



FCC RADIO TEST REPORT

FCC ID : UDX-60076025
Equipment : Wi-Fi Router
Brand Name : CISCO
Model Name : MX68W-HW
Applicant : Cisco Systems, Inc.
170 West Tasman Drive, San Jose, CA 95134
Standard : FCC Part 15 Subpart E §15.407

The product was received on Apr. 10, 2018 and testing was started from Apr. 24, 2018 and completed on Jun. 12, 2018. We, SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory, would like to declare that the tested sample has been evaluated in accordance with the test procedures and has been in compliance with the applicable technical standards.

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

Louis Wu

Approved by: Louis Wu

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



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History of this test report

Report No.	Version	Description	Issued Date
FR832026-04	01	Initial issue of report	Dec. 25, 2020

Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
3.1	15.403(i)	26dB Bandwidth	Pass	-
3.1	2.1049	99% Occupied Bandwidth	Reporting only	-
3.2	15.407(a)	Maximum Conducted Output Power	Pass	-
3.3	15.407(a)	Power Spectral Density	Pass	-
3.4	15.407(b)	Unwanted Emissions	Pass	Under limit 1.07 dB at 5725.515 MHz
3.5	15.207	AC Conducted Emission	Pass	Under limit 20.11 dB at 0.233 MHz
3.6	15.407(c)	Automatically Discontinue Transmission	Pass	-
3.7	15.203 15.407(a)	Antenna Requirement	Pass	-

Note: This report is by updating SW for DFS. Since the test result is not affected by the changes, the FR832026-04 report reuse test data from the FR832026C report.

Declaration of Conformity:

The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.

Comments and Explanations:

The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.

Reviewed by: Wii Chang

Report Producer: Lucy Wu

1 General Description

1.1 Product Feature of Equipment Under Test

Wi-Fi 2.4GHz 802.11b/g/n/ac and Wi-Fi 5GHz 802.11a/n/ac

Product specification subjective to this standard		
Antenna Type	Dipole Antenna	
Antenna information		
5250 MHz ~ 5350 MHz	Peak Gain (dBi)	Ant. 1: 3.1 Ant. 2: 3.1
5470 MHz ~ 5725 MHz	Peak Gain (dBi)	Ant. 1: 2.8 Ant. 2: 2.8

Remark: The above EUT's information was declared by manufacturer. Please refer to Comments and Explanations in report summary.

1.2 Modification of EUT

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

1.3 Testing Location

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

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

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

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

FCC designation No.: TW1190 and TW0007



1.4 Applicable Standards

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

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

Remark:

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

2 Test Configuration of Equipment Under Test

- a. The EUT has been associated with peripherals and configuration operated in a manner tended to maximize its emission characteristics in a typical application. Frequency range investigated: conduction emission (150 kHz to 30 MHz), radiation emission (9 kHz to the 10th harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower). For radiated measurement, pre-scanned in two degrees (0 or 90). The worst cases (Ant. 90°) 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)
5250-5350 MHz Band 2 (U-NII-2A)	52	5260	60	5300
	54*	5270	62*	5310
	56	5280	64	5320
	58 [#]	5290		

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

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

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

Note:

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

2.2 Test Mode

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

MIMO Mode

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

TXBF Mode (Power Only)

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

Test Cases	
AC Conducted Emission	Mode 1 : WLAN (5GHz) Link + RJ-45 Link (LAN) + RJ-45 Link (WAN) + USB Link + Adapter + POE

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

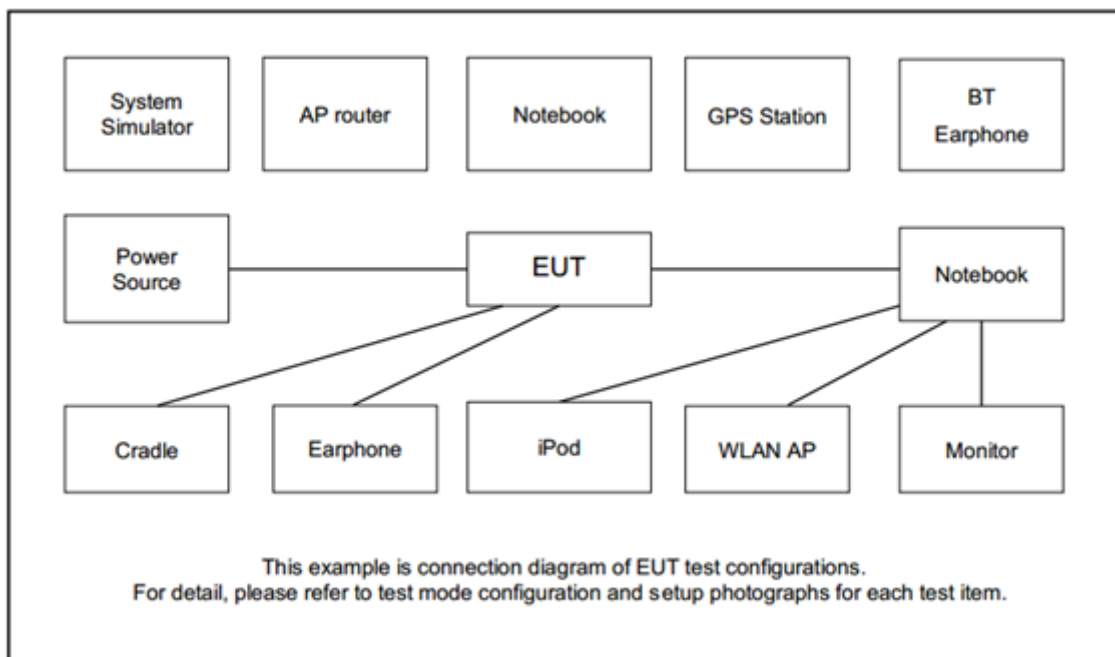
Ch. #		Band II : 5250-5350 MHz	Band III : 5470-5725MHz
		802.11n HT20	802.11n HT20
L	Low	52	100
M	Middle	60	116
H	High	64	140
Straddle		-	144

Ch. #		Band II : 5250-5350 MHz	Band III : 5470-5725MHz
		802.11n HT40	802.11n HT40
L	Low	54	102
M	Middle	-	110
H	High	62	134
Straddle		-	142

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

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

2.3 Connection Diagram of Test System



2.4 Support Unit used in test configuration and system

Item	Equipment	Brand Name	Model Name	FCC ID	Data Cable	Power Cord
1.	Notebook	DELL	Latitude E6320	FCC DoC/ Contains FCC ID: QDS-BRCM1054	N/A	AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m
2.	USB Flash Drive	Kingston	DataTraveler 100	FCC DoC	N/A	N/A

2.5 EUT Operation Test Setup

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



2.6 Measurement Results Explanation Example

For all conducted test items:

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

Example :

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

Offset = RF cable loss + attenuator factor.

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

$$\begin{aligned}\text{Offset(dB)} &= \text{RF cable loss(dB)} + \text{attenuator factor(dB)} \\ &= 4.2 + 10 = 14.2 \text{ (dB)}\end{aligned}$$

3 Test Result

3.1 26dB & 99% Occupied Bandwidth Measurement

3.1.1 Description of 26dB & 99% Occupied Bandwidth

This section is for reporting purpose only.

There is no restriction limits for bandwidth.

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

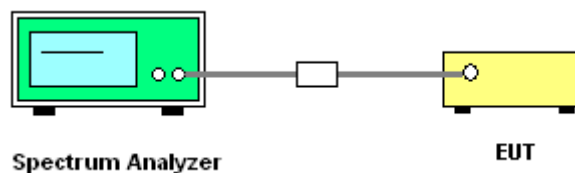
3.1.2 Measuring Instruments

See list of measuring equipment of this test report.

3.1.3 Test Procedures

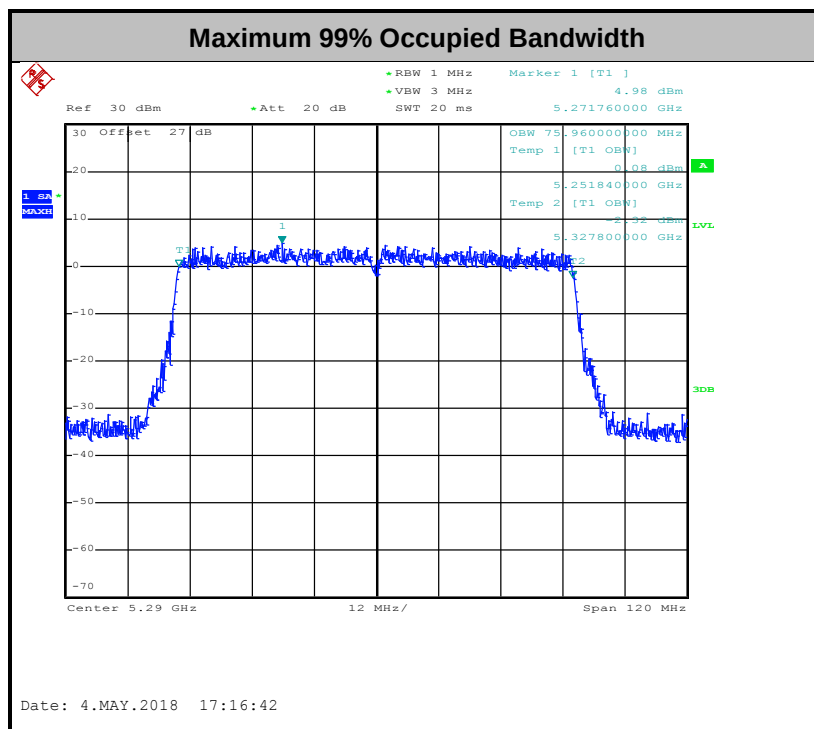
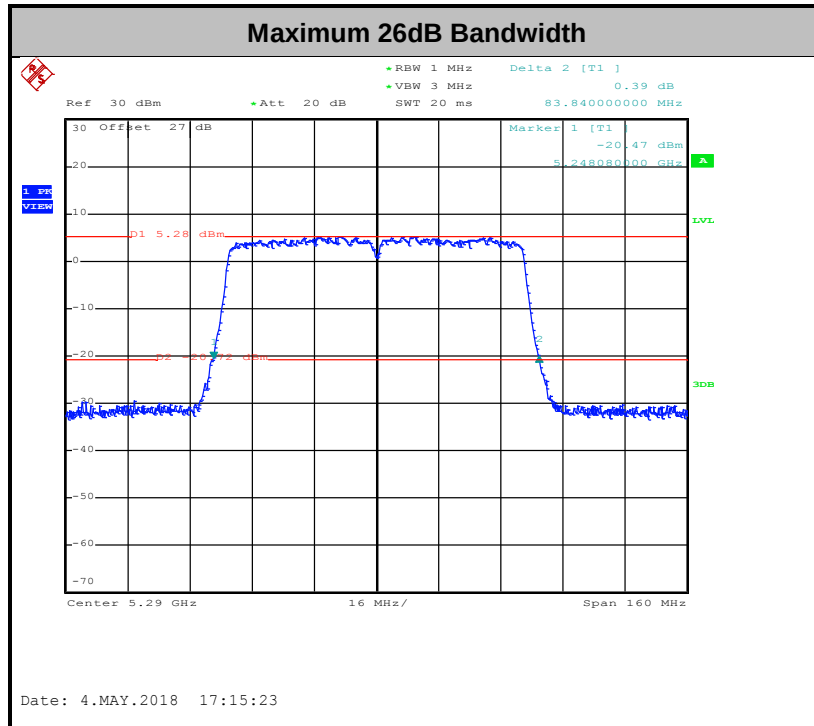
1. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01. Section C) Emission bandwidth
2. Set RBW = approximately 1% of the emission bandwidth.
3. Set the VBW > RBW.
4. Detector = Peak.
5. Trace mode = max hold
6. Measure the maximum width of the emission that is 26 dB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



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 5.25–5.725 GHz bands:

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

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

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

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

3.2.2 Measuring Instruments

See list of measuring equipment of this test report.

3.2.3 Test Procedures

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

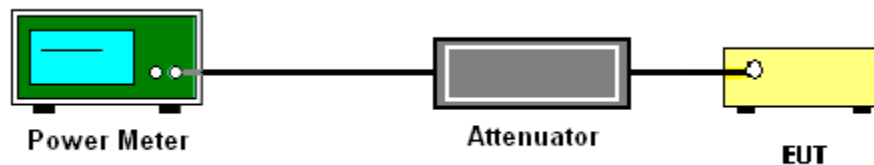
Method PM (Measurement using an RF average power meter):

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

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

Additional TXBF gain $10\log(N = 2)$ has offset to the CDD mode in order to show compliance for TXBF mode.

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 5.25–5.725 GHz bands:

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

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

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

3.3.2 Measuring Instruments

See list of measuring equipment of this test report.

3.3.3 Test Procedures

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

Section F) Maximum power spectral density.

Method SA-2

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

- Measure the duty cycle.
- Set span to encompass the entire emission bandwidth (EBW) of the signal.
- Set RBW = 1 MHz.
- Set VBW $\geq$ 3 MHz.
- Number of points in sweep $\geq$ 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.

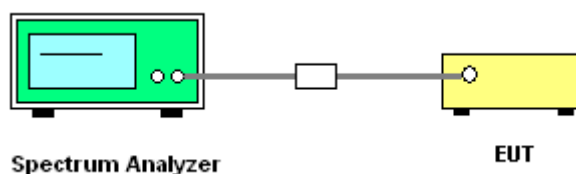
The RF output of EUT was connected to the spectrum analyzer by a low loss cable.

1. Each plot has already offset with cable loss, and attenuator loss. Measure the PPSD and record it.
2. For MIMO mode, calculation method follows FCC KDB 662911 D01 Multiple Transmitter Output v02r01.

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

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

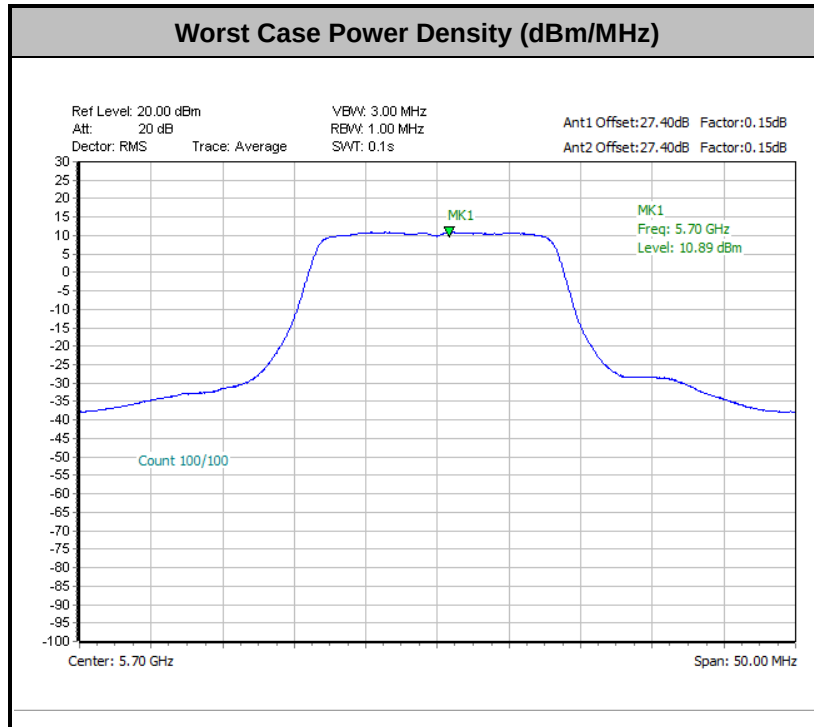
3.3.4 Test Setup





3.3.5 Test Result of Power Spectral Density

Please refer to Appendix A.



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 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.

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

EIRP (dBm)	Field Strength at 3m (dB μ V/m)
- 27	68.3

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

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

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

3.4.2 Measuring Instruments

See list of measuring equipment of this test report.

3.4.3 Test Procedures

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

Section G) Unwanted emissions measurement.

(1) Procedure for Unwanted Emissions Measurements Below 1000MHz

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

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

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

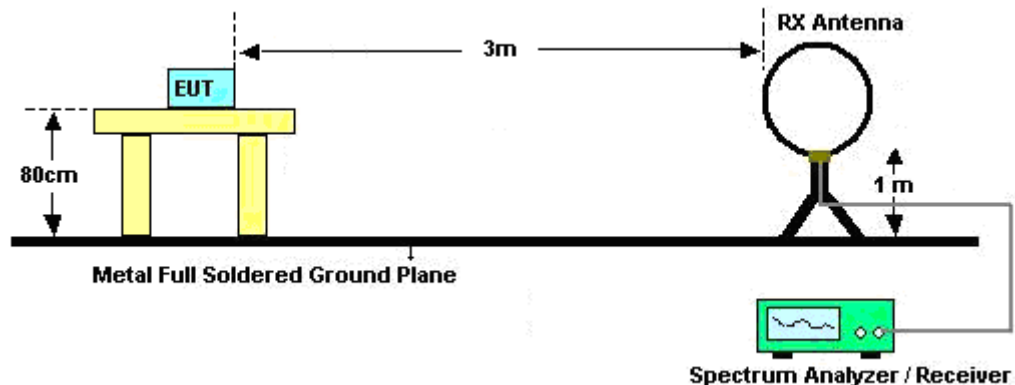
(3) Procedures for Average Unwanted Emissions Measurements Above 1000MHz

- RBW = 1 MHz
- VBW = 10 Hz, when duty cycle is no less than 98 percent.
- VBW $\geq$ 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.

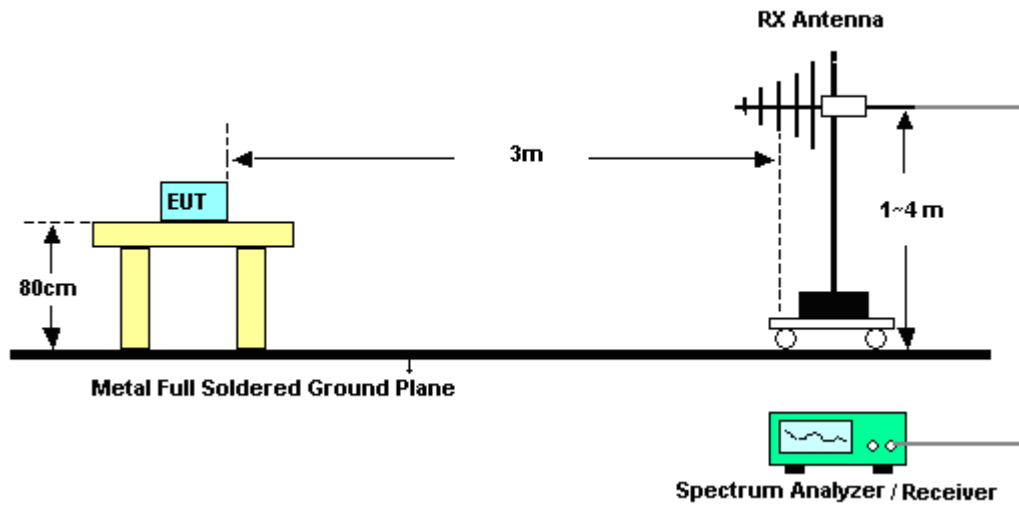
2. The EUT was placed on a turntable with 0.8 meter for frequency below 1GHz and 1.5 meter for frequency above 1GHz respectively above ground.
3. The EUT was set 3 meters from the interference receiving antenna which was mounted on the top of a variable height antenna tower.
4. The antenna is a broadband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

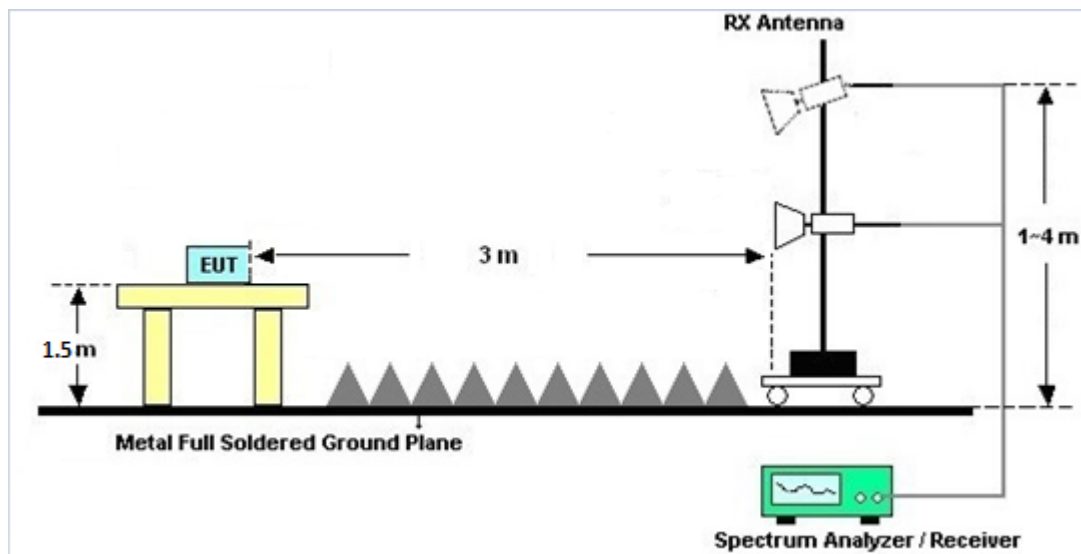
For radiated emissions below 30MHz



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 (dB μ V)	
	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.

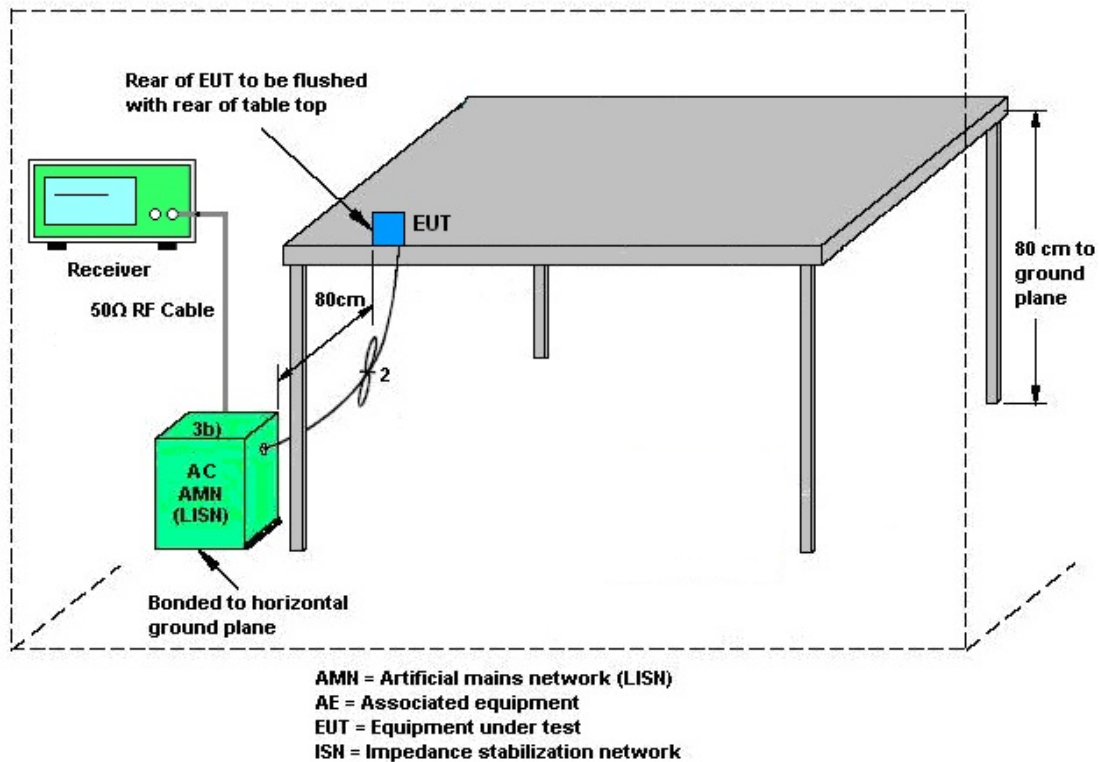
3.5.2 Measuring Instruments

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



3.5.5 Test Result of AC Conducted Emission

Please refer to Appendix B.

3.6 Automatically Discontinue Transmission

3.6.1 Limit of Automatically Discontinue Transmission

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

3.6.2 Measuring Instruments

See list of measuring equipment of this test report.

3.6.3 Test Result of Automatically Discontinue Transmission

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

3.7 Antenna Requirements

3.7.1 Standard Applicable

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

3.7.2 Antenna Anti-Replacement Construction

An embedded-in antenna design is used.

3.7.3 Antenna Gain

<CDD Modes>

FCC KDB 662911 D01 Multiple Transmitter Output v02r01

For CDD transmissions, directional gain is calculated as

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

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

Array Gain = $10 \log(\text{NANT}/\text{NSS}=1)$ dB.

For power measurements on IEEE 802.11 devices,

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

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

The EUT supports CDD mode.

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

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

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

The directional gain "DG" is calculated as following table.

<CDD Modes>						
			DG for Power (dBi)	DG for PSD (dBi)	Power Limit Reduction (dB)	PSD Limit Reduction (dB)
	Ant. 1 (dBi)	Ant. 2 (dBi)				
Band II	3.10	3.10	3.10	6.11	0.00	0.11
Band III	2.80	2.80	2.80	5.81	0.00	0.00

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

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

TXBF modes

FCC KDB 662911 D01 Multiple Transmitter Output v02r01

For CDD transmissions, directional gain is calculated as

$$DirectionalGain = 10 \cdot \log \left[\frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right]$$

where

Each antenna is driven by no more than one spatial stream;

N_{SS} = the number of independent spatial streams of data;

N_{ANT} = the total number of antennas

$g_{j,k} = 10^{G_k / 20}$ if the k th antenna is being fed by spatial stream j , or zero if it is not;
 G_k is the gain in dBi of the k th antenna.

The EUT supports beamforming for 802.11ac modes.

The directional gain calculation is following F)2)e)ii) of KDB 662911 D01 v02r01.

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

The directional gain "DG" is calculated as following table.

			DG	DG	Power	PSD
			for	for	Limit	Limit
	Ant 1	Ant 2	Power	PSD	Reduction	Reduction
	(dBi)	(dBi)	(dBi)	(dBi)	(dB)	(dB)
Band II	3.10	3.10	6.11	6.11	0.11	0.11
Band III	2.80	2.80	5.81	5.81	0.00	0.00

$Power\ Limit\ Reduction = DG(Power) - 6dBi, (min = 0)$

$PSD\ Limit\ Reduction = DG(PSD) - 6dBi, (min = 0)$



4 List of Measuring Equipment

Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Power Meter	Anritsu	ML2495A	1240001	N/A	Sep. 07, 2017	Apr. 24, 2018~ May 10, 2018	Sep. 06, 2018	Conducted (TH05-HY)
Power Sensor	Anritsu	MA2411B	1207349	300MHz~40GHz	Sep. 07, 2017	Apr. 24, 2018~ May 10, 2018	Sep. 06, 2018	Conducted (TH05-HY)
Spectrum Analyzer	Rohde & Schwarz	FSP40	100055	9kHz~40GHz	Jun. 20, 2017	Apr. 24, 2018~ May 10, 2018	Jun. 19, 2018	Conducted (TH05-HY)
Switch Box & RF Cable	Burgeon	ETF-058	EC130048 5	N/A	Mar. 01, 2018	Apr. 24, 2018~ May 10, 2018	Feb. 28, 2019	Conducted (TH05-HY)
AC Power Source	ChainTek	APC-1000W	N/A	N/A	N/A	Apr. 26, 2018	N/A	Conduction (CO05-HY)
EMI Test Receiver	Rohde & Schwarz	ESR3	102388	3.6GHz	Dec. 08, 2017	Apr. 26, 2018	Dec. 07, 2018	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100080	9kHz~30MHz	Nov. 30, 2017	Apr. 26, 2018	Nov. 29, 2018	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100081	9kHz~30MHz	Dec. 08, 2017	Apr. 26, 2018	Dec. 07, 2018	Conduction (CO05-HY)
Software	Rohde & Schwarz	EMC32 V10.30	N/A	N/A	N/A	Apr. 26, 2018	N/A	Conduction (CO05-HY)
LF Cable	HUBER + SUHNER	RG-214/U	LF01	N/A	Jan. 03, 2018	Apr. 26, 2018	Jan. 02, 2019	Conduction (CO05-HY)
Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100851	N/A	Jan. 03, 2018	Apr. 26, 2018	Jan. 02, 2019	Conduction (CO05-HY)
Loop Antenna	Rohde & Schwarz	HFH2-Z2	100315	9 kHz~30 MHz	Nov. 10, 2017	Apr. 24, 2018~ Jun. 12, 2018	Nov. 09, 2018	Radiation (03CH13-HY)
Filter	Wainwright	WLKS1200-8 SS	SN3	1.2G Low Pass	Nov. 21, 2017	Apr. 24, 2018~ Jun. 12, 2018	Nov. 20, 2018	Radiation (03CH13-HY)
Amplifier	MITEQ	TTA1840-35- HG	1871923	18GHz~40GHz, VSWR : 2.5:1 max	Jul. 18, 2017	Apr. 24, 2018~ Jun. 12, 2018	Jul. 17, 2018	Radiation (03CH13-HY)
Filter	Woken	WHKX8-5272. 5-6750-18000 -40ST	SN2	6.75G Highpass	Jul. 17, 2017	Apr. 24, 2018~ Jun. 12, 2018	Jul. 16, 2018	Radiation (03CH13-HY)
Amplifier	Sonoma-Instru ment	310 N	187282	9KHz~1GHz	Jan. 19, 2018	Apr. 24, 2018~ Jun. 12, 2018	Jan. 18, 2020	Radiation (03CH13-HY)
Bilog Antenna	TESEQ	CBL 6111D&00800 N1D01N-06	40103&07	30MHz to 1GHz	Jan. 10, 2018	Apr. 24, 2018~ Jun. 12, 2018	Jan. 09, 2019	Radiation (03CH13-HY)
Horn Antenna	SCHWARZBE CK	BBHA 9120 D	9120D-124 1	1GHz ~ 18GHz	Jun. 15, 2017	Apr. 24, 2018~ Jun. 12, 2018	Jun. 14, 2018	Radiation (03CH13-HY)
Preamplifier	MITEQ	AMF-7D-0010 1800-30-10P	1590074	1GHz~18GHz	May 22, 2017	Apr. 24, 2018~ May 20, 2018	May 21, 2018	Radiation (03CH13-HY)
Preamplifier	MITEQ	AMF-7D-0010 1800-30-10P	1590074	1GHz~18GHz	May 21, 2018	May 21, 2018~ Jun. 12, 2018	May 20, 2019	Radiation (03CH13-HY)
Preamplifier	Keysight	83017A	MY532701 47	1GHz~26.5GHz	Feb. 02, 2018	Apr. 24, 2018~ Jun. 12, 2018	Feb. 01, 2019	Radiation (03CH13-HY)
Spectrum Analyzer	Keysight	N9010A	MY553705 26	10Hz~44GHz	Mar. 15, 2018	Apr. 24, 2018~ Jun. 12, 2018	Mar. 14, 2019	Radiation (03CH13-HY)



Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Antenna Mast	EMEC	AM-BS-4500-B	N/A	1m~4m	N/A	Apr. 24, 2018~ Jun. 12, 2018	N/A	Radiation (03CH13-HY)
Turn Table	EMEC	TT2000	N/A	0~360 Degree	N/A	Apr. 24, 2018~ Jun. 12, 2018	N/A	Radiation (03CH13-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170 584	18GHz- 40GHz	Nov. 27, 2017	Apr. 24, 2018~ Jun. 12, 2018	Nov. 26, 2018	Radiation (03CH13-HY)
EMI Test Receiver	Agilent	N9038A(MXE)	MY532900 53	20Hz to 26.5GHz	Jan. 16, 2018	Apr. 24, 2018~ Jun. 12, 2018	Jan. 15, 2019	Radiation (03CH13-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 126E	MY1082/2 6EA	30M~18GHz	Oct. 17, 2017	Apr. 24, 2018~ Jun. 12, 2018	Oct. 16, 2018	Radiation (03CH13-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	505134/2	30M~40GHz	Oct. 17, 2017	Apr. 24, 2018~ Jun. 12, 2018	Oct. 16, 2018	Radiation (03CH13-HY)
Software	AUDIX	E3 6.2009-8-24c	RK-001124	N/A	N/A	Apr. 24, 2018~ Jun. 12, 2018	N/A	Radiation (03CH13-HY)

5 Uncertainty of Evaluation

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

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	2.7
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Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	4.9
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Uncertainty of Radiated Emission Measurement (1000 MHz ~ 18000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	5.4
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Uncertainty of Radiated Emission Measurement (18000 MHz ~ 40000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	4.3
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Appendix A. Test Result of Conducted Test Items

Test Engineer:	Allen Lin	Temperature:	21~25	°C
Test Date:	2018/04/24~2018/05/10	Relative Humidity:	51~54	%

TEST RESULTS DATA
26dB and 99% OBW

Band II															
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	99% Bandwidth (MHz)		26 dB Bandwidth (MHz)		IC 99% Bandwidth Power Limit (dBm)		IC 99% Bandwidth EIRP Limit (dBm)		FCC 26dB Bandwidth Power Limit (dBm)		Note
					Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	
11a	6Mbps	2	52	5260	17.20	17.15	21.20	21.30	23.34		29.34		23.98		
11a	6Mbps	2	60	5300	17.20	17.20	21.40	21.15	23.36		29.36		23.98		
11a	6Mbps	2	64	5320	17.25	17.15	21.20	21.20	23.34		29.34		23.98		
HT20	MCS0	2	52	5260	18.25	18.20	22.10	22.05	23.60		29.60		23.98		
HT20	MCS0	2	60	5300	18.30	18.20	22.00	21.95	23.60		29.60		23.98		
HT20	MCS0	2	64	5320	18.20	18.20	22.05	22.00	23.60		29.60		23.98		
HT40	MCS0	2	54	5270	36.10	36.30	40.50	40.86	23.98		30.00		23.98		
HT40	MCS0	2	62	5310	36.20	36.30	40.50	40.68	23.98		30.00		23.98		
VHT80	MCS0	2	58	5290	75.84	75.96	83.84	83.52	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	2	52	5260	0.15	0.15	18.96	18.85	21.91	23.98		3.10		30	Pass
11a	6Mbps	2	60	5300	0.15	0.15	19.30	19.08	22.20	23.98		3.10		30	Pass
11a	6Mbps	2	64	5320	0.15	0.15	19.70	19.06	22.40	23.98		3.10		30	Pass
HT20	MCS0	2	52	5260	0.05	0.08	19.21	19.19	22.21	23.98		3.10		30	Pass
HT20	MCS0	2	60	5300	0.05	0.08	19.76	19.60	22.69	23.98		3.10		30	Pass
HT20	MCS0	2	64	5320	0.05	0.08	19.85	19.38	22.63	23.98		3.10		30	Pass
HT40	MCS0	2	54	5270	0.14	0.14	20.94	20.92	23.94	23.98		3.10		30	Pass
HT40	MCS0	2	62	5310	0.14	0.14	16.59	16.45	19.53	23.98		3.10		30	Pass
VHT20	MCS0	2	52	5260	0.08	0.08	19.19	19.14	22.17	23.98		3.10		30	Pass
VHT20	MCS0	2	60	5300	0.08	0.08	19.70	19.58	22.65	23.98		3.10		30	Pass
VHT20	MCS0	2	64	5320	0.08	0.08	19.80	19.36	22.59	23.98		3.10		30	Pass
VHT40	MCS0	2	54	5270	0.14	0.14	20.74	20.66	23.71	23.98		3.10		30	Pass
VHT40	MCS0	2	62	5310	0.14	0.14	16.50	16.44	19.48	23.98		3.10		30	Pass
VHT80	MCS0	2	58	5290	0.29	0.30	14.52	14.48	17.51	23.98		3.10		30	Pass

TEST RESULTS DATA
Power Spectral Density

Band II															
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Duty Factor (dB)		Average Power Density (dBm/MHz)			Average PSD Limit (dBm/MHz)		DG (dBi)		-	Pass /Fail
					Ant 1	Ant 2	Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2		
11a	6Mbps	2	52	5260	0.15	0.15			10.33	10.89	6.11			Pass	
11a	6Mbps	2	60	5300	0.15	0.15			10.72	10.89	6.11			Pass	
11a	6Mbps	2	64	5320	0.15	0.15			10.77	10.89	6.11			Pass	
HT20	MCS0	2	52	5260	0.05	0.08			10.48	10.89	6.11			Pass	
HT20	MCS0	2	60	5300	0.05	0.08			10.68	10.89	6.11			Pass	
HT20	MCS0	2	64	5320	0.05	0.08			10.67	10.89	6.11			Pass	
HT40	MCS0	2	54	5270	0.14	0.14			9.51	10.89	6.11			Pass	
HT40	MCS0	2	62	5310	0.14	0.14			4.97	10.89	6.11			Pass	
VHT80	MCS0	2	58	5290	0.29	0.30			-0.55	10.89	6.11			Pass	

TEST RESULTS DATA
26dB and 99% OBW

Band III																
Mod.	Data Rate	N _{TX}	CH.	Freq. (MHz)	99% Bandwidth In U-NII 2C (MHz)		26 dB Bandwidth In U-NII 2C (MHz)		IC 99% Bandwidth Power Limit (dBm)		IC 99% Bandwidth EIRP Limit (dBm)		FCC 26dB Bandwidth Power Limit (dBm)		6 dB Bandwidth for Straddle Channel (MHz)	
					Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2
11a	6Mbps	2	100	5500	17.20	17.15	21.10	21.10	23.34		29.34		23.98		----	----
11a	6Mbps	2	116	5580	17.15	17.10	21.20	21.05	23.33		29.33		23.98		----	----
11a	6Mbps	2	140	5700	17.15	17.20	21.20	20.90	23.34		29.34		23.98		----	----
11a	6Mbps	2	144	5720	13.70	13.65	15.80	15.55	22.35		28.35		22.92		2.8	3.09
HT20	MCS0	2	100	5500	18.15	18.20	22.10	22.00	23.59		29.59		23.98		----	----
HT20	MCS0	2	116	5580	18.15	18.25	21.90	21.95	23.59		29.59		23.98		----	----
HT20	MCS0	2	140	5700	18.15	18.15	21.85	22.00	23.59		29.59		23.98		----	----
HT20	MCS0	2	144	5720	14.20	14.20	16.00	16.10	22.52		28.52		23.04		3.32	3.07
HT40	MCS0	2	102	5510	36.20	36.20	40.68	40.86	23.98		30.00		23.98		----	----
HT40	MCS0	2	110	5550	36.30	36.10	40.68	40.68	23.98		30.00		23.98		----	----
HT40	MCS0	2	134	5670	36.40	36.20	40.77	40.86	23.98		30.00		23.98		----	----
HT40	MCS0	2	142	5710	33.30	33.20	35.52	35.52	23.98		30.00		23.98		2.46	2.48
VHT80	MCS0	2	106	5530	75.96	75.84	83.84	83.40	23.98		30.00		23.98		----	----
VHT80	MCS0	2	122	5610	75.96	75.84	83.52	83.20	23.98		30.00		23.98		----	----
VHT80	MCS0	2	138	5690	73.16	73.04	77.56	76.76	23.98		30.00		23.98		2.51	2.51

TEST RESULTS DATA
Average Power Table

FCC Band III															
Mod.	Data Rate	N _{TX}	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	2	100	5500	0.15	0.15	18.80	18.25	21.54	23.98		2.80		30	Pass
11a	6Mbps	2	116	5580	0.15	0.15	18.70	17.97	21.36	23.98		2.80		30	Pass
11a	6Mbps	2	140	5700	0.15	0.15	20.40	19.46	22.96	23.98		2.80		30	Pass
11a	6Mbps	2	144	5720	0.15	0.15	20.27	18.96	22.67	22.92		2.80		30	Pass
HT20	MCS0	2	100	5500	0.05	0.08	19.04	18.62	21.85	23.98		2.80		30	Pass
HT20	MCS0	2	116	5580	0.05	0.08	18.97	18.32	21.67	23.98		2.80		30	Pass
HT20	MCS0	2	140	5700	0.05	0.08	20.10	19.13	22.65	23.98		2.80		30	Pass
HT20	MCS0	2	144	5720	0.05	0.08	20.46	19.38	22.96	23.04		2.80		30	Pass
HT40	MCS0	2	102	5510	0.14	0.14	20.04	19.66	22.87	23.98		2.80		30	Pass
HT40	MCS0	2	110	5550	0.14	0.14	14.71	14.28	17.51	23.98		2.80		30	Pass
HT40	MCS0	2	134	5670	0.14	0.14	21.18	20.45	23.84	23.98		2.80		30	Pass
HT40	MCS0	2	142	5710	0.14	0.14	21.29	20.34	23.85	23.98		2.80		30	Pass
VHT20	MCS0	2	100	5500	0.08	0.08	18.99	18.60	21.81	23.98		2.80		30	Pass
VHT20	MCS0	2	116	5580	0.08	0.08	19.00	18.24	21.65	23.98		2.80		30	Pass
VHT20	MCS0	2	140	5700	0.08	0.08	20.08	19.02	22.59	23.98		2.80		30	Pass
VHT20	MCS0	2	144	5720	0.08	0.08	20.44	19.29	22.91	23.98		2.80		30	Pass
VHT40	MCS0	2	102	5510	0.14	0.14	19.96	19.65	22.82	23.98		2.80		30	Pass
VHT40	MCS0	2	110	5550	0.14	0.14	14.59	14.17	17.40	23.98		2.80		30	Pass
VHT40	MCS0	2	134	5670	0.14	0.14	21.17	20.44	23.83	23.98		2.80		30	Pass
VHT40	MCS0	2	142	5710	0.14	0.14	21.26	20.32	23.83	23.98		2.80		30	Pass
VHT80	MCS0	2	106	5530	0.29	0.30	17.74	17.32	20.55	23.98		2.80		30	Pass
VHT80	MCS0	2	122	5610	0.29	0.30	20.55	20.18	23.38	23.98		2.80		30	Pass
VHT80	MCS0	2	138	5690	0.29	0.30	21.12	20.05	23.63	23.98		2.80		30	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	2	100	5500	0.15	0.15			10.84	11.00		5.81		Pass	
11a	6Mbps	2	116	5580	0.15	0.15			10.71	11.00		5.81		Pass	
11a	6Mbps	2	140	5700	0.15	0.15			10.89	11.00		5.81		Pass	
11a	6Mbps	2	144	5720	0.15	0.15			10.83	11.00		5.81		Pass	
HT20	MCS0	2	100	5500	0.05	0.08			10.76	11.00		5.81		Pass	
HT20	MCS0	2	116	5580	0.05	0.08			10.79	11.00		5.81		Pass	
HT20	MCS0	2	140	5700	0.05	0.08			10.60	11.00		5.81		Pass	
HT20	MCS0	2	144	5720	0.05	0.08			10.85	11.00		5.81		Pass	
HT40	MCS0	2	102	5510	0.14	0.14			9.27	11.00		5.81		Pass	
HT40	MCS0	2	110	5550	0.14	0.14			3.81	11.00		5.81		Pass	
HT40	MCS0	2	134	5670	0.14	0.14			9.55	11.00		5.81		Pass	
HT40	MCS0	2	142	5710	0.14	0.14			9.57	11.00		5.81		Pass	
VHT80	MCS0	2	106	5530	0.29	0.30			3.49	11.00		5.81		Pass	
VHT80	MCS0	2	122	5610	0.29	0.30			6.21	11.00		5.81		Pass	
VHT80	MCS0	2	138	5690	0.29	0.30			5.21	11.00		5.81		Pass	

<For TXBF Mode>

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		
HT20	MCS0	2	52	5260	0.05	0.08	16.20	16.18	19.20	23.87		6.11		30	Pass
HT20	MCS0	2	60	5300	0.05	0.08	16.75	16.59	19.68	23.87		6.11		30	Pass
HT20	MCS0	2	64	5320	0.05	0.08	16.84	16.37	19.62	23.87		6.11		30	Pass
HT40	MCS0	2	54	5270	0.14	0.14	17.93	17.91	20.93	23.87		6.11		30	Pass
HT40	MCS0	2	62	5310	0.14	0.14	13.58	13.44	16.52	23.87		6.11		30	Pass
VHT20	MCS0	2	52	5260	0.08	0.08	16.18	16.13	19.16	23.87		6.11		30	Pass
VHT20	MCS0	2	60	5300	0.08	0.08	16.69	16.57	19.64	23.87		6.11		30	Pass
VHT20	MCS0	2	64	5320	0.08	0.08	16.79	16.35	19.58	23.87		6.11		30	Pass
VHT40	MCS0	2	54	5270	0.14	0.14	17.73	17.65	20.70	23.87		6.11		30	Pass
VHT40	MCS0	2	62	5310	0.14	0.14	13.49	13.43	16.47	23.87		6.11		30	Pass
VHT80	MCS0	2	58	5290	0.29	0.30	11.51	11.47	14.50	23.87		6.11		30	Pass

Remark: TXBF = CDD power + 3.01 dB

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		
HT20	MCS0	2	100	5500	0.05	0.08	16.03	15.61	18.84	23.98		5.81		30	Pass
HT20	MCS0	2	116	5580	0.05	0.08	15.96	15.31	18.66	23.98		5.81		30	Pass
HT20	MCS0	2	140	5700	0.05	0.08	17.09	16.12	19.64	23.98		5.81		30	Pass
HT20	MCS0	2	144	5720	0.05	0.08	17.45	16.37	19.95	23.04		5.81		30	Pass
HT40	MCS0	2	102	5510	0.14	0.14	17.03	16.65	19.86	23.98		5.81		30	Pass
HT40	MCS0	2	110	5550	0.14	0.14	11.70	11.27	14.50	23.98		5.81		30	Pass
HT40	MCS0	2	134	5670	0.14	0.14	18.17	17.44	20.83	23.98		5.81		30	Pass
HT40	MCS0	2	142	5710	0.14	0.14	18.28	17.33	20.84	23.98		5.81		30	Pass
VHT20	MCS0	2	100	5500	0.08	0.08	15.98	15.59	18.80	23.98		5.81		30	Pass
VHT20	MCS0	2	116	5580	0.08	0.08	15.99	15.23	18.64	23.98		5.81		30	Pass
VHT20	MCS0	2	140	5700	0.08	0.08	17.07	16.01	19.58	23.98		5.81		30	Pass
VHT20	MCS0	2	144	5720	0.08	0.08	17.43	16.28	19.90	23.98		5.81		30	Pass
VHT40	MCS0	2	102	5510	0.14	0.14	16.95	16.64	19.81	23.98		5.81		30	Pass
VHT40	MCS0	2	110	5550	0.14	0.14	11.58	11.16	14.39	23.98		5.81		30	Pass
VHT40	MCS0	2	134	5670	0.14	0.14	18.16	17.43	20.82	23.98		5.81		30	Pass
VHT40	MCS0	2	142	5710	0.14	0.14	18.25	17.31	20.82	23.98		5.81		30	Pass
VHT80	MCS0	2	106	5530	0.29	0.30	14.73	14.31	17.54	23.98		5.81		30	Pass
VHT80	MCS0	2	122	5610	0.29	0.30	17.54	17.17	20.37	23.98		5.81		30	Pass
VHT80	MCS0	2	138	5690	0.29	0.30	18.11	17.04	20.62	23.98		5.81		30	Pass

Remark: TXBF = CDD power + 3.01 dB



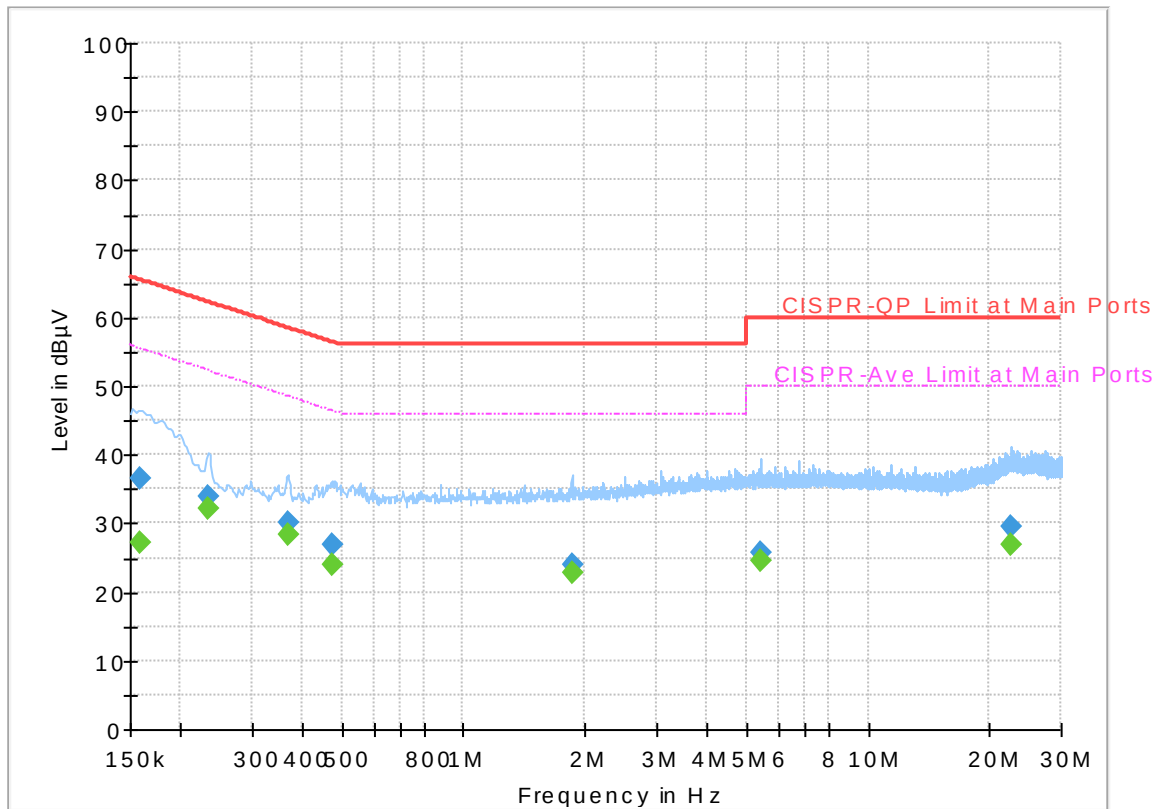
Appendix B. AC Conducted Emission Test Results

Test Engineer :	Shareef Yu	Temperature :	24~25℃
		Relative Humidity :	58~62%

EUT Information

Test Mode : Mode 1
Test Voltage : 120Vac/60Hz
Phase : Line

Full Spectrum



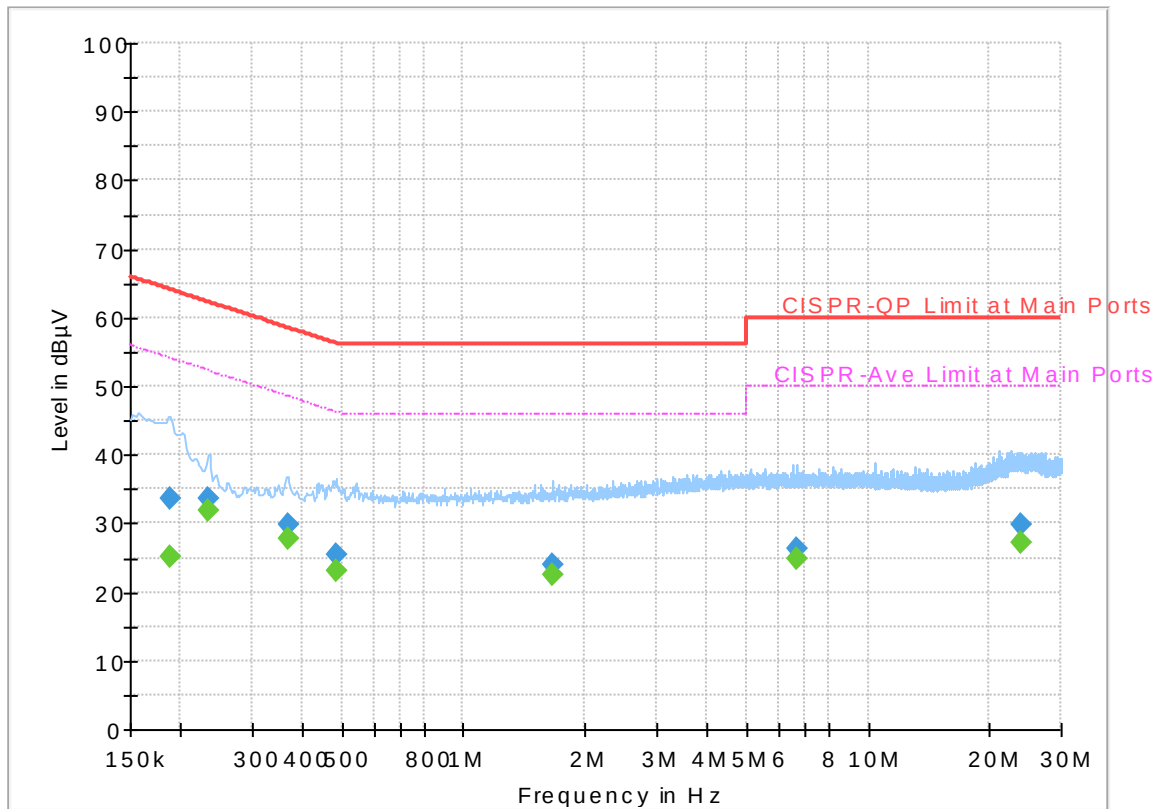
Final_Result

Frequency (MHz)	QuasiPeak (dBµV)	CAverage (dBµV)	Limit (dBµV)	Margin (dB)	Line	Filter	Corr. (dB)
0.159000	---	27.33	55.52	28.19	L1	OFF	19.5
0.159000	36.53	---	65.52	28.99	L1	OFF	19.5
0.233250	---	32.22	52.33	20.11	L1	OFF	19.5
0.233250	33.95	---	62.33	28.38	L1	OFF	19.5
0.368250	---	28.37	48.54	20.17	L1	OFF	19.5
0.368250	30.26	---	58.54	28.28	L1	OFF	19.5
0.471750	---	24.03	46.48	22.45	L1	OFF	19.5
0.471750	26.78	---	56.48	29.70	L1	OFF	19.5
1.851000	---	22.67	46.00	23.33	L1	OFF	19.6
1.851000	23.92	---	56.00	32.08	L1	OFF	19.6
5.421750	---	24.65	50.00	25.35	L1	OFF	19.6
5.421750	25.77	---	60.00	34.23	L1	OFF	19.6
22.551000	---	26.80	50.00	23.20	L1	OFF	19.8
22.551000	29.61	---	60.00	30.39	L1	OFF	19.8

EUT Information

Test Mode : Mode 1
Test Voltage : 120Vac/60Hz
Phase : Neutral

Full Spectrum



Final_Result

Frequency (MHz)	QuasiPeak (dBµV)	CAverage (dBµV)	Limit (dBµV)	Margin (dB)	Line	Filter	Corr. (dB)
0.188250	---	25.13	54.11	28.98	N	OFF	19.5
0.188250	33.69	---	64.11	30.42	N	OFF	19.5
0.233250	---	31.87	52.33	20.46	N	OFF	19.5
0.233250	33.66	---	62.33	28.67	N	OFF	19.5
0.368250	---	27.87	48.54	20.67	N	OFF	19.5
0.368250	29.90	---	58.54	28.64	N	OFF	19.5
0.485250	---	23.16	46.25	23.09	N	OFF	19.5
0.485250	25.58	---	56.25	30.67	N	OFF	19.5
1.662000	---	22.58	46.00	23.42	N	OFF	19.6
1.662000	23.93	---	56.00	32.07	N	OFF	19.6
6.659250	---	24.77	50.00	25.23	N	OFF	19.6
6.659250	26.18	---	60.00	33.82	N	OFF	19.6
23.943750	---	27.06	50.00	22.94	N	OFF	20.0
23.943750	29.90	---	60.00	30.10	N	OFF	20.0



Appendix C. Radiated Spurious Emission

Test Engineer :	Alex Jheng, Fu Chen, Wilson Wu	Temperature :	24.5~25.2°C
		Relative Humidity :	47.0~47.2%

Band 2 - 5250~5350MHz

WIFI 802.11a (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1+2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11a CH 52 5260MHz		5023.46	51.73	-22.27	74	41.41	31.84	8.01	29.53	100	215	P	H
		5120.02	44.04	-9.96	54	33.52	31.94	8.13	29.55	100	215	A	H
	*	5260	109.42	-	-	98.6	32.12	8.26	29.56	100	215	P	H
	*	5260	102	-	-	91.18	32.12	8.26	29.56	100	215	A	H
		5350.08	52.42	-21.58	74	41.48	32.22	8.29	29.57	100	215	P	H
		5360.88	45.4	-8.6	54	34.43	32.24	8.3	29.57	100	215	A	H
		5072.08	53.15	-20.85	74	42.71	31.9	8.08	29.54	207	234	P	V
		5120.02	45.18	-8.82	54	34.66	31.94	8.13	29.55	207	234	A	V
	*	5260	118.36	-	-	107.54	32.12	8.26	29.56	207	234	P	V
	*	5260	111.05	-	-	100.23	32.12	8.26	29.56	207	234	A	V
		5357.76	59.44	-14.56	74	48.5	32.22	8.29	29.57	207	234	P	V
		5352.72	52.79	-1.21	54	41.85	32.22	8.29	29.57	207	234	A	V
802.11a CH 60 5300MHz		5115.6	51.44	-22.56	74	40.91	31.94	8.13	29.54	100	213	P	H
		5120.02	43.32	-10.68	54	32.8	31.94	8.13	29.55	100	213	A	H
	*	5300	108.96	-	-	98.1	32.16	8.27	29.57	100	213	P	H
	*	5300	101.63	-	-	90.77	32.16	8.27	29.57	100	213	A	H
		5393.52	52.21	-21.79	74	41.23	32.26	8.3	29.58	100	213	P	H
		5401.2	45.73	-8.27	54	34.72	32.28	8.31	29.58	100	213	A	H
		5082.96	51.58	-22.42	74	41.14	31.9	8.08	29.54	216	234	P	V
		5120.02	43.67	-10.33	54	33.15	31.94	8.13	29.55	216	234	A	V
	*	5300	118.5	-	-	107.64	32.16	8.27	29.57	216	234	P	V
	*	5300	110.75	-	-	99.89	32.16	8.27	29.57	216	234	A	V
		5402.4	59.2	-14.8	74	48.19	32.28	8.31	29.58	216	234	P	V
		5397.36	52.77	-1.23	54	41.76	32.28	8.31	29.58	216	234	A	V



802.11a CH 64 5320MHz	*	5320	110.89	-	-	100	32.18	8.28	29.57	103	147	P	H
	*	5320	103	-	-	92.11	32.18	8.28	29.57	103	147	A	H
		5413.12	53.43	-20.57	74	42.35	32.3	8.36	29.58	103	147	P	H
		5413.28	45.46	-8.54	54	34.38	32.3	8.36	29.58	103	147	A	H
													H
													H
	*	5320	118.57	-	-	107.68	32.18	8.28	29.57	209	240	P	V
	*	5320	111	-	-	100.11	32.18	8.28	29.57	209	240	A	V
		5421.6	60.81	-13.19	74	49.73	32.3	8.36	29.58	209	240	P	V
		5411.2	52.44	-1.56	54	41.43	32.28	8.31	29.58	209	240	A	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 2 5250~5350MHz

WIFI 802.11a (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 52 5260MHz		10520	47.28	-20.92	68.2	52.36	39.52	11.85	56.99	100	0	P	H
		15780	45.39	-28.61	74	49.33	37.68	13.97	56.33	100	0	P	H
													H
													H
		7013	61.14	-7.06	68.2	71.15	35.63	10.05	56.92	216	331	P	V
		10520	47.04	-21.16	68.2	52.12	39.52	11.85	56.99	100	0	P	V
		15778	46.24	-27.76	74	50.18	37.68	13.97	56.33	100	0	P	V
													V
802.11a CH 60 5300MHz		10600	48.41	-25.59	74	53.3	39.62	11.87	56.92	100	0	P	H
		15900	45.03	-28.97	74	49.15	37.37	14.04	56.26	100	0	P	H
													H
													H
		7066.7	58.28	-9.92	68.2	68.3	35.72	10.09	56.98	216	329	P	V
		10600	47.29	-26.71	74	52.18	39.62	11.87	56.92	100	0	P	V
		15900	45.45	-28.55	74	49.57	37.37	14.04	56.26	100	0	P	V
													V
802.11a CH 64 5320MHz		10640	47.94	-26.06	74	52.75	39.67	11.88	56.89	100	0	P	H
		15965	44.46	-29.54	74	48.7	37.19	14.07	56.22	100	0	P	H
													H
													H
		7093.3	56.86	-11.34	68.2	66.89	35.76	10.11	57	206	331	P	V
		10640	46.83	-27.17	74	51.64	39.67	11.88	56.89	100	0	P	V
		15960	44.77	-29.23	74	49.02	37.19	14.06	56.22	100	0	P	V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 2 5250~5350MHz

WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 52 5260MHz		5052.36	52.77	-21.23	74	42.41	31.86	8.04	29.54	103	216	P	H
		5120.02	43.56	-10.44	54	33.04	31.94	8.13	29.55	103	216	A	H
	*	5260	111.9	-	-	101.08	32.12	8.26	29.56	103	216	P	H
	*	5260	103.71	-	-	92.89	32.12	8.26	29.56	103	216	A	H
		5351.52	54.72	-19.28	74	43.78	32.22	8.29	29.57	103	216	P	H
		5357.04	45.36	-8.64	54	34.42	32.22	8.29	29.57	103	216	A	H
		5120.36	57	-17	74	46.48	31.94	8.13	29.55	209	239	P	V
		5120.02	48.18	-5.82	54	37.66	31.94	8.13	29.55	209	239	A	V
	*	5260	119.63	-	-	108.81	32.12	8.26	29.56	209	239	P	V
	*	5260	111.95	-	-	101.13	32.12	8.26	29.56	209	239	A	V
		5357.04	60.43	-13.57	74	49.49	32.22	8.29	29.57	209	239	P	V
		5359.2	52.63	-1.37	54	41.68	32.22	8.3	29.57	209	239	A	V
802.11n HT20 CH 60 5300MHz		5062.56	51.99	-22.01	74	41.59	31.88	8.06	29.54	114	215	P	H
		5120.02	42.68	-11.32	54	32.16	31.94	8.13	29.55	114	215	A	H
	*	5300	111.32	-	-	100.46	32.16	8.27	29.57	114	215	P	H
	*	5300	103.02	-	-	92.16	32.16	8.27	29.57	114	215	A	H
		5399.04	53.81	-20.19	74	42.8	32.28	8.31	29.58	114	215	P	H
		5394.96	46.12	-7.88	54	35.11	32.28	8.31	29.58	114	215	A	H
		5071.06	53.26	-20.74	74	42.84	31.88	8.08	29.54	212	240	P	V
		5120.02	46.47	-7.53	54	35.95	31.94	8.13	29.55	212	240	A	V
	*	5300	119.7	-	-	108.84	32.16	8.27	29.57	212	240	P	V
	*	5300	111.22	-	-	100.36	32.16	8.27	29.57	212	240	A	V
		5399.52	60.26	-13.74	74	49.25	32.28	8.31	29.58	212	240	P	V
		5397.12	52.76	-1.24	54	41.75	32.28	8.31	29.58	212	240	A	V



802.11n HT20 CH 64 5320MHz	*	5320	111.15	-	-	100.26	32.18	8.28	29.57	101	215	P	H
	*	5320	103.22	-	-	92.33	32.18	8.28	29.57	101	215	A	H
		5413.12	54.59	-19.41	74	43.51	32.3	8.36	29.58	101	215	P	H
		5414.88	46.37	-7.63	54	35.29	32.3	8.36	29.58	101	215	A	H
													H
													H
	*	5320	119.65	-	-	108.76	32.18	8.28	29.57	211	241	P	V
	*	5320	111.24	-	-	100.35	32.18	8.28	29.57	211	241	A	V
		5417.12	59.81	-14.19	74	48.73	32.3	8.36	29.58	211	241	P	V
		5417.28	52.43	-1.57	54	41.35	32.3	8.36	29.58	211	241	A	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



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

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 52 5260MHz		7013.3	47.81	-20.39	68.2	57.82	35.63	10.05	56.92	100	0	P	H
		10520	47.28	-20.92	68.2	52.36	39.52	11.85	56.99	100	0	P	H
		15780	45.96	-28.04	74	49.9	37.68	13.97	56.33	100	0	P	H
													H
		7013.3	61.14	-7.06	68.2	71.15	35.63	10.05	56.92	212	331	P	V
		10520	46.95	-21.25	68.2	52.03	39.52	11.85	56.99	100	0	P	V
		15780	45.3	-28.7	74	49.24	37.68	13.97	56.33	100	0	P	V
													V
802.11n HT20 CH 60 5300MHz		7066	46.15	-22.05	68.2	56.17	35.72	10.09	56.98	100	0	P	H
		10600	48.5	-25.5	74	53.39	39.62	11.87	56.92	100	0	P	H
		15900	46.07	-27.93	74	50.19	37.37	14.04	56.26	100	0	P	H
													H
		7066	58.97	-9.23	68.2	68.99	35.72	10.09	56.98	188	341	P	V
		10600	48.75	-25.25	74	53.64	39.62	11.87	56.92	100	0	P	V
		15900	46.65	-27.35	74	50.77	37.37	14.04	56.26	100	0	P	V
													V
802.11n HT20 CH 64 5320MHz		7088	47.15	-21.05	68.2	57.16	35.76	11.23	57	100	0	P	H
		10640	48.29	-25.71	74	53.1	39.67	12.41	56.89	100	0	P	H
		15960	45.62	-28.38	74	49.87	37.19	14.78	56.22	100	0	P	H
													H
		7088	57.2	-11	68.2	67.21	35.76	11.23	57	208	317	P	V
		10640	48.99	-25.01	74	53.8	39.67	12.41	56.89	100	0	P	V
		15960	46.29	-27.71	74	50.54	37.19	14.78	56.22	100	0	P	V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 2 5250~5350MHz

WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 CH 54 5270MHz		5079.22	51.88	-22.12	74	41.44	31.9	8.08	29.54	100	214	P	H
		5120.02	44.38	-9.62	54	33.86	31.94	8.13	29.55	100	214	A	H
	*	5270	110.68	-	-	99.85	32.12	8.27	29.56	100	214	P	H
	*	5270	102.92	-	-	92.09	32.12	8.27	29.56	100	214	A	H
		5366.64	55.91	-18.09	74	44.94	32.24	8.3	29.57	100	214	P	H
		5368.08	46.21	-7.79	54	35.24	32.24	8.3	29.57	100	214	A	H
		5120.02	55.03	-18.97	74	44.51	31.94	8.13	29.55	205	240	P	V
		5120.02	48.97	-5.03	54	38.45	31.94	8.13	29.55	205	240	A	V
	*	5270	118.9	-	-	108.07	32.12	8.27	29.56	205	240	P	V
	*	5270	110.96	-	-	100.13	32.12	8.27	29.56	205	240	A	V
		5368.56	59.08	-14.92	74	48.11	32.24	8.3	29.57	205	240	P	V
		5368.08	52.88	-1.12	54	41.91	32.24	8.3	29.57	205	240	A	V
802.11n HT40 CH 62 5310MHz		5028.56	51.6	-22.4	74	41.28	31.84	8.01	29.53	101	214	P	H
		5120.02	43.42	-10.58	54	32.9	31.94	8.13	29.55	101	214	A	H
	*	5310	106.33	-	-	95.44	32.18	8.28	29.57	101	214	P	H
	*	5310	97.98	-	-	87.09	32.18	8.28	29.57	101	214	A	H
		5350.08	55.38	-18.62	74	44.44	32.22	8.29	29.57	101	214	P	H
		5350.08	46.06	-7.94	54	35.12	32.22	8.29	29.57	101	214	A	H
		5137.36	53.16	-20.84	74	42.6	31.96	8.15	29.55	209	240	P	V
		5120.02	46.34	-7.66	54	35.82	31.94	8.13	29.55	209	240	A	V
	*	5310	113.9	-	-	103.01	32.18	8.28	29.57	209	240	P	V
	*	5310	105.93	-	-	95.04	32.18	8.28	29.57	209	240	A	V
		5351.76	62.08	-11.92	74	51.14	32.22	8.29	29.57	209	240	P	V
		5350.32	52.37	-1.63	54	41.43	32.22	8.29	29.57	209	240	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



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

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 CH 54 5270MHz		7026.7	49.08	-19.12	68.2	59.11	35.66	10.05	56.94	100	0	P	H
		10540	47.19	-21.01	68.2	52.23	39.54	11.85	56.97	100	0	P	H
		15810	46.17	-27.83	74	50.16	37.59	13.99	56.31	100	0	P	H
													H
		7026.7	63.01	-5.19	68.2	73.04	35.66	10.05	56.94	204	342	P	V
		10540	48.19	-20.01	68.2	53.23	39.54	11.85	56.97	100	0	P	V
		15810	46.05	-27.95	74	50.04	37.59	13.99	56.31	100	0	P	V
													V
802.11n HT40 CH 62 5310MHz		7080	46.88	-21.32	68.2	56.9	35.76	11.22	57	100	0	P	H
		10620	48.12	-25.88	74	52.97	39.64	12.41	56.9	100	0	P	H
		15930	45.41	-28.59	74	49.59	37.28	14.78	56.24	100	0	P	H
													H
		7080	57.44	-10.76	68.2	67.46	35.76	11.22	57	206	342	P	V
		10620	47.5	-26.5	74	52.35	39.64	12.41	56.9	100	0	P	V
		15930	46.37	-27.63	74	50.55	37.28	14.78	56.24	100	0	P	V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 2 5250~5350MHz

WIFI 802.11ac VHT80 (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80 CH 58 5290MHz		5008.5	51.82	-22.18	74	41.54	31.82	7.99	29.53	101	147	P	H
		5064.26	43	-11	54	32.6	31.88	8.06	29.54	101	147	A	H
	*	5290	99.02	-	-	88.17	32.14	8.27	29.56	101	147	P	H
	*	5290	91.54	-	-	80.69	32.14	8.27	29.56	101	147	A	H
		5361.12	56.02	-17.98	74	45.05	32.24	8.3	29.57	101	147	P	H
		5361.12	45.73	-8.27	54	34.76	32.24	8.3	29.57	101	147	A	H
		5072.08	52.34	-21.66	74	41.9	31.9	8.08	29.54	216	236	P	V
		5119.68	43.89	-10.11	54	33.37	31.94	8.13	29.55	216	236	A	V
	*	5290	107.52	-	-	96.67	32.14	8.27	29.56	216	236	P	V
	*	5290	99.66	-	-	88.81	32.14	8.27	29.56	216	236	A	V
		5353.44	61.46	-12.54	74	50.52	32.22	8.29	29.57	216	236	P	V
		5356.08	52.75	-1.25	54	41.81	32.22	8.29	29.57	216	236	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

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

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80 CH 58 5290MHz		7053.5	47.72	-20.48	68.2	57.74	35.69	10.08	56.96	100	0	P	H
		10580	49.08	-19.12	68.2	54.01	39.6	11.86	56.93	100	0	P	H
		15870	45.49	-28.51	74	49.6	37.41	14.02	56.27	100	0	P	H
													H
		7053.5	59.52	-8.68	68.2	69.54	35.69	10.08	56.96	212	317	P	V
		10580	47.48	-20.72	68.2	52.41	39.6	11.86	56.93	100	0	P	V
		15870	45.39	-28.61	74	49.5	37.41	14.02	56.27	100	0	P	V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 - 5470~5725MHz

WIFI 802.11a (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1+2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11a CH 100 5500MHz		5408.88	54.39	-19.61	74	43.38	32.28	8.31	29.58	100	214	P	H
		5469.52	54.33	-13.87	68.2	43.05	32.36	8.51	29.59	100	214	P	H
		5408.56	46.41	-7.59	54	35.4	32.28	8.31	29.58	100	214	A	H
	*	5500	111.03	-	-	99.66	32.4	8.56	29.59	100	214	P	H
	*	5500	103.55	-	-	92.18	32.4	8.56	29.59	100	214	A	H
													H
		5405.68	59.96	-14.04	74	48.95	32.28	8.31	29.58	215	235	P	V
		5468.88	58.07	-10.13	68.2	46.79	32.36	8.51	29.59	215	235	P	V
		5405.04	52.52	-1.48	54	41.51	32.28	8.31	29.58	215	235	A	V
	*	5500	118.65	-	-	107.28	32.4	8.56	29.59	215	235	P	V
	*	5500	111.02	-	-	99.65	32.4	8.56	29.59	215	235	A	V
													V
802.11a CH 116 5580MHz		5437.36	51.72	-22.28	74	40.57	32.32	8.41	29.58	100	217	P	H
		5464.96	51.23	-16.97	68.2	40	32.36	8.46	29.59	100	217	P	H
		5392	42.76	-11.24	54	31.78	32.26	8.3	29.58	100	217	A	H
	*	5580	116.25	-	-	104.61	32.47	8.8	29.63	100	217	P	H
	*	5580	109.13	-	-	97.49	32.47	8.8	29.63	100	217	A	H
		5725.94	51.72	-16.48	68.2	39.96	32.62	8.82	29.68	100	217	P	H
		5394.4	54.57	-19.43	74	43.58	32.26	8.31	29.58	206	233	P	V
		5469.52	55.08	-13.12	68.2	43.8	32.36	8.51	29.59	206	233	P	V
		5389.36	46.87	-7.13	54	35.89	32.26	8.3	29.58	206	233	A	V
	*	5580	125.97	-	-	114.33	32.47	8.8	29.63	206	233	P	V
	*	5580	117.77	-	-	106.13	32.47	8.8	29.63	206	233	A	V
		5727.515	54.24	-13.96	68.2	42.48	32.62	8.82	29.68	206	233	P	V



802.11a CH 140 5700MHz	*	5700	111.12	-	-	99.38	32.59	8.82	29.67	104	218	P	H
	*	5700	102.98	-	-	91.24	32.59	8.82	29.67	104	218	A	H
		5726.52	56.28	-11.92	68.2	44.52	32.62	8.82	29.68	104	218	P	H
													H
													H
													H
	*	5700	120.8	-	-	109.06	32.59	8.82	29.67	199	243	P	V
	*	5700	112.98	-	-	101.24	32.59	8.82	29.67	199	243	A	V
		5726.12	64.94	-3.26	68.2	53.18	32.62	8.82	29.68	199	243	P	V
													V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 - 5470~5725MHz
WIFI 802.11a (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 100 5500MHz		11000	48.01	-25.99	74	52	40.1	11.99	56.6	100	0	P	H
		16500	46.87	-21.33	68.2	49.35	38.3	14.23	55.7	100	0	P	H
													H
													H
		11000	48.11	-25.89	74	52.1	40.1	11.99	56.6	100	0	P	V
		16500	47.16	-21.04	68.2	49.64	38.3	14.23	55.7	100	0	P	V
													V
													V
802.11a CH 116 5580MHz		11160	48.4	-25.6	74	52.31	40.03	12.07	56.53	100	0	P	H
		16740	47.36	-20.84	68.2	49.08	39.12	14.29	55.8	100	0	P	H
													H
													H
		11160	47.66	-26.34	74	51.57	40.03	12.07	56.53	100	0	P	V
		16740	47.91	-20.29	68.2	49.63	39.12	14.29	55.8	100	0	P	V
													V
													V
802.11a CH 140 5700MHz		11400	47.95	-26.05	74	51.73	39.94	12.2	56.44	100	0	P	H
		17100	48.88	-19.32	68.2	49.64	40.24	14.41	56.06	100	0	P	H
													H
													H
		11400	48.29	-25.71	74	52.07	39.94	12.2	56.44	100	0	P	V
		17100	49.87	-18.33	68.2	50.63	40.24	14.41	56.06	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



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

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 100 5500MHz		5403.12	55.9	-18.1	74	44.89	32.28	8.31	29.58	100	215	P	H
		5469.36	54.88	-13.32	68.2	43.6	32.36	8.51	29.59	100	215	P	H
		5402.96	46.41	-7.59	54	35.4	32.28	8.31	29.58	100	215	A	H
	*	5500	112.02	-	-	100.65	32.4	8.56	29.59	100	215	P	H
	*	5500	103.74	-	-	92.37	32.4	8.56	29.59	100	215	A	H
													H
		5407.6	61.92	-12.08	74	50.91	32.28	8.31	29.58	200	234	P	V
		5468.56	58.56	-9.64	68.2	47.28	32.36	8.51	29.59	200	234	P	V
		5408.08	52.81	-1.19	54	41.8	32.28	8.31	29.58	200	234	A	V
	*	5500	120.29	-	-	108.92	32.4	8.56	29.59	200	234	P	V
	*	5500	111.89	-	-	100.52	32.4	8.56	29.59	200	234	A	V
													V
802.11n HT20 CH 116 5580MHz		5396.56	51.41	-22.59	74	40.4	32.28	8.31	29.58	106	215	P	H
		5465.92	51.22	-16.98	68.2	39.99	32.36	8.46	29.59	106	215	P	H
		5387.2	41.9	-12.1	54	30.92	32.26	8.3	29.58	106	215	A	H
	*	5580	117.07	-	-	105.43	32.47	8.8	29.63	106	215	P	H
	*	5580	108.56	-	-	96.92	32.47	8.8	29.63	106	215	A	H
		5725.94	52.58	-15.62	68.2	40.82	32.62	8.82	29.68	106	215	P	H
		5392	55.79	-18.21	74	44.81	32.26	8.3	29.58	209	233	P	V
		5467.84	57.15	-11.05	68.2	45.87	32.36	8.51	29.59	209	233	P	V
		5394.16	46.01	-7.99	54	35.02	32.26	8.31	29.58	209	233	A	V
	*	5580	126.63	-	-	114.99	32.47	8.8	29.63	209	233	P	V
	*	5580	117.65	-	-	106.01	32.47	8.8	29.63	209	233	A	V
		5765	55.37	-12.83	68.2	43.61	32.66	8.81	29.71	209	233	P	V



802.11n HT20 CH 140 5700MHz	*	5700	110.16	-	-	98.42	32.59	8.82	29.67	100	217	P	H
	*	5700	102.56	-	-	90.82	32.59	8.82	29.67	100	217	A	H
		5725	55.85	-12.35	68.2	44.09	32.62	8.82	29.68	100	217	P	H
													H
													H
													H
	*	5700	121.06	-	-	109.32	32.59	8.82	29.67	201	246	P	V
	*	5700	112.47	-	-	100.73	32.59	8.82	29.67	201	246	A	V
		5725.08	65.44	-2.76	68.2	53.68	32.62	8.82	29.68	201	246	P	V
													V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



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

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 100 5500MHz		11000	48.19	-25.81	74	52.18	40.1	11.99	56.6	100	0	P	H
		16500	46.88	-21.32	68.2	49.36	38.3	14.23	55.7	100	0	P	H
													H
													H
		11000	48.83	-25.17	74	52.82	40.1	11.99	56.6	100	0	P	V
		16500	46.85	-21.35	68.2	49.33	38.3	14.23	55.7	100	0	P	V
													V
													V
802.11n HT20 CH 116 5580MHz		11160	48.14	-25.86	74	52.05	40.03	12.59	56.53	100	0	P	H
		16740	47.5	-20.7	68.2	49.22	39.12	14.96	55.8	100	0	P	H
													H
													H
		7440	52.59	-21.41	74	62.54	36.41	11.08	57.44	195	337	P	V
		7440	49.09	-4.91	54	59.04	36.41	11.08	57.44	195	337	A	V
		11160	50.1	-23.9	74	54.01	40.03	12.59	56.53	100	0	P	V
		16740	47.18	-21.02	68.2	48.9	39.12	14.96	55.8	100	0	P	V
802.11n HT20 CH 140 5700MHz		11400	47.72	-26.28	74	51.5	39.94	12.2	56.44	100	0	P	H
		17100	48.58	-19.62	68.2	49.34	40.24	14.41	56.06	100	0	P	H
													H
													H
		11400	47.31	-26.69	74	51.09	39.94	12.2	56.44	100	0	P	V
		17100	49.59	-18.61	68.2	50.35	40.24	14.41	56.06	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



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

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 CH 102 5510MHz		5411.92	53.68	-20.32	74	42.65	32.3	8.31	29.58	100	214	P	H
		5467.84	58.18	-10.02	68.2	46.9	32.36	8.51	29.59	100	214	P	H
		5458.72	44.84	-9.16	54	33.63	32.34	8.46	29.59	100	214	A	H
	*	5510	108.37	-	-	96.97	32.4	8.6	29.6	100	214	P	H
	*	5510	99.8	-	-	88.4	32.4	8.6	29.6	100	214	A	H
		5740.43	52.26	-15.94	68.2	40.5	32.64	8.81	29.69	100	214	P	H
		5458.96	59.95	-14.05	74	48.74	32.34	8.46	29.59	203	240	P	V
		5467.84	66.75	-1.45	68.2	55.47	32.36	8.51	29.59	203	240	P	V
		5416	50.22	-3.78	54	39.14	32.3	8.36	29.58	203	240	A	V
	*	5510	116.22	-	-	104.82	32.4	8.6	29.6	203	240	P	V
	*	5510	107.89	-	-	96.49	32.4	8.6	29.6	203	240	A	V
		5739.8	54.72	-13.48	68.2	42.96	32.64	8.81	29.69	203	240	P	V
802.11n HT40 CH 110 5550MHz		5431.12	52.16	-21.84	74	41.01	32.32	8.41	29.58	100	215	P	H
		5467.6	51.19	-17.01	68.2	39.91	32.36	8.51	29.59	100	215	P	H
		5451.76	43.16	-10.84	54	31.95	32.34	8.46	29.59	100	215	A	H
	*	5550	103.44	-	-	91.9	32.45	8.7	29.61	100	215	P	H
	*	5550	94.86	-	-	83.32	32.45	8.7	29.61	100	215	A	H
		5748.935	51.49	-16.71	68.2	39.73	32.64	8.81	29.69	100	215	P	H
		5451.28	54.23	-19.77	74	43.02	32.34	8.46	29.59	177	217	P	V
		5470	52.73	-15.47	68.2	41.45	32.36	8.51	29.59	177	217	P	V
		5452	46.2	-7.8	54	34.99	32.34	8.46	29.59	177	217	A	V
	*	5550	111.26	-	-	99.72	32.45	8.7	29.61	177	217	P	V
	*	5550	103.22	-	-	91.68	32.45	8.7	29.61	177	217	A	V
		5728.145	54.09	-14.11	68.2	42.33	32.62	8.82	29.68	177	217	P	V



802.11n HT40 CH 134 5670MHz		5449.4	52.12	-21.88	74	40.9	32.34	8.46	29.58	100	217	P	H
		5468.3	51.02	-17.18	68.2	39.74	32.36	8.51	29.59	100	217	P	H
		5459.9	42.43	-11.57	54	31.22	32.34	8.46	29.59	100	217	A	H
	*	5670	108.72	-	-	96.98	32.57	8.83	29.66	100	217	P	H
	*	5670	100.95	-	-	89.21	32.57	8.83	29.66	100	217	A	H
		5726.255	55.36	-12.84	68.2	43.6	32.62	8.82	29.68	100	217	P	H
		5445.2	52.98	-21.02	74	41.83	32.32	8.41	29.58	215	242	P	V
		5469.7	52.59	-15.61	68.2	41.31	32.36	8.51	29.59	215	242	P	V
		5375.9	46.05	-7.95	54	35.09	32.24	8.3	29.58	215	242	A	V
	*	5670	118.33	-	-	106.59	32.57	8.83	29.66	215	242	P	V
	*	5670	110.49	-	-	98.75	32.57	8.83	29.66	215	242	A	V
		5726.255	65.97	-2.23	68.2	54.21	32.62	8.82	29.68	215	242	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



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

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 CH 102 5510MHz		11020	48.21	-25.79	74	52.18	40.09	12.53	56.59	100	0	P	H
		16530	46.27	-21.93	68.2	48.64	38.42	14.92	55.71	100	0	P	H
													H
													H
		7346.5	53.57	-20.43	74	63.61	36.22	11.05	57.31	184	337	P	V
		7346.5	51.4	-2.6	54	61.44	36.22	11.05	57.31	184	337	A	V
		11020	47.95	-26.05	74	51.92	40.09	12.53	56.59	100	0	P	V
		16530	46.84	-21.36	68.2	49.21	38.42	14.92	55.71	100	0	P	V
802.11n HT40 CH 110 5550MHz		11100	48.99	-25.01	74	52.93	40.06	12.56	56.56	100	0	P	H
		16650	47.3	-20.9	68.2	49.28	38.83	14.95	55.76	100	0	P	H
													H
													H
		7400	52.8	-21.2	74	62.85	36.31	11.02	57.38	202	346	P	V
		7400	50.61	-3.39	54	60.66	36.31	11.02	57.38	202	346	A	V
		11100	47.88	-26.12	74	51.82	40.06	12.56	56.56	100	0	P	V
		16650	47.37	-20.83	68.2	49.35	38.83	14.95	55.76	100	0	P	V
802.11n HT40 CH 134 5670MHz		11340	48.35	-25.65	74	52.17	39.97	12.68	56.47	100	0	P	H
		17010	48.82	-19.38	68.2	49.69	40.04	15.02	55.93	100	0	P	H
													H
													H
		7561	51.22	-22.78	74	60.91	36.53	11.25	57.47	201	338	P	V
		7561	47.8	-6.2	54	57.49	36.53	11.25	57.47	201	338	A	V
		11340	46.64	-27.36	74	50.46	39.97	12.68	56.47	100	0	P	V
		17010	48.37	-19.83	68.2	49.24	40.04	15.02	55.93	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



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

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80 CH 106 5530MHz		5443.84	55.46	-18.54	74	44.31	32.32	8.41	29.58	100	214	P	H
		5464.72	58.35	-9.85	68.2	47.12	32.36	8.46	29.59	100	214	P	H
		5459.92	46.9	-7.1	54	35.69	32.34	8.46	29.59	100	214	A	H
	*	5530	102.69	-	-	91.23	32.42	8.65	29.61	100	214	P	H
	*	5530	94.49	-	-	83.03	32.42	8.65	29.61	100	214	A	H
		5729.09	50.51	-17.69	68.2	38.75	32.62	8.82	29.68	100	214	P	H
		5459.2	63.93	-10.07	74	52.72	32.34	8.46	29.59	201	240	P	V
		5465.92	66.46	-1.74	68.2	55.23	32.36	8.46	29.59	201	240	P	V
		5446.72	52.51	-1.49	54	41.34	32.34	8.41	29.58	201	240	A	V
	*	5530	111.62	-	-	100.16	32.42	8.65	29.61	201	240	P	V
	*	5530	102.97	-	-	91.51	32.42	8.65	29.61	201	240	A	V
		5760.905	54.31	-13.89	68.2	42.55	32.66	8.81	29.71	201	240	P	V
802.11ac VHT80 CH 122 5610MHz		5456.08	53.86	-20.14	74	42.65	32.34	8.46	29.59	101	214	P	H
		5470	54.62	-13.58	68.2	43.34	32.36	8.51	29.59	101	214	P	H
		5454.64	43.96	-10.04	54	32.75	32.34	8.46	29.59	101	214	A	H
	*	5610	104.13	-	-	92.42	32.5	8.85	29.64	101	214	P	H
	*	5610	95.91	-	-	84.2	32.5	8.85	29.64	101	214	A	H
		5742.635	53.94	-14.26	68.2	42.18	32.64	8.81	29.69	101	214	P	H
		5406.64	55.99	-18.01	74	44.98	32.28	8.31	29.58	216	257	P	V
		5465.68	56.54	-11.66	68.2	45.31	32.36	8.46	29.59	216	257	P	V
		5459.92	48	-6	54	36.79	32.34	8.46	29.59	216	257	A	V
	*	5610	113.84	-	-	102.13	32.5	8.85	29.64	216	257	P	V
	*	5610	105.62	-	-	93.91	32.5	8.85	29.64	216	257	A	V
		5727.515	67.13	-1.07	68.2	55.37	32.62	8.82	29.68	216	257	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 5470~5725MHz

WIFI 802.11ac VHT80 (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80 CH 106 5530MHz		11060	47.64	-26.36	74	51.59	40.07	12.55	56.57	100	0	P	H
		16590	46.78	-21.42	68.2	48.99	38.59	14.93	55.73	100	0	P	H
													H
													H
		7373.3	54.57	-19.43	74	64.6	36.28	11.05	57.36	209	347	P	V
		7373.3	52.52	-1.48	54	62.55	36.28	11.05	57.36	209	347	A	V
		11060	47.89	-26.11	74	51.84	40.07	12.55	56.57	100	0	P	V
		16590	46.1	-22.1	68.2	48.31	38.59	14.93	55.73	100	0	P	V
802.11ac VHT80 CH 122 5610MHz		11220	47.09	-26.91	74	50.96	40.01	12.63	56.51	100	0	P	H
		16830	47.87	-20.33	68.2	49.3	39.41	14.99	55.83	100	0	P	H
													H
													H
		7480	54.75	-19.25	74	64.61	36.47	11.15	57.48	196	347	P	V
		7480	51.16	-2.84	54	61.02	36.47	11.15	57.48	196	347	A	V
		11220	47.29	-26.71	74	51.16	40.01	12.63	56.51	100	0	P	V
		16830	46.98	-21.22	68.2	48.41	39.41	14.99	55.83	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 - Straddle Channel
WIFI 802.11a (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 144 5720MHz	*	5720	116.09	-	-	104.33	32.62	8.82	29.68	100	217	P	H
	*	5720	108.54	-	-	96.78	32.62	8.82	29.68	100	217	A	H
													H
													H
													H
													H
	*	5720	126.56	-	-	114.8	32.62	8.82	29.68	201	243	P	V
	*	5720	118.73	-	-	106.97	32.62	8.82	29.68	201	243	A	V
													V
													V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 - Straddle Channel
WIFI 802.11a (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 144 5720MHz		11440	49.17	-24.83	74	52.95	39.93	12.21	56.43	100	0	P	H
		17160	50.34	-17.86	68.2	51.04	40.4	14.43	56.17	100	0	P	H
													H
													H
		11440	48.68	-25.32	74	52.46	39.93	12.21	56.43	100	0	P	V
		17160	49.35	-18.85	68.2	50.05	40.4	14.43	56.17	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 - Straddle Channel
WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 144 5720MHz	*	5720	116.87	-	-	105.11	32.62	8.82	29.68	107	217	P	H
	*	5720	108.17	-	-	96.41	32.62	8.82	29.68	107	217	A	H
													H
													H
													H
													H
	*	5720	127.07	-	-	115.31	32.62	8.82	29.68	200	247	P	V
	*	5720	118.3	-	-	106.54	32.62	8.82	29.68	200	247	A	V
													V
													V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

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

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 144 5720MHz		11440	48.01	-25.99	74	51.79	39.93	12.21	56.43	100	0	P	H
		17160	48.93	-19.27	68.2	49.63	40.4	14.43	56.17	100	0	P	H
													H
													H
		11440	48.36	-25.64	74	52.14	39.93	12.21	56.43	100	0	P	V
		17160	49.55	-18.65	68.2	50.25	40.4	14.43	56.17	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 - Straddle Channel
WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 CH 142 5710MHz	*	5710	114.32	-	-	102.57	32.61	8.82	29.68	100	217	P	H
	*	5710	105.55	-	-	93.8	32.61	8.82	29.68	100	217	A	H
													H
													H
													H
													H
	*	5710	124.36	-	-	112.61	32.61	8.82	29.68	206	247	P	V
	*	5710	116.06	-	-	104.31	32.61	8.82	29.68	206	247	A	V
													V
													V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

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

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 CH 142 5710MHz		11420	48.96	-25.04	74	52.75	39.93	12.2	56.43	100	0	P	H
		17130	49.71	-18.49	68.2	50.42	40.32	14.43	56.11	100	0	P	H
													H
													H
		11420	47.53	-26.47	74	51.32	39.93	12.2	56.43	100	0	P	V
		17130	49.24	-18.96	68.2	49.95	40.32	14.43	56.11	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 - Straddle Channel
WIFI 802.11ac VHT80 (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80 CH 138 5690MHz	*	5690	110.04	-	-	98.29	32.59	8.83	29.67	100	217	P	H
	*	5690	101.92	-	-	90.17	32.59	8.83	29.67	100	217	A	H
													H
													H
													H
													H
	*	5690	119.5	-	-	107.75	32.59	8.83	29.67	212	259	P	V
	*	5690	111.69	-	-	99.94	32.59	8.83	29.67	212	259	A	V
													V
													V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 - Straddle Channel
WIFI 802.11ac VHT80 (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80 CH 138 5690MHz		11380	47.95	-26.05	74	51.74	39.95	12.19	56.45	100	0	P	H
		17070	49.22	-18.98	68.2	50.03	40.16	14.39	56.01	100	0	P	H
													H
													H
		11380	46.58	-27.42	74	50.37	39.95	12.19	56.45	100	0	P	V
		17070	48.39	-19.81	68.2	49.2	40.16	14.39	56.01	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

Emission below 1GHz

WIFI 802.11n HT40 (LF @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 LF		125.04	33.87	-9.63	43.5	47.19	17.58	1.32	32.28	-	-	P	H
		166.35	28.24	-15.26	43.5	42.8	16.06	1.6	32.28	-	-	P	H
		250.05	25.79	-20.21	46	37.32	18.72	1.87	32.2	-	-	P	H
		374.9	39.46	-6.54	46	48.19	21.07	2.26	32.15	-	-	P	H
		500.2	42.54	-3.46	46	48.12	23.96	2.58	32.2	100	0	P	H
		624.8	37.59	-8.41	46	40.81	26	2.87	32.2	-	-	P	H
													H
													H
													H
													H
													H
													H
		61.05	27.96	-12.04	40	47.18	12.05	1.06	32.31	-	-	P	V
		125.04	27.74	-15.76	43.5	41.06	17.58	1.32	32.28	-	-	P	V
		250.05	25.48	-20.52	46	37.01	18.72	1.87	32.2	-	-	P	V
		500.2	40.42	-5.58	46	46	23.96	2.58	32.2	-	-	P	V
		874.7	35.49	-10.51	46	34.58	29.01	3.41	31.63	-	-	P	V
		903.4	41.65	-4.35	46	40.47	29.07	3.48	31.48	100	0	P	V
													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 802.11ac VHT80 (LF @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80 LF		125.04	34.25	-9.25	43.5	47.57	17.58	1.32	32.28	-	-	P	H
		165.54	28.01	-15.49	43.5	42.51	16.12	1.6	32.28	-	-	P	H
		250.05	25.87	-20.13	46	37.4	18.72	1.87	32.2	-	-	P	H
		500.2	43.58	-2.42	46	49.16	23.96	2.58	32.2	178	24	QP	H
		624.8	37.93	-8.07	46	41.15	26	2.87	32.2	-	-	P	H
		900.6	42.62	-3.38	46	41.53	29.04	3.44	31.5	-	-	P	H
													H
													H
													H
													H
													H
													H
		31.08	30.98	-9.02	40	38.57	23.96	0.81	32.34	-	-	P	V
		60.78	28.09	-11.91	40	47.31	12.05	1.06	32.31	-	-	P	V
		125.04	27.56	-15.94	43.5	40.88	17.58	1.32	32.28	-	-	P	V
		500.2	41.44	-4.56	46	47.02	23.96	2.58	32.2	100	0	P	V
		699.7	37.09	-8.91	46	39.62	26.5	3.04	32.17	-	-	P	V
		874.7	35.13	-10.87	46	34.22	29.01	3.41	31.63	-	-	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	Peak or Average
H/V	Horizontal or Vertical

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

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

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

For Peak Limit @ 2390MHz:

1. Level(dBμV/m)
 = Antenna Factor(dB/m) + Path Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)
 = 32.22(dB/m) + 4.58(dB) + 54.51(dBμV) – 35.86 (dB)
 = 55.45 (dBμV/m)
2. Over Limit(dB)
 = Level(dBμV/m) – Limit Line(dBμV/m)
 = 55.45(dBμV/m) – 74(dBμV/m)
 = -18.55(dB)

For Average Limit @ 2390MHz:

1. Level(dBμV/m)
 = Antenna Factor(dB/m) + Path Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)
 = 32.22(dB/m) + 4.58(dB) + 42.6(dBμV) – 35.86 (dB)
 = 43.54 (dBμV/m)
2. Over Limit(dB) = Level(dBμV/m) – Limit Line(dBμV/m)
 = 43.54(dBμV/m) – 54(dBμV/m)
 = -10.46(dB)

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



Appendix D. Radiated Spurious Emission

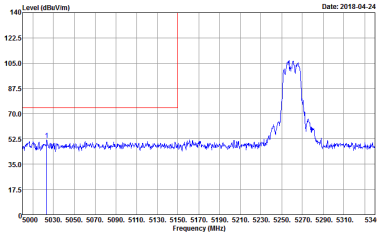
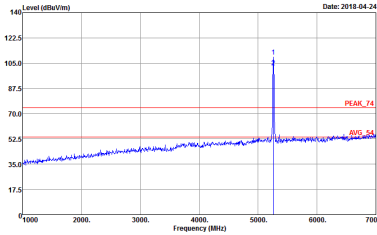
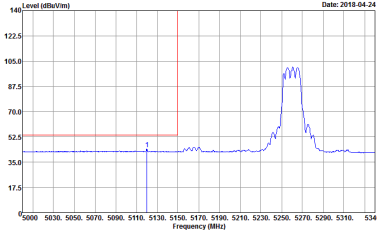
Test Engineer :	Alex Jheng, Fu Chen, Wilson Wu	Temperature :	24.5~25.2°C
		Relative Humidity :	47.0~47.2%

Note symbol

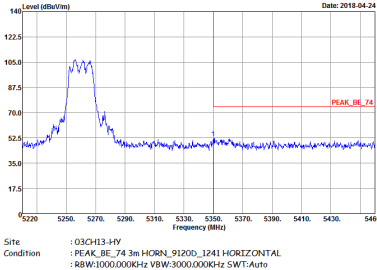
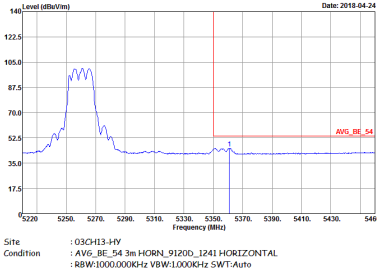
-L	Low channel location
-R	High channel location



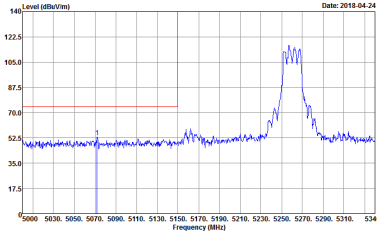
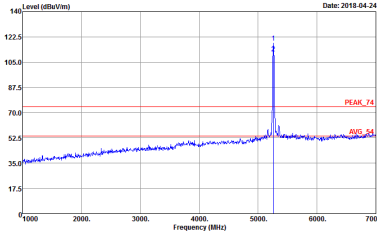
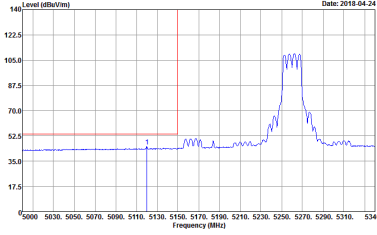
Band 2 - 5250~5350MHz
WIFI 802.11a (Band Edge @ 3m)

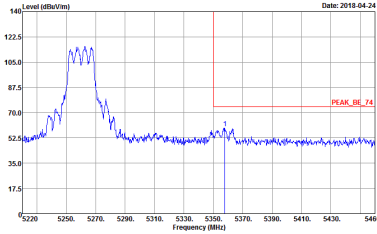
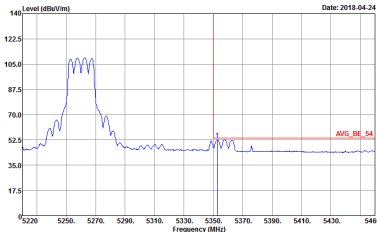
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH52 5260MHz - L	
1+2	Horizontal	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE_74 3m HORN_91200_1241 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH13-HY Condition : PEAK_74 3m HORN_91200_1241 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH13-HY Condition : AVG_BE_54 3m HORN_91200_1241 HORIZONTAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto	Left blank



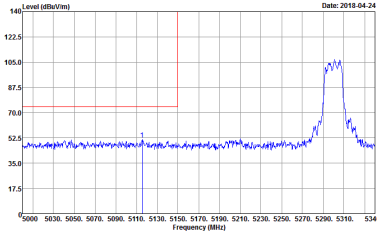
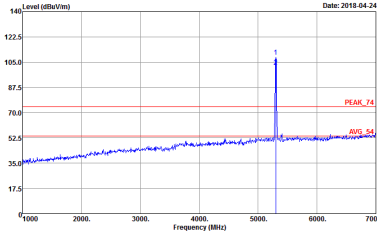
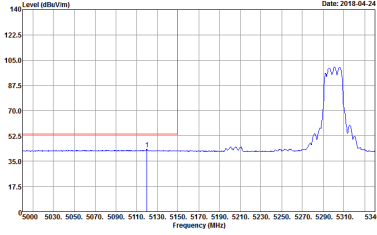
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH52 5260MHz - R	
1+2	Horizontal	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE_74 3m HORN_91200_1241 HORIZONTAL RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	Left blank
Avg.	 Site : 03CH13-HY Condition : AVG_BE_54 3m HORN_91200_1241 HORIZONTAL RBW:1000.000kHz VBW:1.000kHz SWT:Auto	Left blank



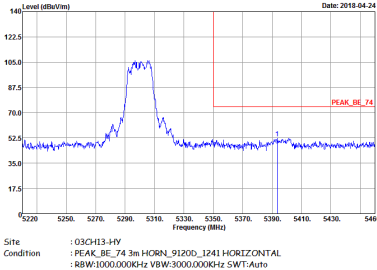
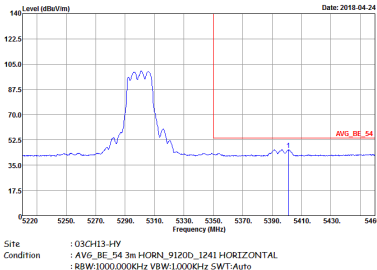
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH52 5260MHz - L	
1+2	Vertical	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE_74 3m HORN_91200_1241 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	 Site : 03CH13-HY Condition : PEAK_74 3m HORN_91200_1241 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto
Avg.	 Site : 03CH13-HY Condition : AVG_BE_54 3m HORN_91200_1241 VERTICAL : RBW:1000.000kHz VBW:1.000kHz SWT:Auto	Left blank

WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH52 5260MHz - R	
1+2	Vertical	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE_74 3m HORN_91200_1241 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	Left blank
Avg.	 Site : 03CH13-HY Condition : AVG_BE_54 3m HORN_91200_1241 VERTICAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto	Left blank



WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH60 5300MHz - L	
1+2	Horizontal	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE_74 3m HORN_91200_1241 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH13-HY Condition : PEAK_74 3m HORN_91200_1241 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH13-HY Condition : AVG_BE_54 3m HORN_91200_1241 HORIZONTAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto	Left blank

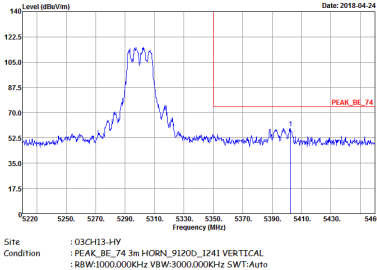
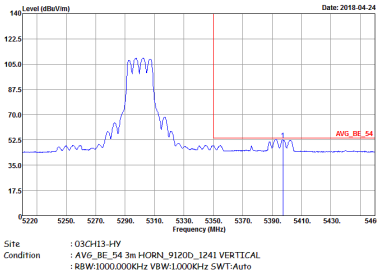


WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH60 5300MHz - R	
1+2	Horizontal	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE_74 3m HORN_91200_1241 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	Left blank
Avg.	 Site : 03CH13-HY Condition : AVG_BE_54 3m HORN_91200_1241 HORIZONTAL RBW:1000.000KHz VBW:1.000KHz SWT:Auto	Left blank



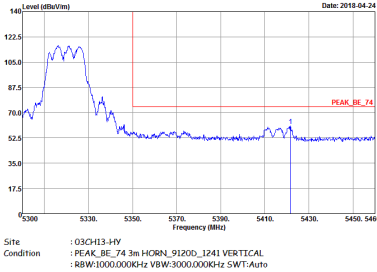
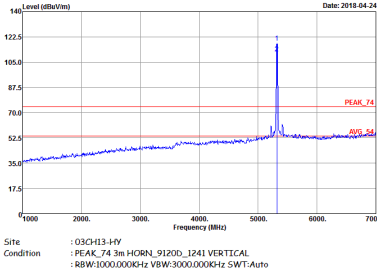
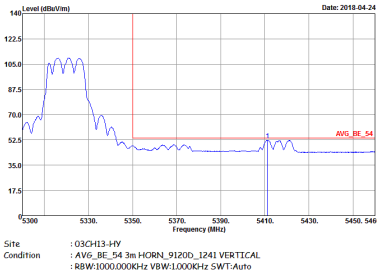
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH60 5300MHz - L	
1+2	Vertical	Fundamental
Peak	Site : 03CH13-HY Condition : PEAK_BE_74 3m HORN_91200_1241 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	Site : 03CH13-HY Condition : PEAK_74 3m HORN_91200_1241 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	Site : 03CH13-HY Condition : AVG_BE_54 3m HORN_91200_1241 VERTICAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto	Left blank



WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH60 5300MHz - R	
1+2	Vertical	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE_74 3m HORN_91200_1241 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	Left blank
Avg.	 Site : 03CH13-HY Condition : AVG_BE_54 3m HORN_91200_1241 VERTICAL RBW:1000.000KHz VBW:1.000KHz SWT:Auto	Left blank

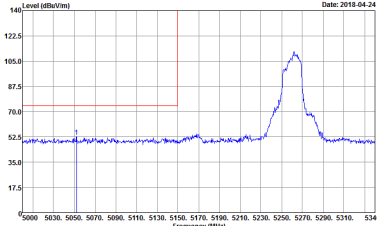
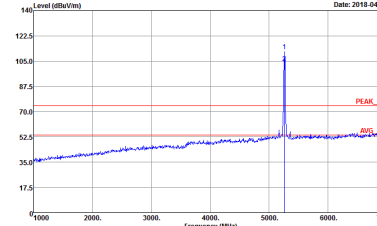
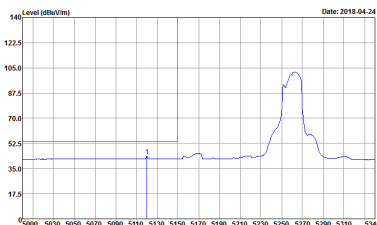


WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH64 5320MHz	
1+2	Horizontal	Fundamental
Peak	Site : 03CH13-HY Condition : PEAK_BE_74 3m HORN_91200_1241 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	Site : 03CH13-HY Condition : PEAK_74 3m HORN_91200_1241 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	Site : 03CH13-HY Condition : AVG_BE_54 3m HORN_91200_1241 HORIZONTAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto	Left blank

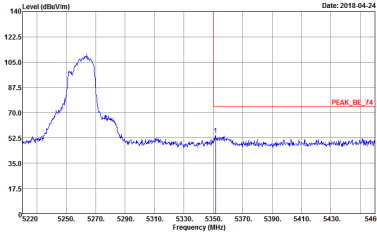
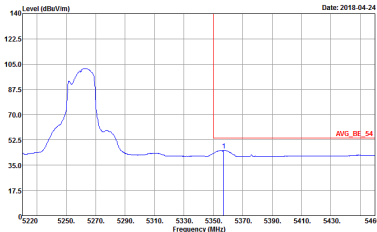
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH64 5320MHz	
1+2	Vertical	Fundamental
Peak		
Avg.		Left blank

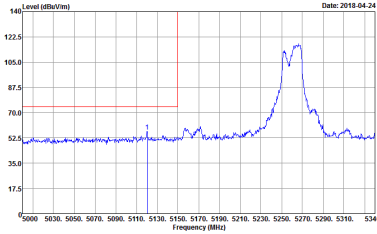
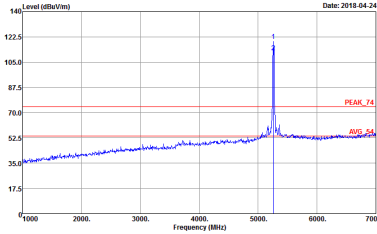
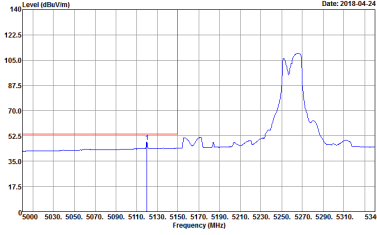


Band 2 5250~5350MHz
WIFI 802.11n HT20 (Band Edge @ 3m)

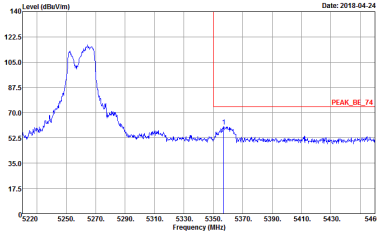
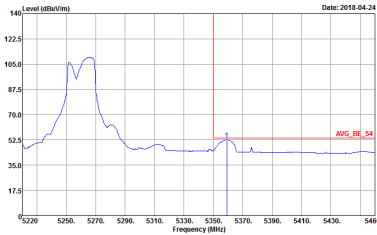
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH52 5260MHz - L	
1+2	Horizontal	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE_74 3m HORN_91200_1241 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH13-HY Condition : PEAK_74 3m HORN_91200_1241 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH13-HY Condition : AVG_BE_54 3m HORN_91200_1241 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto	Left blank



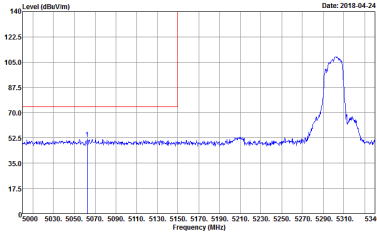
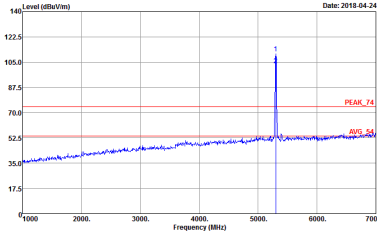
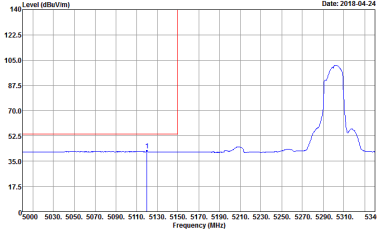
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH52 5260MHz - R	
1+2	Horizontal	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE_74 3m HORN_91200_1241 HORIZONTAL RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	Left blank
Avg.	 Site : 03CH13-HY Condition : AVG_BE_54 3m HORN_91200_1241 HORIZONTAL RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	Left blank

WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH52 5260MHz - L	
1+2	Vertical	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE_74 3m HORN_91200_1241 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH13-HY Condition : PEAK_74 3m HORN_91200_1241 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH13-HY Condition : AVG_BE_54 3m HORN_91200_1241 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	Left blank

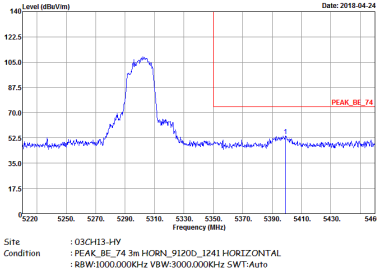
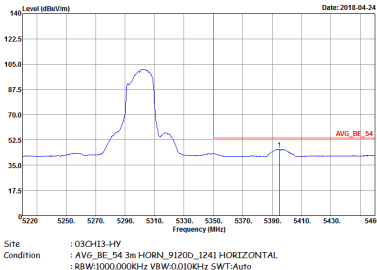


WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH52 5260MHz - R	
1+2	Vertical	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE_74 3m HORN_91200_1241 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	Left blank
Avg.	 Site : 03CH13-HY Condition : AVG_BE_54 3m HORN_91200_1241 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	Left blank



WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH60 5300MHz - L	
1+2	Horizontal	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE_74 3m HORN_91200_1241 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH13-HY Condition : PEAK_74 3m HORN_91200_1241 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH13-HY Condition : AVG_BE_54 3m HORN_91200_1241 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	Left blank

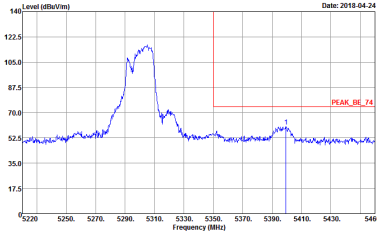
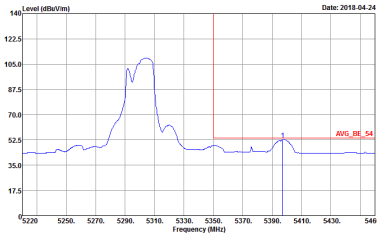


WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH60 5300MHz - R	
1+2	Horizontal	Vertical
Peak	 Site : 03CH13-HY Condition : PEAK_BE_74 3m HORN_91200_1241 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	Left blank
Avg.	 Site : 03CH13-HY Condition : AVG_BE_54 3m HORN_91200_1241 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto	Left blank

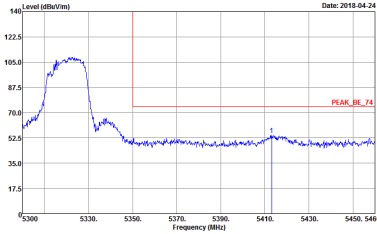
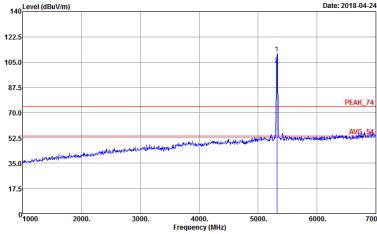
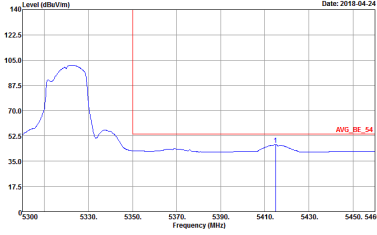


WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH60 5300MHz - L	
1+2	Vertical	Fundamental
Peak	Site : 03CH13-HY Condition : PEAK_BE_74 3m HORN_91200_1241 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	Site : 03CH13-HY Condition : PEAK_74 3m HORN_91200_1241 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	Site : 03CH13-HY Condition : AVG_BE_54 3m HORN_91200_1241 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	Left blank



WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH60 5300MHz - R	
1+2	Vertical	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE_74 3m HORN_91200_1241 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	Left blank
Avg.	 Site : 03CH13-HY Condition : AVG_BE_54 3m HORN_91200_1241 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	Left blank



WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH64 5320MHz	
1+2	Horizontal	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE_74 3m HORN_91200_1241 HORIZONTAL RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	 Site : 03CH13-HY Condition : PEAK_74 3m HORN_91200_1241 HORIZONTAL RBW:1000.000kHz VBW:3000.000kHz SWT:Auto
Avg.	 Site : 03CH13-HY Condition : AVG_BE_54 3m HORN_91200_1241 HORIZONTAL RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	Left blank



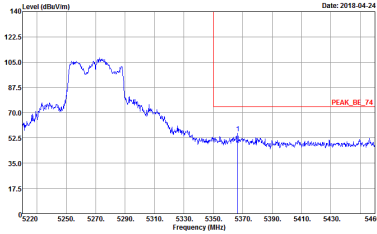
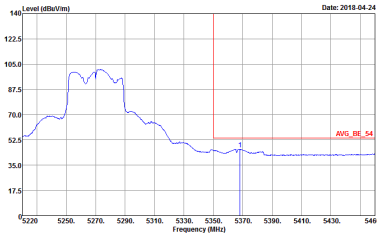
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH64 5320MHz	
1+2	Vertical	Fundamental
Peak	Site : 03CH13-HY Condition : PEAK_BE_74 3m HORN_91200_1241 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	Site : 03CH13-HY Condition : PEAK_F4 3m HORN_91200_1241 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto
Avg.	Site : 03CH13-HY Condition : AVG_BE_54 3m HORN_91200_1241 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	Left blank

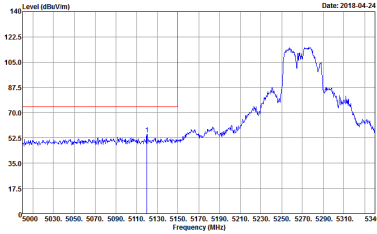
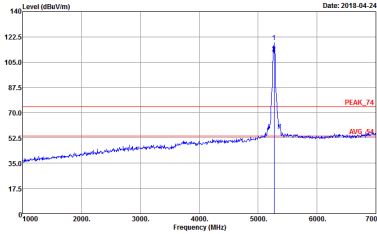
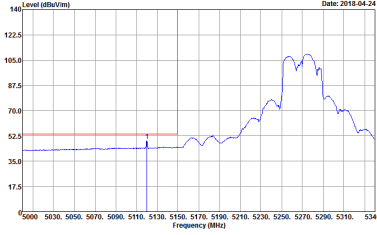


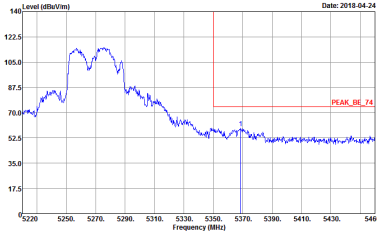
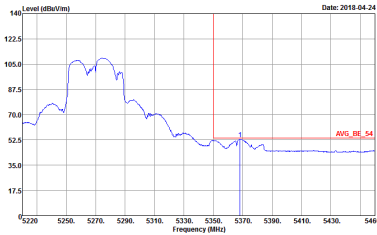
Band 2 5250~5350MHz
WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT40 CH54 5270MHz - L	
1+2	Horizontal	Fundamental
Peak	Site : 03CH13-HY Condition : PEAK_BE_74 3m HORN_91200_1241 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	Site : 03CH13-HY Condition : PEAK_74 3m HORN_91200_1241 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	Site : 03CH13-HY Condition : AVG_BE_54 3m HORN_91200_1241 HORIZONTAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto	Left blank



WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT40 CH54 5270MHz - R	
1+2	Horizontal	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE_74 3m HORN_91200_1241 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	Left blank
Avg.	 Site : 03CH13-HY Condition : AVG_BE_54 3m HORN_91200_1241 HORIZONTAL : RBW:1000.000kHz VBW:1.000kHz SWT:Auto	Left blank

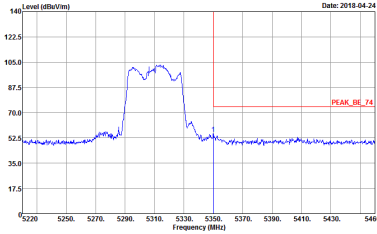
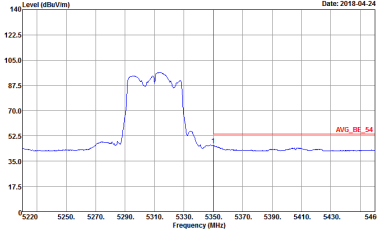
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT40 CH54 5270MHz - L	
1+2	Vertical	Vertical
Peak	 Site : 03CH13-HY Condition : PEAK_BE_74 3m HORN_91200_1241 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH13-HY Condition : PEAK_74 3m HORN_91200_1241 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH13-HY Condition : AVG_BE_54 3m HORN_91200_1241 VERTICAL RBW:1000.000KHz VBW:1.000KHz SWT:Auto	Left blank

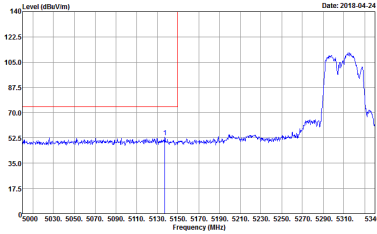
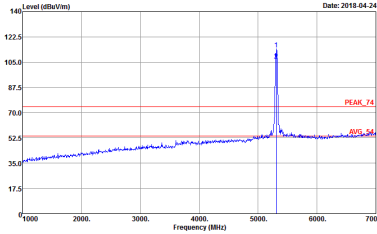
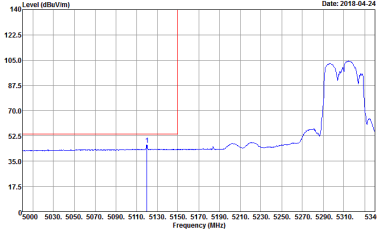
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT40 CH54 5270MHz - R	
1+2	Vertical	Vertical
Peak	 Site : 03CH13-HY Condition : PEAK_BE_74 3m HORN_91200_1241 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	Left blank
Avg.	 Site : 03CH13-HY Condition : AVG_BE_54 3m HORN_91200_1241 VERTICAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto	Left blank



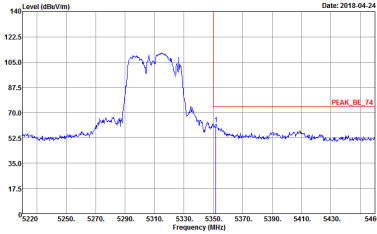
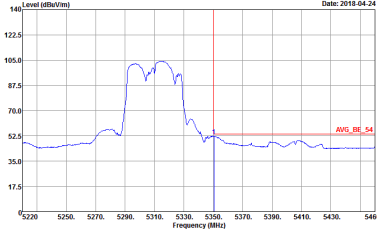
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT40 CH62 5310MHz - L	
1+2	Horizontal	Fundamental
Peak	Site : 03CH13-HY Condition : PEAK_BE_74 3m HORN_91200_1241 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	Site : 03CH13-HY Condition : PEAK_74 3m HORN_91200_1241 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto
Avg.	Site : 03CH13-HY Condition : AVG_BE_54 3m HORN_91200_1241 HORIZONTAL : RBW:1000.000kHz VBW:1.000kHz SWT:Auto	Left blank



WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT40 CH62 5310MHz - R	
1+2	Horizontal	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE_74 3m HORN_91200_1241 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	Left blank
Avg.	 Site : 03CH13-HY Condition : AVG_BE_54 3m HORN_91200_1241 HORIZONTAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto	Left blank

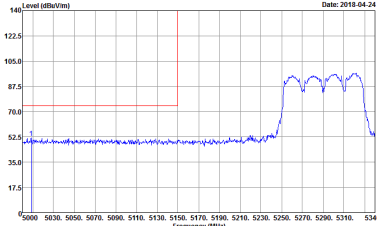
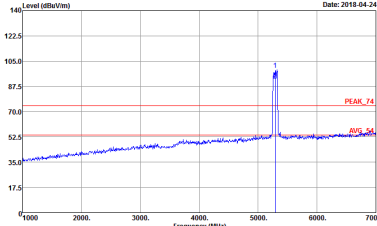
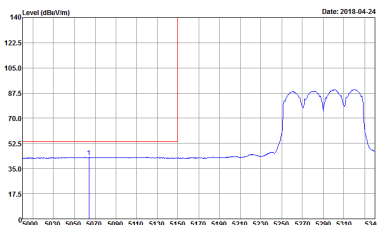
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT40 CH62 5310MHz - L	
1+2	Vertical	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE_74 3m HORN_91200_1241 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH13-HY Condition : PEAK_74 3m HORN_91200_1241 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH13-HY Condition : AVG_BE_54 3m HORN_91200_1241 VERTICAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto	Left blank



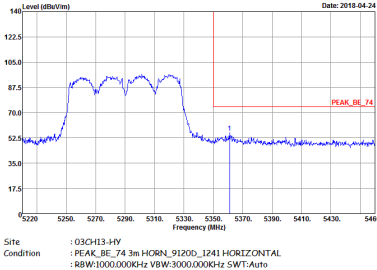
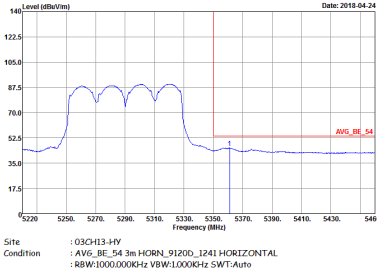
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT40 CH62 5310MHz - R	
1+2	Vertical	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE_74 3m HORN_91200_1241 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	Left blank
Avg.	 Site : 03CH13-HY Condition : AVG_BE_54 3m HORN_91200_1241 VERTICAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto	Left blank

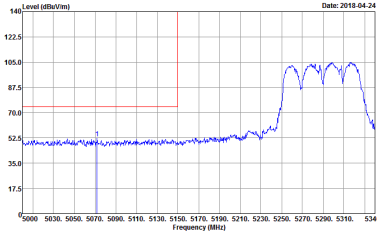
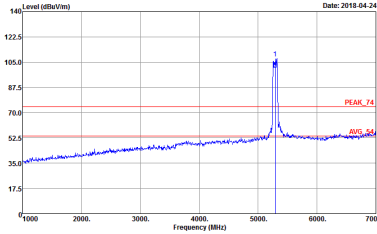
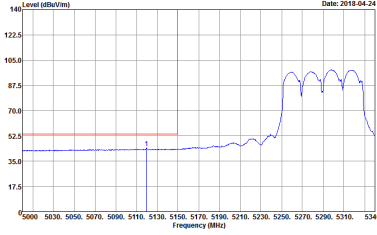


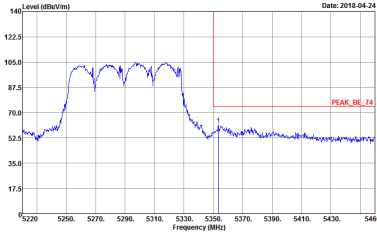
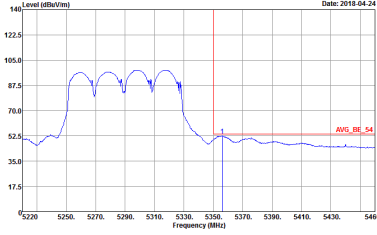
Band 2 5250~5350MHz
WIFI 802.11ac VHT80 (Band Edge @ 3m)

WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH58 5290MHz - L	
1+2	Horizontal	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE_74 3m HORN_91200_1241 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH13-HY Condition : PEAK_74 3m HORN_91200_1241 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH13-HY Condition : AVG_BE_54 3m HORN_91200_1241 HORIZONTAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto	Left blank



WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH58 5290MHz - R	
1+2	Horizontal	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE_74 3m HORN_91200_1241 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	Left blank
Avg.	 Site : 03CH13-HY Condition : AVG_BE_54 3m HORN_91200_1241 HORIZONTAL : RBW:1000.000kHz VBW:1.000kHz SWT:Auto	Left blank

WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH58 5290MHz - L	
1+2	Vertical	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE_74 3m HORN_91200_1241 VERTICAL RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	 Site : 03CH13-HY Condition : PEAK_74 3m HORN_91200_1241 VERTICAL RBW:1000.000kHz VBW:3000.000kHz SWT:Auto
Avg.	 Site : 03CH13-HY Condition : AVG_BE_54 3m HORN_91200_1241 VERTICAL RBW:1000.000kHz VBW:1.000kHz SWT:Auto	Left blank

WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH58 5290MHz - R	
1+2	Vertical	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE_74 3m HORN_91200_1241 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	Left blank
Avg.	 Site : 03CH13-HY Condition : AVG_BE_54 3m HORN_91200_1241 VERTICAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto	Left blank



Band 2 - 5250~5350MHz
WIFI 802.11a (Harmonic @ 3m)

WIFI	Band 2 5250~5350MHz Harmonic @ 3m	
ANT	802.11a CH52 5260MHz	
1+2	Horizontal	Vertical
Peak Avg.	Site : 03CH13-HY Condition : PEAK(UMB) 3m SHF_HORN_576 HORIZONTAL	Site : 03CH13-HY Condition : PEAK(UMB) 3m SHF_HORN_576 VERTICAL

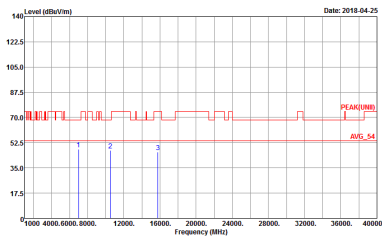
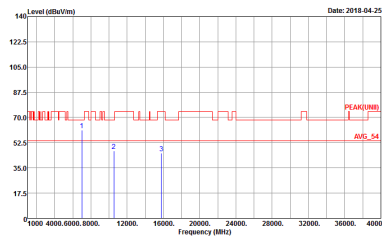


WIFI	Band 2 5250~5350MHz Harmonic @ 3m	
ANT	802.11a CH60 5300MHz	
1+2	Horizontal	Vertical
Peak Avg.	Level (dBuV/m) Date: 2018-04-25 Site : 03CH13-HY Condition : PEAK(UM) 3m SHF_HORN_576 HORIZONTAL	Level (dBuV/m) Date: 2018-04-25 Site : 03CH13-HY Condition : PEAK(UM) 3m SHF_HORN_576 VERTICAL



WIFI	Band 2 5250~5350MHz Harmonic @ 3m	
ANT	802.11a CH64 5320MHz	
1+2	Horizontal	Vertical
Peak Avg.	Level (dBuV/m) Date: 2018-04-25 Site : 03CH13-HY Condition : PEAK(UM) 3m SHF_HORN_576 HORIZONTAL	Level (dBuV/m) Date: 2018-04-25 Site : 03CH13-HY Condition : PEAK(UM) 3m SHF_HORN_576 VERTICAL

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

WIFI	Band 2 5250~5350MHz Harmonic @ 3m	
ANT	802.11n HT20 CH52 5260MHz	
1+2	Horizontal	Vertical
Peak Avg.	 Site : 03CH13-4Y Condition : PEAK(UNIT) 3m SHF_HORN_576 HORIZONTAL	 Site : 03CH13-4Y Condition : PEAK(UNIT) 3m SHF_HORN_576 VERTICAL

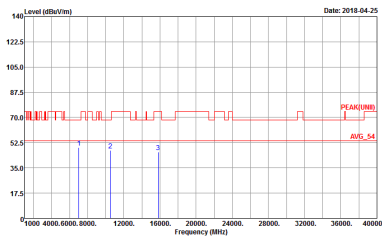
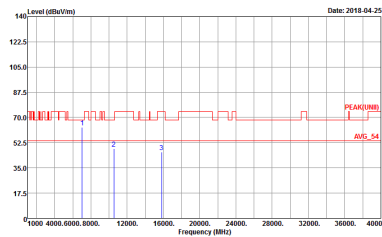


WIFI	Band 2 5250~5350MHz Harmonic @ 3m	
ANT	802.11n HT20 CH60 5300MHz	
1+2	Horizontal	Vertical
Peak Avg.	Site : 03CH13-HY Condition : PEAK(UNII) 3m SHF_HORN_576 VERTICAL	Site : 03CH13-HY Condition : PEAK(UNII) 3m SHF_HORN_576 VERTICAL



WIFI	Band 2 5250~5350MHz Harmonic @ 3m	
ANT	802.11n HT20 CH64 5320MHz	
1+2	Horizontal	Vertical
Peak Avg.	Level (dBuV/m) Date: 2018-04-25 Site : 03CH13-HY Condition : PEAK(UNII) 3m SHF_HORN_576 VERTICAL	Level (dBuV/m) Date: 2018-04-25 Site : 03CH13-HY Condition : PEAK(UNII) 3m SHF_HORN_576 VERTICAL

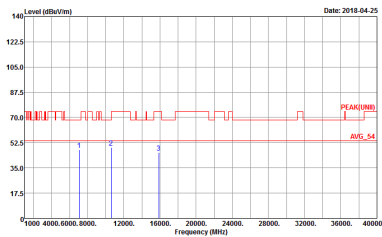
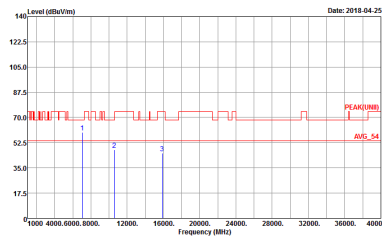
Band 2 5250~5350MHz
WIFI 802.11n HT40 (Harmonic @ 3m)

WIFI	Band 2 5250~5350MHz Harmonic @ 3m	
ANT	802.11n HT40 CH54 5270MHz	
1+2	Horizontal	Vertical
Peak Avg.	 Site : 03CH13-4Y Condition : PEAK(UNIT) 3m SHF_HORN_576 HORIZONTAL	 Site : 03CH13-4Y Condition : PEAK(UNIT) 3m SHF_HORN_576 VERTICAL



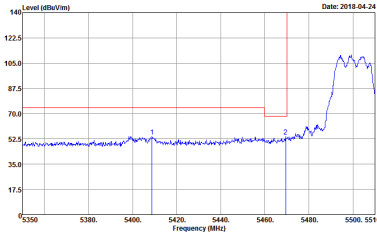
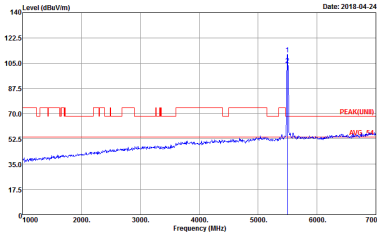
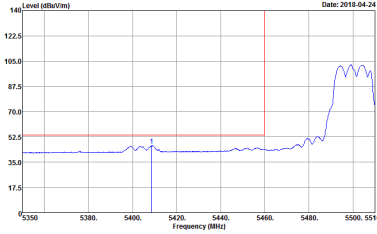
WIFI	Band 2 5250~5350MHz Harmonic @ 3m	
ANT	802.11n HT40 CH62 5310MHz	
1+2	Horizontal	Vertical
Peak Avg.	Level (dBuV/m) Date: 2018-04-25 Frequency (MHz) Site : 03CH13-HY Condition : PEAK(UNII) 3m SHF_HORN_576 HORIZONTAL	Level (dBuV/m) Date: 2018-04-25 Frequency (MHz) Site : 03CH13-HY Condition : PEAK(UNII) 3m SHF_HORN_576 VERTICAL

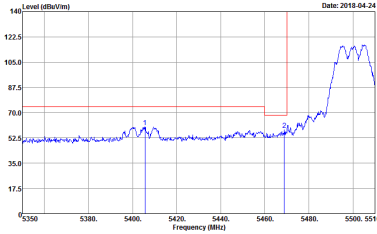
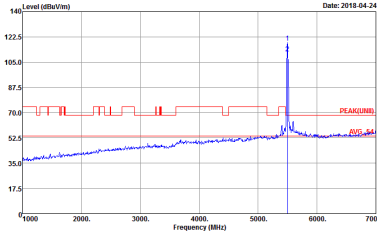
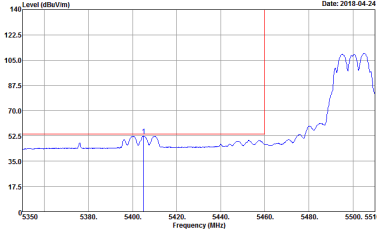
Band 2 5250~5350MHz
WIFI 802.11ac VHT80 (Harmonic @ 3m)

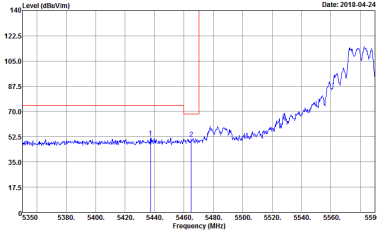
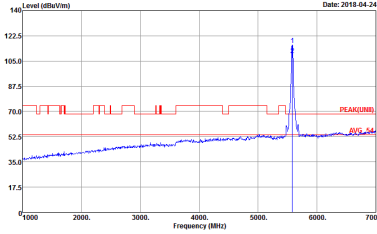
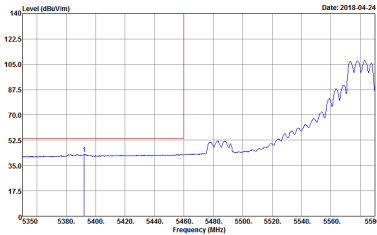
WIFI	Band 2 5250~5350MHz Harmonic @ 3m	
ANT	802.11ac VHT80 CH58 5290MHz	
1+2	Horizontal	Vertical
Peak Avg.	 Site : 03CH13-4Y Condition : PEAK(UNIT) 3m SHF_HORN_576 HORIZONTAL	 Site : 03CH13-4Y Condition : PEAK(UNIT) 3m SHF_HORN_576 VERTICAL



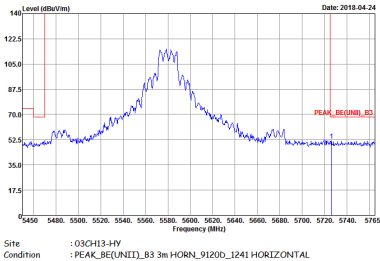
Band 3 - 5470~5725MHz
WIFI 802.11a (Band Edge @ 3m)

WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH100 5500MHz	
1+2	Horizontal	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE(UNIT)_B3 3m HORN_91200_1241 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH13-HY Condition : PEAK(UNIT)_3m HORN_91200_1241 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH13-HY Condition : AVG_BE(UNIT)_B3 3m HORN_91200_1241 HORIZONTAL : RBW:1000.000KHz VBW:1000KHz SWT:Auto	Left blank

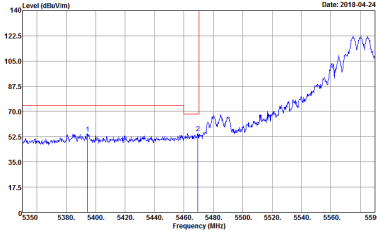
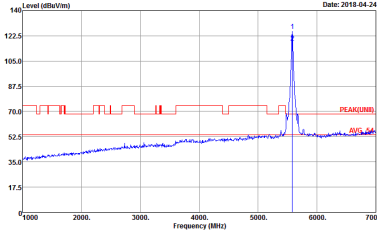
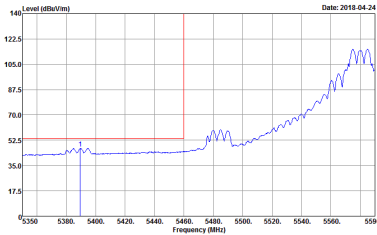
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH100 5500MHz	
1+2	Vertical	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE(UNIT)_B3 3m HORN_91200_1241 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH13-HY Condition : PEAK(UNIT) 3m HORN_91200_1241 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH13-HY Condition : AVG_BE(UNIT)_B3 3m HORN_91200_1241 VERTICAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto	Left blank

WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH116 5580MHz - L	
1+2	Horizontal	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE(UNIT)_B3 3m HORN_91200_1241 HORIZONTAL	 Site : 03CH13-HY Condition : PEAK(UNIT) 3m HORN_91200_1241 HORIZONTAL
Avg.	 Site : 03CH13-HY Condition : AVG_BE(UNIT)_B3 3m HORN_91200_1241 HORIZONTAL	Left blank

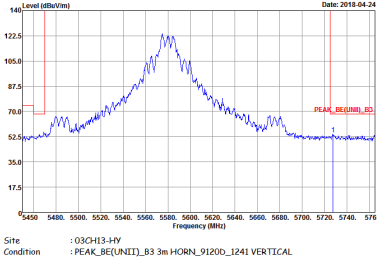


WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH116 5580MHz - R	
1+2	Horizontal	Fundamental
Peak		Left blank

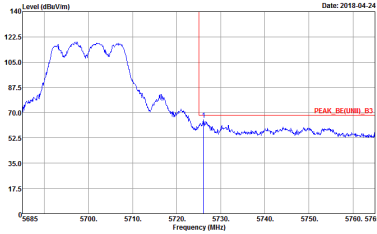
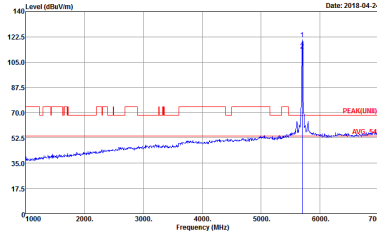


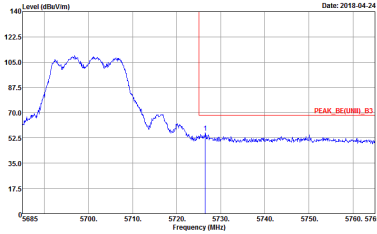
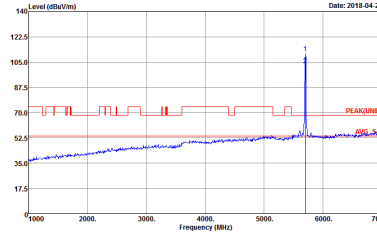
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH116 5580MHz - L	
1+2	Vertical	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE(UNIT)_B3 3m HORN_91200_1241 VERTICAL	 Site : 03CH13-HY Condition : PEAK(UNIT) 3m HORN_91200_1241 VERTICAL
Avg.	 Site : 03CH13-HY Condition : AVG_BE(UNIT)_B3 3m HORN_91200_1241 VERTICAL	Left blank



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

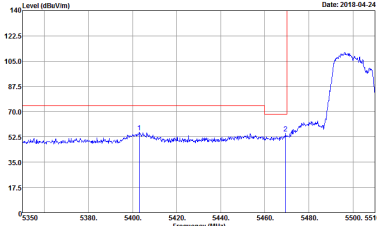
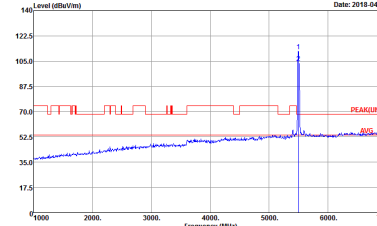
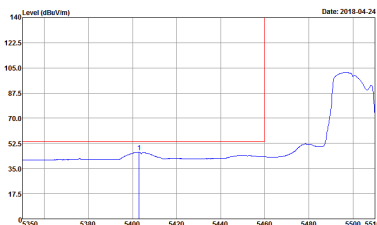


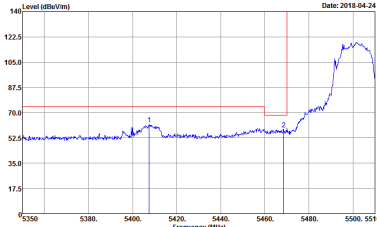
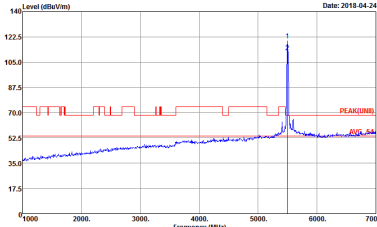
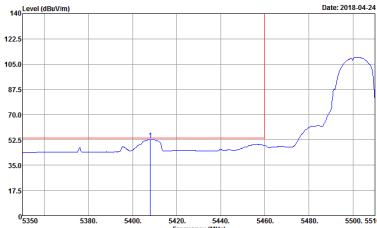
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH140 5700MHz	
1+2	Horizontal	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_B6(UNIT)_B3 3m HORN_91200_1241 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH13-HY Condition : PEAK_B6(UNIT)_B3 3m HORN_91200_1241 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto

WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH140 5700MHz	
1+2	Vertical	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_B6(UNIT)_B3 3m HORN_91200_1241 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH13-HY Condition : PEAK(UNIT) 3m HORN_91200_1241 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto

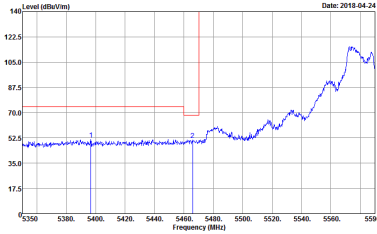
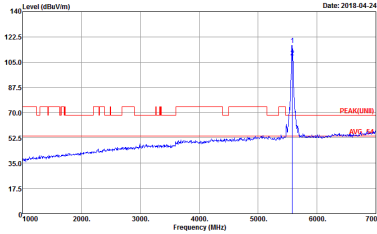
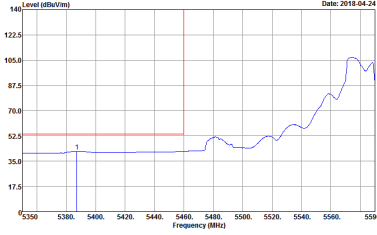


Band 3 5470~5725MHz
WIFI 802.11n HT20 (Band Edge @ 3m)

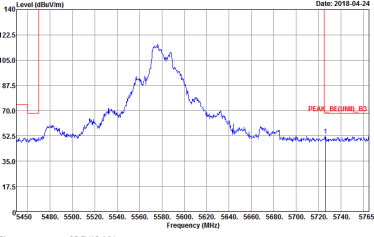
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT20 CH100 5500MHz	
1+2	Horizontal	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE(UNIT1)_B3 3m HORN_9120D_1241 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH13-HY Condition : PEAK(UNIT1) 3m HORN_9120D_1241 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH13-HY Condition : AVG_BE(UNIT1)_B3 3m HORN_9120D_1241 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto	Left blank

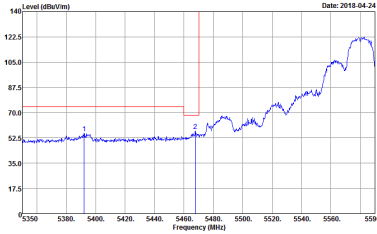
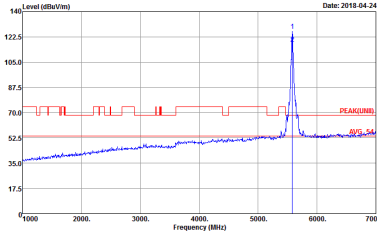
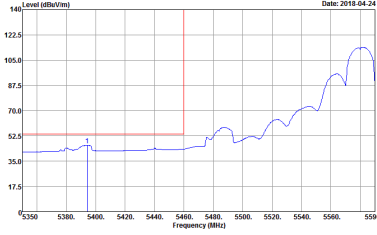
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT20 CH100 5500MHz	
1+2	Vertical	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE(UNIT)_B3 3m HORN_91200_1241 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH13-HY Condition : PEAK(UNIT) 3m HORN_91200_1241 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH13-HY Condition : AVG_BE(UNIT)_B3 3m HORN_91200_1241 VERTICAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto	Left blank

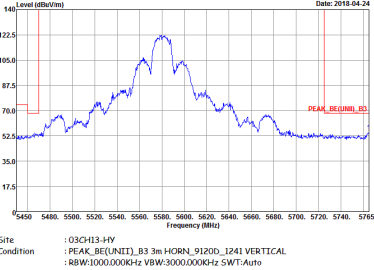


WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT20 CH116 5580MHz - L	
1+2	Horizontal	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE(UNIT)_B3 3m HORN_91200_1241 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH13-HY Condition : PEAK(UNIT) 3m HORN_91200_1241 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH13-HY Condition : AVG_BE(UNIT)_B3 3m HORN_91200_1241 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto	Left blank



WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT20 CH116 5580MHz - R	
1+2	Horizontal	Fundamental
Peak	 Site : 03CH13-HV Condition : PEAK_BE(UNIT)_B3 3m HORN_91200_1241 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Date: 2018-04-24	Left blank

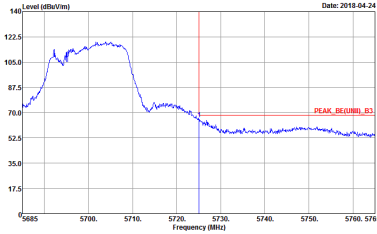
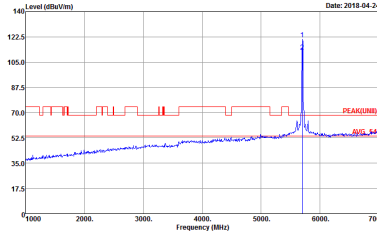
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT20 CH116 5580MHz - L	
1+2	Vertical	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE(UNIT)_B3 3m HORN_91200_1241 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	 Site : 03CH13-HY Condition : PEAK(UNIT) 3m HORN_91200_1241 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto
Avg.	 Site : 03CH13-HY Condition : AVG_BE(UNIT)_B3 3m HORN_91200_1241 VERTICAL : RBW:1000.000kHz VBW:0.010kHz SWT:Auto	Left blank

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



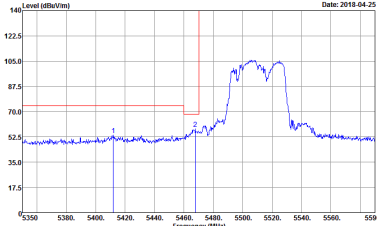
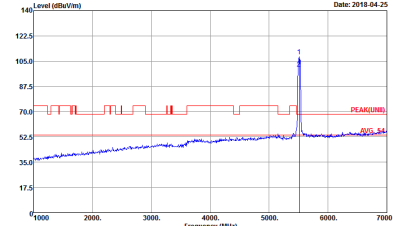
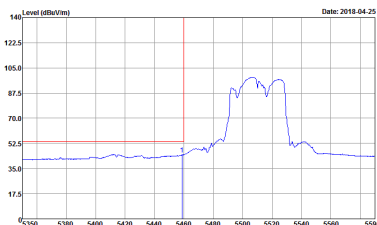
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT20 CH140 5700MHz	
1+2	Horizontal	Fundamental
Peak	Level (dBm/Vm) Date: 2018-04-24 PEAK: 70.00, 5700.00 Site : 03CH13-HY Condition : PEAK: 70.00, 5700.00, 3m HORN, 91200_1241 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	Level (dBm/Vm) Date: 2018-04-24 PEAK: 70.00, 5700.00 Site : 03CH13-HY Condition : PEAK: 70.00, 5700.00, 3m HORN, 91200_1241 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto



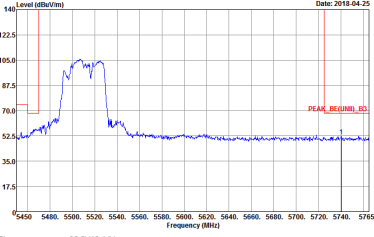
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT20 CH140 5700MHz	
1+2	Vertical	Fundamental
Peak.	 Site : 03CH13-HY Condition : PEAK_B3(UNIT)_B3 3m HORN_91200_1241 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH13-HY Condition : PEAK(UNIT)_B3 3m HORN_91200_1241 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto

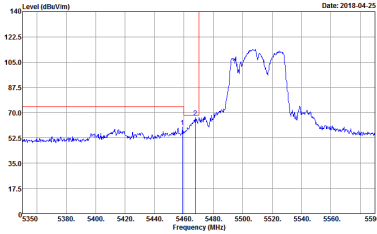
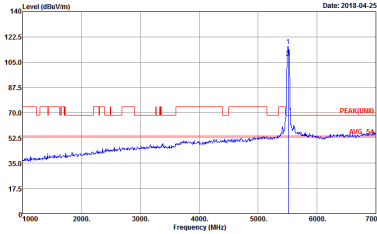
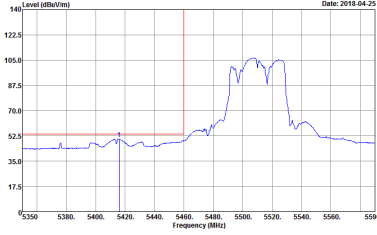


Band 3 5470~5725MHz
WIFI 802.11n HT40 (Band Edge @ 3m)

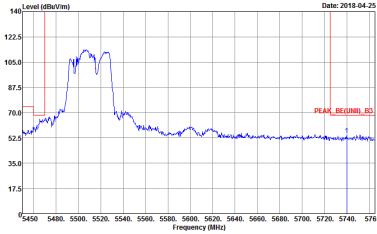
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH102 5510MHz - L	
1+2	Horizontal	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE(UNIT1)_B3 3m HORN_9120D_1241 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH13-HY Condition : PEAK(UNIT1) 3m HORN_9120D_1241 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH13-HY Condition : AVG_BE(UNIT1)_B3 3m HORN_9120D_1241 HORIZONTAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto	Left blank



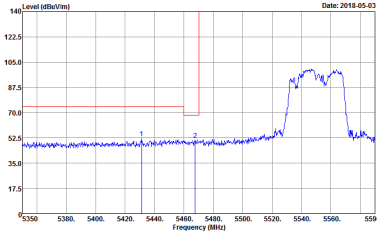
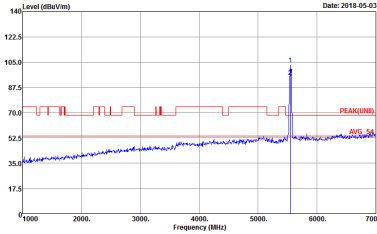
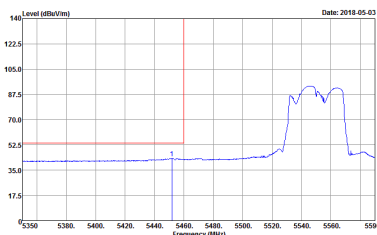
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH102 5510MHz - R	
1+2	Horizontal	Fundamental
Peak	 Site : 03CH13-HV Condition : PEAK_B6(UNIT)_B3 3m HORN_91200_1241 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Date: 2018-04-25	Left blank

WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH102 5510MHz - L	
1+2	Vertical	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE(UNIT)_B3 3m HORN_91200_1241 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH13-HY Condition : PEAK(UNIT) 3m HORN_91200_1241 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH13-HY Condition : AVG_BE(UNIT)_B3 3m HORN_91200_1241 VERTICAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto	Left blank

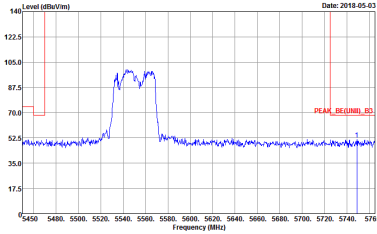


WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH102 5510MHz - R	
1+2	Vertical	Fundamental
Peak	 Site : 03CH13-HV Condition : PEAK_86[UNIT], B3 3m HORN_91200_1241 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Date: 2018-04-25	Left blank

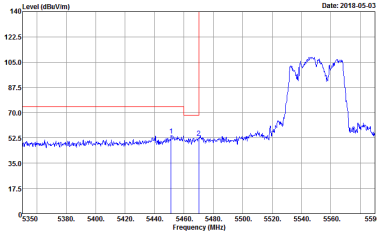
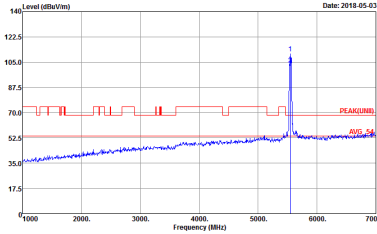
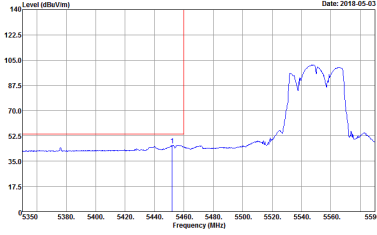


WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH110 5550MHz - L	
1+2	Horizontal	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE(UNIT)_B3 3m HORN_91200_1241 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	 Site : 03CH13-HY Condition : PEAK(UNIT) 3m HORN_91200_1241 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto
Avg.	 Site : 03CH13-HY Condition : AVG_BE(UNIT)_B3 3m HORN_91200_1241 HORIZONTAL : RBW:1000.000kHz VBW:1.000kHz SWT:Auto	Left blank

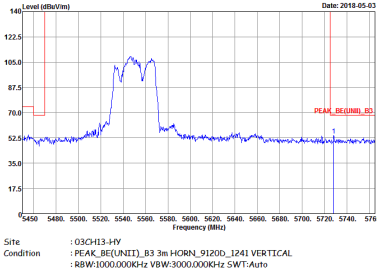


WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH110 5550MHz - R	
1+2	Horizontal	Fundamental
Peak	 Site : 09CH13-HV Condition : PEAK_86[UNIT], B3 3m HORN_91200_1241 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Date: 2018-05-03	Left blank



WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH110 5550MHz - L	
1+2	Vertical	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE(UNIT)_B3 3m HORN_91200_1241 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH13-HY Condition : PEAK(UNIT) 3m HORN_91200_1241 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH13-HY Condition : AVG_BE(UNIT)_B3 3m HORN_91200_1241 VERTICAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto	Left blank

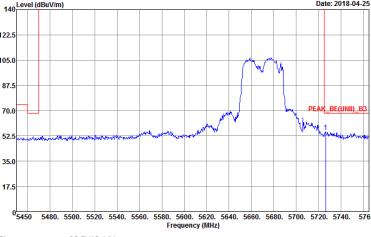


WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH110 5550MHz - R	
1+2	Vertical	Fundamental
Peak	 Site : 09CH13-HV Condition : PEAK_B6(UNIT)_B3 3m HORN_91200_1241 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	Left blank

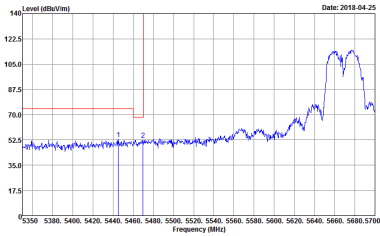
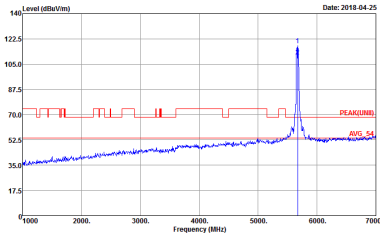
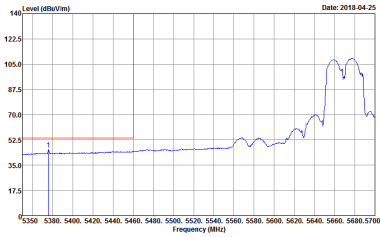


WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH134 5670MHz - L	
1+2	Horizontal	Fundamental
Peak	Site : 03CH13-HY Condition : PEAK_BE(UNIT)_B3 3m HORN_91200_1241 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	Site : 03CH13-HY Condition : PEAK(UNIT) 3m HORN_91200_1241 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	Site : 03CH13-HY Condition : AVG_BE(UNIT)_B3 3m HORN_91200_1241 HORIZONTAL RBW:1000.000KHz VBW:1.000KHz SWT:Auto	Left blank

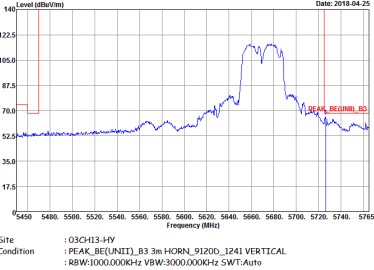


WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH134 5670MHz - R	
1+2	Horizontal	Fundamental
Peak	 Site : 03CH13-HV Condition : PEAK_86[UNIT], B3 3m HORN_91200_1241 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Date: 2018-04-25	Left blank



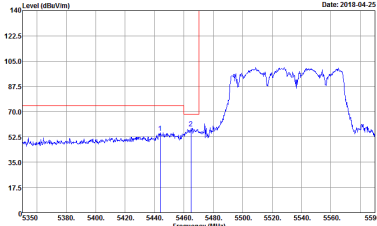
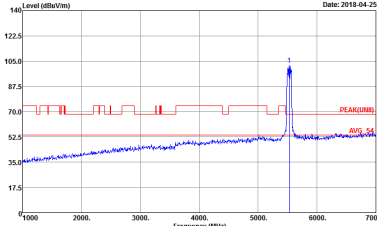
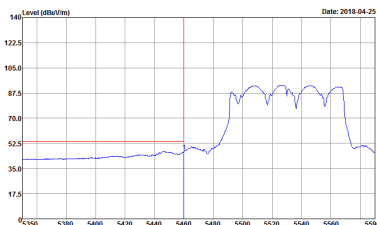
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH134 5670MHz - L	
1+2	Vertical	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE(UNIT)_B3 3m HORN_91200_1241 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH13-HY Condition : PEAK(UNIT) 3m HORN_91200_1241 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH13-HY Condition : AVG_BE(UNIT)_B3 3m HORN_91200_1241 VERTICAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto	Left blank



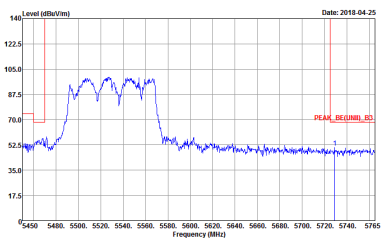
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH134 5670MHz - R	
1+2	Vertical	Fundamental
Peak	 Site : 03CH13-HV Condition : PEAK_86[UNIT], B3 3m HORN_91200_1241 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Date: 2018-04-25	Left blank



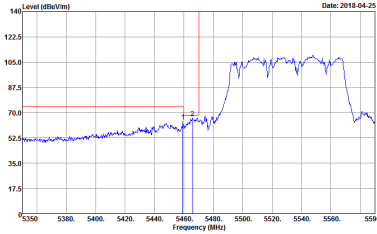
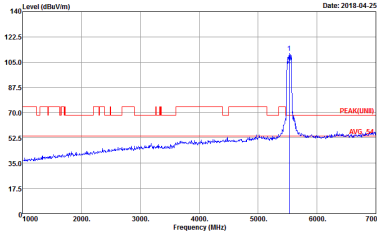
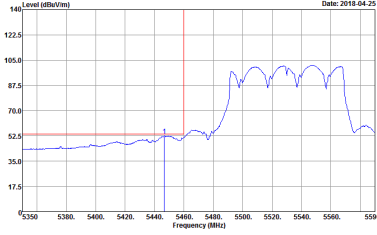
Band 3 5470~5725MHz
WIFI 802.11ac VHT80 (Band Edge @ 3m)

WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH106 5530MHz - L	
1+2	Horizontal	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE(UNIT)_B3 3m HORN_9120D_1241 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH13-HY Condition : PEAK(UNIT) 3m HORN_9120D_1241 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH13-HY Condition : AVG_BE(UNIT)_B3 3m HORN_9120D_1241 HORIZONTAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto	Left blank

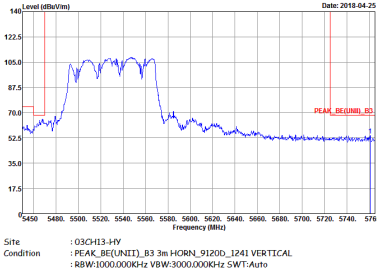


WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH106 5530MHz - R	
1+2	Horizontal	Fundamental
Peak	 Site : 03CH13-HV Condition : PEAK_86[UNIT], B3 3m HORN, 91200_1241 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	Left blank

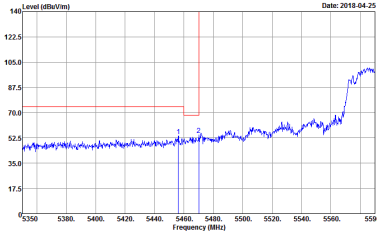
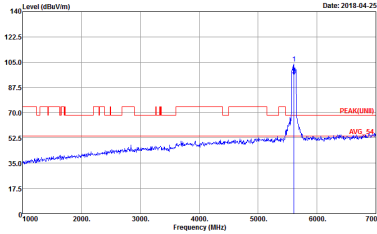
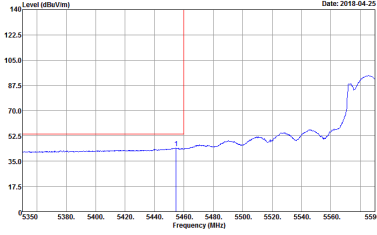


WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH106 5530MHz - L	
1+2	Vertical	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE(UNIT)_B3 3m HORN_91200_1241 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH13-HY Condition : PEAK(UNIT) 3m HORN_91200_1241 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH13-HY Condition : AVG_BE(UNIT)_B3 3m HORN_91200_1241 VERTICAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto	Left blank

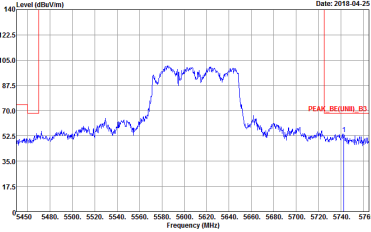


WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH106 5530MHz - R	
1+2	Vertical	Fundamental
Peak	 Site : 03CH13-HV Condition : PEAK_86(UNIT)_B3 3m HORN_91200_1241 VERTICAL RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	Left blank

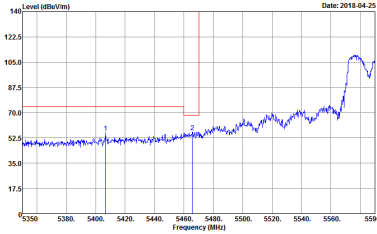
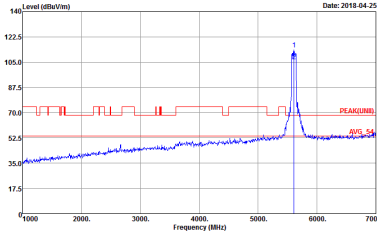
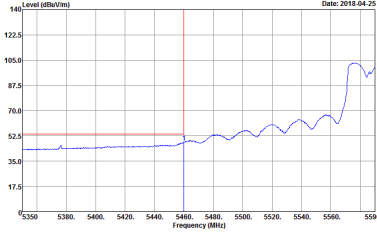


WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH122 5610MHz - L	
1+2	Horizontal	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE(UNIT)_B3 3m HORN_91200_1241 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	 Site : 03CH13-HY Condition : PEAK(UNIT) 3m HORN_91200_1241 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto
Avg.	 Site : 03CH13-HY Condition : AVG_BE(UNIT)_B3 3m HORN_91200_1241 HORIZONTAL : RBW:1000.000kHz VBW:1.000kHz SWT:Auto	Left blank

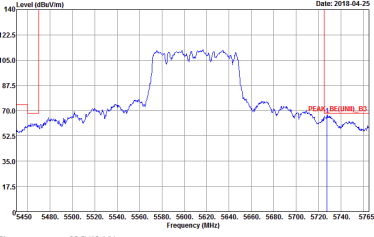


WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH122 5610MHz - R	
1+2	Horizontal	Fundamental
Peak	 Site : 03CH13-HV Condition : PEAK_86[UNIT], B3 3m HORN_91200_1241 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	Left blank



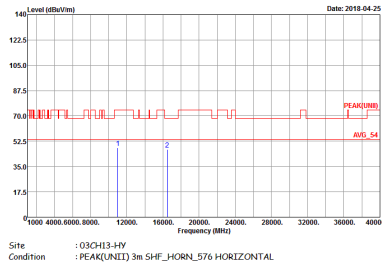
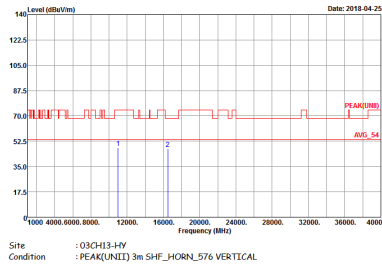
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH122 5610MHz - L	
1+2	Vertical	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE(UNIT)_B3 3m HORN_91200_1241 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	 Site : 03CH13-HY Condition : PEAK(UNIT) 3m HORN_91200_1241 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto
Avg.	 Site : 03CH13-HY Condition : AVG_BE(UNIT)_B3 3m HORN_91200_1241 VERTICAL : RBW:1000.000kHz VBW:1.000kHz SWT:Auto	Left blank



WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH122 5610MHz - R	
1+2	Vertical	Fundamental
Peak	 Site : 09CH13-HV Condition : PEAK_86[UNIT], B3 3m HORN_91200_1241 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Date: 2018-04-25	Left blank



Band 3 - 5470~5725MHz
WIFI 802.11a (Harmonic @ 3m)

WIFI	Band 3 5470~5725MHz Harmonic @ 3m	
ANT	802.11a CH100 5500MHz	
1+2	Horizontal	Vertical
Peak Avg.	 Site : 03CH13-HY Condition : PEAK(UNIT) 3m SHF_HORN_576 HORIZONTAL	 Site : 03CH13-HY Condition : PEAK(UNIT) 3m SHF_HORN_576 VERTICAL

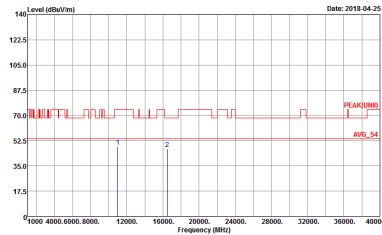
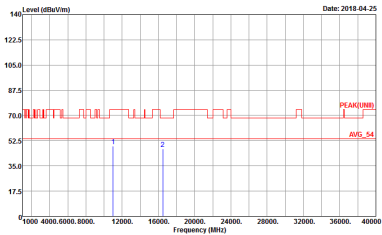


WIFI	Band 3 5470~5725MHz Harmonic @ 3m	
ANT	802.11a CH116 5580MHz	
1+2	Horizontal	Vertical
Peak Avg.	Level (dBuV/m) Date: 2018-04-25 Frequency (MHz) Site : 03CH13-HY Condition : PEAK(UNII) 3m SHF_HORN_576 HORIZONTAL	Level (dBuV/m) Date: 2018-04-25 Frequency (MHz) Site : 03CH13-HY Condition : PEAK(UNII) 3m SHF_HORN_576 VERTICAL



WIFI	Band 3 5470~5725MHz Harmonic @ 3m	
ANT	802.11a CH140 5700MHz	
1+2	Horizontal	Vertical
Peak Avg.	Level (dBuV/m) Date: 2018-04-25 Site : 03CH13-HY Condition : PEAK(UNII) 3m SHF_HORN_576 HORIZONTAL	Level (dBuV/m) Date: 2018-04-25 Site : 03CH13-HY Condition : PEAK(UNII) 3m SHF_HORN_576 VERTICAL

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

WIFI	Band 3 5470~5725MHz Harmonic @ 3m	
ANT	802.11n HT20 CH100 5500MHz	
1+2	Horizontal	Vertical
Peak Avg.	 Site : 03CH13-4Y Condition : PEAK(UNIT) 3m SHF_HORN_576 HORIZONTAL	 Site : 03CH13-4Y Condition : PEAK(UNIT) 3m SHF_HORN_576 VERTICAL

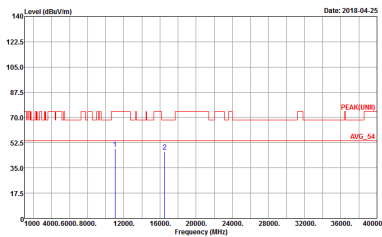
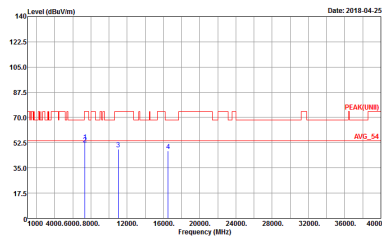


WIFI	Band 3 5470~5725MHz Harmonic @ 3m	
ANT	802.11n HT20 CH116 5580MHz	
1+2	Horizontal	Vertical
Peak Avg.	Level (dBuV/m) Date: 2018-04-25 Frequency (MHz) Site : 03CH13-HY Condition : PEAK(UNII) 3m SHF_HORN_576 HORIZONTAL	Level (dBuV/m) Date: 2018-04-25 Frequency (MHz) Site : 03CH13-HY Condition : PEAK(UNII) 3m SHF_HORN_576 VERTICAL



WIFI	Band 3 5470~5725MHz Harmonic @ 3m	
ANT	802.11n HT20 CH140 5700MHz	
1+2	Horizontal	Vertical
Peak Avg.	Level (dBuV/m) Date: 2018-04-25 Frequency (MHz) Site : 03CH13-HY Condition : PEAK(UNII) 3m SHF_HORN_576 HORIZONTAL	Level (dBuV/m) Date: 2018-04-25 Frequency (MHz) Site : 03CH13-HY Condition : PEAK(UNII) 3m SHF_HORN_576 VERTICAL

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

WIFI	Band 3 5470~5725MHz Harmonic @ 3m	
ANT	802.11n HT40 CH102 5510MHz	
1+2	Horizontal	Vertical
Peak Avg.	 Site : 03CH13-4Y Condition : PEAK(UNIT) 3m SHF_HORN_576 HORIZONTAL	 Site : 03CH13-4Y Condition : PEAK(UNIT) 3m SHF_HORN_576 VERTICAL

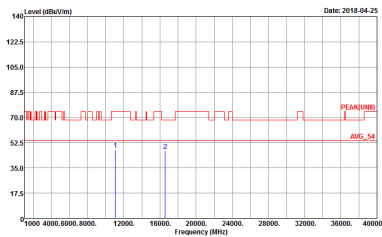
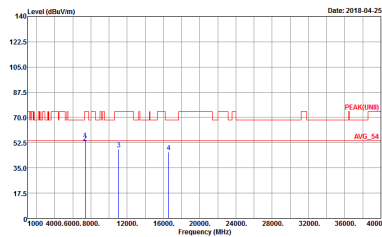


WIFI	Band 3 5470~5725MHz Harmonic @ 3m	
ANT	802.11n HT40 CH110 5550MHz	
1+2	Horizontal	Vertical
Peak Avg.	Level (dBuV/m) Date: 2018-04-25 Site : 03CH13-HY Condition : PEAK(UNII) 3m SHF_HORN_576 HORIZONTAL	Level (dBuV/m) Date: 2018-04-25 Site : 03CH13-HY Condition : PEAK(UNII) 3m SHF_HORN_576 VERTICAL



WIFI	Band 3 5470~5725MHz Harmonic @ 3m	
ANT	802.11n HT40 CH134 5670MHz	
1+2	Horizontal	Vertical
Peak Avg.	Level (dBuV/m) Date: 2018-04-25 Frequency (MHz) Site : 03CH13-HY Condition : PEAK(UNIT) 3m SHF_HORN_576 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	Level (dBuV/m) Date: 2018-04-25 Frequency (MHz) Site : 03CH13-HY Condition : PEAK(UNIT) 3m SHF_HORN_576 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto

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

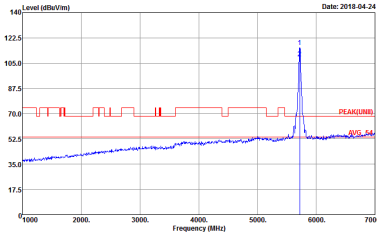
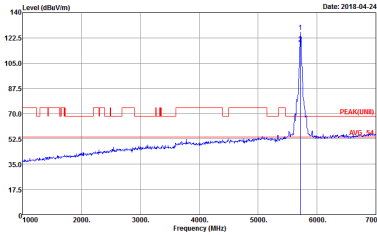
WIFI	Band 3 5470~5725MHz Harmonic @ 3m	
ANT	802.11ac VHT80 CH106 5530MHz	
1+2	Horizontal	Vertical
Peak Avg.	 Site : 03CH13-4Y Condition : PEAK(UNIT) 3m SHF_HORN_576 HORIZONTAL	 Site : 03CH13-4Y Condition : PEAK(UNIT) 3m SHF_HORN_576 VERTICAL



WIFI	Band 3 5470~5725MHz Harmonic @ 3m	
ANT	802.11ac VHT80 CH122 5610MHz	
1+2	Horizontal	Vertical
Peak Avg.	Level (dBuV/m) Date: 2018-04-25 Frequency (MHz) Site : 03CH13-HY Condition : PEAK(UNII) 3m SHF_HORN_576 HORIZONTAL	Level (dBuV/m) Date: 2018-04-25 Frequency (MHz) Site : 03CH13-HY Condition : PEAK(UNII) 3m SHF_HORN_576 VERTICAL

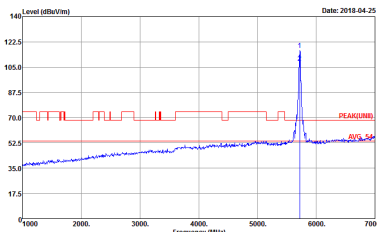
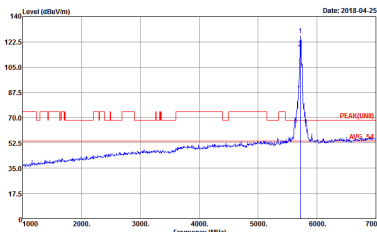


Band 3 - Straddle Channel
WIFI 802.11a (Fundamental @ 3m)

WIFI	Band 3 Straddle Channel Fundamental @ 3m	
ANT	802.11a CH144 5720MHz	
1+2	Horizontal	Vertical
Peak Avg.	 Site : 03CH13-HY Condition : PEAK(UNIT) 3m HORN_91200_1241 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH13-HY Condition : PEAK(UNIT) 3m HORN_91200_1241 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto

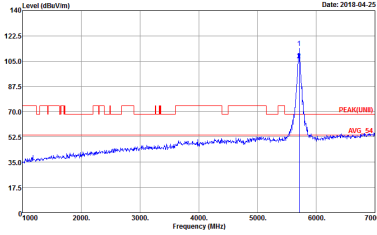
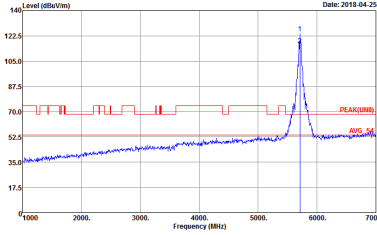


Band 3 – Straddle Channel
WIFI 802.11n HT20 (Fundamental @ 3m)

WIFI	Band 3 Straddle Channel Fundamental @ 3m	
ANT	802.11n HT20 CH144 5720MHz	
1+2	Horizontal	Vertical
Peak Avg.	 Site : 03CH13-HY Condition : PEAK(UNIT) 3m HORN_91200_1241 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH13-HY Condition : PEAK(UNIT) 3m HORN_91200_1241 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto

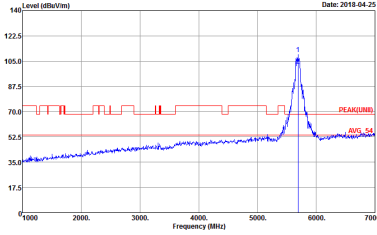
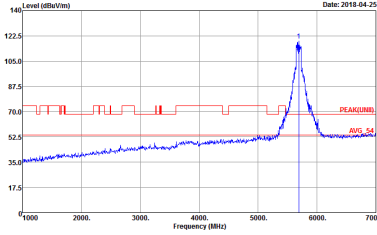


Band 3 – Straddle Channel
WIFI 802.11n HT40 (Fundamental @ 3m)

WIFI	Band 3 Straddle Channel Fundamental @ 3m	
ANT	802.11n HT40 CH142 5710MHz	
1+2	Horizontal	Vertical
Peak Avg.	 Site : 03CH13-HY Condition : PEAK(UNIT) 3m HORN_91200_1241 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH13-HY Condition : PEAK(UNIT) 3m HORN_91200_1241 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto

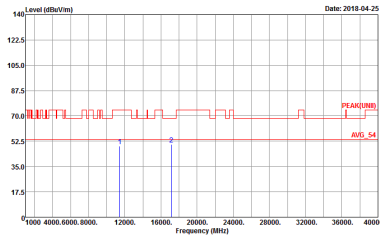
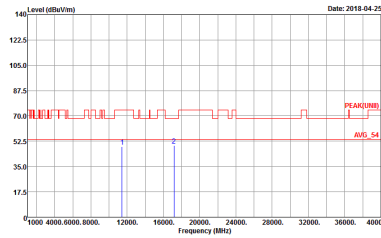


Band 3 – Straddle Channel
WIFI 802.11ac VHT80 (Fundamental @ 3m)

WIFI	Band 3 Straddle Channel Fundamental @ 3m	
ANT	802.11ac VHT80 CH138 5690MHz	
1+2	Horizontal	Vertical
Peak Avg.	 Site : 03CH13-HY Condition : PEAK(UNIT) 3m HORN_91200_1241 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH13-HY Condition : PEAK(UNIT) 3m HORN_91200_1241 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto

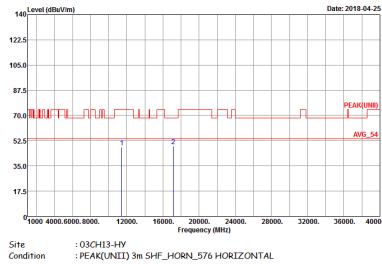
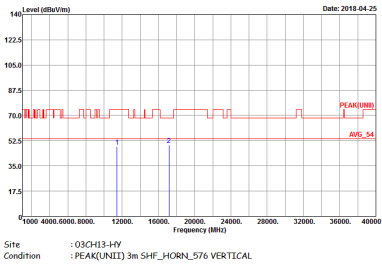


Band 3 - Straddle Channel
WIFI 802.11a (Harmonic @ 3m)

WIFI	Band 3 Straddle Channel Harmonic @ 3m	
ANT	802.11a CH144 5720MHz	
1+2	Horizontal	Vertical
Peak Avg.	 Site : 03CH13-HY Condition : PEAK(UNIT) 3m SHF_HORN_576 HORIZONTAL	 Site : 03CH13-HY Condition : PEAK(UNIT) 3m SHF_HORN_576 VERTICAL

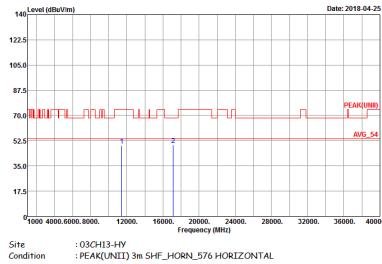
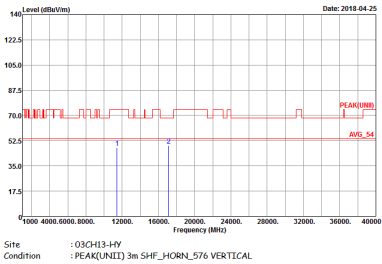


Band 3 – Straddle Channel
WIFI 802.11n HT20 (Harmonic @ 3m)

WIFI	Band 3 Straddle Channel Harmonic @ 3m	
ANT	802.11n HT20 CH144 5720MHz	
1+2	Horizontal	Vertical
Peak Avg.	 Site : 03CH13-4HY Condition : PEAK(UNIT) 3m SHF_HORN_576 HORIZONTAL	 Site : 03CH13-4HY Condition : PEAK(UNIT) 3m SHF_HORN_576 VERTICAL

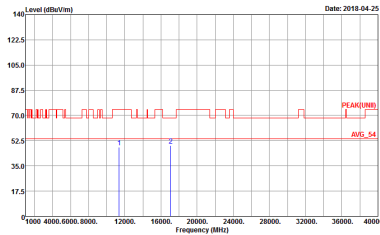
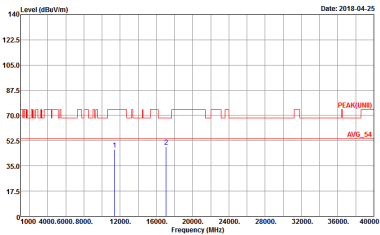


Band 3 – Straddle Channel
WIFI 802.11n HT40 (Harmonic @ 3m)

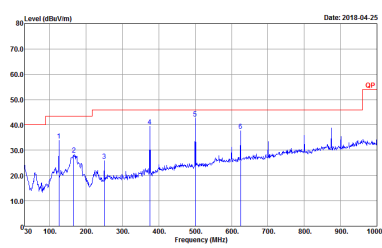
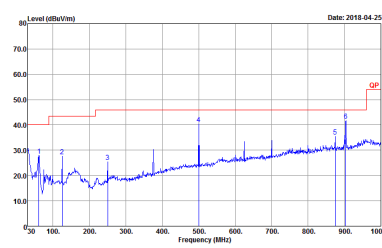
WIFI	Band 3 Straddle Channel Harmonic @ 3m	
ANT	802.11n HT40 CH142 5710MHz	
1+2	Horizontal	Vertical
Peak Avg.	 Site : 03CH13-4HY Condition : PEAK(UNIT) 3m SHF_HORN_576 HORIZONTAL	 Site : 03CH13-4HY Condition : PEAK(UNIT) 3m SHF_HORN_576 VERTICAL



Band 3 – Straddle Channel
WIFI 802.11ac VHT80 (Harmonic @ 3m)

WIFI	Band 3 Straddle Channel Harmonic @ 3m	
ANT	802.11ac VHT80 CH138 5690MHz	
1+2	Horizontal	Vertical
Peak Avg.	 Site : 03CH13-4HY Condition : PEAK(UNIT) 3m SHF_HORN_576 HORIZONTAL	 Site : 03CH13-4HY Condition : PEAK(UNIT) 3m SHF_HORN_576 VERTICAL

Band 2 - 5250~5350MHz
Emission below 1GHz
5GHz WIFI 802.11n HT40 (LF)

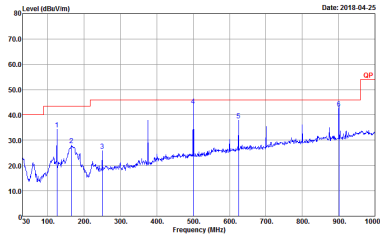
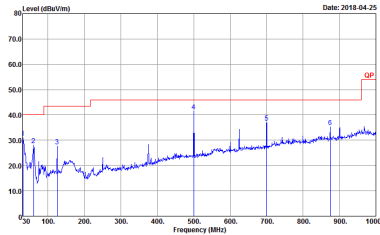
WIFI	5GHz WIFI	
ANT	802.11n HT40 LF	
1+2	Horizontal	Vertical
QP / Peak	 Site : 03CH13-HY Condition : QP 3m BILOG_40103 HORIZONTAL	 Site : 03CH13-HY Condition : QP 3m BILOG_40103 VERTICAL



Band 3 - 5470~5725MHz

Emission below 1GHz

5GHz WIFI 802.11ac VHT80 (LF)

WIFI	5GHz WIFI	
ANT	802.11ac VHT80 LF	
1+2	Horizontal	Vertical
QP / Peak	 Site : 03CH13-HY Condition : QP 3m BILOG_40103 HORIZONTAL	 Site : 03CH13-HY Condition : QP 3m BILOG_40103 VERTICAL

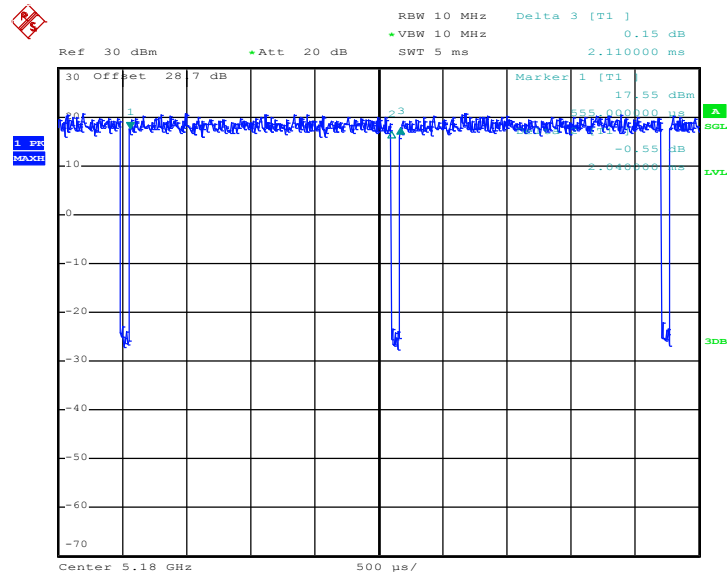


Appendix E. Duty Cycle Plots

Antenna	Band	Duty Cycle(%)	T(us)	1/T(kHz)	VBW Setting	Duty Factor(dB)
1+2	802.11a for Ant. 1	96.68	2040.00	0.49	1kHz	0.15
1+2	802.11a for Ant. 2	96.68	2040.00	0.49	1kHz	0.15
1+2	5GHz 802.11n HT20 for Ant. 1	98.81	-	-	10Hz	0.05
1+2	5GHz 802.11n HT20 for Ant. 2	98.21	-	-	10Hz	0.08
1+2	5GHz 802.11n HT40 for Ant. 1	96.77	2400.00	0.42	1kHz	0.14
1+2	5GHz 802.11n HT40 for Ant. 2	96.77	2400.00	0.42	1kHz	0.14
1+2	5GHz 802.11ac VHT80 for Ant. 1	93.44	1140.00	0.88	1kHz	0.29
1+2	5GHz 802.11ac VHT80 for Ant. 2	93.39	1130.00	0.88	1kHz	0.30

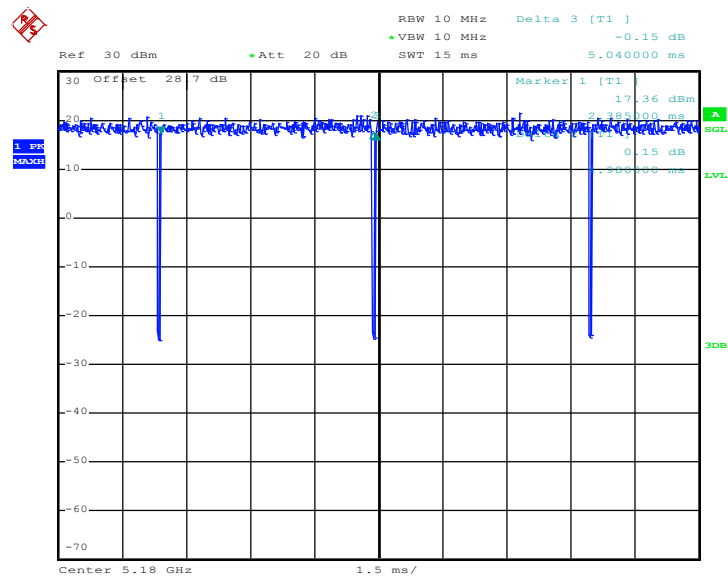
MIMO<Ant. 1>

802.11a



Date: 24.APR.2018 16:57:35

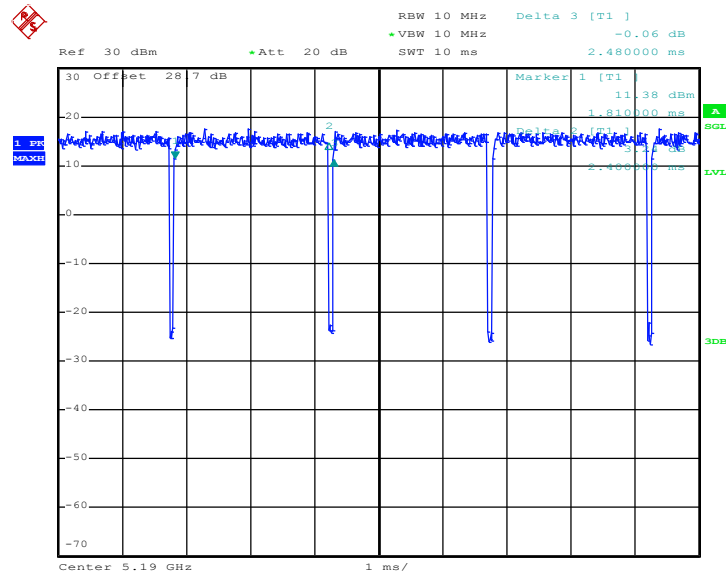
802.11n HT20



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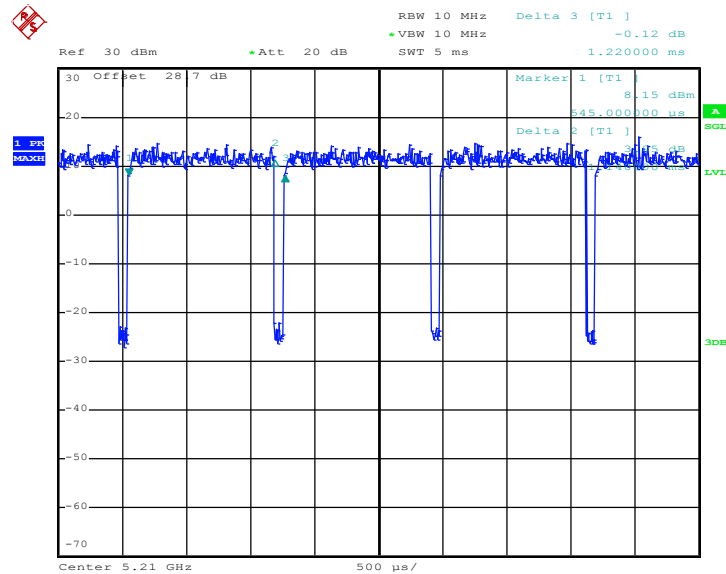


802.11n HT40

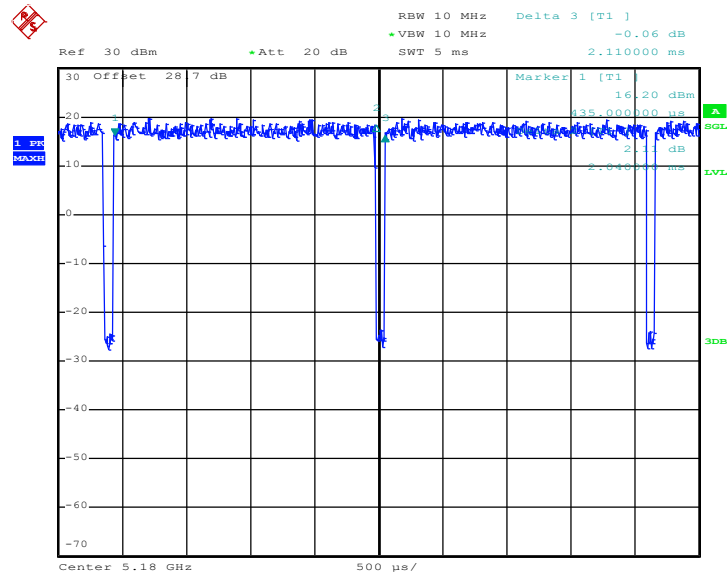


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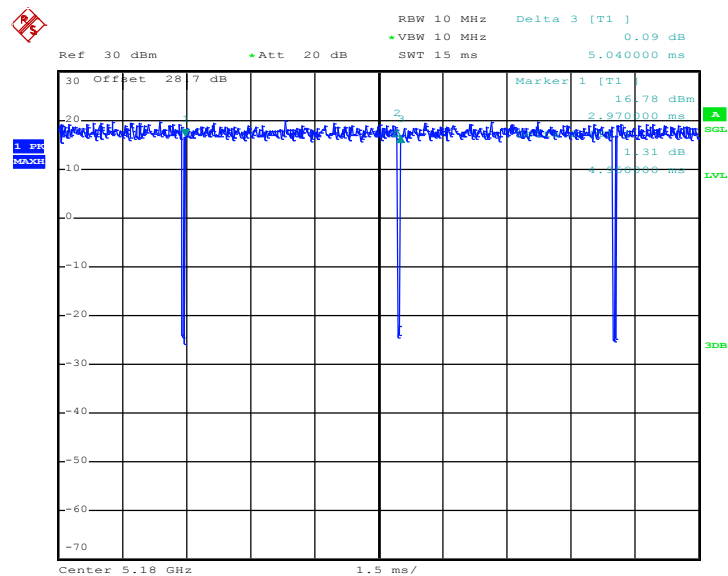
802.11ac VHT80



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MIMO<Ant. 2>
802.11a


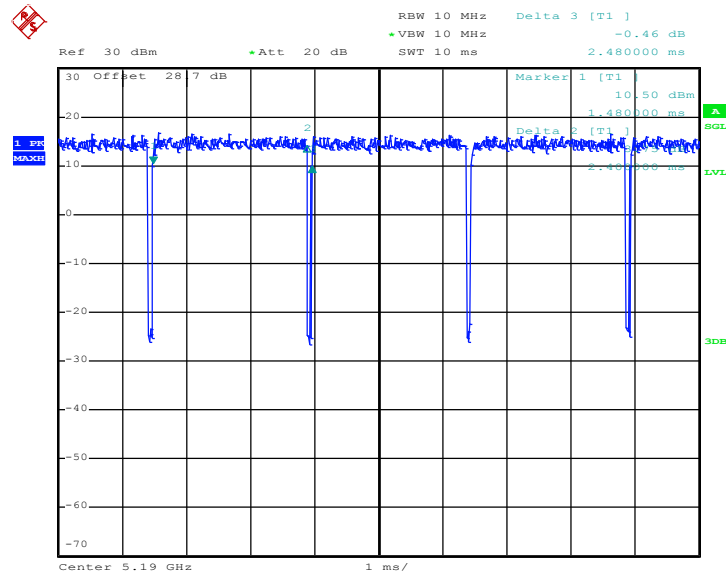
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802.11n HT20


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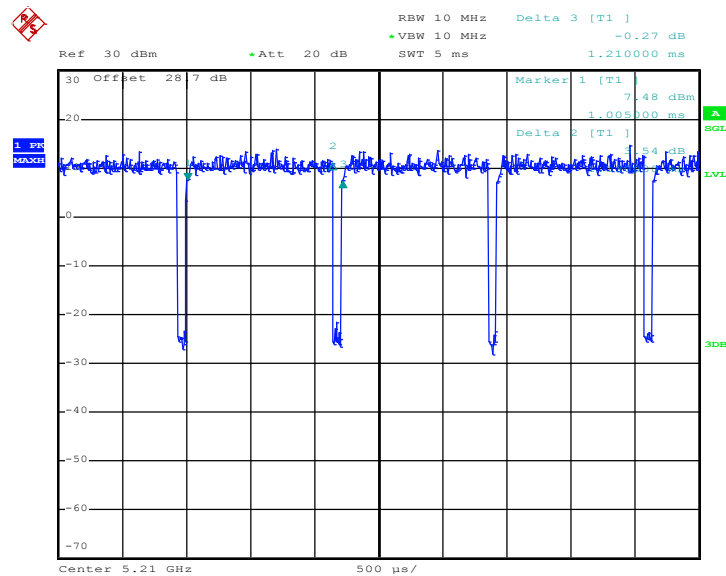


802.11n HT40



Date: 24.APR.2018 17:05:38

802.11ac VHT80



Date: 24.APR.2018 17:23:15