FCC RADIO TEST REPORT

FCC ID	:	**WAP-CYSBSYS-RP01**
Equipment	:	**Wifi 802.11b/g/n/ac + BT/BLE**
Brand Name	:	**Cypress**
Model Name	:	**CYSBSYS-RP01**
Applicant	:	**Cypress Semiconductor, Inc. 198 Champion Court San Jose, CA 95134**
Manufacturer	:	**Cypress Semiconductor, Inc. 198 Champion Court San Jose, CA 95134**
Standard	:	**FCC Part 15 Subpart E §15.407**

The product was received on Dec. 08, 2020 and testing was started from Dec. 08, 2020 and completed on Feb. 03, 2021. We, Sporton International (USA) Inc., would like to declare that the tested sample has been evaluated in accordance with the test procedures and has been in compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of Sporton International (USA) Inc., the test report shall not be reproduced except in full.

Approved by: Neil Kao

Sporton International (USA) Inc.

1175 Montague Expressway, Milpitas, CA 95035

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History of this test report

Report No.	Version	Description	Issued Date
FR201216001D	01	Initial issue of report	Mar. 03, 2021

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 1.92 dB at 5725.320 MHz
3.5	15.207	AC Conducted Emission	Pass	Under limit 12.53 dB at 0.396 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.

1 General Description

1.1 Product Feature of Equipment Under Test

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

Product Specification subjective to this standard	
Antenna Type	WLAN: Chip Antenna Bluetooth: Chip Antenna

Antenna information		
5150 MHz ~ 5250 MHz	Peak Gain (dBi)	1
5250 MHz ~ 5350 MHz	Peak Gain (dBi)	1
5470 MHz ~ 5725 MHz	Peak Gain (dBi)	1

Remark: The above EUT's information was declared by manufacturer. Please refer to Comments and Explanations in report summary.

1.2 Modification of EUT

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

1.3 Testing Location

Test Site	Sporton International (USA) Inc.
Test Site Location	1175 Montague Expressway, Milpitas, CA 95035 TEL: 408 904-3300
Test Site No.	**Sporton Site No.**
	TH01-CA, 03CH02-CA, CO01-CA

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.
- ANSI C63.10-2013

Remark:

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

2 Test Configuration of Equipment Under Test

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

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

2.1 Carrier Frequency and Channel

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

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

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

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

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

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
802.11ac VHT20 (Covered by HT20)	MCS0

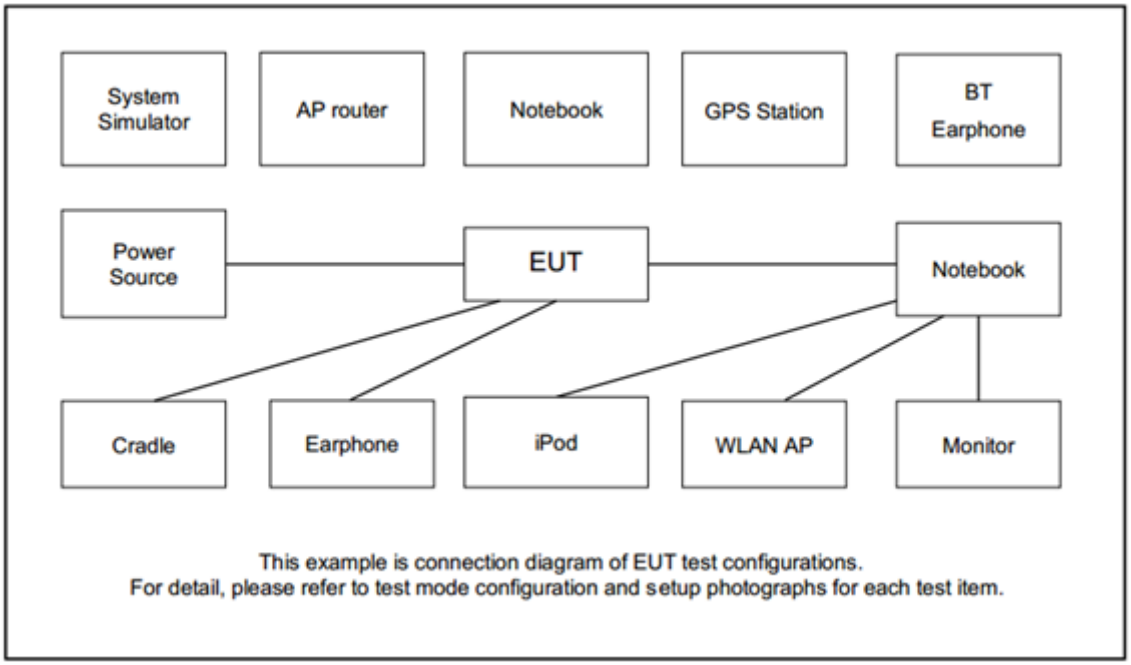
Test Cases	
AC Conducted Emission	Mode 1 :WLAN (2.4GHz) Link + Jig 1 (Fixture) + Jig 1-1 (Fixture) + Jig 1-1 Adapter Mode 2 :WLAN (5GHz) Link + Jig 1 (Fixture) + Jig 1-1 (Fixture) + Jig 1-1 Adapter Mode 3 :Bluetooth Link + Jig 1 (Fixture) + Jig 1-2 (Fixture) + Jig 1-2 Adapter
Remark: The worst case of conducted emission is mode 1; only the test data of it was reported.	

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

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

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	Brand Name	Model Name	FCC ID	Data Cable	Power Cord
1.	Notebook	Altos PS548 Series	82600085033	FCC DoC	N/A	AC I/P：Unshielded, 1.2m DC O/P：Shielded, 1.8m
2.	WLAN AP	NetGear	R6080	PY316400359	N/A	N/A
3.	Jig 1 (Fixture)	Cypress	RP01	N/A	N/A	N/A
4.	Jig 1-1 (Fixture)	Cypress	CYW9SDIOAD_2	N/A	N/A	N/A
5.	Jig 1-1 Adapter	SCEPTRE POWER	ATS036T-A050	N/A	N/A	Unshielded 1.8m
6.	Jig 1-2 (Fixture)	GB-Bxi7-4500	1419631173	N/A	N/A	N/A
7.	Jig 1-2 Adapter	FSP	FSP065-REBN2	N/A	N/A	Unshielded, 1.8m

2.5 EUT Operation Test Setup

The RF test items, utility “PuTTY &Release 0.70” was installed in Notebook which was programmed in order to make the EUT get into the engineering modes to provide channel selection, power level, data rate and the application type and for continuous transmitting signals.

2.6 Measurement Results Explanation Example

For all conducted test items:

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

Example :
The spectrum analyzer offset is derived from RF cable loss and attenuator factor.
Offset = RF cable loss + attenuator factor.
Following shows an offset computation example with cable loss 4.2 dB and 10dB attenuator.

Offset(dB) = RF cable loss(dB) + attenuator factor(dB).
= 4.2 + 10 = 14.2 (dB)

3 Test Result

3.1 26dB & 99% Occupied Bandwidth Measurement

3.1.1 Description of 26dB & 99% Occupied Bandwidth

This section is for reporting purpose only.

There is no restriction limits for bandwidth.

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

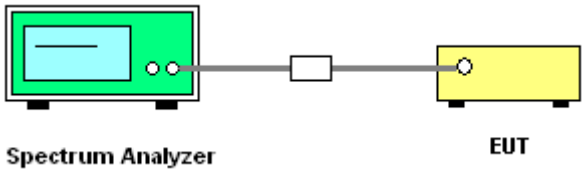
3.1.2 Measuring Instruments

See list of measuring equipment of this test report.

3.1.3 Test Procedures

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

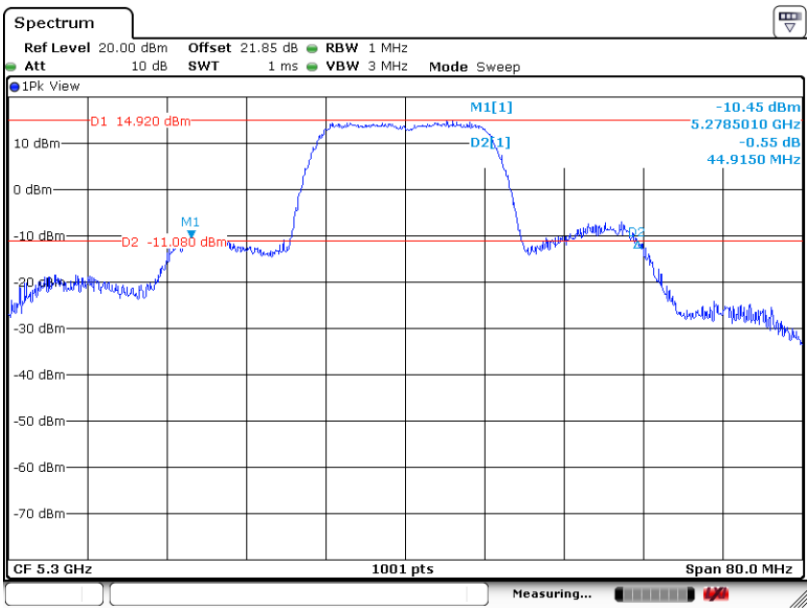
3.1.4 Test Setup



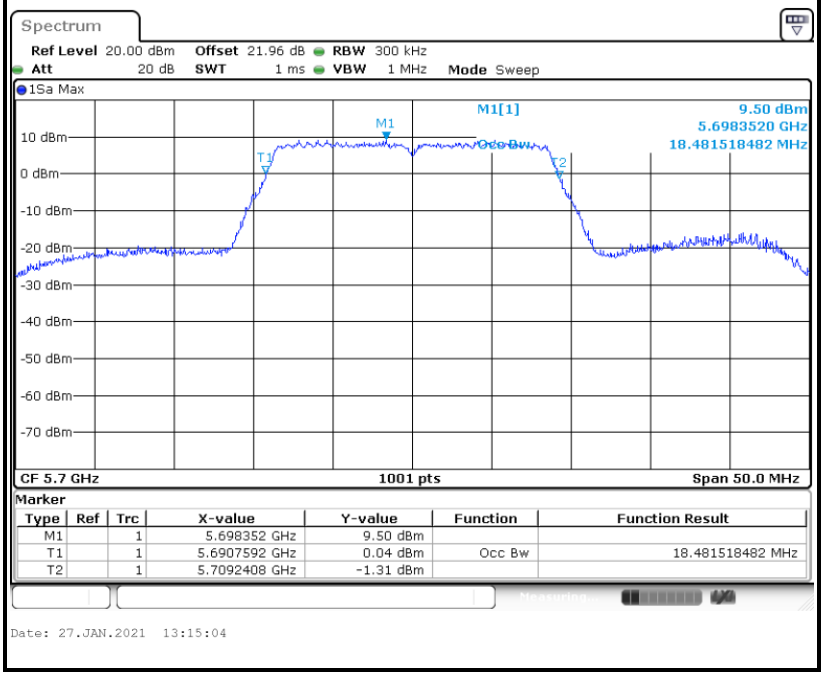
3.1.5 Test Result of 26dB & 99% Occupied Bandwidth

Please refer to Appendix A.

Maximum 26dB Bandwidth



Maximum 99% Occupied Bandwidth



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

3.2 Maximum Conducted Output Power Measurement

3.2.1 Limit of Maximum Conducted Output Power

<FCC 14-30 CFR 15.407>

For 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 dBm 10 log B, where B is the 26 dB emission bandwidth in megahertz.

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

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

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

3.2.2 Measuring Instruments

See list of measuring equipment of this test report.

3.2.3 Test Procedures

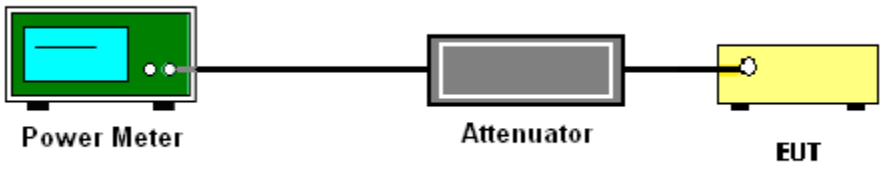
The testing follows Method PM-G of FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01.

Method PM-G (Measurement using a gated 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.

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

3.2.4 Test Setup



3.2.5 Test Result of Maximum Conducted Output Power

Please refer to Appendix A.

3.3 Power Spectral Density Measurement

3.3.1 Limit of Power Spectral Density

<FCC 14-30 CFR 15.407>

For the 5.15–5.25 GHz bands:

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

For the 5.25–5.725 GHz bands:

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

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

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

3.3.2 Measuring Instruments

See list of measuring equipment of this test report.

3.3.3 Test Procedures

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

Section F) Maximum power spectral density.

 # Method SA-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 ≥ 3 MHz.
- Number of points in sweep ≥ 2 Span / RBW.
- Sweep time ≤ (number of points in sweep) × 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.

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

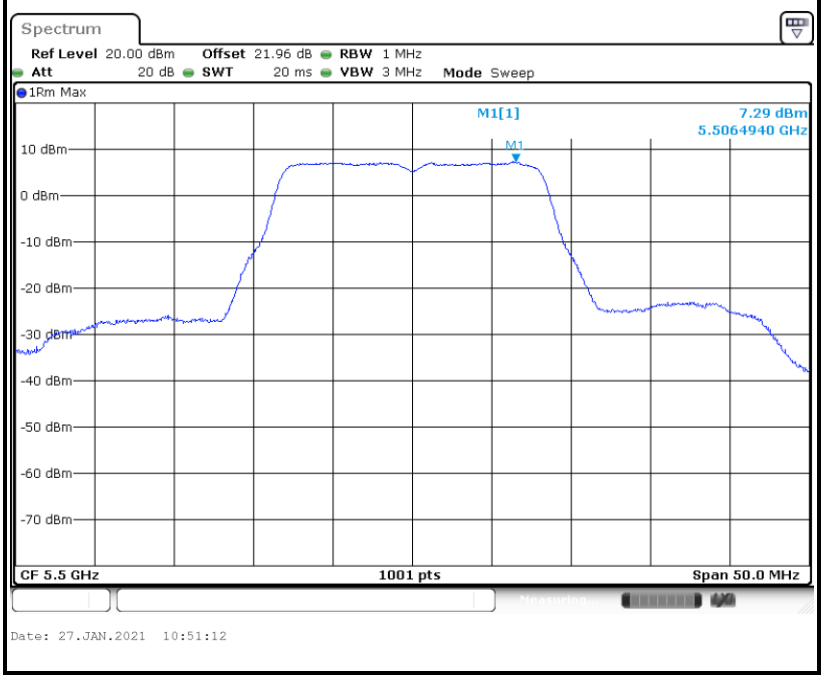
   The total final Power Spectral Density is from a device with 2 transmitter outputs. The spectrum measurements of the individual outputs are all performed with the same span and number of points; the spectrum value in the first spectral bin of output 1 is summed with that in the first spectral bin of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

3.3.4 Test Setup

3.3.5 Test Result of Power Spectral Density

Please refer to Appendix A.

Worst Case Power Density (dBm/MHz)



3.4 Unwanted Emissions Measurement

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

<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.

$$E=\frac{1000000\sqrt{30P}}{3}$$ μV/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.

3.4.1 Measuring Instruments

See list of measuring equipment of this test report.

3.4.2 Test Procedures

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

Section G) Unwanted emissions measurement.

(1) Procedure for Unwanted Emissions Measurements Below 1000MHz

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

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

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

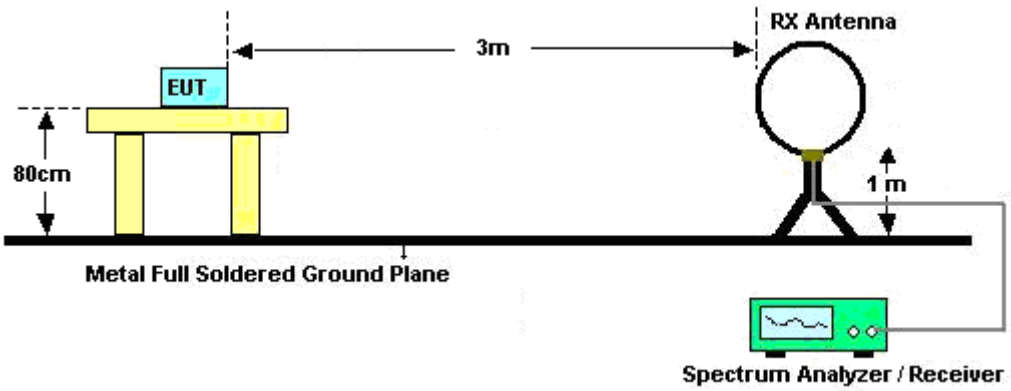
(3) Procedures for Average Unwanted Emissions Measurements Above 1000MHz

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

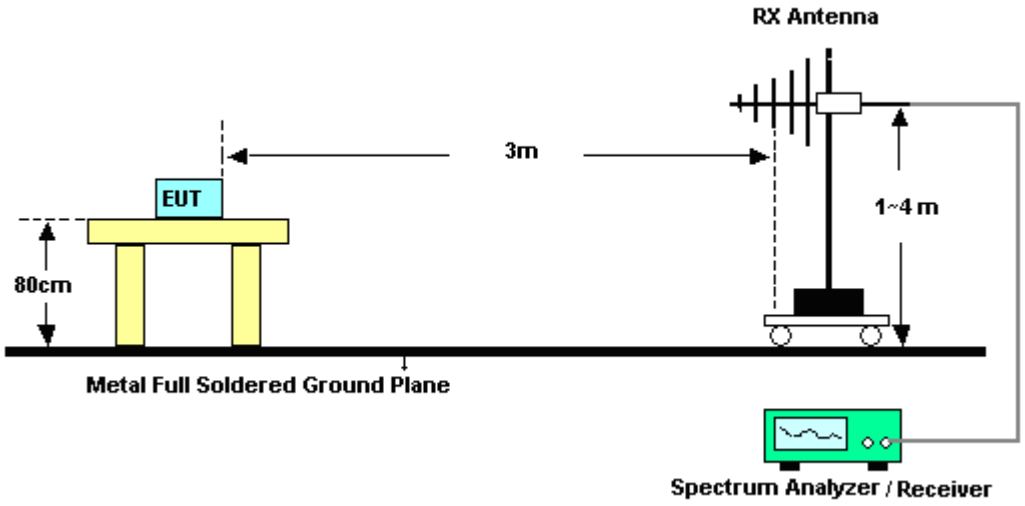
2. The EUT was placed on a turntable with 0.8 meter for frequency below 1GHz and 1.5 meter for frequency above 1GHz respectively above ground.
3. The EUT was set 3 meters from the interference receiving antenna which was mounted on the top of a variable height antenna tower.
4. The antenna is a broadband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

3.4.3 Test Setup

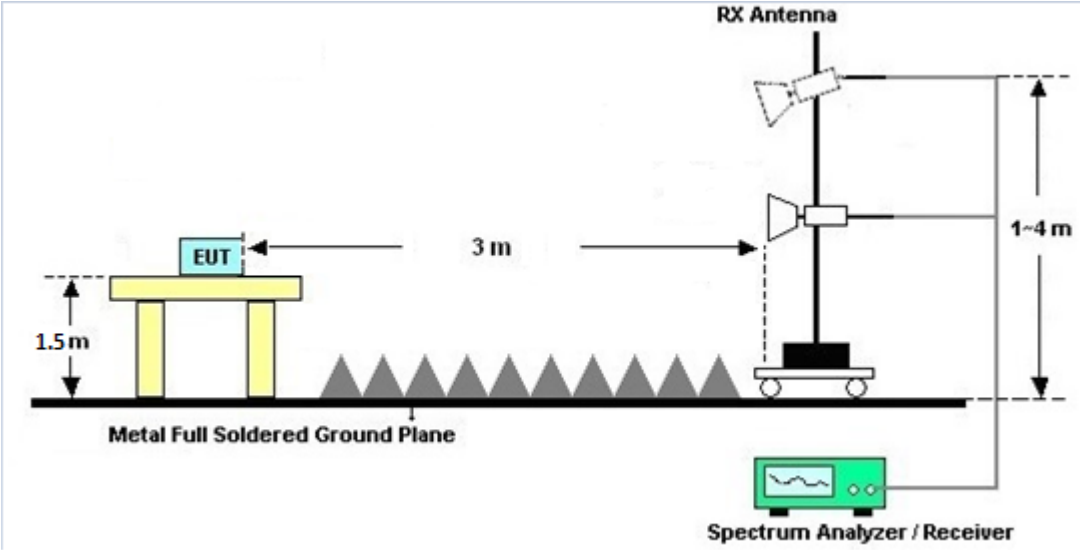
For radiated emissions below 30MHz



For radiated emissions from 30MHz to 1GHz



For radiated test above 1GHz



3.4.4 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.

3.4.5 Test Result of Radiated Spurious at Band Edges

Please refer to Appendix C and D.

3.4.6 Duty Cycle

Please refer to Appendix E.

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

Please refer to Appendix C and D.

3.5 AC Conducted Emission Measurement

3.5.1 Limit of AC Conducted Emission

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

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

*Decreases with the logarithm of the frequency.

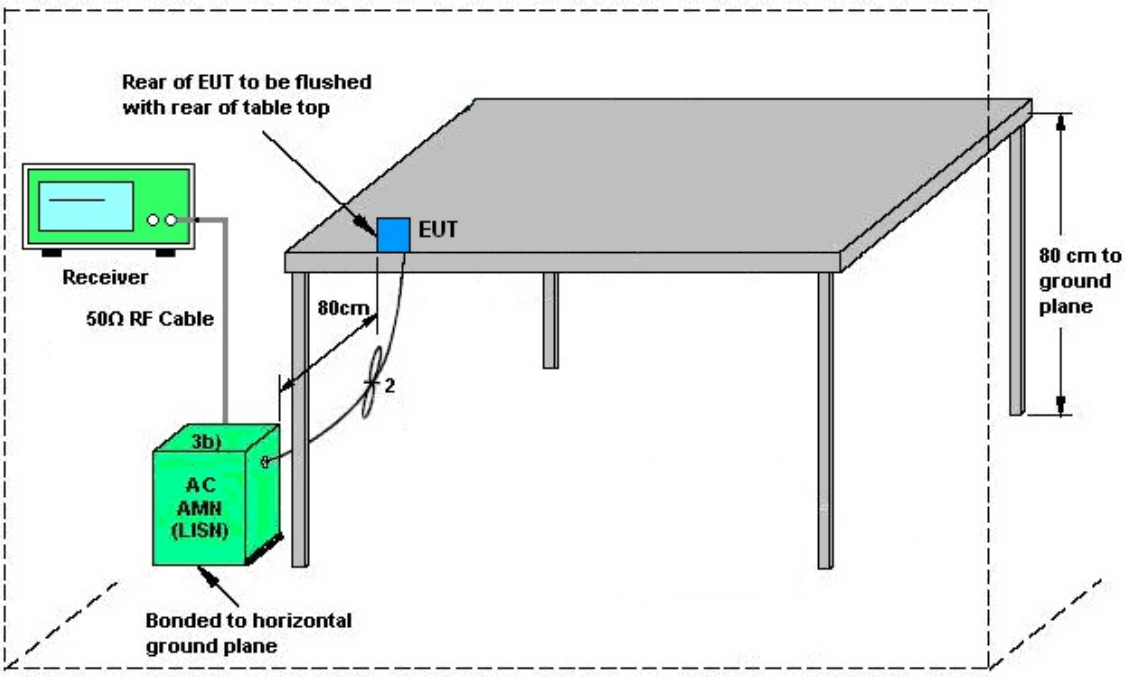
3.5.2 Measuring Instruments

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



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

3.5.5 Test Result of AC Conducted Emission

Please refer to Appendix B.

3.6 Automatically Discontinue Transmission

3.6.1 Limit of Automatically Discontinue Transmission

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

3.6.2 Measuring Instruments

See list of measuring equipment of this test report.

3.6.3 Test Result of Automatically Discontinue Transmission

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

3.7 Antenna Requirements

3.7.1 Standard Applicable

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

3.7.2 Antenna Anti-Replacement Construction

An embedded-in antenna design is used.

3.7.3 Antenna Gain

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

4 List of Measuring Equipment

Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Bilog Antenna	TESEQ	6111D	50392	30MHz~1GHz	Jul. 29, 2020	Dec. 08, 2020~ Feb. 03, 2020	Jul. 28, 2021	Radiation (03CH02-CA)
Horn Antenna	SCHWARZBECK	BBHA 9120D	01895	1GHz~18GHz	Aug. 28, 2020	Dec. 08, 2020~ Feb. 03, 2020	Aug. 27, 2021	Radiation (03CH02-CA)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA9170	00842	18GHz~40GHz	Jul. 27, 2020	Dec. 08, 2020~ Feb. 03, 2020	Jul. 26, 2021	Radiation (03CH02-CA)
Amplifier	SONOMA	310N	372240	N/A	Aug. 12, 2020	Dec. 08, 2020~ Feb. 03, 2020	Aug. 11, 2021	Radiation (03CH02-CA)
Preamplifier	Keysight	83017A	MY53270321	1GHz~26.5GHz	Jul. 28, 2020	Dec. 08, 2020~ Feb. 03, 2020	Jul. 27, 2021	Radiation (03CH02-CA)
Preamplifier	EMEC	EMC18G40G	060725	18G-40G	Aug. 07, 2020	Dec. 08, 2020~ Feb. 03, 2020	Aug. 06, 2021	Radiation (03CH02-CA)
Preamplifier	E-instrument	ERA-100M-18G-56-01-A70	EC1900251	1GHz~18GHz	Nov. 26, 2019	Dec. 08, 2020~ Feb. 03, 2020	Nov. 25, 2021	Radiation (03CH02-CA)
EMI Test Receiver	Rohde & Schwarz	ESU26	100049	20Hz~26.5GHz	Aug. 11, 2020	Dec. 08, 2020~ Feb. 03, 2020	Aug. 10, 2021	Radiation (03CH02-CA)
Spectrum Analyzer	Keysight	N9010A	MY57420221	10Hz~44GHz	Sep. 11, 2020	Dec. 08, 2020~ Feb. 03, 2020	Sep. 10, 2021	Radiation (03CH02-CA)
Filter	Wainwright	Whkx8-5872.5-6750-18000-40ST	SN8	6.75G Highpass	Jul. 24, 2020	Dec. 08, 2020~ Feb. 03, 2020	Jul. 23, 2021	Radiation (03CH02-CA)
Filter	Wainwright	WHKX12-2700-3000-18000-60ST	SN10	3G Highpass	Jul. 24, 2020	Dec. 08, 2020~ Feb. 03, 2020	Jul. 23, 2021	Radiation (03CH02-CA)
Filter	Wainwright	WLK12-1200-1272-11000-40SS	SN2	1.2G Low Pass	Jul. 24, 2020	Dec. 08, 2020~ Feb. 03, 2020	Jul. 23, 2021	Radiation (03CH02-CA)
Hygrometer	TESEO	608-H1	45142602	N/A	Aug. 05, 2020	Dec. 08, 2020~ Feb. 03, 2020	Aug. 04, 2021	Radiation (03CH02-CA)
Controller	ChainTek	3000-1	N/A	Control Turn table & Ant Mast	N/A	Dec. 08, 2020~ Feb. 03, 2020	N/A	Radiation (03CH02-CA)
Antenna Mast	ChainTek	MBS-520-1	N/A	1m~4m	N/A	Dec. 08, 2020~ Feb. 03, 2020	N/A	Radiation (03CH02-CA)
Turn Table	ChainTek	T-200-S-1	N/A	0~360 Degree	N/A	Dec. 08, 2020~ Feb. 03, 2020	N/A	Radiation (03CH02-CA)
Software	Audix	E3	N/A	N/A	N/A	Dec. 08, 2020~ Feb. 03, 2020	N/A	Radiation (03CH02-CA)
Hygrometer	Testo	608-H1	45142595	N/A	Aug. 05, 2020	Dec. 24, 2020~ Jan. 31, 2021	Aug. 04, 2021	Conducted (TH01-CA)
Power Sensor	DARE	RPR3006W	RPR6W-1901026	10MHz-6GHz	Jun. 24, 2020	Dec. 24, 2020~ Jan. 31, 2021	Jun. 23, 2021	Conducted (TH01-CA)
Spectrum Analyzer	Rohde & Schwarz	FSV40	101089	10Hz-40GHz	Sep. 14, 2020	Dec. 24, 2020~ Jan. 31, 2021	Sep. 13, 2021	Conducted (TH01-CA)
Switch Box & RF Cable	EM Electronics	EMSW26	1090304	N/A	Dec. 30, 2019	Dec. 24, 2020~ Dec. 28, 2020	Dec. 29, 2020	Conducted (TH01-CA)
Switch Box & RF Cable	EM Electronics	EMSW26	1090304	N/A	Dec. 30, 2020	Jan. 01, 2021~ Jan. 31, 2021	Dec. 29, 2021	Conducted (TH01-CA)
LISN	TESEQ	NNB51	47407	N/A	Jul. 06, 2020	Jan. 09, 2021	Jul. 05, 2021	Conduction (CO01-CA)
EMI Test Receiver	R&S	ESR7	102177	9KHz~7GHz	Jul. 16, 2020	Jan. 09, 2021	Jul. 15, 2021	Conduction (CO01-CA)
Pulse limiter with 10dB attenuation	R&S	VTSD 9561-F N	9561-F-N00412	N/A	Jul. 08, 2020	Jan. 09, 2021	Jul. 07, 2021	Conduction (CO01-CA)
Test Software	R&S	EMC32 V10.30.0	N/A	N/A	N/A	Jan. 09, 2021	N/A	Conduction (CO01-CA)

5 Uncertainty of Evaluation

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**2.2**

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**4.5**

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**6.1**

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**6.5**

Appendix A. Test Result of Conducted Test Items

Test Engineer:	Andy Kao	Temperature:	15.1~19.4	°C
Test Date:	2020/12/24~2021/1/31	Relative Humidity:	33.2~54.3	%

TEST RESULTS DATA
26dB and 99% OBW

Band I single antenna														
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	99% Bandwidth (MHz)		26 dB Bandwidth (MHz)		IC 99% Bandwidth Power Limit (dBm)		IC 99% Bandwidth EIRP Limit (dBm)			Note
					Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2		
11a	6Mbps	1	36	5180	17.93	-	36.56	-	-		22.54	-		
11a	6Mbps	1	44	5220	18.13	-	40.61	-	-		22.58	-		
11a	6Mbps	1	48	5240	18.08	-	36.51	-	-		22.57	-		
HT20	MCS0	1	36	5180	18.33	-	43.88	-	-		22.63	-		
HT20	MCS0	1	44	5220	18.38	-	44.12	-	-		22.64	-		
HT20	MCS0	1	48	5240	18.43	-	42.91	-	-		22.66	-		

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	17.01	-		24.00	-	1.00	-		Pass
11a	6Mbps	1	44	5220	17.21	-		24.00	-	1.00	-		Pass
11a	6Mbps	1	48	5240	17.21	-		24.00	-	1.00	-		Pass
HT20	MCS0	1	36	5180	17.21	-		24.00	-	1.00	-		Pass
HT20	MCS0	1	44	5220	17.41	-		24.00	-	1.00	-		Pass
HT20	MCS0	1	48	5240	17.31	-		24.00	-	1.00	-		Pass
VHT20	MCS8	1	36	5180	17.11	-		24.00	-	1.00	-		Pass
VHT20	MCS8	1	44	5220	17.31	-		24.00	-	1.00	-		Pass
VHT20	MCS8	1	48	5240	17.21	-		24.00	-	1.00	-		Pass

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	6.84	-		11.00	-	1.00	-		Pass
11a	6Mbps	1	44	5220	6.69	-		11.00	-	1.00	-		Pass
11a	6Mbps	1	48	5240	6.62	-		11.00	-	1.00	-		Pass
HT20	MCS0	1	36	5180	6.57	-		11.00	-	1.00	-		Pass
HT20	MCS0	1	44	5220	6.53	-		11.00	-	1.00	-		Pass
HT20	MCS0	1	48	5240	6.58	-		11.00	-	1.00	-		Pass

TEST RESULTS DATA
26dB and 99% OBW

Band II single antenna															
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	99% Bandwidth (MHz)		26 dB Bandwidth (MHz)		IC 99% Bandwidth Power Limit (dBm)		IC 99% Bandwidth EIRP Limit (dBm)		FCC 26dB Bandwidth Power Limit (dBm)		Note
					Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	
11a	6Mbps	1	52	5260	18.18	-	40.86	-	23.60	-	29.60	-	23.98	-	
11a	6Mbps	1	60	5300	18.33	-	41.26	-	23.63	-	29.63	-	23.98	-	
11a	6Mbps	1	64	5320	18.23	-	41.06	-	23.61	-	29.61	-	23.98	-	
HT20	MCS0	1	52	5260	18.38	-	34.69	-	23.64	-	29.64	-	23.98	-	
HT20	MCS0	1	60	5300	18.48	-	44.92	-	23.67	-	29.67	-	23.98	-	
HT20	MCS0	1	64	5320	18.38	-	43.00	-	23.64	-	29.64	-	23.98	-	

TEST RESULTS DATA
Average Power Table

FCC Band II single antenna													
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)		EIRP Power Limit (dBm)	Pass/Fail
					Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2		
11a	6Mbps	1	52	5260	17.27	-		23.98	-	1.00	-	26.99	Pass
11a	6Mbps	1	60	5300	17.07	-		23.98	-	1.00	-	26.99	Pass
11a	6Mbps	1	64	5320	17.27	-		23.98	-	1.00	-	26.99	Pass
HT20	MCS0	1	52	5260	17.17	-		23.98	-	1.00	-	26.99	Pass
HT20	MCS0	1	60	5300	17.37	-		23.98	-	1.00	-	26.99	Pass
HT20	MCS0	1	64	5320	17.27	-		23.98	-	1.00	-	26.99	Pass
VHT20	MCS8	1	52	5260	17.07	-		23.98	-	1.00	-	26.99	Pass
VHT20	MCS8	1	60	5300	17.17	-		23.98	-	1.00	-	26.99	Pass
VHT20	MCS8	1	64	5320	17.17	-		23.98	-	1.00	-	26.99	Pass

TEST RESULTS DATA
Power Spectral Density

Band II 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	52	5260	6.55	-		11.00	-	1.00	-		Pass
11a	6Mbps	1	60	5300	6.37	-		11.00	-	1.00	-		Pass
11a	6Mbps	1	64	5320	6.66	-		11.00	-	1.00	-		Pass
HT20	MCS0	1	52	5260	6.31	-		11.00	-	1.00	-		Pass
HT20	MCS0	1	60	5300	6.76	-		11.00	-	1.00	-		Pass
HT20	MCS0	1	64	5320	6.50	-		11.00	-	1.00	-		Pass

TEST RESULTS DATA
26dB and 99% OBW

Band III single antenna																
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	99% Bandwidth In U-NII 2C (MHz)		26 dB Bandwidth In U-NII 2C (MHz)		IC 99% Bandwidth Power Limit (dBm)		IC 99% Bandwidth EIRP Limit (dBm)		FCC 26dB Bandwidth Power Limit (dBm)		6 dB Bandwidth for Straddle Channel (MHz)	
					Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2
11a	6Mbps	1	100	5500	17.23	-	31.77	-	23.36	-	29.36	-	23.98	-	----	----
11a	6Mbps	1	116	5580	18.38	-	41.51	-	23.64	-	29.64	-	23.98	-	----	----
11a	6Mbps	1	140	5700	17.93	-	33.17	-	23.54	-	29.54	-	23.98	-	----	----
HT20	MCS0	1	100	5500	18.38	-	34.64	-	23.64	-	29.64	-	23.98	-	----	----
HT20	MCS0	1	116	5580	18.43	-	35.01	-	23.66	-	29.66	-	23.98	-	----	----
HT20	MCS0	1	140	5700	18.48	-	42.92	-	23.67	-	29.67	-	23.98	-	----	----

Band III straddle channel single antenna																
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	99% Bandwidth In U-NII 2C (MHz)		26 dB Bandwidth In U-NII 2C (MHz)		IC 99% Bandwidth Power Limit (dBm)		IC 99% Bandwidth EIRP Limit (dBm)		FCC 26dB Bandwidth Power Limit (dBm)		6 dB Bandwidth for Straddle Channel (MHz)	
					Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2
11a	6Mbps	1	144	5720	14.04	-	25.33	-	22.47	-	28.47	-	23.98	-	-	-
HT20	MCS0	1	144	5720	14.19	-	16.59	-	22.52	-	28.52	-	23.20	-	-	-

TEST RESULTS DATA
Average Power Table

FCC Band III single antenna														
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)		EIRP Power Limit (dBm)	Pass/Fail
					Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2		
11a	6Mbps	1	100	5500	17.57	-		23.98	-	1.00	-	26.99	Pass
11a	6Mbps	1	116	5580	17.07	-		23.98	-	1.00	-	26.99	Pass
11a	6Mbps	1	140	5700	17.47	-		23.98	-	1.00	-	26.99	Pass
HT20	MCS0	1	100	5500	17.07	-		23.98	-	1.00	-	26.99	Pass
HT20	MCS0	1	116	5580	17.27	-		23.98	-	1.00	-	26.99	Pass
HT20	MCS0	1	140	5700	17.37	-		23.98	-	1.00	-	26.99	Pass
VHT20	MCS8	1	100	5500	16.97	-		23.98	-	1.00	-	26.99	Pass
VHT20	MCS8	1	116	5580	17.17	-		23.98	-	1.00	-	26.99	Pass
VHT20	MCS8	1	140	5700	17.27	-		23.98	-	1.00	-	26.99	Pass

FCC Band III straddle channel single antenna													
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)		EIRP Power Limit (dBm)	Pass/Fail
					Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2		
11a	6Mbps	1	144	5720	17.37	-		23.98	-	1.00	-	26.99	Pass
HT20	MCS0	1	144	5720	17.37	-		23.20	-	1.00	-	26.99	Pass
VHT20	MCS8	1	144	5720	17.27	-		23.98	-	1.00	-	26.99	Pass

TEST RESULTS DATA
Power Spectral Density

Band III 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	100	5500	7.29	-		11.00	-	1.00	-		Pass
11a	6Mbps	1	116	5580	6.56	-		11.00	-	1.00	-		Pass
11a	6Mbps	1	140	5700	6.56	-		11.00	-	1.00	-		Pass
HT20	MCS0	1	100	5500	6.90	-		11.00	-	1.00	-		Pass
HT20	MCS0	1	116	5580	6.92	-		11.00	-	1.00	-		Pass
HT20	MCS0	1	140	5700	7.14	-		11.00	-	1.00	-		Pass

Band III straddle channel 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	144	5720	6.53	-		11.00	-	1.00	-		Pass
HT20	MCS0	1	144	5720	6.97	-		11.00	-	1.00	-		Pass

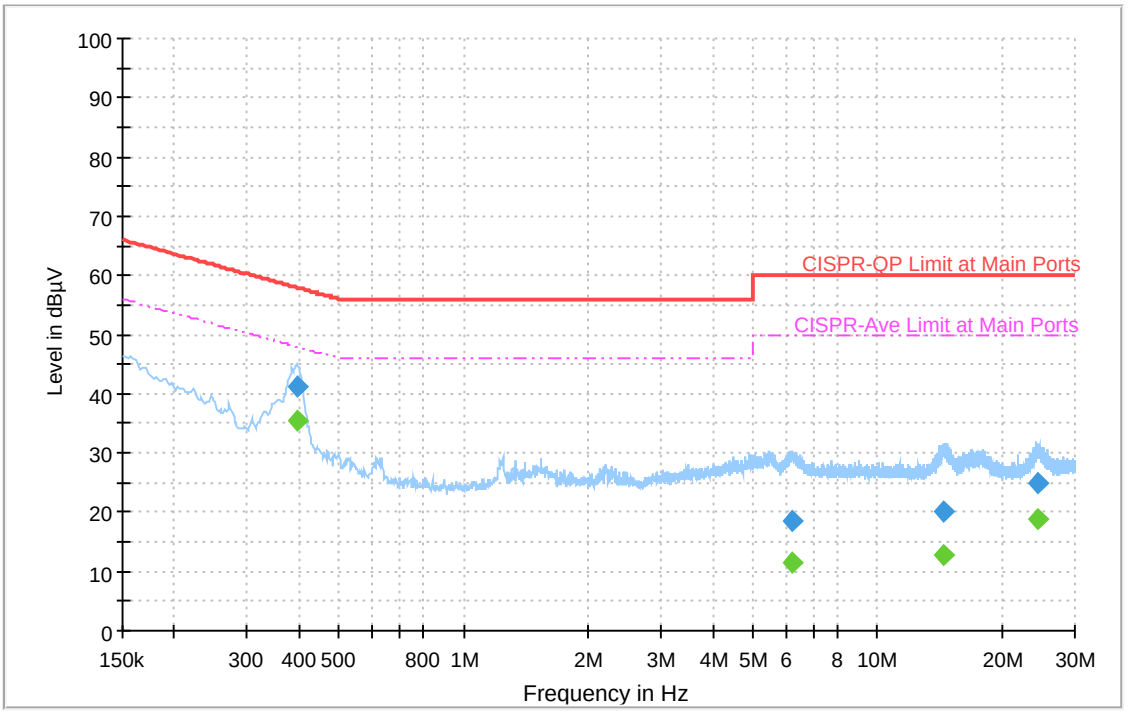
Appendix B. AC Conducted Emission Test Results

Test Engineer :	Janssen Wongso	**Temperature :**	18~21.3℃
		Relative Humidity :	30.6~34.8%

EUT Information

Test Site :	CO01-CA
Mode :	1
Test Voltage :	120Vac/60Hz
Project :	Cypress CYSBSYS
	Line

Full Spectrum



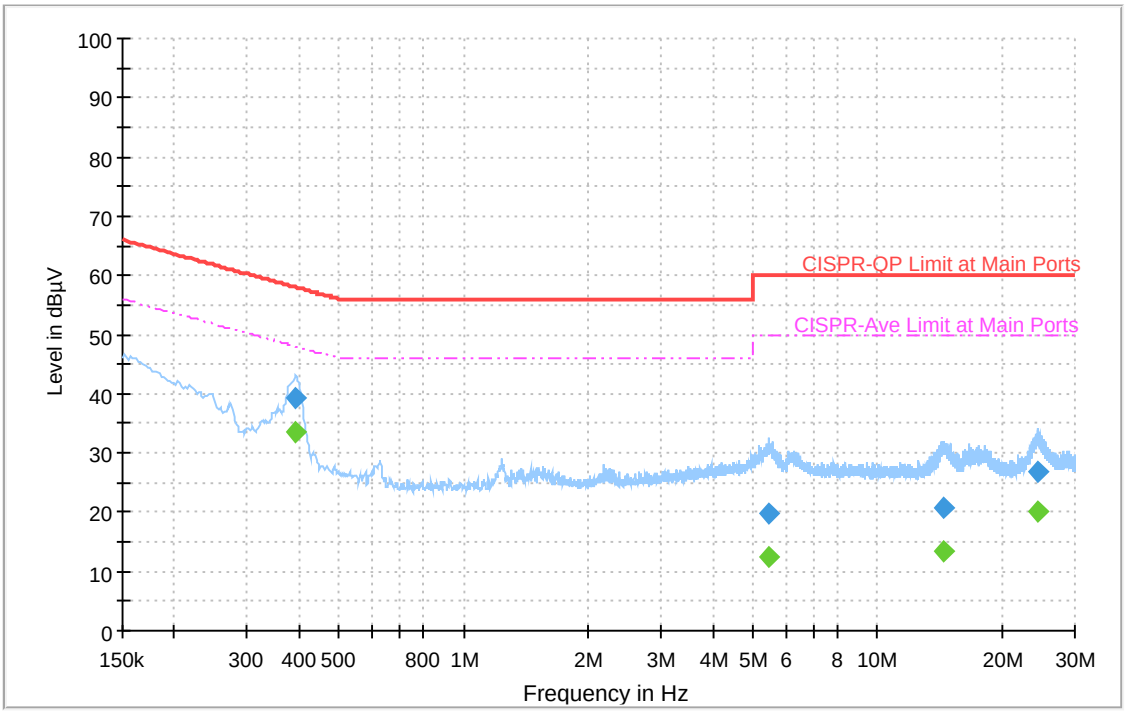
Final_Result

Frequency (MHz)	QuasiPeak (dBµV)	CAverage (dBµV)	Limit (dBµV)	Margin (dB)	Line	Filter	Corr. (dB)
0.395610	---	35.42	47.95	12.53	L1	OFF	20.0
0.395610	41.09	---	57.95	16.86	L1	OFF	20.0
6.209250	---	11.64	50.00	38.36	L1	OFF	20.1
6.209250	18.49	---	60.00	41.51	L1	OFF	20.1
14.469000	---	12.91	50.00	37.09	L1	OFF	20.3
14.469000	20.17	---	60.00	39.83	L1	OFF	20.3
24.349560	---	18.92	50.00	31.08	L1	OFF	20.6
24.349560	24.91	---	60.00	35.09	L1	OFF	20.6

EUT Information

Test Site :	CO01-CA
Mode :	1
Test Voltage :	120Vac/60Hz
Project :	Cypress CYSBSYS
	Neutral

Full Spectrum



Final_Result

Frequency (MHz)	QuasiPeak (dBµV)	CAverage (dBµV)	Limit (dBµV)	Margin (dB)	Line	Filter	Corr. (dB)
0.393990	---	33.46	47.98	14.52	N	OFF	20.0
0.393990	39.20	---	57.98	18.78	N	OFF	20.0
5.444250	---	12.35	50.00	37.65	N	OFF	20.1
5.444250	19.94	---	60.00	40.06	N	OFF	20.1
14.482500	---	13.27	50.00	36.73	N	OFF	20.3
14.482500	20.65	---	60.00	39.35	N	OFF	20.3
24.349290	---	20.00	50.00	30.00	N	OFF	20.6
24.349290	26.78	---	60.00	33.22	N	OFF	20.6

Appendix C. Radiated Spurious Emission

Test Engineer :	Calvin Wu	Temperature :	18~22°C
		Relative Humidity :	46~52%

Band 1 - 5150~5250MHz

WIFI 802.11a (Band Edge @ 3m)

WIFI Ant.	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
1		(MHz)	(dBµV/m)	(dB)	(dBµV/m)	(dBµV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11a CH 36 5180MHz		5147.94	63.15	-10.85	74	50.33	31.95	11.04	30.17	100	346	P	H
		5150	50.98	-3.02	54	38.17	31.94	11.04	30.17	100	346	A	H
	*	5180	108.66	-	-	96.02	31.73	11.07	30.16	100	346	P	H
	*	5180	100.78	-	-	88.14	31.73	11.07	30.16	100	346	A	H
													H
		5148.98	61.41	-12.59	74	48.68	31.86	11.04	30.17	369	262	P	V
		5150	46.46	-7.54	54	33.73	31.86	11.04	30.17	369	262	A	V
	*	5180	105.08	-	-	92.48	31.69	11.07	30.16	369	262	P	V
	*	5180	97.22	-	-	84.62	31.69	11.07	30.16	369	262	A	V
													V
802.11a CH 44 5220MHz		5137.28	52.96	-21.04	74	40.13	31.97	11.03	30.17	100	344	P	H
		5149.76	42.96	-11.04	54	30.15	31.94	11.04	30.17	100	344	A	H
	*	5220	108.15	-	-	95.69	31.51	11.11	30.16	100	344	P	H
	*	5220	100.31	-	-	87.85	31.51	11.11	30.16	100	344	A	H
		5395.88	51.69	-22.31	74	38.84	31.73	11.28	30.16	100	344	P	H
		5458.32	42.36	-11.64	54	29.35	31.83	11.35	30.17	100	344	A	H
		5146.64	53.16	-20.84	74	40.42	31.87	11.04	30.17	386	262	P	V
		5149.5	42.55	-11.45	54	29.82	31.86	11.04	30.17	386	262	A	V
	*	5220	104.69	-	-	92.22	31.52	11.11	30.16	386	262	P	V
	*	5220	96.87	-	-	84.4	31.52	11.11	30.16	386	262	A	V
		5436.76	52.22	-21.78	74	39.31	31.75	11.33	30.17	386	262	P	V
		5459.44	42.3	-11.7	54	29.31	31.81	11.35	30.17	386	262	A	V

802.11a CH 48 5240MHz		5115.96	52.53	-21.47	74	39.65	32.03	11.01	30.16	100	344	P	H
		5144.3	42.78	-11.22	54	29.97	31.95	11.03	30.17	100	344	A	H
	*	5240	107.64	-	-	95.24	31.42	11.13	30.15	100	344	P	H
	*	5240	99.86	-	-	87.46	31.42	11.13	30.15	100	344	A	H
		5449.64	51.98	-22.02	74	38.99	31.82	11.34	30.17	100	344	P	H
		5458.6	42.39	-11.61	54	29.38	31.83	11.35	30.17	100	344	A	H
		5119.34	52.4	-21.6	74	39.64	31.91	11.01	30.16	385	261	P	V
		5147.68	42.53	-11.47	54	29.79	31.87	11.04	30.17	385	261	A	V
	*	5240	104.43	-	-	91.98	31.47	11.13	30.15	385	261	P	V
	*	5240	96.36	-	-	83.91	31.47	11.13	30.15	385	261	A	V
		5453.56	52.07	-21.93	74	39.1	31.79	11.35	30.17	385	261	P	V
		5458.6	42.3	-11.7	54	29.32	31.8	11.35	30.17	385	261	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 1 5150~5250MHz

WIFI 802.11a (Harmonic @ 3m)

WIFI Ant. 1	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	47.85	-20.35	68.2	59.5	39.53	16.53	67.71	100	0	P	H
		15540	49.02	-24.98	74	57.53	38.02	20.53	67.06	100	0	P	H
													H
													H
		10360	48.74	-19.46	68.2	60.39	39.53	16.53	67.71	100	0	P	V
		15540	54.84	-19.16	74	63.31	38.06	20.53	67.06	385	248	P	V
													V
													V
802.11a CH 44 5220MHz		10440	47.78	-20.42	68.2	59.11	39.71	16.61	67.65	100	0	P	H
		15660	48.81	-25.19	74	57.45	37.68	20.62	66.94	100	0	P	H
													H
													H
		10440	48.56	-19.64	68.2	59.85	39.75	16.61	67.65	100	0	P	V
		15660	56.22	-17.78	74	64.78	37.76	20.62	66.94	199	233	P	V
													V
													V
802.11a CH 48 5240MHz		10480	47.5	-20.7	68.2	58.66	39.82	16.64	67.62	100	0	P	H
		15720	51.25	-22.75	74	59.95	37.51	20.67	66.88	395	176	P	H
		15720	40.96	-13.04	54	49.66	37.51	20.67	66.88	395	176	A	H
													H
		10480	47.98	-20.22	68.2	59.15	39.81	16.64	67.62	100	0	P	V
		15720	56.18	-17.82	74	64.83	37.56	20.67	66.88	199	232	P	V
		15720	44.86	-9.14	54	53.51	37.56	20.67	66.88	199	232	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)
		5144.82	65.06	-8.94	74	52.25	31.95	11.03	30.17	100	338	P	H
		5150	49.66	-4.34	54	36.85	31.94	11.04	30.17	100	338	A	H
	*	5180	106.99	-	-	94.35	31.73	11.07	30.16	100	338	P	H
	*	5180	98.71	-	-	86.07	31.73	11.07	30.16	100	338	A	H
802.11n													H
HT20													H
CH 36		5145.34	62.79	-11.21	74	50.05	31.87	11.04	30.17	373	262	P	V
5180MHz		5150	47.31	-6.69	54	34.58	31.86	11.04	30.17	373	262	A	V
	*	5180	105.16	-	-	92.56	31.69	11.07	30.16	373	262	P	V
	*	5180	96.99	-	-	84.39	31.69	11.07	30.16	373	262	A	V
													V
													V
		5131.04	52.25	-21.75	74	39.41	31.99	11.02	30.17	100	345	P	H
		5150	42.86	-11.14	54	30.05	31.94	11.04	30.17	100	345	A	H
	*	5220	106.43	-	-	93.97	31.51	11.11	30.16	100	345	P	H
	*	5220	98.43	-	-	85.97	31.51	11.11	30.16	100	345	A	H
802.11n		5453.84	52.31	-21.69	74	39.31	31.82	11.35	30.17	100	345	P	H
HT20		5456.92	42.34	-11.66	54	29.33	31.83	11.35	30.17	100	345	A	H
CH 44		5058.5	52.58	-21.42	74	39.8	32.01	10.95	30.18	388	262	P	V
5220MHz		5149.5	42.55	-11.45	54	29.82	31.86	11.04	30.17	388	262	A	V
	*	5220	104.91	-	-	92.44	31.52	11.11	30.16	388	262	P	V
	*	5220	96.66	-	-	84.19	31.52	11.11	30.16	388	262	A	V
		5444.04	52.06	-21.94	74	39.12	31.77	11.34	30.17	388	262	P	V
		5457.2	42.27	-11.73	54	29.29	31.8	11.35	30.17	388	262	A	V

		5062.4	52.57	-21.43	74	39.82	31.98	10.95	30.18	100	347	P	H
		5150	42.71	-11.29	54	29.9	31.94	11.04	30.17	100	347	A	H
	*	5240	106.5	-	-	94.1	31.42	11.13	30.15	100	347	P	H
	*	5240	98.54	-	-	86.14	31.42	11.13	30.15	100	347	A	H
802.11n		5423.6	52.6	-21.4	74	39.67	31.78	11.31	30.16	100	347	P	H
HT20		5458.88	42.35	-11.65	54	29.34	31.83	11.35	30.17	100	347	A	H
CH 48		5116.48	52.22	-21.78	74	39.45	31.92	11.01	30.16	383	264	P	V
5240MHz		5139.88	42.54	-11.46	54	29.8	31.88	11.03	30.17	383	264	A	V
	*	5240	104.2	-	-	91.75	31.47	11.13	30.15	383	264	P	V
	*	5240	96.03	-	-	83.58	31.47	11.13	30.15	383	264	A	V
		5453.56	52.51	-21.49	74	39.54	31.79	11.35	30.17	383	264	P	V
		5460	42.3	-11.7	54	29.31	31.81	11.35	30.17	383	264	A	V

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

Band 2 - 5250~5350MHz

WIFI 802.11a (Band Edge @ 3m)

WIFI 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 52 5260MHz		5128.18	52.44	-21.56	74	39.59	32	11.02	30.17	100	347	P	H
		5140.76	42.72	-11.28	54	29.9	31.96	11.03	30.17	100	347	A	H
	*	5260	106.39	-	-	94.01	31.38	11.15	30.15	100	347	P	H
	*	5260	98.47	-	-	86.09	31.38	11.15	30.15	100	347	A	H
		5426.4	51.56	-22.44	74	38.64	31.78	11.31	30.17	100	347	P	H
		5458.8	42.35	-11.65	54	29.34	31.83	11.35	30.17	100	347	A	H
		5137.7	52.42	-21.58	74	39.68	31.88	11.03	30.17	399	275	P	V
		5143.14	42.63	-11.37	54	29.9	31.87	11.03	30.17	399	275	A	V
	*	5260	103.61	-	-	91.19	31.42	11.15	30.15	399	275	P	V
	*	5260	95.98	-	-	83.56	31.42	11.15	30.15	399	275	A	V
		5362.08	51.62	-22.38	74	39	31.54	11.24	30.16	399	275	P	V
		5459.04	42.32	-11.68	54	29.33	31.81	11.35	30.17	399	275	A	V
802.11a CH 60 5300MHz		5129.54	52.77	-21.23	74	39.93	31.99	11.02	30.17	100	344	P	H
		5140.76	42.71	-11.29	54	29.89	31.96	11.03	30.17	100	344	A	H
	*	5300	107.38	-	-	94.96	31.38	11.18	30.14	100	344	P	H
	*	5300	99.6	-	-	87.18	31.38	11.18	30.14	100	344	A	H
		5427.36	52.39	-21.61	74	39.46	31.79	11.31	30.17	100	344	P	H
		5350.08	42.53	-11.47	54	29.94	31.52	11.23	30.16	100	344	A	H
		5087.38	51.98	-22.02	74	39.21	31.96	10.98	30.17	400	260	P	V
		5139.4	42.6	-11.4	54	29.86	31.88	11.03	30.17	400	260	A	V
	*	5300	104.39	-	-	92	31.35	11.18	30.14	400	260	P	V
	*	5300	96.67	-	-	84.28	31.35	11.18	30.14	400	260	A	V
		5428.8	52.17	-21.83	74	39.29	31.73	11.32	30.17	400	260	P	V
		5459.76	42.32	-11.68	54	29.33	31.81	11.35	30.17	400	260	A	V

802.11a CH 64 5320MHz	*	5320	105.68	-	-	93.19	31.44	11.2	30.15	100	338	P	H
	*	5320	97.94	-	-	85.45	31.44	11.2	30.15	100	338	A	H
		5351.36	55.91	-18.09	74	43.32	31.52	11.23	30.16	100	338	P	H
		5350.08	46.41	-7.59	54	33.82	31.52	11.23	30.16	100	338	A	H
													H
													H
	*	5320	103.01	-	-	90.55	31.41	11.2	30.15	395	265	P	V
	*	5320	95.43	-	-	82.97	31.41	11.2	30.15	395	265	A	V
		5427.2	52.43	-21.57	74	39.56	31.73	11.31	30.17	395	265	P	V
		5350.08	43.92	-10.08	54	31.35	31.5	11.23	30.16	395	265	A	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 2 5250~5350MHz

WIFI 802.11a (Harmonic @ 3m)

WIFI Ant. 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 52 5260MHz		10520	47.99	-20.21	68.2	58.99	39.88	16.68	67.56	100	0	P	H
		15780	49.95	-24.05	74	58.7	37.35	20.72	66.82	100	0	P	H
													H
													H
		10520	49.47	-18.73	68.2	60.47	39.88	16.68	67.56	100	0	P	V
		15780	57.24	-16.76	74	65.91	37.43	20.72	66.82	201	231	P	V
													V
													V
802.11a CH 60 5300MHz		10600	49.3	-24.7	74	60.16	39.81	16.75	67.42	100	0	P	H
		15900	54.74	-19.26	74	63.27	37.36	20.81	66.7	396	298	P	H
		15900	43.29	-10.71	54	51.82	37.36	20.81	66.7	396	298	A	H
													H
		10600	49.53	-24.47	74	60.33	39.87	16.75	67.42	100	0	P	V
		15900	61.36	-12.64	74	69.83	37.42	20.81	66.7	374	155	P	V
		15900	49.2	-4.8	54	57.67	37.42	20.81	66.7	374	155	A	V
													V
802.11a CH 64 5320MHz		10640	49.04	-24.96	74	59.79	39.81	16.79	67.35	100	0	P	H
		15960	49.8	-24.2	74	58.19	37.39	20.86	66.64	100	0	P	H
													H
													H
		10640	47.89	-26.11	74	58.58	39.87	16.79	67.35	100	0	P	V
		15960	57.27	-16.73	74	65.55	37.5	20.86	66.64	369	290	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 2 5250~5350MHz

WIFI 802.11n 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 52 5260MHz		5148.92	52.07	-21.93	74	39.26	31.94	11.04	30.17	100	347	P	H
		5148.58	42.75	-11.25	54	29.94	31.94	11.04	30.17	100	347	A	H
	*	5260	106.3	-	-	93.92	31.38	11.15	30.15	100	347	P	H
	*	5260	98.22	-	-	85.84	31.38	11.15	30.15	100	347	A	H
		5454.72	52.41	-21.59	74	39.41	31.82	11.35	30.17	100	347	P	H
		5459.52	42.33	-11.67	54	29.32	31.83	11.35	30.17	100	347	A	H
		5132.26	51.9	-22.1	74	39.16	31.89	11.02	30.17	400	262	P	V
		5143.82	42.64	-11.36	54	29.91	31.87	11.03	30.17	400	262	A	V
	*	5260	103.59	-	-	91.17	31.42	11.15	30.15	400	262	P	V
	*	5260	95.56	-	-	83.14	31.42	11.15	30.15	400	262	A	V
		5394.48	51.77	-22.23	74	39.01	31.65	11.27	30.16	400	262	P	V
		5458.08	42.31	-11.69	54	29.33	31.8	11.35	30.17	400	262	A	V
802.11n HT20 CH 60 5300MHz		5126.48	52.32	-21.68	74	39.47	32	11.02	30.17	100	347	P	H
		5139.74	42.73	-11.27	54	29.9	31.97	11.03	30.17	100	347	A	H
	*	5300	106.68	-	-	94.26	31.38	11.18	30.14	100	347	P	H
	*	5300	98.1	-	-	85.68	31.38	11.18	30.14	100	347	A	H
		5413.92	51.58	-22.42	74	38.67	31.77	11.3	30.16	100	347	P	H
		5458.32	42.38	-11.62	54	29.37	31.83	11.35	30.17	100	347	A	H
		5116.96	52.58	-21.42	74	39.81	31.92	11.01	30.16	400	263	P	V
		5143.82	42.63	-11.37	54	29.9	31.87	11.03	30.17	400	263	A	V
	*	5300	103.71	-	-	91.32	31.35	11.18	30.14	400	263	P	V
	*	5300	95.71	-	-	83.32	31.35	11.18	30.14	400	263	A	V
		5394.24	52.03	-21.97	74	39.27	31.65	11.27	30.16	400	263	P	V
		5458.56	42.36	-11.64	54	29.38	31.8	11.35	30.17	400	263	A	V

	*	5320	108.59	-	-	96.1	31.44	11.2	30.15	276	342	P	H
	*	5320	100.23	-	-	87.74	31.44	11.2	30.15	276	342	A	H
		5351.52	61.57	-12.43	74	48.98	31.52	11.23	30.16	276	342	P	H
		5350.08	51.37	-2.63	54	38.78	31.52	11.23	30.16	276	342	A	H
802.11n													H
HT20													H
CH 64	*	5320	103.66	-	-	91.2	31.41	11.2	30.15	395	255	P	V
5320MHz	*	5320	95.63	-	-	83.17	31.41	11.2	30.15	395	255	A	V
		5350.88	56.38	-17.62	74	43.8	31.51	11.23	30.16	395	255	P	V
		5350.08	46.9	-7.1	54	34.33	31.5	11.23	30.16	395	255	A	V
													V
													V

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

Band 3 - 5470~5725MHz

WIFI 802.11a (Band Edge @ 3m)

WIFI 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 100 5500MHz		5459.44	58.57	-15.43	74	45.56	31.83	11.35	30.17	100	330	P	H
		5468.08	64.95	-3.25	68.2	51.92	31.83	11.37	30.17	100	330	P	H
		5460	47.65	-6.35	54	34.64	31.83	11.35	30.17	100	330	A	H
	*	5500	105.72	-	-	92.63	31.86	11.4	30.17	100	330	P	H
	*	5500	98.04	-	-	84.95	31.86	11.4	30.17	100	330	A	H
													H
		5457.04	55.24	-18.76	74	42.26	31.8	11.35	30.17	388	269	P	V
		5469.2	61.75	-6.45	68.2	48.72	31.83	11.37	30.17	388	269	P	V
		5460	45.25	-8.75	54	32.26	31.81	11.35	30.17	388	269	A	V
	*	5500	103.94	-	-	90.79	31.92	11.4	30.17	388	269	P	V
	*	5500	96.17	-	-	83.02	31.92	11.4	30.17	388	269	A	V
													V
802.11a CH 116 5580MHz		5442.05	51.57	-22.43	74	38.6	31.81	11.33	30.17	100	329	P	H
		5461.65	50.09	-18.11	68.2	37.07	31.83	11.36	30.17	100	329	P	H
		5459.9	42.34	-11.66	54	29.33	31.83	11.35	30.17	100	329	A	H
	*	5580	104.91	-	-	91.7	31.87	11.51	30.17	100	329	P	H
	*	5580	96.85	-	-	83.64	31.87	11.51	30.17	100	329	A	H
		5759.75	53.27	-14.93	68.2	39.59	32.19	11.71	30.22	100	329	P	H
		5412.65	50.72	-23.28	74	37.88	31.7	11.3	30.16	397	245	P	V
		5464.1	51.37	-16.83	68.2	38.36	31.82	11.36	30.17	397	245	P	V
		5458.15	42.31	-11.69	54	29.33	31.8	11.35	30.17	397	245	A	V
	*	5580	103.16	-	-	89.98	31.84	11.51	30.17	397	245	P	V
	*	5580	95.27	-	-	82.09	31.84	11.51	30.17	397	245	A	V
		5742.075	53.63	-14.57	68.2	40.05	32.11	11.69	30.22	397	245	P	V

802.11a CH 140 5700MHz	*	5700	102.97	-	-	89.59	31.93	11.65	30.2	100	329	P	H
	*	5700	95.19	-	-	81.81	31.93	11.65	30.2	100	329	A	H
		5731.16	62.34	-5.86	68.2	48.8	32.07	11.68	30.21	100	329	P	H
													H
													H
													H
	*	5700	102.39	-	-	88.97	31.97	11.65	30.2	400	246	P	V
	*	5700	94.65	-	-	81.23	31.97	11.65	30.2	400	246	A	V
		5730.2	59.8	-8.4	68.2	46.26	32.07	11.68	30.21	400	246	P	V
													V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 - 5470~5725MHz

WIFI 802.11a (Harmonic @ 3m)

WIFI Ant. 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 100 5500MHz		11000	51.96	-22.04	74	61.21	40.34	17.11	66.7	365	276	P	H
		11000	41.54	-12.46	54	50.79	40.34	17.11	66.7	365	276	A	H
		16500	54.13	-14.07	68.2	60.15	39.03	21.25	66.3	100	0	P	H
													H
		11000	54.22	-19.78	74	63.34	40.47	17.11	66.7	400	25	P	V
		11000	43.5	-10.5	54	52.62	40.47	17.11	66.7	400	25	A	V
		16500	57.49	-10.71	68.2	63.25	39.29	21.25	66.3	100	0	P	V
													V
802.11a CH 116 5580MHz		11160	51.6	-22.4	74	61.07	39.97	17.26	66.7	395	307	P	H
		11160	41.53	-12.47	54	51	39.97	17.26	66.7	395	307	A	H
		16740	53.15	-15.05	68.2	58.3	40.07	21.42	66.64	100	0	P	H
													H
		11160	54.63	-19.37	74	64.03	40.04	17.26	66.7	368	273	P	V
		11160	44.71	-9.29	54	54.11	40.04	17.26	66.7	368	273	A	V
		16740	57.43	-10.77	68.2	62.46	40.19	21.42	66.64	100	0	P	V
													V
802.11a CH 140 5700MHz		11400	53.33	-20.67	74	62.36	40.19	17.48	66.7	225	16	P	H
		11400	43.09	-10.91	54	52.12	40.19	17.48	66.7	225	16	A	H
		17100	52.64	-15.56	68.2	57.81	40.31	21.68	67.16	100	0	P	H
													H
		11400	54.68	-19.32	74	63.71	40.19	17.48	66.7	400	271	P	V
		11400	44.53	-9.47	54	53.56	40.19	17.48	66.7	400	271	A	V
		17100	52.92	-15.28	68.2	58.09	40.31	21.68	67.16	100	0	P	V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 - 5470~5725MHz

WIFI 802.11n 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)
		5445.2	61.72	-12.28	74	48.74	31.81	11.34	30.17	288	340	P	H
		5467.76	65.9	-2.3	68.2	52.88	31.83	11.36	30.17	288	340	P	H
		5460	47.88	-6.12	54	34.87	31.83	11.35	30.17	288	340	A	H
	*	5500	107.16	-	-	94.07	31.86	11.4	30.17	288	340	P	H
802.11n	*	5500	99.18	-	-	86.09	31.86	11.4	30.17	288	340	A	H
HT20													H
CH 100		5454.48	53.61	-20.39	74	40.64	31.79	11.35	30.17	388	254	P	V
5500MHz		5468.56	61.01	-7.19	68.2	47.98	31.83	11.37	30.17	388	254	P	V
		5459.92	44.49	-9.51	54	31.5	31.81	11.35	30.17	388	254	A	V
	*	5500	103.35	-	-	90.2	31.92	11.4	30.17	388	254	P	V
	*	5500	95.39	-	-	82.24	31.92	11.4	30.17	388	254	A	V
													V
		5374.85	51.88	-22.12	74	39.15	31.63	11.26	30.16	284	342	P	H
		5465.85	50.15	-18.05	68.2	37.13	31.83	11.36	30.17	284	342	P	H
		5459.9	42.57	-11.43	54	29.56	31.83	11.35	30.17	284	342	A	H
	*	5580	106.98	-	-	93.77	31.87	11.51	30.17	284	342	P	H
802.11n	*	5580	98.84	-	-	85.63	31.87	11.51	30.17	284	342	A	H
HT20		5726.15	52.03	-16.17	68.2	38.52	32.04	11.68	30.21	284	342	P	H
CH 116		5416.5	51.59	-22.41	74	38.74	31.71	11.3	30.16	399	247	P	V
5580MHz		5465.15	51.25	-16.95	68.2	38.24	31.82	11.36	30.17	399	247	P	V
		5459.2	42.47	-11.53	54	29.48	31.81	11.35	30.17	399	247	A	V
	*	5580	103.5	-	-	90.32	31.84	11.51	30.17	399	247	P	V
	*	5580	95.41	-	-	82.23	31.84	11.51	30.17	399	247	A	V
		5751.175	52.47	-15.73	68.2	38.86	32.13	11.7	30.22	399	247	P	V

	*	5700	105.4	-	-	92.02	31.93	11.65	30.2	273	340	P	H
	*	5700	97.21	-	-	83.83	31.93	11.65	30.2	273	340	A	H
		5725.32	66.28	-1.92	68.2	52.78	32.04	11.67	30.21	273	340	P	H
													H
802.11n													H
HT20													H
CH 140	*	5700	102.23	-	-	88.81	31.97	11.65	30.2	400	252	P	V
5700MHz	*	5700	94.11	-	-	80.69	31.97	11.65	30.2	400	252	A	V
		5725.4	64.64	-3.56	68.2	51.13	32.05	11.67	30.21	400	252	P	V
													V
													V
													V

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

Band 3 - Straddle Channel

WIFI 802.11a (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBµV/m)	(dB)	(dBµV/m)	(dBµV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11a CH 144 5720MHz		5385.1	51.82	-22.18	74	39.03	31.68	11.27	30.16	117	330	P	H
		5463.49	51.37	-16.83	68.2	38.35	31.83	11.36	30.17	117	330	P	H
		5456.08	42.32	-11.68	54	29.32	31.82	11.35	30.17	117	330	A	H
	*	5720	102.44	-	-	88.96	32.02	11.67	30.21	117	330	P	H
	*	5720	94.7	-	-	81.22	32.02	11.67	30.21	117	330	A	H
		5861.5	52.8	-15.4	68.2	38.91	32.33	11.83	30.27	117	330	P	H
		5454.91	52.4	-21.6	74	39.43	31.79	11.35	30.17	398	247	P	V
		5465.83	51.08	-17.12	68.2	38.07	31.82	11.36	30.17	398	247	P	V
		5456.08	42.27	-11.73	54	29.29	31.8	11.35	30.17	398	247	A	V
	*	5720	102.45	-	-	88.95	32.04	11.67	30.21	398	247	P	V
	*	5720	94.42	-	-	80.92	32.04	11.67	30.21	398	247	A	V
		5907	52.55	-15.65	68.2	38.43	32.53	11.88	30.29	398	247	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 - Straddle Channel

WIFI 802.11a (Harmonic @ 3m)

WIFI Ant. 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 144 5720MHz		11440	49.76	-24.24	74	58.7	40.25	17.51	66.7	100	0	P	H
		17160	53.72	-14.48	68.2	58.9	40.35	21.73	67.26	100	0	P	H
													H
													H
		11440	49.92	-24.08	74	58.85	40.26	17.51	66.7	100	0	P	V
		17160	53.49	-14.71	68.2	58.69	40.33	21.73	67.26	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.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBµV/m)	(dB)	(dBµV/m)	(dBµV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11n HT20 LF		60.07	21.89	-18.11	40	41.31	11.7	1.32	32.44	-	-	P	H
		105.66	29.63	-13.87	43.5	43.78	16.57	1.7	32.42	-	-	P	H
		167.74	24.58	-18.92	43.5	38.96	15.93	2.1	32.41	-	-	P	H
		216.24	25.69	-20.31	46	40.76	14.92	2.41	32.4	-	-	P	H
		312.27	33.3	-12.7	46	43.47	19.4	2.87	32.44	-	-	P	H
		839.95	34.59	-11.41	46	33.08	28.8	4.76	32.05	100	0	P	H
													H
													H
													H
													H
													H
													H
		30.97	22.35	-17.65	40	29.18	24.71	0.9	32.44	-	-	P	V
		105.66	29.92	-13.58	43.5	44.07	16.57	1.7	32.42	-	-	P	V
		167.74	25.45	-18.05	43.5	39.83	15.93	2.1	32.41	-	-	P	V
		312.27	31.46	-14.54	46	41.63	19.4	2.87	32.44	-	-	P	V
		647.89	31.87	-14.13	46	33.79	26.54	4.15	32.61	-	-	P	V
		887.48	34.52	-11.48	46	32.32	29.05	4.9	31.75	100	0	P	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.	
2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11b CH 01 2412MHz		2390	55.45	-18.55	74	54.51	32.22	4.58	35.86	103	308	P	H
		2390	43.54	-10.46	54	42.6	32.22	4.58	35.86	103	308	A	H

1. 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

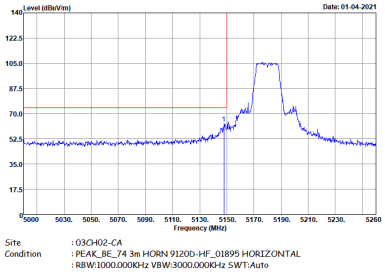
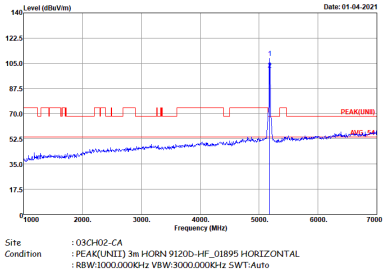
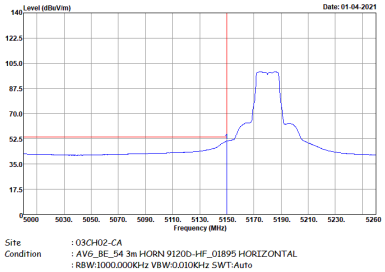
Test Engineer :	Calvin Wu	**Temperature :**	18~22°C
		Relative Humidity :	46~52%

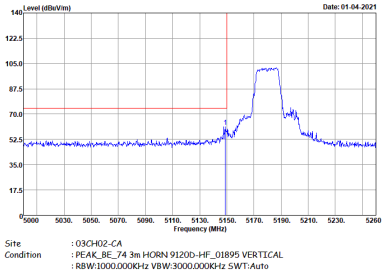
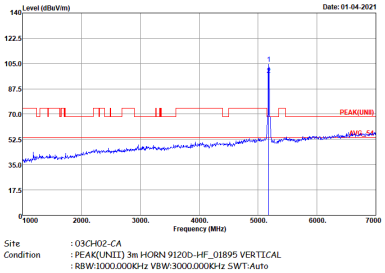
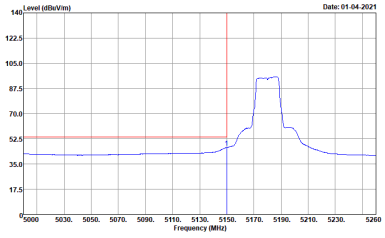
Note symbol

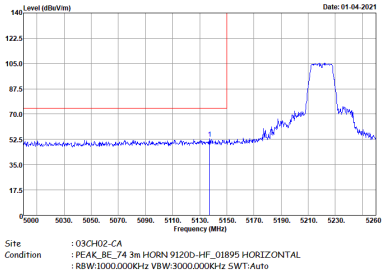
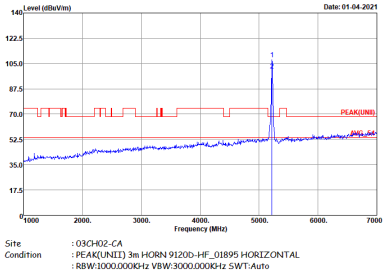
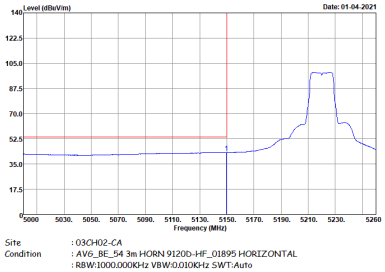
-L	**Low channel location**
-R	**High channel location**

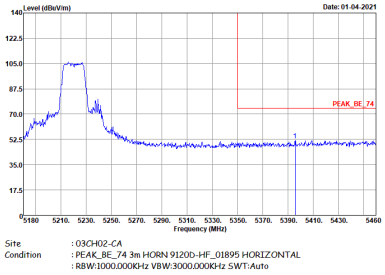
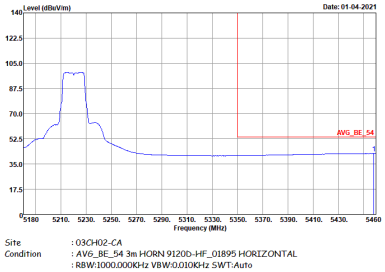
Band 1 - 5150~5250MHz

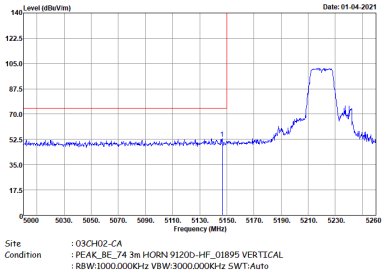
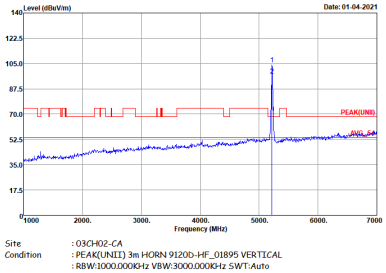
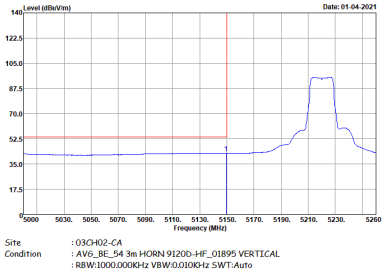
WIFI 802.11a (Band Edge @ 3m)

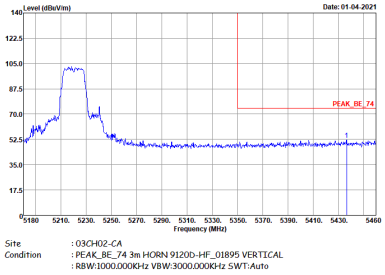
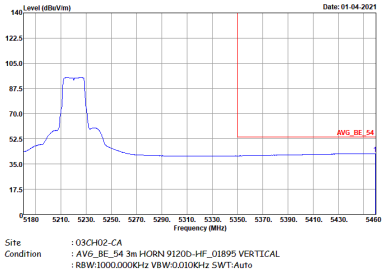
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH36 5180MHz	
1	Horizontal	Fundamental
Peak		
Avg.		Left blank

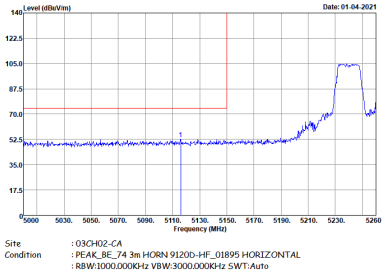
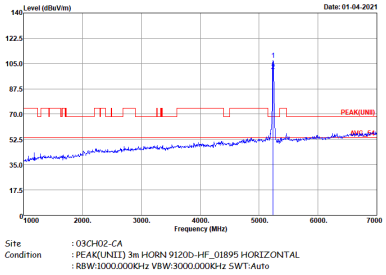
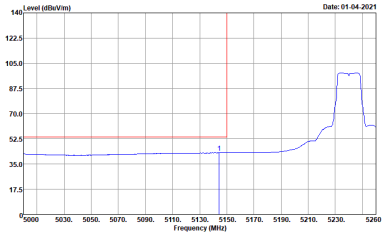
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH36 5180MHz	
1	Vertical	Fundamental
Peak	 Site : 03CH02-CA Condition : PEAK_BE_74 3m HORN 9120D-HF_01895 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH02-CA Condition : PEAK(UNII) 3m HORN 9120D-HF_01895 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH02-CA Condition : AVG_BE_54 3m HORN 9120D-HF_01895 VERTICAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto	Left blank

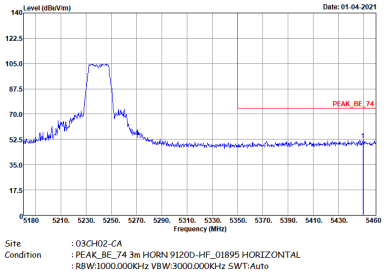
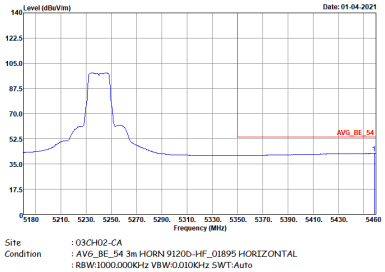
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH44 5220MHz - L	
1	Horizontal	Fundamental
Peak		
Avg.		Left blank

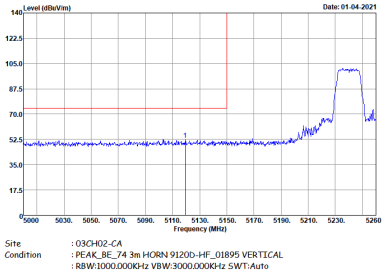
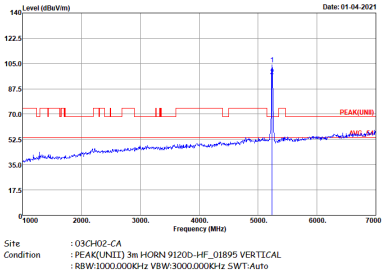
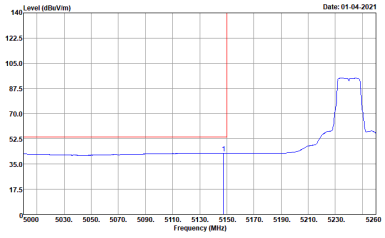
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH44 5220MHz - R	
1	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

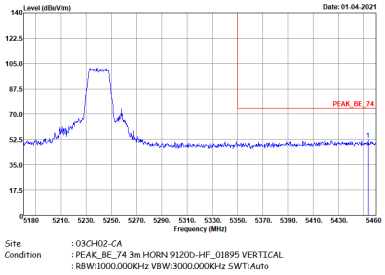
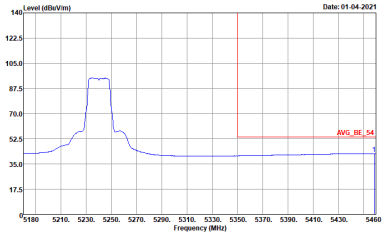
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH44 5220MHz - L	
1	Vertical	Fundamental
Peak		
Avg.		Left blank

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

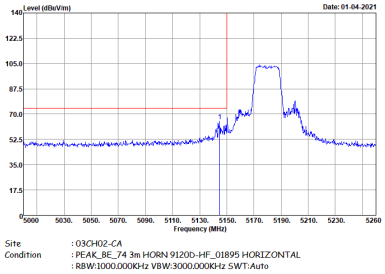
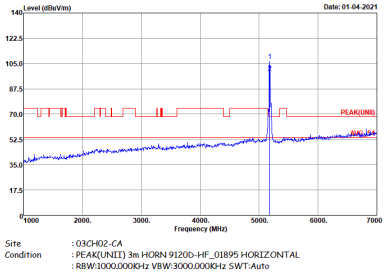
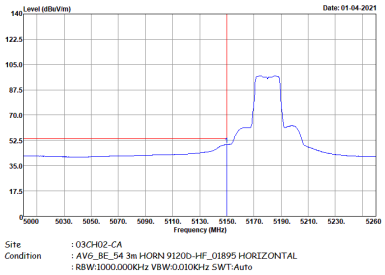
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH48 5240MHz - L	
1	Horizontal	Fundamental
Peak	 Site : 03CH02-CA Condition : PEAK_BE_74 3m HORN 9120D-HF_01895 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH02-CA Condition : PEAK(UNII) 3m HORN 9120D-HF_01895 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH02-CA Condition : AVG_BE_54 3m HORN 9120D-HF_01895 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto	Left blank

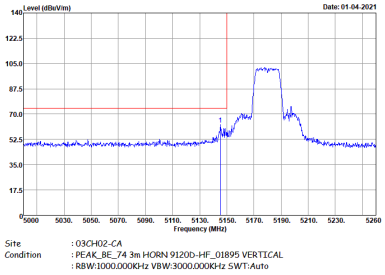
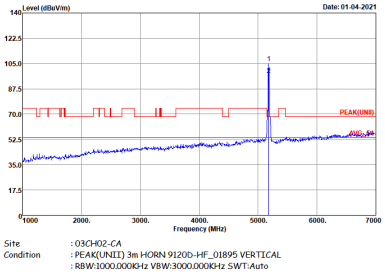
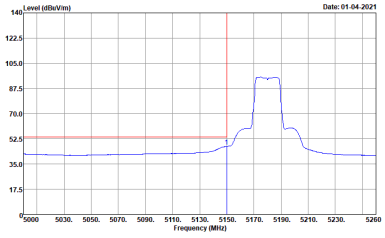
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH48 5240MHz - R	
1	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

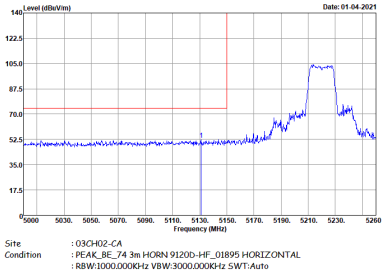
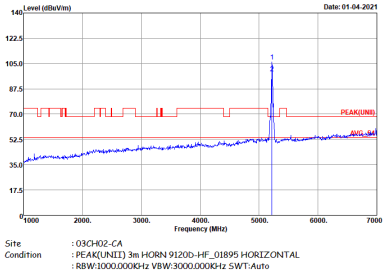
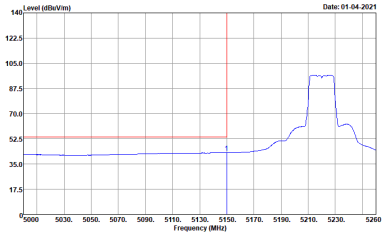
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH48 5240MHz - L	
1	Vertical	Fundamental
Peak	 Site : 03CH02-CA Condition : PEAK_BE_74 3m HORN 9120D-HF_01895 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH02-CA Condition : PEAK(UNII) 3m HORN 9120D-HF_01895 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH02-CA Condition : AVG_BE_54 3m HORN 9120D-HF_01895 VERTICAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto	Left blank

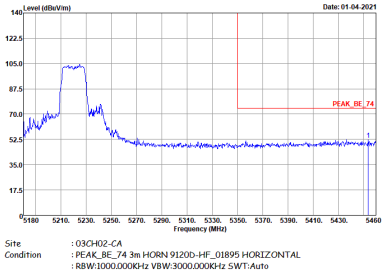
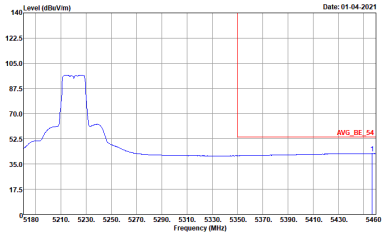
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH48 5240MHz - R	
1	Vertical	Fundamental
Peak	 Site : 03CH02-CA Condition : PEAK_BE_74 3m HORN 9120D-HF_01895 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	Left blank
Avg.	 Site : 03CH02-CA Condition : AVG_BE_54 3m HORN 9120D-HF_01895 VERTICAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto	Left blank

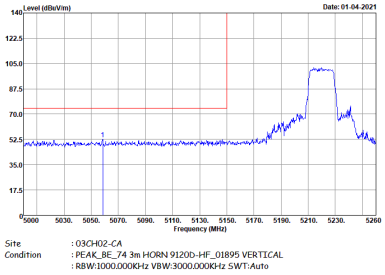
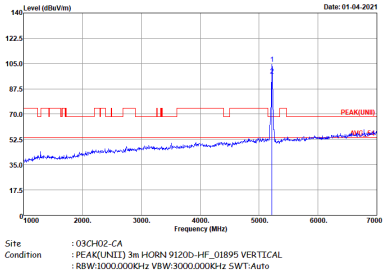
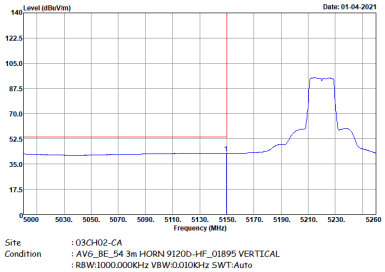
Band 1 5150~5250MHz
WIFI 802.11n HT20 (Band Edge @ 3m)

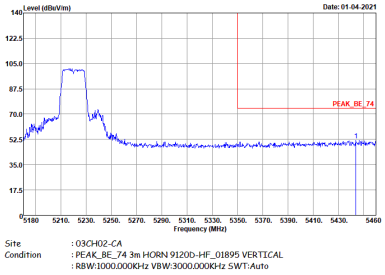
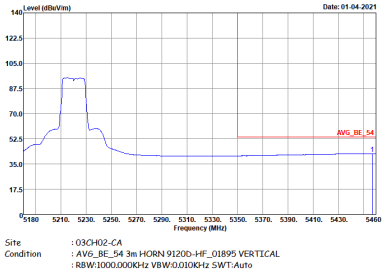
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH36 5180MHz	
1	Horizontal	Fundamental
Peak		
Avg.		Left blank

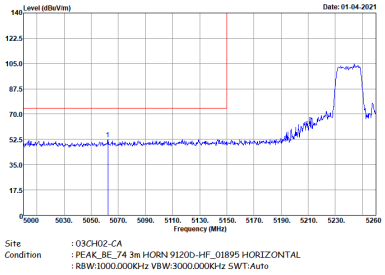
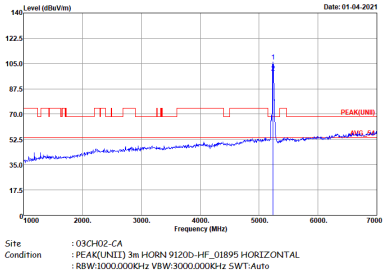
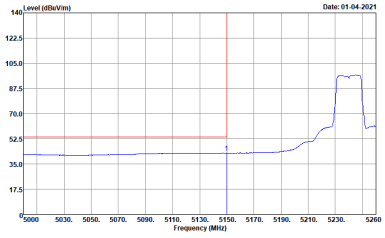
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH36 5180MHz	
1	Vertical	Fundamental
Peak	 Site : 03CH02-CA Condition : PEAK_BE_74 3m HORN 9120D-HF_01895 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH02-CA Condition : PEAK(UNII) 3m HORN 9120D-HF_01895 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH02-CA Condition : AVG_BE_54 3m HORN 9120D-HF_01895 VERTICAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto	Left blank

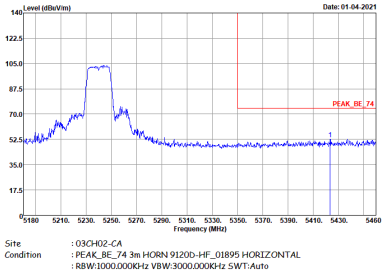
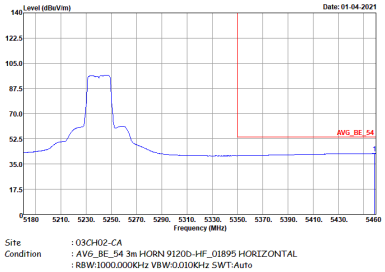
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH44 5220MHz - L	
1	Horizontal	Fundamental
Peak	 Site : 03CH02-CA Condition : PEAK_BE_74 3m HORN 9120D-HF_01895 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH02-CA Condition : PEAK(UNII) 3m HORN 9120D-HF_01895 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH02-CA Condition : AVG_BE_54 3m HORN 9120D-HF_01895 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto	Left blank

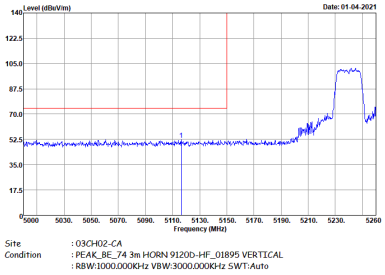
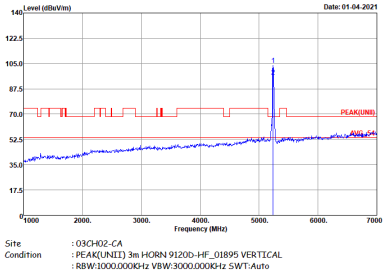
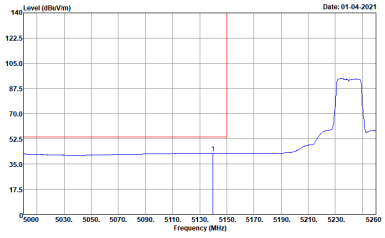
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH44 5220MHz - R	
1	Horizontal	Fundamental
Peak	 Site : 03CH02-CA Condition : PEAK_BE_74 3m HORN 9120D-HF_01895 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	Left blank
Avg.	 Site : 03CH02-CA Condition : AVG_BE_54 3m HORN 9120D-HF_01895 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto	Left blank

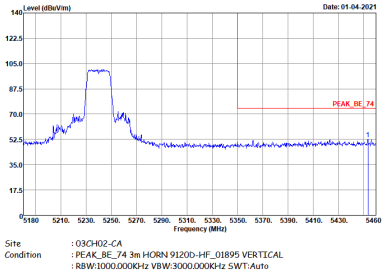
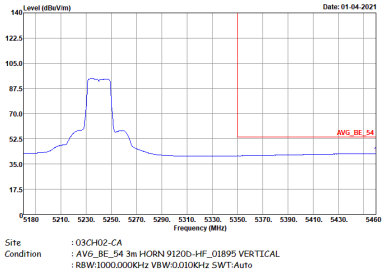
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH44 5220MHz - L	
1	Vertical	Fundamental
Peak		
Avg.		Left blank

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

WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH48 5240MHz - L	
1	Horizontal	Fundamental
Peak	 Site : 03CH02-CA Condition : PEAK_BE_74 3m HORN 9120D-HF_01895 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH02-CA Condition : PEAK(UNII) 3m HORN 9120D-HF_01895 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH02-CA Condition : AVG_BE_54 3m HORN 9120D-HF_01895 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto	Left blank

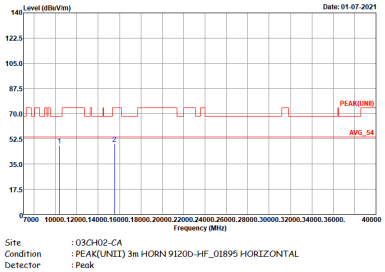
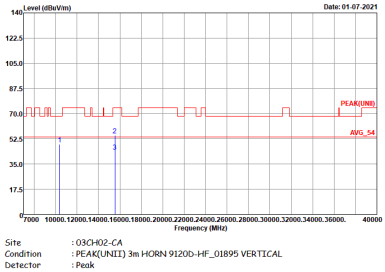
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH48 5240MHz - R	
1	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

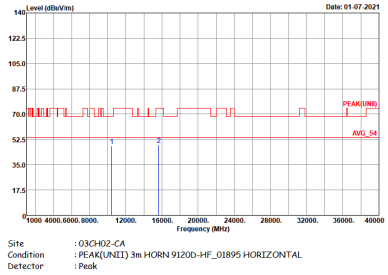
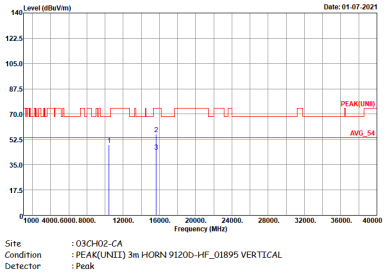
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH48 5240MHz - L	
1	Vertical	Fundamental
Peak	 Site : 03CH02-CA Condition : PEAK_BE_74 3m HORN 9120D-HF_01895 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH02-CA Condition : PEAK(UNII) 3m HORN 9120D-HF_01895 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH02-CA Condition : AV6_BE_54 3m HORN 9120D-HF_01895 VERTICAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto	Left blank

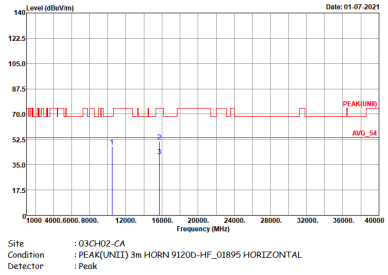
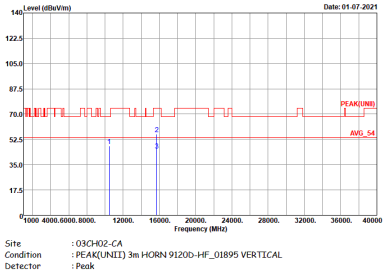
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH48 5240MHz - R	
1	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

Band 1 - 5150~5250MHz

WIFI 802.11a (Harmonic @ 3m)

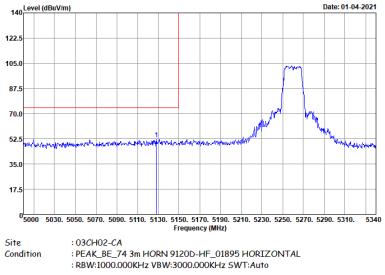
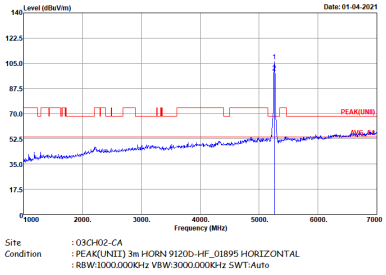
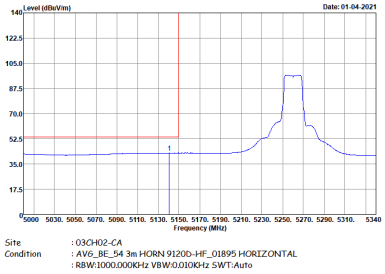
WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11a CH36 5180MHz	
1	Horizontal	Vertical
Peak Avg.		

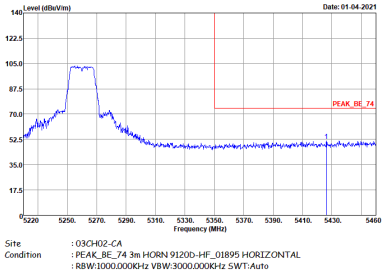
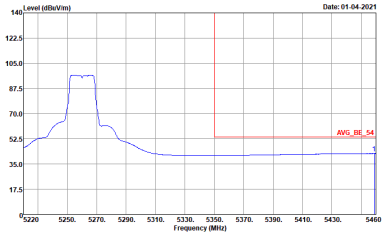
WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11a CH44 5220MHz	
1	Horizontal	Vertical
Peak Avg.		

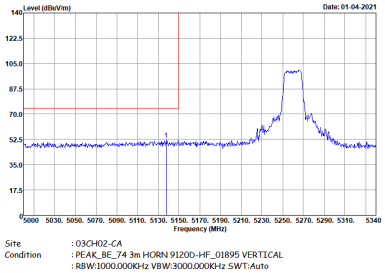
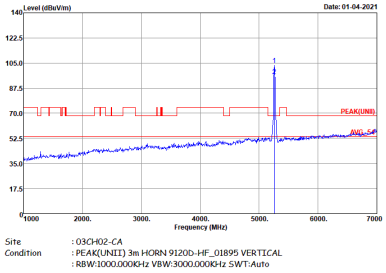
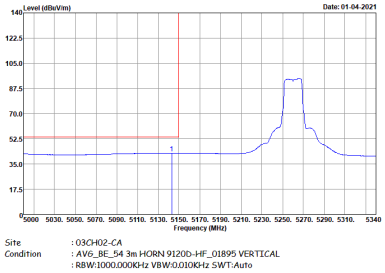
WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11a CH48 5240MHz	
1	Horizontal	Vertical
Peak Avg.		

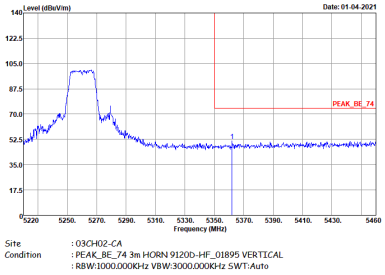
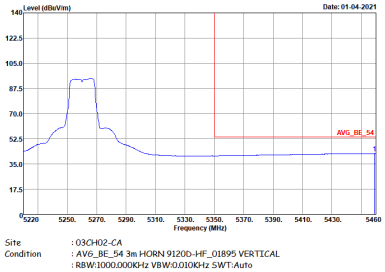
Band 2 - 5250~5350MHz

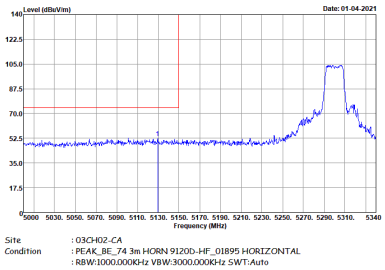
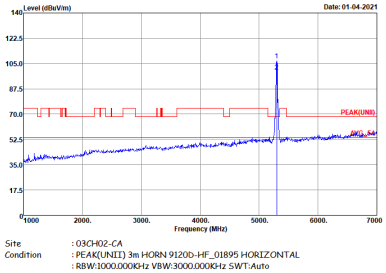
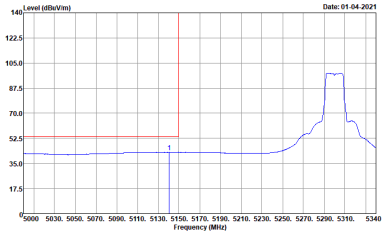
WIFI 802.11a (Band Edge @ 3m)

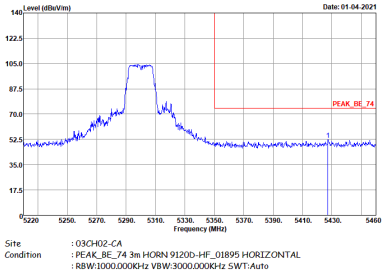
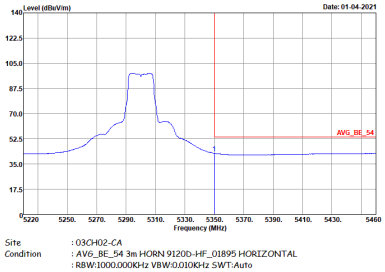
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH52 5260MHz - L	
1	Horizontal	Fundamental
Peak		
Avg.		Left blank

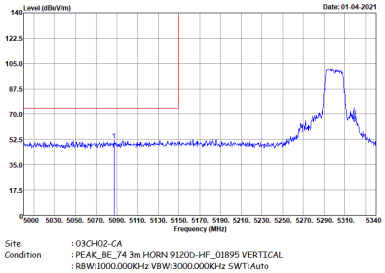
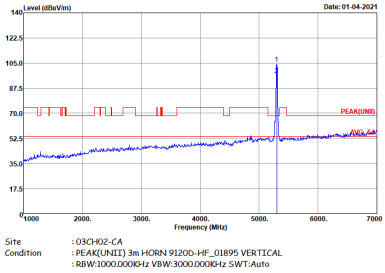
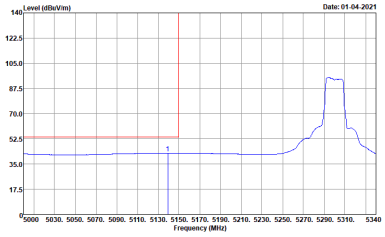
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH52 5260MHz - R	
1	Horizontal	Fundamental
Peak	 Site : 03CH02-CA Condition : PEAK_BE_74 3m HORN 9120D-HF_01895 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	Left blank
Avg.	 Site : 03CH02-CA Condition : AVG_BE_54 3m HORN 9120D-HF_01895 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto	Left blank

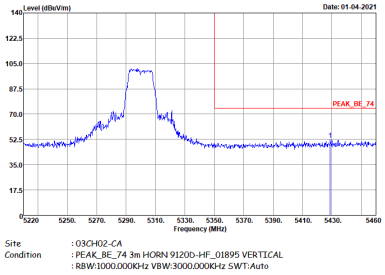
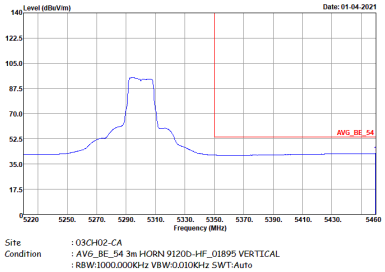
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH52 5260MHz - L	
1	Vertical	Fundamental
Peak		
Avg.		Left blank

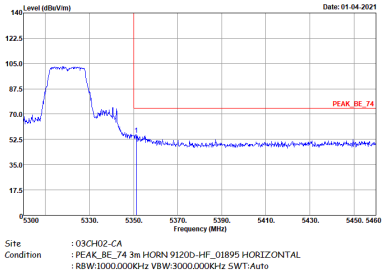
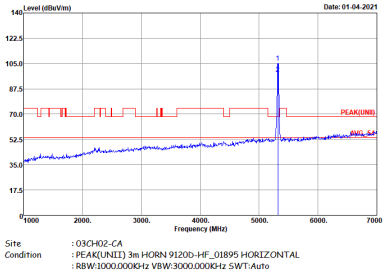
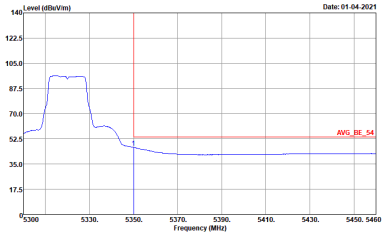
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH52 5260MHz - R	
1	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

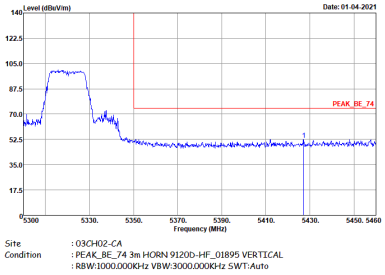
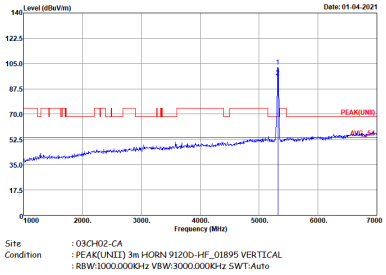
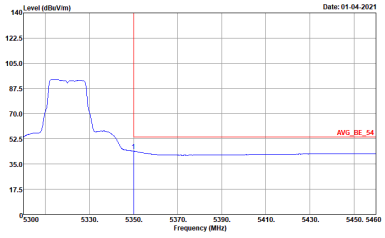
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH60 5300MHz - L	
1	Horizontal	Fundamental
Peak	 Site : 03CH02-CA Condition : PEAK_BE_74 3m HORN 9120D-HF_01895 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH02-CA Condition : PEAK(UNII) 3m HORN 9120D-HF_01895 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH02-CA Condition : AVG_BE_54 3m HORN 9120D-HF_01895 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto	Left blank

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

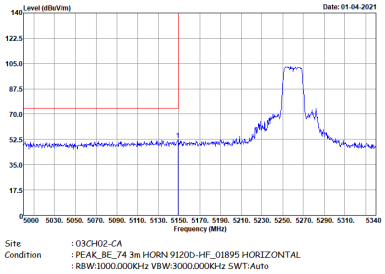
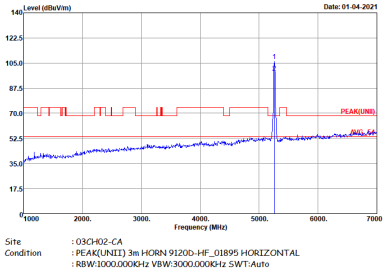
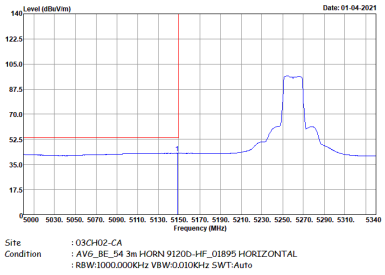
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH60 5300MHz - L	
1	Vertical	Fundamental
Peak	 Site : 03CH02-CA Condition : PEAK_BE_74 3m HORN 9120D-HF_01895 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH02-CA Condition : PEAK(UNII) 3m HORN 9120D-HF_01895 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH02-CA Condition : AVG_BE_54 3m HORN 9120D-HF_01895 VERTICAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto	Left blank

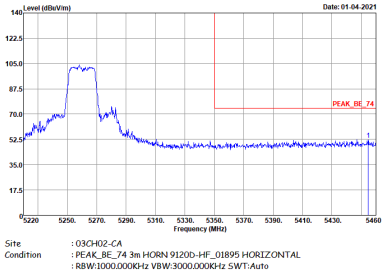
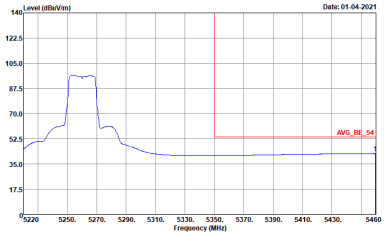
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH60 5300MHz - R	
1	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

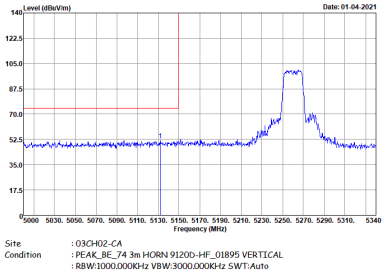
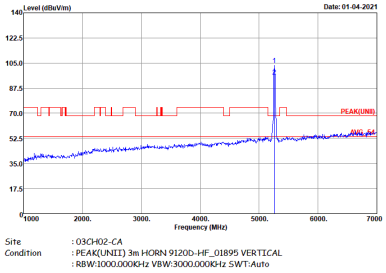
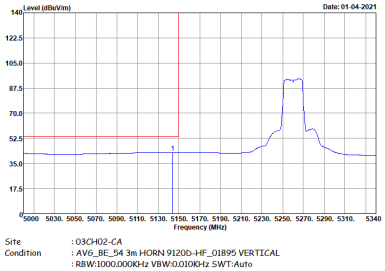
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH64 5320MHz	
1	Horizontal	Fundamental
Peak	 Site : 03CH02-CA Condition : PEAK_BE_74 3m HORN 9120D-HF_01895 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH02-CA Condition : PEAK(UNII) 3m HORN 9120D-HF_01895 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH02-CA Condition : AVG_BE_54 3m HORN 9120D-HF_01895 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto	Left blank

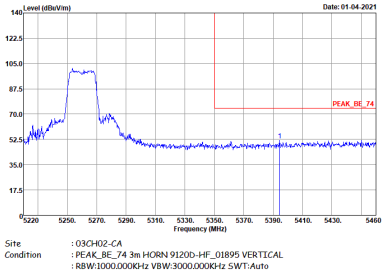
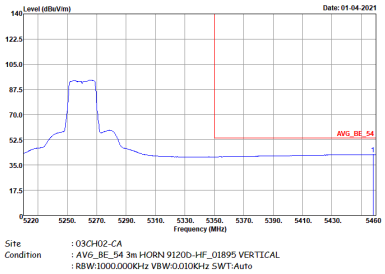
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH64 5320MHz	
1	Vertical	Fundamental
Peak	 Site : 03CH02-CA Condition : PEAK_BE_74 3m HORN 9120D-HF_01895 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH02-CA Condition : PEAK(UNII) 3m HORN 9120D-HF_01895 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH02-CA Condition : AVG_BE_54 3m HORN 9120D-HF_01895 VERTICAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto	Left blank

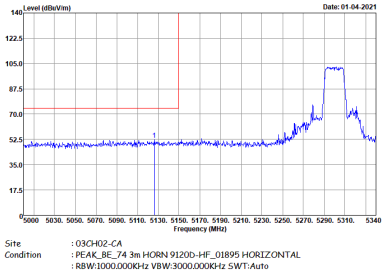
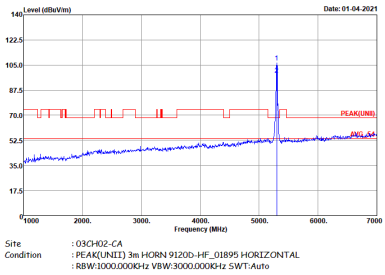
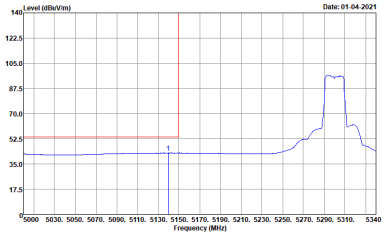
Band 2 5250~5350MHz
WIFI 802.11n HT20 (Band Edge @ 3m)

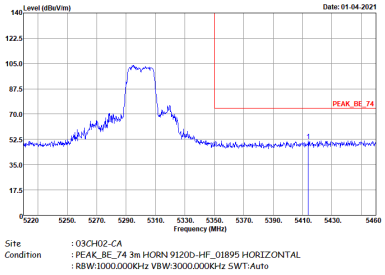
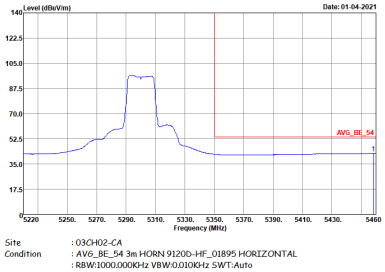
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH52 5260MHz - L	
1	Horizontal	Fundamental
Peak		
Avg.		Left blank

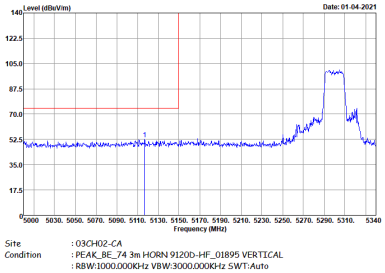
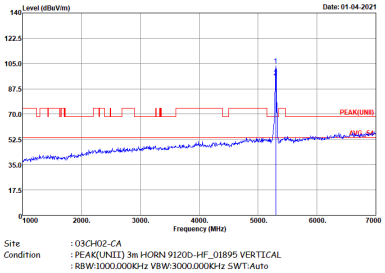
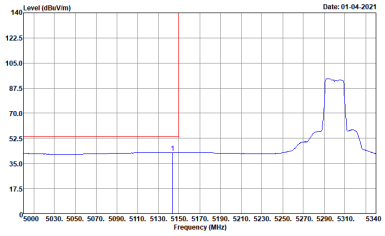
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH52 5260MHz - R	
1	Horizontal	Fundamental
Peak	 Site : 03CH02-CA Condition : PEAK_BE_74 3m HORN 9120D-HF_01895 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	Left blank
Avg.	 Site : 03CH02-CA Condition : AVG_BE_54 3m HORN 9120D-HF_01895 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto	Left blank

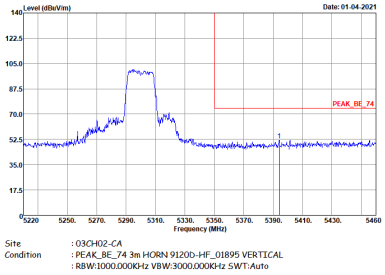
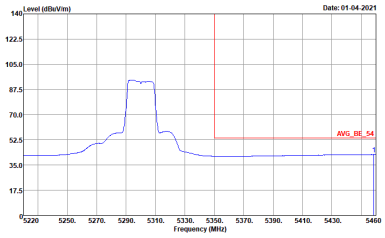
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH52 5260MHz - L	
1	Vertical	Fundamental
Peak		
Avg.		Left blank

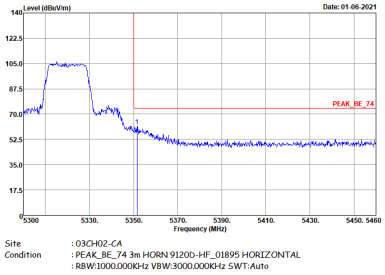
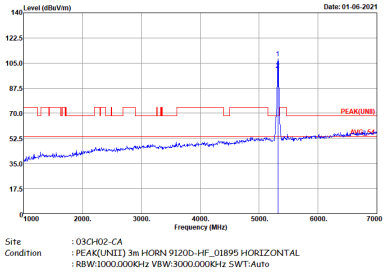
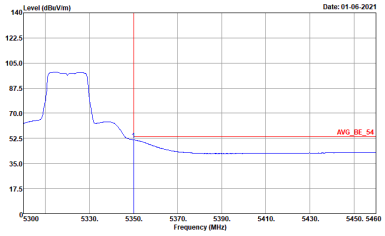
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH52 5260MHz - R	
1	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

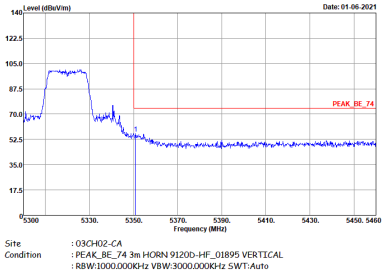
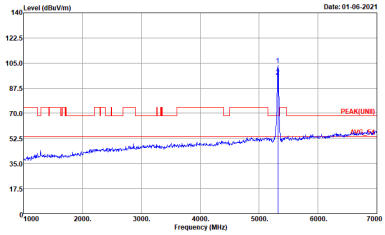
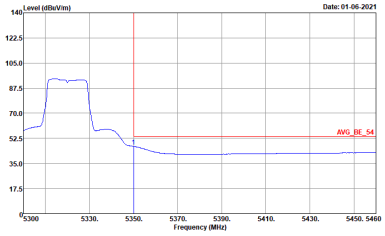
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH60 5300MHz - L	
1	Horizontal	Fundamental
Peak	 Site : 03CH02-CA Condition : PEAK_BE_74 3m HORN 9120D-HF_01895 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH02-CA Condition : PEAK(UNII) 3m HORN 9120D-HF_01895 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH02-CA Condition : AVG_BE_54 3m HORN 9120D-HF_01895 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto	Left blank

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

WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH60 5300MHz - L	
1	Vertical	Fundamental
Peak	 Site : 03CH02-CA Condition : PEAK_BE_74 3m HORN 9120D-HF_01895 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH02-CA Condition : PEAK(UNII) 3m HORN 9120D-HF_01895 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH02-CA Condition : AVG_BE_54 3m HORN 9120D-HF_01895 VERTICAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto	Left blank

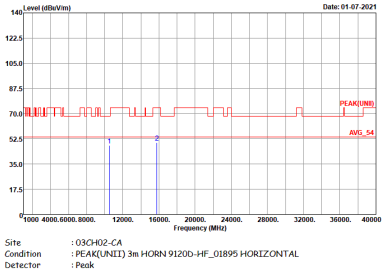
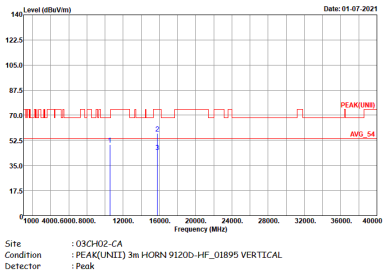
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH60 5300MHz - R	
1	Vertical	Fundamental
Peak	 Site : 03CH02-CA Condition : PEAK_BE_74 3m HORN 9120D-HF_01895 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	Left blank
Avg.	 Site : 03CH02-CA Condition : AVG_BE_54 3m HORN 9120D-HF_01895 VERTICAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto	Left blank

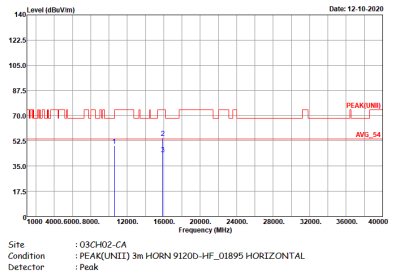
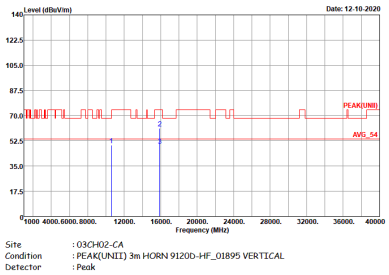
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH64 5320MHz	
1	Horizontal	Fundamental
Peak	 Site : 03CH02-CA Condition : PEAK_BE_74 3m HORN 9120D-HF_01895 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH02-CA Condition : PEAK(UNII) 3m HORN 9120D-HF_01895 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH02-CA Condition : AVG_BE_54 3m HORN 9120D-HF_01895 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto	Left blank

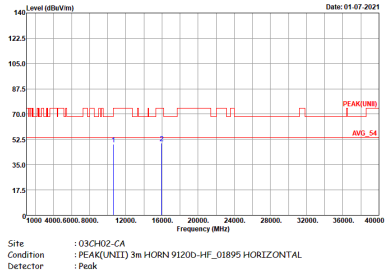
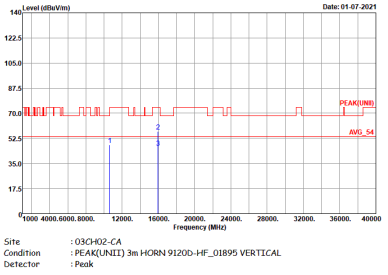
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH64 5320MHz	
1	Vertical	Fundamental
Peak	 Site : 03CH02-CA Condition : PEAK_BE_74 3m HORN 9120D-HF_01895 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH02-CA Condition : PEAK(UNII) 3m HORN 9120D-HF_01895 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH02-CA Condition : AVG_BE_54 3m HORN 9120D-HF_01895 VERTICAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto	Left blank

Band 2 - 5250~5350MHz

WIFI 802.11a (Harmonic @ 3m)

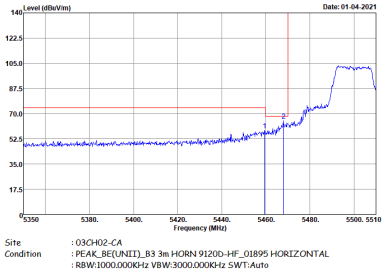
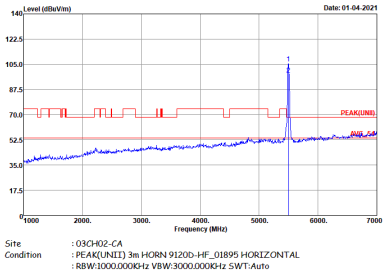
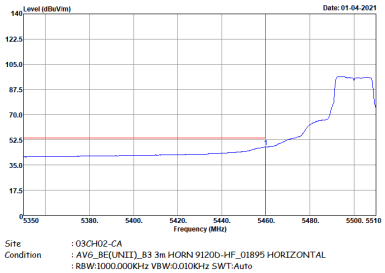
WIFI	Band 2 5250~5350MHz Harmonic @ 3m	
ANT	802.11a CH52 5260MHz	
1	Horizontal	Vertical
Peak Avg.		

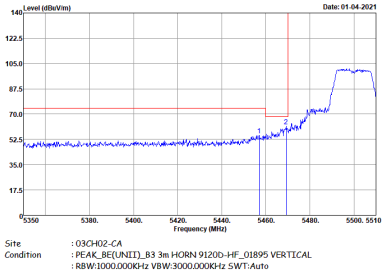
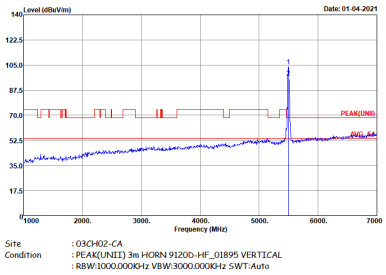
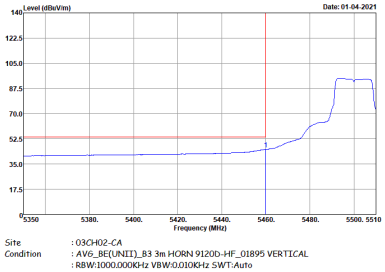
WIFI	Band 2 5250~5350MHz Harmonic @ 3m	
ANT	802.11a CH60 5300MHz	
1	Horizontal	Vertical
Peak Avg.		

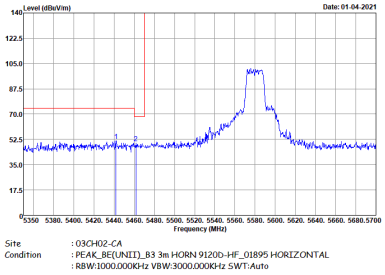
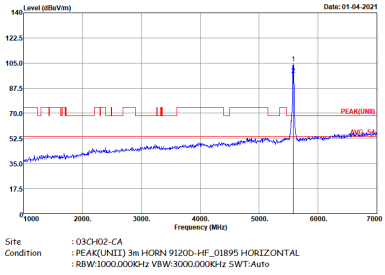
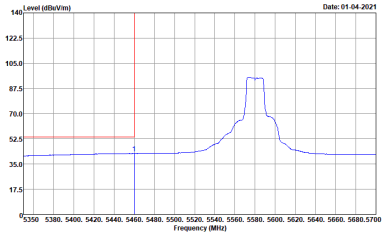
WIFI	Band 2 5250~5350MHz Harmonic @ 3m	
ANT	802.11a CH64 5320MHz	
1	Horizontal	Vertical
Peak Avg.		

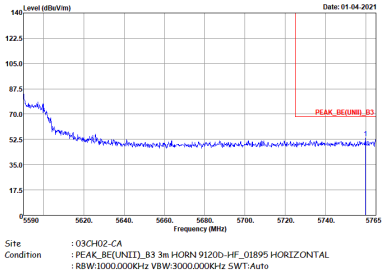
Band 3 - 5470~5725MHz

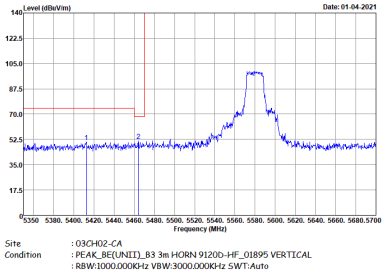
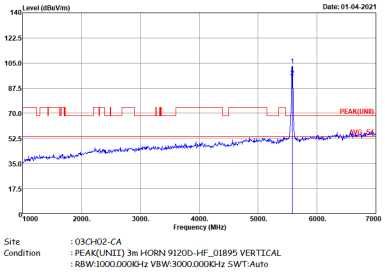
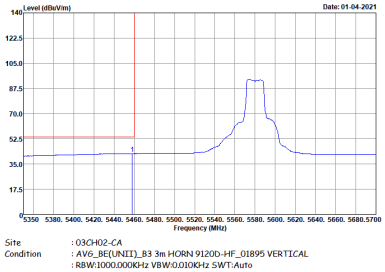
WIFI 802.11a (Band Edge @ 3m)

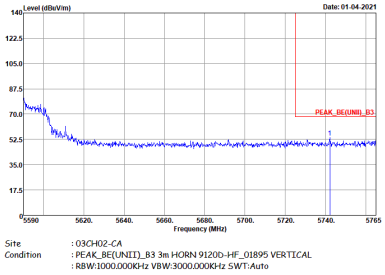
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH100 5500MHz	
1	Horizontal	Fundamental
Peak		
Avg.		Left blank

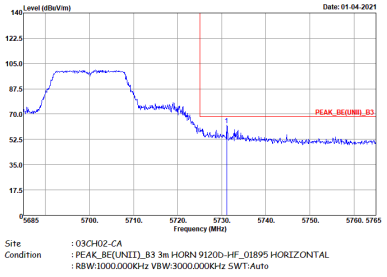
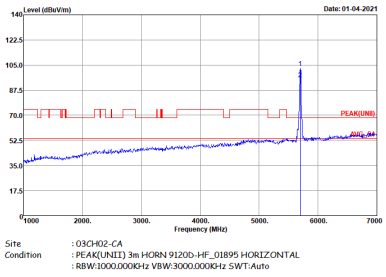
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH100 5500MHz	
1	Vertical	Fundamental
Peak		
Avg.		Left blank

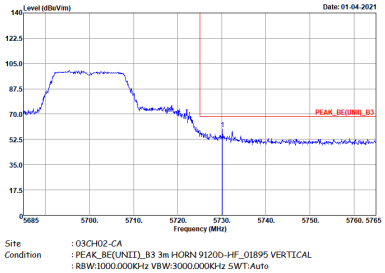
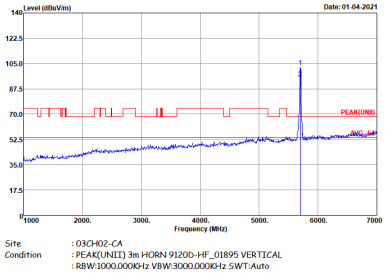
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH116 5580MHz - L	
1	Horizontal	Fundamental
Peak	 Site : 03CH02-CA Condition : PEAK_BE(UNII)_B3 3m HORN 9120D-HF_01895 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH02-CA Condition : PEAK(UNII) 3m HORN 9120D-HF_01895 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH02-CA Condition : AVG_BE(UNII)_B3 3m HORN 9120D-HF_01895 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto	Left blank

WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH116 5580MHz - R	
1	Horizontal	Fundamental
Peak	 Site : 03CH02-CA Condition : PEAK_BE(UNII)_B3 3m HORN 9120D-HF_01895 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	Left blank

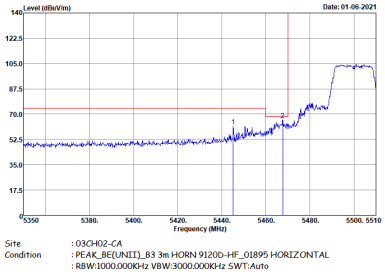
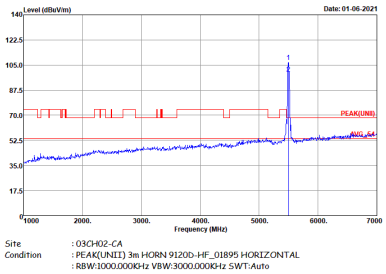
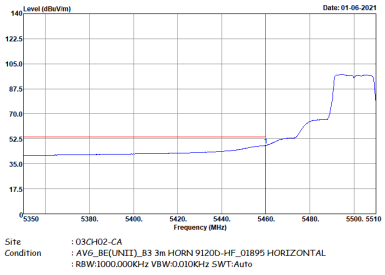
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH116 5580MHz - L	
1	Vertical	Fundamental
Peak		
Avg.		Left blank

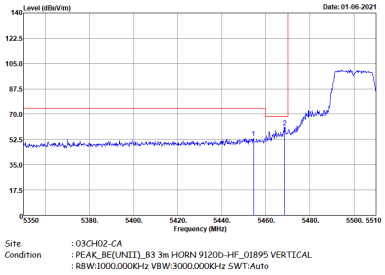
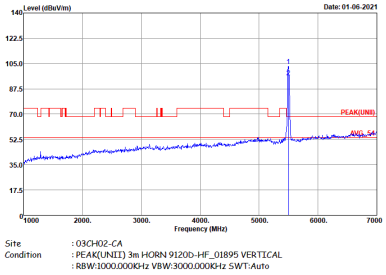
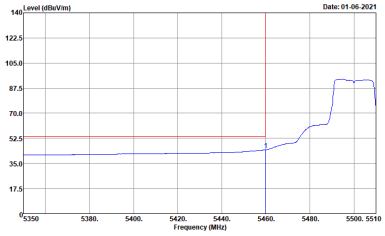
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH116 5580MHz - R	
1	Vertical	Fundamental
Peak	 Site : 03CH02-CA Condition : PEAK_BE(UNII)_B3 3m HORN 9120D-HF_01895 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	Left blank

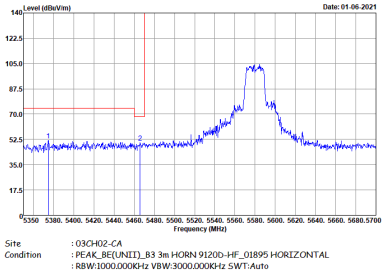
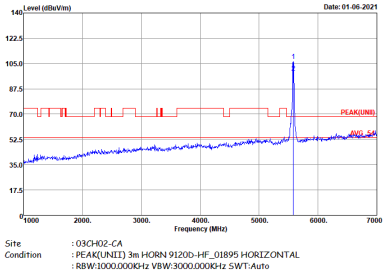
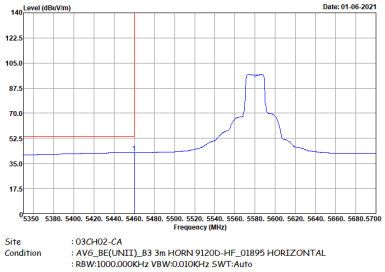
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH140 5700MHz	
1	Horizontal	Fundamental
Peak	 Site : 03CH02-CA Condition : PEAK_BE(UNII)_B3 3m HORN 9120D-HF_01895 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH02-CA Condition : PEAK(UNII) 3m HORN 9120D-HF_01895 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto

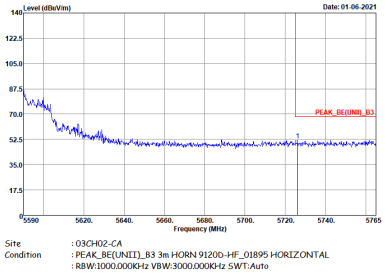
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH140 5700MHz	
1	Vertical	Fundamental
Peak	 Site : 03CH02-CA Condition : PEAK_BE(UNII)_B3 3m HORN 9120D-HF_01895 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH02-CA Condition : PEAK(UNII) 3m HORN 9120D-HF_01895 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto

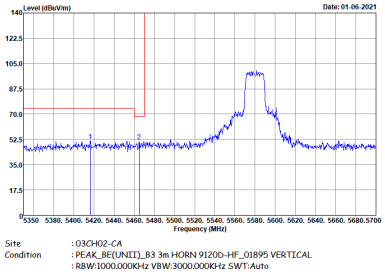
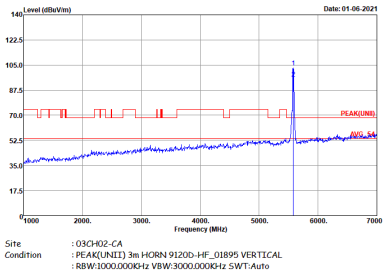
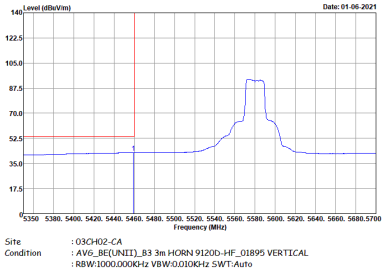
Band 3 5470~5725MHz
WIFI 802.11n HT20 (Band Edge @ 3m)

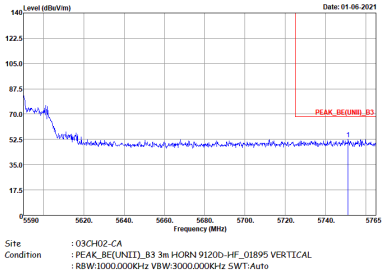
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT20 CH100 5500MHz	
1	Horizontal	Fundamental
Peak		
Avg.		Left blank

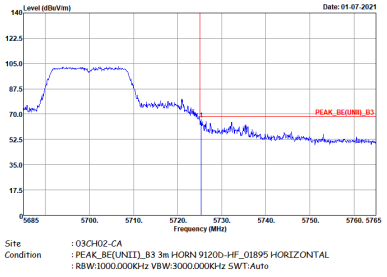
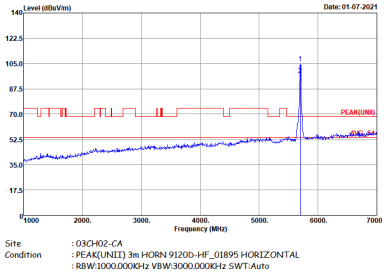
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT20 CH100 5500MHz	
1	Vertical	Fundamental
Peak	 Site : 03CH02-CA Condition : PEAK_BE(UNII)_83 3m HORN 9120D-HF_01895 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH02-CA Condition : PEAK(UNII) 3m HORN 9120D-HF_01895 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH02-CA Condition : AVG_BE(UNII)_83 3m HORN 9120D-HF_01895 VERTICAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto	Left blank

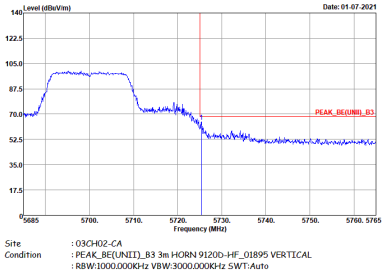
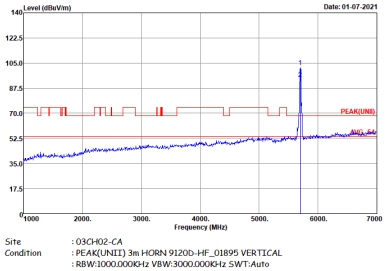
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT20 CH116 5580MHz - L	
1	Horizontal	Fundamental
Peak		
Avg.		Left blank

WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT20 CH116 5580MHz - R	
1	Horizontal	Fundamental
Peak	 Site : 03CH02-CA Condition : PEAK_BE(UNII)_B3 3m HORN 9120D-HF_01895 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	Left blank

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

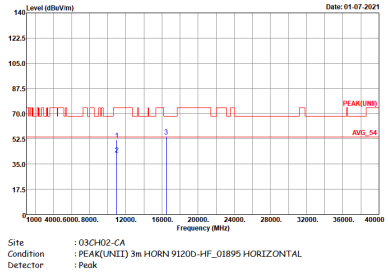
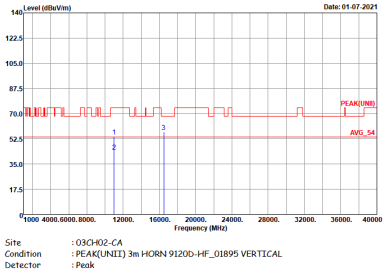
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT20 CH116 5580MHz - R	
1	Vertical	Fundamental
Peak	 Site : 03CH02-CA Condition : PEAK_BE(UNII)_B3 3m HORN 9120D-HF_01895 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	Left blank

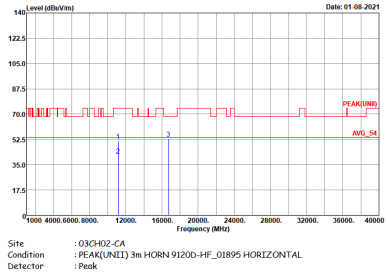
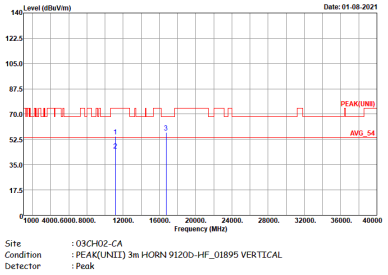
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT20 CH140 5700MHz	
1	Horizontal	Fundamental
Peak	 Site : 03CH02-CA Condition : PEAK_BE(UNII)_B3 3m HORN 9120D-HF_01895 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH02-CA Condition : PEAK(UNII) 3m HORN 9120D-HF_01895 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto

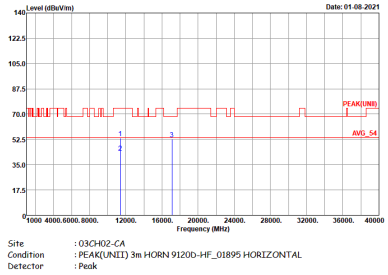
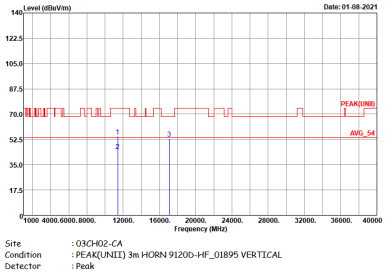
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT20 CH140 5700MHz	
1	Vertical	Fundamental
Peak.	 Site : 03CH02-CA Condition : PEAK_BE(UNII)_B3 3m HORN 9120D-HF_01895 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH02-CA Condition : PEAK(UNII) 3m HORN 9120D-HF_01895 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto

Band 3 - 5470~5725MHz

WIFI 802.11a (Harmonic @ 3m)

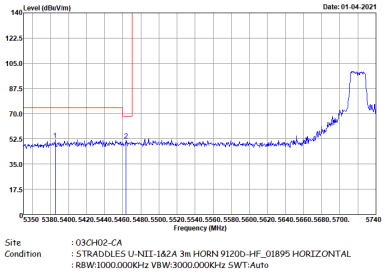
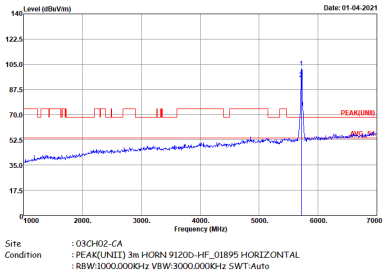
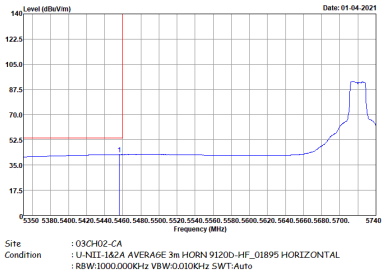
WIFI	Band 3 5470~5725MHz Harmonic @ 3m	
ANT	802.11a CH100 5500MHz	
1	Horizontal	Vertical
Peak Avg.		

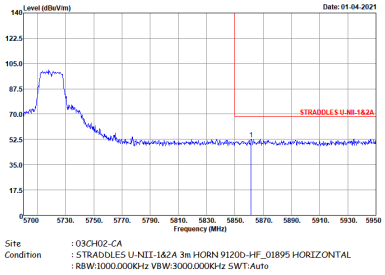
WIFI	Band 3 5470~5725MHz Harmonic @ 3m	
ANT	802.11a CH116 5580MHz	
1	Horizontal	Vertical
Peak Avg.		

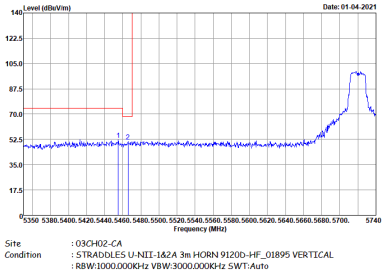
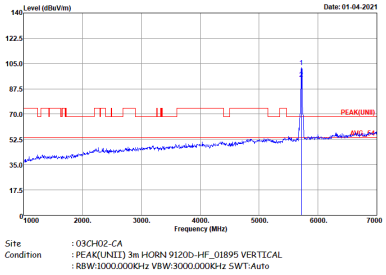
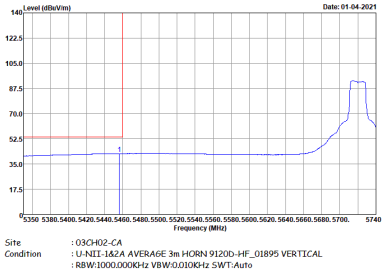
WIFI	Band 3 5470~5725MHz Harmonic @ 3m	
ANT	802.11a CH140 5700MHz	
1	Horizontal	Vertical
Peak Avg.		

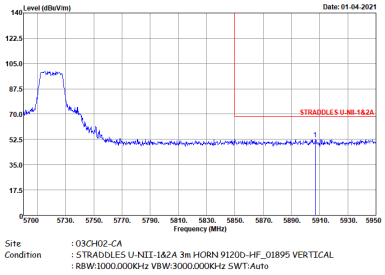
Band 3 - Straddle Channel

WIFI 802.11a (Band Edge @ 3m)

WIFI	Band 3 Straddle Channel Band Edge @ 3m	
ANT	802.11a CH144 5720MHz - L	
1	Horizontal	Fundamental
Peak		
Avg.		Left blank

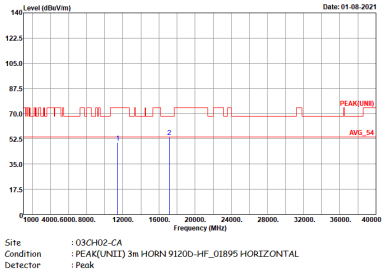
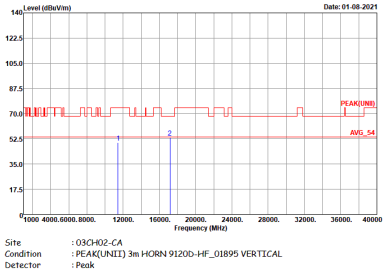
WIFI	Band 3 Straddle Channel Band Edge @ 3m	
ANT	802.11a CH144 5720MHz – R	
1	Horizontal	Fundamental
Peak		Left blank

WIFI	Band 3 Straddle Channel Band Edge @ 3m	
ANT	802.11a CH144 5720MHz - L	
1	Vertical	Fundamental
Peak		
Avg.		Left blank

WIFI	Band 3 Straddle Channel Band Edge @ 3m	
ANT	802.11a CH144 5720MHz - R	
1	Vertical	Fundamental
Peak		Left blank

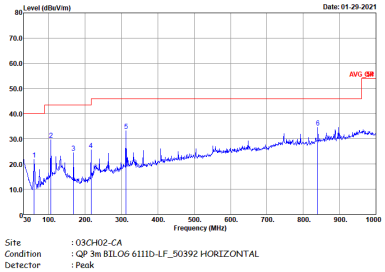
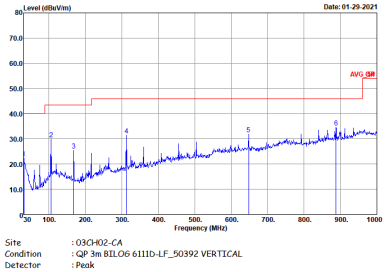
Band 3 - Straddle Channel

WIFI 802.11a (Harmonic @ 3m)

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

Emission below 1GHz

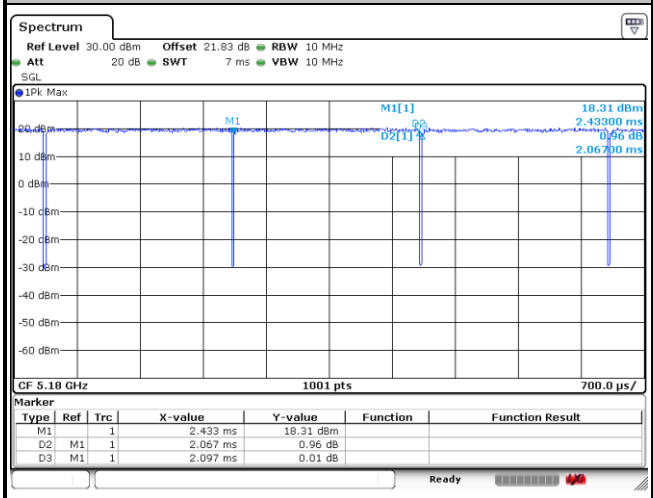
5GHz WIFI 802.11n HT20 (LF)

WIFI	5GHz WIFI	
ANT	802.11n HT20 LF	
1	Horizontal	Vertical
QP / Peak		

Appendix E. Duty Cycle Plots

Band	Duty Cycle(%)	T(us)	1/T(kHz)	VBW Setting	Duty Factor(dB)
802.11a	98.57	-	-	10Hz	0.06
5GHz 802.11n HT20	98.46	-	-	10Hz	0.07

802.11a



802.11n HT20