FCC RF Test Report

APPLICANT	**:**	**Nest Labs Inc.**
EQUIPMENT	**:**	**Nest Hello**
MODEL NAME	**:**	**A0077**
FCC ID	**:**	**ZQANC51**
STANDARD	**:**	**FCC Part 15 Subpart E §15.407**
CLASSIFICATION	**:**	**(NII) Unlicensed National Information Infrastructure**

The product was completed on Nov. 01, 2017. We, SPORTON INTERNATIONAL INC., would like to declare that the tested sample has been evaluated in accordance with the test procedures and has been in compliance with the applicable technical standards.

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

Reviewed by: Joseph Lin / Supervisor

Approved by: Jones Tsai / Manager

Testing Laboratory
1190

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

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REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FR733120-01D	Rev. 01	Initial issue of report	Nov. 01, 2017
FR733120-01D	Rev. 02	Revising antenna gain information in appendix a.	Nov. 09, 2017

SUMMARY OF TEST RESULT

Report Section	FCC Rule	Description	Limit	Result
3.1	2.1049 15.403(i)	26dB & 99% Bandwidth	-	Pass
3.2	15.407(a)	Maximum Conducted Output Power	FCC ≤ 24 dBm (depend on band)	Pass
3.3	15.407(a)	Power Spectral Density	FCC ≤ 11 dBm (depend on band)	Pass
3.4	15.407(b)	Unwanted Emissions	≤ -17, -27 dBm (depend on band)&15.209(a)	Pass
3.5	15.207	AC Conducted Emission	15.207(a)	Pass
3.6	15.407(g)	Frequency Stability	Within Operation Band	Pass
3.7	15.407(c)	Automatically Discontinue Transmission	Discontinue Transmission	Pass
3.8	15.203 & 15.407(a)	Antenna Requirement	N/A	Pass

1 General Description

1.1 Applicant

Nest Labs Inc.
3400 Hillview Ave.Palo Alto, CA 94304 USA

1.2 Feature of Equipment Under Test

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

Product Specification subjective to this standard	
Antenna Type	WLAN: IFA Antenna Bluetooth: IFA Antenna Zigbee: IFA Antenna

1.3 Modification of EUT

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

1.4 Testing Location

Sporton Lab is accredited to ISO 17025 by Taiwan Accreditation Foundation (TAF code : 1190) and the FCC designation No. TW1190 and TW0007 under the FCC 2.948(e) by Mutual Recognition Agreement (MRA) in FCC Test.

Test Site	SPORTON INTERNATIONAL INC.	
Test Site Location	No. 52, Hwa Ya 1st Rd., Hwa Ya Technology Park, Kwei-Shan District, Tao Yuan City, Taiwan, R.O.C. TEL: +886-3-327-3456 FAX: +886-3-328-4978	
Test Site No.	**Sporton Site No.**	
	TH05-HY	CO05-HY

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

Test Site	SPORTON INTERNATIONAL INC.
Test Site Location	No.58, Aly. 75, Ln. 564, Wenhua 3rd Rd. Guishan Dist, Taoyuan City, Taiwan (R.O.C.) TEL: +886-3-327-0868 FAX: +886-3-327-0855
Test Site No.	**Sporton Site No.**
	03CH11-HY

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

1.5 Applicable Standards

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

- FCC Part 15 Subpart E
- FCC KDB 789033 D02 General UNII Test Procedures New Rules v01r04
- FCC KDB 662911 D01 Multiple Transmitter Output v02r01.
- ANSI C63.10-2013

Remark: All test items were verified and recorded according to the standards and without any deviation during the test.

2 Test Configuration of Equipment Under Test

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

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

2.1 Carrier Frequency and Channel

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

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

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

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

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

Note:

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

2.2 Test Mode

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

MIMO Antenna

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

Test Cases	
AC Conducted Emission	Mode 1 : WLAN On + BLE On + Zigbee On + Sensor On + LED On + IR LED On + Speaker On + Cemera + AC to AC transformer
Remark: The MIMO conducted total power has larger 3dB than SISO conducted power, the RSE test with MIMO condition can also cover the SISO condition.	

Ch. #		Band I：5150-5250 MHz	Band II：5250-5350 MHz	Band III：5470-5725MHz
		802.11a	802.11a	802.11a
L	Low	36	52	100
M	Middle	44	60	116
H	High	-	-	132
H	High	48	64	140
Straddle		-	-	144

Ch. #		Band I：5150-5250 MHz	Band II：5250-5350 MHz	Band III：5470-5725MHz
		802.11n HT20	802.11n HT20	802.11n HT20
L	Low	36	52	100
M	Middle	44	60	116
H	High	-	-	132
H	High	48	64	140
Straddle		-	-	144

Ch. #		Band I：5150-5250 MHz	Band II：5250-5350 MHz	Band III：5470-5725MHz
		802.11n HT40	802.11n HT40	802.11n HT40
L	Low	38	54	102
M	Middle	-	-	110
H	High	46	62	134
Straddle		-	-	142

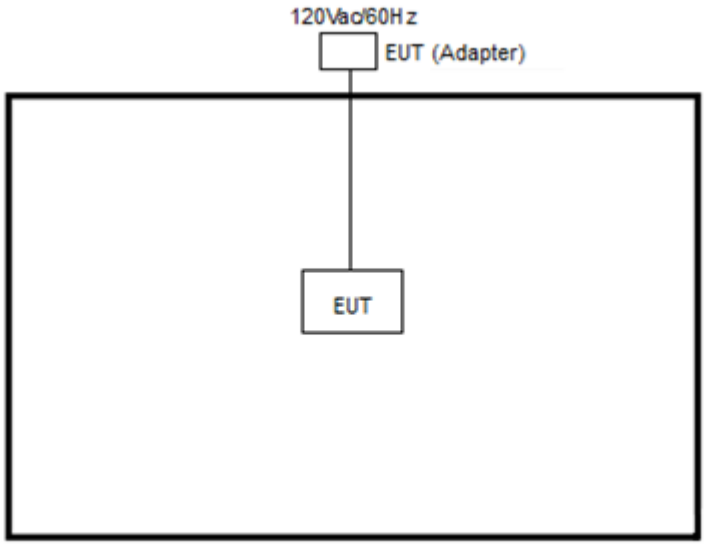
Ch. #		Band I：5150-5250 MHz	Band II：5250-5350 MHz	Band III：5470-5725MHz
		802.11ac VHT20	802.11ac VHT20	802.11ac VHT20
L	Low	36	52	100
M	Middle	44	60	116
H	High	-	-	132
H	High	48	64	140
Straddle		-	-	144

Ch. #		Band I：5150-5250 MHz	Band II：5250-5350 MHz	Band III：5470-5725MHz
		802.11ac VHT40	802.11ac VHT40	802.11ac VHT40
L	Low	38	54	102
M	Middle	-	-	110
H	High	-	-	132
H	High	46	62	134
Straddle		-	-	142

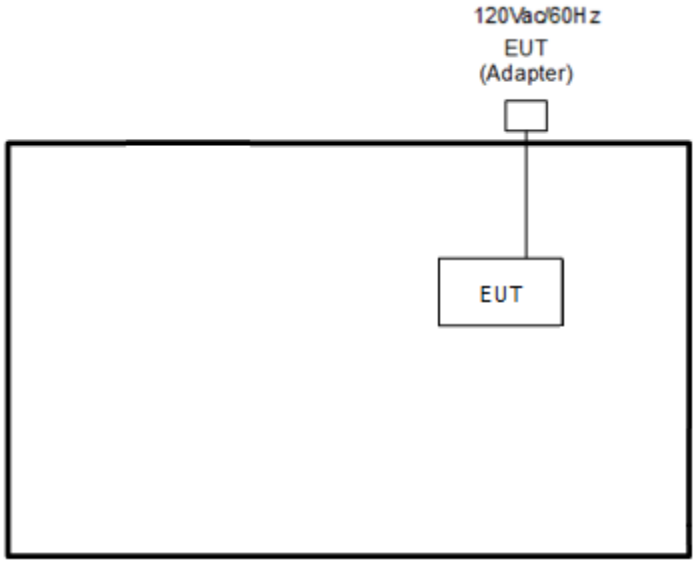
Ch. #		Band I：5150-5250 MHz	Band II：5250-5350 MHz	Band III：5470-5725MHz
		802.11ac VHT80	802.11ac VHT80	802.11ac VHT80
L	Low	-	-	-
M	Middle	42	58	106
H	High	-	-	-
Straddle		-	-	138

2.3 Connection Diagram of Test System

<WLAN Tx Mode>



<AC Conducted Emission Mode>



2.4 EUT Operation Test Setup

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

2.5 Measurement Results Explanation Example

For all conducted test items:

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

Example :

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

Offset = RF cable loss + attenuator factor.

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

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

= 4.2 + 10 = 14.2 (dB)

3 Test Result

3.1 26dB & 99% Occupied Bandwidth Measurement

3.1.1 Description of 26dB & 99% Occupied Bandwidth

This section is for reporting purpose only.

There is no restriction limits for bandwidth.

For Straddle Channel, According to KDB 789033 D02 General UNII Test Procedures New Rules v01r04, 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.

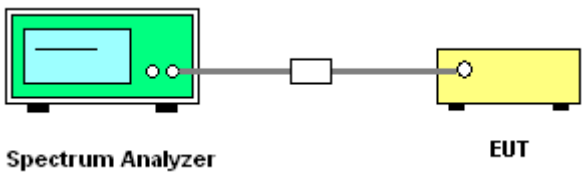
3.1.2 Measuring Instruments

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

3.1.3 Test Procedures

1. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v01r04. Section C) Emission bandwidth
2. Set RBW = approximately 1% of the emission bandwidth.
3. Set the VBW > RBW.
4. Detector = Peak.
5. Trace mode = max hold
6. Measure the maximum width of the emission that is 26 dB down from the peak of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.
7. For 99% Bandwidth Measurement, the spectrum analyzer's resolution bandwidth (RBW) is set 1MHz and set the Video bandwidth (VBW) ≥ 3 * RBW.
8. Measure and record the results in the test report.

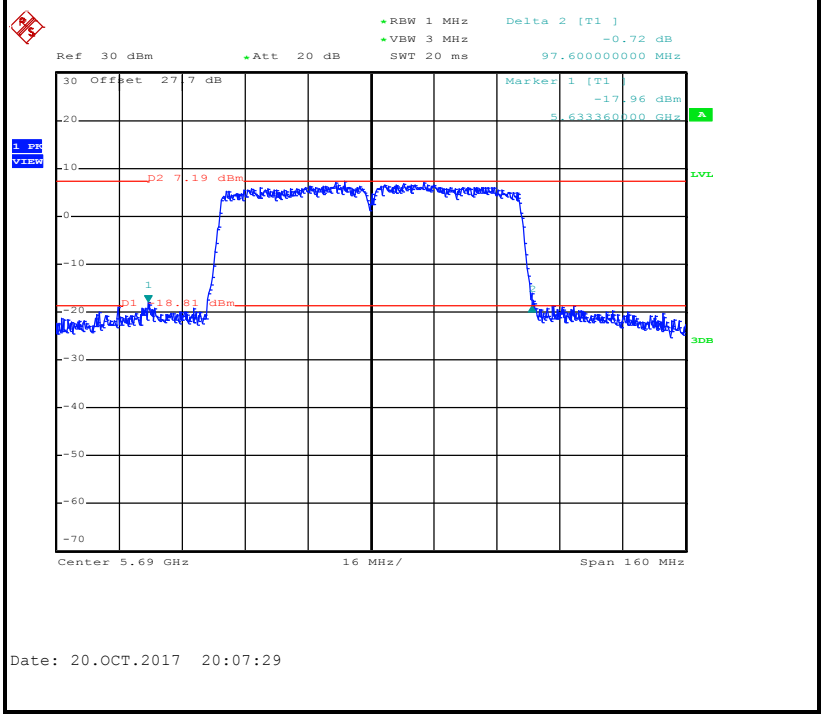
3.1.4 Test Setup



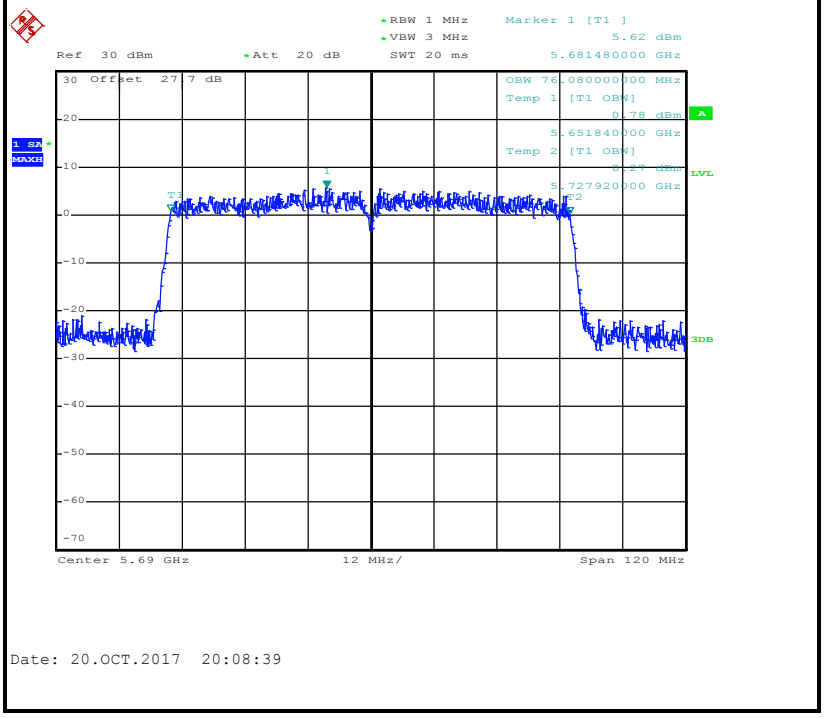
3.1.5 Test Result of 26dB & 99% Occupied Bandwidth

Please refer to Appendix A.

Maximum 26dB Bandwidth



Maximum 99% Occupied Bandwidth



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

3.2 Maximum Conducted Output Power Measurement

3.2.1 Limit of Maximum Conducted Output Power

<FCC 14-30 CFR 15.407>

For mobile and portable client devices in the 5.15–5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW.

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

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

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

For Straddle Channel, According to KDB 789033 D02 General UNII Test Procedures New Rules v01r04. If the power and PSD of the devices are uniform and comply with the lower limits specified for the U-NII-2 bands, a single measurement over the entire emission bandwidth can be performed to show compliance.

3.2.2 Measuring Instruments

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

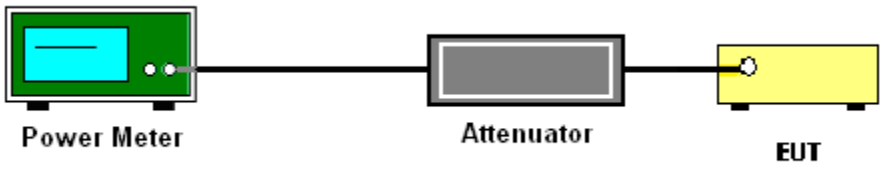
3.2.3 Test Procedures

The testing follows Method PM of FCC KDB 789033 D02 General UNII Test Procedures New Rules v01r04

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

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

3.2.4 Test Setup



3.2.5 Test Result of Maximum Conducted Output Power

Please refer to Appendix A.

3.3 Power Spectral Density Measurement

3.3.1 Limit of Power Spectral Density

<FCC 14-30 CFR 15.407>

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

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

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

For Straddle Channel, According to KDB 789033 D02 General UNII Test Procedures New Rules v01r04, 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.

3.3.2 Measuring Instruments

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

3.3.3 Test Procedures

The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v01r04.
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).

1. The testing follows Method SA-2 of FCC KDB 789033 D02 General UNII Test Procedures New Rules v01r04.
   - Measure the duty cycle.
   - Set span to encompass the entire emission bandwidth (EBW) of the signal.
   - Set RBW = 1 MHz.
   - Set VBW ≥ 3 MHz.
   - Number of points in sweep ≥ 2 Span / RBW.
   - Sweep time = auto.
   - Detector = RMS
   - Trace average at least 100 traces in power averaging mode.

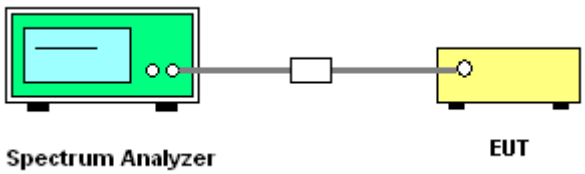
- Add 10 log(1/x), where x is the duty cycle, to the measured power in order to compute the average power during the actual transmission times. For example, add 10 log(1/0.25) = 6 dB if the duty cycle is 25 percent.

2. The RF output of EUT was connected to the spectrum analyzer by a low loss cable.
3. Each plot has already offset with cable loss, and attenuator loss. Measure the PPSD and record it.
4. For MIMO mode, calculation method follows FCC KDB 662911 D01 Multiple Transmitter Output v02r01.

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

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

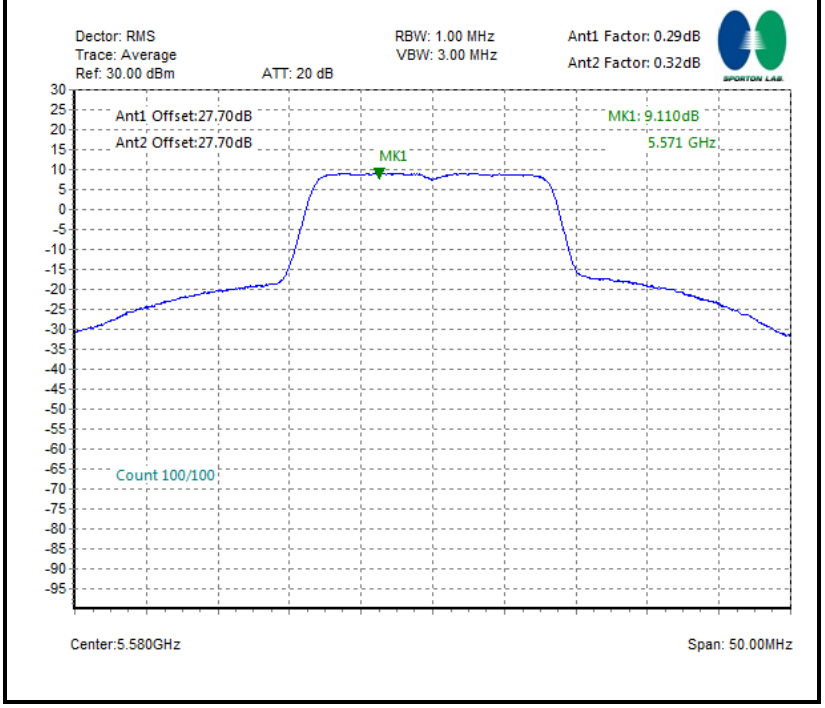
3.3.4 Test Setup



3.3.5 Test Result of Power Spectral Density

Please refer to Appendix A.

Worst Case Power Density (dBm/MHz)



3.4 Unwanted Emissions Measurement

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

3.4.1 Limit of Unwanted Emissions

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

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

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

(2) Unwanted spurious emissions fallen in restricted bands per FCC Part15.205 shall comply with the general field strength limits set forth in § 15.209 as below table,

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

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

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

EIRP (dBm)	Field Strength at 3m (dBµV/m)
-17	78.3
- 27	68.3

(3) KDB789033 D02 v01r04 G)2)c)

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

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

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

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

3.4.2 Measuring Instruments

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

3.4.3 Test Procedures

1. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v01r04. Section G) Unwanted emissions measurement.

   (1) Procedure for Unwanted Emissions Measurements Below 1000MHz

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

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

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

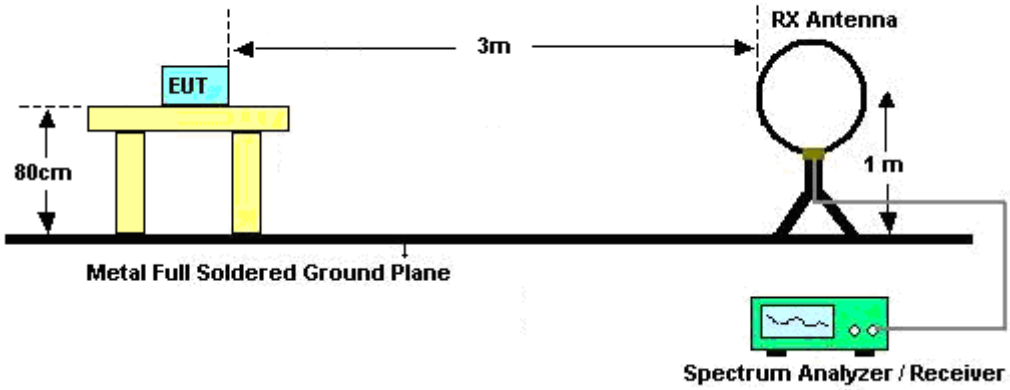
   (3) Procedures for Average Unwanted Emissions Measurements Above 1000MHz

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

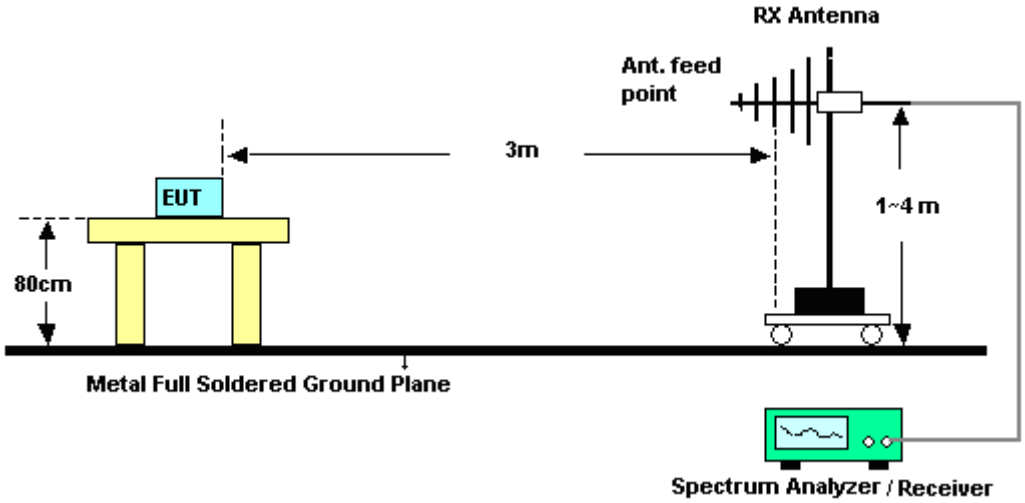
2. The EUT was placed on a turntable with 0.8 meter for frequency below 1GHz and 1.5 meter for frequency above 1GHz respectively above ground.
3. The EUT was set 3 meters from the interference receiving antenna which was mounted on the top of a variable height antenna tower.
4. The antenna is a broadband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

3.4.4 Test Setup

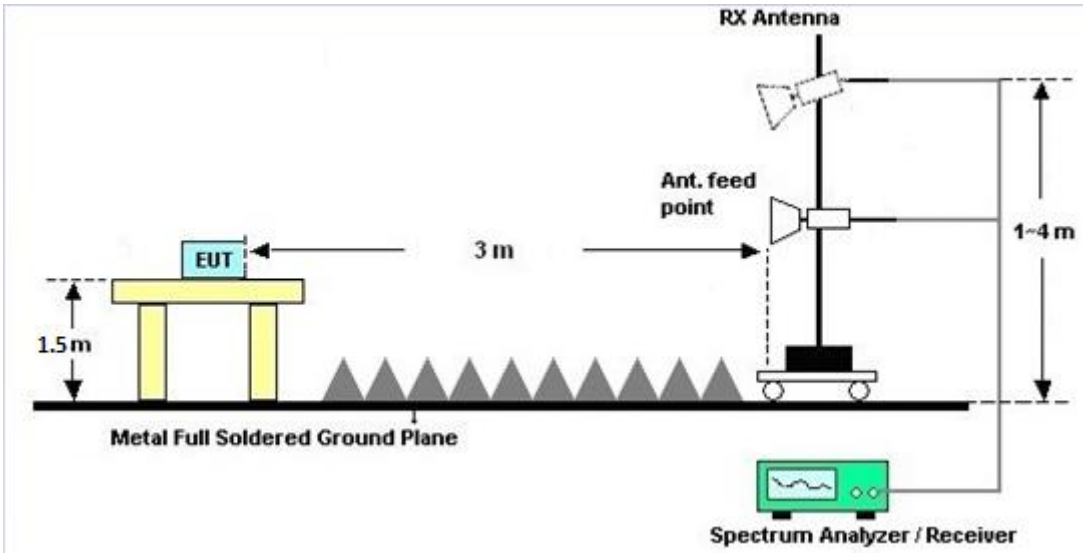
For radiated emissions below 30MHz



For radiated emissions from 30MHz to 1GHz



For radiated emissions above 1GHz



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

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

There is a comparison data of both open-field test site and semi-Anechoic chamber, and the result came out very similar.

3.4.6 Test Result of Radiated Spurious at Band Edges

Please refer to Appendix C and D.

3.4.7 Duty Cycle

Please refer to Appendix E.

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

Please refer to Appendix C and D.

3.5 AC Conducted Emission Measurement

3.5.1 Limit of AC Conducted Emission

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

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

*Decreases with the logarithm of the frequency.

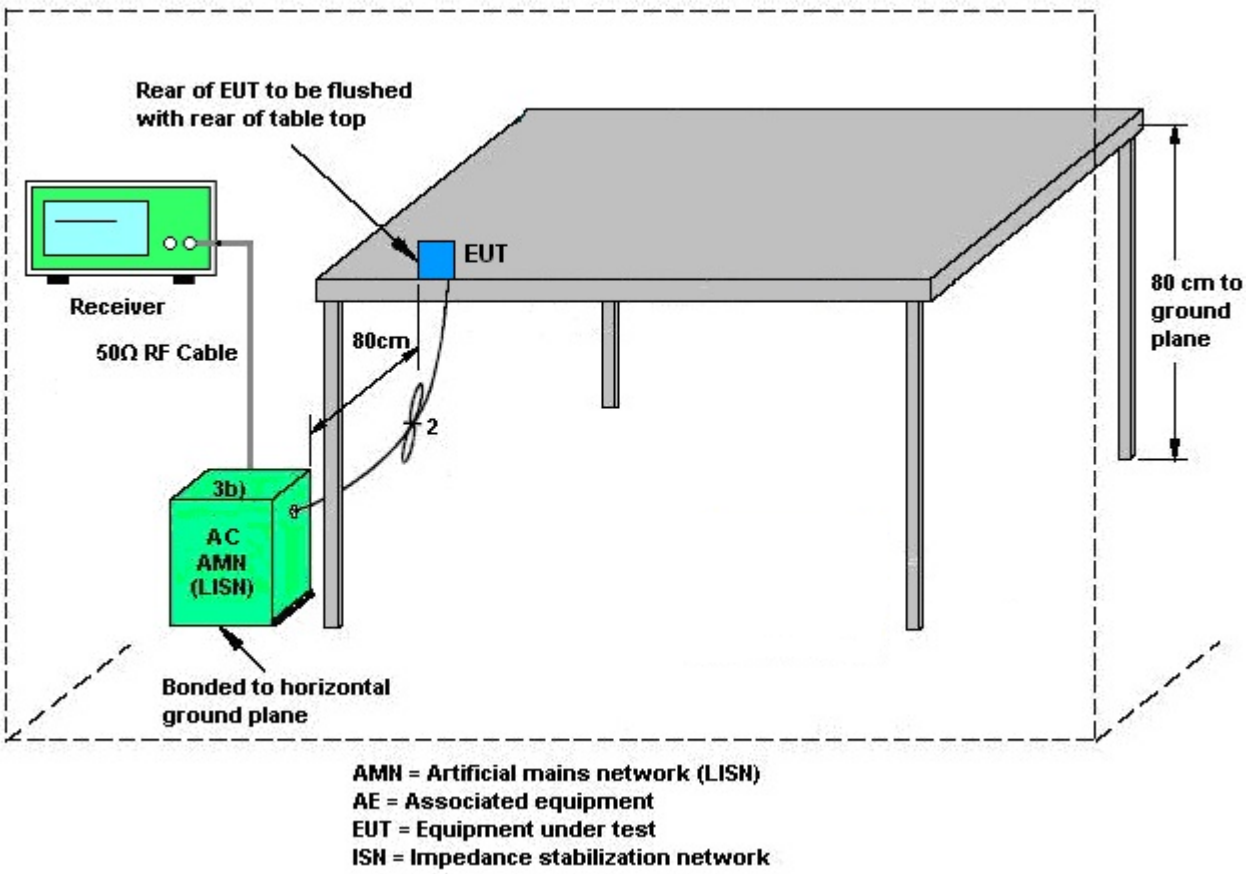
3.5.2 Measuring Instruments

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

3.5.3 Test Procedures

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

3.5.4 Test Setup



3.5.5 Test Result of AC Conducted Emission

Please refer to Appendix B.

3.6 Frequency Stability Measurement

3.6.1 Limit of Frequency Stability

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

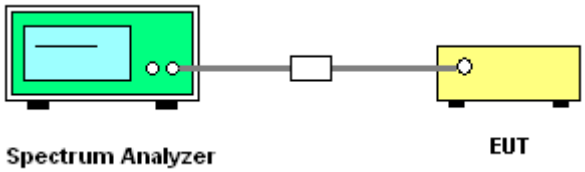
3.6.2 Measuring Instruments

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

3.6.3 Test Procedures

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

3.6.4 Test Setup



3.6.5 Test Result of Frequency Stability

Please refer to Appendix A.

The frequency band 5180-5240MHz which was verified by testing against other standard is less than 20 ppm which is sufficient to maintain the signal within the 5150-5250MHz band.

3.7 Automatically Discontinue Transmission

3.7.1 Limit of Automatically Discontinue Transmission

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

3.7.2 Measuring Instruments

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

3.7.3 Test Result of Automatically Discontinue Transmission

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

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

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

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

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

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

5180MHz

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

3.8 Antenna Requirements

3.8.1 Standard Applicable

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

3.8.2 Antenna Anti-Replacement Construction

An embedded-in antenna design is used.

3.8.3 Antenna Gain

FCC KDB 662911 D01 Multiple Transmitter Output v02r01

For CDD transmissions, directional gain is calculated as

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

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

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

For power measurements on IEEE 802.11 devices,

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

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

The EUT supports CDD mode.

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

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

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

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

	Ant 1 (dBi)	Ant 2 (dBi)	DG for Power (dBi)	DG for PSD (dBi)	Power Limit Reduction (dB)	PSD Limit Reduction (dB)
Band I	1.83	2.12	2.12	4.99	0.00	0.00
Band II	1.83	2.12	2.12	4.99	0.00	0.00
Band III	1.83	2.12	2.12	4.99	0.00	0.00

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

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

4 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
AC Power Source	AC POWER	AFC-500W	F104070011	50Hz~60Hz	Dec. 01, 2016	Oct. 06, 2017 ~ Oct. 25, 2017	Nov. 30, 2017	Conducted (TH05-HY)
Power Meter	Anritsu	ML2495A	1132003	N/A	Aug. 09, 2017	Oct. 06, 2017 ~ Oct. 25, 2017	Aug. 08, 2018	Conducted (TH05-HY)
Power Sensor	Anritsu	MA2411B	1126017	300MHz~40GHz	Aug. 09, 2017	Oct. 06, 2017 ~ Oct. 25, 2017	Aug. 08, 2018	Conducted (TH05-HY)
Spectrum Analyzer	Rohde & Schwarz	FSP40	100057	9kHz-40GHz	Nov. 25, 2016	Oct. 06, 2017 ~ Oct. 25, 2017	Nov. 24, 2017	Conducted (TH05-HY)
Temperature Chamber	ESPEC	SU-241	92003713	-30℃ ~95℃	Jun. 05, 2017	Oct. 06, 2017 ~ Oct. 25, 2017	Jun. 04, 2018	Conducted (TH05-HY)
AC Power Source	ChainTek	APC-1000W	N/A	N/A	N/A	Jul. 22, 2017	N/A	Conduction (CO05-HY)
EMI Test Receiver	Rohde & Schwarz	ESCI 7	100724	9kHz~7GHz	Aug. 30, 2016	Jul. 22, 2017	Aug. 29, 2017	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100080	9kHz~30MHz	Nov. 29, 2016	Jul. 22, 2017	Nov. 28, 2017	Conduction (CO05-HY)
Preamplifier	MITEQ	TTA1840-35-HG	1887435	18GHz~40GHz	Oct. 13, 2016	Jul. 01, 2017~ Jul. 25, 2017	Oct. 12, 2017	Radiation (03CH11-HY)
Amplifier	MITEQ	TTA1840-35-HG	1871923	18GHz~40GHz, VSWR : 2.5:1 max	Jul. 18, 2017	Jul. 26, 2017~ Nov. 01, 2017	Jul. 17, 2018	Radiation (03CH11-HY)
Amplifier	SONOMA	310N	187312	9kHz~1GHz	Nov. 10, 2016	Jul. 01, 2017~ Nov. 01, 2017	Nov. 09, 2017	Radiation (03CH11-HY)
Loop Antenna	Rohde & Schwarz	HFH2-Z2	100488	9 kHz~30 MHz	Oct. 20, 2016	Jul. 01, 2017~ Nov. 01, 2017	Oct. 19, 2018	Radiation (03CH11-HY)
Preamplifier	Keysight	83017A	MY53270080	1GHz~26.5GHz	Nov. 10, 2016	Jul. 01, 2017~ Nov. 01, 2017	Nov. 09, 2017	Radiation (03CH11-HY)
Preamplifier	MITEQ	AMF-7D-00101800-30-10P	1902247	1GHz~18GHz	Jun. 23, 2017	Jul. 01, 2017~ Nov. 01, 2017	Jun. 22, 2018	Radiation (03CH11-HY)
Antenna Mast	EMEC	AM-BS-4500-B	N/A	1~4m	N/A	Jul. 01, 2017~ Nov. 01, 2017	N/A	Radiation (03CH11-HY)
Turn Table	EMEC	TT 2000	N/A	0~360 Degree	N/A	Jul. 01, 2017~ Nov. 01, 2017	N/A	Radiation (03CH11-HY)
Bilog Antenna	TESEQ	CBL6111D&00800N1D01N-06	41912&05	30MHz to 1GHz	Jan. 07, 2017	Jul. 01, 2017~ Nov. 01, 2017	Jan. 06, 2018	Radiation (03CH11-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170584	18GHz- 40GHz	Nov. 08, 2016	Jul. 01, 2017~ Nov. 01, 2017	Nov. 07, 2017	Radiation (03CH11-HY)
EMI Test Receiver	Agilent	N9038A(MXE)	MY53290053	20Hz to 26.5GHz	Jan. 12, 2017	Jul. 01, 2017~ Nov. 01, 2017	Jan. 11, 2018	Radiation (03CH11-HY)
Horn Antenna	SCHWARZBECK	BBHA 9120 D	9120D-1522	1G~18GHz	Mar. 17, 2017	Jul. 01, 2017~ Nov. 01, 2017	Mar. 16, 2018	Radiation (03CH11-HY)
Signal Analyzer	Rohde & Schwarz	FSV 30	100895	9kHz~30GHz	Apr. 25, 2017	Jul. 01, 2017~ Nov. 01, 2017	Apr. 24, 2018	Radiation (03CH11-HY)

5 Uncertainty of Evaluation

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

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

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

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

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**5.50**

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

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

Appendix A. Test Result of Conducted Test Items

Test Engineer:	Aking chang	Temperature:	21~25	°C
Test Date:	2017/10/6~2017/10/25	Relative Humidity:	51~54	%

TEST RESULTS DATA
26dB and 99% OBW

Band I														
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	99% Bandwidth (MHz)		26 dB Bandwidth (MHz)		IC 99% Bandwidth Power Limit (dBm)		IC 99% Bandwidth EIRP Limit (dBm)			Note
					Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2		
11a	6Mbps	2	36	5180	18.20	18.15	22.80	22.35	-		22.59			
11a	6Mbps	2	44	5220	18.20	18.00	26.75	26.35	-		22.55			
11a	6Mbps	2	48	5240	17.40	17.40	27.50	27.80	-		22.41			
HT20	MCS0	2	36	5180	18.80	19.05	23.40	23.00	-		22.74			
HT20	MCS0	2	44	5220	19.10	19.15	30.75	25.60	-		22.81			
HT20	MCS0	2	48	5240	18.30	18.30	33.95	30.25	-		22.62			
HT40	MCS0	2	38	5190	36.70	36.70	41.40	40.86	-		23.01			
HT40	MCS0	2	46	5230	36.90	36.90	57.24	41.04	-		23.01			
VHT80	MCS0	2	42	5210	75.96	75.72	82.56	81.28	-		23.01			

TEST RESULTS DATA
Average Power Table

FCC Band I															
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Duty Factor (dB)		Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)			Pass/Fail
					Ant 1	Ant 2	Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2		
11a	6Mbps	1	36	5180	0.32	0.32	16.41	16.13		24.00	24.00	1.83	2.12		Pass
11a	6Mbps	1	44	5220	0.32	0.32	17.59	17.72		24.00	24.00	1.83	2.12		Pass
11a	6Mbps	1	48	5240	0.32	0.32	18.28	18.38		24.00	24.00	1.83	2.12		Pass
HT20	MCS0	1	36	5180	0.31	0.34	15.66	15.41		24.00	24.00	1.83	2.12		Pass
HT20	MCS0	1	44	5220	0.31	0.34	17.63	17.38		24.00	24.00	1.83	2.12		Pass
HT20	MCS0	1	48	5240	0.31	0.34	18.23	17.95		24.00	24.00	1.83	2.12		Pass
HT40	MCS0	1	38	5190	0.72	0.67	10.91	10.58		24.00	24.00	1.83	2.12		Pass
HT40	MCS0	1	46	5230	0.72	0.67	17.72	17.58		24.00	24.00	1.83	2.12		Pass
VHT20	MCS0	1	36	5180	0.10	0.10	15.45	15.17		24.00	24.00	1.83	2.12		Pass
VHT20	MCS0	1	44	5220	0.10	0.10	17.42	17.14		24.00	24.00	1.83	2.12		Pass
VHT20	MCS0	1	48	5240	0.10	0.10	18.02	17.71		24.00	24.00	1.83	2.12		Pass
VHT40	MCS0	1	38	5190	0.67	0.67	10.86	10.54		24.00	24.00	1.83	2.12		Pass
VHT40	MCS0	1	46	5230	0.67	0.67	17.67	17.49		24.00	24.00	1.83	2.12		Pass
VHT80	MCS0	1	42	5210	1.20	1.14	8.53	8.35		24.00	24.00	1.83	2.12		Pass
11a	6Mbps	2	36	5180	0.29	0.32	16.42	16.45	19.45	24.00		2.12			Pass
11a	6Mbps	2	44	5220	0.29	0.32	17.93	17.92	20.94	24.00		2.12			Pass
11a	6Mbps	2	48	5240	0.29	0.32	18.69	18.52	21.62	24.00		2.12			Pass
HT20	MCS0	2	36	5180	0.34	0.35	15.99	15.74	18.88	24.00		2.12			Pass
HT20	MCS0	2	44	5220	0.34	0.35	17.99	17.69	20.85	24.00		2.12			Pass
HT20	MCS0	2	48	5240	0.34	0.35	18.56	18.31	21.45	24.00		2.12			Pass
HT40	MCS0	2	38	5190	0.60	0.61	11.05	10.76	13.92	24.00		2.12			Pass
HT40	MCS0	2	46	5230	0.60	0.61	17.81	17.63	20.73	24.00		2.12			Pass
VHT20	MCS0	2	36	5180	0.10	0.10	15.75	15.49	18.63	24.00		2.12			Pass
VHT20	MCS0	2	44	5220	0.10	0.10	17.75	17.44	20.61	24.00		2.12			Pass
VHT20	MCS0	2	48	5240	0.10	0.10	18.32	18.06	21.20	24.00		2.12			Pass
VHT40	MCS0	2	38	5190	0.60	0.66	11.00	10.71	13.87	24.00		2.12			Pass
VHT40	MCS0	2	46	5230	0.60	0.66	17.80	17.57	20.70	24.00		2.12			Pass
VHT80	MCS0	2	42	5210	1.20	1.20	8.82	8.53	11.68	24.00		2.12			Pass

TEST RESULTS DATA
Power Spectral Density

FCC Band I															
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Duty Factor (dB)		Average Power Density (dBm/MHz)			Average PSD Limit (dBm/MHz)		DG (dBi)			Pass /Fail
					Ant 1	Ant 2	Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2		
11a	6Mbps	2	36	5180	0.29	0.32			6.61	11.00		4.99			Pass
11a	6Mbps	2	44	5220	0.29	0.32			8.30	11.00		4.99			Pass
11a	6Mbps	2	48	5240	0.29	0.32			8.80	11.00		4.99			Pass
HT20	MCS0	2	36	5180	0.34	0.35			5.84	11.00		4.99			Pass
HT20	MCS0	2	44	5220	0.34	0.35			8.04	11.00		4.99			Pass
HT20	MCS0	2	48	5240	0.34	0.35			8.59	11.00		4.99			Pass
HT40	MCS0	2	38	5190	0.60	0.61			-1.89	11.00		4.99			Pass
HT40	MCS0	2	46	5230	0.60	0.61			5.13	11.00		4.99			Pass
VHT80	MCS0	2	42	5210	1.20	1.20			-6.76	11.00		4.99			Pass

TEST RESULTS DATA
26dB and 99% OBW

Band II															
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	99% Bandwidth (MHz)		26 dB Bandwidth (MHz)		IC 99% Bandwidth Power Limit (dBm)		IC 99% Bandwidth EIRP Limit (dBm)		FCC 26dB Bandwidth Power Limit (dBm)		Note
					Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	
11a	6Mbps	2	52	5260	17.40	17.40	27.40	27.30	23.41		29.41		23.98		
11a	6Mbps	2	60	5300	18.25	18.05	27.30	26.60	23.56		29.56		23.98		
11a	6Mbps	2	64	5320	18.15	17.75	22.90	22.60	23.49		29.49		23.98		
HT20	MCS0	2	52	5260	18.25	18.30	34.30	31.45	23.61		29.61		23.98		
HT20	MCS0	2	60	5300	19.15	18.90	32.05	31.05	23.76		29.76		23.98		
HT20	MCS0	2	64	5320	18.90	19.05	23.30	23.05	23.76		29.76		23.98		
HT40	MCS0	2	54	5270	36.80	36.80	57.78	57.06	23.98		30.00		23.98		
HT40	MCS0	2	62	5310	36.80	36.70	41.58	41.04	23.98		30.00		23.98		
VHT80	MCS0	2	58	5290	75.96	75.84	82.24	81.92	23.98		30.00		23.98		

TEST RESULTS DATA
Average Power Table

FCC Band II															
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Duty Factor (dB)		Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)		EIRP Power Limit (dBm)	Pass/Fail
					Ant 1	Ant 2	Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2		
11a	6Mbps	1	52	5260	0.32	0.32	17.98	18.06		23.98	23.98	1.83	2.12	26.99	Pass
11a	6Mbps	1	60	5300	0.32	0.32	17.88	17.87		23.98	23.98	1.83	2.12	26.99	Pass
11a	6Mbps	1	64	5320	0.32	0.32	16.44	16.40		23.98	23.98	1.83	2.12	26.99	Pass
HT20	MCS0	1	52	5260	0.31	0.34	17.97	18.19		23.98	23.98	1.83	2.12	26.99	Pass
HT20	MCS0	1	60	5300	0.31	0.34	17.79	17.52		23.98	23.98	1.83	2.12	26.99	Pass
HT20	MCS0	1	64	5320	0.31	0.34	15.86	15.64		23.98	23.98	1.83	2.12	26.99	Pass
HT40	MCS0	1	54	5270	0.72	0.67	17.71	17.20		23.98	23.98	1.83	2.12	26.99	Pass
HT40	MCS0	1	62	5310	0.72	0.67	11.08	11.00		23.98	23.98	1.83	2.12	26.99	Pass
VHT20	MCS0	1	52	5260	0.10	0.10	17.76	17.95		23.98	23.98	1.83	2.12	26.99	Pass
VHT20	MCS0	1	60	5300	0.10	0.10	17.58	17.28		23.98	23.98	1.83	2.12	26.99	Pass
VHT20	MCS0	1	64	5320	0.10	0.10	15.65	15.40		23.98	23.98	1.83	2.12	26.99	Pass
VHT40	MCS0	1	54	5270	0.67	0.67	17.66	17.17		23.98	23.98	1.83	2.12	26.99	Pass
VHT40	MCS0	1	62	5310	0.67	0.67	11.03	10.97		23.98	23.98	1.83	2.12	26.99	Pass
VHT80	MCS0	1	58	5290	1.20	1.14	10.92	10.70		23.98	23.98	1.83	2.12	26.99	Pass
11a	6Mbps	2	52	5260	0.29	0.32	18.41	18.21	21.32	23.98		2.12		26.99	Pass
11a	6Mbps	2	60	5300	0.29	0.32	18.09	17.89	21.00	23.98		2.12		26.99	Pass
11a	6Mbps	2	64	5320	0.29	0.32	16.45	16.48	19.48	23.98		2.12		26.99	Pass
HT20	MCS0	2	52	5260	0.34	0.35	18.29	18.26	21.28	23.98		2.12		26.99	Pass
HT20	MCS0	2	60	5300	0.34	0.35	18.00	17.78	20.90	23.98		2.12		26.99	Pass
HT20	MCS0	2	64	5320	0.34	0.35	15.93	16.10	19.02	23.98		2.12		26.99	Pass
HT40	MCS0	2	54	5270	0.60	0.61	17.85	17.60	20.74	23.98		2.12		26.99	Pass
HT40	MCS0	2	62	5310	0.60	0.61	11.28	11.06	14.19	23.98		2.12		26.99	Pass
VHT20	MCS0	2	52	5260	0.10	0.10	18.05	18.01	21.04	23.98		2.12		26.99	Pass
VHT20	MCS0	2	60	5300	0.10	0.10	17.76	17.53	20.66	23.98		2.12		26.99	Pass
VHT20	MCS0	2	64	5320	0.10	0.10	15.69	15.85	18.78	23.98		2.12		26.99	Pass
VHT40	MCS0	2	54	5270	0.60	0.66	17.82	17.55	20.70	23.98		2.12		26.99	Pass
VHT40	MCS0	2	62	5310	0.60	0.66	11.25	11.04	14.16	23.98		2.12		26.99	Pass
VHT80	MCS0	2	58	5290	1.20	1.20	11.12	11.05	14.09	23.98		2.12		26.99	Pass

TEST RESULTS DATA
Power Spectral Density

Band II															
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Duty Factor (dB)		Average Power Density (dBm/MHz)			Average PSD Limit (dBm/MHz)		DG (dBi)			Pass /Fail
					Ant 1	Ant 2	Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2		
11a	6Mbps	2	52	5260	0.29	0.32			8.96	11.00		4.99			Pass
11a	6Mbps	2	60	5300	0.29	0.32			8.21	11.00		4.99			Pass
11a	6Mbps	2	64	5320	0.29	0.32			7.00	11.00		4.99			Pass
HT20	MCS0	2	52	5260	0.34	0.35			8.62	11.00		4.99			Pass
HT20	MCS0	2	60	5300	0.34	0.35			8.13	11.00		4.99			Pass
HT20	MCS0	2	64	5320	0.34	0.35			6.27	11.00		4.99			Pass
HT40	MCS0	2	54	5270	0.60	0.61			5.33	11.00		4.99			Pass
HT40	MCS0	2	62	5310	0.60	0.61			-1.48	11.00		4.99			Pass
VHT80	MCS0	2	58	5290	1.20	1.20			-4.16	11.00		4.99			Pass

TEST RESULTS DATA
26dB and 99% OBW

Band III																
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	99% Bandwidth (MHz)		26 dB Bandwidth (MHz)		IC 99% Bandwidth Power Limit (dBm)		IC 99% Bandwidth EIRP Limit (dBm)		FCC 26dB Bandwidth Power Limit (dBm)		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	18.05	18.00	23.00	22.80	23.55		29.55		23.98		----	----
11a	6Mbps	2	116	5580	17.50	17.30	34.40	32.00	23.38		29.38		23.98		----	----
11a	6Mbps	2	140	5700	17.90	18.25	22.80	23.00	23.53		29.53		23.98		----	----
11a	6Mbps	2	144	5720	18.10	18.35	32.60	30.25	23.58		29.58		23.98		----	----
HT20	MCS0	2	100	5500	18.75	18.85	23.40	22.90	23.73		29.73		23.98		----	----
HT20	MCS0	2	116	5580	18.35	18.35	38.05	33.25	23.64		29.64		23.98		----	----
HT20	MCS0	2	140	5700	18.95	18.85	23.40	23.10	23.75		29.75		23.98		----	----
HT20	MCS0	2	144	5720	19.25	19.20	36.00	34.40	23.83		29.83		23.98		----	----
HT40	MCS0	2	102	5510	36.70	36.60	40.95	40.86	23.98		30.00		23.98		----	----
HT40	MCS0	2	110	5550	36.80	36.80	56.70	49.05	23.98		30.00		23.98		----	----
HT40	MCS0	2	134	5670	36.70	36.80	41.04	41.22	23.98		30.00		23.98		----	----
HT40	MCS0	2	142	5710	37.00	36.80	72.81	64.80	23.98		30.00		23.98		----	----
VHT80	MCS0	2	106	5530	75.96	75.96	83.04	82.24	23.98		30.00		23.98		----	----
VHT80	MCS0	2	122	5610	75.84	75.84	82.24	81.28	23.98		30.00		23.98		----	----
VHT80	MCS0	2	138	5690	75.84	76.08	97.60	97.28	23.98		30.00		23.98		----	----

TEST RESULTS DATA
Average Power Table

FCC Band III															
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Duty Factor (dB)		Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)		EIRP Power Limit (dBm)	Pass/Fail
					Ant 1	Ant 2	Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2		
11a	6Mbps	1	100	5500	0.32	0.32	15.68	17.55		23.98	23.98	1.83	2.12	26.99	Pass
11a	6Mbps	1	116	5580	0.32	0.32	17.92	17.42		23.98	23.98	1.83	2.12	26.99	Pass
11a	6Mbps	1	132	5660	0.32	0.32	17.50	17.14		23.98	23.98	1.83	2.12	26.99	Pass
11a	6Mbps	1	140	5700	0.32	0.32	13.52	12.05		23.98	23.98	1.83	2.12	26.99	Pass
11a	6Mbps	1	144	5720	0.32	0.32	16.93	15.22		23.98	23.98	1.83	2.12	26.99	Pass
HT20	MCS0	1	100	5500	0.31	0.34	13.45	13.19		23.98	23.98	1.83	2.12	26.99	Pass
HT20	MCS0	1	116	5580	0.31	0.34	18.04	17.19		23.98	23.98	1.83	2.12	26.99	Pass
HT20	MCS0	1	132	5660	0.31	0.34	17.85	17.00		23.98	23.98	1.83	2.12	26.99	Pass
HT20	MCS0	1	140	5700	0.31	0.34	12.84	11.84		23.98	23.98	1.83	2.12	26.99	Pass
HT20	MCS0	1	144	5720	0.31	0.34	17.21	15.86		23.98	23.98	1.83	2.12	26.99	Pass
HT40	MCS0	1	102	5510	0.72	0.67	10.33	10.00		23.98	23.98	1.83	2.12	26.99	Pass
HT40	MCS0	1	110	5550	0.72	0.67	16.63	16.22		23.98	23.98	1.83	2.12	26.99	Pass
HT40	MCS0	1	134	5670	0.72	0.67	15.07	13.97		23.98	23.98	1.83	2.12	26.99	Pass
HT40	MCS0	1	142	5710	0.72	0.67	17.14	15.92		23.98	23.98	1.83	2.12	26.99	Pass
VHT20	MCS0	1	100	5500	0.10	0.10	13.24	12.95		23.98	23.98	1.83	2.12	26.99	Pass
VHT20	MCS0	1	116	5580	0.10	0.10	17.83	16.95		23.98	23.98	1.83	2.12	26.99	Pass
VHT20	MCS0	1	132	5660	0.10	0.10	17.55	16.72		23.98	23.98	1.83	2.12	26.99	Pass
VHT20	MCS0	1	140	5700	0.10	0.10	12.63	11.60		23.98	23.98	1.83	2.12	26.99	Pass
VHT20	MCS0	1	144	5720	0.10	0.10	17.00	15.62		23.98	23.98	1.83	2.12	26.99	Pass
VHT40	MCS0	1	102	5510	0.67	0.67	10.28	9.97		23.98	23.98	1.83	2.12	26.99	Pass
VHT40	MCS0	1	110	5550	0.67	0.67	16.58	16.10		23.98	23.98	1.83	2.12	26.99	Pass
VHT40	MCS0	1	134	5670	0.67	0.67	15.02	13.89		23.98	23.98	1.83	2.12	26.99	Pass
VHT40	MCS0	1	142	5710	0.67	0.67	17.09	15.87		23.98	23.98	1.83	2.12	26.99	Pass
VHT80	MCS0	1	106	5530	1.20	1.14	6.92	6.24		23.98	23.98	1.83	2.12	26.99	Pass
VHT80	MCS0	1	122	5610	1.20	1.14	13.10	12.64		23.98	23.98	1.83	2.12	26.99	Pass
VHT80	MCS0	1	138	5690	1.20	1.14	16.69	15.84		23.98	23.98	1.83	2.12	26.99	Pass
11a	6Mbps	2	100	5500	0.29	0.32	15.87	17.67	19.88	23.98		2.12		26.99	Pass
11a	6Mbps	2	116	5580	0.29	0.32	18.38	17.62	21.03	23.98		2.12		26.99	Pass
11a	6Mbps	2	132	5660	0.29	0.32	17.70	17.15	20.45	23.98		2.12		26.99	Pass
11a	6Mbps	2	140	5700	0.29	0.32	13.68	12.36	16.08	23.98		2.12		26.99	Pass
11a	6Mbps	2	144	5720	0.29	0.32	17.19	15.62	19.49	23.98		2.12		26.99	Pass
HT20	MCS0	2	100	5500	0.34	0.35	13.93	13.27	16.62	23.98		2.12		26.99	Pass
HT20	MCS0	2	116	5580	0.34	0.35	18.22	17.34	20.81	23.98		2.12		26.99	Pass
HT20	MCS0	2	132	5660	0.34	0.35	17.92	17.21	20.59	23.98		2.12		26.99	Pass
HT20	MCS0	2	140	5700	0.34	0.35	13.08	12.03	15.60	23.98		2.12		26.99	Pass
HT20	MCS0	2	144	5720	0.34	0.35	17.29	16.05	19.72	23.98		2.12		26.99	Pass
HT40	MCS0	2	102	5510	0.60	0.61	10.74	10.15	13.47	23.98		2.12		26.99	Pass
HT40	MCS0	2	110	5550	0.60	0.61	17.10	16.26	19.71	23.98		2.12		26.99	Pass
HT40	MCS0	2	134	5670	0.60	0.61	15.15	14.16	17.70	23.98		2.12		26.99	Pass
HT40	MCS0	2	142	5710	0.60	0.61	17.42	15.93	19.75	23.98		2.12		26.99	Pass
VHT20	MCS0	2	100	5500	0.10	0.10	13.69	13.02	16.38	23.98		2.12		26.99	Pass
VHT20	MCS0	2	116	5580	0.10	0.10	17.98	17.09	20.57	23.98		2.12		26.99	Pass
VHT20	MCS0	2	132	5660	0.10	0.10	17.79	17.19	20.51	23.98		2.12		26.99	Pass
VHT20	MCS0	2	140	5700	0.10	0.10	12.84	11.78	15.35	23.98		2.12		26.99	Pass
VHT20	MCS0	2	144	5720	0.10	0.10	17.05	15.80	19.48	23.98		2.12		26.99	Pass
VHT40	MCS0	2	102	5510	0.60	0.66	10.70	10.09	13.42	23.98		2.12		26.99	Pass
VHT40	MCS0	2	110	5550	0.60	0.66	17.02	16.16	19.62	23.98		2.12		26.99	Pass
VHT40	MCS0	2	134	5670	0.60	0.66	15.10	14.14	17.66	23.98		2.12		26.99	Pass
VHT40	MCS0	2	142	5710	0.60	0.66	17.40	15.88	19.72	23.98		2.12		26.99	Pass
VHT80	MCS0	2	106	5530	1.20	1.20	7.36	6.47	9.94	23.98		2.12		26.99	Pass
VHT80	MCS0	2	122	5610	1.20	1.20	13.48	12.75	16.14	23.98		2.12		26.99	Pass
VHT80	MCS0	2	138	5690	1.20	1.20	17.02	15.90	19.50	23.98		2.12		26.99	Pass

TEST RESULTS DATA
Power Spectral Density

Band III															
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Duty Factor (dB)		Average Power Density (dBm/MHz)			Average PSD Limit (dBm/MHz)		DG (dBi)			Pass /Fail
					Ant 1	Ant 2	Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2		
11a	6Mbps	2	100	5500	0.29	0.32			6.26	11.00		4.99			Pass
11a	6Mbps	2	116	5580	0.29	0.32			9.11	11.00		4.99			Pass
11a	6Mbps	2	140	5700	0.29	0.32			3.15	11.00		4.99			Pass
11a	6Mbps	2	144	5720	0.29	0.32			6.63	11.00		4.99			Pass
HT20	MCS0	2	100	5500	0.34	0.35			4.85	11.00		4.99			Pass
HT20	MCS0	2	116	5580	0.34	0.35			8.98	11.00		4.99			Pass
HT20	MCS0	2	140	5700	0.34	0.35			2.65	11.00		4.99			Pass
HT20	MCS0	2	144	5720	0.34	0.35			6.50	11.00		4.99			Pass
HT40	MCS0	2	102	5510	0.60	0.61			-1.02	11.00		4.99			Pass
HT40	MCS0	2	110	5550	0.60	0.61			5.20	11.00		4.99			Pass
HT40	MCS0	2	134	5670	0.60	0.61			1.61	11.00		4.99			Pass
HT40	MCS0	2	142	5710	0.60	0.61			3.83	11.00		4.99			Pass
VHT80	MCS0	2	106	5530	1.20	1.20			-7.55	11.00		4.99			Pass
VHT80	MCS0	2	122	5610	1.20	1.20			-1.63	11.00		4.99			Pass
VHT80	MCS0	2	138	5690	1.20	1.20			0.67	11.00		4.99			Pass

TEST RESULTS DATA
Frequency Stability

Band I										
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Center Frequency (MHz)	Frequency Deviation (MHz)	Frequency Stablility (ppm)	Temperature (°C)	Voltage (V)	Note
11a	6Mbps	1	36	5180	5180.000	0.000	0.00	50	20	0 Min
11a	6Mbps	1	36	5180	5180.000	0.000	0.00	50	20	2 Min
11a	6Mbps	1	36	5180	5180.025	0.025	4.83	50	20	5 Min
11a	6Mbps	1	36	5180	5180.025	0.025	4.83	50	20	10 Min
11a	6Mbps	1	36	5180	5179.950	-0.050	-9.65	-30	20	0 Min
11a	6Mbps	1	36	5180	5180.000	0.000	0.00	-30	20	2 Min
11a	6Mbps	1	36	5180	5180.000	0.000	0.00	-30	20	5 Min
11a	6Mbps	1	36	5180	5179.975	-0.025	-4.83	-30	20	10 Min
11a	6Mbps	1	36	5180	5180.000	0.000	0.00	20	24	0 Min
11a	6Mbps	1	36	5180	5179.975	-0.025	-4.83	20	24	2 Min
11a	6Mbps	1	36	5180	5179.975	-0.025	-4.83	20	24	5 Min
11a	6Mbps	1	36	5180	5179.975	-0.025	-4.83	20	24	10 Min
11a	6Mbps	1	36	5180	5180.000	0.000	0.00	20	16	0 Min
11a	6Mbps	1	36	5180	5180.000	0.000	0.00	20	16	2 Min
11a	6Mbps	1	36	5180	5180.000	0.000	0.00	20	16	5 Min
11a	6Mbps	1	36	5180	5180.000	0.000	0.00	20	16	10 Min
11a	6Mbps	1	36	5180	5180.000	0.000	0.00	20	20	0 Min
11a	6Mbps	1	36	5180	5180.000	0.000	0.00	20	20	2 Min
11a	6Mbps	1	36	5180	5179.975	-0.025	-4.83	20	20	5 Min
11a	6Mbps	1	36	5180	5179.975	-0.025	-4.83	20	20	10 Min

Band II										
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Center Frequency (MHz)	Frequency Deviation (MHz)	Frequency Stablility (ppm)	Temperature (°C)	Voltage (V)	Note
11a	6Mbps	1	64	5320	5320.000	0.000	0.00	50	20	0 Min
11a	6Mbps	1	64	5320	5320.000	0.000	0.00	50	20	2 Min
11a	6Mbps	1	64	5320	5320.000	0.000	0.00	50	20	5 Min
11a	6Mbps	1	64	5320	5320.000	0.000	0.00	50	20	10 Min
11a	6Mbps	1	64	5320	5320.000	0.000	0.00	-30	20	0 Min
11a	6Mbps	1	64	5320	5320.000	0.000	0.00	-30	20	2 Min
11a	6Mbps	1	64	5320	5319.975	-0.025	-4.70	-30	20	5 Min
11a	6Mbps	1	64	5320	5319.975	-0.025	-4.70	-30	20	10 Min
11a	6Mbps	1	64	5320	5320.000	0.000	0.00	20	24	0 Min
11a	6Mbps	1	64	5320	5320.000	0.000	0.00	20	24	2 Min
11a	6Mbps	1	64	5320	5320.000	0.000	0.00	20	24	5 Min
11a	6Mbps	1	64	5320	5320.000	0.000	0.00	20	24	10 Min
11a	6Mbps	1	64	5320	5320.000	0.000	0.00	20	16	0 Min
11a	6Mbps	1	64	5320	5320.000	0.000	0.00	20	16	2 Min
11a	6Mbps	1	64	5320	5320.000	0.000	0.00	20	16	5 Min
11a	6Mbps	1	64	5320	5320.000	0.000	0.00	20	16	10 Min
11a	6Mbps	1	64	5320	5320.000	0.000	0.00	20	20	0 Min
11a	6Mbps	1	64	5320	5320.000	0.000	0.00	20	20	2 Min
11a	6Mbps	1	64	5320	5320.000	0.000	0.00	20	20	5 Min
11a	6Mbps	1	64	5320	5320.000	0.000	0.00	20	20	10 Min

Band III										
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Center Frequency (MHz)	Frequency Deviation (MHz)	Frequency Stablility (ppm)	Temperature (°C)	Voltage (V)	Note
11a	6Mbps	1	100	5500	5500.000	0.000	0.00	50	20	0 Min
11a	6Mbps	1	100	5500	5500.000	0.000	0.00	50	20	2 Min
11a	6Mbps	1	100	5500	5500.000	0.000	0.00	50	20	5 Min
11a	6Mbps	1	100	5500	5500.000	0.000	0.00	50	20	10 Min
11a	6Mbps	1	100	5500	5499.975	-0.025	-4.55	-30	20	0 Min
11a	6Mbps	1	100	5500	5500.000	0.000	0.00	-30	20	2 Min
11a	6Mbps	1	100	5500	5500.000	0.000	0.00	-30	20	5 Min
11a	6Mbps	1	100	5500	5500.000	0.000	0.00	-30	20	10 Min
11a	6Mbps	1	100	5500	5500.000	0.000	0.00	20	24	0 Min
11a	6Mbps	1	100	5500	5500.000	0.000	0.00	20	24	2 Min
11a	6Mbps	1	100	5500	5500.000	0.000	0.00	20	24	5 Min
11a	6Mbps	1	100	5500	5500.000	0.000	0.00	20	24	10 Min
11a	6Mbps	1	100	5500	5500.000	0.000	0.00	20	16	0 Min
11a	6Mbps	1	100	5500	5500.000	0.000	0.00	20	16	2 Min
11a	6Mbps	1	100	5500	5500.000	0.000	0.00	20	16	5 Min
11a	6Mbps	1	100	5500	5500.000	0.000	0.00	20	16	10 Min
11a	6Mbps	1	100	5500	5500.000	0.000	0.00	20	20	0 Min
11a	6Mbps	1	100	5500	5500.000	0.000	0.00	20	20	2 Min
11a	6Mbps	1	100	5500	5500.000	0.000	0.00	20	20	5 Min
11a	6Mbps	1	100	5500	5500.000	0.000	0.00	20	20	10 Min

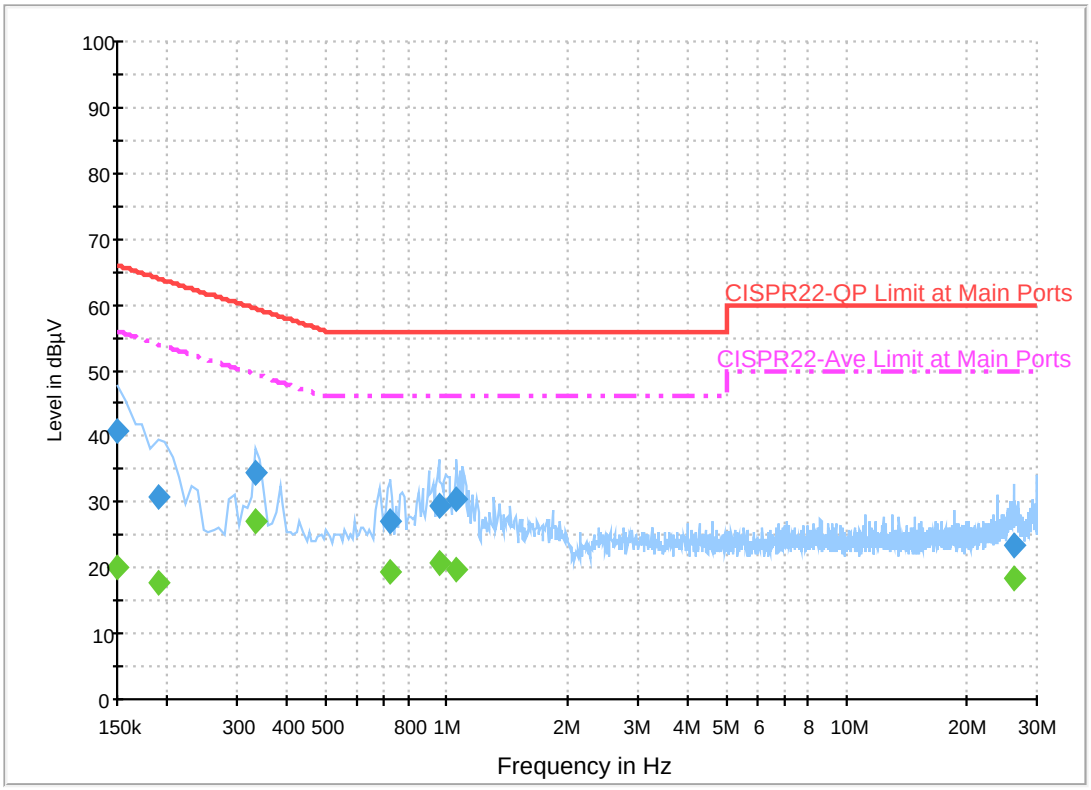
Appendix B. AC Conducted Emission Test Results

Test Engineer :	Kai-Chun Chu	**Temperature :**	22~25℃
		Relative Humidity :	52~55%

EUT Information

Report NO :	733120-01
Test Mode :	Mode 1
Test Voltage :	120Vac/60Hz
Phase :	Line

ENV216 Auto Test FCC Power Bar - L



Final Result 1

Frequency (MHz)	QuasiPeak (dBµV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.150000	40.9	Off	L1	19.6	25.1	66.0
0.190000	30.7	Off	L1	19.6	33.3	64.0
0.334000	34.5	Off	L1	19.6	24.9	59.4
0.726000	27.1	Off	L1	19.6	28.9	56.0
0.958000	29.6	Off	L1	19.6	26.4	56.0
1.062000	30.3	Off	L1	19.6	25.7	56.0
26.342000	23.3	Off	L1	20.9	36.7	60.0

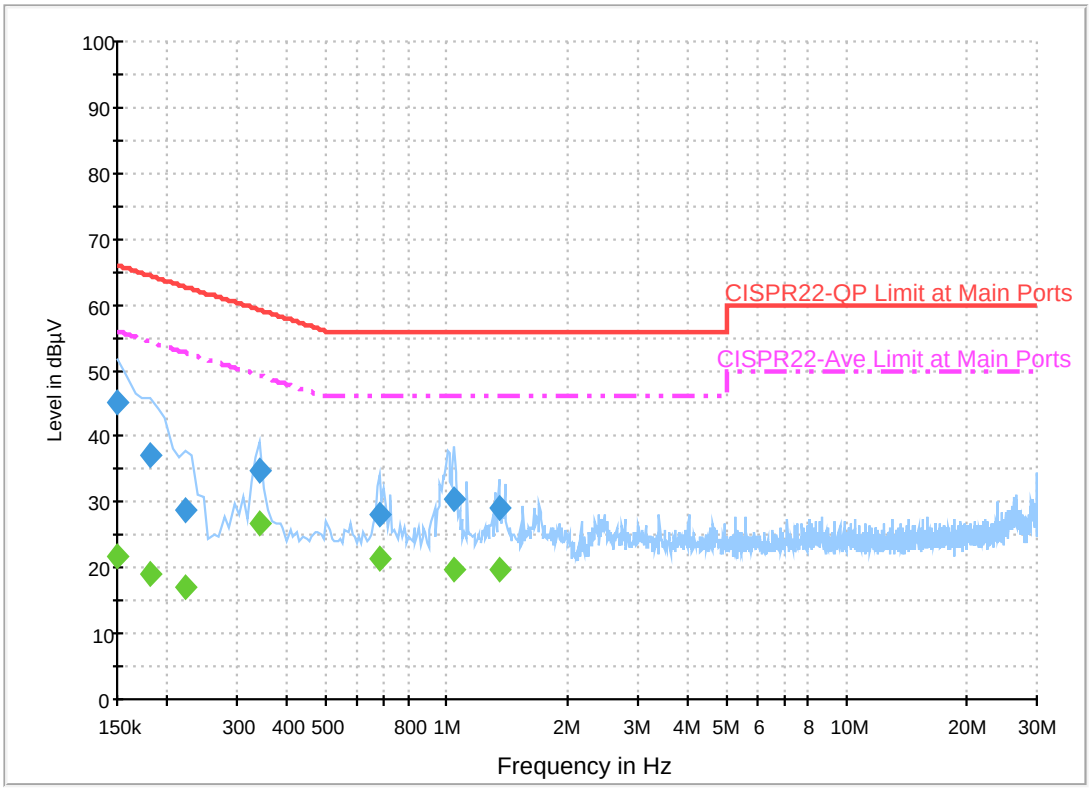
Final Result 2

Frequency (MHz)	Average (dBµV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.150000	20.2	Off	L1	19.6	35.8	56.0
0.190000	17.6	Off	L1	19.6	36.4	54.0
0.334000	27.2	Off	L1	19.6	22.2	49.4
0.726000	19.3	Off	L1	19.6	26.7	46.0
0.958000	20.8	Off	L1	19.6	25.2	46.0
1.062000	19.8	Off	L1	19.6	26.2	46.0
26.342000	18.4	Off	L1	20.9	31.6	50.0

EUT Information

Report NO :	733120-01
Test Mode :	Mode 1
Test Voltage :	120Vac/60Hz
Phase :	Neutral

ENV216 Auto Test FCC Power Bar - N



Final Result 1

Frequency (MHz)	QuasiPeak (dBµV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.150000	45.3	Off	N	19.5	20.7	66.0
0.182000	37.0	Off	N	19.5	27.4	64.4
0.222000	28.6	Off	N	19.5	34.1	62.7
0.342000	34.8	Off	N	19.5	24.4	59.2
0.678000	28.0	Off	N	19.5	28.0	56.0
1.046000	30.3	Off	N	19.6	25.7	56.0
1.350000	29.2	Off	N	19.6	26.8	56.0

Final Result 2

Frequency (MHz)	Average (dBµV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.150000	21.7	Off	N	19.5	34.3	56.0
0.182000	18.9	Off	N	19.5	35.5	54.4
0.222000	17.0	Off	N	19.5	35.7	52.7
0.342000	26.6	Off	N	19.5	22.6	49.2
0.678000	21.4	Off	N	19.5	24.6	46.0
1.046000	19.9	Off	N	19.6	26.1	46.0
1.350000	19.8	Off	N	19.6	26.2	46.0

Appendix C. Radiated Spurious Emission

Test Engineer :	Hao Hsu, Jacky Hung and Ken Wu	**Temperature :**	20-25°C
		Relative Humidity :	50-55%

Band 1 - 5150~5250MHz

WIFI 802.11a (Band Edge @ 3m)

WIFI Ant.	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
1+2		(MHz)	(dBµV/m)	(dB)	(dBµV/m)	(dBµV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11a CH 36 5180MHz		5148.98	67.24	-6.76	74	58.78	32.44	9.05	33.03	216	38	P	H
		5149.5	53.06	-0.94	54	44.6	32.44	9.05	33.03	216	38	A	H
	*	5180	115.62	-	-	107.09	32.49	9.07	33.03	216	38	P	H
	*	5180	104.93	-	-	96.4	32.49	9.07	33.03	216	38	A	H
		5399.8	60.86	-13.14	74	51.82	32.84	9.22	33.02	216	38	P	H
		5389.72	48.78	-5.22	54	39.79	32.81	9.2	33.02	216	38	A	H
		5149.24	59.97	-14.03	74	51.51	32.44	9.05	33.03	329	174	P	V
		5149.5	47.44	-6.56	54	38.98	32.44	9.05	33.03	329	174	A	V
	*	5180	110.61	-	-	102.08	32.49	9.07	33.03	329	174	P	V
	*	5180	100.46	-	-	91.93	32.49	9.07	33.03	329	174	A	V
		5398.12	57.45	-16.55	74	48.41	32.84	9.22	33.02	329	174	P	V
		5393.64	44.48	-9.52	54	35.47	32.81	9.22	33.02	329	174	A	V
802.11a CH 44 5220MHz		5150	57.52	-16.48	74	49.06	32.44	9.05	33.03	212	35	P	H
		5147.94	44.82	-9.18	54	36.36	32.44	9.05	33.03	212	35	A	H
	*	5220	117.11	-	-	108.48	32.55	9.11	33.03	212	35	P	H
	*	5220	106.11	-	-	97.48	32.55	9.11	33.03	212	35	A	H
		5431.44	60.57	-13.43	74	51.44	32.89	9.26	33.02	212	35	P	H
		5431.16	48.51	-5.49	54	39.38	32.89	9.26	33.02	212	35	A	H
		5136.5	54.89	-19.11	74	46.46	32.41	9.05	33.03	340	263	P	V
		5148.72	42.25	-11.75	54	33.79	32.44	9.05	33.03	340	263	A	V
	*	5220	112.29	-	-	103.66	32.55	9.11	33.03	340	263	P	V
	*	5220	101.41	-	-	92.78	32.55	9.11	33.03	340	263	A	V
		5431.16	57.03	-16.97	74	47.9	32.89	9.26	33.02	340	263	P	V
		5430.04	45.2	-8.8	54	36.07	32.89	9.26	33.02	340	263	A	V

802.11a CH 48 5240MHz		5119.08	55.85	-18.15	74	47.46	32.39	9.03	33.03	235	35	P	H
		5149.76	42.71	-11.29	54	34.25	32.44	9.05	33.03	235	35	A	H
	*	5240	117.5	-	-	108.84	32.57	9.12	33.03	235	35	P	H
	*	5240	106.68	-	-	98.02	32.57	9.12	33.03	235	35	A	H
		5451.88	60.54	-13.46	74	51.35	32.92	9.29	33.02	235	35	P	H
		5451.88	48.5	-5.5	54	39.31	32.92	9.29	33.02	235	35	A	H
		5132.08	54.87	-19.13	74	46.46	32.41	9.03	33.03	338	261	P	V
		5149.5	41.58	-12.42	54	33.12	32.44	9.05	33.03	338	261	A	V
	*	5240	113.14	-	-	104.48	32.57	9.12	33.03	338	261	P	V
	*	5240	102.18	-	-	93.52	32.57	9.12	33.03	338	261	A	V
		5375.44	56.67	-17.33	74	47.7	32.79	9.2	33.02	338	261	P	V
		5451.88	45.43	-8.57	54	36.24	32.92	9.29	33.02	338	261	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 1 5150~5250MHz

WIFI 802.11a (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 36 5180MHz		10360	46.6	-27.4	74	57.26	38.47	14.63	64.07	100	0	P	H
		15540	60.88	-13.12	74	65.89	39.02	17.95	62.37	219	298	P	H
		15540	47.22	-6.78	54	52.23	39.02	17.95	62.37	219	298	A	H
		10360	46.62	-27.38	74	57.28	38.47	14.63	64.07	100	0	P	V
		15540	59.91	-14.09	74	64.92	39.02	17.95	62.37	378	195	P	V
		15540	46.71	-7.29	54	51.72	39.02	17.95	62.37	378	195	A	V
802.11a CH 44 5220MHz		10440	46.71	-27.29	74	57.32	38.49	14.68	64.09	100	0	P	H
		15660	59.24	-14.76	74	64.01	38.73	18.06	61.91	312	53	P	H
		15660	46.06	-7.94	54	50.83	38.73	18.06	61.91	312	53	A	H
		10440	46.88	-27.12	74	57.49	38.49	14.68	64.09	100	0	P	V
		15660	59.93	-14.07	74	64.7	38.73	18.06	61.91	400	196	P	V
		15660	47.28	-6.72	54	52.05	38.73	18.06	61.91	400	196	A	V
802.11a CH 48 5240MHz		10480	47.85	-26.15	74	58.42	38.5	14.72	64.1	100	0	P	H
		15720	58.43	-15.57	74	63.09	38.56	18.1	61.65	387	217	P	H
		15720	45.4	-8.6	54	50.06	38.56	18.1	61.65	387	217	A	H
		10480	47.84	-26.16	74	58.41	38.5	14.72	64.1	100	0	P	V
		15720	59.4	-14.6	74	64.06	38.56	18.1	61.65	400	171	P	V
		15720	45.97	-8.03	54	50.63	38.56	18.1	61.65	400	171	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 1 5150~5250MHz

WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		5150	66.3	-7.7	74	57.84	32.44	9.05	33.03	226	26	P	H
		5149.5	52.67	-1.33	54	44.21	32.44	9.05	33.03	226	26	A	H
	*	5180	115.14	-	-	106.61	32.49	9.07	33.03	226	26	P	H
	*	5180	103.83	-	-	95.3	32.49	9.07	33.03	226	26	A	H
802.11n		5395.04	58.51	-15.49	74	49.47	32.84	9.22	33.02	226	26	P	H
HT20		5387.48	47.24	-6.76	54	38.25	32.81	9.2	33.02	226	26	A	H
CH 36		5149.5	60.1	-13.9	74	51.64	32.44	9.05	33.03	382	270	P	V
5180MHz		5149.5	46.01	-7.99	54	37.55	32.44	9.05	33.03	382	270	A	V
	*	5180	110.31	-	-	101.78	32.49	9.07	33.03	382	270	P	V
	*	5180	98.95	-	-	90.42	32.49	9.07	33.03	382	270	A	V
		5412.12	57.21	-16.79	74	48.14	32.87	9.22	33.02	382	270	P	V
		5389.16	44.33	-9.67	54	35.34	32.81	9.2	33.02	382	270	A	V
		5138.58	61.25	-12.75	74	52.82	32.41	9.05	33.03	236	23	P	H
		5149.24	45.43	-8.57	54	36.97	32.44	9.05	33.03	236	23	A	H
	*	5220	116.37	-	-	107.74	32.55	9.11	33.03	236	23	P	H
	*	5220	104.9	-	-	96.27	32.55	9.11	33.03	236	23	A	H
802.11n		5440.4	58.89	-15.11	74	49.76	32.89	9.26	33.02	236	23	P	H
HT20		5429.2	47.36	-6.64	54	38.23	32.89	9.26	33.02	236	23	A	H
CH 44		5105.3	54.41	-19.59	74	46.08	32.36	9.01	33.04	356	266	P	V
5220MHz		5150	42.41	-11.59	54	33.95	32.44	9.05	33.03	356	266	A	V
	*	5220	111.49	-	-	102.86	32.55	9.11	33.03	356	266	P	V
	*	5220	100.05	-	-	91.42	32.55	9.11	33.03	356	266	A	V
		5442.08	56.43	-17.57	74	47.3	32.89	9.26	33.02	356	266	P	V
		5443.76	44.26	-9.74	54	35.13	32.89	9.26	33.02	356	266	A	V

		5144.04	57.34	-16.66	74	48.88	32.44	9.05	33.03	236	28	P	H
		5146.12	43.19	-10.81	54	34.73	32.44	9.05	33.03	236	28	A	H
	*	5240	117.51	-	-	108.85	32.57	9.12	33.03	236	28	P	H
	*	5240	106.43	-	-	97.77	32.57	9.12	33.03	236	28	A	H
802.11n		5458.04	59.75	-14.25	74	50.56	32.92	9.29	33.02	236	28	P	H
HT20		5452.44	48.43	-5.57	54	39.24	32.92	9.29	33.02	236	28	A	H
CH 48		5148.2	54.24	-19.76	74	45.78	32.44	9.05	33.03	338	262	P	V
5240MHz		5147.94	41.65	-12.35	54	33.19	32.44	9.05	33.03	338	262	A	V
	*	5240	112.94	-	-	104.28	32.57	9.12	33.03	338	262	P	V
	*	5240	101.7	-	-	93.04	32.57	9.12	33.03	338	262	A	V
		5355	56.87	-17.13	74	47.95	32.76	9.19	33.03	338	262	P	V
		5456.92	44.78	-9.22	54	35.59	32.92	9.29	33.02	338	262	A	V

Remark

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

Band 1 5150~5250MHz

WIFI 802.11n HT20 (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		10360	48.02	-20.18	68.2	58.74	38.41	14.63	64.07	100	0	P	H
802.11n		15540	59.88	-14.12	74	66.33	37.58	17.95	62.37	220	254	P	H
HT20		15540	45.9	-8.1	54	52.35	37.58	17.95	62.37	220	254	A	H
CH 36		10360	50.29	-17.91	68.2	61.01	38.41	14.63	64.07	100	0	P	V
5180MHz		15540	61.41	-12.59	74	67.86	37.58	17.95	62.37	163	181	P	V
		15540	47.36	-6.64	54	53.81	37.58	17.95	62.37	163	181	A	V
		10440	49.65	-18.55	68.2	60.24	38.51	14.68	64.09	100	0	P	H
802.11n		15660	61.42	-12.58	74	67.78	37.14	18.06	61.91	215	252	P	H
HT20		15660	47.17	-6.83	54	53.53	37.14	18.06	61.91	215	252	A	H
CH 44		10440	49.87	-18.33	68.2	60.46	38.51	14.68	64.09	100	0	P	V
5220MHz		15660	64.41	-9.59	74	70.77	37.14	18.06	61.91	167	179	P	V
		15660	50.28	-3.72	54	56.64	37.14	18.06	61.91	167	179	A	V
		10480	48.12	-20.08	68.2	58.61	38.58	14.72	64.1	100	0	P	H
802.11n		15720	60.95	-13.05	74	67.28	36.89	18.1	61.65	218	254	P	H
HT20		15720	47.35	-6.65	54	53.68	36.89	18.1	61.65	218	254	A	H
CH 48		10480	50.56	-17.64	68.2	61.05	38.58	14.72	64.1	100	0	P	V
5240MHz		15720	64.84	-9.16	74	71.17	36.89	18.1	61.65	170	179	P	V
		15720	50.68	-3.32	54	57.01	36.89	18.1	61.65	170	179	A	V

Remark

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

Band 1 5150~5250MHz

WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		5144.04	65.84	-8.16	74	57.38	32.44	9.05	33.03	211	200	P	H
		5148.98	53.07	-0.93	54	44.61	32.44	9.05	33.03	211	200	A	H
	*	5190	105.89	-	-	97.34	32.49	9.09	33.03	211	200	P	H
	*	5190	96.29	-	-	87.74	32.49	9.09	33.03	211	200	A	H
802.11n		5409.32	56.53	-17.47	74	47.49	32.84	9.22	33.02	211	200	P	H
HT40		5416.6	43.98	-10.02	54	34.91	32.87	9.22	33.02	211	200	A	H
CH 38		5147.16	62.04	-11.96	74	53.58	32.44	9.05	33.03	400	283	P	V
5190MHz		5147.94	49.93	-4.07	54	41.47	32.44	9.05	33.03	400	283	A	V
	*	5190	103.86	-	-	95.31	32.49	9.09	33.03	400	283	P	V
	*	5190	93.95	-	-	85.4	32.49	9.09	33.03	400	283	A	V
		5377.96	55.9	-18.1	74	46.91	32.81	9.2	33.02	400	283	P	V
		5419.96	43.73	-10.27	54	34.62	32.87	9.26	33.02	400	283	A	V
		5149.5	66.42	-7.58	74	57.96	32.44	9.05	33.03	241	203	P	H
		5149.24	52.94	-1.06	54	44.48	32.44	9.05	33.03	241	203	A	H
	*	5230	112.75	-	-	104.1	32.57	9.11	33.03	241	203	P	H
	*	5230	102.85	-	-	94.2	32.57	9.11	33.03	241	203	A	H
802.11n		5353.88	58.84	-15.16	74	49.92	32.76	9.19	33.03	241	203	P	H
HT40		5351.36	46.55	-7.45	54	37.63	32.76	9.19	33.03	241	203	A	H
CH 46		5150	61.63	-12.37	74	53.17	32.44	9.05	33.03	400	284	P	V
5230MHz		5148.72	49.28	-4.72	54	40.82	32.44	9.05	33.03	400	284	A	V
	*	5230	109.63	-	-	100.98	32.57	9.11	33.03	400	284	P	V
	*	5230	99.88	-	-	91.23	32.57	9.11	33.03	400	284	A	V
		5350.8	57.38	-16.62	74	48.46	32.76	9.19	33.03	400	284	P	V
		5350	45.37	-8.63	54	36.45	32.76	9.19	33.03	400	284	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 1 5150~5250MHz

WIFI 802.11n HT40 (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 CH 38 5190MHz		10380	45.33	-22.87	68.2	56.02	38.44	14.64	64.08	100	0	P	H
		15570	46.58	-27.42	74	53.01	37.45	17.98	62.24	100	0	P	H
		10380	44.64	-23.56	68.2	55.33	38.44	14.64	64.08	100	0	P	V
		15570	45.34	-28.66	74	51.77	37.45	17.98	62.24	100	0	P	V
802.11n HT40 CH 46 5230MHz		10460	46.49	-27.51	74	57.05	38.53	14.69	64.09	100	0	P	H
		15690	57.5	-16.5	74	63.85	37.02	18.07	61.78	187	74	P	H
		15690	44.89	-9.11	54	51.24	37.02	18.07	61.78	187	74	A	H
		10460	47.73	-26.27	74	58.29	38.53	14.69	64.09	100	0	P	V
		15690	59.77	-14.23	74	66.12	37.02	18.07	61.78	186	0	P	V
		15690	46.03	-7.97	54	52.38	37.02	18.07	61.78	186	0	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 1 5150~5250MHz

WIFI 802.11ac VHT80 (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80 CH 42 5210MHz		5148.72	62.74	-11.26	74	54.28	32.44	9.05	33.03	229	196	P	H
		5148.2	52.8	-1.2	54	44.34	32.44	9.05	33.03	229	196	A	H
	*	5210	100.81	-	-	92.2	32.55	9.09	33.03	229	196	P	H
	*	5210	92.58	-	-	83.97	32.55	9.09	33.03	229	196	A	H
		5413.8	56.51	-17.49	74	47.44	32.87	9.22	33.02	229	196	P	H
		5437.88	45.28	-8.72	54	36.15	32.89	9.26	33.02	229	196	A	H
		5145.6	59.2	-14.8	74	50.74	32.44	9.05	33.03	400	286	P	V
		5148.2	49.43	-4.57	54	40.97	32.44	9.05	33.03	400	286	A	V
	*	5210	98.75	-	-	90.14	32.55	9.09	33.03	400	286	P	V
	*	5210	89.7	-	-	81.09	32.55	9.09	33.03	400	286	A	V
		5426.68	56	-18	74	46.89	32.87	9.26	33.02	400	286	P	V
		5398.96	45.12	-8.88	54	36.08	32.84	9.22	33.02	400	286	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 1 5150~5250MHz

WIFI 802.11ac VHT80 (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac		10420	44.69	-29.31	74	55.31	38.48	14.67	64.08	100	0	P	H
VHT80		15630	43.28	-30.72	74	49.67	37.2	18.03	61.98	100	0	P	H
CH 42		10420	44.51	-29.49	74	55.13	38.48	14.67	64.08	100	0	P	V
5210MHz		15630	43.26	-30.74	74	49.65	37.2	18.03	61.98	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 2 - 5250~5350MHz

WIFI 802.11a (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1+2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11a CH 52 5260MHz		5140.08	54.56	-19.44	74	46.1	32.44	9.05	33.03	221	31	P	H
		5149.26	42.24	-11.76	54	33.78	32.44	9.05	33.03	221	31	A	H
	*	5260	117.19	-	-	108.47	32.63	9.12	33.03	221	31	P	H
	*	5260	106.15	-	-	97.43	32.63	9.12	33.03	221	31	A	H
		5362.8	57.11	-16.89	74	48.16	32.79	9.19	33.03	221	31	P	H
		5363.04	44.51	-9.49	54	35.56	32.79	9.19	33.03	221	31	A	H
		5137.02	53.58	-20.42	74	45.15	32.41	9.05	33.03	334	262	P	V
		5143.48	41.55	-12.45	54	33.09	32.44	9.05	33.03	334	262	A	V
	*	5260	113.26	-	-	104.54	32.63	9.12	33.03	334	262	P	V
	*	5260	102.25	-	-	93.53	32.63	9.12	33.03	334	262	A	V
		5374.32	56.02	-17.98	74	47.05	32.79	9.2	33.02	334	262	P	V
		5422.8	43.3	-10.7	54	34.19	32.87	9.26	33.02	334	262	A	V
802.11a CH 60 5300MHz		5112.54	54.17	-19.83	74	45.79	32.39	9.03	33.04	243	31	P	H
		5148.58	42.08	-11.92	54	33.62	32.44	9.05	33.03	243	31	A	H
	*	5300	116.81	-	-	108	32.68	9.16	33.03	243	31	P	H
	*	5300	106.7	52.7	54	97.89	32.68	9.16	33.03	243	31	A	H
		5358.48	60.46	-13.54	74	51.54	32.76	9.19	33.03	243	31	P	H
		5350.08	48.4	-5.6	54	39.48	32.76	9.19	33.03	243	31	A	H
		5148.24	54.19	-19.81	74	45.73	32.44	9.05	33.03	367	265	P	V
		5148.92	41.29	-12.71	54	32.83	32.44	9.05	33.03	367	265	A	V
	*	5300	113.31	-	-	104.5	32.68	9.16	33.03	367	265	P	V
	*	5300	102.36	-	-	93.55	32.68	9.16	33.03	367	265	A	V
		5353.44	57.39	-16.61	74	48.47	32.76	9.19	33.03	367	265	P	V
		5351.28	45.4	-8.6	54	36.48	32.76	9.19	33.03	367	265	A	V

802.11a CH 64 5320MHz	*	5320	116.23	-	-	107.38	32.71	9.17	33.03	230	33	P	H
	*	5320	105.85	-	-	97	32.71	9.17	33.03	230	33	A	H
		5351.36	67.14	-6.86	74	58.22	32.76	9.19	33.03	230	33	P	H
		5350.08	52.79	-1.21	54	43.87	32.76	9.19	33.03	230	33	A	H
	*	5320	111.56	-	-	102.71	32.71	9.17	33.03	365	261	P	V
	*	5320	101.19	-	-	92.34	32.71	9.17	33.03	365	261	A	V
		5352.8	62.49	-11.51	74	53.57	32.76	9.19	33.03	365	261	P	V
		5350.08	47.82	-6.18	54	38.9	32.76	9.19	33.03	365	261	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 2 5250~5350MHz

WIFI 802.11a (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 52 5260MHz		10520	45.72	-28.28	74	56.24	38.53	14.74	64.1	100	0	P	H
		15780	58	-16	74	62.55	38.44	18.15	61.45	373	216	P	H
		15780	44.12	-9.88	54	48.67	38.44	18.15	61.45	373	216	A	H
		10520	46.28	-27.72	74	56.8	38.53	14.74	64.1	100	0	P	V
		15780	58.98	-15.02	74	63.53	38.44	18.15	61.45	400	210	P	V
		15780	44.86	-9.14	54	49.41	38.44	18.15	61.45	400	210	A	V
802.11a CH 60 5300MHz		10600	47.33	-26.67	74	57.59	38.71	14.8	64.08	100	0	P	H
		15900	56.72	-17.28	74	61.03	38.15	18.25	60.99	379	90	P	H
		15900	42.86	-11.14	54	47.17	38.15	18.25	60.99	379	90	A	H
		10600	48.22	-25.78	74	58.48	38.71	14.8	64.08	100	0	P	V
		15900	57.69	-16.31	74	62	38.15	18.25	60.99	394	210	P	V
		15900	44.15	-9.85	54	48.46	38.15	18.25	60.99	394	210	A	V
802.11a CH 64 5320MHz		10640	47.2	-26.8	74	57.37	38.78	14.82	64.07	100	0	P	H
		15960	56.09	-17.91	74	60.28	37.98	18.3	60.73	300	87	P	H
		15960	41.97	-12.03	54	46.16	37.98	18.3	60.73	300	87	A	H
		10640	47.06	-26.94	74	57.23	38.78	14.82	64.07	100	0	P	V
		15960	56.31	-17.69	74	60.5	37.98	18.3	60.73	394	212	P	V
		15960	43.06	-10.94	54	47.25	37.98	18.3	60.73	394	212	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 2 5250~5350MHz

WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		5147.22	54.62	-19.38	74	46.16	32.44	9.05	33.03	225	27	P	H
		5144.84	42.55	-11.45	54	34.09	32.44	9.05	33.03	225	27	A	H
	*	5260	117.35	-	-	108.63	32.63	9.12	33.03	225	27	P	H
	*	5260	105.91	-	-	97.19	32.63	9.12	33.03	225	27	A	H
802.11n		5429.28	56.98	-17.02	74	47.85	32.89	9.26	33.02	225	27	P	H
HT20		5368.32	44.67	-9.33	54	35.71	32.79	9.2	33.03	225	27	A	H
CH 52		5069.02	54.43	-19.57	74	46.17	32.31	8.99	33.04	351	264	P	V
5260MHz		5146.88	41.58	-12.42	54	33.12	32.44	9.05	33.03	351	264	A	V
	*	5260	112.36	-	-	103.64	32.63	9.12	33.03	351	264	P	V
	*	5260	101.29	-	-	92.57	32.63	9.12	33.03	351	264	A	V
		5386.56	56.23	-17.77	74	47.24	32.81	9.2	33.02	351	264	P	V
		5412.96	43.36	-10.64	54	34.29	32.87	9.22	33.02	351	264	A	V
		5062.9	54.56	-19.44	74	46.3	32.31	8.99	33.04	237	31	P	H
		5146.54	42.19	-11.81	54	33.73	32.44	9.05	33.03	237	31	A	H
	*	5300	116.8	-	-	107.99	32.68	9.16	33.03	237	31	P	H
	*	5300	105.9	-	-	97.09	32.68	9.16	33.03	237	31	A	H
802.11n		5350.32	62.85	-11.15	74	53.93	32.76	9.19	33.03	237	31	P	H
HT20		5350.08	48.84	-5.16	54	39.92	32.76	9.19	33.03	237	31	A	H
CH 60		5124.44	53.23	-20.77	74	44.82	32.41	9.03	33.03	328	264	P	V
5300MHz		5146.54	41.56	-12.44	54	33.1	32.44	9.05	33.03	328	264	A	V
	*	5300	113.59	-	-	104.78	32.68	9.16	33.03	328	264	P	V
	*	5300	101.87	-	-	93.06	32.68	9.16	33.03	328	264	A	V
		5353.2	56.43	-17.57	74	47.51	32.76	9.19	33.03	328	264	P	V
		5350.08	45.82	-8.18	54	36.9	32.76	9.19	33.03	328	264	A	V

	*	5320	115.3	-	-	106.45	32.71	9.17	33.03	230	33	P	H
	*	5320	104.51	-	-	95.66	32.71	9.17	33.03	230	33	A	H
802.11n		5350.08	67.03	-6.97	74	58.11	32.76	9.19	33.03	230	33	P	H
HT20		5350.24	52.75	-1.25	54	43.83	32.76	9.19	33.03	230	33	A	H
CH 64	*	5320	111.05	-	-	102.2	32.71	9.17	33.03	363	267	P	V
5320MHz	*	5320	100.29	-	-	91.44	32.71	9.17	33.03	363	267	A	V
		5351.68	63.2	-10.8	74	54.28	32.76	9.19	33.03	363	267	P	V
		5351.2	48.81	-5.19	54	39.89	32.76	9.19	33.03	363	267	A	V

Remark

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

Band 2 5250~5350MHz

WIFI 802.11n HT20 (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 52 5260MHz		10520	48.11	-20.09	68.2	58.54	38.62	14.74	64.1	100	0	P	H
		15780	58.46	-15.54	74	64.74	36.71	18.15	61.45	218	251	P	H
		15780	45.21	-8.79	54	51.49	36.71	18.15	61.45	218	251	A	H
		10520	49.61	-18.59	68.2	60.04	38.62	14.74	64.1	100	0	P	V
		15780	63.13	-10.87	74	69.41	36.71	18.15	61.45	167	180	P	V
		15780	49.42	-4.58	54	55.7	36.71	18.15	61.45	167	180	A	V
802.11n HT20 CH 60 5300MHz		10600	48.68	-25.32	74	58.93	38.72	14.8	64.08	100	0	P	H
		15900	60.71	-13.29	74	66.9	36.27	18.25	60.99	219	255	P	H
		15900	46.49	-7.51	54	52.68	36.27	18.25	60.99	219	255	A	H
		10600	54.34	-19.66	74	64.59	38.72	14.8	64.08	100	348	P	V
		10600	41.03	-12.97	54	51.28	38.72	14.8	64.08	100	348	A	V
		15900	67.1	-6.9	74	73.29	36.27	18.25	60.99	170	180	P	V
		15900	52.21	-1.79	54	58.4	36.27	18.25	60.99	170	180	A	V
802.11n HT20 CH 64 5320MHz		10640	47.75	-26.25	74	57.93	38.77	14.82	64.07	100	0	P	H
		15960	55.67	-18.33	74	61.82	36.02	18.3	60.73	189	260	P	H
		15960	42.11	-11.89	54	48.26	36.02	18.3	60.73	189	260	A	H
		10640	48.78	-25.22	74	58.96	38.77	14.82	64.07	100	0	P	V
		15960	62.53	-11.47	74	68.68	36.02	18.3	60.73	164	177	P	V
		15960	47.57	-6.43	54	53.72	36.02	18.3	60.73	164	177	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 (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		5148.92	58.05	-15.95	74	49.59	32.44	9.05	33.03	235	210	P	H
		5149.94	46.29	-7.71	54	37.83	32.44	9.05	33.03	235	210	A	H
	*	5270	112.72	-	-	103.98	32.63	9.14	33.03	235	210	P	H
	*	5270	102.94	-	-	94.2	32.63	9.14	33.03	235	210	A	H
802.11n		5352.24	65.37	-8.63	74	56.45	32.76	9.19	33.03	235	210	P	H
HT40		5350.08	51.84	-2.16	54	42.92	32.76	9.19	33.03	235	210	A	H
CH 54		5132.6	57.3	-16.7	74	48.89	32.41	9.03	33.03	392	288	P	V
5270MHz		5148.24	44.38	-9.62	54	35.92	32.44	9.05	33.03	392	288	A	V
	*	5270	109.84	-	-	101.1	32.63	9.14	33.03	392	288	P	V
	*	5270	99.54	-	-	90.8	32.63	9.14	33.03	392	288	A	V
		5352.24	60.53	-13.47	74	51.61	32.76	9.19	33.03	392	288	P	V
		5352.24	49.3	-4.7	54	40.38	32.76	9.19	33.03	392	288	A	V
		5133.62	54.7	-19.3	74	46.27	32.41	9.05	33.03	242	215	P	H
		5149.26	42.15	-11.85	54	33.69	32.44	9.05	33.03	242	215	A	H
	*	5310	106.79	-	-	97.95	32.71	9.16	33.03	242	215	P	H
	*	5310	96.67	-	-	87.83	32.71	9.16	33.03	242	215	A	H
802.11n		5352	65.41	-8.59	74	56.49	32.76	9.19	33.03	242	215	P	H
HT40		5351.52	52.92	-1.08	54	44	32.76	9.19	33.03	242	215	A	H
CH 62		5125.12	53.65	-20.35	74	45.24	32.41	9.03	33.03	400	292	P	V
5310MHz		5146.88	41.98	-12.02	54	33.52	32.44	9.05	33.03	400	292	A	V
	*	5310	103.39	-	-	94.55	32.71	9.16	33.03	400	292	P	V
	*	5310	93.32	-	-	84.48	32.71	9.16	33.03	400	292	A	V
		5350.08	62.9	-11.1	74	53.98	32.76	9.19	33.03	400	292	P	V
		5350.56	49.68	-4.32	54	40.76	32.76	9.19	33.03	400	292	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)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		10540	45.97	-22.23	68.2	56.35	38.64	14.76	64.09	100	0	P	H
802.11n		15810	52.93	-21.07	74	59.18	36.58	18.18	61.32	186	79	P	H
HT40		15810	42.12	-11.88	54	48.37	36.58	18.18	61.32	186	79	A	H
CH 54		10540	45.55	-22.65	68.2	55.93	38.64	14.76	64.09	100	0	P	V
5270MHz		15810	57.7	-16.3	74	63.95	36.58	18.18	61.32	186	0	P	V
		15810	46.29	-7.71	54	52.54	36.58	18.18	61.32	186	0	A	V
802.11n		10620	46.51	-27.49	74	56.74	38.74	14.81	64.08	100	0	P	H
HT40		15930	45.01	-28.99	74	51.17	36.15	18.28	60.86	100	0	P	H
CH 62		10620	46.78	-27.22	74	57.01	38.74	14.81	64.08	100	0	P	V
5310MHz		15930	46.63	-27.37	74	52.79	36.15	18.28	60.86	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 2 5250~5350MHz

WIFI 802.11ac VHT80 (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80 CH 58 5290MHz		5140.42	56.21	-17.79	74	47.75	32.44	9.05	33.03	233	219	P	H
		5148.24	45.31	-8.69	54	36.85	32.44	9.05	33.03	233	219	A	H
	*	5290	103.39	-	-	94.61	32.65	9.16	33.03	233	219	P	H
	*	5290	94.95	-	-	86.17	32.65	9.16	33.03	233	219	A	H
		5382.24	62.33	-11.67	74	53.34	32.81	9.2	33.02	233	219	P	H
		5356.8	52.43	-1.57	54	43.51	32.76	9.19	33.03	233	219	A	H
		5144.5	56.33	-17.67	74	47.87	32.44	9.05	33.03	384	286	P	V
		5149.6	44.6	-9.4	54	36.14	32.44	9.05	33.03	384	286	A	V
	*	5290	100.44	-	-	91.66	32.65	9.16	33.03	384	286	P	V
	*	5290	91.84	-	-	83.06	32.65	9.16	33.03	384	286	A	V
		5370.96	59.89	-14.11	74	50.93	32.79	9.2	33.03	384	286	P	V
		5360.88	49.65	-4.35	54	40.7	32.79	9.19	33.03	384	286	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)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac		10580	45.53	-28.47	74	55.82	38.7	14.78	64.08	100	0	P	H
VHT80		15870	43.78	-30.22	74	50	36.33	18.22	61.06	100	0	P	H
CH 58		10580	45.22	-28.78	74	55.51	38.7	14.78	64.08	100	0	P	V
5290MHz		15870	46.99	-27.01	74	53.21	36.33	18.22	61.06	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 - 5470~5725MHz

WIFI 802.11a (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1+2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11a CH 100 5500MHz		5458	65.37	-8.63	74	56.18	32.92	9.29	33.02	219	32	P	H
		5468.08	67.01	-1.19	68.2	57.79	32.95	9.29	33.02	219	32	P	H
		5459.28	51.74	-2.26	54	42.55	32.92	9.29	33.02	219	32	A	H
	*	5500	117.33	-	-	107.98	33	9.37	33.02	219	32	P	H
	*	5500	106.76	-	-	97.41	33	9.37	33.02	219	32	A	H
		5457.2	59.31	-14.69	74	50.12	32.92	9.29	33.02	222	186	P	V
		5466.96	61.13	-7.07	68.2	51.91	32.95	9.29	33.02	222	186	P	V
		5457.36	46.22	-7.78	54	37.03	32.92	9.29	33.02	222	186	A	V
	*	5500	110.3	-	-	100.95	33	9.37	33.02	222	186	P	V
	*	5500	99.77	-	-	90.42	33	9.37	33.02	222	186	A	V
802.11a CH 116 5580MHz		5387.92	56.32	-17.68	74	47.33	32.81	9.2	33.02	226	30	P	H
		5461.12	56.6	-11.6	68.2	47.41	32.92	9.29	33.02	226	30	P	H
		5455.36	43.81	-10.19	54	34.62	32.92	9.29	33.02	226	30	P	H
	*	5580	118.76	-	-	109.32	33.03	9.48	33.07	226	30	P	H
	*	5580	107.31	-	-	97.87	33.03	9.48	33.07	226	30	A	H
		5750.195	56.85	-11.35	68.2	47.02	33.1	9.88	33.15	226	30	P	H
		5397.28	55.98	-18.02	74	46.94	32.84	9.22	33.02	223	185	P	V
		5460.4	54.87	-13.33	68.2	45.68	32.92	9.29	33.02	223	185	P	V
		5404	43.02	-10.98	54	33.98	32.84	9.22	33.02	223	185	A	V
	*	5580	111.62	-	-	102.18	33.03	9.48	33.07	223	185	P	V
	*	5580	100.47	-	-	91.03	33.03	9.48	33.07	223	185	A	V
		5754.92	56.23	-11.97	68.2	46.4	33.1	9.88	33.15	223	185	P	V

802.11a CH 132 5660MHz		5453.25	55.84	-18.16	74	47.52	32.05	9.29	33.02	224	27	P	H
		5468.65	54.61	-13.59	68.2	46.27	32.07	9.29	33.02	224	27	P	H
		5422.8	43.38	-10.62	54	35.12	32.02	9.26	33.02	224	27	A	H
	*	5660	119.48	-	-	110.53	32.38	9.68	33.11	224	27	P	H
	*	5660	108.86	-	-	99.91	32.38	9.68	33.11	224	27	A	H
		5726.325	66.16	-2.04	68.2	56.98	32.5	9.81	33.13	224	27	P	H
		5438.55	54.69	-19.31	74	46.42	32.03	9.26	33.02	400	117	P	V
		5462	54.16	-14.04	68.2	45.84	32.05	9.29	33.02	400	117	P	V
		5429.8	42.04	-11.96	54	33.77	32.03	9.26	33.02	400	117	A	V
	*	5660	113.44	-	-	104.49	32.38	9.68	33.11	400	117	P	V
	*	5660	102.87	-	-	93.92	32.38	9.68	33.11	400	117	A	V
		5733.85	59.95	-8.25	68.2	50.72	32.5	9.88	33.15	400	117	P	V
802.11a CH 140 5700MHz	*	5700	115.78	-	-	106.07	33.08	9.75	33.12	217	30	P	H
	*	5700	105.51	-	-	95.8	33.08	9.75	33.12	217	30	A	H
		5726.84	70.03	-3.97	74	60.26	33.09	9.81	33.13	217	30	P	H
		5727.4	52.38	-1.62	54	42.61	33.09	9.81	33.13	217	30	A	H
	*	5700	110.54	-	-	100.83	33.08	9.75	33.12	389	255	P	V
	*	5700	100.31	-	-	90.6	33.08	9.75	33.12	389	255	A	V
		5726.92	62.88	-11.12	74	53.11	33.09	9.81	33.13	389	255	P	V
		5727.24	46.89	-7.11	54	37.12	33.09	9.81	33.13	389	255	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 - 5470~5725MHz

WIFI 802.11a (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)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 100 5500MHz		11000	47.14	-26.86	74	56.26	39.5	15.08	64	100	0	P	H
		16500	49.76	-18.44	68.2	55.52	37.9	18.74	62.7	100	0	P	H
		11000	47.56	-26.44	74	56.68	39.5	15.08	64	100	0	P	V
		16500	51.44	-16.76	68.2	57.2	37.9	18.74	62.7	100	0	P	V
802.11a CH 116 5580MHz		11160	49.98	-24.02	74	58.49	39.67	15.2	63.67	100	0	P	H
		16740	60.08	-8.12	68.2	64.13	39.4	18.93	62.7	100	0	P	H
		11160	54.43	-19.57	74	62.94	39.67	15.2	63.67	392	332	P	V
		11160	40.76	-13.24	54	49.27	39.67	15.2	63.67	392	332	A	V
		16740	61.26	-6.94	68.2	65.31	39.4	18.93	62.7	100	0	P	V

802.11a CH 132 5660MHz		11320	55.23	-18.77	74	62.96	40.04	15.31	63.37	202	40	P	H
		11320	42.03	-11.97	54	49.76	40.04	15.31	63.37	202	40	A	H
		16980	56.56	-11.64	68.2	60.14	39.66	19.12	62.7	100	0	P	H
		11320	53.36	-20.64	74	61.09	40.04	15.31	63.37	105	188	P	V
		11320	40.92	-13.08	54	48.65	40.04	15.31	63.37	105	188	A	V
		16980	57.21	-10.99	68.2	60.79	39.66	19.12	62.7	100	0	P	V
802.11a CH 140 5700MHz		11400	47.74	-26.26	74	55.38	39.9	15.38	63.2	100	0	P	H
		17100	59.98	-14.02	74	61.39	41.06	19.18	62	288	342	P	H
		17100	45.37	-8.63	54	46.78	41.06	19.18	62	288	342	A	H
		11400	47.68	-26.32	74	55.32	39.9	15.38	63.2	100	0	P	V
		17100	62.22	-11.78	74	63.63	41.06	19.18	62	400	214	P	V
		17100	46.72	-7.28	54	48.13	41.06	19.18	62	400	214	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 - 5470~5725MHz

WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		5457.2	64.7	-9.3	74	55.51	32.92	9.29	33.02	230	33	P	H
		5470	66.81	-1.39	68.2	57.59	32.95	9.29	33.02	230	33	P	H
		5459.28	50.87	-3.13	54	41.68	32.92	9.29	33.02	230	33	A	H
802.11n	*	5500	115.77	-	-	106.42	33	9.37	33.02	230	33	P	H
HT20	*	5500	104.71	-	-	95.36	33	9.37	33.02	230	33	A	H
CH 100		5459.44	60.77	-13.23	74	51.58	32.92	9.29	33.02	307	266	P	V
5500MHz		5469.36	62.08	-6.12	68.2	52.86	32.95	9.29	33.02	307	266	P	V
		5459.6	46.62	-7.38	54	37.43	32.92	9.29	33.02	307	266	A	V
	*	5500	110.3	-	-	100.95	33	9.37	33.02	307	266	P	V
	*	5500	99.55	-	-	90.2	33	9.37	33.02	307	266	A	V
		5362	55.37	-18.63	74	46.42	32.79	9.19	33.03	227	32	P	H
		5461.12	54.22	-13.98	68.2	45.03	32.92	9.29	33.02	227	32	P	H
		5456.56	43.87	-10.13	54	34.68	32.92	9.29	33.02	227	32	A	H
	*	5580	119.32	51.12	68.2	109.88	33.03	9.48	33.07	227	32	P	H
802.11n	*	5580	107.74	53.74	54	98.3	33.03	9.48	33.07	227	32	A	H
HT20		5725.94	55.19	-13.01	68.2	45.42	33.09	9.81	33.13	227	32	P	H
CH 116		5421.76	55.43	-18.57	74	46.32	32.87	9.26	33.02	364	270	P	V
5580MHz		5462.56	55.47	-12.73	68.2	46.25	32.95	9.29	33.02	364	270	P	V
		5454.16	43.06	-10.94	54	33.87	32.92	9.29	33.02	364	270	A	V
	*	5580	114.25	46.05	68.2	104.81	33.03	9.48	33.07	364	270	P	V
	*	5580	102.15	48.15	54	92.71	33.03	9.48	33.07	364	270	A	V
		5741.69	56.78	-11.42	68.2	46.95	33.1	9.88	33.15	364	270	P	V

		5422.8	55.77	-18.23	74	47.51	32.02	9.26	33.02	226	28	P	H
		5469.35	54.14	-14.06	68.2	45.8	32.07	9.29	33.02	226	28	P	H
		5421.05	42.87	-11.13	54	34.61	32.02	9.26	33.02	226	28	A	H
	*	5660	117.03	-	-	108.08	32.38	9.68	33.11	226	28	P	H
802.11n	*	5660	106.62	-	-	97.67	32.38	9.68	33.11	226	28	A	H
HT20		5727.025	63.81	-4.39	68.2	54.63	32.5	9.81	33.13	226	28	P	H
CH 132		5437.5	54.57	-19.43	74	46.3	32.03	9.26	33.02	400	122	P	V
5660MHz		5462.35	54.03	-14.17	68.2	45.71	32.05	9.29	33.02	400	122	P	V
		5400.4	42	-12	54	33.8	32	9.22	33.02	400	122	A	V
	*	5660	111.85	-	-	102.9	32.38	9.68	33.11	400	122	P	V
	*	5660	101.49	-	-	92.54	32.38	9.68	33.11	400	122	A	V
		5725.45	58.85	-9.35	68.2	49.67	32.5	9.81	33.13	400	122	P	V
	*	5700	113.98	-	-	104.27	33.08	9.75	33.12	215	30	P	H
	*	5700	103.73	-	-	94.02	33.08	9.75	33.12	215	30	A	H
802.11n		5725.08	66.91	-7.09	74	57.14	33.09	9.81	33.13	215	30	P	H
HT20		5725	52.63	-1.37	54	42.86	33.09	9.81	33.13	215	30	A	H
CH 140	*	5700	109.36	-	-	99.65	33.08	9.75	33.12	369	259	P	V
5700MHz	*	5700	98.43	-	-	88.72	33.08	9.75	33.12	369	259	A	V
		5726.28	63.08	-10.92	74	53.31	33.09	9.81	33.13	369	259	P	V
		5726.2	47.52	-6.48	54	37.75	33.09	9.81	33.13	369	259	A	V

Remark

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

Band 3 - 5470~5725MHz

WIFI 802.11n HT20 (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		11000	54.05	-19.95	74	63.47	39.2	15.08	64	100	239	P	H
802.11n		11000	40.72	-13.28	54	50.14	39.2	15.08	64	100	239	A	H
HT20		16500	47.39	-20.81	68.2	53.95	37.1	18.74	62.7	100	0	P	H
CH 100		11000	57.35	-16.65	74	66.77	39.2	15.08	64	186	234	P	V
5500MHz		11000	43.34	-10.66	54	52.76	39.2	15.08	64	186	234	A	V
		16500	50.64	-17.56	68.2	57.2	37.1	18.74	62.7	100	0	P	V
		11160	59.35	-14.65	74	68.56	38.97	15.2	63.67	205	243	P	H
802.11n		11160	45.61	-8.39	54	54.82	38.97	15.2	63.67	205	243	A	H
HT20		16740	51.27	-16.93	68.2	55.79	38.93	18.93	62.7	100	0	P	H
CH 116		11160	59.01	-14.99	74	68.22	38.97	15.2	63.67	100	58	P	V
5580MHz		11160	45.67	-8.33	54	54.88	38.97	15.2	63.67	100	58	A	V
		16740	51.4	-16.8	68.2	55.92	38.93	18.93	62.7	100	0	P	V

		11320	54.02	-19.98	74	61.75	40.04	15.31	63.37	210	45	P	H
802.11n		11320	41.72	-12.28	54	49.45	40.04	15.31	63.37	210	45	A	H
HT20		16980	56.93	-11.27	68.2	60.51	39.66	19.12	62.7	100	0	P	H
CH 132		11320	52.74	-21.26	74	60.47	40.04	15.31	63.37	150	189	P	V
5660MHz		11320	40.51	-13.49	54	48.24	40.04	15.31	63.37	150	189	A	V
		16980	57.53	-10.67	68.2	61.11	39.66	19.12	62.7	100	0	P	V
802.11n		11410	48.67	-25.33	74	57.57	38.64	15.38	63.2	100	0	P	H
HT20		17100	49.18	-24.82	74	50.81	40.84	19.18	62	100	0	P	H
CH 140		11400	51.32	-22.68	74	60.22	38.64	15.38	63.2	100	0	P	V
5700MHz		17100	50.11	-23.89	74	51.74	40.84	19.18	62	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 - 5470~5725MHz

WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		5459.44	66.26	-7.74	74	57.07	32.92	9.29	33.02	216	212	P	H
		5466.64	67.29	-0.91	68.2	58.07	32.95	9.29	33.02	216	212	P	H
		5458.96	52.3	-1.7	54	43.11	32.92	9.29	33.02	216	212	A	H
	*	5510	108.64	-	-	99.3	33	9.37	33.03	216	212	P	H
802.11n	*	5510	98.36	-	-	89.02	33	9.37	33.03	216	212	A	H
HT40		5725	56.28	-11.92	68.2	46.51	33.09	9.81	33.13	216	212	P	H
CH 102		5455.36	59.08	-14.92	74	49.89	32.92	9.29	33.02	353	284	P	V
5510MHz		5465.92	62.34	-5.86	68.2	53.12	32.95	9.29	33.02	353	284	P	V
		5459.92	47.87	-6.13	54	38.68	32.92	9.29	33.02	353	284	A	V
	*	5510	103.76	-	-	94.42	33	9.37	33.03	353	284	P	V
	*	5510	93.44	-	-	84.1	33	9.37	33.03	353	284	A	V
		5759.645	55.85	-12.35	68.2	45.96	33.1	9.95	33.16	353	284	P	V
		5452.72	64.95	-9.05	74	55.76	32.92	9.29	33.02	254	208	P	H
		5469.28	65.9	-2.3	68.2	56.68	32.95	9.29	33.02	254	208	P	H
		5459.2	53.02	-0.98	54	43.83	32.92	9.29	33.02	254	208	A	H
	*	5550	113.9	-	-	104.49	33.02	9.44	33.05	254	208	P	H
802.11n	*	5550	103.83	-	-	94.42	33.02	9.44	33.05	254	208	A	H
HT40		5755.235	56.77	-11.43	68.2	46.94	33.1	9.88	33.15	254	208	P	H
CH 110		5458.48	61.07	-12.93	74	51.88	32.92	9.29	33.02	387	295	P	V
5550MHz		5460.4	62.3	-5.9	68.2	53.11	32.92	9.29	33.02	387	295	P	V
		5458.48	49.42	-4.58	54	40.23	32.92	9.29	33.02	387	295	A	V
	*	5550	109.83	-	-	100.42	33.02	9.44	33.05	387	295	P	V
	*	5550	99.67	-	-	90.26	33.02	9.44	33.05	387	295	A	V
		5761.22	56.03	-12.17	68.2	46.14	33.1	9.95	33.16	387	295	P	V

		5449.4	56.21	-17.79	74	47.02	32.92	9.29	33.02	225	202	P	H
		5465.15	55.1	-13.1	68.2	45.88	32.95	9.29	33.02	225	202	P	H
		5442.05	43.86	-10.14	54	34.73	32.89	9.26	33.02	225	202	A	H
	*	5670	113.01	-	-	103.37	33.07	9.68	33.11	225	202	P	H
802.11n	*	5670	102.64	-	-	93	33.07	9.68	33.11	225	202	A	H
HT40		5726.675	67.24	-0.96	68.2	57.47	33.09	9.81	33.13	225	202	P	H
CH 134		5350.35	56.33	-17.67	74	47.41	32.76	9.19	33.03	391	291	P	V
5670MHz		5464.8	55.1	-13.1	68.2	45.88	32.95	9.29	33.02	391	291	P	V
		5454.3	43.64	-10.36	54	34.45	32.92	9.29	33.02	391	291	A	V
	*	5670	108.51	-	-	98.87	33.07	9.68	33.11	391	291	P	V
	*	5670	98.49	-	-	88.85	33.07	9.68	33.11	391	291	A	V
		5727.025	61.9	-6.3	68.2	52.13	33.09	9.81	33.13	391	291	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)	Cable 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	46.24	-27.76	74	55.63	39.18	15.11	63.97	100	0	P	H
		16530	42.92	-25.28	68.2	49.2	37.36	18.76	62.7	100	0	P	H
		11020	46.16	-27.84	74	55.55	39.18	15.11	63.97	100	0	P	V
		16530	42.56	-25.64	68.2	48.84	37.36	18.76	62.7	100	0	P	V
802.11n HT40 CH 110 5550MHz		11100	49.4	-24.6	74	58.69	39.06	15.16	63.8	100	0	P	H
		16650	44.61	-23.59	68.2	49.86	38.28	18.86	62.7	100	0	P	H
		11100	53.55	-20.45	74	62.84	39.06	15.16	63.8	207	30	P	V
		11100	41.6	-12.4	54	50.89	39.06	15.16	63.8	207	30	A	V
		16650	48.84	-19.36	68.2	54.09	38.28	18.86	62.7	100	0	P	V
802.11n HT40 CH 134 5670MHz		11340	47.5	-26.5	74	56.48	38.73	15.33	63.33	100	0	P	H
		17010	51.27	-16.93	68.2	53.48	40.89	19.14	62.58	100	0	P	H
		11340	51.21	-22.79	74	60.19	38.73	15.33	63.33	100	0	P	V
		11340	40.75	-13.25	54	49.73	38.73	15.33	63.33	100	0	A	V
		17010	51.18	-17.02	68.2	53.39	40.89	19.14	62.58	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)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		5456.56	62.67	-11.33	74	53.48	32.92	9.29	33.02	225	211	P	H
		5463.76	62.89	-5.31	68.2	53.67	32.95	9.29	33.02	225	211	P	H
		5458.72	52.8	-1.2	54	43.61	32.92	9.29	33.02	225	211	A	H
	*	5530	101.46	-	-	92.09	33.01	9.41	33.05	225	211	P	H
802.11ac	*	5530	92.53	-	-	83.16	33.01	9.41	33.05	225	211	A	H
VHT80		5734.445	55.48	-12.72	68.2	45.66	33.09	9.88	33.15	225	211	P	H
CH 106		5454.88	58.77	-15.23	74	49.58	32.92	9.29	33.02	395	294	P	V
5530MHz		5465.2	58.65	-9.55	68.2	49.43	32.95	9.29	33.02	395	294	P	V
		5455.12	48.05	-5.95	54	38.86	32.92	9.29	33.02	395	294	A	V
	*	5530	96.84	-	-	87.47	33.01	9.41	33.05	395	294	P	V
	*	5530	87.91	-	-	78.54	33.01	9.41	33.05	395	294	A	V
		5733.185	56.71	-11.49	68.2	46.89	33.09	9.88	33.15	395	294	P	V
		5455.12	63.38	-10.62	74	54.19	32.92	9.29	33.02	230	205	P	H
		5462.08	64.2	-4	68.2	55.01	32.92	9.29	33.02	230	205	P	H
		5458.48	52.94	-1.06	54	43.75	32.92	9.29	33.02	230	205	A	H
	*	5610	108.25	-	-	98.74	33.04	9.55	33.08	230	205	P	H
802.11ac	*	5610	98.71	-	-	89.2	33.04	9.55	33.08	230	205	A	H
VHT80		5727.515	59.01	-9.19	68.2	49.24	33.09	9.81	33.13	230	205	P	H
CH 122		5450.08	59.01	-14.99	74	49.82	32.92	9.29	33.02	397	298	P	V
5610MHz		5465.44	60.43	-7.77	68.2	51.21	32.95	9.29	33.02	397	298	P	V
		5454.64	49.18	-4.82	54	39.99	32.92	9.29	33.02	397	298	A	V
	*	5610	102.48	-	-	92.97	33.04	9.55	33.08	397	298	P	V
	*	5610	104.83	-	-	95.32	33.04	9.55	33.08	397	298	A	V
		5745.47	57.74	-10.46	68.2	47.91	33.1	9.88	33.15	397	298	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)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac		11060	46.86	-27.14	74	56.2	39.11	15.13	63.87	100	0	P	H
VHT80		16590	43.06	-25.14	68.2	48.89	37.76	18.81	62.7	100	0	P	H
CH 106		11060	47.33	-26.67	74	56.67	39.11	15.13	63.87	100	0	P	V
5530MHz		16590	42.98	-25.22	68.2	48.81	37.76	18.81	62.7	100	0	P	V
802.11ac		11220	47.27	-26.73	74	56.4	38.9	15.25	63.57	100	0	P	H
VHT80		16830	46.62	-21.58	68.2	50.4	39.59	19	62.7	100	0	P	H
CH 122		11220	48.18	-25.82	74	57.31	38.9	15.25	63.57	100	0	P	V
5610MHz		16830	45.77	-22.43	68.2	49.55	39.59	19	62.7	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 (Fundamental @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1+2		(MHz)	(dBµV/m)	(dB)	(dBµV/m)	(dBµV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11a CH 144 5720MHz	*	5720	118.02	-	-	108.25	33.09	9.81	33.13	224	28	P	H
	*	5720	106.59	-	-	96.82	33.09	9.81	33.13	224	28	A	H
	*	5720	112.32	-	-	102.55	33.09	9.81	33.13	367	263	P	V
	*	5720	101.06	-	-	91.29	33.09	9.81	33.13	367	263	A	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)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 144 5720MHz		11440	55.96	-18.04	74	63.48	39.93	15.4	63.13	173	235	P	H
		11440	41.52	-12.48	54	49.04	39.93	15.4	63.13	173	235	A	H
		17160	60.47	-7.73	68.2	61.34	41.1	19.21	61.53	100	0	P	H
		11440	56.61	-17.39	74	64.13	39.93	15.4	63.13	289	116	P	V
		11440	42.9	-11.1	54	50.42	39.93	15.4	63.13	289	116	A	V
		17160	59.45	-8.75	68.2	60.32	41.1	19.21	61.53	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 - Straddle Channel

WIFI 802.11n HT20 (Fundamental @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n	*	5720	117.57	-	-	107.8	33.09	9.81	33.13	210	243	P	H
HT20	*	5720	107.01	-	-	97.24	33.09	9.81	33.13	210	243	A	H
CH 144	*	5720	113.41	-	-	103.64	33.09	9.81	33.13	284	75	P	V
5720MHz	*	5720	102.92	-	-	93.15	33.09	9.81	33.13	284	75	A	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)	Cable 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	57.13	-16.87	74	65.99	38.59	15.4	63.13	210	239	P	H
		11440	43.12	-10.88	54	51.98	38.59	15.4	63.13	210	239	A	H
		17160	57.32	-10.88	68.2	58.49	40.8	19.21	61.53	100	0	P	H
		11440	58.7	-15.3	74	67.56	38.59	15.4	63.13	100	61	P	V
		11440	45.98	-8.02	54	54.84	38.59	15.4	63.13	100	61	A	V
		17160	57.13	-11.07	68.2	58.3	40.8	19.21	61.53	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 - Straddle Channel

WIFI 802.11n HT40 (Fundamental @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n	*	5710	115.13	-	-	105.37	33.08	9.81	33.13	233	206	P	H
HT40	*	5710	105.1	-	-	95.34	33.08	9.81	33.13	233	206	A	H
CH 142	*	5710	110.56	-	-	100.8	33.08	9.81	33.13	400	283	P	V
5710MHz	*	5710	100.88	-	-	91.12	33.08	9.81	33.13	400	283	A	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)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 CH 142 5710MHz		11420	52.4	-21.6	74	61.28	38.62	15.39	63.17	186	145	P	H
		11420	41.53	-12.47	54	50.41	38.62	15.39	63.17	186	145	A	H
		17130	50.67	-17.53	68.2	52.07	40.82	19.2	61.77	100	0	P	H
		11420	54.01	-19.99	74	62.89	38.62	15.39	63.17	194	30	P	V
		11420	42.79	-11.21	54	51.67	38.62	15.39	63.17	194	30	A	V
		17130	51.62	-16.58	68.2	53.02	40.82	19.2	61.77	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 - Straddle Channel

WIFI 802.11ac VHT80 (Fundamental @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac	*	5690	110.74	-	-	101.03	33.08	9.75	33.12	212	206	P	H
VHT80	*	5690	101.19	-	-	91.48	33.08	9.75	33.12	212	206	A	H
CH 138	*	5690	106.36	-	-	96.65	33.08	9.75	33.12	389	302	P	V
5690MHz	*	5690	96.86	-	-	87.15	33.08	9.75	33.12	389	302	A	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)	Cable 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	47.12	-26.88	74	56.04	38.66	15.36	63.23	100	0	P	H
		17070	46.91	-21.29	68.2	48.76	40.86	19.17	62.23	100	0	P	H
		11380	50.65	-23.35	74	59.57	38.66	15.36	63.23	175	27	P	V
		11380	39.48	-14.52	54	48.4	38.66	15.36	63.23	175	27	A	V
		17070	47.08	-21.12	68.2	48.93	40.86	19.17	62.23	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Emission below 1GHz

WIFI 802.11n HT40 (LF @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1+2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11n HT40 LF		238.44	35.44	-10.56	46	48.72	17.08	1.95	32.38	-	-	P	H
		254.91	36.91	-9.09	46	47.95	19.18	2.09	32.38	150	190	P	H
		296.22	33.82	-12.18	46	44.76	19.11	2.22	32.37	-	-	P	H
		305.6	31.82	-14.18	46	42.51	19.28	2.31	32.37	-	-	P	H
		619.9	31.35	-14.65	46	34.51	26.06	3.15	32.46	-	-	P	H
		950.3	35.38	-10.62	46	31.77	30.82	3.82	31.2	-	-	P	H
		31.08	30.14	-9.86	40	37.95	23.84	0.82	32.49	-	-	P	V
		45.39	27.17	-12.83	40	42.41	16.23	1.02	32.49	-	-	P	V
		62.13	32.06	-7.94	40	51.75	11.76	1.02	32.49	134	243	P	V
		482	29.29	-16.71	46	35.06	23.78	2.77	32.37	-	-	P	V
		619.9	33.15	-12.85	46	36.31	26.06	3.15	32.46	-	-	P	V
		955.2	35.07	-10.93	46	31.13	31.02	3.9	31.15	-	-	P	V
Remark	1. No other spurious found. 2. All results are PASS against limit line.												

Note symbol

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

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

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

1. Level(dBμV/m) =

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

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

For Peak Limit @ 2390MHz:

1. Level(dBμV/m)

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

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

= 55.45 (dBμV/m)

2. Over Limit(dB)

= Level(dBμV/m) – Limit Line(dBμV/m)

= 55.45(dBμV/m) – 74(dBμV/m)

= -18.55(dB)

For Average Limit @ 2390MHz:

1. Level(dBμV/m)

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

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

= 43.54 (dBμV/m)

2. Over Limit(dB)

= Level(dBμV/m) – Limit Line(dBμV/m)

= 43.54(dBμV/m) – 54(dBμV/m)

= -10.46(dB)

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

Appendix D. Radiated Spurious Emission

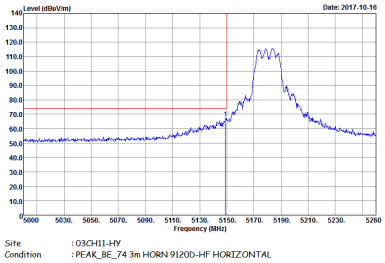
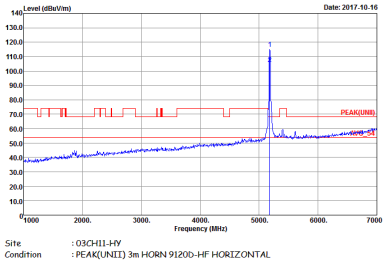
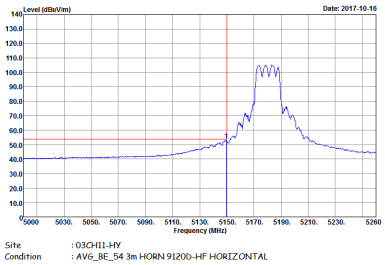
Test Engineer :	Hao Hsu, Jacky Hung and Ken Wu	**Temperature :**	20-25°C
		Relative Humidity :	50-55%

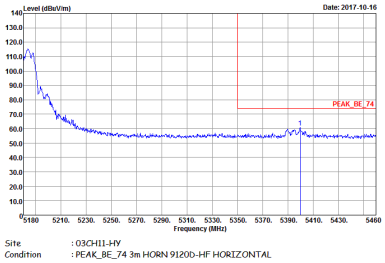
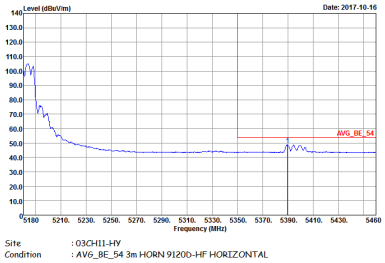
Note symbol

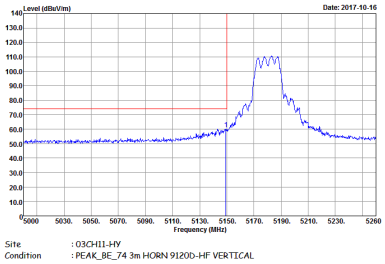
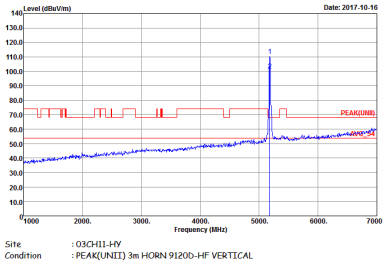
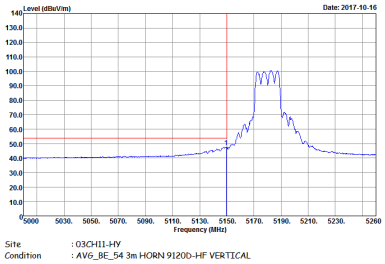
-L	**Low channel location**
-R	**High channel location**

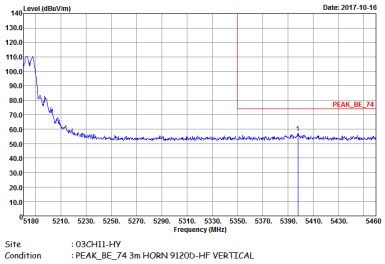
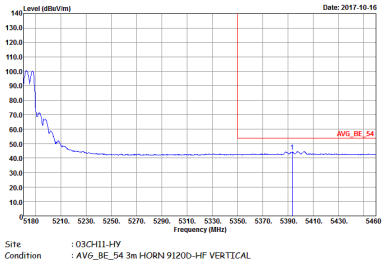
Band 1 - 5150~5250MHz

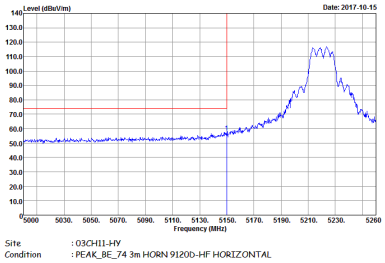
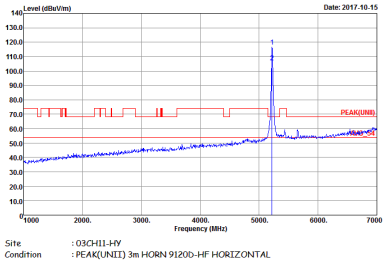
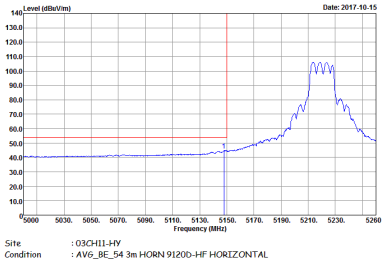
WIFI 802.11a (Band Edge @ 3m)

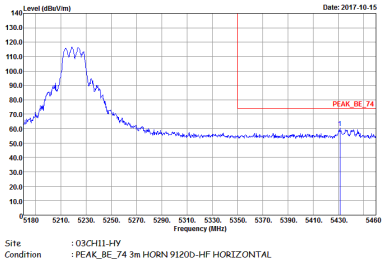
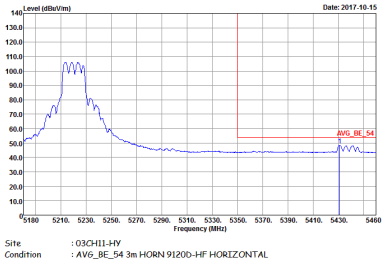
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH36 5180MHz - L	
1+2	Horizontal	Fundamental
Peak		
Avg.		Left blank

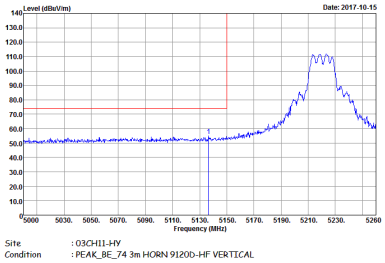
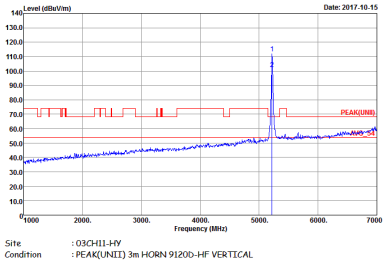
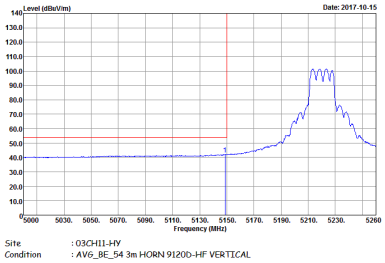
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH36 5180MHz - R	
1+2	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

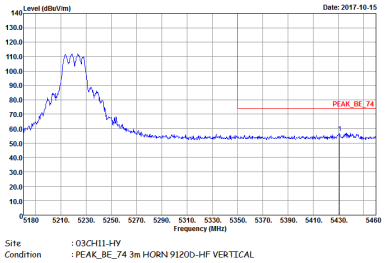
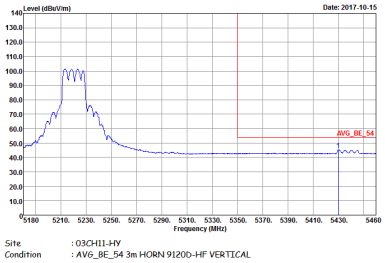
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH36 5180MHz - L	
1+2	Vertical	Fundamental
Peak		
Avg.		Left blank

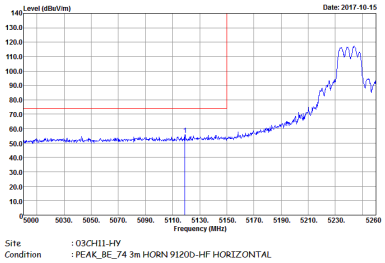
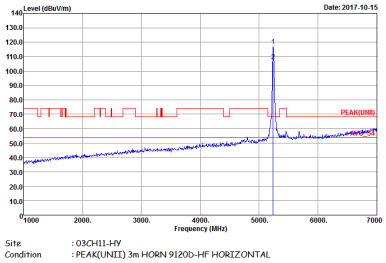
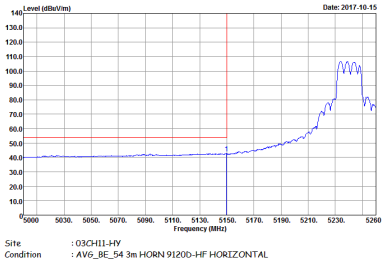
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH36 5180MHz - R	
1+2	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

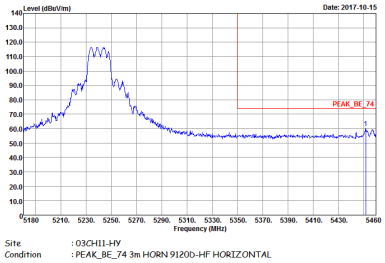
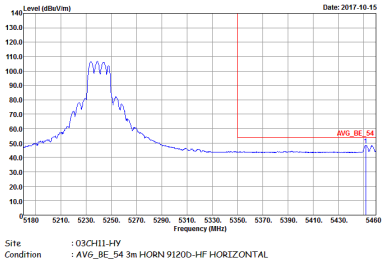
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH44 5220MHz - L	
1+2	Horizontal	Fundamental
Peak		
Avg.		Left blank

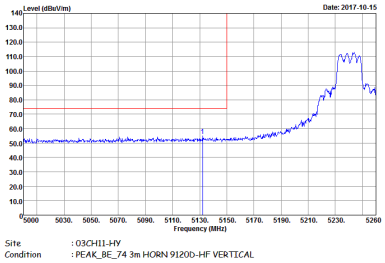
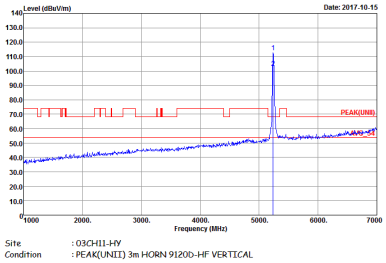
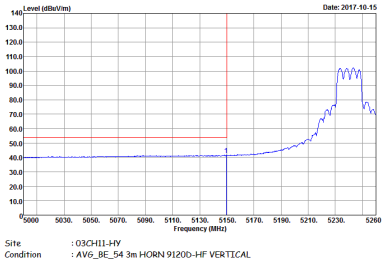
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH44 5220MHz - R	
1+2	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

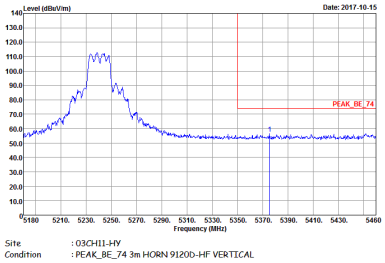
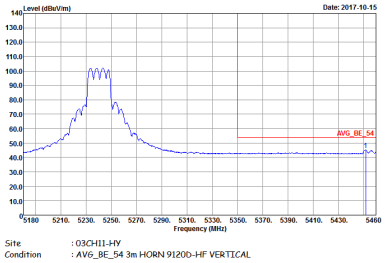
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH44 5220MHz - L	
1+2	Vertical	Fundamental
Peak		
Avg.		Left blank

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

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

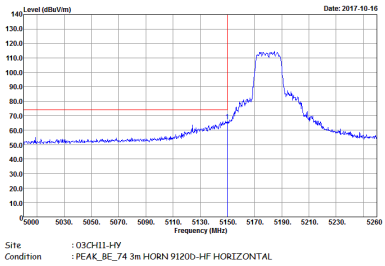
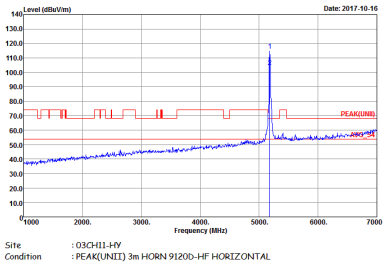
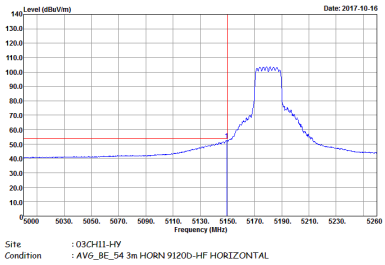
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH48 5240MHz - R	
1+2	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

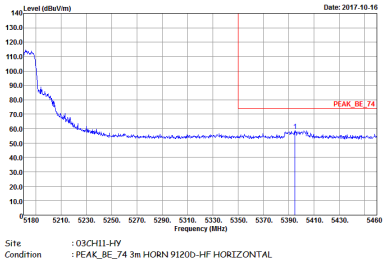
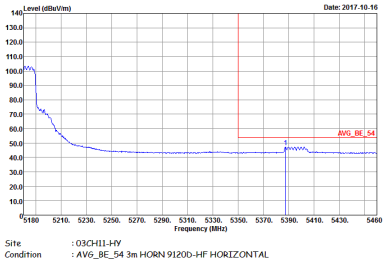
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH48 5240MHz - L	
1+2	Vertical	Fundamental
Peak		
Avg.		Left blank

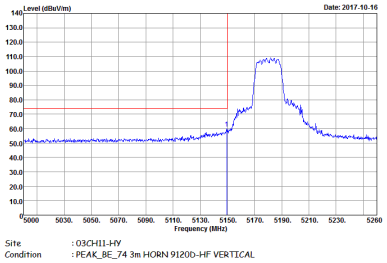
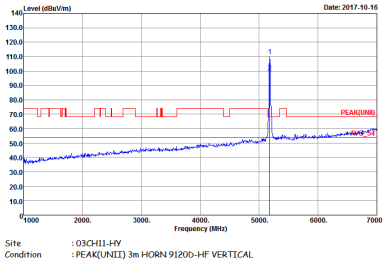
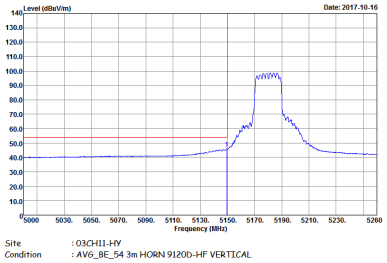
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH48 5240MHz - R	
1+2	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

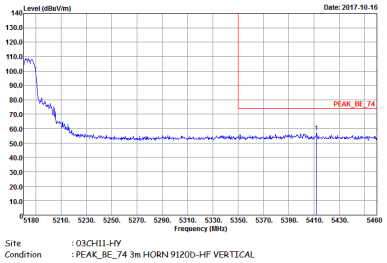
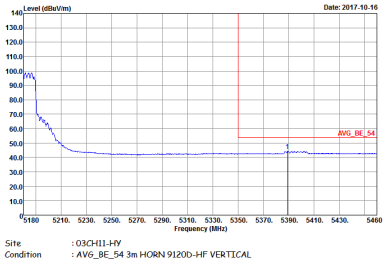
Band 1 5150~5250MHz

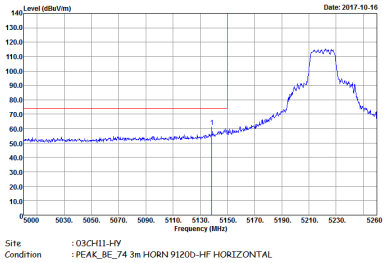
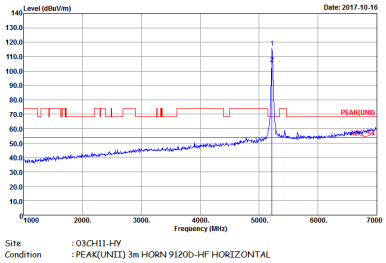
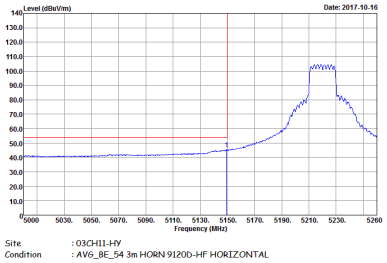
WIFI 802.11n HT20 (Band Edge @ 3m)

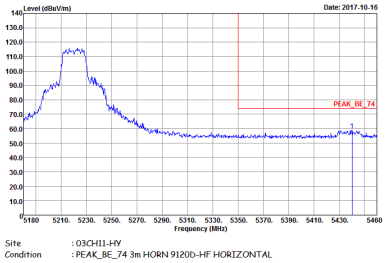
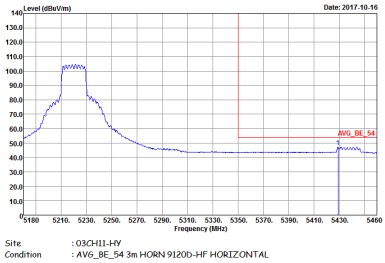
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH36 5180MHz - L	
1+2	Horizontal	Fundamental
Peak		
Avg.		Left blank

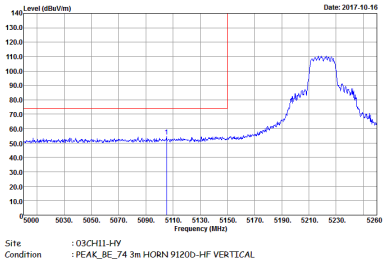
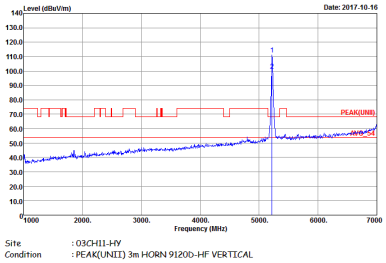
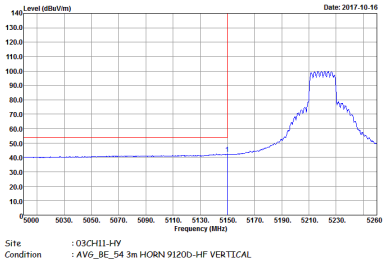
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH36 5180MHz - R	
1+2	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

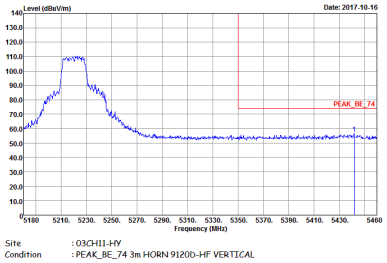
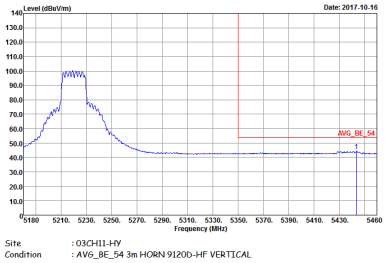
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH36 5180MHz - L	
1+2	Vertical	Fundamental
Peak		
Avg.		Left blank

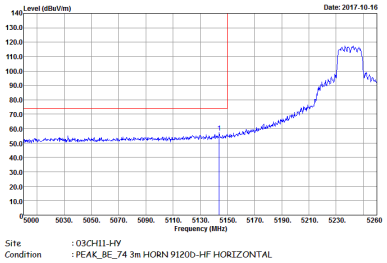
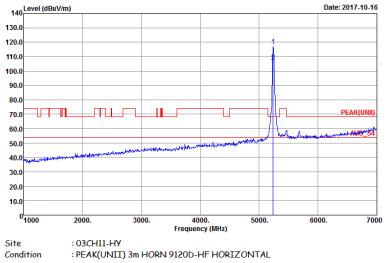
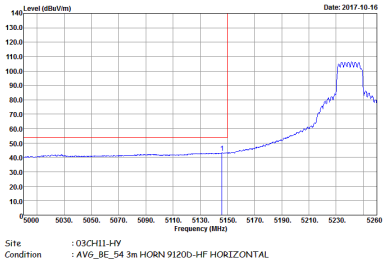
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH36 5180MHz - R	
1+2	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

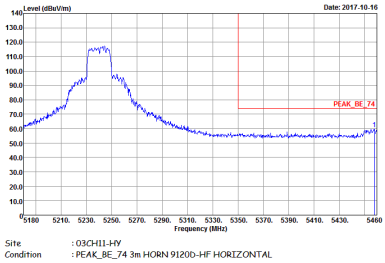
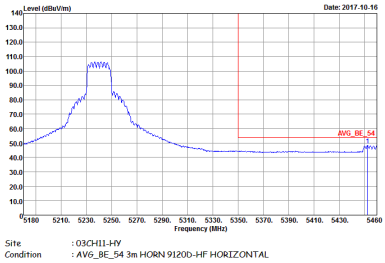
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH44 5220MHz - L	
1+2	Horizontal	Fundamental
Peak		
Avg.		Left blank

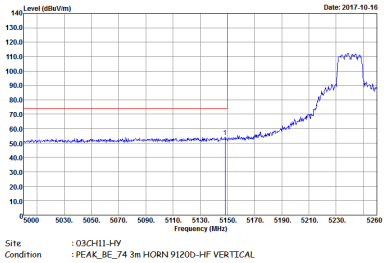
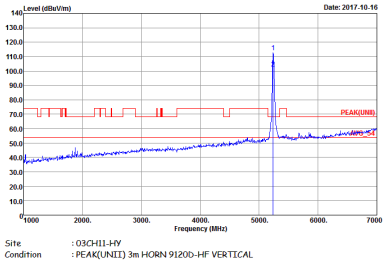
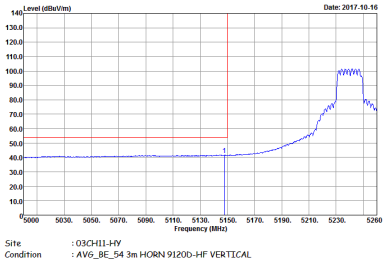
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH44 5220MHz - R	
1+2	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

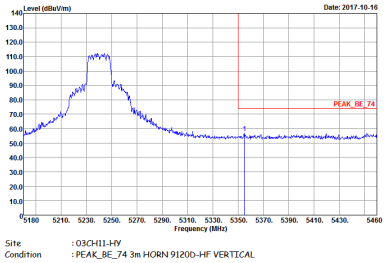
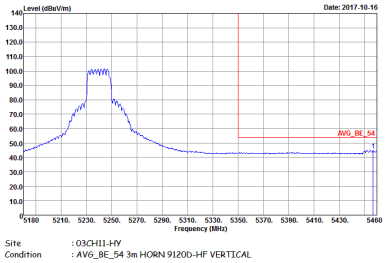
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH44 5220MHz - L	
1+2	Vertical	Fundamental
Peak		
Avg.		Left blank

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

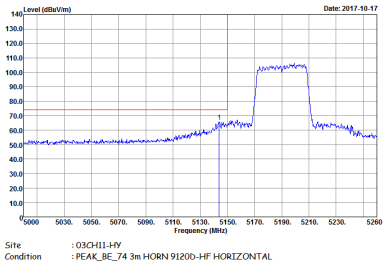
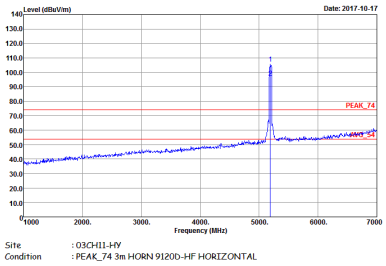
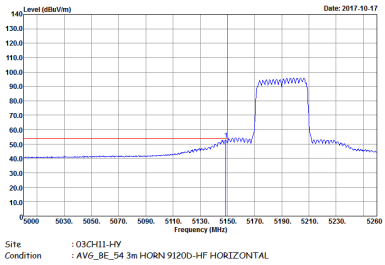
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH48 5240MHz - L	
1+2	Horizontal	Fundamental
Peak		
Avg.		Left blank

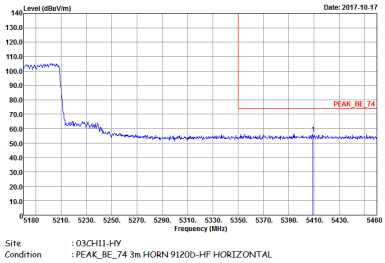
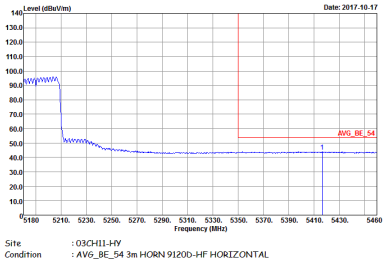
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH48 5240MHz - R	
1+2	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

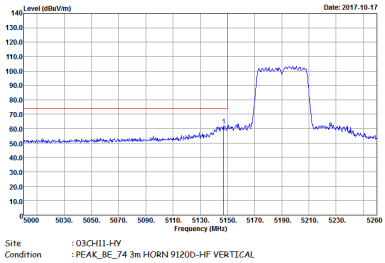
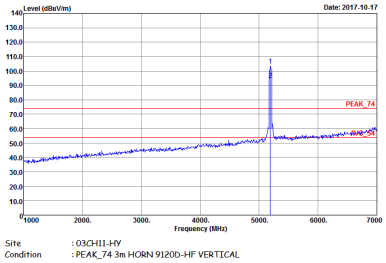
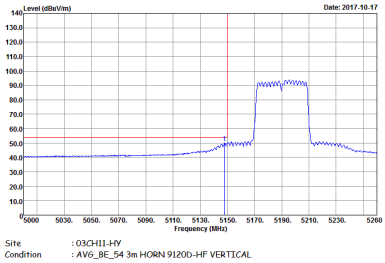
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH48 5240MHz - L	
1+2	Vertical	Fundamental
Peak		
Avg.		Left blank

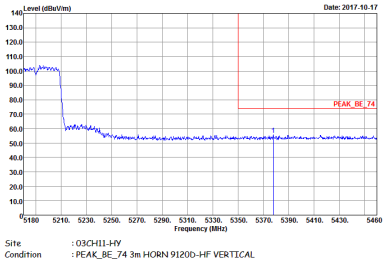
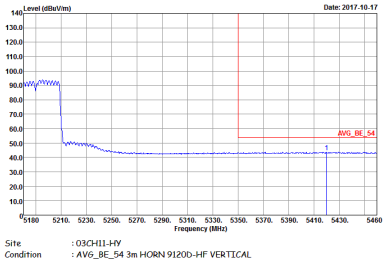
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH48 5240MHz - R	
1+2	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

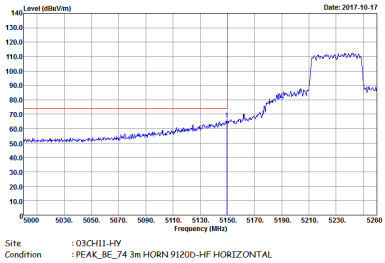
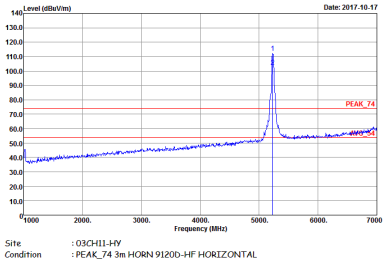
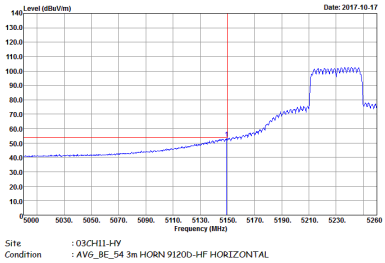
Band 1 5150~5250MHz
WIFI 802.11n HT40 (Band Edge @ 3m)

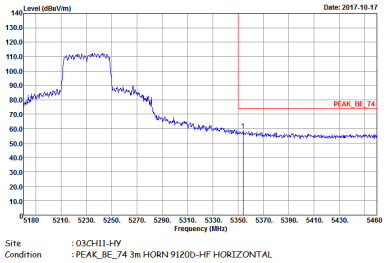
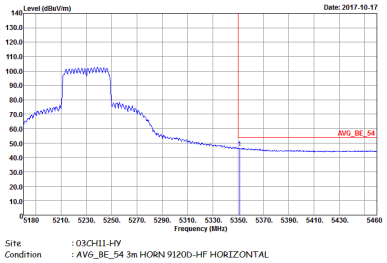
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH38 5190MHz - L	
1+2	Horizontal	Fundamental
Peak		
Avg.		Left blank

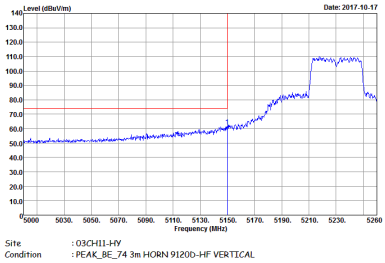
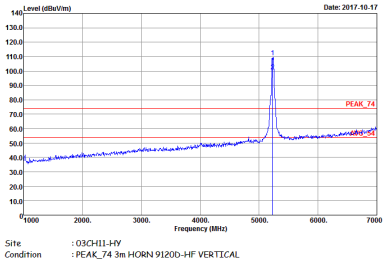
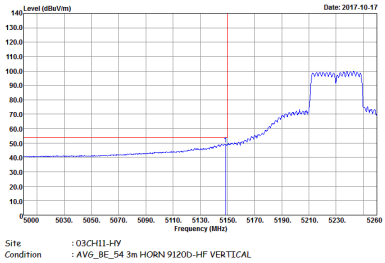
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH38 5190MHz - R	
1+2	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

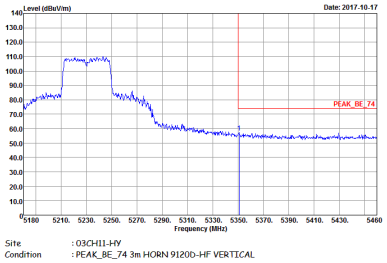
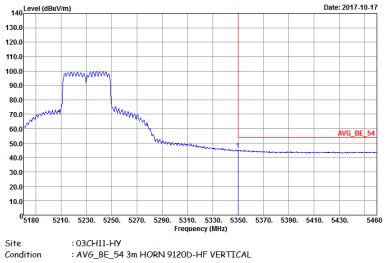
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH38 5190MHz - L	
1+2	Vertical	Fundamental
Peak		
Avg.		Left blank

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

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

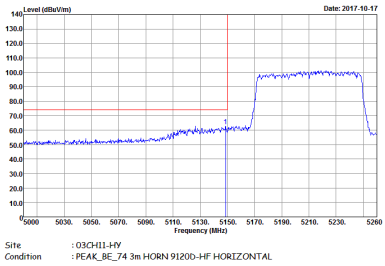
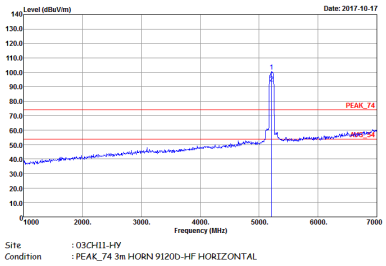
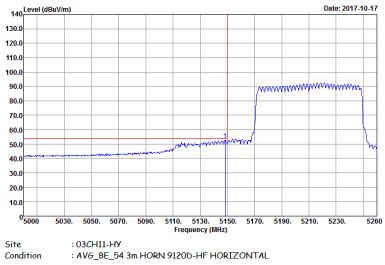
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH46 5230MHz - R	
1+2	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

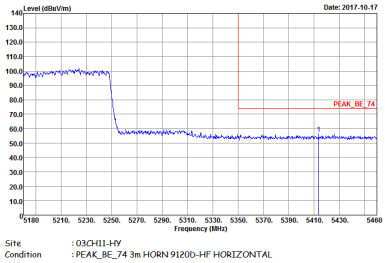
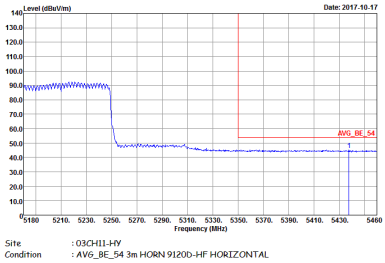
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH46 5230MHz - L	
1+2	Vertical	Fundamental
Peak		
Avg.		Left blank

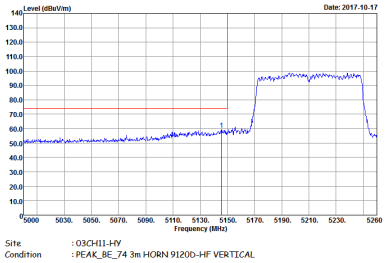
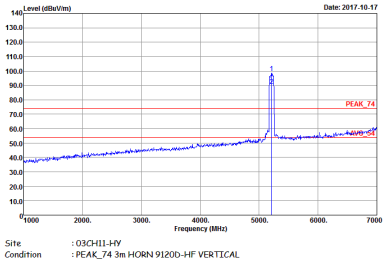
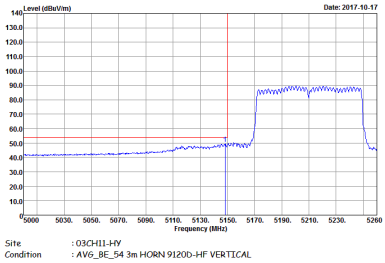
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH46 5230MHz - R	
1+2	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

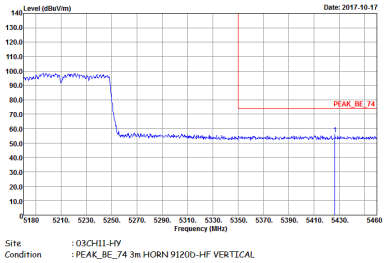
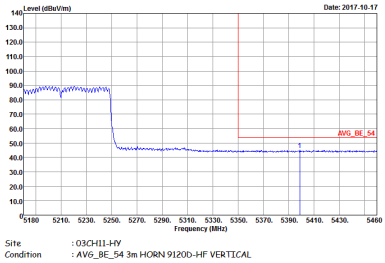
Band 1 5150~5250MHz

WIFI 802.11ac VHT80 (Band Edge @ 3m)

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

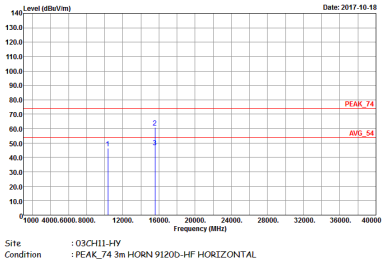
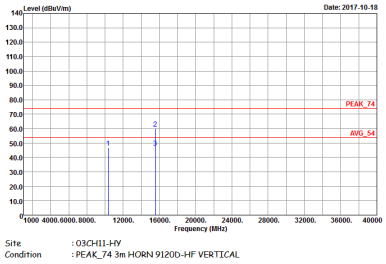
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH42 5210MHz - R	
1+2	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

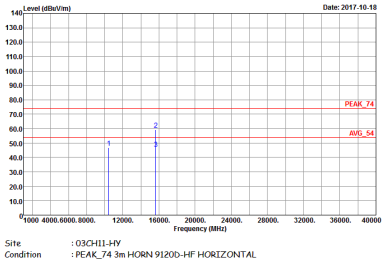
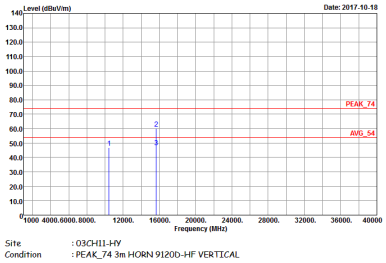
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH42 5210MHz - L	
1+2	Vertical	Fundamental
Peak		
Avg.		Left blank

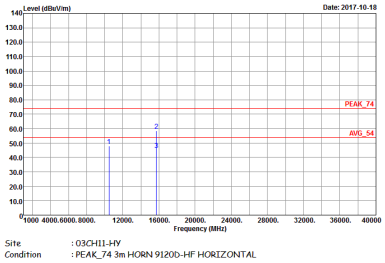
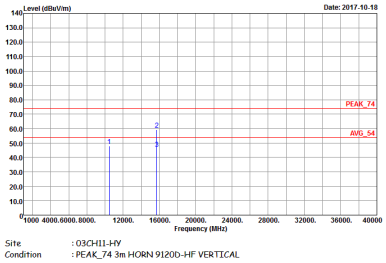
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH42 5210MHz - R	
1+2	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

Band 1 - 5150~5250MHz

WIFI 802.11a (Harmonic @ 3m)

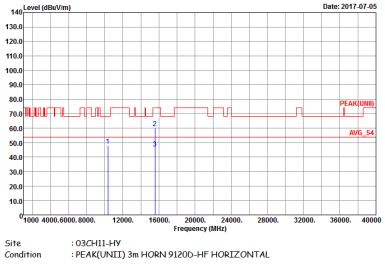
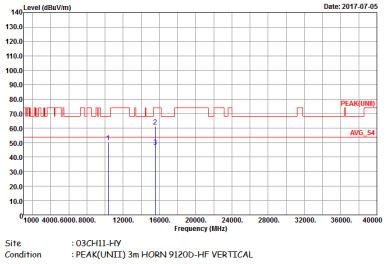
WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11a CH36 5180MHz	
1+2	Horizontal	Vertical
Peak Avg.		

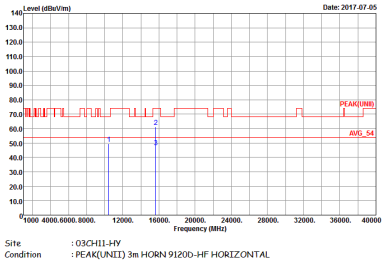
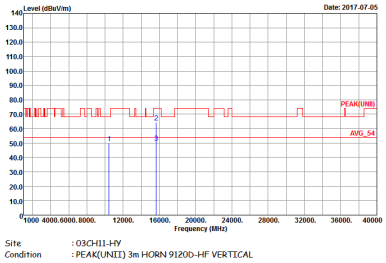
WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11a CH44 5220MHz	
1+2	Horizontal	Vertical
Peak Avg.		

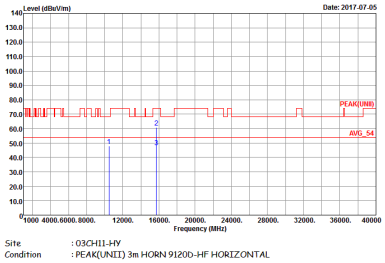
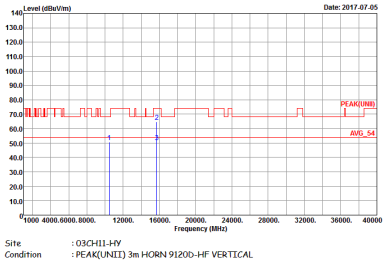
WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11a CH48 5240MHz	
1+2	Horizontal	Vertical
Peak Avg.		

Band 1 5150~5250MHz

WIFI 802.11n HT20 (Harmonic @ 3m)

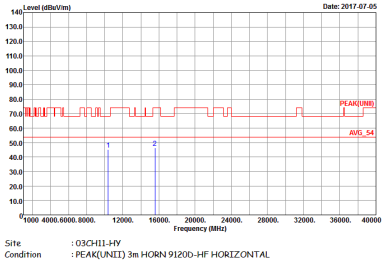
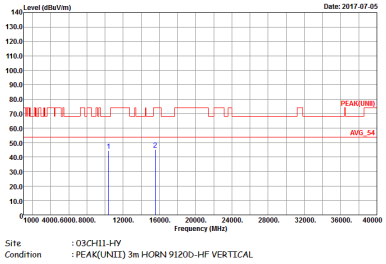
WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11n HT20 CH36 5180MHz	
1+2	Horizontal	Vertical
Peak Avg.		

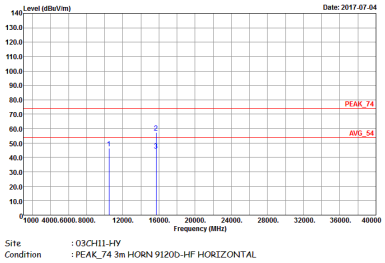
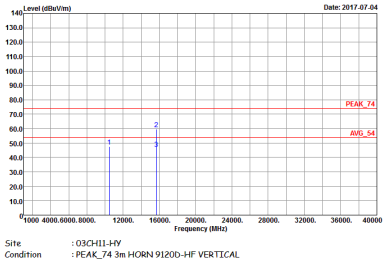
WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11n HT20 CH44 5220MHz	
1+2	Horizontal	Vertical
Peak Avg.		

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

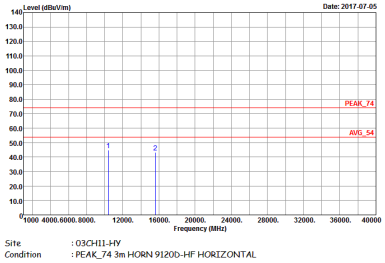
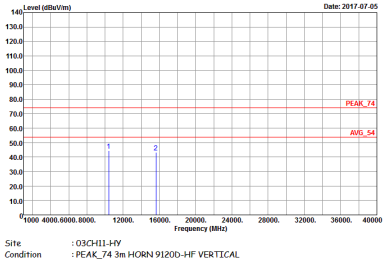
Band 1 5150~5250MHz

WIFI 802.11n HT40 (Harmonic @ 3m)

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

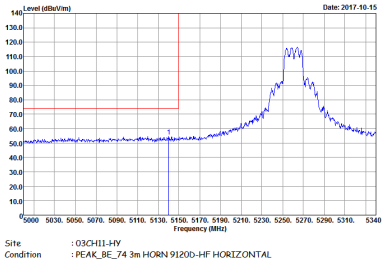
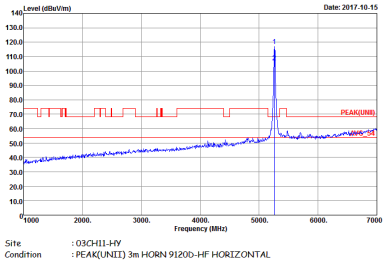
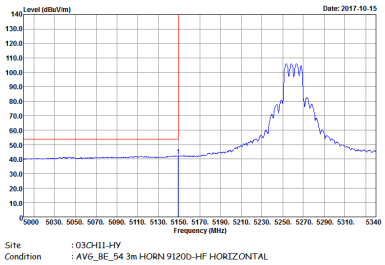
WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11n HT40 CH46 5230MHz	
1+2	Horizontal	Vertical
Peak Avg.		

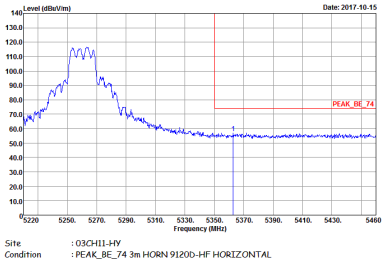
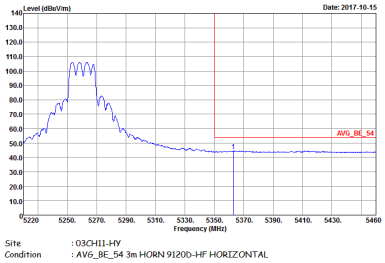
Band 1 5150~5250MHz
WIFI 802.11ac VHT80 (Harmonic @ 3m)

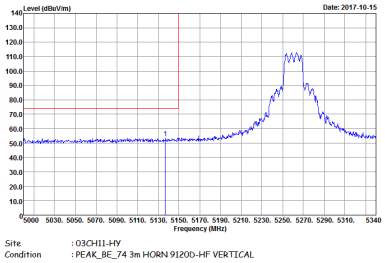
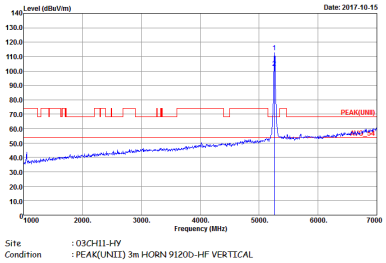
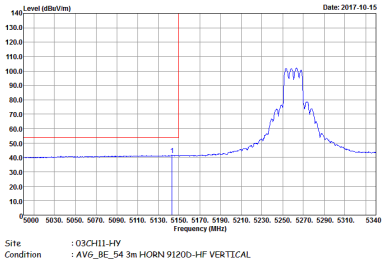
WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11ac VHT80 CH42 5210MHz	
1+2	Horizontal	Vertical
Peak Avg.		

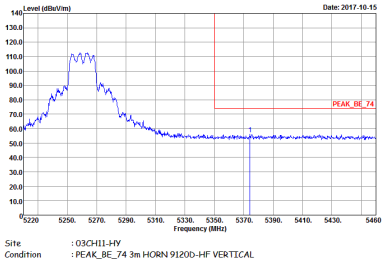
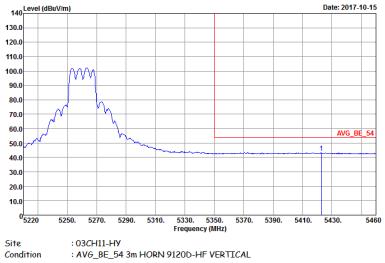
Band 2 - 5250~5350MHz

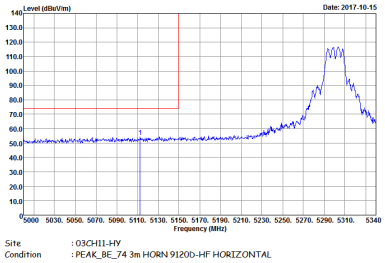
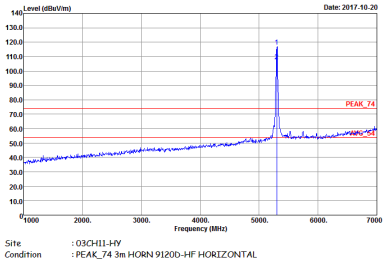
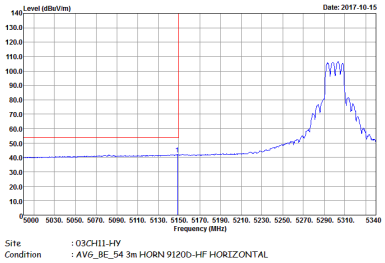
WIFI 802.11a (Band Edge @ 3m)

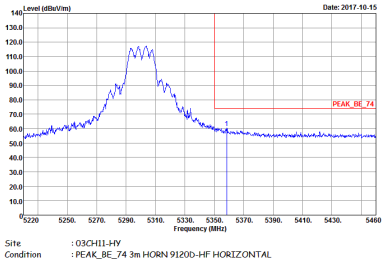
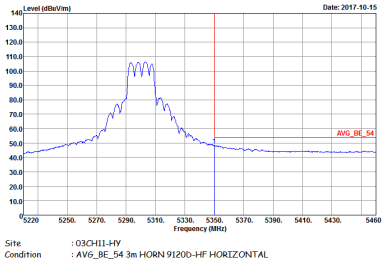
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH52 5260MHz - L	
1+2	Horizontal	Fundamental
Peak		
Avg.		Left blank

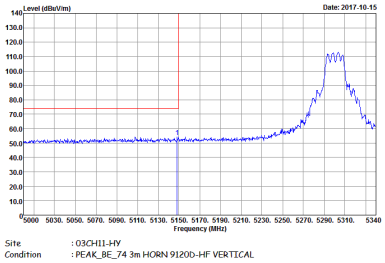
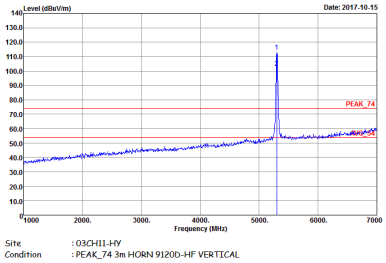
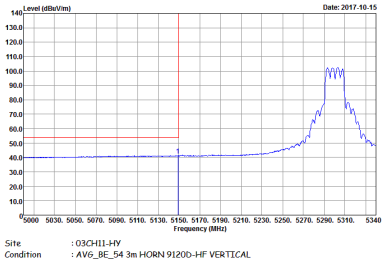
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH52 5260MHz - R	
1+2	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

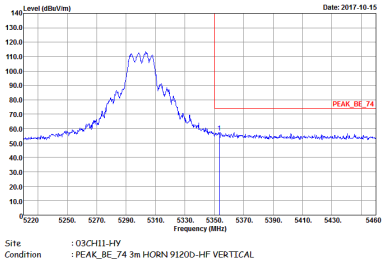
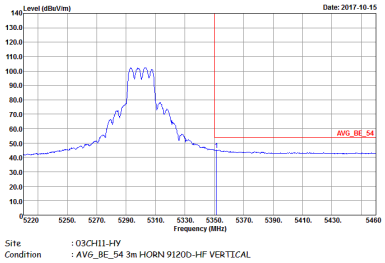
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH52 5260MHz - L	
1+2	Vertical	Fundamental
Peak		
Avg.		Left blank

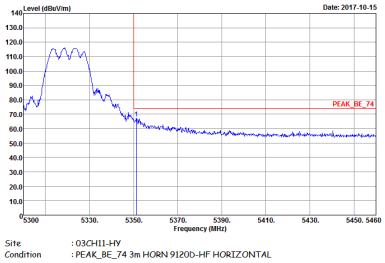
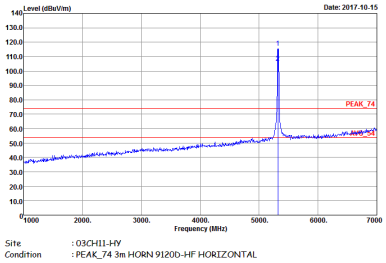
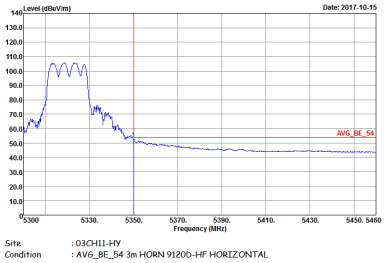
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH52 5260MHz - R	
1+2	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

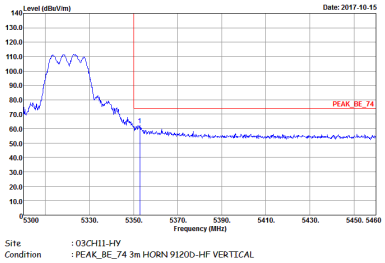
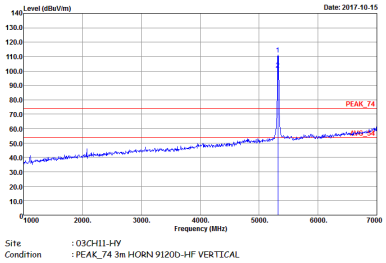
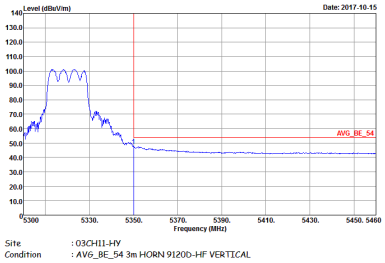
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH60 5300MHz - L	
1+2	Horizontal	Fundamental
Peak		
Avg.		Left blank

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

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

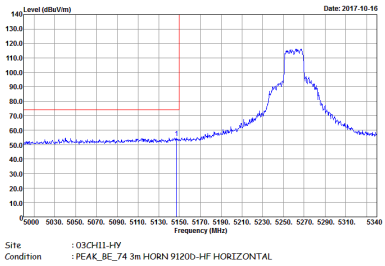
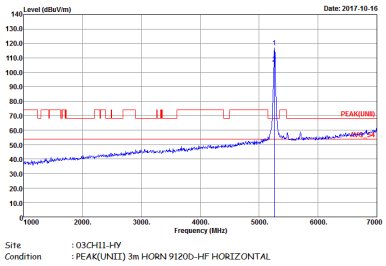
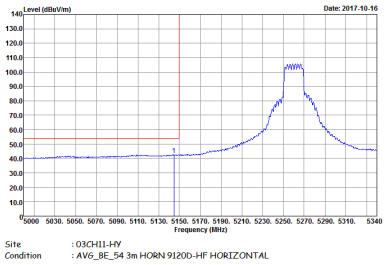
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH60 5300MHz - R	
1+2	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

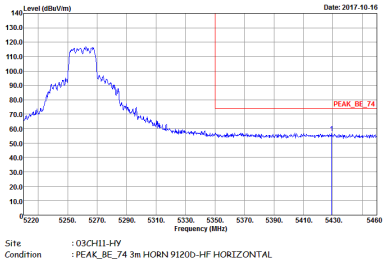
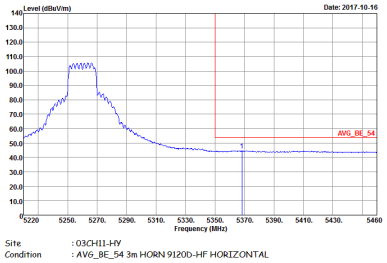
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH64 5320MHz	
1+2	Horizontal	Fundamental
Peak		
Avg.		Left blank

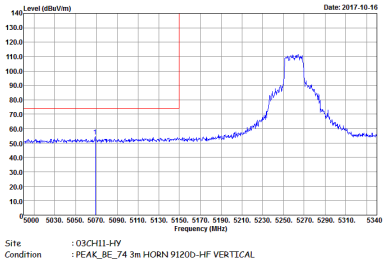
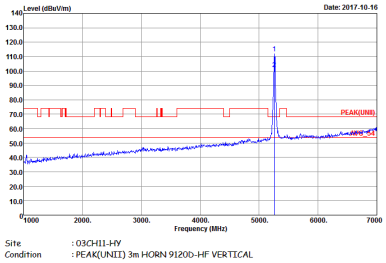
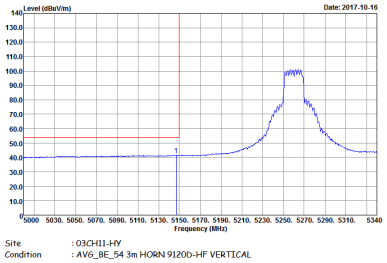
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH64 5320MHz	
1+2	Vertical	Fundamental
Peak		
Avg.		Left blank

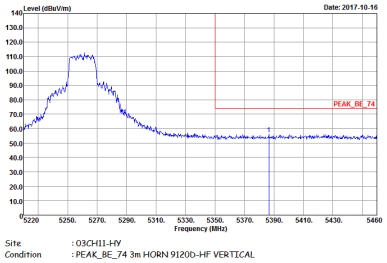
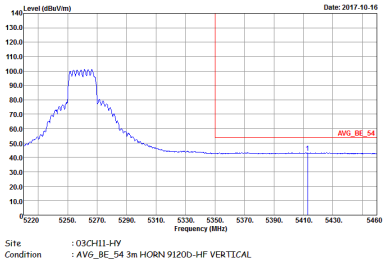
Band 2 5250~5350MHz

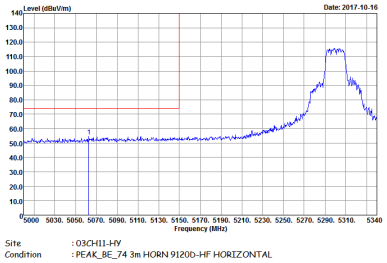
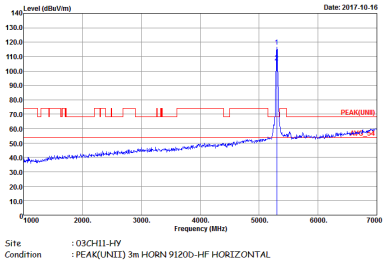
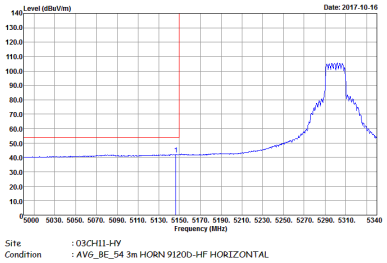
WIFI 802.11n HT20 (Band Edge @ 3m)

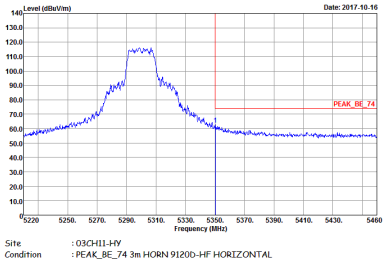
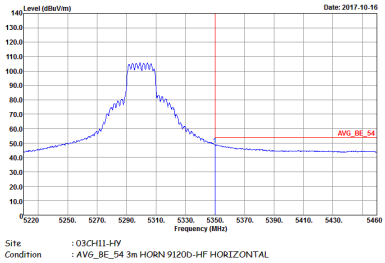
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH52 5260MHz - L	
1+2	Horizontal	Fundamental
Peak		
Avg.		Left blank

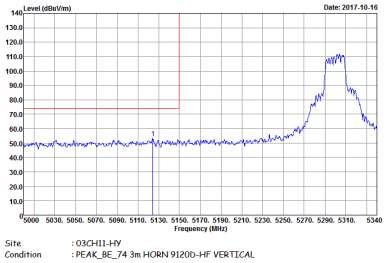
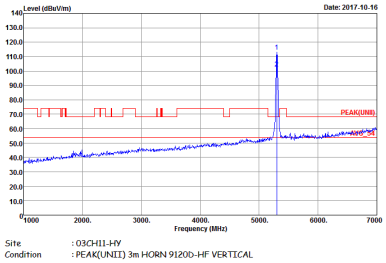
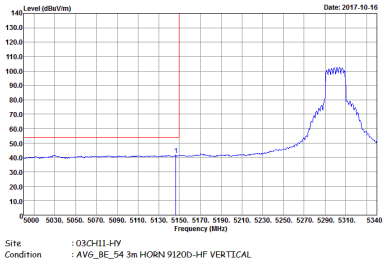
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH52 5260MHz - R	
1+2	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

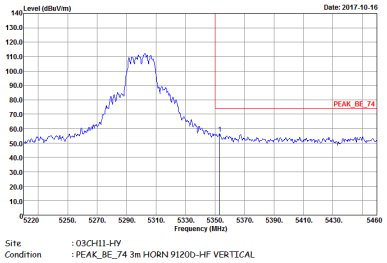
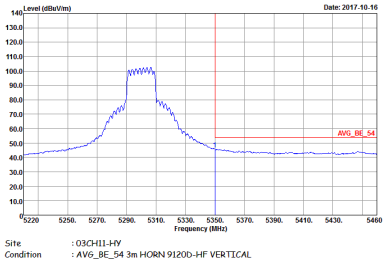
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH52 5260MHz - L	
1+2	Vertical	Fundamental
Peak		
Avg.		Left blank

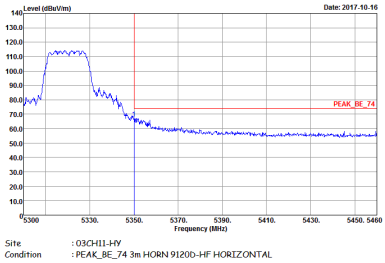
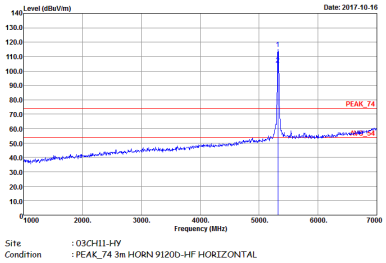
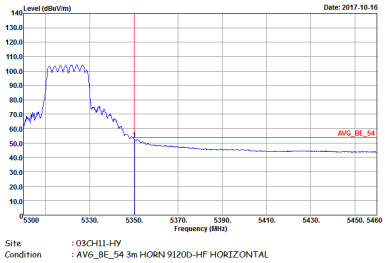
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH52 5260MHz - R	
1+2	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

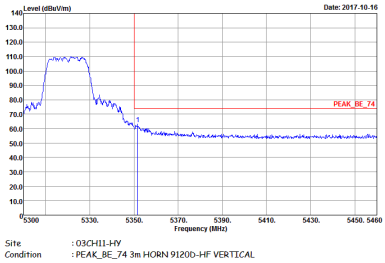
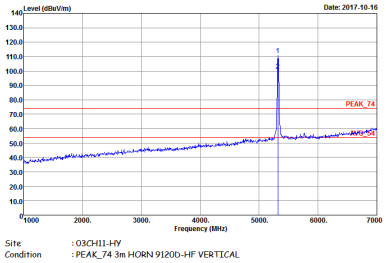
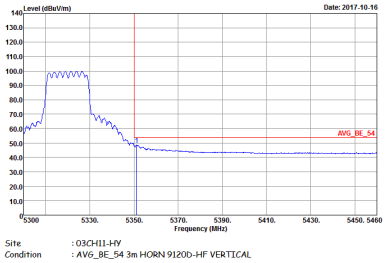
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH60 5300MHz - L	
1+2	Horizontal	Fundamental
Peak		
Avg.		Left blank

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

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

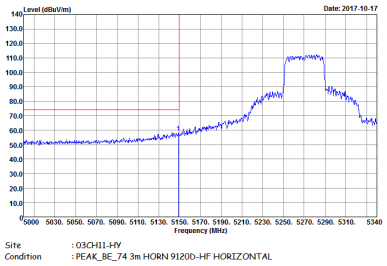
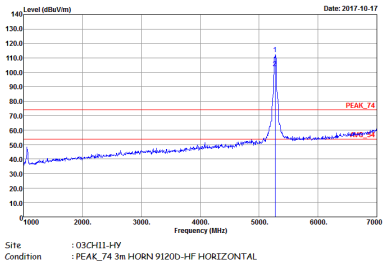
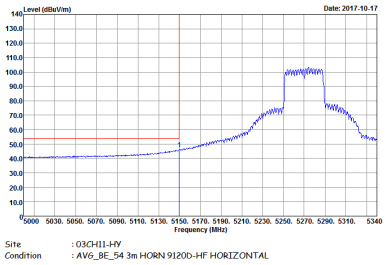
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH60 5300MHz - R	
1+2	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

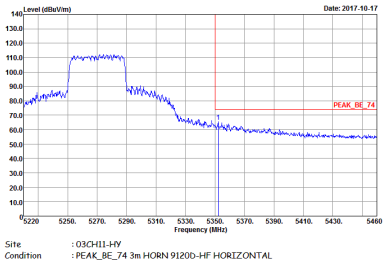
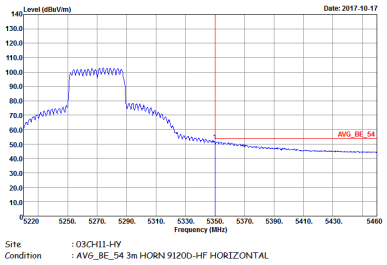
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH64 5320MHz	
1+2	Horizontal	Fundamental
Peak		
Avg.		Left blank

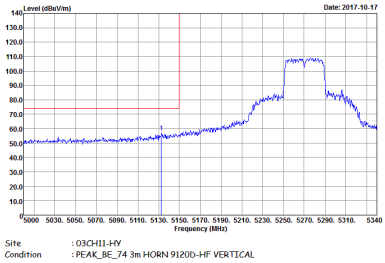
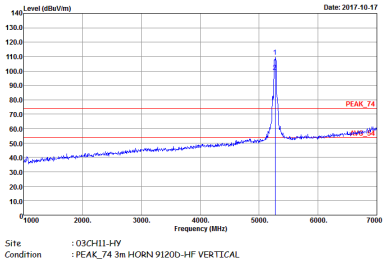
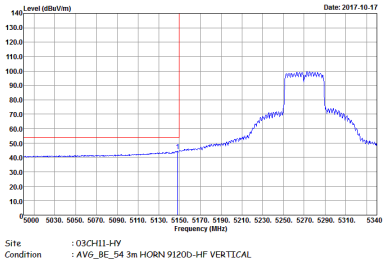
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH64 5320MHz	
1+2	Vertical	Fundamental
Peak		
Avg.		Left blank

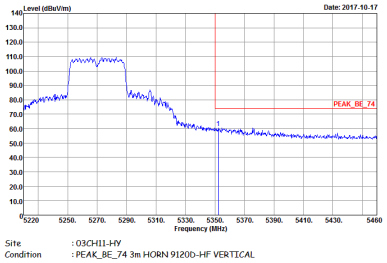
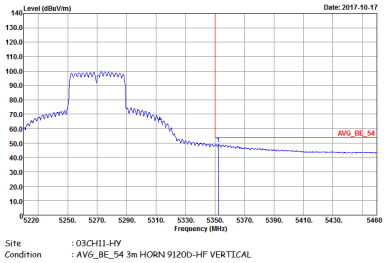
Band 2 5250~5350MHz

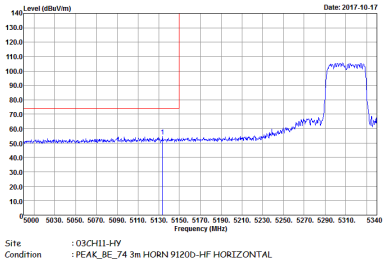
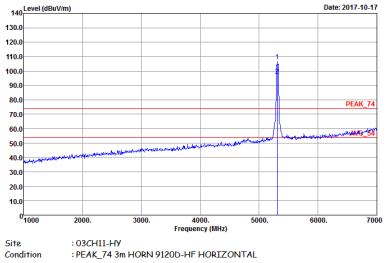
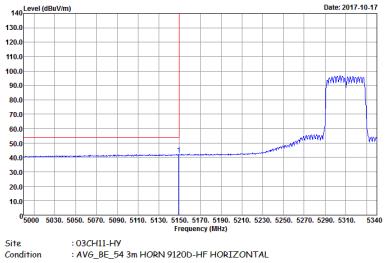
WIFI 802.11n HT40 (Band Edge @ 3m)

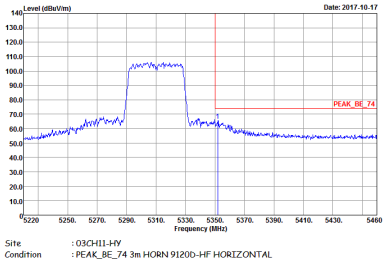
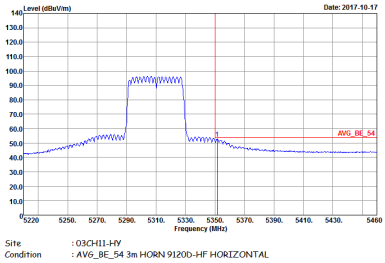
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT40 CH54 5270 - L	
1+2	Horizontal	Fundamental
Peak		
Avg.		Left blank

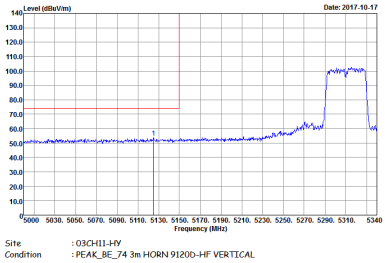
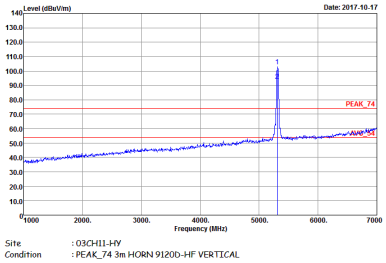
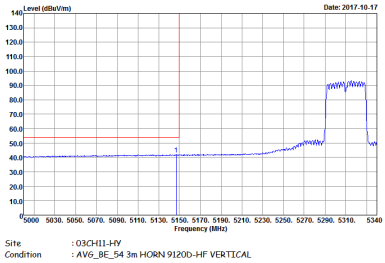
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT40 CH54 5270 - R	
1+2	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

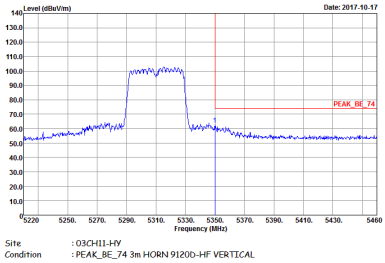
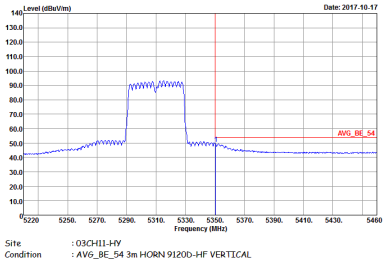
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT40 CH54 5270 - L	
1+2	Vertical	Vertical
Peak		
Avg.		Left blank

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

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

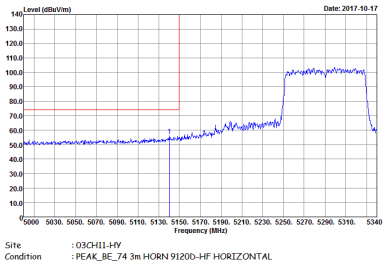
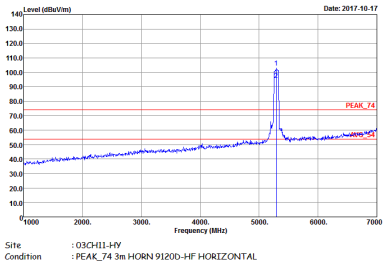
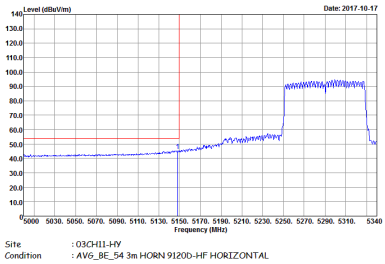
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT40 CH62 5310 - R	
1+2	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

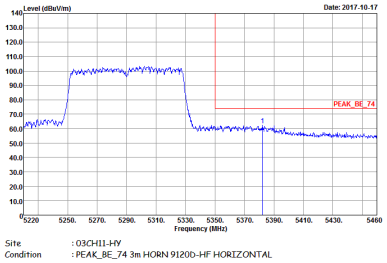
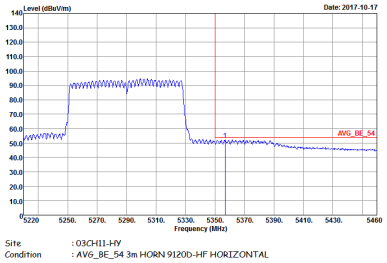
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT40 CH62 5310 - L	
1+2	Vertical	Fundamental
Peak		
Avg.		Left blank

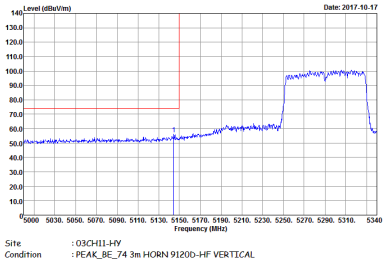
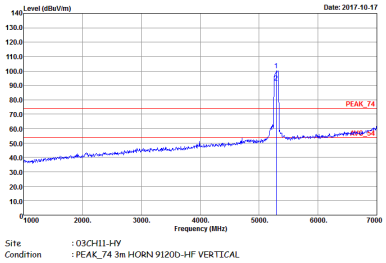
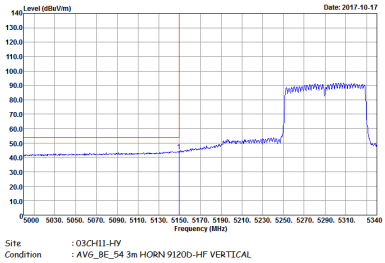
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT40 CH62 5310 - R	
1+2	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

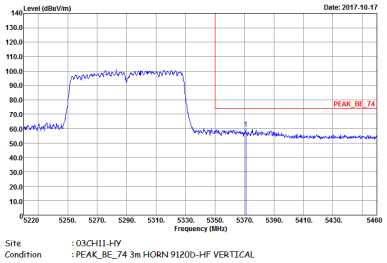
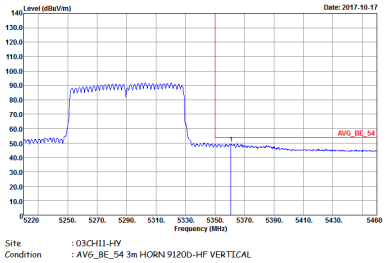
Band 2 5250~5350MHz

WIFI 802.11ac VHT80 (Band Edge @ 3m)

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

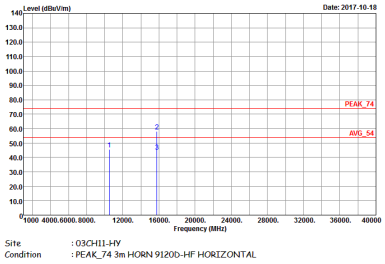
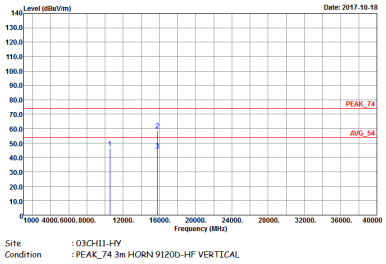
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH58 5290MHz - R	
1+2	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

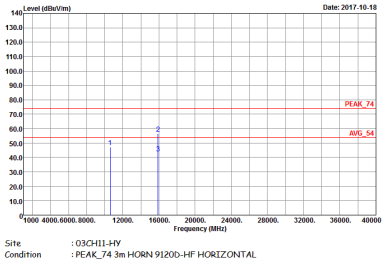
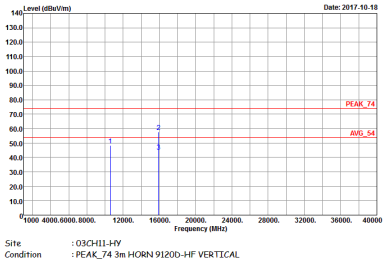
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH58 5290MHz - L	
1+2	Vertical	Fundamental
Peak		
Avg.		Left blank

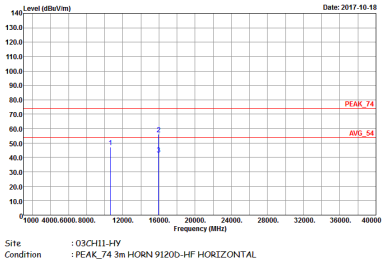
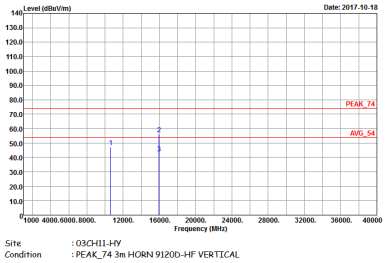
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH58 5290MHz - R	
1+2	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

Band 2 - 5250~5350MHz

WIFI 802.11a (Harmonic @ 3m)

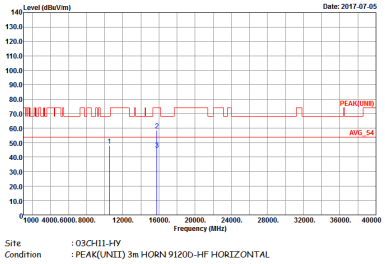
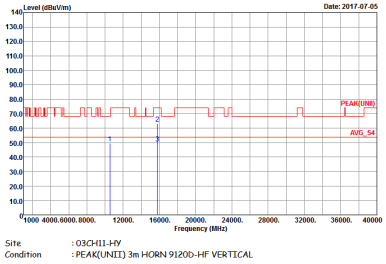
WIFI	Band 2 5250~5350MHz Harmonic @ 3m	
ANT	802.11a CH52 5260MHz	
1+2	Horizontal	Vertical
Peak Avg.		

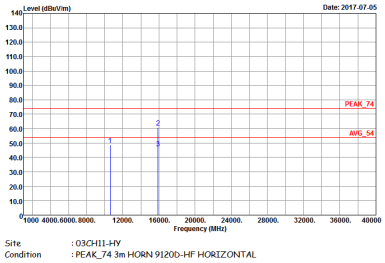
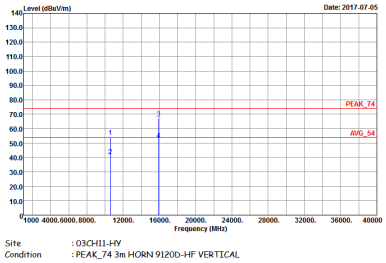
WIFI	Band 2 5250~5350MHz Harmonic @ 3m	
ANT	802.11a CH60 5300MHz	
1+2	Horizontal	Vertical
Peak Avg.		

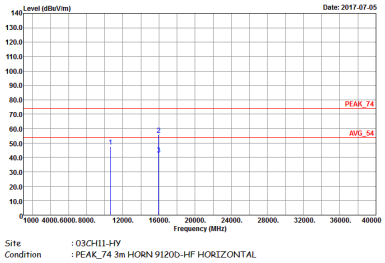
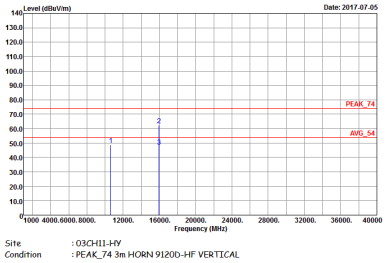
WIFI	Band 2 5250~5350MHz Harmonic @ 3m	
ANT	802.11a CH64 5320MHz	
1+2	Horizontal	Vertical
Peak Avg.		

Band 2 5250~5350MHz

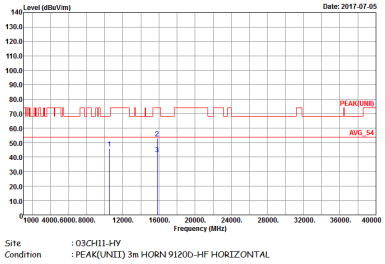
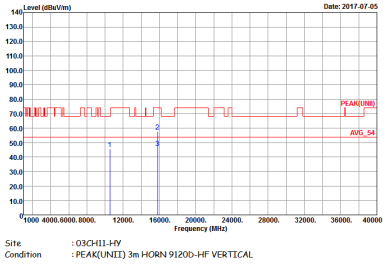
WIFI 802.11n HT20 (Harmonic @ 3m)

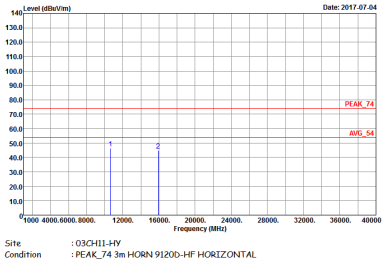
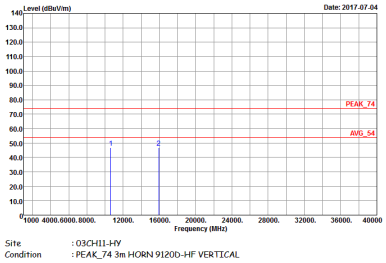
WIFI	Band 2 5250~5350MHz Harmonic @ 3m	
ANT	802.11n HT20 CH52 5260MHz	
1+2	Horizontal	Vertical
Peak Avg.		

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

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

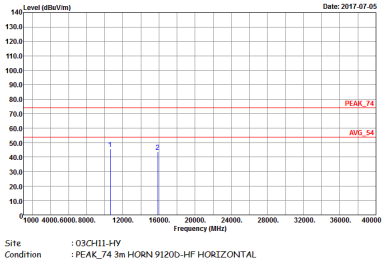
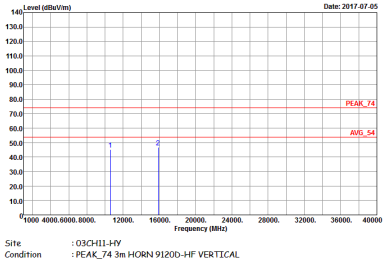
Band 2 5250~5350MHz
WIFI 802.11n HT40 (Harmonic @ 3m)

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

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

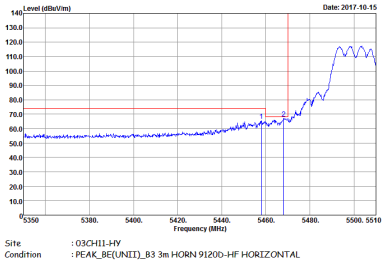
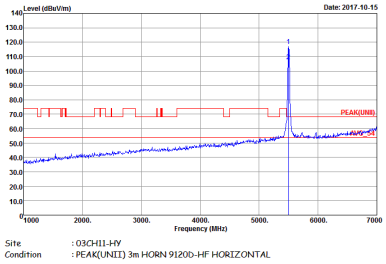
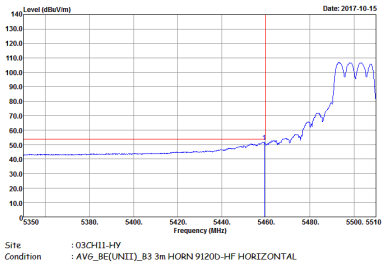
Band 2 5250~5350MHz

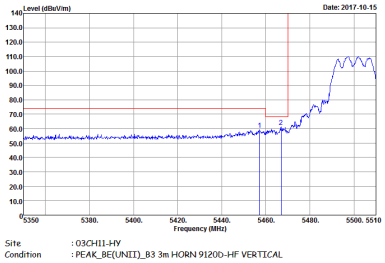
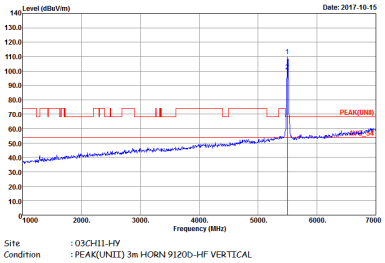
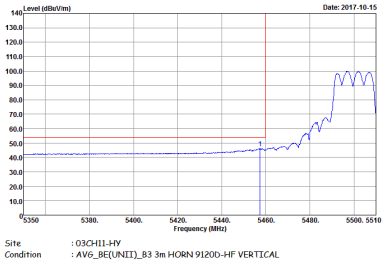
WIFI 802.11ac VHT80 (Harmonic @ 3m)

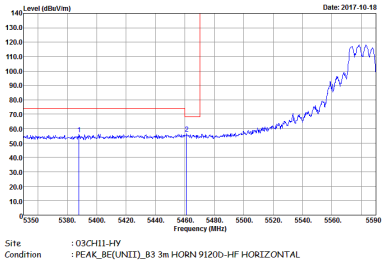
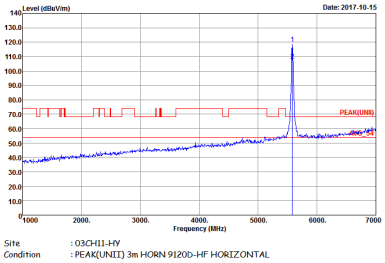
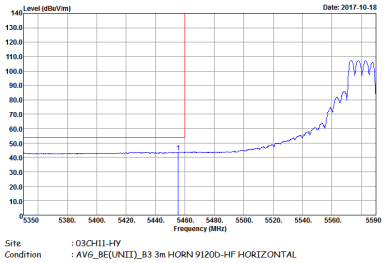
WIFI	Band 2 5250~5350MHz Harmonic @ 3m	
ANT	802.11ac VHT80 CH58 5290MHz	
1+2	Horizontal	Vertical
Peak Avg.		

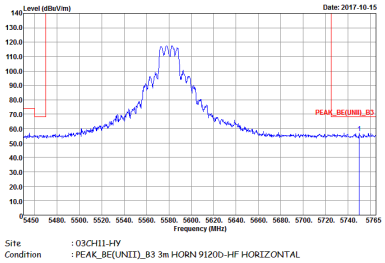
Band 3 - 5470~5725MHz

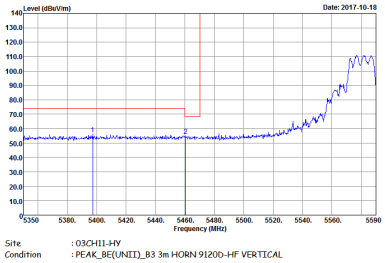
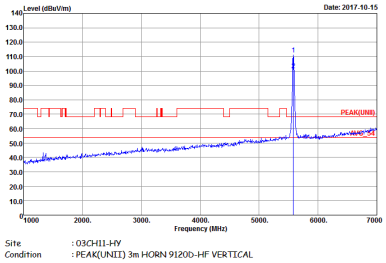
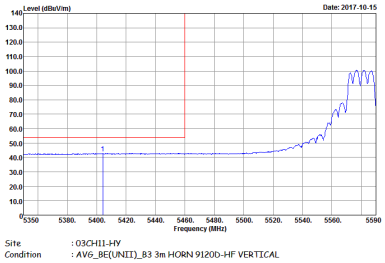
WIFI 802.11a (Band Edge @ 3m)

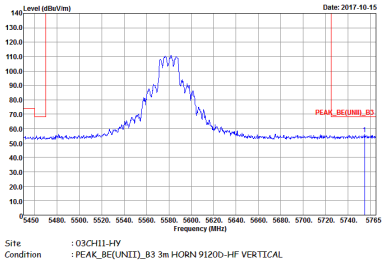
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH100 5500MHz	
1+2	Horizontal	Fundamental
Peak		
Avg.		Left blank

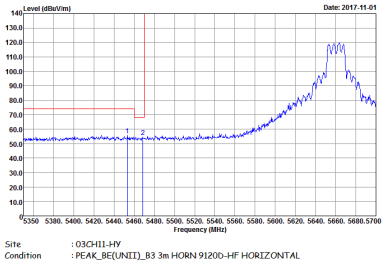
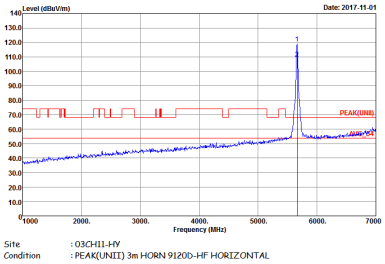
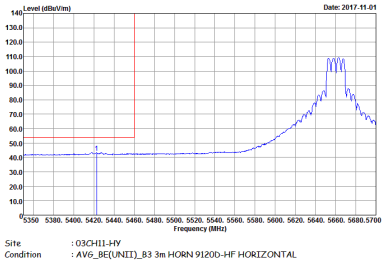
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH100 5500MHz	
1+2	Vertical	Fundamental
Peak		
Avg.		Left blank

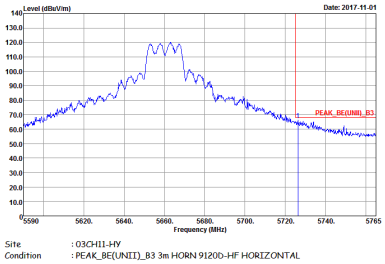
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH116 5580MHz - L	
1+2	Horizontal	Fundamental
Peak		
Avg.		Left blank

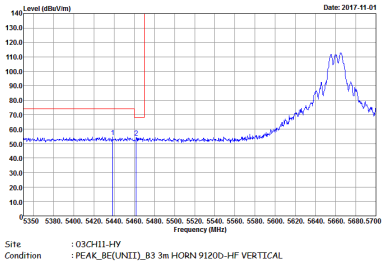
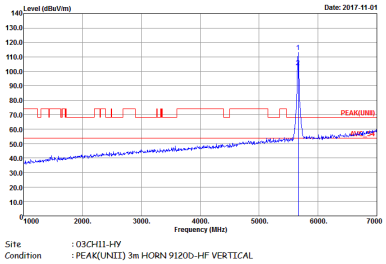
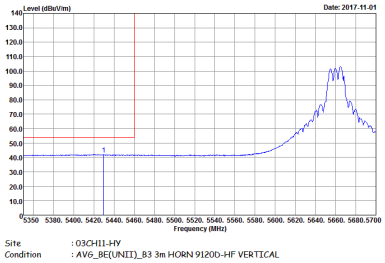
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH116 5580MHz - R	
1+2	Horizontal	Fundamental
Peak		Left blank

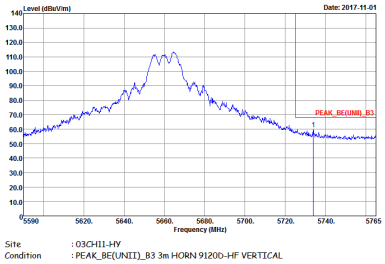
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH116 5580MHz - L	
1+2	Vertical	Fundamental
Peak		
Avg.		Left blank

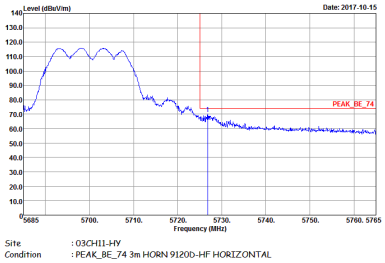
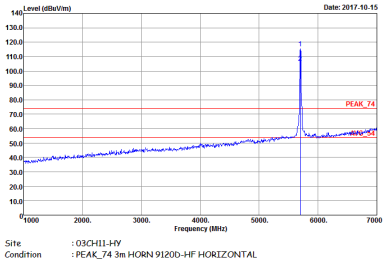
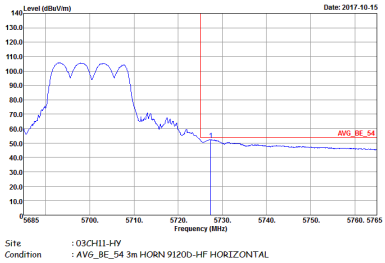
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH116 5580MHz - R	
1+2	Vertical	Fundamental
Peak		Left blank

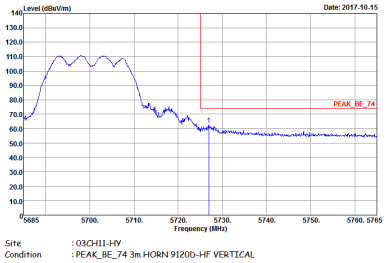
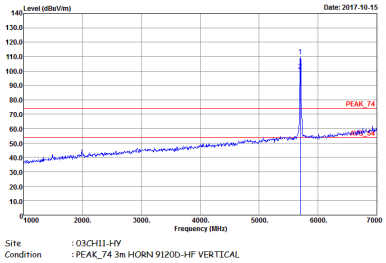
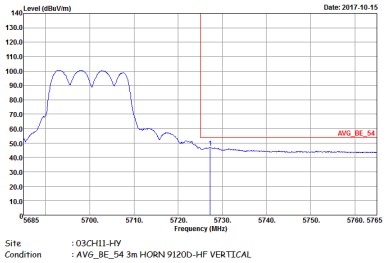
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH132 5660MHz - L	
1+2	Horizontal	Fundamental
Peak		
Avg.		Left blank

WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH132 5660MHz - R	
1+2	Horizontal	Fundamental
Peak		Left blank

WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH132 5660MHz - L	
1+2	Vertical	Fundamental
Peak		
Avg.		Left blank

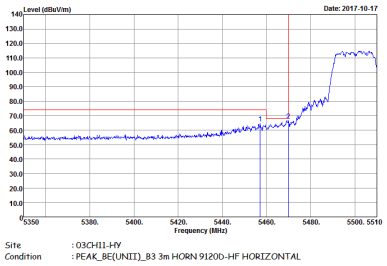
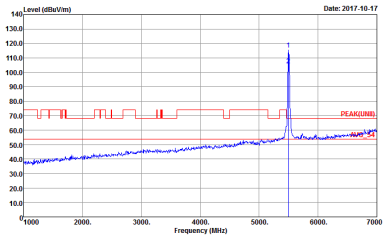
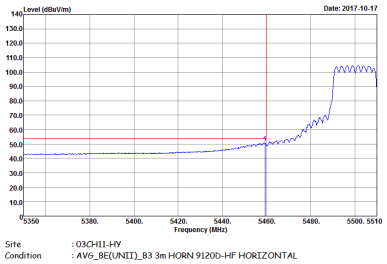
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH132 5660MHz - R	
1+2	Vertical	Fundamental
Peak		Left blank

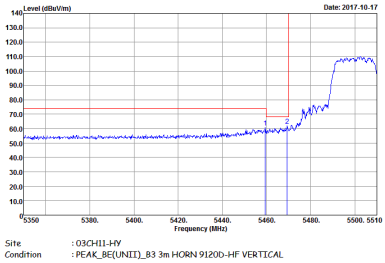
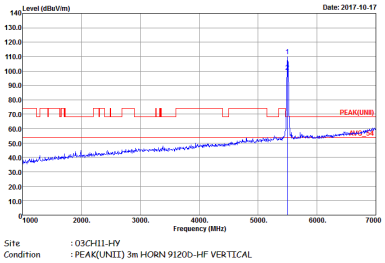
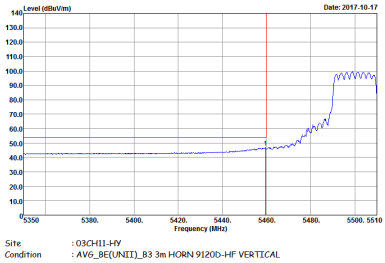
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH140 5700MHz	
1+2	Horizontal	Fundamental
Peak		
Avg.		Left blank

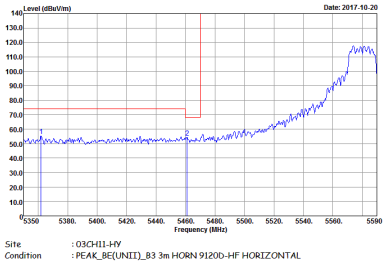
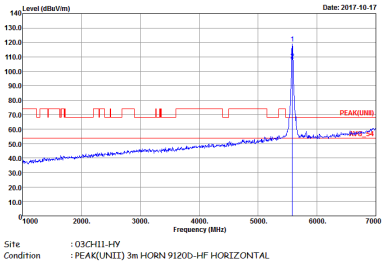
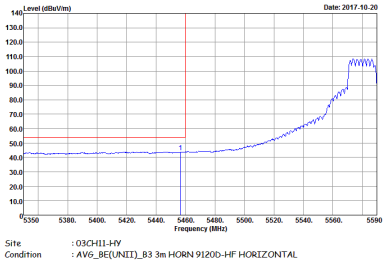
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH140 5700MHz	
1+2	Vertical	Fundamental
Peak		
Avg.		Left blank

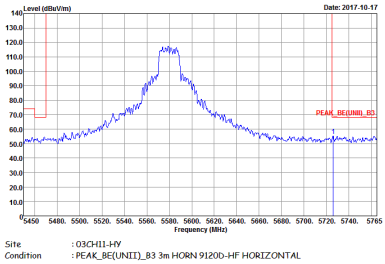
Band 3 5470~5725MHz

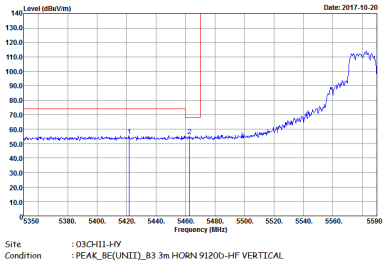
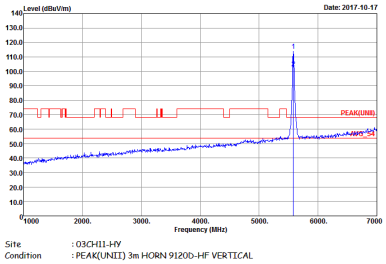
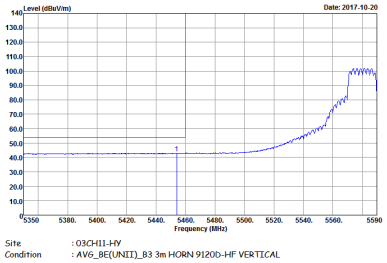
WIFI 802.11n HT20 (Band Edge @ 3m)

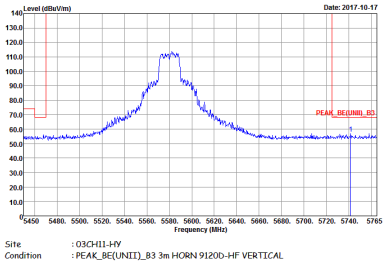
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT20 CH100 5500MHz	
1+2	Horizontal	Fundamental
Peak		
Avg.		Left blank

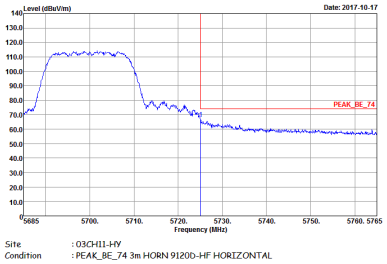
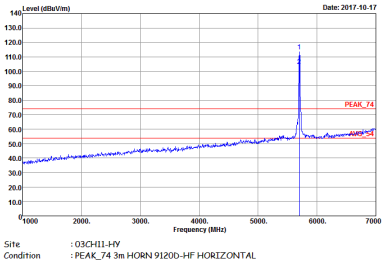
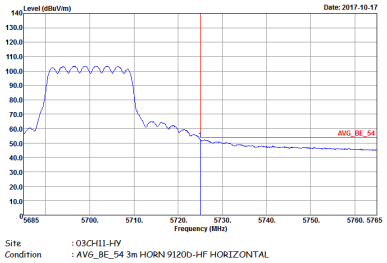
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT20 CH100 5500MHz	
1+2	Vertical	Fundamental
Peak		
Avg.		Left blank

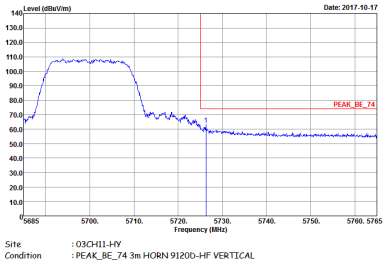
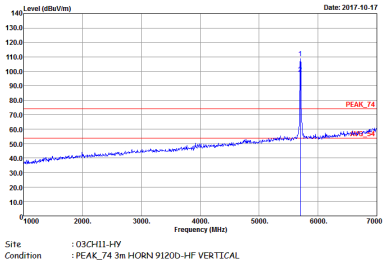
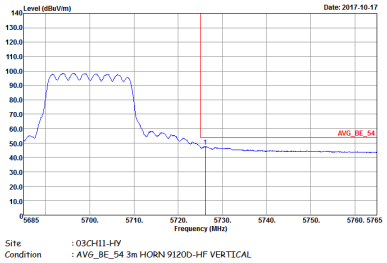
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT20 CH116 5580MHz - L	
1+2	Horizontal	Fundamental
Peak		
Avg.		Left blank

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

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

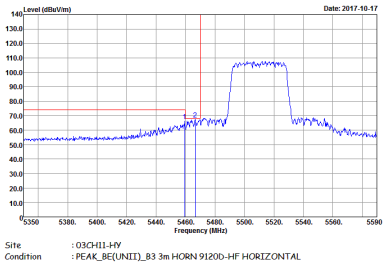
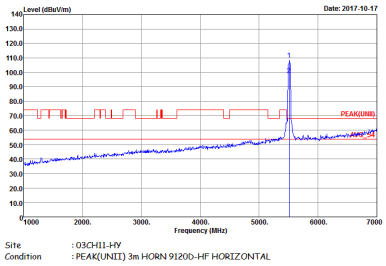
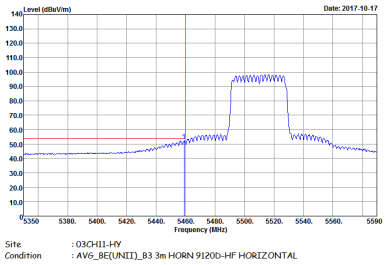
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT20 CH116 5580MHz - R	
1+2	Vertical	Fundamental
Peak		Left blank

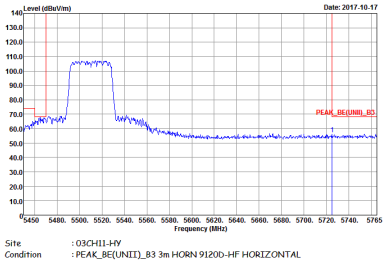
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT20 CH140 5700MHz	
1+2	Horizontal	Fundamental
Peak		
Avg.		Left blank

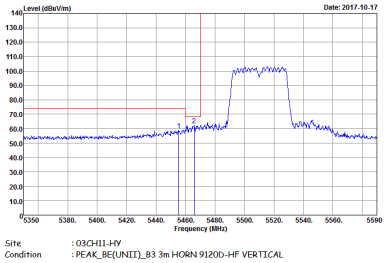
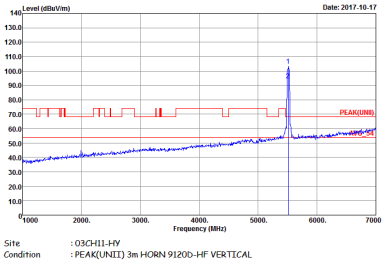
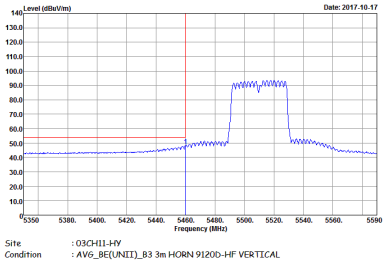
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT20 CH140 5700MHz	
1+2	Vertical	Fundamental
Peak.		
Avg.		Left blank

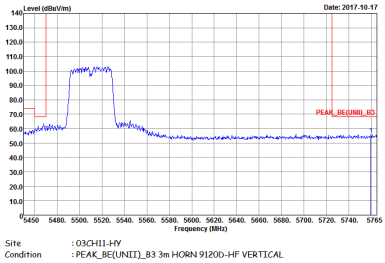
Band 3 5470~5725MHz

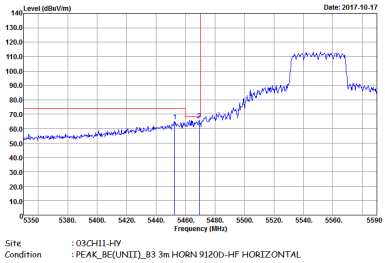
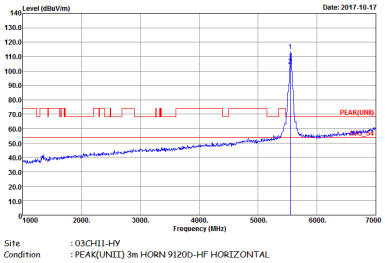
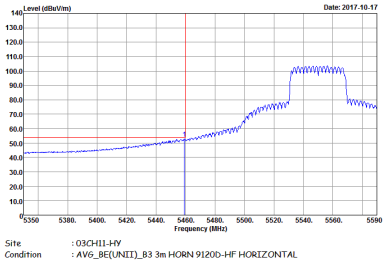
WIFI 802.11n HT40 (Band Edge @ 3m)

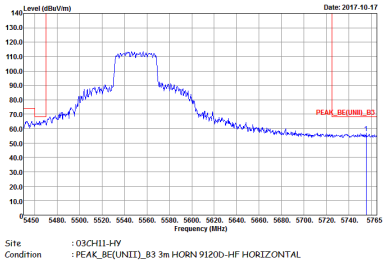
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH102 5510MHz - L	
1+2	Horizontal	Fundamental
Peak		
Avg.		Left blank

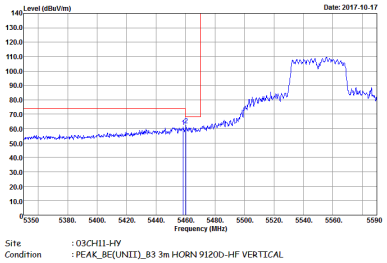
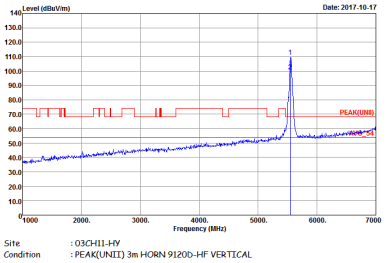
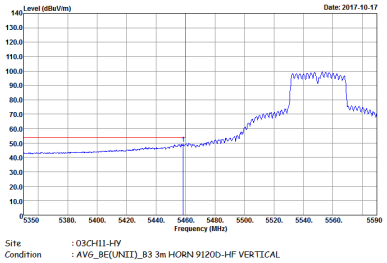
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH102 5510MHz - R	
1+2	Horizontal	Fundamental
Peak		Left blank

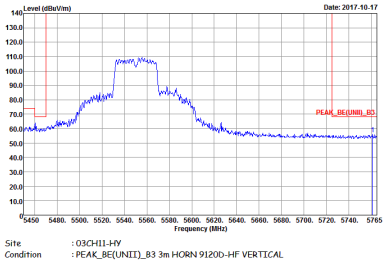
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH102 5510MHz - L	
1+2	Vertical	Fundamental
Peak		
Avg.		Left blank

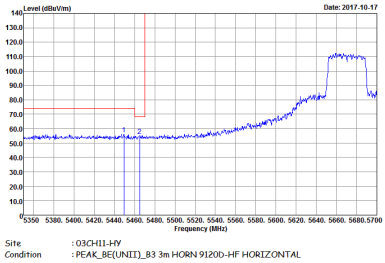
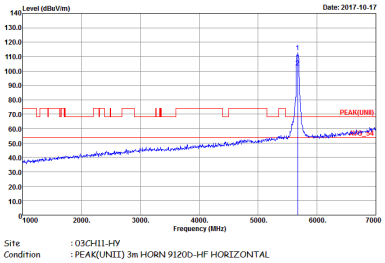
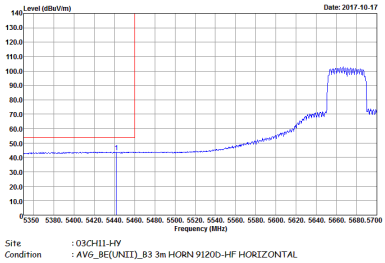
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH102 5510MHz - R	
1+2	Vertical	Fundamental
Peak		Left blank

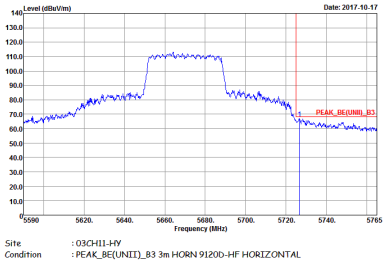
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH110 5550MHz - L	
1+2	Horizontal	Fundamental
Peak		
Avg.		Left blank

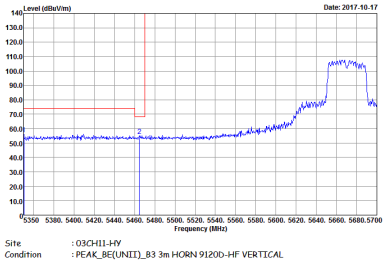
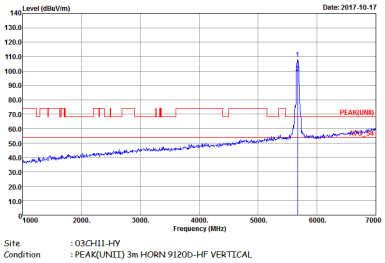
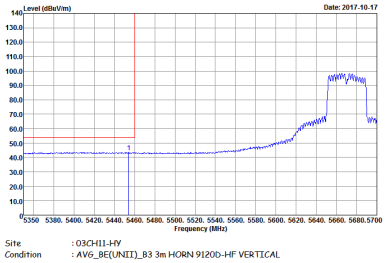
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH110 5550MHz - R	
1+2	Horizontal	Fundamental
Peak		Left blank

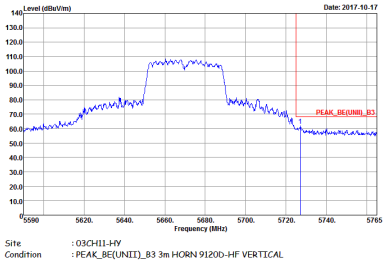
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH110 5550MHz - L	
1+2	Vertical	Fundamental
Peak		
Avg.		Left blank

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

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

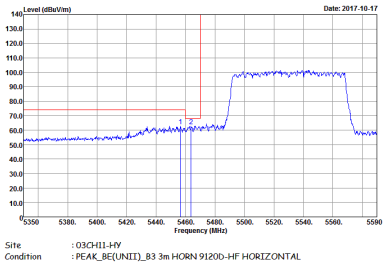
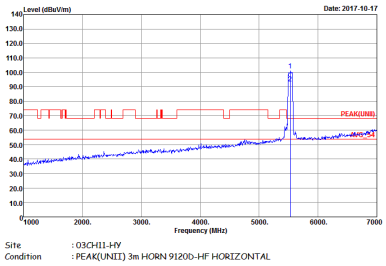
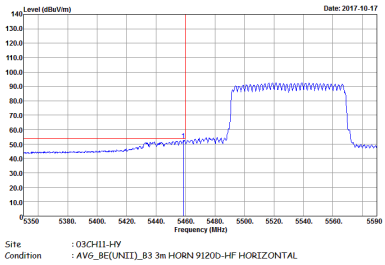
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH134 5670MHz - R	
1+2	Horizontal	Fundamental
Peak		Left blank

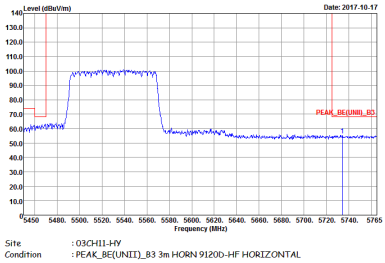
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH134 5670MHz - L	
1+2	Vertical	Fundamental
Peak		
Avg.		Left blank

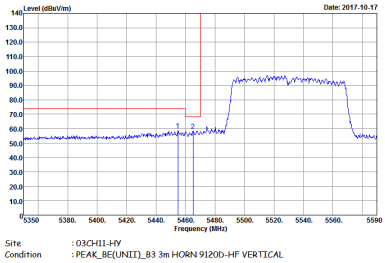
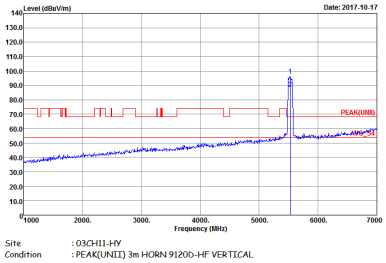
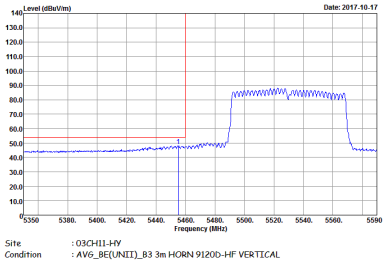
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH134 5670MHz - R	
1+2	Vertical	Fundamental
Peak		Left blank

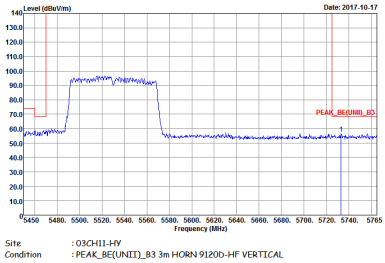
Band 3 5470~5725MHz

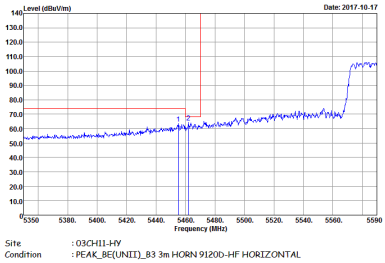
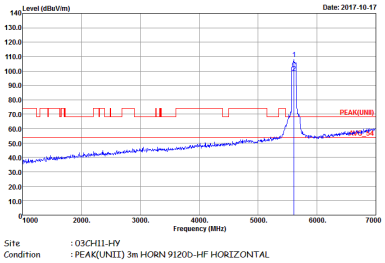
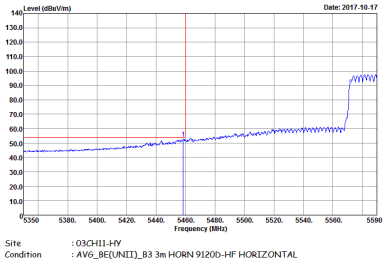
WIFI 802.11ac VHT80 (Band Edge @ 3m)

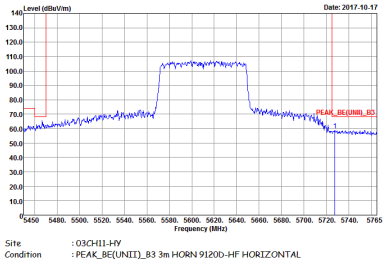
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH106 5530MHz - L	
1+2	Horizontal	Fundamental
Peak		
Avg.		Left blank

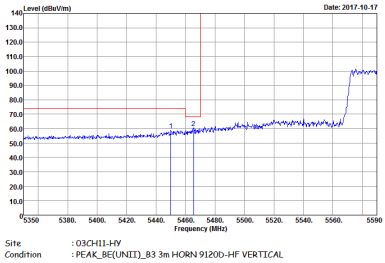
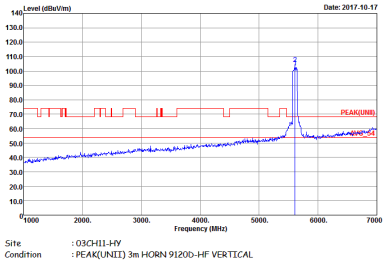
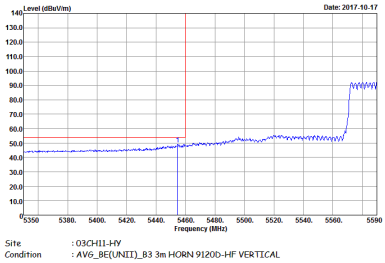
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH106 5530MHz - R	
1+2	Horizontal	Fundamental
Peak		Left blank

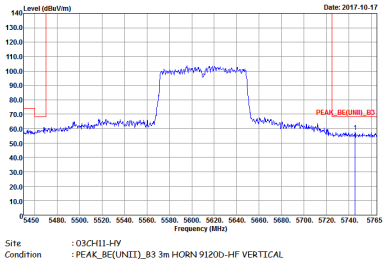
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH106 5530MHz - L	
1+2	Vertical	Fundamental
Peak		
Avg.		Left blank

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

WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH122 5610MHz - L	
1+2	Horizontal	Fundamental
Peak		
Avg.		Left blank

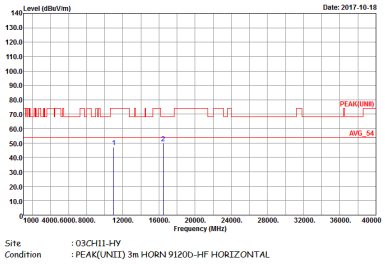
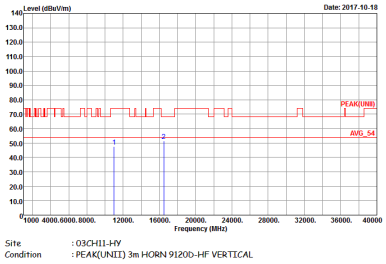
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH122 5610MHz - R	
1+2	Horizontal	Fundamental
Peak		Left blank

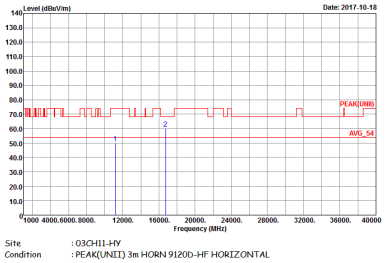
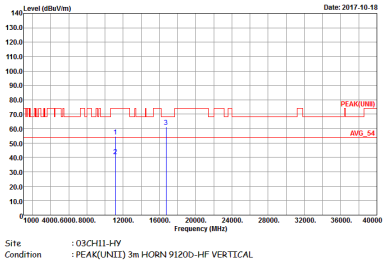
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH122 5610MHz - L	
1+2	Vertical	Fundamental
Peak		
Avg.		Left blank

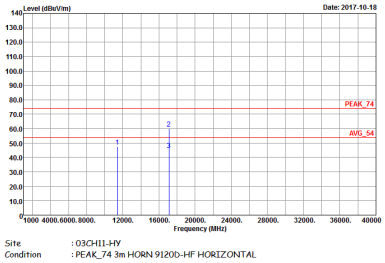
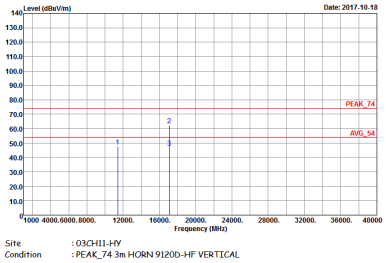
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH122 5610MHz - R	
1+2	Vertical	Fundamental
Peak		Left blank

Band 3 - 5470~5725MHz

WIFI 802.11a (Harmonic @ 3m)

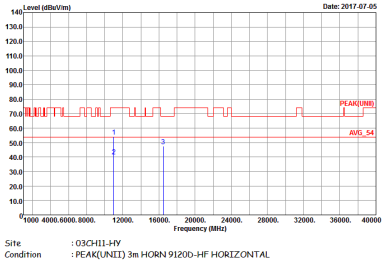
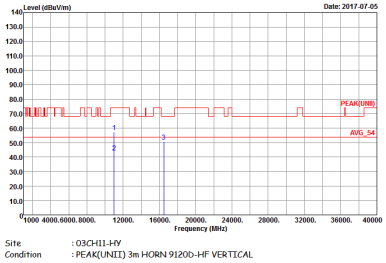
WIFI	Band 3 5470~5725MHz Harmonic @ 3m	
ANT	802.11a CH100 5500MHz	
1+2	Horizontal	Vertical
Peak Avg.		

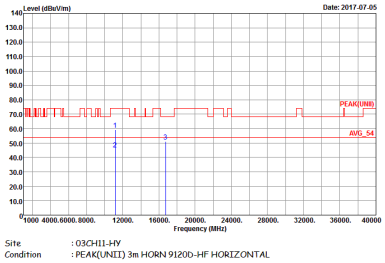
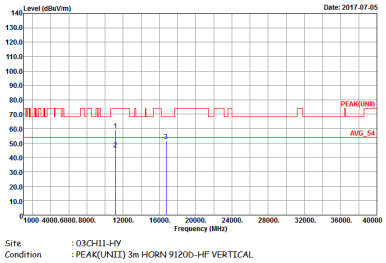
WIFI	Band 3 5470~5725MHz Harmonic @ 3m	
ANT	802.11a CH116 5580MHz	
1+2	Horizontal	Vertical
Peak Avg.		

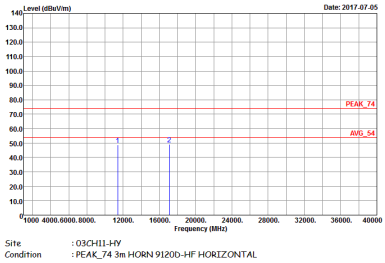
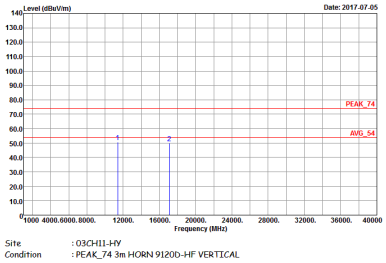
WIFI	Band 3 5470~5725MHz Harmonic @ 3m	
ANT	802.11a CH140 5700MHz	
1+2	Horizontal	Vertical
Peak Avg.		

Band 3 5470~5725MHz

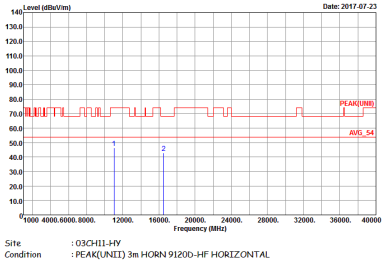
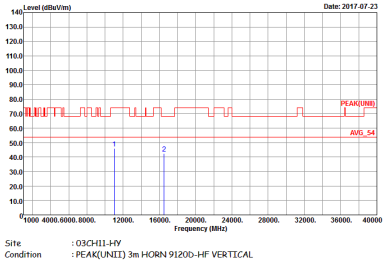
WIFI 802.11n HT20 (Harmonic @ 3m)

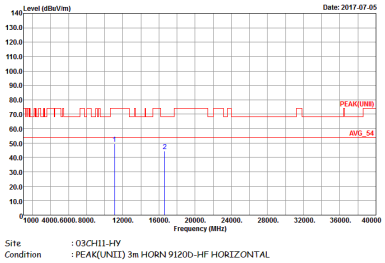
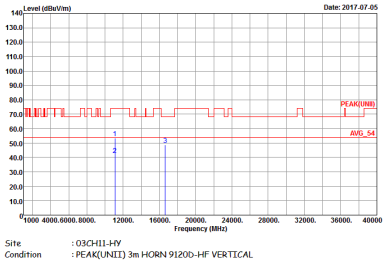
WIFI	Band 3 5470~5725MHz Harmonic @ 3m	
ANT	802.11n HT20 CH100 5500MHz	
1+2	Horizontal	Vertical
Peak Avg.		

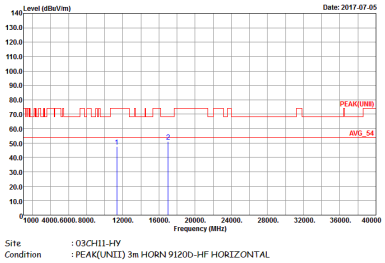
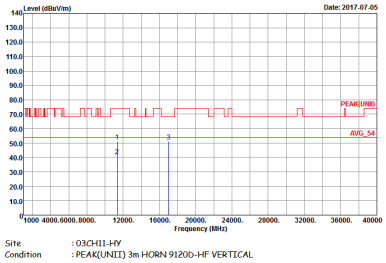
WIFI	Band 3 5470~5725MHz Harmonic @ 3m	
ANT	802.11n HT20 CH116 5580MHz	
1+2	Horizontal	Vertical
Peak Avg.		

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

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

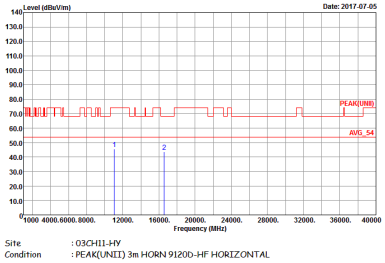
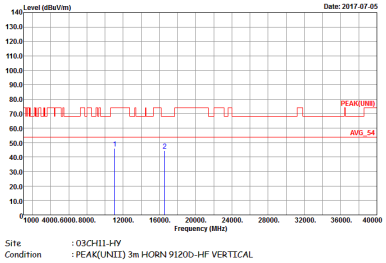
WIFI	Band 3 5470~5725MHz Harmonic @ 3m	
ANT	802.11n HT40 CH102 5510MHz	
1+2	Horizontal	Vertical
Peak Avg.		

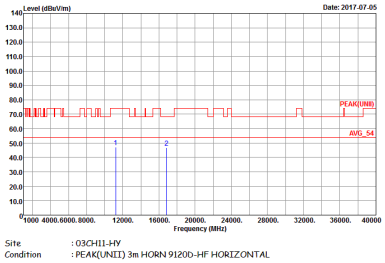
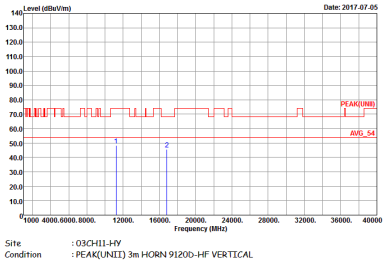
WIFI	Band 3 5470~5725MHz Harmonic @ 3m	
ANT	802.11n HT40 CH110 5550MHz	
1+2	Horizontal	Vertical
Peak Avg.		

WIFI	Band 3 5470~5725MHz Harmonic @ 3m	
ANT	802.11n HT40 CH134 5670MHz	
1+2	Horizontal	Vertical
Peak Avg.		

Band 3 5470~5725MHz

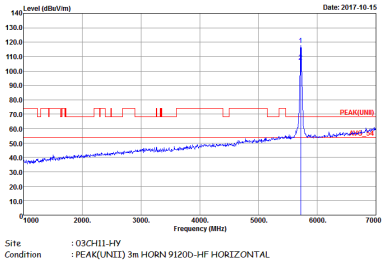
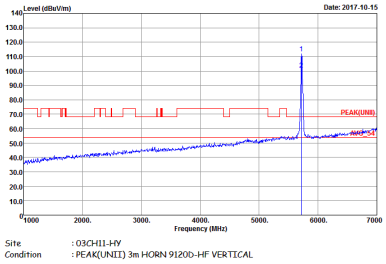
WIFI 802.11ac VHT80 (Harmonic @ 3m)

WIFI	Band 3 5470~5725MHz Harmonic @ 3m	
ANT	802.11ac VHT80 CH106 5530MHz	
1+2	Horizontal	Vertical
Peak Avg.		

WIFI	Band 3 5470~5725MHz Harmonic @ 3m	
ANT	802.11ac VHT80 CH122 5610MHz	
1+2	Horizontal	Vertical
Peak Avg.		

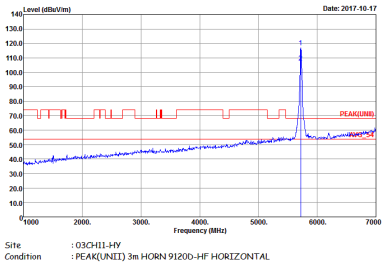
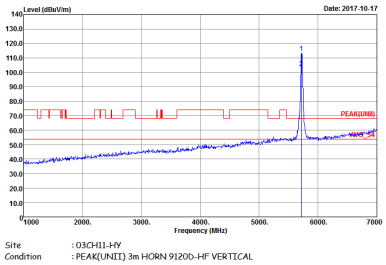
Band 3 - Straddle Channel

WIFI 802.11a (Fundamental @ 3m)

WIFI	Band 3 Straddle Channel Fundamental @ 3m	
ANT	802.11a CH144 5720MHz	
1+2	Horizontal	Vertical
Peak Avg.		

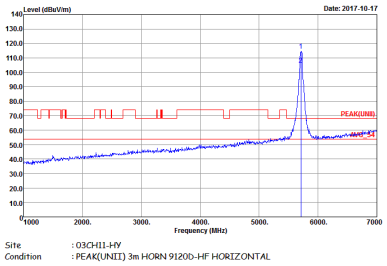
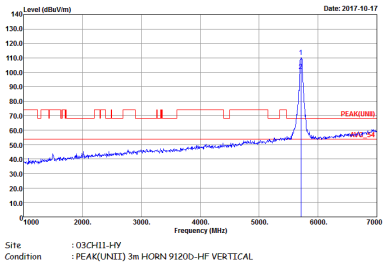
Band 3 – Straddle Channel

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.		

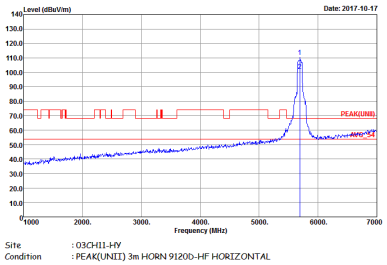
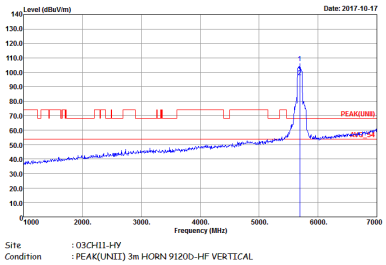
Band 3 – Straddle Channel

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.		

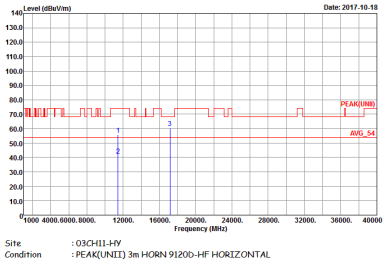
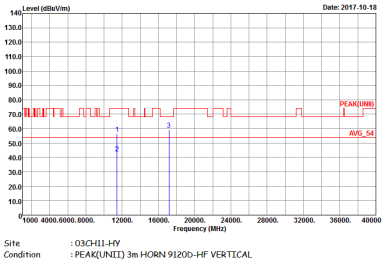
Band 3 – Straddle Channel

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.		

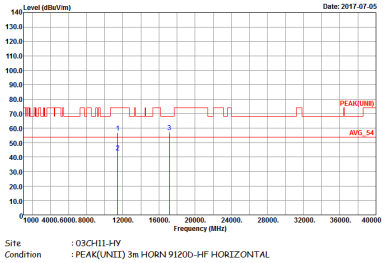
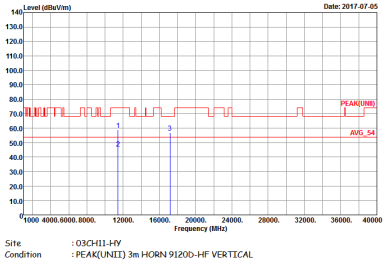
Band 3 - Straddle Channel

WIFI 802.11a (Harmonic @ 3m)

WIFI	Band 3 Straddle Channel Harmonic @ 3m	
ANT	802.11a CH144 5720MHz	
1+2	Horizontal	Vertical
Peak Avg.		

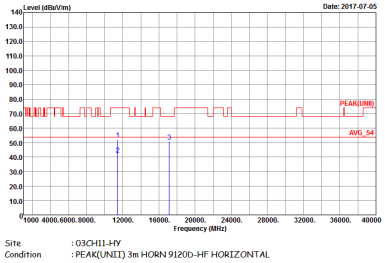
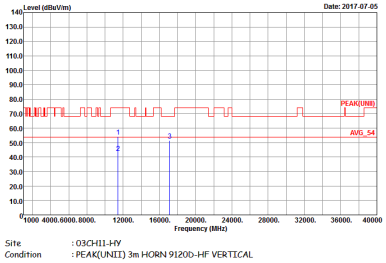
Band 3 – Straddle Channel

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.		

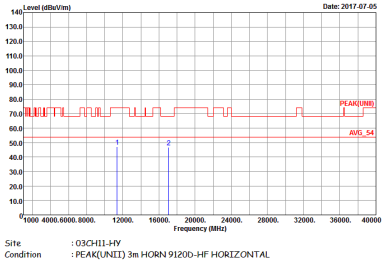
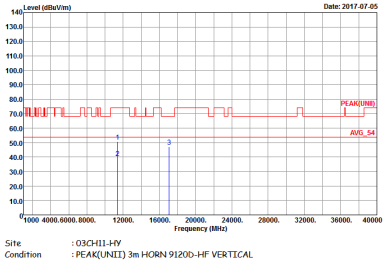
Band 3 – Straddle Channel

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.		

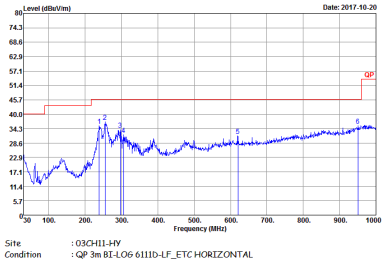
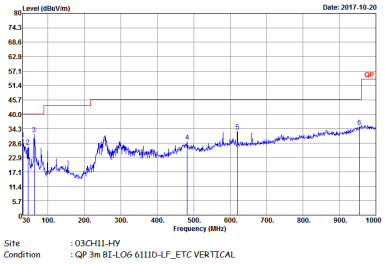
Band 3 – Straddle Channel

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.		

Emission below 1GHz

5GHz WIFI 802.11n HT40 (LF)

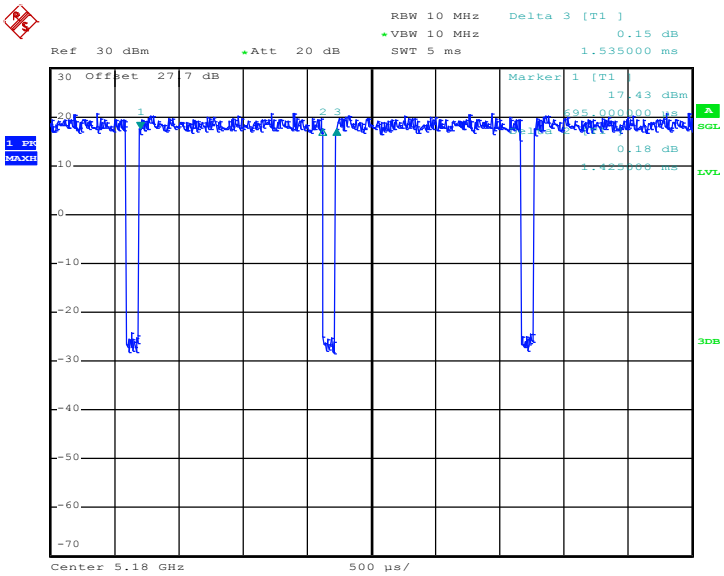
WIFI	5GHz WIFI	
ANT	802.11n HT40 LF	
1+2	Horizontal	Vertical
QP / Peak		

Appendix E. Duty Cycle Plots

Antenna	Band	Duty Cycle(%)	T(us)	1/T(kHz)	VBW Setting	Duty Factor(dB)
1	802.11a	92.83	1425	0.70	1kHz	0.32
2	802.11a	92.86	1430	0.70		0.32
1+2	802.11a for Ant. 1	93.51	1440	0.70		0.29
1+2	802.11a for Ant. 2	92.83	1425	0.70		0.32
1	5GHz 802.11n HT20	93.06	1340	0.75	1kHz	0.31
2	5GHz 802.11n HT20	92.41	1340	0.75		0.34
1+2	5GHz 802.11n HT20 Ant. 1	92.41	1340	0.75		0.34
1+2	5GHz 802.11n HT20 Ant. 2	92.36	1330	0.75		0.35
1	5GHz 802.11n HT40	84.81	670	1.49	3kHz	0.72
2	5GHz 802.11n HT40	85.71	660	1.52		0.67
1+2	5GHz 802.11n HT40 Ant. 1	87.01	670	1.49		0.60
1+2	5GHz 802.11n HT40 Ant. 2	86.84	660	1.52		0.61
1	5GHz 802.11ac VHT20	97.71	5120	0.20	300Hz	0.10
2	5GHz 802.11ac VHT20	97.71	5120	0.20		0.10
1+2	5GHz 802.11ac VHT20 Ant. 1	97.69	5080	0.20		0.10
1+2	5GHz 802.11ac VHT20 Ant. 2	97.71	5120	0.20		0.10
1	5GHz 802.11ac VHT40	85.71	660	1.52	3kHz	0.67
2	5GHz 802.11ac VHT40	85.71	660	1.52		0.67
1+2	5GHz 802.11ac VHT40 Ant. 1	87.01	670	1.49		0.60
1+2	5GHz 802.11ac VHT40 Ant. 2	85.90	670	1.49		0.66
1	5GHz 802.11ac VHT80	75.93	328	3.05	10kHz	1.20
2	5GHz 802.11ac VHT80	76.85	332	3.01		1.14
1+2	5GHz 802.11ac VHT80 Ant. 1	75.93	328	3.05		1.20
1+2	5GHz 802.11ac VHT80 Ant. 2	75.93	328	3.05		1.20

<Ant. 1>

802.11a



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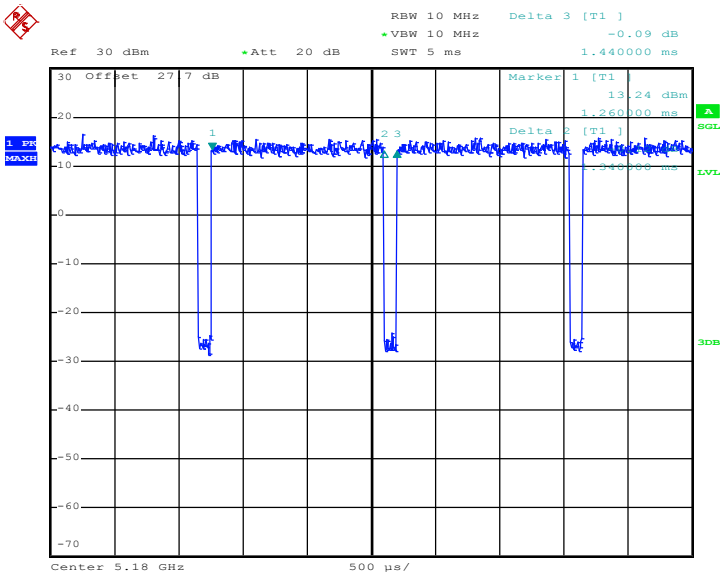
802.11n HT20



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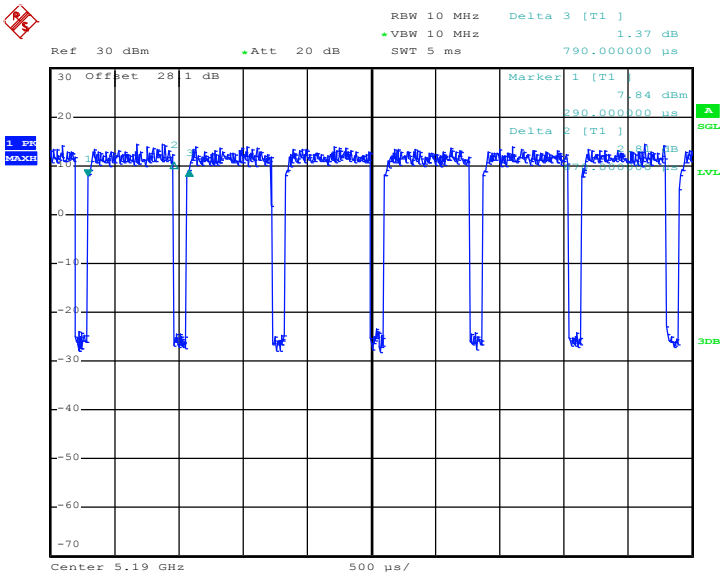

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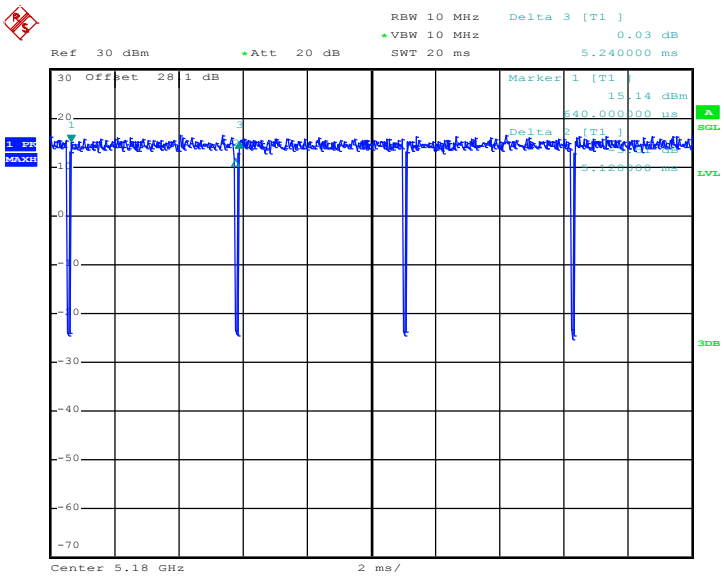

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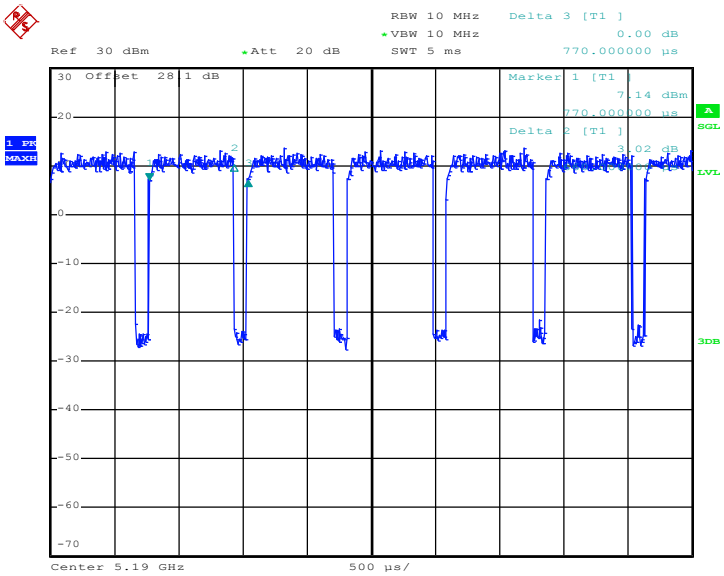

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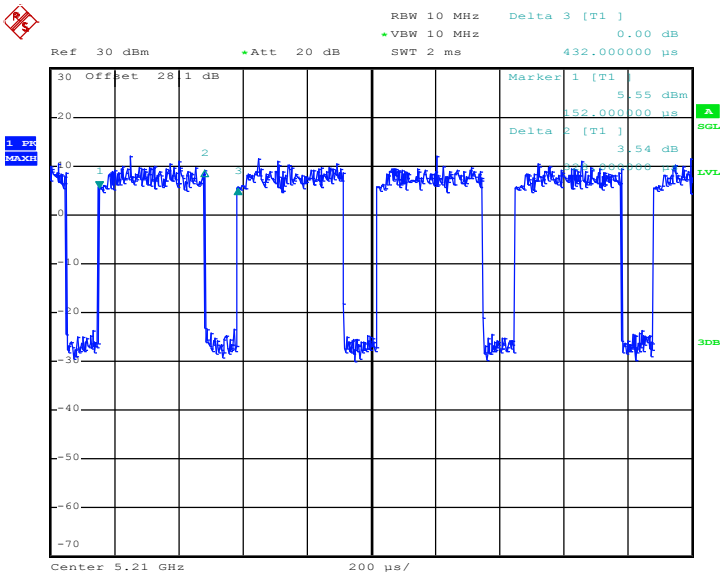

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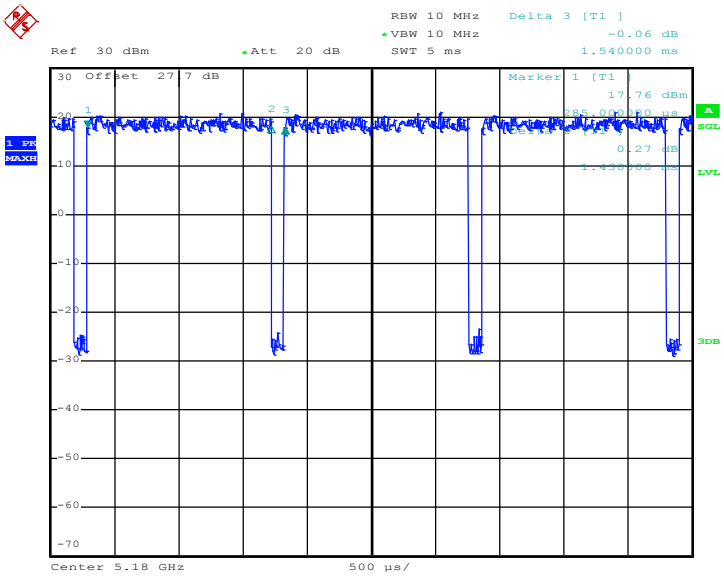
802.11a



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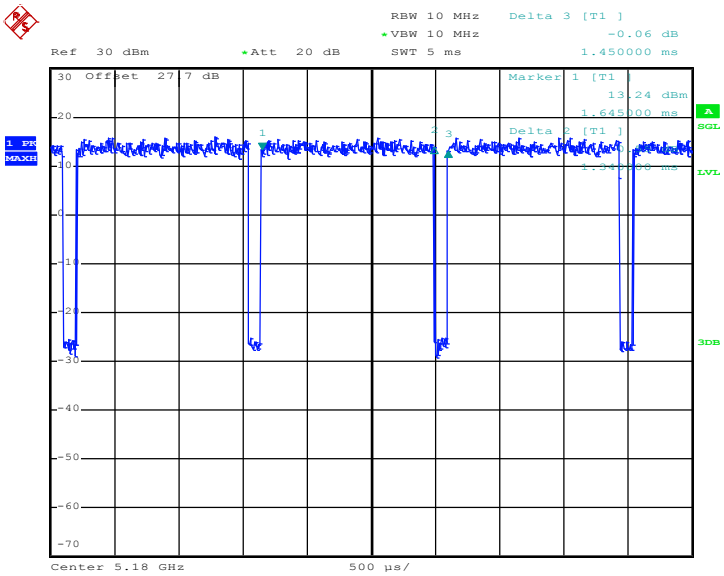

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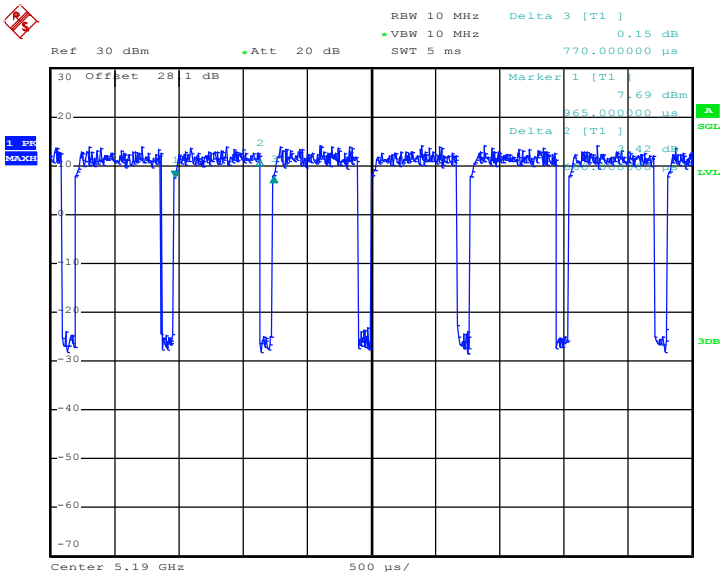

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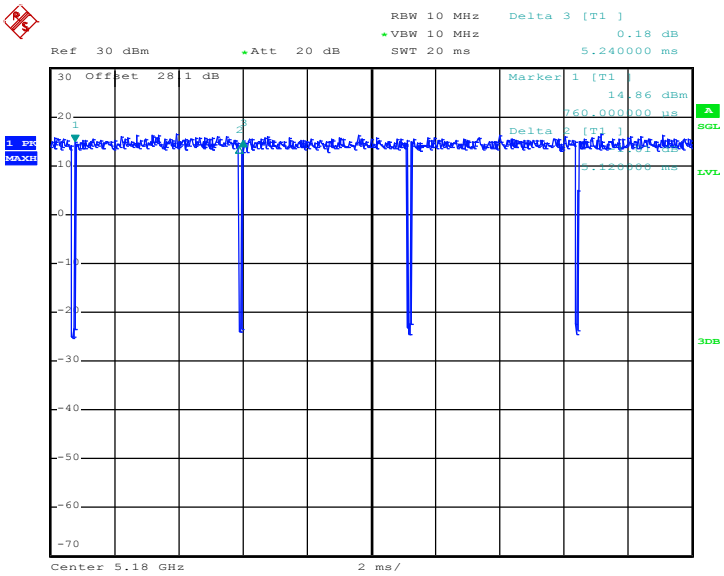

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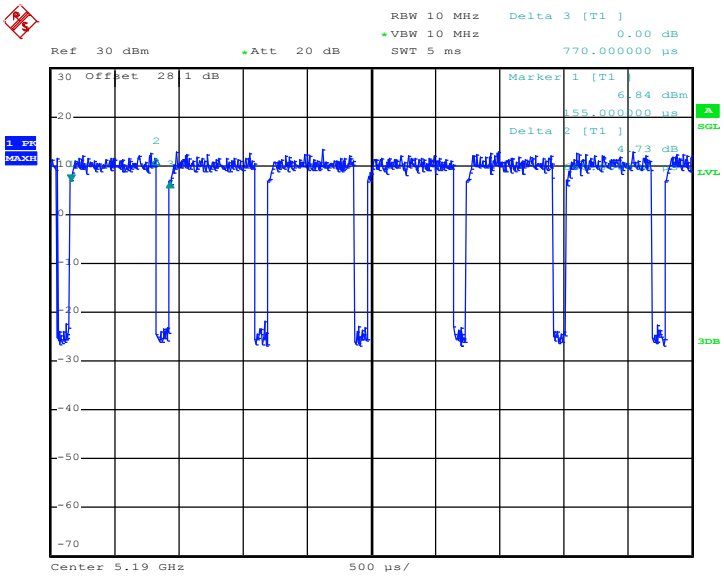

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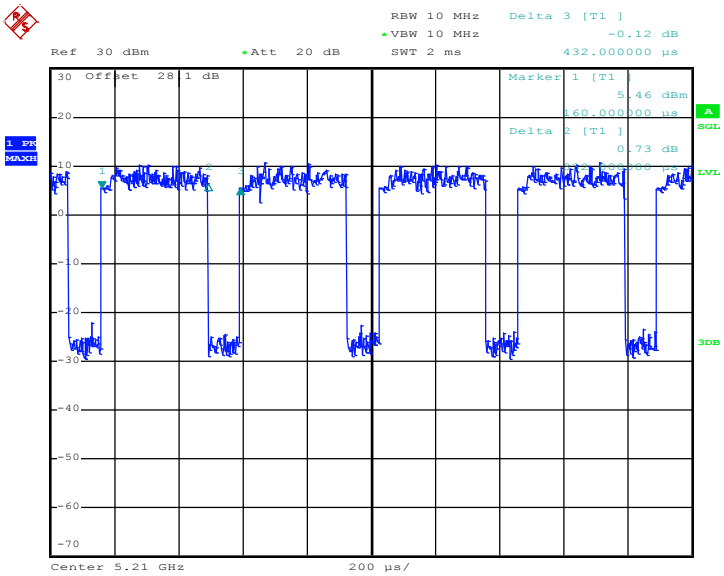

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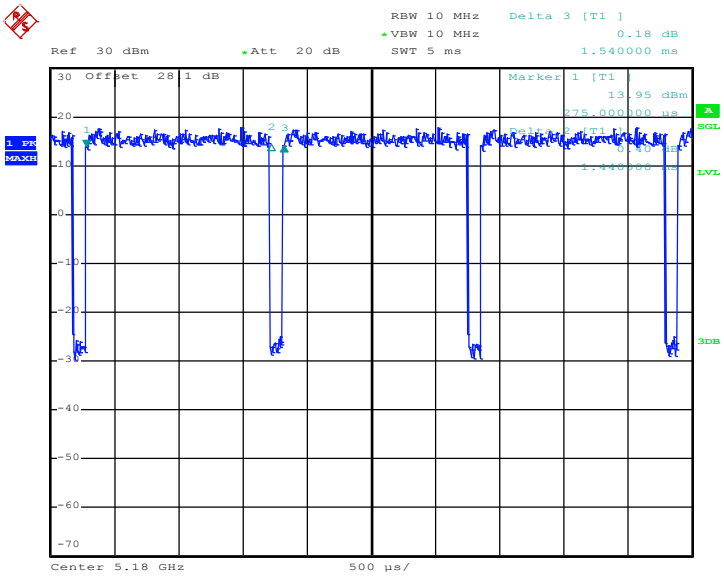

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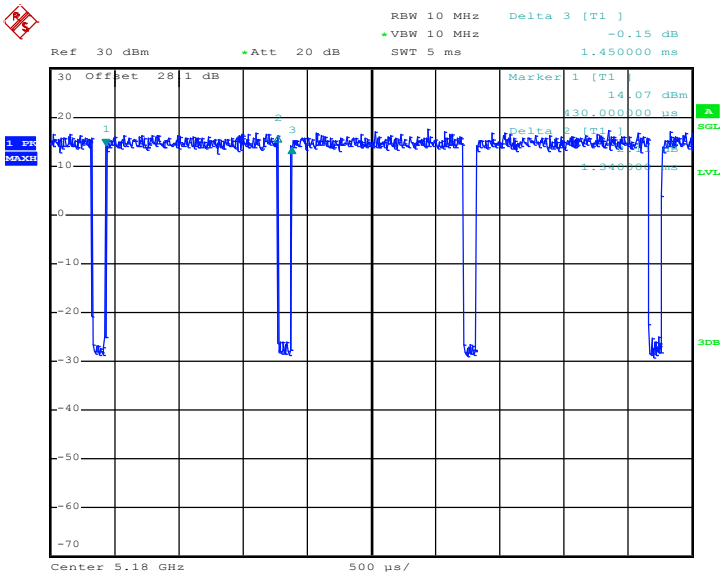

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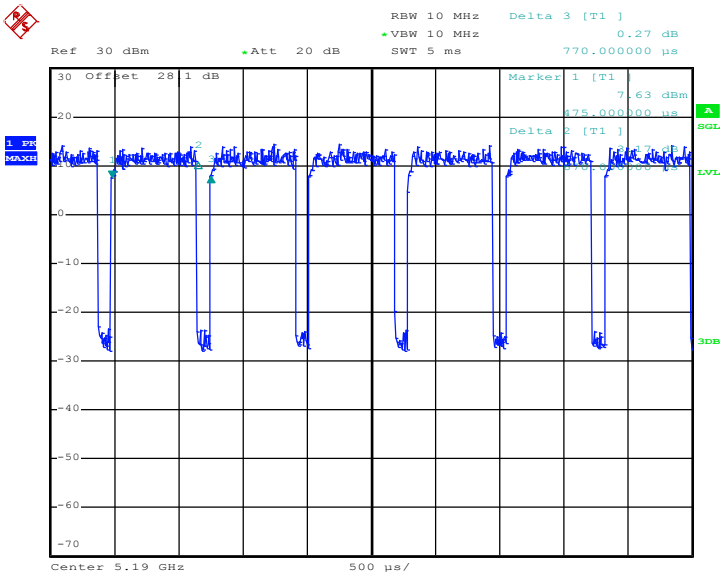

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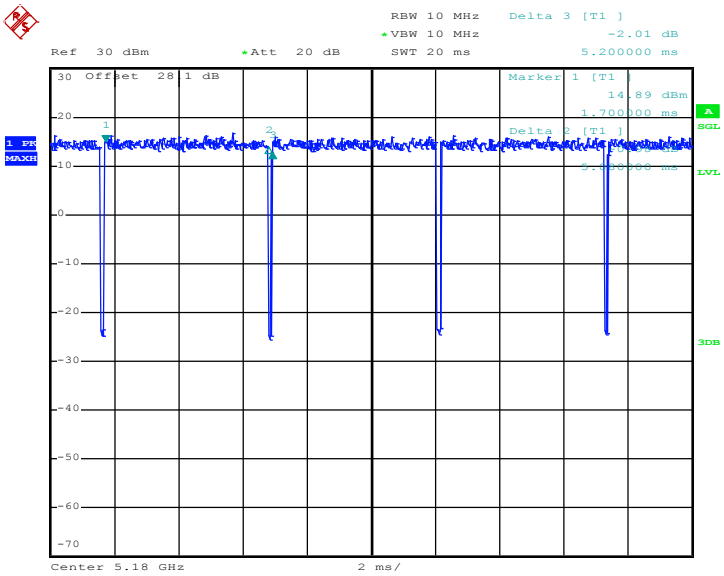

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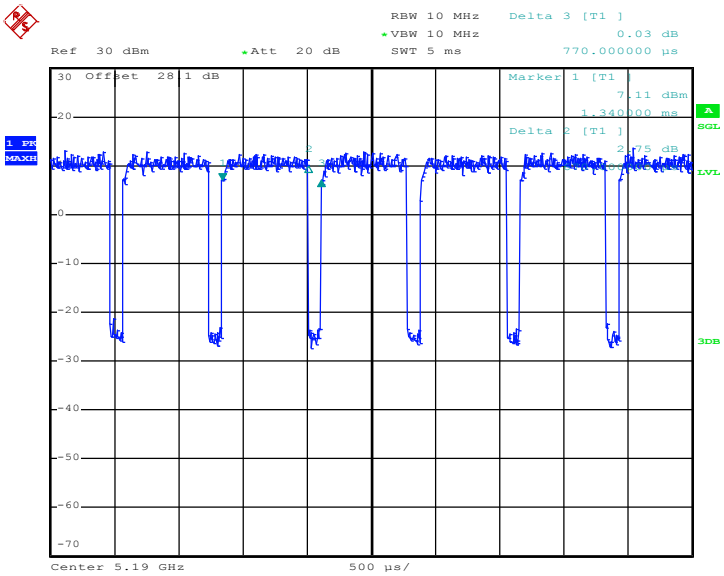

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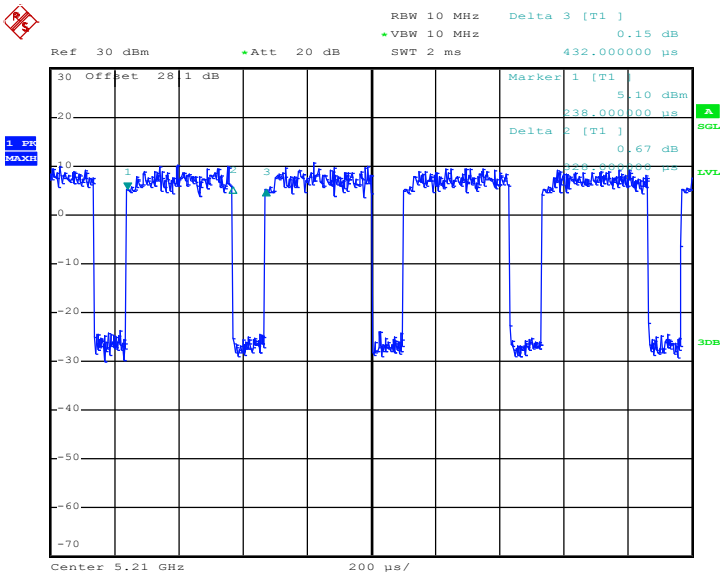

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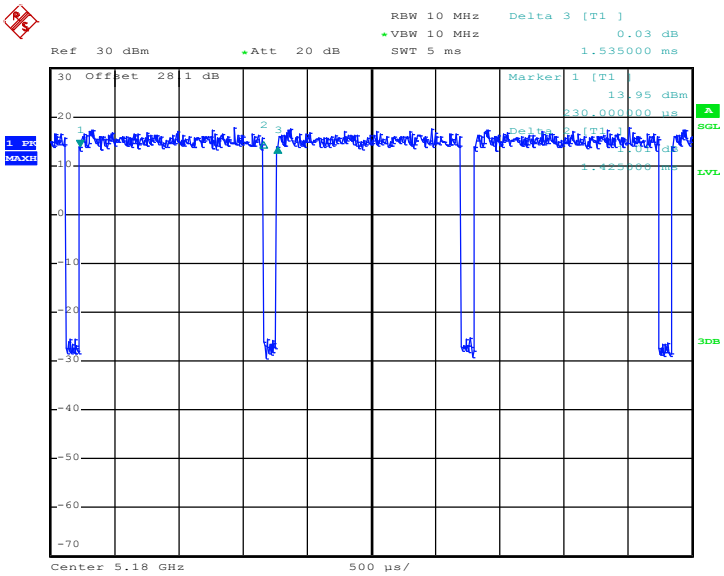

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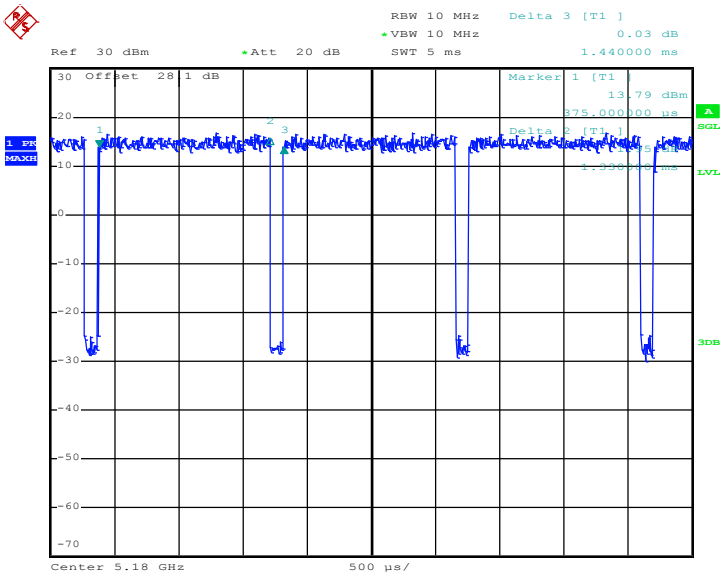

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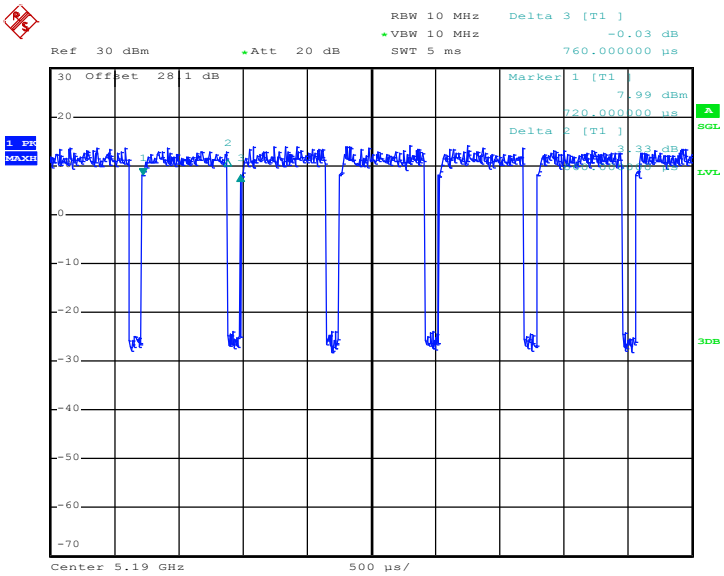

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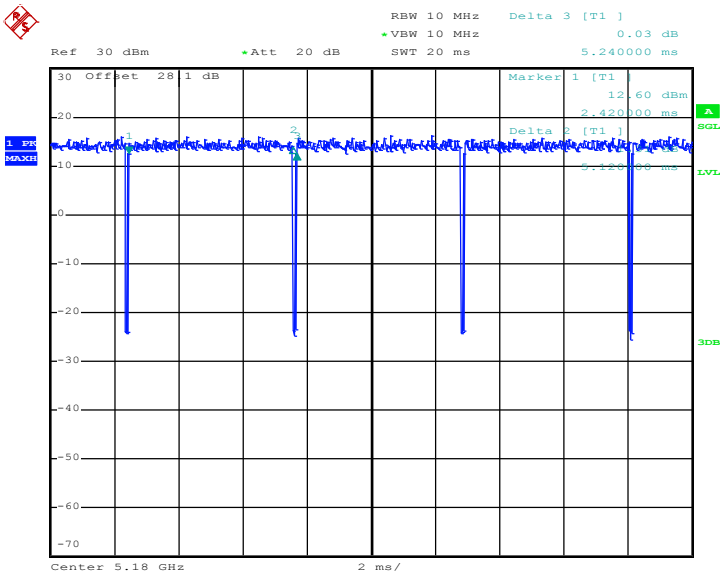

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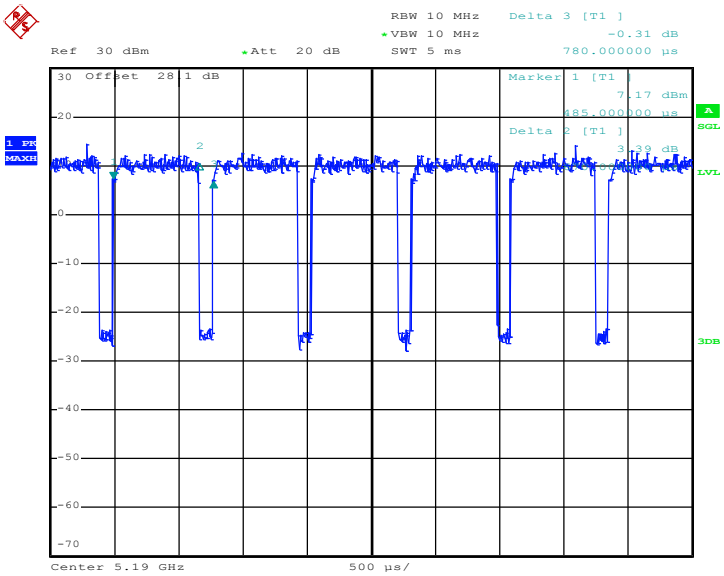

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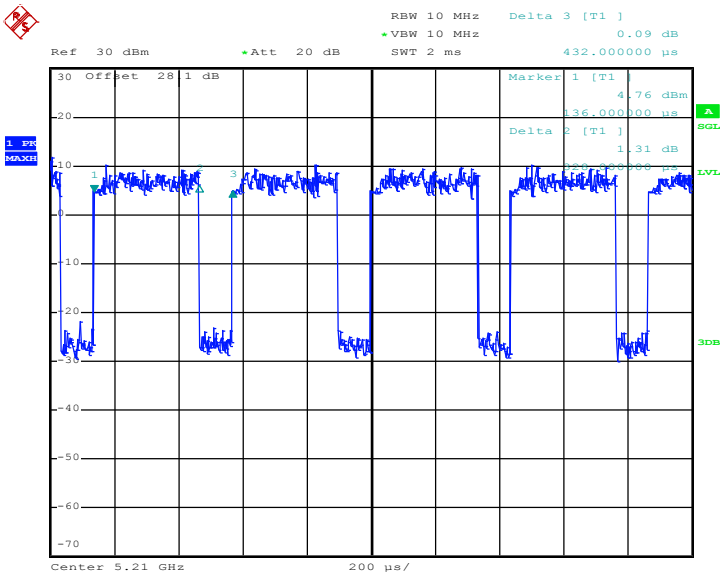

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