FCC RF Test Report

APPLICANT	:	HMD Global Oy
EQUIPMENT	:	Smart Phone
BRAND NAME	:	NOKIA
MODEL NAME	:	TA-1053
FCC ID	:	2AJOTTA-1053
STANDARD	:	FCC Part 15 Subpart E §15.407
CLASSIFICATION	:	(NII) Unlicensed National Information Infrastructure

The product was received on Jan. 26, 2017 and testing was completed on Mar. 11, 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

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TABLE OF CONTENTS

SUMMARY OF TEST RESULT **4**
1 GENERAL DESCRIPTION **5**
1.1 Applicant 5
1.2 Manufacturer 5
1.3 Product Feature of Equipment Under Test 5
1.4 Re-use of Measured Data 5
1.5 Modification of EUT 9
1.6 Testing Location 9
1.7 Applicable Standards 10
2 TEST CONFIGURATION OF EQUIPMENT UNDER TEST **11**
2.1 Carrier Frequency Channel 11
2.2 Test Mode 13
2.3 Connection Diagram of Test System 14
2.4 Support Unit used in test configuration and system 14
2.5 EUT Operation Test Setup 14
3 TEST RESULT **15**
3.1 Maximum Conducted Output Power Measurement 15
3.2 Unwanted Radiated Emission Measurement 18
3.3 AC Conducted Emission Measurement 23
3.4 Automatically Discontinue Transmission 25
3.5 Antenna Requirements 26
4 LIST OF MEASURING EQUIPMENTS **27**
5 UNCERTAINTY OF EVALUATION **28**
APPENDIX A. CONDUCTED TEST RESULTS
APPENDIX B. AC CONDUCTED EMISSION TEST RESULT
APPENDIX C. RADIATED SPURIOUS EMISSION
APPENDIX D. RADIATED SPURIOUS EMISSION PLOTS
APPENDIX E. DUTY CYCLE PLOTS
APPENDIX F. SETUP PHOTOGRAPHS

REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FR712016-02F	Rev. 01	Initial issue of report	Apr. 06, 2017

SUMMARY OF TEST RESULT

Report Section	FCC Rule	Description	Limit	Result	Remark
3.1	15.407(a)	Maximum Conducted Output Power	FCC ≤ 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 4.81 dB at 32.700 MHz
3.3	15.207	AC Conducted Emission	15.207(a)	Pass	Under limit 13.90 dB at 13.558 MHz
3.4	15.407(c)	Automatically Discontinue Transmission	Discontinue Transmission	Pass	-
3.5	15.203 & 15.407(a)	Antenna Requirement	N/A	Pass	-

1 General Description

1.1 Applicant

HMD Global Oy
Karaportti 2, 02610 Espoo, Finland

1.2 Manufacturer

HMD Global Oy
Karaportti 2, 02610 Espoo, Finland

1.3 Product Feature of Equipment Under Test

GSM/WCDMA/LTE, Bluetooth, Wi-Fi 2.4GHz 802.11b/g/n, Wi-Fi 5GHz 802.11a/n, ANT+, FM Receiver, NFC, and GPS.

Product Specification subjective to this standard	
Antenna Type	WWAN: PIFA Antenna WLAN: PIFA Antenna Bluetooth: PIFA Antenna ANT+: PIFA Antenna GPS/Glonass/Beidou : Monopole Antenna NFC : Loop Antenna

1.4 Re-use of Measured Data

1.4.1 Introduction Section

The original model (FCC ID: 2AJOTTA-1044) and the variant model (FCC ID: 2AJOTTA-1053) has identical PCB layout, antenna, SW implementation for Bluetooth/Wi-Fi/GPS. Based on their similarity, the FCC Part 15C & 15E(equipment class: DTS, DSS,DXX, NII) test data issued for original model also apply for the variant model.

The applicant takes full responsibility that the test data as referenced in section 4 below represent compliance for this FCC ID (FCC ID: 2AJOTTA-1053).

1.4.2 Difference Section

The original model (FCC ID: 2AJOTTA-1044) and the variant model (FCC ID: 2AJOTTA-1053) has identical PCB layout, antenna, SW implementation for Bluetooth/Wi-Fi/GPS. The details of similarity and difference can be found in the Operating Description.

The product specification is outlined in the following table:

FCC ID			2AJOTTA-1044	2AJOTTA-1053
Wireless Tech	**Mode**		**Frequency (MHz)**	
GSM	GSM Voice GPRS (GMSK) EDGE (8PSK)	Multi-Slot Class 11 DTM: Yes	850/1900	850/1900
UMTS	AMR/RCM12.2Kbps HSDPA/HSUPA/DC-HSDPA		B2/B4/B5	B2/B5
LTE	QPSK/16QAM VoLTE		B2/B4/B7/B12/B17/B38	B5/B7/B38
Wi-Fi	11b/11g/11n(HT20)		2412-2462 MHz/	
	11a/11n(HT20)/11n(HT40)		5180-5240 MHz 5260-5320 MHz 5500-5700 MHz 5745-5825 MHz	
Bluetooth	BR/EDR/LE		2402-2480 MHz	
ANT+	ANT+		2402-2480 MHz	

1.4.3 Spot Check Verification Data Section

Summary of the spot check:

Test Item	Mode	2AJOTTA-1044 Worst Result	2AJOTTA-1053 Worst Result	Difference (dB)
Average Conducted Power (dBm)	802.11b	13.99	13.89	0.10
	802.11g	11.64	11.65	0.01
	11n HT20	10.90	10.92	-0.02
	20MHz BW 5150-5250MHz	14.42	14.48	-0.06
	20MHz BW 5250-5350MHz	14.41	14.47	-0.06
	20MHz BW 5470-5725MHz	14.37	14.34	0.03
	20MHz BW 5725-5850MHz	14.43	14.40	0.03
	40MHz BW 5150-5250MHz	14.23	14.19	0.04
	40MHz BW 5250-5350MHz	14.21	14.26	-0.05
	40MHz BW 5470-5725MHz	14.17	14.04	0.13
	40MHz BW 5725-5850MHz	14.34	14.40	-0.06
	BT (1Mbps)	7.53	7.62	-0.09
	BT (2Mbps)	5.23	5.17	0.06
	BT (3Mbps)	5.20	5.13	0.07
	BT-LE	0.63	0.72	-0.09
	ANT+	0.47	0.48	-0.01
	Test date	2017/02/11 – 2017/02/24	2017/03/14 – 2017/03/14	
Peak Radiated Spurious Emission (Band Edge) (dBuV/m)	802.11b	54.48	54.95	-0.47
	11n HT20	56.36	57.04	-0.68
	BT (1Mbps)	44.35	43.75	0.60
	BT-LE	55.17	54.61	0.56
	ANT+	65.94	63.66	2.28
	Test date	2017/02/11 – 2017/02/24	2017/03/03 – 2017/03/11	
Average Radiated Spurious Emission (Band Edge) (dBuV/m)	802.11b	45.51	44.25	1.26
	11n HT20	45.77	46.96	-1.19
	BT (1Mbps)	19.59	18.99	0.60
	BT-LE	45.28	45.24	0.04
	ANT+	38.85	38.59	0.26
	Test date	2017/02/11 – 2017/02/24	2017/03/03 – 2017/03/11	
Peak Radiated Spurious Emission (Harmonic) (dBuV/m)	802.11b	45.27	46.25	-0.98
	11n HT20	41.37	43.54	-2.17
	BT (1Mbps)	40.93	41.49	-0.56
	BT-LE	40.63	42.23	-1.60
	ANT+	37.66	39.64	-1.98
	Test date	2017/02/11 – 2017/02/24	2017/03/03 – 2017/03/11	

Conclusion:

WLAN Radiated spurious emission test against the variant model for non-cellular part based on the worst-case condition from the original model was performed in this filing to demonstrate the test data from original model remains representative for the variant model.

Based on the spot check test result (power levels measured are within 0.5dB, and the worst case of RSE spot check verification based on the worst condition from the original model is within 3dB, and are compliance with the limits), the test data from the original model is representative for the variant model.

The unwanted, harmonics, radiated spurious emission is reported peak measurement only due to spurious lower than 20dB than the limit.

The detail test results can be found in this document, Appendix A, hereafter.

1.4.4 Reference detail Section

Equipment Class	Reference FCC ID	Type Grant/Permissive Change	Reference Application	Folder Test/RF Exposure	Report Title
DTS	2AJOTTA-1044	Original Grant	FR712016B	Part 15C	All sections applicable
			FR712016C	Part 15C	All sections applicable
			FA712016	RF Exposure	All sections applicable
DSS	2AJOTTA-1044	Original Grant	FR712016A	Part 15C	All sections applicable
			FA712016	RF Exposure	All sections applicable
DXX	2AJOTTA-1044	Original Grant	FR712016D	Part 15C	All sections applicable
			FA712016	RF Exposure	All sections applicable
NII	2AJOTTA-1044	Original Grant	FR712016F FR712016G FZ712016	Part 15E	Conducted sections applicable
			FA712016	RF Exposure	All sections applicable

1.5 Modification of EUT

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

1.6 Testing Location

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

Test Site	SPORTON INTERNATIONAL INC.	
Test Site Location	No. 52, 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.**	
	TH05-HY	CO05-HY

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

Test Site	SPORTON INTERNATIONAL INC.
Test Site Location	No.58, Aly. 75, Ln. 564, Wenhua 3rd Rd. Guishan Dist, Taoyuan City, Taiwan (R.O.C.) TEL: +886-3-327-0868 FAX: +886-3-327-0855
Test Site No.	**Sporton Site No.**
	03CH11-HY

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

1.7 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 v01r03.
- ANSI C63.10-2013

Remark:

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

2 Test Configuration of Equipment Under Test

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

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

2.1 Carrier Frequency 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	5720

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: The above Frequency and Channel in "*" were 802.11n HT40.

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.

Modulation	Data Rate
802.11a	6 Mbps
802.11n HT20	MCS0
802.11n HT40	MCS0

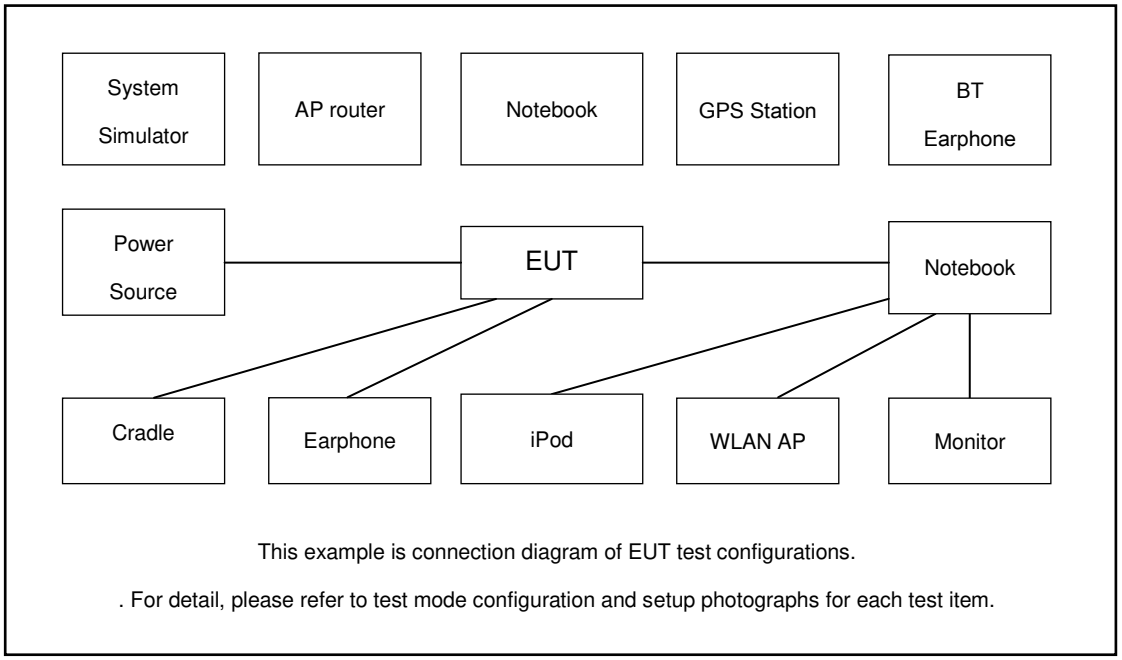
Test Cases	
AC Conducted Emission	Mode 1 : GSM850 Idle + Bluetooth Link + WLAN (5GHz) Link + NFC On + Earphone + USB Cable (Charging from Adapter) + SIM 1

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

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

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

2.3 Connection Diagram of Test System



2.4 Support Unit used in test configuration and system

Item	Equipment	Trade Name	Model Name	FCC ID	Data Cable	Power Cord
1.	System Simulator	Anritsu	MT8820C	N/A	N/A	Unshielded, 1.8 m
2.	Bluetooth Earphone	Sony Ericsson	MW600	PY7DDA-2029	N/A	N/A
3.	WLAN AP	ASUS	RT-AC66U	MSQ-RTAC66U	N/A	Unshielded,1.8m
4.	Notebook	DELL	Latitude E6320	FCC DoC/ Contains FCC ID: QDS-BRCM1054	N/A	AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m
5.	SD Card	SanDisk	MicroSD HC	FCC DoC	N/A	N/A

2.5 EUT Operation Test Setup

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

For Straddle Channel, U-NII procedures and limits were applied for operations in the frequency band in accordance with FCC KDB 644545 D03.

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

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

3.1.2 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 v01r03.

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

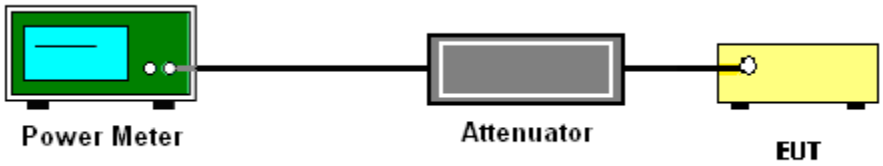
1. Measurement is performed using a wideband RF power meter.
2. The EUT is configured to transmit continuously with a consistent duty cycle at its maximum power control level.
3. Measure the average power of the transmitter, and the average power is corrected with duty factor, 10 log(1/x), where x is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

For straddle channel, the testing follows Method SA-3 (RMS detection with max hold) of FCC KDB 789033 D02 General UNII Test Procedures New Rules v01r03.

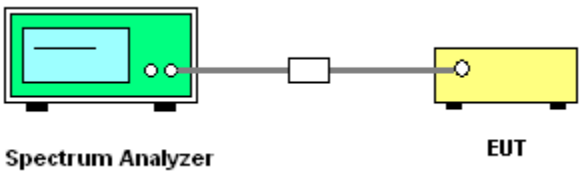
Compute power by integrating the spectrum across the 99% occupied bandwidth of the signal using the instrument's band power measurement function.

3.1.4 Test Setup

For normal channel:

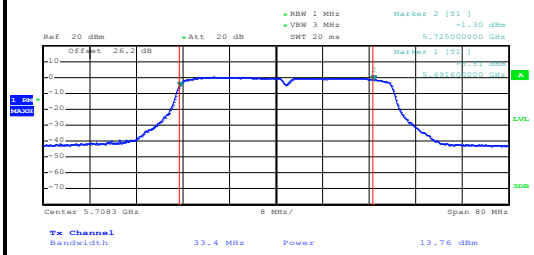
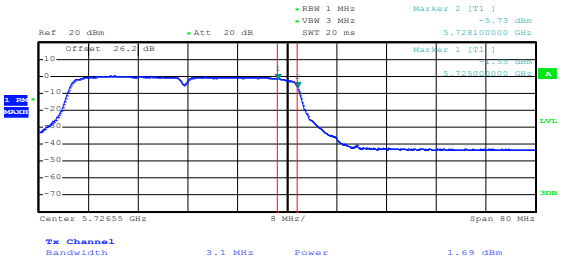


For straddle channel:



3.1.5 Test Result of Maximum Conducted Output Power

Please refer to Appendix A.

Worst Case Straddle Channel Power	
NII-2C Band	**DTS Band**
 Date: 27.FEB.2017 20:31:27	 Date: 27.FEB.2017 20:32:10

3.2 Unwanted Radiated Emission Measurement

This section as specified in FCC Part 15.407(b) is to measure unwanted emissions through radiated measurement for band edge spurious emissions and out of band emissions measurement. The unwanted emissions shall comply with 15.407(b)(1) to (6), and restricted bands per FCC Part15.205.

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 5470-5725MHz band: all emissions outside of the 5470-5725MHz 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 D01 v01r03 G)2)c) As specified in 15.407(b), emissions above 1000 MHz that are outside of the restricted bands are subject to a peak emission limit of -27 dBm/MHz (or -17 dBm/MHz as specified in 15.407(b)(4)). However, an out-of-band emission that complies with both the average and peak limits of 15.209 is not required to satisfy the -27 dBm/MHz or -17 dBm/MHz peak emission limit.

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 v01r03. 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

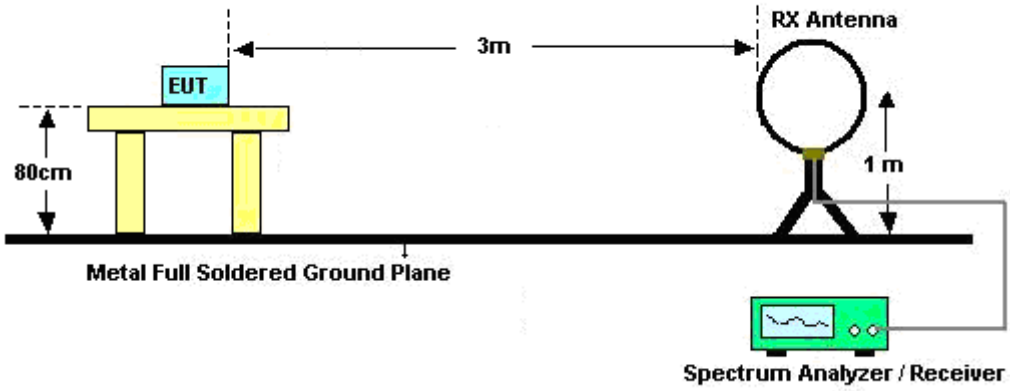
   (2) Procedure for Peak Unwanted Emissions Measurements Above 1000 MHz
   - RBW = 1 MHz
   - VBW ≥ 3 MHz
   - Detector = Peak
   - Sweep time = auto
   - Trace mode = max hold

   (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.

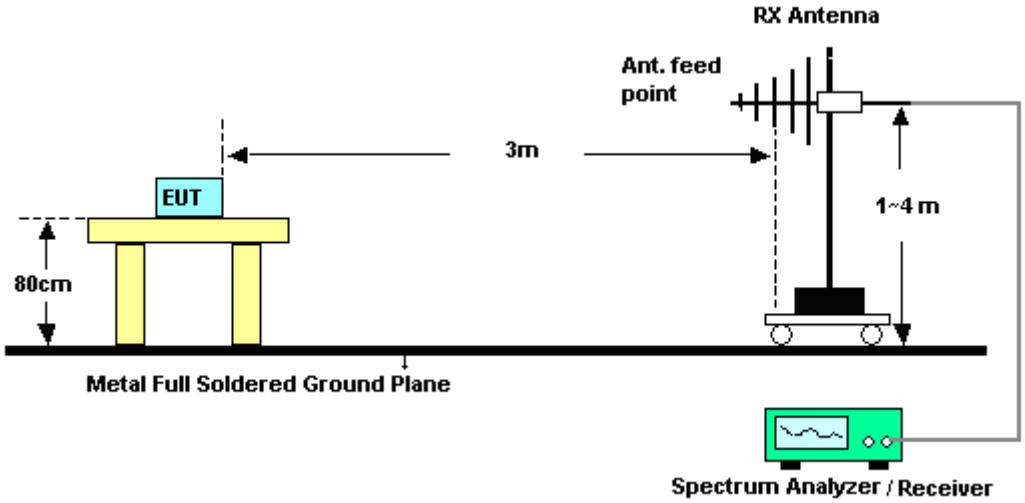
2. The EUT was placed on a turntable with 0.8 meter for frequency below 1GHz and 1.5 meter for frequency above 1GHz respectively above ground.
3. The EUT was set 3 meters from the interference receiving antenna which was mounted on the top of a variable height antenna tower.
4. The antenna is a broadband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

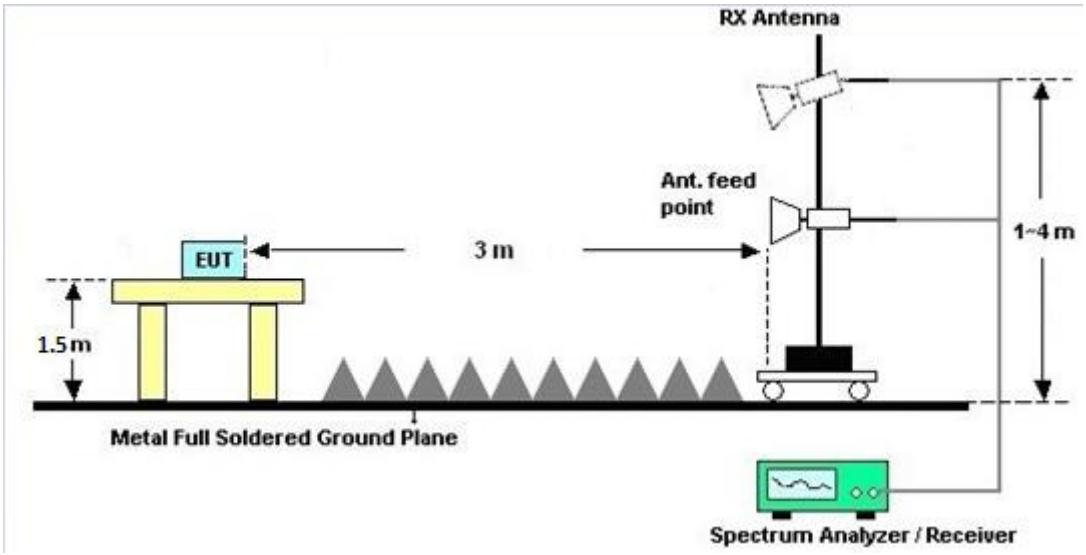
For radiated emissions below 30MHz



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 C and D.

3.2.7 Duty Cycle

Please refer to Appendix E.

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

Please refer to Appendix C and D.

3.3 AC Conducted Emission Measurement

3.3.1 Limit of AC Conducted Emission

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

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

*Decreases with the logarithm of the frequency.

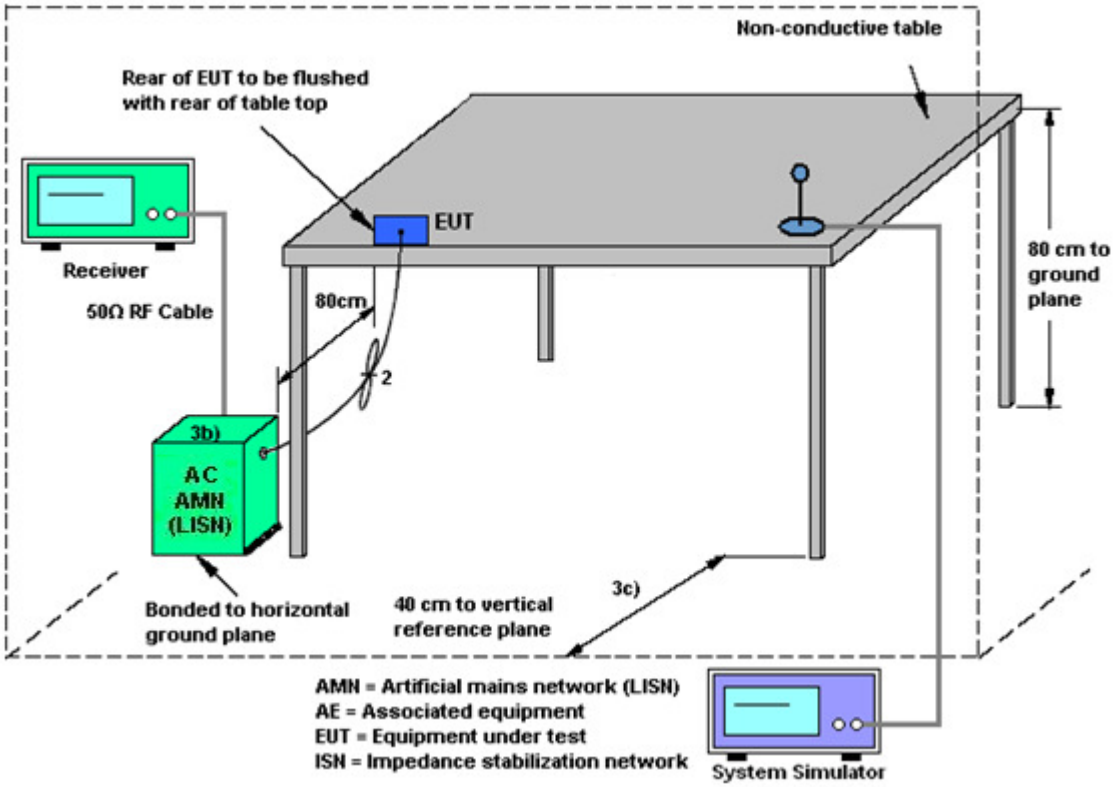
3.3.2 Measuring Instruments

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

3.3.3 Test Procedures

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

3.3.4 Test Setup



3.3.5 Test Result of AC Conducted Emission

Please refer to Appendix B.

3.4 Automatically Discontinue Transmission

3.4.1 Limit of Automatically Discontinue Transmission

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

3.4.2 Measuring Instruments

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

3.4.3 Test Result of Automatically Discontinue Transmission

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

3.5 Antenna Requirements

3.5.1 Standard Applicable

According to FCC 47 CFR Section 15.407(a)(1)(2) ,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.

3.5.2 Antenna Anti-Replacement Construction

An embedded-in antenna design is used.

3.5.3 Antenna Gain

The antenna gain is less than 6 dBi. Therefore, it is not necessary to reduce maximum peak output power limit.

4 List of Measuring Equipments

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Power Meter	Anritsu	ML2495A	0932001	300MHz~40GHz	Sep. 29, 2016	Feb. 09, 2017 ~ Feb. 27, 2017	Sep. 28, 2017	Conducted (TH05-HY)
Power Sensor	Anritsu	MA2411B	0846202	300MHz~40GHz	Sep. 29, 2016	Feb. 09, 2017 ~ Feb. 27, 2017	Sep. 28, 2017	Conducted (TH05-HY)
Spectrum Analyzer	Rohde & Schwarz	FSP40	100055	9kHz-40GHz	Jul. 17, 2016	Feb. 09, 2017 ~ Feb. 27, 2017	Jul. 16, 2017	Conducted (TH05-HY)
Temperature Chamber	ESPEC	SH-641	92013720	-40℃ ~90℃	Sep. 01, 2016	Feb. 09, 2017 ~ Feb. 27, 2017	Aug. 31, 2017	Conducted (TH05-HY)
Programmable Power Supply	GW Instek	PSS-2005	EL890094	1V~20V 0.5A~5A	Oct. 11, 2016	Feb. 09, 2017 ~ Feb. 27, 2017	Oct. 10, 2017	Conducted (TH05-HY)
AC Power Source	ChainTek	APC-1000W	N/A	N/A	N/A	Feb. 11, 2017	N/A	Conduction (CO05-HY)
EMI Test Receiver	Rohde & Schwarz	ESCI 7	100724	9kHz~7GHz	Aug. 30, 2016	Feb. 11, 2017	Aug. 29, 2017	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100080	9kHz~30MHz	Nov. 29, 2016	Feb. 11, 2017	Nov. 28, 2017	Conduction (CO05-HY)
LF Cable	HUBER + SUHNER	RG-214/U	LF01	N/A	Jan. 05, 2017	Feb. 11, 2017	Jan. 04, 2018	Conduction (CO05-HY)
Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100851	N/A	Jan. 05, 2017	Feb. 11, 2017	Jan. 04, 2018	Conduction (CO05-HY)
Amplifier	SONOMA	310N	187312	9kHz~1GHz	Nov. 10, 2016	Mar. 03, 2017 ~ Mar. 11, 2017	Nov. 09, 2017	Radiation (03CH11-HY)
Loop Antenna	Rohde & Schwarz	HFH2-Z2	100315	9 kHz~30 MHz	Sep .02, 2015	Mar. 03, 2017 ~ Mar. 11, 2017	Sep .01, 2017	Radiation (03CH11-HY)
Bilog Antenna	TESEQ	CBL 6111D	35414	30MHz~1GHz	Oct. 15, 2016	Mar. 03, 2017 ~ Mar. 11, 2017	Oct. 14, 2017	Radiation (03CH11-HY)
Horn Antenna	SCHWARZBECK	BBHA 9120 D	9120D-1522	1GHz ~ 18GHz	Mar. 30, 2016	Mar. 03, 2017 ~ Mar. 11, 2017	Mar. 31, 2017	Radiation (03CH11-HY)
Preamplifier	Keysight	83017A	MY53270080	1GHz~26.5GHz	Nov. 10, 2016	Mar. 03, 2017 ~ Mar. 11, 2017	Nov. 09, 2017	Radiation (03CH11-HY)
Spectrum Analyzer	Keysight	N9010A	MY52350276	10Hz ~ 44GHZ	Mar. 21, 2016	Mar. 03, 2017 ~ Mar. 11, 2017	Mar. 20, 2017	Radiation (03CH11-HY)
Antenna Mast	EMEC	AM-BS-4500-B	N/A	1~4m	N/A	Mar. 03, 2017 ~ Mar. 11, 2017	N/A	Radiation (03CH11-HY)
Turn Table	EMEC	TT 2000	N/A	0~360 Degree	N/A	Mar. 03, 2017 ~ Mar. 11, 2017	N/A	Radiation (03CH11-HY)
Preamplifier	MITEQ	AMF-7D-0010 1800	2025787	1GHz~18GHz	Feb. 13, 2017	Mar. 03, 2017 ~ Mar. 11, 2017	Feb. 12, 2018	Radiation (03CH11-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170584	18GHz- 40GHz	Nov. 08, 2016	Mar. 03, 2017 ~ Mar. 11, 2017	Nov. 07, 2017	Radiation (03CH11-HY)

5 Uncertainty of Evaluation

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	2.7

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

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

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	5.5

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

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

Appendix A. Test Result of Conducted Test Items

Test Engineer:	Derek Hsu	Temperature:	21~25	°C
Test Date:	2017/2/9~2017/02/27	Relative Humidity:	51~54	%

Report Number : FR712016-02F

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
11a	6Mbps	1	36	5180	0.59	14.29	24.00	-2.94		Pass
11a	6Mbps	1	44	5220	0.59	14.17	24.00	-2.94		Pass
11a	6Mbps	1	48	5240	0.59	14.45	24.00	-2.94		Pass
HT20	MCS0	1	36	5180	0.63	14.48	24.00	-2.94		Pass
HT20	MCS0	1	44	5220	0.63	14.27	24.00	-2.94		Pass
HT20	MCS0	1	48	5240	0.63	14.33	24.00	-2.94		Pass
HT40	MCS0	1	38	5190	0.63	14.19	24.00	-2.94		Pass
HT40	MCS0	1	46	5230	0.63	14.06	24.00	-2.94		Pass

Report Number : FR712016-02F

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
11a	6M bps	1	52	5260	0.59	14.38	23.98	-2.43	30.00	Pass
11a	6M bps	1	60	5300	0.59	14.31	23.98	-2.43	30.00	Pass
11a	6M bps	1	64	5320	0.59	14.44	23.98	-2.43	30.00	Pass
HT20	MCS 0	1	52	5260	0.63	14.22	23.98	-2.43	30.00	Pass
HT20	MCS 0	1	60	5300	0.63	14.28	23.98	-2.43	30.00	Pass
HT20	MCS 0	1	64	5320	0.63	14.47	23.98	-2.43	30.00	Pass
HT40	MCS 0	1	54	5270	0.63	14.09	23.98	-2.43	30.00	Pass
HT40	MCS 0	1	62	5310	0.63	14.26	23.98	-2.43	30.00	Pass

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
11a	6M bps	1	100	5500	0.59	14.29	23.98	-2.39	30.00	Pass
11a	6M bps	1	116	5580	0.59	13.92	23.98	-2.39	30.00	Pass
11a	6M bps	1	140	5700	0.59	14.27	23.98	-2.39	30.00	Pass
HT20	MCS 0	1	100	5500	0.63	14.31	23.98	-2.39	30.00	Pass
HT20	MCS 0	1	116	5580	0.63	14.12	23.98	-2.39	30.00	Pass
HT20	MCS 0	1	140	5700	0.63	14.34	23.98	-2.39	30.00	Pass
HT40	MCS 0	1	102	5510	0.63	14.19	23.98	-2.39	30.00	Pass
HT40	MCS 0	1	110	5550	0.63	14.04	23.98	-2.39	30.00	Pass
HT40	MCS 0	1	134	5670	0.63	13.96	23.98	-2.39	30.00	Pass

TEST RESULTS DATA
Average Power Table

FCC Straddle Channel										
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Duty Factor (dB)	Average Conducted Power (dBm)	FCC Conducted Power Limit (dBm)	DG (dBi)		Pass/Fail
11a	6Mbps	1	144	5720	0.59	13.75	-	-2.39		Pass
				NII-2C	0.59	12.82	23.24	-2.39		Pass
				NII-3	0.59	6.62	30.00	-2.39		Pass
HT20	MCS0	1	144	5720	0.63	13.83	-	-2.39		Pass
				NII-2C	0.63	12.89	23.30	-2.39		Pass
				NII-3	0.63	6.74	30.00	-2.39		Pass
HT40	MCS0	1	142	5710	0.63	14.02	-	-2.39		Pass
				NII-2C	0.63	13.76	23.98	-2.39		Pass
				NII-3	0.63	1.69	30.00	-2.39		Pass

Report Number : FR712016-02F

TEST RESULTS DATA
Frequency Stability

Band I										
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Center Frequency (MHz)	Frequency Deviation (MHz)	Frequency Stablility (ppm)	Temperature (°C)	Voltage (V)	Note
11a	6Mbps	1	36	5180	5179.950	-0.050	-9.65	55	3.8	
11a	6Mbps	1	36	5180	5180.000	0.000	0.00	-30	3.8	
11a	6Mbps	1	36	5180	5179.950	-0.050	-9.65	20	4.2	
11a	6Mbps	1	36	5180	5180.000	0.000	0.00	20	3.5	
11a	6Mbps	1	36	5180	5180.000	0.000	0.00	20	3.8	

Band II										
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Center Frequency (MHz)	Frequency Deviation (MHz)	Frequency Stablility (ppm)	Temperature (°C)	Voltage (V)	Note
11a	6Mbps	1	64	5320	5319.950	-0.050	-9.40	55	3.8	
11a	6Mbps	1	64	5320	5320.025	0.025	4.70	-30	3.8	
11a	6Mbps	1	64	5320	5320.000	0.000	0.00	20	4.2	
11a	6Mbps	1	64	5320	5320.000	0.000	0.00	20	3.5	
11a	6Mbps	1	64	5320	5320.000	0.000	0.00	20	3.8	

Band III										
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Center Frequency (MHz)	Frequency Deviation (MHz)	Frequency Stablility (ppm)	Temperature (°C)	Voltage (V)	Note
11a	6Mbps	1	100	5500	5499.950	-0.050	-9.09	55	3.8	
11a	6Mbps	1	100	5500	5500.000	0.000	0.00	-30	3.8	
11a	6Mbps	1	100	5500	5500.000	0.000	0.00	20	4.2	
11a	6Mbps	1	100	5500	5500.000	0.000	0.00	20	3.5	
11a	6Mbps	1	100	5500	5500.000	0.000	0.00	20	3.8	

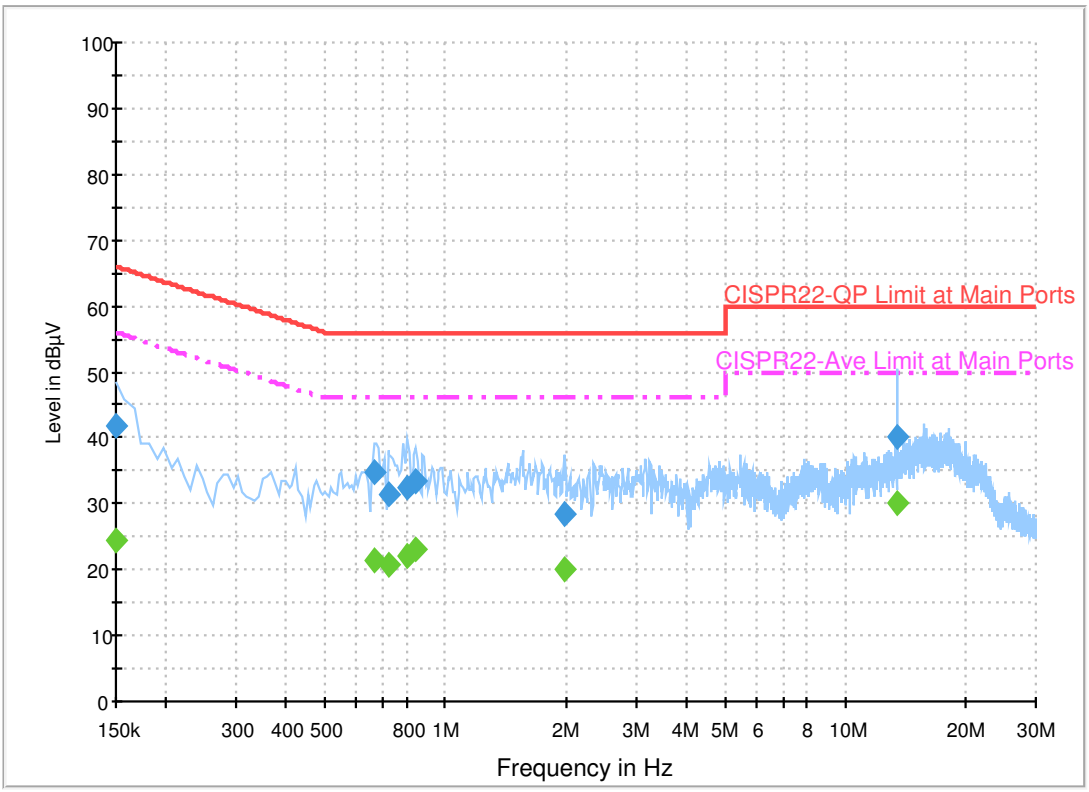
Appendix B. AC Conducted Emission Test Results

Test Engineer :	Arthur Hsieh	**Temperature :**	21~22℃
		Relative Humidity :	54~56%

EUT Information

Report NO :	712016-02
Test Mode :	Mode 1
Test Voltage :	120Vac/60Hz
Phase :	Line

ENV216 Auto Test FCC Power Bar - L



Final Result 1

Frequency (MHz)	QuasiPeak (dBµV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.150000	41.8	Off	L1	19.6	24.2	66.0
0.662000	34.8	Off	L1	19.6	21.2	56.0
0.718000	31.5	Off	L1	19.6	24.5	56.0
0.806000	32.5	Off	L1	19.6	23.5	56.0
0.846000	33.5	Off	L1	19.6	22.5	56.0
1.998000	28.6	Off	L1	19.6	27.4	56.0
13.558000	40.2	Off	L1	20.2	19.8	60.0

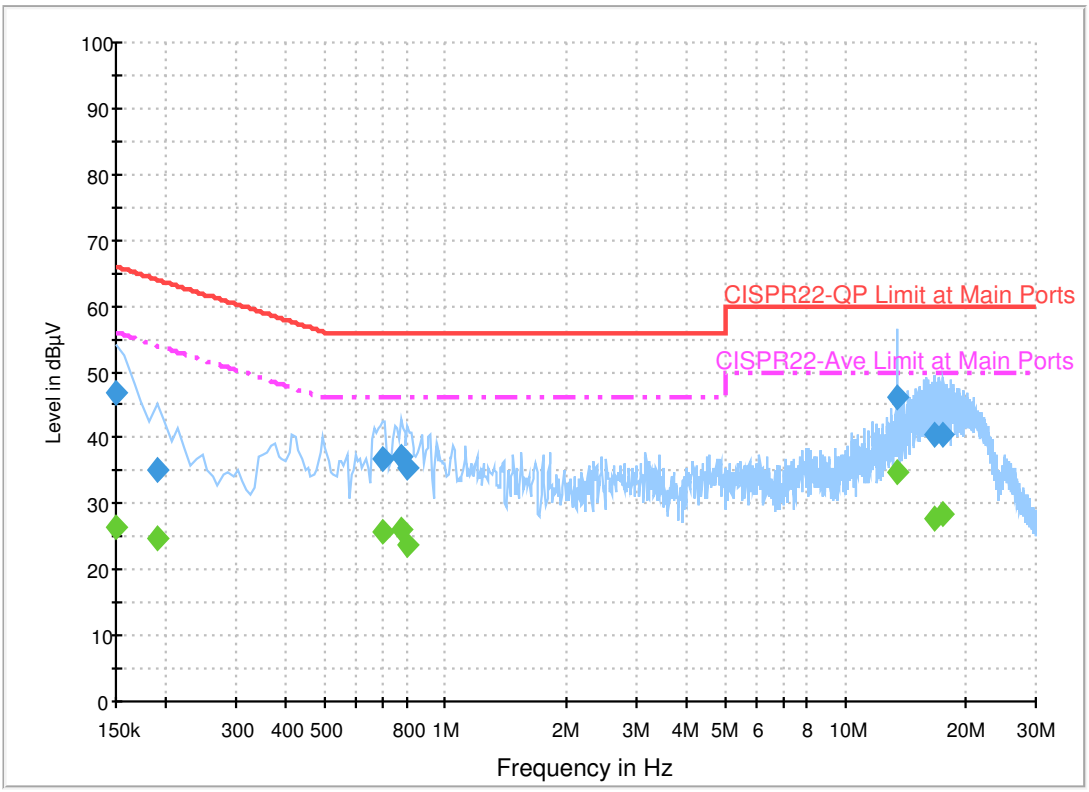
Final Result 2

Frequency (MHz)	Average (dBµV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.150000	24.5	Off	L1	19.6	31.5	56.0
0.662000	21.3	Off	L1	19.6	24.7	46.0
0.718000	20.6	Off	L1	19.6	25.4	46.0
0.806000	22.1	Off	L1	19.6	23.9	46.0
0.846000	23.1	Off	L1	19.6	22.9	46.0
1.998000	20.2	Off	L1	19.6	25.8	46.0
13.558000	30.2	Off	L1	20.2	19.8	50.0

EUT Information

Report NO :	712016-02
Test Mode :	Mode 1
Test Voltage :	120Vac/60Hz
Phase :	Neutral

ENV216 Auto Test FCC Power Bar - N



Final Result 1

Frequency (MHz)	QuasiPeak (dBµV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.150000	46.8	Off	N	19.5	19.2	66.0
0.190000	35.0	Off	N	19.5	29.0	64.0
0.694000	36.7	Off	N	19.5	19.3	56.0
0.774000	37.2	Off	N	19.5	18.8	56.0
0.806000	35.6	Off	N	19.6	20.4	56.0
13.558000	46.1	Off	N	20.3	13.9	60.0
16.766000	40.3	Off	N	20.5	19.7	60.0
17.462000	40.5	Off	N	20.5	19.5	60.0

Final Result 2

Frequency (MHz)	Average (dBµV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.150000	26.6	Off	N	19.5	29.4	56.0
0.190000	24.8	Off	N	19.5	29.2	54.0
0.694000	25.9	Off	N	19.5	20.1	46.0
0.774000	26.1	Off	N	19.5	19.9	46.0
0.806000	23.7	Off	N	19.6	22.3	46.0
13.558000	34.8	Off	N	20.3	15.2	50.0
16.766000	27.8	Off	N	20.5	22.2	50.0
17.462000	28.4	Off	N	20.5	21.6	50.0

Appendix C. Radiated Spurious Emission

Test Engineer :	J.C. Liang, Jacky Hung, and Ken Wu	Temperature :	20~24°C
		Relative Humidity :	50~54%

Band 1 - 5150~5250MHz

WIFI 802.11a (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)
802.11a CH 36 5180MHz		5030.42	51.18	-22.82	74	40.95	32.05	11.22	33.04	100	63	P	H
		5127.92	44.57	-9.43	54	34.22	32.19	11.19	33.03	100	63	A	H
	*	5180	101.56	-	-	91.15	32.26	11.18	33.03	100	63	P	H
	*	5180	94.03	-	-	83.62	32.26	11.18	33.03	100	63	A	H
													H
													H
		5127.14	51.33	-22.67	74	40.98	32.19	11.19	33.03	267	315	P	V
		5127.66	44.71	-9.29	54	34.36	32.19	11.19	33.03	267	315	A	V
	*	5180	102.39	-	-	91.98	32.26	11.18	33.03	267	315	P	V
	*	5180	94.49	-	-	84.08	32.26	11.18	33.03	267	315	A	V
													V
													V
802.11a CH 44 5220MHz		5032.5	51.06	-22.94	74	40.83	32.05	11.22	33.04	109	53	P	H
		5083.2	42.63	-11.37	54	32.34	32.12	11.21	33.04	109	53	A	H
	*	5220	102.6	-	-	92.16	32.3	11.17	33.03	109	53	P	H
	*	5220	93.74	-	-	83.3	32.3	11.17	33.03	109	53	A	H
		5435.76	50.08	-23.92	74	39.15	32.61	11.34	33.02	109	53	P	H
		5450.88	41.82	-12.18	54	30.87	32.63	11.34	33.02	109	53	A	H
		5094.9	51.63	-22.37	74	41.32	32.14	11.21	33.04	298	319	P	V
		5088.92	42.69	-11.31	54	32.38	32.14	11.21	33.04	298	319	A	V
	*	5220	100.85	-	-	90.41	32.3	11.17	33.03	298	319	P	V
	*	5220	93.5	-	-	83.06	32.3	11.17	33.03	298	319	A	V
		5437.68	50.41	-23.59	74	39.48	32.61	11.34	33.02	298	319	P	V
		5448.96	41.85	-12.15	54	30.9	32.63	11.34	33.02	298	319	A	V

802.11a CH 48 5240MHz		5008.32	51.49	-22.51	74	41.27	32.02	11.24	33.04	109	52	P	H
		5088.14	42.72	-11.28	54	32.43	32.12	11.21	33.04	109	52	A	H
	*	5240	102.26	-	-	91.77	32.33	11.19	33.03	109	52	P	H
	*	5240	93.91	-	-	83.42	32.33	11.19	33.03	109	52	A	H
		5454.48	50.49	-23.51	74	39.54	32.63	11.34	33.02	109	52	P	H
		5457.36	41.79	-12.21	54	30.84	32.63	11.34	33.02	109	52	A	H
		5095.42	51.36	-22.64	74	41.05	32.14	11.21	33.04	278	316	P	V
		5026	42.87	-11.13	54	32.64	32.05	11.22	33.04	278	316	A	V
	*	5240	101.28	-	-	90.79	32.33	11.19	33.03	278	316	P	V
	*	5240	93.31	-	-	82.82	32.33	11.19	33.03	278	316	A	V
		5432.88	50.03	-23.97	74	39.1	32.61	11.34	33.02	278	316	P	V
		5441.28	42.03	-11.97	54	31.1	32.61	11.34	33.02	278	316	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 36 5180MHz		10360	44.35	-29.65	74	53.5	39.84	16.21	65.2	100	0	P	H
		15540	43.55	-30.45	74	49.26	38.21	20.06	63.98	100	0	P	H
													H
													H
		10360	45.68	-28.32	74	54.83	39.84	16.21	65.2	100	0	P	V
		15540	43.25	-30.75	74	48.96	38.21	20.06	63.98	100	0	P	V
													V
													V
802.11a CH 44 5220MHz		10440	42.87	-31.13	74	51.87	39.92	16.28	65.2	100	0	P	H
		15660	42.71	-31.29	74	48.58	38.23	20.14	64.24	100	0	P	H
													H
													H
		10440	43.57	-30.43	74	52.57	39.92	16.28	65.2	100	0	P	V
		15660	42.92	-31.08	74	48.79	38.23	20.14	64.24	100	0	P	V
													V
													V
802.11a CH 48 5240MHz		10480	45.6	-28.4	74	54.49	39.98	16.33	65.2	100	0	P	H
		15720	44.54	-29.46	74	50.51	38.24	20.18	64.39	100	0	P	H
													H
													H
		10480	45.7	-28.3	74	54.59	39.98	16.33	65.2	100	0	P	V
		15720	43.1	-30.9	74	49.07	38.24	20.18	64.39	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 1 5150~5250MHz

WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI Ant. 1	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 HT20 CH 36 5180MHz		5127.4	51.56	-22.44	74	41.21	32.19	11.19	33.03	100	52	P	H
		5127.92	45.62	-8.38	54	35.27	32.19	11.19	33.03	100	52	A	H
	*	5180	102.91	-	-	92.5	32.26	11.18	33.03	100	52	P	H
	*	5180	95.08	-	-	84.67	32.26	11.18	33.03	100	52	A	H
													H
													H
		5073.58	51.42	-22.58	74	41.13	32.12	11.21	33.04	288	319	P	V
		5128.44	45.29	-8.71	54	34.94	32.19	11.19	33.03	288	319	A	V
	*	5180	101.21	-	-	90.8	32.26	11.18	33.03	288	319	P	V
	*	5180	94.24	-	-	83.83	32.26	11.18	33.03	288	319	A	V
													V
													V
802.11n HT20 CH 44 5220MHz		5018.2	51.13	-22.87	74	40.91	32.02	11.24	33.04	113	53	P	H
		5048.1	42.8	-11.2	54	32.55	32.07	11.22	33.04	113	53	A	H
	*	5220	101.93	-	-	91.49	32.3	11.17	33.03	113	53	P	H
	*	5220	93.07	-	-	82.63	32.3	11.17	33.03	113	53	A	H
		5401.44	52.05	-21.95	74	41.2	32.56	11.31	33.02	113	53	P	H
		5443.68	41.86	-12.14	54	30.93	32.61	11.34	33.02	113	53	A	H
		5046.8	51.86	-22.14	74	41.61	32.07	11.22	33.04	298	319	P	V
		5103.22	42.84	-11.16	54	32.55	32.14	11.19	33.04	298	319	A	V
	*	5220	101.59	-	-	91.15	32.3	11.17	33.03	298	319	P	V
	*	5220	93.67	-	-	83.23	32.3	11.17	33.03	298	319	A	V
		5384.4	50.32	-23.68	74	39.49	32.54	11.31	33.02	298	319	P	V
		5402.16	41.84	-12.16	54	30.99	32.56	11.31	33.02	298	319	A	V

802.11n HT20 CH 48 5240MHz		5148.2	51.15	-22.85	74	40.79	32.21	11.18	33.03	110	53	P	H
		5053.3	42.67	-11.33	54	32.42	32.07	11.22	33.04	110	53	A	H
	*	5240	101.03	-	-	90.54	32.33	11.19	33.03	110	53	P	H
	*	5240	93.24	-	-	82.75	32.33	11.19	33.03	110	53	A	H
		5415.6	50.84	-23.16	74	39.97	32.58	11.31	33.02	110	53	P	H
		5459.52	41.9	-12.1	54	30.95	32.63	11.34	33.02	110	53	A	H
		5088.66	51.36	-22.64	74	41.05	32.14	11.21	33.04	264	306	P	V
		5118.56	42.63	-11.37	54	32.31	32.16	11.19	33.03	264	306	A	V
	*	5240	100.69	-	-	90.2	32.33	11.19	33.03	264	306	P	V
	*	5240	92.84	-	-	82.35	32.33	11.19	33.03	264	306	A	V
		5390.88	50.16	-23.84	74	39.33	32.54	11.31	33.02	264	306	P	V
		5456.16	41.98	-12.02	54	31.03	32.63	11.34	33.02	264	306	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 1 5150~5250MHz

WIFI 802.11n HT20 (Harmonic @ 3m)

WIFI Ant. 1	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 HT20 CH 36 5180MHz		10360	44.11	-29.89	74	53.26	39.84	16.21	65.2	100	0	P	H
		15540	44.27	-29.73	74	49.98	38.21	20.06	63.98	100	0	P	H
													H
													H
		10360	44.14	-29.86	74	53.29	39.84	16.21	65.2	100	0	P	V
		15540	42.56	-31.44	74	48.27	38.21	20.06	63.98	100	0	P	V
													V
													V
802.11n HT20 CH 44 5220MHz		10440	43.73	-30.27	74	52.73	39.92	16.28	65.2	100	0	P	H
		15660	42.89	-31.11	74	48.76	38.23	20.14	64.24	100	0	P	H
													H
													H
		10440	44.4	-29.6	74	53.4	39.92	16.28	65.2	100	0	P	V
		15660	41.87	-32.13	74	47.74	38.23	20.14	64.24	100	0	P	V
													V
													V
802.11n HT20 CH 48 5240MHz		10480	44.79	-29.21	74	53.68	39.98	16.33	65.2	100	0	P	H
		15720	42.98	-31.02	74	48.95	38.24	20.18	64.39	100	0	P	H
													H
													H
		10480	46.57	-27.43	74	55.46	39.98	16.33	65.2	100	0	P	V
		15720	43.31	-30.69	74	49.28	38.24	20.18	64.39	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 38 5190MHz		5004.16	51.8	-22.2	74	41.58	32.02	11.24	33.04	100	52	P	H
		5149.76	44.22	-9.78	54	33.86	32.21	11.18	33.03	100	52	A	H
	*	5190	98.86	-	-	88.46	32.26	11.17	33.03	100	52	P	H
	*	5190	91.22	-	-	80.82	32.26	11.17	33.03	100	52	A	H
		5455.92	50.53	-23.47	74	39.58	32.63	11.34	33.02	100	52	P	H
		5436.24	42.44	-11.56	54	31.51	32.61	11.34	33.02	100	52	A	H
		5033.28	51.18	-22.82	74	40.95	32.05	11.22	33.04	283	319	P	V
		5087.36	43.77	-10.23	54	33.48	32.12	11.21	33.04	283	319	A	V
	*	5190	98.9	-	-	88.5	32.26	11.17	33.03	283	319	P	V
	*	5190	90.92	-	-	80.52	32.26	11.17	33.03	283	319	A	V
		5435.04	50.57	-23.43	74	39.64	32.61	11.34	33.02	283	319	P	V
		5447.04	42.3	-11.7	54	31.35	32.63	11.34	33.02	283	319	A	V
802.11n HT40 CH 46 5230MHz		5057.72	50.66	-23.34	74	40.39	32.09	11.22	33.04	100	54	P	H
		5126.36	43.49	-10.51	54	33.14	32.19	11.19	33.03	100	54	A	H
	*	5230	99.15	-	-	88.66	32.33	11.19	33.03	100	54	P	H
	*	5230	90.77	-	-	80.28	32.33	11.19	33.03	100	54	A	H
		5395.2	51.15	-22.85	74	40.3	32.56	11.31	33.02	100	54	P	H
		5390.64	42.73	-11.27	54	31.9	32.54	11.31	33.02	100	54	A	H
		5028.86	52.4	-21.6	74	42.17	32.05	11.22	33.04	300	321	P	V
		5128.18	43.77	-10.23	54	33.42	32.19	11.19	33.03	300	321	A	V
	*	5230	99.77	-	-	89.28	32.33	11.19	33.03	300	321	P	V
	*	5230	91.21	-	-	80.72	32.33	11.19	33.03	300	321	A	V
		5453.52	50.66	-23.34	74	39.71	32.63	11.34	33.02	300	321	P	V
		5453.04	42.36	-11.64	54	31.41	32.63	11.34	33.02	300	321	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)
802.11n HT40 CH 38 5190MHz		10380	45.61	-28.39	74	54.72	39.86	16.23	65.2	100	0	P	H
		15570	43.99	-30.01	74	49.75	38.21	20.08	64.05	100	0	P	H
													H
													H
		10380	45.18	-28.82	74	54.29	39.86	16.23	65.2	100	0	P	V
		15570	43.02	-30.98	74	48.78	38.21	20.08	64.05	100	0	P	V
													V
													V
802.11n HT40 CH 46 5230MHz		10460	44.07	-29.93	74	53.03	39.94	16.3	65.2	100	0	P	H
		15690	42.59	-31.41	74	48.52	38.24	20.15	64.32	100	0	P	H
													H
													H
		10460	44.2	-29.8	74	53.16	39.94	16.3	65.2	100	0	P	V
		15690	44.58	-29.42	74	50.51	38.24	20.15	64.32	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 2 - 5250~5350MHz

WIFI 802.11a (Band Edge @ 3m)

WIFI Ant.	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 52 5260MHz		5064.74	51.67	-22.33	74	41.41	32.09	11.21	33.04	100	54	P	H
		5075.4	42.71	-11.29	54	32.42	32.12	11.21	33.04	100	54	A	H
	*	5260	98.66	-	-	88.13	32.37	11.19	33.03	100	54	P	H
	*	5260	91.56	-	-	81.03	32.37	11.19	33.03	100	54	A	H
		5395.44	50.02	-23.98	74	39.17	32.56	11.31	33.02	100	54	P	H
		5457.12	41.94	-12.06	54	30.99	32.63	11.34	33.02	100	54	A	H
		5041.86	51.21	-22.79	74	40.96	32.07	11.22	33.04	262	299	P	V
		5045.5	42.71	-11.29	54	32.46	32.07	11.22	33.04	262	299	A	V
	*	5260	100.35	-	-	89.82	32.37	11.19	33.03	262	299	P	V
	*	5260	92.2	-	-	81.67	32.37	11.19	33.03	262	299	A	V
		5457.12	50.85	-23.15	74	39.9	32.63	11.34	33.02	262	299	P	V
		5456.4	41.91	-12.09	54	30.96	32.63	11.34	33.02	262	299	A	V
802.11a CH 60 5300MHz		5090.22	51.35	-22.65	74	41.04	32.14	11.21	33.04	100	56	P	H
		5053.04	42.68	-11.32	54	32.43	32.07	11.22	33.04	100	56	A	H
	*	5300	99.68	-	-	89.07	32.42	11.22	33.03	100	56	P	H
	*	5300	89.99	-	-	79.38	32.42	11.22	33.03	100	56	A	H
		5451.84	51.76	-22.24	74	40.81	32.63	11.34	33.02	100	56	P	H
		5352.24	42.18	-11.82	54	31.44	32.49	11.28	33.03	100	56	A	H
		5016.38	50.84	-23.16	74	40.62	32.02	11.24	33.04	255	298	P	V
		5037.7	42.69	-11.31	54	32.44	32.07	11.22	33.04	255	298	A	V
	*	5300	100.83	-	-	90.22	32.42	11.22	33.03	255	298	P	V
	*	5300	91.02	-	-	80.41	32.42	11.22	33.03	255	298	A	V
		5446.56	50.37	-23.63	74	39.42	32.63	11.34	33.02	255	298	P	V
		5352	42.12	-11.88	54	31.38	32.49	11.28	33.03	255	298	A	V

802.11a CH 64 5320MHz	*	5320	99.24	-	-	88.58	32.44	11.25	33.03	100	55	P	H
	*	5320	90.58	-	-	79.92	32.44	11.25	33.03	100	55	A	H
		5426.72	50.57	-23.43	74	39.67	32.58	11.34	33.02	100	55	P	H
		5372.16	42.24	-11.76	54	31.48	32.51	11.28	33.03	100	55	A	H
													H
													H
	*	5320	99.01	-	-	88.35	32.44	11.25	33.03	300	309	P	V
	*	5320	89.64	-	-	78.98	32.44	11.25	33.03	300	309	A	V
		5420.48	52.1	-21.9	74	41.2	32.58	11.34	33.02	300	309	P	V
		5372.16	41.85	-12.15	54	31.09	32.51	11.28	33.03	300	309	A	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 2 5250~5350MHz

WIFI 802.11a (Harmonic @ 3m)

WIFI Ant. 1	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 52 5260MHz		10520	43.23	-30.77	74	52.07	39.99	16.37	65.2	100	0	P	H
		15780	43.33	-30.67	74	49.36	38.26	20.22	64.51	100	0	P	H
													H
													H
		10520	43.85	-30.15	74	52.69	39.99	16.37	65.2	100	0	P	V
		15780	42.3	-31.7	74	48.33	38.26	20.22	64.51	100	0	P	V
													V
													V
802.11a CH 60 5300MHz		10600	43.35	-30.65	74	52.17	39.92	16.44	65.18	100	0	P	H
		15900	42.9	-31.1	74	49.09	38.28	20.3	64.77	100	0	P	H
													H
													H
		10600	43.62	-30.38	74	52.44	39.92	16.44	65.18	100	0	P	V
		15900	42.37	-31.63	74	48.56	38.28	20.3	64.77	100	0	P	V
													V
													V
802.11a CH 64 5320MHz		10640	42.65	-31.35	74	51.46	39.89	16.47	65.17	100	0	P	H
		15960	43.49	-30.51	74	49.78	38.29	20.34	64.92	100	0	P	H
													H
													H
		10640	43.43	-30.57	74	52.24	39.89	16.47	65.17	100	0	P	V
		15960	42.56	-31.44	74	48.85	38.29	20.34	64.92	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 2 5250~5350MHz

WIFI 802.11n HT20 (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 HT20 CH 52 5260MHz		5071.24	51.95	-22.05	74	41.69	32.09	11.21	33.04	105	52	P	H
		5083.2	42.74	-11.26	54	32.45	32.12	11.21	33.04	105	52	A	H
	*	5260	98.95	-	-	88.42	32.37	11.19	33.03	105	52	P	H
	*	5260	91.96	-	-	81.43	32.37	11.19	33.03	105	52	A	H
		5452.56	50.94	-23.06	74	39.99	32.63	11.34	33.02	105	52	P	H
		5454.96	41.97	-12.03	54	31.02	32.63	11.34	33.02	105	52	A	H
		5031.2	51.11	-22.89	74	40.88	32.05	11.22	33.04	262	297	P	V
		5100.36	42.85	-11.15	54	32.56	32.14	11.19	33.04	262	297	A	V
	*	5260	100.33	-	-	89.8	32.37	11.19	33.03	262	297	P	V
	*	5260	91.97	-	-	81.44	32.37	11.19	33.03	262	297	A	V
		5447.28	51.46	-22.54	74	40.51	32.63	11.34	33.02	262	297	P	V
		5442.48	41.76	-12.24	54	30.83	32.61	11.34	33.02	262	297	A	V
802.11n HT20 CH 60 5300MHz		5064.74	52.41	-21.59	74	42.15	32.09	11.21	33.04	100	54	P	H
		5094.12	42.77	-11.23	54	32.46	32.14	11.21	33.04	100	54	A	H
	*	5300	100	-	-	89.39	32.42	11.22	33.03	100	54	P	H
	*	5300	91.75	-	-	81.14	32.42	11.22	33.03	100	54	A	H
		5431.68	50.06	-23.94	74	39.13	32.61	11.34	33.02	100	54	P	H
		5351.76	42.61	-11.39	54	31.87	32.49	11.28	33.03	100	54	A	H
		5032.24	51.48	-22.52	74	41.25	32.05	11.22	33.04	256	298	P	V
		5096.2	42.68	-11.32	54	32.37	32.14	11.21	33.04	256	298	A	V
	*	5300	100.1	-	-	89.49	32.42	11.22	33.03	256	298	P	V
	*	5300	91.9	-	-	81.29	32.42	11.22	33.03	256	298	A	V
		5385.6	51.12	-22.88	74	40.29	32.54	11.31	33.02	256	298	P	V
		5351.76	42.53	-11.47	54	31.79	32.49	11.28	33.03	256	298	A	V

	*	5320	97.64	-	-	86.98	32.44	11.25	33.03	100	54	P	H
	*	5320	90.85	-	-	80.19	32.44	11.25	33.03	100	54	A	H
		5451.2	50.19	-23.81	74	39.24	32.63	11.34	33.02	100	54	P	H
		5371.68	42.51	-11.49	54	31.75	32.51	11.28	33.03	100	54	A	H
802.11n													H
HT20													H
CH 64	*	5320	100.77	-	-	90.11	32.44	11.25	33.03	252	298	P	V
5320MHz	*	5320	92.08	-	-	81.42	32.44	11.25	33.03	252	298	A	V
		5441.44	50.31	-23.69	74	39.38	32.61	11.34	33.02	252	298	P	V
		5371.68	42.21	-11.79	54	31.45	32.51	11.28	33.03	252	298	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)
802.11n HT20 CH 52 5260MHz		10520	44.12	-29.88	74	52.96	39.99	16.37	65.2	100	0	P	H
		15780	42.53	-31.47	74	48.56	38.26	20.22	64.51	100	0	P	H
													H
													H
		10520	42.94	-31.06	74	51.78	39.99	16.37	65.2	100	0	P	V
		15780	42	-32	74	48.03	38.26	20.22	64.51	100	0	P	V
													V
													V
802.11n HT20 CH 60 5300MHz		10600	43.55	-30.45	74	52.37	39.92	16.44	65.18	100	0	P	H
		15900	42.05	-31.95	74	48.24	38.28	20.3	64.77	100	0	P	H
													H
													H
		10600	44.4	-29.6	74	53.22	39.92	16.44	65.18	100	0	P	V
		15900	42.32	-31.68	74	48.51	38.28	20.3	64.77	100	0	P	V
													V
													V
802.11n HT20 CH 64 5320MHz		10640	43.28	-30.72	74	52.09	39.89	16.47	65.17	100	0	P	H
		15960	42.56	-31.44	74	48.85	38.29	20.34	64.92	100	0	P	H
													H
													H
		10640	42.76	-31.24	74	51.57	39.89	16.47	65.17	100	0	P	V
		15960	40.85	-33.15	74	47.14	38.29	20.34	64.92	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 2 5250~5350MHz

WIFI 802.11n 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 54 5270MHz		5008.06	52.23	-21.77	74	42.01	32.02	11.24	33.04	100	53	P	H
		5069.68	43.53	-10.47	54	33.27	32.09	11.21	33.04	100	53	A	H
	*	5270	97.59	-	-	87.03	32.37	11.22	33.03	100	53	P	H
	*	5270	89.38	-	-	78.82	32.37	11.22	33.03	100	53	A	H
		5447.52	50.13	-23.87	74	39.18	32.63	11.34	33.02	100	53	P	H
		5453.28	42.73	-11.27	54	31.78	32.63	11.34	33.02	100	53	A	H
		5129.74	50.8	-23.2	74	40.45	32.19	11.19	33.03	293	303	P	V
		5114.92	43.47	-10.53	54	33.16	32.16	11.19	33.04	293	303	A	V
	*	5270	97.09	-	-	86.53	32.37	11.22	33.03	293	303	P	V
	*	5270	89.78	-	-	79.22	32.37	11.22	33.03	293	303	A	V
		5438.64	49.98	-24.02	74	39.05	32.61	11.34	33.02	293	303	P	V
		5448.72	42.5	-11.5	54	31.55	32.63	11.34	33.02	293	303	A	V
802.11n HT40 CH 62 5310MHz		5067.08	50.97	-23.03	74	40.71	32.09	11.21	33.04	100	55	P	H
		5059.02	43.49	-10.51	54	33.22	32.09	11.22	33.04	100	55	A	H
	*	5310	96.75	-	-	86.09	32.44	11.25	33.03	100	55	P	H
	*	5310	88.33	-	-	77.67	32.44	11.25	33.03	100	55	A	H
		5412.24	50.07	-23.93	74	39.2	32.58	11.31	33.02	100	55	P	H
		5430.24	42.49	-11.51	54	31.56	32.61	11.34	33.02	100	55	A	H
		5028.08	51.12	-22.88	74	40.89	32.05	11.22	33.04	292	334	P	V
		5080.34	43.54	-10.46	54	33.25	32.12	11.21	33.04	292	334	A	V
	*	5310	97.19	-	-	86.53	32.44	11.25	33.03	292	334	P	V
	*	5310	88.78	-	-	78.12	32.44	11.25	33.03	292	334	A	V
		5415.6	50.33	-23.67	74	39.46	32.58	11.31	33.02	292	334	P	V
		5350.08	42.79	-11.21	54	32.05	32.49	11.28	33.03	292	334	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)
802.11n HT40 CH 54 5270MHz		10540	43.97	-30.03	74	52.81	39.97	16.38	65.19	100	0	P	H
		15810	43.02	-30.98	74	49.1	38.26	20.24	64.58	100	0	P	H
													H
													H
		10540	42.9	-31.1	74	51.74	39.97	16.38	65.19	100	0	P	V
		15810	42.5	-31.5	74	48.58	38.26	20.24	64.58	100	0	P	V
													V
													V
802.11n HT40 CH 62 5310MHz		10620	42.32	-31.68	74	51.15	39.9	16.45	65.18	100	0	P	H
		15930	41.83	-32.17	74	48.06	38.29	20.33	64.85	100	0	P	H
													H
													H
		10620	43.47	-30.53	74	52.3	39.9	16.45	65.18	100	0	P	V
		15930	42.11	-31.89	74	48.34	38.29	20.33	64.85	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 - 5470~5725MHz

WIFI 802.11a (Band Edge @ 3m)

WIFI Ant.	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 100 5500MHz		5470	50.55	-23.45	74	39.54	32.65	11.38	33.02	100	56	P	H
		5469.52	42.24	-11.76	54	31.23	32.65	11.38	33.02	100	56	A	H
	*	5500	95.96	-	-	84.9	32.7	11.38	33.02	100	56	P	H
	*	5500	85.94	-	-	74.88	32.7	11.38	33.02	100	56	A	H
													H
													H
		5464.88	51.33	-22.67	74	40.32	32.65	11.38	33.02	258	74	P	V
		5447.76	42.45	-11.55	54	31.5	32.63	11.34	33.02	258	74	A	V
	*	5500	96.16	-	-	85.1	32.7	11.38	33.02	258	74	P	V
	*	5500	85.76	-	-	74.7	32.7	11.38	33.02	258	74	A	V
													V
													V
802.11a CH 116 5580MHz		5450.8	50.87	-23.13	74	39.92	32.63	11.34	33.02	100	58	P	H
		5460.64	42.1	-11.9	54	31.11	32.63	11.38	33.02	100	58	A	H
	*	5580	96.27	-	-	85.1	32.8	11.44	33.07	100	58	P	H
	*	5580	86.77	-	-	75.6	32.8	11.44	33.07	100	58	A	H
		5757.65	50.61	-23.39	74	39.25	33.06	11.46	33.16	100	58	P	H
		5764.125	42.42	-11.58	54	31.06	33.06	11.46	33.16	100	58	A	H
		5435.44	50.05	-23.95	74	39.12	32.61	11.34	33.02	295	80	P	V
		5467.36	42.06	-11.94	54	31.05	32.65	11.38	33.02	295	80	A	V
	*	5580	97.39	-	-	86.22	32.8	11.44	33.07	295	80	P	V
	*	5580	87.2	-	-	76.03	32.8	11.44	33.07	295	80	A	V
		5736.125	50.49	-23.51	74	39.14	33.04	11.46	33.15	295	80	P	V
		5747.85	42.41	-11.59	54	31.06	33.04	11.46	33.15	295	80	A	V

802.11a CH 140 5700MHz	*	5700	96.31	-	-	84.99	32.97	11.47	33.12	271	56	P	H
	*	5700	88.16	-	-	76.84	32.97	11.47	33.12	271	56	A	H
		5759.16	50.51	-23.49	74	39.15	33.06	11.46	33.16	271	56	P	H
		5752.6	42.39	-11.61	54	31.02	33.06	11.46	33.15	271	56	A	H
													H
													H
	*	5700	94.39	-	-	83.07	32.97	11.47	33.12	315	74	P	V
	*	5700	86.36	-	-	75.04	32.97	11.47	33.12	315	74	A	V
		5739.08	49.91	-24.09	74	38.56	33.04	11.46	33.15	315	74	P	V
		5743.48	42.11	-11.89	54	30.76	33.04	11.46	33.15	315	74	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 802.11a (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 100 5500MHz		11000	44.75	-29.25	74	53.43	39.6	16.82	65.1	100	0	P	H
		16500	44.23	-29.77	74	49.4	39.2	20.73	65.1	100	0	P	H
													H
													H
		11000	44.37	-29.63	74	53.05	39.6	16.82	65.1	100	0	P	V
		16500	43.14	-30.86	74	48.31	39.2	20.73	65.1	100	0	P	V
													V
													V
802.11a CH 116 5580MHz		11160	45.18	-28.82	74	54	39.43	16.95	65.2	100	0	P	H
		16740	43.03	-30.97	74	46.45	40.55	20.89	64.86	100	0	P	H
													H
													H
		11160	44.45	-29.55	74	53.27	39.43	16.95	65.2	100	0	P	V
		16740	43.9	-30.1	74	47.32	40.55	20.89	64.86	100	0	P	V
													V
													V
802.11a CH 140 5700MHz		11400	44.72	-29.28	74	53.7	39.2	17.16	65.34	100	0	P	H
		17100	47.97	-26.03	74	48.93	42.36	21.14	64.46	100	0	P	H
													H
													H
		11400	44.29	-29.71	74	53.27	39.2	17.16	65.34	100	0	P	V
		17100	47.59	-26.41	74	48.55	42.36	21.14	64.46	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 - 5470~5725MHz

WIFI 802.11n HT20 (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 HT20 CH 100 5500MHz		5443.28	51.56	-22.44	74	40.63	32.61	11.34	33.02	100	59	P	H
		5448.24	42.83	-11.17	54	31.88	32.63	11.34	33.02	100	59	A	H
	*	5500	95.52	-	-	84.46	32.7	11.38	33.02	100	59	P	H
	*	5500	88.76	-	-	77.7	32.7	11.38	33.02	100	59	A	H
													H
													H
		5442	50.29	-23.71	74	39.36	32.61	11.34	33.02	263	70	P	V
		5448.24	42.54	-11.46	54	31.59	32.63	11.34	33.02	263	70	A	V
	*	5506	97.42	-	-	86.34	32.7	11.41	33.03	263	70	P	V
	*	5506	89.12	-	-	78.04	32.7	11.41	33.03	263	70	A	V
													V
													V
802.11n HT20 CH 116 5580MHz		5388.88	50.47	-23.53	74	39.64	32.54	11.31	33.02	100	56	P	H
		5464.48	41.96	-12.04	54	30.95	32.65	11.38	33.02	100	56	A	H
	*	5580	95.9	-	-	84.73	32.8	11.44	33.07	100	56	P	H
	*	5580	87.05	-	-	75.88	32.8	11.44	33.07	100	56	A	H
		5726.85	50.48	-23.52	74	39.14	33.01	11.46	33.13	100	56	P	H
		5763.25	42.45	-11.55	54	31.09	33.06	11.46	33.16	100	56	A	H
		5423.68	50.78	-23.22	74	39.88	32.58	11.34	33.02	258	71	P	V
		5449.12	42.07	-11.93	54	31.12	32.63	11.34	33.02	258	71	A	V
	*	5580	99.11	-	-	87.94	32.8	11.44	33.07	258	71	P	V
	*	5580	89.98	-	-	78.81	32.8	11.44	33.07	258	71	A	V
		5741.9	50.94	-23.06	74	39.59	33.04	11.46	33.15	258	71	P	V
		5748.725	42.49	-11.51	54	31.14	33.04	11.46	33.15	258	71	A	V

	*	5700	96.69	-	-	85.37	32.97	11.47	33.12	100	60	P	H
	*	5700	88.15	-	-	76.83	32.97	11.47	33.12	100	60	A	H
		5725.64	51.66	-22.34	74	40.32	33.01	11.46	33.13	100	60	P	H
		5751.56	42.8	-11.2	54	31.43	33.06	11.46	33.15	100	60	A	H
802.11n													H
HT20													H
CH 140	*	5700	97.78	-	-	86.46	32.97	11.47	33.12	259	72	P	V
5700MHz	*	5700	89.28	-	-	77.96	32.97	11.47	33.12	259	72	A	V
		5741.72	50.79	-23.21	74	39.44	33.04	11.46	33.15	259	72	P	V
		5751.08	42.91	-11.09	54	31.56	33.04	11.46	33.15	259	72	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)
802.11n HT20 CH 100 5500MHz		11000	43.79	-30.21	74	52.47	39.6	16.82	65.1	100	0	P	H
		16500	42.83	-31.17	74	48	39.2	20.73	65.1	100	0	P	H
													H
													H
		11000	44.11	-29.89	74	52.79	39.6	16.82	65.1	100	0	P	V
		16500	42.32	-31.68	74	47.49	39.2	20.73	65.1	100	0	P	V
													V
													V
802.11n HT20 CH 116 5580MHz		11160	45.5	-28.5	74	54.32	39.43	16.95	65.2	100	0	P	H
		16740	44.41	-29.59	74	47.83	40.55	20.89	64.86	100	0	P	H
													H
													H
		11160	44.56	-29.44	74	53.38	39.43	16.95	65.2	100	0	P	V
		16740	43.57	-30.43	74	46.99	40.55	20.89	64.86	100	0	P	V
													V
													V
802.11n HT20 CH 140 5700MHz		11400	44.81	-29.19	74	53.79	39.2	17.16	65.34	100	0	P	H
		17100	47.37	-26.63	74	48.33	42.36	21.14	64.46	100	0	P	H
													H
													H
		11400	44.79	-29.21	74	53.77	39.2	17.16	65.34	100	0	P	V
		17100	48.03	-25.97	74	48.99	42.36	21.14	64.46	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 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		5397.52	50.5	-23.5	74	39.65	32.56	11.31	33.02	108	54	P	H
		5469.28	43.1	-10.9	54	32.09	32.65	11.38	33.02	108	54	A	H
	*	5510	92.25	-	-	81.17	32.7	11.41	33.03	108	54	P	H
	*	5510	84.46	-	-	73.38	32.7	11.41	33.03	108	54	A	H
		5744	50.12	-23.88	74	38.77	33.04	11.46	33.15	108	54	P	H
		5746.8	43.25	-10.75	54	31.9	33.04	11.46	33.15	108	54	A	H
		5431.36	50.4	-23.6	74	39.47	32.61	11.34	33.02	267	73	P	V
		5464.96	42.89	-11.11	54	31.88	32.65	11.38	33.02	267	73	A	V
	*	5510	93.86	-	-	82.78	32.7	11.41	33.03	267	73	P	V
	*	5510	86.09	-	-	75.01	32.7	11.41	33.03	267	73	A	V
		5729.825	50.28	-23.72	74	38.94	33.01	11.46	33.13	267	73	P	V
		5761.325	43.05	-10.95	54	31.69	33.06	11.46	33.16	267	73	A	V
802.11n HT40 CH 110 5550MHz		5470	50.96	-23.04	74	39.95	32.65	11.38	33.02	119	54	P	H
		5449.6	42.92	-11.08	54	31.97	32.63	11.34	33.02	119	54	A	H
	*	5550	92.55	-	-	81.39	32.77	11.44	33.05	119	54	P	H
	*	5550	84.11	-	-	72.95	32.77	11.44	33.05	119	54	A	H
		5739.275	51.2	-22.8	74	39.85	33.04	11.46	33.15	119	54	P	H
		5742.075	43.07	-10.93	54	31.72	33.04	11.46	33.15	119	54	A	H
		5458.24	51.64	-22.36	74	40.69	32.63	11.34	33.02	260	69	P	V
		5458.72	42.67	-11.33	54	31.72	32.63	11.34	33.02	260	69	A	V
	*	5550	93.44	-	-	82.28	32.77	11.44	33.05	260	69	P	V
	*	5550	85.82	-	-	74.66	32.77	11.44	33.05	260	69	A	V
		5748.375	51.05	-22.95	74	39.7	33.04	11.46	33.15	260	69	P	V
		5760.8	43.01	-10.99	54	31.65	33.06	11.46	33.16	260	69	A	V

802.11n HT40 CH 134 5670MHz		5467.12	50.36	-23.64	74	39.35	32.65	11.38	33.02	110	55	P	H
		5467.6	42.83	-11.17	54	31.82	32.65	11.38	33.02	110	55	A	H
	*	5670	91.49	-	-	80.19	32.94	11.47	33.11	110	55	P	H
	*	5670	84.34	-	-	73.04	32.94	11.47	33.11	110	55	A	H
		5747.15	51.97	-22.03	74	40.62	33.04	11.46	33.15	110	55	P	H
		5756.95	43.11	-10.89	54	31.75	33.06	11.46	33.16	110	55	A	H
		5460.64	49.77	-24.23	74	38.78	32.63	11.38	33.02	242	80	P	V
		5425.12	42.71	-11.29	54	31.81	32.58	11.34	33.02	242	80	A	V
	*	5670	93.56	-	-	82.26	32.94	11.47	33.11	242	80	P	V
	*	5670	84.79	-	-	73.49	32.94	11.47	33.11	242	80	A	V
		5747.85	50.76	-23.24	74	39.41	33.04	11.46	33.15	242	80	P	V
		5750.475	43	-11	54	31.65	33.04	11.46	33.15	242	80	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)
802.11n HT40 CH 102 5510MHz		11020	44.81	-29.19	74	53.49	39.58	16.85	65.11	100	0	P	H
		16530	43.77	-30.23	74	48.71	39.39	20.74	65.07	100	0	P	H
													H
													H
		11020	43.95	-30.05	74	52.63	39.58	16.85	65.11	100	0	P	V
		16530	43.65	-30.35	74	48.59	39.39	20.74	65.07	100	0	P	V
													V
													V
802.11n HT40 CH 110 5550MHz		11100	43.39	-30.61	74	52.14	39.5	16.91	65.16	100	0	P	H
		16650	44.35	-29.65	74	48.39	40.07	20.83	64.94	100	0	P	H
													H
													H
		11100	45.88	-28.12	74	54.63	39.5	16.91	65.16	100	0	P	V
		16650	43.74	-30.26	74	47.78	40.07	20.83	64.94	100	0	P	V
													V
													V
802.11n HT40 CH 134 5670MHz		11340	44.4	-29.6	74	53.33	39.27	17.1	65.3	100	0	P	H
		17010	46.65	-27.35	74	48.1	42.06	21.07	64.58	100	0	P	H
													H
													H
		11340	43.84	-30.16	74	52.77	39.27	17.1	65.3	100	0	P	V
		17010	46.64	-27.36	74	48.09	42.06	21.07	64.58	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 - Straddle Channel

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 144 5720MHz	*	5720	96.58	22.58	74	84.87	33.01	11.83	33.13	100	62	P	H
	*	5720	86.91	32.91	54	75.2	33.01	11.83	33.13	100	62	A	H
													H
													H
													H
													H
	*	5720	95.04	21.04	74	83.33	33.01	11.83	33.13	254	77	P	V
	*	5720	86.24	32.24	54	74.53	33.01	11.83	33.13	254	77	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 802.11a (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 144 5720MHz		11440	45.34	-28.66	74	54.34	39.17	17.19	65.36	100	0	P	H
		17160	48.44	-25.56	74	49.02	42.6	21.19	64.37	100	0	P	H
													H
													H
		11440	43.71	-30.29	74	52.71	39.17	17.19	65.36	100	0	P	V
		17160	49.62	-24.38	74	50.2	42.6	21.19	64.37	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 - Straddle Channel

WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI Ant. 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 HT20 CH 144 5720MHz	*	5720	95.94	21.94	74	84.23	33.01	11.83	33.13	254	62	P	H
	*	5720	86.25	32.25	54	74.54	33.01	11.83	33.13	254	62	A	H
													H
													H
													H
													H
	*	5720	94.51	20.51	74	82.8	33.01	11.83	33.13	254	77	P	V
	*	5720	85.15	31.15	54	73.44	33.01	11.83	33.13	254	77	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 802.11n 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)
802.11n HT20 CH 144 5720MHz		11440	44.05	-29.95	74	53.05	39.17	17.19	65.36	100	0	P	H
		17160	48.51	-25.49	74	49.09	42.6	21.19	64.37	100	0	P	H
													H
													H
		11440	43.85	-30.15	74	52.85	39.17	17.19	65.36	100	0	P	V
		17160	48.21	-25.79	74	48.79	42.6	21.19	64.37	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 - Straddle Channel

WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI Ant. 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 142 5710MHz	*	5710	93.54	19.54	74	81.86	32.99	11.82	33.13	100	61	P	H
	*	5710	84.12	30.12	54	72.44	32.99	11.82	33.13	100	61	A	H
													H
													H
													H
													H
	*	5710	92.21	18.21	74	80.53	32.99	11.82	33.13	265	81	P	V
	*	5710	83.27	29.27	54	71.59	32.99	11.82	33.13	265	81	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 802.11n 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)
802.11n HT40 CH 142 5710MHz		11420	45.03	-28.97	74	54.02	39.18	17.18	65.35	100	0	P	H
		17130	48.4	-25.6	74	49.16	42.48	21.17	64.41	100	0	P	H
													H
													H
		11420	44.69	-29.31	74	53.68	39.18	17.18	65.35	100	0	P	V
		17130	47.97	-26.03	74	48.73	42.48	21.17	64.41	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 HT20 (LF @ 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)
802.11n HT20 LF		99.93	26.8	-16.7	43.5	41.67	16.1	1.51	32.48	-	-	P	H
		201.18	27.65	-15.85	43.5	42.28	16.02	2.23	32.88	-	-	P	H
		228.18	26.66	-19.34	46	40.33	16.76	2.31	32.74	-	-	P	H
		729.1	32.9	-13.1	46	33.91	27.29	4.09	32.39	-	-	P	H
		829.2	36.04	-9.96	46	35.11	28.65	4.31	32.03	310	222	P	H
		951	34.93	-11.07	46	30.88	30.6	4.64	31.19	-	-	P	H
													H
													H
													H
													H
													H
													H
		32.7	35.19	-4.81	40	42.66	24.14	0.88	32.49	197	254	P	V
		38.1	35.17	-4.83	40	45.36	21.42	0.88	32.49	-	-	P	V
		131.52	23.4	-20.1	43.5	36.24	17.98	1.79	32.61	-	-	P	V
		729.1	35.14	-10.86	46	36.15	27.29	4.09	32.39	-	-	P	V
		865.6	32.06	-13.94	46	30.51	28.99	4.4	31.84	-	-	P	V
		947.5	33.53	-12.47	46	29.57	30.55	4.64	31.23	-	-	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		(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 D. Radiated Spurious Emission

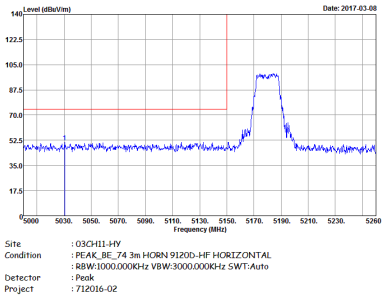
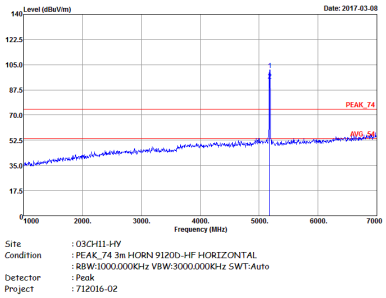
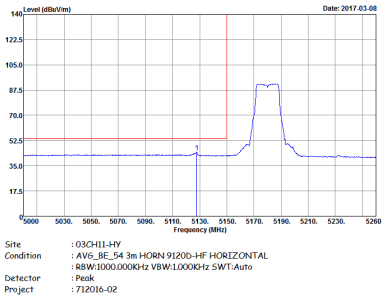
Test Engineer :	J.C. Liang, Jacky Hung, and Ken Wu	**Temperature :**	20~24°C
		Relative Humidity :	50~54%

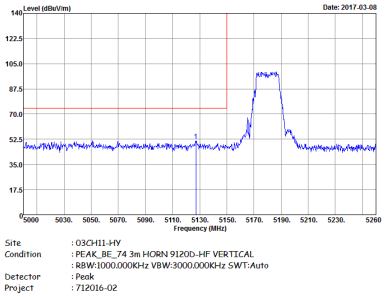
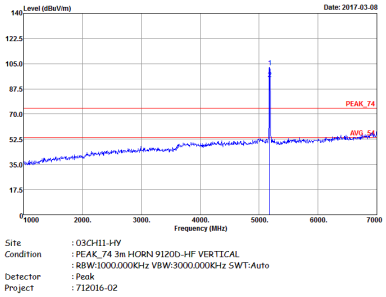
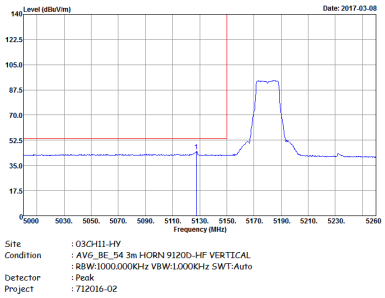
Note symbol

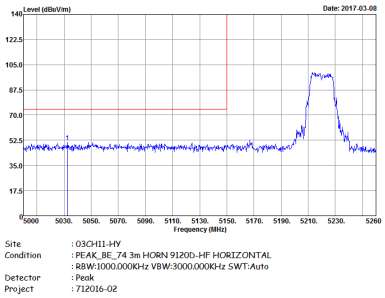
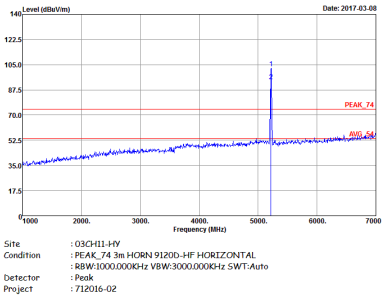
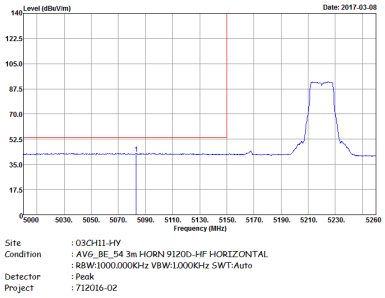
-L	**Low channel location**
-R	**High channel location**

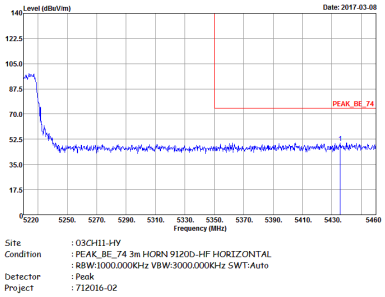
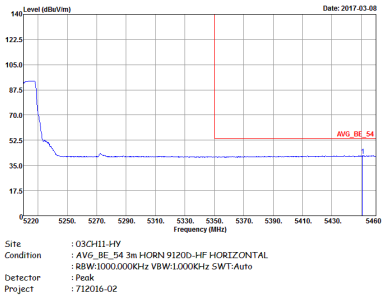
Band 1 - 5150~5250MHz

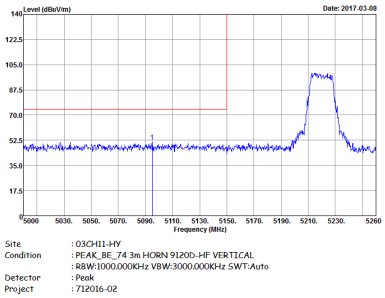
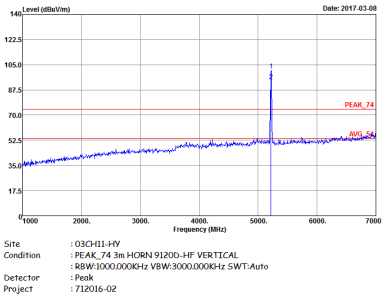
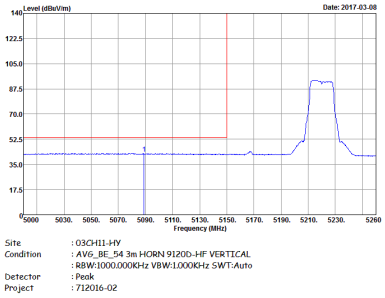
WIFI 802.11a (Band Edge @ 3m)

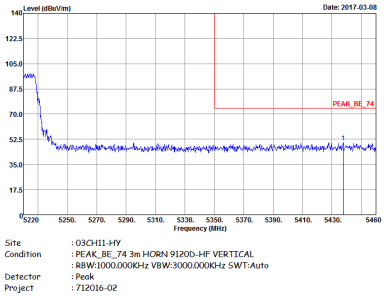
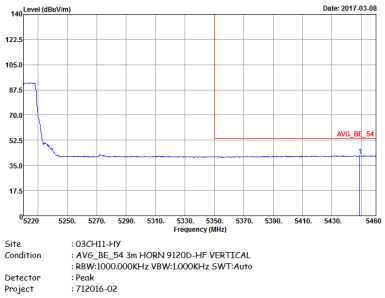
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH36 5180MHz	
1	Horizontal	Fundamental
Peak		
Avg.		Left blank

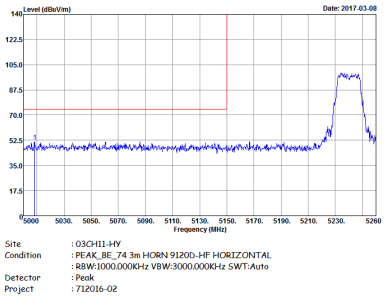
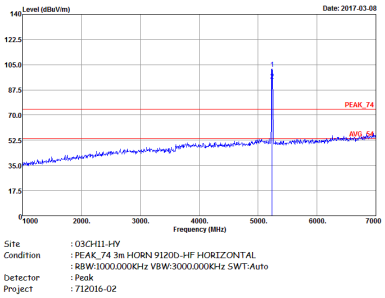
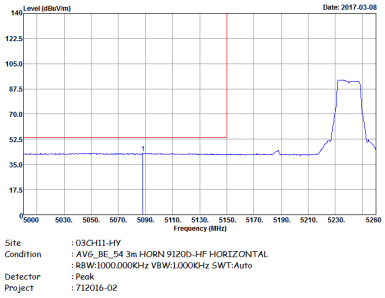
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH36 5180MHz	
1	Vertical	Fundamental
Peak		
Avg.		Left blank

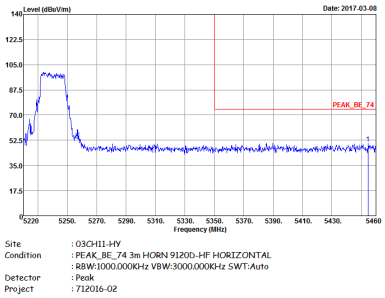
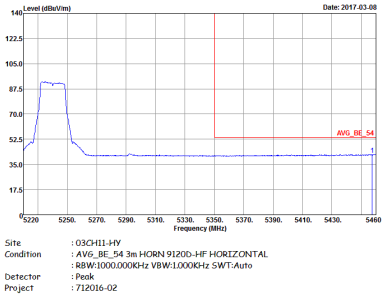
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH44 5220MHz - L	
1	Horizontal	Fundamental
Peak		
Avg.		Left blank

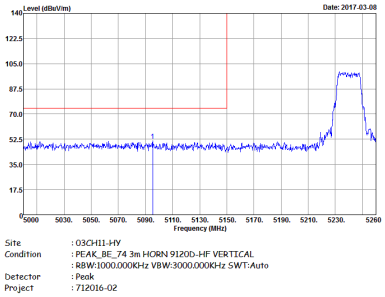
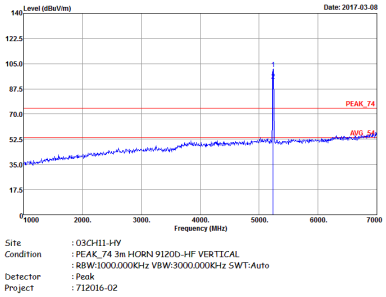
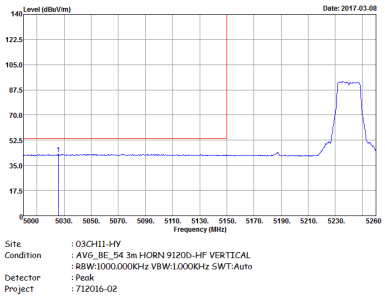
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH44 5220MHz - R	
1	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

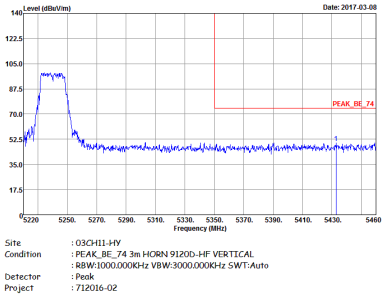
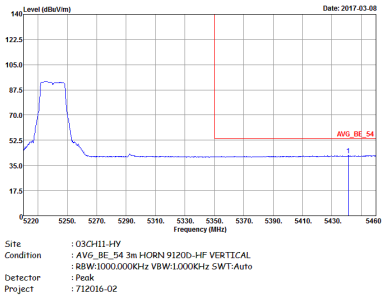
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH44 5220MHz - L	
1	Vertical	Fundamental
Peak		
Avg.		Left blank

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

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

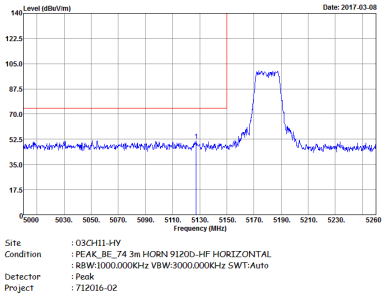
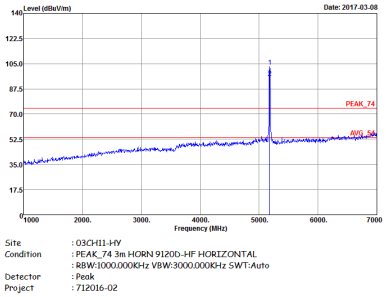
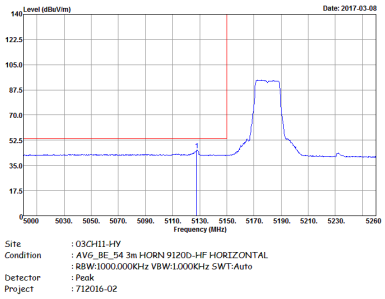
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH48 5240MHz - R	
1	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

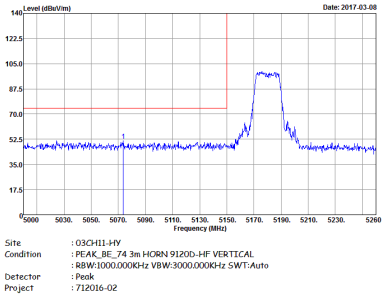
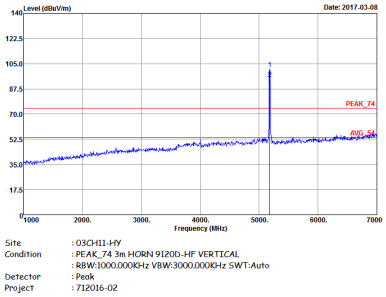
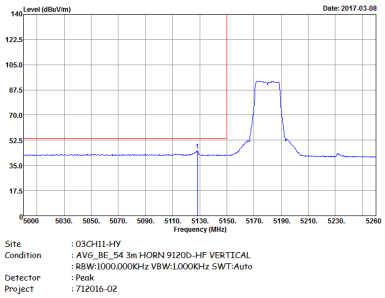
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH48 5240MHz - L	
1	Vertical	Fundamental
Peak		
Avg.		Left blank

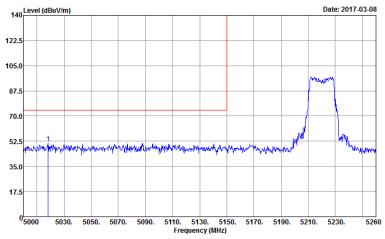
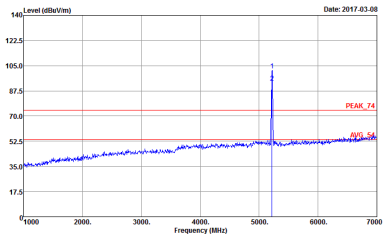
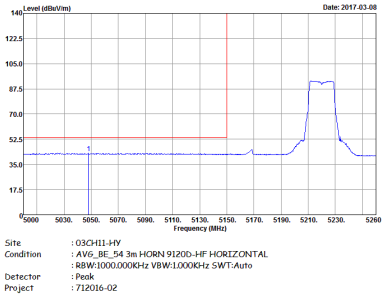
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH48 5240MHz - R	
1	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

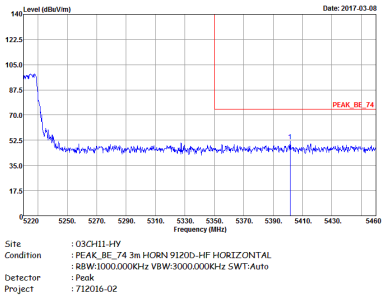
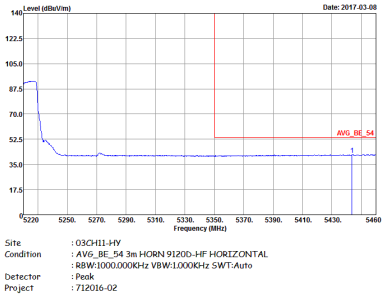
Band 1 5150~5250MHz

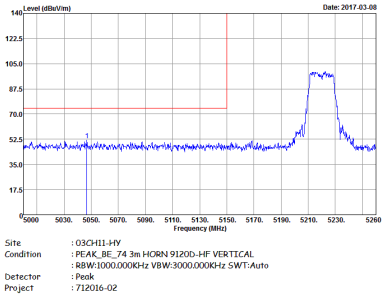
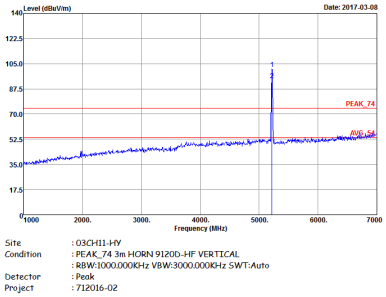
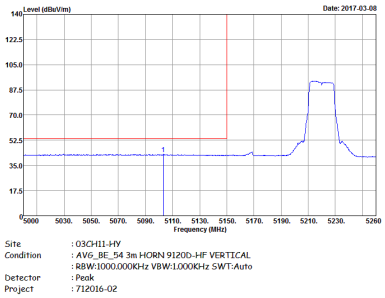
WIFI 802.11n HT20 (Band Edge @ 3m)

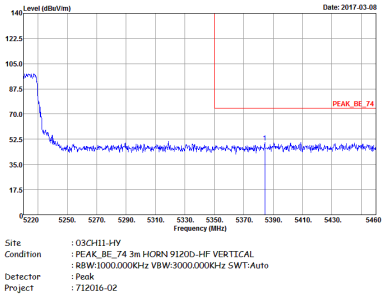
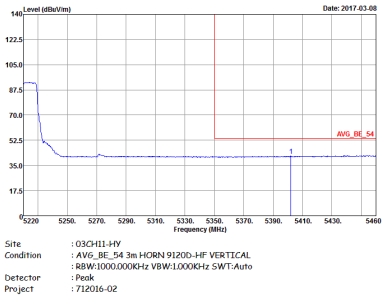
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH36 5180MHz	
1	Horizontal	Fundamental
Peak		
Avg.		Left blank

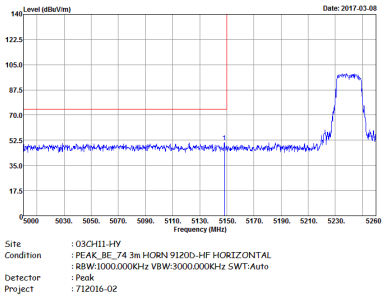
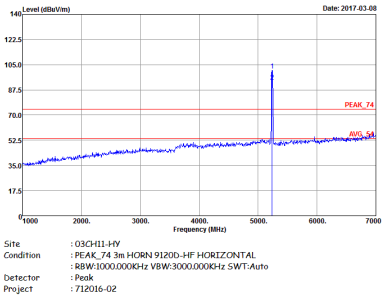
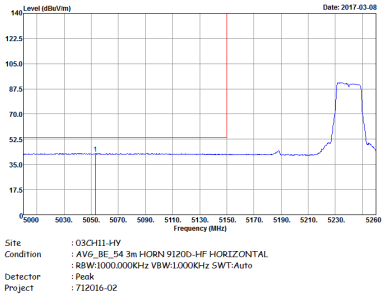
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH36 5180MHz	
1	Vertical	Fundamental
Peak		
Avg.		Left blank

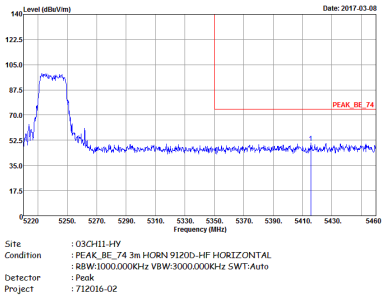
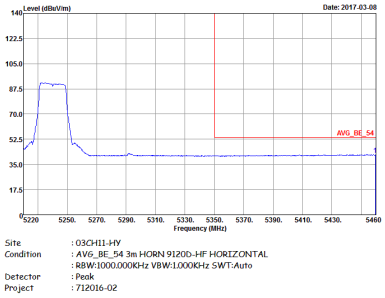
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH44 5220MHz - L	
1	Horizontal	Fundamental
Peak		
Avg.		Left blank

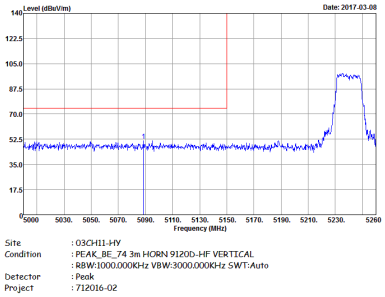
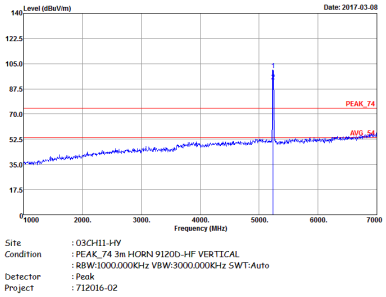
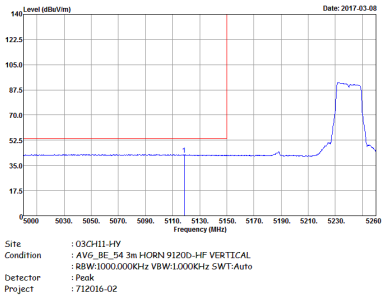
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH44 5220MHz - R	
1	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

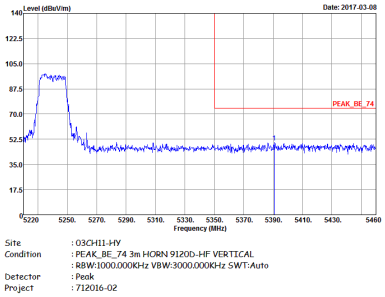
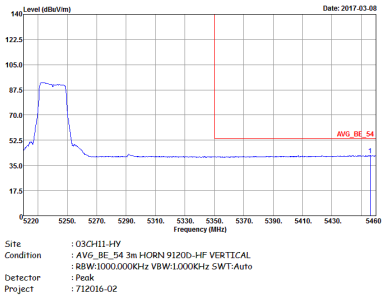
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH44 5220MHz - L	
1	Vertical	Fundamental
Peak		
Avg.		Left blank

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

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

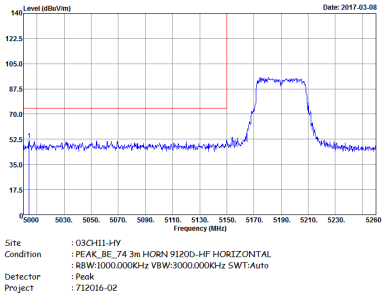
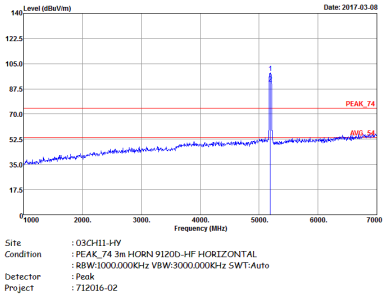
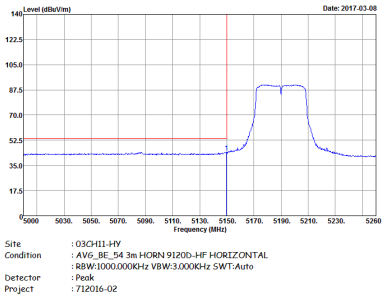
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH48 5240MHz - R	
1	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

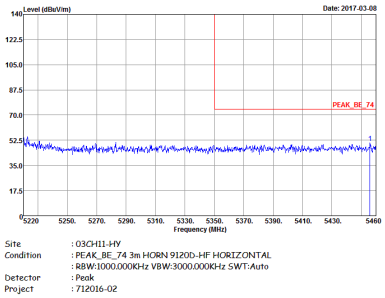
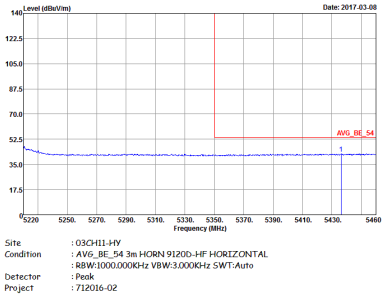
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH48 5240MHz - L	
1	Vertical	Fundamental
Peak		
Avg.		Left blank

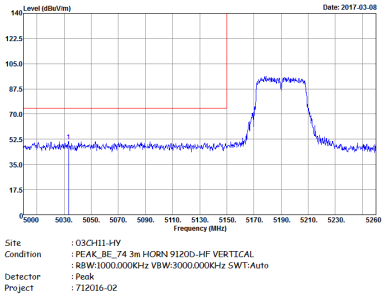
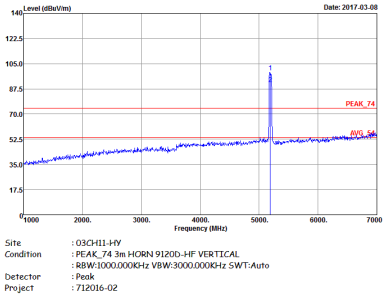
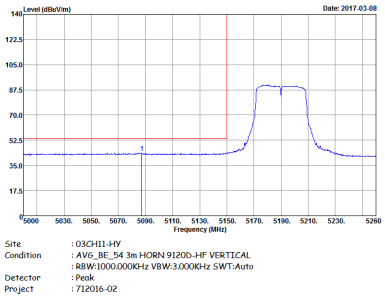
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH48 5240MHz - R	
1	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

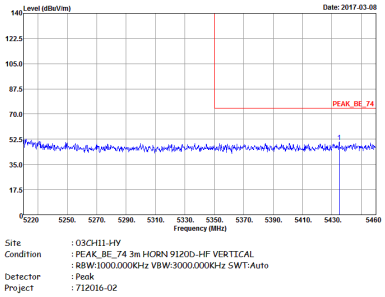
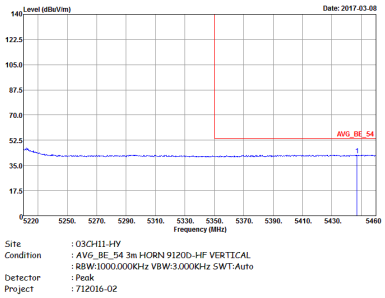
Band 1 5150~5250MHz

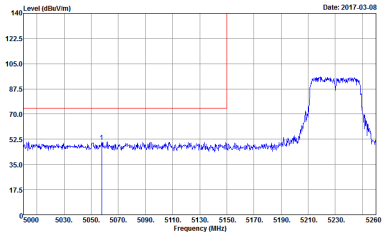
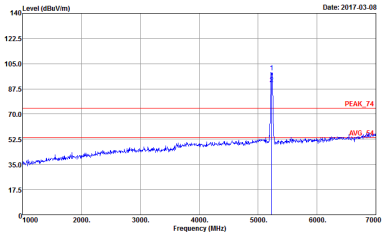
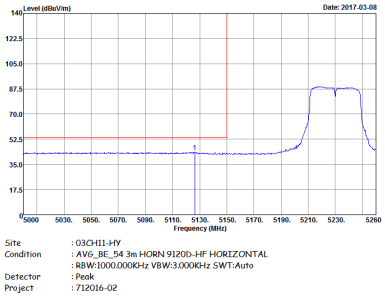
WIFI 802.11n HT40 (Band Edge @ 3m)

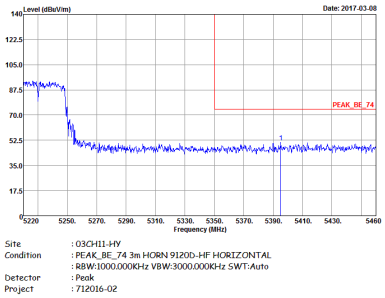
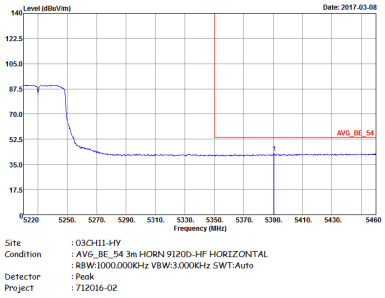
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH38 5190MHz - L	
1	Horizontal	Fundamental
Peak		
Avg.		Left blank

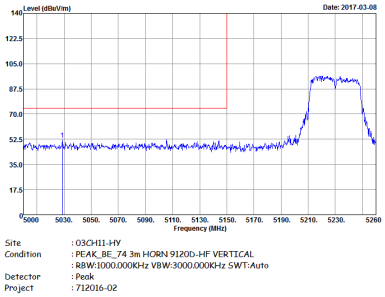
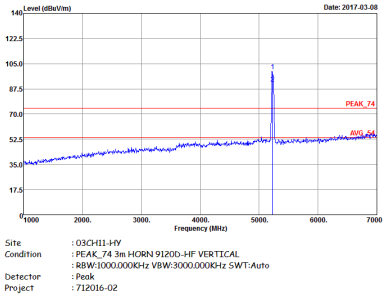
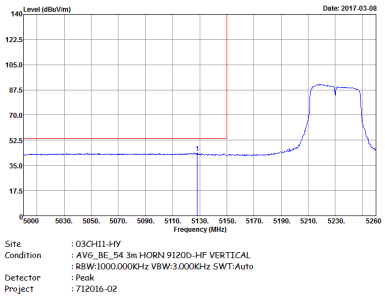
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH38 5190MHz - R	
1	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

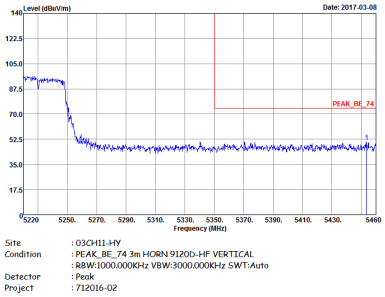
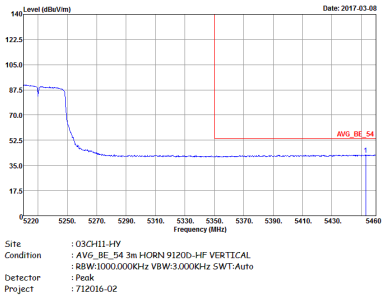
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH38 5190MHz - L	
1	Vertical	Fundamental
Peak		
Avg.		Left blank

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

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

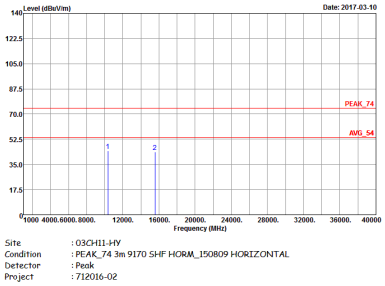
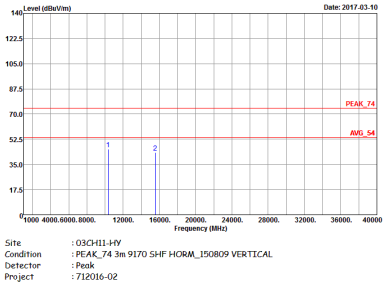
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH46 5230MHz - R	
1	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

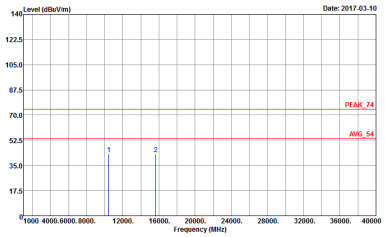
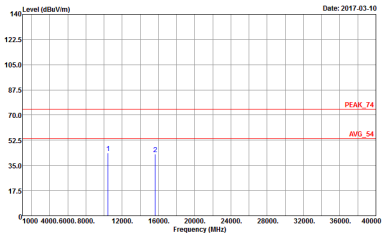
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH46 5230MHz - L	
1	Vertical	Fundamental
Peak		
Avg.		Left blank

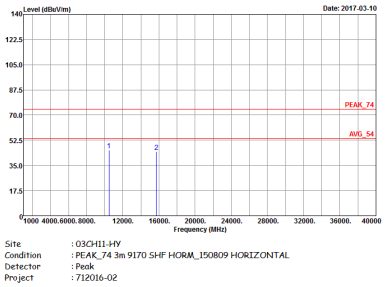
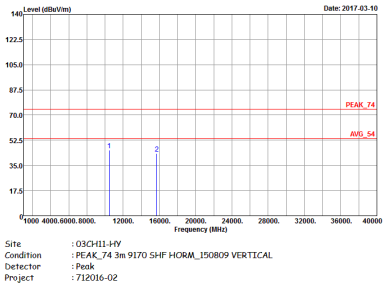
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH46 5230MHz - R	
1	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

Band 1 - 5150~5250MHz

WIFI 802.11a (Harmonic @ 3m)

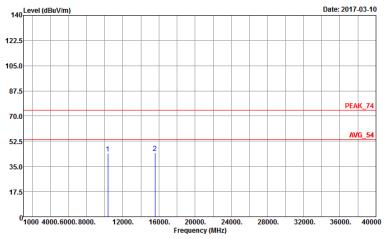
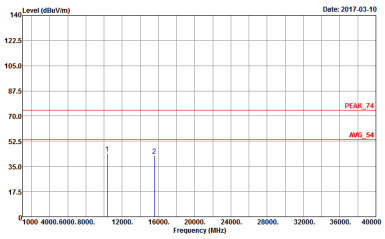
WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11a CH36 5180MHz	
1	Horizontal	Vertical
Peak Avg.		

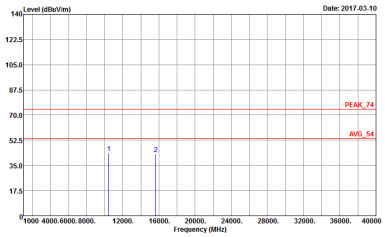
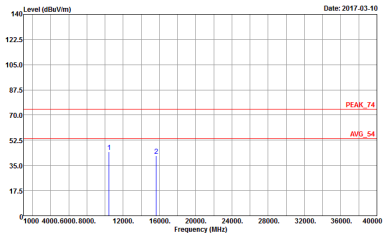
WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11a CH44 5220MHz	
1	Horizontal	Vertical
Peak Avg.	 Site : 03CH11-HY Condition : PEAK_74 3m 9170 SHF HORM_150809 HORIZONTAL Detector : Peak Project : 712016-02	 Site : 03CH11-HY Condition : PEAK_74 3m 9170 SHF HORM_150809 VERTICAL Detector : Peak Project : 712016-02

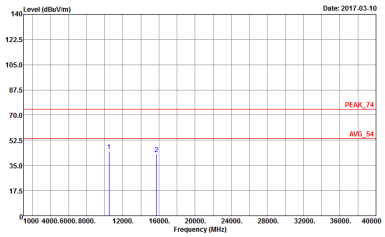
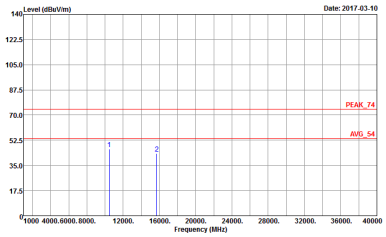
WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11a CH48 5240MHz	
1	Horizontal	Vertical
Peak Avg.		

Band 1 5150~5250MHz

WIFI 802.11n HT20 (Harmonic @ 3m)

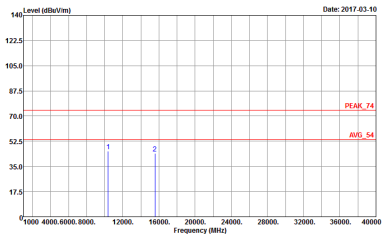
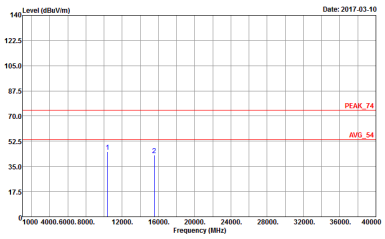
WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11n HT20 CH36 5180MHz	
1	Horizontal	Vertical
Peak Avg.	 Site : 03CH11-HY Condition : PEAK_74 3m 9170 SHF HORM_150809 HORIZONTAL Detector : Peak Project : 712016-02	 Site : 03CH11-HY Condition : PEAK_74 3m 9170 SHF HORM_150809 VERTICAL Detector : Peak Project : 712016-02

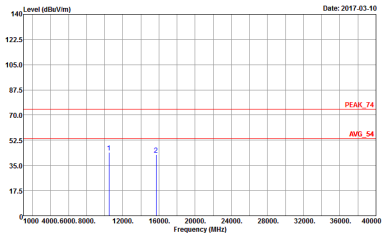
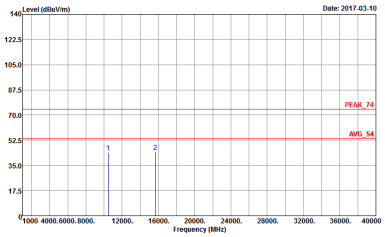
WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11n HT20 CH44 5220MHz	
1	Horizontal	Vertical
Peak Avg.	 Site : 03CH11-HY Condition : PEAK_74 3m 9170 SHF HORM_150809 HORIZONTAL Detector : Peak Project : 712016-02	 Site : 03CH11-HY Condition : PEAK_74 3m 9170 SHF HORM_150809 VERTICAL Detector : Peak Project : 712016-02

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

Band 1 5150~5250MHz

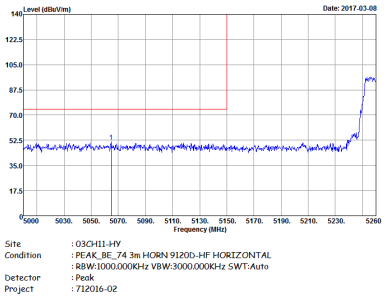
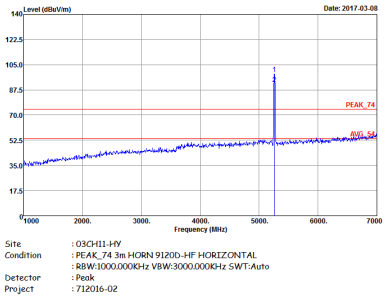
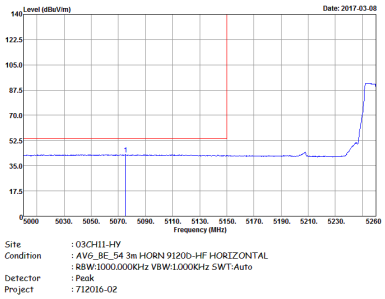
WIFI 802.11n HT40 (Harmonic @ 3m)

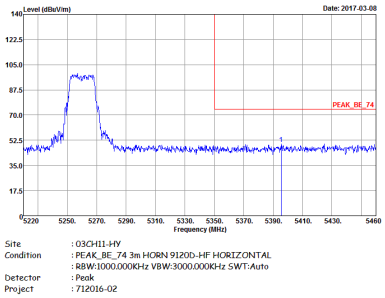
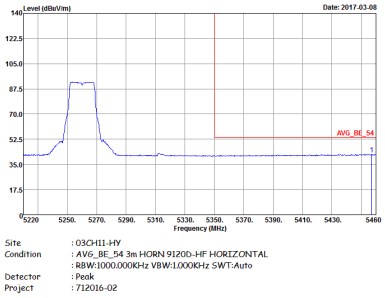
WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11n HT40 CH38 5190MHz	
1	Horizontal	Vertical
Peak Avg.	 Site : 03CH11-HY Condition : PEAK_74 3m 9170 SHF HORM_150809 HORIZONTAL Detector : Peak Project : 712016-02	 Site : 03CH11-HY Condition : PEAK_74 3m 9170 SHF HORM_150809 VERTICAL Detector : Peak Project : 712016-02

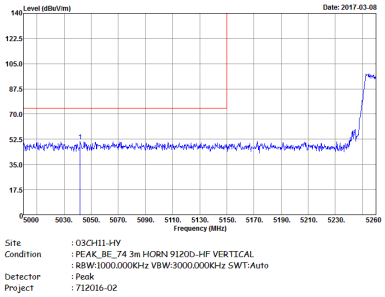
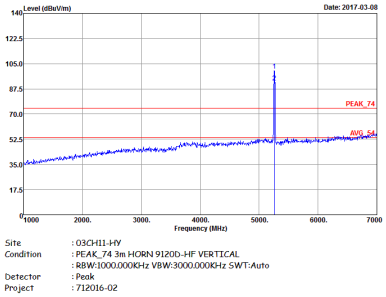
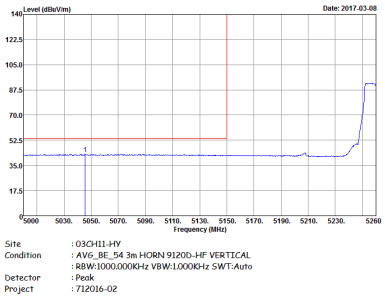
WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11n HT40 CH46 5230MHz	
1	Horizontal	Vertical
Peak Avg.	 Site : 03CH11-HY Condition : PEAK_74 3m 9170 SHF HORM_150809 HORIZONTAL Detector : Peak Project : 712016-02	 Site : 03CH11-HY Condition : PEAK_74 3m 9170 SHF HORM_150809 VERTICAL Detector : Peak Project : 712016-02

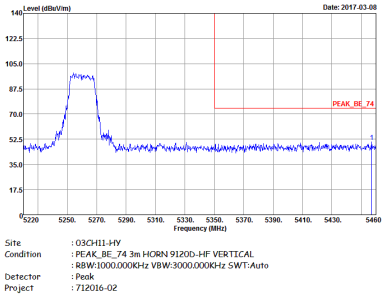
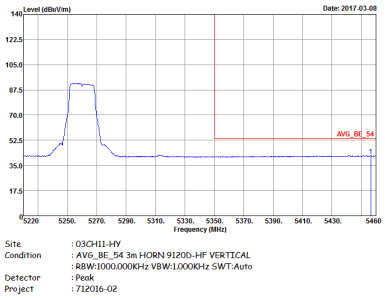
Band 2 - 5250~5350MHz

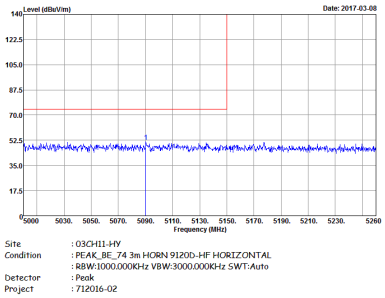
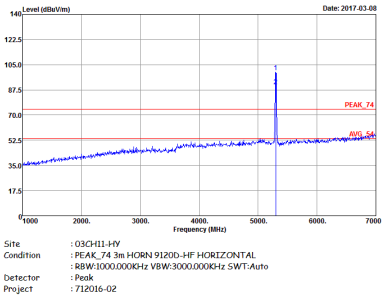
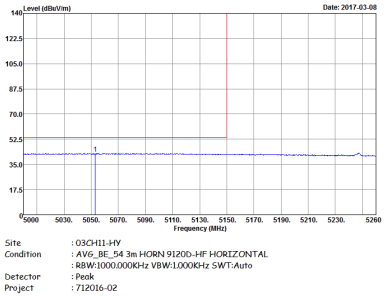
WIFI 802.11a (Band Edge @ 3m)

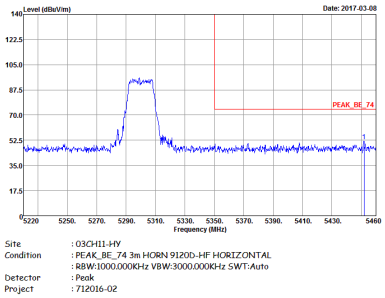
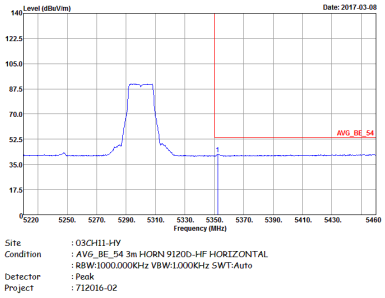
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH52 5260MHz - L	
1	Horizontal	Fundamental
Peak		
Avg.		Left blank

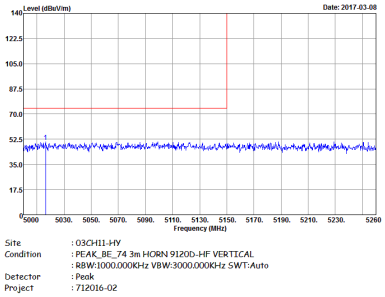
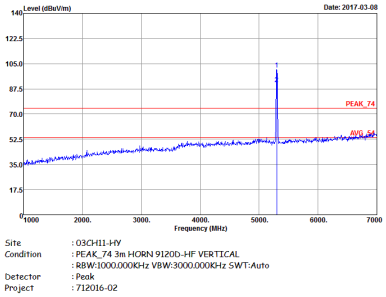
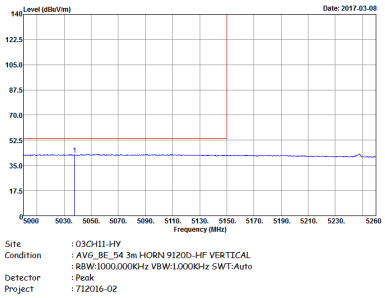
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH52 5260MHz - R	
1	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

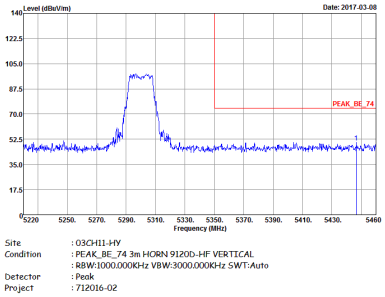
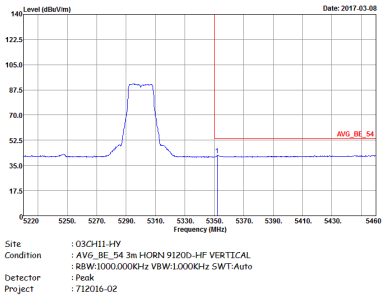
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH52 5260MHz - L	
1	Vertical	Fundamental
Peak		
Avg.		Left blank

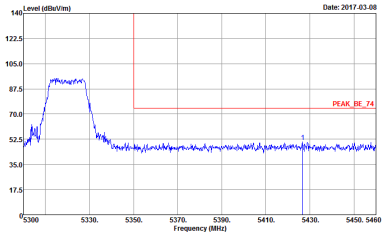
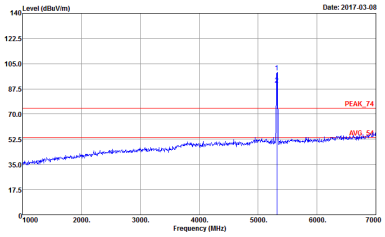
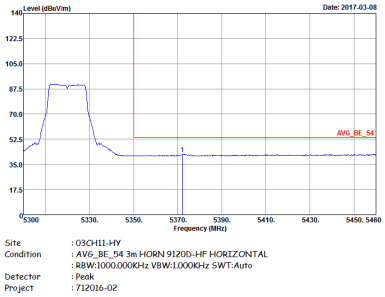
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH52 5260MHz - R	
1	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

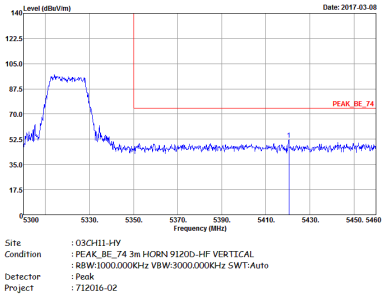
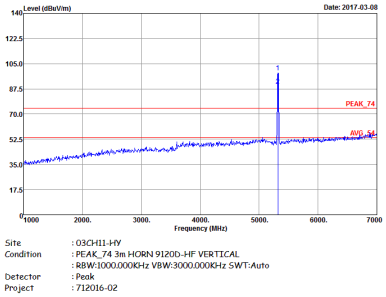
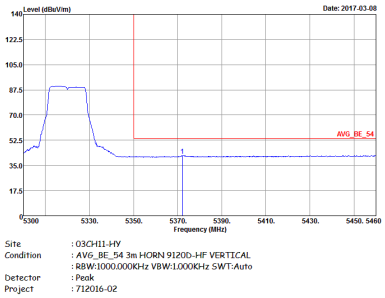
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH60 5300MHz - L	
1	Horizontal	Fundamental
Peak		
Avg.		Left blank

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

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

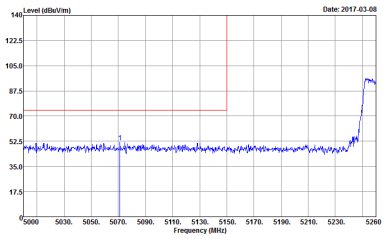
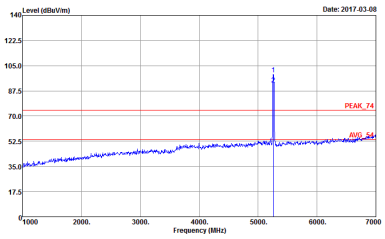
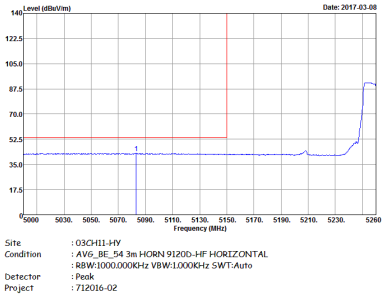
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH60 5300MHz - R	
1	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

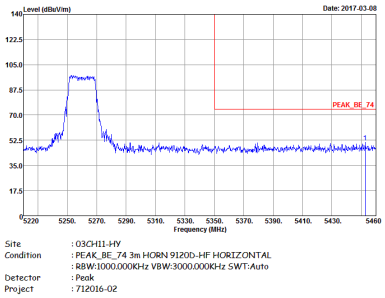
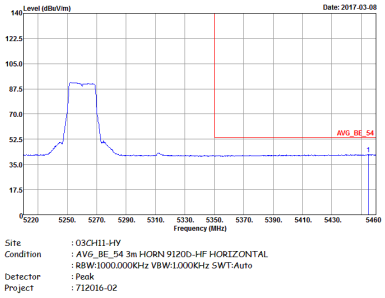
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH64 5320MHz	
1	Horizontal	Fundamental
Peak		
Avg.		Left blank

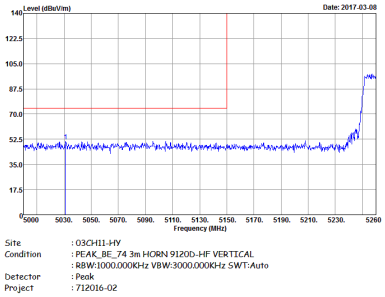
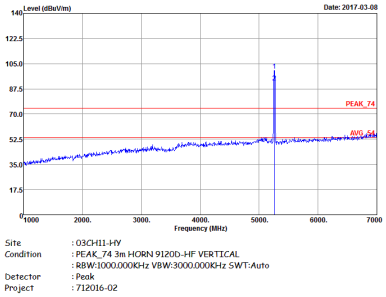
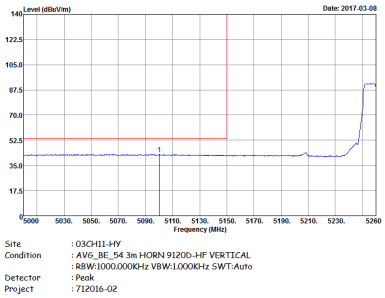
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH64 5320MHz	
1	Vertical	Fundamental
Peak		
Avg.		Left blank

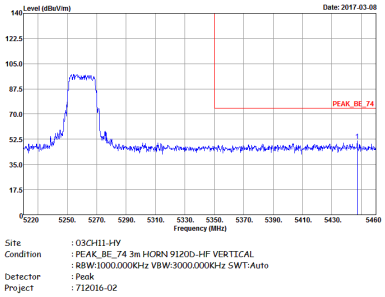
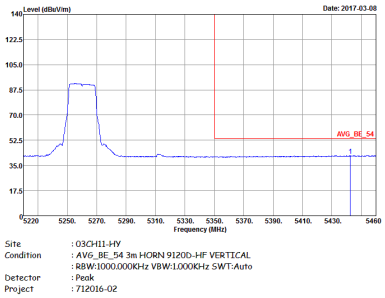
Band 2 5250~5350MHz

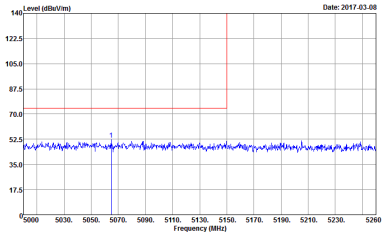
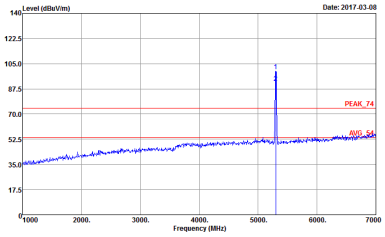
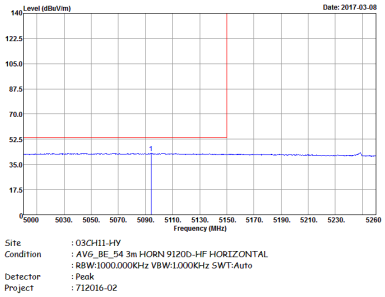
WIFI 802.11n HT20 (Band Edge @ 3m)

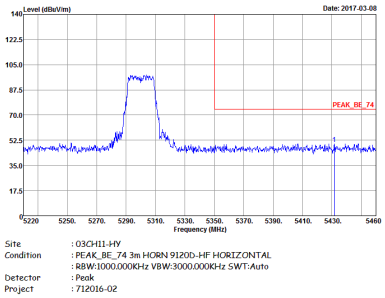
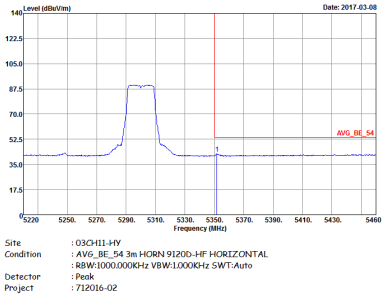
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH52 5260MHz - L	
1	Horizontal	Fundamental
Peak		
Avg.		Left blank

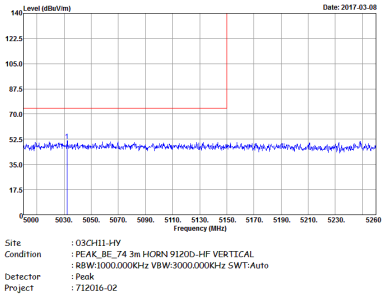
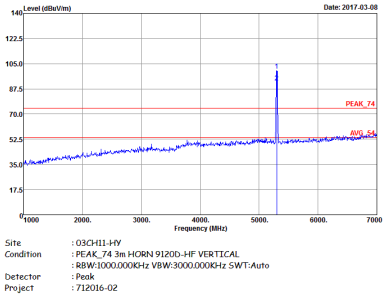
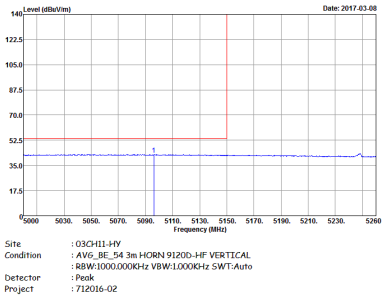
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH52 5260MHz - R	
1	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

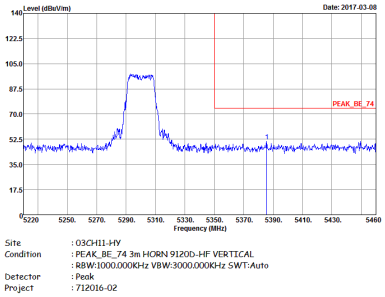
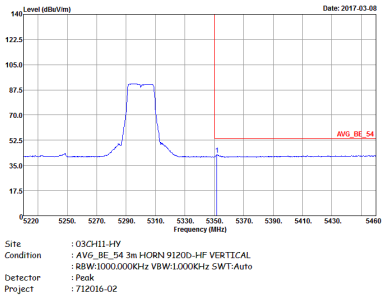
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH52 5260MHz - L	
1	Vertical	Fundamental
Peak		
Avg.		Left blank

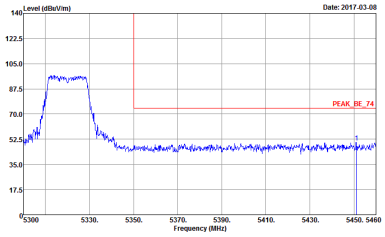
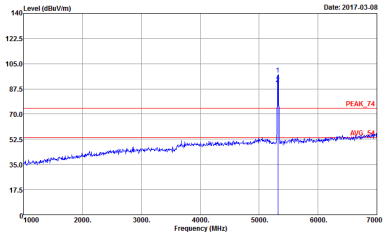
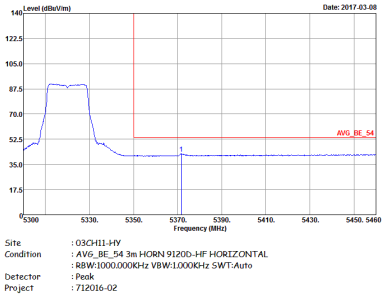
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH52 5260MHz - R	
1	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

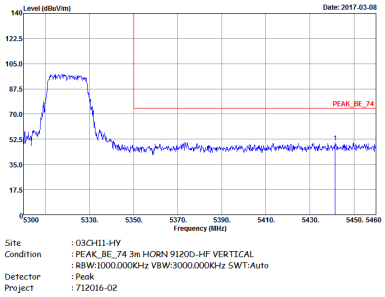
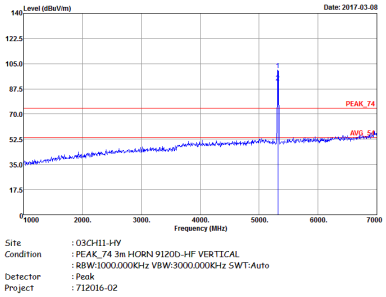
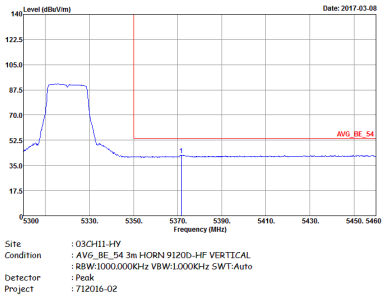
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH60 5300MHz - L	
1	Horizontal	Fundamental
Peak		
Avg.		Left blank

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

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

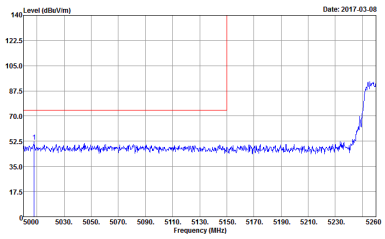
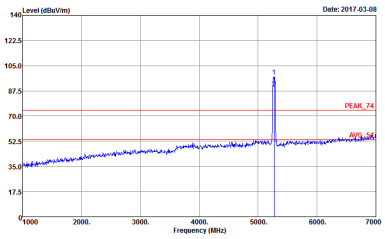
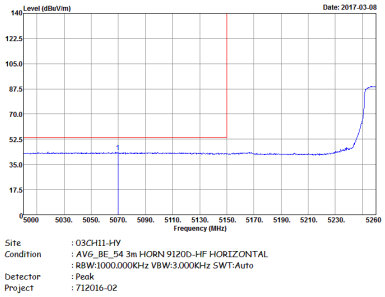
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH60 5300MHz - R	
1	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

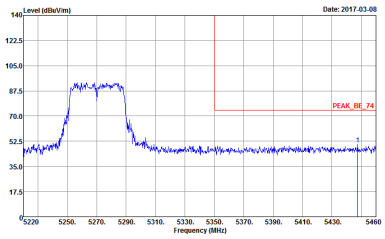
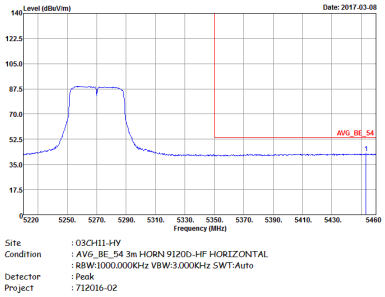
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH64 5320MHz	
1	Horizontal	Fundamental
Peak		
Avg.		Left blank

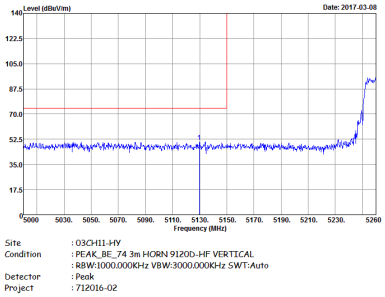
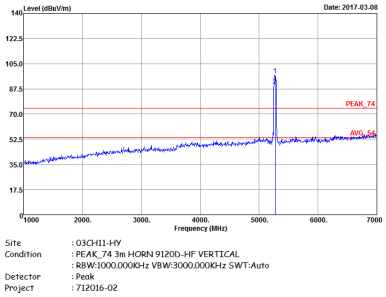
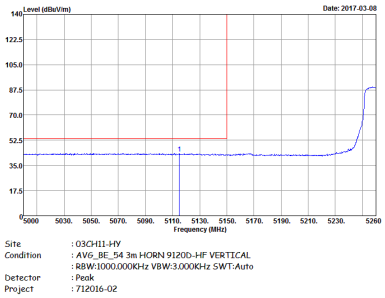
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH64 5320MHz	
1	Vertical	Fundamental
Peak		
Avg.		Left blank

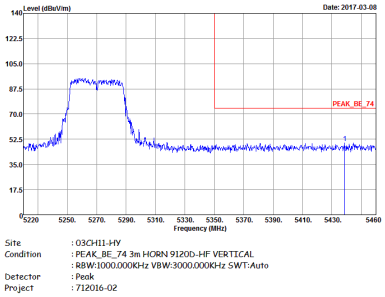
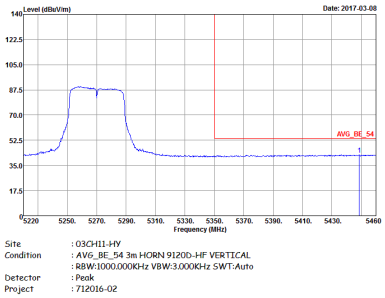
Band 2 5250~5350MHz

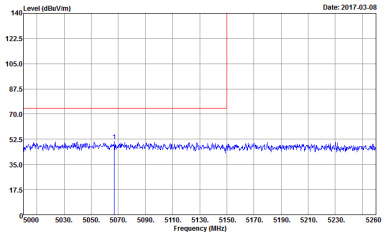
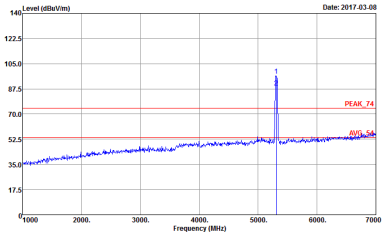
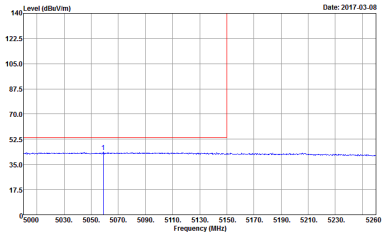
WIFI 802.11n HT40 (Band Edge @ 3m)

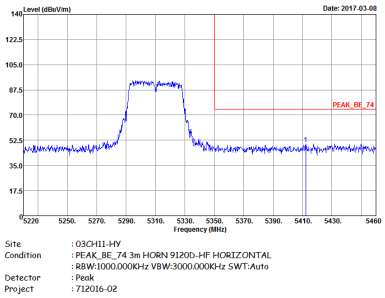
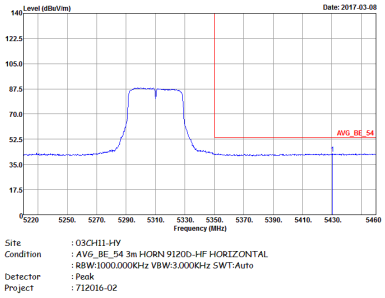
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT40 CH54 5270 - L	
1	Horizontal	Fundamental
Peak		
Avg.		Left blank

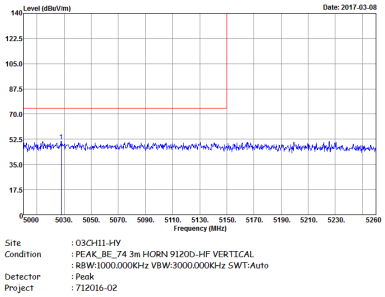
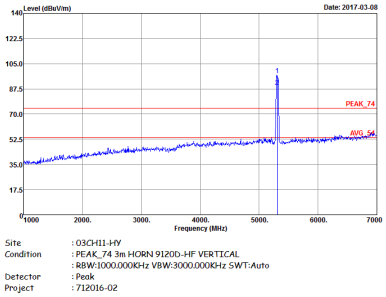
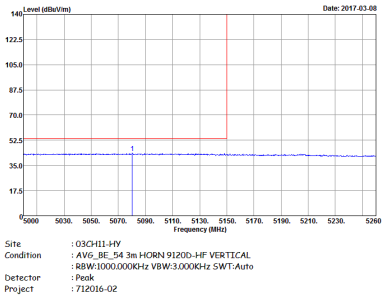
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT40 CH54 5270 - R	
1	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

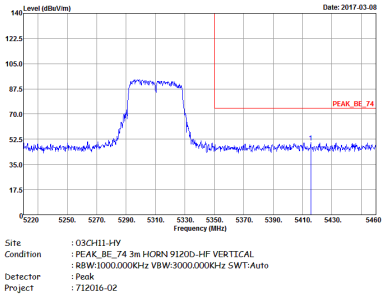
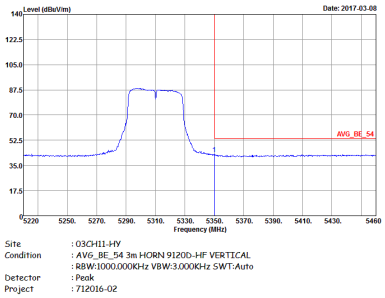
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT40 CH54 5270 - L	
1	Vertical	Vertical
Peak		
Avg.		Left blank

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

WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT40 CH62 5310 - L	
1	Horizontal	Fundamental
Peak	 Site : 03CH11-HY Condition : PEAK_BE_74 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 712016-02	 Site : 03CH11-HY Condition : PEAK_74 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 712016-02
Avg.	 Site : 03CH11-HY Condition : AVG_BE_54 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:3.000KHz SWT:Auto Detector : Peak Project : 712016-02	Left blank

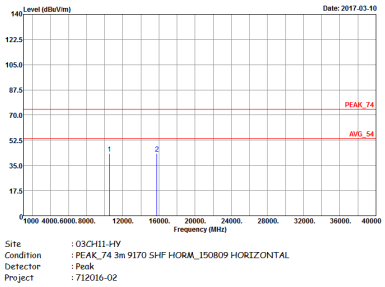
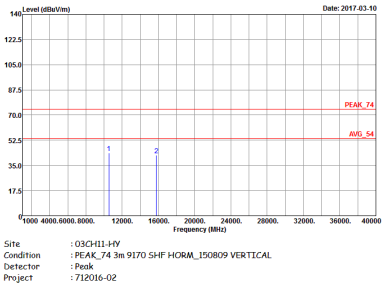
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT40 CH62 5310 - R	
1	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

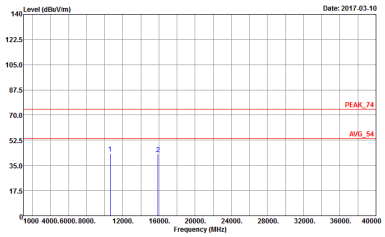
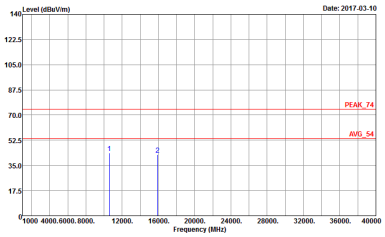
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT40 CH62 5310 - L	
1	Vertical	Fundamental
Peak		
Avg.		Left blank

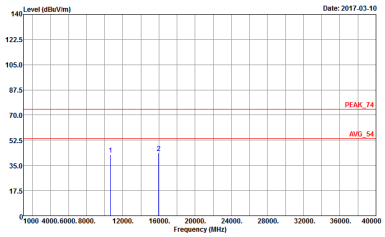
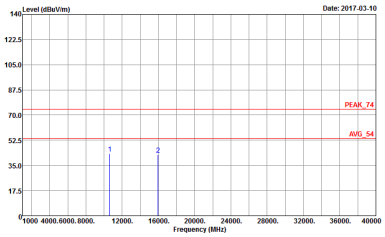
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT40 CH62 5310 - R	
1	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

Band 2 - 5250~5350MHz

WIFI 802.11a (Harmonic @ 3m)

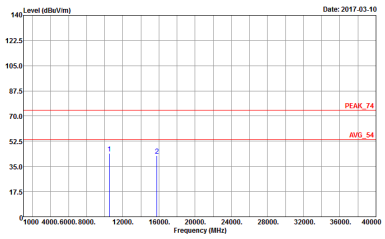
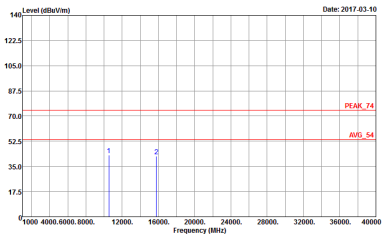
WIFI	Band 2 5250~5350MHz Harmonic @ 3m	
ANT	802.11a CH52 5260MHz	
1	Horizontal	Vertical
Peak Avg.		

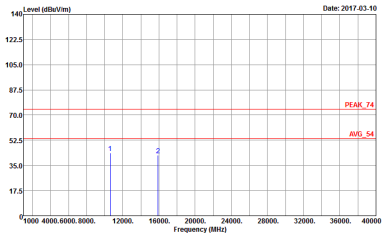
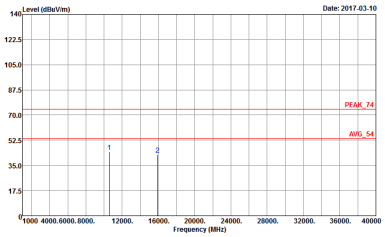
WIFI	Band 2 5250~5350MHz Harmonic @ 3m	
ANT	802.11a CH60 5300MHz	
1	Horizontal	Vertical
Peak Avg.	 Site : 03CH11-HY Condition : PEAK_74 3m 9170 SHF HORM_150809 HORIZONTAL Detector : Peak Project : 712016-02	 Site : 03CH11-HY Condition : PEAK_74 3m 9170 SHF HORM_150809 VERTICAL Detector : Peak Project : 712016-02

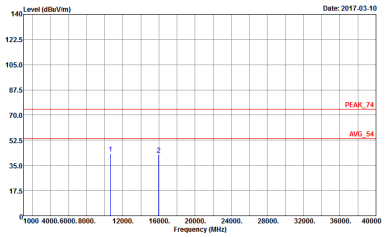
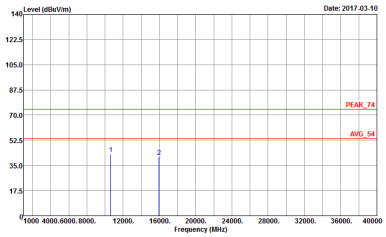
WIFI	Band 2 5250~5350MHz Harmonic @ 3m	
ANT	802.11a CH64 5320MHz	
1	Horizontal	Vertical
Peak Avg.	 Site : 03CH11-HY Condition : PEAK_74 3m 9170 SHF HORM_150809 HORIZONTAL Detector : Peak Project : 712016-02	 Site : 03CH11-HY Condition : PEAK_74 3m 9170 SHF HORM_150809 VERTICAL Detector : Peak Project : 712016-02

Band 2 5250~5350MHz

WIFI 802.11n HT20 (Harmonic @ 3m)

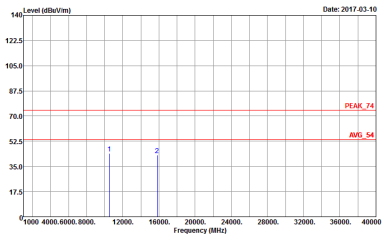
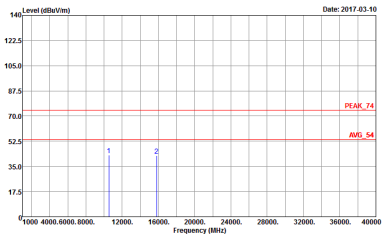
WIFI	Band 2 5250~5350MHz Harmonic @ 3m	
ANT	802.11n HT20 CH52 5260MHz	
1	Horizontal	Vertical
Peak Avg.	 Site : 03CH11-HY Condition : PEAK_74 3m 9170 SHF HORM_150809 HORIZONTAL Detector : Peak Project : 712016-02	 Site : 03CH11-HY Condition : PEAK_74 3m 9170 SHF HORM_150809 VERTICAL Detector : Peak Project : 712016-02

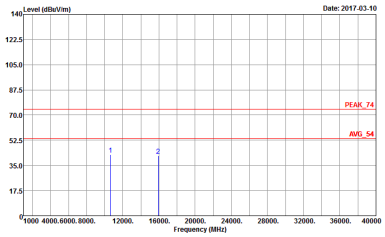
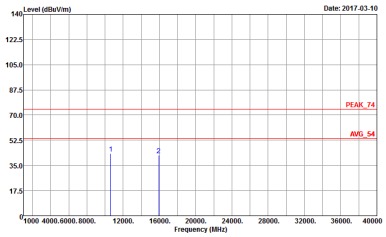
WIFI	Band 2 5250~5350MHz Harmonic @ 3m	
ANT	802.11n HT20 CH60 5300MHz	
1	Horizontal	Vertical
Peak Avg.	 Site : 03CH11-HY Condition : PEAK_74 3m 9170 SHF HORM_150809 HORIZONTAL Detector : Peak Project : 712016-02	 Site : 03CH11-HY Condition : PEAK_74 3m 9170 SHF HORM_150809 VERTICAL Detector : Peak Project : 712016-02

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

Band 2 5250~5350MHz

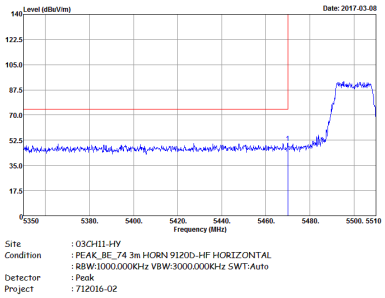
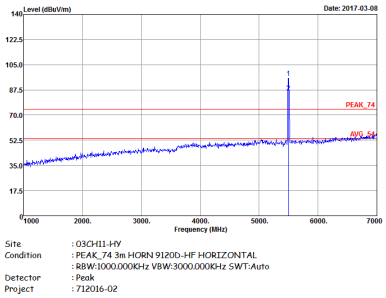
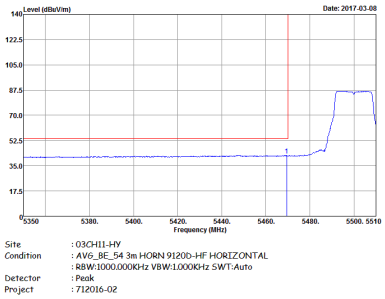
WIFI 802.11n HT40 (Harmonic @ 3m)

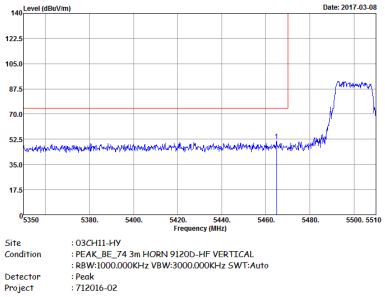
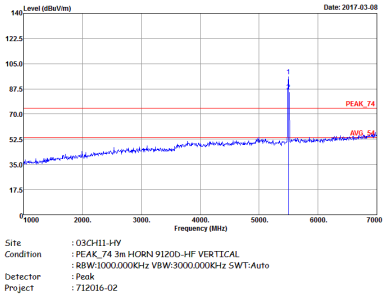
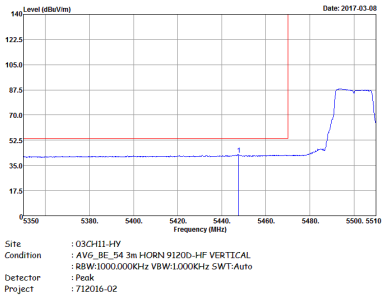
WIFI	Band 2 5250~5350MHz Harmonic @ 3m	
ANT	802.11n HT40 CH54 5270	
1	Horizontal	Vertical
Peak Avg.	 Site : 03CH11-HY Condition : PEAK_74 3m 9170 SHF HORM_150809 HORIZONTAL Detector : Peak Project : 712016-02	 Site : 03CH11-HY Condition : PEAK_74 3m 9170 SHF HORM_150809 VERTICAL Detector : Peak Project : 712016-02

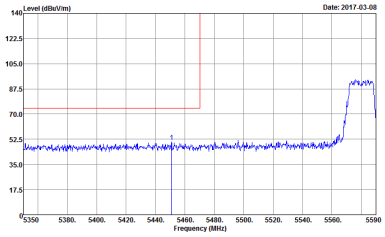
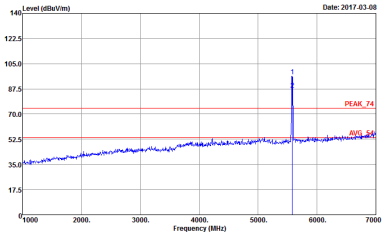
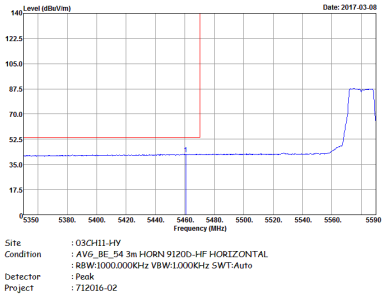
WIFI	Band 2 5250~5350MHz Harmonic @ 3m	
ANT	802.11n HT40 CH62 5310	
1	Horizontal	Vertical
Peak Avg.	 Site : 03CH11-HY Condition : PEAK_74 3m 9170 SHF HORM_150809 HORIZONTAL Detector : Peak Project : 712016-02	 Site : 03CH11-HY Condition : PEAK_74 3m 9170 SHF HORM_150809 VERTICAL Detector : Peak Project : 712016-02

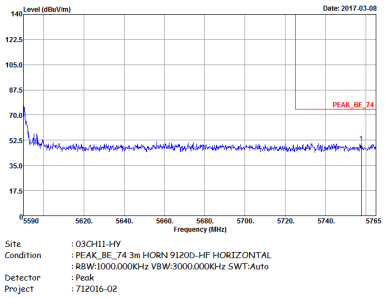
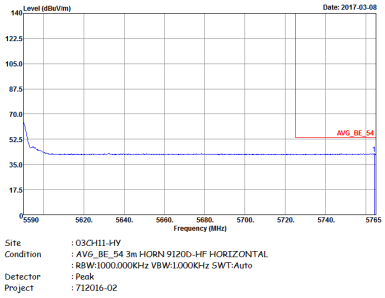
Band 3 - 5470~5725MHz

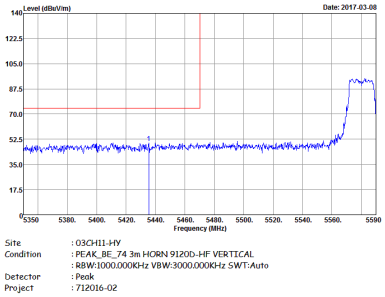
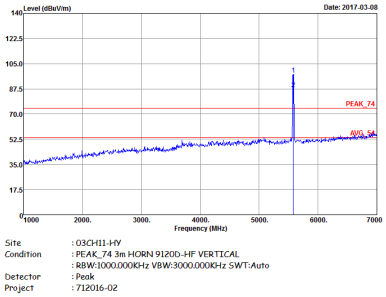
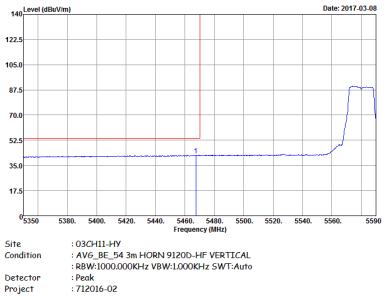
WIFI 802.11a (Band Edge @ 3m)

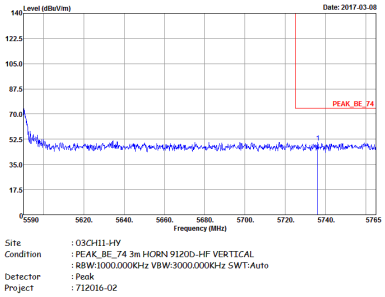
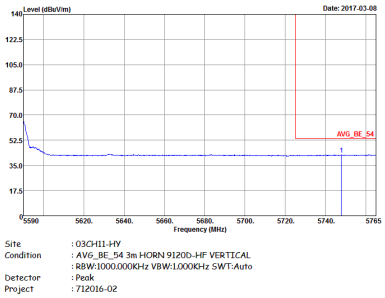
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH100 5500MHz	
1	Horizontal	Fundamental
Peak		
Avg.		Left blank

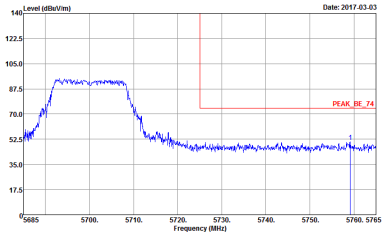
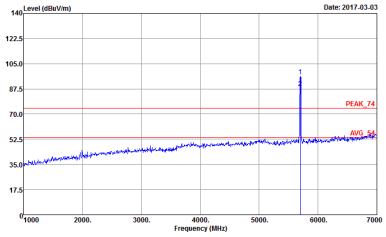
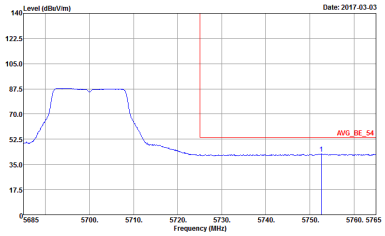
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH100 5500MHz	
1	Vertical	Fundamental
Peak		
Avg.		Left blank

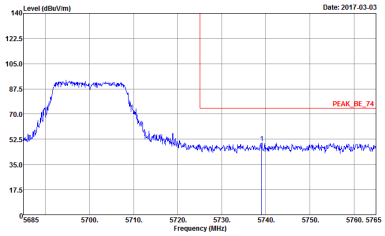
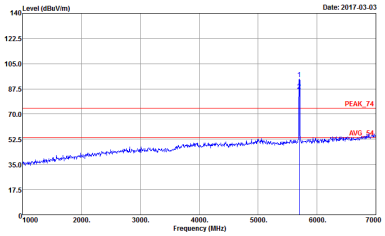
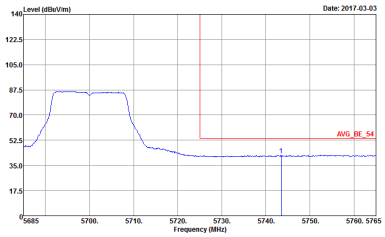
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH116 5580MHz - L	
1	Horizontal	Fundamental
Peak		
Avg.		Left blank

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

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

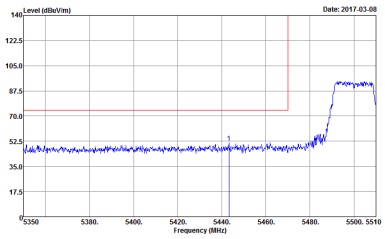
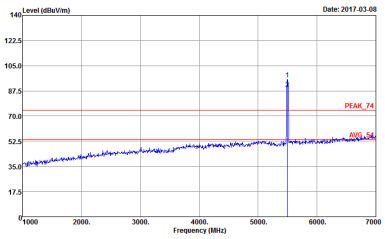
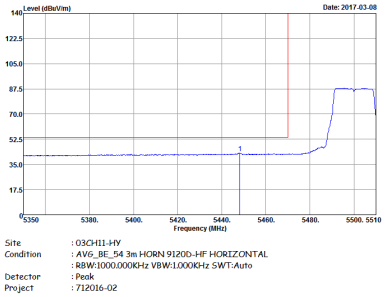
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH116 5580MHz - R	
1	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

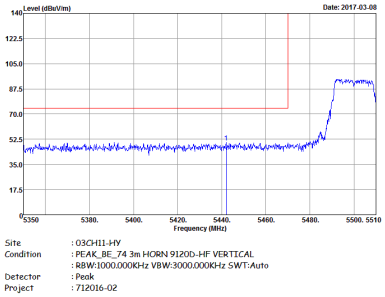
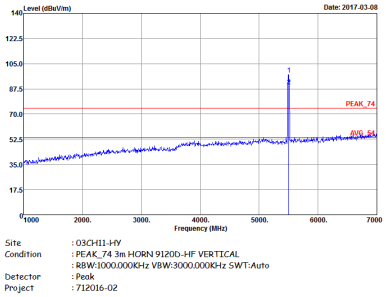
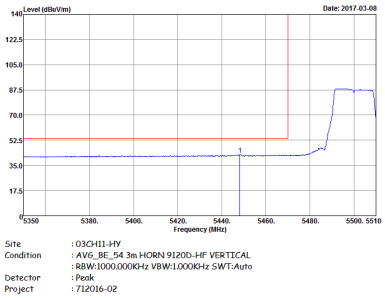
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH140 5700MHz	
1	Horizontal	Fundamental
Peak	 Site : 03CH11-HY Condition : PEAK_BE_74 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 712016-02 1 5759.16 50.51 -23.49 74.00 39.15 33.06 11.46 33.16 271 56 Peak	 Site : 03CH11-HY Condition : PEAK_74 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 712016-02 1 * 5700.00 96.31 22.31 74.00 84.99 32.97 11.47 33.12 271 56 Peak 2 * 5700.00 88.16 34.16 54.00 76.84 32.97 11.47 33.12 271 56 Average
Avg.	 Site : 03CH11-HY Condition : AVG_BE_54 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto Detector : Peak Project : 712016-02 1 5752.60 42.39 -11.61 54.00 31.02 33.06 11.46 33.15 271 56 Average	Left blank

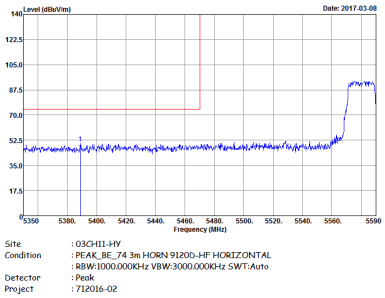
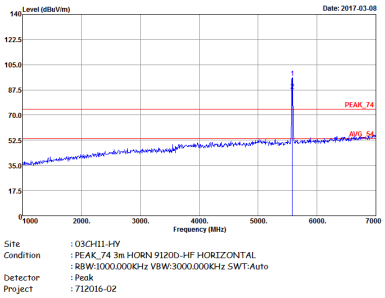
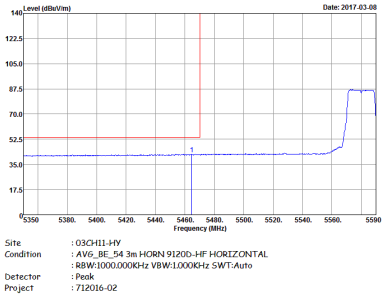
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH140 5700MHz	
1	Vertical	Fundamental
Peak	 Site : 03CH11-HY Condition : PEAK_BE_74 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 712016-02 1 5739.08 49.91 -24.09 74.00 38.56 33.04 11.46 33.15 315 74 Peak	 Site : 03CH11-HY Condition : PEAK_74 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 712016-02 1 * 5700.00 94.39 20.39 74.00 83.07 32.97 11.47 33.12 315 74 Peak 2 * 5700.00 86.36 32.36 54.00 75.04 32.97 11.47 33.12 315 74 Average
Avg.	 Site : 03CH11-HY Condition : AVG_BE_54 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto Detector : Peak Project : 712016-02 1 5743.48 42.11 -11.89 54.00 30.76 33.04 11.46 33.15 315 74 Average	Left blank

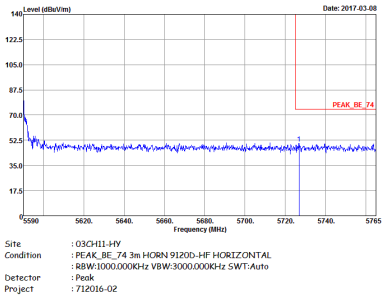
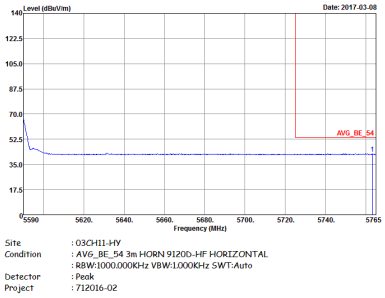
Band 3 5470~5725MHz

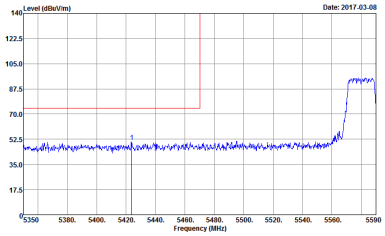
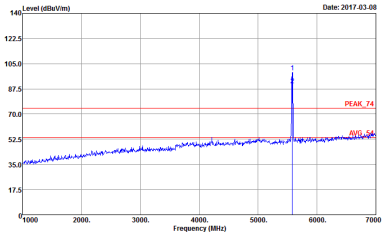
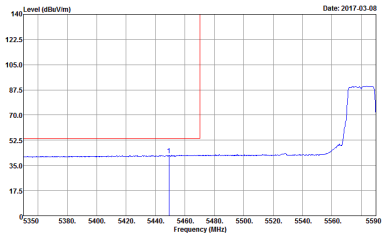
WIFI 802.11n HT20 (Band Edge @ 3m)

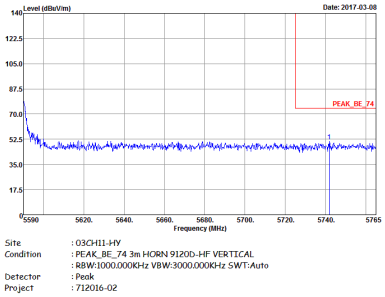
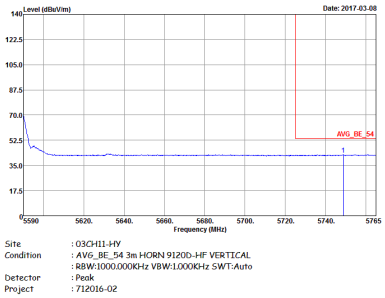
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT20 CH100 5500MHz	
1	Horizontal	Fundamental
Peak		
Avg.		Left blank

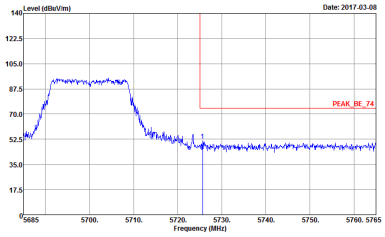
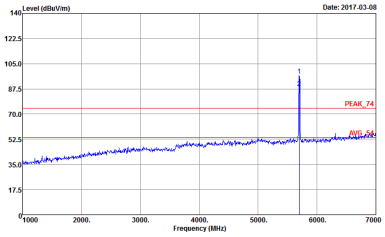
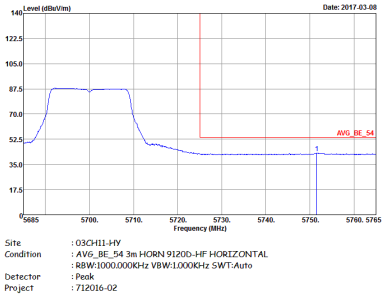
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT20 CH100 5500MHz	
1	Vertical	Fundamental
Peak		
Avg.		Left blank

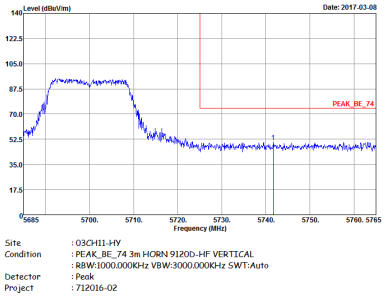
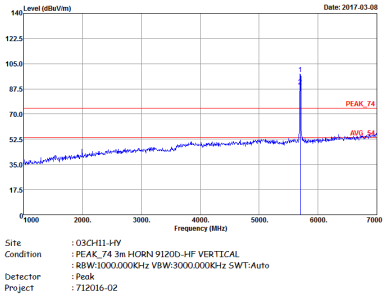
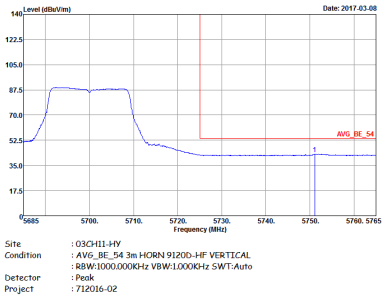
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT20 CH116 5580MHz - L	
1	Horizontal	Fundamental
Peak		
Avg.		Left blank

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

WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT20 CH116 5580MHz - L	
1	Vertical	Fundamental
Peak	 Site : 03CH11-HY Condition : PEAK_BE_74 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 712016-02	 Site : 03CH11-HY Condition : PEAK_74 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 712016-02
Avg.	 Site : 03CH11-HY Condition : AVG_BE_54 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto Detector : Peak Project : 712016-02	Left blank

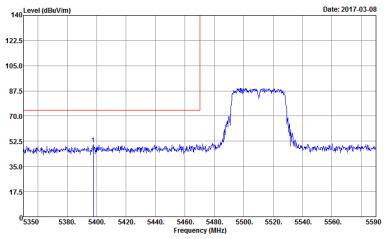
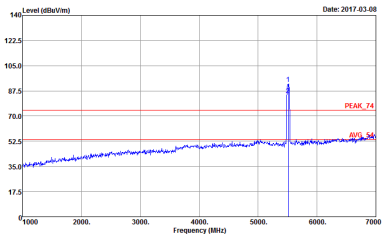
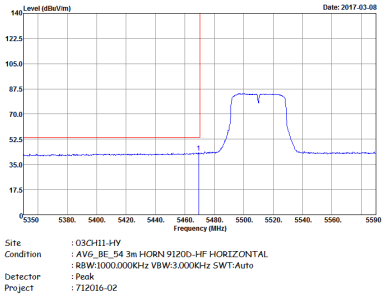
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT20 CH116 5580MHz - R	
1	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

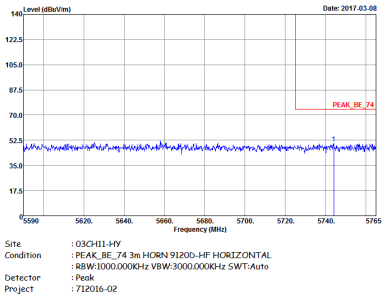
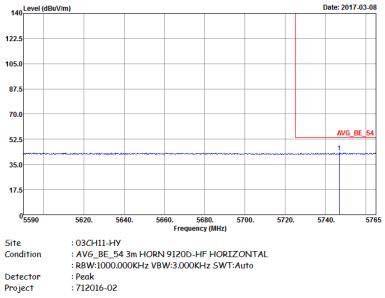
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT20 CH140 5700MHz	
1	Horizontal	Fundamental
Peak		
Avg.		Left blank

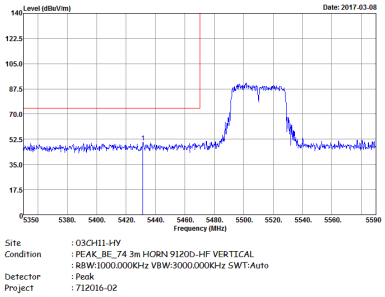
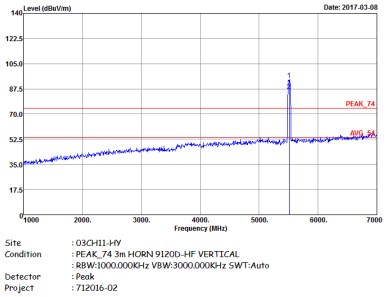
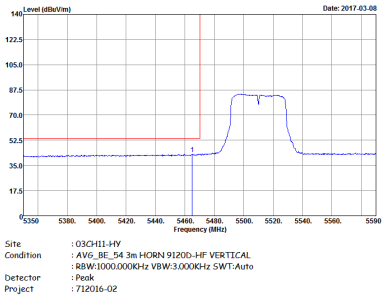
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT20 CH140 5700MHz	
1	Vertical	Fundamental
Peak.		
Avg.		Left blank

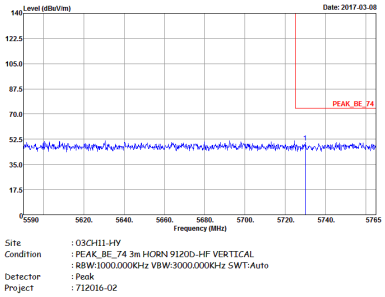
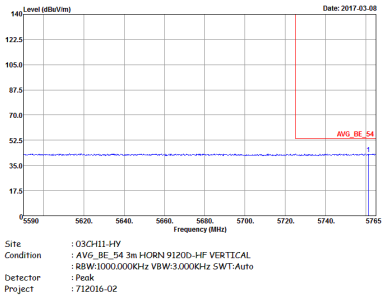
Band 3 5470~5725MHz

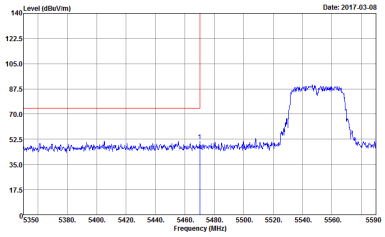
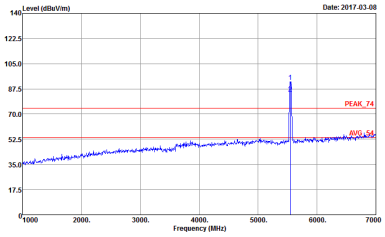
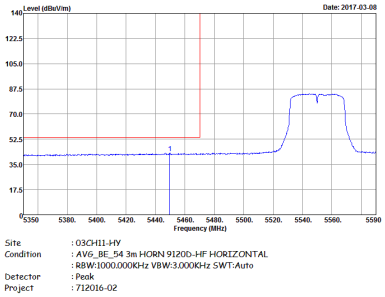
WIFI 802.11n HT40 (Band Edge @ 3m)

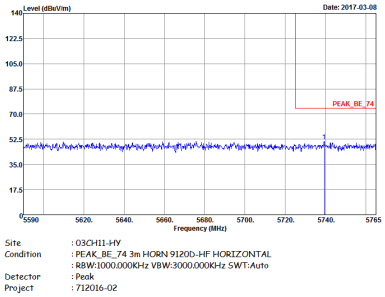
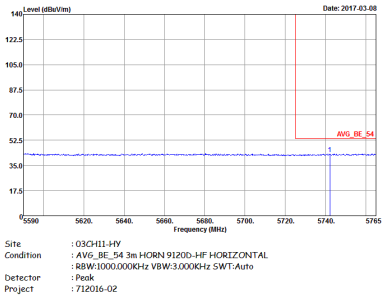
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH102 5510MHz - L	
1	Horizontal	Fundamental
Peak		
Avg.		Left blank

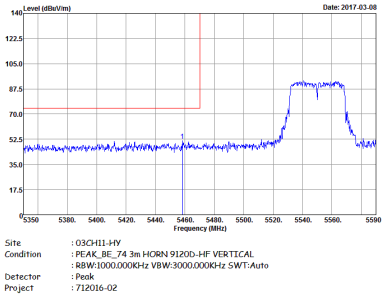
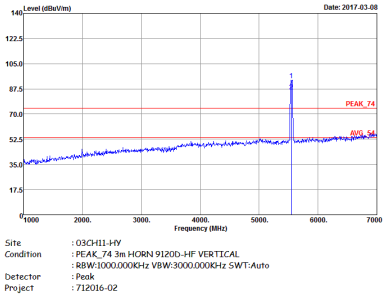
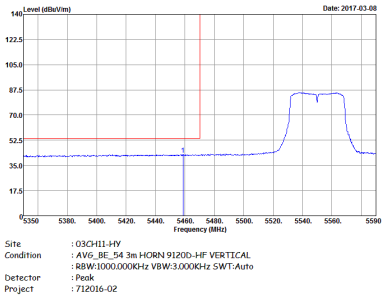
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH102 5510MHz - R	
1	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

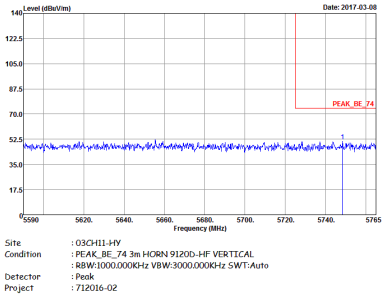
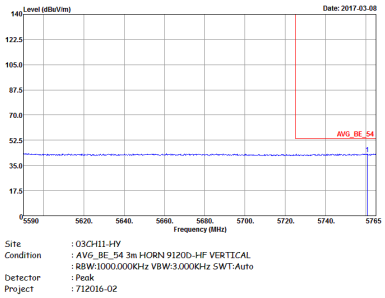
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH102 5510MHz - L	
1	Vertical	Fundamental
Peak		
Avg.		Left blank

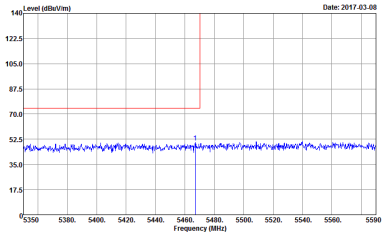
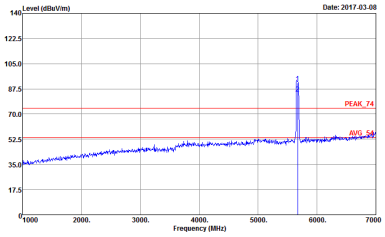
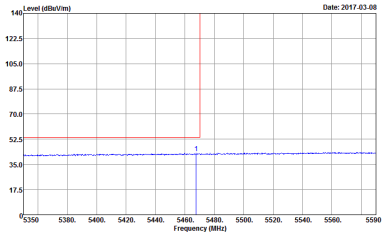
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH102 5510MHz - R	
1	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

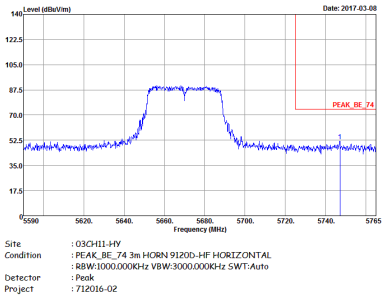
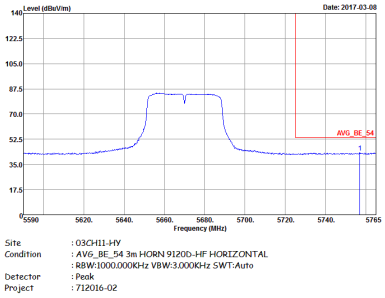
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH110 5550MHz - L	
1	Horizontal	Fundamental
Peak		
Avg.		Left blank

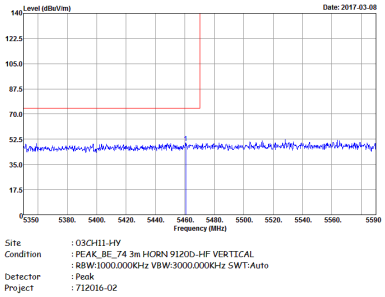
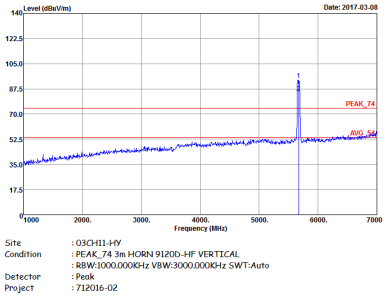
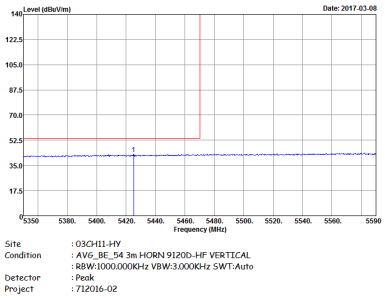
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH110 5550MHz - R	
1	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

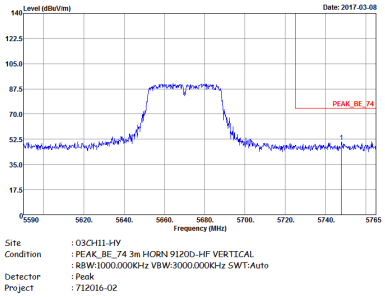
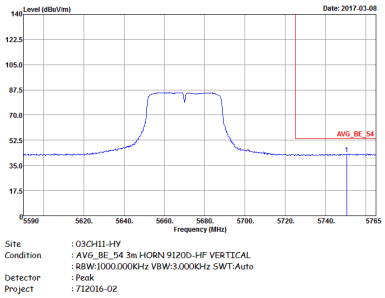
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH110 5550MHz - L	
1	Vertical	Fundamental
Peak		
Avg.		Left blank

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

WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH134 5670MHz - L	
1	Horizontal	Fundamental
Peak	 Site : 03CH11-HY Condition : PEAK_BE_74 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 712016-02	 Site : 03CH11-HY Condition : PEAK_74 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 712016-02
Avg.	 Site : 03CH11-HY Condition : AVG_BE_54 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:3.000KHz SWT:Auto Detector : Peak Project : 712016-02	Left blank

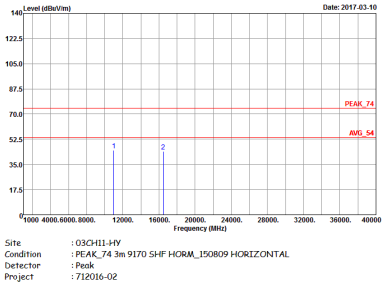
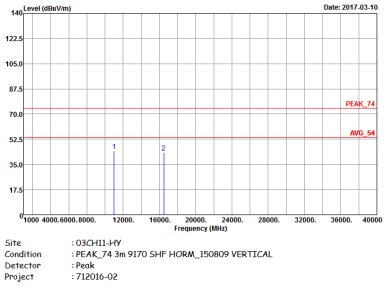
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH134 5670MHz - R	
1	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

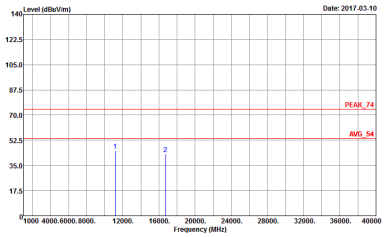
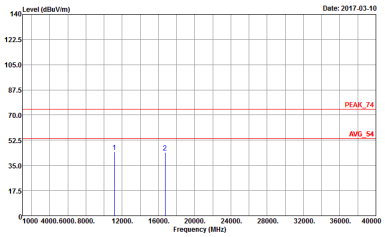
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH134 5670MHz - L	
1	Vertical	Fundamental
Peak		
Avg.		Left blank

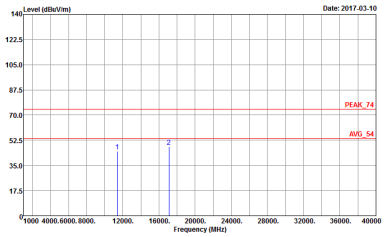
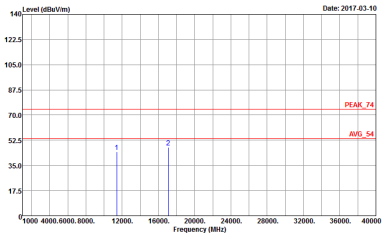
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH134 5670MHz - R	
1	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

Band 3 - 5470~5725MHz

WIFI 802.11a (Harmonic @ 3m)

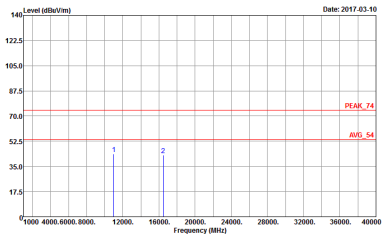
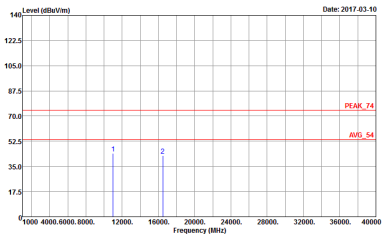
WIFI	Band 3 5470~5725MHz Harmonic @ 3m	
ANT	802.11a CH100 5500MHz	
1	Horizontal	Vertical
Peak Avg.		

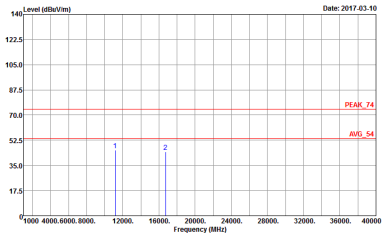
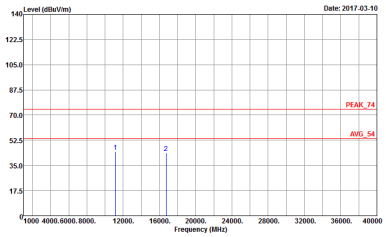
WIFI	Band 3 5470~5725MHz Harmonic @ 3m	
ANT	802.11a CH116 5580MHz	
1	Horizontal	Vertical
Peak Avg.	 Site : 03CH11-HY Condition : PEAK_74 3m 9170 SHF HORM_150809 HORIZONTAL Detector : Peak Project : 712016-02	 Site : 03CH11-HY Condition : PEAK_74 3m 9170 SHF HORM_150809 VERTICAL Detector : Peak Project : 712016-02

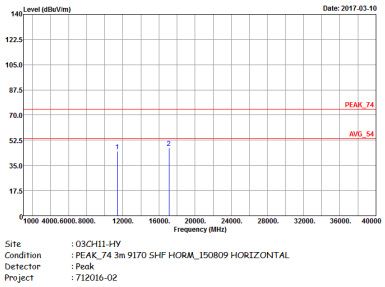
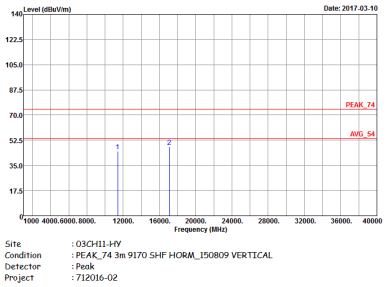
WIFI	Band 3 5470~5725MHz Harmonic @ 3m	
ANT	802.11a CH140 5700MHz	
1	Horizontal	Vertical
Peak Avg.	 Site : 03CH11-HY Condition : PEAK_74 3m 9170 SHF HORM_150809 HORIZONTAL Detector : Peak Project : 712016-02	 Site : 03CH11-HY Condition : PEAK_74 3m 9170 SHF HORM_150809 VERTICAL Detector : Peak Project : 712016-02

Band 3 5470~5725MHz

WIFI 802.11n HT20 (Harmonic @ 3m)

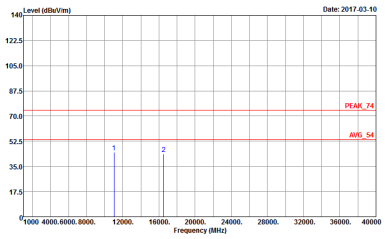
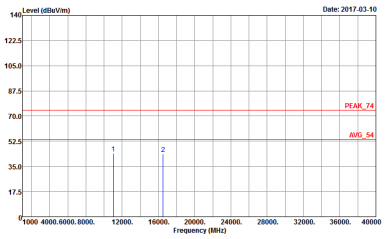
WIFI	Band 3 5470~5725MHz Harmonic @ 3m	
ANT	802.11n HT20 CH100 5500MHz	
1	Horizontal	Vertical
Peak Avg.	 Site : 03CH11-HY Condition : PEAK_74 3m 9170 SHF HORM_150809 HORIZONTAL Detector : Peak Project : 712016-02	 Site : 03CH11-HY Condition : PEAK_74 3m 9170 SHF HORM_150809 VERTICAL Detector : Peak Project : 712016-02

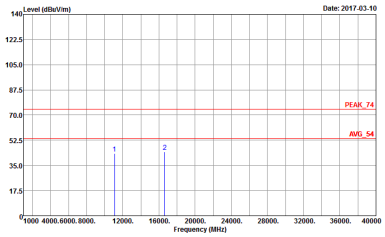
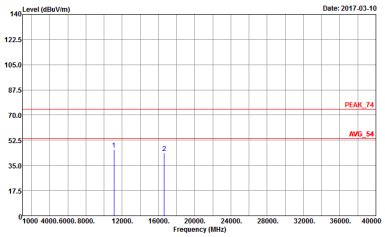
WIFI	Band 3 5470~5725MHz Harmonic @ 3m	
ANT	802.11n HT20 CH116 5580MHz	
1	Horizontal	Vertical
Peak Avg.		

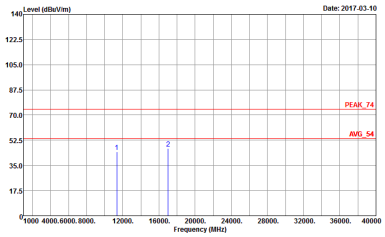
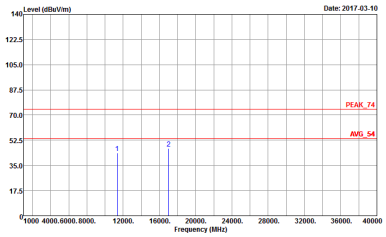
WIFI	Band 3 5470~5725MHz Harmonic @ 3m	
ANT	802.11n HT20 CH140 5700MHz	
1	Horizontal	Vertical
Peak Avg.		

Band 3 5470~5725MHz

WIFI 802.11n HT40 (Harmonic @ 3m)

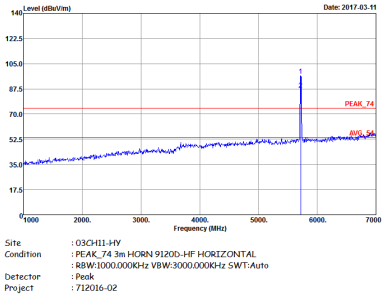
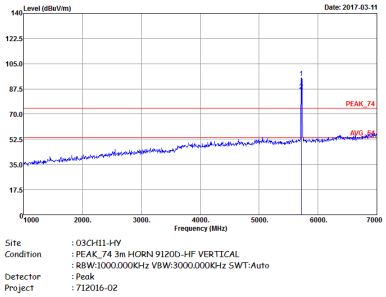
WIFI	Band 3 5470~5725MHz Harmonic @ 3m	
ANT	802.11n HT40 CH102 5510MHz	
1	Horizontal	Vertical
Peak Avg.	 Site : 03CH11-HY Condition : PEAK_74 3m 9170 SHF HORM_150809 HORIZONTAL Detector : Peak Project : 712016-02	 Site : 03CH11-HY Condition : PEAK_74 3m 9170 SHF HORM_150809 VERTICAL Detector : Peak Project : 712016-02

WIFI	Band 3 5470~5725MHz Harmonic @ 3m	
ANT	802.11n HT40 CH110 5550MHz	
1	Horizontal	Vertical
Peak Avg.	 Site : 03CH11-HY Condition : PEAK_74 3m 9170 SHF HORM_150809 HORIZONTAL Detector : Peak Project : 712016-02	 Site : 03CH11-HY Condition : PEAK_74 3m 9170 SHF HORM_150809 VERTICAL Detector : Peak Project : 712016-02

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

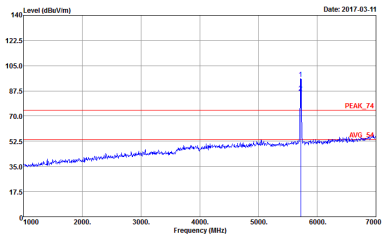
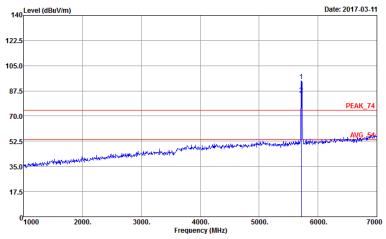
Band 3 - Straddle Channel

WIFI 802.11a (Fundamental @ 3m)

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

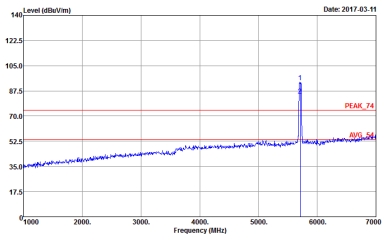
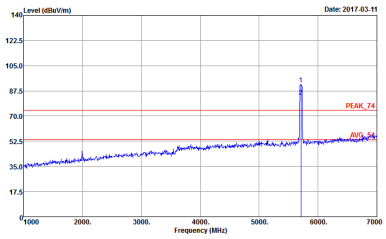
Band 3 – Straddle Channel

WIFI 802.11n HT20 (Fundamental @ 3m)

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

Band 3 – Straddle Channel

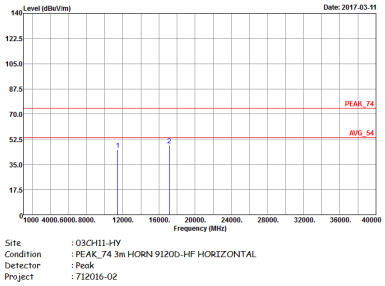
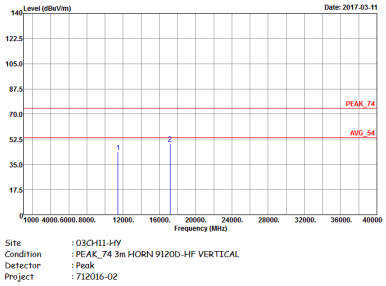
WIFI 802.11n HT40 (Fundamental @ 3m)

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

Band 3 – Straddle Channel

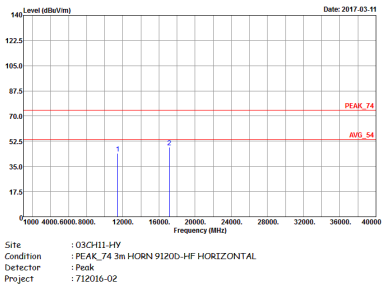
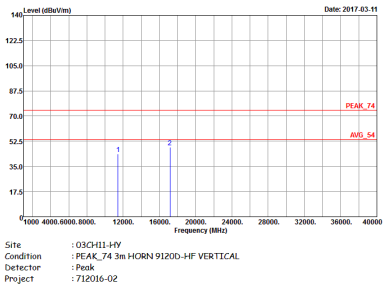
Band 3 - Straddle Channel

WIFI 802.11a (Harmonic @ 3m)

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

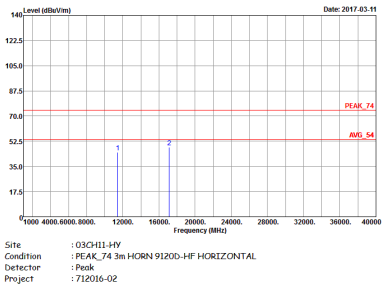
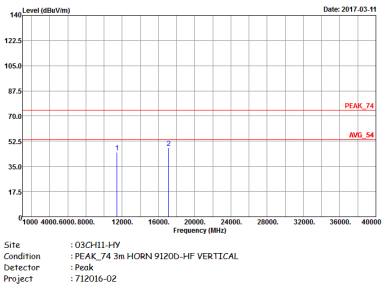
Band 3 – Straddle Channel

WIFI 802.11n HT20 (Harmonic @ 3m)

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

Band 3 – Straddle Channel

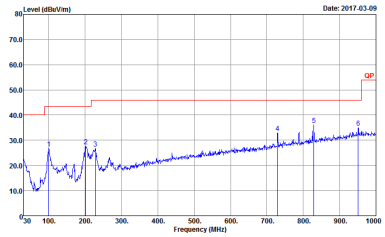
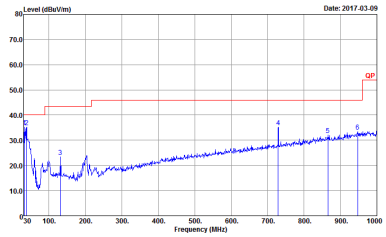
WIFI 802.11n HT40 (Harmonic @ 3m)

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

Band 3 5470~5725MHz

Emission below 1GHz

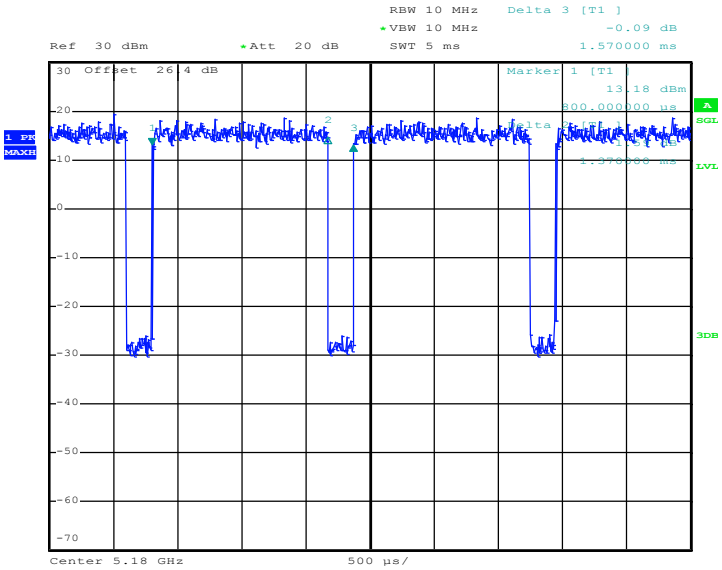
5GHz WIFI 802.11n HT20 (LF)

WIFI	5GHz WIFI	
ANT	802.11n HT20 LF	
1	Horizontal	Vertical
QP / Peak	 Site : 03CH11-HY Condition : QP 3m BI-LOG 6111D-LF_ETC HORIZONTAL Detector : Peak Project : 712016-02	 Site : 03CH11-HY Condition : QP 3m BI-LOG 6111D-LF_ETC VERTICAL Detector : Peak Project : 712016-02

Appendix E. Duty Cycle Plots

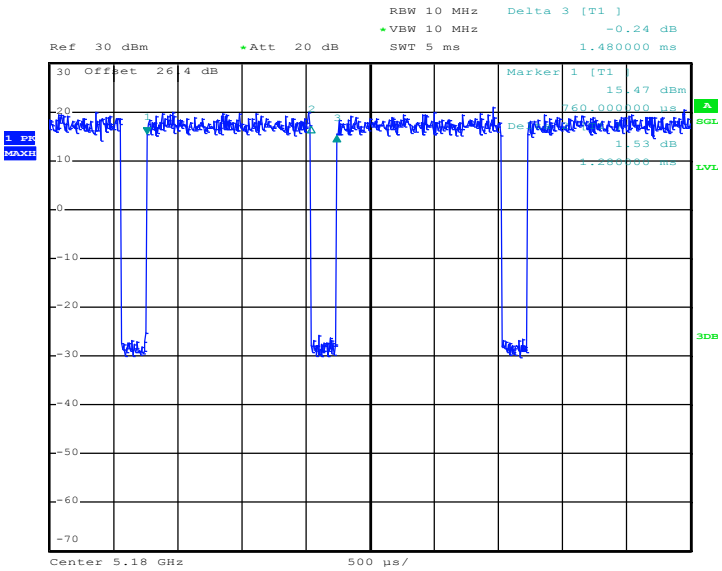
Band	Duty Cycle(%)	T(us)	1/T(kHz)	VBW Setting
802.11a	87.26	1370	0.73	1kHz
5GHz 802.11n HT20	86.49	1280	0.78	1kHz
5GHz 802.11n HT40	86.49	640	1.56	3kHz

802.11a



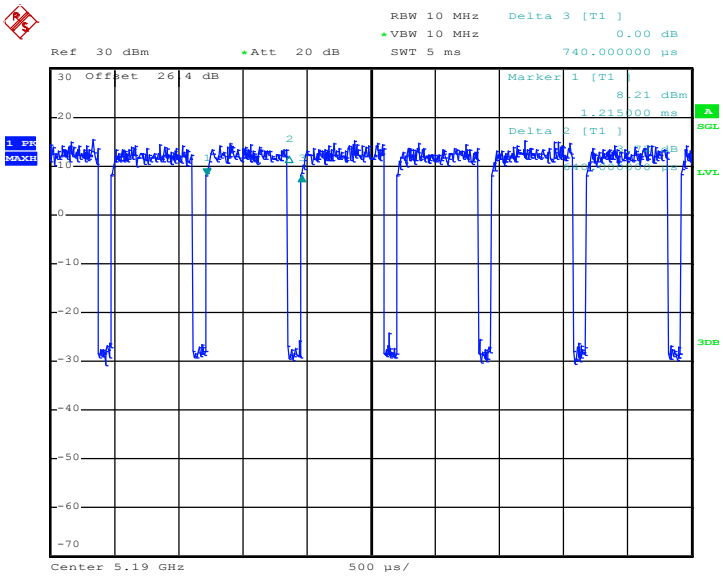
Date: 9.FEB.2017 21:06:17

5GHz 802.11n HT20



Date: 9.FEB.2017 21:21:49

5GHz 802.11n HT40



Date: 15.FEB.2017 22:14:11