FCC RADIO TEST REPORT

FCC ID	:	**A4RG020D**
Equipment	:	**Smartphone**
Model Name	:	**G020D**
Applicant	:	**Google LLC** **1600 Amphitheatre Parkway,** **Mountain View, CA 94043, USA**
Standard	:	**FCC Part 15 Subpart E §15.407**

The product was completed on Dec. 27, 2018. We, SPORTON INTERNATIONAL INC., would like to declare that the tested sample has been evaluated in accordance with the test procedures and has been in compliance with the applicable technical standards.

The 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 INTERTIONAL INC. EMC & Wireless Communications Laboratory, the test report shall not be reproduced except in full.

Approved by: Jones Tsai

SPORTON INTERTIONAL 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 **3**
Summary of Test Result **4**
1 General Description **5**
1.1 Product Feature of Equipment Under Test 5
1.2 Product Specification of Equipment Under Test 5
1.3 Modification of EUT 7
1.4 Testing Location 8
1.5 Applicable Standards 8
2 Test Configuration of Equipment Under Test **9**
2.1 Carrier Frequency and Channel 9
2.2 Test Mode 11
2.3 Connection Diagram of Test System 13
2.4 Support Unit used in test configuration and system 14
2.5 EUT Operation Test Setup 14
2.6 Measurement Results Explanation Example 14
3 Test Result **15**
3.1 26dB & 99% Occupied Bandwidth Measurement 15
3.2 Maximum Conducted Output Power Measurement 17
3.3 Power Spectral Density Measurement 19
3.4 Unwanted Emissions Measurement 22
3.5 AC Conducted Emission Measurement 27
3.6 Automatically Discontinue Transmission 29
3.7 Antenna Requirements 31
4 List of Measuring Equipment **32**
5 Uncertainty of Evaluation **34**
Appendix A. Conducted Test Results
Appendix B. AC Conducted Emission Test Result
Appendix C. Radiated Spurious Emission
Appendix D. Radiated Spurious Emission Plots
Appendix E. Duty Cycle Plots

History of this test report

Report No.	Version	Description	Issued Date
FR891147-01E	01	Initial issue of report	Dec. 26, 2018
FR891147-01E	02	Revising test data.	Jan. 16, 2019
FR891147-01E	03	Add test data.	Jan. 23, 2019
FR891147-01E	04	Add the description.	Jan. 28, 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 1.75 dB at 5350.000 MHz
3.5	15.207	AC Conducted Emission	Pass	Under limit 12.48 dB at 0.168 MHz
3.6	15.407(c)	Automatically Discontinue Transmission	Pass	-
3.7	15.203 15.407(a)	Antenna Requirement	Pass	-

Reviewed by: Wii Chang

Report Producer: Natasha Hsieh

1 General Description

1.1 Product Feature of Equipment Under Test

Product Feature	
Equipment	Smartphone
Model Name	G020D
Sample 1	The device with 1st battery
Sample 2	The device with 2nd battery
EUT supports Radios application	GSM/EGPRS/WCDMA/HSPA/LTE/NFC/GNSS WLAN 11b/g/n HT20 WLAN 11a/n HT20/HT40 WLAN 11ac VHT20/VHT40/VHT80 Bluetooth BR/EDR/LE
EUT Stage	Identical Prototype

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

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. 1>** **<5180 MHz ~ 5240 MHz>** 802.11a : 17.45 dBm / 0.0556 W 802.11n HT20 : 17.34 dBm / 0.0542 W 802.11n HT40 : 17.24 dBm / 0.0530 W 802.11 ac VHT20: 17.31 dBm / 0.0538 W 802.11 ac VHT40: 17.20 dBm / 0.0525 W 802.11 ac VHT80: 12.15 dBm / 0.0164 W **<5260 MHz ~ 5320 MHz>** 802.11a : 17.49 dBm / 0.0561 W 802.11n HT20 : 17.45 dBm / 0.0556 W 802.11n HT40 : 17.47 dBm / 0.0558 W 802.11 ac VHT20: 17.42 dBm / 0.0552 W 802.11 ac VHT40: 17.41 dBm / 0.0551 W 802.11 ac VHT80: 12.27 dBm / 0.0169 W **<5500 MHz ~ 5700 MHz >** 802.11a : 17.39 dBm / 0.0548 W 802.11n HT20 : 17.28 dBm / 0.0535 W 802.11n HT40 : 17.19 dBm / 0.0524 W 802.11 ac VHT20: 17.25 dBm / 0.0531 W 802.11 ac VHT40: 17.14 dBm / 0.0518 W 802.11 ac VHT80: 17.01 dBm / 0.0502 W

Standards-related Product Specification	
Maximum Output Power to Antenna	**<Ant. 2>** **<5180 MHz ~ 5240 MHz>** 802.11a : 16.61 dBm / 0.0458 W 802.11n HT20 : 16.61 dBm / 0.0458 W 802.11n HT40 : 16.81 dBm / 0.0480 W 802.11 ac VHT20: 16.59 dBm / 0.0456 W 802.11 ac VHT40: 16.76 dBm / 0.0474 W 802.11 ac VHT80: 10.22 dBm / 0.0105 W **<5260 MHz ~ 5320 MHz>** 802.11a : 17.26 dBm / 0.0532 W 802.11n HT20 : 17.13 dBm / 0.0516 W 802.11n HT40 : 16.44 dBm / 0.0441 W 802.11 ac VHT20: 17.06 dBm / 0.0508 W 802.11 ac VHT40: 16.41 dBm / 0.0438 W 802.11 ac VHT80: 12.18 dBm / 0.0165 W **<5500 MHz ~ 5700 MHz >** 802.11a : 17.22 dBm / 0.0527 W 802.11n HT20 : 17.30 dBm / 0.0537 W 802.11n HT40 : 17.36 dBm / 0.0545 W 802.11 ac VHT20: 17.28 dBm / 0.0535 W 802.11 ac VHT40: 17.32 dBm / 0.0540 W 802.11 ac VHT80: 16.93 dBm / 0.0493 W
	MIMO <Ant. 1+2> **<5180 MHz ~ 5240 MHz>** 802.11a : 20.49 dBm / 0.1119 W 802.11n HT20 : 20.49 dBm / 0.1119 W 802.11n HT40 : 20.45 dBm / 0.1109 W 802.11 ac VHT20: 20.44 dBm / 0.1107 W 802.11 ac VHT40: 20.39 dBm / 0.1094 W 802.11 ac VHT80: 14.56 dBm / 0.0286 W **<5260 MHz ~ 5320 MHz>** 802.11a : 20.44 dBm / 0.1107 W 802.11n HT20 : 20.28 dBm / 0.1067 W 802.11n HT40 : 20.18 dBm / 0.1042 W 802.11 ac VHT20: 20.22 dBm / 0.1052 W 802.11 ac VHT40: 20.14 dBm / 0.1033 W 802.11 ac VHT80: 15.40 dBm / 0.0347 W **<5500 MHz ~ 5700 MHz >** 802.11a : 20.49 dBm / 0.1119 W 802.11n HT20 : 20.37 dBm / 0.1089 W 802.11n HT40 : 20.38 dBm / 0.1091 W 802.11 ac VHT20: 20.31 dBm / 0.1074 W 802.11 ac VHT40: 20.31 dBm / 0.1074 W 802.11 ac VHT80: 20.12 dBm / 0.1028 W

Standards-related Product Specification	
99% Occupied Bandwidth	**MIMO<Ant. 1>** 802.11a : 16.80 MHz 802.11n HT20 : 18.00 MHz 802.11n HT40 : 36.60 MHz 802.11 ac VHT80 : 76.68 MHz **MIMO<Ant. 2>** 802.11a : 16.85 MHz 802.11n HT20 : 18.05 MHz 802.11n HT40 : 36.70 MHz 802.11 ac VHT80 : 76.68 MHz
Type of Modulation	802.11a/n : OFDM (BPSK / QPSK / 16QAM / 64QAM) 802.11ac: OFDM (BPSK / QPSK / 16QAM / 64QAM / 256QAM)
Antenna Gain / Gain	**<5150 MHz ~ 5250 MHz>** <Ant. 1> : PIFA Antenna with gain -2.00 dBi <Ant. 2> : PIFA Antenna with gain -0.30 dBi **<5250 MHz ~ 5350 MHz>** <Ant. 1> : PIFA Antenna with gain -2.50 dBi <Ant. 2> : PIFA Antenna with gain -0.30 dBi **<5470 MHz ~ 5725 MHz>** <Ant. 1> : PIFA Antenna with gain -3.60 dBi <Ant. 2> : PIFA Antenna with gain -1.00 dBi
Antenna Function Description	

	Ant. 1	Ant. 2
802.11 a/n/ac	V	V
802.11 n/ac MIMO	V	V

Remark: MIMO Ant. 1+2 is a calculated result from sum of the power MIMO Ant. 1 and MIMO Ant. 2.

1.3 Modification of EUT

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

1.4 Testing Location

Sporton Lab is accredited to ISO 17025 by Taiwan Accreditation Foundation (TAF code : 1190) and the FCC designation No. TW1190 and TW0007 under the FCC 2.948(e) by Mutual Recognition Agreement (MRA) in FCC Test.

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

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

Test Site	SPORTON INTERNATIONAL INC.
Test Site Location	No.58, Aly. 75, Ln. 564, Wenhua 3rd, Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.) TEL: +886-3-327-0868 FAX: +886-3-327-0855
Test Site No.	**Sporton Site No.**
	03CH12-HY

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

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 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 for Sample 1 with Adapter 1 and Sample 1 with Adapter 2, and Z Plane for Sample 2 with Adapter 2) 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 : GSM850 Idle + Bluetooth Link + WLAN (5GHz) Link + GPS Rx + Earphone + USB Type C Cable 1 (Charging form Adapter 1) + Battery<10% for Sample 1
Remark: For Radiated Test Cases, the tests were performed with USB Type C Cable 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

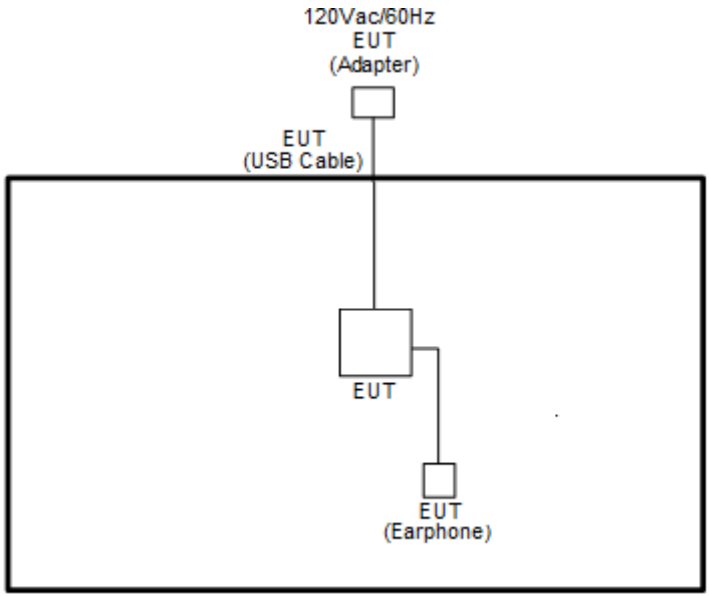
Ch. #		Band I：5150-5250 MHz	Band II：5250-5350 MHz	Band III：5470-5725MHz
		802.11n HT20	802.11n HT20	802.11n HT20
L	Low	36	52	100
M	Middle	44	60	116
H	High	48	64	140
Straddle		-	-	144

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

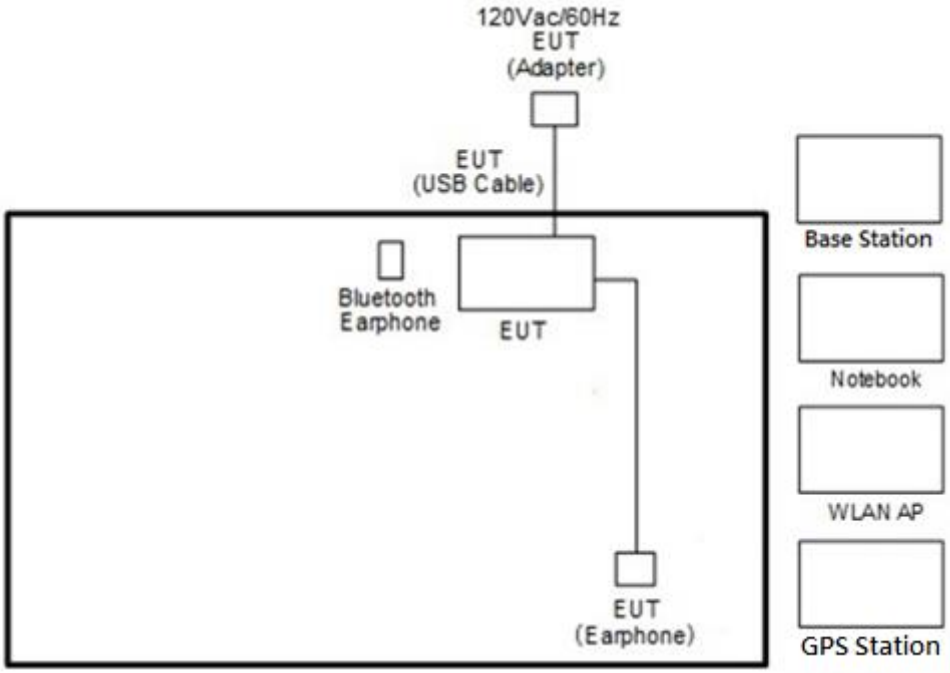
Ch. #		Band I：5150-5250 MHz	Band II：5250-5350 MHz	Band III：5470-5725MHz
		802.11ac VHT80	802.11ac VHT80	802.11ac VHT80
L	Low	-	-	106
M	Middle	42	58	122
H	High	-	-	-
Straddle		-	-	138

2.3 Connection Diagram of Test System

<WLAN Tx Mode>



<AC Conducted Emissions Mode>



2.4 Support Unit used in test configuration and system

Item	Equipment	Trade Name	Model Name	FCC ID	Data Cable	Power Cord
1.	System Simulator	Anritsu	MT8820C	N/A	N/A	Unshielded, 1.8 m
2.	GPS Station	Pendulum	GSG-54	N/A	N/A	Unshielded, 1.8 m
3.	Bluetooth Earphone	Sony	SBH20	PY7-RD0010	N/A	N/A
4.	WLAN AP	ASUS	RT-AC66U	MSQ-RTAC66U	N/A	Unshielded, 1.8 m
5.	Notebook	DELL	P20G	FCC DoC/ Contains FCC ID: QDS-BRCM1051	N/A	AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m

2.5 EUT Operation Test Setup

The RF test items, utility “QRCT” 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.

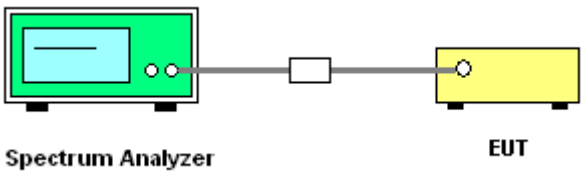
3.1.2 Measuring Instruments

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.

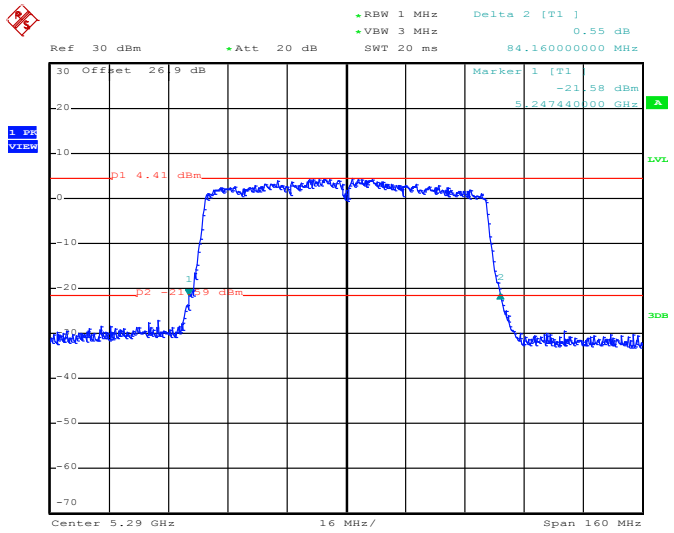
3.1.4 Test Setup



3.1.5 Test Result of 26dB & 99% Occupied Bandwidth

Please refer to Appendix A.

Maximum 26dB Bandwidth



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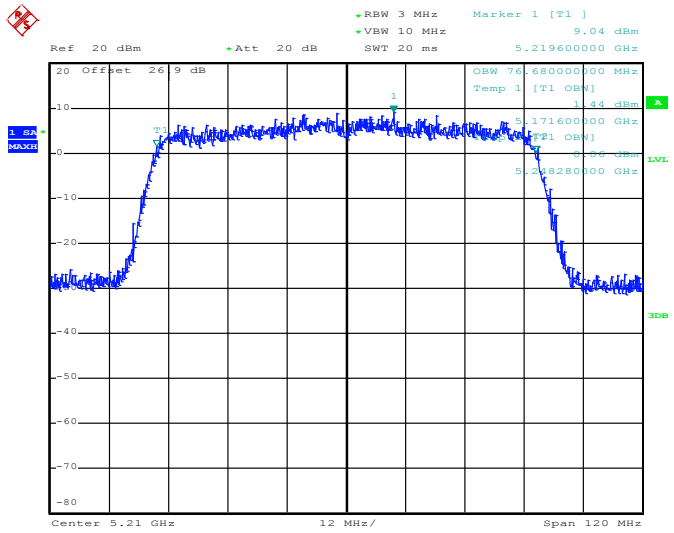
Maximum 99% Occupied Bandwidth



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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

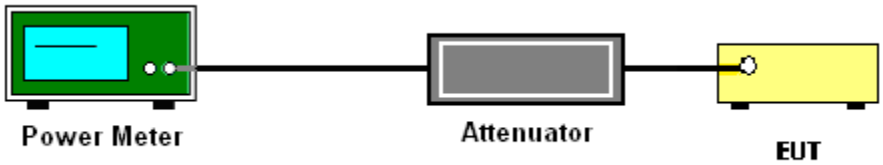
The testing follows Method PM of FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01.

Method PM (Measurement using an RF average power meter):

1. Measurement is performed using a wideband RF power meter.
2. The EUT is configured to transmit continuously with a consistent duty cycle at its maximum power control level.
3. Measure the average power of the transmitter, and the average power is corrected with duty factor, 10 log(1/x), where x is the duty cycle.

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.

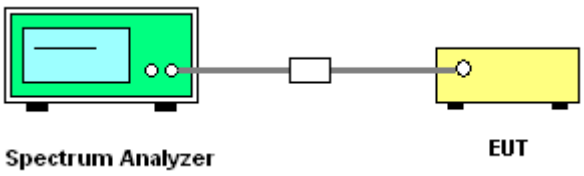
 # Method SA-2 #

(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.

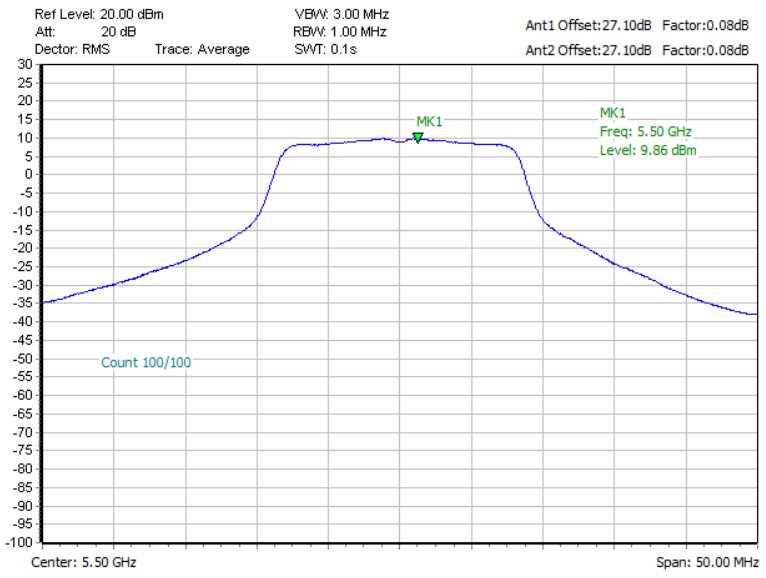
3.3.4 Test Setup



3.3.5 Test Result of Power Spectral Density

Please refer to Appendix A.

Worst Case Power Density (dBm/MHz)



Note:

1. Average Power Density (dB) = Measured value+ Duty Factor
2. MIMO mode is higher power than SISO, per chain, so MIMO mode is considered worst case

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

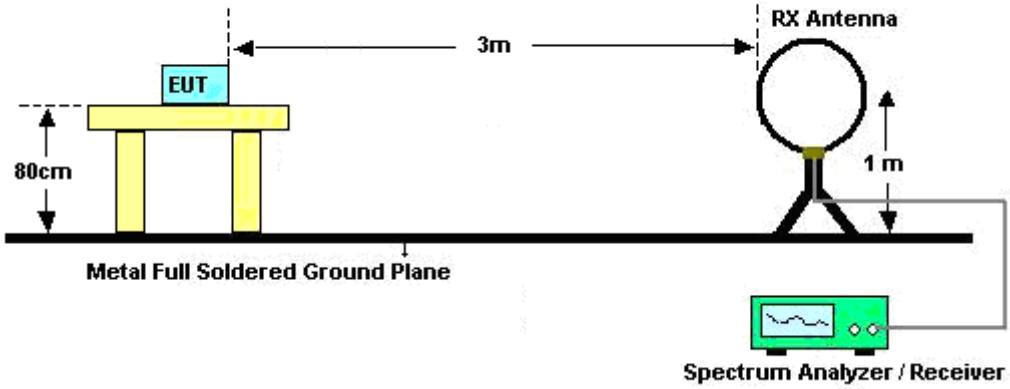
(3) Procedures for Average Unwanted Emissions Measurements Above 1000MHz

- 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.

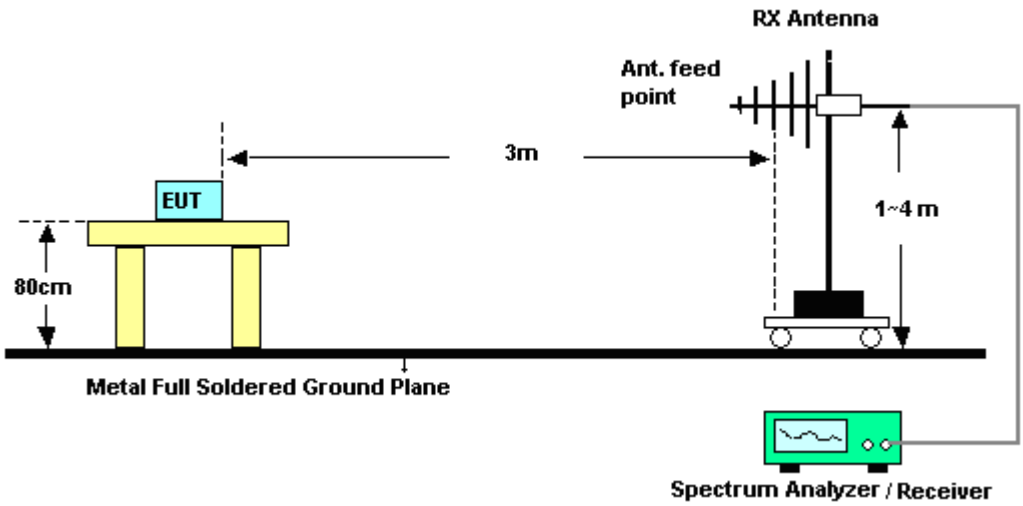
2. The EUT was placed on a turntable with 0.8 meter for frequency below 1GHz and 1.5 meter for frequency above 1GHz respectively above ground.
3. The EUT was set 3 meters from the interference receiving antenna which was mounted on the top of a variable height antenna tower.
4. The antenna is a broadband 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

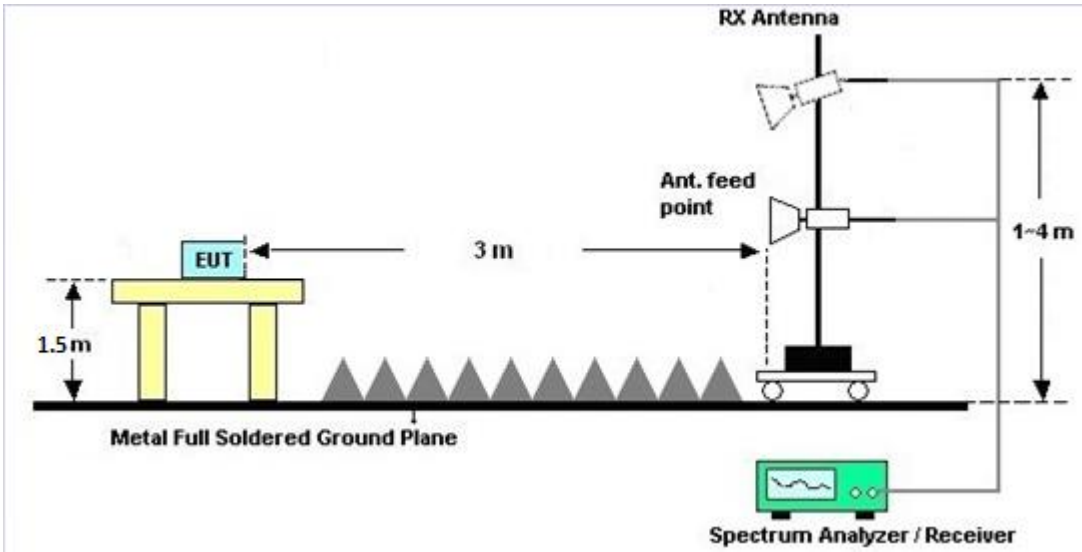
For radiated emissions below 30MHz



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 semi-Anechoic chamber, 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.

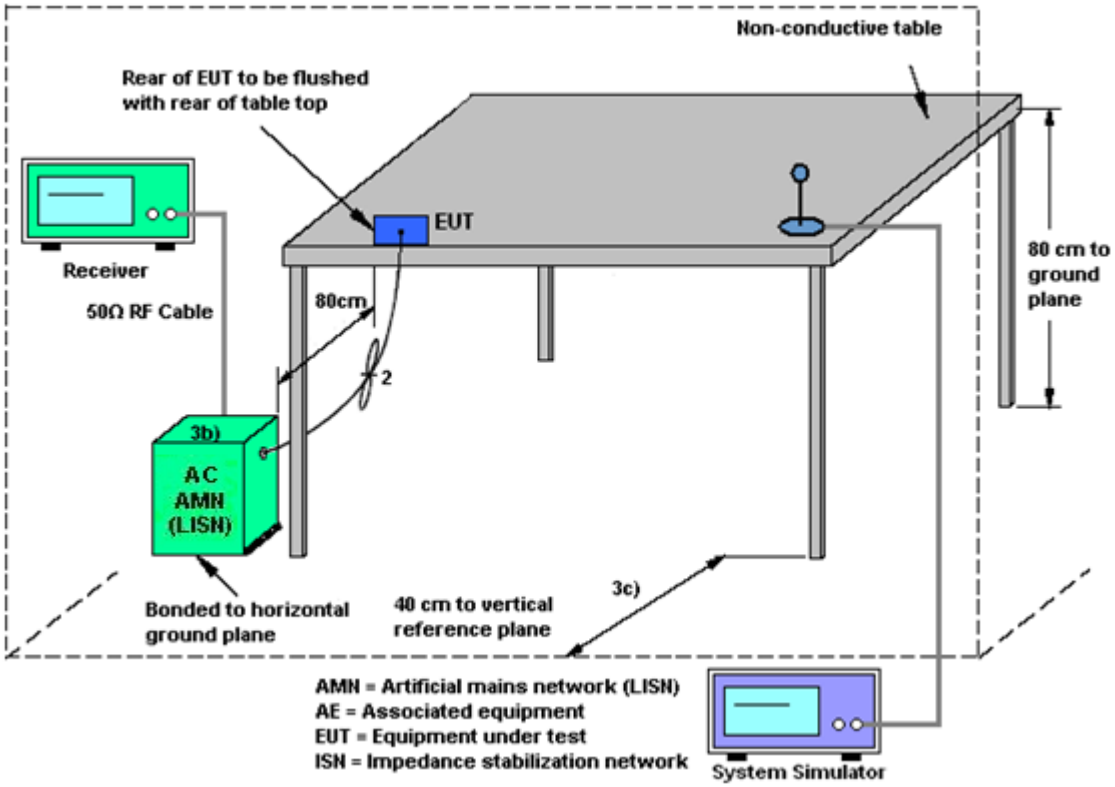
3.5.2 Measuring Instruments

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	-2.00	-0.30	-0.30	1.90	0.00	0.00
Band II	-2.50	-0.30	-0.30	1.68	0.00	0.00
Band III	-3.60	-1.00	-1.00	0.81	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 Meter	Anritsu	ML2495A	1132003	N/A	Aug. 16, 2018	Oct. 04, 2018~ Dec. 21, 2018	Aug. 15, 2019	Conducted (TH05-HY)
Power Sensor	Anritsu	MA2411B	1126017	300MHz~40GHz	Aug. 16, 2018	Oct. 04, 2018~ Dec. 21, 2018	Aug. 15, 2019	Conducted (TH05-HY)
Spectrum Analyzer	Rohde & Schwarz	FSP40	100055	9kHz-40GHz	Jun. 14, 2018	Oct. 04, 2018~ Dec. 21, 2018	Jun. 13, 2019	Conducted (TH05-HY)
Spectrum Analyzer	Rohde & Schwarz	FSV30	100895	9kHz~30GHz	Apr. 20, 2018	Oct. 04, 2018~ Dec. 21, 2018	Apr. 19, 2019	Conducted (TH05-HY)
Switch Box & RF Cable	Burgeon	ETF-058	EC1300484	N/A	Mar. 01, 2018	Oct. 04, 2018~ Dec. 21, 2018	Feb. 28, 2019	Conducted (TH05-HY)
Hygrometer	Testo	DTM-303A	TP157075	N/A	Mar. 06, 2018	Oct. 04, 2018~ Dec. 21, 2018	Mar. 05, 2019	Conducted (TH05-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY84209521	1GHz~26GHz	Dec. 01, 2017	Oct. 04, 2018~ Nov. 29, 2018	Nov. 30, 2018	Conducted (TH05-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY84209521	1GHz~26GHz	Nov. 30, 2018	Nov. 30, 2018~ Dec. 21, 2018	Nov. 29, 2019	Conducted (TH05-HY)
AC Power Source	ChainTek	APC-1000W	N/A	N/A	N/A	Dec. 04, 2018	N/A	Conduction (CO05-HY)
EMI Test Receiver	Rohde & Schwarz	ESR3	102388	9KHz~3.6GHz	Nov. 12, 2018	Dec. 04, 2018	Nov. 11, 2019	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100080	9kHz~30MHz	Nov. 14, 2018	Dec. 04, 2018	Nov. 13, 2019	Conduction (CO05-HY)
LF Cable	HUBER + SUHNER	RG-214/U	LF01	N/A	Jan. 03, 2018	Dec. 04, 2018	Jan. 02, 2019	Conduction (CO05-HY)
Test Software	Rohde & Schwarz	EMC32 V10.30	N/A	N/A	N/A	Dec. 04, 2018	N/A	Conduction (CO05-HY)
Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100851	N/A	Jan. 03, 2018	Dec. 04, 2018	Jan. 02, 2019	Conduction (CO05-HY)
Hygrometer	Testo	608-H1	34913912	N/A	Mar. 06, 2018	Dec. 04, 2018	Mar. 05, 2019	Conduction (CO05-HY)
Loop Antenna	TESEQ	HLA 6120	31244	9 kHz~30 MHz	Mar. 29, 2018	Nov. 30, 2018~ Dec. 27, 2018	Mar. 28, 2019	Radiation (03CH12-HY)
Bilog Antenna	TESEQ	CBL 6111D&00800N1D01N-06	37059&01	30MHz~1GHz	Oct. 13, 2018	Nov. 30, 2018~ Dec. 27, 2018	Oct. 12, 2019	Radiation (03CH12-HY)
Horn Antenna	SCHWARZBECK	BBHA 9120D	9120D-1328	1GHz ~ 18GHz	Oct. 19, 2018	Nov. 30, 2018~ Dec. 27, 2018	Oct. 18, 2019	Radiation (03CH12-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170576	18GHz ~ 40GHz	May 08, 2018	Nov. 30, 2018~ Dec. 27, 2018	May 07, 2019	Radiation (03CH12-HY)
EMI Test Receiver	Rohde & Schwarz	ESU26	100390	20Hz~26.5GHz	Dec. 25, 2017	Nov. 30, 2018~ Dec. 17, 2018	Dec. 24, 2018	Radiation (03CH12-HY)
EMI Test Receiver	Rohde & Schwarz	ESU26	100390	20Hz~26.5GHz	Dec. 24, 2018	Dec. 27, 2018	Dec. 23, 2018	Radiation (03CH12-HY)
Spectrum Analyzer	Keysight	N9010A	MY55370526	10Hz~44GHz	Mar. 15, 2018	Nov. 30, 2018~ Dec. 27, 2018	Mar. 14, 2019	Radiation (03CH12-HY)
Preamplifier	COM-POWER	PA-103	161075	10MHz~1GHz	Mar. 26, 2018	Nov. 30, 2018~ Dec. 27, 2018	Mar. 25, 2019	Radiation (03CH12-HY)
Preamplifier	Keysight	83017A	MY53270148	1GHz~26.5GHz	Jan. 15, 2018	Nov. 30, 2018~ Dec. 27, 2018	Jan. 14, 2019	Radiation (03CH12-HY)

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Preamplifier	Jet-Power	JPA0118-55-303K	1710001800054002	1GHz~18GHz	Apr. 17, 2018	Nov. 30, 2018~ Dec. 27, 2018	Apr. 16, 2019	Radiation (03CH12-HY)
Preamplifier	MITEQ	TTA1840-35-HG	1864481	18GHz ~ 40GHz	Aug. 24, 2018	Nov. 30, 2018~ Dec. 27, 2018	Aug. 23, 2019	Radiation (03CH12-HY)
Hygrometer	TECPEL	DTM-303B	TP161243	N/A	May 12, 2018	Nov. 30, 2018~ Dec. 27, 2018	May 11, 2019	Radiation (03CH12-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 126E	0058/126E	30M-18G	Mar. 14, 2018	Nov. 30, 2018~ Dec. 27, 2018	Mar. 13, 2019	Radiation (03CH12-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	505134/2	30M~40GHz	Oct. 16, 2018	Nov. 30, 2018~ Dec. 27, 2018	Oct. 15, 2019	Radiation (03CH12-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	800740/2	30M~40GHz	Oct. 16, 2018	Nov. 30, 2018~ Dec. 27, 2018	Oct. 15, 2019	Radiation (03CH12-HY)
Filter	Wainwright	WLKS1200-12SS	SN2	1.2GHz Low Pass	Mar. 21, 2018	Nov. 30, 2018~ Dec. 27, 2018	Mar. 20, 2019	Radiation (03CH12-HY)
Filter	Wainwright	WHKX12-2700-3000-18000-60ST	SN2	3GHz High Pass	Mar. 21, 2018	Nov. 30, 2018~ Dec. 27, 2018	Mar. 20, 2019	Radiation (03CH12-HY)
Filter	Woken	WHKX8-5272.5-6750-18000-40ST	SN2	6.75G Highpass	Mar. 21, 2018	Nov. 30, 2018~ Dec. 27, 2018	Mar. 20, 2019	Radiation (03CH12-HY)
Controller	EMEC	EM1000	N/A	Control Turn table & Ant Mast	N/A	Nov. 30, 2018~ Dec. 27, 2018	N/A	Radiation (03CH12-HY)
Antenna Mast	EMEC	AM-BS-4500-B	N/A	1m~4m	N/A	Nov. 30, 2018~ Dec. 27, 2018	N/A	Radiation (03CH12-HY)
Turn Table	EMEC	TT2000	N/A	0~360 Degree	N/A	Nov. 30, 2018~ Dec. 27, 2018	N/A	Radiation (03CH12-HY)
Software	Audix	E3 6.2009-8-24	RK-000989	N/A	N/A	Nov. 30, 2018~ Dec. 27, 2018	N/A	Radiation (03CH12-HY)

5 Uncertainty of Evaluation

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

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))	5.10

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	5.20

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	4.70

Appendix A. Test Result of Conducted Test Items

Test Engineer:	Kai Liao/Shiang Wang/ Luffy Lin	Temperature:	21~25	°C
Test Date:	2018/10/4 ~ 2018/12/21	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 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2		
11a	6Mbps	2	36	5180	16.80	16.75	25.63	25.23	-		22.24			
11a	6Mbps	2	44	5220	16.80	16.70	26.30	25.50	-		22.23			
11a	6Mbps	2	48	5240	16.80	16.75	24.70	24.57	-		22.24			
HT20	MCS0	2	36	5180	17.95	17.90	25.80	25.04	-		22.53			
HT20	MCS0	2	44	5220	17.90	17.90	26.29	25.50	-		22.53			
HT20	MCS0	2	48	5240	17.90	17.90	25.66	26.43	-		22.53			
HT40	MCS0	2	38	5190	36.60	36.60	41.94	42.30	-		23.01			
HT40	MCS0	2	46	5230	36.60	36.60	41.58	41.94	-		23.01			
VHT80	MCS0	2	42	5210	76.68	76.68	83.20	83.20	-		23.01			

TEST RESULTS DATA
Average Power Table

FCC Band I															
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Duty Factor (dB)		Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)			Pass/Fail
					Ant 1	Ant 2	Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2		
11a	6Mbps	1	36	5180	0.08	0.08	17.45	16.44		24.00	24.00	-2.00	-0.30		Pass
11a	6Mbps	1	44	5220	0.08	0.08	17.36	16.33		24.00	24.00	-2.00	-0.30		Pass
11a	6Mbps	1	48	5240	0.08	0.08	17.44	16.61		24.00	24.00	-2.00	-0.30		Pass
HT20	MCS0	1	36	5180	0.09	0.09	17.34	16.37		24.00	24.00	-2.00	-0.30		Pass
HT20	MCS0	1	44	5220	0.09	0.09	17.20	16.61		24.00	24.00	-2.00	-0.30		Pass
HT20	MCS0	1	48	5240	0.09	0.09	17.33	16.45		24.00	24.00	-2.00	-0.30		Pass
HT40	MCS0	1	38	5190	0.18	0.18	14.94	12.40		24.00	24.00	-2.00	-0.30		Pass
HT40	MCS0	1	46	5230	0.18	0.18	17.24	16.81		24.00	24.00	-2.00	-0.30		Pass
VHT20	MCS0	1	36	5180	0.09	0.09	17.30	16.25		24.00	24.00	-2.00	-0.30		Pass
VHT20	MCS0	1	44	5220	0.09	0.09	17.17	16.59		24.00	24.00	-2.00	-0.30		Pass
VHT20	MCS0	1	48	5240	0.09	0.09	17.31	16.42		24.00	24.00	-2.00	-0.30		Pass
VHT40	MCS0	1	38	5190	0.18	0.18	14.88	12.33		24.00	24.00	-2.00	-0.30		Pass
VHT40	MCS0	1	46	5230	0.18	0.18	17.20	16.76		24.00	24.00	-2.00	-0.30		Pass
VHT80	MCS0	1	42	5210	0.33	0.33	12.15	10.22		24.00	24.00	-2.00	-0.30		Pass
11a	6Mbps	2	36	5180	0.08	0.08	17.49	17.47	20.49	24.00		-0.30			Pass
11a	6Mbps	2	44	5220	0.08	0.08	17.48	17.27	20.39	24.00		-0.30			Pass
11a	6Mbps	2	48	5240	0.08	0.08	17.41	16.99	20.22	24.00		-0.30			Pass
HT20	MCS0	2	36	5180	0.09	0.09	17.48	17.47	20.49	24.00		-0.30			Pass
HT20	MCS0	2	44	5220	0.09	0.09	17.47	17.41	20.45	24.00		-0.30			Pass
HT20	MCS0	2	48	5240	0.09	0.09	17.44	16.94	20.21	24.00		-0.30			Pass
HT40	MCS0	2	38	5190	0.18	0.18	15.00	12.49	16.94	24.00		-0.30			Pass
HT40	MCS0	2	46	5230	0.18	0.18	17.49	17.38	20.45	24.00		-0.30			Pass
VHT20	MCS0	2	36	5180	0.09	0.09	17.49	17.37	20.44	24.00		-0.30			Pass
VHT20	MCS0	2	44	5220	0.09	0.09	17.50	17.32	20.42	24.00		-0.30			Pass
VHT20	MCS0	2	48	5240	0.09	0.09	17.48	16.85	20.19	24.00		-0.30			Pass
VHT40	MCS0	2	38	5190	0.16	0.16	15.00	12.50	16.94	24.00		-0.30			Pass
VHT40	MCS0	2	46	5230	0.16	0.16	17.49	17.27	20.39	24.00		-0.30			Pass
VHT80	MCS0	2	42	5210	0.33	0.33	12.38	10.53	14.56	24.00		-0.30			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 1	Ant 2	Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2			
11a	6Mbps	2	36	5180	0.08	0.08			9.28	11.00		1.90				Pass
11a	6Mbps	2	44	5220	0.08	0.08			9.44	11.00		1.90				Pass
11a	6Mbps	2	48	5240	0.08	0.08			9.25	11.00		1.90				Pass
HT20	MCS0	2	36	5180	0.09	0.09			8.99	11.00		1.90				Pass
HT20	MCS0	2	44	5220	0.09	0.09			9.47	11.00		1.90				Pass
HT20	MCS0	2	48	5240	0.09	0.09			9.09	11.00		1.90				Pass
HT40	MCS0	2	38	5190	0.18	0.18			0.62	11.00		1.90				Pass
HT40	MCS0	2	46	5230	0.18	0.18			6.30	11.00		1.90				Pass
VHT80	MCS0	2	42	5210	0.33	0.33			-3.09	11.00		1.90				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 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	
11a	6Mbps	2	52	5260	16.70	16.75	25.00	25.60	23.23		29.23		23.98		
11a	6Mbps	2	60	5300	16.70	16.80	25.06	25.24	23.23		29.23		23.98		
11a	6Mbps	2	64	5320	16.75	16.85	24.80	25.53	23.24		29.24		23.98		
HT20	MCS0	2	52	5260	17.95	17.90	26.70	25.80	23.53		29.53		23.98		
HT20	MCS0	2	60	5300	17.95	17.95	25.93	26.30	23.54		29.54		23.98		
HT20	MCS0	2	64	5320	17.95	17.90	26.10	26.13	23.53		29.53		23.98		
HT40	MCS0	2	54	5270	36.50	36.70	42.12	42.12	23.98		30.00		23.98		
HT40	MCS0	2	62	5310	36.60	36.60	42.12	42.12	23.98		30.00		23.98		
VHT80	MCS0	2	58	5290	76.56	76.68	84.16	83.62	23.98		30.00		23.98		

TEST RESULTS DATA
Average Power Table

FCC Band II															
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Duty Factor (dB)		Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)		EIRP Power Limit (dBm)	Pass/Fail
					Ant 1	Ant 2	Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2		
11a	6Mbps	1	52	5260	0.08	0.08	17.49	16.68		-	-	-2.50	-0.30	30	Pass
11a	6Mbps	1	60	5300	0.08	0.08	17.35	17.26		-	-	-2.50	-0.30	30	Pass
11a	6Mbps	1	64	5320	0.08	0.08	17.40	17.12		-	-	-2.50	-0.30	30	Pass
HT20	MCS0	1	52	5260	0.09	0.09	17.45	16.65		-	-	-2.50	-0.30	30	Pass
HT20	MCS0	1	60	5300	0.09	0.09	16.90	17.13		-	-	-2.50	-0.30	30	Pass
HT20	MCS0	1	64	5320	0.09	0.09	16.98	17.03		-	-	-2.50	-0.30	30	Pass
HT40	MCS0	1	54	5270	0.18	0.18	17.47	16.44		-	-	-2.50	-0.30	30	Pass
HT40	MCS0	1	62	5310	0.18	0.18	13.96	13.96		-	-	-2.50	-0.30	30	Pass
VHT20	MCS0	1	52	5260	0.09	0.09	17.42	16.57		-	-	-2.50	-0.30	30	Pass
VHT20	MCS0	1	60	5300	0.09	0.09	16.88	17.06		-	-	-2.50	-0.30	30	Pass
VHT20	MCS0	1	64	5320	0.09	0.09	16.97	16.99		-	-	-2.50	-0.30	30	Pass
VHT40	MCS0	1	54	5270	0.18	0.18	17.41	16.41		-	-	-2.50	-0.30	30	Pass
VHT40	MCS0	1	62	5310	0.18	0.18	13.94	13.92		-	-	-2.50	-0.30	30	Pass
VHT80	MCS0	1	58	5290	0.33	0.33	12.27	12.18		-	-	-2.50	-0.30	30	Pass
11a	6Mbps	2	52	5260	0.08	0.08	17.43	17.11	20.29	23.98		-0.30		30	Pass
11a	6Mbps	2	60	5300	0.08	0.08	17.45	17.40	20.44	23.98		-0.30		30	Pass
11a	6Mbps	2	64	5320	0.08	0.08	17.48	17.28	20.40	23.98		-0.30		30	Pass
HT20	MCS0	2	52	5260	0.09	0.09	17.46	17.07	20.28	23.98		-0.30		30	Pass
HT20	MCS0	2	60	5300	0.09	0.09	17.04	17.21	20.14	23.98		-0.30		30	Pass
HT20	MCS0	2	64	5320	0.09	0.09	17.10	17.04	20.08	23.98		-0.30		30	Pass
HT40	MCS0	2	54	5270	0.18	0.18	17.48	16.82	20.18	23.98		-0.30		30	Pass
HT40	MCS0	2	62	5310	0.18	0.18	13.66	13.55	16.62	23.98		-0.30		30	Pass
VHT20	MCS0	2	52	5260	0.09	0.09	17.47	16.94	20.22	23.98		-0.30		30	Pass
VHT20	MCS0	2	60	5300	0.09	0.09	17.02	17.16	20.10	23.98		-0.30		30	Pass
VHT20	MCS0	2	64	5320	0.09	0.09	17.04	17.01	20.04	23.98		-0.30		30	Pass
VHT40	MCS0	2	54	5270	0.16	0.16	17.46	16.78	20.14	23.98		-0.30		30	Pass
VHT40	MCS0	2	62	5310	0.16	0.16	13.60	13.47	16.55	23.98		-0.30		30	Pass
VHT80	MCS0	2	58	5290	0.33	0.33	12.50	12.27	15.40	23.98		-0.30		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 1	Ant 2	Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2		
11a	6Mbps	1	52	5260	0.08	0.08	-	-		-	-	-2.50	-0.30		Pass
11a	6Mbps	1	60	5300	0.08	0.08	-	-		-	-	-2.50	-0.30		Pass
11a	6Mbps	1	64	5320	0.08	0.08	-	-		-	-	-2.50	-0.30		Pass
HT20	MCS0	1	52	5260	0.09	0.09	-	-		-	-	-2.50	-0.30		Pass
HT20	MCS0	1	60	5300	0.09	0.09	-	-		-	-	-2.50	-0.30		Pass
HT20	MCS0	1	64	5320	0.09	0.09	-	-		-	-	-2.50	-0.30		Pass
HT40	MCS0	1	54	5270	0.18	0.18	-	-		-	-	-2.50	-0.30		Pass
HT40	MCS0	1	62	5310	0.18	0.18	-	-		-	-	-2.50	-0.30		Pass
VHT20	MCS0	1	52	5260	0.09	0.09	-	-		-	-	-2.50	-0.30		Pass
VHT20	MCS0	1	60	5300	0.09	0.09	-	-		-	-	-2.50	-0.30		Pass
VHT20	MCS0	1	64	5320	0.09	0.09	-	-		-	-	-2.50	-0.30		Pass
VHT40	MCS0	1	54	5270	0.18	0.18	-	-		-	-	-2.50	-0.30		Pass
VHT40	MCS0	1	62	5310	0.18	0.18	-	-		-	-	-2.50	-0.30		Pass
VHT80	MCS0	1	58	5290	0.33	0.33	-	-		-	-	-2.50	-0.30		Pass
11a	6Mbps	2	52	5260	0.08	0.08			9.27	11.00		1.68			Pass
11a	6Mbps	2	60	5300	0.08	0.08			9.50	11.00		1.68			Pass
11a	6Mbps	2	64	5320	0.08	0.08			9.35	11.00		1.68			Pass
HT20	MCS0	2	52	5260	0.09	0.09			9.07	11.00		1.68			Pass
HT20	MCS0	2	60	5300	0.09	0.09			8.89	11.00		1.68			Pass
HT20	MCS0	2	64	5320	0.09	0.09			8.77	11.00		1.68			Pass
HT40	MCS0	2	54	5270	0.18	0.18			5.92	11.00		1.68			Pass
HT40	MCS0	2	62	5310	0.18	0.18			0.98	11.00		1.68			Pass
VHT80	MCS0	2	58	5290	0.33	0.33			-3.22	11.00		1.68			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 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2
11a	6Mbps	2	100	5500	16.70	16.70	25.30	24.47	23.23		29.23		23.98		----	----
11a	6Mbps	2	116	5580	16.75	16.80	24.70	25.70	23.24		29.24		23.98		----	----
11a	6Mbps	2	140	5700	16.75	16.75	25.70	25.70	23.24		29.24		23.98		----	----
11a	6Mbps	2	144	5720	13.40	13.84	17.05	17.25	22.27		28.27		23.32		2.7	2.55
HT20	MCS0	2	100	5500	17.90	17.95	25.90	25.50	23.53		29.53		23.98		----	----
HT20	MCS0	2	116	5580	17.90	17.90	25.90	26.56	23.53		29.53		23.98		----	----
HT20	MCS0	2	140	5700	18.00	18.05	25.40	27.77	23.55		29.55		23.98		----	----
HT20	MCS0	2	144	5720	14.05	14.00	18.02	18.20	22.46		28.46		23.56		3.35	3.35
HT40	MCS0	2	102	5510	36.50	36.60	41.76	41.94	23.98		30.00		23.98		----	----
HT40	MCS0	2	110	5550	36.50	36.60	41.94	42.12	23.98		30.00		23.98		----	----
HT40	MCS0	2	134	5670	36.50	36.50	42.12	41.94	23.98		30.00		23.98		----	----
HT40	MCS0	2	142	5710	33.40	33.40	36.06	36.06	23.98		30.00		23.98		2.6	2.52
VHT80	MCS0	2	106	5530	76.68	76.56	83.20	83.52	23.98		30.00		23.98		----	----
VHT80	MCS0	2	122	5610	76.68	76.56	84.02	83.28	23.98		30.00		23.98		----	----
VHT80	MCS0	2	138	5690	73.52	73.64	77.40	76.76	23.98		30.00		23.98		2.5	2.52

Report Number : FR891147-01E

TEST RESULTS DATA
Average Power Table

FCC Band III															
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Duty Factor (dB)		Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)		EIRP Power Limit (dBm)	Pass/Fail
					Ant 1	Ant 2	Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2		
11a	6Mbps	1	100	5500	0.08	0.08	17.39	17.07		-	-	-3.60	-1.00	30	Pass
11a	6Mbps	1	116	5580	0.08	0.08	16.91	17.22		-	-	-3.60	-1.00	30	Pass
11a	6Mbps	1	140	5700	0.08	0.08	16.97	17.06		-	-	-3.60	-1.00	30	Pass
11a	6Mbps	1	144	5720	0.08	0.08	16.96	17.06		-	-	-3.60	-1.00	30	Pass
HT20	MCS0	1	100	5500	0.09	0.09	17.28	16.95		-	-	-3.60	-1.00	30	Pass
HT20	MCS0	1	116	5580	0.09	0.09	16.77	17.14		-	-	-3.60	-1.00	30	Pass
HT20	MCS0	1	140	5700	0.09	0.09	16.81	17.30		-	-	-3.60	-1.00	30	Pass
HT20	MCS0	1	144	5720	0.09	0.09	16.86	17.14		-	-	-3.60	-1.00	30	Pass
HT40	MCS0	1	102	5510	0.18	0.18	13.24	12.66		-	-	-3.60	-1.00	30	Pass
HT40	MCS0	1	110	5550	0.18	0.18	17.13	17.32		-	-	-3.60	-1.00	30	Pass
HT40	MCS0	1	134	5670	0.18	0.18	17.19	17.25		-	-	-3.60	-1.00	30	Pass
HT40	MCS0	1	142	5710	0.18	0.18	16.95	17.36		-	-	-3.60	-1.00	30	Pass
VHT20	MCS0	1	100	5500	0.09	0.09	17.25	16.92		-	-	-3.60	-1.00	30	Pass
VHT20	MCS0	1	116	5580	0.09	0.09	16.74	17.09		-	-	-3.60	-1.00	30	Pass
VHT20	MCS0	1	140	5700	0.09	0.09	16.79	17.28		-	-	-3.60	-1.00	30	Pass
VHT20	MCS0	1	144	5720	0.09	0.09	16.85	16.95		-	-	-3.60	-1.00	30	Pass
VHT40	MCS0	1	102	5510	0.18	0.18	13.20	12.63		-	-	-3.60	-1.00	30	Pass
VHT40	MCS0	1	110	5550	0.18	0.18	17.07	17.29		-	-	-3.60	-1.00	30	Pass
VHT40	MCS0	1	134	5670	0.18	0.18	17.14	17.20		-	-	-3.60	-1.00	30	Pass
VHT40	MCS0	1	142	5710	0.18	0.18	16.89	17.32		-	-	-3.60	-1.00	30	Pass
VHT80	MCS0	1	106	5530	0.33	0.33	12.15	11.54		-	-	-3.60	-1.00	30	Pass
VHT80	MCS0	1	122	5610	0.33	0.33	16.71	16.93		-	-	-3.60	-1.00	30	Pass
VHT80	MCS0	1	138	5690	0.33	0.33	17.01	16.89		-	-	-3.60	-1.00	30	Pass
11a	6Mbps	2	100	5500	0.08	0.08	17.46	17.49	20.49	23.98		-1.00		30	Pass
11a	6Mbps	2	116	5580	0.08	0.08	16.93	17.23	20.10	23.98		-1.00		30	Pass
11a	6Mbps	2	140	5700	0.08	0.08	17.08	17.20	20.16	23.98		-1.00		30	Pass
11a	6Mbps	2	144	5720	0.08	0.08	17.03	17.17	20.12	23.32		-1.00		30	Pass
HT20	MCS0	2	100	5500	0.09	0.09	17.43	17.28	20.37	23.98		-1.00		30	Pass
HT20	MCS0	2	116	5580	0.09	0.09	16.95	17.34	20.16	23.98		-1.00		30	Pass
HT20	MCS0	2	140	5700	0.09	0.09	17.05	17.32	20.20	23.98		-1.00		30	Pass
HT20	MCS0	2	144	5720	0.09	0.09	17.02	17.23	20.14	23.56		-1.00		30	Pass
HT40	MCS0	2	102	5510	0.18	0.18	13.48	12.82	16.18	23.98		-1.00		30	Pass
HT40	MCS0	2	110	5550	0.18	0.18	17.16	17.56	20.38	23.98		-1.00		30	Pass
HT40	MCS0	2	134	5670	0.18	0.18	17.24	17.36	20.31	23.98		-1.00		30	Pass
HT40	MCS0	2	142	5710	0.18	0.18	17.14	17.39	20.28	23.98		-1.00		30	Pass
VHT20	MCS0	2	100	5500	0.09	0.09	17.47	17.12	20.31	23.98		-1.00		30	Pass
VHT20	MCS0	2	116	5580	0.09	0.09	16.90	17.24	20.08	23.98		-1.00		30	Pass
VHT20	MCS0	2	140	5700	0.09	0.09	17.01	17.29	20.16	23.98		-1.00		30	Pass
VHT20	MCS0	2	144	5720	0.09	0.09	16.99	17.21	20.11	23.98		-1.00		30	Pass
VHT40	MCS0	2	102	5510	0.16	0.16	13.46	12.79	16.15	23.98		-1.00		30	Pass
VHT40	MCS0	2	110	5550	0.16	0.16	17.08	17.50	20.31	23.98		-1.00		30	Pass
VHT40	MCS0	2	134	5670	0.16	0.16	17.19	17.28	20.25	23.98		-1.00		30	Pass
VHT40	MCS0	2	142	5710	0.16	0.16	17.06	17.33	20.21	23.98		-1.00		30	Pass
VHT80	MCS0	2	106	5530	0.33	0.33	12.19	11.56	14.90	23.98		-1.00		30	Pass
VHT80	MCS0	2	122	5610	0.33	0.33	16.86	17.34	20.12	23.98		-1.00		30	Pass
VHT80	MCS0	2	138	5690	0.33	0.33	17.12	16.99	20.07	23.98		-1.00		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 1	Ant 2	Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2		
11a	6Mbps	2	100	5500	0.08	0.08			9.86	11.00		0.81			Pass
11a	6Mbps	2	116	5580	0.08	0.08			9.58	11.00		0.81			Pass
11a	6Mbps	2	140	5700	0.08	0.08			8.51	11.00		0.81			Pass
11a	6Mbps	2	144	5720	0.08	0.08			8.35	11.00		0.81			Pass
HT20	MCS0	2	100	5500	0.09	0.09			9.44	11.00		0.81			Pass
HT20	MCS0	2	116	5580	0.09	0.09			8.86	11.00		0.81			Pass
HT20	MCS0	2	140	5700	0.09	0.09			7.26	11.00		0.81			Pass
HT20	MCS0	2	144	5720	0.09	0.09			8.38	11.00		0.81			Pass
HT40	MCS0	2	102	5510	0.18	0.18			1.60	11.00		0.81			Pass
HT40	MCS0	2	110	5550	0.18	0.18			6.18	11.00		0.81			Pass
HT40	MCS0	2	134	5670	0.18	0.18			5.28	11.00		0.81			Pass
HT40	MCS0	2	142	5710	0.18	0.18			5.41	11.00		0.81			Pass
VHT80	MCS0	2	106	5530	0.33	0.33			-3.16	11.00		0.81			Pass
VHT80	MCS0	2	122	5610	0.33	0.33			3.15	11.00		0.81			Pass
VHT80	MCS0	2	138	5690	0.33	0.33			2.70	11.00		0.81			Pass

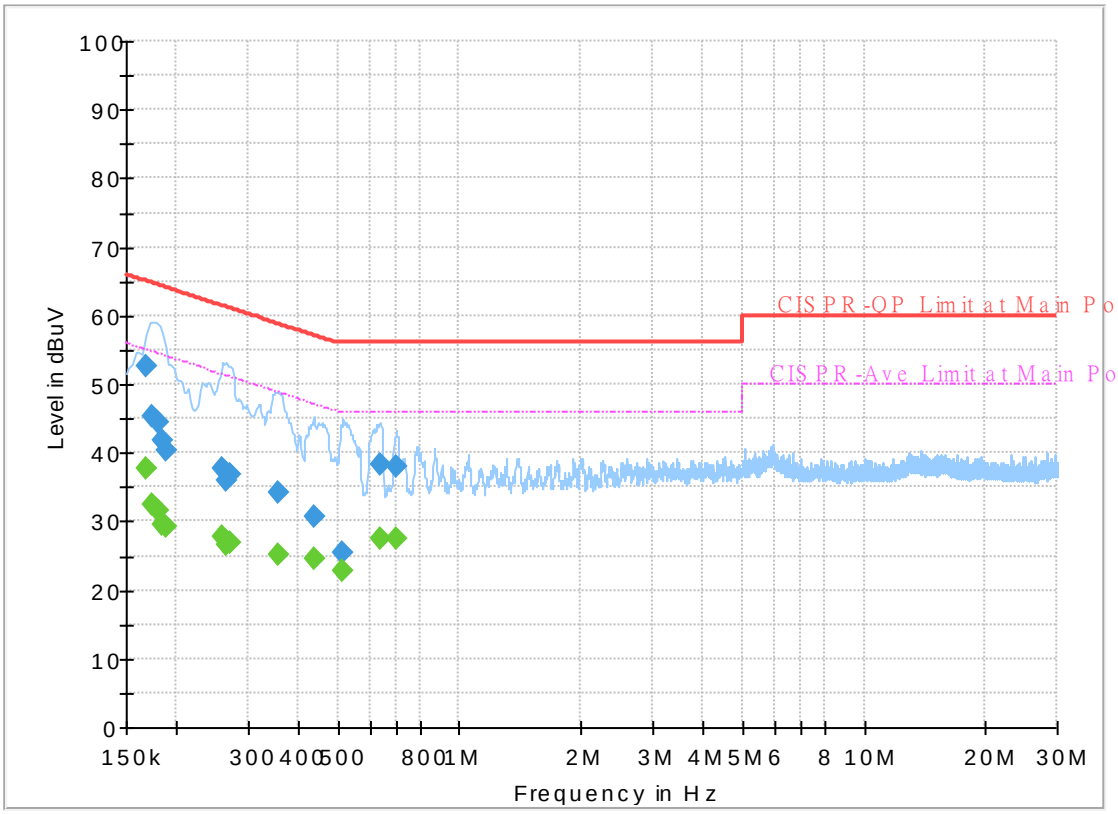
Appendix B. AC Conducted Emission Test Results

Test Engineer :	Rick Lin	**Temperature :**	23~25℃
		Relative Humidity :	55~58%

EUT Information

Report NO :	891147-01
Test Mode :	Mode 1
Test Voltage :	120Vac/60Hz
Phase :	Line

Full Spectrum



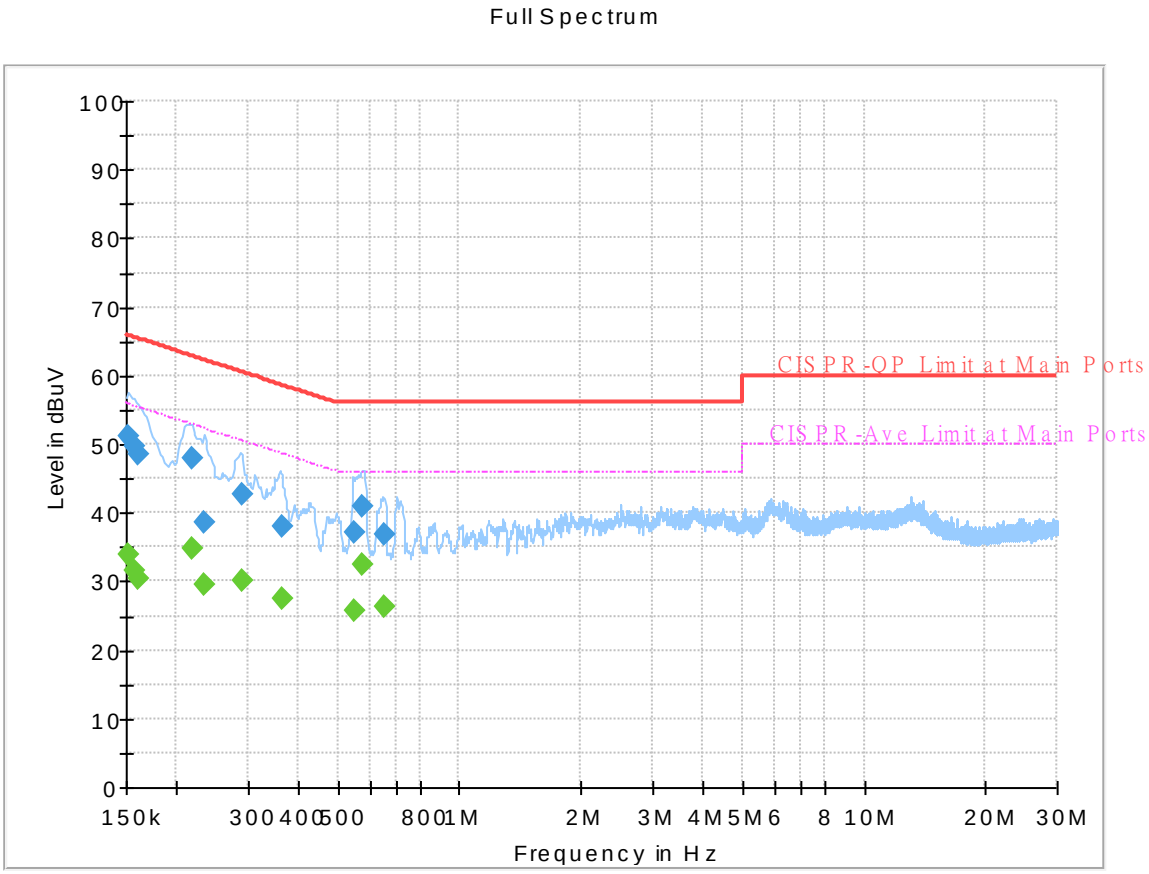
Final_Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.168000	---	37.84	55.06	17.22	L1	OFF	19.5
0.168000	52.58	---	65.06	12.48	L1	OFF	19.5
0.174750	---	32.56	54.73	22.17	L1	OFF	19.5
0.174750	45.39	---	64.73	19.34	L1	OFF	19.5
0.179250	---	31.67	54.52	22.85	L1	OFF	19.5
0.179250	44.53	---	64.52	19.99	L1	OFF	19.5
0.183750	---	29.66	54.31	24.65	L1	OFF	19.5
0.183750	41.77	---	64.31	22.54	L1	OFF	19.5
0.188250	---	29.38	54.11	24.73	L1	OFF	19.5
0.188250	40.38	---	64.11	23.73	L1	OFF	19.5
0.258000	---	27.86	51.50	23.64	L1	OFF	19.5
0.258000	37.80	---	61.50	23.70	L1	OFF	19.5
0.264750	---	26.56	51.28	24.72	L1	OFF	19.5
0.264750	35.95	---	61.28	25.33	L1	OFF	19.5
0.271500	---	26.90	51.07	24.17	L1	OFF	19.5
0.271500	36.96	---	61.07	24.11	L1	OFF	19.5
0.357000	---	25.18	48.80	23.62	L1	OFF	19.5
0.357000	34.07	---	58.80	24.73	L1	OFF	19.5
0.435750	---	24.58	47.14	22.56	L1	OFF	19.5
0.435750	30.69	---	57.14	26.45	L1	OFF	19.5
0.514500	---	22.87	46.00	23.13	L1	OFF	19.5

0.514500	**25.31**	**---**	**56.00**	**30.69**	**L1**	**OFF**	**19.5**
0.636000	**---**	**27.55**	**46.00**	**18.45**	**L1**	**OFF**	**19.6**
0.636000	**38.32**	**---**	**56.00**	**17.68**	**L1**	**OFF**	**19.6**
0.696750	**---**	**27.46**	**46.00**	**18.54**	**L1**	**OFF**	**19.6**
0.696750	**37.95**	**---**	**56.00**	**18.05**	**L1**	**OFF**	**19.6**

EUT Information

Report NO :	891147-01
Test Mode :	Mode 1
Test Voltage :	120Vac/60Hz
Phase :	Neutral



Final_Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.152250	---	34.05	55.88	21.83	N	OFF	19.5
0.152250	51.10	---	65.88	14.78	N	OFF	19.5
0.156750	---	31.62	55.63	24.01	N	OFF	19.5
0.156750	49.72	---	65.63	15.91	N	OFF	19.5
0.161250	---	30.49	55.40	24.91	N	OFF	19.5
0.161250	48.39	---	65.40	17.01	N	OFF	19.5
0.217500	---	34.76	52.91	18.15	N	OFF	19.5
0.217500	47.83	---	62.91	15.08	N	OFF	19.5
0.233250	---	29.41	52.33	22.92	N	OFF	19.5
0.233250	38.56	---	62.33	23.77	N	OFF	19.5
0.289500	---	30.21	50.54	20.33	N	OFF	19.5
0.289500	42.60	---	60.54	17.94	N	OFF	19.5
0.363750	---	27.34	48.64	21.30	N	OFF	19.5
0.363750	37.87	---	58.64	20.77	N	OFF	19.5
0.552750	---	25.61	46.00	20.39	N	OFF	19.5
0.552750	37.10	---	56.00	18.90	N	OFF	19.5
0.575250	---	32.33	46.00	13.67	N	OFF	19.5
0.575250	41.07	---	56.00	14.93	N	OFF	19.5
0.651750	---	26.42	46.00	19.58	N	OFF	19.6
0.651750	36.83	---	56.00	19.17	N	OFF	19.6

Appendix C. Radiated Spurious Emission

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

<For Sample 1>

<Adapter 1>

Band 1 - 5150~5250MHz

WIFI 802.11a (Band Edge @ 3m)

WIFI Ant.	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
1+2		(MHz)	(dBµV/m)	(dB)	(dBµV/m)	(dBµV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11a CH 36 5180MHz		5149.76	63.2	-10.8	74	52.46	31.9	9.98	31.14	117	117	P	H
		5150	49.13	-4.87	54	38.39	31.9	9.98	31.14	117	117	A	H
	*	5180	115.08	-	-	104.42	31.78	10.02	31.14	117	117	P	H
	*	5180	103.24	-	-	92.58	31.78	10.02	31.14	117	117	A	H
													H
													H
		5149.5	61.7	-12.3	74	50.96	31.9	9.98	31.14	308	63	P	V
		5149.24	48.57	-5.43	54	37.83	31.9	9.98	31.14	308	63	A	V
	*	5180	112.89	-	-	102.23	31.78	10.02	31.14	308	63	P	V
	*	5180	101.25	-	-	90.59	31.78	10.02	31.14	308	63	A	V
													V
													V

802.11a CH 44 5220MHz		5147.42	54.73	-19.27	74	43.98	31.91	9.98	31.14	109	118	P	H
		5147.94	42.13	-11.87	54	31.39	31.9	9.98	31.14	109	118	A	H
	*	5220	116.12	-	-	105.62	31.58	10.06	31.14	109	118	P	H
	*	5220	103.56	-	-	93.06	31.58	10.06	31.14	109	118	A	H
		5362.28	53.1	-20.9	74	42.73	31.35	10.17	31.15	109	118	P	H
		5453	40.4	-13.6	54	29.58	31.71	10.26	31.15	109	118	A	H
		5139.1	53.8	-20.2	74	43.05	31.92	9.97	31.14	338	68	P	V
		5150	40.99	-13.01	54	30.25	31.9	9.98	31.14	338	68	A	V
	*	5220	113.26	-	-	102.76	31.58	10.06	31.14	338	68	P	V
	*	5220	101.87	-	-	91.37	31.58	10.06	31.14	338	68	A	V
		5429.76	52.92	-21.08	74	42.22	31.62	10.23	31.15	338	68	P	V
		5456.08	40.24	-13.76	54	29.41	31.72	10.26	31.15	338	68	A	V
802.11a CH 48 5240MHz		5146.38	53.79	-20.21	74	43.04	31.91	9.98	31.14	140	118	P	H
		5148.98	40.92	-13.08	54	30.18	31.9	9.98	31.14	140	118	A	H
	*	5240	114.55	-	-	104.16	31.46	10.07	31.14	140	118	P	H
	*	5240	102.74	-	-	92.35	31.46	10.07	31.14	140	118	A	H
		5351.92	53.47	-20.53	74	43.15	31.31	10.16	31.15	140	118	P	H
		5453	40.4	-13.6	54	29.58	31.71	10.26	31.15	140	118	A	H
		5070.98	53.67	-20.33	74	43.04	31.88	9.89	31.14	358	60	P	V
		5148.98	40.53	-13.47	54	29.79	31.9	9.98	31.14	358	60	A	V
	*	5240	113.32	-	-	102.93	31.46	10.07	31.14	358	60	P	V
	*	5240	101.65	-	-	91.26	31.46	10.07	31.14	358	60	A	V
		5365.64	53.94	-20.06	74	43.56	31.36	10.17	31.15	358	60	P	V
		5459.16	40.26	-13.74	54	29.4	31.74	10.27	31.15	358	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. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 36 5180MHz		10360	50.98	-17.22	68.2	55.79	39.58	15.6	59.99	100	0	P	H
		15540	46.05	-27.95	74	46.28	38.22	19.59	58.04	100	0	P	H
													H
													H
		10360	50.77	-17.43	68.2	55.58	39.58	15.6	59.99	100	0	P	V
		15540	46.93	-27.07	74	47.16	38.22	19.59	58.04	100	0	P	V
													V
													V
802.11a CH 44 5220MHz		10440	50.06	-18.14	68.2	54.86	39.7	15.67	60.17	100	0	P	H
		15660	45.65	-28.35	74	46.09	37.8	19.64	57.88	100	0	P	H
													H
													H
		10440	50.59	-17.61	68.2	55.39	39.7	15.67	60.17	100	0	P	V
		15660	44.94	-29.06	74	45.38	37.8	19.64	57.88	100	0	P	V
													V
													V
802.11a CH 48 5240MHz		10480	49.98	-18.22	68.2	54.84	39.7	15.7	60.26	100	0	P	H
		15720	45.74	-28.26	74	46.12	37.76	19.65	57.79	100	0	P	H
													H
													H
		10480	50.19	-18.01	68.2	55.05	39.7	15.7	60.26	100	0	P	V
		15720	46.06	-27.94	74	46.44	37.76	19.65	57.79	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. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 36 5180MHz		5150	64.64	-9.36	74	53.9	31.9	9.98	31.14	121	117	P	H
		5150	51.2	-2.8	54	40.46	31.9	9.98	31.14	121	117	A	H
	*	5180	116	-	-	105.34	31.78	10.02	31.14	121	117	P	H
	*	5180	104.96	-	-	94.3	31.78	10.02	31.14	121	117	A	H
													H
													H
		5150	62.05	-11.95	74	51.31	31.9	9.98	31.14	365	71	P	V
		5150	48.97	-5.03	54	38.23	31.9	9.98	31.14	365	71	A	V
	*	5180	113.57	-	-	102.91	31.78	10.02	31.14	365	71	P	V
	*	5180	103.03	-	-	92.37	31.78	10.02	31.14	365	71	A	V
													V
													V
802.11n HT20 CH 44 5220MHz		5144.56	53.67	-20.33	74	42.93	31.91	9.97	31.14	125	122	P	H
		5149.24	42.33	-11.67	54	31.59	31.9	9.98	31.14	125	122	A	H
	*	5220	116.08	-	-	105.58	31.58	10.06	31.14	125	122	P	H
	*	5220	104.78	-	-	94.28	31.58	10.06	31.14	125	122	A	H
		5411.56	53.72	-20.28	74	43.11	31.55	10.21	31.15	125	122	P	H
		5433.68	40.97	-13.03	54	30.25	31.63	10.24	31.15	125	122	A	H
		5147.68	53.7	-20.3	74	42.96	31.9	9.98	31.14	321	64	P	V
		5149.5	41.66	-12.34	54	30.92	31.9	9.98	31.14	321	64	A	V
	*	5220	115.22	-	-	104.72	31.58	10.06	31.14	321	64	P	V
	*	5220	103.52	-	-	93.02	31.58	10.06	31.14	321	64	A	V
		5450.2	52.73	-21.27	74	41.92	31.7	10.26	31.15	321	64	P	V
		5436.2	40.96	-13.04	54	30.23	31.64	10.24	31.15	321	64	A	V

802.11n HT20 CH 48 5240MHz		5096.46	53.14	-20.86	74	42.37	31.99	9.92	31.14	100	121	P	H
		5148.72	41.62	-12.38	54	30.88	31.9	9.98	31.14	100	121	A	H
	*	5240	115.52	-	-	105.13	31.46	10.07	31.14	100	121	P	H
	*	5240	104.29	-	-	93.9	31.46	10.07	31.14	100	121	A	H
		5350.8	52.81	-21.19	74	42.5	31.3	10.16	31.15	100	121	P	H
		5457.76	41.09	-12.91	54	30.25	31.73	10.26	31.15	100	121	A	H
		5054.6	53.03	-20.97	74	42.48	31.82	9.87	31.14	355	62	P	V
		5148.72	41.32	-12.68	54	30.58	31.9	9.98	31.14	355	62	A	V
	*	5240	113.95	-	-	103.56	31.46	10.07	31.14	355	62	P	V
	*	5240	102.73	-	-	92.34	31.46	10.07	31.14	355	62	A	V
		5417.16	53.06	-20.94	74	42.42	31.57	10.22	31.15	355	62	P	V
		5459.44	40.96	-13.04	54	30.1	31.74	10.27	31.15	355	62	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 1 5150~5250MHz

WIFI 802.11n HT20 (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 36 5180MHz		10360	50.05	-18.15	68.2	54.86	39.58	15.6	59.99	100	0	P	H
		15540	44.51	-29.49	74	44.74	38.22	19.59	58.04	100	0	P	H
													H
													H
		10360	47.74	-20.46	68.2	52.55	39.58	15.6	59.99	100	0	P	V
		15540	44.92	-29.08	74	45.15	38.22	19.59	58.04	100	0	P	V
													V
													V
802.11n HT20 CH 44 5220MHz		10440	49.86	-18.34	68.2	54.66	39.7	15.67	60.17	100	0	P	H
		15660	44.92	-29.08	74	45.36	37.8	19.64	57.88	100	0	P	H
													H
													H
		10440	50.37	-17.83	68.2	55.17	39.7	15.67	60.17	100	0	P	V
		15660	45.64	-28.36	74	46.08	37.8	19.64	57.88	100	0	P	V
													V
													V
802.11n HT20 CH 48 5240MHz		10480	48.68	-19.52	68.2	53.54	39.7	15.7	60.26	100	0	P	H
		15720	47.2	-26.8	74	47.58	37.76	19.65	57.79	100	0	P	H
													H
													H
		10480	47.94	-20.26	68.2	52.8	39.7	15.7	60.26	100	0	P	V
		15720	46.9	-27.1	74	47.28	37.76	19.65	57.79	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. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 CH 38 5190MHz		5149.76	60.18	-13.82	74	49.44	31.9	9.98	31.14	107	118	P	H
		5150	51.64	-2.36	54	40.9	31.9	9.98	31.14	107	118	A	H
	*	5190	107.08	-	-	96.45	31.74	10.03	31.14	107	118	P	H
	*	5190	96.04	-	-	85.41	31.74	10.03	31.14	107	118	A	H
		5372.92	52.93	-21.07	74	42.51	31.39	10.18	31.15	107	118	P	H
		5379.36	41.84	-12.16	54	31.39	31.42	10.18	31.15	107	118	A	H
		5150	57.8	-16.2	74	47.06	31.9	9.98	31.14	382	77	P	V
		5150	48.34	-5.66	54	37.6	31.9	9.98	31.14	382	77	A	V
	*	5190	106.74	-	-	96.11	31.74	10.03	31.14	382	77	P	V
	*	5190	95.97	-	-	85.34	31.74	10.03	31.14	382	77	A	V
		5430.88	52.85	-21.15	74	42.15	31.62	10.23	31.15	382	77	P	V
		5454.12	41.93	-12.07	54	31.1	31.72	10.26	31.15	382	77	A	V
802.11n HT40 CH 46 5230MHz		5150	56.52	-17.48	74	45.78	31.9	9.98	31.14	103	115	P	H
		5150	45.59	-8.41	54	34.85	31.9	9.98	31.14	103	115	A	H
	*	5230	114.05	-	-	103.61	31.52	10.06	31.14	103	115	P	H
	*	5230	102.9	-	-	92.46	31.52	10.06	31.14	103	115	A	H
		5369.84	53.47	-20.53	74	43.06	31.38	10.18	31.15	103	115	P	H
		5453.56	42.64	-11.36	54	31.82	31.71	10.26	31.15	103	115	A	H
		5135.46	53.87	-20.13	74	43.12	31.93	9.96	31.14	400	64	P	V
		5135.2	43.13	-10.87	54	32.38	31.93	9.96	31.14	400	64	A	V
	*	5230	111.98	-	-	101.54	31.52	10.06	31.14	400	64	P	V
	*	5230	101.07	-	-	90.63	31.52	10.06	31.14	400	64	A	V
		5446.56	52.6	-21.4	74	41.81	31.69	10.25	31.15	400	64	P	V
		5363.4	42.08	-11.92	54	31.71	31.35	10.17	31.15	400	64	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 1 5150~5250MHz

WIFI 802.11n HT40 (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 CH 38 5190MHz		10380	46.28	-21.92	68.2	51.06	39.64	15.62	60.04	100	0	P	H
		15570	44.32	-29.68	74	44.71	38.01	19.6	58	100	0	P	H
													H
													H
		10380	48.15	-20.05	68.2	52.93	39.64	15.62	60.04	100	0	P	V
		15570	45.08	-28.92	74	45.47	38.01	19.6	58	100	0	P	V
													V
													V
802.11n HT40 CH 46 5230MHz		10460	49.91	-18.29	68.2	54.74	39.7	15.68	60.21	100	0	P	H
		15690	45.61	-28.39	74	46	37.8	19.64	57.83	100	0	P	H
													H
													H
		10460	47.79	-20.41	68.2	52.62	39.7	15.68	60.21	100	0	P	V
		15690	46.17	-27.83	74	46.56	37.8	19.64	57.83	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. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80 CH 42 5210MHz		5148.2	61.65	-12.35	74	50.91	31.9	9.98	31.14	128	118	P	H
		5149.76	51.95	-2.05	54	41.21	31.9	9.98	31.14	128	118	A	H
	*	5210	103.85	-	-	93.3	31.64	10.05	31.14	128	118	P	H
	*	5210	93.48	-	-	82.93	31.64	10.05	31.14	128	118	A	H
		5350.52	52.93	-21.07	74	42.62	31.3	10.16	31.15	128	118	P	H
		5352.48	42.29	-11.71	54	31.97	31.31	10.16	31.15	128	118	A	H
		5150	57.43	-16.57	74	46.69	31.9	9.98	31.14	391	67	P	V
		5150	48.05	-5.95	54	37.31	31.9	9.98	31.14	391	67	A	V
	*	5210	103.01	-	-	92.46	31.64	10.05	31.14	391	67	P	V
	*	5210	91.95	-	-	81.4	31.64	10.05	31.14	391	67	A	V
		5381.04	52.23	-21.77	74	41.78	31.42	10.18	31.15	391	67	P	V
		5372.08	41.88	-12.12	54	31.46	31.39	10.18	31.15	391	67	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. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80 CH 42 5210MHz		10420	46.92	-21.28	68.2	51.69	39.7	15.65	60.12	100	0	P	H
		15630	44.46	-29.54	74	44.96	37.8	19.62	57.92	100	0	P	H
													H
													H
		10420	46.41	-21.79	68.2	51.18	39.7	15.65	60.12	100	0	P	V
		15630	44.89	-29.11	74	45.39	37.8	19.62	57.92	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 Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 52 5260MHz		5134.64	52.59	-21.41	74	41.84	31.93	9.96	31.14	115	119	P	H
		5149.94	40.83	-13.17	54	30.09	31.9	9.98	31.14	115	119	A	H
	*	5260	115.87	-	-	105.55	31.38	10.09	31.15	115	119	P	H
	*	5260	103.22	-	-	92.9	31.38	10.09	31.15	115	119	A	H
		5382.96	52.99	-21.01	74	42.52	31.43	10.19	31.15	115	119	P	H
		5350.08	40.9	-13.1	54	30.59	31.3	10.16	31.15	115	119	A	H
		5149.94	52.7	-21.3	74	41.96	31.9	9.98	31.14	355	59	P	V
		5149.94	40.61	-13.39	54	29.87	31.9	9.98	31.14	355	59	A	V
	*	5260	113.53	-	-	103.21	31.38	10.09	31.15	355	59	P	V
	*	5260	100.83	-	-	90.51	31.38	10.09	31.15	355	59	A	V
		5397.12	52.76	-21.24	74	42.22	31.49	10.2	31.15	355	59	P	V
		5454.96	40.4	-13.6	54	29.57	31.72	10.26	31.15	355	59	A	V
802.11a CH 60 5300MHz		5148.58	52.71	-21.29	74	41.97	31.9	9.98	31.14	108	117	P	H
		5148.58	40.89	-13.11	54	30.15	31.9	9.98	31.14	108	117	A	H
	*	5300	116.98	-	-	106.71	31.3	10.12	31.15	108	117	P	H
	*	5300	104.51	-	-	94.24	31.3	10.12	31.15	108	117	A	H
		5352.72	56.75	-17.25	74	46.43	31.31	10.16	31.15	108	117	P	H
		5352.72	43.75	-10.25	54	33.43	31.31	10.16	31.15	108	117	A	H
		5140.76	53.21	-20.79	74	42.46	31.92	9.97	31.14	369	64	P	V
		5149.26	41.01	-12.99	54	30.27	31.9	9.98	31.14	369	64	A	V
	*	5300	115.76	-	-	105.49	31.3	10.12	31.15	369	64	P	V
	*	5300	103.08	-	-	92.81	31.3	10.12	31.15	369	64	A	V
		5352.24	53.52	-20.48	74	43.2	31.31	10.16	31.15	369	64	P	V
		5352.48	41.8	-12.2	54	31.48	31.31	10.16	31.15	369	64	A	V

802.11a CH 64 5320MHz	*	5320	115.87	-	-	105.58	31.3	10.14	31.15	120	118	P	H
	*	5320	103.77	-	-	93.48	31.3	10.14	31.15	120	118	A	H
		5350.72	63	-11	74	52.69	31.3	10.16	31.15	120	118	P	H
		5350.08	50.31	-3.69	54	40	31.3	10.16	31.15	120	118	A	H
													H
													H
	*	5320	114.06	-	-	103.77	31.3	10.14	31.15	387	69	P	V
	*	5320	101.97	-	-	91.68	31.3	10.14	31.15	387	69	A	V
		5350.56	61.43	-12.57	74	51.12	31.3	10.16	31.15	387	69	P	V
		5350.08	47.84	-6.16	54	37.53	31.3	10.16	31.15	387	69	A	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 2 5250~5350MHz

WIFI 802.11a (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 52 5260MHz		10520	48.62	-19.58	68.2	53.5	39.74	15.73	60.35	100	0	P	H
		15780	46.51	-27.49	74	46.9	37.64	19.68	57.71	100	0	P	H
													H
													H
		10520	49.42	-18.78	68.2	54.3	39.74	15.73	60.35	100	0	P	V
		15780	46.51	-27.49	74	46.9	37.64	19.68	57.71	100	0	P	V
													V
													V
802.11a CH 60 5300MHz		10600	54.87	-19.13	74	59.71	39.9	15.8	60.54	102	227	P	H
		10600	39.5	-14.5	54	44.34	39.9	15.8	60.54	102	227	A	H
		15900	47.35	-26.65	74	47.86	37.3	19.73	57.54	100	0	P	H
													H
		10600	49.72	-24.28	74	54.56	39.9	15.8	60.54	100	0	P	V
		15900	46.15	-27.85	74	46.66	37.3	19.73	57.54	100	0	P	V
													V
													V
802.11a CH 64 5320MHz		10640	53.06	-20.94	74	58.02	39.86	15.82	60.64	100	229	P	H
		10640	38.96	-15.04	54	43.92	39.86	15.82	60.64	100	229	A	H
		15960	45.36	-28.64	74	45.72	37.36	19.74	57.46	100	0	P	H
													H
		10640	53.04	-20.96	74	58	39.86	15.82	60.64	106	273	P	V
		10640	39.18	-14.82	54	44.14	39.86	15.82	60.64	106	273	A	V
		15960	54.76	-19.24	74	55.12	37.36	19.74	57.46	123	320	P	V
		15960	39.19	-14.81	54	39.55	37.36	19.74	57.46	123	320	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 HT20 (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 52 5260MHz		5109.82	53.4	-20.6	74	42.63	31.98	9.93	31.14	115	118	P	H
		5133.96	41.7	-12.3	54	30.95	31.93	9.96	31.14	115	118	A	H
	*	5260	114.96	-	-	104.64	31.38	10.09	31.15	115	118	P	H
	*	5260	103.62	-	-	93.3	31.38	10.09	31.15	115	118	A	H
		5357.28	53.83	-20.17	74	43.48	31.33	10.17	31.15	115	118	P	H
		5356.08	41.82	-12.18	54	31.49	31.32	10.16	31.15	115	118	A	H
		5123.76	52.86	-21.14	74	42.1	31.95	9.95	31.14	381	78	P	V
		5141.1	41.46	-12.54	54	30.71	31.92	9.97	31.14	381	78	A	V
	*	5260	112.68	-	-	102.36	31.38	10.09	31.15	381	78	P	V
	*	5260	101.33	-	-	91.01	31.38	10.09	31.15	381	78	A	V
		5438.64	53.67	-20.33	74	42.93	31.65	10.24	31.15	381	78	P	V
		5449.68	41.29	-12.71	54	30.49	31.7	10.25	31.15	381	78	A	V
802.11n HT20 CH 60 5300MHz		5100.3	53.2	-20.8	74	42.42	32	9.92	31.14	111	115	P	H
		5149.94	41.24	-12.76	54	30.5	31.9	9.98	31.14	111	115	A	H
	*	5300	114.48	-	-	104.21	31.3	10.12	31.15	111	115	P	H
	*	5300	103.66	-	-	93.39	31.3	10.12	31.15	111	115	A	H
		5351.52	55.64	-18.36	74	45.32	31.31	10.16	31.15	111	115	P	H
		5350.8	44.51	-9.49	54	34.2	31.3	10.16	31.15	111	115	A	H
		5147.22	52.32	-21.68	74	41.57	31.91	9.98	31.14	367	77	P	V
		5137.02	41.22	-12.78	54	30.47	31.93	9.96	31.14	367	77	A	V
	*	5300	112.96	-	-	102.69	31.3	10.12	31.15	367	77	P	V
	*	5300	102.27	-	-	92	31.3	10.12	31.15	367	77	A	V
		5355.36	53.15	-20.85	74	42.82	31.32	10.16	31.15	367	77	P	V
		5350.08	42.86	-11.14	54	32.55	31.3	10.16	31.15	367	77	A	V

	*	5320	114.15	-	-	103.86	31.3	10.14	31.15	110	115	P	H
	*	5320	102.98	-	-	92.69	31.3	10.14	31.15	110	115	A	H
		5350.72	63.88	-10.12	74	53.57	31.3	10.16	31.15	110	115	P	H
		5350.4	51.38	-2.62	54	41.07	31.3	10.16	31.15	110	115	A	H
802.11n													H
HT20													H
CH 64	*	5320	112.68	-	-	102.39	31.3	10.14	31.15	346	67	P	V
5320MHz	*	5320	101.6	-	-	91.31	31.3	10.14	31.15	346	67	A	V
		5350.24	60.07	-13.93	74	49.76	31.3	10.16	31.15	346	67	P	V
		5350.08	48.86	-5.14	54	38.55	31.3	10.16	31.15	346	67	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. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 52 5260MHz		10520	48.9	-19.3	68.2	53.78	39.74	15.73	60.35	100	0	P	H
		15780	44.67	-29.33	74	45.06	37.64	19.68	57.71	100	0	P	H
													H
													H
		10520	48.05	-20.15	68.2	52.93	39.74	15.73	60.35	100	0	P	V
		15780	44.31	-29.69	74	44.7	37.64	19.68	57.71	100	0	P	V
													V
													V
802.11n HT20 CH 60 5300MHz		10600	49.12	-24.88	74	53.96	39.9	15.8	60.54	100	0	P	H
		15900	48.11	-25.89	74	48.62	37.3	19.73	57.54	100	0	P	H
													H
													H
		10600	49.83	-24.17	74	54.67	39.9	15.8	60.54	100	0	P	V
		15900	45.96	-28.04	74	46.47	37.3	19.73	57.54	100	0	P	V
													V
													V
802.11n HT20 CH 64 5320MHz		10640	49.54	-24.46	74	54.5	39.86	15.82	60.64	100	0	P	H
		15960	47.28	-26.72	74	47.64	37.36	19.74	57.46	100	0	P	H
													H
													H
		10640	49.39	-24.61	74	54.35	39.86	15.82	60.64	100	0	P	V
		15960	43.44	-30.56	74	43.8	37.36	19.74	57.46	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. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 CH 54 5270MHz		5149.26	53.39	-20.61	74	42.65	31.9	9.98	31.14	111	116	P	H
		5148.24	43.17	-10.83	54	32.43	31.9	9.98	31.14	111	116	A	H
	*	5270	114.03	-	-	103.72	31.36	10.1	31.15	111	116	P	H
	*	5270	102.96	-	-	92.65	31.36	10.1	31.15	111	116	A	H
		5363.76	56.04	-17.96	74	45.66	31.36	10.17	31.15	111	116	P	H
		5350.08	45.74	-8.26	54	35.43	31.3	10.16	31.15	111	116	A	H
		5137.02	53.06	-20.94	74	42.31	31.93	9.96	31.14	360	73	P	V
		5146.88	42.57	-11.43	54	31.82	31.91	9.98	31.14	360	73	A	V
	*	5270	111.8	-	-	101.49	31.36	10.1	31.15	360	73	P	V
	*	5270	100.81	-	-	90.5	31.36	10.1	31.15	360	73	A	V
		5350.8	54.36	-19.64	74	44.05	31.3	10.16	31.15	360	73	P	V
		5362.32	43.4	-10.6	54	33.03	31.35	10.17	31.15	360	73	A	V
802.11n HT40 CH 62 5310MHz		5111.18	53.22	-20.78	74	42.45	31.98	9.93	31.14	112	119	P	H
		5126.14	41.96	-12.04	54	31.2	31.95	9.95	31.14	112	119	A	H
	*	5310	109.14	-	-	98.86	31.3	10.13	31.15	112	119	P	H
	*	5310	98.65	-	-	88.37	31.3	10.13	31.15	112	119	A	H
		5350.08	62.24	-11.76	74	51.93	31.3	10.16	31.15	112	119	P	H
		5350.8	52.09	-1.91	54	41.78	31.3	10.16	31.15	112	119	A	H
		5096.56	52.9	-21.1	74	42.13	31.99	9.92	31.14	326	67	P	V
		5106.08	41.97	-12.03	54	31.19	31.99	9.93	31.14	326	67	A	V
	*	5310	107.18	-	-	96.9	31.3	10.13	31.15	326	67	P	V
	*	5310	97.11	-	-	86.83	31.3	10.13	31.15	326	67	A	V
		5350.08	59.99	-14.01	74	49.68	31.3	10.16	31.15	326	67	P	V
		5351.04	49.15	-4.85	54	38.84	31.3	10.16	31.15	326	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 802.11n HT40 (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 CH 54 5270MHz		10540	47.98	-20.22	68.2	52.85	39.78	15.75	60.4	100	0	P	H
		15810	45.53	-28.47	74	45.94	37.57	19.69	57.67	100	0	P	H
													H
													H
		10540	46.78	-21.42	68.2	51.65	39.78	15.75	60.4	100	0	P	V
		15810	44.79	-29.21	74	45.2	37.57	19.69	57.67	100	0	P	V
													V
													V
802.11n HT40 CH 62 5310MHz		10620	49.52	-24.48	74	54.43	39.88	15.8	60.59	100	0	P	H
		15930	45.07	-28.93	74	45.5	37.33	19.74	57.5	100	0	P	H
													H
													H
		10620	48.67	-25.33	74	53.58	39.88	15.8	60.59	100	0	P	V
		15930	45.91	-28.09	74	46.34	37.33	19.74	57.5	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. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80 CH 58 5290MHz		5092.14	52.6	-21.4	74	41.86	31.97	9.91	31.14	113	117	P	H
		5130.22	42.45	-11.55	54	31.69	31.94	9.96	31.14	113	117	A	H
	*	5290	104.4	-	-	94.12	31.32	10.11	31.15	113	117	P	H
	*	5290	93.83	-	-	83.55	31.32	10.11	31.15	113	117	A	H
		5350.32	60.36	-13.64	74	50.05	31.3	10.16	31.15	113	117	P	H
		5350.32	51.02	-2.98	54	40.71	31.3	10.16	31.15	113	117	A	H
		5116.62	52.65	-21.35	74	41.88	31.97	9.94	31.14	356	75	P	V
		5147.56	42.36	-11.64	54	31.62	31.9	9.98	31.14	356	75	A	V
	*	5290	103.56	-	-	93.28	31.32	10.11	31.15	356	75	P	V
	*	5290	92.92	-	-	82.64	31.32	10.11	31.15	356	75	A	V
		5350.56	57.67	-16.33	74	47.36	31.3	10.16	31.15	356	75	P	V
		5350.32	48.24	-5.76	54	37.93	31.3	10.16	31.15	356	75	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. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80 CH 58 5290MHz		10580	47.53	-20.67	68.2	52.38	39.86	15.78	60.49	100	0	P	H
		15870	44.29	-29.71	74	44.77	37.39	19.71	57.58	100	0	P	H
													H
													H
		10580	46.9	-21.3	68.2	51.75	39.86	15.78	60.49	100	0	P	V
		15870	44.82	-29.18	74	45.3	37.39	19.71	57.58	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 802.11a (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 100 5500MHz		5456.88	58.1	-15.9	74	47.26	31.73	10.26	31.15	114	117	P	H
		5467.6	63.94	-4.26	68.2	53.05	31.77	10.27	31.15	114	117	P	H
		5458	45.9	-8.1	54	35.06	31.73	10.26	31.15	114	117	A	H
	*	5500	117.26	-	-	106.2	31.9	10.31	31.15	114	117	P	H
	*	5500	104.68	-	-	93.62	31.9	10.31	31.15	114	117	A	H
													H
		5450.64	55.76	-18.24	74	44.95	31.7	10.26	31.15	342	76	P	V
		5470	60.95	-7.25	68.2	50.04	31.78	10.28	31.15	342	76	P	V
		5460	42.97	-11.03	54	32.11	31.74	10.27	31.15	342	76	A	V
	*	5500	113.16	-	-	102.1	31.9	10.31	31.15	342	76	P	V
	*	5500	101.21	-	-	90.15	31.9	10.31	31.15	342	76	A	V
													V
802.11a CH 116 5580MHz		5437.36	53.18	-20.82	74	42.44	31.65	10.24	31.15	100	116	P	H
		5463.52	53.59	-14.61	68.2	42.72	31.75	10.27	31.15	100	116	P	H
		5458.72	40.72	-13.28	54	29.88	31.73	10.26	31.15	100	116	A	H
	*	5580	114.81	-	-	103.81	31.8	10.4	31.2	100	116	P	H
	*	5580	102.75	-	-	91.75	31.8	10.4	31.2	100	116	A	H
		5728.46	53.25	-14.95	68.2	41.93	32.06	10.52	31.26	100	116	P	H
		5446.72	53.03	-20.97	74	42.24	31.69	10.25	31.15	332	78	P	V
		5468.56	52.28	-15.92	68.2	41.38	31.77	10.28	31.15	332	78	P	V
		5452.96	40.49	-13.51	54	29.67	31.71	10.26	31.15	332	78	A	V
	*	5580	112.09	-	-	101.09	31.8	10.4	31.2	332	78	P	V
	*	5580	100.21	-	-	89.21	31.8	10.4	31.2	332	78	A	V
		5730.98	53.92	-14.28	68.2	42.61	32.06	10.52	31.27	332	78	P	V

802.11a CH 140 5700MHz	*	5700	115.74	-	-	104.49	32	10.5	31.25	116	114	P	H
	*	5700	103.65	-	-	92.4	32	10.5	31.25	116	114	A	H
		5725	64.61	-3.59	68.2	53.3	32.05	10.52	31.26	116	114	P	H
													H
													H
													H
	*	5700	111.17	-	-	99.92	32	10.5	31.25	318	56	P	V
	*	5700	99.65	-	-	88.4	32	10.5	31.25	318	56	A	V
		5725.24	60.99	-7.21	68.2	49.68	32.05	10.52	31.26	318	56	P	V
													V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 - 5470~5725MHz

WIFI 802.11a (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 100 5500MHz		11000	53.96	-20.04	74	59.16	40.2	16.1	61.5	100	223	P	H
		11000	39.62	-14.38	54	44.82	40.2	16.1	61.5	100	223	A	H
		16500	45.16	-23.04	68.2	42.88	39.4	20.18	57.3	100	0	P	H
													H
		11000	55.28	-18.72	74	60.48	40.2	16.1	61.5	100	272	P	V
		11000	41.28	-12.72	54	46.48	40.2	16.1	61.5	100	272	A	V
		16500	44.96	-23.24	68.2	42.68	39.4	20.18	57.3	100	0	P	V
													V
802.11a CH 116 5580MHz		11160	55.22	-18.78	74	60.9	39.62	16.23	61.53	112	238	P	H
		11160	41.55	-12.45	54	47.23	39.62	16.23	61.53	112	238	A	H
		16740	46.86	-21.34	68.2	42.91	40.4	20.37	56.82	100	0	P	H
													H
		11160	55.3	-18.7	74	60.98	39.62	16.23	61.53	100	271	P	V
		11160	41.43	-12.57	54	47.11	39.62	16.23	61.53	100	271	A	V
		16740	47.06	-21.14	68.2	43.11	40.4	20.37	56.82	100	0	P	V
													V
802.11a CH 140 5700MHz		11400	53.48	-20.52	74	59.04	39.6	16.42	61.58	124	237	P	H
		11400	39.59	-14.41	54	45.15	39.6	16.42	61.58	124	237	A	H
		17100	46.99	-21.21	68.2	41.9	40.5	20.67	56.08	100	0	P	H
													H
		11400	54.76	-19.24	74	60.32	39.6	16.42	61.58	100	273	P	V
		11400	40.56	-13.44	54	46.12	39.6	16.42	61.58	100	273	A	V
		17100	46.34	-21.86	68.2	41.25	40.5	20.67	56.08	100	0	P	V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 - 5470~5725MHz

WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 100 5500MHz		5449.68	57.87	-16.13	74	47.07	31.7	10.25	31.15	115	115	P	H
		5468.88	64.74	-3.46	68.2	53.83	31.78	10.28	31.15	115	115	P	H
		5453.04	45.97	-8.03	54	35.15	31.71	10.26	31.15	115	115	A	H
	*	5500	115.83	-	-	104.77	31.9	10.31	31.15	115	115	P	H
	*	5500	104.69	-	-	93.63	31.9	10.31	31.15	115	115	A	H
													H
		5452.08	55.63	-18.37	74	44.81	31.71	10.26	31.15	332	71	P	V
		5470	62.6	-5.6	68.2	51.69	31.78	10.28	31.15	332	71	P	V
		5454	43.9	-10.1	54	33.07	31.72	10.26	31.15	332	71	A	V
	*	5500	113.62	-	-	102.56	31.9	10.31	31.15	332	71	P	V
	*	5500	102.61	-	-	91.55	31.9	10.31	31.15	332	71	A	V
													V
802.11n HT20 CH 116 5580MHz		5401.84	53.5	-20.5	74	42.94	31.51	10.2	31.15	116	115	P	H
		5462.32	53.74	-14.46	68.2	42.87	31.75	10.27	31.15	116	115	P	H
		5452.96	42.01	-11.99	54	31.19	31.71	10.26	31.15	116	115	A	H
	*	5580	114.72	-	-	103.72	31.8	10.4	31.2	116	115	P	H
	*	5580	103.57	-	-	92.57	31.8	10.4	31.2	116	115	A	H
		5753.975	53.94	-14.26	68.2	42.56	32.11	10.54	31.27	116	115	P	H
		5448.16	53.9	-20.1	74	43.11	31.69	10.25	31.15	321	71	P	V
		5468.56	52.98	-15.22	68.2	42.08	31.77	10.28	31.15	321	71	P	V
		5454.88	41.7	-12.3	54	30.87	31.72	10.26	31.15	321	71	A	V
	*	5580	112.74	-	-	101.74	31.8	10.4	31.2	321	71	P	V
	*	5580	101.74	-	-	90.74	31.8	10.4	31.2	321	71	A	V
		5757.44	52.57	-15.63	68.2	41.19	32.11	10.55	31.28	321	71	P	V

	*	5700	112.46	-	-	101.21	32	10.5	31.25	127	117	P	H
	*	5700	101.29	-	-	90.04	32	10.5	31.25	127	117	A	H
		5725	65.6	-2.6	68.2	54.29	32.05	10.52	31.26	127	117	P	H
													H
802.11n													H
HT20													H
CH 140	*	5700	111.75	-	-	100.5	32	10.5	31.25	324	68	P	V
5700MHz	*	5700	100.34	-	-	89.09	32	10.5	31.25	324	68	A	V
		5725	64.08	-4.12	68.2	52.77	32.05	10.52	31.26	324	68	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. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 100 5500MHz		11000	53.46	-20.54	74	58.66	40.2	16.1	61.5	100	241	P	H
		11000	38.73	-15.27	54	43.93	40.2	16.1	61.5	100	241	A	H
		16500	46.15	-22.05	68.2	43.87	39.4	20.18	57.3	100	0	P	H
													H
		11000	54.12	-19.88	74	59.32	40.2	16.1	61.5	100	271	P	V
		11000	39.88	-14.12	54	45.08	40.2	16.1	61.5	100	271	A	V
		16500	44.62	-23.58	68.2	42.34	39.4	20.18	57.3	100	0	P	V
													V
802.11n HT20 CH 116 5580MHz		11160	57.44	-16.56	74	63.12	39.62	16.23	61.53	117	243	P	H
		11160	41.66	-12.34	54	47.34	39.62	16.23	61.53	117	243	A	H
		16740	48.69	-19.51	68.2	44.74	40.4	20.37	56.82	100	0	P	H
													H
		11160	58.19	-15.81	74	63.87	39.62	16.23	61.53	100	272	P	V
		11160	42.13	-11.87	54	47.81	39.62	16.23	61.53	100	272	A	V
		16740	46.95	-21.25	68.2	43	40.4	20.37	56.82	100	0	P	V
													V
802.11n HT20 CH 140 5700MHz		11400	54.47	-19.53	74	60.03	39.6	16.42	61.58	122	240	P	H
		11400	38.57	-15.43	54	44.13	39.6	16.42	61.58	122	240	A	H
		17100	47.12	-21.08	68.2	42.03	40.5	20.67	56.08	100	0	P	H
													H
		11400	53.83	-20.17	74	59.39	39.6	16.42	61.58	100	273	P	V
		11400	39.43	-14.57	54	44.99	39.6	16.42	61.58	100	273	A	V
		17100	47.2	-21	68.2	42.11	40.5	20.67	56.08	100	0	P	V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 - 5470~5725MHz

WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 CH 102 5510MHz		5459.44	57.32	-16.68	74	46.46	31.74	10.27	31.15	117	116	P	H
		5470	66.14	-2.06	68.2	55.23	31.78	10.28	31.15	117	116	P	H
		5459.2	45.95	-8.05	54	35.09	31.74	10.27	31.15	117	116	A	H
	*	5510	109.85	-	-	98.81	31.88	10.32	31.16	117	116	P	H
	*	5510	98.98	-	-	87.94	31.88	10.32	31.16	117	116	A	H
		5740.745	53.13	-15.07	68.2	41.79	32.08	10.53	31.27	117	116	P	H
		5455.84	55.32	-18.68	74	44.49	31.72	10.26	31.15	299	63	P	V
		5469.76	63.13	-5.07	68.2	52.22	31.78	10.28	31.15	299	63	P	V
		5458.48	44.31	-9.69	54	33.47	31.73	10.26	31.15	299	63	A	V
	*	5510	107.56	-	-	96.52	31.88	10.32	31.16	299	63	P	V
	*	5510	97.26	-	-	86.22	31.88	10.32	31.16	299	63	A	V
		5731.295	53.39	-14.81	68.2	42.07	32.06	10.53	31.27	299	63	P	V
802.11n HT40 CH 110 5550MHz		5457.52	55.47	-18.53	74	44.63	31.73	10.26	31.15	106	115	P	H
		5463.52	55.3	-12.9	68.2	44.43	31.75	10.27	31.15	106	115	P	H
		5458.72	44.57	-9.43	54	33.73	31.73	10.26	31.15	106	115	A	H
	*	5550	112.6	-	-	101.61	31.8	10.36	31.17	106	115	P	H
	*	5550	101.61	-	-	90.62	31.8	10.36	31.17	106	115	A	H
		5745.155	52.52	-15.68	68.2	41.16	32.09	10.54	31.27	106	115	P	H
		5459.2	53.38	-20.62	74	42.52	31.74	10.27	31.15	303	75	P	V
		5466.88	54.64	-13.56	68.2	43.75	31.77	10.27	31.15	303	75	P	V
		5458	43.45	-10.55	54	32.61	31.73	10.26	31.15	303	75	A	V
	*	5550	110.73	-	-	99.74	31.8	10.36	31.17	303	75	P	V
	*	5550	100.21	-	-	89.22	31.8	10.36	31.17	303	75	A	V
		5756.81	52.67	-15.53	68.2	41.29	32.11	10.55	31.28	303	75	P	V

802.11n HT40 CH 134 5670MHz		5418.95	52.49	-21.51	74	41.84	31.58	10.22	31.15	121	114	P	H
		5464.1	52.92	-15.28	68.2	42.04	31.76	10.27	31.15	121	114	P	H
		5426.3	42.15	-11.85	54	31.46	31.61	10.23	31.15	121	114	A	H
	*	5670	112.42	-	-	101.35	31.82	10.48	31.23	121	114	P	H
	*	5670	101.81	-	-	90.74	31.82	10.48	31.23	121	114	A	H
		5727.9	57.15	-11.05	68.2	45.83	32.06	10.52	31.26	121	114	P	H
		5442.4	52.21	-21.79	74	41.44	31.67	10.25	31.15	314	71	P	V
		5461.65	52	-16.2	68.2	41.13	31.75	10.27	31.15	314	71	P	V
		5457.45	41.97	-12.03	54	31.13	31.73	10.26	31.15	314	71	A	V
	*	5670	110.53	-	-	99.46	31.82	10.48	31.23	314	71	P	V
	*	5670	99.86	-	-	88.79	31.82	10.48	31.23	314	71	A	V
		5725.625	55.21	-12.99	68.2	43.9	32.05	10.52	31.26	314	71	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. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 CH 102 5510MHz		11020	47.3	-26.7	74	52.56	40.12	16.12	61.5	100	0	P	H
		16530	45.05	-23.15	68.2	42.69	39.4	20.2	57.24	100	0	P	H
													H
													H
		11020	46.84	-27.16	74	52.1	40.12	16.12	61.5	100	0	P	V
		16530	45.68	-22.52	68.2	43.32	39.4	20.2	57.24	100	0	P	V
													V
													V
802.11n HT40 CH 110 5550MHz		11100	47.63	-26.37	74	53.17	39.8	16.18	61.52	100	0	P	H
		16650	46.07	-22.13	68.2	42.97	39.8	20.3	57	100	0	P	H
													H
													H
		11100	47.29	-26.71	74	52.83	39.8	16.18	61.52	100	0	P	V
		16650	45.94	-22.26	68.2	42.84	39.8	20.3	57	100	0	P	V
													V
													V
802.11n HT40 CH 134 5670MHz		11340	47.47	-26.53	74	53.12	39.54	16.38	61.57	100	0	P	H
		17010	47.04	-21.16	68.2	42.23	40.5	20.59	56.28	100	0	P	H
													H
													H
		11340	46.23	-27.77	74	51.88	39.54	16.38	61.57	100	0	P	V
		17010	48.91	-19.29	68.2	44.1	40.5	20.59	56.28	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. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80 CH 106 5530MHz		5459.92	60.44	-13.56	74	49.58	31.74	10.27	31.15	126	116	P	H
		5465.2	61.9	-6.3	68.2	51.02	31.76	10.27	31.15	126	116	P	H
		5459.68	50.52	-3.48	54	39.66	31.74	10.27	31.15	126	116	A	H
	*	5530	104.32	-	-	93.31	31.84	10.34	31.17	126	116	P	H
	*	5530	93.75	-	-	82.74	31.84	10.34	31.17	126	116	A	H
		5751.77	53	-15.2	68.2	41.63	32.1	10.54	31.27	126	116	P	H
		5459.68	59.54	-14.46	74	48.68	31.74	10.27	31.15	311	64	P	V
		5461.12	61.38	-6.82	68.2	50.52	31.74	10.27	31.15	311	64	P	V
		5459.92	48.4	-5.6	54	37.54	31.74	10.27	31.15	311	64	A	V
	*	5530	102.89	-	-	91.88	31.84	10.34	31.17	311	64	P	V
	*	5530	92.18	-	-	81.17	31.84	10.34	31.17	311	64	A	V
		5740.115	53.03	-15.17	68.2	41.69	32.08	10.53	31.27	311	64	P	V
802.11ac VHT80 CH 122 5610MHz		5446.25	54.52	-19.48	74	43.73	31.69	10.25	31.15	119	116	P	H
		5463.4	54.53	-13.67	68.2	43.66	31.75	10.27	31.15	119	116	P	H
		5450.1	44.18	-9.82	54	33.37	31.7	10.26	31.15	119	116	A	H
	*	5610	110.09	-	-	99.09	31.78	10.43	31.21	119	116	P	H
	*	5610	99.03	-	-	88.03	31.78	10.43	31.21	119	116	A	H
		5739.8	54.92	-13.28	68.2	43.58	32.08	10.53	31.27	119	116	P	H
		5458.5	53.67	-20.33	74	42.83	31.73	10.26	31.15	335	69	P	V
		5460.25	53.98	-14.22	68.2	43.12	31.74	10.27	31.15	335	69	P	V
		5459.55	43.34	-10.66	54	32.48	31.74	10.27	31.15	335	69	A	V
	*	5610	108.62	-	-	97.62	31.78	10.43	31.21	335	69	P	V
	*	5610	97.59	-	-	86.59	31.78	10.43	31.21	335	69	A	V
		5741.375	54.17	-14.03	68.2	42.83	32.08	10.53	31.27	335	69	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. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80 CH 106 5530MHz		11060	46.54	-27.46	74	51.94	39.96	16.15	61.51	100	0	P	H
		16590	45.45	-22.75	68.2	42.92	39.4	20.25	57.12	100	0	P	H
													H
													H
		11060	46.81	-27.19	74	52.21	39.96	16.15	61.51	100	0	P	V
		16590	45.25	-22.95	68.2	42.72	39.4	20.25	57.12	100	0	P	V
													V
													V
802.11ac VHT80 CH 122 5610MHz		11220	47.08	-26.92	74	52.84	39.5	16.28	61.54	100	0	P	H
		16830	47.24	-20.96	68.2	42.91	40.52	20.45	56.64	100	0	P	H
													H
													H
		11220	47.65	-26.35	74	53.41	39.5	16.28	61.54	100	0	P	V
		16830	46.4	-21.8	68.2	42.07	40.52	20.45	56.64	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 Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 144 5720MHz		5375.35	53.24	-20.76	74	42.81	31.4	10.18	31.15	106	113	P	H
		5463.49	52.78	-15.42	68.2	41.91	31.75	10.27	31.15	106	113	P	H
		5452.96	40.6	-13.4	54	29.78	31.71	10.26	31.15	106	113	A	H
	*	5720	115.36	-	-	104.06	32.04	10.52	31.26	106	113	P	H
	*	5720	103.3	-	-	92	32.04	10.52	31.26	106	113	A	H
		5937.5	54.52	-13.68	68.2	42.66	32.55	10.68	31.37	106	113	P	H
		5458.03	54.05	-19.95	74	43.21	31.73	10.26	31.15	376	78	P	V
		5464.27	52.97	-15.23	68.2	42.09	31.76	10.27	31.15	376	78	P	V
		5452.57	40.49	-13.51	54	29.67	31.71	10.26	31.15	376	78	A	V
	*	5720	112.12	-	-	100.82	32.04	10.52	31.26	376	78	P	V
	*	5720	99.96	-	-	88.66	32.04	10.52	31.26	376	78	A	V
		5937.25	54.29	-13.91	68.2	42.43	32.55	10.68	31.37	376	78	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 - Straddle Channel

WIFI 802.11a (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 144 5720MHz		11440	52.36	-21.64	74	57.82	39.68	16.45	61.59	124	237	P	H
		11440	38.94	-15.06	54	44.4	39.68	16.45	61.59	124	237	A	H
		17160	47.58	-20.62	68.2	42.26	40.56	20.71	55.95	100	0	P	H
													H
		11440	53.47	-20.53	74	58.93	39.68	16.45	61.59	100	271	P	V
		11440	39.57	-14.43	54	45.03	39.68	16.45	61.59	100	271	A	V
		17160	45.9	-22.3	68.2	40.58	40.56	20.71	55.95	100	0	P	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. 1+2	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 144 5720MHz		5438.14	52.58	-21.42	74	41.84	31.65	10.24	31.15	105	116	P	H
		5469.73	52.9	-15.3	68.2	41.99	31.78	10.28	31.15	105	116	P	H
		5454.52	41.3	-12.7	54	30.47	31.72	10.26	31.15	105	116	A	H
	*	5720	116.33	-	-	105.03	32.04	10.52	31.26	105	116	P	H
	*	5720	104.92	-	-	93.62	32.04	10.52	31.26	105	116	A	H
		5886.25	55.66	-12.54	68.2	43.99	32.37	10.64	31.34	105	116	P	H
		5453.74	53.69	-20.31	74	42.87	31.71	10.26	31.15	377	78	P	V
		5462.71	53.48	-14.72	68.2	42.61	31.75	10.27	31.15	377	78	P	V
		5445.16	41.38	-12.62	54	30.6	31.68	10.25	31.15	377	78	A	V
	*	5720	113.04	-	-	101.74	32.04	10.52	31.26	377	78	P	V
	*	5720	101.76	-	-	90.46	32.04	10.52	31.26	377	78	A	V
		5864.5	54.13	-14.07	68.2	42.5	32.33	10.63	31.33	377	78	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. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 144 5720MHz		11440	55.39	-18.61	74	60.85	39.68	16.45	61.59	121	239	P	H
		11440	39.85	-14.15	54	45.31	39.68	16.45	61.59	121	239	A	H
		17160	49.76	-18.44	68.2	44.44	40.56	20.71	55.95	100	0	P	H
													H
		11440	55.86	-18.14	74	61.32	39.68	16.45	61.59	100	272	P	V
		11440	40.47	-13.53	54	45.93	39.68	16.45	61.59	100	272	A	V
		17160	46.51	-21.69	68.2	41.19	40.56	20.71	55.95	100	0	P	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. 1+2	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 CH 142 5710MHz		5366.77	53.1	-20.9	74	42.71	31.37	10.17	31.15	114	116	P	H
		5467.78	52.52	-15.68	68.2	41.63	31.77	10.27	31.15	114	116	P	H
		5451.4	42.47	-11.53	54	31.65	31.71	10.26	31.15	114	116	A	H
	*	5710	113.16	-	-	101.89	32.02	10.51	31.26	114	116	P	H
	*	5710	102.62	-	-	91.35	32.02	10.51	31.26	114	116	A	H
		5945.75	54.41	-13.79	68.2	42.51	32.58	10.69	31.37	114	116	P	H
		5417.86	53.39	-20.61	74	42.75	31.57	10.22	31.15	362	73	P	V
		5464.27	52.71	-15.49	68.2	41.83	31.76	10.27	31.15	362	73	P	V
		5450.23	42.23	-11.77	54	31.42	31.7	10.26	31.15	362	73	A	V
	*	5710	110.14	-	-	98.87	32.02	10.51	31.26	362	73	P	V
	*	5710	99.61	-	-	88.34	32.02	10.51	31.26	362	73	A	V
		5873.5	53.81	-14.39	68.2	42.15	32.35	10.64	31.33	362	73	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. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 CH 142 5710MHz		11420	48.98	-25.02	74	54.49	39.64	16.43	61.58	100	0	P	H
		17130	48.02	-20.18	68.2	42.8	40.53	20.7	56.01	100	0	P	H
													H
													H
		11420	49.32	-24.68	74	54.83	39.64	16.43	61.58	100	0	P	V
		17130	47.79	-20.41	68.2	42.57	40.53	20.7	56.01	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. 1+2	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80 CH 138 5690MHz		5446.72	53.45	-20.55	74	42.66	31.69	10.25	31.15	108	115	P	H
		5466.22	52.97	-15.23	68.2	42.09	31.76	10.27	31.15	108	115	P	H
		5457.64	42.2	-11.8	54	31.36	31.73	10.26	31.15	108	115	A	H
	*	5690	110.18	-	-	99	31.94	10.49	31.25	108	115	P	H
	*	5690	99.08	-	-	87.9	31.94	10.49	31.25	108	115	A	H
		5858.25	54.49	-13.71	68.2	42.88	32.32	10.62	31.33	108	115	P	H
		5406.16	52.79	-21.21	74	42.21	31.52	10.21	31.15	362	74	P	V
		5461.54	52.56	-15.64	68.2	41.69	31.75	10.27	31.15	362	74	P	V
		5440.48	42.21	-11.79	54	31.46	31.66	10.24	31.15	362	74	A	V
	*	5690	107.92	-	-	96.74	31.94	10.49	31.25	362	74	P	V
	*	5690	96.93	-	-	85.75	31.94	10.49	31.25	362	74	A	V
		5856.25	54.13	-14.07	68.2	42.52	32.31	10.62	31.32	362	74	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. 1+2	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80 CH 138 5690MHz		11380	47.31	-26.69	74	52.9	39.58	16.41	61.58	100	0	P	H
		17070	46.57	-21.63	68.2	41.58	40.5	20.64	56.15	100	0	P	H
													H
													H
		11380	47.2	-26.8	74	52.79	39.58	16.41	61.58	100	0	P	V
		17070	47.59	-20.61	68.2	42.6	40.5	20.64	56.15	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Emission below 1GHz

WIFI 802.11n HT40 (LF @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 LF		30	24.1	-15.9	40	29.01	24.57	0.7	30.18	-	-	P	H
		159.87	28.07	-15.43	43.5	40.08	16.46	1.89	30.36	-	-	P	H
		224.94	28.6	-17.4	46	41.12	15.57	2.19	30.28	-	-	P	H
		496	26.89	-19.11	46	29.84	23.74	3.1	29.79	-	-	P	H
		885.9	37.45	-8.55	46	33.43	28.97	4.21	29.16	100	0	P	H
		972	36.63	-17.37	54	30.3	30.8	4.46	28.93	-	-	P	H
													H
													H
													H
													H
													H
													H
		34.32	31.31	-8.69	40	38.32	22.49	0.76	30.26	100	0	P	V
		79.95	26.77	-13.23	40	42.74	13.2	1.28	30.45	-	-	P	V
		161.22	26.72	-16.78	43.5	38.82	16.36	1.9	30.36	-	-	P	V
		568.8	29.59	-16.41	46	30.02	25.89	3.36	29.68	-	-	P	V
		890.1	34.14	-11.86	46	30.11	28.96	4.22	29.15	-	-	P	V
		960.8	35.72	-18.28	54	29.29	30.94	4.45	28.96	-	-	P	V
													V
													V
													V
													V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against limit line.												

<Adapter 2>

Band 2 - 5250~5350MHz

WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 CH 62 5310MHz		5091.46	53.18	-20.82	74	42.44	31.97	9.91	31.14	118	116	P	H
		5122.74	41.28	-12.72	54	30.52	31.95	9.95	31.14	118	116	A	H
	*	5310	108.57	-	-	98.29	31.3	10.13	31.15	118	116	P	H
	*	5310	98.56	-	-	88.28	31.3	10.13	31.15	118	116	A	H
		5351.04	61.39	-12.61	74	51.08	31.3	10.16	31.15	118	116	P	H
		5350.8	51.48	-2.52	54	41.17	31.3	10.16	31.15	118	116	A	H
		5085.68	53.44	-20.56	74	42.74	31.94	9.9	31.14	346	66	P	V
		5102.34	41.68	-12.32	54	30.9	32	9.92	31.14	346	66	A	V
	*	5310	107.21	-	-	96.93	31.3	10.13	31.15	346	66	P	V
	*	5310	97.22	-	-	86.94	31.3	10.13	31.15	346	66	A	V
		5351.04	58.57	-15.43	74	48.26	31.3	10.16	31.15	346	66	P	V
		5350.56	47.85	-6.15	54	37.54	31.3	10.16	31.15	346	66	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. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 CH 62 5310MHz		10620	45.58	-28.42	74	50.49	39.88	15.27	60.59	100	0	P	H
		15930	45.47	-28.53	74	45.9	37.33	19.01	57.5	100	0	P	H
													H
													H
		10620	45.6	-28.4	74	50.51	39.88	15.27	60.59	100	0	P	V
		15930	44.9	-29.1	74	45.33	37.33	19.01	57.5	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Emission below 1GHz

WIFI 802.11n HT40 (LF @ 3m)

WIFI Ant.	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 LF 1+2		33.78	24.86	-15.14	40	31.85	22.49	0.76	30.24	-	-	P	H
		109.65	23.26	-20.24	43.5	35.46	16.75	1.47	30.42	-	-	P	H
		189.57	27.68	-15.82	43.5	41.26	14.71	2.04	30.33	-	-	P	H
		790.7	32.89	-13.11	46	30.3	27.96	3.94	29.31	-	-	P	H
		896.4	35.14	-10.86	46	31.14	28.91	4.24	29.15	100	0	P	H
		960.8	35.99	-18.01	54	29.56	30.94	4.45	28.96	-	-	P	H
													H
													H
													H
													H
													H
													H
		30.27	31.35	-8.65	40	36.26	24.57	0.7	30.18	100	0	P	V
		89.4	27.02	-16.48	43.5	41.62	14.49	1.35	30.44	-	-	P	V
		159.87	29.69	-13.81	43.5	41.7	16.46	1.89	30.36	-	-	P	V
		799.8	32.48	-13.52	46	29.84	27.96	3.97	29.29	-	-	P	V
		904.1	35.85	-10.15	46	31.71	29	4.27	29.13	-	-	P	V
		962.9	37.35	-16.65	54	30.94	30.92	4.45	28.96	-	-	P	V
													V
													V
													V
													V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against limit line.												

<For Sample 2>

<Adapter 2>

Band 2 - 5250~5350MHz

WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 CH 62 5310MHz		5133.62	53.26	-20.74	74	42.51	31.93	9.96	31.14	104	63	P	H
		5145.86	42.06	-11.94	54	31.31	31.91	9.98	31.14	104	63	A	H
	*	5310	109.25	-	-	98.97	31.3	10.13	31.15	104	63	P	H
	*	5310	98.49	-	-	88.21	31.3	10.13	31.15	104	63	A	H
		5352.48	62.25	-11.75	74	51.93	31.31	10.16	31.15	104	63	P	H
		5350.08	51.96	-2.04	54	41.65	31.3	10.16	31.15	104	63	A	H
		5146.2	52.84	-21.16	74	42.09	31.91	9.98	31.14	100	92	P	V
		5139.4	42.22	-11.78	54	31.47	31.92	9.97	31.14	100	92	A	V
	*	5310	109.53	-	-	99.25	31.3	10.13	31.15	100	92	P	V
	*	5310	98.92	-	-	88.64	31.3	10.13	31.15	100	92	A	V
		5351.52	62.29	-11.71	74	51.97	31.31	10.16	31.15	100	92	P	V
		5350	52.25	-1.75	54	41.94	31.3	10.16	31.15	100	92	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. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 CH 62 5310MHz		10620	46.28	-27.72	74	51.19	39.88	15.8	60.59	100	0	P	H
		15930	43.12	-30.88	74	43.55	37.33	19.74	57.5	100	0	P	H
													H
													H
		10620	45.82	-28.18	74	50.73	39.88	15.8	60.59	100	0	P	V
		15930	42.86	-31.14	74	43.29	37.33	19.74	57.5	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Emission below 1GHz

WIFI 802.11n HT40 (LF @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 LF		35.67	25.93	-14.07	40	33.99	21.43	0.78	30.27	-	-	P	H
		164.46	29.19	-14.31	43.5	41.7	15.94	1.91	30.36	-	-	P	H
		225.75	27.12	-18.88	46	39.52	15.67	2.2	30.27	-	-	P	H
		754.3	31.93	-14.07	46	29.57	27.91	3.84	29.39	-	-	P	H
		845.3	32.96	-13.04	46	29.39	28.71	4.08	29.22	-	-	P	H
		944.7	35.21	-10.79	46	29.45	30.36	4.41	29.01	100	0	P	H
													H
													H
													H
													H
													H
													H
		35.13	35.87	-4.13	40	43.39	21.97	0.77	30.26	100	0	P	V
		105.6	29.69	-13.81	43.5	42.2	16.47	1.44	30.42	-	-	P	V
		165.81	28.69	-14.81	43.5	41.28	15.85	1.92	30.36	-	-	P	V
		738.9	32.75	-13.25	46	30.58	27.8	3.8	29.43	-	-	P	V
		885.9	34.89	-11.11	46	30.87	28.97	4.21	29.16	-	-	P	V
		954.5	35.13	-10.87	46	28.93	30.74	4.44	28.98	-	-	P	V
													V
													V
													V
													V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against limit line.												

Note symbol

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

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

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

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

For Peak Limit @ 2390MHz:

1. Level(dBμV/m)

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

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

= 55.45 (dBμV/m)

2. Over Limit(dB)

= Level(dBμV/m) – Limit Line(dBμV/m)

= 55.45(dBμV/m) – 74(dBμV/m)

= -18.55(dB)

For Average Limit @ 2390MHz:

1. Level(dBμV/m)

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

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

= 43.54 (dBμV/m)

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

= 43.54(dBμV/m) – 54(dBμV/m)

= -10.46(dB)

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

Appendix D. Radiated Spurious Emission

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

Note symbol

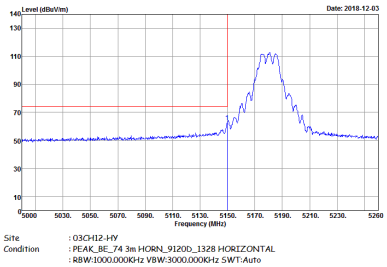
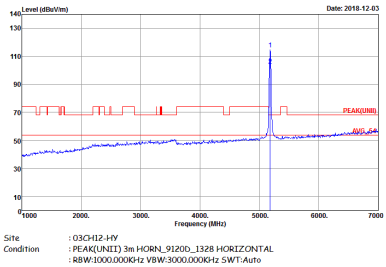
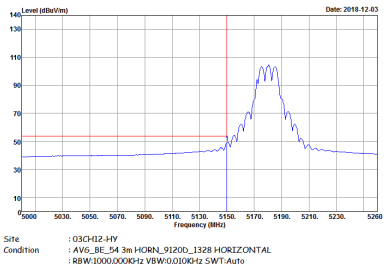
-L	**Low channel location**
-R	**High channel location**

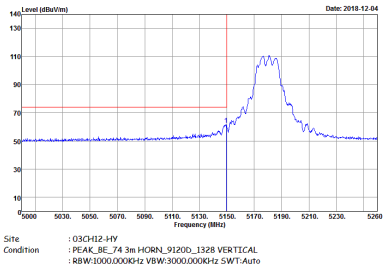
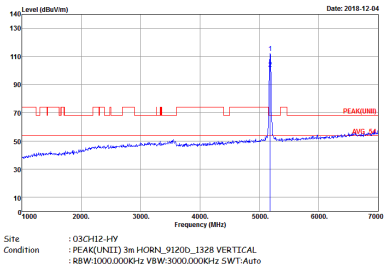
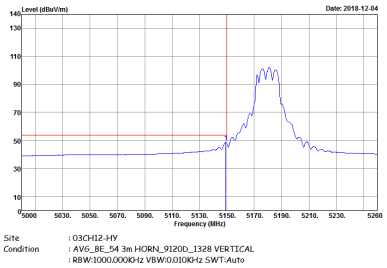
<For Sample 1>

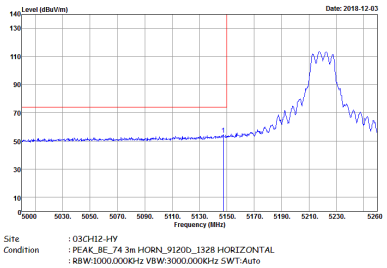
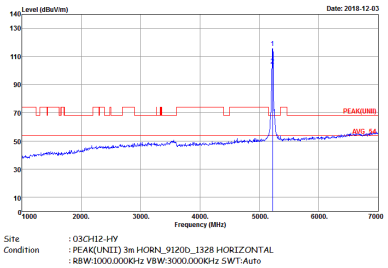
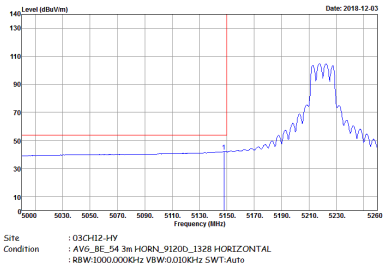
<Adapter 1>

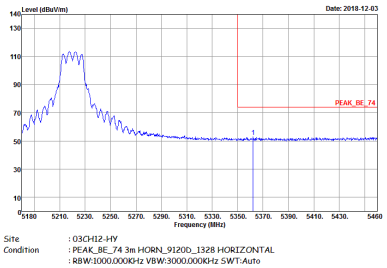
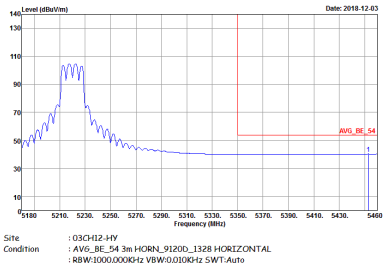
Band 1 - 5150~5250MHz

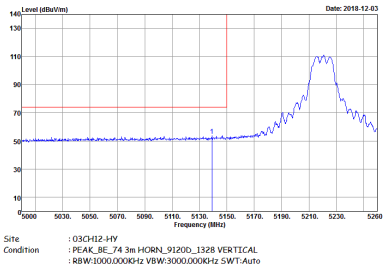
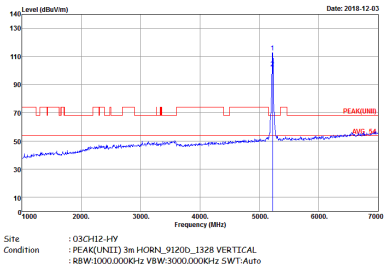
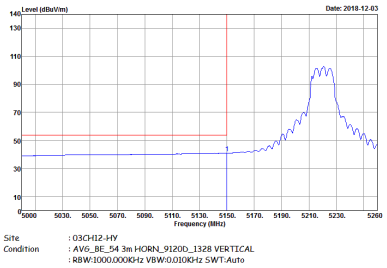
WIFI 802.11a (Band Edge @ 3m)

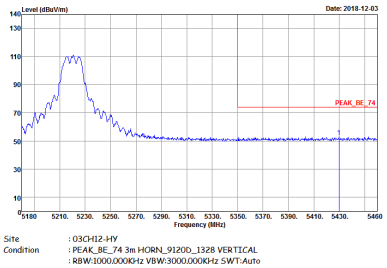
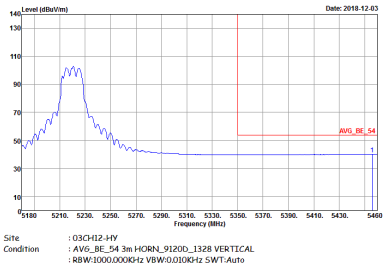
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH36 5180MHz	
1+2	Horizontal	Fundamental
Peak		
Avg.		Left blank

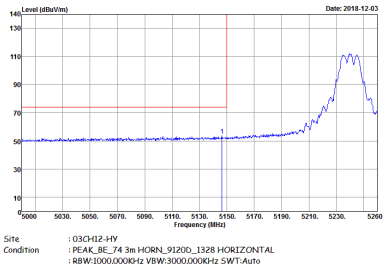
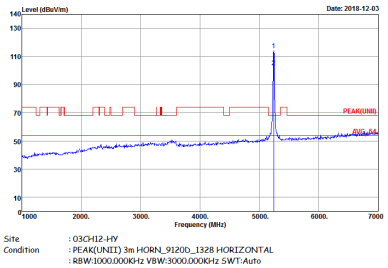
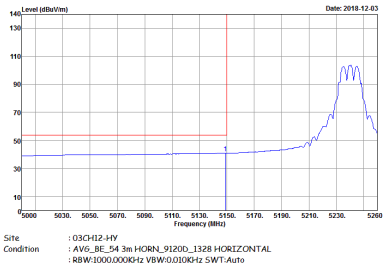
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH36 5180MHz	
1+2	Vertical	Fundamental
Peak		
Avg.		Left blank

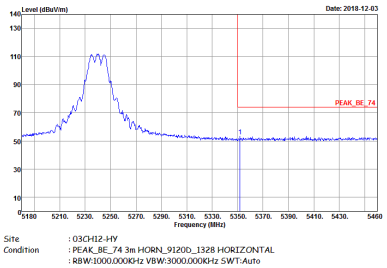
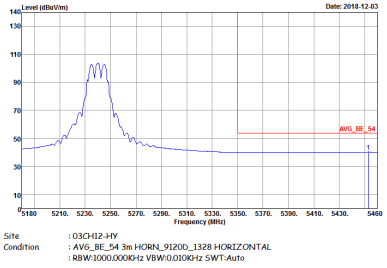
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH44 5220MHz - L	
1+2	Horizontal	Fundamental
Peak		
Avg.		Left blank

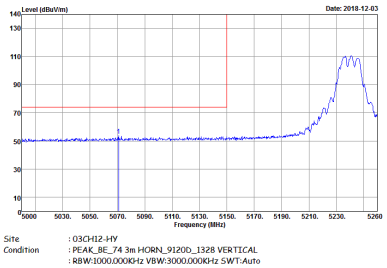
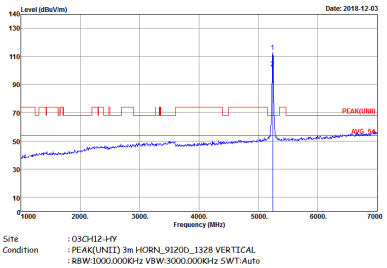
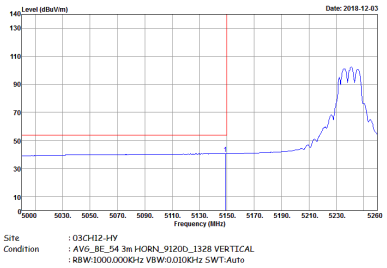
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH44 5220MHz - R	
1+2	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

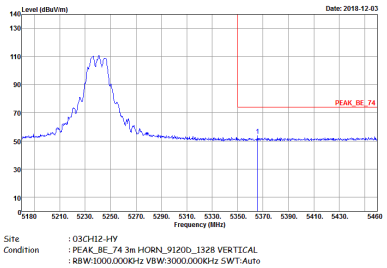
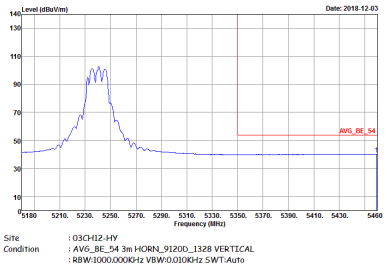
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH44 5220MHz - L	
1+2	Vertical	Fundamental
Peak		
Avg.		Left blank

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

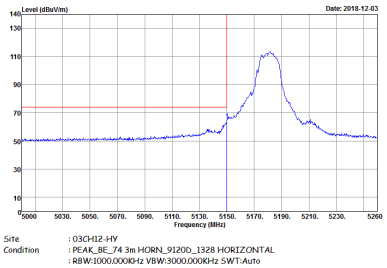
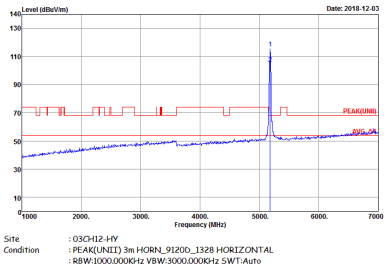
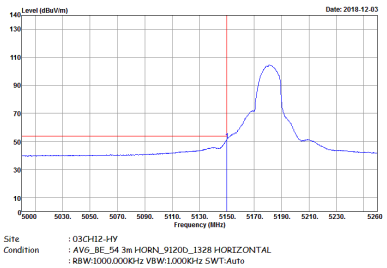
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH48 5240MHz - L	
1+2	Horizontal	Fundamental
Peak		
Avg.		Left blank

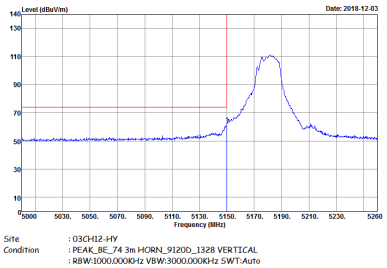
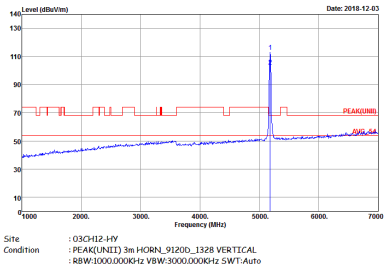
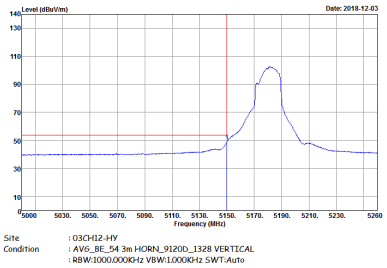
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH48 5240MHz - R	
1+2	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

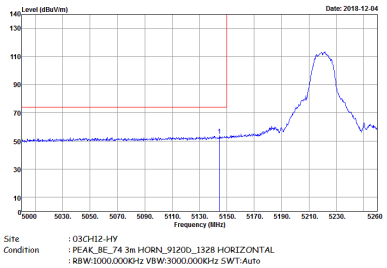
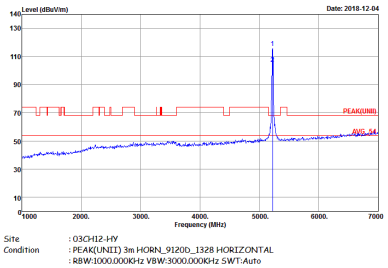
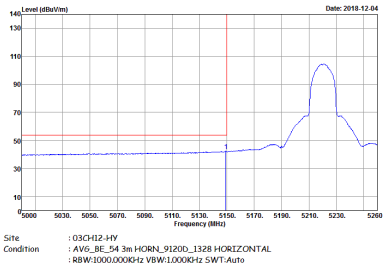
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH48 5240MHz - L	
1+2	Vertical	Fundamental
Peak		
Avg.		Left blank

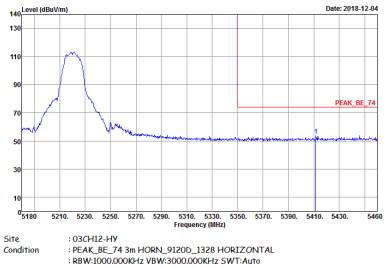
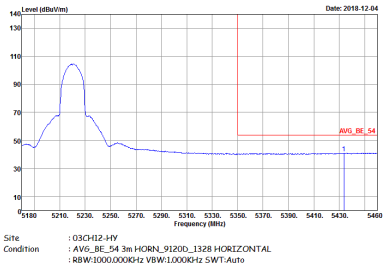
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH48 5240MHz - R	
1+2	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

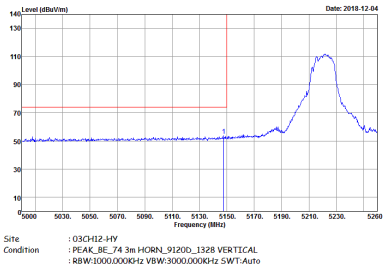
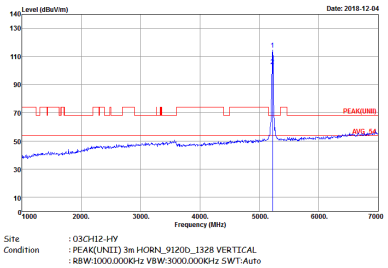
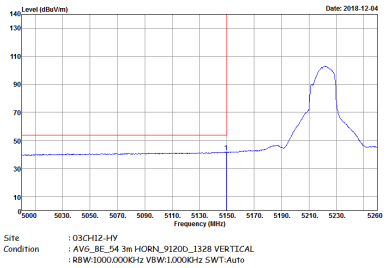
Band 1 5150~5250MHz
WIFI 802.11n HT20 (Band Edge @ 3m)

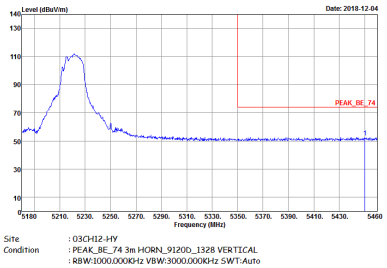
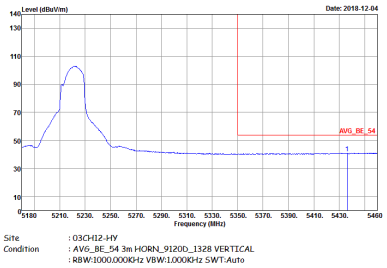
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH36 5180MHz	
1+2	Horizontal	Fundamental
Peak		
Avg.		Left blank

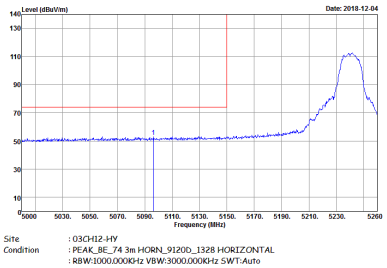
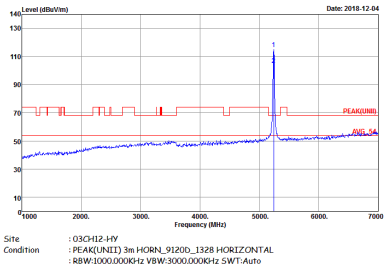
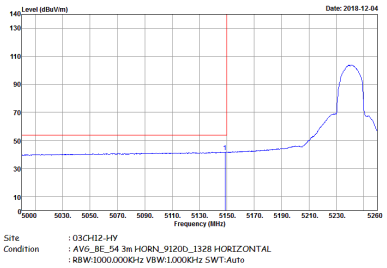
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH36 5180MHz	
1+2	Vertical	Fundamental
Peak		
Avg.		Left blank

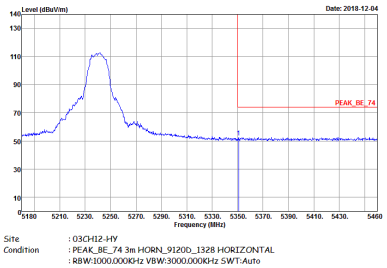
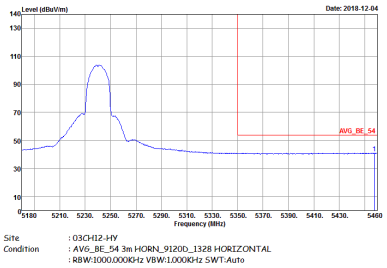
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH44 5220MHz - L	
1+2	Horizontal	Fundamental
Peak		
Avg.		Left blank

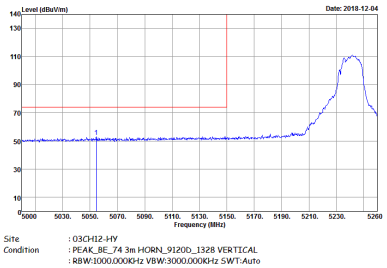
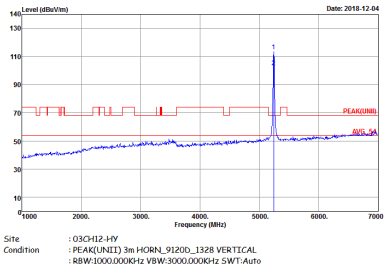
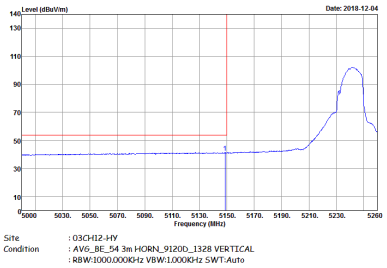
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH44 5220MHz - R	
1+2	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

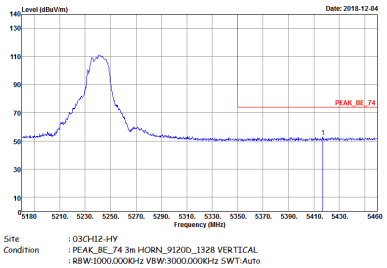
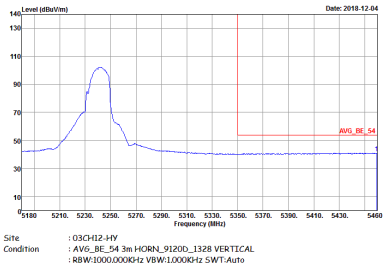
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH44 5220MHz - L	
1+2	Vertical	Fundamental
Peak		
Avg.		Left blank

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

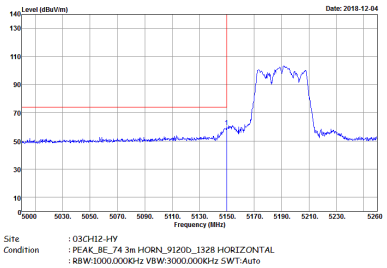
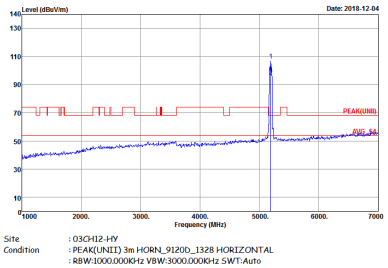
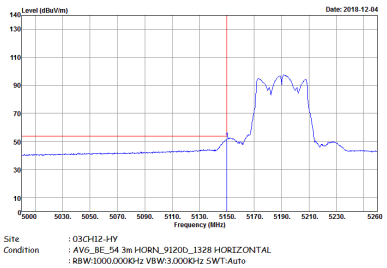
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH48 5240MHz - L	
1+2	Horizontal	Fundamental
Peak		
Avg.		Left blank

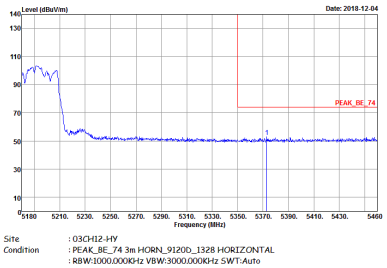
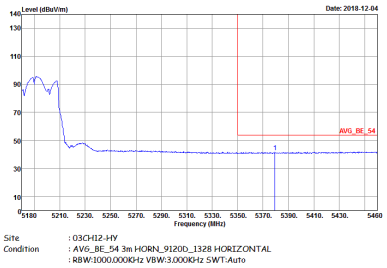
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH48 5240MHz - R	
1+2	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

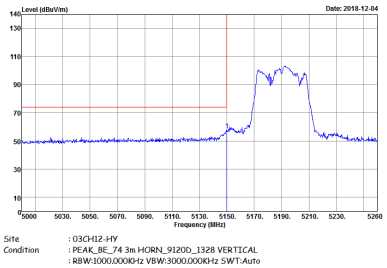
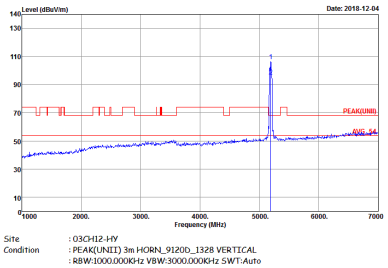
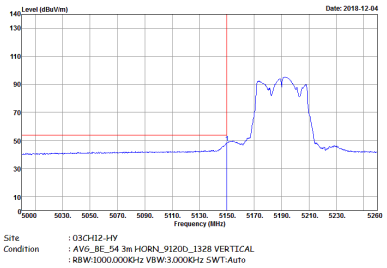
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH48 5240MHz - L	
1+2	Vertical	Fundamental
Peak		
Avg.		Left blank

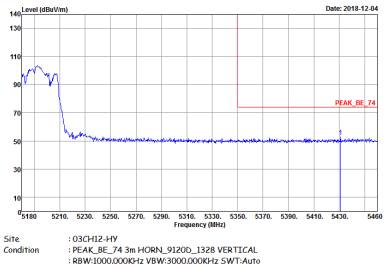
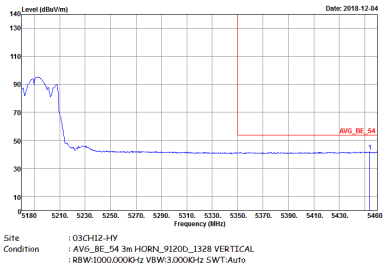
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH48 5240MHz - R	
1+2	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

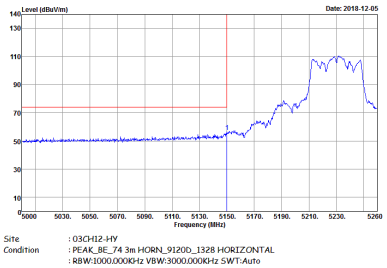
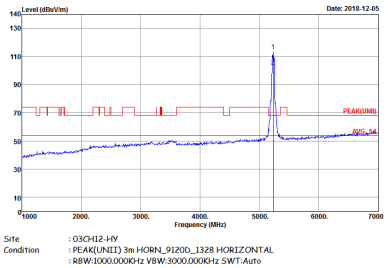
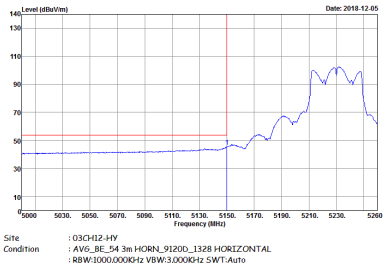
Band 1 5150~5250MHz
WIFI 802.11n HT40 (Band Edge @ 3m)

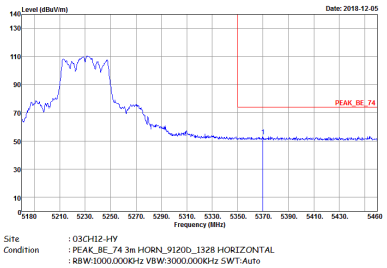
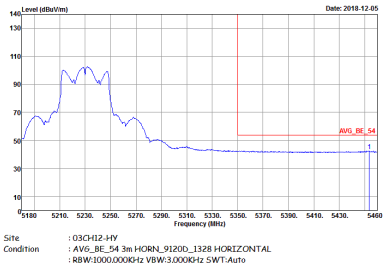
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH38 5190MHz - L	
1+2	Horizontal	Fundamental
Peak		
Avg.		Left blank

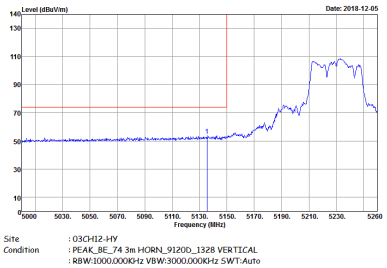
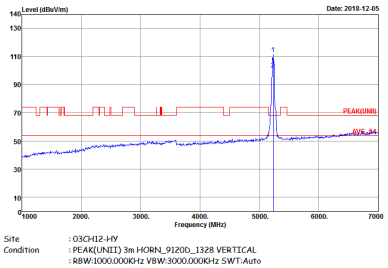
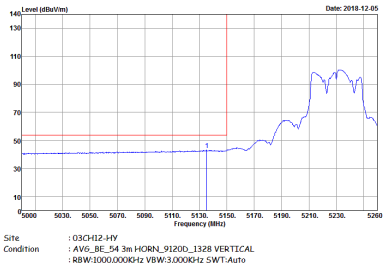
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH38 5190MHz - R	
1+2	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

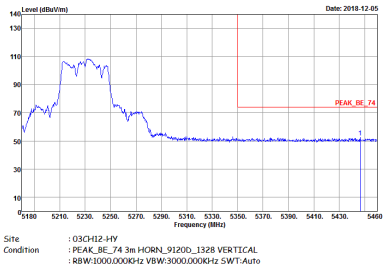
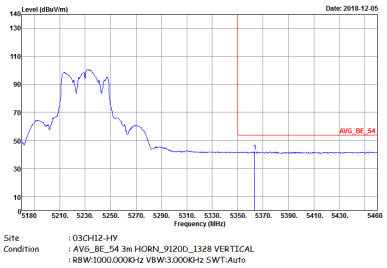
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH38 5190MHz - L	
1+2	Vertical	Fundamental
Peak		
Avg.		Left blank

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

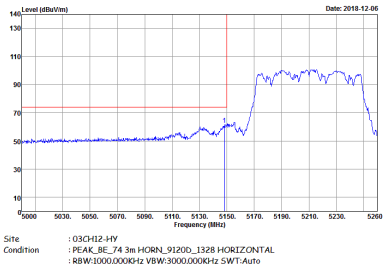
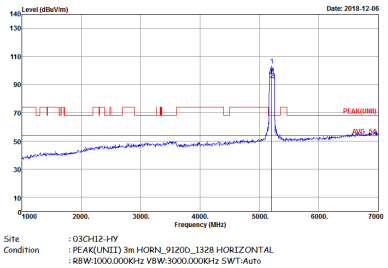
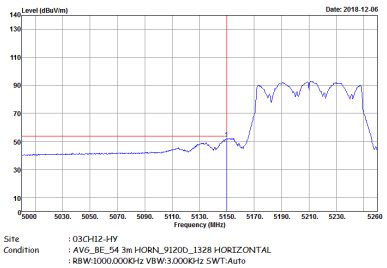
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH46 5230MHz - L	
1+2	Horizontal	Fundamental
Peak		
Avg.		Left blank

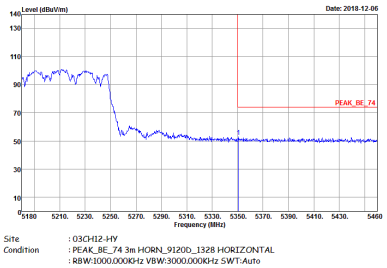
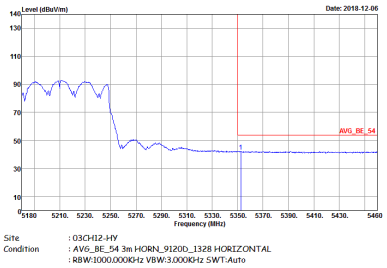
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH46 5230MHz - R	
1+2	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

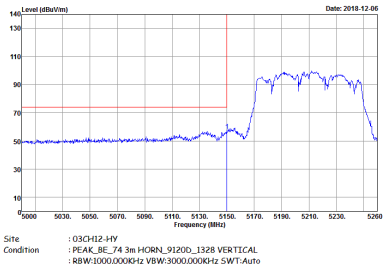
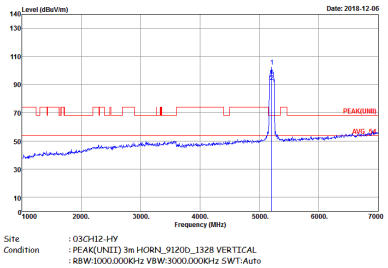
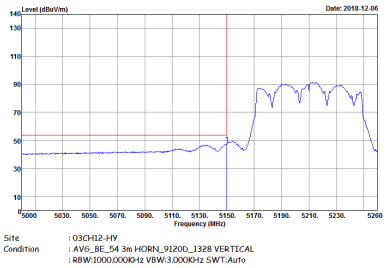
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH46 5230MHz - L	
1+2	Vertical	Fundamental
Peak		
Avg.		Left blank

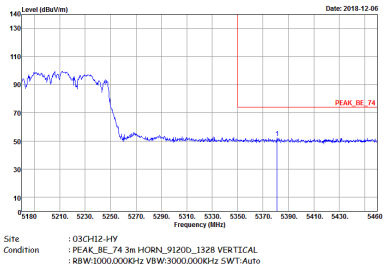
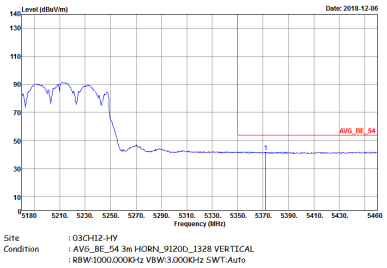
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH46 5230MHz - R	
1+2	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

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	
1+2	Horizontal	Fundamental
Peak		
Avg.		Left blank

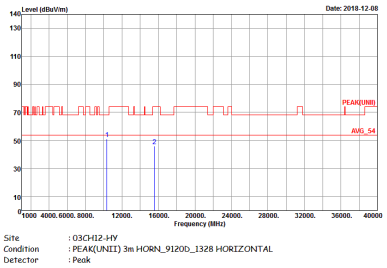
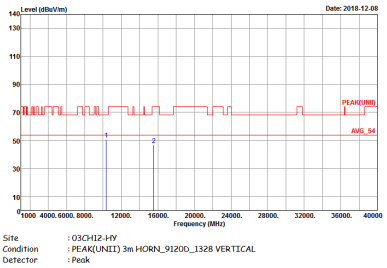
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH42 5210MHz - R	
1+2	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

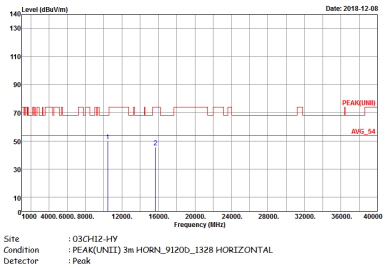
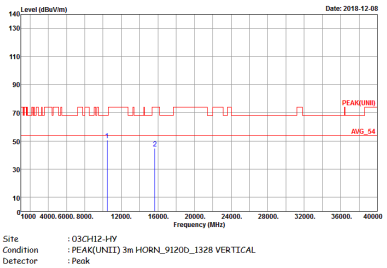
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH42 5210MHz - L	
1+2	Vertical	Fundamental
Peak		
Avg.		Left blank

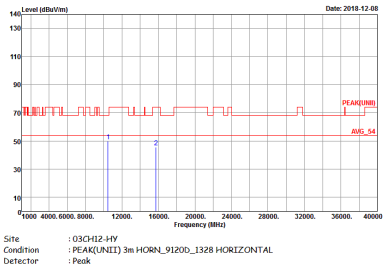
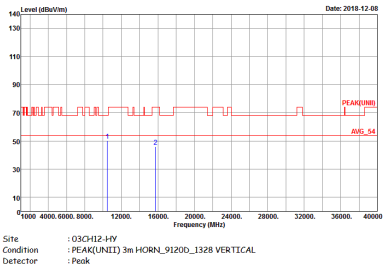
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH42 5210MHz - R	
1+2	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

Band 1 - 5150~5250MHz

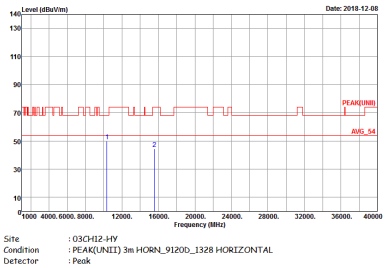
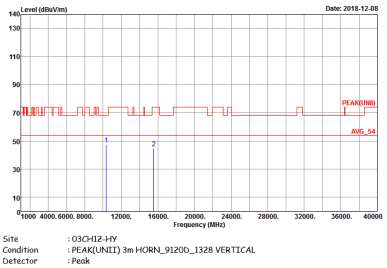
WIFI 802.11a (Harmonic @ 3m)

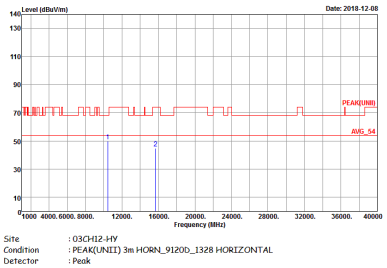
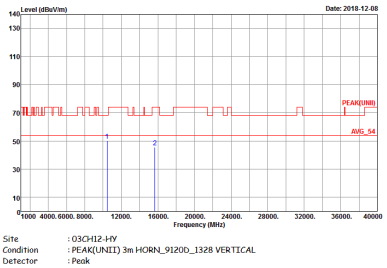
WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11a CH36 5180MHz	
1+2	Horizontal	Vertical
Peak Avg.		

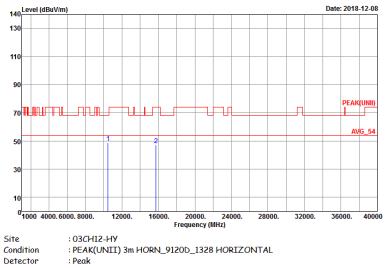
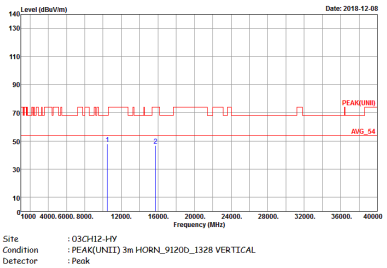
WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11a CH44 5220MHz	
1+2	Horizontal	Vertical
Peak Avg.		

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

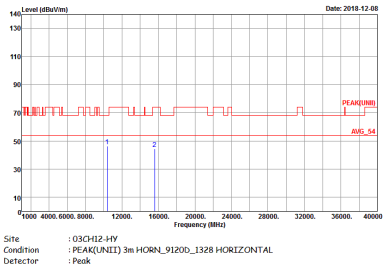
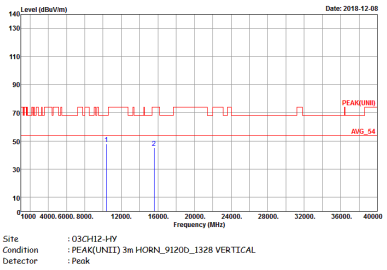
Band 1 5150~5250MHz
WIFI 802.11n HT20 (Harmonic @ 3m)

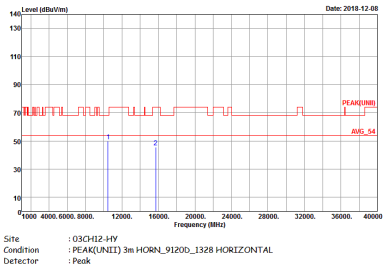
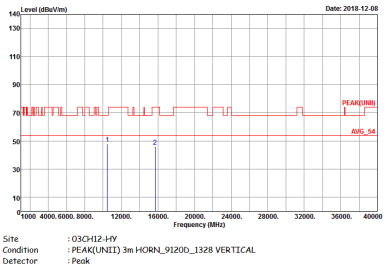
WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11n HT20 CH36 5180MHz	
1+2	Horizontal	Vertical
Peak Avg.		

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

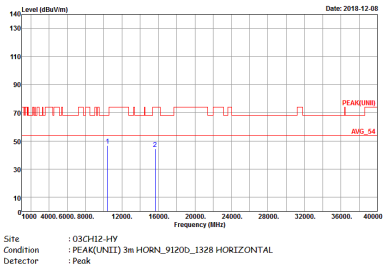
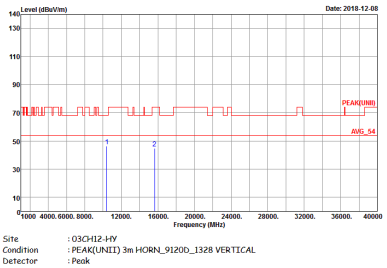
WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11n HT20 CH48 5240MHz	
1+2	Horizontal	Vertical
Peak Avg.		

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

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

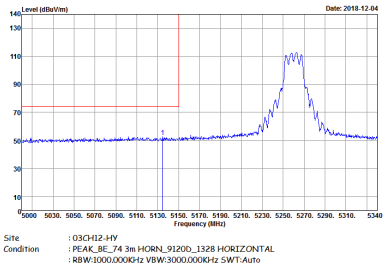
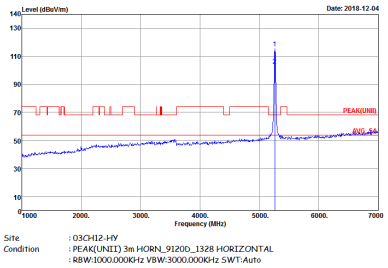
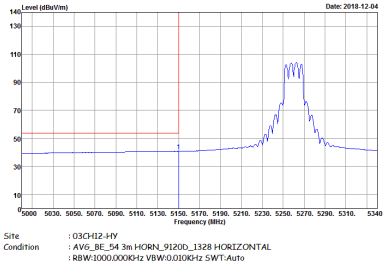
WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11n HT40 CH46 5230MHz	
1+2	Horizontal	Vertical
Peak Avg.		

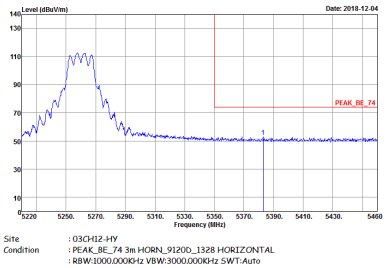
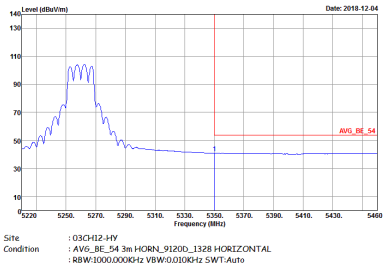
Band 1 5150~5250MHz
WIFI 802.11ac VHT80 (Harmonic @ 3m)

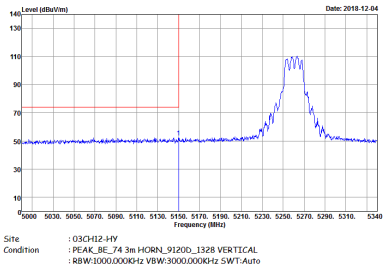
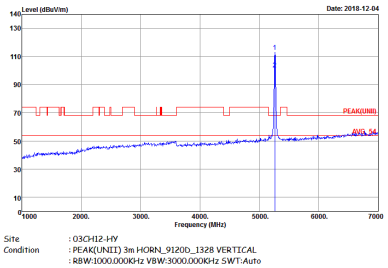
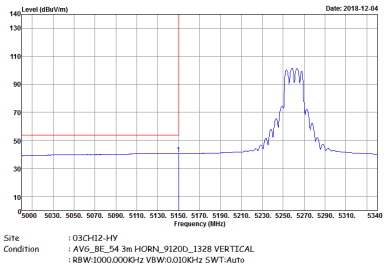
WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11ac VHT80 CH42 5210MHz	
1+2	Horizontal	Vertical
Peak Avg.		

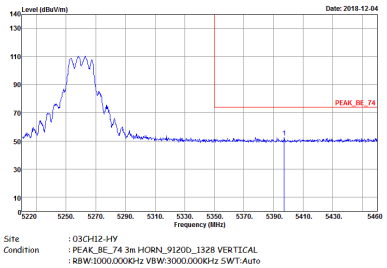
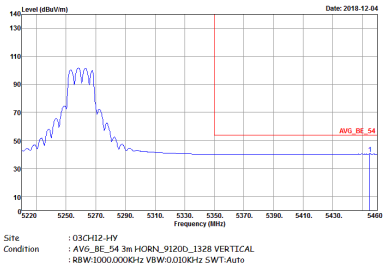
Band 2 - 5250~5350MHz

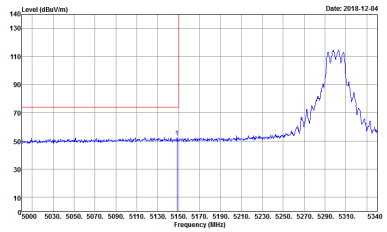
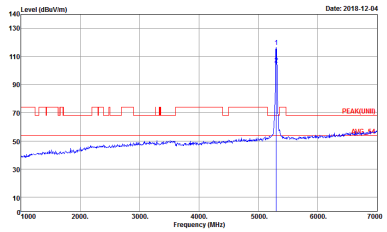
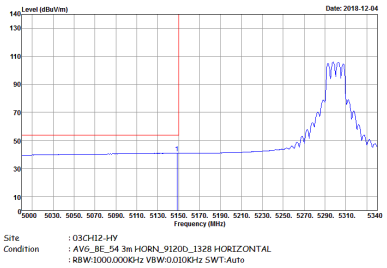
WIFI 802.11a (Band Edge @ 3m)

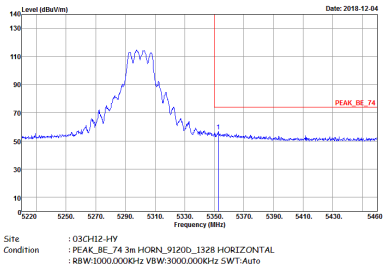
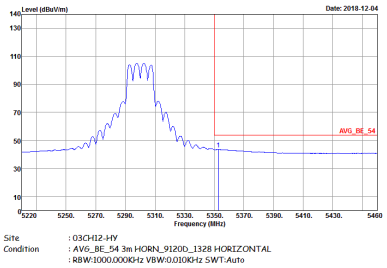
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH52 5260MHz - L	
1+2	Horizontal	Fundamental
Peak		
Avg.		Left blank

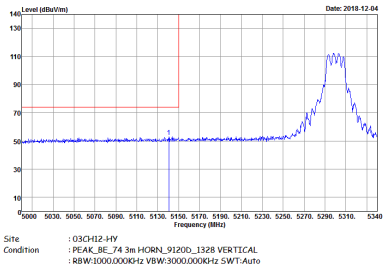
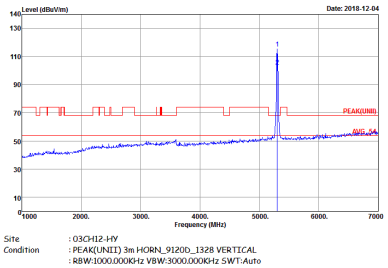
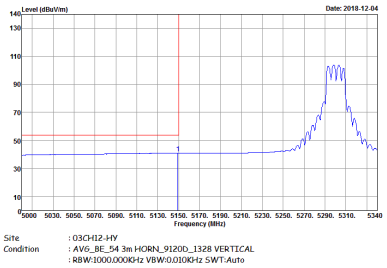
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH52 5260MHz - R	
1+2	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

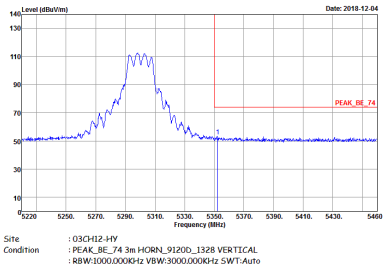
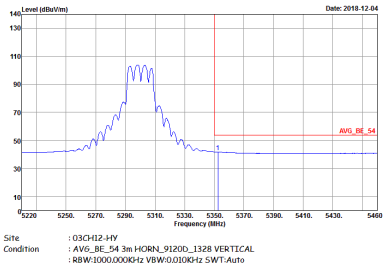
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH52 5260MHz - L	
1+2	Vertical	Fundamental
Peak		
Avg.		Left blank

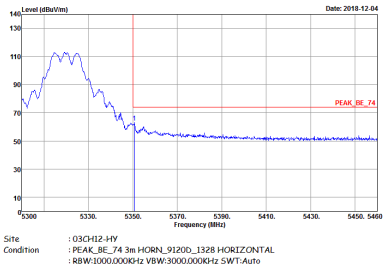
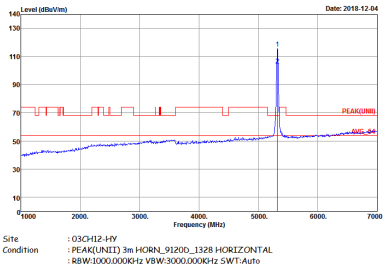
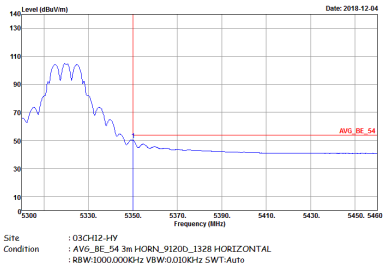
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH52 5260MHz - R	
1+2	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

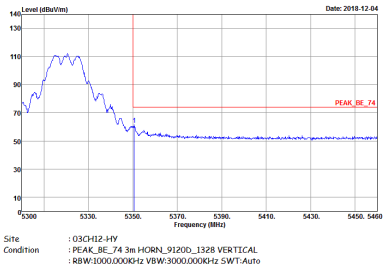
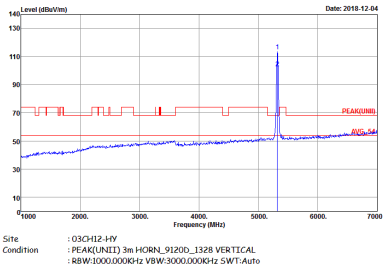
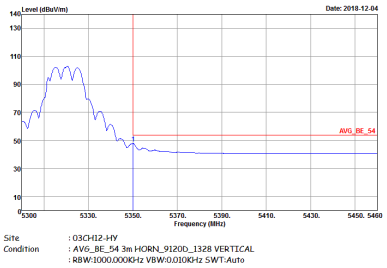
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH60 5300MHz - L	
1+2	Horizontal	Fundamental
Peak		
Avg.		Left blank

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

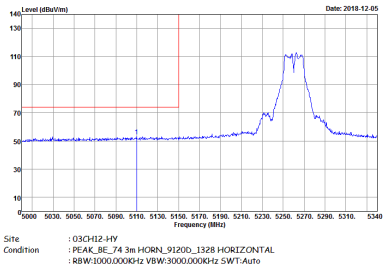
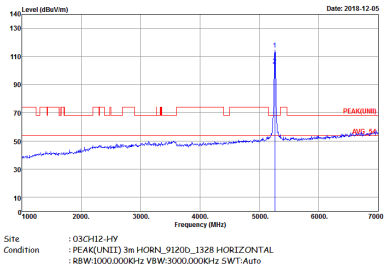
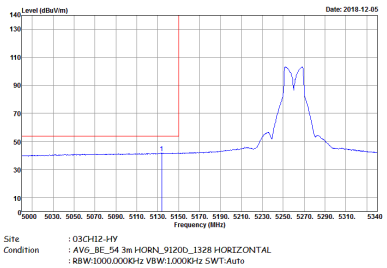
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH60 5300MHz - L	
1+2	Vertical	Fundamental
Peak		
Avg.		Left blank

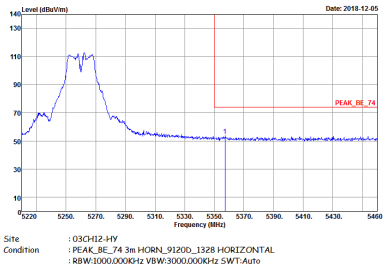
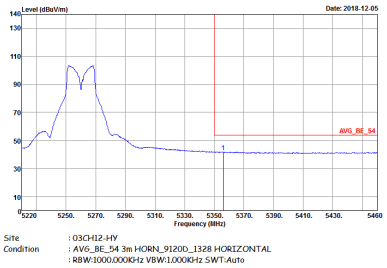
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH60 5300MHz - R	
1+2	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

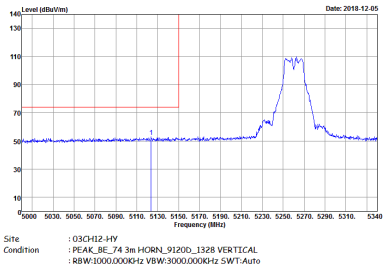
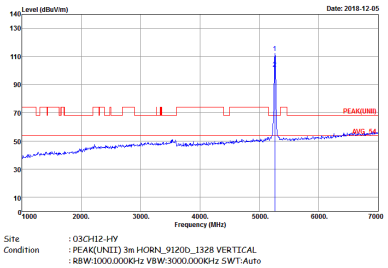
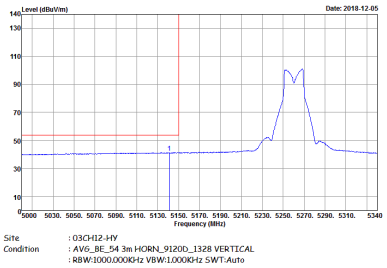
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH64 5320MHz	
1+2	Horizontal	Fundamental
Peak		
Avg.		Left blank

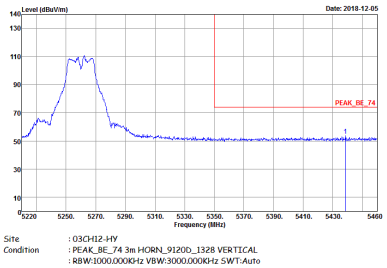
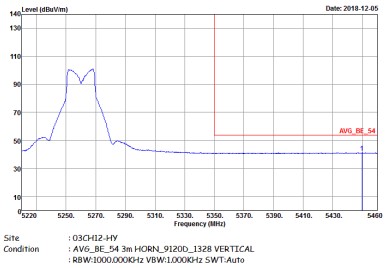
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH64 5320MHz	
1+2	Vertical	Fundamental
Peak		
Avg.		Left blank

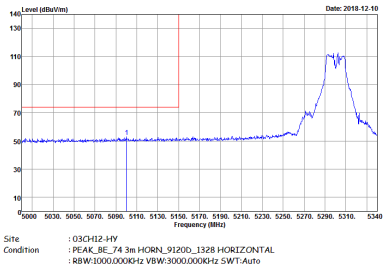
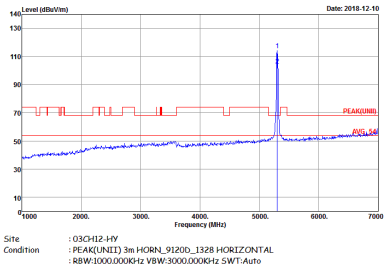
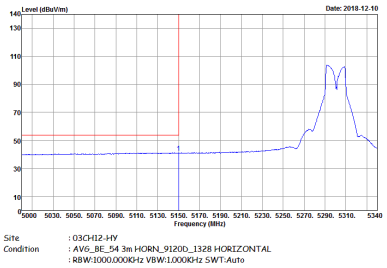
Band 2 5250~5350MHz
WIFI 802.11n HT20 (Band Edge @ 3m)

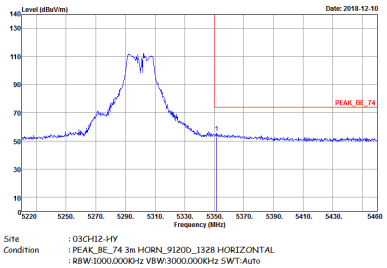
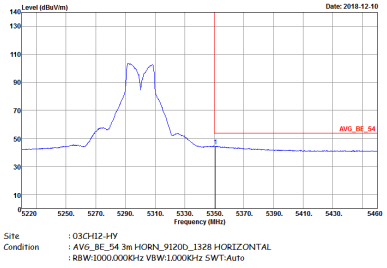
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH52 5260MHz - L	
1+2	Horizontal	Fundamental
Peak		
Avg.		Left blank

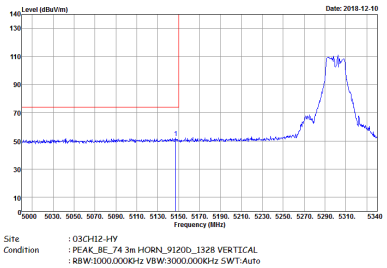
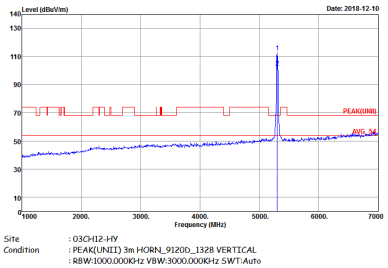
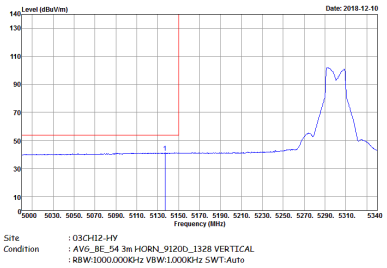
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH52 5260MHz - R	
1+2	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

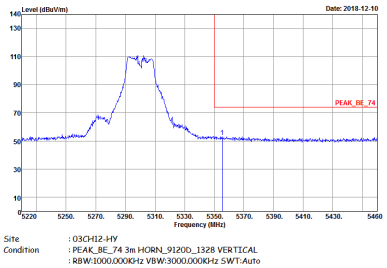
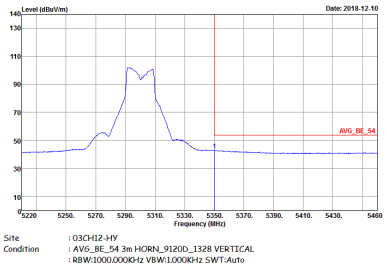
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH52 5260MHz - L	
1+2	Vertical	Fundamental
Peak		
Avg.		Left blank

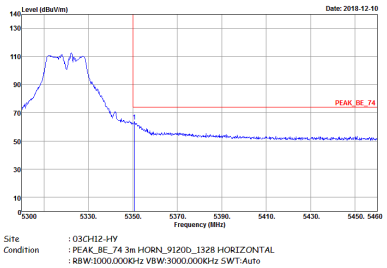
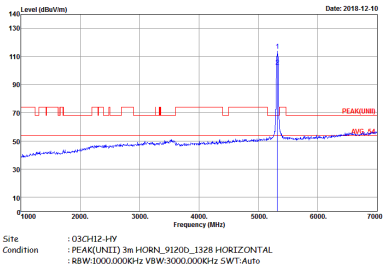
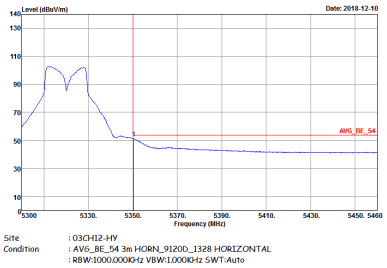
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH52 5260MHz - R	
1+2	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

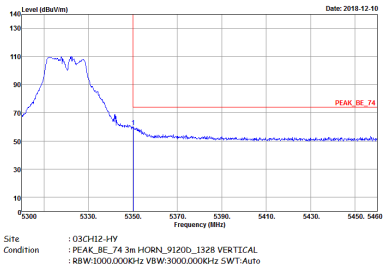
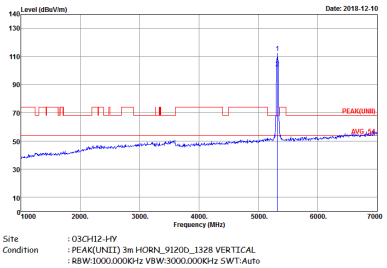
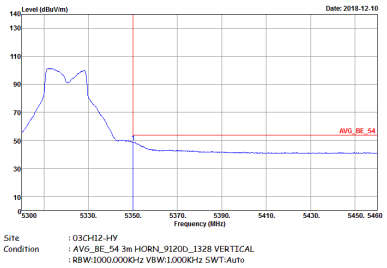
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH60 5300MHz - L	
1+2	Horizontal	Fundamental
Peak		
Avg.		Left blank

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

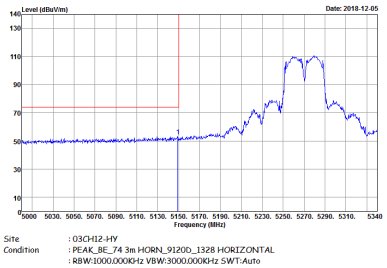
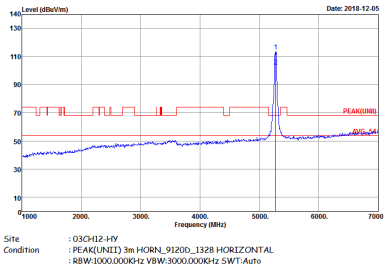
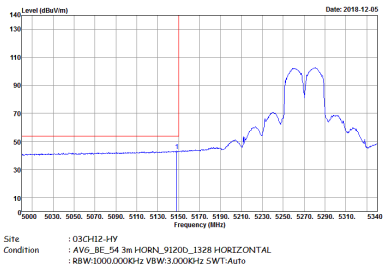
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH60 5300MHz - L	
1+2	Vertical	Fundamental
Peak		
Avg.		Left blank

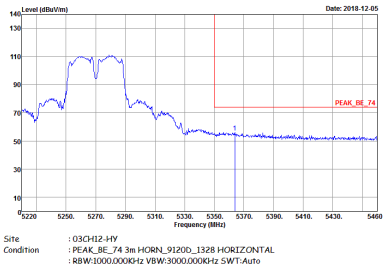
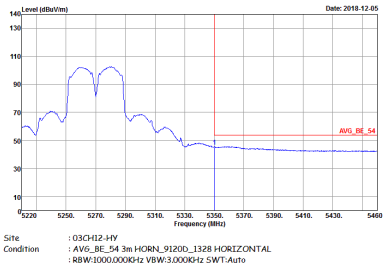
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH60 5300MHz - R	
1+2	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

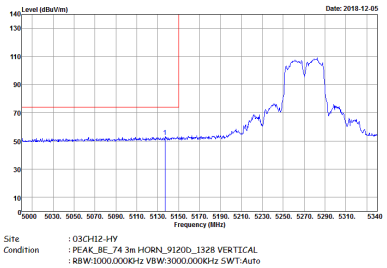
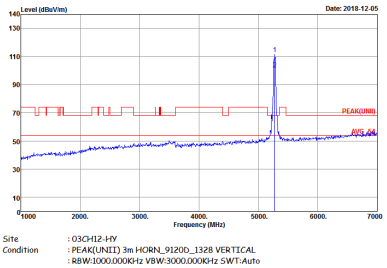
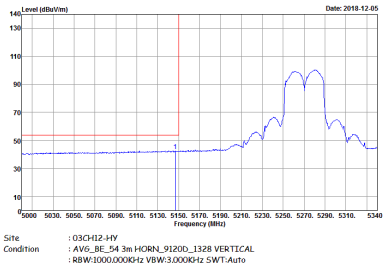
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH64 5320MHz	
1+2	Horizontal	Fundamental
Peak		
Avg.		Left blank

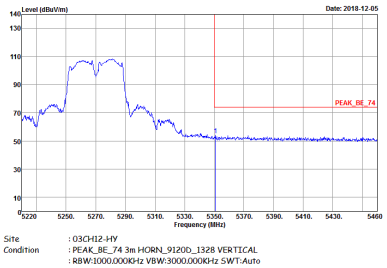
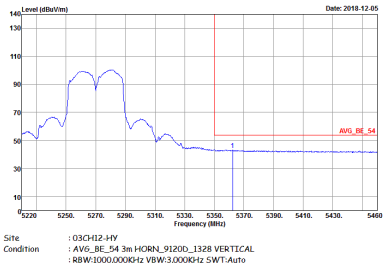
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH64 5320MHz	
1+2	Vertical	Fundamental
Peak		
Avg.		Left blank

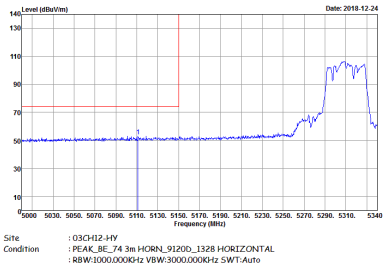
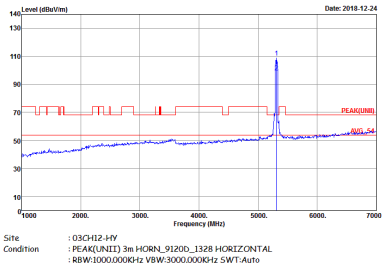
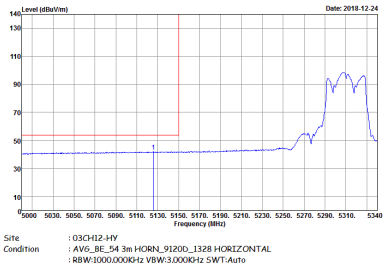
Band 2 5250~5350MHz
WIFI 802.11n HT40 (Band Edge @ 3m)

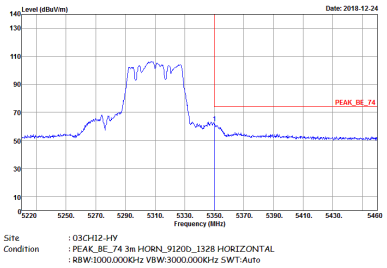
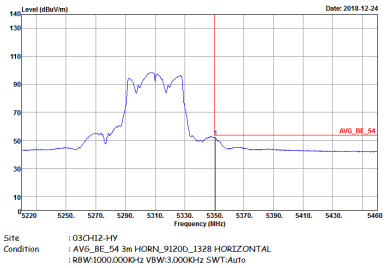
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT40 CH54 5270MHz - L	
1+2	Horizontal	Fundamental
Peak		
Avg.		Left blank

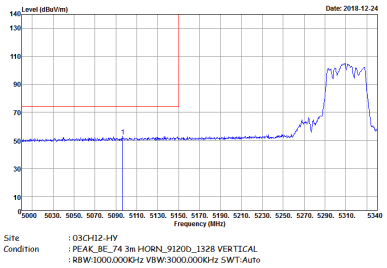
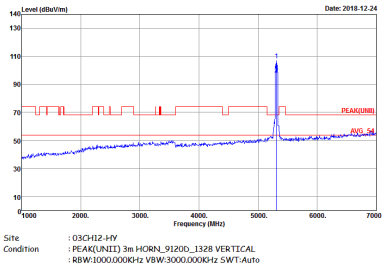
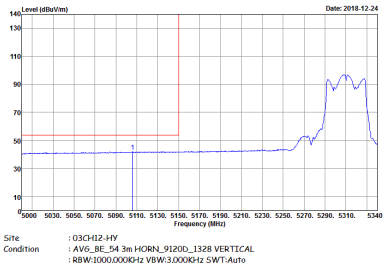
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT40 CH54 5270MHz - R	
1+2	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

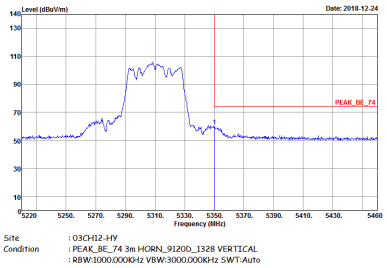
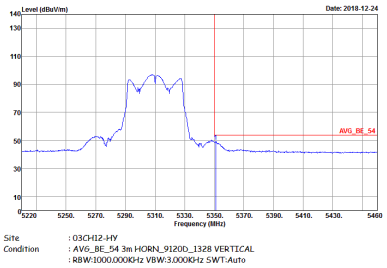
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT40 CH54 5270MHz - L	
1+2	Vertical	Vertical
Peak		
Avg.		Left blank

WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT40 CH54 5270MHz - R	
1+2	Vertical	Vertical
Peak		Left blank
Avg.		Left blank

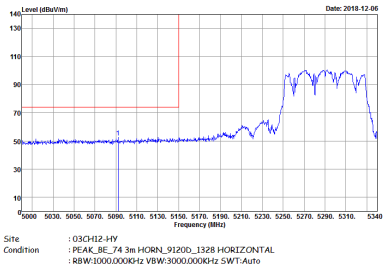
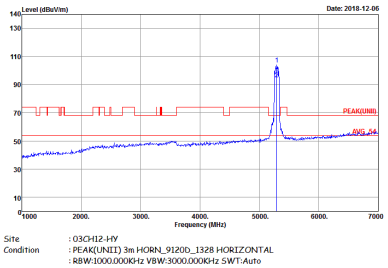
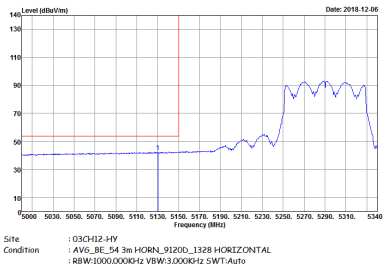
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT40 CH62 5310MHz - L	
1+2	Horizontal	Fundamental
Peak		
Avg.		Left blank

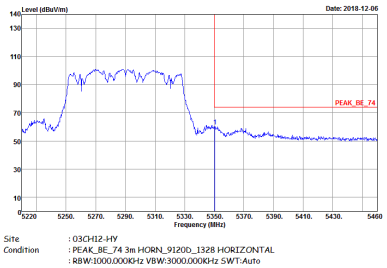
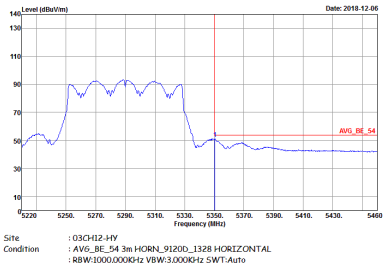
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT40 CH62 5310MHz - R	
1+2	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

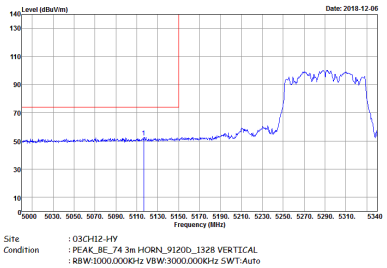
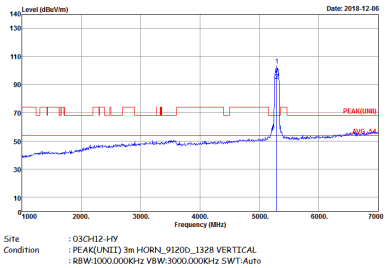
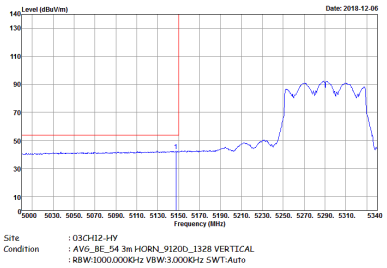
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT40 CH62 5310MHz - L	
1+2	Vertical	Fundamental
Peak		
Avg.		Left blank

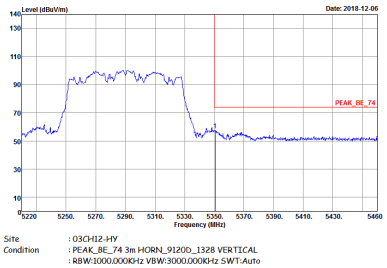
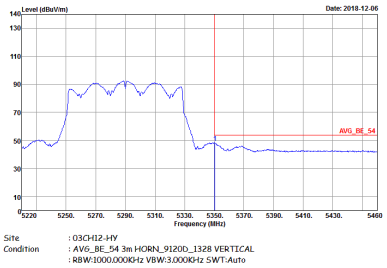
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT40 CH62 5310MHz - R	
1+2	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

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	
1+2	Horizontal	Fundamental
Peak		
Avg.		Left blank

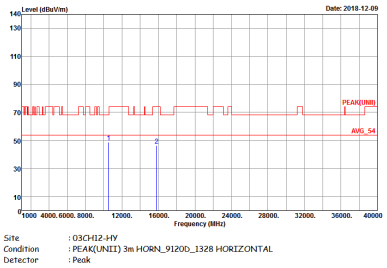
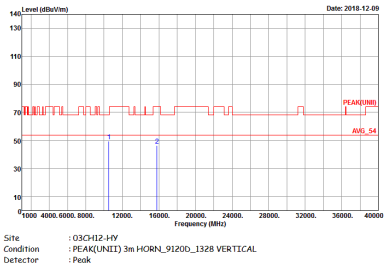
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH58 5290MHz - R	
1+2	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

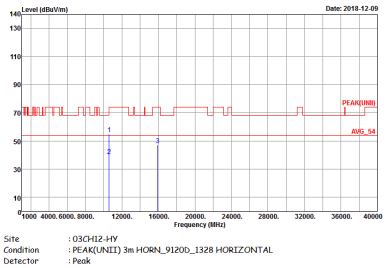
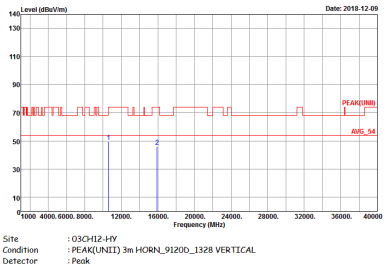
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH58 5290MHz - L	
1+2	Vertical	Fundamental
Peak		
Avg.		Left blank

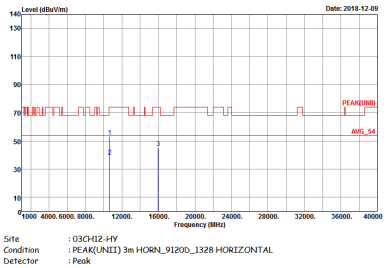
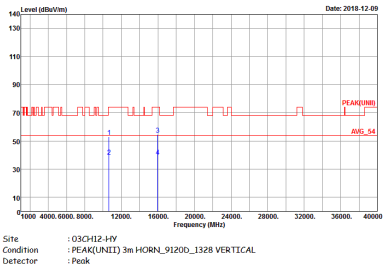
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH58 5290MHz - R	
1+2	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

Band 2 - 5250~5350MHz

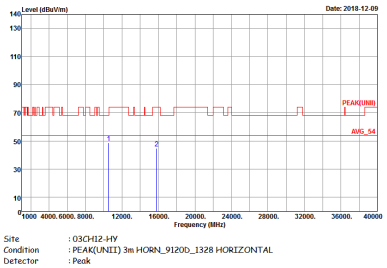
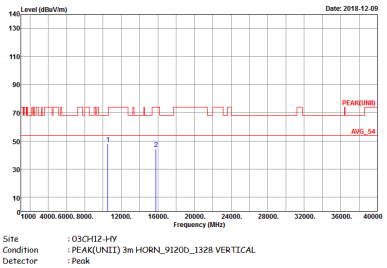
WIFI 802.11a (Harmonic @ 3m)

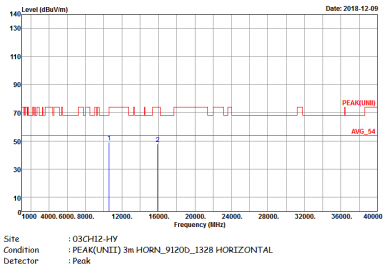
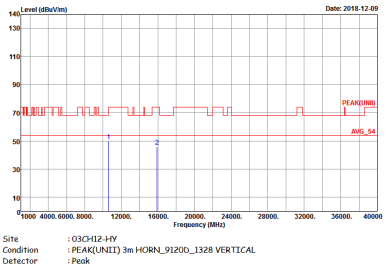
WIFI	Band 2 5250~5350MHz Harmonic @ 3m	
ANT	802.11a CH52 5260MHz	
1+2	Horizontal	Vertical
Peak Avg.		

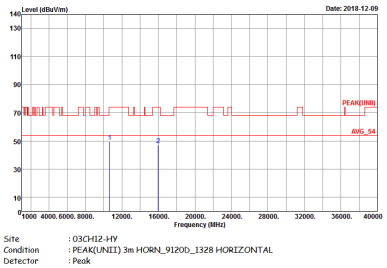
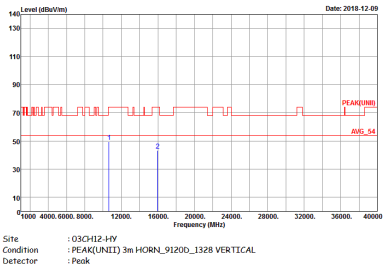
WIFI	Band 2 5250~5350MHz Harmonic @ 3m	
ANT	802.11a CH60 5300MHz	
1+2	Horizontal	Vertical
Peak Avg.		

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

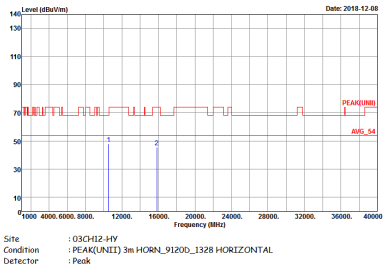
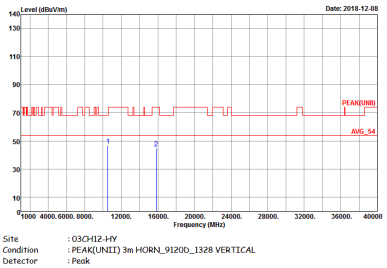
Band 2 5250~5350MHz
WIFI 802.11n HT20 (Harmonic @ 3m)

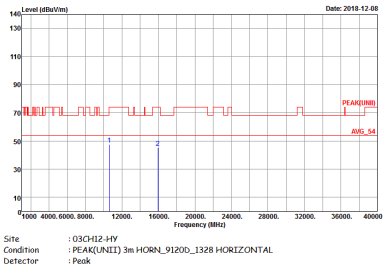
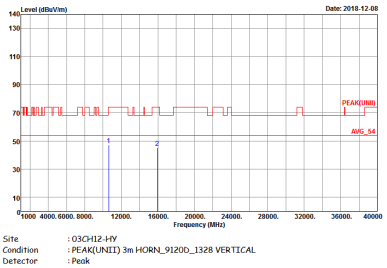
WIFI	Band 2 5250~5350MHz Harmonic @ 3m	
ANT	802.11n HT20 CH52 5260MHz	
1+2	Horizontal	Vertical
Peak Avg.		

WIFI	Band 2 5250~5350MHz Harmonic @ 3m	
ANT	802.11n HT20 CH60 5300MHz	
1+2	Horizontal	Vertical
Peak Avg.		

WIFI	Band 2 5250~5350MHz Harmonic @ 3m	
ANT	802.11n HT20 CH64 5320MHz	
1+2	Horizontal	Vertical
Peak Avg.		

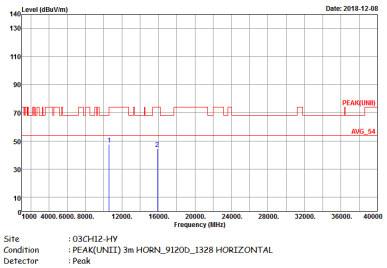
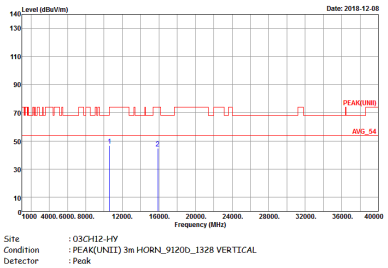
Band 2 5250~5350MHz
WIFI 802.11n HT40 (Harmonic @ 3m)

WIFI	Band 2 5250~5350MHz Harmonic @ 3m	
ANT	802.11n HT40 CH54 5270MHz	
1+2	Horizontal	Vertical
Peak Avg.		

WIFI	Band 2 5250~5350MHz Harmonic @ 3m	
ANT	802.11n HT40 CH62 5310MHz	
1+2	Horizontal	Vertical
Peak Avg.		

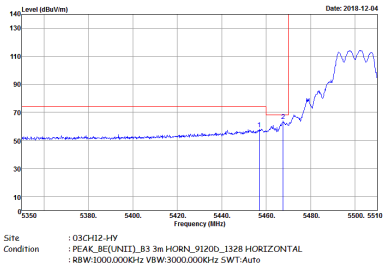
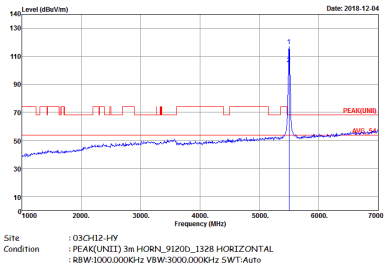
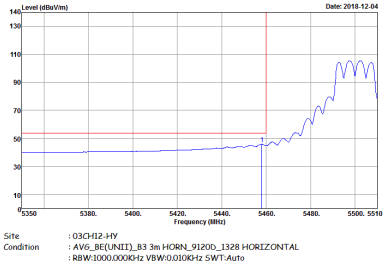
Band 2 5250~5350MHz

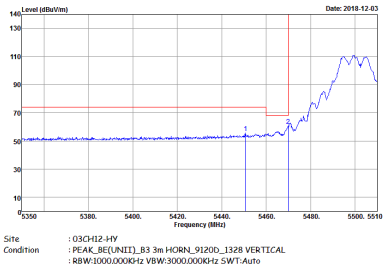
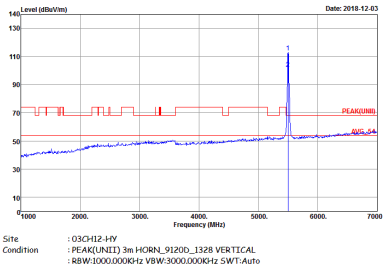
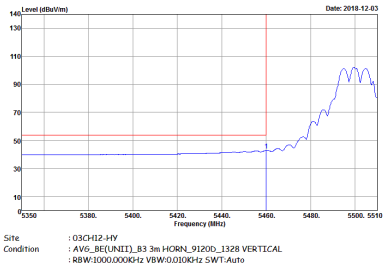
WIFI 802.11ac VHT80 (Harmonic @ 3m)

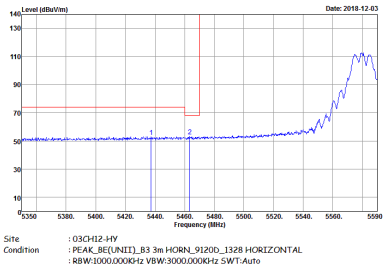
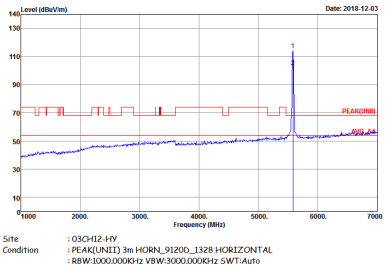
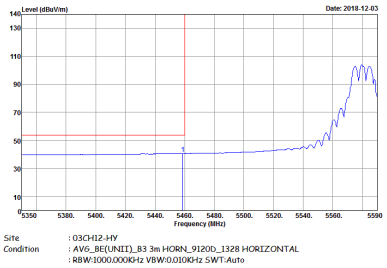
WIFI	Band 2 5250~5350MHz Harmonic @ 3m	
ANT	802.11ac VHT80 CH58 5290MHz	
1+2	Horizontal	Vertical
Peak Avg.		

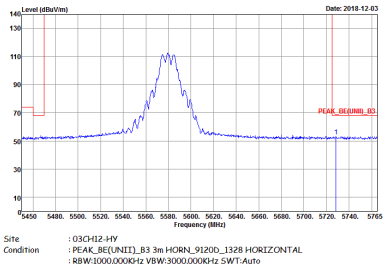
Band 3 - 5470~5725MHz

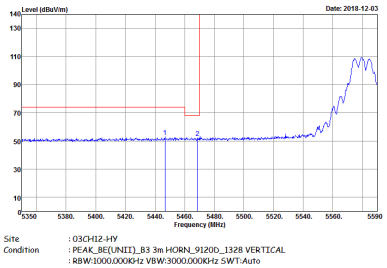
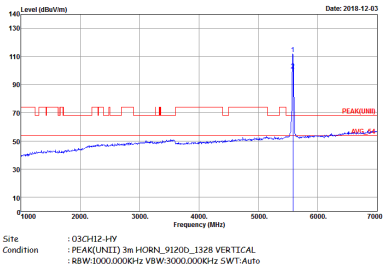
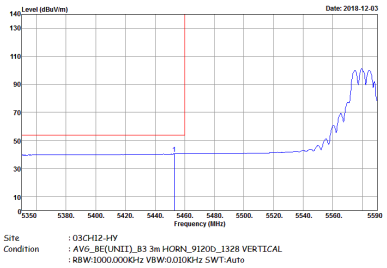
WIFI 802.11a (Band Edge @ 3m)

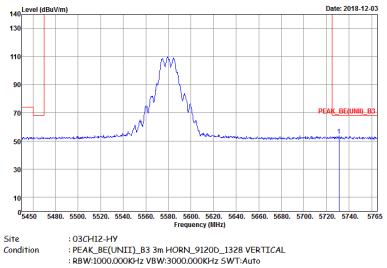
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH100 5500MHz	
1+2	Horizontal	Fundamental
Peak		
Avg.		Left blank

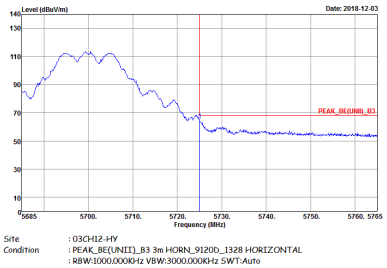
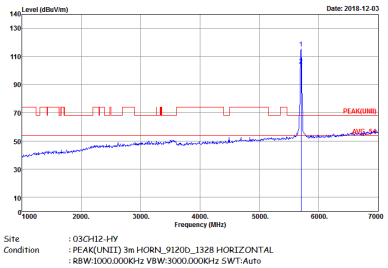
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH100 5500MHz	
1+2	Vertical	Fundamental
Peak		
Avg.		Left blank

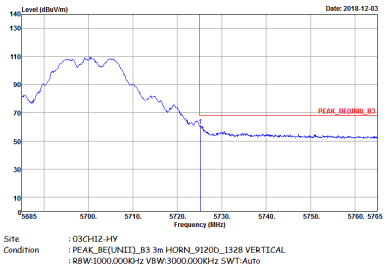
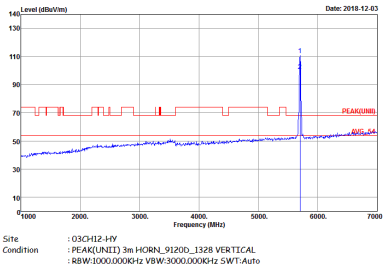
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH116 5580MHz - L	
1+2	Horizontal	Fundamental
Peak		
Avg.		Left blank

WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH116 5580MHz - R	
1+2	Horizontal	Fundamental
Peak		Left blank

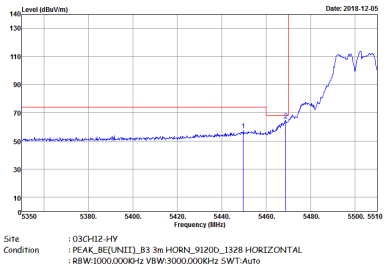
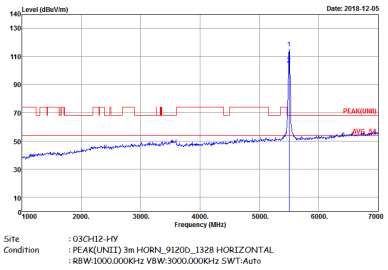
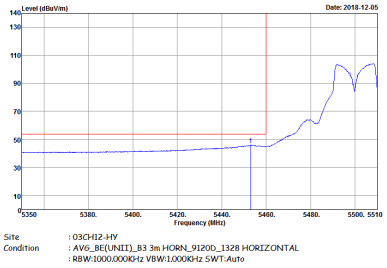
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH116 5580MHz - L	
1+2	Vertical	Fundamental
Peak		
Avg.		Left blank

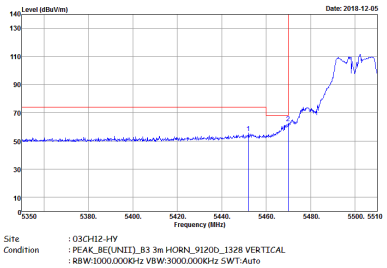
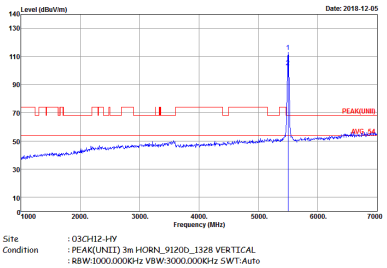
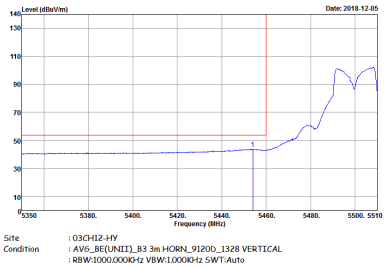
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH116 5580MHz - R	
1+2	Vertical	Fundamental
Peak		Left blank

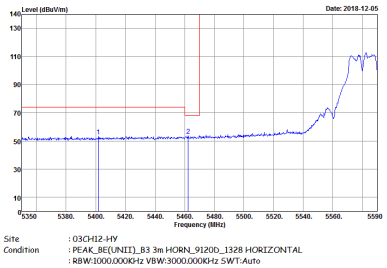
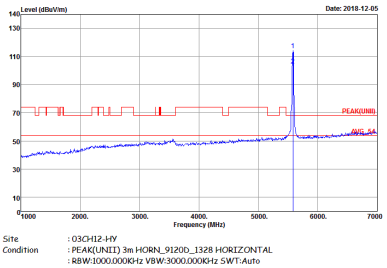
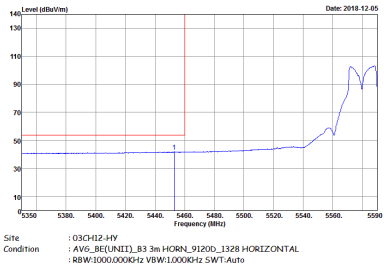
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH140 5700MHz	
1+2	Horizontal	Fundamental
Peak		

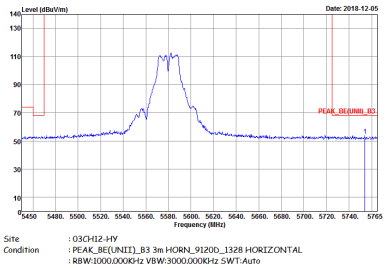
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH140 5700MHz	
1+2	Vertical	Fundamental
Peak		

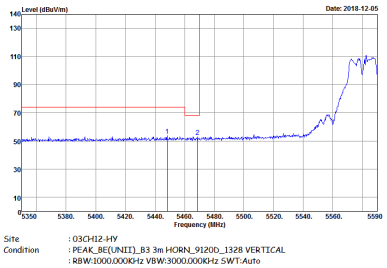
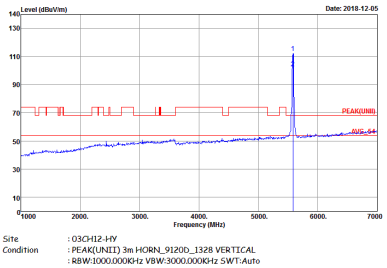
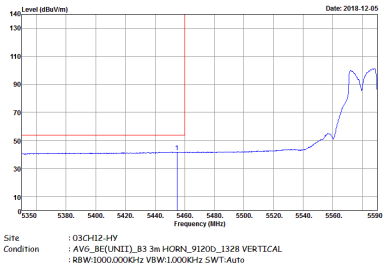
Band 3 5470~5725MHz
WIFI 802.11n HT20 (Band Edge @ 3m)

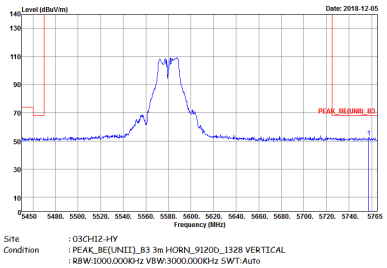
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT20 CH100 5500MHz	
1+2	Horizontal	Fundamental
Peak		
Avg.		Left blank

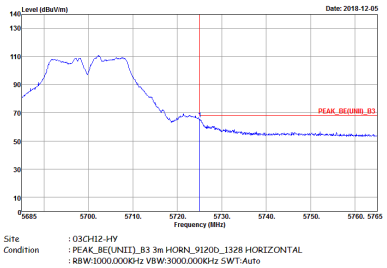
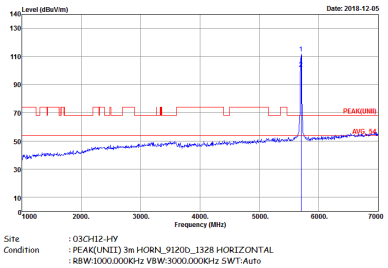
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT20 CH100 5500MHz	
1+2	Vertical	Fundamental
Peak		
Avg.		Left blank

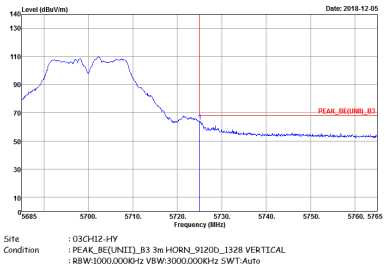
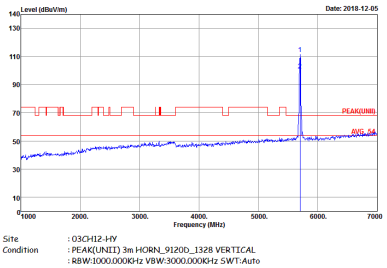
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT20 CH116 5580MHz - L	
1+2	Horizontal	Fundamental
Peak		
Avg.		Left blank

WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT20 CH116 5580MHz - R	
1+2	Horizontal	Fundamental
Peak		Left blank

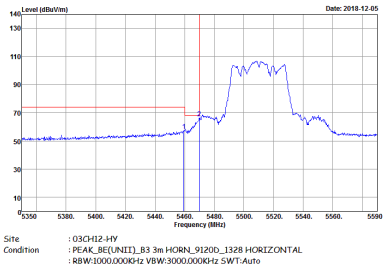
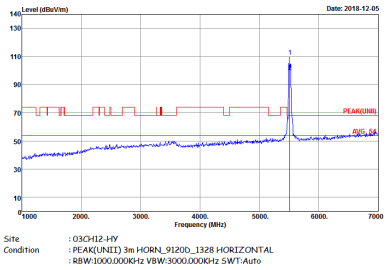
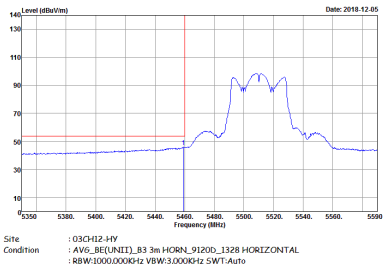
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT20 CH116 5580MHz - L	
1+2	Vertical	Fundamental
Peak		
Avg.		Left blank

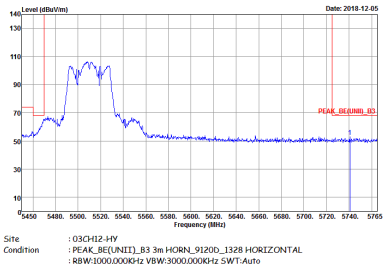
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT20 CH116 5580MHz - R	
1+2	Vertical	Fundamental
Peak		Left blank

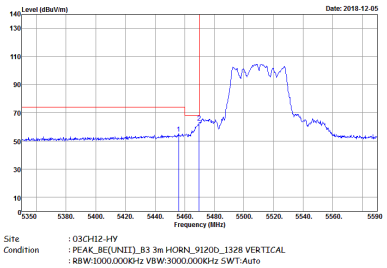
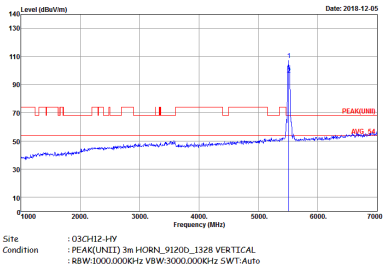
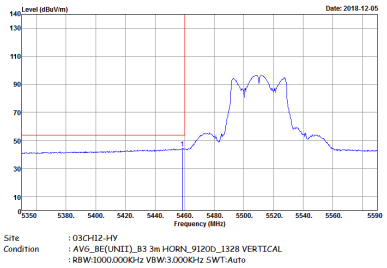
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT20 CH140 5700MHz	
1+2	Horizontal	Fundamental
Peak		

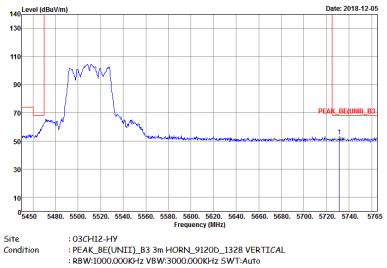
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT20 CH140 5700MHz	
1+2	Vertical	Fundamental
Peak.		

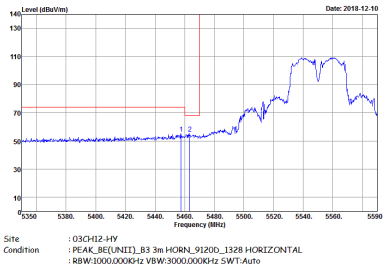
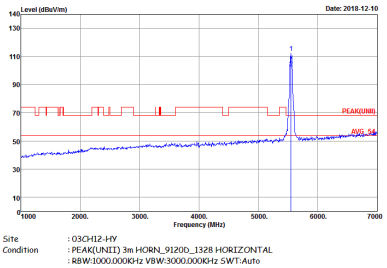
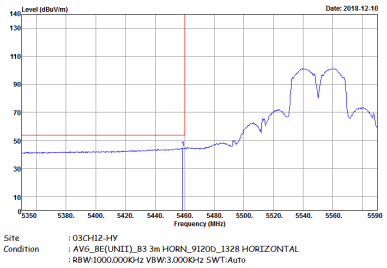
Band 3 5470~5725MHz
WIFI 802.11n HT40 (Band Edge @ 3m)

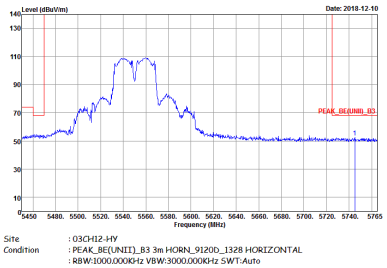
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH102 5510MHz - L	
1+2	Horizontal	Fundamental
Peak		
Avg.		Left blank

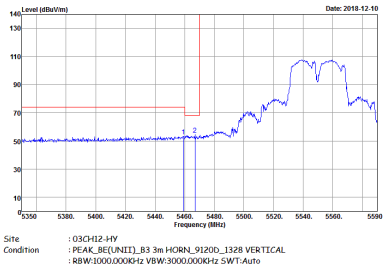
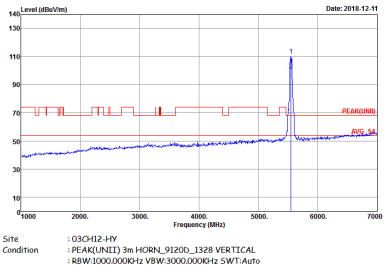
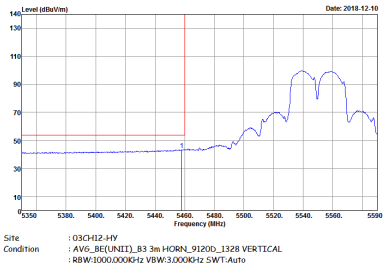
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH102 5510MHz - R	
1+2	Horizontal	Fundamental
Peak		Left blank

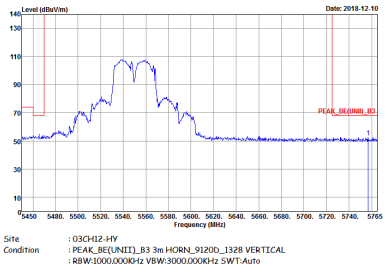
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH102 5510MHz - L	
1+2	Vertical	Fundamental
Peak		
Avg.		Left blank

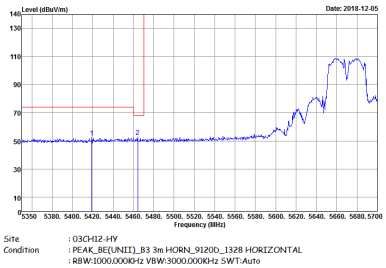
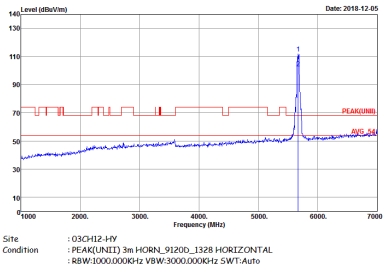
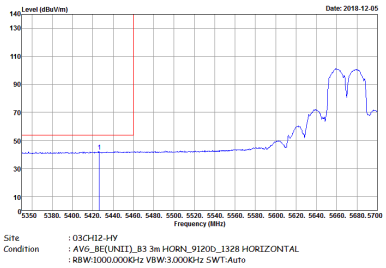
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH102 5510MHz - R	
1+2	Vertical	Fundamental
Peak		Left blank

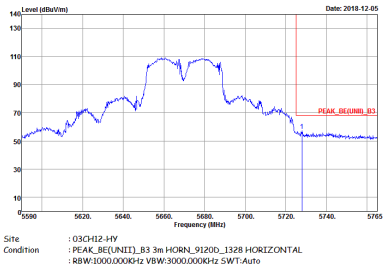
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH110 5550MHz - L	
1+2	Horizontal	Fundamental
Peak		
Avg.		Left blank

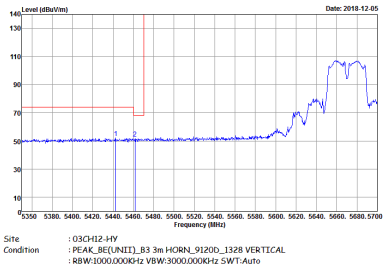
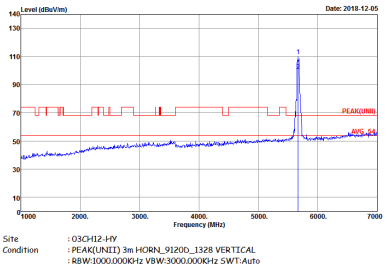
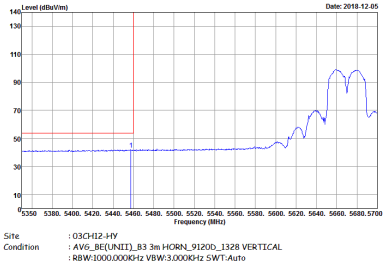
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH110 5550MHz - R	
1+2	Horizontal	Fundamental
Peak		Left blank

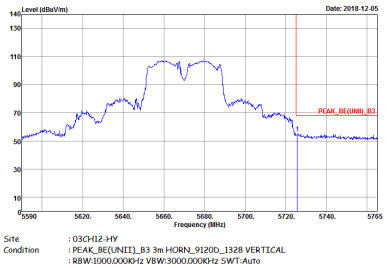
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH110 5550MHz - L	
1+2	Vertical	Fundamental
Peak		
Avg.		Left blank

WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH110 5550MHz - R	
1+2	Vertical	Fundamental
Peak		Left blank

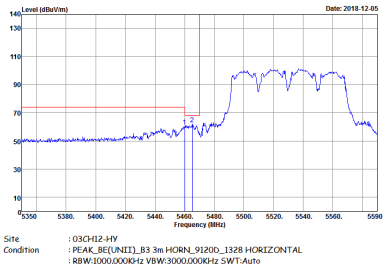
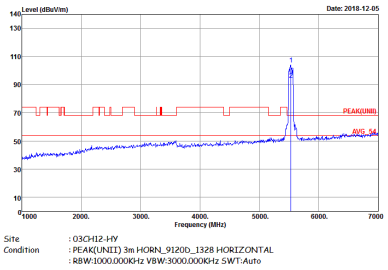
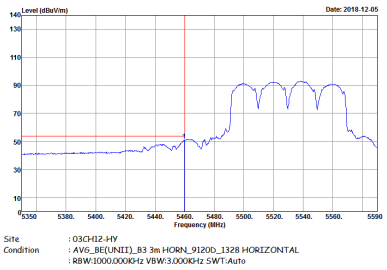
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH134 5670MHz - L	
1+2	Horizontal	Fundamental
Peak		
Avg.		Left blank

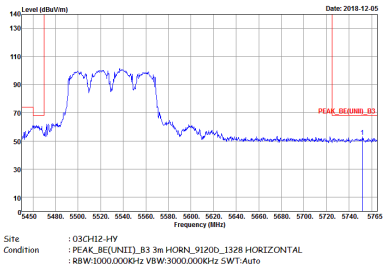
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH134 5670MHz - R	
1+2	Horizontal	Fundamental
Peak		Left blank

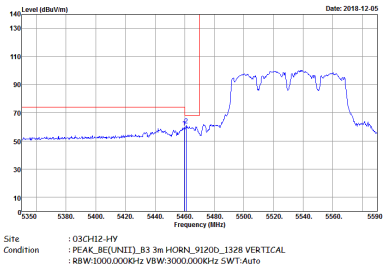
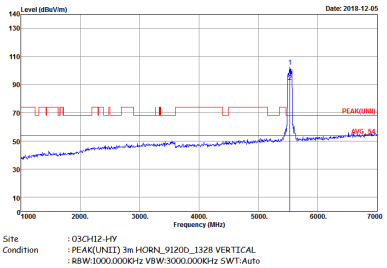
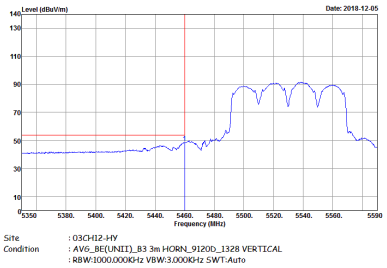
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH134 5670MHz - L	
1+2	Vertical	Fundamental
Peak		
Avg.		Left blank

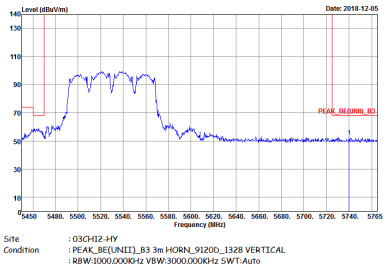
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH134 5670MHz - R	
1+2	Vertical	Fundamental
Peak		Left blank

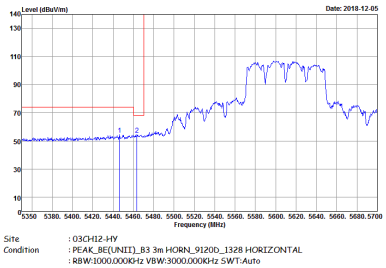
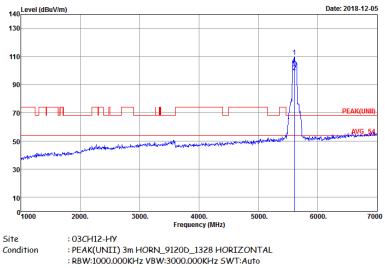
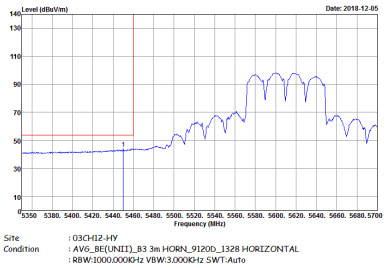
Band 3 5470~5725MHz
WIFI 802.11ac VHT80 (Band Edge @ 3m)

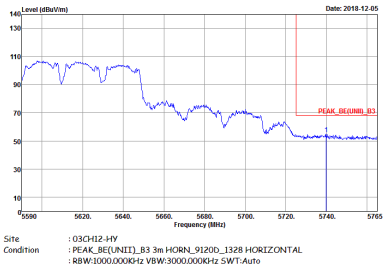
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH106 5530MHz - L	
1+2	Horizontal	Fundamental
Peak		
Avg.		Left blank

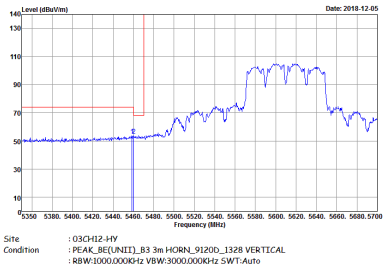
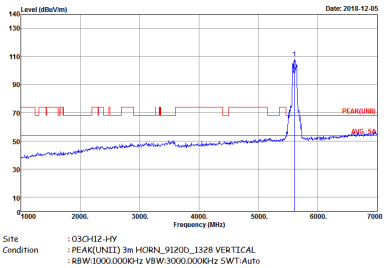
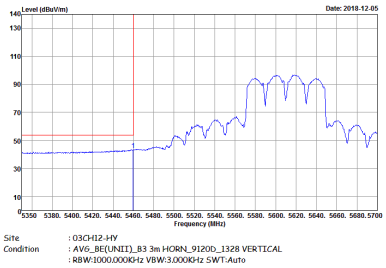
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH106 5530MHz - R	
1+2	Horizontal	Fundamental
Peak		Left blank

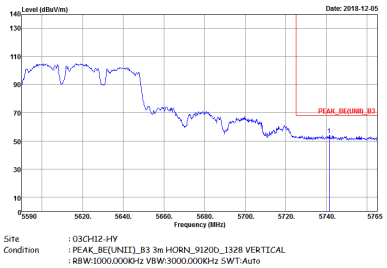
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH106 5530MHz - L	
1+2	Vertical	Fundamental
Peak		
Avg.		Left blank

WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH106 5530MHz - R	
1+2	Vertical	Fundamental
Peak		Left blank

WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH122 5610MHz - L	
1+2	Horizontal	Fundamental
Peak		
Avg.		Left blank

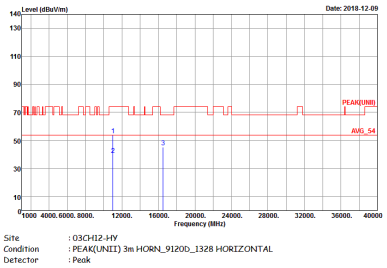
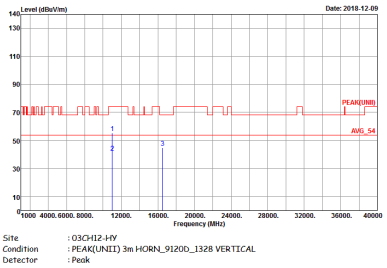
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH122 5610MHz - R	
1+2	Horizontal	Fundamental
Peak		Left blank

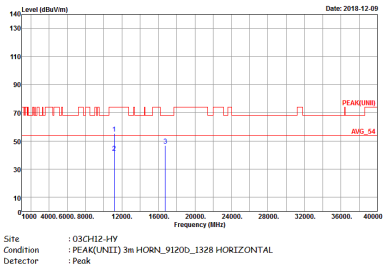
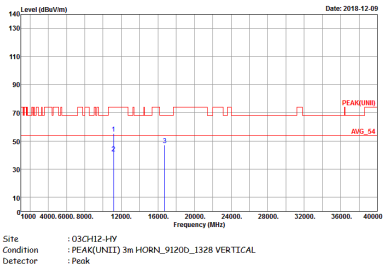
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH122 5610MHz - L	
1+2	Vertical	Fundamental
Peak		
Avg.		Left blank

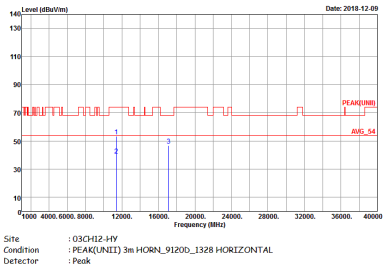
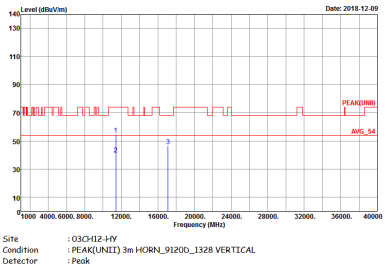
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH122 5610MHz - R	
1+2	Vertical	Fundamental
Peak		Left blank

Band 3 - 5470~5725MHz

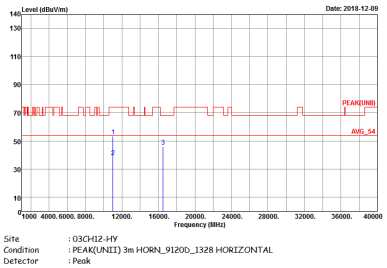
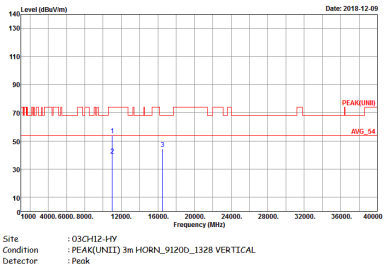
WIFI 802.11a (Harmonic @ 3m)

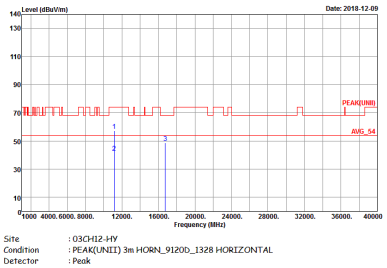
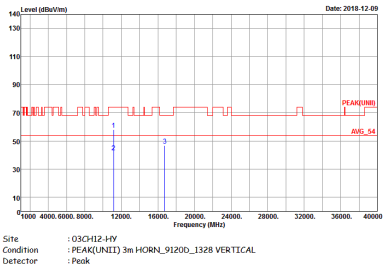
WIFI	Band 3 5470~5725MHz Harmonic @ 3m	
ANT	802.11a CH100 5500MHz	
1+2	Horizontal	Vertical
Peak Avg.		

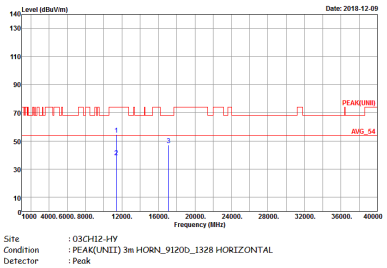
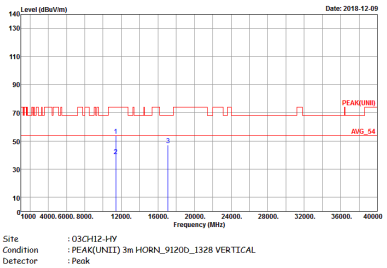
WIFI	Band 3 5470~5725MHz Harmonic @ 3m	
ANT	802.11a CH116 5580MHz	
1+2	Horizontal	Vertical
Peak Avg.		

WIFI	Band 3 5470~5725MHz Harmonic @ 3m	
ANT	802.11a CH140 5700MHz	
1+2	Horizontal	Vertical
Peak Avg.		

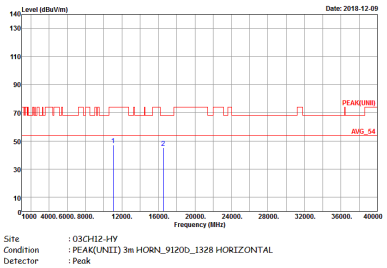
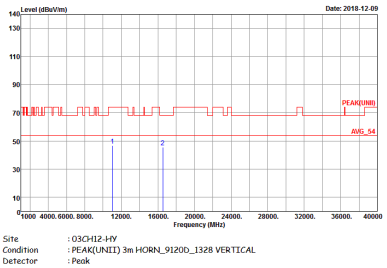
Band 3 5470~5725MHz
WIFI 802.11n HT20 (Harmonic @ 3m)

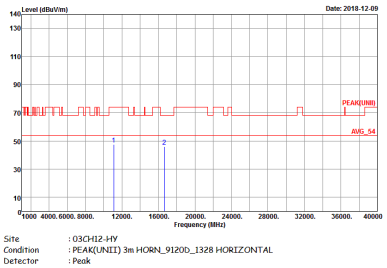
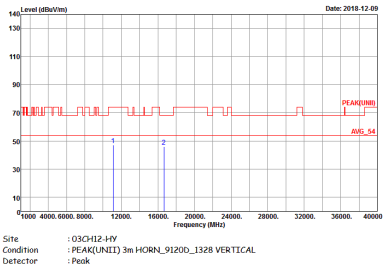
WIFI	Band 3 5470~5725MHz Harmonic @ 3m	
ANT	802.11n HT20 CH100 5500MHz	
1+2	Horizontal	Vertical
Peak Avg.		

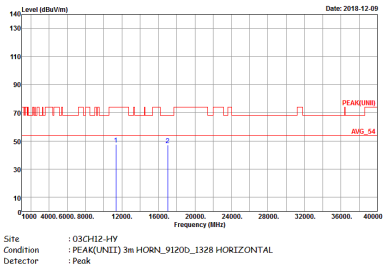
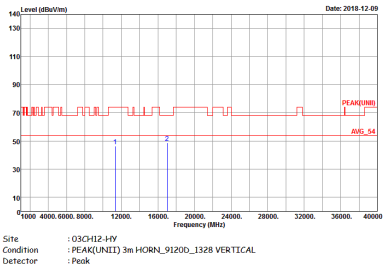
WIFI	Band 3 5470~5725MHz Harmonic @ 3m	
ANT	802.11n HT20 CH116 5580MHz	
1+2	Horizontal	Vertical
Peak Avg.		

WIFI	Band 3 5470~5725MHz Harmonic @ 3m	
ANT	802.11n HT20 CH140 5700MHz	
1+2	Horizontal	Vertical
Peak Avg.		

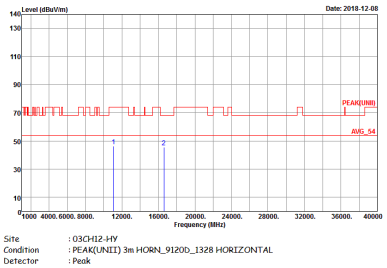
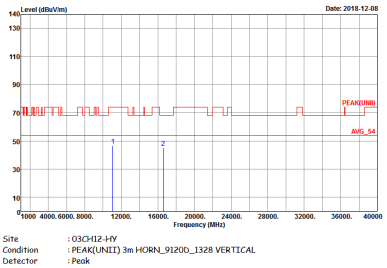
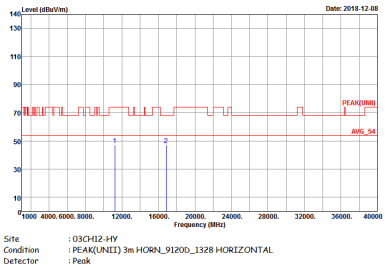
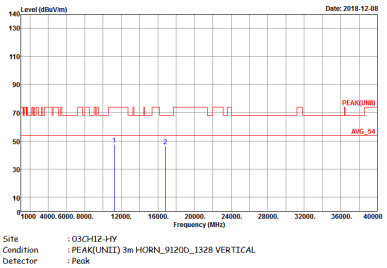
Band 3 5470~5725MHz
WIFI 802.11n HT40 (Harmonic @ 3m)

WIFI	Band 3 5470~5725MHz Harmonic @ 3m	
ANT	802.11n HT40 CH102 5510MHz	
1+2	Horizontal	Vertical
Peak Avg.		

WIFI	Band 3 5470~5725MHz Harmonic @ 3m	
ANT	802.11n HT40 CH110 5550MHz	
1+2	Horizontal	Vertical
Peak Avg.		

WIFI	Band 3 5470~5725MHz Harmonic @ 3m	
ANT	802.11n HT40 CH134 5670MHz	
1+2	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	
1+2	Horizontal	Vertical
Peak Avg.		

WIFI	Band 3 5470~5725MHz Harmonic @ 3m	
ANT	802.11ac VHT80 CH122 5610MHz	
1+2	Horizontal	Vertical
Peak Avg.