FCC RADIO TEST REPORT

FCC ID	:	**TVE-240604**
Equipment	:	**Network Security Gateway**
Brand Name	:	**FORTINET**
Model Name	:	**FortiWiFi 70Gxxxxxxxxxx, FORTIWIFI-70Gxxxxxxxxxx, FWF-70Gxxxxxxxxxx,** **FortiWiFi 71Gxxxxxxxxxx, FORTIWIFI-71Gxxxxxxxxxx, FWF-71Gxxxxxxxxxx** **(where "x" can be used as "0-9", or "A-Z", or "-", or blank for software changes or marketing purposes only)**
Applicant	:	**Fortinet Inc.** **909 Kifer Rd., Sunnyvale, CA 94086, United States**
Manufacturer	:	**Fortinet Inc.** **909 Kifer Rd., Sunnyvale, CA 94086, United States**
Standard	:	**FCC Part 15 Subpart E §15.407**

The product was received on Jun. 15, 2024 and testing was performed from Jul. 04, 2024 to Aug. 09, 2024. We, Sporton International Inc. Wensan Laboratory, would like to declare that the tested sample has been evaluated in accordance with the test procedures and has been in compliance with the applicable technical standards.

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

Louis Wu

Approved by: Louis Wu

Sporton International Inc. Wensan Laboratory
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History of this test report

Report No.	Version	Description	Issue Date
FR452223C	01	Initial issue of report	Oct. 09, 2024

Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
3.1	15.403	26dB Bandwidth	Pass	-
3.1	2.1049	99% Occupied Bandwidth	Pass	-
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	0.63 dB under the limit at 5401.41 MHz
3.5	15.207	AC Conducted Emission	Pass	10.05 dB under the limit at 0.50 MHz
3.6	15.203	Antenna Requirement	Pass	-

Conformity Assessment Condition:

1. The test results (PASS/FAIL) with all measurement uncertainty excluded are presented against the regulation limits or in accordance with the requirements stipulated by the applicant/manufacturer who shall bear all the risks of non-compliance that may potentially occur if measurement uncertainty is taken into account.
2. The measurement uncertainty please refer to each test result in the section “Measurement Uncertainty”.

Disclaimer:

The product specifications of the EUT presented in the test report that may affect the test assessments are declared by the manufacturer who shall take full responsibility for the authenticity.

Reviewed by: Yun Huang

Report Producer: Wilda Wei

1 General Description

1.1 Product Feature of Equipment Under Test

Product Feature
General Specs Bluetooth-LE, Wi-Fi 2.4GHz 802.11b/g/n/ax and Wi-Fi 5GHz 802.11a/n/ac/ax. **Antenna Type** WLAN: **<Ant. 1>:** Dipole Antenna **<Ant. 2>:** Dipole Antenna **<Ant. 3>:** Dipole Antenna Bluetooth-LE: Monopole Antenna

Antenna information		
5150 MHz ~ 5250 MHz	Peak Gain (dBi)	Ant. 1: 3.27 Ant. 2: 3.27 Ant. 3: 3.27
5250 MHz ~ 5350 MHz	Peak Gain (dBi)	Ant. 1: 2.6 Ant. 2: 2.6 Ant. 3: 2.6
5470 MHz ~ 5725 MHz	Peak Gain (dBi)	Ant. 1: 2.01 Ant. 2: 2.01 Ant. 3: 2.01

Remark:

1. Antenna 3 is used for receiving only.
2. The EUT's information above is declared by manufacturer. Please refer to Disclaimer in report summary.

Model differences description		
Model Feature	**FWF-71G**	**FWF-70G**
M.2 SSD	V	X

Remark: All the tests were performed with Model: FWF-71G

1.1.1 Antenna Directional Gain

<For CDD Mode>

Follows FCC KDB 662911 D01 Multiple Transmitter Output v02r01 F)2)f)ii)

Directional gain = G_{ANT} + Array Gain, where Array Gain is as follows:

For power measurements on IEEE 802.11 devices,

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

G_{ANT} is set equal to the gain of the antenna having the highest gain.

For PSD measurements, the directional gain calculation.

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

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

	Ant 1 (dBi)	Ant 2 (dBi)	DG for Power (dBi)	DG for PSD (dBi)	Power Limit Reduction (dB)	PSD Limit Reduction (dB)
Band I	3.27	3.27	3.27	6.28	0.00	0.28
Band II	2.60	2.60	2.60	5.61	0.00	0.00
Band III	2.01	2.01	2.01	5.02	0.00	0.00

Calculation example:

If a device has two antenna, G_{ANT1}= 3.27dBi; G_{ANT2}=3.27dBi

Directional gain of power measurement = max(3.27, 3.27) + 0 = 3.27 dBi

Directional gain of PSD derived from formula which is

10 x log { { [10^ (3.27 dBi / 20) + 10^ (3.27 dBi / 20)] ^ 2 } / 2 }

= 6.28 dBi

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

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

<TXBF Modes>

The EUT supports beamforming modes , then

Follows FCC KDB 662911 D01 Multiple Transmitter Output v02r01 F)2)e)ii)

Directional gain = GANT + 10 log(NANT/NSS) dBi,

where NSS = the number of independent spatial streams of data and GANT is the antenna gain in dBi

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

	Ant 1 (dBi)	Ant 2 (dBi)	DG for Power (dBi)	DG for PSD (dBi)	Power Limit Reduction (dB)	PSD Limit Reduction (dB)
Band I	3.27	3.27	6.28	6.28	0.28	0.28
Band II	2.60	2.60	5.61	5.61	0.00	0.00
Band III	2.01	2.01	5.02	5.02	0.00	0.00

Calculation example:

Directional gain is derived from formula which is

10 x log { { [10^ (3.27 dBi / 20) + 10^ (3.27 dBi / 20)] ^ 2 } / 2 }

= 6.28 dBi

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

1.2 Modification of EUT

No modifications made to the EUT during the testing.

1.3 Testing Location

Test Site	Sporton International Inc. Wensan Laboratory
Test Site Location	No.58, Aly. 75, Ln. 564, Wenhua 3rd, Rd., Guishan Dist., Taoyuan City 333010, Taiwan (R.O.C.) TEL: +886-3-327-0868 FAX: +886-3-327-0855
Test Site No.	**Sporton Site No.**
	TH05-HY, CO07-HY, 03CH22-HY

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

FCC designation No.: TW3786

1.4 Applicable Standards

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

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

Remark:

1. All the test items were validated and recorded in accordance with the standards without any modification during the testing.
2. The TAF code is not including all the FCC KDB listed without accreditation.

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, the measured emission level of the EUT was maximized by rotating the EUT on a turntable, adjusting the orientation of the EUT and EUT antenna in two antenna degree (Ant. degree 0 and Ant. degree 90), and adjusting the measurement antenna orientation, following C63.10 exploratory test procedures and only the worst case emissions were reported 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		

Note:

1. The above Frequency and Channel with "*" are 802.11n HT40 and 802.11ac VHT40 and 802.11ax HE40.
2. The above Frequency and Channel with "#" are 802.11ac VHT80 and 802.11ax HE80.

2.2 Test Mode

The SISO mode conducted power is covered by MIMO mode per chain, so only the MIMO mode is tested.

The power for 802.11n mode is smaller than 802.11ac mode, so all other conducted and radiated test is covered by 802.11ac mode.

The power for TXBF mode is smaller than CDD mode, so all other conducted and radiated test is covered by CDD mode.

The final test modes include the worst data rates for each modulation shown in the table below.

CDD Mode

Modulation	Data Rate
802.11a	6 Mbps
802.11n HT20 (Covered by VHT20)	MCS0
802.11n HT40 (Covered by VHT40)	MCS0
802.11ac VHT20	MCS0
802.11ac VHT40	MCS0
802.11ac VHT80	MCS0
802.11ax HE20	MCS0
802.11ax HE40	MCS0
802.11ax HE80	MCS0

Remark: The conducted power level of each chain in MIMO mode is equal or higher than SISO mode.

TXBF Mode

Modulation	Data Rate
802.11n HT20	MCS0
802.11n HT40	MCS0
802.11ac VHT20	MCS0
802.11ac VHT40	MCS0
802.11ac VHT80	MCS0
802.11ax HE20	MCS0
802.11ax HE40	MCS0
802.11ax HE80	MCS0

Test Cases	
AC Conducted Emission	Mode 1 :WLAN (5GHz) Link + Adapter

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	40	60	116
		44		
H	High	48	64	140
Straddle		-	-	144

Ch. #		Band I：5150-5250 MHz	Band II：5250-5350 MHz	Band III：5470-5725MHz
		802.11ac VHT20	802.11ac VHT20	802.11ac VHT20
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
		802.11ac VHT40	802.11ac VHT40	802.11ac VHT40
L	Low	38	54	102
M	Middle	-	-	110
H	High	46	62	134
Straddle		-	-	142

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

Ch. #		Band I：5150-5250 MHz	Band II：5250-5350 MHz	Band III：5470-5725MHz
		802.11ax HE20	802.11ax HE20	802.11ax HE20
L	Low	36	52	100
M	Middle	40	60	116
		44		
H	High	48	64	140
Straddle		-	-	144

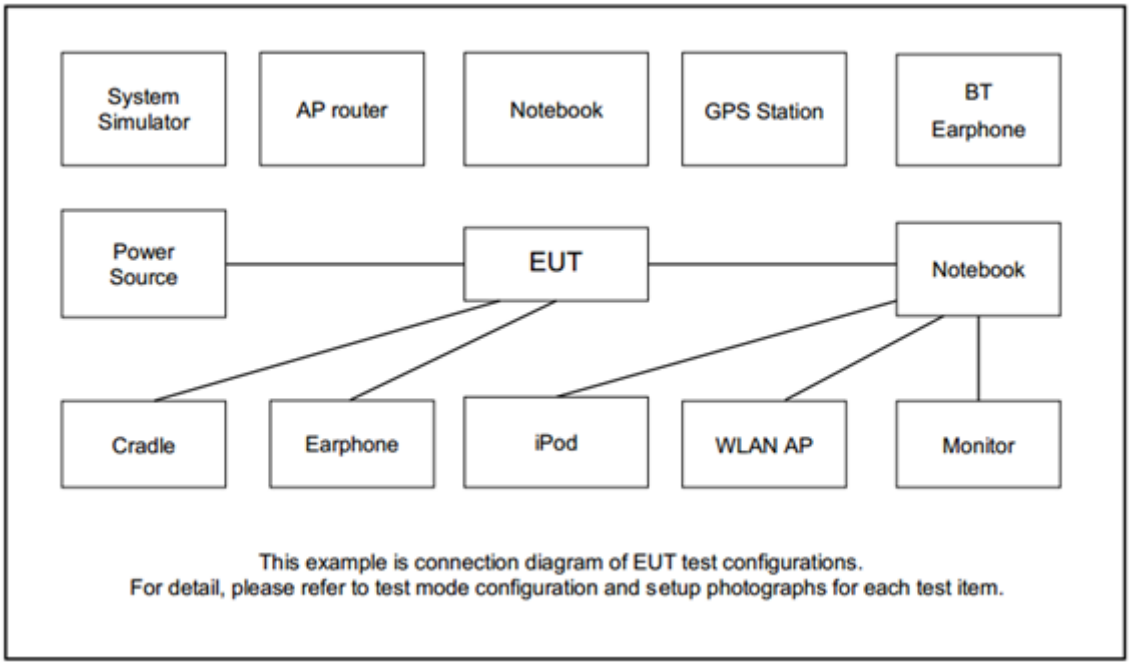
Ch. #		Band I：5150-5250 MHz	Band II：5250-5350 MHz	Band III：5470-5725MHz
		802.11ax HE40	802.11ax HE40	802.11ax HE40
L	Low	38	54	102
M	Middle	-	-	110
H	High	46	62	134
Straddle		-	-	142

Ch. #		Band I：5150-5250 MHz	Band II：5250-5350 MHz	Band III：5470-5725MHz
		802.11ax HE80	802.11ax HE80	802.11ax HE80
L	Low	-	-	106
M	Middle	42	58	-
H	High	-	-	122
Straddle		-	-	138

Remark:

1. For radiation spurious emission, the modulation and the data rate picked for testing are determined by the Max. RF conducted power.
2. For Radiated Spurious Emission above 18GHz and below 1GHz, the modulation and the data rate picked for testing are determined by the worst from Remark 1.

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	DELL	Latitude 3400	FCC DoC	N/A	AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m

2.5 EUT Operation Test Setup

The RF test items, utility “Tera Term Version4.95 / MT7906 Version0.0.2.78” 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 10 dB 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.

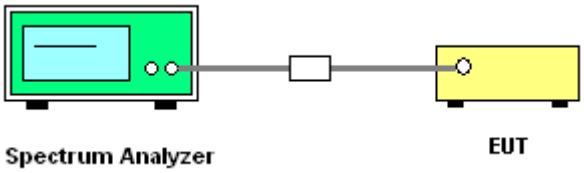
3.1.2 Measuring Instruments

Please refer to the measuring equipment list in 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.

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

Please refer to the measuring equipment list in this test report.

3.2.3 Test Procedures

<CDD Modes>

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

<TXBF Modes>

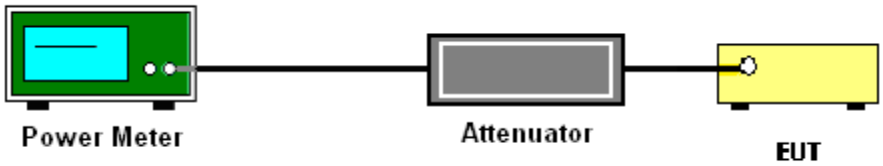
The testing follows Method PM-G of FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01.

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

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

Please refer to the measuring equipment list in 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.

<CDD Modes>

 # Method SA-2 #

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

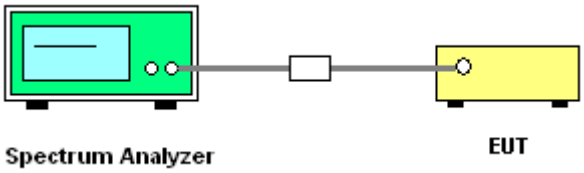
- Measure the duty cycle.
- Set span to encompass the entire emission bandwidth (EBW) of the signal.
- Set RBW = 1 MHz.
- Set VBW ≥ 3 MHz.
- Number of points in sweep ≥ 2 Span / RBW.
- Sweep time = auto.
- Detector = RMS
- Trace average at least 100 traces in power averaging mode.
- Add 10 log(1/x),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

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

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

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

3.3.4 Test Setup



3.3.5 Test Result of Power Spectral Density

Please refer to Appendix A.

3.4 Unwanted Emissions Measurement

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

3.4.1 Limit of Unwanted Emissions

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

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

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

(2) Unwanted spurious emissions falls 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.

3.4.2 Measuring Instruments

Please refer to the measuring equipment list in this test report.

3.4.3 Test Procedures

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

(1) Procedure for Unwanted Emissions Measurements Below 1000 MHz

- 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

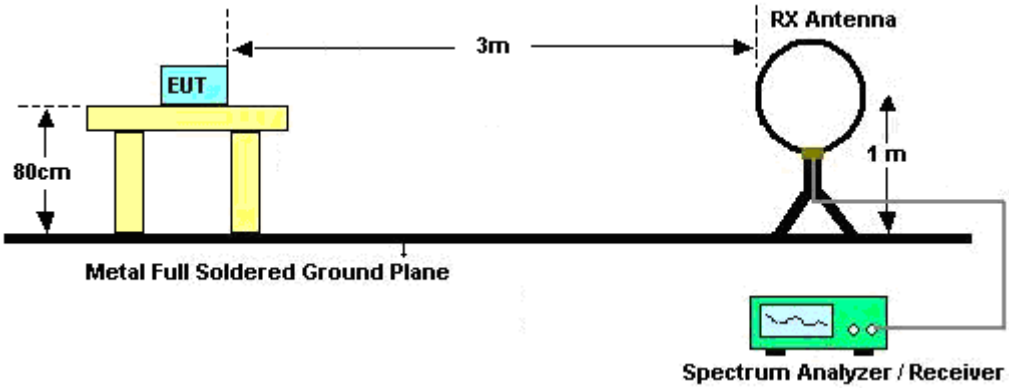
(3) Procedures for Average Unwanted Emissions Measurements Above 1000 MHz

- 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.

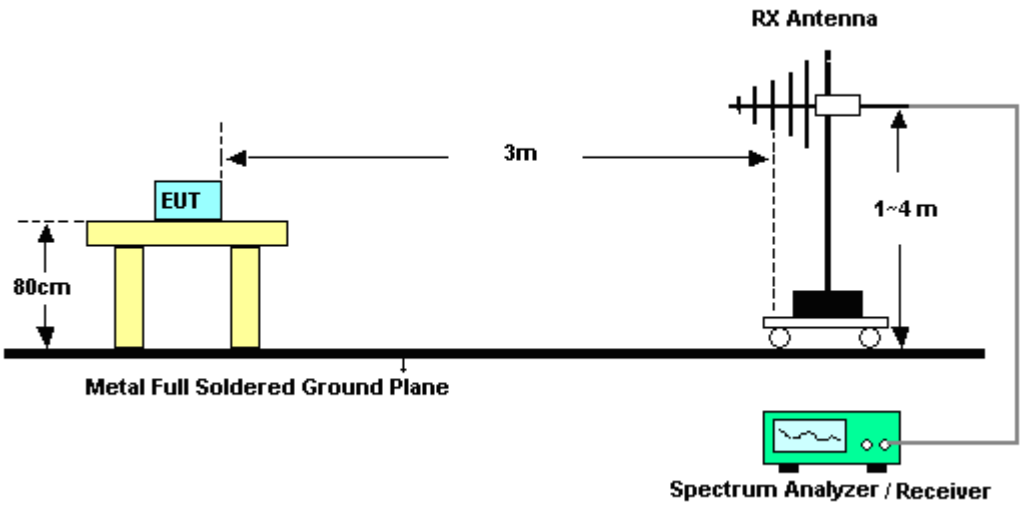
2. The EUT is placed on a turntable with 0.8 meter for frequency below 1 GHz and 1.5 meter for frequency above 1 GHz respectively above ground.
3. The EUT is set 3 meters away from the receiving antenna which is mounted on the top of a variable height antenna tower.
4. The antenna is a broadband antenna 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 is 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. Radiated testing below 1 GHz is performed by adjusting the antenna tower from 1 m to 4 m and by rotating the turn table from 0 degree to 360 degrees to find the peak maximum hold reading. When there is no suspected emission found and the emission level is with at least 6 dB margin against QP limit line, the position is marked as "-".
7. Radiated testing above 1 GHz is performed by adjusting the antenna tower from 1 m to 4 m and by rotating the turn table from 0 degree to 360 degrees to find the peak maximum hold reading for scanning all frequencies. When there is no suspected emission found and the harmonic emission level is with at least 6 dB margin against average limit line, the position is marked as "-".

3.4.4 Test Setup

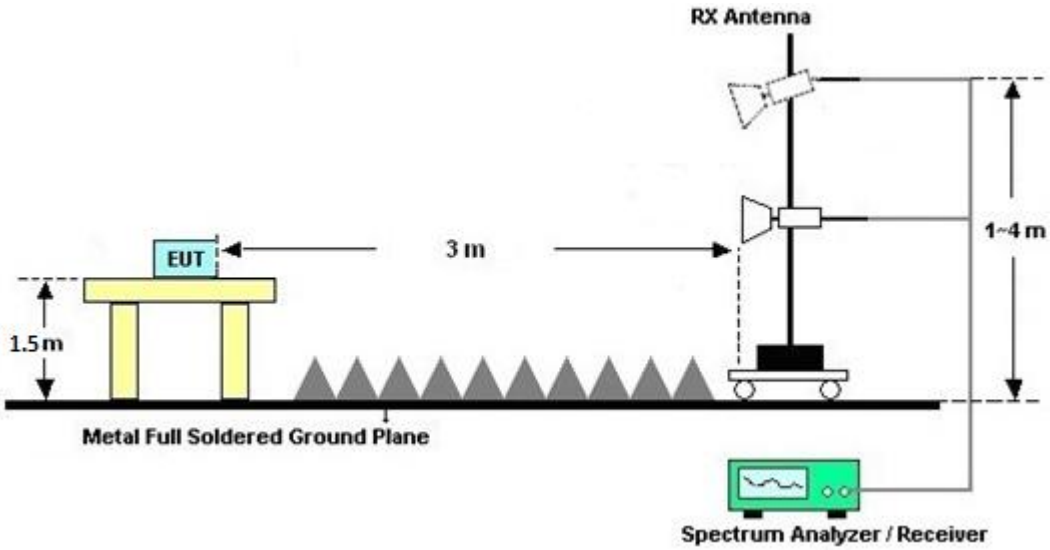
For radiated emissions below 30MHz



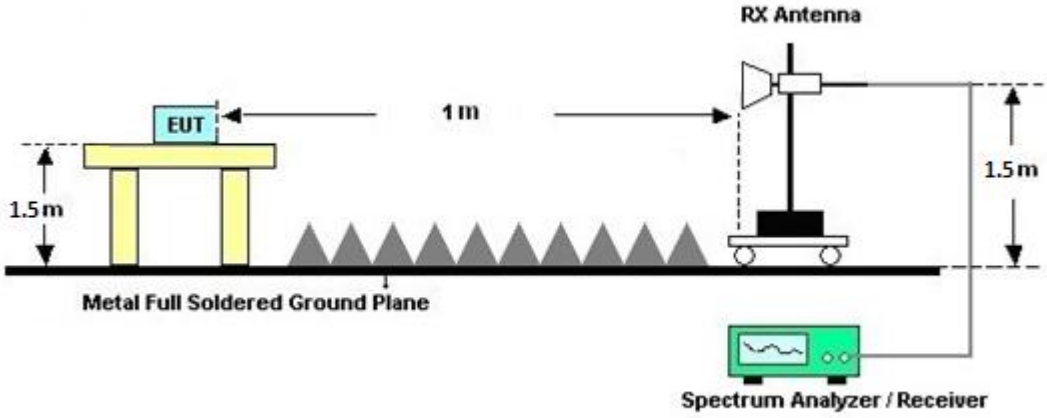
For radiated emissions from 30MHz to 1GHz



For radiated test from 1GHz to 18GHz



For radiated test above 18GHz



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

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

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

3.4.6 Test Result of Radiated Spurious at Band Edges

Please refer to Appendix C.

3.4.7 Duty Cycle

Please refer to Appendix D.

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

Please refer to Appendix C.

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.

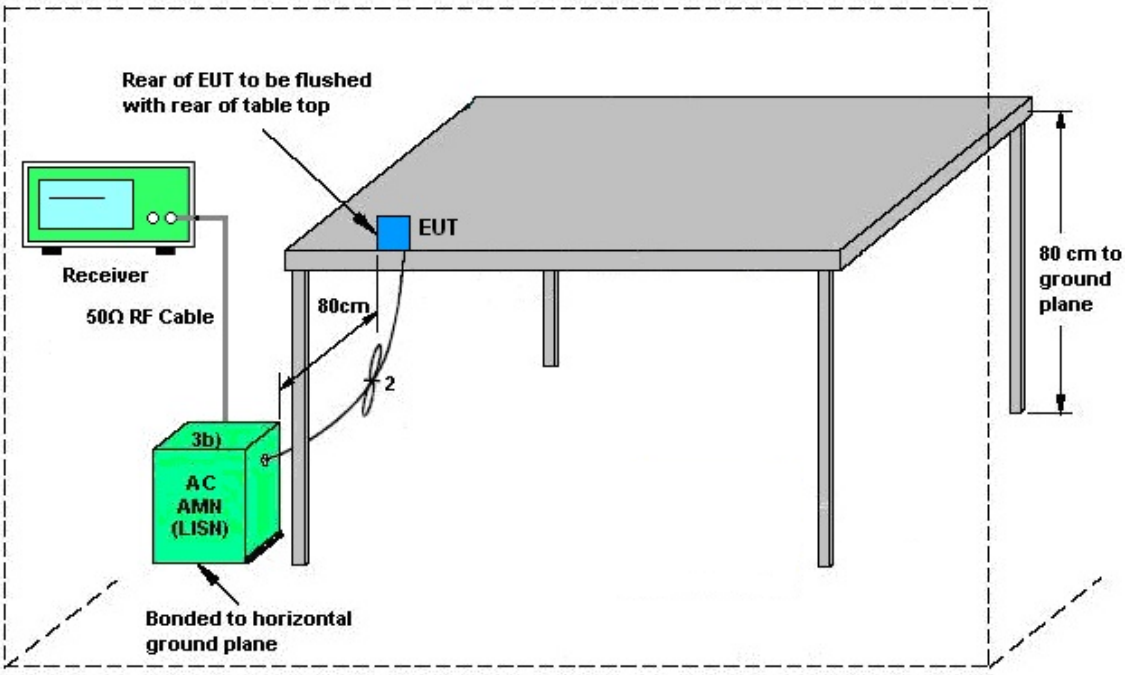
3.5.2 Measuring Instruments

Please refer to the measuring equipment list in this test report.

3.5.3 Test Procedures

1. The EUT is placed 0.4 meter away from the conducting wall of the shielding room, and is 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 shall be used.
6. Both Line and Neutral shall be tested in order to find out the maximum conducted emission.
7. The frequency range from 150 kHz to 30 MHz is scanned.
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 Antenna Requirements

3.6.1 Standard Applicable

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited. This requirement does not apply to carrier current devices or to devices operated under the provisions of §§ 15.211, 15.213, 15.217, 15.219, 15.221, or § 15.236. Further, this requirement does not apply to intentional radiators that must be professionally installed, such as perimeter protection systems and some field disturbance sensors, or to other intentional radiators which, in accordance with § 15.31(d), must be measured at the installation site. However, the installer shall be responsible for ensuring that the proper antenna is employed so that the limits in this part are not exceeded.

3.6.2 Antenna Anti-Replacement Construction

The EUT requires professional installation.

4 List of Measuring Equipment

Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
AC Power Source	ACPOWER	AFC-11003G	F317040033	N/A	N/A	Jul. 04, 2024	N/A	Conduction (CO07-HY)
Software	Rohde & Schwarz	EMC32 V10.30	N/A	N/A	N/A	Jul. 04, 2024	N/A	Conduction (CO07-HY)
Pulse Limiter	SCHWARZBECK	VTSD 9561-F N	9561-F N00373	9kHz-200MHz	Oct. 20, 2023	Jul. 04, 2024	Oct. 19, 2024	Conduction (CO07-HY)
RF Cable	HUBER + SUHNER	RG 214/U	1358175	9kHz~30MHz	Mar. 14, 2024	Jul. 04, 2024	Mar. 13, 2025	Conduction (CO07-HY)
Two-Line V-Network	TESEQ	NNB 51	45051	N/A	Mar. 10, 2024	Jul. 04, 2024	Mar. 09, 2025	Conduction (CO07-HY)
Four-Line V-Network	TESEQ	NNB 52	36122	N/A	Mar. 07, 2024	Jul. 04, 2024	Mar. 06, 2025	Conduction (CO07-HY)
EMI Test Receiver	Rohde & Schwarz	ESR3	102317	9kHz~3.6GHz	Sep. 20, 2023	Jul. 04, 2024	Sep. 19, 2024	Conduction (CO07-HY)
Loop Antenna	Rohde & Schwarz	HFH2-Z2	100488	9kHz~30MHz	Sep. 12, 2023	Jul. 05, 2024~ Aug. 09, 2024	Sep. 11, 2024	Radiation (03CH22-HY)
Bilog Antenna with 6dB	TESEQ & WOKEN	CBL 6111D & 00802N1D-06	63304 & 002	30MHz~1GHz	Oct. 15, 2023	Jul. 05, 2024~ Aug. 09, 2024	Oct. 14, 2024	Radiation (03CH22-HY)
Amplifier	SONOMA	310N	421581	N/A	Jul. 15, 2023	Jul. 05, 2024~ Jul. 13, 2024	Jul. 14, 2024	Radiation (03CH22-HY)
Amplifier	SONOMA	310N	421581	N/A	Jul. 14, 2024	Jul. 14, 2024~ Aug. 09, 2024	Jul. 13, 2025	Radiation (03CH22-HY)
Horn Antenna	SCHWARZBECK	BBHA 9120 D	9120D-1212	1GHz~18GHz	Mar. 21, 2024	Jul. 05, 2024~ Aug. 09, 2024	Mar. 20, 2025	Radiation (03CH22-HY)
Double Ridged Guide Horn Antenna	RFSPIN	DRH18-E	LE2C04A18EN	1GHz~18GHz	Jul. 12, 2023	Jul. 05, 2024~ Jul. 10, 2024	Jul. 11, 2024	Radiation (03CH22-HY)
Double Ridged Guide Horn Antenna	RFSPIN	DRH18-E	LE2C04A18EN	1GHz~18GHz	Jul. 11, 2024	Jul. 11, 2024~ Aug. 09, 2024	Jul. 10, 2025	Radiation (03CH22-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	1223	18GHz-40GHz	Jun. 24, 2024	Jul. 05, 2024~ Aug. 09, 2024	Jun. 23, 2025	Radiation (03CH22-HY)
Amplifier	EMEC	EM01G18GA	060877	N/A	Sep. 28, 2023	Jul. 05, 2024~ Aug. 09, 2024	Sep. 27, 2024	Radiation (03CH22-HY)
Preamplifier	EMEC	EM18G40G	060872	18-40GHz	Sep. 06, 2023	Jul. 05, 2024~ Aug. 09, 2024	Sep. 05, 2024	Radiation (03CH22-HY)
Signal Analyzer	Keysight	N9010B	MY62170278	10Hz~44GHz	Aug. 31, 2023	Jul. 05, 2024~ Aug. 09, 2024	Aug. 30, 2024	Radiation (03CH22-HY)
Hygrometer	TECPEL	DTM-303A	TP211469	N/A	Jan. 03, 2024	Jul. 05, 2024~ Aug. 09, 2024	Jan. 02, 2025	Radiation (03CH22-HY)
Controller	EMEC	EM1000	N/A	Control Turn table & Ant Mast	N/A	Jul. 05, 2024~ Aug. 09, 2024	N/A	Radiation (03CH22-HY)
Antenna Mast	ChainTek	MBS-520-1	N/A	1m~4m	N/A	Jul. 05, 2024~ Aug. 09, 2024	N/A	Radiation (03CH22-HY)
Turn Table	ChainTek	T-200-S-1	N/A	0~360 Degree	N/A	Jul. 05, 2024~ Aug. 09, 2024	N/A	Radiation (03CH22-HY)
Software	Audix	E3 6.09824_2019122	RK-002347	N/A	N/A	Jul. 05, 2024~ Aug. 09, 2024	N/A	Radiation (03CH22-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	803951/2	9kHz~30MHz	Mar. 06, 2024	Jul. 05, 2024~ Aug. 09, 2024	Mar. 05, 2025	Radiation (03CH22-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	804390/2,804611/2,804615/2	N/A	Oct. 24, 2023	Jul. 05, 2024~ Aug. 09, 2024	Oct. 23, 2024	Radiation (03CH22-HY)

Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Hygrometer	TECPEL	DTM-303A	TP201996	N/A	Nov. 07, 2023	Aug. 01, 2024~ Aug. 09, 2024	Nov. 06, 2024	Conducted (TH05-HY)
Power Sensor	DARE	RPR3006W	17I00015SNO36 (NO:35)	10MHz~6GHz	Aug. 23, 2023	Aug. 01, 2024~ Aug. 09, 2024	Aug. 22, 2024	Conducted (TH05-HY)
Signal Analyzer	Rohde & Schwarz	FSV40	101564	10Hz ~ 40GHz	Sep. 12, 2023	Aug. 01, 2024~ Aug. 09, 2024	Sep. 11, 2024	Conducted (TH05-HY)
Switch Control Mainframe	E-Instument	ETF-1405-0	EC1900157 (BOX6)	N/A	Feb. 16, 2024	Aug. 01, 2024~ Aug. 09, 2024	Feb. 15, 2025	Conducted (TH05-HY)
Software1	Sporton	BTWIFI_Final_version:1.0(2024-04-11)	N/A	Conducted Items	N/A	Aug. 01, 2024~ Aug. 09, 2024	N/A	Conducted (TH05-HY)
Software2	Raditeq	RadiMation 2021.1.8	N/A	Conducted Power	N/A	Aug. 01, 2024~ Aug. 09, 2024	N/A	Conducted (TH05-HY)

5 Measurement Uncertainty

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	3.44 dB

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	6.50 dB

Uncertainty of Radiated Emission Measurement (1000 MHz ~ 6000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	4.50 dB

Uncertainty of Radiated Emission Measurement (6000 MHz ~ 18000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	4.50 dB

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

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

Appendix A. Test Result of Conducted Test Items

Test Engineer:	Junyu Jhou	Temperature:	21~25	°C
Test Date:	2024/08/01~2024/08/09	Relative Humidity:	51~54	%

<CDD Mode>

TEST RESULTS DATA
26dB and 99% OBW

U-NII-1 MIMO														
Mod.	Data Rate	N_{TX}	CH.	Freq. (MHz)	99% Bandwidth (MHz)		26 dB Bandwidth (MHz)		IC 99% Bandwidth Power Limit (dBm)		IC 99% Bandwidth EIRP Limit (dBm)			Note
					Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2		
11a	6Mbps	2	36	5180	17.08	16.93	28.81	27.65	-		22.29		-	
11a	6Mbps	2	44	5220	20.13	19.58	39.27	38.48	-		22.92			
11a	6Mbps	2	48	5240	25.97	26.42	41.45	42.93	-		23.01			
VHT20	MCS0	2	36	5180	18.23	18.08	30.23	30.39	-		22.57			
VHT20	MCS0	2	44	5220	18.88	18.58	36.15	34.68	-		22.69			
VHT20	MCS0	2	48	5240	27.82	27.52	45.30	45.31	-		23.01			
VHT40	MCS0	2	38	5190	37.06	36.86	57.31	53.65	-		23.01			
VHT40	MCS0	2	46	5230	36.86	36.76	71.23	65.62	-		23.01			
VHT80	MCS0	2	42	5210	75.52	75.40	105.92	105.92	-		23.01			

TEST RESULTS DATA
Average Power Table

FCC U-NII-1 MIMO													
Mod.	Data Rate	N_{TX}	CH.	Freq. (MHz)	Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)			Pass/Fail
					Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2		
11a	6Mbps	2	36	5180	19.00	18.90	21.96	30.00		3.27			Pass
11a	6Mbps	2	40	5200	20.90	20.70	23.81	30.00		3.27			Pass
11a	6Mbps	2	44	5220	22.70	22.70	25.71	30.00		3.27			Pass
11a	6Mbps	2	48	5240	23.60	23.80	26.71	30.00		3.27			Pass
HT20	MCS0	2	36	5180	18.50	18.30	21.41	30.00		3.27			Pass
HT20	MCS0	2	44	5220	21.50	21.30	24.41	30.00		3.27			Pass
HT20	MCS0	2	48	5240	23.10	23.20	26.16	30.00		3.27			Pass
HT40	MCS0	2	38	5190	17.80	17.40	20.61	30.00		3.27		-	Pass
HT40	MCS0	2	46	5230	19.50	19.40	22.46	30.00		3.27			Pass
VHT20	MCS0	2	36	5180	19.10	18.80	21.96	30.00		3.27			Pass
VHT20	MCS0	2	44	5220	21.90	21.80	24.86	30.00		3.27			Pass
VHT20	MCS0	2	48	5240	23.70	23.80	26.76	30.00		3.27			Pass
VHT40	MCS0	2	38	5190	17.90	17.80	20.86	30.00		3.27			Pass
VHT40	MCS0	2	46	5230	19.80	19.70	22.76	30.00		3.27			Pass
VHT80	MCS0	2	42	5210	15.00	14.70	17.86	30.00		3.27			Pass

Report Number : FR452223C

TEST RESULTS DATA
Power Spectral Density

FCC U-NII-1 MIMO															
Mod.	Data Rate	N_{TX}	CH.	Freq. (MHz)	Duty Factor (dB)		Average Power Density with Duty Factor (dBm/MHz)			Average PSD Limit (dBm/MHz)		DG (dBi)			Pass /Fail
					Ant 1	Ant 2	Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2		
11a	6Mbps	2	36	5180	0.24	0.24	-		11.08	16.72		6.28		-	Pass
11a	6Mbps	2	40	5200	0.24	0.24			13.01	16.72		6.28			Pass
11a	6Mbps	2	44	5220	0.24	0.24			14.82	16.72		6.28			Pass
11a	6Mbps	2	48	5240	0.24	0.24			15.58	16.72		6.28			Pass
VHT20	MCS0	2	36	5180	0.22	0.22			10.94	16.72		6.28			Pass
VHT20	MCS0	2	44	5220	0.22	0.22			13.75	16.72		6.28			Pass
VHT20	MCS0	2	48	5240	0.22	0.22			15.35	16.72		6.28			Pass
VHT40	MCS0	2	38	5190	0.24	0.22			7.47	16.72		6.28			Pass
VHT40	MCS0	2	46	5230	0.24	0.22			9.22	16.72		6.28			Pass
VHT80	MCS0	2	42	5210	0.24	0.24			1.32	16.72		6.28			Pass

TEST RESULTS DATA
26dB and 99% OBW

U-NII-2A MIMO																
Mod.	Data Rate	N_{TX}	CH.	Freq. (MHz)	99% Bandwidth (MHz)		26 dB Bandwidth (MHz)		IC 99% Bandwidth Power Limit (dBm)		IC 99% Bandwidth EIRP Limit (dBm)		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	2	52	5260	16.73	16.63	23.03	20.70	23.21		29.21		23.98		-
11a	6Mbps	2	60	5300	17.13	17.08	29.38	29.35	23.32		29.32		23.98		
11a	6Mbps	2	64	5320	17.23	17.03	29.88	27.97	23.31		29.31		23.98		
VHT20	MCS0	2	52	5260	17.93	17.73	22.32	21.46	23.49		29.49		23.98		
VHT20	MCS0	2	60	5300	18.33	18.13	32.97	29.42	23.58		29.58		23.98		
VHT20	MCS0	2	64	5320	18.28	18.18	31.00	29.09	23.60		29.60		23.98		
VHT40	MCS0	2	54	5270	36.66	36.66	52.85	50.37	23.98		30.00		23.98		
VHT40	MCS0	2	62	5310	36.96	36.86	61.89	50.93	23.98		30.00		23.98		
VHT80	MCS0	2	58	5290	75.52	75.40	107.74	102.08	23.98		30.00		23.98		

TEST RESULTS DATA
Average Power Table

FCC U-NII-2A MIMO													
Mod.	Data Rate	N_{TX}	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	2	52	5260	18.50	18.30	21.41	23.98		2.60		30	Pass
11a	6Mbps	2	60	5300	18.60	18.50	21.56	23.98		2.60		30	Pass
11a	6Mbps	2	64	5320	18.60	18.50	21.56	23.98		2.60		30	Pass
HT20	MCS0	2	52	5260	18.50	18.30	21.41	23.98		2.60		30	Pass
HT20	MCS0	2	60	5300	18.70	18.40	21.56	23.98		2.60		30	Pass
HT20	MCS0	2	64	5320	18.70	18.50	21.61	23.98		2.60		30	Pass
HT40	MCS0	2	54	5270	18.50	18.10	21.31	23.98		2.60		30	Pass
HT40	MCS0	2	62	5310	14.90	14.70	17.81	23.98		2.60		30	Pass
VHT20	MCS0	2	52	5260	19.00	18.80	21.91	23.98		2.60		30	Pass
VHT20	MCS0	2	60	5300	19.00	19.00	22.01	23.98		2.60		30	Pass
VHT20	MCS0	2	64	5320	19.10	19.10	22.11	23.98		2.60		30	Pass
VHT40	MCS0	2	54	5270	18.80	18.60	21.71	23.98		2.60		30	Pass
VHT40	MCS0	2	62	5310	15.30	15.20	18.26	23.98		2.60		30	Pass
VHT80	MCS0	2	58	5290	14.50	14.20	17.36	23.98		2.60		30	Pass

TEST RESULTS DATA
Power Spectral Density

U-NII-2A MIMO															
Mod.	Data Rate	N_{TX}	CH.	Freq. (MHz)	Duty Factor (dB)		Average Power Density with Duty Factor (dBm/MHz)			Average PSD Limit (dBm/MHz)		DG (dBi)			Pass /Fail
					Ant 1	Ant 2	Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2		
11a	6Mbps	2	52	5260	0.24	0.24			10.50	11.00		5.61			Pass
11a	6Mbps	2	60	5300	0.24	0.24			10.62	11.00		5.61			Pass
11a	6Mbps	2	64	5320	0.24	0.24			10.69	11.00		5.61			Pass
VHT20	MCS0	2	52	5260	0.22	0.22			10.63	11.00		5.61			Pass
VHT20	MCS0	2	60	5300	0.22	0.22	-		10.80	11.00		5.61		-	Pass
VHT20	MCS0	2	64	5320	0.22	0.22			10.83	11.00		5.61			Pass
VHT40	MCS0	2	54	5270	0.24	0.22			8.18	11.00		5.61			Pass
VHT40	MCS0	2	62	5310	0.24	0.22			4.58	11.00		5.61			Pass
VHT80	MCS0	2	58	5290	0.24	0.24			0.65	11.00		5.61			Pass

TEST RESULTS DATA
26dB and 99% OBW

U-NII-2C MIMO																
Mod.	Data Rate	N_{TX}	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	2	100	5500	17.08	16.98	29.23	28.35	23.30		29.30		23.98		----	----
11a	6Mbps	2	116	5580	16.73	16.63	21.30	21.02	23.21		29.21		23.98		----	----
11a	6Mbps	2	140	5700	17.03	16.93	26.31	27.25	23.29		29.29		23.98		----	----
VHT20	MCS0	2	100	5500	18.28	18.08	30.60	28.32	23.57		29.57		23.98		----	----
VHT20	MCS0	2	116	5580	17.93	17.73	22.58	21.71	23.49		29.49		23.98		----	----
VHT20	MCS0	2	140	5700	18.13	18.03	28.01	27.83	23.56		29.56		23.98		----	----
VHT40	MCS0	2	102	5510	36.76	36.76	54.77	55.28	23.98		30.00		23.98		----	----
VHT40	MCS0	2	110	5550	36.76	36.66	54.58	51.09	23.98		30.00		23.98		----	----
VHT40	MCS0	2	134	5670	37.56	37.16	66.18	66.43	23.98		30.00		23.98		----	----
VHT80	MCS0	2	106	5530	75.40	75.28	106.62	105.70	23.98		30.00		23.98		----	----
VHT80	MCS0	2	122	5610	75.28	75.04	90.18	87.97	23.98		30.00		23.98		----	----

U-NII-2C straddle channel MIMO																
Mod.	Data Rate	N_{TX}	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	2	144	5720	13.39	13.29	15.92	15.59	22.24		28.24		22.93		3.15	3.16
VHT20	MCS0	2	144	5720	13.94	13.84	16.06	15.94	22.41		28.41		23.02		3.395	3.795
VHT40	MCS0	2	142	5710	33.68	33.48	49.83	49.72	23.98		30.00		23.98		2.55	2.55
VHT80	MCS0	2	138	5690	72.76	72.64	103.26	88.15	23.98		30.00		23.98		2.552	2.552

TEST RESULTS DATA
Average Power Table

FCC U-NII-2C MIMO													
Mod.	Data Rate	N_{TX}	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	2	100	5500	18.40	18.20	21.31	23.98		2.01		30	Pass
11a	6Mbps	2	116	5580	18.30	18.60	21.46	23.98		2.01		30	Pass
11a	6Mbps	2	140	5700	18.40	18.50	21.46	23.98		2.01		30	Pass
HT20	MCS0	2	100	5500	18.40	18.20	21.31	23.98		2.01		30	Pass
HT20	MCS0	2	116	5580	18.30	18.50	21.41	23.98		2.01		30	Pass
HT20	MCS0	2	140	5700	18.50	18.50	21.51	23.98		2.01		30	Pass
HT40	MCS0	2	102	5510	18.50	18.20	21.36	23.98		2.01		30	Pass
HT40	MCS0	2	110	5550	19.80	19.50	22.66	23.98		2.01		30	Pass
HT40	MCS0	2	134	5670	20.60	19.50	23.10	23.98		2.01		30	Pass
VHT20	MCS0	2	100	5500	18.80	18.80	21.81	23.98		2.01		30	Pass
VHT20	MCS0	2	116	5580	18.80	19.20	22.01	23.98		2.01		30	Pass
VHT20	MCS0	2	140	5700	19.00	19.00	22.01	23.98		2.01		30	Pass
VHT40	MCS0	2	102	5510	18.90	18.70	21.81	23.98		2.01		30	Pass
VHT40	MCS0	2	110	5550	20.10	20.10	23.11	23.98		2.01		30	Pass
VHT40	MCS0	2	134	5670	21.10	20.00	23.60	23.98		2.01		30	Pass
VHT80	MCS0	2	106	5530	16.10	15.90	19.01	23.98		2.01		30	Pass
VHT80	MCS0	2	122	5610	19.60	20.00	22.81	23.98		2.01		30	Pass

FCC U-NII-2C straddle channel MIMO													
Mod.	Data Rate	N_{TX}	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	2	144	5720	18.80	19.00	21.91	22.93		2.01		30	Pass
HT20	MCS0	2	144	5720	18.40	18.40	21.41	23.98		2.01		30	Pass
HT40	MCS0	2	142	5710	20.30	20.10	23.21	23.98		2.01		30	Pass
VHT20	MCS0	2	144	5720	18.80	19.00	21.91	23.02		2.01		30	Pass
VHT40	MCS0	2	142	5710	20.70	20.50	23.61	23.98		2.01		30	Pass
VHT80	MCS0	2	138	5690	21.20	20.20	23.74	23.98		2.01		30	Pass

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TEST RESULTS DATA
Power Spectral Density

U-NII-2C MIMO															
Mod.	Data Rate	N_{TX}	CH.	Freq. (MHz)	Duty Factor (dB)		Average Power Density with Duty Factor (dBm/MHz)			Average PSD Limit (dBm/MHz)		DG (dBi)			Pass /Fail
					Ant 1	Ant 2	Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2		
11a	6Mbps	2	100	5500	0.24	0.24			10.53	11.00		5.02			Pass
11a	6Mbps	2	116	5580	0.24	0.24			10.54	11.00		5.02			Pass
11a	6Mbps	2	140	5700	0.24	0.24			10.52	11.00		5.02			Pass
VHT20	MCS0	2	100	5500	0.22	0.22			10.76	11.00		5.02			Pass
VHT20	MCS0	2	116	5580	0.22	0.22			10.73	11.00		5.02			Pass
VHT20	MCS0	2	140	5700	0.22	0.22	-		10.80	11.00		5.02		-	Pass
VHT40	MCS0	2	102	5510	0.24	0.22			8.46	11.00		5.02			Pass
VHT40	MCS0	2	110	5550	0.24	0.22			9.45	11.00		5.02			Pass
VHT40	MCS0	2	134	5670	0.24	0.22			10.01	11.00		5.02			Pass
VHT80	MCS0	2	106	5530	0.24	0.24			2.55	11.00		5.02			Pass
VHT80	MCS0	2	122	5610	0.24	0.24			6.38	11.00		5.02			Pass

U-NII-2C straddle channel MIMO															
Mod.	Data Rate	N_{TX}	CH.	Freq. (MHz)	Duty Factor (dB)		Average Power Density (dBm/MHz)			Average PSD Limit (dBm/MHz)		DG (dBi)			Pass /Fail
					Ant 1	Ant 2	Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2		
11a	6Mbps	2	144	5720	0.24	0.24			10.90	11.00		5.02			Pass
VHT20	MCS0	2	144	5720	0.22	0.22	-		10.51	11.00		5.02		-	Pass
VHT40	MCS0	2	142	5710	0.24	0.22			10.03	11.00		5.02			Pass
VHT80	MCS0	2	138	5690	0.24	0.24			7.26	11.00		5.02			Pass

TEST RESULTS DATA
26dB and 99% OBW

U-NII-1 MIMO															
Mod.	Data Rate	N_{TX}	CH.	Freq. (MHz)	RU Config.	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		
HE20	MCS0	2	36	5180	Full	19.23	19.23	31.25	27.92	-		22.84		-	-
HE20	MCS0	2	44	5220	Full	19.43	19.43	39.18	30.25	-		22.88			
HE20	MCS0	2	48	5240	Full	27.52	27.22	49.26	47.12	-		23.01			
HE40	MCS0	2	38	5190	Full	37.96	38.06	51.44	51.95	-		23.01			
HE40	MCS0	2	46	5230	Full	37.96	37.96	40.90	44.30	-		23.01			
HE80	MCS0	2	42	5210	Full	77.08	77.08	90.43	107.74	-		23.01			

TEST RESULTS DATA
Average Power Table

FCC U-NII-1 MIMO														
Mod.	Data Rate	N_{TX}	CH.	Freq. (MHz)	RU Config.	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		
HE20	MCS0	2	36	5180	Full	18.70	18.50	21.61	30.00		3.27		-	Pass
HE20	MCS0	2	40	5200	Full	20.60	20.50	23.56	30.00		3.27			Pass
HE20	MCS0	2	44	5220	Full	22.00	21.90	24.96	30.00		3.27			Pass
HE20	MCS0	2	48	5240	Full	23.80	23.90	26.86	30.00		3.27			Pass
HE40	MCS0	2	38	5190	Full	17.90	17.70	20.81	30.00		3.27			Pass
HE40	MCS0	2	46	5230	Full	19.30	19.20	22.26	30.00		3.27			Pass
HE80	MCS0	2	42	5210	Full	15.60	15.40	18.51	30.00		3.27			Pass

TEST RESULTS DATA
Power Spectral Density

FCC U-NII-1 MIMO																
Mod.	Data Rate	N_{TX}	CH.	Freq. (MHz)	RU Config.	Duty Factor (dB)		Average Power Density with Duty Factor (dBm/MHz)			Average PSD Limit (dBm/MHz)		DG (dBi)			Pass /Fail
						Ant 1	Ant 2	Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2		
HE20	MCS0	2	36	5180	Full	0.27	0.27			10.25	16.72		6.28			Pass
HE20	MCS0	2	40	5200	Full	0.27	0.27			12.12	16.72		6.28			Pass
HE20	MCS0	2	44	5220	Full	0.27	0.27			13.45	16.72		6.28			Pass
HE20	MCS0	2	48	5240	Full	0.27	0.27	-		15.29	16.72		6.28		-	Pass
HE40	MCS0	2	38	5190	Full	0.25	0.25			7.22	16.72		6.28			Pass
HE40	MCS0	2	46	5230	Full	0.25	0.25			8.42	16.72		6.28			Pass
HE80	MCS0	2	42	5210	Full	0.25	0.25			1.95	16.72		6.28			Pass

TEST RESULTS DATA
26dB and 99% OBW

U-NII-2A MIMO																
Mod.	Data Rate	N_{TX}	CH.	Freq. (MHz)	RU Config.	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	
HE20	MCS0	2	52	5260	Full	19.08	19.03	22.63	21.92	23.79		29.79		23.98		
HE20	MCS0	2	60	5300	Full	19.33	19.28	30.64	27.61	23.85		29.85		23.98		
HE20	MCS0	2	64	5320	Full	19.23	19.23	28.21	27.28	23.84		29.84		23.98		
HE40	MCS0	2	54	5270	Full	37.96	37.86	40.45	40.43	23.98		30.00		23.98		
HE40	MCS0	2	62	5310	Full	38.06	38.16	56.38	56.27	23.98		30.00		23.98		
HE80	MCS0	2	58	5290	Full	77.08	77.20	98.78	98.78	23.98		30.00		23.98		

TEST RESULTS DATA
Average Power Table

FCC U-NII-2A MIMO														
Mod.	Data Rate	N_{TX}	CH.	Freq. (MHz)	RU Config.	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		
HE20	MCS0	2	52	5260	Full	19.20	19.00	22.11	23.98		2.60		30	Pass
HE20	MCS0	2	60	5300	Full	19.20	19.20	22.21	23.98		2.60		30	Pass
HE20	MCS0	2	64	5320	Full	18.20	18.20	21.21	23.98		2.60		30	Pass
HE40	MCS0	2	54	5270	Full	19.30	19.00	22.16	23.98		2.60		30	Pass
HE40	MCS0	2	62	5310	Full	17.10	16.90	20.01	23.98		2.60		30	Pass
HE80	MCS0	2	58	5290	Full	13.80	13.50	16.66	23.98		2.60		30	Pass

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TEST RESULTS DATA
Power Spectral Density

U-NII-2A MIMO																
Mod.	Data Rate	N_{TX}	CH.	Freq. (MHz)	RU Config.	Duty Factor (dB)		Average Power Density with Duty Factor (dBm/MHz)			Average PSD Limit (dBm/MHz)		DG (dBi)			Pass /Fail
						Ant 1	Ant 2	Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2		
HE20	MCS0	2	52	5260	Full	0.27	0.27	-		10.57	11.00		5.61		-	Pass
HE20	MCS0	2	60	5300	Full	0.27	0.27			10.68	11.00		5.61			Pass
HE20	MCS0	2	64	5320	Full	0.27	0.27			9.82	11.00		5.61			Pass
HE40	MCS0	2	54	5270	Full	0.25	0.25			8.29	11.00		5.61			Pass
HE40	MCS0	2	62	5310	Full	0.25	0.25			6.12	11.00		5.61			Pass
HE80	MCS0	2	58	5290	Full	0.25	0.25			-0.15	11.00		5.61			Pass

TEST RESULTS DATA
26dB and 99% OBW

U-NII-2C MIMO																	
Mod.	Data Rate	N_{TX}	CH.	Freq. (MHz)	RU Config.	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
HE20	MCS0	2	100	5500	Full	19.23	19.23	31.13	30.09	23.84		29.84		23.98		----	----
HE20	MCS0	2	116	5580	Full	19.08	19.03	22.28	21.83	23.79		29.79		23.98		----	----
HE20	MCS0	2	140	5700	Full	19.18	19.23	28.45	30.59	23.83		29.83		23.98		----	----
HE40	MCS0	2	102	5510	Full	38.06	38.06	54.94	53.87	23.98		30.00		23.98		----	----
HE40	MCS0	2	110	5550	Full	38.06	38.16	56.14	54.30	23.98		30.00		23.98		----	----
HE40	MCS0	2	134	5670	Full	38.26	38.16	63.42	54.32	23.98		30.00		23.98		----	----
HE80	MCS0	2	106	5530	Full	77.20	77.20	90.66	97.28	23.98		30.00		23.98		----	----
HE80	MCS0	2	122	5610	Full	76.96	76.96	80.29	80.61	23.98		30.00		23.98		----	----

U-NII-2C straddle channel MIMO																	
Mod.	Data Rate	N_{TX}	CH.	Freq. (MHz)	RU Config.	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
HE20	MCS0	2	144	5720	Full	14.54	14.54	17.29	17.93	22.63		28.63		23.38		4.42	4.275
HE40	MCS0	2	142	5710	Full	33.98	33.98	35.13	44.25	23.98		30.00		23.98		3.567	2.559
HE80	MCS0	2	138	5690	Full	73.60	73.48	90.90	90.01	23.98		30.00		23.98		2.504	2.568

TEST RESULTS DATA
Average Power Table

FCC U-NII-2C MIMO														
Mod.	Data Rate	N_{TX}	CH.	Freq. (MHz)	RU Config.	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		
HE20	MCS0	2	100	5500	Full	19.10	19.00	22.06	23.98		2.01		30	Pass
HE20	MCS0	2	116	5580	Full	19.00	19.30	22.16	23.98		2.01		30	Pass
HE20	MCS0	2	140	5700	Full	19.10	19.30	22.21	23.98		2.01		30	Pass
HE40	MCS0	2	102	5510	Full	19.30	19.10	22.21	23.98		2.01		30	Pass
HE40	MCS0	2	110	5550	Full	21.00	20.80	23.91	23.98		2.01		30	Pass
HE40	MCS0	2	134	5670	Full	20.90	19.90	23.44	23.98		2.01		30	Pass
HE80	MCS0	2	106	5530	Full	16.40	16.10	19.26	23.98		2.01		30	Pass
HE80	MCS0	2	122	5610	Full	19.50	19.70	22.61	23.98		2.01		30	Pass

FCC U-NII-2C straddle channel MIMO														
Mod.	Data Rate	N_{TX}	CH.	Freq. (MHz)	RU Config.	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		
HE20	MCS0	2	144	5720	Full	19.50	19.70	22.61	23.38		2.01		30	Pass
HE40	MCS0	2	142	5710	Full	20.60	20.60	23.61	23.98		2.01		30	Pass
HE80	MCS0	2	138	5690	Full	21.30	20.40	23.88	23.98		2.01		30	Pass

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TEST RESULTS DATA
Power Spectral Density

U-NII-2C MIMO																
Mod.	Data Rate	N_{TX}	CH.	Freq. (MHz)	RU Config.	Duty Factor (dB)		Average Power Density with Duty Factor (dBm/MHz)			Average PSD Limit (dBm/MHz)		DG (dBi)			Pass /Fail
						Ant 1	Ant 2	Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2		
HE20	MCS0	2	100	5500	Full	0.27	0.27	-		10.70	11.00		5.02		-	Pass
HE20	MCS0	2	116	5580	Full	0.27	0.27			10.66	11.00		5.02			Pass
HE20	MCS0	2	140	5700	Full	0.27	0.27			10.68	11.00		5.02			Pass
HE40	MCS0	2	102	5510	Full	0.25	0.25			8.69	11.00		5.02			Pass
HE40	MCS0	2	110	5550	Full	0.25	0.25			10.04	11.00		5.02			Pass
HE40	MCS0	2	134	5670	Full	0.25	0.25			9.55	11.00		5.02			Pass
HE80	MCS0	2	106	5530	Full	0.25	0.25			2.73	11.00		5.02			Pass
HE80	MCS0	2	122	5610	Full	0.25	0.25			6.13	11.00		5.02			Pass

U-NII-2C straddle channel MIMO																
Mod.	Data Rate	N_{TX}	CH.	Freq. (MHz)	RU Config.	Duty Factor (dB)		Average Power Density (dBm/MHz)			Average PSD Limit (dBm/MHz)		DG (dBi)			Pass /Fail
						Ant 1	Ant 2	Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2		
HE20	MCS0	2	144	5720	Full	0.27	0.27	-		10.96	11.00		5.02		-	Pass
HE40	MCS0	2	142	5710	Full	0.25	0.25			9.69	11.00		5.02			Pass
HE80	MCS0	2	138	5690	Full	0.25	0.25			7.26	11.00		5.02			Pass

<TXBF Mode>

TEST RESULTS DATA
Average Power Table

FCC U-NII-1 MIMO													
Mod.	Data Rate	N_{TX}	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		
HT20	MCS0	2	36	5180	18.40	18.20	21.31	29.72		6.28		-	Pass
HT20	MCS0	2	44	5220	21.40	21.20	24.31	29.72		6.28			Pass
HT20	MCS0	2	48	5240	23.00	23.10	26.06	29.72		6.28			Pass
HT40	MCS0	2	38	5190	17.70	17.30	20.51	29.72		6.28			Pass
HT40	MCS0	2	46	5230	19.40	19.20	22.31	29.72		6.28			Pass
VHT20	MCS0	2	36	5180	19.00	18.60	21.81	29.72		6.28			Pass
VHT20	MCS0	2	44	5220	21.80	21.60	24.71	29.72		6.28			Pass
VHT20	MCS0	2	48	5240	23.60	23.60	26.61	29.72		6.28			Pass
VHT40	MCS0	2	38	5190	17.80	17.60	20.71	29.72		6.28			Pass
VHT40	MCS0	2	46	5230	19.70	19.50	22.61	29.72		6.28			Pass
VHT80	MCS0	2	42	5210	14.80	14.50	17.66	29.72		6.28			Pass

Report Number : FR452223C

TEST RESULTS DATA
Average Power Table

FCC U-NII-2A MIMO													
Mod.	Data Rate	N_{TX}	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		
HT20	MCS0	2	52	5260	18.40	18.20	21.31	23.98		5.61		30	Pass
HT20	MCS0	2	60	5300	18.60	18.20	21.41	23.98		5.61		30	Pass
HT20	MCS0	2	64	5320	18.60	18.40	21.51	23.98		5.61		30	Pass
HT40	MCS0	2	54	5270	18.40	18.00	21.21	23.98		5.61		30	Pass
HT40	MCS0	2	62	5310	14.80	14.50	17.66	23.98		5.61		30	Pass
VHT20	MCS0	2	52	5260	18.90	18.60	21.76	23.98		5.61		30	Pass
VHT20	MCS0	2	60	5300	18.90	18.90	21.91	23.98		5.61		30	Pass
VHT20	MCS0	2	64	5320	19.00	18.90	21.96	23.98		5.61		30	Pass
VHT40	MCS0	2	54	5270	18.70	18.40	21.56	23.98		5.61		30	Pass
VHT40	MCS0	2	62	5310	15.20	15.00	18.11	23.98		5.61		30	Pass
VHT80	MCS0	2	58	5290	14.30	14.00	17.16	23.98		5.61		30	Pass

Report Number : FR452223C

TEST RESULTS DATA
Average Power Table

FCC U-NII-2C MIMO													
Mod.	Data Rate	N_{TX}	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		
HT20	MCS0	2	100	5500	18.30	18.00	21.16	23.98		5.02		30	Pass
HT20	MCS0	2	116	5580	18.20	18.40	21.31	23.98		5.02		30	Pass
HT20	MCS0	2	140	5700	18.40	18.40	21.41	23.98		5.02		30	Pass
HT40	MCS0	2	102	5510	18.40	18.10	21.26	23.98		5.02		30	Pass
HT40	MCS0	2	110	5550	19.70	19.40	22.56	23.98		5.02		30	Pass
HT40	MCS0	2	134	5670	20.50	19.30	22.95	23.98		5.02		30	Pass
VHT20	MCS0	2	100	5500	18.70	18.60	21.66	23.98		5.02		30	Pass
VHT20	MCS0	2	116	5580	18.70	19.00	21.86	23.98		5.02		30	Pass
VHT20	MCS0	2	140	5700	18.90	18.80	21.86	23.98		5.02		30	Pass
VHT40	MCS0	2	102	5510	18.80	18.50	21.66	23.98		5.02		30	Pass
VHT40	MCS0	2	110	5550	20.00	19.90	22.96	23.98		5.02		30	Pass
VHT40	MCS0	2	134	5670	21.00	19.80	23.45	23.98		5.02		30	Pass
VHT80	MCS0	2	106	5530	15.90	15.70	18.81	23.98		5.02		30	Pass
VHT80	MCS0	2	122	5610	19.50	19.80	22.66	23.98		5.02		30	Pass

FCC U-NII-2C straddle channel MIMO													
Mod.	Data Rate	N_{TX}	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		
HT20	MCS0	2	144	5720	18.30	18.20	21.26	23.98		5.02		30	Pass
HT40	MCS0	2	142	5710	20.20	19.90	23.06	23.98		5.02		30	Pass
VHT20	MCS0	2	144	5720	18.70	18.80	21.76	23.02		5.02		30	Pass
VHT40	MCS0	2	142	5710	20.60	20.30	23.46	23.98		5.02		30	Pass
VHT80	MCS0	2	138	5690	21.00	20.00	23.54	23.98		5.02		30	Pass

TEST RESULTS DATA
Average Power Table

FCC U-NII-1 MIMO														
Mod.	Data Rate	N_{TX}	CH.	Freq. (MHz)	RU Config.	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		
HE20	MCS0	2	36	5180	Full	18.60	18.40	21.51	29.72		6.28		-	Pass
HE20	MCS0	2	40	5200	Full	20.50	20.40	23.46	29.72		6.28			Pass
HE20	MCS0	2	44	5220	Full	21.90	21.80	24.86	29.72		6.28			Pass
HE20	MCS0	2	48	5240	Full	23.70	23.80	26.76	29.72		6.28			Pass
HE40	MCS0	2	38	5190	Full	17.80	17.60	20.71	29.72		6.28			Pass
HE40	MCS0	2	46	5230	Full	19.20	19.10	22.16	29.72		6.28			Pass
HE80	MCS0	2	42	5210	Full	15.50	15.30	18.41	29.72		6.28			Pass

Report Number : FR452223C

TEST RESULTS DATA
Average Power Table

FCC U-NII-2A MIMO														
Mod.	Data Rate	N_{TX}	CH.	Freq. (MHz)	RU Config.	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		
HE20	MCS0	2	52	5260	Full	19.10	18.90	22.01	23.98		5.61		30	Pass
HE20	MCS0	2	60	5300	Full	19.10	19.10	22.11	23.98		5.61		30	Pass
HE20	MCS0	2	64	5320	Full	18.10	18.10	21.11	23.98		5.61		30	Pass
HE40	MCS0	2	54	5270	Full	19.20	18.90	22.06	23.98		5.61		30	Pass
HE40	MCS0	2	62	5310	Full	17.00	16.80	19.91	23.98		5.61		30	Pass
HE80	MCS0	2	58	5290	Full	13.70	13.40	16.56	23.98		5.61		30	Pass

Report Number : FR452223C

TEST RESULTS DATA
Average Power Table

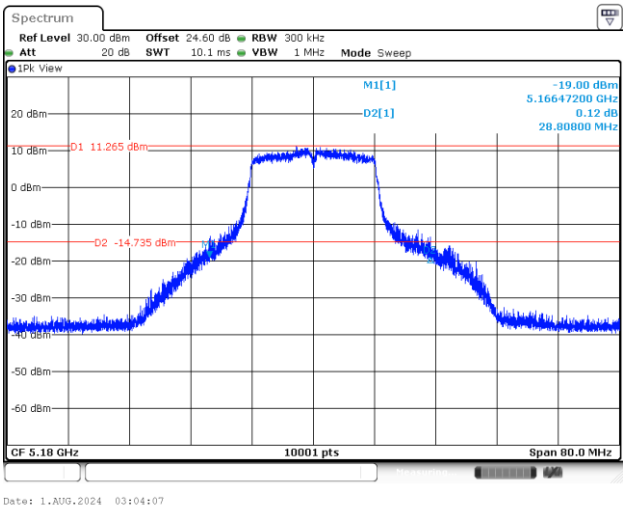
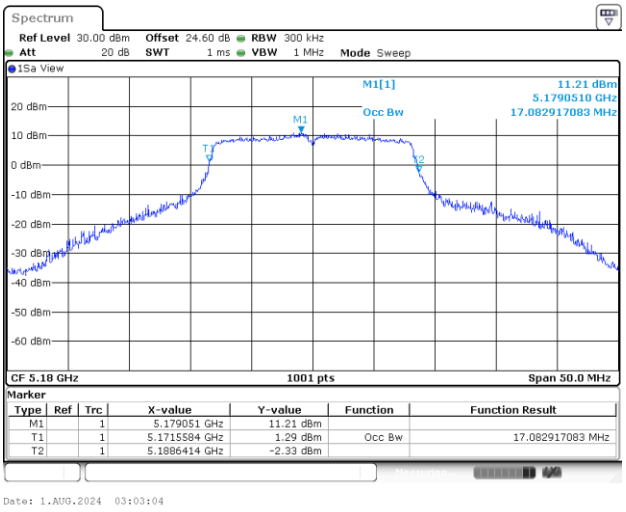
FCC U-NII-2C MIMO														
Mod.	Data Rate	N_{TX}	CH.	Freq. (MHz)	RU Config.	Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)		EIRP Power Limit (dBm)	Pass/Fail
						Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2		
HE20	MCS0	2	100	5500	Full	19.00	18.90	21.96	23.98		5.02		30	Pass
HE20	MCS0	2	116	5580	Full	18.90	19.20	22.06	23.98		5.02		30	Pass
HE20	MCS0	2	140	5700	Full	19.00	19.20	22.11	23.98		5.02		30	Pass
HE40	MCS0	2	102	5510	Full	19.20	19.00	22.11	23.98		5.02		30	Pass
HE40	MCS0	2	110	5550	Full	20.90	20.70	23.81	23.98		5.02		30	Pass
HE40	MCS0	2	134	5670	Full	20.80	19.80	23.34	23.98		5.02		30	Pass
HE80	MCS0	2	106	5530	Full	16.30	15.90	19.11	23.98		5.02		30	Pass
HE80	MCS0	2	122	5610	Full	19.40	19.60	22.51	23.98		5.02		30	Pass

FCC U-NII-2C straddle channel MIMO														
Mod.	Data Rate	N_{TX}	CH.	Freq. (MHz)	RU Config.	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		
HE20	MCS0	2	144	5720	Full	19.40	19.60	22.51	23.38		5.02		30	Pass
HE40	MCS0	2	142	5710	Full	20.50	20.50	23.51	23.98		5.02		30	Pass
HE80	MCS0	2	138	5690	Full	21.20	20.30	23.78	23.98		5.02		30	Pass

Test Result of 26dB & 99% Occupied Bandwidth

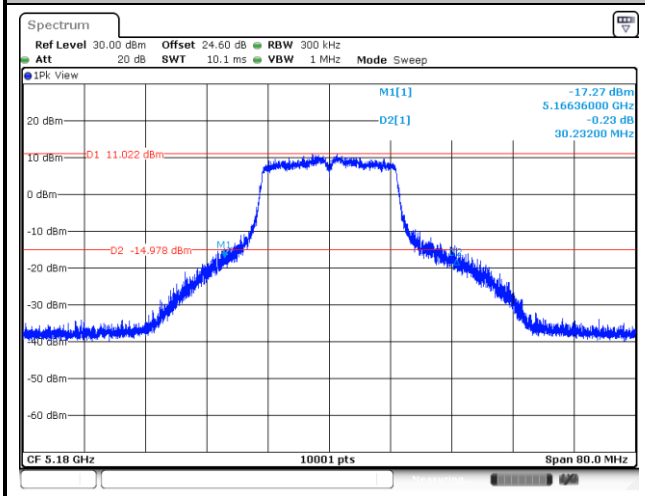
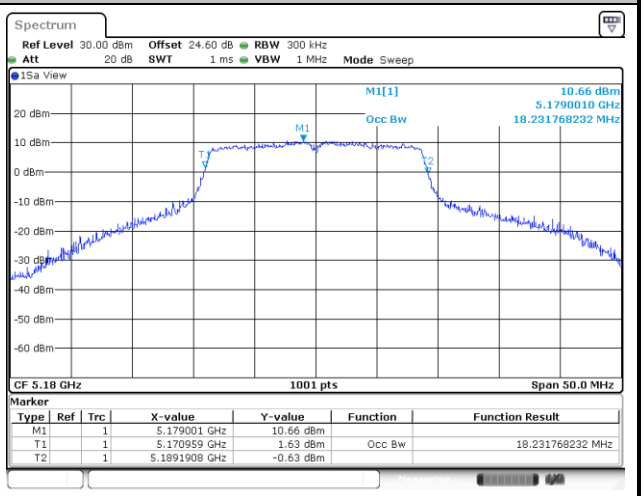
MIMO <Ant. 1+2>

<802.11a>

26dB Bandwidth	99% Occupied Bandwidth
	

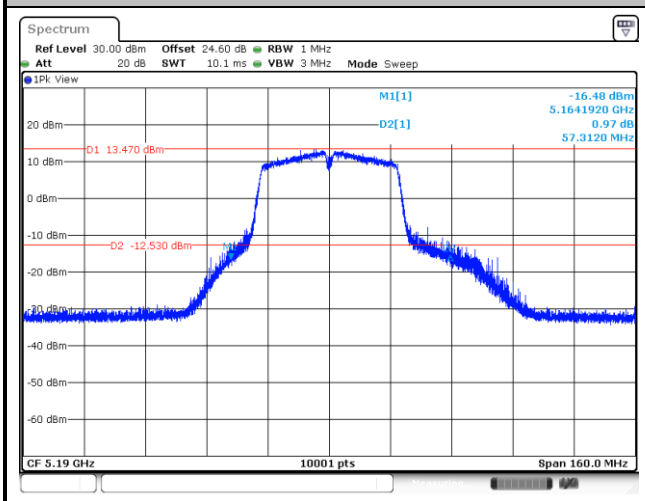
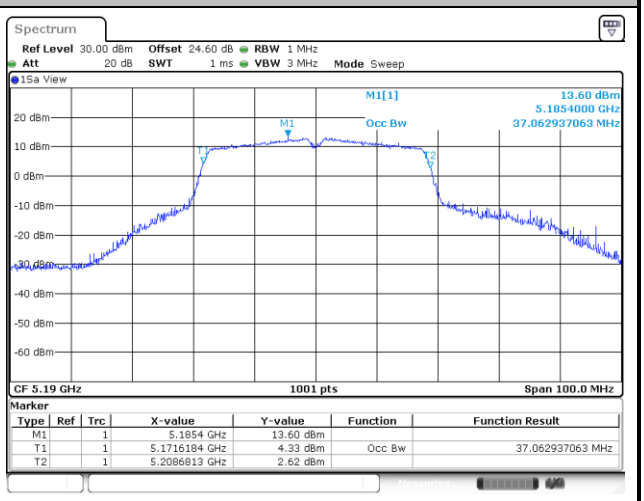
Note: The occupied channel bandwidth is maintained within the band of operation for all of the modulations.

<802.11ac VHT20>

26dB Bandwidth	99% Occupied Bandwidth
	

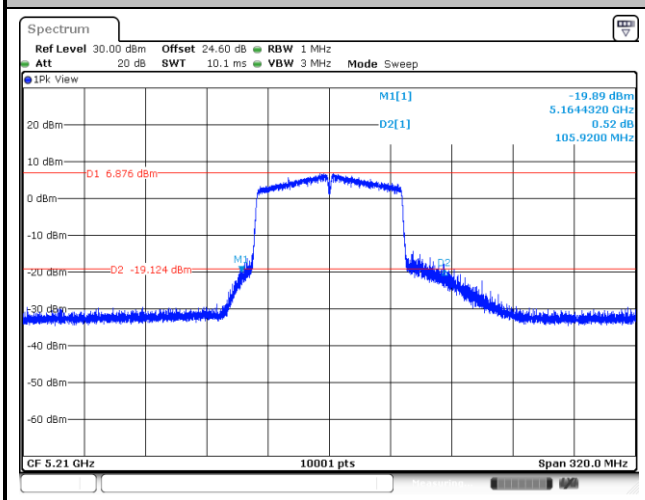
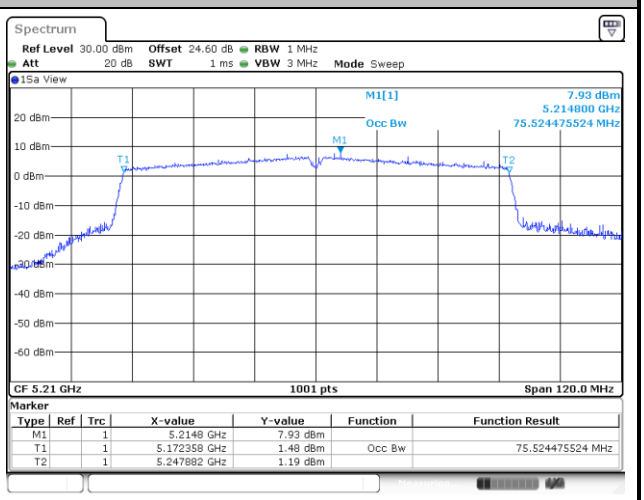
Note: The occupied channel bandwidth is maintained within the band of operation for all of the modulations.

<802.11ac VHT40>

26dB Bandwidth	99% Occupied Bandwidth
	

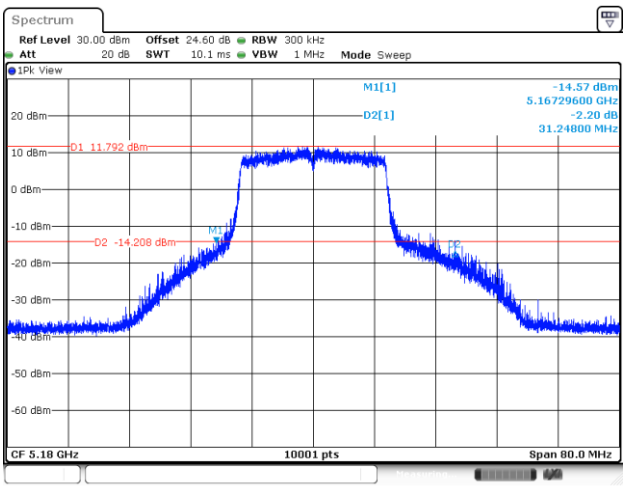
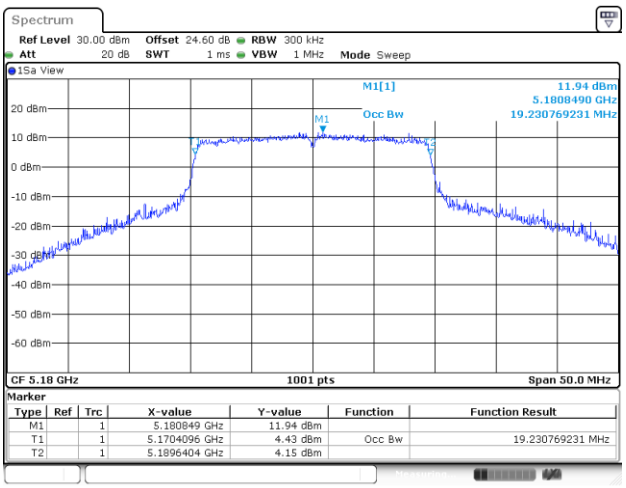
Note: The occupied channel bandwidth is maintained within the band of operation for all of the modulations.

<802.11ac VHT80>

26dB Bandwidth	99% Occupied Bandwidth
	

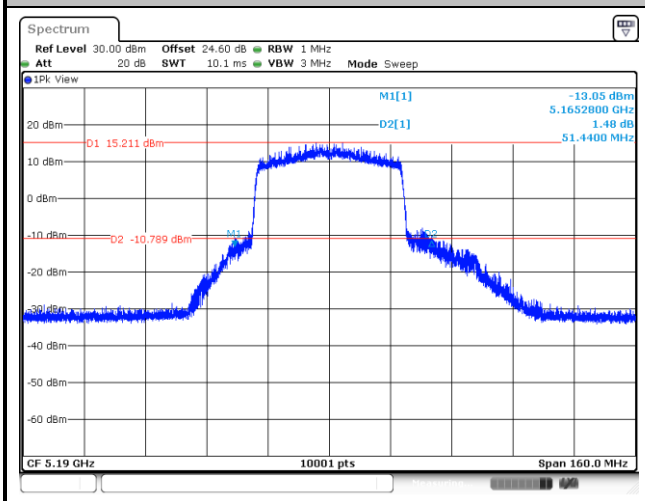
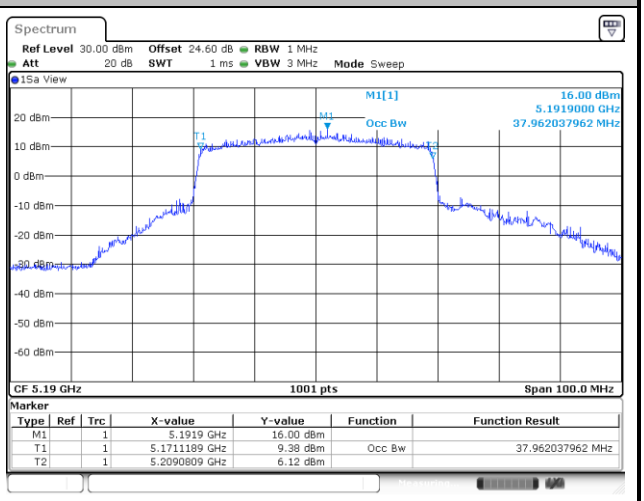
Note: The occupied channel bandwidth is maintained within the band of operation for all of the modulations.

<802.11ax HE20>

26dB Bandwidth	99% Occupied Bandwidth
	

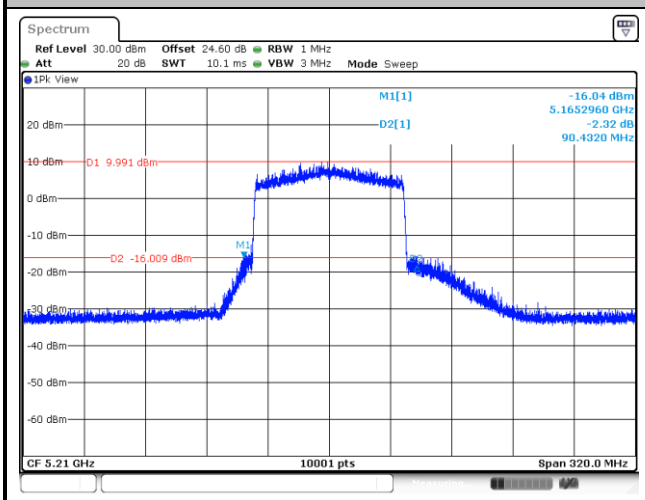
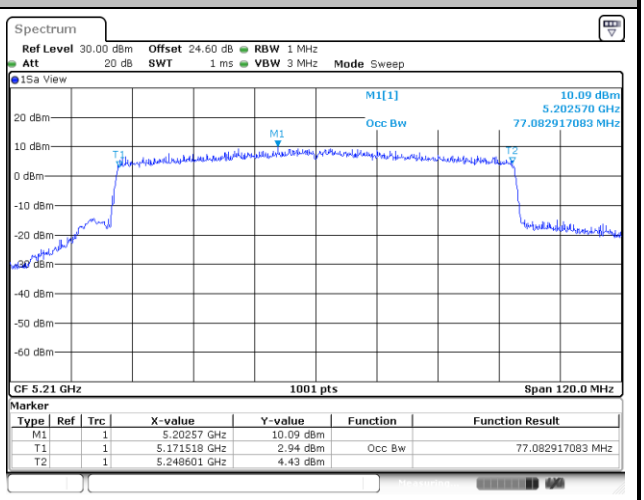
Note: The occupied channel bandwidth is maintained within the band of operation for all of the modulations.

<802.11ax HE40>

26dB Bandwidth	99% Occupied Bandwidth
	

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

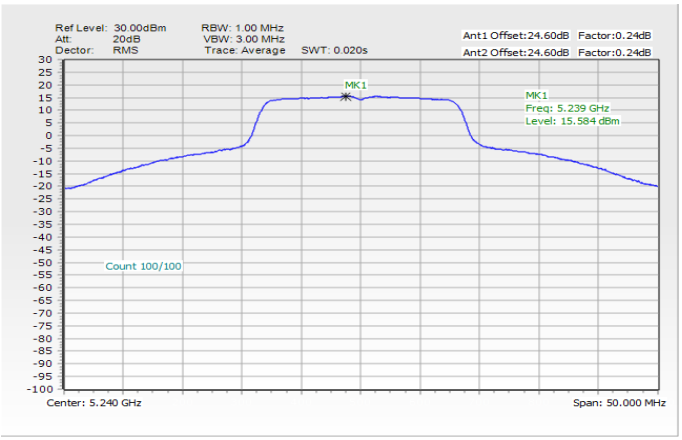
<802.11ax HE80>

26dB Bandwidth	99% Occupied Bandwidth
	

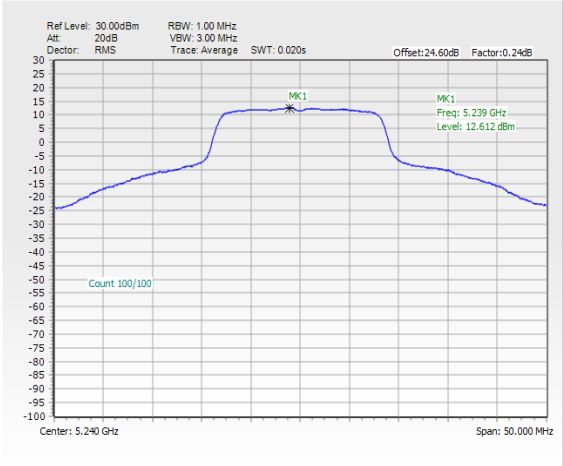
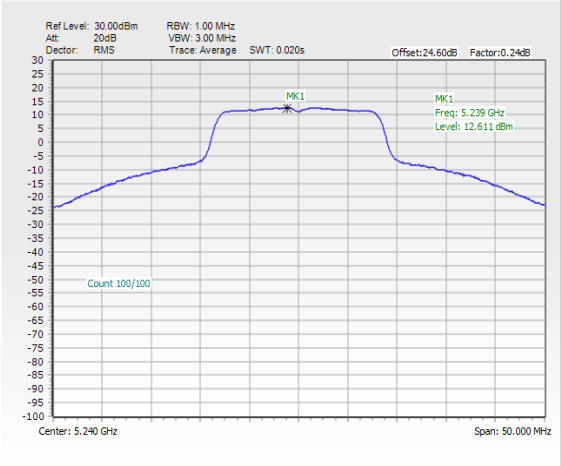
Note: The occupied channel bandwidth is maintained within the band of operation for all of the modulations.

Test Result of Power Spectral Density

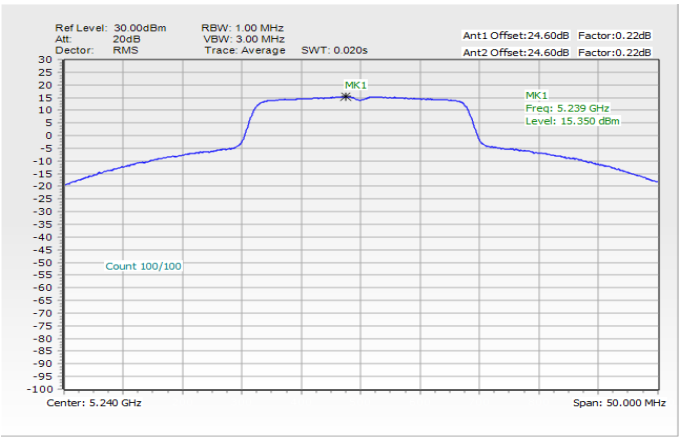
<802.11a>

Maximum Power Density Plot (dBm/MHz)


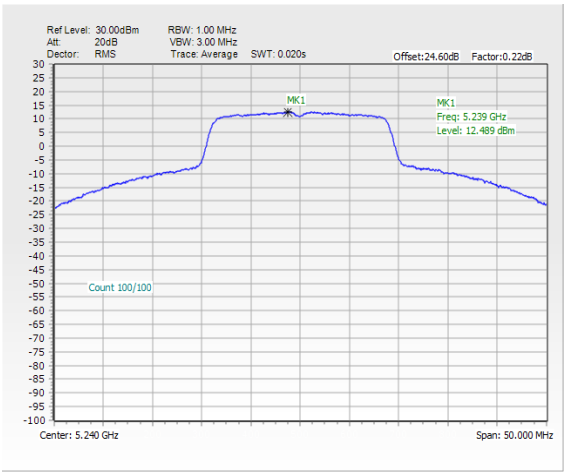
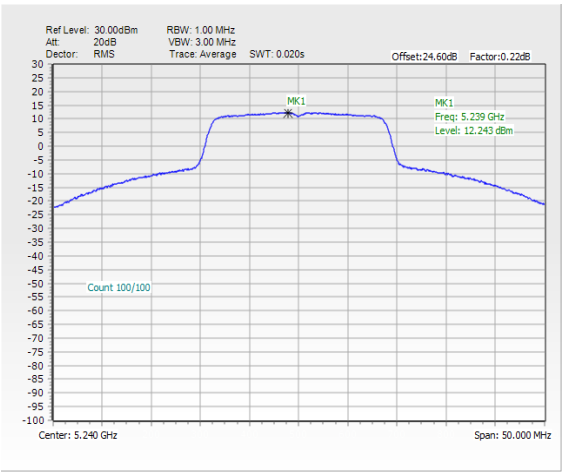
Remark: The test plot is showing a bin by bin combined result mathematically adds two traces.

Maximum Power Density Plot Trace 1 (Ant 1)	Maximum Power Density Plot Trace 2 (Ant 2)
	

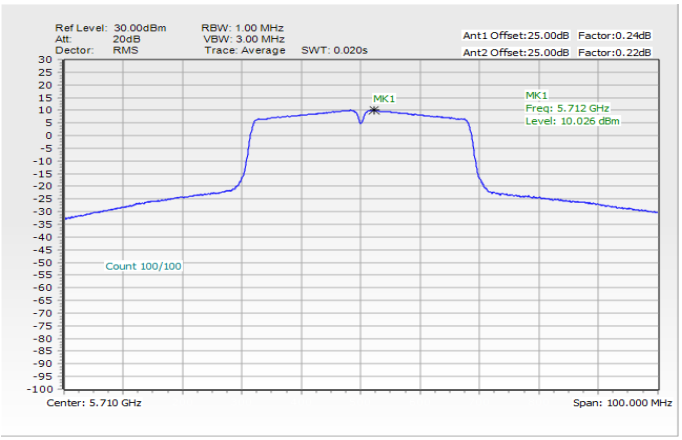
<802.11ac VHT20>

Maximum Power Density Plot (dBm/MHz)


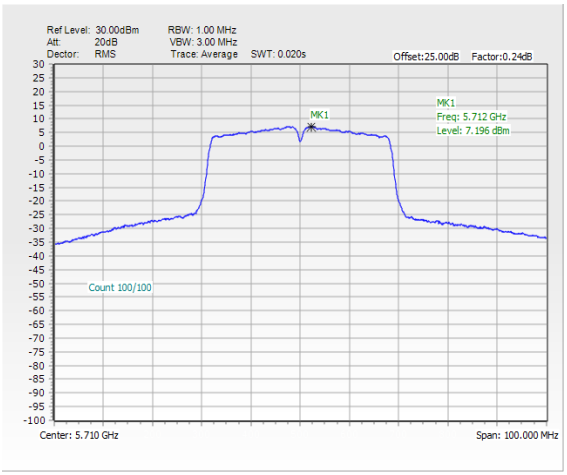
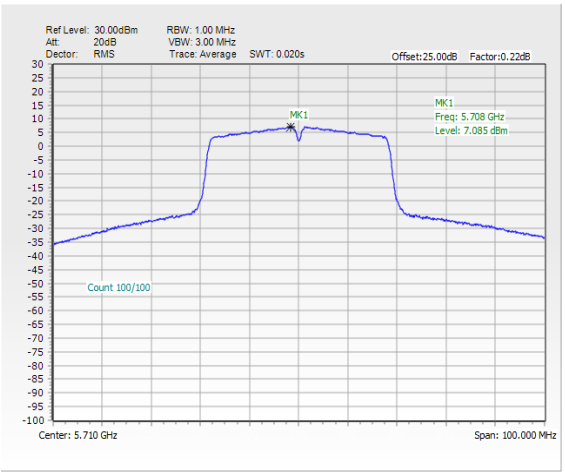
Remark: The test plot is showing a bin by bin combined result mathematically adds two traces.

Maximum Power Density Plot Trace 1 (Ant 1)	Maximum Power Density Plot Trace 2 (Ant 2)
	

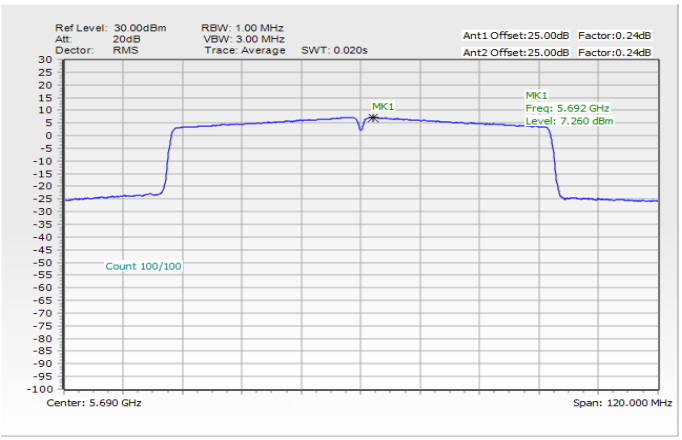
<802.11ac VHT40>

Maximum Power Density Plot (dBm/MHz)


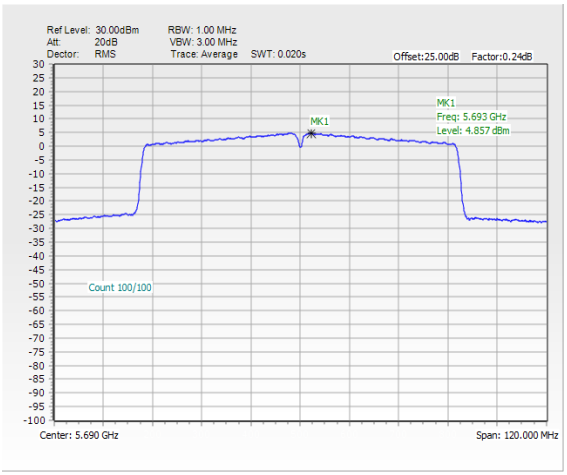
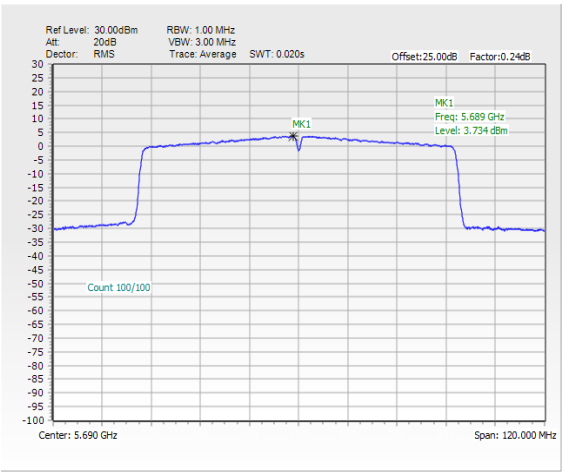
Remark: The test plot is showing a bin by bin combined result mathematically adds two traces.

Maximum Power Density Plot Trace 1 (Ant 1)	Maximum Power Density Plot Trace 2 (Ant 2)
	

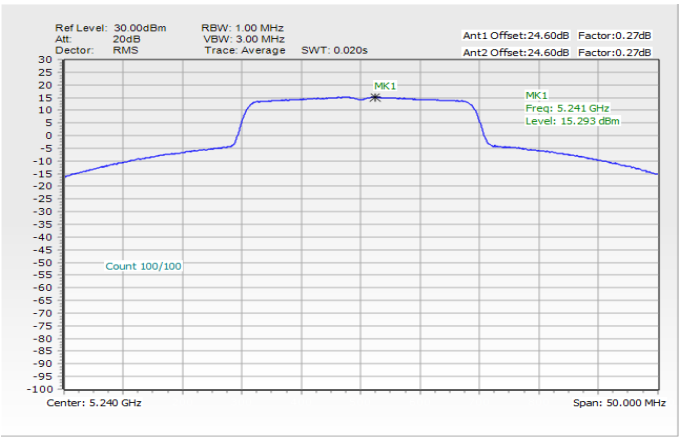
<802.11ac VHT80>

Maximum Power Density Plot (dBm/MHz)


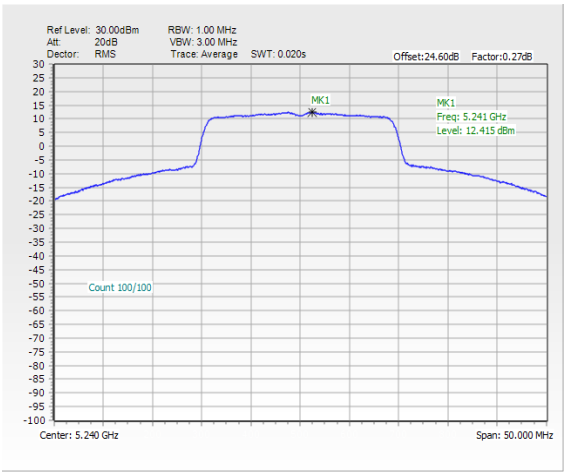
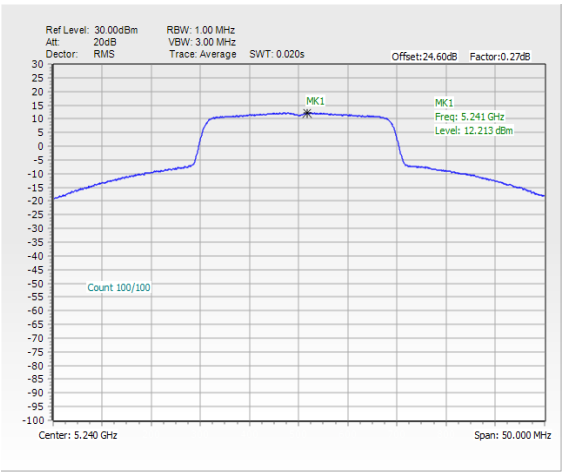
Remark: The test plot is showing a bin by bin combined result mathematically adds two traces.

Maximum Power Density Plot Trace 1 (Ant 1)	Maximum Power Density Plot Trace 2 (Ant 2)
	

<802.11ax HE20>

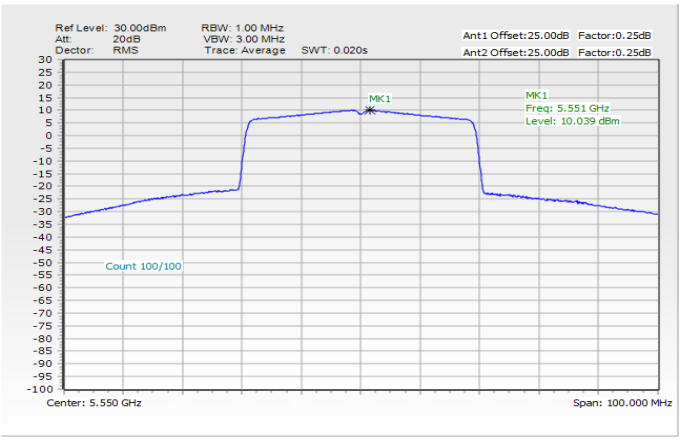
Maximum Power Density Plot (dBm/MHz)


Remark: The test plot is showing a bin by bin combined result mathematically adds two traces.

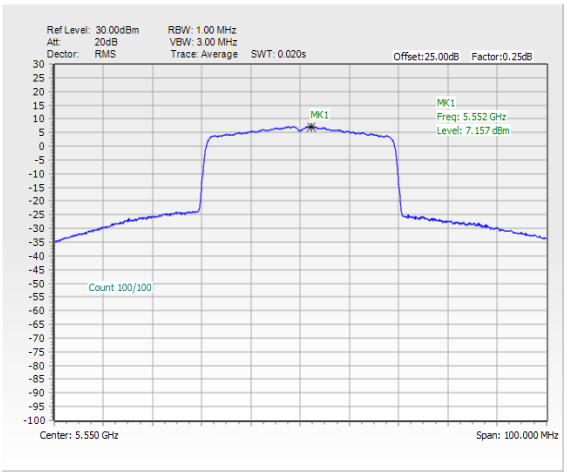
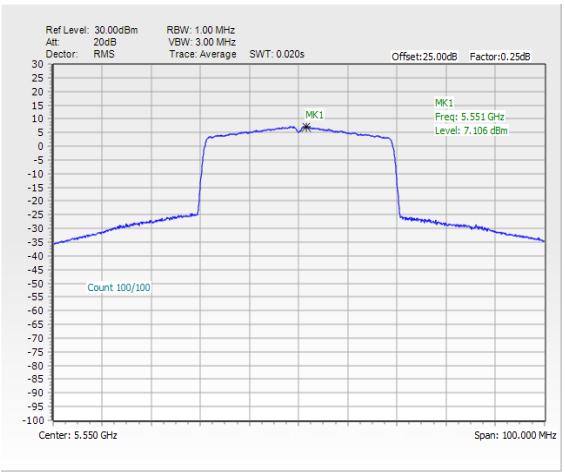
Maximum Power Density Plot Trace 1 (Ant 1)	Maximum Power Density Plot Trace 2 (Ant 2)
	

<802.11ax HE40>

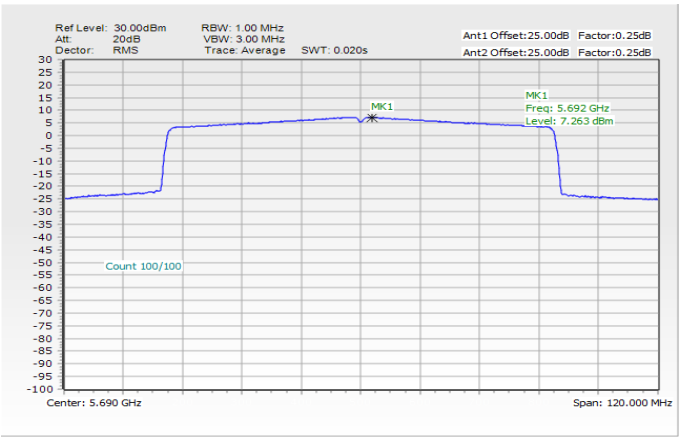
Maximum Power Density Plot (dBm/MHz)



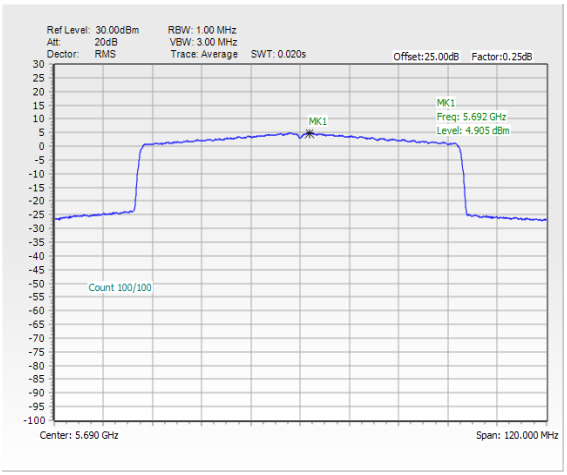
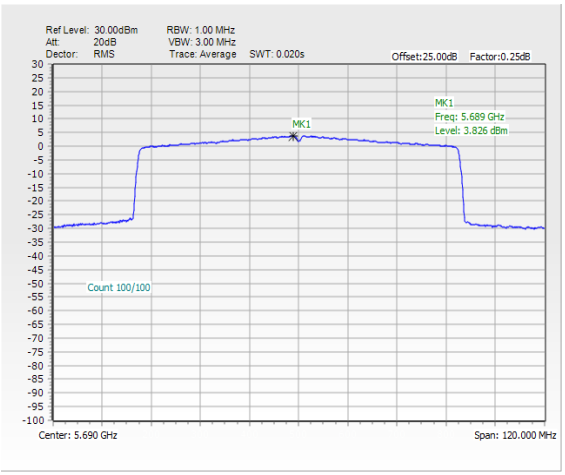
Remark: The test plot is showing a bin by bin combined result mathematically adds two traces.

Maximum Power Density Plot Trace 1 (Ant 1)	Maximum Power Density Plot Trace 2 (Ant 2)
	

<802.11ax HE80>

Maximum Power Density Plot (dBm/MHz)


Remark: The test plot is showing a bin by bin combined result mathematically adds two traces.

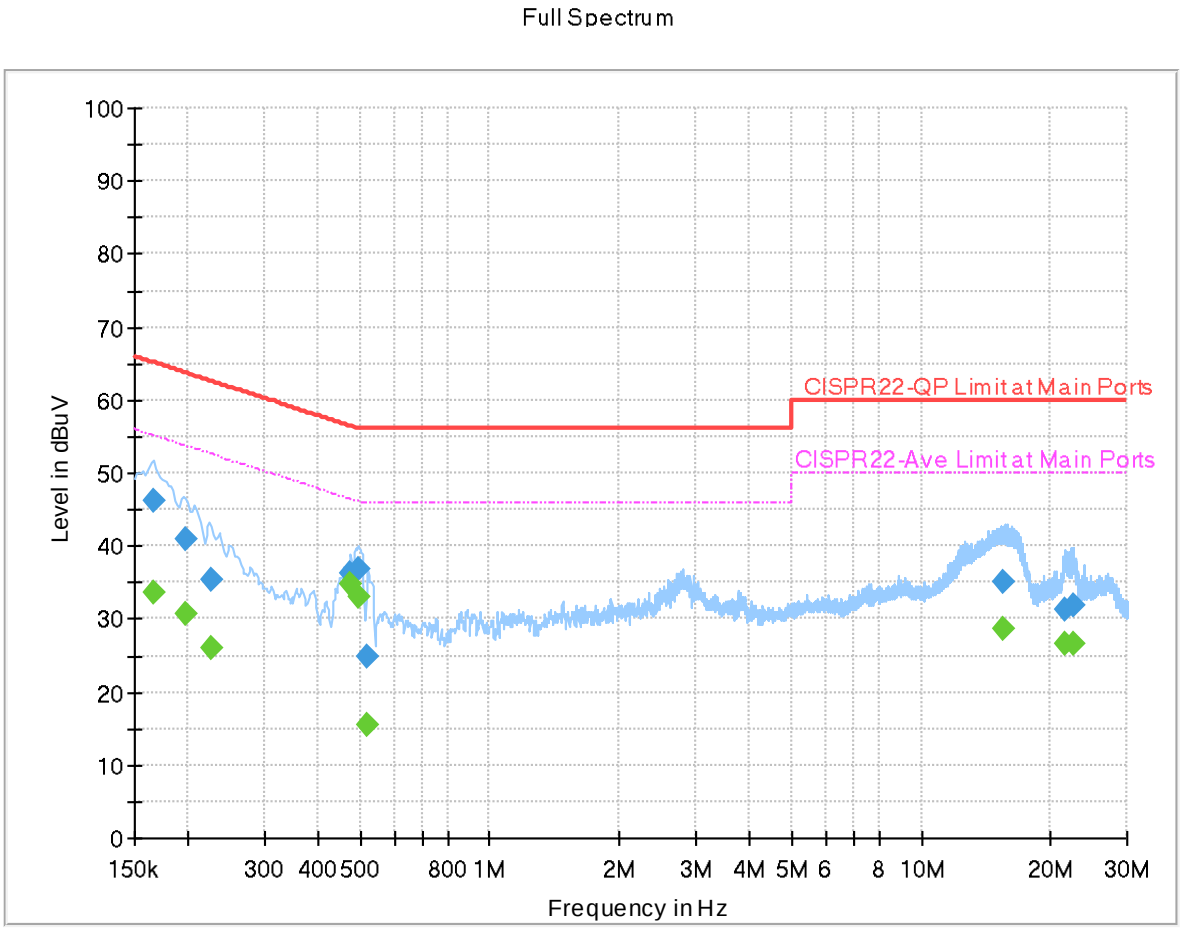
Maximum Power Density Plot Trace 1 (Ant 1)	Maximum Power Density Plot Trace 2 (Ant 2)
	

Appendix B. AC Conducted Emission Test Results

Test Engineer :	Louis Chung	**Temperature :**	23.8~26.7℃
		Relative Humidity :	43.6~55.5%

EUT Information

Report NO :	452223
Test Mode :	Mode 1
Test Voltage :	120Vac/60Hz
Phase :	Line

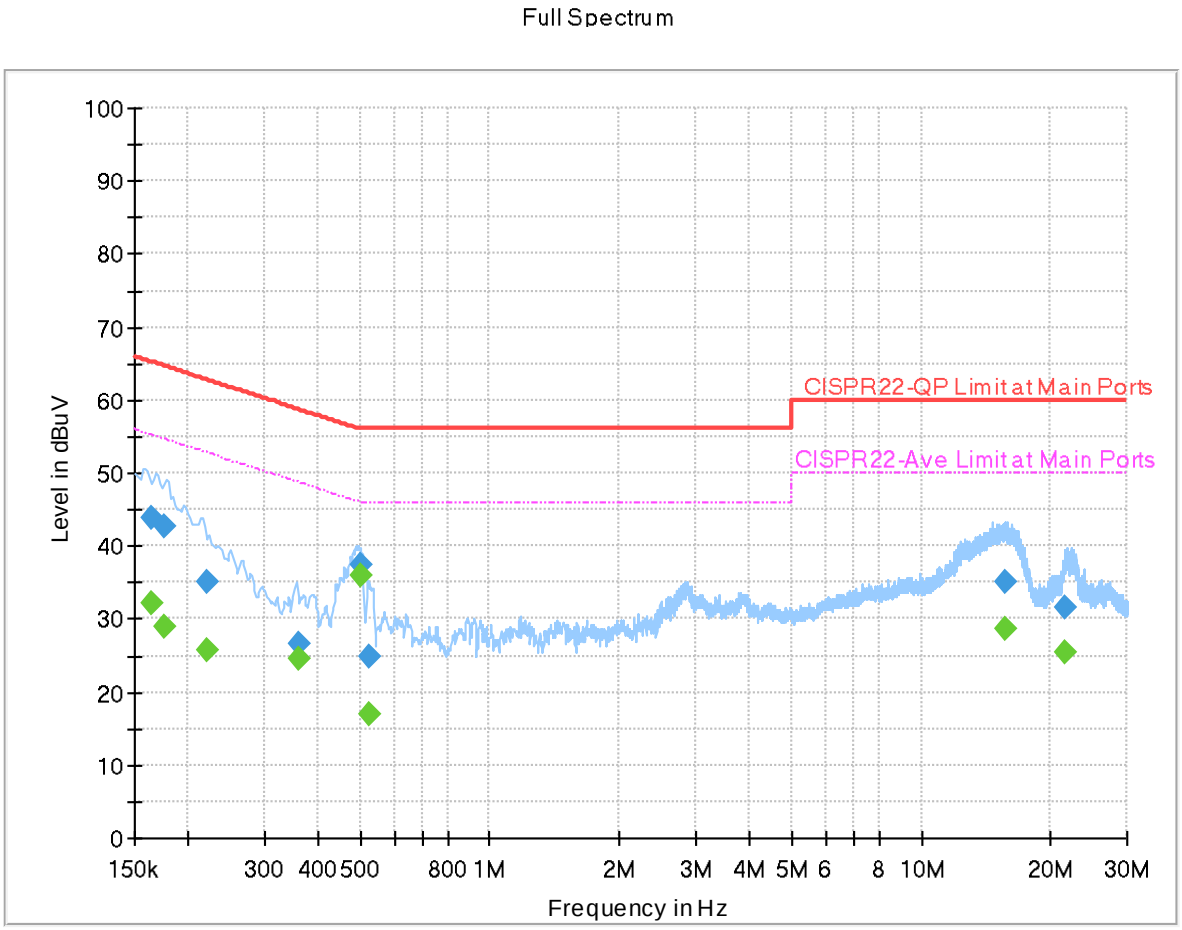


Final_Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.167100	---	33.71	55.10	21.39	L1	OFF	19.9
0.167100	46.29	---	65.10	18.81	L1	OFF	19.9
0.196620	---	30.71	53.75	23.04	L1	OFF	19.9
0.196620	40.96	---	63.75	22.79	L1	OFF	19.9
0.225420	---	26.00	52.62	26.62	L1	OFF	19.9
0.225420	35.45	---	62.62	27.17	L1	OFF	19.9
0.474450	---	34.84	46.44	11.60	L1	OFF	19.9
0.474450	36.37	---	56.44	20.07	L1	OFF	19.9
0.497580	---	32.98	46.04	13.06	L1	OFF	19.9
0.497580	36.93	---	56.04	19.11	L1	OFF	19.9
0.520890	---	15.54	46.00	30.46	L1	OFF	19.9
0.520890	24.76	---	56.00	31.24	L1	OFF	19.9
15.542160	---	28.63	50.00	21.37	L1	OFF	20.1
15.542160	34.99	---	60.00	25.01	L1	OFF	20.1
21.655500	---	26.59	50.00	23.41	L1	OFF	20.1
21.655500	31.35	---	60.00	28.65	L1	OFF	20.1
22.503300	---	26.57	50.00	23.43	L1	OFF	20.1
22.503300	31.85	---	60.00	28.15	L1	OFF	20.1

EUT Information

Report NO :	452223
Test Mode :	Mode 1
Test Voltage :	120Vac/60Hz
Phase :	Neutral



Final_Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.163500	---	32.05	55.28	23.23	N	OFF	19.9
0.163500	43.98	---	65.28	21.30	N	OFF	19.9
0.176550	---	28.84	54.65	25.81	N	OFF	19.9
0.176550	42.69	---	64.65	21.96	N	OFF	19.9
0.219750	---	25.87	52.83	26.96	N	OFF	19.9
0.219750	35.17	---	62.83	27.66	N	OFF	19.9
0.359250	---	24.55	48.75	24.20	N	OFF	19.9
0.359250	26.58	---	58.75	32.17	N	OFF	19.9
0.501000	---	35.95	46.00	10.05	N	OFF	19.9
0.501000	37.47	---	56.00	18.53	N	OFF	19.9
0.523320	---	16.98	46.00	29.02	N	OFF	19.9
0.523320	24.99	---	56.00	31.01	N	OFF	19.9
15.729810	---	28.60	50.00	21.40	N	OFF	20.2
15.729810	35.21	---	60.00	24.79	N	OFF	20.2
21.640470	---	25.46	50.00	24.54	N	OFF	20.2
21.640470	31.72	---	60.00	28.28	N	OFF	20.2

Appendix C. Radiated Spurious Emission Test Data

Test Engineer :	Fred Tseng and Karl Hou	**Temperature :**	18.2~20.5℃
		Relative Humidity :	54.2~62.1%

Note symbol

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

C1. Radiated Spurious Emission Test Modes

Mode	Band	Band (GHz)	Antenna	Modulation	Channel	Frequency	Data Rate	RU	Remark
Mode 1	U-NII-1	5.15-5.25	1+2 (CDD)	802.11a	36	5180	6Mbps	-	-
Mode 2	U-NII-1	5.15-5.25	1+2 (CDD)	802.11a	44	5220	6Mbps	-	-
Mode 3	U-NII-1	5.15-5.25	1+2 (CDD)	802.11a	48	5240	6Mbps	-	-
Mode 4	U-NII-1	5.15-5.25	1+2 (CDD)	802.11ac VHT20	36	5180	MCS0	-	-
Mode 5	U-NII-1	5.15-5.25	1+2 (CDD)	802.11ac VHT20	44	5220	MCS0	-	-
Mode 6	U-NII-1	5.15-5.25	1+2 (CDD)	802.11ac VHT20	48	5240	MCS0	-	-
Mode 7	U-NII-1	5.15-5.25	1+2 (CDD)	802.11ac VHT40	38	5190	MCS0	-	-
Mode 8	U-NII-1	5.15-5.25	1+2 (CDD)	802.11ac VHT40	46	5230	MCS0	-	-
Mode 9	U-NII-1	5.15-5.25	1+2 (CDD)	802.11ac VHT80	42	5210	MCS0	-	-
Mode 10	U-NII-1	5.15-5.25	1+2 (CDD)	802.11ax HE20	36	5180	MCS0	Full RU	-
Mode 11	U-NII-1	5.15-5.25	1+2 (CDD)	802.11ax HE20	44	5220	MCS0	Full RU	-
Mode 12	U-NII-1	5.15-5.25	1+2 (CDD)	802.11ax HE20	48	5240	MCS0	Full RU	-
Mode 13	U-NII-1	5.15-5.25	1+2 (CDD)	802.11ax HE40	38	5190	MCS0	Full RU	-
Mode 14	U-NII-1	5.15-5.25	1+2 (CDD)	802.11ax HE40	46	5230	MCS0	Full RU	-
Mode 15	U-NII-1	5.15-5.25	1+2 (CDD)	802.11ax HE80	42	5210	MCS0	Full RU	-
Mode 16	U-NII-2A	5.25-5.35	1+2 (CDD)	802.11a	52	5260	6Mbps	-	-
Mode 17	U-NII-2A	5.25-5.35	1+2 (CDD)	802.11a	60	5300	6Mbps	-	-
Mode 18	U-NII-2A	5.25-5.35	1+2 (CDD)	802.11a	64	5320	6Mbps	-	-
Mode 19	U-NII-2A	5.15-5.25	1+2 (CDD)	802.11ac VHT20	52	5260	MCS0	-	-
Mode 20	U-NII-2A	5.15-5.25	1+2 (CDD)	802.11ac VHT20	60	5300	MCS0	-	-
Mode 21	U-NII-2A	5.15-5.25	1+2 (CDD)	802.11ac VHT20	64	5320	MCS0	-	-
Mode 22	U-NII-2A	5.15-5.25	1+2 (CDD)	802.11ac VHT40	54	5270	MCS0	-	-
Mode 23	U-NII-2A	5.15-5.25	1+2 (CDD)	802.11ac VHT40	62	5310	MCS0	-	-
Mode 24	U-NII-2A	5.15-5.25	1+2 (CDD)	802.11ac VHT80	58	5290	MCS0	-	-
Mode 25	U-NII-2A	5.25-5.35	1+2 (CDD)	802.11ax HE20	52	5260	MCS0	Full RU	-
Mode 26	U-NII-2A	5.25-5.35	1+2 (CDD)	802.11ax HE20	60	5300	MCS0	Full RU	-

Mode	Band	Band (GHz)	Antenna	Modulation	Channel	Frequency	Data Rate	RU	Remark
Mode 27	U-NII-2A	5.25-5.35	1+2 (CDD)	802.11ax HE20	64	5320	MCS0	Full RU	-
Mode 28	U-NII-2A	5.25-5.35	1+2 (CDD)	802.11ax HE40	54	5270	MCS0	Full RU	-
Mode 29	U-NII-2A	5.25-5.35	1+2 (CDD)	802.11ax HE40	62	5310	MCS0	Full RU	-
Mode 30	U-NII-2A	5.25-5.35	1+2 (CDD)	802.11ax HE80	58	5290	MCS0	Full RU	-
Mode 31	U-NII-2C	5.47-5.725	1+2 (CDD)	802.11a	100	5500	6Mbps	-	-
Mode 32	U-NII-2C	5.47-5.725	1+2 (CDD)	802.11a	116	5580	6Mbps	-	-
Mode 33	U-NII-2C	5.47-5.725	1+2 (CDD)	802.11a	140	5700	6Mbps	-	-
Mode 34	U-NII-2C	5.47-5.725	1+2 (CDD)	802.11a	144	5720	6Mbps	-	-
Mode 35	U-NII-2C	5.47-5.725	1+2 (CDD)	802.11ac VHT20	100	5500	MCS0	-	-
Mode 36	U-NII-2C	5.47-5.725	1+2 (CDD)	802.11ac VHT20	116	5580	MCS0	-	-
Mode 37	U-NII-2C	5.47-5.725	1+2 (CDD)	802.11ac VHT20	140	5700	MCS0	-	-
Mode 38	U-NII-2C	5.47-5.725	1+2 (CDD)	802.11ac VHT20	144	5720	MCS0	-	-
Mode 39	U-NII-2C	5.47-5.725	1+2 (CDD)	802.11ac VHT40	102	5510	MCS0	-	-
Mode 40	U-NII-2C	5.47-5.725	1+2 (CDD)	802.11ac VHT40	110	5550	MCS0	-	-
Mode 41	U-NII-2C	5.47-5.725	1+2 (CDD)	802.11ac VHT40	134	5670	MCS0	-	-
Mode 42	U-NII-2C	5.47-5.725	1+2 (CDD)	802.11ac VHT40	142	5710	MCS0	-	-
Mode 43	U-NII-2C	5.47-5.725	1+2 (CDD)	802.11ac VHT80	106	5530	MCS0	-	-
Mode 44	U-NII-2C	5.47-5.725	1+2 (CDD)	802.11ac VHT80	122	5610	MCS0	-	-
Mode 45	U-NII-2C	5.47-5.725	1+2 (CDD)	802.11ac VHT80	138	5690	MCS0	-	-
Mode 46	U-NII-2C	5.47-5.725	1+2 (CDD)	802.11ax HE20	100	5500	MCS0	Full RU	-
Mode 47	U-NII-2C	5.47-5.725	1+2 (CDD)	802.11ax HE20	116	5580	MCS0	Full RU	-
Mode 48	U-NII-2C	5.47-5.725	1+2 (CDD)	802.11ax HE20	140	5700	MCS0	Full RU	-
Mode 49	U-NII-2C	5.47-5.725	1+2 (CDD)	802.11ax HE20	144	5720	MCS0	Full RU	-
Mode 50	U-NII-2C	5.47-5.725	1+2 (CDD)	802.11ax HE40	102	5510	MCS0	Full RU	-
Mode 51	U-NII-2C	5.47-5.725	1+2 (CDD)	802.11ax HE40	110	5550	MCS0	Full RU	-
Mode 52	U-NII-2C	5.47-5.725	1+2 (CDD)	802.11ax HE40	134	5670	MCS0	Full RU	-
Mode 53	U-NII-2C	5.47-5.725	1+2 (CDD)	802.11ax HE40	142	5710	MCS0	Full RU	-
Mode 54	U-NII-2C	5.47-5.725	1+2 (CDD)	802.11ax HE80	106	5530	MCS0	Full RU	-
Mode 55	U-NII-2C	5.47-5.725	1+2 (CDD)	802.11ax HE80	122	5610	MCS0	Full RU	-
Mode 56	U-NII-2C	5.47-5.725	1+2 (CDD)	802.11ax HE80	138	5690	MCS0	Full RU	-
Mode 57	U-NII-2A	5.15-5.35	1+2 (CDD)	802.11a	116	5580	MCS0	-	SHF

Mode	Band	Band (GHz)	Antenna	Modulation	Channel	Frequency	Data Rate	RU	Remark
Mode 58	U-NII-2A	5.15-5.35	1+2 (CDD)	802.11a	116	5580	MCS0	-	LF
Mode 59	U-NII-1	5.15-5.25	1+2 (CDD)	802.11a	40	5200	6Mbps	-	-
Mode 60	U-NII-1	5.15-5.25	1+2 (CDD)	802.11ax HE20	40	5200	MCS0	Full RU	-

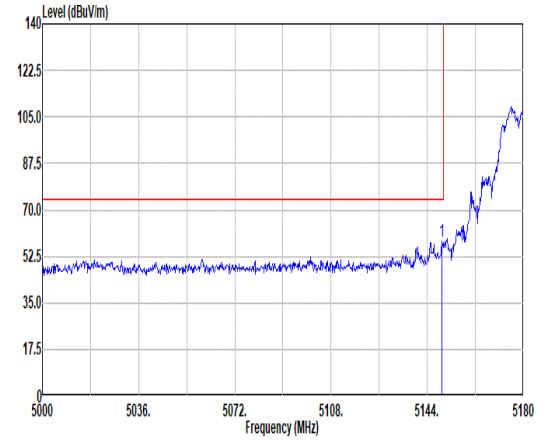
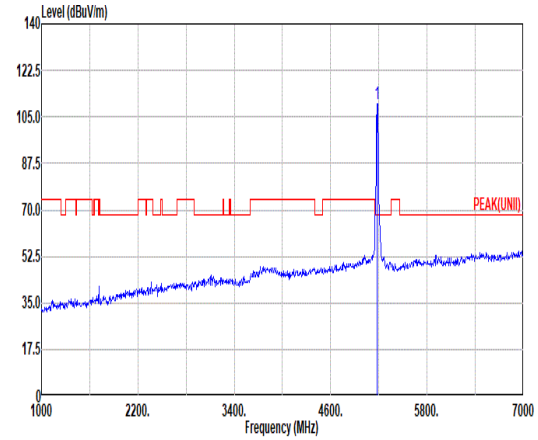
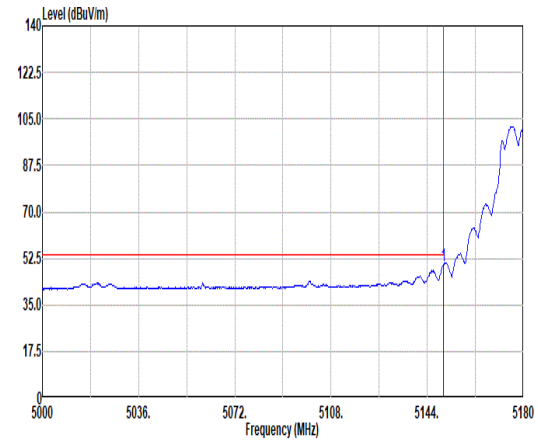
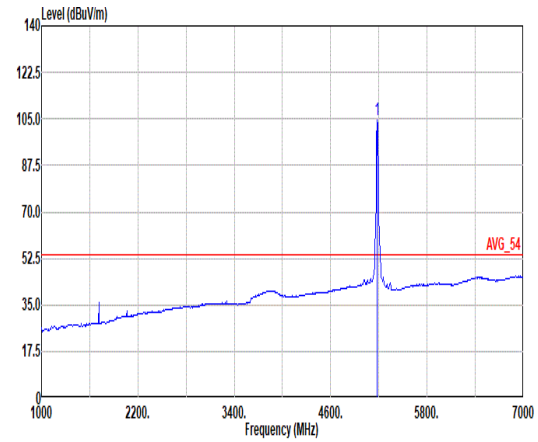
C2. Summary of each worse mode

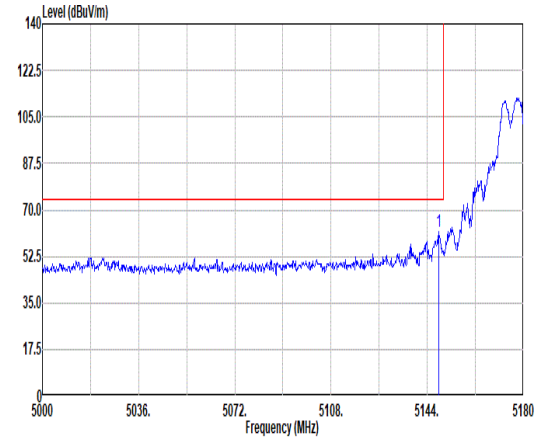
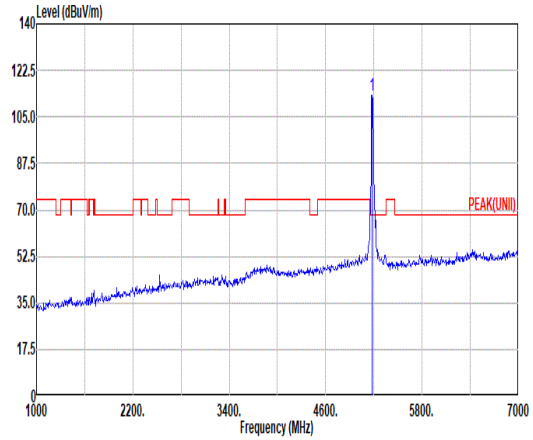
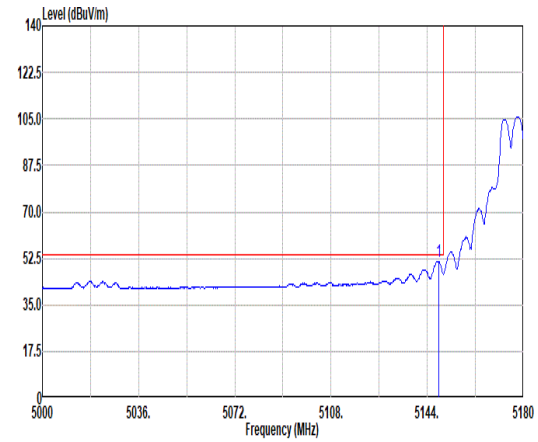
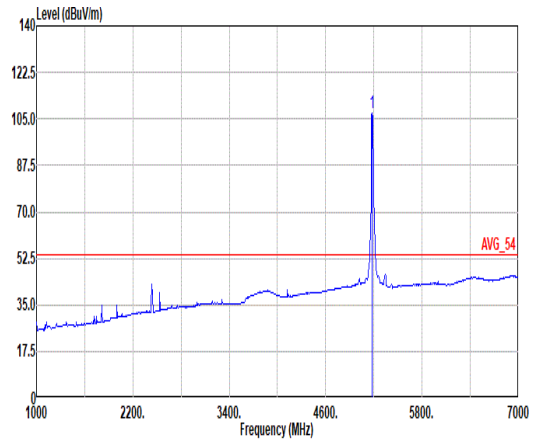
Mode	Modulation	Ch.	Freq. (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Pol.	Peak Avg.	Result	RU	Remark
1	802.11a	36	5148.32	51.38	54.00	-2.62	V	Avg.	Pass	-	Band Edge
	802.11a	36	15540.00	44.32	54.00	-9.68	H	Avg.	Pass	-	Harmonic
2	802.11a	44	5148.06	53.08	54.00	-0.92	V	Avg.	Pass	-	Band Edge
	802.11a	44	15660.00	51.09	54.00	-2.91	V	Avg.	Pass	-	Harmonic
3	802.11a	48	5402.80	48.74	54.00	-5.26	V	Avg.	Pass	-	Band Edge
	802.11a	48	15720.00	52.85	54.00	-1.15	V	Avg.	Pass	-	Harmonic
4	802.11ac VHT20	36	5149.94	52.48	54.00	-1.52	V	Avg.	Pass	-	Band Edge
	802.11ac VHT20	36	15540.00	44.58	54.00	-9.42	V	Avg.	Pass	-	Harmonic
5	802.11ac VHT20	44	5148.94	52.02	54.00	-1.98	V	Avg.	Pass	-	Band Edge
	802.11ac VHT20	44	15660.00	49.25	54.00	-4.75	V	Avg.	Pass	-	Harmonic
6	802.11ac VHT20	48	5149.28	50.00	54.00	-4.00	V	Avg.	Pass	-	Band Edge
	802.11ac VHT20	48	15720.00	50.27	54.00	-3.73	V	Avg.	Pass	-	Harmonic
7	802.11ac VHT40	38	5149.91	53.32	54.00	-0.68	V	Avg.	Pass	-	Band Edge
	802.11ac VHT40	38	15570.00	45.10	54.00	-8.90	V	Avg.	Pass	-	Harmonic
8	802.11ac VHT40	46	5146.51	53.27	54.00	-0.73	V	Avg.	Pass	-	Band Edge
	802.11ac VHT40	46	15690.00	44.59	54.00	-9.41	V	Avg.	Pass	-	Harmonic
9	802.11ac VHT80	42	5149.10	52.53	54.00	-1.47	V	Avg.	Pass	-	Band Edge
	802.11ac VHT80	42	15630.00	44.42	54.00	-9.58	V	Avg.	Pass	-	Harmonic
10	802.11ax HE20	36	5149.94	52.27	54.00	-1.73	V	Avg.	Pass	Full RU	Band Edge
	802.11ax HE20	36	15540.00	44.71	54.00	-9.29	V	Avg.	Pass	Full RU	Harmonic
11	802.11ax HE20	44	5148.94	53.26	54.00	-0.74	V	Avg.	Pass	Full RU	Band Edge
	802.11ax HE20	44	15660.00	49.03	54.00	-4.97	V	Avg.	Pass	Full RU	Harmonic
12	802.11ax HE20	48	5149.04	51.65	54.00	-2.35	V	Avg.	Pass	Full RU	Band Edge
	802.11ax HE20	48	15720.00	49.80	54.00	-4.20	H	Avg.	Pass	Full RU	Harmonic
13	802.11ax HE40	38	5147.63	52.19	54.00	-1.81	V	Avg.	Pass	Full RU	Band Edge
	802.11ax HE40	38	15570.00	44.07	54.00	-9.93	V	Avg.	Pass	Full RU	Harmonic
14	802.11ax HE40	46	5149.27	52.07	54.00	-1.93	V	Avg.	Pass	Full RU	Band Edge
	802.11ax HE40	46	15690.00	43.84	54.00	-10.16	V	Avg.	Pass	Full RU	Harmonic
15	802.11ax HE80	42	5149.31	53.21	54.00	-0.79	V	Avg.	Pass	Full RU	Band Edge
	802.11ax HE80	42	15630.00	44.06	54.00	-9.94	V	Avg.	Pass	Full RU	Harmonic
16	802.11a	52	5353.80	52.92	54.00	-1.08	V	Avg.	Pass	-	Band Edge
	802.11a	52	15780.00	52.33	54.00	-1.67	V	Avg.	Pass	-	Harmonic

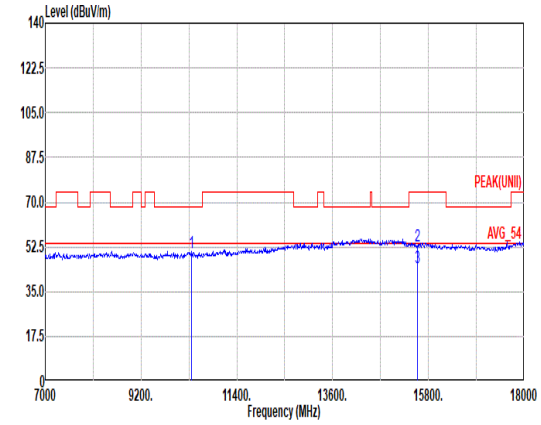
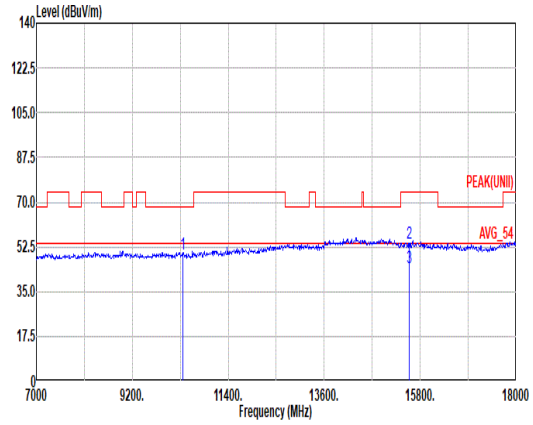
Mode	Modulation	Ch.	Freq. (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Pol.	Peak Avg.	Result	RU	Remark
17	802.11a	60	5350.08	52.58	54.00	-1.42	V	Avg.	Pass	-	Band Edge
	802.11a	60	15900.00	48.49	54.00	-5.51	H	Avg.	Pass	-	Harmonic
18	802.11a	64	5350.10	52.14	54.00	-1.86	V	Avg.	Pass	-	Band Edge
	802.11a	64	15960.00	45.51	54.00	-8.49	V	Avg.	Pass	-	Harmonic
19	802.11ac VHT20	52	5350.20	52.77	54.00	-1.23	V	Avg.	Pass	-	Band Edge
	802.11ac VHT20	52	15780.00	50.64	54.00	-3.36	V	Avg.	Pass	-	Harmonic
20	802.11ac VHT20	60	5354.56	52.04	54.00	-1.96	V	Avg.	Pass	-	Band Edge
	802.11ac VHT20	60	15900.00	47.83	54.00	-6.17	V	Avg.	Pass	-	Harmonic
21	802.11ac VHT20	64	5353.18	52.31	54.00	-1.69	V	Avg.	Pass	-	Band Edge
	802.11ac VHT20	64	15960.00	44.81	54.00	-9.19	V	Avg.	Pass	-	Harmonic
22	802.11ac VHT40	54	5350.37	52.15	54.00	-1.85	V	Avg.	Pass	-	Band Edge
	802.11ac VHT40	54	15810.00	44.60	54.00	-9.40	H	Avg.	Pass	-	Harmonic
23	802.11ac VHT40	62	5351.55	52.14	54.00	-1.86	V	Avg.	Pass	-	Band Edge
	802.11ac VHT40	62	15930.00	43.37	54.00	-10.63	H	Avg.	Pass	-	Harmonic
24	802.11ac VHT80	58	5354.94	53.27	54.00	-0.73	V	Avg.	Pass	-	Band Edge
	802.11ac VHT80	58	15870.00	43.56	54.00	-10.44	V	Avg.	Pass	-	Harmonic
25	802.11ax HE20	52	5350.60	52.40	54.00	-1.60	V	Avg.	Pass	Full RU	Band Edge
	802.11ax HE20	52	15780.00	49.51	54.00	-4.49	V	Avg.	Pass	Full RU	Harmonic
26	802.11ax HE20	60	5350.24	52.79	54.00	-1.21	V	Avg.	Pass	Full RU	Band Edge
	802.11ax HE20	60	15900.00	46.07	54.00	-7.93	V	Avg.	Pass	Full RU	Harmonic
27	802.11ax HE20	64	5350.24	52.07	54.00	-1.93	V	Avg.	Pass	Full RU	Band Edge
	802.11ax HE20	64	15960.00	44.28	54.00	-9.72	H	Avg.	Pass	Full RU	Harmonic
28	802.11ax HE40	54	5350.18	52.18	54.00	-1.82	V	Avg.	Pass	Full RU	Band Edge
	802.11ax HE40	54	15810.00	44.58	54.00	-9.42	V	Avg.	Pass	Full RU	Harmonic
29	802.11ax HE40	62	5350.05	53.24	54.00	-0.76	V	Avg.	Pass	Full RU	Band Edge
	802.11ax HE40	62	15930.00	44.07	54.00	-9.93	H	Avg.	Pass	Full RU	Harmonic
30	802.11ax HE80	58	5350.18	53.09	54.00	-0.91	V	Avg.	Pass	Full RU	Band Edge
	802.11ax HE80	58	15870.00	43.48	54.00	-10.52	V	Avg.	Pass	Full RU	Harmonic
31	802.11a	100	5459.95	51.40	54.00	-2.60	V	Avg.	Pass	-	Band Edge
	802.11a	100	11000.00	40.85	54.00	-13.15	H	Avg.	Pass	-	Harmonic
32	802.11a	116	5418.77	53.33	54.00	-0.67	V	Avg.	Pass	-	Band Edge
	802.11a	116	16740.00	58.15	68.20	-10.05	H	Peak	Pass	-	Harmonic

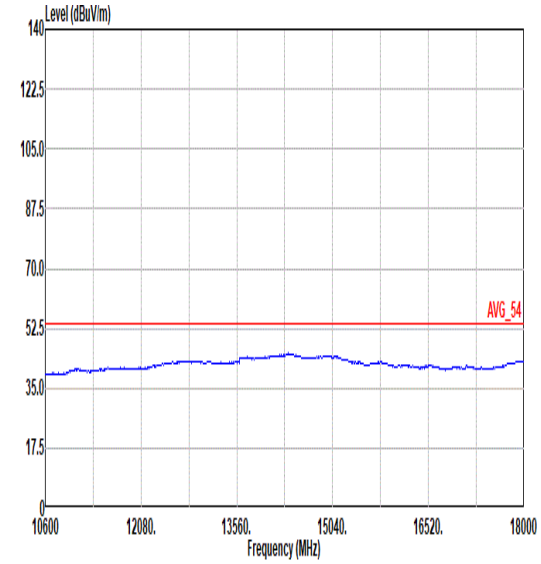
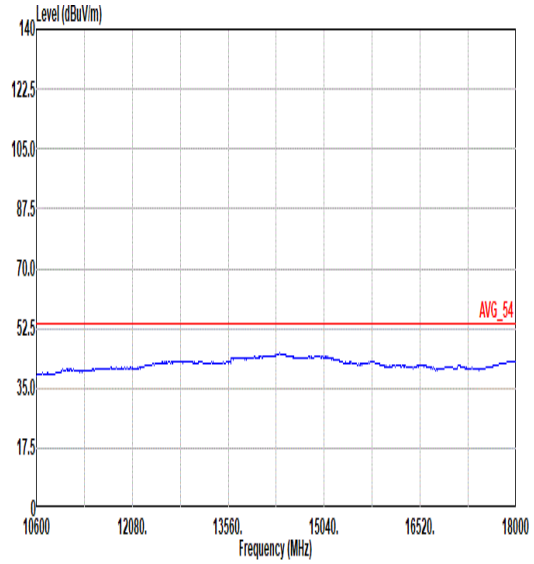
Mode	Modulation	Ch.	Freq. (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Pol.	Peak Avg.	Result	RU	Remark
33	802.11a	140	5726.39	64.41	68.20	-3.79	V	Peak	Pass	-	Band Edge
	802.11a	140	11400.00	41.55	54.00	-12.45	V	Avg.	Pass	-	Harmonic
34	802.11a	144	5852.75	66.03	68.20	-2.17	V	Peak	Pass	-	Band Edge
	802.11a	144	17160.00	65.43	68.20	-2.77	H	Peak	Pass	-	Harmonic
35	802.11ac VHT20	100	5459.80	51.41	54.00	-2.59	V	Avg.	Pass	-	Band Edge
	802.11ac VHT20	100	11000.00	40.44	54.00	-13.56	H	Avg.	Pass	-	Harmonic
36	802.11ac VHT20	116	5417.85	51.67	54.00	-2.33	V	Avg.	Pass	-	Band Edge
	802.11ac VHT20	116	16740.00	55.97	68.20	-12.23	H	Peak	Pass	-	Harmonic
37	802.11ac VHT20	140	5725.87	67.43	68.20	-0.77	V	Peak	Pass	-	Band Edge
	802.11ac VHT20	140	11400.00	41.53	54.00	-12.47	V	Avg.	Pass	-	Harmonic
38	802.11ac VHT20	144	5851.25	65.73	68.20	-2.47	V	Peak	Pass	-	Band Edge
	802.11ac VHT20	144	17160.00	62.60	68.20	-5.60	H	Peak	Pass	-	Harmonic
39	802.11ac VHT40	102	5469.04	65.18	68.20	-3.02	V	Peak	Pass	-	Band Edge
	802.11ac VHT40	102	11020.00	40.32	54.00	-13.68	H	Avg.	Pass	-	Harmonic
40	802.11ac VHT40	110	5459.40	52.78	54.00	-1.22	V	Avg.	Pass	-	Band Edge
	802.11ac VHT40	110	11100.00	40.91	54.00	-13.09	V	Avg.	Pass	-	Harmonic
41	802.11ac VHT40	134	5729.95	66.92	68.20	-1.28	V	Peak	Pass	-	Band Edge
	802.11ac VHT40	134	11340.00	41.31	54.00	-12.69	H	Avg.	Pass	-	Harmonic
42	802.11ac VHT40	142	5859.00	66.62	68.20	-1.58	H	Peak	Pass	-	Band Edge
	802.11ac VHT40	142	11420.00	41.21	54.00	-12.79	H	Avg.	Pass	-	Harmonic
43	802.11ac VHT80	106	5456.92	53.28	54.00	-0.72	V	Avg.	Pass	-	Band Edge
	802.11ac VHT80	106	11060.00	40.71	54.00	-13.29	V	Avg.	Pass	-	Harmonic
44	802.11ac VHT80	122	5734.78	66.79	68.20	-1.41	V	Peak	Pass	-	Band Edge
	802.11ac VHT80	122	11220.00	40.78	54.00	-13.22	V	Avg.	Pass	-	Harmonic
45	802.11ac VHT80	138	5857.60	65.51	68.20	-2.69	V	Peak	Pass	-	Band Edge
	802.11ac VHT80	138	11380.00	41.42	54.00	-12.58	V	Avg.	Pass	-	Harmonic
46	802.11ax HE20	100	5469.25	67.45	68.20	-0.75	V	Peak	Pass	Full RU	Band Edge
	802.11ax HE20	100	11004.00	40.40	54.00	-13.60	H	Avg.	Pass	Full RU	Harmonic
47	802.11ax HE20	116	5419.23	53.07	54.00	-0.93	V	Avg.	Pass	Full RU	Band Edge
	802.11ax HE20	116	11160.00	41.35	54.00	-12.65	V	Avg.	Pass	Full RU	Harmonic
48	802.11ax HE20	140	5728.41	66.00	68.20	-2.20	V	Peak	Pass	Full RU	Band Edge
	802.11ax HE20	140	11400.00	41.29	54.00	-12.71	H	Avg.	Pass	Full RU	Harmonic

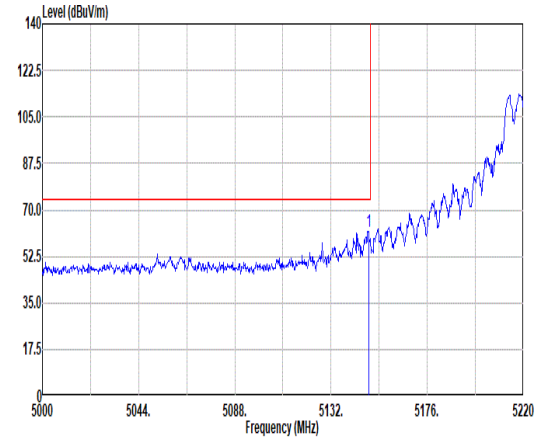
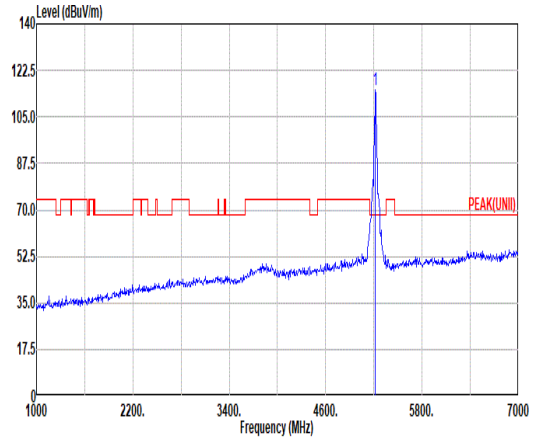
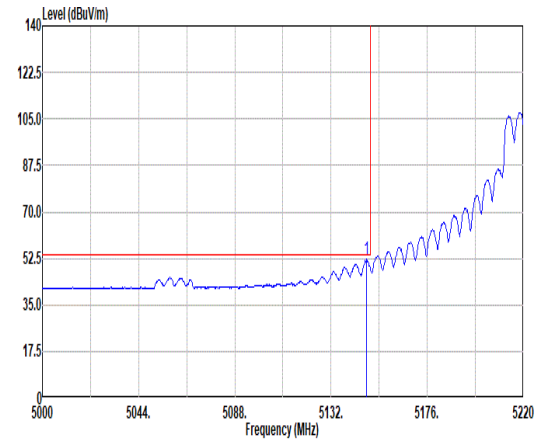
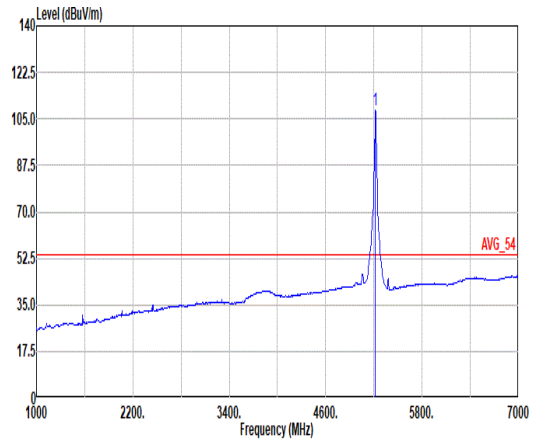
Mode	Modulation	Ch.	Freq. (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Pol.	Peak Avg.	Result	RU	Remark
49	802.11ax HE20	144	5854.75	61.31	68.20	-6.89	H	Peak	Pass	Full RU	Band Edge
	802.11ax HE20	144	17160.00	62.11	68.20	-6.09	H	Peak	Pass	Full RU	Harmonic
50	802.11ax HE40	102	5468.88	67.46	68.20	-0.74	V	Peak	Pass	Full RU	Band Edge
	802.11ax HE40	102	11020.00	40.71	54.00	-13.29	H	Avg.	Pass	Full RU	Harmonic
51	802.11ax HE40	110	5459.40	52.57	54.00	-1.43	V	Avg.	Pass	Full RU	Band Edge
	802.11ax HE40	110	11100.00	40.87	54.00	-13.13	H	Avg.	Pass	Full RU	Harmonic
52	802.11ax HE40	134	5726.72	66.11	68.20	-2.09	V	Peak	Pass	Full RU	Band Edge
	802.11ax HE40	134	17010.00	66.84	68.20	-1.36	H	Peak	Pass	Full RU	Harmonic
53	802.11ax HE40	142	5855.25	67.45	68.20	-0.75	V	Peak	Pass	Full RU	Band Edge
	802.11ax HE40	142	17130.00	66.87	68.20	-1.33	H	Peak	Pass	Full RU	Harmonic
54	802.11ax HE80	106	5456.92	52.96	54.00	-1.04	V	Avg.	Pass	Full RU	Band Edge
	802.11ax HE80	106	11060.00	40.39	54.00	-13.61	V	Avg.	Pass	Full RU	Harmonic
55	802.11ax HE80	122	5738.65	66.87	68.20	-1.33	V	Peak	Pass	Full RU	Band Edge
	802.11ax HE80	122	16830.00	67.03	68.20	-1.17	H	Peak	Pass	Full RU	Harmonic
56	802.11ax HE80	138	5852.80	66.64	68.20	-1.56	V	Peak	Pass	Full RU	Band Edge
	802.11ax HE80	138	11380.00	44.21	54.00	-9.79	H	Avg.	Pass	Full RU	Harmonic
57	802.11a	116	39834.97	47.70	74.00	-26.30	H	Peak	Pass	-	SHF
58	802.11a	116	737.13	38.85	46.00	-7.15	H	Peak	Pass	-	LF
59	802.11a	40	5418.28	51.58	54	-2.42	V	Avg.	Pass	-	Band Edge
	802.11a	40	15600	47.18	54	-6.82	H	Avg.	Pass	-	Harmonic
60	802.11ax HE20	40	5149.38	51.41	54	-2.59	V	Avg.	Pass	Full RU	Band Edge
	802.11ax HE20	40	15600	46.28	54	-7.72	V	Avg.	Pass	Full RU	Harmonic

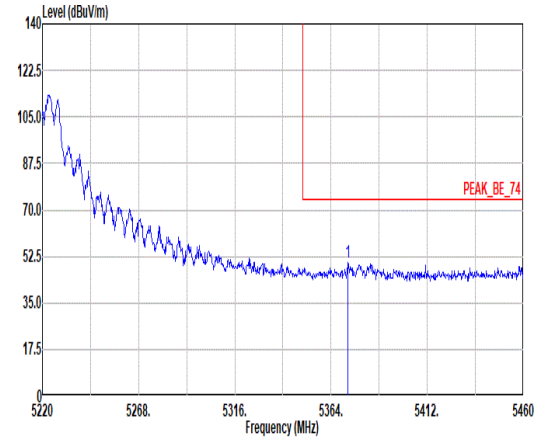
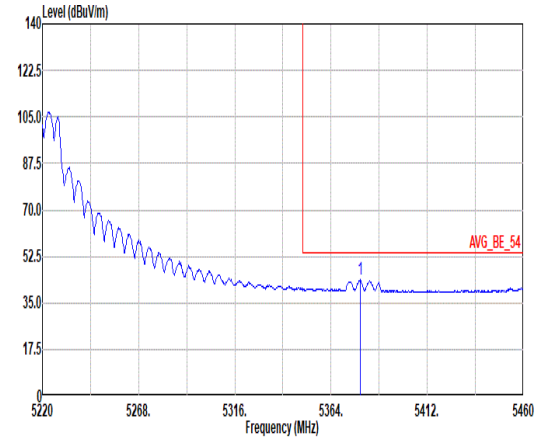
Mode	1	
	Band Edge	
	U-NII-1_5.15-5.25_802.11a_CH36_5180MHz	
ANT	1+2 (CDD)	
Pol.	Horizontal	Fundamental
Peak	 Site : 03CH22-HY Condition: PEAK_BE_74 3m DRH18-E_LE2C04A18EN_240711 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5149.40 58.12 74.00 -15.88 46.36 32.70 12.75 33.69 0.00 200 36 PEAK	 Site : 03CH22-HY Condition: PEAK(UNII) 3m DRH18-E_LE2C04A18EN_240711 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5180.00 109.81 ------ ------ 98.11 32.62 12.83 33.75 0.00 200 36 PEAK
Avg	 Site : 03CH22-HY Condition: AVG_BE_54 3m DRH18-E_LE2C04A18EN_240711 HORIZONTAL : RBW:1000.000kHz VBW:1.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5149.94 49.80 54.00 -4.20 38.04 32.70 12.75 33.69 0.00 200 36 AVERAGE	 Site : 03CH22-HY Condition: AVG_54 3m DRH18-E_LE2C04A18EN_240711 HORIZONTAL : RBW:1000.000kHz VBW:1.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5180.00 104.75 ------ ------ 93.04 32.64 12.81 33.74 0.00 200 36 AVERAGE

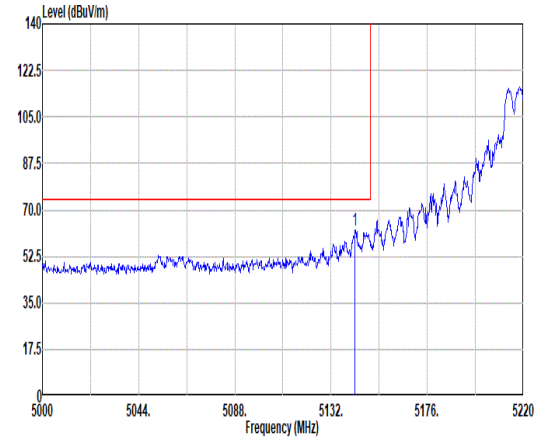
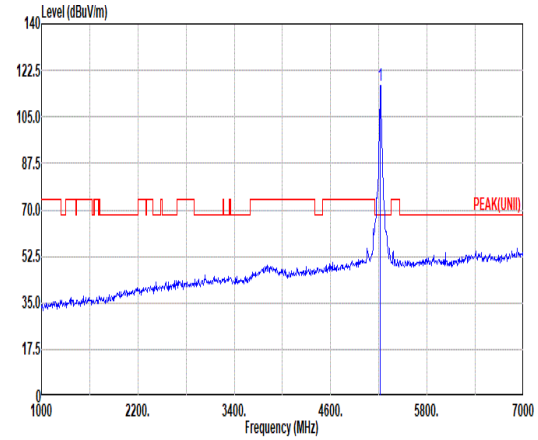
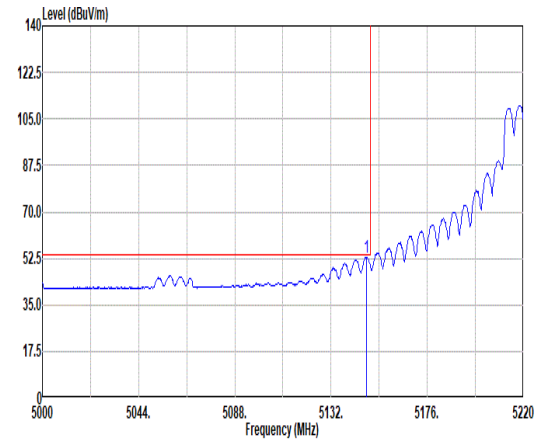
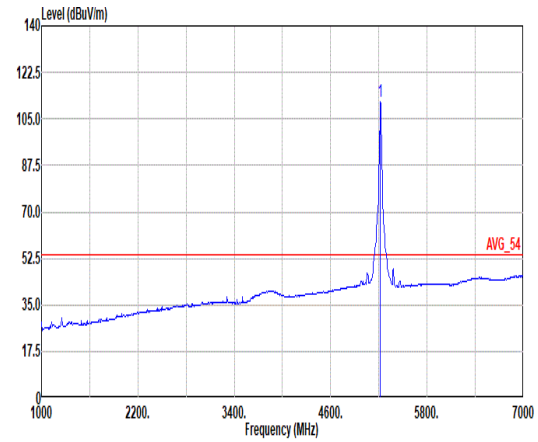
Mode	1	
	Band Edge	
	U-NII-1_5.15-5.25_802.11a_CH36_5180MHz	
ANT	1+2 (CDD)	
Pol.	Vertical	Fundamental
Peak	 Site : 03CH22-HY Condition: PEAK_BE_74 3m DRH18-E_LE2C04A18EN_240711 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto 1 5148.32 61.95 74.00 -12.05 50.20 32.69 12.75 33.69 0.00 213 18 PEAK	 Site : 03CH22-HY Condition: PEAK(UNII) 3m DRH18-E_LE2C04A18EN_240711 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto 1 5180.00 112.89 ------ ------ 101.18 32.64 12.81 33.74 0.00 213 18 PEAK
Avg	 Site : 03CH22-HY Condition: AVG_BE_54 3m DRH18-E_LE2C04A18EN_240711 VERTICAL : RBW:1000.000kHz VBW:1.000kHz SWT:Auto 1 5148.32 51.38 54.00 -2.62 39.63 32.69 12.75 33.69 0.00 213 18 AVERAGE	 Site : 03CH22-HY Condition: AVG_54 3m DRH18-E_LE2C04A18EN_240711 VERTICAL : RBW:1000.000kHz VBW:1.000kHz SWT:Auto 1 5180.00 107.43 ------ ------ 95.71 32.65 12.80 33.73 0.00 213 18 AVERAGE

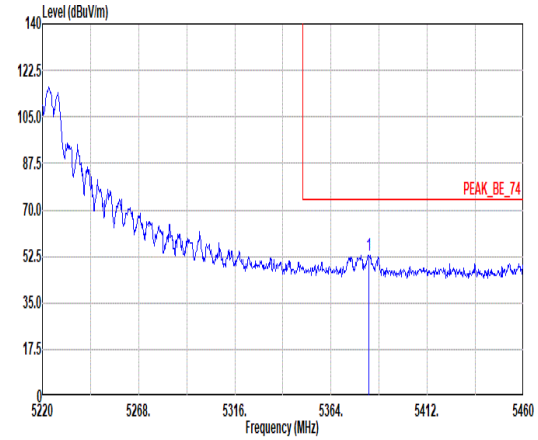
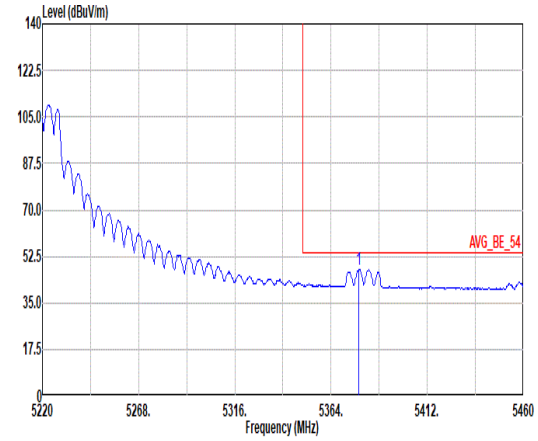
Mode	1	
	Harmonic	
	U-NII-1_5.15-5.25_802.11a_CH36_5180MHz	
ANT	1+2 (CDD)	
Pol.	Horizontal	Vertical
Peak Avg	 Site : 03CH22-HY Condition: PEAK(UNII) 3m DRH18-E_LE2C04A18EN_240711 HORIZONTAL Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 10360.00 49.95 68.20 -18.25 32.70 37.38 18.51 39.14 0.50 -- -- Peak 2 15540.00 52.86 74.00 -21.14 32.48 41.24 22.89 44.30 0.55 -- -- Peak 3 15540.00 44.32 54.00 -9.68 23.94 41.24 22.89 44.30 0.55 -- -- Average	 Site : 03CH22-HY Condition: PEAK(UNII) 3m DRH18-E_LE2C04A18EN_240711 VERTICAL Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 10360.00 49.43 68.20 -18.77 32.18 37.38 18.51 39.14 0.50 -- -- Peak 2 15540.00 54.06 74.00 -19.94 33.68 41.24 22.89 44.30 0.55 -- -- Peak 3 15540.00 44.28 54.00 -9.72 23.90 41.24 22.89 44.30 0.55 -- -- Average

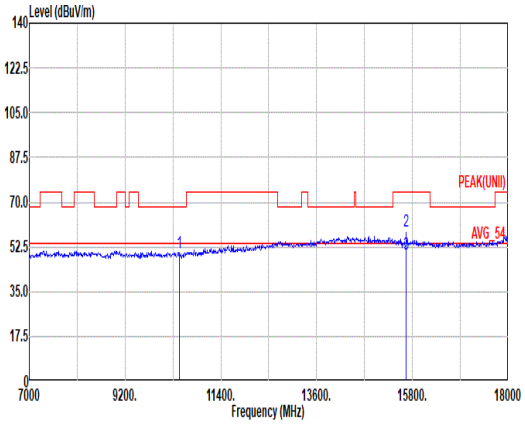
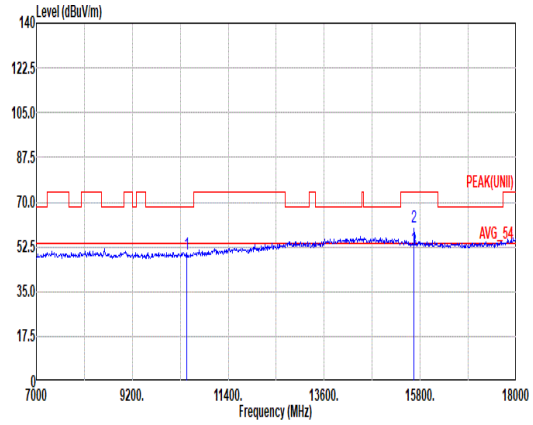
Mode	1	
	Harmonic	
	U-NII-1_5.15-5.25_802.11a_CH36_5180MHz	
ANT	1+2 (CDD)	
Pol.	Horizontal	Vertical
10.6G ~18G Avg		

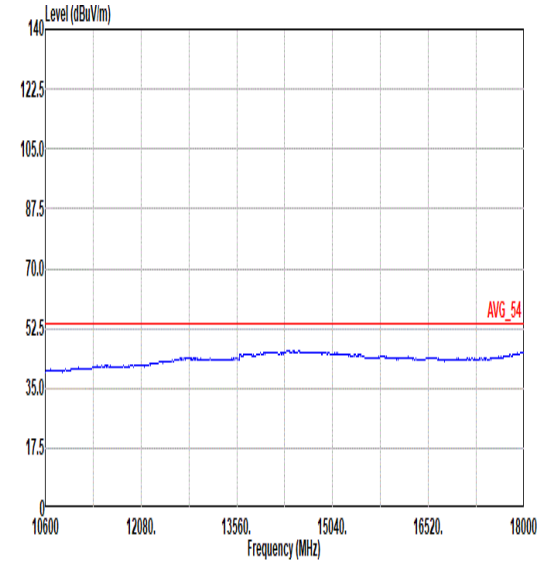
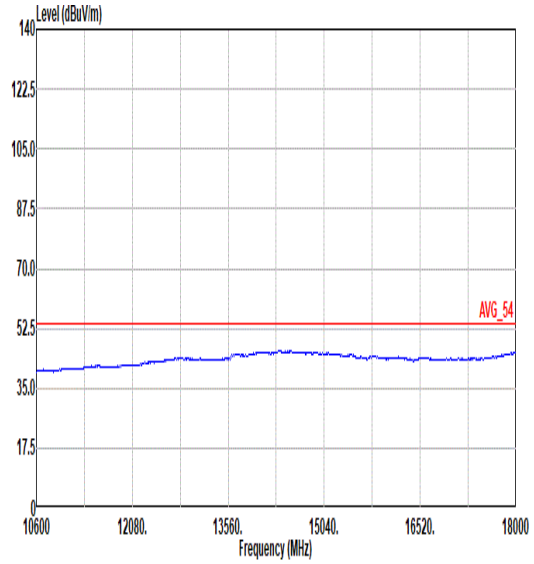
Mode	2	
	Band Edge - L	
	U-NII-1_5.15-5.25_802.11a_CH44_5220MHz	
ANT	1+2 (CDD)	
Pol.	Horizontal	Fundamental
Peak	 Site : 03CH22-HY Condition: PEAK_BE_74 3m DRH18-E_LE2C04A18EN_240711 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto 1 5149.16 61.87 74.00 -12.13 50.11 32.70 12.75 33.69 0.00 203 38 PEAK	 Site : 03CH22-HY Condition: PEAK(UNII) 3m DRH18-E_LE2C04A18EN_240711 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto 1 5220.00 115.24 ------ ------ 103.64 32.53 12.87 33.80 0.00 203 38 PEAK
Avg	 Site : 03CH22-HY Condition: AVG_BE_54 3m DRH18-E_LE2C04A18EN_240711 HORIZONTAL : RBW:1000.000kHz VBW:1.000kHz SWT:Auto 1 5148.28 52.05 54.00 -1.95 40.30 32.69 12.75 33.69 0.00 203 38 AVERAGE	 Site : 03CH22-HY Condition: AVG_54 3m DRH18-E_LE2C04A18EN_240711 HORIZONTAL : RBW:1000.000kHz VBW:1.000kHz SWT:Auto 1 5220.00 108.49 ------ ------ 96.89 32.53 12.87 33.80 0.00 203 38 AVERAGE

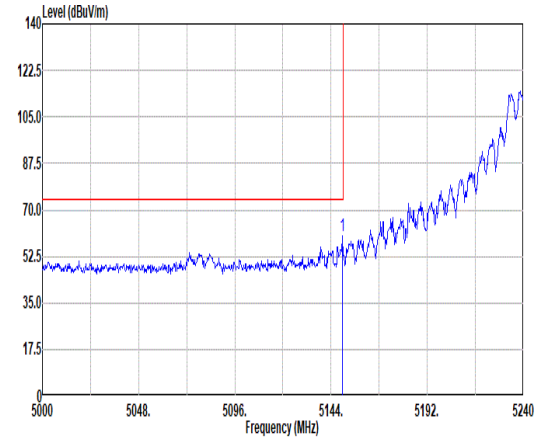
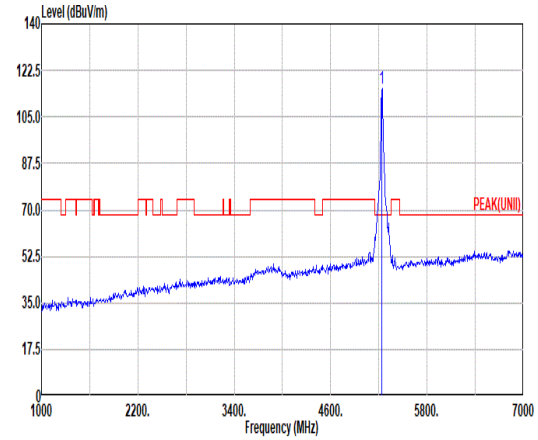
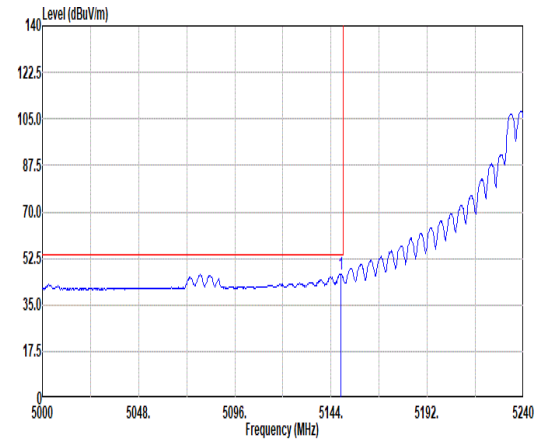
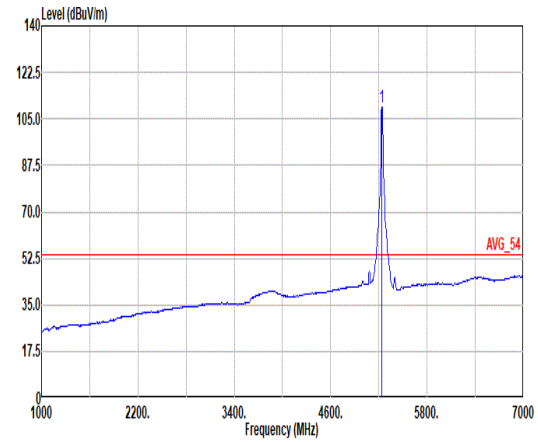
Mode	2	
	Band Edge - R	
	U-NII-1_5.15-5.25_802.11a_CH44_5220MHz	
ANT	1+2 (CDD)	
Pol.	Horizontal	Fundamental
Peak	 Site : 03CH22-HY Condition: PEAK_BE_74 3m DRH18-E_LE2C04A18EN_240711 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Limit Read Ant Cable Preamp Aux APos TPos Freq Level Line Margin Level Factor Loss Factor Factor Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5372.40 50.07 74.00 -23.93 38.67 32.36 13.08 34.04 0.00 203 38 PEAK	Blank
Avg	 Site : 03CH22-HY Condition: AVG_BE_54 3m DRH18-E_LE2C04A18EN_240711 HORIZONTAL : RBW:1000.000kHz VBW:1.000kHz SWT:Auto Limit Read Ant Cable Preamp Aux APos TPos Freq Level Line Margin Level Factor Loss Factor Factor Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5378.64 43.62 54.00 -10.38 32.24 32.34 13.09 34.05 0.00 203 38 AVERAGE	Blank

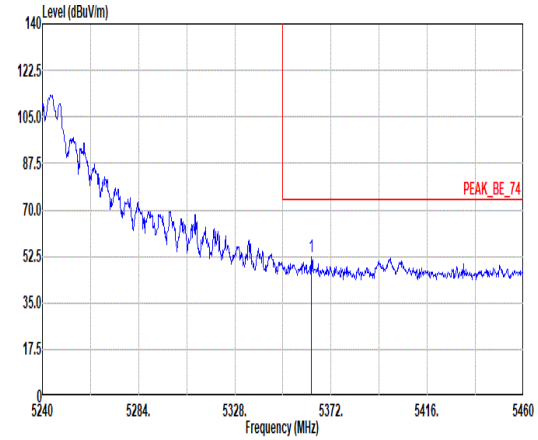
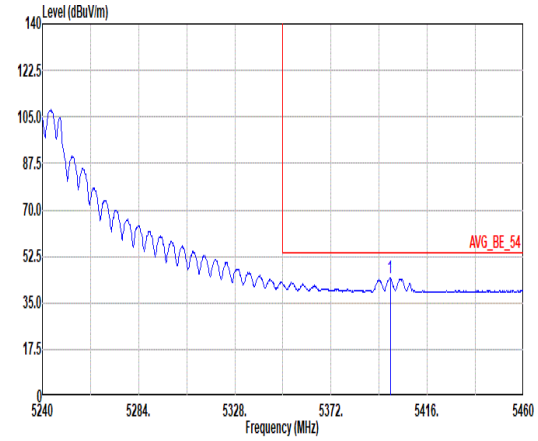
Mode	2	
	Band Edge - L	
	U-NII-1_5.15-5.25_802.11a_CH44_5220MHz	
ANT	1+2 (CDD)	
Pol.	Vertical	Fundamental
Peak	 Site : 03CH22-HY Condition: PEAK_BE_74 3m DRH18-E_LE2C04A18EN_240711 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5143.00 62.40 74.00 -11.60 50.67 32.67 12.74 33.68 0.00 200 1 PEAK	 Site : 03CH22-HY Condition: PEAK(UNII) 3m DRH18-E_LE2C04A18EN_240711 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5220.00 116.96 ------ ------ 105.39 32.50 12.88 33.81 0.00 200 1 PEAK
Avg	 Site : 03CH22-HY Condition: AVG_BE_54 3m DRH18-E_LE2C04A18EN_240711 VERTICAL : RBW:1000.000kHz VBW:1.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5148.06 53.08 54.00 -0.92 41.33 32.69 12.75 33.69 0.00 200 1 AVERAGE	 Site : 03CH22-HY Condition: AVG_54 3m DRH18-E_LE2C04A18EN_240711 VERTICAL : RBW:1000.000kHz VBW:1.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5220.00 111.50 ------ ------ 99.90 32.53 12.87 33.80 0.00 200 1 AVERAGE

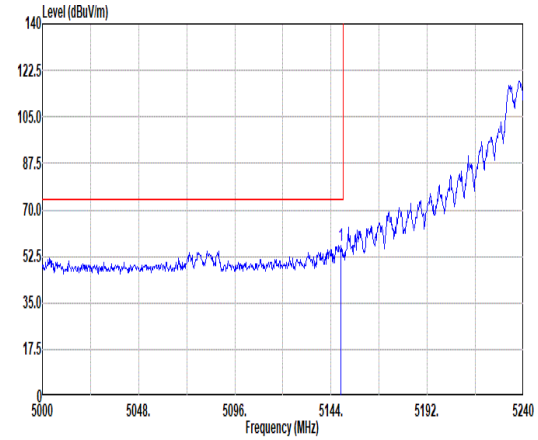
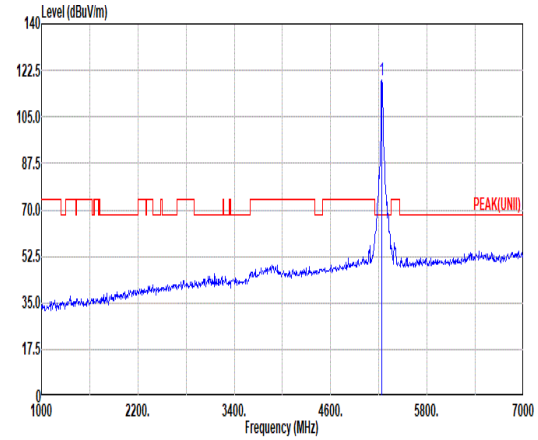
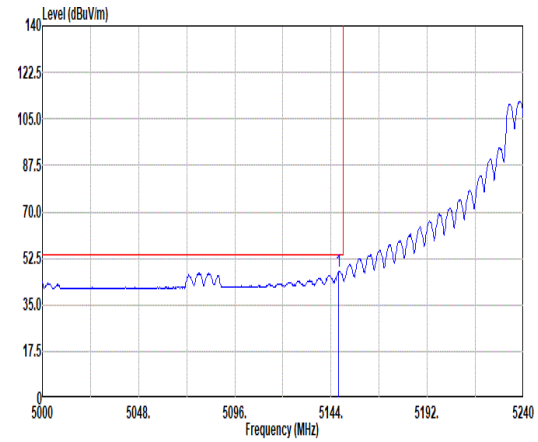
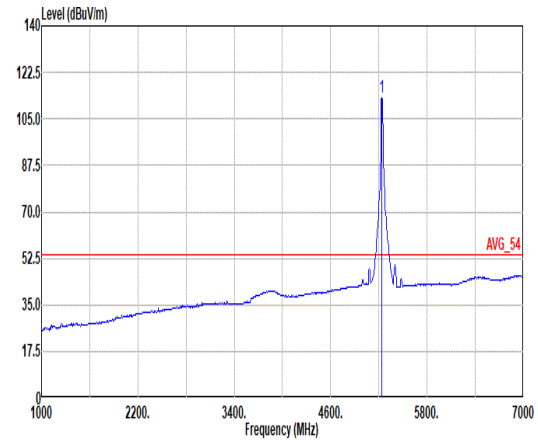
Mode	2	
	Band Edge - R	
	U-NII-1_5.15-5.25_802.11a_CH44_5220MHz	
ANT	1+2 (CDD)	
Pol.	Vertical	Fundamental
Peak	 Site : 03CH22-HY Condition: PEAK_BE_74 3m DRH18-E_LE2C04A18EN_240711 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Limit Read Ant Cable Preamp Aux APos TPos Freq Level Line Margin Level Factor Loss Factor Factor Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5382.72 53.05 74.00 -20.95 41.68 32.33 13.10 34.06 0.00 200 1 PEAK	Blank
Avg	 Site : 03CH22-HY Condition: AVG_BE_54 3m DRH18-E_LE2C04A18EN_240711 VERTICAL : RBW:1000.000kHz VBW:1.000kHz SWT:Auto Limit Read Ant Cable Preamp Aux APos TPos Freq Level Line Margin Level Factor Loss Factor Factor Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5377.92 47.69 54.00 -6.31 36.31 32.34 13.09 34.05 0.00 200 1 AVERAGE	Blank

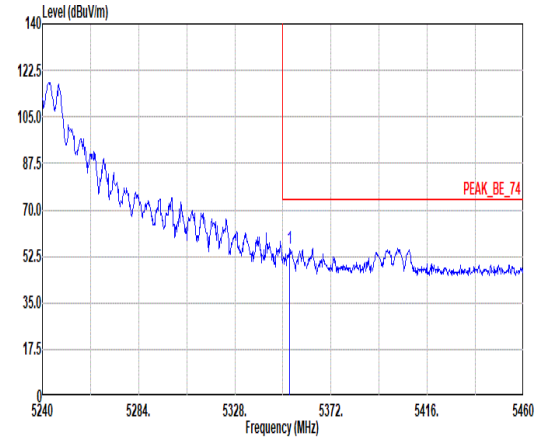
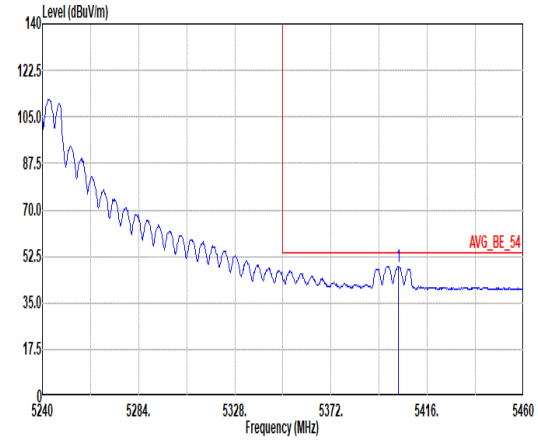
Mode	2	
	Harmonic	
	U-NII-1_5.15-5.25_802.11a_CH44_5220MHz	
ANT	1+2 (CDD)	
Pol.	Horizontal	Vertical
Peak Avg	 Site : 03CH22-HY Condition: PEAK(UNII) 3m DRH18-E_LE2C04A18EN_240711 HORIZONTAL Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 10440.00 50.29 68.20 -17.91 33.14 37.30 18.59 39.25 0.51 -- -- Peak 2 15660.00 58.64 74.00 -15.36 38.45 41.16 22.99 44.52 0.56 198 312 Peak 3 15660.00 49.64 54.00 -4.36 29.45 41.16 22.99 44.52 0.56 198 312 Average	 Site : 03CH22-HY Condition: PEAK(UNII) 3m DRH18-E_LE2C04A18EN_240711 VERTICAL Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 10440.00 49.71 68.20 -18.49 32.56 37.30 18.59 39.25 0.51 -- -- Peak 2 15660.00 60.08 74.00 -13.92 39.89 41.16 22.99 44.52 0.56 306 14 Peak 3 15660.00 51.09 54.00 -2.91 30.90 41.16 22.99 44.52 0.56 306 14 Average

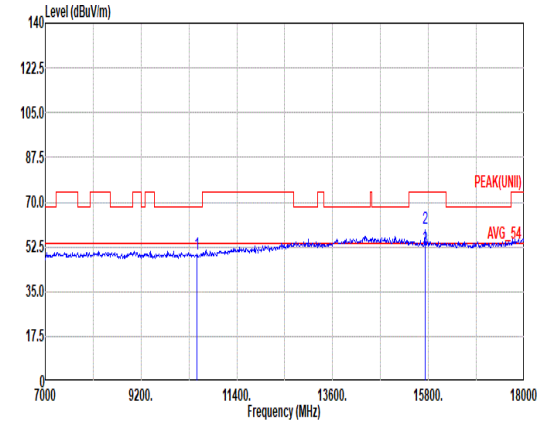
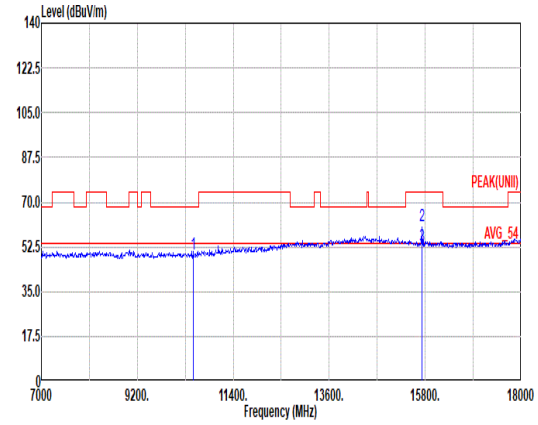
Mode	2	
	Harmonic	
	U-NII-1_5.15-5.25_802.11a_CH44_5220MHz	
ANT	1+2 (CDD)	
Pol.	Horizontal	Vertical
10.6G ~18G Avg		

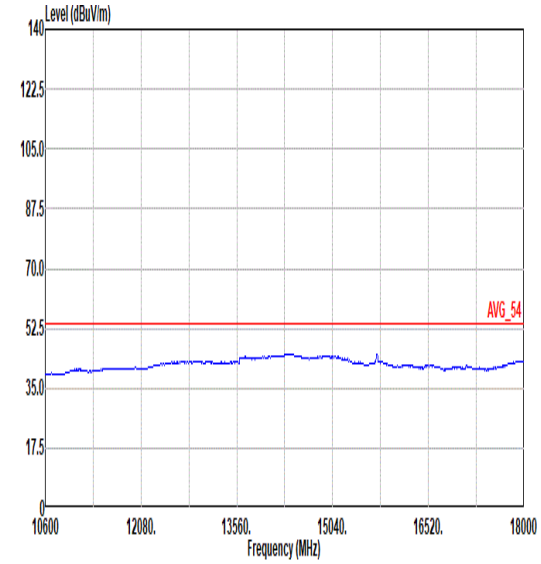
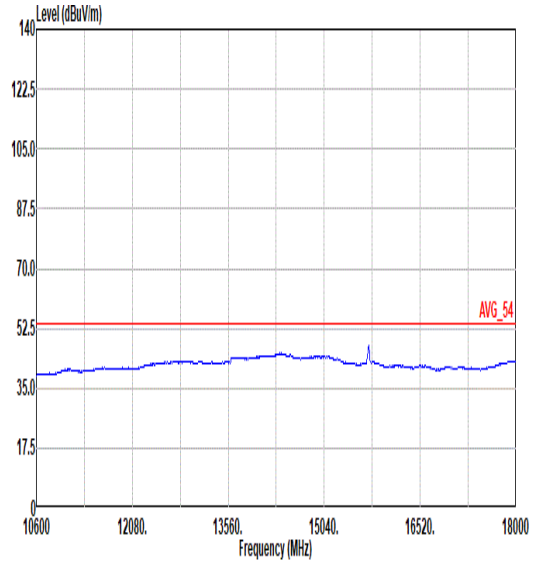
Mode	3	
	Band Edge - L	
	U-NII-1_5.15-5.25_802.11a_CH48_5240MHz	
ANT	1+2 (CDD)	
Pol.	Horizontal	Fundamental
Peak	 Site : 03CH22-HY Condition: PEAK_BE_74 3m DRH18-E_LE2C04A18EN_240711 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5149.52 59.97 74.00 -14.03 48.21 32.70 12.75 33.69 0.00 200 45 PEAK	 Site : 03CH22-HY Condition: PEAK(UNII) 3m DRH18-E_LE2C04A18EN_240711 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5240.00 115.51 ------ ------ 104.01 32.43 12.91 33.84 0.00 200 45 PEAK
Avg	 Site : 03CH22-HY Condition: AVG_BE_54 3m DRH18-E_LE2C04A18EN_240711 HORIZONTAL : RBW:1000.000kHz VBW:1.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5148.80 46.68 54.00 -7.32 34.92 32.70 12.75 33.69 0.00 200 45 AVERAGE	 Site : 03CH22-HY Condition: AVG_54 3m DRH18-E_LE2C04A18EN_240711 HORIZONTAL : RBW:1000.000kHz VBW:1.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5240.00 109.49 ------ ------ 97.96 32.46 12.90 33.83 0.00 200 45 AVERAGE

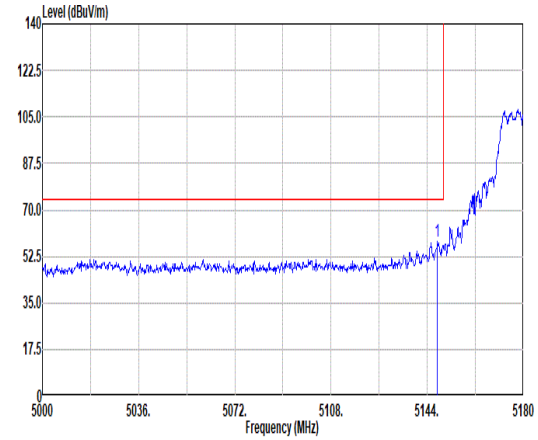
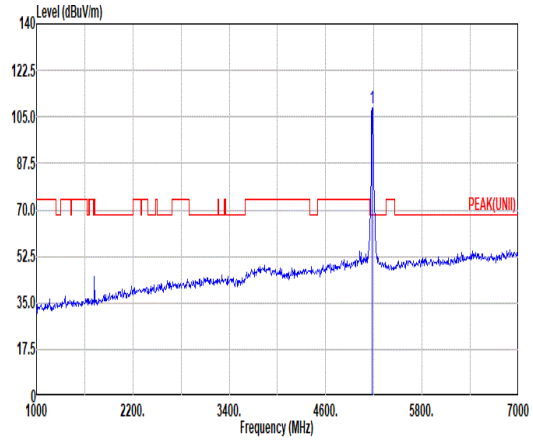
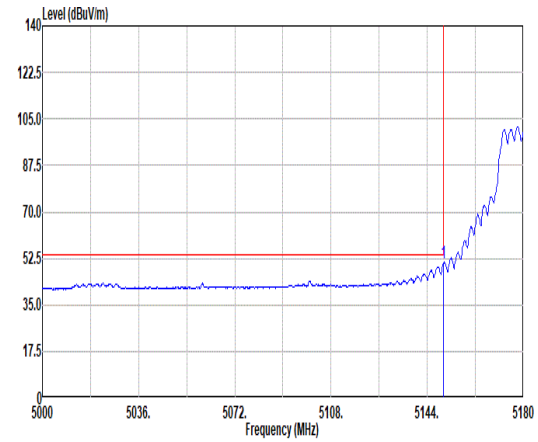
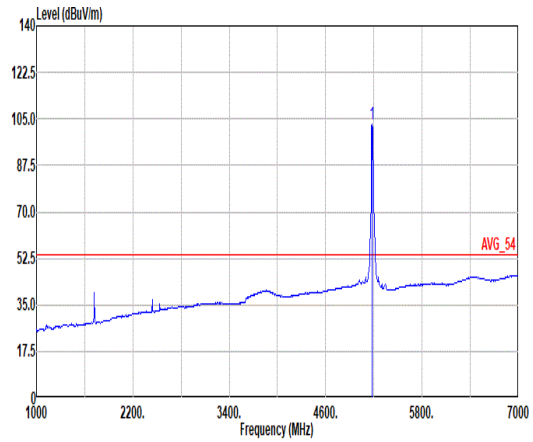
Mode	3	
	Band Edge - R	
	U-NII-1_5.15-5.25_802.11a_CH48_5240MHz	
ANT	1+2 (CDD)	
Pol.	Horizontal	Fundamental
Peak	 Site : 03CH22-HY Condition: PEAK_BE_74 3m DRH18-E_LE2C04A18EN_240711 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Limit Read Ant Cable Preamp Aux APos TPos Freq Level Line Margin Level Factor Loss Factor Factor Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5362.98 52.36 74.00 -21.64 40.95 32.37 13.07 34.03 0.00 200 45 PEAK	Blank
Avg	 Site : 03CH22-HY Condition: AVG_BE_54 3m DRH18-E_LE2C04A18EN_240711 HORIZONTAL : RBW:1000.000kHz VBW:1.000kHz SWT:Auto Limit Read Ant Cable Preamp Aux APos TPos Freq Level Line Margin Level Factor Loss Factor Factor Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5399.06 44.15 54.00 -9.85 32.81 32.30 13.12 34.08 0.00 200 45 AVERAGE	Blank

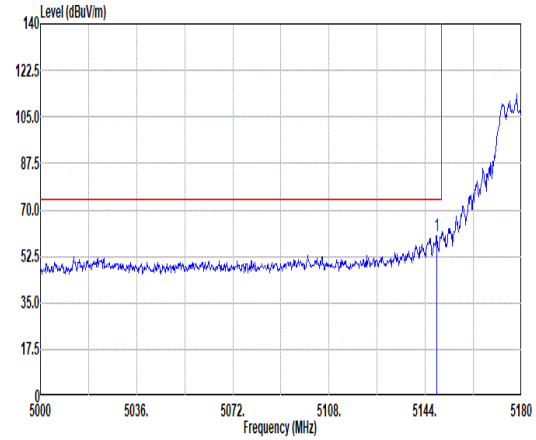
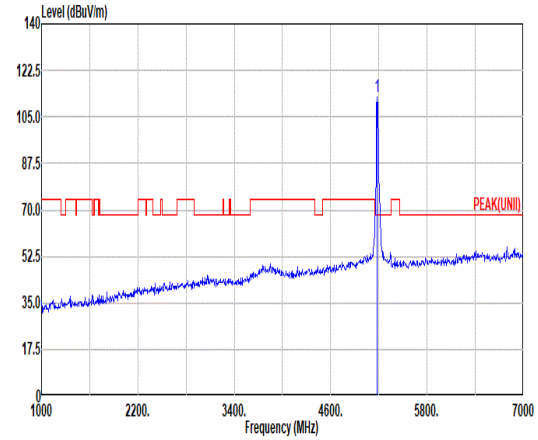
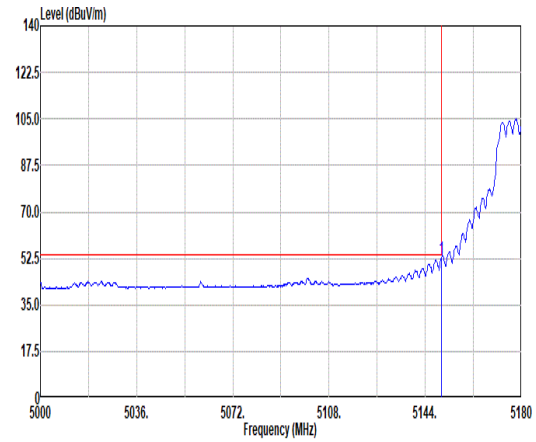
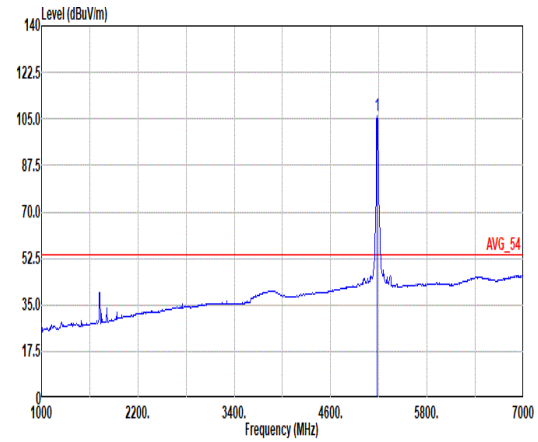
Mode	3	
	Band Edge - L	
	U-NII-1_5.15-5.25_802.11a_CH48_5240MHz	
ANT	1+2 (CDD)	
Pol.	Vertical	Fundamental
Peak	 Site : 03CH22-HY Condition: PEAK_BE_74 3m DRH18-E_LE2C04A18EN_240711 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5149.04 56.58 74.00 -17.42 44.82 32.70 12.75 33.69 0.00 186 360 PEAK	 Site : 03CH22-HY Condition: PEAK(UNII) 3m DRH18-E_LE2C04A18EN_240711 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5240.00 118.95 ------ ------ 107.42 32.46 12.90 33.83 0.00 186 360 PEAK
Avg	 Site : 03CH22-HY Condition: AVG_BE_54 3m DRH18-E_LE2C04A18EN_240711 VERTICAL : RBW:1000.000kHz VBW:1.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5147.84 47.48 54.00 -6.52 35.73 32.69 12.75 33.69 0.00 186 360 AVERAGE	 Site : 03CH22-HY Condition: AVG_54 3m DRH18-E_LE2C04A18EN_240711 VERTICAL : RBW:1000.000kHz VBW:1.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5240.00 112.96 ------ ------ 101.43 32.46 12.90 33.83 0.00 186 360 AVERAGE

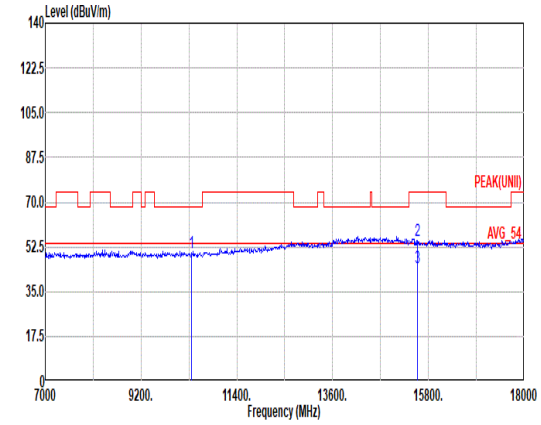
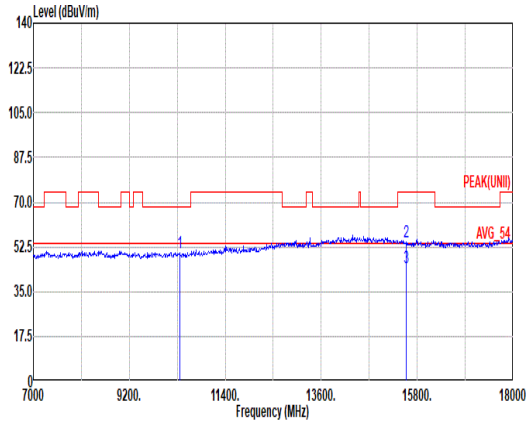
Mode	3	
	Band Edge - R	
	U-NII-1_5.15-5.25_802.11a_CH48_5240MHz	
ANT	1+2 (CDD)	
Pol.	Vertical	Fundamental
Peak	 Site : 03CH22-HY Condition: PEAK_BE_74 3m DRH18-E_LE2C04A18EN_240711 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Limit Read Ant Cable Preamp Aux APos TPos Freq Level Line Margin Level Factor Loss Factor Factor Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5353.08 55.66 74.00 -18.34 44.22 32.39 13.06 34.01 0.00 186 360 PEAK	Blank
Avg	 Site : 03CH22-HY Condition: AVG_BE_54 3m DRH18-E_LE2C04A18EN_240711 VERTICAL : RBW:1000.000kHz VBW:1.000kHz SWT:Auto Limit Read Ant Cable Preamp Aux APos TPos Freq Level Line Margin Level Factor Loss Factor Factor Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5402.80 48.74 54.00 -5.26 37.40 32.31 13.12 34.09 0.00 186 360 AVERAGE	Blank

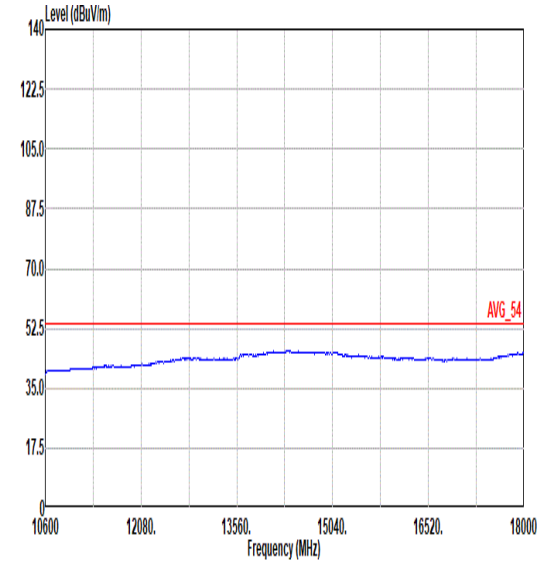
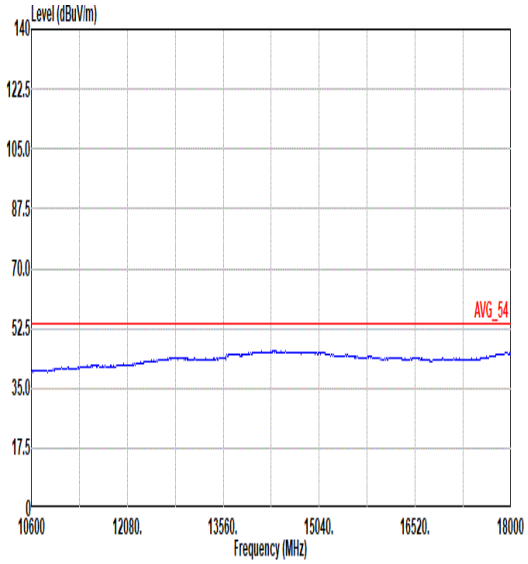
Mode	3	
	Harmonic	
	U-NII-1_5.15-5.25_802.11a_CH48_5240MHz	
ANT	1+2 (CDD)	
Pol.	Horizontal	Vertical
Peak Avg	 Site : 03CH22-HY Condition: PEAK(UNII) 3m DRH18-E_LE2C04A18EN_240711 HORIZONTAL Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 10480.00 49.92 68.20 -18.28 32.78 37.30 18.63 39.30 0.51 -- -- Peak 2 15720.00 59.58 74.00 -14.42 39.45 41.16 23.04 44.63 0.56 189 312 Peak 3 15720.00 51.56 54.00 -2.44 31.43 41.16 23.04 44.63 0.56 189 312 Average	 Site : 03CH22-HY Condition: PEAK(UNII) 3m DRH18-E_LE2C04A18EN_240711 VERTICAL Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 10480.00 49.76 68.20 -18.44 32.62 37.30 18.63 39.30 0.51 -- -- Peak 2 15720.00 60.54 74.00 -13.46 40.41 41.16 23.04 44.63 0.56 300 14 Peak 3 15720.00 52.85 54.00 -1.15 32.72 41.16 23.04 44.63 0.56 300 14 Average

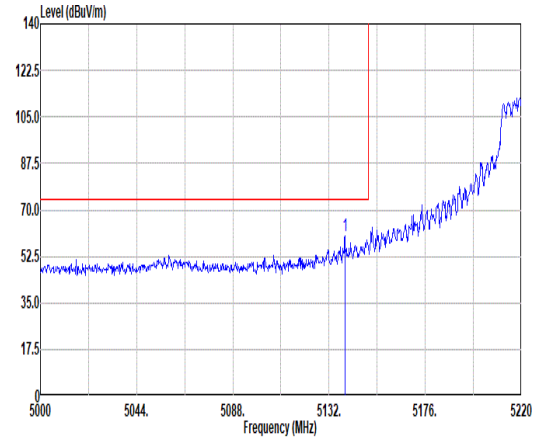
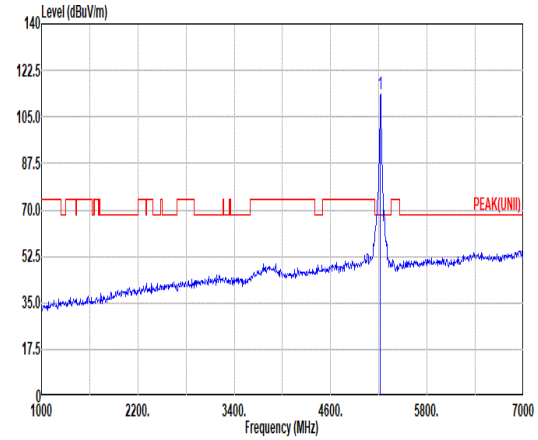
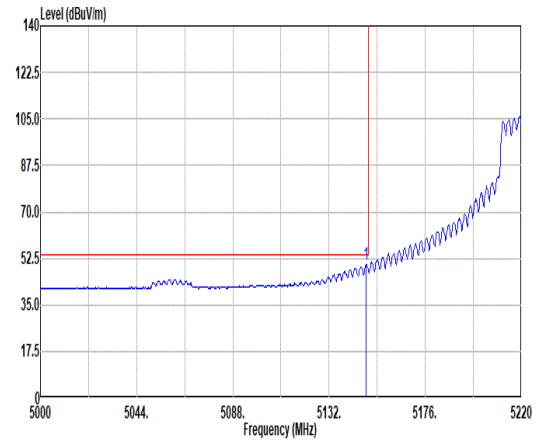
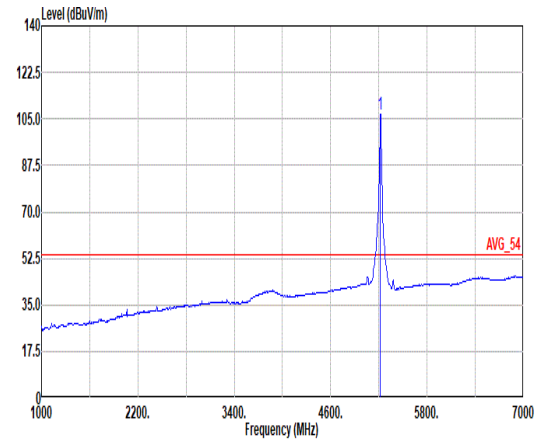
Mode	3	
	Harmonic	
	U-NII-1_5.15-5.25_802.11a_CH48_5240MHz	
ANT	1+2 (CDD)	
Pol.	Horizontal	Vertical
10.6G ~18G Avg		

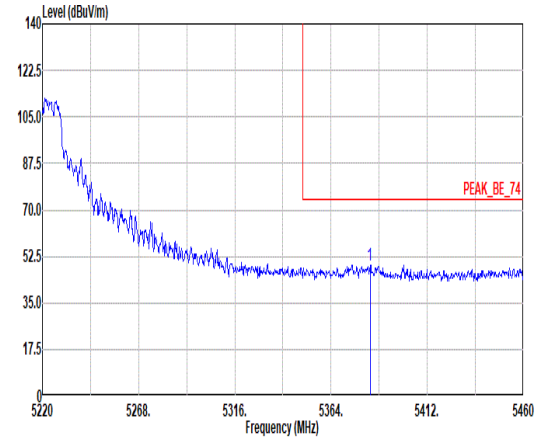
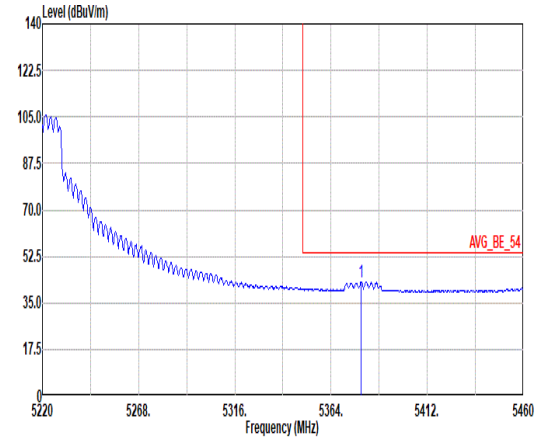
Mode	4	
	Band Edge	
	U-NII-1_5.15-5.25_802.11ac VHT20_CH36_5180MHz	
ANT	1+2 (CDD)	
Pol.	Horizontal	Fundamental
Peak	 Site : 03CH22-HY Condition: PEAK_BE_74 3m DRH18-E_LE2C04A18EN_240711 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5147.78 57.88 74.00 -16.12 46.13 32.69 12.75 33.69 0.00 195 37 PEAK	 Site : 03CH22-HY Condition: PEAK(UNII) 3m DRH18-E_LE2C04A18EN_240711 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5180.00 108.35 ------ ------ 96.65 32.62 12.83 33.75 0.00 195 37 PEAK
Avg	 Site : 03CH22-HY Condition: AVG_BE_54 3m DRH18-E_LE2C04A18EN_240711 HORIZONTAL : RBW:1000.000kHz VBW:1.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5149.94 50.58 54.00 -3.42 38.82 32.70 12.75 33.69 0.00 195 37 AVERAGE	 Site : 03CH22-HY Condition: AVG_54 3m DRH18-E_LE2C04A18EN_240711 HORIZONTAL : RBW:1000.000kHz VBW:1.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5180.00 103.25 ------ ------ 91.53 32.65 12.80 33.73 0.00 195 37 AVERAGE

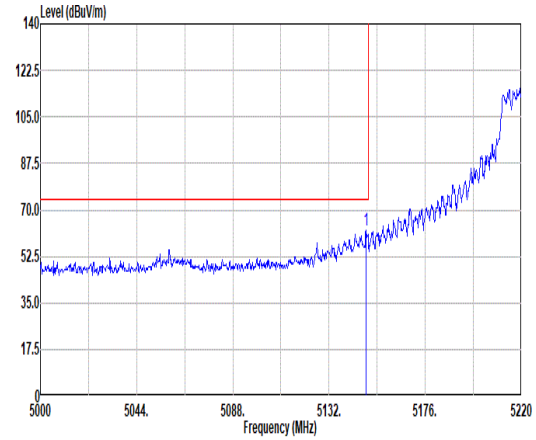
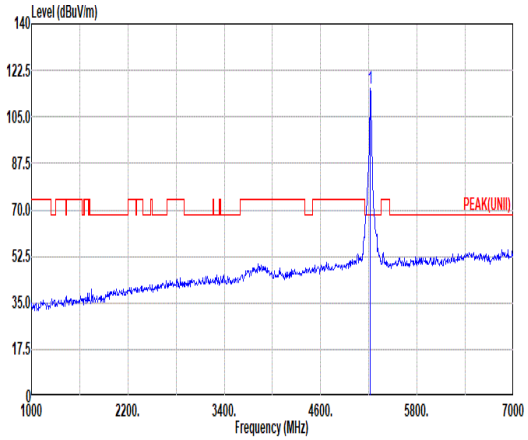
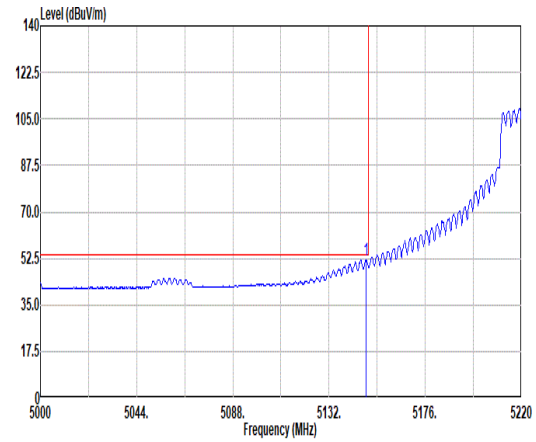
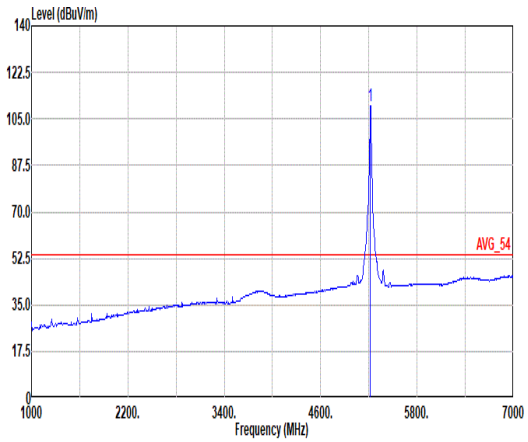
Mode	4	
	Band Edge	
	U-NII-1_5.15-5.25_802.11ac VHT20_CH36_5180MHz	
ANT	1+2 (CDD)	
Pol.	Vertical	Fundamental
Peak	 Site : 03CH22-HY Condition: PEAK_BE_74 3m DRH18-E_LE2C04A18EN_240711 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5148.32 60.34 74.00 -13.66 48.59 32.69 12.75 33.69 0.00 194 1 PEAK	 Site : 03CH22-HY Condition: PEAK(UNII) 3m DRH18-E_LE2C04A18EN_240711 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5180.00 112.74 ------ ------ 101.02 32.65 12.80 33.73 0.00 194 1 PEAK
Avg	 Site : 03CH22-HY Condition: AVG_BE_54 3m DRH18-E_LE2C04A18EN_240711 VERTICAL : RBW:1000.000kHz VBW:1.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5149.94 52.48 54.00 -1.52 40.72 32.70 12.75 33.69 0.00 194 1 AVERAGE	 Site : 03CH22-HY Condition: AVG_54 3m DRH18-E_LE2C04A18EN_240711 VERTICAL : RBW:1000.000kHz VBW:1.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5180.00 105.95 ------ ------ 94.23 32.65 12.80 33.73 0.00 194 1 AVERAGE

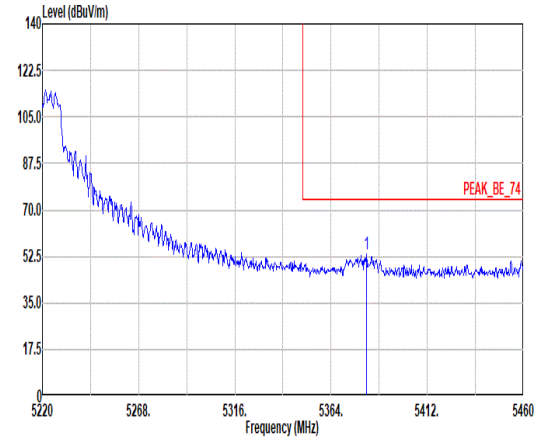
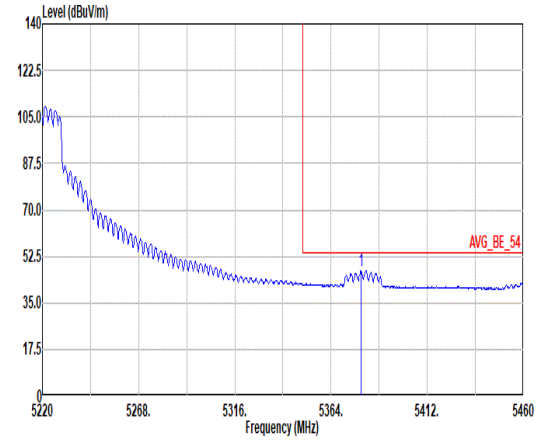
Mode	4	
	Harmonic	
	U-NII-1_5.15-5.25_802.11ac VHT20_CH36_5180MHz	
ANT	1+2 (CDD)	
Pol.	Horizontal	Vertical
Peak Avg	 Site : 03CH22-HY Condition: PEAK(UNII) 3m DRH18-E_LE2C04A18EN_240711 HORIZONTAL Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 10360.00 50.22 68.20 -17.98 32.97 37.38 18.51 39.14 0.50 -- -- PEAK 2 15540.00 54.75 74.00 -19.25 34.37 41.24 22.89 44.30 0.55 -- -- PEAK 3 15540.00 44.50 54.00 -9.50 24.12 41.24 22.89 44.30 0.55 -- -- Average	 Site : 03CH22-HY Condition: PEAK(UNII) 3m DRH18-E_LE2C04A18EN_240711 VERTICAL Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 10360.00 50.24 68.20 -17.96 32.99 37.38 18.51 39.14 0.50 -- -- PEAK 2 15540.00 54.45 74.00 -19.55 34.07 41.24 22.89 44.30 0.55 -- -- PEAK 3 15540.00 44.58 54.00 -9.42 24.20 41.24 22.89 44.30 0.55 -- -- Average

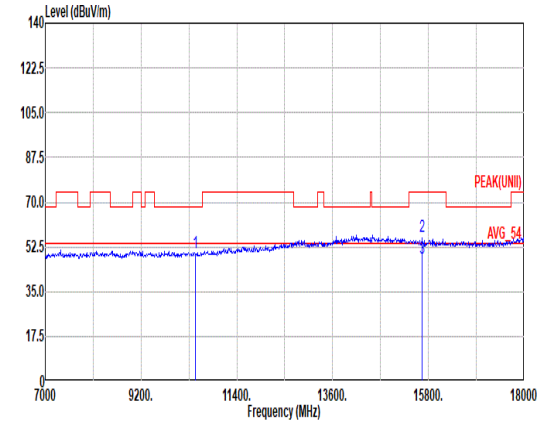
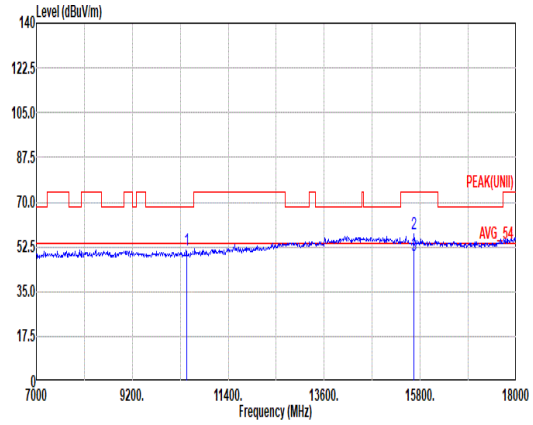
Mode	4	
	Harmonic	
	U-NII-1_5.15-5.25_802.11ac VHT20_CH36_5180MHz	
ANT	1+2 (CDD)	
Pol.	Horizontal	Vertical
10.6G ~18G Avg	 Site : 03CH22-HY Condition: AVG_54 3m DRH18-E_LE2C04A18EN_240711 HORIZONTAL	 Site : 03CH22-HY Condition: AVG_54 3m DRH18-E_LE2C04A18EN_240711 VERTICAL

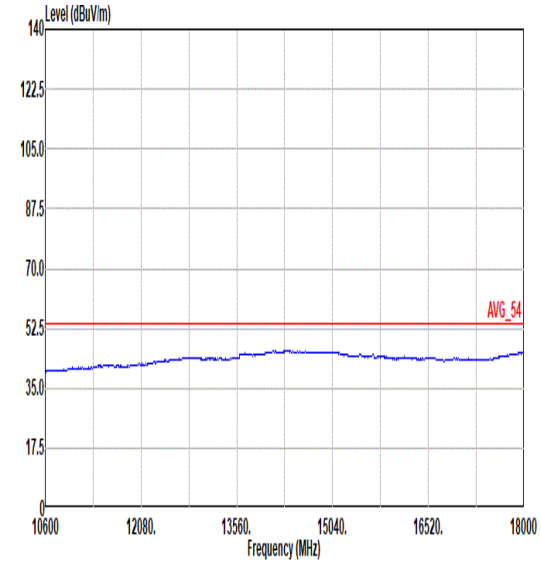
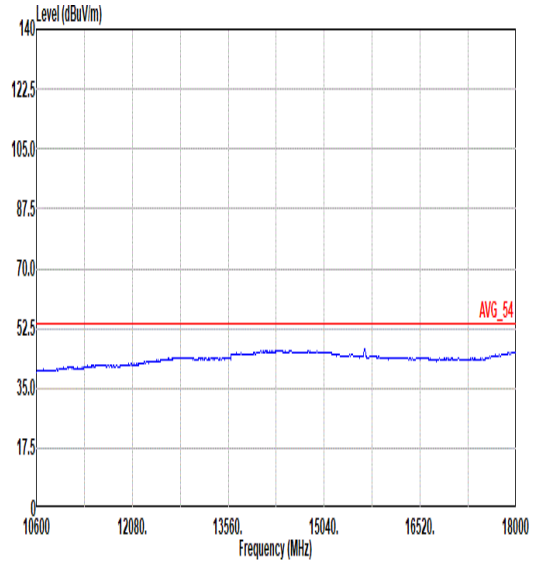
Mode	5	
	Band Edge - L	
	U-NII-1_5.15-5.25_802.11ac VHT20_CH44_5220MHz	
ANT	1+2 (CDD)	
Pol.	Horizontal	Fundamental
Peak	 Site : 03CH22-HY Condition: PEAK_BE_74 3m DRH18-E_LE2C04A18EN_240711 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5139.26 60.11 74.00 -13.89 48.40 32.66 12.73 33.68 0.00 195 37 PEAK	 Site : 03CH22-HY Condition: PEAK(UNII) 3m DRH18-E_LE2C04A18EN_240711 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5220.00 113.51 ------ ------ 101.94 32.50 12.88 33.81 0.00 195 37 PEAK
Avg	 Site : 03CH22-HY Condition: AVG_BE_54 3m DRH18-E_LE2C04A18EN_240711 HORIZONTAL : RBW:1000.000kHz VBW:1.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5148.94 50.23 54.00 -3.77 38.47 32.70 12.75 33.69 0.00 195 37 AVERAGE	 Site : 03CH22-HY Condition: AVG_54 3m DRH18-E_LE2C04A18EN_240711 HORIZONTAL : RBW:1000.000kHz VBW:1.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5220.00 106.73 ------ ------ 95.13 32.53 12.87 33.80 0.00 195 37 AVERAGE

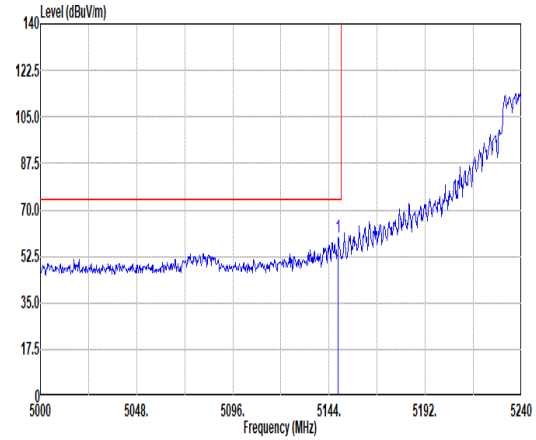
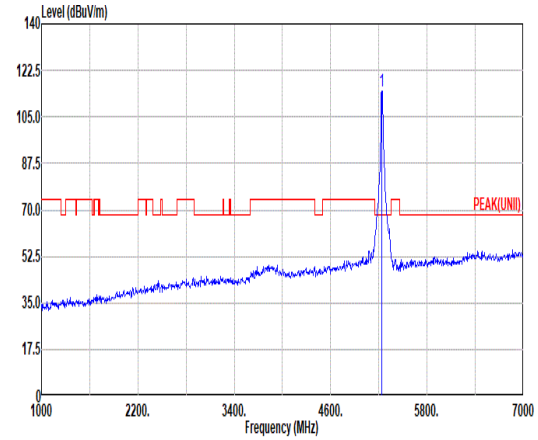
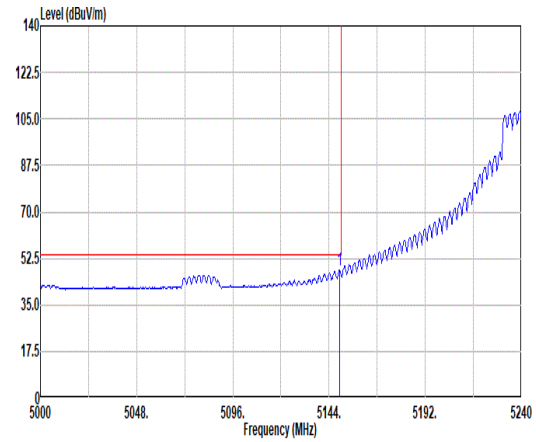
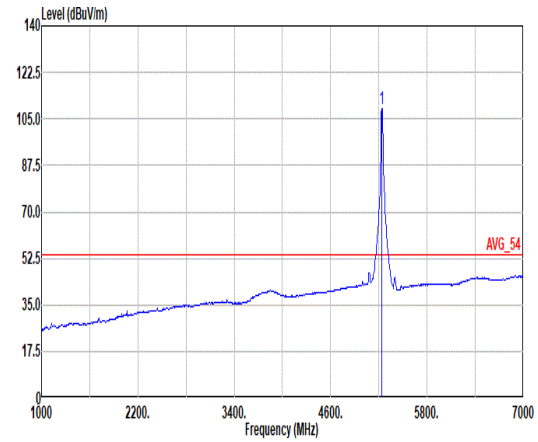
Mode	5	
	Band Edge - R	
	U-NII-1_5.15-5.25_802.11ac VHT20_CH44_5220MHz	
ANT	1+2 (CDD)	
Pol.	Horizontal	Fundamental
Peak	 Site : 03CH22-HY Condition: PEAK_BE_74 3m DRH18-E_LE2C04A18EN_240711 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5383.44 49.09 74.00 -24.91 37.72 32.33 13.10 34.06 0.00 195 37 PEAK	Blank
Avg	 Site : 03CH22-HY Condition: AVG_BE_54 3m DRH18-E_LE2C04A18EN_240711 HORIZONTAL : RBW:1000.000kHz VBW:1.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5379.12 43.04 54.00 -10.96 31.66 32.34 13.09 34.05 0.00 195 37 AVERAGE	Blank

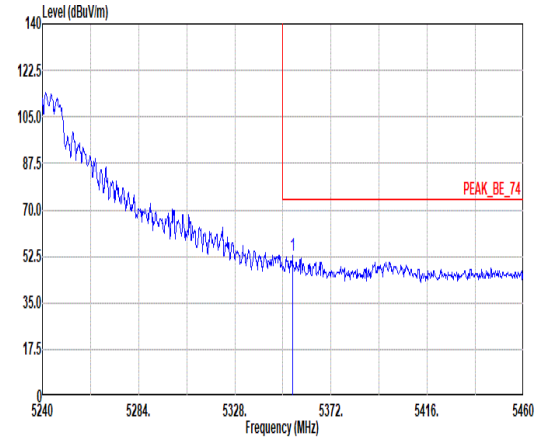
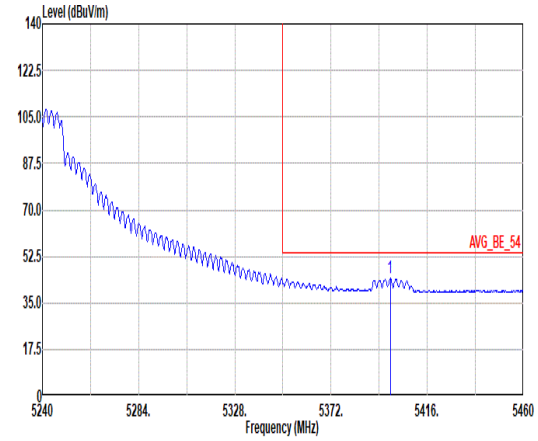
Mode	5	
	Band Edge - L	
	U-NII-1_5.15-5.25_802.11ac VHT20_CH44_5220MHz	
ANT	1+2 (CDD)	
Pol.	Vertical	Fundamental
Peak	 Site : 03CH22-HY Condition: PEAK_BE_74 3m DRH18-E_LE2C04A18EN_240711 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto 1 5148.94 62.57 74.00 -11.43 50.81 32.70 12.75 33.69 0.00 201 360 PEAK	 Site : 03CH22-HY Condition: PEAK(UNII) 3m DRH18-E_LE2C04A18EN_240711 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto 1 5220.00 115.74 ------ ------ 104.11 32.55 12.87 33.79 0.00 201 360 PEAK
Avg	 Site : 03CH22-HY Condition: AVG_BE_54 3m DRH18-E_LE2C04A18EN_240711 VERTICAL : RBW:1000.000kHz VBW:1.000kHz SWT:Auto 1 5148.94 52.02 54.00 -1.98 40.26 32.70 12.75 33.69 0.00 201 360 AVERAGE	 Site : 03CH22-HY Condition: AVG_54 3m DRH18-E_LE2C04A18EN_240711 VERTICAL : RBW:1000.000kHz VBW:1.000kHz SWT:Auto 1 5220.00 109.95 ------ ------ 98.35 32.53 12.87 33.80 0.00 201 360 AVERAGE

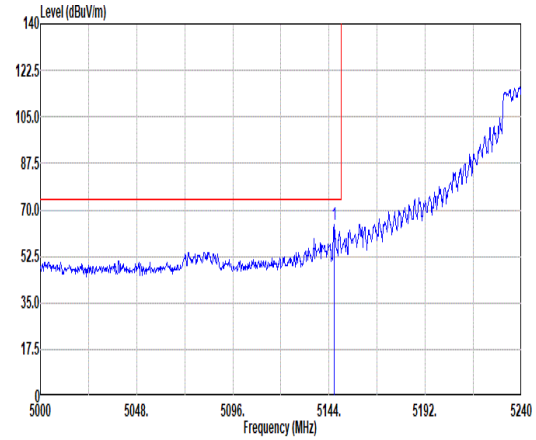
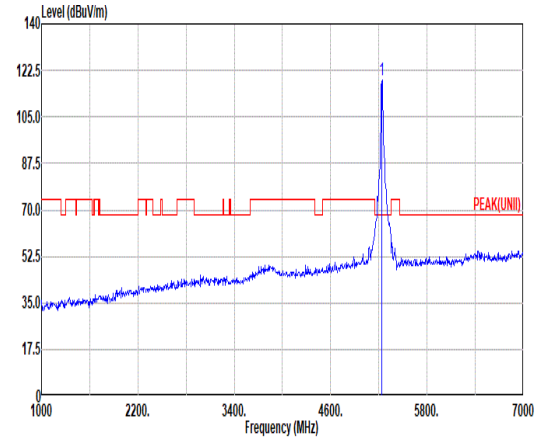
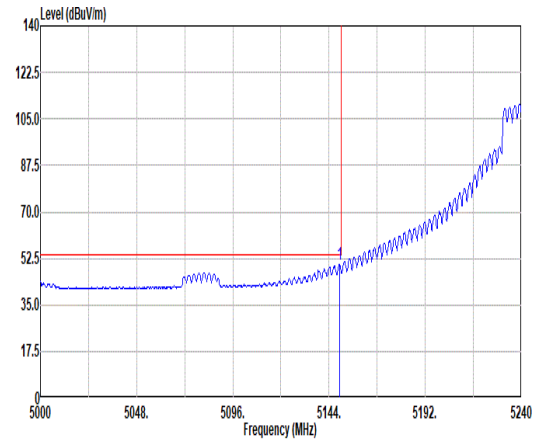
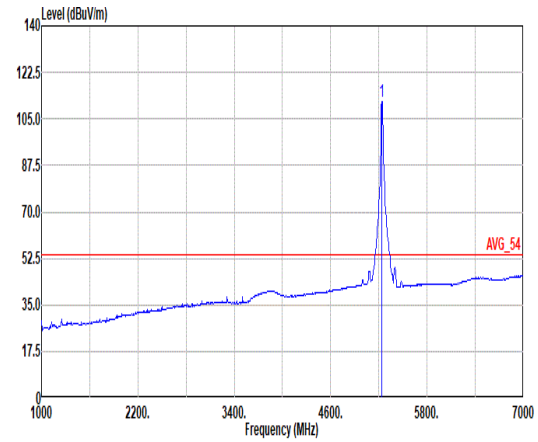
Mode	5	
	Band Edge - R	
	U-NII-1_5.15-5.25_802.11ac VHT20_CH44_5220MHz	
ANT	1+2 (CDD)	
Pol.	Vertical	Fundamental
Peak	 Site : 03CH22-HY Condition: PEAK_BE_74 3m DRH18-E_LE2C04A18EN_240711 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Limit Read Ant Cable Preamp Aux APos TPos Freq Level Line Margin Level Factor Loss Factor Factor Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5381.52 53.48 74.00 -20.52 42.10 32.34 13.10 34.06 0.00 201 360 PEAK	Blank
Avg	 Site : 03CH22-HY Condition: AVG_BE_54 3m DRH18-E_LE2C04A18EN_240711 VERTICAL : RBW:1000.000kHz VBW:1.000kHz SWT:Auto Limit Read Ant Cable Preamp Aux APos TPos Freq Level Line Margin Level Factor Loss Factor Factor Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5378.88 46.99 54.00 -7.01 35.61 32.34 13.09 34.05 0.00 201 360 AVERAGE	Blank

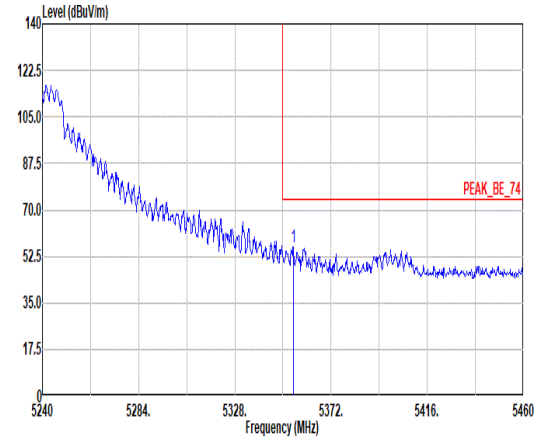
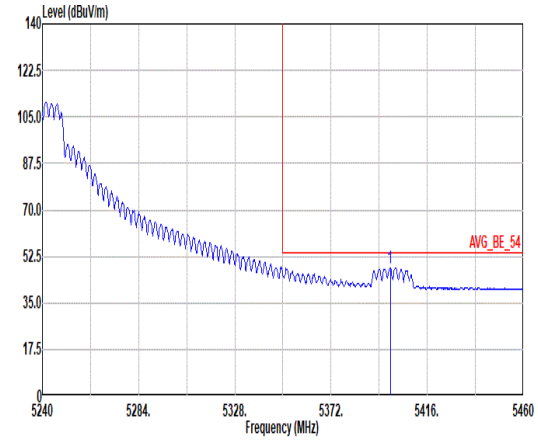
Mode	5	
	Harmonic	
	U-NII-1_5.15-5.25_802.11ac VHT20_CH44_5220MHz	
ANT	1+2 (CDD)	
Pol.	Horizontal	Vertical
Peak Avg	 Site : 03CH22-HY Condition: PEAK(UNII) 3m DRH18-E_LE2C04A18EN_240711 HORIZONTAL Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 10440.00 50.25 68.20 -17.95 33.10 37.30 18.59 39.25 0.51 -- -- PEAK 2 15660.00 56.70 74.00 -17.30 36.51 41.16 22.99 44.52 0.56 196 312 PEAK 3 15660.00 48.23 54.00 -5.77 28.04 41.16 22.99 44.52 0.56 196 312 Average	 Site : 03CH22-HY Condition: PEAK(UNII) 3m DRH18-E_LE2C04A18EN_240711 VERTICAL Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 10440.00 51.12 68.20 -17.08 33.97 37.30 18.59 39.25 0.51 -- -- PEAK 2 15660.00 57.81 74.00 -16.19 37.62 41.16 22.99 44.52 0.56 302 14 PEAK 3 15660.00 49.25 54.00 -4.75 29.06 41.16 22.99 44.52 0.56 302 14 Average

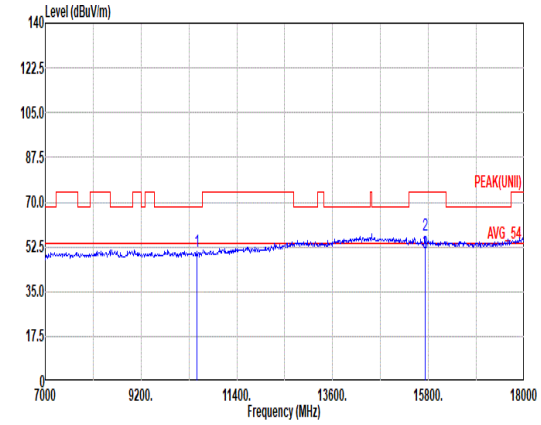
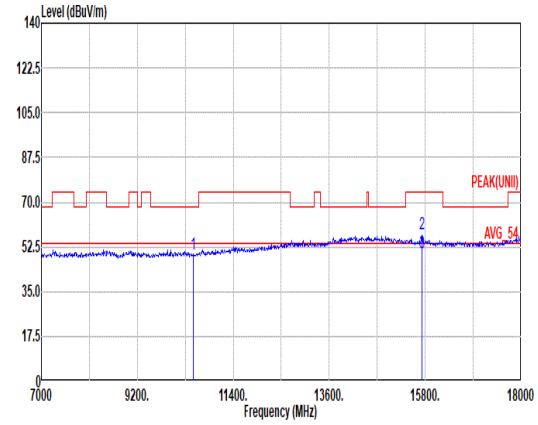
Mode	5	
	Harmonic	
	U-NII-1_5.15-5.25_802.11ac VHT20_CH44_5220MHz	
ANT	1+2 (CDD)	
Pol.	Horizontal	Vertical
10.6G ~18G Avg		

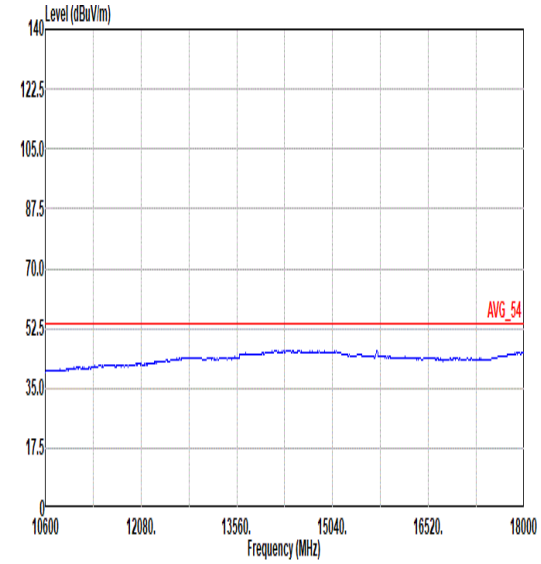
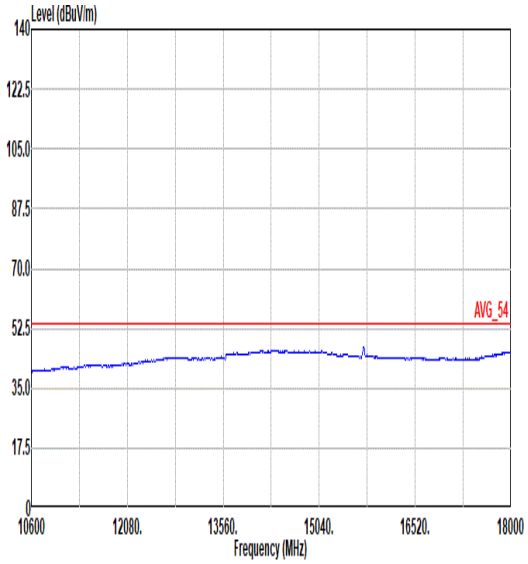
Mode	6	
	Band Edge - L	
	U-NII-1_5.15-5.25_802.11ac VHT20_CH48_5240MHz	
ANT	1+2 (CDD)	
Pol.	Horizontal	Fundamental
Peak	 Site : 03CH22-HY Condition: PEAK_BE_74 3m DRH18-E_LE2C04A18EN_240711 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5148.56 59.69 74.00 -14.31 47.94 32.69 12.75 33.69 0.00 195 39 PEAK	 Site : 03CH22-HY Condition: PEAK(UNII) 3m DRH18-E_LE2C04A18EN_240711 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5240.00 114.85 ------ ------ 103.35 32.43 12.91 33.84 0.00 195 39 PEAK
Avg	 Site : 03CH22-HY Condition: AVG_BE_54 3m DRH18-E_LE2C04A18EN_240711 HORIZONTAL : RBW:1000.000kHz VBW:1.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5149.28 48.20 54.00 -5.80 36.44 32.70 12.75 33.69 0.00 195 39 AVERAGE	 Site : 03CH22-HY Condition: AVG_54 3m DRH18-E_LE2C04A18EN_240711 HORIZONTAL : RBW:1000.000kHz VBW:1.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5240.00 108.73 ------ ------ 97.23 32.43 12.91 33.84 0.00 195 39 AVERAGE

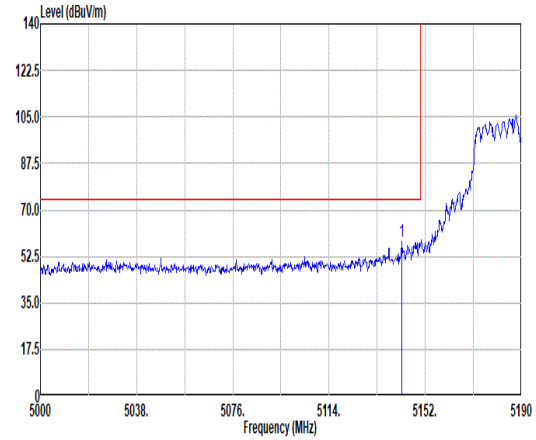
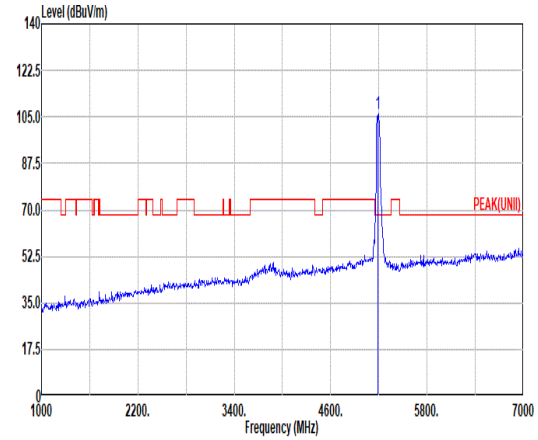
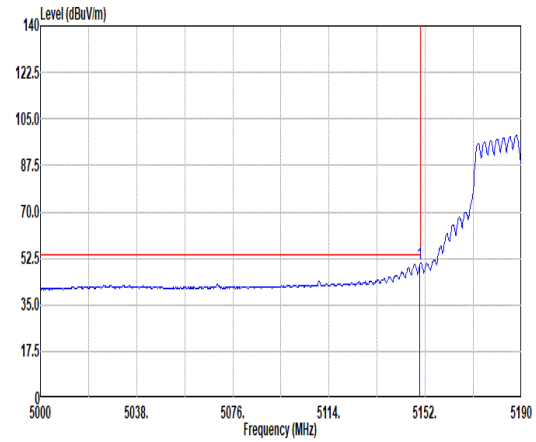
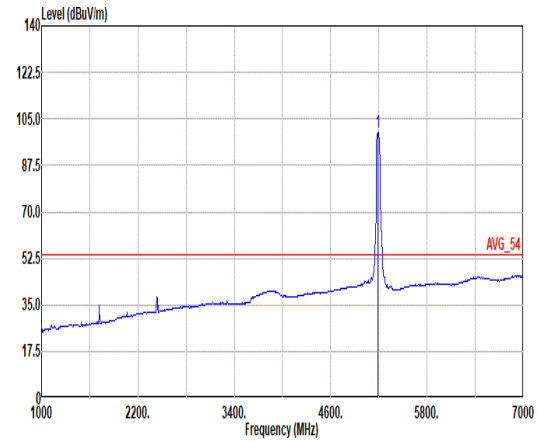
Mode	6	
	Band Edge - R	
	U-NII-1_5.15-5.25_802.11ac VHT20_CH48_5240MHz	
ANT	1+2 (CDD)	
Pol.	Horizontal	Fundamental
Peak	 Site : 03CH22-HY Condition: PEAK_BE_74 3m DRH18-E_LE2C04A18EN_240711 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Limit Read Ant Cable Preamp Aux APos TPos Freq Level Line Margin Level Factor Loss Factor Factor Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5354.40 52.63 74.00 -21.37 41.19 32.39 13.06 34.01 0.00 195 39 PEAK	Blank
Avg	 Site : 03CH22-HY Condition: AVG_BE_54 3m DRH18-E_LE2C04A18EN_240711 HORIZONTAL : RBW:1000.000kHz VBW:1.000kHz SWT:Auto Limit Read Ant Cable Preamp Aux APos TPos Freq Level Line Margin Level Factor Loss Factor Factor Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5399.06 44.14 54.00 -9.86 32.80 32.30 13.12 34.08 0.00 195 39 AVERAGE	Blank

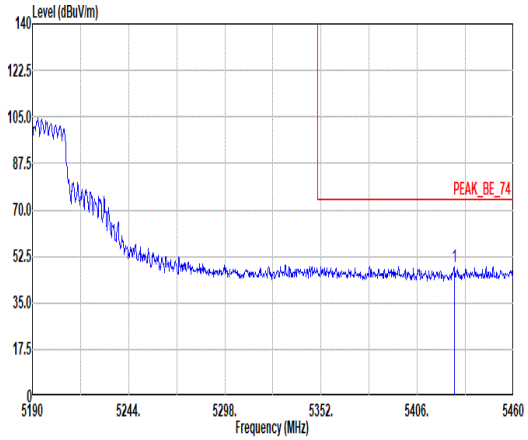
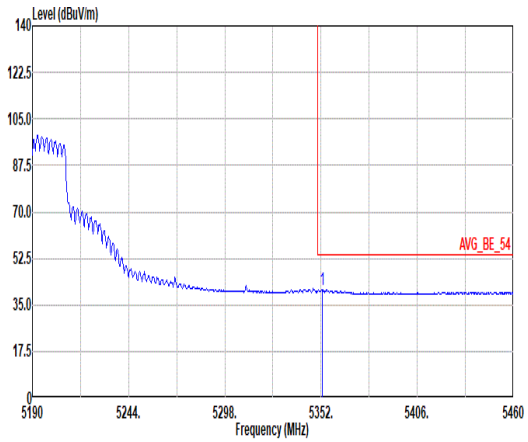
Mode	6	
	Band Edge - L	
	U-NII-1_5.15-5.25_802.11ac VHT20_CH48_5240MHz	
ANT	1+2 (CDD)	
Pol.	Vertical	Fundamental
Peak	 Site : 03CH22-HY Condition: PEAK_BE_74 3m DRH18-E_LE2C04A18EN_240711 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5146.40 64.70 74.00 -9.30 52.96 32.69 12.74 33.69 0.00 200 2 PEAK	 Site : 03CH22-HY Condition: PEAK(UNII) 3m DRH18-E_LE2C04A18EN_240711 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5240.00 118.69 ------ ------ 107.19 32.43 12.91 33.84 0.00 200 2 PEAK
Avg	 Site : 03CH22-HY Condition: AVG_BE_54 3m DRH18-E_LE2C04A18EN_240711 VERTICAL : RBW:1000.000kHz VBW:1.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5149.28 50.00 54.00 -4.00 38.24 32.70 12.75 33.69 0.00 200 2 AVERAGE	 Site : 03CH22-HY Condition: AVG_54 3m DRH18-E_LE2C04A18EN_240711 VERTICAL : RBW:1000.000kHz VBW:1.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5240.00 111.32 ------ ------ 99.82 32.43 12.91 33.84 0.00 200 2 AVERAGE

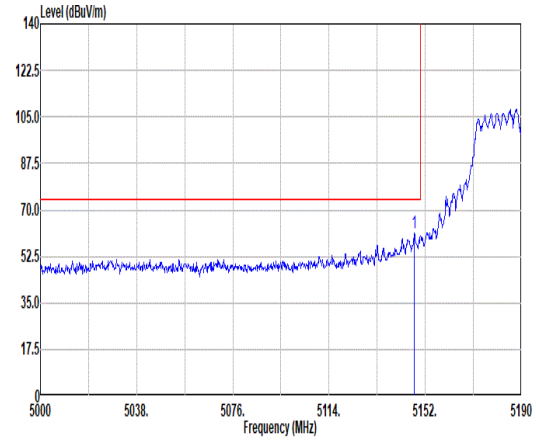
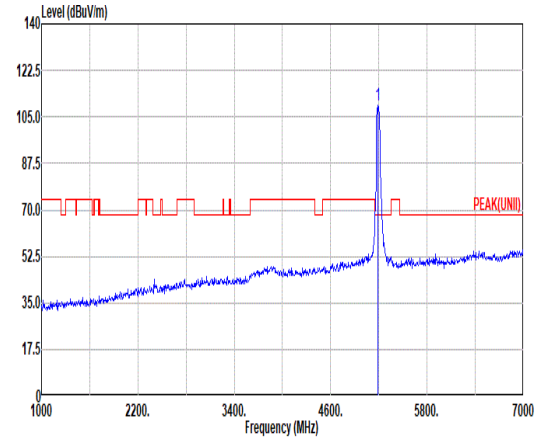
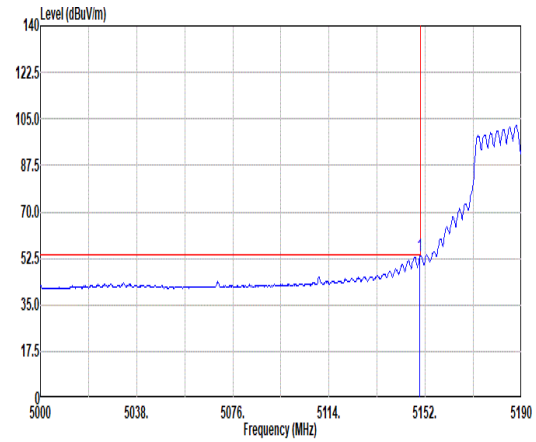
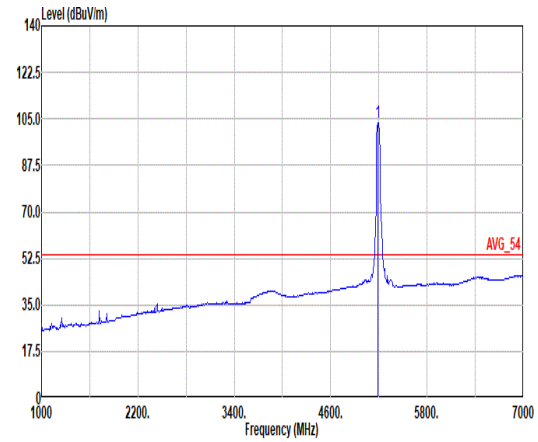
Mode	6	
	Band Edge - R	
	U-NII-1_5.15-5.25_802.11ac VHT20_CH48_5240MHz	
ANT	1+2 (CDD)	
Pol.	Vertical	Fundamental
Peak	 Site : 03CH22-HY Condition: PEAK_BE_74 3m DRH18-E_LE2C04A18EN_240711 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Limit Read Ant Cable Preamp Aux APos TPos Freq Level Line Margin Level Factor Loss Factor Factor Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5354.84 56.16 74.00 -17.84 44.72 32.39 13.06 34.01 0.00 200 2 PEAK	Blank
Avg	 Site : 03CH22-HY Condition: AVG_BE_54 3m DRH18-E_LE2C04A18EN_240711 VERTICAL : RBW:1000.000kHz VBW:1.000kHz SWT:Auto Limit Read Ant Cable Preamp Aux APos TPos Freq Level Line Margin Level Factor Loss Factor Factor Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5399.06 48.15 54.00 -5.85 36.81 32.30 13.12 34.08 0.00 200 2 AVERAGE	Blank

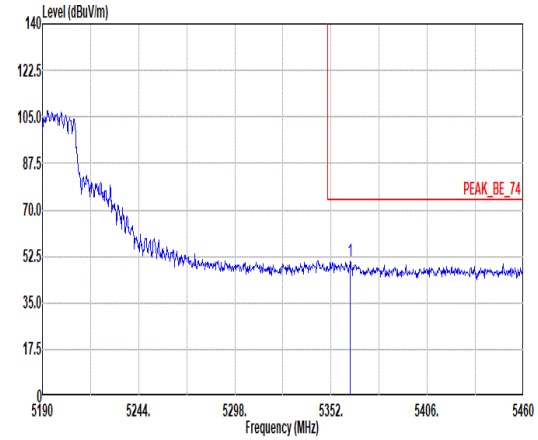
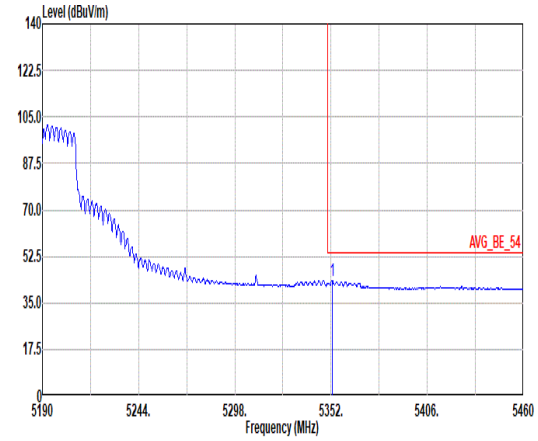
Mode	6	
	Harmonic	
	U-NII-1_5.15-5.25_802.11ac VHT20_CH48_5240MHz	
ANT	1+2 (CDD)	
Pol.	Horizontal	Vertical
Peak Avg	 Site : 03CH22-HY Condition: PEAK(UNII) 3m DRH18-E_LE2C04A18EN_240711 HORIZONTAL Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 10480.00 50.70 68.20 -17.50 33.56 37.30 18.63 39.30 0.51 -- -- PEAK 2 15720.00 57.14 74.00 -16.86 37.01 41.16 23.04 44.63 0.56 199 312 PEAK 3 15720.00 50.22 54.00 -3.78 30.09 41.16 23.04 44.63 0.56 199 312 Average	 Site : 03CH22-HY Condition: PEAK(UNII) 3m DRH18-E_LE2C04A18EN_240711 VERTICAL Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 10480.00 49.90 68.20 -18.30 32.76 37.30 18.63 39.30 0.51 -- -- PEAK 2 15720.00 57.59 74.00 -16.41 37.46 41.16 23.04 44.63 0.56 298 16 PEAK 3 15720.00 50.27 54.00 -3.73 30.14 41.16 23.04 44.63 0.56 298 16 Average

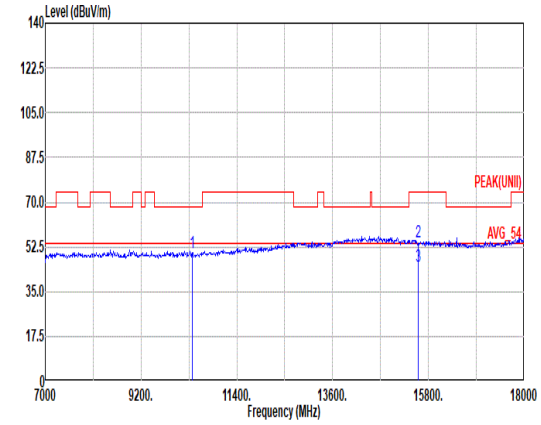
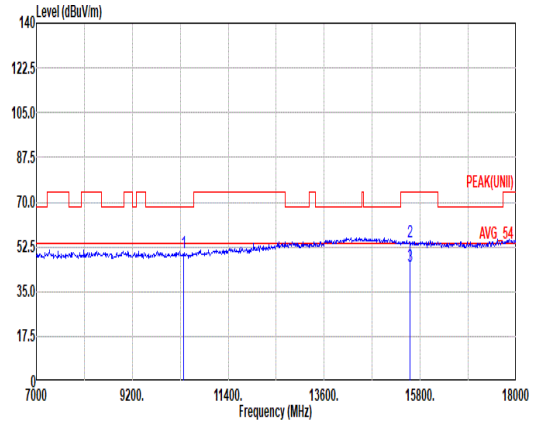
Mode	6	
	Harmonic	
	U-NII-1_5.15-5.25_802.11ac VHT20_CH48_5240MHz	
ANT	1+2 (CDD)	
Pol.	Horizontal	Vertical
10.6G ~18G Avg	 Site : 03CH22-HY Condition: AVG_54 3m DRH18-E_LE2C04A18EN_240711 HORIZONTAL	 Site : 03CH22-HY Condition: AVG_54 3m DRH18-E_LE2C04A18EN_240711 VERTICAL

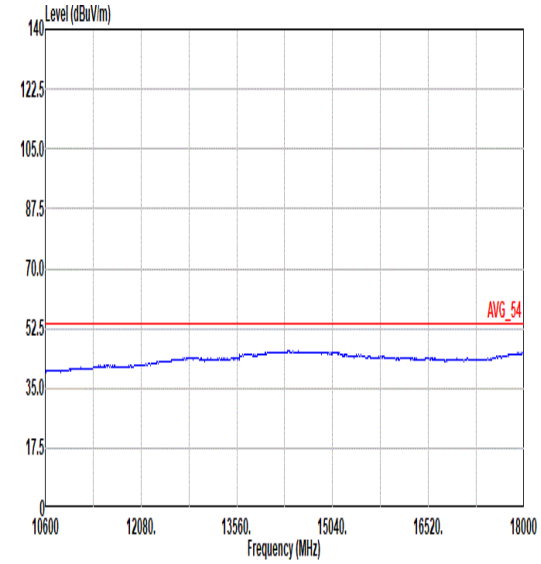
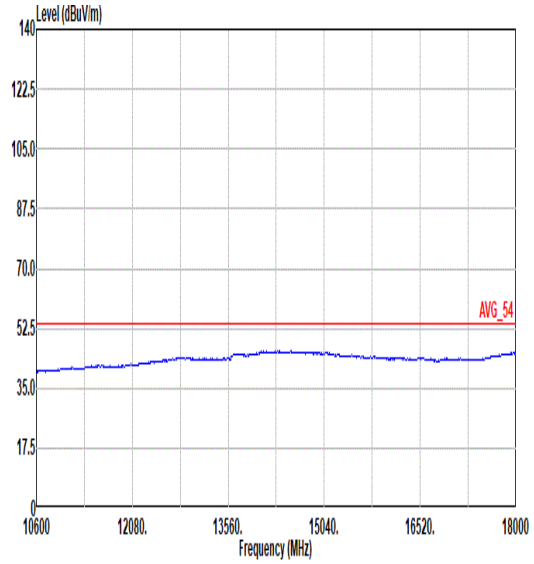
Mode	7	
	Band Edge - L	
	U-NII-1_5.15-5.25_802.11ac VHT40_CH38_5190MHz	
ANT	1+2 (CDD)	
Pol.	Horizontal	Fundamental
Peak	 Site : 03CH22-HY Condition: PEAK_BE_74 3m DRH18-E_LE2C04A18EN_240711 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5142.88 58.31 74.00 -15.69 46.58 32.67 12.74 33.68 0.00 194 37 PEAK	 Site : 03CH22-HY Condition: PEAK(UNII) 3m DRH18-E_LE2C04A18EN_240711 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5190.00 106.21 ------ ------ 94.52 32.61 12.84 33.76 0.00 194 37 PEAK
Avg	 Site : 03CH22-HY Condition: AVG_BE_54 3m DRH18-E_LE2C04A18EN_240711 HORIZONTAL : RBW:1000.000kHz VBW:1.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5149.91 50.37 54.00 -3.63 38.61 32.70 12.75 33.69 0.00 194 37 AVERAGE	 Site : 03CH22-HY Condition: AVG_54 3m DRH18-E_LE2C04A18EN_240711 HORIZONTAL : RBW:1000.000kHz VBW:1.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5190.00 99.98 ------ ------ 88.29 32.61 12.84 33.76 0.00 194 37 AVERAGE

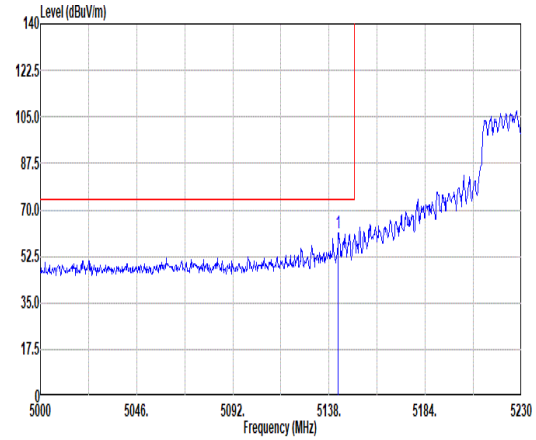
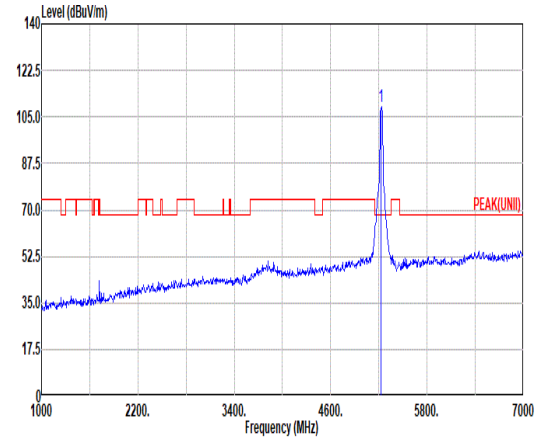
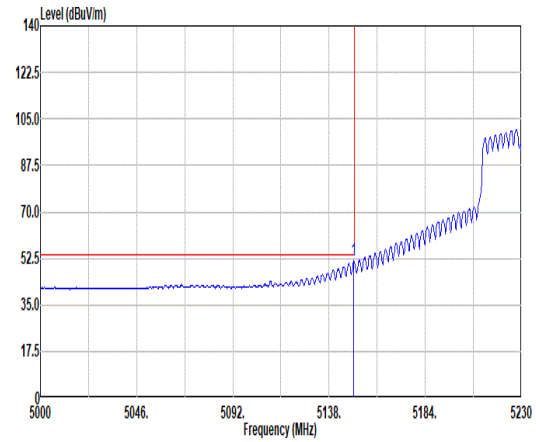
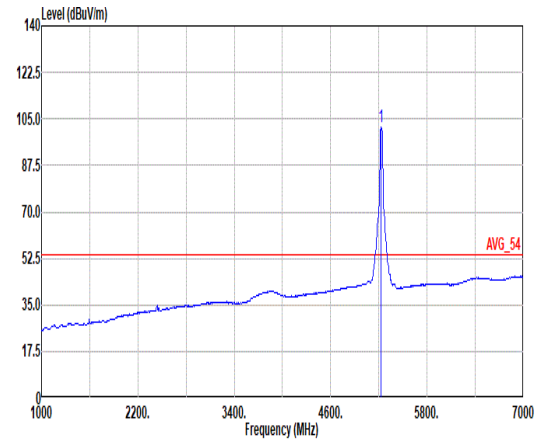
Mode	7	
	Band Edge - R	
	U-NII-1_5.15-5.25_802.11ac VHT40_CH38_5190MHz	
ANT	1+2 (CDD)	
Pol.	Horizontal	Fundamental
Peak	 Site : 03CH22-HY Condition: PEAK_BE_74 3m DRH18-E_LE2C04A18EN_240711 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Limit Read Ant Cable Preamp Aux APos TPos Freq Level Line Margin Level Factor Loss Factor Factor Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5426.79 48.72 74.00 -25.28 37.35 32.35 13.15 34.13 0.00 194 37 PEAK	Blank
Avg	 Site : 03CH22-HY Condition: AVG_BE_54 3m DRH18-E_LE2C04A18EN_240711 HORIZONTAL : RBW:1000.000kHz VBW:1.000kHz SWT:Auto Limit Read Ant Cable Preamp Aux APos TPos Freq Level Line Margin Level Factor Loss Factor Factor Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5352.81 40.73 54.00 -13.27 29.29 32.39 13.06 34.01 0.00 194 37 AVERAGE	Blank

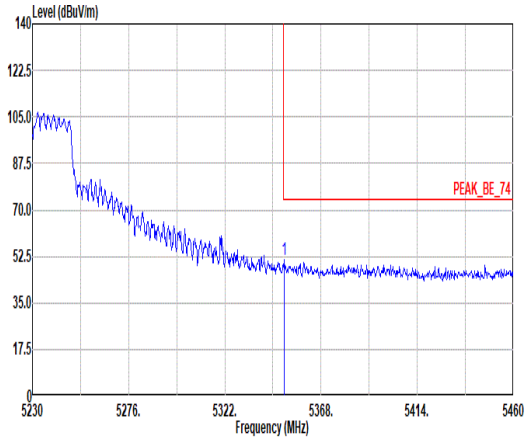
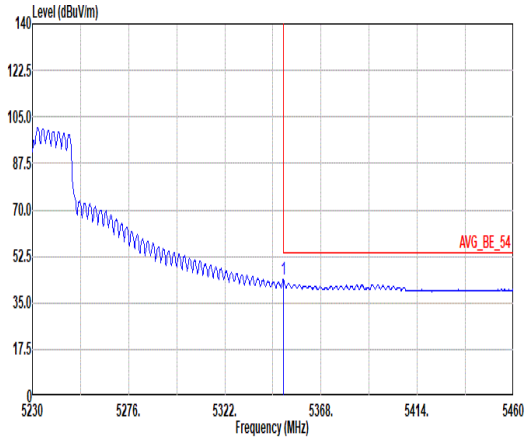
Mode	7	
	Band Edge - L	
	U-NII-1_5.15-5.25_802.11ac VHT40_CH38_5190MHz	
ANT	1+2 (CDD)	
Pol.	Vertical	Fundamental
Peak	 Site : 03CH22-HY Condition: PEAK_BE_74 3m DRH18-E_LE2C04A18EN_240711 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5147.63 61.06 74.00 -12.94 49.31 32.69 12.75 33.69 0.00 214 0 PEAK	 Site : 03CH22-HY Condition: PEAK(UNII) 3m DRH18-E_LE2C04A18EN_240711 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5190.00 109.36 ------ ------ 97.66 32.62 12.83 33.75 0.00 214 0 PEAK
Avg	 Site : 03CH22-HY Condition: AVG_BE_54 3m DRH18-E_LE2C04A18EN_240711 VERTICAL : RBW:1000.000kHz VBW:1.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5149.91 53.32 54.00 -0.68 41.56 32.70 12.75 33.69 0.00 214 0 AVERAGE	 Site : 03CH22-HY Condition: AVG_54 3m DRH18-E_LE2C04A18EN_240711 VERTICAL : RBW:1000.000kHz VBW:1.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5190.00 103.62 ------ ------ 91.92 32.62 12.83 33.75 0.00 214 0 AVERAGE

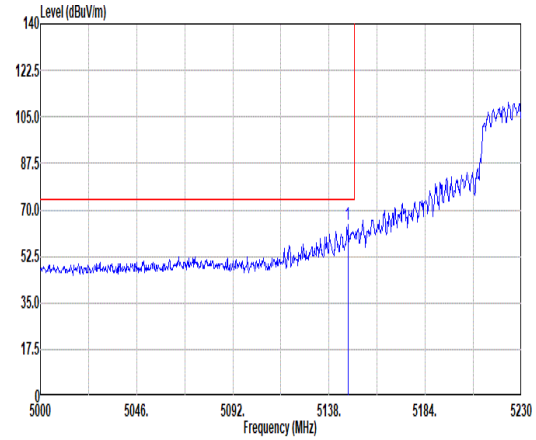
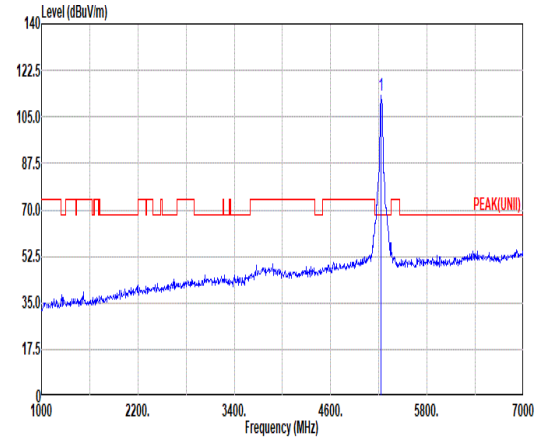
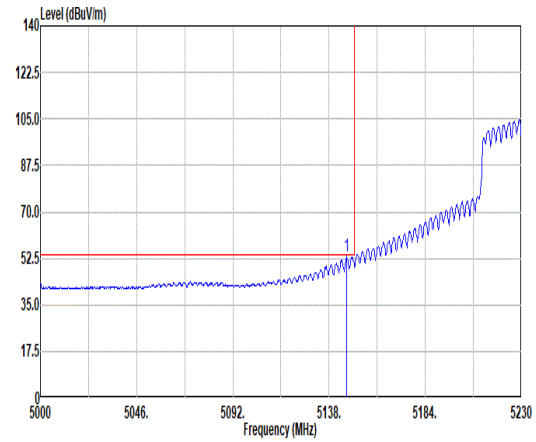
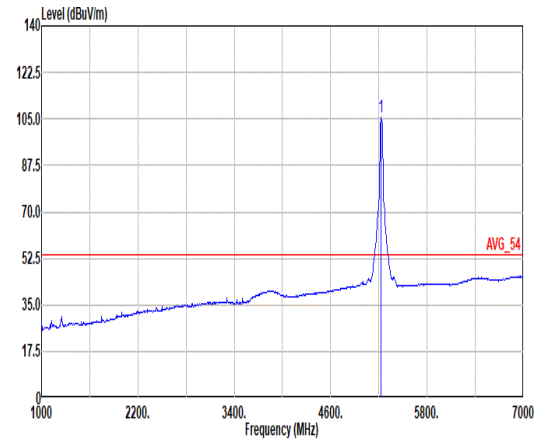
Mode	7	
	Band Edge - R	
	U-NII-1_5.15-5.25_802.11ac VHT40_CH38_5190MHz	
ANT	1+2 (CDD)	
Pol.	Vertical	Fundamental
Peak	 Site : 03CH22-HY Condition: PEAK_BE_74 3m DRH18-E_LE2C04A18EN_240711 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Limit Read Ant Cable Preamp Aux APos TPos Freq Level Line Margin Level Factor Loss Factor Factor Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5362.80 50.52 74.00 -23.48 39.11 32.37 13.07 34.03 0.00 214 0 PEAK	Blank
Avg	 Site : 03CH22-HY Condition: AVG_BE_54 3m DRH18-E_LE2C04A18EN_240711 VERTICAL : RBW:1000.000kHz VBW:1.000kHz SWT:Auto Limit Read Ant Cable Preamp Aux APos TPos Freq Level Line Margin Level Factor Loss Factor Factor Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5352.54 43.24 54.00 -10.76 31.80 32.39 13.06 34.01 0.00 214 0 AVERAGE	Blank

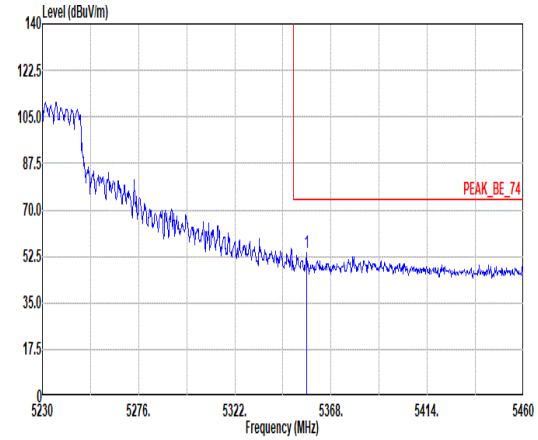
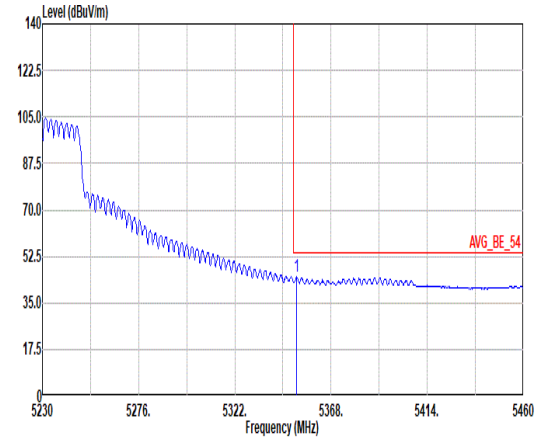
Mode	7	
	Harmonic	
	U-NII-1_5.15-5.25_802.11ac VHT40_CH38_5190MHz	
ANT	1+2 (CDD)	
Pol.	Horizontal	Vertical
Peak Avg	 Site : 03CH22-HY Condition: PEAK(UNII) 3m DRH18-E_LE2C04A18EN_240711 HORIZONTAL Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 10380.00 50.33 68.20 -17.87 33.13 37.34 18.53 39.17 0.50 -- -- PEAK 2 15570.00 54.31 74.00 -19.69 33.95 41.24 22.92 44.35 0.55 -- -- PEAK 3 15570.00 44.97 54.00 -9.03 24.61 41.24 22.92 44.35 0.55 -- -- Average	 Site : 03CH22-HY Condition: PEAK(UNII) 3m DRH18-E_LE2C04A18EN_240711 VERTICAL Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 10380.00 50.13 68.20 -18.07 32.93 37.34 18.53 39.17 0.50 -- -- PEAK 2 15570.00 54.25 74.00 -19.75 33.89 41.24 22.92 44.35 0.55 -- -- PEAK 3 15570.00 45.10 54.00 -8.90 24.74 41.24 22.92 44.35 0.55 -- -- Average

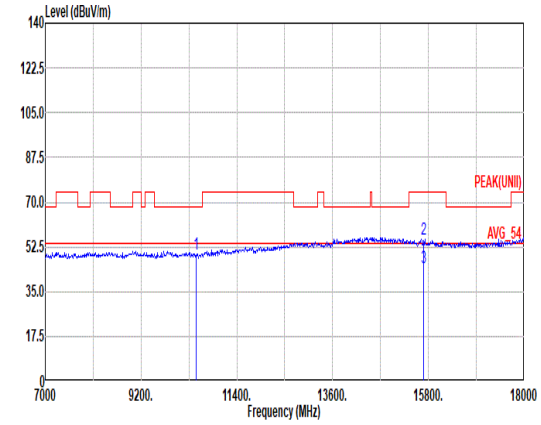
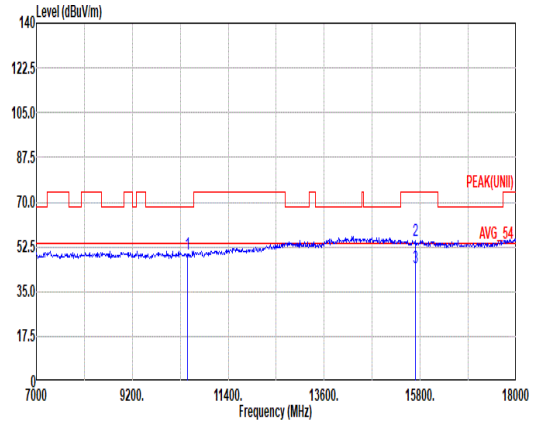
Mode	7	
	Harmonic	
	U-NII-1_5.15-5.25_802.11ac VHT40_CH38_5190MHz	
ANT	1+2 (CDD)	
Pol.	Horizontal	Vertical
10.6G ~18G Avg		

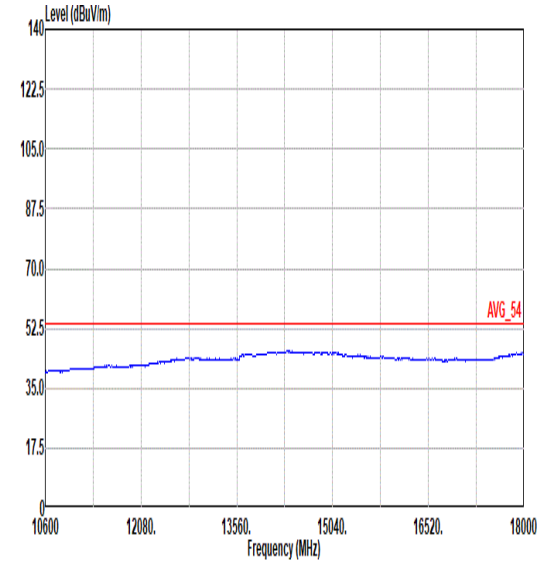
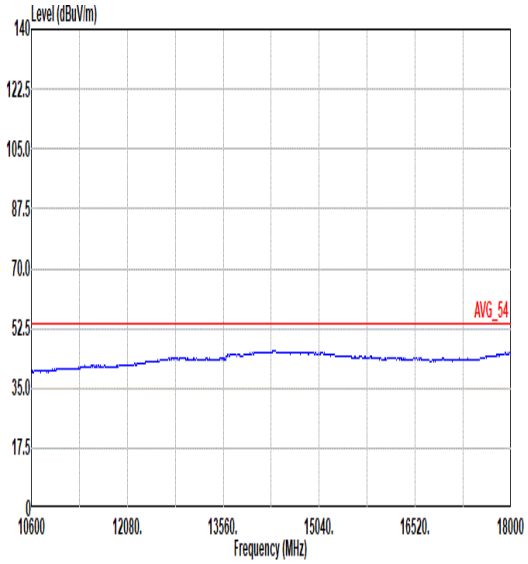
Mode	8	
	Band Edge - L	
	U-NII-1_5.15-5.25_802.11ac VHT40_CH46_5230MHz	
ANT	1+2 (CDD)	
Pol.	Horizontal	Fundamental
Peak	 Site : 03CH22-HY Condition: PEAK_BE_74 3m DRH18-E_LE2C04A18EN_240711 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5142.37 61.29 74.00 -12.71 49.57 32.67 12.73 33.68 0.00 201 61 PEAK	 Site : 03CH22-HY Condition: PEAK(UNII) 3m DRH18-E_LE2C04A18EN_240711 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5230.00 109.03 ------ ------ 97.50 32.46 12.90 33.83 0.00 201 61 PEAK
Avg	 Site : 03CH22-HY Condition: AVG_BE_54 3m DRH18-E_LE2C04A18EN_240711 HORIZONTAL : RBW:1000.000kHz VBW:1.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5149.73 51.52 54.00 -2.48 39.76 32.70 12.75 33.69 0.00 201 61 AVERAGE	 Site : 03CH22-HY Condition: AVG_54 3m DRH18-E_LE2C04A18EN_240711 HORIZONTAL : RBW:1000.000kHz VBW:1.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5230.00 101.88 ------ ------ 90.33 32.48 12.89 33.82 0.00 201 61 AVERAGE

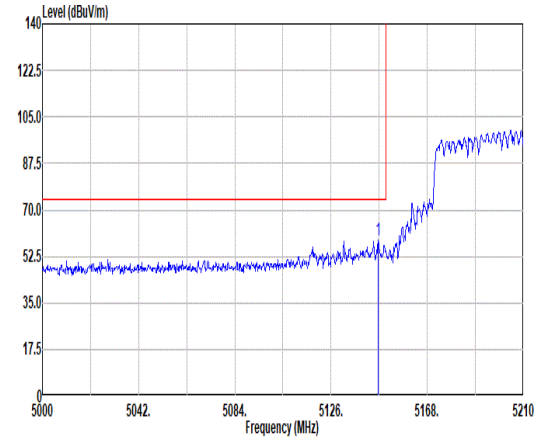
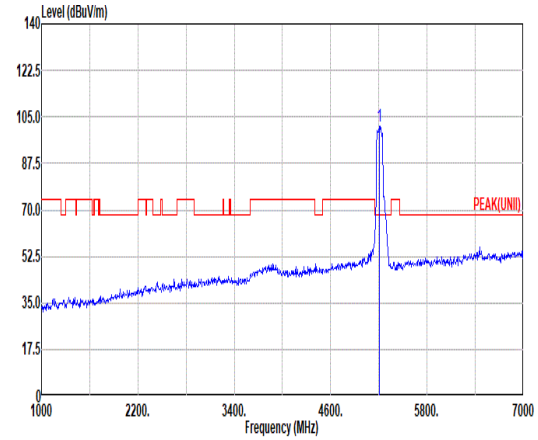
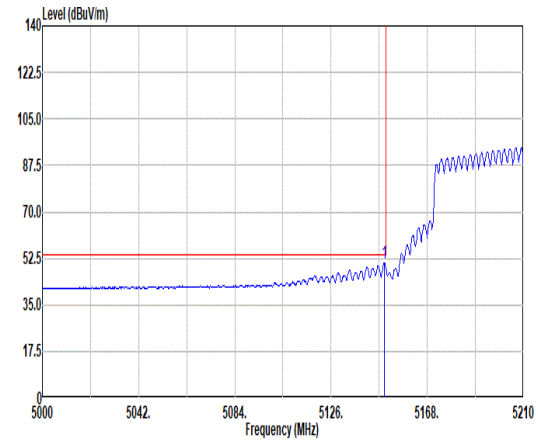
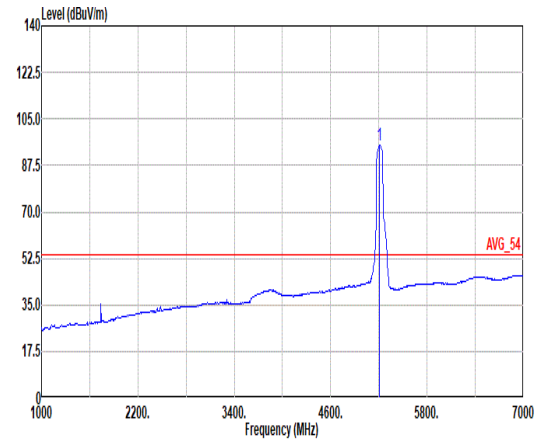
Mode	8	
	Band Edge - R	
	U-NII-1_5.15-5.25_802.11ac VHT40_CH46_5230MHz	
ANT	1+2 (CDD)	
Pol.	Horizontal	Fundamental
Peak	 Site : 03CH22-HY Condition: PEAK_BE_74 3m DRH18-E_LE2C04A18EN_240711 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Limit Read Ant Cable Preamp Aux APos TPos Freq Level Line Margin Level Factor Loss Factor Factor Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5350.29 51.24 74.00 -22.76 39.80 32.40 13.05 34.01 0.00 201 61 PEAK	Blank
Avg	 Site : 03CH22-HY Condition: AVG_BE_54 3m DRH18-E_LE2C04A18EN_240711 HORIZONTAL : RBW:1000.000kHz VBW:1.000kHz SWT:Auto Limit Read Ant Cable Preamp Aux APos TPos Freq Level Line Margin Level Factor Loss Factor Factor Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5350.06 43.83 54.00 -10.17 32.39 32.40 13.05 34.01 0.00 201 61 AVERAGE	Blank

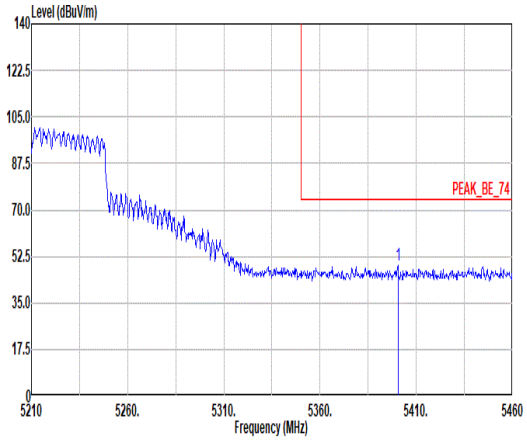
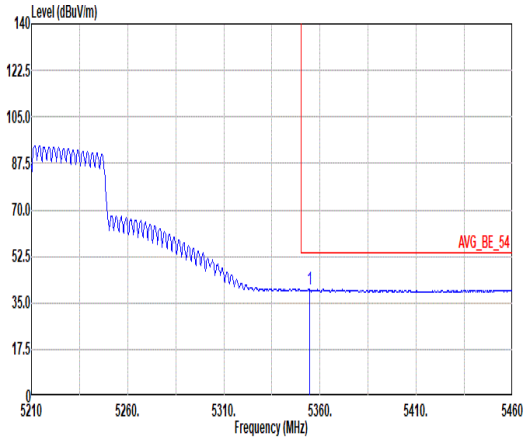
Mode	8	
	Band Edge - L	
	U-NII-1_5.15-5.25_802.11ac VHT40_CH46_5230MHz	
ANT	1+2 (CDD)	
Pol.	Vertical	Fundamental
Peak	 Site : 03CH22-HY Condition: PEAK_BE_74 3m DRH18-E_LE2C04A18EN_240711 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5146.97 64.52 74.00 -9.48 52.78 32.69 12.74 33.69 0.00 213 0 PEAK	 Site : 03CH22-HY Condition: PEAK(UNII) 3m DRH18-E_LE2C04A18EN_240711 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5230.00 113.28 ------ ------ 101.73 32.48 12.89 33.82 0.00 213 0 PEAK
Avg	 Site : 03CH22-HY Condition: AVG_BE_54 3m DRH18-E_LE2C04A18EN_240711 VERTICAL : RBW:1000.000kHz VBW:1.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5146.51 53.27 54.00 -0.73 41.53 32.69 12.74 33.69 0.00 213 0 AVERAGE	 Site : 03CH22-HY Condition: AVG_54 3m DRH18-E_LE2C04A18EN_240711 VERTICAL : RBW:1000.000kHz VBW:1.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5230.00 105.42 ------ ------ 93.87 32.48 12.89 33.82 0.00 213 0 AVERAGE

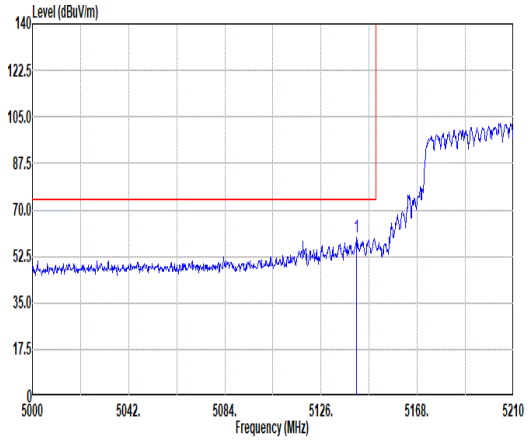
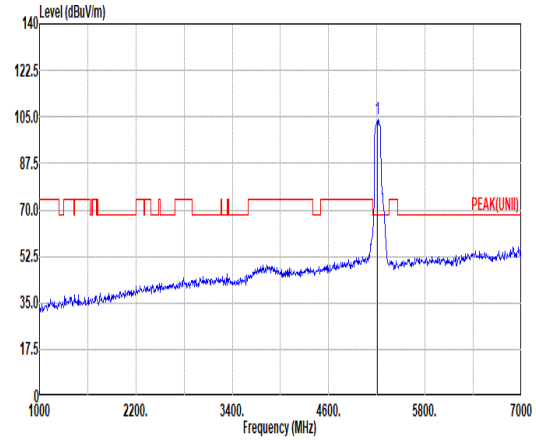
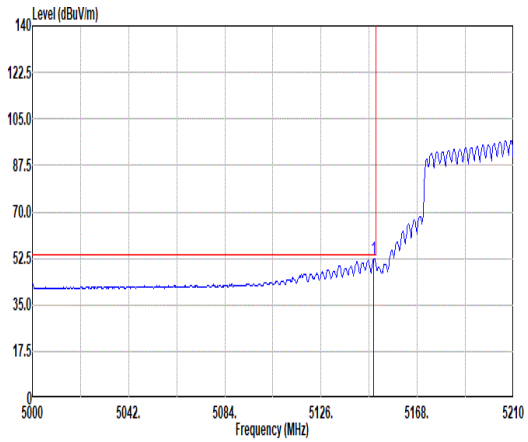
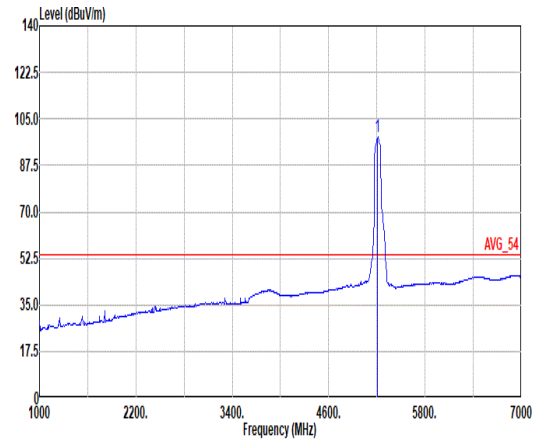
Mode	8	
	Band Edge - R	
	U-NII-1_5.15-5.25_802.11ac VHT40_CH46_5230MHz	
ANT	1+2 (CDD)	
Pol.	Vertical	Fundamental
Peak	 Site : 03CH22-HY Condition: PEAK_BE_74 3m DRH18-E_LE2C04A18EN_240711 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Limit Read Ant Cable Preamp Aux APos TPos Freq Level Line Margin Level Factor Loss Factor Factor Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5356.50 54.01 74.00 -19.99 42.58 32.39 13.06 34.02 0.00 213 0 PEAK	Blank
Avg	 Site : 03CH22-HY Condition: AVG_BE_54 3m DRH18-E_LE2C04A18EN_240711 VERTICAL : RBW:1000.000kHz VBW:1.000kHz SWT:Auto Limit Read Ant Cable Preamp Aux APos TPos Freq Level Line Margin Level Factor Loss Factor Factor Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5351.44 45.04 54.00 -8.96 33.60 32.40 13.05 34.01 0.00 213 0 AVERAGE	Blank

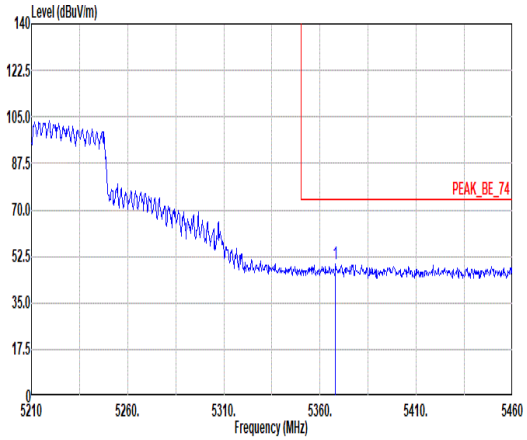
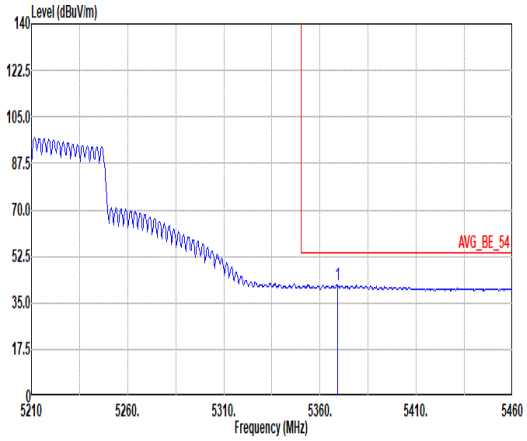
Mode	8	
	Harmonic	
	U-NII-1_5.15-5.25_802.11ac VHT40_CH46_5230MHz	
ANT	1+2 (CDD)	
Pol.	Horizontal	Vertical
Peak Avg	 Site : 03CH22-HY Condition: PEAK(UNII) 3m DRH18-E_LE2C04A18EN_240711 HORIZONTAL Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 10460.00 49.71 68.20 -18.49 32.57 37.30 18.61 39.28 0.51 -- -- PEAK 2 15690.00 55.22 74.00 -18.78 35.19 41.04 23.01 44.58 0.56 -- -- PEAK 3 15690.00 44.28 54.00 -9.72 24.25 41.04 23.01 44.58 0.56 -- -- Average	 Site : 03CH22-HY Condition: PEAK(UNII) 3m DRH18-E_LE2C04A18EN_240711 VERTICAL Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 10460.00 49.67 68.20 -18.53 32.53 37.30 18.61 39.28 0.51 -- -- PEAK 2 15690.00 55.08 74.00 -18.92 35.05 41.04 23.01 44.58 0.56 -- -- PEAK 3 15690.00 44.59 54.00 -9.41 24.56 41.04 23.01 44.58 0.56 -- -- Average

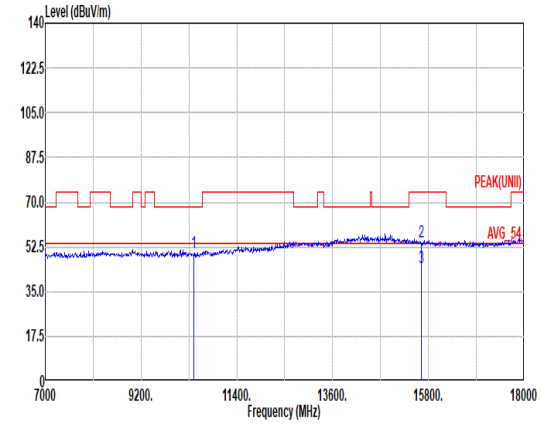
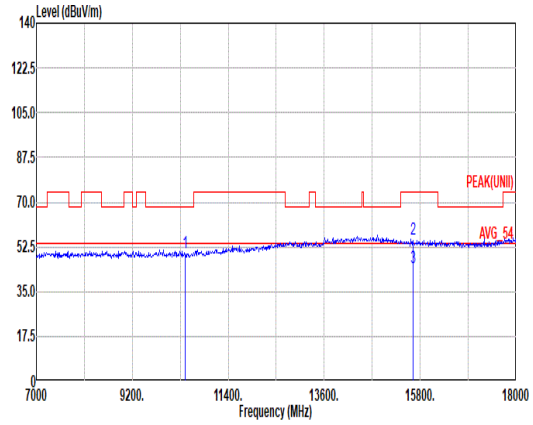
Mode	8	
	Harmonic	
	U-NII-1_5.15-5.25_802.11ac VHT40_CH46_5230MHz	
ANT	1+2 (CDD)	
Pol.	Horizontal	Vertical
10.6G ~18G Avg	 Site : 03CH22-HY Condition: AVG_54 3m DRH18-E_LE2C04A18EN_240711 HORIZONTAL	 Site : 03CH22-HY Condition: AVG_54 3m DRH18-E_LE2C04A18EN_240711 VERTICAL

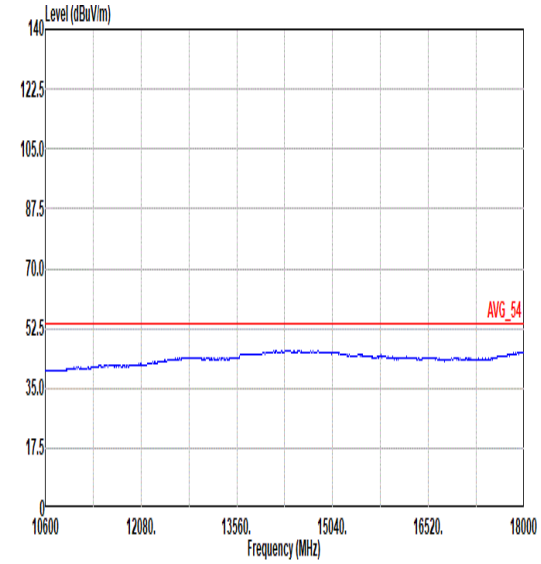
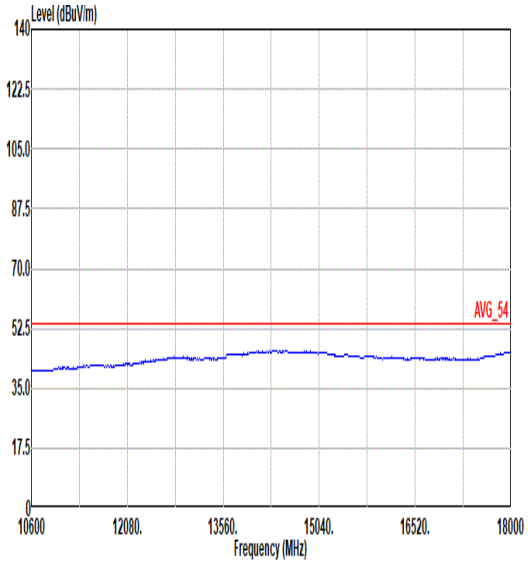
Mode	9	
	Band Edge - L	
	U-NII-1_5.15-5.25_802.11ac VHT80_CH42_5210MHz	
ANT	1+2 (CDD)	
Pol.	Horizontal	Fundamental
Peak	 Site : 03CH22-HY Condition: PEAK_BE_74 3m DRH18-E_LE2C04A18EN_240711 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5146.58 58.44 74.00 -15.56 46.70 32.69 12.74 33.69 0.00 195 38 PEAK	 Site : 03CH22-HY Condition: PEAK(UNII) 3m DRH18-E_LE2C04A18EN_240711 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5210.00 101.54 ------ ------ 89.91 32.55 12.87 33.79 0.00 195 38 PEAK
Avg	 Site : 03CH22-HY Condition: AVG_BE_54 3m DRH18-E_LE2C04A18EN_240711 HORIZONTAL : RBW:1000.000kHz VBW:1.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5149.31 50.94 54.00 -3.06 39.18 32.70 12.75 33.69 0.00 195 38 AVERAGE	 Site : 03CH22-HY Condition: AVG_54 3m DRH18-E_LE2C04A18EN_240711 HORIZONTAL : RBW:1000.000kHz VBW:1.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5210.00 95.26 ------ ------ 83.63 32.55 12.87 33.79 0.00 195 38 AVERAGE

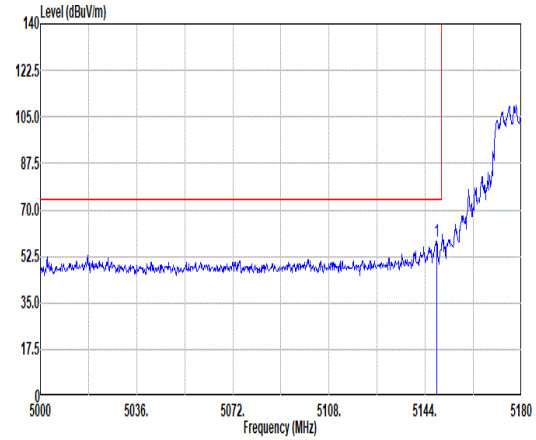
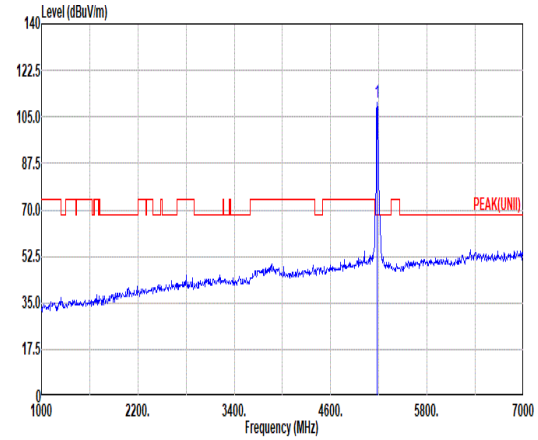
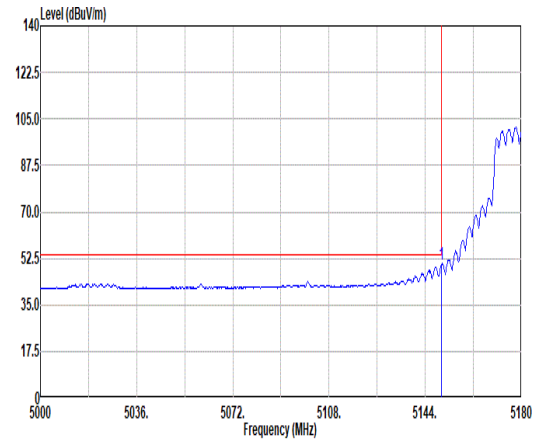
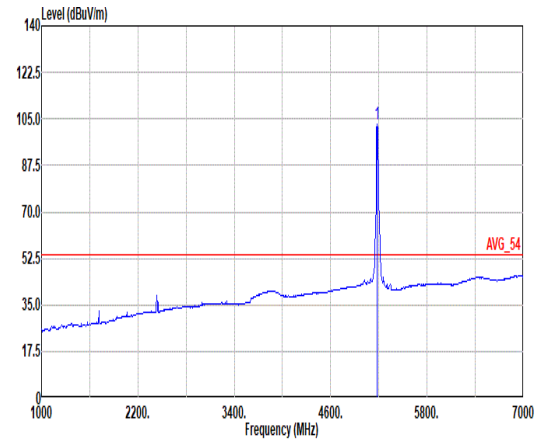
Mode	9	
	Band Edge - R	
	U-NII-1_5.15-5.25_802.11ac VHT80_CH42_5210MHz	
ANT	1+2 (CDD)	
Pol.	Horizontal	Fundamental
Peak	 Site : 03CH22-HY Condition: PEAK_BE_74 3m DRH18-E_LE2C04A18EN_240711 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Limit Read Ant Cable Preamp Aux APos TPos Freq Level Line Margin Level Factor Loss Factor Factor Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5400.50 48.97 74.00 -25.03 37.63 32.30 13.12 34.08 0.00 195 38 PEAK	Blank
Avg	 Site : 03CH22-HY Condition: AVG_BE_54 3m DRH18-E_LE2C04A18EN_240711 HORIZONTAL : RBW:1000.000kHz VBW:1.000kHz SWT:Auto Limit Read Ant Cable Preamp Aux APos TPos Freq Level Line Margin Level Factor Loss Factor Factor Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5354.50 40.20 54.00 -13.80 28.76 32.39 13.06 34.01 0.00 195 38 AVERAGE	Blank

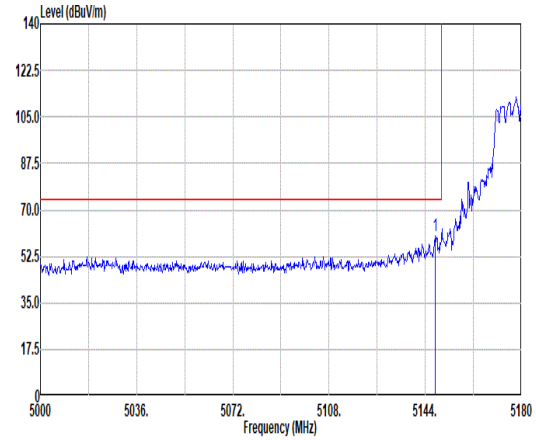
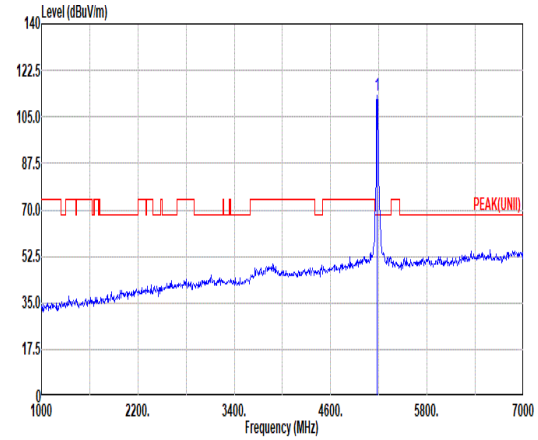
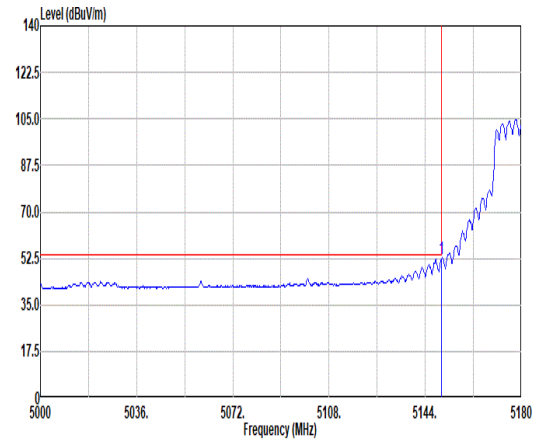
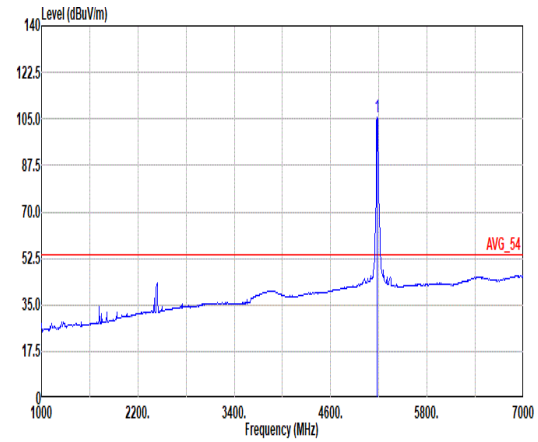
Mode	9	
	Band Edge - L	
	U-NII-1_5.15-5.25_802.11ac VHT80_CH42_5210MHz	
ANT	1+2 (CDD)	
Pol.	Vertical	Fundamental
Peak	 Site : 03CH22-HY Condition: PEAK_BE_74 3m DRH18-E_LE2C04A18EN_240711 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5141.54 59.95 74.00 -14.05 48.23 32.67 12.73 33.68 0.00 201 360 PEAK	 Site : 03CH22-HY Condition: PEAK(UNII) 3m DRH18-E_LE2C04A18EN_240711 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5210.00 104.00 ------ ------ 92.37 32.55 12.87 33.79 0.00 201 360 PEAK
Avg	 Site : 03CH22-HY Condition: AVG_BE_54 3m DRH18-E_LE2C04A18EN_240711 VERTICAL : RBW:1000.000kHz VBW:1.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5149.10 52.53 54.00 -1.47 40.77 32.70 12.75 33.69 0.00 201 360 AVERAGE	 Site : 03CH22-HY Condition: AVG_54 3m DRH18-E_LE2C04A18EN_240711 VERTICAL : RBW:1000.000kHz VBW:1.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5210.00 98.27 ------ ------ 86.64 32.55 12.87 33.79 0.00 201 360 AVERAGE

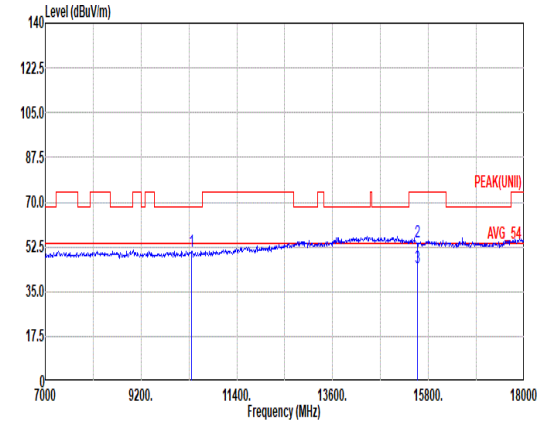
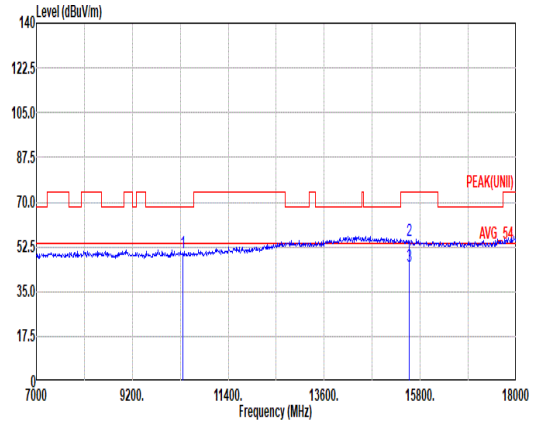
Mode	9	
	Band Edge - R	
	U-NII-1_5.15-5.25_802.11ac VHT80_CH42_5210MHz	
ANT	1+2 (CDD)	
Pol.	Vertical	Fundamental
Peak	 Site : 03CH22-HY Condition: PEAK_BE_74 3m DRH18-E_LE2C04A18EN_240711 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Limit Read Ant Cable Preamp Aux APos TPos Freq Level Line Margin Level Factor Loss Factor Factor Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5368.00 49.44 74.00 -24.56 38.03 32.36 13.08 34.03 0.00 201 360 PEAK	Blank
Avg	 Site : 03CH22-HY Condition: AVG_BE_54 3m DRH18-E_LE2C04A18EN_240711 VERTICAL : RBW:1000.000kHz VBW:1.000kHz SWT:Auto Limit Read Ant Cable Preamp Aux APos TPos Freq Level Line Margin Level Factor Loss Factor Factor Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5369.00 41.84 54.00 -12.16 30.44 32.36 13.08 34.04 0.00 201 360 AVERAGE	Blank

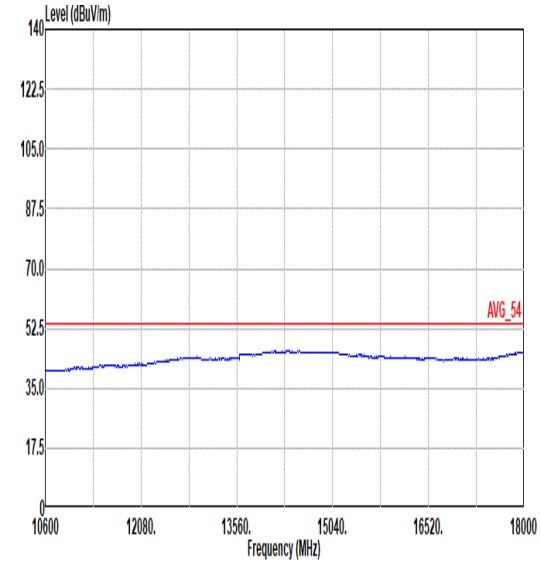
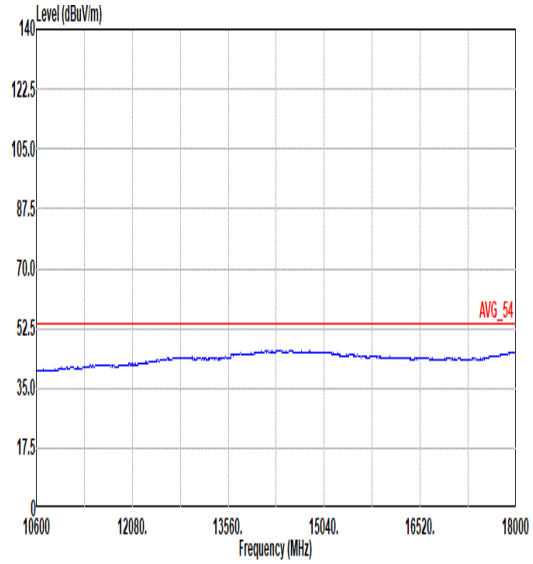
Mode	9	
	Harmonic	
	U-NII-1_5.15-5.25_802.11ac VHT80_CH42_5210MHz	
ANT	1+2 (CDD)	
Pol.	Horizontal	Vertical
Peak Avg	 Site : 03CH22-HY Condition: PEAK(UNII) 3m DRH18-E_LE2C04A18EN_240711 HORIZONTAL Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 10420.00 50.05 68.20 -18.15 32.90 37.30 18.57 39.22 0.50 -- -- PEAK 2 15630.00 54.47 74.00 -19.53 34.17 41.24 22.96 44.46 0.56 -- -- PEAK 3 15630.00 44.42 54.00 -9.58 24.12 41.24 22.96 44.46 0.56 -- -- Average	 Site : 03CH22-HY Condition: PEAK(UNII) 3m DRH18-E_LE2C04A18EN_240711 VERTICAL Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 10420.00 50.13 68.20 -18.07 32.98 37.30 18.57 39.22 0.50 -- -- PEAK 2 15630.00 55.50 74.00 -18.50 35.20 41.24 22.96 44.46 0.56 -- -- PEAK 3 15630.00 44.42 54.00 -9.58 24.12 41.24 22.96 44.46 0.56 -- -- Average

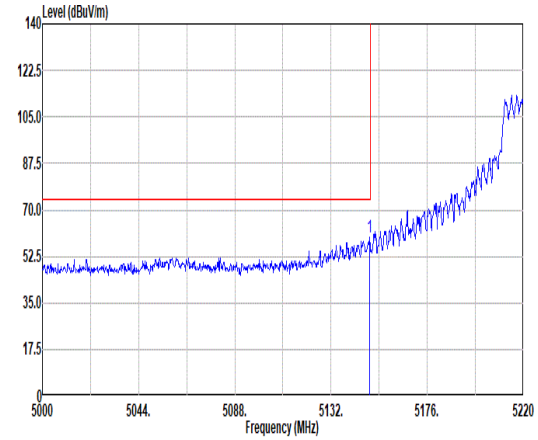
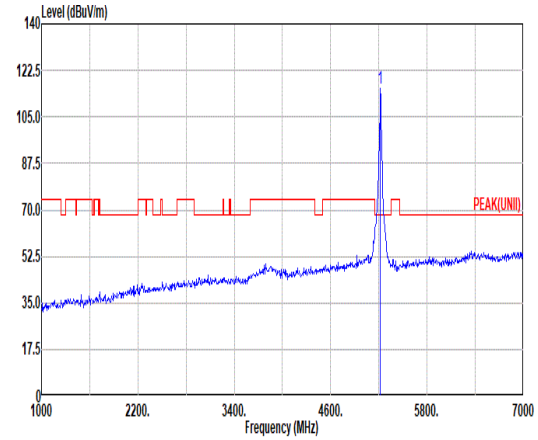
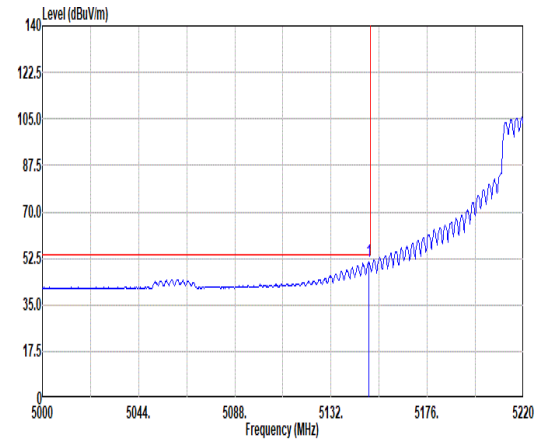
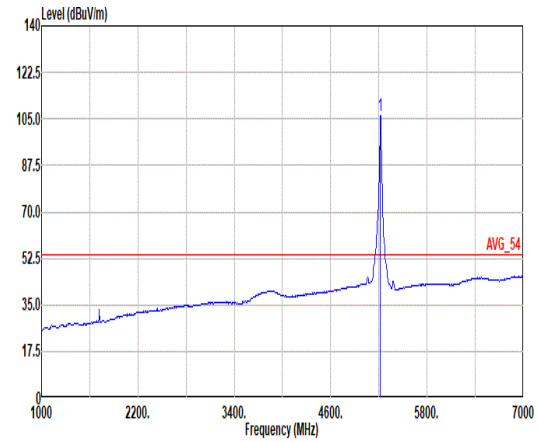
Mode	9	
	Harmonic	
	U-NII-1_5.15-5.25_802.11ac VHT80_CH42_5210MHz	
ANT	1+2 (CDD)	
Pol.	Horizontal	Vertical
10.6G ~18G Avg	 Site : 03CH22-HY Condition: AVG_54 3m DRH18-E_LE2C04A18EN_240711 HORIZONTAL	 Site : 03CH22-HY Condition: AVG_54 3m DRH18-E_LE2C04A18EN_240711 VERTICAL

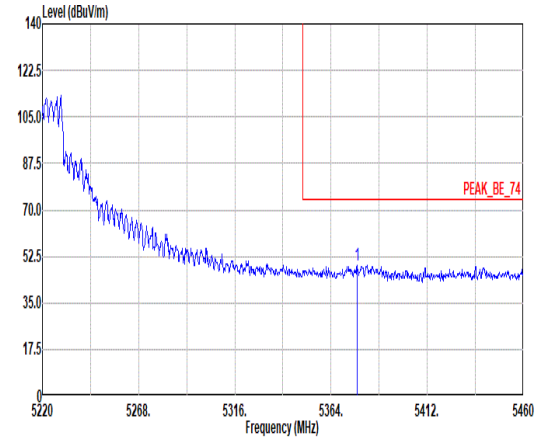
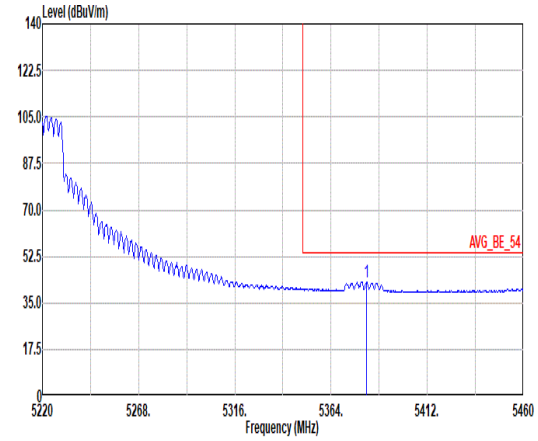
Mode	10	
	Band Edge	
	U-NII-1_5.15-5.25_802.11ax HE20_CH36_Full RU_5180MHz	
ANT	1+2 (CDD)	
Pol.	Horizontal	Fundamental
Peak	 Site : 03CH22-HY Condition: PEAK_BE_74 3m DRH18-E_LE2C04A18EN_240711 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5148.32 58.30 74.00 -15.70 46.55 32.69 12.75 33.69 0.00 200 37 PEAK	 Site : 03CH22-HY Condition: PEAK(UNII) 3m DRH18-E_LE2C04A18EN_240711 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5180.00 110.16 ------ ------ 98.45 32.64 12.81 33.74 0.00 200 37 PEAK
Avg	 Site : 03CH22-HY Condition: AVG_BE_54 3m DRH18-E_LE2C04A18EN_240711 HORIZONTAL : RBW:1000.000kHz VBW:1.100kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5149.94 50.09 54.00 -3.91 38.33 32.70 12.75 33.69 0.00 200 37 AVERAGE	 Site : 03CH22-HY Condition: AVG_54 3m DRH18-E_LE2C04A18EN_240711 HORIZONTAL : RBW:1000.000kHz VBW:1.100kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5180.00 102.89 ------ ------ 91.17 32.65 12.80 33.73 0.00 200 37 AVERAGE

Mode	10	
	Band Edge	
	U-NII-1_5.15-5.25_802.11ax HE20_CH36_Full RU_5180MHz	
ANT	1+2 (CDD)	
Pol.	Vertical	Fundamental
Peak	 Site : 03CH22-HY Condition: PEAK_BE_74 3m DRH18-E_LE2C04A18EN_240711 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5147.60 60.05 74.00 -13.95 48.30 32.69 12.75 33.69 0.00 211 0 PEAK	 Site : 03CH22-HY Condition: PEAK(UNII) 3m DRH18-E_LE2C04A18EN_240711 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5180.00 112.99 ------ ------ 101.27 32.65 12.80 33.73 0.00 211 0 PEAK
Avg	 Site : 03CH22-HY Condition: AVG_BE_54 3m DRH18-E_LE2C04A18EN_240711 VERTICAL : RBW:1000.000kHz VBW:1.100kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5149.94 52.27 54.00 -1.73 40.51 32.70 12.75 33.69 0.00 211 0 AVERAGE	 Site : 03CH22-HY Condition: AVG_54 3m DRH18-E_LE2C04A18EN_240711 VERTICAL : RBW:1000.000kHz VBW:1.100kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5180.00 105.73 ------ ------ 94.02 32.64 12.81 33.74 0.00 211 0 AVERAGE

Mode	10	
	Harmonic	
	U-NII-1_5.15-5.25_802.11ax HE20_CH36_Full RU_5180MHz	
ANT	1+2 (CDD)	
Pol.	Horizontal	Vertical
Peak Avg	 Site : 03CH22-HY Condition: PEAK(UNII) 3m DRH18-E_LE2C04A18EN_240711 HORIZONTAL Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 10360.00 50.62 68.20 -17.58 33.37 37.38 18.51 39.14 0.50 -- -- PEAK 2 15540.00 54.60 74.00 -19.40 34.22 41.24 22.89 44.30 0.55 -- -- PEAK 3 15540.00 44.51 54.00 -9.49 24.13 41.24 22.89 44.30 0.55 -- -- Average	 Site : 03CH22-HY Condition: PEAK(UNII) 3m DRH18-E_LE2C04A18EN_240711 VERTICAL Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 10360.00 50.15 68.20 -18.05 32.90 37.38 18.51 39.14 0.50 -- -- PEAK 2 15540.00 54.78 74.00 -19.22 34.40 41.24 22.89 44.30 0.55 -- -- PEAK 3 15540.00 44.71 54.00 -9.29 24.33 41.24 22.89 44.30 0.55 -- -- Average

Mode	10	
	Harmonic	
	U-NII-1_5.15-5.25_802.11ax HE20_CH36_Full RU_5180MHz	
ANT	1+2 (CDD)	
Pol.	Horizontal	Vertical
10.6G ~18G Avg		

Mode	11	
	Band Edge - L	
	U-NII-1_5.15-5.25_802.11ax HE20_CH44_Full RU_5220MHz	
ANT	1+2 (CDD)	
Pol.	Horizontal	Fundamental
Peak	 Site : 03CH22-HY Condition: PEAK_BE_74 3m DRH18-E_LE2C04A18EN_240711 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5149.60 59.60 74.00 -14.40 47.84 32.70 12.75 33.69 0.00 200 42 PEAK	 Site : 03CH22-HY Condition: PEAK(UNII) 3m DRH18-E_LE2C04A18EN_240711 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5220.00 115.62 ------ ------ 104.02 32.53 12.87 33.80 0.00 200 42 PEAK
Avg	 Site : 03CH22-HY Condition: AVG_BE_54 3m DRH18-E_LE2C04A18EN_240711 HORIZONTAL : RBW:1000.000kHz VBW:1.100kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5149.16 51.00 54.00 -3.00 39.24 32.70 12.75 33.69 0.00 200 42 AVERAGE	 Site : 03CH22-HY Condition: AVG_54 3m DRH18-E_LE2C04A18EN_240711 HORIZONTAL : RBW:1000.000kHz VBW:1.100kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5220.00 106.38 ------ ------ 94.78 32.53 12.87 33.80 0.00 200 42 AVERAGE

Mode	11	
	Band Edge - R	
	U-NII-1_5.15-5.25_802.11ax HE20_CH44_Full RU_5220MHz	
ANT	1+2 (CDD)	
Pol.	Horizontal	Fundamental
Peak	 Site : 03CH22-HY Condition: PEAK_BE_74 3m DRH18-E_LE2C04A18EN_240711 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Limit Read Ant Cable Preamp Aux APos TPos Freq Level Line Margin Level Factor Loss Factor Factor Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5376.96 49.19 74.00 -24.81 37.80 32.35 13.09 34.05 0.00 200 42 PEAK	Blank
Avg	 Site : 03CH22-HY Condition: AVG_BE_54 3m DRH18-E_LE2C04A18EN_240711 HORIZONTAL : RBW:1000.000kHz VBW:1.100kHz SWT:Auto Limit Read Ant Cable Preamp Aux APos TPos Freq Level Line Margin Level Factor Loss Factor Factor Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5381.76 42.99 54.00 -11.01 31.61 32.34 13.10 34.06 0.00 200 42 AVERAGE	Blank