FCC RADIO TEST REPORT

FCC ID	:	**ACJFZL1A**
Equipment	:	**Tablet Computer**
Brand Name	:	**Panasonic**
Model Name	:	**FZ-L1AC**
Marketing Name	:	**FZ-L1**
Applicant	:	**Panasonic Corporation of North America** **Two Riverfront Plaza, 9th Floor, Newark, NJ 07102-5490**
Manufacturer	:	**Panasonic Mobile Communications Co., Ltd.** **600 Saedo-cho, Tsuzuki-ku, Yokohama City 224-8539, Japan**
Standard	:	**FCC Part 15 Subpart E §15.407**

The product was received on Jul. 04, 2018 and testing was started from Oct. 20, 2018 and completed on Nov. 21, 2018. 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 report must not be used by the client to claim product certification, approval, or endorsement by TAF or any agency of government.

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

Approved by: Joseph Lin

SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory

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

Table of Contents

History of this test report

Report No.	Version	Description	Issued Date
FR870418E	01	Initial issue of report	Nov. 13, 2018
FR870418E	02	Add all the test plots of 26dB and 99% occupied bandwidth in section 3.1.5.	Nov. 19, 2018
FR870418E	03	Add 802.11a,.11n HT20 CH104 & CH136 test data of conducted power in appendix A and radiated band edge in appendix C and D.	Nov. 23, 2018

Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
3.1	15.403(i)	26dB Bandwidth	Pass	-
3.1	2.1049	99% Occupied Bandwidth	Reporting only	-
3.2	15.407(a)	Maximum Conducted Output Power	Pass	-
3.3	15.407(a)	Power Spectral Density	Pass	-
3.4	15.407(b)	Unwanted Emissions	Pass	Under limit 4.00 dB at 887.300 MHz & 890.800 MHz
3.5	15.207	AC Conducted Emission	Pass	Under limit 3.18 dB at 13.560 MHz
3.6	15.407(c)	Automatically Discontinue Transmission	Pass	-
3.7	15.203 15.407(a)	Antenna Requirement	Pass	-

Reviewed by: Wii Chang

Report Producer: Yimin Ho

1 General Description

1.1 Product Feature of Equipment Under Test

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

Product Specification subjective to this standard	
Sample 1	EUT with BCR Landscape
Sample 2	EUT with BCR Portrait
Sample 3	EUT without BCR
Antenna Type	WLAN: Monopole Antenna Bluetooth: Monopole Antenna GNSS: Monopole Antenna NFC: Loop Antenna

1.2 Modification of EUT

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

1.3 Testing Location

Sporton Lab is accredited to ISO 17025 by Taiwan Accreditation Foundation (TAF code : 1190) and the FCC designation No. TW1190 and 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, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.) TEL: +886-3-327-3456 FAX: +886-3-328-4978	
Test Site No.	**Sporton Site No.**	
	TH05-HY	CO05-HY

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

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

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

1.4 Applicable Standards

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

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

Remark:

1. All test items were verified and recorded according to the standards and without any deviation during the test.
2. 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 (X 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
	-	-		

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
	-	-		

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
	-	-	134*	5670
	108	5540	136	5680
	110*	5550	140	5700

Note: The above Frequency and Channel in "*" were 802.11n HT40.

2.2 Test Mode

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

Modulation	Data Rate
802.11a	6 Mbps
802.11n HT20	MCS0
802.11n HT40	MCS0

Test Cases	
AC Conducted Emission	Mode 1 : Bluetooth Link + WLAN (5GHz) Link + NFC On + Earphone + SD Card + USB Cable 2 (Data Link with Notebook) + Cradle (Charging from Adapter) for Sample 3

Remark:

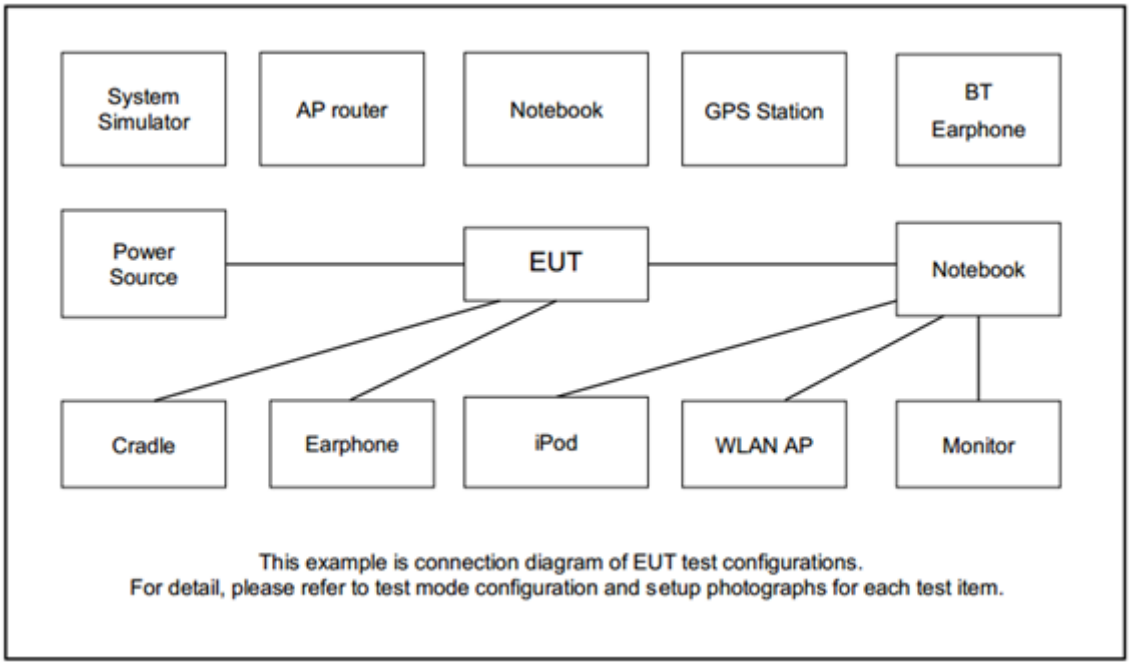
1. Data Link with Notebook means data application transferred mode between EUT and Notebook.
2. For Radiated Test Cases, the tests were performed with USB Cable 1 and Sample 3.

Ch. #		Band I：5150-5250 MHz	Band II：5250-5350 MHz	Band III：5470-5725MHz
		802.11a	802.11a	802.11a
L	Low	36	52	100 / 104
M	Middle	44	60	116
H	High	48	64	136 / 140

Ch. #		Band I：5150-5250 MHz	Band II：5250-5350 MHz	Band III：5470-5725MHz
		802.11n HT20	802.11n HT20	802.11n HT20
L	Low	36	52	100 / 104
M	Middle	44	60	116
H	High	48	64	136 / 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

2.3 Connection Diagram of Test System



2.4 Support Unit used in test configuration and system

Item	Equipment	Trade Name	Model Name	FCC ID	Data Cable	Power Cord
1.	Bluetooth Earphone	Sony Ericsson	MW600	PY7DDA-2029	N/A	N/A
2.	WLAN AP	ASUS	RT-AC66U	MSQ-RTAC66U	N/A	Unshielded ,1.8 m
3.	Notebook	DELL	Latitude E6320	FCC DoC	N/A	AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m
4.	iPod Earphone	Apple	N/A	Verification	Unshielded, 1.0 m	N/A
5.	iPod	Apple	A1285	FCC DoC	Shielded, 1.2 m	N/A
6.	SD Card	SanDisk	MicroSD HC	FCC DoC	N/A	N/A

2.5 EUT Operation Test Setup

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

2.6 Measurement Results Explanation Example

For all conducted test items:

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

Example :

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

Offset = RF cable loss + attenuator factor.

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

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

= 4.2 + 10 = 14.2 (dB)

3 Test Result

3.1 26dB & 99% Occupied Bandwidth Measurement

3.1.1 Description of 26dB & 99% Occupied Bandwidth

This section is for reporting purpose only.

There is no restriction limits for bandwidth.

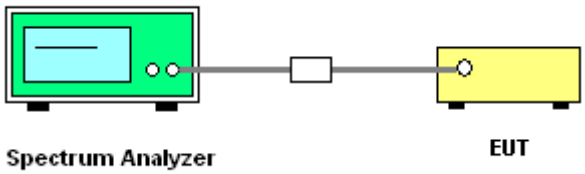
3.1.2 Measuring Instruments

See list of measuring equipment of this test report.

3.1.3 Test Procedures

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

3.1.4 Test Setup



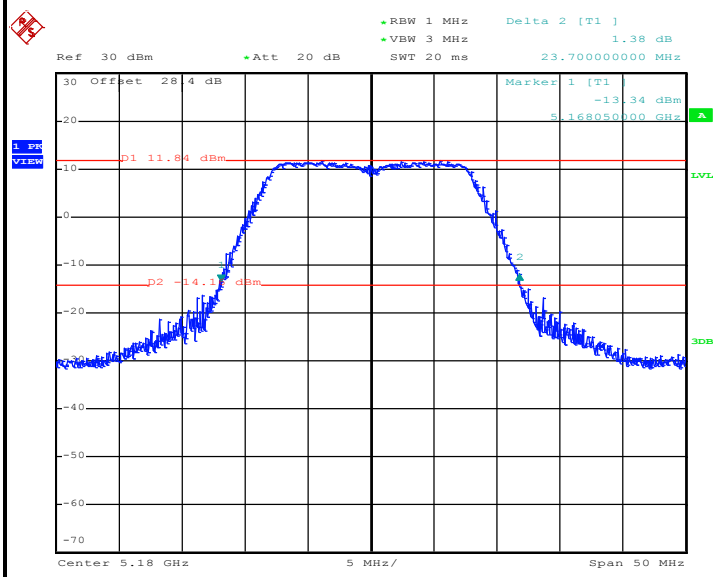
3.1.5 Test Result of 26dB & 99% Occupied Bandwidth

Please refer to Appendix A.

26dB Bandwidth

<802.11a>

26dB Bandwidth Plot on Channel 36



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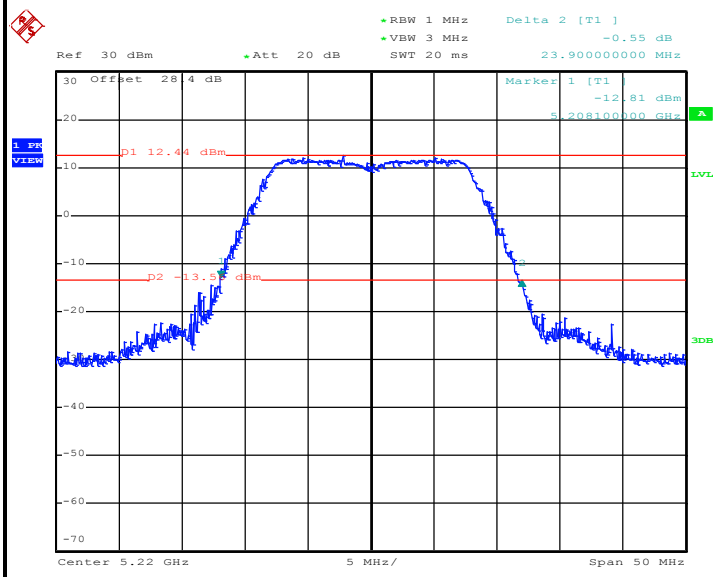
26dB Bandwidth Plot on Channel 44



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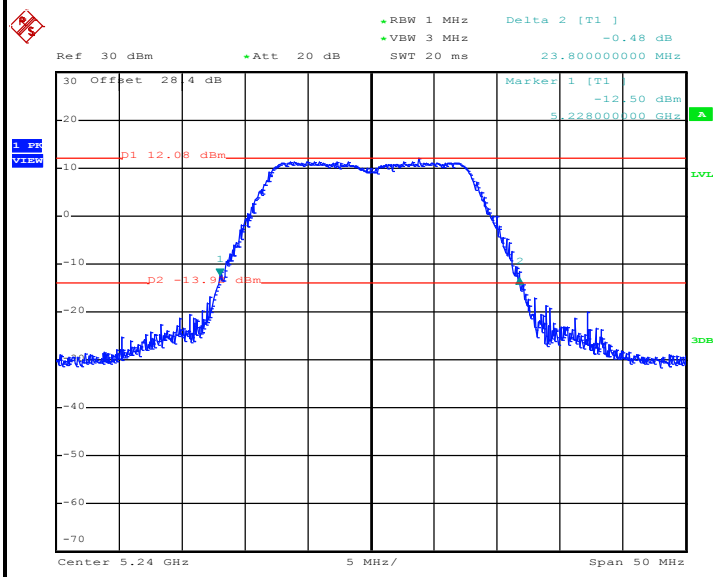
26dB Bandwidth Plot on Channel 48



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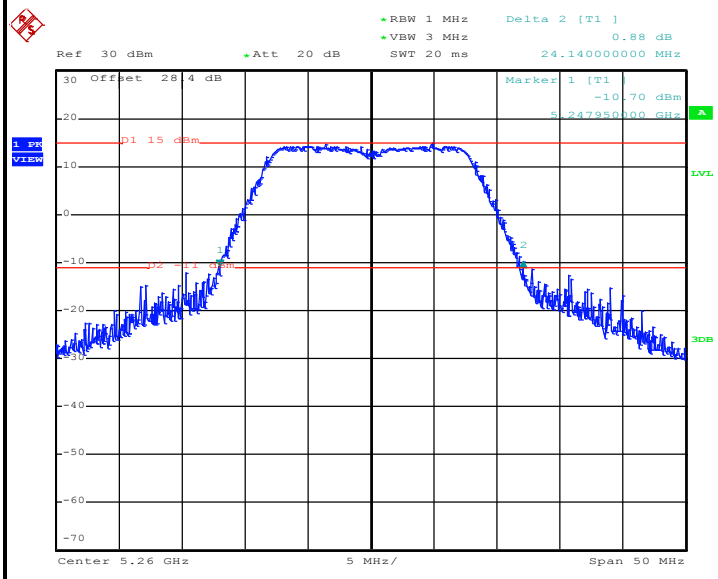
26dB Bandwidth Plot on Channel 52



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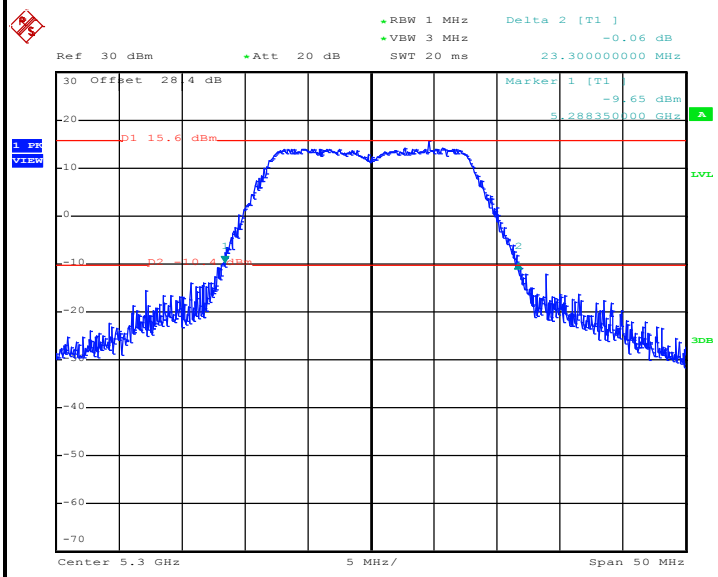
26dB Bandwidth Plot on Channel 60



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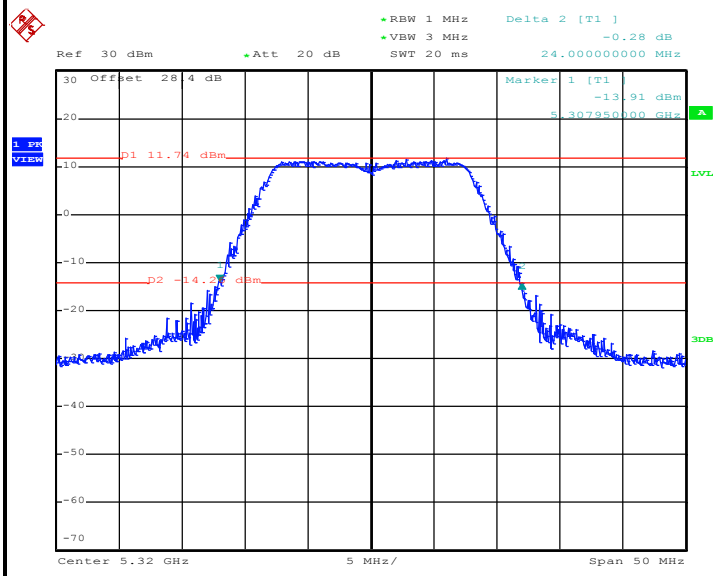
26dB Bandwidth Plot on Channel 64



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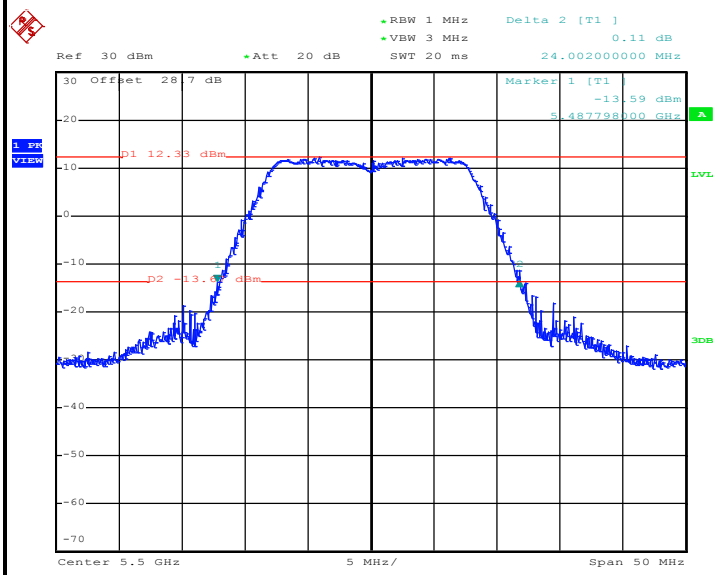
26dB Bandwidth Plot on Channel 100



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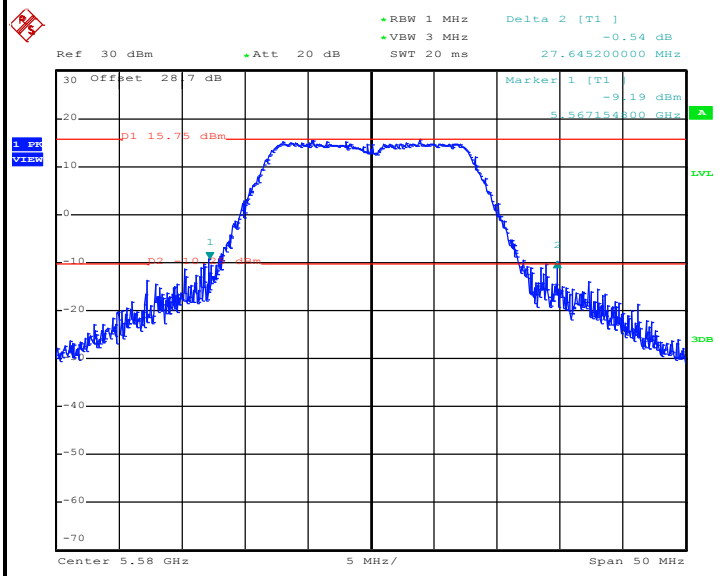
26dB Bandwidth Plot on Channel 116



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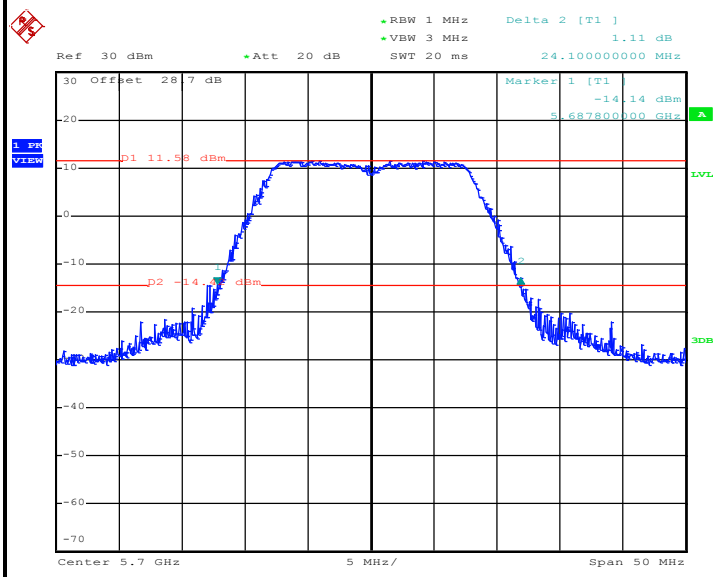
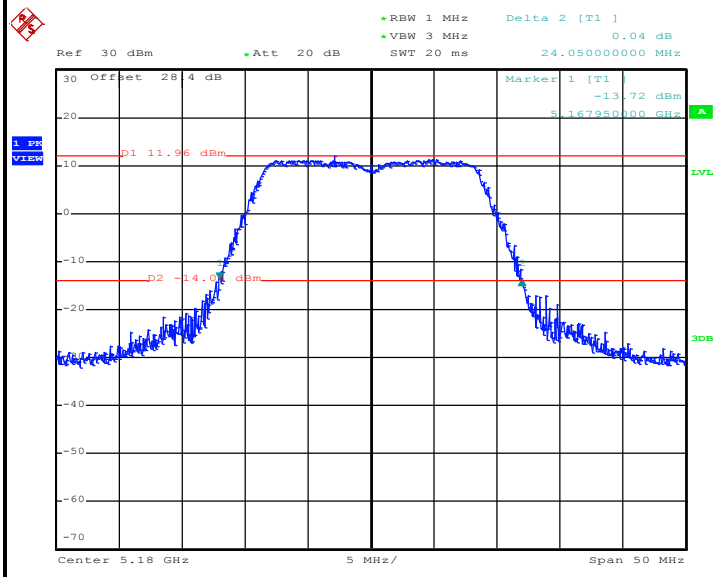
26dB Bandwidth Plot on Channel 140

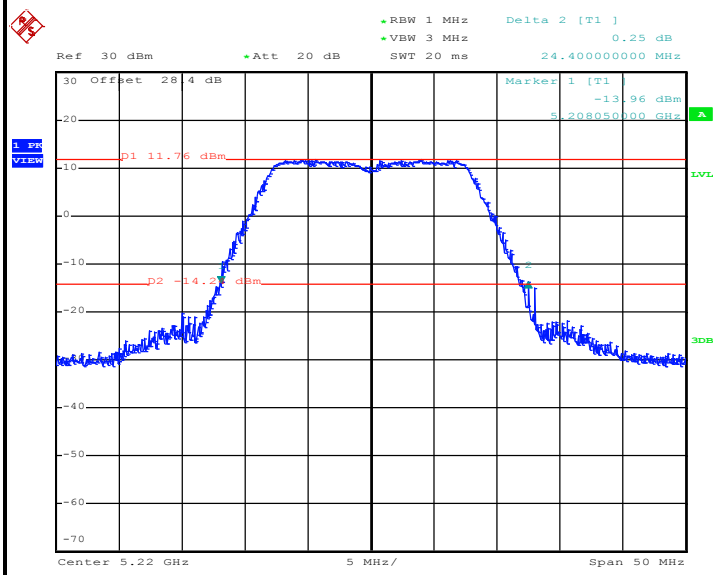


<802.11n HT20>

26dB Bandwidth Plot on Channel 36



26dB Bandwidth Plot on Channel 44



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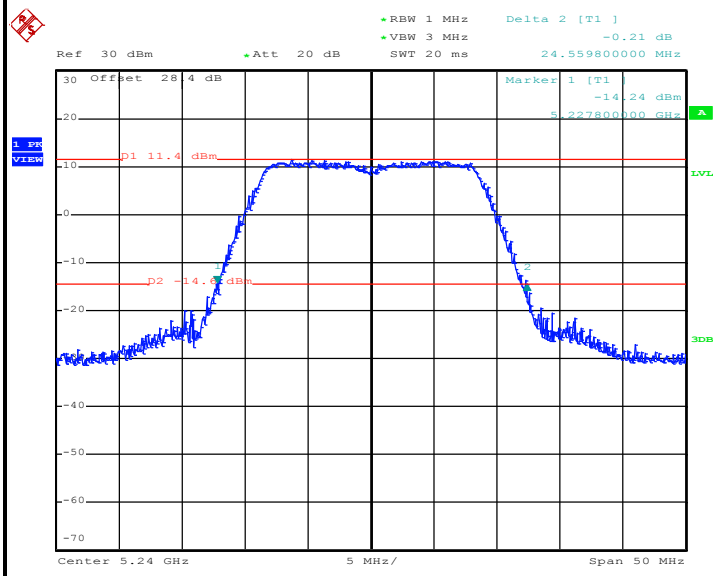
26dB Bandwidth Plot on Channel 48



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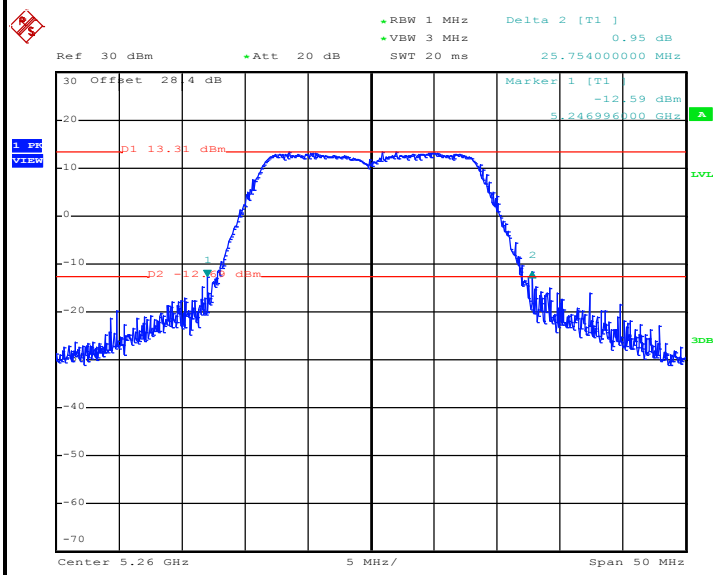
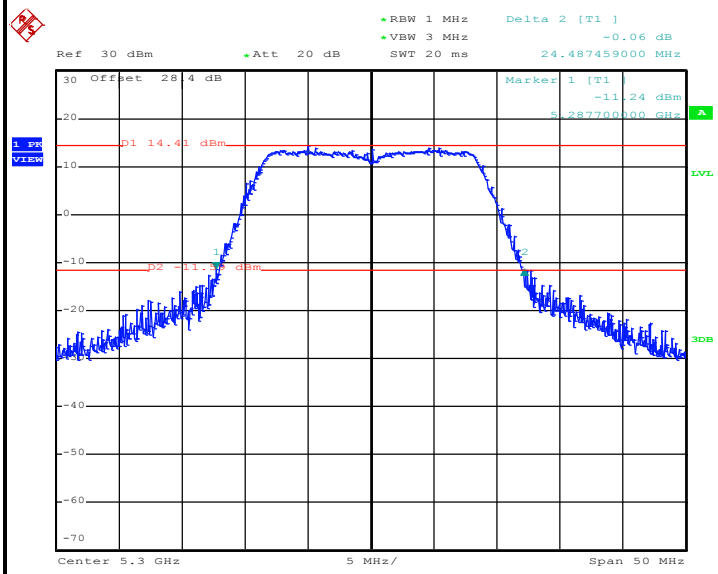
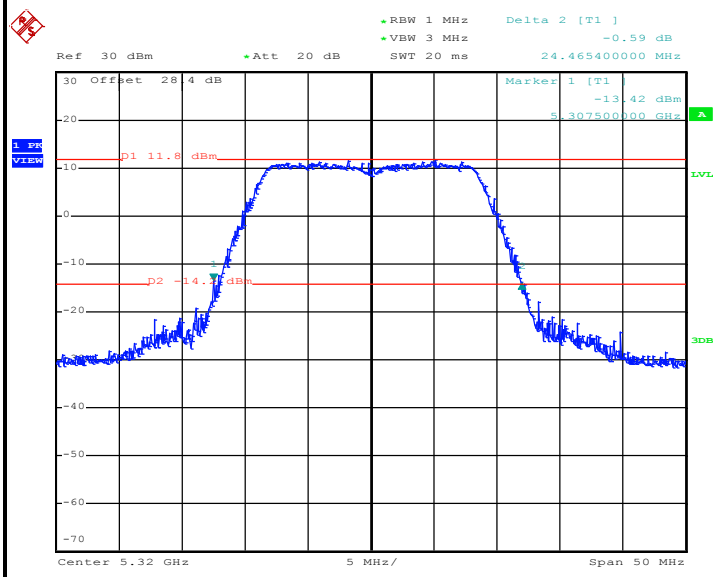
26dB Bandwidth Plot on Channel 52



26dB Bandwidth Plot on Channel 60



26dB Bandwidth Plot on Channel 64



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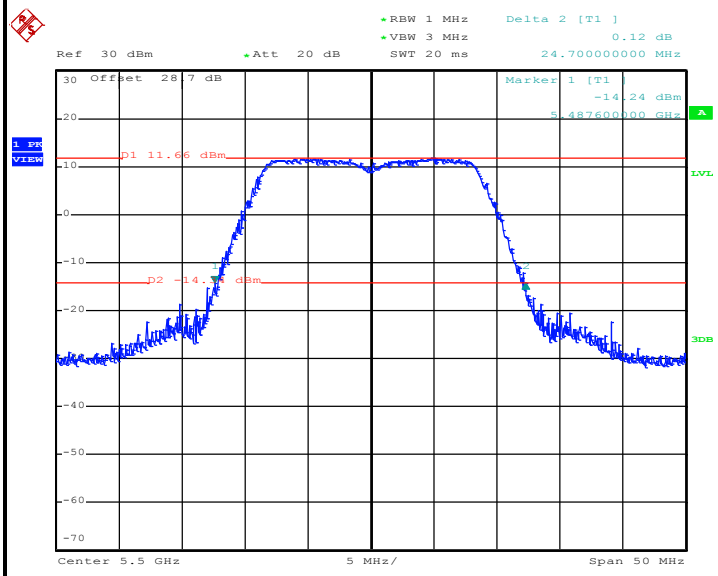
26dB Bandwidth Plot on Channel 100



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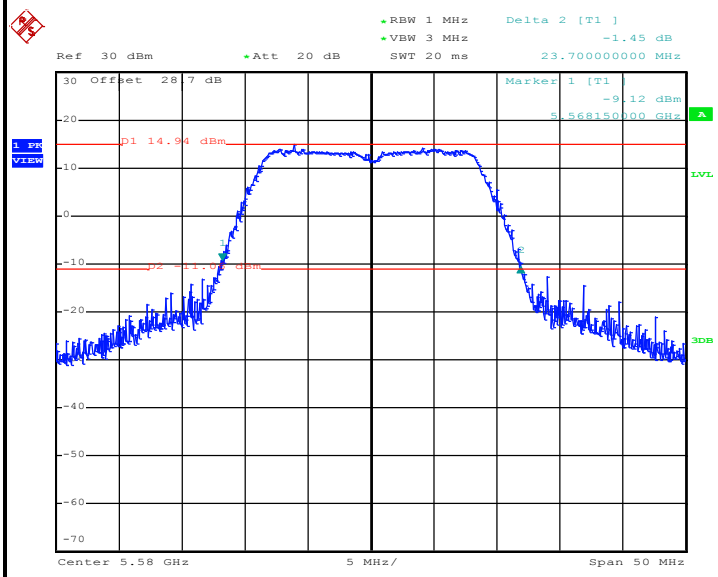
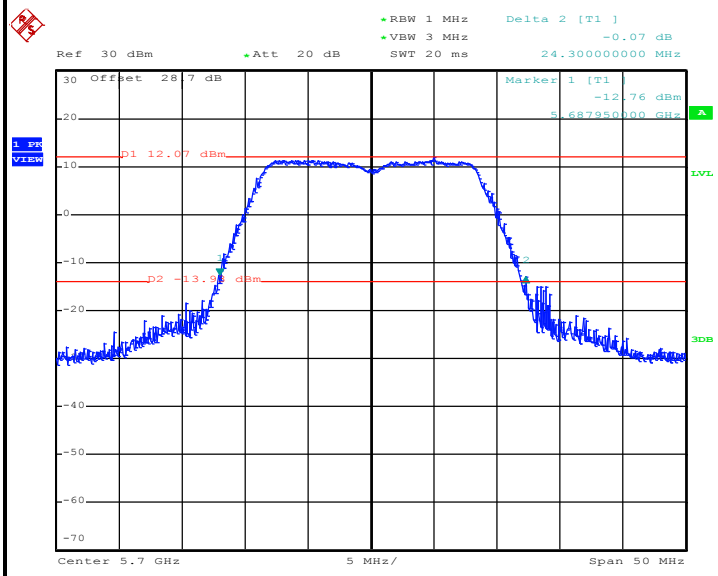
26dB Bandwidth Plot on Channel 116

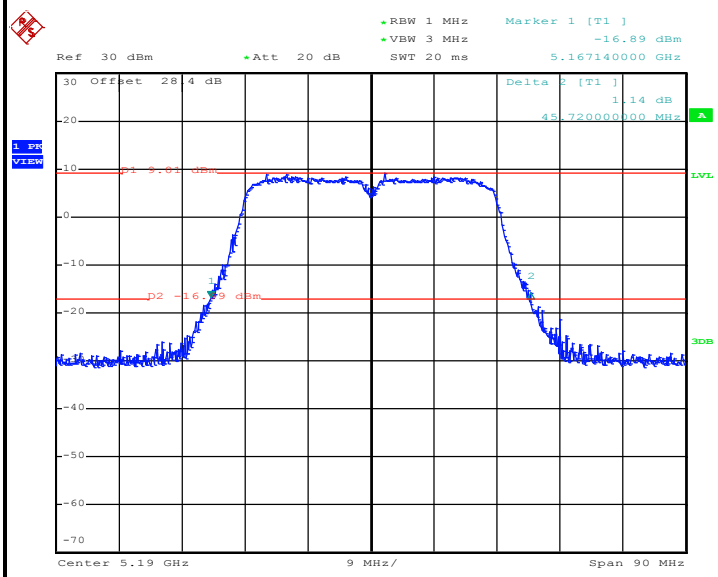


26dB Bandwidth Plot on Channel 140

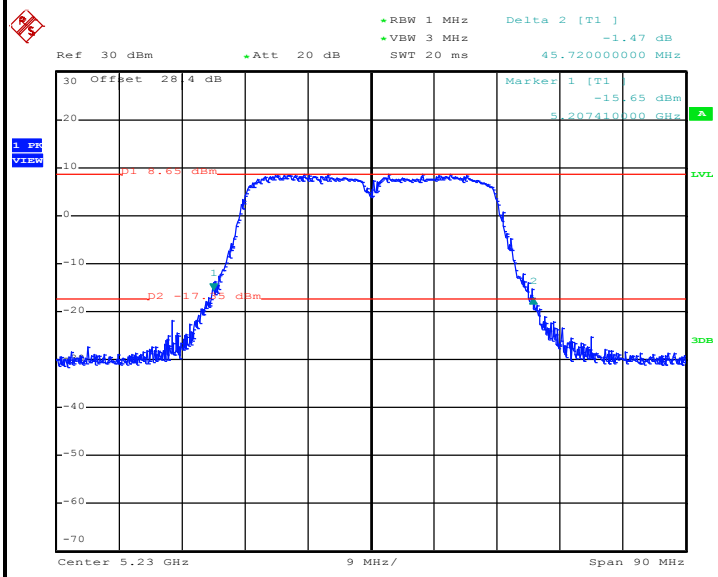


<802.11n HT40>

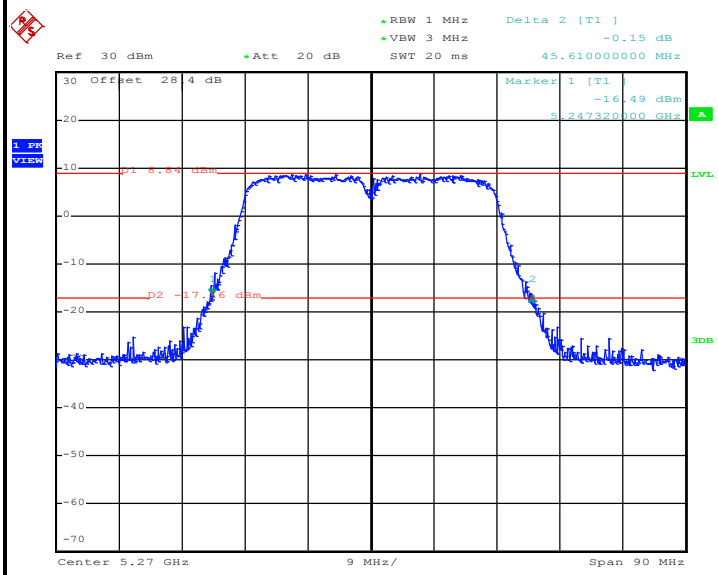
26dB Bandwidth Plot on Channel 38



26dB Bandwidth Plot on Channel 46



26dB Bandwidth Plot on Channel 54



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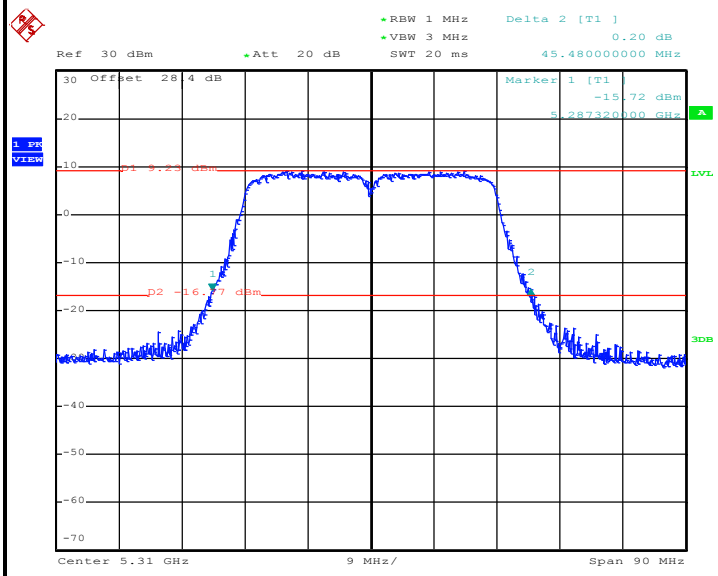
26dB Bandwidth Plot on Channel 62



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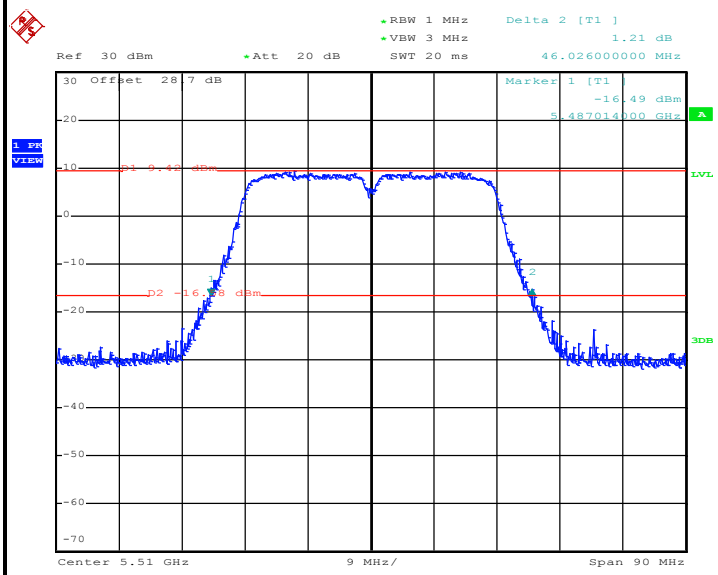
26dB Bandwidth Plot on Channel 102



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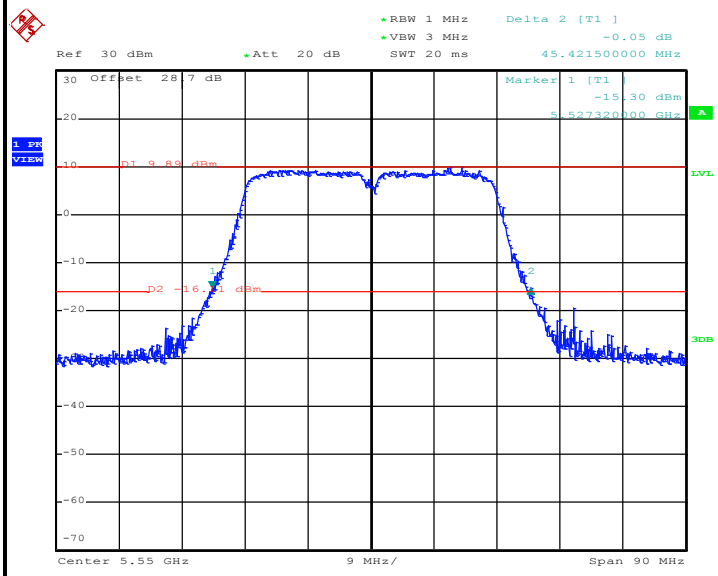
26dB Bandwidth Plot on Channel 110



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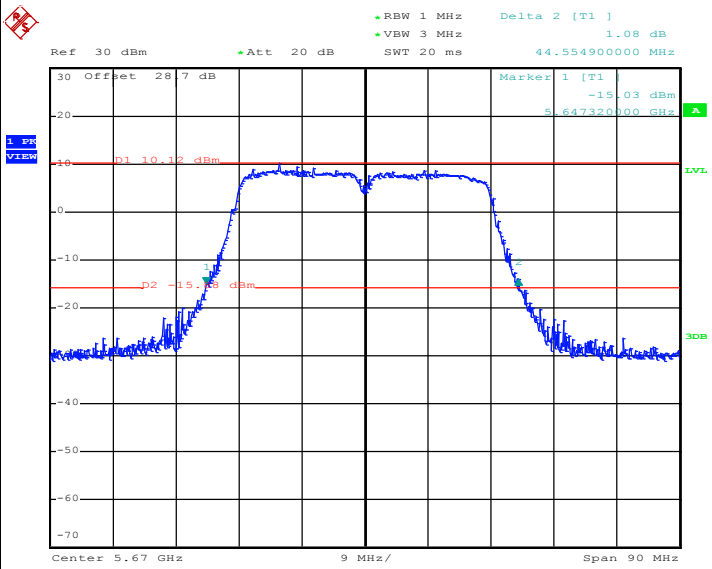
26dB Bandwidth Plot on Channel 134



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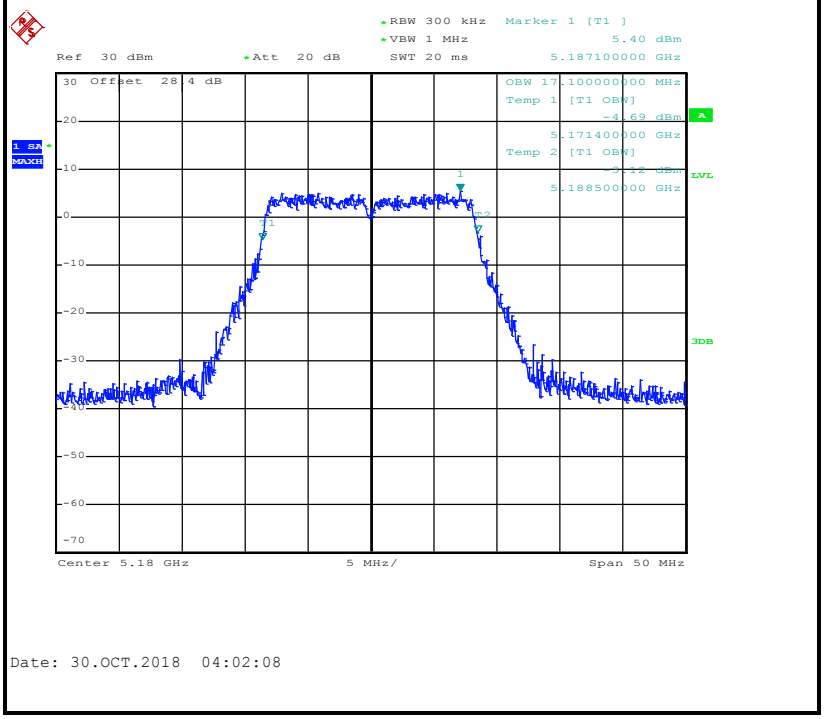
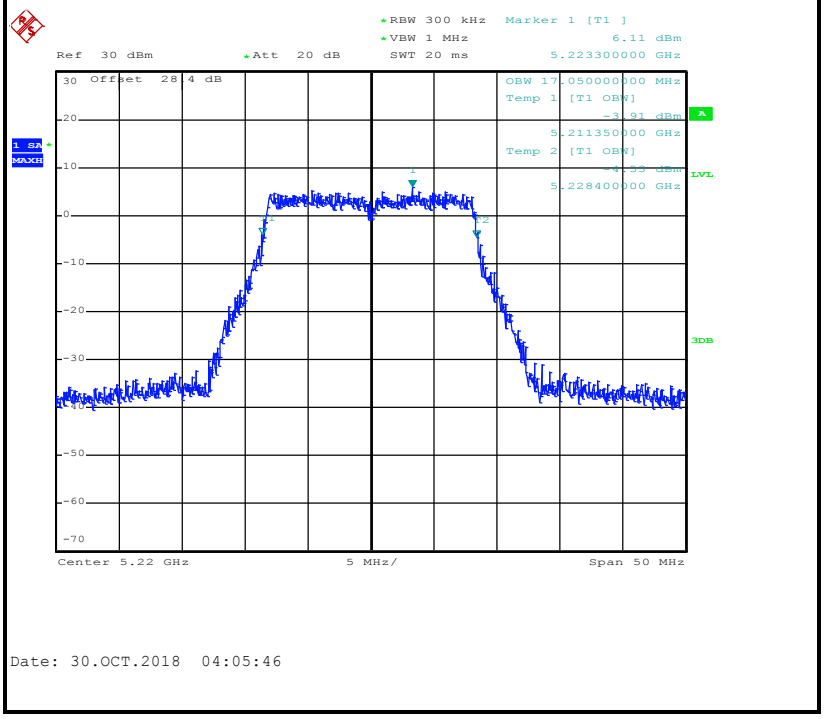
99% Occupied Bandwidth

<802.11a>

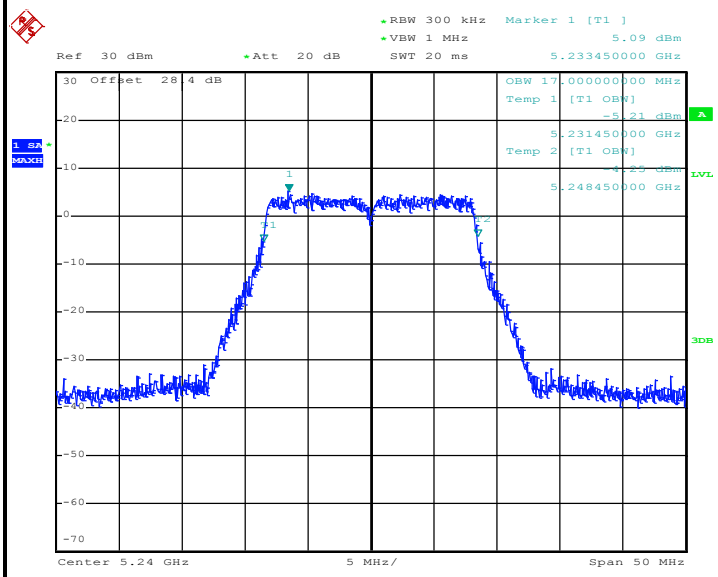
99% Occupied Bandwidth Plot on Channel 36



99% Occupied Bandwidth Plot on Channel 44



99% Occupied Bandwidth Plot on Channel 48



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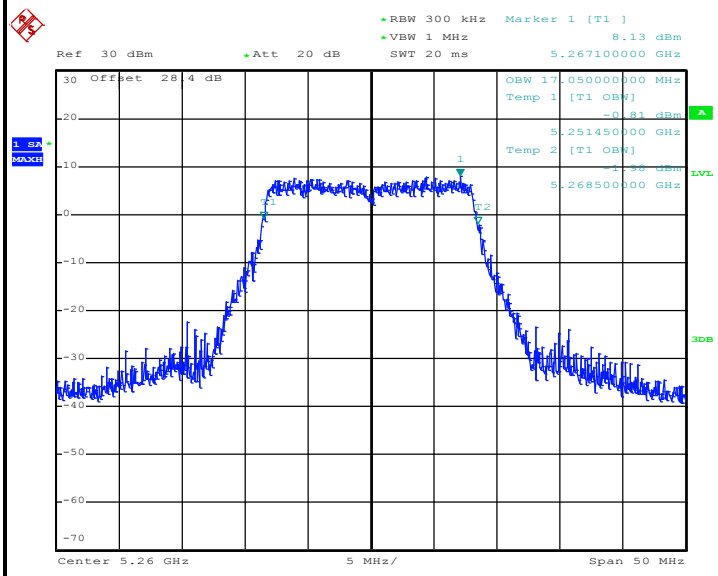
99% Occupied Bandwidth Plot on Channel 52



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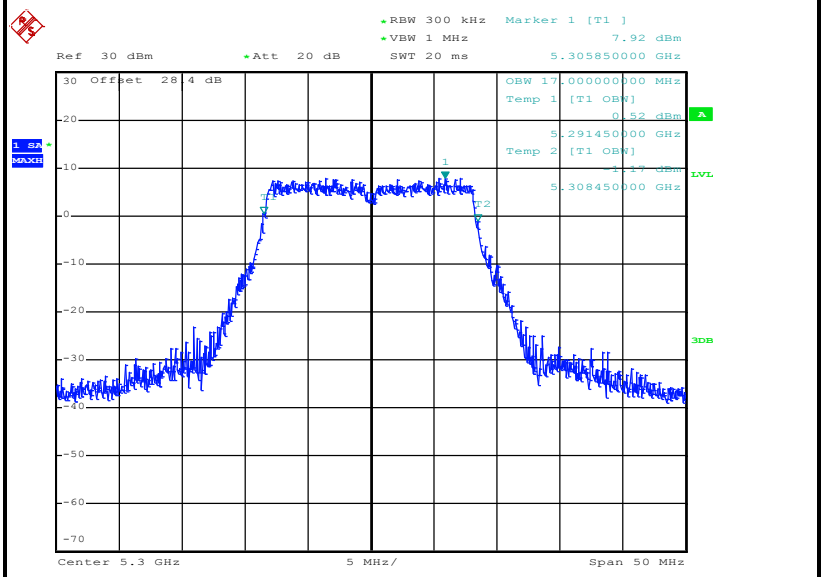
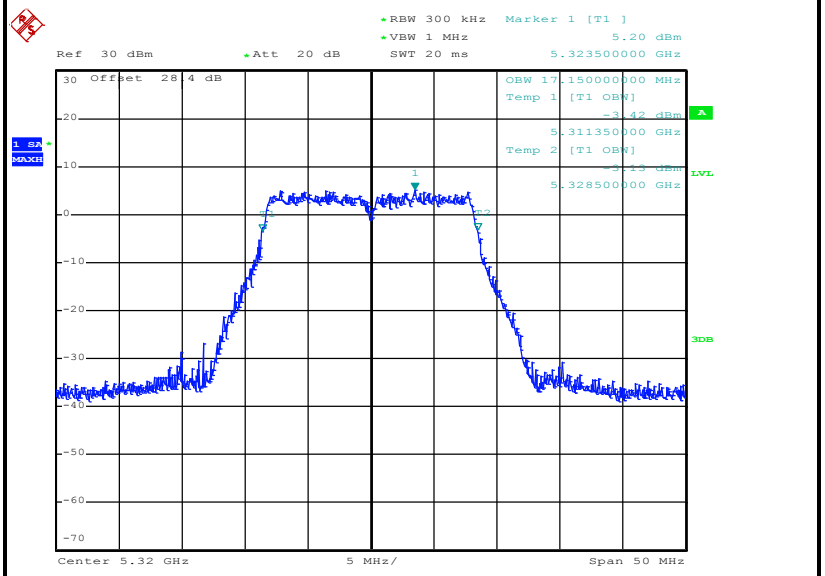
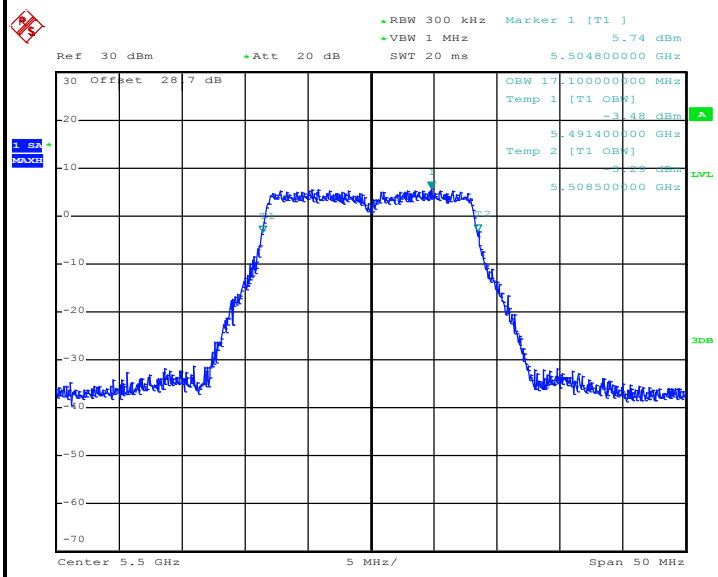
99% Occupied Bandwidth Plot on Channel 60



99% Occupied Bandwidth Plot on Channel 64



99% Occupied Bandwidth Plot on Channel 100



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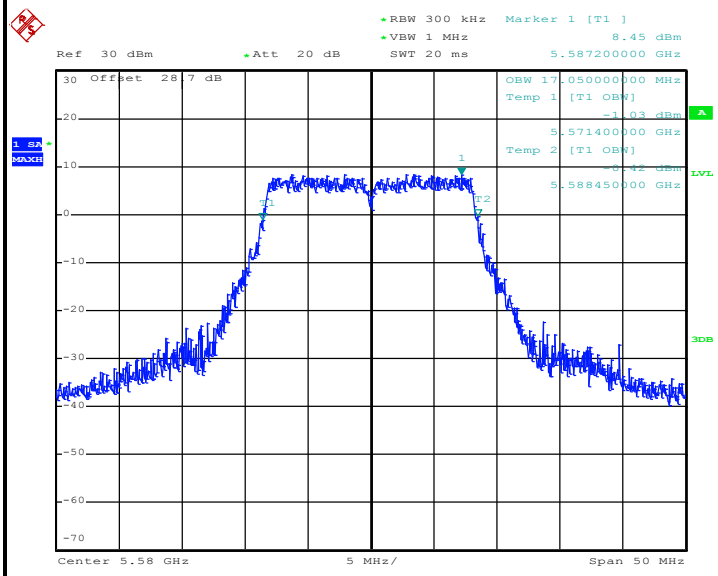
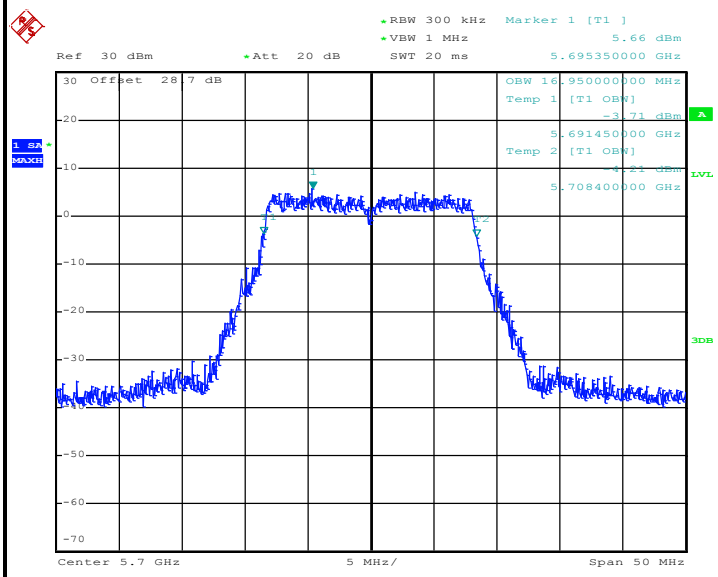
99% Occupied Bandwidth Plot on Channel 116



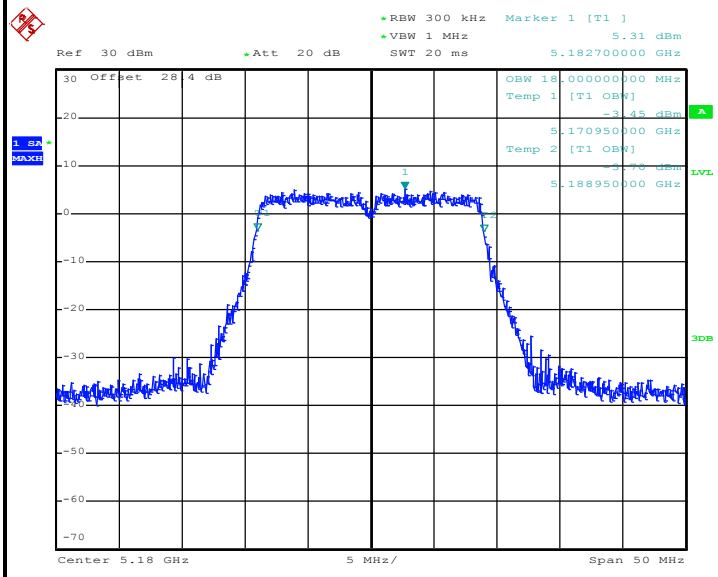
Date: 30.OCT.2018 04:28:09

99% Occupied Bandwidth Plot on Channel 140

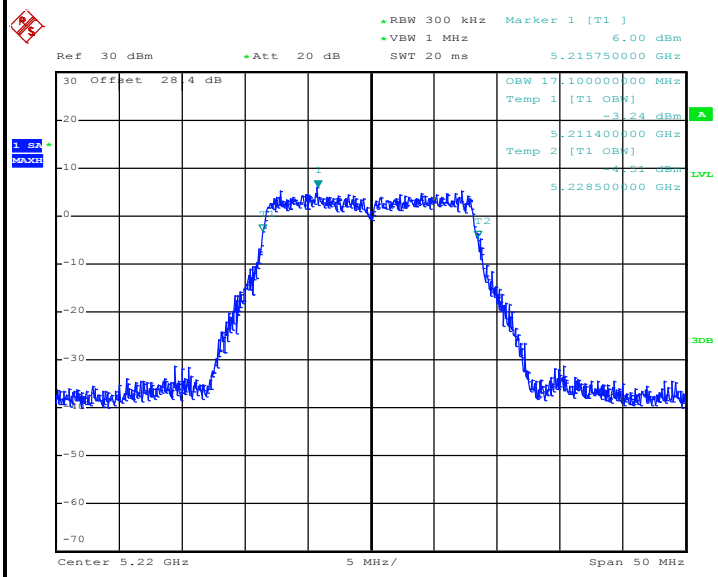


<802.11n HT20>

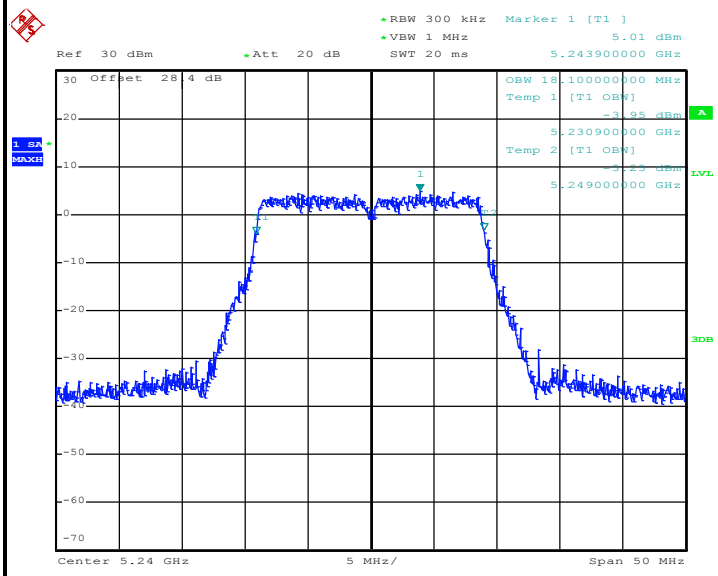
99% Occupied Bandwidth Plot on Channel 36



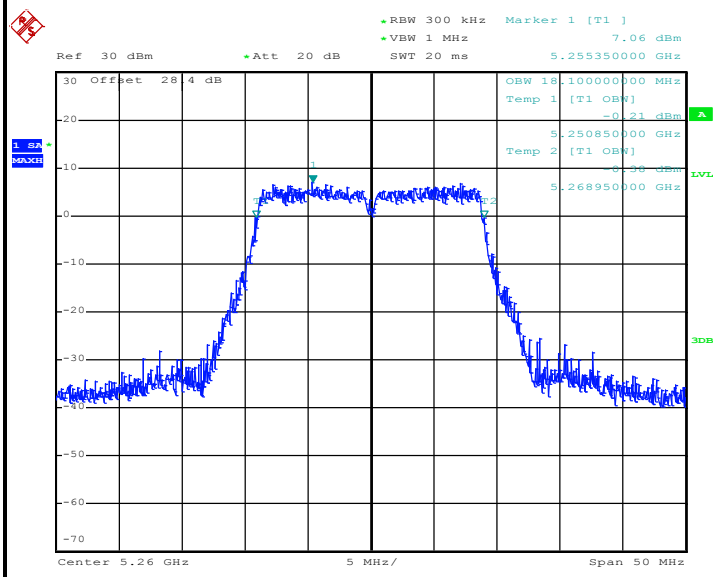
99% Occupied Bandwidth Plot on Channel 44



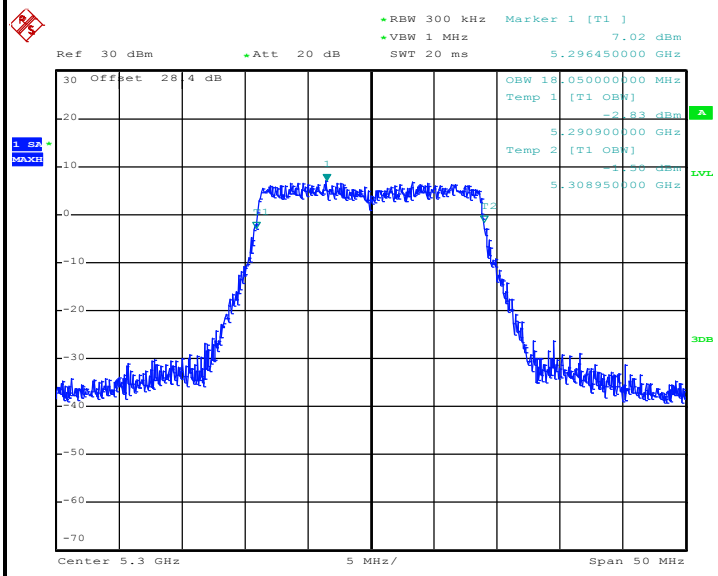
99% Occupied Bandwidth Plot on Channel 48



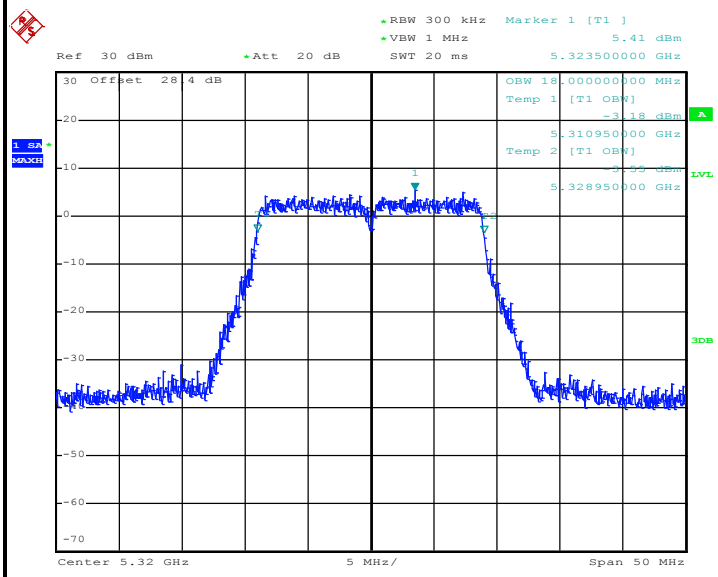
99% Occupied Bandwidth Plot on Channel 52



99% Occupied Bandwidth Plot on Channel 60

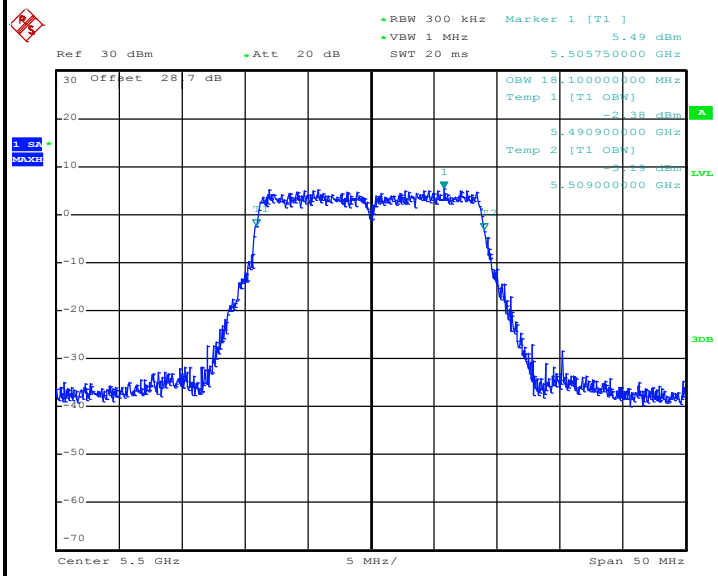


99% Occupied Bandwidth Plot on Channel 64



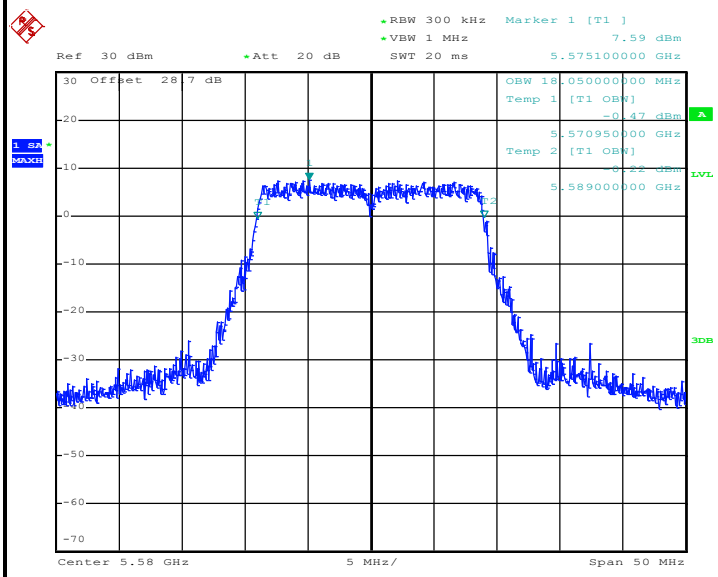
Date: 30.OCT.2018 05:15:37

99% Occupied Bandwidth Plot on Channel 100



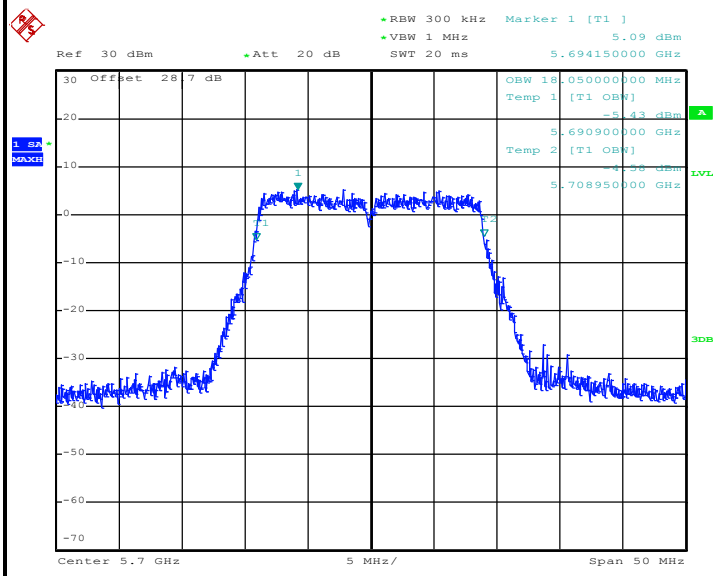
Date: 30.OCT.2018 05:18:41

99% Occupied Bandwidth Plot on Channel 116



Date: 30.OCT.2018 05:27:25

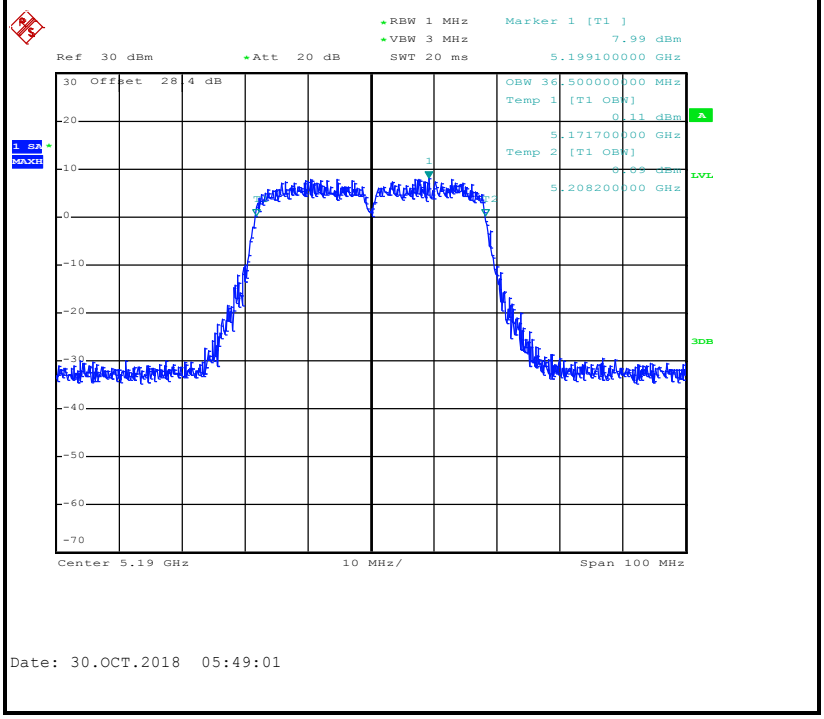
99% Occupied Bandwidth Plot on Channel 140



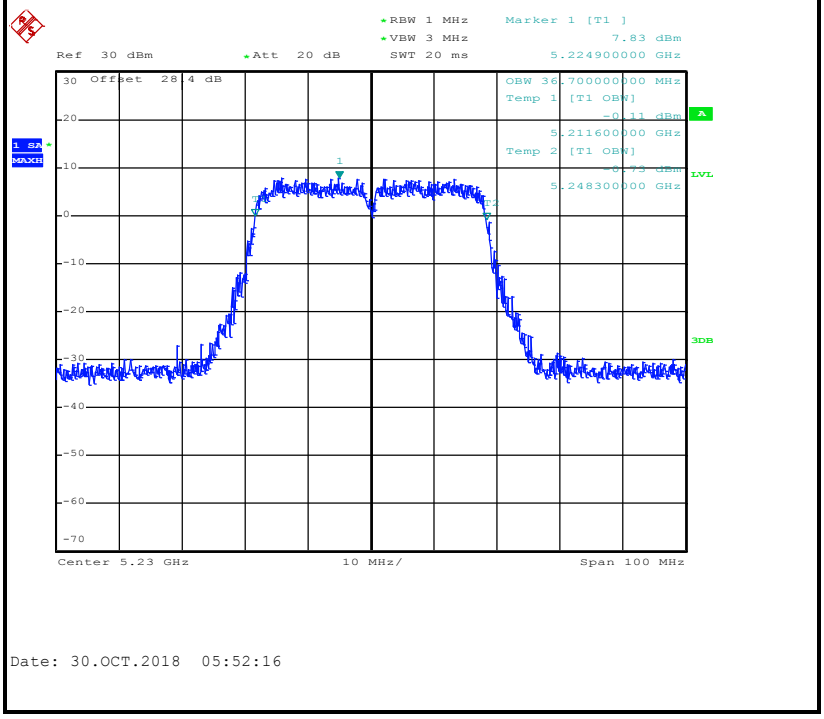
Date: 30.OCT.2018 05:30:09

<802.11n HT40>

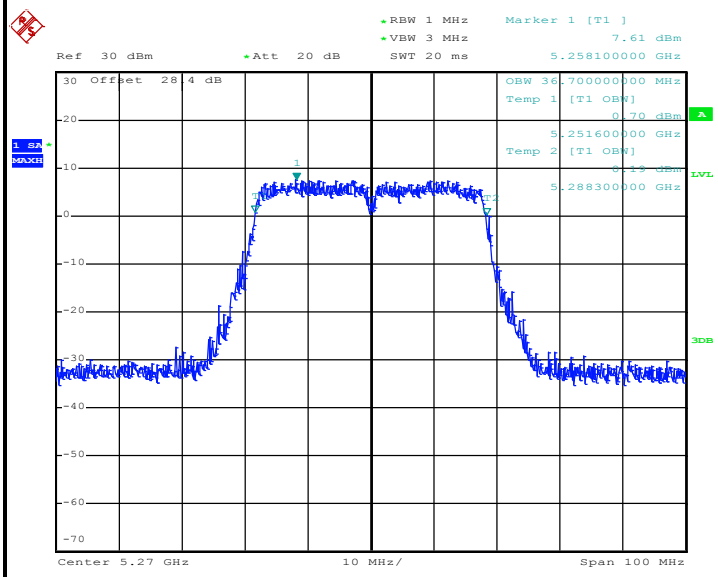
99% Occupied Bandwidth Plot on Channel 38



99% Occupied Bandwidth Plot on Channel 46

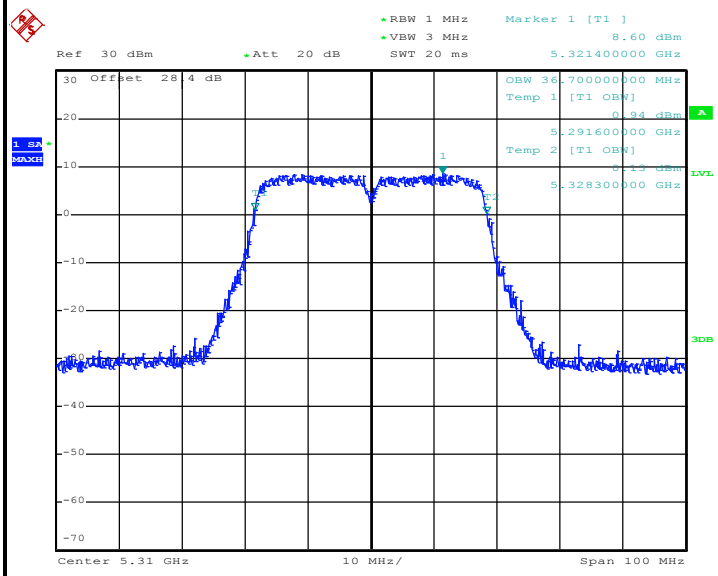


99% Occupied Bandwidth Plot on Channel 54



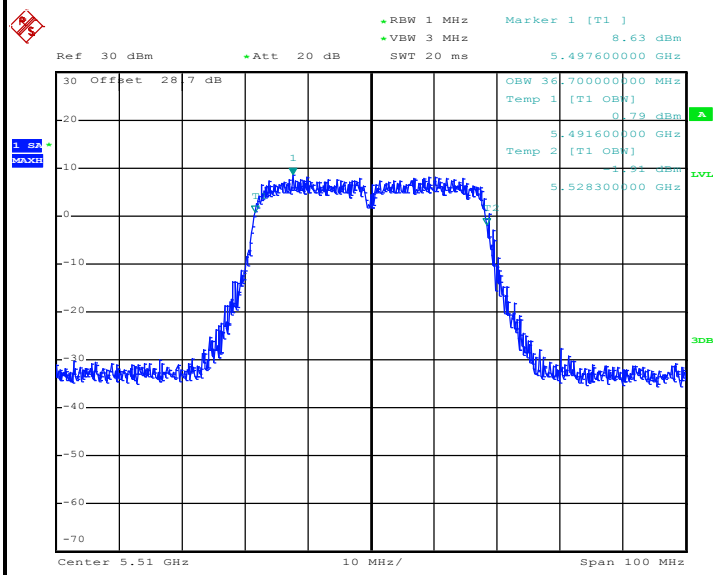
Date: 30.OCT.2018 05:58:57

99% Occupied Bandwidth Plot on Channel 62



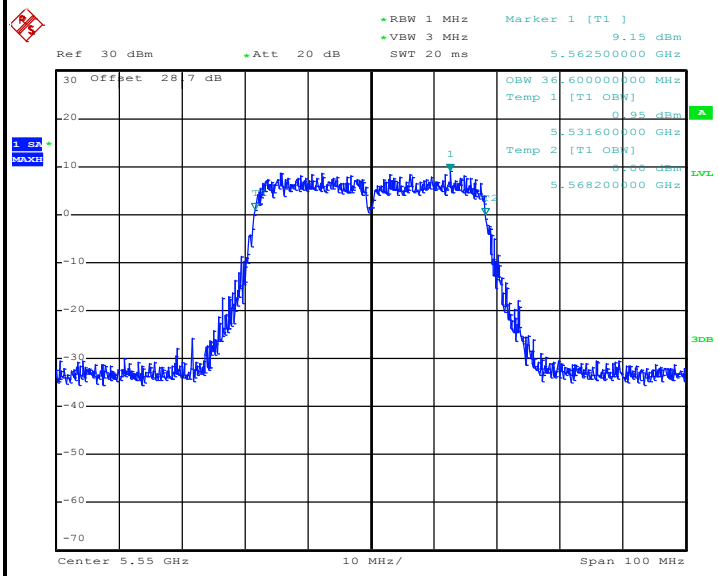
Date: 30.OCT.2018 06:03:19

99% Occupied Bandwidth Plot on Channel 102



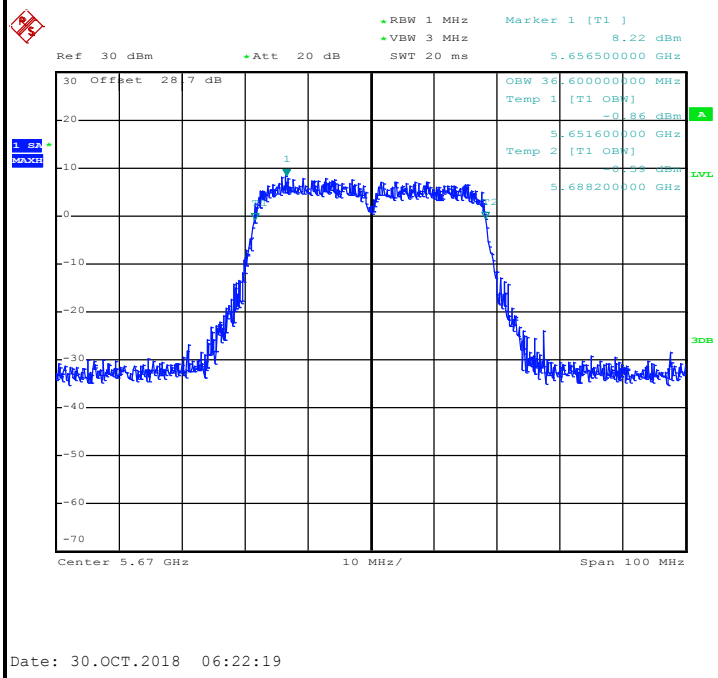
Date: 30.OCT.2018 06:10:07

99% Occupied Bandwidth Plot on Channel 110



Date: 30.OCT.2018 06:16:07

99% Occupied Bandwidth Plot on Channel 134



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

3.2 Maximum Conducted Output Power Measurement

3.2.1 Limit of Maximum Conducted Output Power

<FCC 14-30 CFR 15.407>

For the 5.15–5.25 GHz bands:

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

For the 5.25–5.725 GHz bands:

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

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

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

3.2.2 Measuring Instruments

See list of measuring equipment of this test report.

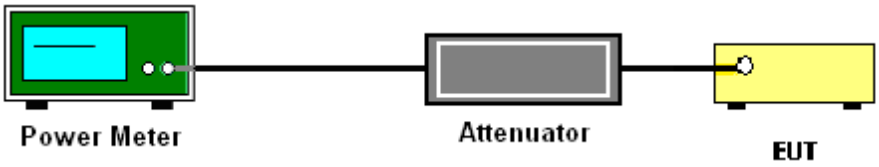
3.2.3 Test Procedures

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

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

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

3.2.4 Test Setup



3.2.5 Test Result of Maximum Conducted Output Power

Please refer to Appendix A.

3.3 Power Spectral Density Measurement

3.3.1 Limit of Power Spectral Density

<FCC 14-30 CFR 15.407>

For the 5.15–5.25 GHz bands:

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

For the 5.25–5.725 GHz bands:

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

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

3.3.2 Measuring Instruments

See list of measuring equipment of this test report.

3.3.3 Test Procedures

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

Section F) Maximum power spectral density.

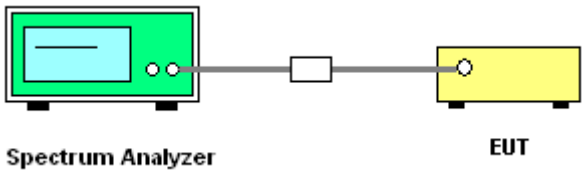
 # Method SA-2 #

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

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

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

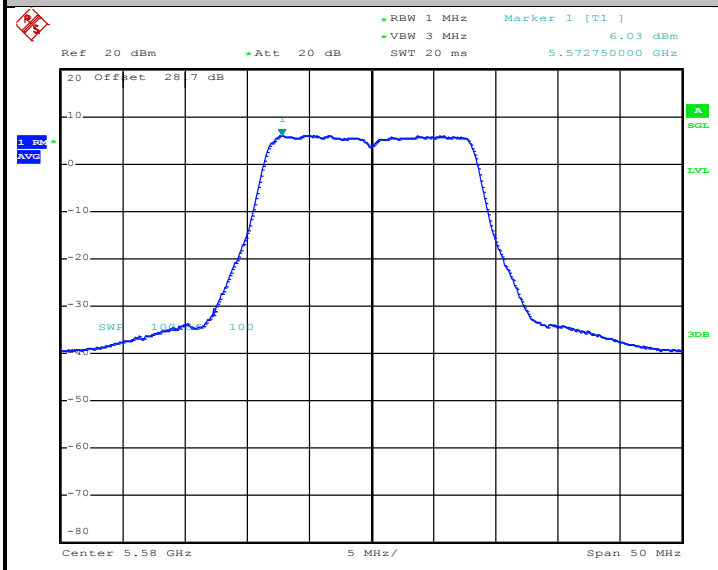
3.3.4 Test Setup



3.3.5 Test Result of Power Spectral Density

Please refer to Appendix A.

Worst Case Power Density (dBm/MHz)



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

3.4 Unwanted Emissions Measurement

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

3.4.1 Limit of Unwanted Emissions

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

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

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

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

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

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

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

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

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

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

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

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

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

3.4.2 Measuring Instruments

See list of measuring equipment of this test report.

3.4.3 Test Procedures

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

(1) Procedure for Unwanted Emissions Measurements Below 1000MHz

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

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

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

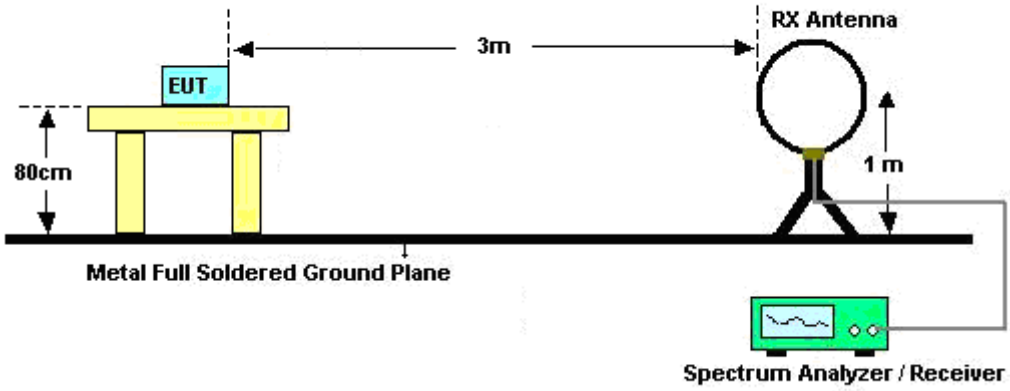
(3) Procedures for Average Unwanted Emissions Measurements Above 1000MHz

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

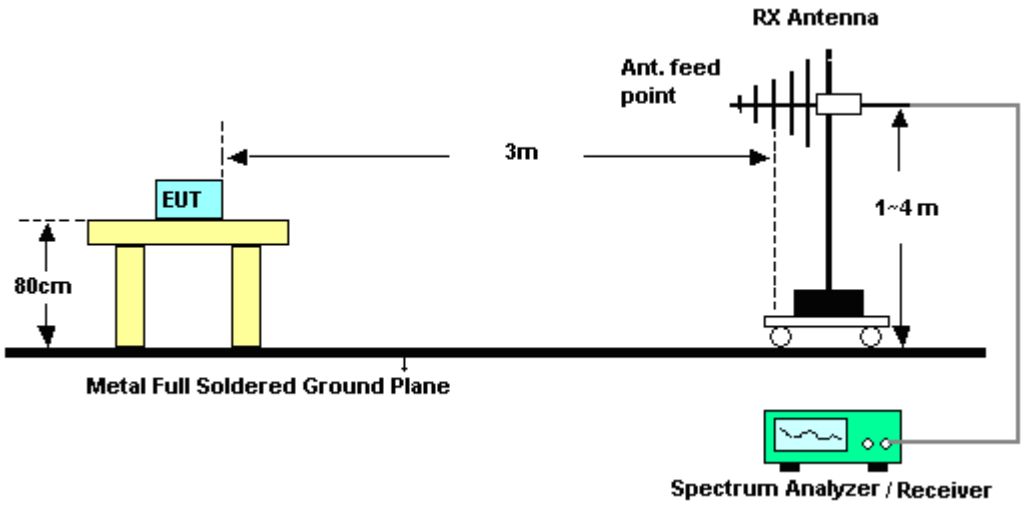
2. The EUT was placed on a turntable with 0.8 meter for frequency below 1GHz and 1.5 meter for frequency above 1GHz respectively above ground.
3. The EUT was set 3 meters from the interference receiving antenna which was mounted on the top of a variable height antenna tower.
4. The antenna is a broadband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

3.4.4 Test Setup

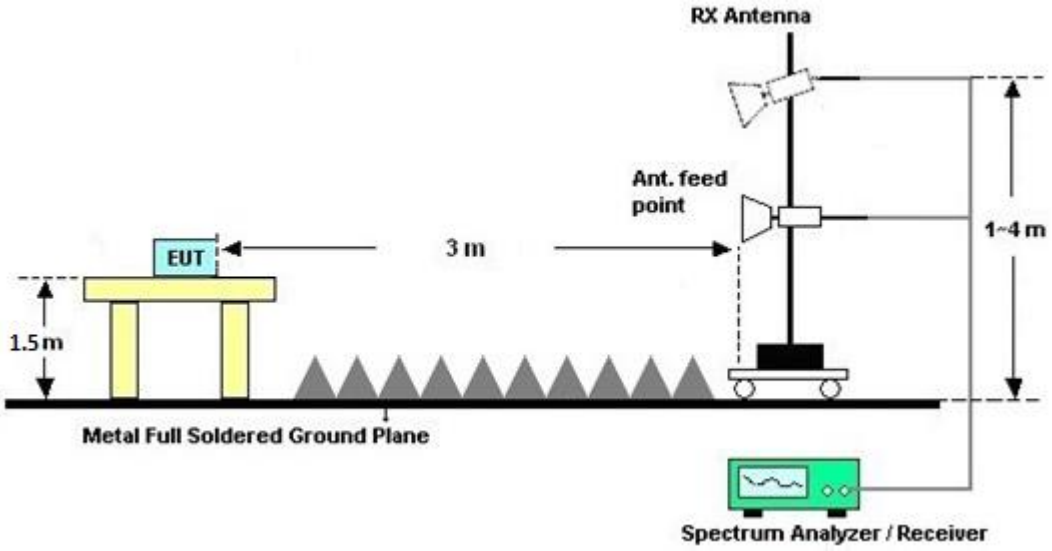
For radiated emissions below 30MHz



For radiated emissions from 30MHz to 1GHz



For radiated emissions above 1GHz



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

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

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

3.4.6 Test Result of Radiated Spurious at Band Edges

Please refer to Appendix C and D.

3.4.7 Duty Cycle

Please refer to Appendix E.

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

Please refer to Appendix C and D.

3.5 AC Conducted Emission Measurement

3.5.1 Limit of AC Conducted Emission

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

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

*Decreases with the logarithm of the frequency.

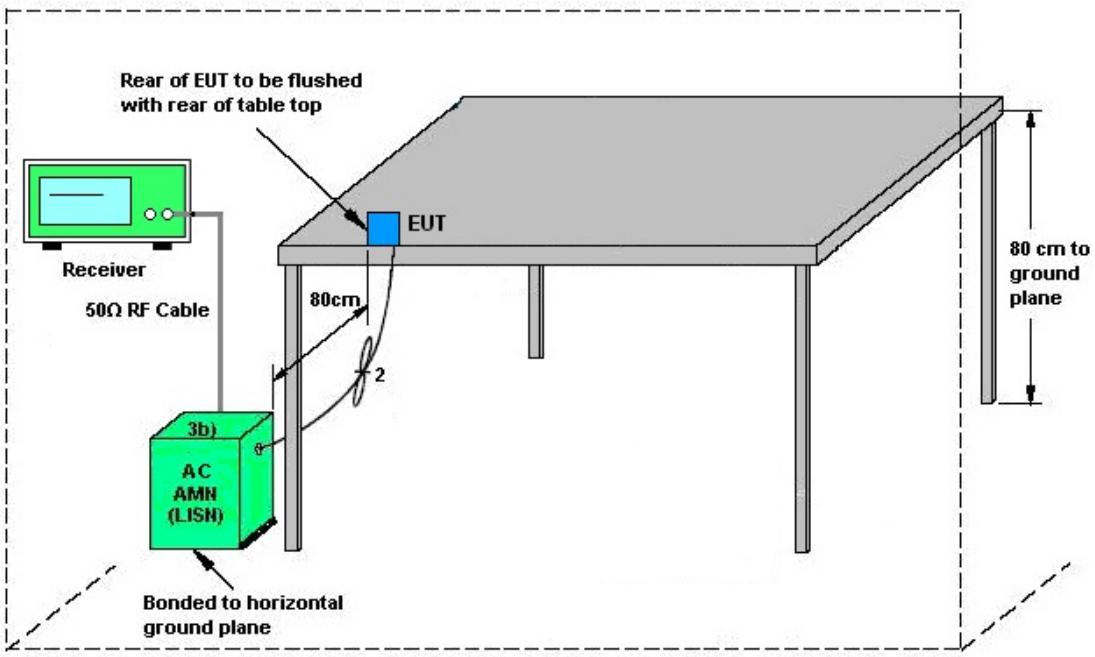
3.5.2 Measuring Instruments

See list of measuring equipment of this test report.

3.5.3 Test Procedures

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

3.5.4 Test Setup



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

3.5.5 Test Result of AC Conducted Emission

Please refer to Appendix B.

3.6 Automatically Discontinue Transmission

3.6.1 Limit of Automatically Discontinue Transmission

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

3.6.2 Measuring Instruments

See list of measuring equipment of this test report.

3.6.3 Test Result of Automatically Discontinue Transmission

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

3.7 Antenna Requirements

3.7.1 Standard Applicable

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

3.7.2 Antenna Anti-Replacement Construction

An embedded-in antenna design is used.

3.7.3 Antenna Gain

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

4 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Filter	Wainwright	WHKX8-5872.5-6750-18000-40ST	SN4	6.75 GHz Highpass	May 22, 2018	Oct. 25, 2018 ~ Nov. 21, 2018	May 21, 2019	Radiation (03CH13-HY)
EMI Test Receiver	Agilent	N9038A (MXE)	MY53290053	20Hz to 26.5GHz	Jan. 16, 2018	Oct. 25, 2018 ~ Nov. 21, 2018	Jan. 15, 2019	Radiation (03CH13-HY)
Loop Antenna	Rohde & Schwarz	HFH2-Z2	100315	9 kHz~30 MHz	Nov. 10, 2017	Oct. 23, 2018 ~ Nov. 01, 2018	Nov. 09, 2018	Radiation (03CH13-HY)
Loop Antenna	Rohde & Schwarz	HFH2-Z2	100488	9 kHz~30 MHz	Nov. 23, 2017	Nov. 21, 2018	Nov. 22, 2018	Radiation (03CH13-HY)
Filter	Wainwright	WLKS1200-8SS	SN3	1.2G Low Pass	Nov. 21, 2017	Oct. 25, 2018 ~ Nov. 01, 2018	Nov. 20, 2018	Radiation (03CH13-HY)
Filter	Wainwright	WLKS1200-8SS	SN3	1.2G Low Pass	Nov. 02, 2018	Nov. 21, 2018	Nov. 01, 2019	Radiation (03CH13-HY)
Amplifier	MITEQ	TTA1840-35-HG	1871923	18GHz~40GHz, VSWR : 2.5:1 max	Jul. 16, 2018	Oct. 25, 2018 ~ Nov. 21, 2018	Jul. 15, 2019	Radiation (03CH13-HY)
Amplifier	Sonoma-Instrument	310 N	187282	9KHz~1GHz	Dec. 21, 2016	Oct. 25, 2018 ~ Nov. 21, 2018	Dec. 20, 2018	Radiation (03CH13-HY)
Bilog Antenna	TESEQ	CBL 6111D&00800N1D01N-06	40103&07	30MHz to 1GHz	Jan. 10, 2018	Oct. 25, 2018 ~ Nov. 21, 2018	Jan. 09, 2019	Radiation (03CH13-HY)
Horn Antenna	SCHWARZBECK	BBHA 9120 D	9120D-1241	1GHz ~ 18GHz	Jun. 29, 2018	Oct. 25, 2018 ~ Nov. 21, 2018	Jun. 28, 2019	Radiation (03CH13-HY)
Preamplifier	MITEQ	AMF-7D-00101800-30-10P	1590074	1GHz~18GHz	May 21, 2018	Oct. 25, 2018 ~ Nov. 21, 2018	May 20, 2019	Radiation (03CH13-HY)
Preamplifier	Keysight	83017A	MY53270147	1GHz~26.5GHz	Feb. 02, 2018	Oct. 25, 2018 ~ Nov. 21, 2018	Feb. 01, 2019	Radiation (03CH13-HY)
Spectrum Analyzer	Keysight	N9010A	MY55370526	10Hz~44GHz	Mar. 15, 2018	Oct. 25, 2018 ~ Nov. 21, 2018	Mar. 14, 2019	Radiation (03CH13-HY)
Antenna Mast	EMEC	AM-BS-4500-B	N/A	1m~4m	N/A	Oct. 25, 2018 ~ Nov. 21, 2018	N/A	Radiation (03CH13-HY)
Turn Table	EMEC	TT2000	N/A	0~360 Degree	N/A	Oct. 25, 2018 ~ Nov. 21, 2018	N/A	Radiation (03CH13-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170584	18GHz- 40GHz	Nov. 27, 2017	Oct. 25, 2018 ~ Nov. 21, 2018	Nov. 26, 2018	Radiation (03CH13-HY)
Preamplifier	MITEQ	AMF-7D-00101800	2025787	1GHZ~18GHZ	Mar. 12, 2018	Oct. 25, 2018 ~ Nov. 21, 2018	Mar. 11, 2019	Radiation (03CH13-HY)
Preamplifier	Jet-Power	JPA0118-55-303	1710001800054001	1GHZ~18GHZ	Apr. 16, 2018	Oct. 25, 2018 ~ Nov. 21, 2018	Apr. 15, 2019	Radiation (03CH13-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 126E	0030/126E	30M-18G	Jan. 22, 2018	Oct. 25, 2018 ~ Nov. 21, 2018	Jan. 21, 2019	Radiation (03CH13-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	335041/4	30M-18G	Jan. 22, 2018	Oct. 25, 2018 ~ Nov. 21, 2018	Jan. 21, 2019	Radiation (03CH13-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY24961/4	30M~18GHz	Jan. 22, 2018	Oct. 25, 2018 ~ Nov. 21, 2018	Jan. 21, 2019	Radiation (03CH13-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	MY2859/2	30M~40GHz	Mar. 14, 2018	Oct. 25, 2018 ~ Nov. 21, 2018	Mar. 13, 2019	Radiation (03CH13-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	MY4274/2	30M~40GHz	Mar. 14, 2018	Oct. 25, 2018 ~ Nov. 21, 2018	Mar. 13, 2019	Radiation (03CH13-HY)
Software	AUDIX	E3 6.2009-8-24c	RK-001124	N/A	N/A	Oct. 25, 2018 ~ Nov. 21, 2018	N/A	Radiation (03CH13-HY)

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Power Meter	Anritsu	ML2495A	1132003	N/A	Aug. 16, 2018	Oct. 20, 2018~ Nov. 21, 2018	Aug. 15, 2019	Conducted (TH05-HY)
Power Sensor	Anritsu	MA2411B	1126017	300MHz~40GHz	Aug. 16, 2018	Oct. 20, 2018~ Nov. 21, 2018	Aug. 15, 2019	Conducted (TH05-HY)
Spectrum Analyzer	Rohde & Schwarz	FSP40	100057	9kHz-40GHz	Nov. 21, 2017	Oct. 20, 2018~ Oct. 30, 2018	Nov. 20, 2018	Conducted (TH05-HY)
Spectrum Analyzer	Rohde & Schwarz	FSQ	200578/026	20Hz~26.5GHz	May 28, 2018	Nov. 21, 2018	May 27, 2019	Conducted (TH05-HY)
Signal Analyzer	Rohde & Schwarz	FSV40	101397	10Hz~40GHz	Nov. 07, 2017	Oct. 20, 2018~ Oct. 30, 2018	Nov. 06, 2018	Conducted (TH05-HY)
Spectrum Analyzer	Rohde & Schwarz	FSV40	101408	10Hz~40GHz	Jul. 30, 2018	Nov. 21, 2018	Jul. 29, 2019	Conducted (TH05-HY)
Switch Box & RF Cable	Burgeon	ETF-058	EC1300484	N/A	Mar. 01, 2018	Oct. 20, 2018~ Nov. 21, 2018	Feb. 28, 2019	Conducted (TH05-HY)
EMI Test Receiver	Rohde & Schwarz	ESR3	102388	9KHz~3.6GHz	Dec. 08, 2017	Oct. 25, 2018	Dec. 07, 2018	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100080	9kHz~30MHz	Nov. 30, 2017	Oct. 25, 2018	Nov. 29, 2018	Conduction (CO05-HY)
Software	Rohde & Schwarz	EMC32 V10.30	N/A	N/A	N/A	Oct. 25, 2018	N/A	Conduction (CO05-HY)
LF Cable	HUBER + SUHNER	RG-214/U	LF01	N/A	Jan. 03, 2018	Oct. 25, 2018	Jan. 02, 2019	Conduction (CO05-HY)
Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100851	N/A	Jan. 03, 2018	Oct. 25, 2018	Jan. 02, 2019	Conduction (CO05-HY)

5 Uncertainty of Evaluation

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

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

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

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

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

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

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**4.3**

Appendix A. Test Result of Conducted Test Items

Test Engineer:	Shiming Liu and Shiang Wang	Temperature:	21~25	°C
Test Date:	2018/10/20~2018/11/21	Relative Humidity:	51~54	%

Report Number : FR870418E

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	1	36	5180	17.10	-	23.70	-	-		22.33	-		
11a	6Mbps	1	44	5220	17.05	-	23.90	-	-		22.32	-		
11a	6Mbps	1	48	5240	17.00	-	23.80	-	-		22.30	-		
HT20	MCS0	1	36	5180	18.00	-	24.05	-	-		22.55	-		
HT20	MCS0	1	44	5220	17.10	-	24.40	-	-		22.33	-		
HT20	MCS0	1	48	5240	18.10	-	24.56	-	-		22.58	-		
HT40	MCS0	1	38	5190	36.50	-	45.72	-	-		23.01	-		
HT40	MCS0	1	46	5230	36.70	-	45.72	-	-		23.01	-		

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	0.59	-	14.31	-		24.00	-	0.00	-		Pass
11a	6Mbps	1	44	5220	0.59	-	14.49	-		24.00	-	0.00	-		Pass
11a	6Mbps	1	48	5240	0.59	-	14.20	-		24.00	-	0.00	-		Pass
HT20	MCS0	1	36	5180	0.63	-	14.38	-		24.00	-	0.00	-		Pass
HT20	MCS0	1	44	5220	0.63	-	14.47	-		24.00	-	0.00	-		Pass
HT20	MCS0	1	48	5240	0.63	-	14.18	-		24.00	-	0.00	-		Pass
HT40	MCS0	1	38	5190	0.63	-	14.11	-		24.00	-	0.00	-		Pass
HT40	MCS0	1	46	5230	0.63	-	14.18	-		24.00	-	0.00	-		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	1	36	5180	0.59	-	3.02	-		11.00	-	0.00	-		Pass
11a	6Mbps	1	44	5220	0.59	-	3.27	-		11.00	-	0.00	-		Pass
11a	6Mbps	1	48	5240	0.59	-	2.73	-		11.00	-	0.00	-		Pass
HT20	MCS0	1	36	5180	0.63	-	2.67	-		11.00	-	0.00	-		Pass
HT20	MCS0	1	44	5220	0.63	-	3.01	-		11.00	-	0.00	-		Pass
HT20	MCS0	1	48	5240	0.63	-	2.36	-		11.00	-	0.00	-		Pass
HT40	MCS0	1	38	5190	0.63	-	-0.31	-		11.00	-	0.00	-		Pass
HT40	MCS0	1	46	5230	0.63	-	-0.05	-		11.00	-	0.00	-		Pass

Report Number : FR870418E

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	1	52	5260	17.05	-	24.14	-	23.32	-	29.32	-	23.98	-	
11a	6Mbps	1	60	5300	17.00	-	23.30	-	23.30	-	29.30	-	23.98	-	
11a	6Mbps	1	64	5320	17.15	-	24.00	-	23.34	-	29.34	-	23.98	-	
HT20	MCS0	1	52	5260	18.10	-	25.75	-	23.58	-	29.58	-	23.98	-	
HT20	MCS0	1	60	5300	18.05	-	24.49	-	23.56	-	29.56	-	23.98	-	
HT20	MCS0	1	64	5320	18.00	-	24.47	-	23.55	-	29.55	-	23.98	-	
HT40	MCS0	1	54	5270	36.70	-	45.61	-	23.98	-	30.00	-	23.98	-	
HT40	MCS0	1	62	5310	36.70	-	45.48	-	23.98	-	30.00	-	23.98	-	

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	0.59	-	17.27	-		23.98	-	0.00	-	26.99	Pass
11a	6Mbps	1	60	5300	0.59	-	17.25	-		23.98	-	0.00	-	26.99	Pass
11a	6Mbps	1	64	5320	0.59	-	14.23	-		23.98	-	0.00	-	26.99	Pass
HT20	MCS0	1	52	5260	0.63	-	16.20	-		23.98	-	0.00	-	26.99	Pass
HT20	MCS0	1	60	5300	0.63	-	16.35	-		23.98	-	0.00	-	26.99	Pass
HT20	MCS0	1	64	5320	0.63	-	14.24	-		23.98	-	0.00	-	26.99	Pass
HT40	MCS0	1	54	5270	0.63	-	14.45	-		23.98	-	0.00	-	26.99	Pass
HT40	MCS0	1	62	5310	0.63	-	14.43	-		23.98	-	0.00	-	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	1	52	5260	0.59	-	5.77	-		11.00	-	0.00	-		Pass
11a	6Mbps	1	60	5300	0.59	-	5.46	-		11.00	-	0.00	-		Pass
11a	6Mbps	1	64	5320	0.59	-	2.50	-		11.00	-	0.00	-		Pass
HT20	MCS0	1	52	5260	0.63	-	4.69	-		11.00	-	0.00	-		Pass
HT20	MCS0	1	60	5300	0.63	-	4.74	-		11.00	-	0.00	-		Pass
HT20	MCS0	1	64	5320	0.63	-	2.39	-		11.00	-	0.00	-		Pass
HT40	MCS0	1	54	5270	0.63	-	0.11	-		11.00	-	0.00	-		Pass
HT40	MCS0	1	62	5310	0.63	-	0.28	-		11.00	-	0.00	-		Pass

Report Number : FR870418E

TEST RESULTS DATA
26dB and 99% OBW

Band III																
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	99% Bandwidth In U-NII 2C (MHz)		26 dB Bandwidth In U-NII 2C (MHz)		IC 99% Bandwidth Power Limit (dBm)		IC 99% Bandwidth EIRP Limit (dBm)		FCC 26dB Bandwidth Power Limit (dBm)		6 dB Bandwidth for Straddle Channel (MHz)	
					Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2
11a	6Mbps	1	100	5500	17.10	-	24.00	-	23.33	-	29.33	-	23.98	-	----	----
11a	6Mbps	1	116	5580	17.05	-	27.65	-	23.32	-	29.32	-	23.98	-	----	----
11a	6Mbps	1	140	5700	16.95	-	24.10	-	23.29	-	29.29	-	23.98	-	----	----
HT20	MCS0	1	100	5500	18.10	-	24.70	-	23.58	-	29.58	-	23.98	-	----	----
HT20	MCS0	1	116	5580	18.05	-	23.70	-	23.56	-	29.56	-	23.98	-	----	----
HT20	MCS0	1	140	5700	18.05	-	24.30	-	23.56	-	29.56	-	23.98	-	----	----
HT40	MCS0	1	102	5510	36.70	-	46.03	-	23.98	-	30.00	-	23.98	-	----	----
HT40	MCS0	1	110	5550	36.60	-	45.42	-	23.98	-	30.00	-	23.98	-	----	----
HT40	MCS0	1	134	5670	36.60	-	44.55	-	23.98	-	30.00	-	23.98	-	----	----

Report Number : FR870418E

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	0.59	-	14.26	-		Ant 1	-	0.00	-	26.99	Pass
11a	6Mbps	1	104	5520	0.59	-	17.04	-		23.98	-	0.00	-	26.99	Pass
11a	6Mbps	1	116	5580	0.59	-	17.15	-		23.98	-	0.00	-	26.99	Pass
11a	6Mbps	1	136	5680	0.59	-	17.14	-		23.98	-	0.00	-	26.99	Pass
11a	6Mbps	1	140	5700	0.59	-	14.20	-		23.98	-	0.00	-	26.99	Pass
HT20	MCS0	1	100	5500	0.63	-	14.34	-		23.98	-	0.00	-	26.99	Pass
HT20	MCS0	1	104	5520	0.63	-	16.10	-		23.98	-	0.00	-	26.99	Pass
HT20	MCS0	1	116	5580	0.63	-	16.48	-		23.98	-	0.00	-	26.99	Pass
HT20	MCS0	1	136	5680	0.63	-	16.35	-		23.98	-	0.00	-	26.99	Pass
HT20	MCS0	1	140	5700	0.63	-	14.41	-		23.98	-	0.00	-	26.99	Pass
HT40	MCS0	1	102	5510	0.63	-	14.48	-		23.98	-	0.00	-	26.99	Pass
HT40	MCS0	1	110	5550	0.63	-	14.27	-		23.98	-	0.00	-	26.99	Pass
HT40	MCS0	1	134	5670	0.63	-	14.16	-		23.98	-	0.00	-	26.99	Pass

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	1	100	5500	0.59	-	3.24	-		11.00	-	0.00	-		Pass
11a	6Mbps	1	116	5580	0.59	-	6.62	-		11.00	-	0.00	-		Pass
11a	6Mbps	1	140	5700	0.59	-	2.88	-		11.00	-	0.00	-		Pass
HT20	MCS0	1	100	5500	0.63	-	2.95	-		11.00	-	0.00	-		Pass
HT20	MCS0	1	116	5580	0.63	-	5.64	-		11.00	-	0.00	-		Pass
HT20	MCS0	1	140	5700	0.63	-	2.79	-		11.00	-	0.00	-		Pass
HT40	MCS0	1	102	5510	0.63	-	0.55	-		11.00	-	0.00	-		Pass
HT40	MCS0	1	110	5550	0.63	-	0.74	-		11.00	-	0.00	-		Pass
HT40	MCS0	1	134	5670	0.63	-	0.36	-		11.00	-	0.00	-		Pass

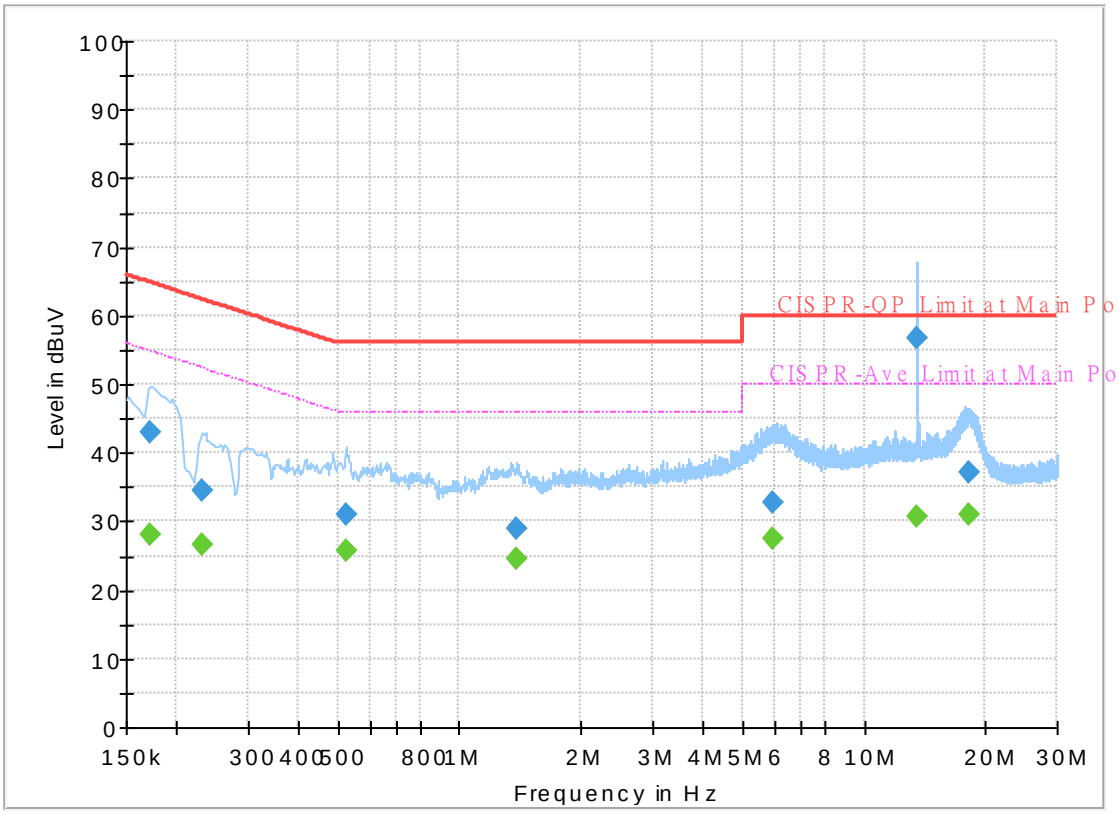
Appendix B. AC Conducted Emission Test Results

Test Engineer :	Jimmy Chang	**Temperature :**	24~26℃
		Relative Humidity :	50~52%

EUT Information

Report NO :	870418
Test Mode :	Mode 1
Test Voltage :	120Vac/60Hz
Phase :	Line

Full Spectrum



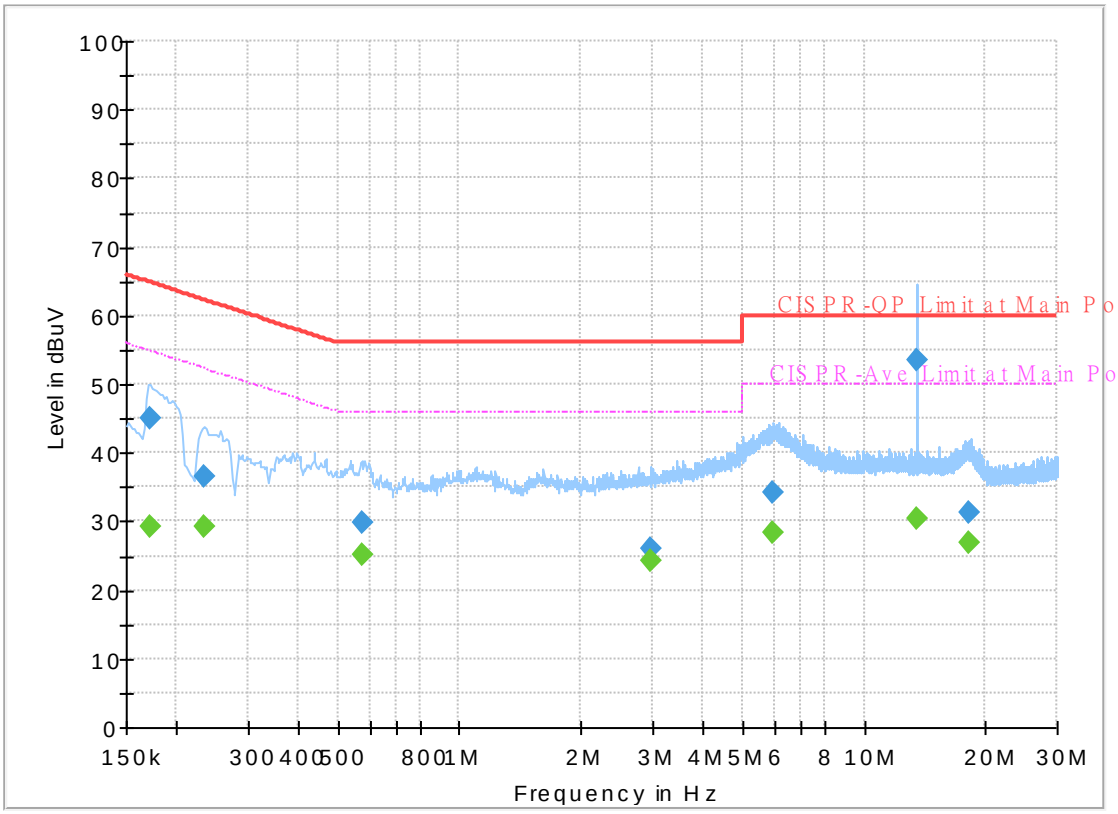
Final_Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.172500	---	28.01	54.84	26.83	L1	OFF	19.5
0.172500	43.05	---	64.84	21.79	L1	OFF	19.5
0.231000	---	26.57	52.41	25.84	L1	OFF	19.5
0.231000	34.56	---	62.41	27.85	L1	OFF	19.5
0.525750	---	25.76	46.00	20.24	L1	OFF	19.5
0.525750	30.96	---	56.00	25.04	L1	OFF	19.5
1.383000	---	24.47	46.00	21.53	L1	OFF	19.6
1.383000	28.95	---	56.00	27.05	L1	OFF	19.6
5.925750	---	27.60	50.00	22.40	L1	OFF	19.8
5.925750	32.84	---	60.00	27.16	L1	OFF	19.8
13.560000	---	30.68	50.00	19.32	L1	OFF	20.0
13.560000	56.82	---	60.00	3.18	L1	OFF	20.0
18.267000	---	30.86	50.00	19.14	L1	OFF	20.2
18.267000	37.07	---	60.00	22.93	L1	OFF	20.2

EUT Information

Report NO :	870418
Test Mode :	Mode 1
Test Voltage :	120Vac/60Hz
Phase :	Neutral

Full Spectrum



Final_Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.172500	---	29.29	54.84	25.55	N	OFF	19.5
0.172500	45.07	---	64.84	19.77	N	OFF	19.5
0.233250	---	29.10	52.33	23.23	N	OFF	19.5
0.233250	36.64	---	62.33	25.69	N	OFF	19.5
0.573000	---	25.14	46.00	20.86	N	OFF	19.5
0.573000	29.75	---	56.00	26.25	N	OFF	19.5
2.980500	---	24.35	46.00	21.65	N	OFF	19.6
2.980500	26.02	---	56.00	29.98	N	OFF	19.6
5.982000	---	28.34	50.00	21.66	N	OFF	19.8
5.982000	34.18	---	60.00	25.82	N	OFF	19.8
13.560000	---	30.32	50.00	19.68	N	OFF	20.1
13.560000	53.61	---	60.00	6.39	N	OFF	20.1
18.118500	---	26.93	50.00	23.07	N	OFF	20.2
18.118500	31.24	---	60.00	28.76	N	OFF	20.2

Appendix C. Radiated Spurious Emission

Test Engineer :	Alex Jheng, Fu Chen, and Wilson Wu	Temperature :	24~25°C
		Relative Humidity :	48~50%

Band 1 - 5150~5250MHz

WIFI 802.11a (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 36 5180MHz		5018.46	51.3	-22.7	74	41.21	31.61	8.01	29.53	100	287	P	H
		5127.92	42.73	-11.27	54	32.45	31.68	8.15	29.55	100	287	A	H
	*	5180	99.21	-	-	88.83	31.71	8.22	29.55	100	287	P	H
	*	5180	91.45	-	-	81.07	31.71	8.22	29.55	100	287	A	H
													H
													H
		5089.18	51.19	-22.81	74	40.97	31.66	8.1	29.54	100	35	P	V
		5127.4	42.72	-11.28	54	32.44	31.68	8.15	29.55	100	35	A	V
	*	5180	99.38	-	-	89	31.71	8.22	29.55	100	35	P	V
	*	5180	91.08	-	-	80.7	31.71	8.22	29.55	100	35	A	V
													V
													V
802.11a CH 44 5220MHz		5033.28	50.47	-23.53	74	40.35	31.62	8.03	29.53	100	286	P	H
		5044.2	42.21	-11.79	54	32.07	31.63	8.05	29.54	100	286	A	H
	*	5220	99.36	-	-	88.94	31.73	8.25	29.56	100	286	P	H
	*	5220	92.08	-	-	81.66	31.73	8.25	29.56	100	286	A	H
		5396.16	50.07	-23.93	74	39.5	31.84	8.31	29.58	100	286	P	H
		5451.6	41.4	-12.6	54	30.67	31.87	8.45	29.59	100	286	A	H
		5069.68	52	-22	74	41.82	31.64	8.08	29.54	100	33	P	V
		5030.42	42.37	-11.63	54	32.25	31.62	8.03	29.53	100	33	A	V
	*	5220	99.02	-	-	88.6	31.73	8.25	29.56	100	33	P	V
	*	5220	91.26	-	-	80.84	31.73	8.25	29.56	100	33	A	V
		5395.88	50.47	-23.53	74	39.9	31.84	8.31	29.58	100	33	P	V
		5457.76	41.39	-12.61	54	30.64	31.87	8.47	29.59	100	33	A	V

802.11a CH 48 5240MHz		5109.46	51.76	-22.24	74	41.5	31.67	8.13	29.54	103	289	P	H
		5041.6	42.15	-11.85	54	32.01	31.63	8.04	29.53	103	289	A	H
	*	5240	99.78	-	-	89.35	31.74	8.25	29.56	103	289	P	H
	*	5240	91.82	-	-	81.39	31.74	8.25	29.56	103	289	A	H
		5404.84	50.74	-23.26	74	40.16	31.84	8.32	29.58	103	289	P	H
		5458.32	41.26	-12.74	54	30.51	31.87	8.47	29.59	103	289	A	H
		5004.68	51.04	-22.96	74	40.96	31.61	8	29.53	100	33	P	V
		5114.4	42.17	-11.83	54	31.91	31.67	8.13	29.54	100	33	A	V
	*	5240	99.93	-	-	89.5	31.74	8.25	29.56	100	33	P	V
	*	5240	91.65	-	-	81.22	31.74	8.25	29.56	100	33	A	V
		5447.68	49.78	-24.22	74	39.05	31.87	8.44	29.58	100	33	P	V
		5457.76	41.44	-12.56	54	30.69	31.87	8.47	29.59	100	33	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 1 5150~5250MHz

WIFI 802.11a (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 36 5180MHz		10360	46.79	-21.41	68.2	51.65	39.76	12.34	56.96	100	0	P	H
		15540	45.42	-28.58	74	48.83	38.62	14.62	56.65	100	0	P	H
													H
													H
		10360	46.34	-21.86	68.2	51.2	39.76	12.34	56.96	100	0	P	V
		15540	45.69	-28.31	74	49.1	38.62	14.62	56.65	100	0	P	V
													V
													V
802.11a CH 44 5220MHz		10440	46.96	-21.24	68.2	51.64	39.88	12.36	56.92	100	0	P	H
		15660	44.75	-29.25	74	48.26	38.33	14.67	56.51	100	0	P	H
													H
													H
		10440	46.98	-21.22	68.2	51.66	39.88	12.36	56.92	100	0	P	V
		15660	44.98	-29.02	74	48.49	38.33	14.67	56.51	100	0	P	V
													V
													V
802.11a CH 48 5240MHz		10480	46.49	-21.71	68.2	51.06	39.97	12.37	56.91	100	0	P	H
		15720	45.8	-28.2	74	49.39	38.16	14.69	56.44	100	0	P	H
													H
													H
		10480	46.81	-21.39	68.2	51.38	39.97	12.37	56.91	100	0	P	V
		15720	46.24	-27.76	74	49.83	38.16	14.69	56.44	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 1 5150~5250MHz

WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		5043.94	51.54	-22.46	74	41.41	31.63	8.04	29.54	100	285	P	H
		5128.44	43.01	-10.99	54	32.73	31.68	8.15	29.55	100	285	A	H
	*	5180	98.99	-	-	88.61	31.71	8.22	29.55	100	285	P	H
	*	5180	91.42	-	-	81.04	31.71	8.22	29.55	100	285	A	H
802.11n													H
HT20													H
CH 36		5070.46	51.65	-22.35	74	41.47	31.64	8.08	29.54	100	34	P	V
5180MHz		5128.44	42.78	-11.22	54	32.5	31.68	8.15	29.55	100	34	A	V
	*	5180	98.43	-	-	88.05	31.71	8.22	29.55	100	34	P	V
	*	5180	90.37	-	-	79.99	31.71	8.22	29.55	100	34	A	V
													V
													V
		5092.82	51.82	-22.18	74	41.59	31.66	8.11	29.54	100	287	P	H
		5073.06	42.07	-11.93	54	31.88	31.65	8.08	29.54	100	287	A	H
	*	5220	99.33	-	-	88.91	31.73	8.25	29.56	100	287	P	H
	*	5220	91.83	-	-	81.41	31.73	8.25	29.56	100	287	A	H
802.11n		5444.04	49.8	-24.2	74	39.09	31.86	8.43	29.58	100	287	P	H
HT20		5459.72	41.4	-12.6	54	30.65	31.87	8.47	29.59	100	287	A	H
CH 44		5022.36	50.83	-23.17	74	40.72	31.62	8.02	29.53	100	32	P	V
5220MHz		5087.62	42.18	-11.82	54	31.97	31.65	8.1	29.54	100	32	A	V
	*	5220	99.28	-	-	88.86	31.73	8.25	29.56	100	32	P	V
	*	5220	91.39	-	-	80.97	31.73	8.25	29.56	100	32	A	V
		5364.8	49.76	-24.24	74	39.21	31.82	8.3	29.57	100	32	P	V
		5454.4	41.31	-12.69	54	30.57	31.87	8.46	29.59	100	32	A	V

		5116.48	51.34	-22.66	74	41.07	31.67	8.14	29.54	100	287	P	H
		5046.8	42.19	-11.81	54	32.05	31.63	8.05	29.54	100	287	A	H
	*	5240	99.01	-	-	88.58	31.74	8.25	29.56	100	287	P	H
	*	5240	91.66	-	-	81.23	31.74	8.25	29.56	100	287	A	H
802.11n		5459.44	49.76	-24.24	74	39.01	31.87	8.47	29.59	100	287	P	H
HT20		5455.8	41.32	-12.68	54	30.58	31.87	8.46	29.59	100	287	A	H
CH 48		5018.46	51.36	-22.64	74	41.27	31.61	8.01	29.53	100	34	P	V
5240MHz		5085.02	42.22	-11.78	54	32.01	31.65	8.1	29.54	100	34	A	V
	*	5240	98.54	-	-	88.11	31.74	8.25	29.56	100	34	P	V
	*	5240	91.11	-	-	80.68	31.74	8.25	29.56	100	34	A	V
		5391.68	49.64	-24.36	74	39.08	31.83	8.31	29.58	100	34	P	V
		5448.24	41.26	-12.74	54	30.53	31.87	8.44	29.58	100	34	A	V

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

Band 1 5150~5250MHz

WIFI 802.11n HT20 (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		10360	47.07	-21.13	68.2	51.93	39.76	12.34	56.96	100	0	P	H
		15540	46.12	-27.88	74	49.53	38.62	14.62	56.65	100	0	P	H
802.11n													H
HT20													H
CH 36		10360	46.68	-21.52	68.2	51.54	39.76	12.34	56.96	100	0	P	V
5180MHz		15540	46.29	-27.71	74	49.7	38.62	14.62	56.65	100	0	P	V
													V
													V
		10440	48.05	-20.15	68.2	52.73	39.88	12.36	56.92	100	0	P	H
		15660	47.05	-26.95	74	50.56	38.33	14.67	56.51	100	0	P	H
802.11n													H
HT20													H
CH 44		10440	46.98	-21.22	68.2	51.66	39.88	12.36	56.92	100	0	P	V
5220MHz		15660	45.17	-28.83	74	48.68	38.33	14.67	56.51	100	0	P	V
													V
													V
		10480	46.95	-21.25	68.2	51.52	39.97	12.37	56.91	100	0	P	H
		15720	46.76	-27.24	74	50.35	38.16	14.69	56.44	100	0	P	H
802.11n													H
HT20													H
CH 48		10480	47.27	-20.93	68.2	51.84	39.97	12.37	56.91	100	0	P	V
5240MHz		15720	45.34	-28.66	74	48.93	38.16	14.69	56.44	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	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		5019.5	51.66	-22.34	74	41.57	31.61	8.01	29.53	100	287	P	H
		5150	44.44	-9.56	54	34.12	31.69	8.18	29.55	100	287	A	H
	*	5190	96.14	-	-	85.75	31.71	8.23	29.55	100	287	P	H
	*	5190	88.68	-	-	78.29	31.71	8.23	29.55	100	287	A	H
802.11n		5450.76	49.93	-24.07	74	39.2	31.87	8.45	29.59	100	287	P	H
HT40		5454.12	41.94	-12.06	54	31.2	31.87	8.46	29.59	100	287	A	H
CH 38		5115.44	52.51	-21.49	74	42.25	31.67	8.13	29.54	100	32	P	V
5190MHz		5150	44	-10	54	33.68	31.69	8.18	29.55	100	32	A	V
	*	5190	96.06	-	-	85.67	31.71	8.23	29.55	100	32	P	V
	*	5190	87.94	-	-	77.55	31.71	8.23	29.55	100	32	A	V
		5350.24	50.1	-23.9	74	39.57	31.81	8.29	29.57	100	32	P	V
		5451.88	42.19	-11.81	54	31.46	31.87	8.45	29.59	100	32	A	V
		5092.04	51.51	-22.49	74	41.28	31.66	8.11	29.54	100	286	P	H
		5068.38	42.96	-11.04	54	32.78	31.64	8.08	29.54	100	286	A	H
	*	5230	96.27	-	-	85.84	31.74	8.25	29.56	100	286	P	H
	*	5230	89.01	-	-	78.58	31.74	8.25	29.56	100	286	A	H
802.11n		5458.88	51.44	-22.56	74	40.69	31.87	8.47	29.59	100	286	P	H
HT40		5460	41.94	-12.06	54	31.19	31.87	8.47	29.59	100	286	A	H
CH 46		5040.04	51.33	-22.67	74	41.19	31.63	8.04	29.53	100	33	P	V
5230MHz		5043.42	43.02	-10.98	54	32.89	31.63	8.04	29.54	100	33	A	V
	*	5230	96.35	-	-	85.92	31.74	8.25	29.56	100	33	P	V
	*	5230	88.71	-	-	78.28	31.74	8.25	29.56	100	33	A	V
		5426.96	49.56	-24.44	74	38.91	31.85	8.38	29.58	100	33	P	V
		5451.32	42.05	-11.95	54	31.32	31.87	8.45	29.59	100	33	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 1 5150~5250MHz

WIFI 802.11n HT40 (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		10380	47.53	-20.67	68.2	52.35	39.79	12.34	56.95	100	0	P	H
		15570	45.72	-28.28	74	49.19	38.53	14.62	56.62	100	0	P	H
802.11n													H
HT40													H
CH 38		10380	47.54	-20.66	68.2	52.36	39.79	12.34	56.95	100	0	P	V
5190MHz		15570	46.18	-27.82	74	49.65	38.53	14.62	56.62	100	0	P	V
													V
													V
		10460	47.21	-20.99	68.2	51.85	39.91	12.37	56.92	100	0	P	H
		15690	46.08	-27.92	74	49.64	38.24	14.67	56.47	100	0	P	H
802.11n													H
HT40													H
CH 46		10460	46.39	-21.81	68.2	51.03	39.91	12.37	56.92	100	0	P	V
5230MHz		15690	45.51	-28.49	74	49.07	38.24	14.67	56.47	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 2 - 5250~5350MHz

WIFI 802.11a (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 52 5260MHz		5006.8	51.4	-22.6	74	41.32	31.61	8	29.53	100	292	P	H
		5043.52	42.29	-11.71	54	32.16	31.63	8.04	29.54	100	292	A	H
	*	5260	102.01	-	-	91.55	31.76	8.26	29.56	100	292	P	H
	*	5260	94.65	-	-	84.19	31.76	8.26	29.56	100	292	A	H
		5444.64	49.35	-24.65	74	38.64	31.86	8.43	29.58	100	292	P	H
		5454	41.34	-12.66	54	30.6	31.87	8.46	29.59	100	292	A	H
		5072.42	51.02	-22.98	74	40.83	31.65	8.08	29.54	100	35	P	V
		5073.1	42.26	-11.74	54	32.07	31.65	8.08	29.54	100	35	A	V
	*	5260	102.42	-	-	91.96	31.76	8.26	29.56	100	35	P	V
	*	5260	94.88	-	-	84.42	31.76	8.26	29.56	100	35	A	V
		5455.92	49.77	-24.23	74	39.03	31.87	8.46	29.59	100	35	P	V
		5458.32	41.53	-12.47	54	30.78	31.87	8.47	29.59	100	35	A	V
802.11a CH 60 5300MHz		5056.1	51.67	-22.33	74	41.51	31.64	8.06	29.54	100	291	P	H
		5089.76	42.14	-11.86	54	31.92	31.66	8.1	29.54	100	291	A	H
	*	5300	102.56	-	-	92.08	31.78	8.27	29.57	100	291	P	H
	*	5300	95.41	-	-	84.93	31.78	8.27	29.57	100	291	A	H
		5407.44	51.2	-22.8	74	40.61	31.84	8.33	29.58	100	291	P	H
		5352	43.04	-10.96	54	32.51	31.81	8.29	29.57	100	291	A	H
		5007.82	50.83	-23.17	74	40.75	31.61	8	29.53	100	33	P	V
		5103.7	42.18	-11.82	54	31.94	31.66	8.12	29.54	100	33	A	V
	*	5300	103.59	-	-	93.11	31.78	8.27	29.57	100	33	P	V
	*	5300	95.35	-	-	84.87	31.78	8.27	29.57	100	33	A	V
		5427.84	50.5	-23.5	74	39.84	31.85	8.39	29.58	100	33	P	V
		5352	43.41	-10.59	54	32.88	31.81	8.29	29.57	100	33	A	V

802.11a CH 64 5320MHz	*	5320	100.03	-	-	89.53	31.79	8.28	29.57	100	289	P	H
	*	5320	92.53	-	-	82.03	31.79	8.28	29.57	100	289	A	H
		5411.84	51.12	-22.88	74	40.51	31.85	8.34	29.58	100	289	P	H
		5372	42.12	-11.88	54	31.57	31.82	8.3	29.57	100	289	A	H
													H
													H
	*	5320	100.96	-	-	90.46	31.79	8.28	29.57	100	32	P	V
	*	5320	93.17	-	-	82.67	31.79	8.28	29.57	100	32	A	V
		5454.08	50.18	-23.82	74	39.44	31.87	8.46	29.59	100	32	P	V
		5372.16	42.72	-11.28	54	32.17	31.82	8.3	29.57	100	32	A	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 2 5250~5350MHz

WIFI 802.11a (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 52 5260MHz		10520	48.35	-19.85	68.2	52.82	40.02	12.39	56.88	100	0	P	H
		15780	44.76	-29.24	74	48.36	38.04	14.72	56.36	100	0	P	H
													H
													H
		10520	47.9	-20.3	68.2	52.37	40.02	12.39	56.88	100	0	P	V
		15780	45.16	-28.84	74	48.76	38.04	14.72	56.36	100	0	P	V
													V
													V
802.11a CH 60 5300MHz		10600	46.5	-27.5	74	50.81	40.1	12.41	56.82	100	0	P	H
		15900	45.27	-28.73	74	48.97	37.75	14.77	56.22	100	0	P	H
													H
													H
		10600	46.03	-27.97	74	50.34	40.1	12.41	56.82	100	0	P	V
		15900	44.9	-29.1	74	48.6	37.75	14.77	56.22	100	0	P	V
													V
													V
802.11a CH 64 5320MHz		10640	47.4	-26.6	74	51.64	40.14	12.41	56.79	100	0	P	H
		15960	45.79	-28.21	74	49.57	37.58	14.79	56.15	100	0	P	H
													H
													H
		10640	46.55	-27.45	74	50.79	40.14	12.41	56.79	100	0	P	V
		15960	45.95	-28.05	74	49.73	37.58	14.79	56.15	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 2 5250~5350MHz

WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		5091.8	51.72	-22.28	74	41.5	31.66	8.1	29.54	100	288	P	H
		5085	42.24	-11.76	54	32.03	31.65	8.1	29.54	100	288	A	H
	*	5260	101.75	-	-	91.29	31.76	8.26	29.56	100	288	P	H
	*	5260	93.71	-	-	83.25	31.76	8.26	29.56	100	288	A	H
802.11n		5455.92	50.27	-23.73	74	39.53	31.87	8.46	29.59	100	288	P	H
HT20		5459.76	41.59	-12.41	54	30.84	31.87	8.47	29.59	100	288	A	H
CH 52		5004.42	51.02	-22.98	74	40.94	31.61	8	29.53	100	33	P	V
5260MHz		5068.34	42.29	-11.71	54	32.11	31.64	8.08	29.54	100	33	A	V
	*	5260	101.66	-	-	91.2	31.76	8.26	29.56	100	33	P	V
	*	5260	93.49	-	-	83.03	31.76	8.26	29.56	100	33	A	V
		5418.48	50.04	-23.96	74	39.41	31.85	8.36	29.58	100	33	P	V
		5457.6	41.5	-12.5	54	30.75	31.87	8.47	29.59	100	33	A	V
		5116.96	51.71	-22.29	74	41.44	31.67	8.14	29.54	100	291	P	H
		5116.96	42.32	-11.68	54	32.05	31.67	8.14	29.54	100	291	A	H
	*	5300	101.88	-	-	91.4	31.78	8.27	29.57	100	291	P	H
	*	5300	94.24	-	-	83.76	31.78	8.27	29.57	100	291	A	H
802.11n		5404.8	50.67	-23.33	74	40.09	31.84	8.32	29.58	100	291	P	H
HT20		5351.52	43.22	-10.78	54	32.69	31.81	8.29	29.57	100	291	A	H
CH 60		5100.3	50.99	-23.01	74	40.75	31.66	8.12	29.54	101	31	P	V
5300MHz		5074.12	42.28	-11.72	54	32.09	31.65	8.08	29.54	101	31	A	V
	*	5300	102.07	-	-	91.59	31.78	8.27	29.57	101	31	P	V
	*	5300	94.43	-	-	83.95	31.78	8.27	29.57	101	31	A	V
		5407.44	49.93	-24.07	74	39.34	31.84	8.33	29.58	101	31	P	V
		5351.52	43.35	-10.65	54	32.82	31.81	8.29	29.57	101	31	A	V

	*	5320	100.48	-	-	89.98	31.79	8.28	29.57	100	293	P	H
	*	5320	92.56	-	-	82.06	31.79	8.28	29.57	100	293	A	H
		5371.68	50.72	-23.28	74	40.17	31.82	8.3	29.57	100	293	P	H
		5371.52	42.21	-11.79	54	31.66	31.82	8.3	29.57	100	293	A	H
802.11n													H
HT20													H
CH 64	*	5320	100.59	-	-	90.09	31.79	8.28	29.57	100	21	P	V
5320MHz	*	5320	92.61	-	-	82.11	31.79	8.28	29.57	100	21	A	V
		5387.04	52.17	-21.83	74	41.61	31.83	8.31	29.58	100	21	P	V
		5371.52	43.29	-10.71	54	32.74	31.82	8.3	29.57	100	21	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	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		10520	47.61	-20.59	68.2	52.08	40.02	12.39	56.88	100	0	P	H
		15780	44.93	-29.07	74	48.53	38.04	14.72	56.36	100	0	P	H
802.11n													H
HT20													H
CH 52		10520	47.78	-20.42	68.2	52.25	40.02	12.39	56.88	100	0	P	V
5260MHz		15780	44.65	-29.35	74	48.25	38.04	14.72	56.36	100	0	P	V
													V
													V
		10600	47.21	-26.79	74	51.52	40.1	12.41	56.82	100	0	P	H
		15900	45.42	-28.58	74	49.12	37.75	14.77	56.22	100	0	P	H
802.11n													H
HT20													H
CH 60		10600	48	-26	74	52.31	40.1	12.41	56.82	100	0	P	V
5300MHz		15900	44.74	-29.26	74	48.44	37.75	14.77	56.22	100	0	P	V
													V
													V
		10640	47.95	-26.05	74	52.19	40.14	12.41	56.79	100	0	P	H
		15960	46.54	-27.46	74	50.32	37.58	14.79	56.15	100	0	P	H
802.11n													H
HT20													H
CH 64		10640	47.35	-26.65	74	51.59	40.14	12.41	56.79	100	0	P	V
5320MHz		15960	44.94	-29.06	74	48.72	37.58	14.79	56.15	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	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 CH 54 5270MHz		5082.96	52.36	-21.64	74	42.16	31.65	8.09	29.54	100	294	P	H
		5058.48	43.21	-10.79	54	33.05	31.64	8.06	29.54	100	294	A	H
	*	5270	97.87	-	-	87.41	31.76	8.26	29.56	100	294	P	H
	*	5270	90.32	-	-	79.86	31.76	8.26	29.56	100	294	A	H
		5447.04	50.57	-23.43	74	39.84	31.87	8.44	29.58	100	294	P	H
		5451.84	42.3	-11.7	54	31.57	31.87	8.45	29.59	100	294	A	H
		5111.86	52.21	-21.79	74	41.95	31.67	8.13	29.54	100	33	P	V
		5027.88	43.15	-10.85	54	33.04	31.62	8.02	29.53	100	33	A	V
	*	5270	98.21	-	-	87.75	31.76	8.26	29.56	100	33	P	V
	*	5270	90.84	-	-	80.38	31.76	8.26	29.56	100	33	A	V
		5458.8	50.18	-23.82	74	39.43	31.87	8.47	29.59	100	33	P	V
		5387.04	42.41	-11.59	54	31.85	31.83	8.31	29.58	100	33	A	V
802.11n HT40 CH 62 5310MHz		5096.56	51.24	-22.76	74	41.01	31.66	8.11	29.54	100	293	P	H
		5082.62	43.07	-10.93	54	32.87	31.65	8.09	29.54	100	293	A	H
	*	5310	98.4	-	-	87.9	31.79	8.28	29.57	100	293	P	H
	*	5310	90.86	-	-	80.36	31.79	8.28	29.57	100	293	A	H
		5439.84	50.25	-23.75	74	39.55	31.86	8.42	29.58	100	293	P	H
		5452.08	42.52	-11.48	54	31.79	31.87	8.45	29.59	100	293	A	H
		5063.58	51.58	-22.42	74	41.41	31.64	8.07	29.54	100	38	P	V
		5064.94	42.93	-11.07	54	32.76	31.64	8.07	29.54	100	38	A	V
	*	5310	99.06	-	-	88.56	31.79	8.28	29.57	100	38	P	V
	*	5310	90.33	-	-	79.83	31.79	8.28	29.57	100	38	A	V
		5437.2	50.32	-23.68	74	39.63	31.86	8.41	29.58	100	38	P	V
		5350.56	42.5	-11.5	54	31.97	31.81	8.29	29.57	100	38	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 2 5250~5350MHz

WIFI 802.11n HT40 (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		10540	47.72	-20.48	68.2	52.17	40.03	12.39	56.87	100	0	P	H
		15810	45.06	-28.94	74	48.7	37.96	14.73	56.33	100	0	P	H
802.11n													H
HT40													H
CH 54		10540	47.25	-20.95	68.2	51.7	40.03	12.39	56.87	100	0	P	V
5270MHz		15810	44.84	-29.16	74	48.48	37.96	14.73	56.33	100	0	P	V
													V
													V
		10620	46.27	-27.73	74	50.54	40.12	12.41	56.8	100	0	P	H
		15930	44.98	-29.02	74	48.71	37.67	14.78	56.18	100	0	P	H
802.11n													H
HT40													H
CH 62		10620	46.55	-27.45	74	50.82	40.12	12.41	56.8	100	0	P	V
5310MHz		15930	44.58	-29.42	74	48.31	37.67	14.78	56.18	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 - 5470~5725MHz

WIFI 802.11a (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 100 5500MHz		5450.64	51.13	-22.87	74	40.39	31.87	8.46	29.59	100	257	P	H
		5464.56	50.88	-17.32	68.2	40.13	31.88	8.46	29.59	100	257	P	H
		5447.76	42.67	-11.33	54	31.97	31.87	8.41	29.58	100	257	A	H
	*	5500	97.35	-	-	86.48	31.9	8.56	29.59	100	257	P	H
	*	5500	89.88	-	-	79.01	31.9	8.56	29.59	100	257	A	H
													H
		5447.92	51.37	-22.63	74	40.67	31.87	8.41	29.58	103	28	P	V
		5468.88	51.43	-16.77	68.2	40.63	31.88	8.51	29.59	103	28	P	V
		5447.6	43.32	-10.68	54	32.62	31.87	8.41	29.58	103	28	A	V
	*	5500	99.81	-	-	88.94	31.9	8.56	29.59	103	28	P	V
	*	5500	92.42	-	-	81.55	31.9	8.56	29.59	103	28	A	V
													V
802.11a CH 104 5520MHz		5422.72	49.21	-24.79	74	38.57	31.85	8.37	29.58	100	261	P	H
		5467.6	50.01	-18.19	68.2	39.23	31.88	8.49	29.59	100	261	P	H
		5453.44	41.61	-12.39	54	30.88	31.87	8.45	29.59	100	261	A	H
	*	5520	101.59	-	-	90.64	31.92	8.63	29.6	100	261	P	H
	*	5520	94.37	-	-	83.42	31.92	8.63	29.6	100	261	A	H
		5736.65	49.91	-18.29	68.2	38.54	32.24	8.82	29.69	100	261	P	H
		5400.88	50.4	-23.6	74	39.83	31.84	8.31	29.58	100	29	P	V
		5467.6	51.22	-16.98	68.2	40.44	31.88	8.49	29.59	100	29	P	V
		5452.48	41.76	-12.24	54	31.03	31.87	8.45	29.59	100	29	A	V
	*	5520	103.4	-	-	92.45	31.92	8.63	29.6	100	29	P	V
	*	5520	96.2	-	-	85.25	31.92	8.63	29.6	100	29	A	V
		5727.2	50.21	-17.99	68.2	38.86	32.21	8.82	29.68	100	29	P	V

		5451.04	50.59	-23.41	74	39.85	31.87	8.46	29.59	100	251	P	H
		5464.96	49.58	-18.62	68.2	38.83	31.88	8.46	29.59	100	251	P	H
		5458.96	41.67	-12.33	54	30.93	31.87	8.46	29.59	100	251	A	H
	*	5580	101.68	-	-	90.51	32	8.8	29.63	100	251	P	H
	*	5580	93.85	-	-	82.68	32	8.8	29.63	100	251	A	H
802.11a		5730.98	49.72	-18.48	68.2	38.38	32.21	8.82	29.69	100	251	P	H
CH 116		5448.4	50.99	-23.01	74	40.24	31.87	8.46	29.58	100	27	P	V
5580MHz		5460.16	49.82	-18.38	68.2	39.08	31.87	8.46	29.59	100	27	P	V
		5457.28	41.84	-12.16	54	31.1	31.87	8.46	29.59	100	27	A	V
	*	5580	104.26	-	-	93.09	32	8.8	29.63	100	27	P	V
	*	5580	96.46	-	-	85.29	32	8.8	29.63	100	27	A	V
		5753.975	50.81	-17.39	68.2	39.43	32.26	8.81	29.69	100	27	P	V
		5451.04	50.59	-23.41	74	39.85	31.87	8.46	29.59	100	251	P	V
		5452.55	51.27	-22.73	74	40.54	31.87	8.45	29.59	100	254	P	H
		5465.15	49.72	-18.48	68.2	38.94	31.88	8.49	29.59	100	254	P	H
		5459.2	41.5	-12.5	54	30.75	31.87	8.47	29.59	100	254	A	H
	*	5680	103.55	-	-	92.25	32.14	8.83	29.67	100	254	P	H
	*	5680	96.33	-	-	85.03	32.14	8.83	29.67	100	254	A	H
802.11a		5728.46	52.83	-15.37	68.2	41.48	32.21	8.82	29.68	100	254	P	H
CH 136		5407.75	49.89	-24.11	74	39.3	31.84	8.33	29.58	100	35	P	V
5680MHz		5465.5	49.73	-18.47	68.2	38.95	31.88	8.49	29.59	100	35	P	V
		5457.8	41.46	-12.54	54	30.71	31.87	8.47	29.59	100	35	A	V
	*	5680	102.8	-	-	91.5	32.14	8.83	29.67	100	35	P	V
	*	5680	95.19	-	-	83.89	32.14	8.83	29.67	100	35	A	V
		5733.185	51.57	-16.63	68.2	40.23	32.21	8.82	29.69	100	35	P	V

802.11a CH 140 5700MHz	*	5700	101.47	-	-	90.15	32.17	8.82	29.67	100	253	P	H
	*	5700	93.45	-	-	82.13	32.17	8.82	29.67	100	253	A	H
		5760.68	52.97	-15.23	68.2	41.61	32.26	8.81	29.71	100	253	P	H
													H
													H
													H
	*	5700	101.42	-	-	90.1	32.17	8.82	29.67	102	33	P	V
	*	5700	93.22	-	-	81.9	32.17	8.82	29.67	102	33	A	V
		5730.52	51.83	-16.37	68.2	40.49	32.21	8.82	29.69	102	33	P	V
													V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 - 5470~5725MHz

WIFI 802.11a (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 100 5500MHz		11000	47.67	-26.33	74	51.16	40.5	12.51	56.5	100	0	P	H
		16500	47.28	-20.92	68.2	48.66	39.4	14.92	55.7	100	0	P	H
													H
													H
		11000	47.65	-26.35	74	51.14	40.5	12.51	56.5	100	0	P	V
		16500	47.48	-20.72	68.2	48.86	39.4	14.92	55.7	100	0	P	V
													V
													V
802.11a CH 116 5580MHz		11160	47.66	-26.34	74	51.21	40.3	12.59	56.44	100	0	P	H
		16740	46.71	-21.49	68.2	47.95	39.69	14.96	55.89	100	0	P	H
													H
													H
		11160	48.16	-25.84	74	51.71	40.3	12.59	56.44	100	0	P	V
		16740	47.37	-20.83	68.2	48.61	39.69	14.96	55.89	100	0	P	V
													V
													V
802.11a CH 140 5700MHz		11400	46.24	-27.76	74	49.85	40.02	12.71	56.34	100	0	P	H
		17100	48.24	-19.96	68.2	49.12	40.36	15.06	56.3	100	0	P	H
													H
													H
		11400	48.44	-25.56	74	52.05	40.02	12.71	56.34	100	0	P	V
		17100	49.18	-19.02	68.2	50.06	40.36	15.06	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 HT20 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		5414.96	50.68	-23.32	74	40.05	31.85	8.36	29.58	101	256	P	H
		5465.68	50.66	-17.54	68.2	39.91	31.88	8.46	29.59	101	256	P	H
		5448.24	42.82	-11.18	54	32.07	31.87	8.46	29.58	101	256	A	H
	*	5500	97.63	-	-	86.76	31.9	8.56	29.59	101	256	P	H
802.11n	*	5500	90.12	-	-	79.25	31.9	8.56	29.59	101	256	A	H
HT20													H
CH 100		5448.08	50.86	-23.14	74	40.11	31.87	8.46	29.58	100	32	P	V
5500MHz		5469.36	50.56	-17.64	68.2	39.76	31.88	8.51	29.59	100	32	P	V
		5447.76	43.56	-10.44	54	32.86	31.87	8.41	29.58	100	32	A	V
	*	5500	100.39	-	-	89.52	31.9	8.56	29.59	100	32	P	V
	*	5500	92.19	-	-	81.32	31.9	8.56	29.59	100	32	A	V
													V
		5429.92	50.81	-23.19	74	40.14	31.86	8.39	29.58	100	259	P	H
		5466.64	50.91	-17.29	68.2	40.13	31.88	8.49	29.59	100	259	P	H
		5455.12	41.63	-12.37	54	30.89	31.87	8.46	29.59	100	259	A	H
	*	5520	99.55	-	-	88.6	31.92	8.63	29.6	100	259	P	H
802.11n	*	5520	92.45	-	-	81.5	31.92	8.63	29.6	100	259	A	H
HT20		5730.665	51.26	-16.94	68.2	39.92	32.21	8.82	29.69	100	259	P	H
CH 104		5399.2	52.06	-21.94	74	41.49	31.84	8.31	29.58	100	25	P	V
5520MHz		5468.08	52.45	-15.75	68.2	41.67	31.88	8.49	29.59	100	25	P	V
		5452	41.5	-12.5	54	30.77	31.87	8.45	29.59	100	25	A	V
	*	5520	102	-	-	91.05	31.92	8.63	29.6	100	25	P	V
	*	5520	94.53	-	-	83.58	31.92	8.63	29.6	100	25	A	V
		5760.59	52.18	-16.02	68.2	40.82	32.26	8.81	29.71	100	25	P	V

		5458.72	50.37	-23.63	74	39.63	31.87	8.46	29.59	102	251	P	H
		5461.36	50.62	-17.58	68.2	39.88	31.87	8.46	29.59	102	251	P	H
		5457.76	41.58	-12.42	54	30.84	31.87	8.46	29.59	102	251	A	H
	*	5580	100.57	-	-	89.4	32	8.8	29.63	102	251	P	H
802.11n	*	5580	92.99	-	-	81.82	32	8.8	29.63	102	251	A	H
HT20		5737.595	50.26	-17.94	68.2	38.9	32.24	8.81	29.69	102	251	P	H
CH 116		5392.72	50.4	-23.6	74	39.85	31.83	8.3	29.58	100	32	P	V
5580MHz		5462.8	50.04	-18.16	68.2	39.29	31.88	8.46	29.59	100	32	P	V
		5456.08	41.57	-12.43	54	30.83	31.87	8.46	29.59	100	32	A	V
	*	5580	104.18	-	-	93.01	32	8.8	29.63	100	32	P	V
	*	5580	95.85	-	-	84.68	32	8.8	29.63	100	32	A	V
		5734.445	51.48	-16.72	68.2	40.14	32.21	8.82	29.69	100	32	P	V
		5450.45	50.45	-23.55	74	39.72	31.87	8.45	29.59	100	254	P	H
		5466.2	51.35	-16.85	68.2	40.57	31.88	8.49	29.59	100	254	P	H
		5442.05	41.3	-12.7	54	30.6	31.86	8.42	29.58	100	254	A	H
	*	5680	103.23	-	-	91.93	32.14	8.83	29.67	100	254	P	H
802.11n	*	5680	96.03	-	-	84.73	32.14	8.83	29.67	100	254	A	H
HT20		5734.13	52.8	-15.4	68.2	41.46	32.21	8.82	29.69	100	254	P	H
CH 136		5392	50.73	-23.27	74	40.17	31.83	8.31	29.58	100	35	P	V
5680MHz		5467.25	51.85	-16.35	68.2	41.07	31.88	8.49	29.59	100	35	P	V
		5457.8	41.61	-12.39	54	30.86	31.87	8.47	29.59	100	35	A	V
	*	5680	102.84	-	-	91.54	32.14	8.83	29.67	100	35	P	V
	*	5680	95.61	-	-	84.31	32.14	8.83	29.67	100	35	A	V
		5731.61	50.86	-17.34	68.2	39.52	32.21	8.82	29.69	100	35	P	V

	*	5700	101.61	-	-	90.29	32.17	8.82	29.67	100	252	P	H
	*	5700	93.62	-	-	82.3	32.17	8.82	29.67	100	252	A	H
		5751.88	52.96	-15.24	68.2	41.58	32.26	8.81	29.69	100	252	P	H
													H
802.11n													H
HT20													H
CH 140	*	5700	100.94	-	-	89.62	32.17	8.82	29.67	102	34	P	V
5700MHz	*	5700	93.11	-	-	81.79	32.17	8.82	29.67	102	34	A	V
		5751.48	51.95	-16.25	68.2	40.59	32.24	8.81	29.69	102	34	P	V
													V
													V
													V

Remark

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

Band 3 - 5470~5725MHz

WIFI 802.11n HT20 (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		11000	47.41	-26.59	74	50.9	40.5	12.51	56.5	100	0	P	H
		16500	47.81	-20.39	68.2	49.19	39.4	14.92	55.7	100	0	P	H
802.11n													H
HT20													H
CH 100		11000	47.39	-26.61	74	50.88	40.5	12.51	56.5	100	0	P	V
5500MHz		16500	47.01	-21.19	68.2	48.39	39.4	14.92	55.7	100	0	P	V
													V
													V
		11160	46.62	-27.38	74	50.17	40.3	12.59	56.44	100	0	P	H
		16740	46.41	-21.79	68.2	47.65	39.69	14.96	55.89	100	0	P	H
802.11n													H
HT20													H
CH 116		11160	47.51	-26.49	74	51.06	40.3	12.59	56.44	100	0	P	V
5580MHz		16740	46.63	-21.57	68.2	47.87	39.69	14.96	55.89	100	0	P	V
													V
													V
		11400	46.59	-27.41	74	50.2	40.02	12.71	56.34	100	0	P	H
		17100	48.25	-19.95	68.2	49.13	40.36	15.06	56.3	100	0	P	H
802.11n													H
HT20													H
CH 140		11400	49.85	-24.15	74	53.46	40.02	12.71	56.34	100	0	P	V
5700MHz		17100	48.44	-19.76	68.2	49.32	40.36	15.06	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	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		5455.6	50.21	-23.79	74	39.47	31.87	8.46	29.59	107	257	P	H
		5460.16	50.68	-17.52	68.2	39.94	31.87	8.46	29.59	107	257	P	H
		5459.68	42.69	-11.31	54	31.95	31.87	8.46	29.59	107	257	A	H
	*	5510	96.02	-	-	85.12	31.9	8.6	29.6	107	257	P	H
802.11n	*	5510	87.51	-	-	76.61	31.9	8.6	29.6	107	257	A	H
HT40		5762.795	50.39	-17.81	68.2	39.03	32.26	8.81	29.71	107	257	P	H
CH 102		5414.32	50.28	-23.72	74	39.65	31.85	8.36	29.58	100	24	P	V
5510MHz		5461.12	50.77	-17.43	68.2	40.03	31.87	8.46	29.59	100	24	P	V
		5459.92	42.53	-11.47	54	31.79	31.87	8.46	29.59	100	24	A	V
	*	5510	97.63	-	-	86.73	31.9	8.6	29.6	100	24	P	V
	*	5510	89.42	-	-	78.52	31.9	8.6	29.6	100	24	A	V
		5749.565	51.01	-17.19	68.2	39.65	32.24	8.81	29.69	100	24	P	V
		5457.28	51.34	-22.66	74	40.6	31.87	8.46	29.59	100	259	P	H
		5461.6	50.86	-17.34	68.2	40.12	31.87	8.46	29.59	100	259	P	H
		5447.92	42.49	-11.51	54	31.79	31.87	8.41	29.58	100	259	A	H
	*	5550	95.9	-	-	84.84	31.97	8.7	29.61	100	259	P	H
802.11n	*	5550	88.18	-	-	77.12	31.97	8.7	29.61	100	259	A	H
HT40		5750.825	51.09	-17.11	68.2	39.73	32.24	8.81	29.69	100	259	P	H
CH 110		5454.16	50.2	-23.8	74	39.46	31.87	8.46	29.59	100	25	P	V
5550MHz		5460.16	49.63	-18.57	68.2	38.89	31.87	8.46	29.59	100	25	P	V
		5447.68	42.7	-11.3	54	32	31.87	8.41	29.58	100	25	A	V
	*	5550	100.19	-	-	89.13	31.97	8.7	29.61	100	25	P	V
	*	5550	91.96	-	-	80.9	31.97	8.7	29.61	100	25	A	V
		5725	51.79	-16.41	68.2	40.44	32.21	8.82	29.68	100	25	P	V

		5420.7	50.59	-23.41	74	39.95	31.85	8.37	29.58	100	251	P	H
		5464.1	50	-18.2	68.2	39.23	31.88	8.48	29.59	100	251	P	H
		5438.9	42.21	-11.79	54	31.51	31.86	8.42	29.58	100	251	A	H
	*	5670	99.12	-	-	87.81	32.14	8.83	29.66	100	251	P	H
802.11n	*	5670	91.14	-	-	79.83	32.14	8.83	29.66	100	251	A	H
HT40		5760.905	51.19	-17.01	68.2	39.83	32.26	8.81	29.71	100	251	P	H
CH 134		5428.4	50.74	-23.26	74	40.08	31.85	8.39	29.58	100	35	P	V
5670MHz		5466.55	50.41	-17.79	68.2	39.63	31.88	8.49	29.59	100	35	P	V
		5459.9	42.24	-11.76	54	31.49	31.87	8.47	29.59	100	35	A	V
	*	5670	100.27	-	-	88.96	32.14	8.83	29.66	100	35	P	V
	*	5670	91.79	-	-	80.48	32.14	8.83	29.66	100	35	A	V
		5747.045	52.22	-15.98	68.2	40.86	32.24	8.81	29.69	100	35	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 - 5470~5725MHz

WIFI 802.11n HT40 (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		11020	49.17	-24.83	74	52.66	40.48	12.52	56.49	100	0	P	H
		16530	47.39	-20.81	68.2	48.75	39.44	14.92	55.72	100	0	P	H
802.11n													H
HT40													H
CH 102		11020	48.57	-25.43	74	52.06	40.48	12.52	56.49	100	0	P	V
5510MHz		16530	46.62	-21.58	68.2	47.98	39.44	14.92	55.72	100	0	P	V
													V
													V
		11100	49.18	-24.82	74	52.7	40.38	12.56	56.46	100	0	P	H
		16650	47.73	-20.47	68.2	49.01	39.59	14.95	55.82	100	0	P	H
802.11n													H
HT40													H
CH 110		11100	47.61	-26.39	74	51.13	40.38	12.56	56.46	100	0	P	V
5550MHz		16650	47.58	-20.62	68.2	48.86	39.59	14.95	55.82	100	0	P	V
													V
													V
		11340	46.53	-27.47	74	50.11	40.1	12.68	56.36	100	0	P	H
		17010	47.49	-20.71	68.2	48.54	40.06	15.01	56.12	100	0	P	H
802.11n													H
HT40													H
CH 134		11340	48.04	-25.96	74	51.62	40.1	12.68	56.36	100	0	P	V
5670MHz		17010	47.45	-20.75	68.2	48.5	40.06	15.01	56.12	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

Emission below 1GHz

WIFI 802.11n HT40 (LF @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 LF		30.54	21.64	-18.36	40	29.29	23.96	0.73	32.34	-	-	P	H
		40.8	21.13	-18.87	40	33.47	19.14	0.85	32.33	-	-	P	H
		92.64	23.26	-20.24	43.5	38.86	15.36	1.33	32.29	-	-	P	H
		885.9	34.26	-11.74	46	33.31	28.99	3.54	31.58	-	-	P	H
		894.3	35.31	-10.69	46	34.3	29.01	3.54	31.54	100	0	P	H
		946.1	33.18	-12.82	46	30.18	30.39	3.7	31.09	-	-	P	H
													H
													H
													H
													H
													H
													H
		30.54	33.99	-6.01	40	41.64	23.96	0.73	32.34	-	-	P	V
		33.51	34.71	-5.29	40	43.59	22.69	0.77	32.34	-	-	P	V
		40.53	31.47	-8.53	40	43.81	19.14	0.85	32.33	-	-	P	V
		887.3	42	-4	46	41.04	28.99	3.54	31.57	100	0	P	V
		925.1	32.37	-13.63	46	30.5	29.52	3.63	31.28	-	-	P	V
		951	33.37	-12.63	46	30.06	30.65	3.71	31.05	-	-	P	V
													V
													V
													V
													V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against limit line.												

Band 2 - 5250~5350MHz

Emission below 1GHz

WIFI 802.11a (LF @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		32.16	22.13	-17.87	40	30.18	23.54	0.75	32.34	-	-	P	H
		93.99	22.36	-21.14	43.5	37.86	15.46	1.33	32.29	-	-	P	H
		226.02	22.76	-23.24	46	37.29	15.85	1.85	32.23	-	-	P	H
		831.3	31.22	-14.78	46	31.03	28.55	3.48	31.84	-	-	P	H
		894.3	38.4	-7.6	46	37.39	29.01	3.54	31.54	100	0	P	H
		958	33.72	-12.28	46	29.92	31.07	3.71	30.98	-	-	P	H
													H
													H
													H
													H
													H
802.11a													H
LF		33.51	33.31	-6.69	40	42.19	22.69	0.77	32.34	-	-	P	V
		40.26	30.01	-9.99	40	42.35	19.14	0.85	32.33	-	-	P	V
		50.52	27.86	-12.14	40	44.7	14.53	0.95	32.32	-	-	P	V
		770.4	30.63	-15.37	46	31.16	28.2	3.31	32.04	-	-	P	V
		890.8	42	-4	46	41.01	29	3.54	31.55	100	0	P	V
		955.2	33.39	-12.61	46	29.78	30.91	3.71	31.01	-	-	P	V
													V
													V
													V
													V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against limit line.												

Band 3 - 5470~5725MHz

Emission below 1GHz

WIFI 802.11n HT20 (LF @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 LF		31.89	21.84	-18.16	40	29.89	23.54	0.75	32.34	-	-	P	H
		91.02	20.51	-22.99	43.5	36.36	15.17	1.28	32.3	-	-	P	H
		226.02	21.32	-24.68	46	35.85	15.85	1.85	32.23	-	-	P	H
		745.9	30.15	-15.85	46	31.08	27.94	3.22	32.09	-	-	P	H
		892.2	39.95	-6.05	46	38.95	29.01	3.54	31.55	100	0	P	H
		949.6	33.53	-12.47	46	30.28	30.6	3.71	31.06	-	-	P	H
													H
													H
													H
													H
													H
													H
		33.51	34.01	-5.99	40	42.89	22.69	0.77	32.34	100	0	P	V
		41.61	27.8	-12.2	40	40.71	18.56	0.86	32.33	-	-	P	V
		72.12	22.72	-17.28	40	41.09	12.75	1.19	32.31	-	-	P	V
		744.5	29.47	-16.53	46	30.41	27.93	3.22	32.09	-	-	P	V
		894.3	34.68	-11.32	46	33.67	29.01	3.54	31.54	-	-	P	V
		952.4	34.38	-11.62	46	30.96	30.75	3.71	31.04	-	-	P	V
													V
													V
													V
													V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against limit line.												

Note symbol

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

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

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

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

For Peak Limit @ 2390MHz:

1. Level(dBμV/m)

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

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

= 55.45 (dBμV/m)

2. Over Limit(dB)

= Level(dBμV/m) – Limit Line(dBμV/m)

= 55.45(dBμV/m) – 74(dBμV/m)

= -18.55(dB)

For Average Limit @ 2390MHz:

1. Level(dBμV/m)

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

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

= 43.54 (dBμV/m)

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

= 43.54(dBμV/m) – 54(dBμV/m)

= -10.46(dB)

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

Appendix D. Radiated Spurious Emission Plots

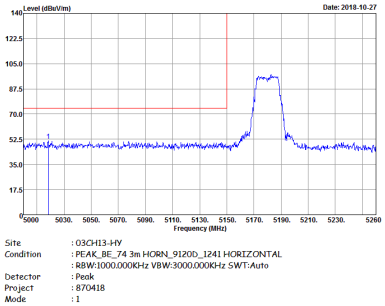
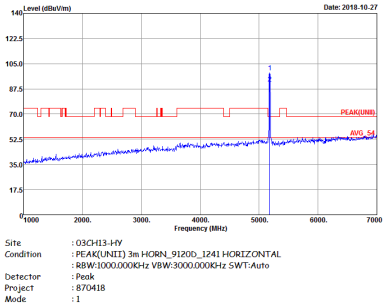
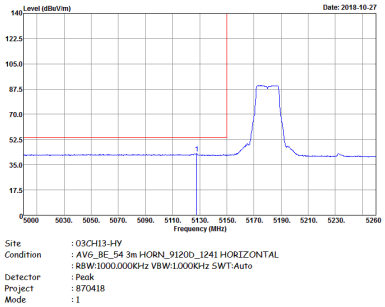
Test Engineer :	Alex Jheng, Fu Chen, and Wilson Wu	**Temperature :**	24~25°C
		Relative Humidity :	48~50%

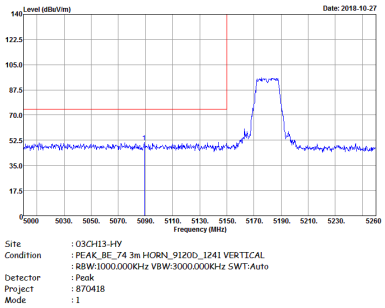
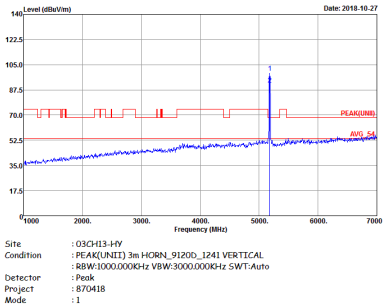
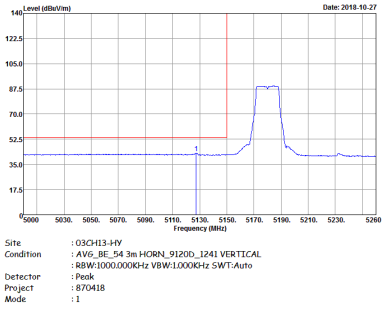
Note symbol

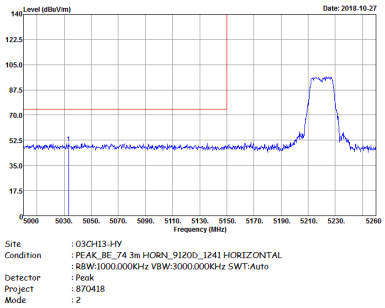
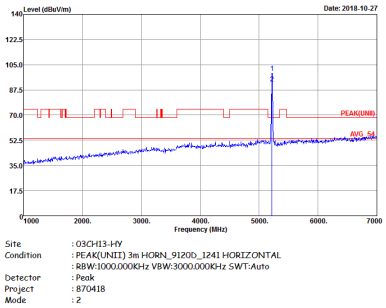
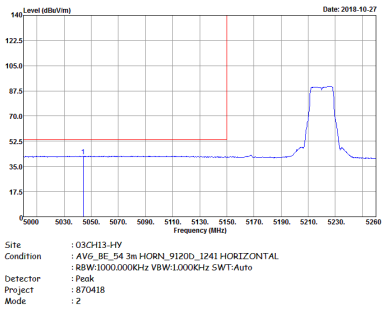
-L	**Low channel location**
-R	**High channel location**

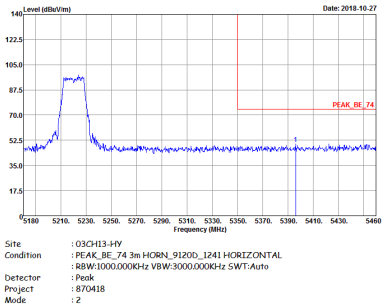
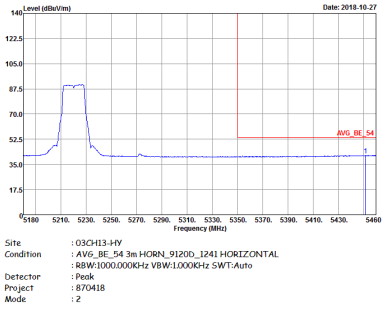
Band 1 - 5150~5250MHz

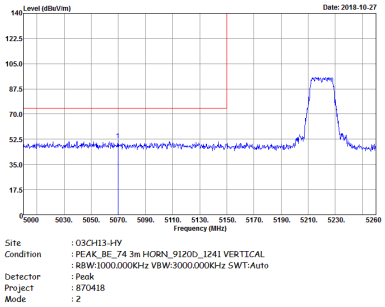
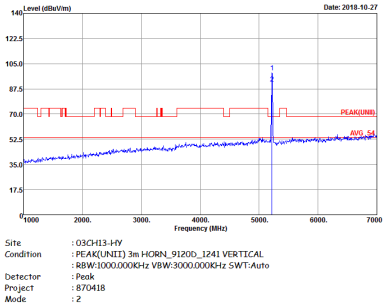
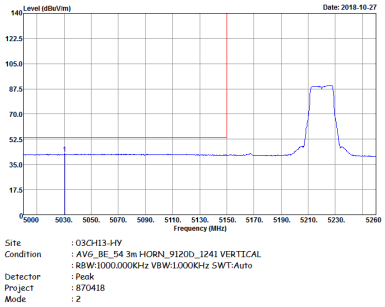
WIFI 802.11a (Band Edge @ 3m)

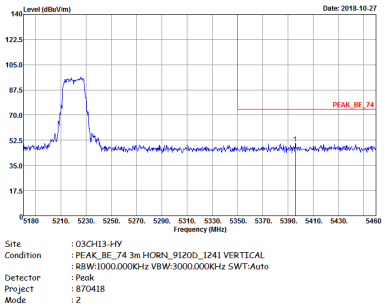
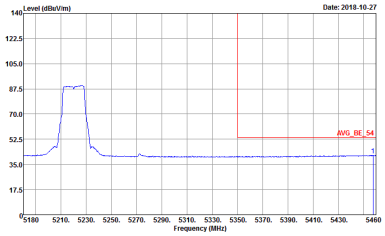
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH36 5180MHz	
1	Horizontal	Fundamental
Peak		
Avg.		Left blank

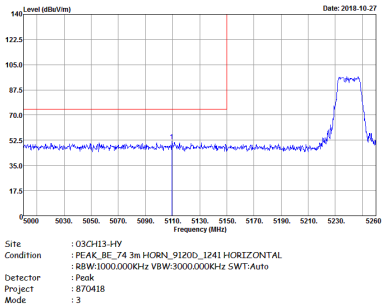
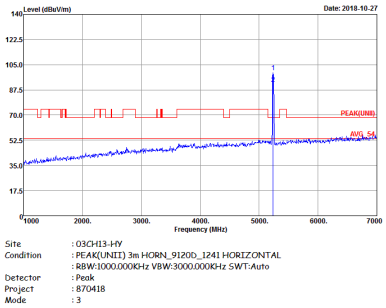
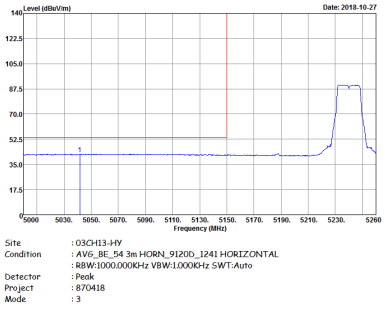
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH36 5180MHz	
1	Vertical	Fundamental
Peak		
Avg.		Left blank

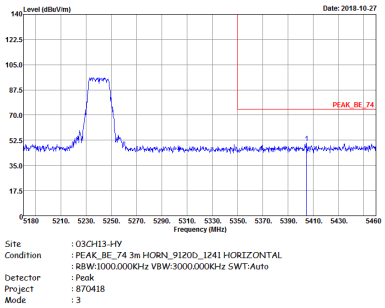
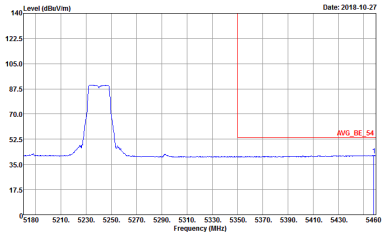
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH44 5220MHz - L	
1	Horizontal	Fundamental
Peak		
Avg.		Left blank

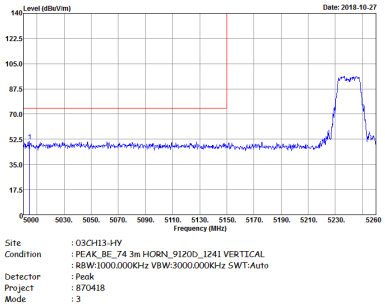
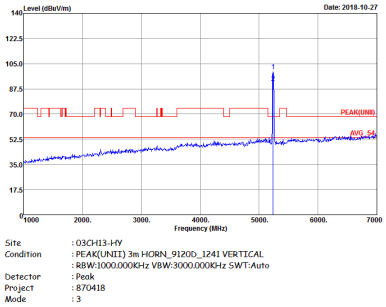
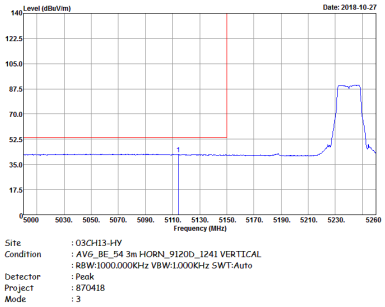
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH44 5220MHz - R	
1	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

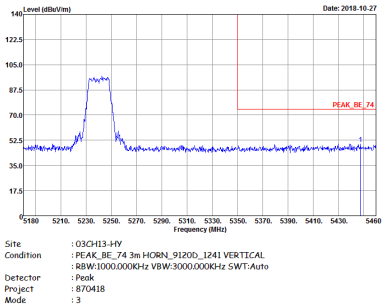
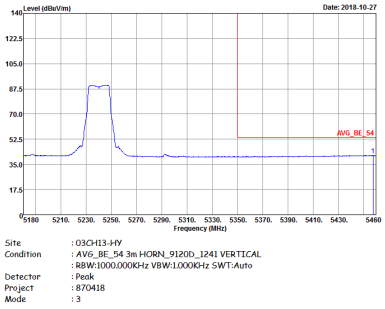
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH44 5220MHz - L	
1	Vertical	Fundamental
Peak		
Avg.		Left blank

WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH44 5220MHz - R	
1	Vertical	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE_74 3m HORN_9120D_1241 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 870418 Mode : 2	Left blank
Avg.	 Site : 03CH13-HY Condition : AVG_BE_54 3m HORN_9120D_1241 VERTICAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto Detector : Peak Project : 870418 Mode : 2	Left blank

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

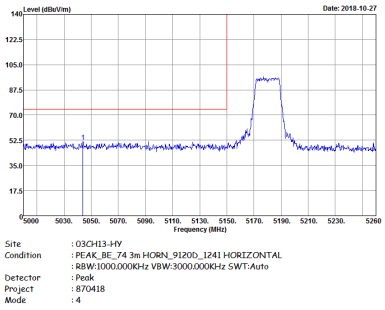
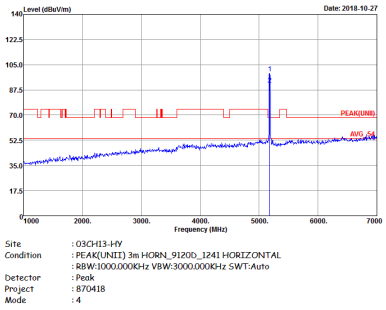
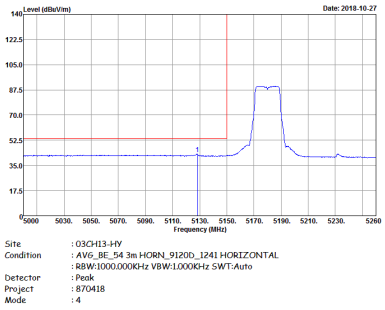
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH48 5240MHz - R	
1	Horizontal	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE_74 3m HORN_9120D_1241 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 870418 Mode : 3	Left blank
Avg.	 Site : 03CH13-HY Condition : AVG_BE_54 3m HORN_9120D_1241 HORIZONTAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto Detector : Peak Project : 870418 Mode : 3	Left blank

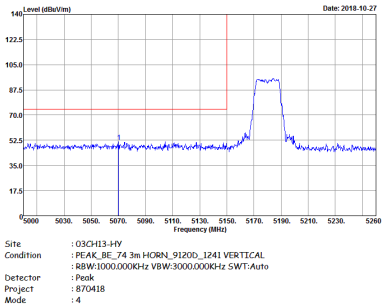
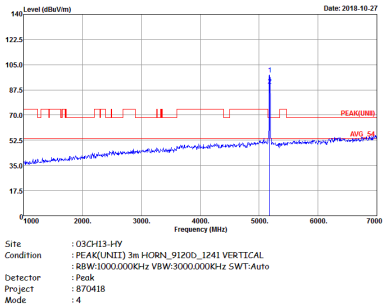
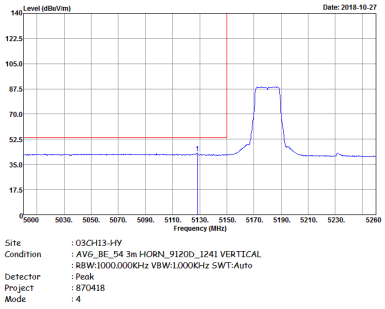
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH48 5240MHz - L	
1	Vertical	Fundamental
Peak		
Avg.		Left blank

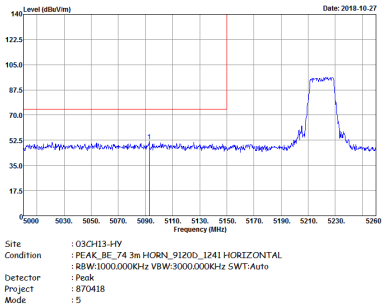
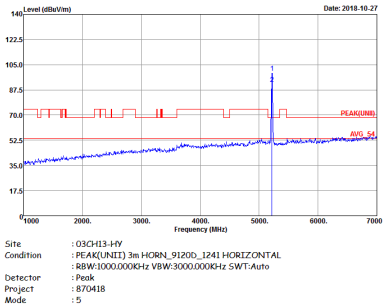
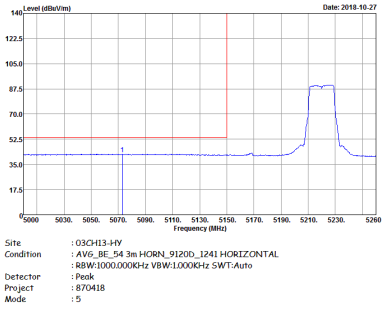
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH48 5240MHz - R	
1	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

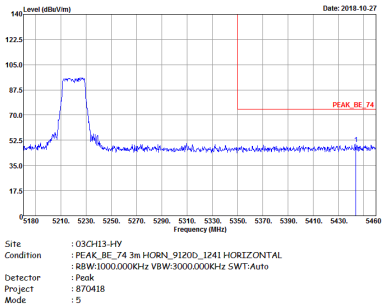
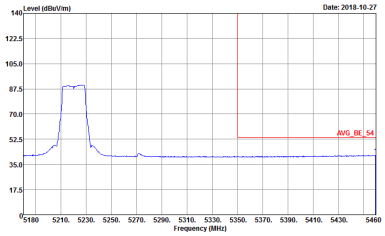
Band 1 5150~5250MHz

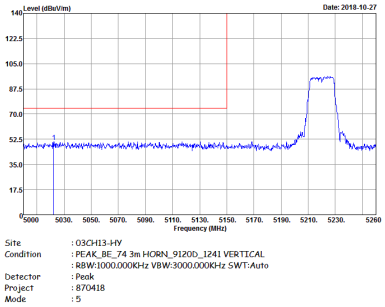
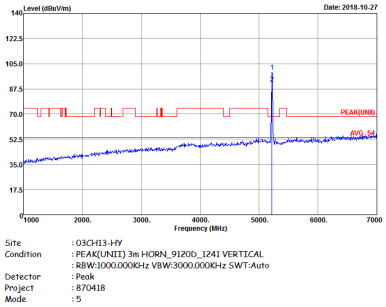
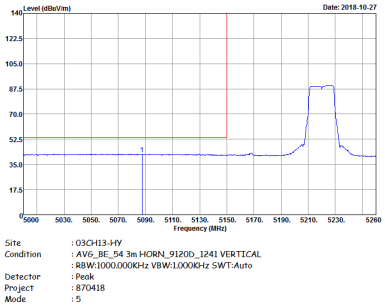
WIFI 802.11n HT20 (Band Edge @ 3m)

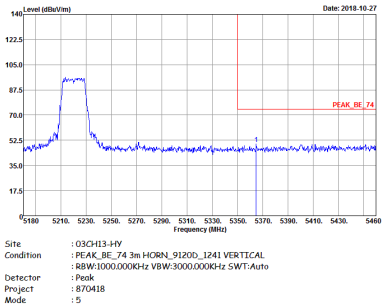
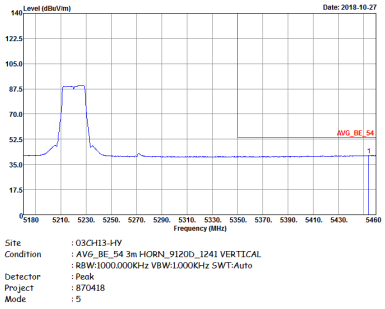
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH36 5180MHz	
1	Horizontal	Fundamental
Peak		
Avg.		Left blank

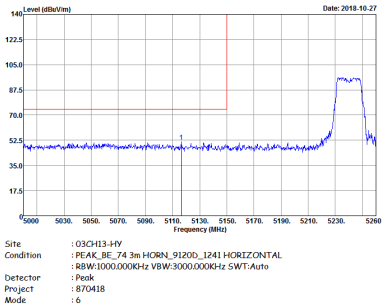
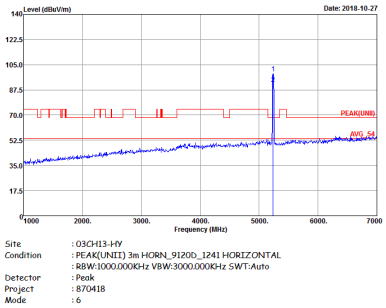
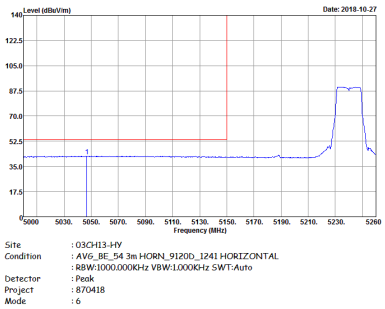
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH36 5180MHz	
1	Vertical	Fundamental
Peak		
Avg.		Left blank

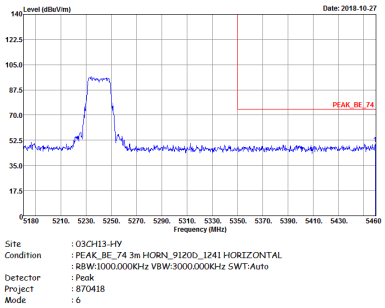
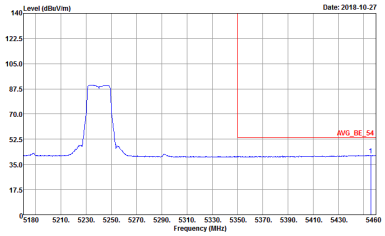
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH44 5220MHz - L	
1	Horizontal	Fundamental
Peak		
Avg.		Left blank

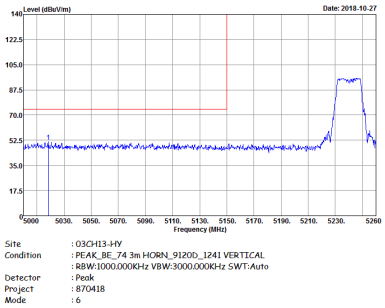
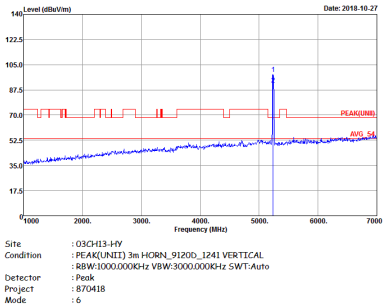
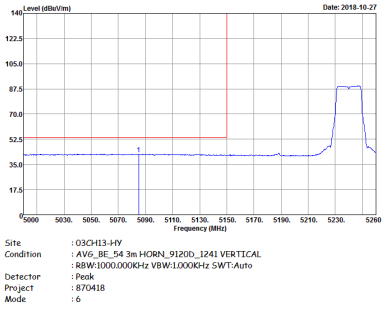
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH44 5220MHz - R	
1	Horizontal	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE_74 3m HORN_9120D_1241 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 870418 Mode : 5	Left blank
Avg.	 Site : 03CH13-HY Condition : AVG_BE_54 3m HORN_9120D_1241 HORIZONTAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto Detector : Peak Project : 870418 Mode : 5	Left blank

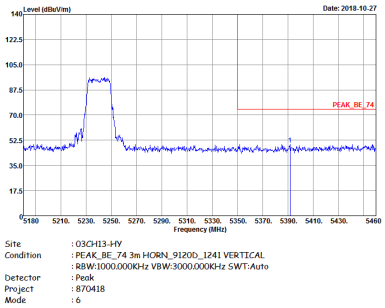
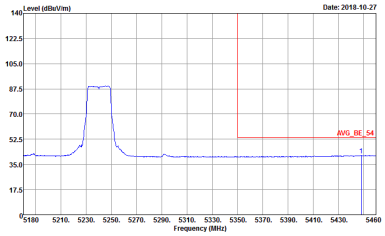
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH44 5220MHz - L	
1	Vertical	Fundamental
Peak		
Avg.		Left blank

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

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

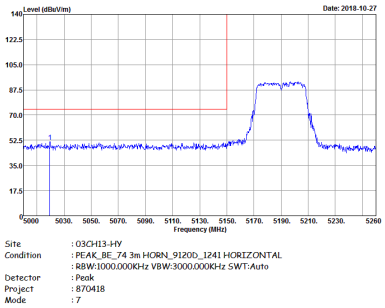
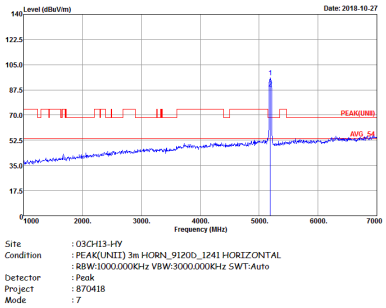
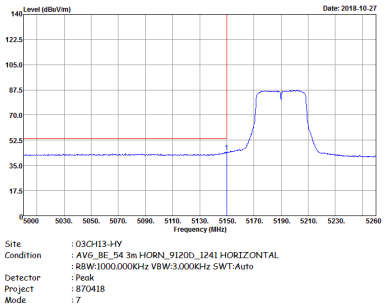
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH48 5240MHz - R	
1	Horizontal	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE_74 3m HORN_9120D_1241 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 870418 Mode : 6	Left blank
Avg.	 Site : 03CH13-HY Condition : AVG_BE_54 3m HORN_9120D_1241 HORIZONTAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto Detector : Peak Project : 870418 Mode : 6	Left blank

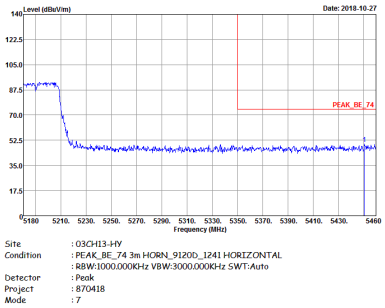
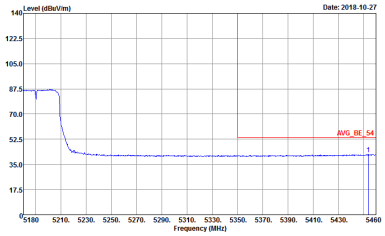
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH48 5240MHz - L	
1	Vertical	Fundamental
Peak		
Avg.		Left blank

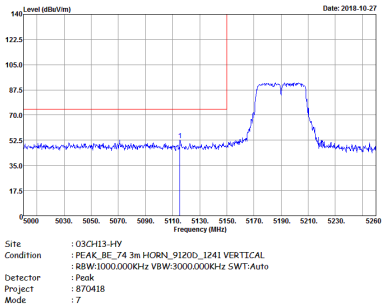
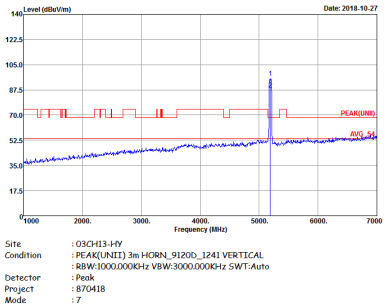
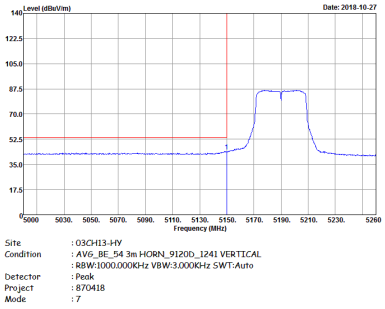
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH48 5240MHz - R	
1	Vertical	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE_74 3m HORN_9120D_1241 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 870418 Mode : 6	Left blank
Avg.	 Site : 03CH13-HY Condition : AVG_BE_54 3m HORN_9120D_1241 VERTICAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto Detector : Peak Project : 870418 Mode : 6	Left blank

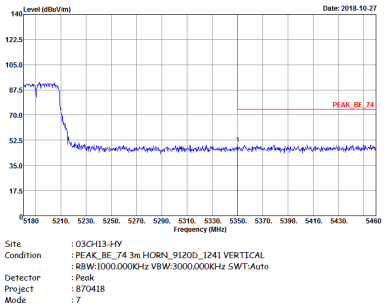
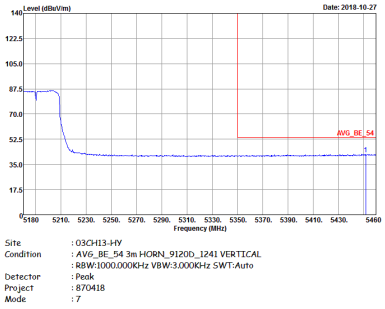
Band 1 5150~5250MHz

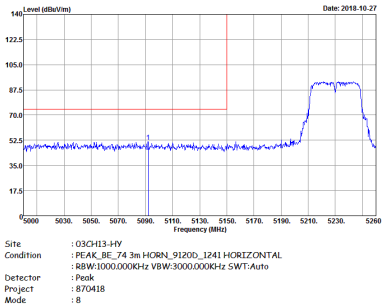
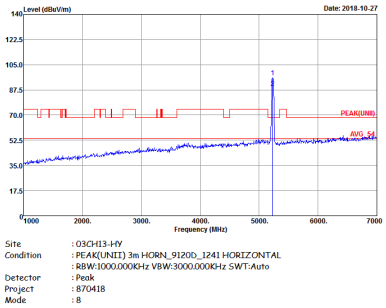
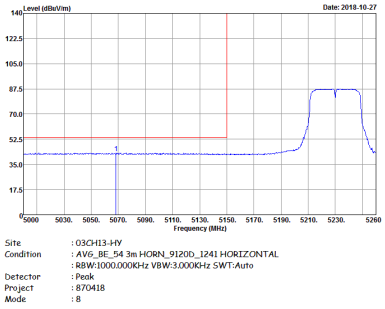
WIFI 802.11n HT40 (Band Edge @ 3m)

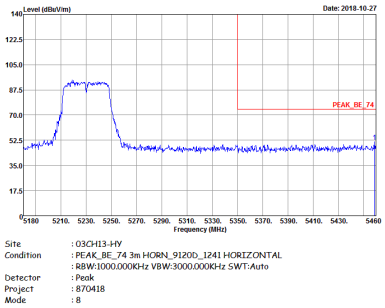
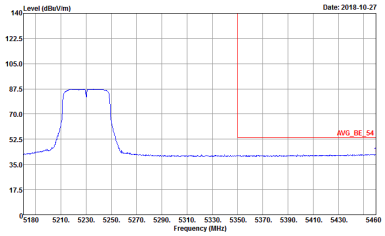
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH38 5190MHz - L	
1	Horizontal	Fundamental
Peak		
Avg.		Left blank

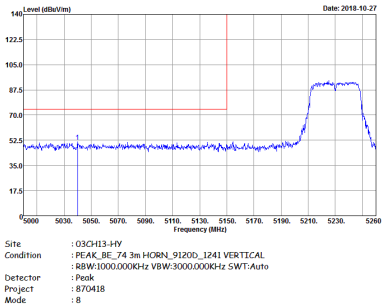
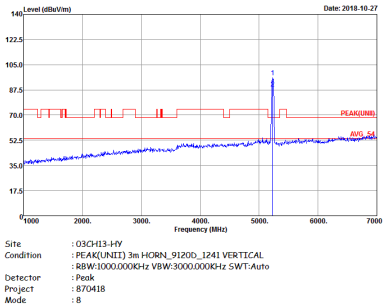
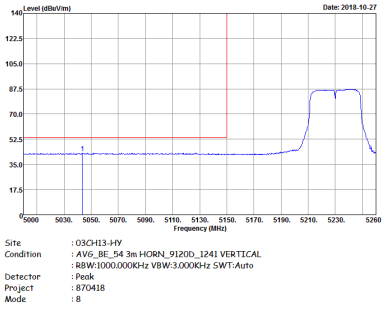
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH38 5190MHz - R	
1	Horizontal	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE_74 3m HORN_9120D_1241 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 870418 Mode : 7	Left blank
Avg.	 Site : 03CH13-HY Condition : AVG_BE_54 3m HORN_9120D_1241 HORIZONTAL : RBW:1000.000KHz VBW:3.000KHz SWT:Auto Detector : Peak Project : 870418 Mode : 7	Left blank

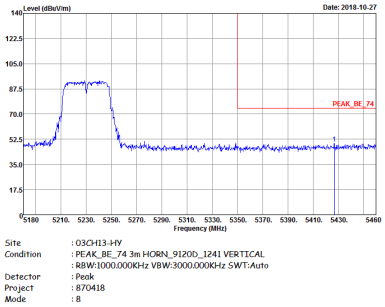
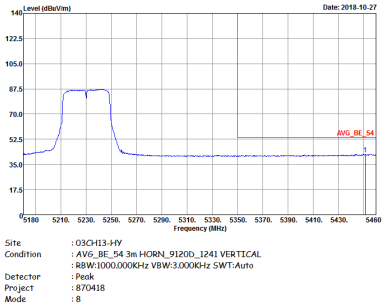
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH38 5190MHz - L	
1	Vertical	Fundamental
Peak		
Avg.		Left blank

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

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

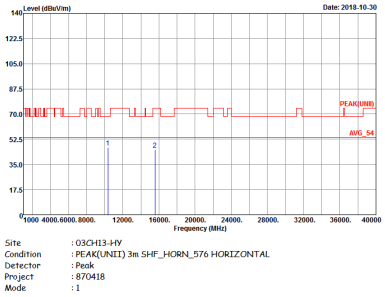
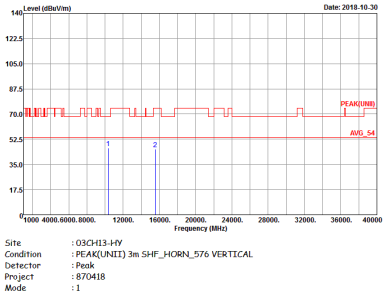
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH46 5230MHz - R	
1	Horizontal	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE_74 3m HORN_9120D_1241 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 870418 Mode : 8	Left blank
Avg.	 Site : 03CH13-HY Condition : AVG_BE_54 3m HORN_9120D_1241 HORIZONTAL : RBW:1000.000KHz VBW:3.000KHz SWT:Auto Detector : Peak Project : 870418 Mode : 8	Left blank

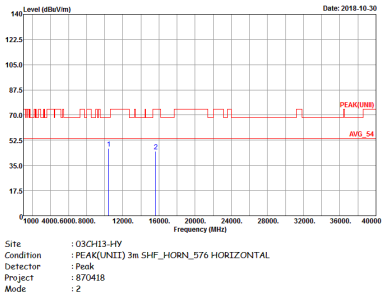
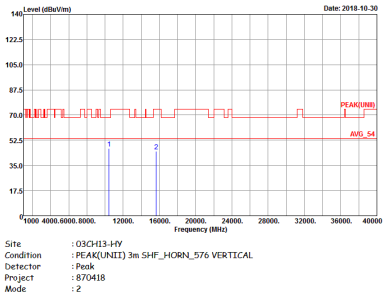
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH46 5230MHz - L	
1	Vertical	Fundamental
Peak		
Avg.		Left blank

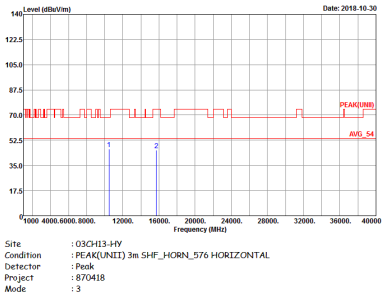
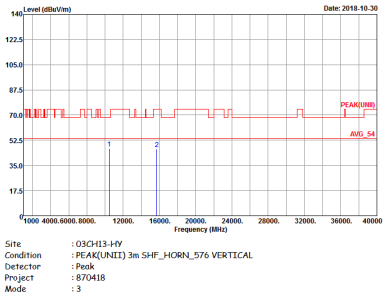
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH46 5230MHz - R	
1	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

Band 1 - 5150~5250MHz

WIFI 802.11a (Harmonic @ 3m)

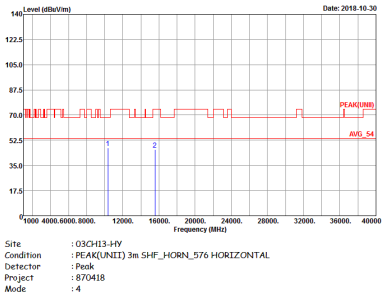
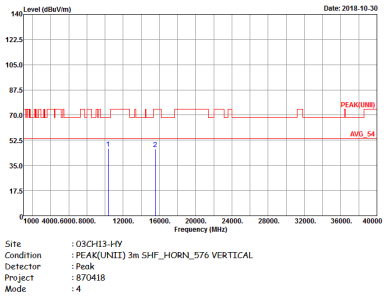
WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11a CH36 5180MHz	
1	Horizontal	Vertical
Peak Avg.		

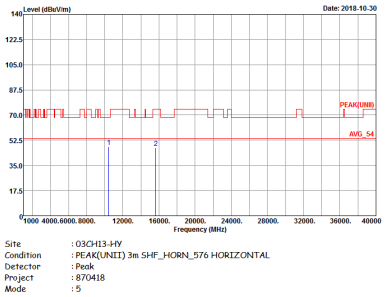
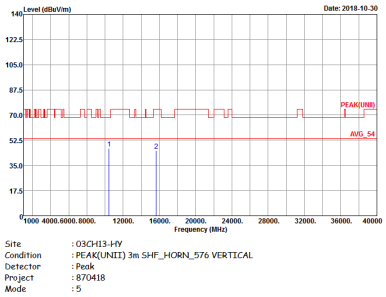
WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11a CH44 5220MHz	
1	Horizontal	Vertical
Peak Avg.		

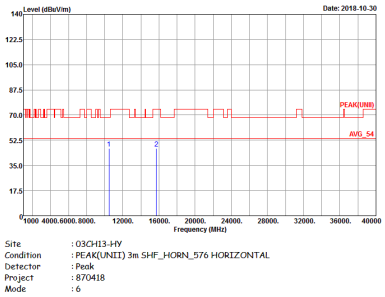
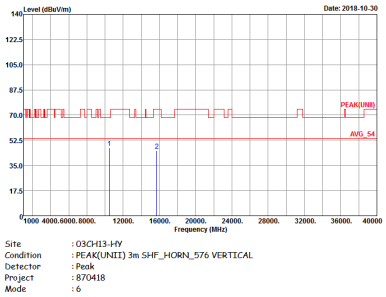
WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11a CH48 5240MHz	
1	Horizontal	Vertical
Peak Avg.		

Band 1 5150~5250MHz

WIFI 802.11n HT20 (Harmonic @ 3m)

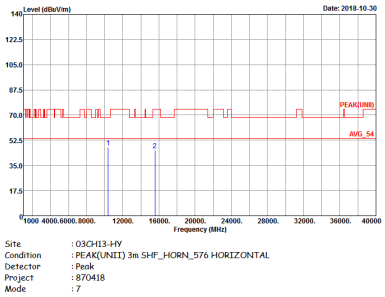
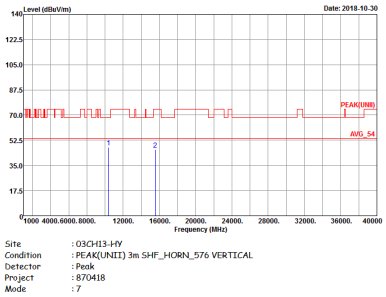
WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11n HT20 CH36 5180MHz	
1	Horizontal	Vertical
Peak Avg.		

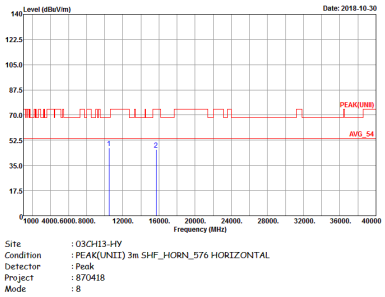
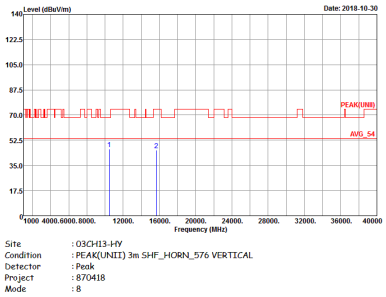
WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11n HT20 CH44 5220MHz	
1	Horizontal	Vertical
Peak Avg.		

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

Band 1 5150~5250MHz

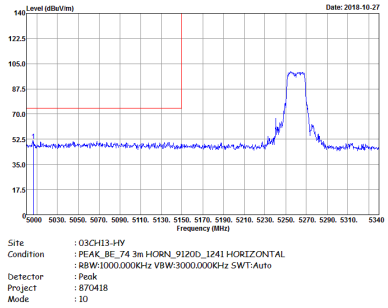
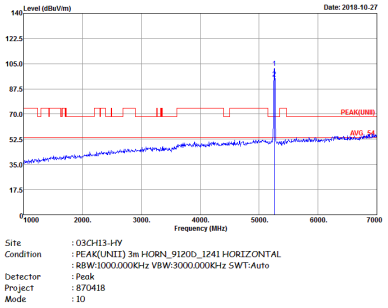
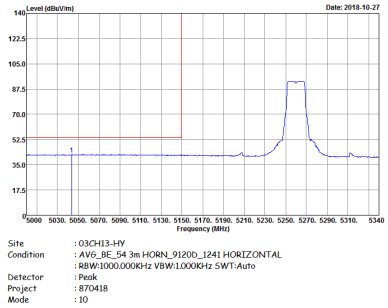
WIFI 802.11n HT40 (Harmonic @ 3m)

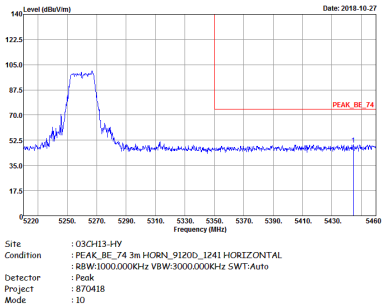
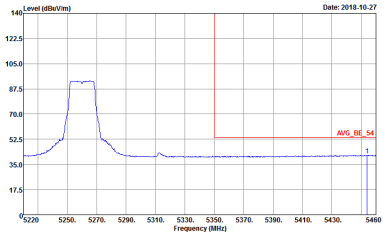
WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11n HT40 CH38 5190MHz	
1	Horizontal	Vertical
Peak Avg.		

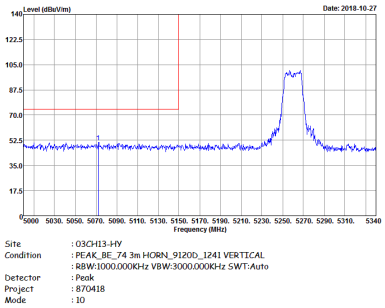
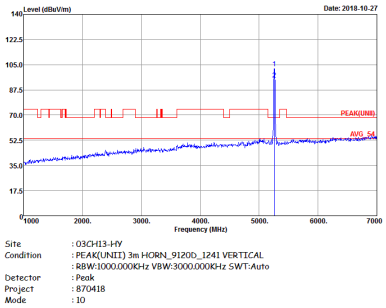
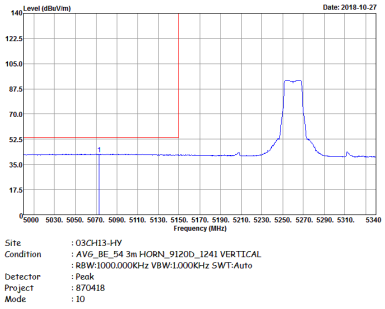
WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11n HT40 CH46 5230MHz	
1	Horizontal	Vertical
Peak Avg.		

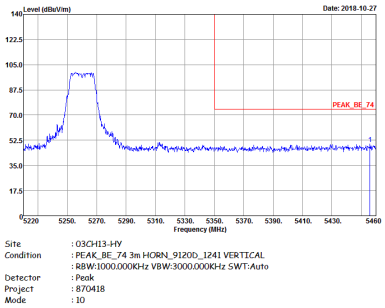
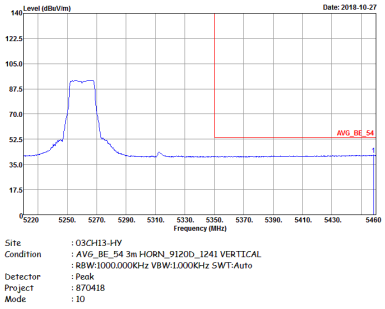
Band 2 - 5250~5350MHz

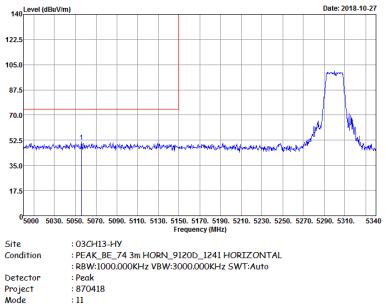
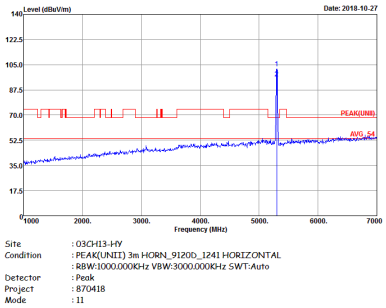
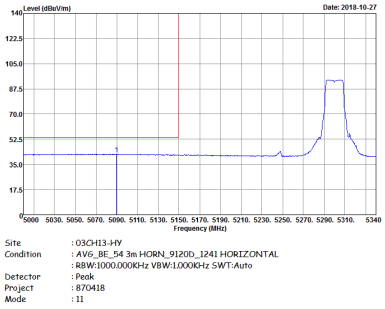
WIFI 802.11a (Band Edge @ 3m)

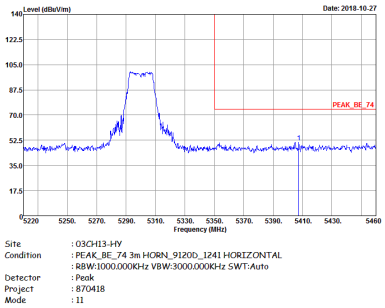
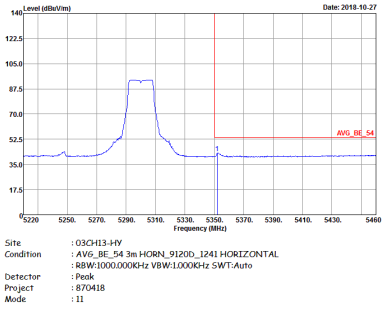
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH52 5260MHz - L	
1	Horizontal	Fundamental
Peak		
Avg.		Left blank

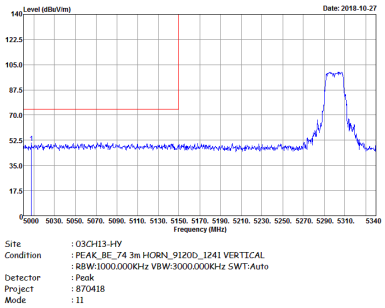
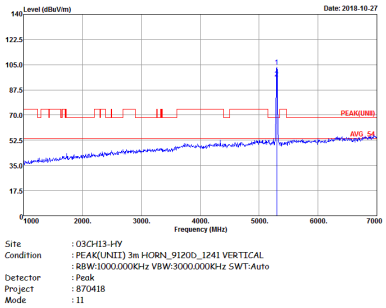
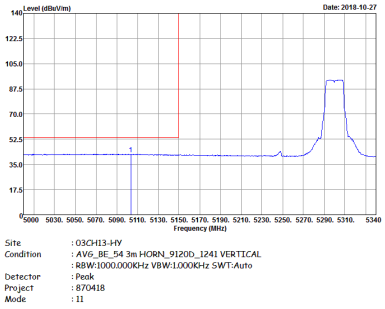
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH52 5260MHz - R	
1	Horizontal	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE_74 3m HORN_9120D_1241 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 870418 Mode : 10	Left blank
Avg.	 Site : 03CH13-HY Condition : AVG_BE_54 3m HORN_9120D_1241 HORIZONTAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto Detector : Peak Project : 870418 Mode : 10	Left blank

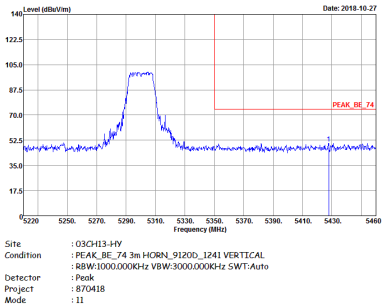
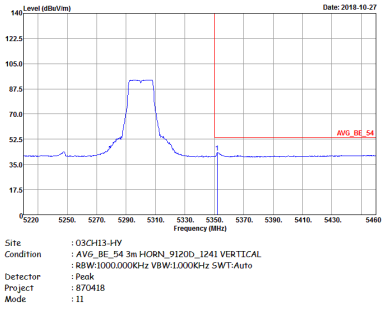
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH52 5260MHz - L	
1	Vertical	Fundamental
Peak		
Avg.		Left blank

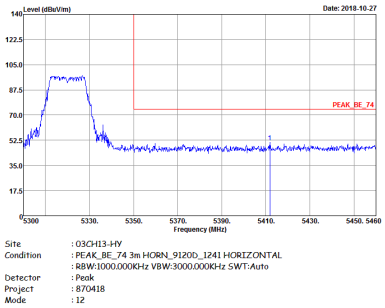
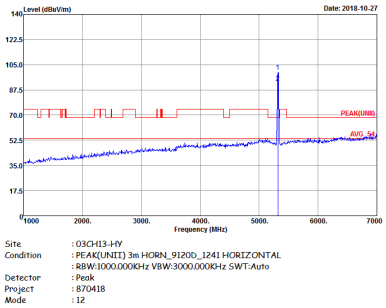
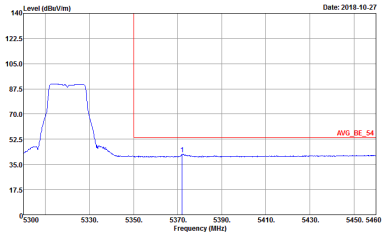
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH52 5260MHz - R	
1	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

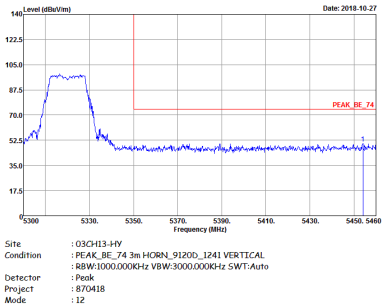
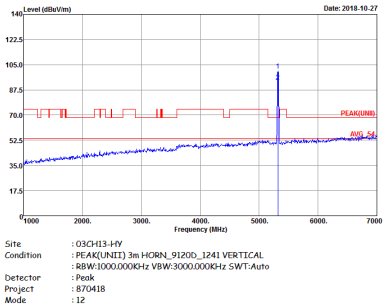
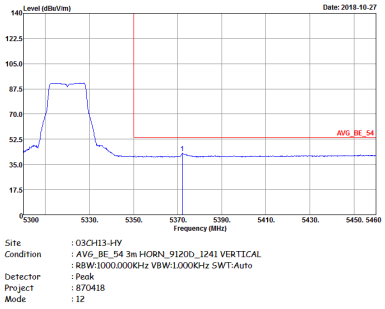
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH60 5300MHz - L	
1	Horizontal	Fundamental
Peak		
Avg.		Left blank

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

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

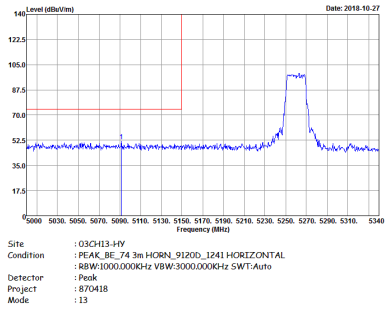
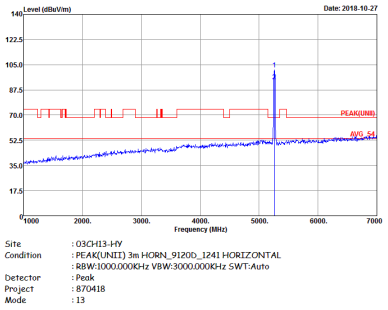
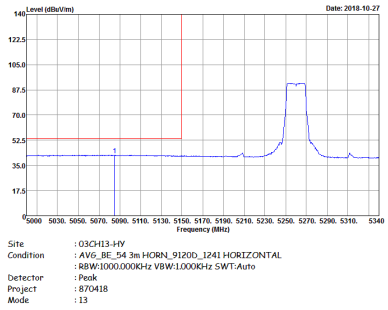
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH60 5300MHz - R	
1	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

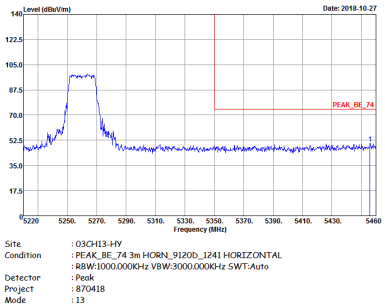
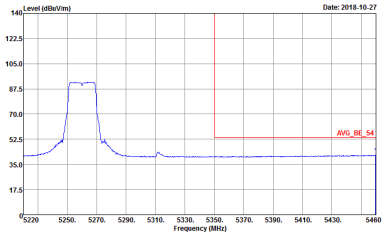
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH64 5320MHz	
1	Horizontal	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE_74 3m HORN_9120D_1241 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 870418 Mode : 12	 Site : 03CH13-HY Condition : PEAK(UNII) 3m HORN_9120D_1241 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 870418 Mode : 12
Avg.	 Site : 03CH13-HY Condition : AVG_BE_54 3m HORN_9120D_1241 HORIZONTAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto Detector : Peak Project : 870418 Mode : 12	Left blank

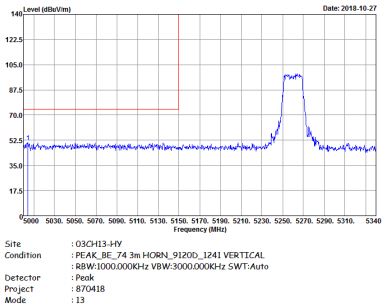
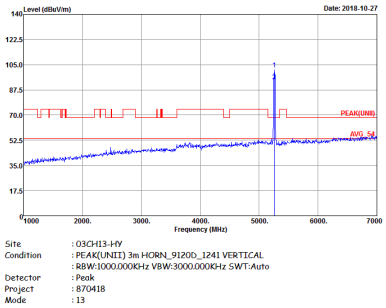
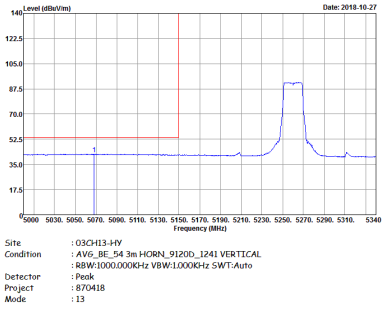
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH64 5320MHz	
1	Vertical	Fundamental
Peak		
Avg.		Left blank

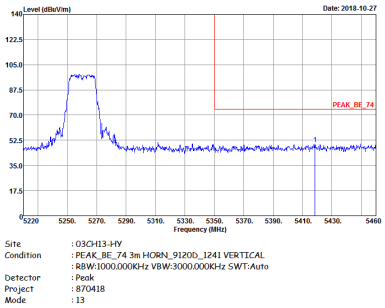
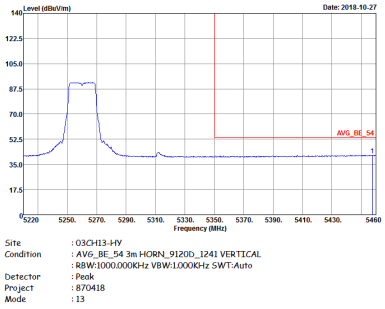
Band 2 5250~5350MHz

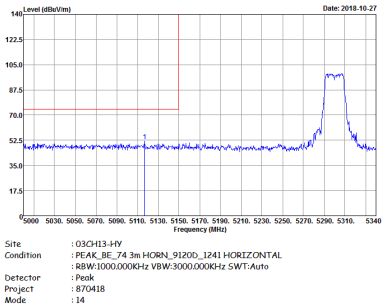
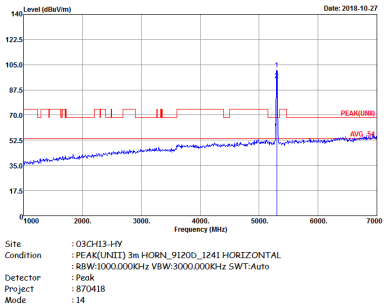
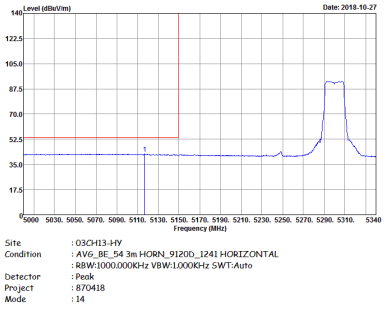
WIFI 802.11n HT20 (Band Edge @ 3m)

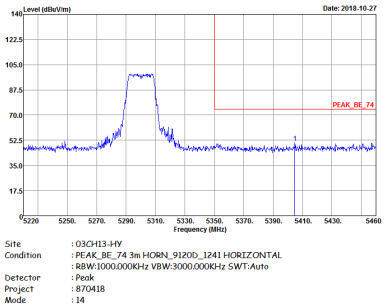
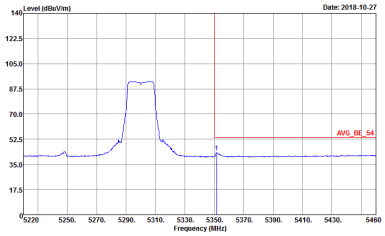
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH52 5260MHz - L	
1	Horizontal	Fundamental
Peak		
Avg.		Left blank

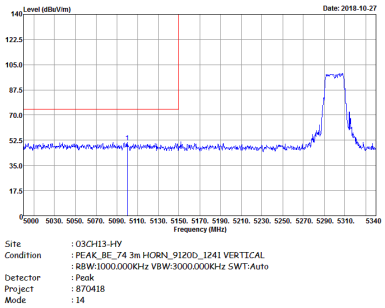
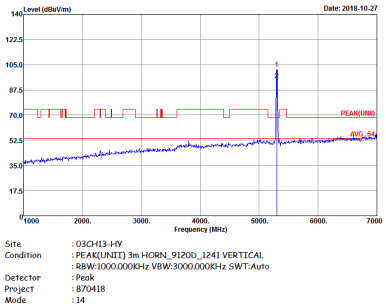
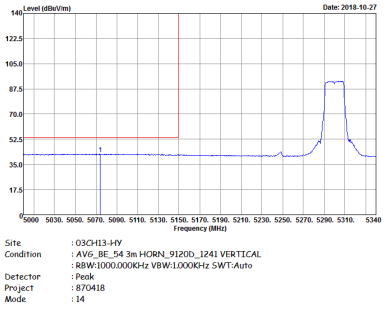
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH52 5260MHz - R	
1	Horizontal	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE_74 3m HORN_9120D_1241 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 870418 Mode : 13	Left blank
Avg.	 Site : 03CH13-HY Condition : AVG_BE_54 3m HORN_9120D_1241 HORIZONTAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto Detector : Peak Project : 870418 Mode : 13	Left blank

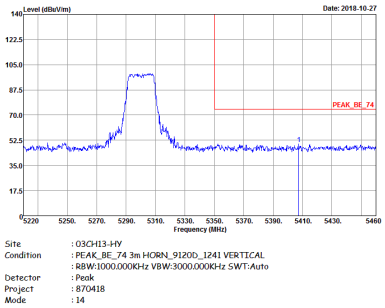
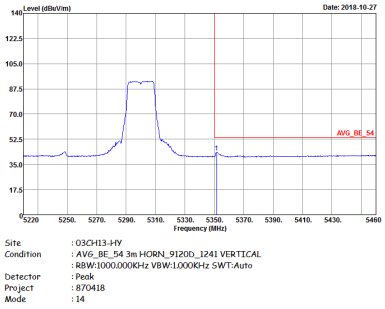
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH52 5260MHz - L	
1	Vertical	Fundamental
Peak		
Avg.		Left blank

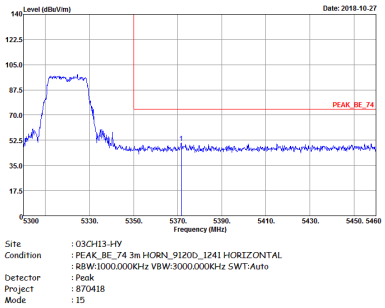
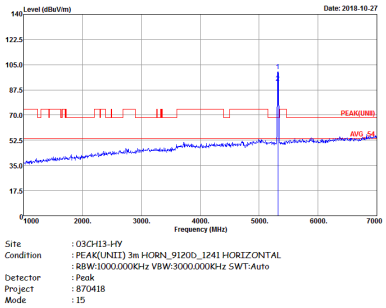
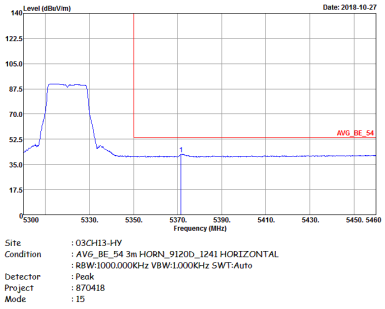
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH52 5260MHz - R	
1	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

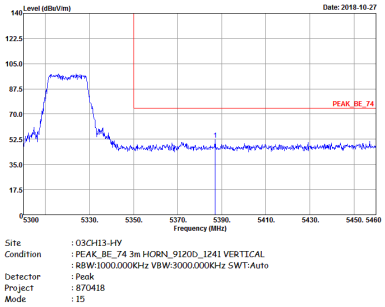
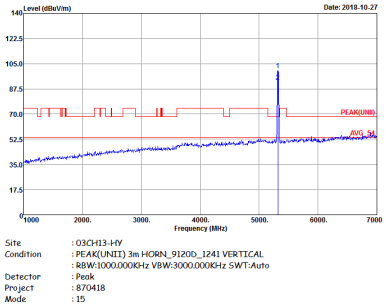
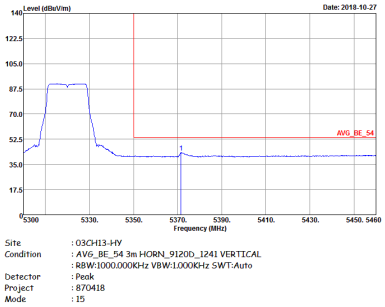
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH60 5300MHz - L	
1	Horizontal	Fundamental
Peak		
Avg.		Left blank

WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH60 5300MHz - R	
1	Horizontal	Vertical
Peak	 Site : 03CH13-HY Condition : PEAK_BE_74 3m HORN_9120D_1241 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 870418 Mode : 14	Left blank
Avg.	 Site : 03CH13-HY Condition : AVG_BE_54 3m HORN_9120D_1241 HORIZONTAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto Detector : Peak Project : 870418 Mode : 14	Left blank

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

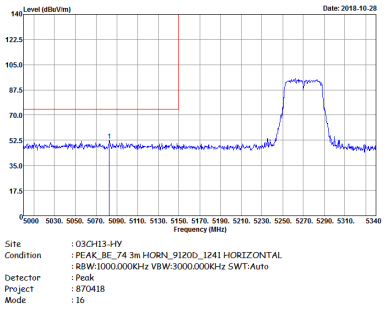
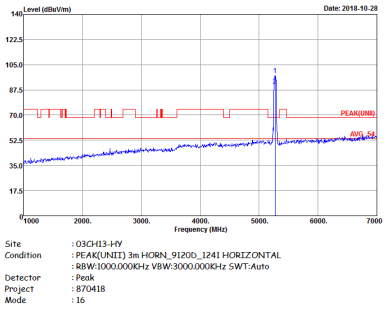
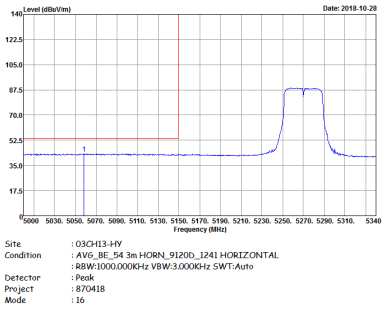
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH60 5300MHz - R	
1	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

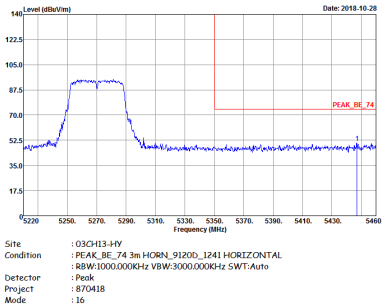
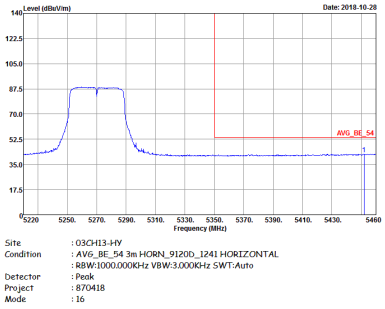
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH64 5320MHz	
1	Horizontal	Fundamental
Peak		
Avg.		Left blank

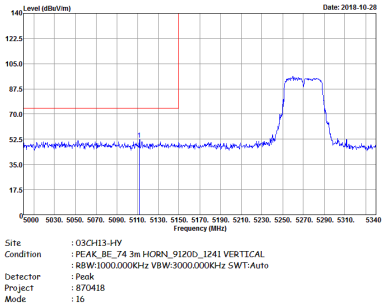
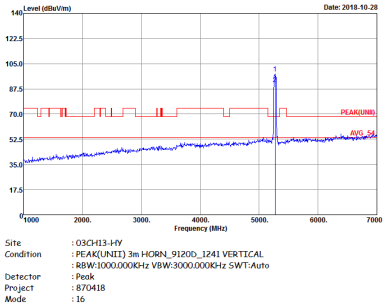
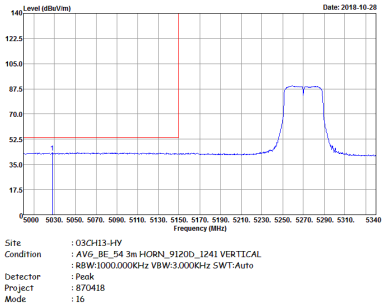
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH64 5320MHz	
1	Vertical	Fundamental
Peak		
Avg.		Left blank

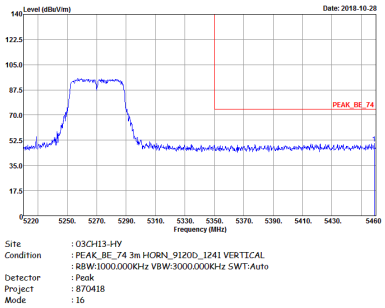
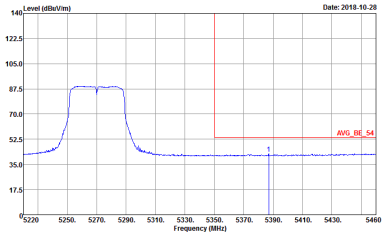
Band 2 5250~5350MHz

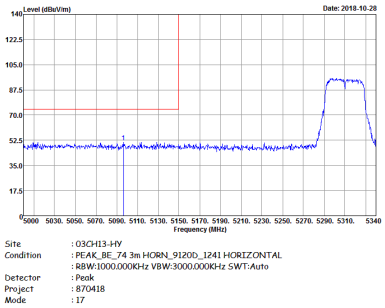
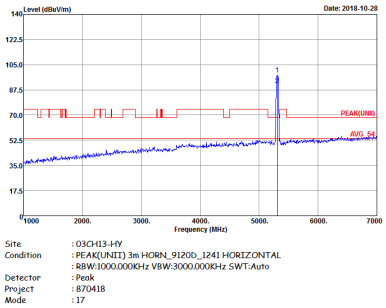
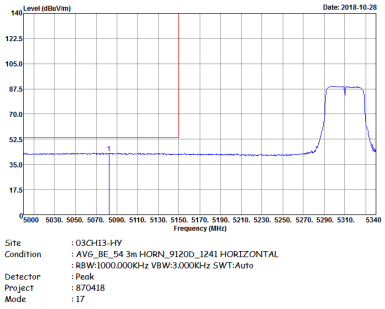
WIFI 802.11n HT40 (Band Edge @ 3m)

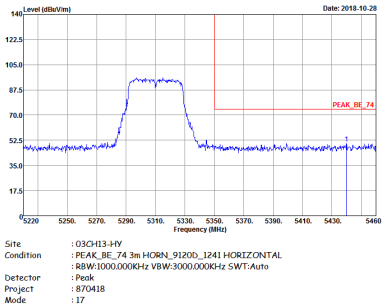
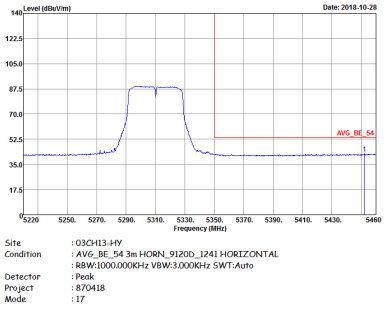
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT40 CH54 5270 - L	
1	Horizontal	Fundamental
Peak		
Avg.		Left blank

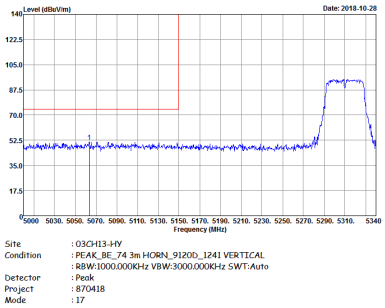
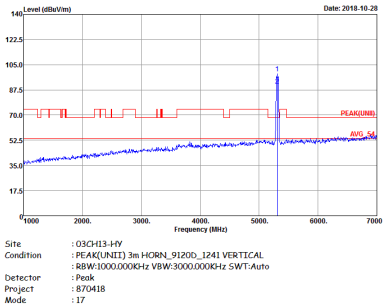
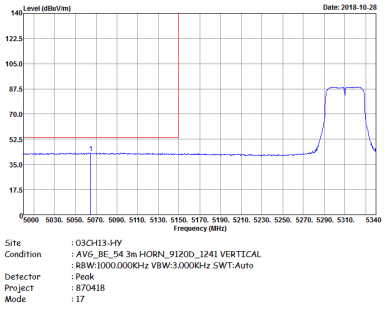
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT40 CH54 5270 - R	
1	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

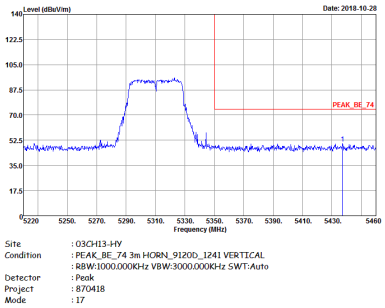
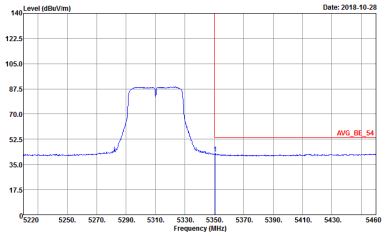
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT40 CH54 5270 - L	
1	Vertical	Vertical
Peak		
Avg.		Left blank

WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT40 CH54 5270 - R	
1	Vertical	Vertical
Peak	 Site : 03CH13-HY Condition : PEAK_BE_74 3m HORN_9120D_1241 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 870418 Mode : 16	Left blank
Avg.	 Site : 03CH13-HY Condition : AVG_BE_54 3m HORN_9120D_1241 VERTICAL : RBW:1000.000KHz VBW:3.000KHz SWT:Auto Detector : Peak Project : 870418 Mode : 16	Left blank

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

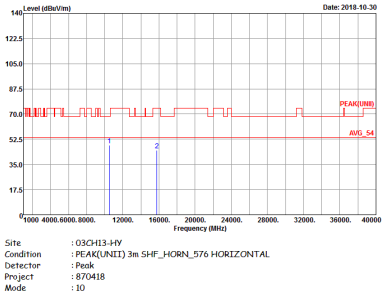
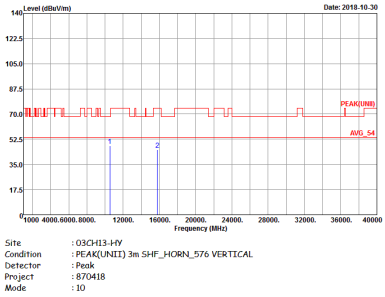
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT40 CH62 5310 - R	
1	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

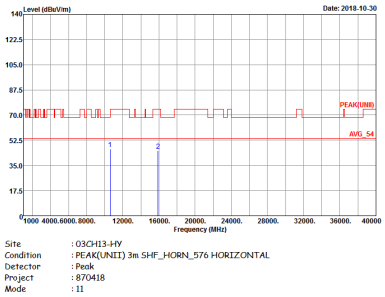
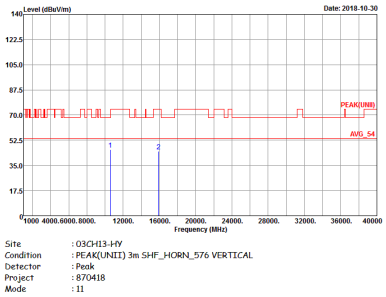
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT40 CH62 5310 - L	
1	Vertical	Fundamental
Peak		
Avg.		Left blank

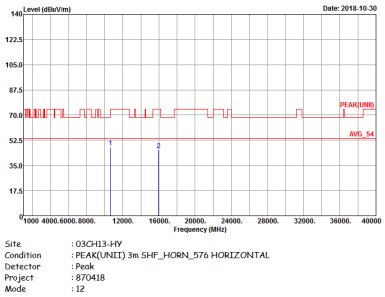
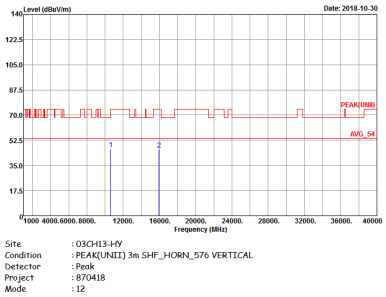
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT40 CH62 5310 - R	
1	Vertical	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE_74 3m HORN_9120D_1241 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 870418 Mode : 17	Left blank
Avg.	 Site : 03CH13-HY Condition : AVG_BE_54 3m HORN_9120D_1241 VERTICAL : RBW:1000.000KHz VBW:3.000KHz SWT:Auto Detector : Peak Project : 870418 Mode : 17	Left blank

Band 2 - 5250~5350MHz

WIFI 802.11a (Harmonic @ 3m)

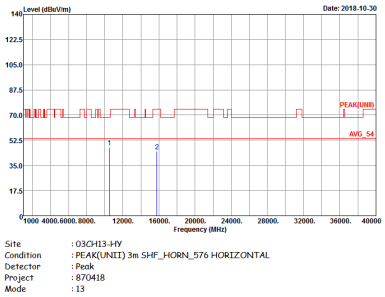
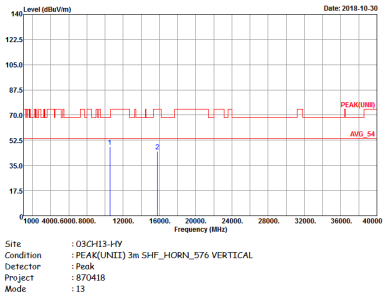
WIFI	Band 2 5250~5350MHz Harmonic @ 3m	
ANT	802.11a CH52 5260MHz	
1	Horizontal	Vertical
Peak Avg.		

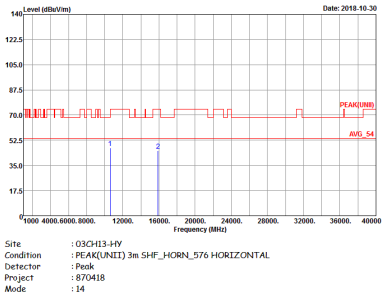
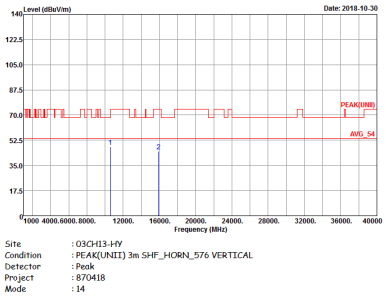
WIFI	Band 2 5250~5350MHz Harmonic @ 3m	
ANT	802.11a CH60 5300MHz	
1	Horizontal	Vertical
Peak Avg.		

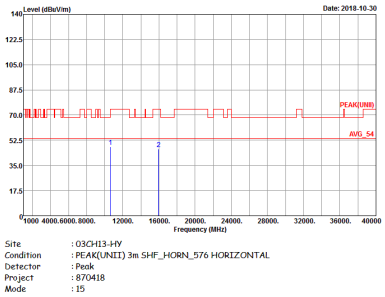
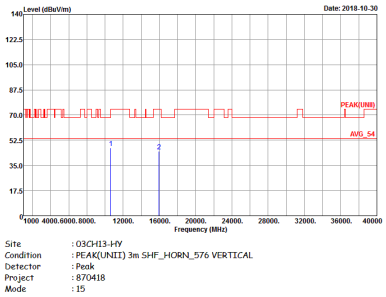
WIFI	Band 2 5250~5350MHz Harmonic @ 3m	
ANT	802.11a CH64 5320MHz	
1	Horizontal	Vertical
Peak Avg.		

Band 2 5250~5350MHz

WIFI 802.11n HT20 (Harmonic @ 3m)

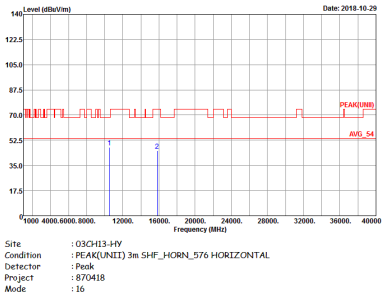
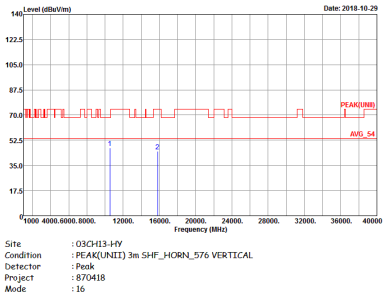
WIFI	Band 2 5250~5350MHz Harmonic @ 3m	
ANT	802.11n HT20 CH52 5260MHz	
1	Horizontal	Vertical
Peak Avg.		

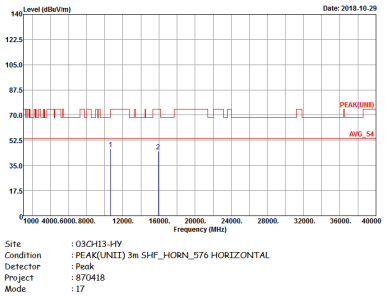
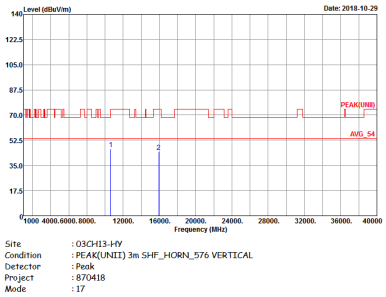
WIFI	Band 2 5250~5350MHz Harmonic @ 3m	
ANT	802.11n HT20 CH60 5300MHz	
1	Horizontal	Vertical
Peak Avg.		

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

Band 2 5250~5350MHz

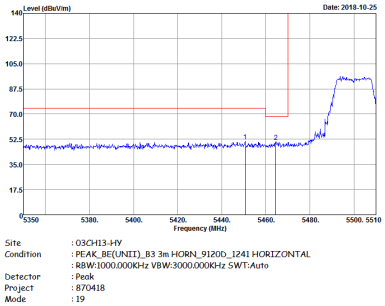
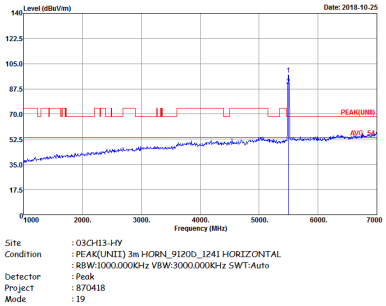
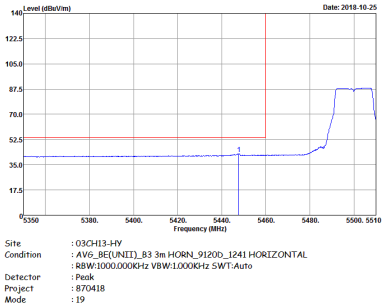
WIFI 802.11n HT40 (Harmonic @ 3m)

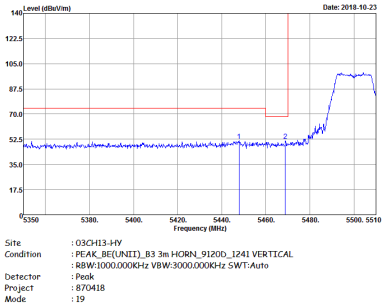
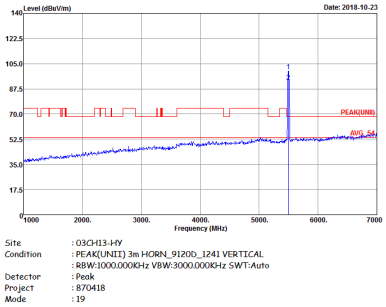
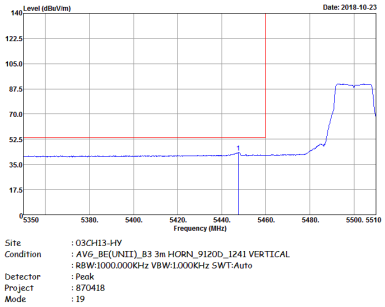
WIFI	Band 2 5250~5350MHz Harmonic @ 3m	
ANT	802.11n HT40 CH54 5270	
1	Horizontal	Vertical
Peak Avg.		

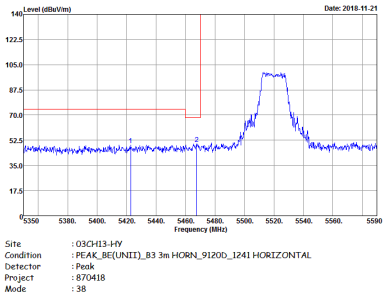
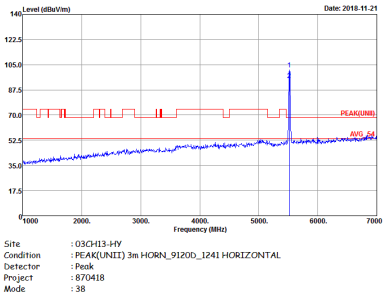
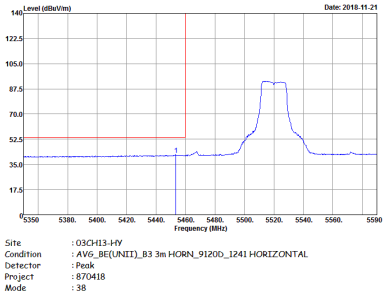
WIFI	Band 2 5250~5350MHz Harmonic @ 3m	
ANT	802.11n HT40 CH62 5310	
1	Horizontal	Vertical
Peak Avg.		

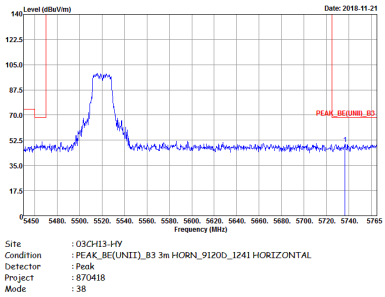
Band 3 - 5470~5725MHz

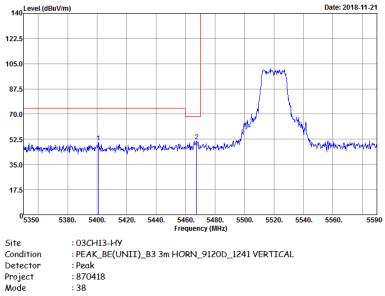
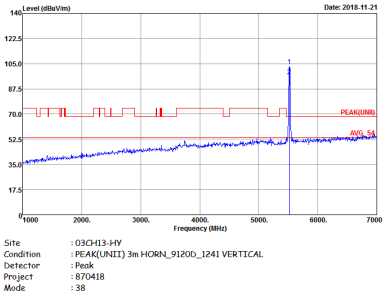
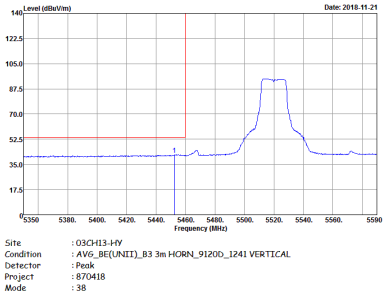
WIFI 802.11a (Band Edge @ 3m)

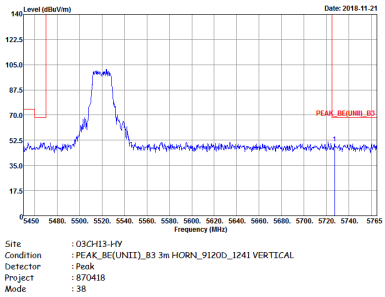
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH100 5500MHz	
1	Horizontal	Fundamental
Peak		
Avg.		Left blank

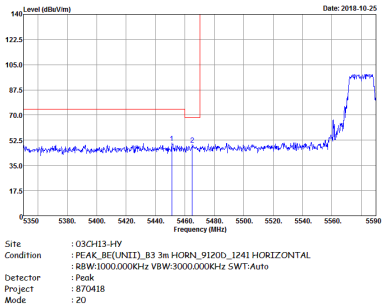
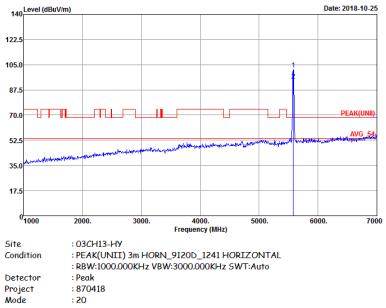
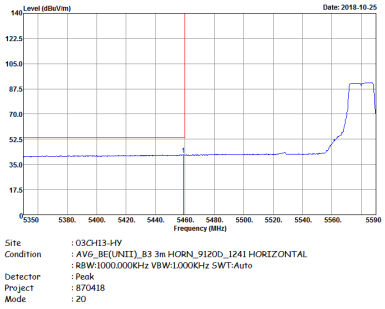
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH100 5500MHz	
1	Vertical	Fundamental
Peak		
Avg.		Left blank

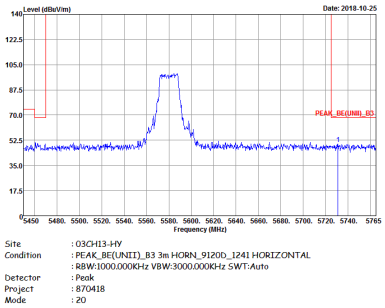
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH104 5520MHz - L	
1	Horizontal	Fundamental
Peak		
Avg.		Left blank

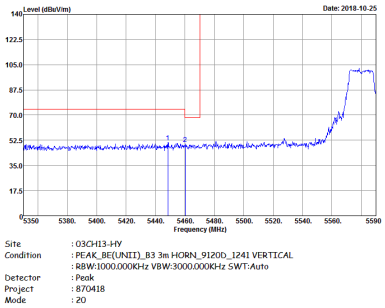
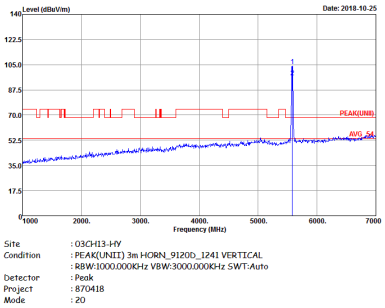
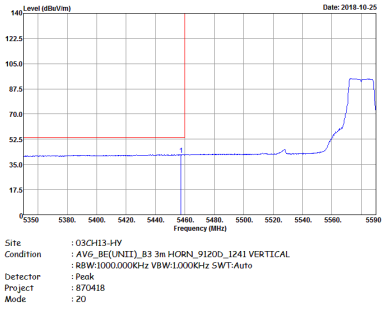
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH104 5520MHz - R	
1	Horizontal	Fundamental
Peak		Left blank

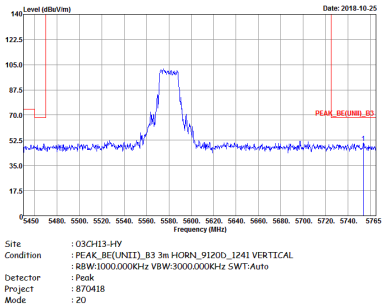
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH104 5520MHz - L	
1	Vertical	Fundamental
Peak		
Avg.		Left blank

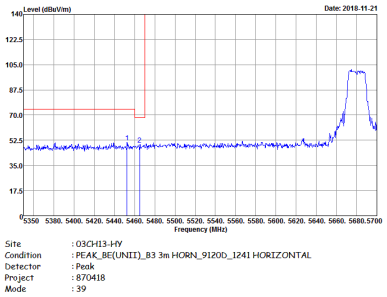
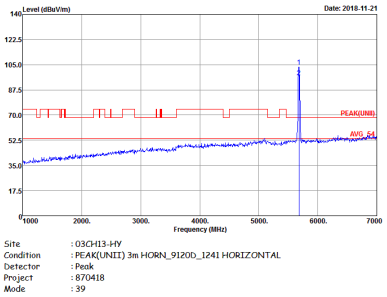
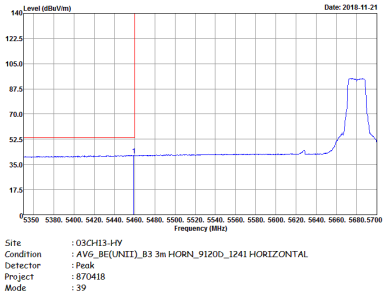
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH104 5520MHz - R	
1	Vertical	Fundamental
Peak		Left blank

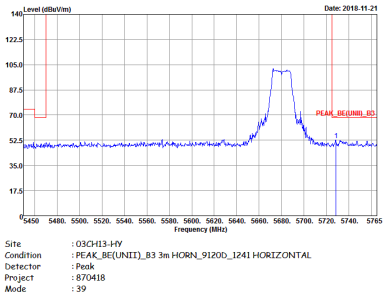
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH116 5580MHz - L	
1	Horizontal	Fundamental
Peak		
Avg.		Left blank

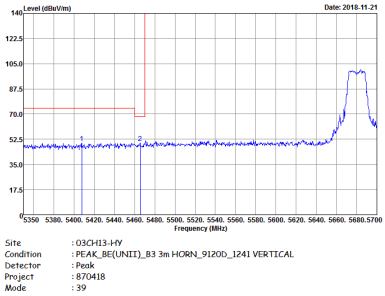
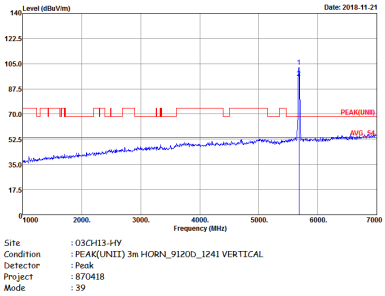
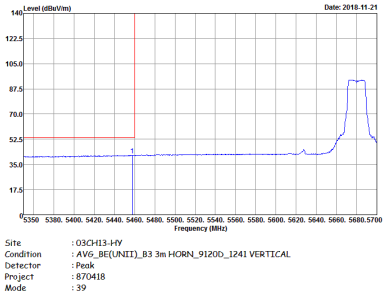
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH116 5580MHz - R	
1	Horizontal	Fundamental
Peak		Left blank

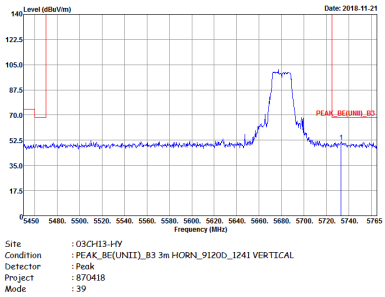
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH116 5580MHz - L	
1	Vertical	Fundamental
Peak		
Avg.		Left blank

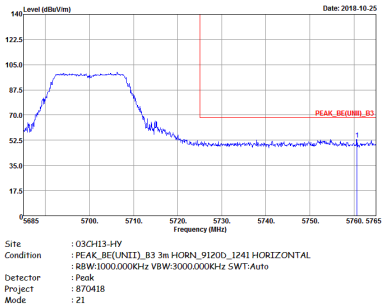
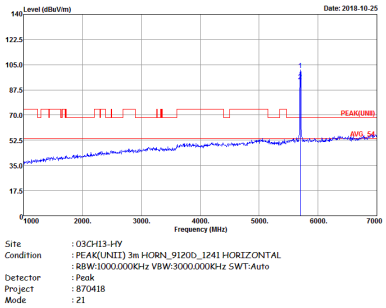
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH116 5580MHz - R	
1	Vertical	Fundamental
Peak		Left blank

WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH136 5680MHz - L	
1	Horizontal	Fundamental
Peak		
Avg.		Left blank

WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH136 5680MHz - R	
1	Horizontal	Fundamental
Peak		Left blank

WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH136 5680MHz - L	
1	Vertical	Fundamental
Peak		
Avg.		Left blank

WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH136 5680MHz - R	
1	Vertical	Fundamental
Peak		Left blank

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

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