FCC RF Test Report

APPLICANT	**:**	**Nimbocumulous LLC**
EQUIPMENT	**:**	**Digital Media Receiver**
MODEL NAME	**:**	**QX91KB**
		QX91KA
FCC ID	**:**	**2AHUD-3819**
STANDARD	**:**	**FCC Part 15 Subpart E §15.407**
CLASSIFICATION	**:**	**(NII) Unlicensed National Information Infrastructure**

The product was testing completed on Feb. 09, 2018. We, SPORTON INTERNATIONAL INC., would like to declare that the tested sample has been evaluated in accordance with the test procedures and has been in compliance with the applicable technical standards.

The 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.
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REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FR741112-01D	Rev. 01	Initial issue of report	May 07, 2018

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	≤ 24 dBm	Pass
3.3	15.407(a)	Power Spectral Density	≤ 11 dBm	Pass
3.4	15.407(b)	Unwanted Emissions	15.407(b) & 15.209(a)	Pass
3.5	15.207	AC Conducted Emission	15.207(a)	Pass
3.6	15.407(c)	Automatically Discontinue Transmission	Discontinue Transmission	Pass
3.7	15.203 & 15.407(a)	Antenna Requirement	N/A	Pass

1 General Description

1.1 Applicant

Nimbocumulous LLC

15 Constitution Drive. 1st Floor Bedford, New Hampshire 03110

1.2 Product Feature of Equipment Under Test

Product Feature	
Equipment	Digital Media Receiver
Model Name	QX91KB QX91KA
FCC ID	2AHUD-3819
EUT supports Radios application	WLAN 11b/g/n HT20 WLAN 11a/n HT20HT40 WLAN 11ac VHT20/VHT40/VHT80

1.3 Product Specification of Equipment Under Test

Standards-related Product Specification	
Tx/Rx Frequency Range	5180 MHz ~ 5240 MHz
Maximum Output Power to Antenna	**<Ant. 1>** 802.11a : 19.18 dBm / 0.0828 W 802.11n HT20 : 20.34 dBm / 0.1081 W 802.11n HT40 : 19.90 dBm / 0.0977 W 802.11ac VHT20: 20.28 dBm / 0.1067 W 802.11ac VHT40: 19.87 dBm / 0.0971 W 802.11ac VHT80: 14.83 dBm / 0.0304 W **<Ant. 2>** 802.11a : 20.68 dBm / 0.1169 W 802.11n HT20 : 20.72 dBm / 0.1180 W 802.11n HT40 : 20.87 dBm / 0.1222 W 802.11ac VHT20: 20.65 dBm / 0.1161 W 802.11ac VHT40: 20.68 dBm / 0.1169 W 802.11ac VHT80: 16.84 dBm / 0.0483 W **MIMO <Ant. 1+2>** 802.11a : 18.49 dBm / 0.0706 W 802.11n HT20 : 19.53 dBm / 0.0897 W 802.11n HT40 : 20.18 dBm / 0.1042 W 802.11ac VHT20: 19.52 dBm / 0.0895 W 802.11ac VHT40: 20.15 dBm / 0.1035 W 802.11ac VHT80: 19.31 dBm / 0.0853 W

<table>
<tr><th colspan="2">Standards-related Product Specification</th></tr>
<tr><td>99% Occupied Bandwidth</td><td><Ant. 1>
802.11a : 17.90 MHz
802.11n HT20 : 18.70 MHz
802.11n HT40 : 36.70 MHz
802.11ac VHT80 : 75.72 MHz
<Ant. 2>
802.11a : 17.85 MHz
802.11n HT20 : 18.70 MHz
802.11n HT40 : 36.70 MHz
802.11ac VHT80 : 75.72 MHz
MIMO <Ant. 1>
802.11a : 17.80 MHz
802.11n HT20 : 18.65 MHz
802.11n HT40 : 36.70 MHz
802.11ac VHT80 : 75.72 MHz
MIMO <Ant. 2>
802.11a : 17.70 MHz
802.11n HT20 : 18.60 MHz
802.11n HT40 : 36.70 MHz
802.11ac VHT80 : 75.72 MHz</td></tr>
<tr><td>Antenna Type / Gain</td><td>Ant. 1 : Fixed internal Antenna with gain 4.9 dBi
Ant. 2 : Fixed internal Antenna with gain 4.4 dBi</td></tr>
<tr><td>Antenna Function Description</td><td><table><tr><td></td><td>Ant. 1</td><td>Ant. 2</td></tr><tr><td>802.11 a/n/ac</td><td>V</td><td>V</td></tr><tr><td>802.11 a/n/ac MIMO</td><td>V</td><td>V</td></tr></table></td></tr>
<tr><td>Type of Modulation</td><td>802.11a/n : OFDM (BPSK / QPSK / 16QAM / 64QAM)
802.11ac : OFDM (BPSK / QPSK / 16QAM / 64QAM / 256QAM)</td></tr>
</table>

Note: MIMO Ant. 1+2 is a calculated result from sum of the power MIMO Ant. 1 and MIMO Ant. 2.

1.4 Modification of EUT

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

1.5 Testing Location

Sporton Lab is accredited to ISO 17025 by Taiwan Accreditation Foundation (TAF code : 1190) and the FCC designation No. 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.**
	03CH13-HY

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

1.6 Applicable Standards

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

- FCC Part 15 Subpart E
- FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01.
- 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).

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		

Note:

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

2.2 Test Mode

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

Single Mode

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

MIMO Mode

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

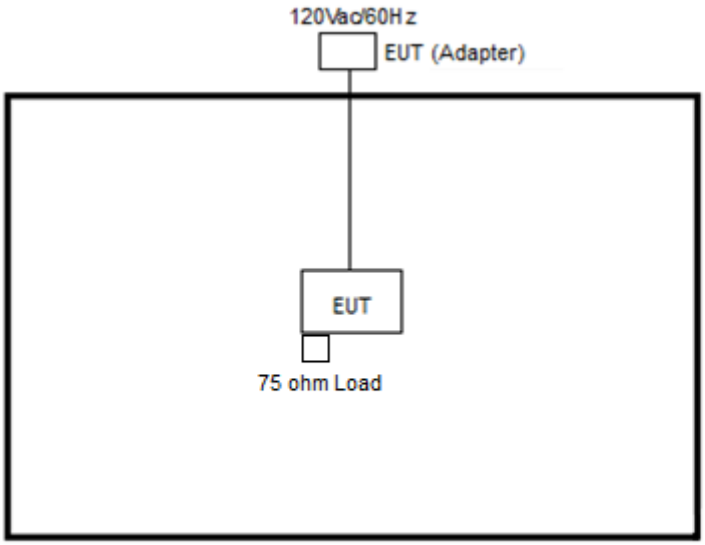
Test Cases	
AC Conducted Emission	Mode 1 : ATSC Rx (Physical connection) WLAN (5GHz) Link + Connected HDD + End to End + External HDD R/W

Ch. #		Band I：5150-5250 MHz	Band I：5150-5250 MHz	Band I：5150-5250 MHz
		802.11a	802.11n HT20	802.11n HT40
L	Low	36	36	38
M	Middle	44	44	-
H	High	48	48	46

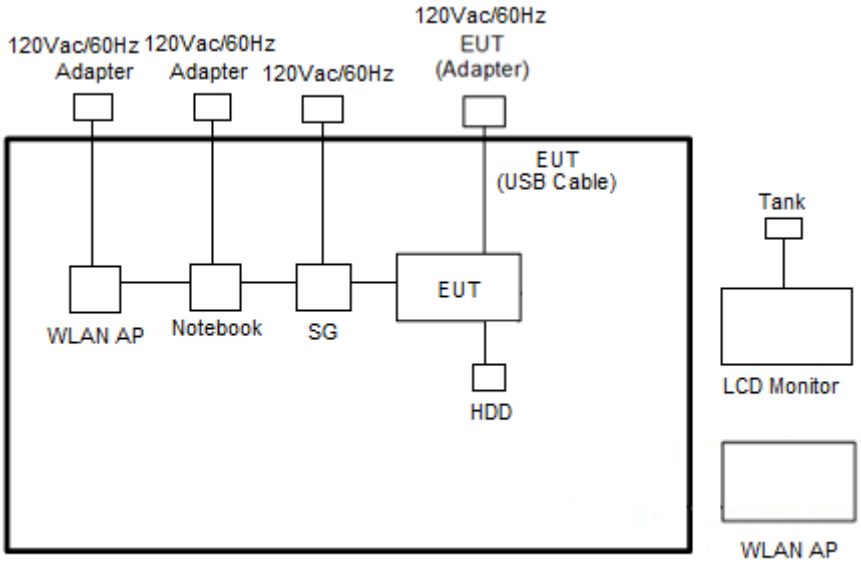
Ch. #		Band I：5150-5250 MHz	Band I：5150-5250 MHz	Band I：5150-5250 MHz
		802.11ac VHT20	802.11ac VHT40	802.11ac VHT80
L	Low	36	38	-
M	Middle	44	-	42
H	High	48	46	-

2.3 Connection Diagram of Test System

<WLAN Tx Mode>



<AC Conducted Emission Mode>



2.4 Support Unit used in test configuration and system

Item	Equipment	Trade Name	Model Name	FCC ID	Data Cable	Power Cord
1.	WLAN AP	ASUS	RT-AC66U	MSQ-RTAC66U	N/A	Unshielded, 1.8 m
2.	Base Station	R&S	SG	N/A	N/A	Unshielded, 1.8 m
3.	iPod	Apple	A1285	FCC DoC	Shielded, 1.0 m	N/A
4.	APP Mac	Apple	A1278	FCC DoC	N/A	AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m
5.	Notebook	DELL	E5530	FCC DoC	N/A	AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m
6.	Mobile Phone	Acer	Z530	N/A	N/A	N/A
7.	LCD MONITOR	DELL	P2715Q	FCC DoC	Shielded, 1.6m	Unshielded, 1.8 m
8.	USB HD	TOSHIBA	DTB310	FCC DoC	Shielded, 0.5m	N/A
9.	Controller	N/A	N/A	N/A	N/A	N/A
10.	Dongle	N/A	N/A	FCC DoC	N/A	N/A

2.5 EUT Operation Test Setup

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

2.6 Measurement Results Explanation Example

For all conducted test items:

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

Example :

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

Offset = RF cable loss + attenuator factor.

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

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

= 4.2 + 10 = 14.2 (dB)

3 Test Result

3.1 26dB & 99% Occupied Bandwidth Measurement

3.1.1 Description of 26dB & 99% Occupied Bandwidth

This section is for reporting purpose only.

There is no restriction limits for bandwidth.

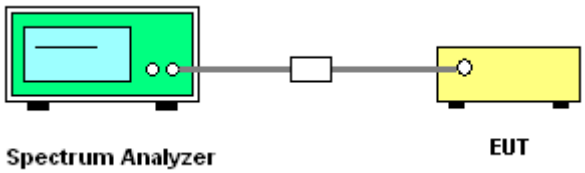
3.1.2 Measuring Instruments

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

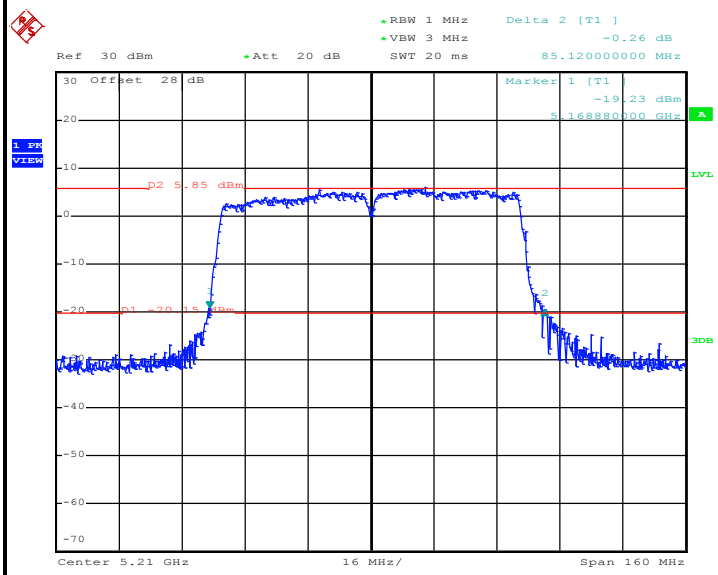
3.1.4 Test Setup



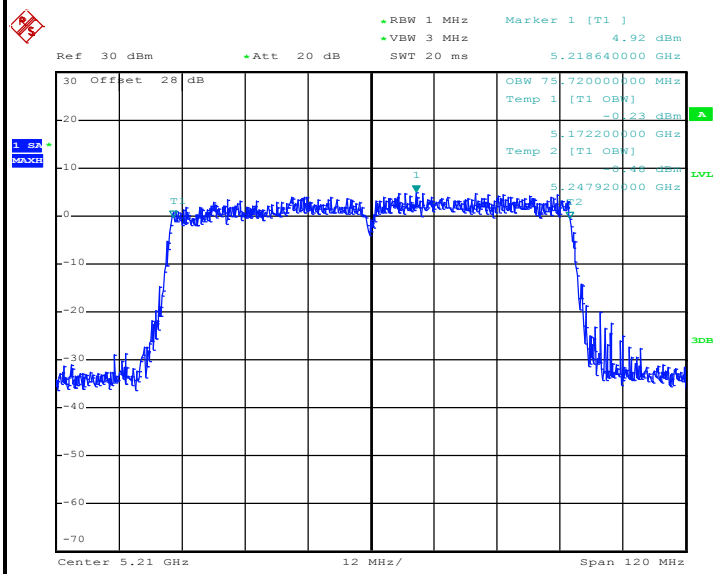
3.1.5 Test Result of 26dB & 99% Occupied Bandwidth

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

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.

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

3.2.2 Measuring Instruments

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

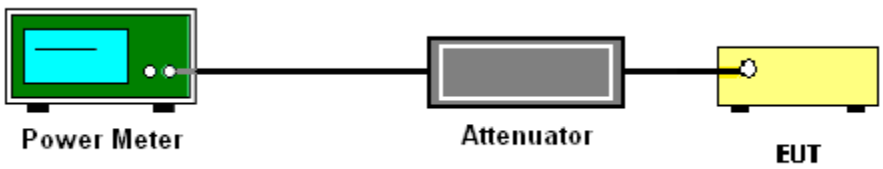
3.2.3 Test Procedures

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

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

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

3.2.4 Test Setup



3.2.5 Test Result of Maximum Conducted Output Power

Please refer to Appendix A.

3.3 Power Spectral Density Measurement

3.3.1 Limit of Power Spectral Density

For an indoor access point operating in the band 5.15-5.25 GHz, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band.

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

3.3.2 Measuring Instruments

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

3.3.3 Test Procedures

The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01.
Section F) Maximum power spectral density.

 # Method SA-2 #

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

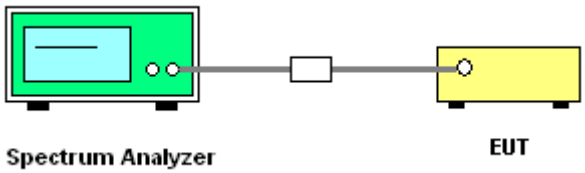
- Measure the duty cycle.
- Set span to encompass the entire emission bandwidth (EBW) of the signal.
- Set RBW = 1 MHz.
- Set VBW ≥ 3 MHz.
- Number of points in sweep ≥ 2 Span / RBW.
- Sweep time = auto.
- Detector = RMS
- Trace average at least 100 traces in power averaging mode.
- Add 10 log(1/x),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

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

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

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

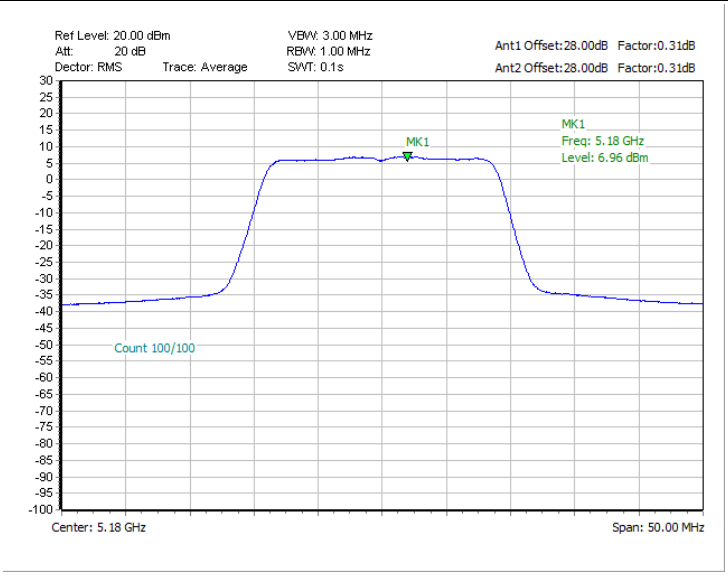
3.3.4 Test Setup



3.3.5 Test Result of Power Spectral Density

Please refer to Appendix A.

Worst Case Power Density (dBm/MHz)



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

3.4 Unwanted Emissions Measurement

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

3.4.1 Limit of Unwanted Emissions

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

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

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

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

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

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

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

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

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

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

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

3.4.2 Measuring Instruments

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 v02r01. Section G) Unwanted emissions measurement.

   (1) Procedure for Unwanted Emissions Measurements Below 1000MHz

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

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

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

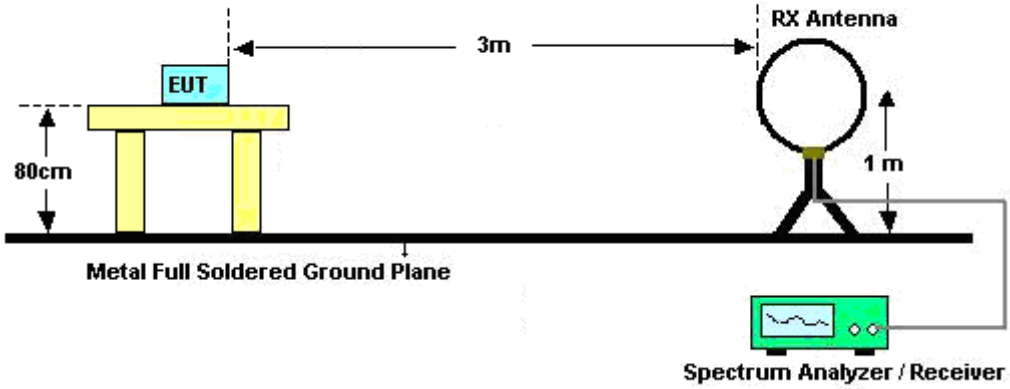
   (3) Procedures for Average Unwanted Emissions Measurements Above 1000MHz

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

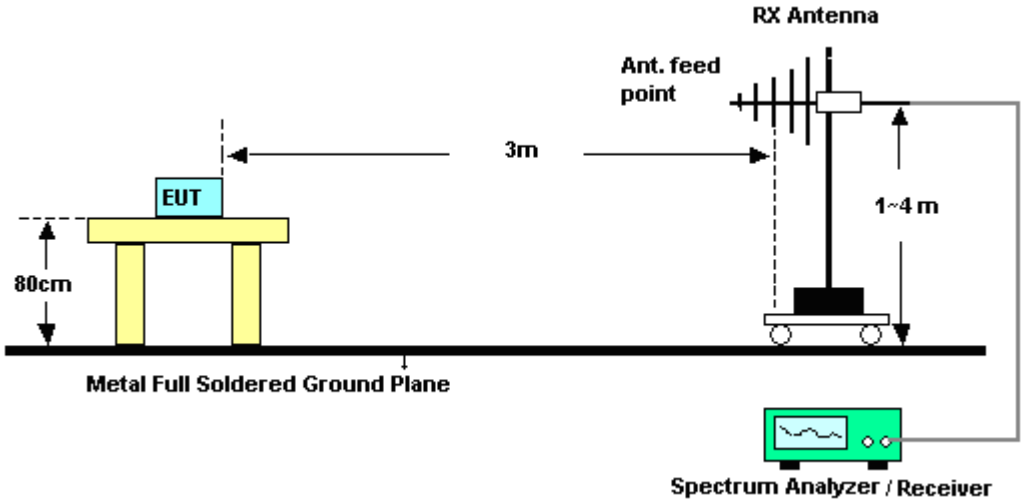
2. The EUT was placed on a turntable with 0.8 meter for frequency below 1GHz and 1.5 meter for frequency above 1GHz respectively above ground.
3. The EUT was set 3 meters from the interference receiving antenna which was mounted on the top of a variable height antenna tower.
4. The antenna is a broadband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

3.4.4 Test Setup

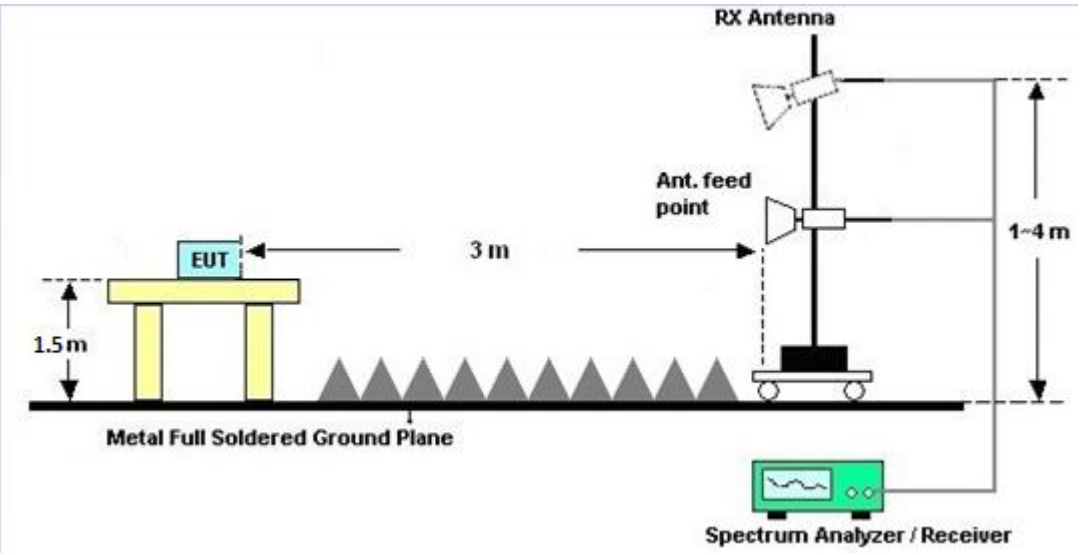
For radiated emissions below 30MHz



For radiated emissions from 30MHz to 1GHz



For radiated emissions above 1GHz



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

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

There is a comparison data of both open-field test site and 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.

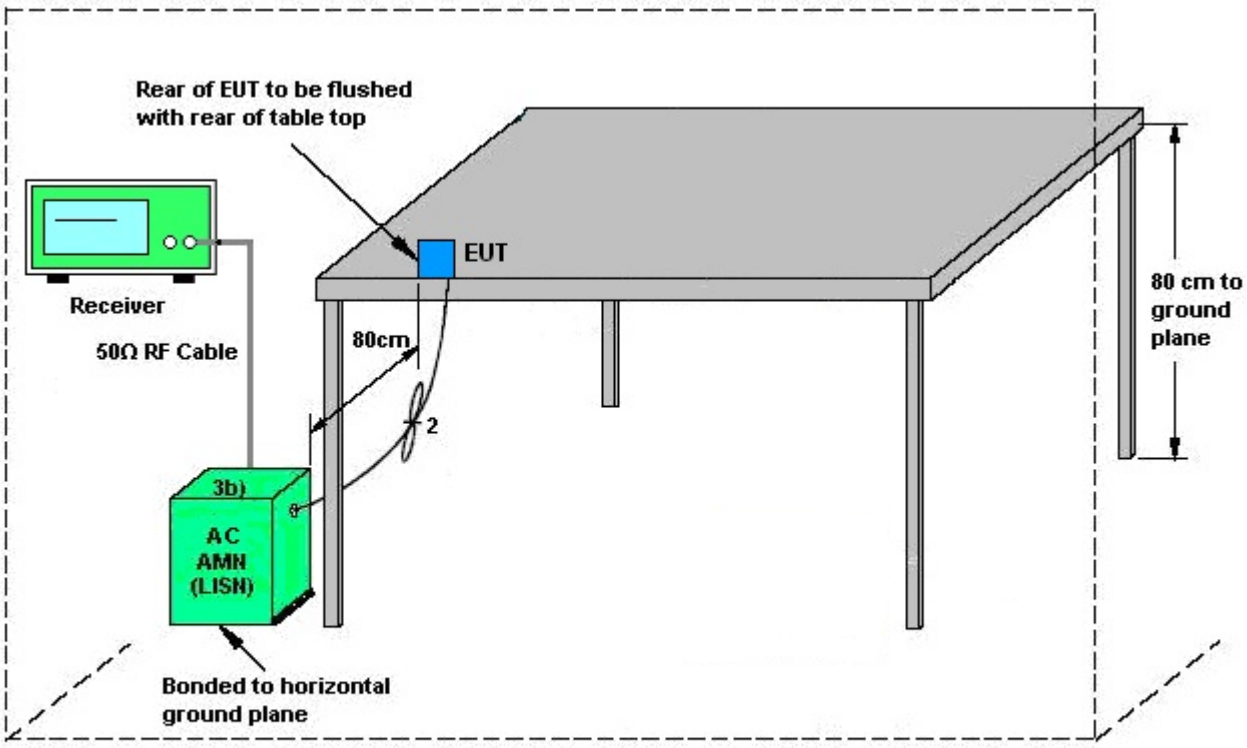
3.5.2 Measuring Instruments

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



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

3.5.5 Test Result of AC Conducted Emission

Please refer to Appendix B.

3.6 Automatically Discontinue Transmission

3.6.1 Limit of Automatically Discontinue Transmission

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

3.6.2 Measuring Instruments

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

3.6.3 Test Result of Automatically Discontinue Transmission

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

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

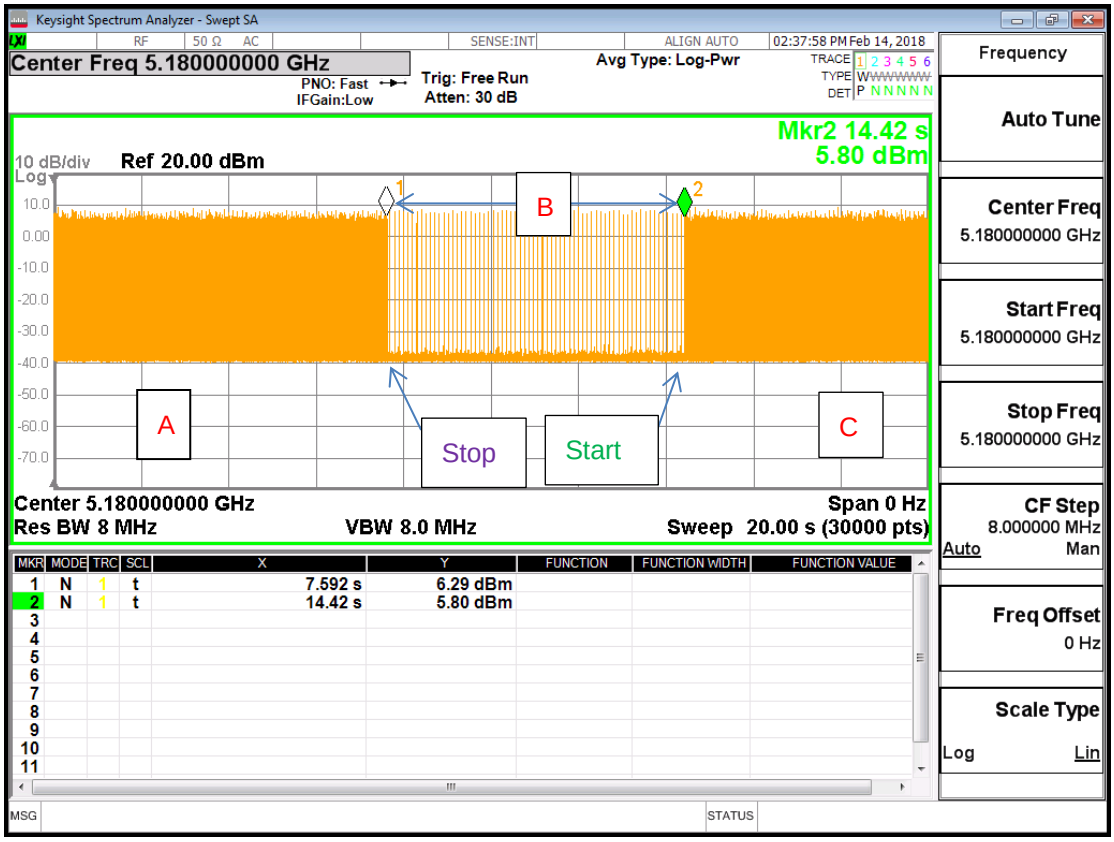
B. Information stop: stop supplying information to the access point.

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

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

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

5180MHz



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

3.7 Antenna Requirements

3.7.1 Standard Applicable

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

3.7.2 Antenna Anti-Replacement Construction

An embedded-in antenna design is used.

3.7.3 Antenna Gain

<CDD Modes >

FCC KDB 662911 D01 Multiple Transmitter Output v02r01

For CDD transmissions, directional gain is calculated as

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

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

Array Gain = 10 log(NANT/NSS=1) dB.

For power measurements on IEEE 802.11 devices,

Array Gain = 0 dB (i.e., no array gain) for NANT ≤ 4.

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

The EUT supports CDD mode.

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

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

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

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

<CDD Modes>

	Ant. 1 (dBi)	Ant. 2 (dBi)	DG for Power (dBi)	DG for PSD (dBi)	Power Limit Reduction (dB)	PSD Limit Reduction (dB)
Band I	4.90	4.40	4.90	7.66	0.00	1.66

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

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

4 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Power Meter	Anritsu	ML2495A	1218006	N/A	Oct. 06, 2017	Jan. 22, 2018~ Feb. 09, 2018	Oct. 05, 2018	Conducted (TH05-HY)
Power Sensor	Anritsu	MA2411B	1207363	300MHz~40GHz	Oct. 06, 2017	Jan. 22, 2018~ Feb. 09, 2018	Oct. 05, 2018	Conducted (TH05-HY)
Spectrum Analyzer	Rohde & Schwarz	FSP40	100057	9kHz-40GHz	Nov. 21, 2017	Jan. 22, 2018~ Feb. 09, 2018	Nov. 20, 2018	Conducted (TH05-HY)
AC Power Source	ChainTek	APC-1000W	N/A	N/A	N/A	Dec. 19, 2017	N/A	Conduction (CO05-HY)
EMI Test Receiver	Rohde & Schwarz	ESCI 7	100724	9kHz~7GHz	Sep. 20, 2017	Dec. 19, 2017	Sep. 19, 2018	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100080	9kHz~30MHz	Nov. 30, 2017	Dec. 19, 2017	Nov. 29, 2018	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100081	9kHz~30MHz	Dec. 08, 2017	Dec. 19, 2017	Dec. 07, 2018	Conduction (CO05-HY)
Loop Antenna	Rohde & Schwarz	HFH2-Z2	100315	9 kHz~30 MHz	May 15, 2017	Jan. 26, 2018~ Feb. 05, 2018	May 14, 2019	Radiation (03CH13-HY)
Amplifier	MITEQ	TTA1840-35-HG	1871923	18GHz~40GHz, VSWR : 2.5:1 max	Jul. 18, 2017	Jan. 26, 2018~ Feb. 05, 2018	Jul. 17, 2018	Radiation (03CH13-HY)
Amplifier	Sonoma-Instrument	310 N	187282	9KHz~1GHz	Dec. 21, 2016	Jan. 26, 2018~ Feb. 05, 2018	Dec. 20, 2018	Radiation (03CH13-HY)
Bilog Antenna	TESEQ	CBL 6111D&00800 N1D01N-06	40103&07	30MHz to 1GHz	Jan. 10, 2018	Jan. 26, 2018~ Feb. 05, 2018	Jan. 09, 2019	Radiation (03CH13-HY)
Horn Antenna	SCHWARZBECK	BBHA 9120 D	9120D-1241	1GHz ~ 18GHz	Jun. 15, 2017	Jan. 26, 2018~ Feb. 05, 2018	Jun. 14, 2018	Radiation (03CH13-HY)
Preamplifier	MITEQ	AMF-7D-00101800-30-10P	1590074	1GHz~18GHz	May 22, 2017	Jan. 26, 2018~ Feb. 05, 2018	May 21, 2018	Radiation (03CH13-HY)
Preamplifier	Keysight	83017A	MY53270264	1GHz ~ 26.5GHz	Dec. 05, 2017	Jan. 26, 2018~ Feb. 05, 2018	Dec. 04, 2018	Radiation (03CH13-HY)
Spectrum Analyzer	Keysight	N9010A	MY55370526	N/A	Mar. 15, 2017	Jan. 26, 2018~ Feb. 05, 2018	Mar. 14, 2018	Radiation (03CH13-HY)
Antenna Mast	EMEC	AM-BS-4500-B	N/A	1m~4m	N/A	Jan. 26, 2018~ Feb. 05, 2018	N/A	Radiation (03CH13-HY)
Turn Table	EMEC	TT2000	N/A	0~360 Degree	N/A	Jan. 26, 2018~ Feb. 05, 2018	N/A	Radiation (03CH13-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170576	18GHz ~ 40GHz	Apr. 27, 2017	Jan. 26, 2018~ Feb. 05, 2018	Apr. 26, 2018	Radiation (03CH13-HY)
EMI Test Receiver	Keysight	N9038A (MXE)	MY57290111	3Hz~26.5GHz	Nov. 02, 2017	Jan. 26, 2018~ Feb. 05, 2018	Nov. 01, 2018	Radiation (03CH13-HY)

5 Uncertainty of Evaluation

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

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

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**4.90**

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**5.40**

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**4.30**

Appendix A. Test Result of Conducted Test Items

Test Engineer:	Kai Liao	Temperature:	21~25	°C
Test Date:	2018/1/22 ~ 2018/2/9	Relative Humidity:	51~54	%

Report Number : FR741112-01D

TEST RESULTS DATA
26dB and 99% OBW

Band I														
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	99% Bandwidth (MHz)		26 dB Bandwidth (MHz)		IC 99% Bandwidth Power Limit (dBm)		IC 99% Bandwidth EIRP Limit (dBm)			Note
					Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2		
11a	6Mbps	1	36	5180	17.75	17.75	21.90	21.80	-		22.49	22.49		
11a	6Mbps	1	44	5220	17.85	17.60	21.90	21.90	-		22.52	22.46		
11a	6Mbps	1	48	5240	17.90	17.85	21.90	21.90	-		22.53	22.52		
HT20	MCS0	1	36	5180	18.50	18.70	22.55	22.20	-		22.67	22.72		
HT20	MCS0	1	44	5220	18.70	18.60	22.30	22.30	-		22.72	22.70		
HT20	MCS0	1	48	5240	18.55	18.50	22.20	22.20	-		22.68	22.67		
HT40	MCS0	1	38	5190	36.70	36.70	41.04	41.04	-		23.01	23.01		
HT40	MCS0	1	46	5230	36.70	36.60	46.01	41.04	-		23.01	23.01		
VHT80	MCS0	1	42	5210	75.72	75.72	85.12	83.20	-		23.01	23.01		
11a	6Mbps	2	36	5180	17.65	17.65	21.60	21.70	-		22.47			
11a	6Mbps	2	44	5220	17.80	17.60	21.90	21.60	-		22.46			
11a	6Mbps	2	48	5240	17.70	17.70	21.70	21.80	-		22.48			
HT20	MCS0	2	36	5180	18.45	18.60	22.40	22.20	-		22.66			
HT20	MCS0	2	44	5220	18.65	18.45	22.10	22.00	-		22.66			
HT20	MCS0	2	48	5240	18.45	18.50	22.20	22.00	-		22.66			
HT40	MCS0	2	38	5190	36.70	36.70	41.04	41.04	-		23.01			
HT40	MCS0	2	46	5230	36.70	36.70	41.22	40.86	-		23.01			
VHT80	MCS0	2	42	5210	75.72	75.72	84.16	82.88	-		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	0.29	19.18	20.23		21.00	21.00	4.90	4.40		Pass
11a	6Mbps	1	44	5220	0.32	0.29	17.77	18.22		21.00	21.00	4.90	4.40		Pass
11a	6Mbps	1	48	5240	0.32	0.29	19.10	20.68		21.00	21.00	4.90	4.40		Pass
HT20	MCS0	1	36	5180	0.31	0.34	20.34	20.35		21.00	21.00	4.90	4.40		Pass
HT20	MCS0	1	44	5220	0.31	0.34	18.39	18.64		21.00	21.00	4.90	4.40		Pass
HT20	MCS0	1	48	5240	0.31	0.34	19.55	20.72		21.00	21.00	4.90	4.40		Pass
HT40	MCS0	1	38	5190	0.67	0.61	16.94	19.12		21.00	21.00	4.90	4.40		Pass
HT40	MCS0	1	46	5230	0.67	0.61	19.90	20.87		21.00	21.00	4.90	4.40		Pass
VHT20	MCS0	1	36	5180	0.31	0.31	20.28	20.25		21.00	21.00	4.90	4.40		Pass
VHT20	MCS0	1	44	5220	0.31	0.31	18.31	18.58		21.00	21.00	4.90	4.40		Pass
VHT20	MCS0	1	48	5240	0.31	0.31	19.48	20.65		21.00	21.00	4.90	4.40		Pass
VHT40	MCS0	1	38	5190	0.67	0.67	16.90	19.08		21.00	21.00	4.90	4.40		Pass
VHT40	MCS0	1	46	5230	0.67	0.67	19.87	20.68		21.00	21.00	4.90	4.40		Pass
VHT80	MCS0	1	42	5210	1.17	1.17	14.83	16.84		21.00	21.00	4.90	4.40		Pass
11a	6Mbps	2	36	5180	0.29	0.29	15.78	15.15	18.49	21.00		4.90			Pass
11a	6Mbps	2	44	5220	0.29	0.29	13.67	13.11	16.41	21.00		4.90			Pass
11a	6Mbps	2	48	5240	0.29	0.29	15.60	15.03	18.34	21.00		4.90			Pass
HT20	MCS0	2	36	5180	0.31	0.31	16.81	16.21	19.53	21.00		4.90			Pass
HT20	MCS0	2	44	5220	0.31	0.31	14.78	14.02	17.43	21.00		4.90			Pass
HT20	MCS0	2	48	5240	0.31	0.31	15.68	15.10	18.41	21.00		4.90			Pass
HT40	MCS0	2	38	5190	0.67	0.60	15.60	14.72	18.19	21.00		4.90			Pass
HT40	MCS0	2	46	5230	0.67	0.60	17.66	16.61	20.18	21.00		4.90			Pass
VHT20	MCS0	2	36	5180	0.31	0.34	16.87	16.11	19.52	21.00		4.90			Pass
VHT20	MCS0	2	44	5220	0.31	0.34	14.71	14.08	17.42	21.00		4.90			Pass
VHT20	MCS0	2	48	5240	0.31	0.34	15.81	14.93	18.40	21.00		4.90			Pass
VHT40	MCS0	2	38	5190	0.66	0.67	15.39	14.91	18.17	21.00		4.90			Pass
VHT40	MCS0	2	46	5230	0.66	0.67	17.55	16.68	20.15	21.00		4.90			Pass
VHT80	MCS0	2	42	5210	1.11	1.17	16.63	15.94	19.31	21.00		4.90			Pass

TEST RESULTS DATA
Power Spectral Density

FCC Band I															
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Duty Factor (dB)		Average Power Density (dBm/MHz)			Average PSD Limit (dBm/MHz)		DG (dBi)			Pass /Fail
					Ant 1	Ant 2	Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2		
11a	6Mbps	1	36	5180	0.32	0.29	7.20	8.31		11.00	11.00	4.90	4.40		Pass
11a	6Mbps	1	44	5220	0.32	0.29	6.11	6.62		11.00	11.00	4.90	4.40		Pass
11a	6Mbps	1	48	5240	0.32	0.29	7.32	8.98		11.00	11.00	4.90	4.40		Pass
HT20	MCS0	1	36	5180	0.31	0.34	7.79	8.08		11.00	11.00	4.90	4.40		Pass
HT20	MCS0	1	44	5220	0.31	0.34	6.08	6.96		11.00	11.00	4.90	4.40		Pass
HT20	MCS0	1	48	5240	0.31	0.34	7.00	8.88		11.00	11.00	4.90	4.40		Pass
HT40	MCS0	1	38	5190	0.67	0.61	1.92	4.33		11.00	11.00	4.90	4.40		Pass
HT40	MCS0	1	46	5230	0.67	0.61	4.70	6.24		11.00	11.00	4.90	4.40		Pass
VHT80	MCS0	1	42	5210	1.17	1.17	-2.65	-0.86		11.00	11.00	4.90	4.40		Pass
11a	6Mbps	2	36	5180	0.29	0.29			6.53	9.34		7.66			Pass
11a	6Mbps	2	44	5220	0.29	0.29			4.90	9.34		7.66			Pass
11a	6Mbps	2	48	5240	0.29	0.29			6.85	9.34		7.66			Pass
HT20	MCS0	2	36	5180	0.31	0.31			6.96	9.34		7.66			Pass
HT20	MCS0	2	44	5220	0.31	0.31			5.04	9.34		7.66			Pass
HT20	MCS0	2	48	5240	0.31	0.31			6.21	9.34		7.66			Pass
HT40	MCS0	2	38	5190	0.67	0.60			2.83	9.34		7.66			Pass
HT40	MCS0	2	46	5230	0.67	0.60			5.56	9.34		7.66			Pass
VHT80	MCS0	2	42	5210	1.11	1.17			1.49	9.34		7.66			Pass

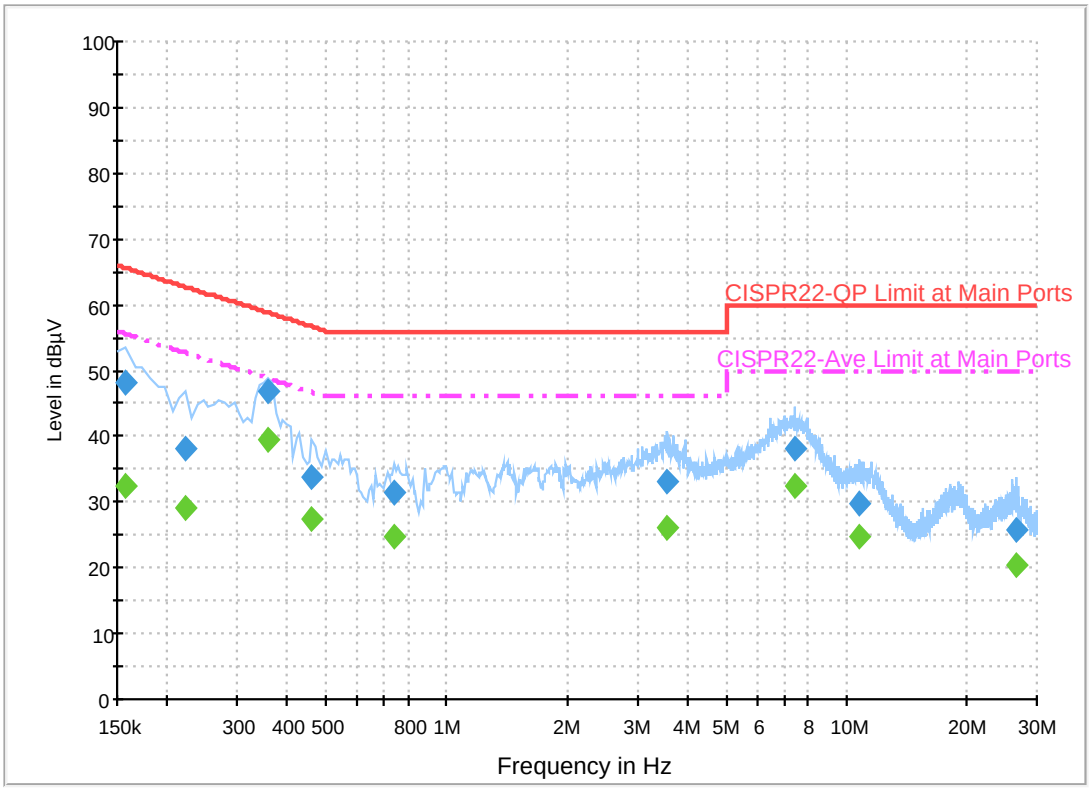
Appendix B. AC Conducted Emission Test Results

Test Engineer :	Shareef Yu	**Temperature :**	21~25℃
		Relative Humidity :	51~55%

EUT Information

Report NO :	741112-01
Test Mode :	Mode 1
Test Voltage :	120Vac/60Hz
Phase :	Line

ENV216 Auto Test-L



Final Result 1

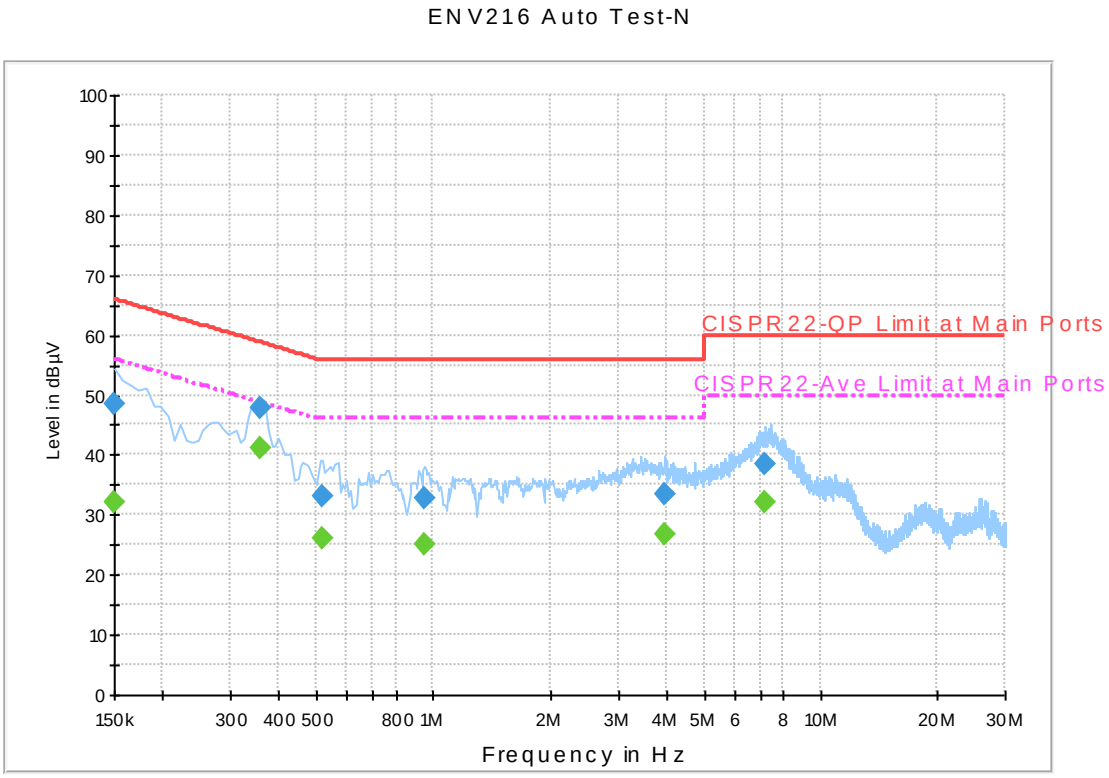
Frequency (MHz)	QuasiPeak (dBµV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.158000	48.0	Off	L1	19.5	17.6	65.6
0.222000	38.2	Off	L1	19.5	24.5	62.7
0.358000	46.8	Off	L1	19.5	12.0	58.8
0.462000	33.7	Off	L1	19.5	23.0	56.7
0.742000	31.4	Off	L1	19.5	24.6	56.0
3.558000	33.1	Off	L1	19.5	22.9	56.0
7.446000	38.3	Off	L1	19.6	21.7	60.0
10.806000	29.8	Off	L1	19.7	30.2	60.0
26.582000	25.6	Off	L1	19.8	34.4	60.0

Final Result 2

Frequency (MHz)	Average (dBµV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.158000	32.4	Off	L1	19.5	23.2	55.6
0.222000	29.0	Off	L1	19.5	23.7	52.7
0.358000	39.4	Off	L1	19.5	9.4	48.8
0.462000	27.4	Off	L1	19.5	19.3	46.7
0.742000	24.6	Off	L1	19.5	21.4	46.0
3.558000	26.2	Off	L1	19.5	19.8	46.0
7.446000	32.6	Off	L1	19.6	17.4	50.0
10.806000	24.6	Off	L1	19.7	25.4	50.0
26.582000	20.4	Off	L1	19.8	29.6	50.0

EUT Information

Report NO :	741112-01
Test Mode :	Mode 1
Test Voltage :	120Vac/60Hz
Phase :	Neutral



Final Result 1

Frequency (MHz)	QuasiPeak (dBµV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.150000	48.5	Off	N	19.5	17.5	66.0
0.358000	47.7	Off	N	19.5	11.1	58.8
0.518000	33.2	Off	N	19.5	22.8	56.0
0.950000	32.7	Off	N	19.5	23.3	56.0
3.950000	33.4	Off	N	19.6	22.6	56.0
7.230000	38.3	Off	N	19.6	21.7	60.0

Final Result 2

Frequency (MHz)	Average (dBµV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.150000	32.1	Off	N	19.5	23.9	56.0
0.358000	41.1	Off	N	19.5	7.7	48.8
0.518000	26.2	Off	N	19.5	19.8	46.0
0.950000	24.9	Off	N	19.5	21.1	46.0
3.950000	26.7	Off	N	19.6	19.3	46.0
7.230000	32.0	Off	N	19.6	18.0	50.0

Appendix C. Radiated Spurious Emission

Test Engineer :	Alex Jheng , Bill Chang , and Wilson Wu	Temperature :	24.7~25.2°C
		Relative Humidity :	49~53%

Band 1 - 5150~5250MHz

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		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11a CH 36 5180MHz		5099.32	59.32	-14.68	74	49.45	31.92	7.32	29.37	100	127	P	H
		5098.28	52.64	-1.36	54	42.77	31.92	7.32	29.37	100	127	A	H
	*	5180	114.76	-	-	104.76	32.02	7.37	29.39	100	127	P	H
	*	5180	107.49	-	-	97.49	32.02	7.37	29.39	100	127	A	H
		5391.96	61.1	-12.9	74	50.78	32.26	7.48	29.42	100	127	P	H
		5396.72	53.44	-0.56	54	43.09	32.28	7.49	29.42	100	127	A	H
		5102.7	54.91	-19.09	74	45.04	31.92	7.32	29.37	102	253	P	V
		5100.88	46.97	-7.03	54	37.1	31.92	7.32	29.37	102	253	A	V
	*	5180	108.59	-	-	98.59	32.02	7.37	29.39	102	253	P	V
	*	5180	101.14	-	-	91.14	32.02	7.37	29.39	102	253	A	V
		5399.8	55.97	-18.03	74	45.62	32.28	7.49	29.42	102	253	P	V
		5396.44	47.6	-6.4	54	37.25	32.28	7.49	29.42	102	253	A	V
802.11a CH 44 5220MHz		5140.92	60.18	-13.82	74	50.24	31.98	7.34	29.38	100	127	P	H
		5140.92	53.21	-0.79	54	43.27	31.98	7.34	29.38	100	127	A	H
	*	5220	113.16	-	-	103.1	32.06	7.39	29.39	100	127	P	H
	*	5220	106.04	-	-	95.98	32.06	7.39	29.39	100	127	A	H
		5373.76	60.02	-13.98	74	49.73	32.24	7.47	29.42	100	127	P	H
		5378.52	52.42	-1.58	54	42.1	32.26	7.48	29.42	100	127	A	H
		5132.86	53.79	-20.21	74	43.87	31.96	7.34	29.38	100	260	P	V
		5138.84	46.71	-7.29	54	36.79	31.96	7.34	29.38	100	260	A	V
	*	5220	107.58	-	-	97.52	32.06	7.39	29.39	100	260	P	V
	*	5220	100.09	-	-	90.03	32.06	7.39	29.39	100	260	A	V
		5440.12	54.42	-19.58	74	44	32.32	7.52	29.42	100	260	P	V
		5378.52	47.48	-6.52	54	37.16	32.26	7.48	29.42	100	260	A	V

802.11a CH 48 5240MHz		5022.62	53.95	-20.05	74	44.19	31.84	7.28	29.36	100	127	P	H
		5086.32	46.31	-7.69	54	36.47	31.9	7.31	29.37	100	127	A	H
	*	5240	115.42	-	-	105.33	32.08	7.4	29.39	100	127	P	H
	*	5240	108.13	-	-	98.04	32.08	7.4	29.39	100	127	A	H
		5407.36	60.64	-13.36	74	50.29	32.28	7.49	29.42	100	127	P	H
		5398.96	53.21	-0.79	54	42.86	32.28	7.49	29.42	100	127	A	H
		5149.5	51.13	-22.87	74	41.18	31.98	7.35	29.38	100	251	P	V
		5080.86	43.28	-10.72	54	33.44	31.9	7.31	29.37	100	251	A	V
	*	5240	108.96	-	-	98.87	32.08	7.4	29.39	100	251	P	V
	*	5240	101.58	-	-	91.49	32.08	7.4	29.39	100	251	A	V
		5401.2	56.22	-17.78	74	45.87	32.28	7.49	29.42	100	251	P	V
		5398.4	48.17	-5.83	54	37.82	32.28	7.49	29.42	100	251	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 1 5150~5250MHz

WIFI 802.11a (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 36 5180MHz	-	1498	62.33	-	-	64.45	24.7	3.81	30.63	396	305	P	H
	-	4486	56.66	-	-	48.3	31.05	6.76	29.45	346	118	P	H
		5614	58.52	-9.68	68.2	47.81	32.5	7.7	29.49	100	129	P	H
		10360	46.14	-22.06	68.2	52.59	39.29	10.75	57.03	100	0	P	H
		15540	45.84	-28.16	74	50.25	38.31	13	56.48	100	0	P	H
	-	1498	60.85	-	-	62.97	24.7	3.81	30.63	351	78	P	V
	-	4498	58.12	-	-	49.72	31.1	6.75	29.45	339	235	P	V
		5614	55.56	-12.64	68.2	44.85	32.5	7.7	29.49	113	262	P	V
		10360	45.88	-22.32	68.2	52.33	39.29	10.75	57.03	100	0	P	V
		15540	46.02	-27.98	74	50.43	38.31	13	56.48	100	0	P	V
802.11a CH 44 5220MHz	-	1498	63.79	-	-	65.91	24.7	3.81	30.63	396	305	P	H
	-	4486	56.23	-	-	47.87	31.05	6.76	29.45	398	115	P	H
		5656	57.07	-11.13	68.2	46.3	32.56	7.73	29.52	100	127	P	H
		10440	46	-22.2	68.2	52.28	39.39	10.8	57.01	100	0	P	H
		15660	45.17	-28.83	74	49.76	38	13.07	56.41	100	0	P	H
	-	1498	61.89	-	-	64.01	24.7	3.81	30.63	351	78	P	V
	-	4486	57.88	-	-	49.52	31.05	6.76	29.45	320	214	P	V
		10440	45.94	-22.26	68.2	52.22	39.39	10.8	57.01	100	0	P	V
		15660	45.3	-28.7	74	49.89	38	13.07	56.41	100	0	P	V
802.11a CH 48 5240MHz	-	1498	63.63	-	-	65.75	24.7	3.81	30.63	396	305	P	H
	-	4486	56.12	-	-	47.76	31.05	6.76	29.45	378	112	P	H
		10480	47.28	-20.92	68.2	53.44	39.47	10.83	57	100	0	P	H
		15720	45.1	-28.9	74	49.81	37.82	13.1	56.37	100	0	P	H
	-	1498	61.55	-	-	63.67	24.7	3.81	30.63	351	78	P	V
	-	4496	58	-	-	49.6	31.1	6.75	29.45	100	251	P	V
		10480	48.9	-19.3	68.2	55.06	39.47	10.83	57	100	0	P	V
		15720	46.6	-27.4	74	51.31	37.82	13.1	56.37	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line. 3. Note "-" is unintentional radiator, the single complies with ANSI C63.4 requirement can be ignored.												

Band 1 5150~5250MHz

WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		5098.02	60.93	-13.07	74	51.06	31.92	7.32	29.37	100	128	P	H
		5101.14	53.27	-0.73	54	43.4	31.92	7.32	29.37	100	128	A	H
	*	5180	116.14	-	-	106.14	32.02	7.37	29.39	100	128	P	H
	*	5180	108.37	-	-	98.37	32.02	7.37	29.39	100	128	A	H
802.11n		5390.56	59.59	-14.41	74	49.27	32.26	7.48	29.42	100	128	P	H
HT20		5397.56	52.84	-1.16	54	42.49	32.28	7.49	29.42	100	128	A	H
CH 36		5107.38	53.39	-20.61	74	43.49	31.94	7.33	29.37	101	257	P	V
5180MHz		5101.14	47.59	-6.41	54	37.72	31.92	7.32	29.37	101	257	A	V
	*	5180	109.16	-	-	99.16	32.02	7.37	29.39	101	257	P	V
	*	5180	101.99	-	-	91.99	32.02	7.37	29.39	101	257	A	V
		5398.68	57.2	-16.8	74	46.85	32.28	7.49	29.42	101	257	P	V
		5396.72	48.85	-5.15	54	38.5	32.28	7.49	29.42	101	257	A	V
		5135.46	59.76	-14.24	74	49.84	31.96	7.34	29.38	100	126	P	H
		5138.06	53.41	-0.59	54	43.49	31.96	7.34	29.38	100	126	A	H
	*	5220	114.21	-	-	104.15	32.06	7.39	29.39	100	126	P	H
	*	5220	106.42	-	-	96.36	32.06	7.39	29.39	100	126	A	H
802.11n		5371.8	59.88	-14.12	74	49.58	32.24	7.47	29.41	100	126	P	H
HT20		5378.52	53.14	-0.86	54	42.82	32.26	7.48	29.42	100	126	A	H
CH 44		5133.9	54.51	-19.49	74	44.59	31.96	7.34	29.38	100	260	P	V
5220MHz		5141.44	47.04	-6.96	54	37.1	31.98	7.34	29.38	100	260	A	V
	*	5220	107.7	-	-	97.64	32.06	7.39	29.39	100	260	P	V
	*	5220	101.77	-	-	91.71	32.06	7.39	29.39	100	260	A	V
		5445.72	55.24	-18.76	74	44.8	32.34	7.52	29.42	100	260	P	V
		5377.68	47.75	-6.25	54	37.43	32.26	7.48	29.42	100	260	A	V

		5023.4	54.04	-19.96	74	44.28	31.84	7.28	29.36	100	127	P	H
		5081.9	46.13	-7.87	54	36.29	31.9	7.31	29.37	100	127	A	H
	*	5240	115.33	-	-	105.24	32.08	7.4	29.39	100	127	P	H
	*	5240	107.98	-	-	97.89	32.08	7.4	29.39	100	127	A	H
802.11n		5398.96	61.5	-12.5	74	51.15	32.28	7.49	29.42	100	127	P	H
HT20		5398.96	53.19	-0.81	54	42.84	32.28	7.49	29.42	100	127	A	H
CH 48		5082.16	51.98	-22.02	74	42.14	31.9	7.31	29.37	100	253	P	V
5240MHz		5021.84	43.27	-10.73	54	33.51	31.84	7.28	29.36	100	253	A	V
	*	5240	108.72	-	-	98.63	32.08	7.4	29.39	100	253	P	V
	*	5240	101.51	-	-	91.42	32.08	7.4	29.39	100	253	A	V
		5403.16	54.93	-19.07	74	44.58	32.28	7.49	29.42	100	253	P	V
		5398.12	47.96	-6.04	54	37.61	32.28	7.49	29.42	100	253	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 1 5150~5250MHz

WIFI 802.11n HT20 (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 36 5180MHz	-	1498	63.13	-	-	65.25	24.7	3.81	30.63	396	305	P	H
	-	4486	55.65	-	-	47.29	31.05	6.76	29.45	355	113	P	H
		5614	57.49	-10.71	68.2	46.78	32.5	7.7	29.49	100	132	P	H
		10360	46.3	-21.9	68.2	52.75	39.29	10.75	57.03	100	0	P	H
		15540	46.1	-27.9	74	50.51	38.31	13	56.48	100	0	P	H
	-	1498	60.82	-	-	62.94	24.7	3.81	30.63	351	78	P	V
	-	4486	58.24	-	-	49.88	31.05	6.76	29.45	339	235	P	V
		5614	55.4	-12.8	68.2	44.69	32.5	7.7	29.49	112	262	P	V
		10360	45.07	-23.13	68.2	51.52	39.29	10.75	57.03	100	0	P	V
		15540	45.28	-28.72	74	49.69	38.31	13	56.48	100	0	P	V
802.11n HT20 CH 44 5220MHz	-	1498	63.74	-	-	65.86	24.7	3.81	30.63	396	305	P	H
	-	4486	56.16	-	-	47.8	31.05	6.76	29.45	393	115	P	H
		5656	57.36	-10.84	68.2	46.59	32.56	7.73	29.52	100	135	P	H
		10440	46.65	-21.55	68.2	52.93	39.39	10.8	57.01	100	0	P	H
		15660	45.49	-28.51	74	50.08	38	13.07	56.41	100	0	P	H
	-	1498	60.83	-	-	62.95	24.7	3.81	30.63	351	78	P	V
	-	4486	57.87	-	-	49.51	31.05	6.76	29.45	339	232	P	V
		10440	47.25	-20.95	68.2	53.53	39.39	10.8	57.01	100	0	P	V
		15660	44.88	-29.12	74	49.47	38	13.07	56.41	100	0	P	V
802.11n HT20 CH 48 5240MHz	-	1498	63.29	-	-	65.41	24.7	3.81	30.63	396	305	P	H
	-	4486	55.79	-	-	47.43	31.05	6.76	29.45	394	115	P	H
		10480	47.26	-20.94	68.2	53.42	39.47	10.83	57	100	0	P	H
		15720	45.85	-28.15	74	50.56	37.82	13.1	56.37	100	0	P	H
	-	1498	60.7	-	-	62.82	24.7	3.81	30.63	351	78	P	V
	-	4486	57	-	-	48.64	31.05	6.76	29.45	110	335	P	V
		10480	48.23	-19.97	68.2	54.39	39.47	10.83	57	100	0	P	V
		15720	45.96	-28.04	74	50.67	37.82	13.1	56.37	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line. 3. Note "-" is unintentional radiator, the single complies with ANSI C63.4 requirement can be ignored.												

Band 1 5150~5250MHz

WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	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		5150	60.95	-13.05	74	51	31.98	7.35	29.38	100	129	P	H
		5150	52.98	-1.02	54	43.03	31.98	7.35	29.38	100	129	A	H
	*	5190	109.31	-	-	99.31	32.02	7.37	29.39	100	129	P	H
	*	5190	102.28	-	-	92.28	32.02	7.37	29.39	100	129	A	H
		5355.28	60.01	-13.99	74	49.74	32.22	7.46	29.41	100	129	P	H
		5354.16	52.8	-1.2	54	42.53	32.22	7.46	29.41	100	129	A	H
		5148.72	55.42	-18.58	74	45.47	31.98	7.35	29.38	102	259	P	V
		5150	46.4	-7.6	54	36.45	31.98	7.35	29.38	102	259	A	V
	*	5190	103.62	-	-	93.62	32.02	7.37	29.39	102	259	P	V
	*	5190	96.58	-	-	86.58	32.02	7.37	29.39	102	259	A	V
		5356.12	54.79	-19.21	74	44.52	32.22	7.46	29.41	102	259	P	V
		5352.48	47.92	-6.08	54	37.65	32.22	7.46	29.41	102	259	A	V
802.11n HT40 CH 46 5230MHz		5144.82	58.11	-15.89	74	48.16	31.98	7.35	29.38	100	127	P	H
		5145.6	52.43	-1.57	54	42.48	31.98	7.35	29.38	100	127	A	H
	*	5230	112.81	-	-	102.73	32.08	7.39	29.39	100	127	P	H
	*	5230	105.82	-	-	95.74	32.08	7.39	29.39	100	127	A	H
		5386.36	60.12	-13.88	74	49.8	32.26	7.48	29.42	100	127	P	H
		5372.64	52.67	-1.33	54	42.37	32.24	7.47	29.41	100	127	A	H
		5146.12	54.16	-19.84	74	44.21	31.98	7.35	29.38	106	253	P	V
		5142.22	46.78	-7.22	54	36.84	31.98	7.34	29.38	106	253	A	V
	*	5230	107.02	-	-	96.94	32.08	7.39	29.39	106	253	P	V
	*	5230	99.69	-	-	89.61	32.08	7.39	29.39	106	253	A	V
		5391.12	54.33	-19.67	74	44.01	32.26	7.48	29.42	106	253	P	V
		5386.36	47.83	-6.17	54	37.51	32.26	7.48	29.42	106	253	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 1 5150~5250MHz

WIFI 802.11n HT40 (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
	-	1498	62.81	-	-	64.93	24.7	3.81	30.63	396	305	P	H
802.11n		10380	46.46	-21.74	68.2	52.87	39.31	10.76	57.02	100	0	P	H
HT40		15570	46	-28	74	50.47	38.22	13.02	56.46	100	0	P	H
CH 38	-	1498	60.97	-	-	63.09	24.7	3.81	30.63	351	78	P	V
5190MHz		10380	47.12	-21.08	68.2	53.53	39.31	10.76	57.02	100	0	P	V
		15570	45.64	-28.36	74	50.11	38.22	13.02	56.46	100	0	P	V
	-	1498	63.45	-	-	65.57	24.7	3.81	30.63	396	305	P	H
	-	4486	55.72	-	-	47.36	31.05	6.76	29.45	346	117	P	H
802.11n		10460	46.92	-21.28	68.2	53.16	39.42	10.81	57.01	100	0	P	H
HT40		15690	45.58	-28.42	74	50.24	37.91	13.08	56.39	100	0	P	H
CH 46	-	1498	61.9	-	-	64.02	24.7	3.81	30.63	351	78	P	V
5230MHz	-	4486	57.64	-	-	49.28	31.05	6.76	29.45	339	235	P	V
		10460	48.09	-20.11	68.2	54.33	39.42	10.81	57.01	100	0	P	V
		15690	45.12	-28.88	74	49.78	37.91	13.08	56.39	100	0	P	V

Remark

1. No other spurious found.
2. All results are PASS against Peak and Average limit line.
3. Note "-" is unintentional radiator, the single complies with ANSI C63.4 requirement can be ignored.

Band 1 5150~5250MHz

WIFI 802.11ac VHT80 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	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		5150	60.76	-13.24	74	50.81	31.98	7.35	29.38	100	125	P	H
		5141.7	53.18	-0.82	54	43.24	31.98	7.34	29.38	100	125	A	H
	*	5210	105.49	-	-	95.44	32.06	7.38	29.39	100	125	P	H
	*	5210	97.99	-	-	87.94	32.06	7.38	29.39	100	125	A	H
		5354.16	55.69	-18.31	74	45.42	32.22	7.46	29.41	100	125	P	H
		5361.44	47.73	-6.27	54	37.43	32.24	7.47	29.41	100	125	A	H
		5143.52	55.61	-18.39	74	45.66	31.98	7.35	29.38	100	247	P	V
		5147.42	46.81	-7.19	54	36.86	31.98	7.35	29.38	100	247	A	V
	*	5210	98.34	-	-	88.29	32.06	7.38	29.39	100	247	P	V
	*	5210	91.91	-	-	81.86	32.06	7.38	29.39	100	247	A	V
		5356.12	50.81	-23.19	74	40.54	32.22	7.46	29.41	100	247	P	V
		5457.76	44.14	-9.86	54	33.69	32.34	7.54	29.43	100	247	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 1 5150~5250MHz

WIFI 802.11ac VHT80 (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
	-	1498	62.99	-	-	65.11	24.7	3.81	30.63	396	305	P	H
802.11ac		10420	46.18	-22.02	68.2	52.5	39.37	10.79	57.02	100	0	P	H
VHT80		15630	44.37	-29.63	74	48.95	38.04	13.05	56.42	100	0	P	H
CH 42	-	1498	62.3	-	-	64.42	24.7	3.81	30.63	351	78	P	V
5210MHz		10420	46.06	-22.14	68.2	52.38	39.37	10.79	57.02	100	0	P	V
		15630	44.5	-29.5	74	49.08	38.04	13.05	56.42	100	0	P	V

Remark

1. No other spurious found.
2. All results are PASS against Peak and Average limit line.
3. Note "-" is unintentional radiator, the single complies with ANSI C63.4 requirement can be ignored.

Emission below 1GHz

WIFI 802.11a (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		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11a LF		84.27	33.28	-6.72	40	50.43	14.16	0.95	32.3	-	-	P	H
		241.14	40.04	-5.96	46	53.04	17.54	1.59	32.21	-	-	P	H
		300	39.76	-6.24	46	50.81	19.3	1.72	32.13	-	-	P	H
		318.9	37.6	-8.4	46	48.42	19.48	1.76	32.13	-	-	P	H
		599.6	42.45	-3.55	46	46.53	25.61	2.42	32.21	100	0	P	H
		895.7	39.56	-6.44	46	39.02	29.02	2.94	31.53	-	-	P	H
		30.54	35.78	-4.22	40	43.59	23.96	0.59	32.34	100	0	P	V
		241.14	38.58	-7.42	46	51.58	17.54	1.59	32.21	-	-	P	V
		299.19	35.78	-10.22	46	46.83	19.3	1.72	32.13	-	-	P	V
		320.3	40.92	-5.08	46	51.73	19.49	1.76	32.13	-	-	P	V
		373.5	36.41	-9.59	46	45.53	21.04	1.89	32.14	-	-	P	V
		899.9	36.13	-9.87	46	35.56	29.03	2.94	31.51	-	-	P	V
Remark	1. No other spurious found. 2. All results are PASS against limit line.												

Band 1 - 5150~5250MHz

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.	
2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11a CH 36 5180MHz		5099.84	58.29	-15.71	74	48.42	31.92	7.32	29.37	261	102	P	H
		5100.88	52.24	-1.76	54	42.37	31.92	7.32	29.37	261	102	A	H
	*	5180	113.71	-	-	103.71	32.02	7.37	29.39	261	102	P	H
	*	5180	106.61	-	-	96.61	32.02	7.37	29.39	261	102	A	H
		5416.88	57.34	-16.66	74	46.95	32.3	7.51	29.42	261	102	P	H
		5418.56	50.34	-3.66	54	39.95	32.3	7.51	29.42	261	102	A	H
		5097.76	60.42	-13.58	74	50.55	31.92	7.32	29.37	100	196	P	V
		5098.8	53.49	-0.51	54	43.62	31.92	7.32	29.37	100	196	A	V
	*	5180	113.43	45.23	68.2	103.43	32.02	7.37	29.39	100	196	P	V
	*	5180	105.67	51.67	54	95.67	32.02	7.37	29.39	100	196	A	V
		5423.32	55.49	-18.51	74	45.1	32.3	7.51	29.42	100	196	P	V
		5418.56	49.53	-4.47	54	39.14	32.3	7.51	29.42	100	196	A	V
802.11a CH 44 5220MHz		5138.84	58.97	-15.03	74	49.05	31.96	7.34	29.38	306	102	P	H
		5138.84	51.59	-2.41	54	41.67	31.96	7.34	29.38	306	102	A	H
	*	5220	111.49	-	-	101.43	32.06	7.39	29.39	306	102	P	H
	*	5220	104.25	-	-	94.19	32.06	7.39	29.39	306	102	A	H
		5375.72	58.32	-15.68	74	48.03	32.24	7.47	29.42	306	102	P	H
		5379.08	51.19	-2.81	54	40.87	32.26	7.48	29.42	306	102	A	H
		5140.92	59.71	-14.29	74	49.77	31.98	7.34	29.38	101	198	P	V
		5138.84	53.4	-0.6	54	43.48	31.96	7.34	29.38	101	198	A	V
	*	5220	111.82	-	-	101.76	32.06	7.39	29.39	101	198	P	V
	*	5220	104.65	-	-	94.59	32.06	7.39	29.39	101	198	A	V
		5383.28	57.95	-16.05	74	47.63	32.26	7.48	29.42	101	198	P	V
		5377.68	50.26	-3.74	54	39.94	32.26	7.48	29.42	101	198	A	V

802.11a CH 48 5240MHz		5081.38	55.15	-18.85	74	45.31	31.9	7.31	29.37	307	100	P	H
		5079.04	47.83	-6.17	54	37.99	31.9	7.31	29.37	307	100	A	H
	*	5240	114.13	-	-	104.04	32.08	7.4	29.39	307	100	P	H
	*	5240	107.16	-	-	97.07	32.08	7.4	29.39	307	100	A	H
		5393.64	60.74	-13.26	74	50.42	32.26	7.48	29.42	307	100	P	H
		5400.92	53.45	-0.55	54	43.1	32.28	7.49	29.42	307	100	A	H
		5083.98	55.01	-18.99	74	45.17	31.9	7.31	29.37	102	199	P	V
		5078.52	48.47	-5.53	54	38.63	31.9	7.31	29.37	102	199	A	V
	*	5240	115.17	-	-	105.08	32.08	7.4	29.39	102	199	P	V
	*	5240	107.99	-	-	97.9	32.08	7.4	29.39	102	199	A	V
		5407.36	59.12	-14.88	74	48.77	32.28	7.49	29.42	102	199	P	V
		5398.4	52.75	-1.25	54	42.4	32.28	7.49	29.42	102	199	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. 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	-	1498	61.66	-	-	63.78	24.7	3.81	30.63	396	305	P	H
		4965	57.94	-16.06	74	48.36	31.75	7.2	29.37	110	97	P	H
		4965	46.71	-7.29	54	37.13	31.75	7.2	29.37	110	97	A	H
		5610	64.92	-3.28	68.2	54.21	32.5	7.7	29.49	393	100	P	H
		10360	46.31	-21.89	68.2	52.76	39.29	10.75	57.03	100	0	P	H
		15540	45.69	-28.31	74	50.1	38.31	13	56.48	100	0	P	H
	-	1498	61.34	-	-	63.46	24.7	3.81	30.63	351	78	P	V
		4965	58.99	-15.01	74	49.41	31.75	7.2	29.37	102	199	P	V
		4965	48.71	-5.29	54	39.13	31.75	7.2	29.37	102	199	A	V
		5610	66.02	-2.18	68.2	55.31	32.5	7.7	29.49	100	204	P	V
		10360	45.55	-22.65	68.2	52	39.29	10.75	57.03	100	0	P	V
		15540	46.12	-27.88	74	50.53	38.31	13	56.48	100	0	P	V
802.11a CH 44 5220MHz	-	1498	62.29	-	-	64.41	24.7	3.81	30.63	396	305	P	H
		4784	53.54	-20.46	74	44.58	31.51	6.85	29.4	100	92	P	H
		4784	45.27	-8.73	54	36.31	31.51	6.85	29.4	100	92	A	H
		5653	63.2	-5	68.2	52.42	32.56	7.73	29.51	100	93	P	H
		10440	46	-22.2	68.2	52.28	39.39	10.8	57.01	100	0	P	H
		15660	45.28	-28.72	74	49.87	38	13.07	56.41	100	0	P	H
	-	1498	61.18	-	-	63.3	24.7	3.81	30.63	351	78	P	V
		4784	52.49	-21.51	74	43.53	31.51	6.85	29.4	100	195	P	V
		4784	45.27	-8.73	54	36.31	31.51	6.85	29.4	100	195	A	V
		5653	61.9	-6.3	68.2	51.12	32.56	7.73	29.51	100	207	P	V
		10440	46.38	-21.82	68.2	52.66	39.39	10.8	57.01	100	0	P	V
		15660	44.56	-29.44	74	49.15	38	13.07	56.41	100	0	P	V

802.11a CH 48 5240MHz	-	1498	62.44	-	-	64.56	24.7	3.81	30.63	396	305	P	H
		4803	57.34	-16.66	74	48.33	31.53	6.88	29.4	106	97	P	H
		4803	48.28	-5.72	54	39.27	31.53	6.88	29.4	106	97	A	H
		5680	62.76	-5.44	68.2	51.97	32.57	7.75	29.53	400	102	P	H
		10480	46.91	-21.29	68.2	53.07	39.47	10.83	57	100	0	P	H
		15720	46.57	-27.43	74	51.28	37.82	13.1	56.37	100	0	P	H
	-	1498	62.01	-	-	64.13	24.7	3.81	30.63	351	78	P	V
		4803	57.85	-16.15	74	48.84	31.53	6.88	29.4	111	194	P	V
		4803	47.92	-6.08	54	38.91	31.53	6.88	29.4	111	194	A	V
		5680	64.44	-3.76	68.2	53.65	32.57	7.75	29.53	100	205	P	V
		10480	47.93	-20.27	68.2	54.09	39.47	10.83	57	100	0	P	V
		15720	45.65	-28.35	74	50.36	37.82	13.1	56.37	100	0	P	V

Remark

1. No other spurious found.
2. All results are PASS against Peak and Average limit line.
3. Note "-" is unintentional radiator, the single complies with ANSI C63.4 requirement can be ignored.

Band 1 5150~5250MHz

WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI Ant. 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)
		5099.06	58.89	-15.11	74	49.02	31.92	7.32	29.37	262	102	P	H
		5100.88	51.67	-2.33	54	41.8	31.92	7.32	29.37	262	102	A	H
	*	5180	113.34	-	-	103.34	32.02	7.37	29.39	262	102	P	H
	*	5180	106.04	-	-	96.04	32.02	7.37	29.39	262	102	A	H
802.11n		5412.96	58	-16	74	47.61	32.3	7.51	29.42	262	102	P	H
HT20		5419.12	49.97	-4.03	54	39.58	32.3	7.51	29.42	262	102	A	H
CH 36		5098.28	60.91	-13.09	74	51.04	31.92	7.32	29.37	100	197	P	V
5180MHz		5098.8	53.12	-0.88	54	43.25	31.92	7.32	29.37	100	197	A	V
	*	5180	114.21	-	-	104.21	32.02	7.37	29.39	100	197	P	V
	*	5180	105.64	-	-	95.64	32.02	7.37	29.39	100	197	A	V
		5418.84	57.67	-16.33	74	47.28	32.3	7.51	29.42	100	197	P	V
		5419.12	50.02	-3.98	54	39.63	32.3	7.51	29.42	100	197	A	V
		5136.76	59.15	-14.85	74	49.23	31.96	7.34	29.38	272	100	P	H
		5138.32	52.84	-1.16	54	42.92	31.96	7.34	29.38	272	100	A	H
	*	5220	112.39	-	-	102.33	32.06	7.39	29.39	272	100	P	H
	*	5220	104.61	-	-	94.55	32.06	7.39	29.39	272	100	A	H
802.11n		5380.76	58.43	-15.57	74	48.11	32.26	7.48	29.42	272	100	P	H
HT20		5378.52	50.95	-3.05	54	40.63	32.26	7.48	29.42	272	100	A	H
CH 44		5141.18	60.31	-13.69	74	50.37	31.98	7.34	29.38	103	198	P	V
5220MHz		5138.84	53.33	-0.67	54	43.41	31.96	7.34	29.38	103	198	A	V
	*	5220	112.38	-	-	102.32	32.06	7.39	29.39	103	198	P	V
	*	5220	104.93	-	-	94.87	32.06	7.39	29.39	103	198	A	V
		5383.56	58.1	-15.9	74	47.78	32.26	7.48	29.42	103	198	P	V
		5380.48	50.86	-3.14	54	40.54	32.26	7.48	29.42	103	198	A	V

		5078.78	56.6	-17.4	74	46.76	31.9	7.31	29.37	270	100	P	H
		5080.86	47.58	-6.42	54	37.74	31.9	7.31	29.37	270	100	A	H
	*	5240	114.32	-	-	104.23	32.08	7.4	29.39	270	100	P	H
	*	5240	107.08	-	-	96.99	32.08	7.4	29.39	270	100	A	H
802.11n		5407.08	60.02	-13.98	74	49.67	32.28	7.49	29.42	270	100	P	H
HT20		5401.76	52.98	-1.02	54	42.63	32.28	7.49	29.42	270	100	A	H
CH 48		5077.74	55.76	-18.24	74	45.92	31.9	7.31	29.37	100	198	P	V
5240MHz		5079.04	47.73	-6.27	54	37.89	31.9	7.31	29.37	100	198	A	V
	*	5240	115.85	-	-	105.76	32.08	7.4	29.39	100	198	P	V
	*	5240	107.43	-	-	97.34	32.08	7.4	29.39	100	198	A	V
		5402.6	59.85	-14.15	74	49.5	32.28	7.49	29.42	100	198	P	V
		5401.2	52.71	-1.29	54	42.36	32.28	7.49	29.42	100	198	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. 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)
	-	1498	61.62	-	-	63.74	24.7	3.81	30.63	396	305	P	H
		4972	62.22	-11.78	74	52.6	31.78	7.2	29.36	100	97	P	H
		4972	52.54	-1.46	54	42.92	31.78	7.2	29.36	100	97	A	H
		5610	66.88	-1.32	68.2	56.17	32.5	7.7	29.49	393	100	P	H
802.11n		10360	46.37	-21.83	68.2	52.82	39.29	10.75	57.03	100	0	P	H
HT20		15540	46.12	-27.88	74	50.53	38.31	13	56.48	100	0	P	H
CH 36	-	1498	61.09	-	-	63.21	24.7	3.81	30.63	351	78	P	V
5180MHz		4960	62.75	-11.25	74	53.21	31.75	7.16	29.37	101	197	P	V
		4960	52.88	-1.12	54	43.34	31.75	7.16	29.37	101	197	A	V
		5610	66.18	-2.02	68.2	55.47	32.5	7.7	29.49	101	204	P	V
		10360	45.72	-22.48	68.2	52.17	39.29	10.75	57.03	100	0	P	V
		15540	45.79	-28.21	74	50.2	38.31	13	56.48	100	0	P	V
	-	1498	61.75	-	-	63.87	24.7	3.81	30.63	396	305	P	H
		5655	63.66	-4.54	68.2	52.89	32.56	7.73	29.52	100	97	P	H
802.11n		10440	46.6	-21.6	68.2	52.88	39.39	10.8	57.01	100	0	P	H
HT20		15660	45.06	-28.94	74	49.65	38	13.07	56.41	100	0	P	H
CH 44	-	1498	61.77	-	-	63.89	24.7	3.81	30.63	351	78	P	V
5220MHz		5655	62.56	-5.64	68.2	51.79	32.56	7.73	29.52	100	205	P	V
		10440	47.17	-21.03	68.2	53.45	39.39	10.8	57.01	100	0	P	V
		15660	45.37	-28.63	74	49.96	38	13.07	56.41	100	0	P	V

	-	1498	61	-	-	63.12	24.7	3.81	30.63	396	305	P	H
		5676	65.18	-3.02	68.2	54.38	32.57	7.75	29.52	100	91	P	H
802.11n		10480	48	-20.2	68.2	54.16	39.47	10.83	57	100	0	P	H
HT20		15720	45.93	-28.07	74	50.64	37.82	13.1	56.37	100	0	P	H
CH 48	-	1498	61.54	-	-	63.66	24.7	3.81	30.63	351	78	P	V
5240MHz		5677	65.39	-2.81	68.2	54.59	32.57	7.75	29.52	100	203	P	V
		10480	49.07	-19.13	68.2	55.23	39.47	10.83	57	100	0	P	V
		15720	45.75	-28.25	74	50.46	37.82	13.1	56.37	100	0	P	V

Remark

1. No other spurious found.
2. All results are PASS against Peak and Average limit line.
3. Note "-" is unintentional radiator, the single complies with ANSI C63.4 requirement can be ignored.

Band 1 5150~5250MHz

WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI Ant. 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		5148.98	62.29	-11.71	74	52.34	31.98	7.35	29.38	261	101	P	H
		5149.5	52.7	-1.3	54	42.75	31.98	7.35	29.38	261	101	A	H
	*	5190	109.72	-	-	99.72	32.02	7.37	29.39	261	101	P	H
	*	5190	102.32	-	-	92.32	32.02	7.37	29.39	261	101	A	H
		5353.32	59.8	-14.2	74	49.53	32.22	7.46	29.41	261	101	P	H
		5354.16	51.84	-2.16	54	41.57	32.22	7.46	29.41	261	101	A	H
		5149.5	61.7	-12.3	74	51.75	31.98	7.35	29.38	100	199	P	V
		5150	52.72	-1.28	54	42.77	31.98	7.35	29.38	100	199	A	V
	*	5190	109.63	-	-	99.63	32.02	7.37	29.39	100	199	P	V
	*	5190	101.38	-	-	91.38	32.02	7.37	29.39	100	199	A	V
		5362.56	58.93	-15.07	74	48.63	32.24	7.47	29.41	100	199	P	V
		5363.96	51.51	-2.49	54	41.21	32.24	7.47	29.41	100	199	A	V
802.11n HT40 CH 46 5230MHz		5145.08	59.74	-14.26	74	49.79	31.98	7.35	29.38	100	100	P	H
		5145.86	53.25	-0.75	54	43.3	31.98	7.35	29.38	100	100	A	H
	*	5230	111.27	-	-	101.19	32.08	7.39	29.39	100	100	P	H
	*	5230	104.39	-	-	94.31	32.08	7.39	29.39	100	100	A	H
		5378.52	58.67	-15.33	74	48.35	32.26	7.48	29.42	100	100	P	H
		5394.2	51.08	-2.92	54	40.75	32.26	7.49	29.42	100	100	A	H
		5146.9	60.24	-13.76	74	50.29	31.98	7.35	29.38	105	199	P	V
		5145.08	52.97	-1.03	54	43.02	31.98	7.35	29.38	105	199	A	V
	*	5230	111.93	-	-	101.85	32.08	7.39	29.39	105	199	P	V
	*	5230	104.97	-	-	94.89	32.08	7.39	29.39	105	199	A	V
		5384.96	60.55	-13.45	74	50.23	32.26	7.48	29.42	105	199	P	V
		5384.68	51.78	-2.22	54	41.46	32.26	7.48	29.42	105	199	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. 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)
	-	1498	61.59	-	-	63.71	24.7	3.81	30.63	396	305	P	H
		5622	58.4	-9.8	68.2	47.67	32.52	7.7	29.49	100	92	P	H
802.11n		10380	45.66	-22.54	68.2	52.07	39.31	10.76	57.02	100	0	P	H
HT40		15570	46.45	-27.55	74	50.92	38.22	13.02	56.46	100	0	P	H
CH 38	-	1498	60.3	-	-	62.42	24.7	3.81	30.63	351	78	P	V
5190MHz		5622	57.94	-10.26	68.2	47.21	32.52	7.7	29.49	100	205	P	V
		10380	46.55	-21.65	68.2	52.96	39.31	10.76	57.02	100	0	P	V
		15570	46	-28	74	50.47	38.22	13.02	56.46	100	0	P	V
	-	1498	61.94	-	-	64.06	24.7	3.81	30.63	396	305	P	H
		4828	54.93	-19.07	74	45.84	31.56	6.92	29.39	286	94	P	H
		4828	44.46	-9.54	54	35.37	31.56	6.92	29.39	286	94	A	H
		5668	59.4	-8.8	68.2	48.6	32.57	7.75	29.52	400	100	P	H
802.11n		10460	46.46	-21.74	68.2	52.7	39.42	10.81	57.01	100	0	P	H
HT40		15690	44.87	-29.13	74	49.53	37.91	13.08	56.39	100	0	P	H
CH 46	-	1498	62.1	-	-	64.22	24.7	3.81	30.63	351	78	P	V
5230MHz		4828	55.48	-18.52	74	46.39	31.56	6.92	29.39	100	192	P	V
		4828	44.42	-9.58	54	35.33	31.56	6.92	29.39	100	192	A	V
		5668	58.98	-9.22	68.2	48.18	32.57	7.75	29.52	106	204	P	V
		10460	48.73	-19.47	68.2	54.97	39.42	10.81	57.01	100	0	P	V
		15690	45.91	-28.09	74	50.57	37.91	13.08	56.39	100	0	P	V

Remark

1. No other spurious found.
2. All results are PASS against Peak and Average limit line.
3. Note "-" is unintentional radiator, the single complies with ANSI C63.4 requirement can be ignored.

Band 1 5150~5250MHz

WIFI 802.11ac VHT80 (Band Edge @ 3m)

WIFI Ant. 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		5149.5	64.91	-9.09	74	54.96	31.98	7.35	29.38	262	102	P	H
		5141.7	53.11	-0.89	54	43.17	31.98	7.34	29.38	262	102	A	H
	*	5210	104.31	-	-	94.26	32.06	7.38	29.39	262	102	P	H
	*	5210	97.92	-	-	87.87	32.06	7.38	29.39	262	102	A	H
		5400.92	53.35	-20.65	74	43	32.28	7.49	29.42	262	102	P	H
		5354.72	47.3	-6.7	54	37.03	32.22	7.46	29.41	262	102	A	H
		5147.94	64.01	-9.99	74	54.06	31.98	7.35	29.38	103	196	P	V
		5146.12	53.37	-0.63	54	43.42	31.98	7.35	29.38	103	196	A	V
	*	5210	104.63	-	-	94.58	32.06	7.38	29.39	103	196	P	V
	*	5210	97.85	-	-	87.8	32.06	7.38	29.39	103	196	A	V
		5359.2	52.82	-21.18	74	42.54	32.22	7.47	29.41	103	196	P	V
		5377.12	46.6	-7.4	54	36.3	32.24	7.48	29.42	103	196	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. 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)
	-	1498	61.28	-	-	63.4	24.7	3.81	30.63	262	102	P	H
	-	4492	57.26	-	-	48.9	31.05	6.76	29.45	309	120	P	H
		5788	60.69	-7.51	68.2	49.72	32.69	7.86	29.58	100	101	P	
802.11ac		10420	46.06	-22.14	68.2	52.38	39.37	10.79	57.02	100	0	P	H
VHT80		15630	43.81	-30.19	74	48.39	38.04	13.05	56.42	100	0	P	H
CH 42	-	1498	61.44	-	-	63.56	24.7	3.81	30.63	351	78	P	V
5210MHz	-	4492	56.21	-	-	47.85	31.05	6.76	29.45	100	349	P	V
		5788	59.53	-8.67	68.2	48.56	32.69	7.86	29.58	102	272	P	
		10420	46.13	-22.07	68.2	52.45	39.37	10.79	57.02	100	0	P	V
		15630	44.06	-29.94	74	48.64	38.04	13.05	56.42	100	0	P	V

Remark

1. No other spurious found.
2. All results are PASS against Peak and Average limit line.
3. Note “-” is unintentional radiator, the single complies with ANSI C63.4 requirement can be ignored.

Emission below 1GHz

WIFI 802.11a (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		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11a LF		84.27	34.5	-5.5	40	51.65	14.16	0.95	32.3			P	H
		198.48	35.53	-7.97	43.5	51.21	15.1	1.42	32.27			P	H
		240.33	41.26	-4.74	46	54.39	17.41	1.59	32.21	100	0	P	H
		318.9	39.1	-6.9	46	49.92	19.48	1.76	32.13			P	H
		599.6	39.1	-6.9	46	43.18	25.61	2.42	32.21			P	H
		895.7	40.64	-5.36	46	40.1	29.02	2.94	31.53			P	H
		30.54	34.69	-5.31	40	42.5	23.96	0.59	32.34	100	0	P	V
		241.14	39.42	-6.58	46	52.42	17.54	1.59	32.21			P	V
		299.19	37.14	-8.86	46	48.19	19.3	1.72	32.13			P	V
		318.9	39.7	-6.3	46	50.52	19.48	1.76	32.13			P	V
		597.5	39.21	-6.79	46	43.31	25.59	2.42	32.21			P	V
		895.7	37.81	-8.19	46	37.27	29.02	2.94	31.53			P	V
Remark	1. No other spurious found. 2. All results are PASS against limit line.												

Band 1 - 5150~5250MHz

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)
		5098.28	57.82	-16.18	74	47.95	31.92	7.32	29.37	100	128	P	H
		5098.8	52.98	-1.02	54	43.11	31.92	7.32	29.37	100	128	A	H
	*	5180	114.71	-	-	104.71	32.02	7.37	29.39	100	128	P	H
	*	5180	107.6	-	-	97.6	32.02	7.37	29.39	100	128	A	H
		5401.48	58.47	-15.53	74	48.12	32.28	7.49	29.42	100	128	P	H
		5396.44	51.6	-2.4	54	41.25	32.28	7.49	29.42	100	128	A	H
		5098.28	56.76	-17.24	74	46.89	31.92	7.32	29.37	100	197	P	V
		5098.54	50.7	-3.3	54	40.83	31.92	7.32	29.37	100	197	A	V
	*	5180	111.44	-	-	101.44	32.02	7.37	29.39	100	197	P	V
	*	5180	103.43	-	-	93.43	32.02	7.37	29.39	100	197	A	V
		5413.24	54.04	-19.96	74	43.65	32.3	7.51	29.42	100	197	P	V
		5419.12	47.49	-6.51	54	37.1	32.3	7.51	29.42	100	197	A	V
802.11a CH 44 5220MHz		5144.3	59.51	-14.49	74	49.56	31.98	7.35	29.38	100	128	P	H
		5139.1	53.28	-0.72	54	43.36	31.96	7.34	29.38	100	128	A	H
	*	5220	112.87	-	-	102.81	32.06	7.39	29.39	100	128	P	H
	*	5220	105.46	-	-	95.4	32.06	7.39	29.39	100	128	A	H
		5373.2	57.78	-16.22	74	47.48	32.24	7.47	29.41	100	128	P	H
		5379.08	51.75	-2.25	54	41.43	32.26	7.48	29.42	100	128	A	H
		5138.84	58.2	-15.8	74	48.28	31.96	7.34	29.38	100	199	P	V
		5138.58	50.2	-3.8	54	40.28	31.96	7.34	29.38	100	199	A	V
	*	5220	109.12	-	-	99.06	32.06	7.39	29.39	100	199	P	V
	*	5220	101.77	-	-	91.71	32.06	7.39	29.39	100	199	A	V
		5382.44	55.12	-18.88	74	44.8	32.26	7.48	29.42	100	199	P	V
		5378.8	48.14	-5.86	54	37.82	32.26	7.48	29.42	100	199	A	V

802.11a CH 48 5240MHz		5019.76	55.84	-18.16	74	46.1	31.82	7.28	29.36	100	127	P	H
		5020.02	47.72	-6.28	54	37.98	31.82	7.28	29.36	100	127	A	H
	*	5240	114.67	-	-	104.58	32.08	7.4	29.39	100	127	P	H
	*	5240	107.7	-	-	97.61	32.08	7.4	29.39	100	127	A	H
		5398.96	60.44	-13.56	74	50.09	32.28	7.49	29.42	100	127	P	H
		5398.4	53.34	-0.66	54	42.99	32.28	7.49	29.42	100	127	A	H
		5015.86	53.92	-20.08	74	44.19	31.82	7.27	29.36	100	199	P	V
		5020.28	46.39	-7.61	54	36.65	31.82	7.28	29.36	100	199	A	V
	*	5240	112.36	-	-	102.27	32.08	7.4	29.39	100	199	P	V
	*	5240	104.26	-	-	94.17	32.08	7.4	29.39	100	199	A	V
		5398.68	58.38	-15.62	74	48.03	32.28	7.49	29.42	100	199	P	V
		5398.4	50.06	-3.94	54	39.71	32.28	7.49	29.42	100	199	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	-	1498	64.09	-	-	66.21	24.7	3.81	30.63	396	305	P	H
		10360	46.27	-21.93	68.2	52.72	39.29	10.75	57.03	100	0	P	H
		15540	46.12	-27.88	74	50.53	38.31	13	56.48	100	0	P	H
	-	1498	61.48	-	-	63.6	24.7	3.81	30.63	351	78	P	V
		10360	46.23	-21.97	68.2	52.68	39.29	10.75	57.03	100	0	P	V
		15540	47.14	-26.86	74	51.55	38.31	13	56.48	100	0	P	V
802.11a CH 44 5220MHz	-	1498	64.43	-	-	66.55	24.7	3.81	30.63	396	305	P	H
		10440	46.63	-21.57	68.2	52.91	39.39	10.8	57.01	100	0	P	H
		15660	45	-29	74	49.59	38	13.07	56.41	100	0	P	H
	-	1498	61.9	-	-	64.02	24.7	3.81	30.63	351	78	P	V
		10440	46.75	-21.45	68.2	53.03	39.39	10.8	57.01	100	0	P	V
		15660	45	-29	74	49.59	38	13.07	56.41	100	0	P	V
802.11a CH 48 5240MHz	-	1498	63.84	-	-	65.96	24.7	3.81	30.63	396	305	P	H
	-	4492	58.36	-	-	50	31.05	6.76	29.45	325	113	P	H
		10480	47.52	-20.68	68.2	53.68	39.47	10.83	57	100	0	P	H
		15720	45.64	-28.36	74	50.35	37.82	13.1	56.37	100	0	P	H
	-	1498	61.92	-	-	64.04	24.7	3.81	30.63	351	78	P	V
	-	4492	58.27	-	-	49.91	31.05	6.76	29.45	318	236	P	V
		10480	47.54	-20.66	68.2	53.7	39.47	10.83	57	100	0	P	V
		15720	45.68	-28.32	74	50.39	37.82	13.1	56.37	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line. 3. Note "-" is unintentional radiator, the single complies with ANSI C63.4 requirement can be ignored.												

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)
		5096.46	58.79	-15.21	74	48.92	31.92	7.32	29.37	100	123	P	H
		5101.66	52.85	-1.15	54	42.98	31.92	7.32	29.37	100	123	A	H
	*	5180	114.81	-	-	104.81	32.02	7.37	29.39	100	123	P	H
	*	5180	106.96	-	-	96.96	32.02	7.37	29.39	100	123	A	H
802.11n		5398.4	58.5	-15.5	74	48.15	32.28	7.49	29.42	100	123	P	H
HT20		5398.12	51.84	-2.16	54	41.49	32.28	7.49	29.42	100	123	A	H
CH 36		5106.08	56.96	-17.04	74	47.07	31.94	7.32	29.37	104	191	P	V
5180MHz		5099.06	50.27	-3.73	54	40.4	31.92	7.32	29.37	104	191	A	V
	*	5180	111.68	-	-	101.68	32.02	7.37	29.39	104	191	P	V
	*	5180	103.6	-	-	93.6	32.02	7.37	29.39	104	191	A	V
		5414.08	54.57	-19.43	74	44.18	32.3	7.51	29.42	104	191	P	V
		5419.12	47.32	-6.68	54	36.93	32.3	7.51	29.42	104	191	A	V
		5141.96	59.59	-14.41	74	49.65	31.98	7.34	29.38	100	128	P	H
		5141.96	53.24	-0.76	54	43.3	31.98	7.34	29.38	100	128	A	H
	*	5220	112.69	-	-	102.63	32.06	7.39	29.39	100	128	P	H
	*	5220	105.26	-	-	95.2	32.06	7.39	29.39	100	128	A	H
802.11n		5372.08	57.94	-16.06	74	47.64	32.24	7.47	29.41	100	128	P	H
HT20		5381.6	51.98	-2.02	54	41.66	32.26	7.48	29.42	100	128	A	H
CH 44		5138.84	58.4	-15.6	74	48.48	31.96	7.34	29.38	100	198	P	V
5220MHz		5139.1	50.49	-3.51	54	40.57	31.96	7.34	29.38	100	198	A	V
	*	5220	110.05	-	-	99.99	32.06	7.39	29.39	100	198	P	V
	*	5220	101.86	-	-	91.8	32.06	7.39	29.39	100	198	A	V
		5376.84	55.91	-18.09	74	45.61	32.24	7.48	29.42	100	198	P	V
		5379.36	48.35	-5.65	54	38.03	32.26	7.48	29.42	100	198	A	V

		5019.24	53.89	-20.11	74	44.15	31.82	7.28	29.36	101	124	P	H
		5079.3	47.11	-6.89	54	37.27	31.9	7.31	29.37	101	124	A	H
	*	5240	113.13	-	-	103.04	32.08	7.4	29.39	101	124	P	H
	*	5240	106.13	-	-	96.04	32.08	7.4	29.39	101	124	A	H
802.11n		5403.44	59.43	-14.57	74	49.08	32.28	7.49	29.42	101	124	P	H
HT20		5398.68	53.09	-0.91	54	42.74	32.28	7.49	29.42	101	124	A	H
CH 48		5022.36	54.19	-19.81	74	44.43	31.84	7.28	29.36	100	199	P	V
5240MHz		5076.96	46.02	-7.98	54	36.18	31.9	7.31	29.37	100	199	A	V
	*	5240	110.1	-	-	100.01	32.08	7.4	29.39	100	199	P	V
	*	5240	103.45	-	-	93.36	32.08	7.4	29.39	100	199	A	V
		5406.8	56.3	-17.7	74	45.95	32.28	7.49	29.42	100	199	P	V
		5399.24	49.82	-4.18	54	39.47	32.28	7.49	29.42	100	199	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)
	-	1498	64.49	-	-	66.61	24.7	3.81	30.63	396	305	P	H
	-	4492	57.52	-	-	49.16	31.05	6.76	29.45	325	114	P	H
		5614	58.95	-9.25	68.2	48.24	32.5	7.7	29.49	100	117	P	H
802.11n		10360	45.79	-22.41	68.2	52.24	39.29	10.75	57.03	100	0	P	H
HT20		15540	45.66	-28.34	74	50.07	38.31	13	56.48	100	0	P	H
CH 36	-	1498	62.03	-	-	64.15	24.7	3.81	30.63	351	78	P	V
5180MHz	-	4492	55.9	-	-	47.54	31.05	6.76	29.45	104	191	P	V
		5614	56.41	-11.79	68.2	45.7	32.5	7.7	29.49	100	265	P	V
		10360	45.37	-22.83	68.2	51.82	39.29	10.75	57.03	100	0	P	V
		15540	45.76	-28.24	74	50.17	38.31	13	56.48	100	0	P	V
	-	1498	64.68	-	-	66.8	24.7	3.81	30.63	396	305	P	H
	-	4492	57.21	-	-	48.85	31.05	6.76	29.45	349	119	P	H
802.11n		10440	45.96	-22.24	68.2	52.24	39.39	10.8	57.01	100	0	P	H
HT20		15660	44.39	-29.61	74	48.98	38	13.07	56.41	100	0	P	H
CH 44	-	1498	61.95	-	-	64.07	24.7	3.81	30.63	351	78	P	V
5220MHz	-	4492	58.18	-	-	49.82	31.05	6.76	29.45	339	214	P	V
		10440	45.91	-22.29	68.2	52.19	39.39	10.8	57.01	100	0	P	V
		15660	44.38	-29.62	74	48.97	38	13.07	56.41	100	0	P	V

	-	1498	63.65	-	-	65.77	24.7	3.81	30.63	396	305	P	H
	-	4492	57.9	-	-	49.54	31.05	6.76	29.45	327	113	P	H
		5680	57.37	-10.83	68.2	46.58	32.57	7.75	29.53	400	113	P	H
802.11n		10480	47.66	-20.54	68.2	53.82	39.47	10.83	57	100	0	P	H
HT20		15720	45.87	-28.13	74	50.58	37.82	13.1	56.37	100	0	P	H
CH 48	-	1498	62.76	-	-	64.88	24.7	3.81	30.63	351	78	P	V
5240MHz	-	4492	58.25	-	-	49.89	31.05	6.76	29.45	322	237	P	V
		5680	56.04	-12.16	68.2	45.25	32.57	7.75	29.53	100	203	P	V
		10480	48.58	-19.62	68.2	54.74	39.47	10.83	57	100	0	P	V
		15720	45.58	-28.42	74	50.29	37.82	13.1	56.37	100	0	P	V

Remark

1. No other spurious found.
2. All results are PASS against Peak and Average limit line.
3. Note “-” is unintentional radiator, the single complies with ANSI C63.4 requirement can be ignored.

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)
		5150	60.26	-13.74	74	50.31	31.98	7.35	29.38	100	122	P	H
		5149.24	51.37	-2.63	54	41.42	31.98	7.35	29.38	100	122	A	H
	*	5190	109.94	-	-	99.94	32.02	7.37	29.39	100	122	P	H
	*	5190	102.93	-	-	92.93	32.02	7.37	29.39	100	122	A	H
802.11n		5364.24	59.34	-14.66	74	49.04	32.24	7.47	29.41	100	122	P	H
HT40		5353.6	53.46	-0.54	54	43.19	32.22	7.46	29.41	100	122	A	H
CH 38		5148.72	55.78	-18.22	74	45.83	31.98	7.35	29.38	101	178	P	V
5190MHz		5148.72	47.6	-6.4	54	37.65	31.98	7.35	29.38	101	178	A	V
	*	5190	106.72	-	-	96.72	32.02	7.37	29.39	101	178	P	V
	*	5190	99.35	-	-	89.35	32.02	7.37	29.39	101	178	A	V
		5366.48	55.03	-18.97	74	44.73	32.24	7.47	29.41	101	178	P	V
		5353.32	49.25	-4.75	54	38.98	32.22	7.46	29.41	101	178	A	V
		5145.08	58.58	-15.42	74	48.63	31.98	7.35	29.38	100	129	P	H
		5147.16	52.84	-1.16	54	42.89	31.98	7.35	29.38	100	129	A	H
	*	5230	112.5	-	-	102.42	32.08	7.39	29.39	100	129	P	H
	*	5230	105.56	-	-	95.48	32.08	7.39	29.39	100	129	A	H
802.11n		5386.08	60.01	-13.99	74	49.69	32.26	7.48	29.42	100	129	P	H
HT40		5384.4	53.22	-0.78	54	42.9	32.26	7.48	29.42	100	129	A	H
CH 46		5148.98	57.25	-16.75	74	47.3	31.98	7.35	29.38	103	199	P	V
5230MHz		5144.04	50.44	-3.56	54	40.49	31.98	7.35	29.38	103	199	A	V
	*	5230	109.89	-	-	99.81	32.08	7.39	29.39	103	199	P	V
	*	5230	102.35	-	-	92.27	32.08	7.39	29.39	103	199	A	V
		5388.04	55.95	-18.05	74	45.63	32.26	7.48	29.42	103	199	P	V
		5394.48	49.68	-4.32	54	39.35	32.26	7.49	29.42	103	199	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)
	-	1498	63.07	-	-	65.19	24.7	3.81	30.63	396	305	P	H
	-	4486	56.56	-	-	48.2	31.05	6.76	29.45	337	112	P	H
		5620	56.79	-11.41	68.2	46.06	32.52	7.7	29.49	100	127	P	H
802.11n		10380	46.08	-22.12	68.2	52.49	39.31	10.76	57.02	100	0	P	H
HT40		15570	46.16	-27.84	74	50.63	38.22	13.02	56.46	100	0	P	H
CH 38	-	1498	61.69	-	-	63.81	24.7	3.81	30.63	351	78	P	V
5190MHz	-	4492	58.48	-	-	50.12	31.05	6.76	29.45	320	235	P	V
		5620	56.78	-11.42	68.2	46.05	32.52	7.7	29.49	109	204	P	V
		10380	45.95	-22.25	68.2	52.36	39.31	10.76	57.02	100	0	P	V
		15570	45.87	-28.13	74	50.34	38.22	13.02	56.46	100	0	P	V
	-	1498	63.58	-	-	65.7	24.7	3.81	30.63	396	305	P	H
	-	4492	57.09	-	-	48.73	31.05	6.76	29.45	360	110	P	H
		5668	56.94	-11.26	68.2	46.14	32.57	7.75	29.52	101	117	P	H
802.11n		10460	46.59	-21.61	68.2	52.83	39.42	10.81	57.01	100	0	P	H
HT40		15690	45.97	-28.03	74	50.63	37.91	13.08	56.39	100	0	P	H
CH 46	-	1498	62.18	-	-	64.3	24.7	3.81	30.63	351	78	P	V
5230MHz	-	4496	58.52	-	-	50.12	31.1	6.75	29.45	320	234	P	V
		5668	56.13	-12.07	68.2	45.33	32.57	7.75	29.52	101	274	P	V
		10460	47.73	-20.47	68.2	53.97	39.42	10.81	57.01	100	0	P	V
		15690	46	-28	74	50.66	37.91	13.08	56.39	100	0	P	V

Remark

1. No other spurious found.
2. All results are PASS against Peak and Average limit line.
3. Note "-" is unintentional radiator, the single complies with ANSI C63.4 requirement can be ignored.

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		5149.24	61.96	-12.04	74	52.01	31.98	7.35	29.38	104	102	P	H
		5150	53.38	-0.62	54	43.43	31.98	7.35	29.38	104	102	A	H
	*	5210	103.36	-	-	93.31	32.06	7.38	29.39	104	102	P	H
	*	5210	96.75	-	-	86.7	32.06	7.38	29.39	104	102	A	H
		5376.84	52.82	-21.18	74	42.52	32.24	7.48	29.42	104	102	P	H
		5360.04	46.44	-7.56	54	36.16	32.22	7.47	29.41	104	102	A	H
		5148.46	61.95	-12.05	74	52	31.98	7.35	29.38	103	200	P	V
		5146.38	52.16	-1.84	54	42.21	31.98	7.35	29.38	103	200	A	V
	*	5210	104.01	-	-	93.96	32.06	7.38	29.39	103	200	P	V
	*	5210	97.09	-	-	87.04	32.06	7.38	29.39	103	200	A	V
		5355	53.11	-20.89	74	42.84	32.22	7.46	29.41	103	200	P	V
		5374.04	46.79	-7.21	54	36.5	32.24	7.47	29.42	103	200	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 1 5150~5250MHz

WIFI 802.11ac VHT80 (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
	-	1498	63.45	-	-	65.57	24.7	3.81	30.63	396	305	P	H
	-	4492	57.59	-	-	49.23	31.05	6.76	29.45	342	115	P	H
		5788	61.01	-7.19	68.2	50.04	32.69	7.86	29.58	100	99	P	H
802.11ac		10420	46.42	-21.78	68.2	52.74	39.37	10.79	57.02	100	0	P	H
VHT80		15630	44.3	-29.7	74	48.88	38.04	13.05	56.42	100	0	P	H
CH 42	-	1498	61.62	-	-	63.74	24.7	3.81	30.63	351	78	P	V
5210MHz	-	4492	59.03	-	-	50.67	31.05	6.76	29.45	366	236	P	V
		5788	60	-8.2	68.2	49.03	32.69	7.86	29.58	100	209	P	V
		10420	46.66	-21.54	68.2	52.98	39.37	10.79	57.02	100	0	P	V
		15630	44.13	-29.87	74	48.71	38.04	13.05	56.42	100	0	P	V

Remark

1. No other spurious found.
2. All results are PASS against Peak and Average limit line.
3. Note “-” is unintentional radiator, the single complies with ANSI C63.4 requirement can be ignored.

Emission below 1GHz

WIFI 802.11a 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)
802.11a HT40 LF		84	34.8	-5.2	40	51.95	14.16	0.95	32.3			P	H
		241.68	41.38	-4.62	46	54.38	17.54	1.59	32.21	100	0	P	H
		298.92	38.13	-7.87	46	49.2	19.28	1.72	32.13			P	H
		318.9	38.7	-7.3	46	49.52	19.48	1.76	32.13			P	H
		599.6	39.76	-6.24	46	43.84	25.61	2.42	32.21			P	H
		899.9	40.4	-5.6	46	39.83	29.03	2.94	31.51			P	H
		30.54	33.81	-6.19	40	41.62	23.96	0.59	32.34			P	V
		241.68	39.49	-6.51	46	52.49	17.54	1.59	32.21			P	V
		299.46	37.09	-8.91	46	48.14	19.3	1.72	32.13			P	V
		319.6	40.08	-5.92	46	50.89	19.49	1.76	32.13	100	0	P	V
		597.5	38.61	-7.39	46	42.71	25.59	2.42	32.21			P	V
		885.9	39.05	-6.95	46	38.59	28.99	2.94	31.58			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.
-	The signal is **Unintentional Radiators**.
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

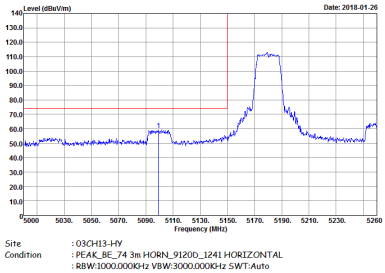
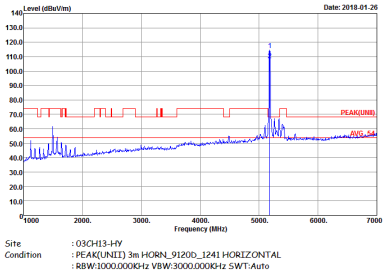
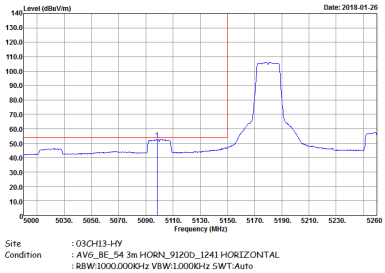
Test Engineer :	Alex Jheng , Bill Chang , and Wilson Wu	**Temperature :**	24.7~25.2°C
		Relative Humidity :	49~53%

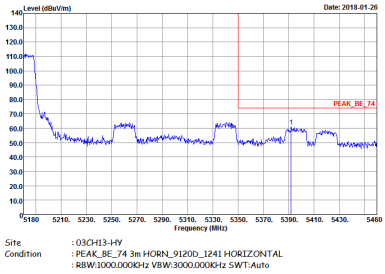
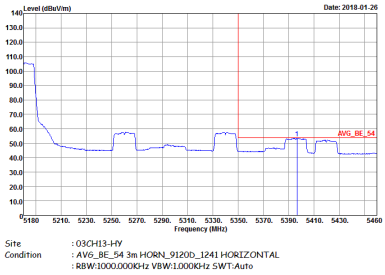
Note symbol

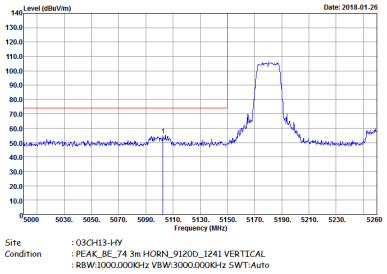
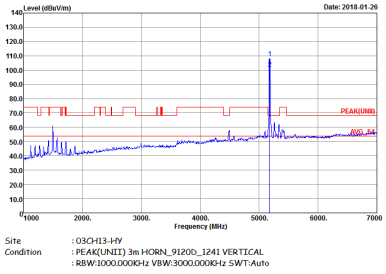
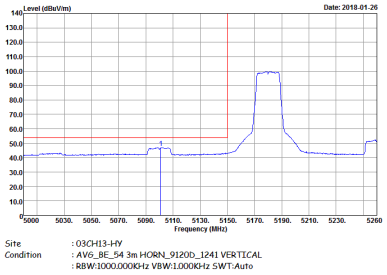
-L	**Low channel location**
-R	**High channel location**

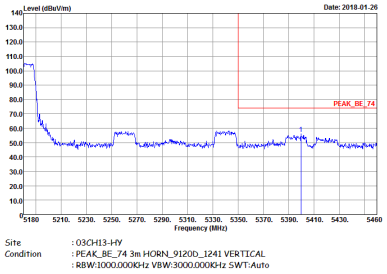
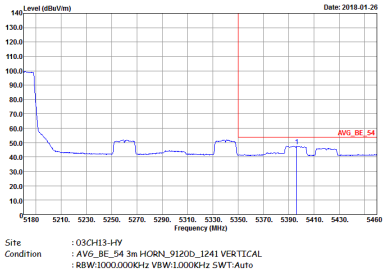
Band 1 - 5150~5250MHz

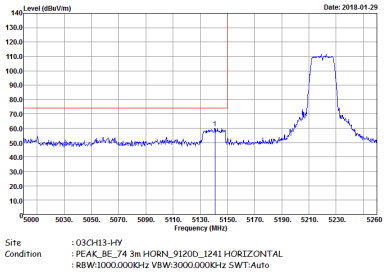
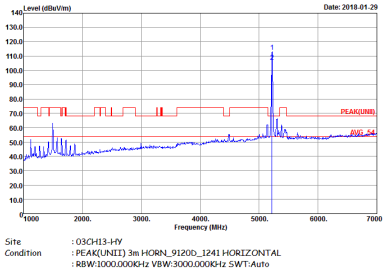
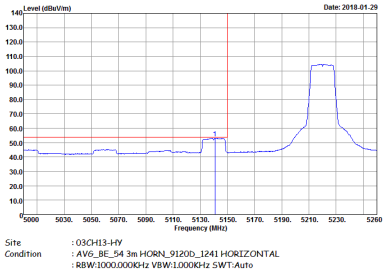
WIFI 802.11a (Band Edge @ 3m)

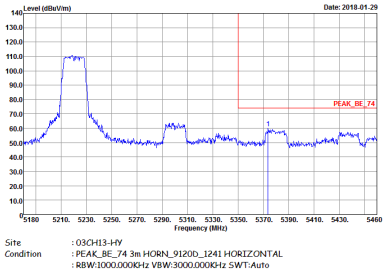
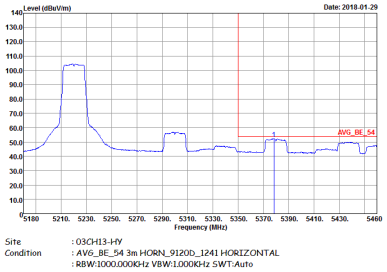
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH36 5180MHz - L	
1	Horizontal	Fundamental
Peak		
Avg.		Left blank

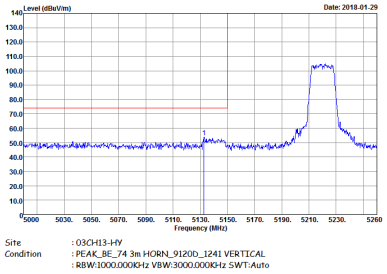
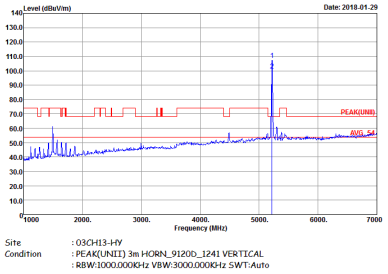
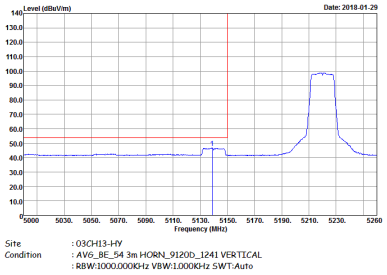
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH36 5180MHz - R	
1	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

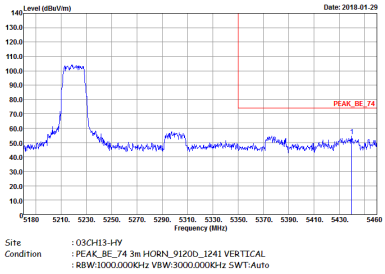
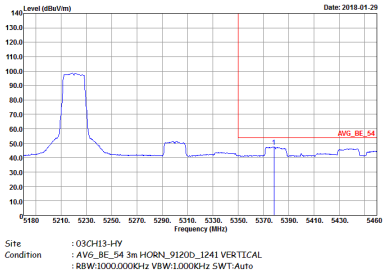
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH36 5180MHz - L	
1	Vertical	Fundamental
Peak		
Avg.		Left blank

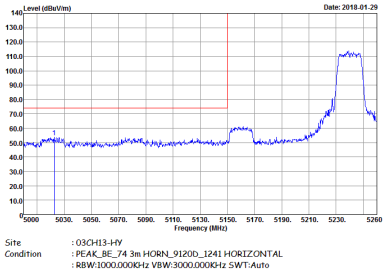
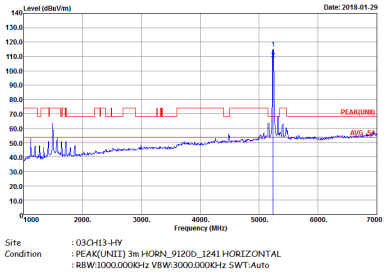
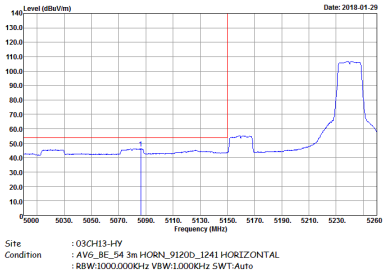
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH36 5180MHz - R	
1	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

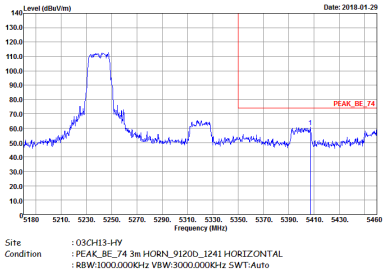
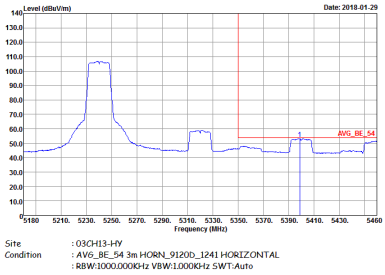
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH44 5220MHz - L	
1	Horizontal	Fundamental
Peak		
Avg.		Left blank

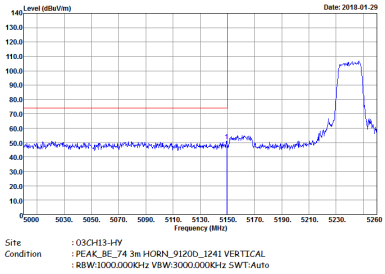
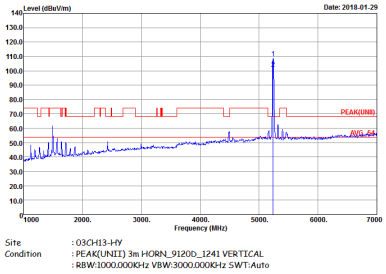
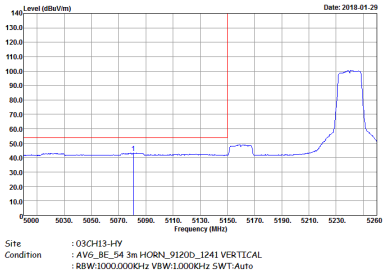
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH44 5220MHz - R	
1	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

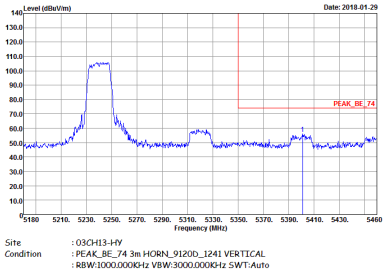
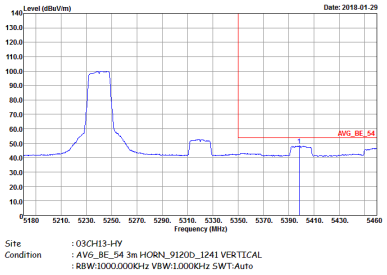
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH44 5220MHz - L	
1	Vertical	Fundamental
Peak		
Avg.		Left blank

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

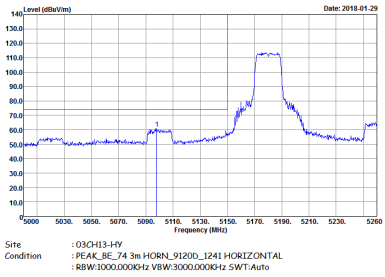
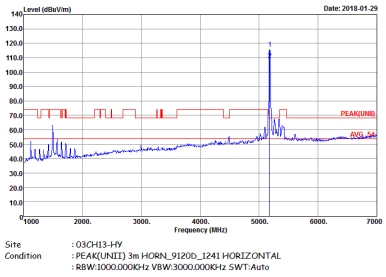
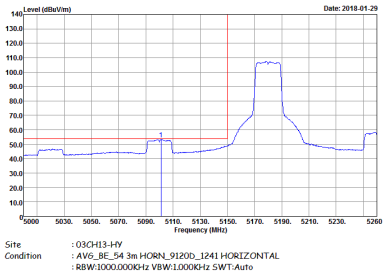
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH48 5240MHz - L	
1	Horizontal	Fundamental
Peak		
Avg.		Left blank

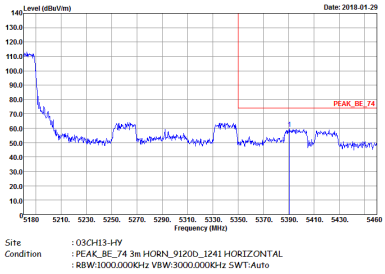
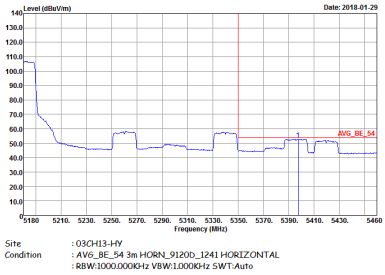
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH48 5240MHz - R	
1	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

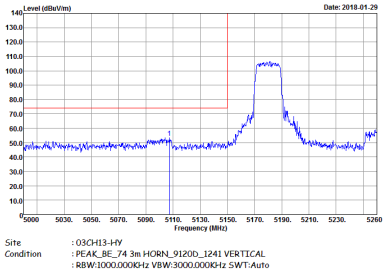
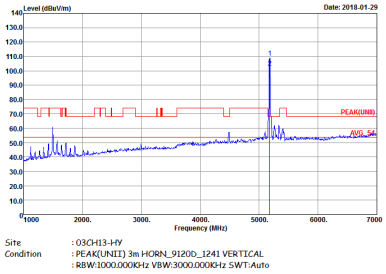
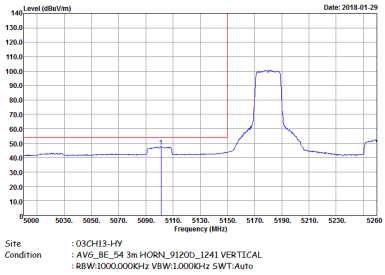
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH48 5240MHz - L	
1	Vertical	Fundamental
Peak		
Avg.		Left blank

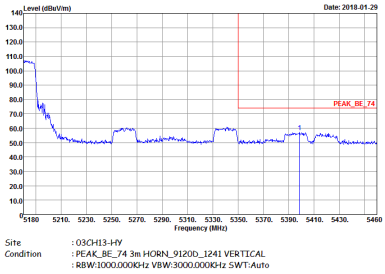
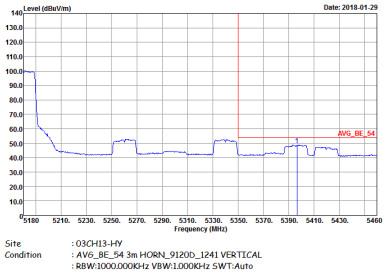
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH48 5240MHz - R	
1	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

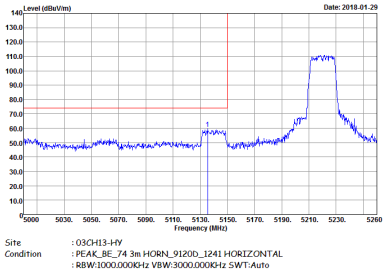
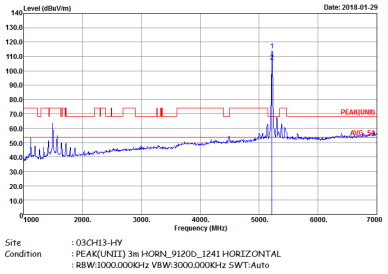
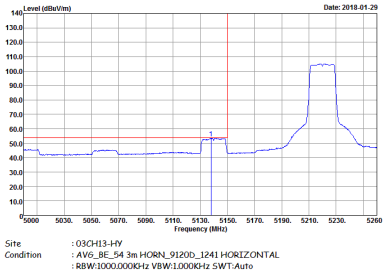
Band 1 5150~5250MHz
WIFI 802.11n HT20 (Band Edge @ 3m)

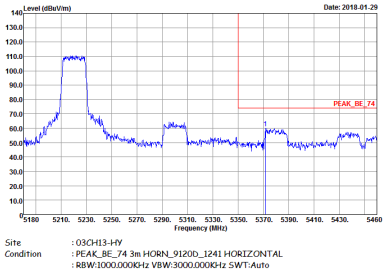
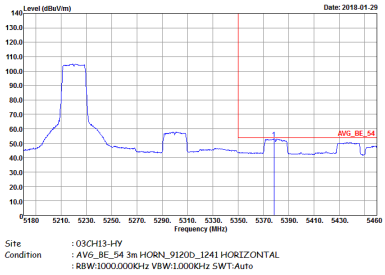
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH36 5180MHz -L	
1	Horizontal	Fundamental
Peak		
Avg.		Left blank

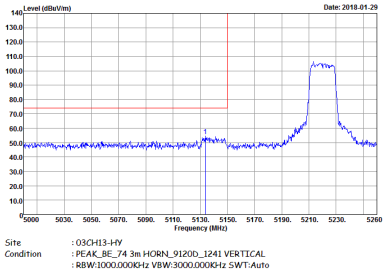
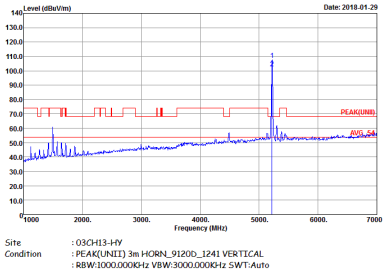
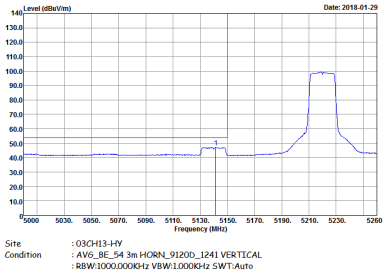
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH36 5180MHz - R	
1	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

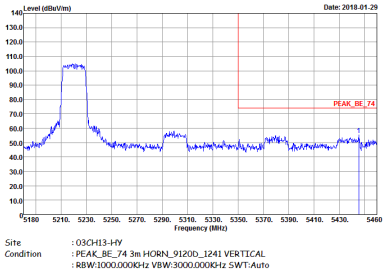
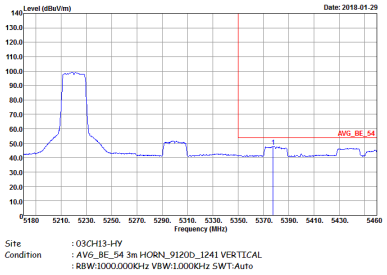
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH36 5180MHz - L	
1	Vertical	Fundamental
Peak		
Avg.		Left blank

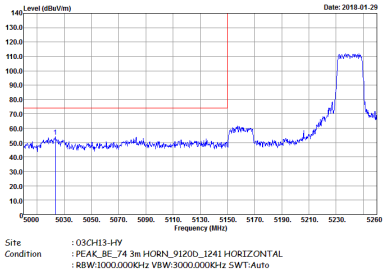
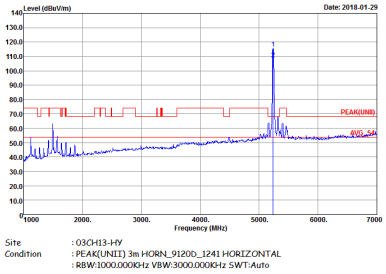
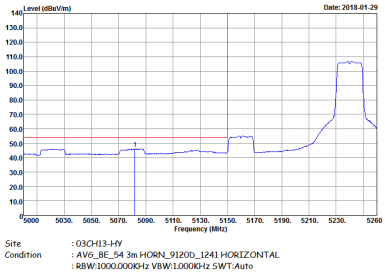
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH36 5180MHz - R	
1	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

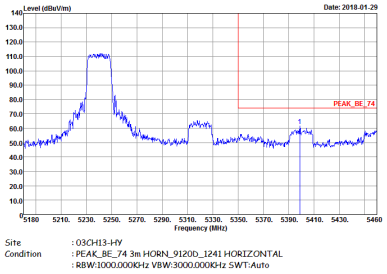
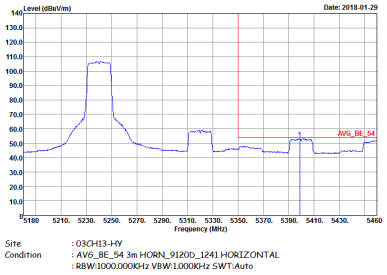
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH44 5220MHz - L	
1	Horizontal	Fundamental
Peak		
Avg.		Left blank

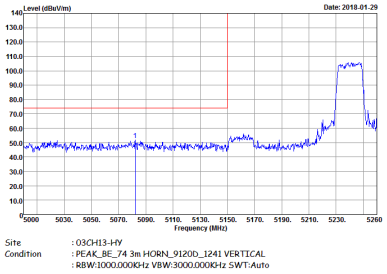
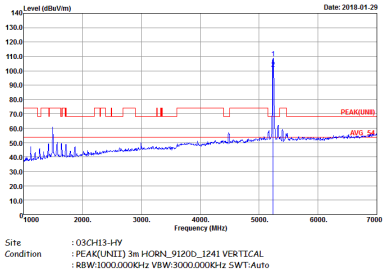
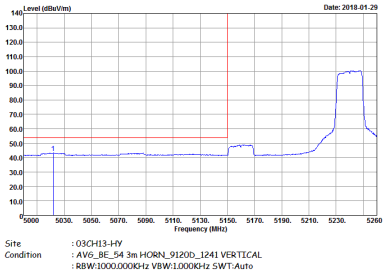
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH44 5220MHz - R	
1	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

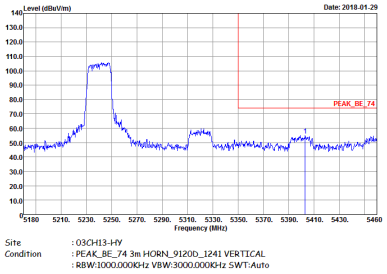
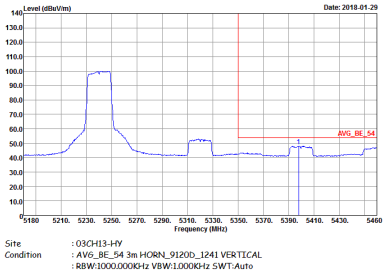
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH44 5220MHz - L	
1	Vertical	Fundamental
Peak		
Avg.		Left blank

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

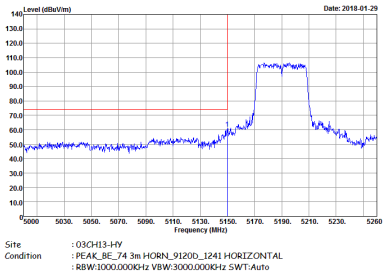
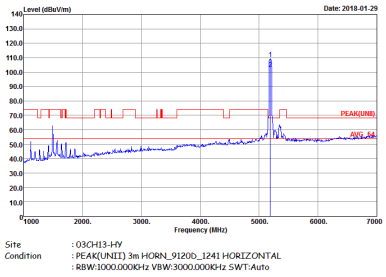
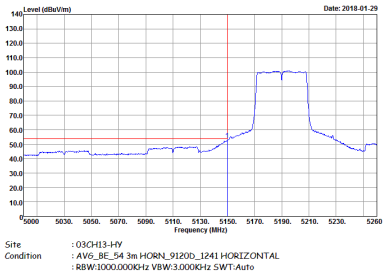
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH48 5240MHz - L	
1	Horizontal	Fundamental
Peak		
Avg.		Left blank

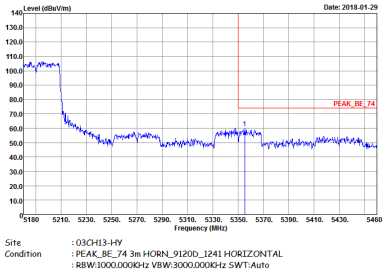
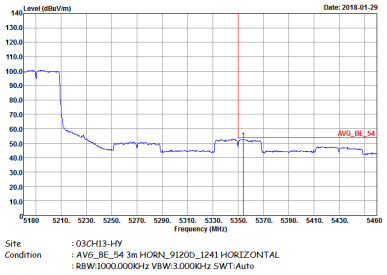
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH48 5240MHz - R	
1	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

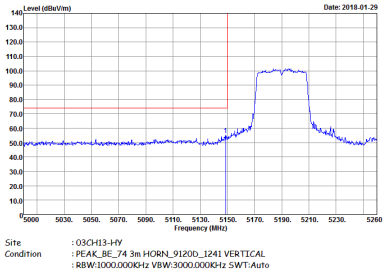
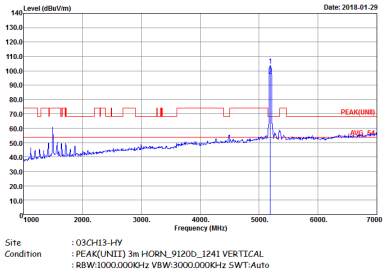
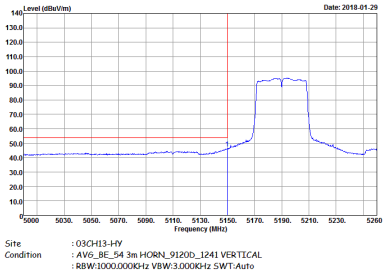
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH48 5240MHz - L	
1	Vertical	Fundamental
Peak		
Avg.		Left blank

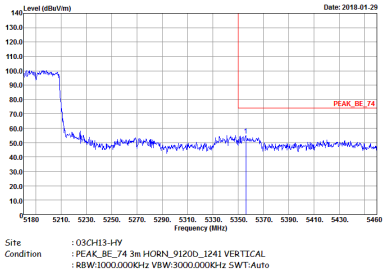
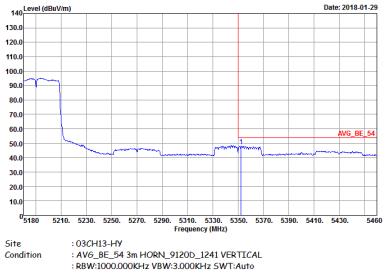
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH48 5240MHz - R	
1	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

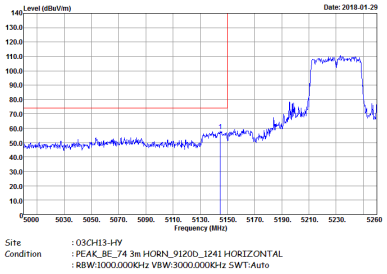
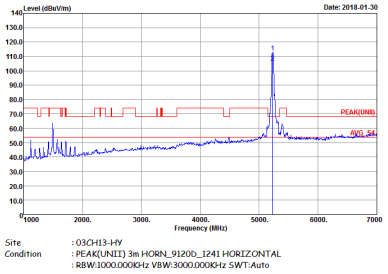
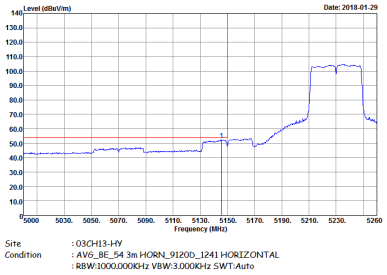
Band 1 5150~5250MHz
WIFI 802.11n HT40 (Band Edge @ 3m)

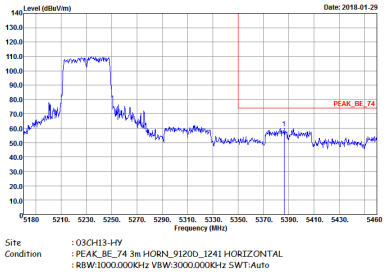
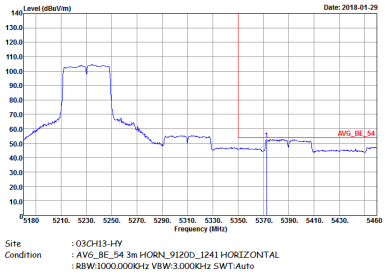
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH38 5190MHz - L	
1	Horizontal	Fundamental
Peak		
Avg.		Left blank

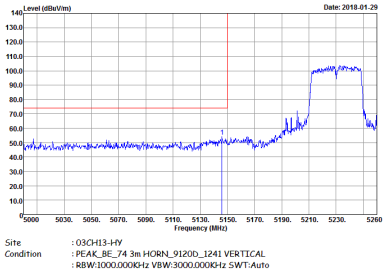
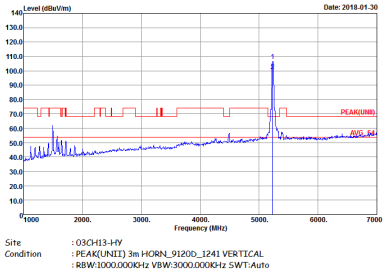
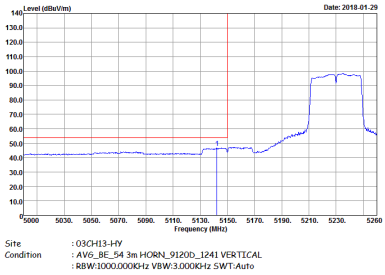
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH38 5190MHz - R	
1	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

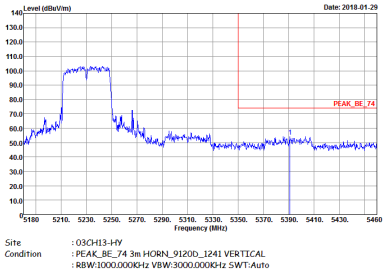
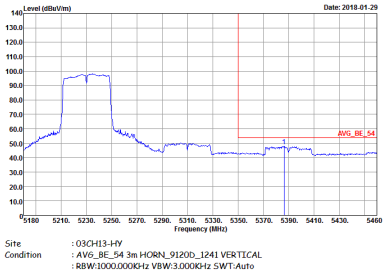
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH38 5190MHz - L	
1	Vertical	Fundamental
Peak		
Avg.		Left blank

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

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

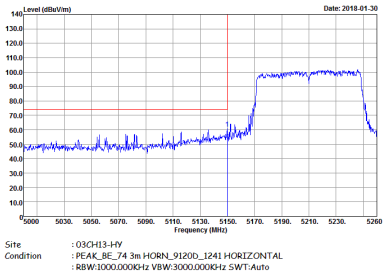
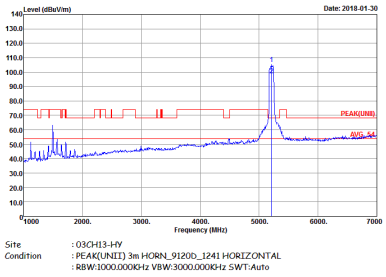
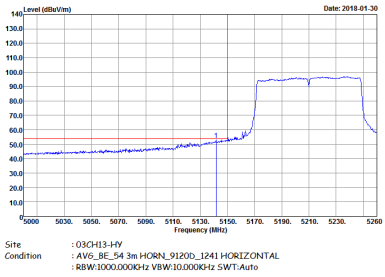
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH46 5230MHz - R	
1	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

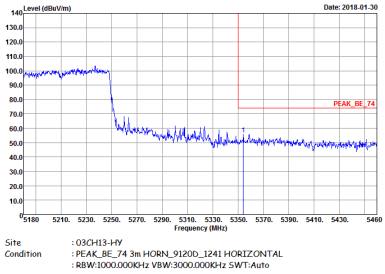
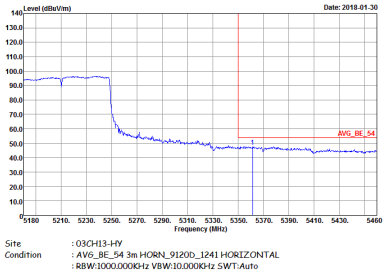
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH46 5230MHz - L	
1	Vertical	Fundamental
Peak		
Avg.		Left blank

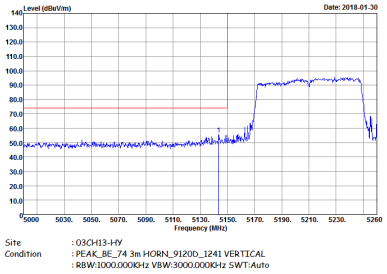
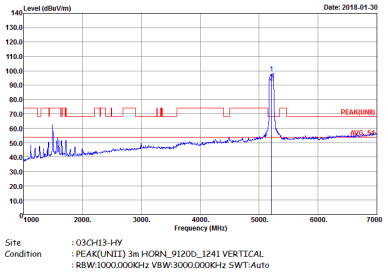
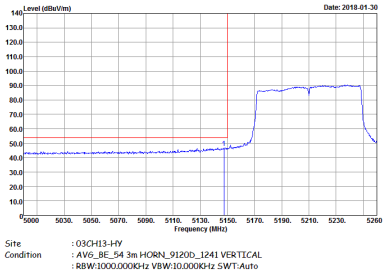
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH46 5230MHz - R	
1	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

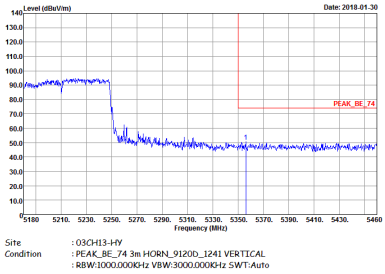
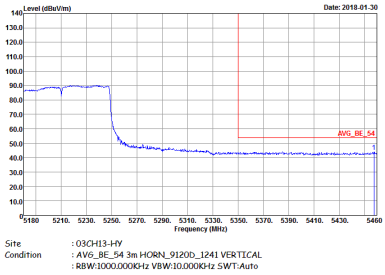
Band 1 5150~5250MHz

WIFI 802.11ac VHT80 (Band Edge @ 3m)

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

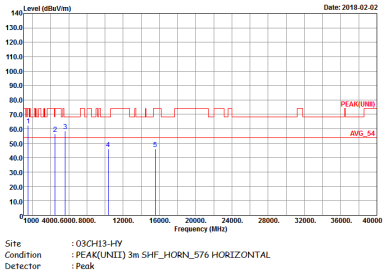
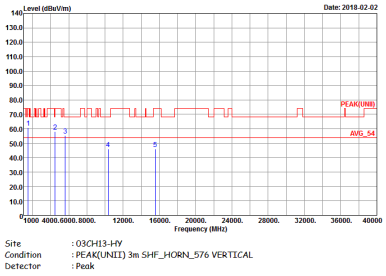
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH42 5210MHz - R	
1	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

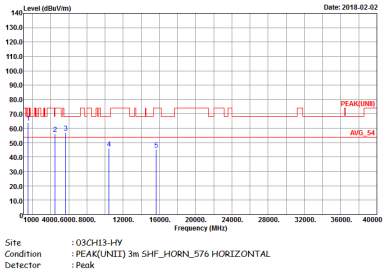
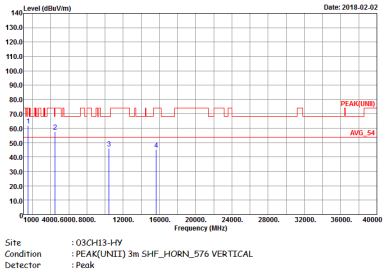
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH42 5210MHz - L	
1	Vertical	Fundamental
Peak		
Avg.		Left blank

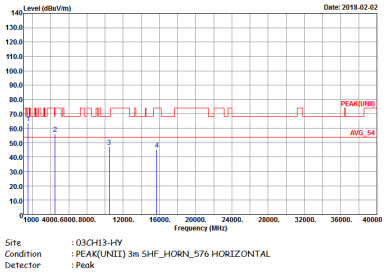
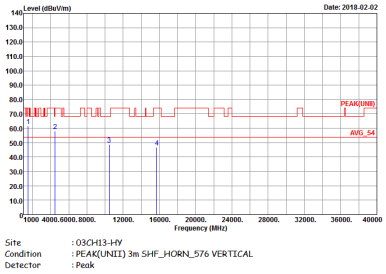
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH42 5210MHz - R	
1	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

Band 1 - 5150~5250MHz

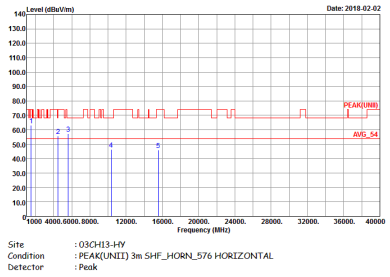
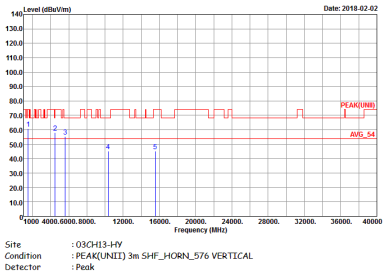
WIFI 802.11a (Harmonic @ 3m)

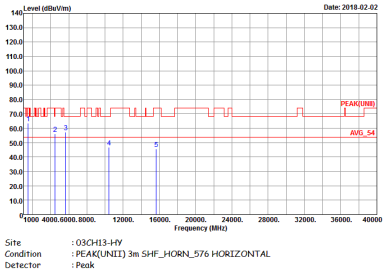
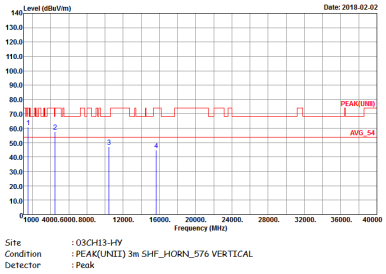
WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11a CH36 5180MHz	
1	Horizontal	Vertical
Peak Avg.		

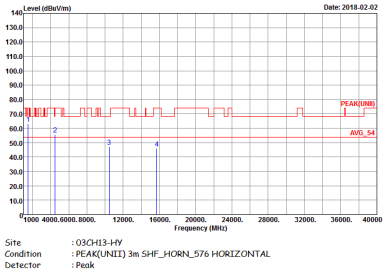
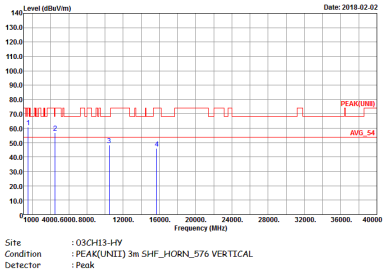
WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11a CH44 5220MHz	
1	Horizontal	Vertical
Peak Avg.		

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

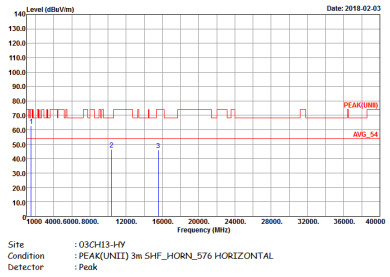
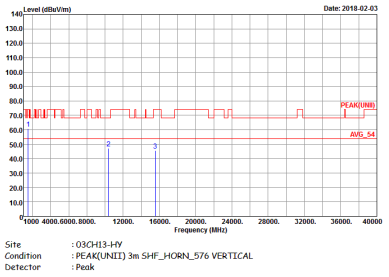
Band 1 5150~5250MHz
WIFI 802.11n HT20 (Harmonic @ 3m)

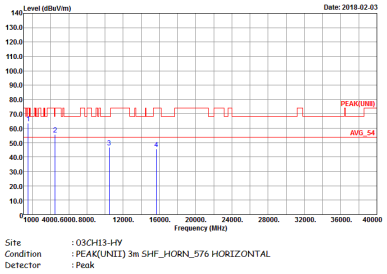
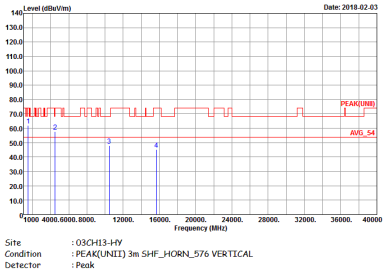
WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11n HT20 CH36 5180MHz	
1	Horizontal	Vertical
Peak Avg.		

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

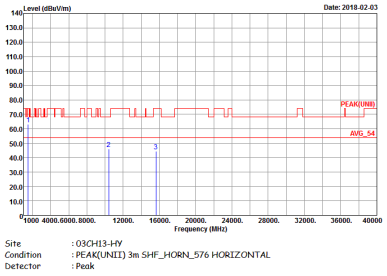
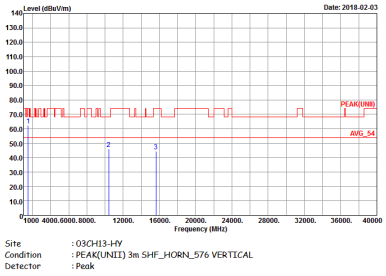
WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11n HT20 CH48 5240MHz	
1	Horizontal	Vertical
Peak Avg.		

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

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

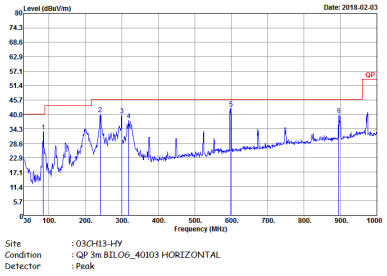
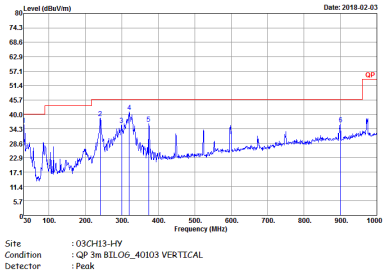
WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11n HT40 CH46 5230MHz	
1	Horizontal	Vertical
Peak Avg.		

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

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

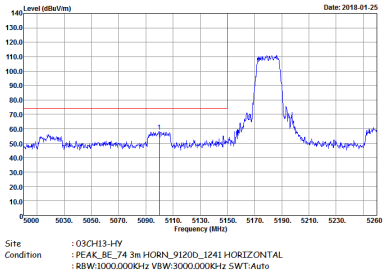
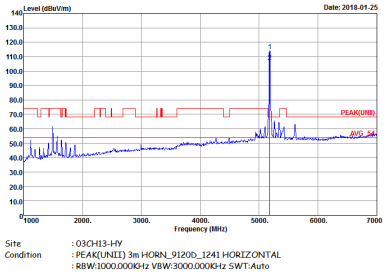
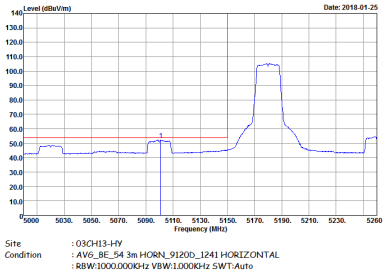
Emission below 1GHz

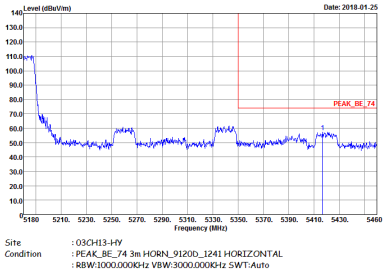
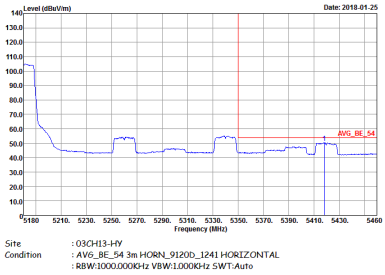
5GHz WIFI 802.11a (LF)

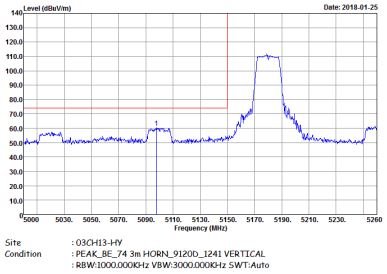
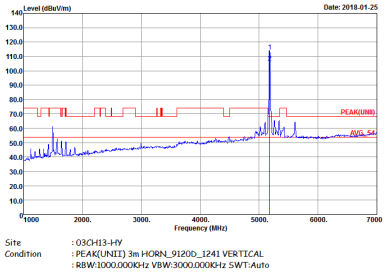
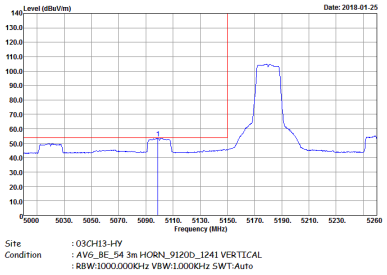
WIFI	5GHz WIFI	
ANT	802.11a LF	
1	Horizontal	Vertical
QP / Peak		

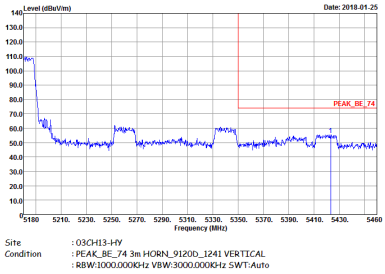
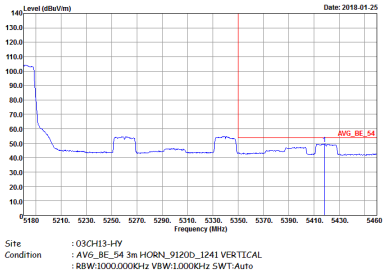
Band 1 - 5150~5250MHz

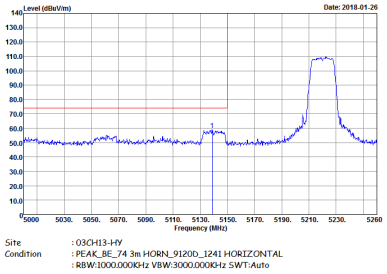
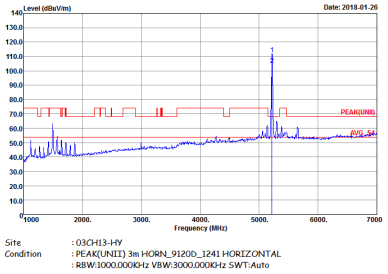
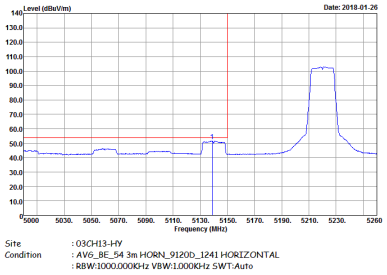
WIFI 802.11a (Band Edge @ 3m)

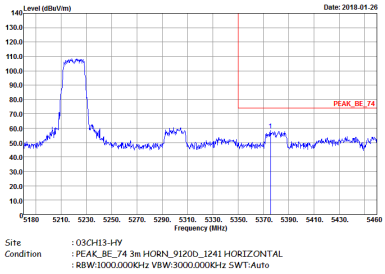
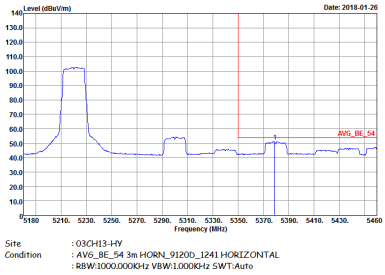
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH36 5180MHz - L	
2	Horizontal	Fundamental
Peak		
Avg.		Left blank

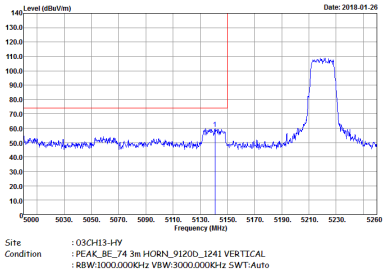
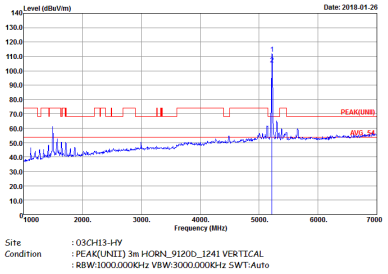
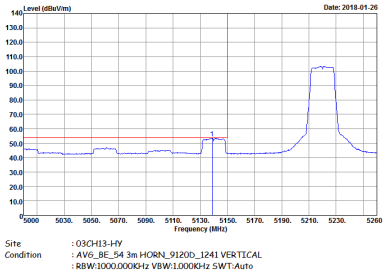
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH36 5180MHz - R	
2	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

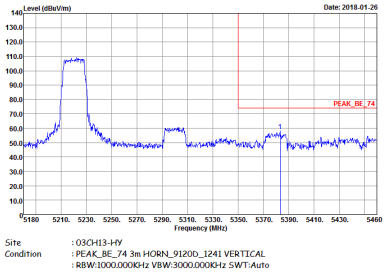
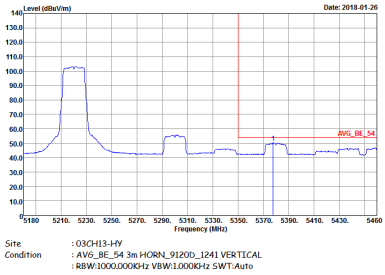
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH36 5180MHz - L	
2	Vertical	Fundamental
Peak		
Avg.		Left blank

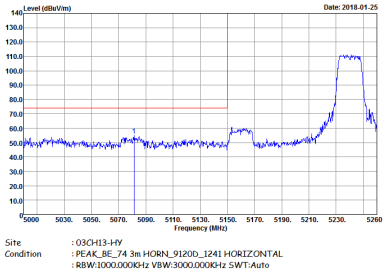
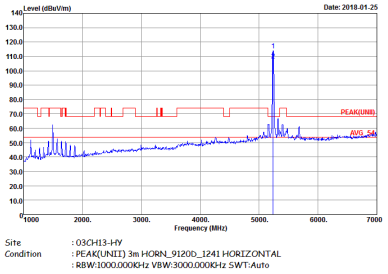
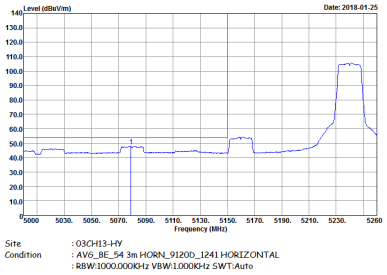
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH36 5180MHz - R	
2	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

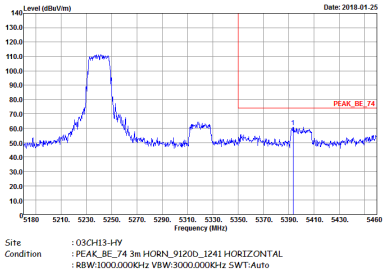
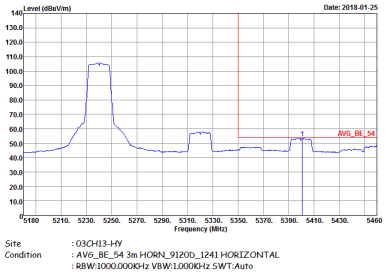
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH44 5220MHz - L	
2	Horizontal	Fundamental
Peak		
Avg.		Left blank

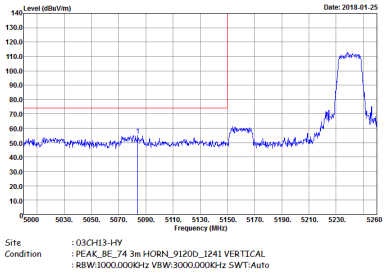
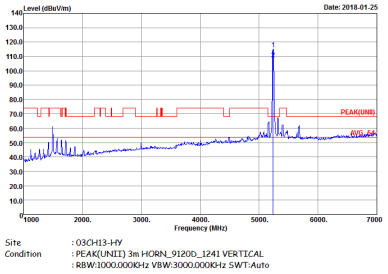
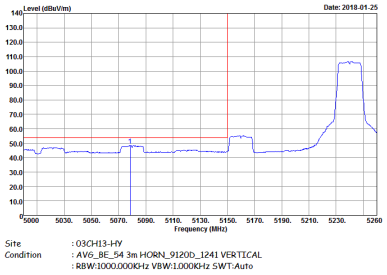
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH44 5220MHz - R	
2	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

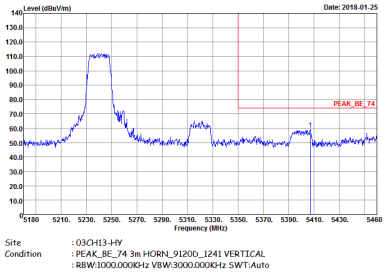
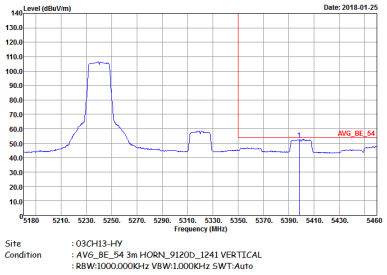
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH44 5220MHz - L	
2	Vertical	Fundamental
Peak		
Avg.		Left blank

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

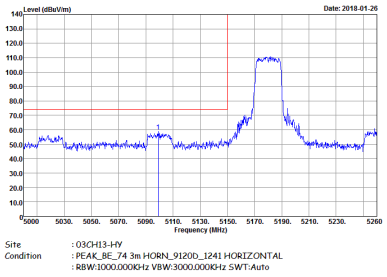
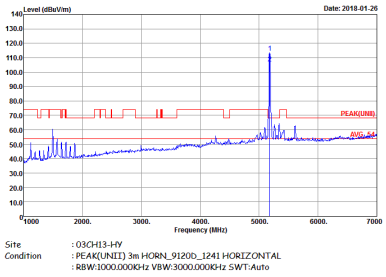
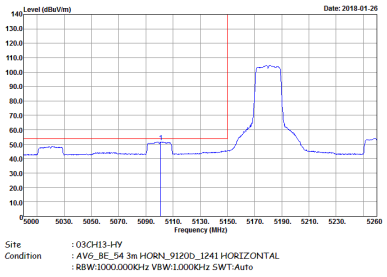
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH48 5240MHz - L	
2	Horizontal	Fundamental
Peak		
Avg.		Left blank

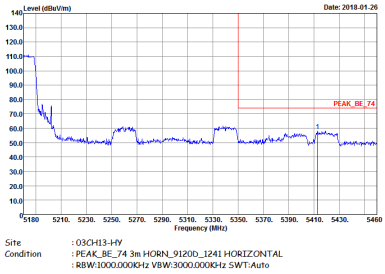
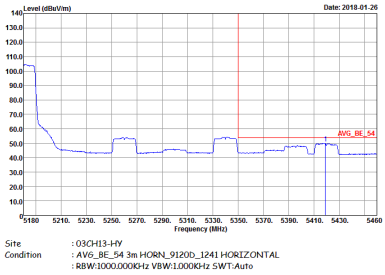
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH48 5240MHz - R	
2	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

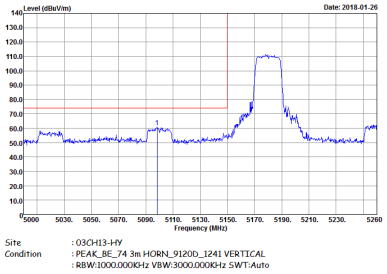
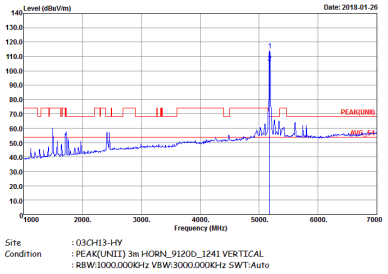
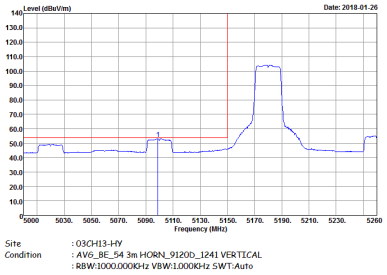
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH48 5240MHz - L	
2	Vertical	Fundamental
Peak		
Avg.		Left blank

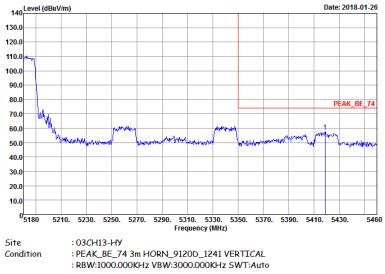
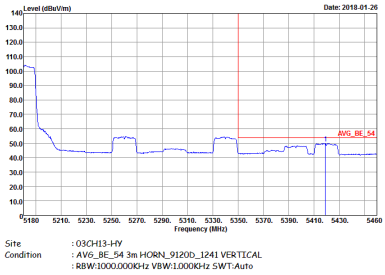
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH48 5240MHz - R	
2	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

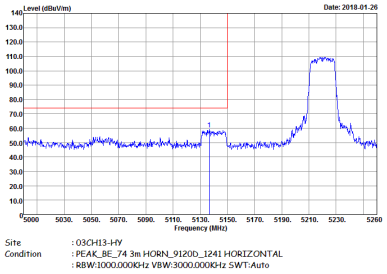
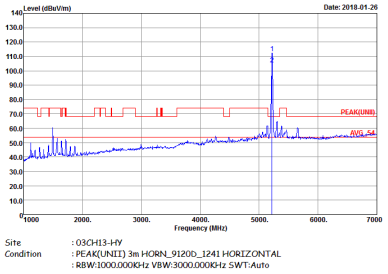
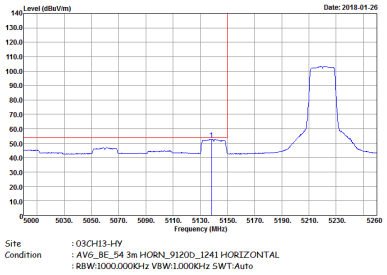
Band 1 5150~5250MHz
WIFI 802.11n HT20 (Band Edge @ 3m)

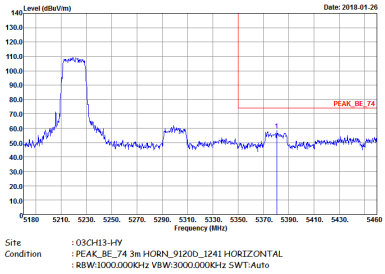
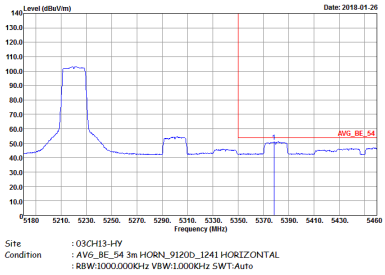
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH36 5180MHz -L	
2	Horizontal	Fundamental
Peak		
Avg.		Left blank

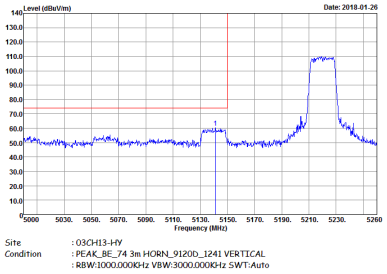
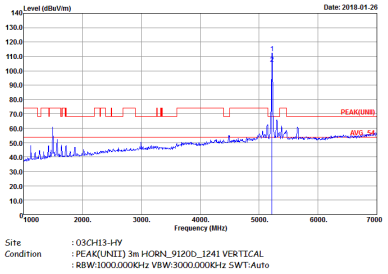
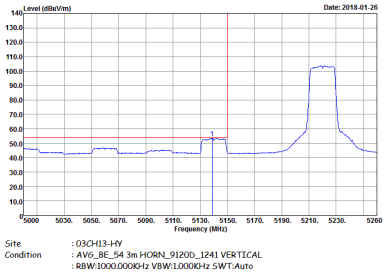
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH36 5180MHz - R	
2	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

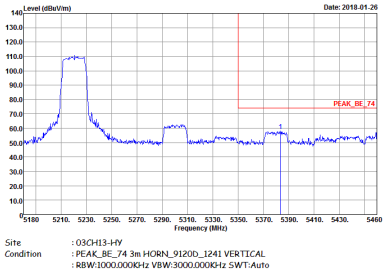
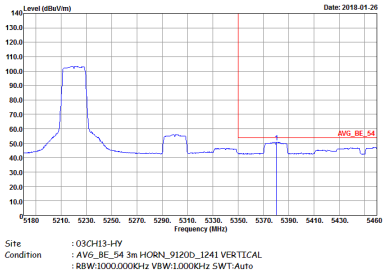
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH36 5180MHz - L	
2	Vertical	Fundamental
Peak		
Avg.		Left blank

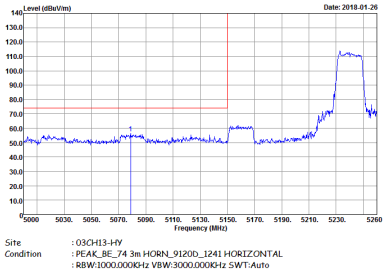
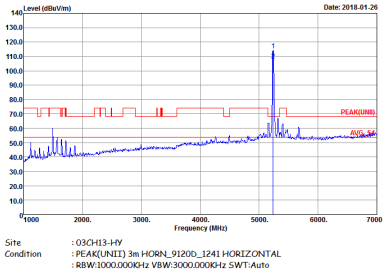
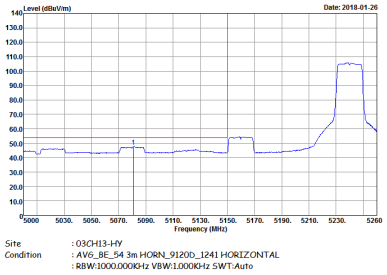
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH36 5180MHz - R	
2	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

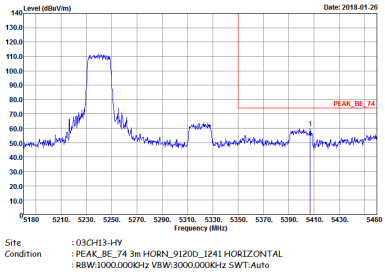
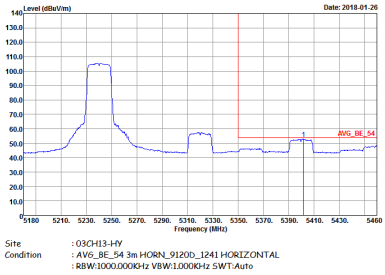
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH44 5220MHz - L	
2	Horizontal	Fundamental
Peak		
Avg.		Left blank

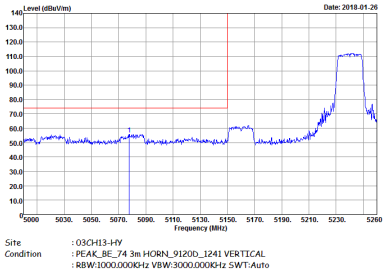
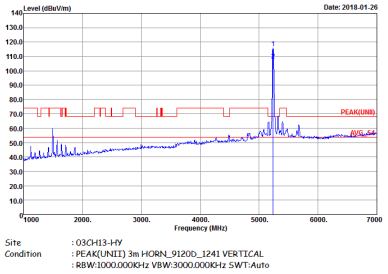
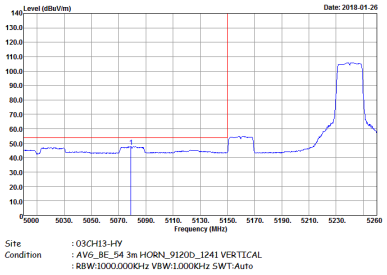
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH44 5220MHz - R	
2	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

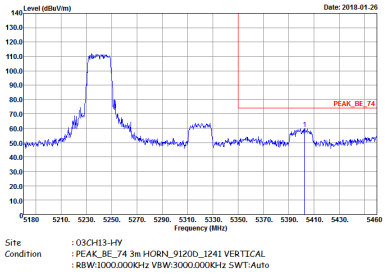
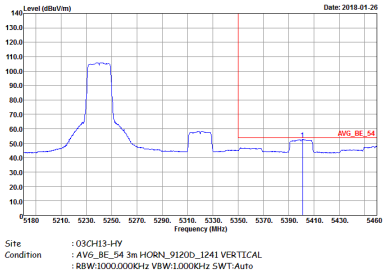
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH44 5220MHz - L	
2	Vertical	Fundamental
Peak		
Avg.		Left blank

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

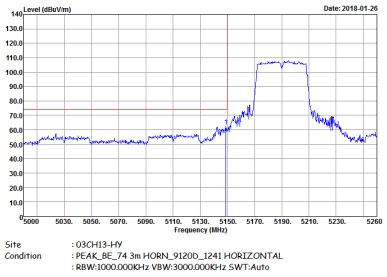
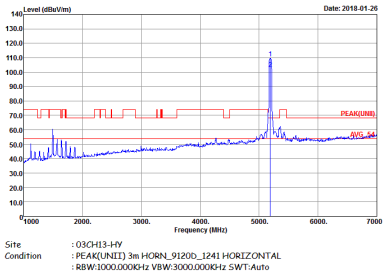
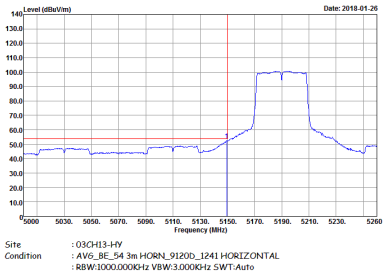
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH48 5240MHz - L	
2	Horizontal	Fundamental
Peak		
Avg.		Left blank

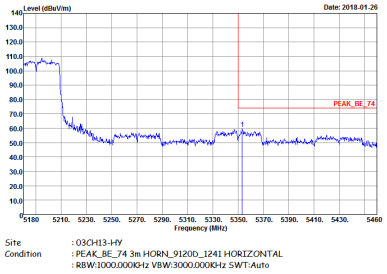
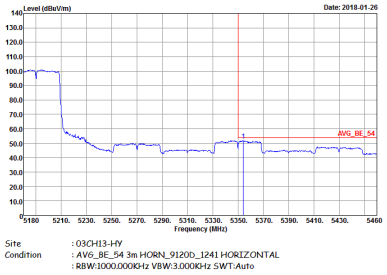
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH48 5240MHz - R	
2	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

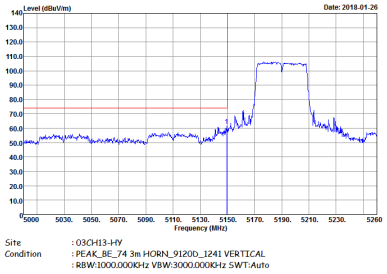
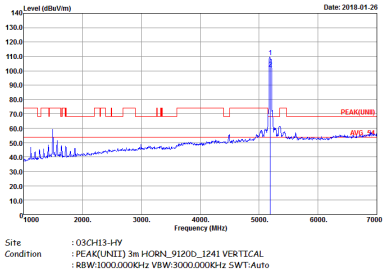
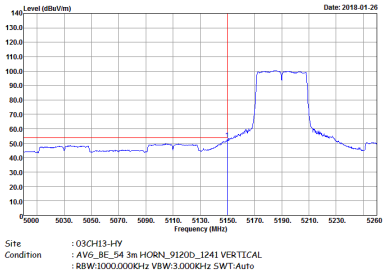
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH48 5240MHz - L	
2	Vertical	Fundamental
Peak		
Avg.		Left blank

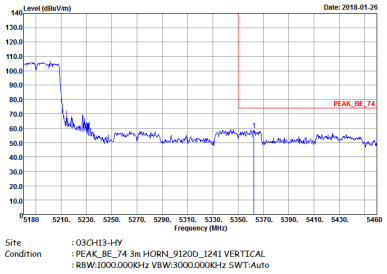
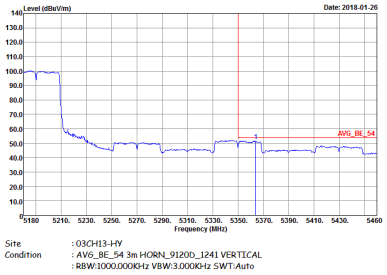
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH48 5240MHz - R	
2	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

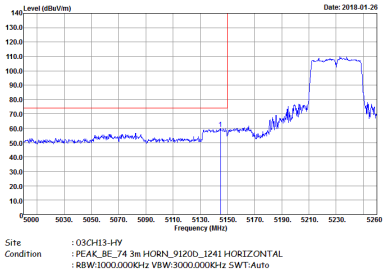
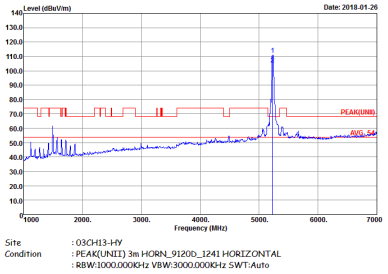
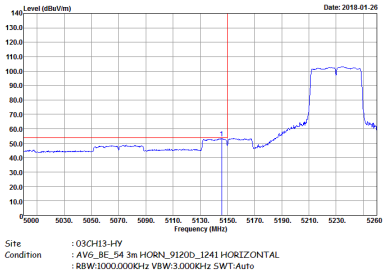
Band 1 5150~5250MHz
WIFI 802.11n HT40 (Band Edge @ 3m)

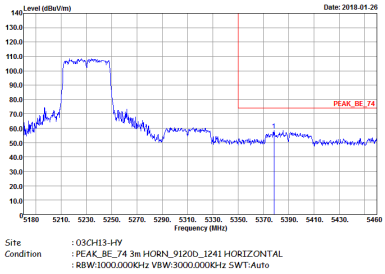
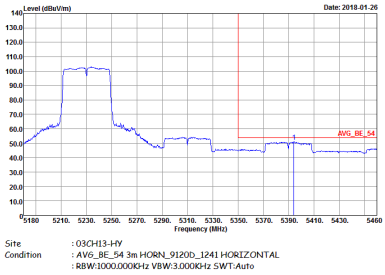
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH38 5190MHz - L	
2	Horizontal	Fundamental
Peak		
Avg.		Left blank

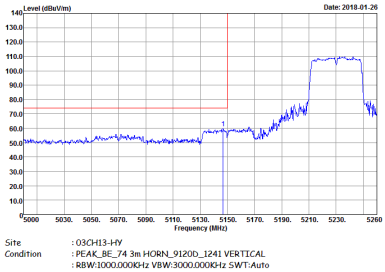
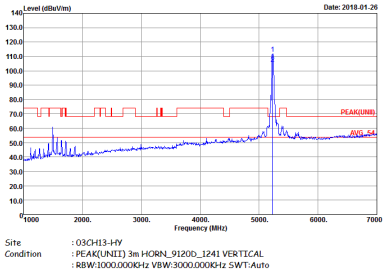
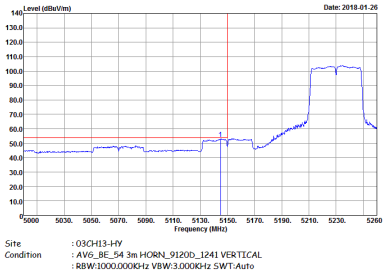
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH38 5190MHz - R	
2	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

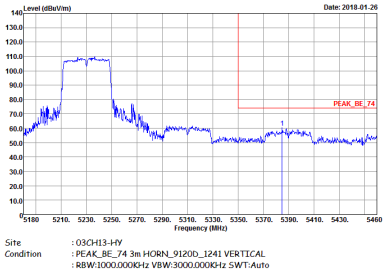
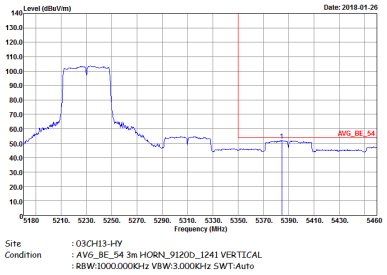
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH38 5190MHz - L	
2	Vertical	Fundamental
Peak		
Avg.		Left blank

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

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

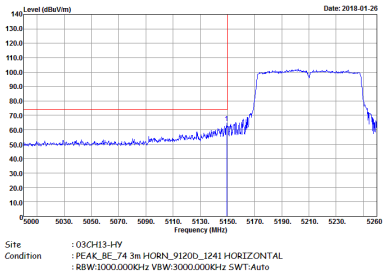
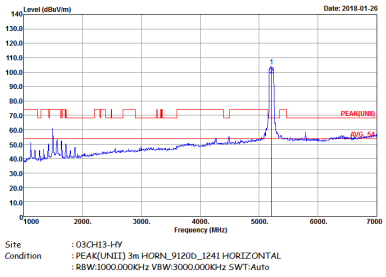
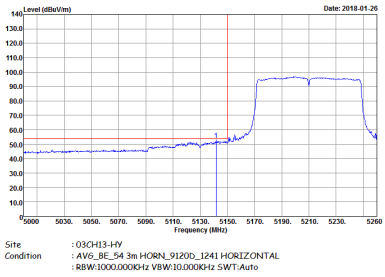
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH46 5230MHz - R	
2	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

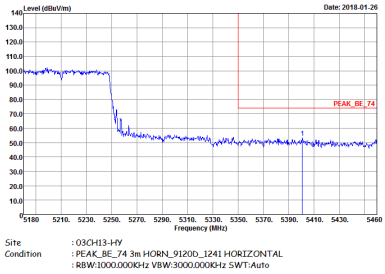
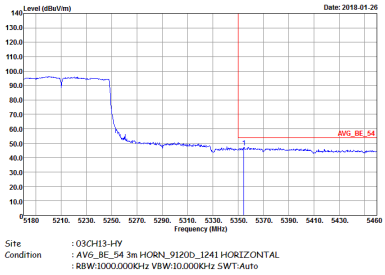
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH46 5230MHz - L	
2	Vertical	Fundamental
Peak		
Avg.		Left blank

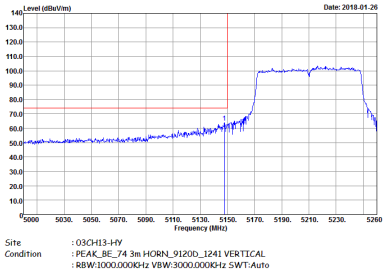
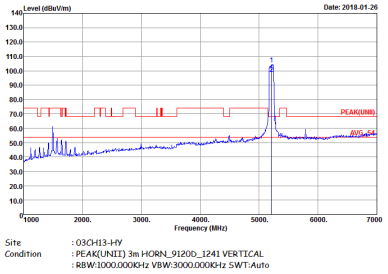
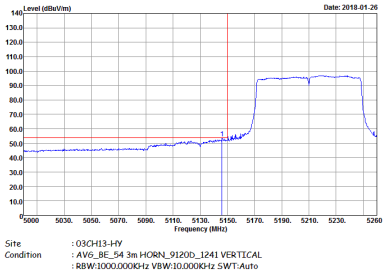
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH46 5230MHz - R	
2	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

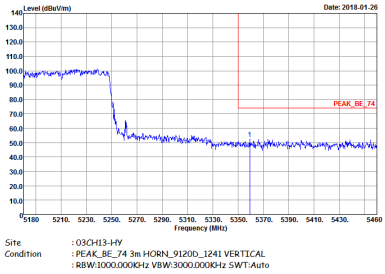
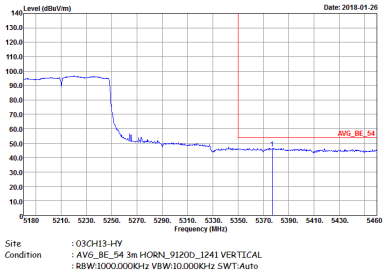
Band 1 5150~5250MHz

WIFI 802.11ac VHT80 (Band Edge @ 3m)

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

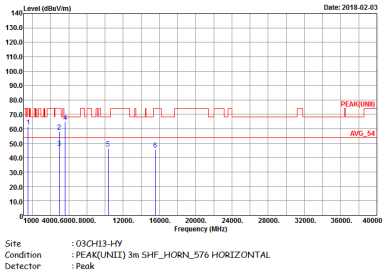
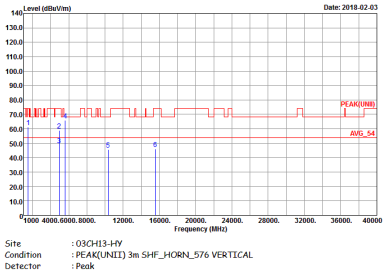
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH42 5210MHz - R	
2	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

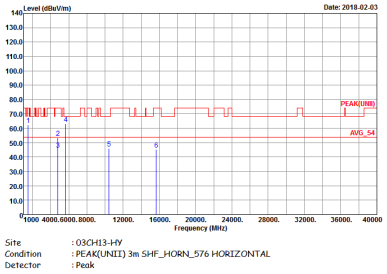
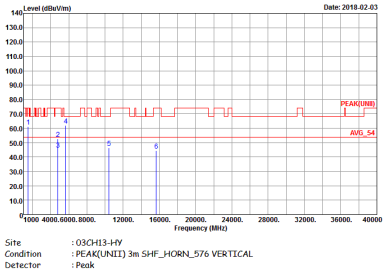
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH42 5210MHz - L	
2	Vertical	Fundamental
Peak		
Avg.		Left blank

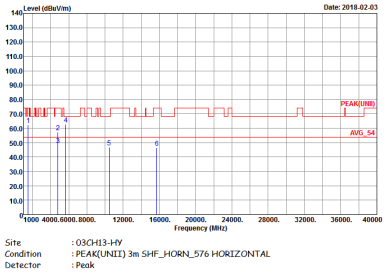
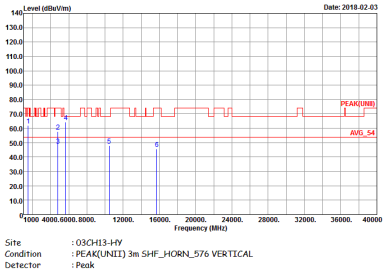
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH42 5210MHz - R	
2	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

Band 1 - 5150~5250MHz

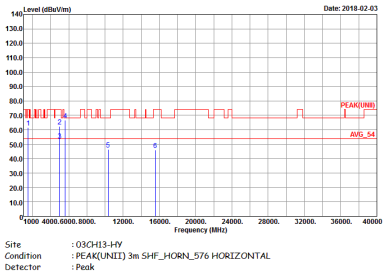
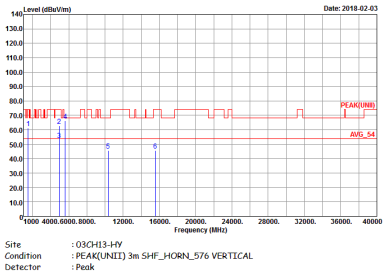
WIFI 802.11a (Harmonic @ 3m)

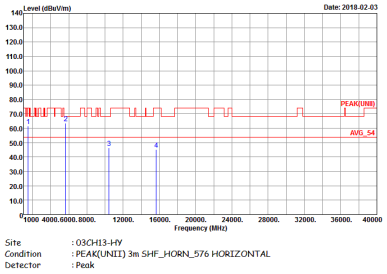
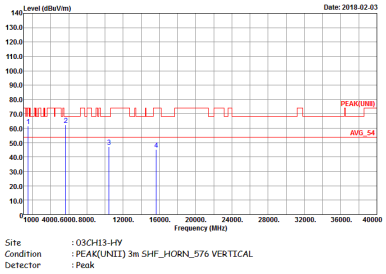
WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11a CH36 5180MHz	
2	Horizontal	Vertical
Peak Avg.		

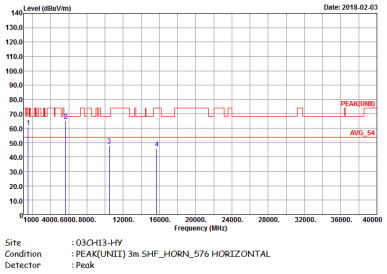
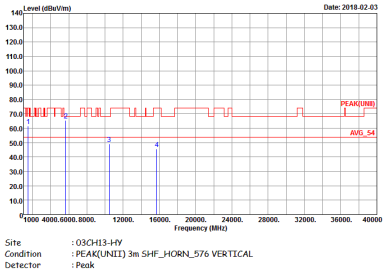
WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11a CH44 5220MHz	
2	Horizontal	Vertical
Peak Avg.		

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

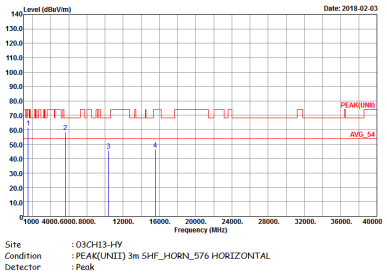
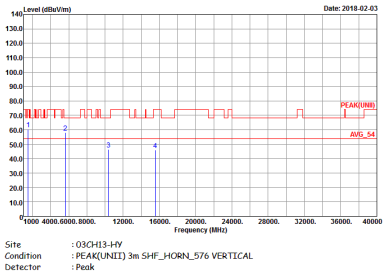
Band 1 5150~5250MHz
WIFI 802.11n HT20 (Harmonic @ 3m)

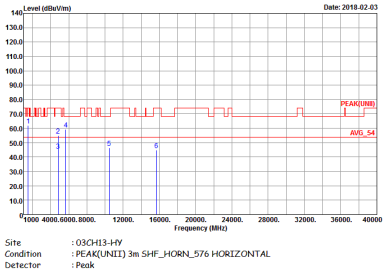
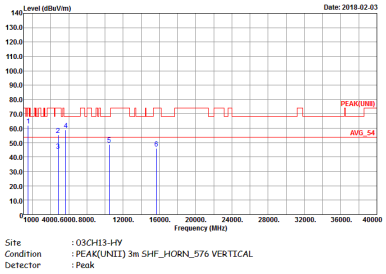
WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11n HT20 CH36 5180MHz	
2	Horizontal	Vertical
Peak Avg.		

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

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

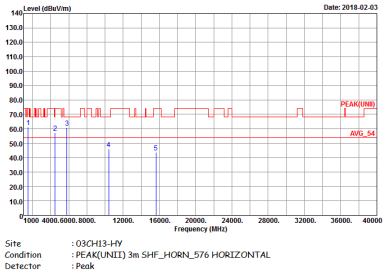
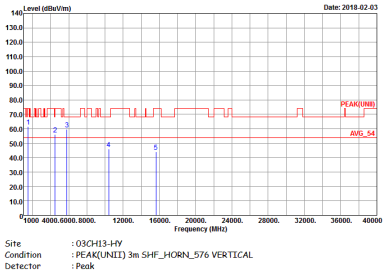
Band 1 5150~5250MHz
WIFI 802.11n HT40 (Harmonic @ 3m)

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

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

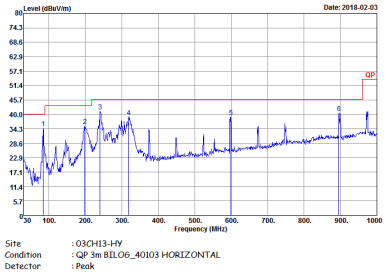
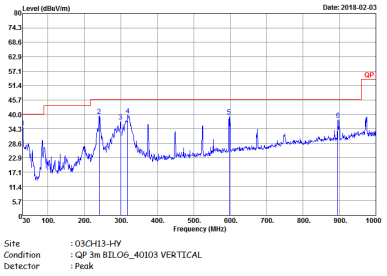
Band 1 5150~5250MHz

WIFI 802.11ac VHT80 (Harmonic @ 3m)

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

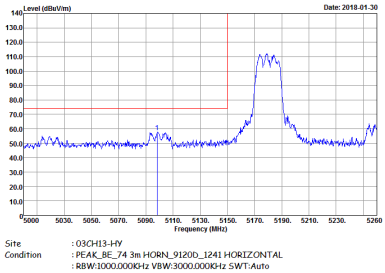
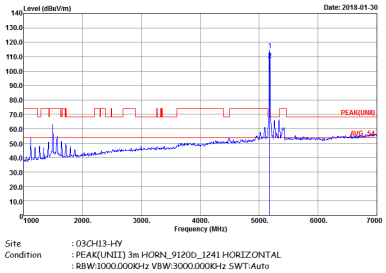
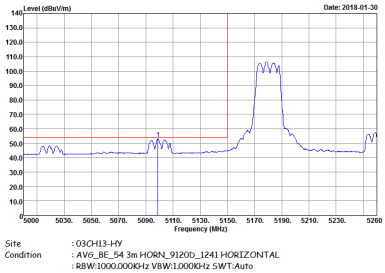
Emission below 1GHz

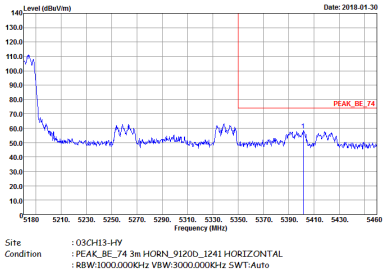
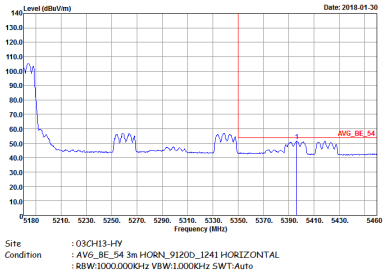
5GHz WIFI 802.11a (LF)

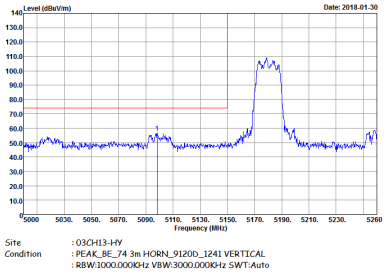
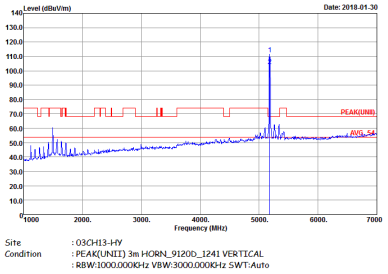
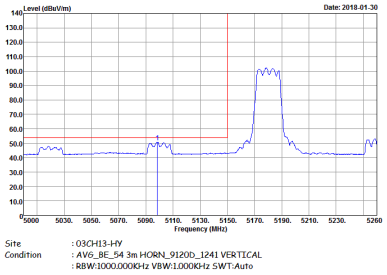
WIFI	5GHz WIFI	
ANT	802.11a LF	
2	Horizontal	Vertical
QP / Peak		

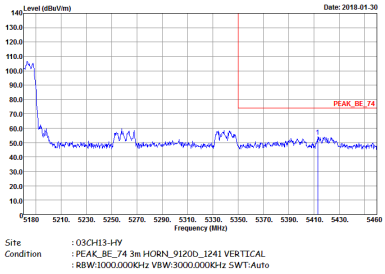
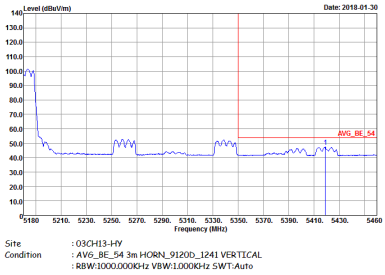
Band 1 - 5150~5250MHz

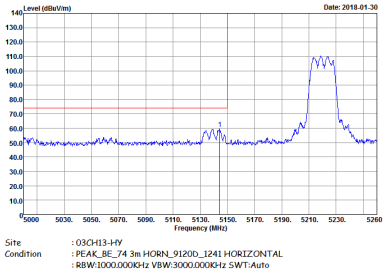
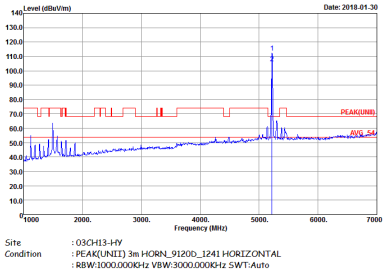
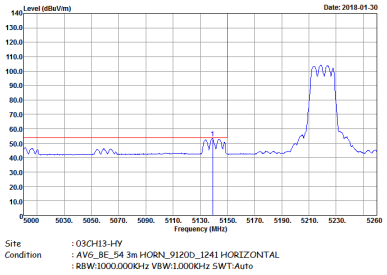
WIFI 802.11a (Band Edge @ 3m)

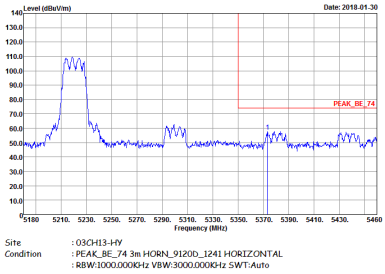
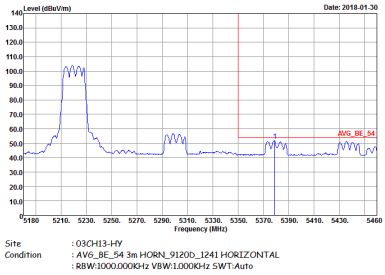
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH36 5180MHz - L	
1+2	Horizontal	Fundamental
Peak		
Avg.		Left blank

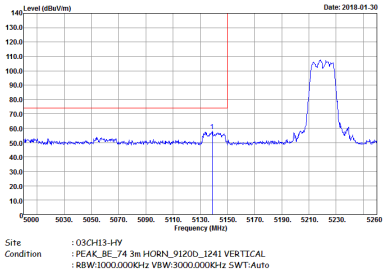
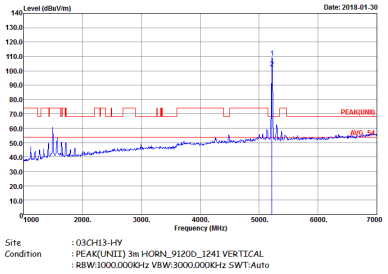
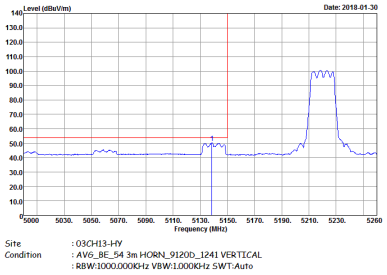
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH36 5180MHz - R	
1+2	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

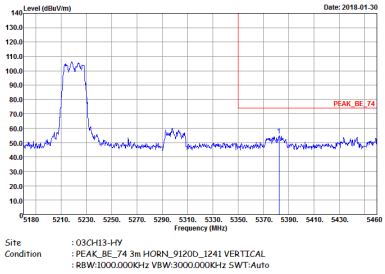
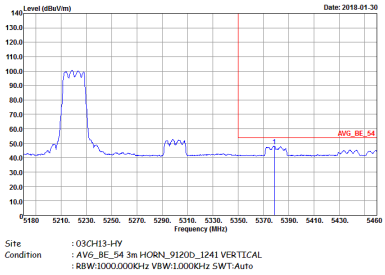
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH36 5180MHz - L	
1+2	Vertical	Fundamental
Peak		
Avg.		Left blank

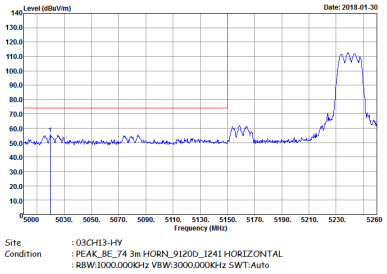
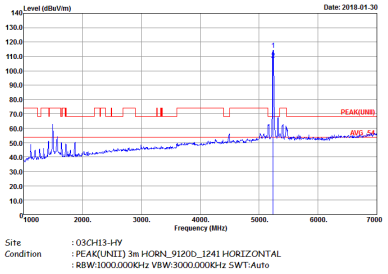
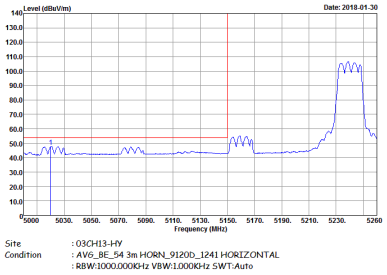
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH36 5180MHz - R	
1+2	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

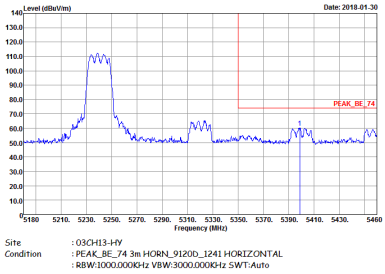
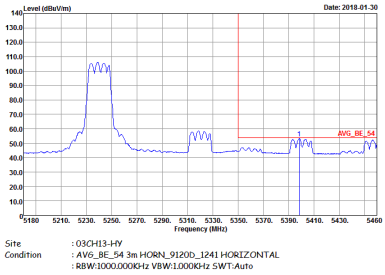
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH44 5220MHz - L	
1+2	Horizontal	Fundamental
Peak		
Avg.		Left blank

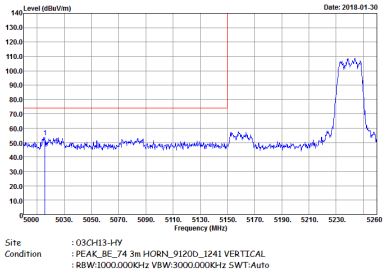
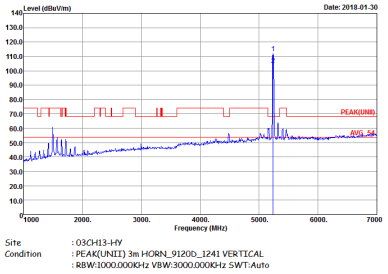
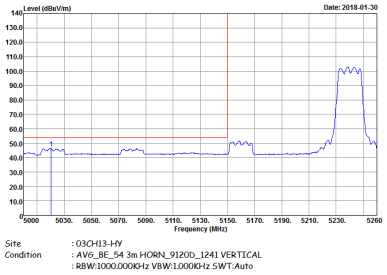
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH44 5220MHz - R	
1+2	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

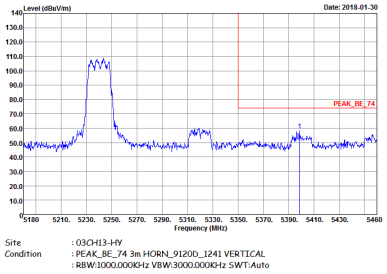
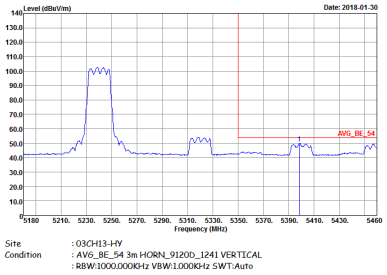
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH44 5220MHz - L	
1+2	Vertical	Fundamental
Peak		
Avg.		Left blank

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

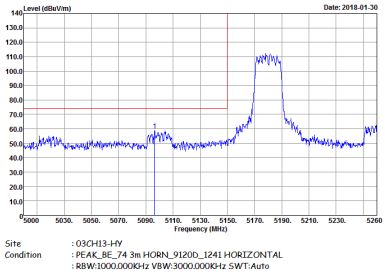
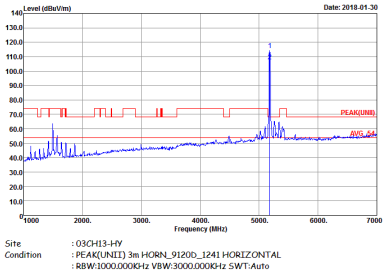
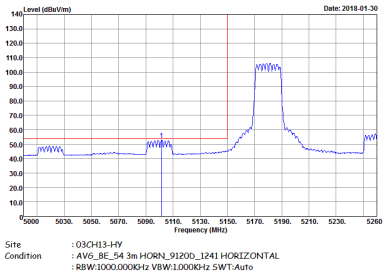
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH48 5240MHz - L	
1+2	Horizontal	Fundamental
Peak		
Avg.		Left blank

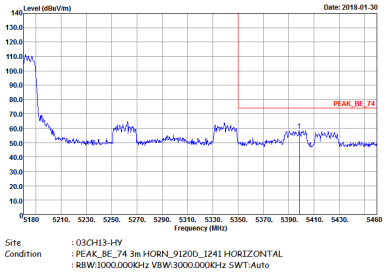
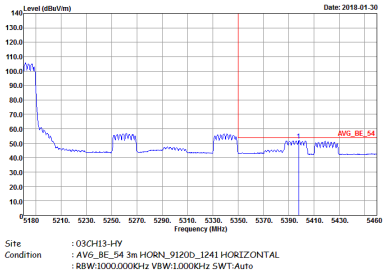
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH48 5240MHz - R	
1+2	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

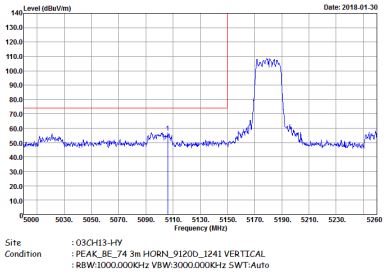
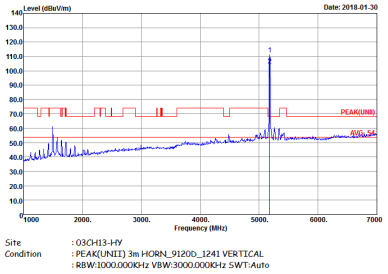
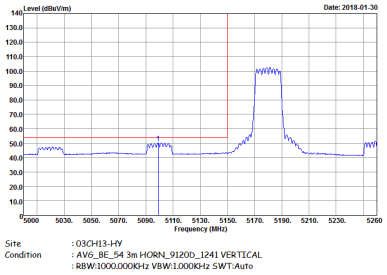
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH48 5240MHz - L	
1+2	Vertical	Fundamental
Peak		
Avg.		Left blank

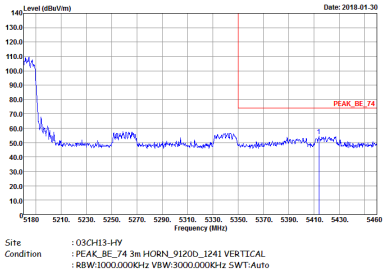
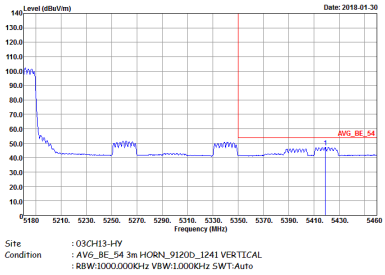
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH48 5240MHz - R	
1+2	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

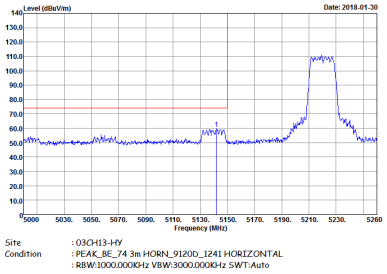
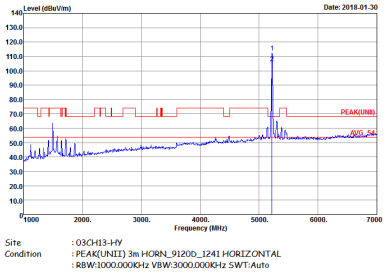
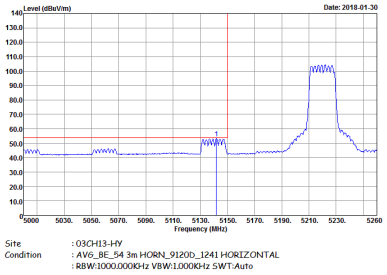
Band 1 5150~5250MHz
WIFI 802.11n HT20 (Band Edge @ 3m)

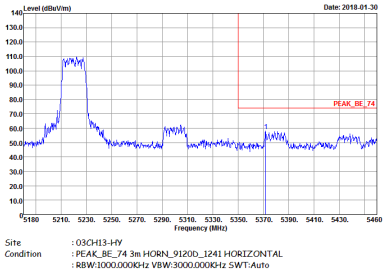
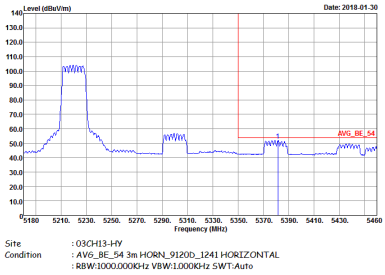
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH36 5180MHz -L	
1+2	Horizontal	Fundamental
Peak		
Avg.		Left blank

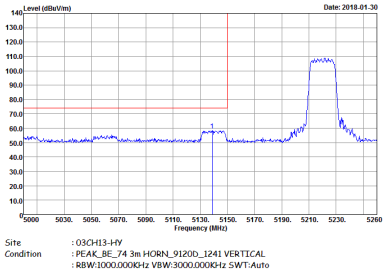
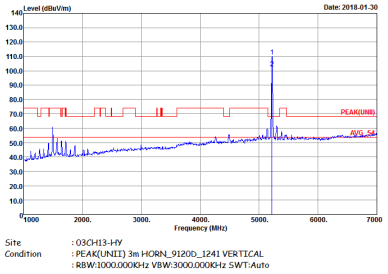
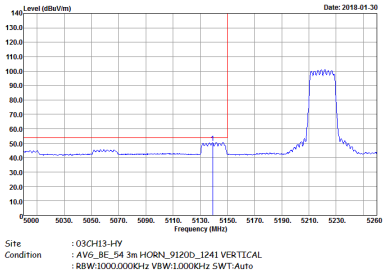
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH36 5180MHz - R	
1+2	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

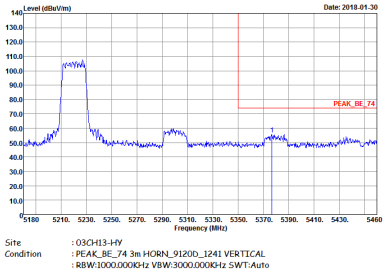
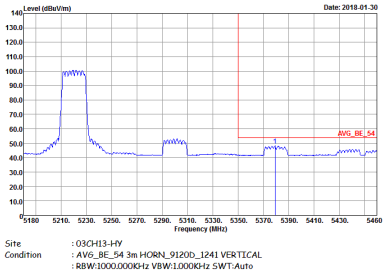
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH36 5180MHz - L	
1+2	Vertical	Fundamental
Peak		
Avg.		Left blank

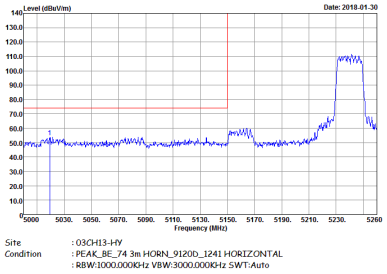
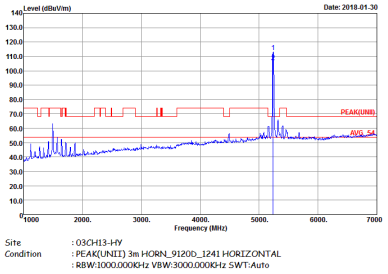
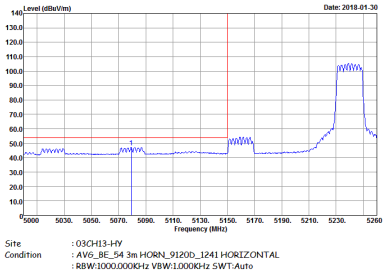
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH36 5180MHz - R	
1+2	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

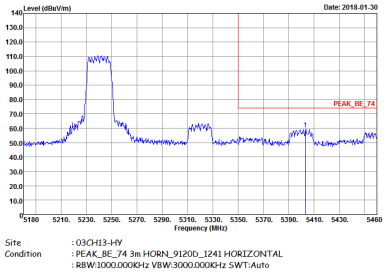
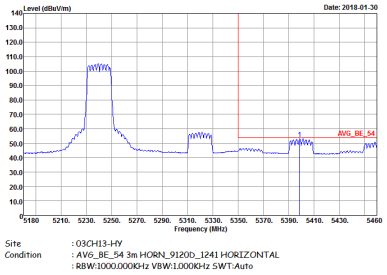
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH44 5220MHz - L	
1+2	Horizontal	Fundamental
Peak		
Avg.		Left blank

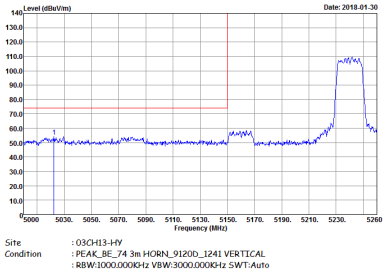
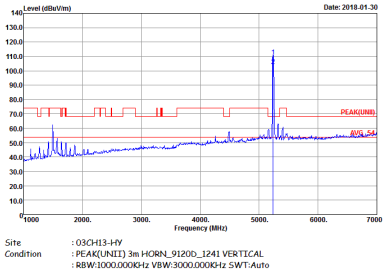
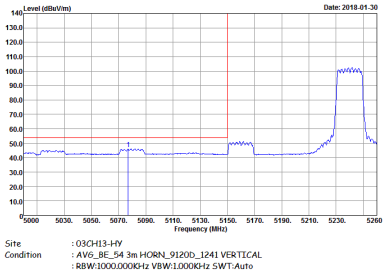
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH44 5220MHz - R	
1+2	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

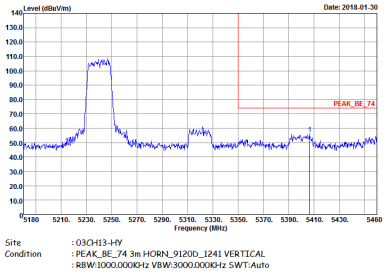
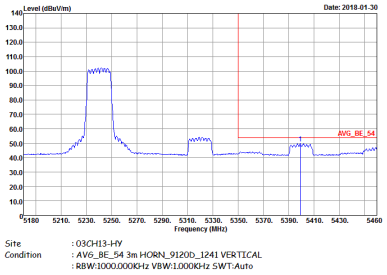
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH44 5220MHz - L	
1+2	Vertical	Fundamental
Peak		
Avg.		Left blank

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

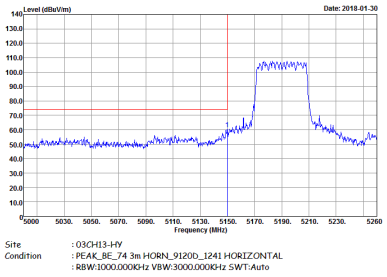
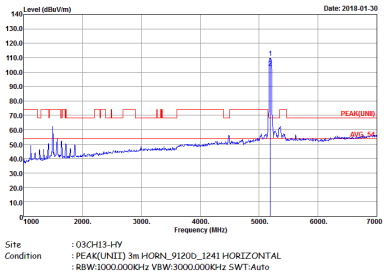
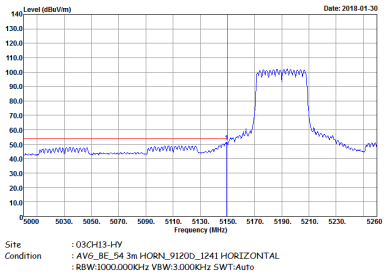
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH48 5240MHz - L	
1+2	Horizontal	Fundamental
Peak		
Avg.		Left blank

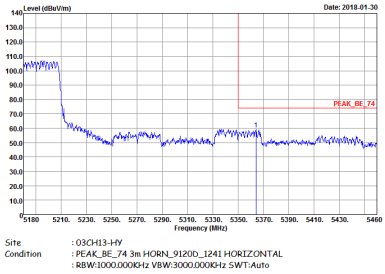
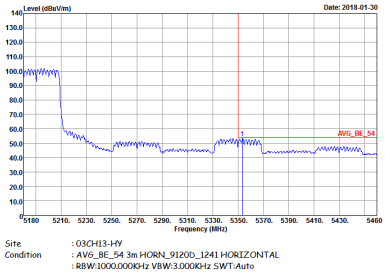
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH48 5240MHz - R	
1+2	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

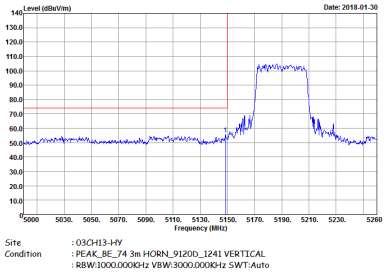
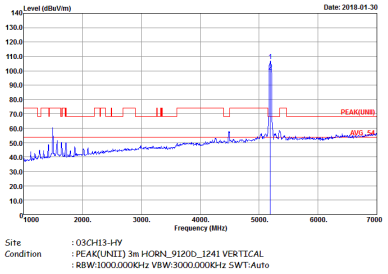
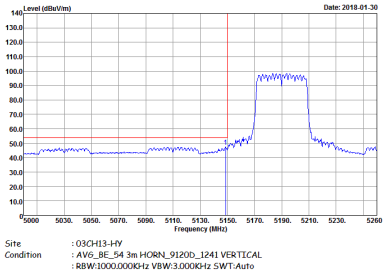
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH48 5240MHz - L	
1+2	Vertical	Fundamental
Peak		
Avg.		Left blank

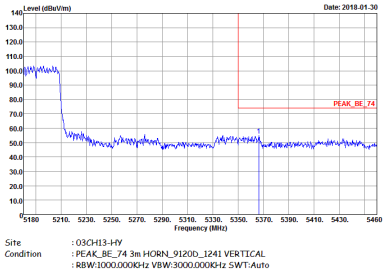
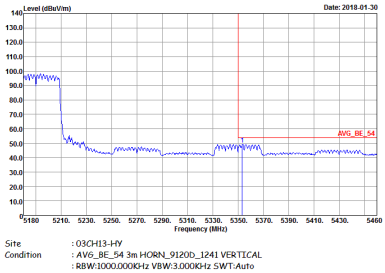
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH48 5240MHz - R	
1+2	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

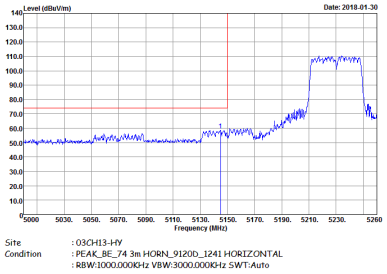
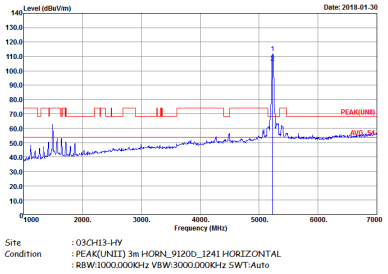
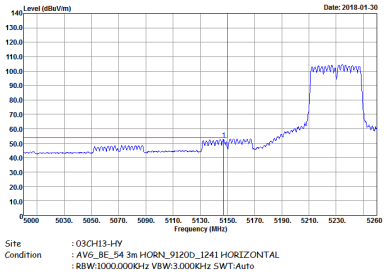
Band 1 5150~5250MHz
WIFI 802.11n HT40 (Band Edge @ 3m)

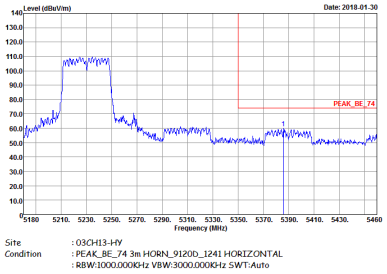
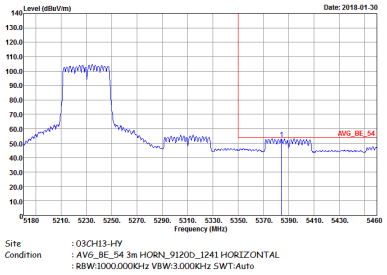
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH38 5190MHz - L	
1+2	Horizontal	Fundamental
Peak		
Avg.		Left blank

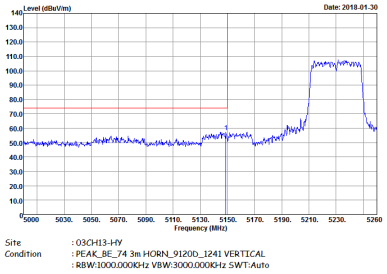
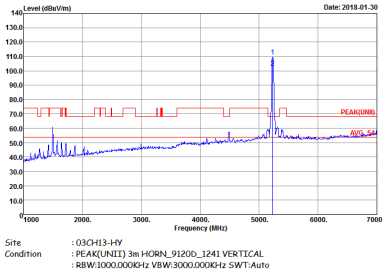
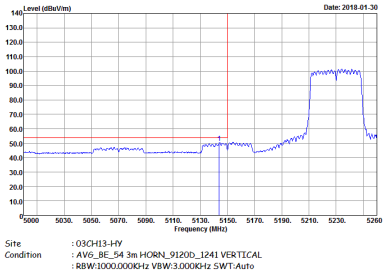
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH38 5190MHz - R	
1+2	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

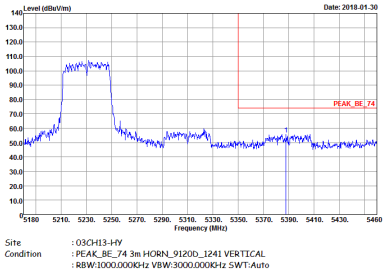
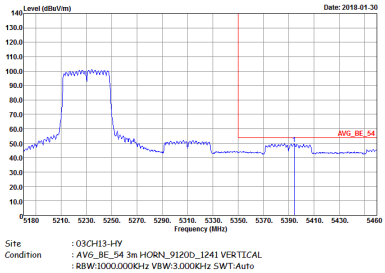
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH38 5190MHz - L	
1+2	Vertical	Fundamental
Peak		
Avg.		Left blank

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

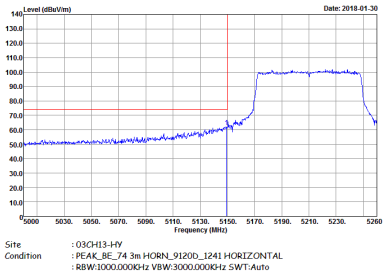
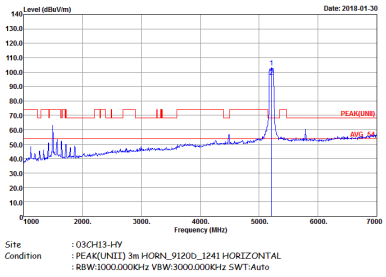
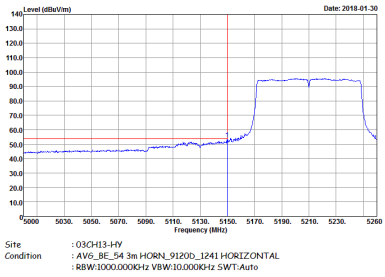
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH46 5230MHz - R	
1+2	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

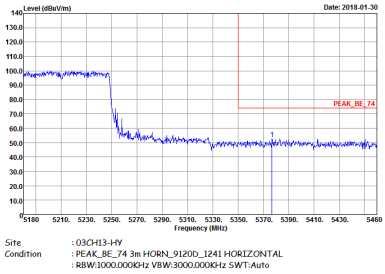
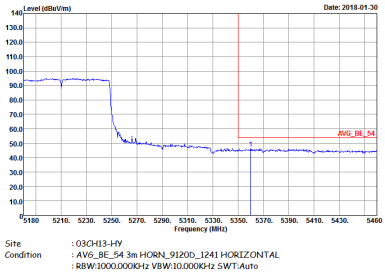
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH46 5230MHz - L	
1+2	Vertical	Fundamental
Peak		
Avg.		Left blank

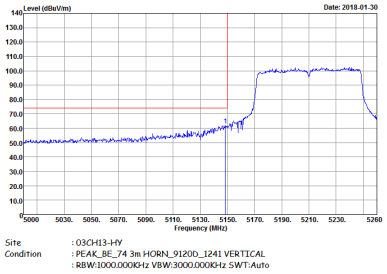
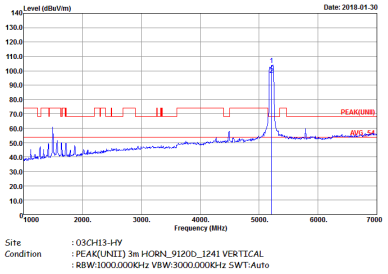
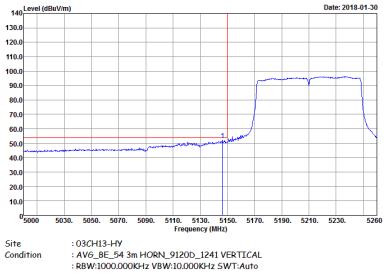
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH46 5230MHz - R	
1+2	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

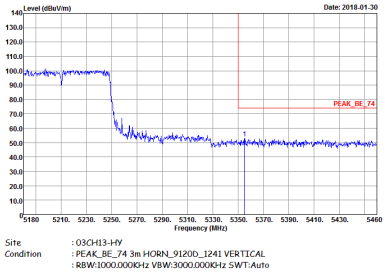
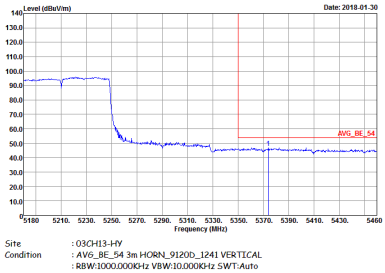
Band 1 5150~5250MHz

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

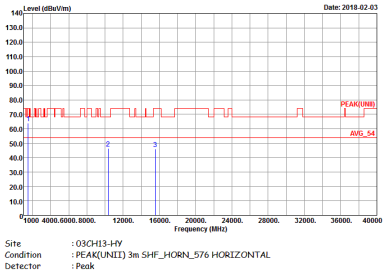
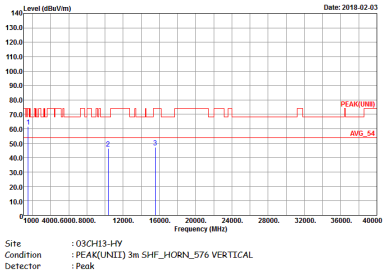
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH42 5210MHz - R	
1+2	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

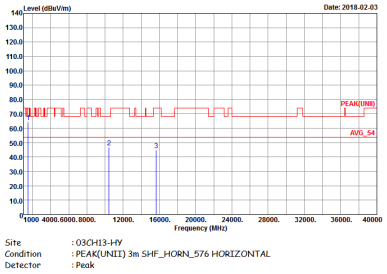
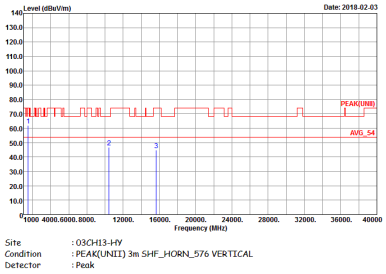
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH42 5210MHz - L	
1+2	Vertical	Fundamental
Peak		
Avg.		Left blank

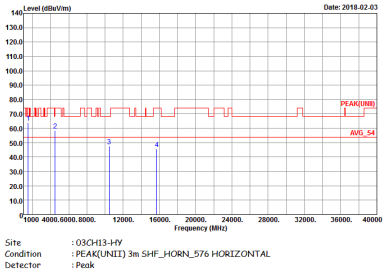
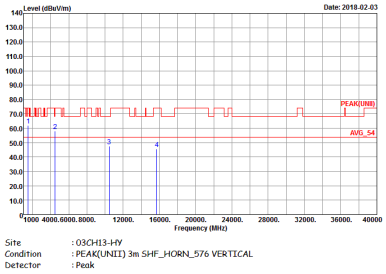
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH42 5210MHz - R	
1+2	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

Band 1 - 5150~5250MHz

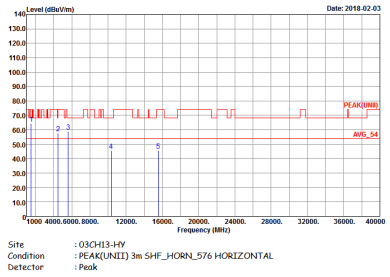
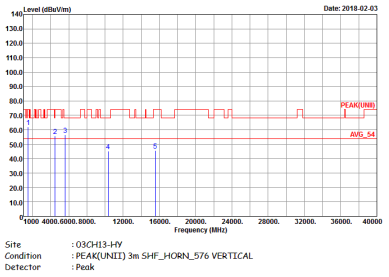
WIFI 802.11a (Harmonic @ 3m)

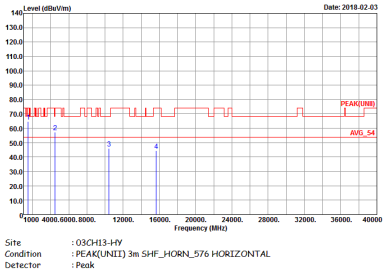
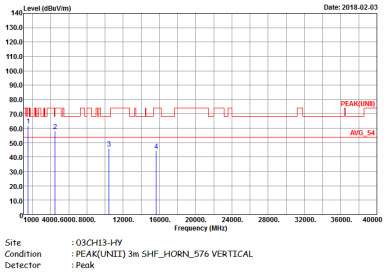
WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11a CH36 5180MHz	
1+2	Horizontal	Vertical
Peak Avg.		

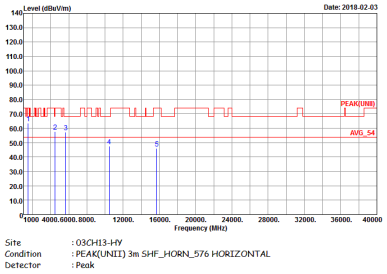
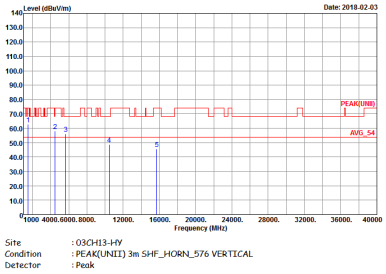
WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11a CH44 5220MHz	
1+2	Horizontal	Vertical
Peak Avg.		

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

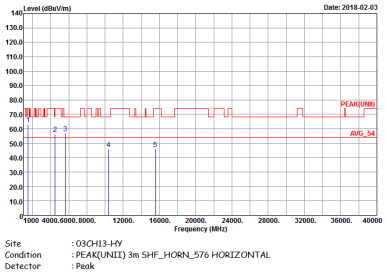
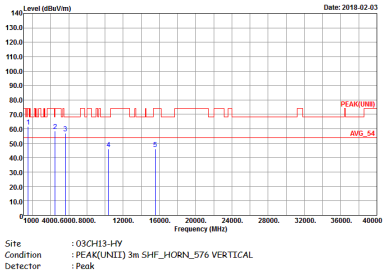
Band 1 5150~5250MHz
WIFI 802.11n HT20 (Harmonic @ 3m)

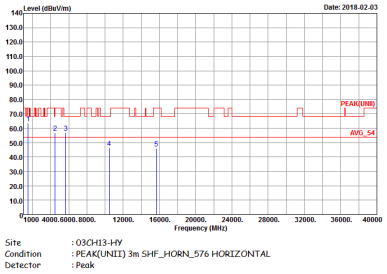
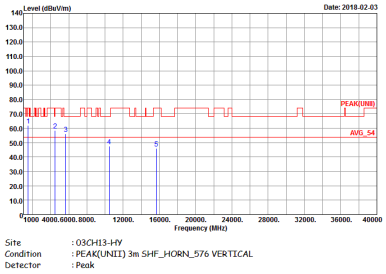
WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11n HT20 CH36 5180MHz	
1+2	Horizontal	Vertical
Peak Avg.		

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.		

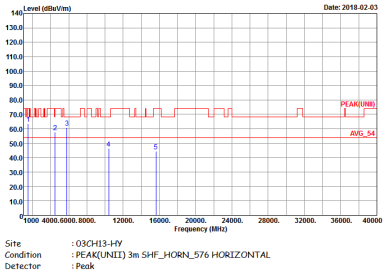
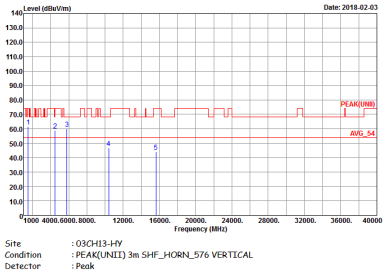
Band 1 5150~5250MHz
WIFI 802.11n HT40 (Harmonic @ 3m)

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.		

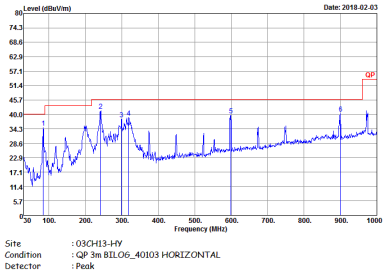
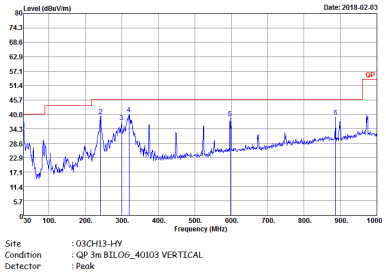
Band 1 5150~5250MHz

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.		

Emission below 1GHz

5GHz WIFI 802.11n HT40 (LF)

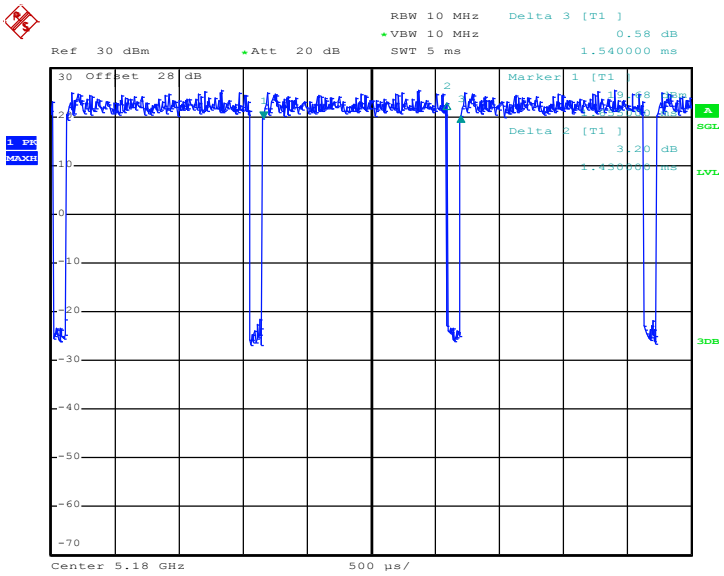
WIFI	5GHz WIFI	
ANT	802.11n HT40 LF	
1+2	Horizontal	Vertical
QP / Peak		

Appendix E. Duty Cycle Plots

Antenna	Band	Duty Cycle(%)	T(us)	1/T(kHz)	VBW Setting	Duty Factor(dB)
1	802.11a	92.86	1430	0.70	1kHz	0.32
2	802.11a	93.46	1430	0.70	1kHz	0.29
1+2	802.11a for Ant. 1	93.46	1430	0.70	1kHz	0.29
1+2	802.11a for Ant. 2	93.46	1430	0.70	1kHz	0.29
1	5GHz 802.11n HT20	93.06	1340	0.75	1kHz	0.31
2	5GHz 802.11n HT20	92.41	1340	0.75	1kHz	0.34
1+2	5GHz 802.11n HT20 for Ant. 1	93.06	1340	0.75	1kHz	0.31
1+2	5GHz 802.11n HT20 for Ant. 2	93.06	1340	0.75	1kHz	0.31
1	5GHz 802.11n HT40	85.71	660	1.52	3kHz	0.67
2	5GHz 802.11n HT40	86.84	660	1.52	3kHz	0.61
1+2	5GHz 802.11n HT40 for Ant. 1	85.71	660	1.52	3kHz	0.67
1+2	5GHz 802.11n HT40 for Ant. 2	87.01	670	1.49	3kHz	0.60
1	5GHz 802.11ac VHT20	93.10	1350	0.74	1kHz	0.31
2	5GHz 802.11ac VHT20	93.08	1345	0.74	1kHz	0.31
1+2	5GHz 802.11ac VHT20 for Ant. 1	93.10	1350	0.74	1kHz	0.31
1+2	5GHz 802.11ac VHT20 for Ant. 2	92.41	1340	0.75	1kHz	0.34
1	5GHz 802.11ac VHT40	85.71	660	1.52	3kHz	0.67
2	5GHz 802.11ac VHT40	85.71	660	1.52	3kHz	0.67
1+2	5GHz 802.11ac VHT40 for Ant. 1	85.90	670	1.49	3kHz	0.66
1+2	5GHz 802.11ac VHT40 for Ant. 2	85.71	660	1.52	3kHz	0.67
1	5GHz 802.11ac VHT80	76.39	330	3.03	10kHz	1.17
2	5GHz 802.11ac VHT80	76.39	330	3.03	10kHz	1.17
1+2	5GHz 802.11ac VHT80 for Ant. 1	77.46	330	3.03	10kHz	1.11
1+2	5GHz 802.11ac VHT80 for Ant. 2	76.39	330	3.03	10kHz	1.17

<Ant. 1>

802.11a



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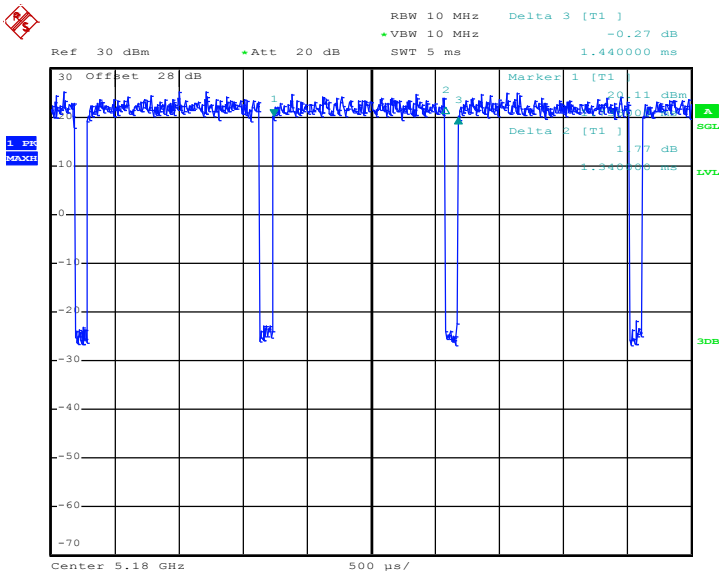

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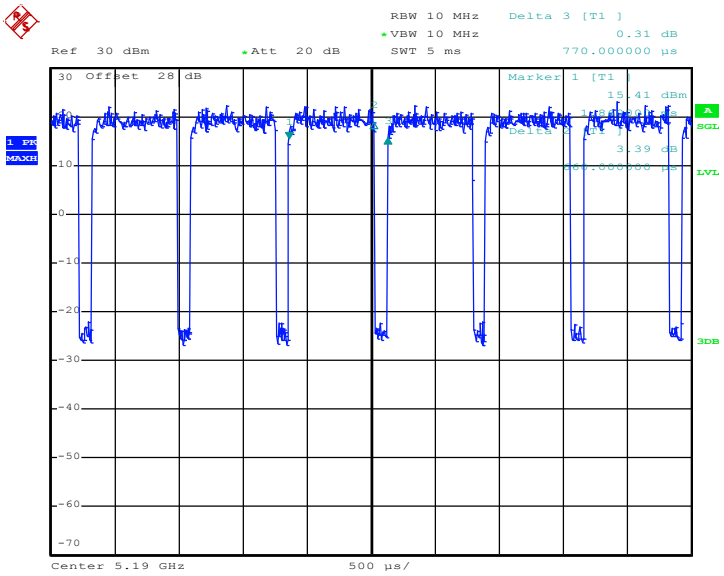

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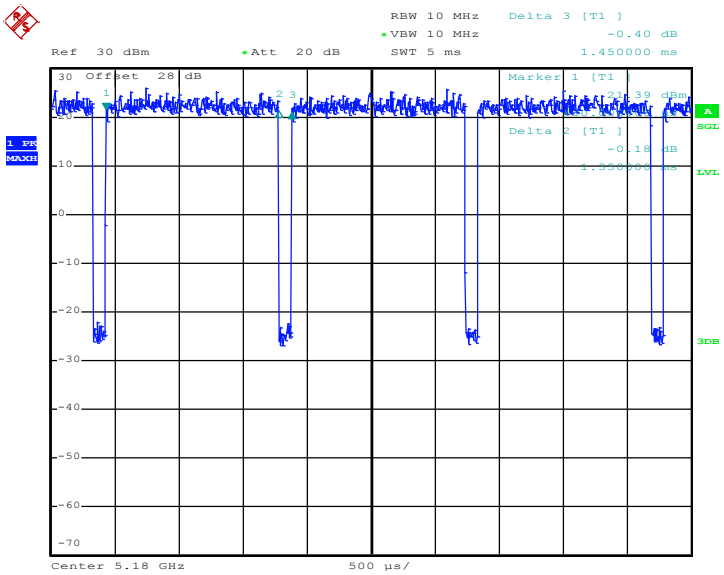

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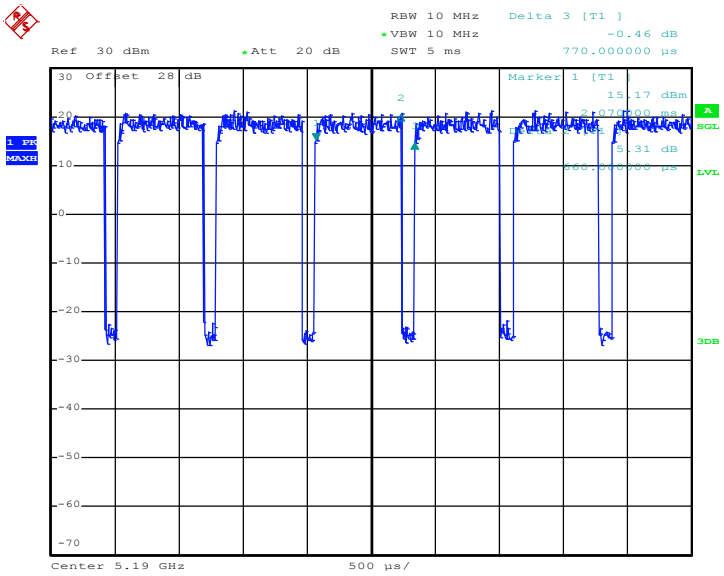

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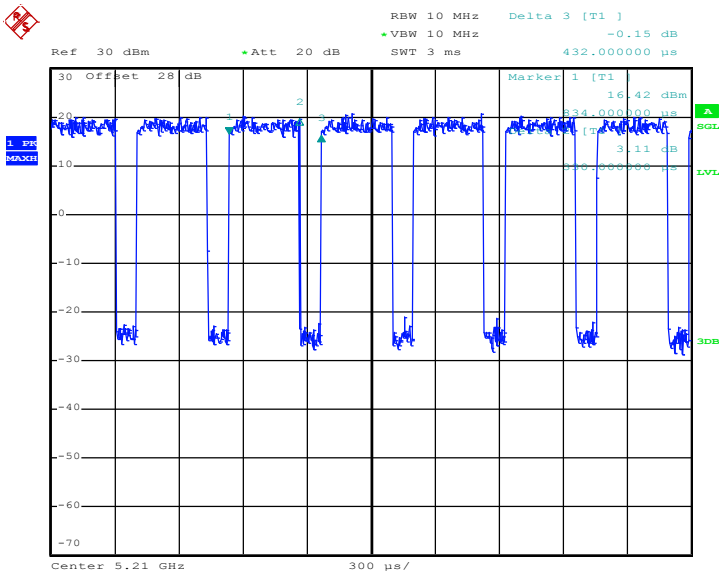

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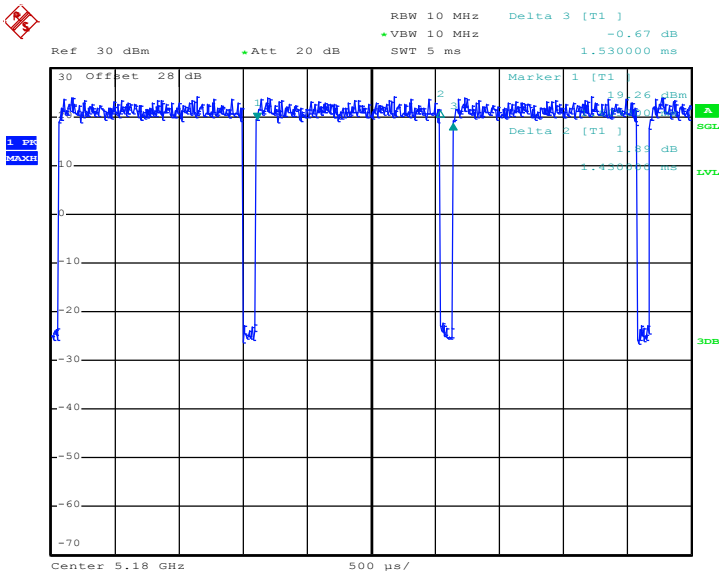

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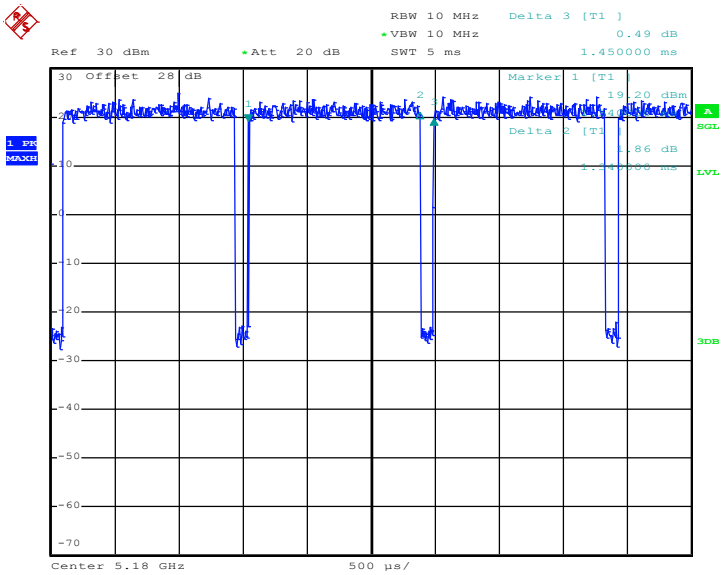

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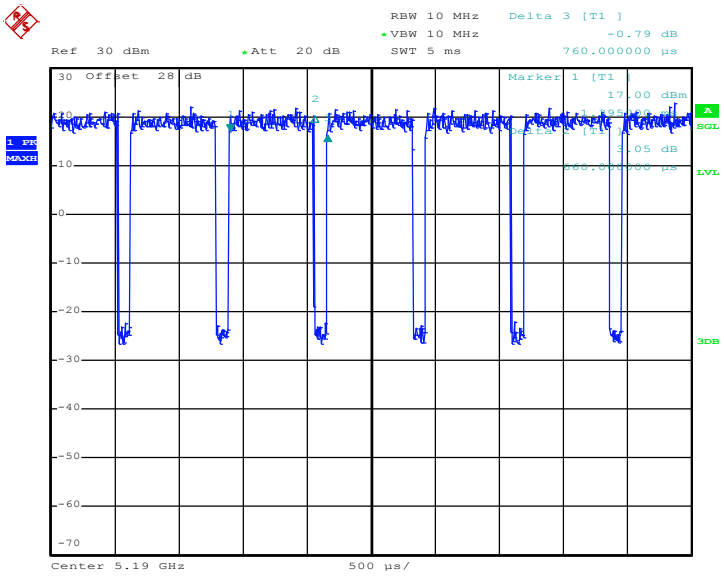

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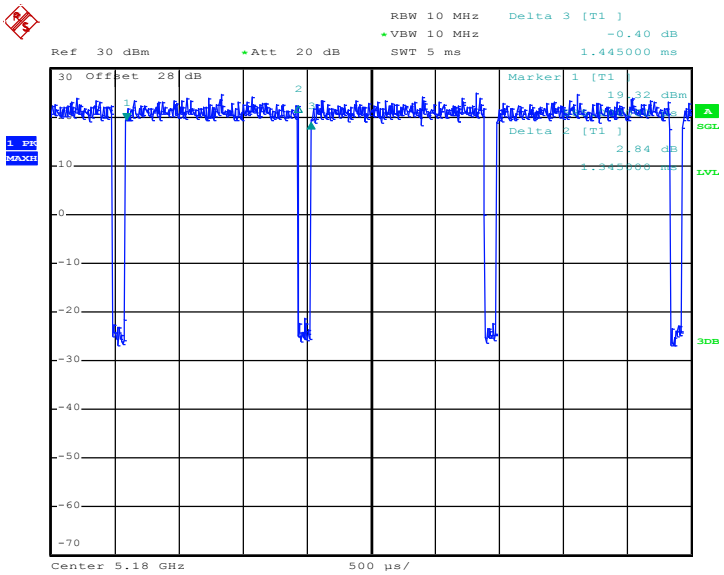

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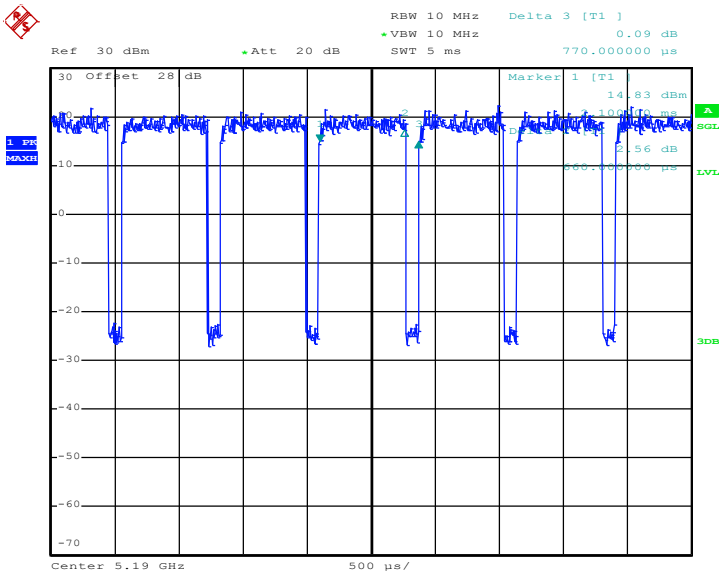

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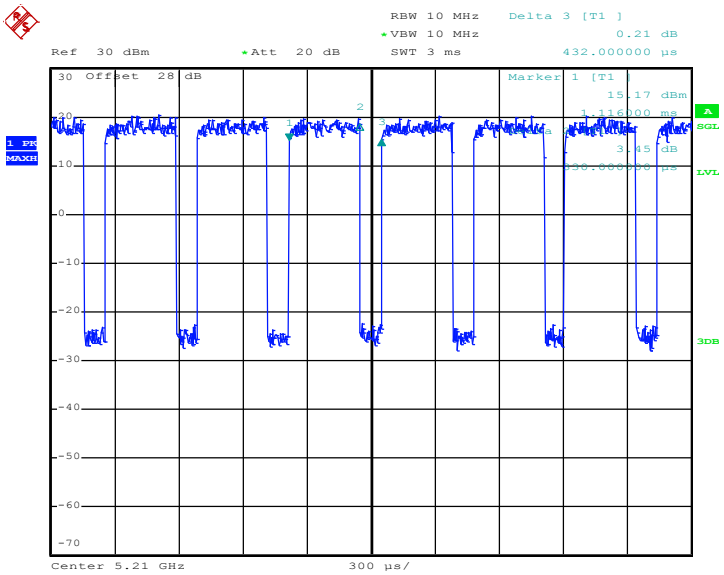

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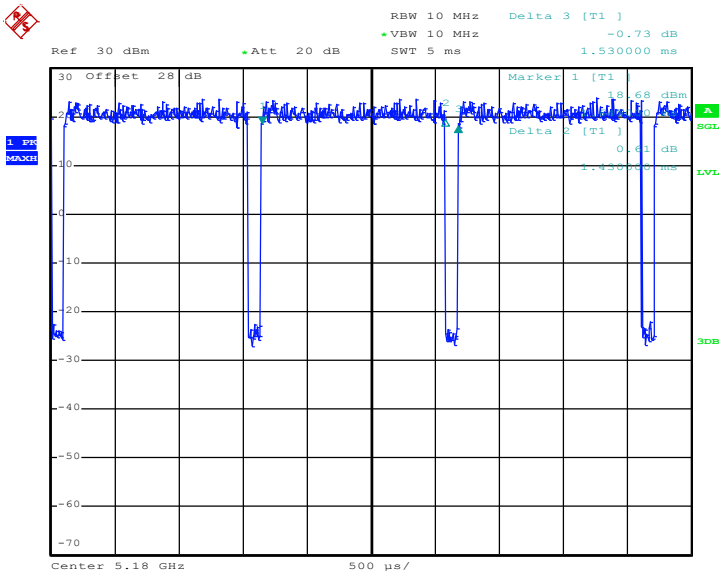

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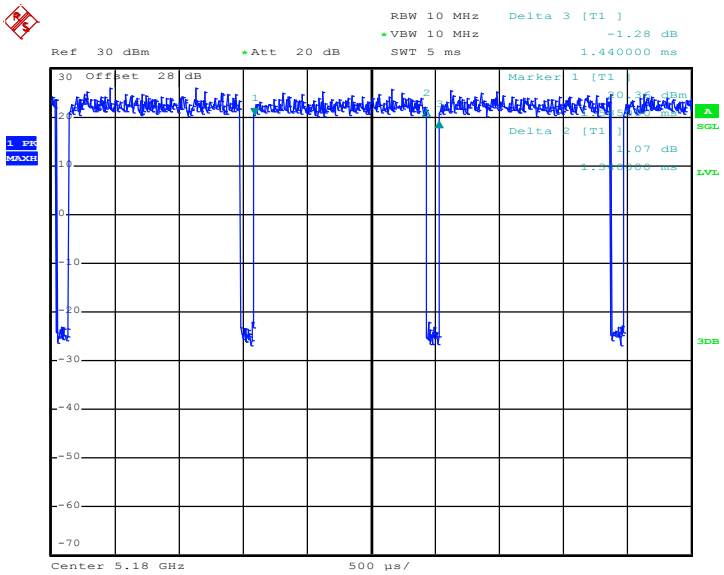

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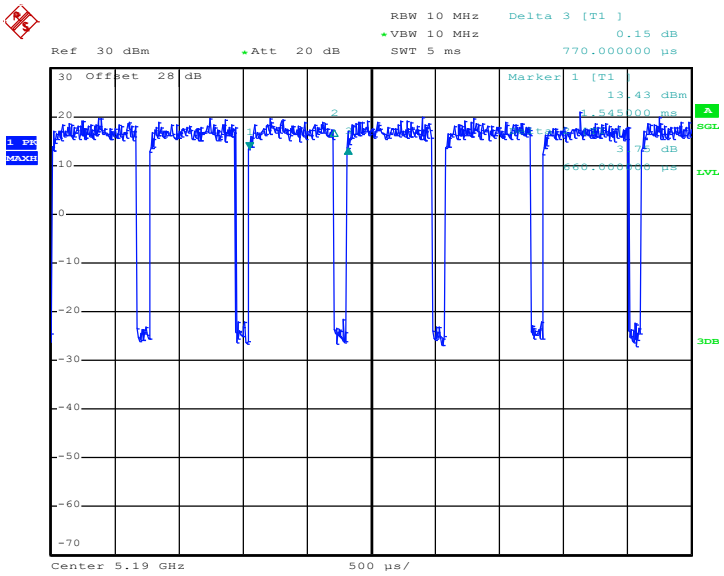

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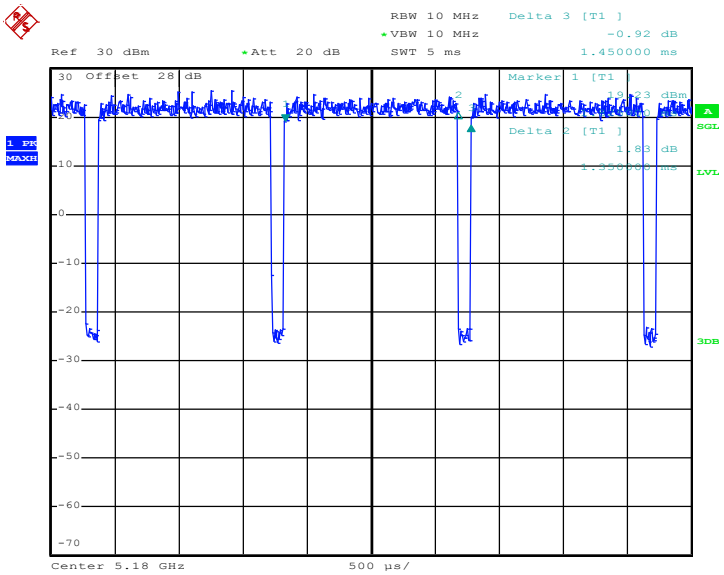

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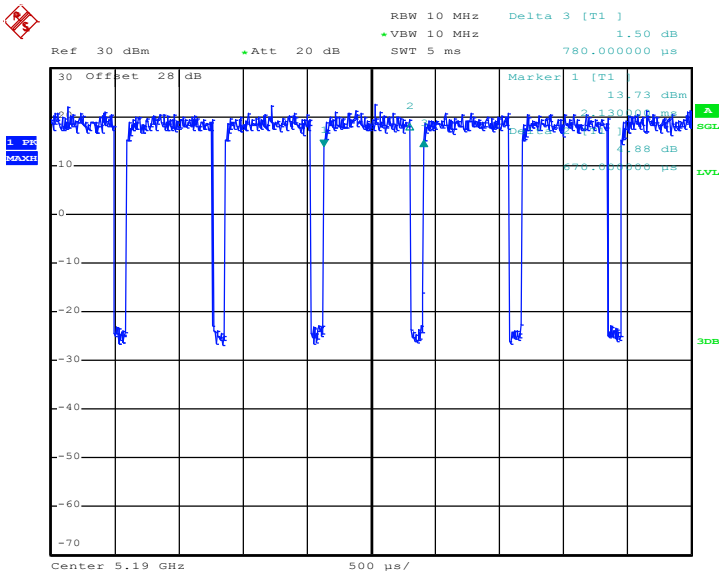

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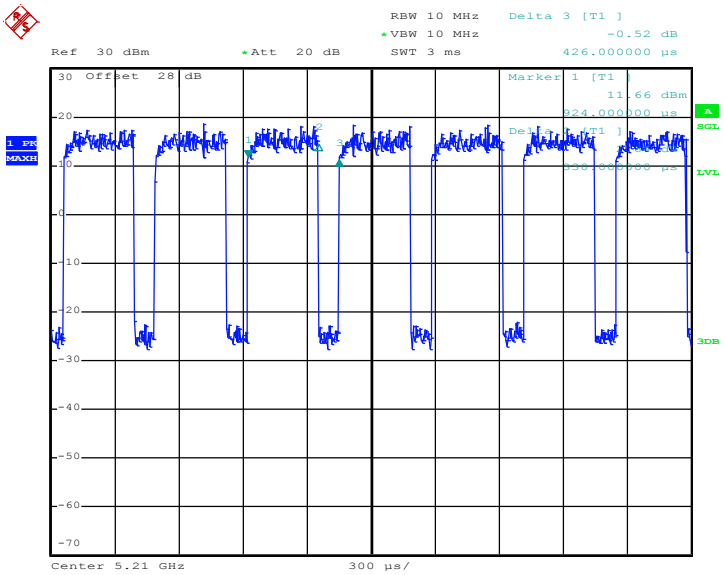

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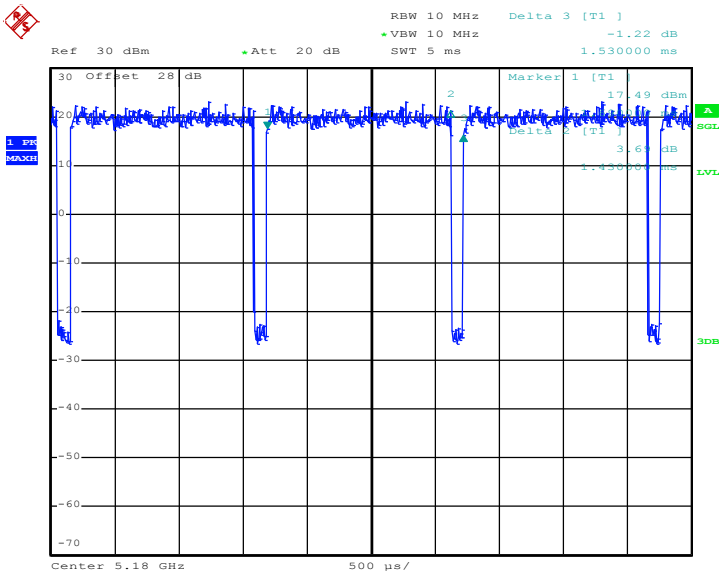

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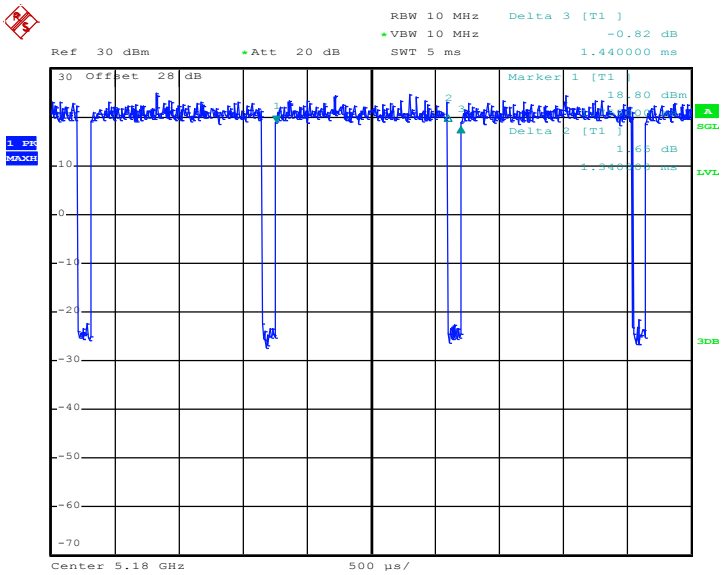

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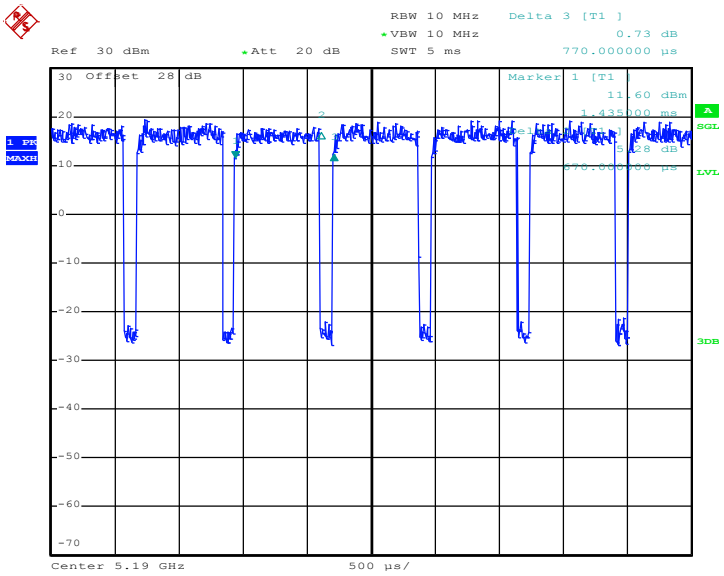

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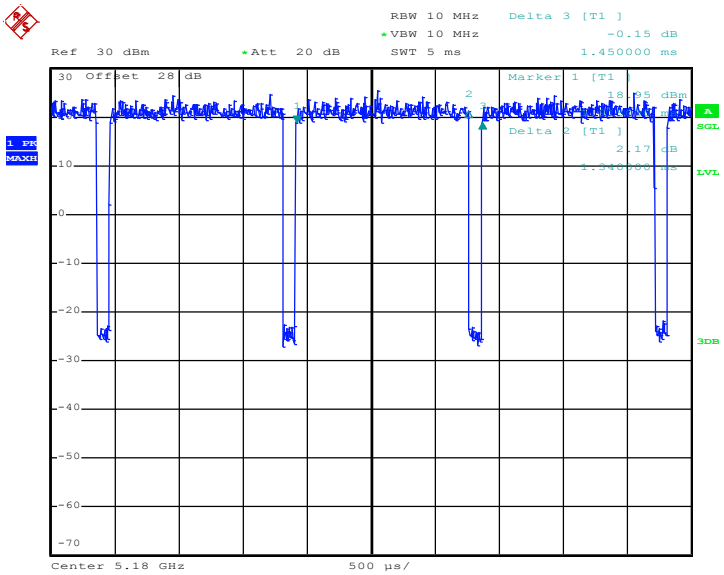

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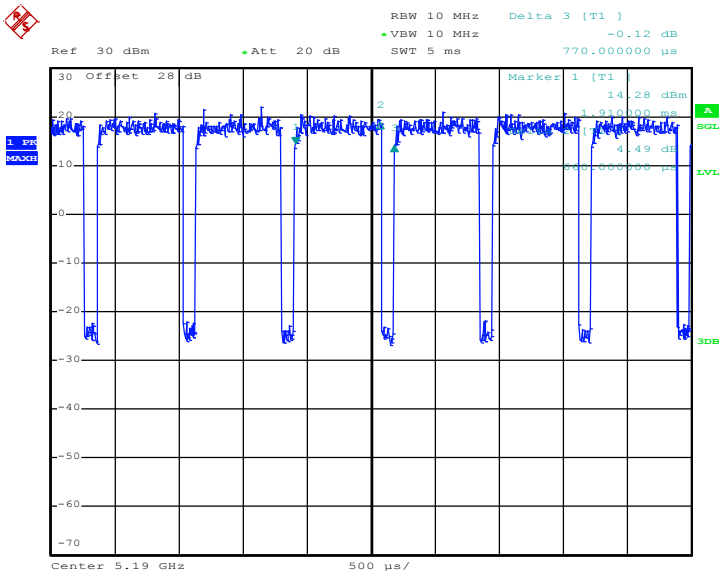

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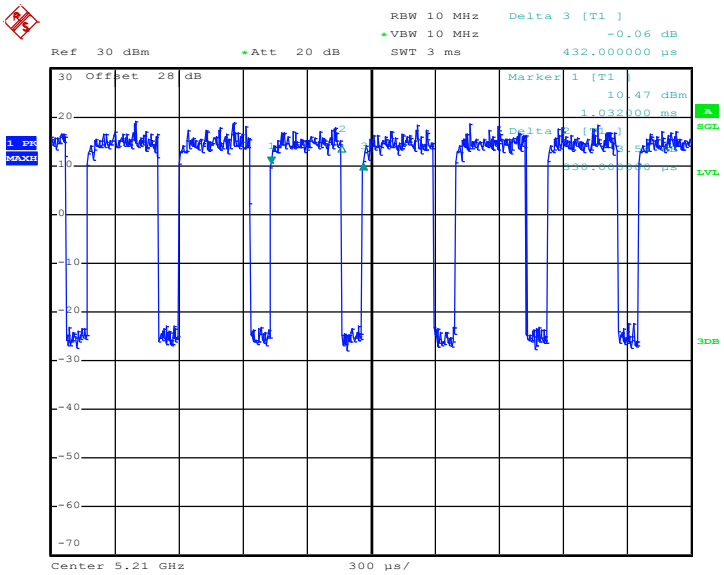

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