



FCC RADIO TEST REPORT

FCC ID : QYL8265BB
Equipment : Notebook
Brand Name : Getac
Model Name : B300
Applicant : Getac Technology Corporation.
5F., Building A, No. 209, Sec.1, Nangang
Rd., Nangang Dist., Taipei City 11568, Taiwan, R.O.C.
Standard : FCC Part 15 Subpart E §15.407

The product was received on Jun. 05, 2018 and testing was started from Jun. 15, 2018 and completed on Jul. 14, 2018. We, SPORTON INTERNATIONAL INC., would like to declare that the tested sample has been evaluated in accordance with the test procedures and has been in compliance with the applicable technical standards.

The report must not be used by the client to claim product certification, approval, or endorsement by TAF or any agency of government.

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

Approved by: Jones Tsai

SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory

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



Table of Contents

History of this test report.....	3
Summary of Test Result.....	4
1 General Description	5
1.1 Product Feature of Equipment Under Test.....	5
1.2 Modification of EUT	5
1.3 Testing Location	5
1.4 Applicable Standards.....	6
2 Test Configuration of Equipment Under Test	7
2.1 Carrier Frequency and Channel	7
2.2 Test Mode.....	9
2.3 Connection Diagram of Test System.....	11
2.4 Support Unit used in test configuration and system	11
2.5 EUT Operation Test Setup	12
2.6 Measurement Results Explanation Example.....	12
3 Test Result	13
3.1 26dB & 99% Occupied Bandwidth Measurement	13
3.2 Maximum Conducted Output Power Measurement	15
3.3 Power Spectral Density Measurement	17
3.4 Unwanted Emissions Measurement.....	20
3.5 AC Conducted Emission Measurement.....	25
3.6 Automatically Discontinue Transmission	27
3.7 Antenna Requirements.....	28
4 List of Measuring Equipment.....	29
5 Uncertainty of Evaluation	31
Appendix A. Conducted Test Results	
Appendix B. AC Conducted Emission Test Result	
Appendix C. Radiated Spurious Emission	
Appendix D. Radiated Spurious Emission Plots	
Appendix E. Duty Cycle Plots	
Appendix F. Setup Photographs	



History of this test report

Report No.	Version	Description	Issued Date
FR372342-17D	01	Initial issue of report	Jul. 28, 2018



Summary of Test Result

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

Reviewed by: Joseph Lin

Report Producer: Polly Tsai



1 General Description

1.1 Product Feature of Equipment Under Test

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

Product Specification subjective to this standard	
Integrated WLAN Module	Brand Name: Intel Module Name: 8265NGW
Antenna Type	WLAN: PIFA Antenna Bluetooth: PIFA Antenna

1.2 Modification of EUT

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

1.3 Testing Location

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

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

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

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

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



1.4 Applicable Standards

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

- ♦ FCC Part 15 Subpart E
- ♦ FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01.
- ♦ ANSI C63.10-2013

Remark:

1. All test items were verified and recorded according to the standards and without any deviation during the test.
2. This EUT has also been tested and complied with the requirements of FCC Part 15, Subpart B, recorded in a separate test report.

2 Test Configuration of Equipment Under Test

- a. The EUT has been associated with peripherals and configuration operated in a manner tended to maximize its emission characteristics in a typical application. Frequency range investigated: conduction emission (150 kHz to 30 MHz), radiation emission (9 kHz to the 10th harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower).
- b. AC power line Conducted Emission was tested under maximum output power.

2.1 Carrier Frequency and Channel

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

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

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



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

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

Note:

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



2.2 Test Mode

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

Modulation	Data Rate
802.11a	6 Mbps
802.11n HT20	MCS0
802.11n HT40	MCS0
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 : Bluetooth Link + WLAN (5GHz) Link + TF + TC
Remark: 1. TF stands for Test Function, and consists of H-Pattern, Camera, and MPEG4. 2. TC stands for Test Configuration, and consists of SD Card, USB3.0 HD*3, Monitor (VGA out), Monitor (HDMI out), RS-232 Cable*2 (Load), PC Card, Earphone with Mic, RJ-45 Link, Battery, and AC Adapter (A10-090P3A).	



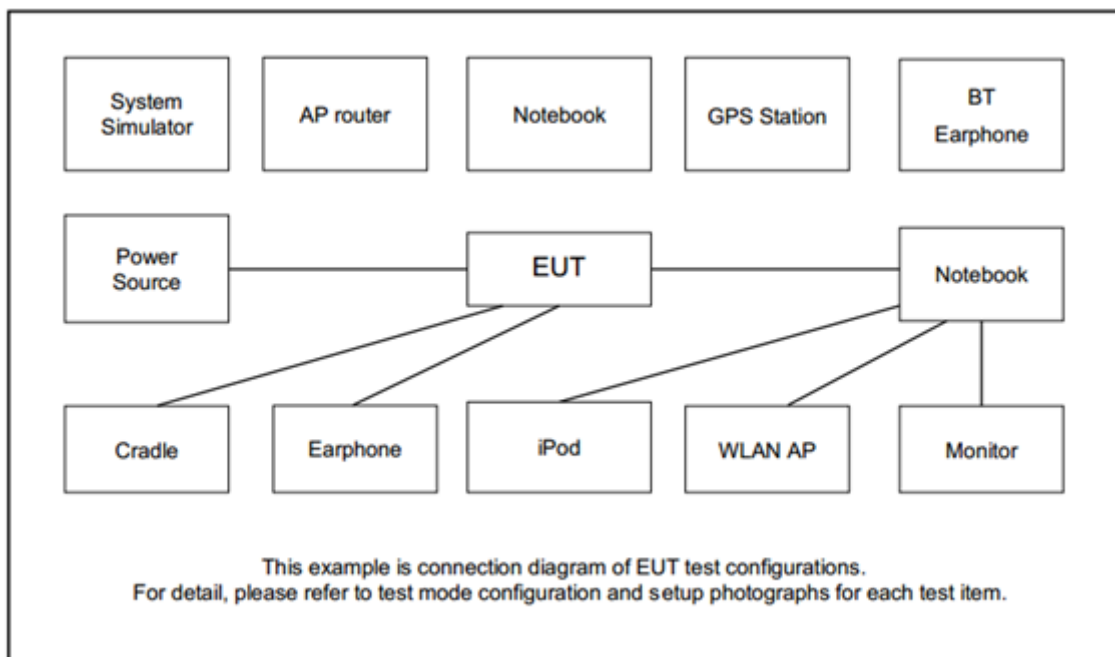
Ch. #		Band I : 5150-5250 MHz	Band II : 5250-5350 MHz	Band III : 5470-5725MHz
		802.11a	802.11a	802.11a
L	Low	36	52	100
M	Middle	44	60	116
H	High	48	64	140
Straddle		-	-	-

Ch. #		Band I : 5150-5250 MHz	Band II : 5250-5350 MHz	Band III : 5470-5725MHz
		802.11n HT20	802.11n HT20	802.11n HT20
L	Low	-	-	-
M	Middle	-	-	-
H	High	-	-	-
Straddle		-	-	144

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

Ch. #		Band I : 5150-5250 MHz	Band II : 5250-5350 MHz	Band III : 5470-5725MHz
		802.11ac VHT80	802.11ac VHT80	802.11ac VHT80
L	Low	-	-	106
M	Middle	42	58	122
H	High	-	-	-
Straddle		-	-	138

2.3 Connection Diagram of Test System



2.4 Support Unit used in test configuration and system

Item	Equipment	Trade Name	Model Name	FCC ID	Data Cable	Power Cord
1.	Bluetooth Earphone	Sony Ericsson	MW600	PY7DDA-2029	N/A	N/A
2.	iPod Earphone	aibo	IP-E1	N/A	Unshielded, 1.1 m	N/A
3.	WLAN AP	ASUS	RT-AC66U	MSQ-RTAC66U	N/A	Unshielded, 1.8 m
4.	Notebook	DELL	Latitude E6320	FCC DoC/ Contains FCC ID: QDS-BRCM1054	N/A	AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m
5.	LCD Monitor	DELL	P2715Q	FCC DoC	Shielded, 1.6 m	Unshielded, 1.8 m
6.	LCD Monitor	DELL	U2410	FCC DoC	Shielded, 1.6 m	Unshielded, 1.8 m
7.	Earphone + Mic	Ergotech	ET-E200	N/A	Unshielded, 1.8 m	N/A
8.	HD USB 3.0	Lenovo	F310S	FCC DoC	Shielded, 0.5 m	N/A
9.	USB HD	PQI	H568V	FCC DoC	Shielded, 0.5 m	N/A
10.	USB HD	Sony	HD-EG5	FCC DoC	Shielded, 0.5 m	N/A
11.	SD Card	SanDisk	MicroSD HC	FCC DoC	N/A	N/A
12.	PC Card	D-Link	DWL650	MXF-WL211F	N/A	N/A



2.5 EUT Operation Test Setup

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

2.6 Measurement Results Explanation Example

For all conducted test items:

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

Example :

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

Offset = RF cable loss + attenuator factor.

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

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

3 Test Result

3.1 26dB & 99% Occupied Bandwidth Measurement

3.1.1 Description of 26dB & 99% Occupied Bandwidth

This section is for reporting purpose only.

There is no restriction limits for bandwidth.

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

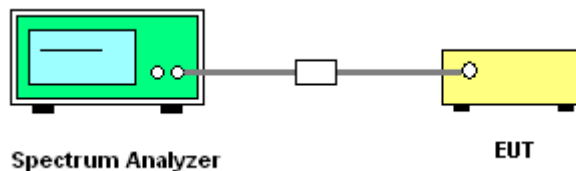
3.1.2 Measuring Instruments

See list of measuring equipment of this test report.

3.1.3 Test Procedures

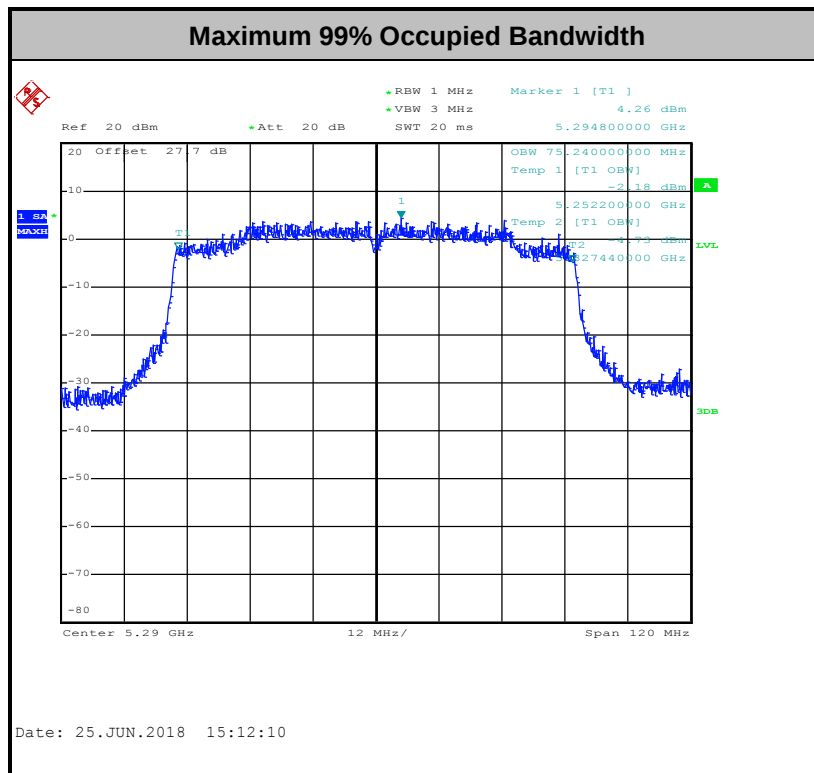
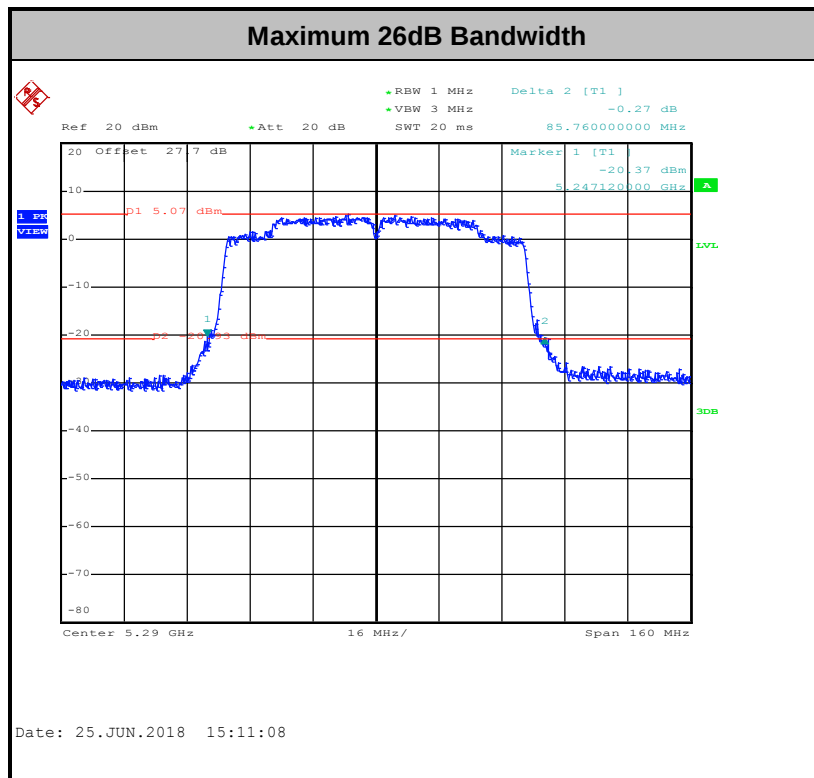
1. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01. Section C) Emission bandwidth
2. Set RBW = approximately 1% of the emission bandwidth.
3. Set the VBW > RBW.
4. Detector = Peak.
5. Trace mode = max hold
6. Measure the maximum width of the emission that is 26 dB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

3.1.4 Test Setup



3.1.5 Test Result of 26dB & 99% Occupied Bandwidth

Please refer to Appendix A.



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



3.2 Maximum Conducted Output Power Measurement

3.2.1 Limit of Maximum Conducted Output Power

<FCC 14-30 CFR 15.407>

For the 5.15–5.25 GHz bands:

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

For the 5.25–5.725 GHz bands:

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

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

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

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

3.2.2 Measuring Instruments

See list of measuring equipment of this test report.

3.2.3 Test Procedures

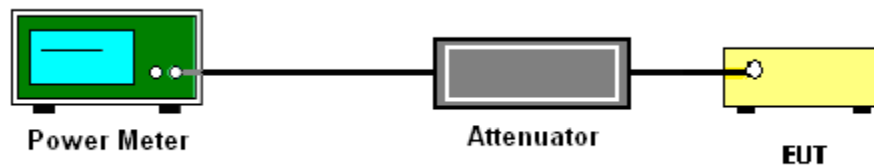
The testing follows Method PM of FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01.

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

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

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

3.2.4 Test Setup



3.2.5 Test Result of Maximum Conducted Output Power

Please refer to Appendix A.



3.3 Power Spectral Density Measurement

3.3.1 Limit of Power Spectral Density

<FCC 14-30 CFR 15.407>

For the 5.15–5.25 GHz bands:

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

For the 5.25–5.725 GHz bands:

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

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

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

3.3.2 Measuring Instruments

See list of measuring equipment of this test report.

3.3.3 Test Procedures

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

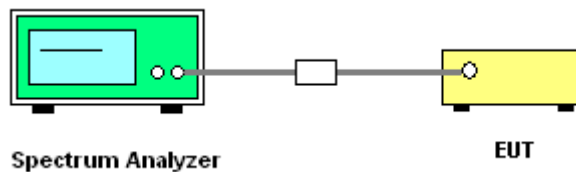
Section F) Maximum power spectral density.

Method SA-2

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

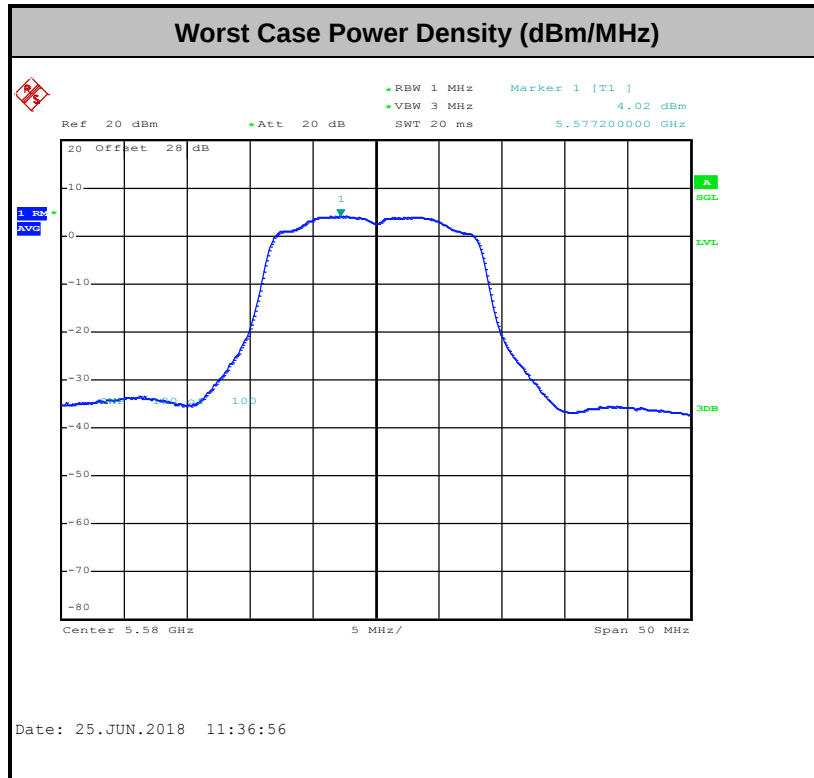
- Measure the duty cycle.
 - Set span to encompass the entire emission bandwidth (EBW) of the signal.
 - Set RBW = 1 MHz.
 - Set VBW $\geq$ 3 MHz.
 - Number of points in sweep $\geq$ 2 Span / RBW.
 - Sweep time = auto.
 - Detector = RMS
 - Trace average at least 100 traces in power averaging mode.
 - Add $10 \log(1/x)$, where x is the duty cycle, to the measured power in order to compute the average power during the actual transmission times. For example, add $10 \log(1/0.25) = 6$ dB if the duty cycle is 25 percent.
1. The RF output of EUT was connected to the spectrum analyzer by a low loss cable.
 2. Each plot has already offset with cable loss, and attenuator loss. Measure the PPSD and record it.

3.3.4 Test Setup



3.3.5 Test Result of Power Spectral Density

Please refer to Appendix A.



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

3.4 Unwanted Emissions Measurement

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

3.4.1 Limit of Unwanted Emissions

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

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

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

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

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

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

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

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

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

- (i) Section 15.407(b)(1) to (b)(3) specify the unwanted emission limits for the U-NII-1 and U-NII-2 bands. As specified, emissions above 1000 MHz that are outside of the restricted bands are subject to a peak emission limit of -27 dBm/MHz.³
- (ii) Section 15.407(b)(4) specifies the unwanted emission limit for the U-NII-3 band. A band emissions mask is specified in Section 15.407(b)(4)(i). The emission limits are in terms of a Peak detector. An alternative to the band emissions mask is specified in Section 15.407(b)(4)(ii). The alternative limits are based on the highest antenna gain specified in the filing. There are also marketing and importation restrictions for the devices using the alternative limit.⁴

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

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

3.4.2 Measuring Instruments

See list of measuring equipment of this test report.

3.4.3 Test Procedures

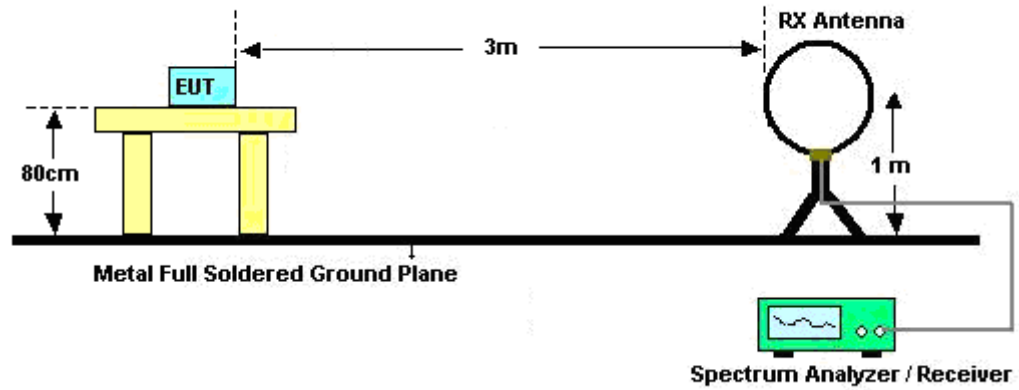
1. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01. Section G) Unwanted emissions measurement.
 - (1) Procedure for Unwanted Emissions Measurements Below 1000MHz
 - RBW = 120 kHz
 - VBW = 300 kHz
 - Detector = Peak
 - Trace mode = max hold
 - (2) Procedure for Peak Unwanted Emissions Measurements Above 1000 MHz
 - RBW = 1 MHz
 - VBW ≥ 3 MHz
 - Detector = Peak
 - Sweep time = auto
 - Trace mode = max hold

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

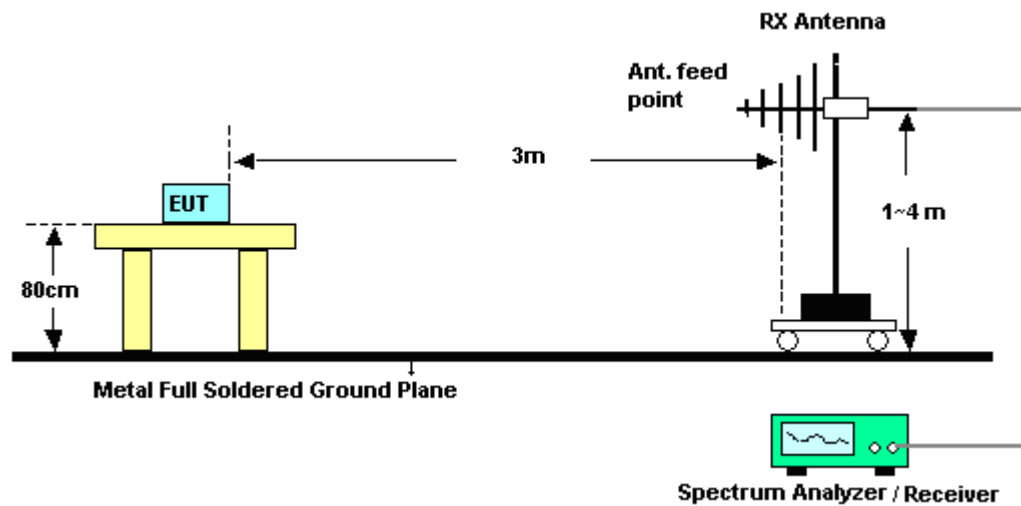
- RBW = 1 MHz
 - VBW = 10 Hz, when duty cycle is no less than 98 percent.
 - $VBW \geq 1/T$, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.
2. The EUT was placed on a turntable with 0.8 meter for frequency below 1GHz and 1.5 meter for frequency above 1GHz respectively above ground.
 3. The EUT was set 3 meters from the interference receiving antenna which was mounted on the top of a variable height antenna tower.
 4. The antenna is a broadband antenna and its height is adjusted between one meter and four meters above ground to find the maximum value of the field strength for both horizontal polarization and vertical polarization of the antenna.
 5. For each suspected emission, the EUT was arranged to its worst case and then adjust the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading.
 6. For testing below 1GHz, if the emission level of the EUT in peak mode was 3 dB lower than the limit specified, then peak values of EUT will be reported, otherwise, the emissions will be repeated one by one using the CISPR quasi-peak method and reported.
 7. For testing above 1GHz, the emission level of the EUT in peak mode was 20dB lower than average limit (that means the emission level in average mode also complies with the limit in average mode), then peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.

3.4.4 Test Setup

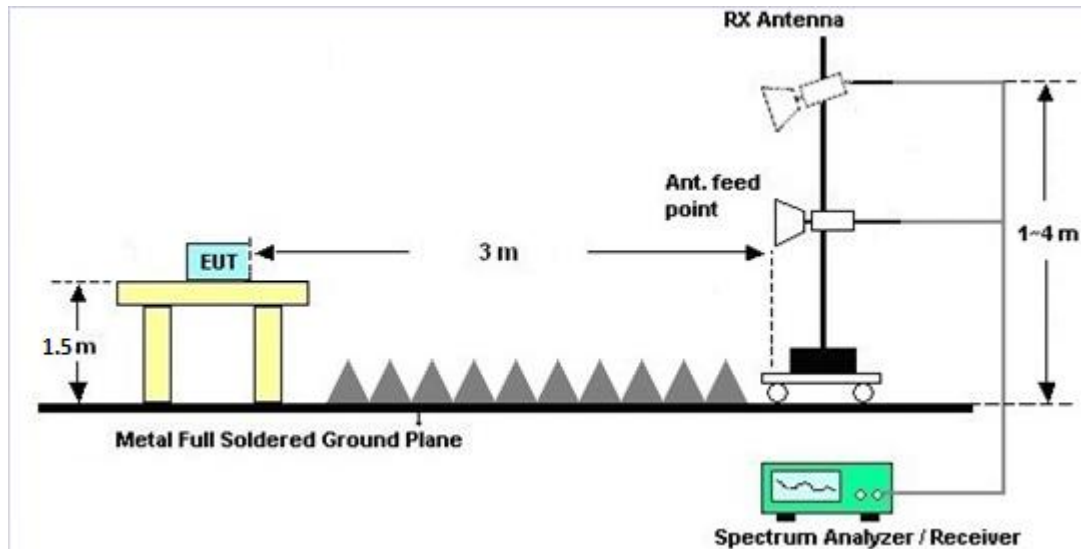
For radiated emissions below 30MHz



For radiated emissions from 30MHz to 1GHz



For radiated emissions above 1GHz



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

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

There is a comparison data of both open-field test site and 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 (dB μ V)	
	Quasi-peak	Average
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50

*Decreases with the logarithm of the frequency.

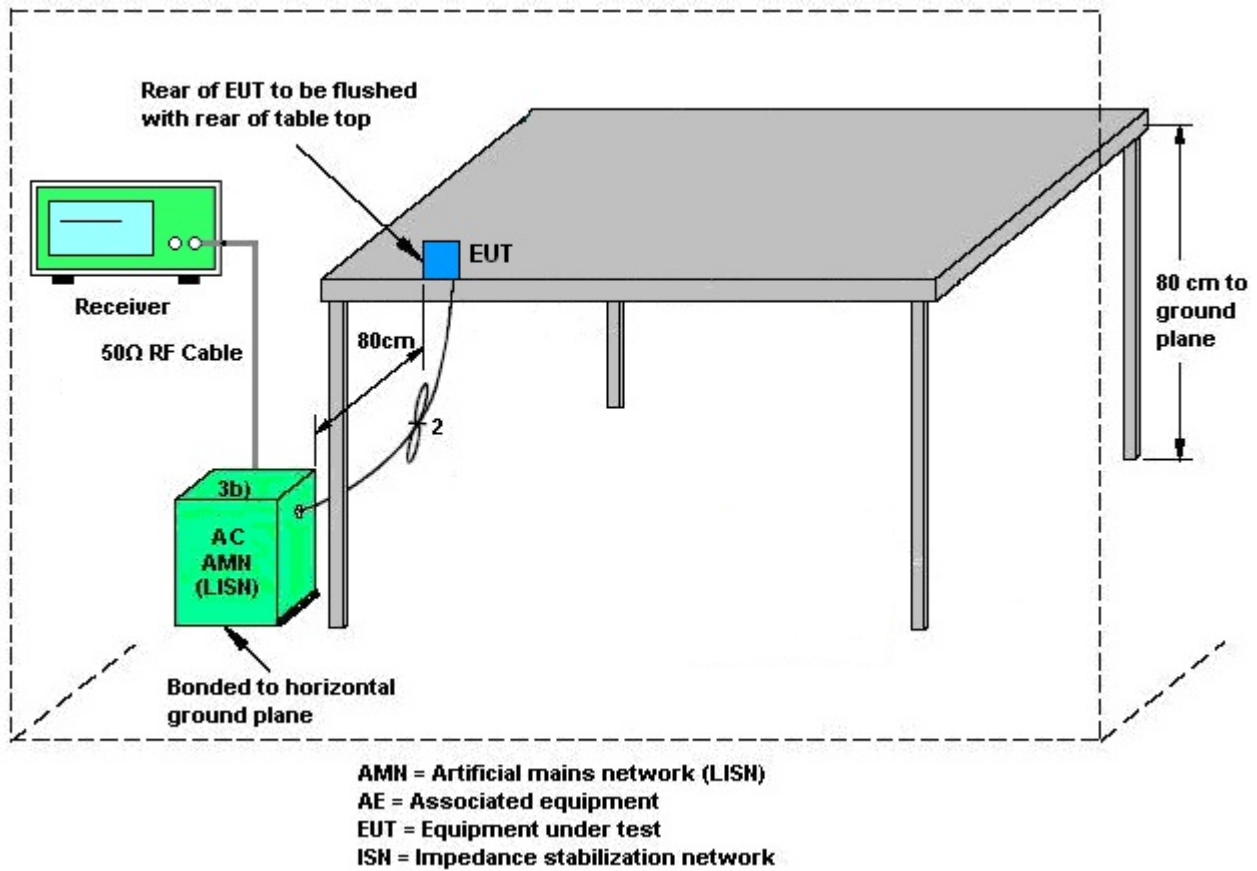
3.5.2 Measuring Instruments

See list of measuring equipment of this test report.

3.5.3 Test Procedures

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

3.5.4 Test Setup



3.5.5 Test Result of AC Conducted Emission

Please refer to Appendix B.



3.6 Automatically Discontinue Transmission

3.6.1 Limit of Automatically Discontinue Transmission

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

3.6.2 Measuring Instruments

See list of measuring equipment of this test report.

3.6.3 Test Result of Automatically Discontinue Transmission

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



3.7 Antenna Requirements

3.7.1 Standard Applicable

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

3.7.2 Antenna Anti-Replacement Construction

An embedded-in antenna design is used.

3.7.3 Antenna Gain

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



4 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Power Meter	Anritsu	ML2495A	1240001	N/A	Sep. 07, 2017	Jun. 15, 2018~ Jul. 04, 2018	Sep. 06, 2018	Conducted (TH05-HY)
Power Sensor	Anritsu	MA2411B	1207349	300MHz~40GHz	Sep. 07, 2017	Jun. 15, 2018~ Jul. 04, 2018	Sep. 06, 2018	Conducted (TH05-HY)
Spectrum Analyzer	Rohde & Schwarz	FSP40	100057	9kHz~40GHz	Nov. 21, 2017	Jun. 15, 2018~ Jul. 04, 2018	Nov. 20, 2018	Conducted (TH05-HY)
Switch Box & RF Cable	Burgeon	ETF-058	EC130048 4	N/A	Mar. 01, 2018	Jun. 15, 2018~ Jul. 04, 2018	Feb. 28, 2019	Conducted (TH05-HY)
AC Power Source	ChainTek	APC-1000W	N/A	N/A	N/A	Jun. 27, 2018	N/A	Conduction (CO05-HY)
EMI Test Receiver	Rohde & Schwarz	ESR3	102388	3.6GHz	Dec. 08, 2017	Jun. 27, 2018	Dec. 07, 2018	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100080	9kHz~30MHz	Nov. 30, 2017	Jun. 27, 2018	Nov. 29, 2018	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100081	9kHz~30MHz	Dec. 08, 2017	Jun. 27, 2018	Dec. 07, 2018	Conduction (CO05-HY)
Software	Rohde & Schwarz	EMC32 V10.30	N/A	N/A	N/A	Jun. 27, 2018	N/A	Conduction (CO05-HY)
LF Cable	HUBER + SUHNER	RG-214/U	LF01	N/A	Jan. 03, 2018	Jun. 27, 2018	Jan. 02, 2019	Conduction (CO05-HY)
Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100851	N/A	Jan. 03, 2018	Jun. 27, 2018	Jan. 02, 2019	Conduction (CO05-HY)
Loop Antenna	Rohde & Schwarz	HFH2-Z2	100315	9 kHz~30 MHz	Nov. 10, 2017	Jun. 24, 2018~ Jul. 14, 2018	Nov. 09, 2018	Radiation (03CH13-HY)
Bilog Antenna	TESEQ	CBL 6111D&00800 N1D01N-06	40103&07	30MHz to 1GHz	Jan. 10, 2018	Jun. 24, 2018~ Jul. 14, 2018	Jan. 09, 2019	Radiation (03CH13-HY)
Horn Antenna	SCHWARZBE CK	BBHA 9120 D	9120D-121 2	1GHz ~ 18GHz	May 10, 2018	Jun. 24, 2018~ Jul. 14, 2018	May 09, 2019	Radiation (03CH13-HY)
SHF-EHF Horn Antenna	SCHWARZBE CK	BBHA 9170	BBHA9170 584	18GHz- 40GHz	Nov. 27, 2017	Jun. 24, 2018~ Jul. 14, 2018	Nov. 26, 2018	Radiation (03CH13-HY)
Amplifier	Sonoma-Instru ment	310 N	187282	9KHz~1GHz	Jan. 19, 2018	Jun. 24, 2018~ Jul. 14, 2018	Jan. 18, 2020	Radiation (03CH13-HY)
Preamplifier	MITEQ	AMF-7D-0010 1800-30-10P	1590074	1GHz~18GHz	May 21, 2018	Jun. 24, 2018~ Jul. 14, 2018	May 20, 2019	Radiation (03CH13-HY)
Preamplifier	Keysight	83017A	MY532701 47	1GHz~26.5GHz	Feb. 02, 2018	Jun. 24, 2018~ Jul. 14, 2018	Feb. 01, 2019	Radiation (03CH13-HY)
Amplifier	MITEQ	TTA1840-35- HG	1871923	18GHz~40GHz, VSWR : 2.5:1 max	Jul. 18, 2017	Jun. 24, 2018~ Jul. 14, 2018	Jul. 17, 2018	Radiation (03CH13-HY)
EMI Test Receiver	Agilent	N9038A (MXE)	MY532900 53	20Hz to 26.5GHz	Jan. 16, 2018	Jun. 24, 2018~ Jul. 14, 2018	Jan. 15, 2019	Radiation (03CH13-HY)
Spectrum Analyzer	Keysight	N9010A	MY553705 26	10Hz~44GHz	Mar. 15, 2018	Jun. 24, 2018~ Jul. 14, 2018	Mar. 14, 2019	Radiation (03CH13-HY)
Antenna Mast	EMEC	AM-BS-4500- B	N/A	1m~4m	N/A	Jun. 24, 2018~ Jul. 14, 2018	N/A	Radiation (03CH13-HY)
Turn Table	EMEC	TT2000	N/A	0~360 Degree	N/A	Jun. 24, 2018~ Jul. 14, 2018	N/A	Radiation (03CH13-HY)



Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Filter	Wainwright	WLKS1200-8 SS	SN3	1.2G Low Pass	Nov. 21, 2017	Jun. 24, 2018~ Jul. 14, 2018	Nov. 20, 2018	Radiation (03CH13-HY)
Filter	Woken	WHKX8-5272. 5-6750-18000 -40ST	SN2	6.75G High pass	Jul. 17, 2017	Jun. 24, 2018~ Jul. 14, 2018	Jul. 16, 2018	Radiation (03CH13-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 126E	0030/126E	30M-18G	Jan. 22, 2018	Jun. 24, 2018~ Jul. 14, 2018	Jan. 21, 2019	Radiation (03CH13-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	335041/4	30M-18G	Jan. 22, 2018	Jun. 24, 2018~ Jul. 14, 2018	Jan. 21, 2019	Radiation (03CH13-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY24961/ 4	30M~18GHz	Jan. 22, 2018	Jun. 24, 2018~ Jul. 14, 2018	Jan. 21, 2019	Radiation (03CH13-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	505134/2	30M~40GHz	Oct. 17, 2017	Jun. 24, 2018~ Jul. 14, 2018	Oct. 16, 2018	Radiation (03CH13-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	800740/2	30M~40GHz	Oct. 17, 2017	Jun. 24, 2018~ Jul. 14, 2018	Oct. 16, 2018	Radiation (03CH13-HY)
Software	AUDIX	E3 6.2009-8-24c	RK-001124	N/A	N/A	Jun. 24, 2018~ Jul. 14, 2018	N/A	Radiation (03CH13-HY)



5 Uncertainty of Evaluation

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

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	2.7
--	-----

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

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

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

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

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

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

Appendix A. Test Result of Conducted Test Items

Test Engineer:	Lena Lo/Shiang Wang	Temperature:	21~25	°C
Test Date:	2018/6/15~2018/7/04	Relative Humidity:	51~54	%

TEST RESULTS DATA
26dB and 99% OBW

Band I														
Mod.	Data Rate	NTx	CH.	Freq. (MHz)	99% Bandwidth (MHz)		26 dB Bandwidth (MHz)		IC 99% Bandwidth Power Limit (dBm)		IC 99% Bandwidth EIRP Limit (dBm)		-	Note
					Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2		
11a	6Mbps	1	36	5180	-	17.80	-	26.30	-	-	22.50			
11a	6Mbps	1	44	5220	-	17.45	-	25.85	-	-	22.42			
11a	6Mbps	1	48	5240	-	17.40	-	25.25	-	-	22.41			
HT20	MCS0	1	36	5180	-	18.55	-	26.40	-	-	22.68			
HT20	MCS0	1	44	5220	-	18.40	-	26.20	-	-	22.65			
HT20	MCS0	1	48	5240	-	18.50	-	26.60	-	-	22.67			
HT40	MCS0	1	38	5190	-	36.40	-	45.72	-	-	23.01			
HT40	MCS0	1	46	5230	-	36.40	-	45.36	-	-	23.01			
VHT80	MCS0	1	42	5210	-	74.88	-	83.93	-	-	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	-	0.08	-	13.45		-	24.00	-	3.30		Pass
11a	6Mbps	1	44	5220	-	0.08	-	13.48		-	24.00	-	3.30		Pass
11a	6Mbps	1	48	5240	-	0.08	-	13.11		-	24.00	-	3.30		Pass
HT20	MCS0	1	36	5180	-	0.07	-	13.42		-	24.00	-	3.30		Pass
HT20	MCS0	1	44	5220	-	0.07	-	13.38		-	24.00	-	3.30		Pass
HT20	MCS0	1	48	5240	-	0.07	-	13.05		-	24.00	-	3.30		Pass
HT40	MCS0	1	38	5190	-	0.11	-	13.27		-	24.00	-	3.30		Pass
HT40	MCS0	1	46	5230	-	0.11	-	13.25		-	24.00	-	3.30		Pass
VHT20	MCS0	1	36	5180	-	0.07	-	13.14		-	24.00	-	3.30		Pass
VHT20	MCS0	1	44	5220	-	0.07	-	13.06		-	24.00	-	3.30		Pass
VHT20	MCS0	1	48	5240	-	0.07	-	13.02		-	24.00	-	3.30		Pass
VHT40	MCS0	1	38	5190	-	0.14	-	13.24		-	24.00	-	3.30		Pass
VHT40	MCS0	1	46	5230	-	0.14	-	13.23	-	24.00	-	3.30		Pass	
VHT80	MCS0	1	42	5210	-	0.26	-	13.12	-	24.00	-	3.30		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	-	0.08	-	3.14		-	11.00	-	3.30		Pass
11a	6Mbps	1	44	5220	-	0.08	-	2.89		-	11.00	-	3.30		Pass
11a	6Mbps	1	48	5240	-	0.08	-	2.22		-	11.00	-	3.30		Pass
HT20	MCS0	1	36	5180	-	0.07	-	2.33		-	11.00	-	3.30		Pass
HT20	MCS0	1	44	5220	-	0.07	-	2.31		-	11.00	-	3.30		Pass
HT20	MCS0	1	48	5240	-	0.07	-	1.81		-	11.00	-	3.30		Pass
HT40	MCS0	1	38	5190	-	0.11	-	-1.28		-	11.00	-	3.30		Pass
HT40	MCS0	1	46	5230	-	0.11	-	-1.42		-	11.00	-	3.30		Pass
VHT80	MCS0	1	42	5210	-	0.26	-	-3.99		-	11.00	-	3.30		Pass

TEST RESULTS DATA
26dB and 99% OBW

Band II															
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	99% Bandwidth (MHz)		26 dB Bandwidth (MHz)		IC 99% Bandwidth Power Limit (dBm)		IC 99% Bandwidth EIRP Limit (dBm)		FCC 26dB Bandwidth Power Limit (dBm)		Note
					Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	
11a	6Mbps	1	52	5260	-	17.25	-	24.35	-	23.37	-	29.37	-	23.98	
11a	6Mbps	1	60	5300	-	17.30	-	25.65	-	23.38	-	29.38	-	23.98	
11a	6Mbps	1	64	5320	-	17.35	-	25.40	-	23.39	-	29.39	-	23.98	
HT20	MCS0	1	52	5260	-	18.40	-	26.50	-	23.65	-	29.65	-	23.98	
HT20	MCS0	1	60	5300	-	18.35	-	26.75	-	23.64	-	29.64	-	23.98	
HT20	MCS0	1	64	5320	-	18.45	-	26.35	-	23.66	-	29.66	-	23.98	
HT40	MCS0	1	54	5270	-	36.30	-	44.82	-	23.98	-	30.00	-	23.98	
HT40	MCS0	1	62	5310	-	36.50	-	45.44	-	23.98	-	30.00	-	23.98	
VHT80	MCS0	1	58	5290	-	75.24	-	85.76	-	23.98	-	30.00	-	23.98	

TEST RESULTS DATA
Average Power Table

FCC Band II															
Mod.	Data Rate	Ntx	CH.	Freq. (MHz)	Duty Factor (dB)		Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)		EIRP Power Limit (dBm)	Pass/Fail
					Ant 1	Ant 2	Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2		
11a	6Mbps	1	52	5260	-	0.08	-	13.43		-	23.98	-	3.30	26.99	Pass
11a	6Mbps	1	60	5300	-	0.08	-	13.37		-	23.98	-	3.30	26.99	Pass
11a	6Mbps	1	64	5320	-	0.08	-	13.46		-	23.98	-	3.30	26.99	Pass
HT20	MCS0	1	52	5260	-	0.07	-	13.24		-	23.98	-	3.30	26.99	Pass
HT20	MCS0	1	60	5300	-	0.07	-	13.11		-	23.98	-	3.30	26.99	Pass
HT20	MCS0	1	64	5320	-	0.07	-	13.25		-	23.98	-	3.30	26.99	Pass
HT40	MCS0	1	54	5270	-	0.11	-	13.41		-	23.98	-	3.30	26.99	Pass
HT40	MCS0	1	62	5310	-	0.11	-	13.43		-	23.98	-	3.30	26.99	Pass
VHT20	MCS0	1	52	5260	-	0.07	-	13.22		-	23.98	-	3.30	26.99	Pass
VHT20	MCS0	1	60	5300	-	0.07	-	13.08		-	23.98	-	3.30	26.99	Pass
VHT20	MCS0	1	64	5320	-	0.07	-	13.21	-	23.98	-	3.30	26.99	Pass	
VHT40	MCS0	1	54	5270	-	0.14	-	13.39	-	23.98	-	3.30	26.99	Pass	
VHT40	MCS0	1	62	5310	-	0.14	-	13.41	-	23.98	-	3.30	26.99	Pass	
VHT80	MCS0	1	58	5290	-	0.26	-	13.39	-	23.98	-	3.30	26.99	Pass	

TEST RESULTS DATA
Power Spectral Density

Band II															
Mod.	Data Rate	NTx	CH.	Freq. (MHz)	Duty Factor (dB)		Average Power Density (dBm/MHz)			Average PSD Limit (dBm/MHz)		DG (dBi)		-	Pass /Fail
					Ant 1	Ant 2	Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2		
11a	6Mbps	1	52	5260	-	0.08	-	2.26		-	11.00	-	3.30		Pass
11a	6Mbps	1	60	5300	-	0.08	-	2.01		-	11.00	-	3.30		Pass
11a	6Mbps	1	64	5320	-	0.08	-	2.21		-	11.00	-	3.30		Pass
HT20	MCS0	1	52	5260	-	0.07	-	2.36		-	11.00	-	3.30		Pass
HT20	MCS0	1	60	5300	-	0.07	-	1.97		-	11.00	-	3.30		Pass
HT20	MCS0	1	64	5320	-	0.07	-	1.86		-	11.00	-	3.30		Pass
HT40	MCS0	1	54	5270	-	0.11	-	-1.43		-	11.00	-	3.30		Pass
HT40	MCS0	1	62	5310	-	0.11	-	-1.53		-	11.00	-	3.30		Pass
VHT80	MCS0	1	58	5290	-	0.26	-	-4.30		-	11.00	-	3.30		Pass

TEST RESULTS DATA
26dB and 99% OBW

Band III																
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	99% Bandwidth In U-NII 2C (MHz)		26 dB Bandwidth In U-NII 2C (MHz)		IC 99% Bandwidth Power Limit (dBm)		IC 99% Bandwidth EIRP Limit (dBm)		FCC 26dB Bandwidth Power Limit (dBm)		6 dB Bandwidth for Straddle Channel (MHz)	
					Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2
11a	6Mbps	1	100	5500	-	17.40	-	26.05	-	23.41	-	29.41	-	23.98	----	----
11a	6Mbps	1	116	5580	-	17.40	-	24.35	-	23.41	-	29.41	-	23.98	----	----
11a	6Mbps	1	140	5700	-	17.40	-	24.00	-	23.41	-	29.41	-	23.98	----	----
HT20	MCS0	1	100	5500	-	18.45	-	26.65	-	23.66	-	29.66	-	23.98	----	----
HT20	MCS0	1	116	5580	-	18.40	-	24.90	-	23.65	-	29.65	-	23.98	----	----
HT20	MCS0	1	140	5700	-	18.45	-	24.50	-	23.66	-	29.66	-	23.98	----	----
HT20	MCS0	1	144	5720	-	14.30	-	17.70	-	22.55	-	28.55	-	23.48	-	2.55
HT40	MCS0	1	102	5510	-	36.30	-	46.12	-	23.98	-	30.00	-	23.98	----	----
HT40	MCS0	1	110	5550	-	36.30	-	45.06	-	23.98	-	30.00	-	23.98	----	----
HT40	MCS0	1	134	5670	-	36.40	-	45.36	-	23.98	-	30.00	-	23.98	----	----
HT40	MCS0	1	142	5710	-	33.40	-	37.68	-	23.98	-	30.00	-	23.98	-	2.46
VHT80	MCS0	1	106	5530	-	75.00	-	85.12	-	23.98	-	30.00	-	23.98	----	----
VHT80	MCS0	1	122	5610	-	75.12	-	84.96	-	23.98	-	30.00	-	23.98	----	----
VHT80	MCS0	1	138	5690	-	72.80	-	77.88	-	23.98	-	30.00	-	23.98	-	0.04

TEST RESULTS DATA
Average Power Table

FCC Band III															
Mod.	Data Rate	NTx	CH.	Freq. (MHz)	Duty Factor (dB)		Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)		EIRP Power Limit (dBm)	Pass/Fail
					Ant 1	Ant 2	Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2		
11a	6Mbps	1	100	5500	-	0.08	-	13.46		-	23.98	-	2.22	26.99	Pass
11a	6Mbps	1	116	5580	-	0.08	-	13.49		-	23.98	-	2.22	26.99	Pass
11a	6Mbps	1	140	5700	-	0.08	-	13.48		-	23.98	-	2.22	26.99	Pass
HT20	MCS0	1	100	5500	-	0.07	-	13.31		-	23.98	-	2.22	26.99	Pass
HT20	MCS0	1	116	5580	-	0.07	-	13.48		-	23.98	-	2.22	26.99	Pass
HT20	MCS0	1	140	5700	-	0.07	-	13.33		-	23.98	-	2.22	26.99	Pass
HT20	MCS0	1	144	5720	-	0.07	-	13.47		-	23.48	-	2.22	26.99	Pass
HT40	MCS0	1	102	5510	-	0.11	-	13.37		-	23.98	-	2.22	26.99	Pass
HT40	MCS0	1	110	5550	-	0.11	-	13.46		-	23.98	-	2.22	26.99	Pass
HT40	MCS0	1	134	5670	-	0.11	-	13.43		-	23.98	-	2.22	26.99	Pass
HT40	MCS0	1	142	5710	-	0.11	-	13.46		-	23.98	-	2.22	26.99	Pass
VHT20	MCS0	1	100	5500	-	0.07	-	13.30		-	23.98	-	2.22	26.99	Pass
VHT20	MCS0	1	116	5580	-	0.07	-	13.05		-	23.98	-	2.22	26.99	Pass
VHT20	MCS0	1	140	5700	-	0.07	-	13.32		-	23.98	-	2.22	26.99	Pass
VHT20	MCS0	1	144	5720	-	0.07	-	13.01		-	23.98	-	2.22	26.99	Pass
VHT40	MCS0	1	102	5510	-	0.14	-	13.36		-	23.98	-	2.22	26.99	Pass
VHT40	MCS0	1	110	5550	-	0.14	-	13.37		-	23.98	-	2.22	26.99	Pass
VHT40	MCS0	1	134	5670	-	0.14	-	13.47		-	23.98	-	2.22	26.99	Pass
VHT40	MCS0	1	142	5710	-	0.14	-	13.46		-	23.98	-	2.22	26.99	Pass
VHT80	MCS0	1	106	5530	-	0.26	-	13.41		-	23.98	-	2.22	26.99	Pass
VHT80	MCS0	1	122	5610	-	0.26	-	13.06		-	23.98	-	2.22	26.99	Pass
VHT80	MCS0	1	138	5690	-	0.26	-	13.45		-	23.98	-	2.22	26.99	Pass

TEST RESULTS DATA
Power Spectral Density

Band III															
Mod.	Data Rate	NTx	CH.	Freq. (MHz)	Duty Factor (dB)		Average Power Density (dBm/MHz)			Average PSD Limit (dBm/MHz)		DG (dBi)		-	Pass /Fail
					Ant 1	Ant 2	Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2		
11a	6Mbps	1	100	5500	-	0.08	-	3.59		-	11.00	-	2.22		Pass
11a	6Mbps	1	116	5580	-	0.08	-	4.10		-	11.00	-	2.22		Pass
11a	6Mbps	1	140	5700	-	0.08	-	2.97		-	11.00	-	2.22		Pass
HT20	MCS0	1	100	5500	-	0.07	-	3.12		-	11.00	-	2.22		Pass
HT20	MCS0	1	116	5580	-	0.07	-	3.44		-	11.00	-	2.22		Pass
HT20	MCS0	1	140	5700	-	0.07	-	2.33		-	11.00	-	2.22		Pass
HT20	MCS0	1	144	5720	-	0.07	-	2.53		-	11.00	-	2.22		Pass
HT40	MCS0	1	102	5510	-	0.11	-	-0.02		-	11.00	-	2.22		Pass
HT40	MCS0	1	110	5550	-	0.11	-	-0.02		-	11.00	-	2.22		Pass
HT40	MCS0	1	134	5670	-	0.11	-	-0.55		-	11.00	-	2.22		Pass
HT40	MCS0	1	142	5710	-	0.11	-	-1.05		-	11.00	-	2.22		Pass
VHT80	MCS0	1	106	5530	-	0.26	-	-2.25		-	11.00	-	2.22		Pass
VHT80	MCS0	1	122	5610	-	0.26	-	-3.16	-	11.00	-	2.22		Pass	
VHT80	MCS0	1	138	5690	-	0.26	-	-3.30	-	11.00	-	2.22		Pass	



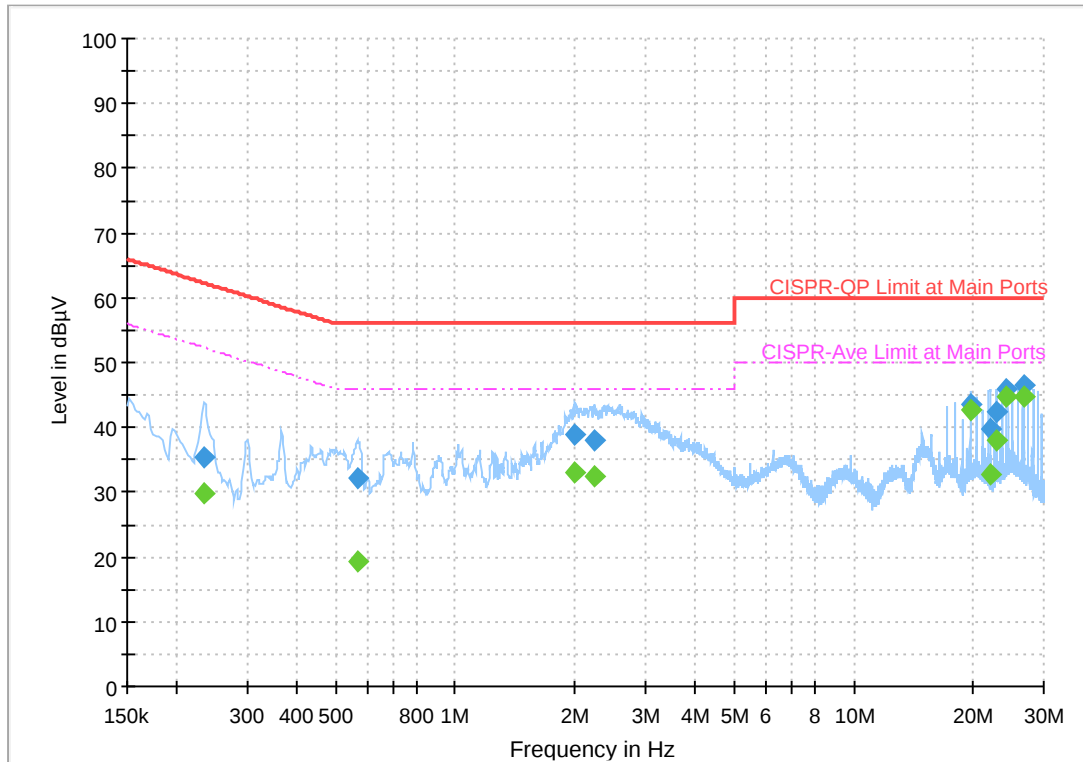
Appendix B. AC Conducted Emission Test Results

Test Engineer :	Arthur Hsieh	Temperature :	21~25°C
		Relative Humidity :	51~55%

EUT Information

Report NO : 372342-17
Test Mode : Mode 1
Test Voltage : 120Vac/60Hz
Phase : Line

Full Spectrum



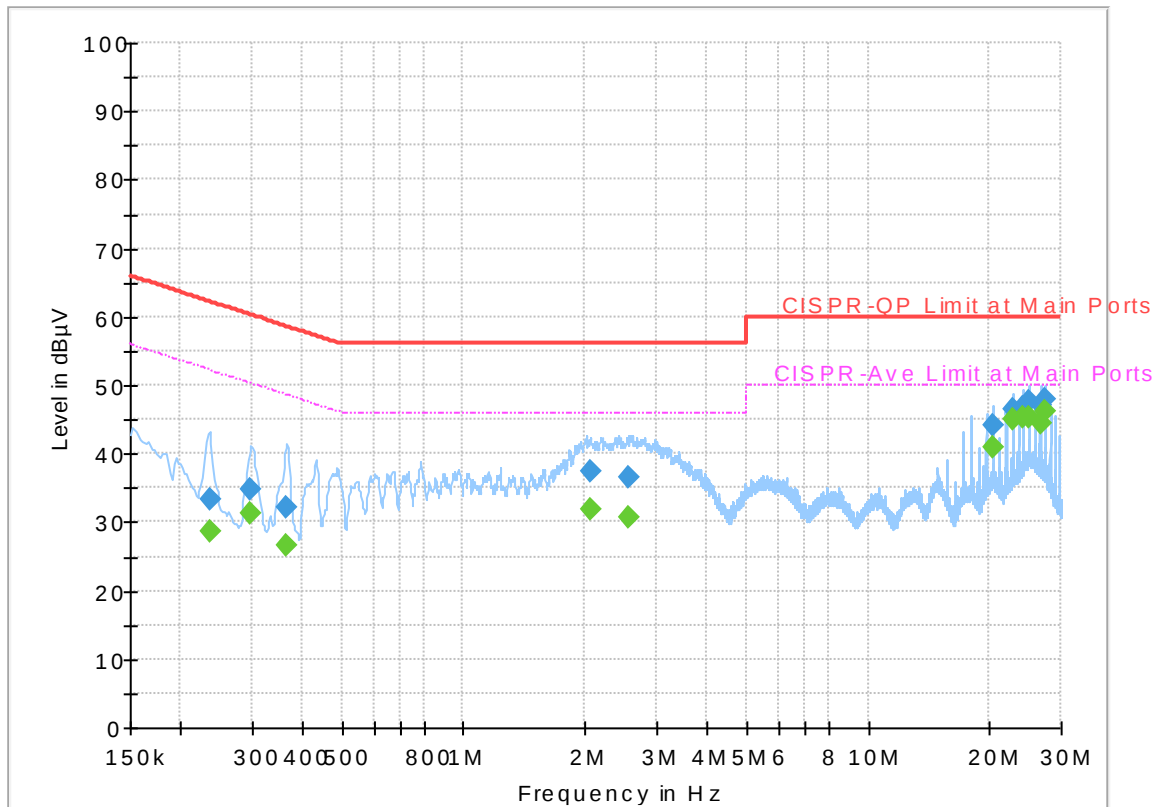
Final Result

Frequency (MHz)	QuasiPeak (dBμV)	CAverage (dBμV)	Limit (dBμV)	Margin (dB)	Line	Filter	Corr. (dB)
0.233250	---	29.92	52.33	22.41	L1	OFF	19.5
0.233250	35.29	---	62.33	27.04	L1	OFF	19.5
0.566250	---	19.25	46.00	26.75	L1	OFF	19.5
0.566250	32.13	---	56.00	23.87	L1	OFF	19.5
2.001750	---	32.93	46.00	13.07	L1	OFF	19.6
2.001750	38.78	---	56.00	17.22	L1	OFF	19.6
2.229000	---	32.43	46.00	13.57	L1	OFF	19.4
2.229000	37.95	---	56.00	18.05	L1	OFF	19.4
19.581000	---	42.72	50.00	7.28	L1	OFF	19.8
19.581000	43.58	---	60.00	16.42	L1	OFF	19.8
21.939000	---	32.66	50.00	17.34	L1	OFF	19.8
21.939000	39.82	---	60.00	20.18	L1	OFF	19.8
22.719750	---	38.12	50.00	11.88	L1	OFF	19.8
22.719750	42.33	---	60.00	17.67	L1	OFF	19.8
24.279000	---	44.61	50.00	5.39	L1	OFF	19.8
24.279000	45.79	---	60.00	14.21	L1	OFF	19.8
26.630250	---	44.68	50.00	5.32	L1	OFF	19.8
26.630250	46.38	---	60.00	13.62	L1	OFF	19.8

EUT Information

Report NO : 372342-17
 Test Mode : Mode 1
 Test Voltage : 120Vac/60Hz
 Phase : Neutral

Full Spectrum



Final Result

Frequency (MHz)	QuasiPeak (dBμV)	CAverage (dBμV)	Limit (dBμV)	Margin (dB)	Line	Filter	Corr. (dB)
0.235500	---	28.66	52.25	23.59	N	OFF	19.5
0.235500	33.47	---	62.25	28.78	N	OFF	19.5
0.298500	---	31.35	50.28	18.93	N	OFF	19.5
0.298500	34.81	---	60.28	25.47	N	OFF	19.5
0.366000	---	26.58	48.59	22.01	N	OFF	19.5
0.366000	32.18	---	58.59	26.41	N	OFF	19.5
2.060250	---	31.75	46.00	14.25	N	OFF	19.4
2.060250	37.41	---	56.00	18.59	N	OFF	19.4
2.559750	---	30.65	46.00	15.35	N	OFF	19.5
2.559750	36.51	---	56.00	19.49	N	OFF	19.5
20.359500	---	40.80	50.00	9.20	N	OFF	19.9
20.359500	44.18	---	60.00	15.82	N	OFF	19.9
22.715250	---	45.08	50.00	4.92	N	OFF	19.9
22.715250	46.55	---	60.00	13.45	N	OFF	19.9
24.279000	---	45.42	50.00	4.58	N	OFF	20.0
24.279000	46.72	---	60.00	13.28	N	OFF	20.0
25.062000	---	45.29	50.00	4.71	N	OFF	20.0
25.062000	47.60	---	60.00	12.40	N	OFF	20.0
26.628000	---	44.37	50.00	5.63	N	OFF	20.0
26.628000	47.09	---	60.00	12.91	N	OFF	20.0
27.413250	---	46.25	50.00	3.75	N	OFF	20.0

27.413250	47.94	---	60.00	12.06	N	OFF	20.0
-----------	-------	-----	-------	-------	---	-----	------



Appendix C. Radiated Spurious Emission

Test Engineer :	Alex Jheng, Fu Chen, and Wilson Wu	Temperature :	24.5~25°C
		Relative Humidity :	48~50%

Band 1 - 5150~5250MHz

WIFI 802.11a (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11a CH 36 5180MHz		5150	52.94	-21.06	74	42.76	31.56	8.17	29.55	131	287	P	H
		5150	44.64	-9.36	54	34.46	31.56	8.17	29.55	131	287	A	H
	*	5180	104.87	-	-	94.63	31.57	8.22	29.55	131	287	P	H
	*	5180	97.2	-	-	86.96	31.57	8.22	29.55	131	287	A	H
													H
													H
		5147.94	52.69	-21.31	74	42.51	31.56	8.17	29.55	360	296	P	V
		5150	44.01	-9.99	54	33.83	31.56	8.17	29.55	360	296	A	V
	*	5180	105.14	-	-	94.9	31.57	8.22	29.55	360	296	P	V
	*	5180	97.45	-	-	87.21	31.57	8.22	29.55	360	296	A	V
													V
													V
802.11a CH 44 5220MHz		5047.58	51.99	-22.01	74	41.97	31.52	8.04	29.54	111	285	P	H
		5150	41.97	-12.03	54	31.79	31.56	8.17	29.55	111	285	A	H
	*	5220	104.73	-	-	94.45	31.59	8.25	29.56	111	285	P	H
	*	5220	97	-	-	86.72	31.59	8.25	29.56	111	285	A	H
		5427.52	50.79	-23.21	74	40.34	31.67	8.36	29.58	111	285	P	H
		5459.16	41.66	-12.34	54	31.11	31.68	8.46	29.59	111	285	A	H
		5123.5	51.49	-22.51	74	41.36	31.55	8.13	29.55	373	296	P	V
		5134.16	41.84	-12.16	54	31.69	31.55	8.15	29.55	373	296	A	V
	*	5220	104.95	-	-	94.67	31.59	8.25	29.56	373	296	P	V
	*	5220	97.08	-	-	86.8	31.59	8.25	29.56	373	296	A	V
		5456.92	51.01	-22.99	74	40.46	31.68	8.46	29.59	373	296	P	V
		5457.2	41.82	-12.18	54	31.27	31.68	8.46	29.59	373	296	A	V



802.11a CH 48 5240MHz		5069.68	52.39	-21.61	74	42.34	31.53	8.06	29.54	121	287	P	H
		5080.86	41.87	-12.13	54	31.8	31.53	8.08	29.54	121	287	A	H
	*	5240	104.46	-	-	94.18	31.59	8.25	29.56	121	287	P	H
	*	5240	96.83	-	-	86.55	31.59	8.25	29.56	121	287	A	H
		5373.76	51.71	-22.29	74	41.34	31.65	8.3	29.58	121	287	P	H
		5395.6	41.25	-12.75	54	30.86	31.66	8.31	29.58	121	287	A	H
		5078.26	53.34	-20.66	74	43.27	31.53	8.08	29.54	279	299	P	V
		5084.24	41.83	-12.17	54	31.76	31.53	8.08	29.54	279	299	A	V
	*	5240	105	-	-	94.72	31.59	8.25	29.56	279	299	P	V
	*	5240	97.09	-	-	86.81	31.59	8.25	29.56	279	299	A	V
		5404.84	53.07	-20.93	74	42.68	31.66	8.31	29.58	279	299	P	V
		5396.72	41.74	-12.26	54	31.35	31.66	8.31	29.58	279	299	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)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 36 5180MHz		10360	49.98	-18.22	68.2	58.96	39.44	11.8	60.76	100	0	P	H
		15540	47.23	-26.77	74	54.11	39.08	13.85	60.57	100	0	P	H
													H
													H
		10360	47.12	-21.08	68.2	56.1	39.44	11.8	60.76	100	0	P	V
		15540	46.9	-27.1	74	53.78	39.08	13.85	60.57	100	0	P	V
													V
													V
802.11a CH 44 5220MHz		10440	51.06	-17.14	68.2	60.06	39.52	11.82	60.88	100	0	P	H
		15660	46.71	-27.29	74	53.88	38.64	13.92	60.48	100	0	P	H
													H
													H
		10440	46.83	-21.37	68.2	55.83	39.52	11.82	60.88	100	0	P	V
		15660	46.56	-27.44	74	53.73	38.64	13.92	60.48	100	0	P	V
													V
													V
802.11a CH 48 5240MHz		10480	50.51	-17.69	68.2	59.52	39.58	11.84	60.97	100	0	P	H
		15720	46.48	-27.52	74	53.83	38.39	13.94	60.42	100	0	P	H
													H
													H
		10480	48.24	-19.96	68.2	57.25	39.58	11.84	60.97	100	0	P	V
		15720	46.39	-27.61	74	53.74	38.39	13.94	60.42	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 1 5150~5250MHz

WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI Ant. 2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 CH 38 5190MHz		5148.46	57.8	-16.2	74	47.62	31.56	8.17	29.55	108	290	P	H
		5149.24	50.15	-3.85	54	39.97	31.56	8.17	29.55	108	290	A	H
	*	5190	100.71	-	-	90.47	31.57	8.22	29.55	108	290	P	H
	*	5190	93.24	-	-	83	31.57	8.22	29.55	108	290	A	H
		5457.76	52.26	-21.74	74	41.71	31.68	8.46	29.59	108	290	P	H
		5446.28	42.63	-11.37	54	32.12	31.68	8.41	29.58	108	290	A	H
		5146.64	56.46	-17.54	74	46.28	31.56	8.17	29.55	299	300	P	V
		5149.76	50.75	-3.25	54	40.57	31.56	8.17	29.55	299	300	A	V
	*	5190	102.05	-	-	91.81	31.57	8.22	29.55	299	300	P	V
	*	5190	94.46	-	-	84.22	31.57	8.22	29.55	299	300	A	V
		5457.76	52.17	-21.83	74	41.62	31.68	8.46	29.59	299	300	P	V
		5435.36	42.84	-11.16	54	32.34	31.67	8.41	29.58	299	300	A	V
802.11n HT40 CH 46 5230MHz		5005.2	52.75	-21.25	74	42.78	31.51	7.99	29.53	117	287	P	H
		5130	43.8	-10.2	54	33.65	31.55	8.15	29.55	117	287	A	H
	*	5230	101.82	-	-	91.54	31.59	8.25	29.56	117	287	P	H
	*	5230	94.52	-	-	84.24	31.59	8.25	29.56	117	287	A	H
		5387.76	51.9	-22.1	74	41.53	31.65	8.3	29.58	117	287	P	H
		5379.64	43	-11	54	32.63	31.65	8.3	29.58	117	287	A	H
		5147.94	52.46	-21.54	74	42.28	31.56	8.17	29.55	278	299	P	V
		5073.84	43.89	-10.11	54	33.82	31.53	8.08	29.54	278	299	A	V
	*	5230	102.11	-	-	91.83	31.59	8.25	29.56	278	299	P	V
	*	5230	94.86	-	-	84.58	31.59	8.25	29.56	278	299	A	V
		5392.24	51.91	-22.09	74	41.54	31.65	8.3	29.58	278	299	P	V
		5367.32	43.19	-10.81	54	32.81	31.65	8.3	29.57	278	299	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 1 5150~5250MHz

WIFI 802.11ac VHT80 (Band Edge @ 3m)

WIFI Ant. 2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80 CH 42 5210MHz		5146.64	60.3	-13.7	74	50.12	31.56	8.17	29.55	115	286	P	H
		5148.98	52.86	-1.14	54	42.68	31.56	8.17	29.55	115	286	A	H
	*	5210	98.34	-	-	88.07	31.59	8.24	29.56	115	286	P	H
	*	5210	91.05	-	-	80.78	31.59	8.24	29.56	115	286	A	H
		5402.32	52	-22	74	41.61	31.66	8.31	29.58	115	286	P	H
		5457.48	42.37	-11.63	54	31.82	31.68	8.46	29.59	115	286	A	H
		5147.68	59.61	-14.39	74	49.43	31.56	8.17	29.55	279	300	P	V
		5148.46	52.31	-1.69	54	42.13	31.56	8.17	29.55	279	300	A	V
	*	5210	98.82	-	-	88.55	31.59	8.24	29.56	279	300	P	V
	*	5210	91.52	-	-	81.25	31.59	8.24	29.56	279	300	A	V
		5354.44	50.5	-23.5	74	40.14	31.64	8.29	29.57	279	300	P	V
		5365.64	42.74	-11.26	54	32.36	31.65	8.3	29.57	279	300	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 2 - 5250~5350MHz

WIFI 802.11a (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11a CH 52 5260MHz		5105.06	52.11	-21.89	74	42.01	31.54	8.1	29.54	101	284	P	H
		5096.9	41.6	-12.4	54	31.5	31.54	8.1	29.54	101	284	A	H
	*	5260	104.06	-	-	93.75	31.61	8.26	29.56	101	284	P	H
	*	5260	96.31	-	-	86	31.61	8.26	29.56	101	284	A	H
		5383.44	52.04	-21.96	74	41.67	31.65	8.3	29.58	101	284	P	H
		5417.52	41.09	-12.91	54	30.64	31.67	8.36	29.58	101	284	A	H
		5114.58	52.16	-21.84	74	42.02	31.55	8.13	29.54	289	299	P	V
		5098.94	41.64	-12.36	54	31.54	31.54	8.1	29.54	289	299	A	V
	*	5260	105.13	-	-	94.82	31.61	8.26	29.56	289	299	P	V
	*	5260	97.28	-	-	86.97	31.61	8.26	29.56	289	299	A	V
		5388.72	51.86	-22.14	74	41.49	31.65	8.3	29.58	289	299	P	V
		5416.08	41.21	-12.79	54	30.76	31.67	8.36	29.58	289	299	A	V
802.11a CH 60 5300MHz		5056.78	51.74	-22.26	74	41.69	31.53	8.06	29.54	100	291	P	H
		5137.02	41.5	-12.5	54	31.35	31.55	8.15	29.55	100	291	A	H
	*	5300	103.42	-	-	93.1	31.62	8.27	29.57	100	291	P	H
	*	5300	95.82	-	-	85.5	31.62	8.27	29.57	100	291	A	H
		5370.96	53.35	-20.65	74	42.97	31.65	8.3	29.57	100	291	P	H
		5376.48	41.46	-12.54	54	31.09	31.65	8.3	29.58	100	291	A	H
		5042.16	52.14	-21.86	74	42.12	31.52	8.04	29.54	287	300	P	V
		5142.12	41.61	-12.39	54	31.45	31.56	8.15	29.55	287	300	A	V
	*	5300	105.15	-	-	94.83	31.62	8.27	29.57	287	300	P	V
	*	5300	97.37	-	-	87.05	31.62	8.27	29.57	287	300	A	V
		5354.88	53.17	-20.83	74	42.81	31.64	8.29	29.57	287	300	P	V
		5362.8	42.2	-11.8	54	31.82	31.65	8.3	29.57	287	300	A	V



802.11a CH 64 5320MHz	*	5320	104.22	-	-	93.88	31.63	8.28	29.57	117	286	P	H
	*	5320	96.16	-	-	85.82	31.63	8.28	29.57	117	286	A	H
		5366.88	53.58	-20.42	74	43.2	31.65	8.3	29.57	117	286	P	H
		5350.08	42.89	-11.11	54	32.53	31.64	8.29	29.57	117	286	A	H
													H
													H
	*	5320	105.19	-	-	94.85	31.63	8.28	29.57	285	300	P	V
	*	5320	97.43	-	-	87.09	31.63	8.28	29.57	285	300	A	V
		5360.48	53.55	-20.45	74	43.18	31.64	8.3	29.57	285	300	P	V
		5350.08	43.45	-10.55	54	33.09	31.64	8.29	29.57	285	300	A	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 2 5250~5350MHz

WIFI 802.11a (Harmonic @ 3m)

WIFI Ant. 2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 52 5260MHz		10520	49.3	-18.9	68.2	58.3	39.62	11.85	61.01	100	0	P	H
		15780	45.21	-28.79	74	52.67	38.21	13.97	60.38	100	0	P	H
													H
													H
		10520	47.83	-20.37	68.2	56.83	39.62	11.85	61.01	100	0	P	V
		15780	45.11	-28.89	74	52.57	38.21	13.97	60.38	100	0	P	V
													V
													V
802.11a CH 60 5300MHz		10600	48.58	-25.42	74	57.53	39.72	11.87	61.08	100	0	P	H
		15900	46.19	-27.81	74	53.93	37.77	14.04	60.28	100	0	P	H
													H
													H
		10600	48.24	-25.76	74	57.19	39.72	11.87	61.08	100	0	P	V
		15900	45.93	-28.07	74	53.67	37.77	14.04	60.28	100	0	P	V
													V
													V
802.11a CH 64 5320MHz		10640	48.46	-25.54	74	57.39	39.77	11.88	61.11	100	0	P	H
		15960	46.88	-27.12	74	54.81	37.52	14.06	60.23	100	0	P	H
													H
													H
		10640	48.19	-25.81	74	57.12	39.77	11.88	61.11	100	0	P	V
		15960	46.61	-27.39	74	54.54	37.52	14.06	60.23	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 2 5250~5350MHz

WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI Ant. 2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 CH 54 5270MHz		5051.68	51.84	-22.16	74	41.82	31.52	8.04	29.54	115	289	P	H
		5128.86	43.34	-10.66	54	33.19	31.55	8.15	29.55	115	289	A	H
	*	5270	100.4	-	-	90.08	31.61	8.27	29.56	115	289	P	H
	*	5270	93.03	-	-	82.71	31.61	8.27	29.56	115	289	A	H
		5404.56	51.78	-22.22	74	41.39	31.66	8.31	29.58	115	289	P	H
		5406	43.28	-10.72	54	32.89	31.66	8.31	29.58	115	289	A	H
		5124.44	52.77	-21.23	74	42.64	31.55	8.13	29.55	290	299	P	V
		5132.26	43.37	-10.63	54	33.22	31.55	8.15	29.55	290	299	A	V
	*	5270	101.98	-	-	91.66	31.61	8.27	29.56	290	299	P	V
	*	5270	94.14	-	-	83.82	31.61	8.27	29.56	290	299	A	V
		5383.44	51.62	-22.38	74	41.25	31.65	8.3	29.58	290	299	P	V
		5417.52	43.3	-10.7	54	32.85	31.67	8.36	29.58	290	299	A	V
802.11n HT40 CH 62 5310MHz		5079.9	52.03	-21.97	74	41.96	31.53	8.08	29.54	111	284	P	H
		5074.8	43.38	-10.62	54	33.31	31.53	8.08	29.54	111	284	A	H
	*	5310	101.22	-	-	90.88	31.63	8.28	29.57	111	284	P	H
	*	5310	93.2	-	-	82.86	31.63	8.28	29.57	111	284	A	H
		5351.28	57.65	-16.35	74	47.29	31.64	8.29	29.57	111	284	P	H
		5350.08	49.93	-4.07	54	39.57	31.64	8.29	29.57	111	284	A	H
		5070.72	51.8	-22.2	74	41.73	31.53	8.08	29.54	284	301	P	V
		5149.26	43.13	-10.87	54	32.95	31.56	8.17	29.55	284	301	A	V
	*	5310	102.59	-	-	92.25	31.63	8.28	29.57	284	301	P	V
	*	5310	94.67	-	-	84.33	31.63	8.28	29.57	284	301	A	V
		5350.56	58.91	-15.09	74	48.55	31.64	8.29	29.57	284	301	P	V
		5350.32	51.48	-2.52	54	41.12	31.64	8.29	29.57	284	301	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 2 5250~5350MHz

WIFI 802.11ac VHT80 (Band Edge @ 3m)

WIFI Ant. 2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80 CH 58 5290MHz		5120.02	50.96	-23.04	74	40.83	31.55	8.13	29.55	106	292	P	H
		5135.32	43.14	-10.86	54	32.99	31.55	8.15	29.55	106	292	A	H
	*	5290	97.49	-	-	87.17	31.61	8.27	29.56	106	292	P	H
	*	5290	90.23	-	-	79.91	31.61	8.27	29.56	106	292	A	H
		5356.56	59.05	-14.95	74	48.69	31.64	8.29	29.57	106	292	P	H
		5350.32	52.52	-1.48	54	42.16	31.64	8.29	29.57	106	292	A	H
		5061.88	51.16	-22.84	74	41.11	31.53	8.06	29.54	286	300	P	V
		5127.84	43.67	-10.33	54	33.52	31.55	8.15	29.55	286	300	A	V
	*	5290	99.44	-	-	89.12	31.61	8.27	29.56	286	300	P	V
	*	5290	91.58	-	-	81.26	31.61	8.27	29.56	286	300	A	V
		5356.8	62.24	-11.76	74	51.88	31.64	8.29	29.57	286	300	P	V
		5352.72	53.7	-0.3	54	43.34	31.64	8.29	29.57	286	300	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 - 5470~5725MHz

WIFI 802.11a (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11a CH 100 5500MHz		5447.6	51.13	-22.87	74	40.62	31.68	8.41	29.58	107	288	P	H
		5461.84	51.46	-16.74	68.2	40.91	31.68	8.46	29.59	107	288	P	H
		5459.92	42.36	-11.64	54	31.81	31.68	8.46	29.59	107	288	A	H
	*	5500	102.81	-	-	92.14	31.7	8.56	29.59	107	288	P	H
	*	5500	95.01	-	-	84.34	31.7	8.56	29.59	107	288	A	H
													H
		5419.12	51.61	-22.39	74	41.16	31.67	8.36	29.58	384	292	P	V
		5467.44	51.68	-16.52	68.2	41.07	31.69	8.51	29.59	384	292	P	V
		5459.76	42.19	-11.81	54	31.64	31.68	8.46	29.59	384	292	A	V
	*	5500	103.42	-	-	92.75	31.7	8.56	29.59	384	292	P	V
	*	5500	95.57	-	-	84.9	31.7	8.56	29.59	384	292	A	V
													V
802.11a CH 116 5580MHz		5417.68	51	-23	74	40.55	31.67	8.36	29.58	123	288	P	H
		5464	50.44	-17.76	68.2	39.88	31.69	8.46	29.59	123	288	P	H
		5417.44	41.85	-12.15	54	31.4	31.67	8.36	29.58	123	288	A	H
	*	5580	103.29	-	-	92.3	31.82	8.8	29.63	123	288	P	H
	*	5580	95.49	-	-	84.5	31.82	8.8	29.63	123	288	A	H
		5759.015	51.12	-17.08	68.2	39.85	32.17	8.81	29.71	123	288	P	H
		5422.24	52.02	-21.98	74	41.57	31.67	8.36	29.58	359	289	P	V
		5466.4	50.6	-17.6	68.2	39.99	31.69	8.51	29.59	359	289	P	V
		5415.76	42.3	-11.7	54	31.85	31.67	8.36	29.58	359	289	A	V
	*	5580	103.93	-	-	92.94	31.82	8.8	29.63	359	289	P	V
	*	5580	96.23	-	-	85.24	31.82	8.8	29.63	359	289	A	V
		5759.015	50.98	-17.22	68.2	39.71	32.17	8.81	29.71	359	289	P	V



802.11a CH 140 5700MHz	*	5700	102.78	-	-	91.59	32.04	8.82	29.67	134	290	P	H
	*	5700	95.05	-	-	83.86	32.04	8.82	29.67	134	290	A	H
		5727.96	53.24	-14.96	68.2	42	32.1	8.82	29.68	134	290	P	H
													H
													H
													H
	*	5700	103.43	-	-	92.24	32.04	8.82	29.67	347	293	P	V
	*	5700	95.57	-	-	84.38	32.04	8.82	29.67	347	293	A	V
		5731.24	53.25	-14.95	68.2	42.02	32.1	8.82	29.69	347	293	P	V
													V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



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

WIFI Ant. 2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 100 5500MHz		11000	47.46	-26.54	74	56.15	40.2	11.99	61.4	100	0	P	H
		16500	47	-21.2	68.2	52.38	39.2	14.23	59.5	100	0	P	H
													H
													H
		11000	46.82	-27.18	74	55.51	40.2	11.99	61.4	100	0	P	V
		16500	46.86	-21.34	68.2	52.24	39.2	14.23	59.5	100	0	P	V
													V
													V
802.11a CH 116 5580MHz		11160	46.63	-27.37	74	55.34	40.1	12.07	61.4	100	0	P	H
		16740	48.2	-20	68.2	52.67	39.49	14.29	58.92	100	0	P	H
													H
													H
		11160	47.55	-26.45	74	56.26	40.1	12.07	61.4	100	0	P	V
		16740	48.55	-19.65	68.2	53.02	39.49	14.29	58.92	100	0	P	V
													V
													V
802.11a CH 140 5700MHz		11400	46.68	-27.32	74	55.4	39.96	12.2	61.4	100	0	P	H
		17100	51.49	-16.71	68.2	54.31	40.08	14.41	57.96	100	0	P	H
													H
													H
		11400	47.3	-26.7	74	56.02	39.96	12.2	61.4	100	0	P	V
		17100	50.58	-17.62	68.2	53.4	40.08	14.41	57.96	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



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

WIFI Ant. 2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 CH 102 5510MHz		5457.52	54.14	-19.86	74	43.59	31.68	8.46	29.59	109	287	P	H
		5469.52	57.63	-10.57	68.2	47.02	31.69	8.51	29.59	109	287	P	H
		5457.52	46.4	-7.6	54	35.85	31.68	8.46	29.59	109	287	A	H
	*	5510	100.14	-	-	89.44	31.7	8.6	29.6	109	287	P	H
	*	5510	92.39	-	-	81.69	31.7	8.6	29.6	109	287	A	H
		5765	52.4	-15.8	68.2	41.13	32.17	8.81	29.71	109	287	P	H
		5457.52	53.57	-20.43	74	43.02	31.68	8.46	29.59	280	297	P	V
		5469.52	57.86	-10.34	68.2	47.25	31.69	8.51	29.59	280	297	P	V
		5457.52	46.04	-7.96	54	35.49	31.68	8.46	29.59	280	297	A	V
	*	5510	101	-	-	90.3	31.7	8.6	29.6	280	297	P	V
	*	5510	93.08	-	-	82.38	31.7	8.6	29.6	280	297	A	V
		5754.29	52.04	-16.16	68.2	40.75	32.17	8.81	29.69	280	297	P	V
802.11n HT40 CH 110 5550MHz		5450.8	52.42	-21.58	74	41.87	31.68	8.46	29.59	109	287	P	H
		5467.6	52.45	-15.75	68.2	41.84	31.69	8.51	29.59	109	287	P	H
		5457.52	43.57	-10.43	54	33.02	31.68	8.46	29.59	109	287	A	H
	*	5550	100.76	-	-	89.88	31.79	8.7	29.61	109	287	P	H
	*	5550	92.64	-	-	81.76	31.79	8.7	29.61	109	287	A	H
		5757.125	52.09	-16.11	68.2	40.82	32.17	8.81	29.71	109	287	P	H
		5456.08	53.16	-20.84	74	42.61	31.68	8.46	29.59	321	297	P	V
		5466.88	52.91	-15.29	68.2	42.3	31.69	8.51	29.59	321	297	P	V
		5458.48	44	-10	54	33.45	31.68	8.46	29.59	321	297	A	V
	*	5550	101.69	-	-	90.81	31.79	8.7	29.61	321	297	P	V
	*	5550	93.71	-	-	82.83	31.79	8.7	29.61	321	297	A	V
		5730.35	51.74	-16.46	68.2	40.51	32.1	8.82	29.69	321	297	P	V



802.11n HT40 CH 134 5670MHz		5366.8	51.21	-22.79	74	40.83	31.65	8.3	29.57	121	289	P	H
		5460.6	51.13	-17.07	68.2	40.58	31.68	8.46	29.59	121	289	P	H
		5423.5	43.04	-10.96	54	32.59	31.67	8.36	29.58	121	289	A	H
	*	5670	101.41	-	-	90.23	32.01	8.83	29.66	121	289	P	H
	*	5670	93.37	-	-	82.19	32.01	8.83	29.66	121	289	A	H
		5741.06	52.31	-15.89	68.2	41.06	32.13	8.81	29.69	121	289	P	H
		5360.5	51.64	-22.36	74	41.27	31.64	8.3	29.57	305	310	P	V
		5465.5	51.19	-17.01	68.2	40.63	31.69	8.46	29.59	305	310	P	V
		5435.4	42.52	-11.48	54	32.02	31.67	8.41	29.58	305	310	A	V
	*	5670	101.68	-	-	90.5	32.01	8.83	29.66	305	310	P	V
	*	5670	93.99	-	-	82.81	32.01	8.83	29.66	305	310	A	V
		5735.39	52.35	-15.85	68.2	41.09	32.13	8.82	29.69	305	310	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



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

WIFI Ant. 2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80 CH 106 5530MHz		5448.88	55.61	-18.39	74	45.05	31.68	8.46	29.58	107	286	P	H
		5466.16	56.48	-11.72	68.2	45.87	31.69	8.51	29.59	107	286	P	H
		5459.92	47.39	-6.61	54	36.84	31.68	8.46	29.59	107	286	A	H
	*	5530	98.45	-	-	87.68	31.73	8.65	29.61	107	286	P	H
	*	5530	89.98	-	-	79.21	31.73	8.65	29.61	107	286	A	H
		5757.44	51.54	-16.66	68.2	40.27	32.17	8.81	29.71	107	286	P	H
		5458.96	55.82	-18.18	74	45.27	31.68	8.46	29.59	317	300	P	V
		5468.32	56.07	-12.13	68.2	45.46	31.69	8.51	29.59	317	300	P	V
		5459.92	47.45	-6.55	54	36.9	31.68	8.46	29.59	317	300	A	V
	*	5530	99.31	-	-	88.54	31.73	8.65	29.61	317	300	P	V
	*	5530	90.82	-	-	80.05	31.73	8.65	29.61	317	300	A	V
		5734.445	50.89	-17.31	68.2	39.66	32.1	8.82	29.69	317	300	P	V
802.11ac VHT80 CH 122 5610MHz		5420.56	50.07	-23.93	74	39.62	31.67	8.36	29.58	102	286	P	H
		5461.84	51.2	-17	68.2	40.65	31.68	8.46	29.59	102	286	P	H
		5446.48	42.69	-11.31	54	32.18	31.68	8.41	29.58	102	286	A	H
	*	5610	98.2	-	-	87.1	31.89	8.85	29.64	102	286	P	H
	*	5610	90.33	-	-	79.23	31.89	8.85	29.64	102	286	A	H
		5758.7	51.46	-16.74	68.2	40.19	32.17	8.81	29.71	102	286	P	H
		5380	52.08	-21.92	74	41.71	31.65	8.3	29.58	322	309	P	V
		5463.04	50.11	-18.09	68.2	39.55	31.69	8.46	29.59	322	309	P	V
		5459.68	42.75	-11.25	54	32.2	31.68	8.46	29.59	322	309	A	V
	*	5610	98.86	-	-	87.76	31.89	8.85	29.64	322	309	P	V
	*	5610	91.05	-	-	79.95	31.89	8.85	29.64	322	309	A	V
		5734.445	51.13	-17.07	68.2	39.9	32.1	8.82	29.69	322	309	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 - Straddle Channel

WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11n HT20 CH 144 5720MHz	*	5720	103.24	-	-	92	32.1	8.82	29.68	100	286	P	H
	*	5720	95.35	-	-	84.11	32.1	8.82	29.68	100	286	A	H
													H
													H
													H
													H
	*	5720	103.86	-	-	92.62	32.1	8.82	29.68	291	312	P	V
	*	5720	96.07	-	-	84.83	32.1	8.82	29.68	291	312	A	V
													V
													V
													V
													V
Remark	1. No other spurious found.												
	2. All results are PASS against Peak and Average limit line.												



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

WIFI Ant. 2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 144 5720MHz		11440	47.77	-26.23	74	56.51	39.94	12.21	61.4	100	0	P	H
		17160	52.14	-16.06	68.2	54.53	40.27	14.43	57.73	100	0	P	H
													H
													H
		11440	47.13	-26.87	74	55.87	39.94	12.21	61.4	100	0	P	V
		17160	52.13	-16.07	68.2	54.52	40.27	14.43	57.73	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



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

WIFI Ant. 2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 CH 142 5710MHz	*	5710	100.27	-	-	89.06	32.07	8.82	29.68	100	287	P	H
	*	5710	93.01	-	-	81.8	32.07	8.82	29.68	100	287	A	H
													H
													H
													H
													H
	*	5710	100.93	-	-	89.72	32.07	8.82	29.68	287	313	P	V
	*	5710	93.53	-	-	82.32	32.07	8.82	29.68	287	313	A	V
													V
													V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 - Straddle Channel
WIFI 802.11ac VHT80 (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)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80 CH 138 5690MHz	*	5690	97.48	-	-	86.28	32.04	8.83	29.67	107	286	P	H
	*	5690	90.52	-	-	79.32	32.04	8.83	29.67	107	286	A	H
													H
													H
													H
													H
	*	5690	97.9	-	-	86.7	32.04	8.83	29.67	303	295	P	V
	*	5690	90.75	-	-	79.55	32.04	8.83	29.67	303	295	A	V
													V
													V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Emission below 1GHz

WIFI 802.11ac VHT80(LF @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	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)
802.11ac VHT80 LF		99.39	31.8	-11.7	43.5	46.59	16.15	1.35	32.29	-	-	P	H
		192	32.06	-11.44	43.5	47.59	15.01	1.73	32.27	-	-	P	H
		271.92	32.36	-13.64	46	43.2	19.33	2	32.17	-	-	P	H
		300.7	36.54	-9.46	46	47.26	19.31	2.1	32.13	-	-	P	H
		885.9	41.33	-4.67	46	40.37	28.99	3.55	31.58	100	0	P	H
		901.3	39.15	-6.85	46	38.06	29.04	3.55	31.5	-	-	P	H
													H
													H
													H
													H
													H
													H
		31.35	34.62	-5.38	40	42.21	23.96	0.79	32.34	100	0	P	V
		48.63	34.43	-5.57	40	50.46	15.3	0.99	32.32	-	-	P	V
		69.96	31.66	-8.34	40	50.26	12.55	1.16	32.31	-	-	P	V
		332.9	35.81	-10.19	46	45.83	19.9	2.22	32.14	-	-	P	V
		696.2	33.14	-12.86	46	35.68	26.49	3.14	32.17	-	-	P	V
		885.9	37.43	-8.57	46	36.47	28.99	3.55	31.58	-	-	P	V
													V
													V
												V	
												V	
												V	
												V	
												V	
Remark	1. No other spurious found. 2. All results are PASS against limit line.												



Note symbol

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



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

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

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

For Peak Limit @ 2390MHz:

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

For Average Limit @ 2390MHz:

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

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



Appendix D. Radiated Spurious Emission

Test Engineer :	Alex Jheng, Fu Chen, and Wilson Wu	Temperature :	24.5~25°C
		Relative Humidity :	48~50%

Note symbol

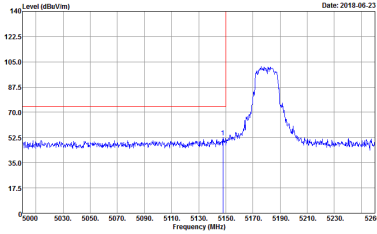
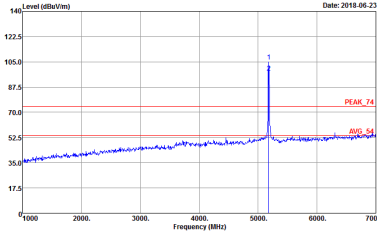
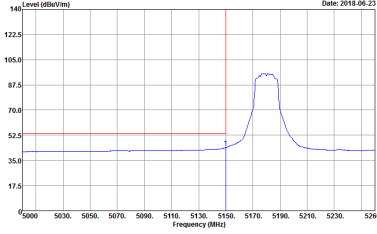
-L	Low channel location
-R	High channel location



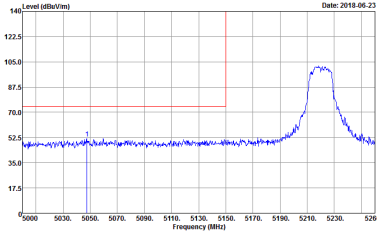
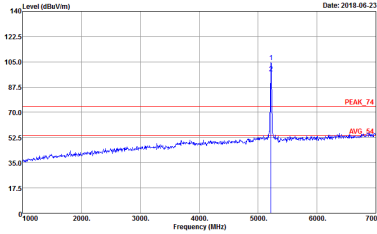
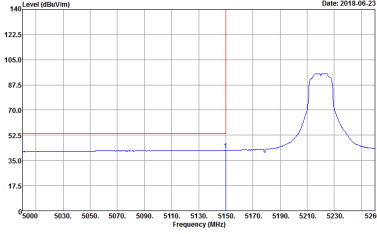
Band 1 - 5150~5250MHz
WIFI 802.11a (Band Edge @ 3m)

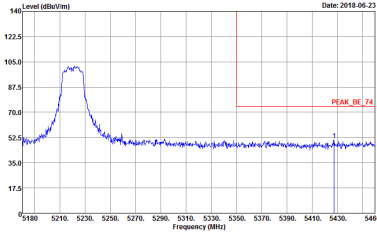
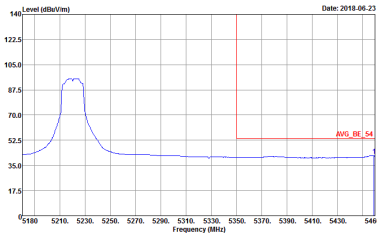
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH36 5180MHz	
2	Horizontal	Fundamental
Peak	Site : 03CH13-HY Condition : PEAK_BE_74 3m HORN_9120D_1212 HORIZONTAL Detector : Peak Project : 372342-17 Mode : 1	Site : 03CH13-HY Condition : PEAK_74 3m HORN_9120D_1212 HORIZONTAL Detector : Peak Project : 372342-17 Mode : 1
Avg.	Site : 03CH13-HY Condition : AVG_BE_54 3m HORN_9120D_1212 HORIZONTAL Detector : Peak Project : 372342-17 Mode : 1	Left blank



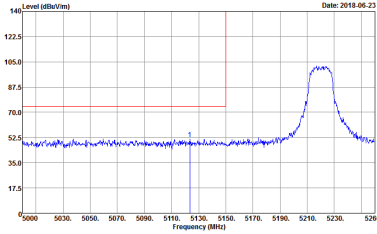
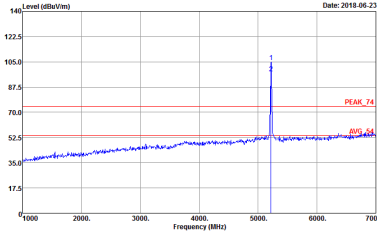
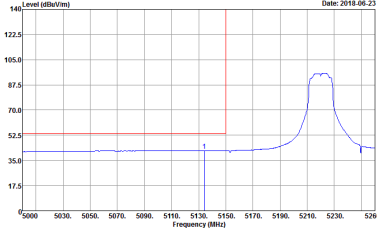
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH36 5180MHz	
2	Vertical	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE_74 3m HORN_91200_1212 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 372342-17 Mode : 1	 Site : 03CH13-HY Condition : PEAK_74 3m HORN_91200_1212 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 372342-17 Mode : 1
Avg.	 Site : 03CH13-HY Condition : AVG_BE_54 3m HORN_91200_1212 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 372342-17 Mode : 1	Left blank



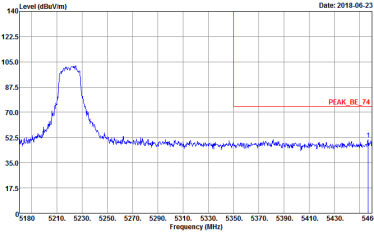
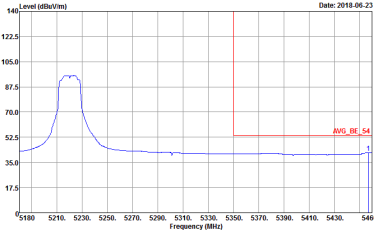
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH44 5220MHz - L	
2	Horizontal	Fundamental
Peak	 Site : 03CH13-HV Condition : PEAK_BE_74 3m HORN_91200_1212 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 372342-17 Mode : 2	 Site : 03CH13-HV Condition : PEAK_74 3m HORN_91200_1212 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 372342-17 Mode : 2
Avg.	 Site : 03CH13-HV Condition : AVG_BE_54 3m HORN_91200_1212 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 372342-17 Mode : 2	Left blank

WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH44 5220MHz - R	
2	Horizontal	Fundamental
Peak	 Site : 03CH13-HV Condition : PEAK_BE_74 3m HORN_91200_1212 HORIZONTAL Detector : Peak Project : 372342-17 Mode : 2	Left blank
Avg.	 Site : 03CH13-HV Condition : AVG_BE_54 3m HORN_91200_1212 HORIZONTAL Detector : Peak Project : 372342-17 Mode : 2	Left blank

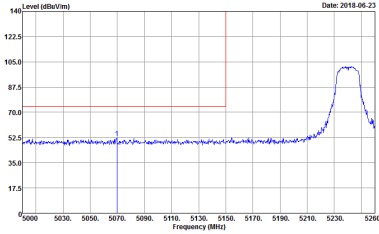
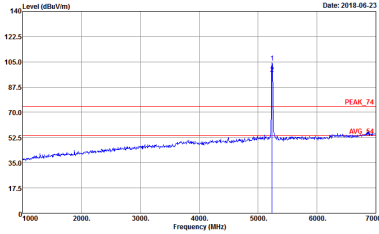
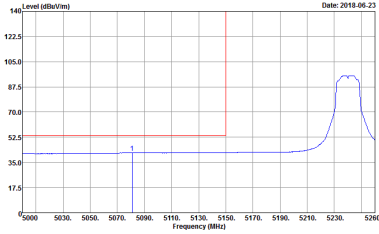


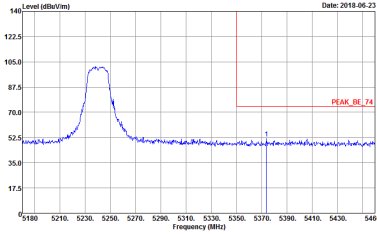
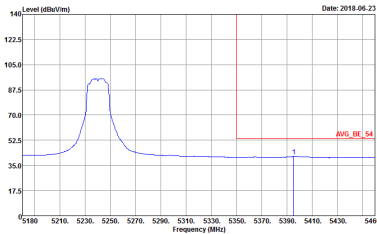
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH44 5220MHz - L	
2	Vertical	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE_74 3m HORN_91200_1212 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 372342-17 Mode : 2	 Site : 03CH13-HY Condition : PEAK_74 3m HORN_91200_1212 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 372342-17 Mode : 2
Avg.	 Site : 03CH13-HY Condition : AVG_BE_54 3m HORN_91200_1212 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 372342-17 Mode : 2	Left blank



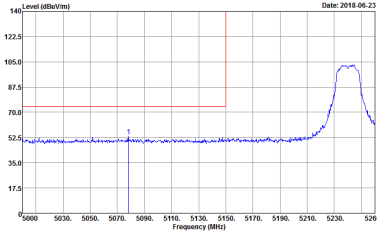
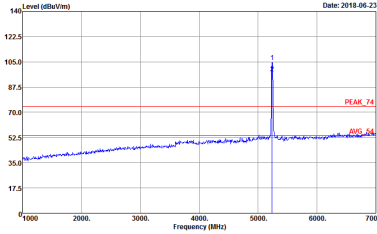
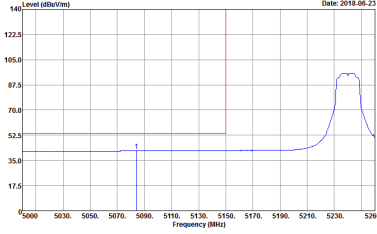
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH44 5220MHz - R	
2	Vertical	Fundamental
Peak	 Site : 03CH13-HV Condition : PEAK_BE_74 3m HORN_91200_1212 VERTICAL Detector : Peak Project : 372342-17 Mode : 2	Left blank
Avg.	 Site : 03CH13-HV Condition : AVG_BE_54 3m HORN_91200_1212 VERTICAL Detector : Peak Project : 372342-17 Mode : 2	Left blank



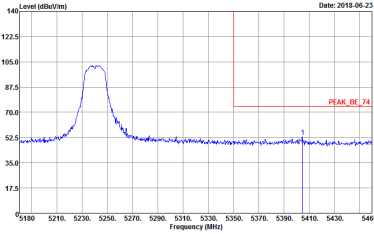
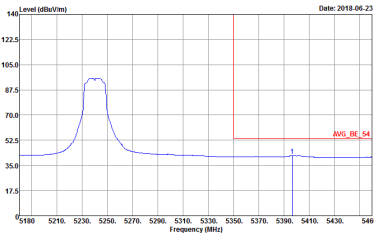
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH48 5240MHz - L	
2	Horizontal	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE_74 3m HORN_91200_1212 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 372342-17 Mode : 3	 Site : 03CH13-HY Condition : PEAK_74 3m HORN_91200_1212 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 372342-17 Mode : 3
Avg.	 Site : 03CH13-HY Condition : AVG_BE_54 3m HORN_91200_1212 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 372342-17 Mode : 3	Left blank

WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH48 5240MHz - R	
2	Horizontal	Fundamental
Peak	 Site : 03CH13-HV Condition : PEAK_BE_74 3m HORN_91200_1212 HORIZONTAL Detector : Peak Project : 372342-17 Mode : 3	Left blank
Avg.	 Site : 03CH13-HV Condition : AVG_BE_54 3m HORN_91200_1212 HORIZONTAL Detector : Peak Project : 372342-17 Mode : 3	Left blank



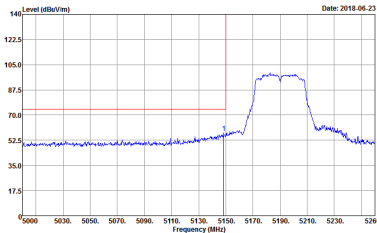
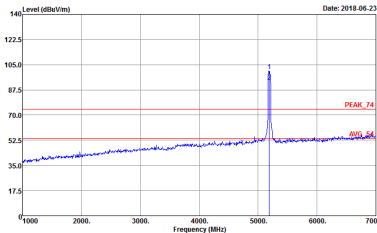
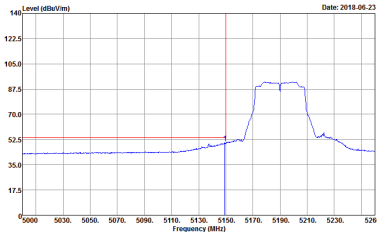
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH48 5240MHz - L	
2	Vertical	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE_74 3m HORN_91200_1212 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 372342-17 Mode : 3	 Site : 03CH13-HY Condition : PEAK_74 3m HORN_91200_1212 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 372342-17 Mode : 3
Avg.	 Site : 03CH13-HY Condition : AVG_BE_54 3m HORN_91200_1212 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 372342-17 Mode : 3	Left blank



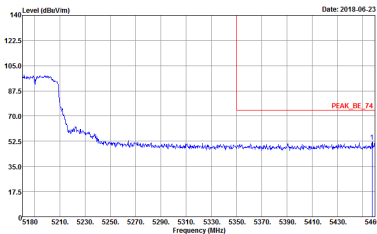
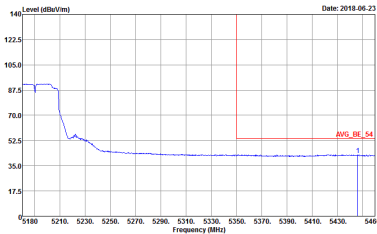
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH48 5240MHz - R	
2	Vertical	Fundamental
Peak	 Site : 03CH13-HV Condition : PEAK_BE_74 3m HORN_91200_1212 VERTICAL Detector : Peak Project : 372342-17 Mode : 3	Left blank
Avg.	 Site : 03CH13-HV Condition : AVG_BE_54 3m HORN_91200_1212 VERTICAL Detector : Peak Project : 372342-17 Mode : 3	Left blank



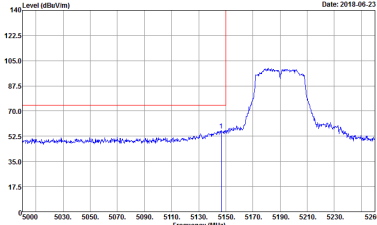
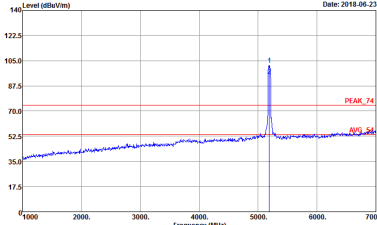
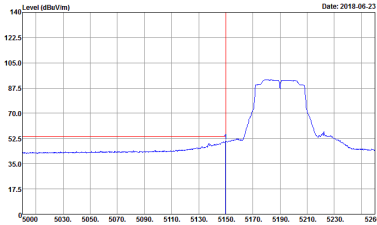
Band 1 5150~5250MHz
WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH38 5190MHz - L	
2	Horizontal	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE_74 3m HORN_91200_1212 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 372342-17 Mode : 7	 Site : 03CH13-HY Condition : PEAK_74 3m HORN_91200_1212 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 372342-17 Mode : 7
Avg.	 Site : 03CH13-HY Condition : AVG_BE_54 3m HORN_91200_1212 HORIZONTAL RBW:1000.000KHz VBW:3.000KHz SWT:Auto Detector : Peak Project : 372342-17 Mode : 7	Left blank

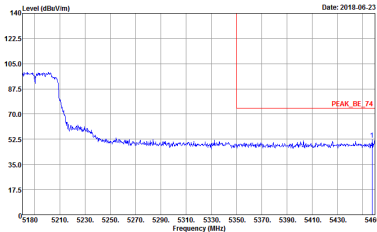
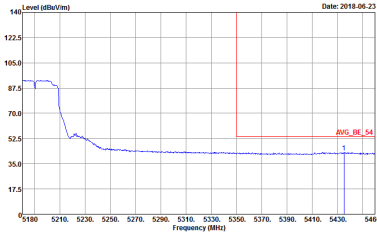


WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH38 5190MHz - R	
2	Horizontal	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE_74 3m HORN_9120D_1212 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Mode : 372342-17 Date: 2018-06-23	Left blank
Avg.	 Site : 03CH13-HY Condition : AVG_BE_54 3m HORN_9120D_1212 HORIZONTAL Detector : RBW:1000.000KHz VBW:3.000KHz SWT:Auto Project : Peak Mode : 372342-17 Date: 2018-06-23	Left blank



WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH38 5190MHz - L	
2	Vertical	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE_74 3m HORN_9120D_1212 VERTICAL Detector : Peak Project : 372342-17 Mode : 7	 Site : 03CH13-HY Condition : PEAK_74 3m HORN_9120D_1212 VERTICAL Detector : Peak Project : 372342-17 Mode : 7
Avg.	 Site : 03CH13-HY Condition : AVG_BE_54 3m HORN_9120D_1212 VERTICAL Detector : Peak Project : 372342-17 Mode : 7	Left blank

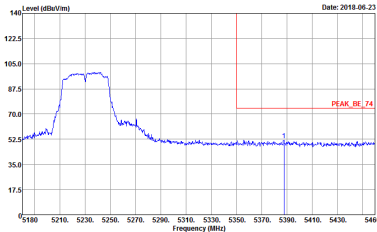
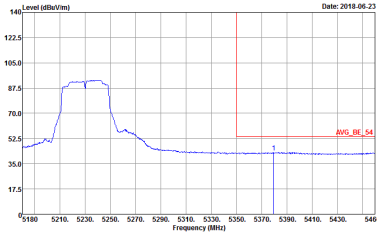


WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH38 5190MHz - R	
2	Vertical	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE_74 3m HORN_9120D_1212 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Mode : 372342-17 Date: 2018-06-23	Left blank
Avg.	 Site : 03CH13-HY Condition : AVG_BE_54 3m HORN_9120D_1212 VERTICAL Detector : RBW:1000.000KHz VBW:3.000KHz SWT:Auto Project : Peak Mode : 372342-17 Date: 2018-06-23	Left blank



WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH46 5230MHz - L	
2	Horizontal	Fundamental
Peak	Site : 03CH13-HY Condition : PEAK_BE_74 3m HORN_91200_1212 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Mode : 372342-17 Date: 2018-06-23	Site : 03CH13-HY Condition : PEAK_74 3m HORN_91200_1212 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Mode : 372342-17 Date: 2018-06-23
Avg.	Site : 03CH13-HY Condition : AVG_BE_54 3m HORN_91200_1212 HORIZONTAL Detector : RBW:1000.000KHz VBW:3.000KHz SWT:Auto Project : Peak Mode : 372342-17 Date: 2018-06-23	Left blank

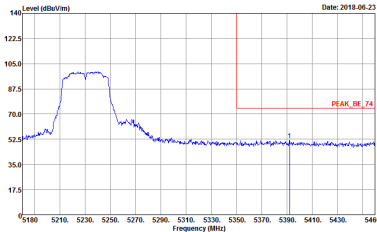
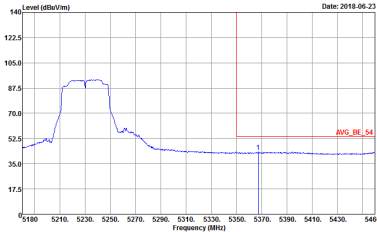


WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH46 5230MHz - R	
2	Horizontal	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE_74 3m HORN_9120D_1212 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Mode : 372342-17 Date: 2018-06-23	Left blank
Avg.	 Site : 03CH13-HY Condition : AVG_BE_54 3m HORN_9120D_1212 HORIZONTAL Detector : RBW:1000.000KHz VBW:3.000KHz SWT:Auto Project : Peak Mode : 372342-17 Date: 2018-06-23	Left blank



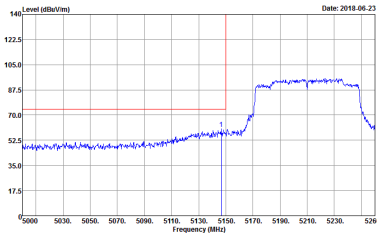
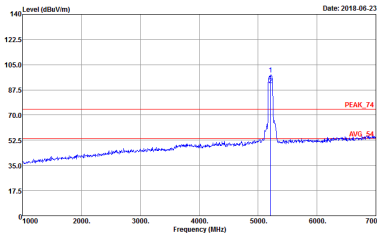
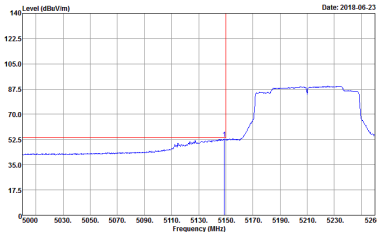
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH46 5230MHz - L	
2	Vertical	Fundamental
Peak	Site : 03CH13-HY Condition : PEAK_BE_74 3m HORN_9120D_1212 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Mode : 372342-17 Date: 2018-06-23	Site : 03CH13-HY Condition : PEAK_74 3m HORN_9120D_1212 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Mode : 372342-17 Date: 2018-06-23
Avg.	Site : 03CH13-HY Condition : AVG_BE_54 3m HORN_9120D_1212 VERTICAL Detector : RBW:1000.000KHz VBW:3.000KHz SWT:Auto Project : Peak Mode : 372342-17 Date: 2018-06-23	Left blank



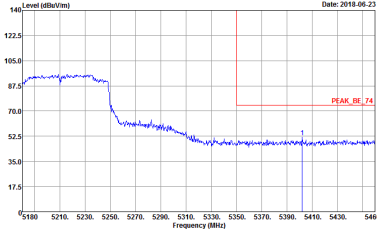
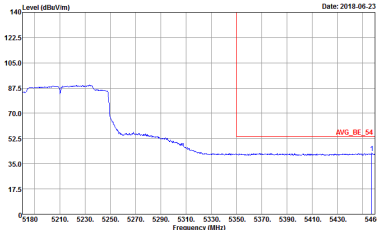
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH46 5230MHz - R	
2	Vertical	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE_74 3m HORN_9120D_1212 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Mode : 372342-17 Date: 2018-06-23	Left blank
Avg.	 Site : 03CH13-HY Condition : AVG_BE_54 3m HORN_9120D_1212 VERTICAL Detector : RBW:1000.000KHz VBW:3.000KHz SWT:Auto Project : Peak Mode : 372342-17 Date: 2018-06-23	Left blank



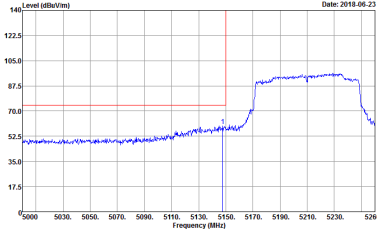
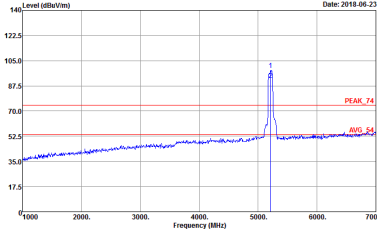
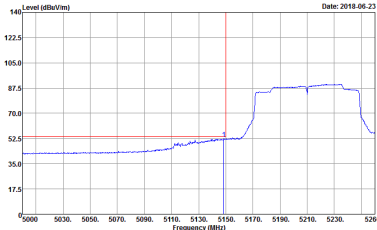
Band 1 5150~5250MHz
WIFI 802.11ac VHT80 (Band Edge @ 3m)

WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH42 5210MHz - L	
2	Horizontal	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE_74 3m HORN_91200_1212 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 372342-17 Mode : 9	 Site : 03CH13-HY Condition : PEAK_74 3m HORN_91200_1212 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 372342-17 Mode : 9
Avg.	 Site : 03CH13-HY Condition : AVG_BE_54 3m HORN_91200_1212 HORIZONTAL RBW:1000.000KHz VBW:3.000KHz SWT:Auto Detector : Peak Project : 372342-17 Mode : 9	Left blank

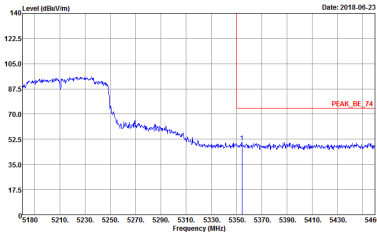
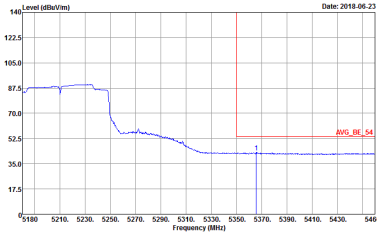


WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH42 5210MHz - R	
2	Horizontal	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE_74 3m HORN_9120D_1212 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Mode : 372342-17 Date: 2018-06-23	Left blank
Avg.	 Site : 03CH13-HY Condition : AVG_BE_54 3m HORN_9120D_1212 HORIZONTAL Detector : RBW:1000.000KHz VBW:3.000KHz SWT:Auto Project : Peak Mode : 372342-17 Date: 2018-06-23	Left blank



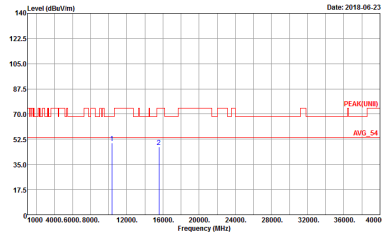
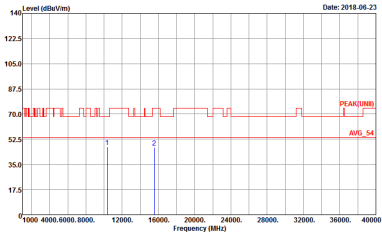
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH42 5210MHz - L	
2	Vertical	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE_74 3m HORN_9120D_1212 VERTICAL Detector : Peak Project : 372342-17 Mode : 9	 Site : 03CH13-HY Condition : PEAK_74 3m HORN_9120D_1212 VERTICAL Detector : Peak Project : 372342-17 Mode : 9
Avg.	 Site : 03CH13-HY Condition : AVG_BE_54 3m HORN_9120D_1212 VERTICAL Detector : Peak Project : 372342-17 Mode : 9	Left blank



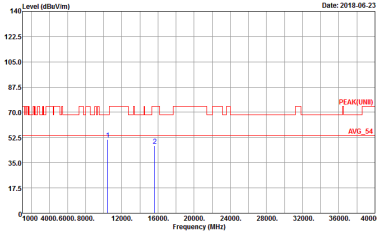
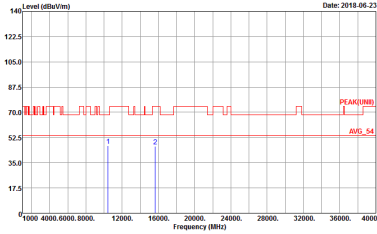
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH42 5210MHz - R	
2	Vertical	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE_74 3m HORN_9120D_1212 VERTICAL Detector : Peak Project : 372342-17 Mode : 9	Left blank
Avg.	 Site : 03CH13-HY Condition : AVG_BE_54 3m HORN_9120D_1212 VERTICAL Detector : Peak Project : 372342-17 Mode : 9	Left blank



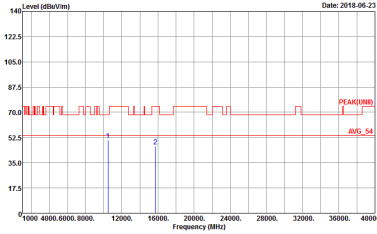
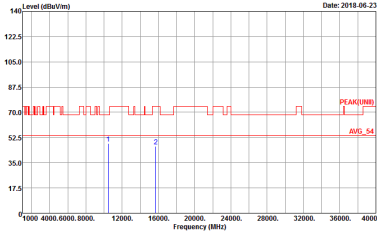
Band 1 - 5150~5250MHz
WIFI 802.11a (Harmonic @ 3m)

WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11a CH36 5180MHz	
2	Horizontal	Vertical
Peak Avg.	 Site : 03CH13-HY Condition : PEAK(UNIT) 3m SHF_HORN_576 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 372342-17 Mode : 1	 Site : 03CH13-HY Condition : PEAK(UNIT) 3m SHF_HORN_576 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 372342-17 Mode : 1



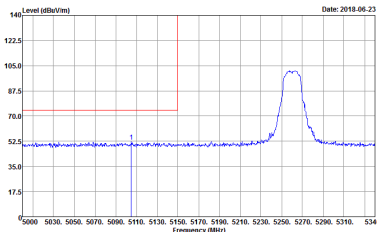
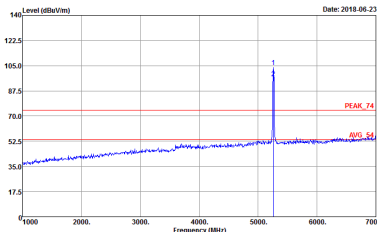
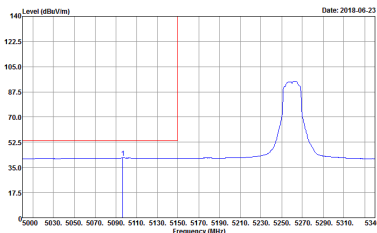
WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11a CH44 5220MHz	
2	Horizontal	Vertical
Peak Avg.	 Site : 03CH13-HV Condition : PEAK(UNB) 3m SHF_HORN_576 HORIZONTAL Detector : Peak Project : 372342-17 Mode : 2	 Site : 03CH13-HV Condition : PEAK(UNB) 3m SHF_HORN_576 VERTICAL Detector : Peak Project : 372342-17 Mode : 2



WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11a CH48 5240MHz	
2	Horizontal	Vertical
Peak Avg.	 Site : 03CH13-1V Condition : PEAK(UNB) 3m SHF_HORN_576 HORIZONTAL Detector : Peak Project : 372342-17 Mode : 3	 Site : 03CH13-1V Condition : PEAK(UNB) 3m SHF_HORN_576 VERTICAL Detector : Peak Project : 372342-17 Mode : 3



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

WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH52 5260MHz - L	
2	Horizontal	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE_74 3m HORN_9120D_1212 HORIZONTAL Detector : Peak Project : 372342-17 Mode : 10	 Site : 03CH13-HY Condition : PEAK_74 3m HORN_9120D_1212 HORIZONTAL Detector : Peak Project : 372342-17 Mode : 10
Avg.	 Site : 03CH13-HY Condition : AVG_BE_54 3m HORN_9120D_1212 HORIZONTAL Detector : Peak Project : 372342-17 Mode : 10	Left blank



WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH52 5260MHz - R	
2	Horizontal	Fundamental
Peak	Site : 03CH13-HV Condition : PEAK_BE_74 3m HORN_91200_1212 HORIZONTAL Detector : Peak Project : 372342-17 Mode : 10	Left blank
Avg.	Site : 03CH13-HV Condition : AVG_BE_54 3m HORN_91200_1212 HORIZONTAL Detector : Peak Project : 372342-17 Mode : 10	Left blank

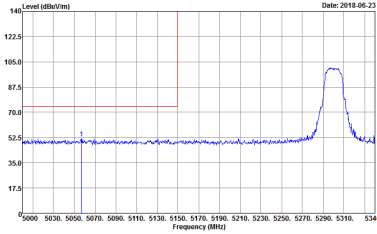
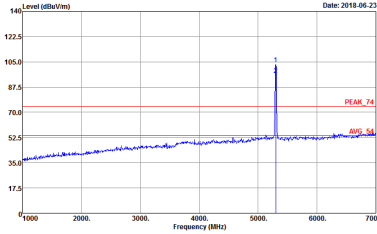
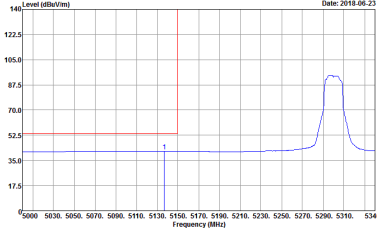


WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH52 5260MHz - L	
2	Vertical	Fundamental
Peak	Site : 03CH13-HV Condition : PEAK_BE_74 3m HORN_91200_1212 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 372342-17 Mode : 10	Site : 03CH13-HV Condition : PEAK_74 3m HORN_91200_1212 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 372342-17 Mode : 10
Avg.	Site : 03CH13-HV Condition : AVG_BE_54 3m HORN_91200_1212 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 372342-17 Mode : 10	Left blank

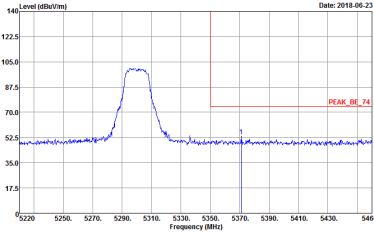
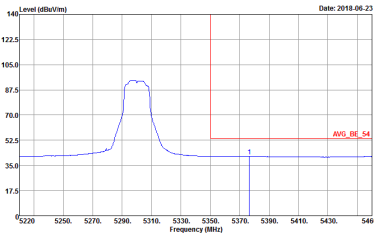


WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH52 5260MHz - R	
2	Vertical	Fundamental
Peak	Site : 03CH13-HV Condition : PEAK_BE_74 3m HORN_91200_1212 VERTICAL Detector : Peak Project : 372342-17 Mode : 10	Left blank
Avg.	Site : 03CH13-HV Condition : AVG_BE_54 3m HORN_91200_1212 VERTICAL Detector : Peak Project : 372342-17 Mode : 10	Left blank

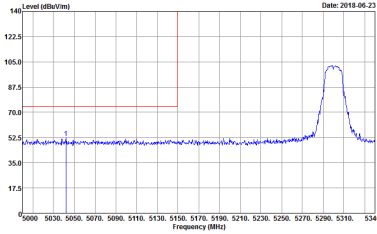
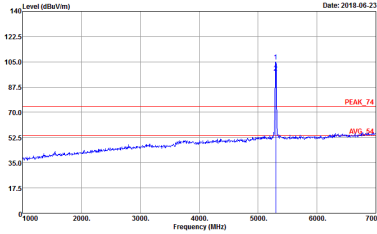
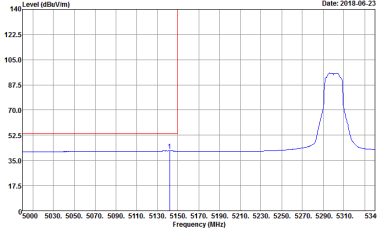


WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH60 5300MHz - L	
2	Horizontal	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE_74 3m HORN_91200_1212 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 372342-17 Mode : 11	 Site : 03CH13-HY Condition : PEAK_74 3m HORN_91200_1212 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 372342-17 Mode : 11
Avg.	 Site : 03CH13-HY Condition : AVG_BE_54 3m HORN_91200_1212 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 372342-17 Mode : 11	Left blank

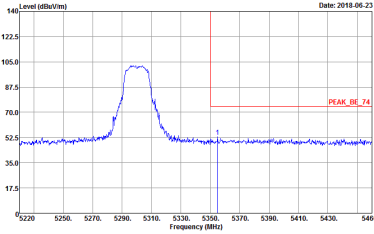
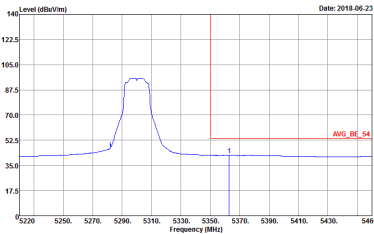


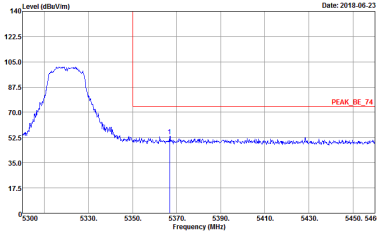
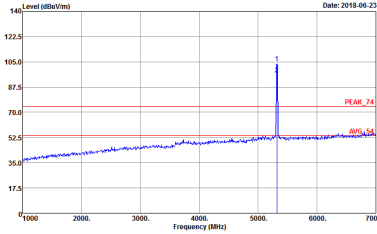
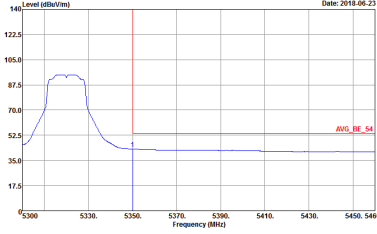
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH60 5300MHz - R	
2	Horizontal	Fundamental
Peak	 Site : 03CH13-HV Condition : PEAK_BE_74 3m HORN_91200_1212 HORIZONTAL Detector : Peak Project : 372342-17 Mode : 11	Left blank
Avg.	 Site : 03CH13-HV Condition : AVG_BE_54 3m HORN_91200_1212 HORIZONTAL Detector : Peak Project : 372342-17 Mode : 11	Left blank



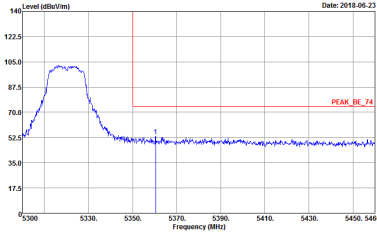
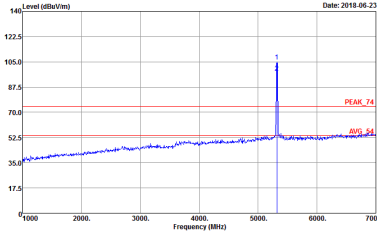
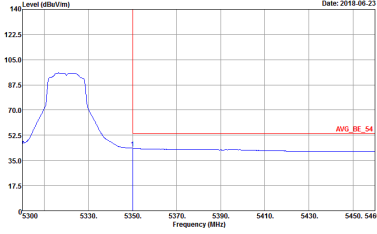
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH60 5300MHz - L	
2	Vertical	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE_74 3m HORN_91200_1212 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 372342-17 Mode : 11	 Site : 03CH13-HY Condition : PEAK_74 3m HORN_91200_1212 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 372342-17 Mode : 11
Avg.	 Site : 03CH13-HY Condition : AVG_BE_54 3m HORN_91200_1212 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 372342-17 Mode : 11	Left blank



WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH60 5300MHz - R	
2	Vertical	Fundamental
Peak	 Site : 03CH13-HV Condition : PEAK_BE_74 3m HORN_91200_1212 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 372342-17 Mode : 11	Left blank
Avg.	 Site : 03CH13-HV Condition : AVG_BE_54 3m HORN_91200_1212 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 372342-17 Mode : 11	Left blank

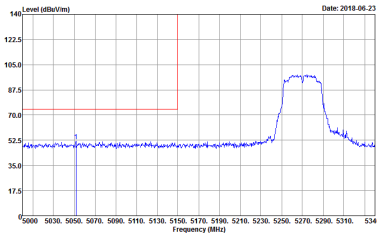
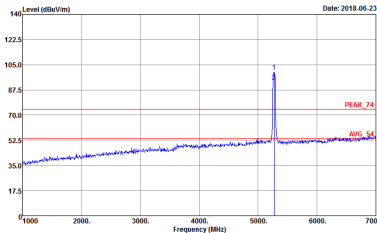
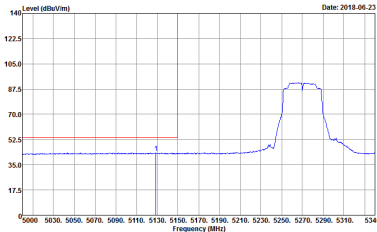
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH64 5320MHz	
2	Horizontal	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE_74 3m HORN_91200_1212 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 372342-17 Mode : 12	 Site : 03CH13-HY Condition : PEAK_74 3m HORN_91200_1212 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 372342-17 Mode : 12
	 Site : 03CH13-HY Condition : AVG_BE_54 3m HORN_91200_1212 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 372342-17 Mode : 12	Left blank



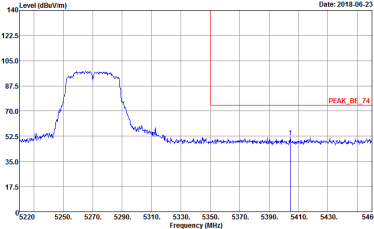
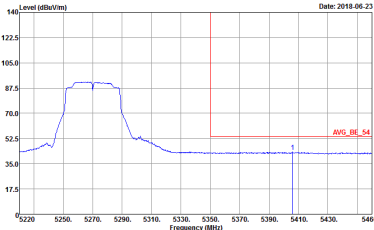
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH64 5320MHz	
2	Vertical	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE_74 3m HORN_91200_1212 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 372342-17 Mode : 12	 Site : 03CH13-HY Condition : PEAK_74 3m HORN_91200_1212 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 372342-17 Mode : 12
Avg.	 Site : 03CH13-HY Condition : AVG_BE_54 3m HORN_91200_1212 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 372342-17 Mode : 12	Left blank



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

WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT40 CH54 5270MHz - L	
2	Horizontal	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE_74 3m HORN_91200_1212 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 372342-17 Mode : 16	 Site : 03CH13-HY Condition : PEAK_74 3m HORN_91200_1212 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 372342-17 Mode : 16
Avg.	 Site : 03CH13-HY Condition : AVG_BE_54 3m HORN_91200_1212 HORIZONTAL RBW:1000.000KHz VBW:3.000KHz SWT:Auto Detector : Peak Project : 372342-17 Mode : 16	Left blank

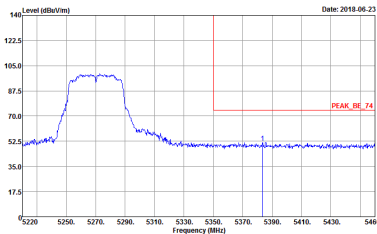
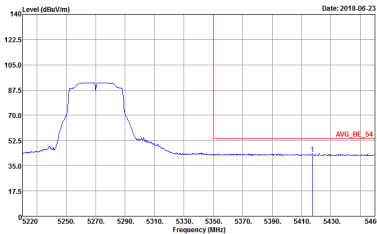


WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT40 CH54 5270MHz - R	
2	Horizontal	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE_74 3m HORN_91200_1212 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Mode : 16	Left blank
Avg.	 Site : 03CH13-HY Condition : AVG_BE_54 3m HORN_91200_1212 HORIZONTAL Detector : RBW:1000.000KHz VBW:3.000KHz SWT:Auto Project : Peak Mode : 16	Left blank

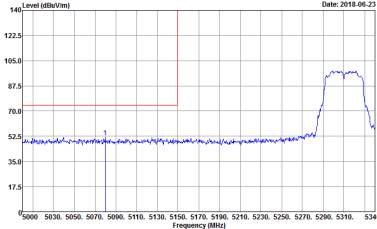
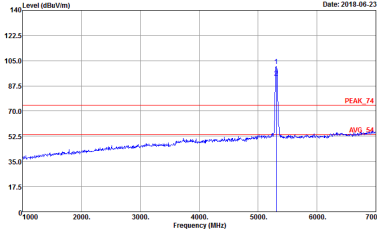
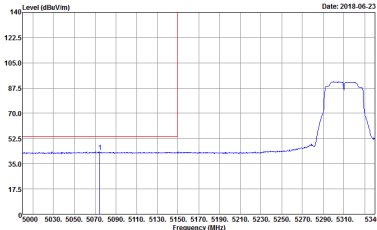


WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT40 CH54 5270MHz - L	
2	Vertical	Vertical
Peak	Site : 03CH13-HY Condition : PEAK_BE_74 3m HORN_9120D_1212 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Mode : 372342-17 Date: 2018-06-23	Site : 03CH13-HY Condition : PEAK_74 3m HORN_9120D_1212 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Mode : 372342-17 Date: 2018-06-23
Avg.	Site : 03CH13-HY Condition : AVG_BE_54 3m HORN_9120D_1212 VERTICAL Detector : RBW:1000.000KHz VBW:3.000KHz SWT:Auto Project : Peak Mode : 372342-17 Date: 2018-06-23	Left blank

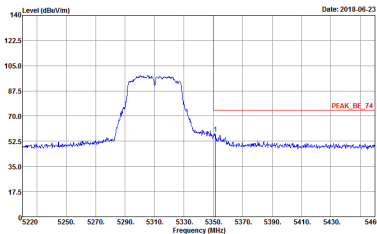
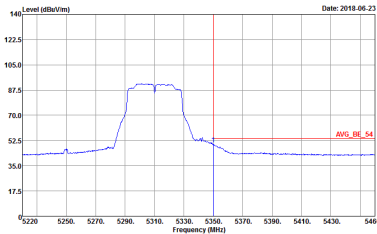


WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT40 CH54 5270MHz - R	
2	Vertical	Vertical
Peak	 Site : 03CH13-HY Condition : PEAK_BE_74 3m HORN_9120D_1212 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Mode : 16	Left blank
Avg.	 Site : 03CH13-HY Condition : AVG_BE_54 3m HORN_9120D_1212 VERTICAL Detector : RBW:1000.000KHz VBW:3.000KHz SWT:Auto Project : Peak Mode : 16	Left blank

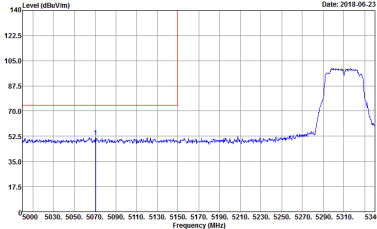
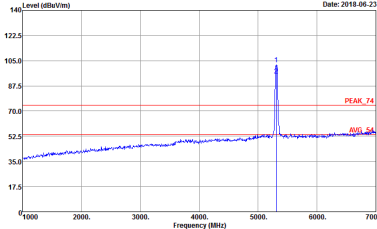
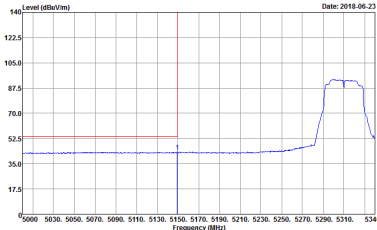


WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT40 CH62 5310MHz - L	
2	Horizontal	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE_74 3m HORN_91200_1212 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Mode : 372342-17	 Site : 03CH13-HY Condition : PEAK_74 3m HORN_91200_1212 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Mode : 372342-17
Avg.	 Site : 03CH13-HY Condition : AVG_BE_54 3m HORN_91200_1212 HORIZONTAL Detector : RBW:1000.000KHz VBW:3.000KHz SWT:Auto Project : Peak Mode : 372342-17	Left blank

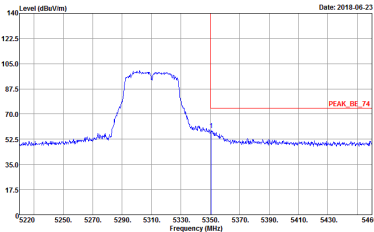
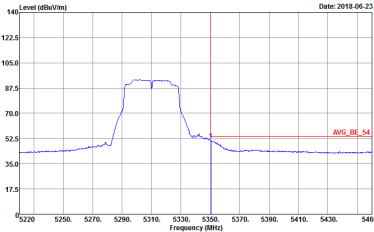


WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT40 CH62 5310MHz - R	
2	Horizontal	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE_74 3m HORN_91200_1212 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Mode : 372342-17	Left blank
Avg.	 Site : 03CH13-HY Condition : AVG_BE_54 3m HORN_91200_1212 HORIZONTAL Detector : RBW:1000.000KHz VBW:3.000KHz SWT:Auto Project : Peak Mode : 372342-17	Left blank



WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT40 CH62 5310MHz - L	
2	Vertical	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE_74 3m HORN_9120D_1212 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Mode : 372342-17	 Site : 03CH13-HY Condition : PEAK_74 3m HORN_9120D_1212 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Mode : 372342-17
Avg.	 Site : 03CH13-HY Condition : AVG_BE_54 3m HORN_9120D_1212 VERTICAL Detector : RBW:1000.000KHz VBW:3.000KHz SWT:Auto Project : Peak Mode : 372342-17	Left blank



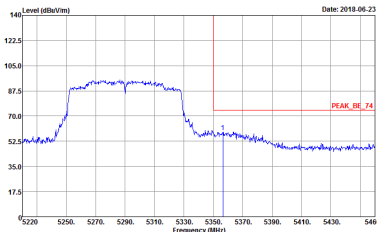
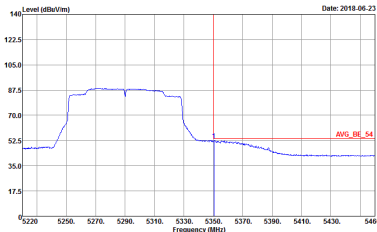
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT40 CH62 5310MHz - R	
2	Vertical	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE_74 3m HORN_9120D_1212 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Mode : 372342-17	Left blank
Avg.	 Site : 03CH13-HY Condition : AVG_BE_54 3m HORN_9120D_1212 VERTICAL Detector : RBW:1000.000KHz VBW:3.000KHz SWT:Auto Project : Peak Mode : 372342-17	Left blank



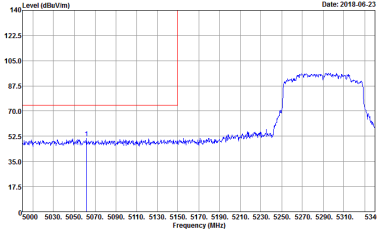
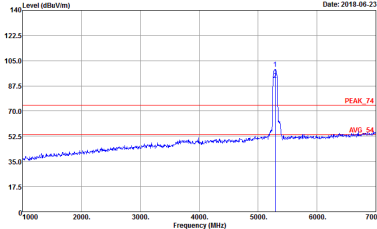
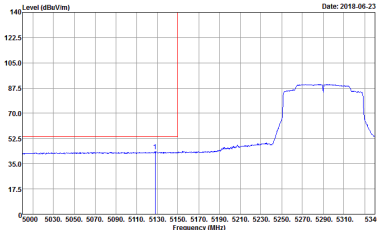
Band 2 5250~5350MHz
WIFI 802.11ac VHT80 (Band Edge @ 3m)

WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH58 5290MHz - L	
2	Horizontal	Fundamental
Peak	Site : 03CH13-HY Condition : PEAK_BE_74 3m HORN_91200_1212 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 372342-17 Mode : 18	Site : 03CH13-HY Condition : PEAK_74 3m HORN_91200_1212 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 372342-17 Mode : 18
Avg.	Site : 03CH13-HY Condition : AVG_BE_54 3m HORN_91200_1212 HORIZONTAL RBW:1000.000KHz VBW:3.000KHz SWT:Auto Detector : Peak Project : 372342-17 Mode : 18	Left blank

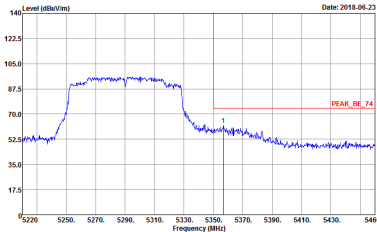
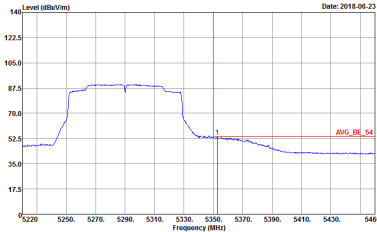


WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH58 5290MHz - R	
2	Horizontal	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE_74 3m HORN_91200_1212 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Mode : 18	Left blank
Avg.	 Site : 03CH13-HY Condition : AVG_BE_54 3m HORN_91200_1212 HORIZONTAL Detector : RBW:1000.000KHz VBW:3.000KHz SWT:Auto Project : Peak Mode : 18	Left blank



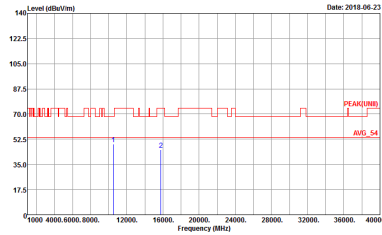
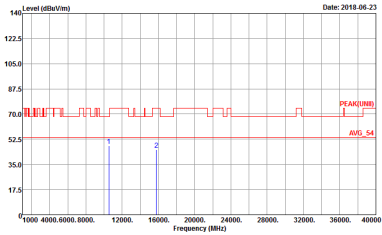
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH58 5290MHz - L	
2	Vertical	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE_74 3m HORN_9120D_1212 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Mode : 372342-17 Date: 2018.06.23	 Site : 03CH13-HY Condition : PEAK_74 3m HORN_9120D_1212 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Mode : 372342-17 Date: 2018.06.23
Avg.	 Site : 03CH13-HY Condition : AVG_BE_54 3m HORN_9120D_1212 VERTICAL Detector : RBW:1000.000KHz VBW:3.000KHz SWT:Auto Project : Peak Mode : 372342-17 Date: 2018.06.23	Left blank



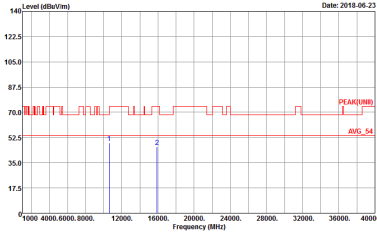
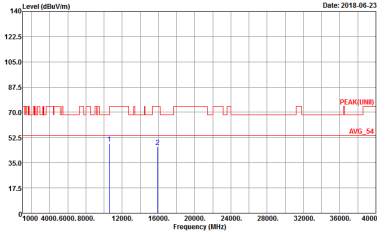
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH58 5290MHz - R	
2	Vertical	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE_74 3m HORN_9120D_1212 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Mode : 372342-17 Date: 2018-06-23	Left blank
Avg.	 Site : 03CH13-HY Condition : AVG_BE_54 3m HORN_9120D_1212 VERTICAL Detector : RBW:1000.000KHz VBW:3.000KHz SWT:Auto Project : Peak Mode : 372342-17 Date: 2018-06-23	Left blank



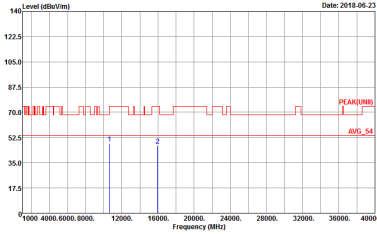
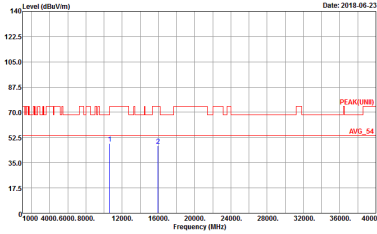
Band 2 - 5250~5350MHz
WIFI 802.11a (Harmonic @ 3m)

WIFI	Band 2 5250~5350MHz Harmonic @ 3m	
ANT	802.11a CH52 5260MHz	
2	Horizontal	Vertical
Peak Avg.	 Site : 03CH13-HY Condition : PEAK(UNIT) 3m SHF_HORN_576 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 372342-17 Mode : 10	 Site : 03CH13-HY Condition : PEAK(UNIT) 3m SHF_HORN_576 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 372342-17 Mode : 10

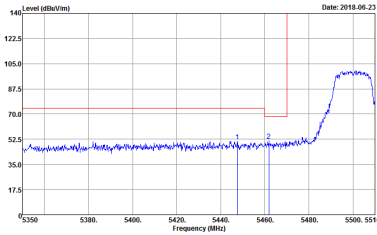
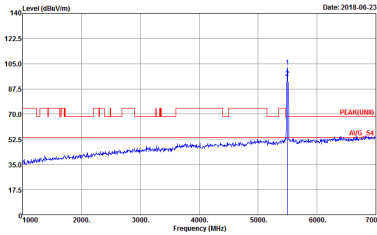
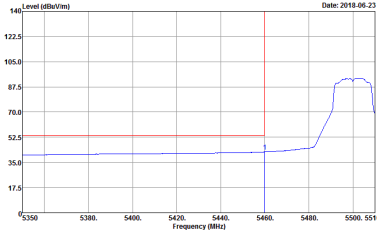


WIFI	Band 2 5250~5350MHz Harmonic @ 3m	
ANT	802.11a CH60 5300MHz	
2	Horizontal	Vertical
Peak Avg.	 Site : 03CH13-HV Condition : PEAK(UNB) 3m SHF_HORN_576 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 372342-17 Mode : 11	 Site : 03CH13-HV Condition : PEAK(UNB) 3m SHF_HORN_576 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 372342-17 Mode : 11

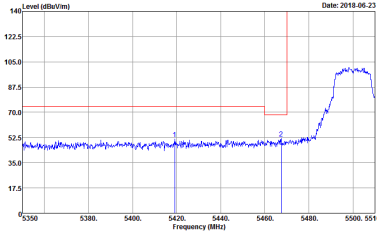
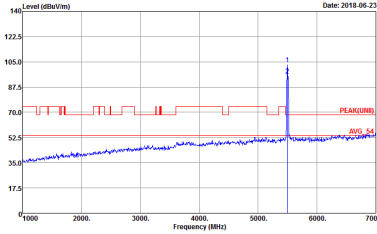
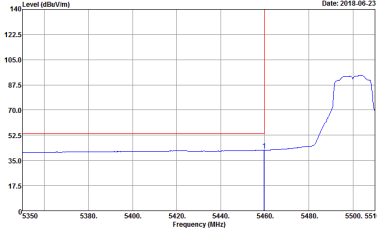


WIFI	Band 2 5250~5350MHz Harmonic @ 3m	
ANT	802.11a CH64 5320MHz	
2	Horizontal	Vertical
Peak Avg.	 Site : 03CH13-HV Condition : PEAK(UNII) 3m SHF_HORN_576 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 372342-17 Mode : 12	 Site : 03CH13-HV Condition : PEAK(UNII) 3m SHF_HORN_576 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 372342-17 Mode : 12

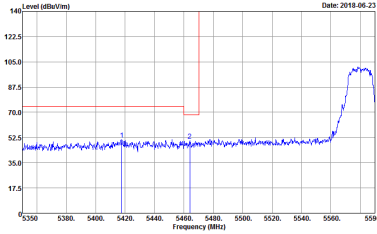
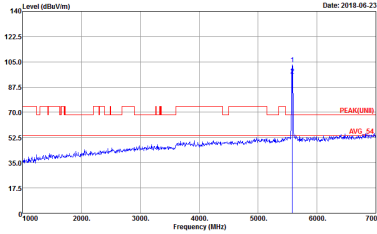
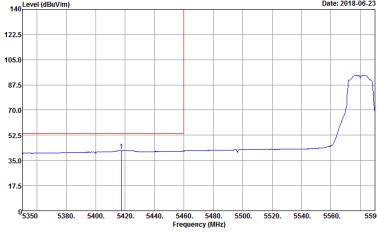
Band 3 - 5470~5725MHz
WIFI 802.11a (Band Edge @ 3m)

WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH100 5500MHz	
2	Horizontal	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE(UNIT1)_B3 3m HORN_91200_1212 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 372342-17 Mode : 19	 Site : 03CH13-HY Condition : PEAK(UNIT1) 3m HORN_91200_1212 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 372342-17 Mode : 19
Avg.	 Site : 03CH13-HY Condition : AVG_BE(UNIT1)_B3 3m HORN_91200_1212 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 372342-17 Mode : 19	Left blank

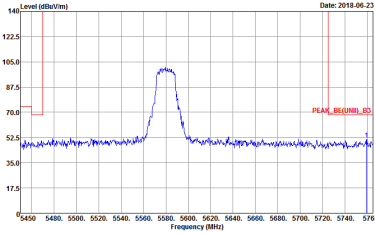


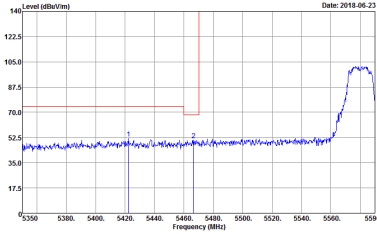
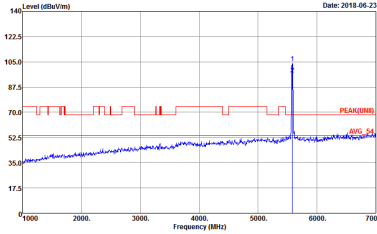
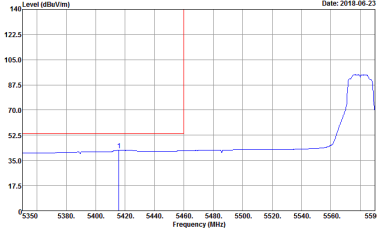
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH100 5500MHz	
2	Vertical	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE(UNIT)_B3 3m HORN_91200_1212 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 372342-17 Mode : 19	 Site : 03CH13-HY Condition : PEAK(UNIT) 3m HORN_91200_1212 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 372342-17 Mode : 19
Avg.	 Site : 03CH13-HY Condition : AVG_BE(UNIT)_B3 3m HORN_91200_1212 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 372342-17 Mode : 19	Left blank



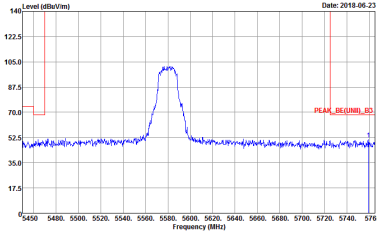
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH116 5580MHz - L	
2	Horizontal	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE(UNIT)_B3 3m HORN_91200_1212 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Mode : 372342-17 20	 Site : 03CH13-HY Condition : PEAK(UNIT) 3m HORN_91200_1212 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Mode : 372342-17 20
Avg.	 Site : 03CH13-HY Condition : AVG_BE(UNIT)_B3 3m HORN_91200_1212 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Mode : 372342-17 20	Left blank



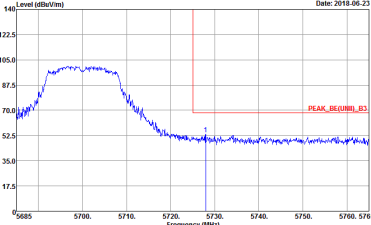
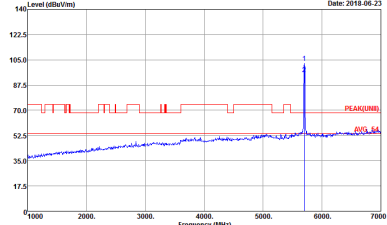
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH116 5580MHz - R	
2	Horizontal	Fundamental
Peak	 Site : 09CH13-HV Condition : PEAK_BE(UNIT)_B3 3m HORN_91200_1212 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 372342-17 Mode : 20	Left blank

WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH116 5580MHz - L	
2	Vertical	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE(UNIT)_B3 3m HORN_91200_1212 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 372342-17 Mode : 20	 Site : 03CH13-HY Condition : PEAK(UNIT) 3m HORN_91200_1212 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 372342-17 Mode : 20
Avg.	 Site : 03CH13-HY Condition : AVG_BE(UNIT)_B3 3m HORN_91200_1212 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 372342-17 Mode : 20	Left blank



WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH116 5580MHz - R	
2	Vertical	Fundamental
Peak	 Site : 09CH13-HV Condition : PEAK_BE(UNIT)_B3 3m HORN_91200_1212 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 372342-17 Mode : 20	Left blank



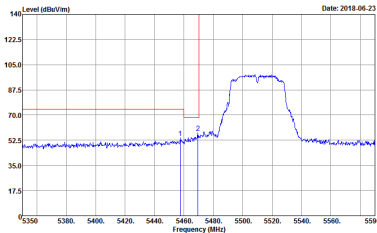
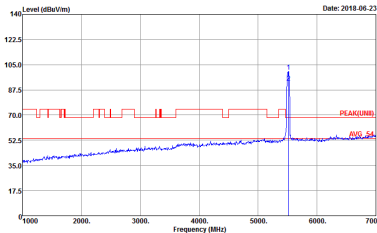
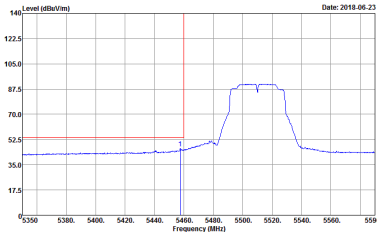
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH140 5700MHz	
2	Horizontal	Fundamental
Peak	 Site : 03CH13-IV Condition : PEAK_BE(UNIT)_B3 3m HORN_91200_1212 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 372342-17 Mode : Z1	 Site : 03CH13-IV Condition : PEAK(UNIT) 3m HORN_91200_1212 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 372342-17 Mode : Z1



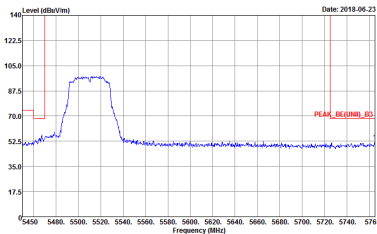
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH140 5700MHz	
2	Vertical	Fundamental
Peak	Site : 03CH13-1V Condition : PEAK_BE(UNIT)_B3 3m HORN_91200_1212 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Mode : 372342-17	Site : 03CH13-1V Condition : PEAK_F(UNIT)_B3 3m HORN_91200_1212 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Mode : 372342-17

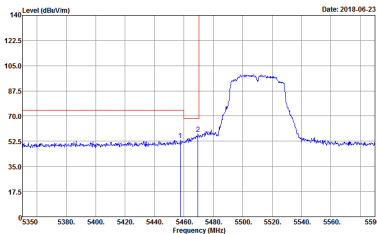
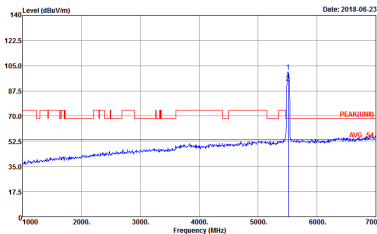
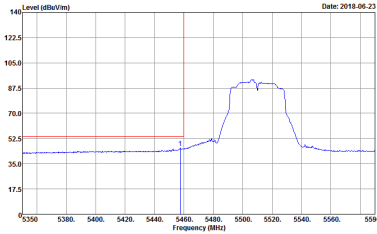


Band 3 5470~5725MHz
WIFI 802.11n HT40 (Band Edge @ 3m)

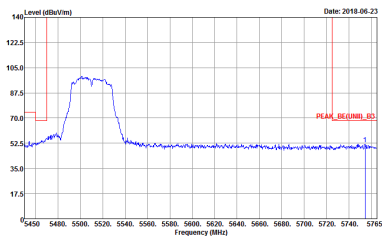
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH102 5510MHz - L	
2	Horizontal	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE(UNIT)_B3 3m HORN_91200_1212 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 372342-17 Mode : 25	 Site : 03CH13-HY Condition : PEAK(UNIT) 3m HORN_91200_1212 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 372342-17 Mode : 25
Avg.	 Site : 03CH13-HY Condition : AVG_BE(UNIT)_B3 3m HORN_91200_1212 HORIZONTAL RBW:1000.000KHz VBW:3.000KHz SWT:Auto Detector : Peak Project : 372342-17 Mode : 25	Left blank

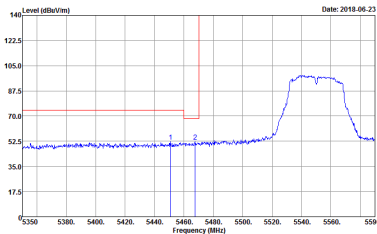
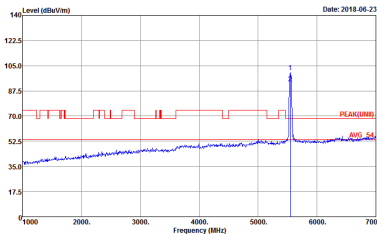
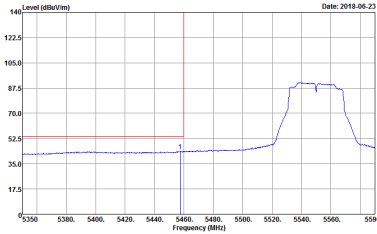


WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH102 5510MHz - R	
2	Horizontal	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE(UNIT1)_B3 3m HORN_91200_1212 HORIZONTAL Detector : Peak Project : 372342-17 Mode : 25	Left blank

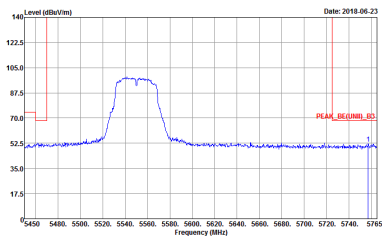
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH102 5510MHz - L	
2	Vertical	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE(UNIT)_B3 3m HORN_91200_1212 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Mode : 372342-17 : 25	 Site : 03CH13-HY Condition : PEAK(UNIT) 3m HORN_91200_1212 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Mode : 372342-17 : 25
Avg.	 Site : 03CH13-HY Condition : AVG_BE(UNIT)_B3 3m HORN_91200_1212 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Mode : 372342-17 : 25	Left blank



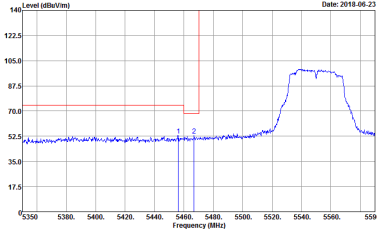
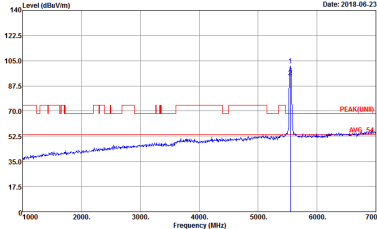
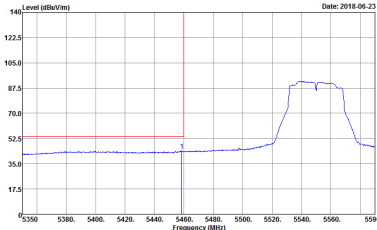
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH102 5510MHz - R	
2	Vertical	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE(UNIT1)_B3 3m HORN_91200_1212 VERTICAL Detector : Peak Project : 372342-17 Mode : 25	Left blank

WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH110 5550MHz - L	
2	Horizontal	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE(UNIT)_B3 3m HORN_91200_1212 HORIZONTAL Detector : Peak Project : 372342-17 Mode : 26	 Site : 03CH13-HY Condition : PEAK(UNIT) 3m HORN_91200_1212 HORIZONTAL Detector : Peak Project : 372342-17 Mode : 26
Avg.	 Site : 03CH13-HY Condition : AVG_BE(UNIT)_B3 3m HORN_91200_1212 HORIZONTAL Detector : Peak Project : 372342-17 Mode : 26	Left blank

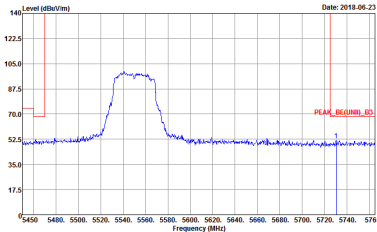


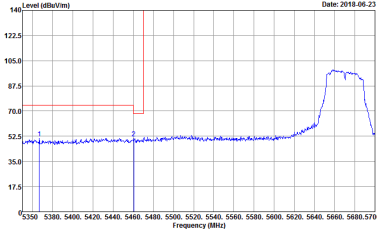
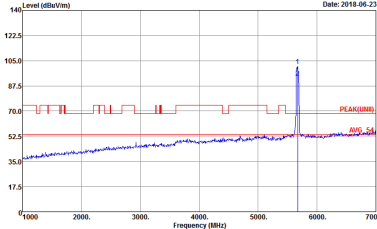
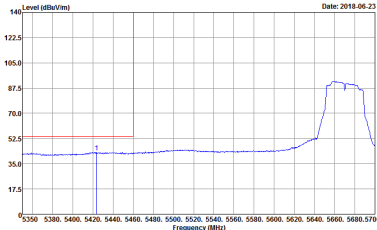
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH110 5550MHz - R	
2	Horizontal	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE(UNIT1)_B3 3m HORN_91200_1212 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : 372342-17 Mode : 26	Left blank



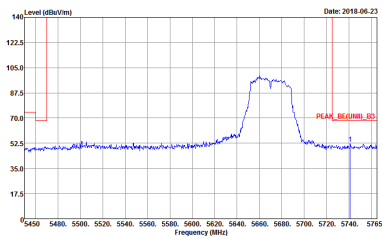
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH110 5550MHz - L	
2	Vertical	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE(UNIT)_B3 3m HORN_91200_1212 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Mode : 372342-17 Date: 2018-06-23	 Site : 03CH13-HY Condition : PEAK(UNIT) 3m HORN_91200_1212 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Mode : 372342-17 Date: 2018-06-23
Avg.	 Site : 03CH13-HY Condition : AVG_BE(UNIT)_B3 3m HORN_91200_1212 VERTICAL Detector : RBW:1000.000KHz VBW:3.000KHz SWT:Auto Project : Peak Mode : 372342-17 Date: 2018-06-23	Left blank



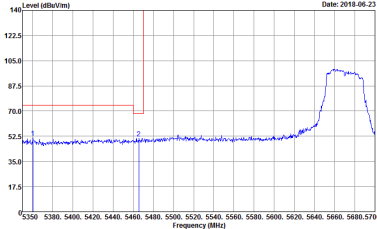
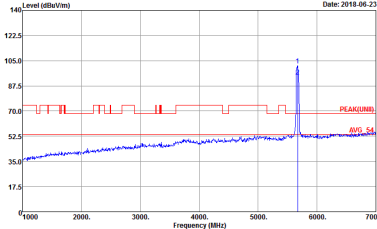
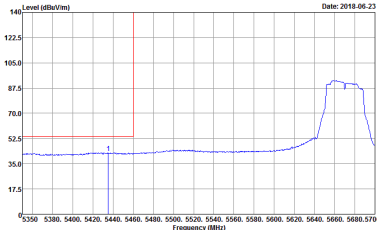
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH110 5550MHz - R	
2	Vertical	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE(UNIT1)_B3 3m HORN_91200_1212 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : 372342-17 Mode : 26	Left blank

WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH134 5670MHz - L	
2	Horizontal	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE(UNIT)_B3 3m HORN_91200_1212 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Mode : 372342-17 Date: 2018-06-23	 Site : 03CH13-HY Condition : PEAK(UNIT) 3m HORN_91200_1212 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Mode : 372342-17 Date: 2018-06-23
Avg.	 Site : 03CH13-HY Condition : AVG_BE(UNIT)_B3 3m HORN_91200_1212 HORIZONTAL Detector : RBW:1000.000KHz VBW:3.000KHz SWT:Auto Project : Peak Mode : 372342-17 Date: 2018-06-23	Left blank

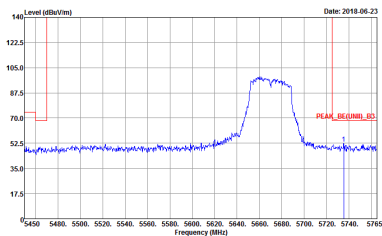


WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH134 5670MHz - R	
2	Horizontal	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE(UNIT)_B3 3m HORN_91200_1212 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : 372342-17 Mode : 27	Left blank



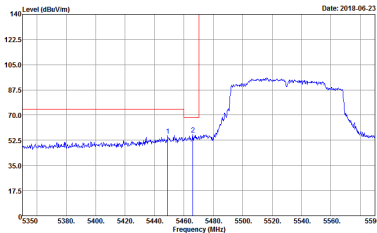
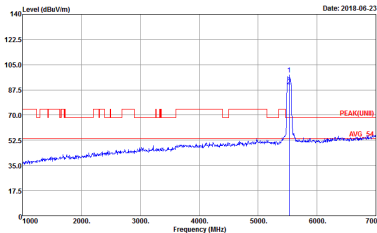
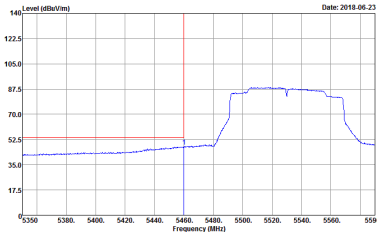
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH134 5670MHz - L	
2	Vertical	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE(UNIT)_B3 3m HORN_91200_1212 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Mode : 372342-17	 Site : 03CH13-HY Condition : PEAK(UNIT) 3m HORN_91200_1212 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Mode : 372342-17
Avg.	 Site : 03CH13-HY Condition : AVG_BE(UNIT)_B3 3m HORN_91200_1212 VERTICAL Detector : RBW:1000.000KHz VBW:3.000KHz SWT:Auto Project : Peak Mode : 372342-17	Left blank



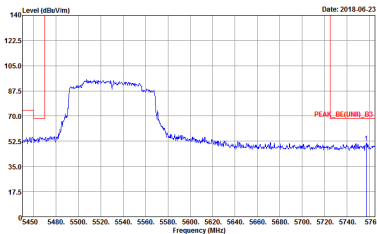
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH134 5670MHz - R	
2	Vertical	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE(UNIT1)_B3 3m HORN_91200_1212 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : 372342-17 Mode : 27	Left blank



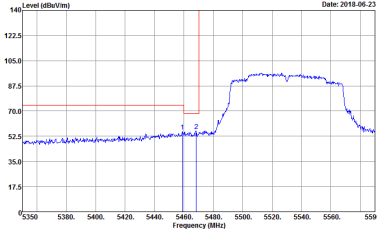
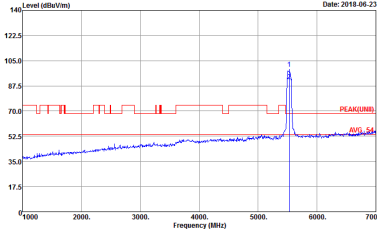
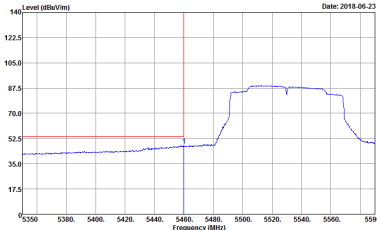
Band 3 5470~5725MHz
WIFI 802.11ac VHT80 (Band Edge @ 3m)

WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH106 5530MHz - L	
2	Horizontal	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE(UNIT)_B3 3m HORN_91200_1212 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 372342-17 Mode : Z8	 Site : 03CH13-HY Condition : PEAK(UNIT) 3m HORN_91200_1212 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 372342-17 Mode : Z8
Avg.	 Site : 03CH13-HY Condition : AVG_BE(UNIT)_B3 3m HORN_91200_1212 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 372342-17 Mode : Z8	Left blank

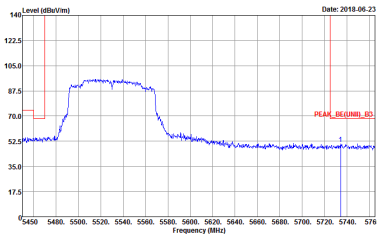


WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH106 5530MHz - R	
2	Horizontal	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE(UNIT1)_B3 3m HORN_91200_1212 HORIZONTAL Detector : Peak Project : 372342-17 Mode : 28	Left blank



WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH106 5530MHz - L	
2	Vertical	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE(UNIT)_B3 3m HORN_91200_1212 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Mode : 372342-17 Date: 2018.06.23	 Site : 03CH13-HY Condition : PEAK(UNIT) 3m HORN_91200_1212 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Mode : 372342-17 Date: 2018.06.23
Avg.	 Site : 03CH13-HY Condition : AVG_BE(UNIT)_B3 3m HORN_91200_1212 VERTICAL Detector : RBW:1000.000KHz VBW:3.000KHz SWT:Auto Project : Peak Mode : 372342-17 Date: 2018.06.23	Left blank

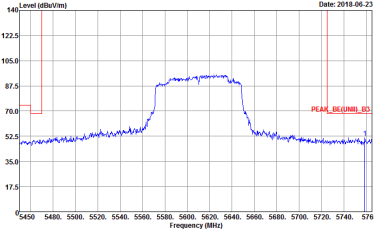


WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH106 5530MHz - R	
2	Vertical	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE(UNIT1)_B3 3m HORN_91200_1212 VERTICAL Detector : Peak Project : 372342-17 Mode : 28	Left blank

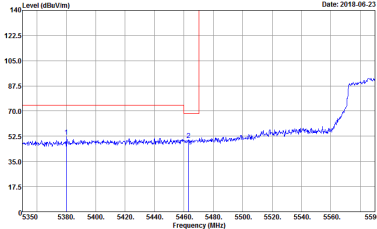
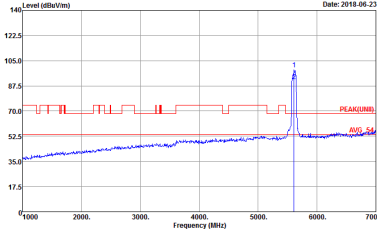
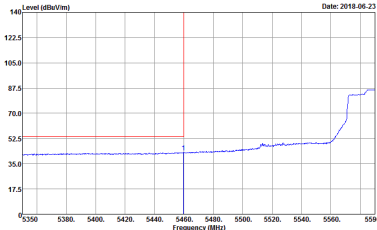


WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH122 5610MHz - L	
2	Horizontal	Fundamental
Peak	Site : 03CH13-HY Condition : PEAK_BE(UNIT)_B3 3m HORN_91200_1212 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Mode : 372342-17 Date: 2018-06-23	Site : 03CH13-HY Condition : PEAK(UNIT) 3m HORN_91200_1212 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Mode : 372342-17 Date: 2018-06-23
Avg.	Site : 03CH13-HY Condition : AVG_BE(UNIT)_B3 3m HORN_91200_1212 HORIZONTAL Detector : RBW:1000.000KHz VBW:3.000KHz SWT:Auto Project : Peak Mode : 372342-17 Date: 2018-06-23	Left blank

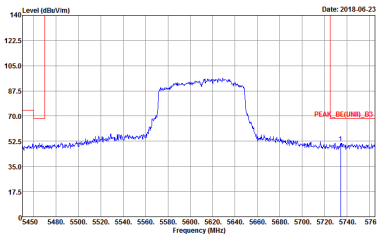


WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH122 5610MHz - R	
2	Horizontal	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE(UNIT)_B3 3m HORN_91200_1212 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT-Auto Project : Peak Mode : 372342-17 Date: 2018-06-23	Left blank



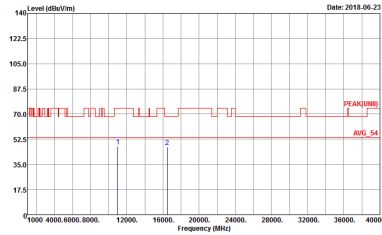
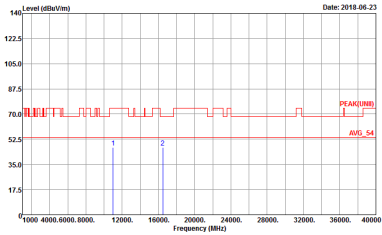
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH122 5610MHz - L	
2	Vertical	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE(UNIT)_B3 3m HORN_91200_1212 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Mode : 372342-17 Date: 2018-06-23	 Site : 03CH13-HY Condition : PEAK(UNIT) 3m HORN_91200_1212 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Mode : 372342-17 Date: 2018-06-23
Avg.	 Site : 03CH13-HY Condition : AVG_BE(UNIT)_B3 3m HORN_91200_1212 VERTICAL Detector : RBW:1000.000KHz VBW:3.000KHz SWT:Auto Project : Peak Mode : 372342-17 Date: 2018-06-23	Left blank



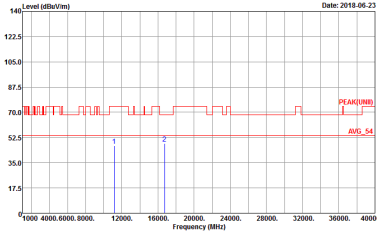
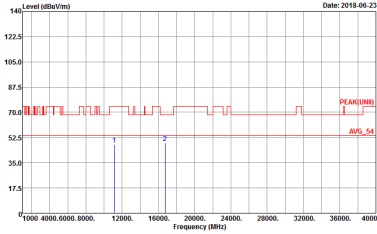
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH122 5610MHz - R	
2	Vertical	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE(UNIT1)_B3 3m HORN_91200_1212 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : 372342-17 Mode : 29	Left blank



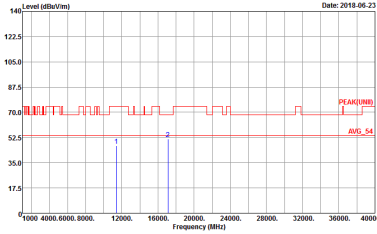
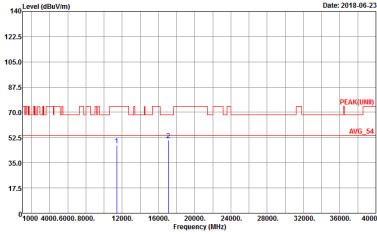
Band 3 - 5470~5725MHz
WIFI 802.11a (Harmonic @ 3m)

WIFI	Band 3 5470~5725MHz Harmonic @ 3m	
ANT	802.11a CH100 5500MHz	
2	Horizontal	Vertical
Peak Avg.	 Site : 03CH13-HY Condition : PEAK(UNII) 3m SHF_HORN_576 HORIZONTAL Detector : Peak Project : 372342-17 Mode : 19	 Site : 03CH13-HY Condition : PEAK(UNII) 3m SHF_HORN_576 VERTICAL Detector : Peak Project : 372342-17 Mode : 19



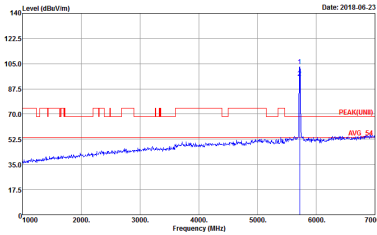
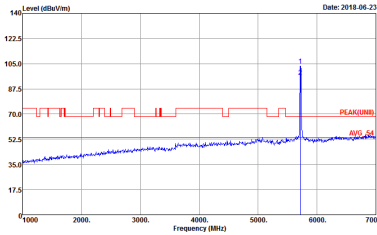
WIFI	Band 3 5470~5725MHz Harmonic @ 3m	
ANT	802.11a CH116 5580MHz	
2	Horizontal	Vertical
Peak Avg.	 Site : 03CH13-HV Condition : PEAK(UNII) 3m SHF_HORN_576 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 372342-17 Mode : 20	 Site : 03CH13-HV Condition : PEAK(UNII) 3m SHF_HORN_576 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 372342-17 Mode : 20



WIFI	Band 3 5470~5725MHz Harmonic @ 3m	
ANT	802.11a CH140 5700MHz	
2	Horizontal	Vertical
Peak Avg.	 Site : 03CH13-HV Condition : PEAK(UNB) 3m SHF_HORN_576 HORIZONTAL Detector : Peak Project : 372342-17 Mode : 21	 Site : 03CH13-HV Condition : PEAK(UNB) 3m SHF_HORN_576 VERTICAL Detector : Peak Project : 372342-17 Mode : 21

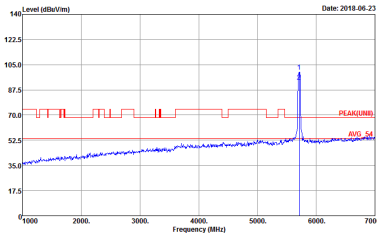
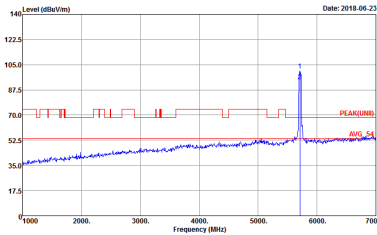


Band 3 - Straddle Channel
WIFI 802.11n HT20 (Fundamental @ 3m)

WIFI	Band 3 Straddle Channel Fundamental @ 3m	
ANT	802.11n HT20 CH144 5720MHz	
2	Horizontal	Vertical
Peak Avg.	 Site : 03CH13-HY Condition : PEAK(UNIT) 3m HORN_91200_1212 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 372342-17 Mode : 30	 Site : 03CH13-HY Condition : PEAK(UNIT) 3m HORN_91200_1212 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 372342-17 Mode : 30

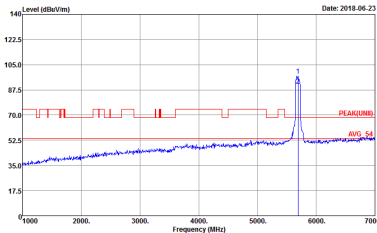
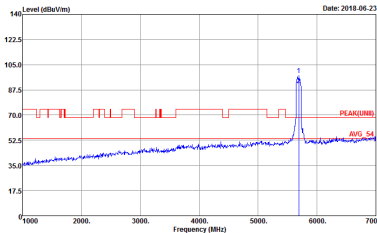


Band 3 – Straddle Channel
WIFI 802.11n HT40 (Fundamental @ 3m)

WIFI	Band 3 Straddle Channel Fundamental @ 3m	
ANT	802.11n HT40 CH142 5710MHz	
2	Horizontal	Vertical
Peak Avg.	 Site : 03CH13-HY Condition : PEAK(LINE) 3m HORN_91200_1212 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 372342-17 Mode : 31	 Site : 03CH13-HY Condition : PEAK(LINE) 3m HORN_91200_1212 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 372342-17 Mode : 31

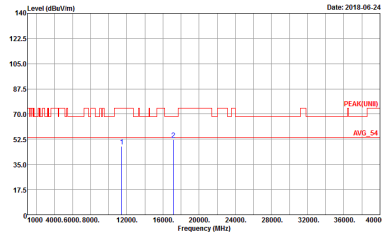
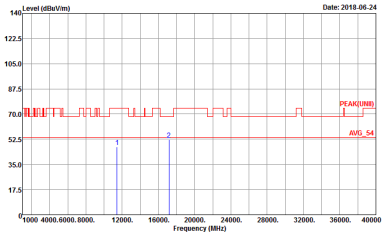


Band 3 – Straddle Channel
WIFI 802.11ac VHT80 (Fundamental @ 3m)

WIFI	Band 3 Straddle Channel Fundamental @ 3m	
ANT	802.11ac VHT80 CH138 5690MHz	
2	Horizontal	Vertical
Peak Avg.	 Site : 03CH13-HY Condition : PEAK(LINE) 3m HORN_91200_1212 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 372342-17 Mode : 32	 Site : 03CH13-HY Condition : PEAK(LINE) 3m HORN_91200_1212 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 372342-17 Mode : 32

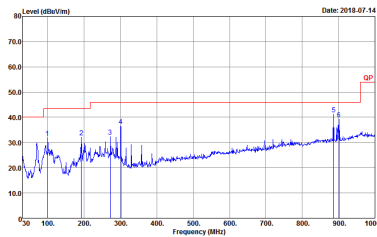
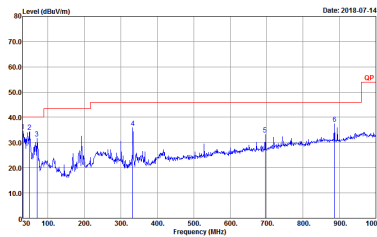


Band 3 - Straddle Channel
WIFI 802.11n HT20 (Harmonic @ 3m)

WIFI	Band 3 Straddle Channel Harmonic @ 3m	
ANT	802.11n HT20 CH144 5720MHz	
2	Horizontal	Vertical
Peak Avg.	 Site : 03CH13-HY Condition : PEAK(UNII) 3m SHF_HORN_576 HORIZONTAL Detector : Peak Project : 372342-17 Mode : 30	 Site : 03CH13-HY Condition : PEAK(UNII) 3m SHF_HORN_576 VERTICAL Detector : Peak Project : 372342-17 Mode : 30



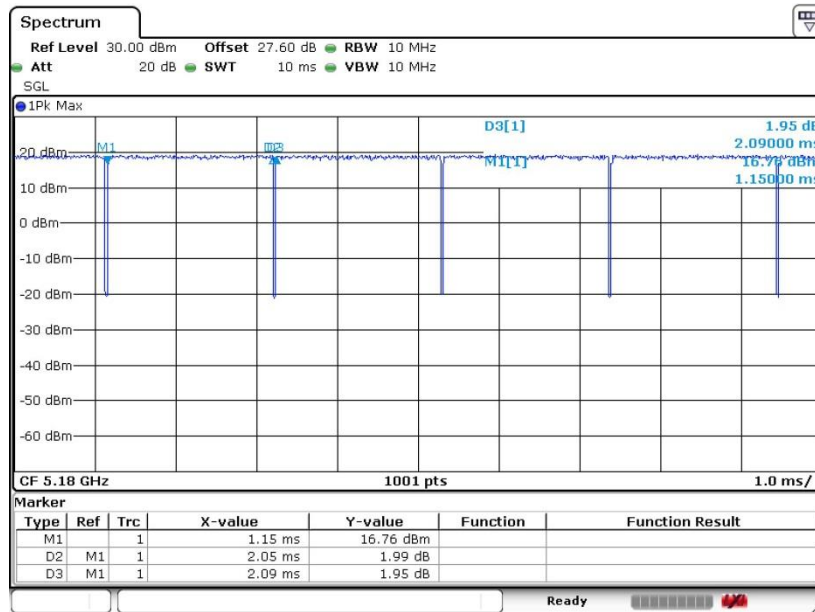
Emission below 1GHz
5GHz WIFI 802.11ac VHT80 (LF)

WIFI	5GHz WIFI	
ANT	802.11ac VHT80 LF	
2	Horizontal	Vertical
QP / Peak	 Site : 03CH13-4V Condition : QP 3m B1LO6_40103 HORIZONTAL Detector : Peak Project : 372342-17 Mode : 42	 Site : 03CH13-4V Condition : QP 3m B1LO6_40103 VERTICAL Detector : Peak Project : 372342-17 Mode : 42

Appendix E. Duty Cycle Plots

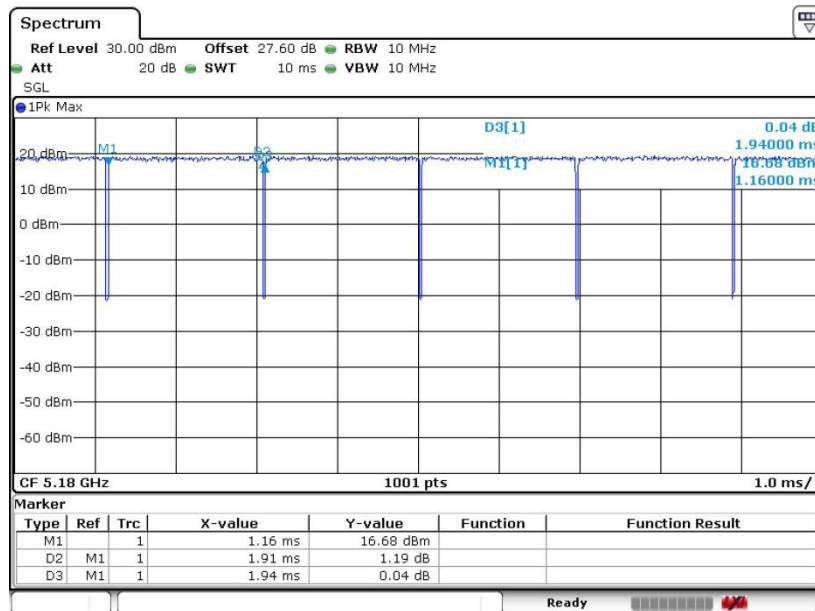
Antenna	Band	Duty Cycle(%)	T(us)	1/T(kHz)	VBW Setting	Duty Factor(dB)
2	802.11a	98.09	2050.00	0.49	10Hz	0.08
2	5GHz 802.11n HT20	98.45	1910.00	0.52	10Hz	0.07
2	5GHz 802.11n HT40	97.41	940.00	1.06	3kHz	0.11
2	5GHz 802.11ac VHT20	98.45	1910.00	0.52	10Hz	0.07
2	5GHz 802.11ac VHT40	96.92	945.00	1.06	3kHz	0.14
2	5GHz 802.11ac VHT80	94.29	462.00	2.16	3kHz	0.26

802.11a



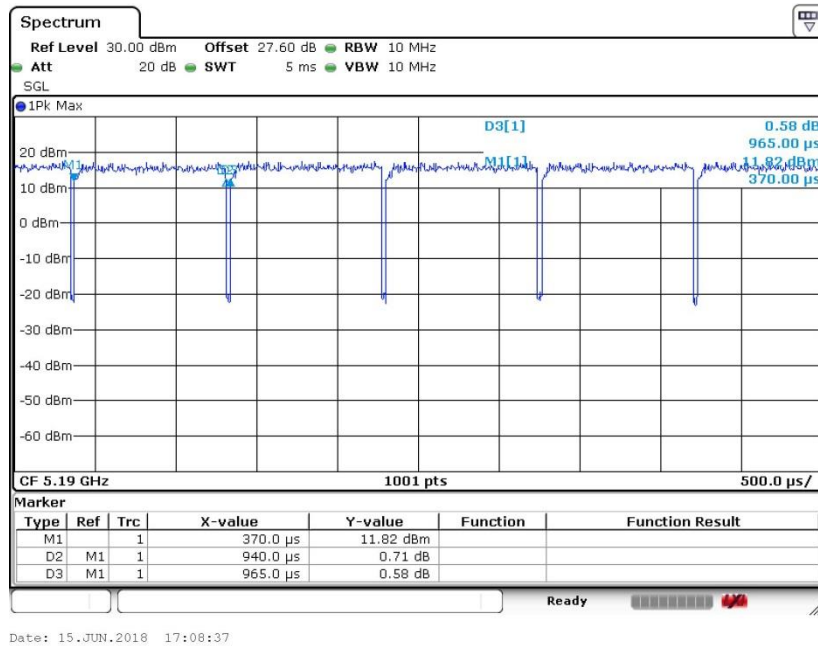
Date: 15.JUN.2018 17:03:58

802.11n HT20

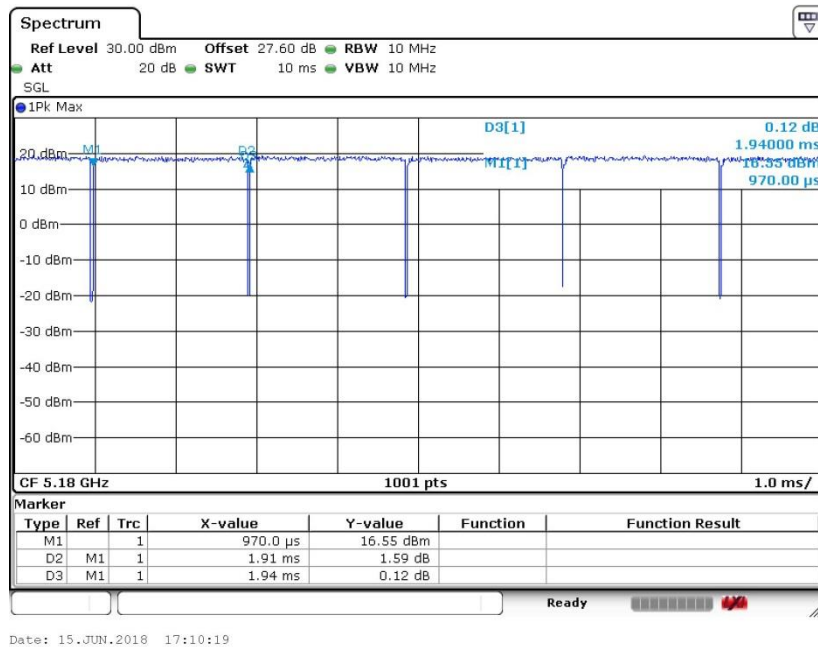


Date: 15.JUN.2018 17:06:55

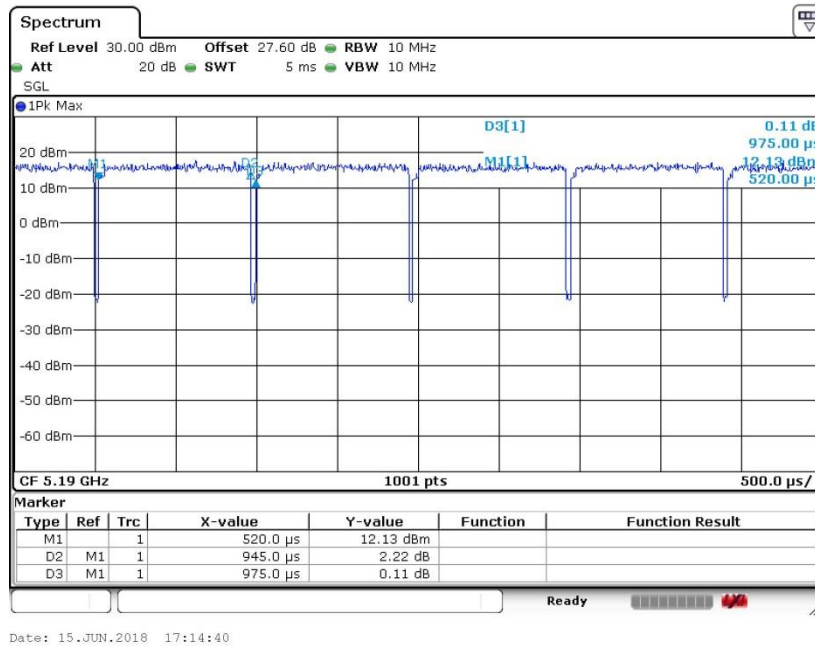
802.11n HT40



802.11ac VHT20



802.11ac VHT40



802.11ac VHT80

