FCC RF Test Report

APPLICANT	:	**Essential Products Inc.**
EQUIPMENT	:	**Smartphone**
BRAND NAME	:	**Essential Products**
MODEL NAME	:	**A11**
FCC ID	:	**2ALBB-A11**
STANDARD	:	**FCC Part 15 Subpart E §15.407**
CLASSIFICATION	:	**(NII) Unlicensed National Information Infrastructure**

The product was received on Apr. 08, 2017 and testing was completed on Jun. 13, 2017. We, SPORTON INTERNATIONAL INC., would like to declare that the tested sample has been evaluated in accordance with the test procedures and has been in compliance with the applicable technical standards.

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

Reviewed by: Joseph Lin / Supervisor

Approved by: Jones Tsai / Manager

Testing Laboratory 1190

SPORTON INTERNATIONAL INC.
No. 52, Hwa Ya 1st Rd., Hwa Ya Technology Park, Kwei-Shan District, Tao Yuan City, Taiwan, R.O.C.

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REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FR740822E	Rev. 01	Initial issue of report	Jun. 16, 2017
FR740822E	Rev. 02	Add the test results description of radiated spurious emission below 30MHz in section 3.4.5.	Jun. 20, 2017

SUMMARY OF TEST RESULT

Report Section	FCC Rule	Description	Limit	Result	Remark
3.1	2.1049 15.403(i)	26dB & 99% Bandwidth	-	Pass	-
3.2	15.407(a)	Maximum Conducted Output Power	≤ 24 dBm (depend on band)	Pass	-
3.3	15.407(a)	Power Spectral Density	≤ 11 dBm (depend on band)	Pass	-
3.4	15.407(b)	Unwanted Emissions	≤ -17, -27 dBm (depend on band)&15.209(a)	Pass	Under limit 3.18 dB at 33.510 MHz
3.5	15.207	AC Conducted Emission	15.207(a)	Pass	Under limit 14.50 dB at 0.518 MHz
0	15.407(g)	Frequency Stability	Within Operation Band	Pass	-
3.7	15.407(c)	Automatically Discontinue Transmission	Discontinue Transmission	Pass	-
3.8	15.203 & 15.407(a)	Antenna Requirement	N/A	Pass	-

1 General Description

1.1 Applicant

Essential Products Inc.
380 Portage Ave., Palo Alto, CA 94306

1.2 Manufacturer

FIH Mobile Limited
No.4, Mingsheng St.,Tu-Cheng Dist., New Taipei City 23679, Taiwan

1.3 Feature of Equipment Under Test

GSM/WCDMA/CDMA2000/LTE, Bluetooth, Wi-Fi 2.4GHz 802.11b/g/n, Wi-Fi 5GHz 802.11a/n/ac, NFC, and GPS.

Product Specification subjective to this standard	
Antenna Type	WWAN: PIFA Antenna WLAN: Monopole Antenna Bluetooth: Monopole Antenna GPS/Glonass/Galileo/Beidou : Monopole Antenna NFC: Loop Antenna

1.4 Modification of EUT

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

1.5 Testing Location

Sporton Lab is accredited to ISO 17025 by Taiwan Accreditation Foundation (TAF code : 1190) and the FCC designation No. TW0007 under the FCC 2.948(e) by Mutual Recognition Agreement (MRA) in FCC Test.

Test Site	SPORTON INTERNATIONAL INC.	
Test Site Location	No. 52, Hwa Ya 1st Rd., Hwa Ya Technology Park, Kwei-Shan District, Tao Yuan 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.**
	03CH12-HY

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

1.6 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 v01r03.
- FCC KDB 662911 D01 Multiple Transmitter Output v02r01.
- FCC KDB 644545 D03 Guidance for IEEE 802 11ac New Rules v01
- 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). For radiated measurement, pre-scanned in three orthogonal panels, X, Y, Z. The worst cases (Z plane) were recorded in this report.

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

2.1 Carrier Frequency and Channel

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

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

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

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 mode of conducted test items and radiated spurious emissions are considering the modulation and worse data rates as below table.

Single Antenna

Modulation	Data Rate
802.11a	6 Mbps
802.11n HT20	MCS0
802.11n HT40	MCS0
802.11ac VHT20	MCS0
802.11ac VHT40	MCS0
802.11ac VHT80	MCS0

MIMO Antenna

Modulation	Data Rate
802.11a	6 Mbps
802.11n HT20	MCS0
802.11n HT40	MCS0
802.11ac VHT20	MCS0
802.11ac VHT40	MCS0
802.11ac VHT80	MCS0

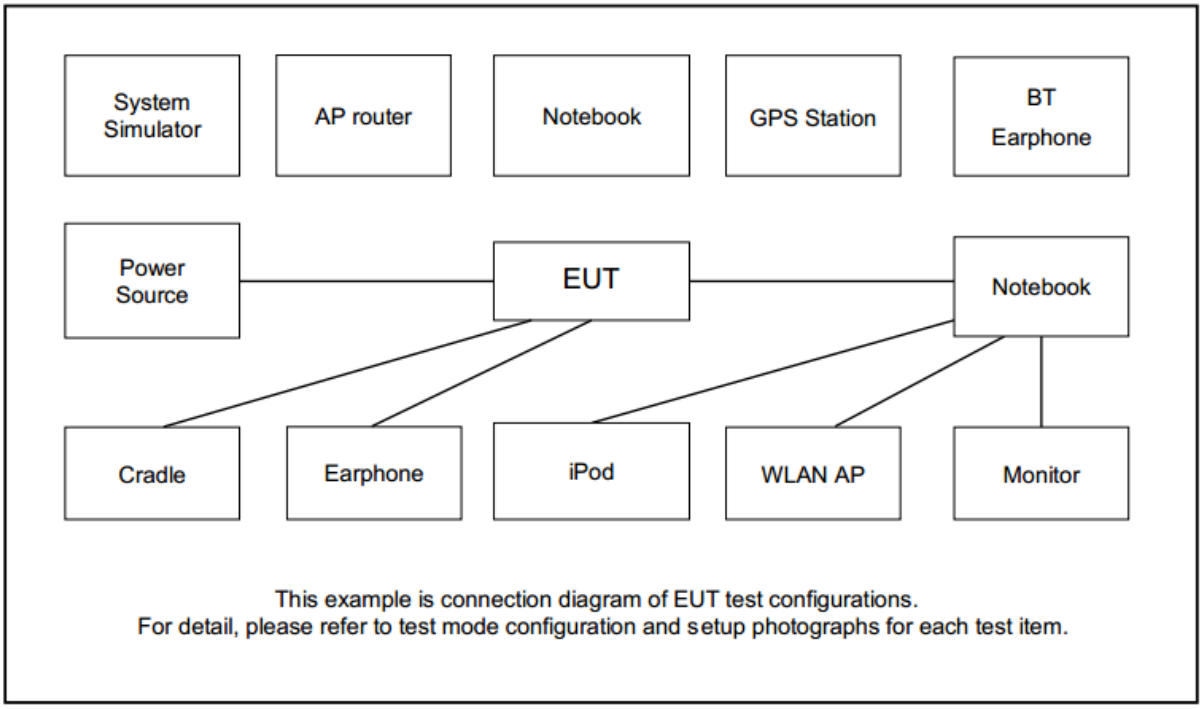
Test Cases	
AC Conducted Emission	Mode 1 : GSM850 Idle + Bluetooth Link + WLAN (5GHz) Link + NFC On + USB Cable (Charging from Adapter)

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

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

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

2.3 Connection Diagram of Test System



This example is connection diagram of EUT test configurations.
For detail, please refer to test mode configuration and setup photographs for each test item.

2.4 Support Unit used in test configuration and system

Item	Equipment	Trade Name	Model Name	FCC ID	Data Cable	Power Cord
1.	System Simulator	Anritsu	MT8820C	N/A	N/A	Unshielded, 1.8 m
2.	Bluetooth Earphone	Sony Ericsson	MW600	PY7DDA-2029	N/A	N/A
3.	WLAN AP	ASUS	RT-AC66U	MSQ-RTAC66U	N/A	Unshielded, 1.8 m
4.	Notebook	DELL	Latitude E6320	FCC DoC/ Contains FCC ID: QDS-BRCM1054	N/A	AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m

2.5 EUT Operation Test Setup

The RF test items, programmed RF utility, “QRCT” installed in the notebook make the EUT provide functions like channel selection and power level for continuous transmitting and receiving signals.

2.6 Measurement Results Explanation Example

For all conducted test items:

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

Example :

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

Offset = RF cable loss + attenuator factor.

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

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

= 4.2 + 10 = 14.2 (dB)

3 Test Result

3.1 26dB & 99% Occupied Bandwidth Measurement

3.1.1 Description of 26dB & 99% Occupied Bandwidth

This section is for reporting purpose only.

There is no restriction limits for bandwidth.

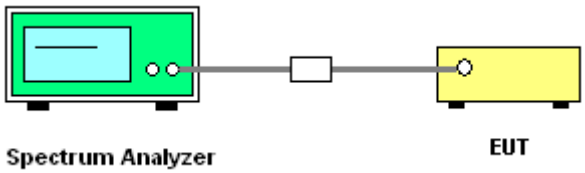
3.1.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

3.1.3 Test Procedures

1. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v01r03. 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 1MHz and set the Video bandwidth (VBW) ≥ 3 * RBW.
8. Measure and record the results in the test report.

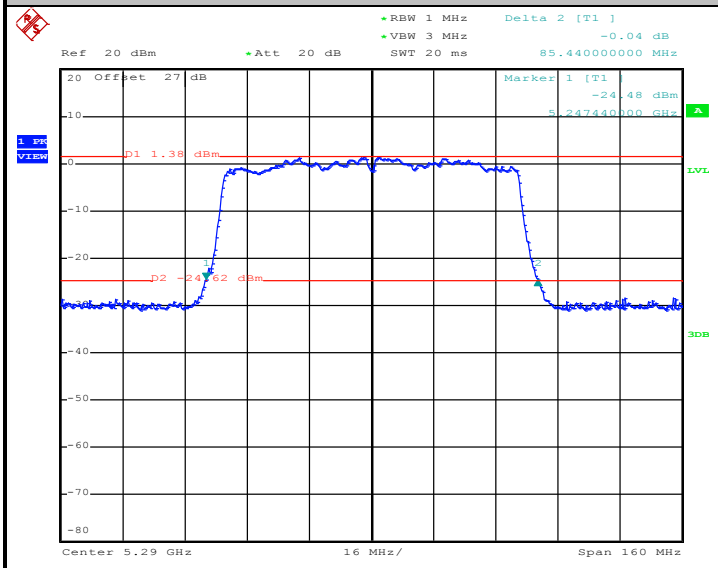
3.1.4 Test Setup



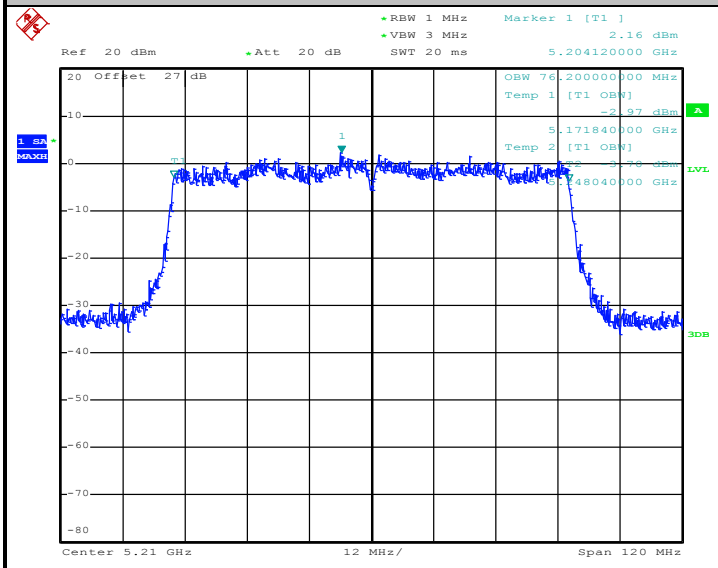
3.1.5 Test Result of 26dB & 99% Occupied Bandwidth

Please refer to Appendix A.

Maximum 26dB Bandwidth



Maximum 99% Occupied Bandwidth



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

3.2 Maximum Conducted Output Power Measurement

3.2.1 Limit of Maximum Conducted Output Power

<FCC 14-30 CFR 15.407>

For 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 the 5.25–5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or 11 dBm 10 log B, where B is the 26 dB emission bandwidth in megahertz.

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

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

3.2.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

3.2.3 Test Procedures

CDD modes

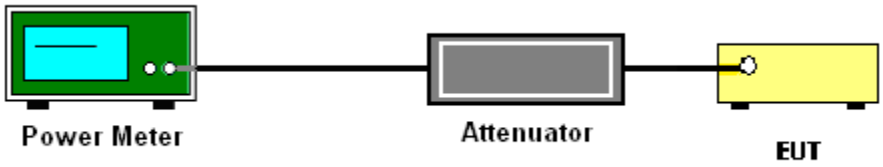
The testing follows Method PM of FCC KDB 789033 D02 General UNII Test Procedures New Rules v01r03 for CDD modes.

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.

3.2.4 Test Setup

For normal channel:



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 mobile and portable client devices in the 5.15–5.25 GHz band, the maximum power spectral density shall not exceed 11dBm in any 1 megahertz band.

For the 5.25–5.725 GHz bands, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band.

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

3.3.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

3.3.3 Test Procedures

The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v01r03.
Section F) Maximum power spectral density.

CDD modes

 # Method SA-2 #

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

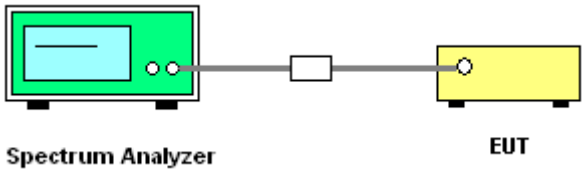
- Measure the duty cycle.
- Set span to encompass the entire emission bandwidth (EBW) of the signal.
- Set RBW = 1 MHz.
- Set VBW ≥ 3 MHz.
- Number of points in sweep ≥ 2 Span / RBW.
- Sweep time = auto.
- Detector = RMS
- Trace average at least 100 traces in power averaging mode.
- Add 10 log(1/x), 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. For MIMO mode, calculation method follows FCC KDB 662911 D01 Multiple Transmitter Output v02r01.

   Method (a): Measure and sum the spectra across the outputs.

   The total final Power Spectral Density is from a device with 2 transmitter outputs. The spectrum measurements of the individual outputs are all performed with the same span and number of points, the spectrum value in the first spectral bin of output 1 is summed with that in the first spectral bin of output 2 to obtain the value for the first frequency bin of the summed spectrum.

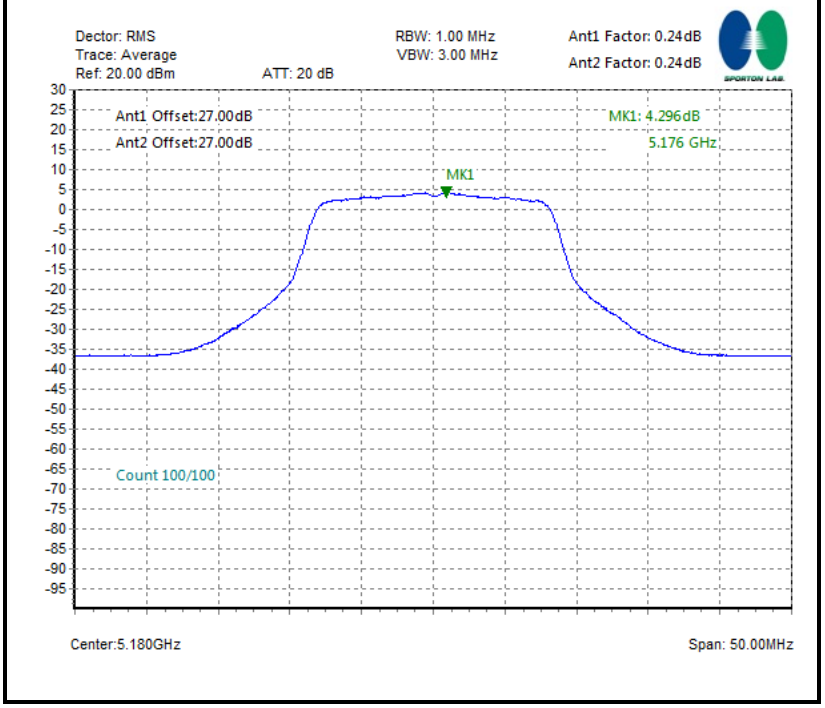
3.3.4 Test Setup



3.3.5 Test Result of Power Spectral Density

Please refer to Appendix A.

Worst Case Power Density (dBm/MHz)



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 per FCC Part15.205 shall comply with the general field strength limits set forth in § 15.209 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)
-17	78.3
- 27	68.3

(3) KDB789033 D02 v01r03 G)2)c)

(i) Section 15.407(b)(1-3) specifies the unwanted emissions limit for the U-NII-1 and 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. However, 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 dBm/MHz peak emission limit.

(ii) Section 15.407(b)(4) specifies the unwanted emissions limit for the U-NII-3 band. A band emissions mask is specified in Section 15.407(b)(4)(i). 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 alternative limit.

3.4.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

3.4.3 Test Procedures

1. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v01r03. 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

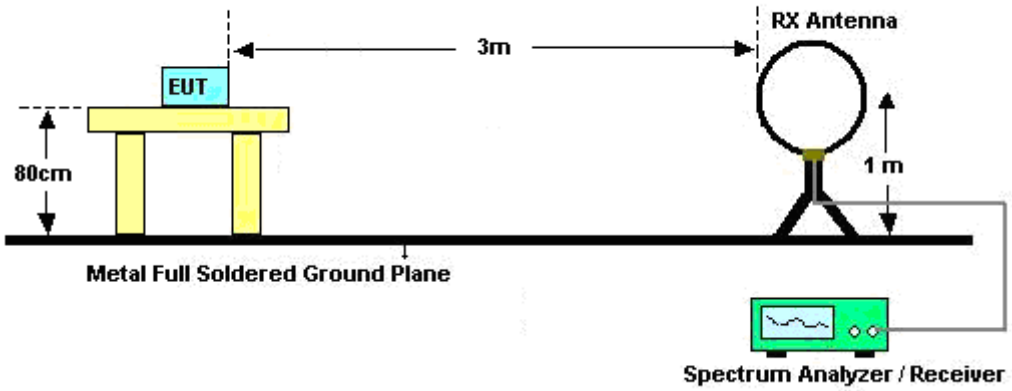
   (3) Procedures for Average Unwanted Emissions Measurements Above 1000MHz

   - 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.

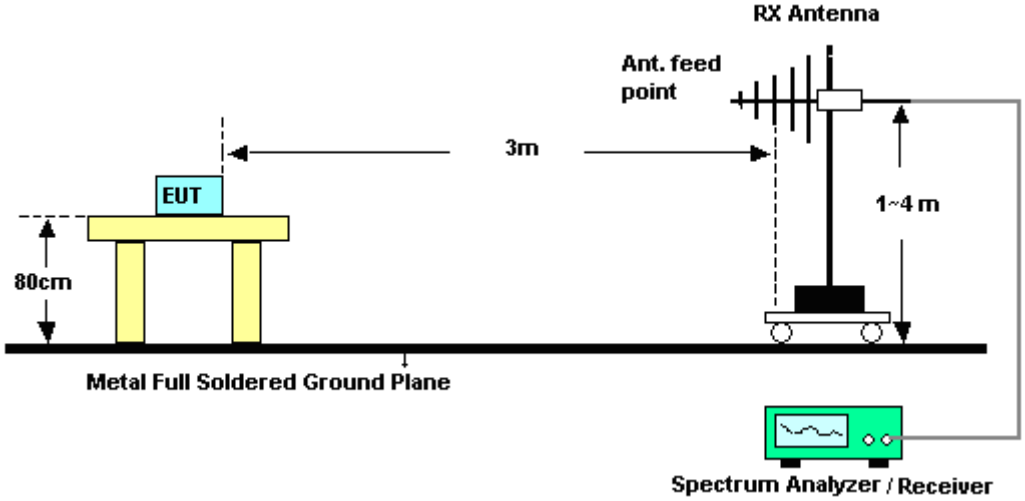
2. The EUT was placed on a turntable with 0.8 meter for frequency below 1GHz and 1.5 meter for frequency above 1GHz respectively above ground.
3. The EUT was set 3 meters from the interference receiving antenna which was mounted on the top of a variable height antenna tower.
4. The antenna is a broadband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

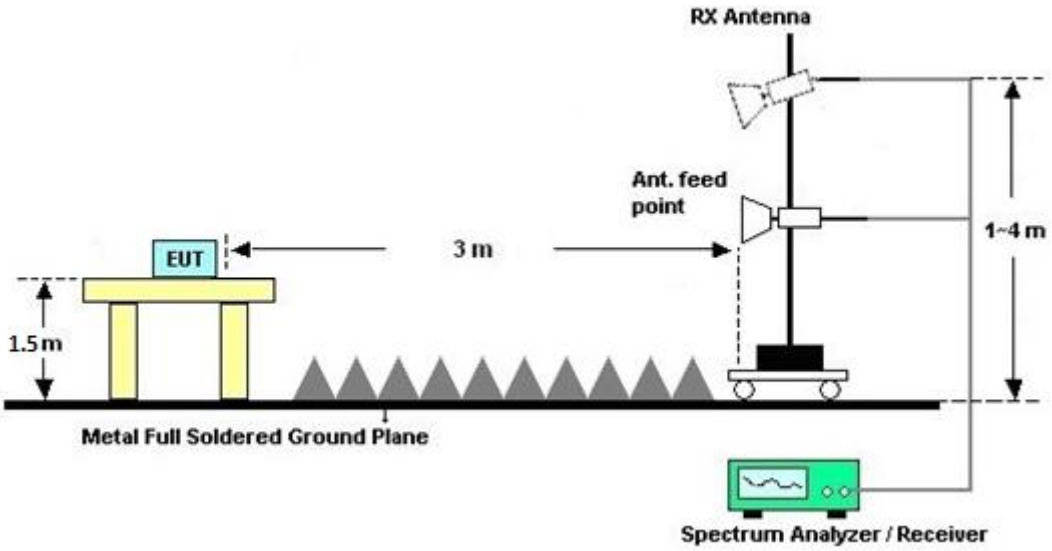
For radiated emissions below 30MHz



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 per 15.31(o) was not reported.

There is a comparison data of both open-field test site and semi-Anechoic chamber, 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.

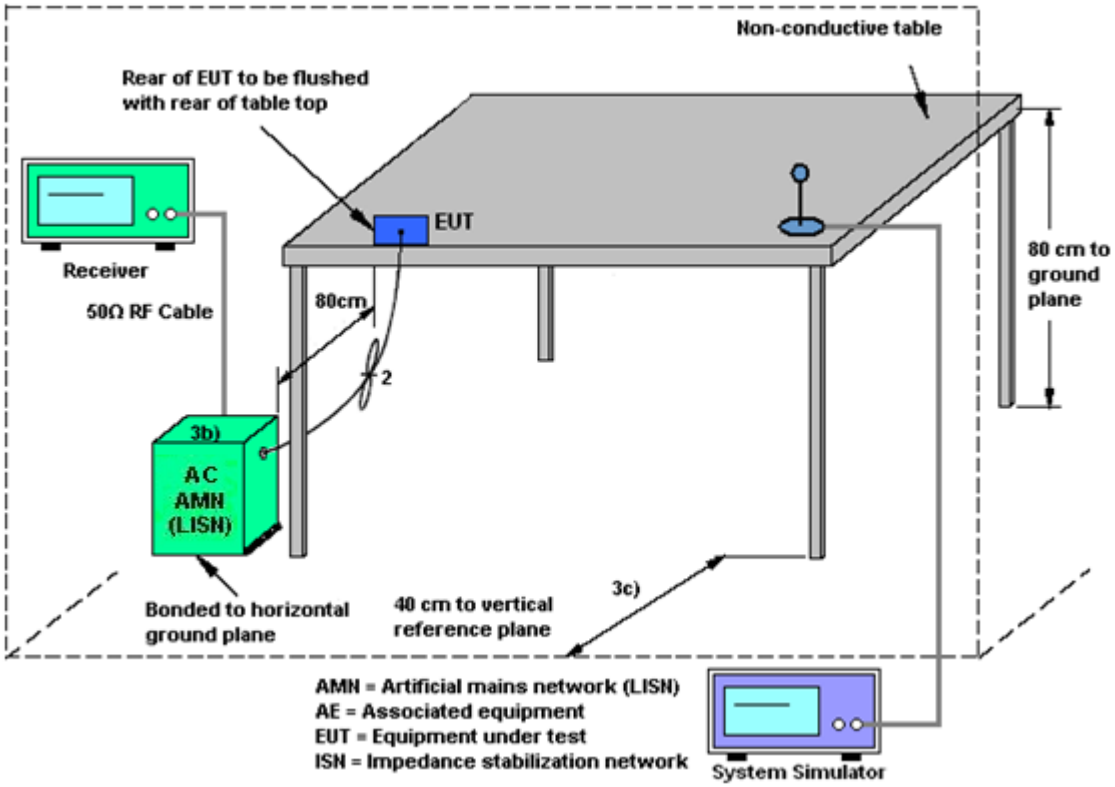
3.5.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

3.5.3 Test Procedures

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

3.5.4 Test Setup



3.5.5 Test Result of AC Conducted Emission

Please refer to Appendix B.

3.6 Frequency Stability Measurement

3.6.1 Limit of Frequency Stability

Manufacturers of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the user's manual.

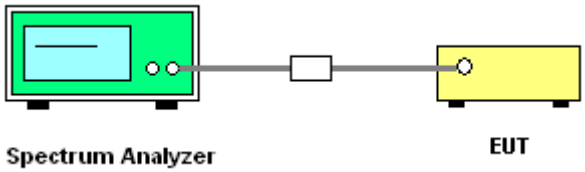
3.6.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

3.6.3 Test Procedures

1. To ensure emission at the band edge is maintained within the authorized band, those values shall be measured by radiation emissions at upper and lower frequency points, and finally compensated by frequency deviation as procedures below.
2. The EUT was operated at the maximum output power, and connected to the spectrum analyzer, which is set to maximum hold function and peak detector. The peak value of the power envelope was measured and noted. The upper and lower frequency points were respectively measured relatively 10dB lower than the measured peak value.
3. The frequency deviation was calculated by adding the upper frequency point and the lower frequency point divided by two. Those detailed values of frequency deviation are provided in table below.

3.6.4 Test Setup



3.6.5 Test Result of Frequency Stability

Please refer to Appendix A.

3.7 Automatically Discontinue Transmission

3.7.1 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.

3.7.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

3.7.3 Test Result of Automatically Discontinue Transmission

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

3.8 Antenna Requirements

3.8.1 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.

3.8.2 Antenna Anti-Replacement Construction

An embedded-in antenna design is used.

3.8.3 Antenna Gain

CDD modes

FCC KDB 662911 D01 Multiple Transmitter Output v02r01

For CDD transmissions, directional gain is calculated as

Directional gain = G_{ANT} + Array Gain, where Array Gain is as follows.

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

Array Gain = 10 log(N_{ANT}/N_{SS}=1) dB.

For power measurements on IEEE 802.11 devices,

Array Gain = 0 dB (i.e., no array gain) for $N_{ANT} \leq 4$.

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

The EUT supports CDD mode.

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

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

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

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

	Ant 1 (dBi)	Ant 2 (dBi)	DG for Power (dBi)	DG for PSD (dBi)	Power Limit Reduction (dB)	PSD Limit Reduction (dB)
Band I	-1.80	-6.70	-1.80	-0.90	0.00	0.00
Band II	-1.80	-6.60	-1.80	-0.86	0.00	0.00
Band III	0.90	-6.30	0.90	1.04	0.00	0.00

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

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

4 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Power Meter	Anritsu	ML2495A	0932001	300MHz~40GHz	Sep. 29, 2016	Jun. 08, 2017 ~ Jun. 11, 2017	Sep. 28, 2017	Conducted (TH05-HY)
Power Sensor	Anritsu	MA2411B	0846202	300MHz~40GHz	Sep. 29, 2016	Jun. 08, 2017 ~ Jun. 11, 2017	Sep. 28, 2017	Conducted (TH05-HY)
Spectrum Analyzer	Rohde & Schwarz	FSP40	100055	9kHz-40GHz	Jul. 17, 2016	Jun. 08, 2017 ~ Jun. 11, 2017	Jul. 16, 2017	Conducted (TH05-HY)
Temperature Chamber	ESPEC	SH-641	92013720	-40℃ ~90℃	Sep. 01, 2016	Jun. 08, 2017 ~ Jun. 11, 2017	Aug. 31, 2017	Conducted (TH05-HY)
Programmable Power Supply	GW Instek	PSS-2005	EL890094	1V~20V 0.5A~5A	Oct. 11, 2016	Jun. 08, 2017 ~ Jun. 11, 2017	Oct. 10, 2017	Conducted (TH05-HY)
AC Power Source	ChainTek	APC-1000W	N/A	N/A	N/A	Jun. 06, 2017	N/A	Conduction (CO05-HY)
EMI Test Receiver	Rohde & Schwarz	ESCI 7	100724	9kHz~7GHz	Aug. 30, 2016	Jun. 06, 2017	Aug. 29, 2017	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100080	9kHz~30MHz	Nov. 29, 2016	Jun. 06, 2017	Nov. 28, 2017	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100081	9kHz~30MHz	Dec. 06, 2016	Jun. 06, 2017	Dec. 05, 2017	Conduction (CO05-HY)
Preamplifier	COM-POWER	PA-103	161075	10MHz~1GHz	Mar. 23, 2017	Jun. 09, 2017 ~ Jun. 13, 2017	Mar. 22, 2018	Radiation (03CH12-HY)
Loop Antenna	Rohde & Schwarz	HFH2-Z2	100488	9 kHz~30 MHz	Oct. 20, 2016	Jun. 09, 2017 ~ Jun. 13, 2017	Oct. 19, 2018	Radiation (03CH12-HY)
Bilog Antenna	TESEQ	CBL 6111D&00800 N1D01N-06	37059&01	30MHz~1GHz	Oct. 15, 2016	Jun. 09, 2017 ~ Jun. 13, 2017	Oct. 14, 2017	Radiation (03CH12-HY)
EMI Test Receiver	Rohde & Schwarz	ESU26	100390	20Hz~26.5GHz	Dec. 23, 2016	Jun. 09, 2017 ~ Jun. 13, 2017	Dec. 22, 2017	Radiation (03CH12-HY)
Horn Antenna	SCHWARZBECK	BBHA 9120D	9120D-1328	1GHz ~ 18GHz	Oct. 25, 2016	Jun. 09, 2017 ~ Jun. 13, 2017	Oct. 24, 2017	Radiation (03CH12-HY)
Preamplifier	MITEQ	AMF-7D-0010 1800-30-10P	1815698	1GHz~18GHz	Dec. 01, 2016	Jun. 09, 2017 ~ Jun. 13, 2017	Nov. 30, 2017	Radiation (03CH12-HY)
Preamplifier	Keysight	83017A	MY53270148	1GHz~26.5GHz	Jan. 12, 2017	Jun. 09, 2017 ~ Jun. 13, 2017	Jan. 11, 2018	Radiation (03CH12-HY)

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Filter	Wainwright	WLJ4-1000-1530-6000-40ST	SN3	1.53 GHz Lowpass	Jul. 07, 2016	Jun. 09, 2017 ~ Jun. 13, 2017	Jul. 06, 2017	Radiation (03CH12-HY)
Filter	Wainwright	WHKX12-2700-3000-18000-60ST	SN2	3 GHz Highpass	Jul. 07, 2016	Jun. 09, 2017 ~ Jun. 13, 2017	Jul. 06, 2017	Radiation (03CH12-HY)
Filter	Woken	WHKX8-5272.5-6750-18000-40ST	SN2	6.75G Highpass	Dec. 08, 2016	Jun. 09, 2017 ~ Jun. 13, 2017	Dec. 07, 2017	Radiation (03CH12-HY)
Antenna Mast	EMEC	AM-BS-4500-B	N/A	1m~4m	N/A	Jun. 09, 2017 ~ Jun. 13, 2017	N/A	Radiation (03CH12-HY)
Turn Table	EMEC	TT2000	N/A	0~360 Degree	N/A	Jun. 09, 2017 ~ Jun. 13, 2017	N/A	Radiation (03CH12-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170576	18GHz ~ 40GHz	Apr. 27, 2017	Jun. 09, 2017 ~ Jun. 13, 2017	Apr. 26, 2018	Radiation (03CH12-HY)
Preamplifier	MITEQ	TTA 1840-35-HG	1887435	18GHz ~ 40GHz	Oct. 13, 2016	Jun. 09, 2017 ~ Jun. 13, 2017	Oct. 12, 2017	Radiation (03CH12-HY)
Spectrum Analyzer	Agilent	N9030A	MY52350276	3Hz~44GHz	Mar. 23, 2017	Jun. 09, 2017 ~ Jun. 13, 2017	Mar. 22, 2018	Radiation (03CH12-HY)

5 Uncertainty of Evaluation

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**2.70**

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**5.10**

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**5.20**

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**4.70**

Appendix A. Test Result of Conducted Test Items

Test Engineer:	Shiming Liu/Allen Lin/Bill Kuo	Temperature:	21~25	°C
Test Date:	2017/6/8~6/11	Relative Humidity:	51~54	%

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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 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2		
11a	6Mbps	2	36	5180	17.50	17.55	24.20	23.90	-		22.43			
11a	6Mbps	2	44	5220	17.40	17.55	24.10	23.90	-		22.41			
11a	6Mbps	2	48	5240	17.40	17.45	23.80	23.65	-		22.41			
HT20	MCS0	2	36	5180	18.40	18.75	25.90	25.50	-		22.65			
HT20	MCS0	2	44	5220	18.50	18.75	25.50	25.60	-		22.67			
HT20	MCS0	2	48	5240	18.45	18.70	25.10	25.60	-		22.66			
HT40	MCS0	2	38	5190	36.60	36.60	42.12	42.66	-		23.01			
HT40	MCS0	2	46	5230	36.60	36.70	41.76	42.48	-		23.01			
VHT80	MCS0	2	42	5210	76.20	75.84	84.80	85.12	-		23.01			

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TEST RESULTS DATA
Average Power Table

FCC Band I															
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Duty Factor (dB)		Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)			Pass/Fail
					Ant 1	Ant 2	Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2		
11a	6Mbps	1	36	5180	0.24	0.24	11.45	9.33		24.00	24.00	-5.00	-8.00		Pass
11a	6Mbps	1	44	5220	0.24	0.24	11.43	9.24		24.00	24.00	-5.00	-8.00		Pass
11a	6Mbps	1	48	5240	0.24	0.24	11.44	9.31		24.00	24.00	-5.00	-8.00		Pass
HT20	MCS0	1	36	5180	0.26	0.26	11.49	9.49		24.00	24.00	-5.00	-8.00		Pass
HT20	MCS0	1	44	5220	0.26	0.26	11.48	9.47		24.00	24.00	-5.00	-8.00		Pass
HT20	MCS0	1	48	5240	0.26	0.26	11.46	9.48		24.00	24.00	-5.00	-8.00		Pass
HT40	MCS0	1	38	5190	0.47	0.44	11.49	9.49		24.00	24.00	-5.00	-8.00		Pass
HT40	MCS0	1	46	5230	0.47	0.44	11.38	9.45		24.00	24.00	-5.00	-8.00		Pass
VHT20	MCS0	1	36	5180	0.26	0.26	9.48	7.48		24.00	24.00	-5.00	-8.00		Pass
VHT20	MCS0	1	44	5220	0.26	0.26	9.37	7.37		24.00	24.00	-5.00	-8.00		Pass
VHT20	MCS0	1	48	5240	0.26	0.26	9.41	7.34		24.00	24.00	-5.00	-8.00		Pass
VHT40	MCS0	1	38	5190	0.47	0.49	9.48	7.49		24.00	24.00	-5.00	-8.00		Pass
VHT40	MCS0	1	46	5230	0.47	0.49	9.37	7.40		24.00	24.00	-5.00	-8.00		Pass
VHT80	MCS0	1	42	5210	0.59	0.63	9.30	7.40		24.00	24.00	-5.00	-8.00		Pass
11a	6Mbps	2	36	5180	0.24	0.24	11.93	10.73	14.39	24.00		-5.00			Pass
11a	6Mbps	2	44	5220	0.24	0.24	11.75	10.64	14.25	24.00		-5.00			Pass
11a	6Mbps	2	48	5240	0.24	0.24	11.92	10.50	14.28	24.00		-5.00			Pass
HT20	MCS0	2	36	5180	0.26	0.26	11.98	10.76	14.42	24.00		-5.00			Pass
HT20	MCS0	2	44	5220	0.26	0.26	11.69	10.75	14.26	24.00		-5.00			Pass
HT20	MCS0	2	48	5240	0.26	0.26	11.93	10.71	14.37	24.00		-5.00			Pass
HT40	MCS0	2	38	5190	0.47	0.52	11.68	10.47	14.13	24.00		-5.00			Pass
HT40	MCS0	2	46	5230	0.47	0.52	11.50	10.52	14.05	24.00		-5.00			Pass
VHT20	MCS0	2	36	5180	0.26	0.26	9.81	9.12	12.49	24.00		-5.00			Pass
VHT20	MCS0	2	44	5220	0.26	0.26	9.69	9.20	12.46	24.00		-5.00			Pass
VHT20	MCS0	2	48	5240	0.26	0.26	10.07	8.67	12.44	24.00		-5.00			Pass
VHT40	MCS0	2	38	5190	0.49	0.49	9.84	9.09	12.49	24.00		-5.00			Pass
VHT40	MCS0	2	46	5230	0.49	0.49	9.82	9.07	12.47	24.00		-5.00			Pass
VHT80	MCS0	2	42	5210	0.59	0.59	9.90	8.84	12.42	24.00		-5.00			Pass

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 1	Ant 2	Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2		
11a	6Mbps	2	36	5180	0.24	0.24			4.30	11.00		-3.36			Pass
11a	6Mbps	2	44	5220	0.24	0.24			3.53	11.00		-3.36			Pass
11a	6Mbps	2	48	5240	0.24	0.24			3.22	11.00		-3.36			Pass
HT20	MCS0	2	36	5180	0.26	0.26			4.04	11.00		-3.36			Pass
HT20	MCS0	2	44	5220	0.26	0.26			3.36	11.00		-3.36			Pass
HT20	MCS0	2	48	5240	0.26	0.26			3.55	11.00		-3.36			Pass
HT40	MCS0	2	38	5190	0.47	0.52			0.65	11.00		-3.36			Pass
HT40	MCS0	2	46	5230	0.47	0.52			-0.15	11.00		-3.36			Pass
VHT80	MCS0	2	42	5210	0.59	0.59			-4.08	11.00		-3.36			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 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	
11a	6Mbps	2	52	5260	17.40	17.50	24.20	24.20	23.41		29.41		23.98		
11a	6Mbps	2	60	5300	17.50	17.60	24.10	24.20	23.43		29.43		23.98		
11a	6Mbps	2	64	5320	17.55	17.55	24.70	24.90	23.44		29.44		23.98		
HT20	MCS0	2	52	5260	18.90	18.60	26.10	25.30	23.70		29.70		23.98		
HT20	MCS0	2	60	5300	18.90	18.65	26.50	25.00	23.71		29.71		23.98		
HT20	MCS0	2	64	5320	18.85	18.70	26.40	25.20	23.72		29.72		23.98		
HT40	MCS0	2	54	5270	36.50	36.60	41.94	42.30	23.98		30.00		23.98		
HT40	MCS0	2	62	5310	36.50	36.60	42.12	42.48	23.98		30.00		23.98		
VHT80	MCS0	2	58	5290	75.84	75.96	85.44	84.48	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)	Duty Factor (dB)		Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)		EIRP Power Limit (dBm)	Pass/Fail
					Ant 1	Ant 2	Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2		
11a	6Mbps	1	52	5260	0.24	0.24	11.42	9.29				-5.00	-8.00	26.99	Pass
11a	6Mbps	1	60	5300	0.24	0.24	11.44	9.30				-5.00	-8.00	26.99	Pass
11a	6Mbps	1	64	5320	0.24	0.24	11.45	9.32				-5.00	-8.00	26.99	Pass
HT20	MCS0	1	52	5260	0.26	0.26	11.44	9.35				-5.00	-8.00	26.99	Pass
HT20	MCS0	1	60	5300	0.26	0.26	11.45	9.36				-5.00	-8.00	26.99	Pass
HT20	MCS0	1	64	5320	0.26	0.26	11.46	9.47				-5.00	-8.00	26.99	Pass
HT40	MCS0	1	54	5270	0.47	0.44	11.42	9.38				-5.00	-8.00	26.99	Pass
HT40	MCS0	1	62	5310	0.47	0.44	11.44	9.43				-5.00	-8.00	26.99	Pass
VHT20	MCS0	1	52	5260	0.26	0.26	9.38	7.40				-5.00	-8.00	26.99	Pass
VHT20	MCS0	1	60	5300	0.26	0.26	9.35	7.45				-5.00	-8.00	26.99	Pass
VHT20	MCS0	1	64	5320	0.26	0.26	9.30	7.47				-5.00	-8.00	26.99	Pass
VHT40	MCS0	1	54	5270	0.47	0.49	9.37	7.38				-5.00	-8.00	26.99	Pass
VHT40	MCS0	1	62	5310	0.47	0.49	9.41	7.45				-5.00	-8.00	26.99	Pass
VHT80	MCS0	1	58	5290	0.59	0.63	9.26	7.34				-5.00	-8.00	26.99	Pass
11a	6Mbps	2	52	5260	0.24	0.24	11.76	10.77	14.31	23.98		-5.00		26.99	Pass
11a	6Mbps	2	60	5300	0.24	0.24	11.55	11.14	14.36	23.98		-5.00		26.99	Pass
11a	6Mbps	2	64	5320	0.24	0.24	11.64	11.07	14.38	23.98		-5.00		26.99	Pass
HT20	MCS0	2	52	5260	0.26	0.26	11.47	11.15	14.32	23.98		-5.00		26.99	Pass
HT20	MCS0	2	60	5300	0.26	0.26	11.64	11.05	14.37	23.98		-5.00		26.99	Pass
HT20	MCS0	2	64	5320	0.26	0.26	11.57	11.24	14.42	23.98		-5.00		26.99	Pass
HT40	MCS0	2	54	5270	0.47	0.52	11.47	10.87	14.19	23.98		-5.00		26.99	Pass
HT40	MCS0	2	62	5310	0.47	0.52	11.52	10.86	14.21	23.98		-5.00		26.99	Pass
VHT20	MCS0	2	52	5260	0.26	0.26	9.45	9.37	12.42			-5.00		26.99	Pass
VHT20	MCS0	2	60	5300	0.26	0.26	9.44	9.24	12.35			-5.00		26.99	Pass
VHT20	MCS0	2	64	5320	0.26	0.26	9.48	9.45	12.48			-5.00		26.99	Pass
VHT40	MCS0	2	54	5270	0.49	0.49	9.45	8.89	12.19			-5.00		26.99	Pass
VHT40	MCS0	2	62	5310	0.49	0.49	9.52	9.14	12.35			-5.00		26.99	Pass
VHT80	MCS0	2	58	5290	0.59	0.59	9.56	8.75	12.19	23.98		-5.00		26.99	Pass

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 1	Ant 2	Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2		
11a	6Mbps	2	52	5260	0.24	0.24			3.07	11.00		-3.36			Pass
11a	6Mbps	2	60	5300	0.24	0.24			3.58	11.00		-3.36			Pass
11a	6Mbps	2	64	5320	0.24	0.24			3.55	11.00		-3.36			Pass
HT20	MCS0	2	52	5260	0.26	0.26			2.72	11.00		-3.36			Pass
HT20	MCS0	2	60	5300	0.26	0.26			2.64	11.00		-3.36			Pass
HT20	MCS0	2	64	5320	0.26	0.26			2.79	11.00		-3.36			Pass
HT40	MCS0	2	54	5270	0.47	0.52			-0.20	11.00		-3.36			Pass
HT40	MCS0	2	62	5310	0.47	0.52			-0.15	11.00		-3.36			Pass
VHT80	MCS0	2	58	5290	0.59	0.59			-4.77	11.00		-3.36			Pass

TEST RESULTS DATA
26dB and 99% OBW

Band III															
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	99% Bandwidth (MHz)		26 dB Bandwidth (MHz)		IC 99% Bandwidth Power Limit (dBm)		IC 99% Bandwidth EIRP Limit (dBm)		FCC 26dB Bandwidth Power Limit (dBm)		Note
					Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	
11a	6Mbps	2	100	5500	17.55	17.40	24.30	24.20	23.41		29.41		23.98		
11a	6Mbps	2	116	5580	17.65	17.50	24.40	24.40	23.43		29.43		23.98		
11a	6Mbps	2	140	5700	17.70	17.45	24.90	23.70	23.42		29.42		23.98		
HT20	MCS0	2	100	5500	18.65	18.70	25.00	24.80	23.71		29.71		23.98		
HT20	MCS0	2	116	5580	18.80	18.55	26.70	25.00	23.68		29.68		23.98		
HT20	MCS0	2	140	5700	19.00	18.55	26.80	25.20	23.68		29.68		23.98		
HT40	MCS0	2	102	5510	36.60	36.70	41.76	42.30	23.98		30.00		23.98		
HT40	MCS0	2	110	5550	36.40	36.70	41.94	42.12	23.98		30.00		23.98		
HT40	MCS0	2	134	5670	36.50	36.70	41.94	42.30	23.98		30.00		23.98		
VHT80	MCS0	2	106	5530	75.84	75.84	84.16	83.52	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)	Duty Factor (dB)		Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)		EIRP Power Limit (dBm)	Pass/Fail
					Ant 1	Ant 2	Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2		
11a	6Mbps	1	100	5500	0.24	0.24	11.32	9.43				-5.00	-8.00	26.99	Pass
11a	6Mbps	1	116	5580	0.24	0.24	11.28	9.36				-5.00	-8.00	26.99	Pass
11a	6Mbps	1	140	5700	0.24	0.24	11.28	9.35				-5.00	-8.00	26.99	Pass
HT20	MCS0	1	100	5500	0.26	0.26	11.42	9.44				-5.00	-8.00	26.99	Pass
HT20	MCS0	1	116	5580	0.26	0.26	11.38	9.38				-5.00	-8.00	26.99	Pass
HT20	MCS0	1	140	5700	0.26	0.26	11.34	9.36				-5.00	-8.00	26.99	Pass
HT40	MCS0	1	102	5510	0.47	0.44	11.38	9.41				-5.00	-8.00	26.99	Pass
HT40	MCS0	1	110	5550	0.47	0.44	11.24	9.40				-5.00	-8.00	26.99	Pass
HT40	MCS0	1	134	5670	0.47	0.44	11.26	9.37				-5.00	-8.00	26.99	Pass
VHT20	MCS0	1	100	5500	0.26	0.26	9.30	7.49				-5.00	-8.00	26.99	Pass
VHT20	MCS0	1	116	5580	0.26	0.26	9.10	7.33				-5.00	-8.00	26.99	Pass
VHT20	MCS0	1	140	5700	0.26	0.26	9.02	7.29				-5.00	-8.00	26.99	Pass
VHT40	MCS0	1	102	5510	0.47	0.49	9.19	7.46				-5.00	-8.00	26.99	Pass
VHT40	MCS0	1	110	5550	0.47	0.49	9.16	7.34				-5.00	-8.00	26.99	Pass
VHT40	MCS0	1	134	5670	0.47	0.49	9.03	7.38				-5.00	-8.00	26.99	Pass
VHT80	MCS0	1	106	5530	0.59	0.63	9.09	7.32				-5.00	-8.00	26.99	Pass
11a	6Mbps	2	100	5500	0.24	0.24	11.34	11.52	14.45	23.98		-5.00		26.99	Pass
11a	6Mbps	2	116	5580	0.24	0.24	10.50	12.07	14.37	23.98		-5.00		26.99	Pass
11a	6Mbps	2	140	5700	0.24	0.24	10.47	12.09	14.37	23.98		-5.00		26.99	Pass
HT20	MCS0	2	100	5500	0.26	0.26	11.47	11.47	14.48	23.98		-5.00		26.99	Pass
HT20	MCS0	2	116	5580	0.26	0.26	11.41	11.49	14.46	23.98		-5.00		26.99	Pass
HT20	MCS0	2	140	5700	0.26	0.26	11.39	11.52	14.47	23.98		-5.00		26.99	Pass
HT40	MCS0	2	102	5510	0.47	0.52	11.43	11.27	14.36	23.98		-5.00		26.99	Pass
HT40	MCS0	2	110	5550	0.47	0.52	11.29	11.49	14.40	23.98		-5.00		26.99	Pass
HT40	MCS0	2	134	5670	0.47	0.52	11.28	11.67	14.49	23.98		-5.00		26.99	Pass
VHT20	MCS0	2	100	5500	0.26	0.26	9.43	9.72	12.59			-5.00		26.99	Pass
VHT20	MCS0	2	116	5580	0.26	0.26	9.12	10.05	12.62			-5.00		26.99	Pass
VHT20	MCS0	2	140	5700	0.26	0.26	9.06	10.39	12.79			-5.00		26.99	Pass
VHT40	MCS0	2	102	5510	0.49	0.49	9.20	9.65	12.44			-5.00		26.99	Pass
VHT40	MCS0	2	110	5550	0.49	0.49	9.19	9.28	12.25			-5.00		26.99	Pass
VHT40	MCS0	2	134	5670	0.49	0.49	9.06	9.71	12.41			-5.00		26.99	Pass
VHT80	MCS0	2	106	5530	0.59	#N/A	9.10	9.56	12.35	23.98		-5.00		26.99	Pass

Report Number : FR740822E

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 1	Ant 2	Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2		
11a	6Mbps	2	100	5500	0.24	0.24			3.99	11.00		-3.36			Pass
11a	6Mbps	2	116	5580	0.24	0.24			3.41	11.00		-3.36			Pass
11a	6Mbps	2	140	5700	0.24	0.24			2.79	11.00		-3.36			Pass
HT20	MCS0	2	100	5500	0.26	0.26			3.57	11.00		-3.36			Pass
HT20	MCS0	2	116	5580	0.26	0.26			4.07	11.00		-3.36			Pass
HT20	MCS0	2	140	5700	0.26	0.26			2.68	11.00		-3.36			Pass
HT40	MCS0	2	102	5510	0.47	0.52			0.79	11.00		-3.36			Pass
HT40	MCS0	2	110	5550	0.47	0.52			1.59	11.00		-3.36			Pass
HT40	MCS0	2	134	5670	0.47	0.52			-0.03	11.00		-3.36			Pass
VHT80	MCS0	2	106	5530	0.59	0.59			-4.13	11.00		-3.36			Pass

TEST RESULTS DATA
Frequency Stability

Band I										
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Center Frequency (MHz)	Frequency Deviation (MHz)	Frequency Stablility (ppm)	Temperature (°C)	Voltage (V)	Note
11a	6Mbps	1	36	5180	5180.100	0.100	19.31	50	3.85	
11a	6Mbps	1	36	5180	5180.100	0.100	19.31	-30	3.85	
11a	6Mbps	1	36	5180	5180.050	0.050	9.65	20	4.2	
11a	6Mbps	1	36	5180	5180.050	0.050	9.65	20	3.5	
11a	6Mbps	1	36	5180	5180.050	0.050	9.65	20	3.85	

Band II										
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Center Frequency (MHz)	Frequency Deviation (MHz)	Frequency Stablility (ppm)	Temperature (°C)	Voltage (V)	Note
11a	6Mbps	1	64	5320	5320.050	0.050	9.40	50	3.85	
11a	6Mbps	1	64	5320	5320.100	0.100	18.80	-30	3.85	
11a	6Mbps	1	64	5320	5320.050	0.050	9.40	20	4.2	
11a	6Mbps	1	64	5320	5320.050	0.050	9.40	20	3.5	
11a	6Mbps	1	64	5320	5320.050	0.050	9.40	20	3.85	

Band III										
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Center Frequency (MHz)	Frequency Deviation (MHz)	Frequency Stablility (ppm)	Temperature (°C)	Voltage (V)	Note
11a	6Mbps	1	100	5500	5500.000	0.000	0.00	50	3.85	
11a	6Mbps	1	100	5500	5500.050	0.050	9.09	-30	3.85	
11a	6Mbps	1	100	5500	5500.000	0.000	0.00	20	4.2	
11a	6Mbps	1	100	5500	5500.050	0.050	9.09	20	3.5	
11a	6Mbps	1	100	5500	5500.000	0.000	0.00	20	3.85	

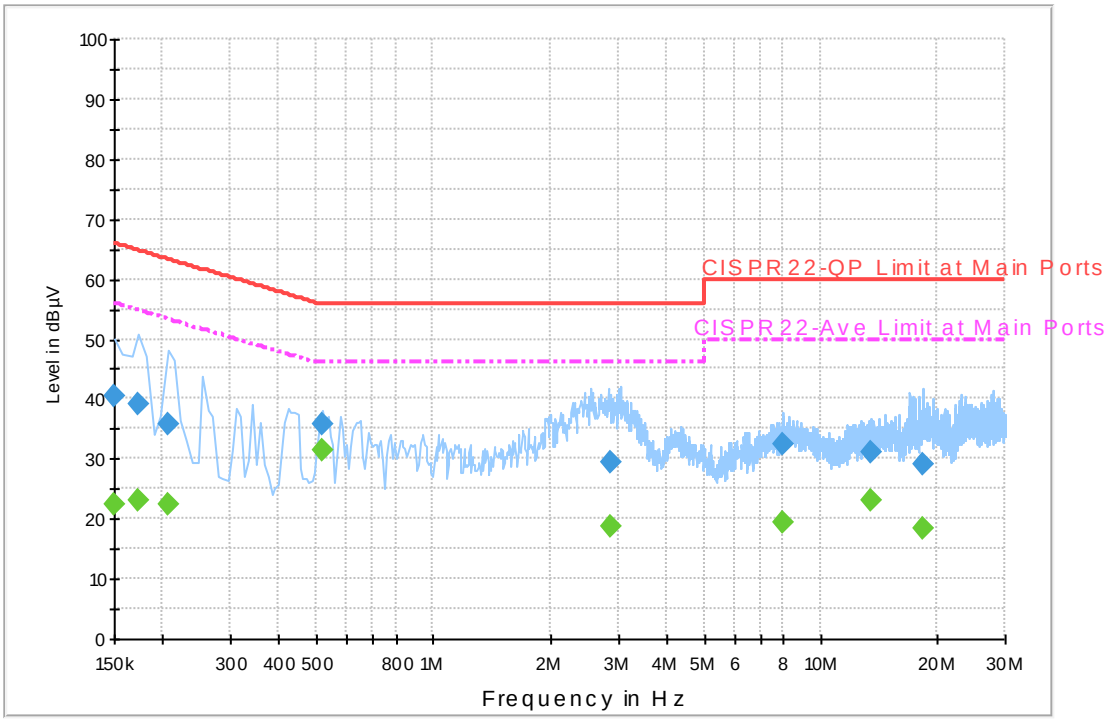
Appendix B. AC Conducted Emission Test Results

Test Engineer :	Marolwe Ho	**Temperature :**	24~26℃
		Relative Humidity :	50~52%

EUT Information

Report NO :	740822
Test Mode :	Mode 1
Test Voltage :	120Vac/60Hz
Phase :	Line

ENV216 Auto Test FCC Power Bar - L



Final Result 1

Frequency (MHz)	QuasiPeak (dBµV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.150000	40.5	Off	L1	19.6	25.5	66.0
0.174000	39.2	Off	L1	19.6	25.6	64.8
0.206000	35.8	Off	L1	19.6	27.6	63.4
0.518000	35.9	Off	L1	19.6	20.1	56.0
2.862000	29.5	Off	L1	19.5	26.5	56.0
8.030000	32.4	Off	L1	19.9	27.6	60.0
13.558000	31.1	Off	L1	20.2	28.9	60.0
18.510000	29.1	Off	L1	20.5	30.9	60.0

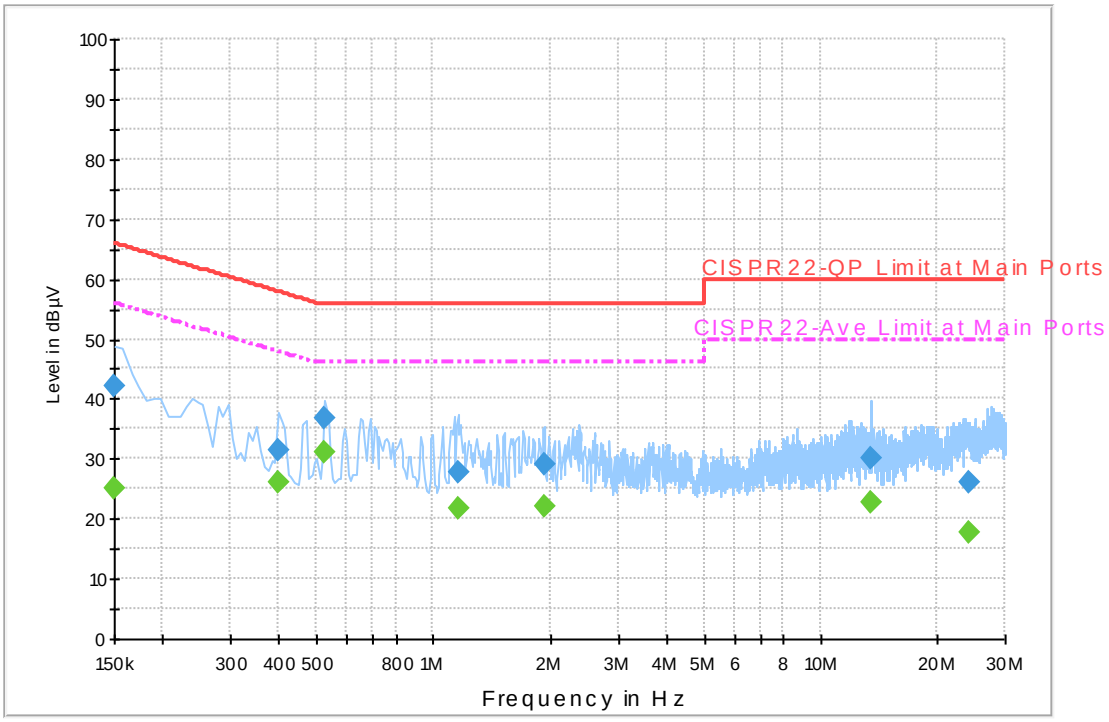
Final Result 2

Frequency (MHz)	Average (dBµV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.150000	22.6	Off	L1	19.6	33.4	56.0
0.174000	22.9	Off	L1	19.6	31.9	54.8
0.206000	22.5	Off	L1	19.6	30.9	53.4
0.518000	31.5	Off	L1	19.6	14.5	46.0
2.862000	18.7	Off	L1	19.5	27.3	46.0
8.030000	19.3	Off	L1	19.9	30.7	50.0
13.558000	23.0	Off	L1	20.2	27.0	50.0
18.510000	18.4	Off	L1	20.5	31.6	50.0

EUT Information

Report NO :	740822
Test Mode :	Mode 1
Test Voltage :	120Vac/60Hz
Phase :	Neutral

ENV216 Auto Test FCC Power Bar - N



Final Result 1

Frequency (MHz)	QuasiPeak (dBµV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.150000	42.1	Off	N	19.5	23.9	66.0
0.398000	31.3	Off	N	19.5	26.6	57.9
0.526000	36.6	Off	N	19.5	19.4	56.0
1.158000	27.6	Off	N	19.6	28.4	56.0
1.934000	29.1	Off	N	19.6	26.9	56.0
13.558000	30.1	Off	N	20.3	29.9	60.0
24.278000	26.2	Off	N	20.9	33.8	60.0

Final Result 2

Frequency (MHz)	Average (dBµV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.150000	25.2	Off	N	19.5	30.8	56.0
0.398000	26.0	Off	N	19.5	21.9	47.9
0.526000	31.2	Off	N	19.5	14.8	46.0
1.158000	21.6	Off	N	19.6	24.4	46.0
1.934000	22.1	Off	N	19.6	23.9	46.0
13.558000	22.9	Off	N	20.3	27.1	50.0
24.278000	17.8	Off	N	20.9	32.2	50.0

Appendix C. Radiated Spurious Emission

Test Engineer :	Peter Liao and Nick Yu	Temperature :	22~23°C
		Relative Humidity :	54~56%

Band 1 - 5150~5250MHz

WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1+2		(MHz)	(dBµV/m)	(dB)	(dBµV/m)	(dBµV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
		5145.34	49.65	-24.35	74	42.14	32.47	5.99	30.95	268	122	P	H
		5149.76	38.6	-15.4	54	31.09	32.47	5.99	30.95	268	122	A	H
	*	5180	101.67	-	-	94.14	32.46	6.02	30.95	268	122	P	H
	*	5180	91.15	-	-	83.62	32.46	6.02	30.95	268	122	A	H
802.11n													H
HT20													H
CH 36		5012.74	49.58	-24.42	74	42.14	32.5	5.89	30.95	100	82	P	V
5180MHz		5145.86	38.86	-15.14	54	31.35	32.47	5.99	30.95	100	82	A	V
	*	5180	102.06	-	-	94.53	32.46	6.02	30.95	100	82	P	V
	*	5180	91.5	-	-	83.97	32.46	6.02	30.95	100	82	A	V
													V
													V
		5095.16	51	-23	74	43.52	32.48	5.95	30.95	275	122	P	H
		5148.72	38.35	-15.65	54	30.84	32.47	5.99	30.95	275	122	A	H
	*	5220	102.52	-	-	94.97	32.46	6.04	30.95	275	122	P	H
	*	5220	91.88	-	-	84.33	32.46	6.04	30.95	275	122	A	H
802.11n		5450.76	49.49	-24.51	74	41.82	32.41	6.21	30.95	275	122	P	H
HT20		5391.96	38.38	-15.62	54	30.76	32.42	6.15	30.95	275	122	A	H
CH 44		5122.72	48.76	-25.24	74	41.26	32.48	5.97	30.95	102	100	P	V
5220MHz		5145.6	38.2	-15.8	54	30.69	32.47	5.99	30.95	102	100	A	V
	*	5220	101.97	-	-	94.42	32.46	6.04	30.95	102	100	P	V
	*	5220	91.51	-	-	83.96	32.46	6.04	30.95	102	100	A	V
		5365.92	49.64	-24.36	74	42.02	32.43	6.14	30.95	102	100	P	V
		5401.48	38.16	-15.84	54	30.53	32.42	6.16	30.95	102	100	A	V

		5122.72	49.61	-24.39	74	42.11	32.48	5.97	30.95	275	123	P	H
		5147.94	38.16	-15.84	54	30.65	32.47	5.99	30.95	275	123	A	H
	*	5240	102.54	-	-	94.99	32.45	6.05	30.95	275	123	P	H
	*	5240	91.98	-	-	84.43	32.45	6.05	30.95	275	123	A	H
802.11n		5407.08	50.2	-23.8	74	42.57	32.42	6.16	30.95	275	123	P	H
HT20		5378.52	38.15	-15.85	54	30.53	32.42	6.15	30.95	275	123	A	H
CH 48		5142.22	49.08	-24.92	74	41.58	32.47	5.98	30.95	100	92	P	V
5240MHz		5142.48	38.09	-15.91	54	30.58	32.47	5.99	30.95	100	92	A	V
	*	5240	102.16	-	-	94.61	32.45	6.05	30.95	100	92	P	V
	*	5240	91.58	-	-	84.03	32.45	6.05	30.95	100	92	A	V
		5459.16	50.34	-23.66	74	42.67	32.41	6.21	30.95	100	92	P	V
		5409.6	38.12	-15.88	54	30.49	32.42	6.16	30.95	100	92	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 1 5150~5250MHz

WIFI 802.11n HT20 (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		10360	48.63	-25.37	74	56.23	39.75	9.25	57.14	100	0	P	H
		15540	48.96	-25.04	74	55.57	39.38	11.47	58.22	100	0	P	H
802.11n													H
HT20													H
CH 36		10360	48.56	-25.44	74	56.16	39.75	9.25	57.14	100	0	P	V
5180MHz		15540	49.16	-24.84	74	55.77	39.38	11.47	58.22	100	0	P	V
													V
													V
		10440	48.84	-25.16	74	56.15	39.89	9.28	57.02	100	0	P	H
		15660	49.27	-24.73	74	55.93	39.02	11.53	57.96	100	0	P	H
802.11n													H
HT20													H
CH 44		10440	48.62	-25.38	74	55.93	39.89	9.28	57.02	100	0	P	V
5220MHz		15660	50.23	-23.77	74	56.89	39.02	11.53	57.96	100	0	P	V
													V
													V
		10480	47.7	-26.3	74	54.82	39.96	9.31	56.93	100	0	P	H
		15720	49.06	-24.94	74	55.73	38.84	11.56	57.81	100	0	P	H
802.11n													H
HT20													H
CH 48		10480	49.7	-24.3	74	56.82	39.96	9.31	56.93	100	0	P	V
5240MHz		15720	47.7	-26.3	74	54.37	38.84	11.56	57.81	100	0	P	V
													V
													V

Remark

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

Band 1 5150~5250MHz

WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		5131.04	49.82	-24.18	74	42.32	32.47	5.98	30.95	265	122	P	H
		5132.6	39.79	-14.21	54	32.29	32.47	5.98	30.95	265	122	A	H
	*	5190	99.43	-	-	91.9	32.46	6.02	30.95	265	122	P	H
	*	5190	88.83	-	-	81.3	32.46	6.02	30.95	265	122	A	H
802.11n		5454.68	49.32	-24.68	74	41.65	32.41	6.21	30.95	265	122	P	H
HT40		5401.76	38.83	-15.17	54	31.2	32.42	6.16	30.95	265	122	A	H
CH 38		5126.88	49.65	-24.35	74	42.15	32.47	5.98	30.95	100	93	P	V
5190MHz		5140.14	39.51	-14.49	54	32.01	32.47	5.98	30.95	100	93	A	V
	*	5190	97.37	-	-	89.84	32.46	6.02	30.95	100	93	P	V
	*	5190	86.86	-	-	79.33	32.46	6.02	30.95	100	93	A	V
		5392.8	48.92	-25.08	74	41.3	32.42	6.15	30.95	100	93	P	V
		5455.52	38.84	-15.16	54	31.17	32.41	6.21	30.95	100	93	A	V
		5013	49.36	-24.64	74	41.92	32.5	5.89	30.95	259	123	P	H
		5117.26	38.99	-15.01	54	31.49	32.48	5.97	30.95	259	123	A	H
	*	5230	98.43	-	-	90.89	32.45	6.04	30.95	259	123	P	H
	*	5230	88.25	-	-	80.71	32.45	6.04	30.95	259	123	A	H
802.11n		5373.76	49.19	-24.81	74	41.57	32.43	6.14	30.95	259	123	P	H
HT40		5376.28	38.84	-15.16	54	31.22	32.42	6.15	30.95	259	123	A	H
CH 46		5137.8	49.51	-24.49	74	42.01	32.47	5.98	30.95	100	92	P	V
5230MHz		5128.18	38.97	-15.03	54	31.47	32.47	5.98	30.95	100	92	A	V
	*	5230	98.3	-	-	90.76	32.45	6.04	30.95	100	92	P	V
	*	5230	87.63	-	-	80.09	32.45	6.04	30.95	100	92	A	V
		5410.16	49.42	-24.58	74	41.79	32.42	6.16	30.95	100	92	P	V
		5436.76	38.99	-15.01	54	31.34	32.41	6.19	30.95	100	92	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 (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		5141.96	50.67	-23.33	74	43.17	32.47	5.98	30.95	274	123	P	H
		5142.22	39.97	-14.03	54	32.47	32.47	5.98	30.95	274	123	A	H
	*	5210	95.16	-	-	87.62	32.46	6.03	30.95	274	123	P	H
	*	5210	84.58	-	-	77.04	32.46	6.03	30.95	274	123	A	H
802.11ac		5362	49.22	-24.78	74	41.6	32.43	6.14	30.95	274	123	P	H
VHT80		5412.96	38.97	-15.03	54	31.32	32.42	6.18	30.95	274	123	A	H
CH 42		5140.66	50.43	-23.57	74	42.93	32.47	5.98	30.95	100	92	P	V
5210MHz		5138.58	40.13	-13.87	54	32.63	32.47	5.98	30.95	100	92	A	V
	*	5210	95.24	-	-	87.7	32.46	6.03	30.95	100	92	P	V
	*	5210	84.66	-	-	77.12	32.46	6.03	30.95	100	92	A	V
		5445.16	48.94	-25.06	74	41.29	32.41	6.19	30.95	100	92	P	V
		5408.2	38.88	-15.12	54	31.25	32.42	6.16	30.95	100	92	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 (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1+2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
		5126.82	49.79	-24.21	74	42.29	32.47	5.98	30.95	260	122	P	H
		5134.3	38.17	-15.83	54	30.67	32.47	5.98	30.95	260	122	A	H
	*	5260	102.46	-	-	94.89	32.45	6.07	30.95	260	122	P	H
	*	5260	92.07	-	-	84.5	32.45	6.07	30.95	260	122	A	H
802.11n		5366.16	49.33	-24.67	74	41.71	32.43	6.14	30.95	260	122	P	H
HT20		5376.48	38.2	-15.8	54	30.58	32.42	6.15	30.95	260	122	A	H
CH 52		5137.36	48.96	-25.04	74	41.46	32.47	5.98	30.95	116	301	P	V
5260MHz		5136.34	37.89	-16.11	54	30.39	32.47	5.98	30.95	116	301	A	V
	*	5260	101.4	-	-	93.83	32.45	6.07	30.95	116	301	P	V
	*	5260	90.84	-	-	83.27	32.45	6.07	30.95	116	301	A	V
		5451.6	49.44	-24.56	74	41.77	32.41	6.21	30.95	116	301	P	V
		5394.24	38.18	-15.82	54	30.55	32.42	6.16	30.95	116	301	A	V
		5096.56	48.72	-25.28	74	41.24	32.48	5.95	30.95	269	123	P	H
		5136	38.16	-15.84	54	30.66	32.47	5.98	30.95	269	123	A	H
	*	5300	102.13	-	-	94.55	32.44	6.09	30.95	269	123	P	H
	*	5300	91.62	-	-	84.04	32.44	6.09	30.95	269	123	A	H
802.11n		5399.52	49.7	-24.3	74	42.07	32.42	6.16	30.95	269	123	P	H
HT20		5352.96	38.78	-15.22	54	31.18	32.43	6.12	30.95	269	123	A	H
CH 60		5059.16	48.68	-25.32	74	41.21	32.49	5.93	30.95	128	301	P	V
5300MHz		5142.46	38.02	-15.98	54	30.52	32.47	5.98	30.95	128	301	A	V
	*	5300	100.16	-	-	92.58	32.44	6.09	30.95	128	301	P	V
	*	5300	89.53	-	-	81.95	32.44	6.09	30.95	128	301	A	V
		5368.08	49.28	-24.72	74	41.66	32.43	6.14	30.95	128	301	P	V
		5354.88	38.47	-15.53	54	30.87	32.43	6.12	30.95	128	301	A	V

	*	5320	102.43	-	-	94.84	32.44	6.1	30.95	260	121	P	H
	*	5320	91.76	-	-	84.17	32.44	6.1	30.95	260	121	A	H
		5355.68	50.75	-23.25	74	43.15	32.43	6.12	30.95	260	121	P	H
		5350.56	39.09	-14.91	54	31.49	32.43	6.12	30.95	260	121	A	H
802.11n													H
HT20													H
CH 64	*	5320	100.72	-	-	93.13	32.44	6.1	30.95	107	91	P	V
5320MHz	*	5320	90.08	-	-	82.49	32.44	6.1	30.95	107	91	A	V
		5356.16	50.09	-23.91	74	42.49	32.43	6.12	30.95	107	91	P	V
		5361.6	38.68	-15.32	54	31.06	32.43	6.14	30.95	107	91	A	V
													V
													V

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

Band 2 5250~5350MHz

WIFI 802.11n HT20 (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		10520	48.57	-25.43	74	55.59	40.01	9.33	56.9	100	0	P	H
		15780	48.68	-25.32	74	55.39	38.66	11.58	57.69	100	0	P	H
802.11n													H
HT20													H
CH 52		10520	48.14	-25.86	74	55.16	40.01	9.33	56.9	100	0	P	V
5260MHz		15780	48.31	-25.69	74	55.02	38.66	11.58	57.69	100	0	P	V
													V
													V
		10600	49.06	-24.94	74	56	40.04	9.36	56.88	100	0	P	H
		15900	48.28	-25.72	74	55.04	38.3	11.64	57.43	100	0	P	H
802.11n													H
HT20													H
CH 60		10600	49.03	-24.97	74	55.97	40.04	9.36	56.88	100	0	P	V
5300MHz		15900	47.92	-26.08	74	54.68	38.3	11.64	57.43	100	0	P	V
													V
													V
		10640	47.86	-26.14	74	54.76	40.06	9.38	56.87	100	0	P	H
		15960	47.31	-26.69	74	54.09	38.12	11.66	57.28	100	0	P	H
802.11n													H
HT20													H
CH 64		10640	48.49	-25.51	74	55.39	40.06	9.38	56.87	100	0	P	V
5320MHz		15960	46.45	-27.55	74	53.23	38.12	11.66	57.28	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 2 5250~5350MHz

WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 CH 54 5270MHz		5018.36	49.48	-24.52	74	42.03	32.5	5.9	30.95	261	123	P	H
		5138.72	39.03	-14.97	54	31.53	32.47	5.98	30.95	261	123	A	H
	*	5270	98.63	-	-	91.05	32.45	6.08	30.95	261	123	P	H
	*	5270	88.53	-	-	80.95	32.45	6.08	30.95	261	123	A	H
		5364.24	49.27	-24.73	74	41.65	32.43	6.14	30.95	261	123	P	H
		5353.68	39.33	-14.67	54	31.73	32.43	6.12	30.95	261	123	A	H
		5146.88	49.39	-24.61	74	41.88	32.47	5.99	30.95	105	92	P	V
		5141.78	38.93	-15.07	54	31.43	32.47	5.98	30.95	105	92	A	V
	*	5270	98.11	-	-	90.53	32.45	6.08	30.95	105	92	P	V
	*	5270	87.5	-	-	79.92	32.45	6.08	30.95	105	92	A	V
		5425.44	49.84	-24.16	74	42.2	32.41	6.18	30.95	105	92	P	V
		5354.16	38.93	-15.07	54	31.33	32.43	6.12	30.95	105	92	A	V
802.11n HT40 CH 62 5310MHz		5135.32	48.98	-25.02	74	41.48	32.47	5.98	30.95	262	121	P	H
		5136	38.72	-15.28	54	31.22	32.47	5.98	30.95	262	121	A	H
	*	5310	98.53	-	-	90.94	32.44	6.1	30.95	262	121	P	H
	*	5310	88.18	-	-	80.59	32.44	6.1	30.95	262	121	A	H
		5350.08	51.84	-22.16	74	44.24	32.43	6.12	30.95	262	121	P	H
		5350.08	41.33	-12.67	54	33.73	32.43	6.12	30.95	262	121	A	H
		5014.96	48.86	-25.14	74	41.42	32.5	5.89	30.95	114	91	P	V
		5143.82	38.83	-15.17	54	31.32	32.47	5.99	30.95	114	91	A	V
	*	5310	97.37	-	-	89.78	32.44	6.1	30.95	114	91	P	V
	*	5310	87.18	-	-	79.59	32.44	6.1	30.95	114	91	A	V
		5352	51.72	-22.28	74	44.12	32.43	6.12	30.95	114	91	P	V
		5352	40.4	-13.6	54	32.8	32.43	6.12	30.95	114	91	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 (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80 CH 58 5290MHz		5041.14	48.87	-25.13	74	41.41	32.49	5.92	30.95	268	123	P	H
		5115.26	38.66	-15.34	54	31.16	32.48	5.97	30.95	268	123	A	H
	*	5290	94.51	-	-	86.93	32.44	6.09	30.95	268	123	P	H
	*	5290	84.17	-	-	76.59	32.44	6.09	30.95	268	123	A	H
		5356.56	54.33	-19.67	74	46.73	32.43	6.12	30.95	268	123	P	H
		5362.56	42.25	-11.75	54	34.63	32.43	6.14	30.95	268	123	A	H
		5071.74	49.56	-24.44	74	42.08	32.49	5.94	30.95	100	92	P	V
		5143.82	38.77	-15.23	54	31.26	32.47	5.99	30.95	100	92	A	V
	*	5290	93.96	-	-	86.38	32.44	6.09	30.95	100	92	P	V
	*	5290	83.21	-	-	75.63	32.44	6.09	30.95	100	92	A	V
		5354.4	53.79	-20.21	74	46.19	32.43	6.12	30.95	100	92	P	V
		5358.72	41.48	-12.52	54	33.86	32.43	6.14	30.95	100	92	A	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	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1+2		(MHz)	(dBµV/m)	(dB)	(dBµV/m)	(dBµV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
		5404.56	49.86	-24.14	74	42.23	32.42	6.16	30.95	114	127	P	H
		5460.56	38.47	-15.53	54	30.8	32.41	6.21	30.95	114	127	A	H
	*	5500	100.14	-	-	92.45	32.4	6.24	30.95	114	127	P	H
	*	5500	89.23	-	-	81.54	32.4	6.24	30.95	114	127	A	H
802.11n													H
HT20													H
CH 100		5449.04	50.28	-23.72	74	42.61	32.41	6.21	30.95	114	314	P	V
5500MHz		5466.8	38.66	-15.34	54	30.97	32.41	6.23	30.95	114	314	A	V
	*	5500	102.01	-	-	94.32	32.4	6.24	30.95	114	314	P	V
	*	5500	91.37	-	-	83.68	32.4	6.24	30.95	114	314	A	V
													V
													V
		5425.6	49.76	-24.24	74	42.12	32.41	6.18	30.95	100	325	P	H
		5411.44	38.08	-15.92	54	30.45	32.42	6.16	30.95	100	325	A	H
	*	5580	100.45	-	-	92.49	32.62	6.32	30.98	100	325	P	H
	*	5580	89.82	-	-	81.86	32.62	6.32	30.98	100	325	A	H
802.11n		5764.055	49.84	-24.16	74	41.37	33.14	6.37	31.04	100	325	P	H
HT20		5752.4	39.03	-14.97	54	30.58	33.11	6.37	31.03	100	325	A	H
CH 116		5413.12	49.31	-24.69	74	41.66	32.42	6.18	30.95	272	322	P	V
5580MHz		5464.72	38.26	-15.74	54	30.59	32.41	6.21	30.95	272	322	A	V
	*	5580	102.05	-	-	94.09	32.62	6.32	30.98	272	322	P	V
	*	5580	91.33	-	-	83.37	32.62	6.32	30.98	272	322	A	V
		5746.1	49.92	-24.08	74	41.49	33.09	6.37	31.03	272	322	P	V
		5733.815	38.99	-15.01	54	30.6	33.05	6.37	31.03	272	322	A	V

	*	5700	102.4	-	-	94.09	32.96	6.36	31.01	100	331	P	H
	*	5700	91.59	-	-	83.28	32.96	6.36	31.01	100	331	A	H
		5725	53.65	-20.35	74	45.27	33.03	6.37	31.02	100	331	P	H
		5725	40.64	-13.36	54	32.26	33.03	6.37	31.02	100	331	A	H
802.11n													H
HT20													H
CH 140	*	5700	100.06	-	-	91.75	32.96	6.36	31.01	279	324	P	V
5700MHz	*	5700	89.46	-	-	81.15	32.96	6.36	31.01	279	324	A	V
		5726.36	53.2	-20.8	74	44.82	33.03	6.37	31.02	279	324	P	V
		5725	39.88	-14.12	54	31.5	33.03	6.37	31.02	279	324	A	V
													V
													V

Remark

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

Band 3 - 5470~5725MHz

WIFI 802.11n HT20 (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		11000	49.88	-24.12	74	56.4	40.2	9.56	56.8	100	0	P	H
		16500	49.28	-24.72	74	52.89	39.5	11.8	55.6	100	0	P	H
802.11n													H
HT20													H
CH 100		11000	49.97	-24.03	74	56.49	40.2	9.56	56.8	100	0	P	V
5500MHz		16500	49.33	-24.67	74	52.94	39.5	11.8	55.6	100	0	P	V
													V
													V
		11160	48.33	-25.67	74	55.04	40.2	9.64	57.07	100	0	P	H
		16740	49.58	-24.42	74	52.39	40.41	11.85	55.74	100	0	P	H
802.11n													H
HT20													H
CH 116		11160	49.08	-24.92	74	55.79	40.2	9.64	57.07	100	0	P	V
5580MHz		16740	48.44	-25.56	74	51.25	40.41	11.85	55.74	100	0	P	V
													V
													V
		11400	48.09	-25.91	74	55.04	40.2	9.77	57.44	100	0	P	H
		17100	49.84	-24.16	74	51.88	41.62	11.99	56.3	100	0	P	H
802.11n													H
HT20													H
CH 140		11400	47.41	-26.59	74	54.36	40.2	9.77	57.44	100	0	P	V
5700MHz		17100	49.67	-24.33	74	51.71	41.62	11.99	56.3	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 - 5470~5725MHz

WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		5470	54.31	-19.69	74	46.62	32.41	6.23	30.95	115	126	P	H
		5469.52	40.13	-13.87	54	32.44	32.41	6.23	30.95	115	126	A	H
	*	5510	96.35	-	-	88.62	32.43	6.26	30.96	115	126	P	H
	*	5510	86.08	-	-	78.35	32.43	6.26	30.96	115	126	A	H
802.11n		5763.74	49.6	-24.4	74	41.13	33.14	6.37	31.04	115	126	P	H
HT40		5732.555	39.69	-14.31	54	31.3	33.05	6.37	31.03	115	126	A	H
CH 102		5470	51.99	-22.01	74	44.3	32.41	6.23	30.95	128	310	P	V
5510MHz		5467.36	40.23	-13.77	54	32.54	32.41	6.23	30.95	128	310	A	V
	*	5510	97.63	-	-	89.9	32.43	6.26	30.96	128	310	P	V
	*	5510	87.66	-	-	79.93	32.43	6.26	30.96	128	310	A	V
		5761.22	50.27	-23.73	74	41.81	33.13	6.37	31.04	128	310	P	V
		5742.635	39.48	-14.52	54	31.06	33.08	6.37	31.03	128	310	A	V
		5371.6	49.21	-24.79	74	41.59	32.43	6.14	30.95	109	126	P	H
		5420.56	38.78	-15.22	54	31.13	32.42	6.18	30.95	109	126	A	H
	*	5550	96.36	-	-	88.5	32.54	6.29	30.97	109	126	P	H
	*	5550	86.03	-	-	78.17	32.54	6.29	30.97	109	126	A	H
802.11n		5762.165	49.8	-24.2	74	41.34	33.13	6.37	31.04	109	126	P	H
HT40		5760.275	39.57	-14.43	54	31.11	33.13	6.37	31.04	109	126	A	H
CH 110		5467.84	49.2	-24.8	74	41.51	32.41	6.23	30.95	127	321	P	V
5550MHz		5463.04	39.44	-14.56	54	31.77	32.41	6.21	30.95	127	321	A	V
	*	5550	98.12	-	-	90.26	32.54	6.29	30.97	127	321	P	V
	*	5550	87.86	-	-	80	32.54	6.29	30.97	127	321	A	V
		5729.09	50.17	-23.83	74	41.78	33.04	6.37	31.02	127	321	P	V
		5755.865	39.51	-14.49	54	31.06	33.12	6.37	31.04	127	321	A	V

		5441	49.52	-24.48	74	41.87	32.41	6.19	30.95	102	327	P	H
		5388.85	39.49	-14.51	54	31.87	32.42	6.15	30.95	102	327	A	H
	*	5670	96.73	-	-	88.51	32.88	6.35	31.01	102	327	P	H
	*	5670	86.72	-	-	78.5	32.88	6.35	31.01	102	327	A	H
802.11n		5726.85	50.24	-23.76	74	41.85	33.04	6.37	31.02	102	327	P	H
HT40		5726.675	40.74	-13.26	54	32.36	33.03	6.37	31.02	102	327	A	H
CH 134		5392.35	48.99	-25.01	74	41.37	32.42	6.15	30.95	105	91	P	V
5670MHz		5440.65	38.92	-15.08	54	31.27	32.41	6.19	30.95	105	91	A	V
	*	5670	95.25	-	-	87.03	32.88	6.35	31.01	105	91	P	V
	*	5670	85.13	-	-	76.91	32.88	6.35	31.01	105	91	A	V
		5734.55	50.38	-23.62	74	41.98	33.06	6.37	31.03	105	91	P	V
		5729.825	39.95	-14.05	54	31.56	33.04	6.37	31.02	105	91	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 - 5470~5725MHz

WIFI 802.11ac VHT80 (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80 CH 106 5530MHz		5461.84	51.07	-22.93	74	43.4	32.41	6.21	30.95	263	120	P	H
		5462.8	39.69	-14.31	54	32.02	32.41	6.21	30.95	263	120	A	H
	*	5530	91.98	-	-	84.2	32.48	6.27	30.97	263	120	P	H
	*	5530	81.67	-	-	73.89	32.48	6.27	30.97	263	120	A	H
		5752.715	49.77	-24.23	74	41.32	33.11	6.37	31.03	263	120	P	H
		5727.83	39.58	-14.42	54	31.19	33.04	6.37	31.02	263	120	A	H
		5400.4	50.5	-23.5	74	42.87	32.42	6.16	30.95	125	321	P	V
		5469.76	39.64	-14.36	54	31.95	32.41	6.23	30.95	125	321	A	V
	*	5530	92.78	-	-	85	32.48	6.27	30.97	125	321	P	V
	*	5530	82	-	-	74.22	32.48	6.27	30.97	125	321	A	V
		5753.345	51.26	-22.74	74	42.81	33.11	6.37	31.03	125	321	P	V
		5760.275	39.56	-14.44	54	31.1	33.13	6.37	31.04	125	321	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Emission below 1GHz

WIFI 802.11ac VHT80 (LF @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1+2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11ac VHT80 LF		94.53	28.34	-15.16	43.5	42.47	15.42	0.8	30.41	-	-	P	H
		177.69	29.2	-14.3	43.5	42.96	15.28	1.09	30.3	-	-	P	H
		214.41	28.06	-15.44	43.5	41.73	15.25	1.19	30.25	-	-	P	H
		315.4	27.8	-18.2	46	36.88	19.52	1.43	30.12	-	-	P	H
		745.9	32.13	-13.87	46	31.11	28.15	2.21	29.44	100	0	P	H
		981.1	34.71	-19.29	54	29.91	31.04	2.53	29	-	-	P	H
													H
													H
													H
													H
													H
													H
		33.51	36.82	-3.18	40	44.11	22.49	0.48	30.23	100	0	P	V
		46.47	33.9	-6.1	40	47.71	15.99	0.6	30.41	-	-	P	V
		63.75	34.37	-5.63	40	52.17	11.92	0.68	30.44	-	-	P	V
		729.8	31.5	-14.5	46	31.04	27.65	2.18	29.47	-	-	P	V
		885.9	33.37	-12.63	46	30.76	29.21	2.42	29.18	-	-	P	V
		978.3	34.09	-19.91	54	29.25	31.08	2.53	29	-	-	P	V
													V
													V
													V
													V
													V
													V

Remark

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

Note symbol

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

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

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

1. Level(dBµV/m) =

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

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

For Peak Limit @ 2390MHz:

1. Level(dBµV/m)

= Antenna Factor(dB/m) + Cable 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) + Cable 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

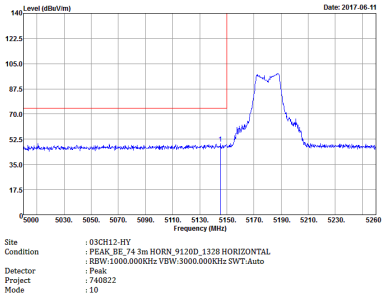
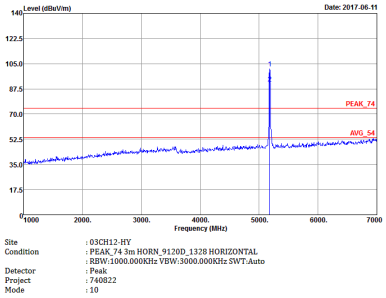
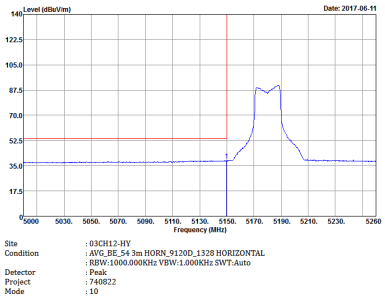
Test Engineer :	Peter Liao and Nick Yu	**Temperature :**	22~23°C
		Relative Humidity :	54~56%

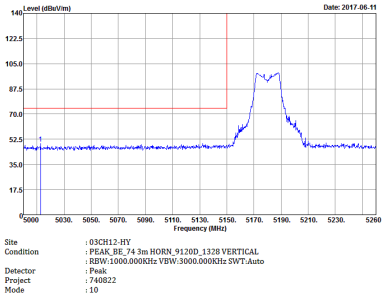
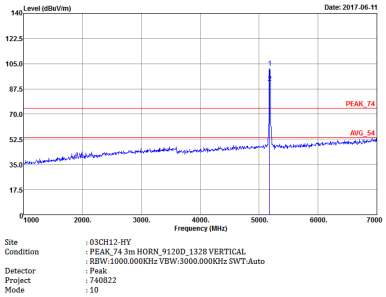
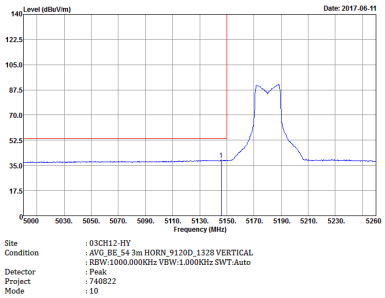
Note symbol

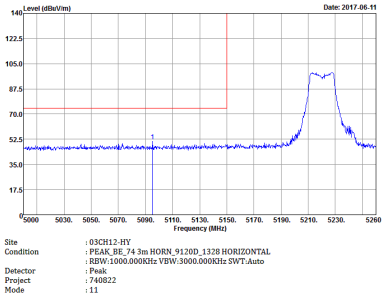
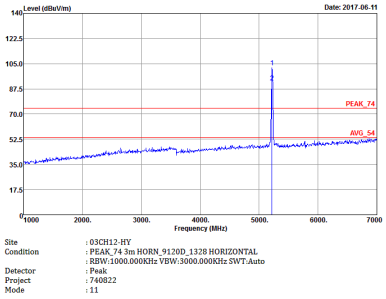
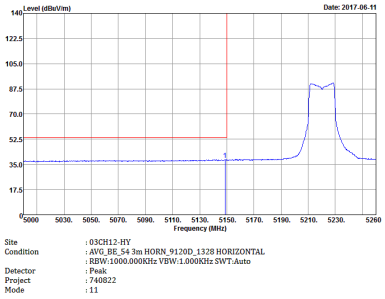
-L	**Low channel location**
-R	**High channel location**

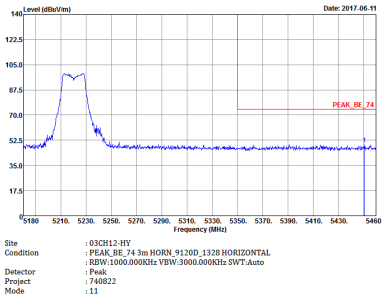
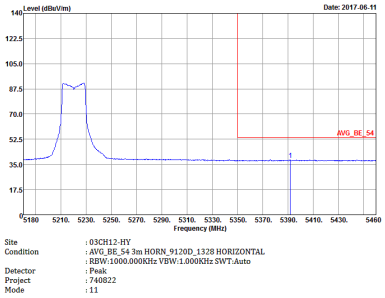
Band 1 - 5150~5250MHz

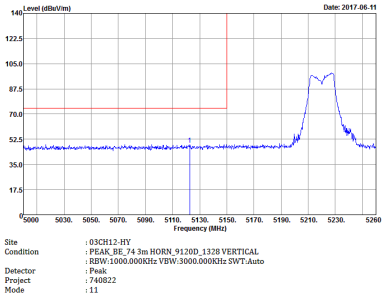
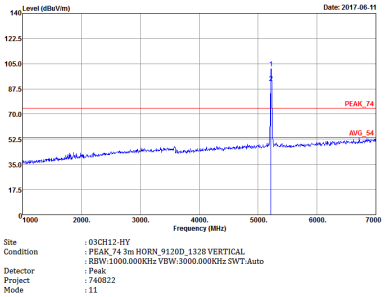
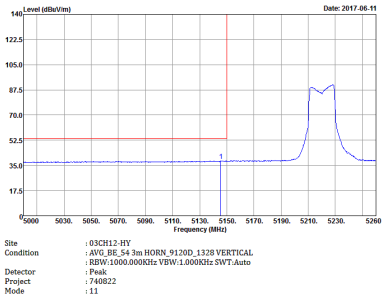
WIFI 802.11n HT20 (Band Edge @ 3m)

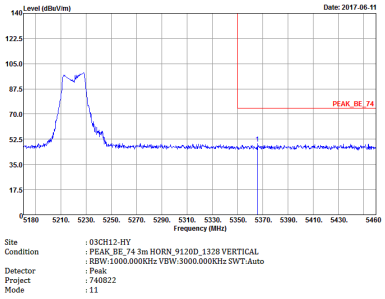
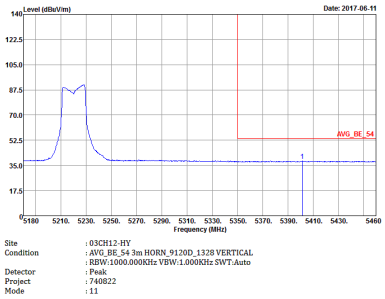
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH36 5180MHz	
1+2	Horizontal	Fundamental
Peak		
Avg.		Left blank

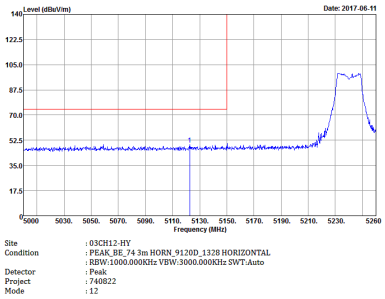
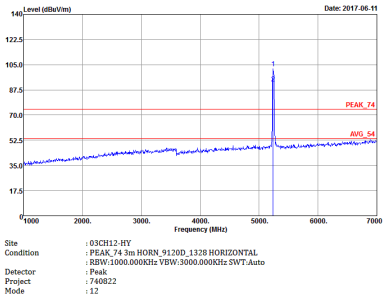
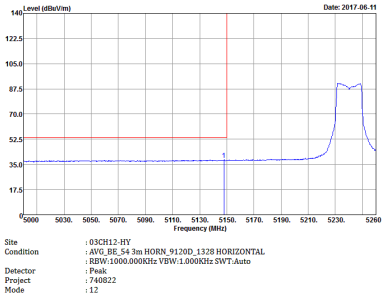
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH36 5180MHz	
1+2	Vertical	Fundamental
Peak		
Avg.		Left blank

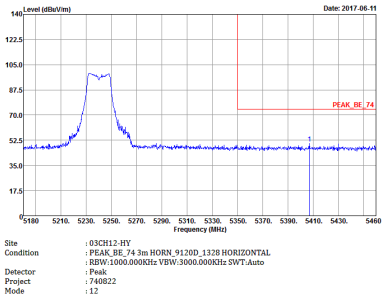
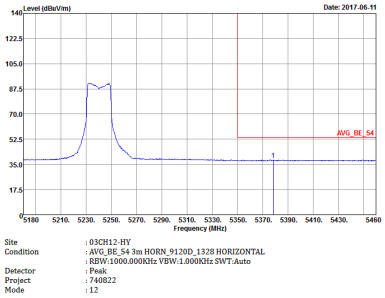
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH44 5220MHz - L	
1+2	Horizontal	Fundamental
Peak		
Avg.		Left blank

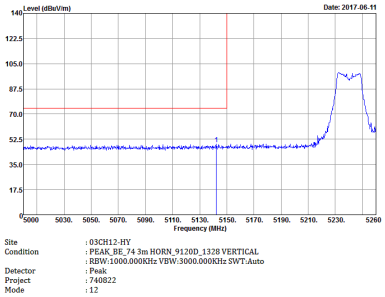
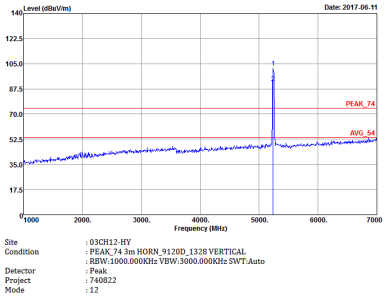
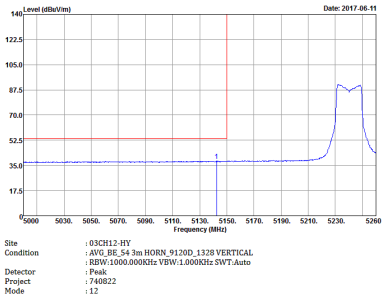
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH44 5220MHz - R	
1+2	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

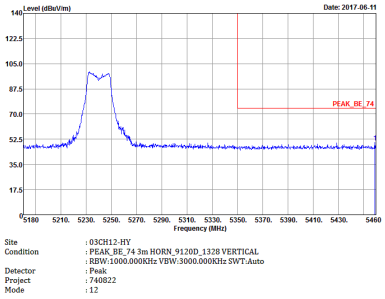
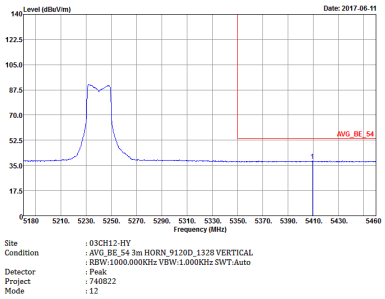
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH44 5220MHz - L	
1+2	Vertical	Fundamental
Peak	 Site : 03CH12-HY Condition : PEAK_BE_74 3m HORN_9120D_1328 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 740822 Mode : 11	 Site : 03CH12-HY Condition : PEAK_74 3m HORN_9120D_1328 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 740822 Mode : 11
Avg.	 Site : 03CH12-HY Condition : AVG_BE_54 3m HORN_9120D_1328 VERTICAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto Detector : Peak Project : 740822 Mode : 11	Left blank

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

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

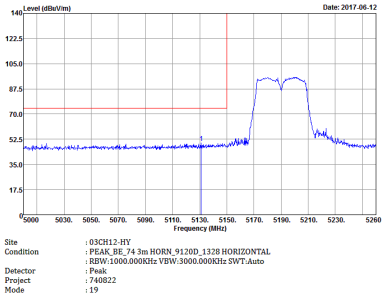
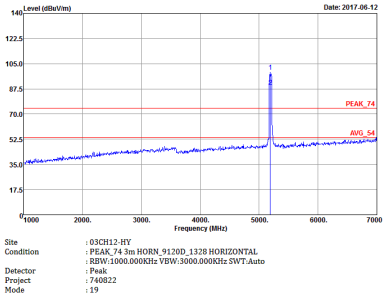
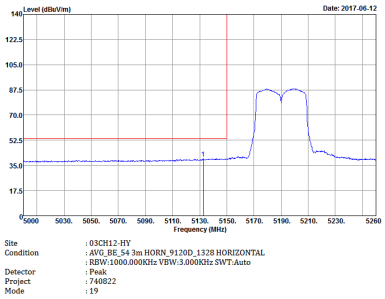
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH48 5240MHz - R	
1+2	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

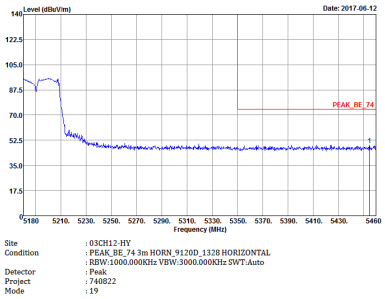
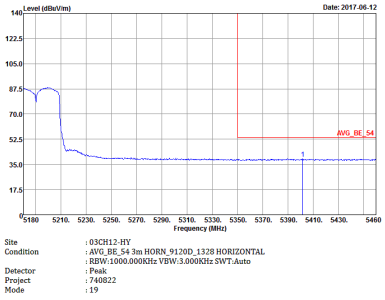
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH48 5240MHz - L	
1+2	Vertical	Fundamental
Peak		
Avg.		Left blank

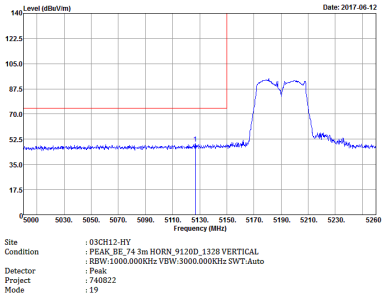
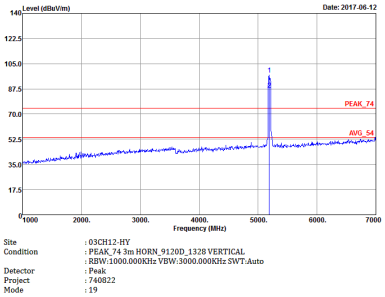
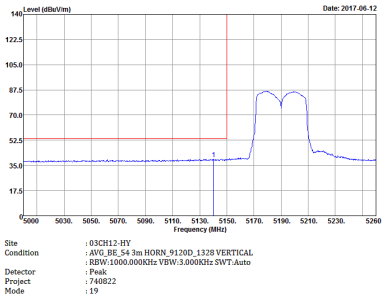
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH48 5240MHz - R	
1+2	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

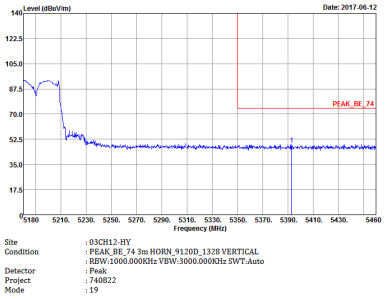
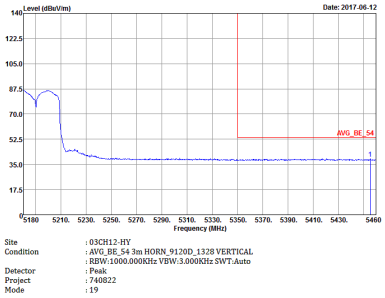
Band 1 5150~5250MHz

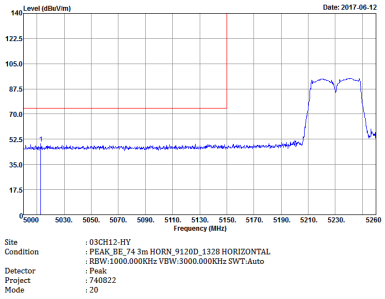
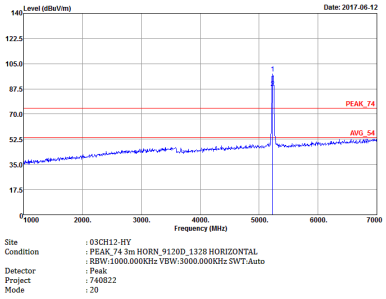
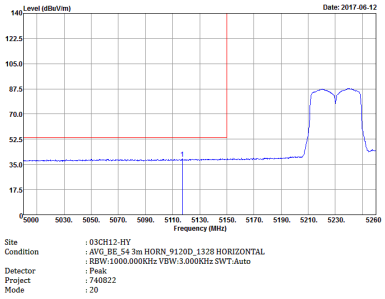
WIFI 802.11n HT40 (Band Edge @ 3m)

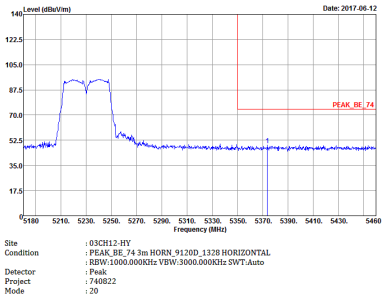
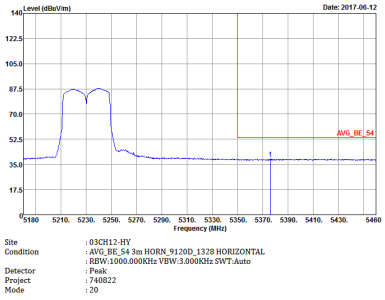
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH38 5190MHz - L	
1+2	Horizontal	Fundamental
Peak		
Avg.		Left blank

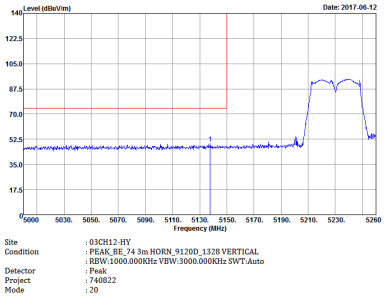
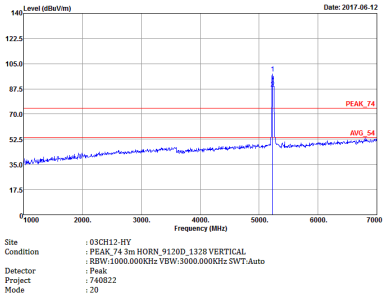
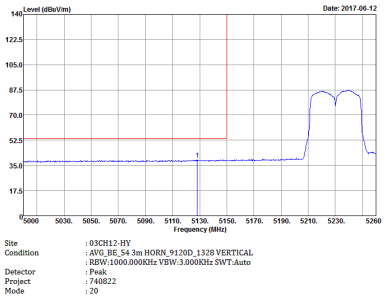
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH38 5190MHz - R	
1+2	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

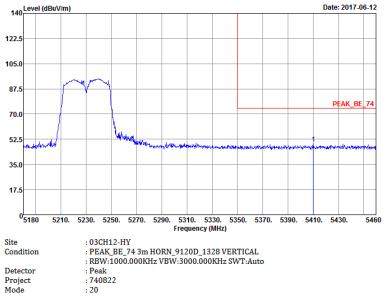
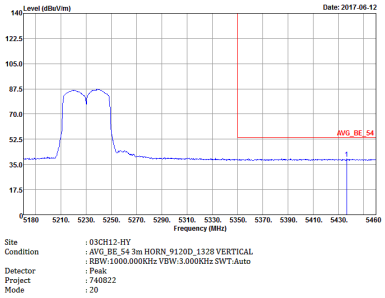
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH38 5190MHz - L	
1+2	Vertical	Fundamental
Peak		
Avg.		Left blank

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

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

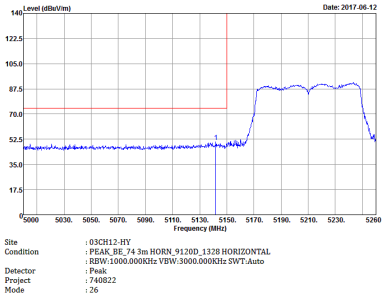
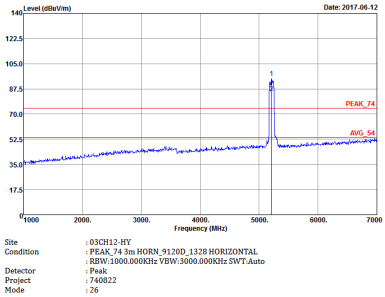
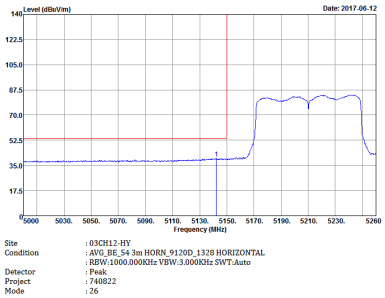
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH46 5230MHz - R	
1+2	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

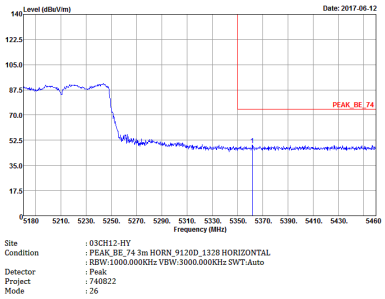
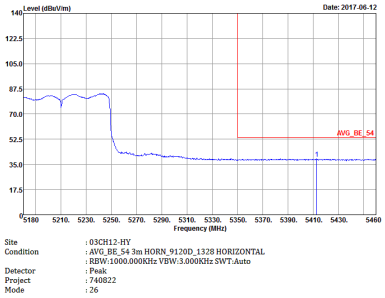
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH46 5230MHz - L	
1+2	Vertical	Fundamental
Peak		
Avg.		Left blank

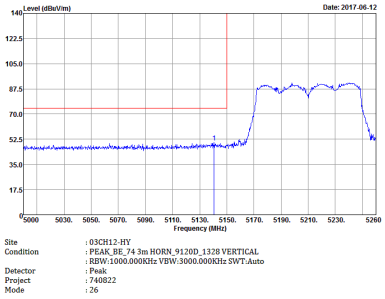
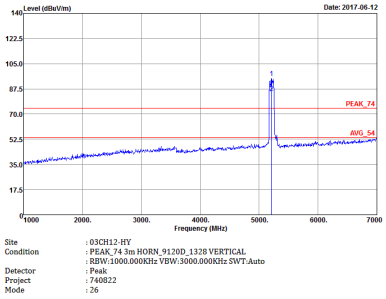
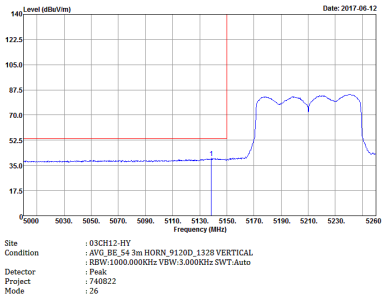
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH46 5230MHz - R	
1+2	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

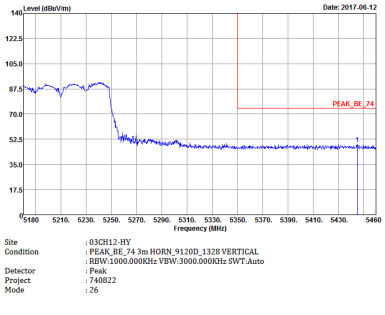
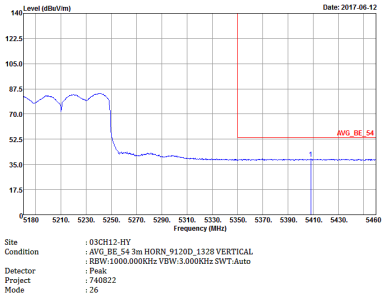
Band 1 5150~5250MHz

WIFI 802.11ac VHT80 (Band Edge @ 3m)

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

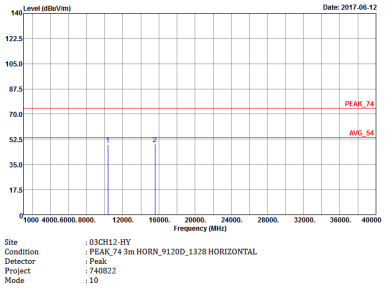
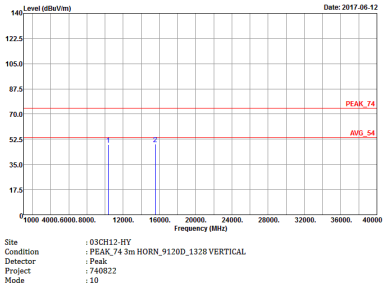
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH42 5210MHz - R	
1+2	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

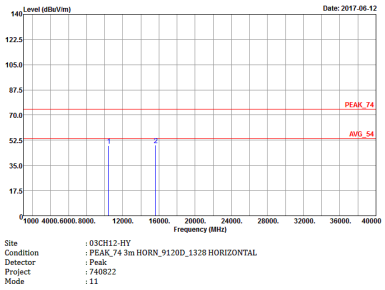
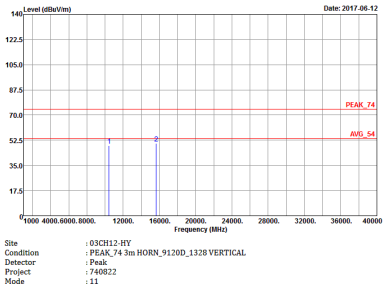
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH42 5210MHz - L	
1+2	Vertical	Fundamental
Peak		
Avg.		Left blank

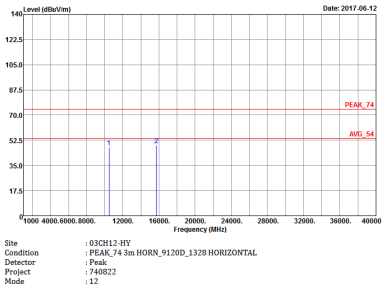
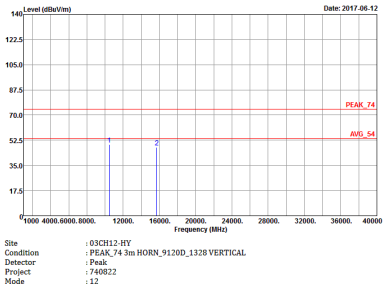
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH42 5210MHz - R	
1+2	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

Band 1 - 5150~5250MHz

WIFI 802.11n HT20 (Harmonic @ 3m)

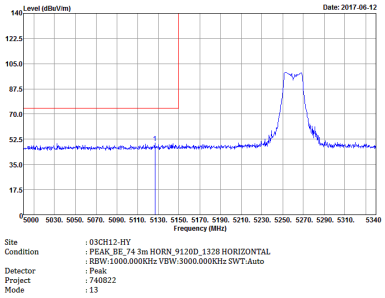
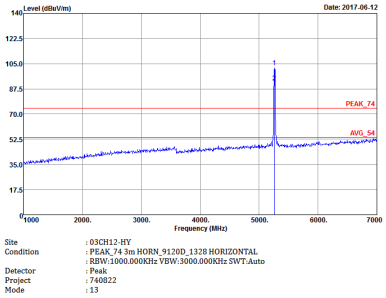
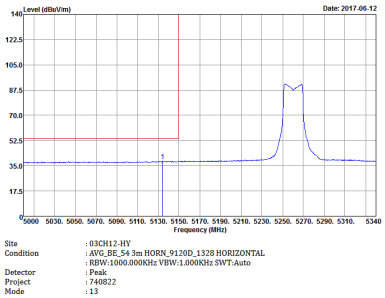
WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11n HT20 CH36 5180MHz	
1+2	Horizontal	Vertical
Peak Avg.		

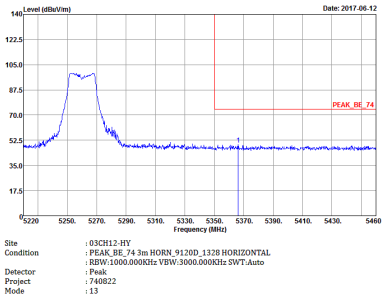
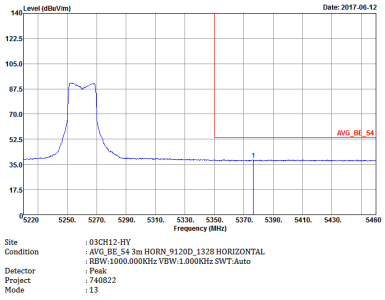
WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11n HT20 CH44 5220MHz	
1+2	Horizontal	Vertical
Peak Avg.		

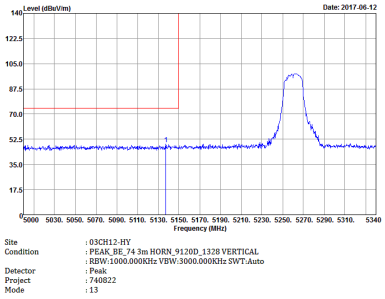
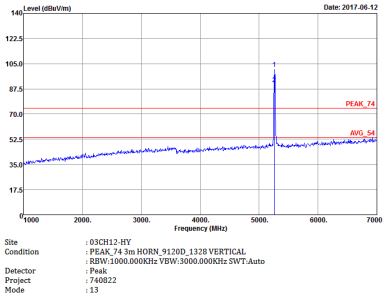
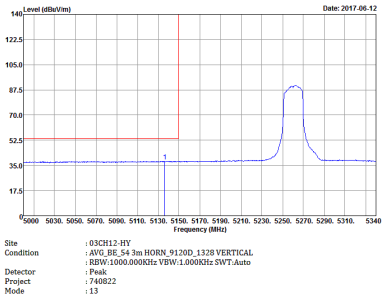
WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11n HT20 CH48 5240MHz	
1+2	Horizontal	Vertical
Peak Avg.		

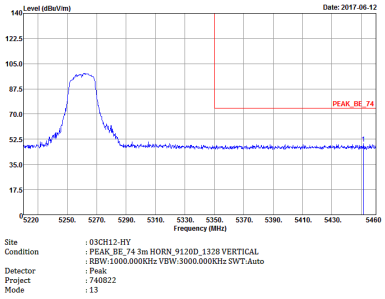
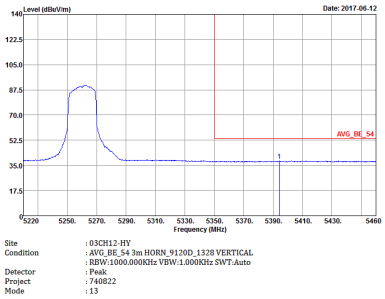
Band 2 - 5250~5350MHz

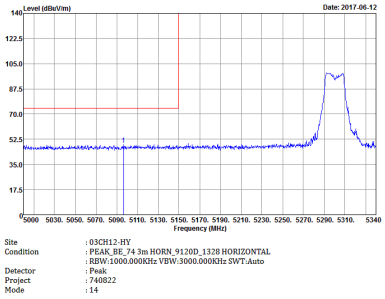
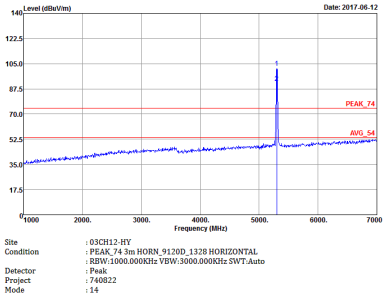
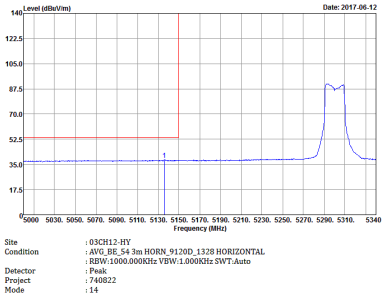
WIFI 802.11n HT20 (Band Edge @ 3m)

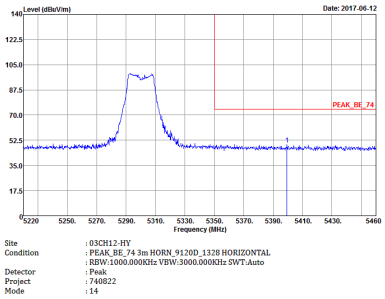
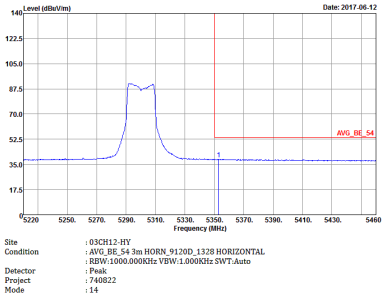
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH52 5260MHz - L	
1+2	Horizontal	Fundamental
Peak		
Avg.		Left blank

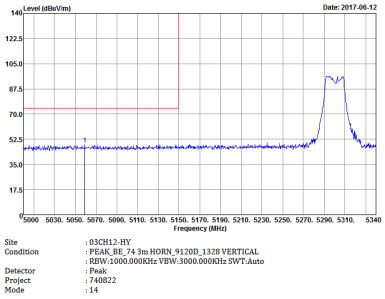
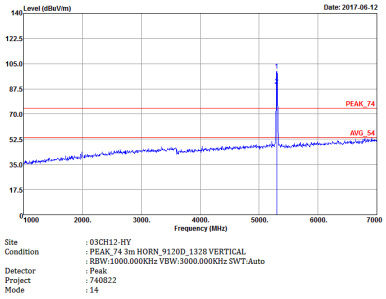
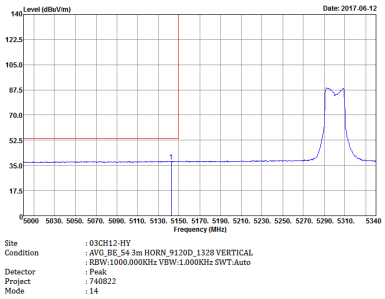
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH52 5260MHz - R	
1+2	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

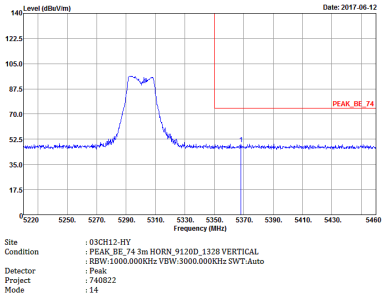
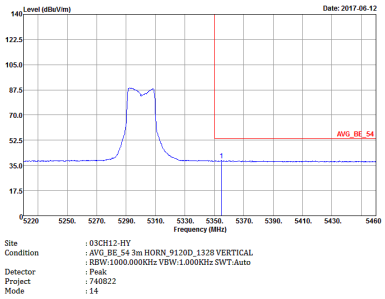
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH52 5260MHz - L	
1+2	Vertical	Fundamental
Peak		
Avg.		Left blank

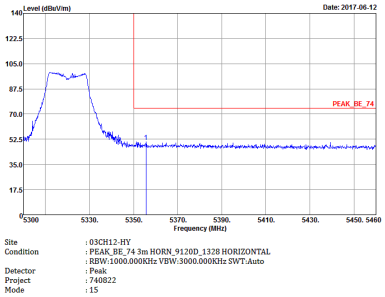
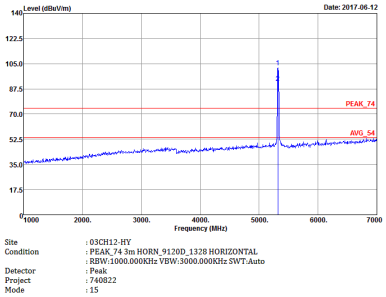
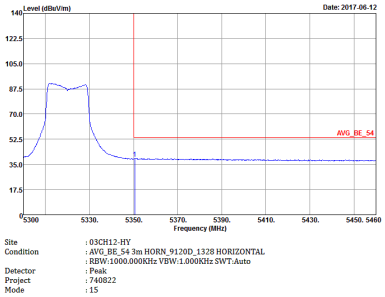
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH52 5260MHz - R	
1+2	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

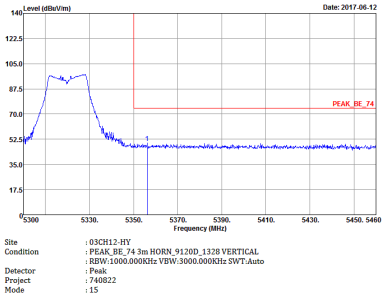
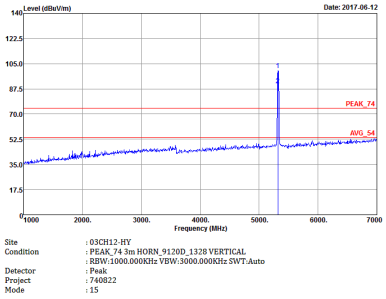
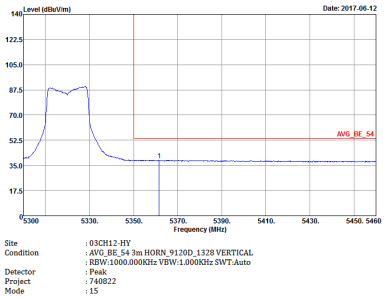
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH60 5300MHz - L	
1+2	Horizontal	Fundamental
Peak		
Avg.		Left blank

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

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

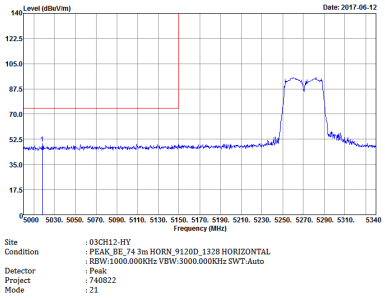
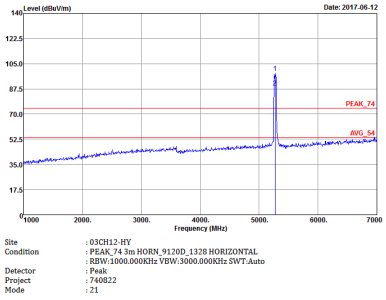
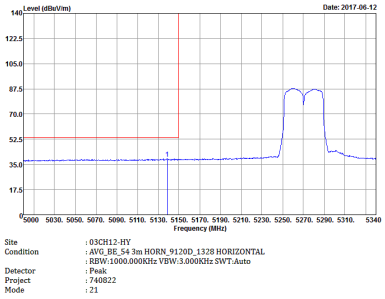
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH60 5300MHz - R	
1+2	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

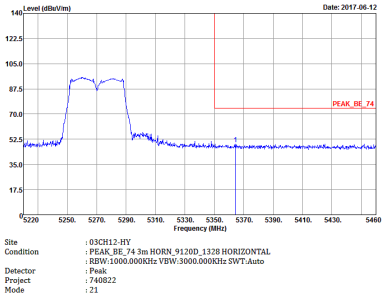
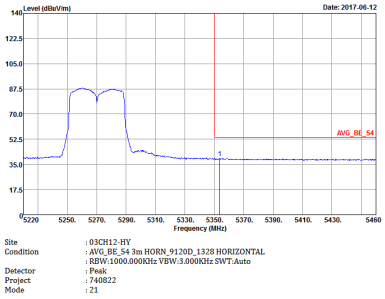
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH64 5320MHz	
1+2	Horizontal	Fundamental
Peak		
Avg.		Left blank

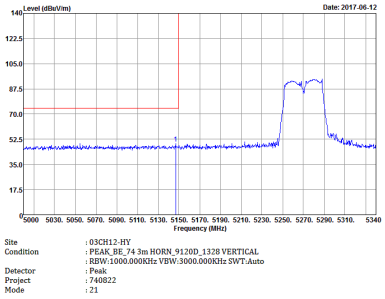
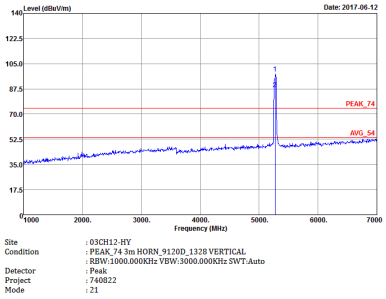
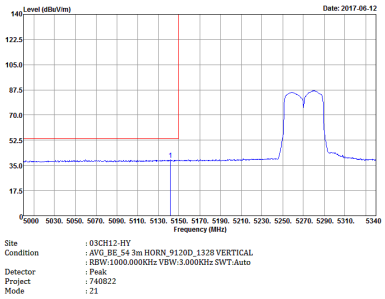
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH64 5320MHz	
1+2	Vertical	Fundamental
Peak		
Avg.		Left blank

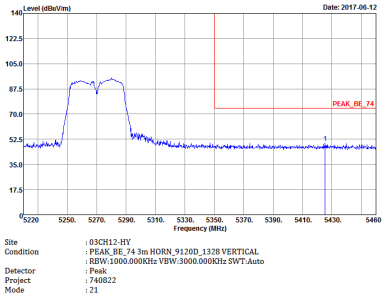
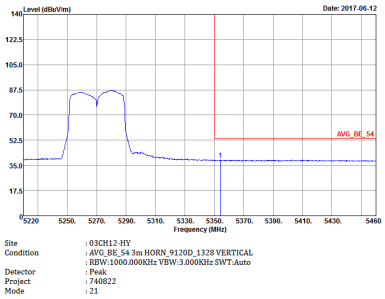
Band 2 5250~5350MHz

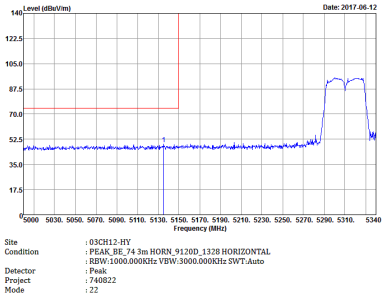
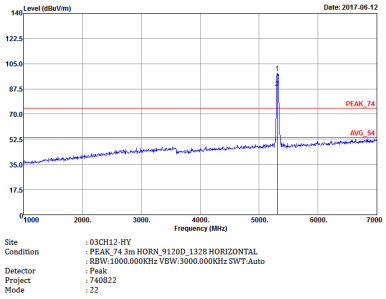
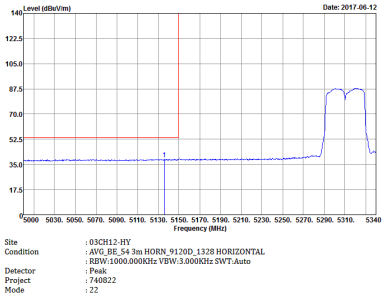
WIFI 802.11n HT40 (Band Edge @ 3m)

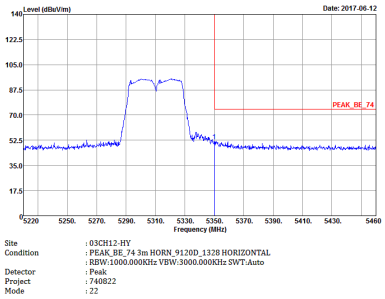
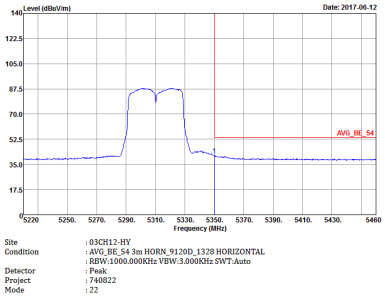
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT40 CH54 5270 - L	
1+2	Horizontal	Fundamental
Peak		
Avg.		Left blank

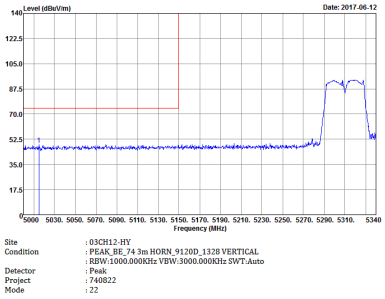
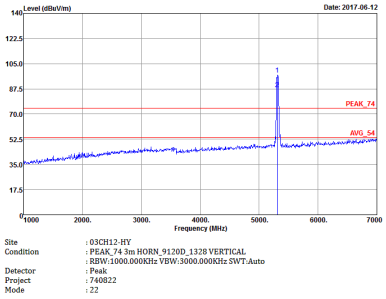
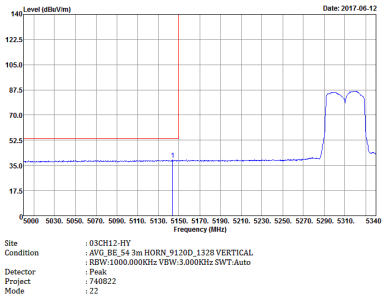
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT40 CH54 5270 - R	
1+2	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

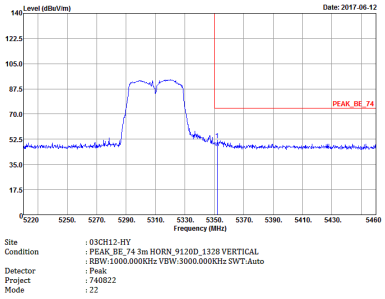
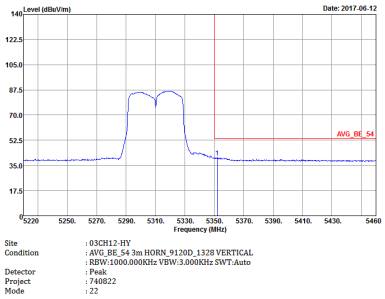
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT40 CH54 5270 - L	
1+2	Vertical	Vertical
Peak		
Avg.		Left blank

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

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

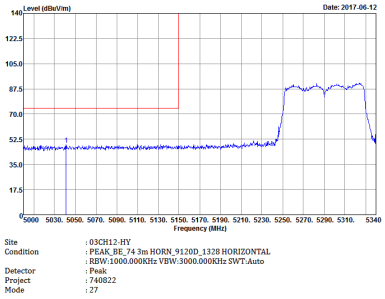
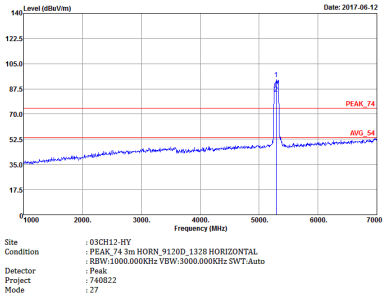
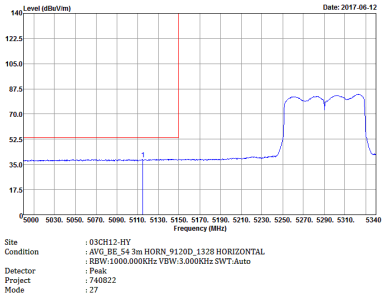
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT40 CH62 5310 - R	
1+2	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

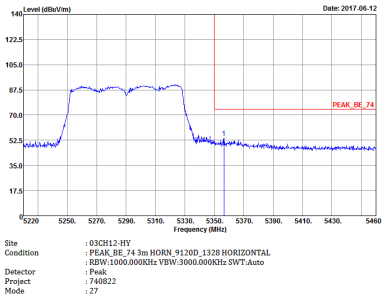
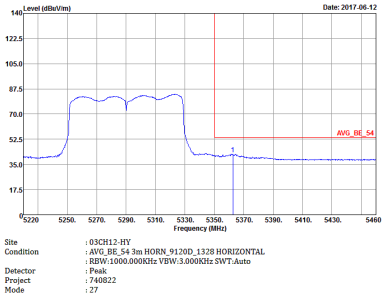
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT40 CH62 5310 - L	
1+2	Vertical	Fundamental
Peak		
Avg.		Left blank

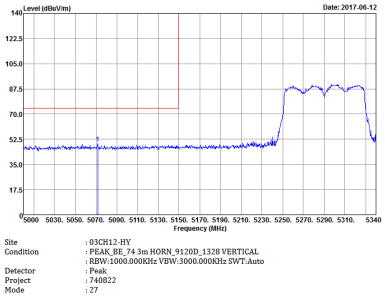
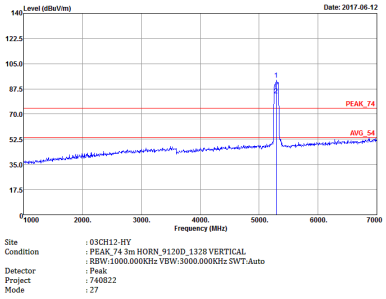
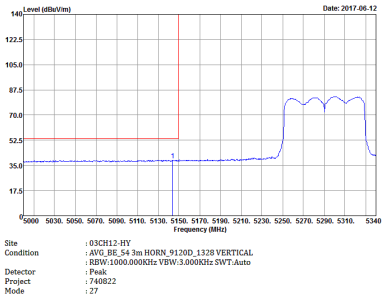
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT40 CH62 5310 - R	
1+2	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

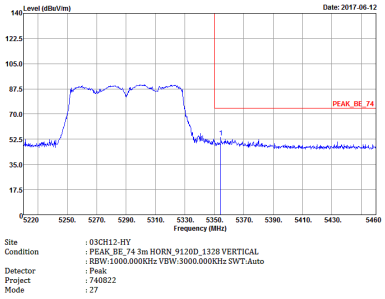
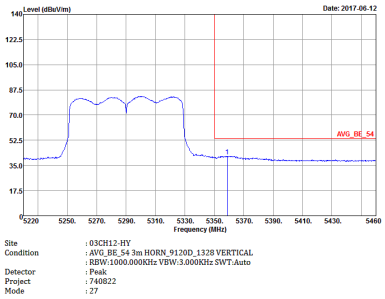
Band 2 5250~5350MHz

WIFI 802.11ac VHT80 (Band Edge @ 3m)

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

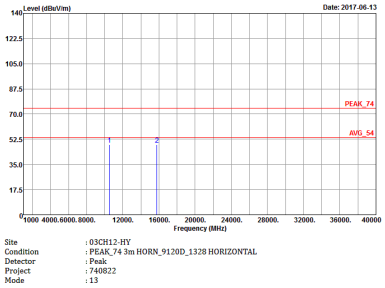
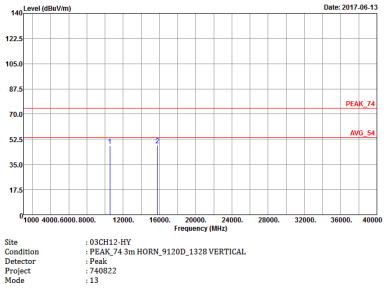
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH58 5290MHz - R	
1+2	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

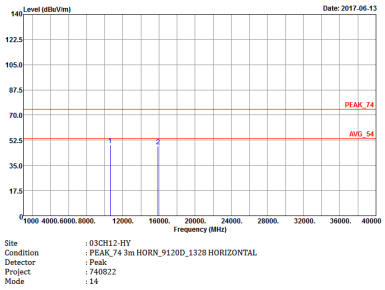
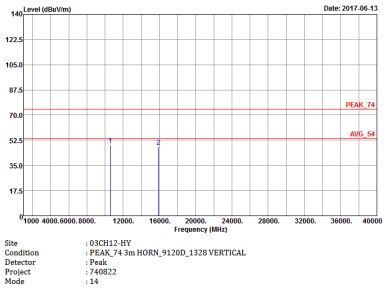
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH58 5290MHz - L	
1+2	Vertical	Fundamental
Peak		
Avg.		Left blank

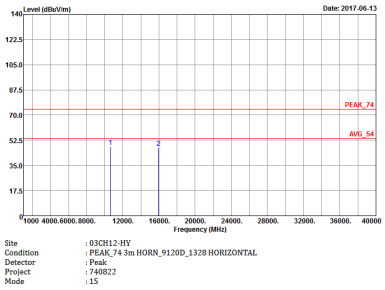
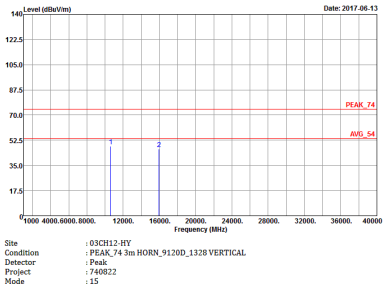
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH58 5290MHz - R	
1+2	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

Band 2 - 5250~5350MHz

WIFI 802.11n HT20 (Harmonic @ 3m)

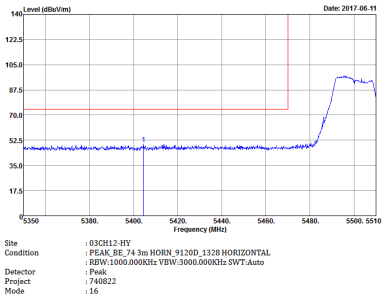
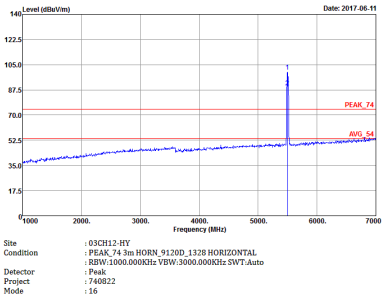
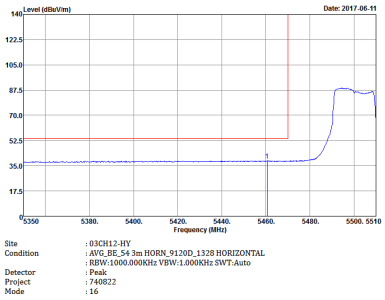
WIFI	Band 2 5250~5350MHz Harmonic @ 3m	
ANT	802.11n HT20 CH52 5260MHz	
1+2	Horizontal	Vertical
Peak Avg.		

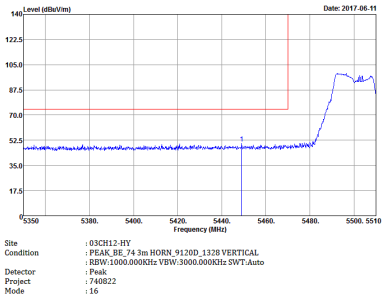
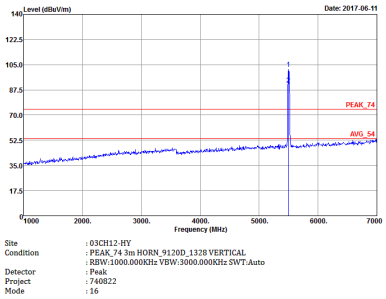
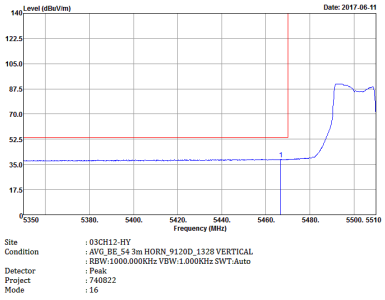
WIFI	Band 2 5250~5350MHz Harmonic @ 3m	
ANT	802.11n HT20 CH60 5300MHz	
1+2	Horizontal	Vertical
Peak Avg.		

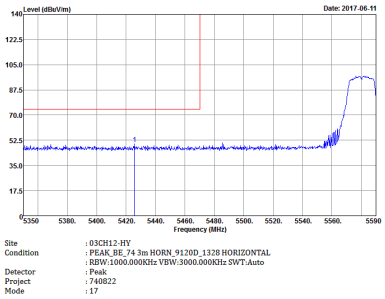
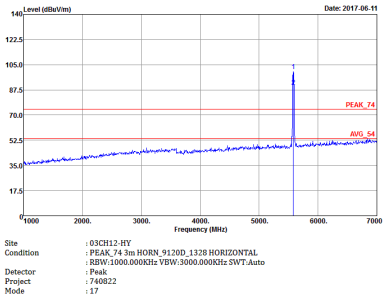
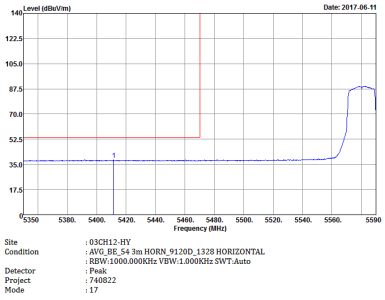
WIFI	Band 2 5250~5350MHz Harmonic @ 3m	
ANT	802.11n HT20 CH64 5320MHz	
1+2	Horizontal	Vertical
Peak Avg.		

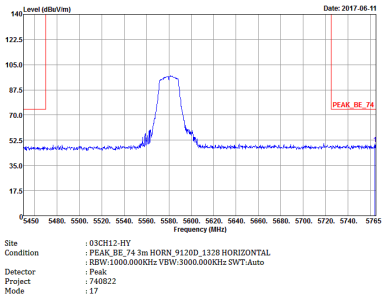
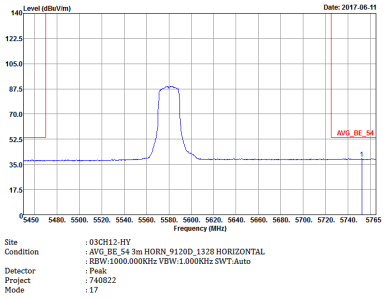
Band 3 - 5470~5725MHz

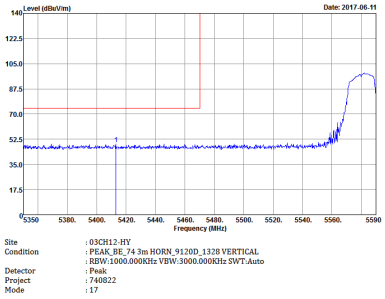
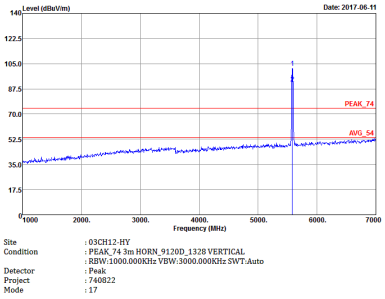
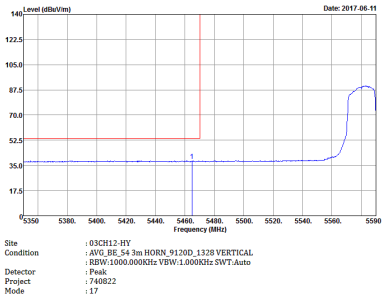
WIFI 802.11n HT20 (Band Edge @ 3m)

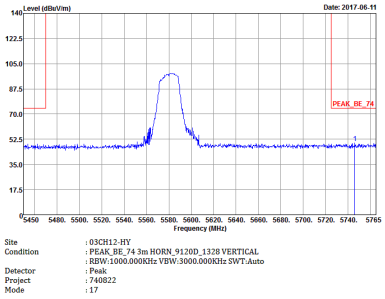
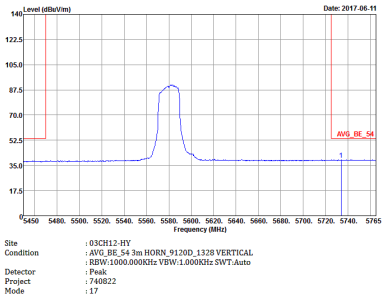
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT20 CH100 5500MHz	
1+2	Horizontal	Fundamental
Peak		
Avg.		Left blank

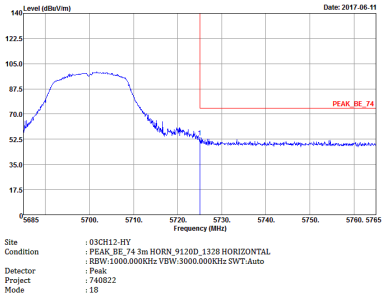
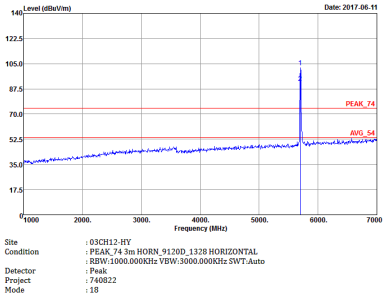
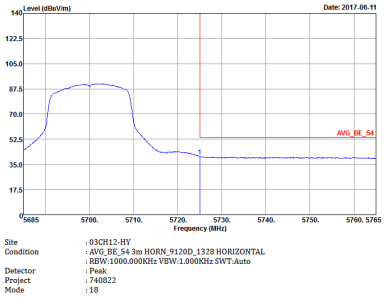
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT20 CH100 5500MHz	
1+2	Vertical	Fundamental
Peak		
Avg.		Left blank

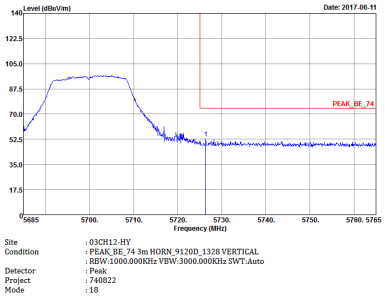
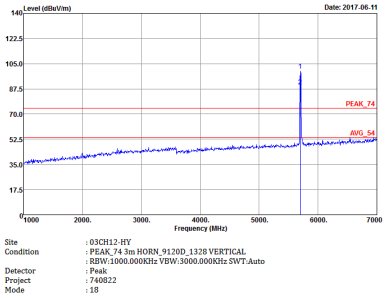
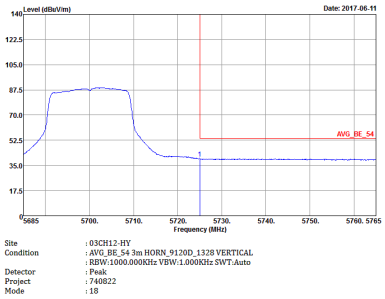
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT20 CH116 5580MHz - L	
1+2	Horizontal	Fundamental
Peak		
Avg.		Left blank

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

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

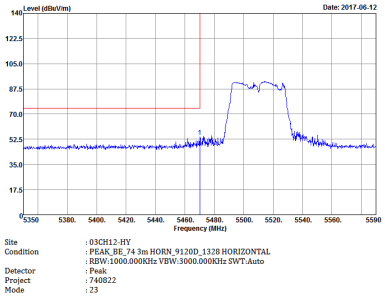
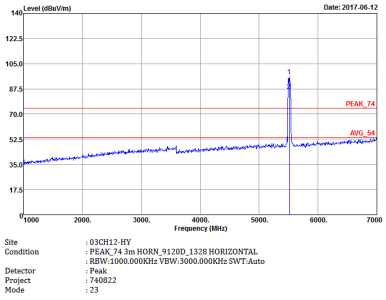
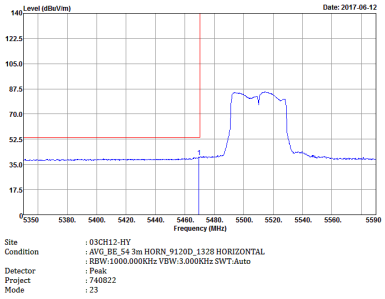
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT20 CH116 5580MHz - R	
1+2	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

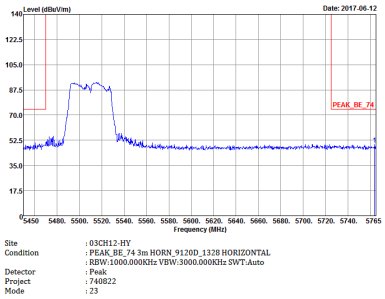
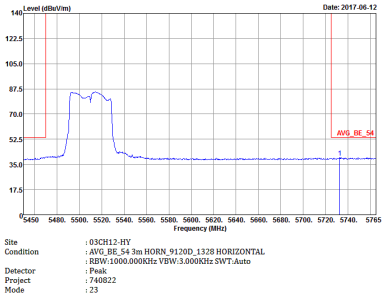
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT20 CH140 5700MHz	
1+2	Horizontal	Fundamental
Peak		
Avg.		Left blank

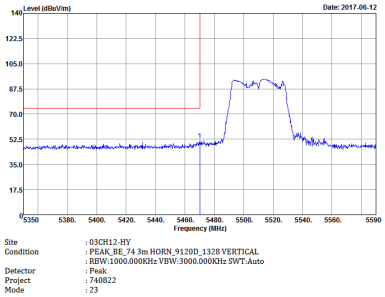
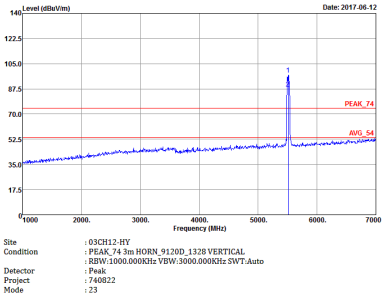
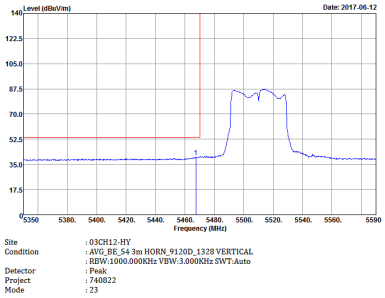
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT20 CH140 5700MHz	
1+2	Vertical	Fundamental
Peak.		
Avg.		Left blank

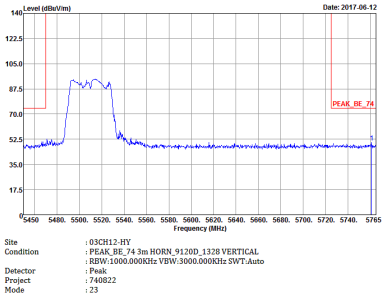
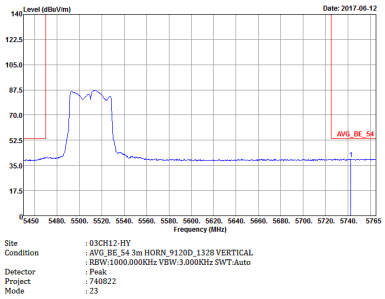
Band 3 5470~5725MHz

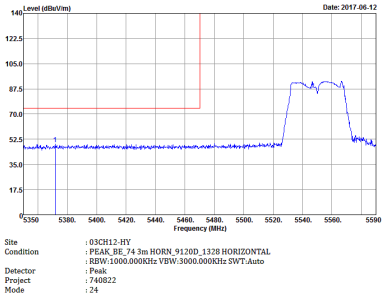
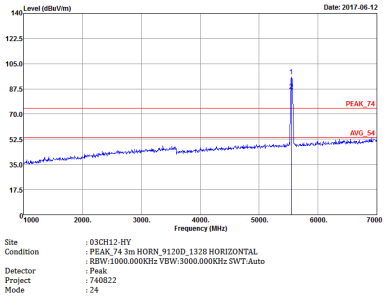
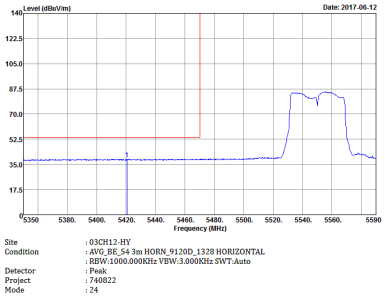
WIFI 802.11n HT40 (Band Edge @ 3m)

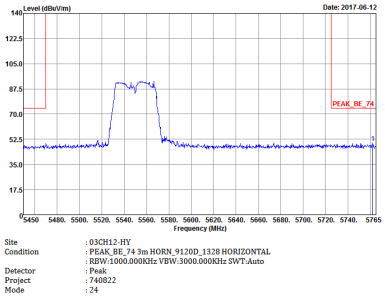
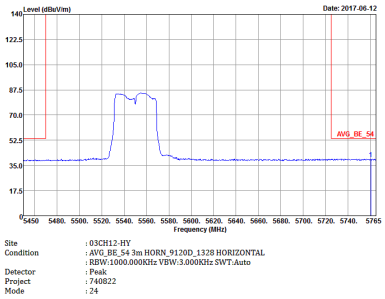
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH102 5510MHz - L	
1+2	Horizontal	Fundamental
Peak		
Avg.		Left blank

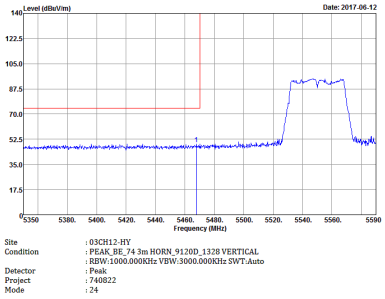
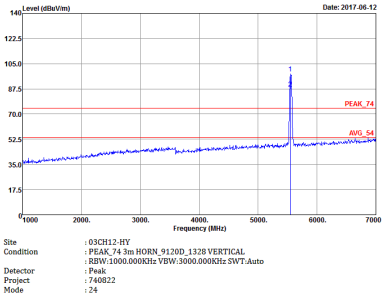
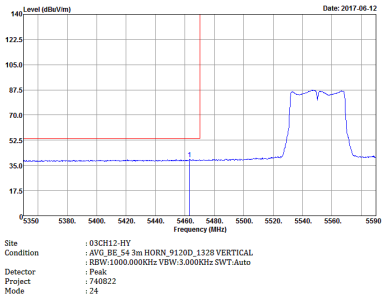
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH102 5510MHz - R	
1+2	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

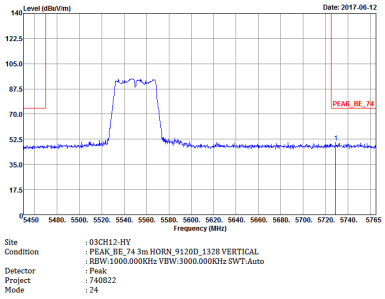
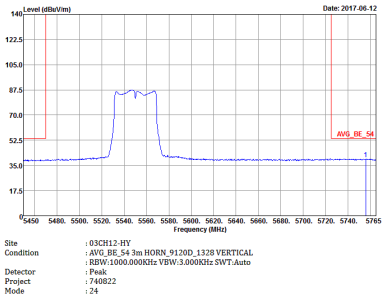
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH102 5510MHz - L	
1+2	Vertical	Fundamental
Peak		
Avg.		Left blank

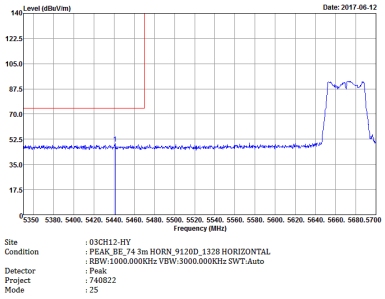
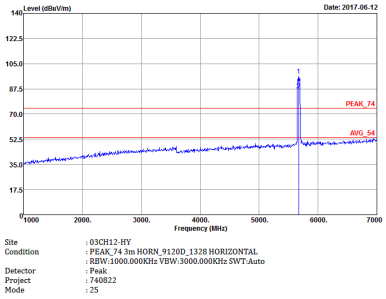
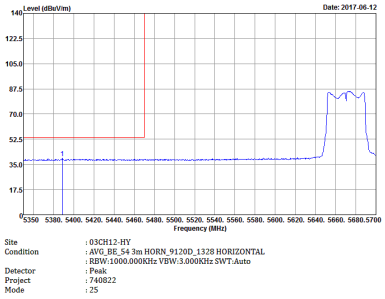
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH102 5510MHz - R	
1+2	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

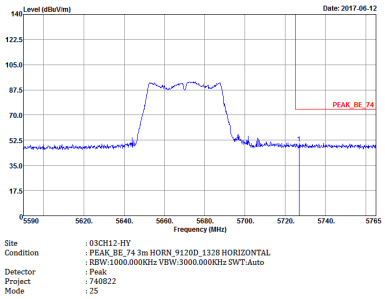
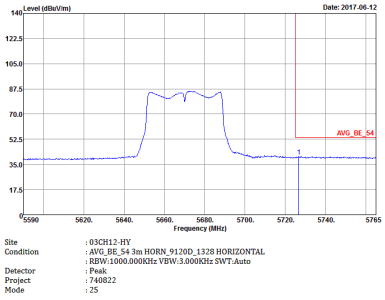
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH110 5550MHz - L	
1+2	Horizontal	Fundamental
Peak		
Avg.		Left blank

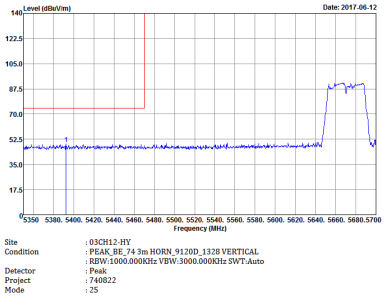
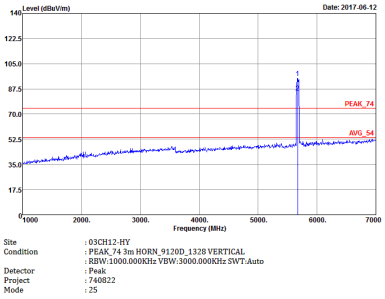
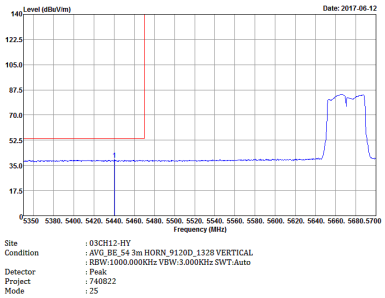
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH110 5550MHz - R	
1+2	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

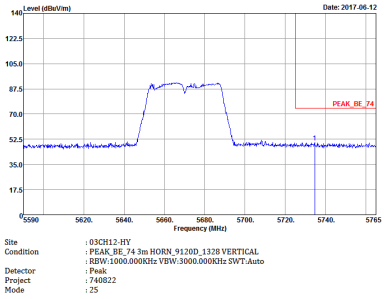
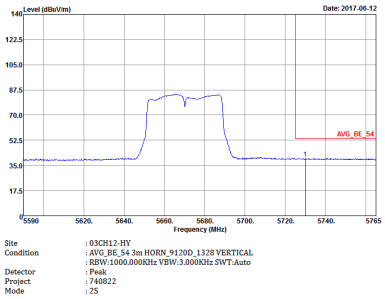
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH110 5550MHz - L	
1+2	Vertical	Fundamental
Peak		
Avg.		Left blank

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

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

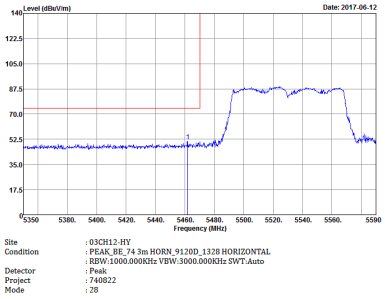
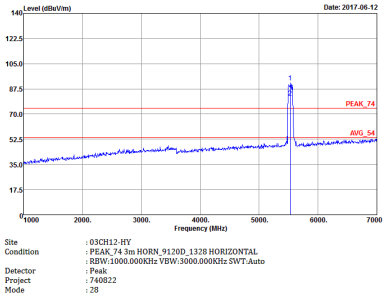
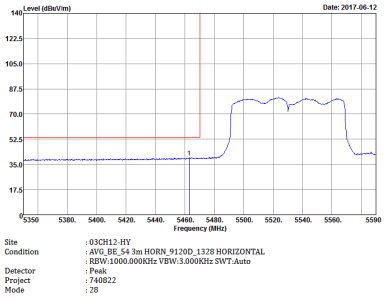
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH134 5670MHz - R	
1+2	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

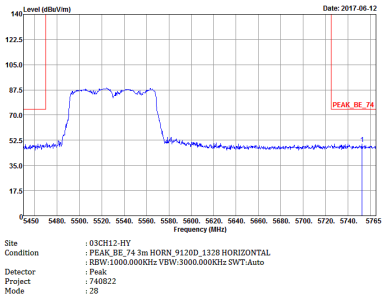
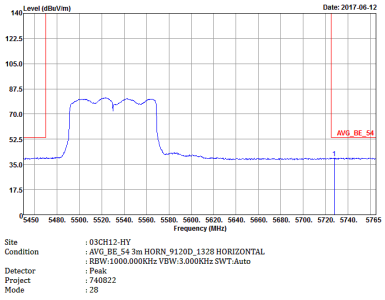
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH134 5670MHz - L	
1+2	Vertical	Fundamental
Peak		
Avg.		Left blank

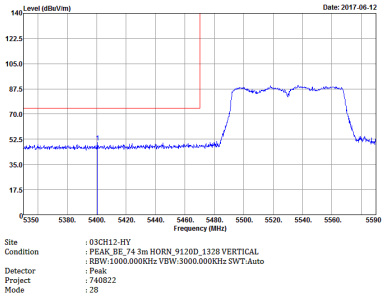
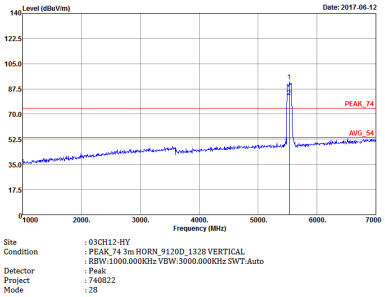
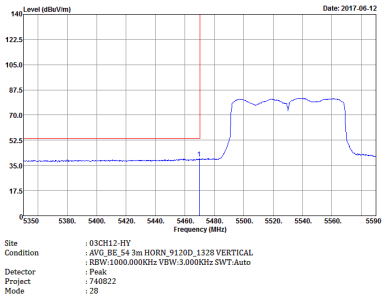
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH134 5670MHz - R	
1+2	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

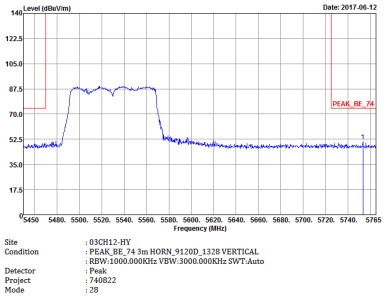
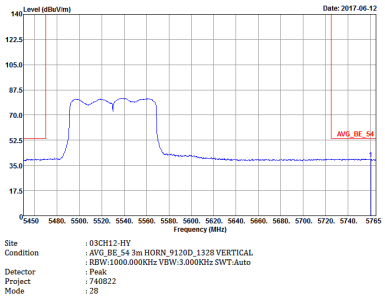
Band 3 5470~5725MHz

WIFI 802.11ac VHT80 (Band Edge @ 3m)

WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH106 5530MHz - L	
1+2	Horizontal	Fundamental
Peak		
Avg.		Left blank

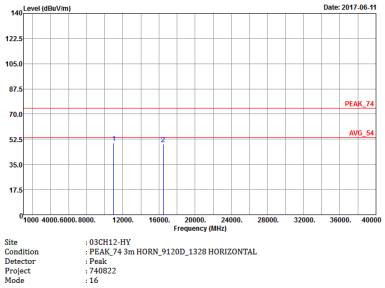
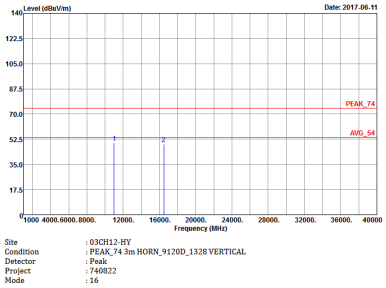
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH106 5530MHz - R	
1+2	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

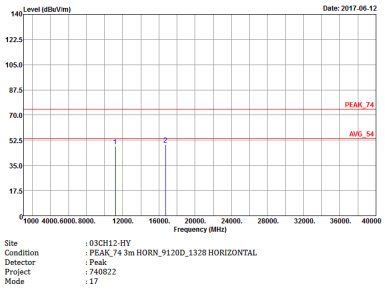
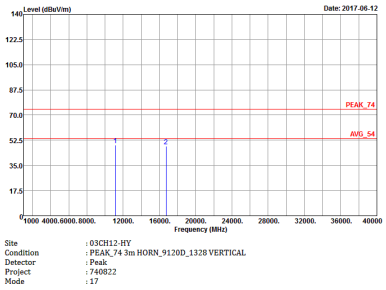
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH106 5530MHz - L	
1+2	Vertical	Fundamental
Peak		
Avg.		Left blank

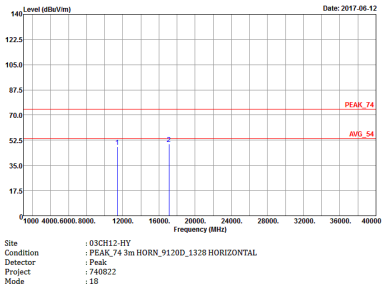
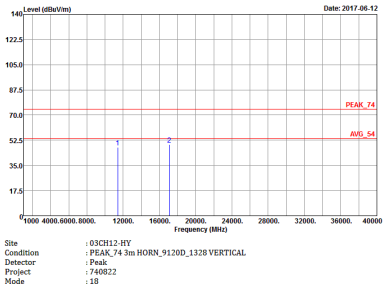
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH106 5530MHz - R	
1+2	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

Band 3 - 5470~5725MHz

WIFI 802.11n HT20 (Harmonic @ 3m)

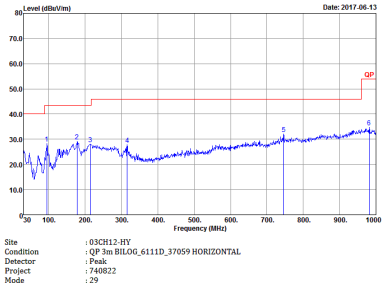
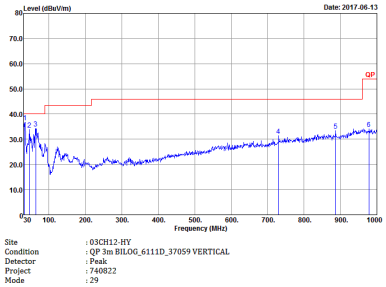
WIFI	Band 3 5470~5725MHz Harmonic @ 3m	
ANT	802.11n HT20 CH100 5500MHz	
1+2	Horizontal	Vertical
Peak Avg.		

WIFI	Band 3 5470~5725MHz Harmonic @ 3m	
ANT	802.11n HT20 CH116 5580MHz	
1+2	Horizontal	Vertical
Peak Avg.		

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

Emission below 1GHz

5GHz WIFI 802.11ac VHT80 (LF)

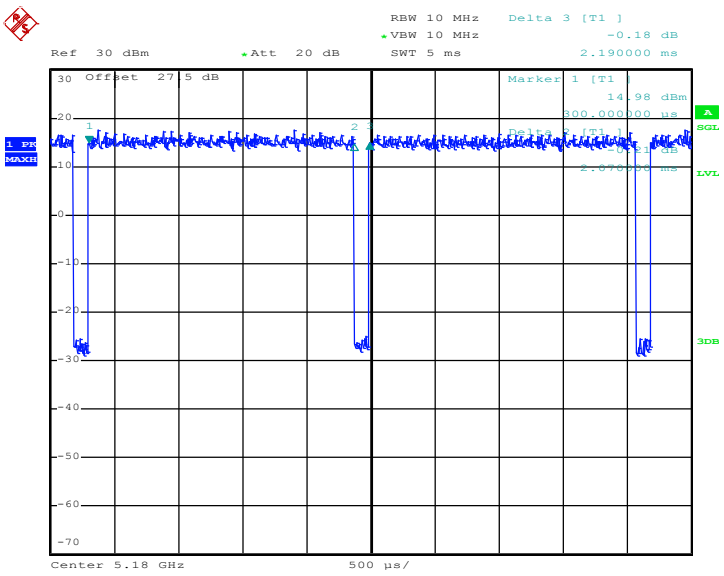
WIFI	5GHz WIFI	
ANT	802.11ac VHT80 LF	
1+2	Horizontal	Vertical
QP / Peak		

Appendix E. Duty Cycle Plots

Antenna	Band	Duty Cycle(%)	T(us)	1/T(kHz)	VBW Setting
1	802.11a	94.52	2070	0.48	1kHz
1	5GHz 802.11n HT20	94.15	1930	0.52	1kHz
1	5GHz 802.11n HT40	89.77	948	1.05	3kHz
1	5GHz 802.11n ac20	94.18	1940	0.52	1kHz
1	5GHz 802.11n ac40	89.77	948	1.05	3kHz
1	5GHz 802.11n ac80	87.2	736	1.36	3kHz
2	802.11a	94.52	2070	0.48	1kHz
2	5GHz 802.11n HT20	94.15	1930	0.52	1kHz
2	5GHz 802.11n HT40	90.29	948	1.05	3kHz
2	5GHz 802.11n ac20	94.18	1940	0.52	1kHz
2	5GHz 802.11n ac40	89.27	948	1.05	3kHz
2	5GHz 802.11n ac80	86.59	736	1.36	3kHz
1+2	5GHz 802.11a for Ant. 1	94.52	2070	0.48	1kHz
1+2	5GHz 802.11n HT20 for Ant. 1	94.18	1940	0.52	1kHz
1+2	5GHz 802.11n HT40 for Ant. 1	89.77	948	1.05	3kHz
1+2	5GHz 802.11n ac20 for Ant. 1	94.18	1940	0.52	1kHz
1+2	5GHz 802.11n ac40 for Ant. 1	89.27	948	1.05	3kHz
1+2	5GHz 802.11n ac80 for Ant. 1	87.2	736	1.36	3kHz
1+2	5GHz 802.11a for Ant. 2	94.52	2070	0.48	1kHz
1+2	5GHz 802.11n HT20 for Ant. 2	94.15	1930	0.52	1kHz
1+2	5GHz 802.11n HT40 for Ant. 2	88.76	948	1.05	3kHz
1+2	5GHz 802.11n ac20 for Ant. 2	94.18	1940	0.52	1kHz
1+2	5GHz 802.11n ac40 for Ant. 2	89.27	948	1.05	3kHz
1+2	5GHz 802.11n ac80 for Ant. 2	87.2	736	1.36	3kHz

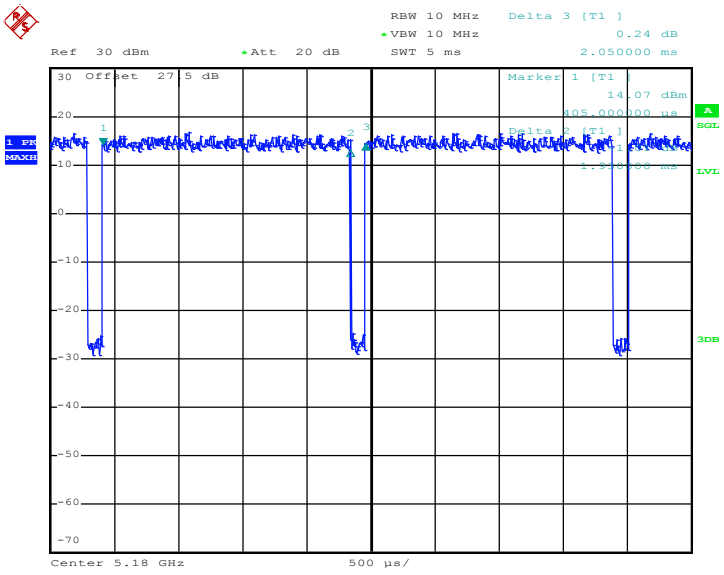
SISO <Ant. 1>

802.11a



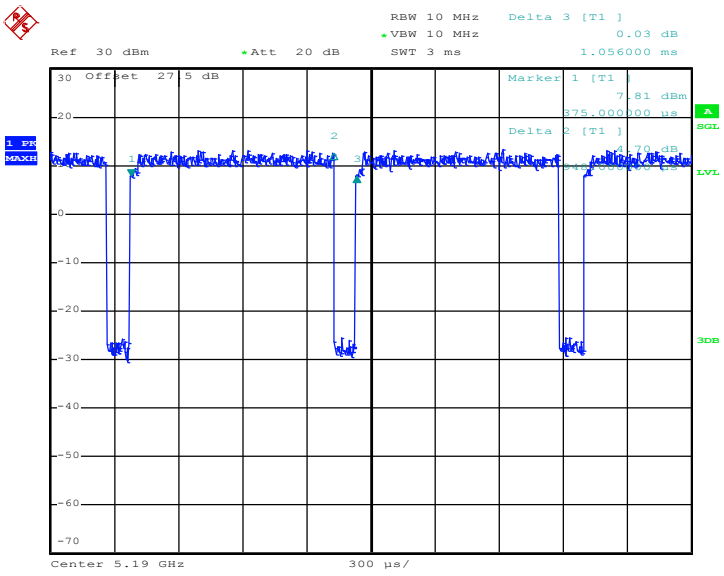
Date: 8.JUN.2017 18:54:03

802.11n HT20



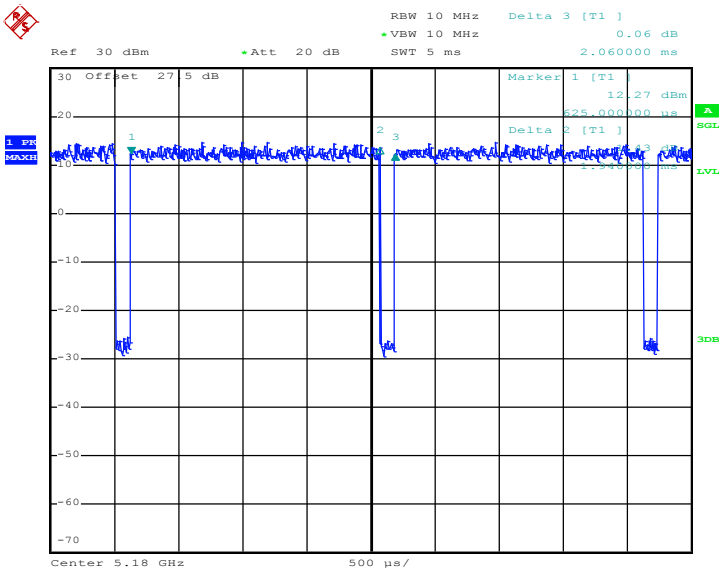
Date: 8.JUN.2017 19:07:13

802.11n HT40



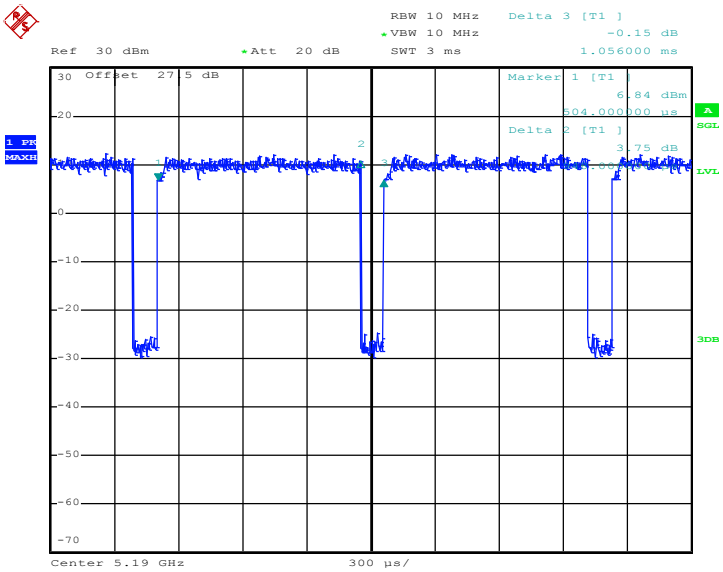
Date: 8.JUN.2017 19:17:46

802.11ac VHT20



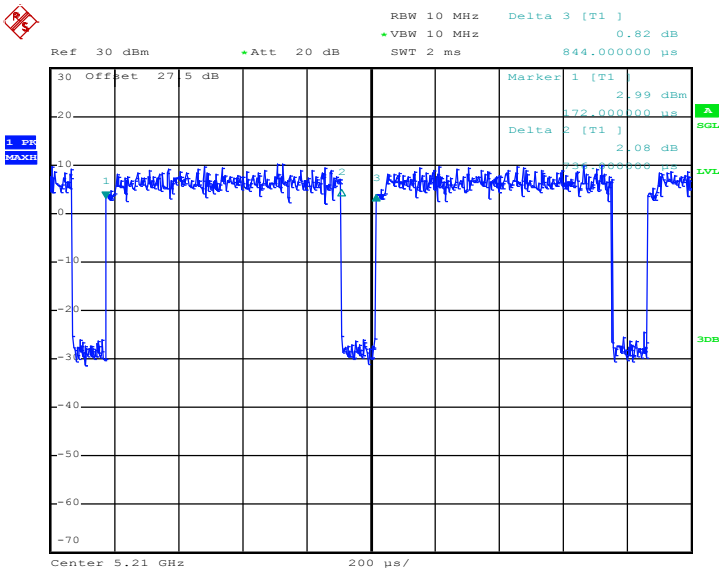
Date: 8.JUN.2017 19:21:06

802.11ac VHT40



Date: 8.JUN.2017 19:24:31

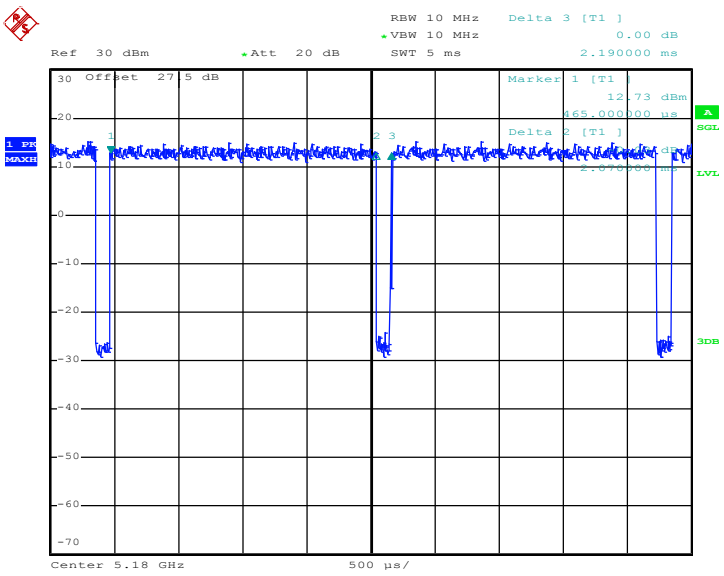
802.11ac VHT80



Date: 8.JUN.2017 19:30:29

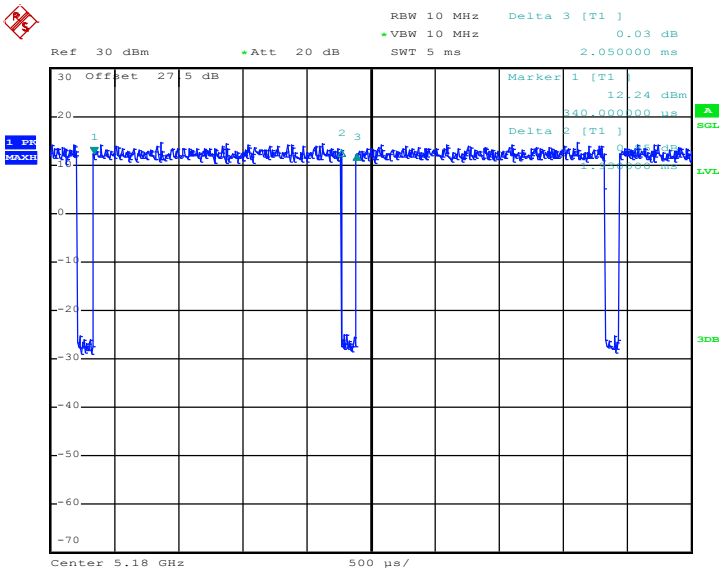
SISO <Ant. 2>

802.11a



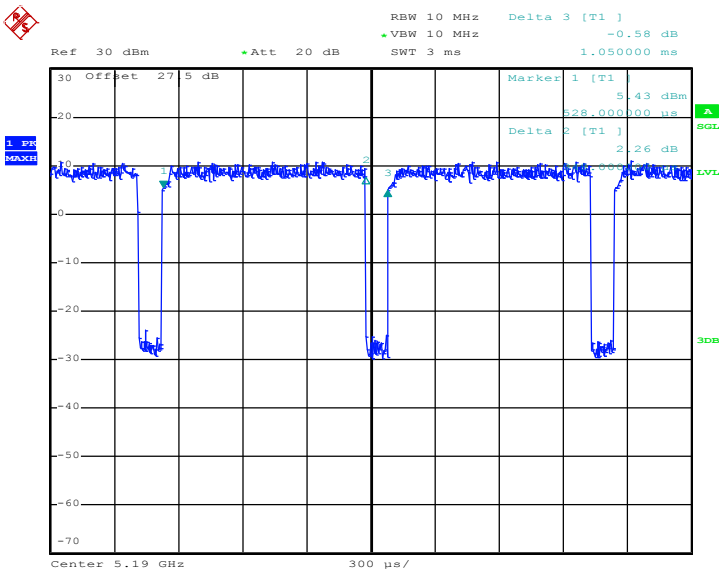
Date: 8.JUN.2017 18:55:28

802.11n HT20



Date: 8.JUN.2017 19:08:50

802.11n HT40



Date: 8.JUN.2017 19:16:46

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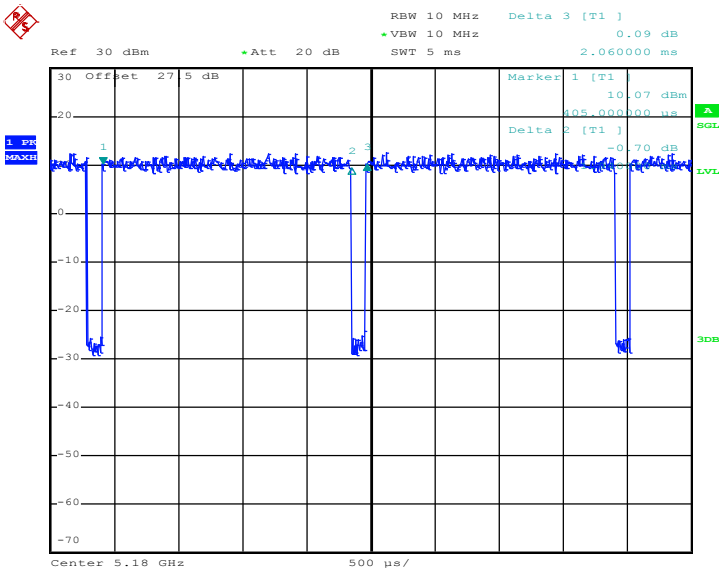

Date: 8.JUN.2017 19:21:48

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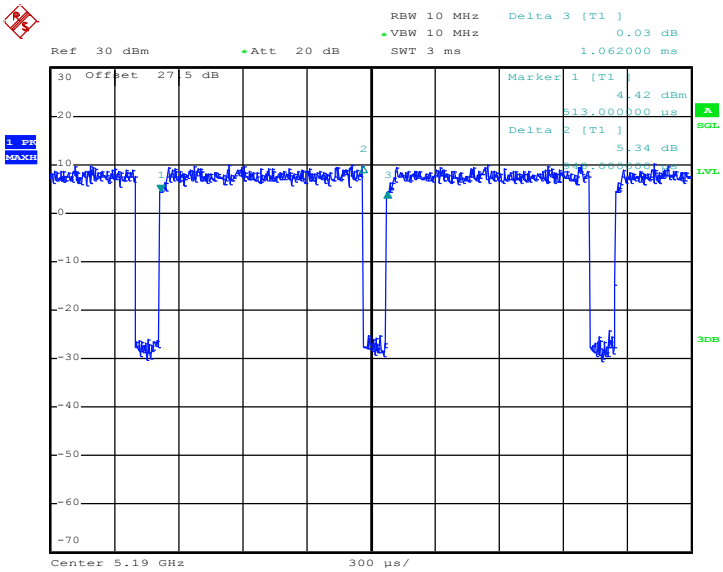
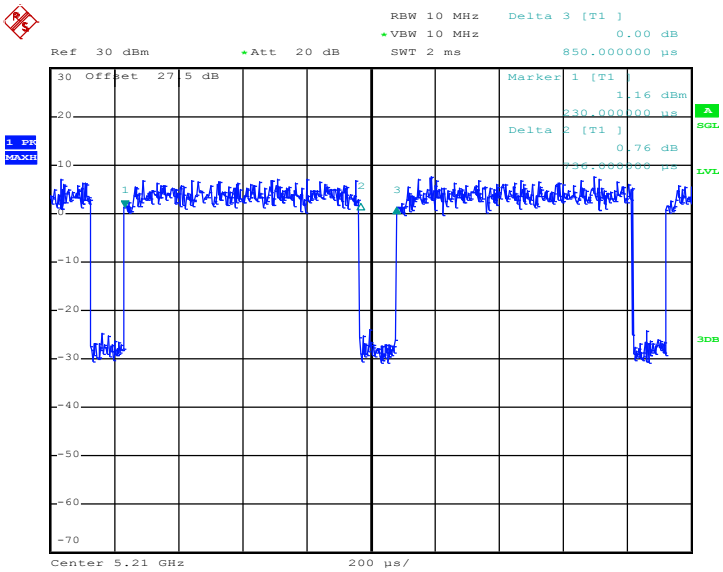


Date: 8.JUN.2017 19:25:26

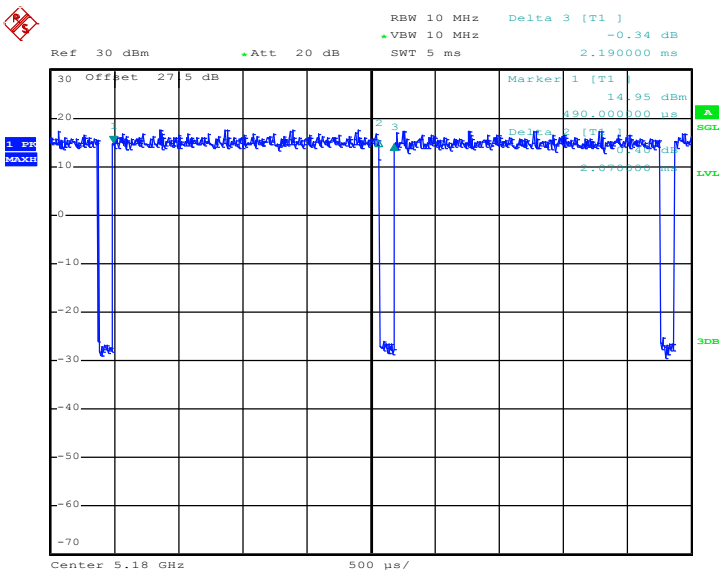
802.11ac VHT80



Date: 8.JUN.2017 19:31:30

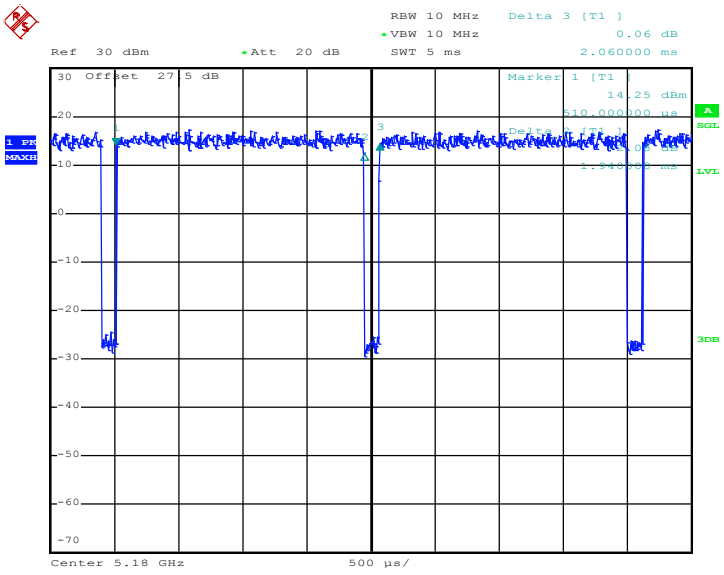
MIMO <Ant. 1>

802.11a



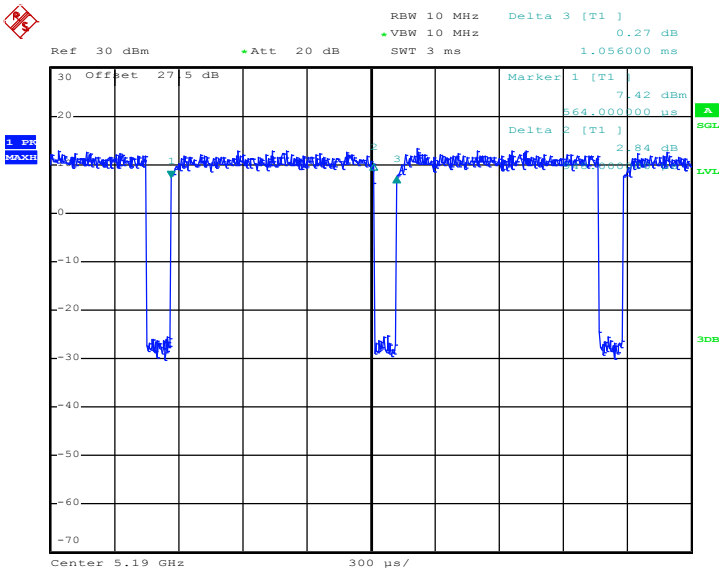
Date: 8.JUN.2017 18:59:45

802.11n HT20



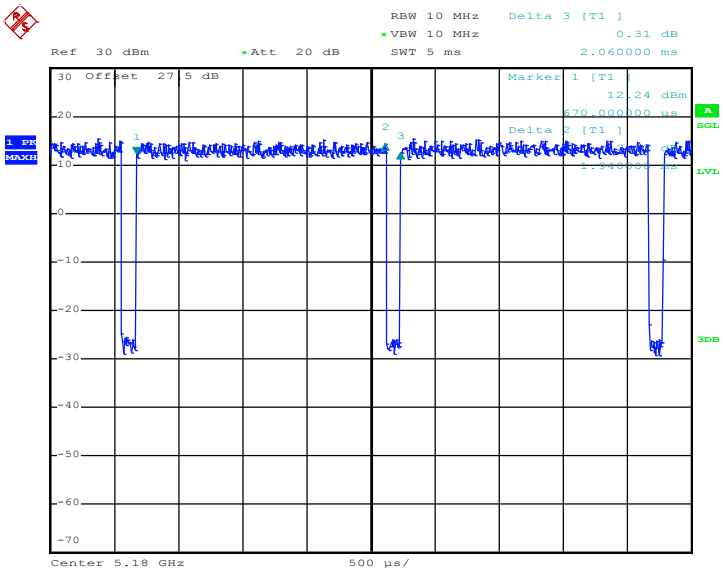
Date: 8.JUN.2017 19:11:55

802.11n HT40



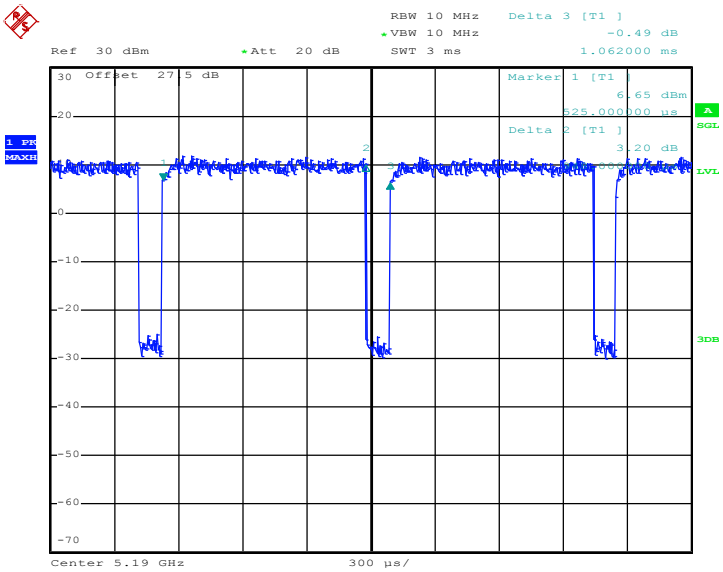
Date: 8.JUN.2017 19:18:43

802.11ac VHT20



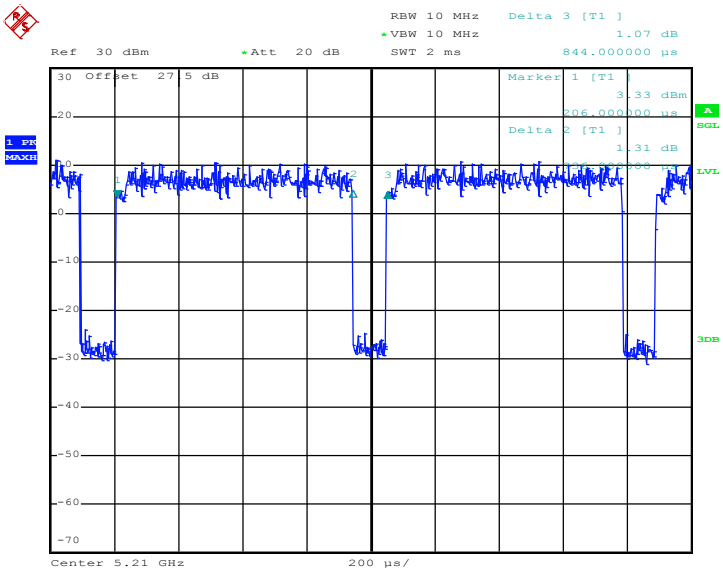
Date: 8.JUN.2017 19:22:28

802.11ac VHT40



Date: 8.JUN.2017 19:27:04

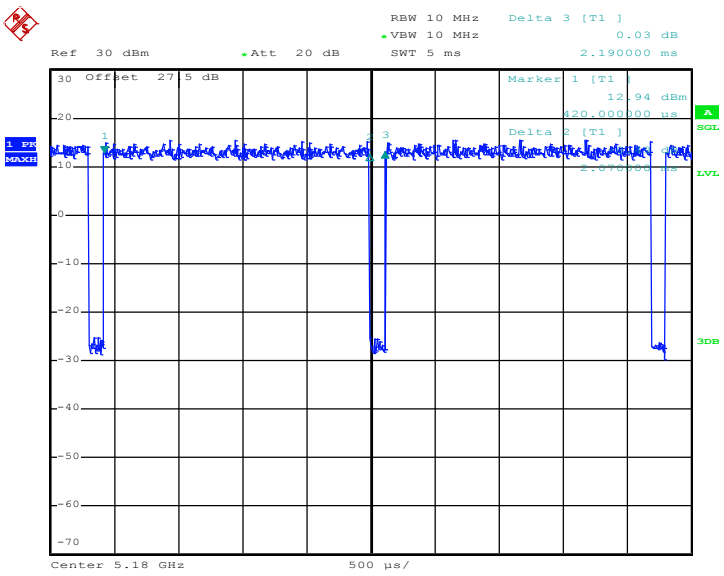
802.11ac VHT80



Date: 8.JUN.2017 19:32:19

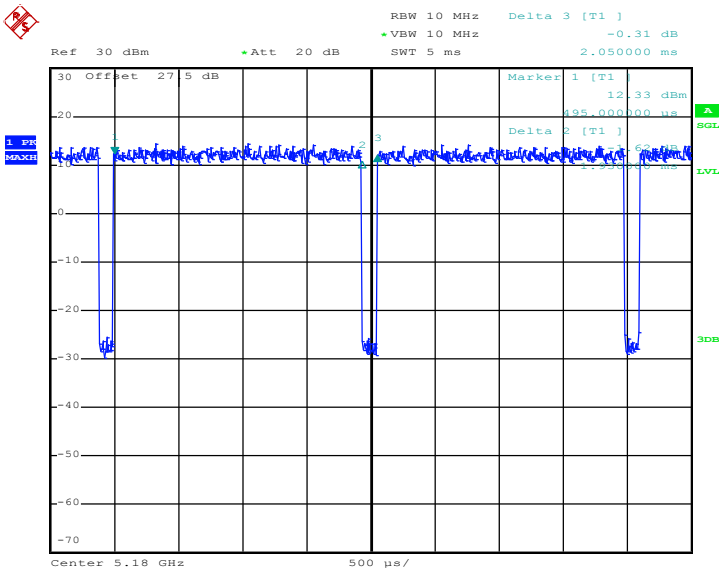
MIMO <Ant. 2>

802.11a



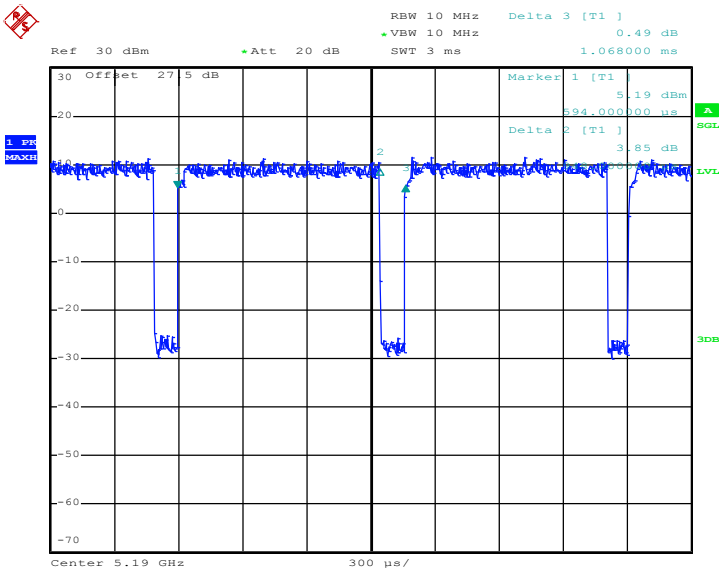
Date: 8.JUN.2017 19:00:26

802.11n HT20



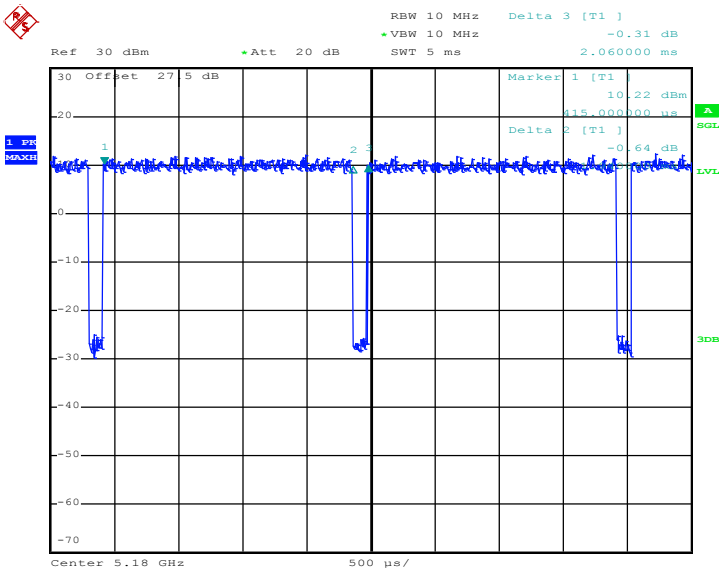
Date: 8.JUN.2017 19:11:09

802.11n HT40



Date: 8.JUN.2017 19:19:48

802.11ac VHT20



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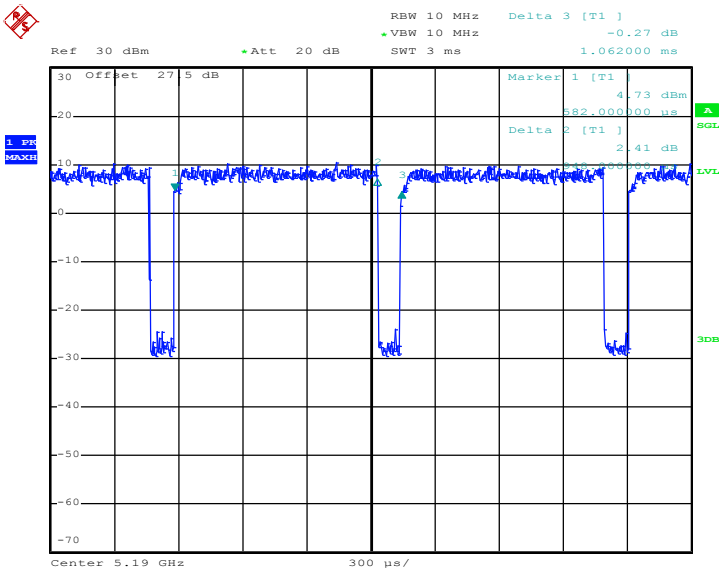
802.11ac VHT40



Date: 8.JUN.2017 19:28:02

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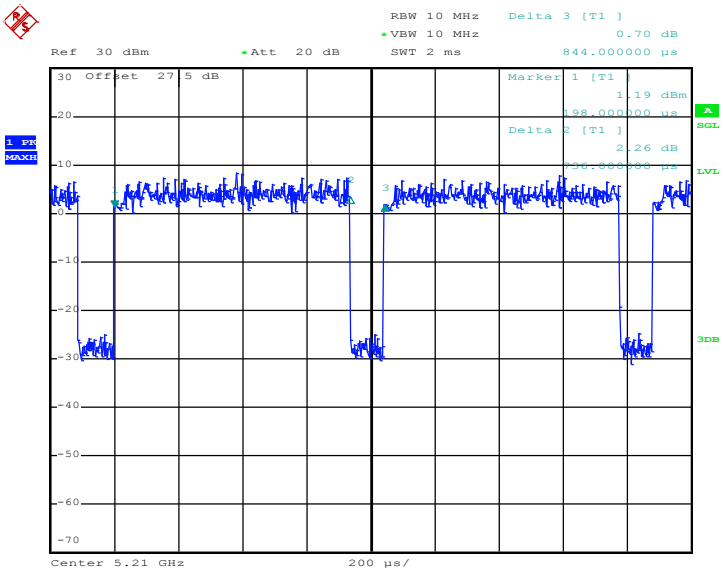

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