

FCC RADIO TEST REPORT

FCC ID : U8G-P1941

Equipment : PEPWAVE / peplink Wireless Product

Brand Name : PEPWAVE / peplink

Model Name : UBR LTE
MAX UBR LTE
MAX UBR
MAX UBR LTEA
UBR
MAX BR2 Pro
BR2 Pro
MAX BR2 Pro LTE
MAX BR2 Pro LTEA
MAX-CX2-Mini
MAX CX2 Mini
CX2 Mini
MAX-BR2-PRO-LTEA-W-T
MAX-BR2-PRO-LTE-US-T
Pismo941
UBR-LTE
UBR-LTE-US-T
UBR-LTE-US-T-PRM
UBR-LTEA-W-T
UBR-LTEA-W-T-PRM
MAX BR1 Pro
MAX BR1 Pro LTE
MAX BR1 Pro LTEA
MAX-BR1-PRO-LTEA-W-T
MAX-BR1-PRO-LTE-US-T

Applicant : PISMO LABS TECHNOLOGY LIMITED
A8, 5/F, HK Spinners Industrial Building, Phase 6,
481 Castle Peak Road, Cheung Sha Wan, Hong Kong

Manufacturer : PISMO LABS TECHNOLOGY LIMITED
A8, 5/F, HK Spinners Industrial Building, Phase 6,
481 Castle Peak Road, Cheung Sha Wan, Hong Kong

Standard : FCC Part 15 Subpart E §15.407



The detailed of model name can be referred PISMO_FCC_model_confirmation_to_Sporton_UBR LTE List

The product was received on Nov. 01, 2019 and testing was started from Nov. 08, 2019 and completed on Mar. 23, 2020. 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
FR9N0104B	01	Initial issue of report	Mar. 18, 2020
FR9N0104B	02	1. Revise power spectral density test result of 802.11a 5180MHz 2. Update 802.11a HT20 CH. 36 test result 3. Revise antenna type, model name, and table of contents	Mar. 26, 2020
FR9N0104B	03	Revise Brand Name and Model Name	Mar. 30, 2020

Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
3.1	15.403(i)	26dB Bandwidth	Pass	-
3.1	2.1049	99% Occupied Bandwidth	Reporting only	-
3.2	15.407(a)	Maximum Conducted Output Power	Pass	-
3.3	15.407(a)	Power Spectral Density	Pass	-
3.4	15.407(b)	Unwanted Emissions	Pass	Under limit 1.12 dB at 5148.980 MHz
3.5	15.207	AC Conducted Emission	Pass	Under limit 15.20 dB at 0.355 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: Dara Chiu



1 General Description

1.1 Product Feature of Equipment Under Test

WCDMA/LTE, Wi-Fi 2.4GHz 802.11b/g/n, Wi-Fi 5GHz 802.11a/n, and GNSS

Product Specification subjective to this standard	
Integrated WWAN Module 1	Brand Name: Sierra Model Name: MC7455 FCC ID: N7NMC7455
Integrated WWAN Module 2	Brand Name: Telit Model Name: LE910C4-NF FCC ID: RI7LE910CXNF
Antenna Type	WWAN: Omni-directional Antenna WLAN: Omni-directional Antenna GPS: Directional Antenna
Serial Number	Conducted: 2937-8EEB-A663 AC Conducted Emission: 2937-1BEC-3318 Radiation spurious emission: 2937-8EEB-A663

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.	
	03CH16-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 types of antenna angle, horizontal and vertical. The worst cases (vertical) were recorded in this report.
- b. AC power line Conducted Emission was tested under maximum output power.

2.1 Carrier Frequency and Channel

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

Note: The above Frequency and Channel in "*" were 802.11n HT40.

2.2 Test Mode

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

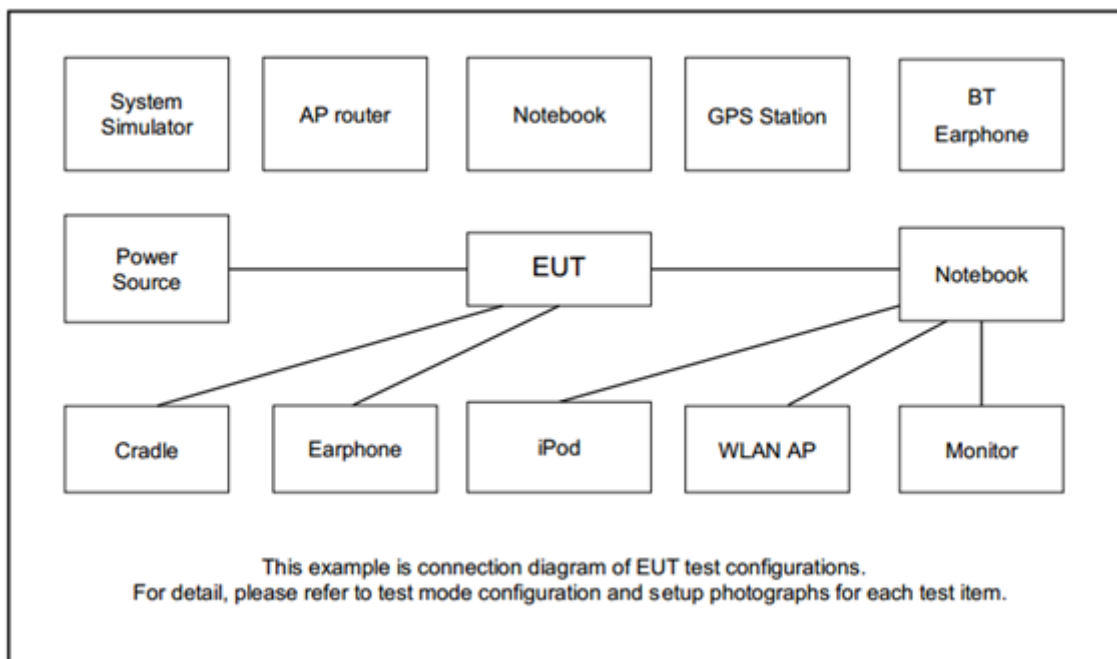
Modulation	Data Rate
802.11a	6 Mbps
802.11n HT20	MCS0
802.11n HT40	MCS0

Test Cases	
AC Conducted Emission	Mode 1 : WLAN (5GHz) Link + Adapter + WAN Link + LAN Link
Remark: For AC Conducted Emission, the test voltage 120Vac was the worst case.	

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

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

2.3 Connection Diagram of Test System



2.4 Support Unit used in test configuration and system

Item	Equipment	Trade Name	Model Name	FCC ID	Data Cable	Power Cord
1.	WLAN AP	ASUS	RT-AC66U	MSQ-RTAC66U	N/A	Unshielded, 1.8 m
2.	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	P20G	FCC DoC/ Contains FCC ID: QDS-BRCM1051	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 “Artgui Tool” 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.

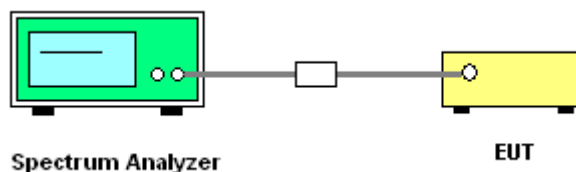
3.1.2 Measuring Instruments

See list of measuring equipment of this test report.

3.1.3 Test Procedures

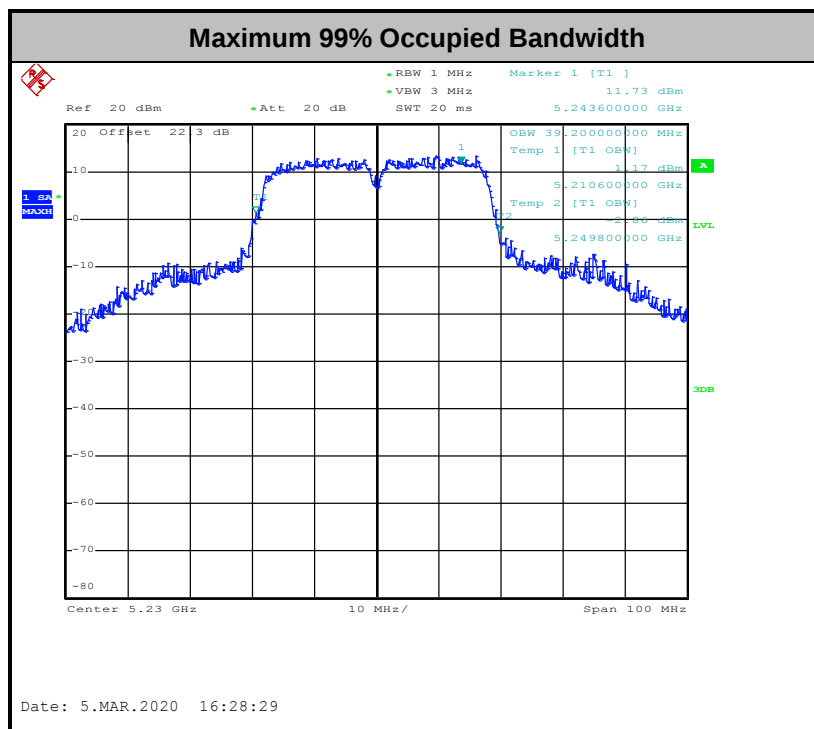
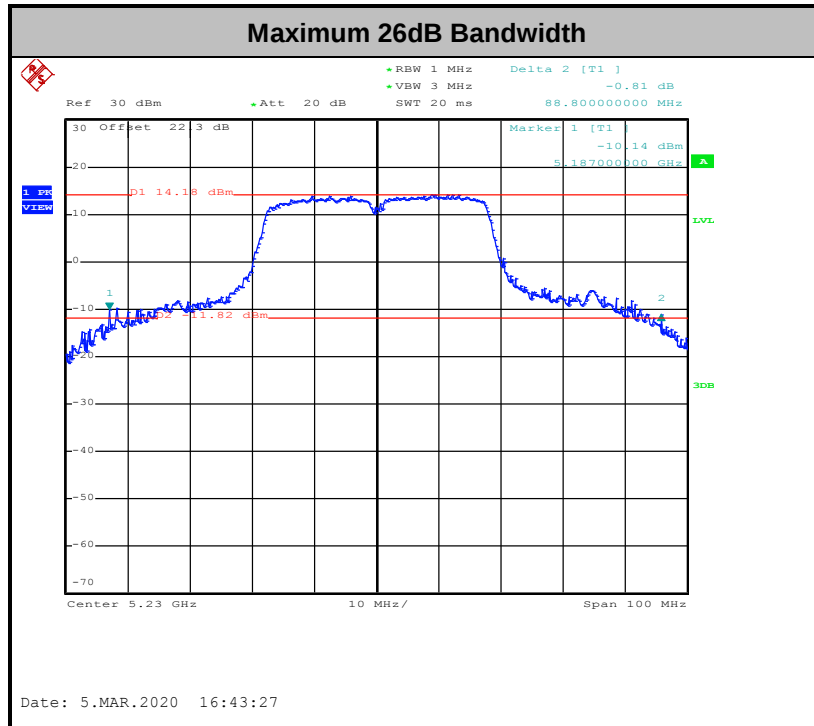
1. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01. Section C) Emission bandwidth
2. Set RBW = approximately 1% of the emission bandwidth.
3. Set the VBW > RBW.
4. Detector = Peak.
5. Trace mode = max hold
6. Measure the maximum width of the emission that is 26 dB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

3.1.4 Test Setup



3.1.5 Test Result of 26dB & 99% Occupied Bandwidth

Please refer to Appendix A.



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

3.2 Maximum Conducted Output Power Measurement

3.2.1 Limit of Maximum Conducted Output Power

<FCC 14-30 CFR 15.407>

For the 5.15–5.25 GHz bands:

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

For the 5.25–5.725 GHz bands:

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

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.

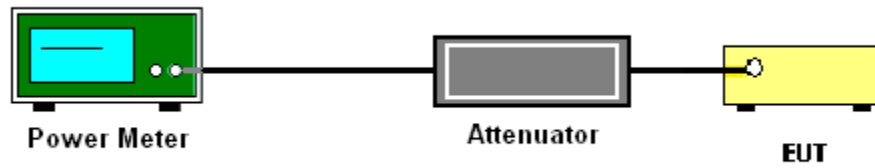
3.2.3 Test Procedures

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 at its maximum power control level.
3. Measure the average power of the transmitter
4. Since the measurement is made only during the ON time of the transmitter, no duty cycle correction factor is required.

3.2.4 Test Setup



3.2.5 Test Result of Maximum Conducted Output Power

Please refer to Appendix A.

3.3 Power Spectral Density Measurement

3.3.1 Limit of Power Spectral Density

<FCC 14-30 CFR 15.407>

For the 5.15–5.25 GHz bands:

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

For the 5.25–5.725 GHz bands:

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

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):

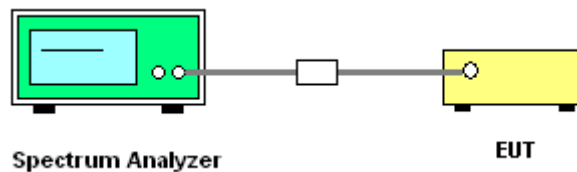
- Set span to encompass the entire emission bandwidth (EBW) of the signal.
- Set RBW = 1 MHz.
- Set VBW $\geq$ 3 MHz
- Number of points in sweep $\geq$ 2 Span / RBW.
- Sweep time $\leq$ (number of points in sweep) $\times$ T, when duty cycle is less than 98 percent where T is the minimum transmission 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 2 transmitter outputs. The spectrum measurements of the individual outputs are all performed with the same span and number of points; the spectrum value in the first spectral bin of output 1 is summed with that in the first spectral bin of output 2 to obtain the value for the first frequency bin of the summed spectrum.

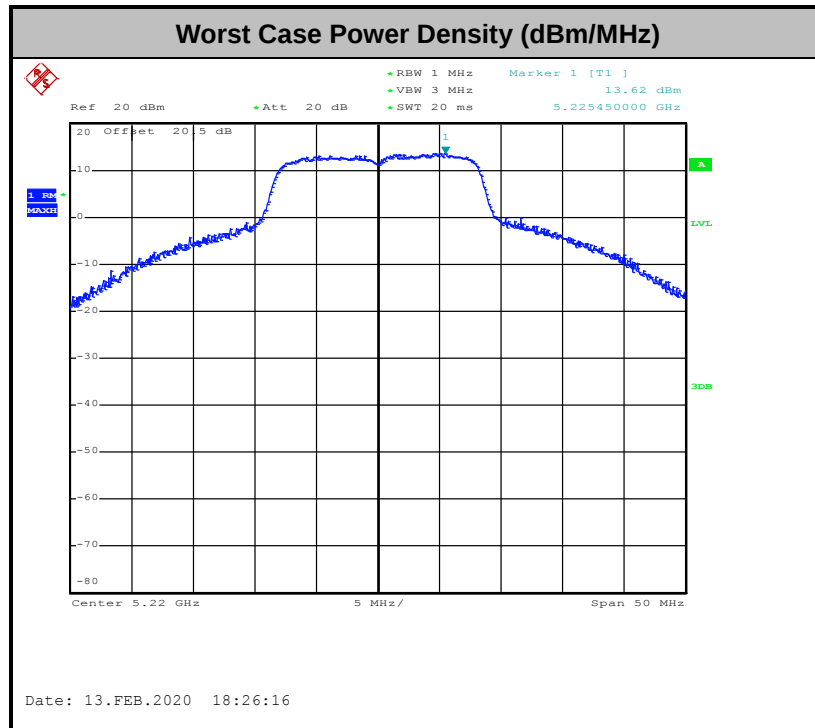
3.3.4 Test Setup





3.3.5 Test Result of Power Spectral Density

Please refer to Appendix A.



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

3.4 Unwanted Emissions Measurement

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

3.4.1 Limit of Unwanted Emissions

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

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

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

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

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

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

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

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

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

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

3.4.2 Measuring Instruments

See list of measuring equipment of this test report.

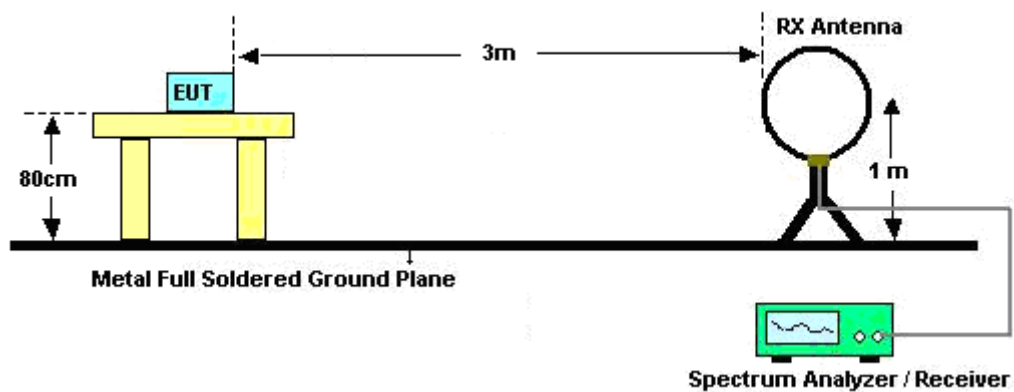
3.4.3 Test Procedures

1. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01. Section G) Unwanted emissions measurement.
 - (1) Procedure for Unwanted Emissions Measurements Below 1000MHz
 - RBW = 120 kHz
 - VBW = 300 kHz
 - Detector = Peak
 - Trace mode = max hold
 - (2) Procedure for Peak Unwanted Emissions Measurements Above 1000 MHz
 - RBW = 1 MHz
 - VBW $\geq$ 3 MHz
 - Detector = Peak
 - Sweep time = auto
 - Trace mode = max hold
 - (3) Procedures for Average Unwanted Emissions Measurements Above 1000MHz
 - RBW = 1 MHz
 - VBW = 10 Hz, when duty cycle is no less than 98 percent.
 - VBW $\geq$ $1/T$, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.
2. The EUT was placed on a turntable with 0.8 meter for frequency below 1GHz and 1.5 meter for frequency above 1GHz respectively above ground.
3. The EUT was set 3 meters from the interference receiving antenna which was mounted on the top of a variable height antenna tower.
4. The antenna is a broadband antenna and its height is adjusted between one meter and four meters above ground to find the maximum value of the field strength for both horizontal polarization and vertical polarization of the antenna.

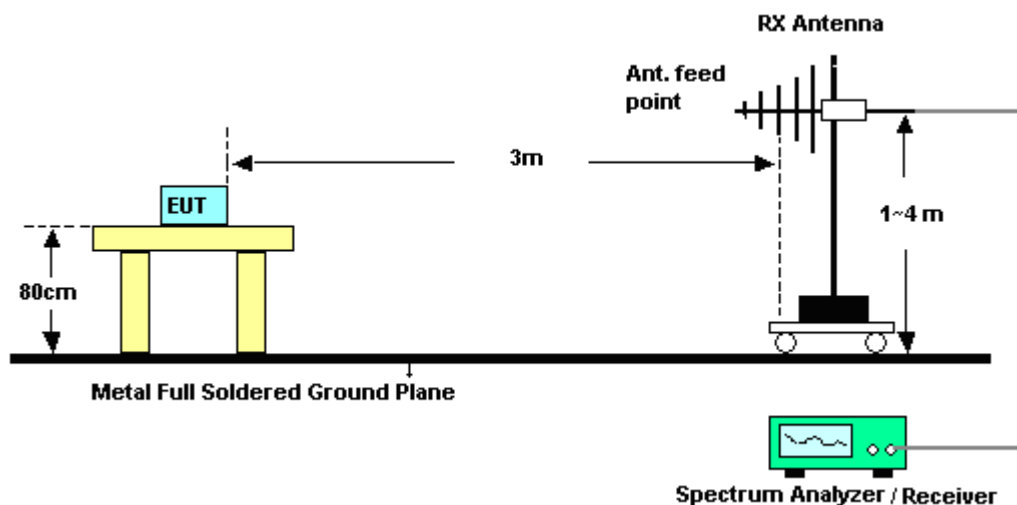
5. For each suspected emission, the EUT was arranged to its worst case and then adjust the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading.
6. For testing below 1GHz, if the emission level of the EUT in peak mode was 3 dB lower than the limit specified, then peak values of EUT will be reported, otherwise, the emissions will be repeated one by one using the CISPR quasi-peak method and reported.
7. For testing above 1GHz, the emission level of the EUT in peak mode was 20dB lower than average limit (that means the emission level in average mode also complies with the limit in average mode), then peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.

3.4.4 Test Setup

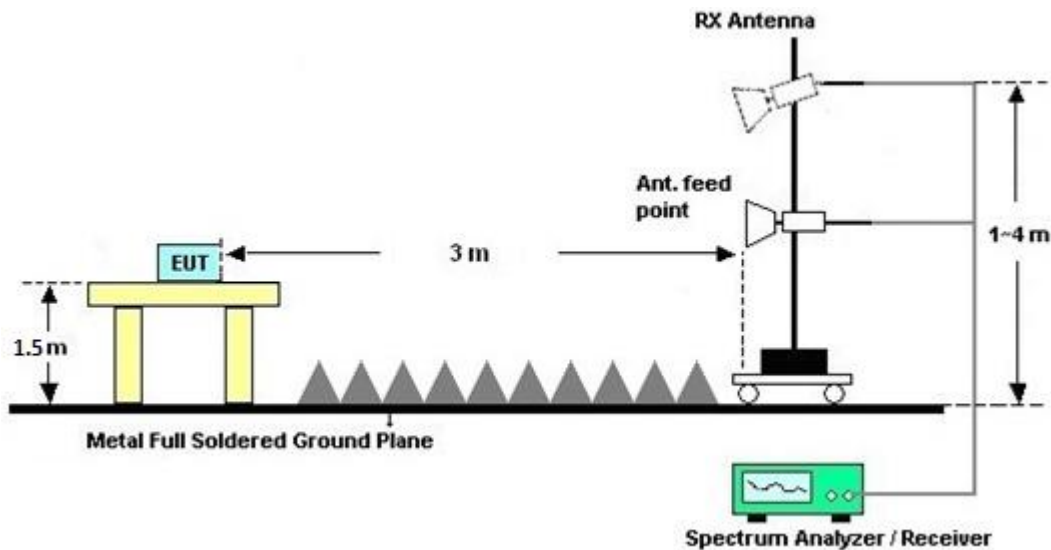
For radiated emissions below 30MHz



For radiated emissions from 30MHz to 1GHz



For radiated emissions above 1GHz



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

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

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

3.4.6 Test Result of Radiated Spurious at Band Edges

Please refer to Appendix C and D.

3.4.7 Duty Cycle

Please refer to Appendix E.

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

Please refer to Appendix C and D.

3.5 AC Conducted Emission Measurement

3.5.1 Limit of AC Conducted Emission

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

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

*Decreases with the logarithm of the frequency.

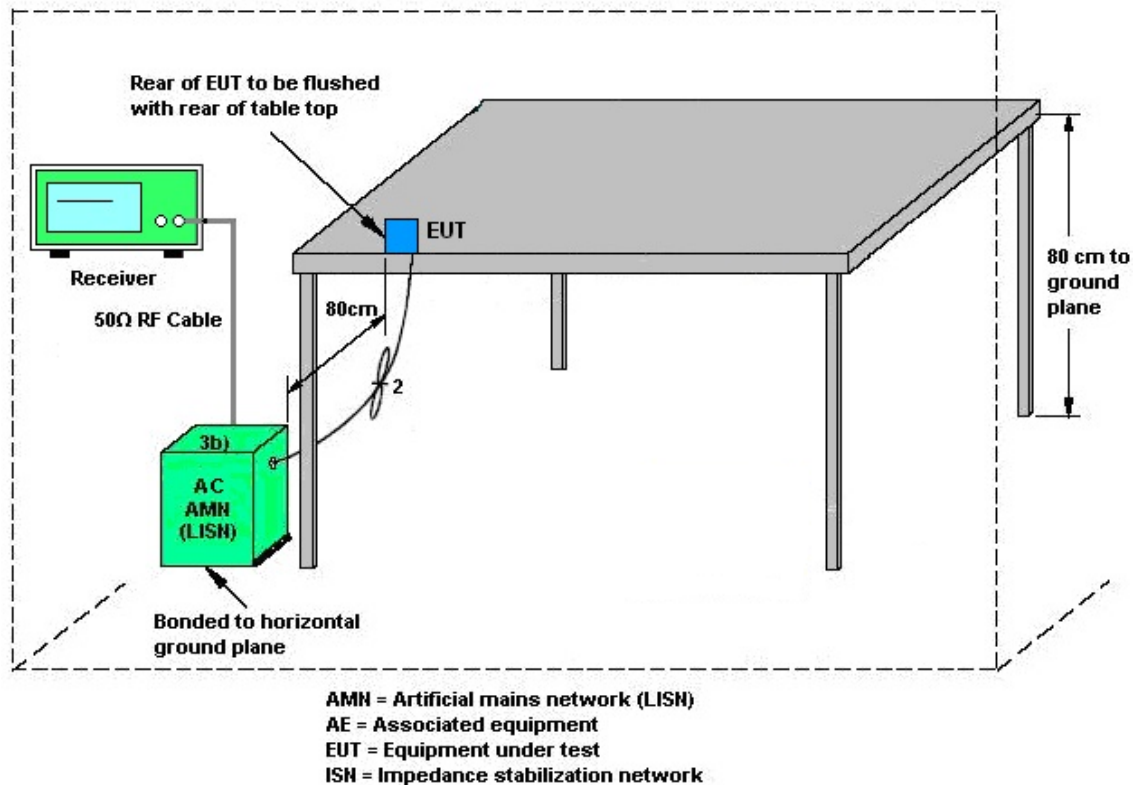
3.5.2 Measuring Instruments

See list of measuring equipment of this test report.

3.5.3 Test Procedures

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

3.5.4 Test Setup



3.5.5 Test Result of AC Conducted Emission

Please refer to Appendix B.



3.6 Automatically Discontinue Transmission

3.6.1 Limit of Automatically Discontinue Transmission

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

3.6.2 Measuring Instruments

See list of measuring equipment of this test report.

3.6.3 Test Result of Automatically Discontinue Transmission

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

3.7 Antenna Requirements

3.7.1 Standard Applicable

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

3.7.2 Antenna Anti-Replacement Construction

An embedded-in antenna design is used.

3.7.3 Antenna Gain

<CDD Modes >

FCC KDB 662911 D01 Multiple Transmitter Output v02r01

For CDD transmissions, directional gain is calculated as

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

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

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

For power measurements on IEEE 802.11 devices,

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

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

The EUT supports CDD mode.

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

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

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

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

<CDD Modes>						
			DG	DG	Power	PSD
			for	for	Limit	Limit
	Ant. 1	Ant. 2	Power	PSD	Reduction	Reduction
	(dBi)	(dBi)	(dBi)	(dBi)	(dB)	(dB)
Band I	4.10	4.10	4.10	7.11	0.00	1.11

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	Feb. 12, 2020~ Mar. 23, 2020	Jun. 16, 2020	Conducted (TH05-HY)
Power Sensor	DARE	RPR3006W	13I00030SNO 32	9kHz~6GHz	Dec. 17, 2019	Feb. 12, 2020~ Mar. 23, 2020	Dec. 16, 2020	Conducted (TH05-HY)
Spectrum Analyzer	Rohde & Schwarz	FSQ	200578/026	20Hz~26.5GHz	Jul. 10, 2019	Feb. 12, 2020~ Mar. 23, 2020	Jul. 09, 2020	Conducted (TH05-HY)
Switch Box & RF Cable	Burgeon	ETF-058	EC1208382	N/A	Mar. 27, 2019	Feb. 12, 2020~ Mar. 23, 2020	Mar. 26, 2020	Conducted (TH05-HY)
Spectrum Analyzer	Rohde & Schwarz	FSP7	101131	9kHz~7GHz	Aug. 14, 2019	Feb. 12, 2020~ Mar. 23, 2020	Aug. 13, 2020	Conducted (TH05-HY)
AC Power Source	ChainTek	APC-1000W	N/A	N/A	N/A	Nov. 08, 2019	N/A	Conduction (CO05-HY)
EMI Test Receiver	Rohde & Schwarz	ESR3	102388	9kHz~3.6GHz	Nov. 12, 2018	Nov. 08, 2019	Nov. 11, 2019	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100080	9kHz~30MHz	Nov. 14, 2018	Nov. 08, 2019	Nov. 13, 2019	Conduction (CO05-HY)
Software	Rohde & Schwarz	EMC32 V10.30	N/A	N/A	N/A	Nov. 08, 2019	N/A	Conduction (CO05-HY)
LF Cable	HUBER + SUHNER	RG-214/U	LF01	N/A	Dec. 31, 2018	Nov. 08, 2019	Dec. 30, 2019	Conduction (CO05-HY)
Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100851	N/A	Dec. 31, 2018	Nov. 08, 2019	Dec. 30, 2019	Conduction (CO05-HY)
Loop Antenna	Rohde & Schwarz	HFH2-Z2	100488	9 kHz~30 MHz	Dec. 26, 2019	Jan. 18, 2020~ Jan. 25, 2020	Dec. 25, 2020	Radiation (03CH16-HY)
Bilog Antenna	TESEQ	CBL6111D&00 802N1D01N-0 6	47020&06	30MHz to 1GHz	Oct. 13, 2019	Jan. 18, 2020~ Jan. 25, 2020	Oct. 12, 2020	Radiation (03CH16-HY)
Horn Antenna	SCHWARZBE CK	BBHA 9120 D	9120D-1522	1G~18GHz	Sep. 19, 2019	Jan. 18, 2020~ Jan. 25, 2020	Sep. 18, 2020	Radiation (03CH16-HY)
Amplifier	SONOMA	310N	371607	9kHz~1000MHz	Oct. 01, 2019	Jan. 18, 2020~ Jan. 25, 2020	Sep. 30, 2020	Radiation (03CH16-HY)
Preamplifier	Jet-Power	JPA0118-55-30 3	17100018000 54001	1GHz~18GHz	May 19, 2019	Jan. 18, 2020~ Jan. 25, 2020	May 18, 2020	Radiation (03CH16-HY)
Preamplifier	EMEC	EMC184045B	980192	18GHz ~40GHz	Jul. 10, 2019	Jan. 18, 2020~ Jan. 25, 2020	Jul. 09, 2020	Radiation (03CH16-HY)
Preamplifier	Keysight	83017A	MY53270264	1GHz~26.5GHz	Dec. 11, 2019	Jan. 18, 2020~ Jan. 25, 2020	Dec. 10, 2020	Radiation (03CH16-HY)
EMI Test Receiver	Keysight	N9038A (MXE)	MY55420170	20MHz~8.4GHz	Mar. 08, 2019	Jan. 18, 2020~ Jan. 25, 2020	Mar. 07, 2020	Radiation (03CH16-HY)
Spectrum Analyzer	Agilent	E4446A	MY50180136	3Hz~44GHz	Apr. 29, 2019	Jan. 18, 2020~ Jan. 25, 2020	Apr. 28, 2020	Radiation (03CH16-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY11680/4P E	NA	Aug. 30, 2019	Jan. 18, 2020~ Jan. 25, 2020	Aug. 29, 2020	Radiation (03CH16-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY11688/4P E	NA	Aug. 30, 2019	Jan. 18, 2020~ Jan. 25, 2020	Aug. 29, 2020	Radiation (03CH16-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	EC-A5-300-5 757	NA	Aug. 30, 2019	Jan. 18, 2020~ Jan. 25, 2020	Aug. 29, 2020	Radiation (03CH16-HY)
Software	Audix	E3 6.2009-8-24	RK-001136	N/A	N/A	Jan. 18, 2020~ Jan. 25, 2020	N/A	Radiation (03CH16-HY)
SHF-EHF Horn Antenna	SCHWARZBE CK	BBHA 9170	BBHA917057 6	18GHz- 40GHz	May 14, 2019	Jan. 18, 2020~ Jan. 25, 2020	May 13, 2020	Radiation (03CH16-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% ($U = 2Uc(y)$)	4.9
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Uncertainty of Radiated Emission Measurement (1000 MHz ~ 18000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	6.7
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Uncertainty of Radiated Emission Measurement (18000 MHz ~ 40000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	3.9
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Appendix A. Test Result of Conducted Test Items

Test Engineer:	Hank Hsu/Rebecca Li	Temperature:	21~25	°C
Test Date:	2020/2/12~2020/3/23	Relative Humidity:	51~54	%

TEST RESULTS DATA
26dB and 99% OBW

Band I single antenna													
Mod.	Data Rate	N _{TX}	CH.	Freq. (MHz)	99% Bandwidth (MHz)		26 dB Bandwidth (MHz)		IC 99% Bandwidth Power Limit (dBm)		IC 99% Bandwidth EIRP Limit (dBm)		Note
					Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	
11a	6Mbps	1	36	5180	16.90	-	29.50	-	-	-	22.28	-	
11a	6Mbps	1	44	5220	29.75	-	47.70	-	-	-	23.01	-	
11a	6Mbps	1	48	5240	18.20	-	41.00	-	-	-	22.60	-	
HT20	MCS0	1	36	5180	18.00	-	40.95	-	-	-	22.55	-	
HT20	MCS0	1	44	5220	30.10	-	54.01	-	-	-	23.01	-	
HT20	MCS0	1	48	5240	19.00	-	46.70	-	-	-	22.79	-	
HT40	MCS0	1	38	5190	37.10	-	49.80	-	-	-	23.01	-	
HT40	MCS0	1	46	5230	38.80	-	88.80	-	-	-	23.01	-	

Band I MIMO													
Mod.	Data Rate	N _{TX}	CH.	Freq. (MHz)	99% Bandwidth (MHz)		26 dB Bandwidth (MHz)		IC 99% Bandwidth Power Limit (dBm)		IC 99% Bandwidth EIRP Limit (dBm)		Note
					Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	
11a	6Mbps	2	36	5180	17.70	17.90	39.15	40.80	-	-	22.48	-	
11a	6Mbps	2	44	5220	18.75	17.40	43.50	41.40	-	-	22.41	-	
11a	6Mbps	2	48	5240	18.20	17.15	42.80	40.00	-	-	22.34	-	
HT20	MCS0	2	36	5180	18.50	18.60	41.75	42.35	-	-	22.67	-	
HT20	MCS0	2	44	5220	20.75	18.65	47.16	45.15	-	-	22.71	-	
HT20	MCS0	2	48	5240	19.00	18.20	44.45	41.90	-	-	22.60	-	
HT40	MCS0	2	38	5190	36.70	36.80	47.88	50.94	-	-	23.01	-	
HT40	MCS0	2	46	5230	39.20	38.00	84.80	83.20	-	-	23.01	-	

TEST RESULTS DATA
Average Power Table

FCC Band I single antenna													
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)			Pass/Fail
					Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2		
11a	6Mbps	1	36	5180	19.00	18.80		30.00	30.00	4.10	4.10		Pass
11a	6Mbps	1	44	5220	23.70	23.20		30.00	30.00	4.10	4.10		Pass
11a	6Mbps	1	48	5240	21.40	21.20		30.00	30.00	4.10	4.10		Pass
HT20	MCS0	1	36	5180	18.20	18.10		30.00	30.00	4.10	4.10		Pass
HT20	MCS0	1	44	5220	23.60	23.30		30.00	30.00	4.10	4.10		Pass
HT20	MCS0	1	48	5240	21.00	20.90		30.00	30.00	4.10	4.10		Pass
HT40	MCS0	1	38	5190	11.00	10.90		30.00	30.00	4.10	4.10		Pass
HT40	MCS0	1	46	5230	20.90	20.80		30.00	30.00	4.10	4.10		Pass

Power Setting	
Ant 1	Ant 2
19	18.5
25	25
19.5	19
18.5	18.5
25	25.5
19.5	19.5
10.5	10
19	18.5

FCC Band I MIMO													
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)			Pass/Fail
					Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2		
11a	6Mbps	2	36	5180	21.00	20.50	23.77	30.00		4.10			Pass
11a	6Mbps	2	44	5220	21.40	20.00	23.77	30.00		4.10			Pass
11a	6Mbps	2	48	5240	21.50	20.10	23.87	30.00		4.10			Pass
HT20	MCS0	2	36	5180	20.70	20.60	23.66	30.00		4.10			Pass
HT20	MCS0	2	44	5220	21.30	19.90	23.67	30.00		4.10			Pass
HT20	MCS0	2	48	5240	21.50	20.00	23.82	30.00		4.10			Pass
HT40	MCS0	2	38	5190	12.90	12.80	15.86	30.00		4.10			Pass
HT40	MCS0	2	46	5230	20.90	19.80	23.40	30.00		4.10			Pass

Power Setting	
Ant 1	Ant 2
20.5	
19.5	
19	
19	
20	
20	
11.5	
18	

TEST RESULTS DATA
Power Spectral Density

FCC Band I single antenna												
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Average Power Density (dBm/MHz)			Average PSD Limit (dBm/MHz)		DG (dBi)		Pass /Fail
					Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2	
11a	6Mbps	1	36	5180	7.52	-		17.00	-	4.10	4.10	Pass
11a	6Mbps	1	44	5220	13.62	-		17.00	-	4.10	4.10	Pass
11a	6Mbps	1	48	5240	9.21	-		17.00	-	4.10	4.10	Pass
HT20	MCS0	1	36	5180	7.48	-		17.00	-	4.10	4.10	Pass
HT20	MCS0	1	44	5220	13.52	-		17.00	-	4.10	4.10	Pass
HT20	MCS0	1	48	5240	9.28	-		17.00	-	4.10	4.10	Pass
HT40	MCS0	1	38	5190	-2.49	-		17.00	-	4.10	4.10	Pass
HT40	MCS0	1	46	5230	5.70	-		17.00	-	4.10	4.10	Pass

FCC Band I MIMO												
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Average Power Density (dBm/MHz)			Average PSD Limit (dBm/MHz)		DG (dBi)		Pass /Fail
					Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2	
11a	6Mbps	2	36	5180			12.87	15.89		7.11		Pass
11a	6Mbps	2	44	5220			13.52	15.89		7.11		Pass
11a	6Mbps	2	48	5240			13.02	15.89		7.11		Pass
HT20	MCS0	2	36	5180			12.64	15.89		7.11		Pass
HT20	MCS0	2	44	5220			13.53	15.89		7.11		Pass
HT20	MCS0	2	48	5240			13.19	15.89		7.11		Pass
HT40	MCS0	2	38	5190			2.22	15.89		7.11		Pass
HT40	MCS0	2	46	5230			7.92	15.89		7.11		Pass



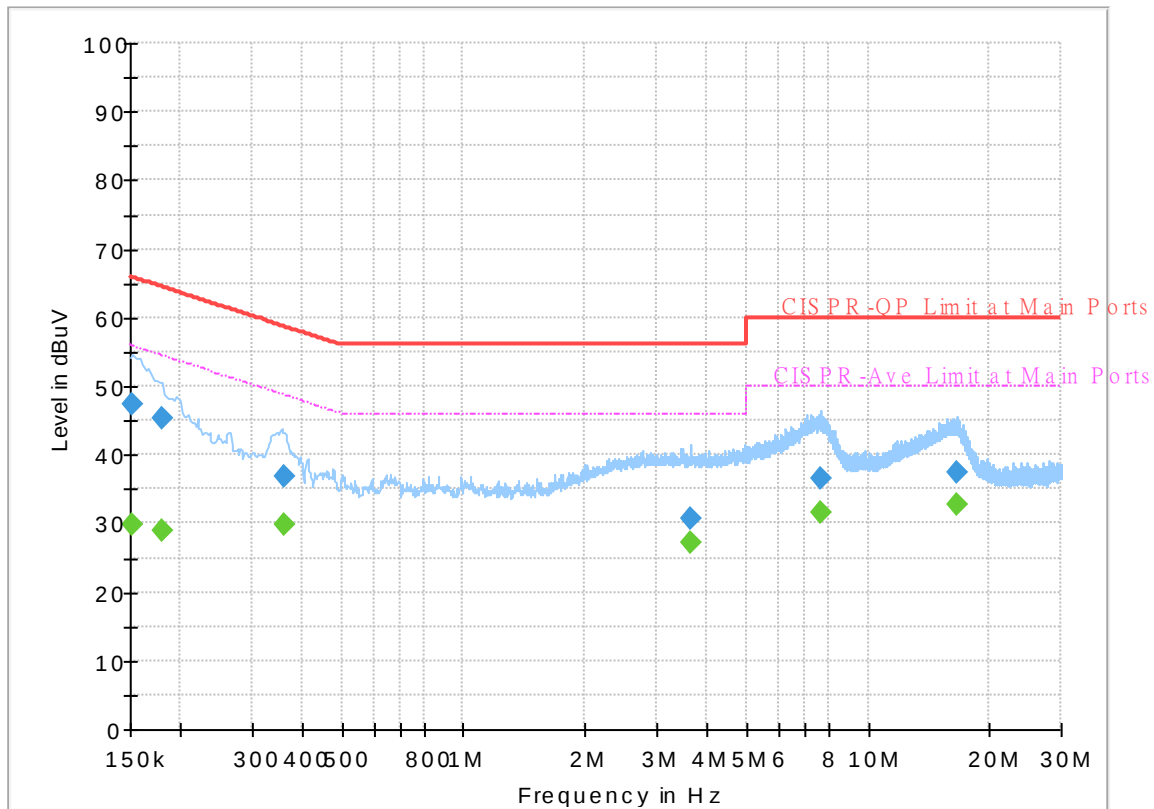
Appendix B. AC Conducted Emission Test Results

Test Engineer :	Tom Lee	Temperature :	24.2~25.6℃
		Relative Humidity :	48.5~52.3%

EUT Information

Report NO : 9N0104
Test Mode : Mode 1
Test Voltage : 120Vac/60Hz
Phase : Line

Full Spectrum



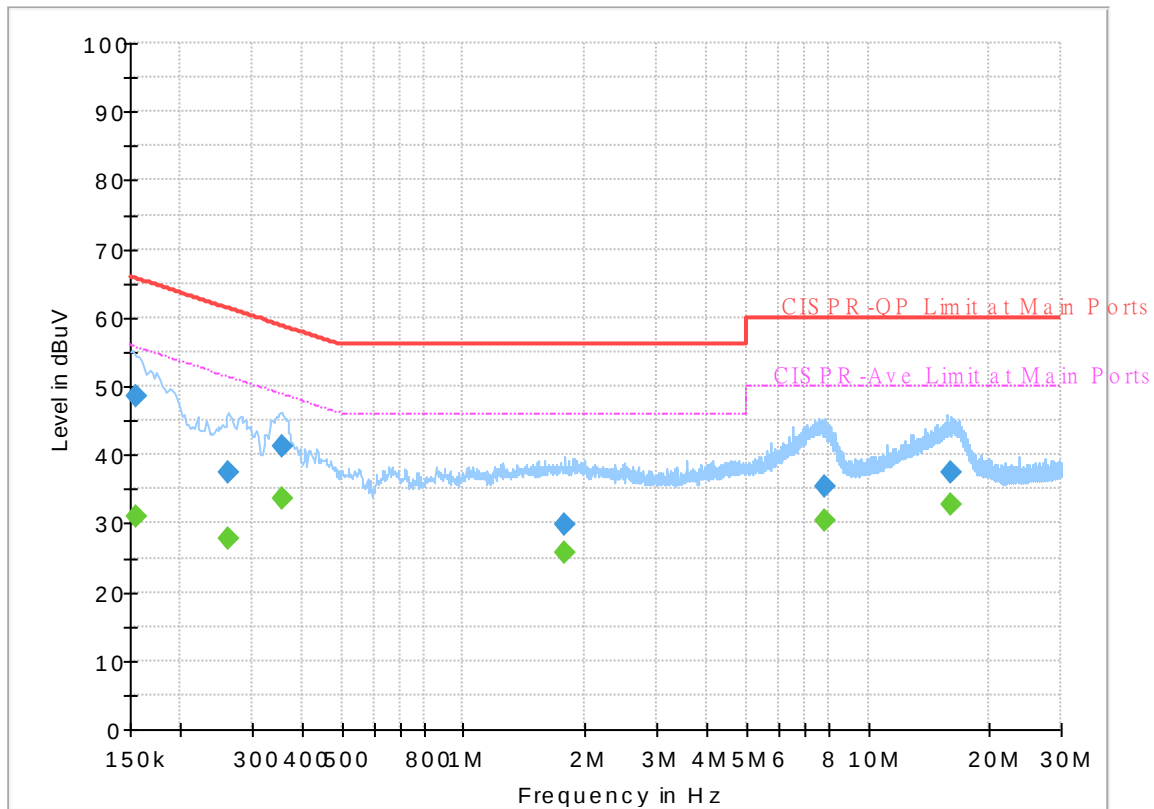
Final_Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.152250	---	29.80	55.88	26.08	L1	OFF	19.4
0.152250	47.49	---	65.88	18.39	L1	OFF	19.4
0.179250	---	29.06	54.52	25.46	L1	OFF	19.4
0.179250	45.32	---	64.52	19.20	L1	OFF	19.4
0.361500	---	29.95	48.69	18.74	L1	OFF	19.4
0.361500	36.95	---	58.69	21.74	L1	OFF	19.4
3.660000	---	27.27	46.00	18.73	L1	OFF	19.6
3.660000	30.81	---	56.00	25.19	L1	OFF	19.6
7.626750	---	31.70	50.00	18.30	L1	OFF	19.7
7.626750	36.68	---	60.00	23.32	L1	OFF	19.7
16.599750	---	32.84	50.00	17.16	L1	OFF	20.0
16.599750	37.30	---	60.00	22.70	L1	OFF	20.0

EUT Information

Report NO : 9N0104
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)
0.154500	---	31.10	55.75	24.65	N	OFF	19.5
0.154500	48.58	---	65.75	17.17	N	OFF	19.5
0.262500	---	27.80	51.35	23.55	N	OFF	19.5
0.262500	37.29	---	61.35	24.06	N	OFF	19.5
0.354750	---	33.65	48.85	15.20	N	OFF	19.5
0.354750	41.12	---	58.85	17.73	N	OFF	19.5
1.785750	---	25.82	46.00	20.18	N	OFF	19.6
1.785750	29.77	---	56.00	26.23	N	OFF	19.6
7.800000	---	30.42	50.00	19.58	N	OFF	19.8
7.800000	35.49	---	60.00	24.51	N	OFF	19.8
16.080000	---	32.79	50.00	17.21	N	OFF	20.1
16.080000	37.43	---	60.00	22.57	N	OFF	20.1



Appendix C. Radiated Spurious Emission

Test Engineer :	Jacky Hung, CR Liro, and Andy Yang	Temperature :	20~25°C
		Relative Humidity :	50~60%

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

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 36 5180MHz		5079.82	53.61	-20.39	74	38.42	31.76	12.23	28.8	351	108	P	H
		5097.5	42.23	-11.77	54	26.99	31.8	12.25	28.81	351	108	A	H
	*	5180	99.3	-	-	84.23	31.58	12.36	28.87	351	108	P	H
	*	5180	91.08	-	-	76.01	31.58	12.36	28.87	351	108	A	H
													H
													H
		5150	67.68	-6.32	74	52.51	31.7	12.32	28.85	200	355	P	V
		5150	52.6	-1.4	54	37.43	31.7	12.32	28.85	200	355	A	V
	*	5180	115.36	-	-	100.29	31.58	12.36	28.87	200	355	P	V
	*	5180	106.86	-	-	91.79	31.58	12.36	28.87	200	355	A	V
													V
													V
802.11a CH 44 5220MHz		5027.56	54.13	-19.87	74	39.13	31.61	12.16	28.77	389	118	P	H
		5146.38	42.51	-11.49	54	27.33	31.71	12.32	28.85	389	118	A	H
	*	5220	103.38	-	-	88.45	31.42	12.41	28.9	389	118	P	H
	*	5220	94.86	-	-	79.93	31.42	12.41	28.9	389	118	A	H
		5417.72	53.87	-20.13	74	38.82	31.47	12.61	29.03	389	118	P	H
		5454.4	41.56	-12.44	54	26.32	31.61	12.68	29.05	389	118	A	H
		5141.18	64.94	-9.06	74	49.75	31.72	12.31	28.84	191	355	P	V
		5145.08	52.42	-1.58	54	37.24	31.71	12.32	28.85	191	355	A	V
	*	5220	121.41	-	-	106.48	31.42	12.41	28.9	191	355	P	V
	*	5220	112.23	-	-	97.3	31.42	12.41	28.9	191	355	A	V
		5392.8	59.24	-14.76	74	44.31	31.37	12.57	29.01	191	355	P	V
		5386.92	48.93	-5.07	54	34.02	31.35	12.57	29.01	191	355	A	V



802.11a CH 48 5240MHz		5057.72	54.49	-19.51	74	39.36	31.72	12.2	28.79	341	108	P	H
		5093.6	42.07	-11.93	54	26.84	31.79	12.25	28.81	341	108	A	H
	*	5240	103.24	-	-	88.38	31.34	12.43	28.91	341	108	P	H
	*	5240	94.37	-	-	79.51	31.34	12.43	28.91	341	108	A	H
		5414.64	53.32	-20.68	74	38.27	31.46	12.61	29.02	341	108	P	H
		5457.76	41.57	-12.43	54	26.31	31.62	12.69	29.05	341	108	A	H
		5143.78	58.85	-15.15	74	43.67	31.71	12.31	28.84	192	353	P	V
		5150	46.37	-7.63	54	31.2	31.7	12.32	28.85	192	353	A	V
	*	5240	121.26	-	-	106.4	31.34	12.43	28.91	192	353	P	V
	*	5240	112.43	-	-	97.57	31.34	12.43	28.91	192	353	A	V
		5351.64	58.74	-15.26	74	43.98	31.21	12.53	28.98	192	353	P	V
		5439.84	48.86	-5.14	54	33.68	31.56	12.66	29.04	192	353	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 1 5150~5250MHz

WIFI 802.11a (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 36 5180MHz		10360	52.43	-15.77	68.2	52.91	39.64	19.17	59.29	100	0	P	H
		15540	48.56	-25.44	74	46.19	37.94	24.38	59.95	100	0	P	H
													H
													H
		10360	60.4	-7.8	68.2	60.88	39.64	19.17	59.29	100	0	P	V
		15540	49.18	-24.82	74	46.81	37.94	24.38	59.95	100	0	P	V
													V
													V
802.11a CH 44 5220MHz		10440	55.31	-12.89	68.2	55.47	39.88	19.29	59.33	100	0	P	H
		15660	56.7	-17.3	74	54.74	37.46	24.38	59.88	296	80	P	H
		15660	45.7	-8.3	54	43.74	37.46	24.38	59.88	296	80	A	H
													H
		10440	61.35	-6.85	68.2	61.51	39.88	19.29	59.33	100	0	P	V
		15660	59.02	-14.98	74	57.06	37.46	24.38	59.88	185	68	P	V
		15660	47.96	-6.04	54	46	37.46	24.38	59.88	185	68	A	V
													V
802.11a CH 48 5240MHz		10480	55.39	-12.81	68.2	55.43	39.96	19.35	59.35	100	0	P	H
		15720	55.57	-18.43	74	53.74	37.3	24.37	59.84	297	80	P	H
		15720	44.78	-9.22	54	42.95	37.3	24.37	59.84	297	80	A	H
													H
		10480	61.96	-6.24	68.2	62	39.96	19.35	59.35	100	0	P	V
		15720	59.05	-14.95	74	57.22	37.3	24.37	59.84	188	68	P	V
		15720	48.69	-5.31	54	46.86	37.3	24.37	59.84	188	68	A	V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 1 5150~5250MHz

WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 36 5180MHz		5094.12	53.89	-20.11	74	38.66	31.79	12.25	28.81	351	107	P	H
		5150	42.3	-11.7	54	27.13	31.7	12.32	28.85	351	107	A	H
	*	5180	99.57	-	-	84.5	31.58	12.36	28.87	351	107	P	H
	*	5180	90.42	-	-	75.35	31.58	12.36	28.87	351	107	A	H
													H
													H
		5148.2	63.65	-10.35	74	48.48	31.7	12.32	28.85	195	354	P	V
		5150	52.48	-1.52	54	37.31	31.7	12.32	28.85	195	354	A	V
	*	5180	114.74	-	-	99.67	31.58	12.36	28.87	195	354	P	V
	*	5180	106.31	-	-	91.24	31.58	12.36	28.87	195	354	A	V
													V
													V
802.11n HT20 CH 44 5220MHz		5065.26	53.83	-20.17	74	38.68	31.73	12.21	28.79	387	118	P	H
		5142.74	42.6	-11.4	54	27.42	31.71	12.31	28.84	387	118	A	H
	*	5220	103.54	-	-	88.61	31.42	12.41	28.9	387	118	P	H
	*	5220	94.71	-	-	79.78	31.42	12.41	28.9	387	118	A	H
		5377.4	53.73	-20.27	74	38.86	31.31	12.56	29	387	118	P	H
		5458.88	41.54	-12.46	54	26.28	31.62	12.69	29.05	387	118	A	H
		5143.52	66.15	-7.85	74	50.97	31.71	12.31	28.84	179	354	P	V
		5146.38	52.54	-1.46	54	37.36	31.71	12.32	28.85	179	354	A	V
	*	5220	120.81	-	-	105.88	31.42	12.41	28.9	179	354	P	V
	*	5220	112	-	-	97.07	31.42	12.41	28.9	179	354	A	V
		5399.52	59.67	-14.33	74	44.7	31.4	12.58	29.01	179	354	P	V
		5403.72	49.16	-4.84	54	34.18	31.41	12.59	29.02	179	354	A	V



802.11n HT20 CH 48 5240MHz		5135.46	54.62	-19.38	74	39.43	31.73	12.3	28.84	392	109	P	H
		5088.14	42.07	-11.93	54	26.86	31.78	12.24	28.81	392	109	A	H
	*	5240	102.36	-	-	87.5	31.34	12.43	28.91	392	109	P	H
	*	5240	93.91	-	-	79.05	31.34	12.43	28.91	392	109	A	H
		5435.64	53.08	-20.92	74	37.93	31.54	12.65	29.04	392	109	P	H
		5439.28	41.53	-12.47	54	26.36	31.56	12.65	29.04	392	109	A	H
		5142.74	60.1	-13.9	74	44.92	31.71	12.31	28.84	189	354	P	V
		5150	46.61	-7.39	54	31.44	31.7	12.32	28.85	189	354	A	V
	*	5240	120.82	-	-	105.96	31.34	12.43	28.91	189	354	P	V
	*	5240	112.03	-	-	97.17	31.34	12.43	28.91	189	354	A	V
		5458.32	59.52	-14.48	74	44.26	31.62	12.69	29.05	189	354	P	V
		5440.12	49	-5	54	33.82	31.56	12.66	29.04	189	354	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



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

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 36 5180MHz		10360	51.04	-17.16	68.2	51.52	39.64	19.17	59.29	100	0	P	H
		15540	46.99	-27.01	74	44.62	37.94	24.38	59.95	100	0	P	H
													H
													H
		10360	59.1	-9.1	68.2	59.58	39.64	19.17	59.29	100	0	P	V
		15540	47.84	-26.16	74	45.47	37.94	24.38	59.95	100	0	P	V
													V
													V
802.11n HT20 CH 44 5220MHz		10440	52.71	-15.49	68.2	52.87	39.88	19.29	59.33	100	0	P	H
		15660	56.4	-17.6	74	54.44	37.46	24.38	59.88	296	80	P	H
		15660	45.27	-8.73	54	43.31	37.46	24.38	59.88	296	80	A	H
													H
		10440	62.49	-5.71	68.2	62.65	39.88	19.29	59.33	100	0	P	V
		15660	59.46	-14.54	74	57.5	37.46	24.38	59.88	183	68	P	V
		15660	48.3	-5.7	54	46.34	37.46	24.38	59.88	183	68	A	V
													V
802.11n HT20 CH 48 5240MHz		10480	55.27	-12.93	68.2	55.31	39.96	19.35	59.35	100	0	P	H
		15720	55.82	-18.18	74	53.99	37.3	24.37	59.84	295	79	P	H
		15720	44.86	-9.14	54	43.03	37.3	24.37	59.84	295	79	A	H
													H
		10480	61.31	-6.89	68.2	61.35	39.96	19.35	59.35	100	0	P	V
		15720	58.69	-15.31	74	56.86	37.3	24.37	59.84	188	67	P	V
		15720	47.99	-6.01	54	46.16	37.3	24.37	59.84	188	67	A	V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 1 5150~5250MHz

WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 CH 38 5190MHz		5019.76	54.44	-19.56	74	39.47	31.58	12.15	28.76	354	107	P	H
		5150.02	42.25	-11.75	54	27.08	31.7	12.32	28.85	354	107	A	H
	*	5190	87.57	-	-	72.53	31.54	12.38	28.88	354	107	P	H
	*	5190	79.12	-	-	64.08	31.54	12.38	28.88	354	107	A	H
		5412.96	54.05	-19.95	74	39.02	31.45	12.6	29.02	354	107	P	H
		5459.44	41.55	-12.45	54	26.29	31.62	12.69	29.05	354	107	A	H
		5148.72	63.19	-10.81	74	48.02	31.7	12.32	28.85	193	354	P	V
		5150	52.09	-1.91	54	36.92	31.7	12.32	28.85	193	354	A	V
	*	5190	105.22	-	-	90.18	31.54	12.38	28.88	193	354	P	V
	*	5190	96.94	-	-	81.9	31.54	12.38	28.88	193	354	A	V
		5419.4	54.74	-19.26	74	39.67	31.48	12.62	29.03	193	354	P	V
		5422.48	44.55	-9.45	54	29.47	31.49	12.62	29.03	193	354	A	V
802.11n HT40 CH 46 5230MHz		5132.6	54.16	-19.84	74	38.97	31.73	12.3	28.84	344	107	P	H
		5148.98	42.66	-11.34	54	27.49	31.7	12.32	28.85	344	107	A	H
	*	5230	97.19	-	-	82.29	31.38	12.42	28.9	344	107	P	H
	*	5230	88.99	-	-	74.09	31.38	12.42	28.9	344	107	A	H
		5356.68	54.11	-19.89	74	39.33	31.23	12.54	28.99	344	107	P	H
		5439.84	41.57	-12.43	54	26.39	31.56	12.66	29.04	344	107	A	H
		5146.38	67.31	-6.69	74	52.13	31.71	12.32	28.85	193	354	P	V
		5148.98	52.88	-1.12	54	37.71	31.7	12.32	28.85	193	354	A	V
	*	5230	114.71	-	-	99.81	31.38	12.42	28.9	193	354	P	V
	*	5230	106.34	-	-	91.44	31.38	12.42	28.9	193	354	A	V
		5412.4	59.22	-14.78	74	44.19	31.45	12.6	29.02	193	354	P	V
		5423.32	48.4	-5.6	54	33.32	31.49	12.62	29.03	193	354	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



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

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 CH 38 5190MHz		10380	47.3	-20.9	68.2	47.68	39.72	19.2	59.3	100	0	P	H
		15570	46.65	-27.35	74	44.39	37.82	24.38	59.94	100	0	P	H
													H
													H
		10380	50.81	-17.39	68.2	51.19	39.72	19.2	59.3	100	0	P	V
		15570	45.25	-28.75	74	42.99	37.82	24.38	59.94	100	0	P	V
													V
													V
802.11n HT40 CH 46 5230MHz		10460	52.28	-15.92	68.2	52.38	39.92	19.32	59.34	100	0	P	H
		15690	46.75	-27.25	74	44.9	37.34	24.37	59.86	100	0	P	H
													H
													H
		10460	59.92	-8.28	68.2	60.02	39.92	19.32	59.34	100	0	P	V
		15690	49.56	-24.44	74	47.71	37.34	24.37	59.86	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 HT40 (LF @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 LF		58.13	21.17	-18.83	40	40.47	11.79	1.31	32.4	-	-	P	H
		145.43	29.77	-13.73	43.5	42.77	17.16	2.12	32.28	-	-	P	H
		250.19	34.25	-11.75	46	45.24	18.58	2.77	32.34	-	-	P	H
		375.32	38.93	-7.07	46	46.92	20.94	3.31	32.24	-	-	P	H
		499.48	38.23	-7.77	46	42.67	23.9	3.75	32.09	-	-	P	H
		900.09	39.45	-6.55	46	37.23	28.99	5.15	31.92	100	0	P	H
													H
													H
													H
													H
													H
													H
		58.13	32.89	-7.11	40	52.19	11.79	1.31	32.4	-	-	P	V
		132.82	27.41	-16.09	43.5	40.18	17.49	2.01	32.27	-	-	P	V
		375.32	32.82	-13.18	46	40.81	20.94	3.31	32.24	-	-	P	V
		450.01	36.93	-9.07	46	42.35	23.11	3.61	32.14	-	-	P	V
		500.45	38.57	-7.43	46	42.99	23.92	3.75	32.09	-	-	P	V
		900.09	39.13	-6.87	46	36.91	28.99	5.15	31.92	100	0	P	V
													V
													V
													V
													V
													V
													V
													V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against limit line.												



Band 1 - 5150~5250MHz

WIFI 802.11a (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 36 5180MHz		5029.64	53.59	-20.41	74	38.58	31.62	12.16	28.77	251	237	P	H
		5150	41.37	-12.63	54	26.2	31.7	12.32	28.85	251	237	A	H
	*	5180	99.73	-	-	84.66	31.58	12.36	28.87	251	237	P	H
	*	5180	92.62	-	-	77.55	31.58	12.36	28.87	251	237	A	H
													H
													H
		5144.82	67.11	-6.89	74	51.93	31.71	12.32	28.85	200	11	P	V
		5149.5	52.39	-1.61	54	37.22	31.7	12.32	28.85	200	11	A	V
	*	5180	117.25	-	-	102.18	31.58	12.36	28.87	200	11	P	V
	*	5180	110.08	-	-	95.01	31.58	12.36	28.87	200	11	A	V
													V
													V
802.11a CH 44 5220MHz		5023.66	52.21	-21.79	74	37.24	31.59	12.15	28.77	250	237	P	H
		5135.2	41.32	-12.68	54	26.13	31.73	12.3	28.84	250	237	A	H
	*	5220	101.69	-	-	86.76	31.42	12.41	28.9	250	237	P	H
	*	5220	94.9	-	-	79.97	31.42	12.41	28.9	250	237	A	H
		5445.16	53.07	-20.93	74	37.86	31.58	12.67	29.04	250	237	P	H
		5456.08	39.68	-14.32	54	24.43	31.61	12.69	29.05	250	237	A	H
		5145.34	60.02	-13.98	74	44.84	31.71	12.32	28.85	204	13	P	V
		5144.56	52.59	-1.41	54	37.41	31.71	12.32	28.85	204	13	A	V
	*	5220	120	-	-	105.07	31.42	12.41	28.9	204	13	P	V
	*	5220	113.05	-	-	98.12	31.42	12.41	28.9	204	13	A	V
		5416.32	58.26	-15.74	74	43.2	31.47	12.61	29.02	204	13	P	V
		5456.08	48.66	-5.34	54	33.41	31.61	12.69	29.05	204	13	A	V



802.11a CH 48 5240MHz		5040.3	53.31	-20.69	74	38.26	31.66	12.17	28.78	263	235	P	H
		5066.3	40.99	-13.01	54	25.84	31.73	12.21	28.79	263	235	A	H
	*	5240	102.25	-	-	87.39	31.34	12.43	28.91	263	235	P	H
	*	5240	96.06	-	-	81.2	31.34	12.43	28.91	263	235	A	H
		5418	52.12	-21.88	74	37.07	31.47	12.61	29.03	263	235	P	H
		5456.08	39.73	-14.27	54	24.48	31.61	12.69	29.05	263	235	A	H
		5147.42	56.75	-17.25	74	41.57	31.71	12.32	28.85	201	11	P	V
		5150	46.05	-7.95	54	30.88	31.7	12.32	28.85	201	11	A	V
	*	5240	120.36	-	-	105.5	31.34	12.43	28.91	201	11	P	V
	*	5240	114.09	-	-	99.23	31.34	12.43	28.91	201	11	A	V
		5455.24	59.66	-14.34	74	44.42	31.61	12.68	29.05	201	11	P	V
		5400.08	50.14	-3.86	54	35.17	31.4	12.58	29.01	201	11	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 1 5150~5250MHz

WIFI 802.11a (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 36 5180MHz		10360	52.9	-15.3	68.2	53.38	39.64	19.17	59.29	100	0	P	H
		15540	48.55	-25.45	74	46.18	37.94	24.38	59.95	100	0	P	H
													H
													H
		10360	61.25	-6.95	68.2	61.73	39.64	19.17	59.29	100	0	P	V
		15540	49.83	-24.17	74	47.46	37.94	24.38	59.95	100	0	P	V
													V
													V
802.11a CH 44 5220MHz		10440	55.74	-12.46	68.2	55.9	39.88	19.29	59.33	100	0	P	H
		15660	55.41	-18.59	74	53.45	37.46	24.38	59.88	106	19	P	H
		15660	43.65	-10.35	54	41.69	37.46	24.38	59.88	106	19	A	H
													H
		10440	63.76	-4.44	68.2	63.92	39.88	19.29	59.33	100	0	P	V
		15660	56.74	-17.26	74	54.78	37.46	24.38	59.88	150	12	P	V
		15660	44.49	-9.51	54	42.53	37.46	24.38	59.88	150	12	A	V
													V
802.11a CH 48 5240MHz		10480	54.43	-13.77	68.2	54.47	39.96	19.35	59.35	100	0	P	H
		15720	57.93	-16.07	74	56.1	37.3	24.37	59.84	100	18	P	H
		15720	46.85	-7.15	54	45.02	37.3	24.37	59.84	100	18	A	H
													H
		10480	64.19	-4.01	68.2	64.23	39.96	19.35	59.35	100	0	P	V
		15720	59.68	-14.32	74	57.85	37.3	24.37	59.84	161	12	P	V
		15720	49.18	-4.82	54	47.35	37.3	24.37	59.84	161	12	A	V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 1 5150~5250MHz

WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 36 5180MHz		5048.36	53.77	-20.23	74	38.67	31.69	12.19	28.78	246	323	P	H
		5102.18	41.43	-12.57	54	26.19	31.8	12.26	28.82	246	323	A	H
	*	5180	102.47	-	-	87.4	31.58	12.36	28.87	246	323	P	H
	*	5180	94.89	-	-	79.82	31.58	12.36	28.87	246	323	A	H
													H
													H
		5147.68	68.05	-5.95	74	52.88	31.7	12.32	28.85	201	11	P	V
		5150	52.82	-1.18	54	37.65	31.7	12.32	28.85	201	11	A	V
	*	5180	116.69	-	-	101.62	31.58	12.36	28.87	201	11	P	V
	*	5180	109.4	-	-	94.33	31.58	12.36	28.87	201	11	A	V
													V
													V
802.11n HT20 CH 44 5220MHz		5144.3	53.38	-20.62	74	38.21	31.71	12.31	28.85	244	324	P	H
		5134.16	42.02	-11.98	54	26.83	31.73	12.3	28.84	244	324	A	H
	*	5220	105.17	-	-	90.24	31.42	12.41	28.9	244	324	P	H
	*	5220	97.72	-	-	82.79	31.42	12.41	28.9	244	324	A	H
		5433.4	51.66	-22.34	74	36.53	31.53	12.64	29.04	244	324	P	H
		5455.52	39.63	-14.37	54	24.38	31.61	12.69	29.05	244	324	A	H
		5144.3	60.03	-13.97	74	44.86	31.71	12.31	28.85	201	19	P	V
		5143.78	52.38	-1.62	54	37.2	31.71	12.31	28.84	201	19	A	V
	*	5220	120.97	-	-	106.04	31.42	12.41	28.9	201	19	P	V
	*	5220	112.87	-	-	97.94	31.42	12.41	28.9	201	19	A	V
		5411	57.94	-16.06	74	42.92	31.44	12.6	29.02	201	19	P	V
		5440.12	49.17	-4.83	54	33.99	31.56	12.66	29.04	201	19	A	V



802.11n HT20 CH 48 5240MHz		5081.12	53.01	-20.99	74	37.82	31.76	12.23	28.8	238	324	P	H
		5060.58	40.93	-13.07	54	25.8	31.72	12.2	28.79	238	324	A	H
	*	5240	105.73	-	-	90.87	31.34	12.43	28.91	238	324	P	H
	*	5240	98.39	-	-	83.53	31.34	12.43	28.91	238	324	A	H
		5451.6	52.53	-21.47	74	37.3	31.6	12.68	29.05	238	324	P	H
		5456.64	39.54	-14.46	54	24.29	31.61	12.69	29.05	238	324	A	H
		5139.88	56.16	-17.84	74	40.97	31.72	12.31	28.84	199	3	P	V
		5120.12	45.61	-8.39	54	30.4	31.76	12.28	28.83	199	3	A	V
	*	5240	120.52	-	-	105.66	31.34	12.43	28.91	199	3	P	V
	*	5240	113.47	-	-	98.61	31.34	12.43	28.91	199	3	A	V
		5435.92	57.78	-16.22	74	42.63	31.54	12.65	29.04	199	3	P	V
		5365.36	48.22	-5.78	54	33.4	31.26	12.55	28.99	199	3	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



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

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 36 5180MHz		10360	54.8	-13.4	68.2	55.28	39.64	19.17	59.29	100	0	P	H
		15540	51.7	-22.3	74	49.33	37.94	24.38	59.95	298	79	P	H
		15540	40.48	-13.52	54	38.11	37.94	24.38	59.95	298	79	A	H
													H
		10360	62.39	-5.81	68.2	62.87	39.64	19.17	59.29	100	0	P	V
		15540	54.97	-19.03	74	52.6	37.94	24.38	59.95	100	66	P	V
		15540	43.78	-10.22	54	41.41	37.94	24.38	59.95	100	66	A	V
													V
802.11n HT20 CH 44 5220MHz		10440	55.17	-13.03	68.2	55.33	39.88	19.29	59.33	100	0	P	H
		15660	56.22	-17.78	74	54.26	37.46	24.38	59.88	103	17	P	H
		15660	45.86	-8.14	54	43.9	37.46	24.38	59.88	103	17	A	H
													H
		10440	63.52	-4.68	68.2	63.68	39.88	19.29	59.33	100	0	P	V
		15660	55.63	-18.37	74	53.67	37.46	24.38	59.88	100	66	P	V
		15660	45.19	-8.81	54	43.23	37.46	24.38	59.88	100	66	A	V
													V
802.11n HT20 CH 48 5240MHz		10480	53.5	-14.7	68.2	53.54	39.96	19.35	59.35	100	0	P	H
		15720	57.54	-16.46	74	55.71	37.3	24.37	59.84	100	0	P	H
		15720	47.35	-6.65	54	45.52	37.3	24.37	59.84	100	0	A	H
													H
		10480	63.07	-5.13	68.2	63.11	39.96	19.35	59.35	100	0	P	V
		15720	59.18	-14.82	74	57.35	37.3	24.37	59.84	100	0	P	V
		15720	47.58	-6.42	54	45.75	37.3	24.37	59.84	100	0	A	V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 1 5150~5250MHz

WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 CH 38 5190MHz		5063.96	52.76	-21.24	74	37.61	31.73	12.21	28.79	209	330	P	H
		5150	42.12	-11.88	54	26.95	31.7	12.32	28.85	209	330	A	H
	*	5190	92.65	-	-	77.61	31.54	12.38	28.88	209	330	P	H
	*	5190	84.59	-	-	69.55	31.54	12.38	28.88	209	330	A	H
		5438.16	51.05	-22.95	74	35.89	31.55	12.65	29.04	209	330	P	H
		5455.8	39.43	-14.57	54	24.18	31.61	12.69	29.05	209	330	A	H
		5149.5	62.38	-11.62	74	47.21	31.7	12.32	28.85	190	2	P	V
		5150	52.63	-1.37	54	37.46	31.7	12.32	28.85	190	2	A	V
	*	5190	107.25	-	-	92.21	31.54	12.38	28.88	190	2	P	V
	*	5190	98.93	-	-	83.89	31.54	12.38	28.88	190	2	A	V
		5426.12	53.22	-20.78	74	38.12	31.5	12.63	29.03	190	2	P	V
		5414.36	42.67	-11.33	54	27.62	31.46	12.61	29.02	190	2	A	V
802.11n HT40 CH 46 5230MHz		5137.54	52.8	-21.2	74	37.61	31.72	12.31	28.84	203	330	P	H
		5144.56	41.7	-12.3	54	26.52	31.71	12.32	28.85	203	330	A	H
	*	5230	101.24	-	-	86.34	31.38	12.42	28.9	203	330	P	H
	*	5230	94.43	-	-	79.53	31.38	12.42	28.9	203	330	A	H
		5432.56	52.16	-21.84	74	37.03	31.53	12.64	29.04	203	330	P	H
		5446.56	39.5	-14.5	54	24.28	31.59	12.67	29.04	203	330	A	H
		5148.98	64.29	-9.71	74	49.12	31.7	12.32	28.85	200	12	P	V
		5148.72	52.51	-1.49	54	37.34	31.7	12.32	28.85	200	12	A	V
	*	5230	115.75	-	-	100.85	31.38	12.42	28.9	200	12	P	V
	*	5230	108.57	-	-	93.67	31.38	12.42	28.9	200	12	A	V
		5358.08	55.98	-18.02	74	41.2	31.23	12.54	28.99	200	12	P	V
		5400.08	47.1	-6.9	54	32.13	31.4	12.58	29.01	200	12	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



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

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 CH 38 5190MHz		10380	47.77	-20.43	68.2	48.15	39.72	19.2	59.3	100	0	P	H
		15570	45.39	-28.61	74	43.13	37.82	24.38	59.94	100	0	P	H
													H
													H
		10380	51.17	-17.03	68.2	51.55	39.72	19.2	59.3	100	0	P	V
		15570	46.48	-27.52	74	44.22	37.82	24.38	59.94	100	0	P	V
													V
													V
802.11n HT40 CH 46 5230MHz		10460	51.28	-16.92	68.2	51.38	39.92	19.32	59.34	100	0	P	H
		15690	47.9	-26.1	74	46.05	37.34	24.37	59.86	100	0	P	H
													H
													H
		10460	60.02	-8.18	68.2	60.12	39.92	19.32	59.34	100	0	P	V
		15690	49.31	-24.69	74	47.46	37.34	24.37	59.86	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 HT20 (LF @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.		(MHz)	(dBμV/m)	Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1+2				(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11n HT20 LF		85.29	25.01	-14.99	40	41.76	13.99	1.56	32.3	-	-	P	H
		145.43	31.36	-12.14	43.5	44.36	17.16	2.12	32.28	-	-	P	H
		250.19	33.94	-12.06	46	44.93	18.58	2.77	32.34	-	-	P	H
		375.32	38.14	-7.86	46	46.13	20.94	3.31	32.24	-	-	P	H
		500.45	34.79	-11.21	46	39.21	23.92	3.75	32.09	-	-	P	H
		910.76	41.05	-4.95	46	38.42	29.24	5.18	31.79	100	336	QP	H
													H
													H
													H
													H
													H
													H
													H
		58.13	31.41	-8.59	40	50.71	11.79	1.31	32.4	-	-	P	V
		250.19	29.41	-16.59	46	40.4	18.58	2.77	32.34	-	-	P	V
		375.32	32.68	-13.32	46	40.67	20.94	3.31	32.24	-	-	P	V
		450.01	38.29	-7.71	46	43.71	23.11	3.61	32.14	-	-	P	V
		500.45	37.46	-8.54	46	41.88	23.92	3.75	32.09	-	-	P	V
		900.09	39.09	-6.91	46	36.87	28.99	5.15	31.92	100	0	P	V
													V
													V
													V
												V	
												V	
												V	
												V	
Remark	1. No other spurious found. 2. All results are PASS against limit line.												



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.	
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

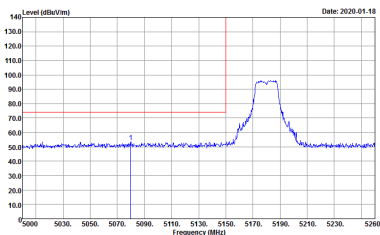
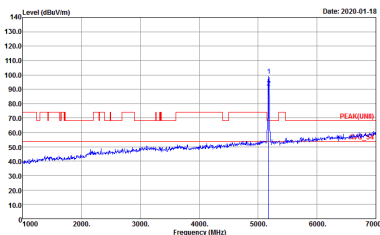
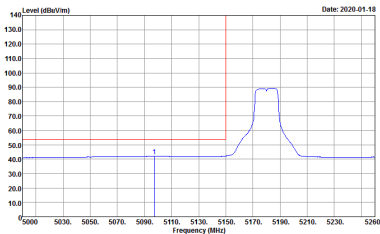
Test Engineer :	Jacky Hung, CR Liro, and Andy Yang	Temperature :	20~25°C
		Relative Humidity :	50~60%

Note symbol

-L	Low channel location
-R	High channel location



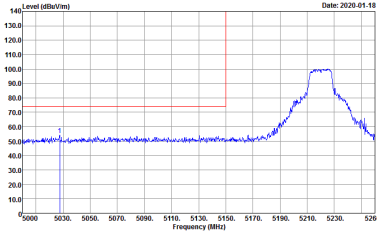
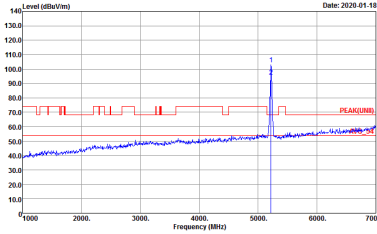
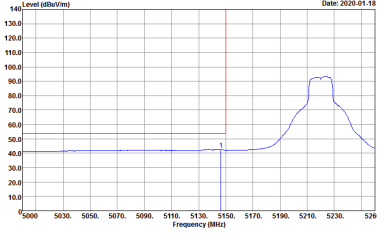
Band 1 - 5150~5250MHz
WIFI 802.11a (Band Edge @ 3m)

WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH36 5180MHz	
1	Horizontal	Fundamental
Peak	 Site : 03CH16-HY Condition : PEAK_BE_74 3m 91200_1522 HORIZONTAL Detector : Peak Project : 9N0104 Setting : 19	 Site : 03CH16-HY Condition : PEAK(UNIT) 3m 91200_1522 HORIZONTAL Detector : Peak Project : 9N0104 Setting : 19
Avg.	 Site : 03CH16-HY Condition : AVG_BE_54 3m 91200_1522 HORIZONTAL Detector : Peak Project : 9N0104 Setting : 19	Left blank

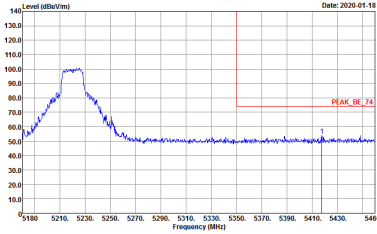
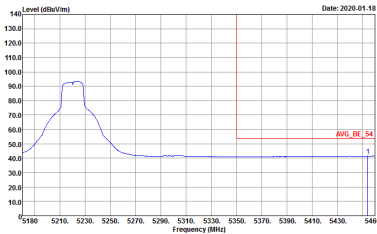


WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH36 5180MHz	
1	Vertical	Fundamental
Peak	Site : 03CH16-HY Condition : PEAK_BE_74 3m 91200_1522 VERTICAL Detector : Peak Project : 9N0104 Setting : 19	Site : 03CH16-HY Condition : PEAK(UNII) 3m 91200_1522 VERTICAL Detector : Peak Project : 9N0104 Setting : 19
Avg.	Site : 03CH16-HY Condition : AVG_BE_54 3m 91200_1522 VERTICAL Detector : Peak Project : 9N0104 Setting : 19	Left blank

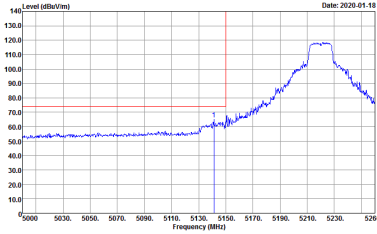
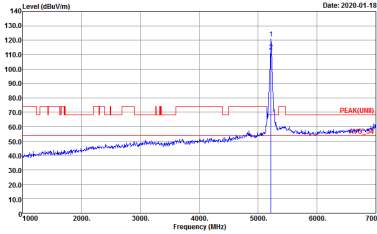
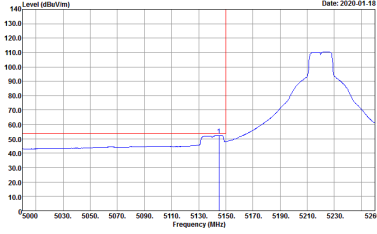


WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH44 5220MHz - L	
1	Horizontal	Fundamental
Peak	 Site : 03CH16-HY Condition : PEAK_BE_74 3m 91200_1522 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Setting : 9N0104 Setting : 31.5	 Site : 03CH16-HY Condition : PEAK(UNII) 3m 91200_1522 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Setting : 9N0104 Setting : 31.5
Avg.	 Site : 03CH16-HY Condition : AVG_BE_54 3m 91200_1522 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Setting : 9N0104 Setting : 31.5	Left blank



WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH44 5220MHz - R	
1	Horizontal	Fundamental
Peak	 Site : 03CH16-HV Condition : PEAK_BE_74 3m 91200_1522 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 9N0104 Setting : 31.5	Left blank
Avg.	 Site : 03CH16-HV Condition : AVG_BE_54 3m 91200_1522 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 9N0104 Setting : 31.5	Left blank



WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH44 5220MHz - L	
1	Vertical	Fundamental
Peak	 Site : 03CH16-HY Condition : PEAK_BE_74 3m 91200_1522 VERTICAL Detector : Peak Project : 9N0104 Setting : 31.5	 Site : 03CH16-HY Condition : PEAK(UNII) 3m 91200_1522 VERTICAL Detector : Peak Project : 9N0104 Setting : 31.5
Avg.	 Site : 03CH16-HY Condition : AVG_BE_54 3m 91200_1522 VERTICAL Detector : Peak Project : 9N0104 Setting : 31.5	Left blank

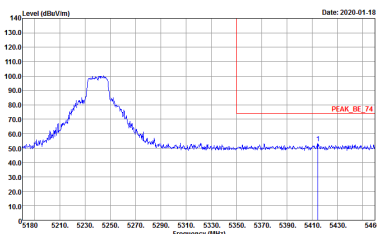
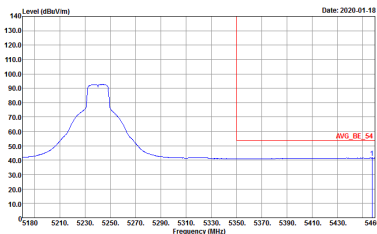


WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH44 5220MHz - R	
1	Vertical	Fundamental
Peak	Site : 03CH16-HY Condition : PEAK_BE_74 3m 91200_1522 VERTICAL Detector : Peak Project : 9N0104 Setting : 31.5	Left blank
Avg.	Site : 03CH16-HY Condition : AVG_BE_54 3m 91200_1522 VERTICAL Detector : Peak Project : 9N0104 Setting : 31.5	Left blank

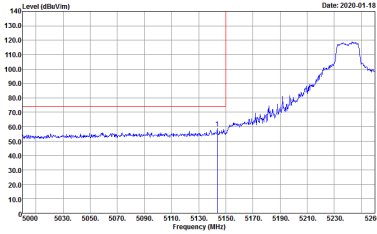
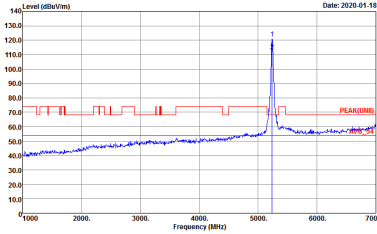
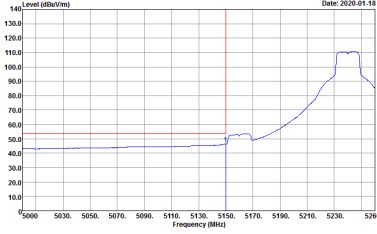


WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH48 5240MHz - L	
1	Horizontal	Fundamental
Peak	Site : 03CH16-HY Condition : PEAK_BE_74 3m 91200_1522 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Setting : 9N0104 Setting : 31.5	Site : 03CH16-HY Condition : PEAK(UNII) 3m 91200_1522 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Setting : 9N0104 Setting : 31.5
Avg.	Site : 03CH16-HY Condition : AVG_BE_54 3m 91200_1522 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Setting : 9N0104 Setting : 31.5	Left blank

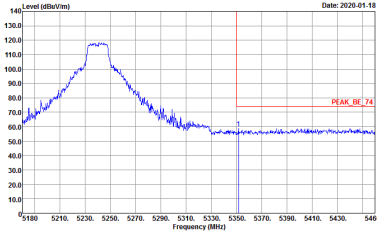
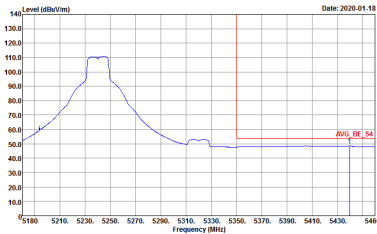


WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH48 5240MHz - R	
1	Horizontal	Fundamental
Peak	 Site : 03CH16-HY Condition : PEAK_BE_74 3m 91200_1522 HORIZONTAL Detector : Peak Project : 9N0104 Setting : 31.5	Left blank
Avg.	 Site : 03CH16-HY Condition : AVG_BE_54 3m 91200_1522 HORIZONTAL Detector : Peak Project : 9N0104 Setting : 31.5	Left blank

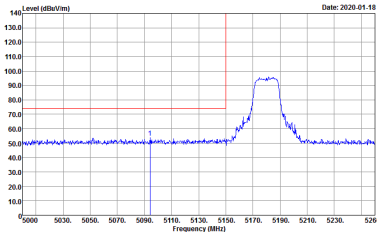
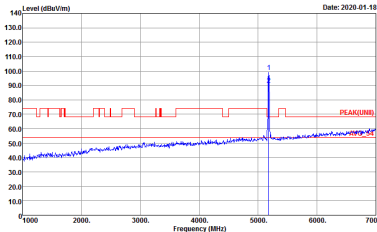
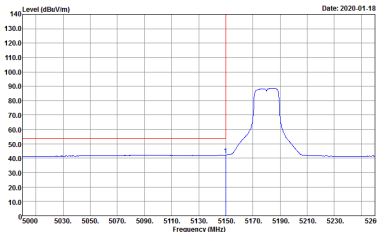


WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH48 5240MHz - L	
1	Vertical	Fundamental
Peak	 Site : 03CH16-HY Condition : PEAK_BE_74 3m 91200_1522 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Setting : 9N0104 Setting : 31.5	 Site : 03CH16-HY Condition : PEAK(UNII) 3m 91200_1522 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Setting : 9N0104 Setting : 31.5
Avg.	 Site : 03CH16-HY Condition : AVG_BE_54 3m 91200_1522 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Setting : 9N0104 Setting : 31.5	Left blank

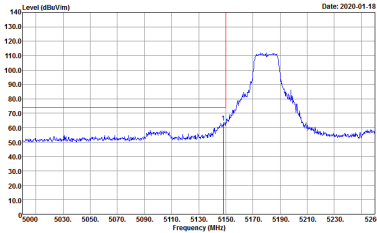
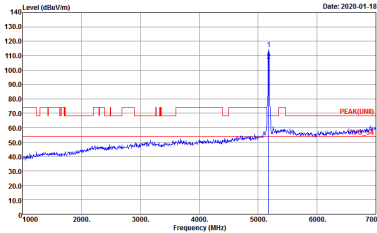
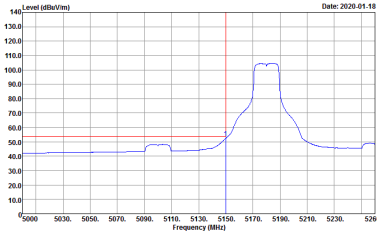


WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH48 5240MHz - R	
1	Vertical	Fundamental
Peak	 Site : 03CH16-HY Condition : PEAK_BE_74 3m 91200_1522 VERTICAL Detector : Peak Project : 9N0104 Setting : 31.5	Left blank
Avg.	 Site : 03CH16-HY Condition : AVG_BE_54 3m 91200_1522 VERTICAL Detector : Peak Project : 9N0104 Setting : 31.5	Left blank

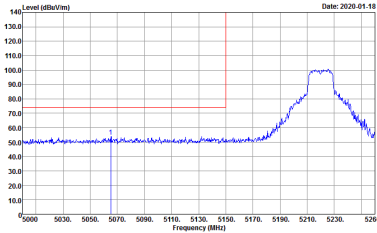
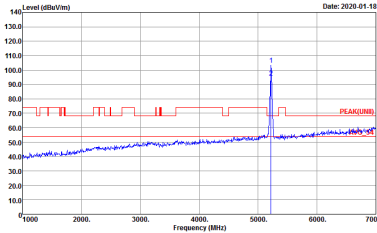
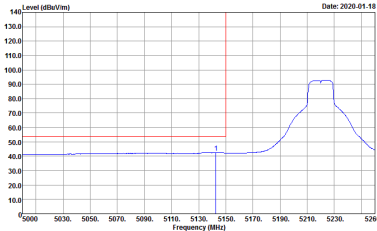
Band 1 5150~5250MHz
WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH36 5180MHz	
1	Horizontal	Fundamental
Peak	 Site : 03CH16-HY Condition : PEAK_BE_74 3m 91200_1522 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 9N0104 Setting : 18.5	 Site : 03CH16-HY Condition : PEAK(UNIT) 3m 91200_1522 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 9N0104 Setting : 18.5
Avg.	 Site : 03CH16-HY Condition : AVG_BE_54 3m 91200_1522 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 9N0104 Setting : 18.5	Left blank

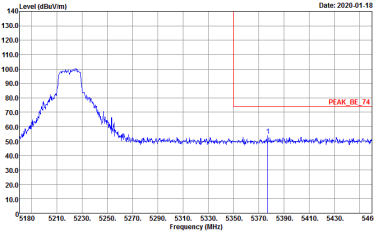
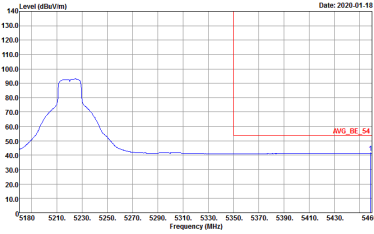


WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH36 5180MHz	
1	Vertical	Fundamental
Peak	 Site : 03CH16-HY Condition : PEAK_BE_74 3m 91200_1522 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 9N0104 Setting : 18.5	 Site : 03CH16-HY Condition : PEAK(UNII) 3m 91200_1522 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 9N0104 Setting : 18.5
Avg.	 Site : 03CH16-HY Condition : AVG_BE_54 3m 91200_1522 VERTICAL RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak Project : 9N0104 Setting : 18.5	Left blank

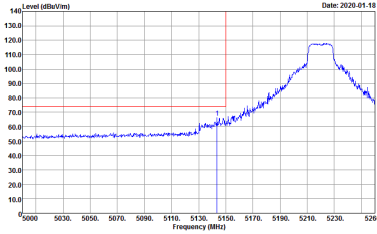
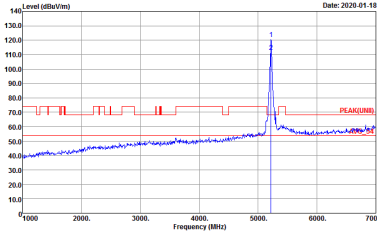
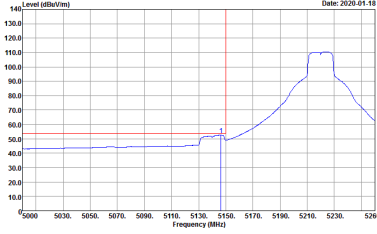


WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH44 5220MHz - L	
1	Horizontal	Fundamental
Peak	 Site : 03CH16-HY Condition : PEAK_BE_74 3m 91200_1522 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 9N0104 Setting : 31.5	 Site : 03CH16-HY Condition : PEAK(UNII) 3m 91200_1522 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 9N0104 Setting : 31.5
Avg.	 Site : 03CH16-HY Condition : AVG_BE_54 3m 91200_1522 HORIZONTAL RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak Project : 9N0104 Setting : 31.5	Left blank

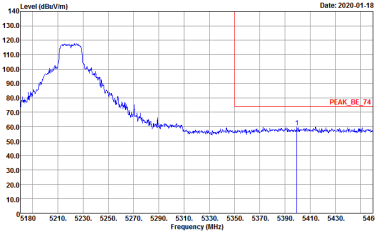
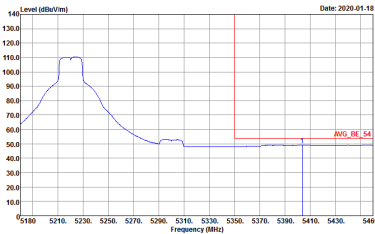


WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH44 5220MHz - R	
1	Horizontal	Fundamental
Peak	 Site : 03CH16-HY Condition : PEAK_BE_74 3m 91200_1522 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 9N0104 Setting : 31.5	Left blank
Avg.	 Site : 03CH16-HY Condition : AVG_BE_54 3m 91200_1522 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 9N0104 Setting : 31.5	Left blank

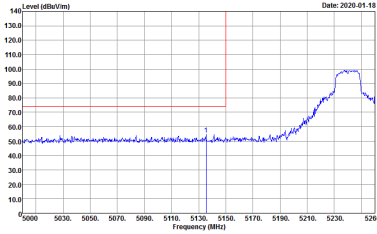
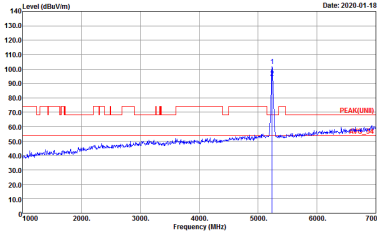
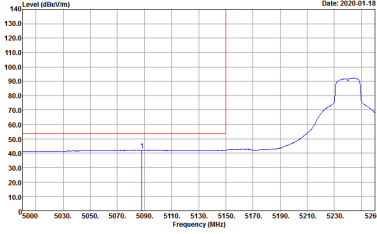


WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH44 5220MHz - L	
1	Vertical	Fundamental
Peak	 Site : 03CH16-HY Condition : PEAK_BE_74 3m 91200_1522 VERTICAL Detector : Peak Project : 9N0104 Setting : 31.5	 Site : 03CH16-HY Condition : PEAK(UNII) 3m 91200_1522 VERTICAL Detector : Peak Project : 9N0104 Setting : 31.5
Avg.	 Site : 03CH16-HY Condition : AVG_BE_54 3m 91200_1522 VERTICAL Detector : Peak Project : 9N0104 Setting : 31.5	Left blank

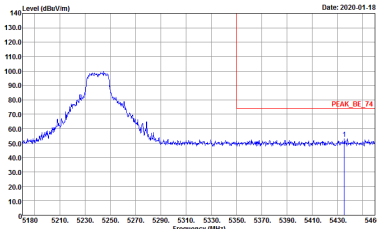
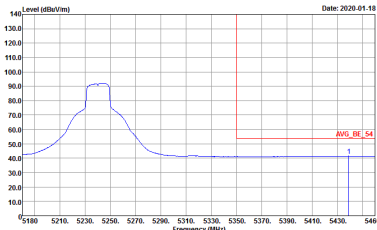


WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH44 5220MHz - R	
1	Vertical	Fundamental
Peak	 Site : 03CH16-HY Condition : PEAK_BE_74 3m 91200_1522 VERTICAL Detector : Peak Project : 9N0104 Setting : 31.5	Left blank
Avg.	 Site : 03CH16-HY Condition : AVG_BE_54 3m 91200_1522 VERTICAL Detector : Peak Project : 9N0104 Setting : 31.5	Left blank



WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH48 5240MHz - L	
1	Horizontal	Fundamental
Peak	 Site : 03CH16-HY Condition : PEAK_BE_74 3m 91200_1522 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Setting : 9N0104 Setting : 31.5	 Site : 03CH16-HY Condition : PEAK(UNII) 3m 91200_1522 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Setting : 9N0104 Setting : 31.5
Avg.	 Site : 03CH16-HY Condition : AVG_BE_54 3m 91200_1522 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Setting : 9N0104 Setting : 31.5	Left blank

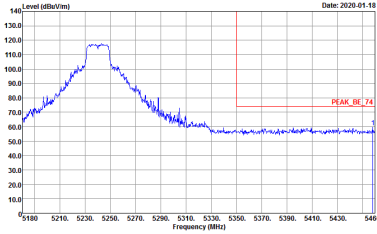
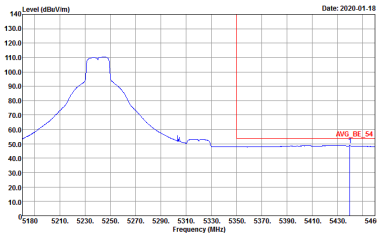


WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH48 5240MHz - R	
1	Horizontal	Fundamental
Peak	 Site : 03CH16-HY Condition : PEAK_BE_74 3m 91200_1522 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 9N0104 Setting : 31.5	Left blank
Avg.	 Site : 03CH16-HY Condition : AVG_BE_54 3m 91200_1522 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 9N0104 Setting : 31.5	Left blank

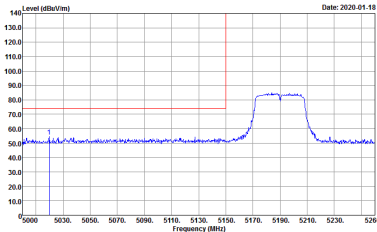
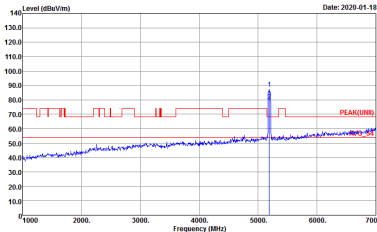
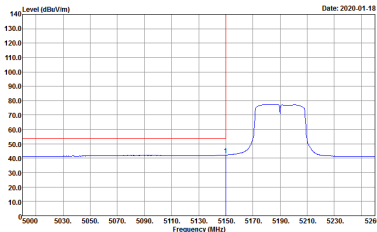


WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH48 5240MHz - L	
1	Vertical	Fundamental
Peak	Site : 03CH16-HY Condition : PEAK_BE_74 3m 91200_1522 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Setting : 9N0104 Setting : 31.5	Site : 03CH16-HY Condition : PEAK(UNII) 3m 91200_1522 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Setting : 9N0104 Setting : 31.5
Avg.	Site : 03CH16-HY Condition : AVG_BE_54 3m 91200_1522 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Setting : 9N0104 Setting : 31.5	Left blank

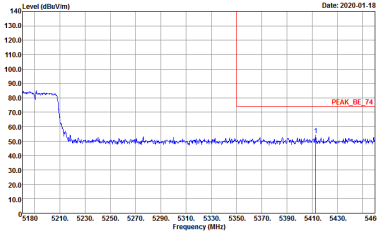
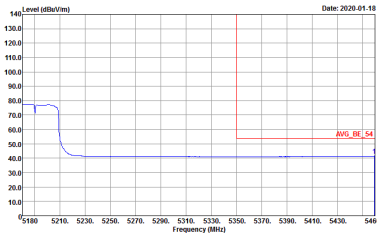


WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH48 5240MHz - R	
1	Vertical	Fundamental
Peak	 Site : 03CH16-HY Condition : PEAK_BE_74 3m 91200_1522 VERTICAL Detector : Peak Project : 9N0104 Setting : 31.5	Left blank
Avg.	 Site : 03CH16-HY Condition : AVG_BE_54 3m 91200_1522 VERTICAL Detector : Peak Project : 9N0104 Setting : 31.5	Left blank

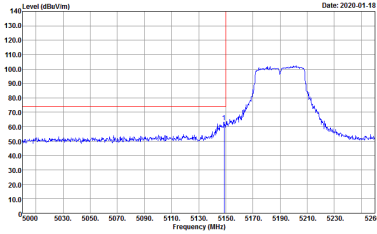
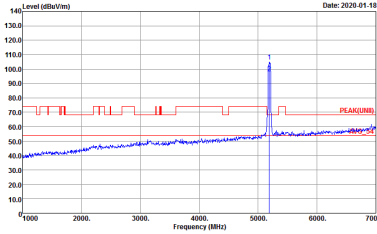
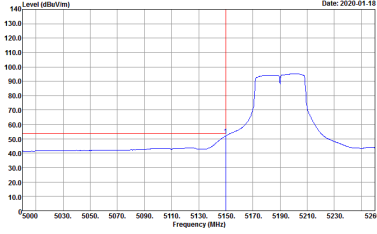
Band 1 5150~5250MHz
WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH38 5190MHz - L	
1	Horizontal	Fundamental
Peak	 Site : 03CH16-HY Condition : PEAK_BE_74 3m 91200_1522 HORIZONTAL Detector : Peak Project : 9N0104 Setting : 10.5	 Site : 03CH16-HY Condition : PEAK(UNIT) 3m 91200_1522 HORIZONTAL Detector : Peak Project : 9N0104 Setting : 10.5
Avg.	 Site : 03CH16-HY Condition : AVG_BE_54 3m 91200_1522 HORIZONTAL Detector : Peak Project : 9N0104 Setting : 10.5	Left blank

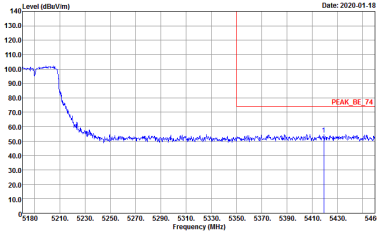
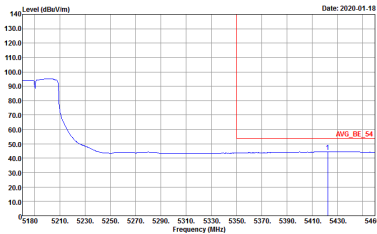


WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH38 5190MHz - R	
1	Horizontal	Fundamental
Peak	 Site : 03CH16-HY Condition : PEAK_BE_74 3m 91200_1522 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 9N0104 Setting : 10.5	Left blank
Avg.	 Site : 03CH16-HY Condition : AVG_BE_54 3m 91200_1522 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 9N0104 Setting : 10.5	Left blank

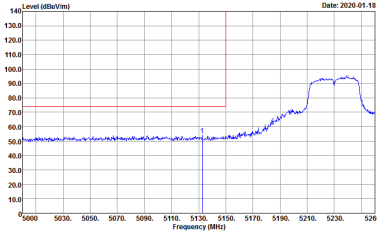
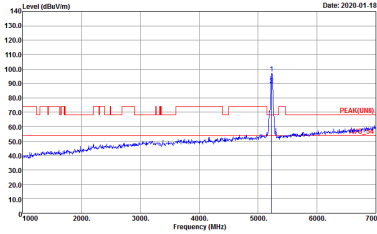
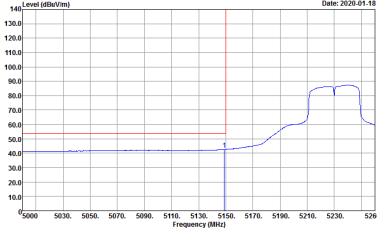


WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH38 5190MHz - L	
1	Vertical	Fundamental
Peak	 Site : 03CH16-HY Condition : PEAK_BE_74 3m 91200_1522 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Setting : 9N0104 Setting : 10.5	 Site : 03CH16-HY Condition : PEAK(UNII) 3m 91200_1522 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Setting : 9N0104 Setting : 10.5
Avg.	 Site : 03CH16-HY Condition : AVG_BE_54 3m 91200_1522 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Setting : 9N0104 Setting : 10.5	Left blank

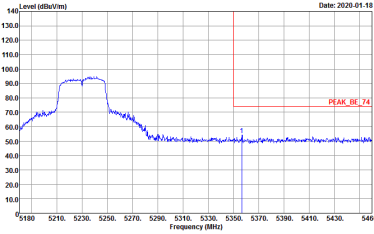
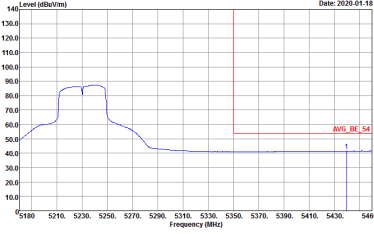


WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH38 5190MHz - R	
1	Vertical	Fundamental
Peak	 Site : 03CH16-HY Condition : PEAK_BE_74 3m 91200_1522 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Setting : 9N0104 Setting : 10.5	Left blank
Avg.	 Site : 03CH16-HY Condition : AVG_BE_54 3m 91200_1522 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Setting : 9N0104 Setting : 10.5	Left blank

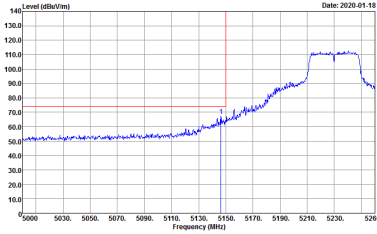
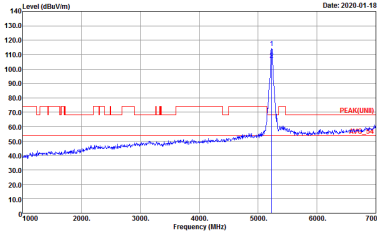
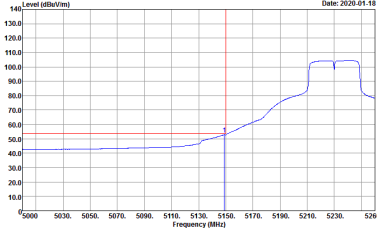


WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH46 5230MHz - L	
1	Horizontal	Fundamental
Peak	 Site : 03CH16-HY Condition : PEAK_BE_74 3m 91200_1522 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Setting : 9N0104 Setting : 21.5	 Site : 03CH16-HY Condition : PEAK(UNII) 3m 91200_1522 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Setting : 9N0104 Setting : 21.5
Avg.	 Site : 03CH16-HY Condition : AVG_BE_54 3m 91200_1522 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Setting : 9N0104 Setting : 21.5	Left blank

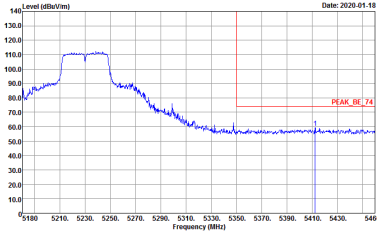
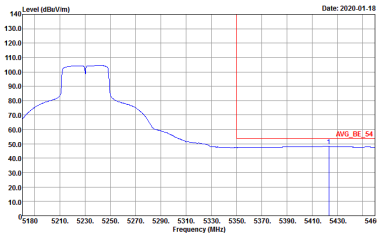


WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH46 5230MHz - R	
1	Horizontal	Fundamental
Peak	 Site : 03CH16-HY Condition : PEAK_BE_74 3m 91200_1522 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 9N0104 Setting : 21.5	Left blank
Avg.	 Site : 03CH16-HY Condition : AVG_BE_54 3m 91200_1522 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 9N0104 Setting : 21.5	Left blank



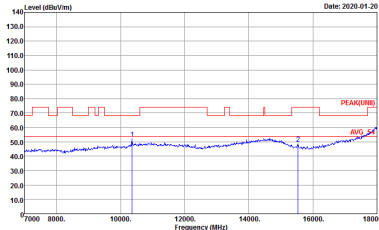
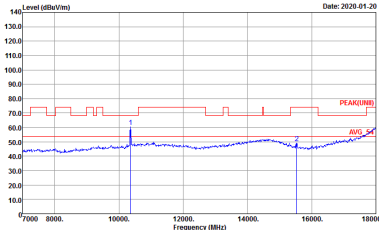
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH46 5230MHz - L	
1	Vertical	Fundamental
Peak	 Site : 03CH16-HY Condition : PEAK_BE_74 3m 91200_1522 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Setting : 9N0104 Setting : 21.5	 Site : 03CH16-HY Condition : PEAK(UNII) 3m 91200_1522 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Setting : 9N0104 Setting : 21.5
Avg.	 Site : 03CH16-HY Condition : AVG_BE_54 3m 91200_1522 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Setting : 9N0104 Setting : 21.5	Left blank



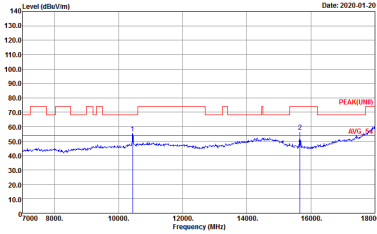
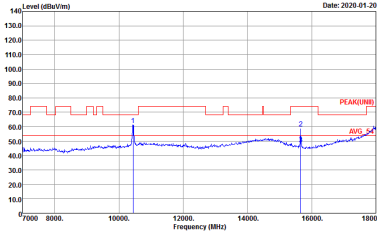
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH46 5230MHz - R	
1	Vertical	Fundamental
Peak	 Site : 03CH16-HY Condition : PEAK_BE_74 3m 91200_1522 VERTICAL Detector : Peak Project : 9N0104 Setting : 21.5	Left blank
Avg.	 Site : 03CH16-HY Condition : AVG_BE_54 3m 91200_1522 VERTICAL Detector : Peak Project : 9N0104 Setting : 21.5	Left blank



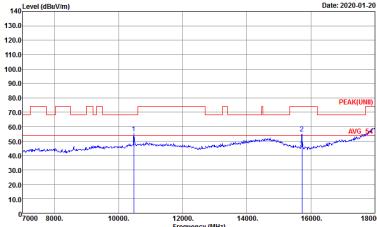
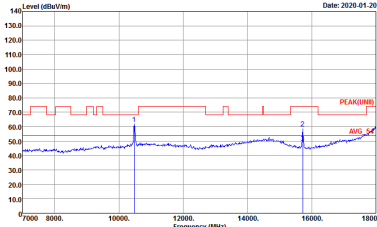
Band 1 - 5150~5250MHz
WIFI 802.11a (Harmonic @ 3m)

WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11a CH36 5180MHz	
1	Horizontal	Vertical
Peak Avg.	 Site : 03CH16-HY Condition : PEAK(UWB) 3m 91200_1522 HORIZONTAL Detector : Peak Project : 9N0104 Setting : 19	 Site : 03CH16-HY Condition : PEAK(UWB) 3m 91200_1522 VERTICAL Detector : Peak Project : 9N0104 Setting : 19

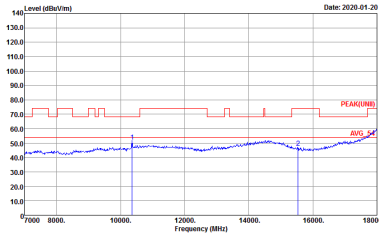
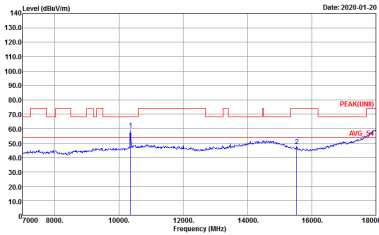


WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11a CH44 5220MHz	
1	Horizontal	Vertical
Peak Avg.	 Site : 03CH16-HV Condition : PEAK(UNB) 3m 91200_1522 HORIZONTAL Detector : Peak Project : 9N0104 Setting : 31.5	 Site : 03CH16-HV Condition : PEAK(UNB) 3m 91200_1522 VERTICAL Detector : Peak Project : 9N0104 Setting : 31.5

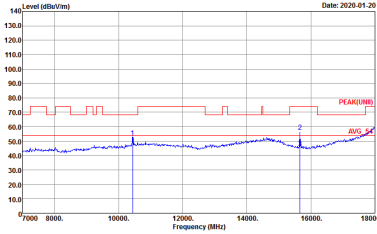
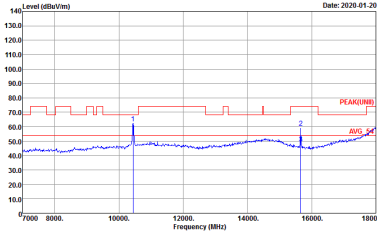


WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11a CH48 5240MHz	
1	Horizontal	Vertical
Peak Avg.	 Site : 03CH16-HY Condition : PEAK(UNII) 3m 91200_1522 HORIZONTAL Detector : Peak Project : 9N0104 Setting : 31.5	 Site : 03CH16-HY Condition : PEAK(UNII) 3m 91200_1522 VERTICAL Detector : Peak Project : 9N0104 Setting : 31.5

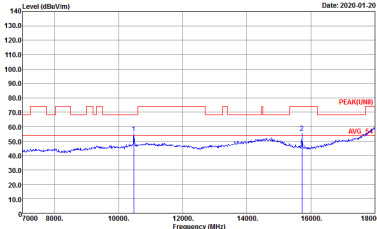
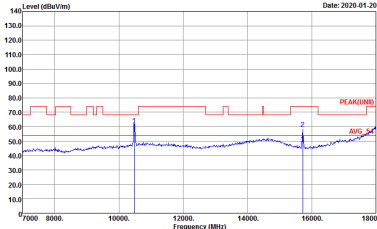
Band 1 5150~5250MHz
WIFI 802.11n HT20 (Harmonic @ 3m)

WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11n HT20 CH36 5180MHz	
1	Horizontal	Vertical
Peak Avg.	 Site : 03CH16-HY Condition : PEAK(UWB) 3m 91200_1522 HORIZONTAL Detector : Peak Project : 9N0104 Setting : 18.5	 Site : 03CH16-HY Condition : PEAK(UWB) 3m 91200_1522 VERTICAL Detector : Peak Project : 9N0104 Setting : 18.5



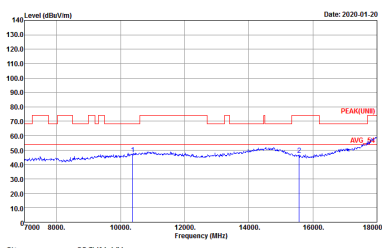
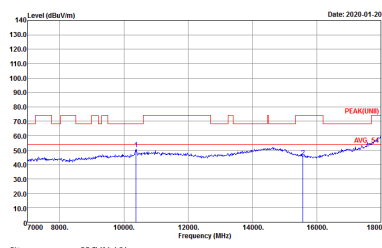
WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11n HT20 CH44 5220MHz	
1	Horizontal	Vertical
Peak Avg.	 Site : 03CH16-HY Condition : PEAK(UNII) 3m 91200_1522 HORIZONTAL Detector : Peak Project : 9N0104 Setting : 31.5	 Site : 03CH16-HY Condition : PEAK(UNII) 3m 91200_1522 VERTICAL Detector : Peak Project : 9N0104 Setting : 31.5



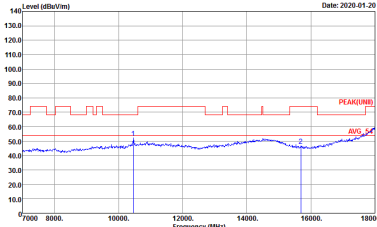
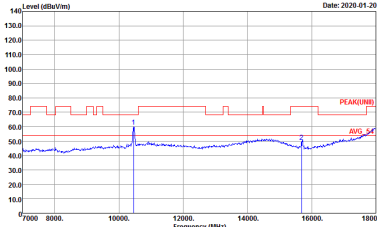
WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11n HT20 CH48 5240MHz	
1	Horizontal	Vertical
Peak Avg.	 Site : 03CH16-HY Condition : PEAK(UNII) 3m 91200_1522 HORIZONTAL Detector : Peak Project : 9N0104 Setting : 31.5	 Site : 03CH16-HY Condition : PEAK(UNII) 3m 91200_1522 VERTICAL Detector : Peak Project : 9N0104 Setting : 31.5



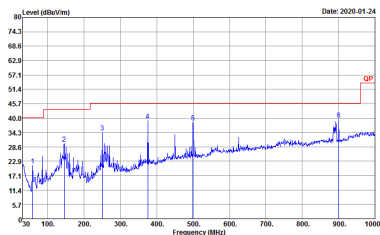
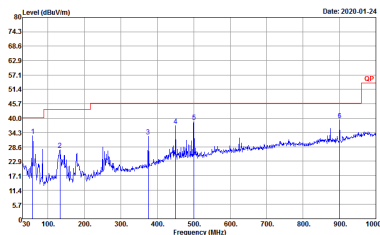
Band 1 5150~5250MHz
WIFI 802.11n HT40 (Harmonic @ 3m)

WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11n HT40 CH38 5190MHz	
1	Horizontal	Vertical
Peak Avg.	 Site : 03CH16-HY Condition : PEAK(UNIT) 3m 91200_1522 HORIZONTAL Detector : Peak Project : 9N0104 Setting : 10.5	 Site : 03CH16-HY Condition : PEAK(UNIT) 3m 91200_1522 VERTICAL Detector : Peak Project : 9N0104 Setting : 10.5



WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11n HT40 CH46 5230MHz	
1	Horizontal	Vertical
Peak Avg.	 Site : 03CH16-HY Condition : PEAK(UNII) 3m 91200_1522 HORIZONTAL Detector : Peak Project : 9N0104 Setting : 21.5	 Site : 03CH16-HY Condition : PEAK(UNII) 3m 91200_1522 VERTICAL Detector : Peak Project : 9N0104 Setting : 21.5

Emission below 1GHz
5GHz WIFI 802.11n HT40 (LF)

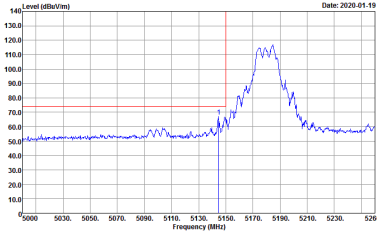
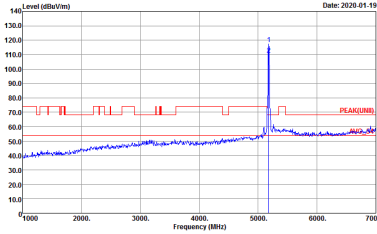
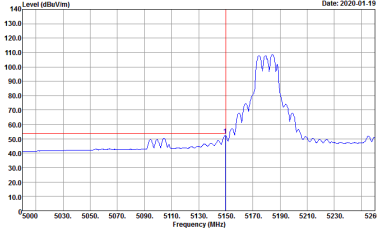
WIFI	5GHz WIFI	
ANT	802.11n HT40 LF	
1	Horizontal	Vertical
QP / Peak	 Site : 03CH16-HY Condition : QP 3m B1LOG_47020406 HORIZONTAL Detector : Peak Project : 9N0104	 Site : 03CH16-HY Condition : QP 3m B1LOG_47020406 VERTICAL Detector : Peak Project : 9N0104



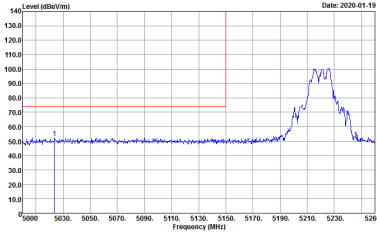
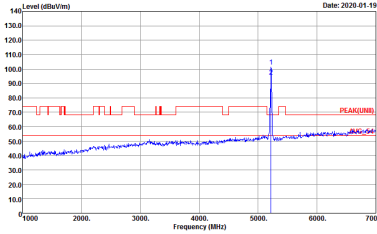
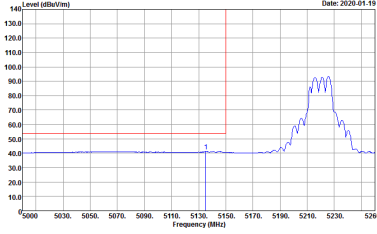
Band 1 - 5150~5250MHz
WIFI 802.11a (Band Edge @ 3m)

WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH36 5180MHz	
1+2	Horizontal	Fundamental
Peak	Site : 03CH16-HY Condition : PEAK_BE_74 3m 91200_1522 HORIZONTAL Detector : Peak Project : 9N0104 Setting : 20.5	Site : 03CH16-HY Condition : PEAK(UNIT) 3m 91200_1522 HORIZONTAL Detector : Peak Project : 9N0104 Setting : 20.5
Avg.	Site : 03CH16-HY Condition : AVG_BE_54 3m 91200_1522 HORIZONTAL Detector : Peak Project : 9N0104 Setting : 20.5	Left blank

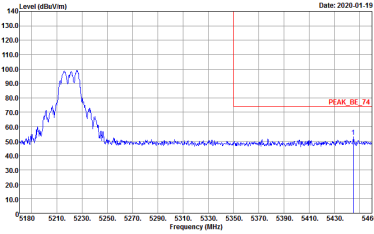
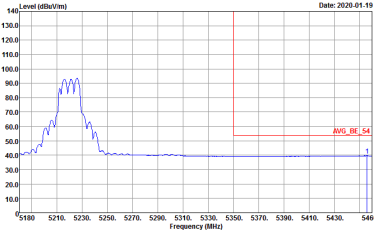


WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH36 5180MHz	
1+2	Vertical	Fundamental
Peak	 Site : 03CH16-HY Condition : PEAK_BE_74 3m 91200_1522 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Setting : 9N0104 Setting : 20.5	 Site : 03CH16-HY Condition : PEAK(UNII) 3m 91200_1522 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Setting : 9N0104 Setting : 20.5
Avg.	 Site : 03CH16-HY Condition : AVG_BE_54 3m 91200_1522 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Setting : 9N0104 Setting : 20.5	Left blank

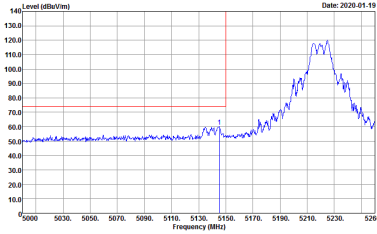
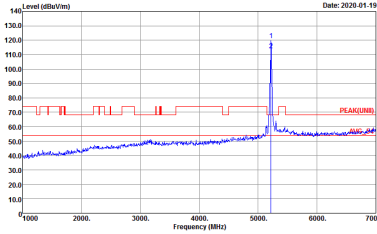
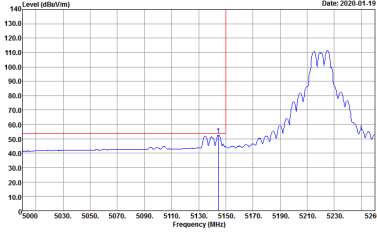


WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH44 5220MHz - L	
1+2	Horizontal	Fundamental
Peak	 Site : 03CH16-HY Condition : PEAK_BE_74 3m 91200_1522 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Setting : 9N0104 Setting : 22.5	 Site : 03CH16-HY Condition : PEAK(UNII) 3m 91200_1522 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Setting : 9N0104 Setting : 22.5
Avg.	 Site : 03CH16-HY Condition : AVG_BE_54 3m 91200_1522 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Setting : 9N0104 Setting : 22.5	Left blank

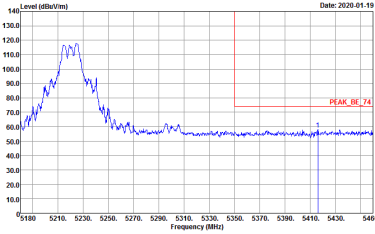
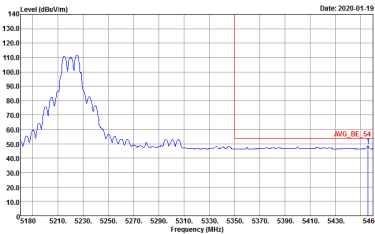


WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH44 5220MHz - R	
1+2	Horizontal	Fundamental
Peak	 Site : 03CH16-HY Condition : PEAK_BE_74 3m 91200_1522 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 9N0104 Setting : 22.5	Left blank
Avg.	 Site : 03CH16-HY Condition : AVG_BE_54 3m 91200_1522 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 9N0104 Setting : 22.5	Left blank

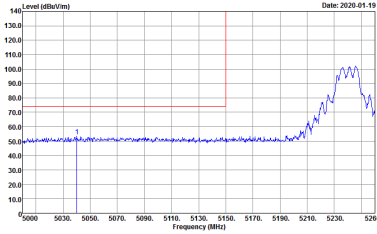
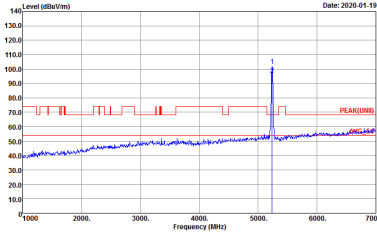
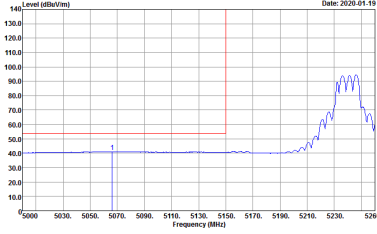


WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH44 5220MHz - L	
1+2	Vertical	Fundamental
Peak	 Site : 03CH16-HY Condition : PEAK_BE_74 3m 91200_1522 VERTICAL Detector : Peak Project : 9N0104 Setting : 22.5	 Site : 03CH16-HY Condition : PEAK(UNII) 3m 91200_1522 VERTICAL Detector : Peak Project : 9N0104 Setting : 22.5
Avg.	 Site : 03CH16-HY Condition : AVG_BE_54 3m 91200_1522 VERTICAL Detector : Peak Project : 9N0104 Setting : 22.5	Left blank

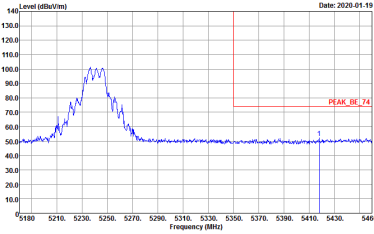
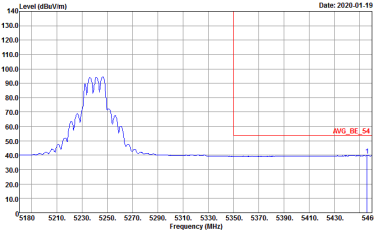


WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH44 5220MHz - R	
1+2	Vertical	Fundamental
Peak	 Site : 03CH16-HY Condition : PEAK_BE_74 3m 91200_1522 VERTICAL Detector : Peak Project : 9N0104 Setting : 22.5	Left blank
Avg.	 Site : 03CH16-HY Condition : AVG_BE_54 3m 91200_1522 VERTICAL Detector : Peak Project : 9N0104 Setting : 22.5	Left blank

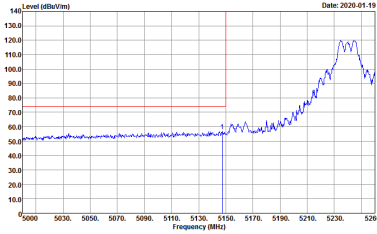
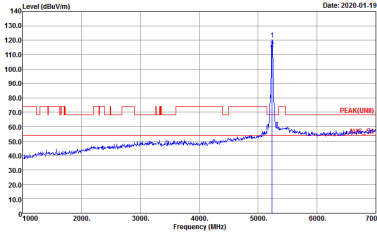
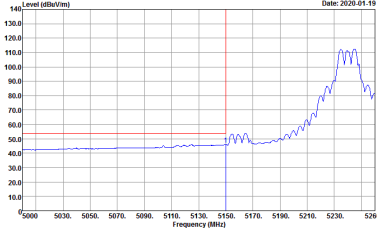


WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH48 5240MHz - L	
1+2	Horizontal	Fundamental
Peak	 Site : 03CH16-HY Condition : PEAK_BE_74 3m 91200_1522 HORIZONTAL Detector : Peak Project : 9N0104 Setting : 24	 Site : 03CH16-HY Condition : PEAK(UNII) 3m 91200_1522 HORIZONTAL Detector : Peak Project : 9N0104 Setting : 24
Avg.	 Site : 03CH16-HY Condition : AVG_BE_54 3m 91200_1522 HORIZONTAL Detector : Peak Project : 9N0104 Setting : 24	Left blank

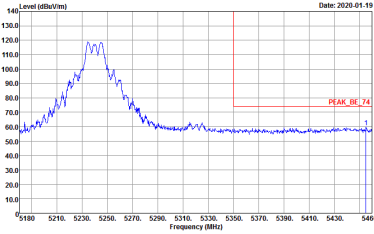
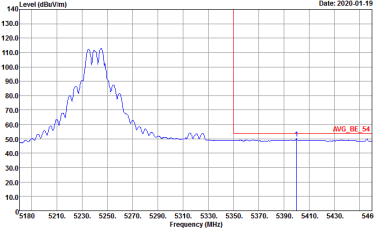


WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH48 5240MHz - R	
1+2	Horizontal	Fundamental
Peak	 Site : 03CH16-HV Condition : PEAK_BE_74 3m 91200_1522 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 9N0104 Setting : 24	Left blank
Avg.	 Site : 03CH16-HV Condition : AVG_BE_54 3m 91200_1522 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 9N0104 Setting : 24	Left blank

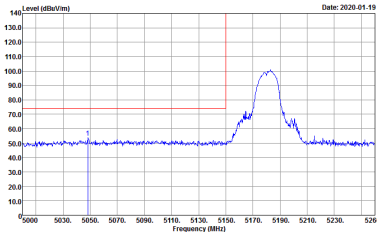
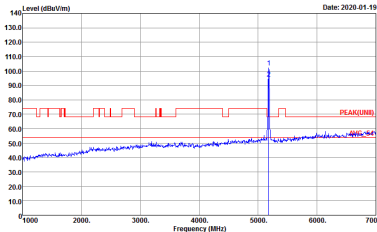
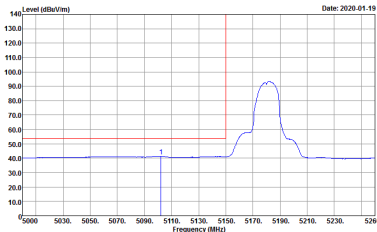


WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH48 5240MHz - L	
1+2	Vertical	Fundamental
Peak	 Site : 03CH16-HY Condition : PEAK_BE_74 3m 91200_1522 VERTICAL Detector : Peak Project : 9N0104 Setting : 24	 Site : 03CH16-HY Condition : PEAK(UNII) 3m 91200_1522 VERTICAL Detector : Peak Project : 9N0104 Setting : 24
Avg.	 Site : 03CH16-HY Condition : AVG_BE_54 3m 91200_1522 VERTICAL Detector : Peak Project : 9N0104 Setting : 24	Left blank

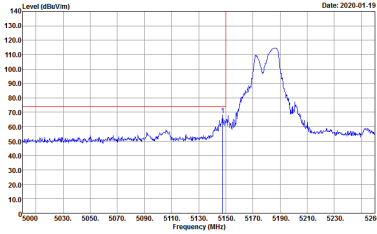
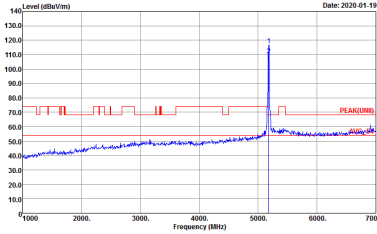
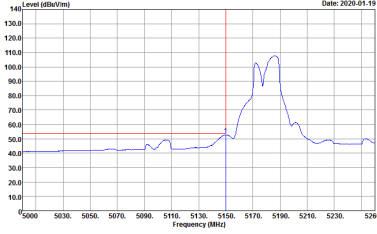


WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH48 5240MHz - R	
1+2	Vertical	Fundamental
Peak	 Site : 03CH16-HY Condition : PEAK_BE_74 3m 91200_1522 VERTICAL Detector : Peak Project : 9N0104 Setting : 24	Left blank
Avg.	 Site : 03CH16-HY Condition : AVG_BE_54 3m 91200_1522 VERTICAL Detector : Peak Project : 9N0104 Setting : 24	Left blank

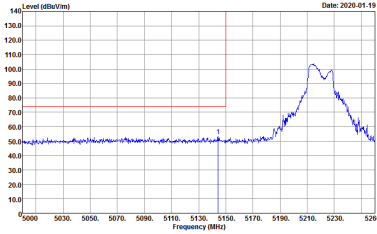
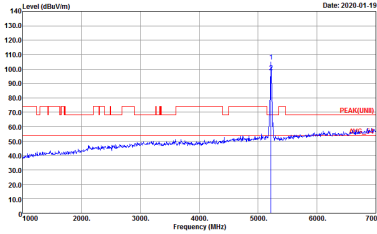
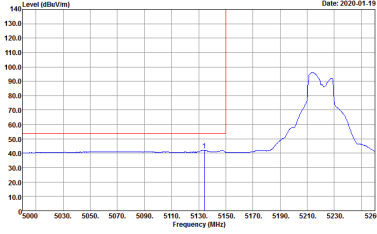
Band 1 5150~5250MHz
WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH36 5180MHz	
1+2	Horizontal	Fundamental
Peak	 Site : 03CH16-HY Condition : PEAK_BE_74 3m 91200_1522 HORIZONTAL Detector : Peak Project : 9N0104 Setting : Z1	 Site : 03CH16-HY Condition : PEAK(UNIT) 3m 91200_1522 HORIZONTAL Detector : Peak Project : 9N0104 Setting : Z1
Avg.	 Site : 03CH16-HY Condition : AVG_BE_54 3m 91200_1522 HORIZONTAL Detector : Peak Project : 9N0104 Setting : Z1	Left blank

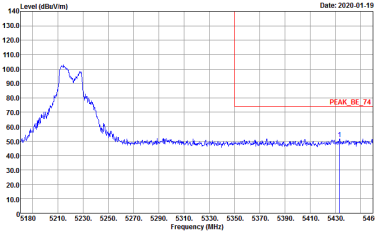
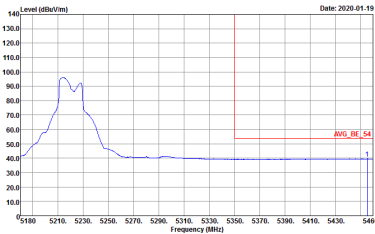


WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH36 5180MHz	
1+2	Vertical	Fundamental
Peak	 Site : 03CH16-HY Condition : PEAK_BE_74 3m 91200_1522 VERTICAL Detector : Peak Project : 9N0104 Setting : Z1	 Site : 03CH16-HY Condition : PEAK(UNII) 3m 91200_1522 VERTICAL Detector : Peak Project : 9N0104 Setting : Z1
Avg.	 Site : 03CH16-HY Condition : AVG_BE_54 3m 91200_1522 VERTICAL Detector : Peak Project : 9N0104 Setting : Z1	Left blank

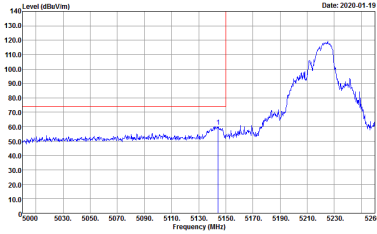
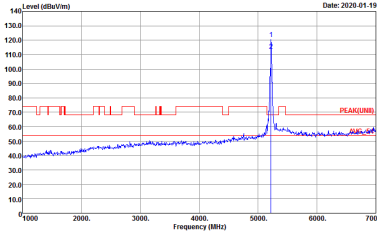
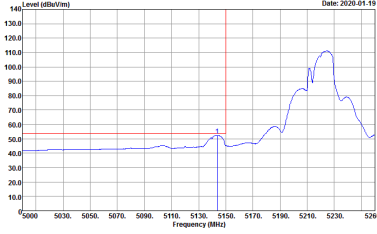


WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH44 5220MHz - L	
1+2	Horizontal	Fundamental
Peak	 Site : 03CH16-HY Condition : PEAK_BE_74 3m 91200_1522 HORIZONTAL Detector : Peak Project : 9N0104 Setting : 24.5	 Site : 03CH16-HY Condition : PEAK(UNII) 3m 91200_1522 HORIZONTAL Detector : Peak Project : 9N0104 Setting : 24.5
Avg.	 Site : 03CH16-HY Condition : AVG_BE_54 3m 91200_1522 HORIZONTAL Detector : Peak Project : 9N0104 Setting : 24.5	Left blank

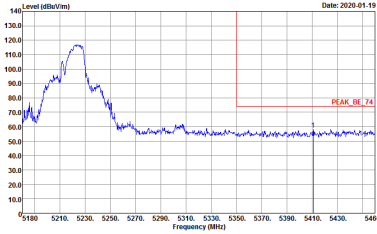
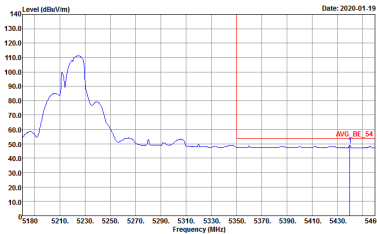


WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH44 5220MHz - R	
1+2	Horizontal	Fundamental
Peak	 Site : 03CH16-HY Condition : PEAK_BE_74 3m 91200_1522 HORIZONTAL Detector : Peak Project : 9N0104 Setting : 24.5	Left blank
Avg.	 Site : 03CH16-HY Condition : AVG_BE_54 3m 91200_1522 HORIZONTAL Detector : Peak Project : 9N0104 Setting : 24.5	Left blank

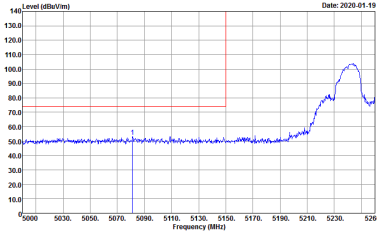
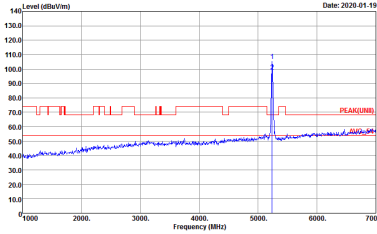
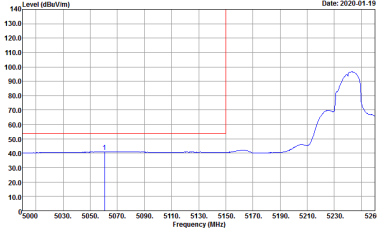


WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH44 5220MHz - L	
1+2	Vertical	Fundamental
Peak	 Site : 03CH16-HY Condition : PEAK_BE_74 3m 91200_1522 VERTICAL Detector : Peak Project : 9N0104 Setting : 24.5	 Site : 03CH16-HY Condition : PEAK(UNII) 3m 91200_1522 VERTICAL Detector : Peak Project : 9N0104 Setting : 24.5
Avg.	 Site : 03CH16-HY Condition : AVG_BE_54 3m 91200_1522 VERTICAL Detector : Peak Project : 9N0104 Setting : 24.5	Left blank

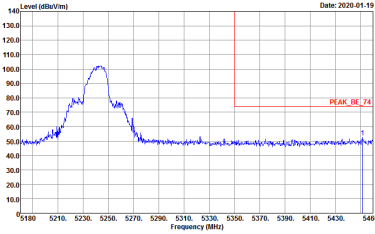
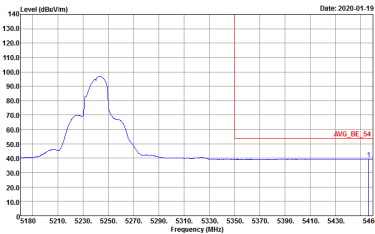


WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH44 5220MHz - R	
1+2	Vertical	Fundamental
Peak	 Site : 03CH16-HY Condition : PEAK_BE_74 3m 91200_1522 VERTICAL Detector : Peak Project : 9N0104 Setting : 24.5	Left blank
Avg.	 Site : 03CH16-HY Condition : AVG_BE_54 3m 91200_1522 VERTICAL Detector : Peak Project : 9N0104 Setting : 24.5	Left blank

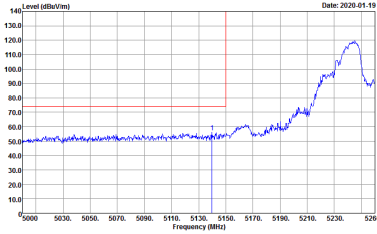
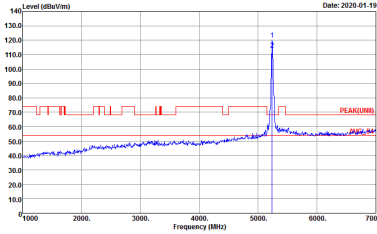
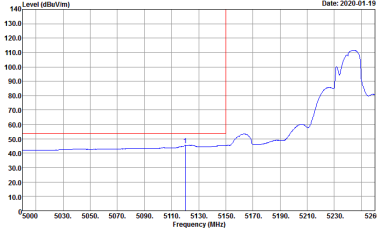


WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH48 5240MHz - L	
1+2	Horizontal	Fundamental
Peak	 Site : 03CH16-HY Condition : PEAK_BE_74 3m 91200_1522 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Setting : 9N0104 Setting : 25	 Site : 03CH16-HY Condition : PEAK(UNII) 3m 91200_1522 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Setting : 9N0104 Setting : 25
Avg.	 Site : 03CH16-HY Condition : AVG_BE_54 3m 91200_1522 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Setting : 9N0104 Setting : 25	Left blank

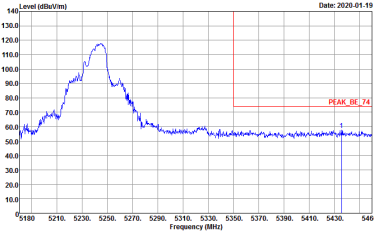
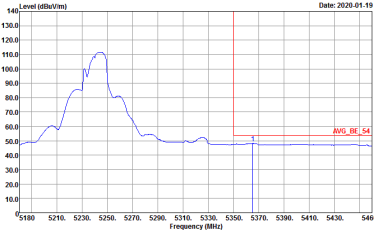


WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH48 5240MHz - R	
1+2	Horizontal	Fundamental
Peak	 Site : 03CH16-HY Condition : PEAK_BE_74 3m 91200_1522 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 9N0104 Setting : 25	Left blank
Avg.	 Site : 03CH16-HY Condition : AVG_BE_54 3m 91200_1522 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 9N0104 Setting : 25	Left blank

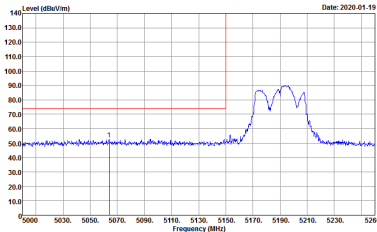
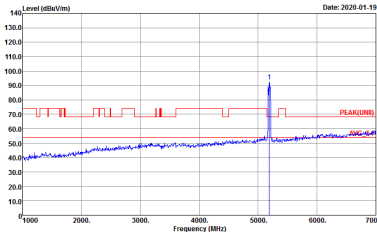
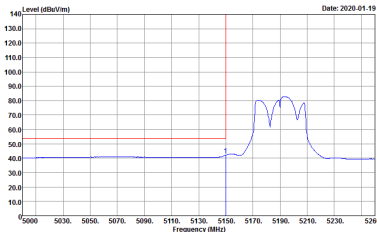


WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH48 5240MHz - L	
1+2	Vertical	Fundamental
Peak	 Site : 03CH16-HY Condition : PEAK_BE_74 3m 91200_1522 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Setting : 9N0104 Setting : 25	 Site : 03CH16-HY Condition : PEAK(UNII) 3m 91200_1522 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Setting : 9N0104 Setting : 25
Avg.	 Site : 03CH16-HY Condition : AVG_BE_54 3m 91200_1522 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Setting : 9N0104 Setting : 25	Left blank



WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH48 5240MHz - R	
1+2	Vertical	Fundamental
Peak	 Site : 03CH16-HY Condition : PEAK_BE_74 3m 91200_1522 VERTICAL Detector : Peak Project : 9N0104 Setting : 25	Left blank
Avg.	 Site : 03CH16-HY Condition : AVG_BE_54 3m 91200_1522 VERTICAL Detector : Peak Project : 9N0104 Setting : 25	Left blank

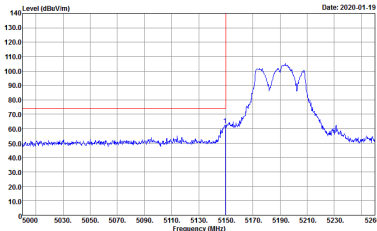
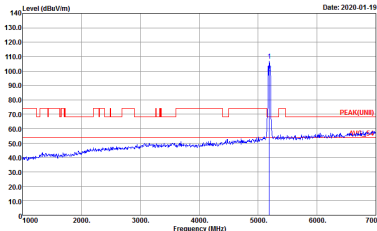
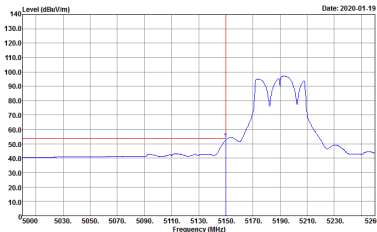
Band 1 5150~5250MHz
WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH38 5190MHz - L	
1+2	Horizontal	Fundamental
Peak	 Site : 03CH16-HY Condition : PEAK_BE_74 3m 91200_1522 HORIZONTAL Detector : Peak Project : 9N0104 Setting : 11.5	 Site : 03CH16-HY Condition : PEAK(UNIT) 3m 91200_1522 HORIZONTAL Detector : Peak Project : 9N0104 Setting : 11.5
Avg.	 Site : 03CH16-HY Condition : AVG_BE_54 3m 91200_1522 HORIZONTAL Detector : Peak Project : 9N0104 Setting : 11.5	Left blank

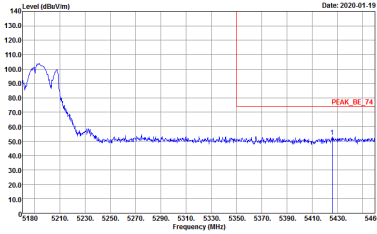
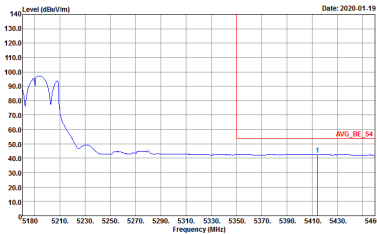


WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH38 5190MHz - R	
1+2	Horizontal	Fundamental
Peak	Site : 03CH16-HY Condition : PEAK_BE_74 3m 91200_1522 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 9N0104 Setting : 11.5	Left blank
Avg.	Site : 03CH16-HY Condition : AVG_BE_54 3m 91200_1522 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 9N0104 Setting : 11.5	Left blank

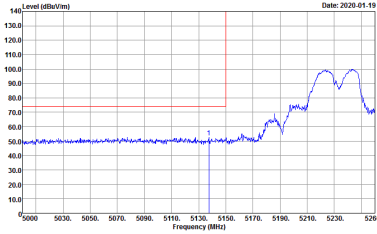
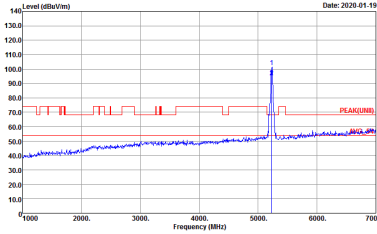
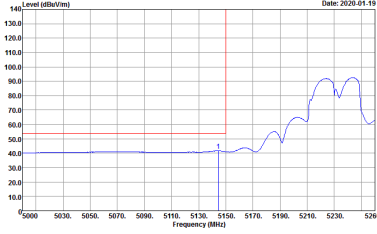


WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH38 5190MHz - L	
1+2	Vertical	Fundamental
Peak	 Site : 03CH16-HY Condition : PEAK_BE_74 3m 91200_1522 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Setting : 9N0104 Setting : 11.5	 Site : 03CH16-HY Condition : PEAK(UNII) 3m 91200_1522 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Setting : 9N0104 Setting : 11.5
Avg.	 Site : 03CH16-HY Condition : AVG_BE_54 3m 91200_1522 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Setting : 9N0104 Setting : 11.5	Left blank

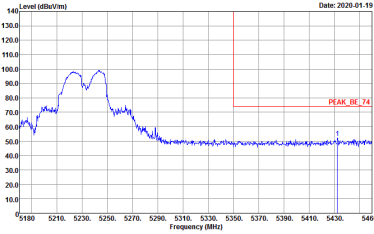
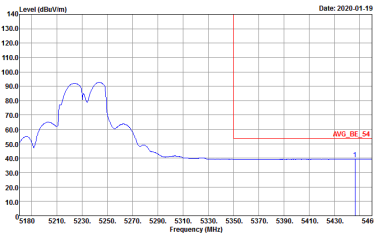


WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH38 5190MHz - R	
1+2	Vertical	Fundamental
Peak	 Site : 03CH16-HY Condition : PEAK_BE_74 3m 91200_1522 VERTICAL Detector : Peak Project : 9N0104 Setting : 11.5	Left blank
Avg.	 Site : 03CH16-HY Condition : AVG_BE_54 3m 91200_1522 VERTICAL Detector : Peak Project : 9N0104 Setting : 11.5	Left blank

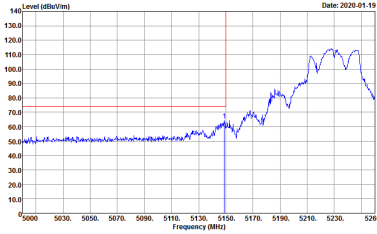
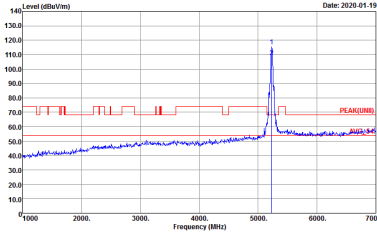
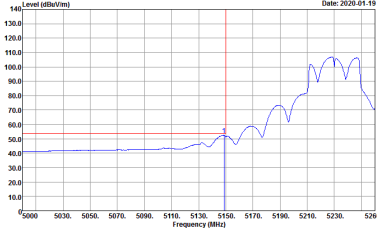


WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH46 5230MHz - L	
1+2	Horizontal	Fundamental
Peak	 Site : 03CH16-HY Condition : PEAK_BE_74 3m 91200_1522 HORIZONTAL Detector : Peak Project : 9N0104 Setting : 22	 Site : 03CH16-HY Condition : PEAK(UNII) 3m 91200_1522 HORIZONTAL Detector : Peak Project : 9N0104 Setting : 22
Avg.	 Site : 03CH16-HY Condition : AVG_BE_54 3m 91200_1522 HORIZONTAL Detector : Peak Project : 9N0104 Setting : 22	Left blank

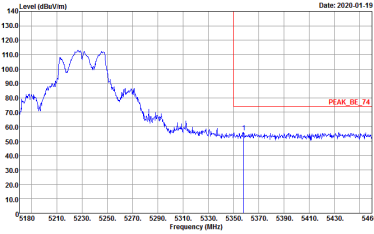
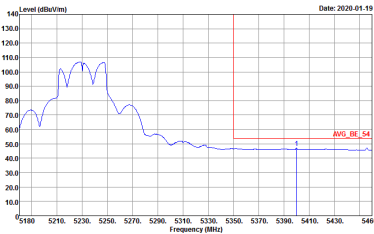


WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH46 5230MHz - R	
1+2	Horizontal	Fundamental
Peak	 Site : 03CH16-HY Condition : PEAK_BE_74 3m 91200_1522 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 9N0104 Setting : 22	Left blank
Avg.	 Site : 03CH16-HY Condition : AVG_BE_54 3m 91200_1522 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 9N0104 Setting : 22	Left blank



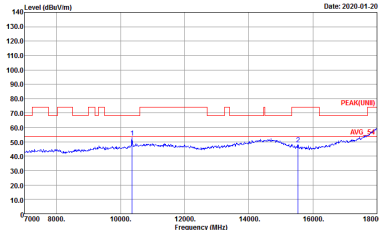
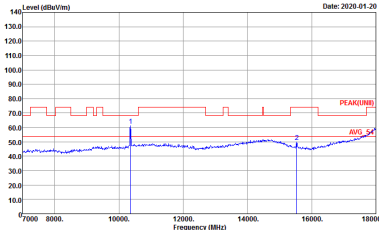
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH46 5230MHz - L	
1+2	Vertical	Fundamental
Peak	 Site : 03CH16-HY Condition : PEAK_BE_74 3m 91200_1522 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Setting : 9N0104 Setting : 22	 Site : 03CH16-HY Condition : PEAK(UNII) 3m 91200_1522 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Setting : 9N0104 Setting : 22
Avg.	 Site : 03CH16-HY Condition : AVG_BE_54 3m 91200_1522 VERTICAL Detector : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Project : Peak Setting : 9N0104 Setting : 22	Left blank



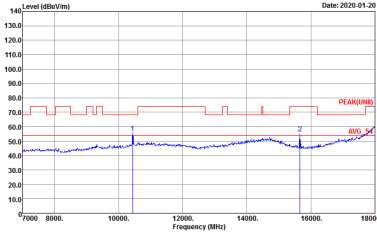
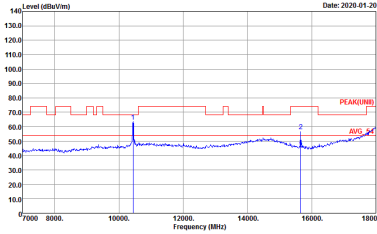
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH46 5230MHz - R	
1+2	Vertical	Fundamental
Peak	 Site : 03CH16-HY Condition : PEAK_BE_74 3m 91200_1522 VERTICAL Detector : Peak Project : 9N0104 Setting : 22	Left blank
Avg.	 Site : 03CH16-HY Condition : AVG_BE_54 3m 91200_1522 VERTICAL Detector : Peak Project : 9N0104 Setting : 22	Left blank



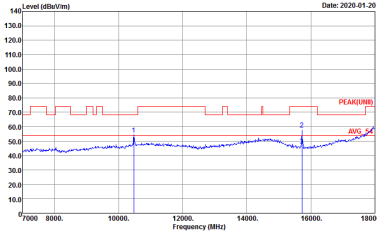
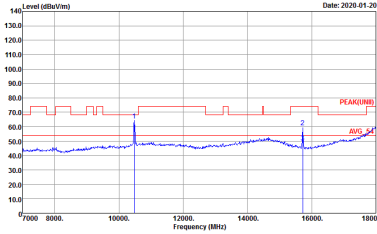
Band 1 - 5150~5250MHz
WIFI 802.11a (Harmonic @ 3m)

WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11a CH36 5180MHz	
1+2	Horizontal	Vertical
Peak Avg.	 Site : 03CH16-HY Condition : PEAK(UNB) 3m 91200_1522 HORIZONTAL Detector : Peak Project : 9N0104 Setting : 20.5	 Site : 03CH16-HY Condition : PEAK(UNB) 3m 91200_1522 VERTICAL Detector : Peak Project : 9N0104 Setting : 20.5



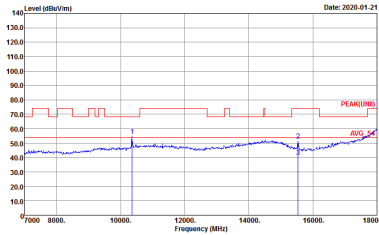
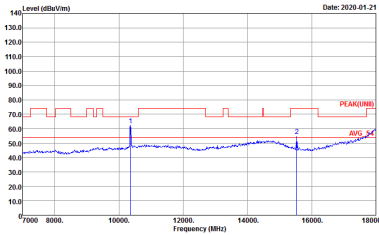
WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11a CH44 5220MHz	
1+2	Horizontal	Vertical
Peak Avg.	 Site : 03CH16-HY Condition : PEAK(UNII) 3m 91200_1522 HORIZONTAL Detector : Peak Project : 9N0104 Setting : 22.5	 Site : 03CH16-HY Condition : PEAK(UNII) 3m 91200_1522 VERTICAL Detector : Peak Project : 9N0104 Setting : 22.5



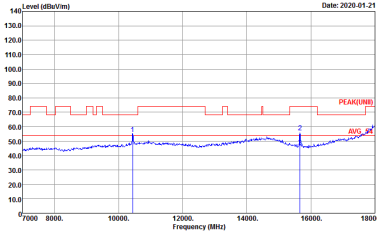
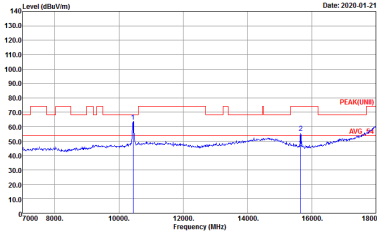
WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11a CH48 5240MHz	
1+2	Horizontal	Vertical
Peak Avg.	 Site : 03CH16-HV Condition : PEAK(UNII) 3m 91200_1522 HORIZONTAL Detector : Peak Project : 9N0104 Setting : 24	 Site : 03CH16-HV Condition : PEAK(UNII) 3m 91200_1522 VERTICAL Detector : Peak Project : 9N0104 Setting : 24



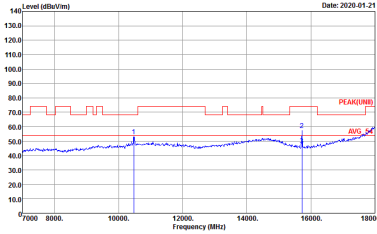
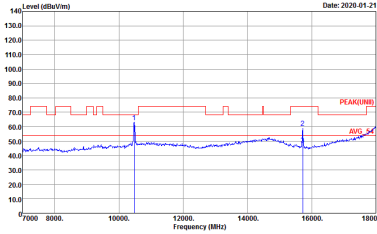
Band 1 5150~5250MHz
WIFI 802.11n HT20 (Harmonic @ 3m)

WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11n HT20 CH36 5180MHz	
1+2	Horizontal	Vertical
Peak Avg.	 Site : 03CH16-HY Condition : PEAK(UNIT) 3m 91200_1522 HORIZONTAL Detector : Peak Project : 9N0104 Setting : 21	 Site : 03CH16-HY Condition : PEAK(UNIT) 3m 91200_1522 VERTICAL Detector : Peak Project : 9N0104 Setting : 21



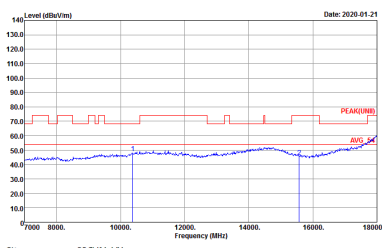
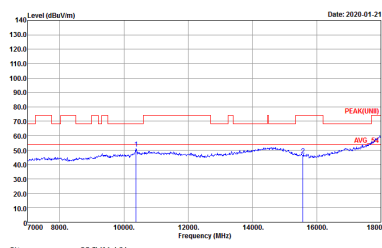
WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11n HT20 CH44 5220MHz	
1+2	Horizontal	Vertical
Peak Avg.	 Site : 03CH16-HY Condition : PEAK(UNB) 3m 91200_1522 HORIZONTAL Detector : Peak Project : 9N0104 Setting : 24.5	 Site : 03CH16-HY Condition : PEAK(UNB) 3m 91200_1522 VERTICAL Detector : Peak Project : 9N0104 Setting : 24.5



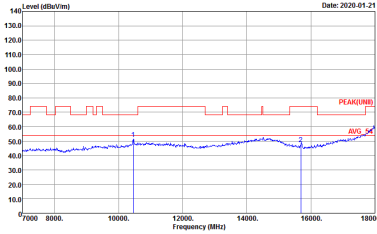
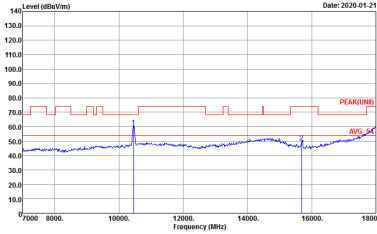
WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11n HT20 CH48 5240MHz	
1+2	Horizontal	Vertical
Peak Avg.	 Site : 03CH16-HY Condition : PEAK(UWB) 3m 91200_1522 HORIZONTAL Detector : Peak Project : 9N0104 Setting : 25	 Site : 03CH16-HY Condition : PEAK(UWB) 3m 91200_1522 VERTICAL Detector : Peak Project : 9N0104 Setting : 25



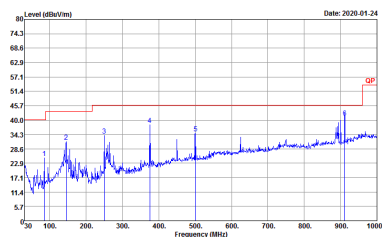
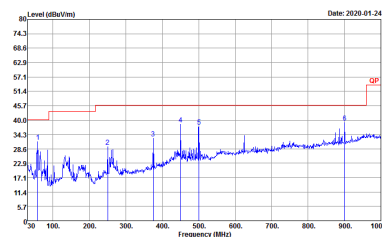
Band 1 5150~5250MHz
WIFI 802.11n HT40 (Harmonic @ 3m)

WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11n HT40 CH38 5190MHz	
1+2	Horizontal	Vertical
Peak Avg.	 Site : 03CH16-HY Condition : PEAK(UNIT) 3m 91200_1522 HORIZONTAL Detector : Peak Project : 9N0104 Setting : 11.5	 Site : 03CH16-HY Condition : PEAK(UNIT) 3m 91200_1522 VERTICAL Detector : Peak Project : 9N0104 Setting : 11.5



WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11n HT40 CH46 5230MHz	
1+2	Horizontal	Vertical
Peak Avg.	 Site : 03CH16-HY Condition : PEAK(UNII) 3m 91200_1522 HORIZONTAL Detector : Peak Project : 9N0104 Setting : 22	 Site : 03CH16-HY Condition : PEAK(UNII) 3m 91200_1522 VERTICAL Detector : Peak Project : 9N0104 Setting : 22

Emission below 1GHz
5GHz WIFI 802.11n HT20 (LF)

WIFI	5GHz WIFI	
ANT	802.11n HT20 LF	
1+2	Horizontal	Vertical
QP / Peak	 Site : 03CH16-HY Condition : QP 3m BTL06_47020406 HORIZONTAL Detector : Peak Project : 9N0104	 Site : 03CH16-HY Condition : QP 3m BTL06_47020406 VERTICAL Detector : Peak Project : 9N0104

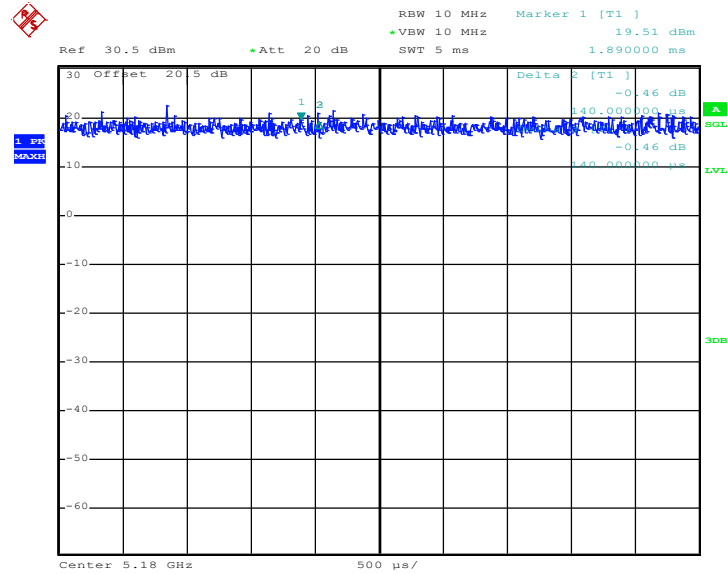


Appendix E. Duty Cycle Plots

Antenna	Band	Duty Cycle(%)	T(us)	1/T(kHz)	VBW Setting	Duty Factor(dB)
1	802.11a	100.00	-	-	1kHz	0.00
2	802.11a	100.00	-	-	1kHz	0.00
1+2	802.11a for Ant. 1	100.00	-	-	1kHz	0.00
1+2	802.11a for Ant. 2	100.00	-	-	1kHz	0.00
1	5GHz 802.11n HT20	100.00	-	-	1kHz	0.00
2	5GHz 802.11n HT20	100.00	-	-	1kHz	0.00
1+2	5GHz 802.11n HT20 for Ant. 1	100.00	-	-	1kHz	0.00
1+2	5GHz 802.11n HT20 for Ant. 2	100.00	-	-	1kHz	0.00
1	5GHz 802.11n HT40	100.00	-	-	3kHz	0.00
2	5GHz 802.11n HT40	100.00	-	-	3kHz	0.00
1+2	5GHz 802.11n HT40 for Ant. 1	100.00	-	-	3kHz	0.00
1+2	5GHz 802.11n HT40 for Ant. 2	100.00	-	-	3kHz	0.00

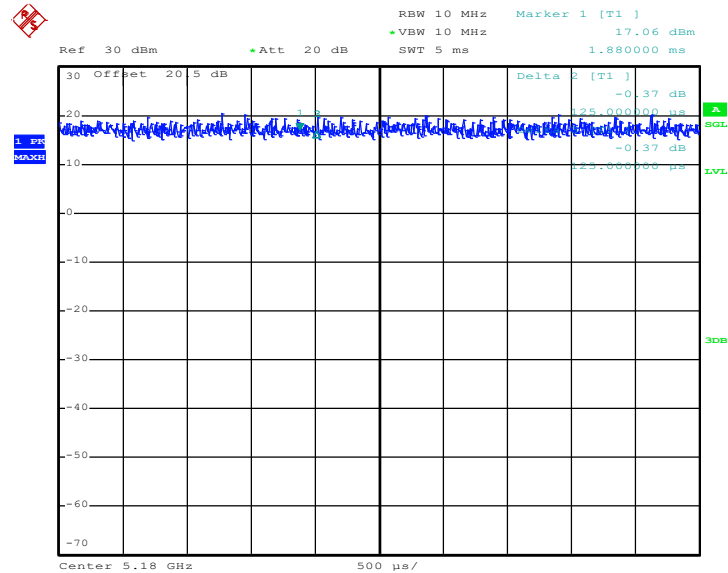
<Ant. 1>

802.11a

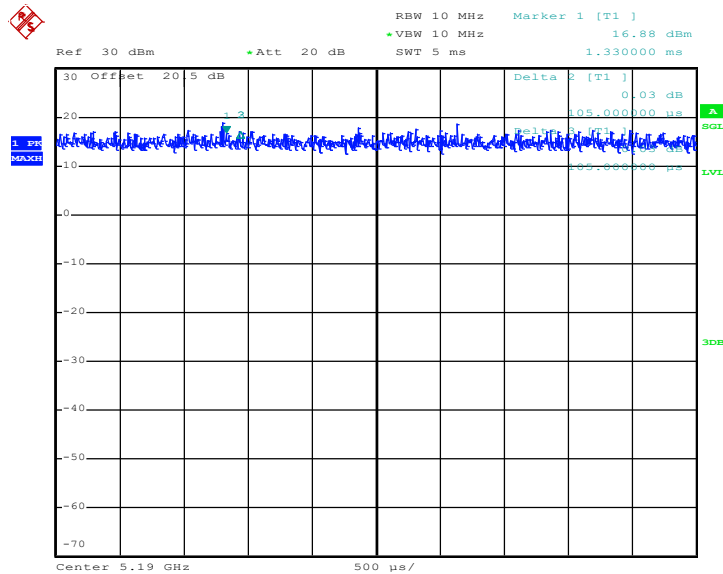


Date: 12.MAR.2020 14:00:00

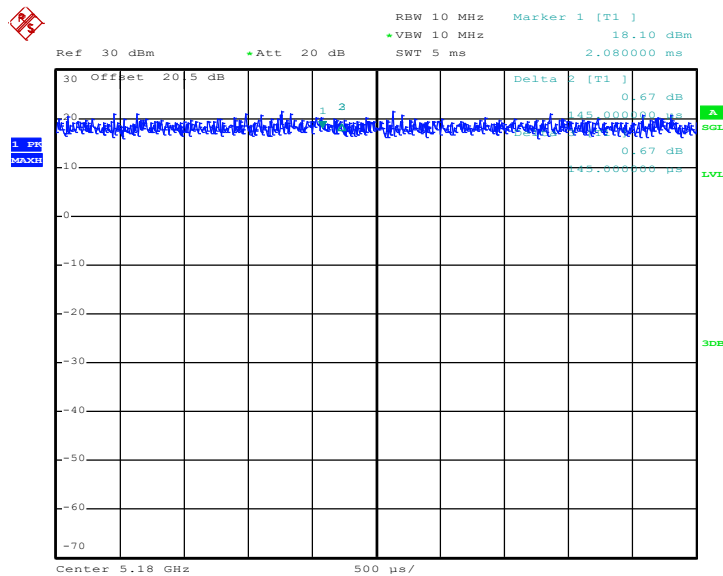
802.11n HT20



Date: 12.MAR.2020 14:07:43

802.11n HT40


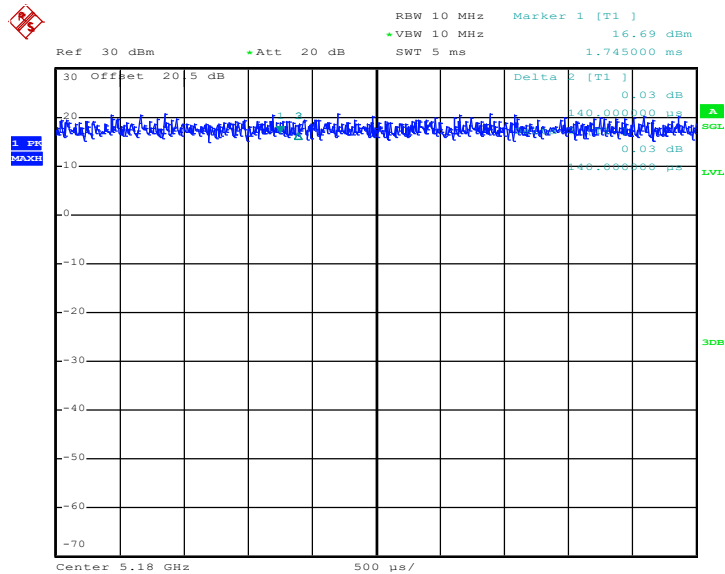
Date: 12.MAR.2020 14:18:39

<Ant. 2>
802.11a


Date: 12.MAR.2020 14:01:32

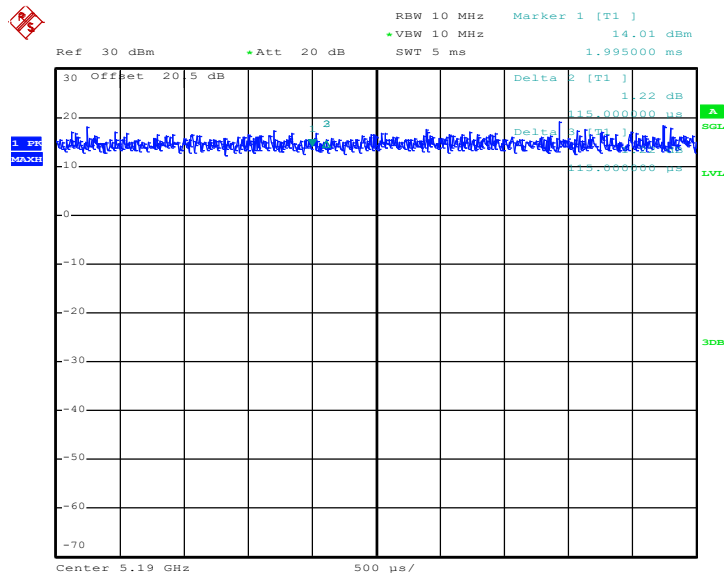


802.11n HT20



Date: 12.MAR.2020 14:09:17

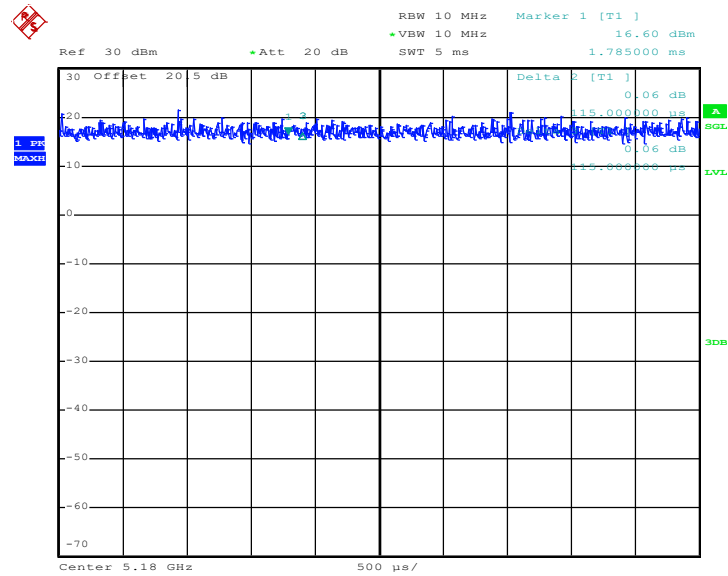
802.11n HT40



Date: 12.MAR.2020 14:19:35

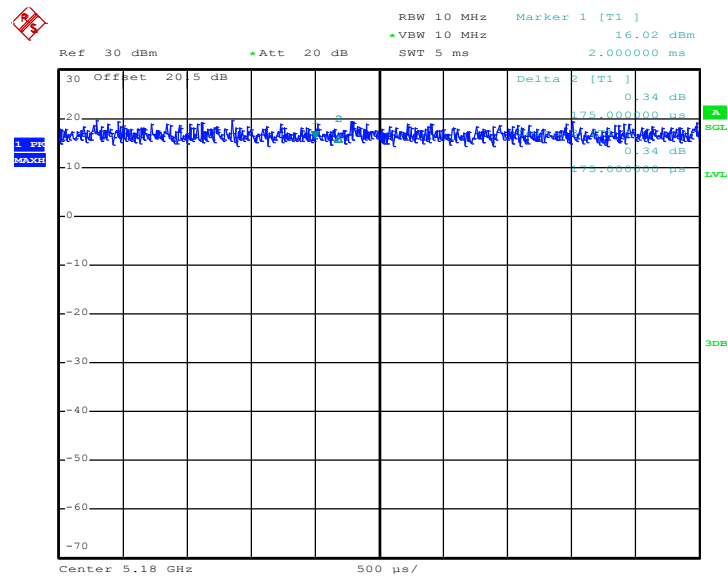
MIMO <Ant. 1>

802.11a

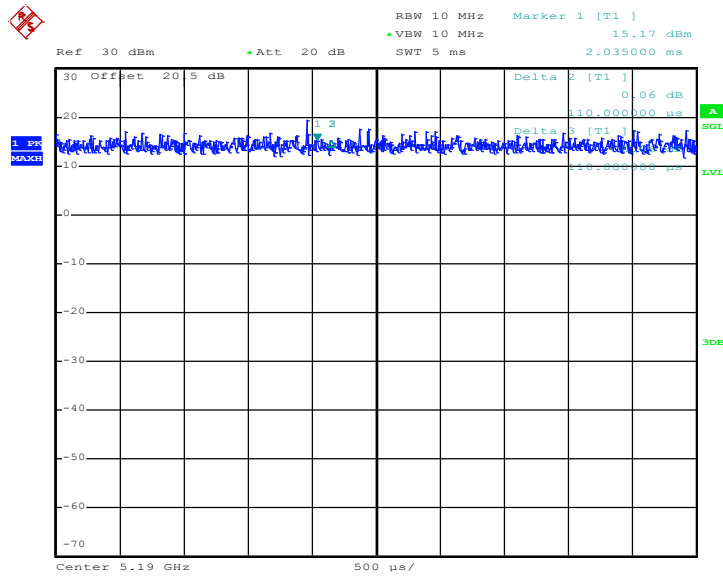


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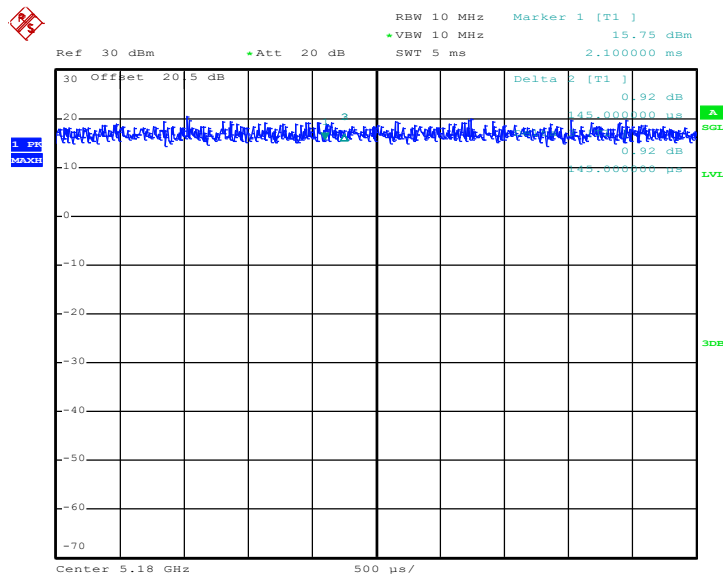
802.11n HT20



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802.11n HT40


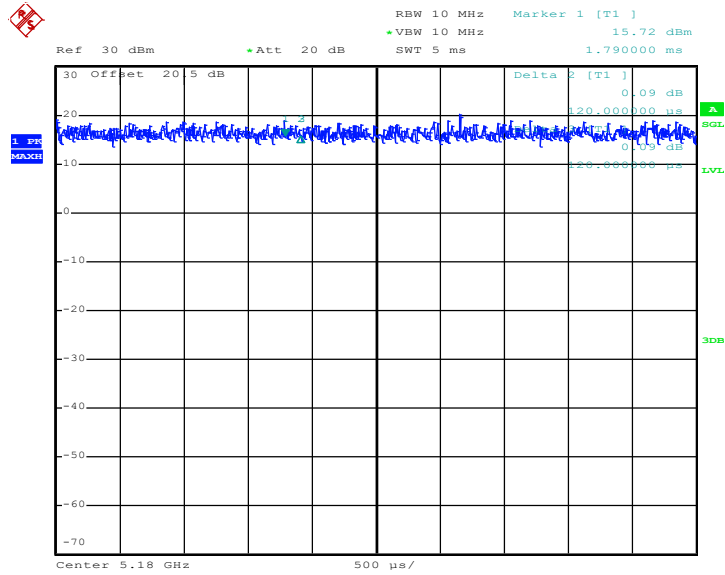
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MIMO <Ant. 2>
802.11a


Date: 12.MAR.2020 14:05:18

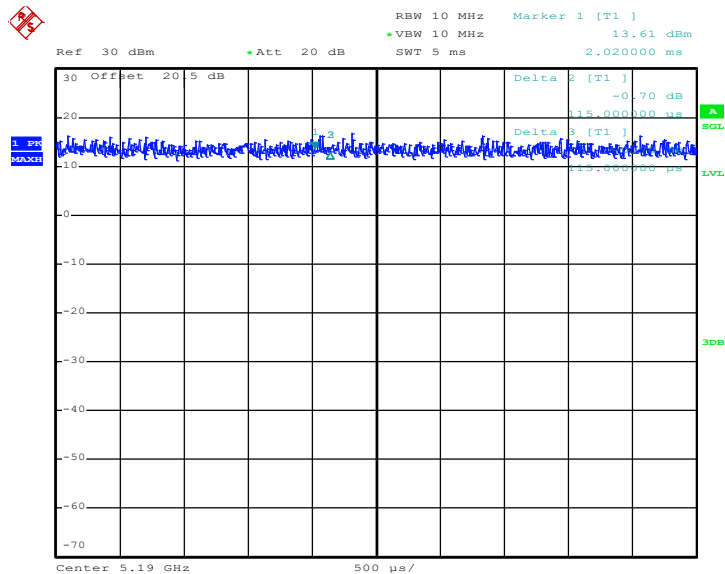


802.11n HT20



Date: 12.MAR.2020 14:16:03

802.11n HT40



Date: 12.MAR.2020 14:21:22