FCC RADIO TEST REPORT

FCC ID	:	**A4RG013C**
Equipment	:	**Smartphone**
Model Name	:	**G013C**
Applicant	:	**Google LLC** **1600 Amphitheatre Parkway,** **Mountain View, California, 94043 USA**
Standard	:	**FCC Part 15 Subpart E §15.407**

The product was completed on Jun. 26, 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.

Jones Tsai

Approved by: Jones Tsai

SPORTON INTERTIONAL INC. EMC & Wireless Communications Laboratory
No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.)

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History of this test report

Report No.	Version	Description	Issued Date
FR820502-02E	01	Initial issue of report	Jun. 27, 2018

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 1.13 dB at 5356.320 MHz
3.5	15.207	AC Conducted Emission	Pass	Under limit 7.21 dB at 13.560 MHz
3.6	15.407(c)	Automatically Discontinue Transmission	Pass	-
3.7	15.203 15.407(a)	Antenna Requirement	Pass	-

Reviewed by: Joseph Lin

Report Producer: Natasha Hsieh

1 General Description

1.1 Product Feature of Equipment Under Test

Product Feature	
Equipment	Smartphone
Model Name	G013C
FCC ID	A4RG013C
EUT supports Radios application	CDMA/EV-DO/GSM/EGPRS/WCDMA/HSPA/LTE/NFC/GNSS/WPC WLAN 11b/g/n HT20/VHT20 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. Please refer to the specifications or user's manual for more detailed description.

EUT Information List	
No.	S/N
#1	85KY00936
#2	85LY00985
#3	85LY009BE

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 : 18.32 dBm / 0.0679 W 802.11n HT20 : 18.24 dBm / 0.0667 W 802.11n HT40 : 18.35 dBm / 0.0684 W 802.11 ac VHT20: 18.21 dBm / 0.0662 W 802.11 ac VHT40: 18.33 dBm / 0.0681 W 802.11 ac VHT80: 11.71 dBm / 0.0148 W **<5260 MHz ~ 5320 MHz>** 802.11a : 18.44 dBm / 0.0698 W 802.11n HT20 : 18.42 dBm / 0.0695 W 802.11n HT40 : 18.46 dBm / 0.0701 W 802.11 ac VHT20: 18.41 dBm / 0.0693 W 802.11 ac VHT40: 18.42 dBm / 0.0695 W 802.11 ac VHT80: 13.28 dBm / 0.0213 W **<5500 MHz ~ 5700 MHz >** 802.11a : 18.48 dBm / 0.0705 W 802.11n HT20 : 17.54 dBm / 0.0568 W 802.11n HT40 : 18.28 dBm / 0.0673 W 802.11 ac VHT20: 17.51 dBm / 0.0564 W 802.11 ac VHT40: 18.27 dBm / 0.0671 W 802.11 ac VHT80: 17.85 dBm / 0.0610 W **<Ant. 2>** **<5180 MHz ~ 5240 MHz>** 802.11a : 18.20 dBm / 0.0661 W 802.11n HT20 : 18.01 dBm / 0.0632 W 802.11n HT40 : 17.95 dBm / 0.0624 W 802.11 ac VHT20: 18.00 dBm / 0.0631 W 802.11 ac VHT40: 17.93 dBm / 0.0621 W 802.11 ac VHT80: 11.48 dBm / 0.0141 W **<5260 MHz ~ 5320 MHz>** 802.11a : 17.77 dBm / 0.0598 W 802.11n HT20 : 18.11 dBm / 0.0647 W 802.11n HT40 : 17.90 dBm / 0.0617 W 802.11 ac VHT20: 17.93 dBm / 0.0621 W 802.11 ac VHT40: 17.89 dBm / 0.0615 W 802.11 ac VHT80: 12.63 dBm / 0.0183 W **<5500 MHz ~ 5700 MHz >** 802.11a : 18.31 dBm / 0.0678 W 802.11n HT20 : 17.11 dBm / 0.0514 W 802.11n HT40 : 17.76 dBm / 0.0597 W 802.11 ac VHT20: 17.09 dBm / 0.0512 W 802.11 ac VHT40: 17.68 dBm / 0.0586 W 802.11 ac VHT80: 17.58 dBm / 0.0573 W

Standards-related Product Specification	
Maximum Output Power to Antenna	**MIMO <Ant. 1+2>** **<5180 MHz ~ 5240 MHz>** 802.11a : 21.34 dBm / 0.1361 W 802.11n HT20 : 21.15 dBm / 0.1303 W 802.11n HT40 : 21.23 dBm / 0.1327 W 802.11 ac VHT20: 21.14 dBm / 0.1300 W 802.11 ac VHT40: 21.21 dBm / 0.1321 W 802.11 ac VHT80: 14.73 dBm / 0.0297 W **<5260 MHz ~ 5320 MHz>** 802.11a : 21.12 dBm / 0.1294 W 802.11n HT20 : 21.32 dBm / 0.1355 W 802.11n HT40 : 21.25 dBm / 0.1334 W 802.11 ac VHT20: 21.24 dBm / 0.1330 W 802.11 ac VHT40: 21.22 dBm / 0.1324 W 802.11 ac VHT80: 16.09 dBm / 0.0406 W **<5500 MHz ~ 5700 MHz >** 802.11a : 21.42 dBm / 0.1387 W 802.11n HT20 : 20.40 dBm / 0.1096 W 802.11n HT40 : 21.09 dBm / 0.1285 W 802.11 ac VHT20: 20.39 dBm / 0.1094 W 802.11 ac VHT40: 21.04 dBm / 0.1271 W 802.11 ac VHT80: 20.80 dBm / 0.1202 W
Maximum Output Power to Antenna for Straddle Channel	**<Ant. 1>** 802.11a : 18.20 dBm / 0.0661 W 802.11n HT20 : 16.99 dBm / 0.0500 W 802.11n HT40 : 17.40 dBm / 0.0550 W 802.11 ac VHT20: 16.88 dBm / 0.0488 W 802.11 ac VHT40: 17.38 dBm / 0.0547 W 802.11 ac VHT80: 17.86 dBm / 0.0611 W **<Ant. 2>** 802.11a : 18.28 dBm / 0.0673 W 802.11n HT20 : 17.23 dBm / 0.0528 W 802.11n HT40 : 17.38 dBm / 0.0547 W 802.11 ac VHT20: 17.21 dBm / 0.0526 W 802.11 ac VHT40: 17.30 dBm / 0.0537 W 802.11 ac VHT80: 17.71 dBm / 0.0590 W **MIMO <Ant. 1+2>** 802.11a : 21.31 dBm / 0.1352 W 802.11n HT20 : 20.15 dBm / 0.1035 W 802.11n HT40 : 20.47 dBm / 0.1114 W 802.11 ac VHT20: 20.13 dBm / 0.1030 W 802.11 ac VHT40: 20.44 dBm / 0.1107 W 802.11 ac VHT80: 20.81 dBm / 0.1205 W

Standards-related Product Specification	
99% Occupied Bandwidth	**<Ant. 1>** 802.11a : 19.25 MHz 802.11n HT20 : 18.65 MHz 802.11n HT40 : 37.00 MHz 802.11 ac VHT80 : 76.20 MHz **<Ant. 2>** 802.11a : 34.65 MHz 802.11n HT20 : 25.10 MHz 802.11n HT40 : 64.70 MHz 802.11 ac VHT80 : 92.88 MHz
99% Occupied Bandwidth for Straddle Channel	**<Ant. 1>** 802.11a : 14.00 MHz 802.11n HT20 : 14.10 MHz 802.11n HT40 : 33.30 MHz 802.11 ac VHT80 : 73.16 MHz **<Ant. 2>** 802.11a : 22.15 MHz 802.11n HT20 : 18.00 MHz 802.11n HT40 : 44.00 MHz 802.11 ac VHT80 : 84.56 MHz
Antenna Gain / Gain	**<5150 MHz ~ 5250 MHz>** <Ant. 1> : slot Antenna with gain -0.30 dBi <Ant. 2> : integrated monopole Antenna with gain -0.40 dBi **<5250 MHz ~ 5350 MHz>** <Ant. 1> : slot Antenna with gain -0.30 dBi <Ant. 2> : integrated monopole Antenna with gain -0.40 dBi **<5470 MHz ~ 5725 MHz>** <Ant. 1> : slot Antenna with gain -0.30 dBi <Ant. 2> : integrated monopole Antenna with gain -0.40 dBi
Type of Modulation	802.11a/n : OFDM (BPSK / QPSK / 16QAM / 64QAM) 802.11ac: OFDM (BPSK / QPSK / 16QAM / 64QAM / 256QAM)

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.**
	03CH15-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 (Y plane) were recorded in this report.

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

2.1 Carrier Frequency and Channel

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

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

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

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

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

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 : GSM1900 Idle + WLAN Link (5GHz) + Bluetooth Link + NFC Read On + USB cable (Type C) (Charging from Adapter 1)
Remark: For Radiated Test Cases, the tests were performed with Adapter 1.	

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

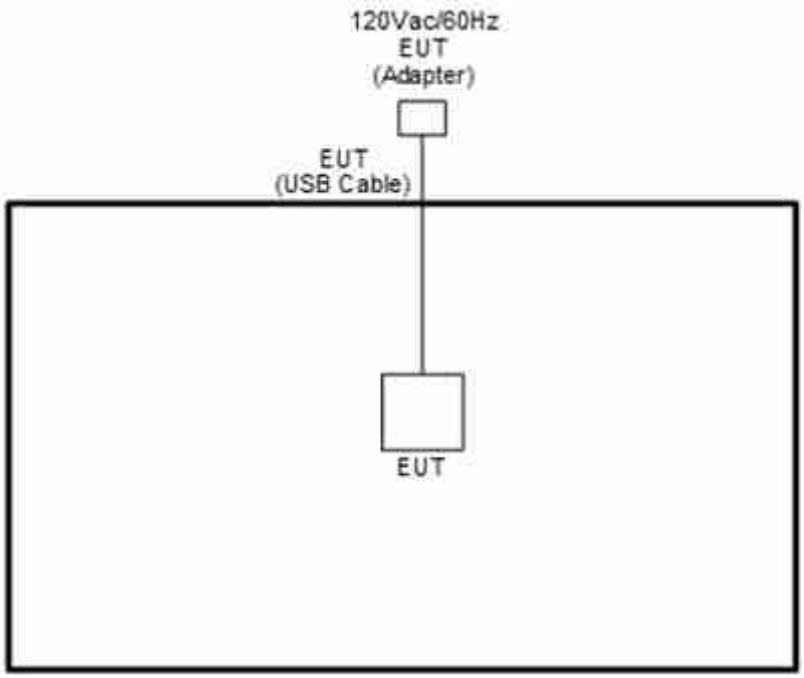
Ch. #		Band I：5150-5250 MHz	Band II：5250-5350 MHz	Band III：5470-5725MHz
		802.11n HT20	802.11n HT20	802.11n HT20
L	Low	36	52	100
M	Middle	44	60	116
H	High	48	64	140
Straddle		-	-	144

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

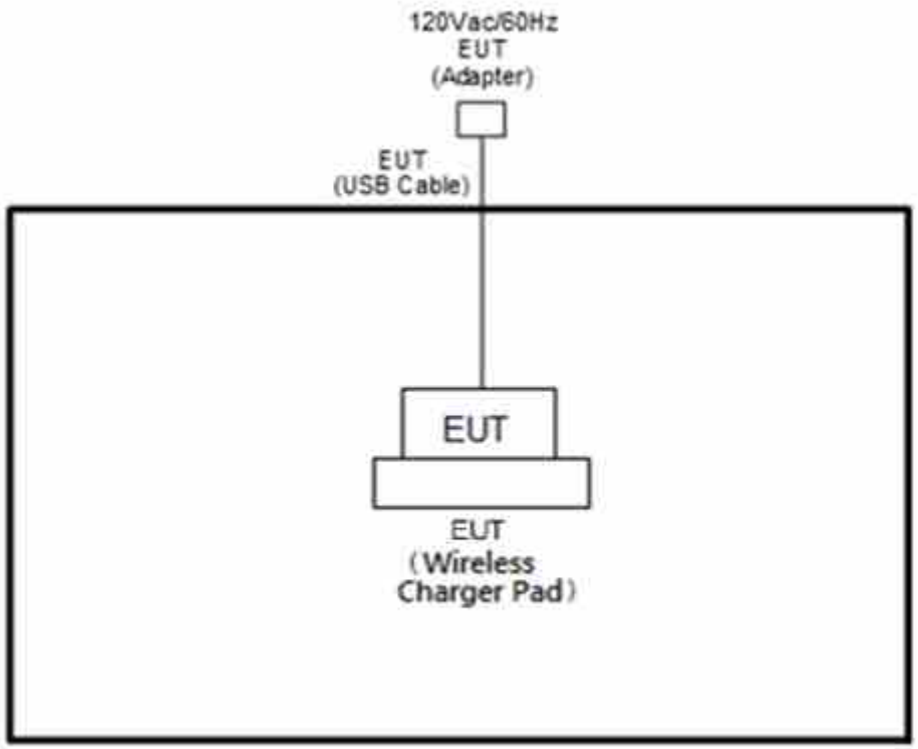
Ch. #		Band I：5150-5250 MHz	Band II：5250-5350 MHz	Band III：5470-5725MHz
		802.11ac VHT80	802.11ac VHT80	802.11ac VHT80
L	Low	-	-	106
M	Middle	42	58	122
H	High	-	-	-
Straddle		-	-	138

2.3 Connection Diagram of Test System

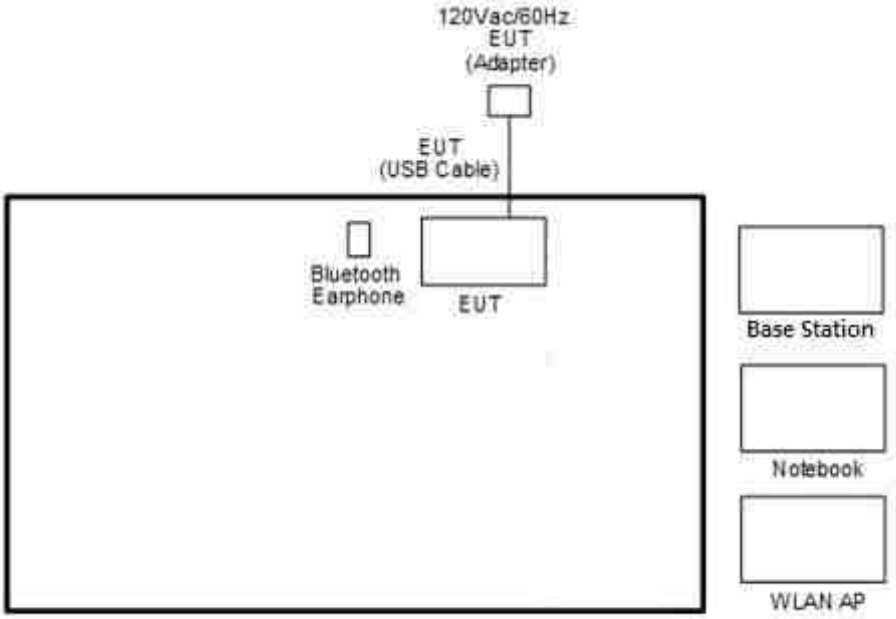
<WLAN Tx Mode>



< WLAN Tx with WPC Charging 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.	Bluetooth Earphone	Sony Ericsson	MW600	PY7DDA-2029	N/A	N/A
3.	WLAN AP	ASUS	RT-AC66U	MSQ-RTAC66U	N/A	Unshielded, 1.8 m
4.	Notebook	DELL	Latitude E6320	FCC DoC/ Contains FCC ID: QDS-BRCM1054	N/A	AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m

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.

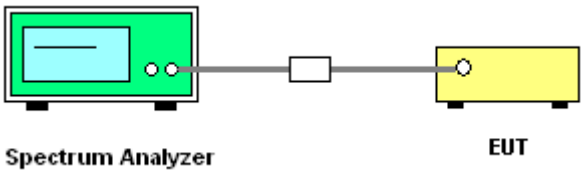
3.1.2 Measuring Instruments

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.

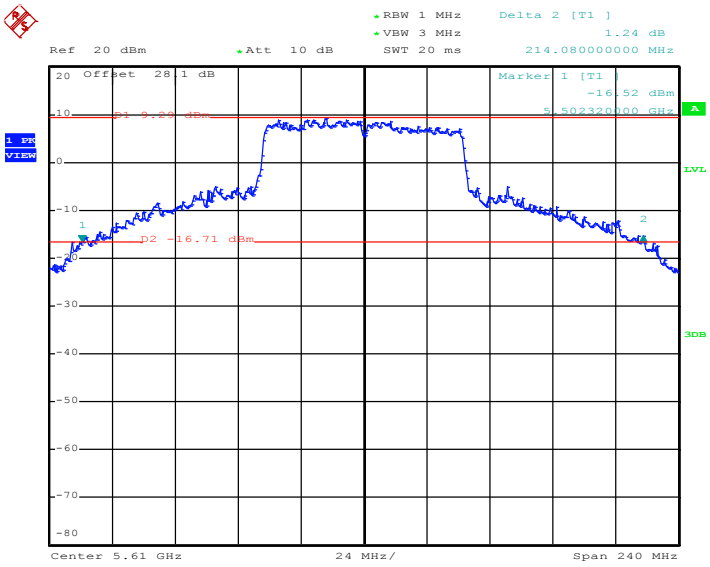
3.1.4 Test Setup



3.1.5 Test Result of 26dB & 99% Occupied Bandwidth

Please refer to Appendix A.

Maximum 26dB Bandwidth



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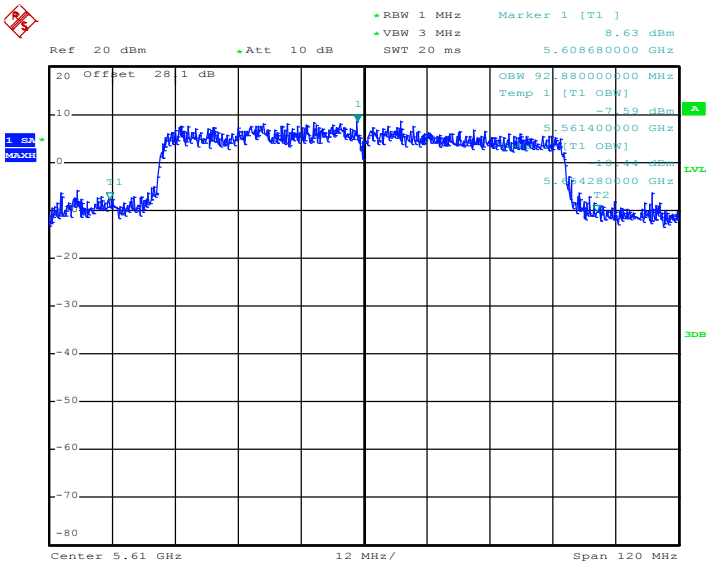
Maximum 99% Occupied Bandwidth



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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

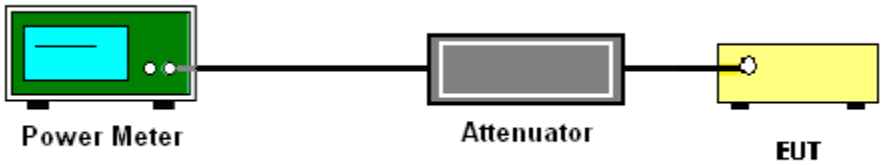
The testing follows Method PM of FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01.

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.

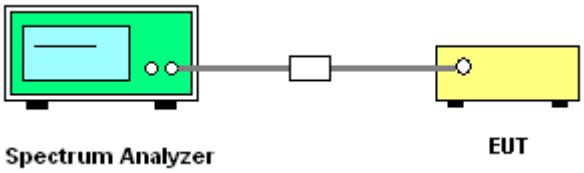
 # Method SA-2 #

(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.

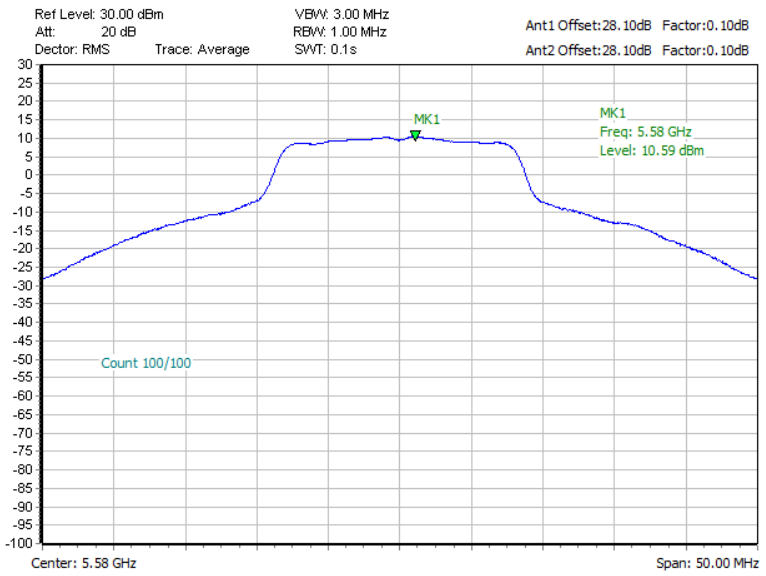
3.3.4 Test Setup



3.3.5 Test Result of Power Spectral Density

Please refer to Appendix A.

Worst Case Power Density (dBm/MHz)



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

3.4 Unwanted Emissions Measurement

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

3.4.1 Limit of Unwanted Emissions

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

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

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

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

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

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

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

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

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

(i) Section 15.407(b)(1) to (b)(3) specify the unwanted emission limits for the U-NII-1 and U-NII-2 bands. As specified, emissions above 1000 MHz that are outside of the restricted bands are subject to a peak emission limit of -27 dBm/MHz.[3]

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

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

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

3.4.2 Measuring Instruments

See list of measuring equipment of this test report.

3.4.3 Test Procedures

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

   Section G) Unwanted emissions measurement.

   (1) Procedure for Unwanted Emissions Measurements Below 1000MHz

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

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

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

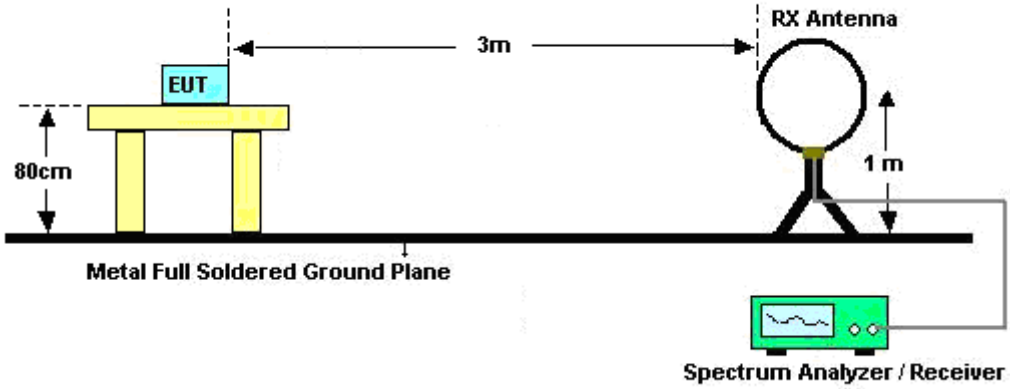
(3) Procedures for Average Unwanted Emissions Measurements Above 1000MHz

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

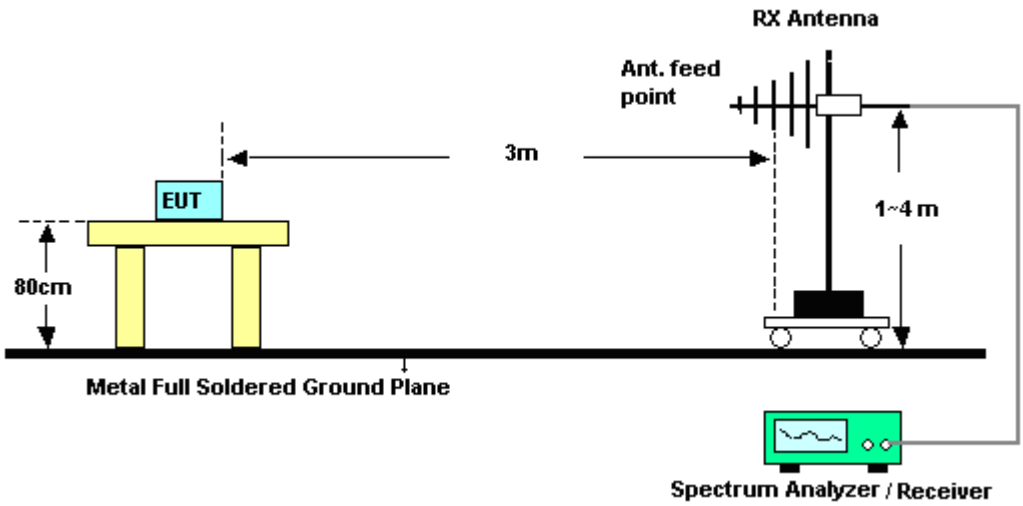
2. The EUT was placed on a turntable with 0.8 meter for frequency below 1GHz and 1.5 meter for frequency above 1GHz respectively above ground.
3. The EUT was set 3 meters from the interference receiving antenna which was mounted on the top of a variable height antenna tower.
4. The antenna is a broadband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

3.4.4 Test Setup

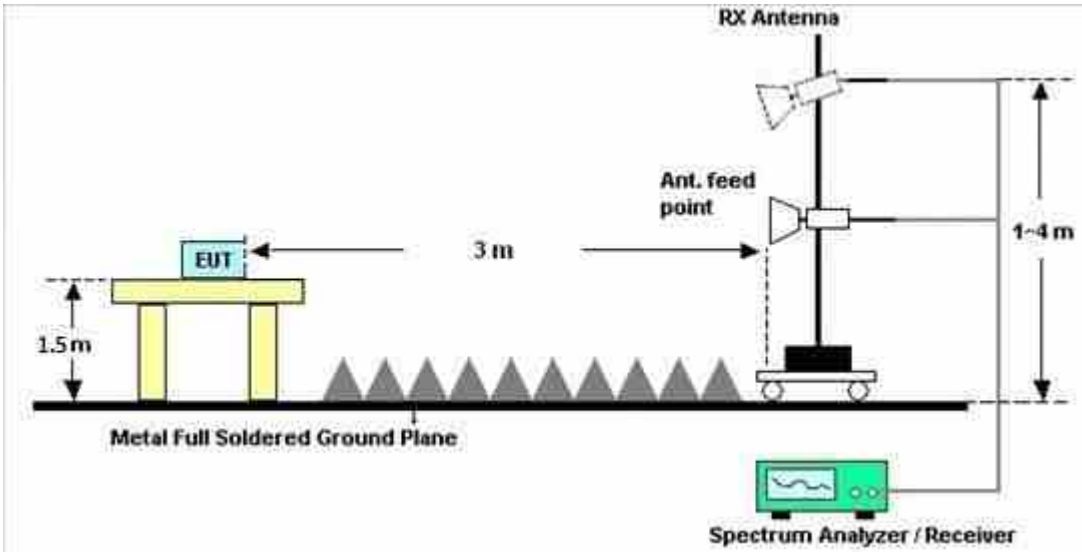
For radiated emissions below 30MHz



For radiated emissions from 30MHz to 1GHz



For radiated emissions above 1GHz



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

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

There is a comparison data of both open-field test site and 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.

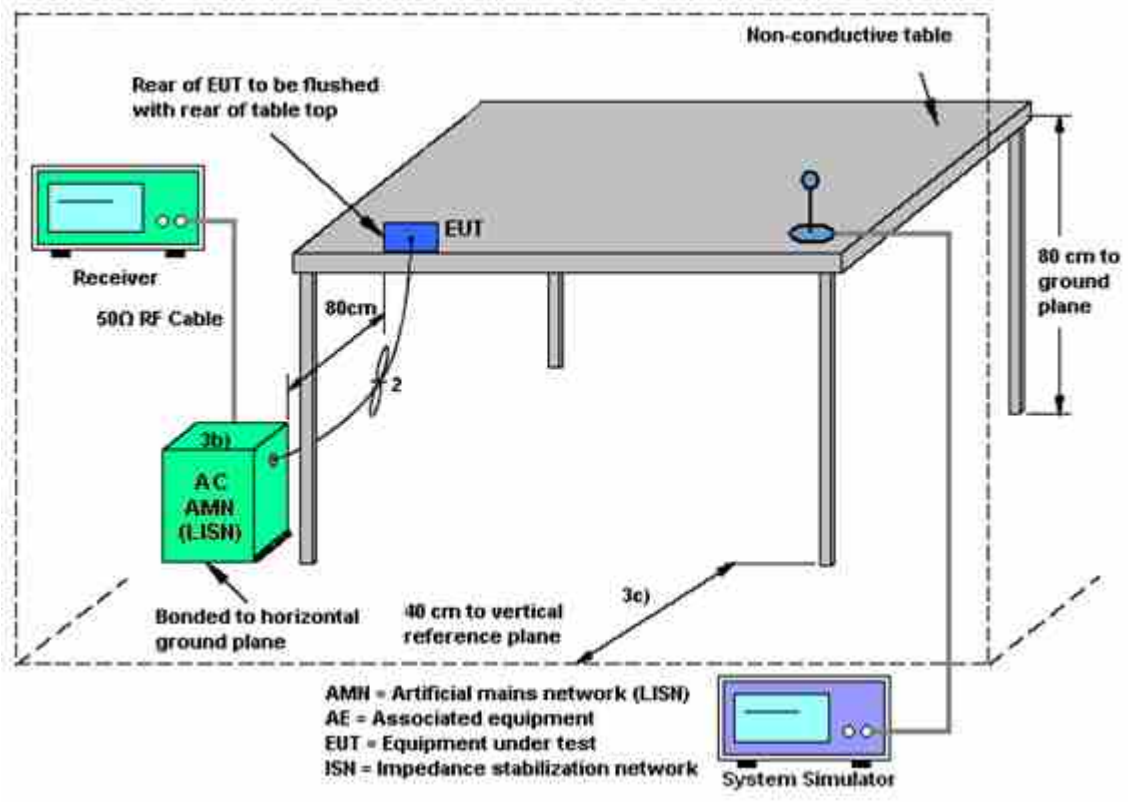
3.5.2 Measuring Instruments

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

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

3.7 Antenna Requirements

3.7.1 Standard Applicable

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

3.7.2 Antenna Anti-Replacement Construction

An embedded-in antenna design is used.

3.7.3 Antenna Gain

<CDD Modes >

FCC KDB 662911 D01 Multiple Transmitter Output v02r01

For CDD transmissions, directional gain is calculated as

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

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

Array Gain = 10 log(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	-0.30	-0.40	-0.30	2.66	0.00	0.00
Band II	-0.30	-0.40	-0.30	2.66	0.00	0.00
Band III	-0.30	-0.40	-0.30	2.66	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	1240001	N/A	Sep. 07, 2017	Jun. 06, 2018~ Jun. 22, 2018	Sep. 06, 2018	Conducted (TH05-HY)
Power Sensor	Anritsu	MA2411B	1207349	300MHz~40GHz	Sep. 07, 2017	Jun. 06, 2018~ Jun. 22, 2018	Sep. 06, 2018	Conducted (TH05-HY)
Spectrum Analyzer	Rohde & Schwarz	FSP40	100057	9kHz-40GHz	Nov. 21, 2017	Jun. 06, 2018~ Jun. 22, 2018	Nov. 20, 2018	Conducted (TH05-HY)
Switch Box & RF Cable	Burgeon	ETF-058	EC1300484	N/A	Mar. 01, 2018	Jun. 06, 2018~ Jun. 22, 2018	Feb. 28, 2019	Conducted (TH05-HY)
Hygrometer	Testo	DTM-303A	TP157075	N/A	Mar. 06, 2018	Jun. 06, 2018~ Jun. 22, 2018	Mar. 05, 2019	Conducted (TH05-HY)
AC Power Source	ChainTek	APC-1000W	N/A	N/A	N/A	Jun. 23, 2018	N/A	Conduction (CO05-HY)
EMI Test Receiver	Rohde & Schwarz	ESR3	102388	3.6GHz	Dec. 08, 2017	Jun. 23, 2018	Dec. 07, 2018	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100080	9kHz~30MHz	Nov. 30, 2017	Jun. 23, 2018	Nov. 29, 2018	Conduction (CO05-HY)
Software	Rohde & Schwarz	EMC32 V10.30	N/A	N/A	N/A	Jun. 23, 2018	N/A	Conduction (CO05-HY)
LF Cable	HUBER + SUHNER	RG-214/U	LF01	N/A	Jan. 03, 2018	Jun. 23, 2018	Jan. 02, 2019	Conduction (CO05-HY)
Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100851	N/A	Jan. 03, 2018	Jun. 23, 2018	Jan. 02, 2019	Conduction (CO05-HY)
Hygrometer	Testo	608-H1	34913912	N/A	Mar. 06, 2018	Jun. 23, 2018	Mar. 05, 2019	Conduction (CO05-HY)
Amplifier	MITEQ	TTA1840-35-HG	1871923	18GHz~40GHz, VSWR : 2.5:1 max	Jul. 18, 2017	Jun. 12, 2018~ Jun. 26, 2018	Jul. 17, 2018	Radiation (03CH15-HY)
Amplifier	SONOMA	310N	363440	9kHz~1GHz	Dec. 26, 2017	Jun. 12, 2018~ Jun. 26, 2018	Dec. 25, 2018	Radiation (03CH15-HY)
Bilog Antenna	TESEQ	CBL6111D&00800N1D01N-06	41912&05	30MHz to 1GHz	Jan. 10, 2018	Jun. 12, 2018~ Jun. 26, 2018	Jan. 09, 2019	Radiation (03CH15-HY)
Horn Antenna	SCHWARZBECK	BBHA 9120D	9120D-1620	1G~18GHz	Oct. 03, 2017	Jun. 12, 2018~ Jun. 26, 2018	Oct. 02, 2018	Radiation (03CH15-HY)
Loop Antenna	Rohde & Schwarz	HFH2-Z2	100488	9 kHz~30 MHz	Nov. 23, 2017	Jun. 12, 2018~ Jun. 26, 2018	Nov. 22, 2018	Radiation (03CH15-HY)
Preamplifier	Keysight	83017A	MY53270195	1GHz~26.5GHz	Aug. 21, 2017	Jun. 12, 2018~ Jun. 26, 2018	Aug. 20, 2018	Radiation (03CH15-HY)
EMI Test Receiver	Keysight	N9038A (MXE)	MY54130085	20Hz ~ 8.4GHz	Oct. 31, 2017	Jun. 12, 2018~ Jun. 26, 2018	Oct. 30, 2018	Radiation (03CH15-HY)
Spectrum Analyzer	Agilent	E4446A	MY50180136	3Hz~44GHz	Apr. 25, 2018	Jun. 12, 2018~ Jun. 26, 2018	Apr. 24, 2019	Radiation (03CH15-HY)
Controller	ChainTek	3000-1	N/A	Control Turn table & Ant Mast	N/A	Jun. 12, 2018~ Jun. 26, 2018	N/A	Radiation (03CH15-HY)
Antenna Mast	ChainTek	MBS-520-1	N/A	1m~4m	N/A	Jun. 12, 2018~ Jun. 26, 2018	N/A	Radiation (03CH15-HY)
Turn Table	ChainTek	T-200-S-1	N/A	0~360 Degree	N/A	Jun. 12, 2018~ Jun. 26, 2018	N/A	Radiation (03CH15-HY)

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170584	18GHz- 40GHz	Nov. 27, 2017	Jun. 12, 2018~ Jun. 26, 2018	Nov. 26, 2018	Radiation (03CH15-HY)
Preamplifier	Jet-Power	JPA00101800-30-10P	1601180002	1GHz~18GHz	Jul. 31, 2017	Jun. 12, 2018~ Jun. 26, 2018	Jul. 30, 2018	Radiation (03CH15-HY)
RF Cable	HUBER + SUHNER / MTJ Cooperation	SUCOFLEX 104 / 000000-MT18A-100	MY36980/4, MY9838/4PE, D3210	30MHz~1GHz	Mar. 15, 2018	Jun. 12, 2018~ Jun. 26, 2018	Mar. 14, 2019	Radiation (03CH15-HY)
RF Cable	HUBER + SUHNER / MTJ Cooperation	SUCOFLEX 104 / 000000-MT18A-100	MY36980/4, MY9838/4PE, D3210	1GHz~18GHz	Mar. 15, 2018	Jun. 12, 2018~ Jun. 26, 2018	Mar. 14, 2019	Radiation (03CH15-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	505134/2	30M~40GHz	Oct. 17, 2017	Jun. 12, 2018~ Jun. 26, 2018	Oct. 16, 2018	Radiation (03CH15-HY)
Filter	Wainwright	WHKX8-5872.5-6750-18000-40ST	SN3	6.75GHz High Pass	Sep. 18, 2017	Jun. 12, 2018~ Jun. 26, 2018	Sep. 17, 2018	Radiation (03CH15-HY)
Filter	Wainwright	WLK4-1000-1530-8000-40SS	SN11	1G Low Pass	Sep. 18, 2017	Jun. 12, 2018~ Jun. 26, 2018	Sep. 17, 2018	Radiation (03CH15-HY)
Software	Audix	E3 6.2009-8-24	RK-001042	N/A	N/A	Jun. 12, 2018~ Jun. 26, 2018	N/A	Radiation (03CH15-HY)
Hygrometer	TECPEL	DTM-303B	TP162976	N/A	Oct. 12, 2017	Jun. 12, 2018~ Jun. 26, 2018	Oct. 11, 2018	Radiation (03CH15-HY)

5 Uncertainty of Evaluation

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	2.70

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

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

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	5.50

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

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

Appendix A. Test Result of Conducted Test Items

Test Engineer:	Shiming Liu / Rebecca Li	Temperature:	21~25	°C
Test Date:	2018/6/6~2018/6/22	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	17.30	18.55	30.20	33.20	-		22.38			
11a	6Mbps	2	44	5220	17.30	18.70	29.60	33.90	-		22.38			
11a	6Mbps	2	48	5240	17.20	18.70	29.00	34.20	-		22.36			
HT20	MCS0	2	36	5180	18.30	19.70	30.90	35.50	-		22.62			
HT20	MCS0	2	44	5220	18.30	19.70	30.90	36.00	-		22.62			
HT20	MCS0	2	48	5240	18.25	19.00	29.40	35.15	-		22.61			
HT40	MCS0	2	38	5190	36.70	36.60	41.58	41.76	-		23.01			
HT40	MCS0	2	46	5230	37.00	37.60	56.16	73.80	-		23.01			
VHT80	MCS0	2	42	5210	75.72	75.84	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	0.10	0.10	18.32	18.20		24.00	24.00	-0.30	-0.40		Pass
11a	6Mbps	1	44	5220	0.10	0.10	18.28	18.02		24.00	24.00	-0.30	-0.40		Pass
11a	6Mbps	1	48	5240	0.10	0.10	18.20	17.95		24.00	24.00	-0.30	-0.40		Pass
HT20	MCS0	1	36	5180	0.11	0.11	18.24	18.01		24.00	24.00	-0.30	-0.40		Pass
HT20	MCS0	1	44	5220	0.11	0.11	18.21	17.91		24.00	24.00	-0.30	-0.40		Pass
HT20	MCS0	1	48	5240	0.11	0.11	18.13	17.73		24.00	24.00	-0.30	-0.40		Pass
HT40	MCS0	1	38	5190	0.18	0.18	12.46	12.16		24.00	24.00	-0.30	-0.40		Pass
HT40	MCS0	1	46	5230	0.18	0.18	18.35	17.95		24.00	24.00	-0.30	-0.40		Pass
VHT20	MCS0	1	36	5180	0.11	0.11	18.21	18.00		24.00	24.00	-0.30	-0.40		Pass
VHT20	MCS0	1	44	5220	0.11	0.11	18.16	17.78		24.00	24.00	-0.30	-0.40		Pass
VHT20	MCS0	1	48	5240	0.11	0.11	18.12	17.72		24.00	24.00	-0.30	-0.40		Pass
VHT40	MCS0	1	38	5190	0.18	0.18	12.38	12.13		24.00	24.00	-0.30	-0.40		Pass
VHT40	MCS0	1	46	5230	0.18	0.18	18.33	17.93		24.00	24.00	-0.30	-0.40		Pass
VHT80	MCS0	1	42	5210	0.36	0.38	11.71	11.48		24.00	24.00	-0.30	-0.40		Pass
11a	6Mbps	2	36	5180	0.10	0.10	18.36	18.30	21.34	24.00		-0.30			Pass
11a	6Mbps	2	44	5220	0.10	0.10	18.30	18.05	21.19	24.00		-0.30			Pass
11a	6Mbps	2	48	5240	0.10	0.10	18.29	17.97	21.14	24.00		-0.30			Pass
HT20	MCS0	2	36	5180	0.11	0.11	18.26	18.03	21.15	24.00		-0.30			Pass
HT20	MCS0	2	44	5220	0.11	0.11	18.22	17.96	21.10	24.00		-0.30			Pass
HT20	MCS0	2	48	5240	0.11	0.11	18.21	17.81	21.02	24.00		-0.30			Pass
HT40	MCS0	2	38	5190	0.22	0.18	12.57	12.28	15.44	24.00		-0.30			Pass
HT40	MCS0	2	46	5230	0.22	0.18	18.40	18.03	21.23	24.00		-0.30			Pass
VHT20	MCS0	2	36	5180	0.11	0.11	18.25	18.01	21.14	24.00		-0.30			Pass
VHT20	MCS0	2	44	5220	0.11	0.11	18.21	17.81	21.02	24.00		-0.30			Pass
VHT20	MCS0	2	48	5240	0.11	0.11	18.19	17.80	21.01	24.00		-0.30			Pass
VHT40	MCS0	2	38	5190	0.18	0.18	12.55	12.24	15.41	24.00		-0.30			Pass
VHT40	MCS0	2	46	5230	0.18	0.18	18.38	18.01	21.21	24.00		-0.30			Pass
VHT80	MCS0	2	42	5210	0.36	0.40	11.78	11.65	14.73	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	0.10	0.10			9.56	11.00		2.66			Pass
11a	6Mbps	2	44	5220	0.10	0.10			9.72	11.00		2.66			Pass
11a	6Mbps	2	48	5240	0.10	0.10			9.92	11.00		2.66			Pass
HT20	MCS0	2	36	5180	0.11	0.11			9.02	11.00		2.66			Pass
HT20	MCS0	2	44	5220	0.11	0.11			9.13	11.00		2.66			Pass
HT20	MCS0	2	48	5240	0.11	0.11			9.26	11.00		2.66			Pass
HT40	MCS0	2	38	5190	0.22	0.18			0.69	11.00		2.66			Pass
HT40	MCS0	2	46	5230	0.22	0.18			6.48	11.00		2.66			Pass
VHT80	MCS0	2	42	5210	0.36	0.40			-3.33	11.00		2.66			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	17.20	18.70	30.20	33.60	23.36		29.36		23.98		
11a	6Mbps	2	60	5300	17.30	19.75	30.30	36.10	23.38		29.38		23.98		
11a	6Mbps	2	64	5320	16.80	17.40	25.70	30.00	23.25		29.25		23.98		
HT20	MCS0	2	52	5260	18.65	19.15	32.70	38.50	23.71		29.71		23.98		
HT20	MCS0	2	60	5300	18.50	21.95	32.80	40.60	23.67		29.67		23.98		
HT20	MCS0	2	64	5320	17.95	18.30	27.20	30.60	23.54		29.54		23.98		
HT40	MCS0	2	54	5270	36.80	37.70	58.14	74.16	23.98		30.00		23.98		
HT40	MCS0	2	62	5310	36.60	36.60	41.94	41.94	23.98		30.00		23.98		
VHT80	MCS0	2	58	5290	75.72	75.96	84.16	83.20	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	0.10	0.10	18.27	17.77		-	-	-0.30	-0.40	30	Pass
11a	6Mbps	1	60	5300	0.10	0.10	18.44	17.70		-	-	-0.30	-0.40	30	Pass
11a	6Mbps	1	64	5320	0.10	0.10	17.23	16.72		-	-	-0.30	-0.40	30	Pass
HT20	MCS0	1	52	5260	0.11	0.11	18.33	18.11		-	-	-0.30	-0.40	30	Pass
HT20	MCS0	1	60	5300	0.11	0.11	18.42	17.91		-	-	-0.30	-0.40	30	Pass
HT20	MCS0	1	64	5320	0.11	0.11	17.11	16.53		-	-	-0.30	-0.40	30	Pass
HT40	MCS0	1	54	5270	0.18	0.18	18.46	17.90		-	-	-0.30	-0.40	30	Pass
HT40	MCS0	1	62	5310	0.18	0.18	14.03	13.33		-	-	-0.30	-0.40	30	Pass
VHT20	MCS0	1	52	5260	0.11	0.11	18.31	17.72		-	-	-0.30	-0.40	30	Pass
VHT20	MCS0	1	60	5300	0.11	0.11	18.41	17.93		-	-	-0.30	-0.40	30	Pass
VHT20	MCS0	1	64	5320	0.11	0.11	17.09	16.49		-	-	-0.30	-0.40	30	Pass
VHT40	MCS0	1	54	5270	0.18	0.18	18.42	17.89		-	-	-0.30	-0.40	30	Pass
VHT40	MCS0	1	62	5310	0.18	0.18	14.00	13.30		-	-	-0.30	-0.40	30	Pass
VHT80	MCS0	1	58	5290	0.36	0.38	13.28	12.63		-	-	-0.30	-0.40	30	Pass
11a	6Mbps	2	52	5260	0.10	0.10	18.28	17.80	21.06	23.98		-0.30		30	Pass
11a	6Mbps	2	60	5300	0.10	0.10	18.45	17.74	21.12	23.98		-0.30		30	Pass
11a	6Mbps	2	64	5320	0.10	0.10	17.25	16.75	20.02	23.98		-0.30		30	Pass
HT20	MCS0	2	52	5260	0.11	0.11	18.46	18.16	21.32	23.98		-0.30		30	Pass
HT20	MCS0	2	60	5300	0.11	0.11	18.48	17.96	21.24	23.98		-0.30		30	Pass
HT20	MCS0	2	64	5320	0.11	0.11	17.16	16.56	19.88	23.98		-0.30		30	Pass
HT40	MCS0	2	54	5270	0.22	0.18	18.48	18.00	21.25	23.98		-0.30		30	Pass
HT40	MCS0	2	62	5310	0.22	0.18	14.12	13.38	16.77	23.98		-0.30		30	Pass
VHT20	MCS0	2	52	5260	0.11	0.11	18.43	18.03	21.24	23.98		-0.30		30	Pass
VHT20	MCS0	2	60	5300	0.11	0.11	18.46	17.94	21.21	23.98		-0.30		30	Pass
VHT20	MCS0	2	64	5320	0.11	0.11	17.11	16.51	19.83	23.98		-0.30		30	Pass
VHT40	MCS0	2	54	5270	0.18	0.18	18.43	17.98	21.22	23.98		-0.30		30	Pass
VHT40	MCS0	2	62	5310	0.18	0.18	14.08	13.36	16.74	23.98		-0.30		30	Pass
VHT80	MCS0	2	58	5290	0.36	0.40	13.43	12.70	16.09	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	2	52	5260	0.10	0.10			9.86	11.00		2.66			Pass
11a	6Mbps	2	60	5300	0.10	0.10			9.81	11.00		2.66			Pass
11a	6Mbps	2	64	5320	0.10	0.10			8.88	11.00		2.66			Pass
HT20	MCS0	2	52	5260	0.11	0.11			9.78	11.00		2.66			Pass
HT20	MCS0	2	60	5300	0.11	0.11			9.81	11.00		2.66			Pass
HT20	MCS0	2	64	5320	0.11	0.11			8.40	11.00		2.66			Pass
HT40	MCS0	2	54	5270	0.22	0.18			6.67	11.00		2.66			Pass
HT40	MCS0	2	62	5310	0.22	0.18			2.33	11.00		2.66			Pass
VHT80	MCS0	2	58	5290	0.36	0.40			-1.74	11.00		2.66			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	17.75	25.40	33.00	42.55	23.49		29.49		23.98		----	----
11a	6Mbps	2	116	5580	19.25	27.25	33.90	44.35	23.84		29.84		23.98		----	----
11a	6Mbps	2	140	5700	18.50	34.65	33.70	62.71	23.67		29.67		23.98		----	----
11a	6Mbps	2	144	5720	14.00	22.15	20.95	34.49	22.46		28.46		23.98		2.5	3.15
HT20	MCS0	2	100	5500	18.15	22.00	27.80	43.10	23.59		29.59		23.98		----	----
HT20	MCS0	2	116	5580	18.15	25.10	28.60	45.50	23.59		29.59		23.98		----	----
HT20	MCS0	2	140	5700	17.90	18.15	25.60	31.00	23.53		29.53		23.98		----	----
HT20	MCS0	2	144	5720	14.10	18.00	19.70	27.55	22.49		28.49		23.94		3.1	2.5
HT40	MCS0	2	102	5510	36.60	36.70	41.76	41.76	23.98		30.00		23.98		----	----
HT40	MCS0	2	110	5550	37.00	64.70	58.32	103.20	23.98		30.00		23.98		----	----
HT40	MCS0	2	134	5670	36.80	62.20	42.48	102.00	23.98		30.00		23.98		----	----
HT40	MCS0	2	142	5710	33.30	44.00	35.97	63.78	23.98		30.00		23.98		2.4	2.4
VHT80	MCS0	2	106	5530	75.84	75.84	83.84	83.20	23.98		30.00		23.98		----	----
VHT80	MCS0	2	122	5610	76.20	92.88	119.36	214.08	23.98		30.00		23.98		----	----
VHT80	MCS0	2	138	5690	73.16	84.56	93.72	146.20	23.98		30.00		23.98		2.44	2.76

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	0.10	0.10	18.48	18.31		-	-	-0.30	-0.40	30	Pass
11a	6Mbps	1	116	5580	0.10	0.10	18.39	18.07		-	-	-0.30	-0.40	30	Pass
11a	6Mbps	1	140	5700	0.10	0.10	18.36	18.30		-	-	-0.30	-0.40	30	Pass
11a	6Mbps	1	144	5720	0.10	0.10	18.20	18.28		-	-	-0.30	-0.40	30	Pass
HT20	MCS0	1	100	5500	0.11	0.11	17.34	17.11		-	-	-0.30	-0.40	30	Pass
HT20	MCS0	1	116	5580	0.11	0.11	17.54	16.89		-	-	-0.30	-0.40	30	Pass
HT20	MCS0	1	140	5700	0.11	0.11	15.27	15.01		-	-	-0.30	-0.40	30	Pass
HT20	MCS0	1	144	5720	0.11	0.11	16.99	17.23		-	-	-0.30	-0.40	30	Pass
HT40	MCS0	1	102	5510	0.18	0.18	14.84	14.38		-	-	-0.30	-0.40	30	Pass
HT40	MCS0	1	110	5550	0.18	0.18	18.28	17.76		-	-	-0.30	-0.40	30	Pass
HT40	MCS0	1	134	5670	0.18	0.18	17.71	17.26		-	-	-0.30	-0.40	30	Pass
HT40	MCS0	1	142	5710	0.18	0.18	17.40	17.38		-	-	-0.30	-0.40	30	Pass
VHT20	MCS0	1	100	5500	0.11	0.11	17.33	17.09		-	-	-0.30	-0.40	30	Pass
VHT20	MCS0	1	116	5580	0.11	0.11	17.51	16.88		-	-	-0.30	-0.40	30	Pass
VHT20	MCS0	1	140	5700	0.11	0.11	15.26	14.91		-	-	-0.30	-0.40	30	Pass
VHT20	MCS0	1	144	5720	0.11	0.11	16.88	17.21		-	-	-0.30	-0.40	30	Pass
VHT40	MCS0	1	102	5510	0.18	0.18	14.80	14.36		-	-	-0.30	-0.40	30	Pass
VHT40	MCS0	1	110	5550	0.18	0.18	18.27	17.68		-	-	-0.30	-0.40	30	Pass
VHT40	MCS0	1	134	5670	0.18	0.18	17.61	17.25		-	-	-0.30	-0.40	30	Pass
VHT40	MCS0	1	142	5710	0.18	0.18	17.38	17.30		-	-	-0.30	-0.40	30	Pass
VHT80	MCS0	1	106	5530	0.36	0.38	12.46	12.00		-	-	-0.30	-0.40	30	Pass
VHT80	MCS0	1	122	5610	0.36	0.38	17.85	17.58		-	-	-0.30	-0.40	30	Pass
VHT80	MCS0	1	138	5690	0.36	0.38	17.86	17.71		-	-	-0.30	-0.40	30	Pass
11a	6Mbps	2	100	5500	0.10	0.10	18.49	18.33	21.42	23.98		-0.30		30	Pass
11a	6Mbps	2	116	5580	0.10	0.10	18.40	18.15	21.29	23.98		-0.30		30	Pass
11a	6Mbps	2	140	5700	0.10	0.10	18.41	18.32	21.38	23.98		-0.30		30	Pass
11a	6Mbps	2	144	5720	0.10	0.10	18.30	18.29	21.31	23.98		-0.30		30	Pass
HT20	MCS0	2	100	5500	0.11	0.11	17.57	17.21	20.40	23.98		-0.30		30	Pass
HT20	MCS0	2	116	5580	0.11	0.11	17.55	16.91	20.25	23.98		-0.30		30	Pass
HT20	MCS0	2	140	5700	0.11	0.11	15.32	15.09	18.21	23.98		-0.30		30	Pass
HT20	MCS0	2	144	5720	0.11	0.11	17.01	17.27	20.15	23.94		-0.30		30	Pass
HT40	MCS0	2	102	5510	0.22	0.18	15.06	14.49	17.79	23.98		-0.30		30	Pass
HT40	MCS0	2	110	5550	0.22	0.18	18.36	17.78	21.09	23.98		-0.30		30	Pass
HT40	MCS0	2	134	5670	0.22	0.18	17.77	17.28	20.54	23.98		-0.30		30	Pass
HT40	MCS0	2	142	5710	0.22	0.18	17.54	17.39	20.47	23.98		-0.30		30	Pass
VHT20	MCS0	2	100	5500	0.11	0.11	17.56	17.20	20.39	23.98		-0.30		30	Pass
VHT20	MCS0	2	116	5580	0.11	0.11	17.54	16.90	20.24	23.98		-0.30		30	Pass
VHT20	MCS0	2	140	5700	0.11	0.11	15.31	14.94	18.14	23.98		-0.30		30	Pass
VHT20	MCS0	2	144	5720	0.11	0.11	16.99	17.26	20.13	23.94		-0.30		30	Pass
VHT40	MCS0	2	102	5510	0.18	0.18	15.00	14.43	17.73	23.98		-0.30		30	Pass
VHT40	MCS0	2	110	5550	0.18	0.18	18.29	17.76	21.04	23.98		-0.30		30	Pass
VHT40	MCS0	2	134	5670	0.18	0.18	17.65	17.26	20.47	23.98		-0.30		30	Pass
VHT40	MCS0	2	142	5710	0.18	0.18	17.53	17.33	20.44	23.98		-0.30		30	Pass
VHT80	MCS0	2	106	5530	0.36	0.40	12.58	12.10	15.36	23.98		-0.30		30	Pass
VHT80	MCS0	2	122	5610	0.36	0.40	17.97	17.60	20.80	23.98		-0.30		30	Pass
VHT80	MCS0	2	138	5690	0.36	0.40	17.88	17.72	20.81	23.98		-0.30		30	Pass

TEST RESULTS DATA
Power Spectral Density

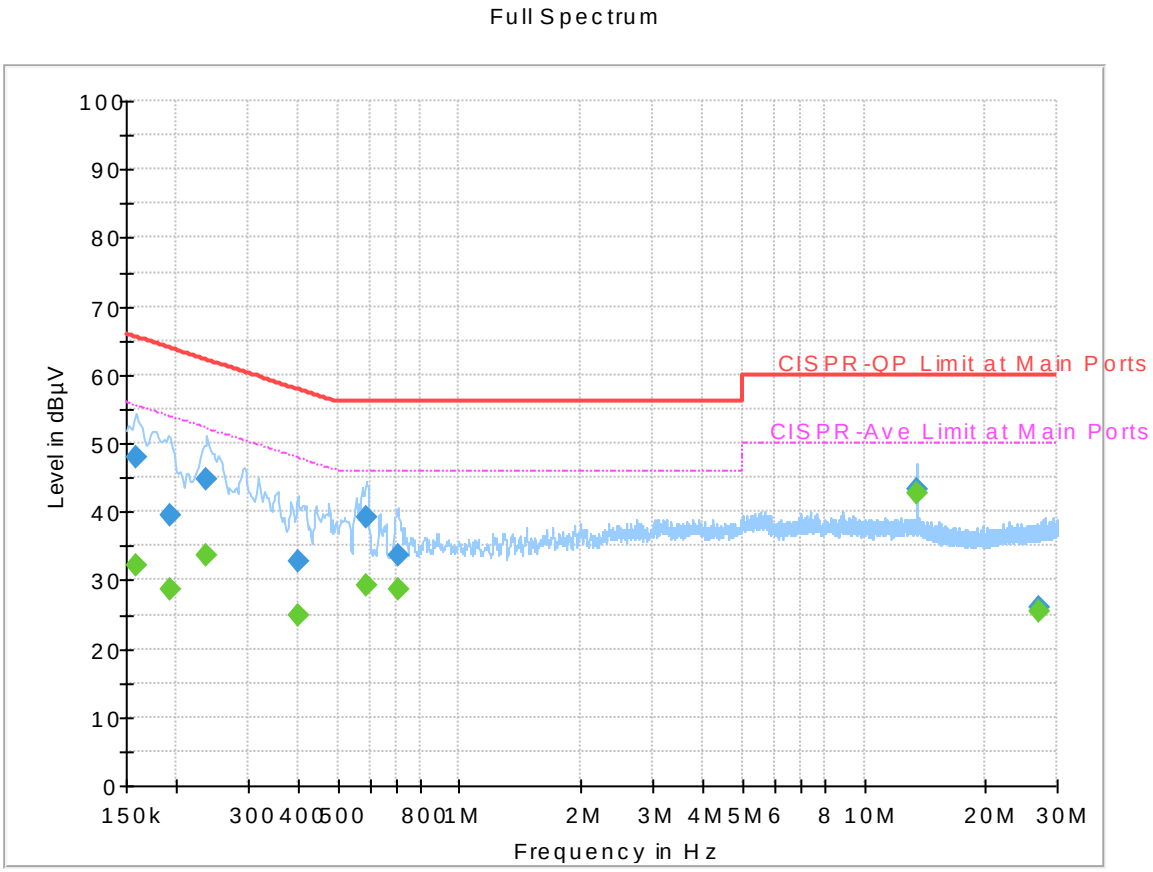
Band III															
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Duty Factor (dB)		Average Power Density (dBm/MHz)			Average PSD Limit (dBm/MHz)		DG (dBi)			Pass /Fail
					Ant 1	Ant 2	Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2		
11a	6Mbps	2	100	5500	0.10	0.10			10.41	11.00		2.66			Pass
11a	6Mbps	2	116	5580	0.10	0.10			10.59	11.00		2.66			Pass
11a	6Mbps	2	140	5700	0.10	0.10			9.11	11.00		2.66			Pass
11a	6Mbps	2	144	5720	0.10	0.10			9.48	11.00		2.66			Pass
HT20	MCS0	2	100	5500	0.11	0.11			9.42	11.00		2.66			Pass
HT20	MCS0	2	116	5580	0.11	0.11			9.49	11.00		2.66			Pass
HT20	MCS0	2	140	5700	0.11	0.11			6.27	11.00		2.66			Pass
HT20	MCS0	2	144	5720	0.11	0.11			8.12	11.00		2.66			Pass
HT40	MCS0	2	102	5510	0.22	0.18			4.15	11.00		2.66			Pass
HT40	MCS0	2	110	5550	0.22	0.18			7.57	11.00		2.66			Pass
HT40	MCS0	2	134	5670	0.22	0.18			5.44	11.00		2.66			Pass
HT40	MCS0	2	142	5710	0.22	0.18			5.42	11.00		2.66			Pass
VHT80	MCS0	2	106	5530	0.36	0.40			-0.90	11.00		2.66			Pass
VHT80	MCS0	2	122	5610	0.36	0.40			3.59	11.00		2.66			Pass
VHT80	MCS0	2	138	5690	0.36	0.40			2.63	11.00		2.66			Pass

Appendix B. AC Conducted Emission Test Results

Test Engineer :	Kai-Chun Chu	**Temperature :**	25~27℃
		Relative Humidity :	50~52%

EUT Information

Report NO :	820502-02
Test Mode :	Mode 1
Test Voltage :	120Vac/60Hz
Phase :	Line

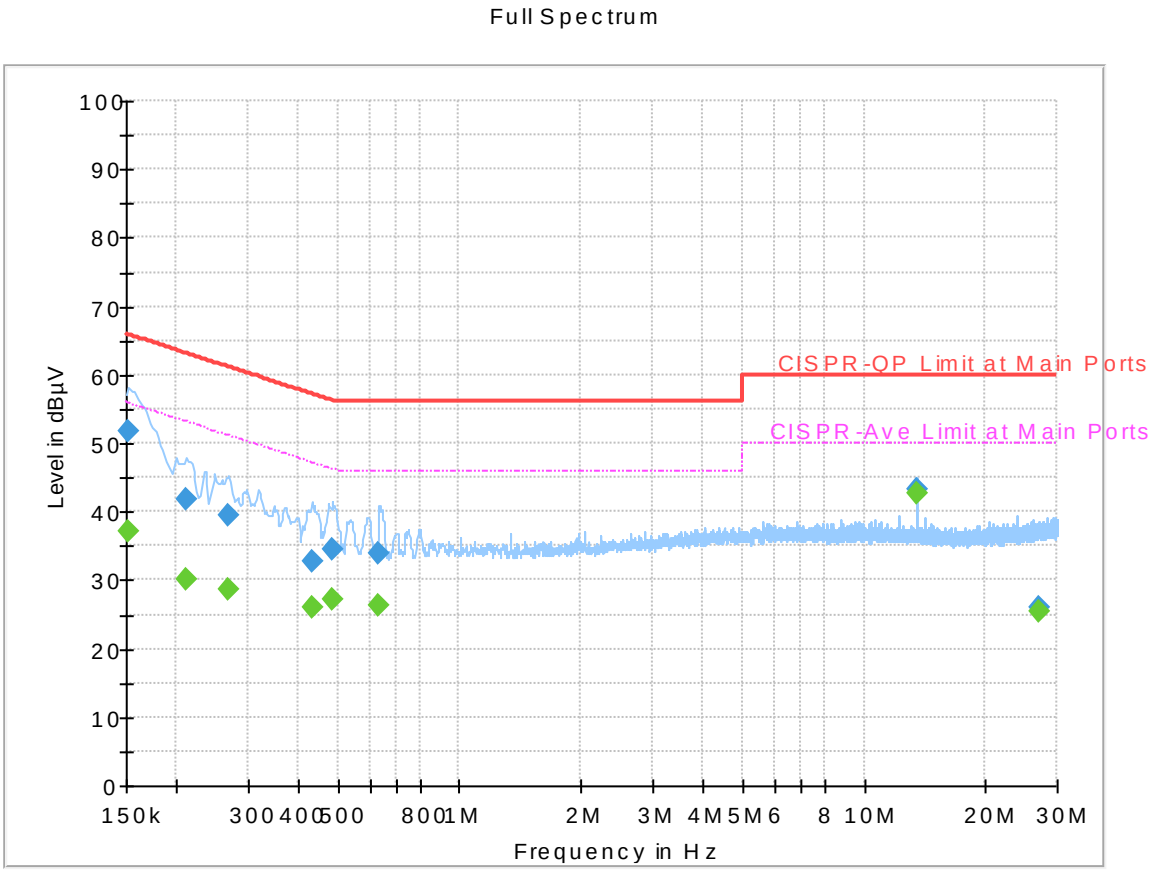


Final_Result

Frequency (MHz)	QuasiPeak (dBµV)	CAverage (dBµV)	Limit (dBµV)	Margin (dB)	Line	Filter	Corr. (dB)
0.159000	---	32.18	55.52	23.34	L1	OFF	19.5
0.159000	47.89	---	65.52	17.63	L1	OFF	19.5
0.192750	---	28.53	53.92	25.39	L1	OFF	19.5
0.192750	39.47	---	63.92	24.45	L1	OFF	19.5
0.237750	---	33.62	52.17	18.55	L1	OFF	19.5
0.237750	44.80	---	62.17	17.37	L1	OFF	19.5
0.397500	---	24.98	47.91	22.93	L1	OFF	19.5
0.397500	32.70	---	57.91	25.21	L1	OFF	19.5
0.588750	---	29.28	46.00	16.72	L1	OFF	19.5
0.588750	39.24	---	56.00	16.76	L1	OFF	19.5
0.703500	---	28.62	46.00	17.38	L1	OFF	19.6
0.703500	33.59	---	56.00	22.41	L1	OFF	19.6
13.560000	---	42.79	50.00	7.21	L1	OFF	20.0
13.560000	43.29	---	60.00	16.71	L1	OFF	20.0
27.120000	---	25.44	50.00	24.56	L1	OFF	20.4
27.120000	26.15	---	60.00	33.85	L1	OFF	20.4

EUT Information

Report NO :	820502-02
Test Mode :	Mode 1
Test Voltage :	120Vac/60Hz
Phase :	Neutral



Final_Result

Frequency (MHz)	QuasiPeak (dBµV)	CAverage (dBµV)	Limit (dBµV)	Margin (dB)	Line	Filter	Corr. (dB)
0.152250	---	37.06	55.88	18.82	N	OFF	19.5
0.152250	51.82	---	65.88	14.06	N	OFF	19.5
0.210750	---	30.18	53.18	23.00	N	OFF	19.5
0.210750	41.67	---	63.18	21.51	N	OFF	19.5
0.269250	---	28.53	51.14	22.61	N	OFF	19.5
0.269250	39.47	---	61.14	21.67	N	OFF	19.5
0.431250	---	26.15	47.23	21.08	N	OFF	19.5
0.431250	32.85	---	57.23	24.38	N	OFF	19.5
0.485250	---	27.33	46.25	18.92	N	OFF	19.5
0.485250	34.43	---	56.25	21.82	N	OFF	19.5
0.633750	---	26.18	46.00	19.82	N	OFF	19.6
0.633750	33.95	---	56.00	22.05	N	OFF	19.6
13.560000	---	42.67	50.00	7.33	N	OFF	20.1
13.560000	43.16	---	60.00	16.84	N	OFF	20.1
27.120000	---	25.32	50.00	24.68	N	OFF	20.6
27.120000	25.89	---	60.00	34.11	N	OFF	20.6

Appendix C. Radiated Spurious Emission

Test Engineer :	Bill Chang, Karl Hou, and Lance Chiang	Temperature :	24~26°C
		Relative Humidity :	50~54%

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		5137.02	49.83	-24.17	74	39.52	31.78	8.63	30.1	269	25	P	H
		5148.72	41.47	-12.53	54	31.15	31.79	8.63	30.1	269	25	A	H
	*	5180	106.31	-	-	95.95	31.81	8.65	30.1	269	25	P	H
	*	5180	98.82	-	-	88.46	31.81	8.65	30.1	269	25	A	H
		5053.82	49.21	-24.79	74	38.98	31.73	8.59	30.09	254	302	P	V
		5147.94	40.91	-13.09	54	30.59	31.79	8.63	30.1	254	302	A	V
	*	5180	103.5	-	-	93.14	31.81	8.65	30.1	254	302	P	V
	*	5180	96.29	-	-	85.93	31.81	8.65	30.1	254	302	A	V
802.11a CH 44 5220MHz		5039.26	49.73	-24.27	74	39.5	31.73	8.58	30.08	272	316	P	H
		5135.72	40.33	-13.67	54	30.02	31.78	8.63	30.1	272	316	A	H
	*	5220	110.75	-	-	100.32	31.83	8.71	30.11	272	316	P	H
	*	5220	103.62	-	-	93.19	31.83	8.71	30.11	272	316	A	H
		5362	50.77	-23.23	74	39.95	31.92	9.02	30.12	272	316	P	H
		5421.92	40.76	-13.24	54	29.83	31.95	9.11	30.13	272	316	A	H
		5052	49.42	-24.58	74	39.19	31.73	8.59	30.09	289	309	P	V
		5147.16	40.37	-13.63	54	30.05	31.79	8.63	30.1	289	309	A	V
	*	5220	110.63	-	-	100.21	31.83	8.7	30.11	289	309	P	V
	*	5220	103.5	-	-	93.08	31.83	8.7	30.11	289	309	A	V
		5411.28	49.4	-24.6	74	38.48	31.94	9.11	30.13	289	309	P	V
		5459.44	40.85	-13.15	54	29.9	31.97	9.12	30.14	289	309	A	V

802.11a CH 48 5240MHz		5148.72	50.16	-23.84	74	39.84	31.79	8.63	30.1	186	323	P	H
		5145.08	40.24	-13.76	54	29.92	31.79	8.63	30.1	186	323	A	H
	*	5240	111.52	-	-	101.04	31.84	8.75	30.11	186	323	P	H
	*	5240	104.33	-	-	93.85	31.84	8.75	30.11	186	323	A	H
		5372.36	49.4	-24.6	74	38.55	31.92	9.05	30.12	186	323	P	H
		5422.48	40.76	-13.24	54	29.83	31.95	9.11	30.13	186	323	A	H
		5117.78	49.54	-24.46	74	39.24	31.77	8.62	30.09	289	310	P	V
		5107.64	40.28	-13.72	54	29.99	31.77	8.61	30.09	289	310	A	V
	*	5240	111.14	-	-	100.66	31.84	8.75	30.11	289	310	P	V
	*	5240	103.92	-	-	93.44	31.84	8.75	30.11	289	310	A	V
		5387.48	49.52	-24.48	74	38.64	31.93	9.08	30.13	289	310	P	V
		5447.96	40.57	-13.43	54	29.61	31.97	9.12	30.13	289	310	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	48.01	-20.19	68.2	55.06	39.63	13.33	60.01	100	0	P	H
		15540	49.25	-24.75	74	52.71	37.92	16.67	58.05	100	0	P	H
		10360	52	-16.2	68.2	59.05	39.63	13.33	60.01	100	0	P	V
		15540	51.44	-22.56	74	54.9	37.92	16.67	58.05	400	353	P	V
		15540	43.23	-10.77	54	46.69	37.92	16.67	58.05	400	353	A	V
802.11a CH 44 5220MHz		10440	49.56	-18.64	68.2	56.56	39.77	13.38	60.15	100	0	P	H
		15660	55.42	-18.58	74	58.8	37.63	16.87	57.88	353	29	P	H
		15660	46.13	-7.87	54	49.51	37.63	16.87	57.88	353	29	A	H
		10440	53.55	-14.65	68.2	60.55	39.77	13.38	60.15	100	0	P	V
		15660	57.37	-16.63	74	60.75	37.63	16.87	57.88	114	324	P	V
		15660	48.02	-5.98	54	51.4	37.63	16.87	57.88	114	324	A	V
802.11a CH 48 5240MHz		10480	49.07	-19.13	68.2	56.06	39.87	13.4	60.26	100	0	P	H
		15720	50.16	-23.84	74	53.54	37.46	16.95	57.79	100	0	P	H
		15720	42.03	-11.97	54	45.41	37.46	16.95	57.79	100	0	A	H
		10480	54.31	-13.89	68.2	61.3	39.87	13.4	60.26	100	0	P	V
		15720	53.66	-20.34	74	57.04	37.46	16.95	57.79	125	325	P	V
		15720	44.45	-9.55	54	47.83	37.46	16.95	57.79	125	325	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 (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		5148.46	62.01	-11.99	74	51.69	31.79	8.63	30.1	250	0	P	H
		5150	52.5	-1.5	54	42.17	31.79	8.64	30.1	250	0	A	H
	*	5180	109.13	-	-	98.77	31.81	8.65	30.1	250	0	P	H
	*	5180	101.53	-	-	91.17	31.81	8.65	30.1	250	0	A	H
		5150	62.89	-11.11	74	52.56	31.79	8.64	30.1	243	349	P	V
		5150	52.37	-1.63	54	42.04	31.79	8.64	30.1	243	349	A	V
	*	5180	108.01	-	-	97.65	31.81	8.65	30.1	243	349	P	V
	*	5180	100.11	-	-	89.75	31.81	8.65	30.1	243	349	A	V
802.11n HT20 CH 44 5220MHz		5042.9	50.04	-23.96	74	39.82	31.73	8.58	30.09	234	12	P	H
		5149.24	40.47	-13.53	54	30.15	31.79	8.63	30.1	234	12	A	H
	*	5220	109.47	-	-	99.05	31.83	8.7	30.11	234	12	P	H
	*	5220	101.94	-	-	91.52	31.83	8.7	30.11	234	12	A	H
		5385.8	50.34	-23.66	74	39.46	31.93	9.08	30.13	234	12	P	H
		5389.44	40.86	-13.14	54	29.97	31.93	9.09	30.13	234	12	A	H
		5072.28	50.07	-23.93	74	39.81	31.75	8.6	30.09	249	352	P	V
		5141.96	40.37	-13.63	54	30.05	31.79	8.63	30.1	249	352	A	V
	*	5220	105.93	-	-	95.51	31.83	8.7	30.11	249	352	P	V
	*	5220	97.8	-	-	87.38	31.83	8.7	30.11	249	352	A	V
		5445.72	50.25	-23.75	74	39.29	31.97	9.12	30.13	249	352	P	V
		5425.28	40.92	-13.08	54	29.98	31.95	9.12	30.13	249	352	A	V

802.11n HT20 CH 48 5240MHz		5081.64	49.98	-24.02	74	39.72	31.75	8.6	30.09	302	332	P	H
		5144.56	40.43	-13.57	54	30.11	31.79	8.63	30.1	302	332	A	H
	*	5240	110.92	-	-	100.44	31.84	8.75	30.11	302	332	P	H
	*	5240	103.39	-	-	92.91	31.84	8.75	30.11	302	332	A	H
		5359.48	49.76	-24.24	74	38.95	31.91	9.02	30.12	302	332	P	H
		5423.04	40.96	-13.04	54	30.03	31.95	9.11	30.13	302	332	A	H
		5022.1	51.3	-22.7	74	41.09	31.72	8.57	30.08	118	352	P	V
		5084.5	40.29	-13.71	54	30.03	31.75	8.6	30.09	118	352	A	V
	*	5240	106.84	-	-	96.36	31.84	8.75	30.11	118	352	P	V
	*	5240	98.66	-	-	88.18	31.84	8.75	30.11	118	352	A	V
		5415.76	50.44	-23.56	74	39.51	31.95	9.11	30.13	118	352	P	V
		5447.68	40.77	-13.23	54	29.81	31.97	9.12	30.13	118	352	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	46.73	-21.47	68.2	53.78	39.63	13.33	60.01	100	0	P	H
		15540	54.21	-19.79	74	57.67	37.92	16.67	58.05	280	23	P	H
		15540	43.33	-10.67	54	46.79	37.92	16.67	58.05	280	23	A	H
		10360	52.23	-15.97	68.2	59.28	39.63	13.33	60.01	100	0	P	V
		15540	56.32	-17.68	74	59.78	37.92	16.67	58.05	350	342	P	V
		15540	44.52	-9.48	54	47.98	37.92	16.67	58.05	350	342	A	V
802.11n HT20 CH 44 5220MHz		10440	48.73	-19.47	68.2	55.73	39.77	13.38	60.15	100	0	P	H
		15660	53.19	-20.81	74	56.57	37.63	16.87	57.88	271	12	P	H
		15660	42.13	-11.87	54	45.51	37.63	16.87	57.88	271	12	A	H
		10440	53.88	-14.32	68.2	60.88	39.77	13.38	60.15	100	0	P	V
		15660	52.65	-21.35	74	56.03	37.63	16.87	57.88	364	333	P	V
		15660	42.53	-11.47	54	45.91	37.63	16.87	57.88	364	333	A	V
802.11n HT20 CH 48 5240MHz		10480	48.98	-19.22	68.2	55.97	39.87	13.4	60.26	100	0	P	H
		15720	52.22	-21.78	74	55.6	37.46	16.95	57.79	271	13	P	H
		15720	40.66	-13.34	54	44.04	37.46	16.95	57.79	271	13	A	H
		10480	53.52	-14.68	68.2	60.51	39.87	13.4	60.26	100	0	P	V
		15720	53.25	-20.75	74	56.63	37.46	16.95	57.79	305	330	P	V
		15720	43.16	-10.84	54	46.54	37.46	16.95	57.79	305	330	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 (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	58.65	-15.35	74	48.33	31.79	8.63	30.1	275	326	P	H
		5150	51.93	-2.07	54	41.6	31.79	8.64	30.1	275	326	A	H
	*	5190	104.1	-	-	93.74	31.81	8.65	30.1	275	326	P	H
	*	5190	96.19	-	-	85.83	31.81	8.65	30.1	275	326	A	H
		5424.16	49.79	-24.21	74	38.86	31.95	9.11	30.13	275	326	P	H
		5400.92	41.9	-12.1	54	30.98	31.94	9.11	30.13	275	326	A	H
		5145.6	59.13	-14.87	74	48.81	31.79	8.63	30.1	295	311	P	V
		5147.94	52.32	-1.68	54	42	31.79	8.63	30.1	295	311	A	V
	*	5190	103.54	-	-	93.18	31.81	8.65	30.1	295	311	P	V
	*	5190	95.79	-	-	85.43	31.81	8.65	30.1	295	311	A	V
		5378.8	49.99	-24.01	74	39.13	31.93	9.06	30.13	295	311	P	V
		5373.2	41.72	-12.28	54	30.87	31.92	9.05	30.12	295	311	A	V
802.11n HT40 CH 46 5230MHz		5149.24	55.38	-18.62	74	45.06	31.79	8.63	30.1	275	323	P	H
		5150	44.54	-9.46	54	34.21	31.79	8.64	30.1	275	323	A	H
	*	5230	108.84	-	-	98.38	31.84	8.73	30.11	275	323	P	H
	*	5230	101.09	-	-	90.63	31.84	8.73	30.11	275	323	A	H
		5389.16	50.05	-23.95	74	39.16	31.93	9.09	30.13	275	323	P	H
		5364.24	41.58	-12.42	54	30.75	31.92	9.03	30.12	275	323	A	H
		5147.68	51.78	-22.22	74	41.46	31.79	8.63	30.1	290	311	P	V
		5150	44.33	-9.67	54	34	31.79	8.64	30.1	290	311	A	V
	*	5230	107.38	-	-	96.92	31.84	8.73	30.11	290	311	P	V
	*	5230	99.04	-	-	88.58	31.84	8.73	30.11	290	311	A	V
		5354.44	50.2	-23.8	74	39.4	31.91	9.01	30.12	290	311	P	V
		5400.08	41.46	-12.54	54	30.54	31.94	9.11	30.13	290	311	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		10380	45.84	-22.36	68.2	52.87	39.67	13.34	60.04	100	0	P	H
HT40		15570	45.45	-28.55	74	48.89	37.83	16.73	58	100	0	P	H
CH 38		10380	45.38	-22.82	68.2	52.41	39.67	13.34	60.04	100	0	P	V
5190MHz		15570	45.49	-28.51	74	48.93	37.83	16.73	58	100	0	P	V
802.11n		10460	46.39	-21.81	68.2	53.39	39.8	13.39	60.19	100	0	P	H
HT40		15690	46.64	-27.36	74	50.01	37.54	16.92	57.83	100	0	P	H
CH 46		10460	49.84	-18.36	68.2	56.84	39.8	13.39	60.19	100	0	P	V
5230MHz		15690	49.96	-24.04	74	53.33	37.54	16.92	57.83	100	0	P	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		5146.12	57.95	-16.05	74	47.63	31.79	8.63	30.1	172	322	P	H
		5138.32	50.25	-3.75	54	39.94	31.78	8.63	30.1	172	322	A	H
	*	5210	100.06	-	-	89.66	31.83	8.68	30.11	172	322	P	H
	*	5210	92.23	-	-	81.83	31.83	8.68	30.11	172	322	A	H
		5387.48	49.97	-24.03	74	39.09	31.93	9.08	30.13	172	322	P	H
		5426.96	41.7	-12.3	54	30.76	31.95	9.12	30.13	172	322	A	H
		5145.86	59.41	-14.59	74	49.09	31.79	8.63	30.1	293	309	P	V
		5149.76	52.02	-1.98	54	41.7	31.79	8.63	30.1	293	309	A	V
	*	5210	98.92	-	-	88.52	31.83	8.68	30.11	293	309	P	V
	*	5210	91.36	-	-	80.96	31.83	8.68	30.11	293	309	A	V
		5417.16	49.54	-24.46	74	38.61	31.95	9.11	30.13	293	309	P	V
		5355.84	41.34	-12.66	54	30.54	31.91	9.01	30.12	293	309	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		10420	47.34	-20.86	68.2	54.37	39.73	13.36	60.12	100	0	P	H
VHT80		15630	45.43	-28.57	74	48.85	37.67	16.82	57.91	100	0	P	H
CH 42		10420	45.32	-22.88	68.2	52.35	39.73	13.36	60.12	100	0	P	V
5210MHz		15630	46.26	-27.74	74	49.68	37.67	16.82	57.91	100	0	P	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		5057.12	49.26	-24.74	74	39.02	31.74	8.59	30.09	272	314	P	H
		5134.64	40.15	-13.85	54	29.84	31.78	8.63	30.1	272	314	A	H
	*	5260	112.16	-	-	101.61	31.86	8.8	30.11	272	314	P	H
	*	5260	104.96	-	-	94.41	31.86	8.8	30.11	272	314	A	H
		5442.48	50.12	-23.88	74	39.17	31.96	9.12	30.13	272	314	P	H
		5406.24	40.69	-13.31	54	29.77	31.94	9.11	30.13	272	314	A	H
		5141.1	49.79	-24.21	74	39.47	31.79	8.63	30.1	296	309	P	V
		5083.98	40.25	-13.75	54	29.99	31.75	8.6	30.09	296	309	A	V
	*	5260	112.69	-	-	102.14	31.86	8.8	30.11	296	309	P	V
	*	5260	105.24	-	-	94.69	31.86	8.8	30.11	296	309	A	V
		5413.92	50.71	-23.29	74	39.78	31.95	9.11	30.13	296	309	P	V
		5459.52	40.71	-13.29	54	29.76	31.97	9.12	30.14	296	309	A	V
802.11a CH 60 5300MHz		5064.6	49.23	-24.77	74	38.99	31.74	8.59	30.09	275	328	P	H
		5133.96	40.22	-13.78	54	29.91	31.78	8.63	30.1	275	328	A	H
	*	5300	112.5	-	-	101.85	31.88	8.89	30.12	275	328	P	H
	*	5300	104.64	-	-	93.99	31.88	8.89	30.12	275	328	A	H
		5352.24	53.31	-20.69	74	42.52	31.91	9	30.12	275	328	P	H
		5352	43.59	-10.41	54	32.8	31.91	9	30.12	275	328	A	H
		5091.12	50	-24	74	39.72	31.76	8.61	30.09	297	311	P	V
		5136.68	40.2	-13.8	54	29.89	31.78	8.63	30.1	297	311	A	V
	*	5300	111.03	-	-	100.38	31.88	8.89	30.12	297	311	P	V
	*	5300	103.91	-	-	93.26	31.88	8.89	30.12	297	311	A	V
		5351.28	52.41	-21.59	74	41.62	31.91	9	30.12	297	311	P	V
		5351.04	43.38	-10.62	54	32.59	31.91	9	30.12	297	311	A	V

802.11a CH 64 5320MHz	*	5320	111.33	-	-	100.63	31.89	8.93	30.12	271	324	P	H
	*	5320	104.11	-	-	93.41	31.89	8.93	30.12	271	324	A	H
		5350.24	61.63	-12.37	74	50.84	31.91	9	30.12	271	324	P	H
		5350.08	52.62	-1.38	54	41.83	31.91	9	30.12	271	324	P	H
	*	5320	110.09	-	-	99.39	31.89	8.93	30.12	212	311	P	V
	*	5320	102.8	-	-	92.1	31.89	8.93	30.12	212	311	A	V
		5353.28	57.13	-16.87	74	46.34	31.91	9	30.12	212	311	P	V
		5353.12	48.09	-5.91	54	37.3	31.91	9	30.12	212	311	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 2 5250~5350MHz

WIFI 802.11a (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	49.19	-19.01	68.2	56.2	39.92	13.41	60.34	100	0	P	H
		15780	54.86	-19.14	74	58.2	37.34	17.03	57.71	274	16	P	H
		15780	46.28	-7.72	54	49.62	37.34	17.03	57.71	274	16	A	H
		10520	54.91	-13.29	68.2	61.92	39.92	13.41	60.34	100	0	P	V
		15780	58.13	-15.87	74	61.47	37.34	17.03	57.71	117	324	P	V
		15780	49.82	-4.18	54	53.16	37.34	17.03	57.71	117	324	A	V
802.11a CH 60 5300MHz		10600	47.47	-26.53	74	54.58	40.04	13.4	60.55	100	0	P	H
		15900	59.22	-14.78	74	62.52	37.05	17.19	57.54	299	14	P	H
		15900	48.55	-5.45	54	51.85	37.05	17.19	57.54	299	14	A	H
		10600	54.4	-19.6	74	61.51	40.04	13.4	60.55	161	331	P	V
		10600	46.15	-7.85	54	53.26	40.04	13.4	60.55	161	331	A	V
		15900	60.9	-13.1	74	64.2	37.05	17.19	57.54	330	331	P	V
		15900	50.1	-3.9	54	53.4	37.05	17.19	57.54	330	331	A	V
802.11a CH 64 5320MHz		10640	48.48	-25.52	74	55.62	40.09	13.4	60.63	100	0	P	H
		15960	55.7	-18.3	74	59.1	36.88	17.17	57.45	300	3	P	H
		15960	46.27	-7.73	54	49.67	36.88	17.17	57.45	300	3	A	H
		10640	56.15	-17.85	74	63.29	40.09	13.4	60.63	164	330	P	V
		10640	47.75	-6.25	54	54.89	40.09	13.4	60.63	164	330	A	V
		15960	59.66	-14.34	74	63.06	36.88	17.17	57.45	327	332	P	V
		15960	50.07	-3.93	54	53.47	36.88	17.17	57.45	327	332	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		5121.04	50.2	-23.8	74	39.91	31.77	8.62	30.1	203	332	P	H
		5071.4	40.49	-13.51	54	30.24	31.74	8.6	30.09	203	332	A	H
	*	5260	111.42	-	-	100.87	31.86	8.8	30.11	203	332	P	H
	*	5260	103.5	-	-	92.95	31.86	8.8	30.11	203	332	A	H
		5458.8	51.17	-22.83	74	40.22	31.97	9.12	30.14	203	332	P	H
		5368.8	40.99	-13.01	54	30.15	31.92	9.04	30.12	203	332	A	H
		5119.68	49.92	-24.08	74	39.63	31.77	8.62	30.1	261	343	P	V
		5094.86	40.35	-13.65	54	30.07	31.76	8.61	30.09	261	343	A	V
	*	5260	107.17	-	-	96.62	31.86	8.8	30.11	261	343	P	V
	*	5260	99.25	-	-	88.7	31.86	8.8	30.11	261	343	A	V
		5427.84	50.72	-23.28	74	39.78	31.95	9.12	30.13	261	343	P	V
		5418.72	40.92	-13.08	54	29.99	31.95	9.11	30.13	261	343	A	V
802.11n HT20 CH 60 5300MHz		5076.16	49.24	-24.76	74	38.98	31.75	8.6	30.09	239	13	P	H
		5043.52	40.35	-13.65	54	30.13	31.73	8.58	30.09	239	13	A	H
	*	5300	108.6	-	-	97.95	31.88	8.89	30.12	239	13	P	H
	*	5300	101.07	-	-	90.42	31.88	8.89	30.12	239	13	A	H
		5358.48	50.86	-23.14	74	40.05	31.91	9.02	30.12	239	13	P	H
		5356.56	41.89	-12.11	54	31.09	31.91	9.01	30.12	239	13	A	H
		5112.54	49.3	-24.7	74	39	31.77	8.62	30.09	236	353	P	V
		5132.26	40.34	-13.66	54	30.03	31.78	8.63	30.1	236	353	A	V
	*	5300	107.33	-	-	96.68	31.88	8.89	30.12	236	353	P	V
	*	5300	97.58	-	-	86.93	31.88	8.89	30.12	236	353	A	V
		5369.04	51.96	-22.04	74	41.12	31.92	9.04	30.12	236	353	P	V
		5352.48	41.82	-12.18	54	31.03	31.91	9	30.12	236	353	A	V

802.11n HT20 CH 64 5320MHz	*	5320	111.82	-	-	101.12	31.89	8.93	30.12	312	328	P	H
	*	5320	104.22	-	-	93.52	31.89	8.93	30.12	312	328	A	H
		5355.84	56.19	-17.81	74	45.39	31.91	9.01	30.12	312	328	P	H
		5350.08	47.78	-6.22	54	36.99	31.91	9	30.12	312	328	A	H
	*	5320	110.69	-	-	99.99	31.89	8.93	30.12	244	349	P	V
	*	5320	102.85	-	-	92.15	31.89	8.93	30.12	244	349	A	V
		5351.84	60.15	-13.85	74	49.36	31.91	9	30.12	244	349	P	V
		5350.24	51.52	-2.48	54	40.73	31.91	9	30.12	244	349	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 (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	45.95	-22.25	68.2	52.96	39.92	13.41	60.34	100	0	P	H
		15780	48.91	-25.09	74	52.25	37.34	17.03	57.71	100	0	P	H
		10520	48.33	-19.87	68.2	55.34	39.92	13.41	60.34	100	0	P	V
		15780	55.64	-18.36	74	58.98	37.34	17.03	57.71	334	331	P	V
		15780	42.85	-11.15	54	46.19	37.34	17.03	57.71	334	331	A	V
802.11n HT20 CH 60 5300MHz		10600	53.78	-20.22	74	60.89	40.04	13.4	60.55	126	79	P	H
		10600	42.31	-11.69	54	49.42	40.04	13.4	60.55	126	79	A	H
		15900	54.66	-19.34	74	57.96	37.05	17.19	57.54	277	31	P	H
		15900	43.51	-10.49	54	46.81	37.05	17.19	57.54	277	31	A	H
		10600	54.18	-19.82	74	61.29	40.04	13.4	60.55	251	326	P	V
		10600	43.76	-10.24	54	50.87	40.04	13.4	60.55	251	326	A	V
		15900	55.49	-18.51	74	58.79	37.05	17.19	57.54	377	334	P	V
		15900	45.35	-8.65	54	48.65	37.05	17.19	57.54	377	334	A	V
802.11n HT20 CH 64 5320MHz		10640	49.36	-24.64	74	56.5	40.09	13.4	60.63	100	0	P	H
		15960	58.08	-15.92	74	61.48	36.88	17.17	57.45	301	18	P	H
		15960	46.14	-7.86	54	49.54	36.88	17.17	57.45	301	18	A	H
		10640	53.13	-20.87	74	60.27	40.09	13.4	60.63	160	68	P	V
		10640	40.63	-13.37	54	47.77	40.09	13.4	60.63	160	68	A	V
		15960	61.76	-12.24	74	65.16	36.88	17.17	57.45	330	330	P	V
		15960	50	-4	54	53.4	36.88	17.17	57.45	330	330	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 (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		5149.94	49.21	-24.79	74	38.89	31.79	8.63	30.1	272	326	P	H
		5149.94	41.5	-12.5	54	31.18	31.79	8.63	30.1	272	326	A	H
	*	5270	110.94	-	-	100.37	31.86	8.82	30.11	272	326	P	H
	*	5270	102.57	-	-	92	31.86	8.82	30.11	272	326	A	H
		5357.52	55.92	-18.08	74	45.12	31.91	9.01	30.12	272	326	P	H
		5357.28	48.67	-5.33	54	37.87	31.91	9.01	30.12	272	326	A	H
		5094.86	49.29	-24.71	74	39.01	31.76	8.61	30.09	298	310	P	V
		5144.5	41.39	-12.61	54	31.07	31.79	8.63	30.1	298	310	A	V
	*	5270	106.22	-	-	95.65	31.86	8.82	30.11	298	310	P	V
	*	5270	98.62	-	-	88.05	31.86	8.82	30.11	298	310	A	V
		5388.96	49.79	-24.21	74	38.9	31.93	9.09	30.13	298	310	P	V
		5359.92	42.58	-11.42	54	31.77	31.91	9.02	30.12	298	310	A	V
802.11n HT40 CH 62 5310MHz		5009.52	48.64	-25.36	74	38.45	31.71	8.56	30.08	268	328	P	H
		5125.46	40.9	-13.1	54	30.6	31.78	8.62	30.1	268	328	A	H
	*	5310	106.06	-	-	95.38	31.89	8.91	30.12	268	328	P	H
	*	5310	98.32	-	-	87.64	31.89	8.91	30.12	268	328	A	H
		5357.28	57.35	-16.65	74	46.55	31.91	9.01	30.12	268	328	P	H
		5357.04	50.51	-3.49	54	39.71	31.91	9.01	30.12	268	328	A	H
		5135.32	48.79	-25.21	74	38.48	31.78	8.63	30.1	292	310	P	V
		5089.42	40.83	-13.17	54	30.56	31.76	8.6	30.09	292	310	A	V
	*	5310	104.92	-	-	94.24	31.89	8.91	30.12	292	310	P	V
	*	5310	97.39	-	-	86.71	31.89	8.91	30.12	292	310	A	V
		5353.68	59.57	-14.43	74	48.77	31.91	9.01	30.12	292	310	P	V
		5353.68	52.08	-1.92	54	41.28	31.91	9.01	30.12	292	310	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	45.93	-22.27	68.2	52.95	39.95	13.41	60.38	100	0	P	H
		15810	49.72	-24.28	74	53.05	37.26	17.08	57.67	100	0	P	H
		10540	48.96	-19.24	68.2	55.98	39.95	13.41	60.38	100	0	P	V
		15810	52.91	-21.09	74	56.24	37.26	17.08	57.67	306	330	P	V
		15810	39.39	-14.61	54	42.72	37.26	17.08	57.67	306	330	A	V
802.11n HT40 CH 62 5310MHz		10620	46.49	-27.51	74	53.6	40.07	13.41	60.59	100	0	P	H
		15930	46.27	-27.73	74	49.61	36.97	17.19	57.5	100	0	P	H
		10620	46.23	-27.77	74	53.34	40.07	13.41	60.59	100	0	P	V
		15930	49.99	-24.01	74	53.33	36.97	17.19	57.5	100	0	P	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		5138.38	49.51	-24.49	74	39.2	31.78	8.63	30.1	274	326	P	H
		5115.6	41.02	-12.98	54	30.72	31.77	8.62	30.09	274	326	A	H
	*	5290	102.26	-	-	91.64	31.87	8.86	30.11	274	326	P	H
	*	5290	94.69	-	-	84.07	31.87	8.86	30.11	274	326	A	H
		5361.6	60.67	-13.33	74	49.85	31.92	9.02	30.12	274	326	P	H
		5362.56	52.86	-1.14	54	42.03	31.92	9.03	30.12	274	326	P	H
		5069.02	50.41	-23.59	74	40.17	31.74	8.59	30.09	295	310	P	V
		5069.7	41.23	-12.77	54	30.99	31.74	8.59	30.09	295	310	A	V
	*	5290	101.6	27.6	74	90.98	31.87	8.86	30.11	295	310	P	V
	*	5290	94.07	40.07	54	83.45	31.87	8.86	30.11	295	310	A	V
		5352.96	58.74	-15.26	74	47.95	31.91	9	30.12	295	310	P	V
		5355.84	51.42	-2.58	54	40.62	31.91	9.01	30.12	295	310	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		10580	45.65	-22.55	68.2	52.73	40.02	13.41	60.51	100	0	P	H
VHT80		15870	44.62	-29.38	74	47.94	37.09	17.16	57.57	100	0	P	H
CH 58		10580	45.88	-22.32	68.2	52.96	40.02	13.41	60.51	100	0	P	V
5290MHz		15870	44.39	-29.61	74	47.71	37.09	17.16	57.57	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 - 5470~5725MHz

WIFI 802.11a (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		5459.92	60.26	-13.74	74	49.31	31.97	9.12	30.14	259	344	P	H
		5468.4	65.87	-2.33	68.2	54.91	31.98	9.12	30.14	259	344	P	H
		5458.32	50.27	-3.73	54	39.32	31.97	9.12	30.14	259	344	A	H
	*	5500	110.97	-	-	99.98	32	9.13	30.14	259	344	P	H
	*	5500	102.96	-	-	91.97	32	9.13	30.14	259	344	A	H
		5456.56	63.29	-10.71	74	52.34	31.97	9.12	30.14	244	349	P	V
		5467.12	66.25	-1.95	68.2	55.29	31.98	9.12	30.14	244	349	P	V
		5456.88	50.14	-3.86	54	39.19	31.97	9.12	30.14	244	349	A	V
	*	5500	111.48	-	-	100.49	32	9.13	30.14	244	349	P	V
	*	5500	104.38	-	-	93.39	32	9.13	30.14	244	349	A	V
802.11a CH 116 5580MHz		5417.92	50.26	-23.74	74	39.33	31.95	9.11	30.13	246	344	P	H
		5461.12	50.02	-18.18	68.2	39.07	31.97	9.12	30.14	246	344	P	H
		5458.24	40.85	-13.15	54	29.9	31.97	9.12	30.14	246	344	A	H
	*	5580	110.59	-	-	99.55	32.08	9.15	30.19	246	344	P	H
	*	5580	102.5	-	-	91.46	32.08	9.15	30.19	246	344	A	H
		5756.81	49.68	-18.52	68.2	38.22	32.31	9.44	30.29	246	344	P	H
		5386	50.09	-23.91	74	39.21	31.93	9.08	30.13	261	4	P	V
		5468.08	49.29	-18.91	68.2	38.33	31.98	9.12	30.14	261	4	P	V
		5449.6	40.89	-13.11	54	29.93	31.97	9.12	30.13	261	4	A	V
	*	5580	111.96	-	-	100.92	32.08	9.15	30.19	261	4	P	V
	*	5580	104.97	-	-	93.93	32.08	9.15	30.19	261	4	A	V
		5734.13	49.66	-18.54	68.2	38.26	32.27	9.4	30.27	261	4	P	V

802.11a CH 140 5700MHz	*	5700	105.31	-	-	93.99	32.23	9.34	30.25	210	12	P	H
	*	5700	97.85	-	-	86.53	32.23	9.34	30.25	210	12	A	H
		5726.6	53.48	-14.72	68.2	42.09	32.27	9.38	30.26	210	12	P	H
	*	5700	108.66	-	-	97.34	32.23	9.34	30.25	238	4	P	V
	*	5700	101.26	-	-	89.94	32.23	9.34	30.25	238	4	A	V
		5725	65.95	-2.25	68.2	54.56	32.27	9.38	30.26	238	4	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 - 5470~5725MHz

WIFI 802.11a (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	55.57	-18.43	74	63.03	40.6	13.44	61.5	190	71	P	H
		11000	47.27	-6.73	54	54.73	40.6	13.44	61.5	190	71	A	H
		16500	51.58	-16.62	68.2	53.07	38.6	17.21	57.3	100	0	P	H
		11000	58.25	-15.75	74	65.71	40.6	13.44	61.5	222	318	P	V
		11000	49.62	-4.38	54	57.08	40.6	13.44	61.5	222	318	A	V
		16500	56.42	-11.78	68.2	57.91	38.6	17.21	57.3	100	0	P	V
802.11a CH 116 5580MHz		11160	56.17	-17.83	74	63.5	40.53	13.67	61.53	189	68	P	H
		11160	47.6	-6.4	54	54.93	40.53	13.67	61.53	189	68	A	H
		16740	52.4	-15.8	68.2	52.22	39.52	17.48	56.82	100	0	P	H
		11160	58.54	-15.46	74	65.87	40.53	13.67	61.53	147	329	P	V
		11160	50.46	-3.54	54	57.79	40.53	13.67	61.53	147	329	A	V
		16740	56.65	-11.55	68.2	56.47	39.52	17.48	56.82	100	0	P	V
802.11a CH 140 5700MHz		11400	52.85	-21.15	74	60.02	40.44	13.97	61.58	190	64	P	H
		11400	44.16	-9.84	54	51.33	40.44	13.97	61.58	190	64	A	H
		17100	53.08	-15.12	68.2	50.48	41.02	17.66	56.08	100	0	P	H
		11400	56.71	-17.29	74	63.88	40.44	13.97	61.58	153	317	P	V
		11400	47.51	-6.49	54	54.68	40.44	13.97	61.58	153	317	A	V
		17100	55.15	-13.05	68.2	52.55	41.02	17.66	56.08	100	0	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 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		5455.92	56.26	-17.74	74	45.31	31.97	9.12	30.14	235	346	P	H
		5468.56	60.24	-7.96	68.2	49.28	31.98	9.12	30.14	235	346	P	H
		5459.92	46.68	-7.32	54	35.73	31.97	9.12	30.14	235	346	A	H
	*	5500	109.2	-	-	98.21	32	9.13	30.14	235	346	P	H
	*	5500	101.54	-	-	90.55	32	9.13	30.14	235	346	A	H
		5459.28	58.72	-15.28	74	47.77	31.97	9.12	30.14	123	347	P	V
		5462.48	59.99	-8.21	68.2	49.04	31.97	9.12	30.14	123	347	P	V
		5459.92	49.16	-4.84	54	38.21	31.97	9.12	30.14	123	347	A	V
	*	5500	111.03	-	-	100.04	32	9.13	30.14	123	347	P	V
	*	5500	103	-	-	92.01	32	9.13	30.14	123	347	A	V
802.11n HT20 CH 116 5580MHz		5457.52	49.71	-24.29	74	38.76	31.97	9.12	30.14	198	353	P	H
		5465.44	49.68	-18.52	68.2	38.72	31.98	9.12	30.14	198	353	P	H
		5454.16	40.8	-13.2	54	29.85	31.97	9.12	30.14	198	353	A	H
	*	5580	108.31	-	-	97.27	32.08	9.15	30.19	198	353	P	H
	*	5580	100.43	-	-	89.39	32.08	9.15	30.19	198	353	A	H
		5746.1	49.75	-18.45	68.2	38.31	32.29	9.42	30.27	198	353	P	H
		5436.88	50.49	-23.51	74	39.54	31.96	9.12	30.13	122	354	P	V
		5464	49.61	-18.59	68.2	38.65	31.98	9.12	30.14	122	354	P	V
		5456.08	40.88	-13.12	54	29.93	31.97	9.12	30.14	122	354	A	V
	*	5580	112.1	-	-	101.06	32.08	9.15	30.19	122	354	P	V
	*	5580	103.74	-	-	92.7	32.08	9.15	30.19	122	354	A	V
		5742.635	50.52	-17.68	68.2	39.09	32.29	9.41	30.27	122	354	P	V

802.11n HT20 CH 140 5700MHz	*	5700	105.6	-	-	94.28	32.23	9.34	30.25	256	18	P	H
	*	5700	97.66	-	-	86.34	32.23	9.34	30.25	256	18	A	H
		5725.08	61.9	-6.3	68.2	50.51	32.27	9.38	30.26	256	18	P	H
	*	5700	108.16	-	-	96.84	32.23	9.34	30.25	240	355	P	V
	*	5700	100.5	-	-	89.18	32.23	9.34	30.25	240	355	A	V
		5725.24	65.22	-2.98	68.2	53.83	32.27	9.38	30.26	240	355	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 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	55.58	-18.42	74	63.04	40.6	13.44	61.5	124	70	P	H
		11000	46.54	-7.46	54	54	40.6	13.44	61.5	124	70	A	H
		16500	49.63	-18.57	68.2	51.12	38.6	17.21	57.3	400	0	P	H
		11000	59.48	-14.52	74	66.94	40.6	13.44	61.5	163	325	P	V
		11000	49.09	-4.91	54	56.55	40.6	13.44	61.5	163	325	A	V
		16500	53.67	-14.53	68.2	55.16	38.6	17.21	57.3	100	0	P	V
802.11n HT20 CH 116 5580MHz		11160	48.82	-25.18	74	56.15	40.53	13.67	61.53	158	64	P	H
		11160	37.44	-16.56	54	44.77	40.53	13.67	61.53	158	64	A	H
		16740	51.12	-17.08	68.2	50.94	39.52	17.48	56.82	100	0	P	H
		11160	61.59	-12.41	74	68.92	40.53	13.67	61.53	156	329	P	V
		11160	48.55	-5.45	54	55.88	40.53	13.67	61.53	156	329	A	V
		16740	54.11	-14.09	68.2	53.93	39.52	17.48	56.82	100	0	P	V
802.11n HT20 CH 140 5700MHz		11400	57.12	-16.88	74	64.29	40.44	13.97	61.58	177	66	P	H
		11400	44.55	-9.45	54	51.72	40.44	13.97	61.58	177	66	A	H
		17100	53.02	-15.18	68.2	50.42	41.02	17.66	56.08	100	0	P	H
		11400	60.78	-13.22	74	67.95	40.44	13.97	61.58	160	320	P	V
		11400	47.95	-6.05	54	55.12	40.44	13.97	61.58	160	320	A	V
		17100	55.41	-12.79	68.2	52.81	41.02	17.66	56.08	100	0	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 (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		5459.92	57.02	-16.98	74	46.07	31.97	9.12	30.14	217	356	P	H
		5464.72	61.74	-6.46	68.2	50.78	31.98	9.12	30.14	217	356	P	H
		5459.68	49.88	-4.12	54	38.93	31.97	9.12	30.14	217	356	A	H
	*	5510	105.49	-	-	94.51	32	9.13	30.15	217	356	P	H
	*	5510	97.63	-	-	86.65	32	9.13	30.15	217	356	A	H
		5765	49.69	-18.51	68.2	38.21	32.31	9.46	30.29	217	356	P	H
		5459.92	58.69	-15.31	74	47.74	31.97	9.12	30.14	289	308	P	V
		5469.76	65.19	-3.01	68.2	54.23	31.98	9.12	30.14	289	308	P	V
		5459.2	51.43	-2.57	54	40.48	31.97	9.12	30.14	289	308	A	V
	*	5510	105.97	-	-	94.99	32	9.13	30.15	289	308	P	V
	*	5510	98.37	-	-	87.39	32	9.13	30.15	289	308	A	V
		5747.99	49.95	-18.25	68.2	38.51	32.29	9.42	30.27	289	308	P	V
802.11n HT40 CH 110 5550MHz		5451.76	51.52	-22.48	74	40.57	31.97	9.12	30.14	208	354	P	H
		5465.68	53.73	-14.47	68.2	42.77	31.98	9.12	30.14	208	354	P	H
		5449.84	44.74	-9.26	54	33.79	31.97	9.12	30.14	208	354	A	H
	*	5550	106.87	-	-	95.84	32.06	9.14	30.17	208	354	P	H
	*	5550	99.3	-	-	88.27	32.06	9.14	30.17	208	354	A	H
		5762.165	49.35	-18.85	68.2	37.88	32.31	9.45	30.29	208	354	P	H
		5457.52	51.9	-22.1	74	40.95	31.97	9.12	30.14	223	312	P	V
		5468.56	53.92	-14.28	68.2	42.96	31.98	9.12	30.14	223	312	P	V
		5457.28	45.17	-8.83	54	34.22	31.97	9.12	30.14	223	312	A	V
	*	5550	108.24	-	-	97.21	32.06	9.14	30.17	223	312	P	V
	*	5550	100.45	-	-	89.42	32.06	9.14	30.17	223	312	A	V
		5728.775	50.07	-18.13	68.2	38.67	32.27	9.39	30.26	223	312	P	V

802.11n HT40 CH 134 5670MHz		5430.15	50.37	-23.63	74	39.42	31.96	9.12	30.13	199	1	P	H
		5469	48.45	-19.75	68.2	37.49	31.98	9.12	30.14	199	1	P	H
		5371.7	41.34	-12.66	54	30.49	31.92	9.05	30.12	199	1	A	H
	*	5670	106.31	-	-	95.05	32.21	9.28	30.23	199	1	P	H
	*	5670	98.51	-	-	87.25	32.21	9.28	30.23	199	1	A	H
		5725.275	58.56	-9.64	68.2	47.17	32.27	9.38	30.26	199	1	P	H
		5437.15	49.7	-24.3	74	38.75	31.96	9.12	30.13	210	352	P	V
		5461.3	48.76	-19.44	68.2	37.81	31.97	9.12	30.14	210	352	P	V
		5459.2	41.65	-12.35	54	30.7	31.97	9.12	30.14	210	352	A	V
	*	5670	105.79	-	-	94.53	32.21	9.28	30.23	210	352	P	V
	*	5670	97.99	-	-	86.73	32.21	9.28	30.23	210	352	A	V
		5728.6	57.61	-10.59	68.2	46.21	32.27	9.39	30.26	210	352	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	49.4	-24.6	74	56.84	40.59	13.47	61.5	100	0	P	H
		16530	46.83	-21.37	68.2	48.09	38.73	17.24	57.23	100	0	P	H
		11020	47.75	-26.25	74	55.19	40.59	13.47	61.5	100	0	P	V
		16530	48.2	-20	68.2	49.46	38.73	17.24	57.23	100	0	P	V
802.11n HT40 CH 110 5550MHz		11100	51.1	-22.9	74	58.53	40.56	13.53	61.52	107	79	P	H
		11100	44.34	-9.66	54	51.77	40.56	13.53	61.52	107	79	A	H
		16650	47.94	-20.26	68.2	48.33	39.19	17.41	56.99	100	0	P	H
		11100	55.33	-18.67	74	62.76	40.56	13.53	61.52	171	323	P	V
		11100	47.21	-6.79	54	54.64	40.56	13.53	61.52	171	323	A	V
		16650	49.93	-18.27	68.2	50.32	39.19	17.41	56.99	100	0	P	V
802.11n HT40 CH 134 5670MHz		11340	52.61	-21.39	74	59.71	40.47	14	61.57	141	65	P	H
		11340	44.27	-9.73	54	51.37	40.47	14	61.57	141	65	A	H
		17010	49.82	-18.38	68.2	47.95	40.59	17.54	56.26	100	0	P	H
		11340	54.57	-19.43	74	61.67	40.47	14	61.57	144	331	P	V
		11340	47.33	-6.67	54	54.43	40.47	14	61.57	144	331	A	V
		17010	54.27	-13.93	68.2	52.4	40.59	17.54	56.26	100	0	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 (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		5451.76	57.27	-16.73	74	46.32	31.97	9.12	30.14	212	354	P	H
		5469.76	58.53	-9.67	68.2	47.57	31.98	9.12	30.14	212	354	P	H
		5454.88	49.31	-4.69	54	38.36	31.97	9.12	30.14	212	354	A	H
	*	5530	99.7	-	-	88.71	32.02	9.14	30.17	212	354	P	H
	*	5530	91.88	-	-	80.89	32.02	9.14	30.17	212	354	A	H
		5747.99	49.59	-18.61	68.2	38.15	32.29	9.42	30.27	212	354	P	H
		5458	57.59	-16.41	74	46.64	31.97	9.12	30.14	285	312	P	V
		5460.64	58.25	-9.95	68.2	47.3	31.97	9.12	30.14	285	312	P	V
		5458.48	49.97	-4.03	54	39.02	31.97	9.12	30.14	285	312	A	V
	*	5530	100.84	-	-	89.85	32.02	9.14	30.17	285	312	P	V
	*	5530	93.79	-	-	82.8	32.02	9.14	30.17	285	312	A	V
		5765	49.6	-18.6	68.2	38.12	32.31	9.46	30.29	285	312	P	V
802.11ac VHT80 CH 122 5610MHz		5456.8	55.25	-18.75	74	44.3	31.97	9.12	30.14	201	357	P	H
		5461.12	56.17	-12.03	68.2	45.22	31.97	9.12	30.14	201	357	P	H
		5457.04	46.35	-7.65	54	35.4	31.97	9.12	30.14	201	357	A	H
	*	5610	103.26	-	-	92.18	32.12	9.17	30.21	201	357	P	H
	*	5610	95.91	-	-	84.83	32.12	9.17	30.21	201	357	A	H
		5725.94	56.94	-11.26	68.2	45.55	32.27	9.38	30.26	201	357	P	H
		5456.32	54.49	-19.51	74	43.54	31.97	9.12	30.14	282	310	P	V
		5467.84	56.79	-11.41	68.2	45.83	31.98	9.12	30.14	282	310	P	V
		5454.88	46.76	-7.24	54	35.81	31.97	9.12	30.14	282	310	A	V
	*	5610	103.98	-	-	92.9	32.12	9.17	30.21	282	310	P	V
	*	5610	96.68	-	-	85.6	32.12	9.17	30.21	282	310	A	V
		5733.185	57.82	-10.38	68.2	46.42	32.27	9.4	30.27	282	310	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		11060	47.03	-26.97	74	54.47	40.57	13.5	61.51	100	0	P	H
VHT80		16590	46.06	-22.14	68.2	46.94	38.93	17.32	57.13	100	0	P	H
CH 106		11060	47.11	-26.89	74	54.55	40.57	13.5	61.51	100	0	P	V
5530MHz		16590	47.21	-20.99	68.2	48.09	38.93	17.32	57.13	100	0	P	V
802.11ac		11220	49.72	-24.28	74	56.92	40.51	13.83	61.54	100	0	P	H
VHT80		16830	47.09	-21.11	68.2	46.41	39.84	17.48	56.64	100	0	P	H
CH 122		11220	49.85	-24.15	74	57.05	40.51	13.83	61.54	100	0	P	V
5610MHz		16830	52.08	-16.12	68.2	51.4	39.84	17.48	56.64	100	0	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 (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		5457.64	49.26	-24.74	74	38.31	31.97	9.12	30.14	146	346	P	H
		5467.39	48.73	-19.47	68.2	37.77	31.98	9.12	30.14	146	346	P	H
		5458.81	39.54	-14.46	54	28.59	31.97	9.12	30.14	146	346	A	H
	*	5720	106.83	-	-	95.45	32.27	9.37	30.26	146	346	P	H
	*	5720	99.13	-	-	87.75	32.27	9.37	30.26	146	346	A	H
		5881.5	52.94	-15.26	68.2	41.21	32.46	9.61	30.34	146	346	P	H
		5356.63	50.77	-23.23	74	39.97	31.91	9.01	30.12	256	360	P	V
		5465.44	49.64	-18.56	68.2	38.68	31.98	9.12	30.14	256	360	P	V
		5459.98	39.61	-14.39	54	28.66	31.97	9.12	30.14	256	360	A	V
	*	5720	108.68	-	-	97.3	32.27	9.37	30.26	256	360	P	V
	*	5720	101.53	-	-	90.15	32.27	9.37	30.26	256	360	A	V
		5885.5	52.03	-16.17	68.2	40.31	32.46	9.62	30.36	256	360	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	49.81	-24.19	74	57.03	40.43	13.94	61.59	100	0	P	H
		17160	52.36	-15.84	68.2	49.16	41.37	17.76	55.93	100	0	P	H
		11440	57.48	-16.52	74	64.7	40.43	13.94	61.59	147	330	P	V
		11440	48.76	-5.24	54	55.98	40.43	13.94	61.59	147	330	A	V
		17160	55.17	-13.03	68.2	51.97	41.37	17.76	55.93	100	0	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 (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		5451.79	49.4	-24.6	74	38.45	31.97	9.12	30.14	240	342	P	H
		5464.27	48.89	-19.31	68.2	37.93	31.98	9.12	30.14	240	342	P	H
		5458.03	40.69	-13.31	54	29.74	31.97	9.12	30.14	240	342	A	H
	*	5720	107.39	-	-	96.01	32.27	9.37	30.26	240	342	P	H
	*	5720	99.63	-	-	88.25	32.27	9.37	30.26	240	342	A	H
		5919	50.91	-17.29	68.2	39.12	32.5	9.66	30.37	240	342	P	H
		5458.81	49.53	-24.47	74	38.58	31.97	9.12	30.14	130	7	P	V
		5469.34	49.59	-18.61	68.2	38.63	31.98	9.12	30.14	130	7	P	V
		5456.47	40.52	-13.48	54	29.57	31.97	9.12	30.14	130	7	A	V
	*	5720	108.02	-	-	96.64	32.27	9.37	30.26	130	7	P	V
	*	5720	100.11	-	-	88.73	32.27	9.37	30.26	130	7	A	V
		5859	51.09	-17.11	68.2	39.41	32.43	9.59	30.34	130	7	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	55.58	-18.42	74	62.8	40.43	13.94	61.59	190	71	P	H
		11440	45.11	-8.89	54	52.33	40.43	13.94	61.59	190	71	A	H
		17160	54.87	-13.33	68.2	51.67	41.37	17.76	55.93	400	0	P	H
		11440	60.34	-13.66	74	67.56	40.43	13.94	61.59	160	331	P	V
		11440	49.53	-4.47	54	56.75	40.43	13.94	61.59	160	331	A	V
		17160	55.56	-12.64	68.2	52.36	41.37	17.76	55.93	100	0	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 (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		5422.93	51.28	-22.72	74	40.35	31.95	9.11	30.13	235	341	P	H
		5466.22	49.86	-18.34	68.2	38.9	31.98	9.12	30.14	235	341	P	H
		5418.64	42.79	-11.21	54	31.86	31.95	9.11	30.13	235	341	A	H
	*	5710	105.41	-	-	94.07	32.25	9.35	30.26	235	341	P	H
	*	5710	97.9	-	-	86.56	32.25	9.35	30.26	235	341	A	H
		5856.5	57.17	-11.03	68.2	45.49	32.43	9.58	30.33	235	341	P	H
		5421.76	50.55	-23.45	74	39.62	31.95	9.11	30.13	214	355	P	V
		5462.32	48.48	-19.72	68.2	37.53	31.97	9.12	30.14	214	355	P	V
		5426.44	42.16	-11.84	54	31.22	31.95	9.12	30.13	214	355	A	V
	*	5710	105.3	-	-	93.96	32.25	9.35	30.26	214	355	P	V
	*	5710	97.85	-	-	86.51	32.25	9.35	30.26	214	355	A	V
		5864.25	60.79	-7.41	68.2	49.11	32.43	9.59	30.34	214	355	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	51.03	-22.97	74	58.22	40.43	13.96	61.58	196	67	P	H
		11420	43.84	-10.16	54	51.03	40.43	13.96	61.58	196	67	A	H
		17130	52.35	-15.85	68.2	49.46	41.19	17.71	56.01	100	0	P	H
		11420	54.56	-19.44	74	61.75	40.43	13.96	61.58	112	327	P	V
		11420	46.85	-7.15	54	54.04	40.43	13.96	61.58	112	327	A	V
		17130	53.8	-14.4	68.2	50.91	41.19	17.71	56.01	100	0	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 (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		5409.67	56.7	-17.3	74	45.78	31.94	9.11	30.13	221	347	P	H
		5467.39	55.89	-12.31	68.2	44.93	31.98	9.12	30.14	221	347	P	H
		5457.64	45.41	-8.59	54	34.46	31.97	9.12	30.14	221	347	A	H
	*	5690	102.56	-	-	91.26	32.23	9.32	30.25	221	347	P	H
	*	5690	95.07	-	-	83.77	32.23	9.32	30.25	221	347	A	H
		5898.7	61.12	-7.08	68.2	49.37	32.48	9.63	30.36	221	347	P	H
		5435.8	57.41	-16.59	74	46.46	31.96	9.12	30.13	115	7	P	V
		5463.88	55.82	-12.38	68.2	44.86	31.98	9.12	30.14	115	7	P	V
		5456.08	50.4	-3.6	54	39.45	31.97	9.12	30.14	115	7	A	V
	*	5690	103.31	-	-	92.01	32.23	9.32	30.25	115	7	P	V
	*	5690	95.65	-	-	84.35	32.23	9.32	30.25	115	7	A	V
		5858.5	66.89	-1.31	68.2	55.21	32.43	9.59	30.34	115	7	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	49.8	-24.2	74	56.94	40.45	13.99	61.58	100	0	P	H
		17070	49.51	-18.69	68.2	47.19	40.85	17.62	56.15	100	0	P	H
		11380	51.56	-22.44	74	58.7	40.45	13.99	61.58	123	329	P	V
		11380	46.22	-7.78	54	53.36	40.45	13.99	61.58	123	329	A	V
		17070	53.97	-14.23	68.2	51.65	40.85	17.62	56.15	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Emission below 1GHz

WIFI 802.11ac VHT80 (LF @ 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)
802.11ac VHT80 LF		73.2	28.35	-11.65	40	47.11	12.72	1.04	32.6	-	-	P	H
		172.83	33.27	-10.23	43.5	48.48	15.56	1.58	32.55	-	-	P	H
		207.93	27.92	-15.58	43.5	43.06	15.52	1.73	32.54	-	-	P	H
		736.8	29.99	-16.01	46	31.13	27.96	3.17	32.39	-	-	P	H
		904.8	36.96	-9.04	46	35.35	29.54	3.53	31.66	100	0	P	H
		980.4	33.03	-20.97	54	29.6	30.49	3.7	31.02	-	-	P	H
		39.72	30.59	-9.41	40	42.76	19.66	0.79	32.63	-	-	P	V
		72.93	29.48	-10.52	40	48.27	12.69	1.04	32.6	-	-	P	V
		169.86	28.34	-15.16	43.5	43.36	15.77	1.56	32.55	-	-	P	V
		673.8	31.81	-14.19	46	34.63	26.51	3.05	32.51	-	-	P	V
		895.7	39.4	-6.6	46	38.05	29.35	3.51	31.72	100	0	P	V
		965.7	32.98	-21.02	54	29.18	31	3.67	31.14	-	-	P	V
Remark	1. No other spurious found. 2. All results are PASS against limit line.												

<For WPC Charging Mode>

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		5002.38	50.11	-23.89	74	39.93	31.7	8.56	30.08	232	336	P	H
		5091.46	40.92	-13.08	54	30.64	31.76	8.61	30.09	232	336	A	H
	*	5290	101.42	-	-	90.8	31.87	8.86	30.11	232	336	P	H
	*	5290	93.48	-	-	82.86	31.87	8.86	30.11	232	336	A	H
		5362.32	61.69	-12.31	74	50.86	31.92	9.03	30.12	232	336	P	H
		5362.56	51.66	-2.34	54	40.83	31.92	9.03	30.12	232	337	A	H
		5078.2	49.67	-24.33	74	39.41	31.75	8.6	30.09	223	331	P	V
		5074.46	41.17	-12.83	54	30.91	31.75	8.6	30.09	223	331	A	V
	*	5290	101.48	-	-	90.86	31.87	8.86	30.11	223	331	P	V
	*	5290	93.88	-	-	83.26	31.87	8.86	30.11	223	331	A	V
		5357.76	61.5	-12.5	74	50.7	31.91	9.01	30.12	223	331	P	V
		5356.32	52.87	-1.13	54	42.07	31.91	9.01	30.12	223	331	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		10580	46.41	-21.79	68.2	53.49	40.02	12.91	60.51	100	0	P	H
VHT80		15870	44.75	-29.25	74	48.07	37.09	16.45	57.57	100	0	P	H
CH 58		10580	46.19	-22.01	68.2	53.27	40.02	12.91	60.51	100	0	P	V
5290MHz		15870	46.59	-27.41	74	49.91	37.09	16.45	57.57	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Emission below 1GHz

WIFI 802.11ac VHT80 (LF @ 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)
802.11ac VHT80 LF		105.6	20.86	-22.64	43.5	35.57	16.53	1.25	32.57	-	-	P	H
		170.94	32.8	-10.7	43.5	47.89	15.69	1.57	32.55	100	0	P	H
		208.47	29.39	-14.11	43.5	44.49	15.56	1.73	32.54	-	-	P	H
		613.6	27.1	-18.9	46	30.48	26.1	2.94	32.56	-	-	P	H
		769.7	30.22	-15.78	46	30.91	28.22	3.25	32.3	-	-	P	H
		946.8	33.89	-12.11	46	30.37	30.95	3.63	31.3	-	-	P	H
		38.91	33.7	-6.3	40	45.49	20.07	0.77	32.64	100	0	P	V
		72.93	25.69	-14.31	40	44.48	12.69	1.04	32.6	-	-	P	V
		208.47	27.52	-15.98	43.5	42.62	15.56	1.73	32.54	-	-	P	V
		555.5	27.52	-18.48	46	31.13	25.99	2.78	32.56	-	-	P	V
		674.5	32.04	-13.96	46	34.86	26.51	3.05	32.51	-	-	P	V
		938.4	32.76	-13.24	46	29.55	30.75	3.61	31.38	-	-	P	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

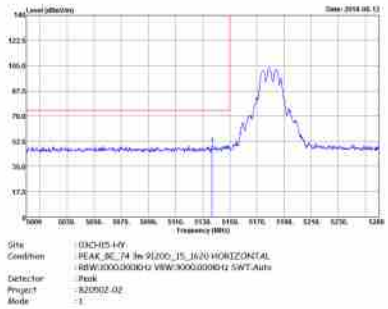
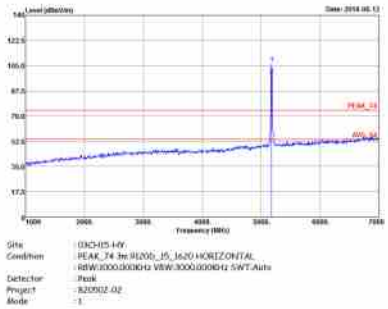
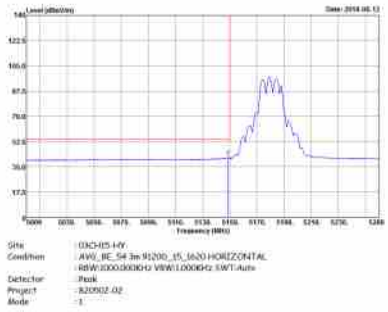
Test Engineer :	Bill Chang, Karl Hou, and Lance Chiang	**Temperature :**	24~26°C
		Relative Humidity :	50~54%

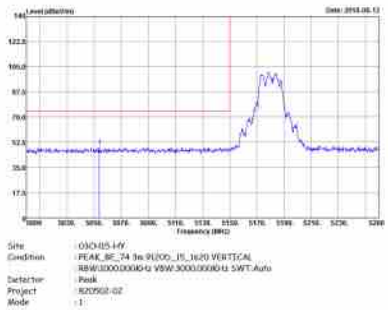
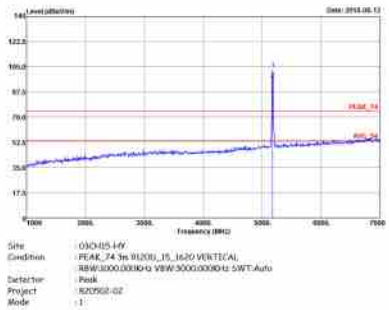
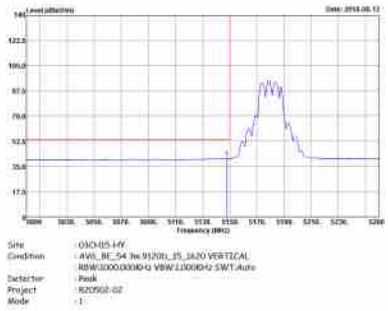
Note symbol

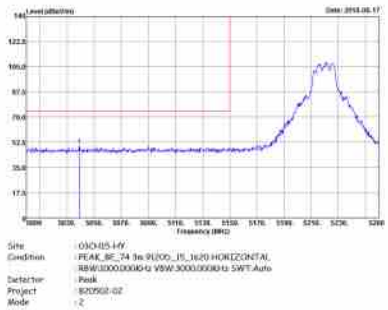
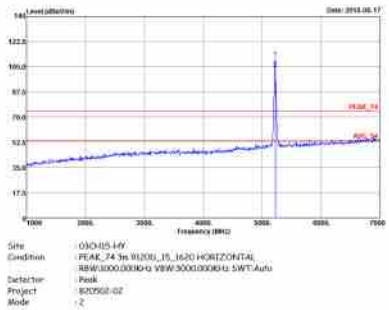
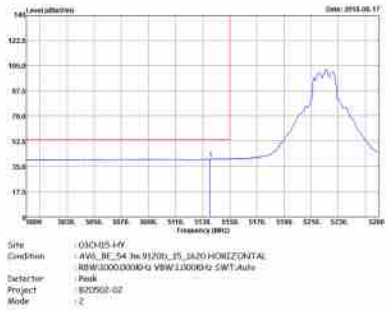
-L	**Low channel location**
-R	**High channel location**

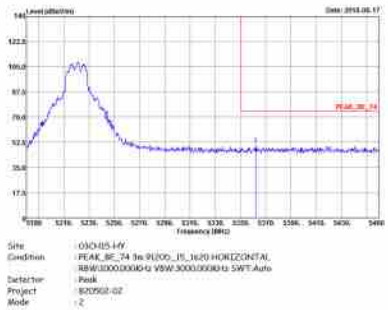
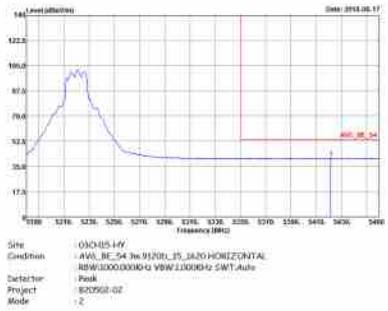
Band 1 - 5150~5250MHz

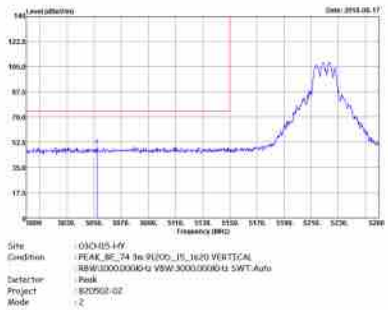
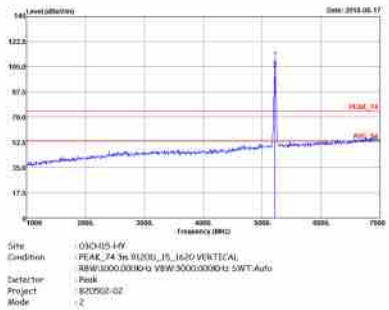
WIFI 802.11a (Band Edge @ 3m)

WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH36 5180MHz	
1+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		
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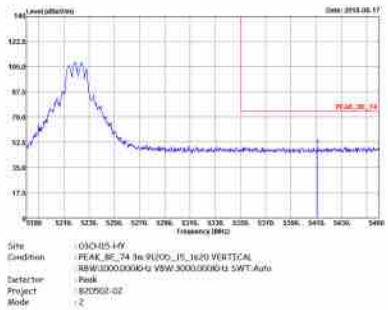
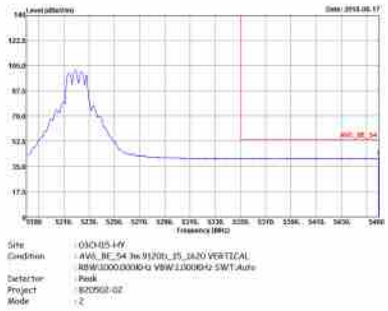
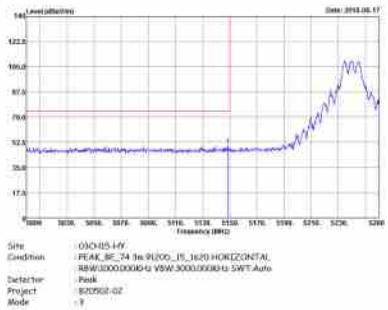
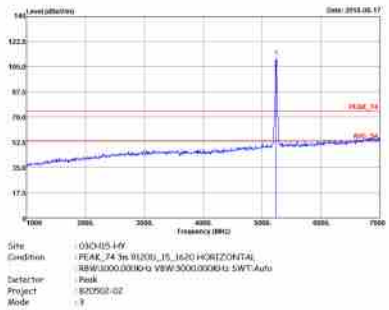
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH44 5220MHz - R	
1+2	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

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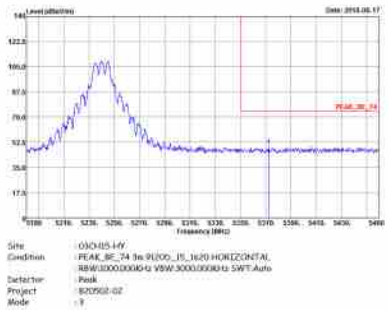
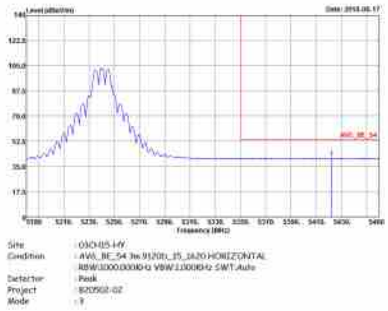
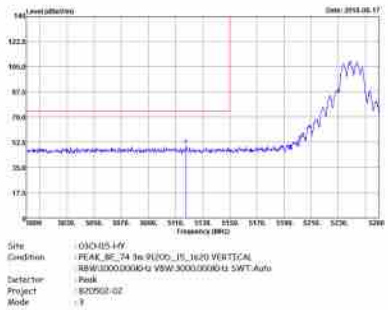
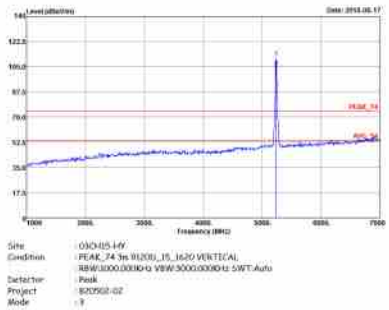
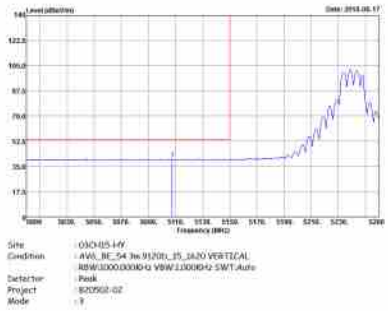
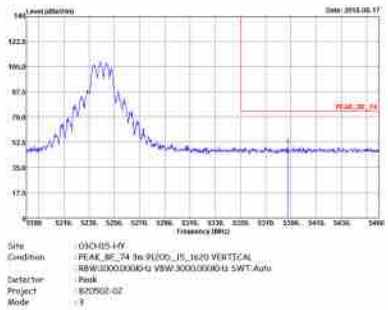
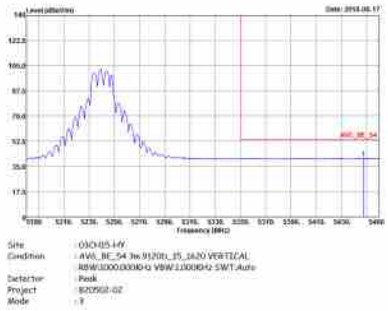
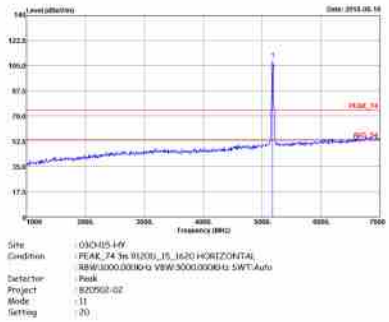
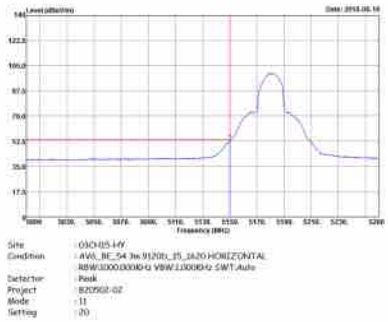
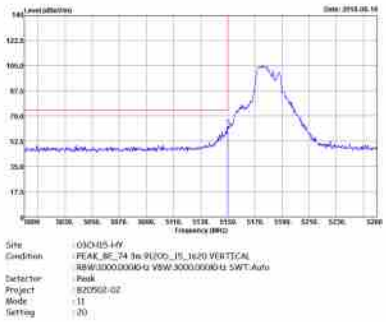
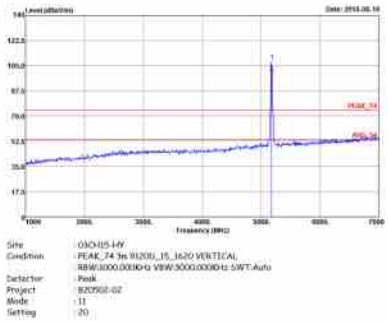
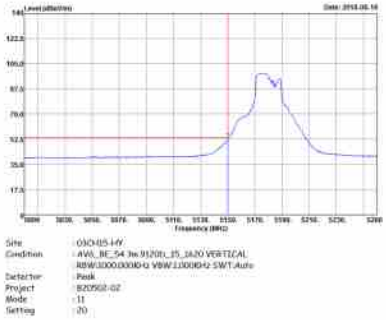
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH48 5240MHz - R	
1+2	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

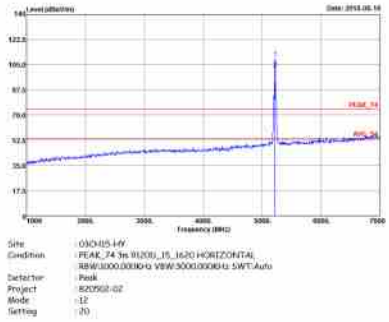
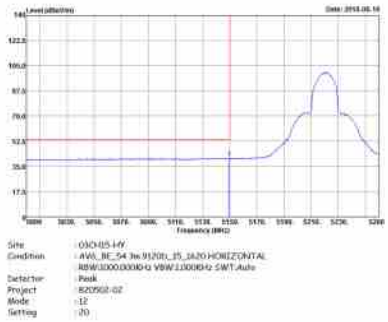
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH48 5240MHz - L	
1+2	Vertical	Fundamental
Peak		
Avg.		Left blank

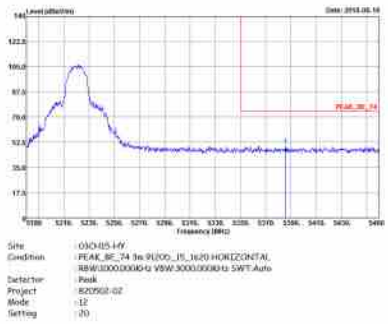
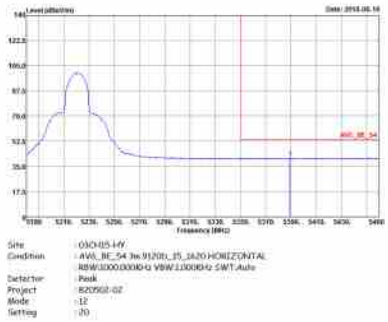
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH48 5240MHz - R	
1+2	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

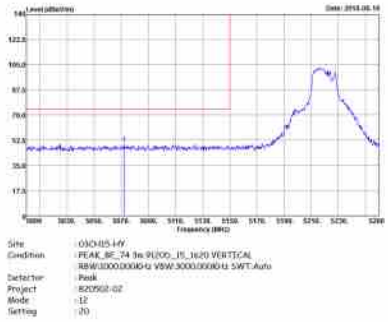
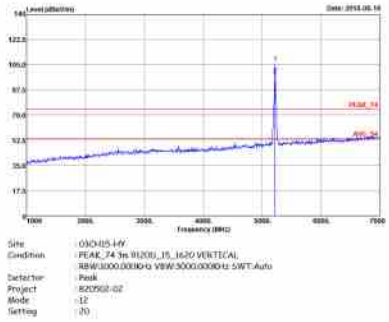
Band 1 5150~5250MHz
WIFI 802.11n HT20 (Band Edge @ 3m)

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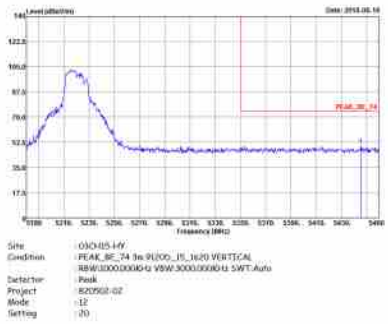
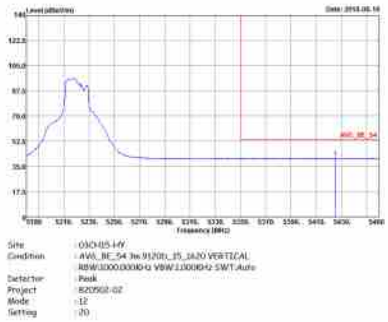
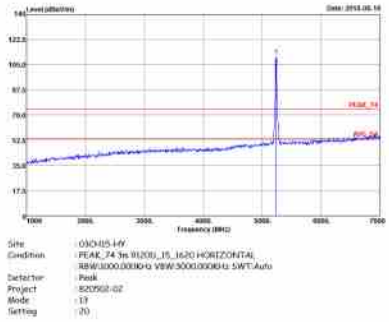
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH44 5220MHz - R	
1+2	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

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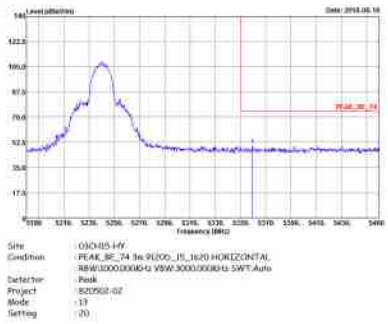
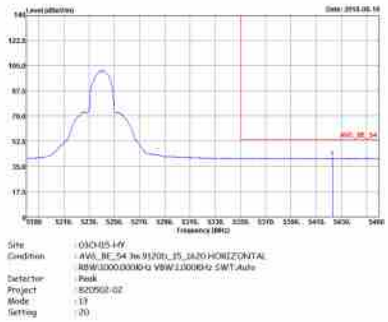
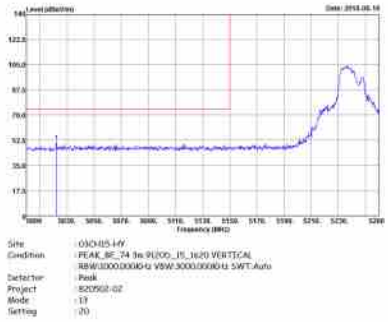
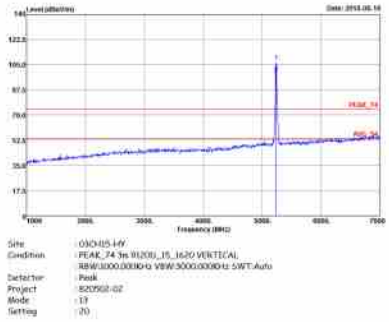
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH48 5240MHz - R	
1+2	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

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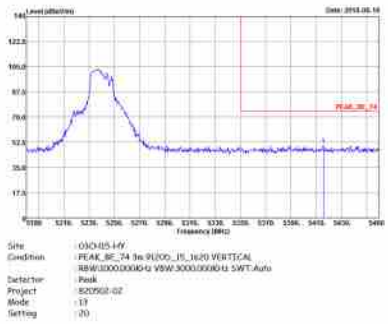
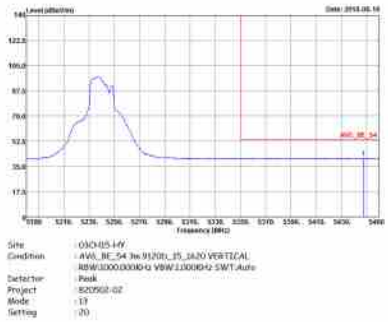
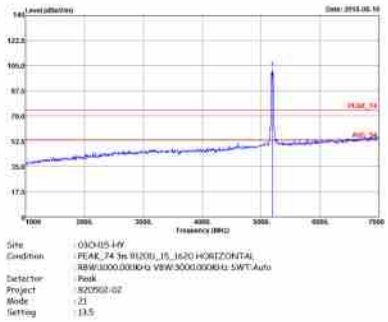
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH48 5240MHz - R	
1+2	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

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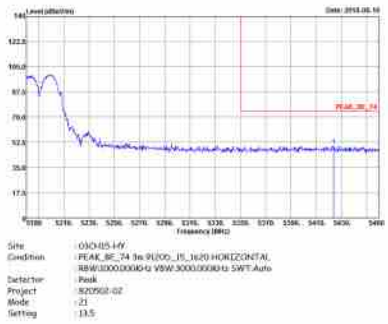
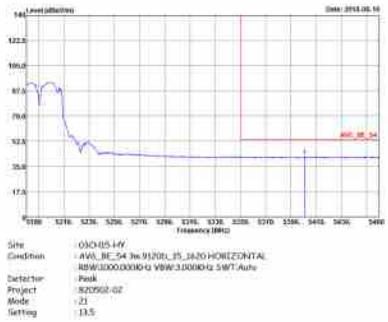
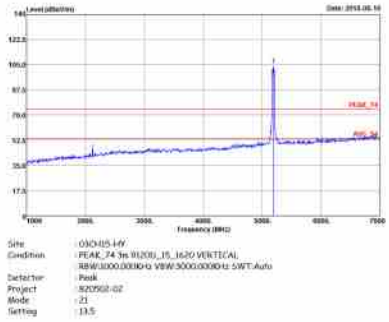
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH38 5190MHz - R	
1+2	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

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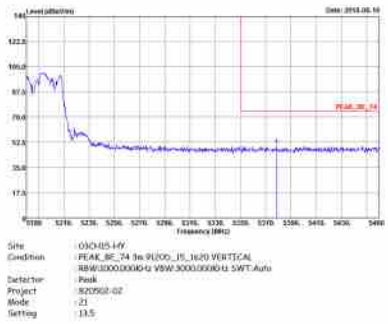
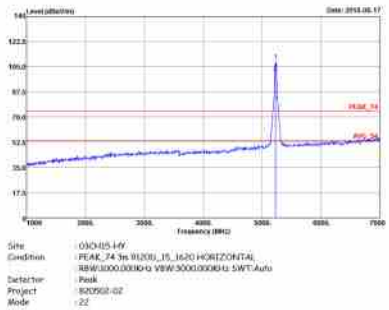
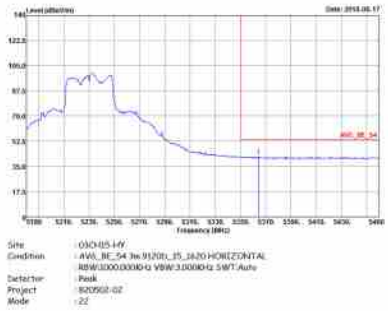
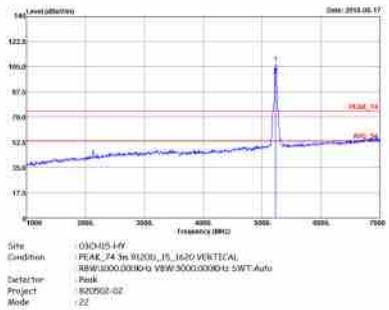
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH38 5190MHz - R	
1+2	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

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

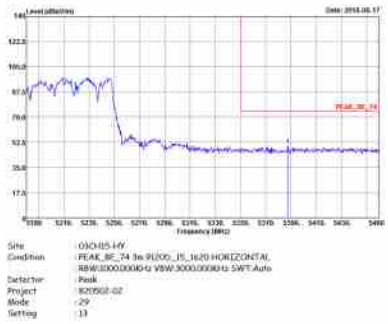
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH46 5230MHz - R	
1+2	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

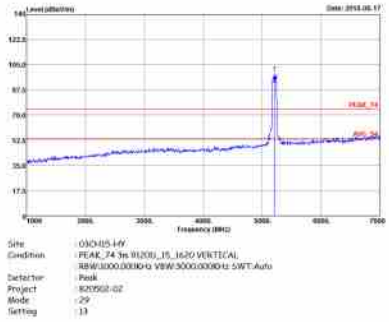
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH46 5230MHz - L	
1+2	Vertical	Fundamental
Peak		
Avg.		Left blank

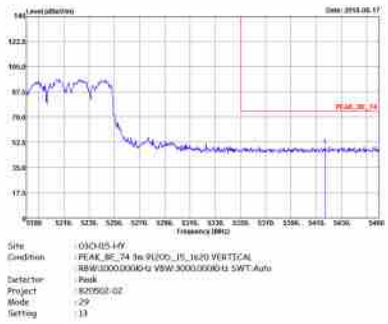
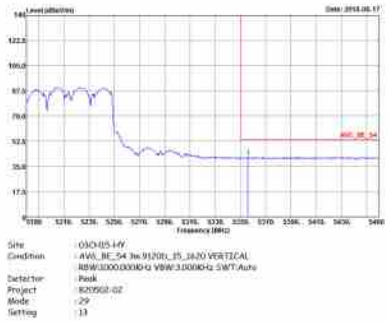
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH46 5230MHz - R	
1+2	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

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

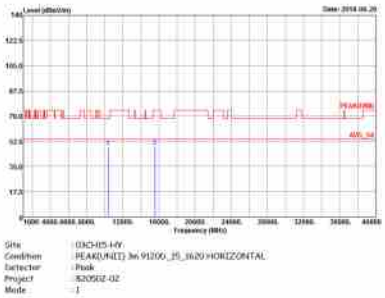
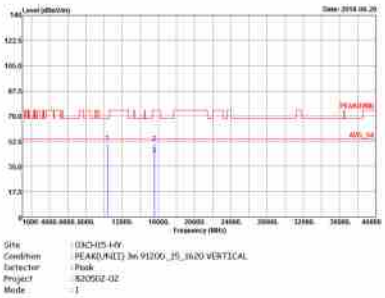
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH42 5210MHz - R	
1+2	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

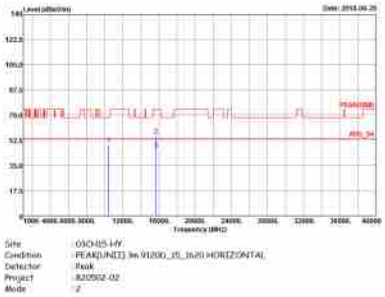
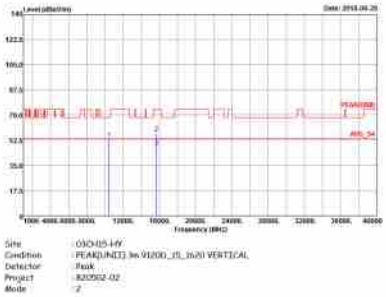
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH42 5210MHz - L	
1+2	Vertical	Fundamental
Peak		
Avg.		Left blank

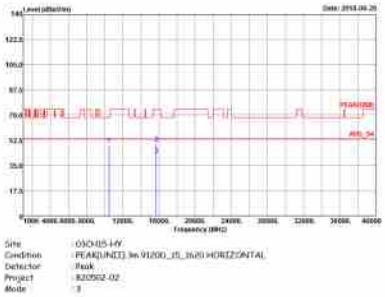
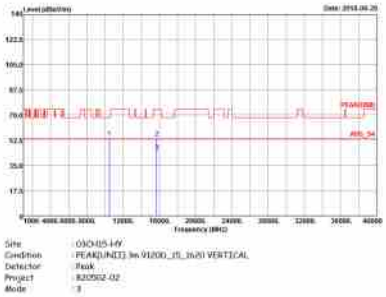
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH42 5210MHz - R	
1+2	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

Band 1 - 5150~5250MHz

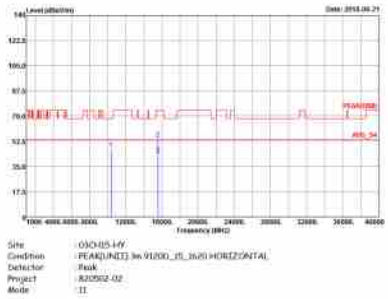
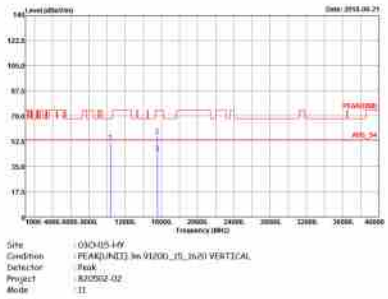
WIFI 802.11a (Harmonic @ 3m)

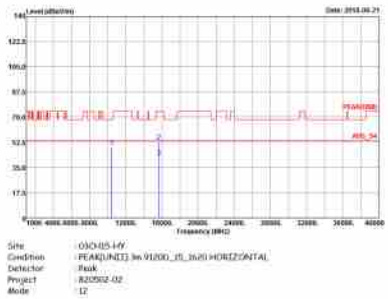
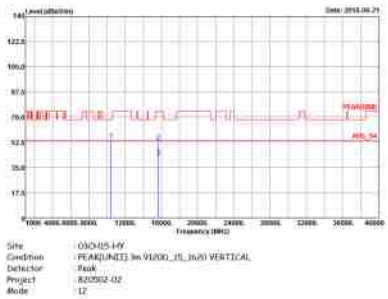
WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11a CH36 5180MHz	
1+2	Horizontal	Vertical
Peak Avg.		

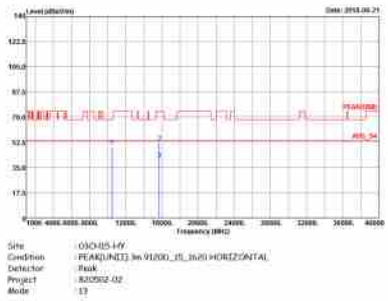
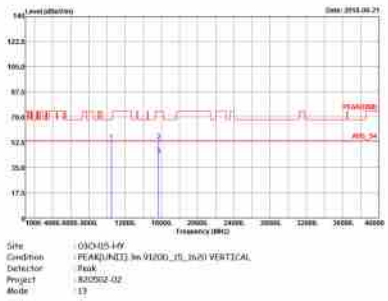
WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11a CH44 5220MHz	
1+2	Horizontal	Vertical
Peak Avg.		

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

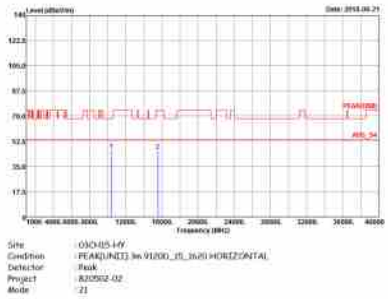
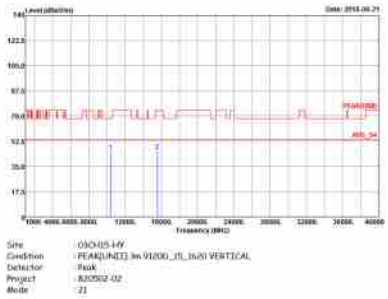
Band 1 5150~5250MHz
WIFI 802.11n HT20 (Harmonic @ 3m)

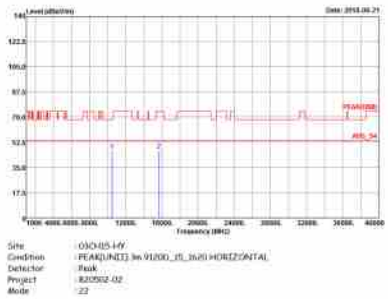
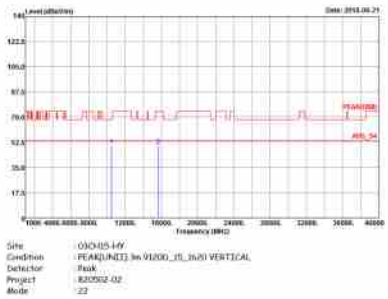
WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11n HT20 CH36 5180MHz	
1+2	Horizontal	Vertical
Peak Avg.		

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

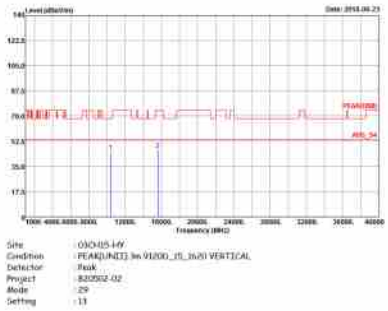
WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11n HT20 CH48 5240MHz	
1+2	Horizontal	Vertical
Peak Avg.		

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.		

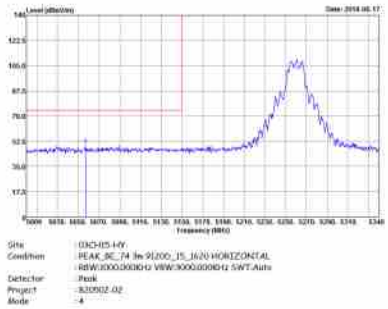
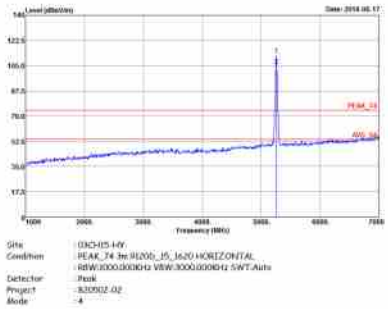
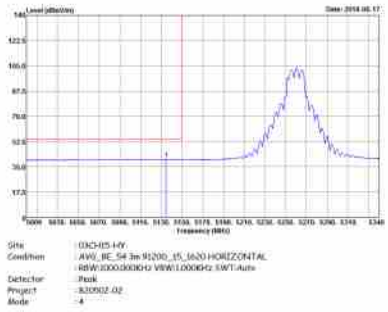
WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11n HT40 CH46 5230MHz	
1+2	Horizontal	Vertical
Peak Avg.		

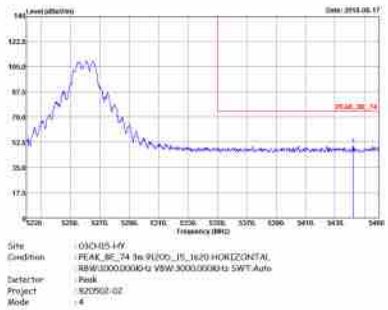
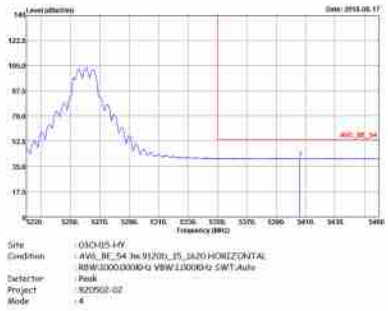
Band 1 5150~5250MHz
WIFI 802.11ac VHT80 (Harmonic @ 3m)

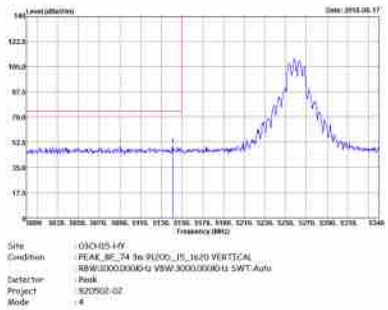
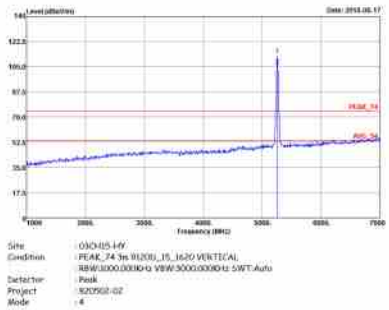
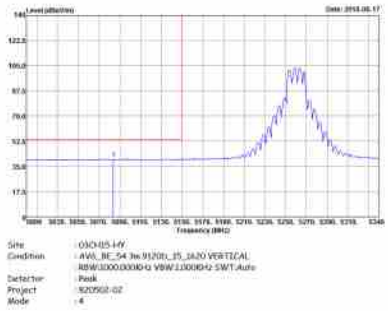
WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11ac VHT80 CH42 5210MHz	
1+2	Horizontal	Vertical
Peak Avg.		

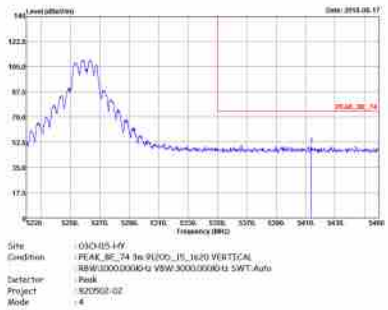
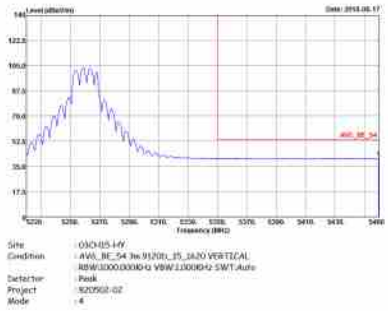
Band 2 - 5250~5350MHz

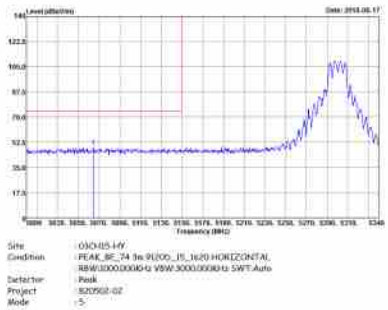
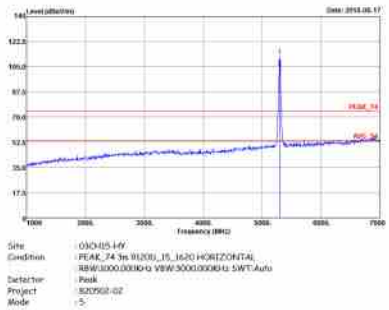
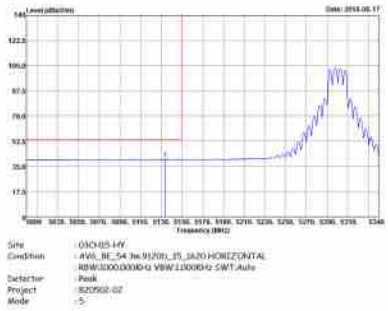
WIFI 802.11a (Band Edge @ 3m)

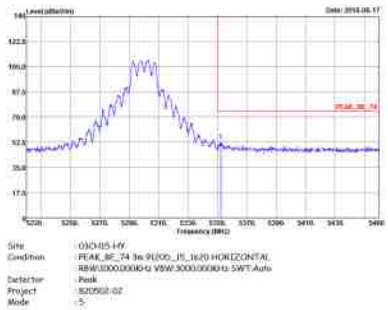
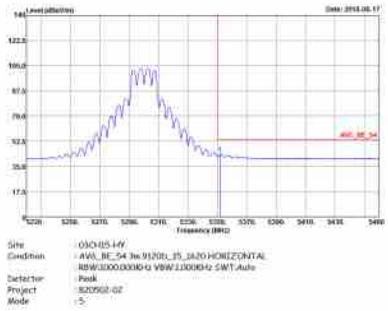
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH52 5260MHz - L	
1+2	Horizontal	Fundamental
Peak		
Avg.		Left blank

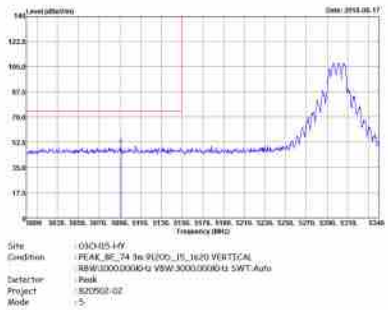
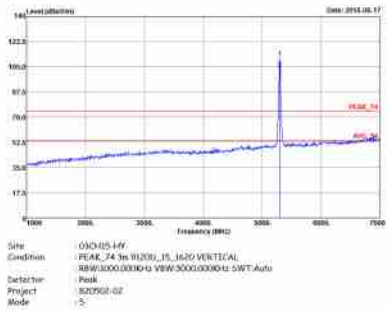
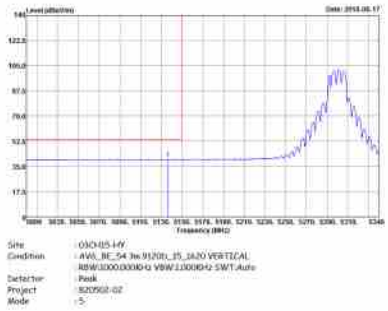
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH52 5260MHz - R	
1+2	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

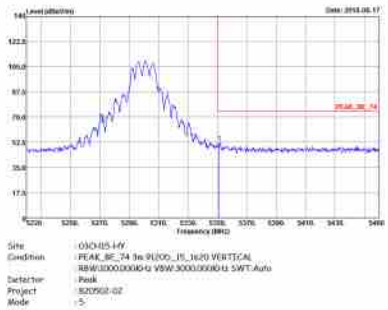
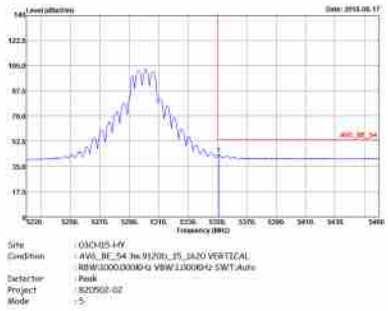
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH52 5260MHz - L	
1+2	Vertical	Fundamental
Peak		
Avg.		Left blank

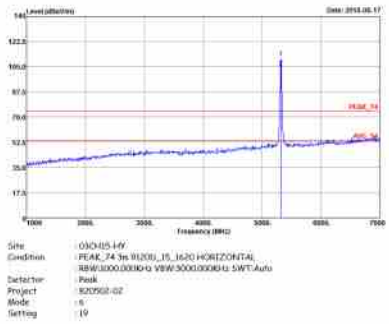
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH52 5260MHz - R	
1+2	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

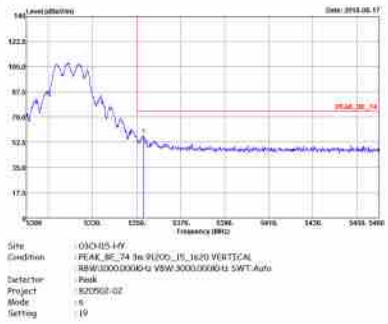
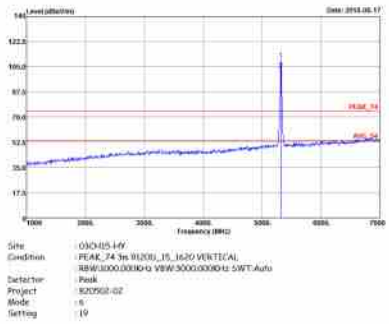
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH60 5300MHz - L	
1+2	Horizontal	Fundamental
Peak		
Avg.		Left blank

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

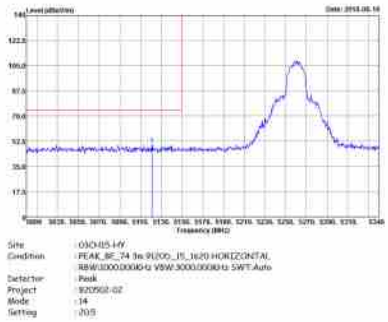
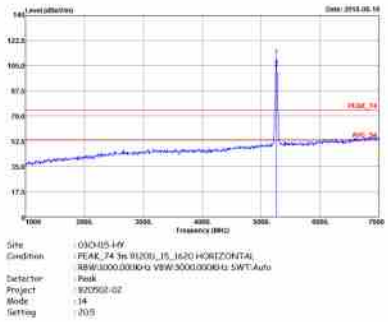
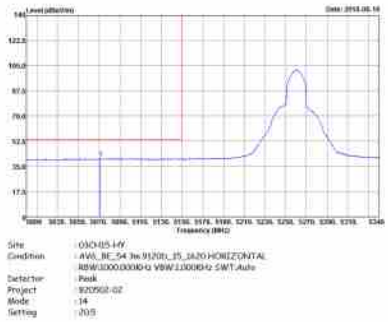
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH60 5300MHz - L	
1+2	Vertical	Fundamental
Peak		
Avg.		Left blank

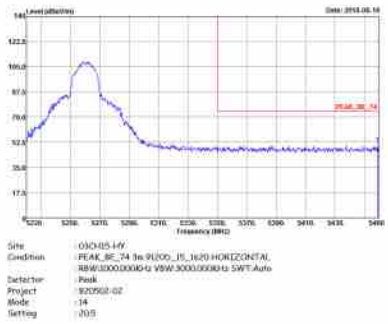
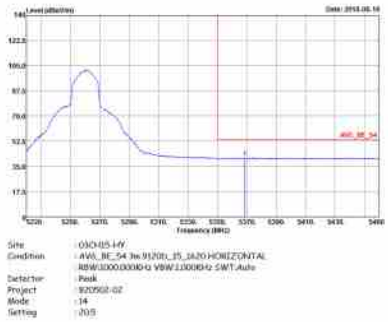
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH60 5300MHz - R	
1+2	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

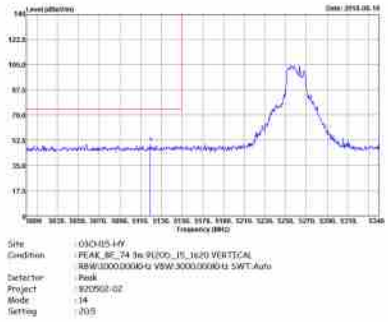
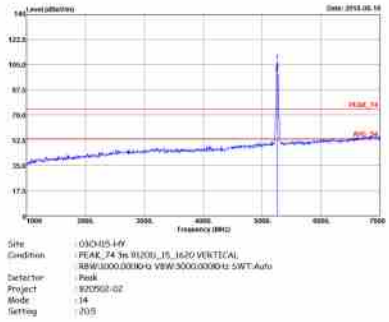
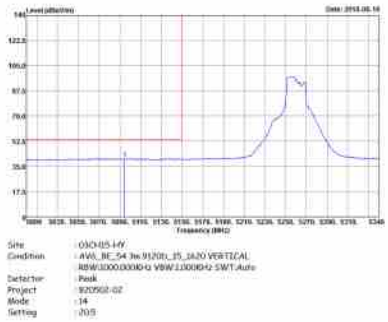
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH64 5320MHz	
1+2	Horizontal	Fundamental
Peak		
Avg.		Left blank

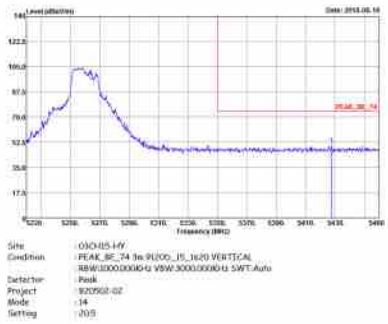
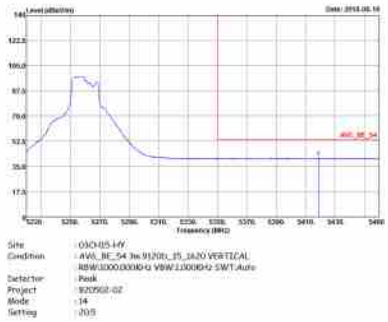
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH64 5320MHz	
1+2	Vertical	Fundamental
Peak		
Avg.		Left blank

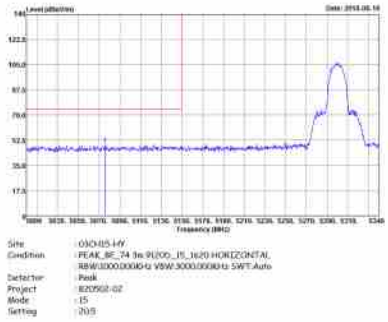
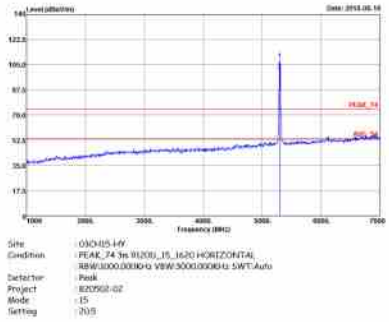
Band 2 5250~5350MHz
WIFI 802.11n HT20 (Band Edge @ 3m)

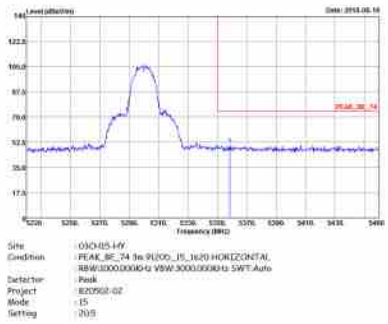
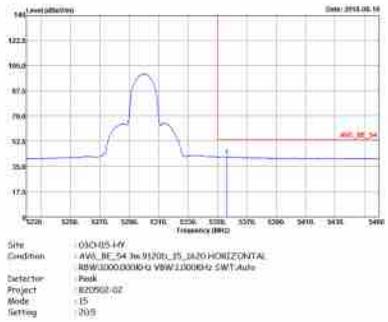
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH52 5260MHz - L	
1+2	Horizontal	Fundamental
Peak		
Avg.		Left blank

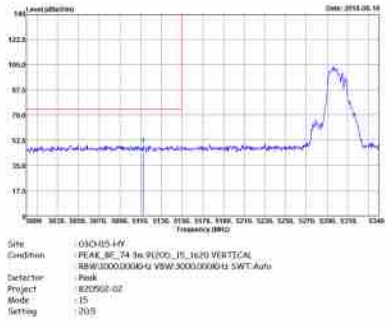
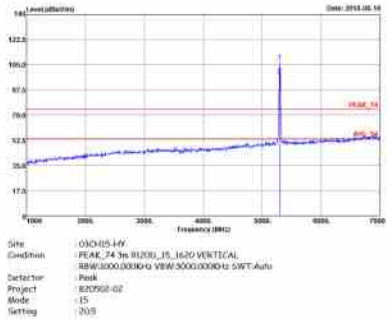
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH52 5260MHz - R	
1+2	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

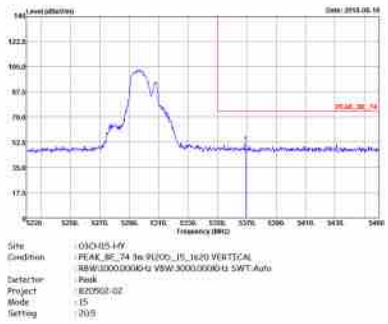
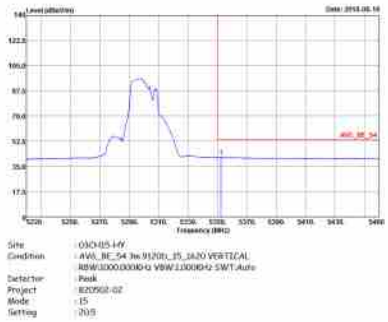
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH52 5260MHz - L	
1+2	Vertical	Fundamental
Peak		
Avg.		Left blank

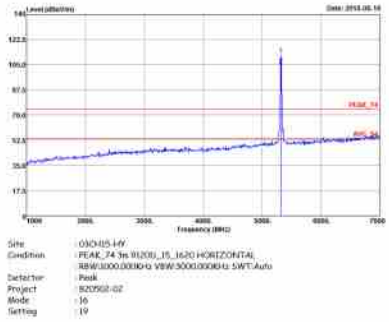
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH52 5260MHz - R	
1+2	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

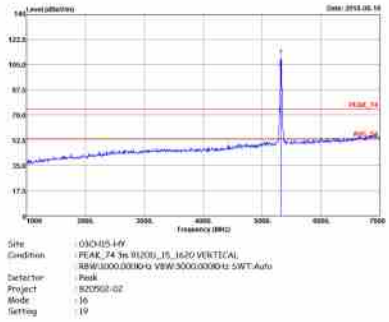
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH60 5300MHz - L	
1+2	Horizontal	Fundamental
Peak		
Avg.		Left blank

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

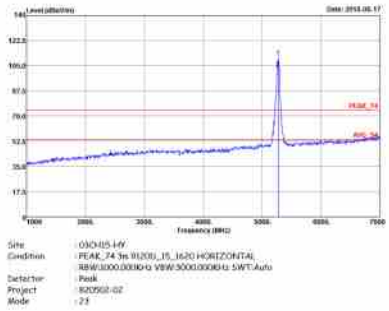
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH60 5300MHz - L	
1+2	Vertical	Fundamental
Peak		
Avg.		Left blank

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

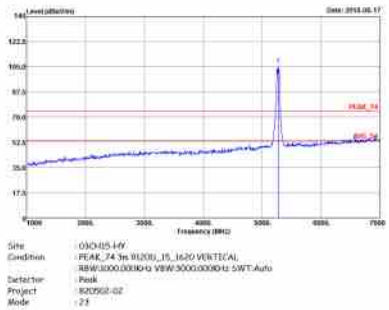
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH64 5320MHz	
1+2	Horizontal	Fundamental
Peak		
Avg.		Left blank

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

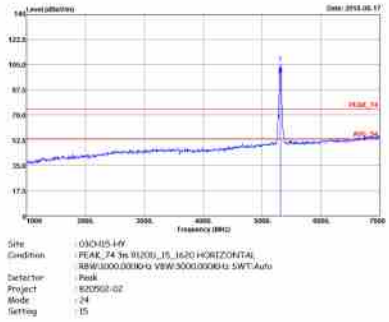
Band 2 5250~5350MHz
WIFI 802.11n HT40 (Band Edge @ 3m)

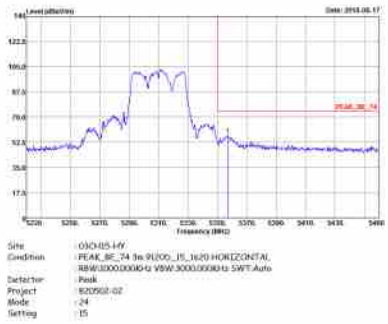
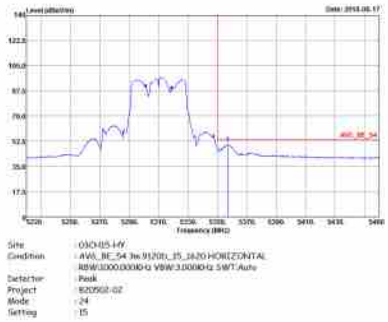
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT40 CH54 5270 - L	
1+2	Horizontal	Fundamental
Peak		
Avg.		Left blank

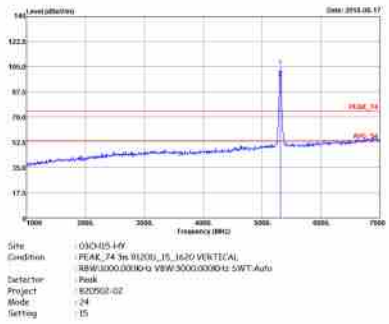
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT40 CH54 5270 - R	
1+2	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

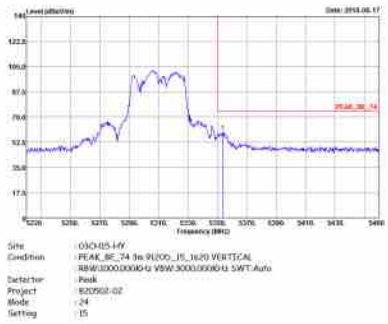
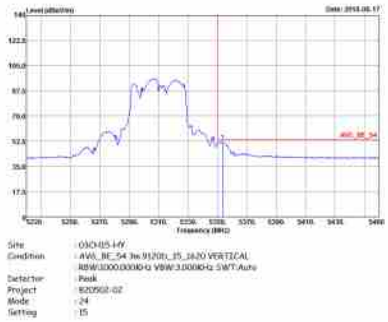
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT40 CH54 5270 - L	
1+2	Vertical	Vertical
Peak		
Avg.		Left blank

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

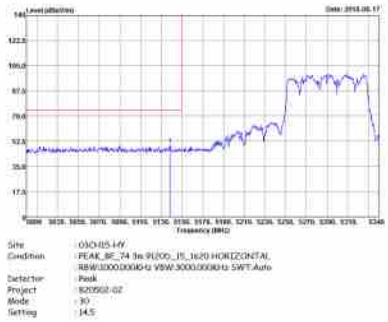
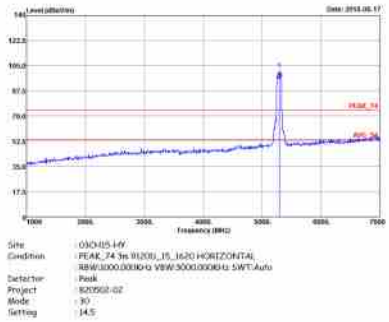
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT40 CH62 5310 - L	
1+2	Horizontal	Fundamental
Peak		
Avg.		Left blank

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

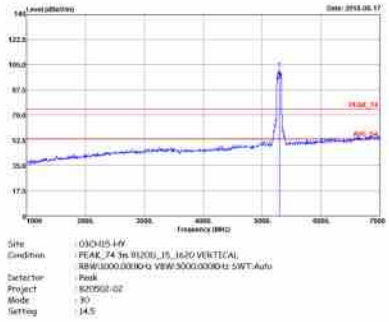
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT40 CH62 5310 - L	
1+2	Vertical	Fundamental
Peak		
Avg.		Left blank

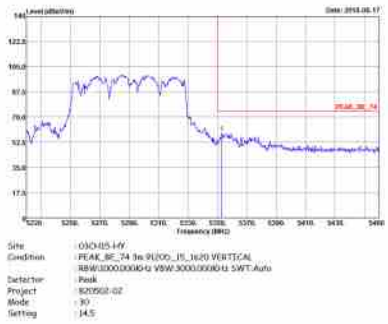
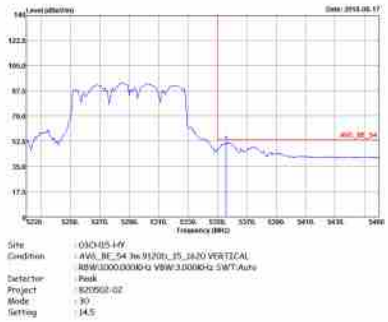
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT40 CH62 5310 - R	
1+2	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

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

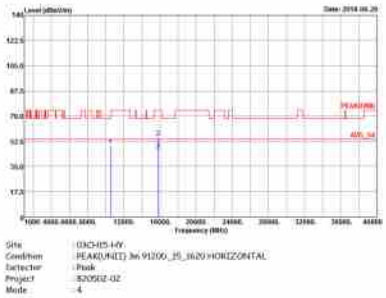
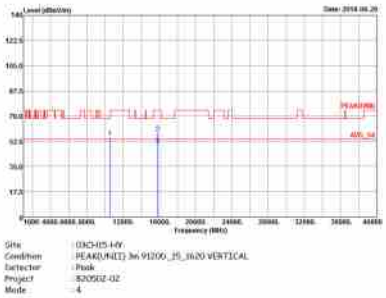
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH58 5290MHz - R	
1+2	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

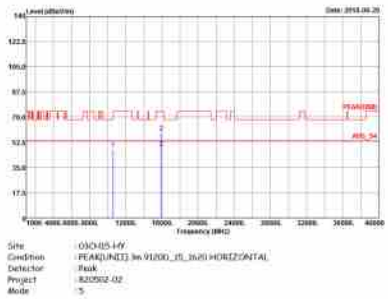
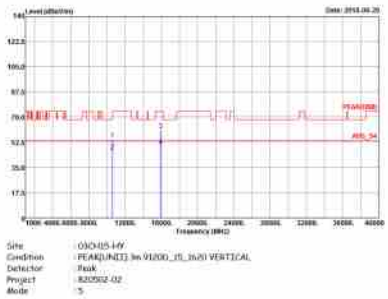
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH58 5290MHz - L	
1+2	Vertical	Fundamental
Peak		
Avg.		Left blank

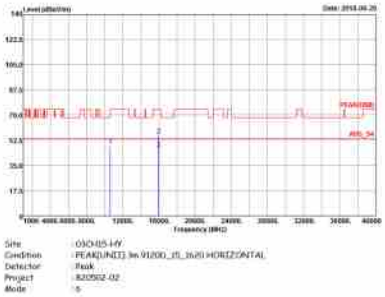
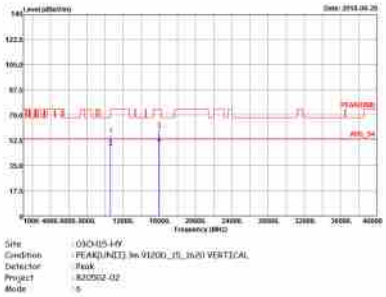
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH58 5290MHz - R	
1+2	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

Band 2 - 5250~5350MHz

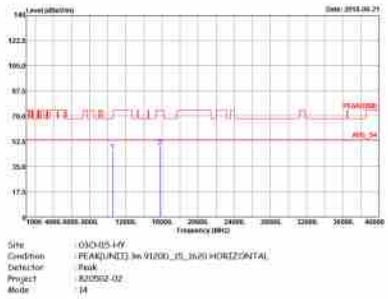
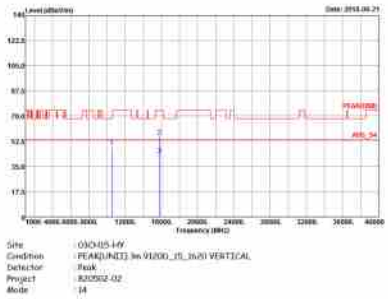
WIFI 802.11a (Harmonic @ 3m)

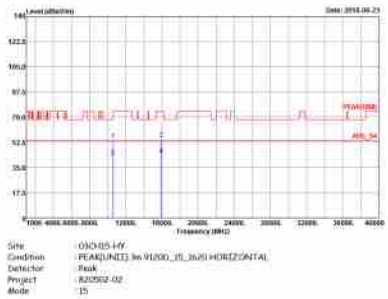
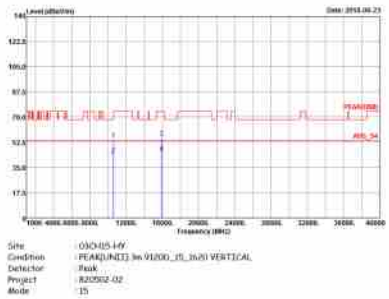
WIFI	Band 2 5250~5350MHz Harmonic @ 3m	
ANT	802.11a CH52 5260MHz	
1+2	Horizontal	Vertical
Peak Avg.		

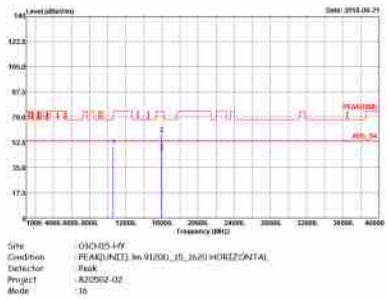
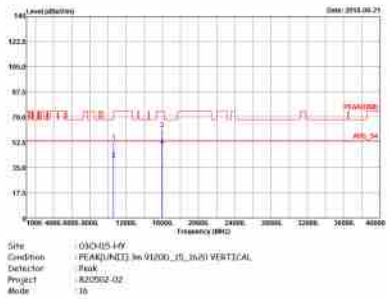
WIFI	Band 2 5250~5350MHz Harmonic @ 3m	
ANT	802.11a CH60 5300MHz	
1+2	Horizontal	Vertical
Peak Avg.		

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

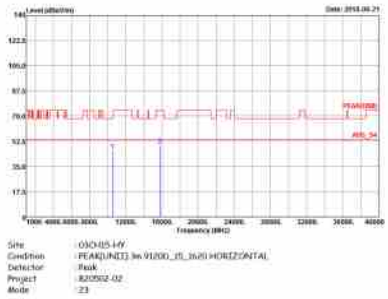
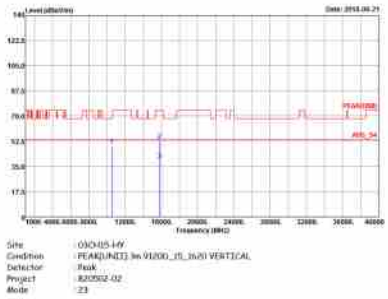
Band 2 5250~5350MHz
WIFI 802.11n HT20 (Harmonic @ 3m)

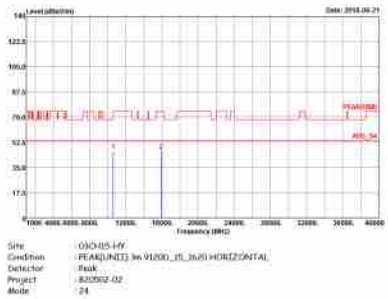
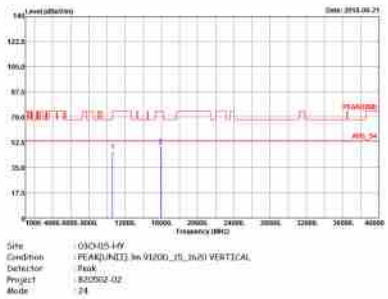
WIFI	Band 2 5250~5350MHz Harmonic @ 3m	
ANT	802.11n HT20 CH52 5260MHz	
1+2	Horizontal	Vertical
Peak Avg.		

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

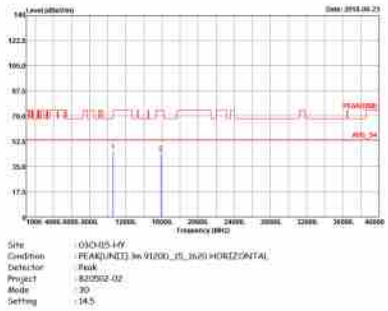
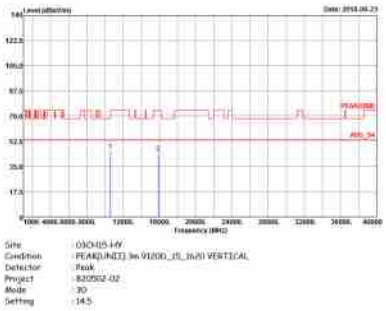
WIFI	Band 2 5250~5350MHz Harmonic @ 3m	
ANT	802.11n HT20 CH64 5320MHz	
1+2	Horizontal	Vertical
Peak Avg.		

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

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

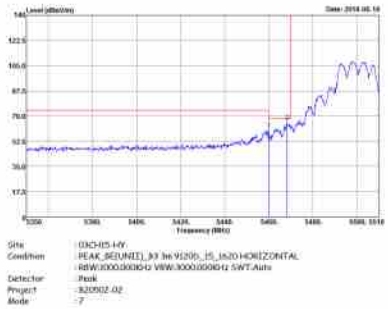
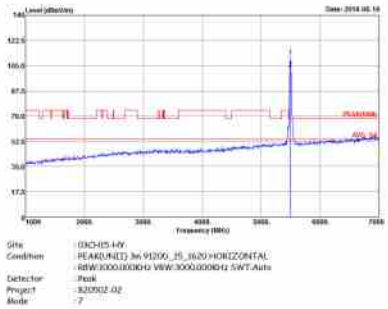
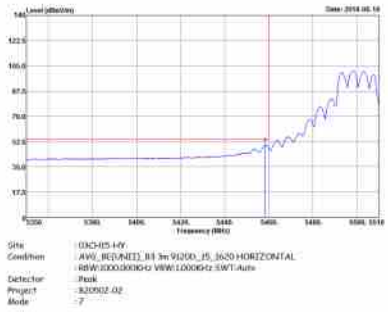
WIFI	Band 2 5250~5350MHz Harmonic @ 3m	
ANT	802.11n HT40 CH62 5310	
1+2	Horizontal	Vertical
Peak Avg.		

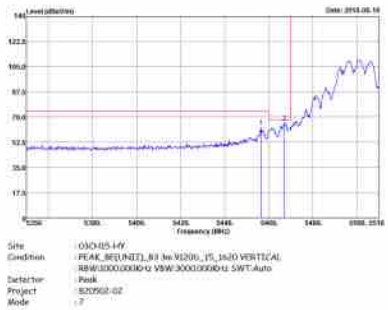
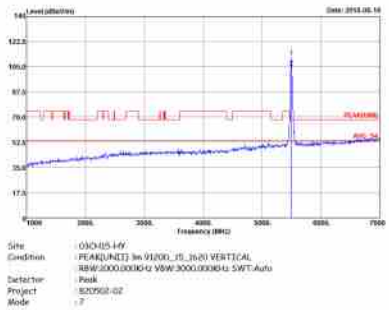
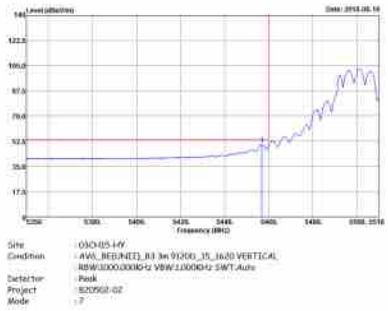
Band 2 5250~5350MHz
WIFI 802.11ac VHT80 (Harmonic @ 3m)

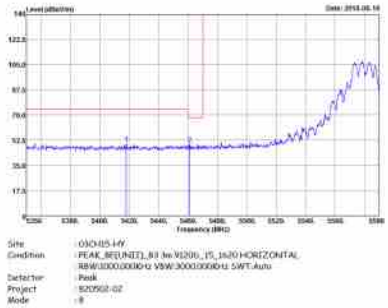
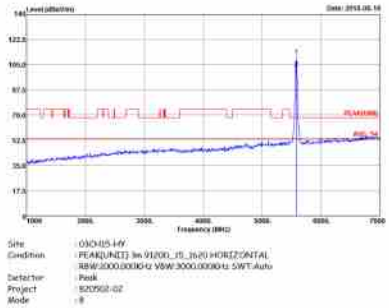
WIFI	Band 2 5250~5350MHz Harmonic @ 3m	
ANT	802.11ac VHT80 CH58 5290MHz	
1+2	Horizontal	Vertical
Peak Avg.		

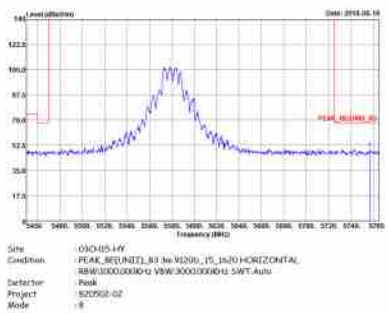
Band 3 - 5470~5725MHz

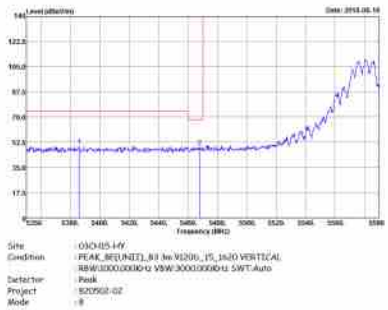
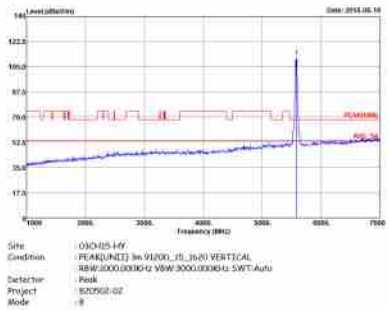
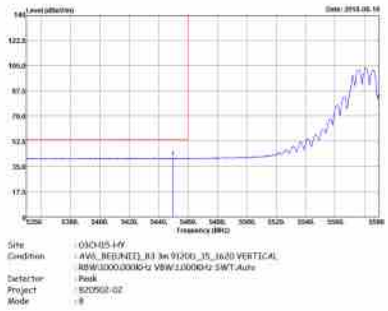
WIFI 802.11a (Band Edge @ 3m)

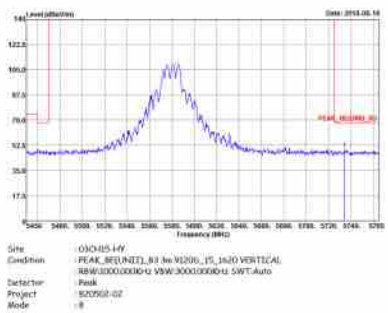
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH100 5500MHz	
1+2	Horizontal	Fundamental
Peak		
Avg.		Left blank

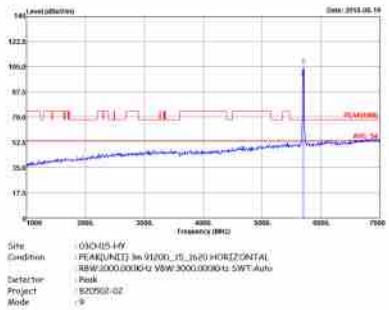
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH100 5500MHz	
1+2	Vertical	Fundamental
Peak		
Avg.		Left blank

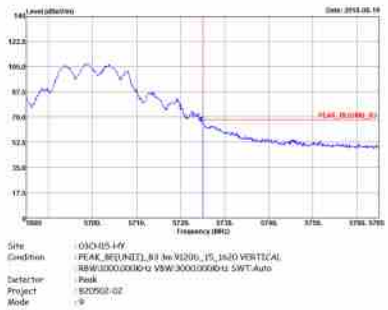
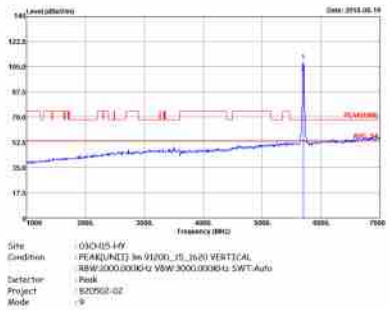
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH116 5580MHz - L	
1+2	Horizontal	Fundamental
Peak		
Avg.		Left blank

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

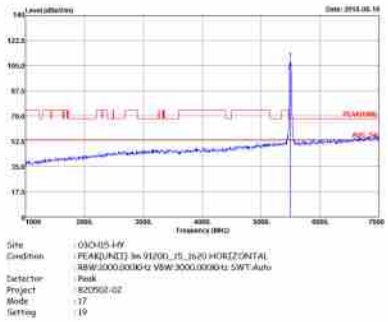
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH116 5580MHz - L	
1+2	Vertical	Fundamental
Peak		
Avg.		Left blank

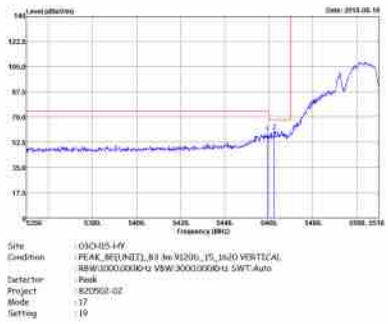
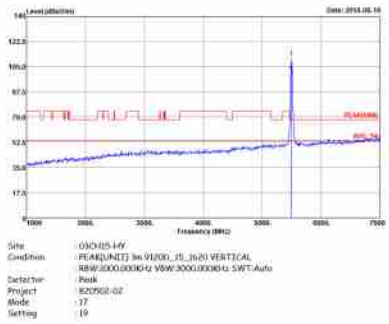
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH116 5580MHz - R	
1+2	Vertical	Fundamental
Peak		Left blank

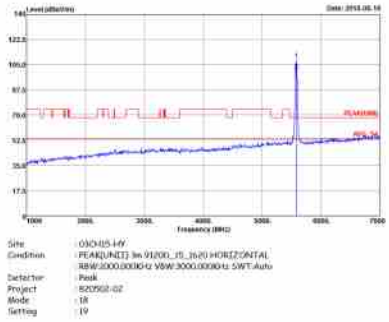
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH140 5700MHz	
1+2	Horizontal	Fundamental
Peak		

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

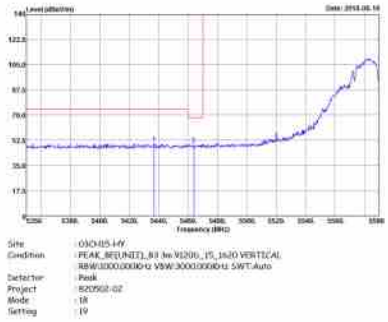
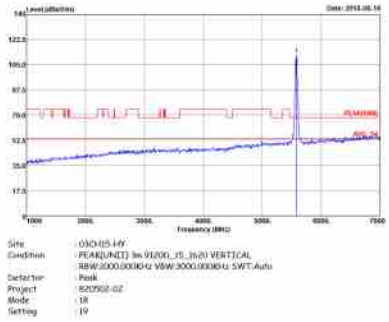
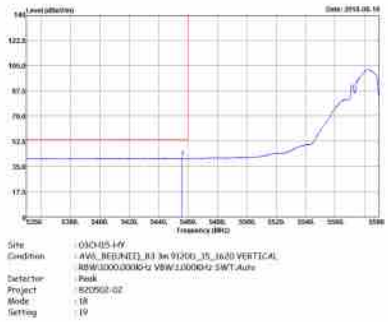
Band 3 5470~5725MHz
WIFI 802.11n HT20 (Band Edge @ 3m)

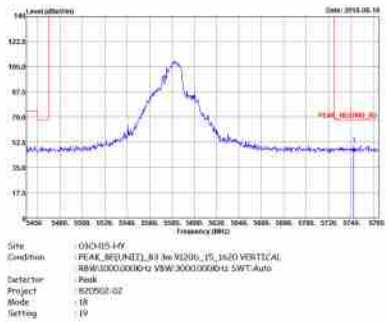
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT20 CH100 5500MHz	
1+2	Horizontal	Fundamental
Peak		
Avg.		Left blank

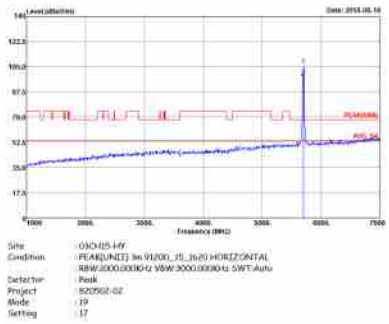
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT20 CH100 5500MHz	
1+2	Vertical	Fundamental
Peak		
Avg.		Left blank

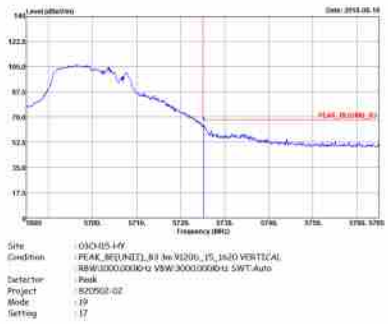
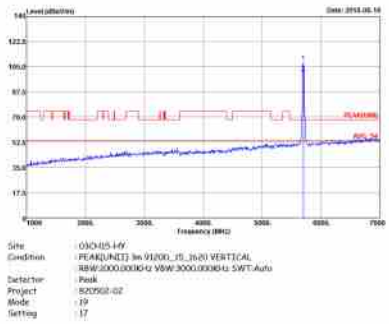
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT20 CH116 5580MHz - L	
1+2	Horizontal	Fundamental
Peak		
Avg.		Left blank

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

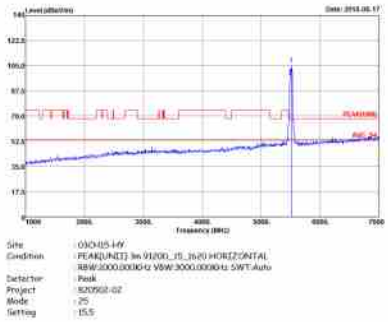
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT20 CH116 5580MHz - L	
1+2	Vertical	Fundamental
Peak		
Avg.		Left blank

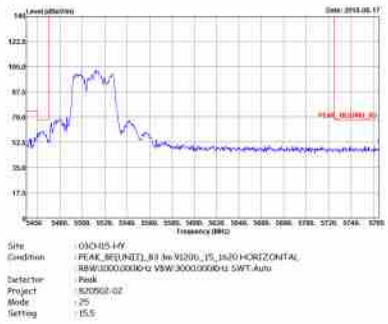
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT20 CH116 5580MHz - R	
1+2	Vertical	Fundamental
Peak		Left blank

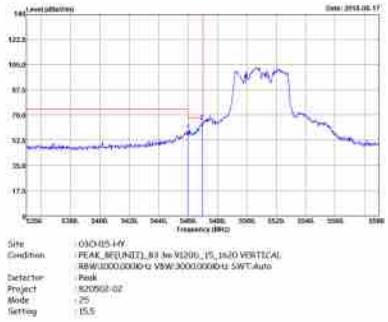
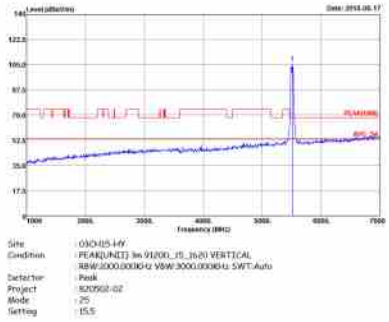
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT20 CH140 5700MHz	
1+2	Horizontal	Fundamental
Peak		

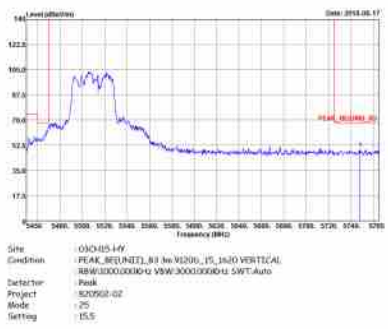
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT20 CH140 5700MHz	
1+2	Vertical	Fundamental
Peak.		

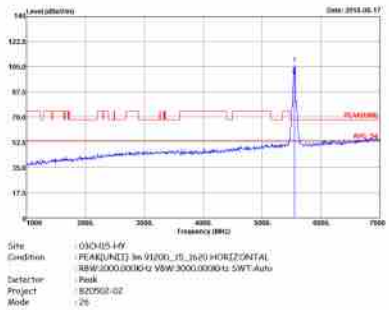
Band 3 5470~5725MHz
WIFI 802.11n HT40 (Band Edge @ 3m)

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

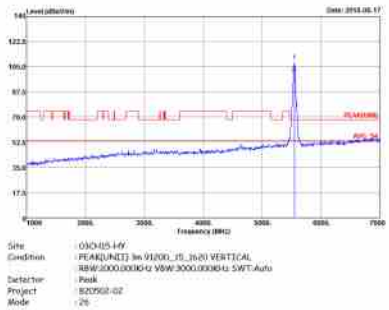
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH102 5510MHz - R	
1+2	Horizontal	Fundamental
Peak		Left blank

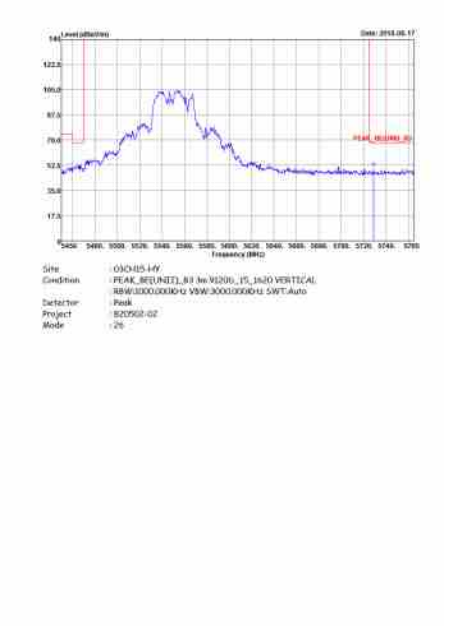
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH102 5510MHz - L	
1+2	Vertical	Fundamental
Peak		
Avg.		Left blank

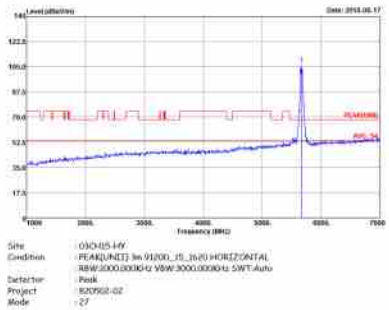
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH102 5510MHz - R	
1+2	Vertical	Fundamental
Peak		Left blank

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

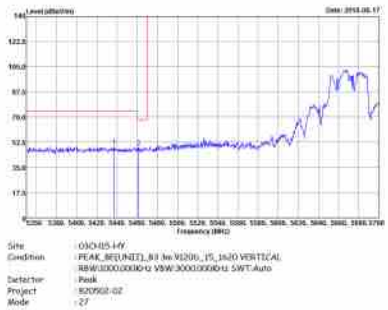
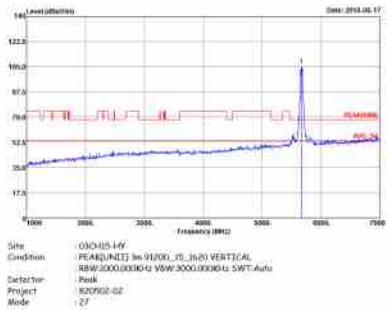
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH110 5550MHz - R	
1+2	Horizontal	Fundamental
Peak		Left blank

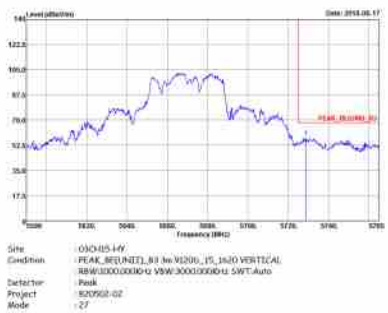
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH110 5550MHz - L	
1+2	Vertical	Fundamental
Peak		
Avg.		Left blank

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

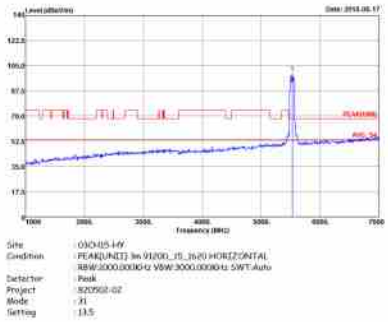
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH134 5670MHz - L	
1+2	Horizontal	Fundamental
Peak		
Avg.		Left blank

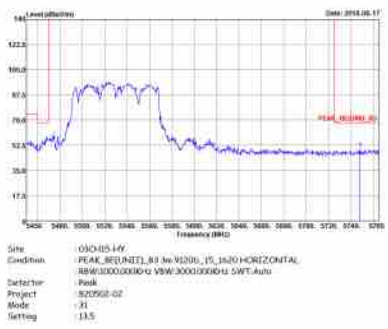
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH134 5670MHz - R	
1+2	Horizontal	Fundamental
Peak		Left blank

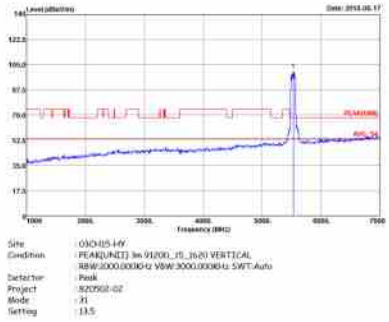
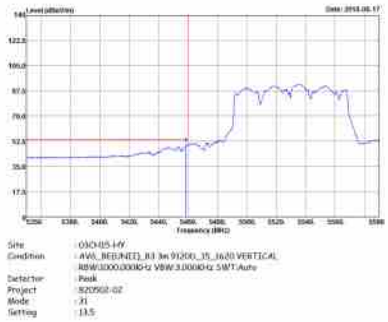
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH134 5670MHz - L	
1+2	Vertical	Fundamental
Peak		
Avg.		Left blank

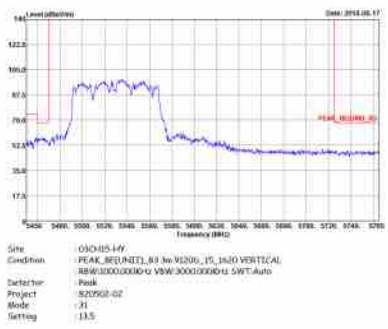
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH134 5670MHz - R	
1+2	Vertical	Fundamental
Peak		Left blank

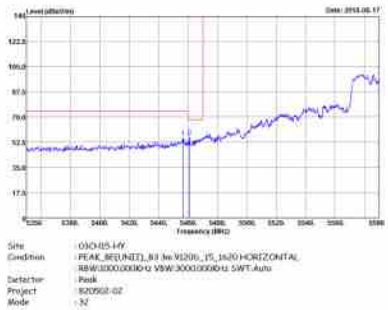
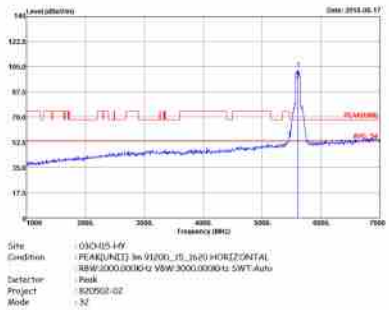
Band 3 5470~5725MHz
WIFI 802.11ac VHT80 (Band Edge @ 3m)

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

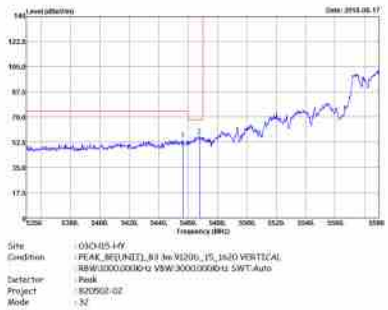
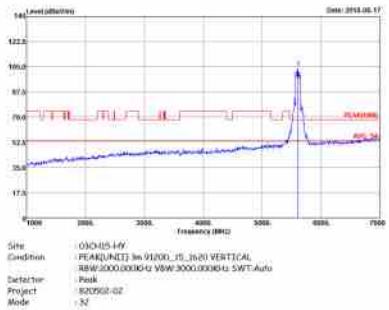
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH106 5530MHz - R	
1+2	Horizontal	Fundamental
Peak		Left blank

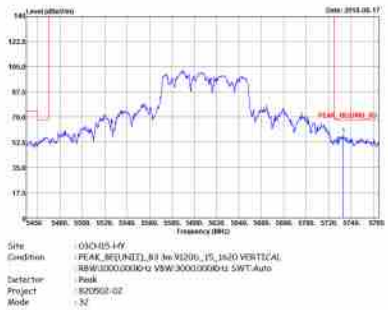
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH106 5530MHz - L	
1+2	Vertical	Fundamental
Peak		
Avg.		Left blank

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

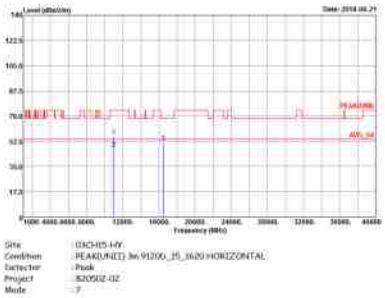
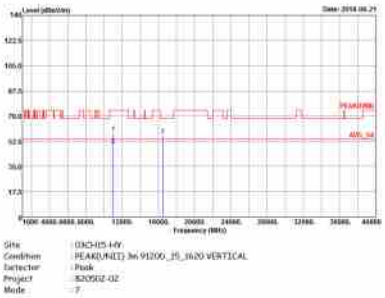
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH122 5610MHz - R	
1+2	Horizontal	Fundamental
Peak		Left blank

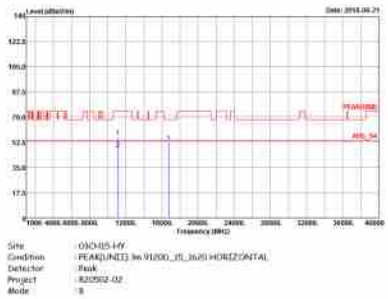
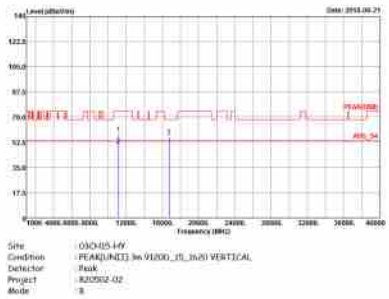
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH122 5610MHz - L	
1+2	Vertical	Fundamental
Peak		
Avg.		Left blank

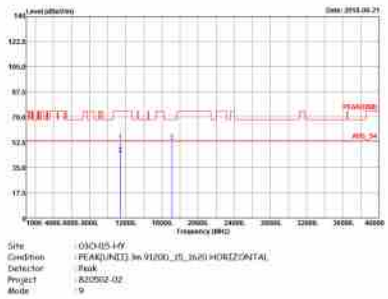
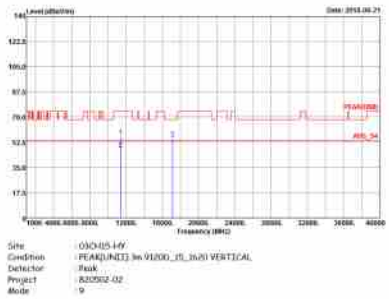
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH122 5610MHz - R	
1+2	Vertical	Fundamental
Peak		Left blank

Band 3 - 5470~5725MHz

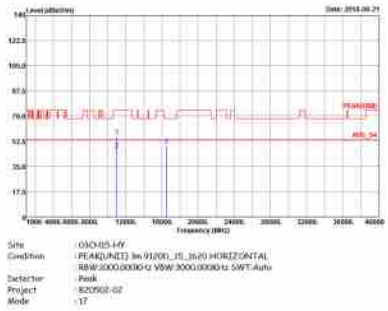
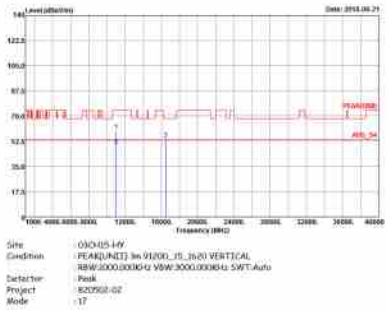
WIFI 802.11a (Harmonic @ 3m)

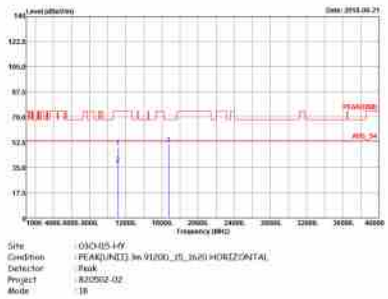
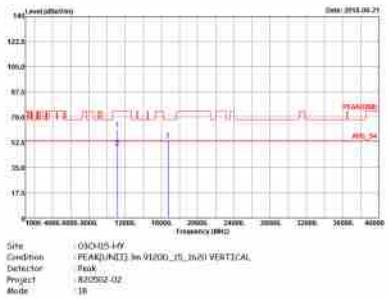
WIFI	Band 3 5470~5725MHz Harmonic @ 3m	
ANT	802.11a CH100 5500MHz	
1+2	Horizontal	Vertical
Peak Avg.		

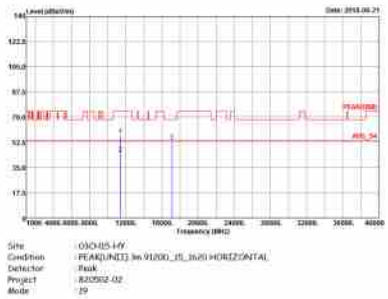
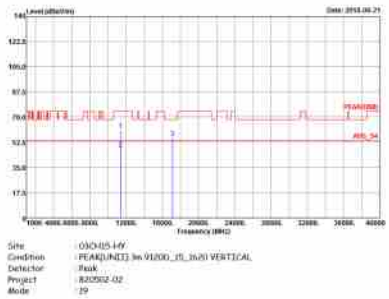
WIFI	Band 3 5470~5725MHz Harmonic @ 3m	
ANT	802.11a CH116 5580MHz	
1+2	Horizontal	Vertical
Peak Avg.		

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

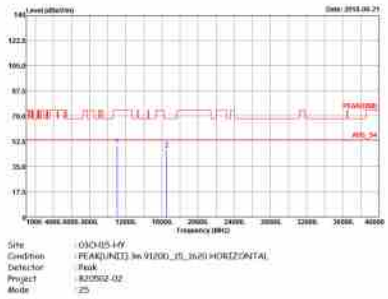
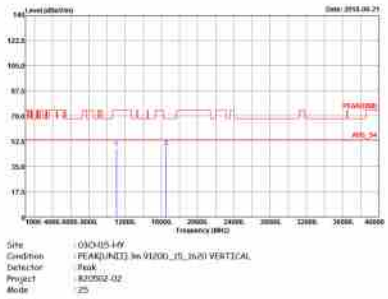
Band 3 5470~5725MHz
WIFI 802.11n HT20 (Harmonic @ 3m)

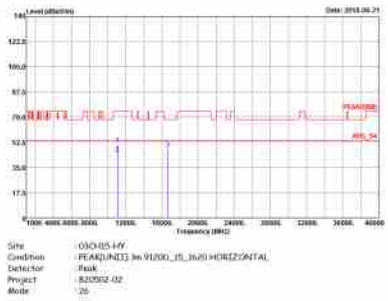
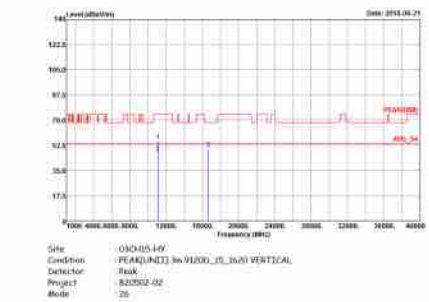
WIFI	Band 3 5470~5725MHz Harmonic @ 3m	
ANT	802.11n HT20 CH100 5500MHz	
1+2	Horizontal	Vertical
Peak Avg.		

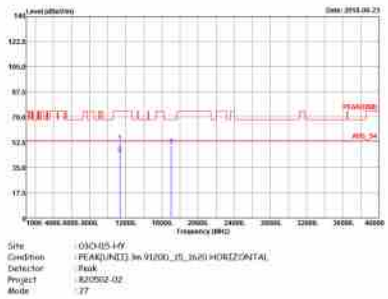
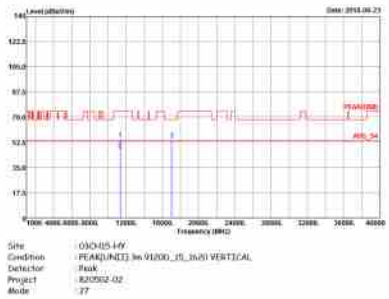
WIFI	Band 3 5470~5725MHz Harmonic @ 3m	
ANT	802.11n HT20 CH116 5580MHz	
1+2	Horizontal	Vertical
Peak Avg.		

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

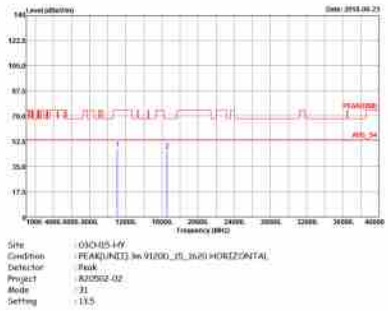
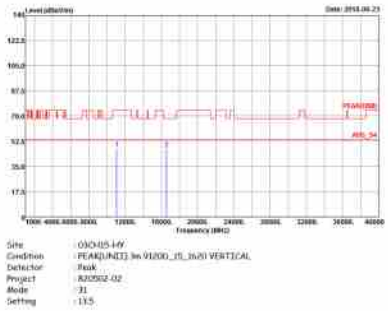
Band 3 5470~5725MHz
WIFI 802.11n HT40 (Harmonic @ 3m)

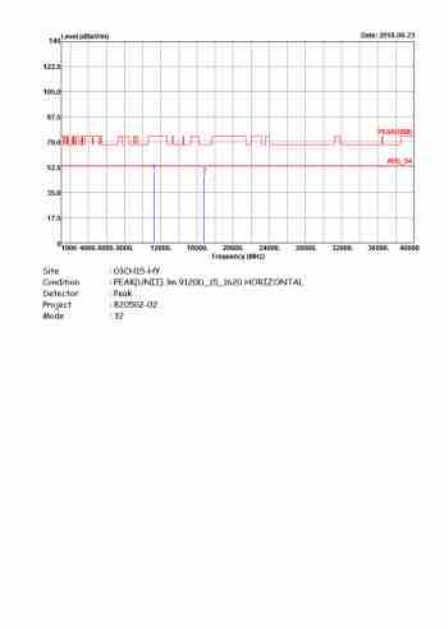
WIFI	Band 3 5470~5725MHz Harmonic @ 3m	
ANT	802.11n HT40 CH102 5510MHz	
1+2	Horizontal	Vertical
Peak Avg.		

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.		

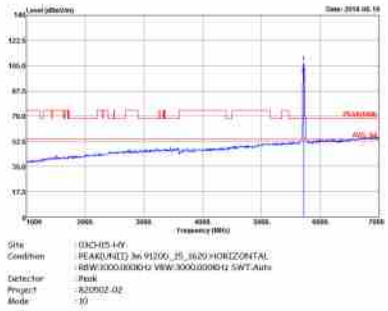
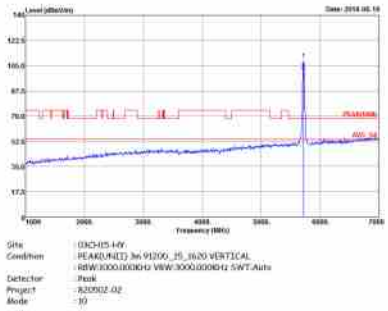
Band 3 5470~5725MHz
WIFI 802.11ac VHT80 (Harmonic @ 3m)

WIFI	Band 3 5470~5725MHz Harmonic @ 3m	
ANT	802.11ac VHT80 CH106 5530MHz	
1+2	Horizontal	Vertical
Peak Avg.		

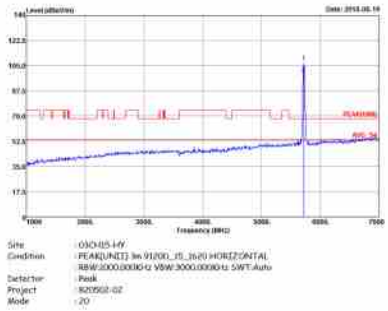
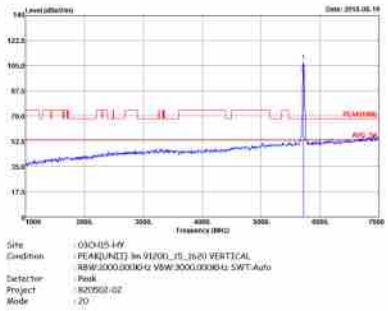
WIFI	Band 3 5470~5725MHz Harmonic @ 3m	
ANT	802.11ac VHT80 CH122 5610MHz	
1+2	Horizontal	Vertical
Peak Avg.		

Band 3 - Straddle Channel

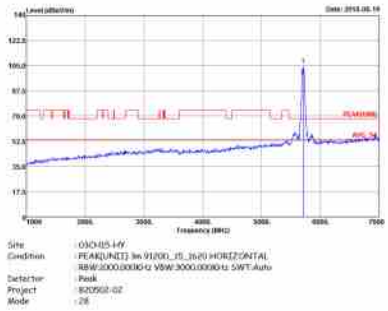
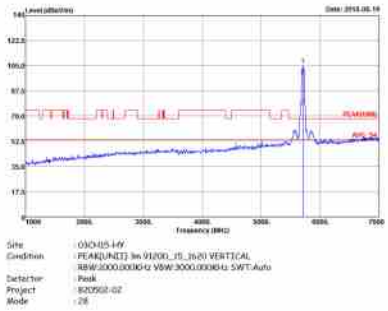
WIFI 802.11a (Fundamental @ 3m)

WIFI	Band 3 Straddle Channel Fundamental @ 3m	
ANT	802.11a CH144 5720MHz	
1+2	Horizontal	Vertical
Peak Avg.		

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

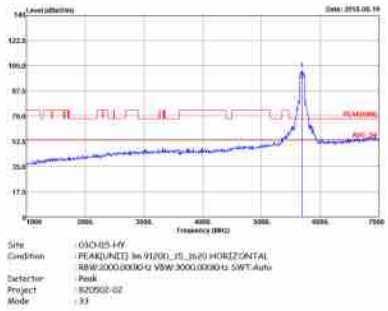
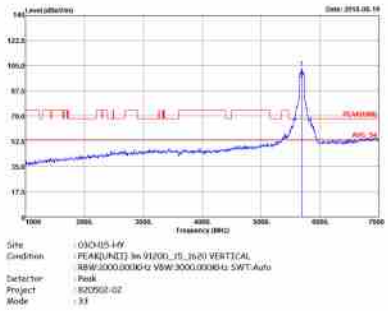
WIFI	Band 3 Straddle Channel Fundamental @ 3m	
ANT	802.11n HT20 CH144 5720MHz	
1+2	Horizontal	Vertical
Peak Avg.		

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

WIFI	Band 3 Straddle Channel Fundamental @ 3m	
ANT	802.11n HT40 CH142 5710MHz	
1+2	Horizontal	Vertical
Peak Avg.		

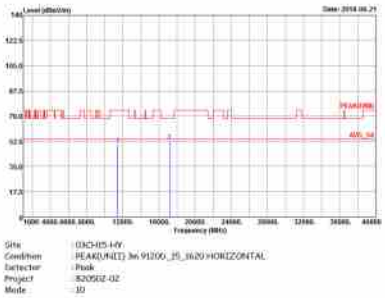
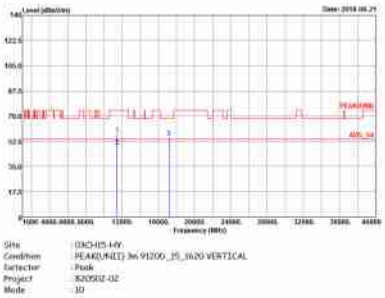
Band 3 – Straddle Channel

WIFI 802.11ac VHT80 (Fundamental @ 3m)

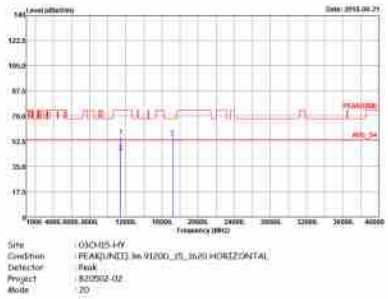
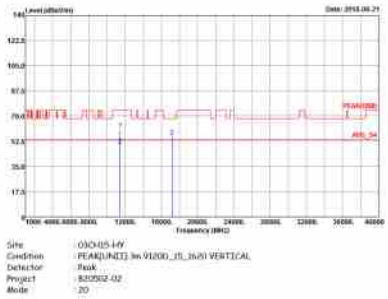
WIFI	Band 3 Straddle Channel Fundamental @ 3m	
ANT	802.11ac VHT80 CH138 5690MHz	
1+2	Horizontal	Vertical
Peak Avg.		

Band 3 - Straddle Channel

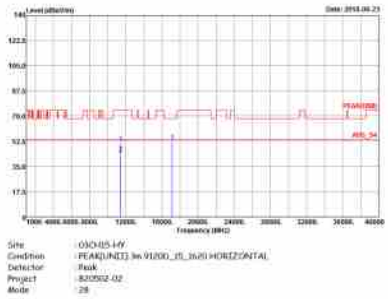
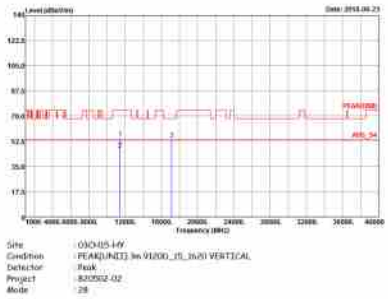
WIFI 802.11a (Harmonic @ 3m)

WIFI	Band 3 Straddle Channel Harmonic @ 3m	
ANT	802.11a CH144 5720MHz	
1+2	Horizontal	Vertical
Peak Avg.		

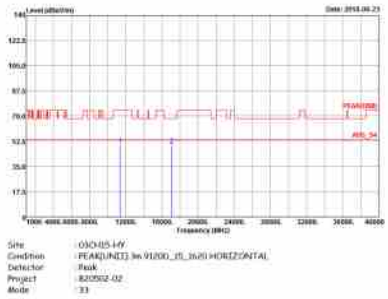
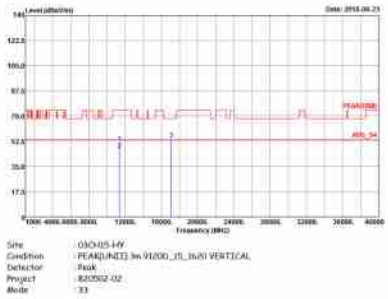
Band 3 – Straddle Channel
WIFI 802.11n HT20 (Harmonic @ 3m)

WIFI	Band 3 Straddle Channel Harmonic @ 3m	
ANT	802.11n HT20 CH144 5720MHz	
1+2	Horizontal	Vertical
Peak Avg.		

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

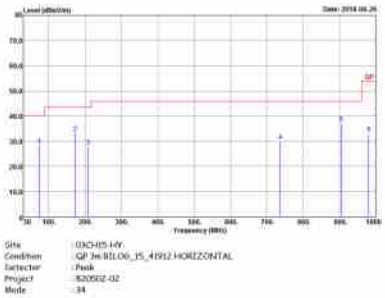
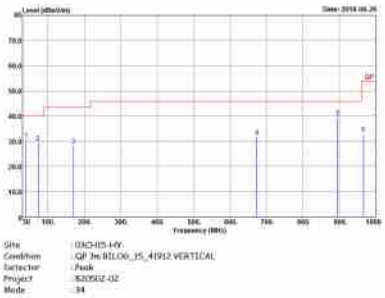
WIFI	Band 3 Straddle Channel Harmonic @ 3m	
ANT	802.11n HT40 CH142 5710MHz	
1+2	Horizontal	Vertical
Peak Avg.		

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

WIFI	Band 3 Straddle Channel Harmonic @ 3m	
ANT	802.11ac VHT80 CH138 5690MHz	
1+2	Horizontal	Vertical
Peak Avg.		

Emission below 1GHz

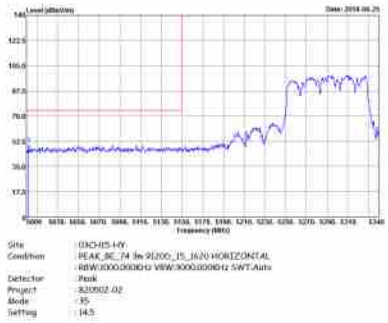
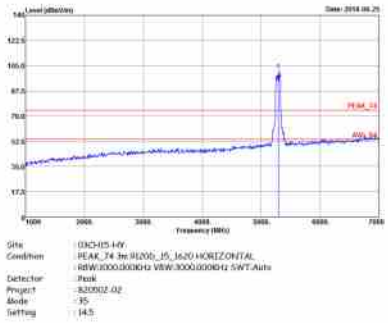
5GHz WIFI 802.11ac VHT80 (LF)

WIFI	5GHz WIFI	
ANT	802.11ac VHT80 LF	
1+2	Horizontal	Vertical
QP / Peak		

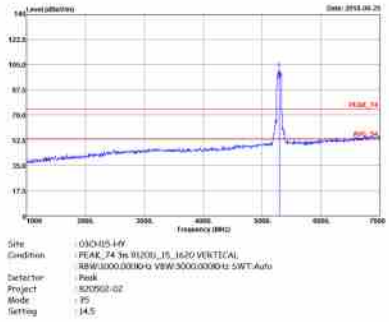
<For WPC Charging Mode>

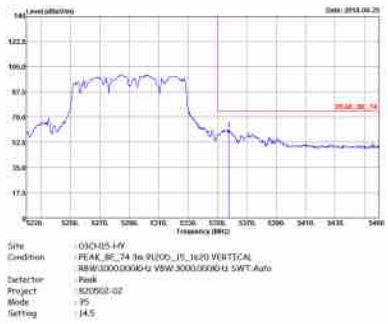
Band 2 - 5250~5350MHz

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

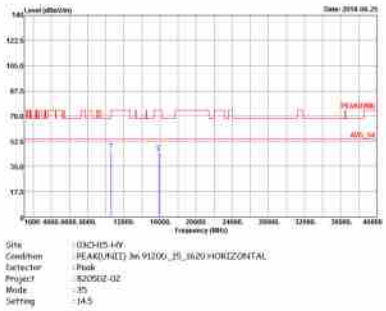
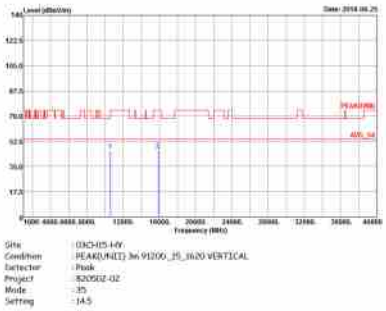
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH58 5290MHz - R	
1+2	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

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

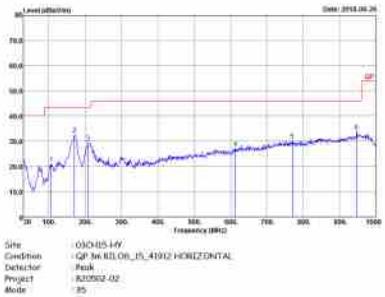
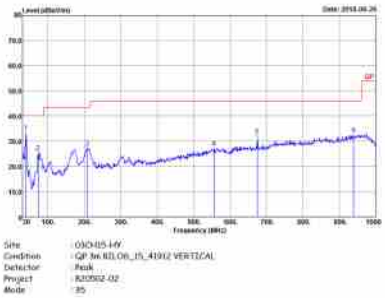
Band 2 - 5250~5350MHz

WIFI 802.11ac VHT80 (Harmonic @ 3m)

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

Emission below 1GHz

5GHz WIFI 802.11ac VHT80 (LF)

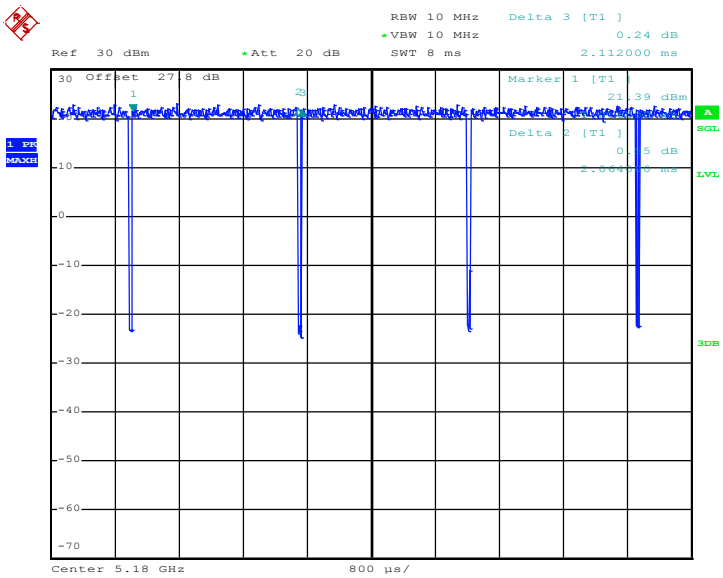
WIFI	5GHz WIFI	
ANT	802.11ac VHT80 LF	
1+2	Horizontal	Vertical
QP / Peak		

Appendix E. Duty Cycle Plots

Antenna	Band	Duty Cycle(%)	T(us)	1/T(kHz)	VBW Setting	Duty Factor(dB)
1	802.11a	97.73	2064.00	0.48	1kHz	0.10
2	802.11a	97.73	2064.00	0.48	1kHz	0.10
1+2	802.11a for Antenna 1	97.73	2064.00	0.48	1kHz	0.10
1+2	802.11a for Antenna 2	97.73	2064.00	0.48	1kHz	0.10
1	5GHz 802.11n HT20	97.56	1920.00	0.52	1kHz	0.11
2	5GHz 802.11n HT20	97.56	1920.00	0.52	1kHz	0.00
1+2	5GHz 802.11n HT20 for Antenna 1	97.56	1920.00	0.52	1kHz	0.11
1+2	5GHz 802.11n HT20 for Antenna 2	97.56	1920.00	0.52	1kHz	0.11
1	5GHz 802.11n HT40	95.93	944.00	1.06	3kHz	0.18
2	5GHz 802.11n HT40	95.93	944.00	1.06	3kHz	0.18
1+2	5GHz 802.11n HT40 for Antenna 1	95.16	944.00	1.06	3kHz	0.22
1+2	5GHz 802.11n HT40 for Antenna 2	95.93	944.00	1.06	3kHz	0.18
1	5GHz 802.11ac VHT20	97.58	1936.00	0.52	1kHz	0.11
2	5GHz 802.11ac VHT20	97.58	1936.00	0.52	1kHz	0.11
1+2	5GHz 802.11ac VHT20 for Antenna 1	97.56	1920.00	0.52	1kHz	0.11
1+2	5GHz 802.11ac VHT20 for Antenna 2	97.58	1936.00	0.52	1kHz	0.11
1	5GHz 802.11ac VHT40	95.97	952.00	1.05	3kHz	0.18
2	5GHz 802.11ac VHT40	95.93	944.00	1.06	3kHz	0.18
1+2	5GHz 802.11ac VHT40 for Antenna 1	95.97	952.00	1.05	3kHz	0.18
1+2	5GHz 802.11ac VHT40 for Antenna 2	95.93	944.00	1.06	3kHz	0.18
1	5GHz 802.11ac VHT80	92.00	460.00	2.17	3kHz	0.36
2	5GHz 802.11ac VHT80	91.63	460.00	2.17	3kHz	0.38
1+2	5GHz 802.11ac VHT80 for Antenna 1	92.00	460.00	2.17	3kHz	0.36
1+2	5GHz 802.11ac VHT80 for Antenna 2	91.20	460.00	2.17	3kHz	0.40

<Ant. 1>

802.11a



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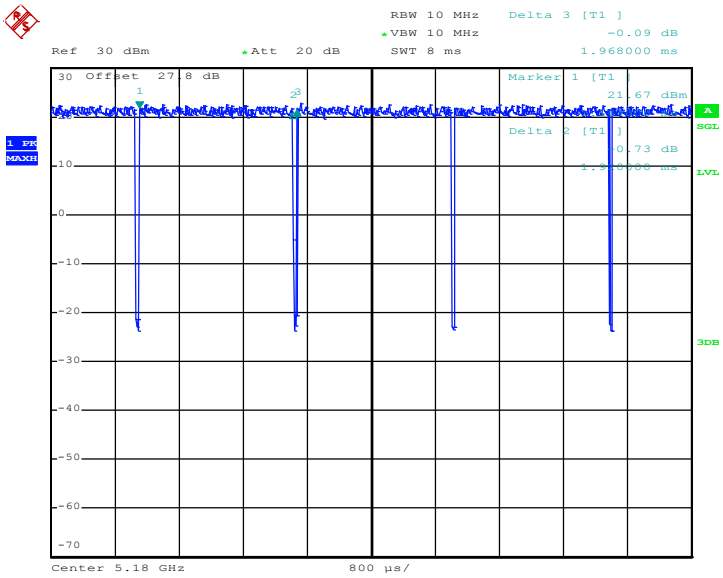
802.11n HT20



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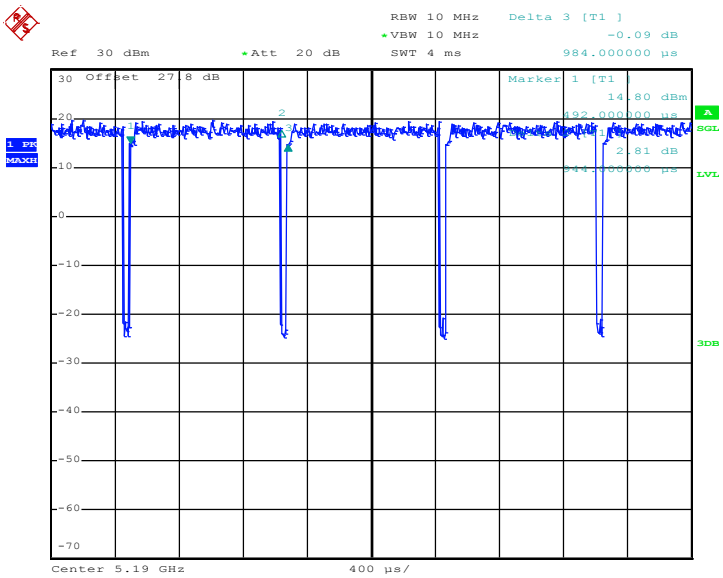
802.11n HT40



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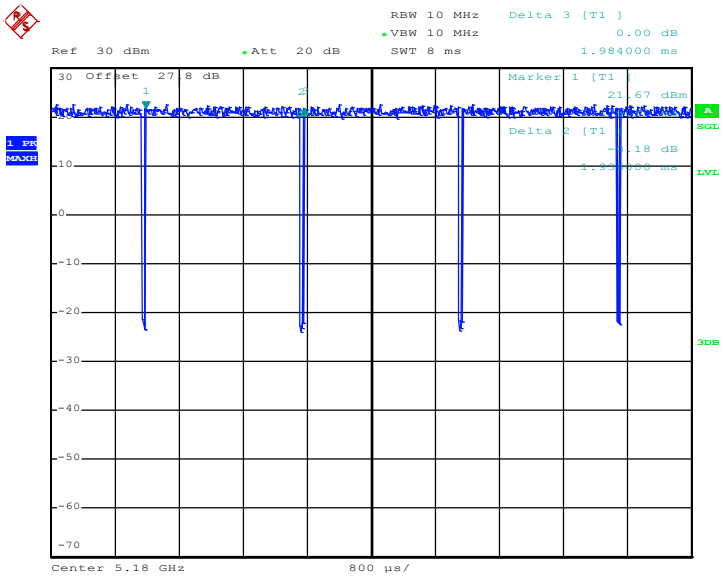
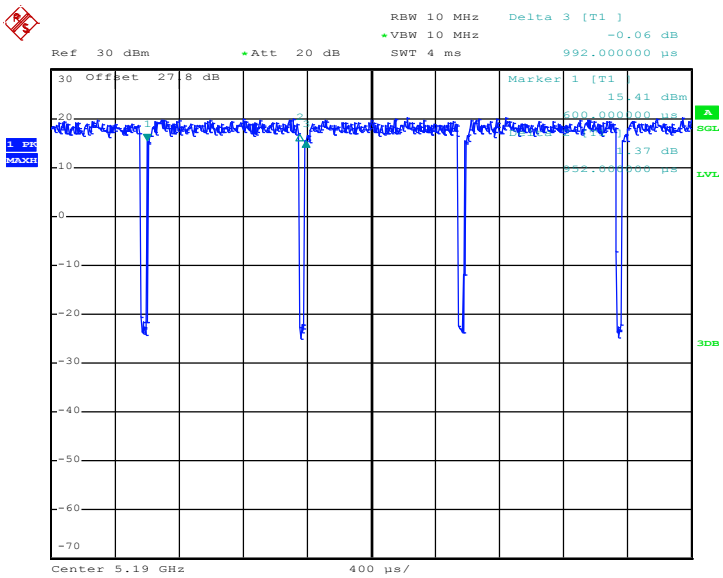
802.11ac VHT20



Date: 9.JUN.2018 00:56:12

802.11ac VHT40



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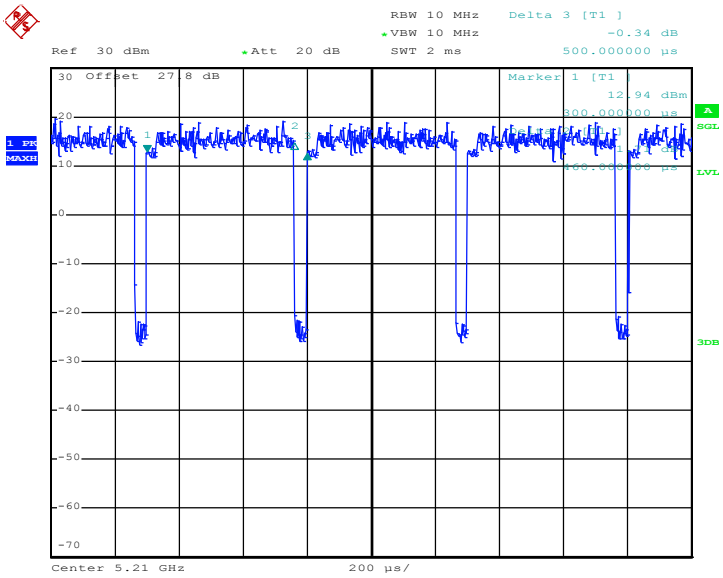
802.11ac VHT80



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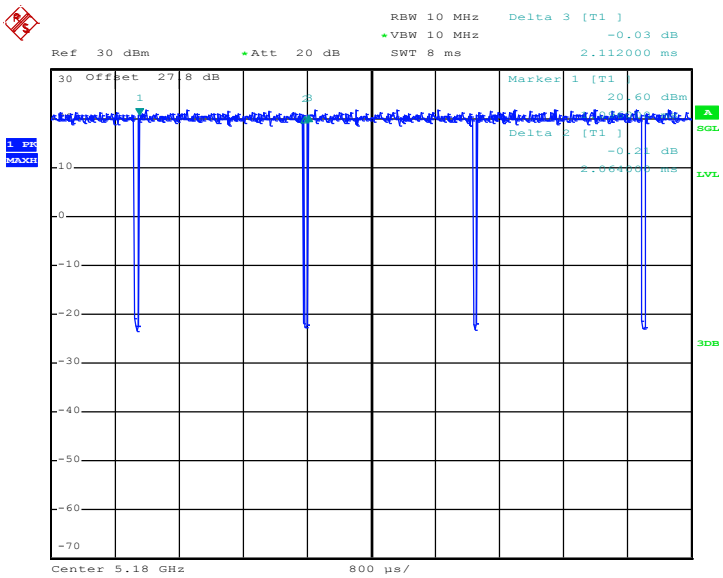
<Ant. 2>

802.11a



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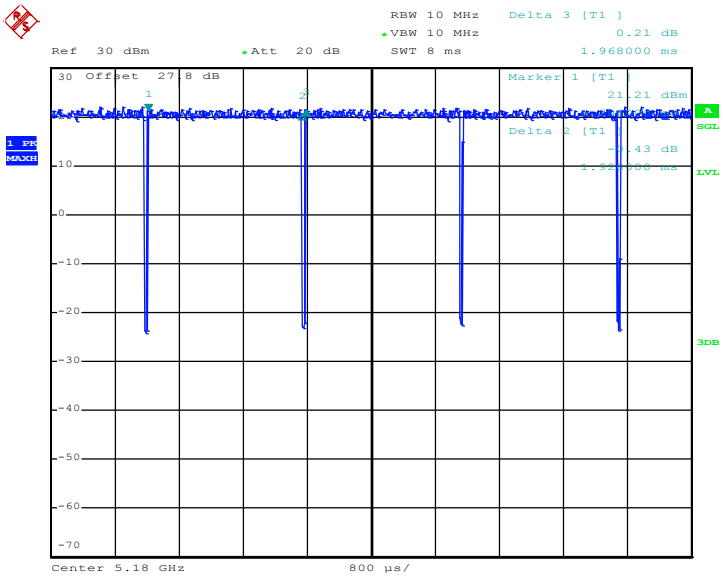
802.11n HT20



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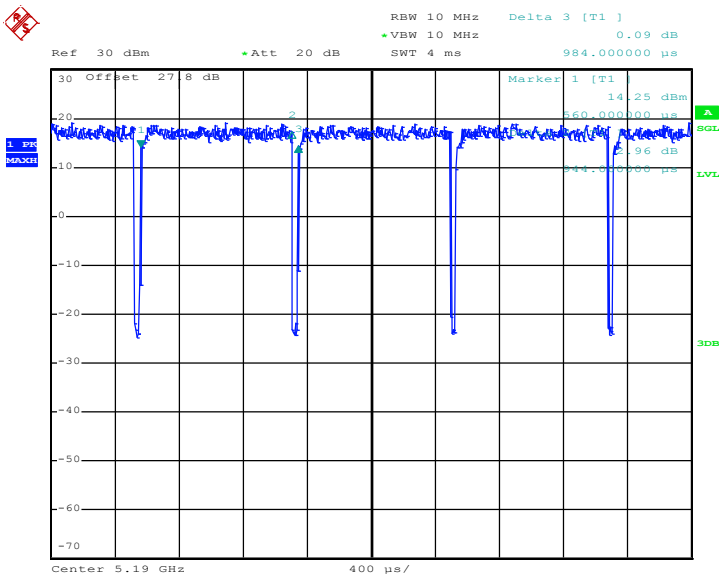

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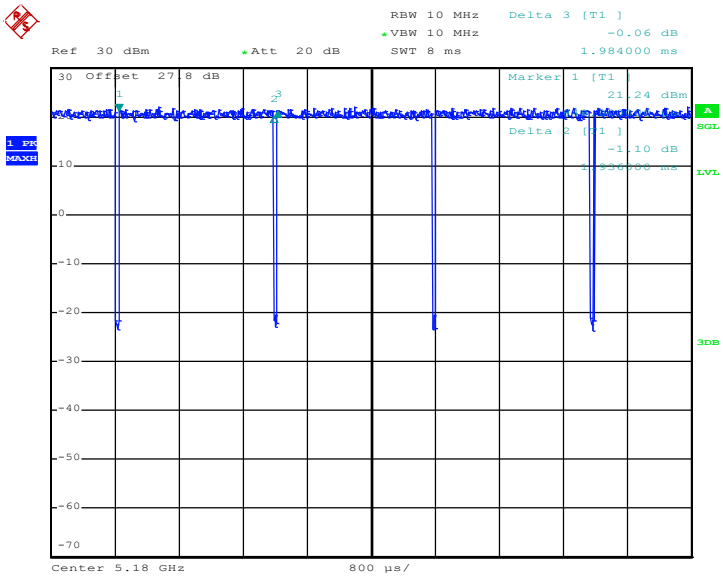

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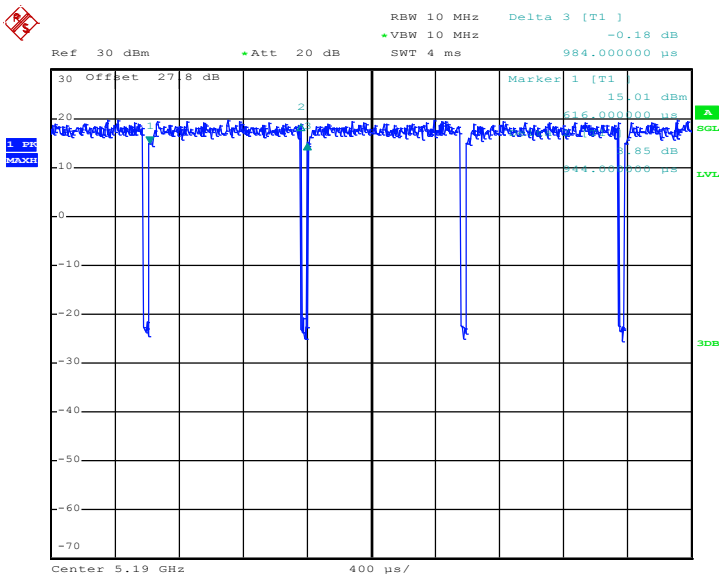
802.11ac VHT40



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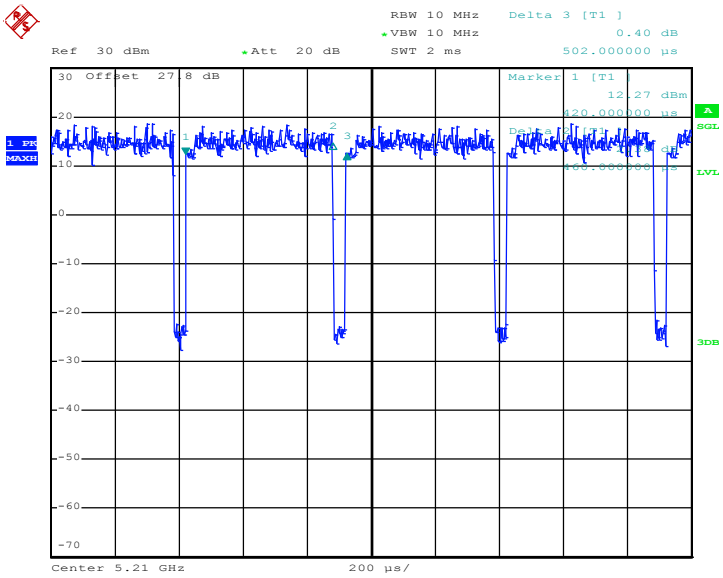
802.11ac VHT80



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MIMO <Ant. 1>

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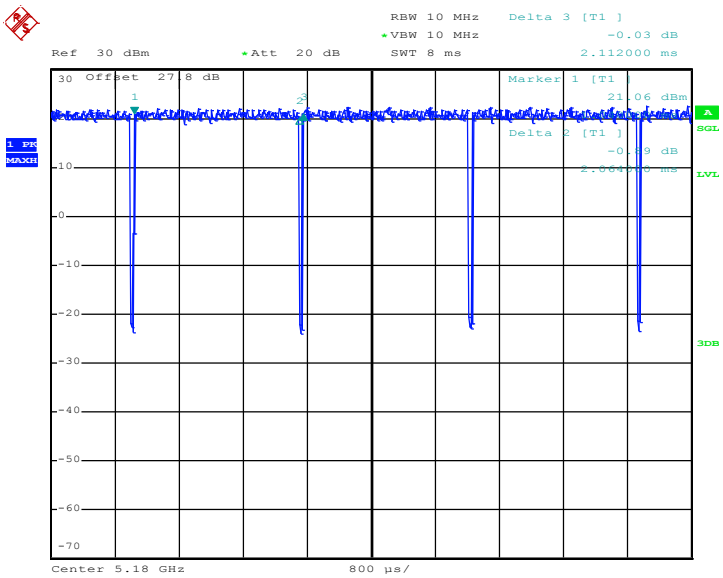

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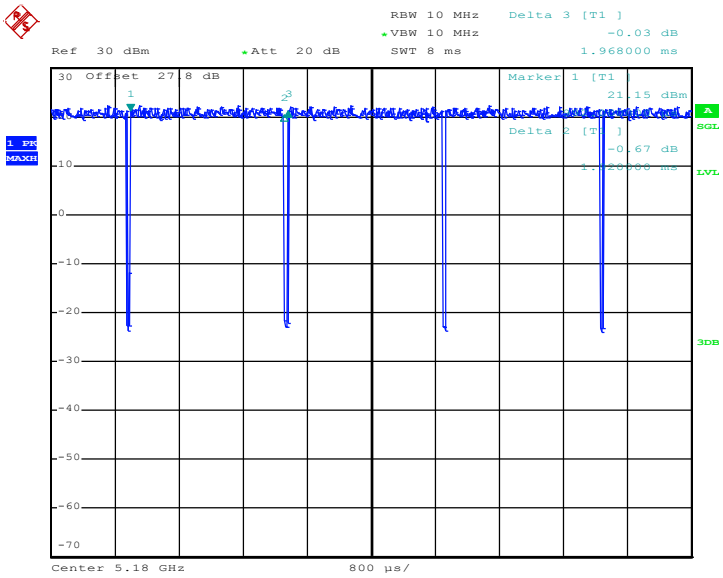
802.11n HT20



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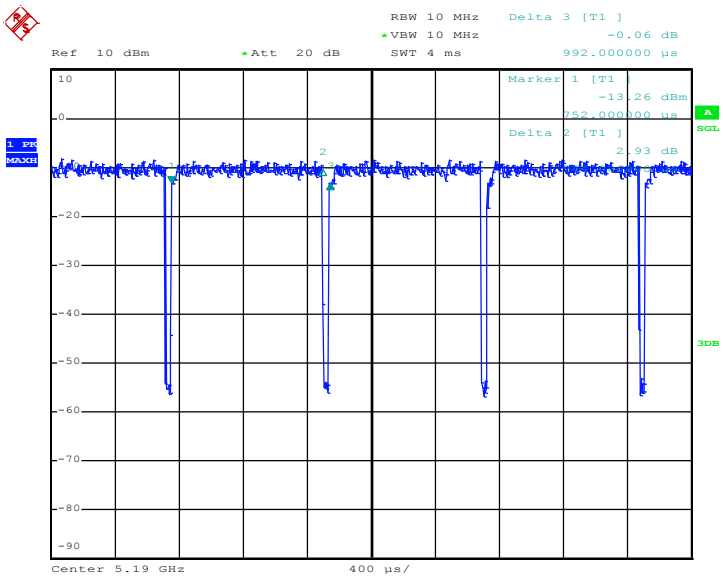
802.11n HT40



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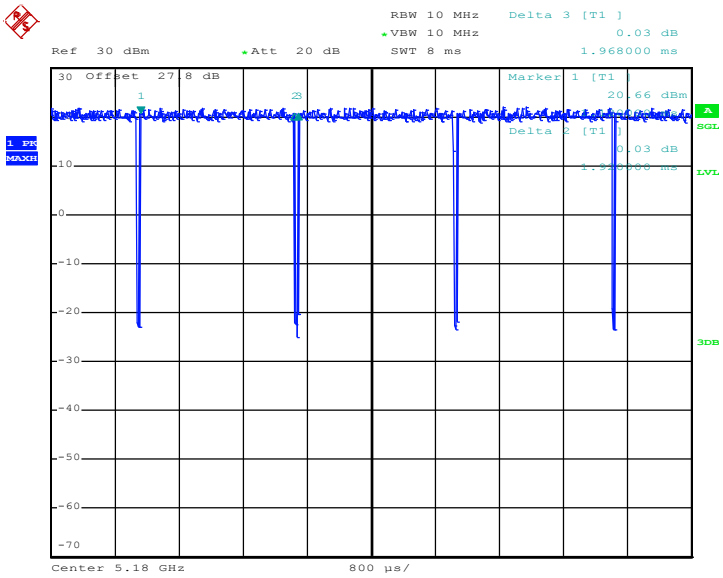
802.11ac VHT20



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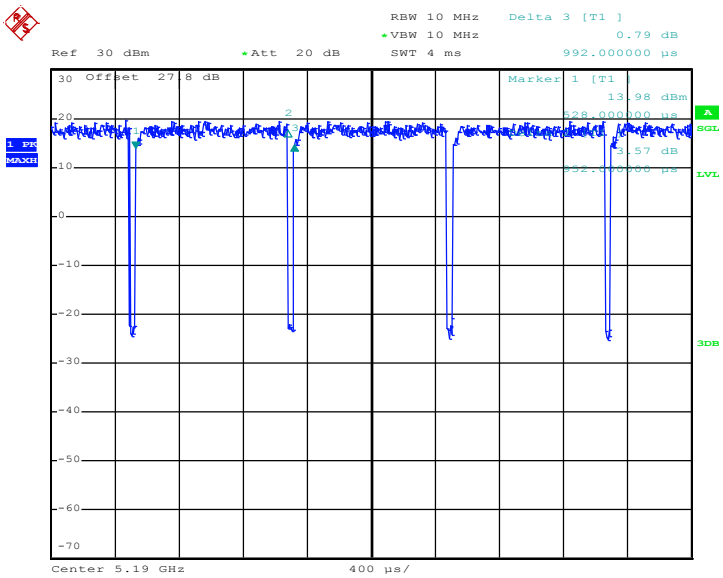

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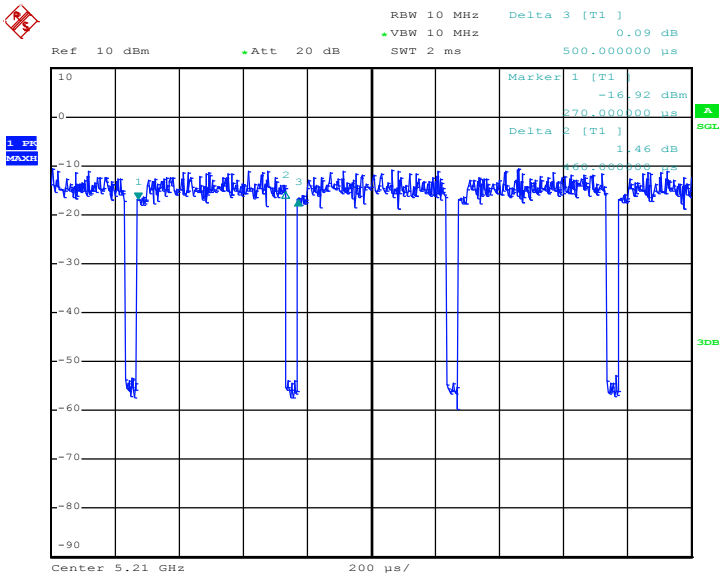
802.11ac VHT80



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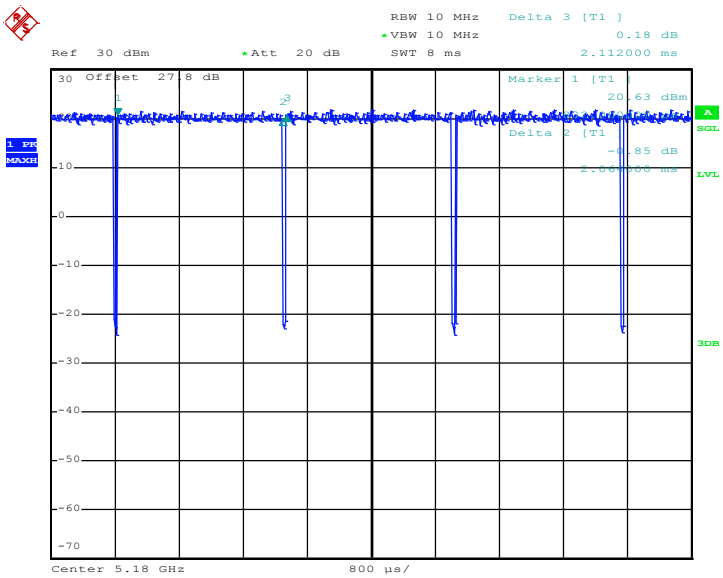
MIMO <Ant. 2>

802.11a



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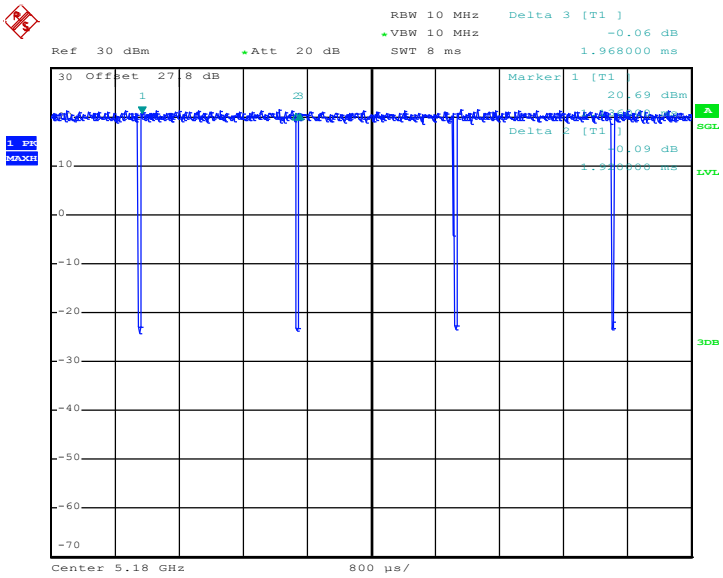
802.11n HT20



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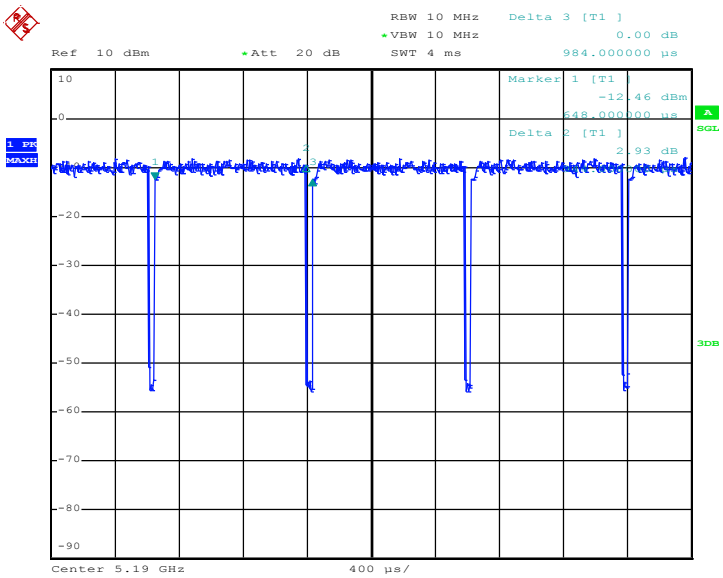
802.11n HT40



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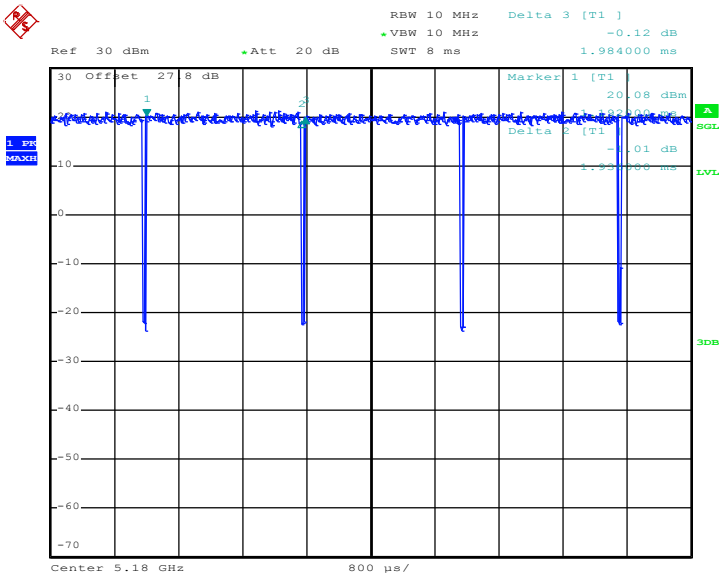
802.11ac VHT20



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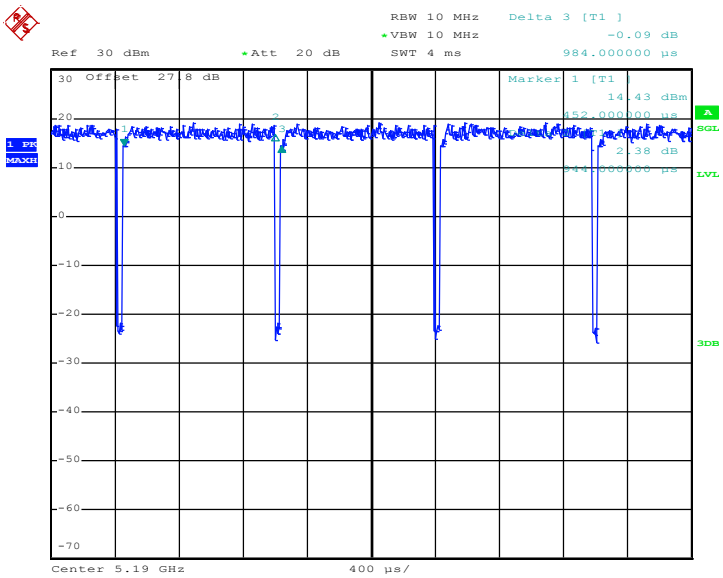
802.11ac VHT40



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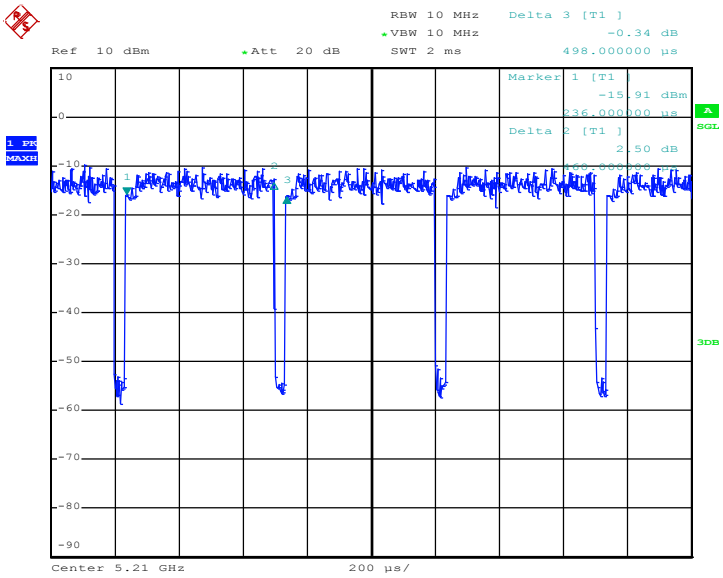
802.11ac VHT80



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THE END