



FCC RADIO TEST REPORT

FCC ID : TVE-121757B
Equipment : Network Security Gateway
Brand Name : FORTINET **FORTINET**
Model Name : FWF-41Fxxxxxx, FortiWiFi 41Fxxxxxx, FORTIWIFI-41Fxxxxxx
FWF-40Fxxxxxx, FortiWiFi 40Fxxxxxx, FORTIWIFI-40Fxxxxxx
FWF-41F-3G4Gxxxxxx, FortiWiFi 41F-3G4Gxxxxxx,
FORTIWIFI-41F-3G4Gxxxxxx
FWF-40F-3G4Gxxxxxx, FortiWiFi 40F-3G4Gxxxxxx,
FORTIWIFI-40F-3G4Gxxxxxx
(Where "x" can be used as "A-Z", or "0-9", or "-", or blank for software purposes or marketing purposes only)
Marketing Name : FortiWiFi 41F, FortiWiFi 40F, FortiWiFi 41F-3G4G, FortiWiFi 40F-3G4G
Applicant : FORTINET, INC.
899 KIFER RD
SUNNYVALE CA 94086-5301
UNITED STATES
Manufacturer : FORTINET, INC.
899 KIFER RD
SUNNYVALE CA 94086-5301
UNITED STATES
Standard : FCC Part 15 Subpart E §15.407

The product was received on Oct. 16, 2019 and testing was started from Nov. 26, 2019 and completed on Dec. 09, 2019. We, SPORTON INTERNATIONAL INC., EMC & Wireless Communications Laboratory, would like to declare that the tested sample has been evaluated in accordance with the test procedures and has been in compliance with the applicable technical standards.

The 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.

Louis Wu

Approved by: Louis Wu

SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory

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



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History of this test report

Report No.	Version	Description	Issued Date
FR992436-02	01	Initial issue of report	Apr. 21, 2020

Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
3.1	15.403(i)	26dB Bandwidth	Pass	-
3.1	2.1049	99% Occupied Bandwidth	Reporting only	-
3.2	15.407(a)	Maximum Conducted Output Power	Pass	-
3.3	15.407(a)	Power Spectral Density	Pass	-
3.4	15.407(b)	Unwanted Emissions	Pass	Under limit 0.59 dB at 5361.600 MHz
3.5	15.207	AC Conducted Emission	Pass	Under limit 12.56 dB at 0.320 MHz
3.6	15.407(c)	Automatically Discontinue Transmission	Pass	-
3.7	15.203 15.407(a)	Antenna Requirement	Pass	-

Declaration of Conformity:

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

Comments and Explanations:

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

Reviewed by: Wii Chang

Report Producer: Tina Chuang



1 General Description

1.1 Product Feature of Equipment Under Test

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

Product Specification subjective to this standard		
WLAN Antenna	Model Number	50000846
Antenna Type	WLAN <Ant. 1>: Dipole Antenna <Ant. 2>: Dipole Antenna <Ant. 3>: Dipole Antenna	

1.2 Modification of EUT

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



1.3 Testing Location

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

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

Test Site	SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory	
Test Site Location	No.58, Aly. 75, Ln. 564, Wenhua 3rd, Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.) TEL: +886-3-327-0868 FAX: +886-3-327-0855	
Test Site No.	Sporton Site No.	
	03CH15-HY	

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

FCC designation No.: TW1190 and TW0007

1.4 Applicable Standards

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

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

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

2 Test Configuration of Equipment Under Test

- a. The EUT has been associated with peripherals and configuration operated in a manner tended to maximize its emission characteristics in a typical application. Frequency range investigated: conduction emission (150 kHz to 30 MHz), radiation emission (9 kHz to the 10th harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower). For radiated measurement, pre-scanned in two type antenna degrees, 0° and 90°. The worst cases (Ant. 90°) were recorded in this report.
- b. AC power line Conducted Emission was tested under maximum output power.

2.1 Carrier Frequency and Channel

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

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

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

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

Note:

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

2.2 Test Mode

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

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

Remark: The manufacturer defines worst case were Non Beamforming, other test items only test worst case and documented.

Test Cases	
AC Conducted Emission	Mode 1 : WLAN (5GHz) Link + WAN Link + LAN (1) Link + LAN (2) Link + LAN (3) Link + LAN (A) Load + Adapter

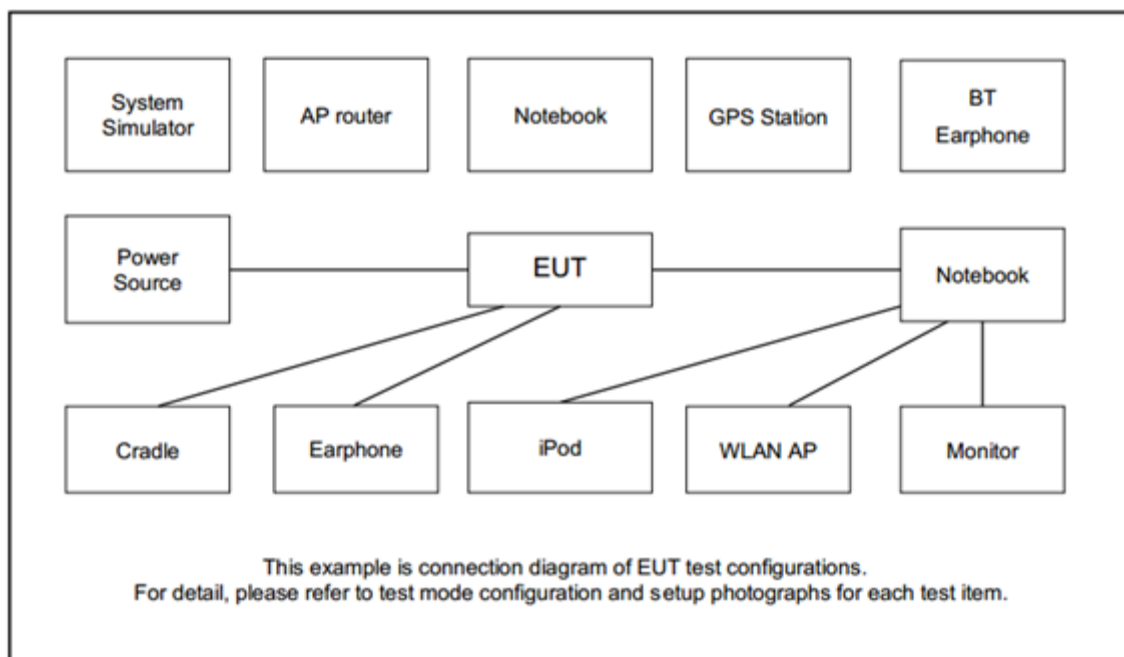
Ch. #		Band II : 5250-5350 MHz	Band III : 5470-5725MHz
		802.11a	802.11a
L	Low	52	100
M	Middle	60	116
H	High	64	140
Straddle		-	144

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

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

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

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.	Notebook	DELL	Latitude E3340	FCC DoC/ Contains FCC ID: PD97260NGU	N/A	AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m
2.	Notebook	Dell	Latitude E3400	FCC DoC	N/A	AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m
3.	Notebook	Dell	Latitude E5480	FCC DoC	N/A	AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m
4.	Notebook	ASUS	8260NGW	FCC DoC	N/A	AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m
5.	Notebook	Lenovo	L570	N/A	N/A	AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m

2.5 EUT Operation Test Setup

The RF test items, utility "QSPR V5.0-00188" was installed in Notebook which was programmed in order to make the EUT get into the engineering modes to provide channel selection, power level, data rate and the application type and for continuous transmitting signals.

2.6 Measurement Results Explanation Example

For all conducted test items:

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

Example :

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

Offset = RF cable loss + attenuator factor.

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

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

3 Test Result

3.1 26dB & 99% Occupied Bandwidth Measurement

3.1.1 Description of 26dB & 99% Occupied Bandwidth

This section is for reporting purpose only.

There is no restriction limits for bandwidth.

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

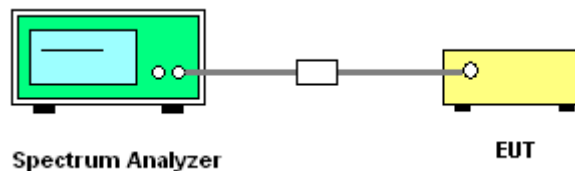
3.1.2 Measuring Instruments

See list of measuring equipment of this test report.

3.1.3 Test Procedures

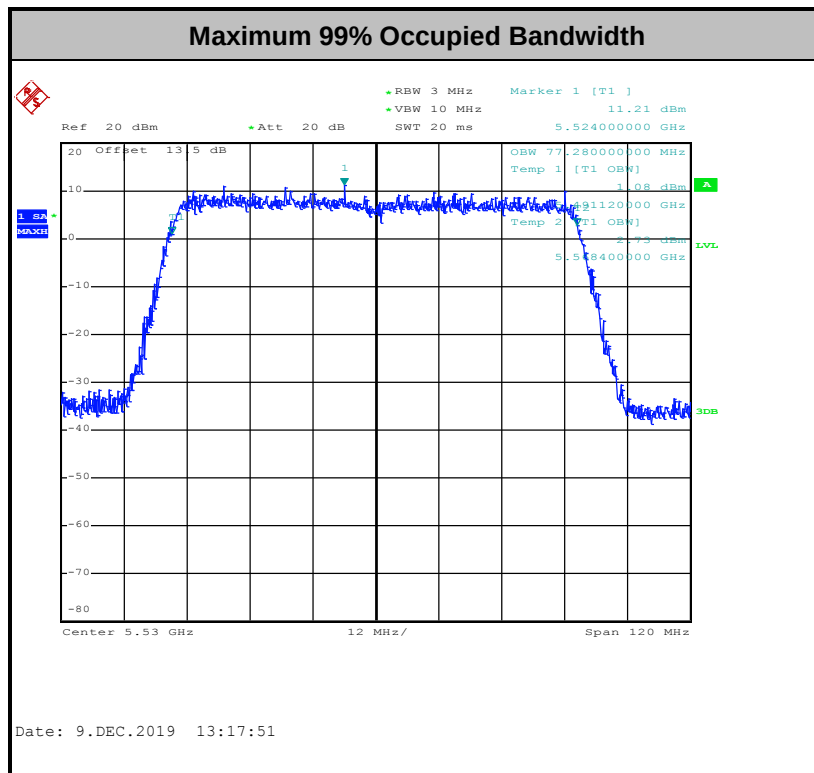
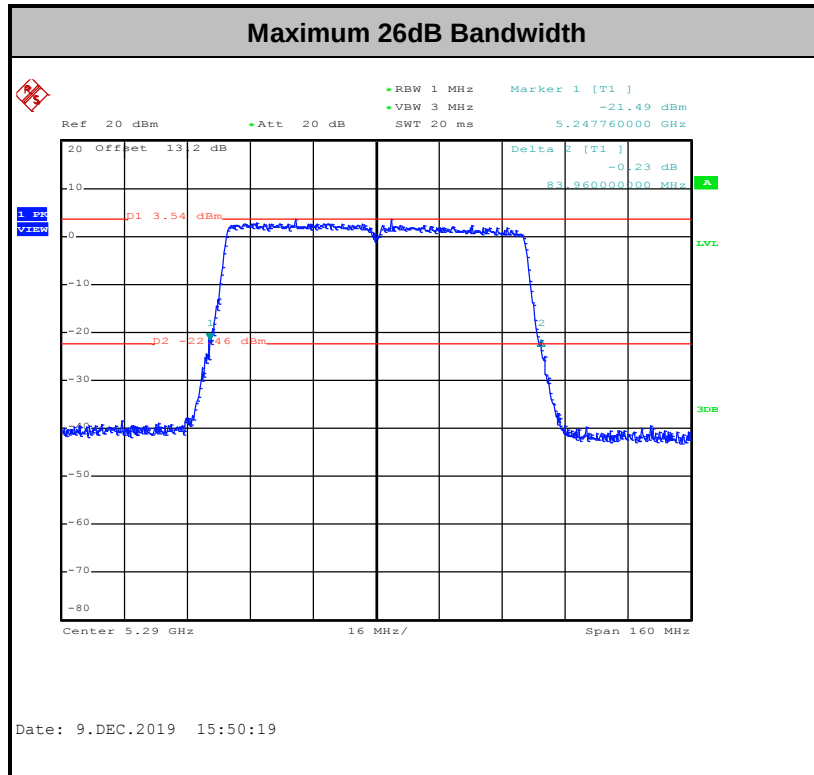
1. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01. Section C) Emission bandwidth
2. Set RBW = approximately 1% of the emission bandwidth.
3. Set the VBW > RBW.
4. Detector = Peak.
5. Trace mode = max hold
6. Measure the maximum width of the emission that is 26 dB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

3.1.4 Test Setup



3.1.5 Test Result of 26dB & 99% Occupied Bandwidth

Please refer to Appendix A.



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



3.2 Maximum Conducted Output Power Measurement

3.2.1 Limit of Maximum Conducted Output Power

<FCC 14-30 CFR 15.407>

For the 5.25–5.725 GHz bands:

- The maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or 11 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

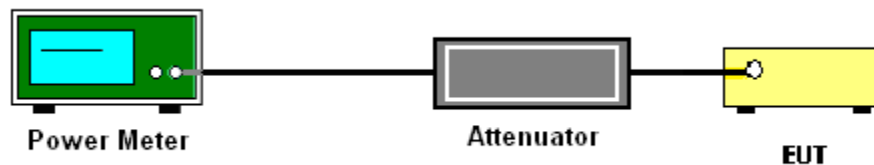
The testing follows Method PM-G of FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01.

Method PM-G (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.
4. Since the measurement is made only during the ON time of the transmitter, no duty cycle correction factor is required.

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 5.25–5.725 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-3

(power averaging (rms) detection with max hold):

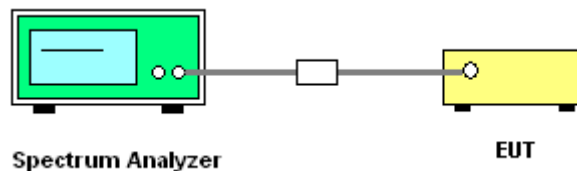
- Set span to encompass the entire emission bandwidth (EBW) of the signal.
 - Set RBW = 1 MHz.
 - Set VBW $\geq$ 3 MHz
 - Number of points in sweep $\geq$ 2 Span / RBW.
 - Sweep time $\leq$ (number of points in sweep) $\times$ T, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.
 - Detector = power averaging (rms).
 - Trace mode = max hold.
 - Allow max hold to run for at least 60 seconds, or longer as needed to allow the trace to stabilize.
1. The RF output of EUT was connected to the spectrum analyzer by a low loss cable.
 2. Each plot has already offset with cable loss, and attenuator loss. Measure the PPSD and record it.

3. For MIMO mode, calculation method follows FCC KDB 662911 D01 Multiple Transmitter Output v02r01.

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

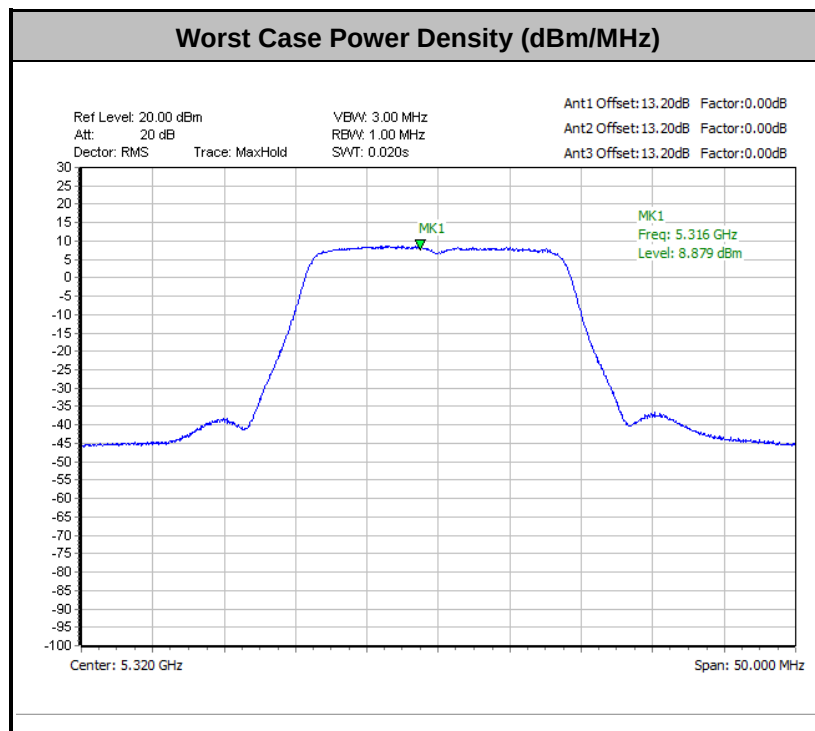
The total final Power Spectral Density is from a device with 3 transmitter outputs. The spectrum measurements of the individual outputs are all performed with the same span and number of points; the spectrum value in the first spectral bin of output 1 is summed with that in the first spectral bin of output 2 and output 3 to obtain the value for the first frequency bin of the summed spectrum.

3.3.4 Test Setup



3.3.5 Test Result of Power Spectral Density

Please refer to Appendix A.



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.

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



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

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

- (i) Sections 15.407(b)(1-3) specifies the unwanted emissions limit for the U-NII-1 and U-NII-2 bands. As specified, emissions above 1000 MHz that are outside of the restricted bands are subject to a peak emission limit of -27 dBm/MHz.
- (ii) Section 15.407(b)(4) specifies the unwanted emissions limit for the U-NII-3 band. A band emissions mask is specified in Section 15.407(b)(4)(i). The emission limits are based on the use of a peak detector.

3.4.2 Measuring Instruments

See list of measuring equipment of this test report.

3.4.3 Test Procedures

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

(1) Procedure for Unwanted Emissions Measurements Below 1000MHz

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

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

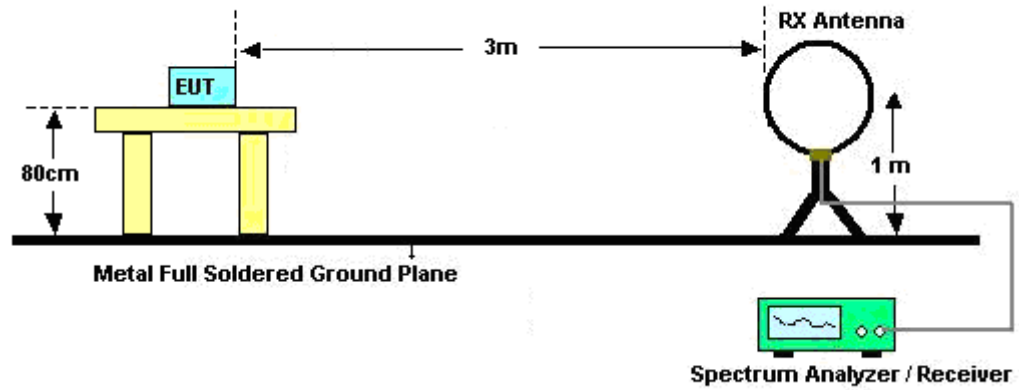
- RBW = 1 MHz
- VBW ≥ 3 MHz
- Detector = Peak
- Sweep time = auto
- Trace mode = max hold

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

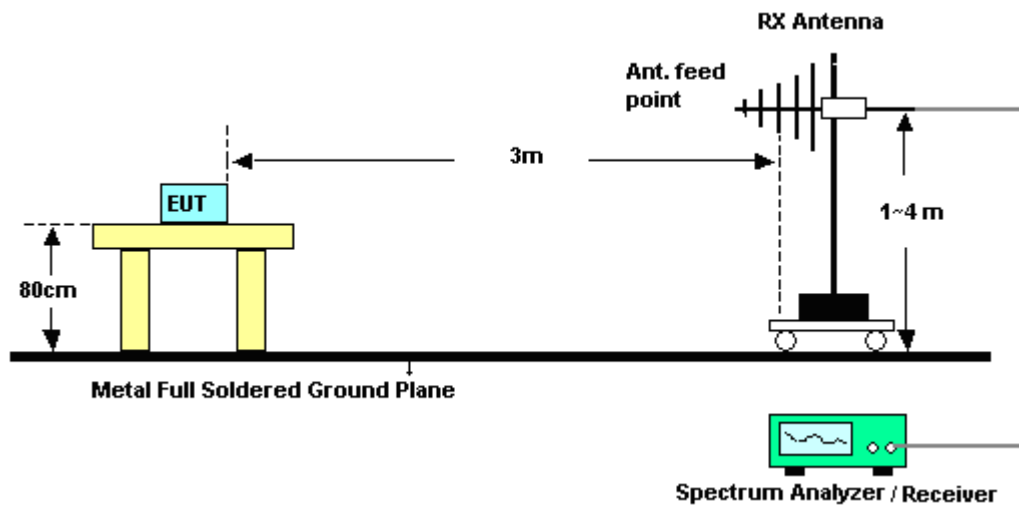
- RBW = 1 MHz
 - VBW = 10 Hz, when duty cycle is no less than 98 percent.
 - $VBW \geq 1/T$, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.
2.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

3.4.4 Test Setup

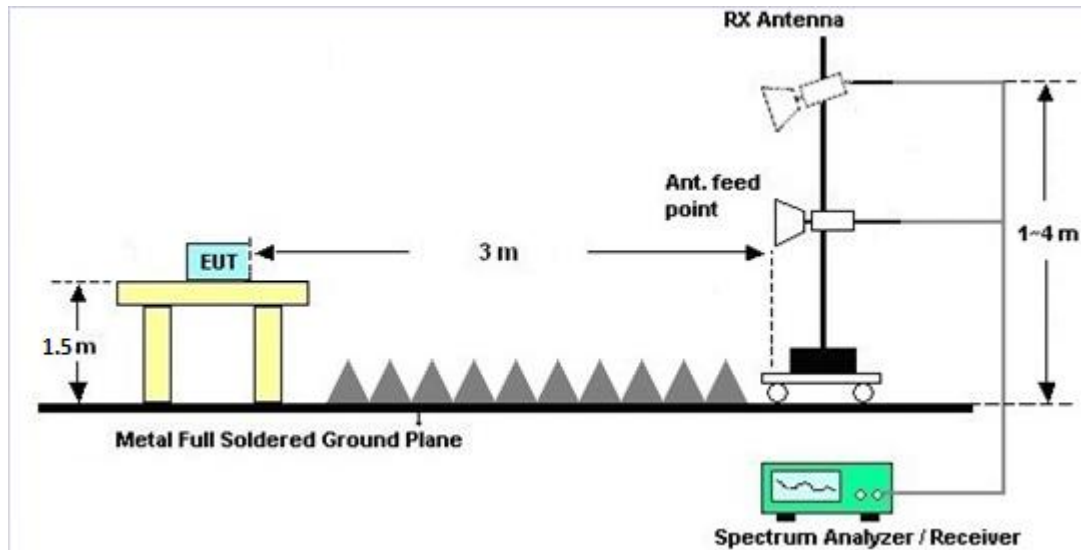
For radiated emissions below 30MHz



For radiated emissions from 30MHz to 1GHz



For radiated emissions above 1GHz



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

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

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

3.4.6 Test Result of Radiated Spurious at Band Edges

Please refer to Appendix C and D.

3.4.7 Duty Cycle

Please refer to Appendix E.

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

Please refer to Appendix C and D.

3.5 AC Conducted Emission Measurement

3.5.1 Limit of AC Conducted Emission

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

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

*Decreases with the logarithm of the frequency.

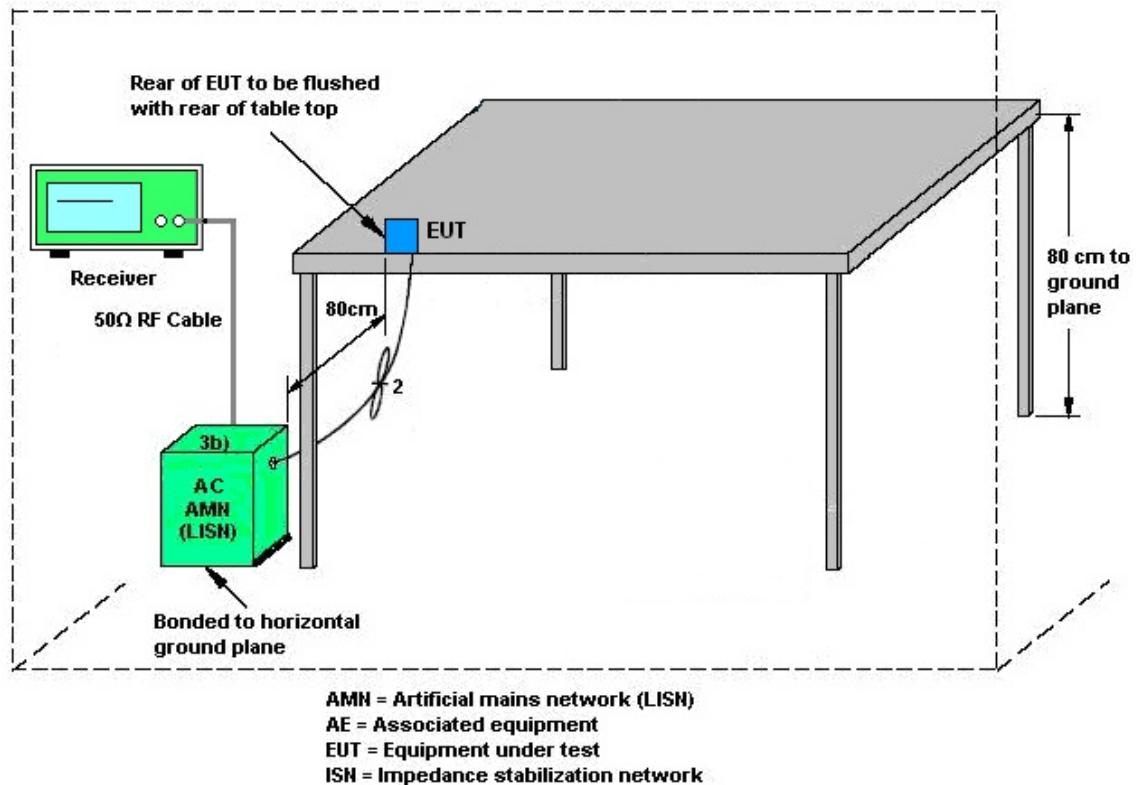
3.5.2 Measuring Instruments

See list of measuring equipment of this test report.

3.5.3 Test Procedures

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

3.5.4 Test Setup



3.5.5 Test Result of AC Conducted Emission

Please refer to Appendix B.

3.6 Automatically Discontinue Transmission

3.6.1 Limit of Automatically Discontinue Transmission

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

3.6.2 Measuring Instruments

See list of measuring equipment of this test report.

3.6.3 Test Result of Automatically Discontinue Transmission

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

3.7 Antenna Requirements

3.7.1 Standard Applicable

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

3.7.2 Antenna Anti-Replacement Construction

An embedded-in antenna design is used.

3.7.3 Antenna Gain

FCC KDB 662911 D01 Multiple Transmitter Output v02r01

For CDD transmissions, directional gain is calculated as

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

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

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

For power measurements on IEEE 802.11 devices,

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

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

The EUT supports CDD mode.

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

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

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

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

<CDD Modes>							
				DG	DG	Power	PSD
				for	for	Limit	Limit
	Ant. 1	Ant. 2	Ant. 3	Power	PSD	Reduction	Reduction
	(dBi)	(dBi)	(dBi)	(dBi)	(dBi)	(dB)	(dB)
Band II	3.23	3.23	3.23	3.23	8.00	0.00	2.00
Band III	3.46	3.46	3.46	3.46	8.23	0.00	2.23

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

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



4 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Hygrometer	Testo	608-H2	41410069	N/A	Jun. 17, 2019	Dec. 03, 2019~ Dec. 09, 2019	Jun. 16, 2020	Conducted (TH05-HY)
Power Sensor	DARE	RPR3006W	16I00054S NO10	10MHz~6GHz	Dec. 19, 2018	Dec. 03, 2019~ Dec. 09, 2019	Dec. 18, 2019	Conducted (TH05-HY)
Spectrum Analyzer	Rohde & Schwarz	FSP40	100055	9kHz-40GHz	Aug. 14, 2019	Dec. 03, 2019~ Dec. 09, 2019	Aug. 13, 2020	Conducted (TH05-HY)
Switch Control Manframe	E-IUSTRUMENT	ETF-1405-0	EC190006 7	N/A	Aug. 15, 2019	Dec. 03, 2019~ Dec. 09, 2019	Aug. 14, 2020	Conducted (TH05-HY)
AC Power Source	ChainTek	APC-1000W	N/A	N/A	N/A	Nov. 26, 2019	N/A	Conduction (CO05-HY)
EMI Test Receiver	Rohde & Schwarz	ESR3	102388	9kHz~3.6GHz	Nov. 15, 2019	Nov. 26, 2019	Nov. 14, 2020	Conduction (CO05-HY)
Hygrometer	Testo	608-H1	34913912	N/A	Mar. 19, 2019	Nov. 26, 2019	Mar. 18, 2020	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100081	9kHz~30MHz	Nov. 15, 2019	Nov. 26, 2019	Nov. 14, 2020	Conduction (CO05-HY)
Software	Rohde & Schwarz	EMC32 V10.30	N/A	N/A	N/A	Nov. 26, 2019	N/A	Conduction (CO05-HY)
LF Cable	HUBER + SUHNER	RG-214/U	LF01	N/A	Dec. 31, 2018	Nov. 26, 2019	Dec. 30, 2019	Conduction (CO05-HY)
Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100851	N/A	Dec. 31, 2018	Nov. 26, 2019	Dec. 30, 2019	Conduction (CO05-HY)
Loop Antenna	Rohde & Schwarz	HFH2-Z2	100488	9 kHz~30 MHz	Jan. 07, 2019	Dec. 01, 2019~ Dec. 03, 2019	Jan. 06, 2020	Radiation (03CH15-HY)
Preamplifier	EMEC	EM18G40G	060715	18GHz ~ 40GHz	Dec. 06, 2018	Dec. 01, 2019~ Dec. 03, 2019	Dec. 05, 2019	Radiation (03CH15-HY)
Bilog Antenna	TESEQ	CBL6111D&0 0800N1D01N- 06	41912&05	30MHz to 1GHz	Feb. 12, 2019	Dec. 01, 2019~ Dec. 03, 2019	Feb. 11, 2020	Radiation (03CH15-HY)
Horn Antenna	SCHWARZBECK	BBHA 9120 D	9120D-211 4	1-18GHz	Jul. 31, 2019	Dec. 01, 2019~ Dec. 03, 2019	Jul. 30, 2020	Radiation (03CH15-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170 584	18GHz- 40GHz	Dec. 05, 2018	Dec. 01, 2019~ Dec. 03, 2019	Dec. 04, 2019	Radiation (03CH15-HY)
Amplifier	SONOMA	310N	363440	9kHz~1GHz	Dec. 28, 2018	Dec. 01, 2019~ Dec. 03, 2019	Dec. 27, 2019	Radiation (03CH15-HY)
Preamplifier	Jet-Power	JPA0118-55-3 03	171000180 0055007	1GHz~18GHz	Apr. 01, 2019	Dec. 01, 2019~ Dec. 03, 2019	May. 31, 2020	Radiation (03CH15-HY)
Preamplifier	Keysight	83017A	MY532701 95	1GHz~26.5GHz	Aug. 23, 2019	Dec. 01, 2019~ Dec. 03, 2019	Aug. 22, 2020	Radiation (03CH15-HY)
EMI Test Receiver	Keysight	N9038A(MXE)	MY541300 85	20MHz~8.4GHz	Nov. 01, 2019	Dec. 01, 2019~ Dec. 03, 2019	Oct. 31, 2020	Radiation (03CH15-HY)
EMI Test Receiver	Rohde & Schwarz	ESU26	100390	20Hz~26.5GHz	Dec. 27, 2018	Dec. 01, 2019~ Dec. 03, 2019	Dec. 26, 2019	Radiation (03CH15-HY)
Controller	ChainTek	3000-1	N/A	Control Turn table & Ant Mast	N/A	Dec. 01, 2019~ Dec. 03, 2019	N/A	Radiation (03CH15-HY)
Antenna Mast	ChainTek	MBS-520-1	N/A	1m~4m	N/A	Dec. 01, 2019~ Dec. 03, 2019	N/A	Radiation (03CH15-HY)
Turn Table	ChainTek	T-200-S-1	N/A	0~360 Degree	N/A	Dec. 01, 2019~ Dec. 03, 2019	N/A	Radiation (03CH15-HY)
Software	Audix	E3 6.2009-8-24(k 5)	RK-00045 1	N/A	N/A	Dec. 01, 2019~ Dec. 03, 2019	N/A	Radiation (03CH15-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY36980/ 4	30M-18G	Apr. 15, 2019	Dec. 01, 2019~ Dec. 03, 2019	Apr. 14, 2020	Radiation (03CH15-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY9838/4 PE	30M-18G	Apr. 15, 2019	Dec. 01, 2019~ Dec. 03, 2019	Apr. 14, 2020	Radiation (03CH15-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY802430 /4	30M~18G	May 13, 2019	Dec. 01, 2019~ Dec. 03, 2019	May 12, 2020	Radiation (03CH15-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	505134/2	30MHz-40GHz	Feb. 26, 2019	Dec. 01, 2019~ Dec. 03, 2019	Feb. 25, 2020	Radiation (03CH15-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	800740/2	30MHz-40GHz	Feb. 26, 2019	Dec. 01, 2019~ Dec. 03, 2019	Feb. 25, 2020	Radiation (03CH15-HY)
Filter	Wainwright	WLK4-1000-1 530-8000-40S S	SN4	1.53G Low Pass	Jul. 04, 2019	Dec. 01, 2019~ Dec. 03, 2019	Jul. 03, 2020	Radiation (03CH15-HY)
Filter	Wainwright	WHKX8-5872. 5-6750-18000 -40ST	SN6	6.75GHz High Pass Filter	Jul. 02, 2019	Dec. 01, 2019~ Dec. 03, 2019	Jul. 01, 2020	Radiation (03CH15-HY)

5 Uncertainty of Evaluation

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

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	2.0
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Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	5.0
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Uncertainty of Radiated Emission Measurement (1000 MHz ~ 18000 MHz)

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

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	5.0
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Appendix A. Test Result of Conducted Test Items

Test Engineer	Hank Hsu	Temperature	21~25	°C
Test Date	2019/12/3~2019/12/9	Relative Humidity	51~54	%

<CDD Mode>

TEST RESULTS DATA
26dB and 99% OBW

Band II MIMO 3Tx Mode Ant 0 + 1 + 2										
Mod.	Data Rate	NTx	CH.	Freq. (MHz)	26 dB Bandwidth (MHz)				FCC 26dB Bandwidth Power Limit (dBm)	Note
					Ant 0	Ant 1	Ant 2	Ant 3	Ant 0 + 1 + 2	
11a	6Mbps	3	52	5260	20.80	20.70	20.80		23.98	-
11a	6Mbps	3	60	5300	21.10	20.80	21.00		23.98	
11a	6Mbps	3	64	5320	21.10	20.80	21.10		23.98	
VHT20	MCS0	3	52	5260	22.00	21.40	21.60		23.98	
VHT20	MCS0	3	60	5300	22.00	21.40	21.60		23.98	
VHT20	MCS0	3	64	5320	21.90	21.80	21.60		23.98	
VHT40	MCS0	3	54	5270	40.68	40.68	40.50		23.98	
VHT40	MCS0	3	62	5310	40.68	40.50	39.96		23.98	
VHT80	MCS 0	3	58	5290	83.96	83.20	83.52		23.98	

Band II MIMO 3Tx Mode Ant 0 + 1 + 2													
Mod.	Data Rate	NTx	CH.	Freq. (MHz)	99% Bandwidth (MHz)				IC 99% Bandwidth Power Limit (dBm)	IC 99% Bandwidth EIRP Limit (dBm)			
					Ant 0	Ant 1	Ant 2	Ant 3		Ant 0	Ant 1	Ant 2	Ant 3
11a	6Mbps	3	52	5260	16.50	16.50	16.50		23.17	29.17			
11a	6Mbps	3	60	5300	16.50	16.50	16.55		23.17	29.17			
11a	6Mbps	3	64	5320	16.55	16.45	16.55		23.16	29.16			
VHT20	MCS0	3	52	5260	17.70	17.70	17.65		23.47	29.47			
VHT20	MCS0	3	60	5300	17.70	17.70	17.65		23.47	29.47			
VHT20	MCS0	3	64	5320	17.75	17.70	17.65		23.47	29.47			
VHT40	MCS0	3	54	5270	36.10	36.30	36.20		23.98	30.00			
VHT40	MCS0	3	62	5310	36.30	36.00	36.20		23.98	30.00			
VHT80	MCS 0	3	58	5290	77.28	77.04	77.28		23.98	30.00			

<CDD Mode>

TEST RESULTS DATA
Average Power Table

FCC Band II MIMO 3Tx Mode Ant 0 + 1 + 2													
Mod.	Data Rate	N _{TX}	CH.	Freq. (MHz)	Average Conducted Power (dBm)					FCC Power Limit (dBm)	DG (dBi)	Pass /Fail	Setting
					Ant 0	Ant 1	Ant 2	Ant 3	SUM				
11a	6Mbps	3	52	5260	13.70	14.60	13.70		18.79	23.98	3.23	Pass	3Tx
11a	6Mbps	3	60	5300	14.20	15.00	14.50		19.35	23.98	3.23	Pass	16.5
11a	6Mbps	3	64	5320	14.00	14.90	14.20		19.16	23.98	3.23	Pass	16.5
HT20	MCS0	3	52	5260	13.80	14.60	13.70		18.82	23.98	3.23	Pass	17
HT20	MCS0	3	60	5300	14.20	15.00	14.50		19.35	23.98	3.23	Pass	17
HT20	MCS0	3	64	5320	14.00	15.00	14.30		19.23	23.98	3.23	Pass	17
HT40	MCS0	3	54	5270	17.40	18.30	17.40		22.49	23.98	3.23	Pass	20
HT40	MCS0	3	62	5310	15.30	15.80	15.50		20.31	23.98	3.23	Pass	18
VHT20	MCS0	3	52	5260	13.90	14.60	13.80		18.89	23.98	3.23	Pass	17
VHT20	MCS0	3	60	5300	14.30	15.00	14.60		19.41	23.98	3.23	Pass	17
VHT20	MCS0	3	64	5320	14.10	15.00	14.40		19.29	23.98	3.23	Pass	17
VHT40	MCS0	3	54	5270	17.50	18.30	17.40		22.52	23.98	3.23	Pass	20
VHT40	MCS0	3	62	5310	15.40	16.00	15.60		20.45	23.98	3.23	Pass	18
VHT80	MCS0	3	58	5290	11.90	12.90	12.30		17.16	23.98	3.23	Pass	14.5

<CDD Mode>

TEST RESULTS DATA
Power Spectral Density

Band II MIMO 3Tx Mode Ant 0 + 1 + 2								
Mod.	Data Rate	N _{TX}	CH.	Freq. (MHz)	Average Power Density (dBm/MHz)	PSD Limit (dBm/MHz)	DG (dBi)	Pass /Fail
					Ant 0 + 1 + 2	Ant 0 + 1 + 2	Ant 0 + 1 + 2	
11a	6Mbps	3	52	5260	8.75	9.00	8.00	Pass
11a	6Mbps	3	60	5300	8.57	9.00	8.00	Pass
11a	6Mbps	3	64	5320	8.60	9.00	8.00	Pass
VHT20	MCS0	3	52	5260	8.77	9.00	8.00	Pass
VHT20	MCS0	3	60	5300	8.39	9.00	8.00	Pass
VHT20	MCS0	3	64	5320	8.88	9.00	8.00	Pass
VHT40	MCS0	3	54	5270	8.86	9.00	8.00	Pass
VHT40	MCS0	3	62	5310	7.29	9.00	8.00	Pass
VHT80	MCS0	3	58	5290	0.34	9.00	8.00	Pass

<CDD Mode>

TEST RESULTS DATA
26dB and 99% OBW

Band III MIMO 3Tx Mode Ant 0 + 1 + 2													
Mod.	Data Rate	N _{Tx}	CH.	Freq. (MHz)	26 dB Bandwidth (MHz)				FCC 26dB Bandwidth Power Limit (dBm)	6 dB Bandwidth for Straddle Channel (MHz)			
					Ant 0	Ant 1	Ant 2	Ant 3		Ant 0 + 1 + 2	Ant 0	Ant 1	Ant 2
11a	6Mbps	3	100	5500	21.00	21.10	21.10		23.98	----	----	----	
11a	6Mbps	3	116	5580	21.20	21.00	20.90		23.98	----	----	----	
11a	6Mbps	3	140	5700	21.20	20.80	21.00		23.98	----	----	----	
VHT20	MCS0	3	100	5500	21.90	22.00	21.80		23.98	----	----	----	
VHT20	MCS0	3	116	5580	22.00	21.90	21.60		23.98	----	----	----	
VHT20	MCS0	3	140	5700	22.20	21.80	21.70		23.98	----	----	----	
VHT40	MCS0	3	102	5510	40.86	40.50	40.32		23.98	----	----	----	
VHT40	MCS0	3	110	5550	40.86	40.32	40.50		23.98	----	----	----	
VHT40	MCS0	3	134	5670	40.86	40.50	40.32		23.98	----	----	----	
VHT80	MCS0	3	106	5530	83.84	83.52	82.88		23.98	----	----	----	
VHT80	MCS0	3	122	5610	83.52	83.32	82.56		23.98	----	----	----	

Band III Straddle Channel MIMO 3Tx Mode Ant 0 + 1 + 2													
Mod.	Data Rate	N _{TX}	CH.	Freq. (MHz)	26 dB Bandwidth (MHz)				FCC 26dB Bandwidth Power Limit (dBm)	6 dB Bandwidth for Straddle Channel (MHz)			
					Ant 0	Ant 1	Ant 2	Ant 3		Ant 0 + 1 + 2	Ant 0	Ant 1	Ant 2
11a	6Mbps	3	144	5720	15.55	15.45	15.50		22.89	3.15	2.90	3.15	
VHT20	MCS0	3	144	5720	16.00	16.15	16.00		23.04	3.75	3.75	3.75	
VHT40	MCS0	3	142	5710	35.34	35.43	35.16		23.98	2.55	2.55	2.51	
VHT80	MCS0	3	138	5690	76.72	76.80	76.54		23.98	2.55	2.56	3.16	

Band III MIMO 3Tx Mode Ant 0 + 1 + 2										
Mod.	Data Rate	NTx	CH.	Freq. (MHz)	99% Bandwidth (MHz)				IC 99% Bandwidth Power Limit (dBm)	IC 99% Bandwidth EIRP Limit (dBm)
					Ant 0	Ant 1	Ant 2	Ant 3	Ant 0 + 1 + 2	Ant 0 + 1 + 2
11a	6Mbps	3	100	5500	16.50	16.50	16.45		23.16	29.16
11a	6Mbps	3	116	5580	16.50	16.50	16.50		23.17	29.17
11a	6Mbps	3	140	5700	16.50	16.50	16.50		23.17	29.17
VHT20	MCS0	3	100	5500	17.70	17.70	17.75		23.48	29.48
VHT20	MCS0	3	116	5580	17.70	17.80	17.65		23.47	29.47
VHT20	MCS0	3	140	5700	17.70	17.75	17.70		23.48	29.48
VHT40	MCS0	3	102	5510	36.20	36.20	36.00		23.98	30.00
VHT40	MCS0	3	110	5550	36.30	36.10	36.20		23.98	30.00
VHT40	MCS0	3	134	5670	36.10	36.00	36.10		23.98	30.00
VHT80	MCS0	3	106	5530	77.28	77.04	77.28		23.98	30.00
VHT80	MCS0	3	122	5610	77.16	77.16	77.16	23.98	30.00	

Band III Straddle Channel MIMO 3Tx Mode Ant 0 + 1 + 2											
Mod.	Data Rate	N _{TX}	CH.	Freq. (MHz)	99% Bandwidth (MHz)				IC 99% Bandwidth Power Limit (dBm)	IC 99% Bandwidth EIRP Limit (dBm)	
					Ant 0	Ant 1	Ant 2	Ant 3			
11a	6Mbps	3	144	5720	13.30	13.30	13.30		22.24	28.24	
VHT20	MCS0	3	144	5720	13.90	13.95	13.90		22.43	28.43	
VHT40	MCS0	3	142	5710	33.20	33.20	33.10		23.98	30.00	
VHT80	MCS0	3	138	5690	73.76	73.64	73.64		23.98	30.00	

<CDD Mode>

TEST RESULTS DATA
Average Power Table

FCC Band III MIMO 3Tx Mode Ant 0 + 1 + 2												
Mod.	Data Rate	NTx	CH.	Freq. (MHz)	Average Conducted Power (dB)					FCC Power Limit (dBm)	DG (dBi)	Pass /Fail
					Ant 0	Ant 1	Ant 2	Ant 3	SUM			
11a	6Mbps	3	100	5500	14.70	14.80	14.10		19.32	23.98	3.46	Pass
11a	6Mbps	3	116	5580	14.40	14.60	13.90		19.08	23.98	3.46	Pass
11a	6Mbps	3	140	5700	13.30	14.90	13.90		18.86	23.98	3.46	Pass
HT20	MCS0	3	100	5500	14.70	14.70	14.00		19.25	23.98	3.46	Pass
HT20	MCS0	3	116	5580	14.30	14.50	13.90		19.01	23.98	3.46	Pass
HT20	MCS0	3	140	5700	14.00	15.30	14.30		19.34	23.98	3.46	Pass
HT40	MCS0	3	102	5510	16.30	16.30	15.40		20.79	23.98	3.46	Pass
HT40	MCS0	3	110	5550	17.60	18.00	17.00		22.32	23.98	3.46	Pass
HT40	MCS0	3	134	5670	17.10	18.30	17.40		22.40	23.98	3.46	Pass
VHT20	MCS0	3	100	5500	14.80	14.70	14.00		19.29	23.98	3.46	Pass
VHT20	MCS0	3	116	5580	14.40	14.50	13.90		19.05	23.98	3.46	Pass
VHT20	MCS0	3	140	5700	14.10	15.30	14.30		19.37	23.98	3.46	Pass
VHT40	MCS0	3	102	5510	16.50	16.60	15.60		21.03	23.98	3.46	Pass
VHT40	MCS0	3	110	5550	17.70	18.00	17.10		22.39	23.98	3.46	Pass
VHT40	MCS0	3	134	5670	17.20	18.30	17.50		22.46	23.98	3.46	Pass
VHT80	MCS0	3	106	5530	14.10	14.10	13.20		18.59	23.98	3.46	Pass
VHT80	MCS0	3	122	5610	15.90	16.70	15.60		20.86	23.98	3.46	Pass

Setting
3Tx
15.5
15
15
16
15.5
16
17.5
19
18.5
16
15.5
16
17.5
19
18.5
15
17

FCC Band III Straddle Channel MIMO 3Tx Mode Ant 0 + 1 + 2												
Mod.	Data Rate	NTx	CH.	Freq. (MHz)	Average Conducted Power (dB)					FCC Power Limit (dBm)	DG (dBi)	Pass /Fail
					Ant 0	Ant 1	Ant 2	Ant 3	SUM			
11a	6Mbps	3	144	5720	13.90	15.50	14.80		19.55	22.89	3.46	Pass
HT20	MCS0	3	144	5720	14.00	15.50	14.70		19.55	23.04	3.46	Pass
HT40	MCS0	3	142	5710	17.30	18.80	17.90		22.82	23.98	3.46	Pass
VHT20	MCS0	3	144	5720	14.10	15.40	14.80		19.57	23.04	3.46	Pass
VHT40	MCS0	3	142	5710	17.40	18.90	17.80		22.85	23.98	3.46	Pass
VHT80	MCS0	3	138	5690	17.40	18.50	17.60		22.63	23.98	3.46	Pass

Setting
3Tx
15.5
16
19
16
19
18.5

<CDD Mode>

TEST RESULTS DATA
Power Spectral Density

FCC Band III MIMO 3Tx Mode Ant 0 + 1 + 2								
Mod.	Data Rate	N _{TX}	CH.	Freq. (MHz)	Average Power Density (dBm/MHz)	PSD Limit (dBm/MHz)	DG (dBi)	Pass /Fail
					Ant 0 + 1 + 2	Ant 0 + 1 + 2	Ant 0 + 1 + 2	
11a	6Mbps	3	100	5500	8.56	8.77	8.23	Pass
11a	6Mbps	3	116	5580	8.65	8.77	8.23	Pass
11a	6Mbps	3	140	5700	8.14	8.77	8.23	Pass
VHT20	MCS0	3	100	5500	8.25	8.77	8.23	Pass
VHT20	MCS0	3	116	5580	8.50	8.77	8.23	Pass
VHT20	MCS0	3	140	5700	8.75	8.77	8.23	Pass
VHT40	MCS0	3	102	5510	7.69	8.77	8.23	Pass
VHT40	MCS0	3	110	5550	8.58	8.77	8.23	Pass
VHT40	MCS0	3	134	5670	8.46	8.77	8.23	Pass
VHT80	MCS0	3	106	5530	1.96	8.77	8.23	Pass
VHT80	MCS0	3	122	5610	4.35	8.77	8.23	Pass

FCC Band III Straddle Channel MIMO 3Tx Mode Ant 0 + 1 + 2								
Mod.	Data Rate	N _{TX}	CH.	Freq. (MHz)	Average Power Density (dBm/MHz)	PSD Limit (dBm/MHz)	DG (dBi)	Pass /Fail
					Ant 0 + 1 + 2	Ant 0 + 1 + 2	Ant 0 + 1 + 2	
11a	6Mbps	3	144	5720	8.31	8.77	8.23	Pass
VHT20	MCS0	3	144	5720	8.30	8.77	8.23	Pass
VHT40	MCS0	3	142	5710	8.57	8.77	8.23	Pass
VHT80	MCS0	3	138	5690	5.93	8.77	8.23	Pass

<TXBF Mode>

TEST RESULTS DATA
Average Power Table
(Reporting Only)

FCC Band II MIMO 3Tx Mode Ant 0 + 1 + 2												
Mod.	Data Rate	NTx	CH.	Freq. (MHz)	Average Conducted Power (dBm)					FCC Power Limit (dBm)	DG (dBi)	Pass /Fail
					Ant 0	Ant 1	Ant 2	Ant 3	SUM			
HT20	MCS0	3	52	5260	13.30	14.20	13.40		18.42	21.98	8.00	Pass
HT20	MCS0	3	60	5300	14.00	14.80	14.30		19.15	21.98	8.00	Pass
HT20	MCS0	3	64	5320	13.70	14.60	13.90		18.86	21.98	8.00	Pass
HT40	MCS0	3	54	5270	16.90	17.80	16.50		21.87	21.98	8.00	Pass
HT40	MCS0	3	62	5310	14.80	15.50	15.00		19.88	21.98	8.00	Pass
VHT20	MCS0	3	52	5260	13.40	14.20	13.40		18.45	21.98	8.00	Pass
VHT20	MCS0	3	60	5300	14.10	14.80	14.30		19.18	21.98	8.00	Pass
VHT20	MCS0	3	64	5320	13.80	14.60	13.90		18.89	21.98	8.00	Pass
VHT40	MCS0	3	54	5270	17.00	17.80	16.60		21.93	21.98	8.00	Pass
VHT40	MCS0	3	62	5310	14.90	15.50	15.00		19.91	21.98	8.00	Pass
VHT80	MCS0	3	58	5290	11.50	12.50	11.50		16.63	21.98	8.00	Pass

Setting
3Tx
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<TXBF Mode>

TEST RESULTS DATA
Average Power Table
(Reporting Only)

FCC Band III MIMO 3Tx Mode Ant 0 + 1 + 2												
Mod.	Data Rate	NTx	CH.	Freq. (MHz)	Average Conducted Power (dB)					FCC Power Limit (dBm)	DG (dBi)	Pass /Fail
					Ant 0	Ant 1	Ant 2	Ant 3	SUM			
HT20	MCS0	3	100	5500	14.20	14.20	13.40		18.72	21.75	8.23	Pass
HT20	MCS0	3	116	5580	13.70	13.90	13.30		18.41	21.75	8.23	Pass
HT20	MCS0	3	140	5700	13.50	14.80	13.80		18.84	21.75	8.23	Pass
HT40	MCS0	3	102	5510	16.20	16.50	15.20		20.77	21.75	8.23	Pass
HT40	MCS0	3	110	5550	16.70	17.00	15.80		21.30	21.75	8.23	Pass
HT40	MCS0	3	134	5670	16.10	17.30	16.20		21.34	21.75	8.23	Pass
VHT20	MCS0	3	100	5500	14.30	14.20	13.40		18.76	21.75	8.23	Pass
VHT20	MCS0	3	116	5580	13.90	14.00	13.30		18.52	21.75	8.23	Pass
VHT20	MCS0	3	140	5700	13.50	14.80	13.90		18.87	21.75	8.23	Pass
VHT40	MCS0	3	102	5510	16.30	16.50	15.30		20.84	21.75	8.23	Pass
VHT40	MCS0	3	110	5550	16.70	17.10	15.80		21.34	21.75	8.23	Pass
VHT40	MCS0	3	134	5670	16.10	17.40	16.30		21.41	21.75	8.23	Pass
VHT80	MCS0	3	106	5530	14.00	14.10	13.00		18.50	21.75	8.23	Pass
VHT80	MCS0	3	122	5610	15.30	16.20	15.00		20.30	21.75	8.23	Pass

Setting
3Tx
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17.5
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16.5

FCC Band III Straddle Channel MIMO 3Tx Mode Ant 0 + 1 + 2												
Mod.	Data Rate	NTx	CH.	Freq. (MHz)	Average Conducted Power (dB)					FCC Power Limit (dBm)	DG (dBi)	Pass /Fail
					Ant 0	Ant 1	Ant 2	Ant 3	SUM			
HT20	MCS0	3	144	5720	13.90	15.20	14.60		19.37	21.75	8.23	Pass
HT40	MCS0	3	142	5710	15.80	17.30	16.00		21.19	21.75	8.23	Pass
VHT20	MCS0	3	144	5720	13.90	15.20	14.70		19.40	21.75	8.23	Pass
VHT40	MCS0	3	142	5710	15.80	17.30	16.10		21.22	21.75	8.23	Pass
VHT80	MCS0	3	138	5690	16.30	17.70	16.50		21.65	21.75	8.23	Pass

Setting
3Tx
16
17.5
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17.5
17.5



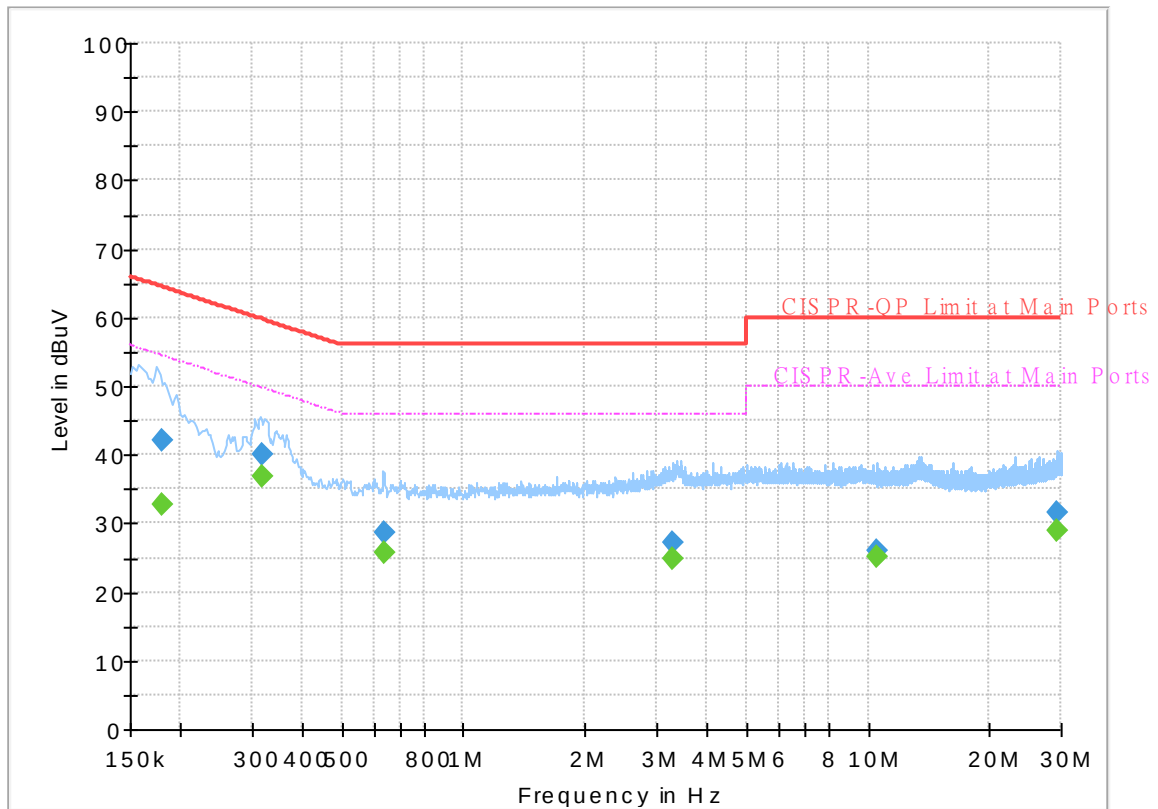
Appendix B. AC Conducted Emission Test Results

Test Engineer :	Tom Lee	Temperature :	23~26℃
		Relative Humidity :	48~54%

EUT Information

Report NO : 992436-02
Test Mode : Mode 1
Test Voltage : 120Vac/60Hz
Phase : Line

Full Spectrum



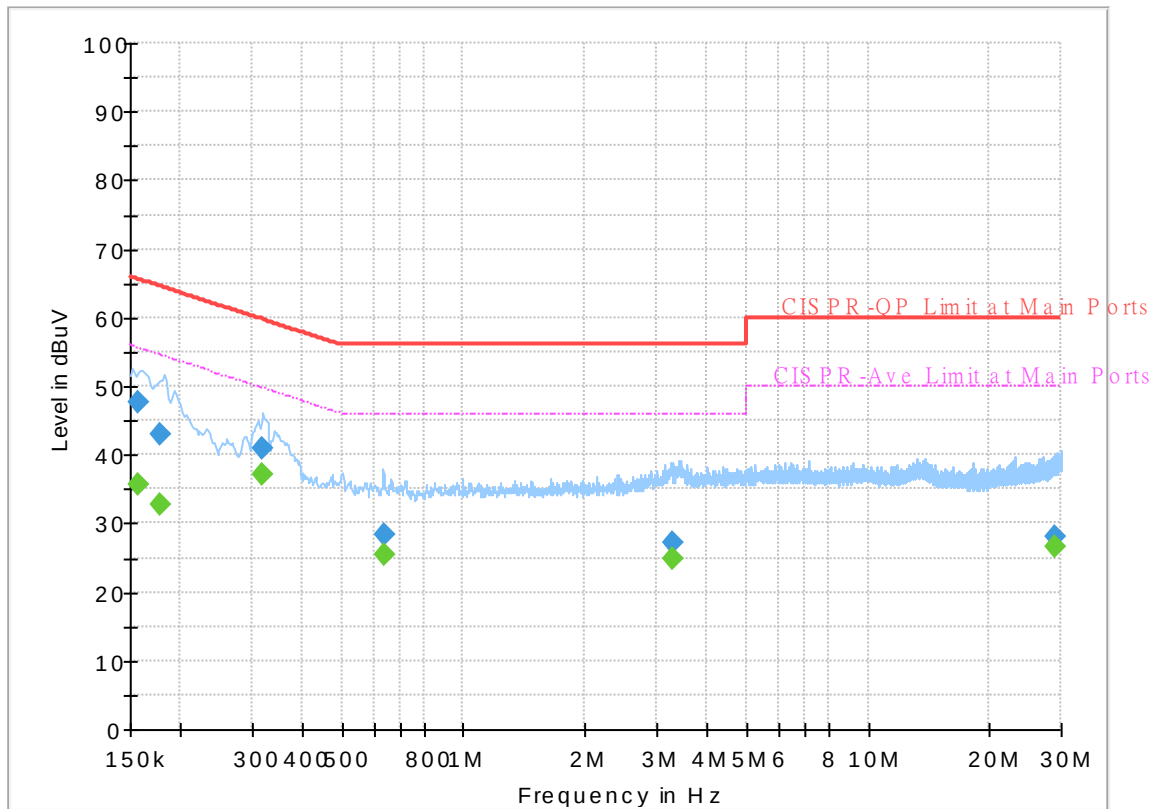
Final Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.179250	---	32.64	54.52	21.88	L1	OFF	19.5
0.179250	42.19	---	64.52	22.33	L1	OFF	19.5
0.318750	---	36.90	49.74	12.84	L1	OFF	19.5
0.318750	40.18	---	59.74	19.56	L1	OFF	19.5
0.634020	---	25.67	46.00	20.33	L1	OFF	19.5
0.634020	28.52	---	56.00	27.48	L1	OFF	19.5
3.293880	---	24.96	46.00	21.04	L1	OFF	19.6
3.293880	27.14	---	56.00	28.86	L1	OFF	19.6
10.484790	---	25.12	50.00	24.88	L1	OFF	19.9
10.484790	26.10	---	60.00	33.90	L1	OFF	19.9
29.233950	---	28.94	50.00	21.06	L1	OFF	20.4
29.233950	31.52	---	60.00	28.48	L1	OFF	20.4

EUT Information

Report NO : 992436-02
Test Mode : Mode 1
Test Voltage : 120Vac/60Hz
Phase : Neutral

Full Spectrum



Final Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.156750	---	35.63	55.63	20.00	N	OFF	19.5
0.156750	47.53	---	65.63	18.10	N	OFF	19.5
0.177270	---	32.73	54.61	21.88	N	OFF	19.5
0.177270	42.98	---	64.61	21.63	N	OFF	19.5
0.319650	---	37.16	49.72	12.56	N	OFF	19.5
0.319650	40.85	---	59.72	18.87	N	OFF	19.5
0.635100	---	25.53	46.00	20.47	N	OFF	19.6
0.635100	28.28	---	56.00	27.72	N	OFF	19.6
3.301890	---	24.91	46.00	21.09	N	OFF	19.6
3.301890	27.07	---	56.00	28.93	N	OFF	19.6
28.923630	---	26.54	50.00	23.46	N	OFF	20.6
28.923630	27.93	---	60.00	32.07	N	OFF	20.6



Appendix C. Radiated Spurious Emission

Test Engineer :	Leo Li , Mancy Chou , Bigshow Wang	Temperature :	24.2~25.1°C
		Relative Humidity :	55.0~63.0%

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.	
0+1+2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11a CH 52 5260MHz		5110.5	49.76	-24.24	74	38.96	32.02	9.21	30.43	400	307	P	H
		5114.58	41.13	-12.87	54	30.31	32.03	9.22	30.43	400	307	A	H
	*	5260	111.01	-	-	100.6	31.48	9.36	30.43	400	307	P	H
	*	5260	102.74	-	-	92.33	31.48	9.36	30.43	400	307	A	H
		5453.52	49.47	-24.53	74	38.33	32.01	9.56	30.43	400	307	P	H
		5446.8	40.66	-13.34	54	29.56	31.98	9.55	30.43	400	307	A	H
		5109.82	50.9	-23.1	74	40.1	32.02	9.21	30.43	209	185	P	V
		5112.54	42.85	-11.15	54	32.04	32.03	9.21	30.43	209	185	A	V
	*	5260	116.38	-	-	105.97	31.48	9.36	30.43	209	185	P	V
	*	5260	108.36	-	-	97.95	31.48	9.36	30.43	209	185	A	V
		5431.2	51.81	-22.19	74	40.83	31.89	9.52	30.43	209	185	P	V
		5400.72	42.9	-11.1	54	32.17	31.7	9.46	30.43	209	185	A	V
802.11a CH 60 5300MHz		5121.72	49.59	-24.41	74	38.76	32.04	9.22	30.43	346	310	P	H
		5097.58	40.84	-13.16	54	30.08	31.99	9.2	30.43	346	310	A	H
	*	5300	111.67	-	-	101.31	31.4	9.39	30.43	346	310	P	H
	*	5300	102.74	-	-	92.38	31.4	9.39	30.43	346	310	A	H
		5354.88	49.97	-24.03	74	39.54	31.43	9.43	30.43	346	310	P	H
		5442.48	40.74	-13.26	54	29.68	31.95	9.54	30.43	346	310	A	H
		5074.46	51.01	-22.99	74	40.37	31.9	9.17	30.43	206	189	P	V
		5149.94	42.67	-11.33	54	31.75	32.1	9.25	30.43	206	189	A	V
	*	5300	116.11	-	-	105.75	31.4	9.39	30.43	206	189	P	V
	*	5300	107.56	-	-	97.2	31.4	9.39	30.43	206	189	A	V
		5369.76	51.56	-22.44	74	41.03	31.52	9.44	30.43	206	189	P	V
		5354.16	43.11	-10.89	54	32.69	31.42	9.43	30.43	206	189	A	V



802.11a CH 64 5320MHz	*	5320	110.86	-	-	100.49	31.4	9.4	30.43	329	309	P	H
	*	5320	102.1	-	-	91.73	31.4	9.4	30.43	329	309	A	H
		5432	50.78	-23.22	74	39.8	31.89	9.52	30.43	329	309	P	H
		5351.2	41.05	-12.95	54	30.65	31.41	9.42	30.43	329	309	A	H
													H
													H
	*	5320	115.85	-	-	105.48	31.4	9.4	30.43	224	183	P	V
	*	5320	107.89	-	-	97.52	31.4	9.4	30.43	224	183	A	V
		5352.96	53	-21	74	42.59	31.42	9.42	30.43	224	183	P	V
		5351.84	44.03	-9.97	54	33.63	31.41	9.42	30.43	224	183	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. 0+1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 52 5260MHz		10520	49.06	-19.14	68.2	56.61	39.88	13.69	61.12	100	0	P	H
		15780	47.47	-26.53	74	53.8	37.66	17.27	61.26	100	0	P	H
													H
													H
		10520	48.43	-19.77	68.2	55.98	39.88	13.69	61.12	100	0	P	V
		15780	48.25	-25.75	74	54.58	37.66	17.27	61.26	100	0	P	V
													V
													V
802.11a CH 60 5300MHz		10600	48.72	-25.28	74	56.43	39.8	13.71	61.22	100	0	P	H
		15900	46.1	-27.9	74	52.54	37.3	17.38	61.12	100	0	P	H
													H
													H
		10600	49.01	-24.99	74	56.72	39.8	13.71	61.22	100	0	P	V
		15900	46.4	-27.6	74	52.84	37.3	17.38	61.12	100	0	P	V
													V
													V
802.11a CH 64 5320MHz		10640	48.27	-25.73	74	55.94	39.88	13.72	61.27	100	0	P	H
		15960	46.89	-27.11	74	53.43	37.18	17.33	61.05	100	0	P	H
													H
													H
		10640	49.93	-24.07	74	57.6	39.88	13.72	61.27	100	0	P	V
		15960	45.99	-28.01	74	52.53	37.18	17.33	61.05	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 802.11ac VHT20 (Band Edge @ 3m)

WIFI Ant. 0+1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT20 CH 52 5260MHz		5102	50.48	-23.52	74	39.71	32	9.2	30.43	400	305	P	H
		5112.2	40.55	-13.45	54	29.75	32.02	9.21	30.43	400	305	A	H
	*	5260	111.32	-	-	100.91	31.48	9.36	30.43	400	305	P	H
	*	5260	101.82	-	-	91.41	31.48	9.36	30.43	400	305	A	H
		5364.24	51.34	-22.66	74	40.85	31.49	9.43	30.43	400	305	P	H
		5457.12	40.13	-13.87	54	28.98	32.01	9.57	30.43	400	305	A	H
		5116.62	50.97	-23.03	74	40.15	32.03	9.22	30.43	100	28	P	V
		5112.54	41.92	-12.08	54	31.11	32.03	9.21	30.43	100	28	A	V
	*	5260	116.37	-	-	105.96	31.48	9.36	30.43	100	28	P	V
	*	5260	108.06	-	-	97.65	31.48	9.36	30.43	100	28	A	V
		5362.32	50.78	-23.22	74	40.31	31.47	9.43	30.43	100	28	P	V
		5400	42.29	-11.71	54	31.56	31.7	9.46	30.43	100	28	A	V
802.11ac VHT20 CH 60 5300MHz		5100.98	49.38	-24.62	74	38.61	32	9.2	30.43	368	299	P	H
		5149.6	40.36	-13.64	54	29.44	32.1	9.25	30.43	368	299	A	H
	*	5300	109.25	-	-	98.89	31.4	9.39	30.43	368	299	P	H
	*	5300	100.97	-	-	90.61	31.4	9.39	30.43	368	299	A	H
		5352.72	49.34	-24.66	74	38.93	31.42	9.42	30.43	368	299	P	H
		5444.16	40.23	-13.77	54	29.15	31.96	9.55	30.43	368	299	A	H
		5141.78	50.32	-23.68	74	39.42	32.08	9.25	30.43	100	28	P	V
		5149.94	42.16	-11.84	54	31.24	32.1	9.25	30.43	100	28	A	V
	*	5300	116.32	-	-	105.96	31.4	9.39	30.43	100	28	P	V
	*	5300	107.46	-	-	97.1	31.4	9.39	30.43	100	28	A	V
		5367.12	52.12	-21.88	74	41.61	31.5	9.44	30.43	100	28	P	V
		5354.16	42.42	-11.58	54	32	31.42	9.43	30.43	100	28	A	V



802.11ac VHT20 CH 64 5320MHz	*	5320	110.41	-	-	100.04	31.4	9.4	30.43	389	307	P	H
	*	5320	101.18	-	-	90.81	31.4	9.4	30.43	389	307	A	H
		5394.96	49.8	-24.2	74	39.1	31.67	9.46	30.43	389	307	P	H
		5355.6	40.53	-13.47	54	30.1	31.43	9.43	30.43	389	307	A	H
													H
													H
	*	5320	117.26	-	-	106.89	31.4	9.4	30.43	100	28	P	V
	*	5320	107.54	-	-	97.17	31.4	9.4	30.43	100	28	A	V
		5351.52	52.51	-21.49	74	42.11	31.41	9.42	30.43	100	28	P	V
		5354.72	44.07	-9.93	54	33.64	31.43	9.43	30.43	100	28	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 802.11ac VHT20 (Harmonic @ 3m)

WIFI Ant. 0+1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT20 CH 52 5260MHz		10520	48.28	-19.92	68.2	55.83	39.88	13.69	61.12	100	0	P	H
		15780	47.47	-26.53	74	53.8	37.66	17.27	61.26	100	0	P	H
													H
													H
		10520	48.69	-19.51	68.2	56.24	39.88	13.69	61.12	100	0	P	V
		15780	47.44	-26.56	74	53.77	37.66	17.27	61.26	100	0	P	V
													V
													V
802.11ac VHT20 CH 60 5300MHz		10600	48.02	-25.98	74	55.73	39.8	13.71	61.22	100	0	P	H
		15900	46.23	-27.77	74	52.67	37.3	17.38	61.12	100	0	P	H
													H
													H
		10600	48.81	-25.19	74	56.52	39.8	13.71	61.22	100	0	P	V
		15900	46.36	-27.64	74	52.8	37.3	17.38	61.12	100	0	P	V
													V
													V
802.11ac VHT20 CH 64 5320MHz		10640	48.84	-25.16	74	56.51	39.88	13.72	61.27	100	0	P	H
		15960	45.55	-28.45	74	52.09	37.18	17.33	61.05	100	0	P	H
													H
													H
		10640	49.91	-24.09	74	57.58	39.88	13.72	61.27	100	0	P	V
		15960	45.27	-28.73	74	51.81	37.18	17.33	61.05	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 802.11ac VHT40 (Band Edge @ 3m)

WIFI Ant. 0+1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT40 CH 54 5270MHz		5133.28	50.74	-23.26	74	39.86	32.07	9.24	30.43	336	50	P	H
		5136	41.86	-12.14	54	30.98	32.07	9.24	30.43	336	50	A	H
	*	5270	110.58	-	-	100.19	31.46	9.36	30.43	336	50	P	H
	*	5270	102.78	-	-	92.39	31.46	9.36	30.43	336	50	A	H
		5364.24	52.76	-21.24	74	42.27	31.49	9.43	30.43	336	50	P	H
		5350.32	44.23	-9.77	54	33.84	31.4	9.42	30.43	336	50	A	H
		5138.04	52.7	-21.3	74	41.81	32.08	9.24	30.43	100	360	P	V
		5118.66	44.02	-9.98	54	33.19	32.04	9.22	30.43	100	360	A	V
	*	5270	116.12	-	-	105.73	31.46	9.36	30.43	100	360	P	V
	*	5270	108.31	-	-	97.92	31.46	9.36	30.43	100	360	A	V
		5352	59.26	-14.74	74	48.86	31.41	9.42	30.43	100	360	P	V
		5352.24	50.61	-3.39	54	40.21	31.41	9.42	30.43	100	360	A	V
802.11ac VHT40 CH 62 5310MHz		5076.16	49.61	-24.39	74	38.97	31.9	9.17	30.43	354	52	P	H
		5137.7	40.78	-13.22	54	29.89	32.08	9.24	30.43	354	52	A	H
	*	5310	107.89	-	-	97.53	31.4	9.39	30.43	354	52	P	H
	*	5310	100.23	-	-	89.87	31.4	9.39	30.43	354	52	A	H
		5351.04	55.09	-18.91	74	44.69	31.41	9.42	30.43	354	52	P	H
		5352.48	46.29	-7.71	54	35.89	31.41	9.42	30.43	354	52	A	H
		5034.34	49.89	-24.11	74	39.48	31.71	9.13	30.43	100	359	P	V
		5149.94	42.17	-11.83	54	31.25	32.1	9.25	30.43	100	359	A	V
	*	5310	115.04	-	-	104.68	31.4	9.39	30.43	100	359	P	V
	*	5310	106.74	-	-	96.38	31.4	9.39	30.43	100	359	A	V
		5361.36	59.28	-14.72	74	48.81	31.47	9.43	30.43	100	359	P	V
		5360.4	51.18	-2.82	54	40.72	31.46	9.43	30.43	100	359	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 VHT40 (Harmonic @ 3m)

WIFI Ant. 0+1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT40 CH 54 5270MHz		10540	48.12	-20.08	68.2	55.71	39.86	13.7	61.15	100	0	P	H
		15810	47.82	-26.18	74	54.09	37.66	17.3	61.23	100	0	P	H
													H
													H
		10540	48.48	-19.72	68.2	56.07	39.86	13.7	61.15	100	0	P	V
		15810	47.33	-26.67	74	53.6	37.66	17.3	61.23	100	0	P	V
													V
													V
802.11ac VHT40 CH 62 5310MHz		10620	48.24	-25.76	74	55.92	39.84	13.72	61.24	100	0	P	H
		15930	46.23	-27.77	74	52.71	37.24	17.36	61.08	100	0	P	H
													H
													H
		10620	48.49	-25.51	74	56.17	39.84	13.72	61.24	100	0	P	V
		15930	46.9	-27.1	74	53.38	37.24	17.36	61.08	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 802.11ac VHT80 (Band Edge @ 3m)**

WIFI Ant. 0+1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80 CH 58 5290MHz		5149.6	50.2	-23.8	74	39.28	32.1	9.25	30.43	355	53	P	H
		5149.94	41.27	-12.73	54	30.35	32.1	9.25	30.43	355	53	A	H
	*	5290	101.29	-	-	90.92	31.42	9.38	30.43	355	53	P	H
	*	5290	93.79	-	-	83.42	31.42	9.38	30.43	355	53	A	H
		5353.92	54.81	-19.19	74	44.39	31.42	9.43	30.43	355	53	P	H
		5357.04	45.66	-8.34	54	35.22	31.44	9.43	30.43	355	53	A	H
		5135.66	52.54	-21.46	74	41.66	32.07	9.24	30.43	100	359	P	V
		5149.94	43.62	-10.38	54	32.7	32.1	9.25	30.43	100	359	A	V
	*	5290	107.69	-	-	97.32	31.42	9.38	30.43	100	359	P	V
	*	5290	100.08	-	-	89.71	31.42	9.38	30.43	100	359	A	V
		5359.68	62.08	-11.92	74	51.62	31.46	9.43	30.43	100	359	P	V
		5361.6	53.41	-0.59	54	42.94	31.47	9.43	30.43	100	359	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

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

WIFI Ant. 0+1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80 CH 58 5290MHz		10580	47.87	-20.33	68.2	55.54	39.82	13.71	61.2	100	0	P	H
		15870	46.49	-27.51	74	52.88	37.42	17.35	61.16	100	0	P	H
													H
													H
		10580	47.15	-21.05	68.2	54.82	39.82	13.71	61.2	100	0	P	V
		15870	46.78	-27.22	74	53.17	37.42	17.35	61.16	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 - 5470~5725MHz

WIFI 802.11a (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
0+1+2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11a CH 100 5500MHz		5457.2	51.55	-22.45	74	40.4	32.01	9.57	30.43	352	68	P	H
		5464.56	50.52	-17.68	68.2	39.33	32.03	9.59	30.43	352	68	P	H
		5459.12	41.92	-12.08	54	30.75	32.02	9.58	30.43	352	68	A	H
	*	5500	109.47	-	-	98.14	32.1	9.66	30.43	352	68	P	H
	*	5500	101.26	-	-	89.93	32.1	9.66	30.43	352	68	A	H
													H
		5456.88	55.22	-18.78	74	44.07	32.01	9.57	30.43	200	181	P	V
		5467.6	56.16	-12.04	68.2	44.96	32.04	9.59	30.43	200	181	P	V
		5455.76	45.6	-8.4	54	34.45	32.01	9.57	30.43	200	181	A	V
	*	5500	117.02	-	-	105.69	32.1	9.66	30.43	200	181	P	V
	*	5500	108.66	-	-	97.33	32.1	9.66	30.43	200	181	A	V
													V
802.11a CH 116 5580MHz		5433.76	49.98	-24.02	74	38.98	31.9	9.53	30.43	357	67	P	H
		5462.32	51.44	-16.76	68.2	40.27	32.02	9.58	30.43	357	67	P	H
		5458.72	41.31	-12.69	54	30.15	32.02	9.57	30.43	357	67	A	H
	*	5580	109.2	-	-	97.93	31.94	9.81	30.48	357	67	P	H
	*	5580	100.93	-	-	89.66	31.94	9.81	30.48	357	67	A	H
		5748.935	50.65	-17.55	68.2	38.97	32.4	9.86	30.58	357	67	P	H
		5452.96	52.39	-21.61	74	41.25	32.01	9.56	30.43	201	162	P	V
		5460.64	51.57	-16.63	68.2	40.4	32.02	9.58	30.43	201	162	P	V
		5442.64	43.16	-10.84	54	32.09	31.96	9.54	30.43	201	162	A	V
	*	5580	115.94	-	-	104.67	31.94	9.81	30.48	201	162	P	V
	*	5580	107.46	-	-	96.19	31.94	9.81	30.48	201	162	A	V
		5725.31	51.78	-16.42	68.2	40.19	32.3	9.86	30.57	201	162	P	V



802.11a CH 140 5700MHz	*	5700	108.58	-	-	97.07	32.2	9.86	30.55	324	59	P	H
	*	5700	100.68	-	-	89.17	32.2	9.86	30.55	324	59	A	H
		5737.24	51.37	-16.83	68.2	39.74	32.35	9.86	30.58	324	59	P	H
													H
													H
													H
	*	5700	116.69	-	-	105.18	32.2	9.86	30.55	196	164	P	V
	*	5700	108.82	-	-	97.31	32.2	9.86	30.55	196	164	A	V
		5727	56.47	-11.73	68.2	44.87	32.31	9.86	30.57	196	164	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. 0+1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 100 5500MHz		11000	49.28	-24.72	74	56.52	40.6	13.86	61.7	100	0	P	H
		16500	46.11	-22.09	68.2	48.96	39.3	17.55	59.7	100	0	P	H
													H
													H
		11000	62.95	-11.05	74	70.19	40.6	13.86	61.7	400	229	P	V
		11000	50.2	-3.8	54	57.44	40.6	13.86	61.7	400	229	A	V
		16500	46.74	-21.46	68.2	49.59	39.3	17.55	59.7	100	0	P	V
													V
802.11a CH 116 5580MHz		11160	48.57	-25.43	74	56.21	40.08	14.14	61.86	100	0	P	H
		16740	47.52	-20.68	68.2	49.37	39.88	17.92	59.65	100	0	P	H
													H
													H
		11160	49.91	-24.09	74	57.55	40.08	14.14	61.86	100	0	P	V
		16740	47.55	-20.65	68.2	49.4	39.88	17.92	59.65	100	0	P	V
													V
													V
802.11a CH 140 5700MHz		11400	48.21	-25.79	74	55.58	40.2	14.53	62.1	100	0	P	H
		17100	48	-20.2	68.2	49.24	39.9	18.24	59.38	100	0	P	H
													H
													H
		11400	48.37	-25.63	74	55.74	40.2	14.53	62.1	100	0	P	V
		17100	47.97	-20.23	68.2	49.21	39.9	18.24	59.38	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 802.11ac VHT20 (Band Edge @ 3m)

WIFI Ant. 0+1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT20 CH 100 5500MHz		5455.12	50.6	-23.4	74	39.45	32.01	9.57	30.43	352	67	P	H
		5467.92	52.14	-16.06	68.2	40.94	32.04	9.59	30.43	352	67	P	H
		5456.08	41.13	-12.87	54	29.98	32.01	9.57	30.43	352	67	A	H
	*	5500	109.9	-	-	98.57	32.1	9.66	30.43	352	67	P	H
	*	5500	100.87	-	-	89.54	32.1	9.66	30.43	352	67	A	H
													H
		5431.76	52.52	-21.48	74	41.54	31.89	9.52	30.43	204	182	P	V
		5470	54.26	-13.94	68.2	43.05	32.04	9.6	30.43	204	182	P	V
		5459.92	44.22	-9.78	54	33.05	32.02	9.58	30.43	204	182	A	V
	*	5500	117.1	-	-	105.77	32.1	9.66	30.43	204	182	P	V
	*	5500	107.64	-	-	96.31	32.1	9.66	30.43	204	182	A	V
													V
802.11ac VHT20 CH 116 5580MHz		5405.2	51.24	-22.76	74	40.47	31.73	9.47	30.43	307	52	P	H
		5461.36	49.35	-18.85	68.2	38.18	32.02	9.58	30.43	307	52	P	H
		5439.76	41.46	-12.54	54	30.41	31.94	9.54	30.43	307	52	A	H
	*	5580	110.93	-	-	99.66	31.94	9.81	30.48	307	52	P	H
	*	5580	101.39	-	-	90.12	31.94	9.81	30.48	307	52	A	H
		5752.085	50.69	-17.51	68.2	39.01	32.4	9.87	30.59	307	52	P	H
		5444.32	51.77	-22.23	74	40.68	31.97	9.55	30.43	204	183	P	V
		5462.8	51.33	-16.87	68.2	40.15	32.03	9.58	30.43	204	183	P	V
		5440	43.34	-10.66	54	32.29	31.94	9.54	30.43	204	183	A	V
	*	5580	116.56	-	-	105.29	31.94	9.81	30.48	204	183	P	V
	*	5580	107.43	-	-	96.16	31.94	9.81	30.48	204	183	A	V
		5725	52.29	-15.91	68.2	40.7	32.3	9.86	30.57	204	183	P	V



802.11ac VHT20 CH 140 5700MHz	*	5700	110.21	-	-	98.7	32.2	9.86	30.55	310	50	P	H
	*	5700	101.49	-	-	89.98	32.2	9.86	30.55	310	50	A	H
		5732.36	51.21	-16.99	68.2	39.59	32.33	9.86	30.57	310	50	P	H
													H
													H
													H
	*	5700	118.49	-	-	106.98	32.2	9.86	30.55	216	179	P	V
	*	5700	109.09	-	-	97.58	32.2	9.86	30.55	216	179	A	V
		5725.16	55.74	-12.46	68.2	44.15	32.3	9.86	30.57	216	179	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 802.11ac VHT20 (Harmonic @ 3m)

WIFI Ant. 0+1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT20 CH 100 5500MHz		11000	49.91	-24.09	74	57.15	40.6	13.86	61.7	100	0	P	H
		16500	47.56	-20.64	68.2	50.41	39.3	17.55	59.7	100	0	P	H
													H
													H
		11000	62.75	-11.25	74	69.99	40.6	13.86	61.7	400	230	P	V
		11000	49.85	-4.15	54	57.09	40.6	13.86	61.7	400	230	A	V
		16500	47.35	-20.85	68.2	50.2	39.3	17.55	59.7	100	0	P	V
													V
802.11ac VHT20 CH 116 5580MHz		11160	48.31	-25.69	74	55.95	40.08	14.14	61.86	100	0	P	H
		16740	47.76	-20.44	68.2	49.61	39.88	17.92	59.65	100	0	P	H
													H
													H
		11160	49.52	-24.48	74	57.16	40.08	14.14	61.86	100	0	P	V
		16740	47.35	-20.85	68.2	49.2	39.88	17.92	59.65	100	0	P	V
													V
													V
802.11ac VHT20 CH 140 5700MHz		11400	47.71	-26.29	74	55.08	40.2	14.53	62.1	100	0	P	H
		17100	47.97	-20.23	68.2	49.21	39.9	18.24	59.38	100	0	P	H
													H
													H
		11400	48.48	-25.52	74	55.85	40.2	14.53	62.1	100	0	P	V
		17100	47.78	-20.42	68.2	49.02	39.9	18.24	59.38	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 802.11ac VHT40 (Band Edge @ 3m)

WIFI Ant. 0+1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT40 CH 102 5510MHz		5459.92	55.38	-18.62	74	44.21	32.02	9.58	30.43	351	65	P	H
		5465.2	59.65	-8.55	68.2	48.46	32.03	9.59	30.43	351	65	P	H
		5459.92	45.12	-8.88	54	33.95	32.02	9.58	30.43	351	65	A	H
	*	5510	108.22	-	-	96.91	32.08	9.67	30.44	351	65	P	H
	*	5510	100.26	-	-	88.95	32.08	9.67	30.44	351	65	A	H
		5731.295	50.17	-18.03	68.2	38.55	32.33	9.86	30.57	351	65	P	H
		5455.6	62.9	-11.1	74	51.75	32.01	9.57	30.43	216	182	P	V
		5470	67.03	-1.17	68.2	55.82	32.04	9.6	30.43	216	182	P	V
		5453.44	51.32	-2.68	54	40.18	32.01	9.56	30.43	216	182	A	V
	*	5510	115.13	-	-	103.82	32.08	9.67	30.44	216	182	P	V
	*	5510	110.13	-	-	98.82	32.08	9.67	30.44	216	182	A	V
		5750.51	51.79	-16.41	68.2	40.11	32.4	9.87	30.59	216	182	P	V
802.11ac VHT40 CH 110 5550MHz		5458.72	55.68	-18.32	74	44.52	32.02	9.57	30.43	261	53	P	H
		5467.6	58.16	-10.04	68.2	46.96	32.04	9.59	30.43	261	53	P	H
		5454.16	44.61	-9.39	54	33.46	32.01	9.57	30.43	261	53	A	H
	*	5550	110.42	-	-	99.13	32	9.75	30.46	261	53	P	H
	*	5550	101.75	-	-	90.46	32	9.75	30.46	261	53	A	H
		5747.045	50.01	-18.19	68.2	38.34	32.39	9.86	30.58	261	53	P	H
		5459.44	60.86	-13.14	74	49.69	32.02	9.58	30.43	182	161	P	V
		5469.52	62.93	-5.27	68.2	51.72	32.04	9.6	30.43	182	161	P	V
		5459.92	50.19	-3.81	54	39.02	32.02	9.58	30.43	182	161	A	V
	*	5550	115.97	-	-	104.68	32	9.75	30.46	182	161	P	V
	*	5550	107.71	-	-	96.42	32	9.75	30.46	182	161	A	V
		5725.31	50.86	-17.34	68.2	39.27	32.3	9.86	30.57	182	161	P	V



802.11ac VHT40 CH 134 5670MHz		5447.65	48.96	-25.04	74	37.85	31.99	9.55	30.43	361	60	P	H
		5467.95	49.26	-18.94	68.2	38.06	32.04	9.59	30.43	361	60	P	H
		5455	40.48	-13.52	54	29.33	32.01	9.57	30.43	361	60	A	H
	*	5670	109.25	-	-	97.91	32.02	9.86	30.54	361	60	P	H
	*	5670	101.28	-	-	89.94	32.02	9.86	30.54	361	60	A	H
		5725	62.62	-5.58	68.2	51.03	32.3	9.86	30.57	361	60	P	H
		5438.2	50.15	-23.85	74	39.12	31.93	9.53	30.43	200	190	P	V
		5464.45	50.12	-18.08	68.2	38.93	32.03	9.59	30.43	200	190	P	V
		5457.45	41.48	-12.52	54	30.33	32.01	9.57	30.43	200	190	A	V
	*	5670	117.04	-	-	105.7	32.02	9.86	30.54	200	190	P	V
	*	5670	108.7	-	-	97.36	32.02	9.86	30.54	200	190	A	V
		5737.525	65	-3.2	68.2	53.37	32.35	9.86	30.58	200	190	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 VHT40 (Harmonic @ 3m)

WIFI Ant. 0+1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT40 CH 102 5510MHz		11020	48.79	-25.21	74	56.1	40.52	13.89	61.72	100	0	P	H
		16530	45.82	-22.38	68.2	48.55	39.36	17.6	59.69	100	0	P	H
													H
													H
		11020	62.13	-11.87	74	69.44	40.52	13.89	61.72	400	233	P	V
		11020	49.84	-4.16	54	57.15	40.52	13.89	61.72	400	233	A	V
		16530	46.26	-21.94	68.2	48.99	39.36	17.6	59.69	100	0	P	V
													V
802.11ac VHT40 CH 110 5550MHz		11100	48.27	-25.73	74	55.89	40.2	13.98	61.8	100	0	P	H
		16650	47.33	-20.87	68.2	49.63	39.55	17.82	59.67	100	0	P	H
													H
													H
		11100	49.34	-24.66	74	56.96	40.2	13.98	61.8	100	0	P	V
		16650	46.59	-21.61	68.2	48.89	39.55	17.82	59.67	100	0	P	V
													V
													V
802.11ac VHT40 CH 134 5670MHz		11340	48.41	-25.59	74	55.84	40.08	14.53	62.04	100	0	P	H
		17010	46.86	-21.34	68.2	48.36	39.99	18.09	59.58	100	0	P	H
													H
													H
		11340	47.77	-26.23	74	55.2	40.08	14.53	62.04	100	0	P	V
		17010	47.01	-21.19	68.2	48.51	39.99	18.09	59.58	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 802.11ac VHT80 (Band Edge @ 3m)

WIFI Ant. 0+1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80 CH 106 5530MHz		5446.72	54.59	-19.41	74	43.49	31.98	9.55	30.43	361	62	P	H
		5463.76	56.13	-12.07	68.2	44.95	32.03	9.58	30.43	361	62	P	H
		5445.28	45.89	-8.11	54	34.8	31.97	9.55	30.43	361	62	A	H
	*	5530	103.58	-	-	92.28	32.04	9.71	30.45	361	62	P	H
	*	5530	94.94	-	-	83.64	32.04	9.71	30.45	361	62	A	H
		5764.685	49.71	-18.49	68.2	38.03	32.4	9.87	30.59	361	62	P	H
		5453.2	63.18	-10.82	74	52.04	32.01	9.56	30.43	200	166	P	V
		5462.56	63.23	-4.97	68.2	52.05	32.03	9.58	30.43	200	166	P	V
		5452.48	52.25	-1.75	54	41.12	32	9.56	30.43	200	166	A	V
	*	5530	108.77	-	-	97.47	32.04	9.71	30.45	200	166	P	V
	*	5530	101.06	-	-	89.76	32.04	9.71	30.45	200	166	A	V
		5733.5	51.63	-16.57	68.2	40.01	32.33	9.86	30.57	200	166	P	V
802.11ac VHT80 CH 122 5610MHz		5448.16	50.84	-23.16	74	39.73	31.99	9.55	30.43	332	57	P	H
		5463.28	55.29	-12.91	68.2	44.11	32.03	9.58	30.43	332	57	P	H
		5459.68	42.73	-11.27	54	31.56	32.02	9.58	30.43	332	57	A	H
	*	5610	104.42	-	-	93.17	31.9	9.85	30.5	332	57	P	H
	*	5610	96.85	-	-	85.6	31.9	9.85	30.5	332	57	A	H
		5726.885	56.63	-11.57	68.2	45.03	32.31	9.86	30.57	332	57	P	H
		5459.68	56.98	-17.02	74	45.81	32.02	9.58	30.43	200	195	P	V
		5468.32	57.96	-10.24	68.2	46.76	32.04	9.59	30.43	200	195	P	V
		5458.96	47.51	-6.49	54	36.35	32.02	9.57	30.43	200	195	A	V
	*	5610	112.7	-	-	101.45	31.9	9.85	30.5	200	195	P	V
	*	5610	104	-	-	92.75	31.9	9.85	30.5	200	195	A	V
		5741.375	63.44	-4.76	68.2	51.79	32.37	9.86	30.58	200	195	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 5470~5725MHz

WIFI 802.11ac VHT80 (Harmonic @ 3m)

WIFI Ant. 0+1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80 CH 106 5530MHz		11060	49.6	-24.4	74	57.06	40.36	13.94	61.76	100	0	P	H
		16590	47.43	-20.77	68.2	49.92	39.48	17.71	59.68	100	0	P	H
													H
													H
		11060	49.24	-24.76	74	56.7	40.36	13.94	61.76	100	0	P	V
		16590	46.8	-21.4	68.2	49.29	39.48	17.71	59.68	100	0	P	V
													V
													V
802.11ac VHT80 CH 122 5610MHz		11220	49.69	-24.31	74	57.29	40	14.32	61.92	100	0	P	H
		16830	47.7	-20.5	68.2	49.1	40.27	17.96	59.63	100	0	P	H
													H
													H
		11220	47.91	-26.09	74	55.51	40	14.32	61.92	100	0	P	V
		16830	47.25	-20.95	68.2	48.65	40.27	17.96	59.63	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 802.11a (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.	
0+1+2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11a CH 144 5720MHz		5456.86	50.28	-23.72	74	39.13	32.01	9.57	30.43	340	59	P	H
		5465.44	49.69	-18.51	68.2	38.5	32.03	9.59	30.43	340	59	P	H
		5452.57	41.06	-12.94	54	29.92	32.01	9.56	30.43	340	59	A	H
	*	5720	107.93	-	-	96.37	32.26	9.86	30.56	340	59	P	H
	*	5720	101.36	-	-	89.8	32.26	9.86	30.56	340	59	A	H
		5909.5	51.79	-16.41	68.2	39.92	32.54	10.01	30.68	340	59	P	H
		5458.42	50.64	-23.36	74	39.48	32.02	9.57	30.43	202	168	P	V
		5462.32	50.63	-17.57	68.2	39.46	32.02	9.58	30.43	202	168	P	V
		5456.86	41.72	-12.28	54	30.57	32.01	9.57	30.43	202	168	A	V
	*	5720	118.21	-	-	106.64	32.28	9.86	30.57	202	168	P	V
	*	5720	109.64	-	-	98.07	32.28	9.86	30.57	202	168	A	V
		5861.75	52.73	-15.47	68.2	41.01	32.42	9.95	30.65	202	168	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



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

WIFI Ant. 0+1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 144 5720MHz		11440	47.97	-26.03	74	55.36	40.24	14.51	62.14	100	0	P	H
		17160	48.7	-19.5	68.2	49.57	40.02	18.36	59.25	100	0	P	H
													H
													H
		11440	47.56	-26.44	74	54.95	40.24	14.51	62.14	100	0	P	V
		17160	48.38	-19.82	68.2	49.25	40.02	18.36	59.25	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 - Straddle Channel
WIFI 802.11ac VHT20 (Band Edge @ 3m)

WIFI Ant. 0+1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT20 CH 144 5720MHz		5354.29	49.66	-24.34	74	39.23	31.43	9.43	30.43	325	50	P	H
		5461.93	49.05	-19.15	68.2	37.88	32.02	9.58	30.43	325	50	P	H
		5443.21	40.5	-13.5	54	29.43	31.96	9.54	30.43	325	50	A	H
	*	5720	111.16	-	-	99.59	32.28	9.86	30.57	325	50	P	H
	*	5720	101.59	-	-	90.02	32.28	9.86	30.57	325	50	A	H
		5860	51.5	-16.7	68.2	39.79	32.42	9.94	30.65	325	50	P	H
		5440.09	51.19	-22.81	74	40.14	31.94	9.54	30.43	208	174	P	V
		5467.39	50.22	-17.98	68.2	39.03	32.03	9.59	30.43	208	174	P	V
		5440.09	41.5	-12.5	54	30.45	31.94	9.54	30.43	208	174	A	V
	*	5720	117.79	-	-	106.22	32.28	9.86	30.57	208	174	P	V
	*	5720	108.93	-	-	97.36	32.28	9.86	30.57	208	174	A	V
		5940	52.72	-15.48	68.2	40.71	32.66	10.05	30.7	208	174	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 - Straddle Channel
WIFI 802.11ac VHT20 (Harmonic @ 3m)

WIFI Ant. 0+1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT20 CH 144 5720MHz		11440	47.82	-26.18	74	55.21	40.24	14.51	62.14	100	0	P	H
		17160	48.26	-19.94	68.2	49.13	40.02	18.36	59.25	100	0	P	H
													H
													H
		11440	48.38	-25.62	74	55.77	40.24	14.51	62.14	100	0	P	V
		17160	48.61	-19.59	68.2	49.48	40.02	18.36	59.25	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 - Straddle Channel
WIFI 802.11ac VHT40 (Band Edge @ 3m)

WIFI Ant. 0+1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT40 CH 142 5710MHz		5459.98	49.37	-24.63	74	38.2	32.02	9.58	30.43	353	59	P	H
		5468.17	49.67	-18.53	68.2	38.47	32.04	9.59	30.43	353	59	P	H
		5424.1	40.67	-13.33	54	29.75	31.84	9.51	30.43	353	59	A	H
	*	5710	110.6	-	-	99.06	32.24	9.86	30.56	353	59	P	H
	*	5710	102.05	-	-	90.51	32.24	9.86	30.56	353	59	A	H
		5915.75	50.79	-17.41	68.2	38.91	32.56	10.01	30.69	353	59	P	H
		5452.18	49.69	-24.31	74	38.56	32	9.56	30.43	200	195	P	V
		5467.39	49.41	-18.79	68.2	38.22	32.03	9.59	30.43	200	195	P	V
		5458.42	40.97	-13.03	54	29.81	32.02	9.57	30.43	200	195	A	V
	*	5710	117.95	-	-	106.41	32.24	9.86	30.56	200	195	P	V
	*	5710	109.77	-	-	98.23	32.24	9.86	30.56	200	195	A	V
		5866.75	53.07	-15.13	68.2	41.35	32.43	9.95	30.66	200	195	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 - Straddle Channel
WIFI 802.11ac VHT40 (Harmonic @ 3m)

WIFI Ant. 0+1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT40 CH 142 5710MHz		11420	47.82	-26.18	74	55.2	40.22	14.52	62.12	100	0	P	H
		17130	47.62	-20.58	68.2	48.67	39.96	18.3	59.31	100	0	P	H
													H
													H
		11420	48.57	-25.43	74	55.95	40.22	14.52	62.12	100	0	P	V
		17130	47.55	-20.65	68.2	48.6	39.96	18.3	59.31	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



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

WIFI Ant. 0+1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80 CH 138 5690MHz		5442.43	53.03	-20.97	74	41.97	31.95	9.54	30.43	357	59	P	H
		5465.44	55.26	-12.94	68.2	44.07	32.03	9.59	30.43	357	59	P	H
		5459.59	43.87	-10.13	54	32.7	32.02	9.58	30.43	357	59	A	H
	*	5690	105.68	-	-	94.23	32.14	9.86	30.55	357	59	P	H
	*	5690	98.23	-	-	86.78	32.14	9.86	30.55	357	59	A	H
		5867.5	59	-9.2	68.2	47.27	32.44	9.95	30.66	357	59	P	H
		5458.81	55.77	-18.23	74	44.61	32.02	9.57	30.43	200	193	P	V
		5461.15	58.63	-9.57	68.2	47.46	32.02	9.58	30.43	200	193	P	V
		5459.98	47.37	-6.63	54	36.2	32.02	9.58	30.43	200	193	A	V
	*	5690	114.41	-	-	102.96	32.14	9.86	30.55	200	193	P	V
	*	5690	106.2	-	-	94.75	32.14	9.86	30.55	200	193	A	V
		5861.2	66.2	-2	68.2	54.48	32.42	9.95	30.65	200	193	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



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

WIFI Ant. 0+1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80 CH 138 5690MHz		11380	47.53	-26.47	74	54.92	40.16	14.53	62.08	100	0	P	H
		17070	47.67	-20.53	68.2	49	39.93	18.19	59.45	100	0	P	H
													H
													H
		11380	47.96	-26.04	74	55.35	40.16	14.53	62.08	100	0	P	V
		17070	47.8	-20.4	68.2	49.13	39.93	18.19	59.45	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Emission below 1GHz

WIFI 802.11n 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.	
0+1+2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11n VHT80 LF		59.1	26.08	-13.92	40	45.71	11.91	1.04	32.58	-	-	P	H
		208.48	27.22	-16.28	43.5	42.54	15.2	1.97	32.49	-	-	P	H
		322.94	37.99	-8.01	46	48.62	19.56	2.35	32.54	100	0	P	H
		378.23	35.57	-10.43	46	44.55	21.06	2.51	32.55	-	-	P	H
		499.48	29.84	-16.16	46	35.56	23.99	2.86	32.57	-	-	P	H
		874.87	36.66	-9.34	46	35.55	29	3.9	31.79	-	-	P	H
													H
													H
													H
													H
													H
													H
		33.88	32.37	-7.63	40	40.98	23.25	0.75	32.61	100	0	P	V
		210.42	28.74	-14.76	43.5	44.09	15.17	1.98	32.5	-	-	P	V
		327.79	32.14	-13.86	46	42.62	19.71	2.35	32.54	-	-	P	V
		377.26	32.96	-13.04	46	41.95	21.05	2.51	32.55	-	-	P	V
		450.01	29.72	-16.28	46	36.47	23.1	2.71	32.56	-	-	P	V
		874.87	34.24	-11.76	46	33.13	29	3.9	31.79	-	-	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	P eak or A verage
H/V	H orizontal or V ertical



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

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
0+1+2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11b		2390	55.45	-18.55	74	54.51	32.22	4.58	35.86	103	308	P	H
CH 01													
2412MHz		2390	43.54	-10.46	54	42.6	32.22	4.58	35.86	103	308	A	H

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

For Peak Limit @ 2390MHz:

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

For Average Limit @ 2390MHz:

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

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



Appendix D. Radiated Spurious Emission

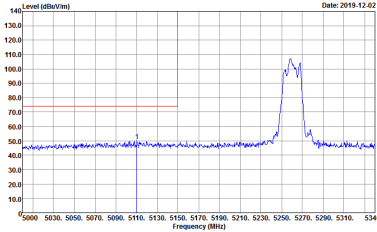
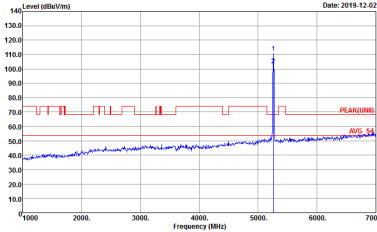
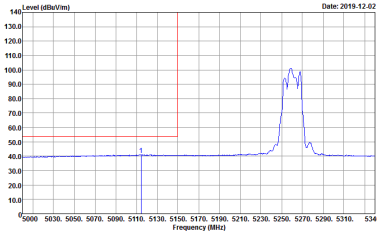
Test Engineer :	Leo Li , Mancy Chou , Bigshow Wang	Temperature :	24.2~25.1°C
		Relative Humidity :	55.0~63.0%

Note symbol

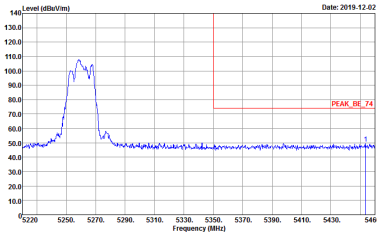
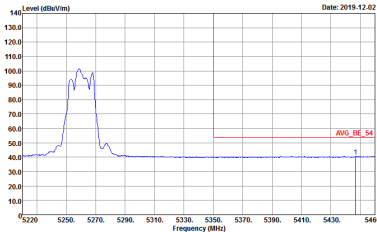
-L	Low channel location
-R	High channel location



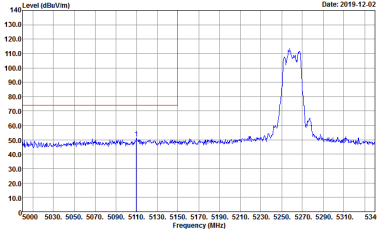
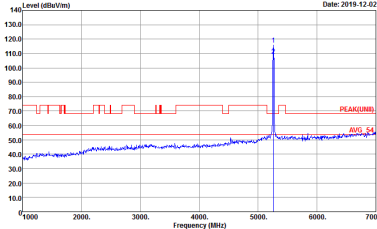
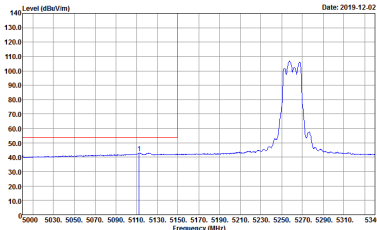
Band 2 - 5250~5350MHz
WIFI 802.11a (Band Edge @ 3m)

WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH52 5260MHz - L	
0+1+2	Horizontal	Fundamental
Peak	 Site : 03CH15-HY Condition : PEAK_BE_74 3m HORN_91200_2114 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Project : 992436-02	 Site : 03CH15-HY Condition : PEAK(UNIT) 3m HORN_91200_2114 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Project : 992436-02
Avg.	 Site : 03CH15-HY Condition : AVG_BE_54 3m HORN_91200_2114 HORIZONTAL Detector : RBW:1000.000KHz VBW:1000KHz SWT:Auto Project : Peak Project : 992436-02	Left blank

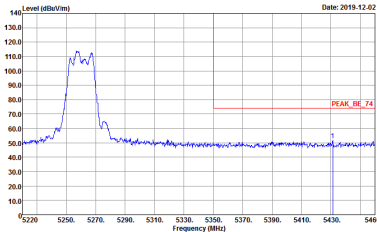
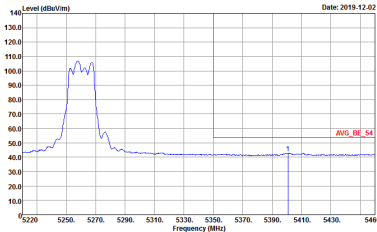


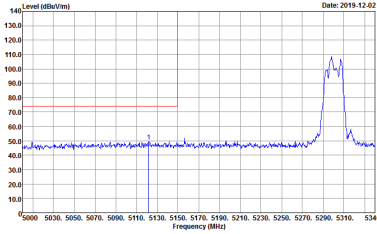
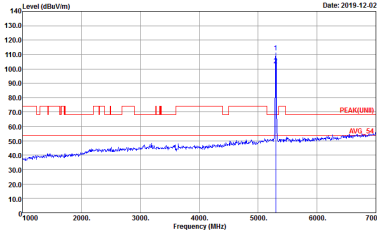
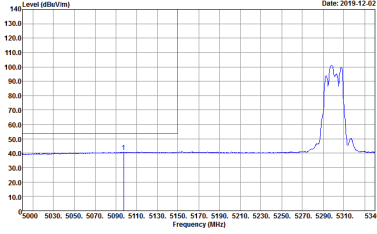
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH52 5260MHz - R	
0+1+2	Horizontal	Fundamental
Peak	 Site : 03CH15-HY Condition : PEAK_BE_74 3m HORN_91200_2114 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 992436-02	Left blank
Avg.	 Site : 03CH15-HY Condition : AVG_BE_54 3m HORN_91200_2114 HORIZONTAL RBW:1000.000KHz VBW:1.000KHz SWT:Auto Detector : Peak Project : 992436-02	Left blank

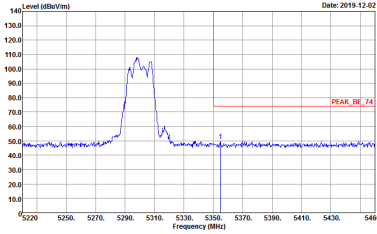
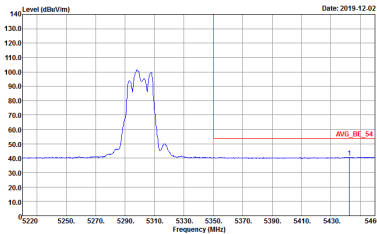


WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH52 5260MHz - L	
0+1+2	Vertical	Fundamental
Peak	 Site : 03CH15-HY Condition : PEAK_BE_74 3m HORN_91200_2114 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 992436-02	 Site : 03CH15-HY Condition : PEAK(UNIT) 3m HORN_91200_2114 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 992436-02
Avg.	 Site : 03CH15-HY Condition : AVG_BE_54 3m HORN_91200_2114 VERTICAL RBW:1000.000KHz VBW:1.000KHz SWT:Auto Detector : Peak Project : 992436-02	Left blank

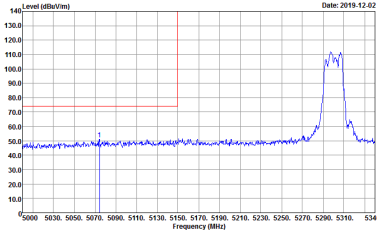
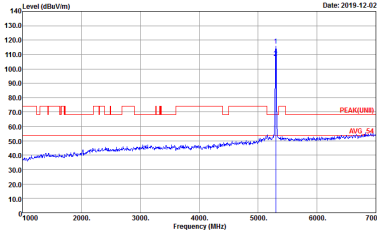
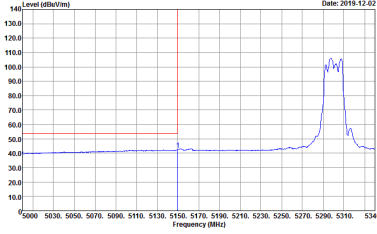


WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH52 5260MHz - R	
0+1+2	Vertical	Fundamental
Peak	 Site : 03CH15-HY Condition : PEAK_BE_74 3m HORN_91200_2114 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 992436-02	Left blank
Avg.	 Site : 03CH15-HY Condition : AVG_BE_54 3m HORN_91200_2114 VERTICAL RBW:1000.000KHz VBW:1.000KHz SWT:Auto Detector : Peak Project : 992436-02	Left blank

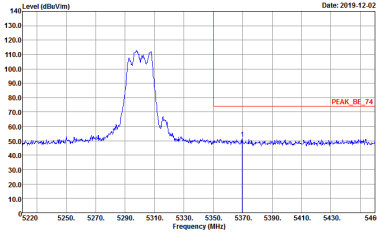
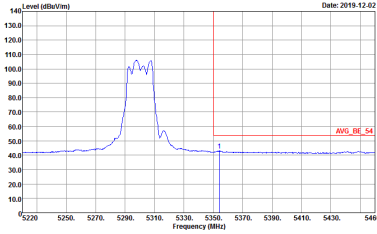
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH60 5300MHz - L	
0+1+2	Horizontal	Fundamental
Peak	 Site : 03CH15-HY Condition : PEAK_BE_74 3m HORN_91200_2114 HORIZONTAL Detector : Peak Project : 992436-02	 Site : 03CH15-HY Condition : PEAK(UNII) 3m HORN_91200_2114 HORIZONTAL Detector : Peak Project : 992436-02
Avg.	 Site : 03CH15-HY Condition : AVG_BE_54 3m HORN_91200_2114 HORIZONTAL Detector : Peak Project : 992436-02	Left blank

WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH60 5300MHz - R	
0+1+2	Horizontal	Fundamental
Peak	 Site : 03CH15-HV Condition : PEAK_BE_74 3m HORN_91200_2114 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 992436-02	Left blank
Avg.	 Site : 03CH15-HV Condition : AVG_BE_54 3m HORN_91200_2114 HORIZONTAL RBW:1000.000KHz VBW:1000.000KHz SWT:Auto Detector : Peak Project : 992436-02	Left blank

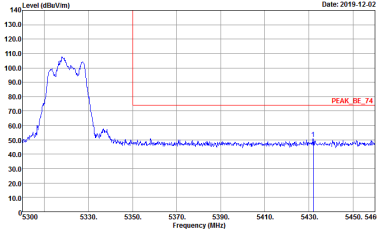
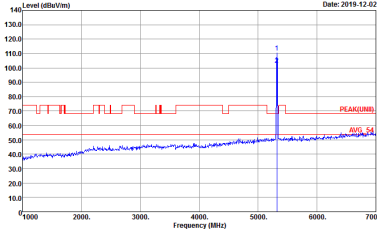
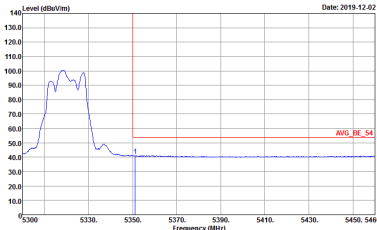


WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH60 5300MHz - L	
0+1+2	Vertical	Fundamental
Peak	 Site : 03CH15-HY Condition : PEAK_BE_74 3m HORN_9120D_2114 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 992436-02	 Site : 03CH15-HY Condition : PEAK(UNII) 3m HORN_9120D_2114 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 992436-02
Avg.	 Site : 03CH15-HY Condition : AVG_BE_54 3m HORN_9120D_2114 VERTICAL RBW:1000.000KHz VBW:1.000KHz SWT:Auto Detector : Peak Project : 992436-02	Left blank

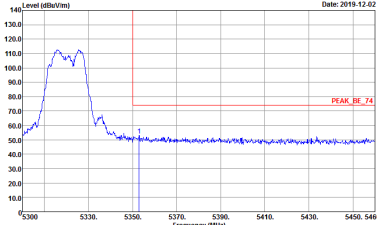
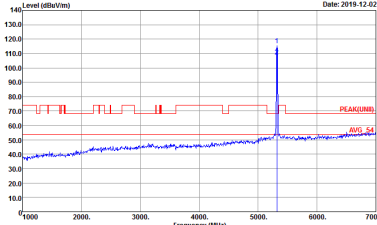
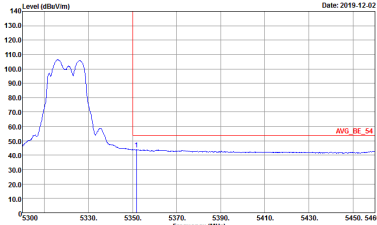


WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH60 5300MHz - R	
0+1+2	Vertical	Fundamental
Peak	 Site : 03CH15-HY Condition : PEAK_BE_74 3m HORN_91200_2114 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 992436-02	Left blank
Avg.	 Site : 03CH15-HY Condition : AVG_BE_54 3m HORN_91200_2114 VERTICAL RBW:1000.000KHz VBW:1000.000KHz SWT:Auto Detector : Peak Project : 992436-02	Left blank

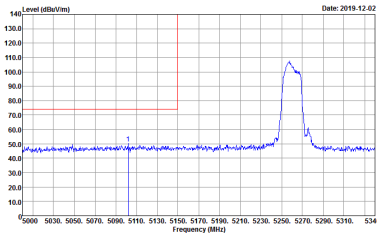
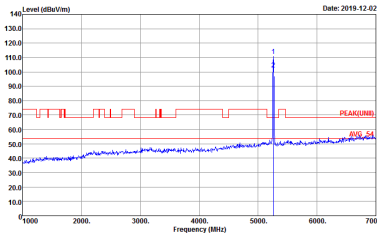
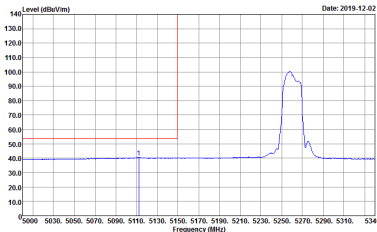


WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH64 5320MHz	
0+1+2	Horizontal	Fundamental
Peak	 Site : 03CH15-HY Condition : PEAK_BE_74 3m HORN_91200_2114 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 992436-02	 Site : 03CH15-HY Condition : PEAK(UNIT) 3m HORN_91200_2114 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 992436-02
Avg.	 Site : 03CH15-HY Condition : AVG_BE_54 3m HORN_91200_2114 HORIZONTAL RBW:1000.000KHz VBW:1.000KHz SWT:Auto Detector : Peak Project : 992436-02	Left blank

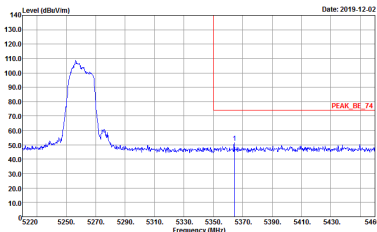
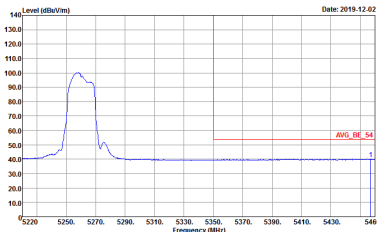


WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH64 5320MHz	
0+1+2	Vertical	Fundamental
Peak	 Site : 03CH15-HY Condition : PEAK_BE_74 3m HORN_91200_2114 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 992436-02	 Site : 03CH15-HY Condition : PEAK(UNIT) 3m HORN_91200_2114 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 992436-02
Avg.	 Site : 03CH15-HY Condition : AVG_BE_54 3m HORN_91200_2114 VERTICAL RBW:1000.000KHz VBW:1.000KHz SWT:Auto Detector : Peak Project : 992436-02	Left blank

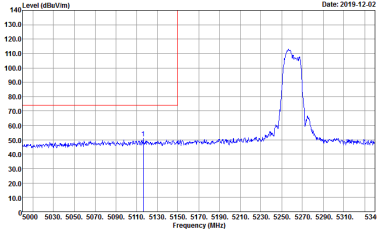
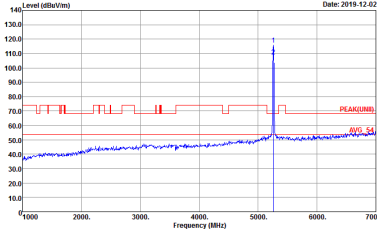
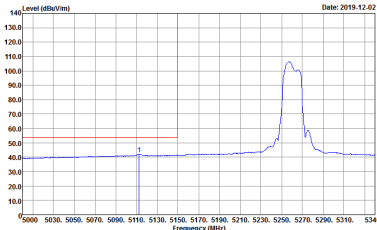
Band 2 5250~5350MHz
WIFI 802.11ac VHT20 (Band Edge @ 3m)

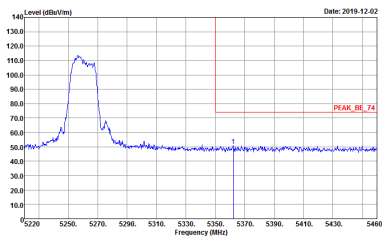
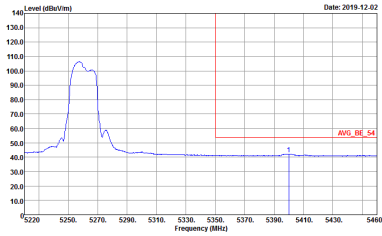
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH52 5260MHz - L	
0+1+2	Horizontal	Fundamental
Peak	 Site : 03CH15-HY Condition : PEAK_BE_74 3m HORN_91200_2114 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 992436-02	 Site : 03CH15-HY Condition : PEAK(LINE) 3m HORN_91200_2114 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 992436-02
Avg.	 Site : 03CH15-HY Condition : AVG_BE_54 3m HORN_91200_2114 HORIZONTAL RBW:1000.000KHz VBW:0.300KHz SWT:Auto Detector : Peak Project : 992436-02	Left blank



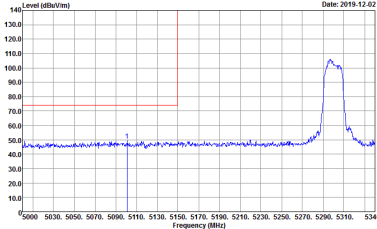
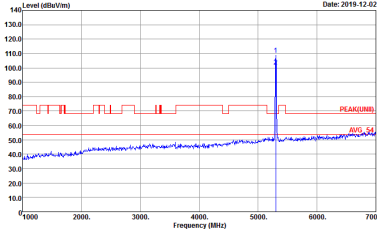
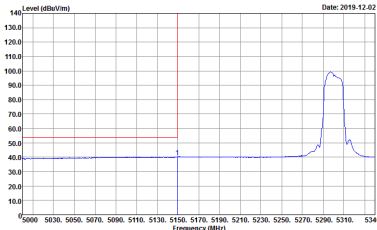
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH52 5260MHz - R	
0+1+2	Horizontal	Fundamental
Peak	 Site : 03CH15-HY Condition : PEAK_BE_74 3m HORN_91200_2114 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 992436-02	Left blank
Avg.	 Site : 03CH15-HY Condition : AVG_BE_54 3m HORN_91200_2114 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 992436-02	Left blank



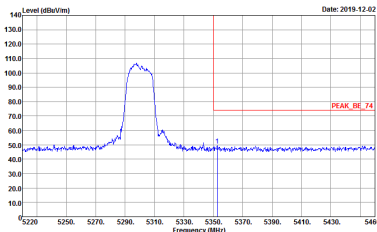
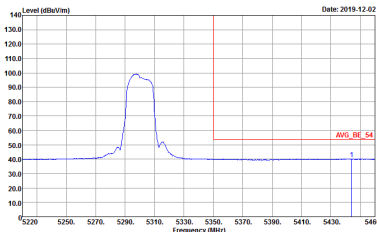
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH52 5260MHz - L	
0+1+2	Vertical	Fundamental
Peak	 Site : 03CH15-HY Condition : PEAK_BE_74 3m HORN_91200_2114 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 992436-02	 Site : 03CH15-HY Condition : PEAK(UNIT) 3m HORN_91200_2114 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 992436-02
Avg.	 Site : 03CH15-HY Condition : AVG_BE_54 3m HORN_91200_2114 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 992436-02	Left blank

WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH52 5260MHz - R	
0+1+2	Vertical	Fundamental
Peak	 Site : 03CH15-HY Condition : PEAK_BE_74 3m HORN_91200_2114 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 992436-02	Left blank
Avg.	 Site : 03CH15-HY Condition : AVG_BE_54 3m HORN_91200_2114 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 992436-02	Left blank

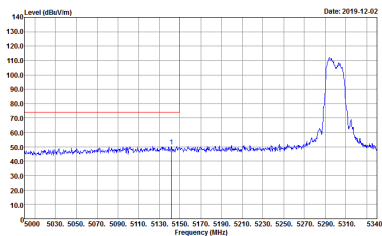
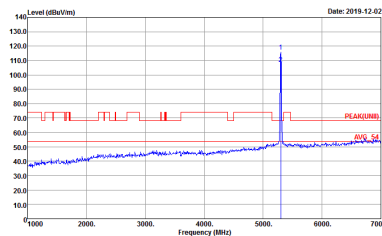
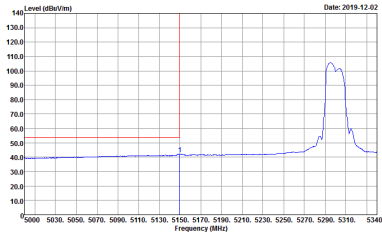


WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH60 5300MHz - L	
0+1+2	Horizontal	Fundamental
Peak	 Site : 03CH15-HY Condition : PEAK_BE_74 3m HORN_91200_2114 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 992436-02	 Site : 03CH15-HY Condition : PEAK(UNIT) 3m HORN_91200_2114 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 992436-02
Avg.	 Site : 03CH15-HY Condition : AVG_BE_54 3m HORN_91200_2114 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 992436-02	Left blank

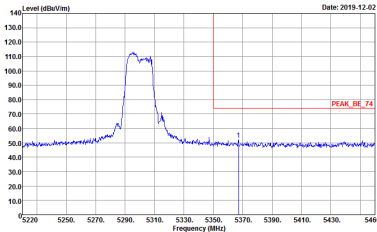
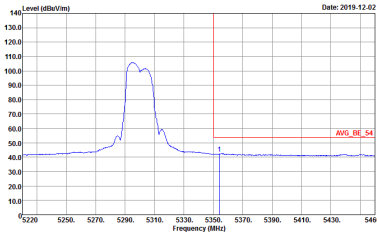


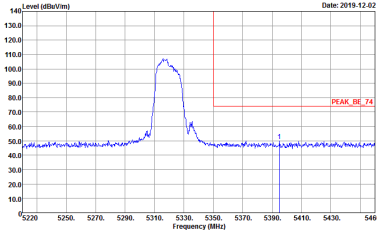
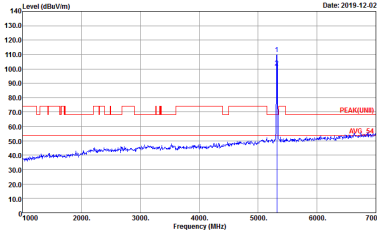
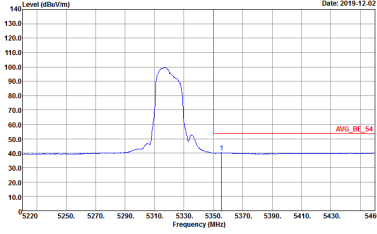
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH60 5300MHz - R	
0+1+2	Horizontal	Fundamental
Peak	 Site : 03CH15-HY Condition : PEAK_BE_74 3m HORN_91200_2114 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 992436-02	Left blank
Avg.	 Site : 03CH15-HY Condition : AVG_BE_54 3m HORN_91200_2114 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 992436-02	Left blank



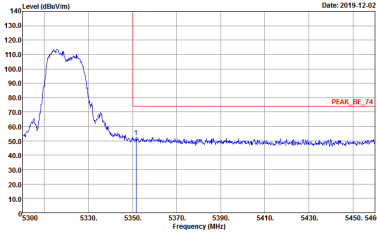
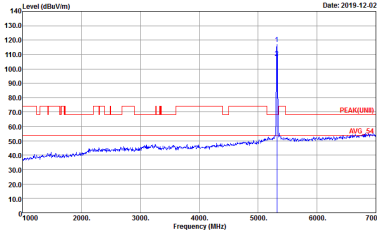
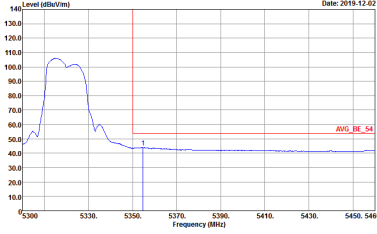
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH60 5300MHz - L	
0+1+2	Vertical	Fundamental
Peak	 Site : 03CH15-HY Condition : PEAK_BE_74 3m HORN_91200_2114 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 992436-02	 Site : 03CH15-HY Condition : PEAK(UNIT) 3m HORN_91200_2114 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 992436-02
Avg.	 Site : 03CH15-HY Condition : AVG_BE_54 3m HORN_91200_2114 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 992436-02	Left blank



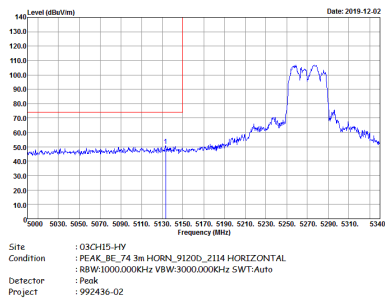
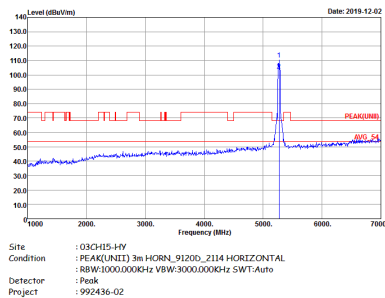
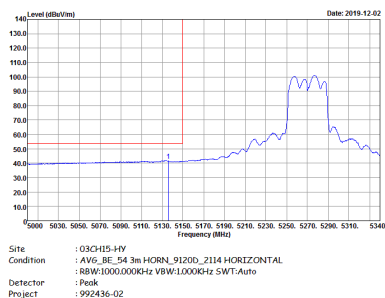
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH60 5300MHz - R	
0+1+2	Vertical	Fundamental
Peak	 Site : 03CH15-HY Condition : PEAK_BE_74 3m HORN_91200_2114 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 992436-02	Left blank
Avg.	 Site : 03CH15-HY Condition : AVG_BE_54 3m HORN_91200_2114 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 992436-02	Left blank

WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH64 5320MHz	
0+1+2	Horizontal	Fundamental
Peak	 Site : 03CH15-HY Condition : PEAK_BE_74 3m HORN_91200_2114 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 992436-02	 Site : 03CH15-HY Condition : PEAK(UNIT) 3m HORN_91200_2114 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 992436-02
Avg.	 Site : 03CH15-HY Condition : AVG_BE_54 3m HORN_91200_2114 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 992436-02	Left blank

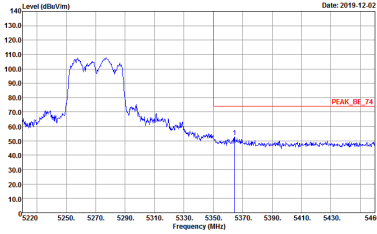
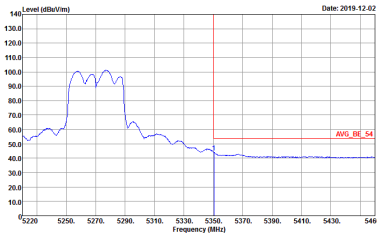


WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH64 5320MHz	
0+1+2	Vertical	Fundamental
Peak	 Site : 03CH15-HY Condition : PEAK_BE_74 3m HORN_9120D_2114 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 992436-02	 Site : 03CH15-HY Condition : PEAK(UNII) 3m HORN_9120D_2114 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 992436-02
Avg.	 Site : 03CH15-HY Condition : AVG_BE_54 3m HORN_9120D_2114 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 992436-02	Left blank

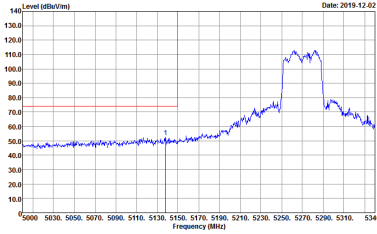
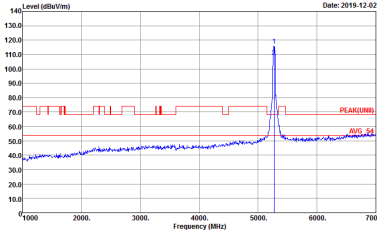
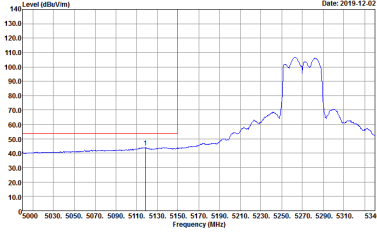
Band 2 5250~5350MHz
WIFI 802.11ac VHT40 (Band Edge @ 3m)

WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH54 5270 - L	
0+1+2	Horizontal	Fundamental
Peak		
Avg.		Left blank



WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH54 5270 - R	
0+1+2	Horizontal	Fundamental
Peak	 Site : 03CH15-HV Condition : PEAK_BE_74 3m HORN_91200_2114 HORIZONTAL RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Detector : Peak Project : 992436-02	Left blank
Avg.	 Site : 03CH15-HV Condition : AVG_BE_54 3m HORN_91200_2114 HORIZONTAL RBW:1000.000kHz VBW:1000.000kHz SWT:Auto Detector : Peak Project : 992436-02	Left blank

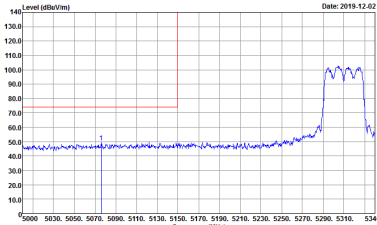
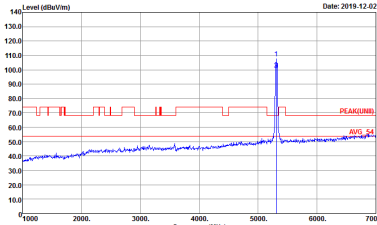
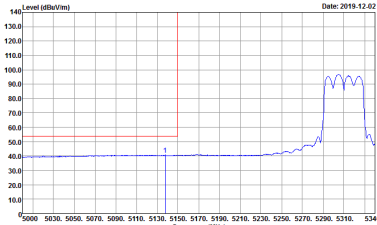


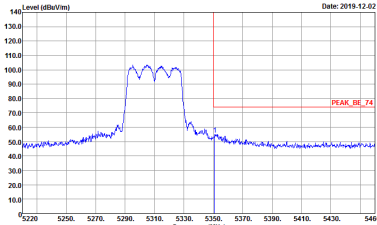
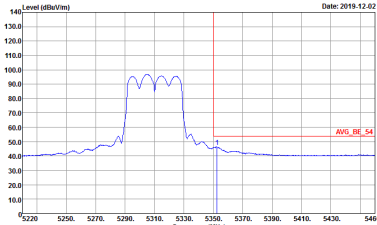
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH54 5270 - L	
0+1+2	Vertical	Fundamental
Peak	 Site : 03CH15-HY Condition : PEAK_BE_74 3m HORN_9120D_2114 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 992436-02	 Site : 03CH15-HY Condition : PEAK(UNIT) 3m HORN_9120D_2114 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 992436-02
Avg.	 Site : 03CH15-HY Condition : AVG_BE_54 3m HORN_9120D_2114 VERTICAL RBW:1000.000KHz VBW:1.000KHz SWT:Auto Detector : Peak Project : 992436-02	Left blank



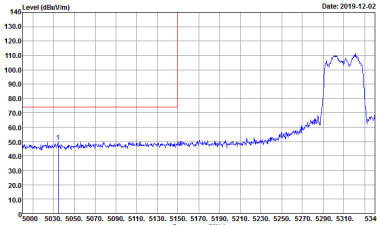
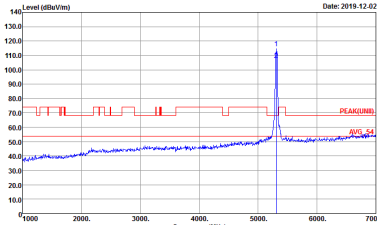
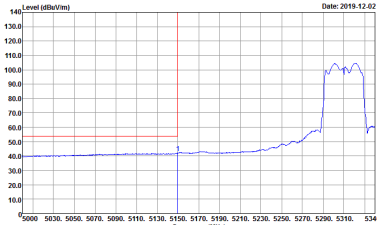
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH54 5270 - R	
0+1+2	Vertical	Fundamental
Peak	Site : 03CH15-HY Condition : PEAK_BE_74 3m HORN_91200_2114 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 992436-02	Left blank
Avg.	Site : 03CH15-HY Condition : AVG_BE_54 3m HORN_91200_2114 VERTICAL RBW:1000.000KHz VBW:1000KHz SWT:Auto Detector : Peak Project : 992436-02	Left blank

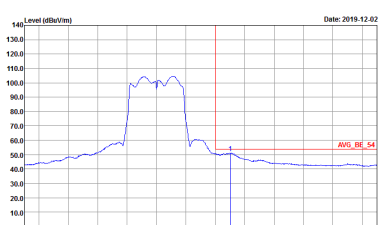


WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH62 5310 - L	
0+1+2	Horizontal	Fundamental
Peak	 Site Condition : 03CH15-HY : PEAK_BE_74 3m HORN_91200_2114 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site Condition : 03CH15-HY : PEAK(UNIT) 3m HORN_91200_2114 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site Condition : 03CH15-HY : AVG_BE_54 3m HORN_91200_2114 HORIZONTAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto	Left blank

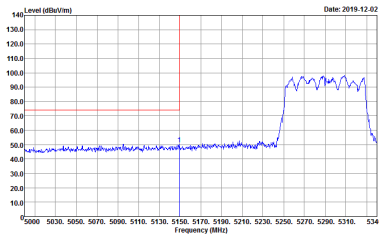
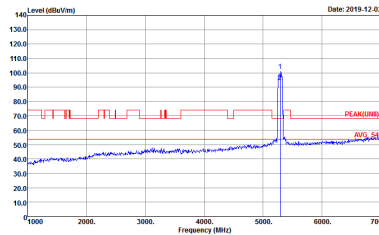
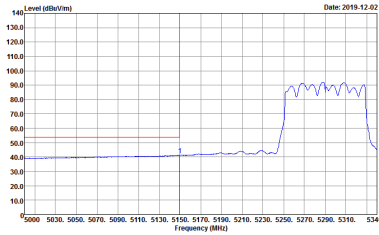
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH62 5310 - R	
0+1+2	Horizontal	Fundamental
Peak	 Site : 03CH15-HY Condition : PEAK_BE_74 3m HORN_91200_2114 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	Left blank
Avg.	 Site : 03CH15-HY Condition : AVG_BE_54 3m HORN_91200_2114 HORIZONTAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto	Left blank

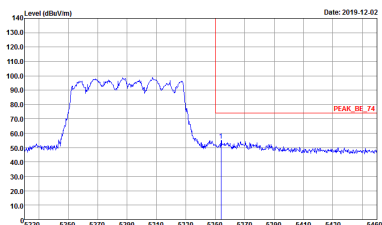
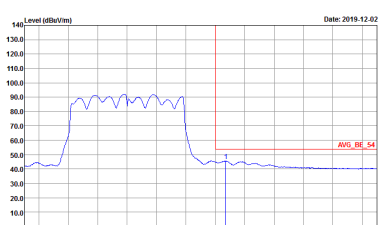


WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH62 5310 - L	
0+1+2	Vertical	Fundamental
Peak	 Site Condition : 03CH15-HY : PEAK_BE_74 3m HORN_91200_2114 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site Condition : 03CH15-HY : PEAK(UNIT) 3m HORN_91200_2114 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site Condition : 03CH15-HY : AVG_BE_54 3m HORN_91200_2114 VERTICAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto	Left blank

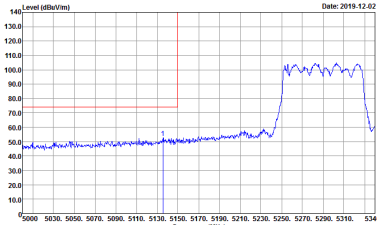
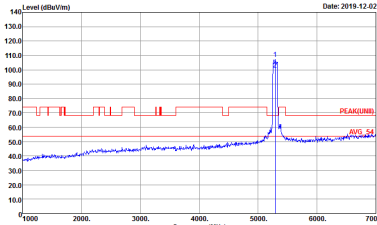
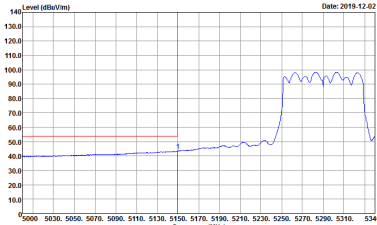
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH62 5310 - R	
0+1+2	Vertical	Fundamental
Peak	 Site : 03CH15-HY Condition : PEAK_BE_74 3m HORN_91200_2114 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	Left blank
Avg.	 Site : 03CH15-HY Condition : AVG_BE_54 3m HORN_91200_2114 VERTICAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto	Left blank

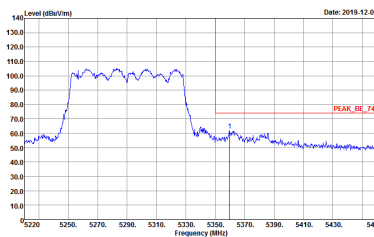
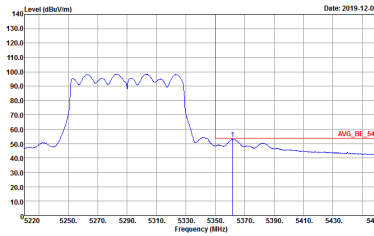
Band 2 5250~5350MHz
WIFI 802.11ac VHT80 (Band Edge @ 3m)

WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH58 5290MHz - L	
0+1+2	Horizontal	Fundamental
Peak	 Site : 03CH15-HY Condition : PEAK_BE_74 3m HORN_91200_2114 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH15-HY Condition : PEAK(UNIT) 3m HORN_91200_2114 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH15-HY Condition : AVG_BE_54 3m HORN_91200_2114 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	Left blank

WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH58 5290MHz - R	
0+1+2	Horizontal	Fundamental
Peak	 Site : 03CH15-HY Condition : PEAK_BE_74 3m HORN_91200_2114 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	Left blank
Avg.	 Site : 03CH15-HY Condition : AVG_BE_54 3m HORN_91200_2114 HORIZONTAL : RBW:1000.000KHz VBW:0.300KHz SWT:Auto	Left blank

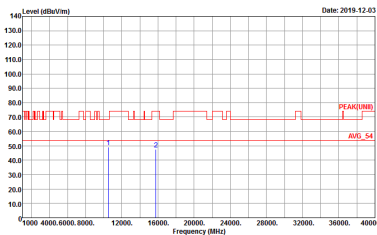
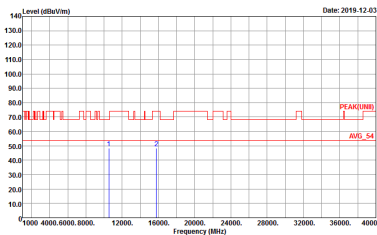


WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH58 5290MHz - L	
0+1+2	Vertical	Fundamental
Peak	 Site : 03CH15-HY Condition : PEAK_BE_74 3m HORN_91200_2114 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH15-HY Condition : PEAK(UNIT) 3m HORN_91200_2114 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH15-HY Condition : AVG_BE_54 3m HORN_91200_2114 VERTICAL : RBW:1000.000KHz VBW:0.300KHz SWT:Auto	Left blank

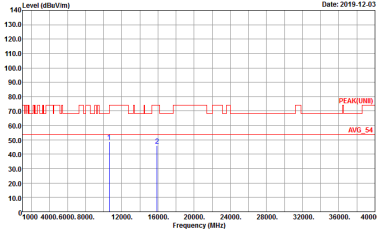
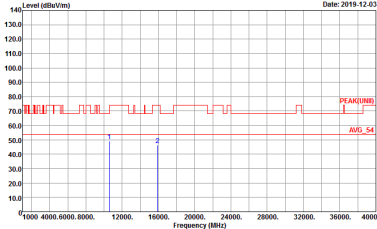
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH58 5290MHz - R	
0+1+2	Vertical	Fundamental
Peak	 Site : 03CH15-HY Condition : PEAK_BE_74 3m HORN_91200_2114 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	Left blank
Avg.	 Site : 03CH15-HY Condition : AVG_BE_54 3m HORN_91200_2114 VERTICAL : RBW:1000.000KHz VBW:0.300KHz SWT:Auto	Left blank



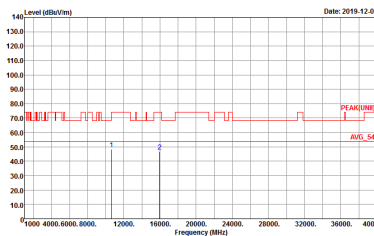
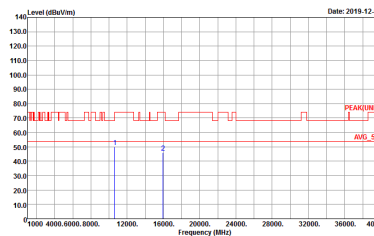
Band 2 - 5250~5350MHz
WIFI 802.11a (Harmonic @ 3m)

WIFI	Band 2 5250~5350MHz Harmonic @ 3m	
ANT	802.11a CH52 5260MHz	
0+1+2	Horizontal	Vertical
Peak Avg.	 Site : 03CH15-HY Condition : PEAK(UNIT) 3m HORN_91200_2114 HORIZONTAL Detector : Peak Project : 992436-02	 Site : 03CH15-HY Condition : PEAK(UNIT) 3m HORN_91200_2114 VERTICAL Detector : Peak Project : 992436-02



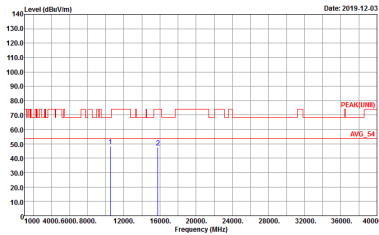
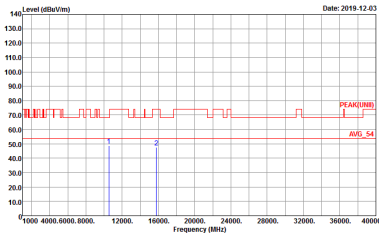
WIFI	Band 2 5250~5350MHz Harmonic @ 3m	
ANT	802.11a CH60 5300MHz	
0+1+2	Horizontal	Vertical
Peak Avg.	 Site : 03CH15-HY Condition : PEAK(UNIT) 3m HORN_91200_2114 HORIZONTAL Detector : Peak Project : 992436-02	 Site : 03CH15-HY Condition : PEAK(UNIT) 3m HORN_91200_2114 VERTICAL Detector : Peak Project : 992436-02



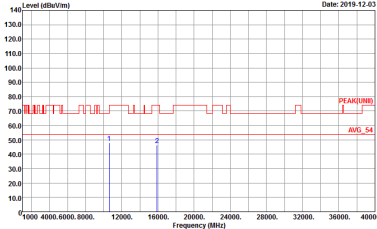
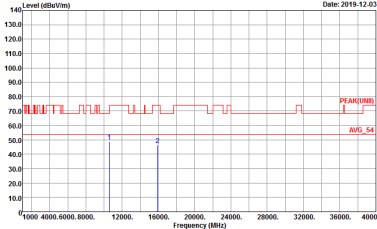
WIFI	Band 2 5250~5350MHz Harmonic @ 3m	
ANT	802.11a CH64 5320MHz	
0+1+2	Horizontal	Vertical
Peak Avg.	 Site : 03CH15-HY Condition : PEAK(UNIT) 3m HORN_91200_2114 HORIZONTAL Detector : Peak Project : 992436-02	 Site : 03CH15-HY Condition : PEAK(UNIT) 3m HORN_91200_2114 VERTICAL Detector : Peak Project : 992436-02



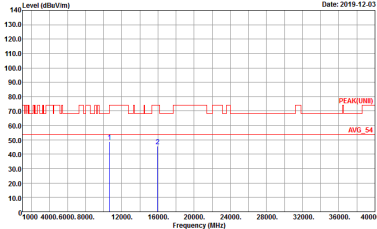
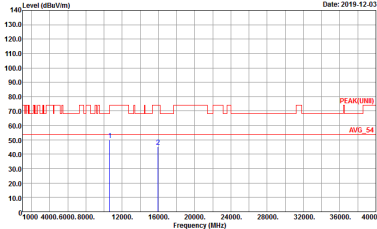
Band 2 5250~5350MHz
WIFI 802.11ac VHT20 (Harmonic @ 3m)

WIFI	Band 2 5250~5350MHz Harmonic @ 3m	
ANT	802.11ac VHT20 CH52 5260MHz	
0+1+2	Horizontal	Vertical
Peak Avg.	 Site : 03CH15-HY Condition : PEAK(UNIT) 3m HORN_91200_2114 HORIZONTAL Detector : Peak Project : 992436-02	 Site : 03CH15-HY Condition : PEAK(UNIT) 3m HORN_91200_2114 VERTICAL Detector : Peak Project : 992436-02



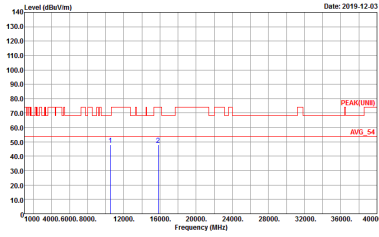
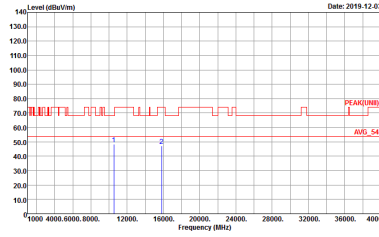
WIFI	Band 2 5250~5350MHz Harmonic @ 3m	
ANT	802.11ac VHT20 CH60 5300MHz	
0+1+2	Horizontal	Vertical
Peak Avg.	 Site : 03CH15-HY Condition : PEAK(UNII) 3m HORN_91200_2114 HORIZONTAL Detector : Peak Project : 992436-02	 Site : 03CH15-HY Condition : PEAK(UNII) 3m HORN_91200_2114 VERTICAL Detector : Peak Project : 992436-02



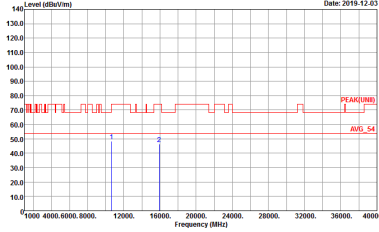
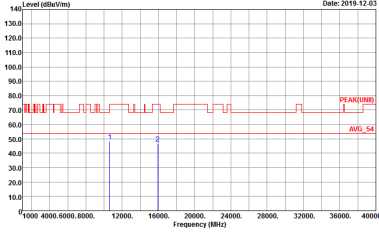
WIFI	Band 2 5250~5350MHz Harmonic @ 3m	
ANT	802.11ac VHT20 CH64 5320MHz	
0+1+2	Horizontal	Vertical
Peak Avg.	 Site : 03CH15-HY Condition : PEAK(UNIT) 3m HORN_91200_2114 HORIZONTAL Detector : Peak Project : 992436-02	 Site : 03CH15-HY Condition : PEAK(UNIT) 3m HORN_91200_2114 VERTICAL Detector : Peak Project : 992436-02



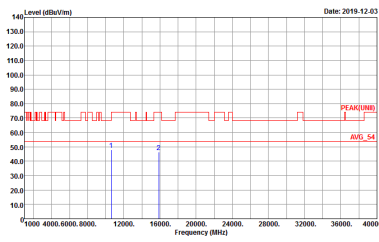
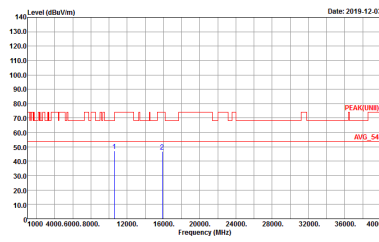
Band 2 5250~5350MHz
WIFI 802.11ac VHT40 (Harmonic @ 3m)

WIFI	Band 2 5250~5350MHz Harmonic @ 3m	
ANT	802.11ac VHT40 CH54 5270	
0+1+2	Horizontal	Vertical
Peak Avg.	 Site : 03CH15-HY Condition : PEAK(UNIT) 3m HORN_91200_2114 HORIZONTAL Detector : Peak Project : 992436-02	 Site : 03CH15-HY Condition : PEAK(UNIT) 3m HORN_91200_2114 VERTICAL Detector : Peak Project : 992436-02

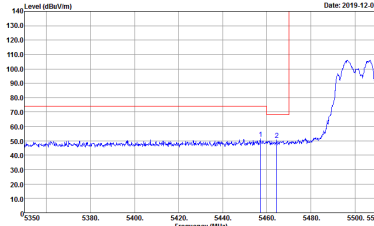
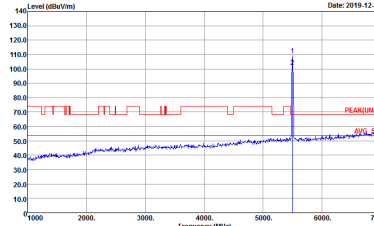
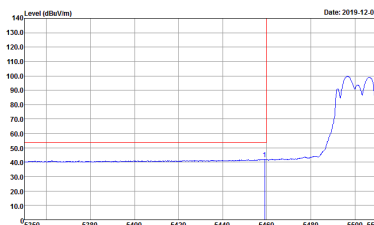


WIFI	Band 2 5250~5350MHz Harmonic @ 3m	
ANT	802.11ac VHT40 CH62 5310	
0+1+2	Horizontal	Vertical
Peak Avg.	 Site : 03CH125-HY Condition : PEAK(UNIT) 3m HORN_9120D_2114 HORIZONTAL Detector : Peak Project : 992436-02	 Site : 03CH125-HY Condition : PEAK(UNIT) 3m HORN_9120D_2114 VERTICAL Detector : Peak Project : 992436-02

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

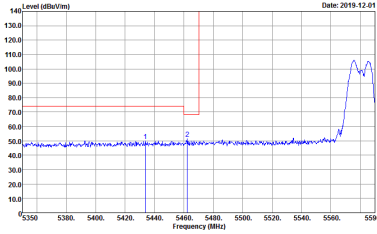
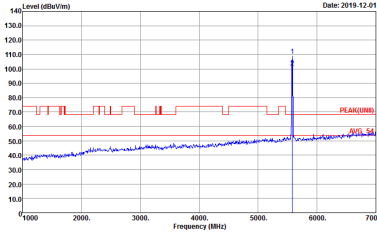
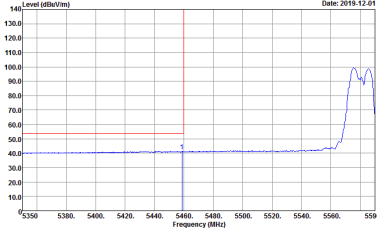
WIFI	Band 2 5250~5350MHz Harmonic @ 3m	
ANT	802.11ac VHT80 CH58 5290MHz	
0+1+2	Horizontal	Vertical
Peak Avg.	 Site : 03CH15-HY Condition : PEAK(UNII) 3m HORN_91200_2114 HORIZONTAL Detector : Peak Project : 992436-02	 Site : 03CH15-HY Condition : PEAK(UNII) 3m HORN_91200_2114 VERTICAL Detector : Peak Project : 992436-02

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

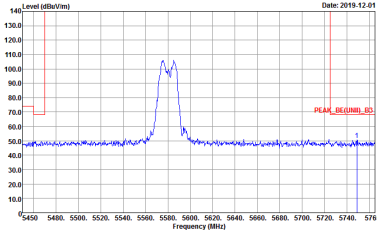
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH100 5500MHz	
0+1+2	Horizontal	Fundamental
Peak	 Site : 03CH15-HY Condition : PEAK_BE(UNIT1)_B3 3m HORN_91200_2114 HORIZONTAL Detector : Peak Project : 992436-02	 Site : 03CH15-HY Condition : PEAK(UNIT1) 3m HORN_91200_2114 HORIZONTAL Detector : Peak Project : 992436-02
Avg.	 Site : 03CH15-HY Condition : AVG_BE(UNIT1)_B3 3m HORN_91200_2114 HORIZONTAL Detector : Peak Project : 992436-02	Left blank



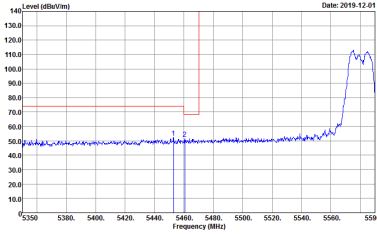
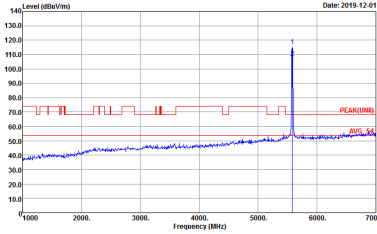
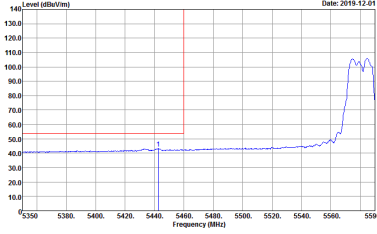
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH100 5500MHz	
0+1+2	Vertical	Fundamental
Peak	Site : 03CH15-HY Condition : PEAK_BE(UNIT)_B3 3m HORN_91200_2114 VERTICAL Detector : Peak Project : 992436-02	Site : 03CH15-HY Condition : PEAK(UNIT) 3m HORN_91200_2114 VERTICAL Detector : Peak Project : 992436-02
Avg.	Site : 03CH15-HY Condition : AVG_BE(UNIT)_B3 3m HORN_91200_2114 VERTICAL Detector : Peak Project : 992436-02	Left blank

WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH116 5580MHz - L	
0+1+2	Horizontal	Fundamental
Peak	 Site : 03CH15-HY Condition : PEAK_BE(UNIT)_B3 3m HORN_91200_2114 HORIZONTAL Detector : Peak Project : 992436-02	 Site : 03CH15-HY Condition : PEAK(UNIT) 3m HORN_91200_2114 HORIZONTAL Detector : Peak Project : 992436-02
Avg.	 Site : 03CH15-HY Condition : AVG_BE(UNIT)_B3 3m HORN_91200_2114 HORIZONTAL Detector : Peak Project : 992436-02	Left blank

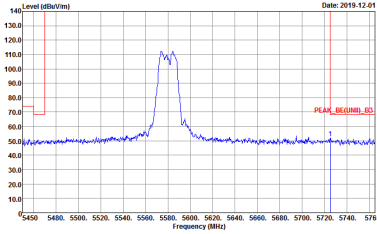


WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH116 5580MHz - R	
0+1+2	Horizontal	Fundamental
Peak	 Site : 03CH125-HV Condition : PEAK_BE(UNIT)_B3 3m HORN_91200_2114 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 992436-02	Left blank

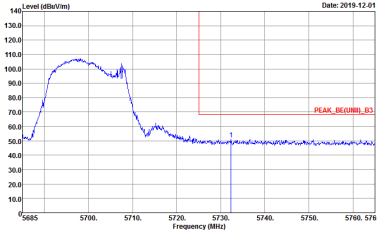
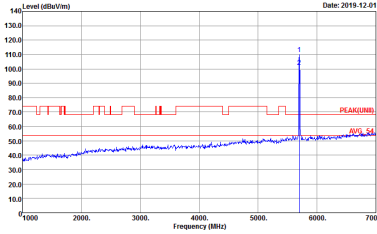


WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH116 5580MHz - L	
0+1+2	Vertical	Fundamental
Peak	 Site : 03CH15-HY Condition : PEAK_BE(UNIT)_B3 3m HORN_91200_2114 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 992436-02	 Site : 03CH15-HY Condition : PEAK(UNIT) 3m HORN_91200_2114 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 992436-02
Avg.	 Site : 03CH15-HY Condition : AVG_BE(UNIT)_B3 3m HORN_91200_2114 VERTICAL RBW:1000.000KHz VBW:1000KHz SWT:Auto Detector : Peak Project : 992436-02	Left blank

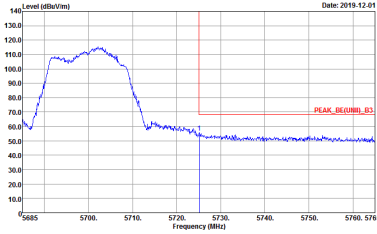
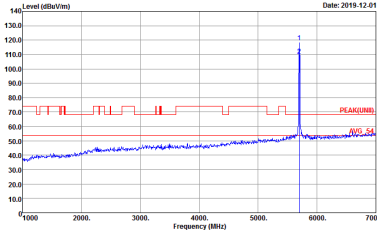


WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH116 5580MHz - R	
0+1+2	Vertical	Fundamental
Peak	 Site : 03CH125-HV Condition : PEAK_BE(UNIT)_B3 3m HORN_91200_2114 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 992436-02	Left blank



WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH140 5700MHz	
0+1+2	Horizontal	Fundamental
Peak	 Site : 03CH125-HV Condition : PEAK_BE(UNIT1)_B3 3m HORN_91200_2114 HORIZONTAL Detector : Peak Project : 992436-02	 Site : 03CH125-HV Condition : PEAK(UNIT1) 3m HORN_91200_2114 HORIZONTAL Detector : Peak Project : 992436-02



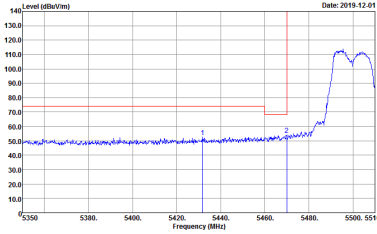
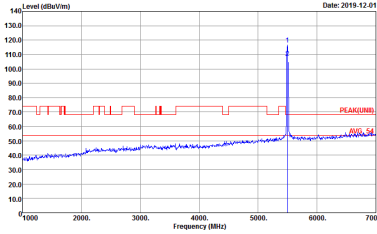
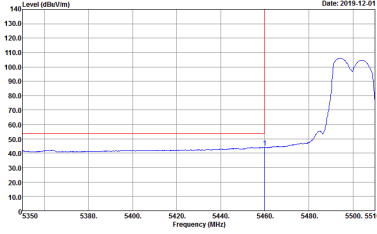
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH140 5700MHz	
0+1+2	Vertical	Fundamental
Peak	 Site : 03CH125-HY Condition : PEAK_BE(UNIT1)_B3 3m HORN_91200_2114 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 992436-02	 Site : 03CH125-HY Condition : PEAK(UNIT1) 3m HORN_91200_2114 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 992436-02



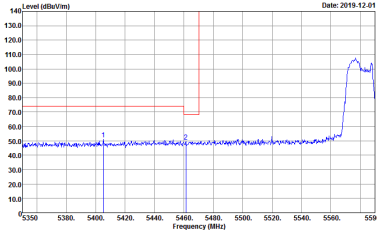
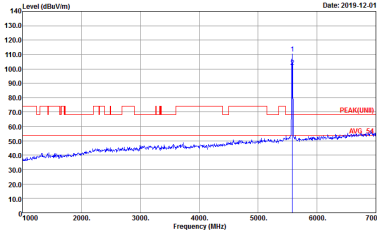
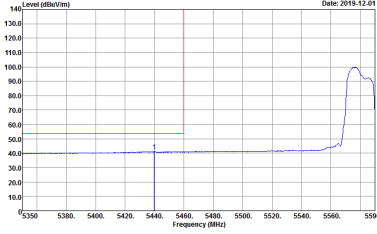
Band 3 5470~5725MHz
WIFI 802.11ac VHT20 (Band Edge @ 3m)

WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH100 5500MHz	
0+1+2	Horizontal	Fundamental
Peak	Site : 03CH15-HY Condition : PEAK_BE(UNIT)_B3 3m HORN_91200_2114 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 992436-02	Site : 03CH15-HY Condition : PEAK(UNIT) 3m HORN_91200_2114 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 992436-02
Avg.	Site : 03CH15-HY Condition : AVG_BE(UNIT)_B3 3m HORN_91200_2114 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 992436-02	Left blank

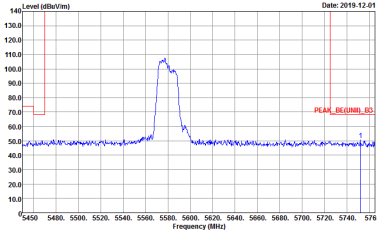


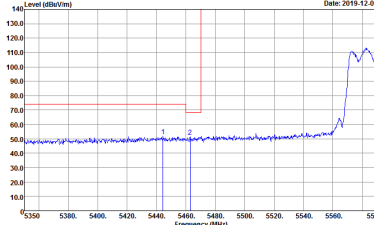
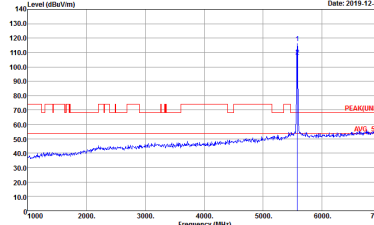
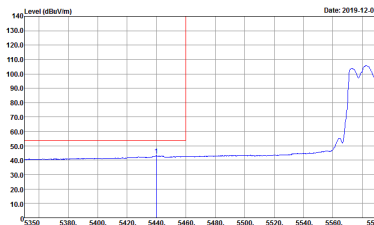
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH100 5500MHz	
0+1+2	Vertical	Fundamental
Peak	 Site : 03CH15-HY Condition : PEAK_BE(UNIT)_B3 3m HORN_91200_2114 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 992436-02	 Site : 03CH15-HY Condition : PEAK(UNIT) 3m HORN_91200_2114 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 992436-02
Avg.	 Site : 03CH15-HY Condition : AVG_BE(UNIT)_B3 3m HORN_91200_2114 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 992436-02	Left blank



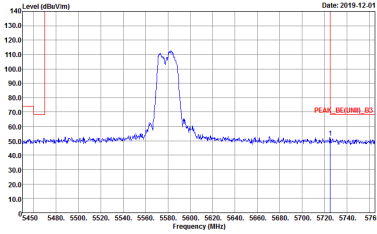
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH116 5580MHz - L	
0+1+2	Horizontal	Fundamental
Peak	 Site : 03CH15-HY Condition : PEAK_BE(UNIT)_B3 3m HORN_91200_2114 HORIZONTAL Detector : Peak Project : 992436-02	 Site : 03CH15-HY Condition : PEAK(UNIT) 3m HORN_91200_2114 HORIZONTAL Detector : Peak Project : 992436-02
Avg.	 Site : 03CH15-HY Condition : AVG_BE(UNIT)_B3 3m HORN_91200_2114 HORIZONTAL Detector : Peak Project : 992436-02	Left blank



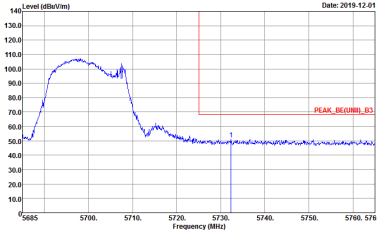
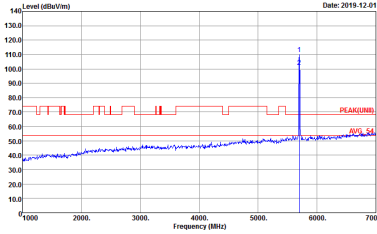
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH116 5580MHz - R	
0+1+2	Horizontal	Fundamental
Peak	 Site : 03CH125-HV Condition : PEAK_BE(UNIT)_B3 3m HORN_91200_2114 HORIZONTAL Detector : Peak Project : 992436-02	Left blank

WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH116 5580MHz - L	
0+1+2	Vertical	Fundamental
Peak	 Site : 03CH15-HY Condition : PEAK_BE(UNIT)_B3 3m HORN_91200_2114 VERTICAL Detector : Peak Project : 992436-02	 Site : 03CH15-HY Condition : PEAK(UNIT) 3m HORN_91200_2114 VERTICAL Detector : Peak Project : 992436-02
Avg.	 Site : 03CH15-HY Condition : AVG_BE(UNIT)_B3 3m HORN_91200_2114 VERTICAL Detector : Peak Project : 992436-02	Left blank

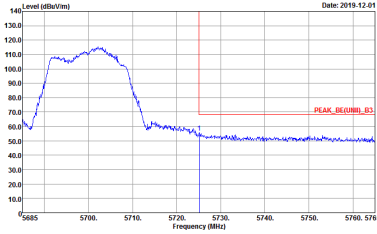
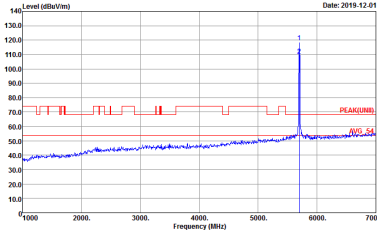


WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH116 5580MHz - R	
0+1+2	Vertical	Fundamental
Peak	 Site : 03CH125-HV Condition : PEAK_BE(UNIT)_B3 3m HORN_91200_2114 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 992436-02	Left blank

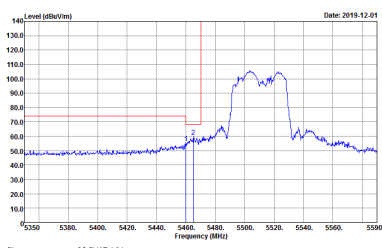
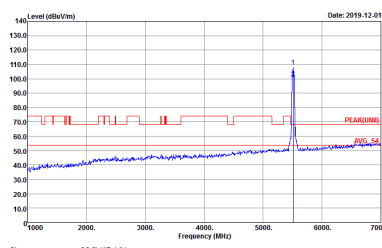
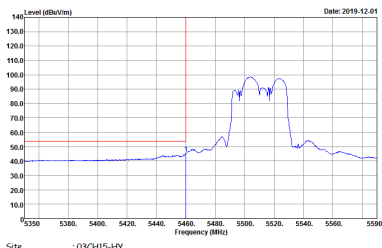


WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH140 5700MHz	
0+1+2	Horizontal	Fundamental
Peak	 Site : 03CH125-HV Condition : PEAK_BE(UNIT1)_B3 3m HORN_91200_2114 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 992436-02	 Site : 03CH125-HV Condition : PEAK(UNIT1) 3m HORN_91200_2114 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 992436-02

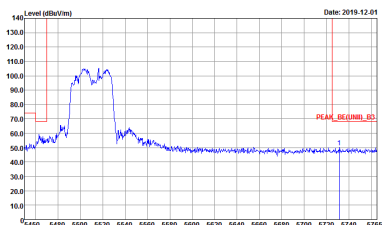


WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH140 5700MHz	
0+1+2	Vertical	Fundamental
Peak	 Site : 03CH125-HY Condition : PEAK_BE(UNIT)_B3 3m HORN_91200_2114 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 992436-02	 Site : 03CH125-HY Condition : PEAK_F(UNIT)_B3 3m HORN_91200_2114 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 992436-02

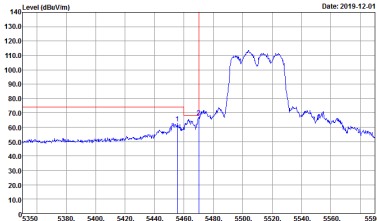
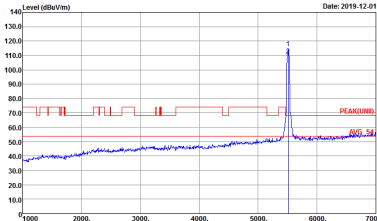
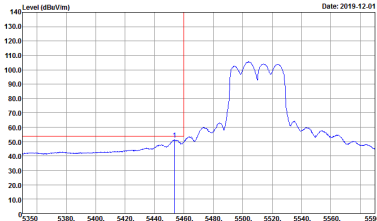
Band 3 5470~5725MHz
WIFI 802.11ac VHT40 (Band Edge @ 3m)

WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH102 5510MHz - L	
0+1+2	Horizontal	Fundamental
Peak	 Site : 03CH15-HY Condition : PEAK_BE(UNIT), B3 3m HORN_91200_2114 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH15-HY Condition : PEAK(UNIT) 3m HORN_91200_2114 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH15-HY Condition : AVG_BE(UNIT), B3 3m HORN_91200_2114 HORIZONTAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto	Left blank

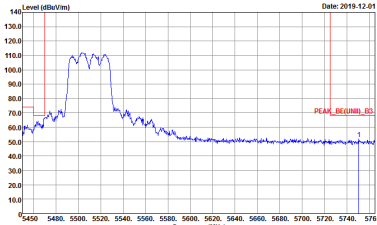


WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH102 5510MHz - R	
0+1+2	Horizontal	Fundamental
Peak	 Site : 03CH15-HY Condition : PEAK_BE(UNIT1)_B3 3m HORN_9120D_2114 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Date: 2019-12-01	Left blank

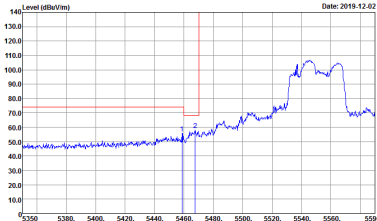
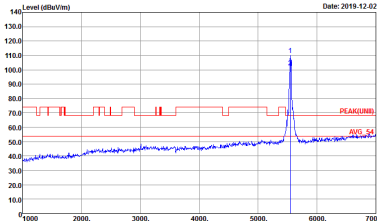
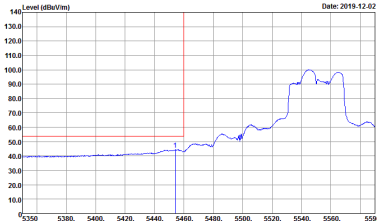


WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH102 5510MHz - L	
0+1+2	Vertical	Fundamental
Peak	 Site Condition : 03CH15-HY : PEAK_BE(UNIT)_B3 3m HORN_9120D_2114 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site Condition : 03CH15-HY : PEAK(UNIT) 3m HORN_9120D_2114 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site Condition : 03CH15-HY : AVG_BE(UNIT)_B3 3m HORN_9120D_2114 VERTICAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto	Left blank

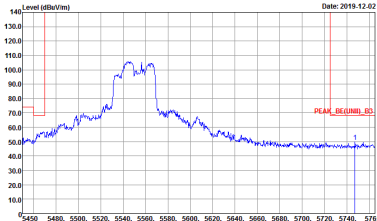


WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH102 5510MHz - R	
0+1+2	Vertical	Fundamental
Peak	 Site : 03CH15-HY Condition : PEAK_BE(UNIT1)_B3 3m HORN_9120D_2114 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SFT:Auto Date: 2019-12-01	Left blank

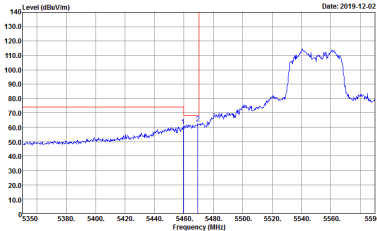
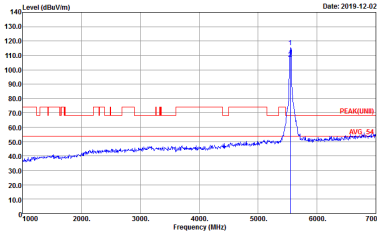
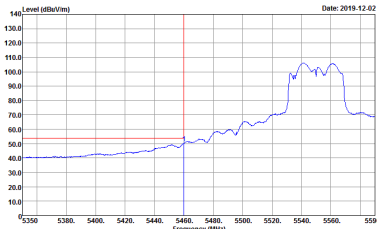


WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH110 5550MHz - L	
0+1+2	Horizontal	Fundamental
Peak	 Site : 03CH15-HY Condition : PEAK_BE(UNIT1)_B3 3m HORN_9120D_2114 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH15-HY Condition : PEAK(UNIT1) 3m HORN_9120D_2114 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH15-HY Condition : AVG_BE(UNIT1)_B3 3m HORN_9120D_2114 HORIZONTAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto	Left blank

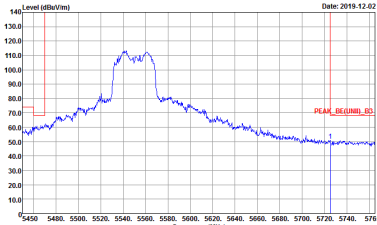


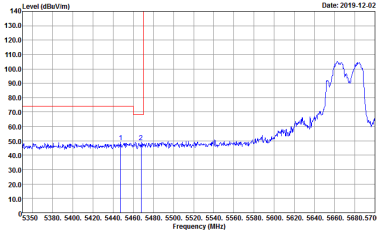
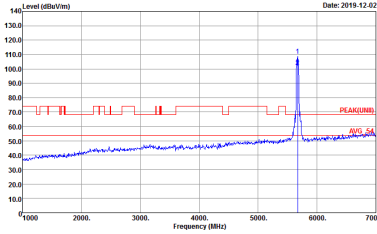
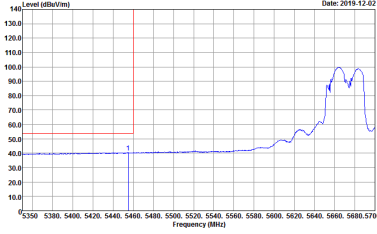
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH110 5550MHz - R	
0+1+2	Horizontal	Fundamental
Peak	 Site : 03CH15-HY Condition : PEAK_BE(UNIT1)_B3 3m HORN_9120D_2114 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SFT:Auto	Left blank



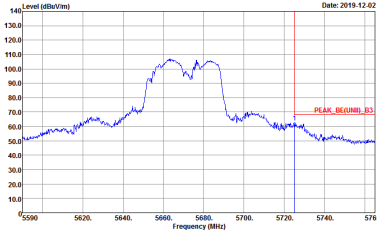
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH110 5550MHz - L	
0+1+2	Vertical	Fundamental
Peak	 Site : 03CH15-HY Condition : PEAK_BE(UNIT)_B3 3m HORN_9120D_2114 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH15-HY Condition : PEAK(UNIT) 3m HORN_9120D_2114 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH15-HY Condition : AVG_BE(UNIT)_B3 3m HORN_9120D_2114 VERTICAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto	Left blank

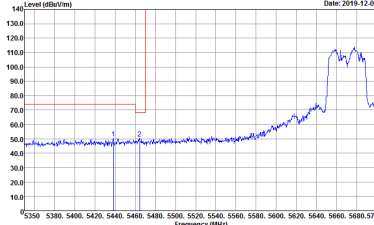
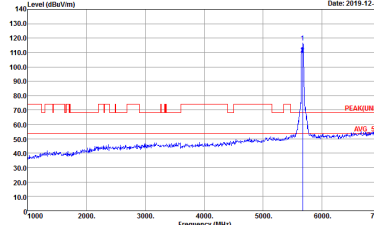
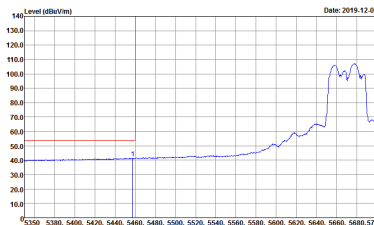


WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH110 5550MHz - R	
0+1+2	Vertical	Fundamental
Peak	 Site : 03CH15-HY Condition : PEAK_BE(UNIT1)_B3 3m HORN_9120D_2114 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWFT:Auto Date: 2019-12-02	Left blank

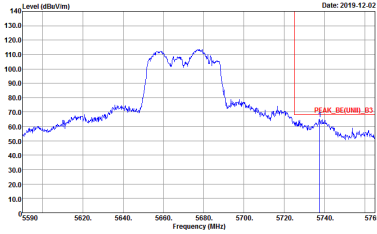
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH134 5670MHz - L	
0+1+2	Horizontal	Fundamental
Peak	 Site : 03CH15-HY Condition : PEAK_BE(UNIT)_B3 3m HORN_91200_2114 HORIZONTAL Detector : Peak Project : 992436-02	 Site : 03CH15-HY Condition : PEAK(UNIT) 3m HORN_91200_2114 HORIZONTAL Detector : Peak Project : 992436-02
Avg.	 Site : 03CH15-HY Condition : AVG_BE(UNIT)_B3 3m HORN_91200_2114 HORIZONTAL Detector : Peak Project : 992436-02	Left blank



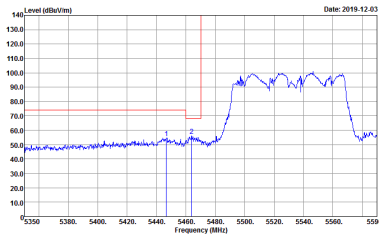
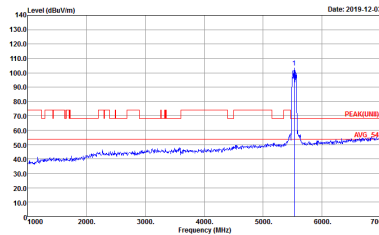
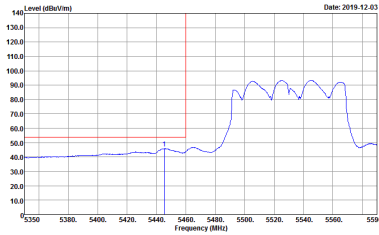
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH134 5670MHz - R	
0+1+2	Horizontal	Fundamental
Peak	 Site : 03CH125-HV Condition : PEAK_BE(UNIT)_B3 3m HORN_91200_2114 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak : 992436-02	Left blank

WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH134 5670MHz - L	
0+1+2	Vertical	Fundamental
Peak	 Site : 03CH15-HY Condition : PEAK_BE(UNIT)_B3 3m HORN_91200_2114 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 992436-02	 Site : 03CH15-HY Condition : PEAK(UNIT) 3m HORN_91200_2114 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 992436-02
Avg.	 Site : 03CH15-HY Condition : AVG_BE(UNIT)_B3 3m HORN_91200_2114 VERTICAL RBW:1000.000KHz VBW:1000.000KHz SWT:Auto Detector : Peak Project : 992436-02	Left blank

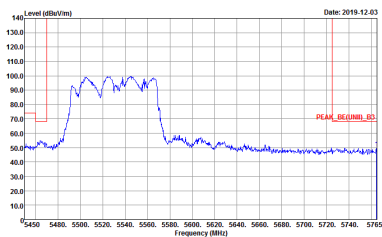


WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH134 5670MHz - R	
0+1+2	Vertical	Fundamental
Peak	 Site : 03CH125-HV Condition : PEAK_BE(UNIT)_B3 3m HORN_91200_2114 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : 992436-02	Left blank

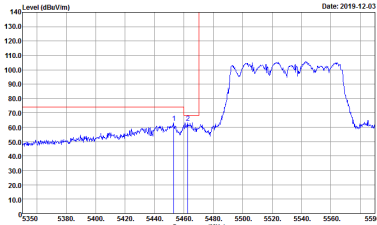
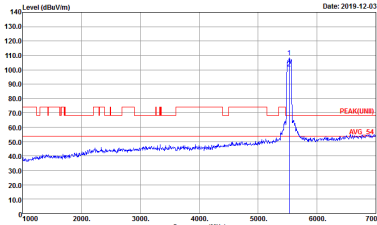
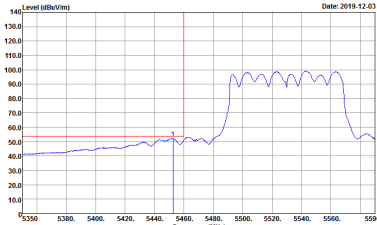
Band 3 5470~5725MHz
WIFI 802.11ac VHT80 (Band Edge @ 3m)

WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH106 5530MHz - L	
0+1+2	Horizontal	Fundamental
Peak	 Site : 03CH15-HY Condition : PEAK_BE(UNIT)_B3 3m HORN_91200_2114 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH15-HY Condition : PEAK(UNIT) 3m HORN_91200_2114 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH15-HY Condition : AVG_BE(UNIT)_B3 3m HORN_91200_2114 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	Left blank

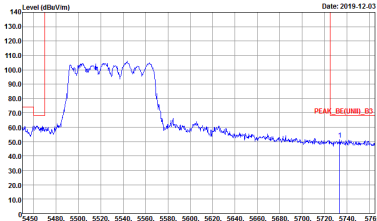


WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH106 5530MHz - R	
0+1+2	Horizontal	Fundamental
Peak	 Site : 03CH15-HY Condition : PEAK_BE(UNIT1)_B3 3m HORN_9120D_2114 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	Left blank

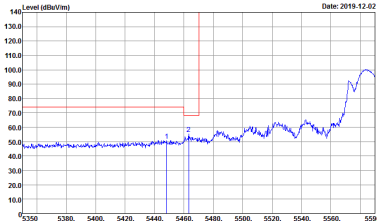
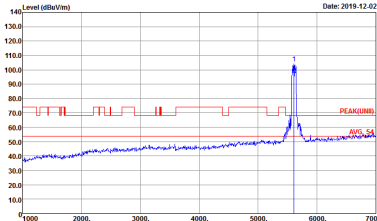


WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH106 5530MHz - L	
0+1+2	Vertical	Fundamental
Peak	 Site : 03CH15-HY Condition : PEAK_BE(UNIT1)_B3 3m HORN_9120D_2114 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH15-HY Condition : PEAK(UNIT1) 3m HORN_9120D_2114 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH15-HY Condition : AVG_BE(UNIT1)_B3 3m HORN_9120D_2114 VERTICAL : RBW:1000.000KHz VBW:0.300KHz SWT:Auto	Left blank

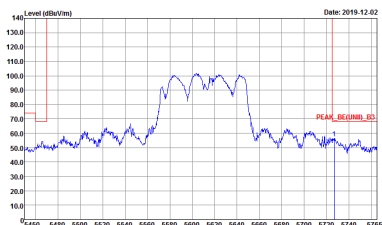


WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH106 5530MHz - R	
0+1+2	Vertical	Fundamental
Peak	 Site : 03CH15-HY Condition : PEAK_BE(UNIT1)_B3 3m HORN_9120D_2114 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWFT:Auto	Left blank

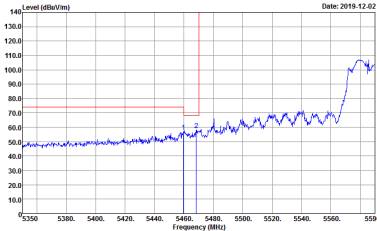
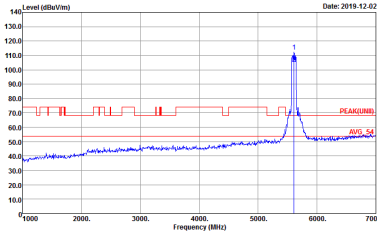
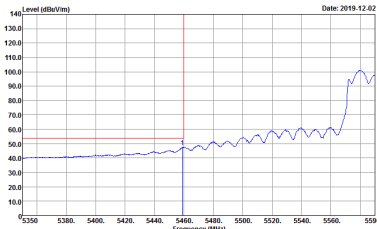


WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH122 5610MHz - L	
0+1+2	Horizontal	Fundamental
Peak	 Site Condition : 03CH15-HY : PEAK_BE(UNIT)_B3 3m HORN_9120D_2114 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site Condition : 03CH15-HY : PEAK(UNIT) 3m HORN_9120D_2114 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site Condition : 03CH15-HY : AVG_BE(UNIT)_B3 3m HORN_9120D_2114 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	Left blank

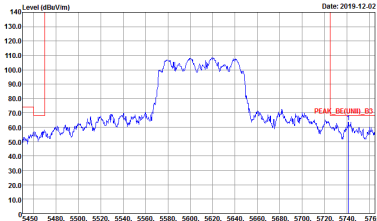


WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH122 5610MHz - R	
0+1+2	Horizontal	Fundamental
Peak	 Site : 03CH15-HY Condition : PEAK_BE(UNIT1)_B3 3m HORN_9120D_2114 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SFT:Auto	Left blank



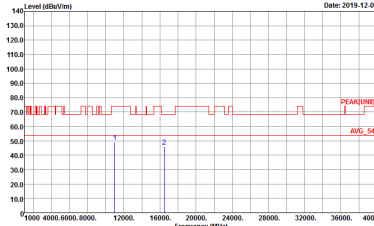
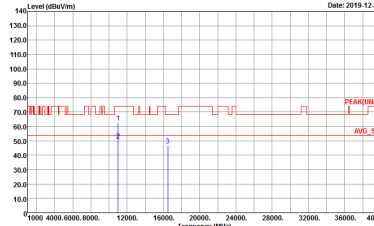
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH122 5610MHz - L	
0+1+2	Vertical	Fundamental
Peak	 Site : 03CH15-HY Condition : PEAK_BE(UNIT1)_B3 3m HORN_9120D_2114 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH15-HY Condition : PEAK(UNIT1) 3m HORN_9120D_2114 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH15-HY Condition : AVG_BE(UNIT1)_B3 3m HORN_9120D_2114 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	Left blank



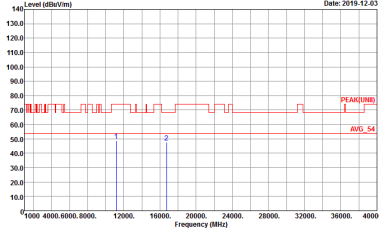
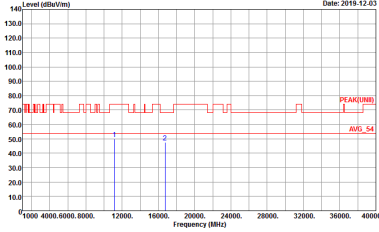
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH122 5610MHz - R	
0+1+2	Vertical	Fundamental
Peak	 Site : 03CH15-HY Condition : PEAK_BE(UNIT1)_B3 3m HORN_9120D_2114 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SFT:Auto	Left blank



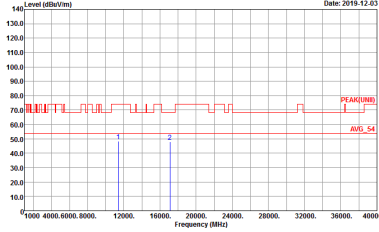
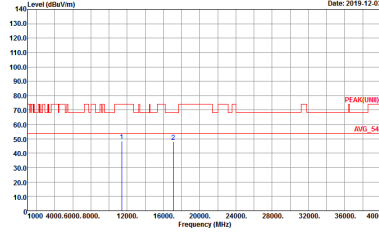
Band 3 - 5470~5725MHz
WIFI 802.11a (Harmonic @ 3m)

WIFI	Band 3 5470~5725MHz Harmonic @ 3m	
ANT	802.11a CH100 5500MHz	
0+1+2	Horizontal	Vertical
Peak Avg.	 Site : 03CH15-HY Condition : PEAK(UNIT) 3m HORN_91200_2114 HORIZONTAL Detector : Peak Project : 992436-02	 Site : 03CH15-HY Condition : PEAK(UNIT) 3m HORN_91200_2114 VERTICAL Detector : Peak Project : 992436-02

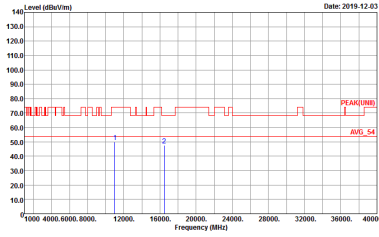
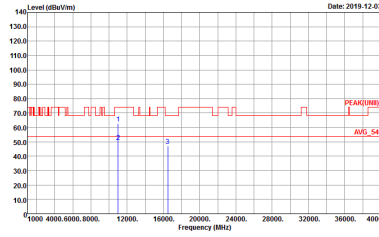


WIFI	Band 3 5470~5725MHz Harmonic @ 3m	
ANT	802.11a CH116 5580MHz	
0+1+2	Horizontal	Vertical
Peak Avg.	 Site : 03CH125-HY Condition : PEAK(UNIT) 3m HORN_9120D_2114 HORIZONTAL Detector : Peak Project : 992436-02	 Site : 03CH125-HY Condition : PEAK(UNIT) 3m HORN_9120D_2114 VERTICAL Detector : Peak Project : 992436-02

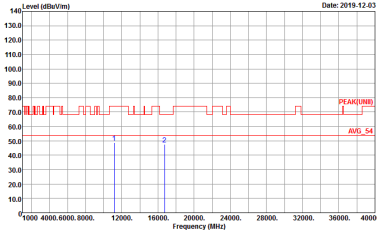
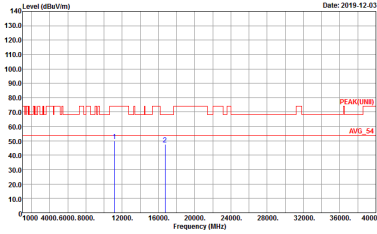


WIFI	Band 3 5470~5725MHz Harmonic @ 3m	
ANT	802.11a CH140 5700MHz	
0+1+2	Horizontal	Vertical
Peak Avg.	 Site : 03CH125-HY Condition : PEAK(UNIT) 3m HORN_9120D_2114 HORIZONTAL Detector : Peak Project : 992436-02	 Site : 03CH125-HY Condition : PEAK(UNIT) 3m HORN_9120D_2114 VERTICAL Detector : Peak Project : 992436-02

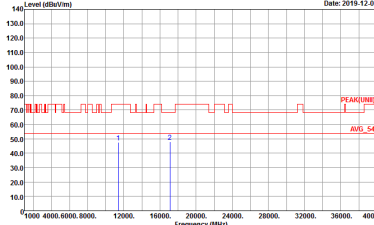
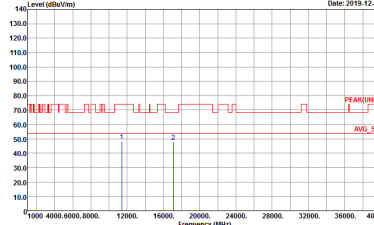
Band 3 5470~5725MHz
WIFI 802.11ac VHT20 (Harmonic @ 3m)

WIFI	Band 3 5470~5725MHz Harmonic @ 3m	
ANT	802.11ac VHT20 CH100 5500MHz	
0+1+2	Horizontal	Vertical
Peak Avg.	 Site : 03CH15-HY Condition : PEAK(UNII) 3m HORN_91200_2114 HORIZONTAL Detector : Peak Project : 992436-02	 Site : 03CH15-HY Condition : PEAK(UNII) 3m HORN_91200_2114 VERTICAL Detector : Peak Project : 992436-02

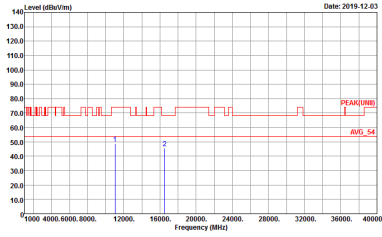
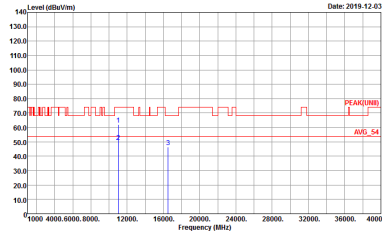


WIFI	Band 3 5470~5725MHz Harmonic @ 3m	
ANT	802.11ac VHT20 CH116 5580MHz	
0+1+2	Horizontal	Vertical
Peak Avg.	 Site : 03CH125-HY Condition : PEAK(UNIT) 3m HORN_9120D_2114 HORIZONTAL Detector : Peak Project : 992436-02	 Site : 03CH125-HY Condition : PEAK(UNIT) 3m HORN_9120D_2114 VERTICAL Detector : Peak Project : 992436-02

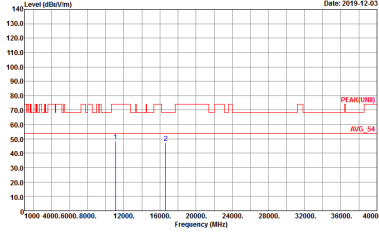
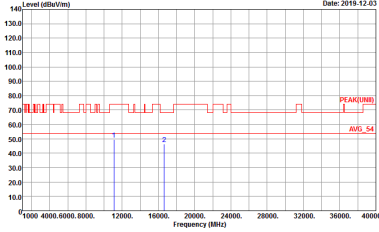


WIFI	Band 3 5470~5725MHz Harmonic @ 3m	
ANT	802.11ac VHT20 CH140 5700MHz	
0+1+2	Horizontal	Vertical
Peak Avg.	 Site : 03CH125-HY Condition : PEAK(UNIT) 3m HORN_9120D_2114 HORIZONTAL Detector : Peak Project : 992436-02	 Site : 03CH125-HY Condition : PEAK(UNIT) 3m HORN_9120D_2114 VERTICAL Detector : Peak Project : 992436-02

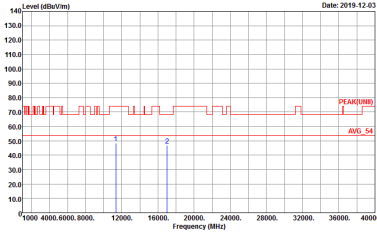
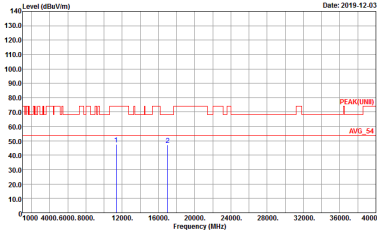
Band 3 5470~5725MHz
WIFI 802.11ac VHT40 (Harmonic @ 3m)

WIFI	Band 3 5470~5725MHz Harmonic @ 3m	
ANT	802.11ac VHT40 CH102 5510MHz	
0+1+2	Horizontal	Vertical
Peak Avg.	 Date: 2019-12-03 Site : 03CH15-HY Condition : PEAK(UNIT) 3m HORN_91200_2114 HORIZONTAL Detector : Peak Project : 992436-02	 Date: 2019-12-03 Site : 03CH15-HY Condition : PEAK(UNIT) 3m HORN_91200_2114 VERTICAL Detector : Peak Project : 992436-02

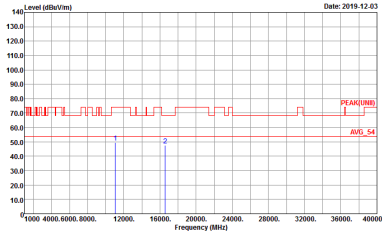
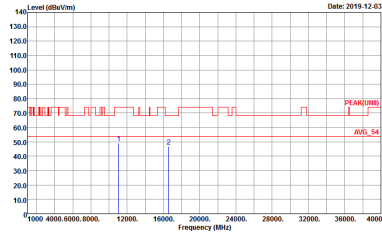


WIFI	Band 3 5470~5725MHz Harmonic @ 3m	
ANT	802.11ac VHT40 CH110 5550MHz	
0+1+2	Horizontal	Vertical
Peak Avg.	 Site : 03CH125-HY Condition : PEAK(UNIT) 3m HORN_9120D_2114 HORIZONTAL Detector : Peak Project : 992436-02	 Site : 03CH125-HY Condition : PEAK(UNIT) 3m HORN_9120D_2114 VERTICAL Detector : Peak Project : 992436-02

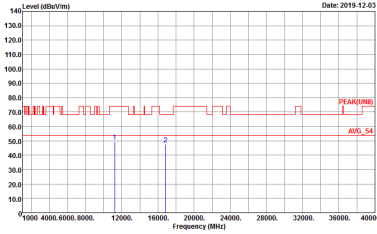
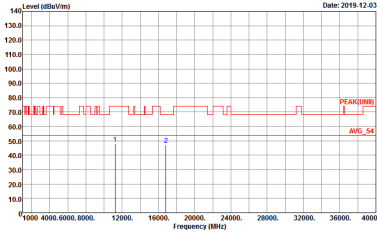


WIFI	Band 3 5470~5725MHz Harmonic @ 3m	
ANT	802.11ac VHT40 CH134 5670MHz	
0+1+2	Horizontal	Vertical
Peak Avg.	 Site : 03CH125-HY Condition : PEAK(UNB) 3m HORN_9120D_2114 HORIZONTAL Detector : Peak Project : 992436-02	 Site : 03CH125-HY Condition : PEAK(UNB) 3m HORN_9120D_2114 VERTICAL Detector : Peak Project : 992436-02

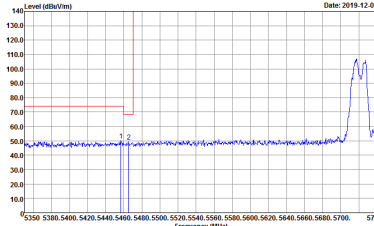
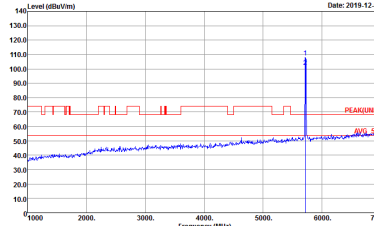
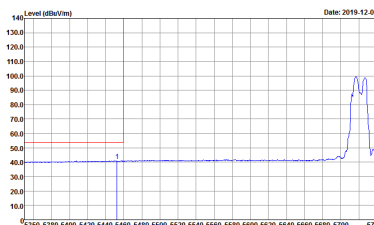
Band 3 5470~5725MHz
WIFI 802.11ac VHT80 (Harmonic @ 3m)

WIFI	Band 3 5470~5725MHz Harmonic @ 3m	
ANT	802.11ac VHT80 CH106 5530MHz	
0+1+2	Horizontal	Vertical
Peak Avg.	 Site : 03CH15-HY Condition : PEAK(UNII) 3m HORN_91200_2114 HORIZONTAL Detector : Peak Project : 992436-02	 Site : 03CH15-HY Condition : PEAK(UNII) 3m HORN_91200_2114 VERTICAL Detector : Peak Project : 992436-02

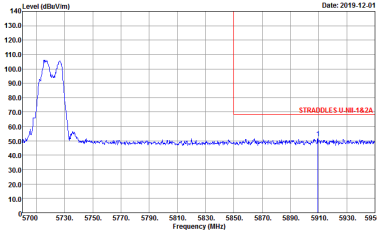


WIFI	Band 3 5470~5725MHz Harmonic @ 3m	
ANT	802.11ac VHT80 CH122 5610MHz	
0+1+2	Horizontal	Vertical
Peak Avg.	 Site : 03CH125-HY Condition : PEAK(UNIT) 3m HORN_9120D_2114 HORIZONTAL Detector : Peak Project : 992436-02	 Site : 03CH125-HY Condition : PEAK(UNIT) 3m HORN_9120D_2114 VERTICAL Detector : Peak Project : 992436-02

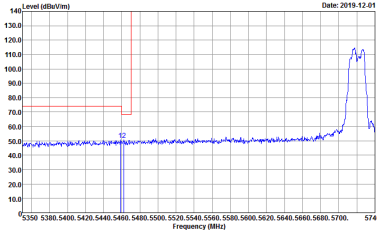
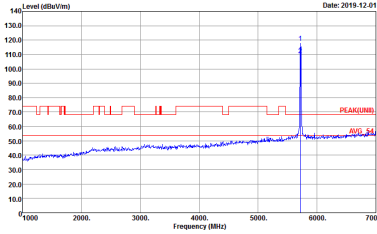
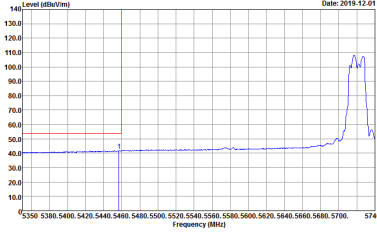
Band 3 - Straddle Channel
WIFI 802.11a (Band Edge @ 3m)

WIFI	Band 3 Straddle Channel Band Edge @ 3m	
ANT	802.11a CH144 5720MHz - L	
0+1+2	Horizontal	Fundamental
Peak	 Site : 03CH15-HY Condition : STRADDLES U-NIT-1A2A 3m HORN_91200_2114 HORIZONTAL Detector : Peak Project : 992436-02	 Site : 03CH15-HY Condition : PEAK(UNIT) 3m HORN_91200_2114 HORIZONTAL Detector : Peak Project : 992436-02
Avg.	 Site : 03CH15-HY Condition : U-NIT-1A2A AVERAGE 3m HORN_91200_2114 HORIZONTAL Detector : Peak Project : 992436-02	Left blank

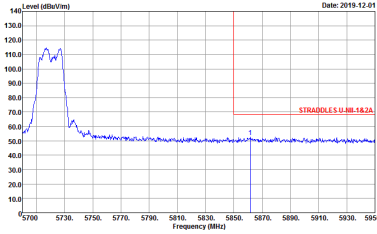


WIFI	Band 3 Straddle Channel Band Edge @ 3m	
ANT	802.11a CH144 5720MHz – R	
0+1+2	Horizontal	Fundamental
Peak	 Site : 09CH125-HV Condition : STRADDLES U-NIT-142A 3m HORN_9120D_Z114 HORIZONTAL Detector : Peak Project : 992436-02	Left blank
Avg.	Left blank	Left blank

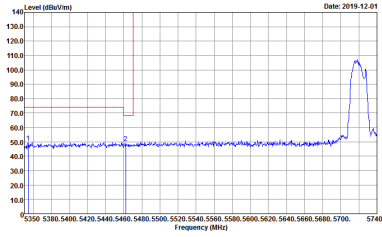
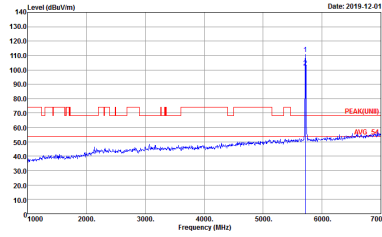
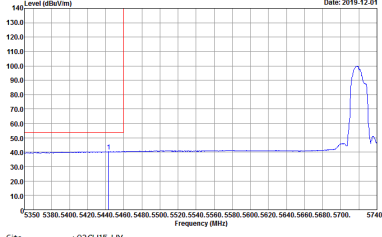


WIFI	Band 3 Straddle Channel Band Edge @ 3m	
ANT	802.11a CH144 5720MHz - L	
0+1+2	Vertical	Fundamental
Peak	 Site : 03CH15-HY Condition : STRADDLES U-NIT-1A2A 3m HORN_9120D_2114 VERTICAL Detector : Peak Project : 992436-02	 Site : 03CH15-HY Condition : PEAK(UNIT) 3m HORN_9120D_2114 VERTICAL Detector : Peak Project : 992436-02
Avg.	 Site : 03CH15-HY Condition : U-NIT-1A2A AVERAGE 3m HORN_9120D_2114 VERTICAL Detector : Peak Project : 992436-02	Left blank

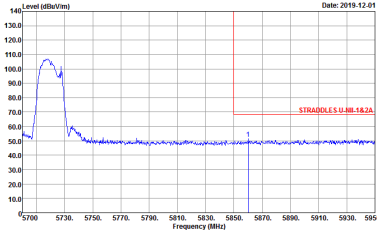


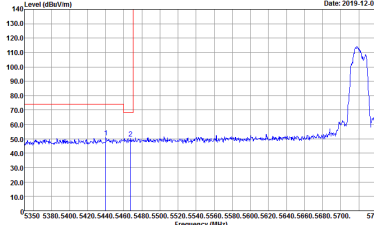
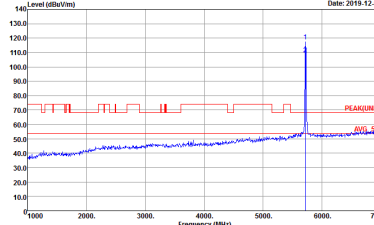
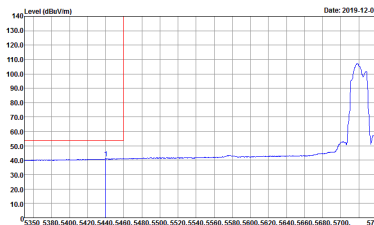
WIFI	Band 3 Straddle Channel Band Edge @ 3m	
ANT	802.11a CH144 5720MHz - R	
0+1+2	Vertical	Fundamental
Peak	 Site : 09CH25-HV Condition : STRADDLES U-NIT-1A2A 3m HORN_9120D_Z114 VERTICAL Detector : Peak Project : 992436-02	Left blank

Band 3 – Straddle Channel
WIFI 802.11ac VHT20 (Band Edge @ 3m)

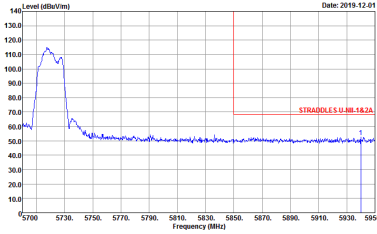
WIFI	Band 3 Straddle Channel Band Edge @ 3m	
ANT	802.11ac VHT20 CH144 5720MHz - L	
0+1+2	Horizontal	Fundamental
Peak	 Site : 03CH15-HY Condition : 5 STRADDOLES U-NIT-1A2A 3m HORN_9120D_2114 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : 992436-02	 Site : 03CH15-HY Condition : PEAK(UNIT) 3m HORN_9120D_2114 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : 992436-02
Avg.	 Site : 03CH15-HY Condition : U-NIT-1A2A AVERAGE 3m HORN_9120D_2114 HORIZONTAL Detector : Peak Project : 992436-02	Left blank



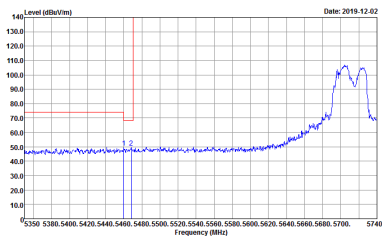
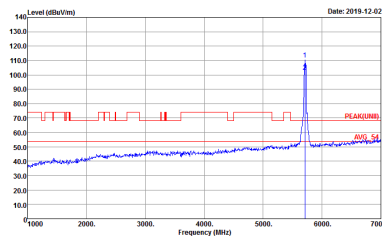
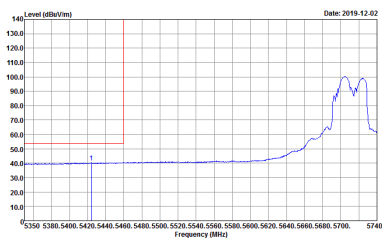
WIFI	Band 3 Straddle Channel Band Edge @ 3m	
ANT	802.11ac VHT20 CH144 5720MHz - R	
0+1+2	Horizontal	Fundamental
Peak	 Site : 09CH25-HV Condition : STRADDLES U-NIT-142A 3m HORN_9120D_Z114 HORIZONTAL Detector : Peak Project : 992436-02	Left blank

WIFI	Band 3 Straddle Channel Band Edge @ 3m	
ANT	802.11ac VHT20 CH144 5720MHz - L	
0+1+2	Vertical	Fundamental
Peak	 Site : 03CH15-HY Condition : STRADDLES U-NIT-1A2A 3m HORN_9120D_2114 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 992436-02	 Site : 03CH15-HY Condition : PEAK(UNIT) 3m HORN_9120D_2114 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 992436-02
Avg.	 Site : 03CH15-HY Condition : U-NIT-1A2A AVERAGE 3m HORN_9120D_2114 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 992436-02	Left blank



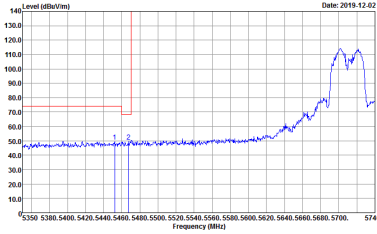
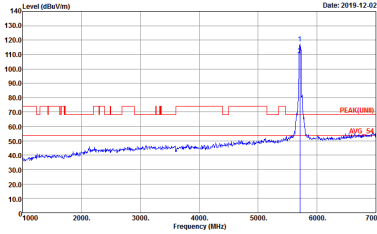
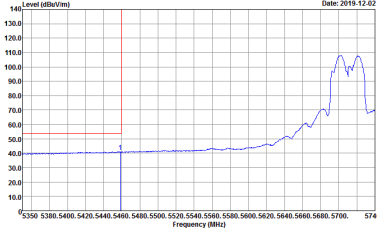
WIFI	Band 3 Straddle Channel Band Edge @ 3m	
ANT	802.11ac VHT20 CH144 5720MHz - R	
0+1+2	Vertical	Fundamental
Peak	 Site : 09CH25-HV Condition : STRADDLES U-NIT-142A 3m HORN_9120D_Z114 VERTICAL Detector : Peak Project : 992436-02	Left blank

Band 3 – Straddle Channel
WIFI 802.11ac VHT40 (Band Edge @ 3m)

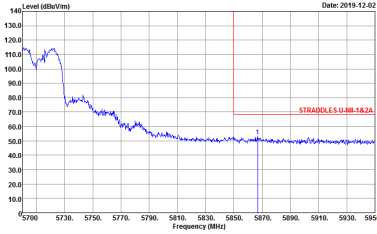
WIFI	Band 3 Straddle Channel Band Edge @ 3m	
ANT	802.11ac VHT40 CH142 5710MHz - L	
0+1+2	Horizontal	Fundamental
Peak	 Site : 03CH15-HY Condition : 5 STRADDOLES U-NIT-1A2A 3m HORN_9120D_2114 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : 992436-02	 Site : 03CH15-HY Condition : PEAK(UNIT) 3m HORN_9120D_2114 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : 992436-02
Avg.	 Site : 03CH15-HY Condition : U-NIT-1A2A AVERAGE 3m HORN_9120D_2114 HORIZONTAL Detector : RBW:1000.000KHz VBW:1.000KHz SWT:Auto Project : 992436-02	Left blank



WIFI	Band 3 Straddle Channel Band Edge @ 3m	
ANT	802.11ac VHT40 CH142 5710MHz - R	
0+1+2	Horizontal	Fundamental
Peak	Site : 09CH25-HV Condition : STRADDLES U-NIT-1A2A 3m HORN_9120D_Z114 HORIZONTAL Detector : Peak Project : 992436-02	Left blank

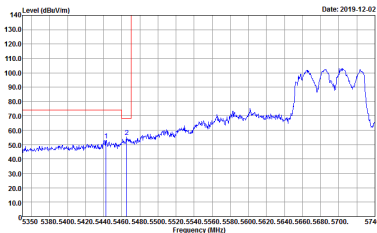
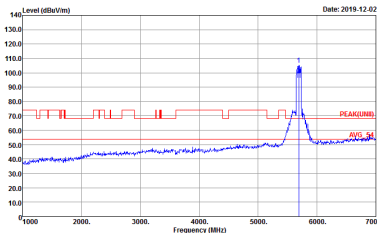
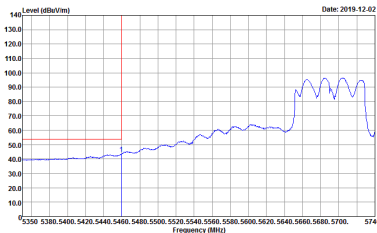
WIFI	Band 3 Straddle Channel Band Edge @ 3m	
ANT	802.11ac VHT40 CH142 5710MHz - L	
0+1+2	Vertical	Fundamental
Peak	 Site : 03CH15-HY Condition : STRADDLES U-NIT-1A2A 3m HORN_9120D_2114 VERTICAL Detector : Peak Project : 992436-02	 Site : 03CH15-HY Condition : PEAK(UNIT) 3m HORN_9120D_2114 VERTICAL Detector : Peak Project : 992436-02
Avg.	 Site : 03CH15-HY Condition : U-NIT-1A2A AVERAGE 3m HORN_9120D_2114 VERTICAL Detector : Peak Project : 992436-02	Left blank



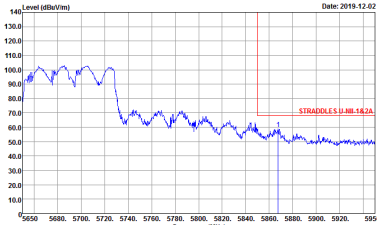
WIFI	Band 3 Straddle Channel Band Edge @ 3m	
ANT	802.11ac VHT40 CH142 5710MHz - R	
0+1+2	Vertical	Fundamental
Peak	 Site : 09CH25-HV Condition : STRADDLES U-NIT-1A2A 3m HORN_9120D_Z114 VERTICAL Detector : Peak Project : 992436-02	Left blank



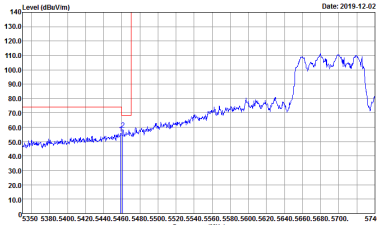
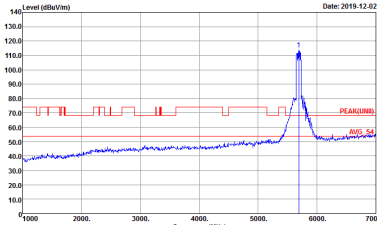
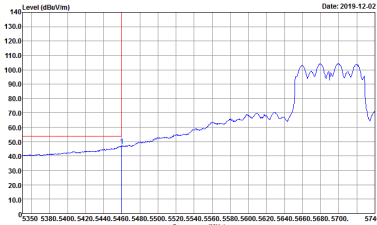
Band 3 – Straddle Channel
WIFI 802.11ac VHT80 (Band Edge @ 3m)

WIFI	Band 3 Straddle Channel Band Edge @ 3m	
ANT	802.11ac CH138 5690MHz - L	
0+1+2	Horizontal	Fundamental
Peak	 Site : 03CH15-HY Condition : STRADDOLES U-NII-1A2A 3m HORN_9120D_2114 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH15-HY Condition : PEAK(UNIT) 3m HORN_9120D_2114 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH15-HY Condition : U-NII-1A2A AVERAGE 3m HORN_9120D_2114 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	Left blank



WIFI	Band 3 Straddle Channel Band Edge @ 3m	
ANT	802.11ac CH138 5690MHz - R	
0+1+2	Horizontal	Fundamental
Peak	 Site : 03CH15-HY Condition : STRADDLES U-NIT-1A2A 3m HORN_91200_2114 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	Left blank



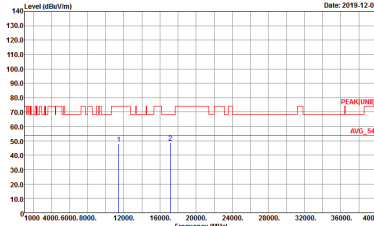
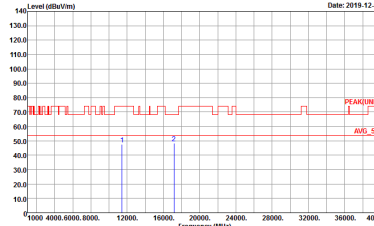
WIFI	Band 3 Straddle Channel Band Edge @ 3m	
ANT	802.11ac CH138 5690MHz - L	
0+1+2	Vertical	Fundamental
Peak	 Site : 03CH15-HY Condition : STRADDLES U-NII-1A2A 3m HORN_9120D_2114 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH15-HY Condition : PEAK(UNIT) 3m HORN_9120D_2114 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH15-HY Condition : U-NII-1A2A AVERAGE 3m HORN_9120D_2114 VERTICAL : RBW:1000.000KHz VBW:0.300KHz SWT:Auto	Left blank



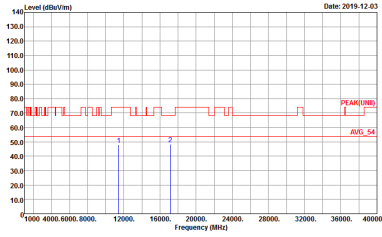
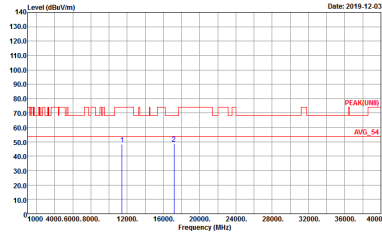
WIFI	Band 3 Straddle Channel Band Edge @ 3m	
ANT	802.11ac CH138 5690MHz - R	
0+1+2	Vertical	Fundamental
Peak	 Site : 03CH15-HY Condition : STRADDLES U-NIT-1&2A 3m HORN_91200_2114 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SFT:Auto	Left blank



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

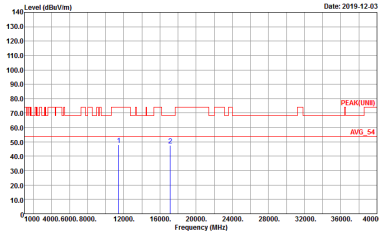
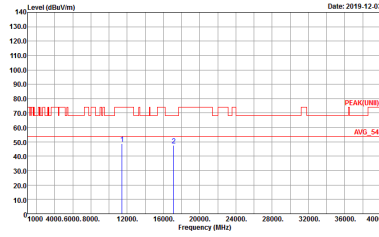
WIFI	Band 3 Straddle Channel Harmonic @ 3m	
ANT	802.11a CH144 5720MHz	
0+1+2	Horizontal	Vertical
Peak Avg.	 Site : 03CH15-HY Condition : PEAK(UNII) 3m HORN_91200_2114 HORIZONTAL Detector : Peak Project : 992436-02	 Site : 03CH15-HY Condition : PEAK(UNII) 3m HORN_91200_2114 VERTICAL Detector : Peak Project : 992436-02

Band 3 – Straddle Channel
WIFI 802.11ac VHT20 (Harmonic @ 3m)

WIFI	Band 3 Straddle Channel Harmonic @ 3m	
ANT	802.11ac VHT20 CH144 5720MHz	
0+1+2	Horizontal	Vertical
Peak Avg.	 Site : 03CH15-HY Condition : PEAK(UNII) 3m HORN_91200_2114 HORIZONTAL Detector : Peak Project : 992436-02	 Site : 03CH15-HY Condition : PEAK(UNII) 3m HORN_91200_2114 VERTICAL Detector : Peak Project : 992436-02

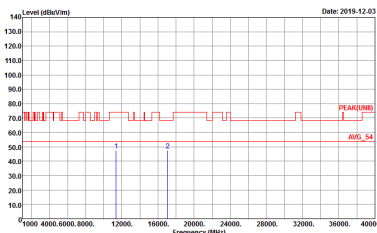
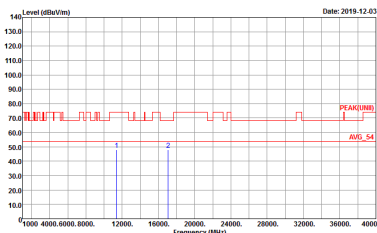


Band 3 – Straddle Channel
WIFI 802.11ac VHT40 (Harmonic @ 3m)

WIFI	Band 3 Straddle Channel Harmonic @ 3m	
ANT	802.11ac VHT40 CH142 5710MHz	
0+1+2	Horizontal	Vertical
Peak Avg.	 Site : 03CH15-HY Condition : PEAK(UNB) 3m HORN_91200_2114 HORIZONTAL Detector : Peak Project : 992436-02	 Site : 03CH15-HY Condition : PEAK(UNB) 3m HORN_91200_2114 VERTICAL Detector : Peak Project : 992436-02

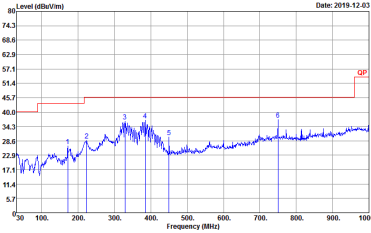
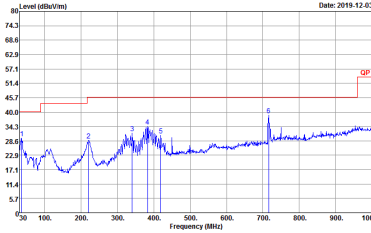


Band 3 – Straddle Channel
WIFI 802.11ac VHT80 (Harmonic @ 3m)

WIFI	Band 3 Straddle Channel Harmonic @ 3m	
ANT	802.11ac VHT80 CH138 5690MHz	
0+1+2	Horizontal	Vertical
Peak Avg.	 Site : 03CH15-HY Condition : PEAK(UNII) 3m HORN_91200_2114 VERTICAL Detector : Peak Project : 992436-02	 Site : 03CH15-HY Condition : PEAK(UNII) 3m HORN_91200_2114 VERTICAL Detector : Peak Project : 992436-02



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

WIFI	5GHz WIFI	
ANT	802.11ac VHT80 LF	
0+1+2	Horizontal	Vertical
QP / Peak	 Site : 03CH15-HY Condition : QP 3m B1LOG_15_41912 HORIZONTAL Detector : Peak Project : 992436-02	 Site : 03CH15-HY Condition : QP 3m B1LOG_15_41912 VERTICAL Detector : Peak Project : 992436-02

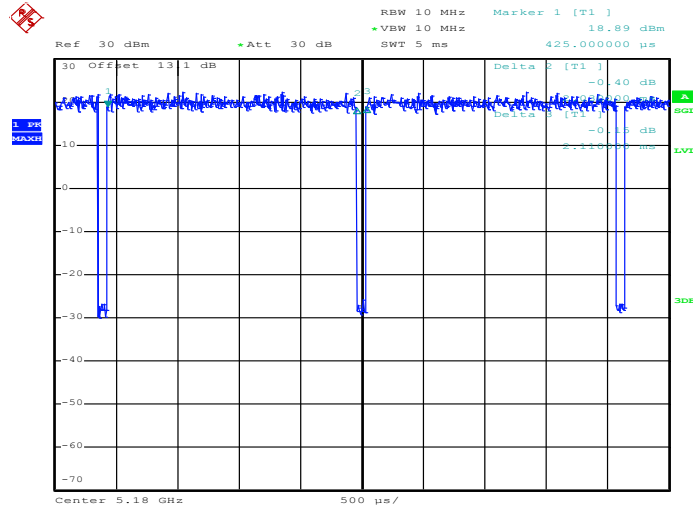
Appendix E. Duty Cycle Plots

Antenna	Band	Duty Cycle(%)	T(us)	1/T(kHz)	VBW Setting	Duty Factor(dB)
0+1+2	802.11a for Ant 0	96.21	2030	0.49	1kHz	0.17
0+1+2	802.11a for Ant 1	96.68	2040	0.49	1kHz	0.15
0+1+2	802.11a for Ant 2	96.21	2030	0.49	1kHz	0.17
0+1+2	802.11n HT20 for Ant 0	98.61	-	-	10Hz	0.06
0+1+2	802.11n HT20 for Ant 1	98.02	-	-	10Hz	0.09
0+1+2	802.11n HT20 for Ant 2	98.31	-	-	10Hz	0.07
0+1+2	2.4GHz 802.11n HT40 for Ant 0	95.80	2395	0.42	1kHz	0.19
0+1+2	2.4GHz 802.11n HT40 for Ant 1	96.19	2400	0.42	1kHz	0.17
0+1+2	2.4GHz 802.11n HT40 for Ant 2	96.41	2420	0.41	1kHz	0.16
0+1+2	2.4GHz 802.11n VHT20 for Ant 0	90.28	4970	0.20	300Hz	0.44
0+1+2	2.4GHz 802.11n VHT20 for Ant 1	90.45	4975	0.20	300Hz	0.44
0+1+2	2.4GHz 802.11n VHT20 for Ant 2	91.07	4995	0.20	300Hz	0.41
0+1+2	2.4GHz 802.11VHT40 for Ant 0	82.39	2410	0.41	1kHz	0.84
0+1+2	2.4GHz 802.11VHT40 for Ant 1	82.20	2425	0.41	1kHz	0.85
0+1+2	2.4GHz 802.11VHT40 for Ant 2	82.31	2420	0.41	1kHz	0.85
0+1+2	2.4GHz 802.11VHT80 for Ant 0	86.19	3340	0.30	300Hz	0.65
0+1+2	2.4GHz 802.11VHT80 for Ant 1	86.69	3355	0.30	300Hz	0.62
0+1+2	2.4GHz 802.11VHT80 for Ant 2	86.34	3350	0.30	300Hz	0.64



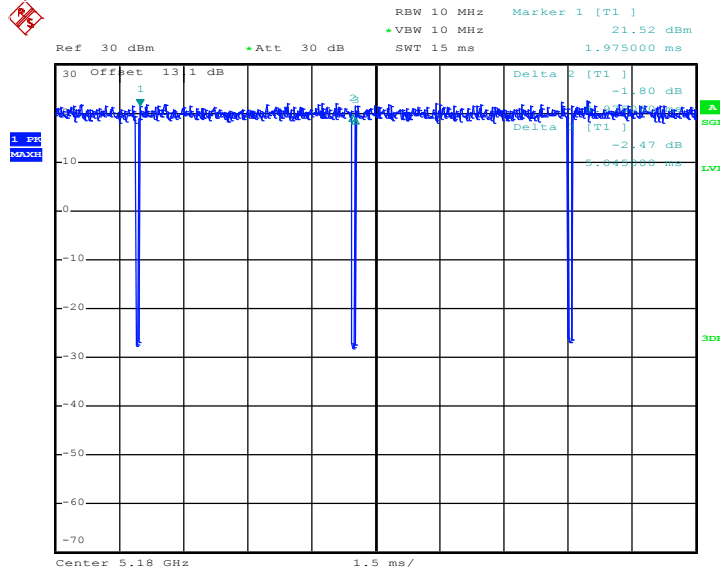
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802.11a

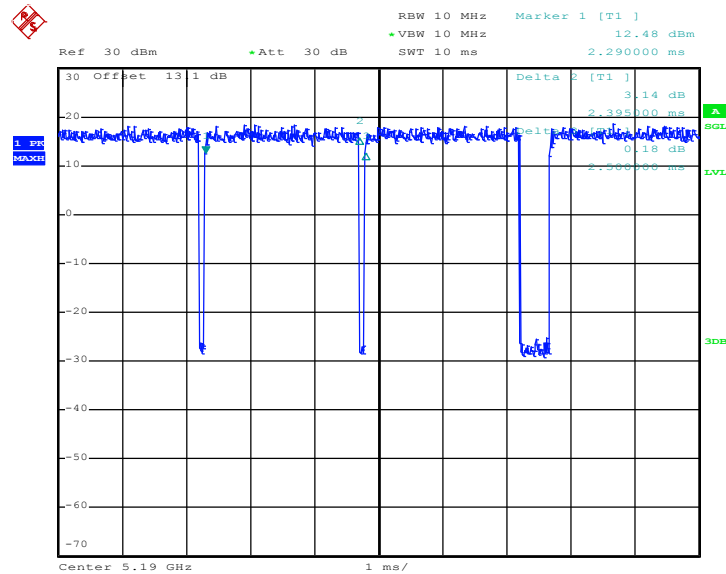


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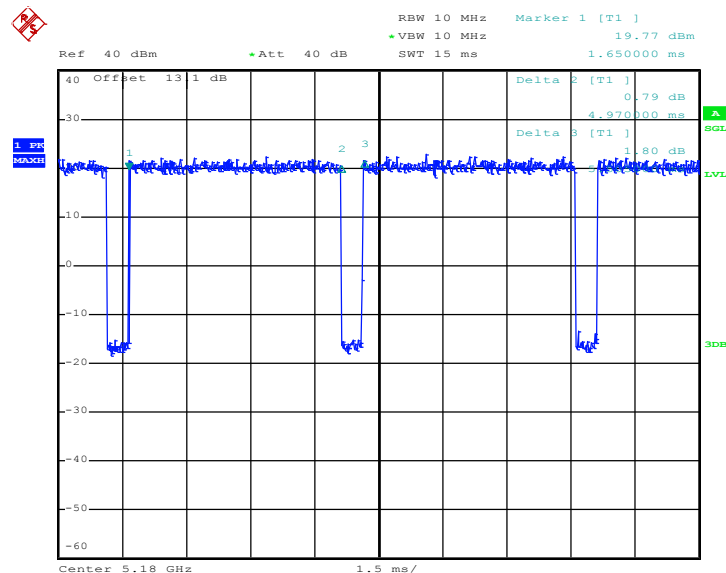
802.11n HT20



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802.11n HT40


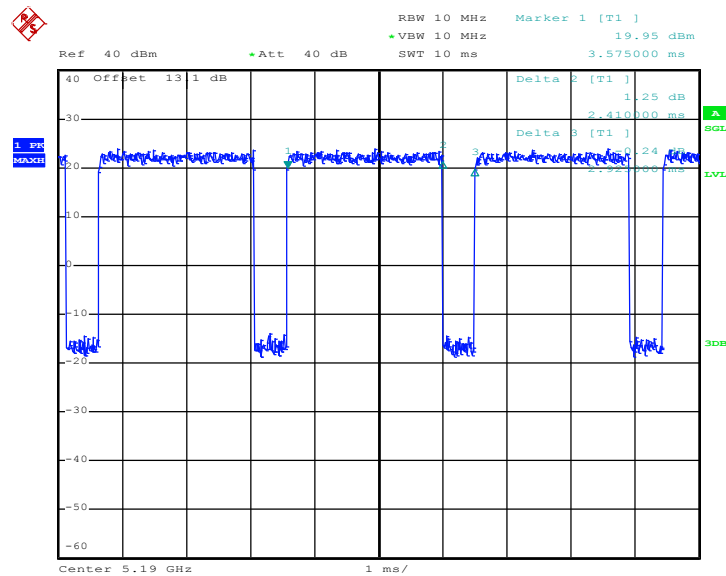
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802.11ac VHT20


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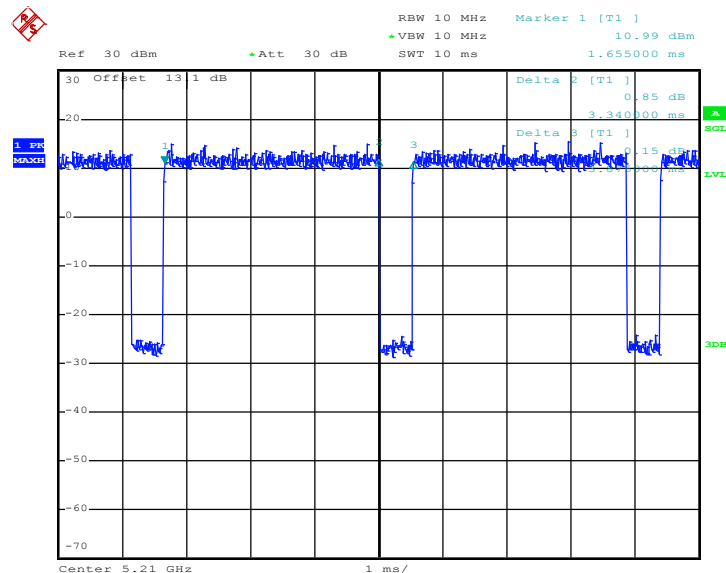


802.11ac VHT40

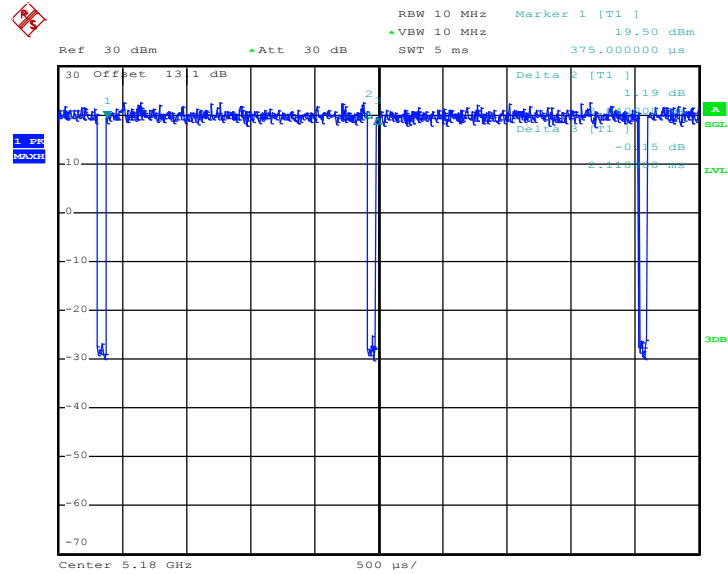


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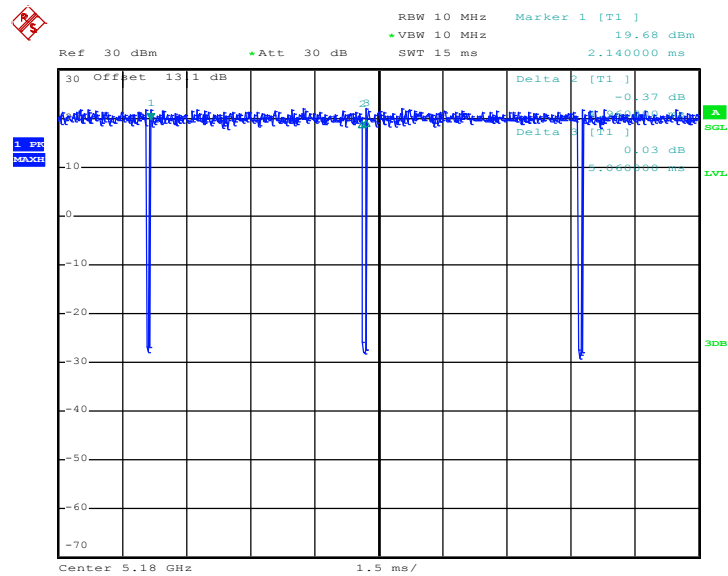
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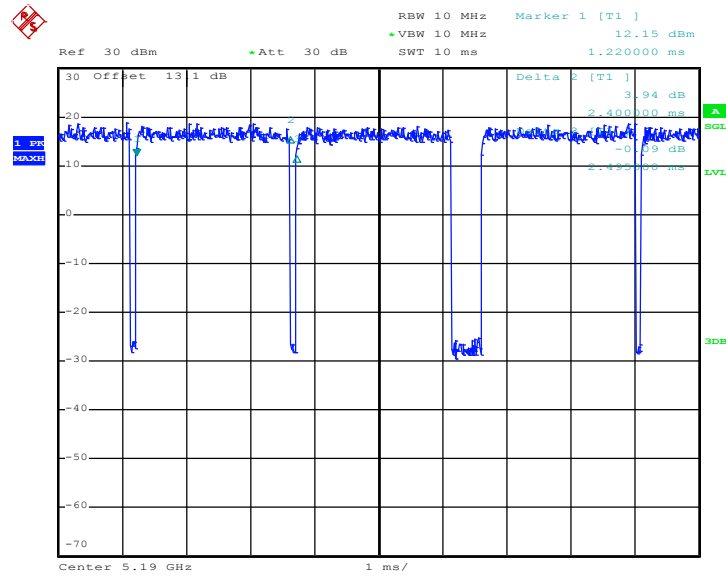
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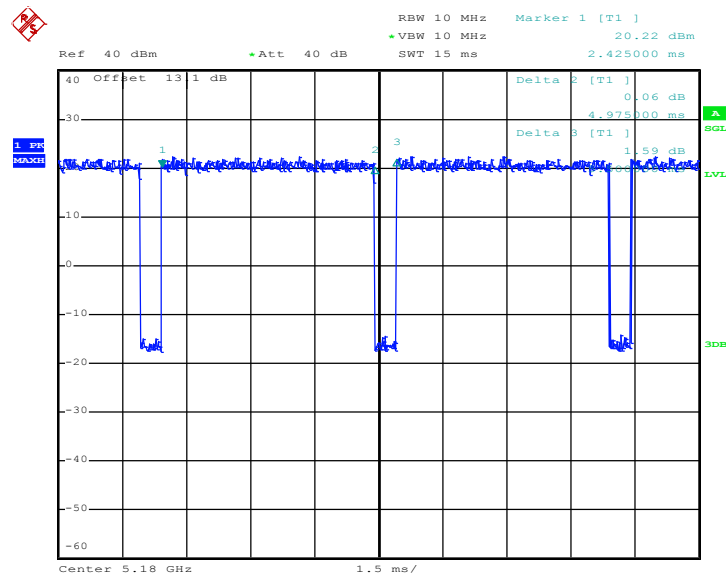
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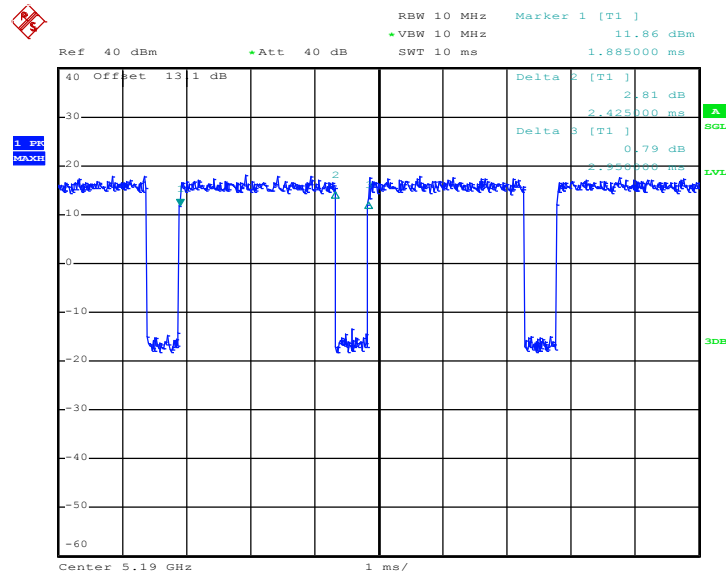
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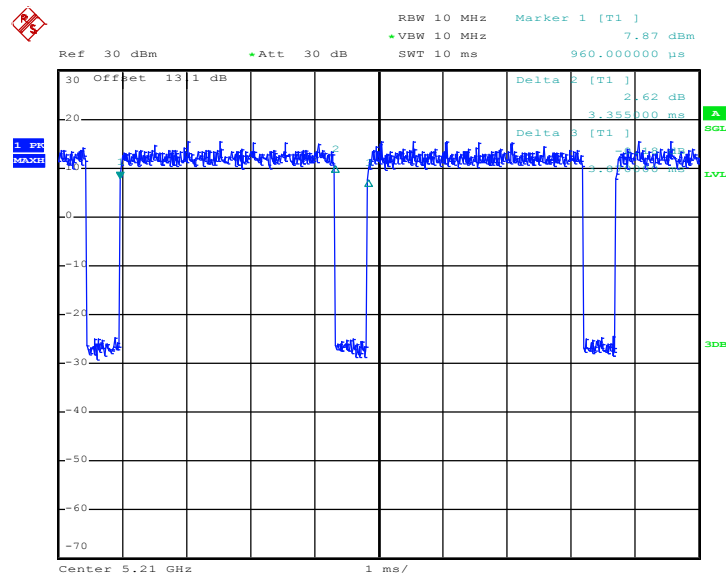
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802.11ac VHT20


Date: 23.OCT.2019 10:36:00

802.11ac VHT40


Date: 23.OCT.2019 11:32:18

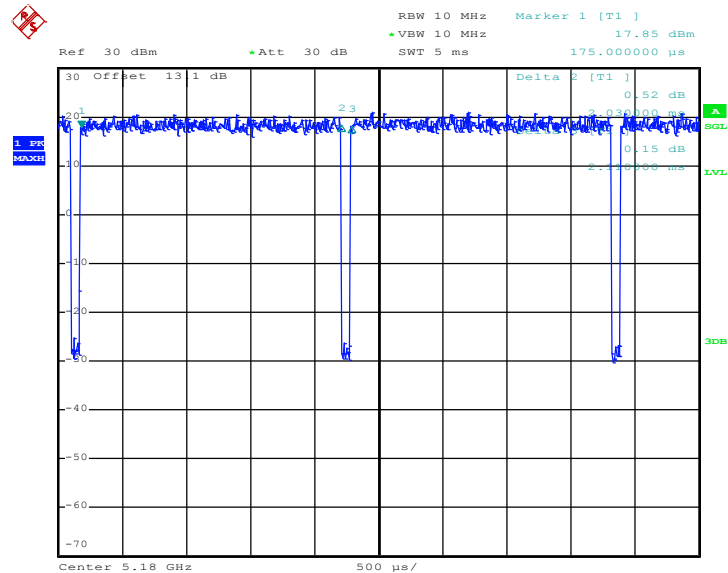
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Date: 23.OCT.2019 11:52:38



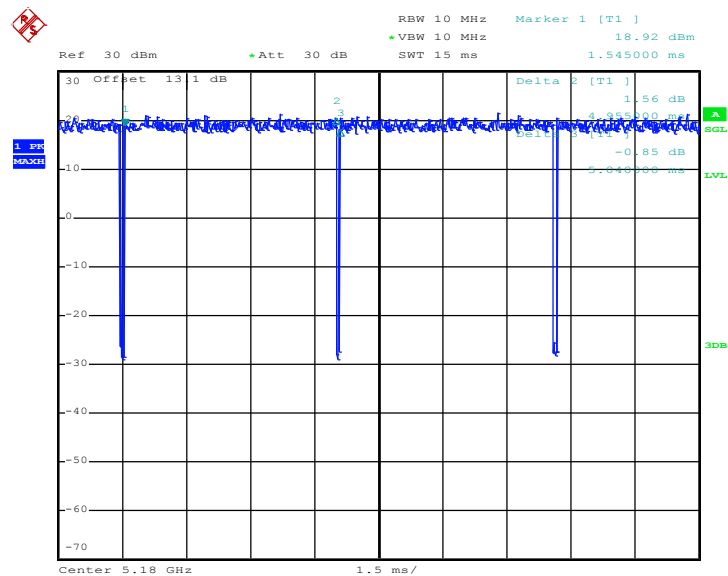
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Date: 22.OCT.2019 16:03:13

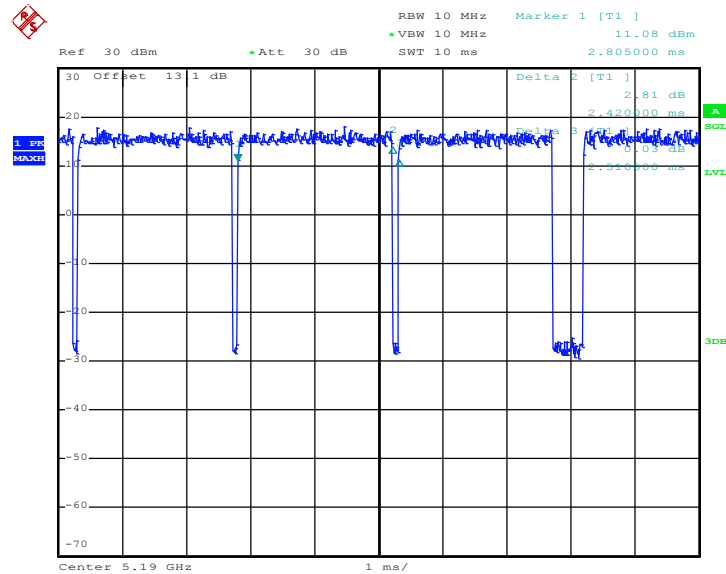
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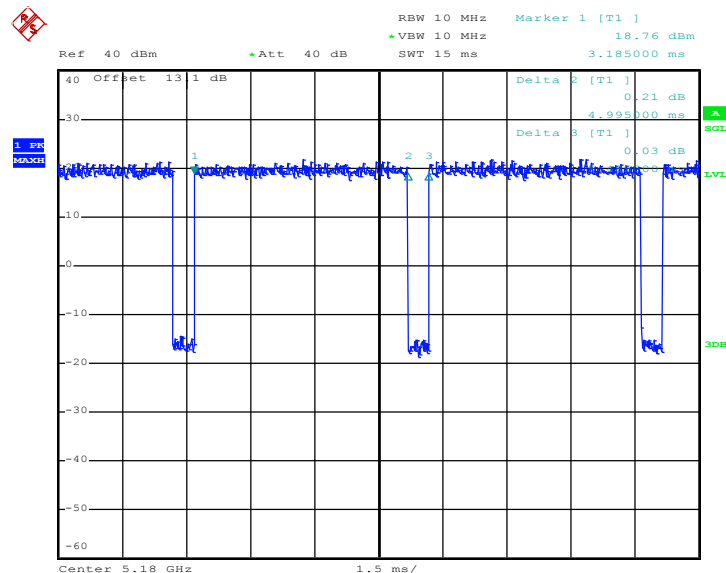


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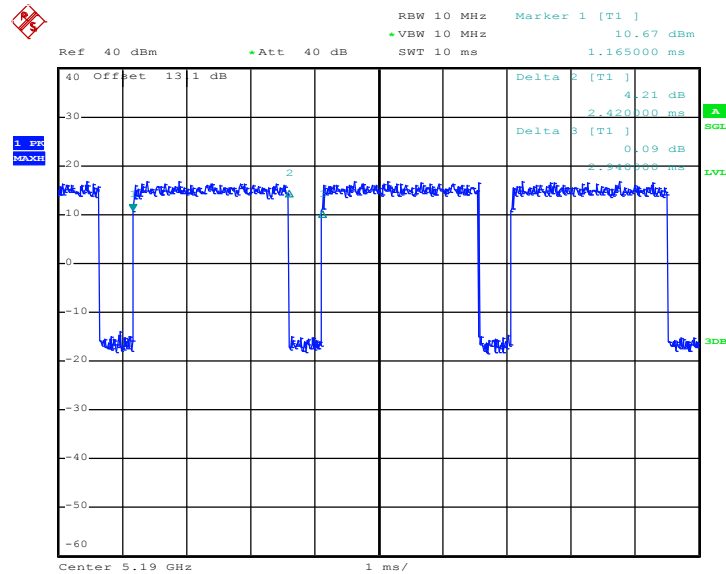


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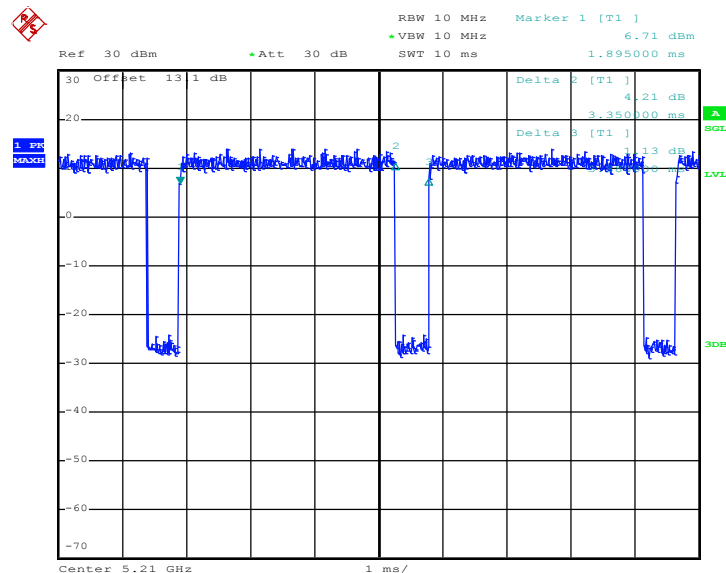
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802.11ac VHT40


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Date: 23.OCT.2019 11:53:57