FCC RADIO TEST REPORT

FCC ID	:	**A4RG020I**
Equipment	:	**Phone**
Model Name	:	**G020I**
Applicant	:	**Google LLC** **1600 Amphitheatre Parkway,** **Mountain View, California, 94043 USA**
Standard	:	**FCC Part 15 Subpart E §15.407**

The product was received on Nov. 06, 2018 and testing was started from Apr. 07, 2019 and completed on Jun. 26, 2019. We, SPORTON INTERNATIONAL INC., EMC & Wireless Communications Laboratory, would like to declare that the tested sample has been evaluated in accordance with the test procedures and has been in compliance with the applicable technical standards.

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

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

Approved by: Jones Tsai

SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory

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

Table of Contents

History of this test report

Report No.	Version	Description	Issued Date
FR8N0616-05E	01	Initial issue of report	Jun. 27, 2019
FR8N0616-05E	02	Revise the antenna numbers in the report	Jul. 04, 2019

Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
3.1	15.403(i)	26dB Bandwidth	Pass	-
3.1	2.1049	99% Occupied Bandwidth	Reporting only	-
3.2	15.407(a)	Maximum Conducted Output Power	Pass	-
3.3	15.407(a)	Power Spectral Density	Pass	-
3.4	15.407(b)	Unwanted Emissions	Pass	Under limit 1.55 dB at 5469.520 MHz
3.5	15.207	AC Conducted Emission	Pass	Under limit 11.88 dB at 0.161 MHz
3.6	15.407(c)	Automatically Discontinue Transmission	Pass	-
3.7	15.203 15.407(a)	Antenna Requirement	Pass	-

Declaration of Conformity:
The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.
Comments and Explanations:
The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.

Reviewed by: Wii Chang

Report Producer: Aileen Huang

1 General Description

1.1 Product Feature of Equipment Under Test

Product Feature	
Equipment	Phone
Model Name	G020I
FCC ID	A4RG020I
EUT supports Radios application	CDMA/EV-DO/GSM/EGPRS/WCDMA/HSPA/LTE/NFC/ GNSS/WPC WLAN 11b/g/n HT20 WLAN 11a/n HT20/HT40 WLAN 11ac VHT20/VHT40/VHT80 Bluetooth BR/EDR/LE 60 GHz Low Power Transmitter
EUT Stage	Identical Prototype

Remark: The above EUT's information was declared by manufacturer.

EUT Information List	
No.	S/N
#1	934AZ06931
#2	935AZ06999
#3	935AZ07022

1.2 Product Specification of Equipment Under Test

Standards-related Product Specification	
Tx/Rx Frequency Range	5180 MHz ~ 5240 MHz 5260 MHz ~ 5320 MHz 5500 MHz ~ 5720 MHz
Maximum Output Power to Antenna	**<Ant. 2>** **<5180 MHz ~ 5240 MHz>** 802.11a : 18.50 dBm / 0.0708 W 802.11n HT20 : 18.70 dBm / 0.0741 W 802.11n HT40 : 20.60 dBm / 0.1148 W 802.11 ac VHT20: 18.60 dBm / 0.0724 W 802.11 ac VHT40: 20.60 dBm / 0.1148 W 802.11 ac VHT80: 14.30 dBm / 0.0269 W **<5260 MHz ~ 5320 MHz>** 802.11a : 18.40 dBm / 0.0692 W 802.11n HT20 : 18.80 dBm / 0.0759 W 802.11n HT40 : 20.60 dBm / 0.1148 W 802.11 ac VHT20: 18.80 dBm / 0.0759 W 802.11 ac VHT40: 20.60 dBm / 0.1148 W 802.11 ac VHT80: 16.20 dBm / 0.0417 W **<5500 MHz ~ 5720 MHz >** 802.11a : 18.70 dBm / 0.0741 W 802.11n HT20 : 19.00 dBm / 0.0794 W 802.11n HT40 : 20.70 dBm / 0.1175 W 802.11 ac VHT20: 18.90 dBm / 0.0776 W 802.11 ac VHT40: 20.50 dBm / 0.1122 W 802.11 ac VHT80: 20.70 dBm / 0.1175 W **<Ant. 5>** **<5180 MHz ~ 5240 MHz>** 802.11a : 18.50 dBm / 0.0708 W 802.11n HT20 : 18.80 dBm / 0.0759 W 802.11n HT40 : 20.60 dBm / 0.1148 W 802.11 ac VHT20: 18.50 dBm / 0.0708 W 802.11 ac VHT40: 20.60 dBm / 0.1148 W 802.11 ac VHT80: 14.50 dBm / 0.0282 W **<5260 MHz ~ 5320 MHz>** 802.11a : 18.60 dBm / 0.0724 W 802.11n HT20 : 18.80 dBm / 0.0759 W 802.11n HT40 : 20.60 dBm / 0.1148 W 802.11 ac VHT20: 18.60 dBm / 0.0724 W 802.11 ac VHT40: 20.50 dBm / 0.1122 W 802.11 ac VHT80: 16.40 dBm / 0.0437 W **<5500 MHz ~ 5700 MHz >** 802.11a : 18.60 dBm / 0.0724 W 802.11n HT20 : 18.90 dBm / 0.0776 W 802.11n HT40 : 20.70 dBm / 0.1175 W 802.11 ac VHT20: 18.90 dBm / 0.0776 W 802.11 ac VHT40: 20.70 dBm / 0.1175 W 802.11 ac VHT80: 20.60 dBm / 0.1148 W

Standards-related Product Specification	
Maximum Output Power to Antenna	**MIMO <Ant. 2+5>** **<5180 MHz ~ 5240 MHz>** 802.11a : 21.82 dBm / 0.1521 W 802.11n HT20 : 21.81 dBm / 0.1517 W 802.11n HT40 : 23.66 dBm / 0.2323 W 802.11 ac VHT20: 21.81 dBm / 0.1517 W 802.11 ac VHT40: 23.61 dBm / 0.2296 W 802.11 ac VHT80: 17.61 dBm / 0.0577 W **<5260 MHz ~ 5320 MHz>** 802.11a : 21.96 dBm / 0.1570 W 802.11n HT20 : 21.86 dBm / 0.1535 W 802.11n HT40 : 23.66 dBm / 0.2323 W 802.11 ac VHT20: 21.86 dBm / 0.1535 W 802.11 ac VHT40: 23.61 dBm / 0.2296 W 802.11 ac VHT80: 19.41 dBm / 0.0873 W **<5500 MHz ~ 5700 MHz >** 802.11a : 22.06 dBm / 0.1607 W 802.11n HT20 : 22.06 dBm / 0.1607 W 802.11n HT40 : 23.81 dBm / 0.2404 W 802.11 ac VHT20: 22.06 dBm / 0.1607 W 802.11 ac VHT40: 23.81 dBm / 0.2404 W 802.11 ac VHT80: 23.76 dBm / 0.2377 W
99% Occupied Bandwidth	**<Ant. 2>** 802.11a : 16.90 MHz 802.11n HT20 : 18.00 MHz 802.11n HT40 : 55.30 MHz 802.11 ac VHT80 : 78.36 MHz **<Ant. 5>** 802.11a : 16.70 MHz 802.11n HT20 : 17.95 MHz 802.11n HT40 : 39.20 MHz 802.11 ac VHT80 : 77.52 MHz
Antenna Gain / Gain	**<5150 MHz ~ 5250 MHz>** <Ant. 2> : IFA Antenna with gain 2.8 dBi <Ant. 5> : ILA Antenna with gain -1.5 dBi **<5250 MHz ~ 5350 MHz>** <Ant. 2> : IFA Antenna with gain 3.0 dBi <Ant. 5> : ILA Antenna with gain -1.5 dBi **<5470 MHz ~ 5725 MHz>** <Ant. 2> : IFA Antenna with gain 3.1 dBi <Ant. 5> : ILA Antenna with gain -1.5 dBi

<table>
<tr><th colspan="2">Standards-related Product Specification</th></tr>
<tr><td>Type of Modulation</td><td>802.11a/n : OFDM (BPSK / QPSK / 16QAM / 64QAM)
802.11ac: OFDM (BPSK / QPSK / 16QAM / 64QAM / 256QAM)</td></tr>
<tr><td>Antenna Function Description</td><td>
<table>
<tr><td></td><td>Ant. 2</td><td>Ant. 5</td></tr>
<tr><td>802.11 a/n/ac</td><td>V</td><td>V</td></tr>
<tr><td>802.11 a/n/ac MIMO</td><td>V</td><td>V</td></tr>
</table>
</td></tr>
</table>

Note: MIMO Ant. 2+5 is a calculated result from sum of the power MIMO Ant. 2 and MIMO Ant. 5.

1.3 Modification of EUT

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

1.4 Testing Location

<table>
<tr><td>Test Site</td><td colspan="2">SPORTON INTERNATIONAL INC., EMC & Wireless Communications Laboratory</td></tr>
<tr><td>Test Site Location</td><td colspan="2">No.52, Huaya 1st Rd., Guishan Dist.,
Taoyuan City, Taiwan (R.O.C.)
TEL: +886-3-327-3456
FAX: +886-3-328-4978</td></tr>
<tr><td rowspan="2">Test Site No.</td><td colspan="2">Sporton Site No.</td></tr>
<tr><td>TH05-HY</td><td>CO05-HY</td></tr>
</table>

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

<table>
<tr><td>Test Site</td><td>SPORTON INTERNATIONAL INC., EMC & Wireless Communications Laboratory</td></tr>
<tr><td>Test Site Location</td><td>No.58, Aly. 75, Ln. 564, Wenhua 3rd, Rd., Guishan Dist.,
Taoyuan City, Taiwan (R.O.C.)
TEL: +886-3-327-0868
FAX: +886-3-327-0855</td></tr>
<tr><td rowspan="2">Test Site No.</td><td>Sporton Site No.</td></tr>
<tr><td>03CH12-HY</td></tr>
</table>

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

FCC designation No.: TW1190 and TW0007

1.5 Applicable Standards

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

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

Remark:

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

2 Test Configuration of Equipment Under Test

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

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

2.1 Carrier Frequency and Channel

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

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

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

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

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

Note:

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

2.2 Test Mode

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

MIMO Mode

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

Test Cases	
AC Conducted Emission	Mode 1 : WLAN (5GHz) Link + Bluetooth Link + USB Type C Cable (Charging from AC Adapter 1) Mode 2 : WLAN (5GHz) Link + Bluetooth Link + Earphone (Type C) + Wireless Charging

Remark:

1. The worst case of conducted emission is mode 2; only the test data of it was reported.

2. For Radiated Test Cases, the tests were performed with Adapter 1

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

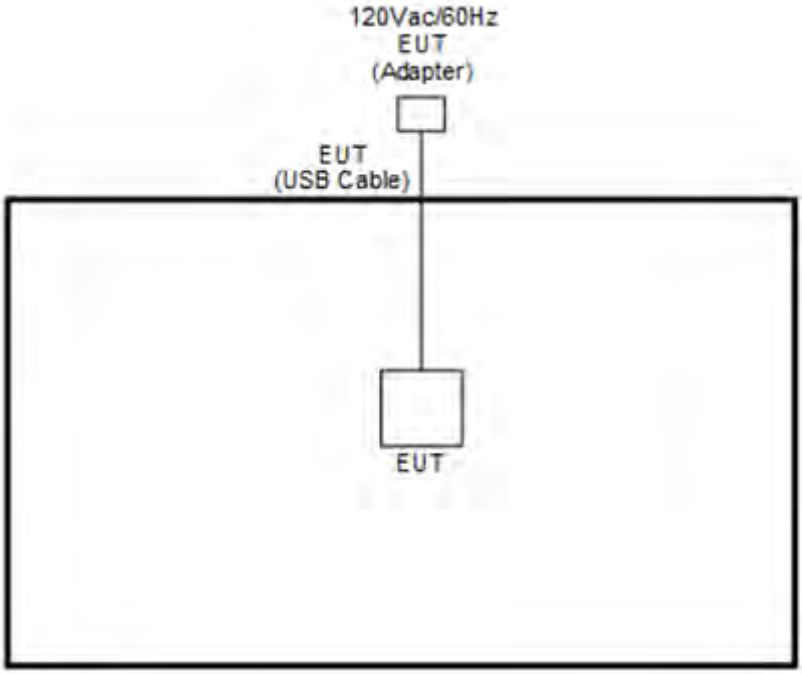
Ch. #		Band I：5150-5250 MHz	Band II：5250-5350 MHz	Band III：5470-5725MHz
		802.11n HT20	802.11n HT20	802.11n HT20
L	Low	36	52	100
M	Middle	44	60	116
H	High	48	64	140
Straddle		-	-	144

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

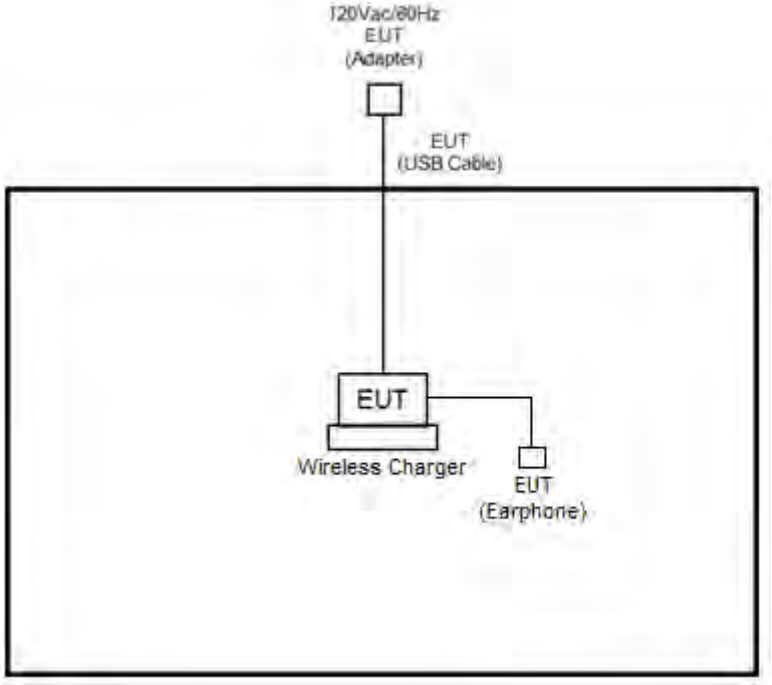
Ch. #		Band I：5150-5250 MHz	Band II：5250-5350 MHz	Band III：5470-5725MHz
		802.11ac VHT80	802.11ac VHT80	802.11ac VHT80
L	Low	-	-	106
M	Middle	42	58	122
H	High	-	-	-
Straddle		-	-	138

2.3 Connection Diagram of Test System

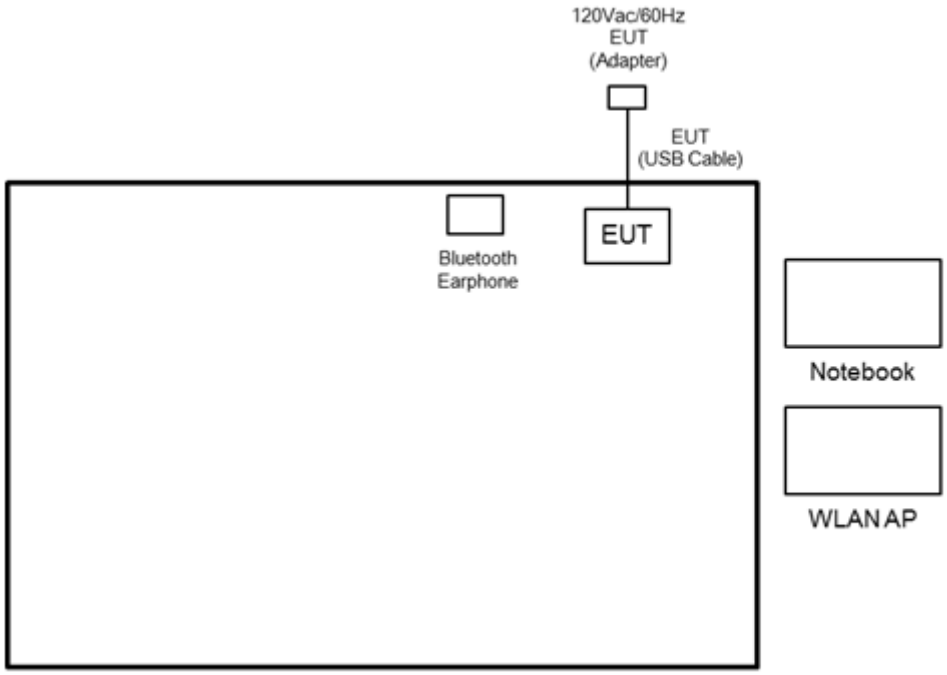
<WLAN Tx Mode>



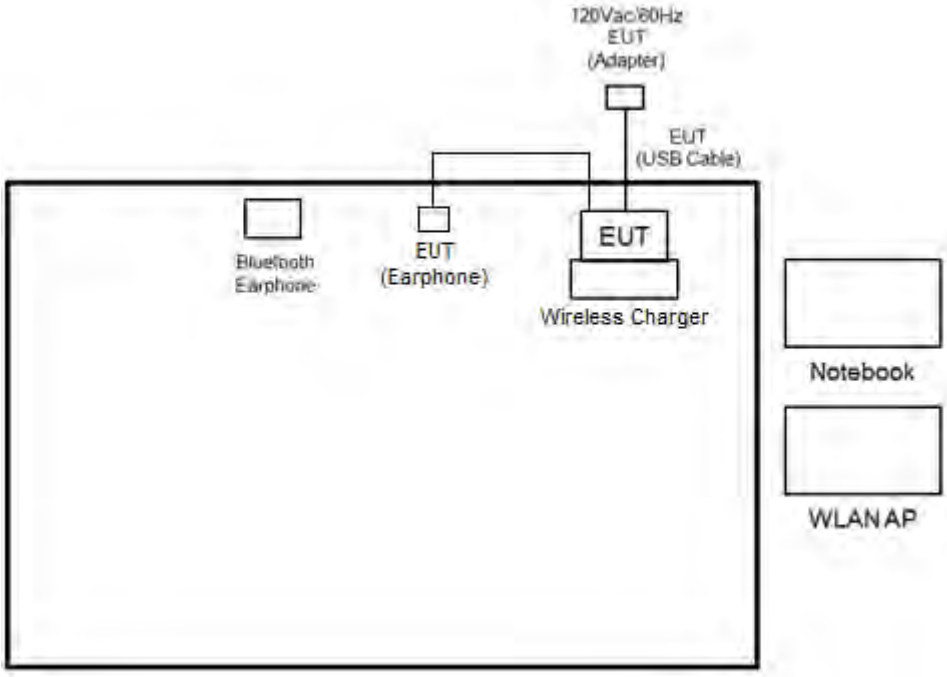
<WLAN Tx Mode with WPC Charging Mode>



<AC Conducted Emissions Mode>



<AC Conducted Emissions with WPC Charging Mode>



2.4 Support Unit used in test configuration and system

Item	Equipment	Trade Name	Model Name	FCC ID	Data Cable	Power Cord
1.	WLAN AP	ASUS	RT-AC66U	MSQ-RTAC66U	N/A	Unshielded, 1.8 m
2.	Notebook	DELL	Latitude E6320	FCC DoC/ Contains FCC ID: QDS-BRCM1054	N/A	AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m
3.	Wireless charger	Google	G019C	2APYSG019C	N/A	N/A
4.	Bluetooth Earphone	Google	G015B	SZGG015B	N/A	N/A

2.5 EUT Operation Test Setup

The RF test items, utility “QRCT 3.0.271.0” was installed in Notebook which was programmed in order to make the EUT get into the engineering modes to provide channel selection, power level, data rate and the application type and for continuous transmitting signals.

2.6 Measurement Results Explanation Example

For all conducted test items:

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

Example :

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

Offset = RF cable loss + attenuator factor.

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

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

= 4.2 + 10 = 14.2 (dB)

3 Test Result

3.1 26dB & 99% Occupied Bandwidth Measurement

3.1.1 Description of 26dB & 99% Occupied Bandwidth

This section is for reporting purpose only.

There is no restriction limits for bandwidth.

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

3.1.2 Measuring Instruments

See list of measuring equipment of this test report.

3.1.3 Test Procedures

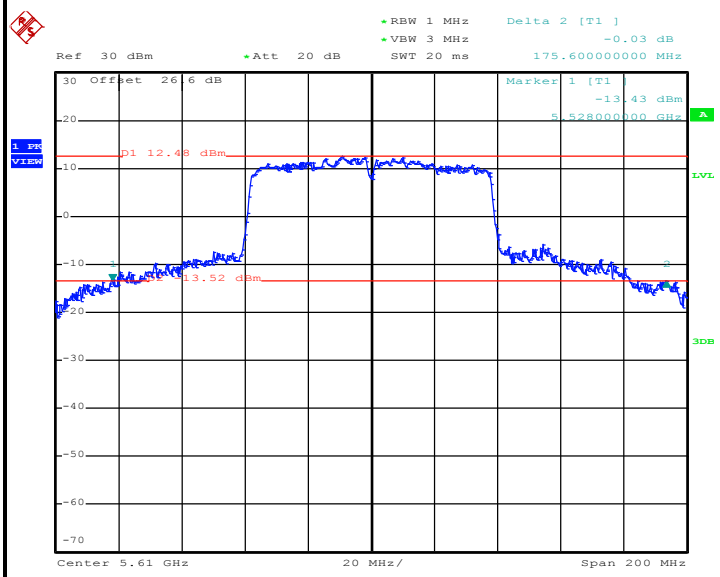
1. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01. Section C) Emission bandwidth
2. Set RBW = approximately 1% of the emission bandwidth.
3. Set the VBW > RBW.
4. Detector = Peak.
5. Trace mode = max hold
6. Measure the maximum width of the emission that is 26 dB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

3.1.4 Test Setup

3.1.5 Test Result of 26dB & 99% Occupied Bandwidth

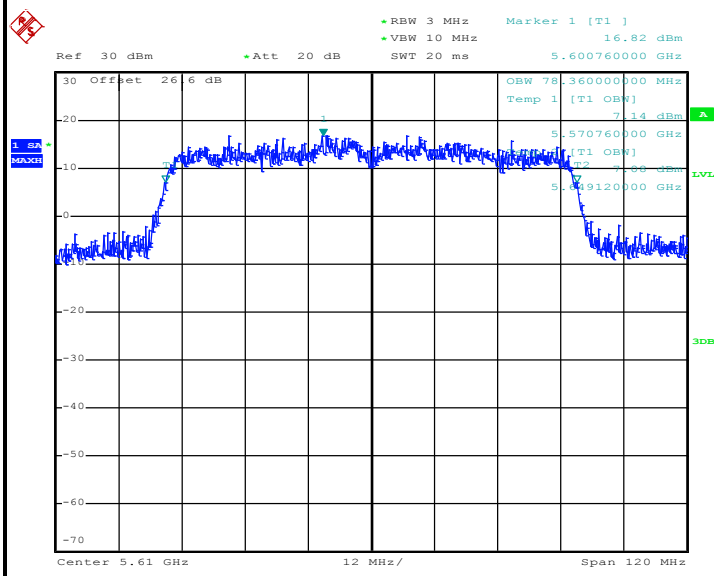
Please refer to Appendix A.

Maximum 26dB Bandwidth



Date: 25.APR.2019 18:08:20

Maximum 99% Occupied Bandwidth



Date: 25.APR.2019 18:06:10

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

3.2 Maximum Conducted Output Power Measurement

3.2.1 Limit of Maximum Conducted Output Power

<FCC 14-30 CFR 15.407>

For the 5.15–5.25 GHz bands:

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

For the 5.25–5.725 GHz bands:

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

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

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

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

3.2.2 Measuring Instruments

See list of measuring equipment of this test report.

3.2.3 Test Procedures

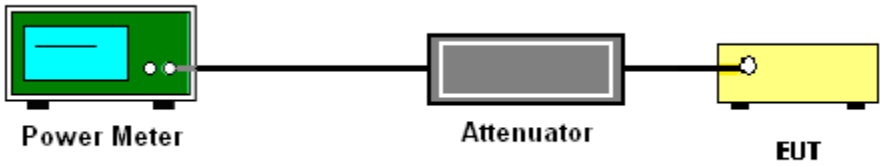
The testing follows Method PM-G of FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01.

Method PM-G (Measurement using a gated RF average power meter):

1. Measurement is performed using a wideband RF power meter.
2. The EUT is configured to transmit at its maximum power control level.
3. Measure the average power of the transmitter
4. Since the measurement is made only during the ON time of the transmitter, no duty cycle correction factor is required.

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

3.2.4 Test Setup



3.2.5 Test Result of Maximum Conducted Output Power

Please refer to Appendix A.

3.3 Power Spectral Density Measurement

3.3.1 Limit of Power Spectral Density

<FCC 14-30 CFR 15.407>

For the 5.15–5.25 GHz bands:

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

For the 5.25–5.725 GHz bands:

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

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

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

3.3.2 Measuring Instruments

See list of measuring equipment of this test report.

3.3.3 Test Procedures

The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01. Section F) Maximum power spectral density.

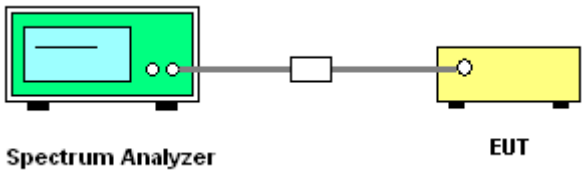
 # Method SA-2 #

(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 was connected to the spectrum analyzer by a low loss cable.
2. Each plot has already offset with cable loss, and attenuator loss. Measure the PPSD and record it.
3. For MIMO mode, calculation method follows FCC KDB 662911 D01 Multiple Transmitter Output v02r01.
   Method (a): Measure and sum the spectra across the outputs.
   The total final Power Spectral Density is from a device with 2 transmitter outputs. The spectrum measurements of the individual outputs are all performed with the same span and number of points; the spectrum value in the first spectral bin of output 1 is summed with that in the first spectral bin of output 2 to obtain the value for the first frequency bin of the summed spectrum.

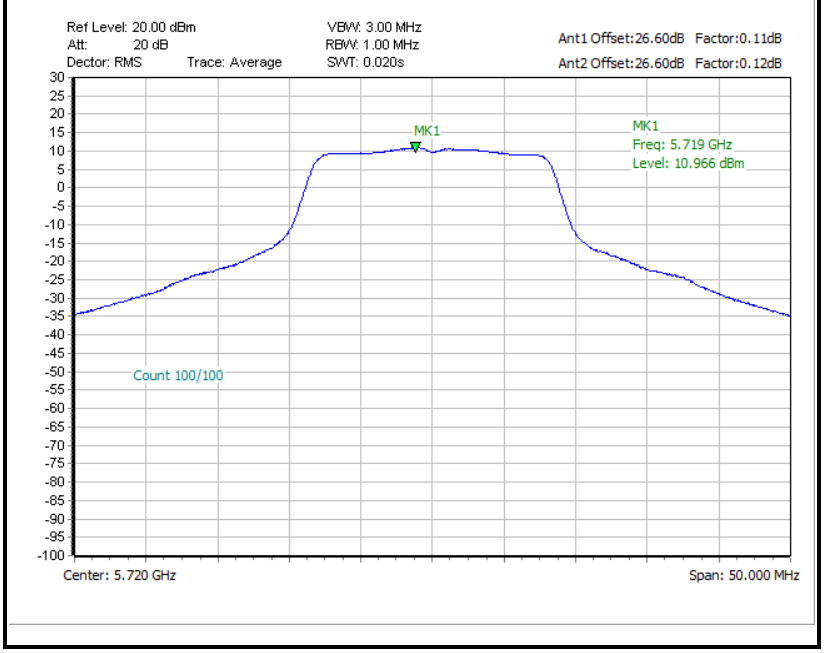
3.3.4 Test Setup



3.3.5 Test Result of Power Spectral Density

Please refer to Appendix A.

Worst Case Power Density (dBm/MHz)



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

3.4 Unwanted Emissions Measurement

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

3.4.1 Limit of Unwanted Emissions

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

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

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

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

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

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

$$E=\frac{1000000\sqrt{30P}}{3}$$ 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) Section 15.407(b)(1) to (b)(3) specify the unwanted emission limits for the U-NII-1 and U-NII-2 bands. As specified, emissions above 1000 MHz that are outside of the restricted bands are subject to a peak emission limit of -27 dBm/MHz.3

(ii) Section 15.407(b)(4) specifies the unwanted emission limit for the U-NII-3 band. A band emissions mask is specified in Section 15.407(b)(4)(i). The emission limits are in terms of a Peak detector. An alternative to the band emissions mask is specified in Section 15.407(b)(4)(ii). The alternative limits are based on the highest antenna gain specified in the filing. There are also marketing and importation restrictions for the devices using the alternative limit.[4]

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

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

3.4.2 Measuring Instruments

See list of measuring equipment of this test report.

3.4.3 Test Procedures

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

   Section G) Unwanted emissions measurement.

   (1) Procedure for Unwanted Emissions Measurements Below 1000MHz

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

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

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

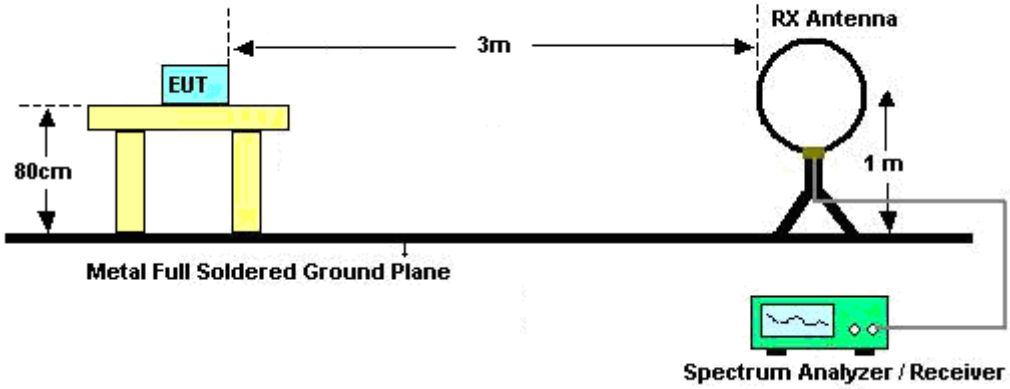
(3) Procedures for Average Unwanted Emissions Measurements Above 1000MHz

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

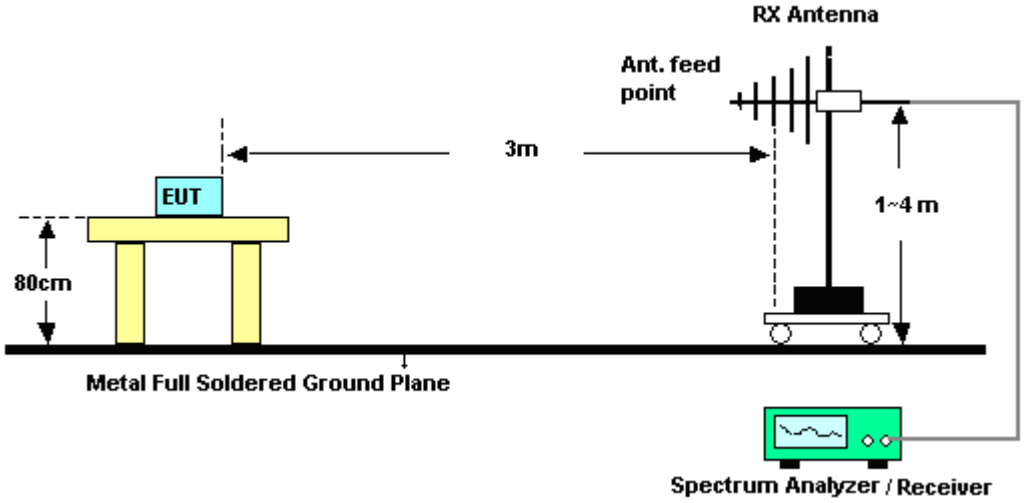
2. The EUT was placed on a turntable with 0.8 meter for frequency below 1GHz and 1.5 meter for frequency above 1GHz respectively above ground.
3. The EUT was set 3 meters from the interference receiving antenna which was mounted on the top of a variable height antenna tower.
4. The antenna is a broadband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

3.4.4 Test Setup

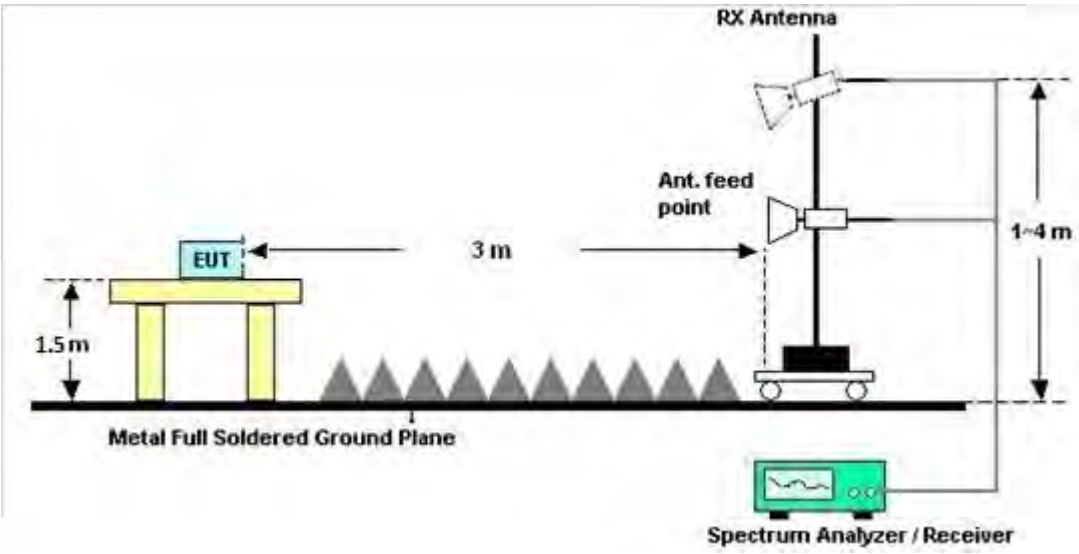
For radiated emissions below 30MHz



For radiated emissions from 30MHz to 1GHz



For radiated emissions above 1GHz



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

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

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

3.4.6 Test Result of Radiated Spurious at Band Edges

Please refer to Appendix C and D.

3.4.7 Duty Cycle

Please refer to Appendix E.

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

Please refer to Appendix C and D.

3.5 AC Conducted Emission Measurement

3.5.1 Limit of AC Conducted Emission

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

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

*Decreases with the logarithm of the frequency.

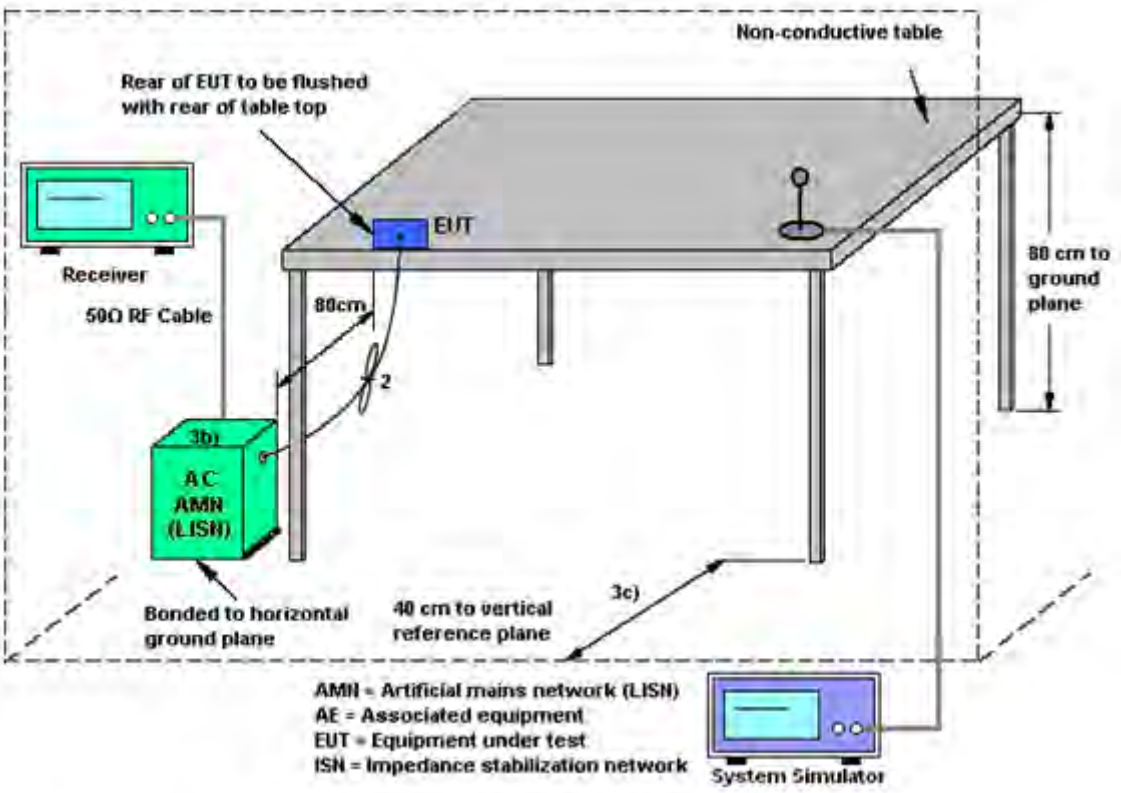
3.5.2 Measuring Instruments

See list of measuring equipment of this test report.

3.5.3 Test Procedures

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

3.5.4 Test Setup



3.5.5 Test Result of AC Conducted Emission

Please refer to Appendix B.

3.6 Automatically Discontinue Transmission

3.6.1 Limit of Automatically Discontinue Transmission

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

3.6.2 Measuring Instruments

See list of measuring equipment of this test report.

3.6.3 Test Result of Automatically Discontinue Transmission

EUT is verified this characteristic during the function check of normal sample associated with an access point:

A. Information start: make EUT supply information to the access point.

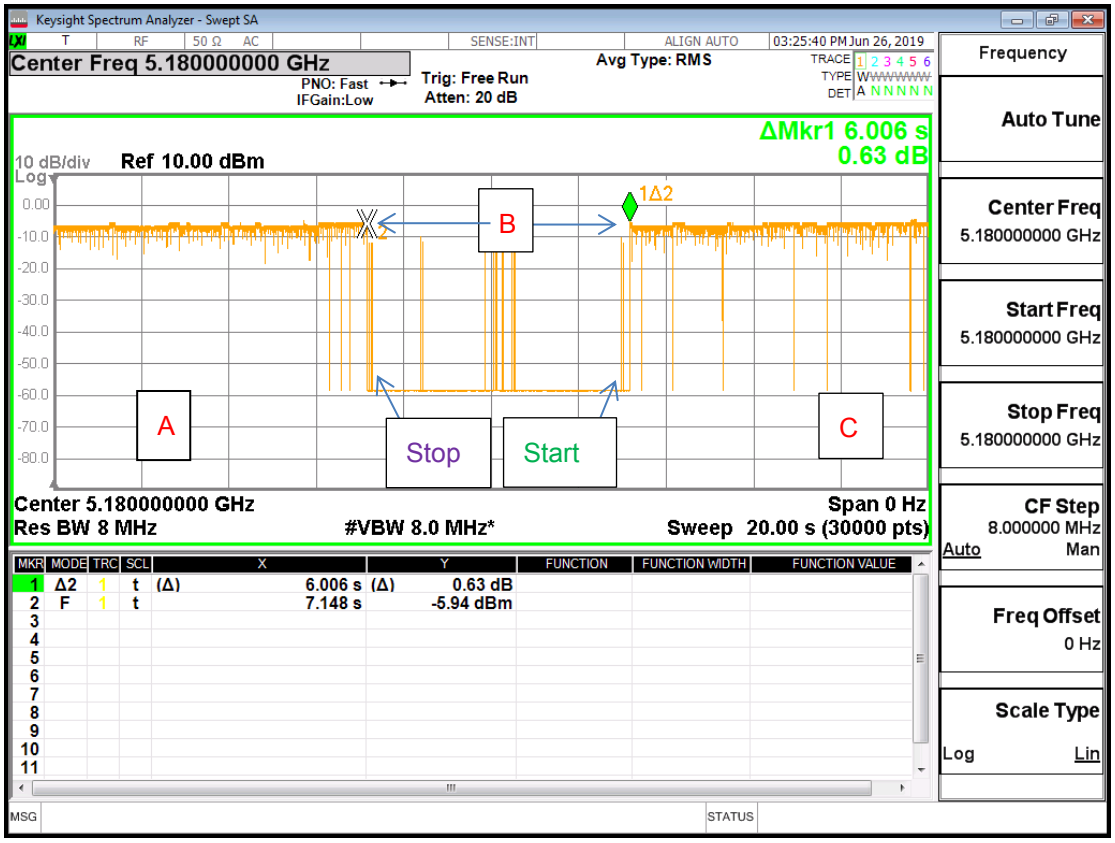
B. Information stop: stop supplying information to the access point.

While the EUT is not transmitting any information, the EUT can automatically discontinue transmission and become standby mode for power saving.

C. Information start: make EUT supply information to the access point again.

The EUT can detect the controlling signal of ACK message transmitting from remote device and verify whether it shall resend or discontinue transmission.

5180MHz



Note : The control / signalling information during the period B is precluded.

3.7 Antenna Requirements

3.7.1 Standard Applicable

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

3.7.2 Antenna Anti-Replacement Construction

An embedded-in antenna design is used.

3.7.3 Antenna Gain

<CDD Modes >

FCC KDB 662911 D01 Multiple Transmitter Output v02r01

For CDD transmissions, directional gain is calculated as

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

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

Array Gain = 10 log(NANT/NSS=1) dB.

For power measurements on IEEE 802.11 devices,

Array Gain = 0 dB (i.e., no array gain) for NANT ≤ 4.

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

The EUT supports CDD mode.

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

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

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

The directional gain “DG” is calculated as following table.

<CDD Modes>

	Ant. 1 (dBi)	Ant. 2 (dBi)	DG for Power (dBi)	DG for PSD (dBi)	Power Limit Reduction (dB)	PSD Limit Reduction (dB)
Band I	2.80	-1.50	2.80	3.92	0.00	0.00
Band II	3.00	-1.50	3.00	4.05	0.00	0.00
Band III	3.10	-1.50	3.10	4.11	0.00	0.00

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

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

4 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Power Sensor	DARE	RPR3006W	13I00030SNO32	9kHz~6GHz	Dec. 03, 2018	Apr. 08, 2019~ May 30, 2019	Dec. 02, 2019	Conducted (TH05-HY)
Spectrum Analyzer	Rohde & Schwarz	FSP40	100057	9kHz-40GHz	Nov. 21, 2018	Apr. 08, 2019~ May 30, 2019	Nov. 20, 2019	Conducted (TH05-HY)
Switch Box & RF Cable	Burgeon	ETF-058	EC1208382	N/A	Mar. 27, 2019	Apr. 08, 2019~ May 30, 2019	Mar. 26, 2020	Conducted (TH05-HY)
AC Power Source	ChainTek	APC-1000W	N/A	N/A	N/A	Apr. 07, 2019	N/A	Conduction (CO05-HY)
EMI Test Receiver	Rohde & Schwarz	ESR3	102388	9KHz~3.6GHz	Nov. 12, 2018	Apr. 07, 2019	Nov. 11, 2019	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100080	9kHz~30MHz	Nov. 14, 2018	Apr. 07, 2019	Nov. 13, 2019	Conduction (CO05-HY)
Software	Rohde & Schwarz	EMC32 V10.30	N/A	N/A	N/A	Apr. 07, 2019	N/A	Conduction (CO05-HY)
LF Cable	HUBER + SUHNER	RG-214/U	LF01	N/A	Dec. 31, 2018	Apr. 07, 2019	Dec. 30, 2019	Conduction (CO05-HY)
Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100851	N/A	Dec. 31, 2018	Apr. 07, 2019	Dec. 30, 2019	Conduction (CO05-HY)
Loop Antenna	TESEQ	HLA 6120	31244	9 kHz~30 MHz	Mar. 28, 2019	Apr. 14, 2019~ Apr. 19, 2019	Mar. 27, 2020	Radiation (03CH12-HY)
Bilog Antenna	TESEQ	CBL 6111D&00800N1D01N-06	37059&01	30MHz~1GHz	Oct. 13, 2018	Apr. 14, 2019~ Apr. 19, 2019	Oct. 12, 2019	Radiation (03CH12-HY)
Horn Antenna	SCHWARZBECK	BBHA 9120D	9120D-1328	1GHz ~ 18GHz	Oct. 19, 2018	Apr. 14, 2019~ Apr. 19, 2019	Oct. 18, 2019	Radiation (03CH12-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170576	18GHz ~ 40GHz	May 08, 2018	Apr. 14, 2019~ Apr. 19, 2019	May 07, 2019	Radiation (03CH12-HY)
Preamplifier	SONOMA	310N	187312	10MHz~1GHz	Dec. 04, 2018	Apr. 14, 2019~ Apr. 19, 2019	Dec. 03, 2019	Radiation (03CH12-HY)
Preamplifier	Keysight	83017A	MY53270148	1GHz~26.5GHz	Jan. 14, 2019	Apr. 14, 2019~ Apr. 19, 2019	Jan. 13, 2020	Radiation (03CH12-HY)
Preamplifier	Agilent	8449B	3008A02375	1GHz~26.5GHz	May 28, 2018	Apr. 14, 2019~ Apr. 19, 2019	May 27, 2019	Radiation (03CH12-HY)
Preamplifier	Jet-Power	JPA0118-55-303K	17100018000550006	1GHz~18GHz	Jul. 10, 2018	Apr. 14, 2019~ Apr. 16, 2019	Jul. 09, 2019	Radiation (03CH12-HY)
Preamplifier	Jet-Power	JPA0118-55-303K	17100018000054002	1GHz~18GHz	Apr. 16, 2019	Apr. 17, 2019~ Apr. 19, 2019	Apr. 15, 2020	Radiation (03CH12-HY)
Preamplifier	MITEQ	TTA1840-35-HG	1864481	18GHz ~ 40GHz	Aug. 24, 2018	Apr. 14, 2019~ Apr. 19, 2019	Aug. 23, 2019	Radiation (03CH12-HY)
Spectrum Analyzer	Rohde & Schwarz	FSV30	103738	9kHz~30GHz	May 22, 2018	Apr. 14, 2019~ Apr. 19, 2019	May 21, 2019	Radiation (03CH12-HY)
Spectrum Analyzer	Keysight	N9010A	MY55370526	10Hz~44GHz	Mar. 14, 2019	Apr. 14, 2019~ Apr. 19, 2019	Mar. 13, 2020	Radiation (03CH12-HY)
Filter	Wainwright	WLKS1200-12SS	SN2	1.2GHz Low Pass	Mar. 20, 2019	Apr. 14, 2019~ Apr. 19, 2019	Mar. 19, 2020	Radiation (03CH12-HY)
Filter	Woken	WHKX8-5272.5-6750-18000-40ST	SN2	6.75G Highpass	Mar. 20, 2019	Apr. 14, 2019~ Apr. 19, 2019	Mar. 19, 2020	Radiation (03CH12-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 126E	0058/126E	30M-18G	Mar. 13, 2019	Apr. 14, 2019~ Apr. 19, 2019	Mar. 12, 2020	Radiation (03CH12-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	505134/2	30M~40GHz	Oct. 16, 2018	Apr. 14, 2019~ Apr. 19, 2019	Oct. 15, 2019	Radiation (03CH12-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	800740/2	30M~40GHz	Oct. 16, 2018	Apr. 14, 2019~ Apr. 19, 2019	Oct. 15, 2019	Radiation (03CH12-HY)
Antenna Mast	EMEC	AM-BS-4500-B	N/A	1m~4m	N/A	Apr. 14, 2019~ Apr. 19, 2019	N/A	Radiation (03CH12-HY)
Turn Table	EMEC	TT2000	N/A	0~360 Degree	N/A	Apr. 14, 2019~ Apr. 19, 2019	N/A	Radiation (03CH12-HY)
Software	Audix	E3 6.2009-8-24	RK-000989	N/A	N/A	Apr. 14, 2019~ Apr. 19, 2019	N/A	Radiation (03CH12-HY)
Spectrum Analyzer	Keysight	N9010A	MY56070412	10Hz~7GHz	Aug. 16, 2018	Jun. 26, 2019	Aug. 15, 2019	DFS (DFS02-HY)

5 Uncertainty of Evaluation

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**2.20**

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**5.1**

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**5.2**

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**4.7**

Appendix A. Test Result of Conducted Test Items

Test Engineer:	Leo Li, Nick Yu and Rebecca Li	Temperature:	21~25	℃
Test Date:	2019/4/8 ~ 2019/5/30	Relative Humidity:	51~54	%

TEST RESULTS DATA
26dB and 99% OBW

Band I														
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	99% Bandwidth (MHz)		26 dB Bandwidth (MHz)		IC 99% Bandwidth Power Limit (dBm)		IC 99% Bandwidth EIRP Limit (dBm)			Note
					Ant 2	Ant 5	Ant 2	Ant 5	Ant 2	Ant 5	Ant 2	Ant 5		
11a	6Mbps	2	36	5180	16.75	16.65	25.30	25.80	-		22.21			
11a	6Mbps	2	44	5220	16.75	16.70	27.60	27.30	-		22.23			
11a	6Mbps	2	48	5240	16.65	16.60	24.70	25.40	-		22.20			
HT20	MCS0	2	36	5180	17.90	17.95	28.40	30.00	-		22.53			
HT20	MCS0	2	44	5220	17.85	17.90	28.20	27.85	-		22.52			
HT20	MCS0	2	48	5240	17.90	17.85	26.94	27.30	-		22.52			
HT40	MCS0	2	38	5190	36.60	36.50	41.58	41.58	-		23.01			
HT40	MCS0	2	46	5230	39.90	39.20	79.56	72.09	-		23.01			
VHT80	MCS0	2	42	5210	76.56	76.92	83.84	82.88	-		23.01			

TEST RESULTS DATA
Average Power Table

FCC Band I													
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)			Pass/Fail
					Ant 2	Ant 5	SUM	Ant 2	Ant 5	Ant 2	Ant 5		
11a	6Mbps	1	36	5180	18.50	18.50		24.00	24.00	2.80	-1.50		Pass
11a	6Mbps	1	44	5220	18.50	18.40		24.00	24.00	2.80	-1.50		Pass
11a	6Mbps	1	48	5240	18.40	18.40		24.00	24.00	2.80	-1.50		Pass
HT20	MCS0	1	36	5180	18.70	18.80		24.00	24.00	2.80	-1.50		Pass
HT20	MCS0	1	44	5220	18.70	18.60		24.00	24.00	2.80	-1.50		Pass
HT20	MCS0	1	48	5240	18.60	18.70		24.00	24.00	2.80	-1.50		Pass
HT40	MCS0	1	38	5190	15.70	15.50		24.00	24.00	2.80	-1.50		Pass
HT40	MCS0	1	46	5230	20.60	20.60		24.00	24.00	2.80	-1.50		Pass
VHT20	MCS0	1	36	5180	18.60	18.50		24.00	24.00	2.80	-1.50		Pass
VHT20	MCS0	1	44	5220	18.50	18.40		24.00	24.00	2.80	-1.50		Pass
VHT20	MCS0	1	48	5240	18.40	18.40		24.00	24.00	2.80	-1.50		Pass
VHT40	MCS0	1	38	5190	15.20	15.40		24.00	24.00	2.80	-1.50		Pass
VHT40	MCS0	1	46	5230	20.60	20.60		24.00	24.00	2.80	-1.50		Pass
VHT80	MCS0	1	42	5210	14.30	14.50		24.00	24.00	2.80	-1.50		Pass
11a	6Mbps	2	36	5180	18.60	18.50	21.56	24.00		2.80			Pass
11a	6Mbps	2	44	5220	19.10	18.50	21.82	24.00		2.80			Pass
11a	6Mbps	2	48	5240	18.40	18.50	21.46	24.00		2.80			Pass
HT20	MCS0	2	36	5180	18.80	18.80	21.81	24.00		2.80			Pass
HT20	MCS0	2	44	5220	18.80	18.70	21.76	24.00		2.80			Pass
HT20	MCS0	2	48	5240	18.70	18.80	21.76	24.00		2.80			Pass
HT40	MCS0	2	38	5190	15.90	15.60	18.76	24.00		2.80			Pass
HT40	MCS0	2	46	5230	20.70	20.60	23.66	24.00		2.80			Pass
VHT20	MCS0	2	36	5180	18.90	18.70	21.81	24.00		2.80			Pass
VHT20	MCS0	2	44	5220	18.80	18.60	21.71	24.00		2.80			Pass
VHT20	MCS0	2	48	5240	18.70	18.70	21.71	24.00		2.80			Pass
VHT40	MCS0	2	38	5190	15.80	15.50	18.66	24.00		2.80			Pass
VHT40	MCS0	2	46	5230	20.70	20.50	23.61	24.00		2.80			Pass
VHT80	MCS0	2	42	5210	14.50	14.70	17.61	24.00		2.80			Pass

TEST RESULTS DATA
Power Spectral Density

FCC Band I														
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Duty Factor (dB)		Average Power Density (dBm/MHz)			Average PSD Limit (dBm/MHz)		DG (dBi)			Pass /Fail
					Ant 2	Ant 5	Ant 2	Ant 5	SUM	Ant 2	Ant 5	Ant 2	Ant 5		
11a	6Mbps	2	36	5180	0.11	0.12			10.73	11.00		3.92			Pass
11a	6Mbps	2	44	5220	0.11	0.12			10.70	11.00		3.92			Pass
11a	6Mbps	2	48	5240	0.11	0.12			10.71	11.00		3.92			Pass
HT20	MCS0	2	36	5180	0.10	0.09			10.74	11.00		3.92			Pass
HT20	MCS0	2	44	5220	0.10	0.09			10.82	11.00		3.92			Pass
HT20	MCS0	2	48	5240	0.10	0.09			10.88	11.00		3.92			Pass
HT40	MCS0	2	38	5190	0.18	0.20			4.38	11.00		3.92			Pass
HT40	MCS0	2	46	5230	0.18	0.20			9.49	11.00		3.92			Pass
VHT80	MCS0	2	42	5210	0.35	0.36			0.05	11.00		3.92			Pass

TEST RESULTS DATA
26dB and 99% OBW

Band II															
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	99% Bandwidth (MHz)		26 dB Bandwidth (MHz)		IC 99% Bandwidth Power Limit (dBm)		IC 99% Bandwidth EIRP Limit (dBm)		FCC 26dB Bandwidth Power Limit (dBm)		Note
					Ant 2	Ant 5	Ant 2	Ant 5	Ant 2	Ant 5	Ant 2	Ant 5	Ant 2	Ant 5	
11a	6Mbps	2	52	5260	16.75	16.65	25.20	24.40	23.21		29.21		23.98		
11a	6Mbps	2	60	5300	16.75	16.70	27.51	27.20	23.23		29.23		23.98		
11a	6Mbps	2	64	5320	16.65	16.65	23.60	23.00	23.21		29.21		23.98		
HT20	MCS0	2	52	5260	17.90	17.85	27.50	25.40	23.52		29.52		23.98		
HT20	MCS0	2	60	5300	17.85	17.85	27.30	25.60	23.52		29.52		23.98		
HT20	MCS0	2	64	5320	17.85	17.85	25.20	25.00	23.52		29.52		23.98		
HT40	MCS0	2	54	5270	37.50	37.60	71.28	71.40	23.98		30.00		23.98		
HT40	MCS0	2	62	5310	36.60	36.60	41.40	41.58	23.98		30.00		23.98		
VHT80	MCS0	2	58	5290	76.68	76.68	83.84	82.56	23.98		30.00		23.98		

TEST RESULTS DATA
Average Power Table

FCC Band II													
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)		EIRP Power Limit (dBm)	Pass/Fail
					Ant 2	Ant 5	SUM	Ant 2	Ant 5	Ant 2	Ant 5		
11a	6Mbps	1	52	5260	18.20	18.40		23.98	23.98	3.00	-1.50	30	Pass
11a	6Mbps	1	60	5300	18.40	18.60		23.98	23.98	3.00	-1.50	30	Pass
11a	6Mbps	1	64	5320	18.10	17.90		23.98	23.98	3.00	-1.50	30	Pass
HT20	MCS0	1	52	5260	18.80	18.70		23.98	23.98	3.00	-1.50	30	Pass
HT20	MCS0	1	60	5300	18.80	18.80		23.98	23.98	3.00	-1.50	30	Pass
HT20	MCS0	1	64	5320	18.50	18.60		23.98	23.98	3.00	-1.50	30	Pass
HT40	MCS0	1	54	5270	20.60	20.60		23.98	23.98	3.00	-1.50	30	Pass
HT40	MCS0	1	62	5310	17.40	17.60		23.98	23.98	3.00	-1.50	30	Pass
VHT20	MCS0	1	52	5260	18.50	18.40		23.98	23.98	3.00	-1.50	30	Pass
VHT20	MCS0	1	60	5300	18.80	18.60		23.98	23.98	3.00	-1.50	30	Pass
VHT20	MCS0	1	64	5320	17.90	18.20		23.98	23.98	3.00	-1.50	30	Pass
VHT40	MCS0	1	54	5270	20.60	20.50		23.98	23.98	3.00	-1.50	30	Pass
VHT40	MCS0	1	62	5310	17.40	17.20		23.98	23.98	3.00	-1.50	30	Pass
VHT80	MCS0	1	58	5290	16.20	16.40		23.98	23.98	3.00	-1.50	30	Pass
11a	6Mbps	2	52	5260	18.50	18.30	21.41	23.98		3.00		30	Pass
11a	6Mbps	2	60	5300	19.00	18.90	21.96	23.98		3.00		30	Pass
11a	6Mbps	2	64	5320	18.10	18.40	21.26	23.98		3.00		30	Pass
HT20	MCS0	2	52	5260	18.90	18.70	21.81	23.98		3.00		30	Pass
HT20	MCS0	2	60	5300	18.80	18.90	21.86	23.98		3.00		30	Pass
HT20	MCS0	2	64	5320	18.50	18.80	21.66	23.98		3.00		30	Pass
HT40	MCS0	2	54	5270	20.80	20.50	23.66	23.98		3.00		30	Pass
HT40	MCS0	2	62	5310	17.60	17.70	20.66	23.98		3.00		30	Pass
VHT20	MCS0	2	52	5260	18.60	18.50	21.56	23.98		3.00		30	Pass
VHT20	MCS0	2	60	5300	18.80	18.90	21.86	23.98		3.00		30	Pass
VHT20	MCS0	2	64	5320	18.10	18.40	21.26	23.98		3.00		30	Pass
VHT40	MCS0	2	54	5270	20.80	20.40	23.61	23.98		3.00		30	Pass
VHT40	MCS0	2	62	5310	17.50	17.70	20.61	23.98		3.00		30	Pass
VHT80	MCS0	2	58	5290	16.30	16.50	19.41	23.98		3.00		30	Pass

TEST RESULTS DATA
Power Spectral Density

Band II															
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Duty Factor (dB)		Average Power Density (dBm/MHz)			Average PSD Limit (dBm/MHz)		DG (dBi)			Pass /Fail
					Ant 2	Ant 5	Ant 2	Ant 5	SUM	Ant 2	Ant 5	Ant 2	Ant 5		
11a	6Mbps	2	52	5260	0.11	0.12			10.93	11.00		4.05			Pass
11a	6Mbps	2	60	5300	0.11	0.12			10.74	11.00		4.05			Pass
11a	6Mbps	2	64	5320	0.11	0.12			10.35	11.00		4.05			Pass
HT20	MCS0	2	52	5260	0.10	0.09			10.93	11.00		4.05			Pass
HT20	MCS0	2	60	5300	0.10	0.09			10.73	11.00		4.05			Pass
HT20	MCS0	2	64	5320	0.10	0.09			10.19	11.00		4.05			Pass
HT40	MCS0	2	54	5270	0.18	0.20			9.79	11.00		4.05			Pass
HT40	MCS0	2	62	5310	0.18	0.20			6.29	11.00		4.05			Pass
VHT80	MCS0	2	58	5290	0.35	0.36			2.29	11.00		4.05			Pass

TEST RESULTS DATA
26dB and 99% OBW

Band III																
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	99% Bandwidth In U-NII 2C (MHz)		26 dB Bandwidth In U-NII 2C (MHz)		IC 99% Bandwidth Power Limit (dBm)		IC 99% Bandwidth EIRP Limit (dBm)		FCC 26dB Bandwidth Power Limit (dBm)		6 dB Bandwidth for Straddle Channel (MHz)	
					Ant 2	Ant 5	Ant 2	Ant 5	Ant 2	Ant 5	Ant 2	Ant 5	Ant 2	Ant 5	Ant 2	Ant 5
11a	6Mbps	2	100	5500	16.90	16.60	29.40	25.10	23.20		29.20		23.98		----	----
11a	6Mbps	2	116	5580	16.75	16.60	30.10	23.00	23.20		29.20		23.98		----	----
11a	6Mbps	2	140	5700	16.65	16.60	24.00	22.35	23.20		29.20		23.98		----	----
11a	6Mbps	2	144	5720	13.55	13.35	20.04	17.64	22.25		28.25		23.47		2.75	2.556
HT20	MCS0	2	100	5500	17.95	17.80	29.86	25.00	23.50		29.50		23.98		----	----
HT20	MCS0	2	116	5580	18.00	17.80	30.95	24.75	23.50		29.50		23.98		----	----
HT20	MCS0	2	140	5700	17.80	17.80	24.65	24.40	23.50		29.50		23.98		----	----
HT20	MCS0	2	144	5720	14.00	13.95	20.05	17.50	22.45		28.45		23.43		2.55	3.35
HT40	MCS0	2	102	5510	36.50	36.50	41.58	41.76	23.98		30.00		23.98		----	----
HT40	MCS0	2	110	5550	42.90	37.10	81.72	66.96	23.98		30.00		23.98		----	----
HT40	MCS0	2	134	5670	55.30	38.00	98.94	81.27	23.98		30.00		23.98		----	----
HT40	MCS0	2	142	5710	38.30	33.80	57.93	50.46	23.98		30.00		23.98		2.55	2.46
VHT80	MCS0	2	106	5530	76.68	76.92	83.20	82.56	23.98		30.00		23.98		----	----
VHT80	MCS0	2	122	5610	78.36	77.52	175.60	142.40	23.98		30.00		23.98		----	----
VHT80	MCS0	2	138	5690	76.16	74.36	129.76	124.20	23.98		30.00		23.98		2.56	2.62

TEST RESULTS DATA
Average Power Table

FCC Band III													
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)		EIRP Power Limit (dBm)	Pass/Fail
					Ant 2	Ant 5	SUM	Ant 2	Ant 5	Ant 2	Ant 5		
11a	6Mbps	1	100	5500	18.70	18.40		23.98	23.98	3.10	-1.50	30	Pass
11a	6Mbps	1	116	5580	18.30	18.50		23.98	23.98	3.10	-1.50	30	Pass
11a	6Mbps	1	140	5700	16.70	16.90		23.98	23.98	3.10	-1.50	30	Pass
11a	6Mbps	1	144	5720	18.50	18.60		23.47	23.47	3.10	-1.50	30	Pass
HT20	MCS0	1	100	5500	19.00	18.80		23.98	23.98	3.10	-1.50	30	Pass
HT20	MCS0	1	116	5580	19.00	18.90		23.98	23.98	3.10	-1.50	30	Pass
HT20	MCS0	1	140	5700	17.10	16.80		23.98	23.98	3.10	-1.50	30	Pass
HT20	MCS0	1	144	5720	18.50	18.50		23.43	23.43	3.10	-1.50	30	Pass
HT40	MCS0	1	102	5510	16.10	16.50		23.98	23.98	3.10	-1.50	30	Pass
HT40	MCS0	1	110	5550	20.60	20.60		23.98	23.98	3.10	-1.50	30	Pass
HT40	MCS0	1	134	5670	20.50	20.70		23.98	23.98	3.10	-1.50	30	Pass
HT40	MCS0	1	142	5710	20.70	20.20		23.98	23.98	3.10	-1.50	30	Pass
VHT20	MCS0	1	100	5500	18.90	18.90		23.98	23.98	3.10	-1.50	30	Pass
VHT20	MCS0	1	116	5580	18.90	18.90		23.98	23.98	3.10	-1.50	30	Pass
VHT20	MCS0	1	140	5700	17.00	16.80		23.98	23.98	3.10	-1.50	30	Pass
VHT20	MCS0	1	144	5720	18.50	18.50		23.43	23.43	3.10	-1.50	30	Pass
VHT40	MCS0	1	102	5510	16.00	16.00		23.98	23.98	3.10	-1.50	30	Pass
VHT40	MCS0	1	110	5550	20.50	20.60		23.98	23.98	3.10	-1.50	30	Pass
VHT40	MCS0	1	134	5670	20.50	20.70		23.98	23.98	3.10	-1.50	30	Pass
VHT40	MCS0	1	142	5710	20.30	20.40		23.98	23.98	3.10	-1.50	30	Pass
VHT80	MCS0	1	106	5530	15.30	15.60		23.98	23.98	3.10	-1.50	30	Pass
VHT80	MCS0	1	122	5610	20.60	20.60		23.98	23.98	3.10	-1.50	30	Pass
VHT80	MCS0	1	138	5690	20.70	20.50		23.98	23.98	3.10	-1.50	30	Pass
11a	6Mbps	2	100	5500	18.70	18.80	21.76	23.98		3.10		30	Pass
11a	6Mbps	2	116	5580	19.10	19.00	22.06	23.98		3.10		30	Pass
11a	6Mbps	2	140	5700	17.20	17.00	20.11	23.98		3.10		30	Pass
11a	6Mbps	2	144	5720	18.80	18.50	21.66	23.47		3.10		30	Pass
HT20	MCS0	2	100	5500	18.90	19.20	22.06	23.98		3.10		30	Pass
HT20	MCS0	2	116	5580	18.90	19.10	22.01	23.98		3.10		30	Pass
HT20	MCS0	2	140	5700	17.20	17.10	20.16	23.98		3.10		30	Pass
HT20	MCS0	2	144	5720	18.70	18.40	21.56	23.43		3.10		30	Pass
HT40	MCS0	2	102	5510	16.40	16.20	19.31	23.98		3.10		30	Pass
HT40	MCS0	2	110	5550	20.80	20.80	23.81	23.98		3.10		30	Pass
HT40	MCS0	2	134	5670	20.90	20.70	23.81	23.98		3.10		30	Pass
HT40	MCS0	2	142	5710	20.70	20.50	23.61	23.98		3.10		30	Pass
VHT20	MCS0	2	100	5500	18.90	19.20	22.06	23.98		3.10		30	Pass
VHT20	MCS0	2	116	5580	19.10	18.80	21.96	23.98		3.10		30	Pass
VHT20	MCS0	2	140	5700	17.20	17.00	20.11	23.98		3.10		30	Pass
VHT20	MCS0	2	144	5720	18.70	18.30	21.51	23.43		3.10		30	Pass
VHT40	MCS0	2	102	5510	16.40	16.20	19.31	23.98		3.10		30	Pass
VHT40	MCS0	2	110	5550	20.50	20.70	23.61	23.98		3.10		30	Pass
VHT40	MCS0	2	134	5670	20.90	20.70	23.81	23.98		3.10		30	Pass
VHT40	MCS0	2	142	5710	20.70	20.30	23.51	23.98		3.10		30	Pass
VHT80	MCS0	2	106	5530	15.60	15.70	18.66	23.98		3.10		30	Pass
VHT80	MCS0	2	122	5610	20.60	20.60	23.61	23.98		3.10		30	Pass
VHT80	MCS0	2	138	5690	20.90	20.60	23.76	23.98		3.10		30	Pass

TEST RESULTS DATA
Power Spectral Density

Band III														
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Duty Factor (dB)		Average Power Density (dBm/MHz)			Average PSD Limit (dBm/MHz)		DG (dBi)			Pass /Fail
					Ant 2	Ant 5	Ant 2	Ant 5	SUM	Ant 2	Ant 5	Ant 2	Ant 5		
11a	6Mbps	2	100	5500	0.11	0.12			10.71	11.00		4.11			Pass
11a	6Mbps	2	116	5580	0.11	0.12			10.84	11.00		4.11			Pass
11a	6Mbps	2	140	5700	0.11	0.12			9.33	11.00		4.11			Pass
11a	6Mbps	2	144	5720	0.11	0.12			10.97	11.00		4.11			Pass
HT20	MCS0	2	100	5500	0.10	0.09			10.62	11.00		4.11			Pass
HT20	MCS0	2	116	5580	0.10	0.09			10.66	11.00		4.11			Pass
HT20	MCS0	2	140	5700	0.10	0.09			8.71	11.00		4.11			Pass
HT20	MCS0	2	144	5720	0.10	0.09			10.76	11.00		4.11			Pass
HT40	MCS0	2	102	5510	0.18	0.20			4.53	11.00		4.11			Pass
HT40	MCS0	2	110	5550	0.18	0.20			9.54	11.00		4.11			Pass
HT40	MCS0	2	134	5670	0.18	0.20			10.14	11.00		4.11			Pass
HT40	MCS0	2	142	5710	0.18	0.20			9.54	11.00		4.11			Pass
VHT80	MCS0	2	106	5530	0.35	0.36			1.03	11.00		4.11			Pass
VHT80	MCS0	2	122	5610	0.35	0.36			6.72	11.00		4.11			Pass
VHT80	MCS0	2	138	5690	0.35	0.36			6.70	11.00		4.11			Pass

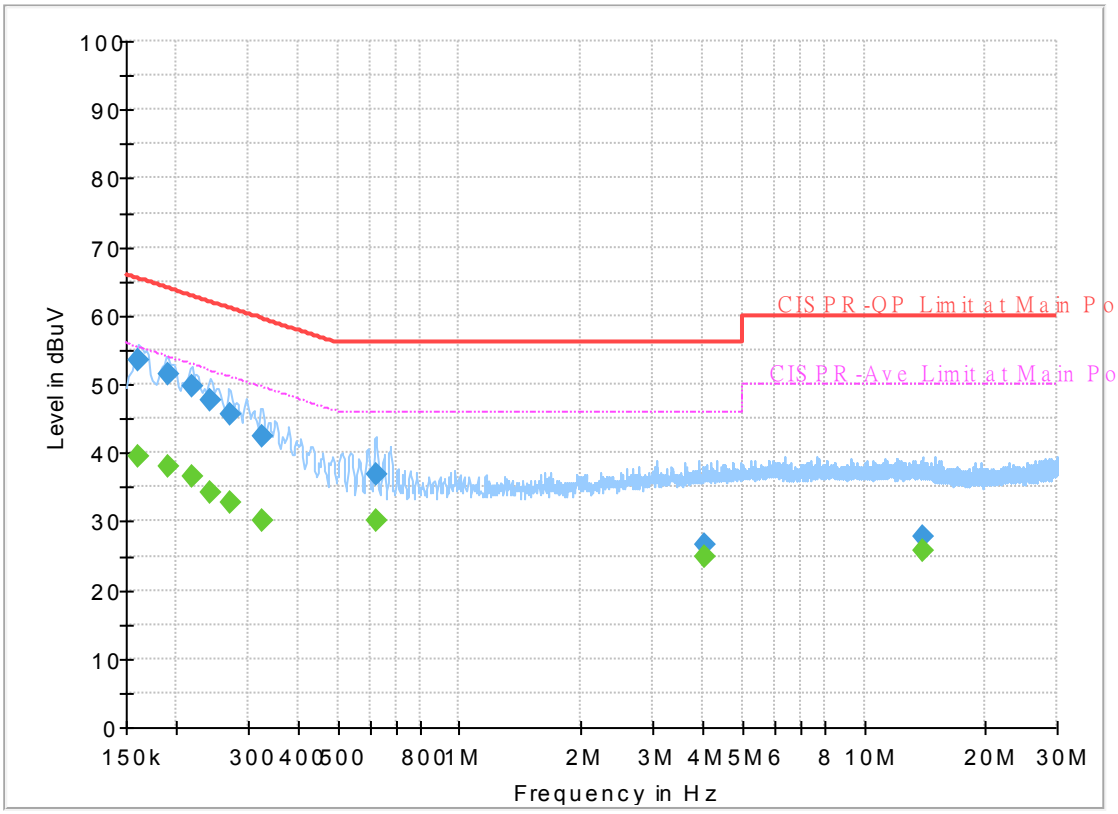
Appendix B. AC Conducted Emission Test Results

Test Engineer :	Jimmy Chang	**Temperature :**	24~26℃
		Relative Humidity :	51~54%

EUT Information

Report NO :	8N0616-05
Test Mode :	Mode 2
Test Voltage :	120Vac/60Hz
Phase :	Line

Full Spectrum



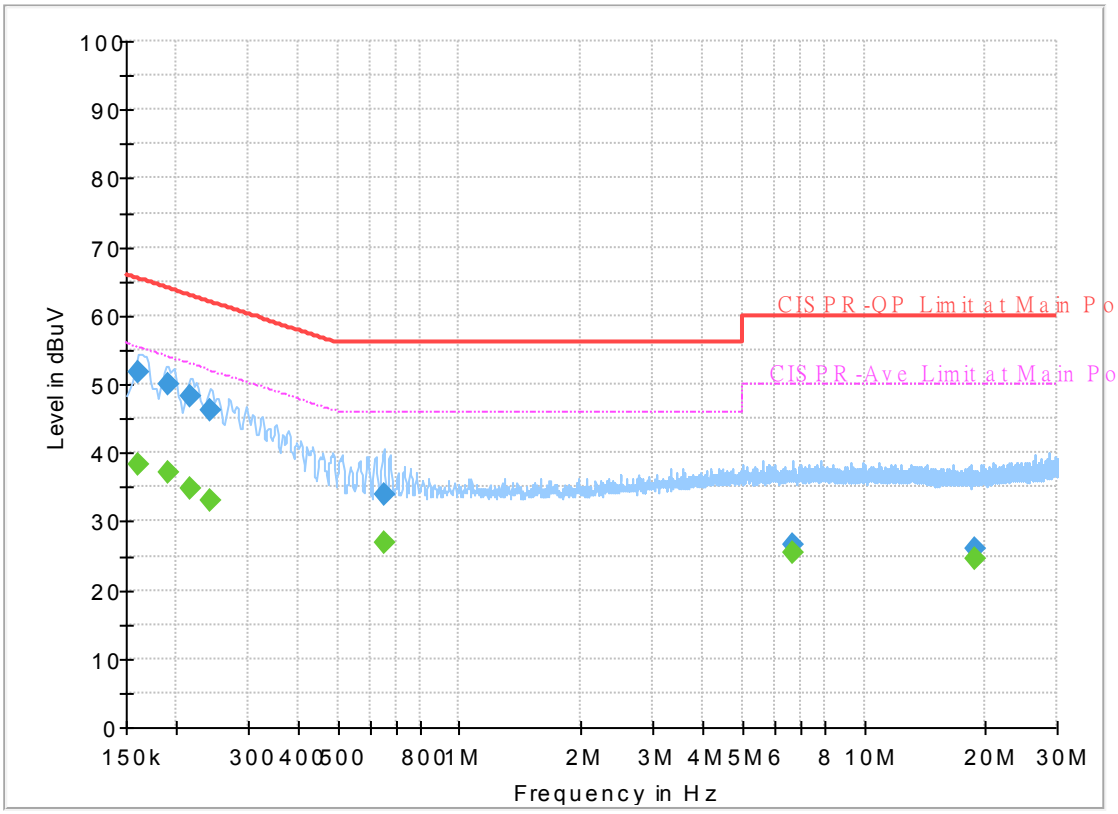
Final_Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.161250	---	39.61	55.40	15.79	L1	OFF	19.5
0.161250	53.52	---	65.40	11.88	L1	OFF	19.5
0.190500	---	38.15	54.02	15.87	L1	OFF	19.5
0.190500	51.44	---	64.02	12.58	L1	OFF	19.5
0.217500	---	36.52	52.91	16.39	L1	OFF	19.5
0.217500	49.64	---	62.91	13.27	L1	OFF	19.5
0.242250	---	34.25	52.02	17.77	L1	OFF	19.5
0.242250	47.80	---	62.02	14.22	L1	OFF	19.5
0.271500	---	32.87	51.07	18.20	L1	OFF	19.5
0.271500	45.64	---	61.07	15.43	L1	OFF	19.5
0.325500	---	30.03	49.57	19.54	L1	OFF	19.5
0.325500	42.36	---	59.57	17.21	L1	OFF	19.5
0.620250	---	30.17	46.00	15.83	L1	OFF	19.6
0.620250	36.89	---	56.00	19.11	L1	OFF	19.6
4.056000	---	24.88	46.00	21.12	L1	OFF	19.7
4.056000	26.53	---	56.00	29.47	L1	OFF	19.7
13.906500	---	25.79	50.00	24.21	L1	OFF	20.1
13.906500	27.76	---	60.00	32.24	L1	OFF	20.1

EUT Information

Report NO :	8N0616-05
Test Mode :	Mode 2
Test Voltage :	120Vac/60Hz
Phase :	Neutral

Full Spectrum



Final_Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.161250	---	38.18	55.40	17.22	N	OFF	19.5
0.161250	51.89	---	65.40	13.51	N	OFF	19.5
0.190500	---	37.11	54.02	16.91	N	OFF	19.5
0.190500	49.97	---	64.02	14.05	N	OFF	19.5
0.215250	---	34.78	53.00	18.22	N	OFF	19.5
0.215250	48.25	---	63.00	14.75	N	OFF	19.5
0.242250	---	32.96	52.02	19.06	N	OFF	19.5
0.242250	46.07	---	62.02	15.95	N	OFF	19.5
0.649500	---	27.03	46.00	18.97	N	OFF	19.6
0.649500	33.82	---	56.00	22.18	N	OFF	19.6
6.670500	---	25.40	50.00	24.60	N	OFF	19.8
6.670500	26.54	---	60.00	33.46	N	OFF	19.8
18.759750	---	24.66	50.00	25.34	N	OFF	20.3
18.759750	26.02	---	60.00	33.98	N	OFF	20.3

Appendix C. Radiated Spurious Emission

Test Engineer :	Jack Cheng, Lance Chiang and Chuan Chu	Temperature :	22~24°C
		Relative Humidity :	52~60%

<EUT with Adapter Mode>

Band 1 - 5150~5250MHz

WIFI 802.11a (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
2+5		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11a CH 36 5180MHz		5132.34	53.73	-20.27	74	45.46	31.94	9.8	33.47	100	57	P	H
		5147.42	45.59	-8.41	54	37.33	31.91	9.82	33.47	100	57	A	H
	*	5180	111.47	-	-	103.28	31.78	9.87	33.46	100	57	P	H
	*	5180	104.04	-	-	95.85	31.78	9.87	33.46	100	57	A	H
													H
													H
		5127.66	54.91	-19.09	74	46.64	31.94	9.8	33.47	108	60	P	V
		5146.64	43.58	-10.42	54	35.32	31.91	9.82	33.47	108	60	A	V
	*	5180	107.33	-	-	99.14	31.78	9.87	33.46	108	60	P	V
	*	5180	99.91	-	-	91.72	31.78	9.87	33.46	108	60	A	V
													V
													V
802.11a CH 44 5220MHz		5125.06	52.58	-21.42	74	44.31	31.95	9.79	33.47	100	65	P	H
		5149.5	44.49	-9.51	54	36.23	31.9	9.83	33.47	100	65	A	H
	*	5220	115.92	-	-	107.88	31.58	9.92	33.46	100	65	P	H
	*	5220	108.6	-	-	100.56	31.58	9.92	33.46	100	65	A	H
		5454.96	50.96	-23.04	74	42.44	31.72	10.23	33.43	100	65	P	H
		5452.72	42.36	-11.64	54	33.86	31.71	10.22	33.43	100	65	A	H
		5123.5	51.54	-22.46	74	43.27	31.95	9.79	33.47	343	127	P	V
		5147.68	42.66	-11.34	54	34.41	31.9	9.82	33.47	343	127	A	V
	*	5220	112.11	-	-	104.07	31.58	9.92	33.46	343	127	P	V
	*	5220	105.19	-	-	97.15	31.58	9.92	33.46	343	127	A	V
		5433.12	50.35	-23.65	74	41.96	31.63	10.2	33.44	343	127	P	V
		5438.44	42.22	-11.78	54	33.81	31.65	10.2	33.44	343	127	A	V

802.11a CH 48 5240MHz		5074.36	51.59	-22.41	74	43.44	31.9	9.72	33.47	100	65	P	H
		5147.94	42.71	-11.29	54	34.46	31.9	9.82	33.47	100	65	A	H
	*	5240	114.94	-	-	106.99	31.46	9.95	33.46	100	65	P	H
	*	5240	107.76	-	-	99.81	31.46	9.95	33.46	100	65	A	H
		5434.8	50.42	-23.58	74	42.02	31.64	10.2	33.44	100	65	P	H
		5366.48	42.35	-11.65	54	34.31	31.37	10.11	33.44	100	65	A	H
		5093.08	51.63	-22.37	74	43.39	31.97	9.74	33.47	108	60	P	V
		5147.94	42.4	-11.6	54	34.15	31.9	9.82	33.47	108	60	A	V
	*	5240	111.21	-	-	103.26	31.46	9.95	33.46	108	60	P	V
	*	5240	104.17	-	-	96.22	31.46	9.95	33.46	108	60	A	V
		5428.08	50.43	-23.57	74	42.07	31.61	10.19	33.44	108	60	P	V
		5459.72	42.17	-11.83	54	33.63	31.74	10.23	33.43	108	60	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 1 5150~5250MHz

WIFI 802.11a (Harmonic @ 3m)

WIFI Ant. 2+5	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 36 5180MHz		10360	44.9	-23.3	68.2	50.61	39.58	15.47	60.76	100	0	P	H
		15540	44.85	-29.15	74	47.86	38.22	19.34	60.57	100	0	P	H
													H
													H
		10360	45.53	-22.67	68.2	51.24	39.58	15.47	60.76	100	0	P	V
		15540	43.39	-30.61	74	46.4	38.22	19.34	60.57	100	0	P	V
													V
													V
802.11a CH 44 5220MHz		10440	44.64	-23.56	68.2	50.32	39.7	15.5	60.88	100	0	P	H
		15660	44.16	-29.84	74	47.42	37.8	19.42	60.48	100	0	P	H
													H
													H
		10440	43.75	-24.45	68.2	49.43	39.7	15.5	60.88	100	0	P	V
		15660	44.4	-29.6	74	47.66	37.8	19.42	60.48	100	0	P	V
													V
													V
802.11a CH 48 5240MHz		10480	44.75	-23.45	68.2	50.5	39.7	15.52	60.97	100	0	P	H
		15720	43.74	-30.26	74	46.95	37.76	19.45	60.42	100	0	P	H
													H
													H
		10480	44.94	-23.26	68.2	50.69	39.7	15.52	60.97	100	0	P	V
		15720	43.91	-30.09	74	47.12	37.76	19.45	60.42	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 1 5150~5250MHz

WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI Ant. 2+5	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		5121.68	57.99	-16.01	74	49.71	31.96	9.79	33.47	104	60	P	H
		5150	45.4	-8.6	54	37.14	31.9	9.83	33.47	104	60	A	H
	*	5180	111.43	-	-	103.24	31.78	9.87	33.46	104	60	P	H
	*	5180	104.37	-	-	96.18	31.78	9.87	33.46	104	60	A	H
802.11n													H
HT20													H
CH 36		5150	51.88	-22.12	74	43.62	31.9	9.83	33.47	100	64	P	V
5180MHz		5150	43.59	-10.41	54	35.33	31.9	9.83	33.47	100	64	A	V
	*	5180	106.18	-	-	97.99	31.78	9.87	33.46	100	64	P	V
	*	5180	98.34	-	-	90.15	31.78	9.87	33.46	100	64	A	V
													V
													V
		5144.3	53.45	-20.55	74	45.19	31.91	9.82	33.47	100	61	P	H
		5150	45.11	-8.89	54	36.85	31.9	9.83	33.47	100	61	A	H
	*	5220	114.83	-	-	106.79	31.58	9.92	33.46	100	61	P	H
	*	5220	107.19	-	-	99.15	31.58	9.92	33.46	100	61	A	H
802.11n		5421.08	51.1	-22.9	74	42.78	31.58	10.18	33.44	100	61	P	H
HT20		5392.52	42.33	-11.67	54	34.16	31.47	10.14	33.44	100	61	A	H
CH 44		5085.8	50.35	-23.65	74	42.15	31.94	9.73	33.47	113	59	P	V
5220MHz		5149.5	42.78	-11.22	54	34.52	31.9	9.83	33.47	113	59	A	V
	*	5220	110.49	-	-	102.45	31.58	9.92	33.46	113	59	P	V
	*	5220	103.45	-	-	95.41	31.58	9.92	33.46	113	59	A	V
		5376.56	50.45	-23.55	74	42.36	31.41	10.12	33.44	113	59	P	V
		5458.88	42.08	-11.92	54	33.54	31.74	10.23	33.43	113	59	A	V

		5037.18	51.11	-22.89	74	43.23	31.7	9.66	33.48	105	60	P	H
		5148.46	42.88	-11.12	54	34.62	31.9	9.83	33.47	105	60	A	H
	*	5240	114.1	-	-	106.15	31.46	9.95	33.46	105	60	P	H
	*	5240	106.7	-	-	98.75	31.46	9.95	33.46	105	60	A	H
802.11n		5437.6	50.25	-23.75	74	41.84	31.65	10.2	33.44	105	60	P	H
HT20		5430.6	42.35	-11.65	54	33.98	31.62	10.19	33.44	105	60	A	H
CH 48		5102.96	51.69	-22.31	74	43.41	31.99	9.76	33.47	109	60	P	V
5240MHz		5145.08	42.15	-11.85	54	33.89	31.91	9.82	33.47	109	60	A	V
	*	5240	109	-	-	101.05	31.46	9.95	33.46	109	60	P	V
	*	5240	101.49	-	-	93.54	31.46	9.95	33.46	109	60	A	V
		5433.12	50.07	-23.93	74	41.68	31.63	10.2	33.44	109	60	P	V
		5442.92	42.08	-11.92	54	33.64	31.67	10.21	33.44	109	60	A	V

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

Band 1 5150~5250MHz

WIFI 802.11n HT20 (Harmonic @ 3m)

WIFI Ant. 2+5	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		10360	46.72	-21.48	68.2	52.32	39.58	15.47	60.65	100	0	P	H
		15540	43.72	-30.28	74	46.95	38.22	19.34	60.79	100	0	P	H
802.11n													H
HT20													H
CH 36		10360	45.26	-22.94	68.2	50.86	39.58	15.47	60.65	100	0	P	V
5180MHz		15540	43.95	-30.05	74	47.18	38.22	19.34	60.79	100	0	P	V
													V
													V
		10440	44.58	-23.62	68.2	50.08	39.7	15.5	60.7	100	0	P	H
		15660	43.62	-30.38	74	47.13	37.8	19.42	60.73	100	0	P	H
802.11n													H
HT20													H
CH 44		10440	45.28	-22.92	68.2	50.78	39.7	15.5	60.7	100	0	P	V
5220MHz		15660	43.25	-30.75	74	46.76	37.8	19.42	60.73	100	0	P	V
													V
													V
		10480	45.36	-22.84	68.2	50.87	39.7	15.52	60.73	100	0	P	H
		15720	42.44	-31.56	74	45.93	37.76	19.45	60.7	100	0	P	H
802.11n													H
HT20													H
CH 48		10480	44.87	-23.33	68.2	50.38	39.7	15.52	60.73	100	0	P	V
5240MHz		15720	43.57	-30.43	74	47.06	37.76	19.45	60.7	100	0	P	V
													V
													V

Remark

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

Band 1 5150~5250MHz

WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI Ant. 2+5	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 CH 38 5190MHz		5148.72	63.34	-10.66	74	55.08	31.9	9.83	33.47	116	299	P	H
		5149.24	51.16	-2.84	54	42.9	31.9	9.83	33.47	116	299	A	H
	*	5190	105.41	-	-	97.24	31.74	9.89	33.46	116	299	P	H
	*	5190	96.14	-	-	87.97	31.74	9.89	33.46	116	299	A	H
		5358.36	54.24	-19.76	74	46.25	31.33	10.1	33.44	116	299	P	H
		5375.44	41.33	-12.67	54	33.25	31.4	10.12	33.44	116	299	A	H
		5150	61.57	-12.43	74	53.31	31.9	9.83	33.47	105	58	P	V
		5150	49.9	-4.1	54	41.64	31.9	9.83	33.47	105	58	A	V
	*	5190	103.77	-	-	95.6	31.74	9.89	33.46	105	58	P	V
	*	5190	93.75	-	-	85.58	31.74	9.89	33.46	105	58	A	V
		5405.96	53.63	-20.37	74	45.39	31.52	10.16	33.44	105	58	P	V
		5442.92	41.36	-12.64	54	32.92	31.67	10.21	33.44	105	58	A	V
802.11n HT40 CH 46 5230MHz		5148.72	59.27	-14.73	74	51.01	31.9	9.83	33.47	140	58	P	H
		5150	50.91	-3.09	54	42.65	31.9	9.83	33.47	140	58	A	H
	*	5230	110.65	-	-	102.65	31.52	9.94	33.46	140	58	P	H
	*	5230	103.63	-	-	95.63	31.52	9.94	33.46	140	58	A	H
		5352.76	50.8	-23.2	74	42.84	31.31	10.09	33.44	140	58	P	H
		5350.52	43.7	-10.3	54	35.75	31.3	10.09	33.44	140	58	A	H
		5146.9	56.45	-17.55	74	48.19	31.91	9.82	33.47	100	63	P	V
		5146.64	49	-5	54	40.74	31.91	9.82	33.47	100	63	A	V
	*	5230	107.52	-	-	99.52	31.52	9.94	33.46	100	63	P	V
	*	5230	100.55	-	-	92.55	31.52	9.94	33.46	100	63	A	V
		5350.8	49.71	-24.29	74	41.76	31.3	10.09	33.44	100	63	P	V
		5350.52	42.4	-11.6	54	34.45	31.3	10.09	33.44	100	63	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 1 5150~5250MHz

WIFI 802.11n HT40 (Harmonic @ 3m)

WIFI Ant. 2+5	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		10380	44.9	-23.3	68.2	50.45	39.64	15.48	60.67	100	0	P	H
		15570	43.08	-30.92	74	46.5	38.01	19.35	60.78	100	0	P	H
802.11n													H
HT40													H
CH 38		10380	44.29	-23.91	68.2	49.84	39.64	15.48	60.67	100	0	P	V
5190MHz		15570	42.61	-31.39	74	46.03	38.01	19.35	60.78	100	0	P	V
													V
													V
		10460	43.91	-24.29	68.2	49.42	39.7	15.51	60.72	100	0	P	H
		15690	43.13	-30.87	74	46.62	37.8	19.43	60.72	100	0	P	H
802.11n													H
HT40													H
CH 46		10460	44.92	-23.28	68.2	50.43	39.7	15.51	60.72	100	0	P	V
5230MHz		15690	42.94	-31.06	74	46.43	37.8	19.43	60.72	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 1 5150~5250MHz

WIFI 802.11ac VHT80 (Band Edge @ 3m)

WIFI Ant. 2+5	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80 CH 42 5210MHz		5139.88	62.87	-11.13	74	54.61	31.92	9.81	33.47	100	61	P	H
		5137.54	51.97	-2.03	54	43.71	31.92	9.81	33.47	100	61	A	H
	*	5210	103.42	-	-	95.33	31.64	9.91	33.46	100	61	P	H
	*	5210	93.97	-	-	85.88	31.64	9.91	33.46	100	61	A	H
		5361.72	53.53	-20.47	74	45.52	31.35	10.1	33.44	100	61	P	H
		5395.32	41.46	-12.54	54	33.28	31.48	10.14	33.44	100	61	A	H
		5135.98	60.01	-13.99	74	51.74	31.93	9.81	33.47	100	61	P	V
		5150	49.26	-4.74	54	41	31.9	9.83	33.47	100	61	A	V
	*	5210	99.71	-	-	91.62	31.64	9.91	33.46	100	61	P	V
	*	5210	89.64	-	-	81.55	31.64	9.91	33.46	100	61	A	V
		5427.52	53.52	-20.48	74	45.16	31.61	10.19	33.44	100	61	P	V
		5430.04	41.35	-12.65	54	32.98	31.62	10.19	33.44	100	61	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 1 5150~5250MHz

WIFI 802.11ac VHT80 (Harmonic @ 3m)

WIFI Ant. 2+5	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		10420	41.84	-26.36	68.2	47.33	39.7	15.5	60.69	100	0	P	H
		15630	39.32	-34.68	74	42.88	37.8	19.39	60.75	100	0	P	H
802.11ac													H
VHT80													H
CH 42		10420	41.75	-26.45	68.2	47.24	39.7	15.5	60.69	100	0	P	V
5210MHz		15630	40.42	-33.58	74	43.98	37.8	19.39	60.75	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 2 - 5250~5350MHz

WIFI 802.11a (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
2+5		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11a CH 52 5260MHz		5010.88	51.21	-22.79	74	43.57	31.49	9.63	33.48	113	67	P	H
		5145.52	42.45	-11.55	54	34.19	31.91	9.82	33.47	113	67	A	H
	*	5260	115.95	-	-	108.05	31.38	9.97	33.45	113	67	P	H
	*	5260	108.56	-	-	100.66	31.38	9.97	33.45	113	67	A	H
		5429.28	50.3	-23.7	74	41.93	31.62	10.19	33.44	113	67	P	H
		5351.76	42.81	-11.19	54	34.85	31.31	10.09	33.44	113	67	A	H
		5030.26	51	-23	74	43.19	31.64	9.65	33.48	100	68	P	V
		5097.92	42.21	-11.79	54	33.94	31.99	9.75	33.47	100	68	A	V
	*	5260	110.92	-	-	103.02	31.38	9.97	33.45	100	68	P	V
	*	5260	103.68	-	-	95.78	31.38	9.97	33.45	100	68	A	V
		5386.32	49.51	-24.49	74	41.37	31.45	10.13	33.44	100	68	P	V
		5459.52	42.08	-11.92	54	33.54	31.74	10.23	33.43	100	68	A	V
802.11a CH 60 5300MHz		5086.02	51.46	-22.54	74	43.26	31.94	9.73	33.47	115	66	P	H
		5144.84	42.77	-11.23	54	34.51	31.91	9.82	33.47	115	66	A	H
	*	5300	115.92	-	-	108.05	31.3	10.02	33.45	115	66	P	H
	*	5300	108.54	-	-	100.67	31.3	10.02	33.45	115	66	A	H
		5352.72	60.37	-13.63	74	52.41	31.31	10.09	33.44	115	66	P	H
		5351.28	50.53	-3.47	54	42.57	31.31	10.09	33.44	115	66	A	H
		5096.56	51.57	-22.43	74	43.3	31.99	9.75	33.47	100	68	P	V
		5101.66	42.4	-11.6	54	34.11	32	9.76	33.47	100	68	A	V
	*	5300	109.29	-	-	101.42	31.3	10.02	33.45	100	68	P	V
	*	5300	101.5	-	-	93.63	31.3	10.02	33.45	100	68	A	V
		5353.2	54.01	-19.99	74	46.05	31.31	10.09	33.44	100	68	P	V
		5351.28	46.4	-7.6	54	38.44	31.31	10.09	33.44	100	68	A	V

802.11a CH 64 5320MHz	*	5320	112.8	-	-	104.9	31.3	10.05	33.45	100	68	P	H
	*	5320	105.62	-	-	97.72	31.3	10.05	33.45	100	68	A	H
		5362.24	57.54	-16.46	74	49.53	31.35	10.1	33.44	100	68	P	H
		5350.88	50.52	-3.48	54	42.57	31.3	10.09	33.44	100	68	A	H
													H
													H
	*	5320	107.69	-	-	99.79	31.3	10.05	33.45	121	68	P	V
	*	5320	100.55	-	-	92.65	31.3	10.05	33.45	121	68	A	V
		5354.24	53.93	-20.07	74	45.96	31.32	10.09	33.44	121	68	P	V
		5350.08	46.47	-7.53	54	38.52	31.3	10.09	33.44	121	68	A	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 2 5250~5350MHz

WIFI 802.11a (Harmonic @ 3m)

WIFI Ant. 2+5	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 52 5260MHz		10520	44.77	-23.43	68.2	50.5	39.74	15.54	61.01	100	0	P	H
		15780	43.31	-30.69	74	46.56	37.64	19.49	60.38	100	0	P	H
													H
													H
		10520	45.28	-22.92	68.2	51.01	39.74	15.54	61.01	100	0	P	V
		15780	48.03	-25.97	74	51.28	37.64	19.49	60.38	100	0	P	V
													V
													V
802.11a CH 60 5300MHz		10600	44.24	-29.76	74	49.85	39.9	15.57	61.08	100	0	P	H
		15900	43.34	-30.66	74	46.75	37.3	19.57	60.28	100	0	P	H
													H
													H
		10600	43.59	-30.41	74	49.2	39.9	15.57	61.08	100	0	P	V
		15900	43.05	-30.95	74	46.46	37.3	19.57	60.28	100	0	P	V
													V
													V
802.11a CH 64 5320MHz		10640	44.44	-29.56	74	50.11	39.86	15.58	61.11	100	0	P	H
		15960	43.43	-30.57	74	46.7	37.36	19.6	60.23	100	0	P	H
													H
													H
		10640	44.4	-29.6	74	50.07	39.86	15.58	61.11	100	0	P	V
		15960	43.59	-30.41	74	46.86	37.36	19.6	60.23	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 2 5250~5350MHz

WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI Ant. 2+5	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		5111.18	50.96	-23.04	74	42.68	31.98	9.77	33.47	100	60	P	H
		5145.86	42.4	-11.6	54	34.14	31.91	9.82	33.47	100	60	A	H
	*	5260	114.38	-	-	106.48	31.38	9.97	33.45	100	60	P	H
	*	5260	106.63	-	-	98.73	31.38	9.97	33.45	100	60	A	H
802.11n		5420.64	51.46	-22.54	74	43.14	31.58	10.18	33.44	100	60	P	H
HT20		5350.08	42.66	-11.34	54	34.71	31.3	10.09	33.44	100	60	A	H
CH 52		5047.26	51.98	-22.02	74	44	31.78	9.68	33.48	100	58	P	V
5260MHz		5137.02	42.25	-11.75	54	33.98	31.93	9.81	33.47	100	58	A	V
	*	5260	110.68	-	-	102.78	31.38	9.97	33.45	100	58	P	V
	*	5260	102.95	-	-	95.05	31.38	9.97	33.45	100	58	A	V
		5376.24	50.44	-23.56	74	42.36	31.4	10.12	33.44	100	58	P	V
		5458.8	42.14	-11.86	54	33.6	31.74	10.23	33.43	100	58	A	V
		5145.86	51.03	-22.97	74	42.77	31.91	9.82	33.47	100	59	P	H
		5098.6	42.46	-11.54	54	34.19	31.99	9.75	33.47	100	59	A	H
	*	5300	114.04	-	-	106.17	31.3	10.02	33.45	100	59	P	H
	*	5300	106.07	-	-	98.2	31.3	10.02	33.45	100	59	A	H
802.11n		5350.08	58.01	-15.99	74	50.06	31.3	10.09	33.44	100	59	P	H
HT20		5350.08	49.72	-4.28	54	41.77	31.3	10.09	33.44	100	59	A	H
CH 60		5059.5	51.78	-22.22	74	43.71	31.84	9.7	33.47	104	61	P	V
5300MHz		5128.86	42.28	-11.72	54	34.01	31.94	9.8	33.47	104	61	A	V
	*	5300	107.97	-	-	100.1	31.3	10.02	33.45	104	61	P	V
	*	5300	100.55	-	-	92.68	31.3	10.02	33.45	104	61	A	V
		5353.2	52.52	-21.48	74	44.56	31.31	10.09	33.44	104	61	P	V
		5350.08	43.23	-10.77	54	35.28	31.3	10.09	33.44	104	61	A	V

	*	5320	112	-	-	104.1	31.3	10.05	33.45	104	59	P	H
	*	5320	104.69	-	-	96.79	31.3	10.05	33.45	104	59	A	H
		5350.88	60.39	-13.61	74	52.44	31.3	10.09	33.44	104	59	P	H
		5352	51.14	-2.86	54	43.18	31.31	10.09	33.44	104	59	A	H
802.11n													H
HT20													H
CH 64	*	5320	106.98	-	-	99.08	31.3	10.05	33.45	115	66	P	V
5320MHz	*	5320	99.69	-	-	91.79	31.3	10.05	33.45	115	66	A	V
		5351.04	56.48	-17.52	74	48.53	31.3	10.09	33.44	115	66	P	V
		5351.52	47.44	-6.56	54	39.48	31.31	10.09	33.44	115	66	A	V
													V
													V

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

Band 2 5250~5350MHz

WIFI 802.11n HT20 (Harmonic @ 3m)

WIFI Ant. 2+5	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		10520	45.01	-23.19	68.2	50.51	39.74	15.54	60.78	100	0	P	H
		15780	44.37	-29.63	74	47.92	37.64	19.49	60.68	100	0	P	H
802.11n													H
HT20													H
CH 52		10520	44.29	-23.91	68.2	49.79	39.74	15.54	60.78	100	0	P	V
5260MHz		15780	43.38	-30.62	74	46.93	37.64	19.49	60.68	100	0	P	V
													V
													V
		10600	43.89	-30.11	74	49.37	39.9	15.57	60.95	100	0	P	H
		15900	42.47	-31.53	74	46.22	37.3	19.57	60.62	100	0	P	H
802.11n													H
HT20													H
CH 60		10600	43.33	-30.67	74	48.81	39.9	15.57	60.95	100	0	P	V
5300MHz		15900	42.04	-31.96	74	45.79	37.3	19.57	60.62	100	0	P	V
													V
													V
		10640	44.75	-29.25	74	50.34	39.86	15.58	61.03	100	0	P	H
		15960	42.63	-31.37	74	46.26	37.36	19.6	60.59	100	0	P	H
802.11n													H
HT20													H
CH 64		10640	43.69	-30.31	74	49.28	39.86	15.58	61.03	100	0	P	V
5320MHz		15960	42.37	-31.63	74	46	37.36	19.6	60.59	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 2 5250~5350MHz

WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI Ant. 2+5	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 CH 54 5270MHz		5145.52	53.15	-20.85	74	44.89	31.91	9.82	33.47	155	60	P	H
		5147.9	44.99	-9.01	54	36.74	31.9	9.82	33.47	155	60	A	H
	*	5270	109.7	-	-	101.8	31.36	9.99	33.45	155	60	P	H
	*	5270	102.64	-	-	94.74	31.36	9.99	33.45	155	60	A	H
		5350.08	57.11	-16.89	74	49.16	31.3	10.09	33.44	155	60	P	H
		5350.08	51	-3	54	43.05	31.3	10.09	33.44	155	60	A	H
		5022.1	50.61	-23.39	74	42.87	31.58	9.64	33.48	100	64	P	V
		5146.2	43.07	-10.93	54	34.81	31.91	9.82	33.47	100	64	A	V
	*	5270	106.84	-	-	98.94	31.36	9.99	33.45	100	64	P	V
	*	5270	100.02	-	-	92.12	31.36	9.99	33.45	100	64	A	V
		5358.96	52.13	-21.87	74	44.13	31.34	10.1	33.44	100	64	P	V
		5350.08	47.77	-6.23	54	39.82	31.3	10.09	33.44	100	64	A	V
802.11n HT40 CH 62 5310MHz		5058.48	51.45	-22.55	74	43.4	31.83	9.69	33.47	106	297	P	H
		5117.64	42.72	-11.28	54	34.45	31.96	9.78	33.47	106	297	A	H
	*	5310	105.52	-	-	97.63	31.3	10.04	33.45	106	297	P	H
	*	5310	98.83	-	-	90.94	31.3	10.04	33.45	106	297	A	H
		5350.08	57.35	-16.65	74	49.4	31.3	10.09	33.44	106	297	P	H
		5350.32	50.38	-3.62	54	42.43	31.3	10.09	33.44	106	297	A	H
		5101.32	51.32	-22.68	74	43.03	32	9.76	33.47	106	65	P	V
		5080.58	42.77	-11.23	54	34.59	31.92	9.73	33.47	106	65	A	V
	*	5310	102.77	-	-	94.88	31.3	10.04	33.45	106	65	P	V
	*	5310	95.95	-	-	88.06	31.3	10.04	33.45	106	65	A	V
		5352.48	56.41	-17.59	74	48.45	31.31	10.09	33.44	106	65	P	V
		5352.48	48.05	-5.95	54	40.09	31.31	10.09	33.44	106	65	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 2 5250~5350MHz

WIFI 802.11n HT40 (Harmonic @ 3m)

WIFI Ant. 2+5	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		10540	45.19	-23.01	68.2	50.68	39.78	15.55	60.82	100	0	P	H
		15810	44.28	-29.72	74	47.86	37.57	19.51	60.66	100	0	P	H
802.11n													H
HT40													H
CH 54		10540	44.68	-23.52	68.2	50.17	39.78	15.55	60.82	100	0	P	V
5270MHz		15810	43.41	-30.59	74	46.99	37.57	19.51	60.66	100	0	P	V
													V
													V
		10620	44.7	-29.3	74	50.24	39.88	15.57	60.99	100	0	P	H
		15930	42.67	-31.33	74	46.35	37.33	19.59	60.6	100	0	P	H
802.11n													H
HT40													H
CH 62		10620	44.35	-29.65	74	49.89	39.88	15.57	60.99	100	0	P	V
5310MHz		15930	43.22	-30.78	74	46.9	37.33	19.59	60.6	100	0	P	V
													V
													V

Remark

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

Band 2 5250~5350MHz

WIFI 802.11ac VHT80 (Band Edge @ 3m)

WIFI Ant. 2+5	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80 CH 58 5290MHz		5065.96	53.48	-20.52	74	45.38	31.86	9.71	33.47	100	60	P	H
		5136.68	41.58	-12.42	54	33.31	31.93	9.81	33.47	100	60	A	H
	*	5290	104.24	-	-	96.36	31.32	10.01	33.45	100	60	P	H
	*	5290	94.64	-	-	86.76	31.32	10.01	33.45	100	60	A	H
		5361.6	64.37	-9.63	74	56.36	31.35	10.1	33.44	100	60	P	H
		5355.84	51.75	-2.25	54	43.78	31.32	10.09	33.44	100	60	A	H
		5118.32	53.17	-20.83	74	44.9	31.96	9.78	33.47	100	67	P	V
		5143.48	41.14	-12.86	54	32.88	31.91	9.82	33.47	100	67	A	V
	*	5290	100.21	-	-	92.33	31.32	10.01	33.45	100	67	P	V
	*	5290	90.54	-	-	82.66	31.32	10.01	33.45	100	67	A	V
		5350.8	59.27	-14.73	74	51.32	31.3	10.09	33.44	100	67	P	V
		5350.08	47.94	-6.06	54	39.99	31.3	10.09	33.44	100	67	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 2 5250~5350MHz

WIFI 802.11ac VHT80 (Harmonic @ 3m)

WIFI Ant. 2+5	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		10580	42.28	-25.92	68.2	47.77	39.86	15.56	60.91	100	0	P	H
		15870	38.32	-35.68	74	42.01	37.39	19.55	60.63	100	0	P	H
802.11ac													H
VHT80													H
CH 58		10580	42.93	-25.27	68.2	48.42	39.86	15.56	60.91	100	0	P	V
5290MHz		15870	38.82	-35.18	74	42.51	37.39	19.55	60.63	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 - 5470~5725MHz

WIFI 802.11a (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
2+5		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11a CH 100 5500MHz		5453.68	57.39	-16.61	74	48.88	31.71	10.23	33.43	100	78	P	H
		5468.24	64.56	-3.64	68.2	55.97	31.77	10.25	33.43	100	78	P	H
		5459.44	49.91	-4.09	54	41.37	31.74	10.23	33.43	100	78	A	H
	*	5500	113.11	-	-	104.35	31.9	10.29	33.43	100	78	P	H
	*	5500	105.84	-	-	97.08	31.9	10.29	33.43	100	78	A	H
													H
		5458.8	55.06	-18.94	74	46.52	31.74	10.23	33.43	321	93	P	V
		5468.88	61.07	-7.13	68.2	52.47	31.78	10.25	33.43	321	93	P	V
		5458.32	48.11	-5.89	54	39.58	31.73	10.23	33.43	321	93	A	V
	*	5500	112.43	-	-	103.67	31.9	10.29	33.43	321	93	P	V
	*	5500	105.17	-	-	96.41	31.9	10.29	33.43	321	93	A	V
													V
802.11a CH 116 5580MHz		5452.48	50.32	-23.68	74	41.82	31.71	10.22	33.43	100	69	P	H
		5464.72	49.38	-18.82	68.2	40.81	31.76	10.24	33.43	100	69	P	H
		5456.8	42.5	-11.5	54	33.97	31.73	10.23	33.43	100	69	A	H
	*	5580	115.02	-	-	106.26	31.8	10.4	33.44	100	69	P	H
	*	5580	108.1	-	-	99.34	31.8	10.4	33.44	100	69	A	H
		5727.83	51.51	-16.69	68.2	42.41	32.06	10.5	33.46	100	69	P	H
		5381.44	50.18	-23.82	74	42.06	31.43	10.13	33.44	100	98	P	V
		5467.36	48.95	-19.25	68.2	40.37	31.77	10.24	33.43	100	98	P	V
		5455.6	42.23	-11.77	54	33.71	31.72	10.23	33.43	100	98	A	V
	*	5580	110.61	-	-	101.85	31.8	10.4	33.44	100	98	P	V
	*	5580	103.41	-	-	94.65	31.8	10.4	33.44	100	98	A	V
		5755.235	51.06	-17.14	68.2	41.9	32.11	10.52	33.47	100	98	P	V

802.11a CH 140 5700MHz	*	5700	112.56	-	-	103.53	32	10.49	33.46	100	61	P	H
	*	5700	105.27	-	-	96.24	32	10.49	33.46	100	61	A	H
		5725.8	65.62	-2.58	68.2	56.53	32.05	10.5	33.46	100	61	P	H
													H
													H
													H
	*	5700	105.52	-	-	96.49	32	10.49	33.46	100	95	P	V
	*	5700	98.2	-	-	89.17	32	10.49	33.46	100	95	A	V
		5726.2	55.12	-13.08	68.2	46.03	32.05	10.5	33.46	100	95	P	V
													V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 - 5470~5725MHz

WIFI 802.11a (Harmonic @ 3m)

WIFI Ant. 2+5	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 100 5500MHz		11000	44.3	-29.7	74	49.78	40.2	15.72	61.4	100	0	P	H
		16500	43.72	-24.48	68.2	43.62	39.4	20.2	59.5	100	0	P	H
													H
													H
		11000	44.49	-29.51	74	49.97	40.2	15.72	61.4	100	0	P	V
		16500	44.01	-24.19	68.2	43.91	39.4	20.2	59.5	100	0	P	V
													V
													V
802.11a CH 116 5580MHz		11160	44.29	-29.71	74	50.19	39.62	15.88	61.4	100	0	P	H
		16740	45.91	-22.29	68.2	43.97	40.4	20.46	58.92	100	0	P	H
													H
													H
		11160	44.41	-29.59	74	50.31	39.62	15.88	61.4	100	0	P	V
		16740	46.09	-22.11	68.2	44.15	40.4	20.46	58.92	100	0	P	V
													V
													V
802.11a CH 140 5700MHz		11400	44.17	-29.83	74	49.84	39.6	16.13	61.4	100	0	P	H
		17100	47.41	-20.79	68.2	44.04	40.5	20.83	57.96	100	0	P	H
													H
													H
		11400	44.61	-29.39	74	50.28	39.6	16.13	61.4	100	0	P	V
		17100	48.75	-19.45	68.2	45.38	40.5	20.83	57.96	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 - 5470~5725MHz

WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI Ant. 2+5	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		5447.76	59.05	-14.95	74	50.58	31.69	10.22	33.44	100	59	P	H
		5468.56	64.89	-3.31	68.2	56.3	31.77	10.25	33.43	100	59	P	H
		5459.76	50.08	-3.92	54	41.54	31.74	10.23	33.43	100	59	A	H
	*	5500	112.95	-	-	104.19	31.9	10.29	33.43	100	59	P	H
802.11n	*	5500	105.76	-	-	97	31.9	10.29	33.43	100	59	A	H
HT20													H
CH 100		5458.32	51.84	-22.16	74	43.31	31.73	10.23	33.43	100	91	P	V
5500MHz		5465.52	60.93	-7.27	68.2	52.36	31.76	10.24	33.43	100	91	P	V
		5459.92	45.63	-8.37	54	37.09	31.74	10.23	33.43	100	91	A	V
	*	5500	107.48	-	-	98.72	31.9	10.29	33.43	100	91	P	V
	*	5500	100.11	-	-	91.35	31.9	10.29	33.43	100	91	A	V
													V
		5435.92	50.99	-23.01	74	42.59	31.64	10.2	33.44	105	60	P	H
		5463.04	49.53	-18.67	68.2	40.97	31.75	10.24	33.43	105	60	P	H
		5452.48	42.46	-11.54	54	33.96	31.71	10.22	33.43	105	60	A	H
	*	5580	114.68	-	-	105.92	31.8	10.4	33.44	105	60	P	H
802.11n	*	5580	107.22	-	-	98.46	31.8	10.4	33.44	105	60	A	H
HT20		5734.445	51.01	-17.19	68.2	41.9	32.07	10.5	33.46	105	60	P	H
CH 116		5432.32	50.81	-23.19	74	42.42	31.63	10.2	33.44	100	91	P	V
5580MHz		5464.48	49.01	-19.19	68.2	40.44	31.76	10.24	33.43	100	91	P	V
		5456.08	42.21	-11.79	54	33.69	31.72	10.23	33.43	100	91	A	V
	*	5580	108.9	-	-	100.14	31.8	10.4	33.44	100	91	P	V
	*	5580	101.58	-	-	92.82	31.8	10.4	33.44	100	91	A	V
		5725.31	51.81	-16.39	68.2	42.72	32.05	10.5	33.46	100	91	P	V

	*	5700	111.56	-	-	102.53	32	10.49	33.46	100	61	P	H
	*	5700	104.15	-	-	95.12	32	10.49	33.46	100	61	A	H
		5733.96	66.18	-2.02	68.2	57.07	32.07	10.5	33.46	100	61	P	H
													H
802.11n													H
HT20													H
CH 140	*	5700	103.76	-	-	94.73	32	10.49	33.46	100	94	P	V
5700MHz	*	5700	96.5	-	-	87.47	32	10.49	33.46	100	94	A	V
		5725.72	56.83	-11.37	68.2	47.74	32.05	10.5	33.46	100	94	P	V
													V
													V
													V

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

Band 3 - 5470~5725MHz

WIFI 802.11n HT20 (Harmonic @ 3m)

WIFI Ant. 2+5	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		11000	43.16	-30.84	74	49.03	40.2	15.72	61.79	100	0	P	H
		16500	43.82	-24.38	68.2	44.19	39.4	20.2	59.97	100	0	P	H
802.11n													H
HT20													H
CH 100		11000	43.66	-30.34	74	49.53	40.2	15.72	61.79	100	0	P	V
5500MHz		16500	44	-24.2	68.2	44.37	39.4	20.2	59.97	100	0	P	V
													V
													V
		11160	43.82	-30.18	74	50.08	39.62	15.88	61.76	100	0	P	H
		16740	45.25	-22.95	68.2	43.85	40.4	20.46	59.46	100	0	P	H
802.11n													H
HT20													H
CH 116		11160	43.18	-30.82	74	49.44	39.62	15.88	61.76	100	0	P	V
5580MHz		16740	45.37	-22.83	68.2	43.97	40.4	20.46	59.46	100	0	P	V
													V
													V
		11400	43.3	-30.7	74	49.3	39.6	16.13	61.73	100	0	P	H
		17100	46.33	-21.87	68.2	43.58	40.5	20.83	58.58	100	0	P	H
802.11n													H
HT20													H
CH 140		11400	43.78	-30.22	74	49.78	39.6	16.13	61.73	100	0	P	V
5700MHz		17100	46.8	-21.4	68.2	44.05	40.5	20.83	58.58	100	0	P	V
													V
													V

Remark

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

Band 3 - 5470~5725MHz

WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI Ant. 2+5	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		5459.68	59.65	-14.35	74	51.11	31.74	10.23	33.43	100	63	P	H
		5469.52	66.65	-1.55	68.2	58.05	31.78	10.25	33.43	100	63	P	H
		5459.92	47.29	-6.71	54	38.75	31.74	10.23	33.43	100	63	A	H
	*	5510	107.54	-	-	98.79	31.88	10.3	33.43	100	63	P	H
802.11n	*	5510	98.07	-	-	89.32	31.88	10.3	33.43	100	63	A	H
HT40													H
CH 102		5742.635	53.41	-14.79	68.2	44.27	32.09	10.51	33.46	100	63	P	H
5510MHz		5456.08	54.85	-19.15	74	46.33	31.72	10.23	33.43	100	96	P	V
		5470	61.13	-7.07	68.2	52.53	31.78	10.25	33.43	100	96	P	V
		5458	44.03	-9.97	54	35.5	31.73	10.23	33.43	100	96	A	V
	*	5510	102.26	-	-	93.51	31.88	10.3	33.43	100	96	P	V
		5763.11	53.25	-14.95	68.2	44.07	32.13	10.52	33.47	100	96	P	V
		5457.76	59.25	-14.75	74	50.72	31.73	10.23	33.43	101	62	P	H
		5462.08	60.39	-7.81	68.2	51.83	31.75	10.24	33.43	101	62	P	H
		5459.92	46.82	-7.18	54	38.28	31.74	10.23	33.43	101	62	A	H
	*	5550	111.4	-	-	102.68	31.8	10.36	33.44	101	62	P	H
802.11n	*	5550	102.26	-	-	93.54	31.8	10.36	33.44	101	62	A	H
HT40		5730.035	53.36	-14.84	68.2	44.26	32.06	10.5	33.46	101	62	P	H
CH 110		5454.16	55.78	-18.22	74	47.26	31.72	10.23	33.43	100	92	P	V
5550MHz		5465.92	57.71	-10.49	68.2	49.14	31.76	10.24	33.43	100	92	P	V
		5457.52	44.11	-9.89	54	35.58	31.73	10.23	33.43	100	92	A	V
	*	5550	107.49	-	-	98.77	31.8	10.36	33.44	100	92	P	V
	*	5550	98.06	-	-	89.34	31.8	10.36	33.44	100	92	A	V
		5755.235	53.47	-14.73	68.2	44.31	32.11	10.52	33.47	100	92	P	V

		5427.7	53.23	-20.77	74	44.87	31.61	10.19	33.44	100	66	P	H
		5463.05	51.97	-16.23	68.2	43.41	31.75	10.24	33.43	100	66	P	H
		5442.75	41.13	-12.87	54	32.69	31.67	10.21	33.44	100	66	A	H
	*	5670	108.17	-	-	99.33	31.82	10.47	33.45	100	66	P	H
802.11n	*	5670	98.92	-	-	90.08	31.82	10.47	33.45	100	66	A	H
HT40		5727.55	60.57	-7.63	68.2	51.47	32.06	10.5	33.46	100	66	P	H
CH 134		5438.55	53.38	-20.62	74	44.97	31.65	10.2	33.44	100	92	P	V
5670MHz		5462.7	52.27	-15.93	68.2	43.71	31.75	10.24	33.43	100	92	P	V
		5437.15	41.18	-12.82	54	32.77	31.65	10.2	33.44	100	92	A	V
	*	5670	105.37	-	-	96.53	31.82	10.47	33.45	100	92	P	V
	*	5670	96.06	-	-	87.22	31.82	10.47	33.45	100	92	A	V
		5727.725	61.31	-6.89	68.2	52.21	32.06	10.5	33.46	100	92	P	V

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

Band 3 - 5470~5725MHz

WIFI 802.11n HT40 (Harmonic @ 3m)

WIFI Ant. 2+5	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		11020	44.54	-29.46	74	50.47	40.12	15.74	61.79	100	0	P	H
		16530	44.36	-23.84	68.2	44.64	39.4	20.23	59.91	100	0	P	H
802.11n													H
HT40													H
CH 102		11020	44.29	-29.71	74	50.22	40.12	15.74	61.79	100	0	P	V
5510MHz		16530	45.05	-23.15	68.2	45.33	39.4	20.23	59.91	100	0	P	V
													V
													V
		11100	43.69	-30.31	74	49.84	39.8	15.82	61.77	100	0	P	H
		16650	45.39	-22.81	68.2	44.88	39.8	20.36	59.65	100	0	P	H
802.11n													H
HT40													H
CH 110		11100	44.03	-29.97	74	50.18	39.8	15.82	61.77	100	0	P	V
5550MHz		16650	45.02	-23.18	68.2	44.51	39.8	20.36	59.65	100	0	P	V
													V
													V
		11340	39.88	-34.12	74	46.01	39.54	16.07	61.74	100	0	P	H
		17010	43.64	-24.56	68.2	41.26	40.5	20.76	58.88	100	0	P	H
802.11n													H
HT40													H
CH 134		11340	40.57	-33.43	74	46.7	39.54	16.07	61.74	100	0	P	V
5670MHz		17010	42.95	-25.25	68.2	40.57	40.5	20.76	58.88	100	0	P	V
													V
													V

Remark

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

Band 3 - 5470~5725MHz

WIFI 802.11ac VHT80 (Band Edge @ 3m)

WIFI Ant. 2+5	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80 CH 106 5530MHz		5453.2	63.21	-10.79	74	54.71	31.71	10.22	33.43	100	55	P	H
		5470	64.61	-3.59	68.2	56.01	31.78	10.25	33.43	100	55	P	H
		5455.12	52.05	-1.95	54	43.53	31.72	10.23	33.43	100	55	A	H
	*	5530	103.91	-	-	95.17	31.84	10.33	33.43	100	55	P	H
	*	5530	94.07	-	-	85.33	31.84	10.33	33.43	100	55	A	H
		5743.58	53.38	-14.82	68.2	44.24	32.09	10.51	33.46	100	55	P	H
		5455.12	60.91	-13.09	74	52.39	31.72	10.23	33.43	100	91	P	V
		5469.76	61.25	-6.95	68.2	52.65	31.78	10.25	33.43	100	91	P	V
		5457.76	50.03	-3.97	54	41.5	31.73	10.23	33.43	100	91	A	V
	*	5530	100.52	-	-	91.78	31.84	10.33	33.43	100	91	P	V
	*	5530	90.69	-	-	81.95	31.84	10.33	33.43	100	91	A	V
		5760.59	53.7	-14.5	68.2	44.53	32.12	10.52	33.47	100	91	P	V
802.11ac VHT80 CH 122 5610MHz		5459.9	63.4	-10.6	74	54.86	31.74	10.23	33.43	100	59	P	H
		5463.75	64.97	-3.23	68.2	56.4	31.76	10.24	33.43	100	59	P	H
		5459.55	50.58	-3.42	54	42.04	31.74	10.23	33.43	100	59	A	H
	*	5610	109.11	-	-	100.34	31.78	10.44	33.45	100	59	P	H
	*	5610	99.24	-	-	90.47	31.78	10.44	33.45	100	59	A	H
		5726.675	64.95	-3.25	68.2	55.86	32.05	10.5	33.46	100	59	P	H
		5459.55	59.04	-14.96	74	50.5	31.74	10.23	33.43	100	90	P	V
		5464.1	61.38	-6.82	68.2	52.81	31.76	10.24	33.43	100	90	P	V
		5459.9	45.84	-8.16	54	37.3	31.74	10.23	33.43	100	90	A	V
	*	5610	104.83	-	-	96.06	31.78	10.44	33.45	100	90	P	V
	*	5610	95.17	-	-	86.4	31.78	10.44	33.45	100	90	A	V
		5726.85	61.25	-6.95	68.2	52.16	32.05	10.5	33.46	100	90	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 5470~5725MHz

WIFI 802.11ac VHT80 (Harmonic @ 3m)

WIFI Ant. 2+5	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		11060	42.24	-31.76	74	48.28	39.96	15.78	61.78	100	0	P	H
		16590	42.32	-25.88	68.2	42.41	39.4	20.29	59.78	100	0	P	H
802.11ac													H
VHT80													H
CH 106		11060	41.44	-32.56	74	47.48	39.96	15.78	61.78	100	0	P	V
5530MHz		16590	41.55	-26.65	68.2	41.64	39.4	20.29	59.78	100	0	P	V
													V
													V
		11220	41.16	-32.84	74	47.46	39.5	15.95	61.75	100	0	P	H
		16830	41.92	-26.28	68.2	40.1	40.52	20.57	59.27	100	0	P	H
802.11ac													H
VHT80													H
CH 122		11220	40.02	-33.98	74	46.32	39.5	15.95	61.75	100	0	P	V
5610MHz		16830	42.33	-25.87	68.2	40.51	40.52	20.57	59.27	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 - Straddle Channel

WIFI 802.11a (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
2+5		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11a CH 144 5720MHz		5428	51.23	-22.77	74	42.87	31.61	10.19	33.44	102	62	P	H
		5465.83	49.62	-18.58	68.2	41.05	31.76	10.24	33.43	102	62	P	H
		5457.25	42.28	-11.72	54	33.75	31.73	10.23	33.43	102	62	A	H
	*	5720	113.42	-	-	104.34	32.04	10.5	33.46	102	62	P	H
	*	5720	106.34	-	-	97.26	32.04	10.5	33.46	102	62	A	H
		5878.75	51.6	-16.6	68.2	42.11	32.36	10.61	33.48	102	62	P	H
		5445.55	50.6	-23.4	74	42.15	31.68	10.21	33.44	100	96	P	V
		5464.66	50.06	-18.14	68.2	41.49	31.76	10.24	33.43	100	96	P	V
		5454.52	41.98	-12.02	54	33.46	31.72	10.23	33.43	100	96	A	V
	*	5720	108.21	-	-	99.13	32.04	10.5	33.46	100	96	P	V
	*	5720	101.17	-	-	92.09	32.04	10.5	33.46	100	96	A	V
		5873.75	51.6	-16.6	68.2	42.12	32.35	10.61	33.48	100	96	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 - Straddle Channel

WIFI 802.11a (Harmonic @ 3m)

WIFI Ant. 2+5	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 144 5720MHz		11440	46.09	-27.91	74	51.65	39.68	16.16	61.4	100	0	P	H
		17160	47.92	-20.28	68.2	44.23	40.56	20.86	57.73	100	0	P	H
													H
													H
		11440	45.18	-28.82	74	50.74	39.68	16.16	61.4	100	0	P	V
		17160	49.4	-18.8	68.2	45.71	40.56	20.86	57.73	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 - Straddle Channel

WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI Ant. 2+5	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 144 5720MHz		5357.8	51.73	-22.27	74	43.74	31.33	10.1	33.44	100	59	P	H
		5462.71	49.55	-18.65	68.2	40.99	31.75	10.24	33.43	100	59	P	H
		5458.81	42.32	-11.68	54	33.78	31.74	10.23	33.43	100	59	A	H
	*	5720	112.59	-	-	103.51	32.04	10.5	33.46	100	59	P	H
	*	5720	105.31	-	-	96.23	32.04	10.5	33.46	100	59	A	H
		5946.25	52.58	-15.62	68.2	42.82	32.58	10.67	33.49	100	59	P	H
		5380.03	50.01	-23.99	74	41.9	31.42	10.13	33.44	100	96	P	V
		5465.44	49.87	-18.33	68.2	41.3	31.76	10.24	33.43	100	96	P	V
		5459.98	42.41	-11.59	54	33.87	31.74	10.23	33.43	100	96	A	V
	*	5720	106.27	-	-	97.19	32.04	10.5	33.46	100	96	P	V
	*	5720	98.87	-	-	89.79	32.04	10.5	33.46	100	96	A	V
		5918.75	51.86	-16.34	68.2	42.23	32.47	10.65	33.49	100	96	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 - Straddle Channel

WIFI 802.11n HT20 (Harmonic @ 3m)

WIFI Ant. 2+5	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		11440	43.2	-30.8	74	49.08	39.68	16.16	61.72	100	0	P	H
		17160	46.18	-22.02	68.2	43.14	40.56	20.86	58.38	100	0	P	H
802.11n													H
HT20													H
CH 144		11440	44.27	-29.73	74	50.15	39.68	16.16	61.72	100	0	P	V
5720MHz		17160	46.81	-21.39	68.2	43.77	40.56	20.86	58.38	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 - Straddle Channel

WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI Ant. 2+5	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 CH 142 5710MHz		5387.44	52.41	-21.59	74	44.27	31.45	10.13	33.44	100	65	P	H
		5462.32	52.72	-15.48	68.2	44.16	31.75	10.24	33.43	100	65	P	H
		5447.5	41.32	-12.68	54	32.85	31.69	10.22	33.44	100	65	A	H
	*	5710	111.85	-	-	102.8	32.02	10.49	33.46	100	65	P	H
	*	5710	102	-	-	92.95	32.02	10.49	33.46	100	65	A	H
		5898.25	55.53	-12.67	68.2	45.99	32.4	10.63	33.49	100	65	P	H
		5351.56	53.24	-20.76	74	45.28	31.31	10.09	33.44	100	95	P	V
		5459.98	52.31	-21.69	74	43.77	31.74	10.23	33.43	100	95	P	V
		5458.42	41.04	-12.96	54	32.51	31.73	10.23	33.43	100	95	A	V
	*	5710	107.16	-	-	98.11	32.02	10.49	33.46	100	95	P	V
	*	5710	97.92	-	-	88.87	32.02	10.49	33.46	100	95	A	V
		5930	54.91	-13.29	68.2	45.22	32.52	10.66	33.49	100	95	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 - Straddle Channel

WIFI 802.11n HT40 (Harmonic @ 3m)

WIFI Ant. 2+5	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		11420	40.43	-33.57	74	46.37	39.64	16.14	61.72	100	0	P	H
		17130	43.39	-24.81	68.2	40.49	40.53	20.85	58.48	100	0	P	H
802.11n													H
HT40													H
CH 142		11420	41.98	-32.02	74	47.92	39.64	16.14	61.72	100	0	P	V
5710MHz		17130	42.93	-25.27	68.2	40.03	40.53	20.85	58.48	100	0	P	V
													V
													V

Remark

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

Band 3 - Straddle Channel

WIFI 802.11ac VHT80 (Band Edge @ 3m)

WIFI Ant. 2+5	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80 CH 138 5690MHz		5447.5	56.44	-17.56	74	47.97	31.69	10.22	33.44	100	59	P	H
		5464.27	59.33	-8.87	68.2	50.76	31.76	10.24	33.43	100	59	P	H
		5459.98	44.62	-9.38	54	36.08	31.74	10.23	33.43	100	59	A	H
	*	5690	109.52	-	-	100.56	31.94	10.48	33.46	100	59	P	H
	*	5690	100.05	-	-	91.09	31.94	10.48	33.46	100	59	A	H
		5869	59.89	-8.31	68.2	50.43	32.34	10.6	33.48	100	59	P	H
		5441.26	53.77	-20.23	74	45.33	31.67	10.21	33.44	100	95	P	V
		5462.71	53.87	-14.33	68.2	45.31	31.75	10.24	33.43	100	95	P	V
		5443.21	41.98	-12.02	54	33.54	31.67	10.21	33.44	100	95	A	V
	*	5690	104.51	-	-	95.55	31.94	10.48	33.46	100	95	P	V
	*	5690	94.96	-	-	86	31.94	10.48	33.46	100	95	A	V
		5850.75	55.93	-12.27	68.2	46.52	32.3	10.59	33.48	100	95	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 - Straddle Channel

WIFI 802.11ac VHT80 (Harmonic @ 3m)

WIFI Ant. 2+5	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		11380	39.74	-34.26	74	45.78	39.58	16.11	61.73	100	0	P	H
		17070	43.44	-24.76	68.2	40.82	40.5	20.8	58.68	100	0	P	H
802.11ac													H
VHT80													H
CH 138		11380	39.62	-34.38	74	45.66	39.58	16.11	61.73	100	0	P	V
5690MHz		17070	43.71	-24.49	68.2	41.09	40.5	20.8	58.68	100	0	P	V
													V
													V

Remark

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

Emission below 1GHz

WIFI 802.11n HT40 (LF @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
2+5		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11n HT40 LF		30.97	23.58	-16.42	40	29.26	23.74	0.78	30.2			P	H
		99.84	23.72	-19.78	43.5	36.88	15.81	1.46	30.43			P	H
		168.71	32.15	-11.35	43.5	44.86	15.77	1.87	30.35			P	H
		716.76	37.03	-8.97	46	35.74	27.02	3.75	29.48	100	0	P	H
		854.5	34.95	-11.05	46	30.88	29.17	4.11	29.21			P	H
		940.83	35.04	-10.96	46	29.43	30.22	4.41	29.02			P	H
													H
													H
													H
													H
													H
													H
		42.61	29.88	-10.12	40	41.4	17.92	0.93	30.37	100	0	P	V
		69.77	24.05	-15.95	40	41.12	12.16	1.22	30.45			P	V
		169.68	28.83	-14.67	43.5	41.62	15.68	1.88	30.35			P	V
		760.41	31.99	-14.01	46	29.53	27.97	3.87	29.38			P	V
		885.54	32.85	-13.15	46	28.71	29.08	4.22	29.16			P	V
		947.62	35.19	-10.81	46	29.31	30.45	4.43	29			P	V
													V
													V
													V
													V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against limit line.												

<EUT with WPC Charging Mode>

Band 3 - 5470~5725MHz

WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI Ant.	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
2+5		(MHz)	(dBµV/m)	(dB)	(dBµV/m)	(dBµV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11n HT40 CH 102 5510MHz		5452.24	57.8	-16.2	74	49.3	31.71	10.22	33.43	100	353	P	H
		5470	60.43	-7.77	68.2	51.83	31.78	10.25	33.43	100	353	P	H
		5458.96	45.56	-8.44	54	37.02	31.74	10.23	33.43	100	353	A	H
	*	5510	105.69	-	-	96.94	31.88	10.3	33.43	100	353	P	H
	*	5510	95.81	-	-	87.06	31.88	10.3	33.43	100	353	A	H
		5747.36	54.47	-13.73	68.2	45.33	32.09	10.51	33.46	100	353	P	H
		5458.72	56.03	-17.97	74	47.5	31.73	10.23	33.43	262	211	P	V
		5470	58.91	-9.29	68.2	50.31	31.78	10.25	33.43	262	211	P	V
		5458.72	43.48	-10.52	54	34.95	31.73	10.23	33.43	262	211	A	V
	*	5510	103.15	-	-	94.4	31.88	10.3	33.43	262	211	P	V
	*	5510	93.71	-	-	84.96	31.88	10.3	33.43	262	211	A	V
		5764.685	53.37	-14.83	68.2	44.19	32.13	10.52	33.47	262	211	P	V
Remark	3. No other spurious found. 4. All results are PASS against Peak and Average limit line.												

Band 3 - 5470~5725MHz

WIFI 802.11n HT40 (Harmonic @ 3m)

WIFI Ant. 2+5	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		11020	43.27	-30.73	74	49.2	40.12	15.74	61.79	100	0	P	H
		16530	43.25	-24.95	68.2	43.53	39.4	20.23	59.91	100	0	P	H
802.11n													H
HT40													H
CH 102		11020	42.86	-31.14	74	48.79	40.12	15.74	61.79	100	0	P	V
5510MHz		16530	43.64	-24.56	68.2	43.92	39.4	20.23	59.91	100	0	P	V
													V
													V

Remark

3. No other spurious found.
4. All results are PASS against Peak and Average limit line.

Emission below 1GHz

WIFI 802.11n HT40 (LF @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
2+5		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11n HT40 LF		45.52	23.2	-16.8	40	36.16	16.49	0.96	30.41			P	H
		180.35	28.11	-15.39	43.5	41.5	15.01	1.94	30.34			P	H
		240.49	26.14	-19.86	46	37.13	17.18	2.08	30.25			P	H
		781.75	32.27	-13.73	46	29.53	28.14	3.93	29.33			P	H
		891.36	33.76	-12.24	46	29.64	29.04	4.23	29.15			P	H
		954.41	35.91	-10.09	46	29.76	30.68	4.45	28.98	100	0	P	H
													H
													H
													H
													H
													H
													H
		43.58	33.82	-6.18	40	45.8	17.45	0.95	30.38	100	0	P	V
		94.02	25.64	-17.86	43.5	39.45	15.21	1.41	30.43			P	V
		172.59	25.32	-18.18	43.5	38.29	15.48	1.9	30.35			P	V
		791.45	32.63	-13.37	46	29.91	28.08	3.95	29.31			P	V
		898.15	34.81	-11.19	46	30.69	29	4.26	29.14			P	V
		954.41	35.59	-10.41	46	29.44	30.68	4.45	28.98			P	V
													V
													V
													V
													V
													V
													V
Remark	3. No other spurious found. 4. All results are PASS against limit line.												

Note symbol

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

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

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
2+5		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11b CH 01 2412MHz		2390	55.45	-18.55	74	54.51	32.22	4.58	35.86	103	308	P	H
		2390	43.54	-10.46	54	42.6	32.22	4.58	35.86	103	308	A	H

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

For Peak Limit @ 2390MHz:

1. Level(dBμV/m)

= Antenna Factor(dB/m) + Path Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)

= 32.22(dB/m) + 4.58(dB) + 54.51(dBμV) – 35.86 (dB)

= 55.45 (dBμV/m)

2. Over Limit(dB)

= Level(dBμV/m) – Limit Line(dBμV/m)

= 55.45(dBμV/m) – 74(dBμV/m)

= -18.55(dB)

For Average Limit @ 2390MHz:

1. Level(dBμV/m)

= Antenna Factor(dB/m) + Path Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)

= 32.22(dB/m) + 4.58(dB) + 42.6(dBμV) – 35.86 (dB)

= 43.54 (dBμV/m)

2. Over Limit(dB) = Level(dBμV/m) – Limit Line(dBμV/m)

= 43.54(dBμV/m) – 54(dBμV/m)

= -10.46(dB)

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

Appendix D. Radiated Spurious Emission

Test Engineer :	Jack Cheng, Lance Chiang and Chuan Chu	**Temperature :**	22~24°C
		Relative Humidity :	52~60%

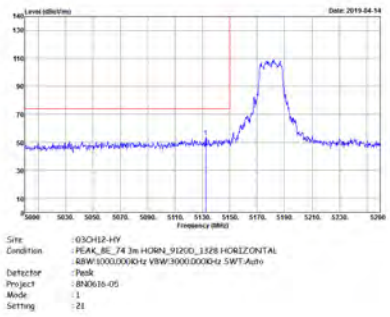
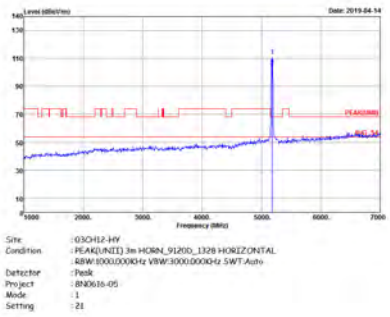
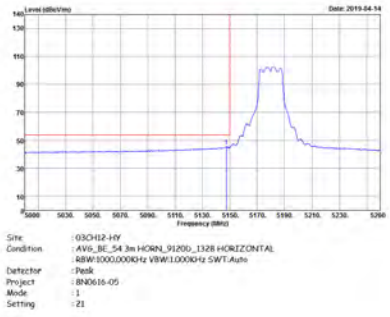
Note symbol

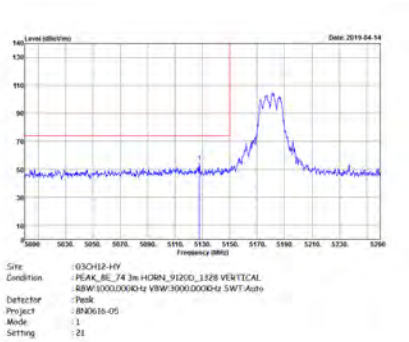
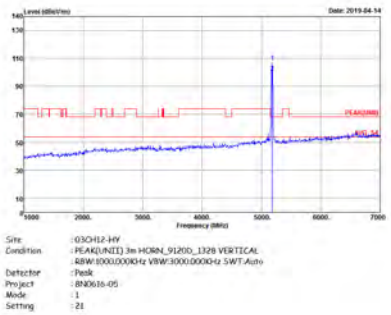
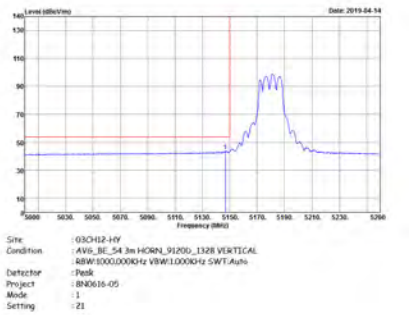
-L	**Low channel location**
-R	**High channel location**

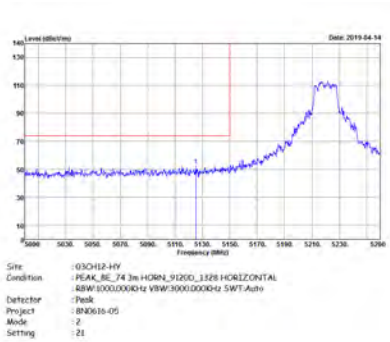
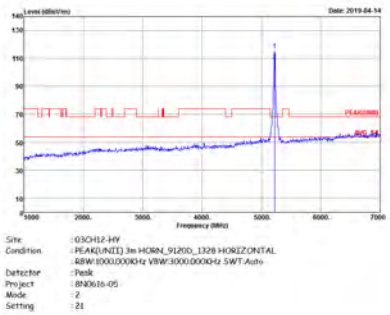
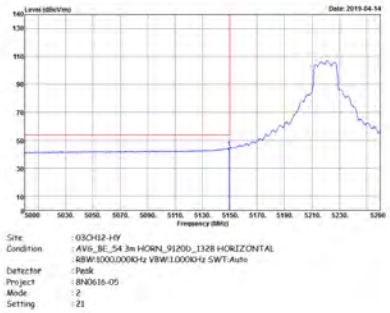
<EUT with Adapter Mode>

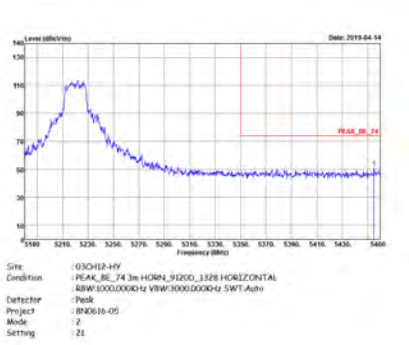
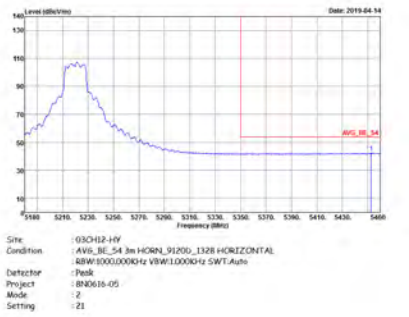
Band 1 - 5150~5250MHz

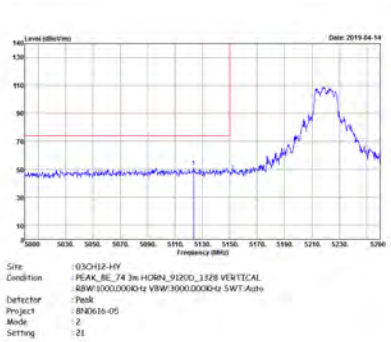
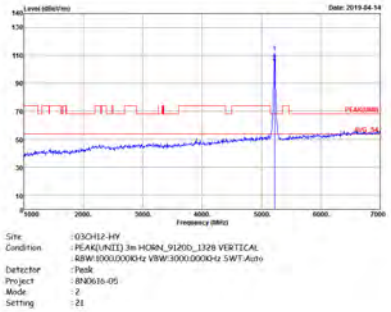
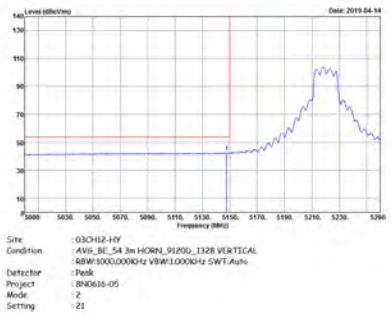
WIFI 802.11a (Band Edge @ 3m)

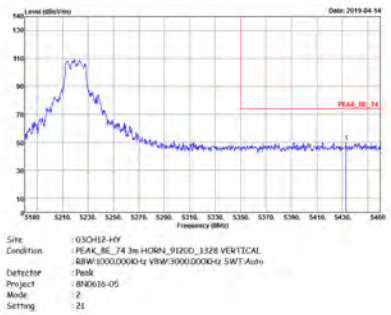
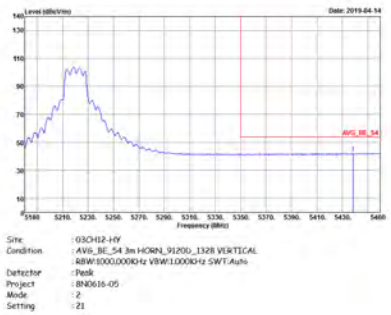
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH36 5180MHz	
2+5	Horizontal	Fundamental
Peak		
Avg.		Left blank

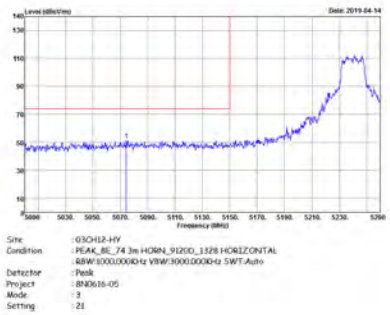
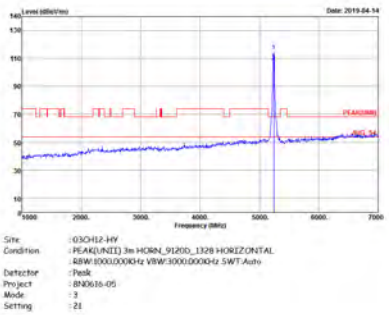
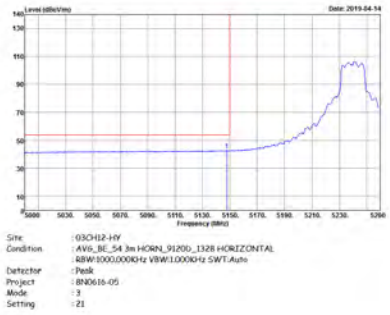
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH36 5180MHz	
2+5	Vertical	Fundamental
Peak		
Avg.		Left blank

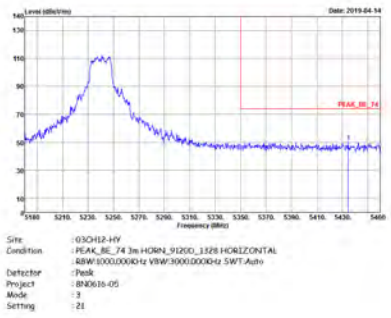
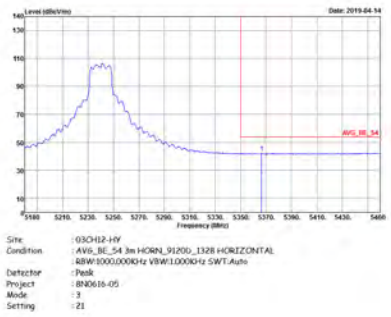
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH44 5220MHz - L	
2+5	Horizontal	Fundamental
Peak		
Avg.		Left blank

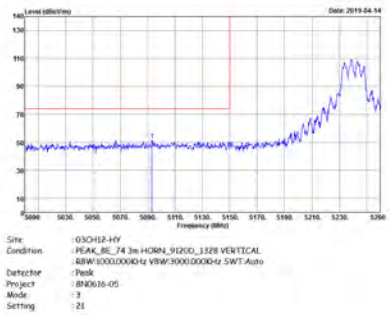
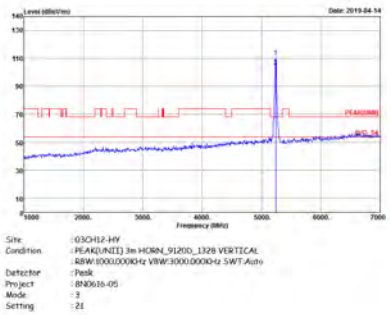
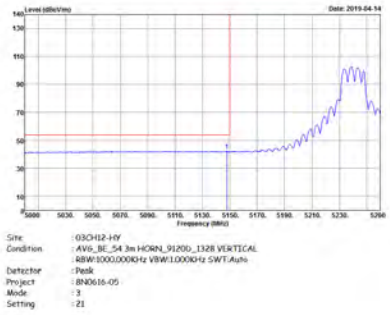
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH44 5220MHz - R	
2+5	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

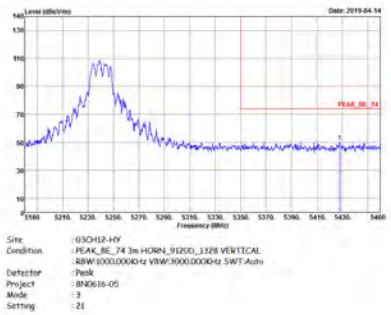
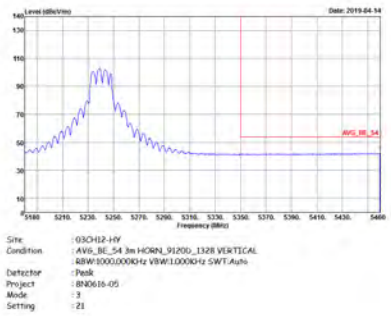
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH44 5220MHz - L	
2+5	Vertical	Fundamental
Peak		
Avg.		Left blank

WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH44 5220MHz - R	
2+5	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

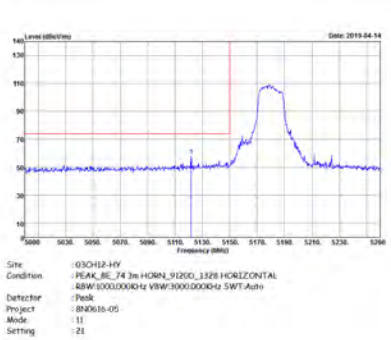
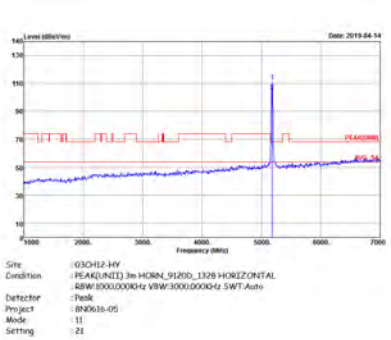
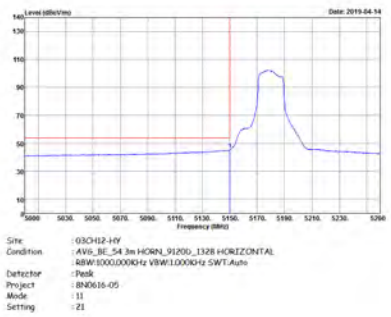
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH48 5240MHz - L	
2+5	Horizontal	Fundamental
Peak		
Avg.		Left blank

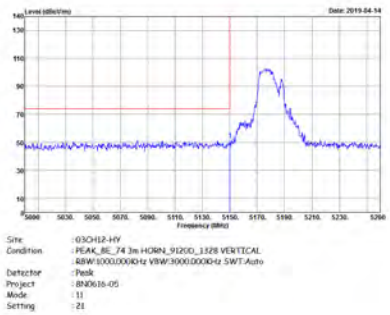
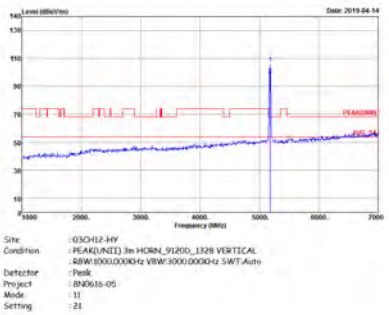
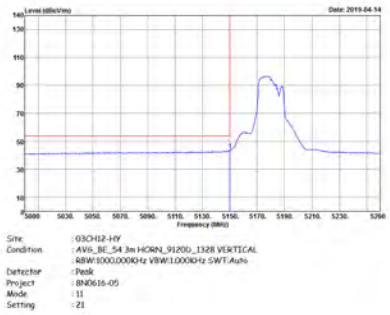
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH48 5240MHz - R	
2+5	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

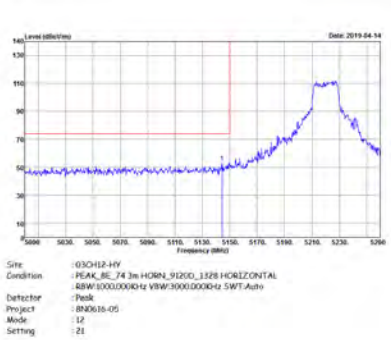
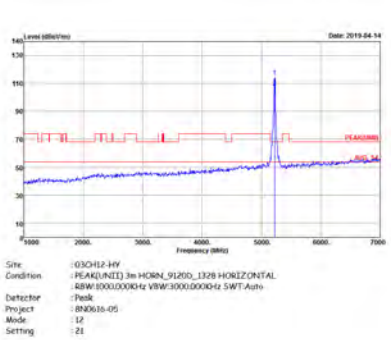
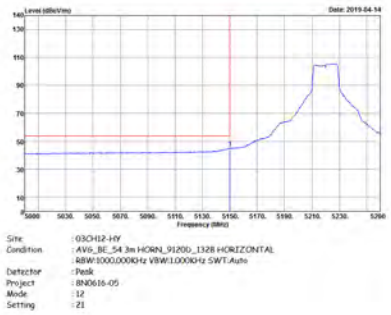
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH48 5240MHz - L	
2+5	Vertical	Fundamental
Peak		
Avg.		Left blank

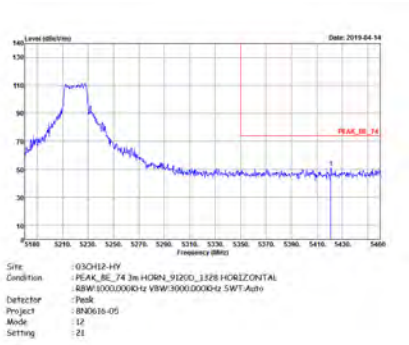
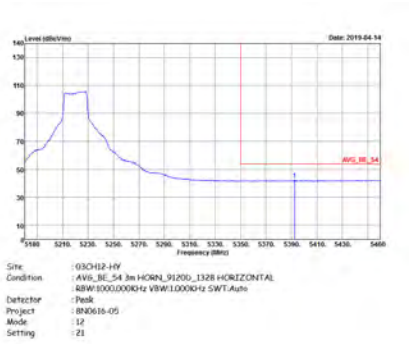
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH48 5240MHz - R	
2+5	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

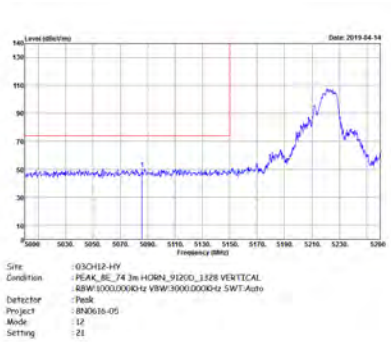
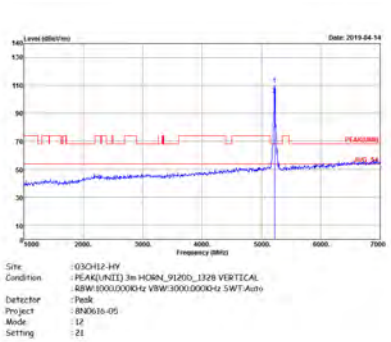
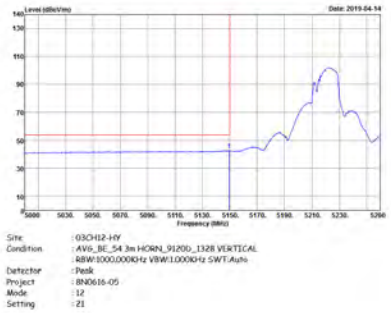
Band 1 5150~5250MHz
WIFI 802.11n HT20 (Band Edge @ 3m)

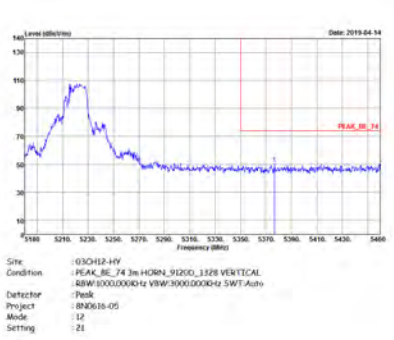
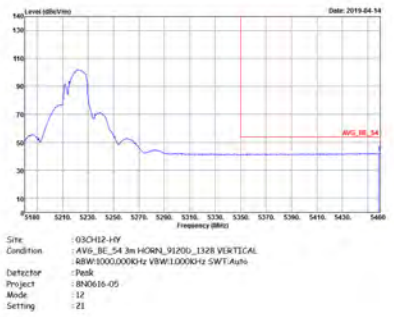
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH36 5180MHz	
2+5	Horizontal	Fundamental
Peak		
Avg.		Left blank

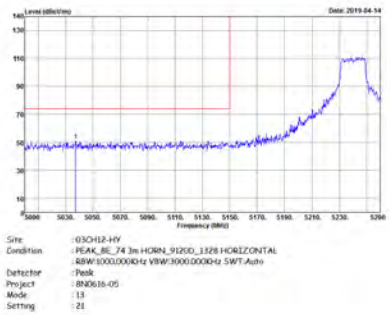
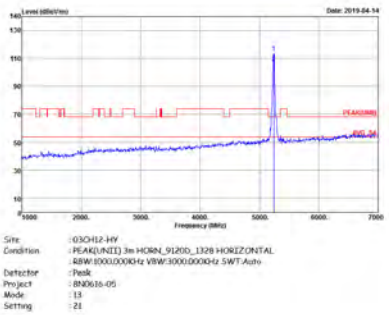
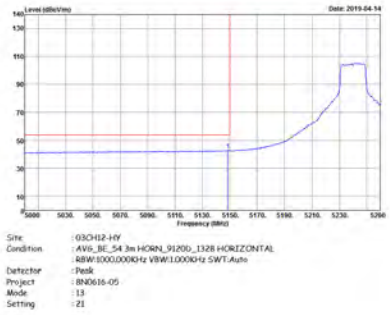
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH36 5180MHz	
2+5	Vertical	Fundamental
Peak		
Avg.		Left blank

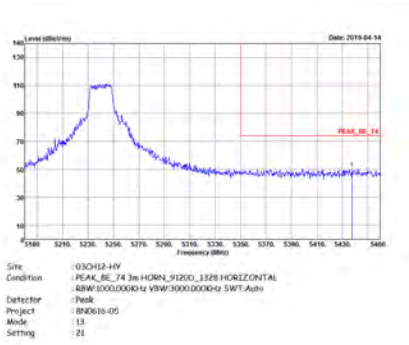
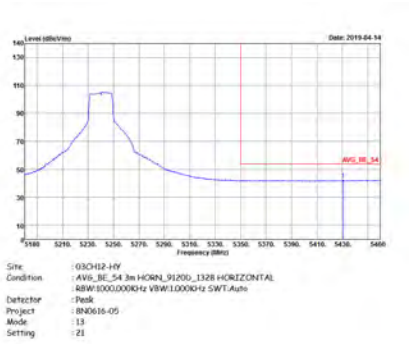
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH44 5220MHz - L	
2+5	Horizontal	Fundamental
Peak		
Avg.		Left blank

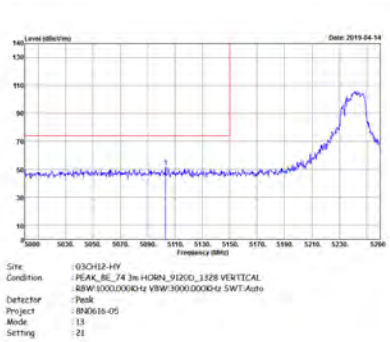
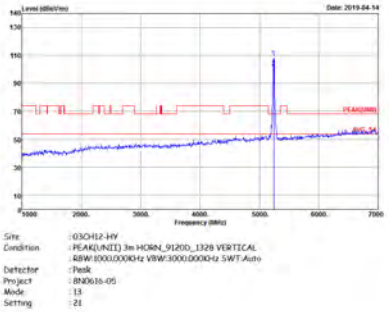
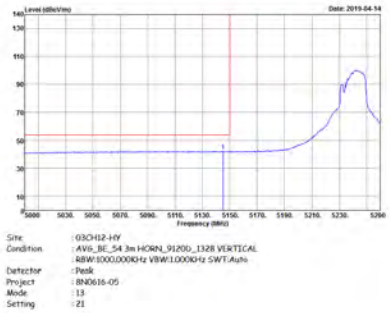
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH44 5220MHz - R	
2+5	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

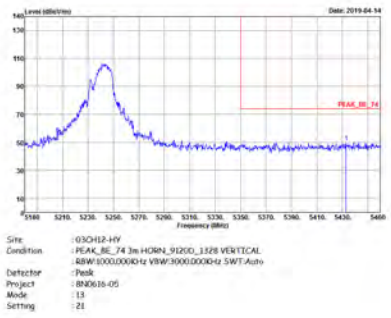
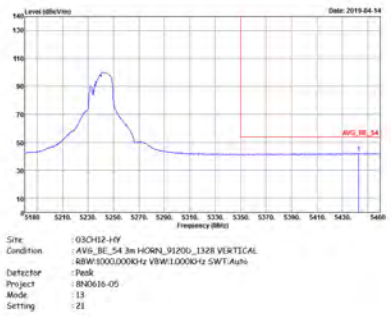
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH44 5220MHz - L	
2+5	Vertical	Fundamental
Peak		
Avg.		Left blank

WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH44 5220MHz - R	
2+5	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

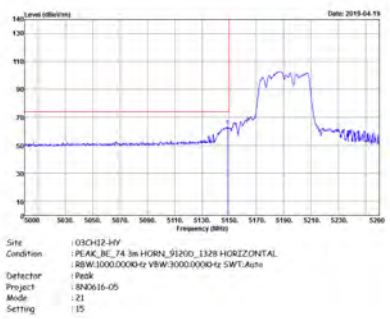
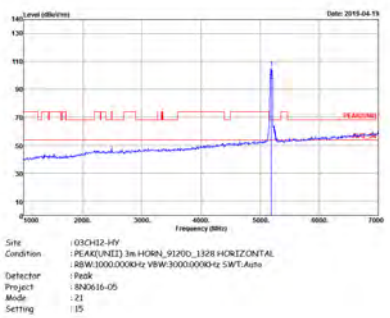
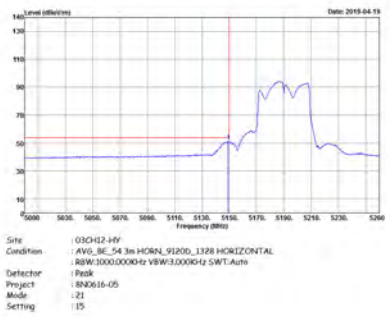
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH48 5240MHz - L	
2+5	Horizontal	Fundamental
Peak		
Avg.		Left blank

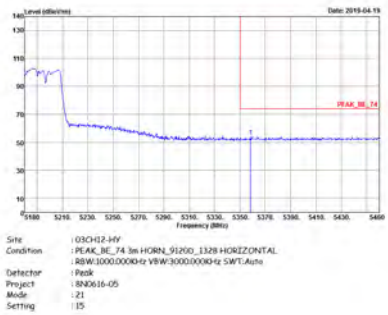
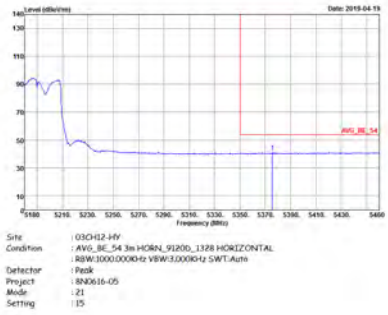
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH48 5240MHz - R	
2+5	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

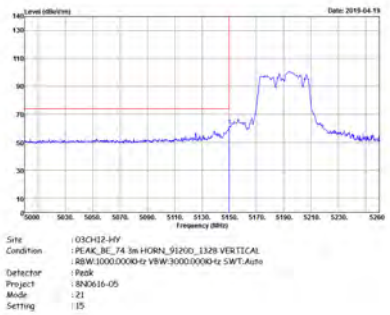
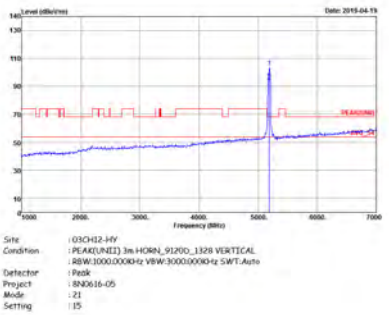
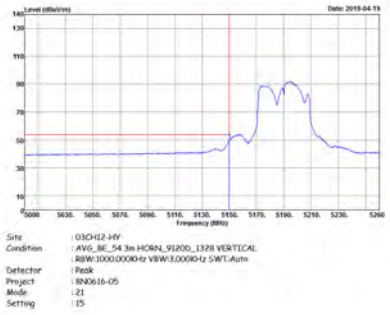
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH48 5240MHz - L	
2+5	Vertical	Fundamental
Peak		
Avg.		Left blank

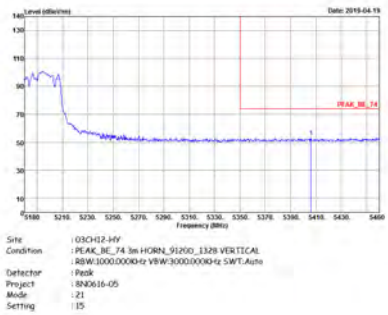
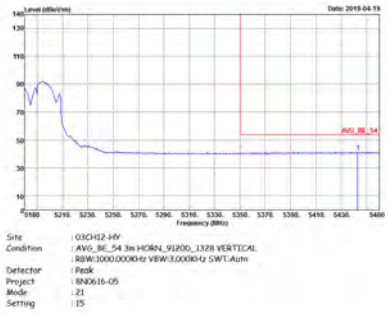
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH48 5240MHz - R	
2+5	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

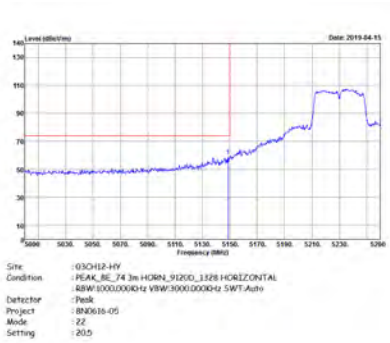
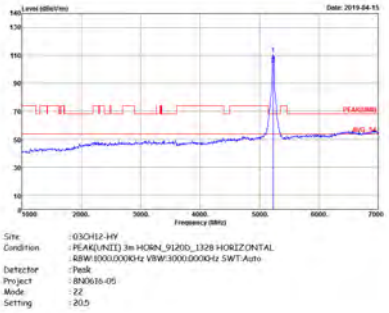
Band 1 5150~5250MHz
WIFI 802.11n HT40 (Band Edge @ 3m)

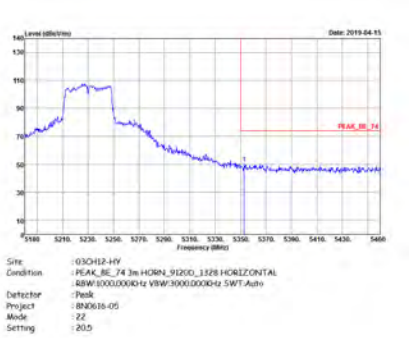
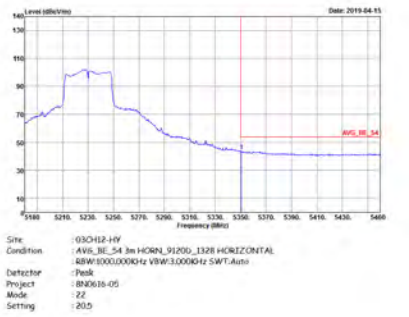
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH38 5190MHz - L	
2+5	Horizontal	Fundamental
Peak		
Avg.		Left blank

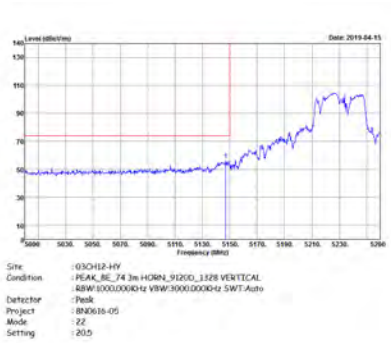
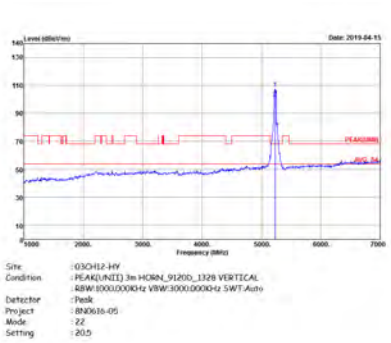
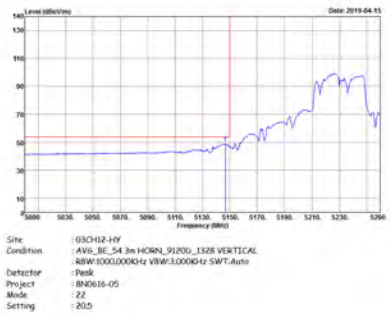
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH38 5190MHz - R	
2+5	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

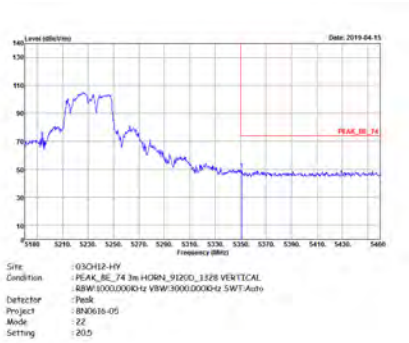
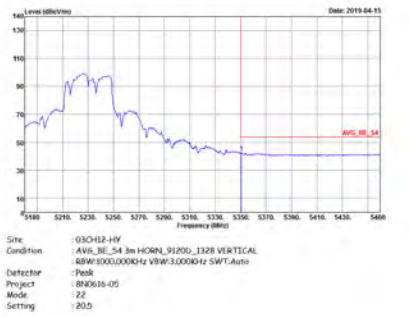
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH38 5190MHz - L	
2+5	Vertical	Fundamental
Peak		
Avg.		Left blank

WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH38 5190MHz - R	
2+5	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

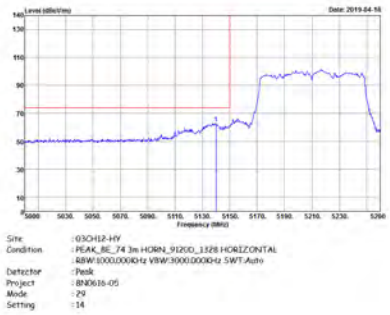
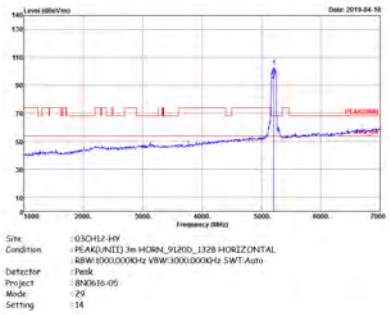
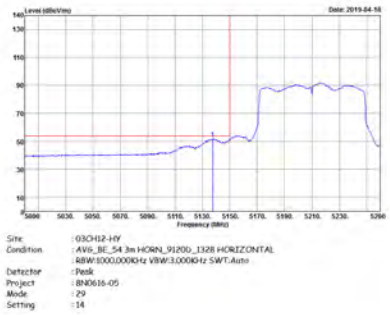
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH46 5230MHz - L	
2+5	Horizontal	Fundamental
Peak		
Avg.		Left blank

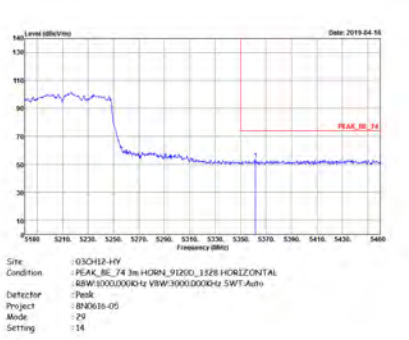
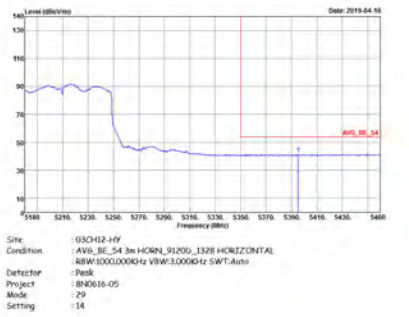
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH46 5230MHz - R	
2+5	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

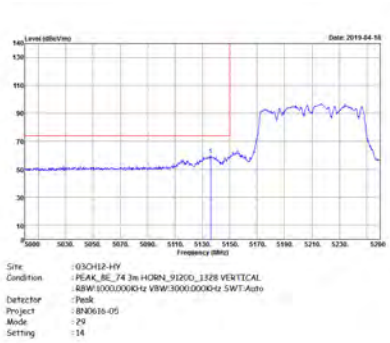
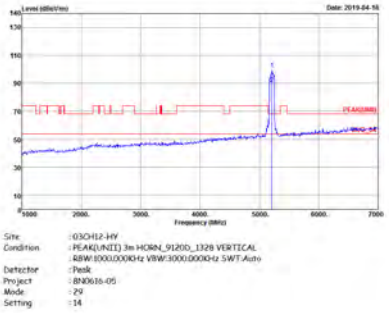
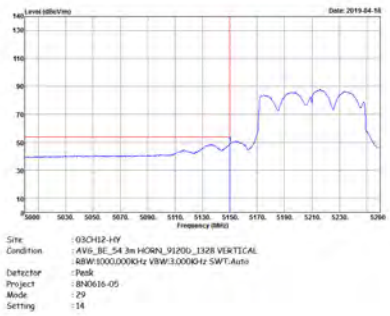
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH46 5230MHz - L	
2+5	Vertical	Fundamental
Peak		
Avg.		Left blank

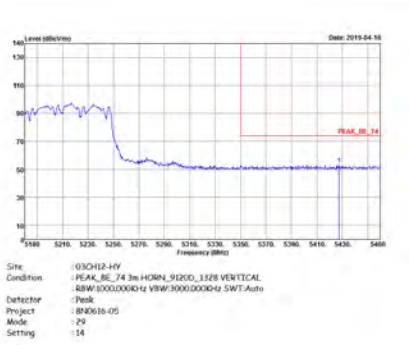
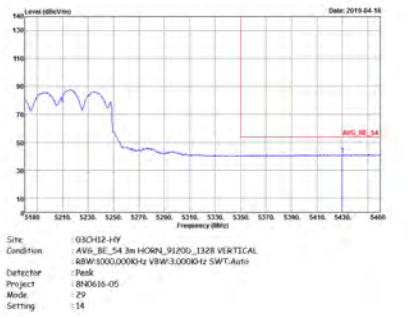
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH46 5230MHz - R	
2+5	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

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

WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH42 5210MHz - L	
2+5	Horizontal	Fundamental
Peak		
Avg.		Left blank

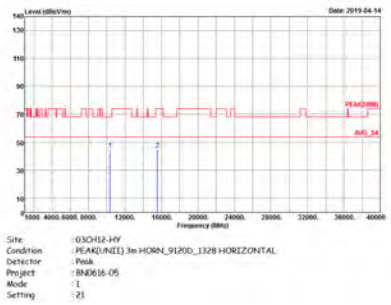
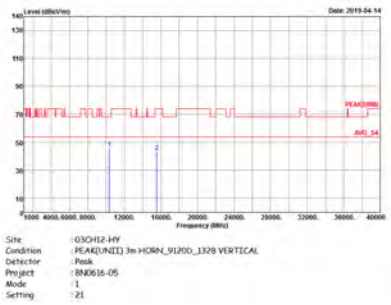
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH42 5210MHz - R	
2+5	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

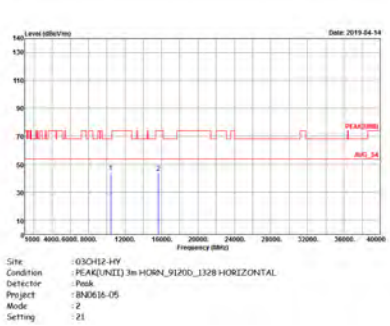
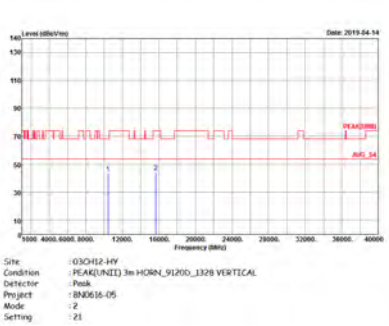
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH42 5210MHz - L	
2+5	Vertical	Fundamental
Peak		
Avg.		Left blank

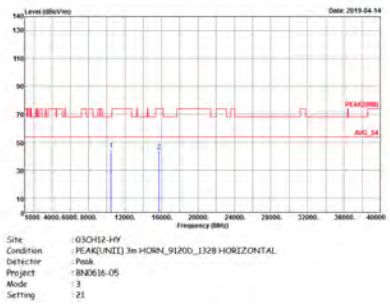
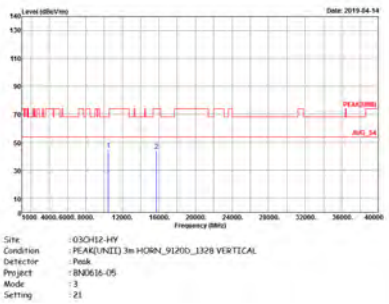
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH42 5210MHz - R	
2+5	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

Band 1 - 5150~5250MHz

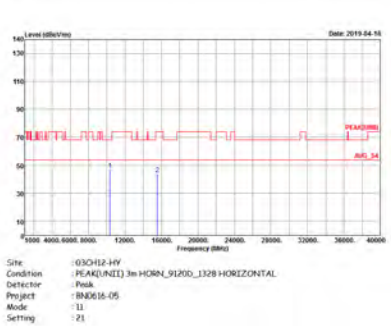
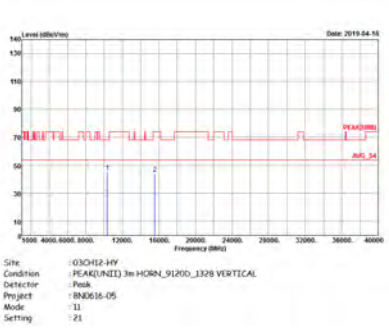
WIFI 802.11a (Harmonic @ 3m)

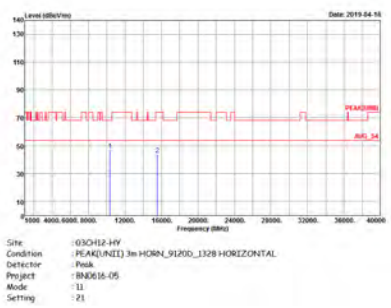
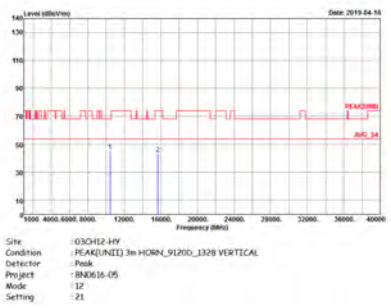
WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11a CH36 5180MHz	
2+5	Horizontal	Vertical
Peak Avg.		

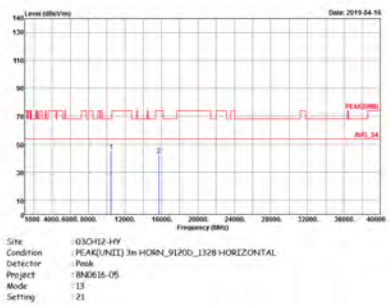
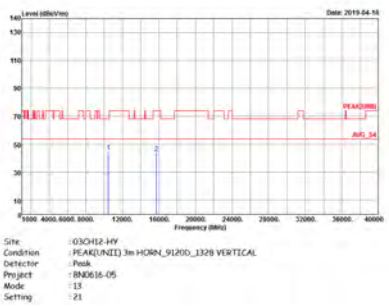
WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11a CH44 5220MHz	
2+5	Horizontal	Vertical
Peak Avg.		

WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11a CH48 5240MHz	
2+5	Horizontal	Vertical
Peak Avg.		

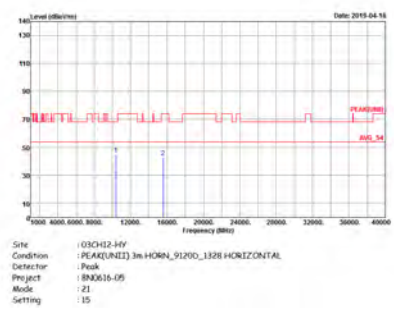
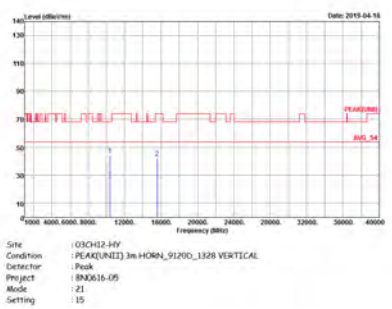
Band 1 5150~5250MHz
WIFI 802.11n HT20 (Harmonic @ 3m)

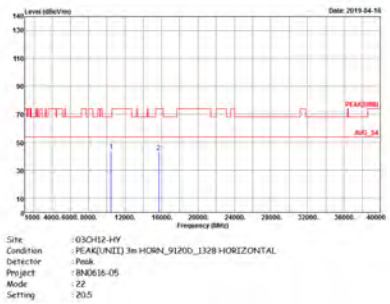
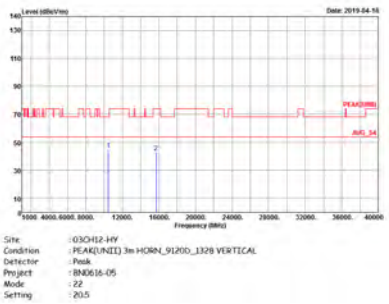
WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11n HT20 CH36 5180MHz	
2+5	Horizontal	Vertical
Peak Avg.		

WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11n HT20 CH44 5220MHz	
2+5	Horizontal	Vertical
Peak Avg.		

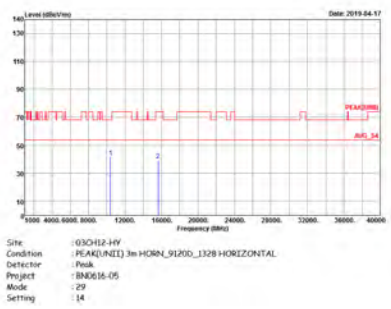
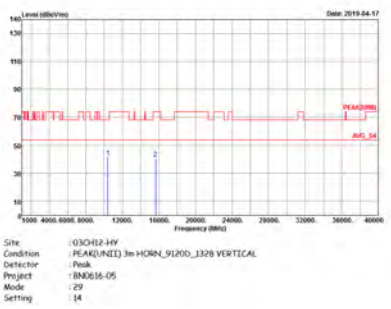
WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11n HT20 CH48 5240MHz	
2+5	Horizontal	Vertical
Peak Avg.		

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

WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11n HT40 CH38 5190MHz	
2+5	Horizontal	Vertical
Peak Avg.		

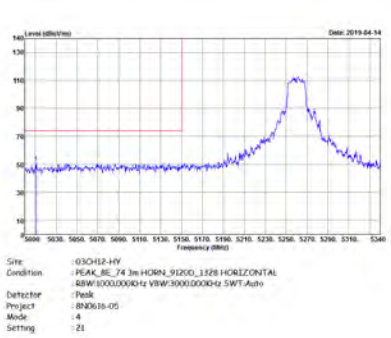
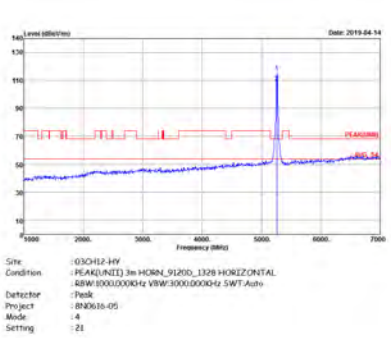
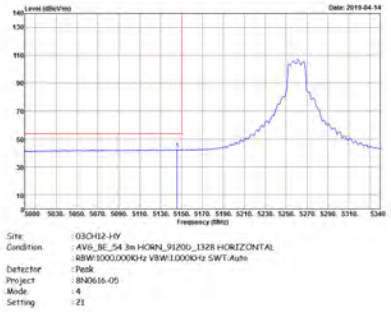
WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11n HT40 CH46 5230MHz	
2+5	Horizontal	Vertical
Peak Avg.		

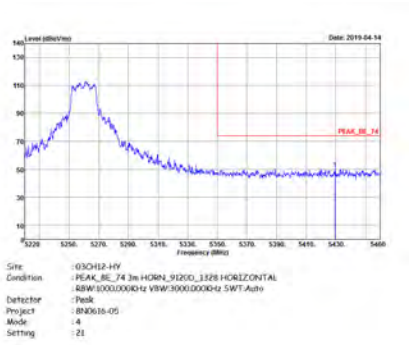
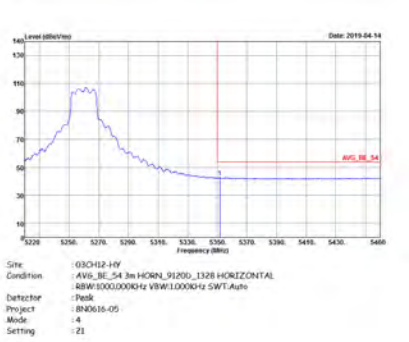
Band 1 5150~5250MHz
WIFI 802.11ac VHT80 (Harmonic @ 3m)

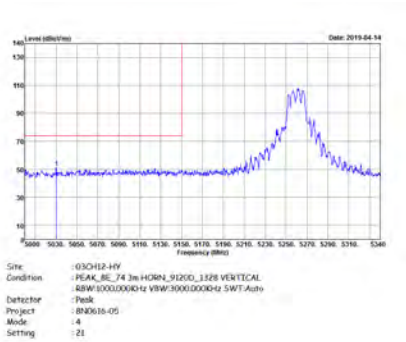
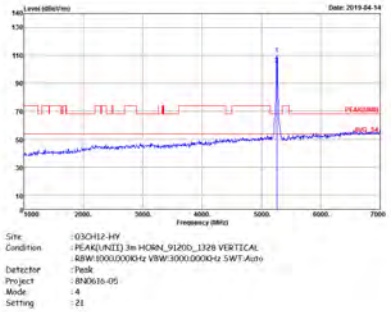
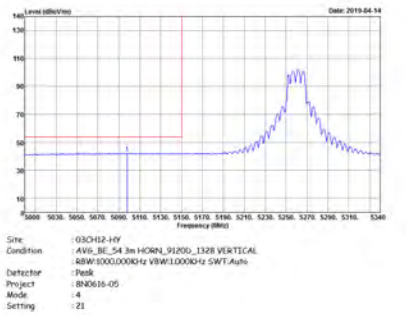
WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11ac VHT80 CH42 5210MHz	
2+5	Horizontal	Vertical
Peak Avg.		

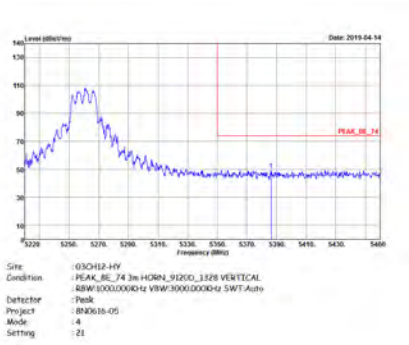
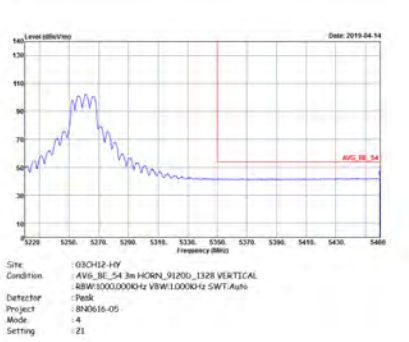
Band 2 - 5250~5350MHz

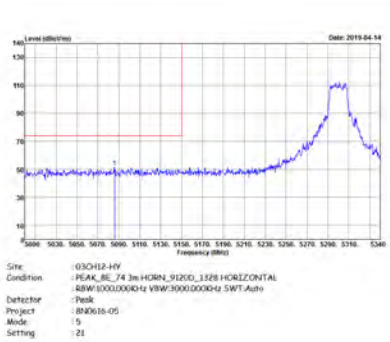
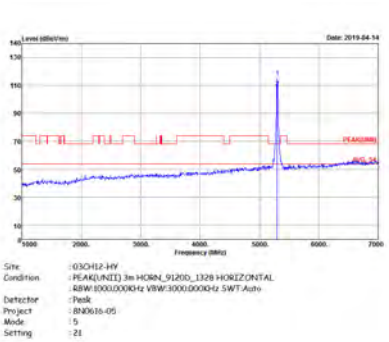
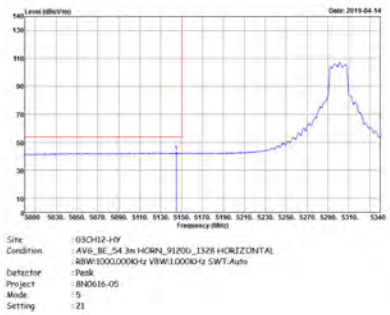
WIFI 802.11a (Band Edge @ 3m)

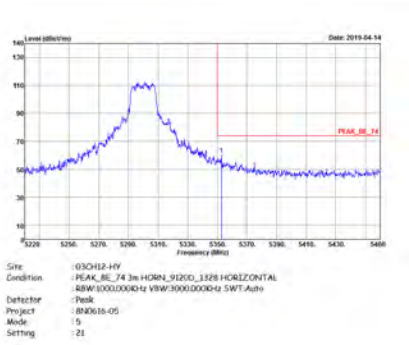
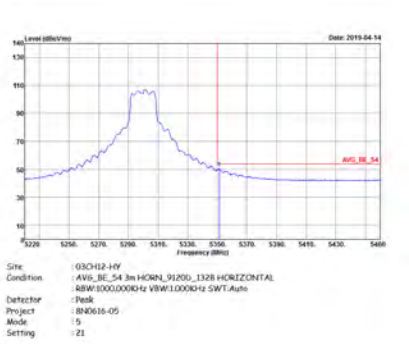
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH52 5260MHz - L	
2+5	Horizontal	Fundamental
Peak		
Avg.		Left blank

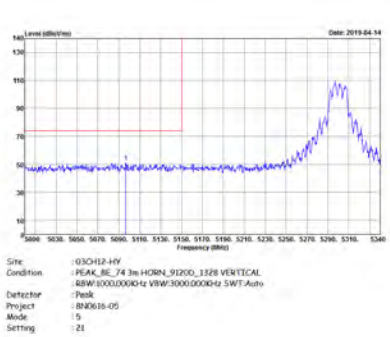
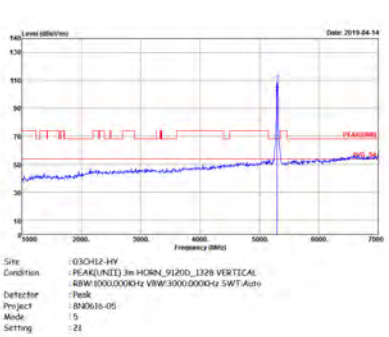
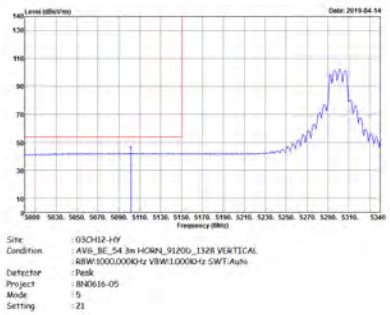
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH52 5260MHz - R	
2+5	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

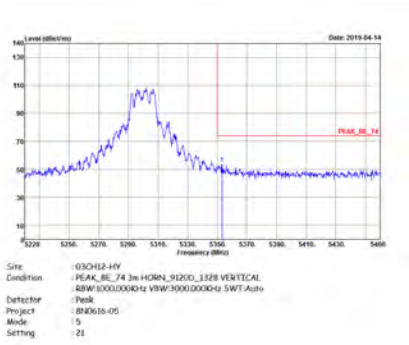
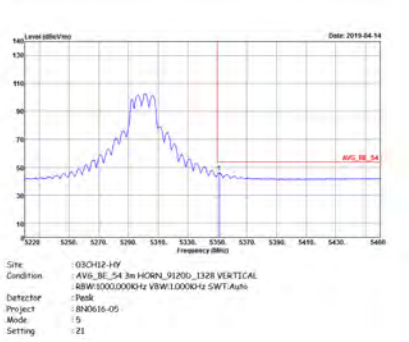
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH52 5260MHz - L	
2+5	Vertical	Fundamental
Peak		
Avg.		Left blank

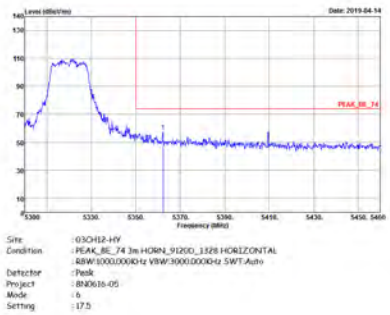
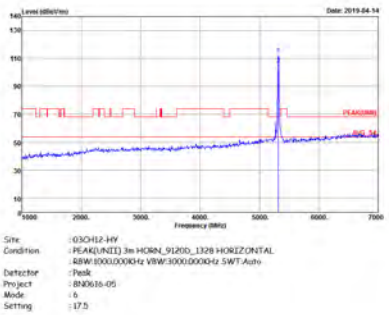
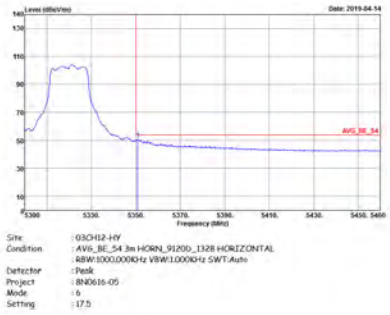
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH52 5260MHz - R	
2+5	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

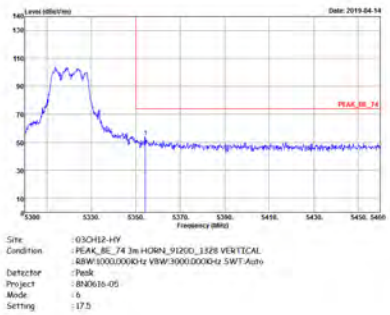
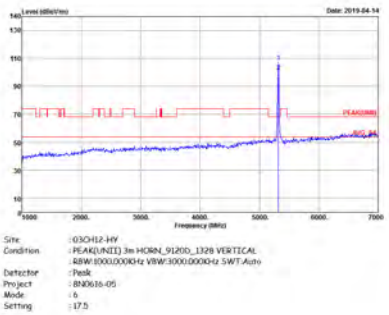
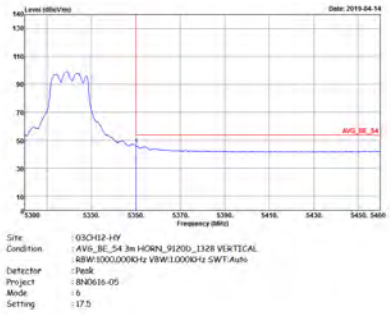
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH60 5300MHz - L	
2+5	Horizontal	Fundamental
Peak		
Avg.		Left blank

WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH60 5300MHz - R	
2+5	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

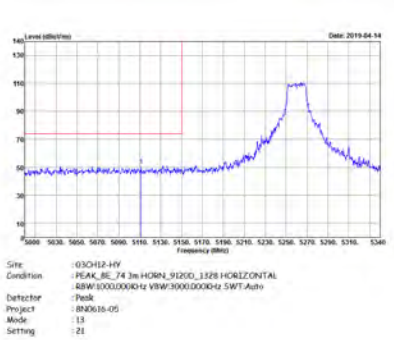
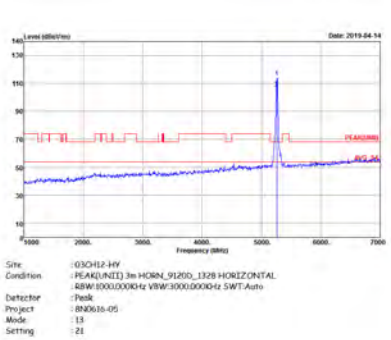
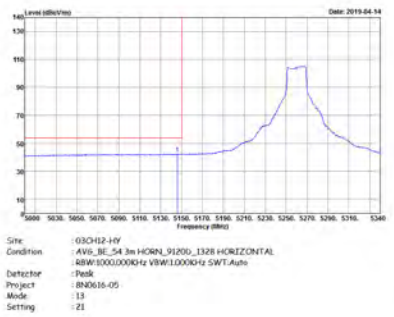
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH60 5300MHz - L	
2+5	Vertical	Fundamental
Peak		
Avg.		Left blank

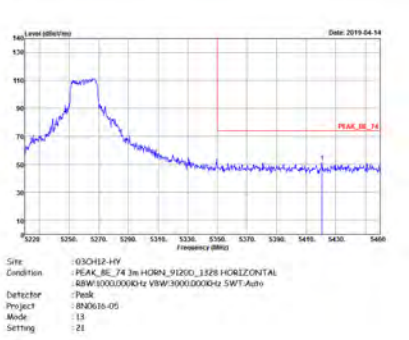
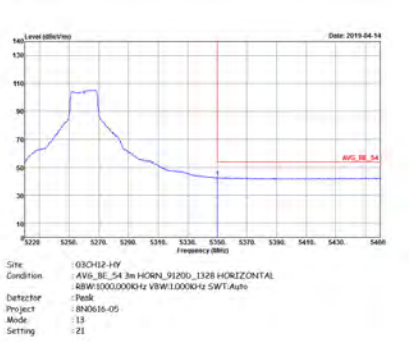
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH60 5300MHz - R	
2+5	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

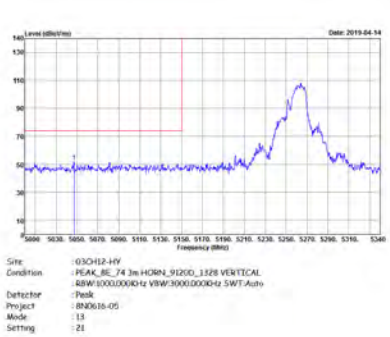
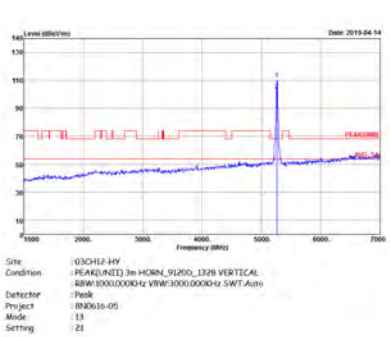
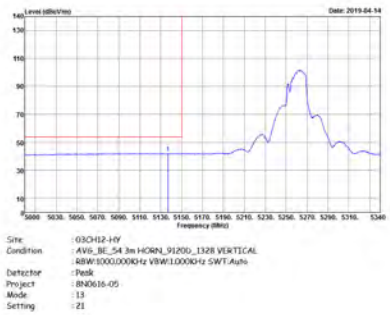
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH64 5320MHz	
2+5	Horizontal	Fundamental
Peak		
Avg.		Left blank

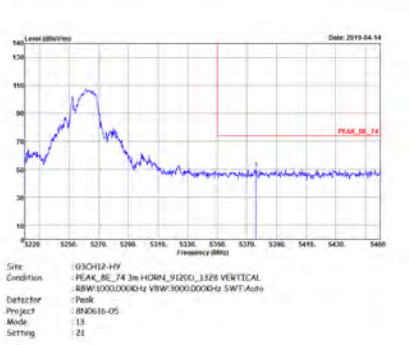
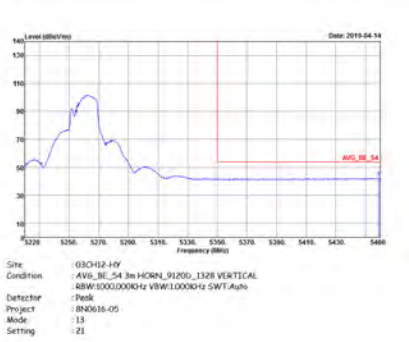
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH64 5320MHz	
2+5	Vertical	Fundamental
Peak		
Avg.		Left blank

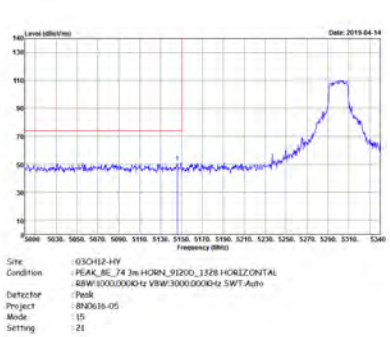
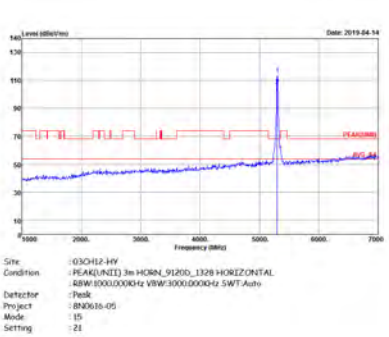
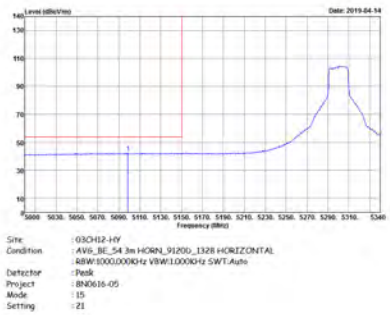
Band 2 5250~5350MHz
WIFI 802.11n HT20 (Band Edge @ 3m)

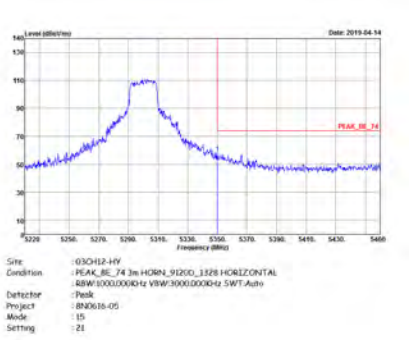
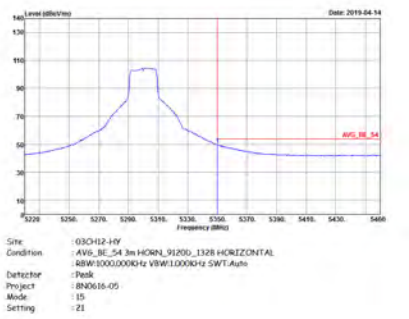
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH52 5260MHz - L	
2+5	Horizontal	Fundamental
Peak		
Avg.		Left blank

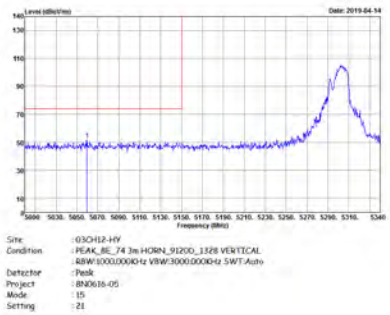
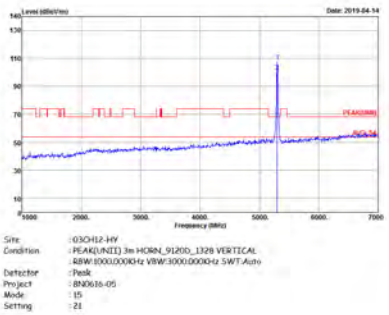
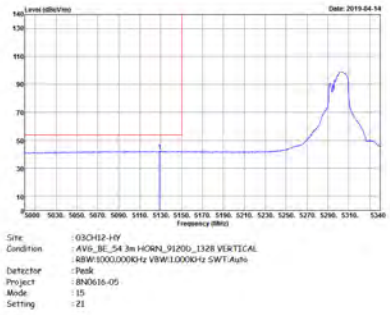
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH52 5260MHz - R	
2+5	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

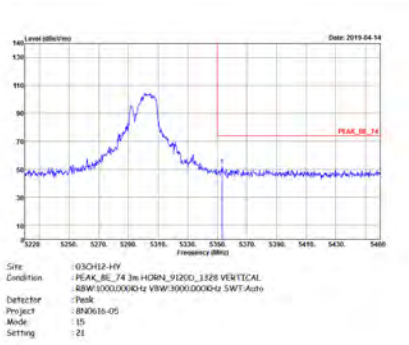
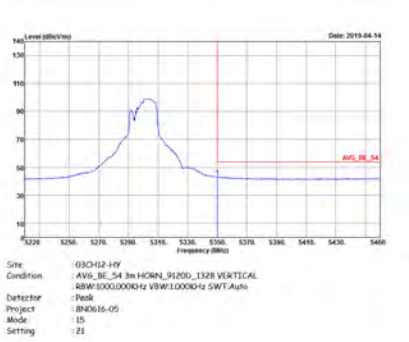
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH52 5260MHz - L	
2+5	Vertical	Fundamental
Peak		
Avg.		Left blank

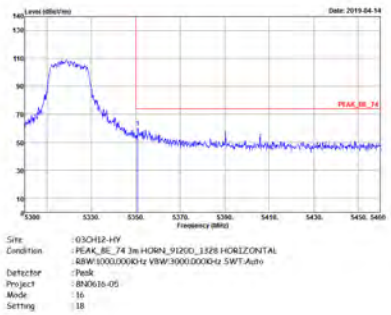
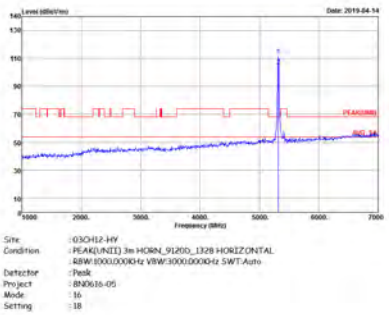
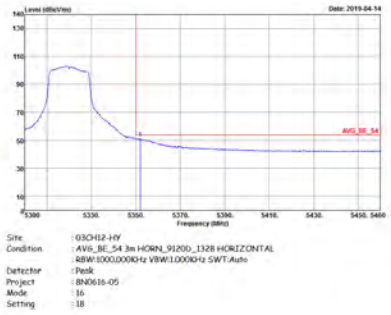
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH52 5260MHz - R	
2+5	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

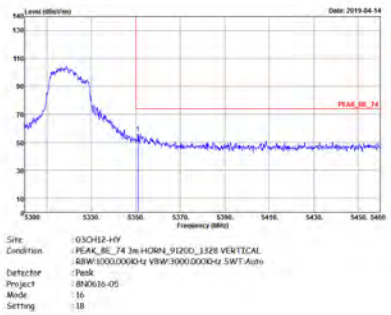
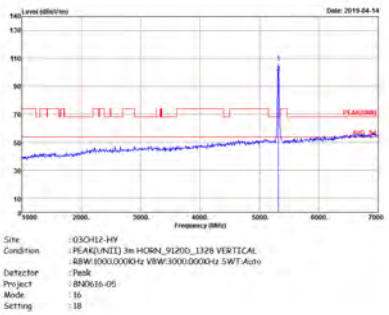
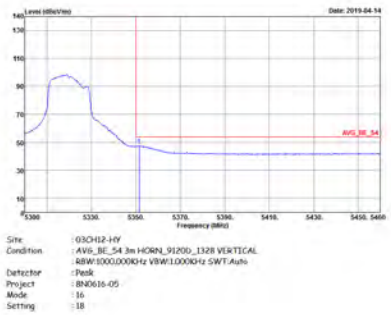
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH60 5300MHz - L	
2+5	Horizontal	Fundamental
Peak		
Avg.		Left blank

WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH60 5300MHz - R	
2+5	Horizontal	Vertical
Peak		Left blank
Avg.		Left blank

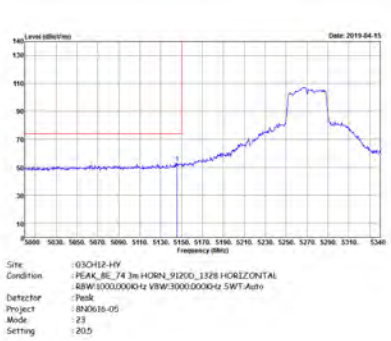
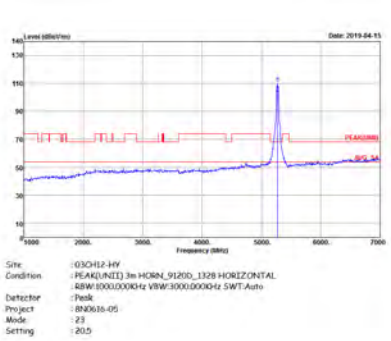
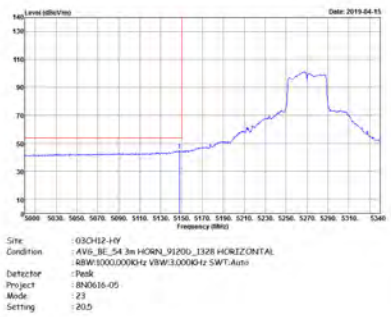
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH60 5300MHz - L	
2+5	Vertical	Fundamental
Peak		
Avg.		Left blank

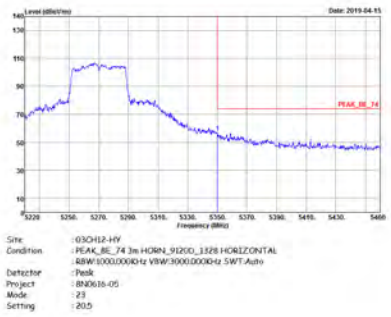
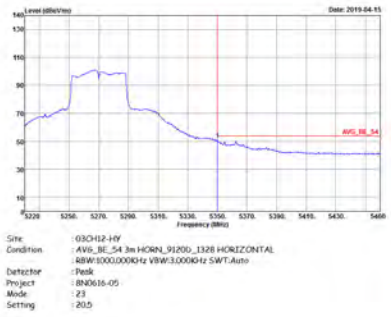
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH60 5300MHz - R	
2+5	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

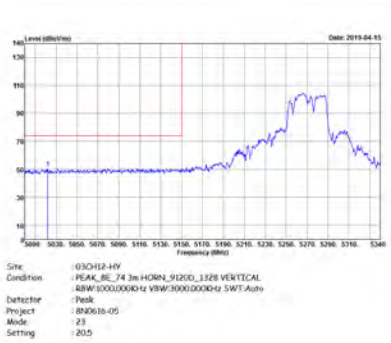
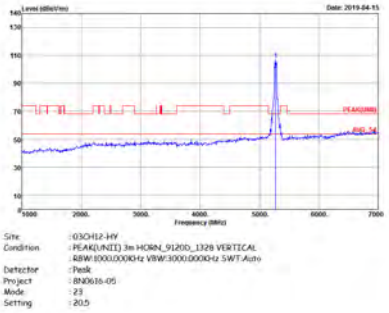
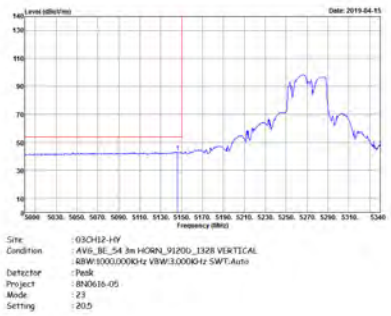
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH64 5320MHz	
2+5	Horizontal	Fundamental
Peak		
Avg.		Left blank

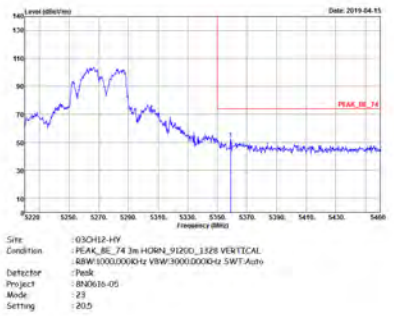
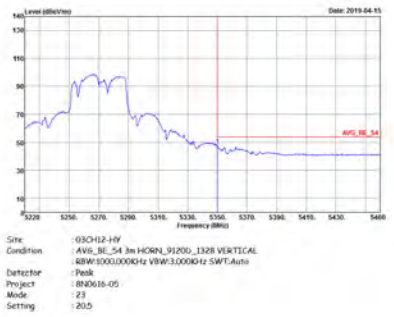
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH64 5320MHz	
2+5	Vertical	Fundamental
Peak		
Avg.		Left blank

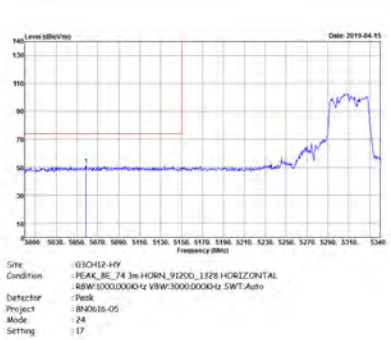
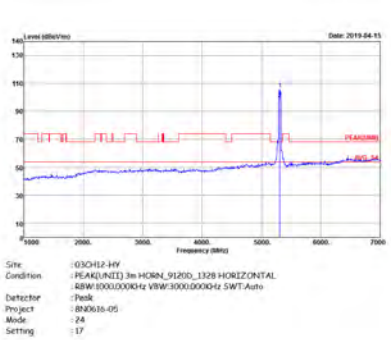
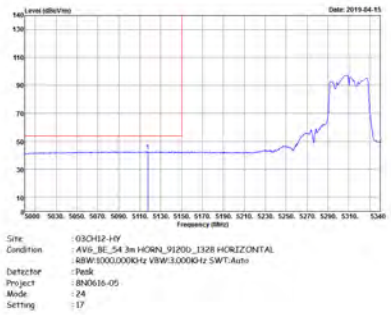
Band 2 5250~5350MHz
WIFI 802.11n HT40 (Band Edge @ 3m)

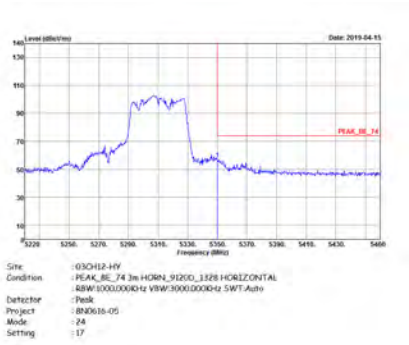
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT40 CH54 5270MHz - L	
2+5	Horizontal	Fundamental
Peak		
Avg.		Left blank

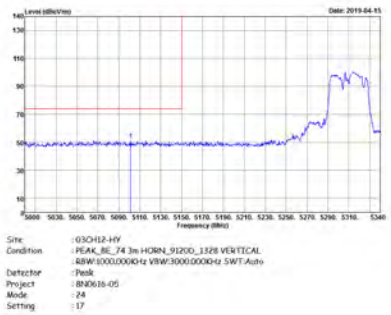
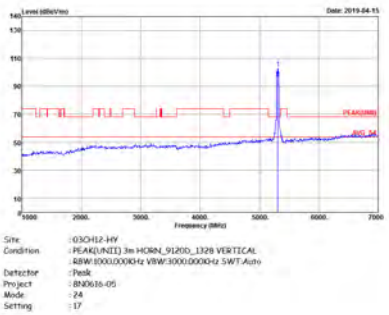
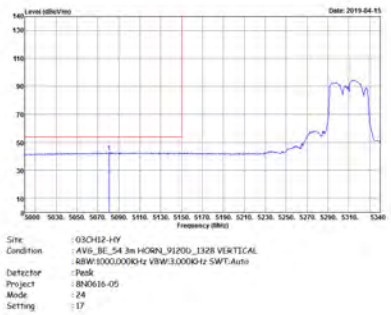
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT40 CH54 5270MHz - R	
2+5	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

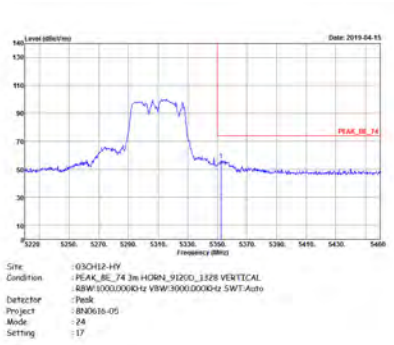
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT40 CH54 5270MHz - L	
2+5	Vertical	Vertical
Peak		
Avg.		Left blank

WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT40 CH54 5270MHz - R	
2+5	Vertical	Vertical
Peak		Left blank
Avg.		Left blank

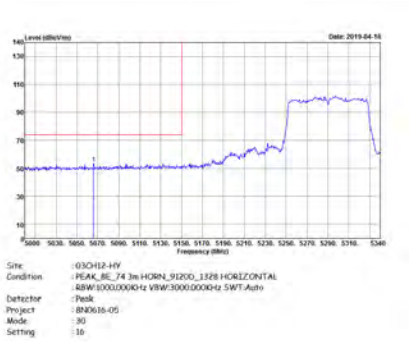
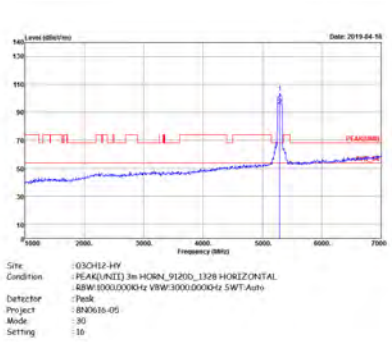
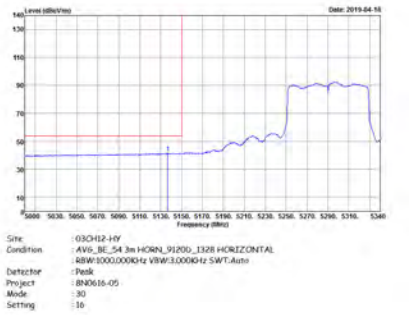
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT40 CH62 5310MHz - L	
2+5	Horizontal	Fundamental
Peak		
Avg.		Left blank

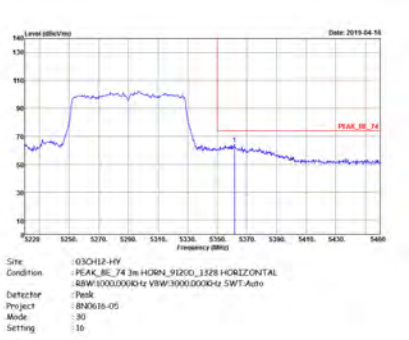
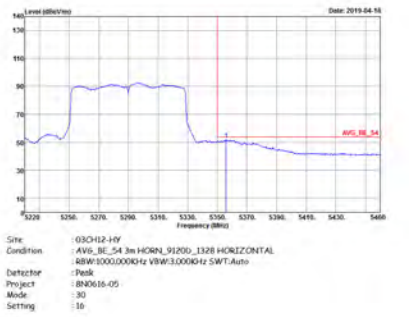
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT40 CH62 5310MHz - R	
2+5	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

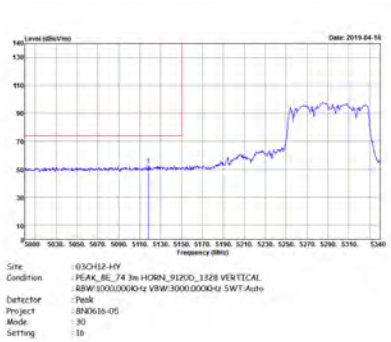
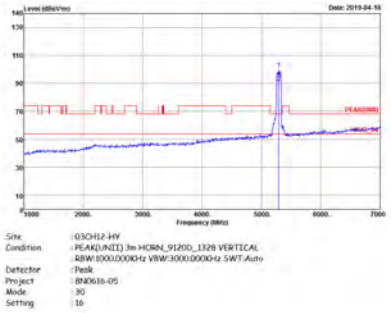
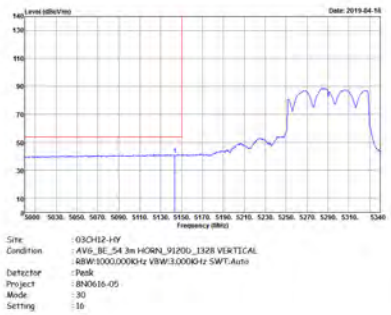
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT40 CH62 5310MHz - L	
2+5	Vertical	Fundamental
Peak		
Avg.		Left blank

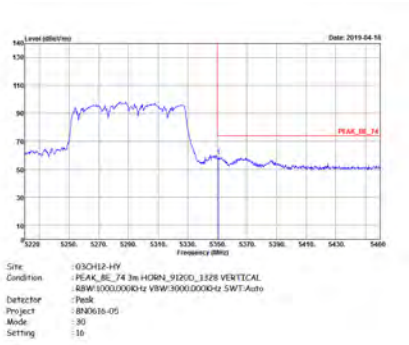
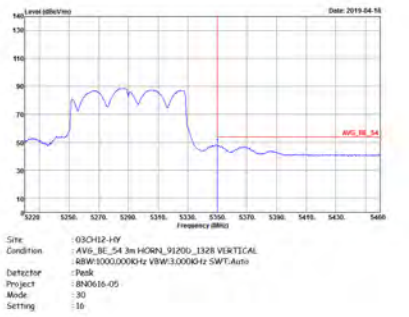
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT40 CH62 5310MHz - R	
2+5	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

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

WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH58 5290MHz - L	
2+5	Horizontal	Fundamental
Peak		
Avg.		Left blank

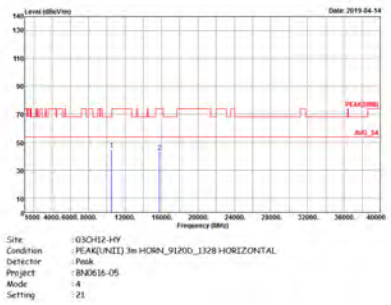
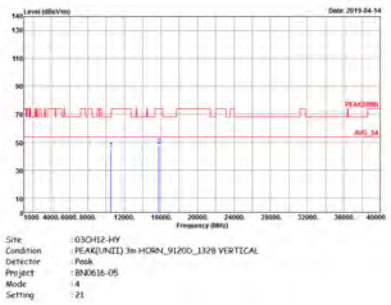
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH58 5290MHz - R	
2+5	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

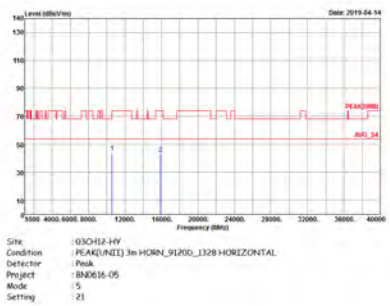
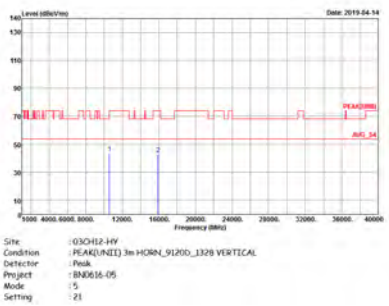
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH58 5290MHz - L	
2+5	Vertical	Fundamental
Peak		
Avg.		Left blank

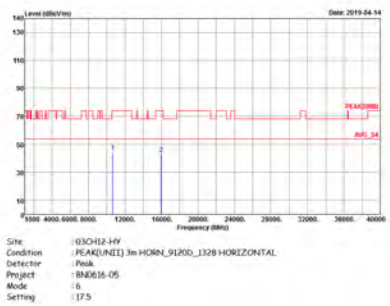
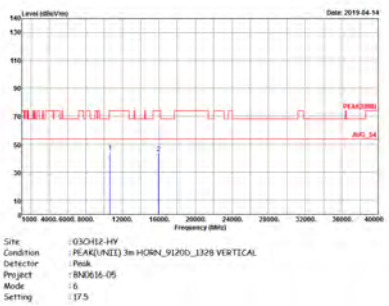
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH58 5290MHz - R	
2+5	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

Band 2 - 5250~5350MHz

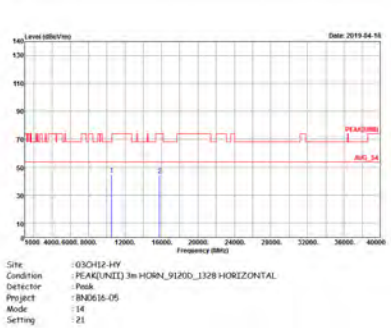
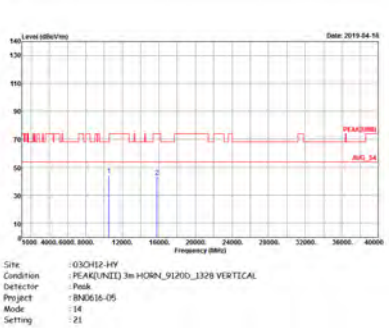
WIFI 802.11a (Harmonic @ 3m)

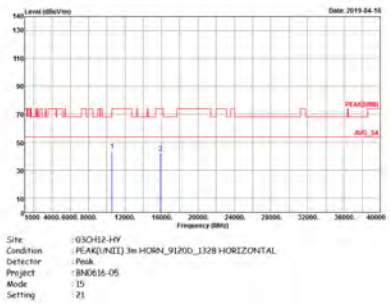
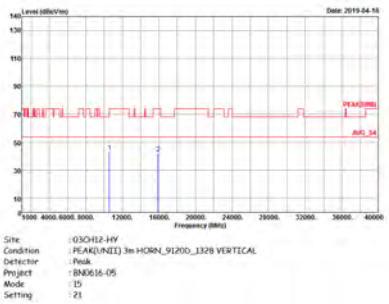
WIFI	Band 2 5250~5350MHz Harmonic @ 3m	
ANT	802.11a CH52 5260MHz	
2+5	Horizontal	Vertical
Peak Avg.		

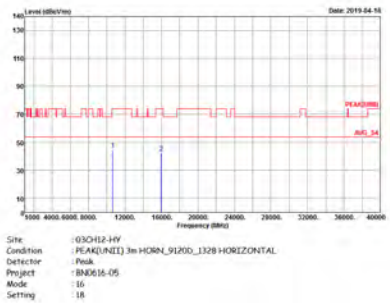
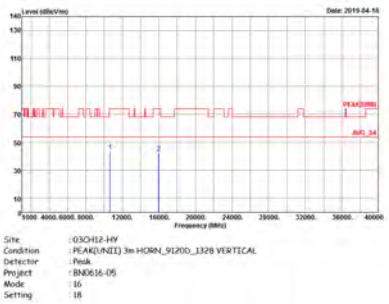
WIFI	Band 2 5250~5350MHz Harmonic @ 3m	
ANT	802.11a CH60 5300MHz	
2+5	Horizontal	Vertical
Peak Avg.		

WIFI	Band 2 5250~5350MHz Harmonic @ 3m	
ANT	802.11a CH64 5320MHz	
2+5	Horizontal	Vertical
Peak Avg.		

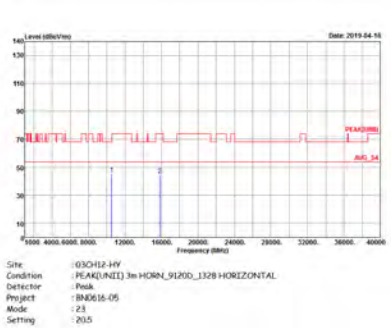
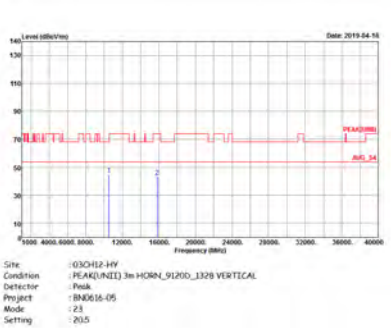
Band 2 5250~5350MHz
WIFI 802.11n HT20 (Harmonic @ 3m)

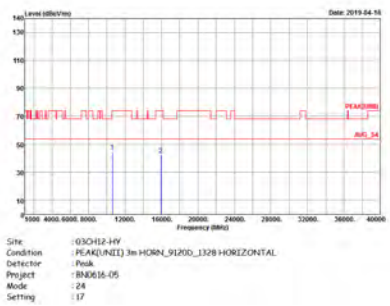
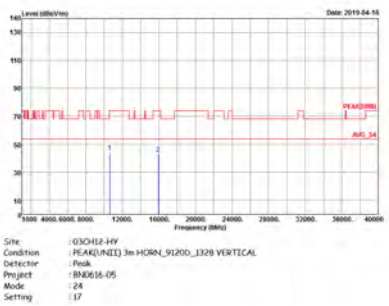
WIFI	Band 2 5250~5350MHz Harmonic @ 3m	
ANT	802.11n HT20 CH52 5260MHz	
2+5	Horizontal	Vertical
Peak Avg.		

WIFI	Band 2 5250~5350MHz Harmonic @ 3m	
ANT	802.11n HT20 CH60 5300MHz	
2+5	Horizontal	Vertical
Peak Avg.		

WIFI	Band 2 5250~5350MHz Harmonic @ 3m	
ANT	802.11n HT20 CH64 5320MHz	
2+5	Horizontal	Vertical
Peak Avg.		

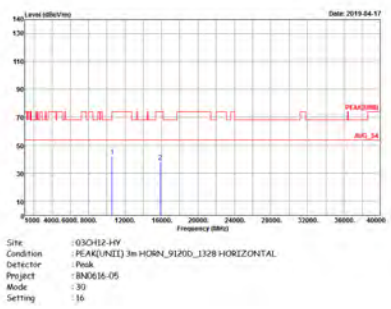
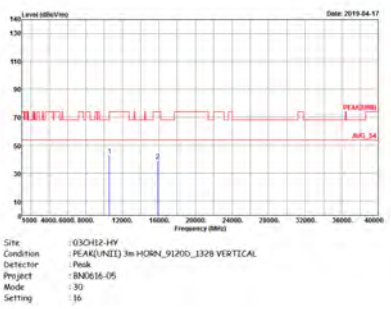
Band 2 5250~5350MHz
WIFI 802.11n HT40 (Harmonic @ 3m)

WIFI	Band 2 5250~5350MHz Harmonic @ 3m	
ANT	802.11n HT40 CH54 5270MHz	
2+5	Horizontal	Vertical
Peak Avg.		

WIFI	Band 2 5250~5350MHz Harmonic @ 3m	
ANT	802.11n HT40 CH62 5310MHz	
2+5	Horizontal	Vertical
Peak Avg.		

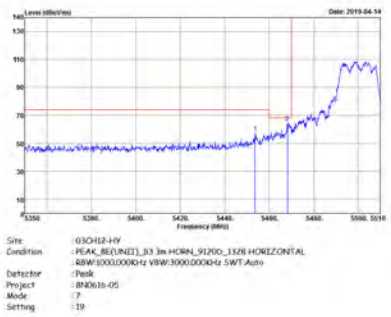
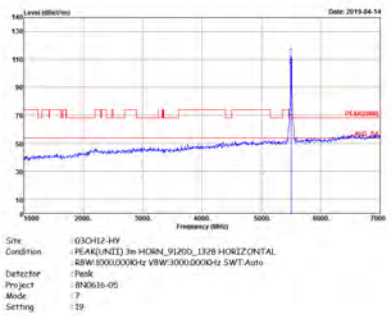
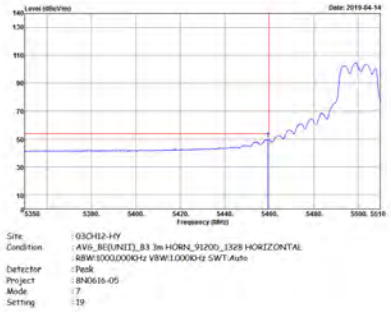
Band 2 5250~5350MHz

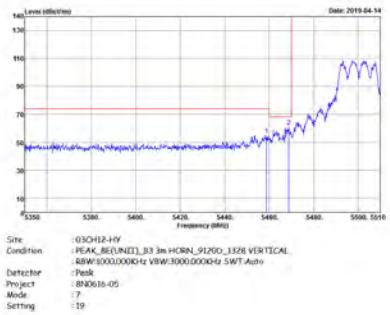
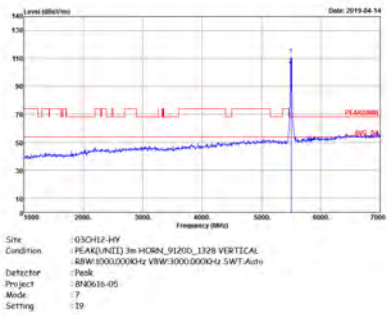
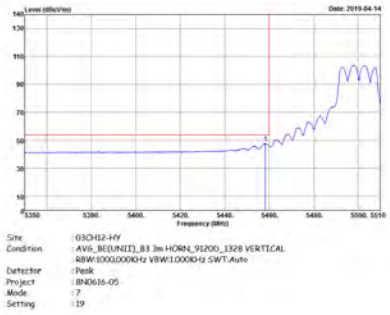
WIFI 802.11ac VHT80 (Harmonic @ 3m)

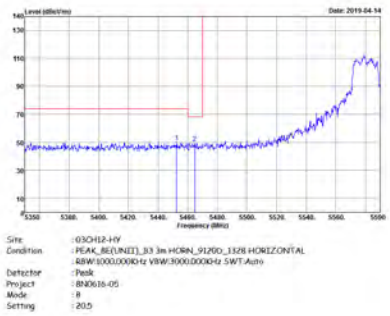
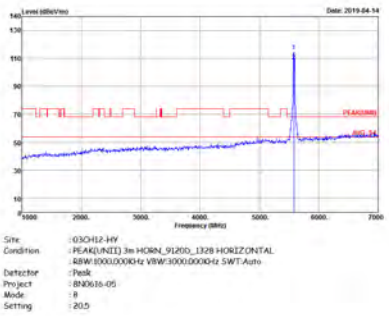
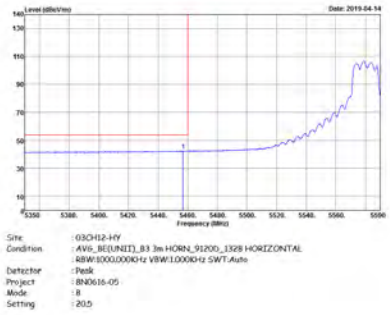
WIFI	Band 2 5250~5350MHz Harmonic @ 3m	
ANT	802.11ac VHT80 CH58 5290MHz	
2+5	Horizontal	Vertical
Peak Avg.		

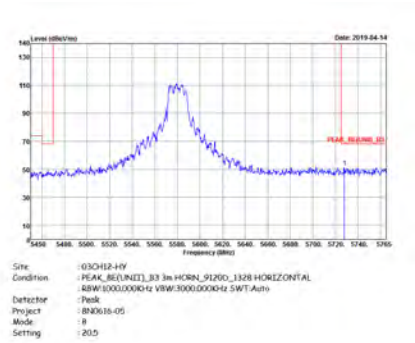
Band 3 - 5470~5725MHz

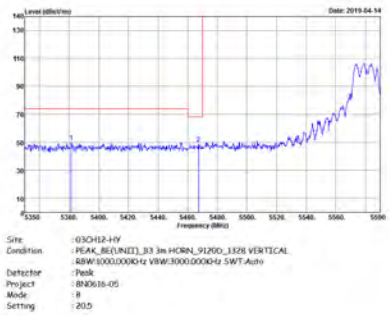
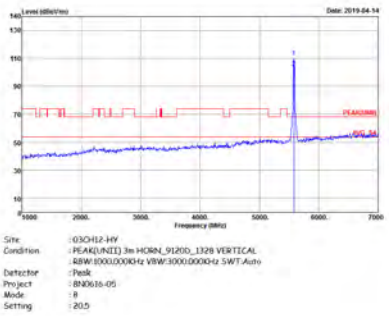
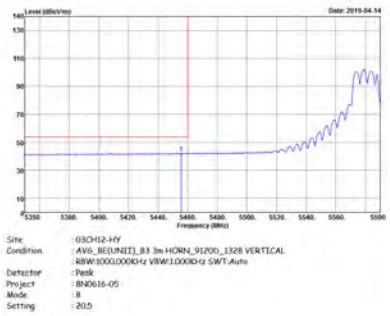
WIFI 802.11a (Band Edge @ 3m)

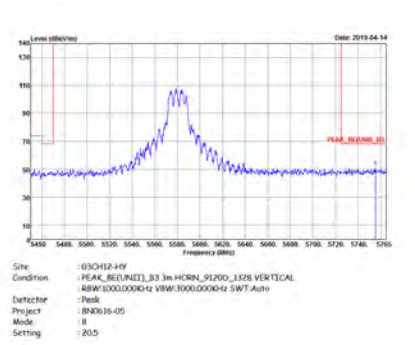
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH100 5500MHz	
2+5	Horizontal	Fundamental
Peak		
Avg.		Left blank

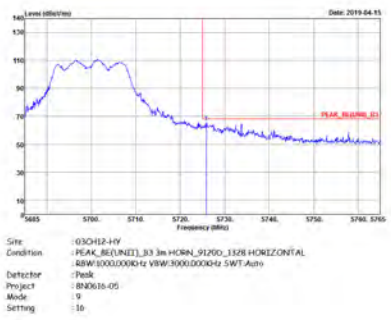
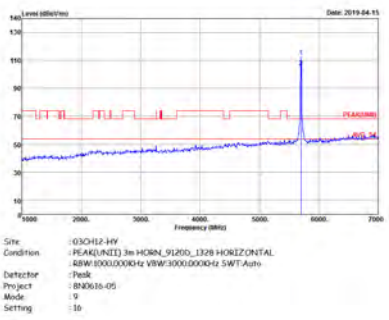
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH100 5500MHz	
2+5	Vertical	Fundamental
Peak		
Avg.		Left blank

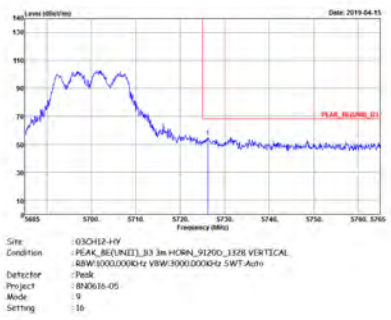
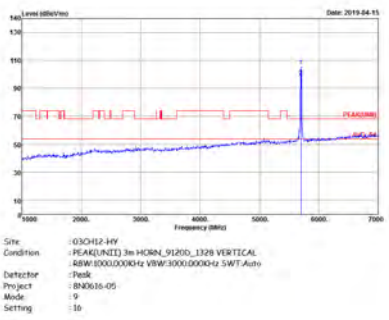
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH116 5580MHz - L	
2+5	Horizontal	Fundamental
Peak		
Avg.		Left blank

WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH116 5580MHz - R	
2+5	Horizontal	Fundamental
Peak		Left blank

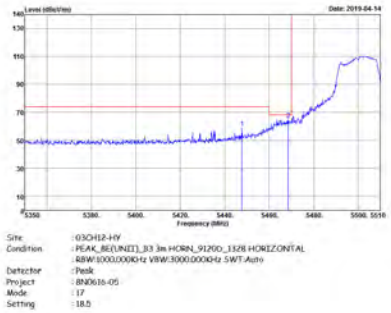
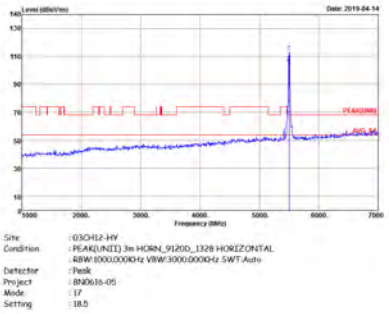
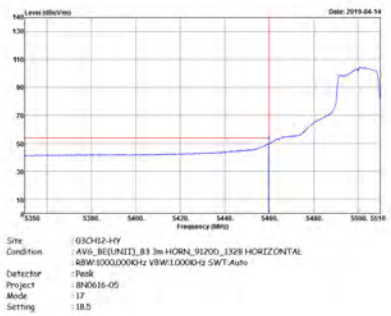
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH116 5580MHz - L	
2+5	Vertical	Fundamental
Peak		
Avg.		Left blank

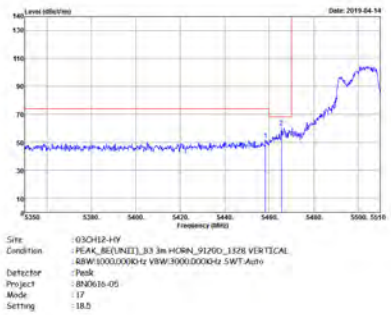
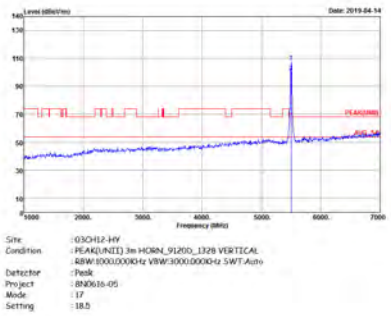
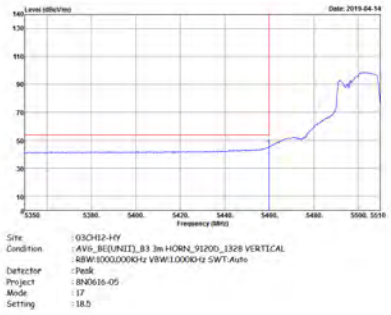
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH116 5580MHz - R	
2+5	Vertical	Fundamental
Peak		Left blank

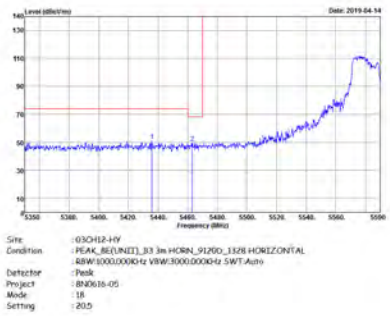
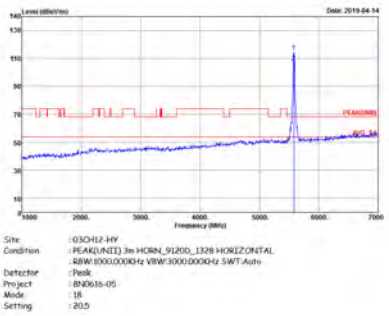
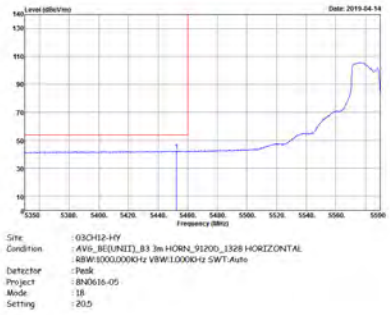
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH140 5700MHz	
2+5	Horizontal	Fundamental
Peak		

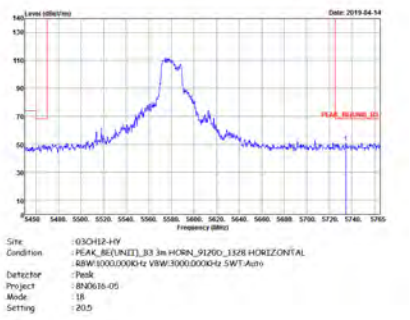
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH140 5700MHz	
2+5	Vertical	Fundamental
Peak		

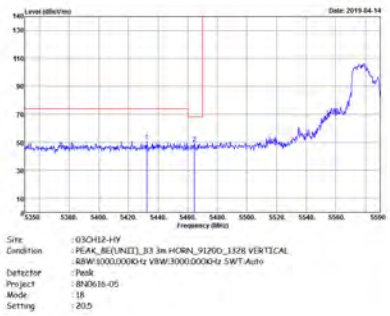
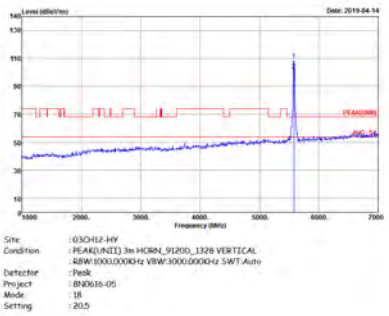
Band 3 5470~5725MHz
WIFI 802.11n HT20 (Band Edge @ 3m)

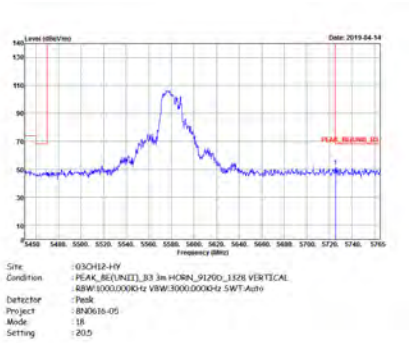
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT20 CH100 5500MHz	
2+5	Horizontal	Fundamental
Peak		
Avg.		Left blank

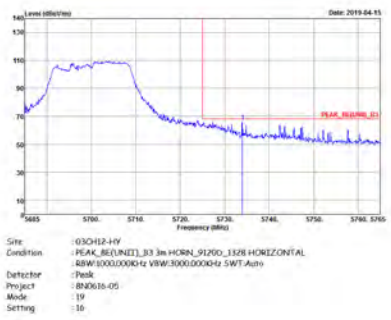
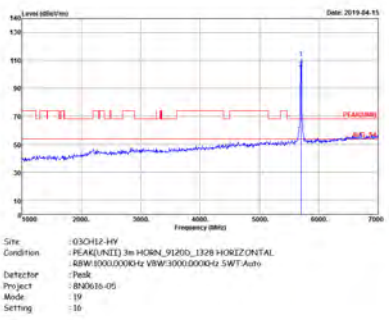
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT20 CH100 5500MHz	
2+5	Vertical	Fundamental
Peak		
Avg.		Left blank

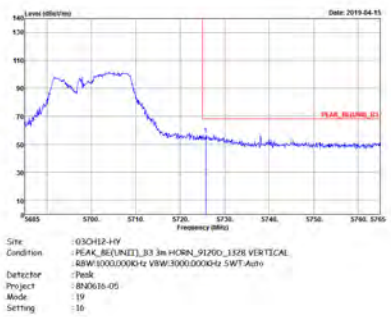
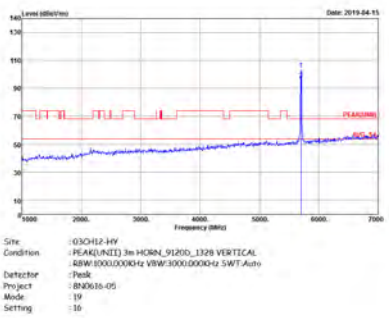
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT20 CH116 5580MHz - L	
2+5	Horizontal	Fundamental
Peak		
Avg.		Left blank

WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT20 CH116 5580MHz - R	
2+5	Horizontal	Fundamental
Peak		Left blank

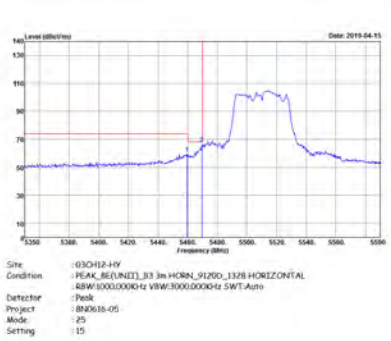
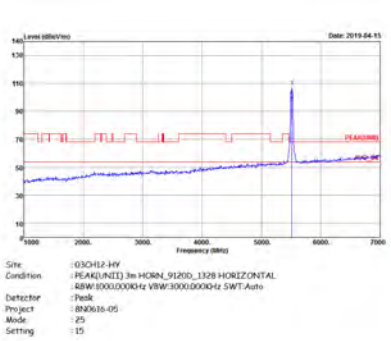
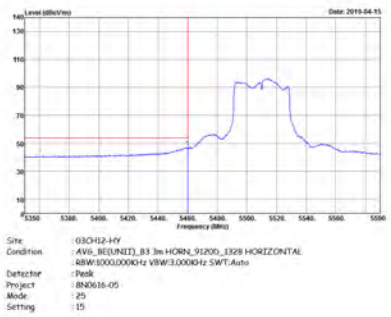
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT20 CH116 5580MHz - L	
2+5	Vertical	Fundamental
Peak		
Avg.		Left blank

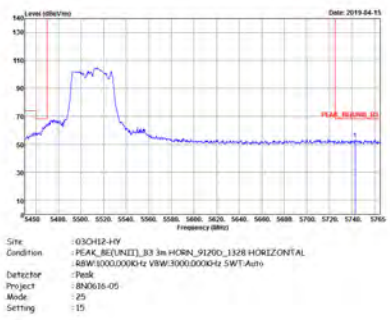
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT20 CH116 5580MHz - R	
2+5	Vertical	Fundamental
Peak		Left blank

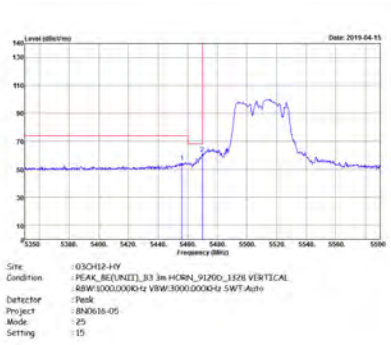
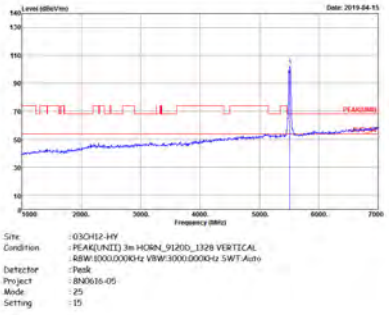
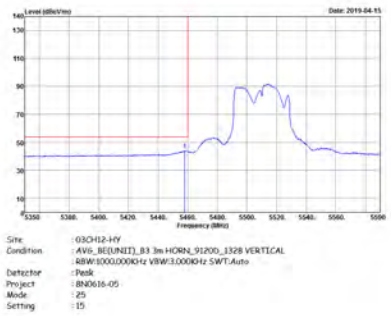
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT20 CH140 5700MHz	
2+5	Horizontal	Fundamental
Peak		

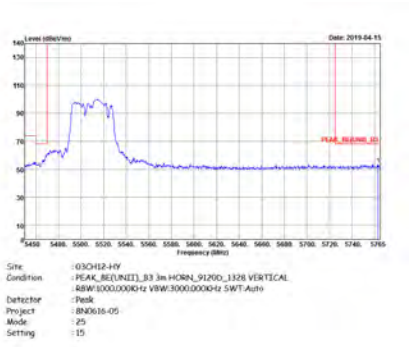
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT20 CH140 5700MHz	
2+5	Vertical	Fundamental
Peak.		

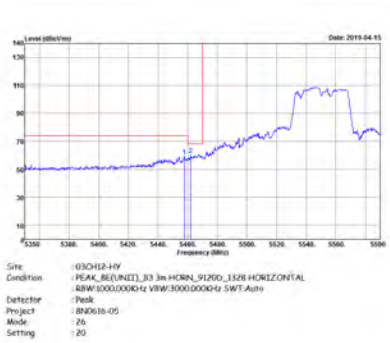
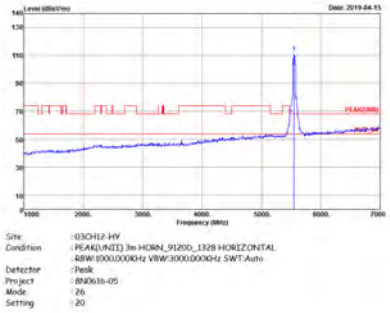
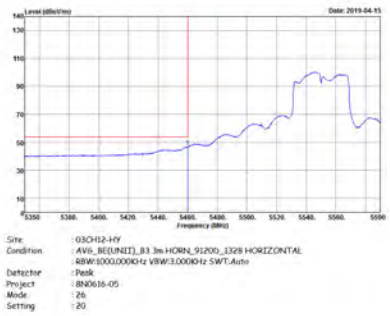
Band 3 5470~5725MHz
WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH102 5510MHz - L	
2+5	Horizontal	Fundamental
Peak		
Avg.		Left blank

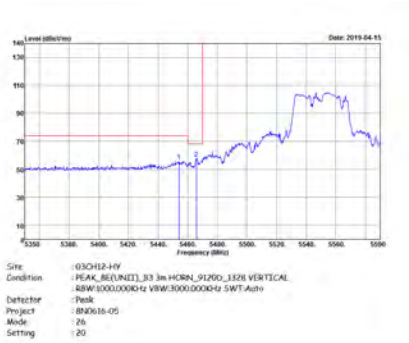
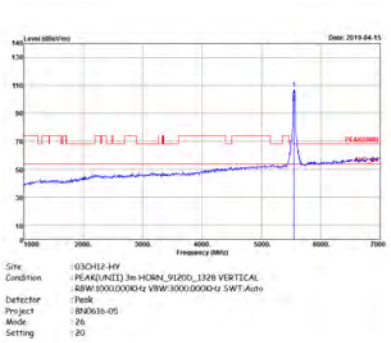
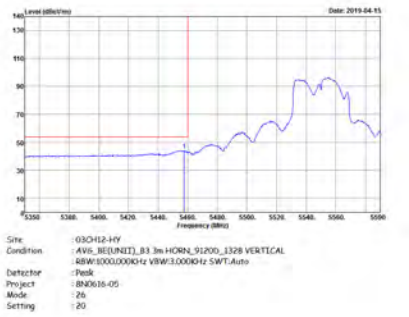
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH102 5510MHz - R	
2+5	Horizontal	Fundamental
Peak		Left blank

WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH102 5510MHz - L	
2+5	Vertical	Fundamental
Peak		
Avg.		Left blank

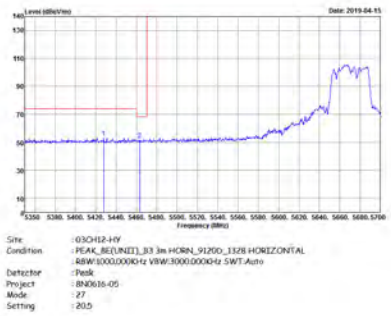
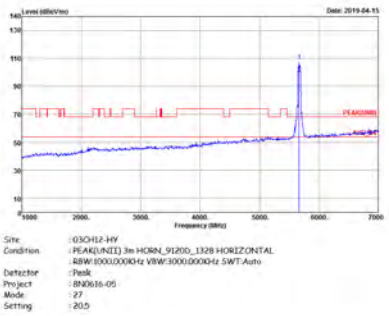
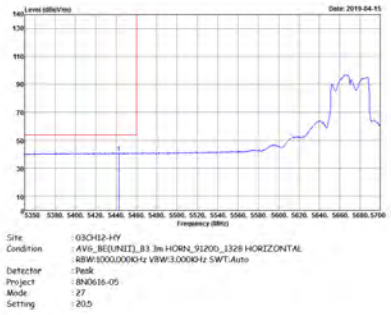
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH102 5510MHz - R	
2+5	Vertical	Fundamental
Peak		Left blank

WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH110 5550MHz - L	
2+5	Horizontal	Fundamental
Peak		
Avg.		Left blank

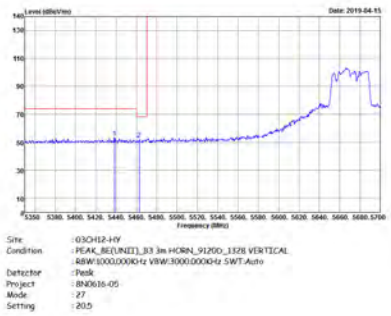
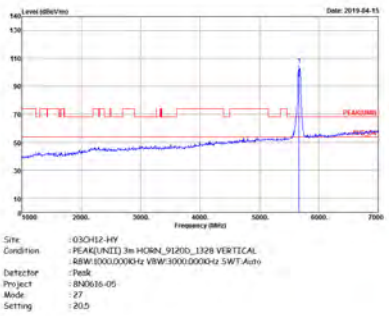
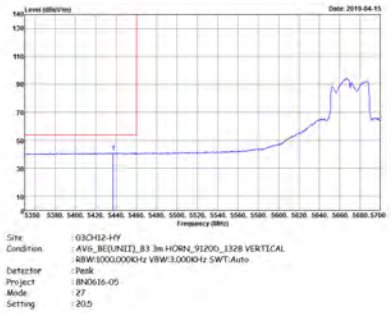
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH110 5550MHz - R	
2+5	Horizontal	Fundamental
Peak		Left blank

WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH110 5550MHz - L	
2+5	Vertical	Fundamental
Peak		
Avg.		Left blank

WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH110 5550MHz - R	
2+5	Vertical	Fundamental
Peak		Left blank

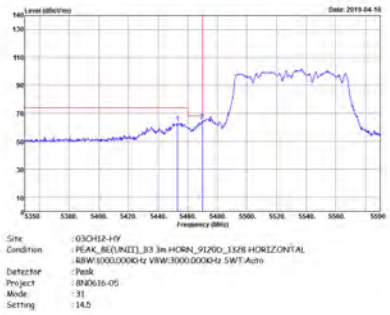
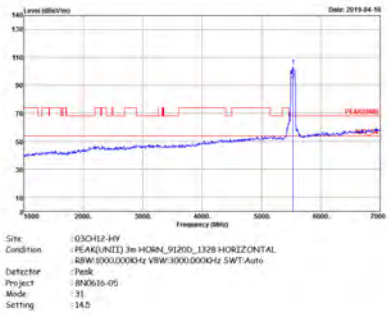
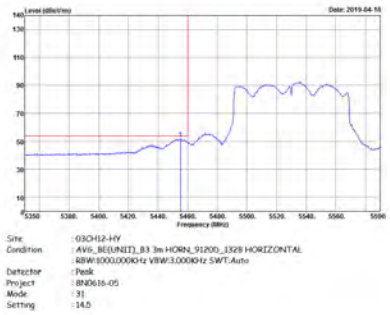
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH134 5670MHz - L	
2+5	Horizontal	Fundamental
Peak		
Avg.		Left blank

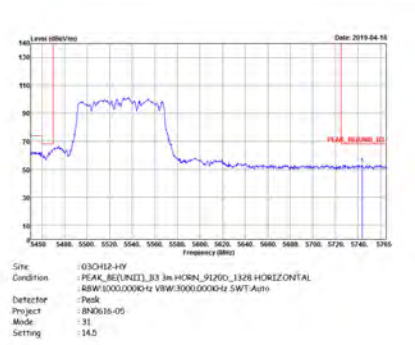
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH134 5670MHz - R	
2+5	Horizontal	Fundamental
Peak		Left blank

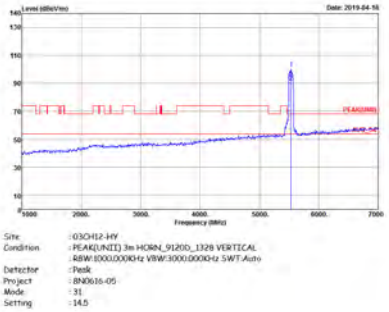
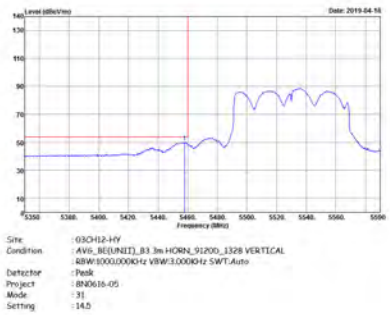
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH134 5670MHz - L	
2+5	Vertical	Fundamental
Peak		
Avg.		Left blank

WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH134 5670MHz - R	
2+5	Vertical	Fundamental
Peak		Left blank

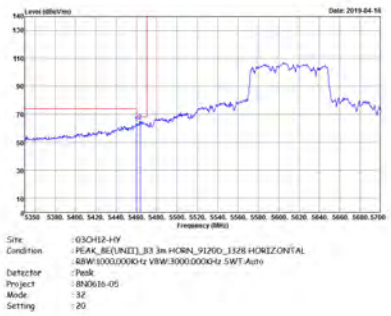
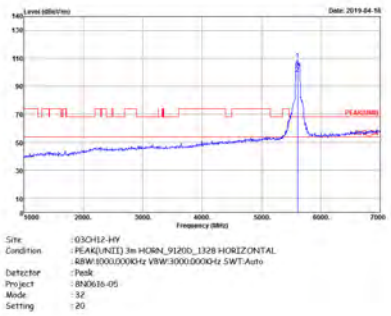
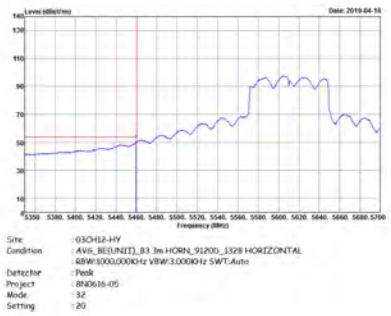
Band 3 5470~5725MHz
WIFI 802.11ac VHT80 (Band Edge @ 3m)

WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH106 5530MHz - L	
2+5	Horizontal	Fundamental
Peak		
Avg.		Left blank

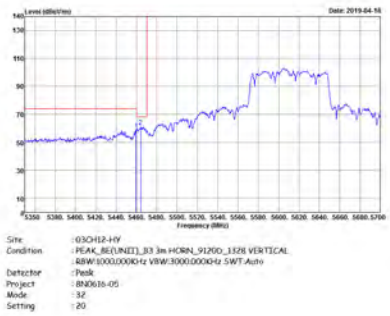
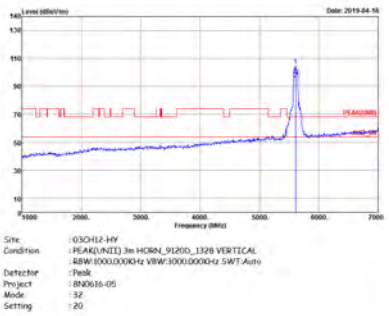
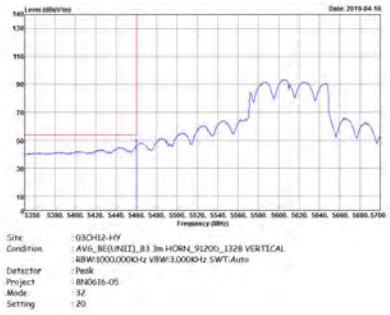
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH106 5530MHz - R	
2+5	Horizontal	Fundamental
Peak		Left blank

WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH106 5530MHz - L	
2+5	Vertical	Fundamental
Peak		
Avg.		Left blank

WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH106 5530MHz - R	
2+5	Vertical	Fundamental
Peak		Left blank

WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH122 5610MHz - L	
2+5	Horizontal	Fundamental
Peak		
Avg.		Left blank

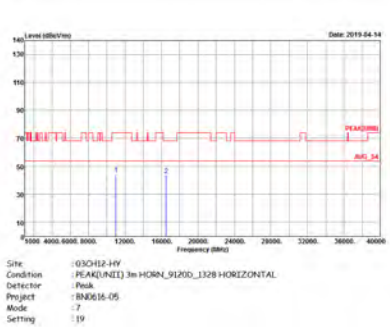
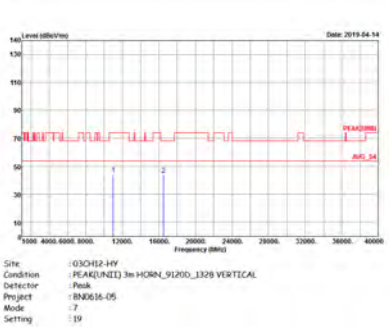
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH122 5610MHz - R	
2+5	Horizontal	Fundamental
Peak		Left blank

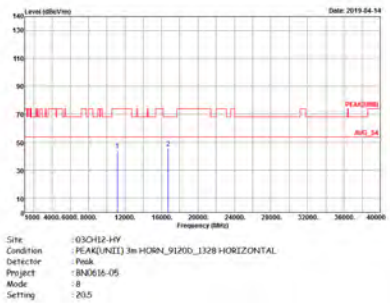
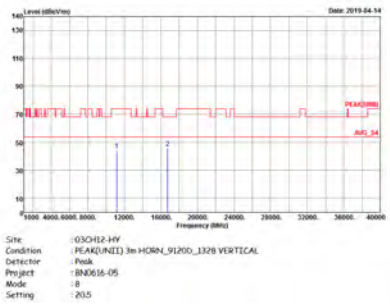
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH122 5610MHz - L	
2+5	Vertical	Fundamental
Peak		
Avg.		Left blank

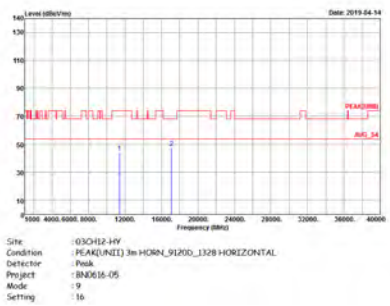
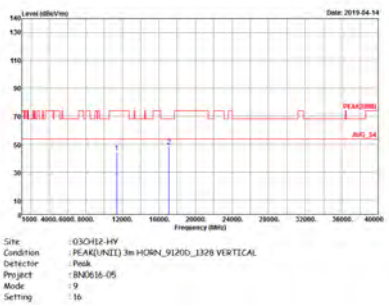
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH122 5610MHz - R	
2+5	Vertical	Fundamental
Peak		Left blank

Band 3 - 5470~5725MHz

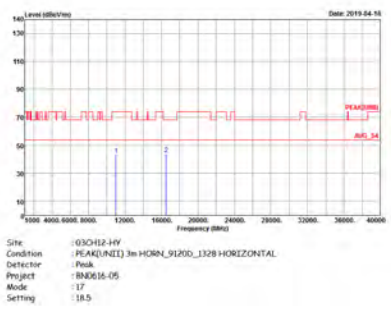
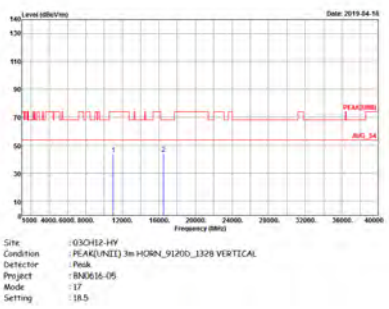
WIFI 802.11a (Harmonic @ 3m)

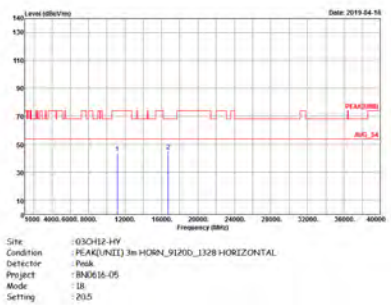
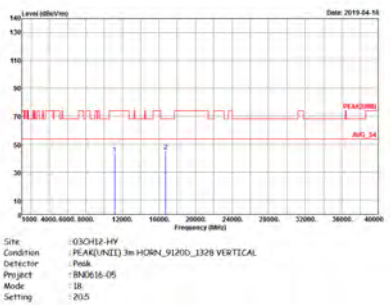
WIFI	Band 3 5470~5725MHz Harmonic @ 3m	
ANT	802.11a CH100 5500MHz	
2+5	Horizontal	Vertical
Peak Avg.		

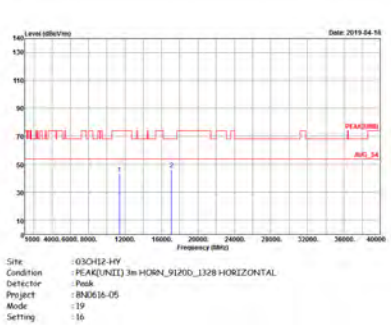
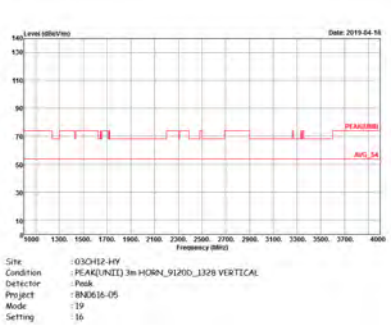
WIFI	Band 3 5470~5725MHz Harmonic @ 3m	
ANT	802.11a CH116 5580MHz	
2+5	Horizontal	Vertical
Peak Avg.		

WIFI	Band 3 5470~5725MHz Harmonic @ 3m	
ANT	802.11a CH140 5700MHz	
2+5	Horizontal	Vertical
Peak Avg.		

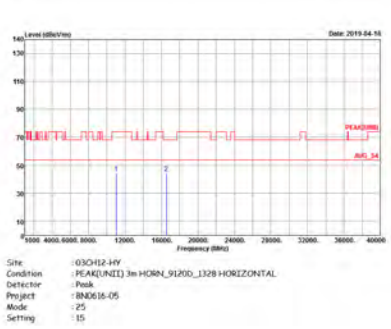
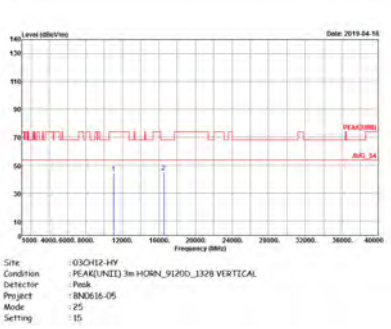
Band 3 5470~5725MHz
WIFI 802.11n HT20 (Harmonic @ 3m)

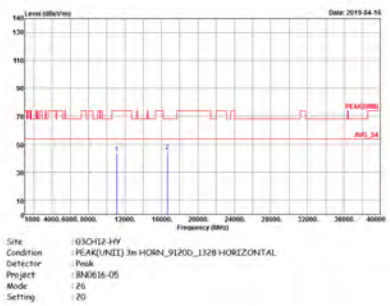
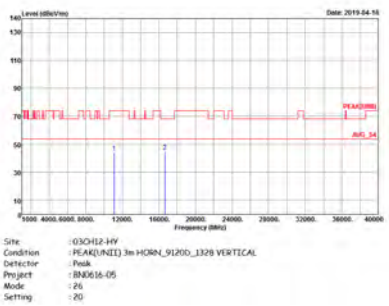
WIFI	Band 3 5470~5725MHz Harmonic @ 3m	
ANT	802.11n HT20 CH100 5500MHz	
2+5	Horizontal	Vertical
Peak Avg.		

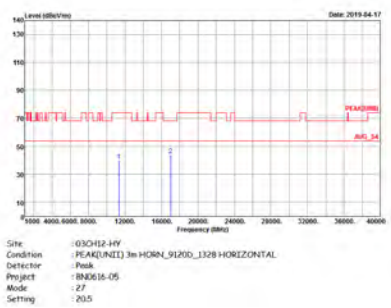
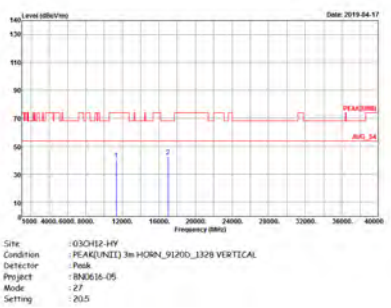
WIFI	Band 3 5470~5725MHz Harmonic @ 3m	
ANT	802.11n HT20 CH116 5580MHz	
2+5	Horizontal	Vertical
Peak Avg.		

WIFI	Band 3 5470~5725MHz Harmonic @ 3m	
ANT	802.11n HT20 CH140 5700MHz	
2+5	Horizontal	Vertical
Peak Avg.		

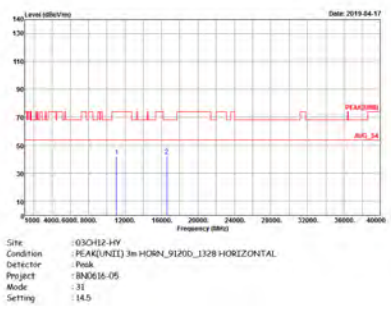
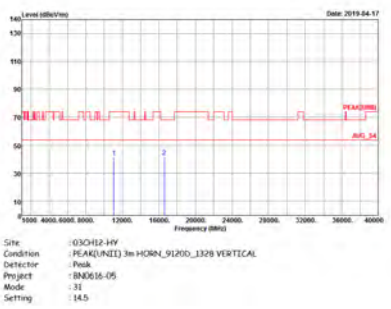
Band 3 5470~5725MHz
WIFI 802.11n HT40 (Harmonic @ 3m)

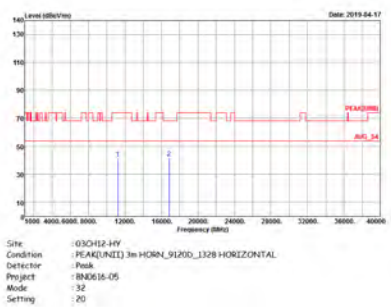
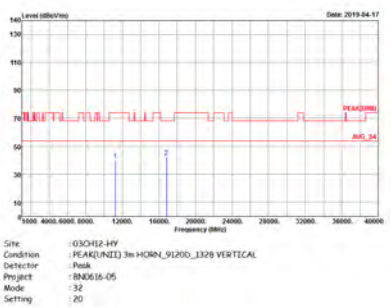
WIFI	Band 3 5470~5725MHz Harmonic @ 3m	
ANT	802.11n HT40 CH102 5510MHz	
2+5	Horizontal	Vertical
Peak Avg.		

WIFI	Band 3 5470~5725MHz Harmonic @ 3m	
ANT	802.11n HT40 CH110 5550MHz	
2+5	Horizontal	Vertical
Peak Avg.		

WIFI	Band 3 5470~5725MHz Harmonic @ 3m	
ANT	802.11n HT40 CH134 5670MHz	
2+5	Horizontal	Vertical
Peak Avg.		

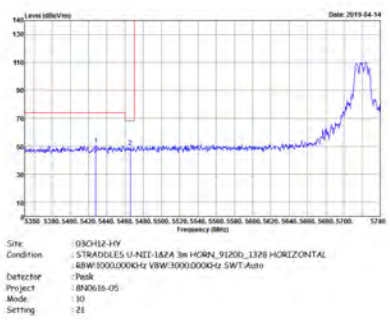
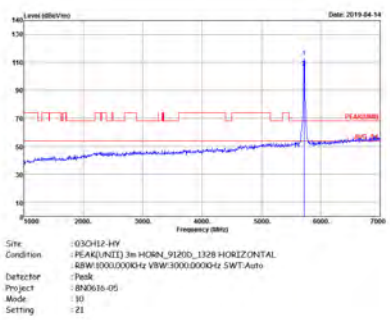
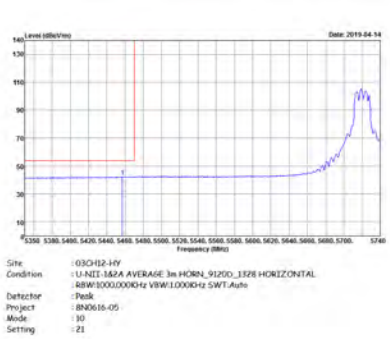
Band 3 5470~5725MHz
WIFI 802.11ac VHT80 (Harmonic @ 3m)

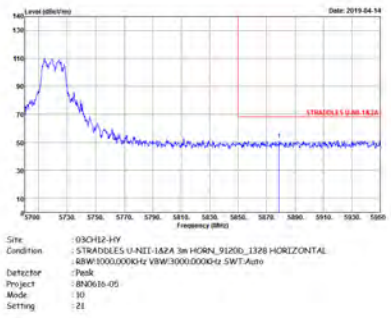
WIFI	Band 3 5470~5725MHz Harmonic @ 3m	
ANT	802.11ac VHT80 CH106 5530MHz	
2+5	Horizontal	Vertical
Peak Avg.		

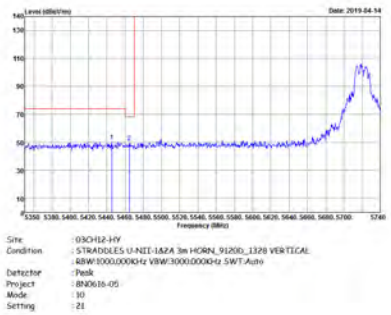
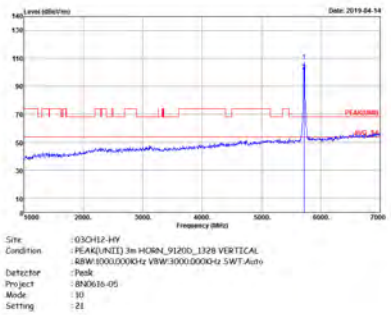
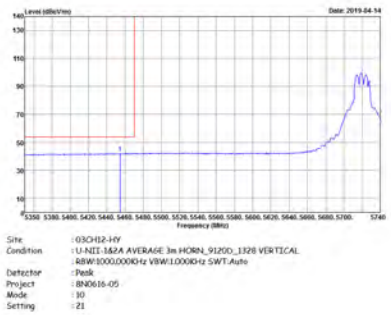
WIFI	Band 3 5470~5725MHz Harmonic @ 3m	
ANT	802.11ac VHT80 CH122 5610MHz	
2+5	Horizontal	Vertical
Peak Avg.		

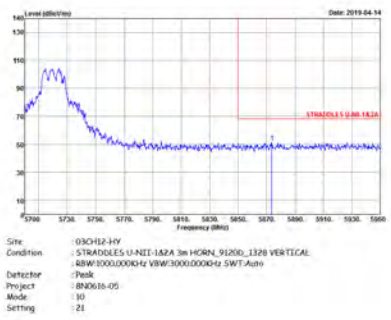
Band 3 - Straddle Channel

WIFI 802.11a (Fundamental @ 3m)

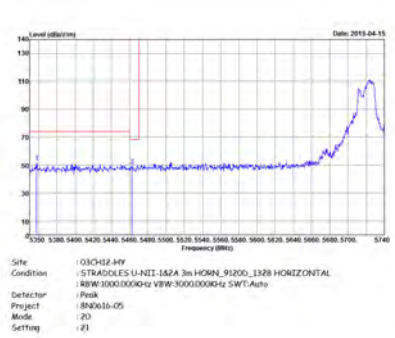
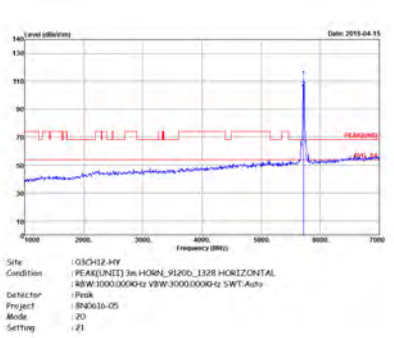
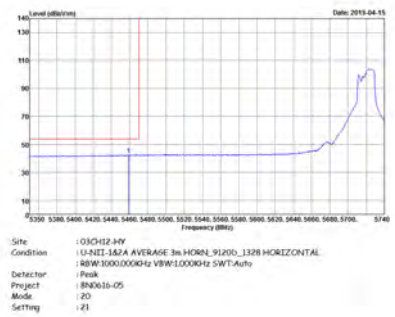
WIFI	Band 3 Straddle Channel Fundamental @ 3m	
ANT	802.11a CH144 5720MHz - L	
2+5	Horizontal	Fundamental
Peak		
Avg.		Left blank

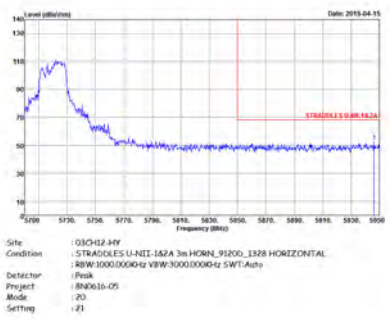
WIFI	Band 3 Straddle Channel Fundamental @ 3m	
ANT	802.11a CH144 5720MHz - R	
2+5	Horizontal	Fundamental
Peak		Left blank

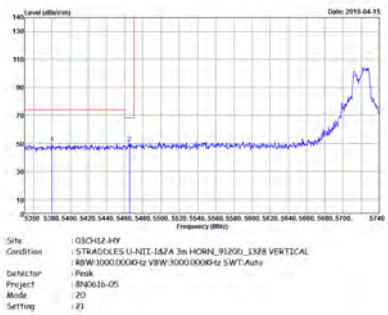
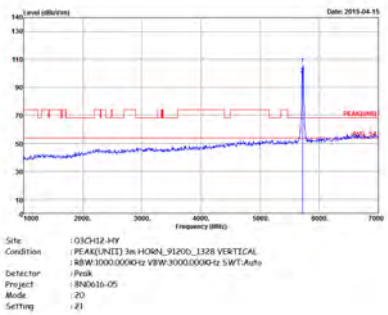
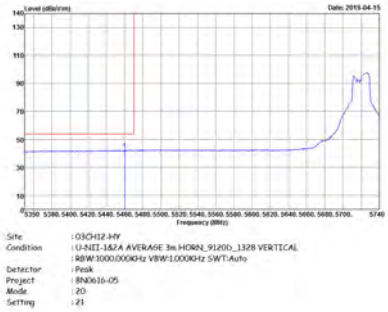
WIFI	Band 3 Straddle Channel Fundamental @ 3m	
ANT	802.11a CH144 5720MHz - L	
2+5	Vertical	Fundamental
Peak		
Avg.		Left blank

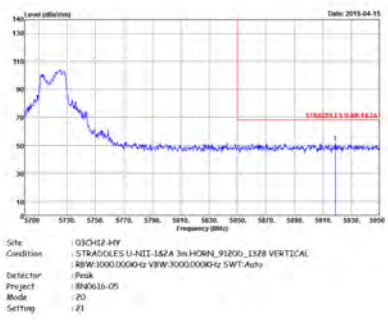
WIFI	Band 3 Straddle Channel Fundamental @ 3m	
ANT	802.11a CH140 5720MHz - R	
2+5	Vertical	Fundamental
Peak		Left blank

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

WIFI	Band 3 Straddle Channel Fundamental @ 3m	
ANT	802.11n HT20 CH144 5720MHz - L	
2+5	Horizontal	Fundamental
Peak		
Avg.		Left blank

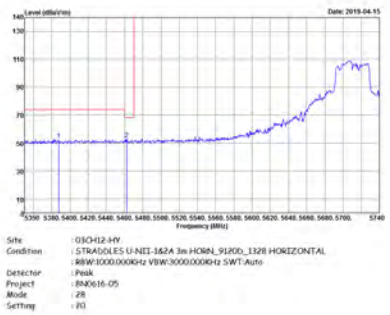
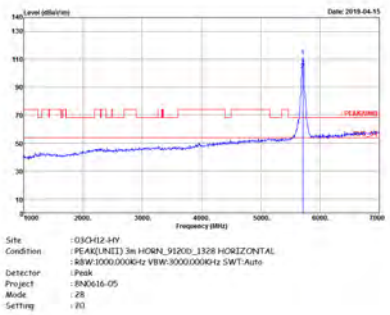
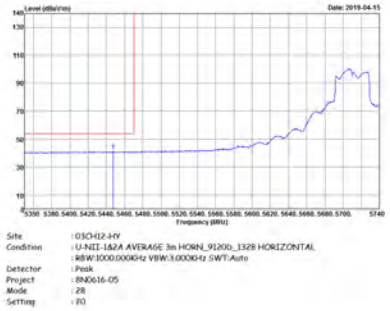
WIFI	Band 3 Straddle Channel Fundamental @ 3m	
ANT	802.11n HT20 CH144 5720MHz - R	
2+5	Horizontal	Fundamental
Peak		Left blank

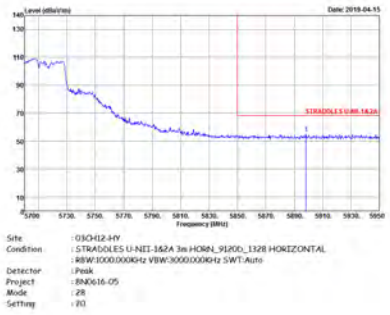
WIFI	Band 3 Straddle Channel Fundamental @ 3m	
ANT	802.11n HT20 CH144 5720MHz - L	
2+5	Vertical	Fundamental
Peak		
Avg.		Left blank

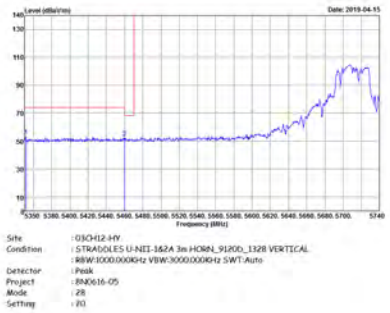
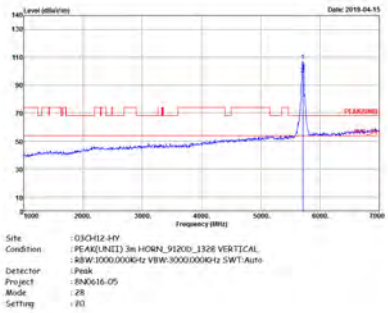
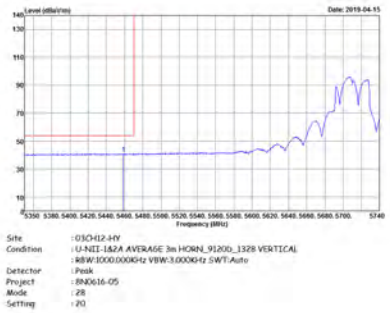
WIFI	Band 3 Straddle Channel Fundamental @ 3m	
ANT	802.11n HT20 CH144 5720MHz - R	
2+5	Vertical	Fundamental
Peak		Left blank

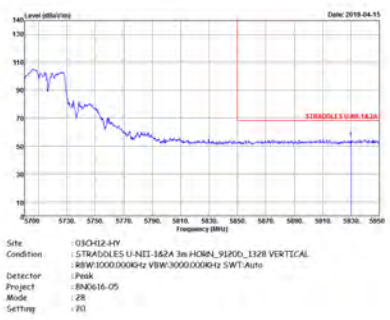
Band 3 – Straddle Channel

WIFI 802.11n HT40 (Fundamental @ 3m)

WIFI	Band 3 Straddle Channel Fundamental @ 3m	
ANT	802.11n HT40 CH142 5710MHz - L	
2+5	Horizontal	Fundamental
Peak		
Avg.		Left blank

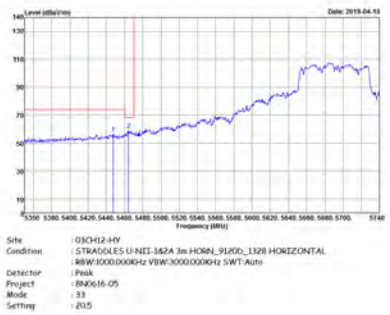
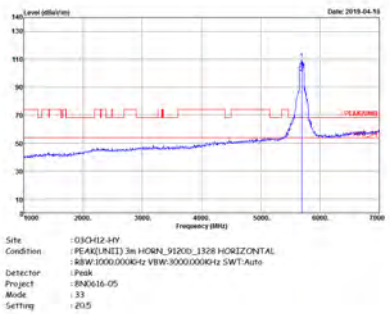
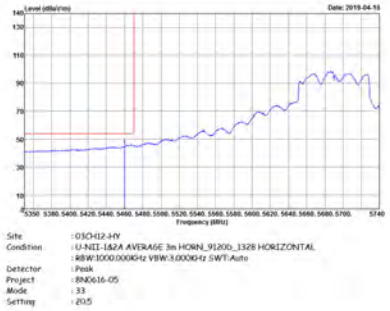
WIFI	Band 3 Straddle Channel Fundamental @ 3m	
ANT	802.11n HT40 CH142 5710MHz - R	
2+5	Horizontal	Fundamental
Peak		Left blank

WIFI	Band 3 Straddle Channel Fundamental @ 3m	
ANT	802.11n HT40 CH142 5710MHz - L	
2+5	Vertical	Fundamental
Peak		
Avg.		Left blank

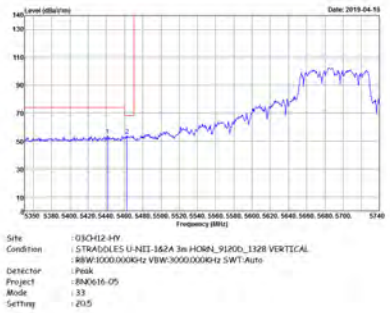
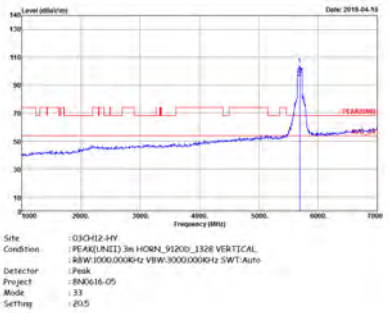
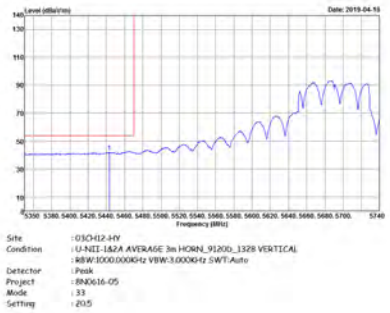
WIFI	Band 3 Straddle Channel Fundamental @ 3m	
ANT	802.11n HT40 CH142 5710MHz - R	
2+5	Vertical	Fundamental
Peak		Left blank

Band 3 – Straddle Channel

WIFI 802.11ac VHT80 (Fundamental @ 3m)

WIFI	Band 3 Straddle Channel Fundamental @ 3m	
ANT	802.11ac VHT80 CH138 5690MHz - L	
2+5	Horizontal	Fundamental
Peak		
Avg.		Left blank

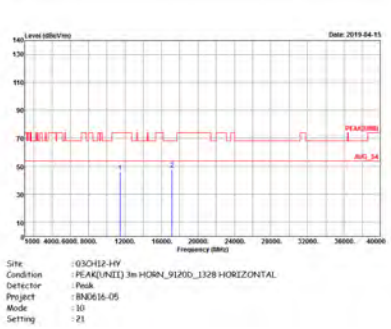
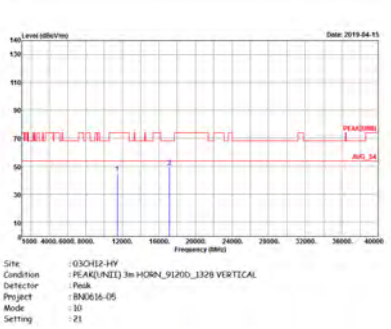
WIFI	Band 3 Straddle Channel Fundamental @ 3m	
ANT	802.11ac VHT80 CH138 5690MHz - R	
2+5	Horizontal	Fundamental
Peak		Left blank

WIFI	Band 3 Straddle Channel Fundamental @ 3m	
ANT	802.11ac VHT80 CH138 5690MHz - L	
2+5	Vertical	Fundamental
Peak		
Avg.		Left blank

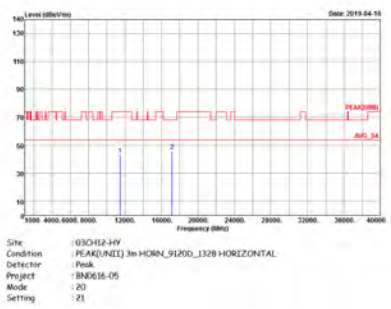
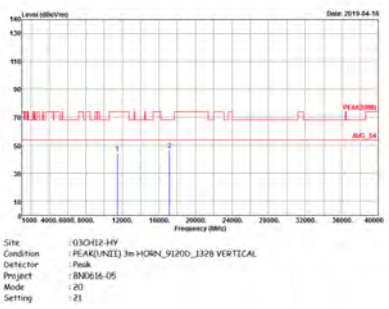
WIFI	Band 3 Straddle Channel Fundamental @ 3m	
ANT	802.11ac VHT80 CH138 5690MHz - R	
2+5	Vertical	Fundamental
Peak		Left blank

Band 3 - Straddle Channel

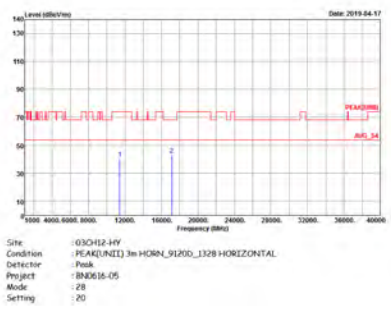
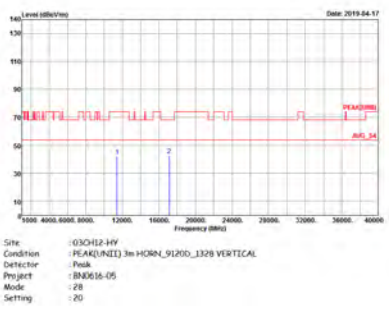
WIFI 802.11a (Harmonic @ 3m)

WIFI	Band 3 Straddle Channel Harmonic @ 3m	
ANT	802.11a CH144 5720MHz	
2+5	Horizontal	Vertical
Peak Avg.		

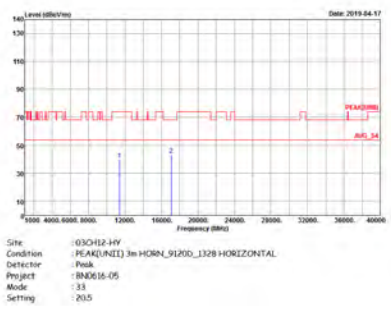
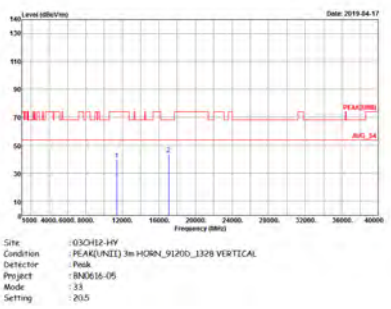
Band 3 – Straddle Channel
WIFI 802.11n HT20 (Harmonic @ 3m)

WIFI	Band 3 Straddle Channel Harmonic @ 3m	
ANT	802.11n HT20 CH144 5720MHz	
2+5	Horizontal	Vertical
Peak Avg.		

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

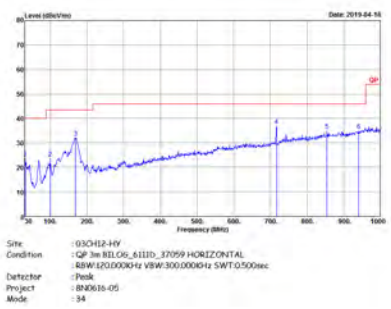
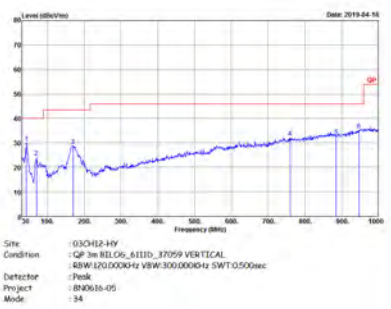
WIFI	Band 3 Straddle Channel Harmonic @ 3m	
ANT	802.11n HT40 CH142 5710MHz	
2+5	Horizontal	Vertical
Peak Avg.		

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

WIFI	Band 3 Straddle Channel Harmonic @ 3m	
ANT	802.11ac VHT80 CH138 5690MHz	
2+5	Horizontal	Vertical
Peak Avg.		

Emission below 1GHz

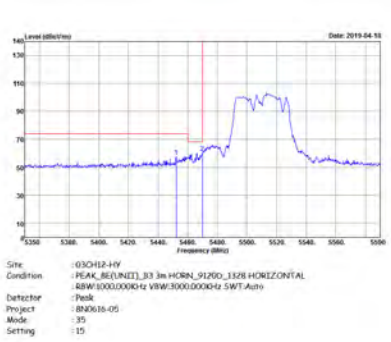
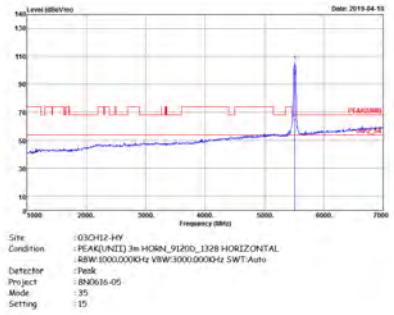
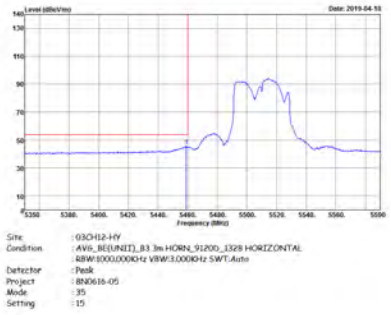
5GHz WIFI 802.11n HT40 (LF)

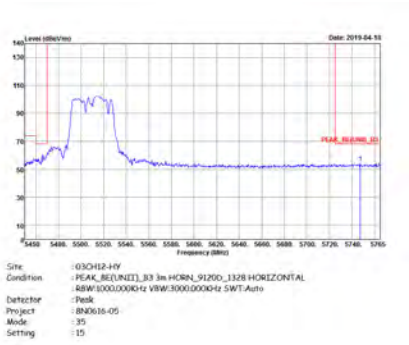
WIFI	5GHz WIFI	
ANT	802.11n HT40 LF	
2+5	Horizontal	Vertical
QP / Peak		

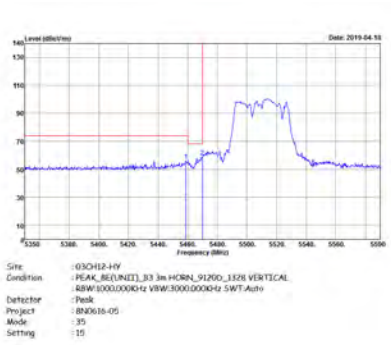
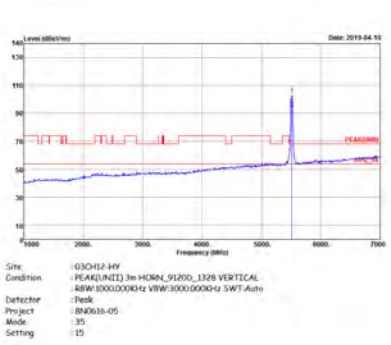
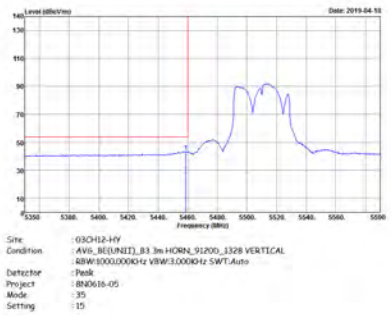
<EUT with WPC Charging Mode>

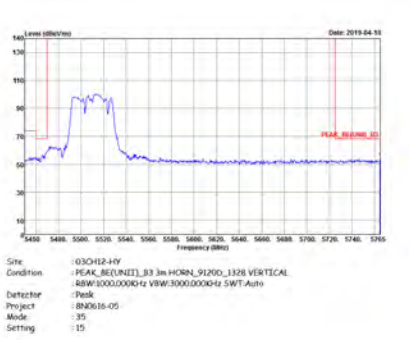
Band 3 - 5470~5725MHz

WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH102 5510MHz - L	
2+5	Horizontal	Fundamental
Peak		
Avg.		Left blank

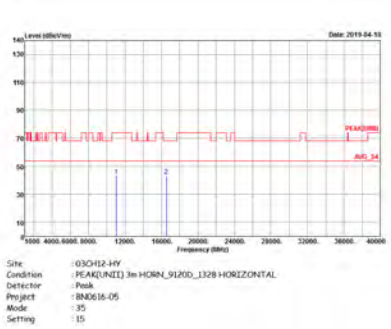
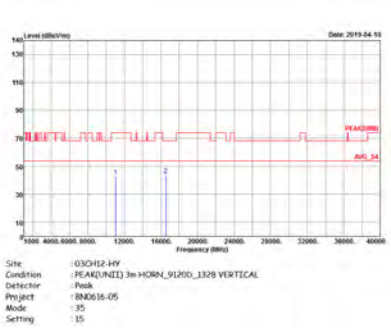
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH102 5510MHz - R	
2+5	Horizontal	Fundamental
Peak		Left blank

WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH102 5510MHz - L	
2+5	Vertical	Fundamental
Peak		
Avg.		Left blank

WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH102 5510MHz - R	
2+5	Vertical	Fundamental
Peak		Left blank

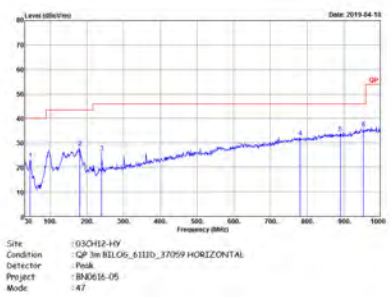
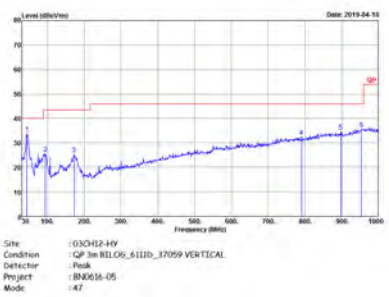
Band 3 - 5470~5725MHz

WIFI 802.11n HT40 (Harmonic @ 3m)

WIFI	Band 3 5470~5725MHz Harmonic @ 3m	
ANT	802.11n HT40 CH102 5510MHz	
2+5	Horizontal	Vertical
Peak Avg.		

Emission below 1GHz

5GHz WIFI 802.11n HT40 (LF)

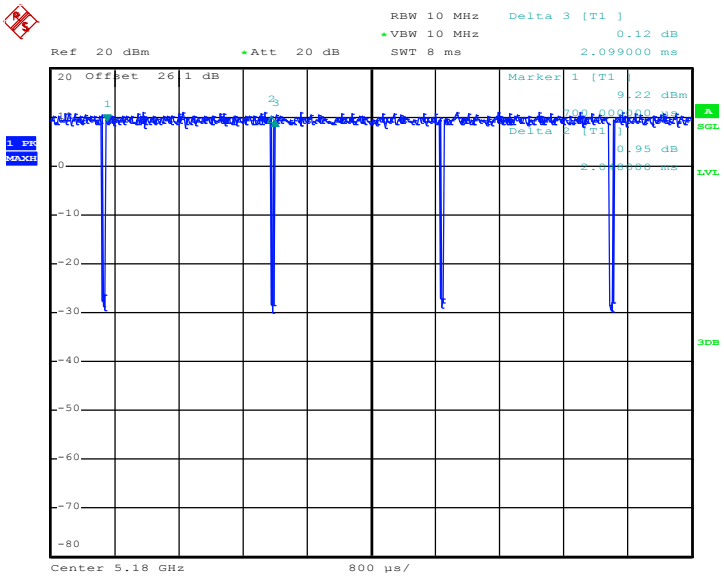
WIFI	5GHz WIFI	
ANT	802.11n HT40 LF	
2+5	Horizontal	Vertical
QP / Peak		

Appendix E. Duty Cycle Plots

Antenna	Band	Duty Cycle(%)	T(us)	1/T(kHz)	VBW Setting	Duty Factor(dB)
2+5	5GHz 802.11a for Ant. 2	97.57	2048	0.49	1kHz	0.11
2+5	5GHz 802.11a for Ant. 5	97.26	2057	0.49	1kHz	0.12
2+5	5GHz 802.11n HT20 for Ant. 2	97.83	1936	0.52	1kHz	0.10
2+5	5GHz 802.11n HT20 for Ant. 5	97.97	1935	0.52	1kHz	0.09
2+5	5GHz 802.11n HT40 for Ant. 2	95.96	950	1.05	3kHz	0.18
2+5	5GHz 802.11n HT40 for Ant. 5	95.45	945	1.06	3kHz	0.20
2+5	5GHz 802.11ac VHT80 for Ant. 2	92.23	463	2.16	3kHz	0.35
2+5	5GHz 802.11ac VHT80 for Ant. 5	92.15	458	2.18	3kHz	0.36

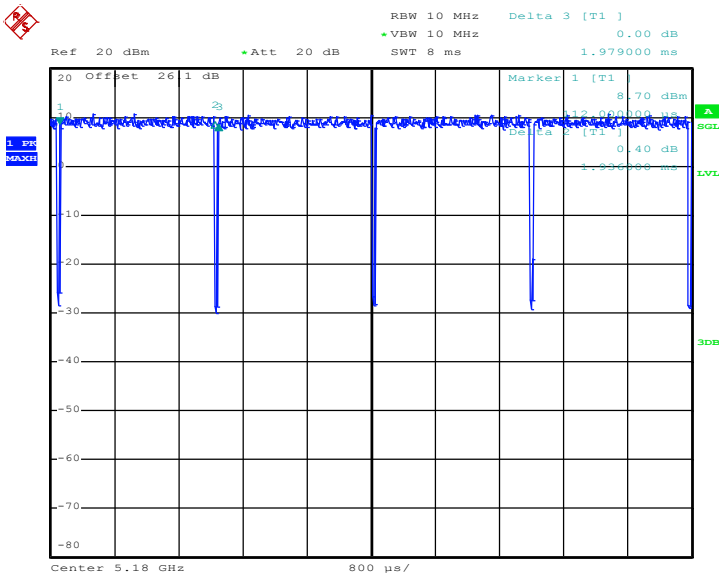
MIMO <Ant. 2>

802.11a



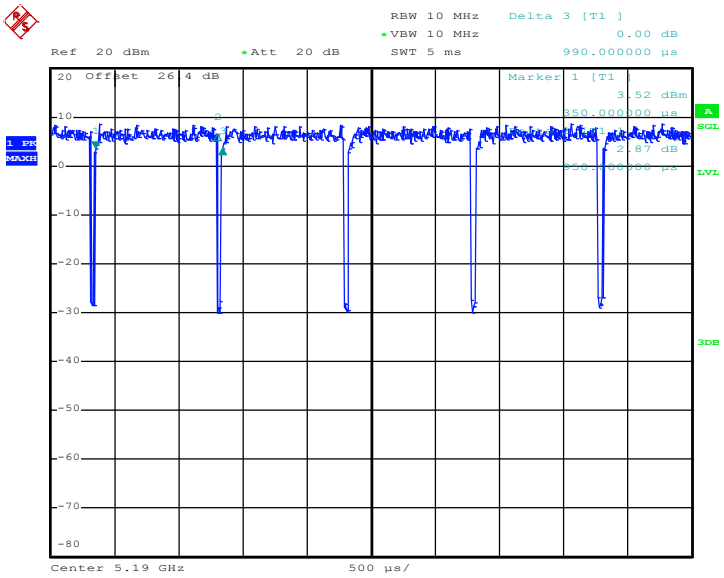
Date: 13.APR.2019 11:50:03

802.11n HT20



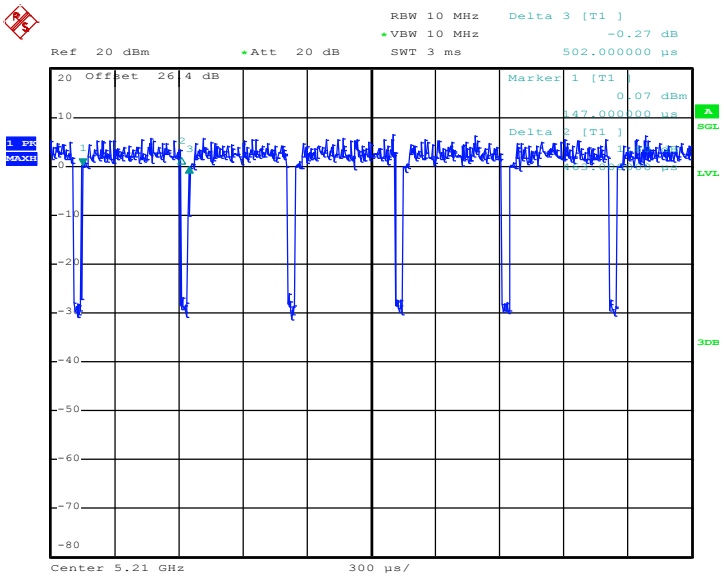
Date: 13.APR.2019 12:43:11

802.11n HT40



Date: 13.APR.2019 14:31:16

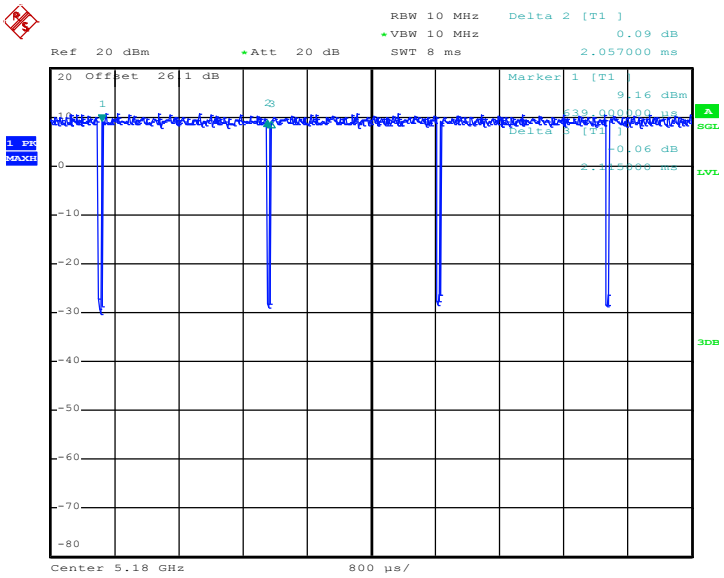
802.11ac VHT80



Date: 13.APR.2019 15:57:06

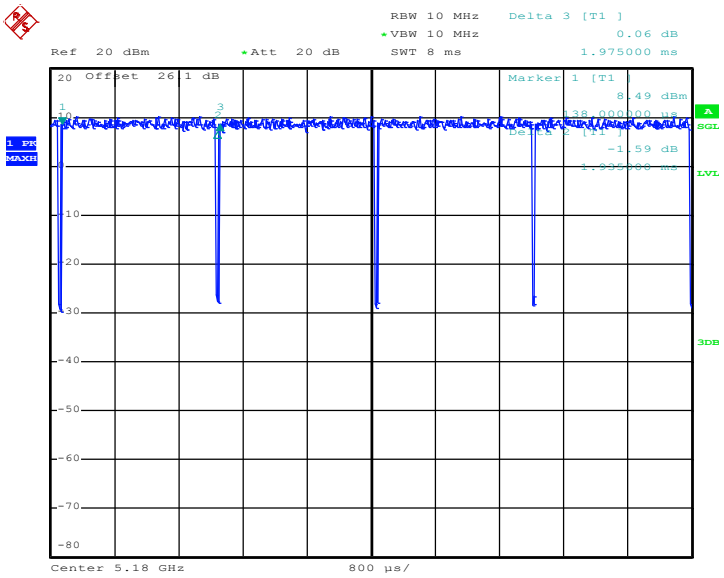
MIMO <Ant. 5>

802.11a



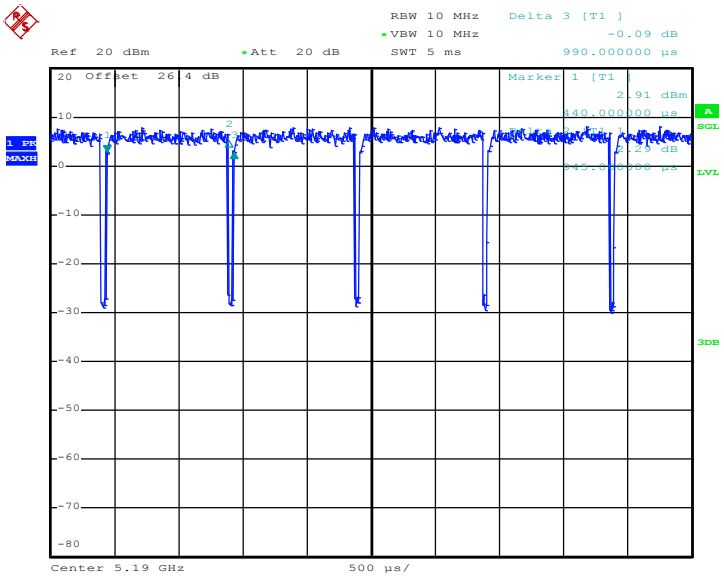
Date: 13.APR.2019 11:53:39

802.11n HT20



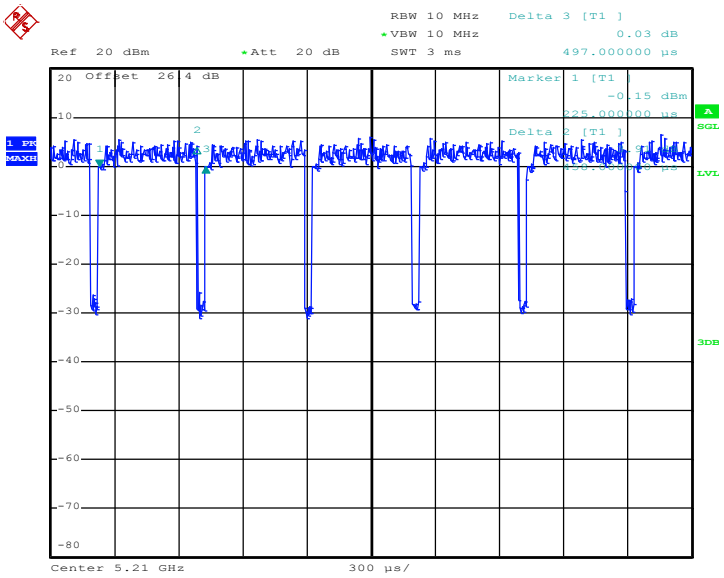
Date: 13.APR.2019 12:43:54

802.11n HT40



Date: 13.APR.2019 14:32:01

802.11ac VHT80



Date: 13.APR.2019 15:58:21

THE END