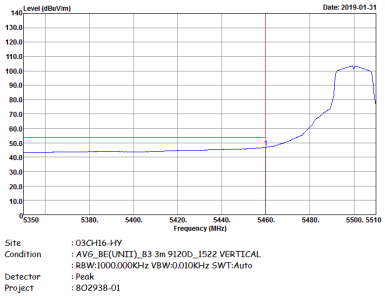
WIFI 802.11ac VHT80 (Harmonic @ 3m)

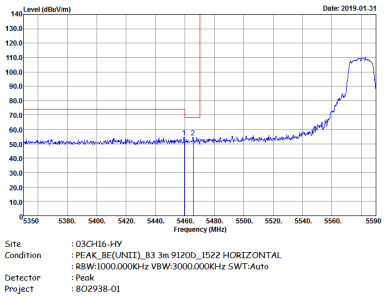
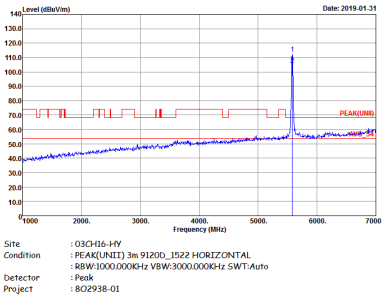
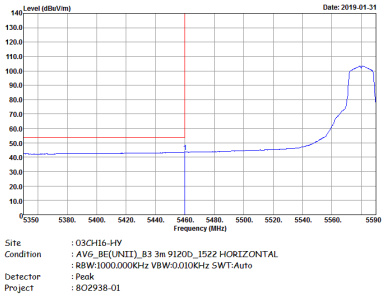
WIFI	Band 2 5250~5350MHz Harmonic @ 3m	
ANT	802.11ac VHT80 CH58 5290MHz	
1	Horizontal	Vertical
Peak Avg.		

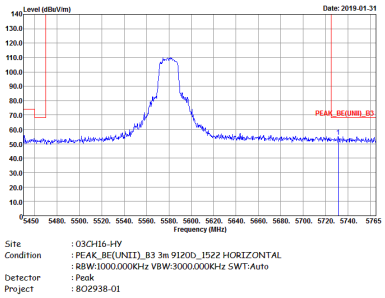
Band 3 - 5470~5725MHz

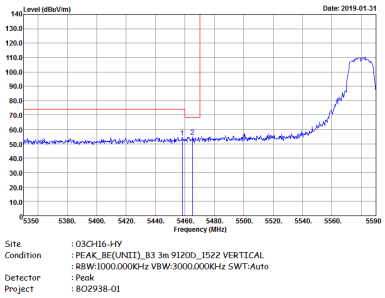
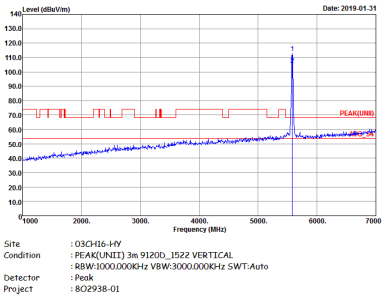
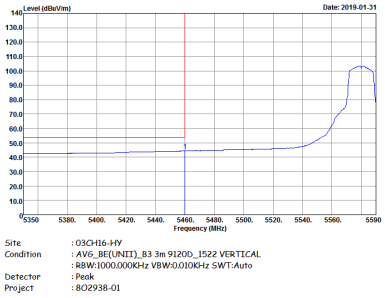
WIFI 802.11a (Band Edge @ 3m)

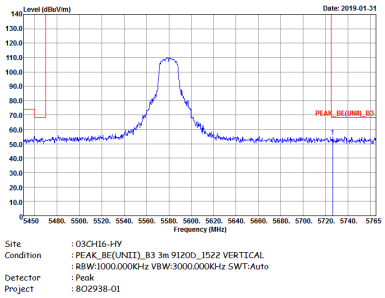
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH100 5500MHz	
1	Horizontal	Fundamental
Peak		
Avg.		Left blank

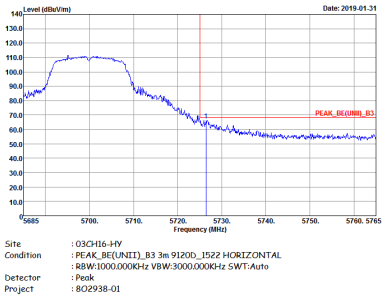
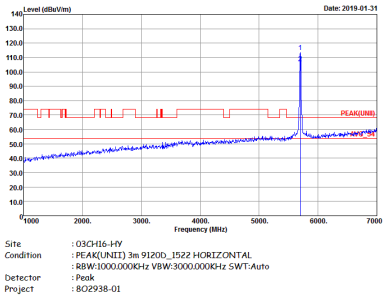
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH100 5500MHz	
1	Vertical	Fundamental
Peak		
Avg.		Left blank

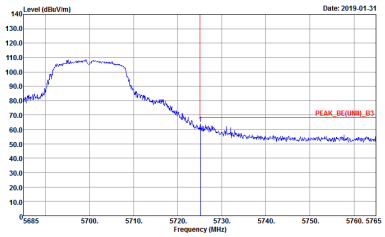
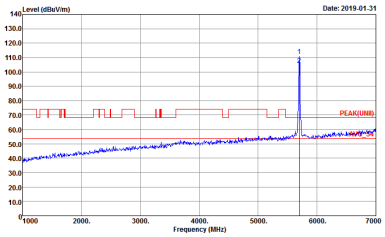
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH116 5580MHz - L	
1	Horizontal	Fundamental
Peak		
Avg.		Left blank

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

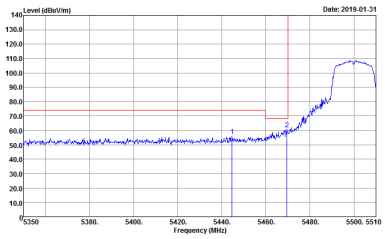
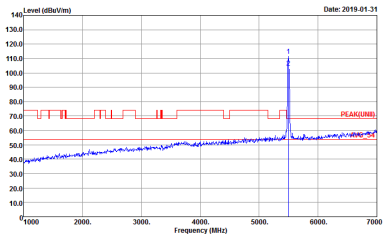
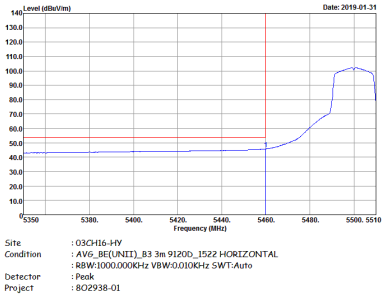
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH116 5580MHz - L	
1	Vertical	Fundamental
Peak		
Avg.		Left blank

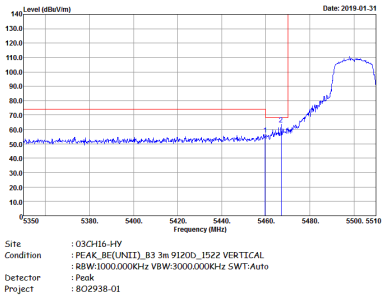
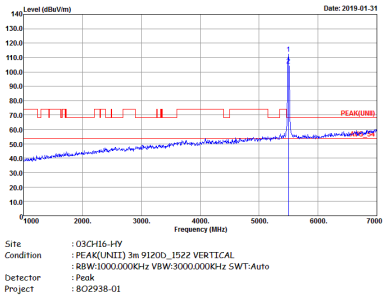
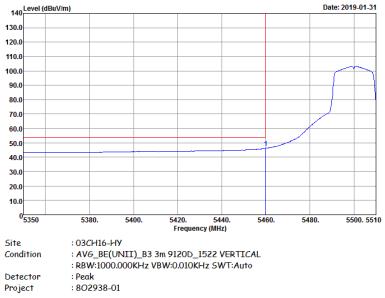
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH116 5580MHz - R	
1	Vertical	Fundamental
Peak		Left blank

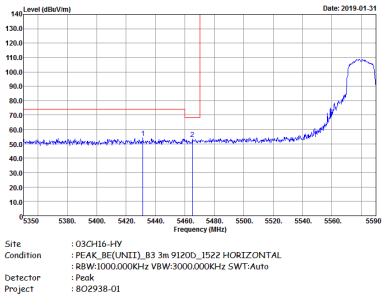
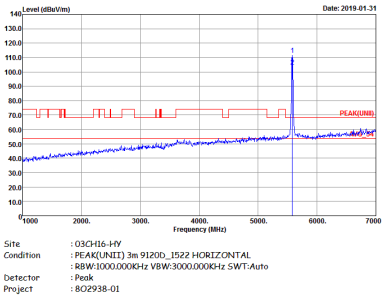
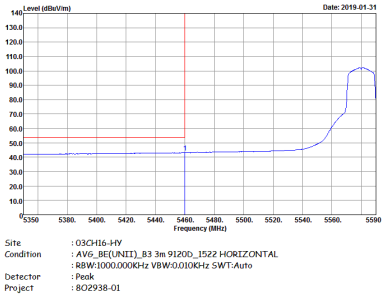
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH140 5700MHz	
1	Horizontal	Fundamental
Peak		

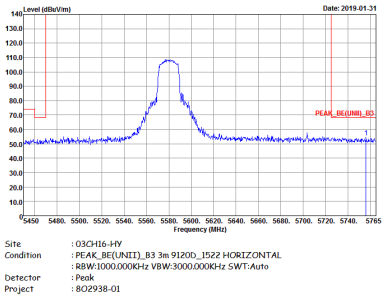
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH140 5700MHz	
1	Vertical	Fundamental
Peak	 Site : 03CH16-HY Condition : PEAK_BE(UNII)_B3 3m 9120D_1522 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 8O2938-01	 Site : 03CH16-HY Condition : PEAK(UNII) 3m 9120D_1522 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 8O2938-01

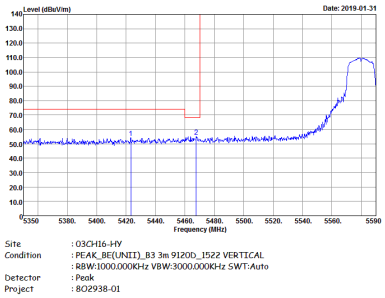
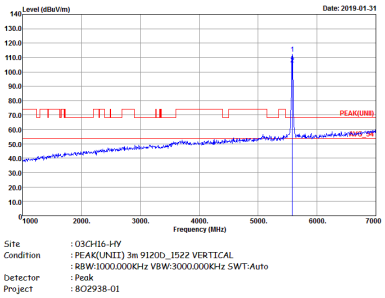
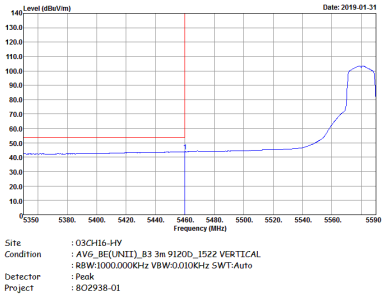
Band 3 5470~5725MHz
WIFI 802.11n HT20 (Band Edge @ 3m)

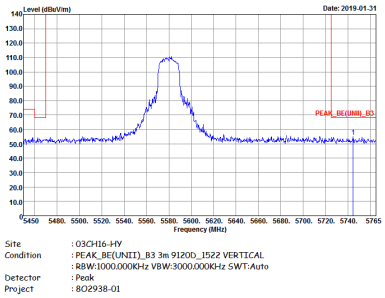
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT20 CH100 5500MHz	
1	Horizontal	Fundamental
Peak		
Avg.		Left blank

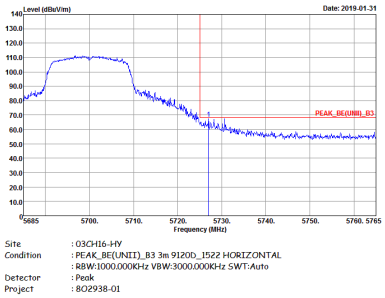
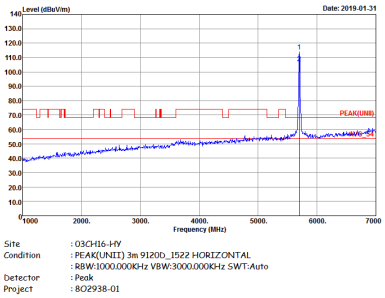
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT20 CH100 5500MHz	
1	Vertical	Fundamental
Peak		
Avg.		Left blank

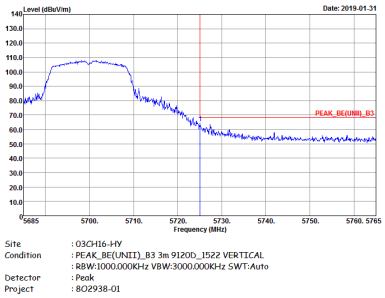
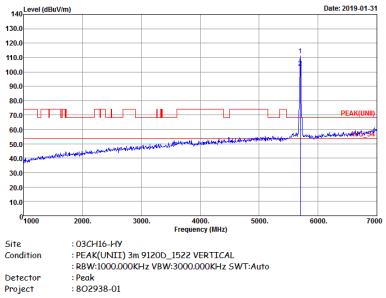
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT20 CH116 5580MHz - L	
1	Horizontal	Fundamental
Peak		
Avg.		Left blank

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

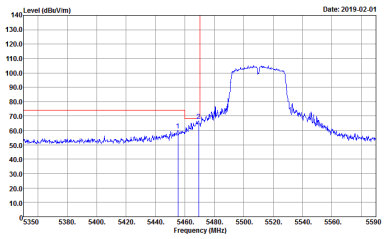
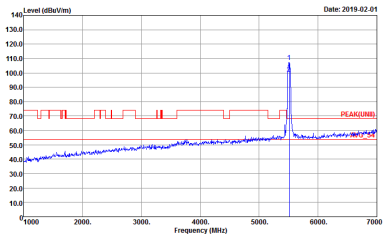
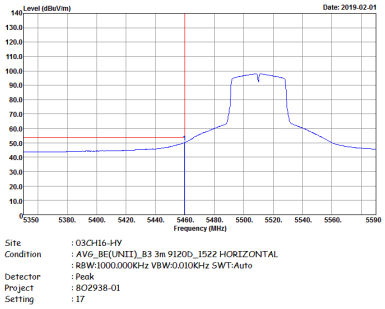
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT20 CH116 5580MHz - L	
1	Vertical	Fundamental
Peak		
Avg.		Left blank

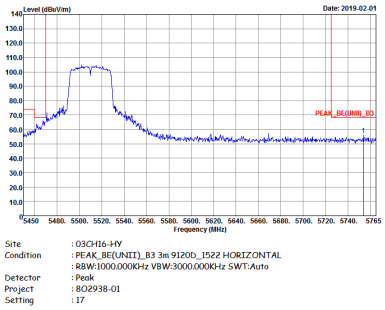
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT20 CH116 5580MHz - R	
1	Vertical	Fundamental
Peak		Left blank

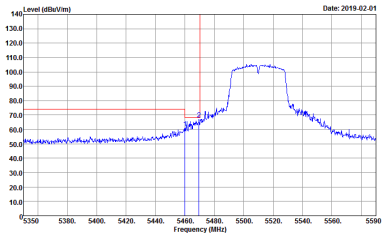
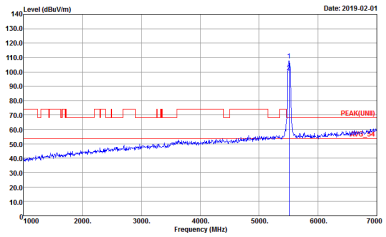
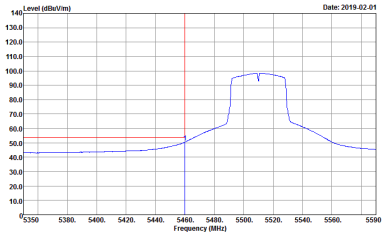
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT20 CH140 5700MHz	
1	Horizontal	Fundamental
Peak		

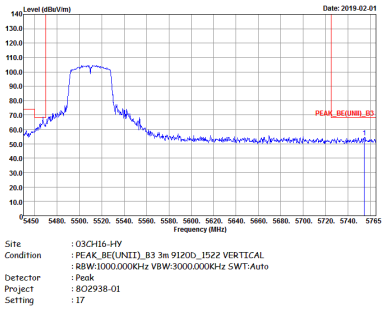
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT20 CH140 5700MHz	
1	Vertical	Fundamental
Peak.		

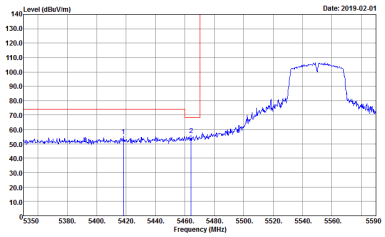
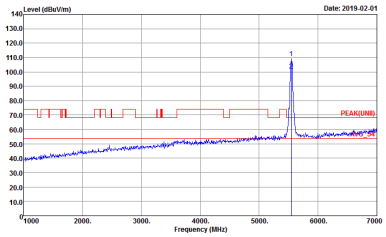
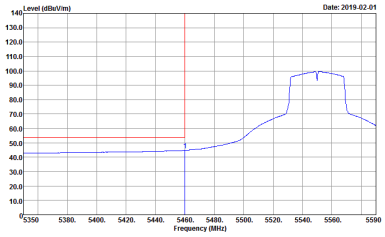
Band 3 5470~5725MHz
WIFI 802.11n HT40 (Band Edge @ 3m)

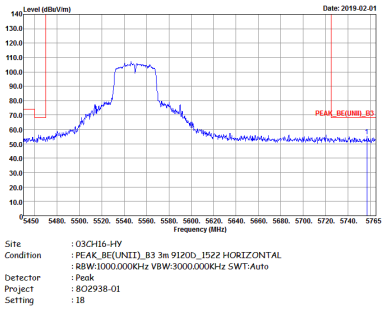
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH102 5510MHz - L	
1	Horizontal	Fundamental
Peak		
Avg.		Left blank

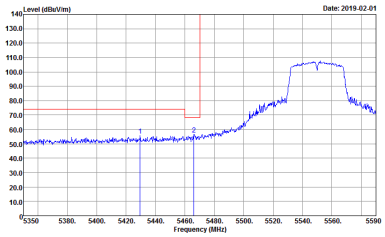
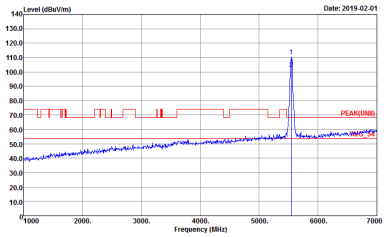
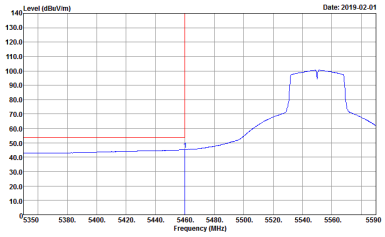
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH102 5510MHz - R	
1	Horizontal	Fundamental
Peak		Left blank

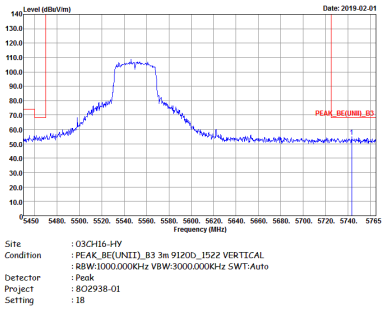
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH102 5510MHz - L	
1	Vertical	Fundamental
Peak		
Avg.		Left blank

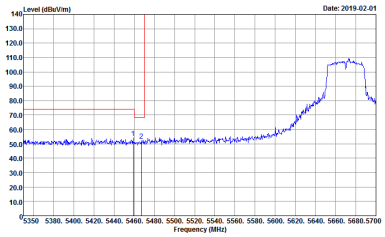
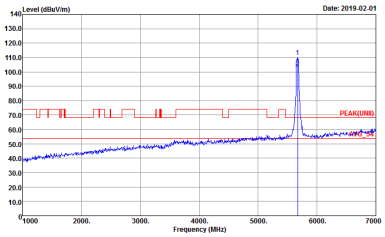
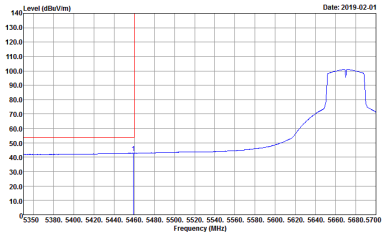
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH102 5510MHz - R	
1	Vertical	Fundamental
Peak		Left blank

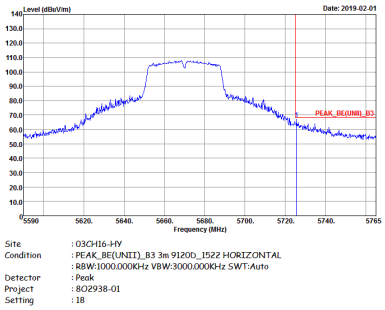
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH110 5550MHz - L	
1	Horizontal	Fundamental
Peak	 Site : 03CH16-HY Condition : PEAK_BE(UNII)_B3 3m 9120D_1522 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 8O2938-01 Setting : 18	 Site : 03CH16-HY Condition : PEAK(UNII) 3m 9120D_1522 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 8O2938-01 Setting : 18
Avg.	 Site : 03CH16-HY Condition : AVG_BE(UNII)_B3 3m 9120D_1522 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak Project : 8O2938-01 Setting : 18	Left blank

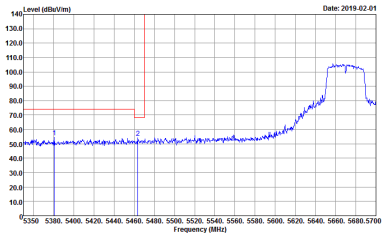
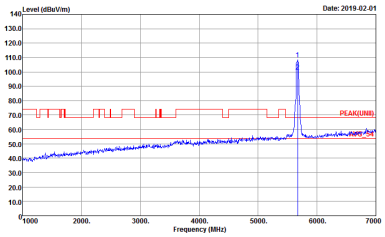
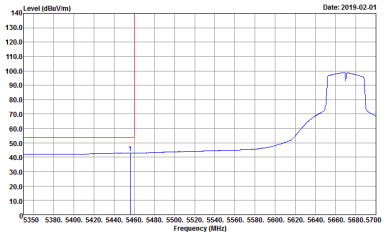
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH110 5550MHz - R	
1	Horizontal	Fundamental
Peak		Left blank

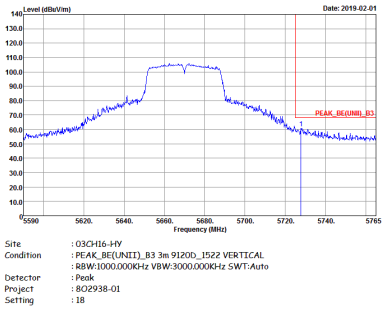
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH110 5550MHz - L	
1	Vertical	Fundamental
Peak	 Site : 03CH16-HY Condition : PEAK_BE(UNII)_B3 3m 9120D_1522 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 8O2938-01 Setting : 18	 Site : 03CH16-HY Condition : PEAK(UNII) 3m 9120D_1522 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 8O2938-01 Setting : 18
Avg.	 Site : 03CH16-HY Condition : AVG_BE(UNII)_B3 3m 9120D_1522 VERTICAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak Project : 8O2938-01 Setting : 18	Left blank

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

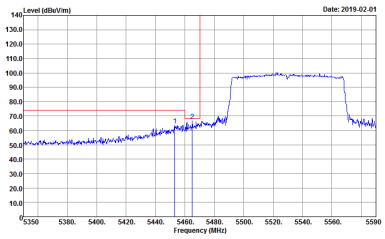
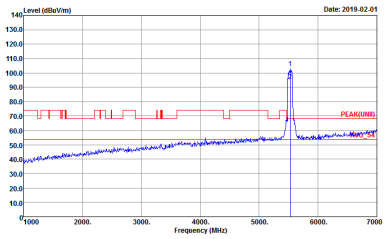
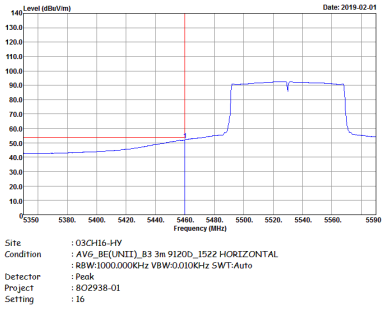
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH134 5670MHz - L	
1	Horizontal	Fundamental
Peak	 Site : 03CH16-HY Condition : PEAK_BE(UNII)_B3 3m 9120D_1522 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 8O2938-01 Setting : 18	 Site : 03CH16-HY Condition : PEAK(UNII) 3m 9120D_1522 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 8O2938-01 Setting : 18
Avg.	 Site : 03CH16-HY Condition : AVG_BE(UNII)_B3 3m 9120D_1522 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak Project : 8O2938-01 Setting : 18	Left blank

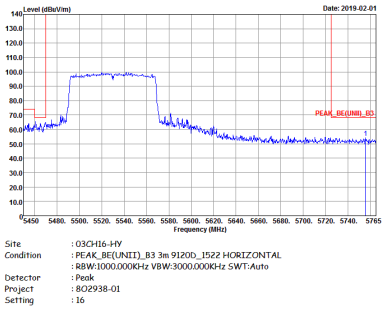
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH134 5670MHz - R	
1	Horizontal	Fundamental
Peak		Left blank

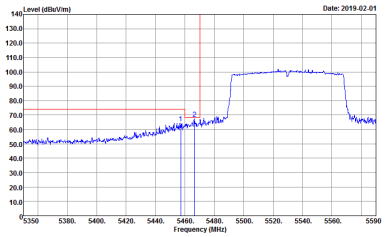
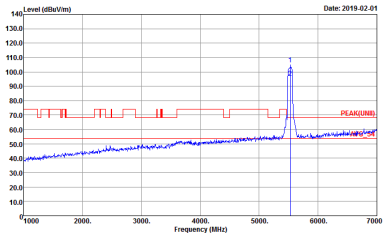
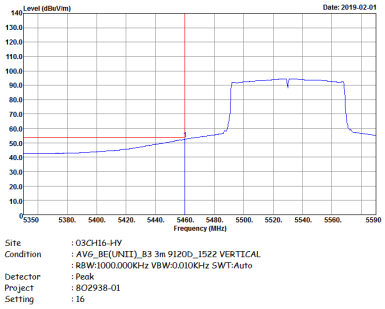
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH134 5670MHz - L	
1	Vertical	Fundamental
Peak	 Site : 03CH16-HY Condition : PEAK_BE(UNII)_B3 3m 9120D_1522 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 8O2938-01 Setting : 18	 Site : 03CH16-HY Condition : PEAK(UNII) 3m 9120D_1522 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 8O2938-01 Setting : 18
Avg.	 Site : 03CH16-HY Condition : AVG_BE(UNII)_B3 3m 9120D_1522 VERTICAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak Project : 8O2938-01 Setting : 18	Left blank

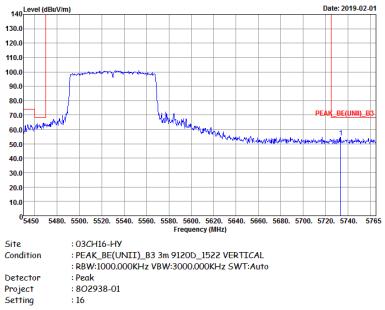
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH134 5670MHz - R	
1	Vertical	Fundamental
Peak		Left blank

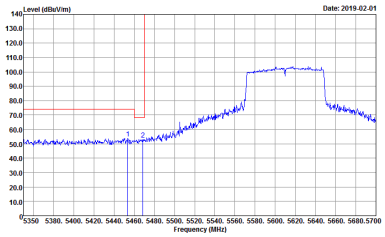
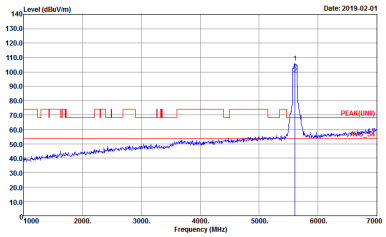
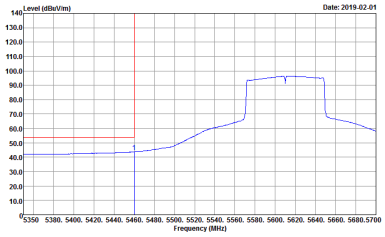
Band 3 5470~5725MHz
WIFI 802.11ac VHT80 (Band Edge @ 3m)

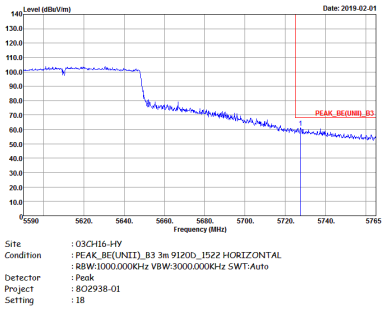
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH106 5530MHz - L	
1	Horizontal	Fundamental
Peak		
Avg.		Left blank

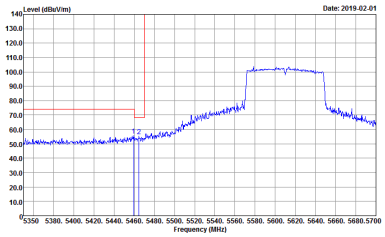
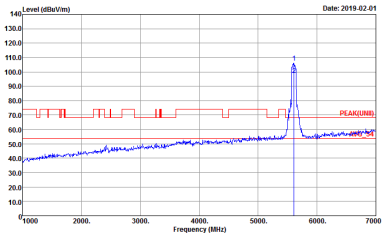
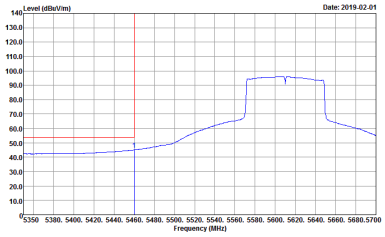
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH106 5530MHz - R	
1	Horizontal	Fundamental
Peak		Left blank

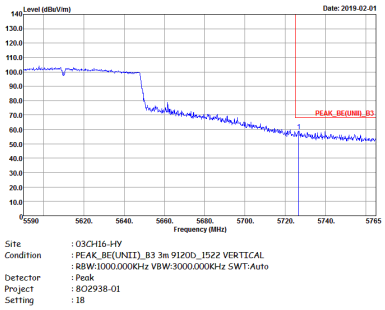
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH106 5530MHz - L	
1	Vertical	Fundamental
Peak		
Avg.		Left blank

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

WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH122 5610MHz - L	
1	Horizontal	Fundamental
Peak	 Site : 03CH16-HY Condition : PEAK_BE(UNII)_B3 3m 9120D_1522 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 8O2938-01 Setting : 18	 Site : 03CH16-HY Condition : PEAK(UNII) 3m 9120D_1522 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 8O2938-01 Setting : 18
Avg.	 Site : 03CH16-HY Condition : AVG_BE(UNII)_B3 3m 9120D_1522 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak Project : 8O2938-01 Setting : 18	Left blank

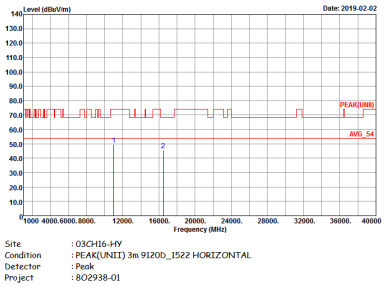
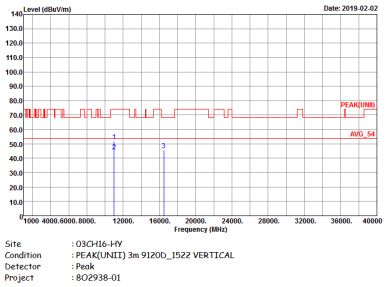
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH122 5610MHz - R	
1	Horizontal	Fundamental
Peak		Left blank

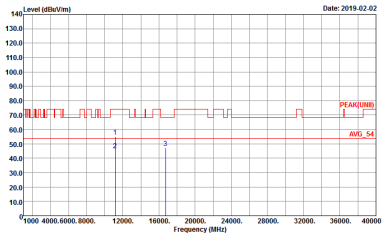
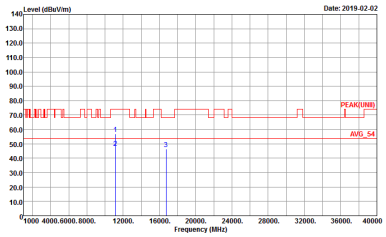
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH122 5610MHz - L	
1	Vertical	Fundamental
Peak	 Site : 03CH16-HY Condition : PEAK_BE(UNII)_B3 3m 9120D_1522 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 8O2938-01 Setting : 18	 Site : 03CH16-HY Condition : PEAK(UNII) 3m 9120D_1522 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 8O2938-01 Setting : 18
Avg.	 Site : 03CH16-HY Condition : AVG_BE(UNII)_B3 3m 9120D_1522 VERTICAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak Project : 8O2938-01 Setting : 18	Left blank

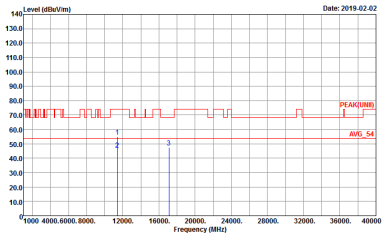
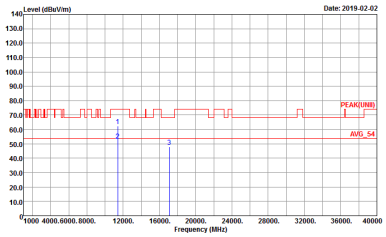
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH122 5610MHz - R	
1	Vertical	Fundamental
Peak		Left blank

Band 3 - 5470~5725MHz

WIFI 802.11a (Harmonic @ 3m)

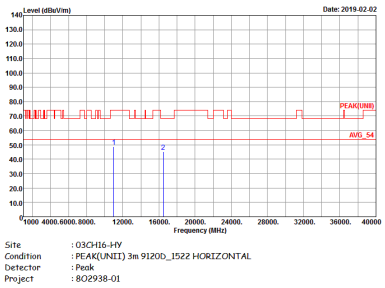
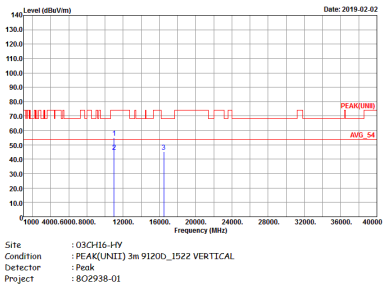
WIFI	Band 3 5470~5725MHz Harmonic @ 3m	
ANT	802.11a CH100 5500MHz	
1	Horizontal	Vertical
Peak Avg.	 	

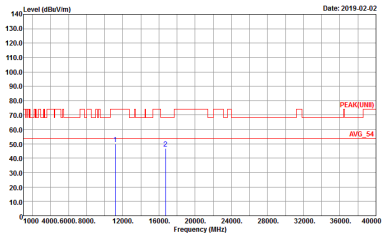
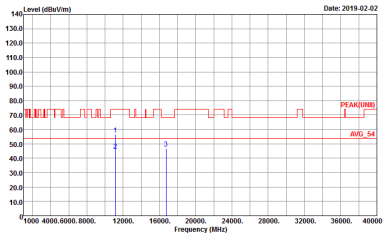
WIFI	Band 3 5470~5725MHz Harmonic @ 3m	
ANT	802.11a CH116 5580MHz	
1	Horizontal	Vertical
Peak Avg.	 Site : 03CH16-HY Condition : PEAK(UNII) 3m 9120D_1522 HORIZONTAL Detector : Peak Project : 8O2938-01	 Site : 03CH16-HY Condition : PEAK(UNII) 3m 9120D_1522 VERTICAL Detector : Peak Project : 8O2938-01

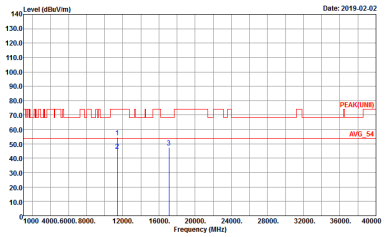
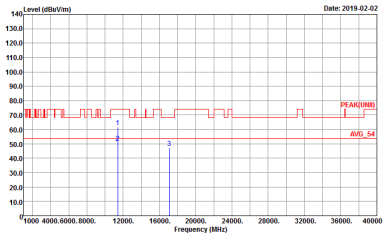
WIFI	Band 3 5470~5725MHz Harmonic @ 3m	
ANT	802.11a CH140 5700MHz	
1	Horizontal	Vertical
Peak Avg.	 Site : 03CH16-HY Condition : PEAK(UNII) 3m 9120D_1522 HORIZONTAL Detector : Peak Project : 8O2938-01	 Site : 03CH16-HY Condition : PEAK(UNII) 3m 9120D_1522 VERTICAL Detector : Peak Project : 8O2938-01

Band 3 5470~5725MHz

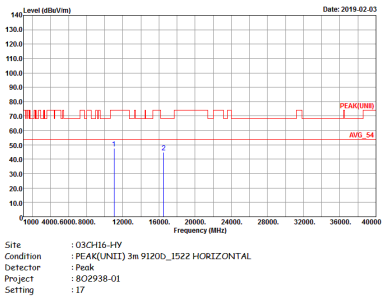
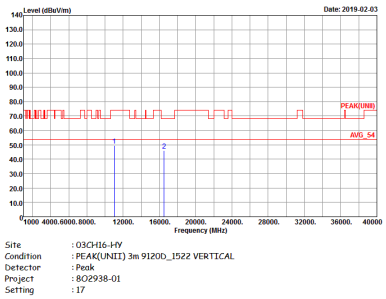
WIFI 802.11n HT20 (Harmonic @ 3m)

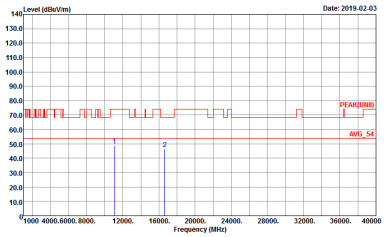
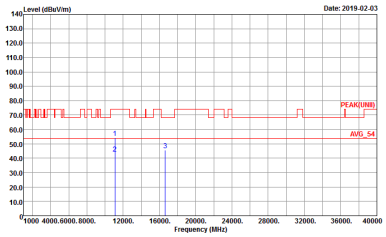
WIFI	Band 3 5470~5725MHz Harmonic @ 3m	
ANT	802.11n HT20 CH100 5500MHz	
1	Horizontal	Vertical
Peak Avg.		

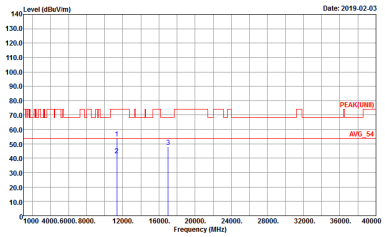
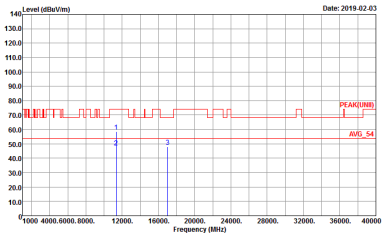
WIFI	Band 3 5470~5725MHz Harmonic @ 3m	
ANT	802.11n HT20 CH116 5580MHz	
1	Horizontal	Vertical
Peak Avg.		

WIFI	Band 3 5470~5725MHz Harmonic @ 3m	
ANT	802.11n HT20 CH140 5700MHz	
1	Horizontal	Vertical
Peak Avg.	 Site : 03CH16-HY Condition : PEAK(UNII) 3m 9120D_1522 HORIZONTAL Detector : Peak Project : 8O2938-01	 Site : 03CH16-HY Condition : PEAK(UNII) 3m 9120D_1522 VERTICAL Detector : Peak Project : 8O2938-01

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

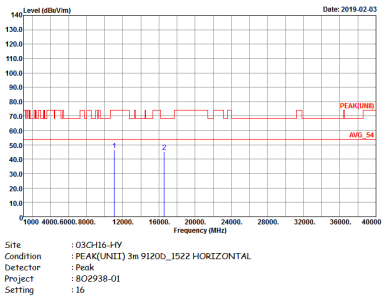
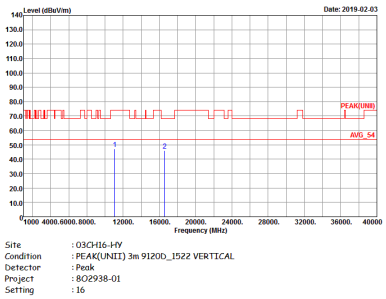
WIFI	Band 3 5470~5725MHz Harmonic @ 3m	
ANT	802.11n HT40 CH102 5510MHz	
1	Horizontal	Vertical
Peak Avg.		

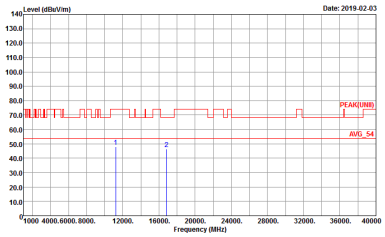
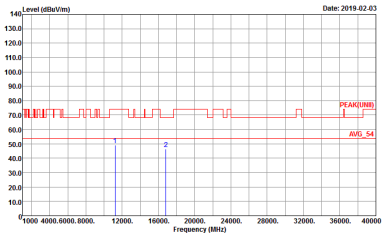
WIFI	Band 3 5470~5725MHz Harmonic @ 3m	
ANT	802.11n HT40 CH110 5550MHz	
1	Horizontal	Vertical
Peak Avg.	 Site : 03CH16-HY Condition : PEAK(UNII) 3m 9120D_1522 HORIZONTAL Detector : Peak Project : 8O2938-01	 Site : 03CH16-HY Condition : PEAK(UNII) 3m 9120D_1522 VERTICAL Detector : Peak Project : 8O2938-01

WIFI	Band 3 5470~5725MHz Harmonic @ 3m	
ANT	802.11n HT40 CH134 5670MHz	
1	Horizontal	Vertical
Peak Avg.	 Site : 03CH16-HY Condition : PEAK(UNII) 3m 9120D_1522 HORIZONTAL Detector : Peak Project : 8O2938-01	 Site : 03CH16-HY Condition : PEAK(UNII) 3m 9120D_1522 VERTICAL Detector : Peak Project : 8O2938-01

Band 3 5470~5725MHz

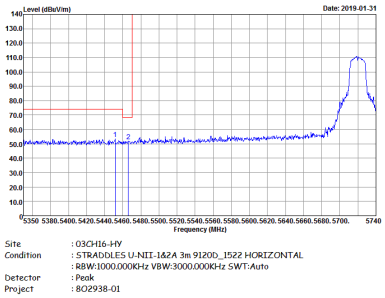
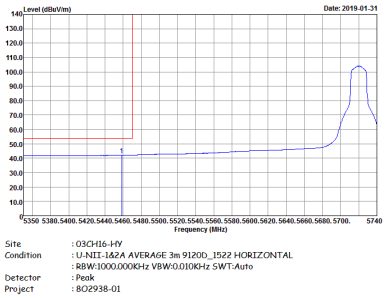
WIFI 802.11ac VHT80 (Harmonic @ 3m)

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

WIFI	Band 3 5470~5725MHz Harmonic @ 3m	
ANT	802.11ac VHT80 CH122 5610MHz	
1	Horizontal	Vertical
Peak Avg.	 Site : 03CH16-HY Condition : PEAK(UNII) 3m 9120D_1522 HORIZONTAL Detector : Peak Project : 8O2938-01	 Site : 03CH16-HY Condition : PEAK(UNII) 3m 9120D_1522 VERTICAL Detector : Peak Project : 8O2938-01

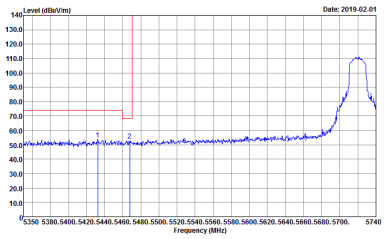
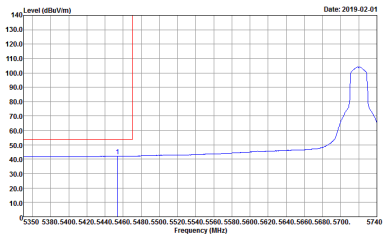
Band 3 - Straddle Channel

WIFI 802.11a (Fundamental @ 3m)

WIFI	Band 3 Straddle Channel Fundamental @ 3m	
ANT	802.11a CH144 5720MHz	
1	Horizontal	Vertical
Peak Avg.		

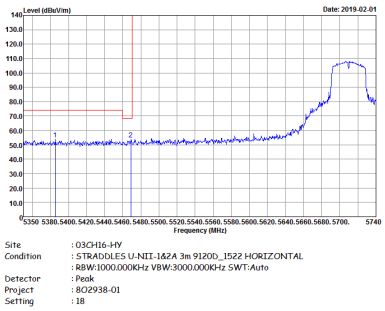
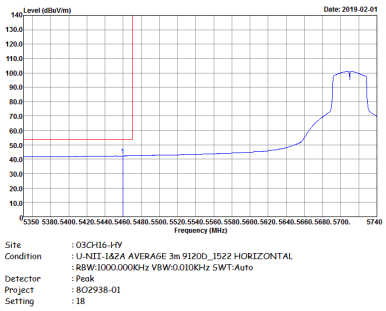
Band 3 – Straddle Channel

WIFI 802.11n HT20 (Fundamental @ 3m)

WIFI	Band 3 Straddle Channel Fundamental @ 3m	
ANT	802.11n HT20 CH144 5720MHz	
1	Horizontal	Vertical
Peak Avg.	 Site : 03CH16-HY Condition : STRADDLES U-NII-1&2A 3m 9120D_1522 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 8O2938-01	 Site : 03CH16-HY Condition : U-NII-1&2A AVERAGE 3m 9120D_1522 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak Project : 8O2938-01

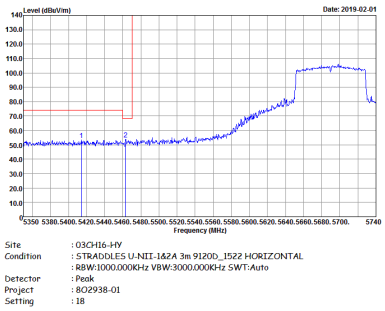
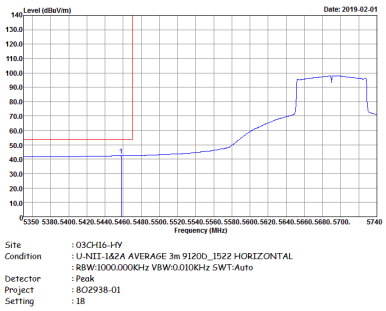
Band 3 – Straddle Channel

WIFI 802.11n HT40 (Fundamental @ 3m)

WIFI	Band 3 Straddle Channel Fundamental @ 3m	
ANT	802.11n HT40 CH142 5710MHz	
1	Horizontal	Vertical
Peak Avg.	 Site : 03CH16-HY Condition : STRADDLES U-NII-1&2A 3m 9120D_1522 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 8O2938-01 Setting : 18	 Site : 03CH16-HY Condition : U-NII-1&2A AVERAGE 3m 9120D_1522 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak Project : 8O2938-01 Setting : 18

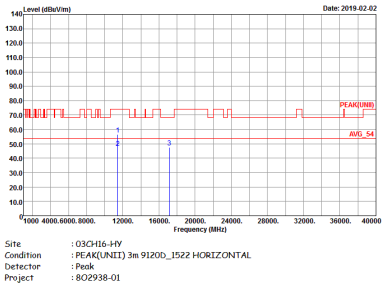
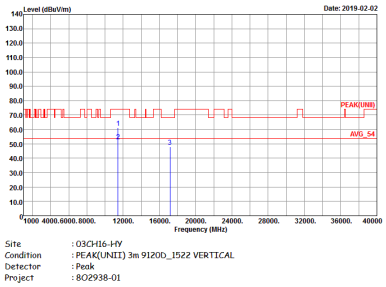
Band 3 – Straddle Channel

WIFI 802.11ac VHT80 (Fundamental @ 3m)

WIFI	Band 3 Straddle Channel Fundamental @ 3m	
ANT	802.11ac VHT80 CH138 5690MHz	
1	Horizontal	Vertical
Peak Avg.		

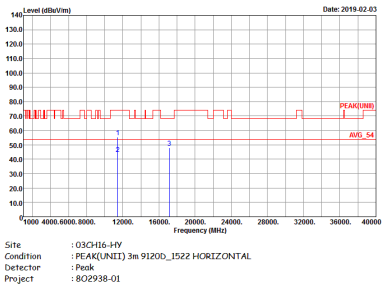
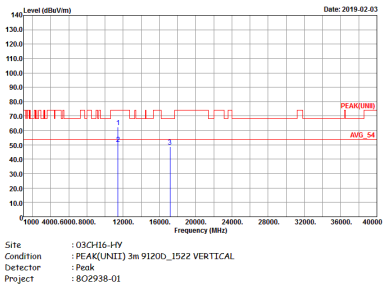
Band 3 - Straddle Channel

WIFI 802.11a (Harmonic @ 3m)

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

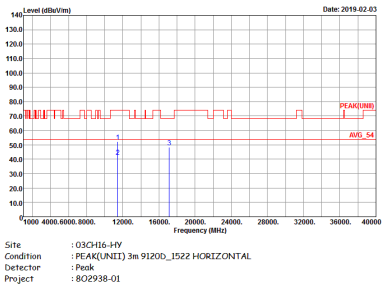
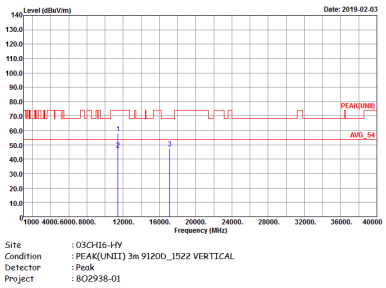
Band 3 – Straddle Channel

WIFI 802.11n HT20 (Harmonic @ 3m)

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

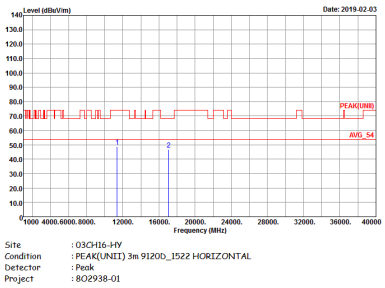
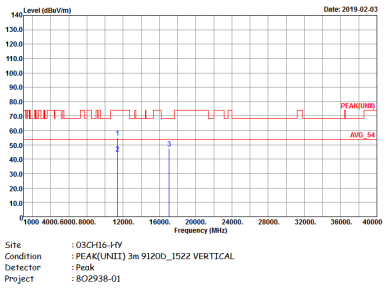
Band 3 – Straddle Channel

WIFI 802.11n HT40 (Harmonic @ 3m)

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

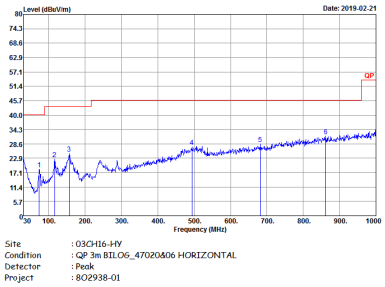
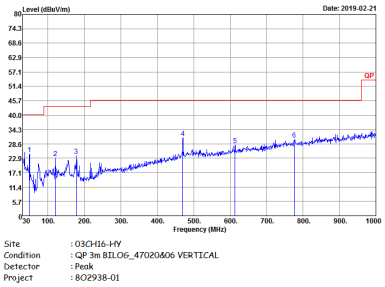
Band 3 – Straddle Channel

WIFI 802.11ac VHT80 (Harmonic @ 3m)

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

Emission below 1GHz

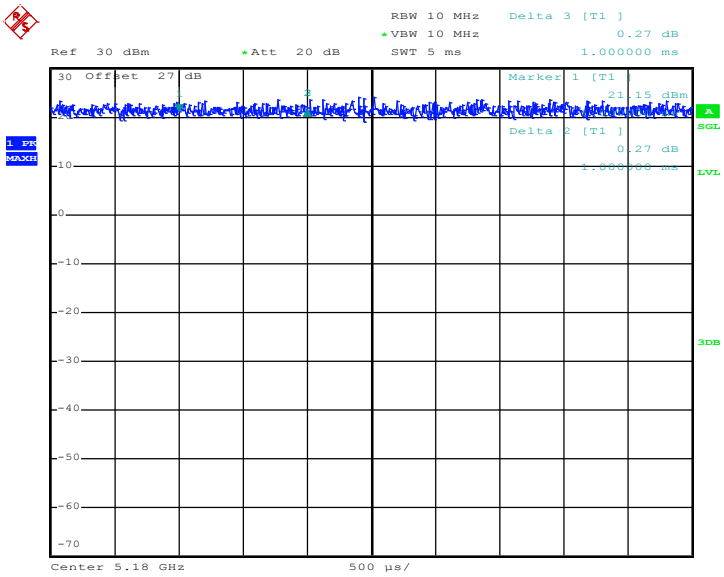
5GHz WIFI 802.11n HT40 (LF)

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

Appendix E. Duty Cycle Plots

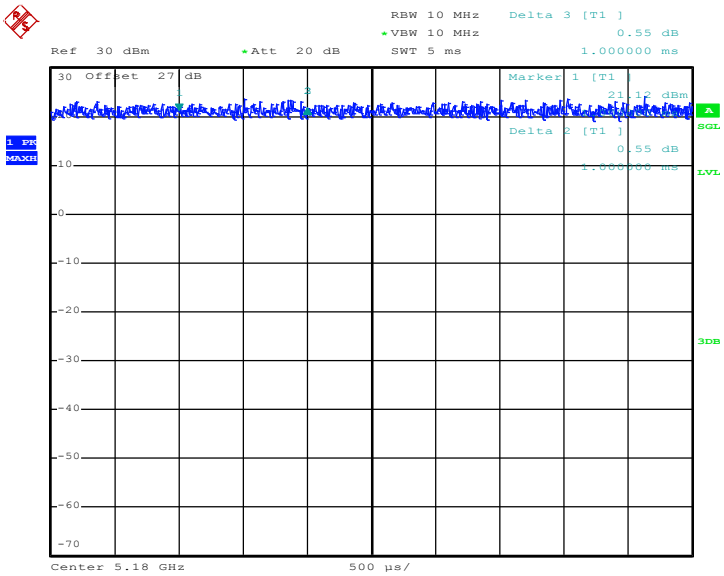
Antenna	Band	Duty Cycle(%)	T(us)	1/T(kHz)	VBW Setting	Duty Factor(dB)
1	802.11a	100.00	-	-	10Hz	0.00
1	5GHz 802.11n HT20	100.00	-	-	10Hz	0.00
1	5GHz 802.11n HT40	100.00	-	-	10Hz	0.00
1	5GHz 802.11ac VHT20	100.00	-	-	10Hz	0.00
1	5GHz 802.11ac VHT40	100.00	-	-	10Hz	0.00
1	5GHz 802.11ac VHT80	100.00	-	-	10Hz	0.00

802.11a



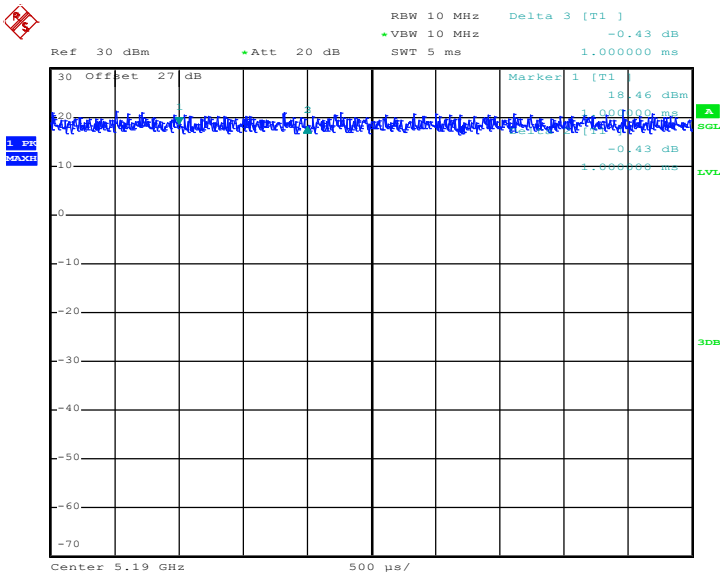
Date: 29.JAN.2019 17:02:47

802.11n HT20



Date: 29.JAN.2019 17:18:00

802.11n HT40



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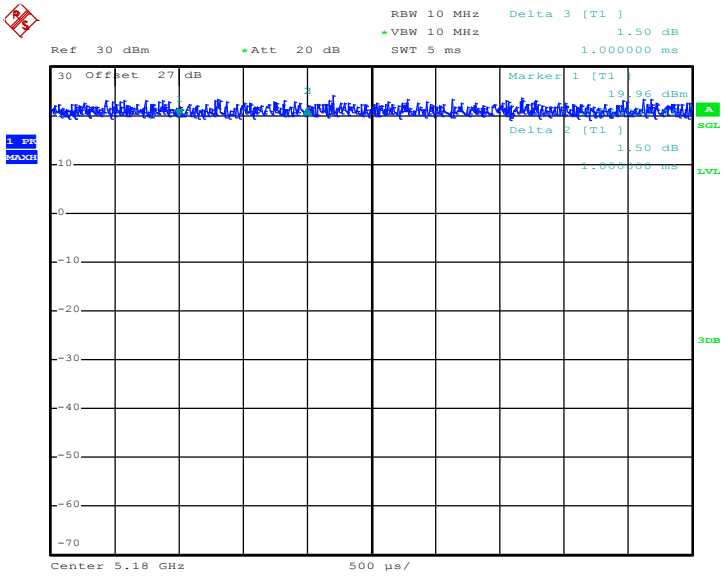

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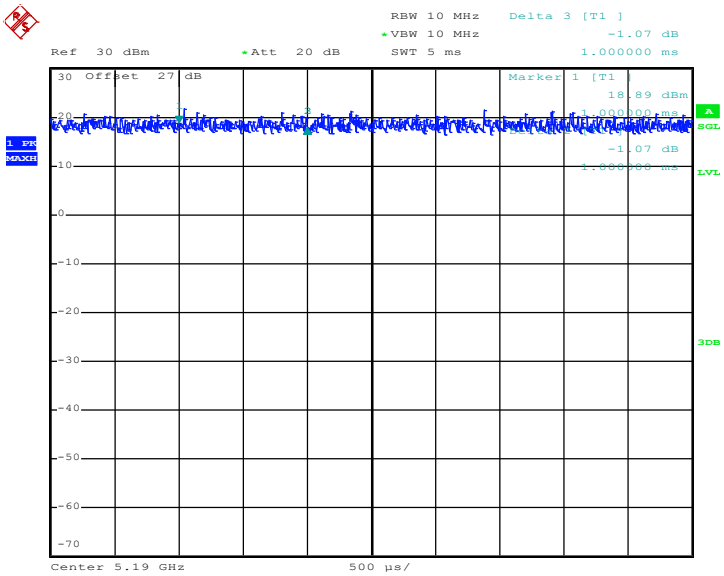

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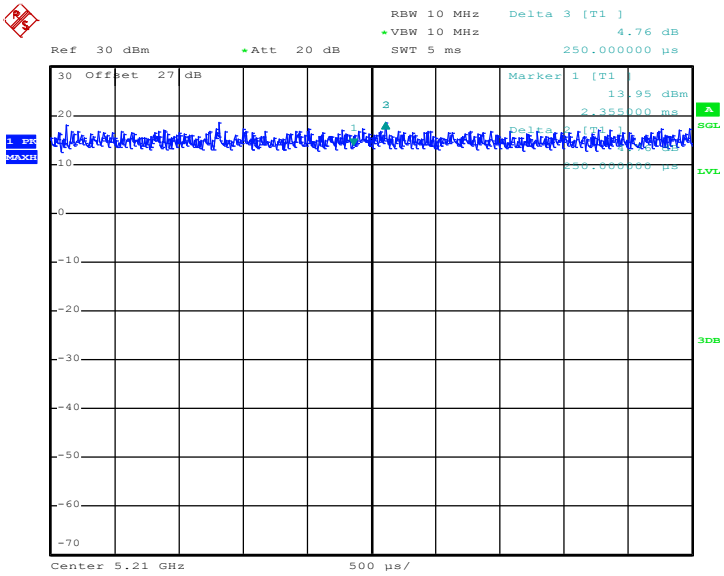

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