

FCC RF Test Report

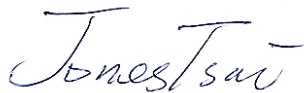
APPLICANT : Honeywell International Inc.
EQUIPMENT : CK75LAN mobile computer
BRAND NAME : Honeywell
MODEL NAME : CK75LAN
MARKETING NAME : CK75
FCC ID : HD5-CK75LAN
STANDARD : FCC Part 15 Subpart E §15.407
CLASSIFICATION : (UNII) Unlicensed National Information Infrastructure

The product was received on Dec. 28, 2016 and testing was completed on Feb. 02, 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



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FCC ID : HD5-CK75LAN

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TABLE OF CONTENTS

REVISION HISTORY	3
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 Product Specification of Equipment Under Test	6
1.5 Modification of EUT	6
1.6 Testing Location	7
1.7 Applicable Standards	7
2 TEST CONFIGURATION OF EQUIPMENT UNDER TEST	8
2.1 Carrier Frequency Channel	8
2.2 Test Mode	9
2.3 Connection Diagram of Test System	10
2.4 Support Unit used in test configuration and system	11
2.5 EUT Operation Test Setup	11
2.6 Measurement Results Explanation Example	12
3 TEST RESULT	13
3.1 26dB & 99% Occupied Bandwidth Measurement	13
3.2 Maximum Conducted Output Power Measurement	15
3.3 Power Spectral Density Measurement	17
3.4 Unwanted Radiated Emission Measurement	19
3.5 AC Conducted Emission Measurement	24
3.6 Frequency Stability Measurement	34
3.7 Automatically Discontinue Transmission	35
3.8 Antenna Requirements	36
4 LIST OF MEASURING EQUIPMENTS	37
5 UNCERTAINTY OF EVALUATION	38
APPENDIX A. CONDUCTED TEST RESULTS	
APPENDIX B. RADIATED SPURIOUS EMISSION	
APPENDIX C. RADIATED SPURIOUS EMISSION PLOTS	
APPENDIX D. DUTY CYCLE PLOTS	
APPENDIX E. SETUP PHOTOGRAPHS	



REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FR6D2819-02D	Rev. 01	Initial issue of report	Mar. 08, 2017
FR6D2819-02D	Rev. 02	Revising battery information	Mar. 16, 2017

SUMMARY OF TEST RESULT

Report Section	FCC Rule	Description	Limit	Result	Remark
3.1	2.1049 15.403(i)	26dB & 99% Bandwidth	-	Pass	-
3.2	15.407(a)	Maximum Conducted Output Power	≤ 24 dBm (depend on band)	Pass	-
3.3	15.407(a)	Power Spectral Density	≤ 11 dBm (depend on band)	Pass	-
3.4	15.407(b)	Unwanted Emissions	$\leq -17, -27$ dBm (depend on band)&15.209(a)	Pass	Under limit 4.08 dB at 5350.080 MHz
3.5	15.207	AC Conducted Emission	15.207(a)	Pass	Under limit 7.50 dB at 0.702 MHz
3.6	15.407(g)	Frequency Stability	Within Operation Band	Pass	-
3.7	15.407(c)	Automatically Discontinue Transmission	Discontinue Transmission	Pass	-
3.8	15.203 & 15.407(a)	Antenna Requirement	N/A	Pass	-



1 General Description

1.1 Applicant

Honeywell International Inc.

9680 Old Bailes Road, Fort Mill, SC 29707 USA

1.2 Manufacturer

Honeywell International Inc.

9680 Old Bailes Road, Fort Mill, SC 29707 USA

1.3 Product Feature of Equipment Under Test

Product Feature	
Equipment	CK75LAN mobile computer
Brand Name	Honeywell
Model Name	CK75LAN
Marketing Name	CK75
FCC ID	HD5-CK75LAN
Sample 1	CK75 A6-N5603 A6 keypad_N5603 imager
Sample 2	CK75 B6-N5603 B6 keypad_N5603 imager
Sample 3	CK75 A6-EX25 A6 keypad_EX25 imager
Sample 4	CK75 B6-EX25 B6 keypad_EX25 imager
EUT supports Radios application	WLAN 11a/b/g/n HT20 Bluetooth BR/EDR/LE
HW Version	v1.1
SW Version	3.00.05.0075
EUT Stage	Identical Prototype

Remark: The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.

1.4 Product Specification of Equipment Under Test

Standards-related Product Specification	
Tx/Rx Frequency Range	5180 MHz ~ 5240 MHz 5260 MHz ~ 5320 MHz 5500 MHz ~ 5700 MHz
Maximum Output Power to Antenna	<5180 MHz ~ 5240 MHz> 802.11a : 13.06 dBm / 0.0202 W 802.11n HT20 : 13.18 dBm / 0.0208 W <5260 MHz ~ 5320 MHz> 802.11a : 13.04 dBm / 0.0201 W 802.11n HT20 : 13.17 dBm / 0.0207 W <5500 MHz ~ 5700 MHz> 802.11a : 13.11 dBm / 0.0205 W 802.11n HT20 : 13.13 dBm / 0.0206 W
99% Occupied Bandwidth	802.11a : 18.35 MHz 802.11n HT20 : 19.25 MHz
Antenna Gain / Gain	<5180 MHz ~ 5240 MHz> : PIFA Antenna with gain 4.72 dBi <5260 MHz ~ 5320 MHz> : PIFA Antenna with gain 5.26 dBi <5500 MHz ~ 5700 MHz> : PIFA Antenna with gain 4.73 dBi
Type of Modulation	OFDM (BPSK / QPSK / 16QAM / 64QAM)

Note: WLAN operation in 5600 MHz ~ 5650 MHz is notched.

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. TW1022 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 1 st 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

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: conducted emission (150 kHz to 30 MHz) and radiated emission (9 kHz to the 10th harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower). For radiated measurement, pre-scanned in three orthogonal panels, X, Y, Z. The worst cases (Y plane) were recorded in this report.

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
	-	-	-	-
	40	5200	48	5240
	-	-	-	-

Frequency Band	Channel	Freq. (MHz)	Channel	Freq. (MHz)
5250-5350 MHz Band 2 (U-NII-2A)	52	5260	60	5300
	-	-	-	-
	56	5280	64	5320
	-	-	-	-

Frequency Band	Channel	Freq. (MHz)	Channel	Freq. (MHz)
5470-5725 MHz Band 3 (U-NII-2C)	100	5500	112	5560
	-	-	116	5580
	104	5520	132	5660
	-	-	-	-
	108	5540	136	5680
	-	-	140	5700

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

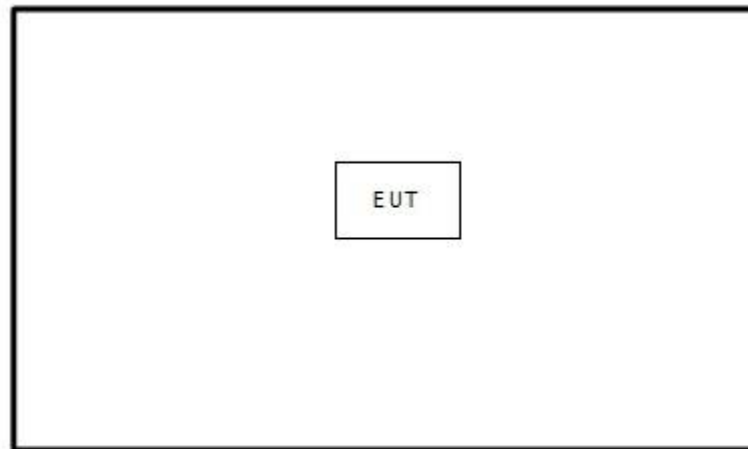
Test Cases	
AC Conducted Emission	Mode 1 : Bluetooth Link + WLAN (5GHz) Link + MPEG4 + Scanner + Snap-on 1 + RJ-45 Cable Link with Notebook + Adapter + SD Card for Sample 4
Remark: 1. Snap-on 1: Ethernet Snap-On 1000AA01 2. Adapter: Level V (for Snap-on) 3. All the radiated test cases were performed with sample 3.	

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

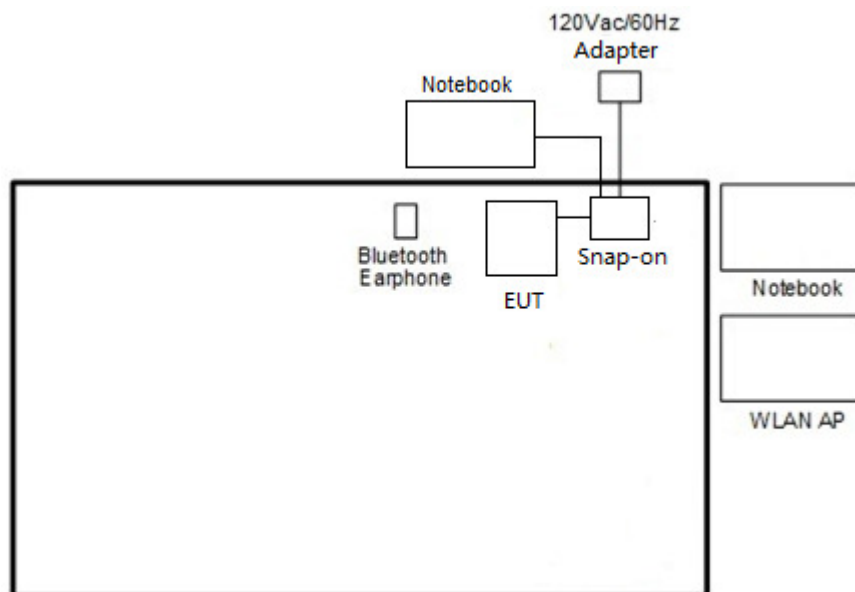
Ch. #		Band I : 5150-5250 MHz	Band II : 5250-5350 MHz	Band III : 5470-5725MHz
		802.11n HT20	802.11n HT20	802.11n HT20
L	Low	36	52	100
M	Middle	44	60	116
H	High	48	64	140

2.3 Connection Diagram of Test System

<Radiated Emission Mode>



<AC Conducted Emission Mode>



2.4 Support Unit used in test configuration and system

Item	Equipment	Trade Name	Model Name	FCC ID	Data Cable	Power Cord
1.	WLAN AP	ASUS	RT-AC66U	MSQ-RTAC66U	N/A	Unshielded, 1.8m
2.	Notebook	DELL	Latitude E6320	FCC DoC/ Contains FCC ID: QDS-BRCM1054	N/A	AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m
3.	Bluetooth Earphone	Sony Ericsson	MW600	PY7DDA-2029	N/A	N/A
4.	SD Card	SanDisk	MicroSD HC	FCC DoC	N/A	N/A
5.	CN75A/CN75E Vehicle dock	intermec technologies corp	1000AV01	FCC DoC	NA	NA
6.	CK75 Vehicle dock	intermec technologies corp	1001AV01	FCC DoC	NA	NA
7.	car charger	intermec technologies corp	852-057-005	Verification	NA	Unshielded, 1.2m
8.	Snap-on(LAN)	intermec technologies corp	1000AA01	FCC DoC	NA	NA
9.	Snap-on(RS232)	intermec technologies corp	1000AA03	FCC DoC	NA	NA
10.	Snap-On (VoCollect)	intermec technologies corp	1000AA05	FCC DoC	NA	NA
11.	Snap-on (USB)	intermec technologies corp	1000AA07	FCC DoC	NA	NA
12.	Snap-on adapter	intermec technologies corp	9001AE01	FCC DoC	NA	AC IP: Unshielded, 1.8m DC OP: Shielded, 1.8m
13.	Earphone	Honeywell	Voccollect SR-20	FCC DoC	1.1 meter, shielded cable	NA
14.	USB Cable	intermec technologies corp	VE011-2018	FCC DoC	NA	1.4 meter, shielded cable, w/t ferrite core
15.	Battery	intermec technologies corp	1001AB01	NA	NA	NA

2.5 EUT Operation Test Setup

For WLAN function, the RF utility, "rtt-adv-usr v21" was installed in EUT which was programmed in order to make the EUT provide functions like channel selection and power level for continuous transmitting and receiving signals.



2.6 Measurement Results Explanation Example

For all conducted test items:

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

Example :

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

Offset = RF cable loss + attenuator factor.

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

$$\begin{aligned}\text{Offset(dB)} &= \text{RF cable loss(dB)} + \text{attenuator factor(dB)} \\ &= 4.2 + 10 = 14.2 \text{ (dB)}\end{aligned}$$

3 Test Result

3.1 26dB & 99% Occupied Bandwidth Measurement

3.1.1 Description of 26dB & 99% Occupied Bandwidth

This section is for reporting purpose only.

There is no restriction limits for bandwidth.

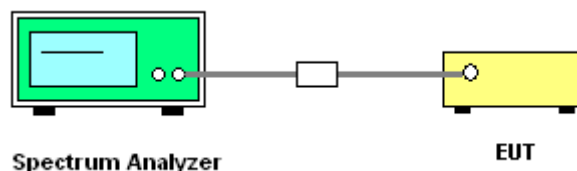
3.1.2 Measuring Instruments

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

3.1.3 Test Procedures

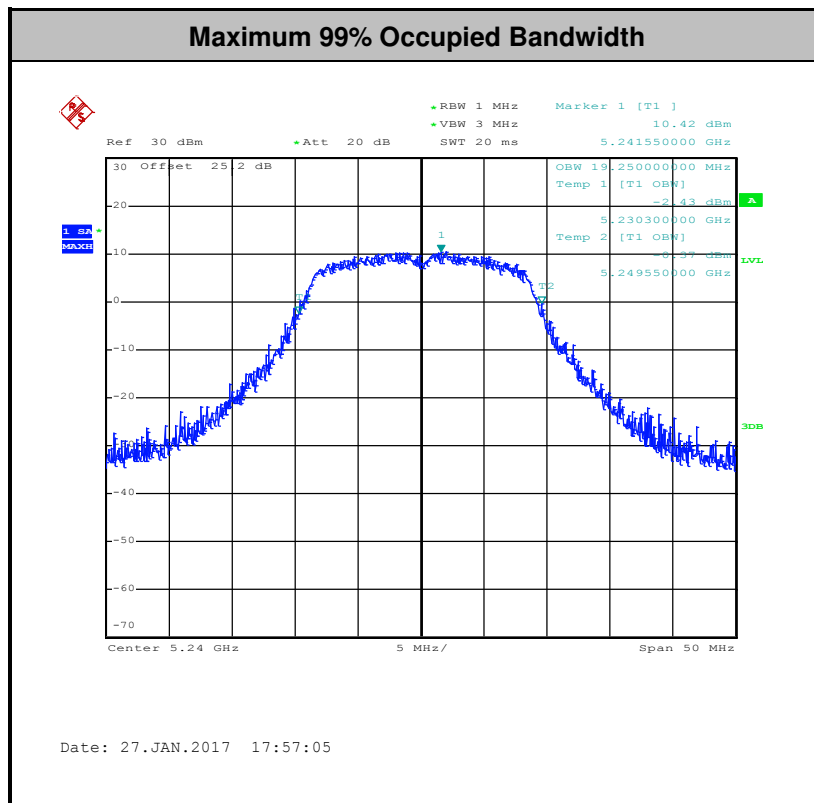
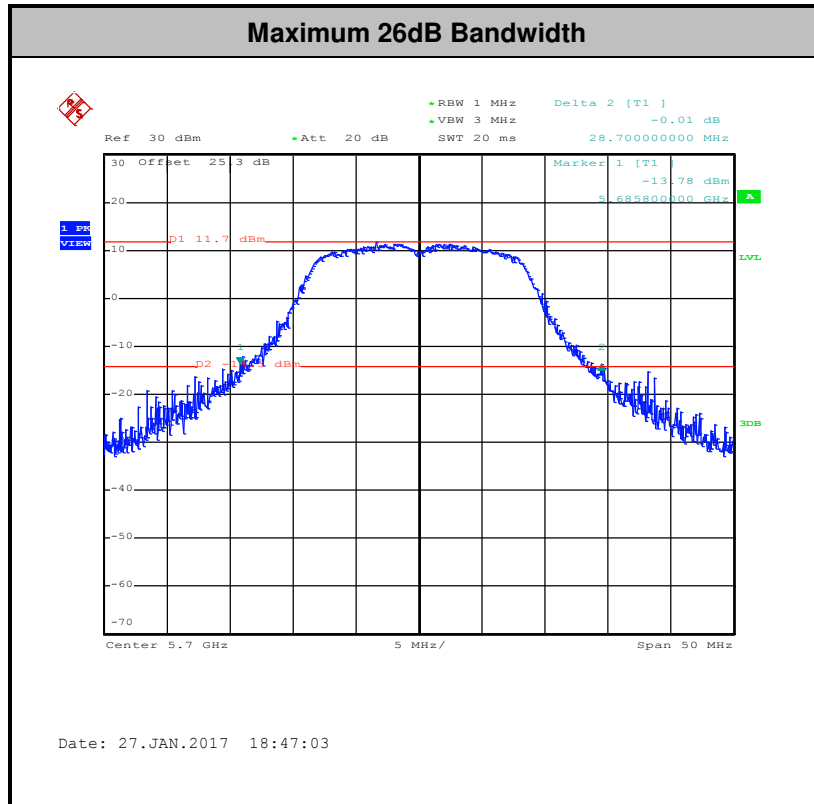
1. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v01r03. Section C) Emission bandwidth
2. Set RBW = approximately 1% of the emission bandwidth.
3. Set the VBW > RBW.
4. Detector = Peak.
5. Trace mode = max hold
6. Measure the maximum width of the emission that is 26 dB down from the peak of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.
7. For 99% Bandwidth Measurement, the spectrum analyzer's resolution bandwidth (RBW) is set 1MHz and set the Video bandwidth (VBW) $\geq 3 * \text{RBW}$.
8. Measure and record the results in the test report.

3.1.4 Test Setup



3.1.5 Test Result of 26dB & 99% Occupied Bandwidth Plots

Please refer to Appendix A.



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



3.2 Maximum Conducted Output Power Measurement

3.2.1 Limit of Maximum Conducted Output Power

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 $11 \text{ dBm} + 10 \log B$, where B is the 26 dB emission bandwidth in megahertz.

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

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

3.2.2 Measuring Instruments

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

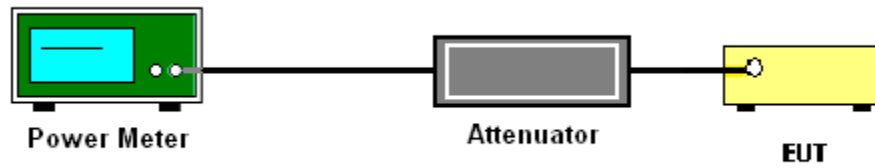
3.2.3 Test Procedures

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

3.2.4 Test Setup



3.2.5 Test Result of Maximum Conducted Output Power

Please refer to Appendix A.

3.3 Power Spectral Density Measurement

3.3.1 Limit of Power Spectral Density

For mobile and portable client devices in the 5.15–5.25 GHz band, the maximum power spectral density shall not exceed 11dBm in any 1 megahertz band.

For the 5.25–5.725 GHz bands, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band.

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

3.3.2 Measuring Instruments

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

3.3.3 Test Procedures

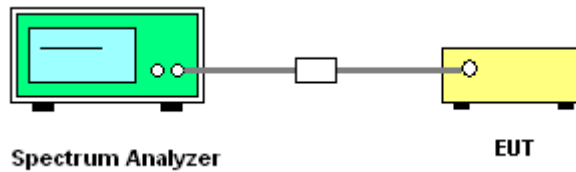
The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v01r03.
Section F) Maximum power spectral density.

Method SA-2

(trace averaging across on and off times of the EUT transmissions, followed by duty cycle correction).

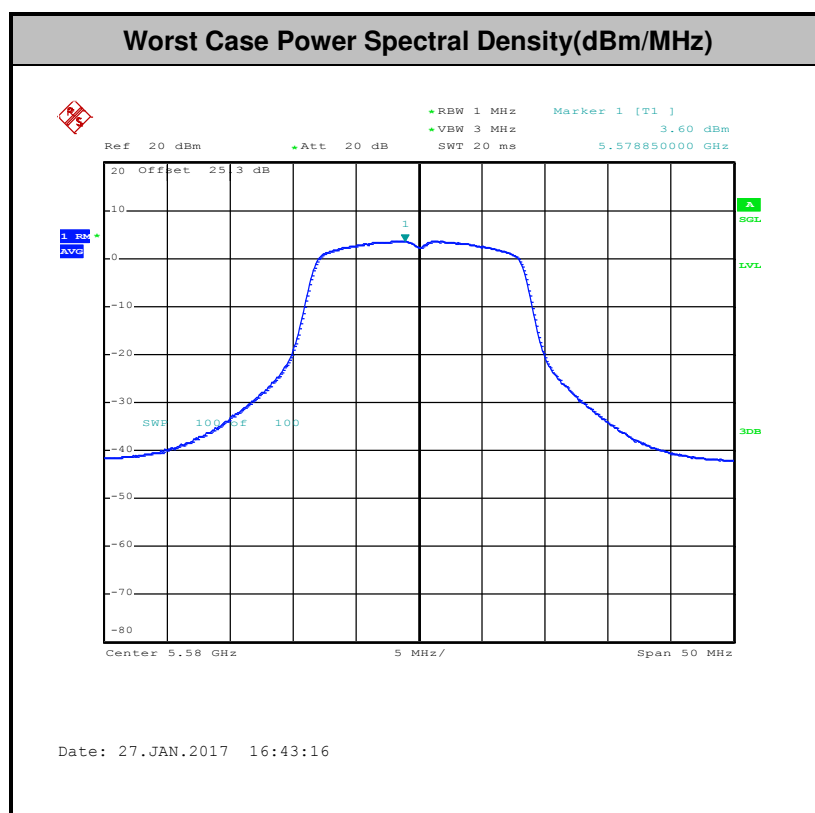
1. The testing follows Method SA-2 of FCC KDB 789033 D02 General UNII Test Procedures New Rules v01r03.
 - Measure the duty cycle.
 - Set span to encompass the entire emission bandwidth (EBW) of the signal.
 - Set RBW = 1 MHz.
 - Set VBW $\geq$ 3 MHz.
 - Number of points in sweep $\geq$ 2 Span / RBW.
 - Sweep time = auto.
 - Detector = RMS
 - Trace average at least 100 traces in power averaging mode.
 - Add $10 \log(1/x)$, where x is the duty cycle, to the measured power in order to compute the average power during the actual transmission times. For example, add $10 \log(1/0.25) = 6$ dB if the duty cycle is 25 percent.
2. The RF output of EUT was connected to the spectrum analyzer by a low loss cable.
3. Each plot has already offset with cable loss, and attenuator loss. Measure the PPSD and record it.

3.3.4 Test Setup



3.3.5 Test Result of Power Spectral Density

Please refer to Appendix A.



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

3.4 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 Part 15.205.

3.4.1 Limit of Unwanted Emissions

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

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

For transmitters operating in the 5470-5725MHz 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 Part 15.205 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.

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

EIRP (dBm)	Field Strength at 3m (dBμV/m)
-17	78.3
- 27	68.3

- (3) KDB789033 D02 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.

3.4.2 Measuring Instruments

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

3.4.3 Test Procedures

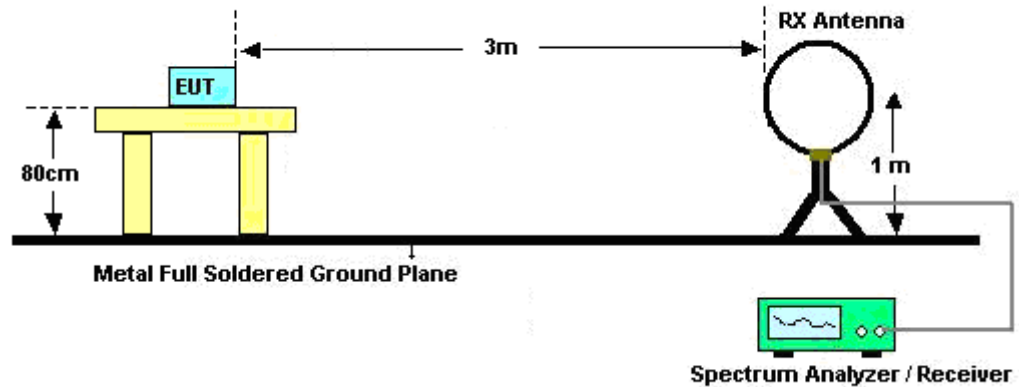
1. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v01r03. Section G) Unwanted emissions measurement.
 - (1) Procedure for Unwanted Emissions Measurements Below 1000MHz
 - RBW = 120 kHz
 - VBW = 300 kHz
 - Detector = Peak
 - Trace mode = max hold
 - (2) Procedure for Peak Unwanted Emissions Measurements Above 1000 MHz
 - RBW = 1 MHz
 - VBW $\geq$ 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 $\geq$ 1/T, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.



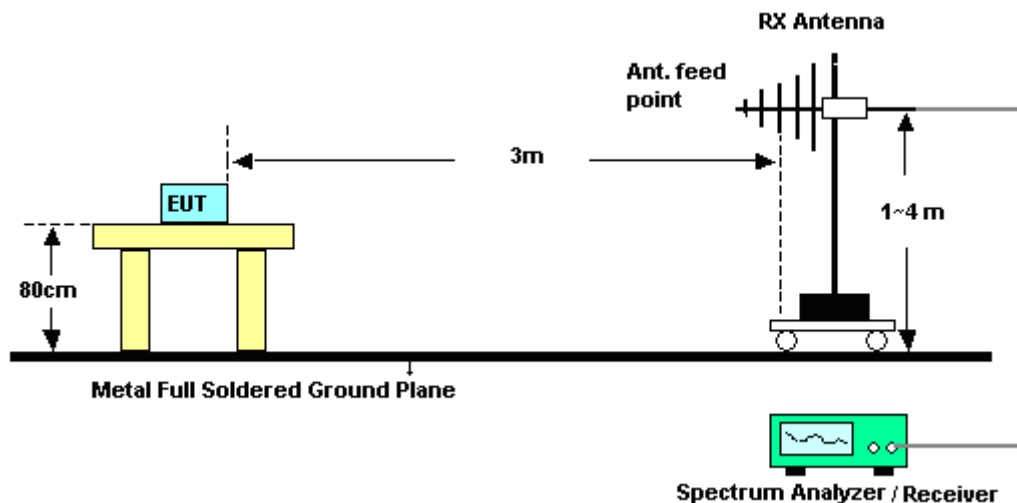
2. The EUT was placed on a turntable with 0.8 meter for frequency below 1GHz and 1.5 meter for frequency above 1GHz respectively above ground.
3. The EUT was set 3 meters from the interference receiving antenna which was mounted on the top of a variable height antenna tower.
4. The antenna is a broadband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

3.4.4 Test Setup

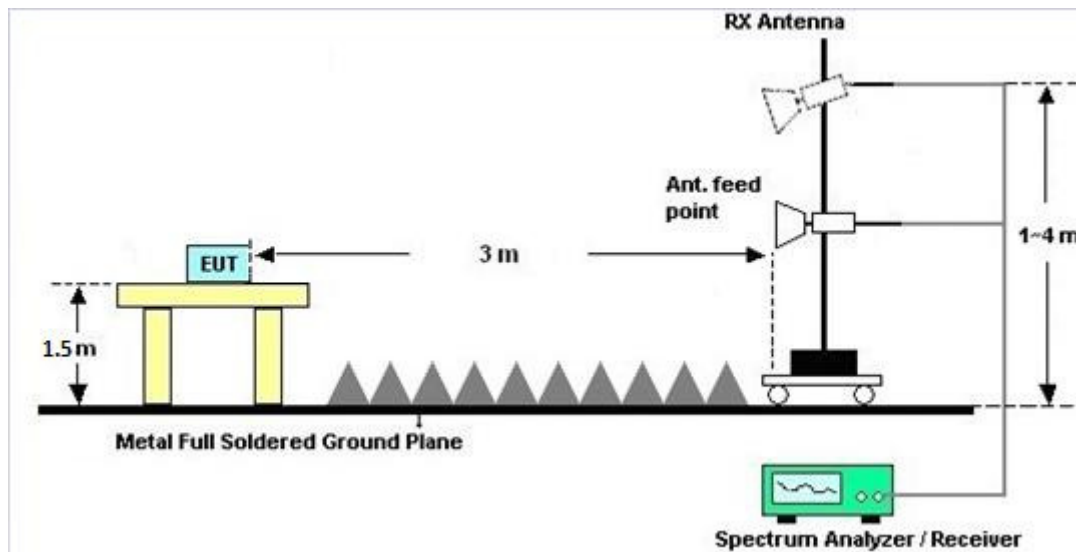
For radiated emissions below 30MHz



For radiated emissions from 30MHz to 1GHz



For radiated emissions above 1GHz



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

The low frequency, which started from 9 kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit line per 15.31(o) was not reported.

3.4.6 Test Result of Radiated Spurious at Band Edges

Please refer to Appendix B and C.

3.4.7 Duty Cycle

Please refer to Appendix D.

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

Please refer to Appendix B and C.

3.5 AC Conducted Emission Measurement

3.5.1 Limit of AC Conducted Emission

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

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

*Decreases with the logarithm of the frequency.

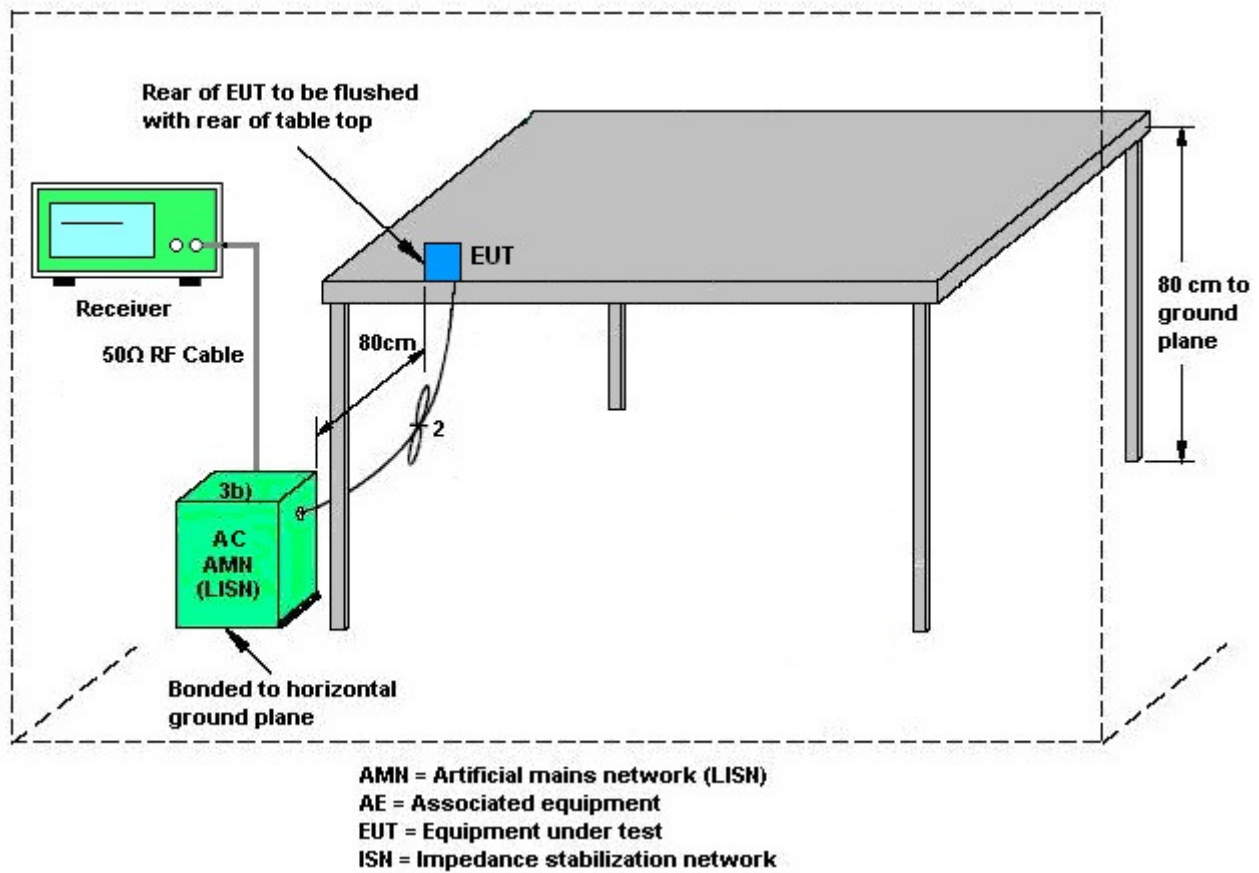
3.5.2 Measuring Instruments

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

3.5.3 Test Procedures

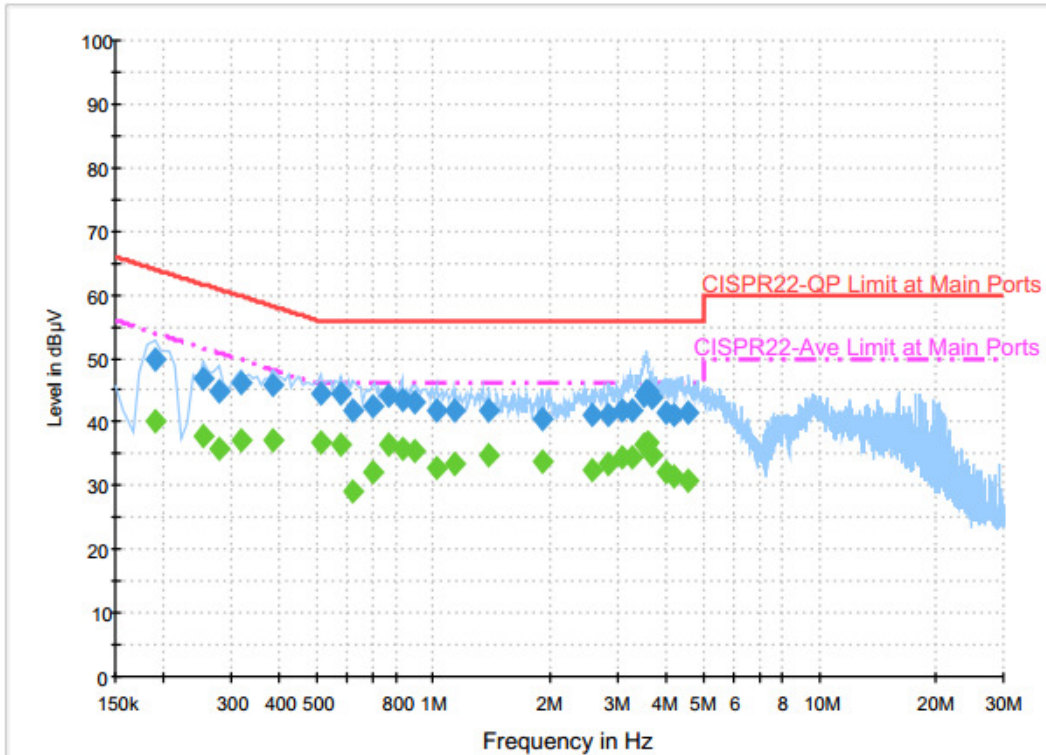
1. The EUT was placed 0.4 meter from the conducting wall of the shielding room was kept at least 80 centimeters from any other grounded conducting surface.
2. Connect EUT to the power mains through a line impedance stabilization network (LISN).
3. All the support units are connecting to the other LISN.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

3.5.4 Test Setup



3.5.5 Test Result of AC Conducted Emission

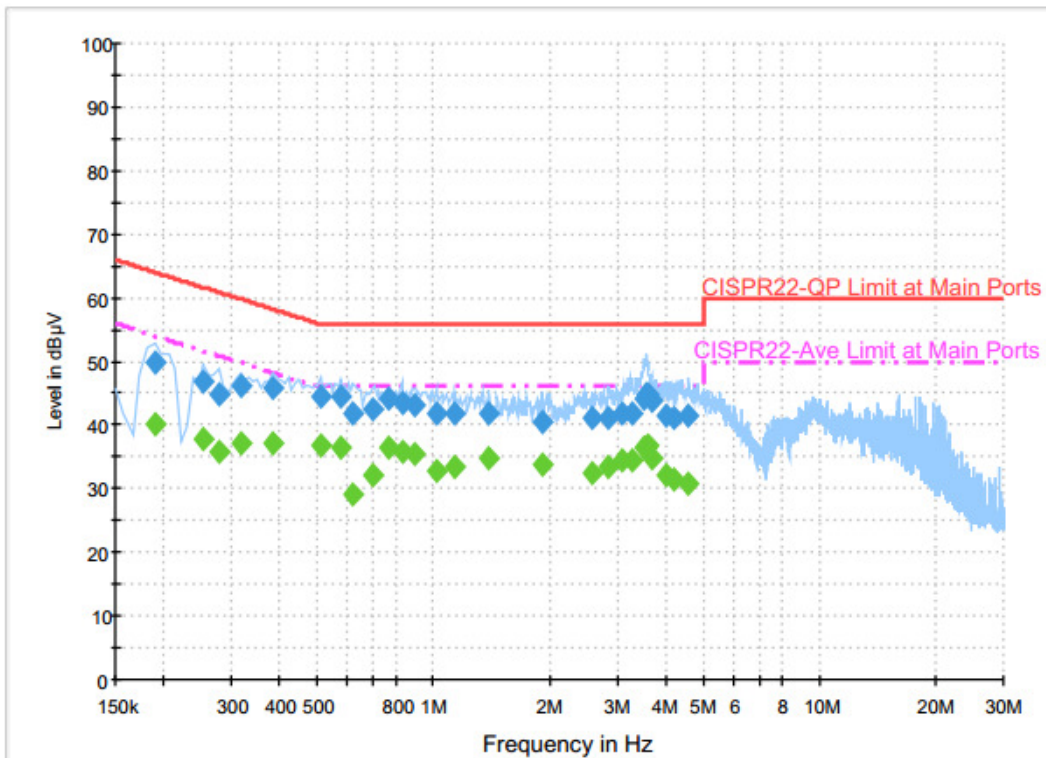
Test Mode :	Mode 1	Temperature :	21~23℃
Test Engineer :	Arthur Hsieh	Relative Humidity :	51~53%
Test Voltage :	120Vac / 60Hz	Phase :	Line
Function Type :	Bluetooth Link + WLAN (5GHz) Link + MPEG4 + Scanner + Snap-on 1 + RJ-45 Cable Link with Notebook + Adapter + SD Card for Sample 4		



Final Result : QuasiPeak

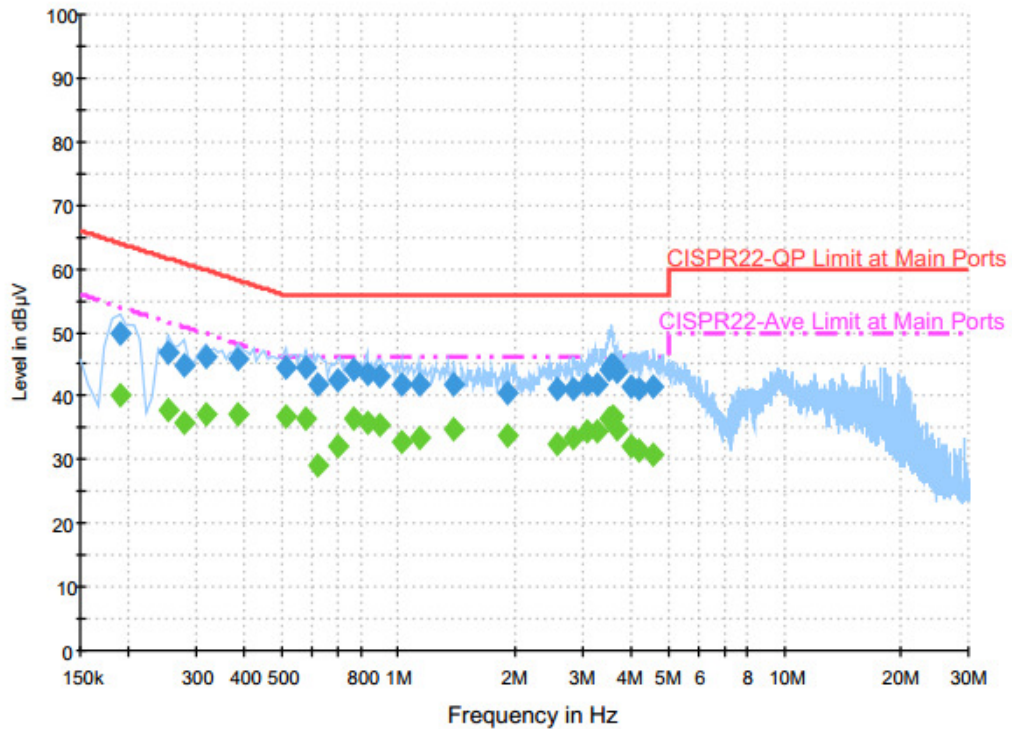
Frequency (MHz)	QuasiPeak (dBμV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.190000	49.9	Off	L1	19.6	14.1	64.0
0.254000	46.7	Off	L1	19.6	14.9	61.6
0.278000	44.7	Off	L1	19.6	16.2	60.9
0.318000	46.0	Off	L1	19.6	13.8	59.8
0.382000	45.8	Off	L1	19.6	12.4	58.2
0.510000	44.4	Off	L1	19.6	11.6	56.0
0.574000	44.6	Off	L1	19.6	11.4	56.0
0.622000	41.9	Off	L1	19.6	14.1	56.0
0.694000	42.5	Off	L1	19.6	13.5	56.0
0.766000	44.3	Off	L1	19.6	11.7	56.0
0.830000	43.6	Off	L1	19.6	12.4	56.0
0.894000	43.3	Off	L1	19.6	12.7	56.0

Test Mode :	Mode 1	Temperature :	21~23°C
Test Engineer :	Arthur Hsieh	Relative Humidity :	51~53%
Test Voltage :	120Vac / 60Hz	Phase :	Line
Function Type :	Bluetooth Link + WLAN (5GHz) Link + MPEG4 + Scanner + Snap-on 1 + RJ-45 Cable Link with Notebook + Adapter + SD Card for Sample 4		


Final Result : QuasiPeak

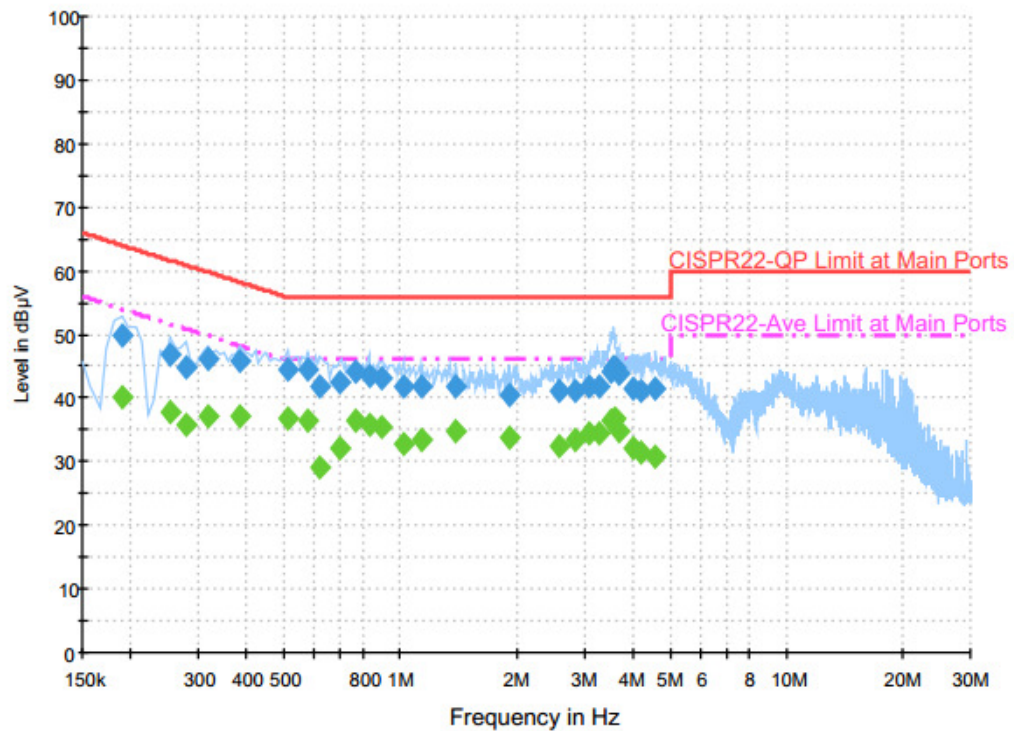
Frequency (MHz)	QuasiPeak (dBμV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
1.014000	41.8	Off	L1	19.6	14.2	56.0
1.142000	41.7	Off	L1	19.6	14.3	56.0
1.398000	41.8	Off	L1	19.6	14.2	56.0
1.910000	40.5	Off	L1	19.6	15.5	56.0
2.582000	41.1	Off	L1	19.2	14.9	56.0
2.838000	41.1	Off	L1	19.4	14.9	56.0
3.094000	41.8	Off	L1	19.5	14.2	56.0
3.270000	41.8	Off	L1	19.5	14.2	56.0
3.502000	44.2	Off	L1	19.5	11.8	56.0
3.558000	44.8	Off	L1	19.5	11.2	56.0
3.606000	44.9	Off	L1	19.5	11.1	56.0
3.670000	43.8	Off	L1	19.6	12.2	56.0
4.014000	41.5	Off	L1	19.6	14.5	56.0
4.222000	41.1	Off	L1	19.6	14.9	56.0
4.590000	41.4	Off	L1	19.6	14.6	56.0

Test Mode :	Mode 1	Temperature :	21~23°C
Test Engineer :	Arthur Hsieh	Relative Humidity :	51~53%
Test Voltage :	120Vac / 60Hz	Phase :	Line
Function Type :	Bluetooth Link + WLAN (5GHz) Link + MPEG4 + Scanner + Snap-on 1 + RJ-45 Cable Link with Notebook + Adapter + SD Card for Sample 4		


Final Result : Average

Frequency (MHz)	Average (dBµV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.190000	40.1	Off	L1	19.6	13.9	54.0
0.254000	37.9	Off	L1	19.6	13.7	51.6
0.278000	35.8	Off	L1	19.6	15.1	50.9
0.318000	37.1	Off	L1	19.6	12.7	49.8
0.382000	37.0	Off	L1	19.6	11.2	48.2
0.510000	36.8	Off	L1	19.6	9.2	46.0
0.574000	36.5	Off	L1	19.6	9.5	46.0
0.622000	29.2	Off	L1	19.6	16.8	46.0
0.694000	32.0	Off	L1	19.6	14.0	46.0
0.766000	36.3	Off	L1	19.6	9.7	46.0
0.830000	35.7	Off	L1	19.6	10.3	46.0
0.894000	35.5	Off	L1	19.6	10.5	46.0

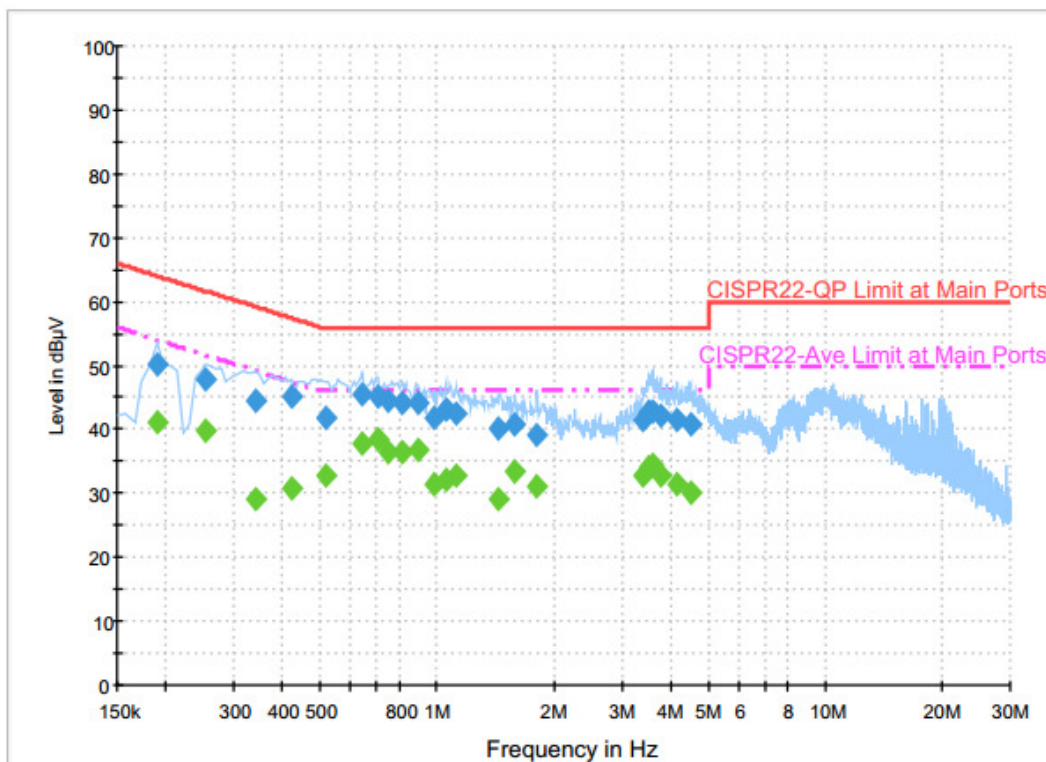
Test Mode :	Mode 1	Temperature :	21~23°C
Test Engineer :	Arthur Hsieh	Relative Humidity :	51~53%
Test Voltage :	120Vac / 60Hz	Phase :	Line
Function Type :	Bluetooth Link + WLAN (5GHz) Link + MPEG4 + Scanner + Snap-on 1 + RJ-45 Cable Link with Notebook + Adapter + SD Card for Sample 4		


Final Result : Average

Frequency (MHz)	Average (dBμV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
1.014000	32.7	Off	L1	19.6	13.3	46.0
1.142000	33.4	Off	L1	19.6	12.6	46.0
1.398000	34.9	Off	L1	19.6	11.1	46.0
1.910000	33.6	Off	L1	19.6	12.4	46.0
2.582000	32.4	Off	L1	19.2	13.6	46.0
2.838000	33.5	Off	L1	19.4	12.5	46.0
3.094000	34.3	Off	L1	19.5	11.7	46.0
3.270000	34.3	Off	L1	19.5	11.7	46.0
3.502000	36.4	Off	L1	19.5	9.6	46.0
3.558000	36.5	Off	L1	19.5	9.5	46.0
3.606000	36.7	Off	L1	19.5	9.3	46.0
3.670000	34.6	Off	L1	19.6	11.4	46.0
4.014000	32.0	Off	L1	19.6	14.0	46.0
4.222000	31.3	Off	L1	19.6	14.7	46.0
4.590000	30.7	Off	L1	19.6	15.3	46.0

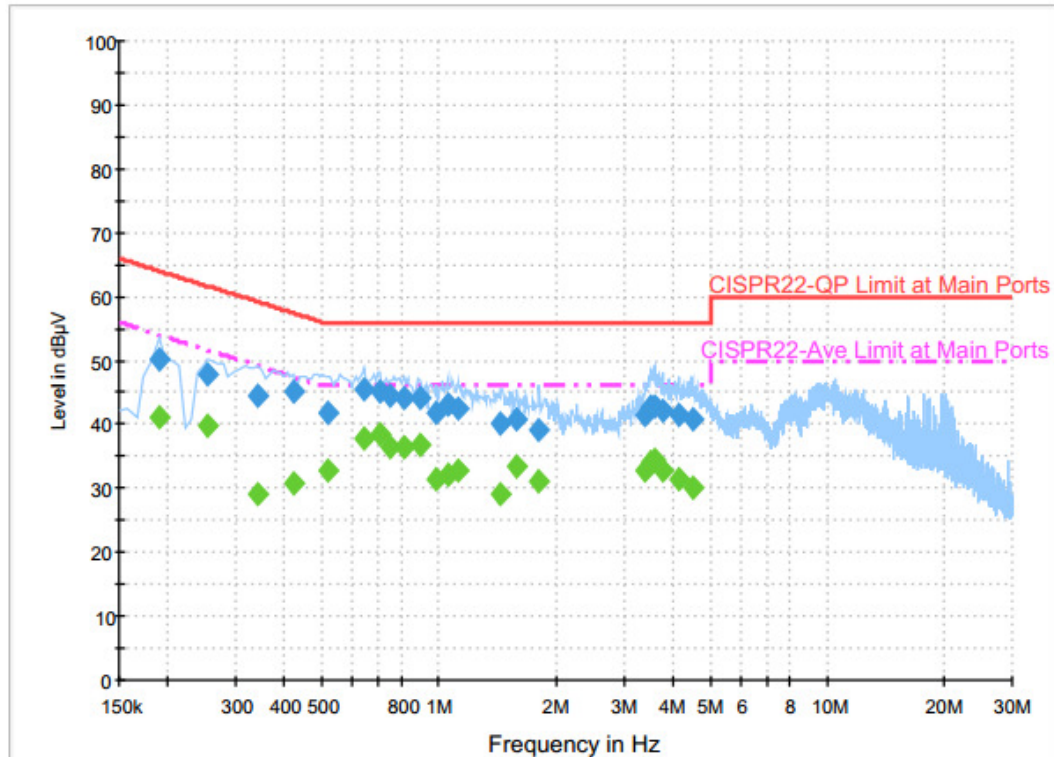


Test Mode :	Mode 1	Temperature :	21~23°C
Test Engineer :	Arthur Hsieh	Relative Humidity :	51~53%
Test Voltage :	120Vac / 60Hz	Phase :	Neutral
Function Type :	Bluetooth Link + WLAN (5GHz) Link + MPEG4 + Scanner + Snap-on 1 + RJ-45 Cable Link with Notebook + Adapter + SD Card for Sample 4		

**Final Result : QuasiPeak**

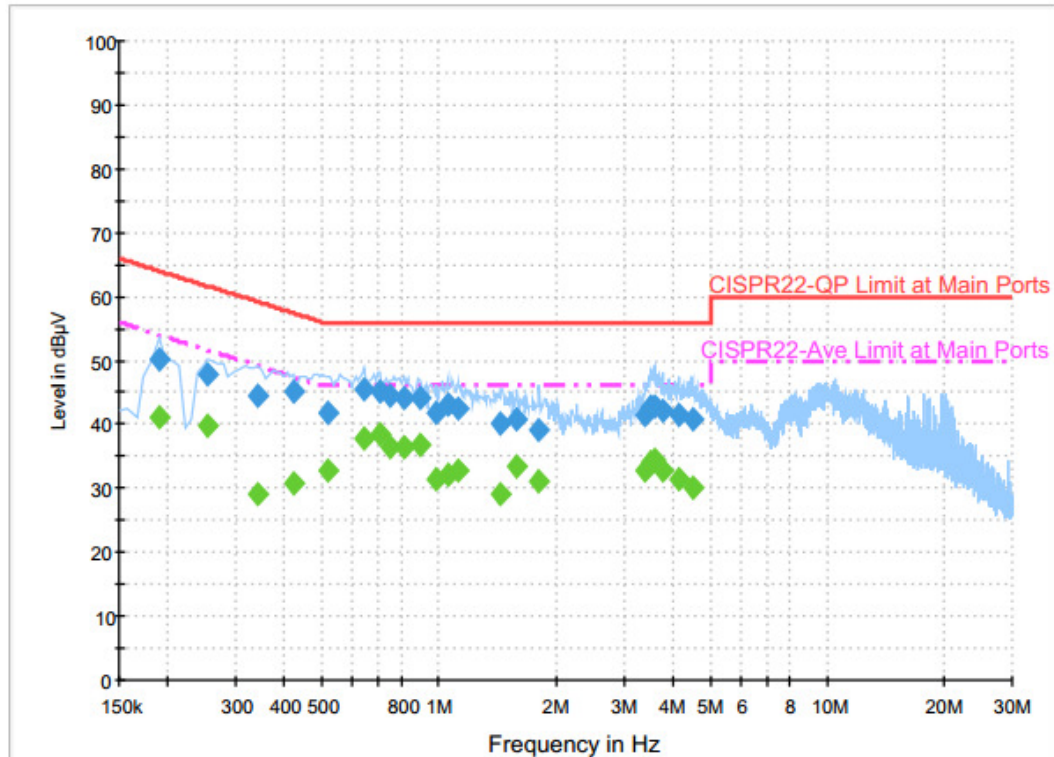
Frequency (MHz)	QuasiPeak (dBμV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.190000	50.2	Off	N	19.5	13.8	64.0
0.254000	47.8	Off	N	19.5	13.8	61.6
0.342000	44.3	Off	N	19.5	14.9	59.2
0.422000	45.0	Off	N	19.5	12.4	57.4
0.518000	41.7	Off	N	19.5	14.3	56.0
0.638000	45.3	Off	N	19.5	10.7	56.0
0.702000	45.3	Off	N	19.5	10.7	56.0
0.750000	44.5	Off	N	19.6	11.5	56.0
0.814000	44.2	Off	N	19.5	11.8	56.0
0.894000	44.2	Off	N	19.5	11.8	56.0
0.990000	41.8	Off	N	19.6	14.2	56.0

Test Mode :	Mode 1	Temperature :	21~23°C
Test Engineer :	Arthur Hsieh	Relative Humidity :	51~53%
Test Voltage :	120Vac / 60Hz	Phase :	Neutral
Function Type :	Bluetooth Link + WLAN (5GHz) Link + MPEG4 + Scanner + Snap-on 1 + RJ-45 Cable Link with Notebook + Adapter + SD Card for Sample 4		


Final Result : QuasiPeak

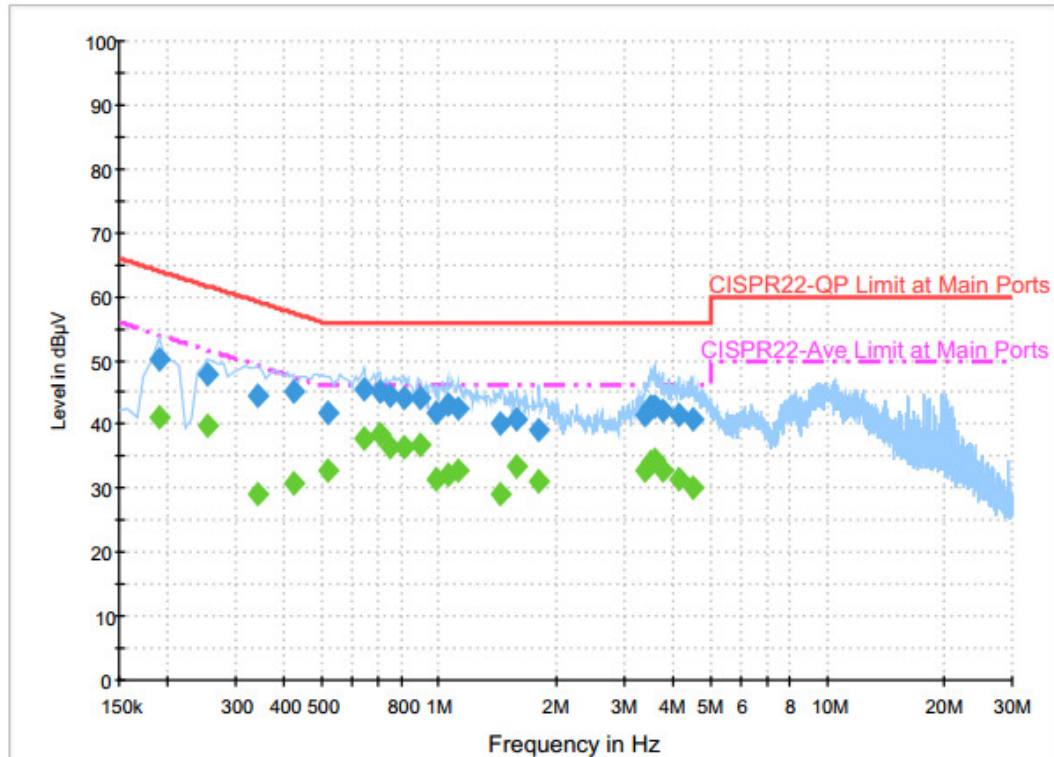
Frequency (MHz)	QuasiPeak (dBμV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
1.054000	43.0	Off	N	19.6	13.0	56.0
1.118000	42.3	Off	N	19.6	13.7	56.0
1.446000	40.2	Off	N	19.6	15.8	56.0
1.590000	40.9	Off	N	19.6	15.1	56.0
1.814000	39.3	Off	N	19.6	16.7	56.0
3.398000	41.3	Off	N	19.5	14.7	56.0
3.518000	42.9	Off	N	19.5	13.1	56.0
3.582000	42.7	Off	N	19.5	13.3	56.0
3.774000	42.3	Off	N	19.6	13.7	56.0
4.150000	41.4	Off	N	19.6	14.6	56.0
4.494000	41.0	Off	N	19.6	15.0	56.0

Test Mode :	Mode 1	Temperature :	21~23°C
Test Engineer :	Arthur Hsieh	Relative Humidity :	51~53%
Test Voltage :	120Vac / 60Hz	Phase :	Neutral
Function Type :	Bluetooth Link + WLAN (5GHz) Link + MPEG4 + Scanner + Snap-on 1 + RJ-45 Cable Link with Notebook + Adapter + SD Card for Sample 4		


Final Result : Average

Frequency (MHz)	Average (dBμV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.190000	41.1	Off	N	19.5	12.9	54.0
0.254000	39.7	Off	N	19.5	11.9	51.6
0.342000	29.2	Off	N	19.5	20.0	49.2
0.422000	30.9	Off	N	19.5	16.5	47.4
0.518000	32.7	Off	N	19.5	13.3	46.0
0.638000	37.9	Off	N	19.5	8.1	46.0
0.702000	38.5	Off	N	19.5	7.5	46.0
0.750000	36.5	Off	N	19.6	9.5	46.0
0.814000	36.3	Off	N	19.5	9.7	46.0
0.894000	36.8	Off	N	19.5	9.2	46.0
0.990000	31.5	Off	N	19.6	14.5	46.0

Test Mode :	Mode 1	Temperature :	21~23°C
Test Engineer :	Arthur Hsieh	Relative Humidity :	51~53%
Test Voltage :	120Vac / 60Hz	Phase :	Neutral
Function Type :	Bluetooth Link + WLAN (5GHz) Link + MPEG4 + Scanner + Snap-on 1 + RJ-45 Cable Link with Notebook + Adapter + SD Card for Sample 4		


Final Result : Average

Frequency (MHz)	Average (dBμV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
1.054000	32.2	Off	N	19.6	13.8	46.0
1.118000	32.8	Off	N	19.6	13.2	46.0
1.446000	29.1	Off	N	19.6	16.9	46.0
1.590000	33.6	Off	N	19.6	12.4	46.0
1.814000	31.2	Off	N	19.6	14.8	46.0
3.398000	32.7	Off	N	19.5	13.3	46.0
3.518000	34.0	Off	N	19.5	12.0	46.0
3.582000	34.5	Off	N	19.5	11.5	46.0
3.774000	32.8	Off	N	19.6	13.2	46.0
4.150000	31.5	Off	N	19.6	14.5	46.0
4.494000	30.2	Off	N	19.6	15.8	46.0

3.6 Frequency Stability Measurement

3.6.1 Limit of Frequency Stability

Manufacturers of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the user's manual.

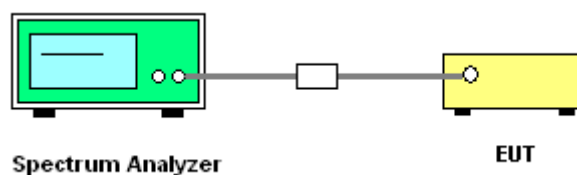
3.6.2 Measuring Instruments

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

3.6.3 Test Procedures

1. To ensure emission at the band edge is maintained within the authorized band, those values shall be measured by radiation emissions at upper and lower frequency points, and finally compensated by frequency deviation as procedures below.
2. The EUT was operated at the maximum output power, and connected to the spectrum analyzer, which is set to maximum hold function and peak detector. The peak value of the power envelope was measured and noted. The upper and lower frequency points were respectively measured relatively 10dB lower than the measured peak value.
3. The frequency deviation was calculated by adding the upper frequency point and the lower frequency point divided by two. Those detailed values of frequency deviation are provided in table below.

3.6.4 Test Setup



3.6.5 Test Result of Frequency Stability

Please refer to Appendix A.

3.7 Automatically Discontinue Transmission

3.7.1 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.

3.7.2 Measuring Instruments

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

3.7.3 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.



3.8 Antenna Requirements

3.8.1 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.

3.8.2 Antenna Anti-Replacement Construction

An embedded-in antenna design is used.

3.8.3 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	Jan. 12, 2017 ~ Jan. 28, 2017	Sep. 28, 2017	Conducted (TH05-HY)
Power Sensor	Anritsu	MA2411B	0846202	300MHz~40GHz	Sep. 29, 2016	Jan. 12, 2017 ~ Jan. 28, 2017	Sep. 28, 2017	Conducted (TH05-HY)
Spectrum Analyzer	Rohde & Schwarz	FSP40	100055	9kHz-40GHz	Jul. 17, 2016	Jan. 12, 2017 ~ Jan. 28, 2017	Jul. 16, 2017	Conducted (TH05-HY)
AC Power Source	ChainTek	APC-1000W	N/A	N/A	N/A	Jan. 17, 2017	N/A	Conduction (CO05-HY)
EMI Test Receiver	Rohde & Schwarz	ESCI 7	100724	9kHz~7GHz	Aug. 30, 2016	Jan. 17, 2017	Aug. 29, 2017	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100080	9kHz~30MHz	Nov. 29, 2016	Jan. 17, 2017	Nov. 28, 2017	Conduction (CO05-HY)
Amplifier	SONOMA	310N	187312	9kHz~1GHz	Nov. 10, 2016	Jan. 22, 2017 ~ Feb. 02, 2017	Nov. 09, 2017	Radiation (03CH11-HY)
Loop Antenna	Rohde & Schwarz	HFH2-Z2	100315	9 kHz~30 MHz	Sep. 02, 2015	Jan. 22, 2017 ~ Feb. 02, 2017	Sep. 01, 2017	Radiation (03CH11-HY)
Bilog Antenna	TESEQ	CBL 6111D	35414	30MHz~1GHz	Oct. 15, 2016	Jan. 22, 2017 ~ Feb. 02, 2017	Oct. 14, 2017	Radiation (03CH11-HY)
Horn Antenna	SCHWARZBECK	BBHA 9120 D	9120D-1522	1GHz ~ 18GHz	Mar. 30, 2016	Jan. 22, 2017 ~ Feb. 02, 2017	Mar. 31, 2017	Radiation (03CH11-HY)
Preamplifier	Keysight	83017A	MY53270080	1GHz~26.5GHz	Nov. 10, 2016	Jan. 22, 2017 ~ Feb. 02, 2017	Nov. 09, 2017	Radiation (03CH11-HY)
Spectrum Analyzer	Keysight	N9010A	MY52350276	10Hz ~ 44GHZ	Mar. 21, 2016	Jan. 22, 2017 ~ Feb. 02, 2017	Mar. 20, 2017	Radiation (03CH11-HY)
Antenna Mast	EMEC	AM-BS-4500-B	N/A	1~4m	N/A	Jan. 22, 2017 ~ Feb. 02, 2017	N/A	Radiation (03CH11-HY)
Turn Table	EMEC	TT 2000	N/A	0~360 Degree	N/A	Jan. 22, 2017 ~ Feb. 02, 2017	N/A	Radiation (03CH11-HY)
Preamplifier	MITEQ	TTA0204	1872107	2GHz~40GHz	Feb. 15, 2016	Jan. 22, 2017 ~ Feb. 02, 2017	Feb. 14, 2017	Radiation (03CH11-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170584	18GHz- 40GHz	Nov. 08, 2016	Jan. 22, 2017 ~ Feb. 02, 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
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Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	5.2
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Uncertainty of Radiated Emission Measurement (1000 MHz ~ 18000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	5.5
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Uncertainty of Radiated Emission Measurement (18000 MHz ~ 40000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	5.2
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Appendix A. Conducted Test Results

Test Engineer:	Shiming Liu / Jeremy Lin	Temperature:	21~25	°C
Test Date:	2017/01/12~2017/01/28	Relative Humidity:	51~54	%

TEST RESULTS DATA
26dB and 99% OBW

Band I										
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	99% Bandwidth (MHz)	26 dB Bandwidth (MHz)	IC 99% Bandwidth Power Limit (dBm)	IC 99% Bandwidth EIRP Limit (dBm)		
11a	6Mbps	1	36	5180	18.00	26.30	-	22.55		
11a	6Mbps	1	44	5220	17.95	25.90	-	22.54		
11a	6Mbps	1	48	5240	17.85	26.80	-	22.52		
HT20	MCS0	1	36	5180	19.15	27.64	-	22.82		
HT20	MCS0	1	44	5220	19.20	27.90	-	22.83		
HT20	MCS0	1	48	5240	19.25	27.74	-	22.84		

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	0.06	13.06	24.00	4.72		Pass
11a	6Mbps	1	44	5220	0.06	13.04	24.00	4.72		Pass
11a	6Mbps	1	48	5240	0.06	13.01	24.00	4.72		Pass
HT20	MCS0	1	36	5180	0.07	13.18	24.00	4.72		Pass
HT20	MCS0	1	44	5220	0.07	13.17	24.00	4.72		Pass
HT20	MCS0	1	48	5240	0.07	13.16	24.00	4.72		Pass

TEST RESULTS DATA
Power Spectral Density

FCC Band I										
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Duty Factor (dB)	Average Power Density (dBm/MHz)	Average PSD Limit (dBm/MHz)	DG (dBi)	-	Pass/Fail
11a	6Mbps	1	36	5180	0.06	2.62	11.00	4.72		Pass
11a	6Mbps	1	44	5220	0.06	2.26	11.00	4.72		Pass
11a	6Mbps	1	48	5240	0.06	1.95	11.00	4.72		Pass
HT20	MCS0	1	36	5180	0.07	2.50	11.00	4.72		Pass
HT20	MCS0	1	44	5220	0.07	2.11	11.00	4.72		Pass
HT20	MCS0	1	48	5240	0.07	1.98	11.00	4.72		Pass

TEST RESULTS DATA
26dB and 99% OBW

Band II										
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	99% Bandwidth (MHz)	26 dB Bandwidth (MHz)	IC 99% Bandwidth Power Limit (dBm)	IC 99% Bandwidth EIRP Limit (dBm)	FCC 26dB Bandwidth Power Limit (dBm)	Note
11a	6M bps	1	52	5260	17.55	27.40	23.44	29.44	23.98	
11a	6M bps	1	60	5300	17.70	26.00	23.48	29.48	23.98	
11a	6M bps	1	64	5320	18.20	26.64	23.60	29.60	23.98	
HT20	MCS 0	1	52	5260	19.10	27.33	23.81	29.81	23.98	
HT20	MCS 0	1	60	5300	19.25	27.20	23.84	29.84	23.98	
HT20	MCS 0	1	64	5320	19.20	28.25	23.83	29.83	23.98	

TEST RESULTS DATA
Average Power Table

FCC Band II										
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Duty Factor (dB)	Average Conducted Power (dBm)	FCC Conducted Power Limit (dBm)	DG (dBi)	EIRP Power Limit (dBm)	Pass/Fail
11a	6M bps	1	52	5260	0.06	13.01	23.98	5.26	26.99	Pass
11a	6M bps	1	60	5300	0.06	13.01	23.98	5.26	26.99	Pass
11a	6M bps	1	64	5320	0.06	13.04	23.98	5.26	26.99	Pass
HT20	MCS 0	1	52	5260	0.07	13.09	23.98	5.26	26.99	Pass
HT20	MCS 0	1	60	5300	0.07	13.12	23.98	5.26	26.99	Pass
HT20	MCS 0	1	64	5320	0.07	13.17	23.98	5.26	26.99	Pass

TEST RESULTS DATA
Power Spectral Density

Band II										
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Duty Factor (dB)	Average Power Density (dBm/MHz)	Average PSD Limit (dBm/MHz)	DG (dBi)		Pass/Fail
11a	6M bps	1	52	5260	0.06	2.11	11.00	5.26		Pass
11a	6M bps	1	60	5300	0.06	1.89	11.00	5.26		Pass
11a	6M bps	1	64	5320	0.06	1.67	11.00	5.26		Pass
HT20	MCS 0	1	52	5260	0.07	1.70	11.00	5.26		Pass
HT20	MCS 0	1	60	5300	0.07	1.70	11.00	5.26		Pass
HT20	MCS 0	1	64	5320	0.07	3.04	11.00	5.26		Pass

TEST RESULTS DATA
26dB and 99% OBW

Band III										
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	99% Bandwidth (MHz)	26 dB Bandwidth (MHz)	IC 99% Bandwidth Power Limit (dBm)	IC 99% Bandwidth EIRP Limit (dBm)	FCC 26dB Bandwidth Power Limit (dBm)	Note
11a	6M bps	1	100	5500	18.30	25.70	23.62	29.62	23.98	
11a	6M bps	1	116	5580	18.15	26.70	23.59	29.59	23.98	
11a	6M bps	1	140	5700	18.35	26.20	23.64	29.64	23.98	
HT20	MCS 0	1	100	5500	19.20	28.25	23.83	29.83	23.98	
HT20	MCS 0	1	116	5580	19.00	28.00	23.79	29.79	23.98	
HT20	MCS 0	1	140	5700	18.90	28.70	23.76	29.76	23.98	

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	0.06	13.11	23.98	4.73	26.99	Pass
11a	6M bps	1	116	5580	0.06	13.07	23.98	4.73	26.99	Pass
11a	6M bps	1	140	5700	0.06	13.06	23.98	4.73	26.99	Pass
HT20	MCS 0	1	100	5500	0.07	13.13	23.98	4.73	26.99	Pass
HT20	MCS 0	1	116	5580	0.07	13.07	23.98	4.73	26.99	Pass
HT20	MCS 0	1	140	5700	0.07	13.12	23.98	4.73	26.99	Pass

TEST RESULTS DATA
Power Spectral Density

Band III										
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Duty Factor (dB)	Average Power Density (dBm/MHz)	Average PSD Limit (dBm/MHz)	DG (dBi)		Pass/Fail
11a	6M bps	1	100	5500	0.06	3.21	11.00	4.73		Pass
11a	6M bps	1	116	5580	0.06	3.66	11.00	4.73		Pass
11a	6M bps	1	140	5700	0.06	2.94	11.00	4.73		Pass
HT20	MCS 0	1	100	5500	0.07	3.04	11.00	4.73		Pass
HT20	MCS 0	1	116	5580	0.07	3.47	11.00	4.73		Pass
HT20	MCS 0	1	140	5700	0.07	2.81	11.00	4.73		Pass

TEST RESULTS DATA
Frequency Stability

Band I										
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Center Frequency (MHz)	Frequency Deviation (MHz)	Frequency Stability (ppm)	Temperature (°C)	Voltage (V)	Note
11a	6Mbps	1	36	5180	5180.050	0.050	9.65	50	3.7	
11a	6Mbps	1	36	5180	5180.050	0.050	9.65	-30	3.7	
11a	6Mbps	1	36	5180	5180.000	0.000	0.00	20	4.2	
11a	6Mbps	1	36	5180	5180.050	0.050	9.65	20	3.5	
11a	6Mbps	1	36	5180	5180.000	0.000	0.00	20	3.7	

Band II										
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Center Frequency (MHz)	Frequency Deviation (MHz)	Frequency Stability (ppm)	Temperature (°C)	Voltage (V)	Note
11a	6Mbps	1	64	5320	5320.025	0.025	4.70	50	3.7	
11a	6Mbps	1	64	5320	5320.000	0.000	0.00	-30	3.7	
11a	6Mbps	1	64	5320	5320.000	0.000	0.00	20	4.2	
11a	6Mbps	1	64	5320	5320.025	0.025	4.70	20	3.5	
11a	6Mbps	1	64	5320	5320.025	0.025	4.70	20	3.7	

Band III										
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Center Frequency (MHz)	Frequency Deviation (MHz)	Frequency Stability (ppm)	Temperature (°C)	Voltage (V)	Note
11a	6Mbps	1	100	5500	5500.050	0.050	9.09	50	3.7	
11a	6Mbps	1	100	5500	5500.025	0.025	4.55	-30	3.7	
11a	6Mbps	1	100	5500	5500.025	0.025	4.55	20	4.2	
11a	6Mbps	1	100	5500	5499.975	-0.025	-4.55	20	3.5	
11a	6Mbps	1	100	5500	5500.025	0.025	4.55	20	3.7	



Appendix B. Radiated Spurious Emission

Test Engineer :	Jacky Hung and Ken Wu	Temperature :	20~23°C
		Relative Humidity :	50~54%

Band 1 - 5150~5250MHz

WIFI 802.11a (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11a CH 36 5180MHz		5149.76	52.34	-21.66	74	41.98	32.21	11.18	33.03	165	300	P	H
		5150	44.96	-9.04	54	34.6	32.21	11.18	33.03	165	300	A	H
	*	5180	109.38	-	-	98.97	32.26	11.18	33.03	165	300	P	H
	*	5180	101.96	-	-	91.55	32.26	11.18	33.03	165	300	A	H
													H
													H
		5144.56	57.07	-16.93	74	46.71	32.21	11.18	33.03	254	313	P	V
		5150	47.8	-6.2	54	37.44	32.21	11.18	33.03	254	313	A	V
	*	5180	113.42	-	-	103.01	32.26	11.18	33.03	254	313	P	V
	*	5180	105.57	-	-	95.16	32.26	11.18	33.03	254	313	A	V
													V
													V
802.11a CH 44 5220MHz		5035.62	51.39	-22.61	74	41.16	32.05	11.22	33.04	168	298	P	H
		5134.16	42.02	-11.98	54	31.67	32.19	11.19	33.03	168	298	A	H
	*	5220	109.85	-	-	99.41	32.3	11.17	33.03	168	298	P	H
	*	5220	102.11	-	-	91.67	32.3	11.17	33.03	168	298	A	H
		5415.84	51.4	-22.6	74	40.53	32.58	11.31	33.02	168	298	P	H
		5458.8	41.8	-12.2	54	30.85	32.63	11.34	33.02	168	298	A	H
		5147.68	52.27	-21.73	74	41.91	32.21	11.18	33.03	228	307	P	V
		5142.48	42.74	-11.26	54	32.38	32.21	11.18	33.03	228	307	A	V
	*	5220	113.68	-	-	103.24	32.3	11.17	33.03	228	307	P	V
	*	5220	105.92	-	-	95.48	32.3	11.17	33.03	228	307	A	V
		5378.64	51.97	-22.03	74	41.17	32.54	11.28	33.02	228	307	P	V
		5382.72	42.4	-11.6	54	31.57	32.54	11.31	33.02	228	307	A	V



802.11a CH 48 5240MHz		5090.74	51.78	-22.22	74	41.47	32.14	11.21	33.04	172	294	P	H
		5022.62	41.86	-12.14	54	31.63	32.05	11.22	33.04	172	294	A	H
	*	5240	109.09	-	-	98.6	32.33	11.19	33.03	172	294	P	H
	*	5240	101.7	-	-	91.21	32.33	11.19	33.03	172	294	A	H
		5415.6	52.27	-21.73	74	41.4	32.58	11.31	33.02	172	294	P	H
		5458.08	41.76	-12.24	54	30.81	32.63	11.34	33.02	172	294	A	H
		5043.68	51.88	-22.12	74	41.63	32.07	11.22	33.04	265	313	P	V
		5082.94	42.48	-11.52	54	32.19	32.12	11.21	33.04	265	313	A	V
	*	5240	112.47	-	-	101.98	32.33	11.19	33.03	265	313	P	V
	*	5240	105.28	-	-	94.79	32.33	11.19	33.03	265	313	A	V
		5369.52	52.11	-21.89	74	41.35	32.51	11.28	33.03	265	313	P	V
		5397.36	42.25	-11.75	54	31.4	32.56	11.31	33.02	265	313	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	40.85	-33.15	74	37.07	39.84	15.02	51.08	100	0	P	H
		15540	39.84	-34.16	74	35.27	38.21	18.16	51.8	100	0	P	H
													H
													H
		10360	39.99	-34.01	74	36.21	39.84	15.02	51.08	100	0	P	V
		15540	39.19	-34.81	74	34.62	38.21	18.16	51.8	100	0	P	V
													V
													V
802.11a CH 44 5220MHz		10440	39.97	-34.03	74	36.13	39.92	15.08	51.16	100	0	P	H
		15660	40.84	-33.16	74	36.18	38.23	18.23	51.8	100	0	P	H
													H
													H
		10440	39.3	-34.7	74	35.46	39.92	15.08	51.16	100	0	P	V
		15660	39.61	-34.39	74	34.95	38.23	18.23	51.8	100	0	P	V
													V
													V
802.11a CH 48 5240MHz		10480	40	-34	74	36.11	39.98	15.11	51.2	100	0	P	H
		15720	39.65	-34.35	74	34.93	38.24	18.28	51.8	100	0	P	H
													H
													H
		10480	39.59	-34.41	74	35.7	39.98	15.11	51.2	100	0	P	V
		15720	40.26	-33.74	74	35.54	38.24	18.28	51.8	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		5145.86	55.42	-18.58	74	45.06	32.21	11.18	33.03	165	295	P	H
		5150	45.95	-8.05	54	35.59	32.21	11.18	33.03	165	295	A	H
	*	5180	107.91	-	-	97.5	32.26	11.18	33.03	165	295	P	H
	*	5180	101.58	-	-	91.17	32.26	11.18	33.03	165	295	A	H
													H
													H
		5149.76	62.61	-11.39	74	52.25	32.21	11.18	33.03	250	315	P	V
		5150	48.73	-5.27	54	38.37	32.21	11.18	33.03	250	315	A	V
	*	5180	111.68	-	-	101.27	32.26	11.18	33.03	250	315	P	V
	*	5180	104.8	-	-	94.39	32.26	11.18	33.03	250	315	A	V
													V
													V
802.11n HT20 CH 44 5220MHz		5149.76	51.29	-22.71	74	40.93	32.21	11.18	33.03	168	298	P	H
		5135.2	41.94	-12.06	54	31.59	32.19	11.19	33.03	168	298	A	H
	*	5220	108.8	-	-	98.36	32.3	11.17	33.03	168	298	P	H
	*	5220	101.64	-	-	91.2	32.3	11.17	33.03	168	298	A	H
		5411.04	50.95	-23.05	74	40.1	32.56	11.31	33.02	168	298	P	H
		5458.56	41.9	-12.1	54	30.95	32.63	11.34	33.02	168	298	A	H
		5095.94	52.28	-21.72	74	41.97	32.14	11.21	33.04	253	317	P	V
		5147.68	42.75	-11.25	54	32.39	32.21	11.18	33.03	253	317	A	V
	*	5220	112.74	-	-	102.3	32.3	11.17	33.03	253	317	P	V
	*	5220	105.11	-	-	94.67	32.3	11.17	33.03	253	317	A	V
		5441.28	52.51	-21.49	74	41.58	32.61	11.34	33.02	253	317	P	V
		5457.12	42.32	-11.68	54	31.37	32.63	11.34	33.02	253	317	A	V



802.11n HT20 CH 48 5240MHz		5059.28	51.4	-22.6	74	41.13	32.09	11.22	33.04	172	293	P	H
		5023.92	41.92	-12.08	54	31.69	32.05	11.22	33.04	172	293	A	H
	*	5240	108.35	-	-	97.86	32.33	11.19	33.03	172	293	P	H
	*	5240	101.34	-	-	90.85	32.33	11.19	33.03	172	293	A	H
		5401.44	52	-22	74	41.15	32.56	11.31	33.02	172	293	P	H
		5456.4	42.02	-11.98	54	31.07	32.63	11.34	33.02	172	293	A	H
		5008.32	51.6	-22.4	74	41.38	32.02	11.24	33.04	265	313	P	V
		5080.86	42.45	-11.55	54	32.16	32.12	11.21	33.04	265	313	A	V
	*	5240	111.83	-	-	101.34	32.33	11.19	33.03	265	313	P	V
	*	5240	104.59	-	-	94.1	32.33	11.19	33.03	265	313	A	V
		5398.32	51.75	-22.25	74	40.9	32.56	11.31	33.02	265	313	P	V
		5398.8	42.27	-11.73	54	31.42	32.56	11.31	33.02	265	313	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	40.04	-33.96	74	36.26	39.84	15.02	51.08	100	0	P	H
		15540	39.25	-34.75	74	34.68	38.21	18.16	51.8	100	0	P	H
													H
													H
		10360	40.67	-33.33	74	36.89	39.84	15.02	51.08	100	0	P	V
		15540	39.48	-34.52	74	34.91	38.21	18.16	51.8	100	0	P	V
													V
													V
802.11n HT20 CH 44 5220MHz		10440	40.48	-33.52	74	36.64	39.92	15.08	51.16	100	0	P	H
		15660	39.72	-34.28	74	35.06	38.23	18.23	51.8	100	0	P	H
													H
													H
		10440	39.82	-34.18	74	35.98	39.92	15.08	51.16	100	0	P	V
		15660	40.86	-33.14	74	36.2	38.23	18.23	51.8	100	0	P	V
													V
													V
802.11n HT20 CH 48 5240MHz		10480	39.84	-34.16	74	35.95	39.98	15.11	51.2	100	0	P	H
		15720	39.47	-34.53	74	34.75	38.24	18.28	51.8	100	0	P	H
													H
													H
		10480	39.35	-34.65	74	35.46	39.98	15.11	51.2	100	0	P	V
		15720	41.17	-32.83	74	36.45	38.24	18.28	51.8	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 2 - 5250~5350MHz

WIFI 802.11a (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	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)
802.11a CH 52 5260MHz		5119.08	51.92	-22.08	74	41.6	32.16	11.19	33.03	160	288	P	H
		5096.2	41.88	-12.12	54	31.57	32.14	11.21	33.04	160	288	A	H
	*	5260	109.84	-	-	99.31	32.37	11.19	33.03	160	288	P	H
	*	5260	102.39	-	-	91.86	32.37	11.19	33.03	160	288	A	H
		5387.52	51.06	-22.94	74	40.23	32.54	11.31	33.02	160	288	P	H
		5418.72	41.86	-12.14	54	30.99	32.58	11.31	33.02	160	288	A	H
		5085.54	53.23	-20.77	74	42.94	32.12	11.21	33.04	252	316	P	V
		5103.74	42.67	-11.33	54	32.38	32.14	11.19	33.04	252	316	A	V
	*	5260	112.4	-	-	101.87	32.37	11.19	33.03	252	316	P	V
	*	5260	105.69	-	-	95.16	32.37	11.19	33.03	252	316	A	V
		5454.24	51.55	-22.45	74	40.6	32.63	11.34	33.02	252	316	P	V
		5419.2	42.34	-11.66	54	31.47	32.58	11.31	33.02	252	316	A	V
802.11a CH 60 5300MHz		5132.6	52.09	-21.91	74	41.74	32.19	11.19	33.03	158	289	P	H
		5047.06	41.96	-12.04	54	31.71	32.07	11.22	33.04	158	289	A	H
	*	5300	108.92	-	-	98.31	32.42	11.22	33.03	158	289	P	H
	*	5300	102.8	-	-	92.19	32.42	11.22	33.03	158	289	A	H
		5444.64	53.13	-20.87	74	42.2	32.61	11.34	33.02	158	289	P	H
		5350.08	42.24	-11.76	54	31.5	32.49	11.28	33.03	158	289	A	H
		5138.32	51.8	-22.2	74	41.45	32.19	11.19	33.03	221	287	P	V
		5038.48	42.58	-11.42	54	32.33	32.07	11.22	33.04	221	287	A	V
	*	5300	112.32	-	-	101.71	32.42	11.22	33.03	221	287	P	V
	*	5300	105.92	-	-	95.31	32.42	11.22	33.03	221	287	A	V
		5355.36	52.35	-21.65	74	41.61	32.49	11.28	33.03	221	287	P	V
		5350.08	43.6	-10.4	54	32.86	32.49	11.28	33.03	221	287	A	V



802.11a CH 64 5320MHz	*	5320	109.55	-	-	98.89	32.44	11.25	33.03	163	287	P	H
	*	5320	102.41	-	-	91.75	32.44	11.25	33.03	163	287	A	H
		5351.04	57.54	-16.46	74	46.8	32.49	11.28	33.03	163	287	P	H
		5350.08	46.74	-7.26	54	36	32.49	11.28	33.03	163	287	A	H
													H
													H
	*	5320	113.17	-	-	102.51	32.44	11.25	33.03	230	308	P	V
	*	5320	105.75	-	-	95.09	32.44	11.25	33.03	230	308	A	V
		5354.08	60.08	-13.92	74	49.34	32.49	11.28	33.03	230	308	P	V
		5350.08	49.08	-4.92	54	38.34	32.49	11.28	33.03	230	308	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	40.31	-33.69	74	36.43	39.99	15.13	51.24	100	0	P	H
		15780	39.45	-34.55	74	34.69	38.26	18.3	51.8	100	0	P	H
													H
													H
		10520	39.31	-34.69	74	35.43	39.99	15.13	51.24	100	0	P	V
		15780	40.29	-33.71	74	35.53	38.26	18.3	51.8	100	0	P	V
													V
													V
802.11a CH 60 5300MHz		10600	40.04	-33.96	74	36.14	39.92	15.19	51.21	100	0	P	H
		15900	39.38	-34.62	74	34.53	38.28	18.37	51.8	100	0	P	H
													H
													H
		10600	40.55	-33.45	74	36.65	39.92	15.19	51.21	100	0	P	V
		15900	39.49	-34.51	74	34.64	38.28	18.37	51.8	100	0	P	V
													V
													V
802.11a CH 64 5320MHz		10640	38.62	-35.38	74	34.7	39.89	15.22	51.19	100	0	P	H
		15960	39.19	-34.81	74	34.28	38.29	18.42	51.8	100	0	P	H
													H
													H
		10640	38.98	-35.02	74	35.06	39.89	15.22	51.19	100	0	P	V
		15960	39.18	-34.82	74	34.27	38.29	18.42	51.8	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		5141.96	51.88	-22.12	74	41.52	32.21	11.18	33.03	160	288	P	H
		5017.94	41.88	-12.12	54	31.66	32.02	11.24	33.04	160	288	A	H
	*	5260	108.79	-	-	98.26	32.37	11.19	33.03	160	288	P	H
	*	5260	102.01	-	-	91.48	32.37	11.19	33.03	160	288	A	H
		5387.28	51.27	-22.73	74	40.44	32.54	11.31	33.02	160	288	P	H
		5457.84	41.85	-12.15	54	30.9	32.63	11.34	33.02	160	288	A	H
		5136.24	53.43	-20.57	74	43.08	32.19	11.19	33.03	252	316	P	V
		5101.14	42.54	-11.46	54	32.25	32.14	11.19	33.04	252	316	A	V
	*	5260	111.99	-	-	101.46	32.37	11.19	33.03	252	316	P	V
	*	5260	105.14	-	-	94.61	32.37	11.19	33.03	252	316	A	V
		5388.72	51.98	-22.02	74	41.15	32.54	11.31	33.02	252	316	P	V
		5417.28	42.23	-11.77	54	31.36	32.58	11.31	33.02	252	316	A	V
802.11n HT20 CH 60 5300MHz		5003.38	51.87	-22.13	74	41.67	32	11.24	33.04	158	289	P	H
		5049.92	41.96	-12.04	54	31.71	32.07	11.22	33.04	158	289	A	H
	*	5300	109.56	-	-	98.95	32.42	11.22	33.03	158	289	P	H
	*	5300	102.64	-	-	92.03	32.42	11.22	33.03	158	289	A	H
		5431.68	52.5	-21.5	74	41.57	32.61	11.34	33.02	158	289	P	H
		5350.08	42.3	-11.7	54	31.56	32.49	11.28	33.03	158	289	A	H
		5004.42	52.15	-21.85	74	41.93	32.02	11.24	33.04	233	297	P	V
		5022.36	42.72	-11.28	54	32.49	32.05	11.22	33.04	233	297	A	V
	*	5300	112.71	-	-	102.1	32.42	11.22	33.03	233	297	P	V
	*	5300	105.53	-	-	94.92	32.42	11.22	33.03	233	297	A	V
		5368.8	52.51	-21.49	74	41.75	32.51	11.28	33.03	233	297	P	V
		5350.08	43.48	-10.52	54	32.74	32.49	11.28	33.03	233	297	A	V



802.11n HT20 CH 64 5320MHz	*	5320	108.99	-	-	98.33	32.44	11.25	33.03	161	287	P	H
	*	5320	102.15	-	-	91.49	32.44	11.25	33.03	161	287	A	H
		5351.04	58.96	-15.04	74	48.22	32.49	11.28	33.03	161	287	P	H
		5350.08	47.7	-6.3	54	36.96	32.49	11.28	33.03	161	287	A	H
													H
													H
	*	5320	113.22	-	-	102.56	32.44	11.25	33.03	230	303	P	V
	*	5320	105.48	-	-	94.82	32.44	11.25	33.03	230	303	A	V
		5354.72	59.45	-14.55	74	48.71	32.49	11.28	33.03	230	303	P	V
		5350.08	49.92	-4.08	54	39.18	32.49	11.28	33.03	230	303	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	39.16	-34.84	74	35.28	39.99	15.13	51.24	100	0	P	H
		15780	39.79	-34.21	74	35.03	38.26	18.3	51.8	100	0	P	H
													H
													H
		10520	39.46	-34.54	74	35.58	39.99	15.13	51.24	100	0	P	V
		15780	39.75	-34.25	74	34.99	38.26	18.3	51.8	100	0	P	V
													V
													V
802.11n HT20 CH 60 5300MHz		10600	39.67	-34.33	74	35.77	39.92	15.19	51.21	100	0	P	H
		15900	39.09	-34.91	74	34.24	38.28	18.37	51.8	100	0	P	H
													H
													H
		10600	39.02	-34.98	74	35.12	39.92	15.19	51.21	100	0	P	V
		15900	39.22	-34.78	74	34.37	38.28	18.37	51.8	100	0	P	V
													V
													V
802.11n HT20 CH 64 5320MHz		10640	38.64	-35.36	74	34.72	39.89	15.22	51.19	100	0	P	H
		15960	39.43	-34.57	74	34.52	38.29	18.42	51.8	100	0	P	H
													H
													H
		10640	38.54	-35.46	74	34.62	39.89	15.22	51.19	100	0	P	V
		15960	39.39	-34.61	74	34.48	38.29	18.42	51.8	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 - 5470~5725MHz

WIFI 802.11a (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	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)
802.11a CH 100 5500MHz		5470	55.59	-18.41	74	44.58	32.65	11.38	33.02	153	289	P	H
		5470	47.49	-6.51	54	36.48	32.65	11.38	33.02	153	289	A	H
	*	5500	108.55	-	-	97.49	32.7	11.38	33.02	153	289	P	H
	*	5500	102.14	-	-	91.08	32.7	11.38	33.02	153	289	A	H
													H
													H
		5470	58.79	-15.21	74	47.78	32.65	11.38	33.02	175	298	P	V
		5470	49.36	-4.64	54	38.35	32.65	11.38	33.02	175	298	A	V
	*	5500	111.61	-	-	100.55	32.7	11.38	33.02	175	298	P	V
	*	5500	104.79	-	-	93.73	32.7	11.38	33.02	175	298	A	V
													V
													V
802.11a CH 116 5580MHz		5454.4	51.91	-22.09	74	40.96	32.63	11.34	33.02	159	292	P	H
		5469.52	42.12	-11.88	54	31.11	32.65	11.38	33.02	159	292	A	H
	*	5580	107.96	-	-	96.79	32.8	11.44	33.07	159	292	P	H
	*	5580	101.78	-	-	90.61	32.8	11.44	33.07	159	292	A	H
		5737.7	52.13	-21.87	74	40.78	33.04	11.46	33.15	159	292	P	H
		5746.625	41.79	-12.21	54	30.44	33.04	11.46	33.15	159	292	A	H
		5459.68	52.91	-21.09	74	41.96	32.63	11.34	33.02	224	294	P	V
		5470	42.74	-11.26	54	31.73	32.65	11.38	33.02	224	294	A	V
	*	5580	112.5	-	-	101.33	32.8	11.44	33.07	224	294	P	V
	*	5580	105.47	-	-	94.3	32.8	11.44	33.07	224	294	A	V
		5746.625	51.33	-22.67	74	39.98	33.04	11.46	33.15	224	294	P	V
		5738.575	42.45	-11.55	54	31.1	33.04	11.46	33.15	224	294	A	V



802.11a CH 140 5700MHz	*	5700	107.61	-	-	96.29	32.97	11.47	33.12	154	306	P	H
	*	5700	100.35	-	-	89.03	32.97	11.47	33.12	154	306	A	H
		5725.24	54.45	-13.75	68.2	43.11	33.01	11.46	33.13	154	306	P	H
													H
													H
													H
	*	5700	112.92	-	-	101.6	32.97	11.47	33.12	167	297	P	V
	*	5700	106.84	-	-	95.52	32.97	11.47	33.12	167	297	A	V
		5727.24	62	-6.2	68.2	50.66	33.01	11.46	33.13	167	297	P	V
													V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 - 5470~5725MHz

WIFI 802.11a (Harmonic @ 3m)

WIFI Ant. 1	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	40.04	-33.96	74	35.98	39.6	15.49	51.03	100	0	P	H
		16500	41.75	-32.25	74	35.15	39.2	19.27	51.87	100	0	P	H
													H
													H
		11000	40.62	-33.38	74	36.56	39.6	15.49	51.03	100	0	P	V
		16500	40.94	-33.06	74	34.34	39.2	19.27	51.87	100	0	P	V
													V
													V
802.11a CH 116 5580MHz		11160	41.34	-32.66	74	37.39	39.43	15.61	51.09	100	0	P	H
		16740	42.53	-31.47	74	34.21	40.55	19.68	51.91	100	0	P	H
													H
													H
		11160	41.41	-32.59	74	37.46	39.43	15.61	51.09	100	0	P	V
		16740	42.34	-31.66	74	34.02	40.55	19.68	51.91	100	0	P	V
													V
													V
802.11a CH 140 5700MHz		11400	40.37	-33.63	74	36.57	39.2	15.79	51.19	100	0	P	H
		17100	46	-22.2	68.2	35.31	42.36	20.3	51.97	100	0	P	H
													H
													H
		11400	40.36	-33.64	74	36.56	39.2	15.79	51.19	100	0	P	V
		17100	45.34	-22.86	68.2	34.65	42.36	20.3	51.97	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		5469.84	59.65	-14.35	74	48.64	32.65	11.38	33.02	153	288	P	H
		5470	47.91	-6.09	54	36.9	32.65	11.38	33.02	153	288	A	H
	*	5500	108.82	-	-	97.76	32.7	11.38	33.02	153	288	P	H
	*	5500	101.94	-	-	90.88	32.7	11.38	33.02	153	288	A	H
													H
													H
		5468.24	59	-15	74	47.99	32.65	11.38	33.02	175	296	P	V
		5470	49.88	-4.12	54	38.87	32.65	11.38	33.02	175	296	A	V
	*	5500	111.32	-	-	100.26	32.7	11.38	33.02	175	296	P	V
	*	5500	104.51	-	-	93.45	32.7	11.38	33.02	175	296	A	V
													V
													V
802.11n HT20 CH 116 5580MHz		5434.24	51.92	-22.08	74	40.99	32.61	11.34	33.02	160	295	P	H
		5470	42.11	-11.89	54	31.1	32.65	11.38	33.02	160	295	A	H
	*	5580	108.86	-	-	97.69	32.8	11.44	33.07	160	295	P	H
	*	5580	101.61	-	-	90.44	32.8	11.44	33.07	160	295	A	H
		5738.75	50.52	-23.48	74	39.17	33.04	11.46	33.15	160	295	P	H
		5760.975	41.87	-12.13	54	30.51	33.06	11.46	33.16	160	295	A	H
		5425.6	52.05	-21.95	74	41.15	32.58	11.34	33.02	212	289	P	V
		5421.28	42.76	-11.24	54	31.86	32.58	11.34	33.02	212	289	A	V
	*	5580	111.84	-	-	100.67	32.8	11.44	33.07	212	289	P	V
	*	5580	105.39	-	-	94.22	32.8	11.44	33.07	212	289	A	V
		5748.2	51.69	-22.31	74	40.34	33.04	11.46	33.15	212	289	P	V
		5740.85	42.49	-11.51	54	31.14	33.04	11.46	33.15	212	289	A	V



802.11n HT20 CH 140 5700MHz	*	5700	106.98	-	-	95.66	32.97	11.47	33.12	154	307	P	H
	*	5700	100.26	-	-	88.94	32.97	11.47	33.12	154	307	A	H
		5729.88	55.86	-12.34	68.2	44.52	33.01	11.46	33.13	154	307	P	H
													H
													H
													H
	*	5700	112.62	-	-	101.3	32.97	11.47	33.12	167	298	P	V
	*	5700	105.74	-	-	94.42	32.97	11.47	33.12	167	298	A	V
		5725.4	63.98	-4.22	68.2	52.64	33.01	11.46	33.13	167	298	P	V
													V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 - 5470~5725MHz

WIFI 802.11n HT20 (Harmonic @ 3m)

WIFI Ant. 1	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	40.51	-33.49	74	36.45	39.6	15.49	51.03	100	0	P	H
		16500	41.82	-32.18	74	35.22	39.2	19.27	51.87	100	0	P	H
													H
													H
		11000	40.5	-33.5	74	36.44	39.6	15.49	51.03	100	0	P	V
		16500	40.8	-33.2	74	34.2	39.2	19.27	51.87	100	0	P	V
													V
													V
802.11n HT20 CH 116 5580MHz		11160	40.35	-33.65	74	36.4	39.43	15.61	51.09	100	0	P	H
		16740	42.51	-31.49	74	34.19	40.55	19.68	51.91	100	0	P	H
													H
													H
		11160	41.72	-32.28	74	37.77	39.43	15.61	51.09	100	0	P	V
		16740	43.89	-30.11	74	35.57	40.55	19.68	51.91	100	0	P	V
													V
													V
802.11n HT20 CH 140 5700MHz		11140	40.98	-33.02	74	37.02	39.47	15.58	51.09	100	0	P	H
		17100	45.66	-22.54	68.2	34.97	42.36	20.3	51.97	100	0	P	H
													H
													H
		11140	40.86	-33.14	74	36.9	39.47	15.58	51.09	100	0	P	V
		17100	46.13	-27.87	74	35.44	42.36	20.3	51.97	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 1 GHz

WIFI 802.11n HT20 (LF @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.	
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.		
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)	
802.11n HT20 LF		30	24.54	-15.46	40	30.05	25.7	1.29	32.5	-	-	P	H	
		119.37	17.28	-26.22	43.5	30.41	17.65	1.78	32.56	-	-	P	H	
		299.73	19.66	-26.34	46	29.75	19.7	2.58	32.37	-	-	P	H	
		524.7	26.21	-19.79	46	30.79	24.44	3.38	32.4	-	-	P	H	
		811.7	31.03	-14.97	46	30.45	28.44	4.26	32.12	-	-	P	H	
		956.6	33.53	-12.47	46	29.39	30.59	4.69	31.14	100	253	P	H	
													H	
													H	
													H	
													H	
													H	
													H	
		30.27	24.91	-15.09	40	30.42	25.7	1.29	32.5	32.5	-	-	P	V
		47.01	27	-13	40	42	16.2	1.29	32.49	32.49	-	-	P	V
		130.71	17.81	-25.69	43.5	30.65	17.99	1.78	32.61	32.61	-	-	P	V
		688.5	28.69	-17.31	46	30.64	26.58	3.94	32.47	32.47	-	-	P	V
		847.4	31.53	-14.47	46	30.2	28.88	4.39	31.94	31.94	-	-	P	V
		955.9	33.39	-12.61	46	29.25	30.59	4.69	31.14	31.14	100	238	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	Peak or Average
H/V	Horizontal or Vertical

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		2390	55.45	-18.55	74	54.51	32.22	4.58	35.86	103	308	P	H
CH 01													
2412MHz		2390	43.54	-10.46	54	42.6	32.22	4.58	35.86	103	308	A	H

1. Level(dBμV/m) =

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

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

For Peak Limit @ 2390MHz:

1. Level(dBμV/m)

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

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

= 55.45 (dBμV/m)

2. Over Limit(dB)

= Level(dBμV/m) – Limit Line(dBμV/m)

= 55.45(dBμV/m) – 74(dBμV/m)

= -18.55(dB)

For Average Limit @ 2390MHz:

1. Level(dBμV/m)

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

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

= 43.54 (dBμV/m)

2. Over Limit(dB)

= Level(dBμV/m) – Limit Line(dBμV/m)

= 43.54(dBμV/m) – 54(dBμV/m)

= -10.46(dB)

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



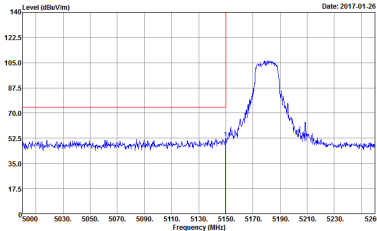
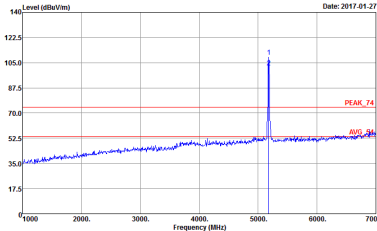
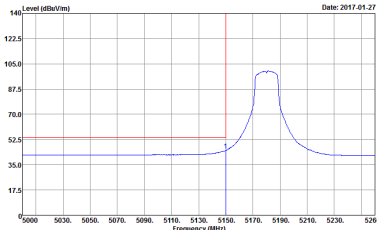
Appendix C. Radiated Spurious Emission Plots

Test Engineer :	Jacky Hung and Ken Wu	Temperature :	20~23°C
		Relative Humidity :	50~54%

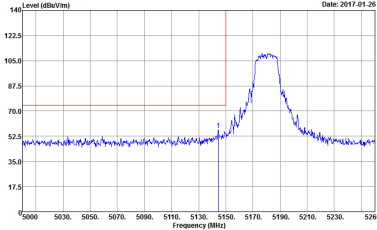
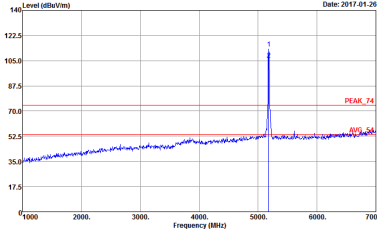
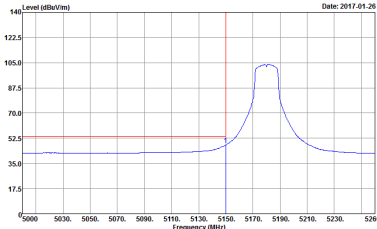
Note symbol

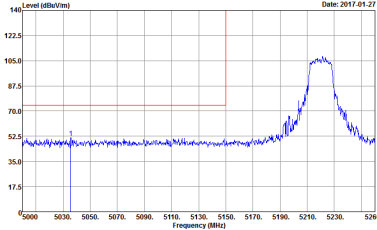
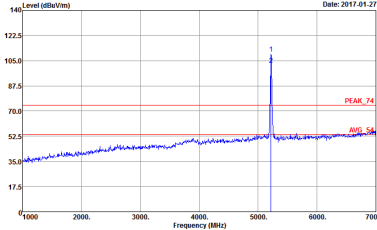
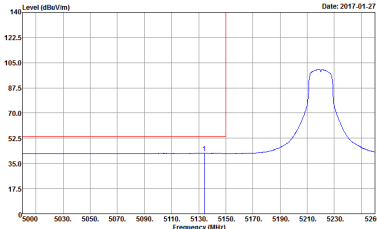
-L	Low channel location
-R	High channel location

Band 1 - 5150~5250MHz
WIFI 802.11a (Band Edge @ 3m)

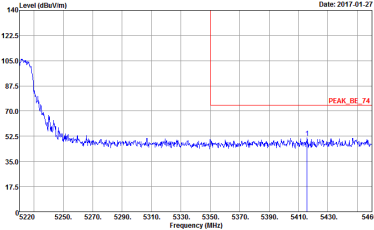
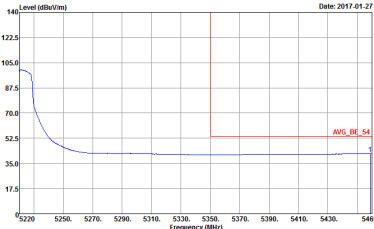
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH36 5180MHz	
1	Horizontal	Fundamental
Peak	 Site : 03CH11-HY Condition : PEAK_BE_74 3m HORN 9120D-HF HORIZONTAL Detector : Peak Project : 6D2819-02	 Site : 03CH11-HY Condition : PEAK_74 3m HORN 9120D-HF HORIZONTAL Detector : Peak Project : 6D2819-02
	 Site : 03CH11-HY Condition : AVG_BE_54 3m HORN 9120D-HF HORIZONTAL Detector : Peak Project : 6D2819-02	Left blank

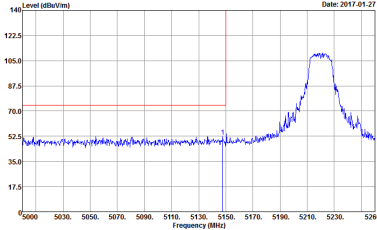
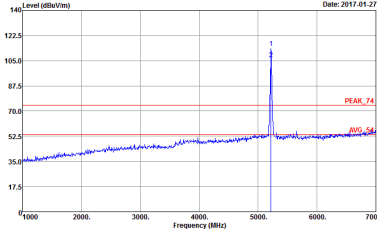
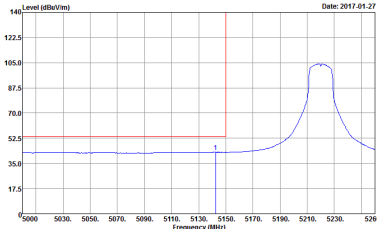


WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH36 5180MHz	
1	Vertical	Fundamental
Peak	 Site : 03CH11-HY Condition : PEAK_BE_74 3m HORN 9120D-HF VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 6D2819-02	 Site : 03CH11-HY Condition : PEAK_74 3m HORN 9120D-HF VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 6D2819-02
Avg.	 Site : 03CH11-HY Condition : AVG_BE_54 3m HORN 9120D-HF VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 6D2819-02	Left blank

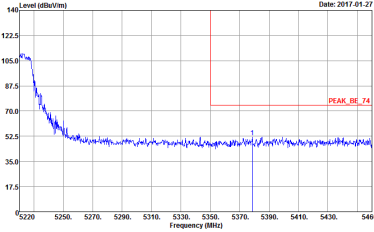
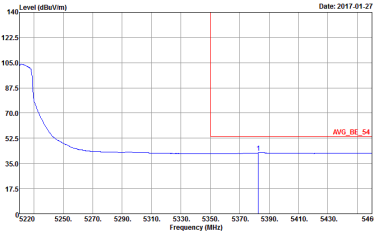
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH44 5220MHz - L	
1	Horizontal	Fundamental
Peak	 Site : 03CH11-HY Condition : PEAK_BE_74 3m HORN 9120D-HF HORIZONTAL Detector : Peak Project : 6D2819-02	 Site : 03CH11-HY Condition : PEAK_74 3m HORN 9120D-HF HORIZONTAL Detector : Peak Project : 6D2819-02
	 Site : 03CH11-HY Condition : AVG_BE_54 3m HORN 9120D-HF HORIZONTAL Detector : Peak Project : 6D2819-02	Left blank

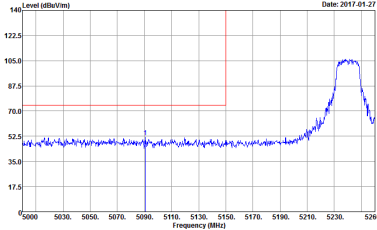
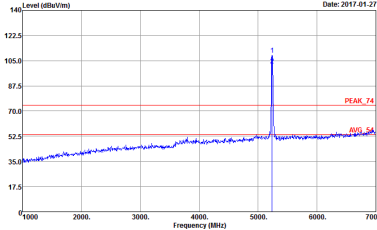
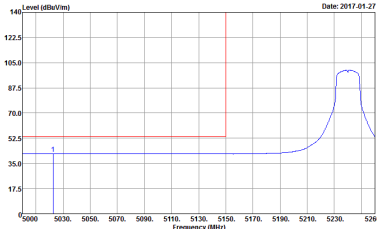


WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH44 5220MHz - R	
1	Horizontal	Fundamental
Peak	 Site : 03CH11-HY Condition : PEAK_BE_74 3m HORN 91200-HF HORIZONTAL Detector : Peak Project : 6D2819-02	Left blank
Avg.	 Site : 03CH11-HY Condition : AVG_BE_54 3m HORN 91200-HF HORIZONTAL Detector : Peak Project : 6D2819-02	Left blank

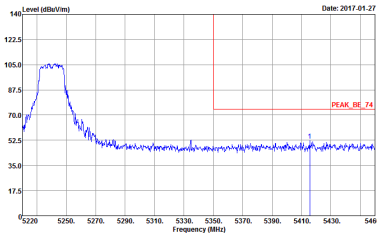
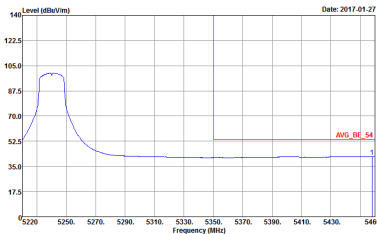
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH44 5220MHz - L	
1	Vertical	Fundamental
Peak	 Site : 03CH11-HY Condition : PEAK_BE_74 3m HORN 9120D-HF VERTICAL Detector : Peak Project : 6D2819-02	 Site : 03CH11-HY Condition : PEAK_74 3m HORN 9120D-HF VERTICAL Detector : Peak Project : 6D2819-02
	 Site : 03CH11-HY Condition : AVG_BE_54 3m HORN 9120D-HF VERTICAL Detector : Peak Project : 6D2819-02	Left blank

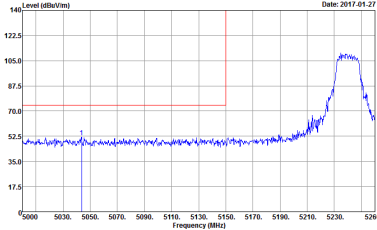
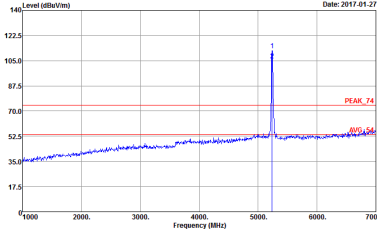
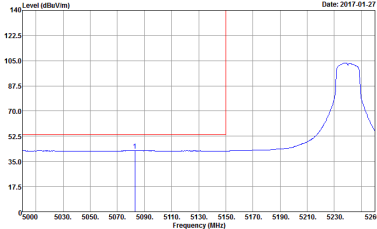


WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH44 5220MHz - R	
1	Vertical	Fundamental
Peak	 Site : 03CH11-HY Condition : PEAK_BE_74 3m HORN 9120D-HF VERTICAL Detector : Peak Project : 6D2819-02	Left blank
Avg.	 Site : 03CH11-HY Condition : AVG_BE_54 3m HORN 9120D-HF VERTICAL Detector : Peak Project : 6D2819-02	Left blank

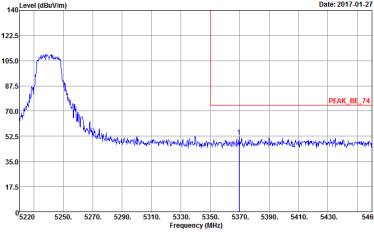
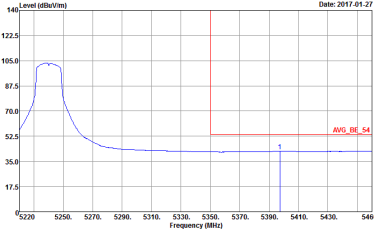
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH48 5240MHz - L	
1	Horizontal	Fundamental
Peak	 Site : 03CH11-HY Condition : PEAK_BE_74 3m HORN 9120D-HF HORIZONTAL Detector : Peak Project : 6D2819-02	 Site : 03CH11-HY Condition : PEAK_74 3m HORN 9120D-HF HORIZONTAL Detector : Peak Project : 6D2819-02
	 Site : 03CH11-HY Condition : AVG_BE_54 3m HORN 9120D-HF HORIZONTAL Detector : Peak Project : 6D2819-02	Left blank



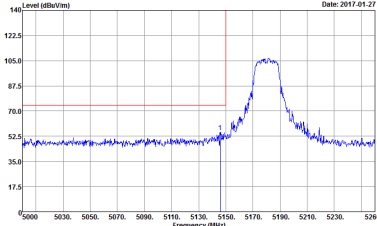
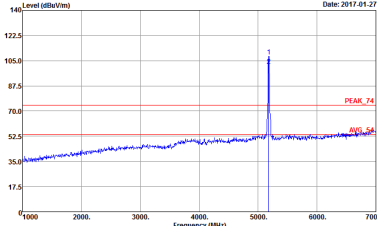
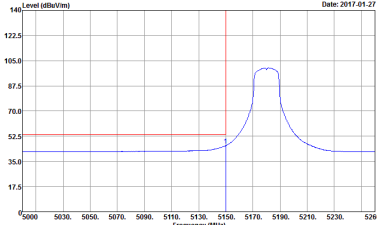
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH48 5240MHz - R	
1	Horizontal	Fundamental
Peak	 Site : 03CH11-HY Condition : PEAK_BE_74 3m HORN 9120D-HF HORIZONTAL Detector : Peak Project : 6D2819-02	Left blank
Avg.	 Site : 03CH11-HY Condition : AVG_BE_54 3m HORN 9120D-HF HORIZONTAL Detector : Peak Project : 6D2819-02	Left blank

WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH48 5240MHz - L	
1	Vertical	Fundamental
Peak	 Site : 03CH11-HY Condition : PEAK_BE_74 3m HORN 9120D-HF VERTICAL Detector : Peak Project : 6D2819-02	 Site : 03CH11-HY Condition : PEAK_74 3m HORN 9120D-HF VERTICAL Detector : Peak Project : 6D2819-02
	 Site : 03CH11-HY Condition : AVG_BE_54 3m HORN 9120D-HF VERTICAL Detector : Peak Project : 6D2819-02	Left blank

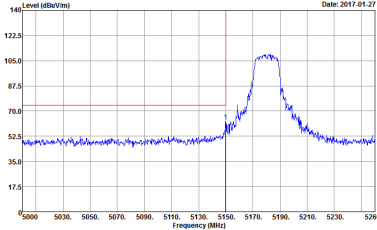
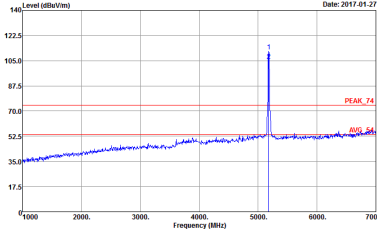
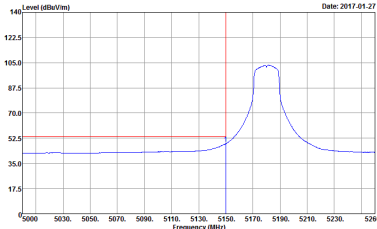


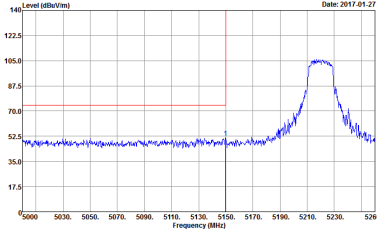
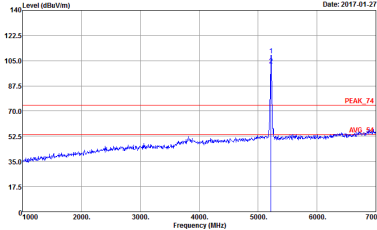
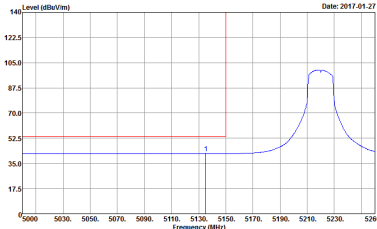
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH48 5240MHz - R	
1	Vertical	Fundamental
Peak	 Site : 03CH11-HY Condition : PEAK_BE_74 3m HORN 9120D-HF VERTICAL Detector : Peak Project : 6D2819-02	Left blank
Avg.	 Site : 03CH11-HY Condition : AVG_BE_54 3m HORN 9120D-HF VERTICAL Detector : Peak Project : 6D2819-02	Left blank

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

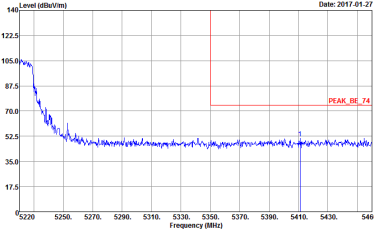
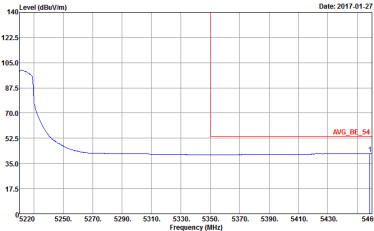
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH36 5180MHz	
1	Horizontal	Fundamental
Peak	 Site : 03CHI1-HY Condition : PEAK_BE_74 3m HORN 9120D-HF HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 6D2819-02	 Site : 03CHI1-HY Condition : PEAK_74 3m HORN 9120D-HF HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 6D2819-02
Avg.	 Site : 03CHI1-HY Condition : AVG_BE_54 3m HORN 9120D-HF HORIZONTAL RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak Project : 6D2819-02	Left blank



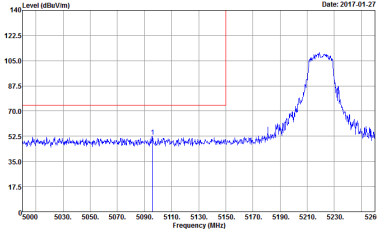
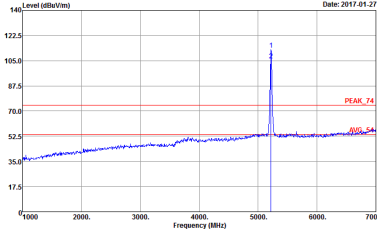
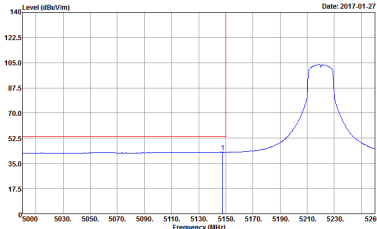
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH36 5180MHz	
1	Vertical	Fundamental
Peak	 Site : 03CH11-HY Condition : PEAK_BE_74 3m HORN 9120D-HF VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 6D2819-02	 Site : 03CH11-HY Condition : PEAK_74 3m HORN 9120D-HF VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 6D2819-02
Avg.	 Site : 03CH11-HY Condition : AVG_BE_54 3m HORN 9120D-HF VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 6D2819-02	Left blank

WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH44 5220MHz - L	
1	Horizontal	Fundamental
Peak	 Site : 03CH11-HY Condition : PEAK_BE_74 3m HORN 9120D-HF HORIZONTAL Detector : Peak Project : 6D2819-02	 Site : 03CH11-HY Condition : PEAK_74 3m HORN 9120D-HF HORIZONTAL Detector : Peak Project : 6D2819-02
	 Site : 03CH11-HY Condition : AVG_BE_54 3m HORN 9120D-HF HORIZONTAL Detector : Peak Project : 6D2819-02	Left blank

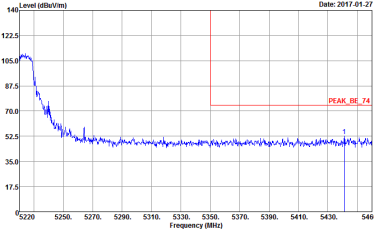
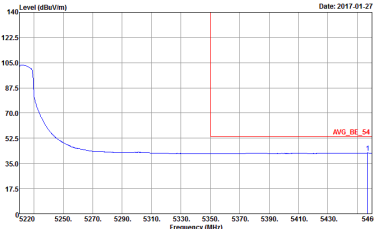


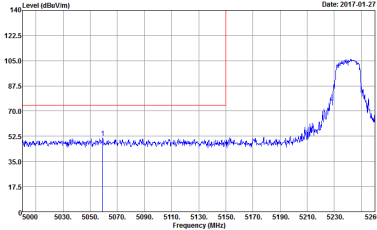
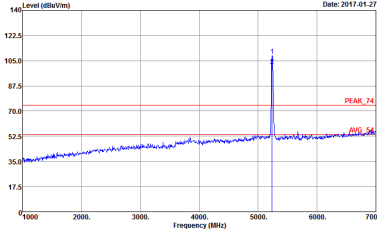
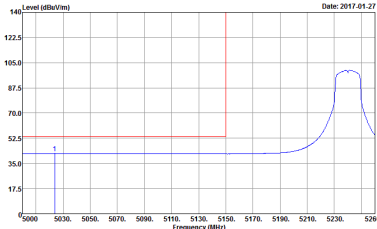
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH44 5220MHz - R	
1	Horizontal	Fundamental
Peak	 Site : 03CH11-HY Condition : PEAK_BE_74 3m HORN 9120D-HF HORIZONTAL Detector : Peak Project : 6D2819-02	Left blank
Avg.	 Site : 03CH11-HY Condition : AVG_BE_54 3m HORN 9120D-HF HORIZONTAL Detector : Peak Project : 6D2819-02	Left blank



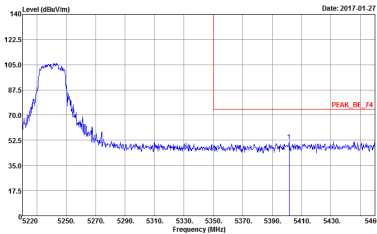
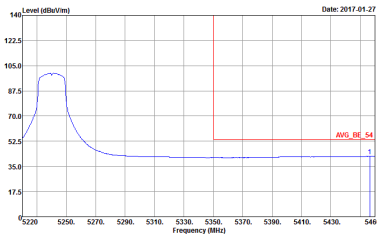
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH44 5220MHz - L	
1	Vertical	Fundamental
Peak	 Site : 03CH11-HY Condition : PEAK_BE_74 3m HORN 9120D-HF VERTICAL Detector : Peak Project : 6D2819-02	 Site : 03CH11-HY Condition : PEAK_74 3m HORN 9120D-HF VERTICAL Detector : Peak Project : 6D2819-02
Avg.	 Site : 03CH11-HY Condition : AVG_BE_54 3m HORN 9120D-HF VERTICAL Detector : Peak Project : 6D2819-02	Left blank

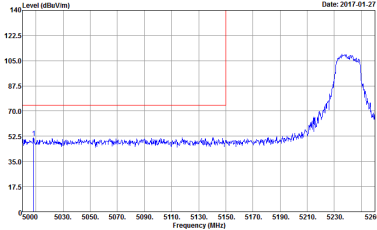
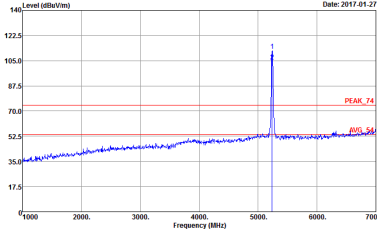
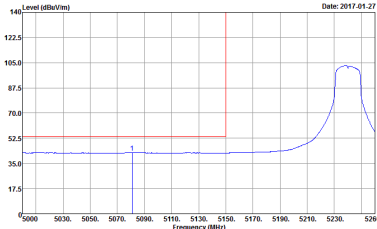


WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH44 5220MHz - R	
1	Vertical	Fundamental
Peak	 Site : 03CH11-HY Condition : PEAK_BE_74 3m HORN 9120D-HF VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 6D2819-02	Left blank
Avg.	 Site : 03CH11-HY Condition : AVG_BE_54 3m HORN 9120D-HF VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 6D2819-02	Left blank

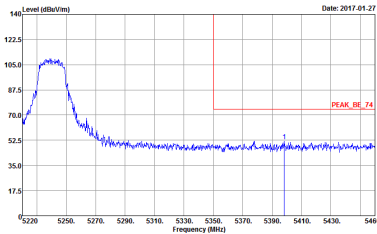
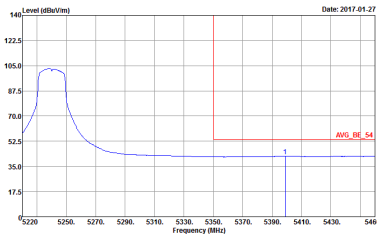
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH48 5240MHz - L	
1	Horizontal	Fundamental
Peak	 Site : 03CH11-HY Condition : PEAK_BE_74 3m HORN 9120D-HF HORIZONTAL Detector : Peak Project : 6D2819-02	 Site : 03CH11-HY Condition : PEAK_74 3m HORN 9120D-HF HORIZONTAL Detector : Peak Project : 6D2819-02
	 Site : 03CH11-HY Condition : AVG_BE_54 3m HORN 9120D-HF HORIZONTAL Detector : Peak Project : 6D2819-02	Left blank



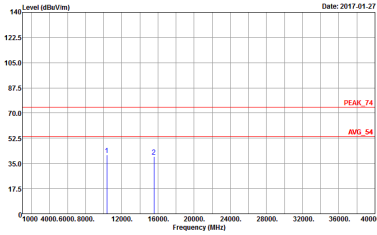
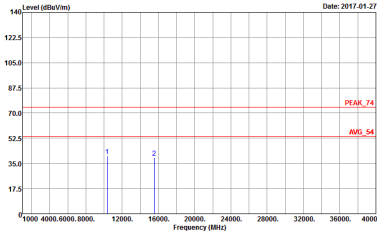
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH48 5240MHz - R	
1	Horizontal	Fundamental
Peak	 Site : 03CH11-HY Condition : PEAK_BE_74 3m HORN 9120D-HF HORIZONTAL Detector : Peak Project : 6D2819-02	Left blank
Avg.	 Site : 03CH11-HY Condition : AVG_BE_54 3m HORN 9120D-HF HORIZONTAL Detector : Peak Project : 6D2819-02	Left blank

WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH48 5240MHz - L	
1	Vertical	Fundamental
Peak	 Site : 03CH11-HY Condition : PEAK_BE_74 3m HORN 9120D-HF VERTICAL Detector : Peak Project : 6D2819-02	 Site : 03CH11-HY Condition : PEAK_74 3m HORN 9120D-HF VERTICAL Detector : Peak Project : 6D2819-02
	 Site : 03CH11-HY Condition : AVG_BE_54 3m HORN 9120D-HF VERTICAL Detector : Peak Project : 6D2819-02	Left blank

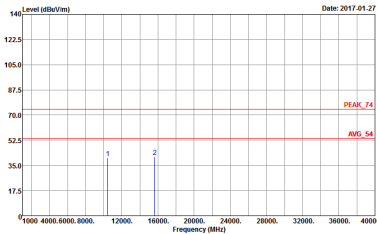
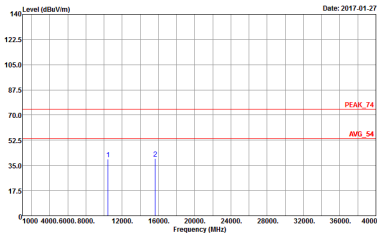


WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH48 5240MHz - R	
1	Vertical	Fundamental
Peak	 Site : 03CH11-HY Condition : PEAK_BE_74 3m HORN 9120D-HF VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 6D2819-02	Left blank
Avg.	 Site : 03CH11-HY Condition : AVG_BE_54 3m HORN 9120D-HF VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 6D2819-02	Left blank

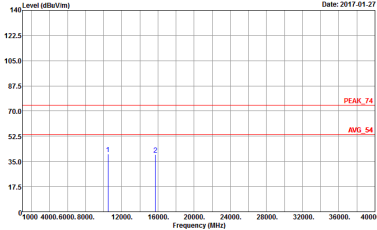
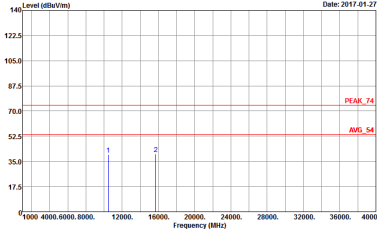
Band 1 - 5150~5250MHz
WIFI 802.11a (Harmonic @ 3m)

WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11a CH36 5180MHz	
1	Horizontal	Vertical
Peak Avg.	 Site : 03CH11-HY Condition : PEAK_74 3m 9170 SHF HORM_150809 HORIZONTAL Detector : Peak Project : 6D2819-02	 Site : 03CH11-HY Condition : PEAK_74 3m 9170 SHF HORM_150809 VERTICAL Detector : Peak Project : 6D2819-02

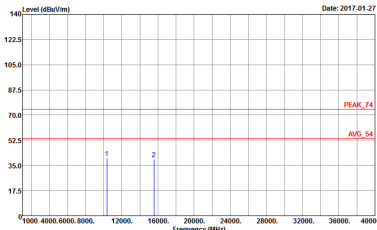
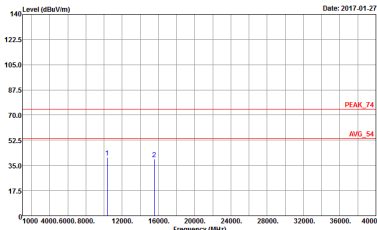


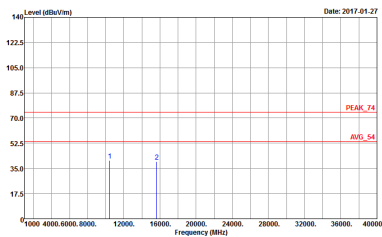
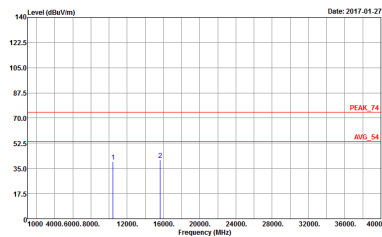
WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11a CH44 5220MHz	
1	Horizontal	Vertical
Peak Avg.	 Site : 03CH11-14Y Condition : PEAK_74 3m 9170 SHF HORM_150809 HORIZONTAL Detector : Peak Project : 6D2819-02	 Site : 03CH11-14Y Condition : PEAK_74 3m 9170 SHF HORM_150809 VERTICAL Detector : Peak Project : 6D2819-02

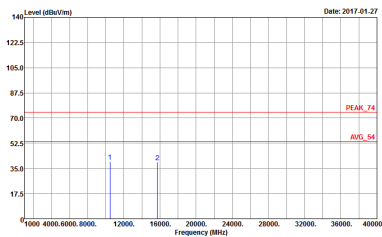
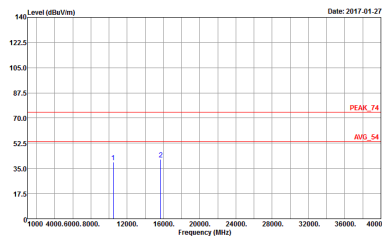


WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11a CH48 5240MHz	
1	Horizontal	Vertical
Peak Avg.	 Site : 03CH11-14Y Condition : PEAK_74 3m 9170 SHF HORM_150809 HORIZONTAL Detector : Peak Project : 6D2819-02	 Site : 03CH11-14Y Condition : PEAK_74 3m 9170 SHF HORM_150809 VERTICAL Detector : Peak Project : 6D2819-02

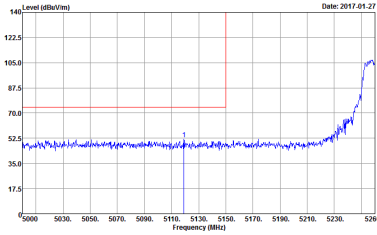
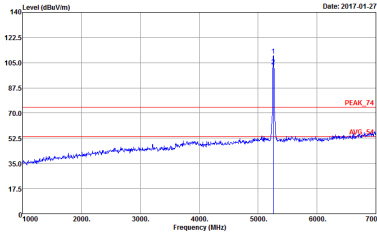
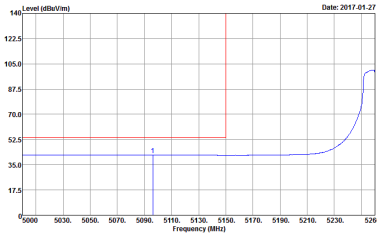
Band 1 5150~5250MHz
WIFI 802.11n HT20 (Harmonic @ 3m)

WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11n HT20 CH36 5180MHz	
1	Horizontal	Vertical
Peak Avg.	 Site : 03CHI1-HY Condition : PEAK_74 3m 9170 SHF HORM_150809 HORIZONTAL Detector : Peak Project : 6D2819-02	 Site : 03CHI1-HY Condition : PEAK_74 3m 9170 SHF HORM_150809 VERTICAL Detector : Peak Project : 6D2819-02

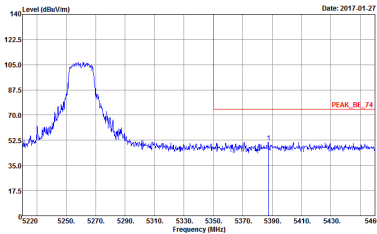
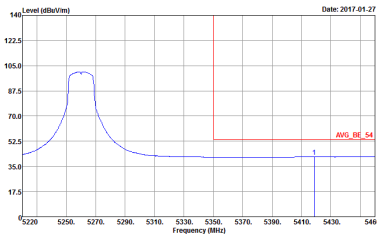
WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11n HT20 CH44 5220MHz	
1	Horizontal	Vertical
Peak Avg.	 Site : 03CH11-14Y Condition : PEAK_74 3m 9170 SHF HORM_150809 HORIZONTAL Detector : Peak Project : 6D2819-02	 Site : 03CH11-14Y Condition : PEAK_74 3m 9170 SHF HORM_150809 VERTICAL Detector : Peak Project : 6D2819-02

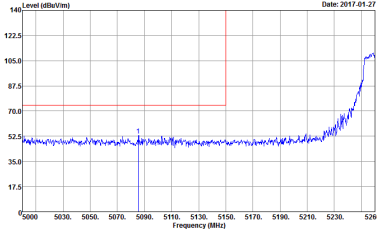
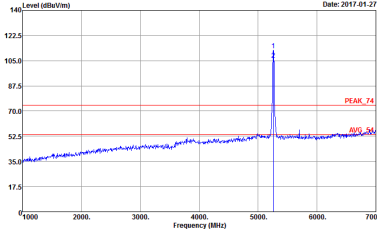
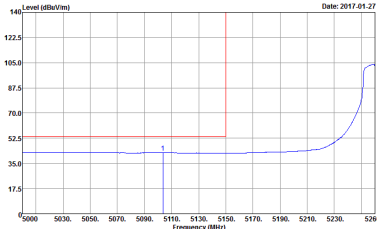
WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11n HT20 CH48 5240MHz	
1	Horizontal	Vertical
Peak Avg.	 Site : 03CH11-14Y Condition : PEAK_74 3m 9170 SHF HORM_150809 HORIZONTAL Detector : Peak Project : 6D2819-02	 Site : 03CH11-14Y Condition : PEAK_74 3m 9170 SHF HORM_150809 VERTICAL Detector : Peak Project : 6D2819-02

Band 2 - 5250~5350MHz
WIFI 802.11a (Band Edge @ 3m)

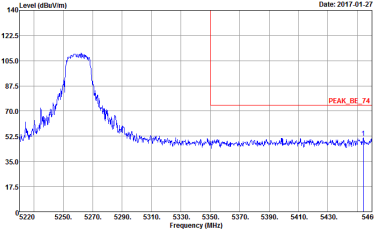
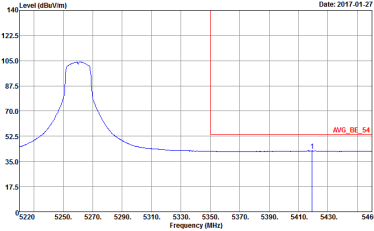
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH52 5260MHz - L	
1	Horizontal	Fundamental
Peak	 Site : 03CH11-HY Condition : PEAK_BE_74 3m HORN 9120D-HF HORIZONTAL Detector : Peak Project : 6D2819-02	 Site : 03CH11-HY Condition : PEAK_74 3m HORN 9120D-HF HORIZONTAL Detector : Peak Project : 6D2819-02
Avg.	 Site : 03CH11-HY Condition : AVG_BE_54 3m HORN 9120D-HF HORIZONTAL Detector : Peak Project : 6D2819-02	Left blank



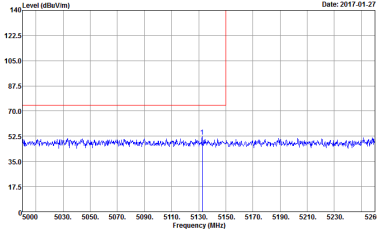
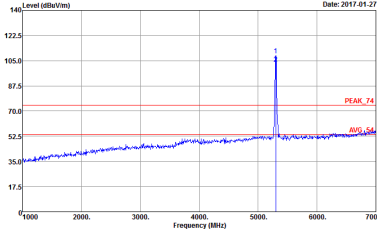
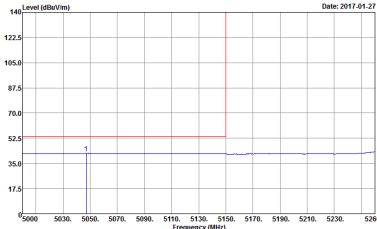
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH52 5260MHz - R	
1	Horizontal	Fundamental
Peak	 Site : 03CH11-HY Condition : PEAK_BE_74 3m HORN 91200-HF HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 6D2819-02	Left blank
Avg.	 Site : 03CH11-HY Condition : AVG_BE_54 3m HORN 91200-HF HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 6D2819-02	Left blank

WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH52 5260MHz - L	
1	Vertical	Fundamental
Peak	 Site : 03CH11-HY Condition : PEAK_BE_74 3m HORN 9120D-HF VERTICAL Detector : Peak Project : 6D2819-02	 Site : 03CH11-HY Condition : PEAK_74 3m HORN 9120D-HF VERTICAL Detector : Peak Project : 6D2819-02
	 Site : 03CH11-HY Condition : AVG_BE_54 3m HORN 9120D-HF VERTICAL Detector : Peak Project : 6D2819-02	Left blank

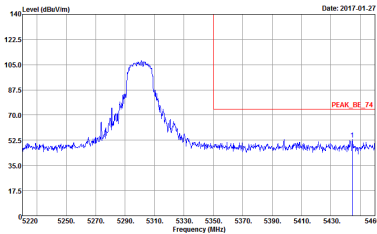
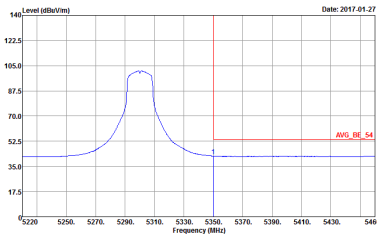


WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH52 5260MHz - R	
1	Vertical	Fundamental
Peak	 Site : 03CH11-HY Condition : PEAK_BE_74 3m HORN 9120D-HF VERTICAL Detector : Peak Project : 6D2819-02	Left blank
Avg.	 Site : 03CH11-HY Condition : AVG_BE_54 3m HORN 9120D-HF VERTICAL Detector : Peak Project : 6D2819-02	Left blank

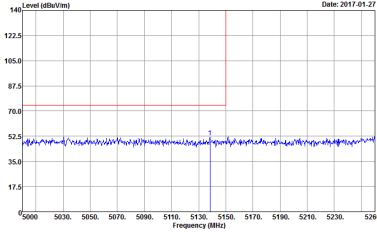
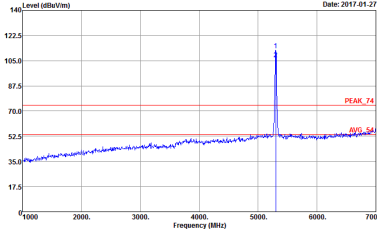
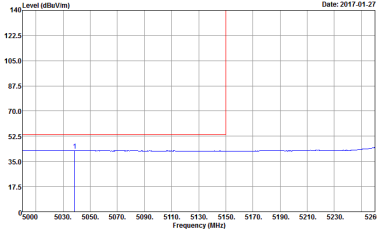


WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH60 5300MHz - L	
1	Horizontal	Fundamental
Peak	 Site : 03CH11-HY Condition : PEAK_BE_74 3m HORN 9120D-HF HORIZONTAL Detector : Peak Project : 6D2819-02	 Site : 03CH11-HY Condition : PEAK_74 3m HORN 9120D-HF HORIZONTAL Detector : Peak Project : 6D2819-02
Avg.	 Site : 03CH11-HY Condition : AVG_BE_54 3m HORN 9120D-HF HORIZONTAL Detector : Peak Project : 6D2819-02	Left blank

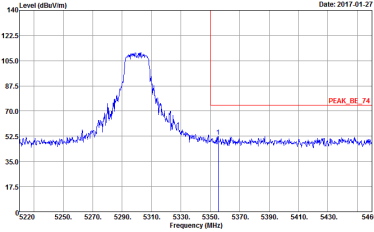
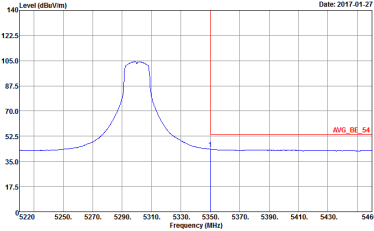


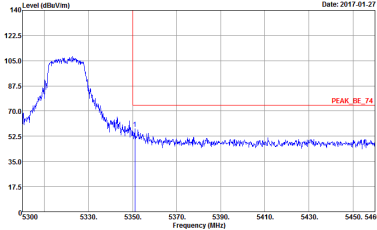
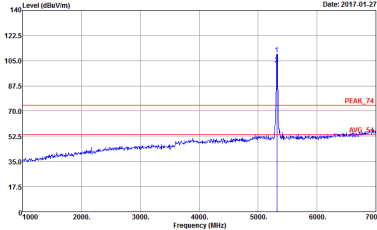
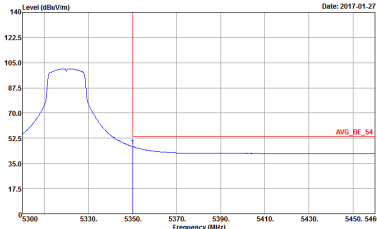
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH60 5300MHz - R	
1	Horizontal	Fundamental
Peak	 Site : 03CH11-HY Condition : PEAK_BE_74 3m HORN 9120D-HF HORIZONTAL Detector : Peak Project : 6D2819-02	Left blank
Avg.	 Site : 03CH11-HY Condition : AVG_BE_54 3m HORN 9120D-HF HORIZONTAL Detector : Peak Project : 6D2819-02	Left blank



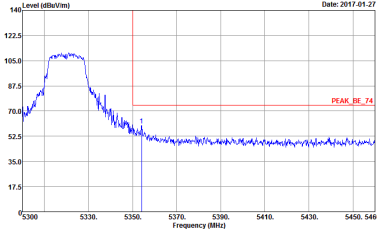
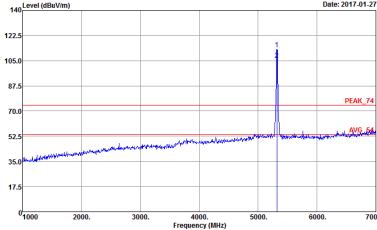
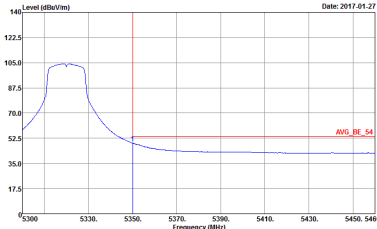
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH60 5300MHz - L	
1	Vertical	Fundamental
Peak	 Site : 03CH11-HY Condition : PEAK_BE_74 3m HORN 9120D-HF VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 6D2819-02	 Site : 03CH11-HY Condition : PEAK_74 3m HORN 9120D-HF VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 6D2819-02
Avg.	 Site : 03CH11-HY Condition : AVG_BE_54 3m HORN 9120D-HF VERTICAL RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak Project : 6D2819-02	Left blank



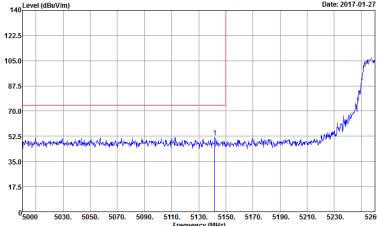
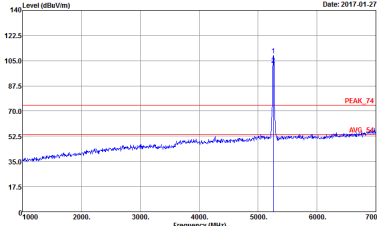
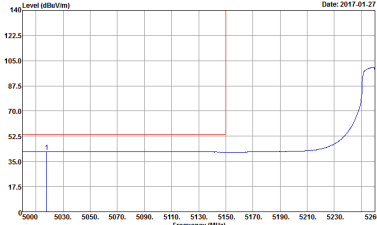
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH60 5300MHz - R	
1	Vertical	Fundamental
Peak	 Site : 03CH11-HY Condition : PEAK_BE_74 3m HORN 9120D-HF VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 6D2819-02	Left blank
Avg.	 Site : 03CH11-HY Condition : AVG_BE_54 3m HORN 9120D-HF VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 6D2819-02	Left blank

WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH64 5320MHz	
1	Horizontal	Fundamental
Peak	 Site : 03CH11-HY Condition : PEAK_BE_74 3m HORN 9120D-HF HORIZONTAL Detector : Peak Project : 6D2819-02	 Site : 03CH11-HY Condition : PEAK_74 3m HORN 9120D-HF HORIZONTAL Detector : Peak Project : 6D2819-02
	 Site : 03CH11-HY Condition : AVG_BE_54 3m HORN 9120D-HF HORIZONTAL Detector : Peak Project : 6D2819-02	Left blank

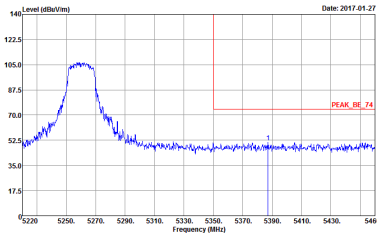
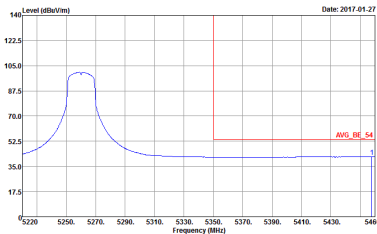


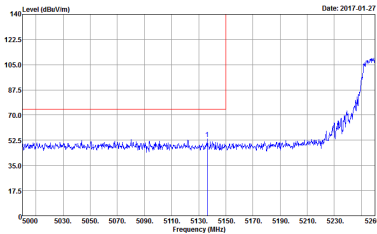
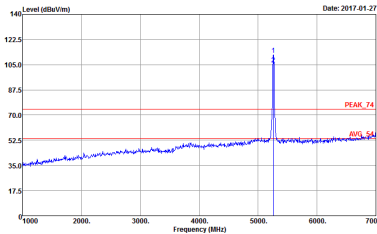
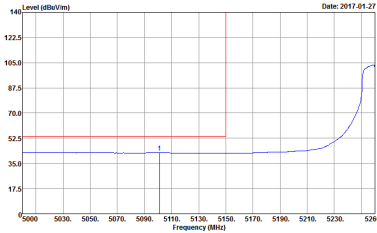
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH64 5320MHz	
1	Vertical	Fundamental
Peak	 Site : 03CH11-HY Condition : PEAK_BE_74 3m HORN 9120D-HF VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 6D2819-02	 Site : 03CH11-HY Condition : PEAK_74 3m HORN 9120D-HF VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 6D2819-02
Avg.	 Site : 03CH11-HY Condition : AVG_BE_54 3m HORN 9120D-HF VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 6D2819-02	Left blank

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

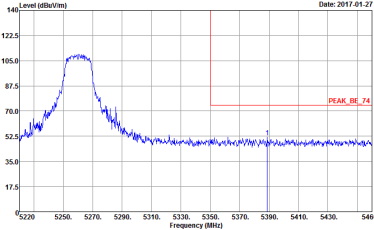
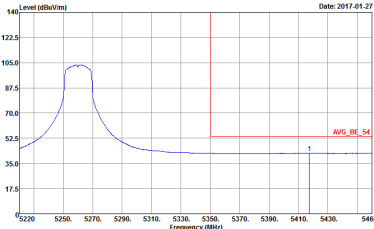
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH52 5260MHz - L	
1	Horizontal	Fundamental
Peak	 Site : 03CHI1-HY Condition : PEAK_BE_74 3m HORN 9120D-HF HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 6D2819-02	 Site : 03CHI1-HY Condition : PEAK_74 3m HORN 9120D-HF HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 6D2819-02
Avg.	 Site : 03CHI1-HY Condition : AVG_BE_54 3m HORN 9120D-HF HORIZONTAL RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak Project : 6D2819-02	Left blank

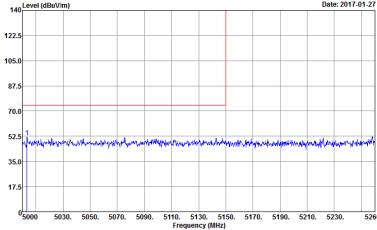
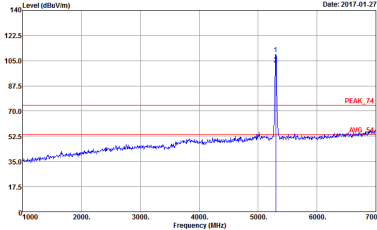
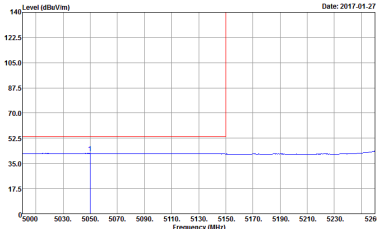


WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH52 5260MHz - R	
1	Horizontal	Fundamental
Peak	 Site : 03CH11-HY Condition : PEAK_BE_74 3m HORN 91200-HF HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 6D2819-02	Left blank
Avg.	 Site : 03CH11-HY Condition : AVG_BE_54 3m HORN 91200-HF HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 6D2819-02	Left blank

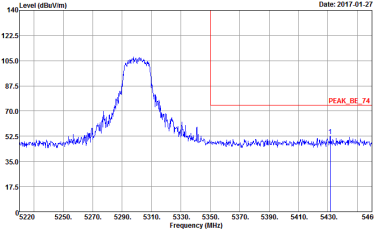
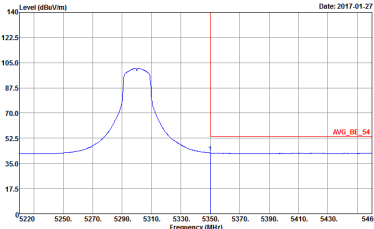
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH52 5260MHz - L	
1	Vertical	Fundamental
Peak	 Site : 03CH11-HY Condition : PEAK_BE_74 3m HORN 9120D-HF VERTICAL Detector : Peak Project : 6D2819-02	 Site : 03CH11-HY Condition : PEAK_74 3m HORN 9120D-HF VERTICAL Detector : Peak Project : 6D2819-02
	 Site : 03CH11-HY Condition : AVG_BE_54 3m HORN 9120D-HF VERTICAL Detector : Peak Project : 6D2819-02	Left blank

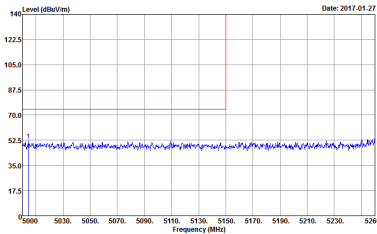
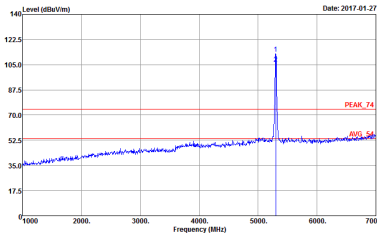
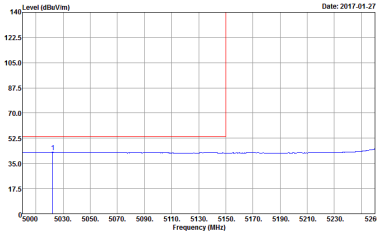


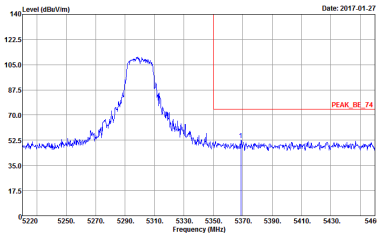
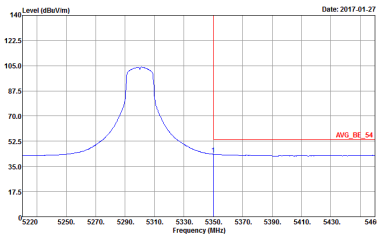
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH52 5260MHz - R	
1	Vertical	Fundamental
Peak	 Site : 03CH11-HY Condition : PEAK_BE_74 3m HORN 9120D-HF VERTICAL Detector : Peak Project : 6D2819-02	Left blank
Avg.	 Site : 03CH11-HY Condition : AVG_BE_54 3m HORN 9120D-HF VERTICAL Detector : Peak Project : 6D2819-02	Left blank

WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH60 5300MHz - L	
1	Horizontal	Fundamental
Peak	 Site : 03CH11-HY Condition : PEAK_BE_74 3m HORN 9120D-HF HORIZONTAL Detector : Peak Project : 6D2819-02	 Site : 03CH11-HY Condition : PEAK_74 3m HORN 9120D-HF HORIZONTAL Detector : Peak Project : 6D2819-02
	 Site : 03CH11-HY Condition : AVG_BE_54 3m HORN 9120D-HF HORIZONTAL Detector : Peak Project : 6D2819-02	Left blank

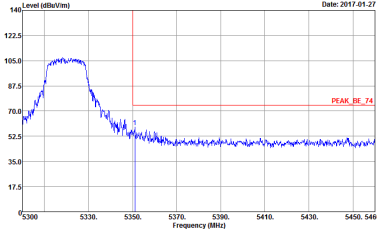
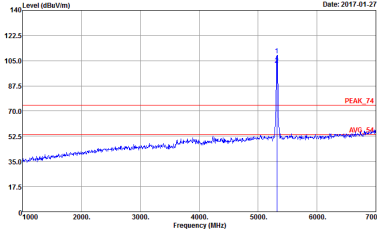
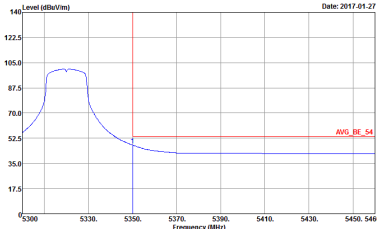


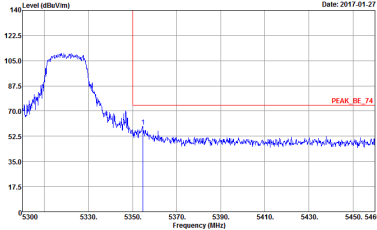
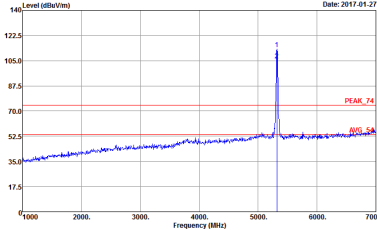
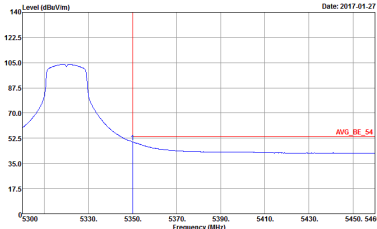
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH60 5300MHz - R	
1	Horizontal	Vertical
Peak	 Site : 03CH11-HY Condition : PEAK_BE_74 3m HORN 9120D-HF HORIZONTAL Detector : Peak Project : 6D2819-02	Left blank
Avg.	 Site : 03CH11-HY Condition : AVG_BE_54 3m HORN 9120D-HF HORIZONTAL Detector : Peak Project : 6D2819-02	Left blank

WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH60 5300MHz - L	
1	Vertical	Fundamental
Peak	 Site : 03CH11-HY Condition : PEAK_BE_74 3m HORN 9120D-HF VERTICAL Detector : Peak Project : 6D2819-02	 Site : 03CH11-HY Condition : PEAK_74 3m HORN 9120D-HF VERTICAL Detector : Peak Project : 6D2819-02
	 Site : 03CH11-HY Condition : AVG_BE_54 3m HORN 9120D-HF VERTICAL Detector : Peak Project : 6D2819-02	Left blank

WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH60 5300MHz - R	
1	Vertical	Fundamental
Peak	 Site : 03CH11-HY Condition : PEAK_BE_74 3m HORN 9120D-HF VERTICAL Detector : Peak Project : 6D2819-02	Left blank
Avg.	 Site : 03CH11-HY Condition : AVG_BE_54 3m HORN 9120D-HF VERTICAL Detector : Peak Project : 6D2819-02	Left blank



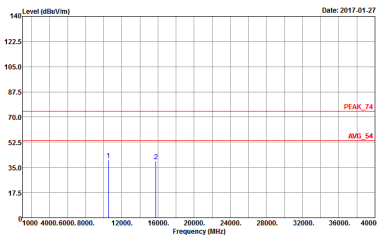
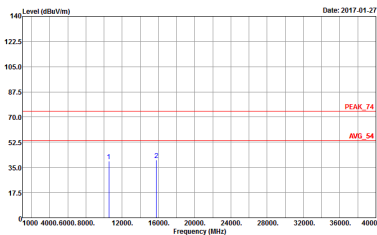
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH64 5320MHz	
1	Horizontal	Fundamental
Peak	 Site : 03CH11-HY Condition : PEAK_BE_74 3m HORN 9120D-HF HORIZONTAL Detector : Peak Project : 6D2819-02	 Site : 03CH11-HY Condition : PEAK_74 3m HORN 9120D-HF HORIZONTAL Detector : Peak Project : 6D2819-02
Avg.	 Site : 03CH11-HY Condition : AVG_BE_54 3m HORN 9120D-HF HORIZONTAL Detector : Peak Project : 6D2819-02	Left blank

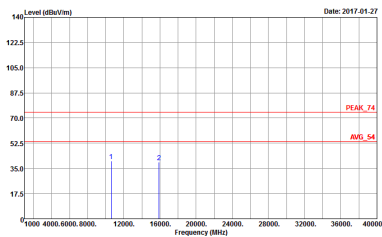
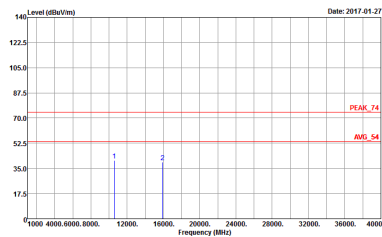
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH64 5320MHz	
1	Vertical	Fundamental
Peak	 Site : 03CH11-HY Condition : PEAK_BE_74 3m HORN 9120D-HF VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 6D2819-02	 Site : 03CH11-HY Condition : PEAK_74 3m HORN 9120D-HF VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 6D2819-02
	 Site : 03CH11-HY Condition : AVG_BE_54 3m HORN 9120D-HF VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 6D2819-02	Left blank

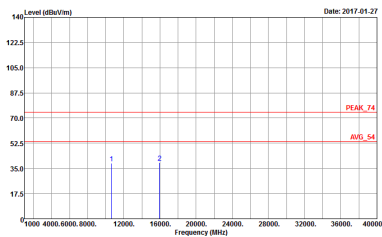
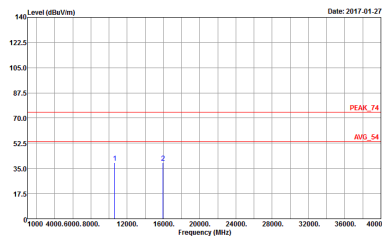


Band 2 - 5250~5350MHz

WIFI 802.11a (Harmonic @ 3m)

WIFI	Band 2 5250~5350MHz Harmonic @ 3m	
ANT	802.11a CH52 5260MHz	
1	Horizontal	Vertical
Peak Avg.	 Site : 03CH11-HY Condition : PEAK_74 3m 9170 SHF HORM_150809 HORIZONTAL Detector : Peak Project : 6D2819-02	 Site : 03CH11-HY Condition : PEAK_74 3m 9170 SHF HORM_150809 VERTICAL Detector : Peak Project : 6D2819-02

WIFI	Band 2 5250~5350MHz Harmonic @ 3m	
ANT	802.11a CH60 5300MHz	
1	Horizontal	Vertical
Peak Avg.	 Site : 03CH11-14Y Condition : PEAK_74 3m 9170 SHF HORM_150809 HORIZONTAL Detector : Peak Project : 6D2819-02	 Site : 03CH11-14Y Condition : PEAK_74 3m 9170 SHF HORM_150809 VERTICAL Detector : Peak Project : 6D2819-02

WIFI	Band 2 5250~5350MHz Harmonic @ 3m	
ANT	802.11a CH64 5320MHz	
1	Horizontal	Vertical
Peak Avg.	 Site : 03CH11-14Y Condition : PEAK_74 3m 9170 SHF HORM_150809 HORIZONTAL Detector : Peak Project : 6D2819-02	 Site : 03CH11-14Y Condition : PEAK_74 3m 9170 SHF HORM_150809 VERTICAL Detector : Peak Project : 6D2819-02

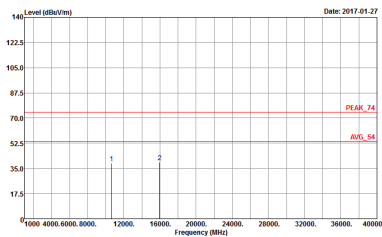
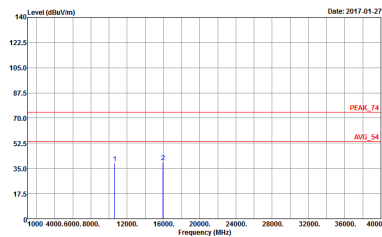


Band 2 5250~5350MHz
WIFI 802.11n HT20 (Harmonic @ 3m)

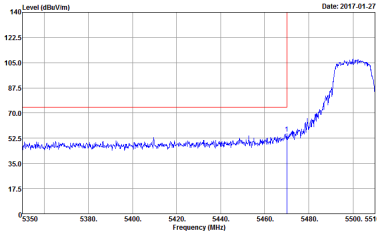
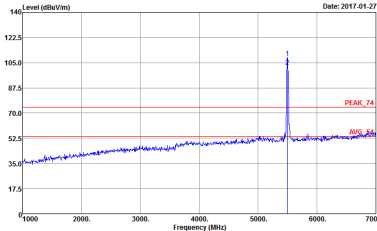
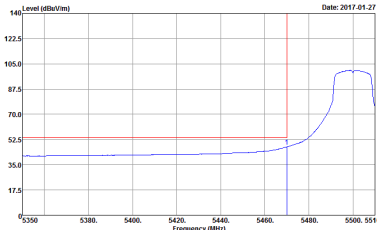
WIFI	Band 2 5250~5350MHz Harmonic @ 3m	
ANT	802.11n HT20 CH52 5260MHz	
1	Horizontal	Vertical
Peak Avg.	Site : 03CHI1-HY Condition : PEAK_74 3m 9170 SHF HORM_150809 HORIZONTAL Detector : Peak Project : 6D2819-02	Site : 03CHI1-HY Condition : PEAK_74 3m 9170 SHF HORM_150809 VERTICAL Detector : Peak Project : 6D2819-02



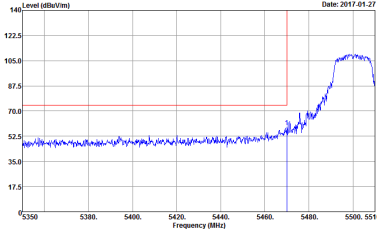
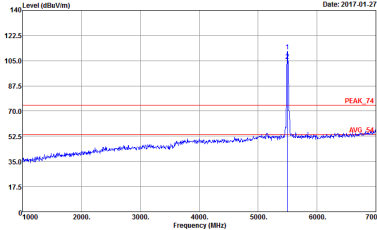
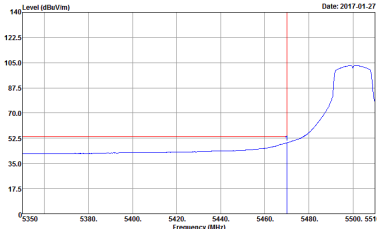
WIFI	Band 2 5250~5350MHz Harmonic @ 3m	
ANT	802.11n HT20 CH60 5300MHz	
1	Horizontal	Vertical
Peak Avg.	Level (dBuV/m) Date: 2017-01-27 Site : 03CH11-14Y Condition : PEAK_74 3m 9170 SHF HORM_150809 HORIZONTAL Detector : Peak Project : 6D2819-02	Level (dBuV/m) Date: 2017-01-27 Site : 03CH11-14Y Condition : PEAK_74 3m 9170 SHF HORM_150809 VERTICAL Detector : Peak Project : 6D2819-02

WIFI	Band 2 5250~5350MHz Harmonic @ 3m	
ANT	802.11n HT20 CH64 5320MHz	
1	Horizontal	Vertical
Peak Avg.	 Site : 03CH11-14Y Condition : PEAK_74 3m 9170 SHF HORM_150809 HORIZONTAL Detector : Peak Project : 6D2819-02	 Site : 03CH11-14Y Condition : PEAK_74 3m 9170 SHF HORM_150809 VERTICAL Detector : Peak Project : 6D2819-02

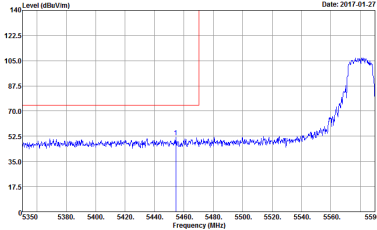
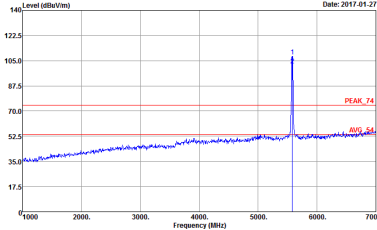
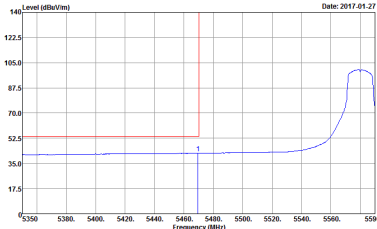
Band 3 - 5470~5725MHz
WIFI 802.11a (Band Edge @ 3m)

WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH100 5500MHz	
1	Horizontal	Fundamental
Peak	 Site : 03CH11-HY Condition : PEAK_BE_74 3m HORN 9120D-HF HORIZONTAL Detector : Peak Project : 6D2819-02	 Site : 03CH11-HY Condition : PEAK_74 3m HORN 9120D-HF HORIZONTAL Detector : Peak Project : 6D2819-02
	 Site : 03CH11-HY Condition : AVG_BE_54 3m HORN 9120D-HF HORIZONTAL Detector : Peak Project : 6D2819-02	Left blank

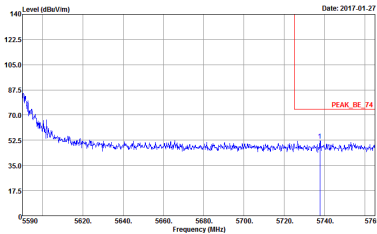
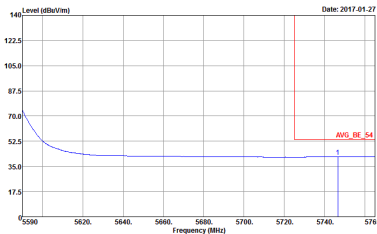


WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH100 5500MHz	
1	Vertical	Fundamental
Peak	 Site : 03CH11-HY Condition : PEAK_BE_74 3m HORN 9120D-HF VERTICAL Detector : Peak Project : 6D2819-02	 Site : 03CH11-HY Condition : PEAK_74 3m HORN 9120D-HF VERTICAL Detector : Peak Project : 6D2819-02
Avg.	 Site : 03CH11-HY Condition : AVG_BE_54 3m HORN 9120D-HF VERTICAL Detector : Peak Project : 6D2819-02	Left blank

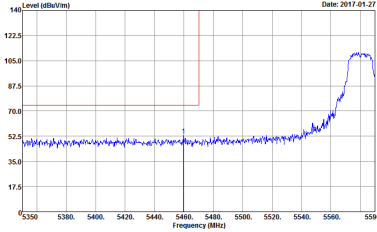
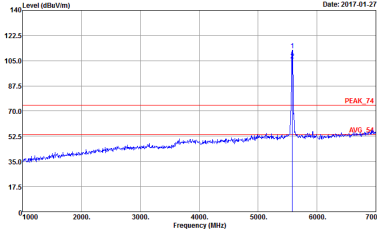
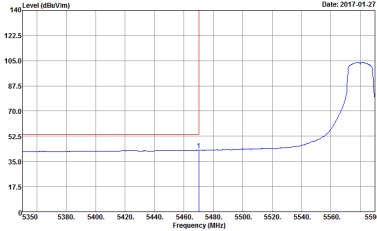


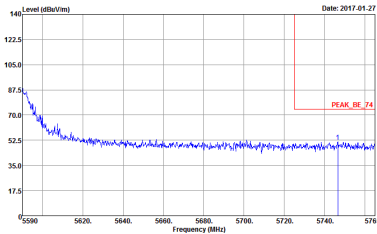
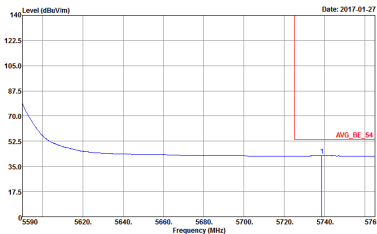
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH116 5580MHz - L	
1	Horizontal	Fundamental
Peak	 Site : 03CH11-HY Condition : PEAK_BE_74 3m HORN 9120D-HF HORIZONTAL Detector : Peak Project : 6D2819-02	 Site : 03CH11-HY Condition : PEAK_74 3m HORN 9120D-HF HORIZONTAL Detector : Peak Project : 6D2819-02
Avg.	 Site : 03CH11-HY Condition : AVG_BE_54 3m HORN 9120D-HF HORIZONTAL Detector : Peak Project : 6D2819-02	Left blank



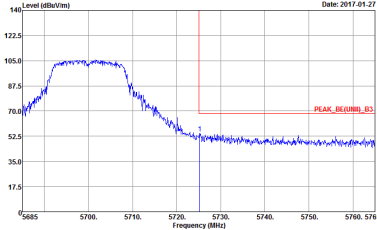
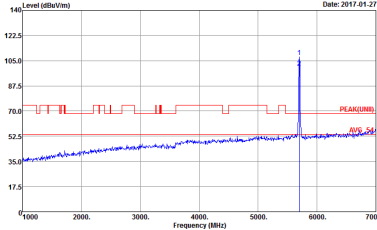
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH116 5580MHz - R	
1	Horizontal	Fundamental
Peak	 Site : 03CH11-HY Condition : PEAK_BE_74 3m HORN 9120D-HF HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 6D2819-02	Left blank
Avg.	 Site : 03CH11-HY Condition : AVG_BE_54 3m HORN 9120D-HF HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 6D2819-02	Left blank



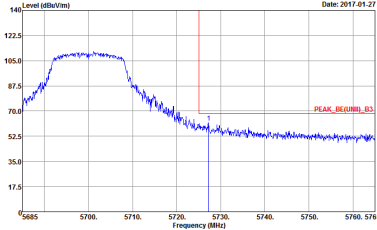
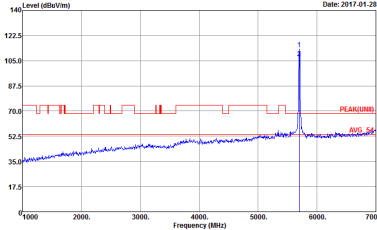
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH116 5580MHz - L	
1	Vertical	Fundamental
Peak	 Site : 03CH11-HY Condition : PEAK_BE_74 3m HORN 9120D-HF VERTICAL Detector : Peak Project : 6D2819-02	 Site : 03CH11-HY Condition : PEAK_74 3m HORN 9120D-HF VERTICAL Detector : Peak Project : 6D2819-02
Avg.	 Site : 03CH11-HY Condition : AVG_BE_54 3m HORN 9120D-HF VERTICAL Detector : Peak Project : 6D2819-02	Left blank

WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH116 5580MHz - R	
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 : 6D2819-02	Left blank
Avg.	 Site : 03CH11-HY Condition : AVG_BE_54 3m HORN 9120D-HF VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 6D2819-02	Left blank



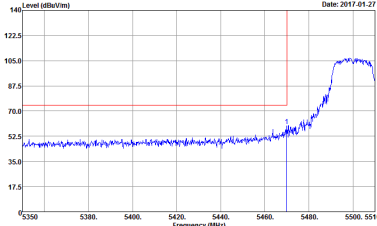
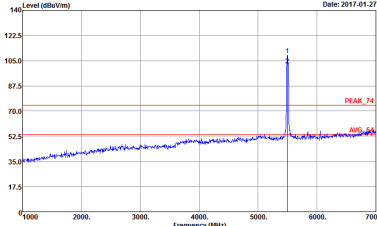
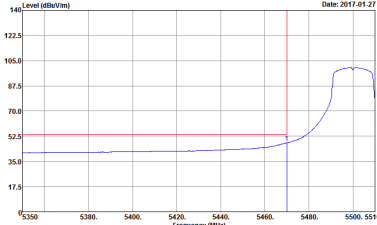
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH140 5700MHz	
1	Horizontal	Fundamental
Peak	 Site : 03CH11-14Y Condition : PEAK_BE(UNIT)_B3 3m HORN 9120D-HF HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 602819-02 Setting : 14 : 68.2	 Site : 03CH11-14Y Condition : PEAK(UNIT) 3m HORN 9120D-HF HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 602819-02 Setting : 14 : 68.2
Avg.	Left blank	Left blank



WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH140 5700MHz	
1	Vertical	Fundamental
Peak	 Site : 03CH11-14Y Condition : PEAK_BE(UNIT1)_B3 3m HORN 9120D-HF VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 602819-02 Setting : 14 : 68.2	 Site : 03CH11-14Y Condition : PEAK(UNIT1) 3m HORN 9120D-HF VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 602819-02 Setting : 14 : 68.2
Avg.	Left blank	Left blank

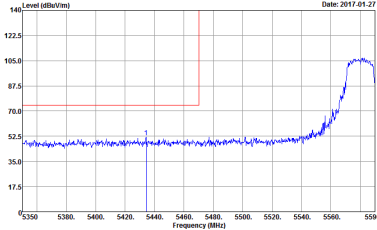
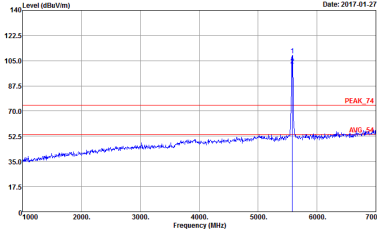
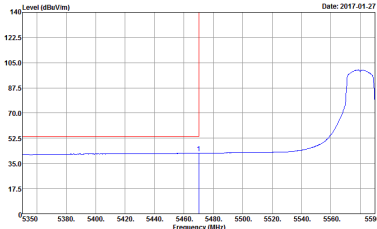


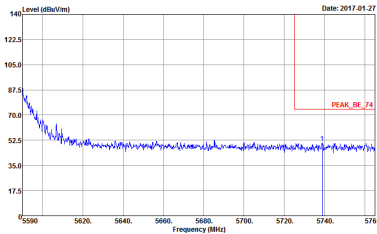
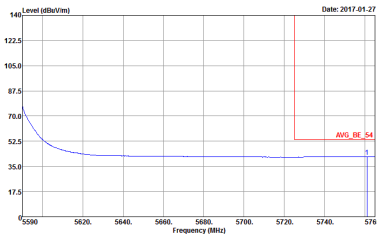
Band 3 5470~5725MHz
WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT20 CH100 5500MHz	
1	Horizontal	Fundamental
Peak	 Site : 03CH11-1FY Condition : PEAK_BE_74 3m HORN 9120D-HF HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 6D2819-02	 Site : 03CH11-1FY Condition : PEAK_74 3m HORN 9120D-HF HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 6D2819-02
Avg.	 Site : 03CH11-1FY Condition : AVG_BE_54 3m HORN 9120D-HF HORIZONTAL RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak Project : 6D2819-02	Left blank

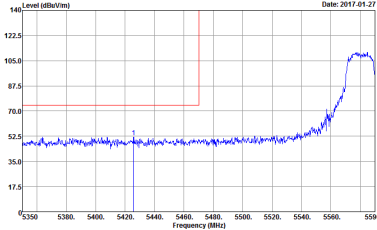
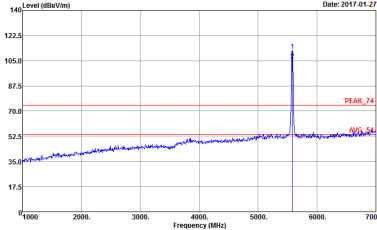
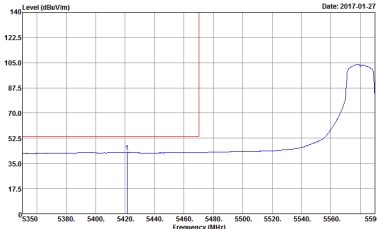


WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT20 CH100 5500MHz	
1	Vertical	Fundamental
Peak	Site : 03CH11-HY Condition : PEAK_BE_74 3m HORN 9120D-HF VERTICAL Detector : Peak Project : 6D2819-02	Site : 03CH11-HY Condition : PEAK_74 3m HORN 9120D-HF VERTICAL Detector : Peak Project : 6D2819-02
Avg.	Site : 03CH11-HY Condition : AVG_BE_54 3m HORN 9120D-HF VERTICAL Detector : Peak Project : 6D2819-02	Left blank

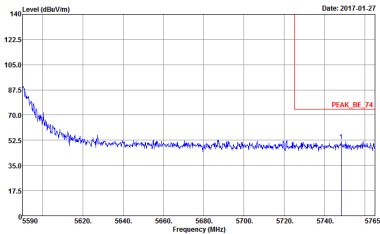
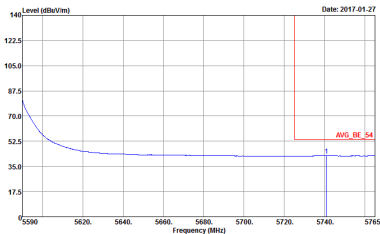
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT20 CH116 5580MHz - L	
1	Horizontal	Fundamental
Peak	 Site : 03CH11-HY Condition : PEAK_BE_74 3m HORN 9120D-HF HORIZONTAL Detector : Peak Project : 6D2819-02	 Site : 03CH11-HY Condition : PEAK_74 3m HORN 9120D-HF HORIZONTAL Detector : Peak Project : 6D2819-02
	 Site : 03CH11-HY Condition : AVG_BE_54 3m HORN 9120D-HF HORIZONTAL Detector : Peak Project : 6D2819-02	Left blank

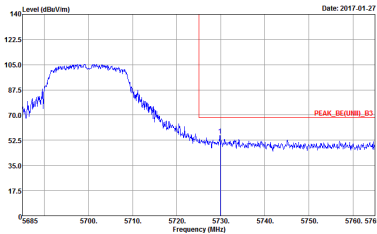
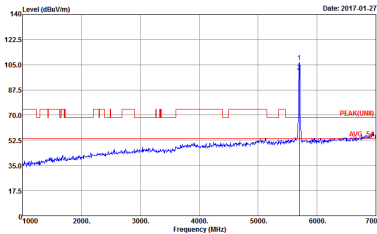
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT20 CH116 5580MHz - R	
1	Horizontal	Fundamental
Peak	 Site : 03CH11-HY Condition : PEAK_BE_74 3m HORN 9120D-HF HORIZONTAL Detector : Peak Project : 6D2819-02	Left blank
Avg.	 Site : 03CH11-HY Condition : AVG_BE_54 3m HORN 9120D-HF HORIZONTAL Detector : Peak Project : 6D2819-02	Left blank

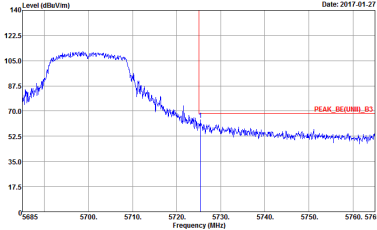
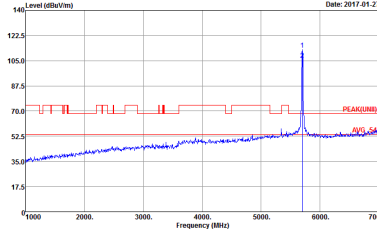


WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT20 CH116 5580MHz - L	
1	Vertical	Fundamental
Peak	 Site : 03CH11-HY Condition : PEAK_BE_74 3m HORN 9120D-HF VERTICAL Detector : Peak Project : 6D2819-02	 Site : 03CH11-HY Condition : PEAK_74 3m HORN 9120D-HF VERTICAL Detector : Peak Project : 6D2819-02
Avg.	 Site : 03CH11-HY Condition : AVG_BE_54 3m HORN 9120D-HF VERTICAL Detector : Peak Project : 6D2819-02	Left blank

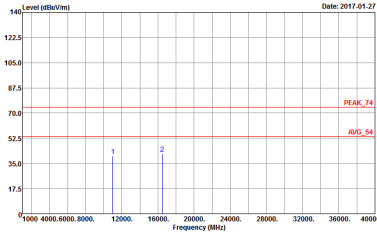
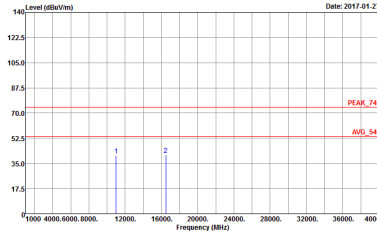


WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT20 CH116 5580MHz - R	
1	Vertical	Fundamental
Peak	 Site : 03CH11-HY Condition : PEAK_BE_74 3m HORN 9120D-HF VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 6D2819-02	Left blank
Avg.	 Site : 03CH11-HY Condition : AVG_BE_54 3m HORN 9120D-HF VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 6D2819-02	Left blank

WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT20 CH140 5700MHz	
1	Horizontal	Fundamental
Peak	 Site : 03CH11-14Y Condition : PEAK_BE(UNIT1)_B3 3m HORN 9120D-HF HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 602819-02 Setting : 14 : 68.2	 Site : 03CH11-14Y Condition : PEAK(UNIT1) 3m HORN 9120D-HF HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 602819-02 Setting : 14 : 68.2
Avg.	Left blank	Left blank

WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT20 CH140 5700MHz	
1	Vertical	Fundamental
Peak.	 Site : 03CH11-14Y Condition : PEAK_BE(UNIT1)_B3 3m HORN 9120D-HF VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 602819-02 Setting : 14 : 68.2	 Site : 03CH11-14Y Condition : PEAK(UNIT1) 3m HORN 9120D-HF VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 602819-02 Setting : 14 : 68.2
Avg.	Left blank	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.	 Site : 03CH11-HY Condition : PEAK_74 3m 9170 SHF HORM_150809 HORIZONTAL Detector : Peak Project : 6D2819-02	 Site : 03CH11-HY Condition : PEAK_74 3m 9170 SHF HORM_150809 VERTICAL Detector : Peak Project : 6D2819-02



WIFI	Band 3 5470~5725MHz Harmonic @ 3m	
ANT	802.11a CH116 5580MHz	
1	Horizontal	Vertical
Peak Avg.	Site : 03CH11-14Y Condition : PEAK_74 3m 9170 SHF HORM_150809 HORIZONTAL Detector : Peak Project : 6D2819-02	Site : 03CH11-14Y Condition : PEAK_74 3m 9170 SHF HORM_150809 VERTICAL Detector : Peak Project : 6D2819-02



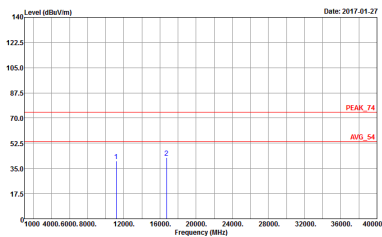
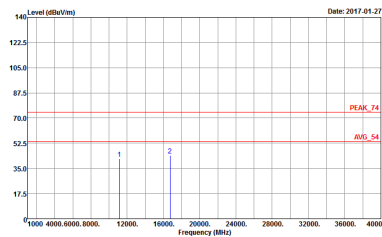
WIFI	Band 3 5470~5725MHz Harmonic @ 3m	
ANT	802.11a CH140 5700MHz	
1	Horizontal	Vertical
Peak Avg.	Level (dBuV/m) Date: 2017-01-27 Site : 03CH11-14Y Condition : PEAK(UNII) 3m 9170 SHF HORM_150809 HORIZONTAL Detector : Peak Project : 6D2819-02	Level (dBuV/m) Date: 2017-01-27 Site : 03CH11-14Y Condition : PEAK(UNII) 3m 9170 SHF HORM_150809 VERTICAL Detector : Peak Project : 6D2819-02

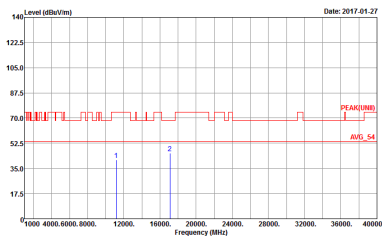
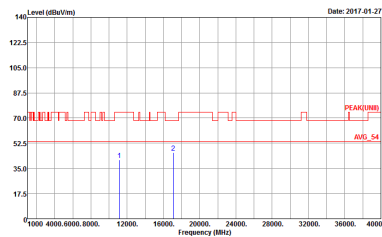


Band 3 5470~5725MHz
WIFI 802.11n HT20 (Harmonic @ 3m)

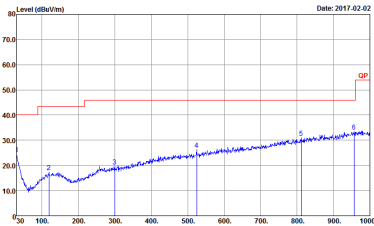
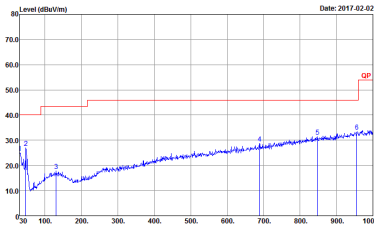
WIFI	Band 3 5470~5725MHz Harmonic @ 3m	
ANT	802.11n HT20 CH100 5500MHz	
1	Horizontal	Vertical
Peak Avg.	Site : 03CH11-HY Condition : PEAK_74 3m 9170 SHF HORM_150809 HORIZONTAL Detector : Peak Project : 6D2819-02	Site : 03CH11-HY Condition : PEAK_74 3m 9170 SHF HORM_150809 VERTICAL Detector : Peak Project : 6D2819-02



WIFI	Band 3 5470~5725MHz Harmonic @ 3m	
ANT	802.11n HT20 CH116 5580MHz	
1	Horizontal	Vertical
Peak Avg.	 Site : 03CH11-14Y Condition : PEAK_74 3m 9170 SHF HORM_150809 HORIZONTAL Detector : Peak Project : 6D2819-02	 Site : 03CH11-14Y Condition : PEAK_74 3m 9170 SHF HORM_150809 VERTICAL Detector : Peak Project : 6D2819-02

WIFI	Band 3 5470~5725MHz Harmonic @ 3m	
ANT	802.11n HT20 CH140 5700MHz	
1	Horizontal	Vertical
Peak Avg.	 Site : 03CH11-14Y Condition : PEAK(UNIT) 3m 9170 SHF HORM_150809 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : 602819-02	 Site : 03CH11-14Y Condition : PEAK(UNIT) 3m 9170 SHF HORM_150809 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : 602819-02

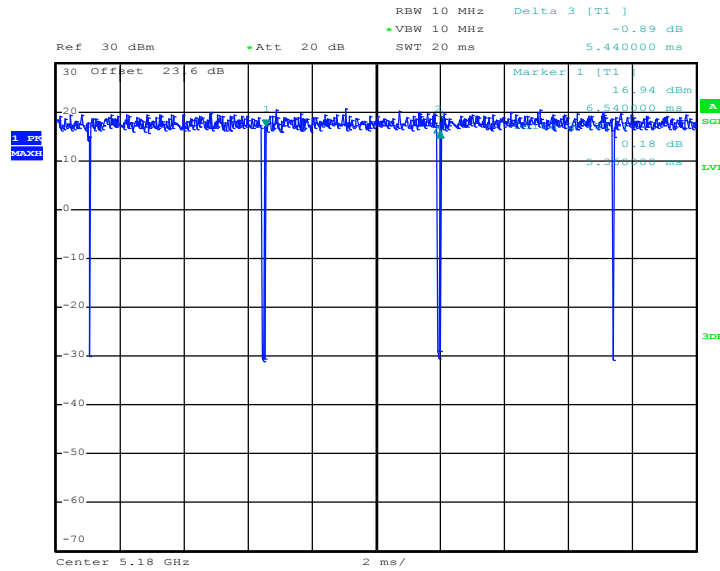
Emission below 1GHz
5GHz WIFI 802.11n HT20 (LF)

WIFI	5GHz WIFI	
ANT	802.11n HT20 LF	
1	Horizontal	Vertical
QP / Peak	 Site : 03CH11-HY Condition : QP 3m BE-LOG 6111D-LF_ETC HORIZONTAL Project : 6D2819-02	 Site : 03CH11-HY Condition : QP 3m BE-LOG 6111D-LF_ETC VERTICAL Project : 6D2819-02

Appendix D. Duty Cycle Plots

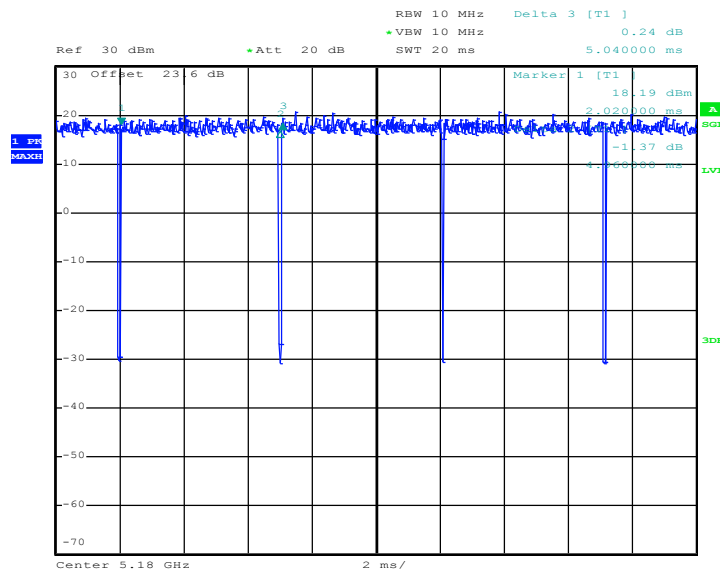
Band	Duty Cycle(%)	T(us)	1/T(kHz)	VBW Setting
802.11a	98.53	-	-	10Hz
5GHz 802.11n HT20	98.41	-	-	10Hz

802.11a



Date: 12.JAN.2017 01:27:39

802.11n HT20



Date: 12.JAN.2017 01:23:21