FCC RF Test Report

APPLICANT	:	FUJITSU LIMITED
EQUIPMENT	:	STYLISTIC Q series Tablet PC
BRAND NAME	:	FUJITSU
MODEL NAME	:	Q738
FCC ID	:	EJE-WB0104
STANDARD	:	FCC Part 15 Subpart E §15.407
CLASSIFICATION	:	(NII) Unlicensed National Information Infrastructure

This is a partial report. The product was received on Nov. 18, 2017 and testing was completed on Nov. 29, 2017. 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 test results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL INC., the test report shall not be reproduced except in full.

Reviewed by: Joseph Lin / Supervisor

Approved by: Jones Tsai / Manager

Testing Laboratory 1190

SPORTON INTERNATIONAL INC.

No. 52, Hwa Ya 1st Rd., Hwa Ya Technology Park, Kwei-Shan District, Tao Yuan City, Taiwan, R.O.C.

TABLE OF CONTENTS

REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FR7N1801D	Rev. 01	Initial issue of report	Jan. 11, 2018

SUMMARY OF TEST RESULT

Report Section	FCC Rule	Description	Limit	Result	Remark
3.1	15.407(a)	Maximum Conducted Output Power	≤ 24 dBm (depend on band)	Pass	-
3.2	15.407(b)	Unwanted Emissions	≤ -17, -27 dBm (depend on band)&15.209(a)	Pass	Under limit 4.13 dB at 5143.780 MHz
3.3	15.203 & 15.407(a)	Antenna Requirement	N/A	Pass	-

1 General Description

1.1 Applicant

FUJITSU LIMITED

1-1, Kamikonadaka 4-chome, Nakahara-ku, Kawasaki, 211-8588 Japan

1.2 Manufacturer

FUJITSU LIMITED

1-1, Kamikonadaka 4-chome, Nakahara-ku, Kawasaki, 211-8588 Japan

1.3 Feature of Equipment Under Test

Bluetooth, Wi-Fi 2.4GHz 802.11b/g/n, Wi-Fi 5GHz 802.11a/n/ac, and 60GHz

Product Specification subjective to this standard	
Integrated WLAN Module	Brand Name: Intel Model Name: 8265NGW
Antenna Type	WLAN: <Ant. 1>: PIFA Antenna <Ant. 2>: PIFA Antenna Bluetooth: PIFA Antenna 60GHz: Integral Antenna

1.4 Modification of EUT

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

1.5 Testing Location

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

Test Site	SPORTON INTERNATIONAL INC.	
Test Site Location	No. 52, Hwa Ya 1st Rd., Hwa Ya Technology Park, Kwei-Shan District, Tao Yuan City, Taiwan, R.O.C. TEL: +886-3-327-3456 FAX: +886-3-328-4978	
Test Site No.	**Sporton Site No.**	
	TH02-HY	03CH07-HY

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

1.6 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 v01r04
- FCC KDB 662911 D01 Multiple Transmitter Output v02r01.
- ANSI C63.10-2013

Remark: All test items were verified and recorded according to the standards and without any deviation during the test.

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: radiation emission (9 kHz to the 10th harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower). For radiated measurement, pre-scanned in three orthogonal panels, X, Y, Z. The worst cases (X plane) were recorded in this report.

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 mode of conducted test items and radiated spurious emissions are considering the modulation and worse data rates as below table.

Single Antenna

Modulation	Data Rate
802.11a	6 Mbps
802.11n HT20	MCS0
802.11n HT40	MCS0
802.11ac VHT20	MCS0
802.11ac VHT40	MCS0
802.11ac VHT80	MCS0

MIMO Antenna

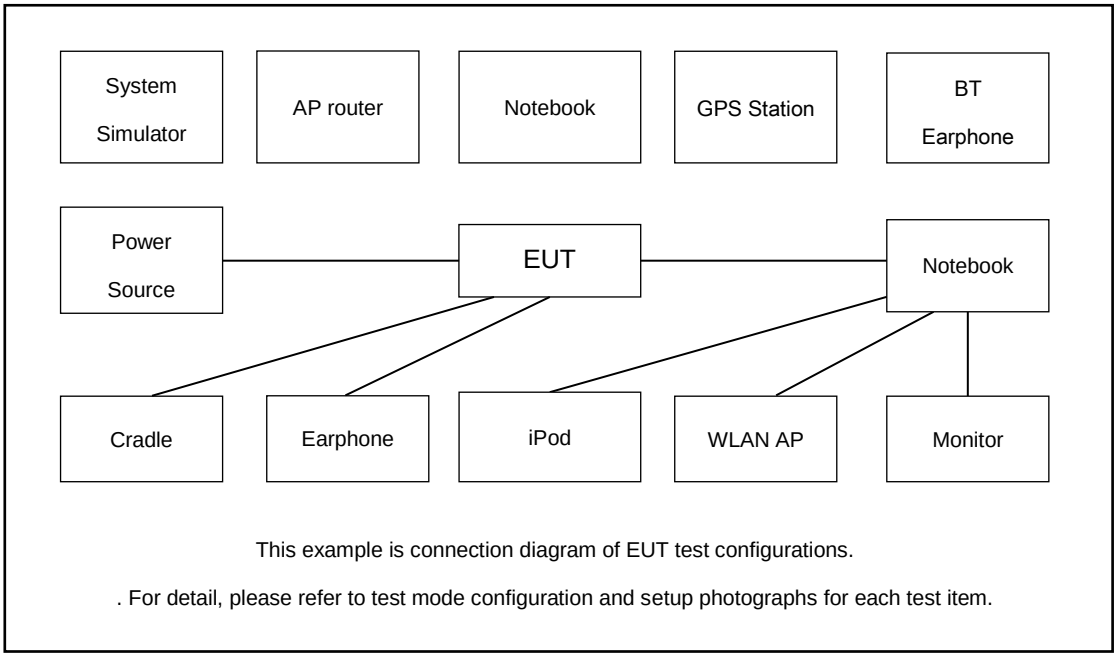
Modulation	Data Rate
802.11a	6 Mbps
802.11n HT20	MCS0
802.11n HT40	MCS0
802.11ac VHT20	MCS0
802.11ac VHT40	MCS0
802.11ac VHT80	MCS0

Ch. #		Band I：5150-5250 MHz			
		802.11a	802.11n HT20	802.11n HT40	802.11ac VHT80
L	Low	-	36	38	-
M	Middle	-	-	-	42
H	High	48	-	46	-
Straddle		-	-	-	-

Ch. #		Band II：5250-5350 MHz		
		802.11n HT20	802.11n HT40	802.11ac VHT80
L	Low	-	-	-
M	Middle	-	-	58
H	High	64	62	-
Straddle		-	-	-

Ch. #		Band III：5470-5725MHz		
		802.11n HT20	802.11n HT40	802.11ac VHT80
L	Low	100	102	-
M	Middle	-	-	-
H	High	-	-	-
Straddle		-	-	138

2.3 Connection Diagram of Test System



This example is connection diagram of EUT test configurations.

. For detail, please refer to test mode configuration and setup photographs for each test item.

2.4 Support Unit used in test configuration and system

Item	Equipment	Trade Name	Model Name	FCC ID	Data Cable	Power Cord
1.	iPod Earphone	Apple	A1285	Verification	Unshielded, 1.0 m	N/A

2.5 EUT Operation Test Setup

The RF test items, programmed RF utility, “tool” installed in the notebook make the EUT provide functions like channel selection and power level for continuous transmitting signals.

3 Test Result

3.1 Maximum Conducted Output Power Measurement

3.1.1 Limit of Maximum Conducted Output Power

<FCC 14-30 CFR 15.407>

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 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.

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.

For Straddle Channel, According to KDB 789033 D02 General UNII Test Procedures New Rules v01r04. 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

The measuring equipment is listed in the section 4 of this test report.

3.1.3 Test Procedures

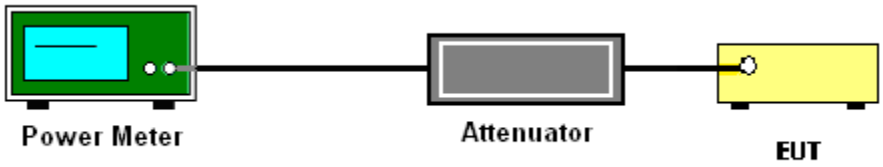
The testing follows Method PM of FCC KDB 789033 D02 General UNII Test Procedures New Rules v01r04 for CDD modes.

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.

3.1.4 Test Setup

For normal channel:



3.1.5 Test Result of Maximum Conducted Output Power

Please refer to Appendix A.

3.2 Unwanted Emissions Measurement

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

3.2.1 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 per FCC Part15.205 shall comply with the general field strength limits set forth in § 15.209 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)
-17	78.3
- 27	68.3

(3) KDB789033 D02 v01r04 G)2)c)

(i) Sections 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).

3.2.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

3.2.3 Test Procedures

1. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v01r04. 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

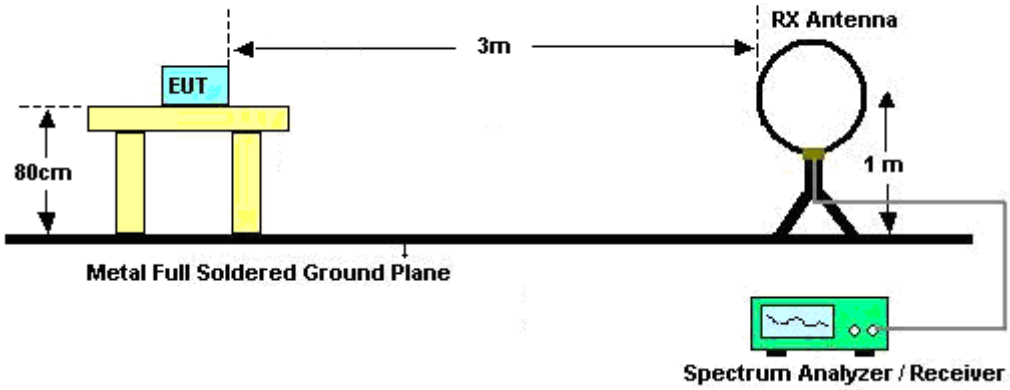
   (3) Procedures for Average Unwanted Emissions Measurements Above 1000MHz

   - 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.

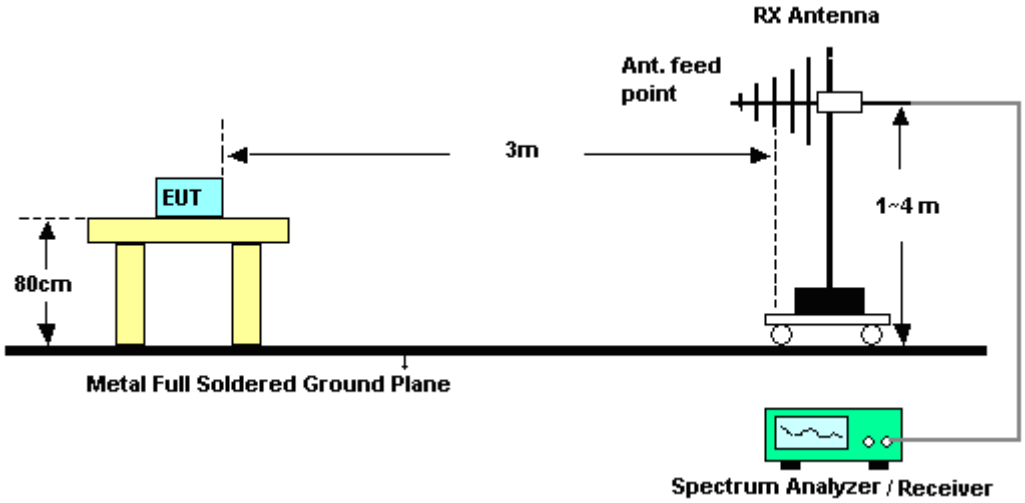
2. The EUT was placed on a turntable with 0.8 meter for frequency below 1GHz and 1.5 meter for frequency above 1GHz respectively above ground.
3. The EUT was set 3 meters from the interference receiving antenna which was mounted on the top of a variable height antenna tower.
4. The antenna is a broadband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

3.2.4 Test Setup

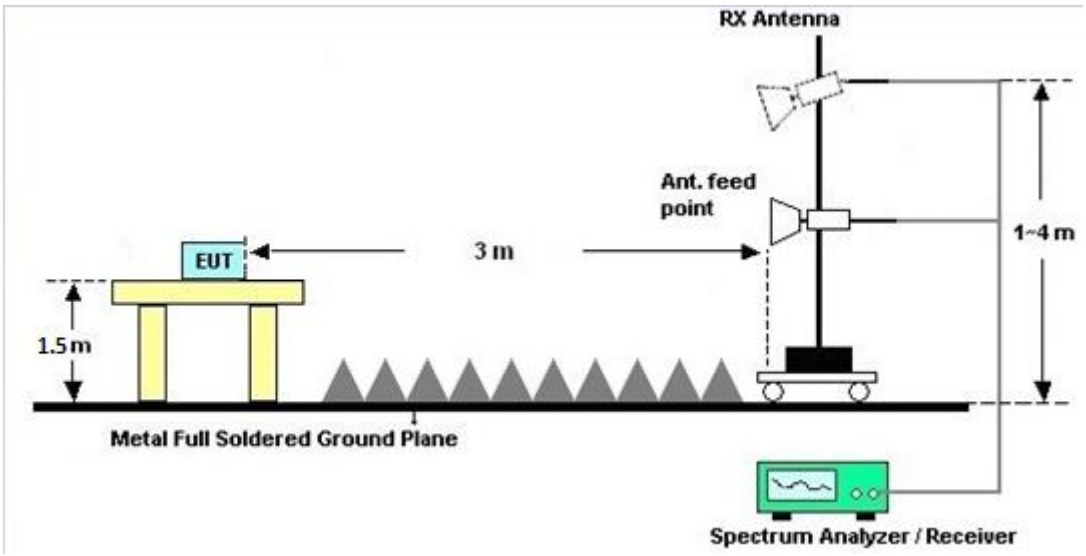
For radiated emissions below 30MHz



For radiated emissions from 30MHz to 1GHz



For radiated emissions above 1GHz



3.2.5 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 per 15.31(o) was not reported.

3.2.6 Test Result of Radiated Spurious at Band Edges

Please refer to Appendix B and C.

3.2.7 Duty Cycle

Please refer to Appendix D.

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

Please refer to Appendix B and C.

3.3 Antenna Requirements

3.3.1 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.

3.3.2 Antenna Anti-Replacement Construction

An embedded-in antenna design is used.

3.3.3 Antenna Gain

FCC KDB 662911 D01 Multiple Transmitter Output v02r01

For CDD transmissions, directional gain is calculated as

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

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

Array Gain = 10 log(N_{ANT}/N_{SS}=1) dB.

For power measurements on IEEE 802.11 devices,

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

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

The EUT supports CDD mode.

For power, the directional gain G_{ANT} 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.

	Ant 1 (dBi)	Ant 2 (dBi)	DG for Power (dBi)	DG for PSD (dBi)	Power Limit Reduction (dB)	PSD Limit Reduction (dB)
Band I	1.80	2.10	2.10	4.96	0.00	0.00
Band II	1.80	2.10	2.10	4.96	0.00	0.00
Band III	0.32	-0.73	0.32	2.82	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	0932001	N/A	Sep. 26, 2017	Nov. 21, 2017	Sep. 25, 2018	Conducted (TH05-HY)
Power Sensor	Anritsu	MA2411B	0846202	300MHz~40GHz	Sep. 26, 2017	Nov. 21, 2017	Sep. 25, 2018	Conducted (TH05-HY)
Spectrum Analyzer	Rohde & Schwarz	FSP40	100057	9kHz-40GHz	Nov. 25, 2016	Nov. 21, 2017	Nov. 24, 2017	Conducted (TH05-HY)
Double Ridge Horn Antenna	ESCO	3117	00075962	1GHz ~ 18GHz	Aug. 23, 2017	Nov. 22, 2017~ Nov. 29, 2017	Aug. 22, 2018	Radiation (03CH07-HY)
Preamplifier	MITEQ	AMF-7D-00101800-30-10P	1590075	1GHz ~ 18GHz	Apr. 25, 2017	Nov. 22, 2017~ Nov. 29, 2017	Apr. 24, 2018	Radiation (03CH07-HY)
Preamplifier	COM-POWER	PA-103A	161241	10MHz-1GHz	Mar. 14, 2017	Nov. 22, 2017~ Nov. 29, 2017	Mar. 13, 2018	Radiation (03CH07-HY)
Spectrum Analyzer	Agilent	N9010A	MY53470118	10Hz~44GHz	Apr. 17, 2017	Nov. 22, 2017~ Nov. 29, 2017	Apr. 16, 2018	Radiation (03CH07-HY)
Antenna Mast	Max-Full	MFA520BS	N/A	1m~4m	N/A	Nov. 22, 2017~ Nov. 29, 2017	N/A	Radiation (03CH07-HY)
Turn Table	ChainTek	Chaintek 3000	N/A	0~360 Degree	N/A	Nov. 22, 2017~ Nov. 29, 2017	N/A	Radiation (03CH07-HY)
Amplifier	MITEQ	TTA1840-35-HG	1871923	18GHz~40GHz, VSWR : 2.5:1 max	Jul. 18, 2017	Nov. 22, 2017~ Nov. 29, 2017	Jul. 17, 2018	Radiation (03CH07-HY)
Loop Antenna	Rohde & Schwarz	HFH2-Z2	100488	9 kHz~30 MHz	Oct. 20, 2016	Nov. 22, 2017~ Nov. 29, 2017	Oct. 19, 2018	Radiation (03CH07-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170251	18GHz- 40GHz	Nov. 10, 2017	Nov. 22, 2017~ Nov. 29, 2017	Nov. 09, 2018	Radiation (03CH07-HY)
EMI Test Receiver	Agilent	N9038A(MXE)	MY53290053	20Hz to 26.5GHz	Jan. 12, 2017	Nov. 22, 2017~ Nov. 29, 2017	Jan. 11, 2018	Radiation (03CH07-HY)
Preamplifier	Agilent	8449B	3008A02362	1GHz~26.5GHz	Oct. 30, 2017	Nov. 22, 2017~ Nov. 29, 2017	Oct. 29, 2018	Radiation (03CH07-HY)

5 Uncertainty of Evaluation

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**5.70**

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:	Allen Lin	Temperature:	21~25	°C
Test Date:	2017/11/21	Relative Humidity:	51~54	%

Report Number : FR7N1801D

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	0.06	0.06	13.26	13.22		21.00	21.00	1.80	2.10		Pass
11a	6Mbps	1	44	5220	0.06	0.06	13.24	13.19		21.00	21.00	1.80	2.10		Pass
11a	6Mbps	1	48	5240	0.06	0.06	13.21	13.20		21.00	21.00	1.80	2.10		Pass
HT20	MCS0	1	36	5180	0.09	0.07	13.44	13.40		21.00	21.00	1.80	2.10		Pass
HT20	MCS0	1	44	5220	0.09	0.07	13.42	13.32		21.00	21.00	1.80	2.10		Pass
HT20	MCS0	1	48	5240	0.09	0.07	13.33	13.27		21.00	21.00	1.80	2.10		Pass
HT40	MCS0	1	38	5190	0.14	0.14	13.27	13.24		21.00	21.00	1.80	2.10		Pass
HT40	MCS0	1	46	5230	0.14	0.14	13.19	13.16		21.00	21.00	1.80	2.10		Pass
VHT20	MCS0	1	36	5180	0.07	0.07	13.42	13.38		21.00	21.00	1.80	2.10		Pass
VHT20	MCS0	1	44	5220	0.07	0.07	13.40	13.31		21.00	21.00	1.80	2.10		Pass
VHT20	MCS0	1	48	5240	0.07	0.07	13.29	13.25		21.00	21.00	1.80	2.10		Pass
VHT40	MCS0	1	38	5190	0.16	0.14	13.22	13.21		21.00	21.00	1.80	2.10		Pass
VHT40	MCS0	1	46	5230	0.16	0.14	13.14	13.09		21.00	21.00	1.80	2.10		Pass
VHT80	MCS0	1	42	5210	0.29	0.29	12.79	12.69		21.00	21.00	1.80	2.10		Pass
HT20	MCS 8	2	36	5180	0.17	0.16	13.45	13.41	16.44	21.00		2.10			Pass
HT20	MCS 8	2	44	5220	0.17	0.16	13.43	13.26	16.35	21.00		2.10			Pass
HT20	MCS 8	2	48	5240	0.17	0.16	13.42	13.23	16.34	21.00		2.10			Pass
HT40	MCS 8	2	38	5190	0.34	0.31	11.74	11.61	14.69	21.00		2.10			Pass
HT40	MCS 8	2	46	5230	0.34	0.31	13.44	13.11	16.29	21.00		2.10			Pass
VHT20	MCS0	2	36	5180	0.18	0.18	13.42	13.40	16.42	21.00		2.10			Pass
VHT20	MCS0	2	44	5220	0.18	0.18	13.38	13.13	16.27	21.00		2.10			Pass
VHT20	MCS0	2	48	5240	0.18	0.18	13.28	13.11	16.21	21.00		2.10			Pass
VHT40	MCS0	2	38	5190	0.34	0.31	11.64	11.58	14.62	21.00		2.10			Pass
VHT40	MCS0	2	46	5230	0.34	0.31	13.34	13.08	16.22	21.00		2.10			Pass
VHT80	MCS0	2	42	5210	0.64	0.61	9.84	9.66	12.76	21.00		2.10			Pass

Report Number : FR7N1801D

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	0.06	0.06	13.28	13.10		23.98	23.98	1.80	2.10	26.99	Pass
11a	6Mbps	1	60	5300	0.06	0.06	13.16	13.01		23.98	23.98	1.80	2.10	26.99	Pass
11a	6Mbps	1	64	5320	0.06	0.06	13.41	13.21		23.98	23.98	1.80	2.10	26.99	Pass
HT20	MCS0	1	52	5260	0.09	0.07	13.34	13.22		23.98	23.98	1.80	2.10	26.99	Pass
HT20	MCS0	1	60	5300	0.09	0.07	13.36	13.24		23.98	23.98	1.80	2.10	26.99	Pass
HT20	MCS0	1	64	5320	0.09	0.07	13.43	13.41		23.98	23.98	1.80	2.10	26.99	Pass
HT40	MCS0	1	54	5270	0.14	0.14	13.28	13.14		23.98	23.98	1.80	2.10	26.99	Pass
HT40	MCS0	1	62	5310	0.14	0.14	12.64	13.12		23.98	23.98	1.80	2.10	26.99	Pass
VHT20	MCS0	1	52	5260	0.07	0.07	13.27	13.20		23.98	23.98	1.80	2.10	26.99	Pass
VHT20	MCS0	1	60	5300	0.07	0.07	13.35	13.23		23.98	23.98	1.80	2.10	26.99	Pass
VHT20	MCS0	1	64	5320	0.07	0.07	13.38	13.37		23.98	23.98	1.80	2.10	26.99	Pass
VHT40	MCS0	1	54	5270	0.16	0.14	13.26	13.11		23.98	23.98	1.80	2.10	26.99	Pass
VHT40	MCS0	1	62	5310	0.16	0.14	12.61	13.07		23.98	23.98	1.80	2.10	26.99	Pass
VHT80	MCS0	1	58	5290	0.29	0.29	10.91	11.89		23.98	23.98	1.80	2.10	26.99	Pass
HT20	MCS 8	2	52	5260	0.17	0.16	13.38	13.21	16.30	23.98		2.10		26.99	Pass
HT20	MCS 8	2	60	5300	0.17	0.16	13.40	13.22	16.32	23.98		2.10		26.99	Pass
HT20	MCS 8	2	64	5320	0.17	0.16	13.41	13.40	16.41	23.98		2.10		26.99	Pass
HT40	MCS 8	2	54	5270	0.34	0.31	13.49	13.28	16.40	23.98		2.10		26.99	Pass
HT40	MCS 8	2	62	5310	0.34	0.31	10.99	10.81	13.91	23.98		2.10		26.99	Pass
VHT20	MCS0	2	52	5260	0.18	0.18	13.36	13.20	16.29	23.98		2.10		26.99	Pass
VHT20	MCS0	2	60	5300	0.18	0.18	13.37	13.21	16.30	23.98		2.10		26.99	Pass
VHT20	MCS0	2	64	5320	0.18	0.18	13.40	13.38	16.40	23.98		2.10		26.99	Pass
VHT40	MCS0	2	54	5270	0.34	0.31	13.47	13.26	16.37	23.98		2.10		26.99	Pass
VHT40	MCS0	2	62	5310	0.34	0.31	10.97	10.79	13.89	23.98		2.10		26.99	Pass
VHT80	MCS0	2	58	5290	0.64	0.61	8.74	8.56	11.66	23.98		2.10		26.99	Pass

Report Number : FR7N1801D

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	0.06	0.06	13.45	13.43		23.98	23.98	0.32	-0.73	26.99	Pass
11a	6Mbps	1	116	5580	0.06	0.06	13.36	13.18		23.98	23.98	0.32	-0.73	26.99	Pass
11a	6Mbps	1	140	5700	0.06	0.06	13.10	13.09		23.98	23.98	0.32	-0.73	26.99	Pass
11a	6Mbps	1	144	5720	0.06	0.06	13.18	13.17		23.98	23.98	0.32	-0.73	26.99	Pass
HT20	MCS0	1	100	5500	0.09	0.07	13.46	13.42		23.98	23.98	0.32	-0.73	26.99	Pass
HT20	MCS0	1	116	5580	0.09	0.07	13.40	13.33		23.98	23.98	0.32	-0.73	26.99	Pass
HT20	MCS0	1	140	5700	0.09	0.07	13.38	13.25		23.98	23.98	0.32	-0.73	26.99	Pass
HT20	MCS0	1	144	5720	0.09	0.07	13.31	13.20		23.98	23.98	0.32	-0.73	26.99	Pass
HT40	MCS0	1	102	5510	0.14	0.14	13.49	13.44		23.98	23.98	0.32	-0.73	26.99	Pass
HT40	MCS0	1	110	5550	0.14	0.14	13.24	13.19		23.98	23.98	0.32	-0.73	26.99	Pass
HT40	MCS0	1	134	5670	0.14	0.14	13.21	13.16		23.98	23.98	0.32	-0.73	26.99	Pass
HT40	MCS0	1	142	5710	0.14	0.14	13.14	13.11		23.98	23.98	0.32	-0.73	26.99	Pass
VHT20	MCS0	1	100	5500	0.07	0.07	13.45	13.41		23.98	23.98	0.32	-0.73	26.99	Pass
VHT20	MCS0	1	116	5580	0.07	0.07	13.37	13.22		23.98	23.98	0.32	-0.73	26.99	Pass
VHT20	MCS0	1	140	5700	0.07	0.07	13.32	13.17		23.98	23.98	0.32	-0.73	26.99	Pass
VHT20	MCS0	1	144	5720	0.07	0.07	13.30	13.15		23.98	23.98	0.32	-0.73	26.99	Pass
VHT40	MCS0	1	102	5510	0.16	0.14	13.37	13.34		23.98	23.98	0.32	-0.73	26.99	Pass
VHT40	MCS0	1	110	5550	0.16	0.14	13.21	13.16		23.98	23.98	0.32	-0.73	26.99	Pass
VHT40	MCS0	1	134	5670	0.16	0.14	13.16	13.12		23.98	23.98	0.32	-0.73	26.99	Pass
VHT40	MCS0	1	142	5710	0.16	0.14	13.13	13.09		23.98	23.98	0.32	-0.73	26.99	Pass
VHT80	MCS0	1	106	5530	0.29	0.29	12.99	13.19		23.98	23.98	0.32	-0.73	26.99	Pass
VHT80	MCS0	1	122	5610	0.29	0.29	12.97	13.09		23.98	23.98	0.32	-0.73	26.99	Pass
VHT80	MCS0	1	138	5690	0.29	0.29	13.14	13.12		23.98	23.98	0.32	-0.73	26.99	Pass
HT20	MCS 8	2	100	5500	0.17	0.16	13.44	13.38	16.42	23.98		0.32		26.99	Pass
HT20	MCS 8	2	116	5580	0.17	0.16	13.32	13.26	16.30	23.98		0.32		26.99	Pass
HT20	MCS 8	2	140	5700	0.17	0.16	13.29	13.21	16.26	23.98		0.32		26.99	Pass
HT20	MCS 8	2	144	5720	0.17	0.16	13.25	13.16	16.21	23.98		0.32		26.99	Pass
HT40	MCS 8	2	102	5510	0.34	0.31	12.64	12.56	15.61	23.98		0.32		26.99	Pass
HT40	MCS 8	2	110	5550	0.34	0.31	13.24	13.16	16.21	23.98		0.32		26.99	Pass
HT40	MCS 8	2	134	5670	0.34	0.31	13.22	13.14	16.19	23.98		0.32		26.99	Pass
HT40	MCS 8	2	142	5710	0.34	0.31	13.19	13.11	16.16	23.98		0.32		26.99	Pass
VHT20	MCS0	2	100	5500	0.18	0.18	13.43	13.36	16.41	23.98		0.32		26.99	Pass
VHT20	MCS0	2	116	5580	0.18	0.18	13.31	13.25	16.29	23.98		0.32		26.99	Pass
VHT20	MCS0	2	140	5700	0.18	0.18	13.26	13.18	16.23	23.98		0.32		26.99	Pass
VHT20	MCS0	2	144	5720	0.18	0.18	13.23	13.15	16.20	23.98		0.32		26.99	Pass
VHT40	MCS0	2	102	5510	0.34	0.31	12.62	12.52	15.58	23.98		0.32		26.99	Pass
VHT40	MCS0	2	110	5550	0.34	0.31	13.21	13.15	16.19	23.98		0.32		26.99	Pass
VHT40	MCS0	2	134	5670	0.34	0.31	13.19	13.11	16.16	23.98		0.32		26.99	Pass
VHT40	MCS0	2	142	5710	0.34	0.31	13.18	13.09	16.14	23.98		0.32		26.99	Pass
VHT80	MCS0	2	106	5530	0.64	0.61	10.84	10.76	13.81	23.98		0.32		26.99	Pass
VHT80	MCS0	2	122	5610	0.64	0.61	10.82	10.63	13.73	23.98		0.32		26.99	Pass
VHT80	MCS0	2	138	5690	0.64	0.61	13.14	13.08	16.12	23.98		0.32		26.99	Pass

Appendix B. Radiated Spurious Emission

Test Engineer :	Jesse Wang / Stan Hsieh / James Chiu	Temperature :	21~23°C
		Relative Humidity :	51~53%

Band 1 - 5150~5250MHz

WIFI 802.11a (Band Edge @ 3m)

WIFI Ant.	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
1		(MHz)	(dBµV/m)	(dB)	(dBµV/m)	(dBµV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11a CH 48 5240MHz		5131.3	51.09	-22.91	74	39.89	34.39	11.95	35.14	100	335	P	H
		5150	40.83	-13.17	54	29.57	34.41	11.99	35.14	100	335	A	H
	*	5240	104.41	-	-	92.86	34.53	12.16	35.14	100	335	P	H
	*	5240	96.31	-	-	84.76	34.53	12.16	35.14	100	335	A	H
		5370.96	52.04	-21.96	74	39.95	34.71	12.53	35.15	100	335	P	H
		5401.76	40.62	-13.38	54	28.37	34.76	12.65	35.16	100	335	A	H
		5083.46	50.43	-23.57	74	39.34	34.32	11.9	35.13	335	211	P	V
		5078.52	40.6	-13.4	54	29.51	34.32	11.9	35.13	335	211	A	V
	*	5240	102.48	-	-	90.93	34.53	12.16	35.14	335	211	P	V
	*	5240	94.74	-	-	83.19	34.53	12.16	35.14	335	211	A	V
		5367.04	49.89	-24.11	74	37.8	34.71	12.53	35.15	335	211	P	V
		5400.92	40.33	-13.67	54	28.08	34.76	12.65	35.16	335	211	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 1 5150~5250MHz

WIFI 802.11a (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 48 5240MHz		10480	46.48	-21.72	68.2	50.46	37.29	17.94	59.21	100	0	P	H
		15720	50.06	-23.94	74	43.83	40.58	22.37	56.72	100	0	P	H
													H
													H
		10480	45.88	-22.32	68.2	49.86	37.29	17.94	59.21	100	0	P	V
		15720	49.66	-24.34	74	43.43	40.58	22.37	56.72	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 1 5150~5250MHz

WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 CH 46 5230MHz		5086.58	50.36	-23.64	74	39.27	34.32	11.9	35.13	117	335	P	H
		5146.12	42.49	-11.51	54	31.23	34.41	11.99	35.14	117	335	A	H
	*	5230	101.73	-	-	90.18	34.53	12.16	35.14	117	335	P	H
	*	5230	94.18	-	-	82.63	34.53	12.16	35.14	117	335	A	H
		5356.68	50.46	-23.54	74	38.39	34.69	12.53	35.15	117	335	P	H
		5379.36	42.22	-11.78	54	30.1	34.74	12.53	35.15	117	335	A	H
		5122.2	50.1	-23.9	74	38.93	34.36	11.95	35.14	319	212	P	V
		5073.58	42.2	-11.8	54	31.11	34.32	11.9	35.13	319	212	A	V
	*	5230	99.67	-	-	88.12	34.53	12.16	35.14	319	212	P	V
	*	5230	92.05	-	-	80.5	34.53	12.16	35.14	319	212	A	V
		5354.72	51.11	-22.89	74	39.04	34.69	12.53	35.15	319	212	P	V
		5456.36	41.81	-12.19	54	29.51	34.83	12.63	35.16	319	212	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	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		10460	45.84	-22.36	68.2	49.91	37.26	17.91	59.24	100	0	P	H
		15690	49.57	-24.43	74	43.44	40.55	22.33	56.75	100	0	P	H
802.11n													H
HT40													H
CH 46		10460	46.01	-22.19	68.2	50.08	37.26	17.91	59.24	100	0	P	V
5230MHz		15690	49.11	-24.89	74	42.98	40.55	22.33	56.75	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 1 5150~5250MHz

WIFI 802.11ac VHT80 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80 CH 42 5210MHz		5145.34	55.12	-18.88	74	43.86	34.41	11.99	35.14	100	339	P	H
		5149.76	47.91	-6.09	54	36.65	34.41	11.99	35.14	100	339	A	H
	*	5210	98.16	-	-	86.76	34.5	12.04	35.14	100	339	P	H
	*	5210	90.41	-	-	79.01	34.5	12.04	35.14	100	339	A	H
		5422.48	50.42	-23.58	74	38.17	34.78	12.63	35.16	100	339	P	H
		5375.16	41.92	-12.08	54	29.83	34.71	12.53	35.15	100	339	A	H
		5145.34	54.89	-19.11	74	43.63	34.41	11.99	35.14	305	208	P	V
		5148.46	46.9	-7.1	54	35.64	34.41	11.99	35.14	305	208	A	V
	*	5210	96.64	-	-	85.24	34.5	12.04	35.14	305	208	P	V
	*	5210	89.55	-	-	78.15	34.5	12.04	35.14	305	208	A	V
		5455.24	50.57	-23.43	74	38.27	34.83	12.63	35.16	305	208	P	V
		5419.68	41.91	-12.09	54	29.64	34.78	12.65	35.16	305	208	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	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		10420	44.86	-23.34	68.2	49.03	37.23	17.87	59.27	100	0	P	H
		15630	49.53	-24.47	74	43.52	40.51	22.29	56.79	100	0	P	H
802.11ac													H
VHT80													H
CH 42		10420	44.34	-23.86	68.2	48.51	37.23	17.87	59.27	100	0	P	V
5210MHz		15630	48.69	-25.31	74	42.68	40.51	22.29	56.79	100	0	P	V
													V
													V

Remark

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

Band 2 - 5250~5350MHz

WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
	*	5320	104.68	-	-	92.78	34.64	12.41	35.15	113	293	P	H
	*	5320	95.96	-	-	84.06	34.64	12.41	35.15	113	293	A	H
		5451.84	50.46	-23.54	74	38.16	34.83	12.63	35.16	113	293	P	H
		5350.08	42.32	-11.68	54	30.25	34.69	12.53	35.15	113	293	A	H
802.11n													H
HT20													H
CH 64	*	5320	101.34	-	-	89.44	34.64	12.41	35.15	294	213	P	V
5320MHz	*	5320	93.96	-	-	82.06	34.64	12.41	35.15	294	213	A	V
		5390.72	50.9	-23.1	74	38.66	34.74	12.65	35.15	294	213	P	V
		5352.48	41.78	-12.22	54	29.71	34.69	12.53	35.15	294	213	A	V
													V
													V

Remark

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

Band 2 5250~5350MHz

WIFI 802.11n HT20 (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		10640	46.68	-27.32	74	50.15	37.47	18.09	59.03	100	0	P	H
		15960	49.8	-24.2	74	42.95	40.77	22.61	56.53	100	0	P	H
802.11n													H
HT20													H
CH 64		10640	46.1	-27.9	74	49.57	37.47	18.09	59.03	100	0	P	V
5320MHz		15960	50.55	-23.45	74	43.7	40.77	22.61	56.53	100	0	P	V
													V
													V

Remark

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

Band 2 5250~5350MHz

WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 CH 62 5310MHz		5086.1	49.65	-24.35	74	38.56	34.32	11.9	35.13	100	355	P	H
		5135.45	41.76	-12.24	54	30.56	34.39	11.95	35.14	100	355	A	H
	*	5310	100.48	-	-	88.58	34.64	12.41	35.15	100	355	P	H
	*	5310	92.17	-	-	80.27	34.64	12.41	35.15	100	355	A	H
		5419.92	51.93	-22.07	74	39.66	34.78	12.65	35.16	100	355	P	H
		5351.28	43.28	-10.72	54	31.21	34.69	12.53	35.15	100	355	A	H
		5126.35	50.19	-23.81	74	38.99	34.39	11.95	35.14	326	215	P	V
		5138.25	41.47	-12.53	54	30.27	34.39	11.95	35.14	326	215	A	V
	*	5310	98.17	-	-	86.27	34.64	12.41	35.15	326	215	P	V
	*	5310	90.2	-	-	78.3	34.64	12.41	35.15	326	215	A	V
		5388.48	50.7	-23.3	74	38.46	34.74	12.65	35.15	326	215	P	V
		5424.96	42.02	-11.98	54	29.77	34.78	12.63	35.16	326	215	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	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		10620	46.97	-27.03	74	50.53	37.44	18.06	59.06	100	0	P	H
		15930	49.13	-24.87	74	42.38	40.74	22.57	56.56	100	0	P	H
802.11n													H
HT40													H
CH 62		10620	46.81	-27.19	74	50.37	37.44	18.06	59.06	100	0	P	V
5310MHz		15930	49	-25	74	42.25	40.74	22.57	56.56	100	0	P	V
													V
													V

Remark

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

Band 2 5250~5350MHz

WIFI 802.11ac VHT80 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80 CH 58 5290MHz		5127.4	49.49	-24.51	74	38.29	34.39	11.95	35.14	106	335	P	H
		5055.3	41.58	-12.42	54	30.57	34.29	11.85	35.13	106	335	A	H
	*	5290	96.11	-	-	84.38	34.6	12.28	35.15	106	335	P	H
	*	5290	88.15	-	-	76.42	34.6	12.28	35.15	106	335	A	H
		5350.32	51.71	-22.29	74	39.64	34.69	12.53	35.15	106	335	P	H
		5354.64	43.53	-10.47	54	31.46	34.69	12.53	35.15	106	335	A	H
		5099.75	49.56	-24.44	74	38.46	34.34	11.9	35.14	329	213	P	V
		5124.95	41.34	-12.66	54	30.14	34.39	11.95	35.14	329	213	A	V
	*	5290	93.27	-	-	81.54	34.6	12.28	35.15	329	213	P	V
	*	5290	85.85	-	-	74.12	34.6	12.28	35.15	329	213	A	V
		5397.6	49.84	-24.16	74	37.58	34.76	12.65	35.15	329	213	P	V
		5405.28	41.89	-12.11	54	29.64	34.76	12.65	35.16	329	213	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	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		10580	44.51	-23.69	68.2	48.19	37.4	18.02	59.1	100	0	P	H
		15870	48.35	-25.65	74	41.72	40.7	22.53	56.6	100	0	P	H
802.11ac													H
VHT80													H
CH 58		10580	43.83	-24.37	68.2	47.51	37.4	18.02	59.1	100	0	P	V
5290MHz		15870	48.16	-25.84	74	41.53	40.7	22.53	56.6	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 - 5470~5725MHz

WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
		5462.32	54.78	-19.22	74	42.5	34.83	12.61	35.16	100	281	P	H
		5470	45.15	-8.85	54	32.85	34.85	12.61	35.16	100	281	A	H
	*	5500	105.23	-	-	92.88	34.9	12.61	35.16	100	281	P	H
	*	5500	97.89	-	-	85.54	34.9	12.61	35.16	100	281	A	H
802.11n													H
HT20													H
CH 100		5466.96	51.45	-22.55	74	39.15	34.85	12.61	35.16	276	208	P	V
5500MHz		5469.84	43.31	-10.69	54	31.01	34.85	12.61	35.16	276	208	A	V
	*	5500	102.03	-	-	89.68	34.9	12.61	35.16	276	208	P	V
	*	5500	94.85	-	-	82.5	34.9	12.61	35.16	276	208	A	V
													V
													V

Remark

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

Band 3 - 5470~5725MHz

WIFI 802.11n HT20 (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		11000	46.64	-27.36	74	48.91	37.9	18.43	58.6	100	0	P	H
		16500	53.25	-14.95	68.2	44.62	41.8	22.93	56.1	100	0	P	H
802.11n													H
HT20													H
CH 100		11000	45.62	-28.38	74	47.89	37.9	18.43	58.6	100	0	P	V
5500MHz		16500	53.72	-14.48	68.2	45.09	41.8	22.93	56.1	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 - 5470~5725MHz

WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 CH 102 5510MHz		5468.56	56.62	-17.38	74	44.32	34.85	12.61	35.16	100	281	P	H
		5469.76	48.11	-5.89	54	35.81	34.85	12.61	35.16	100	281	A	H
	*	5510	102.43	-	-	90.11	34.9	12.59	35.17	100	281	P	H
	*	5510	94.46	-	-	82.14	34.9	12.59	35.17	100	281	A	H
		5763.425	51.49	-22.51	74	38.66	35.26	12.79	35.22	100	281	P	H
		5739.17	43.33	-10.67	54	30.57	35.24	12.73	35.21	100	281	A	H
		5465.44	51.61	-22.39	74	39.31	34.85	12.61	35.16	318	208	P	V
		5467.6	43.83	-10.17	54	31.53	34.85	12.61	35.16	318	208	A	V
	*	5510	99.65	-	-	87.33	34.9	12.59	35.17	318	208	P	V
	*	5510	92.01	-	-	79.69	34.9	12.59	35.17	318	208	A	V
		5737.91	50.65	-23.35	74	37.89	35.24	12.73	35.21	318	208	P	V
		5740.745	43.14	-10.86	54	30.32	35.24	12.79	35.21	318	208	A	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	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		11020	46.08	-27.92	74	48.29	37.92	18.43	58.56	100	0	P	H
		16530	51.64	-16.56	68.2	42.94	41.82	22.96	56.08	100	0	P	H
802.11n													H
HT40													H
CH 102		11020	44.04	-29.96	74	46.25	37.92	18.43	58.56	100	0	P	V
5510MHz		16530	49.9	-18.3	68.2	41.2	41.82	22.96	56.08	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 - 5470~5725MHz

Band 3 - Straddle Channel

WIFI 802.11ac VHT80 (Band Edge @ 3m)

WIFI Ant.	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
1		(MHz)	(dBµV/m)	(dB)	(dBµV/m)	(dBµV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
	*	5690	100.24	-	-	87.6	35.17	12.67	35.2	100	291	P	H
	*	5690	92.65	-	-	80.01	35.17	12.67	35.2	100	291	A	H
													H
													H
802.11ac													H
VHT80													H
CH 138	*	5690	97.04	-	-	84.4	35.17	12.67	35.2	278	186	P	V
5690MHz	*	5690	89.7	-	-	77.06	35.17	12.67	35.2	278	186	A	V
													V
													V
													V
													V

Remark

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

Band 3 - Straddle Channel

WIFI 802.11ac VHT80 (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		11380	44.3	-29.7	74	44.85	38.28	18.77	57.6	100	0	P	H
		17070	50.17	-18.03	68.2	40.68	42.01	23.28	55.8	100	0	P	H
802.11ac													H
VHT80													H
CH 138		11380	45.19	-28.81	74	45.74	38.28	18.77	57.6	100	0	P	V
5690MHz		17070	51.11	-17.09	68.2	41.62	42.01	23.28	55.8	100	0	P	V
													V
													V

Remark

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

Emission below 1GHz

WIFI 802.11n HT40 (LF @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11n HT40 LF		101.01	25.98	-17.52	43.5	39.14	16.06	2.34	31.56	-	-	P	H
		194.97	37	-6.5	43.5	50.97	14.77	2.72	31.46	100	33	P	H
		244.11	37.13	-8.87	46	47.81	17.67	3.03	31.38	-	-	P	H
		350.4	35.28	-10.72	46	42.59	20.33	3.57	31.21	-	-	P	H
		740.3	29.91	-16.09	46	27.86	27.81	4.88	30.64	-	-	P	H
		941.2	33.74	-12.26	46	28.81	30.05	5.4	30.52	-	-	P	H
													H
													H
													H
													H
													H
													H
		30.27	26.29	-13.71	40	31.21	24.72	1.71	31.35	-	-	P	V
		197.13	28.19	-15.31	43.5	42.09	14.83	2.72	31.45	-	-	P	V
		226.02	28.85	-17.15	46	41.44	15.79	3.03	31.41	-	-	P	V
		371.4	29.45	-16.55	46	36.19	20.87	3.57	31.18	-	-	P	V
		647.9	28.66	-17.34	46	28.46	26.37	4.59	30.76	-	-	P	V
		872.6	32.48	-13.52	46	28.69	29.06	5.27	30.54	100	69	P	V
													V
													V
													V
													V
													V
													V

Remark

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

Band 1 - 5150~5250MHz

WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	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)
		5146.9	53.91	-20.09	74	42.65	34.41	11.99	35.14	100	334	P	H
		5150	46.41	-7.59	54	35.15	34.41	11.99	35.14	100	334	A	H
	*	5180	108.63	-	-	97.32	34.46	11.99	35.14	100	334	P	H
	*	5180	100.92	-	-	89.61	34.46	11.99	35.14	100	334	A	H
802.11n													H
HT20													H
CH 36		5143.52	52.41	-21.59	74	41.15	34.41	11.99	35.14	308	116	P	V
5180MHz		5150	45.33	-8.67	54	34.07	34.41	11.99	35.14	308	116	A	V
	*	5180	107.11	-	-	95.8	34.46	11.99	35.14	308	116	P	V
	*	5180	98.13	-	-	86.82	34.46	11.99	35.14	308	116	A	V
													V
													V

Remark

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

Band 1 5150~5250MHz

WIFI 802.11n HT20 (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)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		10360	45.11	-23.09	68.2	49.4	37.19	17.83	59.31	100	0	P	H
		15540	49.53	-24.47	74	43.81	40.43	22.16	56.87	100	0	P	H
802.11n													H
HT20													H
CH 36		10360	44.14	-24.06	68.2	48.43	37.19	17.83	59.31	100	0	P	V
5180MHz		15540	54.69	-19.31	74	48.97	40.43	22.16	56.87	100	322	P	V
		15540	46.41	-7.59	54	40.69	40.43	22.16	56.87	100	322	A	V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 1 5150~5250MHz

WIFI 802.11n 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)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 CH 38 5190MHz		5150	55.92	-18.08	74	44.66	34.41	11.99	35.14	100	335	P	H
		5149.24	48.6	-5.4	54	37.34	34.41	11.99	35.14	100	335	A	H
	*	5190	103.41	-	-	92.05	34.46	12.04	35.14	100	335	P	H
	*	5190	95.67	-	-	84.31	34.46	12.04	35.14	100	335	A	H
		5432.56	52.03	-21.97	74	39.75	34.81	12.63	35.16	100	335	P	H
		5353.6	42.66	-11.34	54	30.59	34.69	12.53	35.15	100	335	A	H
		5148.98	52.08	-21.92	74	40.82	34.41	11.99	35.14	100	96	P	V
		5149.24	45.69	-8.31	54	34.43	34.41	11.99	35.14	100	96	A	V
	*	5190	100.46	-	-	89.1	34.46	12.04	35.14	100	96	P	V
	*	5190	91.74	-	-	80.38	34.46	12.04	35.14	100	96	A	V
		5427.52	51.89	-22.11	74	39.64	34.78	12.63	35.16	100	96	P	V
		5421.64	42.18	-11.82	54	29.93	34.78	12.63	35.16	100	96	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)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		10380	43.72	-24.48	68.2	47.97	37.21	17.83	59.29	100	0	P	H
		15570	47.77	-26.23	74	41.95	40.46	22.2	56.84	100	0	P	H
802.11n													H
HT40													H
CH 38		10380	43.7	-24.5	68.2	47.95	37.21	17.83	59.29	100	0	P	V
5190MHz		15570	47.82	-26.18	74	42	40.46	22.2	56.84	100	0	P	V
													V
													V

Remark

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

Band 1 5150~5250MHz

WIFI 802.11ac VHT80 (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		5143.78	55.26	-18.74	74	44	34.41	11.99	35.14	100	333	P	H
		5143.78	49.87	-4.13	54	38.61	34.41	11.99	35.14	100	333	A	H
	*	5210	99.81	-	-	88.41	34.5	12.04	35.14	100	333	P	H
	*	5210	92.81	-	-	81.41	34.5	12.04	35.14	100	333	A	H
802.11ac		5449.08	50.56	-23.44	74	38.26	34.83	12.63	35.16	100	333	P	H
VHT80		5426.12	43.65	-10.35	54	31.4	34.78	12.63	35.16	100	333	A	H
CH 42		5148.98	51.89	-22.11	74	40.63	34.41	11.99	35.14	100	100	P	V
5210MHz		5140.92	45.16	-8.84	54	33.9	34.41	11.99	35.14	100	100	A	V
	*	5210	95.72	-	-	84.32	34.5	12.04	35.14	100	100	P	V
	*	5210	89.31	-	-	77.91	34.5	12.04	35.14	100	100	A	V
		5457.48	51.07	-22.93	74	38.77	34.83	12.63	35.16	100	100	P	V
		5390.56	43.61	-10.39	54	31.37	34.74	12.65	35.15	100	100	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)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		10420	44.6	-23.6	68.2	48.77	37.23	17.87	59.27	100	0	P	H
		15630	48.01	-25.99	74	42	40.51	22.29	56.79	100	0	P	H
802.11ac													H
VHT80													H
CH 42		10420	44.53	-23.67	68.2	48.7	37.23	17.87	59.27	100	0	P	V
5210MHz		15630	47.78	-26.22	74	41.77	40.51	22.29	56.79	100	0	P	V
													V
													V

Remark

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

Band 2 - 5250~5350MHz

WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	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)
	*	5320	106.94	-	-	95.04	34.64	12.41	35.15	100	333	P	H
	*	5320	98.64	-	-	86.74	34.64	12.41	35.15	100	333	A	H
		5352.48	52.9	-21.1	74	40.83	34.69	12.53	35.15	100	333	P	H
		5350.24	45.13	-8.87	54	33.06	34.69	12.53	35.15	100	333	A	H
802.11n													H
HT20													H
CH 64	*	5320	104.53	-	-	92.63	34.64	12.41	35.15	304	116	P	V
5320MHz	*	5320	96.66	-	-	84.76	34.64	12.41	35.15	304	116	A	V
		5365.6	52.47	-21.53	74	40.38	34.71	12.53	35.15	304	116	P	V
		5352.32	45.15	-8.85	54	33.08	34.69	12.53	35.15	304	116	A	V
													V
													V

Remark

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

Band 2 5250~5350MHz

WIFI 802.11n HT20 (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		10640	45.29	-28.71	74	48.76	37.47	18.09	59.03	100	0	P	H
		15960	49.09	-24.91	74	42.24	40.77	22.61	56.53	100	0	P	H
802.11n													H
HT20													H
CH 64		10640	45.69	-28.31	74	49.16	37.47	18.09	59.03	100	0	P	V
5320MHz		15960	49.8	-24.2	74	42.95	40.77	22.61	56.53	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 2 5250~5350MHz

WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 CH 62 5310MHz		5060.2	50.2	-23.8	74	39.14	34.29	11.9	35.13	100	333	P	H
		5080.15	42.37	-11.63	54	31.28	34.32	11.9	35.13	100	333	A	H
	*	5310	101.5	-	-	89.6	34.64	12.41	35.15	100	333	P	H
	*	5310	93.36	-	-	81.46	34.64	12.41	35.15	100	333	A	H
		5352.48	52.5	-21.5	74	40.43	34.69	12.53	35.15	100	333	P	H
		5351.04	45.85	-8.15	54	33.78	34.69	12.53	35.15	100	333	A	H
		5143.15	50.05	-23.95	74	38.79	34.41	11.99	35.14	378	90	P	V
		5148.4	41.3	-12.7	54	30.04	34.41	11.99	35.14	378	90	A	V
	*	5310	97.62	-	-	85.72	34.64	12.41	35.15	378	90	P	V
	*	5310	89.73	-	-	77.83	34.64	12.41	35.15	378	90	A	V
		5456.64	51.87	-22.13	74	39.57	34.83	12.63	35.16	378	90	P	V
		5426.4	42.76	-11.24	54	30.51	34.78	12.63	35.16	378	90	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)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		10620	45.01	-28.99	74	48.57	37.44	18.06	59.06	100	0	P	H
		15930	48.33	-25.67	74	41.58	40.74	22.57	56.56	100	0	P	H
802.11n													H
HT40													H
CH 62		10620	44.91	-29.09	74	48.47	37.44	18.06	59.06	100	0	P	V
5310MHz		15930	48.92	-25.08	74	42.17	40.74	22.57	56.56	100	0	P	V
													V
													V

Remark

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

Band 2 5250~5350MHz

WIFI 802.11ac VHT80 (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		5132.3	50.94	-23.06	74	39.74	34.39	11.95	35.14	100	330	P	H
		5063.7	43.15	-10.85	54	32.09	34.29	11.9	35.13	100	330	A	H
	*	5290	97.57	-	-	85.84	34.6	12.28	35.15	100	330	P	H
	*	5290	90.61	-	-	78.88	34.6	12.28	35.15	100	330	A	H
802.11ac		5352.24	52.58	-21.42	74	40.51	34.69	12.53	35.15	100	330	P	H
VHT80		5355.84	44.99	-9.01	54	32.92	34.69	12.53	35.15	100	330	A	H
CH 58		5127.75	49.57	-24.43	74	38.37	34.39	11.95	35.14	100	102	P	V
5290MHz		5061.6	42.68	-11.32	54	31.62	34.29	11.9	35.13	100	102	A	V
	*	5290	92.64	-	-	80.91	34.6	12.28	35.15	100	102	P	V
	*	5290	86.55	-	-	74.82	34.6	12.28	35.15	100	102	A	V
		5392.56	50.47	-23.53	74	38.23	34.74	12.65	35.15	100	102	P	V
		5368.08	44.07	-9.93	54	31.98	34.71	12.53	35.15	100	102	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)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		10580	44.76	-23.44	68.2	48.44	37.4	18.02	59.1	100	0	P	H
		15870	48.23	-25.77	74	41.6	40.7	22.53	56.6	100	0	P	H
802.11ac													H
VHT80													H
CH 58		10580	44.25	-23.95	68.2	47.93	37.4	18.02	59.1	100	0	P	V
5290MHz		15870	48.5	-25.5	74	41.87	40.7	22.53	56.6	100	0	P	V
													V
													V

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

Band 3 - 5470~5725MHz

WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	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)
		5454.16	54.04	-19.96	74	41.74	34.83	12.63	35.16	100	282	P	H
		5468.4	45.61	-8.39	54	33.31	34.85	12.61	35.16	100	282	A	H
	*	5500	106.75	-	-	94.4	34.9	12.61	35.16	100	282	P	H
	*	5500	99.13	-	-	86.78	34.9	12.61	35.16	100	282	A	H
802.11n													H
HT20													H
CH 100		5469.36	52.89	-21.11	74	40.59	34.85	12.61	35.16	100	104	P	V
5500MHz		5468.72	43.98	-10.02	54	31.68	34.85	12.61	35.16	100	104	A	V
	*	5500	103.9	-	-	91.55	34.9	12.61	35.16	100	104	P	V
	*	5500	95.52	-	-	83.17	34.9	12.61	35.16	100	104	A	V
													V
													V

Remark

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

Band 3 - 5470~5725MHz

WIFI 802.11n 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)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		11000	45.16	-28.84	74	47.43	37.9	18.43	58.6	100	0	P	H
		16500	52.16	-16.04	68.2	43.53	41.8	22.93	56.1	100	0	P	H
802.11n													H
HT20													H
CH 100		11000	45.28	-28.72	74	47.55	37.9	18.43	58.6	100	0	P	V
5500MHz		16500	50.76	-17.44	68.2	42.13	41.8	22.93	56.1	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 - 5470~5725MHz

WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 CH 102 5510MHz		5469.76	54.93	-19.07	74	42.63	34.85	12.61	35.16	100	282	P	H
		5470	46.91	-7.09	54	34.61	34.85	12.61	35.16	100	282	A	H
	*	5510	102.41	-	-	90.09	34.9	12.59	35.17	100	282	P	H
	*	5510	94.44	-	-	82.12	34.9	12.59	35.17	100	282	A	H
		5745.155	51.66	-22.34	74	38.84	35.24	12.79	35.21	100	282	P	H
		5752.715	43.34	-10.66	54	30.5	35.26	12.79	35.21	100	282	A	H
		5460.16	51.54	-22.46	74	39.26	34.83	12.61	35.16	100	104	P	V
		5469.04	44.98	-9.02	54	32.68	34.85	12.61	35.16	100	104	A	V
	*	5510	98.87	-	-	86.55	34.9	12.59	35.17	100	104	P	V
	*	5510	91.27	-	-	78.95	34.9	12.59	35.17	100	104	A	V
		5765	51.81	-22.19	74	38.98	35.26	12.79	35.22	100	104	P	V
		5744.525	43.47	-10.53	54	30.65	35.24	12.79	35.21	100	104	A	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)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		11020	45.65	-28.35	74	47.86	37.92	18.43	58.56	100	0	P	H
		16530	49.34	-18.86	68.2	40.64	41.82	22.96	56.08	100	0	P	H
802.11n													H
HT40													H
CH 102		11020	45.56	-28.44	74	47.77	37.92	18.43	58.56	100	0	P	V
5510MHz		16530	49.1	-19.1	68.2	40.4	41.82	22.96	56.08	100	0	P	V
													V
													V

Remark

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

Band 3 - 5470~5725MHz

Band 3 - Straddle Channel

WIFI 802.11ac VHT80 (Band Edge @ 3m)

WIFI Ant.	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable 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)
	*	5690	101.66	-	-	89.02	35.17	12.67	35.2	100	285	P	H
	*	5690	95.42	-	-	82.78	35.17	12.67	35.2	100	285	A	H
													H
													H
802.11ac													H
VHT80													H
CH 138	*	5690	99.4	-	-	86.76	35.17	12.67	35.2	100	107	P	V
5690MHz	*	5690	92.31	-	-	79.67	35.17	12.67	35.2	100	107	A	V
													V
													V
													V
													V

Remark

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

Band 3 - Straddle Channel

WIFI 802.11ac 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)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		11380	43.76	-30.24	74	44.31	38.28	18.77	57.6	100	0	P	H
		17070	50.65	-17.55	68.2	41.16	42.01	23.28	55.8	100	0	P	H
802.11ac													H
VHT80													H
CH 138		11380	44.84	-29.16	74	45.39	38.28	18.77	57.6	100	0	P	V
5690MHz		17070	49.82	-18.38	68.2	40.33	42.01	23.28	55.8	100	0	P	V
													V
													V

Remark

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

Emission below 1GHz

WIFI 802.11ac VHT80 (LF @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	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)
802.11ac VHT80 LF		31.89	24.24	-15.76	40	30.23	23.68	1.71	31.38	-	-	P	H
		201.18	37.34	-6.16	43.5	51.14	14.93	2.72	31.45	100	162	P	H
		289.47	33.8	-12.2	46	42.88	18.96	3.28	31.32	-	-	P	H
		333.6	34.94	-11.06	46	42.96	19.79	3.43	31.24	-	-	P	H
		646.5	27.35	-18.65	46	27.15	26.37	4.59	30.76	-	-	P	H
		928.6	29.44	-16.56	46	25.08	29.55	5.33	30.52	-	-	P	H
													H
													H
													H
													H
													H
													H
		102.09	26.1	-17.4	43.5	39.16	16.16	2.34	31.56	-	-	P	V
		153.39	31.62	-11.88	43.5	43.63	16.87	2.62	31.5	100	69	P	V
		224.67	29.37	-16.63	46	42.05	15.7	3.03	31.41	-	-	P	V
		647.2	28.01	-17.99	46	27.81	26.37	4.59	30.76	-	-	P	V
		753.6	30.33	-15.67	46	28.14	27.94	4.88	30.63	-	-	P	V
		852.3	31.53	-14.47	46	27.9	28.98	5.2	30.55	-	-	P	V
													V
													V
													V
													V
													V
													V

Remark

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

Note symbol

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

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

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	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. Level(dBμV/m) =

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

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

For Peak Limit @ 2390MHz:

1. Level(dBμV/m)

= Antenna Factor(dB/m) + Cable 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) + Cable 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 C. Radiated Spurious Emission

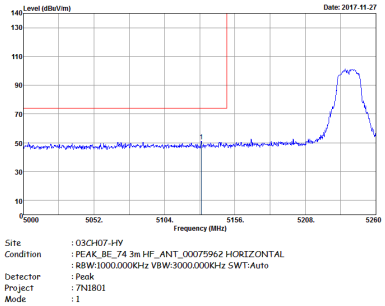
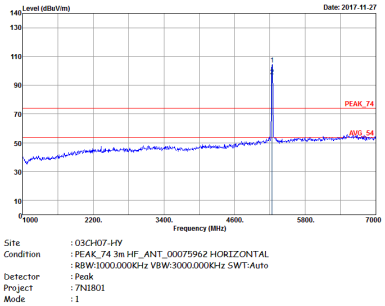
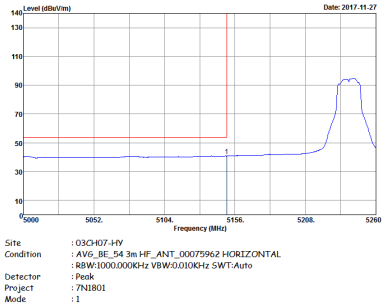
Test Engineer :	Jesse Wang / Stan Hsieh / James Chiu	**Temperature :**	21~23°C
		Relative Humidity :	51~53%

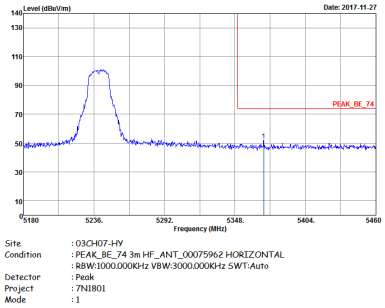
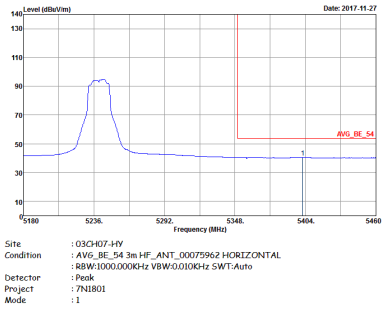
Note symbol

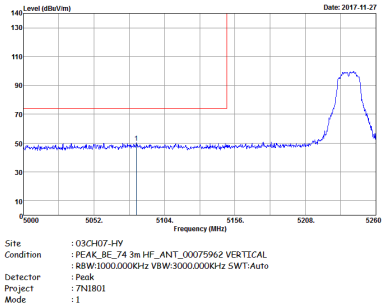
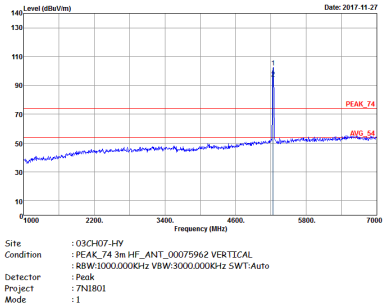
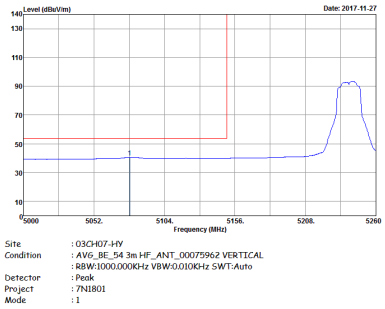
-L	**Low channel location**
-R	**High channel location**

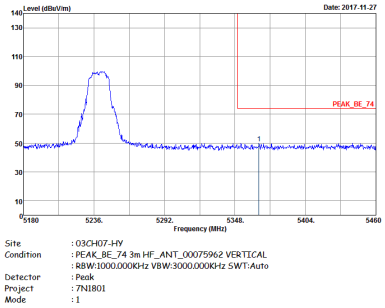
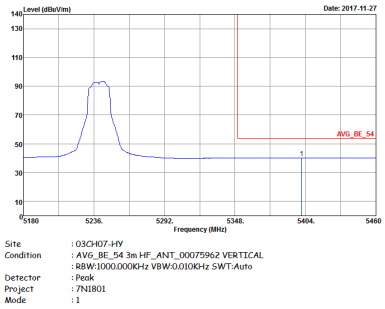
Band 1 - 5150~5250MHz

WIFI 802.11a (Band Edge @ 3m)

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

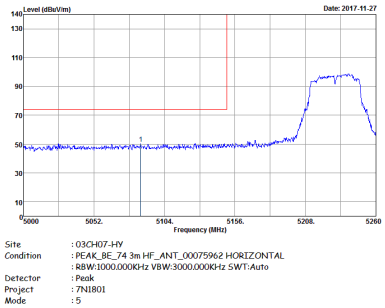
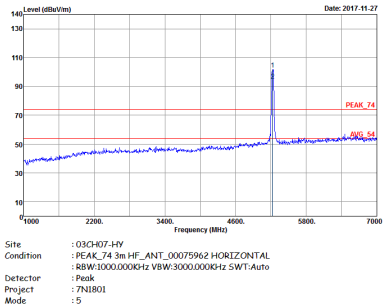
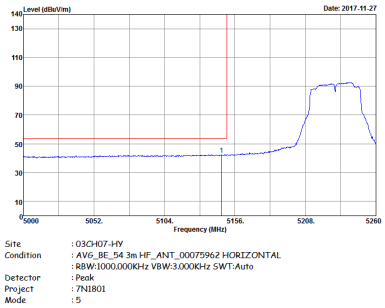
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH48 5240MHz - R	
1	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

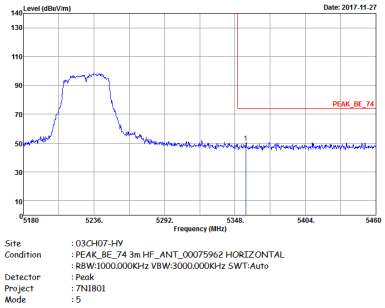
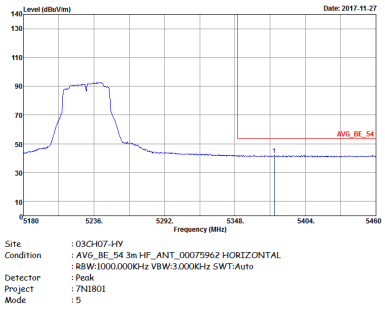
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH48 5240MHz - L	
1	Vertical	Fundamental
Peak		
Avg.		Left blank

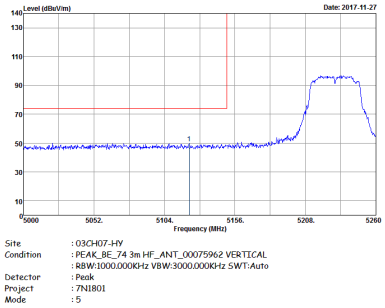
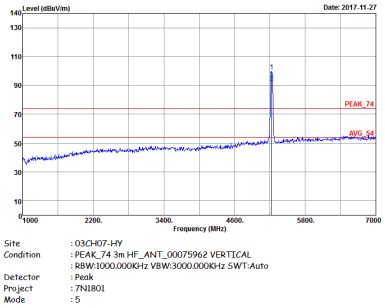
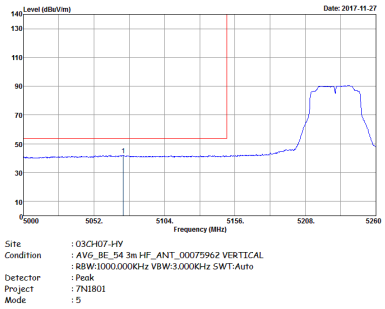
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH48 5240MHz - R	
1	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

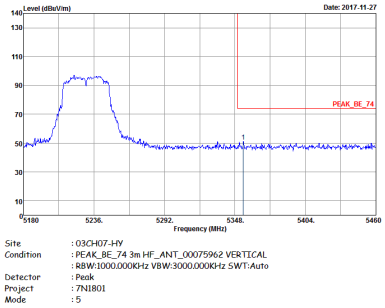
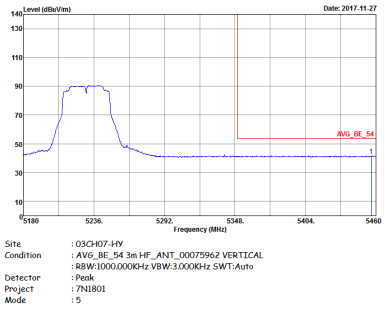
Band 1 5150~5250MHz

WIFI 802.11n HT40 (Band Edge @ 3m)

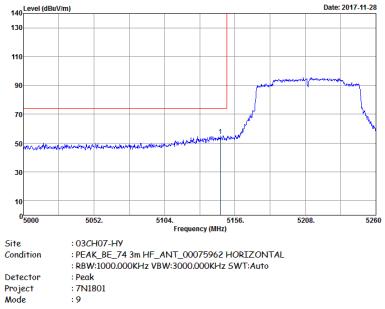
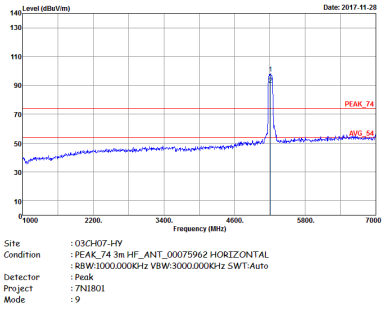
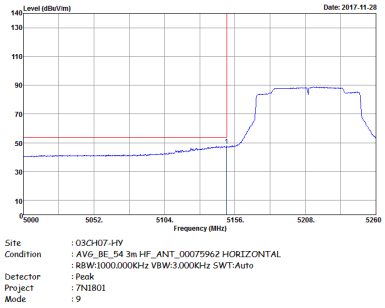
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH46 5230MHz - L	
1	Horizontal	Fundamental
Peak		
Avg.		Left blank

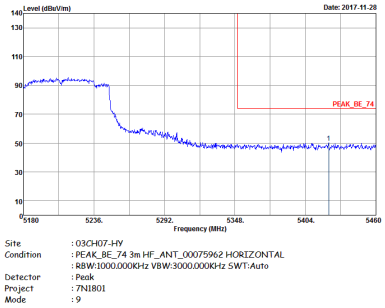
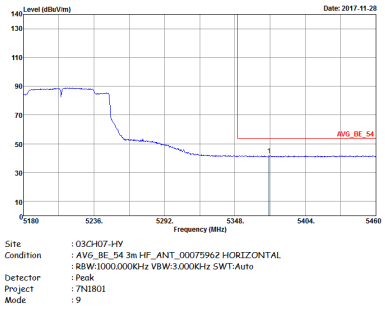
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH46 5230MHz - R	
1	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

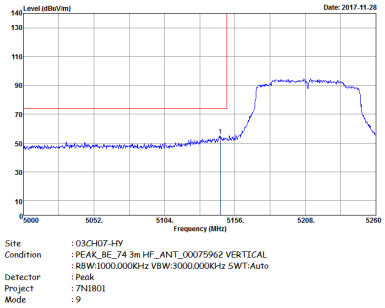
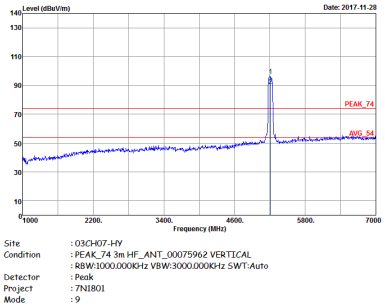
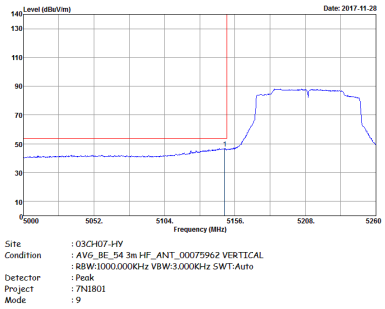
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH46 5230MHz - L	
1	Vertical	Fundamental
Peak		
Avg.		Left blank

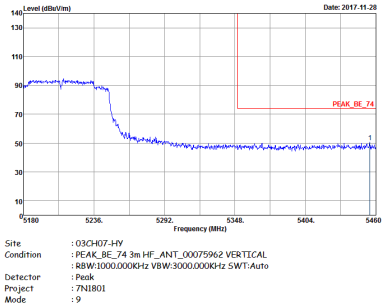
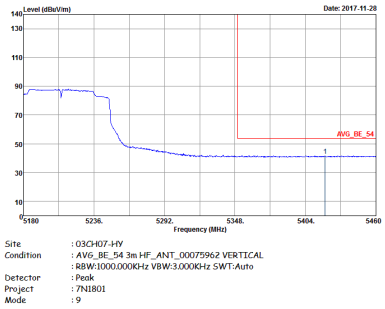
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH46 5230MHz - R	
1	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

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	Horizontal	Fundamental
Peak		
Avg.		Left blank

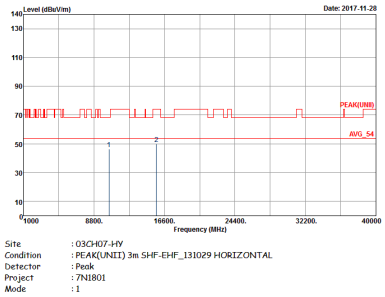
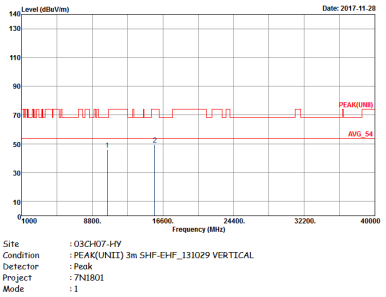
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH42 5210MHz - R	
1	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

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

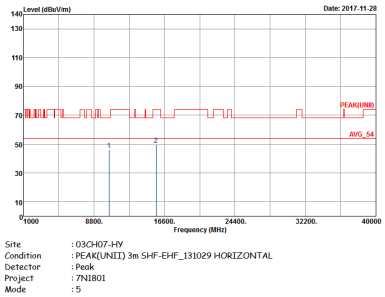
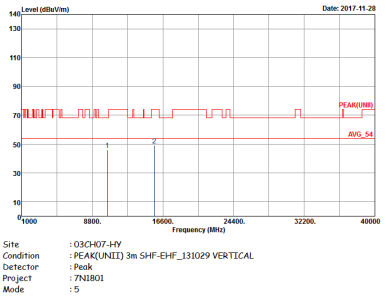
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH42 5210MHz - R	
1	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

Band 1 - 5150~5250MHz

WIFI 802.11a (Harmonic @ 3m)

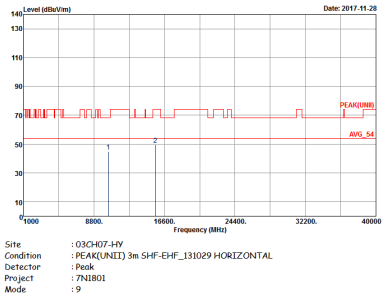
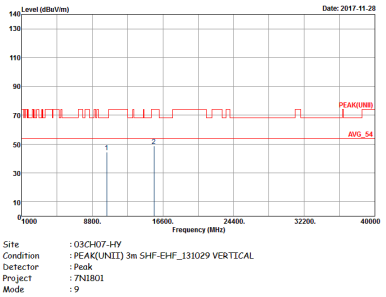
WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11a CH48 5240MHz	
1	Horizontal	Vertical
Peak Avg.		

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

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

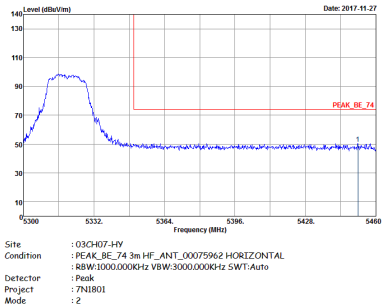
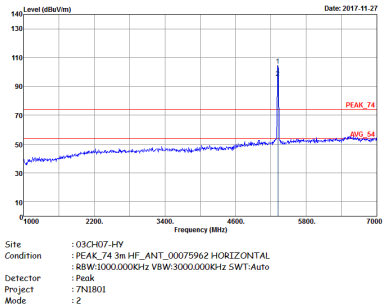
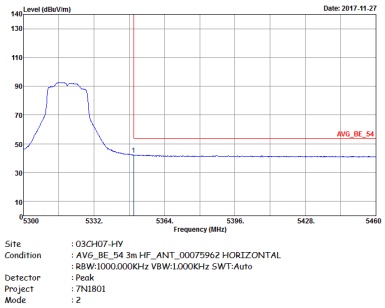
Band 1 5150~5250MHz

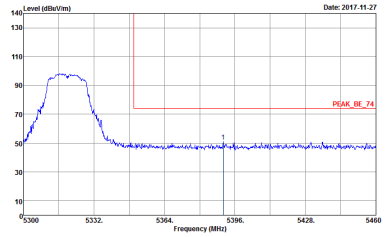
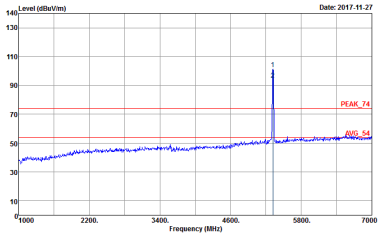
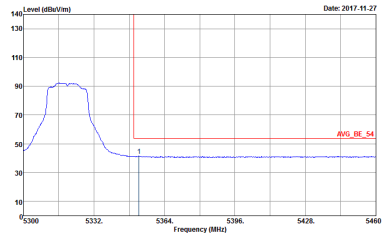
WIFI 802.11ac VHT80 (Harmonic @ 3m)

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

Band 2 5250~5350MHz

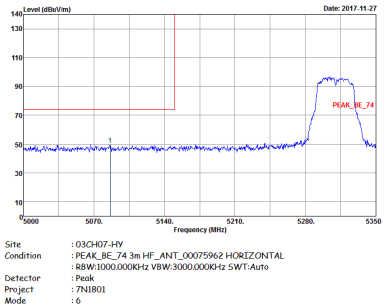
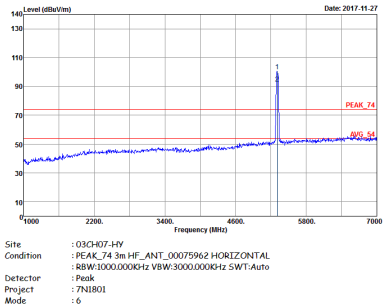
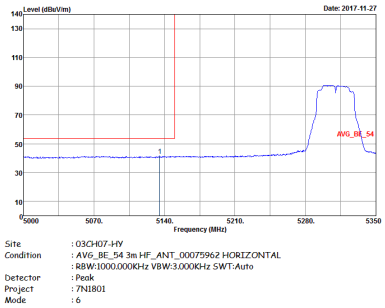
WIFI 802.11n HT20 (Band Edge @ 3m)

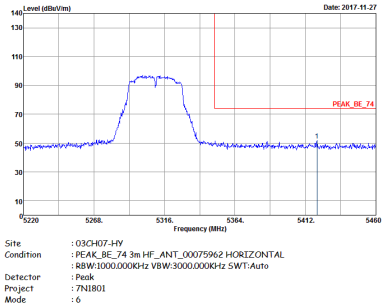
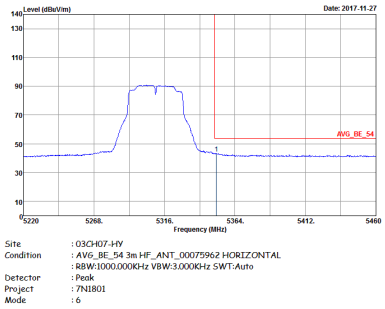
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH64 5320MHz	
1	Horizontal	Fundamental
Peak		
Avg.		Left blank

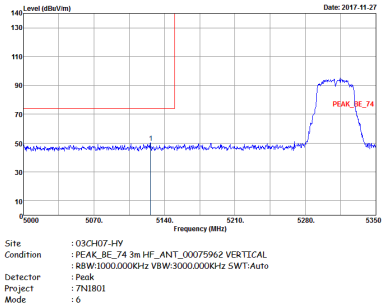
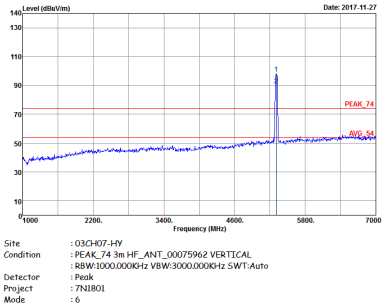
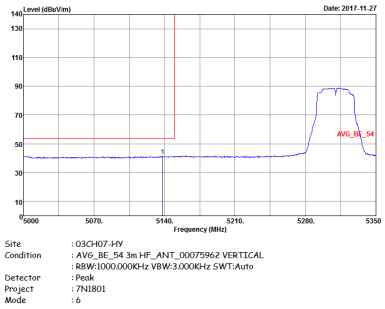
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH64 5320MHz	
1	Vertical	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 7N1801 Mode : 2	 Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00075962 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 7N1801 Mode : 2
Avg.	 Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 VERTICAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto Detector : Peak Project : 7N1801 Mode : 2	Left blank

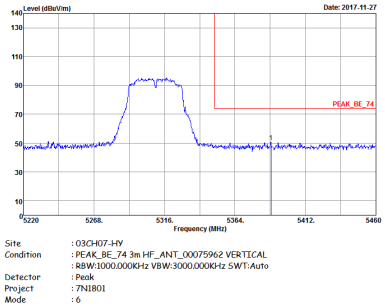
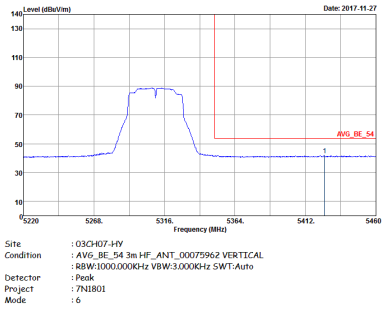
Band 2 5250~5350MHz

WIFI 802.11n HT40 (Band Edge @ 3m)

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

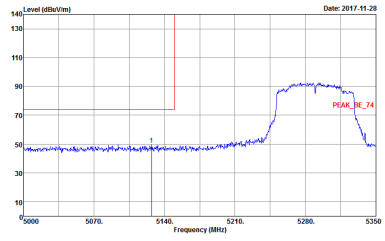
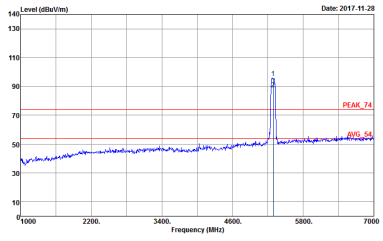
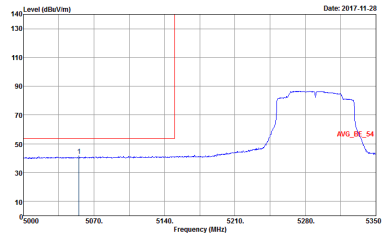
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT40 CH62 5310 - R	
1	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

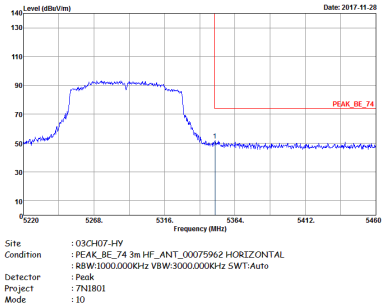
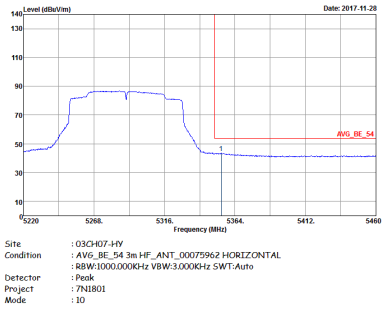
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT40 CH62 5310 - L	
1	Vertical	Fundamental
Peak		
Avg.		Left blank

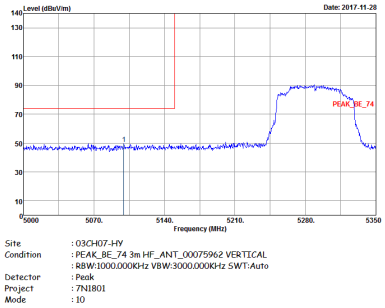
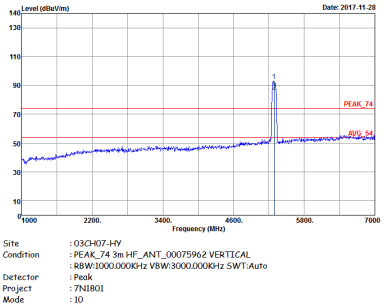
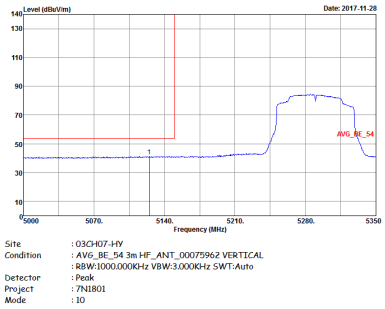
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT40 CH62 5310 - R	
1	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

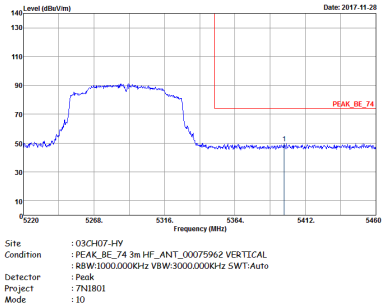
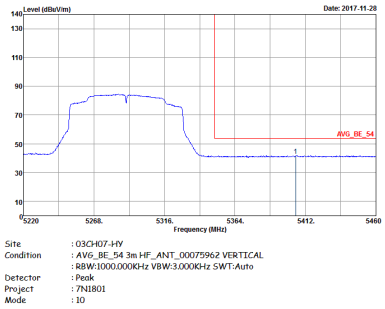
Band 2 5250~5350MHz

WIFI 802.11ac VHT80 (Band Edge @ 3m)

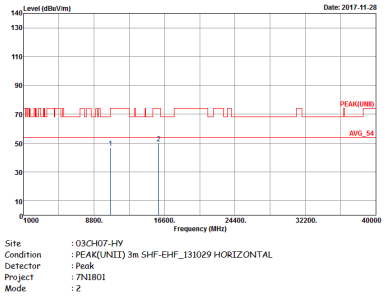
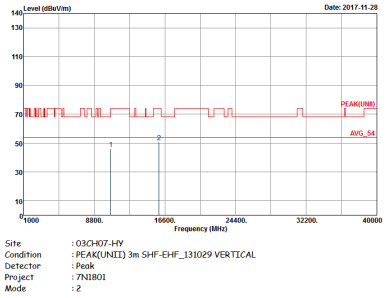
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH58 5290MHz - L	
1	Horizontal	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 7N1801 Mode : 10	 Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 7N1801 Mode : 10
Avg.	 Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000KHz VBW:3.000KHz SWT:Auto Detector : Peak Project : 7N1801 Mode : 10	Left blank

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

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

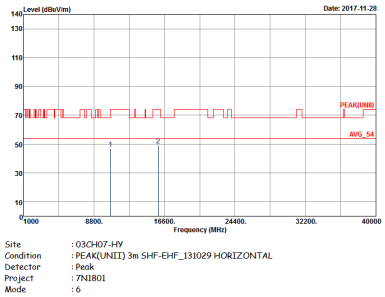
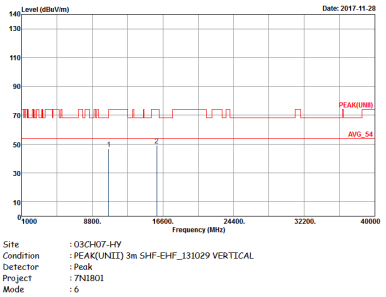
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH58 5290MHz - R	
1	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

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

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

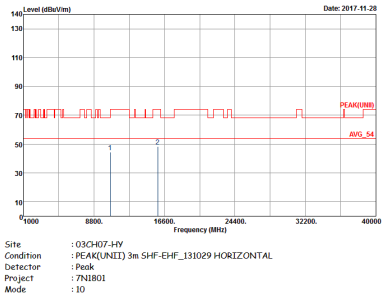
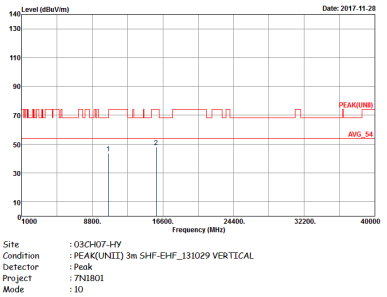
Band 2 5250~5350MHz

WIFI 802.11n HT40 (Harmonic @ 3m)

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

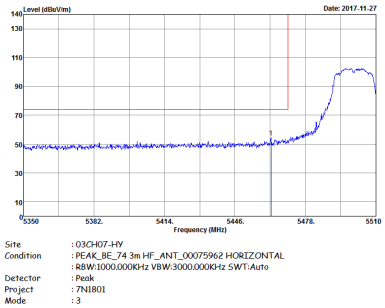
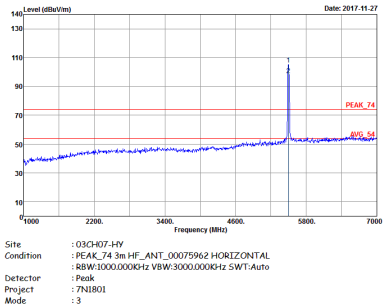
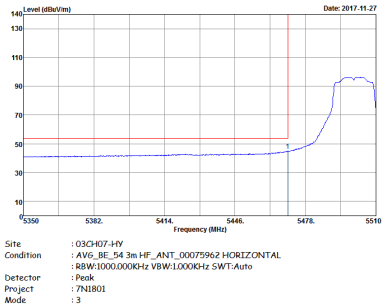
Band 2 5250~5350MHz

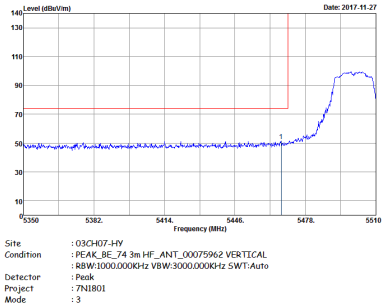
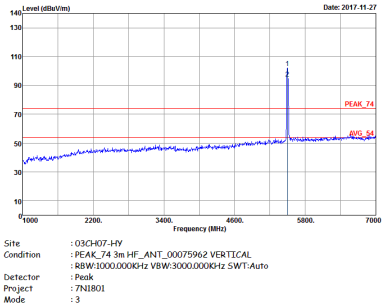
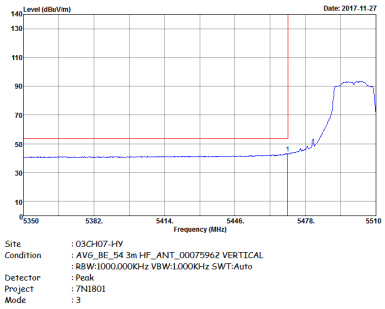
WIFI 802.11ac VHT80 (Harmonic @ 3m)

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

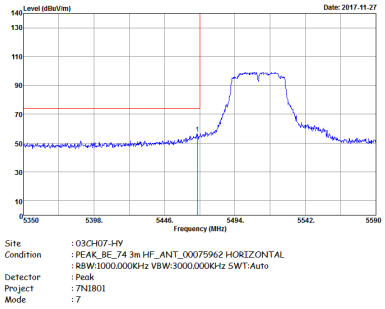
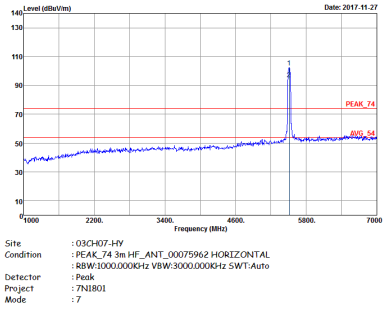
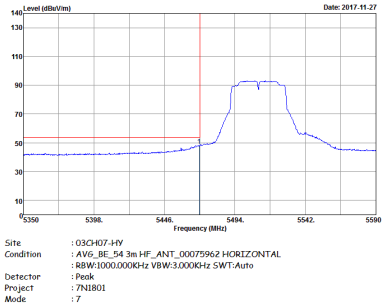
Band 3 5470~5725MHz

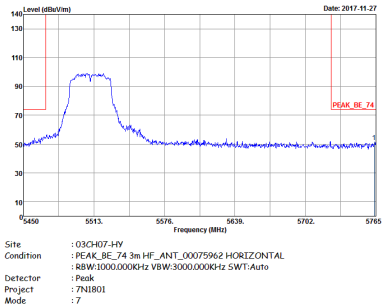
WIFI 802.11n HT20 (Band Edge @ 3m)

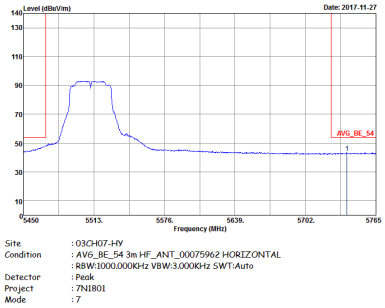
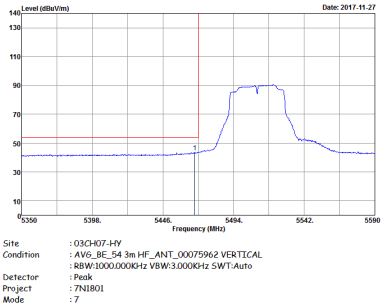
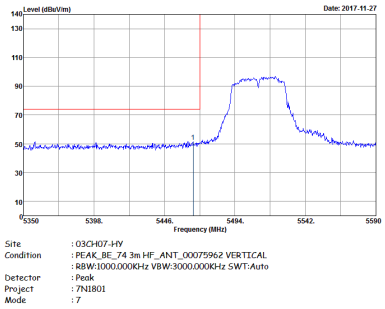
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT20 CH100 5500MHz	
1	Horizontal	Fundamental
Peak		
Avg.		Left blank

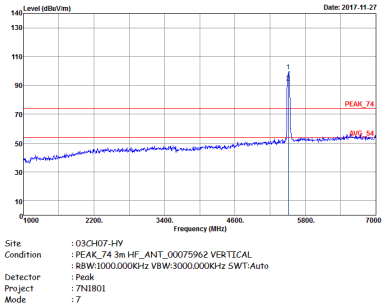
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT20 CH100 5500MHz	
1	Vertical	Fundamental
Peak		
Avg.		Left blank

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

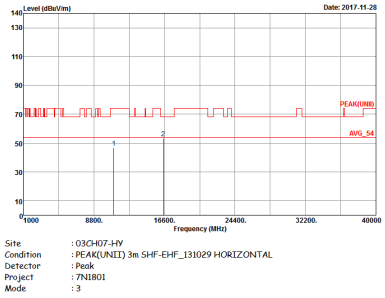
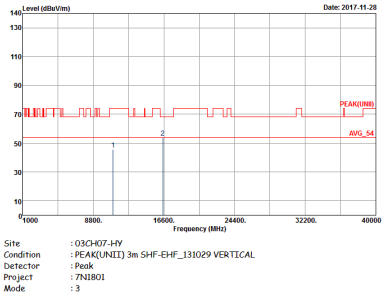
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH102 5510MHz - L	
1	Horizontal	Fundamental
Peak		
Avg.		Left blank

WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH102 5510MHz - R	
1	Horizontal	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 7N1801 Mode : 7	Left blank

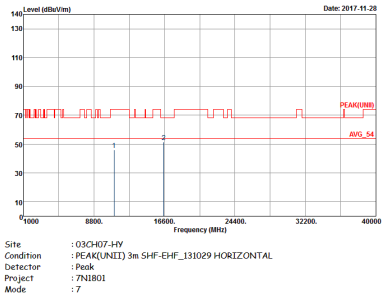
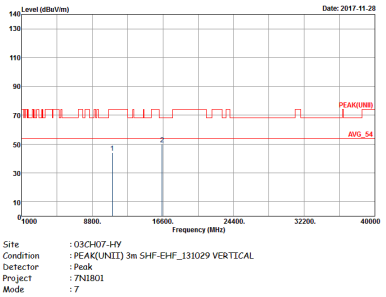
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH102 5510MHz - L	
1	Vertical	Fundamental
Peak		
Avg.		Left blank

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

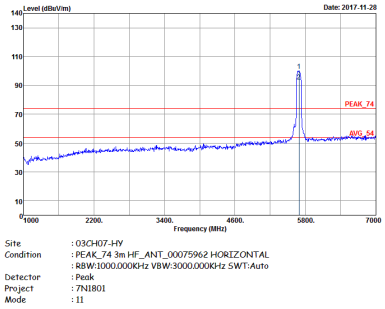
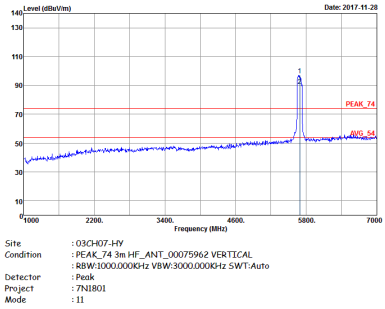
Band 3 5470~5725MHz
WIFI 802.11n HT20 (Harmonic @ 3m)

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

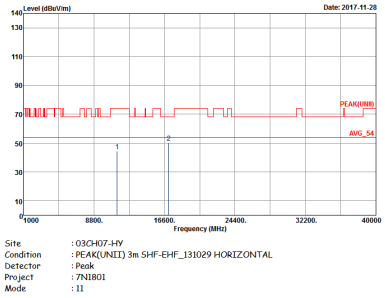
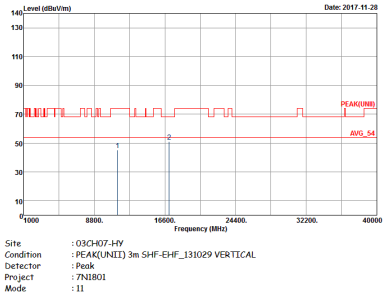
Band 3 5470~5725MHz
WIFI 802.11n HT40 (Harmonic @ 3m)

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

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

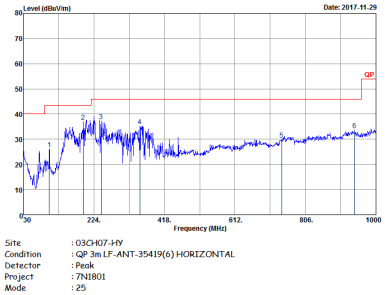
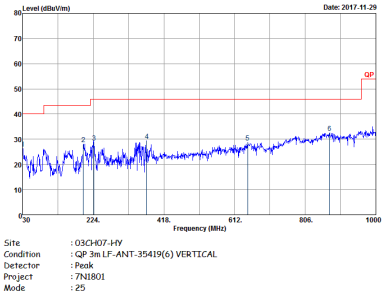
WIFI	Band 3 Straddle Channel Fundamental @ 3m	
ANT	802.11ac VHT80 CH138 5690MHz	
1	Horizontal	Vertical
Peak Avg.		

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

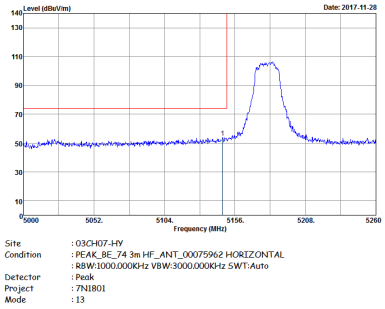
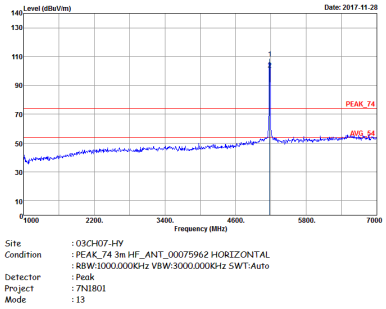
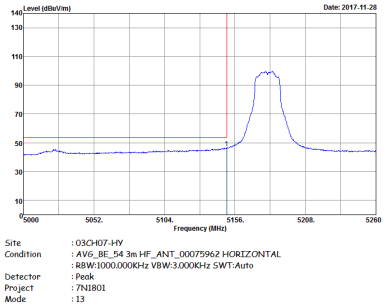
WIFI	Band 3 Straddle Channel Harmonic @ 3m	
ANT	802.11ac VHT80 CH138 5690MHz	
1	Horizontal	Vertical
Peak Avg.		

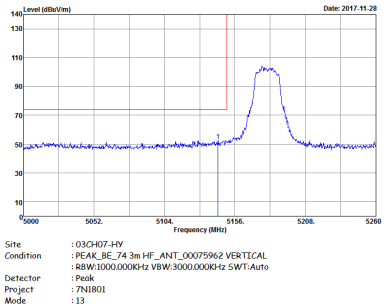
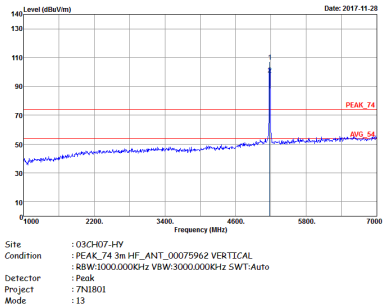
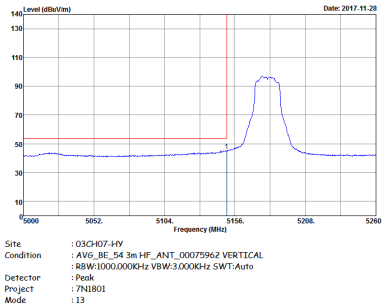
Emission below 1GHz

5GHz WIFI 802.11n HT40 (LF)

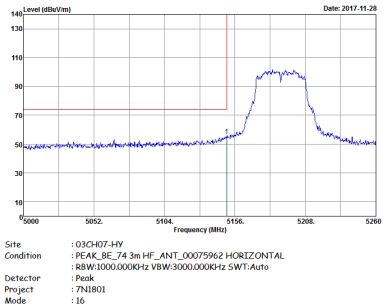
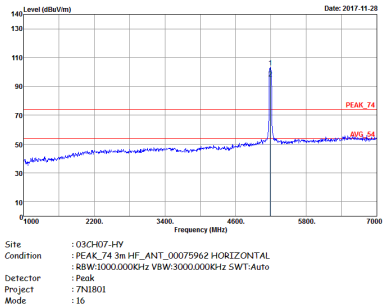
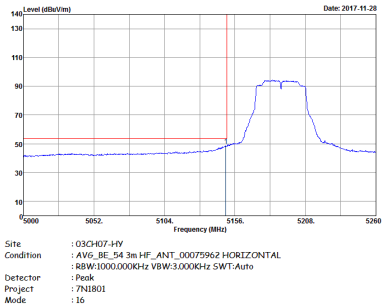
WIFI	5GHz WIFI	
ANT	802.11n HT40 LF	
1	Horizontal	Vertical
QP / Peak		

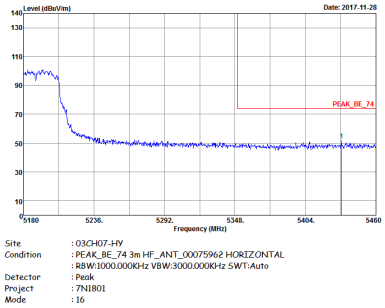
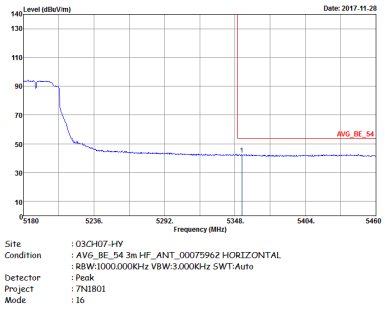
Band 1 5150~5250MHz
WIFI 802.11n HT20 (Band Edge @ 3m)

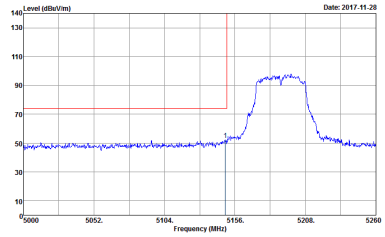
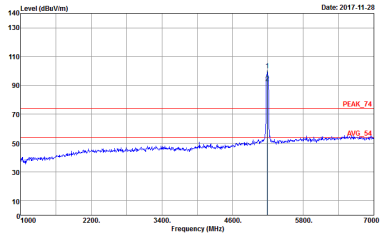
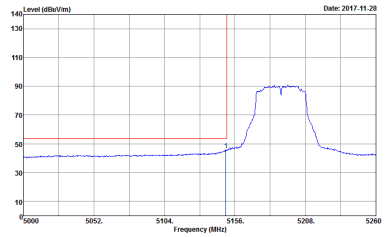
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH36 5180MHz	
1+2	Horizontal	Fundamental
Peak		
Avg.		Left blank

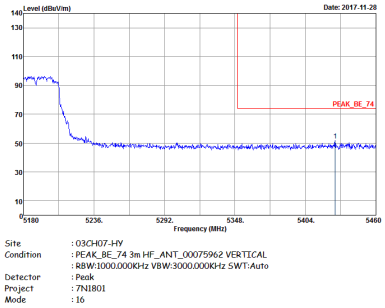
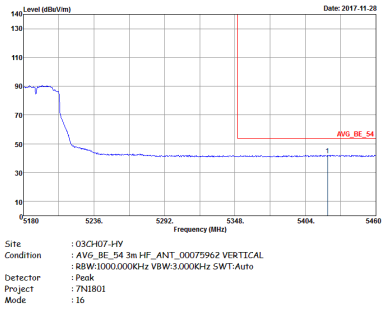
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH36 5180MHz	
1+2	Vertical	Fundamental
Peak		
Avg.		Left blank

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

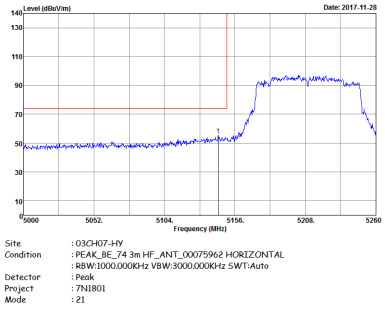
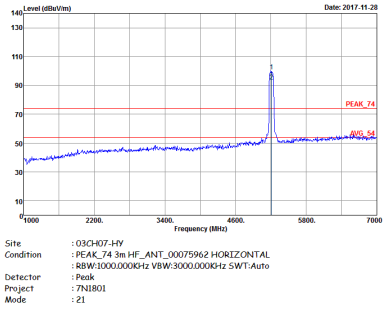
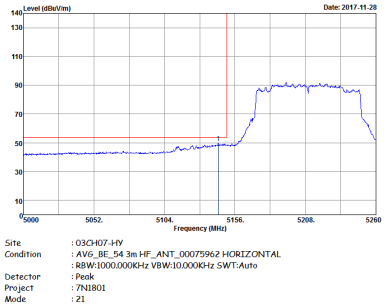
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH38 5190MHz - L	
1+2	Horizontal	Fundamental
Peak		
Avg.		Left blank

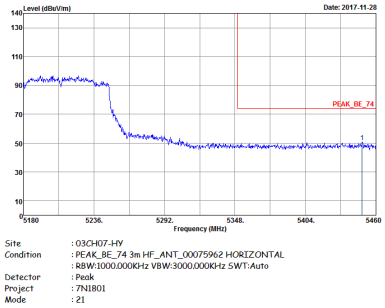
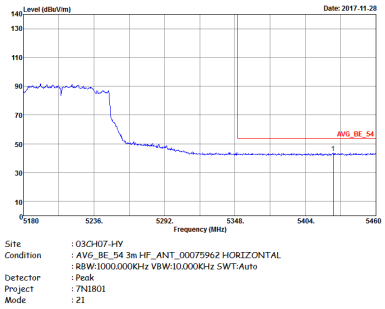
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH38 5190MHz - R	
1+2	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

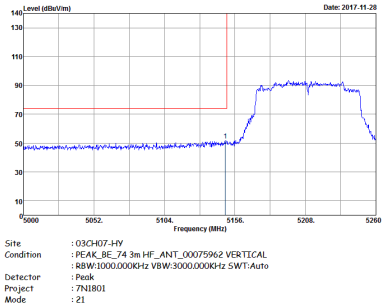
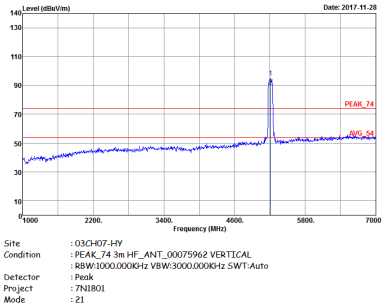
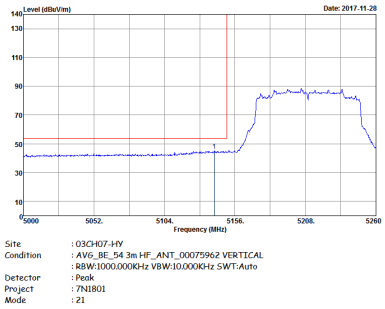
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH38 5190MHz - L	
1+2	Vertical	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 7N1801 Mode : 16	 Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00075962 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 7N1801 Mode : 16
Avg.	 Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 VERTICAL : RBW:1000.000KHz VBW:3.000KHz SWT:Auto Detector : Peak Project : 7N1801 Mode : 16	Left blank

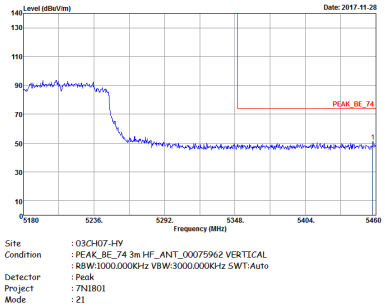
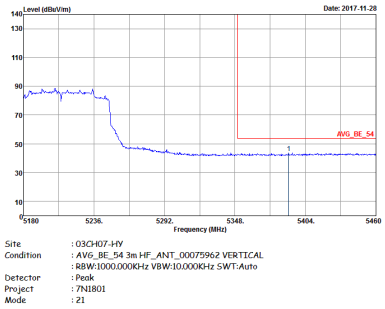
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH38 5190MHz - R	
1+2	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

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

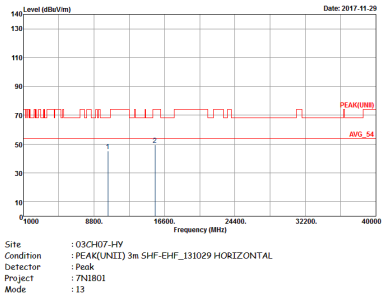
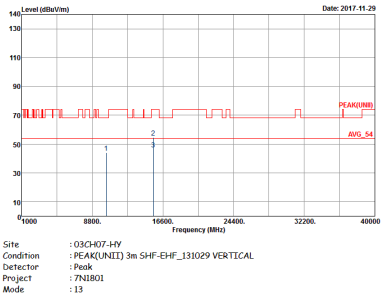
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH42 5210MHz - L	
1+2	Horizontal	Fundamental
Peak		
Avg.		Left blank

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

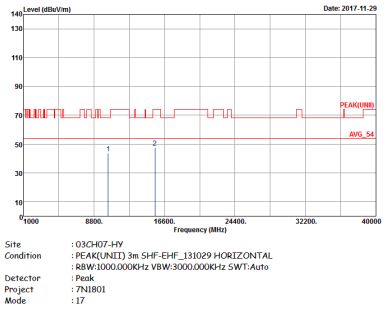
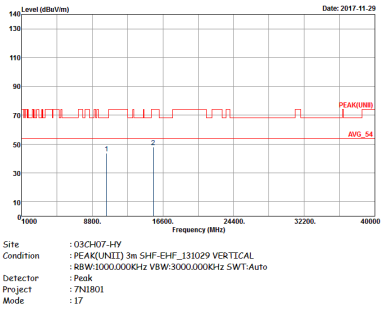
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH42 5210MHz - R	
1+2	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

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

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

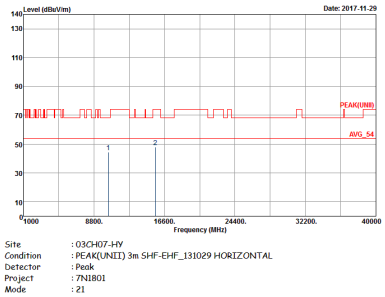
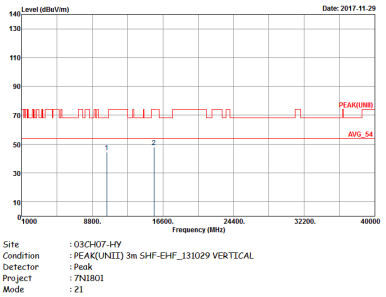
Band 1 5150~5250MHz

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.		

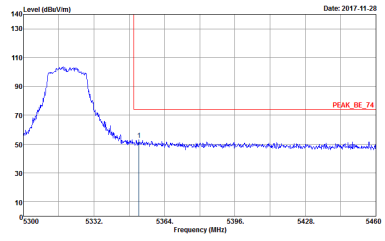
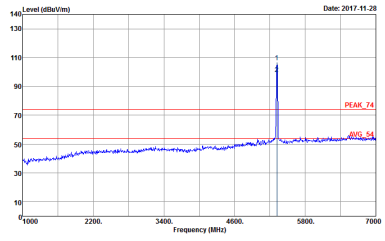
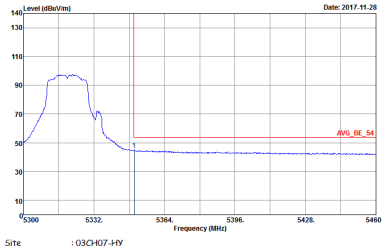
Band 1 5150~5250MHz

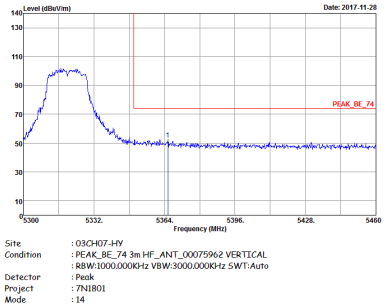
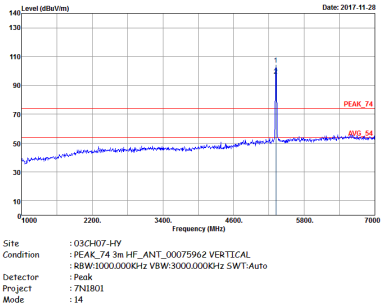
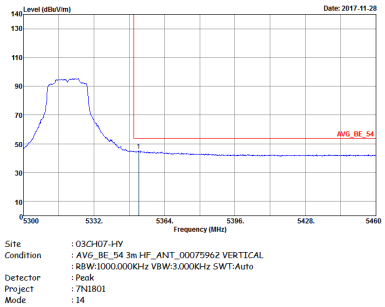
WIFI 802.11ac VHT80 (Harmonic @ 3m)

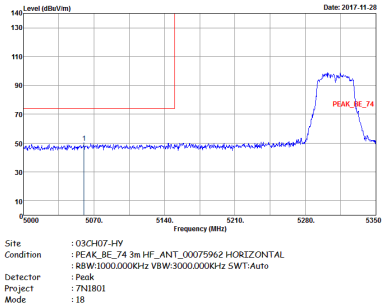
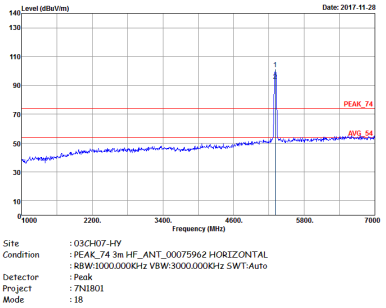
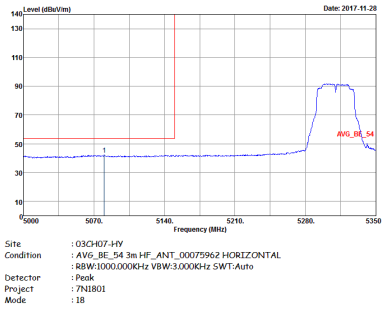
WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11ac VHT80 CH42 5210MHz	
1+2	Horizontal	Vertical
Peak Avg.		

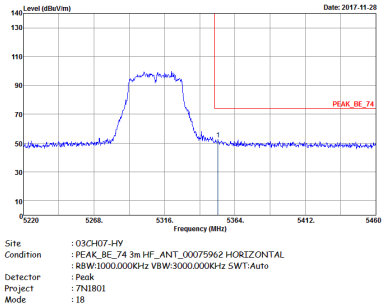
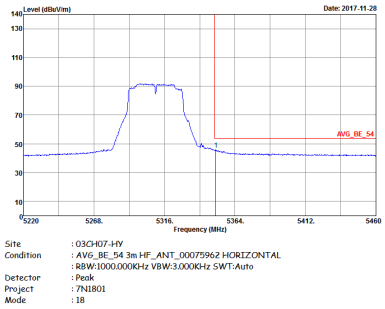
Band 2 5250~5350MHz

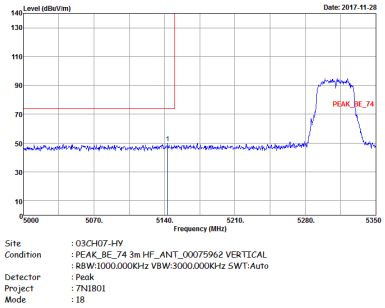
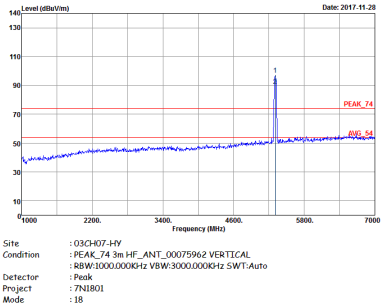
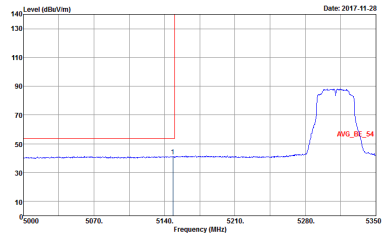
WIFI 802.11n HT20 (Band Edge @ 3m)

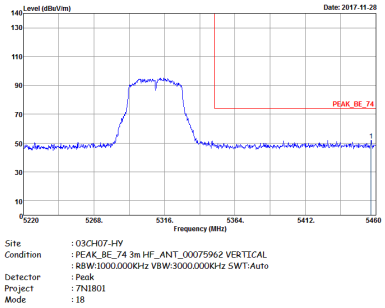
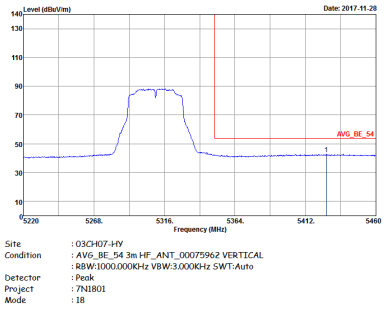
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH64 5320MHz	
1+2	Horizontal	Fundamental
Peak		
Avg.		Left blank

WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH64 5320MHz	
1+2	Vertical	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 7N1801 Mode : 14	 Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00075962 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 7N1801 Mode : 14
Avg.	 Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 VERTICAL : RBW:1000.000KHz VBW:3.000KHz SWT:Auto Detector : Peak Project : 7N1801 Mode : 14	Left blank

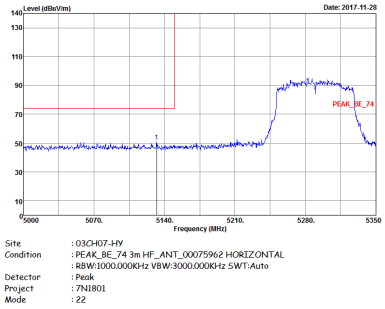
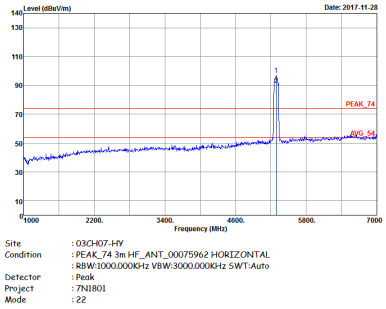
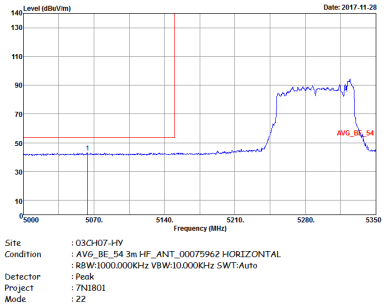
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT40 CH62 5310 - L	
1+2	Horizontal	Fundamental
Peak		
Avg.		Left blank

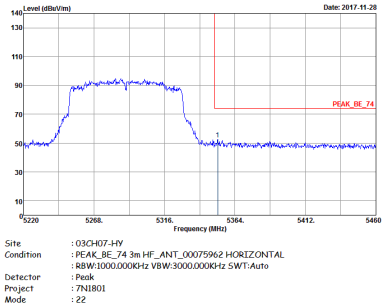
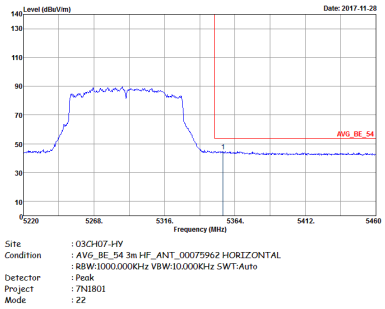
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT40 CH62 5310 - R	
1+2	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

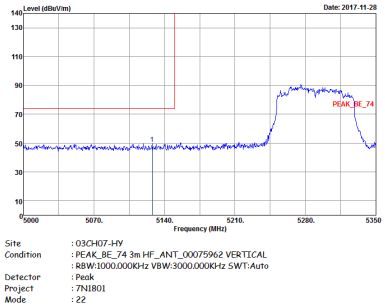
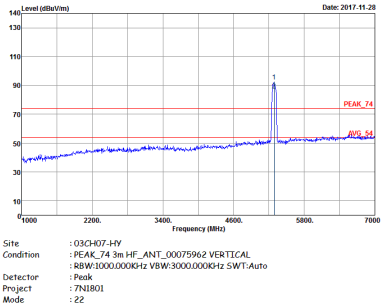
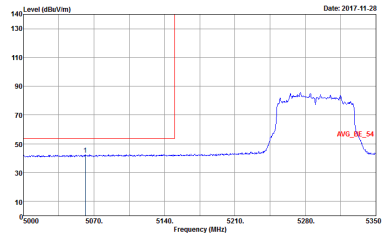
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT40 CH62 5310 - L	
1+2	Vertical	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 7N1801 Mode : 18	 Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00075962 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 7N1801 Mode : 18
Avg.	 Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 VERTICAL : RBW:1000.000KHz VBW:3.000KHz SWT:Auto Detector : Peak Project : 7N1801 Mode : 18	Left blank

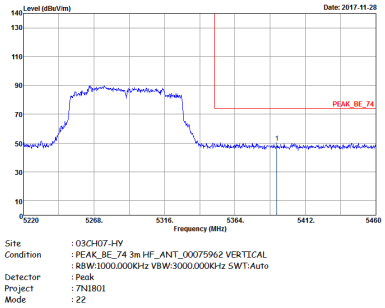
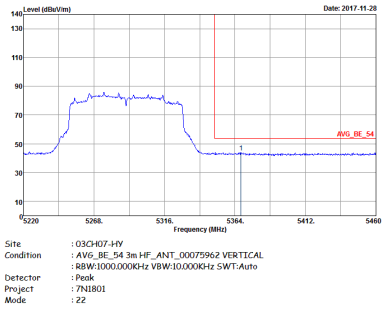
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT40 CH62 5310 - R	
1+2	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

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

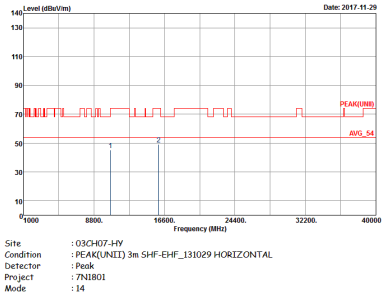
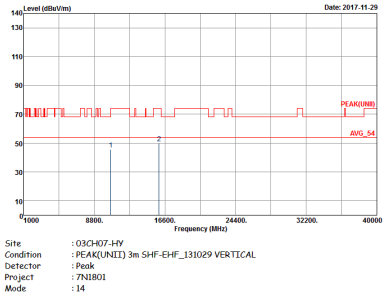
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH58 5290MHz - L	
1+2	Horizontal	Fundamental
Peak		
Avg.		Left blank

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	 Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 7N1801 Mode : 22	 Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00075962 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 7N1801 Mode : 22
Avg.	 Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 VERTICAL : RBW:1000.000KHz VBW:10.000KHz SWT:Auto Detector : Peak Project : 7N1801 Mode : 22	Left blank

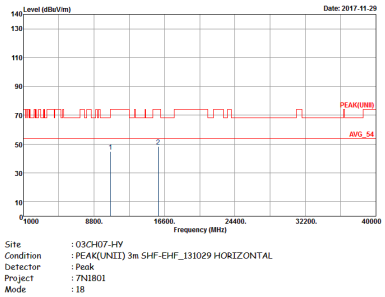
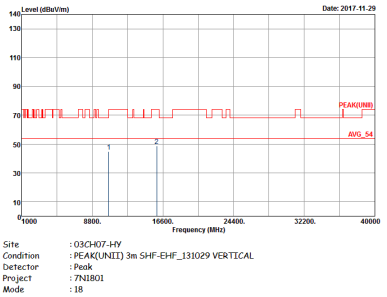
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH58 5290MHz - R	
1+2	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

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

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

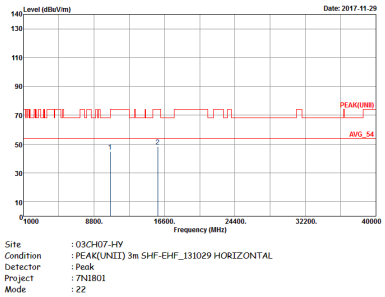
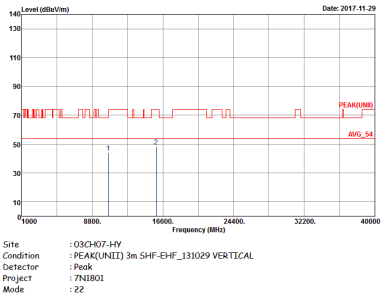
Band 2 5250~5350MHz

WIFI 802.11n HT40 (Harmonic @ 3m)

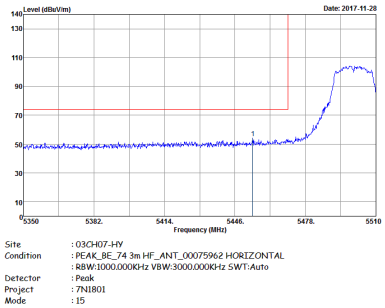
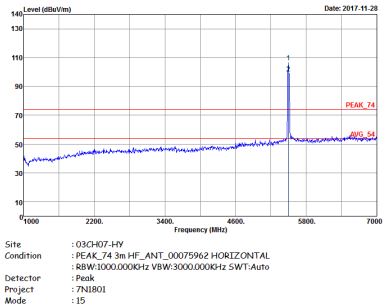
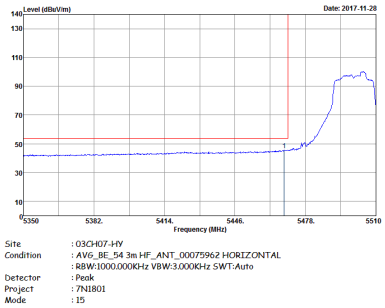
WIFI	Band 2 5250~5350MHz Harmonic @ 3m	
ANT	802.11n HT40 CH62 5310	
1+2	Horizontal	Vertical
Peak Avg.		

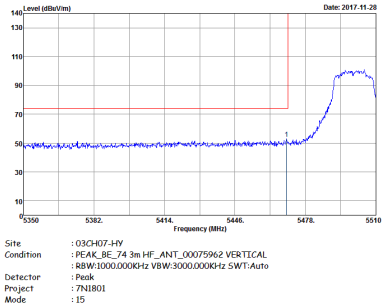
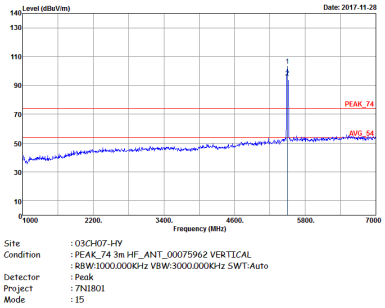
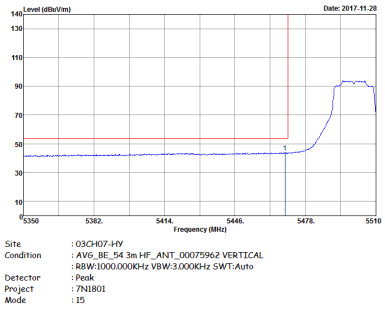
Band 2 5250~5350MHz

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.		

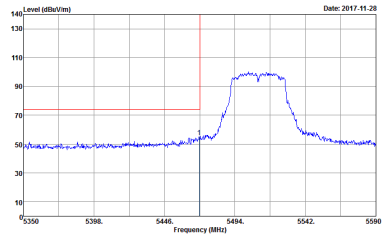
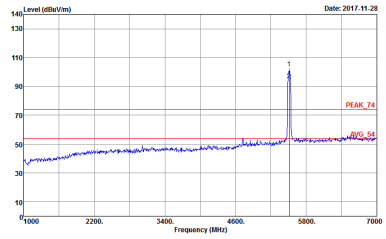
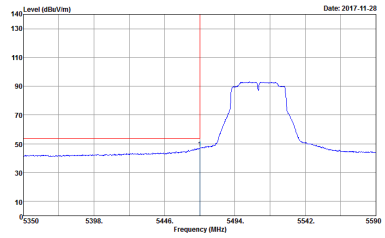
Band 3 5470~5725MHz
WIFI 802.11n HT20 (Band Edge @ 3m)

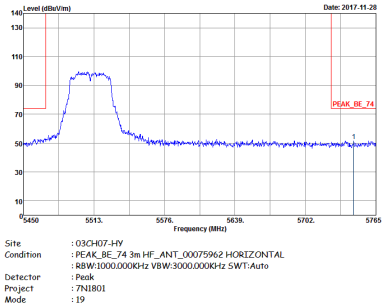
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT20 CH100 5500MHz	
1+2	Horizontal	Fundamental
Peak		
Avg.		Left blank

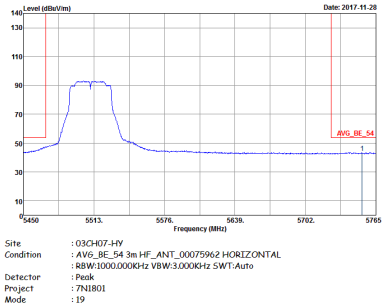
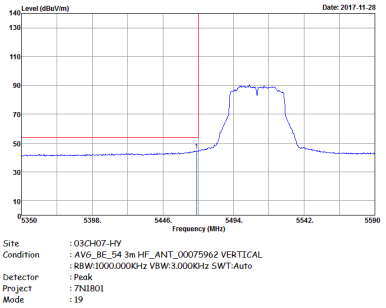
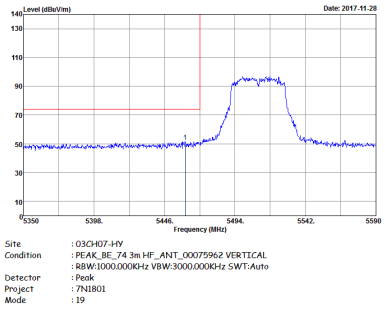
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT20 CH100 5500MHz	
1+2	Vertical	Fundamental
Peak		
Avg.		Left blank

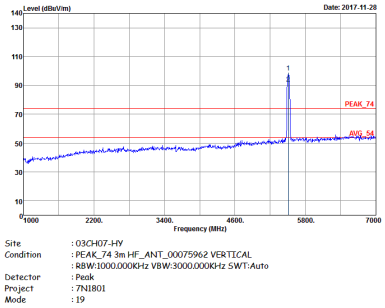
Band 3 5470~5725MHz

WIFI 802.11n HT40 (Band Edge @ 3m)

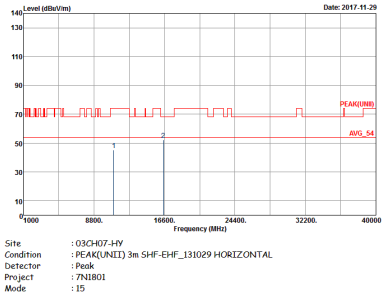
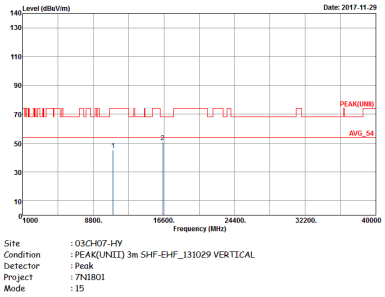
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH102 5510MHz - L	
1+2	Horizontal	Fundamental
Peak		
Avg.		Left blank

WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH102 5510MHz - R	
1+2	Horizontal	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 7N1801 Mode : 19	Left blank

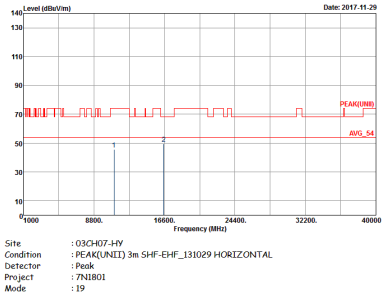
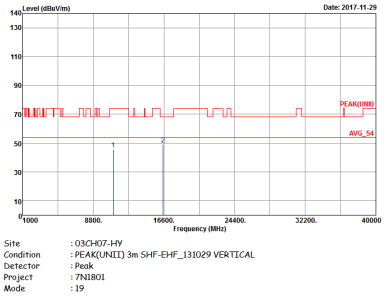
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH102 5510MHz - L	
1+2	Vertical	Fundamental
Peak		
Avg.		Left blank

WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH102 5510MHz - R	
1+2	Vertical	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00075962 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 7N1801 Mode : 19	Left blank

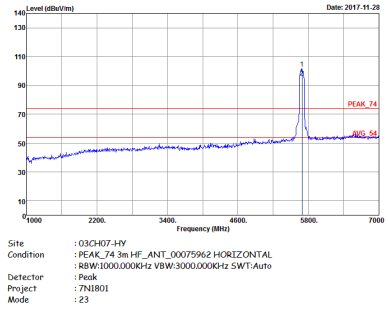
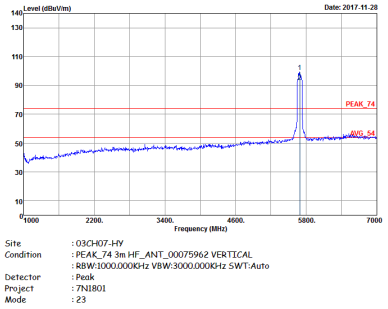
Band 3 5470~5725MHz
WIFI 802.11n HT20 (Harmonic @ 3m)

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

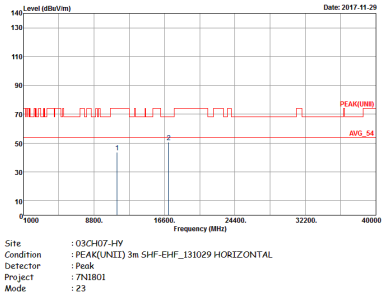
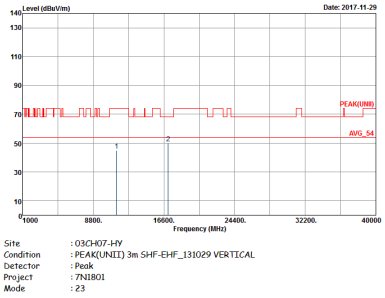
Band 3 5470~5725MHz
WIFI 802.11n HT40 (Harmonic @ 3m)

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

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

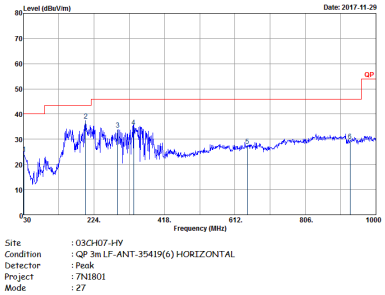
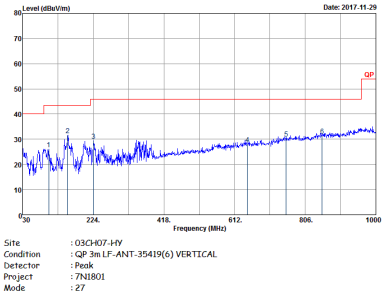
WIFI	Band 3 Straddle Channel Fundamental @ 3m	
ANT	802.11ac VHT80 CH138 5690MHz	
1+2	Horizontal	Vertical
Peak Avg.		

Band 3 – Straddle Channel
WIFI 802.11ac 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)

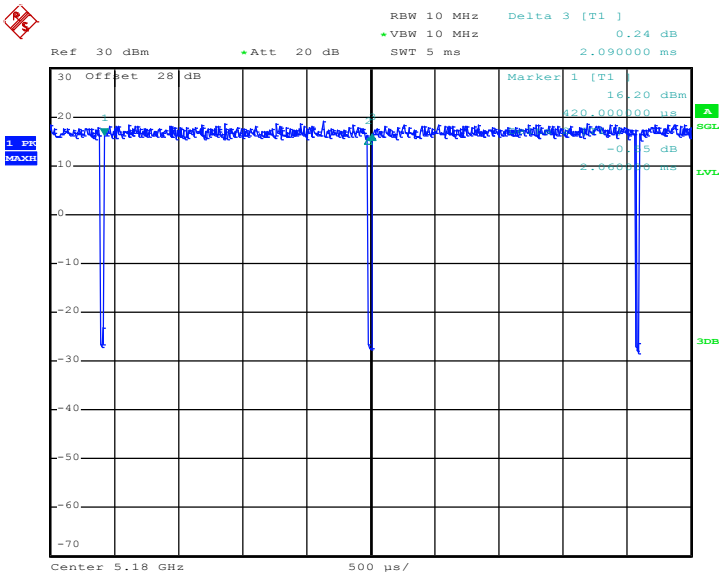
WIFI	5GHz WIFI	
ANT	802.11ac VHT80 LF	
1+2	Horizontal	Vertical
QP / Peak		

Appendix D. Duty Cycle Plots

Antenna	Band	Duty Cycle(%)	T(us)	1/T(kHz)	VBW Setting
1	802.11a	98.57	-	-	10Hz
2	802.11a	98.57	-	-	10Hz
1	5GHz 802.11n HT20	97.95	1910	0.52	1kHz
2	5GHz 802.11n HT20	98.45	-	-	10Hz
1+2	5GHz 802.11n HT20 for Ant. 1	96.15	975	1.03	3kHz
1+2	5GHz 802.11n HT20 for Ant. 2	96.45	978	1.02	3kHz
1	5GHz 802.11n HT40	96.89	936	1.07	3kHz
2	5GHz 802.11n HT40	96.89	936	1.07	3kHz
1+2	5GHz 802.11n HT40 for Ant. 1	92.42	488	2.05	3kHz
1+2	5GHz 802.11n HT40 for Ant. 2	93.18	492	2.03	3kHz
1	5GHz 802.11ac VHT20	98.46	-	-	10Hz
2	5GHz 802.11ac VHT20	98.46	-	-	10Hz
1+2	5GHz 802.11ac VHT20 for Ant. 1	95.91	984	1.02	3kHz
1+2	5GHz 802.11ac VHT20 for Ant. 2	95.88	978	1.02	3kHz
1	5GHz 802.11ac VHT40	96.32	942	1.06	3kHz
2	5GHz 802.11ac VHT40	96.91	942	1.06	3kHz
1+2	5GHz 802.11ac VHT40 for Ant. 1	92.48	492	2.03	3kHz
1+2	5GHz 802.11ac VHT40 for Ant. 2	93.21	494	2.02	3kHz
1	5GHz 802.11ac VHT80	93.50	460	2.17	3kHz
2	5GHz 802.11ac VHT80	93.44	456	2.19	3kHz
1+2	5GHz 802.11ac VHT80 for Ant. 1	86.30	252	3.97	10kHz
1+2	5GHz 802.11ac VHT80 for Ant. 2	86.99	254	3.94	10kHz

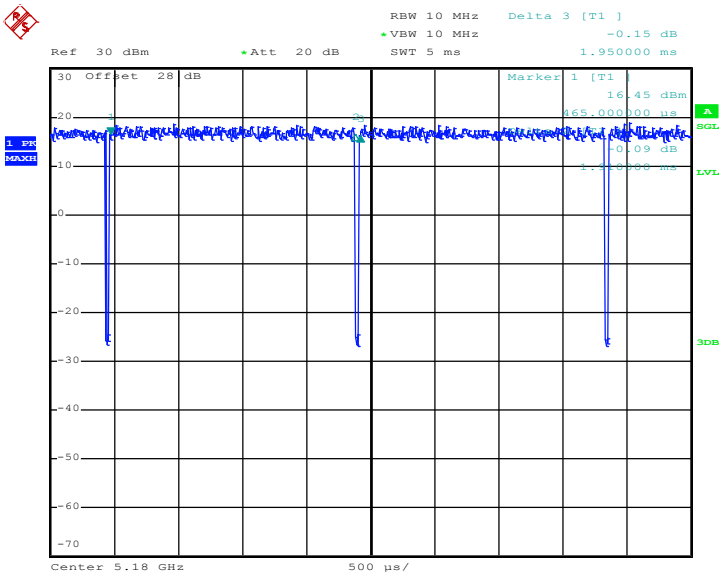
<Ant. 1>

802.11a



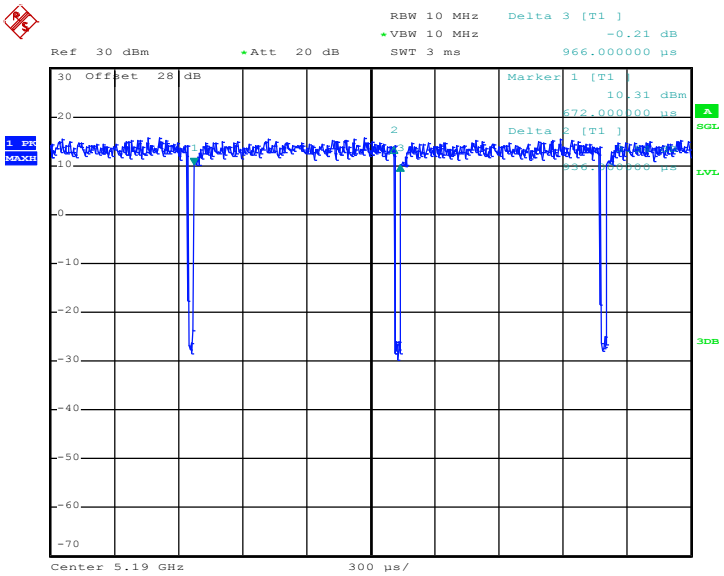
Date: 21.NOV.2017 15:44:51

802.11n HT20



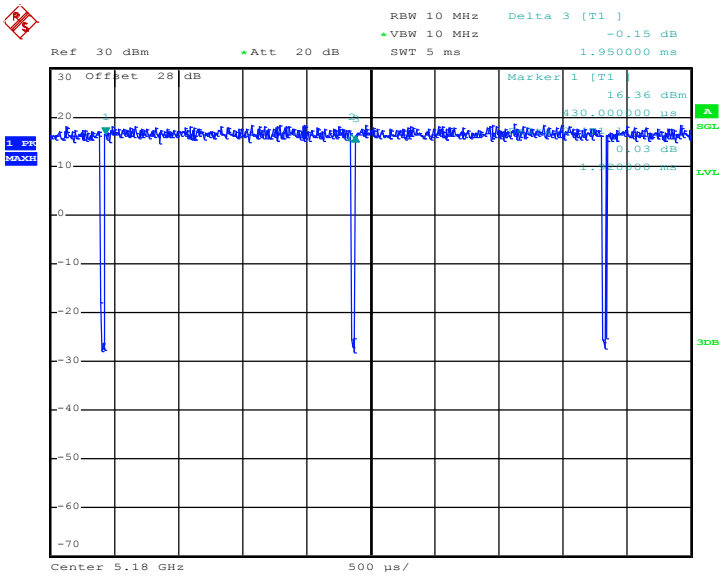
Date: 21.NOV.2017 15:46:30

802.11n HT40



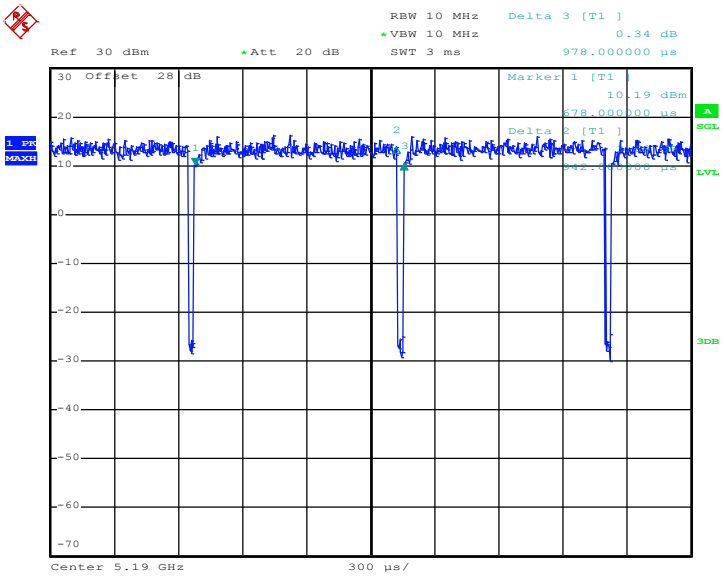
Date: 21.NOV.2017 15:49:55

802.11ac VHT20



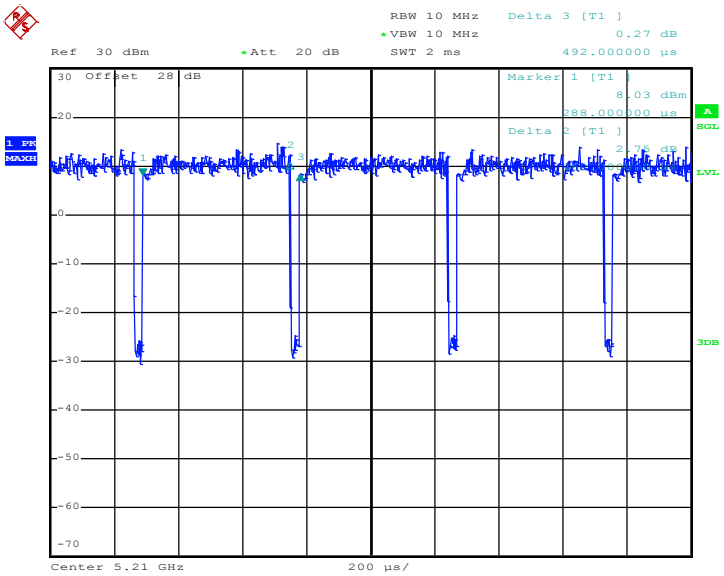
Date: 21.NOV.2017 15:55:52

802.11ac VHT40



Date: 21.NOV.2017 15:54:15

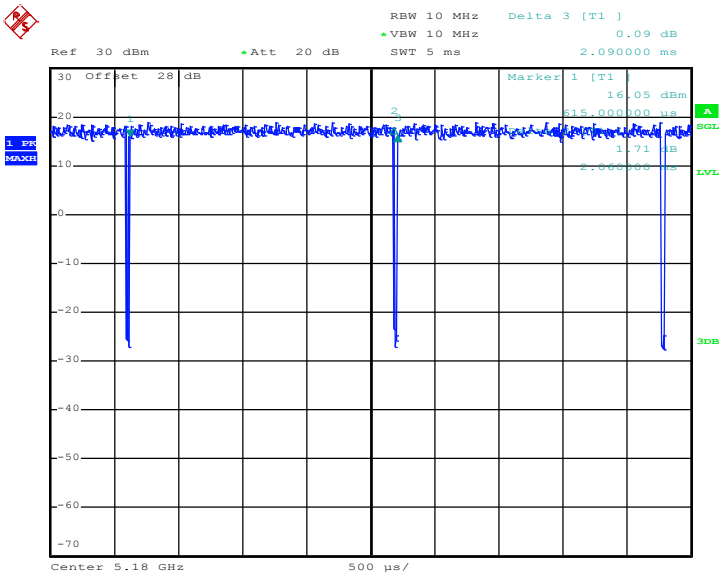
802.11ac VHT80



Date: 21.NOV.2017 16:00:15

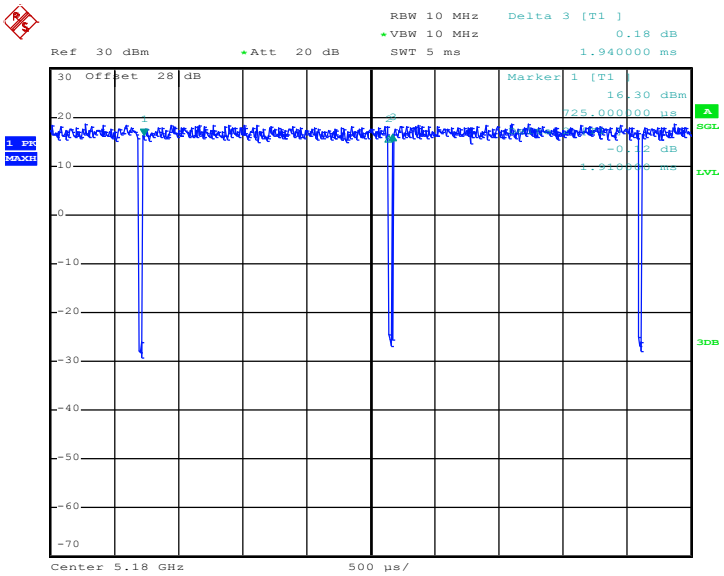
<Ant. 2>

802.11a



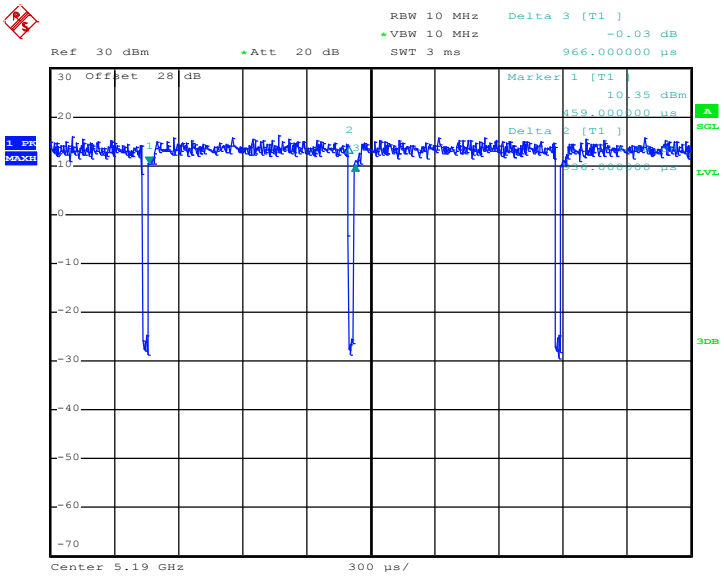
Date: 21.NOV.2017 15:45:40

802.11n HT20



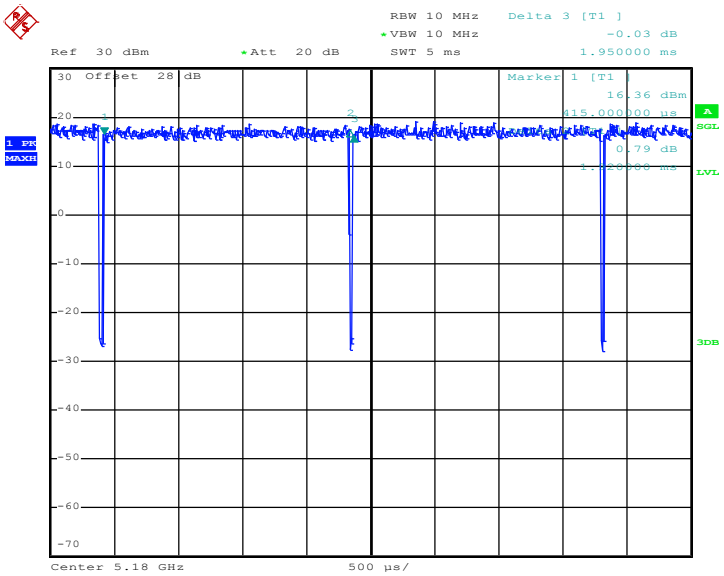
Date: 21.NOV.2017 15:47:11

802.11n HT40



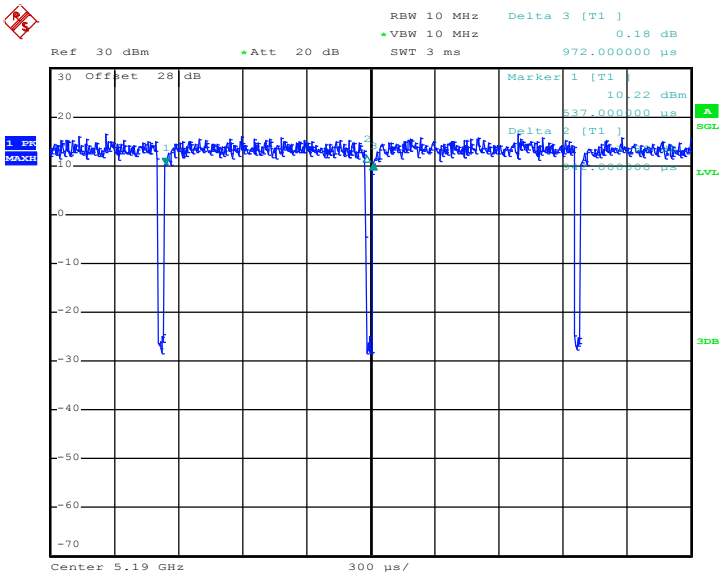
Date: 21.NOV.2017 15:50:32

802.11ac VHT20



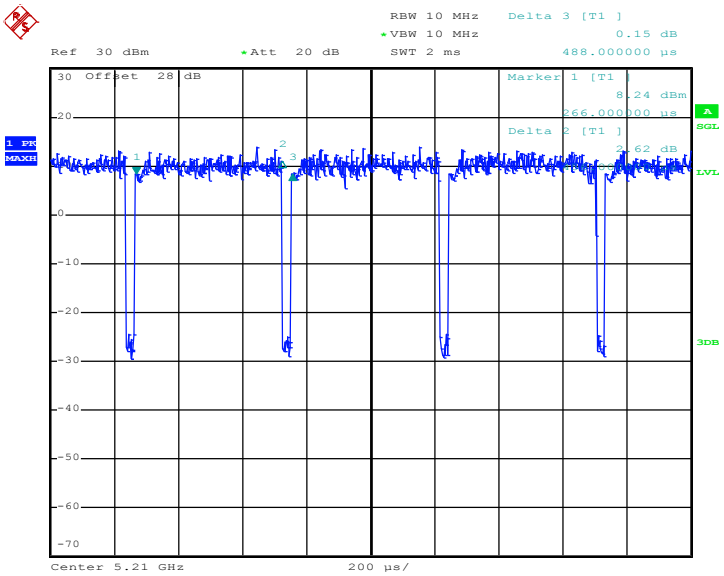
Date: 21.NOV.2017 15:56:24

802.11ac VHT40



Date: 21.NOV.2017 15:54:59

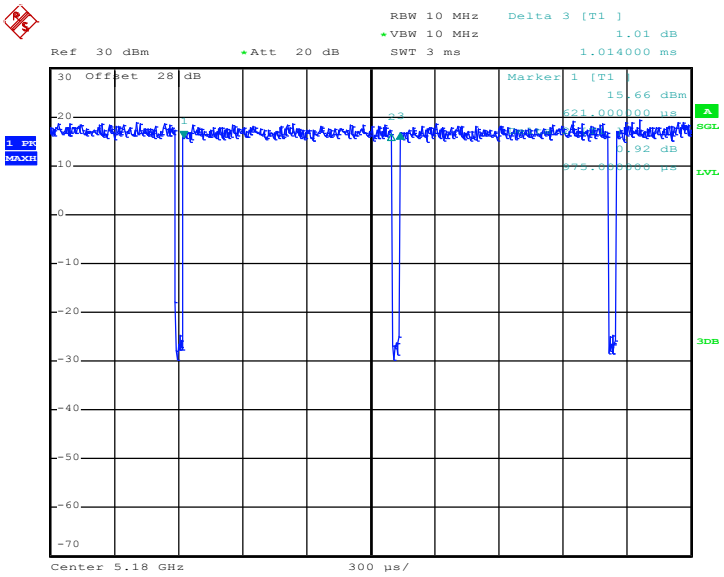
802.11ac VHT80



Date: 21.NOV.2017 16:01:00

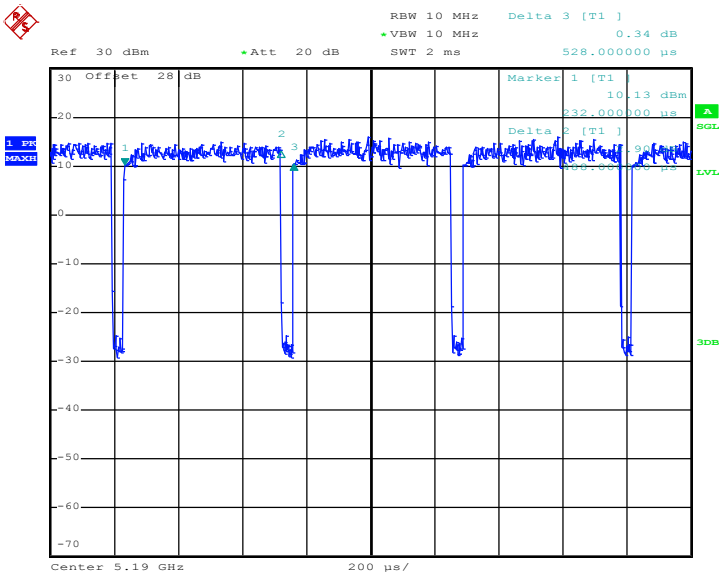
<MIMO Ant. 1>

802.11n HT20



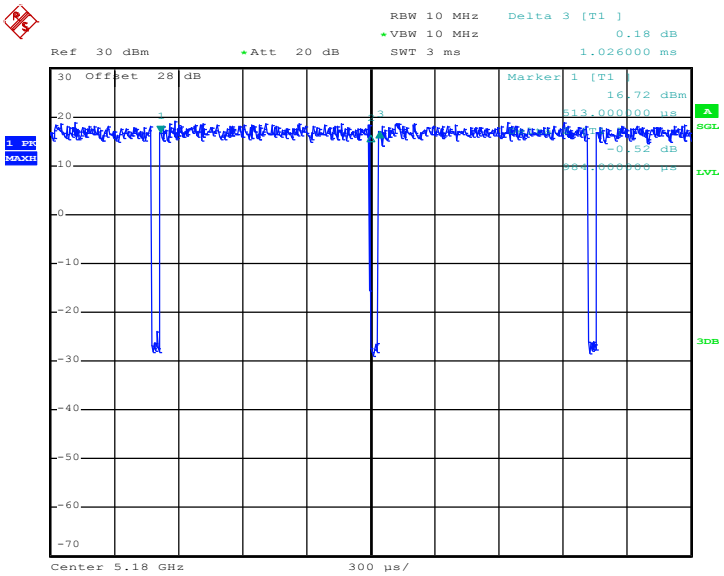
Date: 21.NOV.2017 15:48:16

802.11n HT40



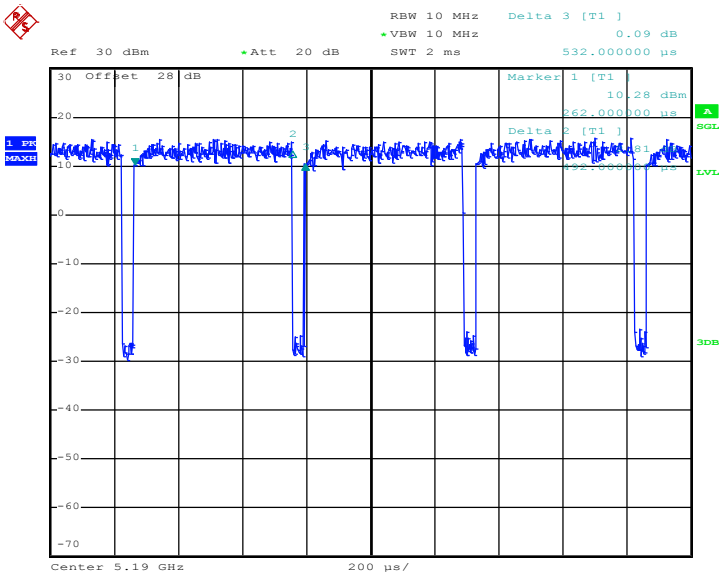
Date: 21.NOV.2017 15:51:19

802.11ac VHT20



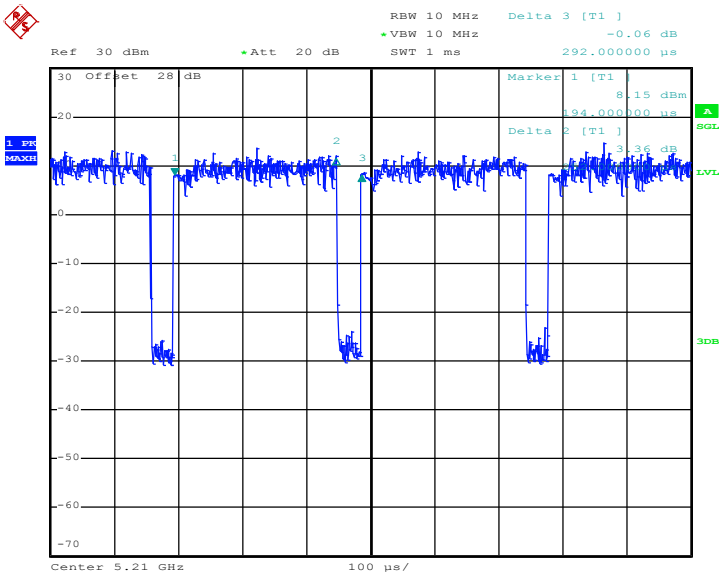
Date: 21.NOV.2017 15:57:03

802.11ac VHT40



Date: 21.NOV.2017 15:52:48

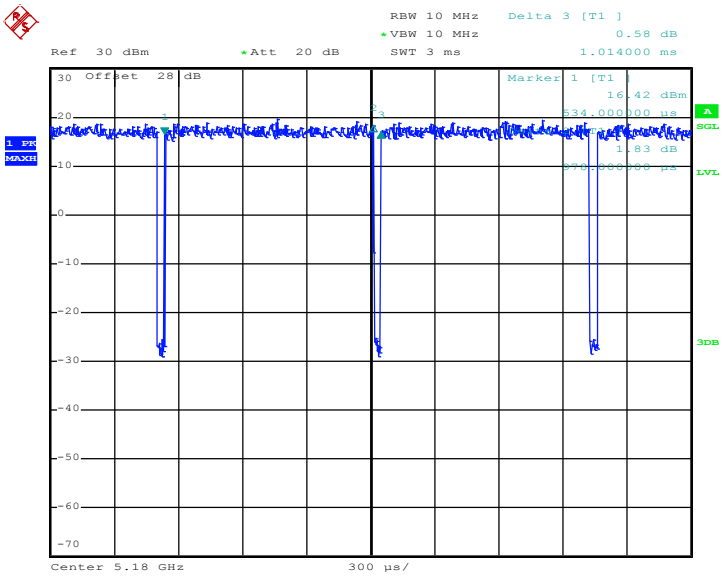
802.11ac VHT80



Date: 21.NOV.2017 15:58:31

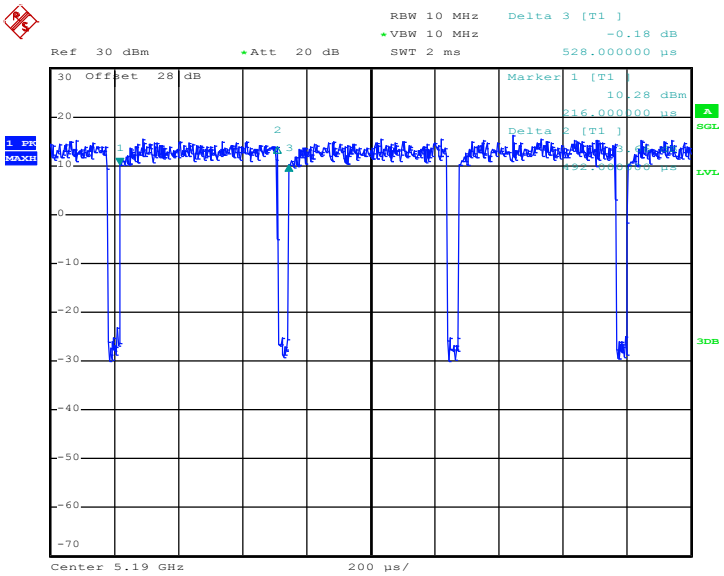
<MIMO Ant. 2>

802.11n HT20



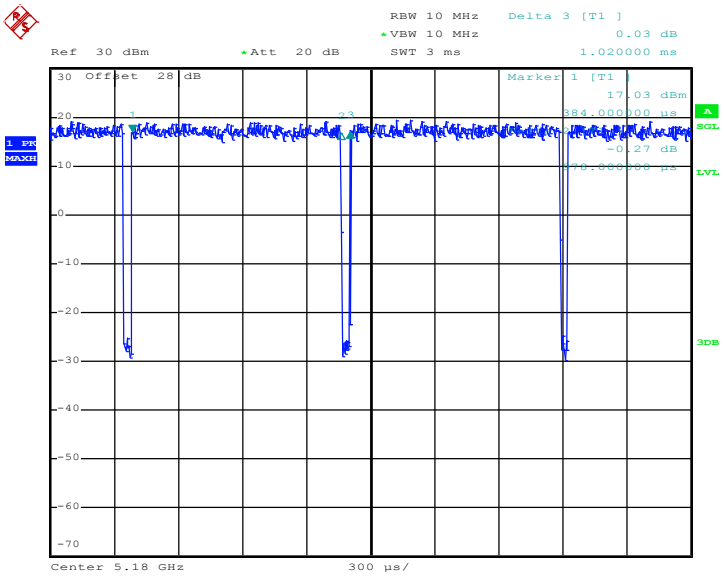
Date: 21.NOV.2017 15:48:48

802.11n HT40



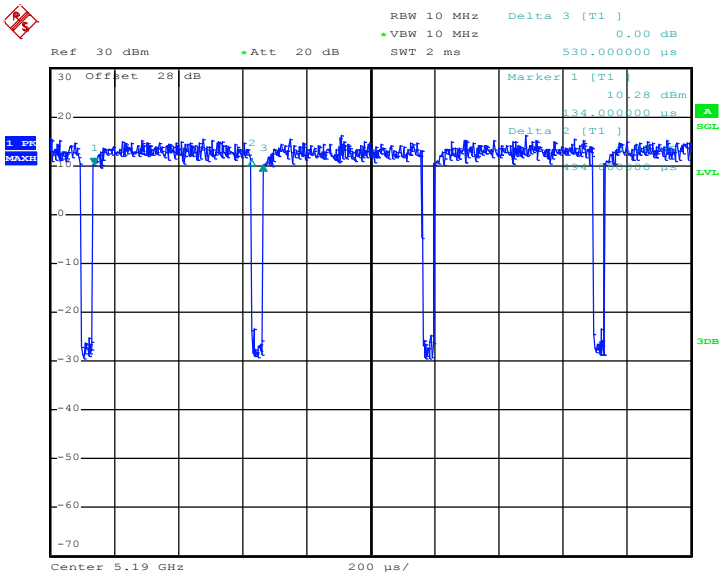
Date: 21.NOV.2017 15:51:49

802.11ac VHT20



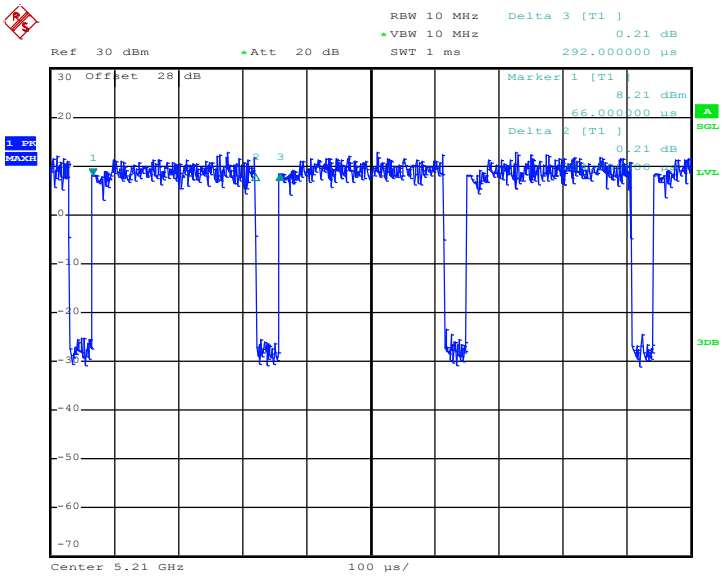
Date: 21.NOV.2017 15:57:38

802.11ac VHT40



Date: 21.NOV.2017 15:53:27

802.11ac VHT80



Date: 21.NOV.2017 15:59:11