



Partial FCC RF Test Report

APPLICANT : Huawei Technologies Co.,Ltd.
EQUIPMENT : Smart Phone
BRAND NAME : honor
MODEL NAME : JAT-L41
FCC ID : QISJAT-L41
STANDARD : FCC Part 15 Subpart C §15.247
CLASSIFICATION : (DTS) Digital Transmission System

This is a partial report. The product was received on Jan. 14, 2019 and testing was completed on Jan. 29, 2019. We, Sporton International (Shenzhen) 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 (Shenzhen) Inc., the test report shall not be reproduced except in full.

Eric Shih



Approved by: Eric Shih / Manager

Sporton International (Shenzhen) Inc.

**1/F, 2/F, Bldg 5, Shiling Industrial Zone, Xinwei Village, Xili, Nanshan, Shenzhen City,
Guangdong Province 518055, China**



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REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FR911406C	Rev. 01	Initial issue of report	Jan. 31, 2019



SUMMARY OF TEST RESULT

Report Section	FCC Partial FCC Rule	Description	Limit	Result	Remark
3.1	15.247(b)	Power Output Measurement	$\leq 30\text{dBm}$	Pass	-
3.2	15.247(d)	Radiated Band Edges and Radiated Spurious Emission	15.209(a) & 15.247(d)	Pass	Under limit 4.07 dB at 2488.38 MHz
3.3	15.207	AC Conducted Emission	15.207(a)	Pass	Under limit 11.70 dB at 0.59 MHz
3.4	15.203 & 15.247(b)	Antenna Requirement	N/A	Pass	-



1 General Description

1.1 Applicant

Huawei Technologies Co.,Ltd.

Administration Building, Headquarters of Huawei Technologies Co., Ltd., Bantian, Longgang District, Shenzhen, 518129, P.R.C

1.2 Manufacturer

Huawei Technologies Co.,Ltd.

Administration Building, Headquarters of Huawei Technologies Co., Ltd., Bantian, Longgang District, Shenzhen, 518129, P.R.C

1.3 Product Feature of Equipment Under Test

Product Feature	
Equipment	Smart Phone
Brand Name	honor
Model Name	JAT-L41
FCC ID	QISJAT-L41
EUT supports Radios application	GSM/GPRS/EGPRS/WCDMA/HSPA/HSPA+/DC-HSDPA/LTE WLAN 2.4GHz 802.11b/g/n (HT20/HT40) Bluetooth BR/EDR/LE
IMEI Code	Conducted: N/A AC Conducted Emission: 867638040015223/867638040016809 Radiated Emission: N/A
HW Version	HL1JATM
SW Version	9.0.1.108(C900E70R1P8)
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 Channel Frequency Range	2412 MHz ~ 2462 MHz
Maximum (Peak) Output Power to antenna	802.11b : 20.78 dBm (0.1197 W) 802.11g : 25.18 dBm (0.3296 W) 802.11n HT20 : 25.13 dBm (0.3258 W) 802.11n HT40 : 24.61 dBm (0.2891 W)
Antenna Type / Gain	Internal Antenna with gain -0.87 dBi
Type of Modulation	802.11b : DSSS (DBPSK / DQPSK / CCK) 802.11g/n : OFDM (BPSK / QPSK / 16QAM / 64QAM)

1.5 Accessories List

Specification of Accessory				
AC Adapter 1	Brand Name	Huawei Technologies Co., Ltd.	Model Name	HW-050100B01
	Power Rating	I/P: 100 - 240 Vac; O/P: 5Vdc, 1.0A		
	Manufacturer	Dongguan Phitek Electronics Co., Ltd		
AC Adapter 2	Brand Name	Huawei Technologies Co., Ltd.	Model Name	HW-050100B01
	Power Rating	I/P: 100 - 240 Vac; O/P: 5Vdc, 1.0A		
	Manufacturer	HUIZHOU BYD ELECTRONIC CO., LTD		
AC Adapter 3	Brand Name	Huawei Technologies Co., Ltd.	Model Name	HW-050100B01
	Power Rating	I/P: 100 - 240 Vac; O/P: 5Vdc, 1.0A		
	Manufacturer	SHENZHEN HUNTKEY ELECTRIC CO., LTD.		
AC Adapter 4	Brand Name	Huawei Technologies Co., Ltd.	Model Name	HW-050100E01
	Power Rating	I/P: 100 - 240 Vac; O/P: 5Vdc, 1.0A		
	Manufacturer	Dongguan Phitek Electronics Co., Ltd.		
AC Adapter 5	Brand Name	Huawei Technologies Co., Ltd.	Model Name	HW-050100E01
	Power Rating	I/P: 100 - 240 Vac; O/P: 5Vdc, 1.0A		
	Manufacturer	HUIZHOU BYD ELECTRONIC CO., LTD		
AC Adapter 6	Brand Name	Huawei Technologies Co., Ltd.	Model Name	HW-050100E01
	Power Rating	I/P: 100 - 240 Vac; O/P: 5Vdc, 1.0A		
	Manufacturer	SHENZHEN HUNTKEY ELECTRIC CO., LTD.		
AC Adapter 7	Brand Name	Huawei Technologies Co., Ltd.	Model Name	HW-050100A01
	Power Rating	I/P: 100 - 240 Vac; O/P: 5Vdc, 1.0A		
	Manufacturer	Dongguan Phitek Electronics Co., Ltd.		
AC Adapter 8	Brand Name	Huawei Technologies Co., Ltd.	Model Name	HW-050100A01
	Power Rating	I/P: 100 - 240 Vac; O/P: 5Vdc, 1.0A		
	Manufacturer	HUIZHOU BYD ELECTRONIC CO., LTD		
AC Adapter 9	Brand Name	Huawei Technologies Co., Ltd.	Model Name	HW-050100A01
	Power Rating	I/P: 100 - 240 Vac; O/P: 5Vdc, 1.0A		
	Manufacturer	SHENZHEN HUNTKEY ELECTRIC CO., LTD.		
AC Adapter 10	Brand Name	Huawei Technologies Co., Ltd.	Model Name	HW-050100U01
	Power Rating	I/P: 100 - 240 Vac; O/P: 5Vdc, 1.0A		
	Manufacturer	Dongguan Phitek Electronics Co., Ltd.		
AC Adapter 11	Brand Name	Huawei Technologies Co., Ltd.	Model Name	HW-050100U01
	Power Rating	I/P: 100 - 240 Vac; O/P: 5Vdc, 1.0A		
	Manufacturer	HUIZHOU BYD ELECTRONIC CO., LTD		
AC Adapter 12	Brand Name	Huawei Technologies Co., Ltd.	Model Name	HW-050100U01
	Power Rating	I/P: 100 - 240 Vac; O/P: 5Vdc, 1.0A		
	Manufacturer	SHENZHEN HUNTKEY ELECTRIC CO., LTD.		

Battery 1	Brand Name	Huawei Technologies Co., Ltd.	Model Name	HB405979ECW
	Power Rating	3.82Vdc, 2920mAh	Manufacturer	Sunwoda
Battery 2	Brand Name	Huawei Technologies Co., Ltd.	Model Name	HB405979ECW
	Power Rating	3.82Vdc, 2920mAh	Manufacturer	SCUD
Battery 3	Brand Name	Huawei Technologies Co., Ltd.	Model Name	HB405979ECW
	Power Rating	3.82Vdc, 2920mAh	Manufacturer	Desay
USB Cable 1	Brand Name	Huawei Technologies Co., Ltd.	Model Name	L99U2013-CS-H
	Signal Line	1.0 meter, non-shielded cable, without ferrite core		
USB Cable 2	Brand Name	Huawei Technologies Co., Ltd.	Model Name	203-0786-0
	Signal Line	1.0 meter, non-shielded cable, without ferrite core		
USB Cable 3	Brand Name	Huawei Technologies Co., Ltd.	Model Name	130-26654
	Signal Line	1.0 meter, non-shielded cable, without ferrite core		
USB Cable 4	Brand Name	Huawei Technologies Co., Ltd.	Model Name	WA0007
	Signal Line	1.0 meter, non-shielded cable, without ferrite core		
USB Cable 5	Brand Name	Huawei Technologies Co., Ltd.	Model Name	L99U2017-CS-H
	Signal Line	1.0 meter, non-shielded cable, without ferrite core		
USB Cable 6	Brand Name	Huawei Technologies Co., Ltd.	Model Name	203-1583-0
	Signal Line	1.0 meter, non-shielded cable, without ferrite core		
USB Cable 7	Brand Name	Huawei Technologies Co., Ltd.	Model Name	130-26669
	Signal Line	1.0 meter, non-shielded cable, without ferrite core		
USB Cable 8	Brand Name	Huawei Technologies Co., Ltd.	Model Name	WA0001
	Signal Line	1.0 meter, non-shielded cable, without ferrite core		
USB Cable 9	Brand Name	Huawei Technologies Co., Ltd.	Model Name	CUBB01M-HC304-DH
	Signal Line	1.0 meter, non-shielded cable, without ferrite core		

1.6 Modification of EUT

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

1.7 Testing Location

Sporton Lab is accredited to ISO 17025 by National Voluntary Laboratory Accreditation Program (NVLAP code: 600156-0).

Test Site	Sporton International (Shenzhen) Inc.		
Test Site Location	1/F, 2/F, Bldg 5, Shiling Industrial Zone, Xinwei Village, Xili, Nanshan, Shenzhen City, Guangdong Province 518055, China TEL: +86-755-8637-9589 FAX: +86-755-8637-9595		
Test Site No.	Sporton Site No.	FCC designation No.	FCC Test Firm Registration No.
	TH01-SZ CO01-SZ	CN5018	337463

Test Site	Sporton International (Shenzhen) Inc.		
Test Site Location	No. 3 Bldg the third floor of south, Shahe River west, Fengzeyuan Warehouse, Nanshan District, Shenzhen City, Guangdong Province 518055, China TEL: +86-755- 3320-2398		
Test Site No.	Sporton Site No.	FCC designation No.	FCC Test Firm Registration No.
	03CH01-SZ	CN5019	577730

1.8 Applicable Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- ♦ 47 CFR Part 15 Subpart C §15.247
- ♦ FCC KDB 558074 D01 15.247 Meas Guidance v05
- ♦ ANSI C63.10-2013

Remark:

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

2 Test Configuration of Equipment Under Test

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

2.1 Carrier Frequency and Channel

Frequency Band	Channel	Freq. (MHz)	Channel	Freq. (MHz)
2400-2483.5 MHz	1	2412	7	2442
	2	2417	8	2447
	3	2422	9	2452
	4	2427	10	2457
	5	2432	11	2462
	6	2437		

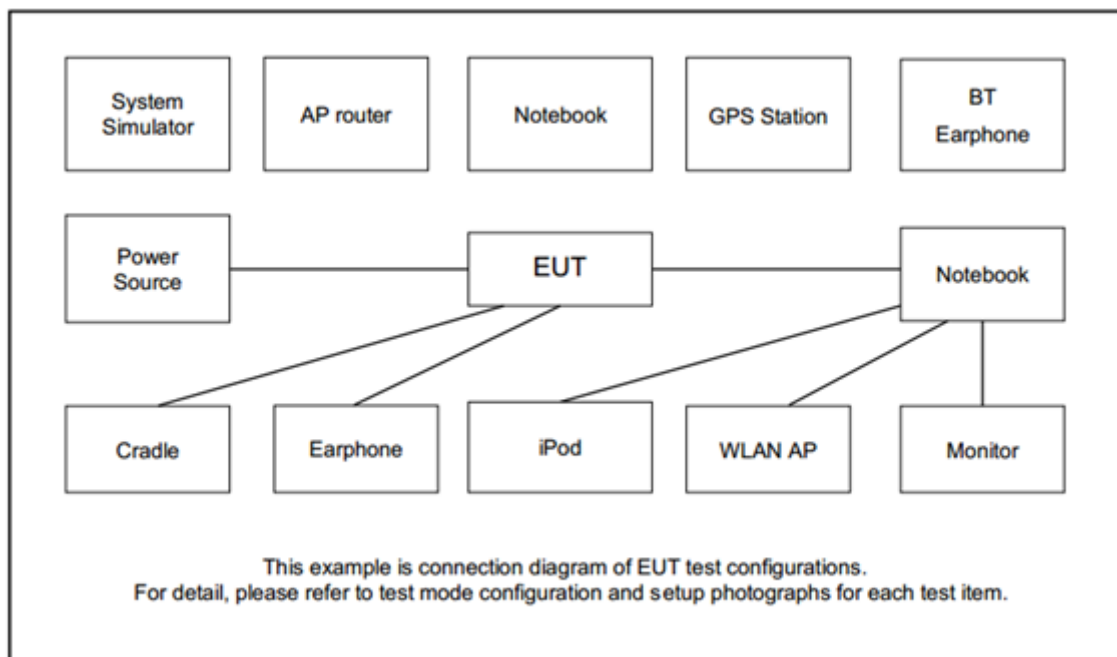
2.2 Test Mode

Final test modes are considering the modulation and worse data rates as below table.

Modulation	Data Rate
802.11b	1 Mbps
802.11g	6 Mbps
802.11n HT20	MCS0
802.11n HT40	MCS0

Test Cases	
AC Conducted Emission	Mode 1 : GSM1900 Idle + Bluetooth Link + WLAN Link + USB Cable 1(Charging from Adapter 1) + Battery 1 + Earphone + SIM 1
Remark: For Radiated Test Cases, The tests were performed with Adapter 4, USB Cable 9 and Earphone.	

2.3 Connection Diagram of Test System



2.4 Support Unit used in test configuration and system

Item	Equipment	Trade Name	Model Name	FCC ID	Data Cable	Power Cord
1.	System Simulator	R&S	CMU 200	N/A	N/A	Unshielded, 1.8 m
2.	WLAN AP	Dlink	DIR-820L	KA2IR820LA1	N/A	Unshielded, 1.8m
3.	Notebook	Lenovo	E540	FCC DoC	N/A	AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m
4.	Bluetooth Earphone	Samsung	EO-MG900	PYAHS-107W	N/A	N/A
5.	Earphone	Apple	MC690ZP/A	N/A	Shielded, 1.0m	N/A

2.5 EUT Operation Test Setup

For WLAN function, the engineering test program was provided and enabled to make EUT continuous transmit/receive.

For AC power line conducted emissions, the EUT was set to connect with the WLAN AP under large package sizes transmission.

3 Test Result

3.1 Output Power Measurement

3.1.1 Limit of Output Power

For systems using digital modulation in the 2400-2483.5MHz, the limit for peak output power is 30dBm. If transmitting antenna with directional gain greater than 6dBi is used, the peak output power from the intentional radiator shall be reduced below the above stated value by the amount in dB that the directional gain of the antenna exceeds 6 dBi. In case of point-to-point operation, the limit has to be reduced by 1dB for every 3dB that the directional gain of the antenna exceeds 6dBi.

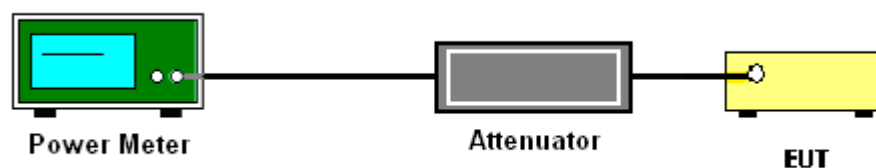
3.1.2 Measuring Instruments

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

3.1.3 Test Procedures

1. The testing follows the Measurement Procedure of ANSI C63.10-2013 clause 11.9.1.3 PKPM1 Peak power meter method.
2. The RF output of EUT was connected to the power meter by RF cable and attenuator. The path loss was compensated to the results for each measurement.
3. Set to the maximum power setting and enable the EUT transmit continuously.
4. Measure the conducted output power and record the results in the test report.

3.1.4 Test Setup



**3.1.5 Test Result of Peak Output Power**

2.4GHz Band										
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Peak Conducted Power (dBm)	Conducted Power Limit (dBm)	DG (dBi)	EIRP Power (dBm)	EIRP Power Limit (dBm)	Pass /Fail
11b	1Mbps	1	1	2412	20.26	30.00	-0.87	19.39	36.00	Pass
11b	1Mbps	1	6	2437	20.78	30.00	-0.87	19.91	36.00	Pass
11b	1Mbps	1	11	2462	20.68	30.00	-0.87	19.81	36.00	Pass
11g	6Mbps	1	1	2412	23.15	30.00	-0.87	22.28	36.00	Pass
11g	6Mbps	1	2	2417	24.62	30.00	-0.87	23.75	36.00	Pass
11g	6Mbps	1	6	2437	25.18	30.00	-0.87	24.31	36.00	Pass
11g	6Mbps	1	10	2457	24.83	30.00	-0.87	23.96	36.00	Pass
11g	6Mbps	1	11	2462	23.52	30.00	-0.87	22.65	36.00	Pass
HT20	MCS0	1	1	2412	23.46	30.00	-0.87	22.59	36.00	Pass
HT20	MCS0	1	2	2417	24.65	30.00	-0.87	23.78	36.00	Pass
HT20	MCS0	1	6	2437	25.13	30.00	-0.87	24.26	36.00	Pass
HT20	MCS0	1	10	2457	24.72	30.00	-0.87	23.85	36.00	Pass
HT20	MCS0	1	11	2462	23.61	30.00	-0.87	22.74	36.00	Pass
HT40	MCS0	1	3	2422	24.52	30.00	-0.87	23.65	36.00	Pass
HT40	MCS0	1	6	2437	24.61	30.00	-0.87	23.74	36.00	Pass
HT40	MCS0	1	9	2452	24.14	30.00	-0.87	23.27	36.00	Pass

3.1.6 Test Result of Average output Power (Reporting Only)

2.4GHz Band						
Mod.	Data Rate	N _{TX}	CH.	Freq. (MHz)	Duty Factor (dB)	Average Conducted Power (dBm)
11b	1Mbps	1	1	2412	0.00	17.83
11b	1Mbps	1	6	2437	0.00	18.48
11b	1Mbps	1	11	2462	0.00	18.33
11g	6Mbps	1	1	2412	0.16	13.84
11g	6Mbps	1	2	2417	0.16	17.44
11g	6Mbps	1	6	2437	0.16	17.77
11g	6Mbps	1	10	2457	0.16	17.35
11g	6Mbps	1	11	2462	0.16	14.27
HT20	MCS0	1	1	2412	0.14	13.96
HT20	MCS0	1	2	2417	0.00	16.81
HT20	MCS0	1	6	2437	0.14	17.32
HT20	MCS0	1	10	2457	0.00	16.78
HT20	MCS0	1	11	2462	0.14	14.16
HT40	MCS0	1	3	2422	0.28	14.23
HT40	MCS0	1	6	2437	0.28	14.96
HT40	MCS0	1	9	2452	0.28	14.13

3.2 Radiated Band Edges and Spurious Emission Measurement

3.2.1 Limit of Radiated band edge and Spurious Emission Measurement

In any 100 kHz bandwidth outside the intentional radiator frequency band, all harmonics/spurious must be at least 20 dB below the highest emission level within the authorized band. If the output power of this device was measured by spectrum analyzer, the attenuation under this paragraph shall be 30 dB instead of 20 dB. In addition, radiated emissions which fall in the restricted bands must also comply with the limits as below.

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

3.2.2 Measuring Instruments

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



3.2.3 Test Procedures

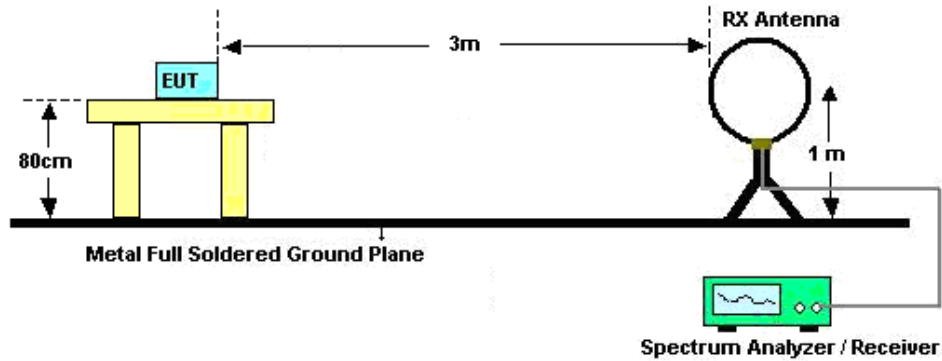
1. The testing follows ANSI C63.10-2013 clause 11.11 & 11.12
2. The EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level.
3. 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.
4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
5. Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level
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.
8. Use the following spectrum analyzer settings:
 - (1) Span shall wide enough to fully capture the emission being measured;
 - (2) Set RBW=100 kHz for $f < 1$ GHz; VBW $\geq$ RBW; Sweep = auto; Detector function = peak; Trace = max hold;
 - (3) Set RBW = 1 MHz, VBW= 3MHz for $f \geq 1$ GHz for peak measurement.

For average measurement:

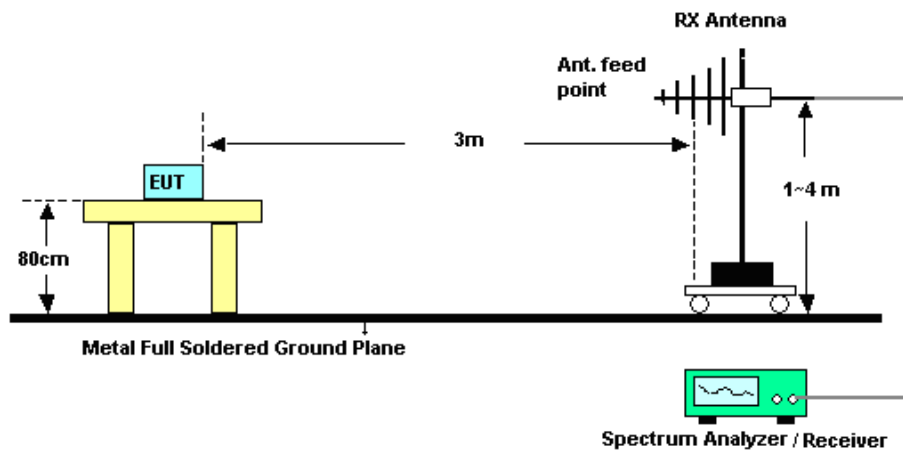
 - VBW = 10 Hz, when duty cycle is no less than 98 percent.
 - VBW $\geq 1/T$, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.

3.2.4 Test Setup

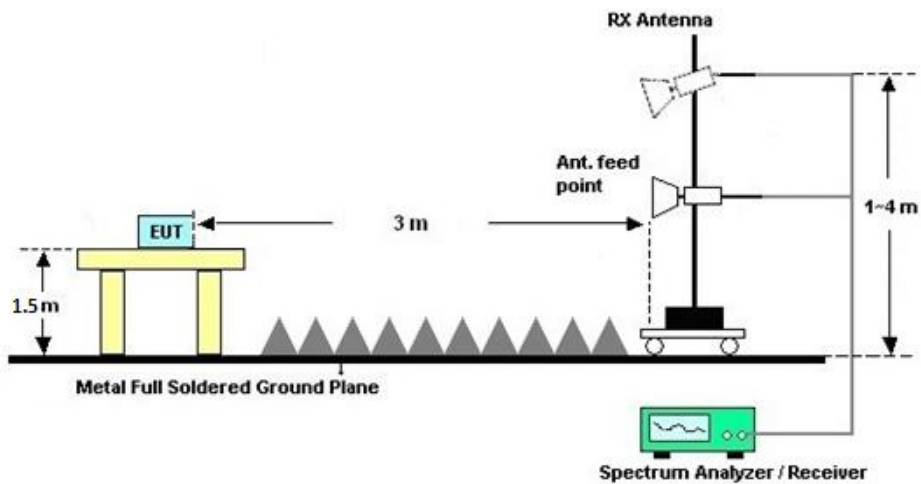
For radiated emissions below 30MHz



For radiated emissions from 30MHz to 1GHz



For radiated emissions above 1GHz





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

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

There is a comparison data of both open-field test site and semi-Anechoic chamber, and the result came out very similar.

3.2.6 Test Result of Radiated Spurious at Band Edges

Please refer to Appendix B and C.

3.2.7 Duty Cycle

Please refer to Appendix D.

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

Please refer to Appendix B and C.

3.3 AC Conducted Emission Measurement

3.3.1 Limit of AC Conducted Emission

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

Frequency of Emission (MHz)	Conducted Limit (dBμV)	
	Quasi-Peak	Average
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50

*Decreases with the logarithm of the frequency.

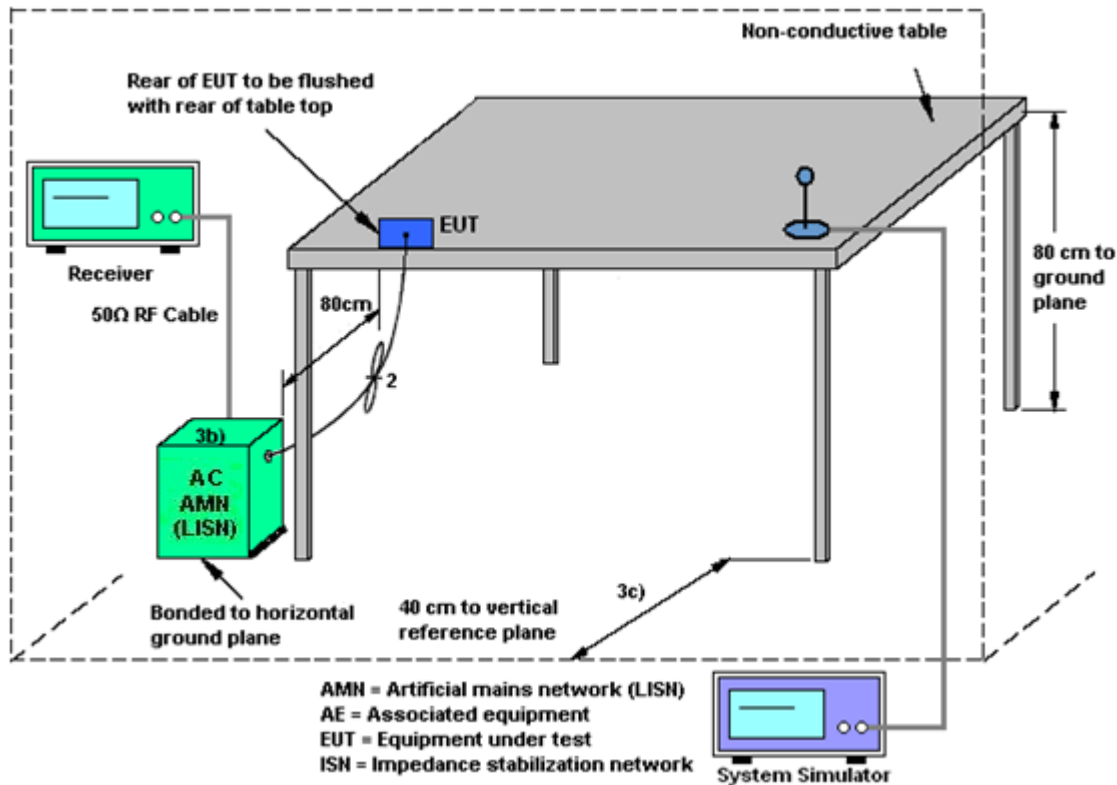
3.3.2 Measuring Instruments

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

3.3.3 Test Procedures

1. The EUT was placed 0.4 meter from the conducting wall of the shielding room, and it 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 (IF bandwidth = 9kHz) with Maximum Hold Mode.

3.3.4 Test Setup



3.3.5 Test Result of AC Conducted Emission

Please refer to Appendix A.



3.4 Antenna Requirements

3.4.1 Standard Applicable

If directional gain of transmitting Antennas is greater than 6dBi, the power shall be reduced by the same level in dB comparing to gain minus 6dBi. The use of a permanently attached Antenna or of an Antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the rule.

3.4.2 Antenna Anti-Replacement Construction

An embedded-in antenna design is used.

3.4.3 Antenna Gain

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



4 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Pulse Power Sensor	Anritsu	MA2411B	0917070	300MHz~40GHz	Jan. 14, 2019	Jan. 25, 2019	Jan. 13, 2020	Conducted (TH01-KS)
Power Meter	Anritsu	ML2495A	1005002	50MHz Bandwidth	Jan. 14, 2019	Jan. 25, 2019	Jan. 13, 2020	Conducted (TH01-KS)
EMI Test Receiver&SA	Agilent	N9038A	MY52260185	20Hz~26.5GHz	Aug. 30, 2018	Jan. 09, 2019~Jan. 29, 2019	Aug. 29, 2019	Radiation (03CH01-SZ)
Loop Antenna	R&S	HFH2-Z2	100354	9kHz~30MHz	May 29, 2018	Jan. 09, 2019~Jan. 29, 2019	May 29, 2020	Radiation (03CH01-SZ)
Bilog Antenna	TeseQ	CBL6112D	35407	30MHz~2GHz	Jun. 05, 2018	Jan. 09, 2019~Jan. 29, 2019	Jun. 04, 2019	Radiation (03CH01-SZ)
Double Ridge Horn Antenna	ETS Lindgren	3117	119436	1GHz~18GHz	Jun. 28, 2018	Jan. 09, 2019~Jan. 29, 2019	Jun. 27, 2019	Radiation (03CH01-SZ)
SHF-EHF Horn	com-power	AH-840	101071	18GHz~40GHz	Mar. 30, 2018	Jan. 09, 2019~Jan. 29, 2019	Mar. 29, 2019	Radiation (03CH01-SZ)
LF Amplifier	Burgeon	BPA-530	102209	0.01~3000Mhz	Apr. 20, 2018	Jan. 09, 2019~Jan. 29, 2019	Apr. 19, 2019	Radiation (03CH01-SZ)
HF Amplifier	MITEQ	AMF-7D-00101800-30-10P-R	1707137	1GHz~18GHz	Oct. 19, 2018	Jan. 09, 2019~Jan. 29, 2019	Oct. 18, 2019	Radiation (03CH01-SZ)
HF Amplifier	KEYSIGHT	83017A	MY53270104	0.5GHz~26.5GHz	Dec. 26, 2018	Jan. 09, 2019~Jan. 29, 2019	Dec. 25, 2019	Radiation (03CH01-SZ)
HF Amplifier	MITEQ	TTA1840-35-HG	1871923	18GHz~40GHz	Jul. 17, 2018	Jan. 09, 2019~Jan. 29, 2019	Jul. 16, 2019	Radiation (03CH01-SZ)
AC Power Source	Chroma	61601	616010001985	N/A	NCR	Jan. 09, 2019~Jan. 29, 2019	NCR	Radiation (03CH01-SZ)
Turn Table	EM	EM1000	N/A	0~360 degree	NCR	Jan. 09, 2019~Jan. 29, 2019	NCR	Radiation (03CH01-SZ)
Antenna Mast	Chaintek	MBS-400	N/A	1 m~4 m	NCR	Jan. 09, 2019~Jan. 29, 2019	NCR	Radiation (03CH01-SZ)
EMI Receiver	R&S	ESR7	101630	9kHz~7GHz;	Dec. 23, 2018	Jan. 25, 2019	Dec. 22, 2019	Conduction (CO01-SZ)
AC LISN	EMCO	3816/2SH	00103912	9kHz~30MHz	Oct. 18, 2018	Jan. 25, 2019	Oct. 17, 2019	Conduction (CO01-SZ)
AC LISN (for auxiliary equipment)	EMCO	3816/2SH	00103892	9kHz~30MHz	Dec. 23, 2018	Jan. 25, 2019	Dec. 22, 2019	Conduction (CO01-SZ)
AC Power Source	Chroma	61602	616020000891	100Vac~250Vac	Jul. 18, 2018	Jan. 25, 2019	Jul. 17, 2019	Conduction (CO01-SZ)

5 Uncertainty of Evaluation

The measurement uncertainties shown below were calculated in accordance with the requirements of ANSI 63.10-2013. All the measurement uncertainty value were shown with a coverage $K=2$ to indicate 95% level of confidence. The measurement data show herein meets or exceeds the CISPR measurement uncertainty values specified in CISPR 16-4-2 and can be compared directly to specified limit to determine compliance.

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

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	2.6dB
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Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	4.8dB
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Uncertainty of Radiated Emission Measurement (1000 MHz ~ 18000 MHz)

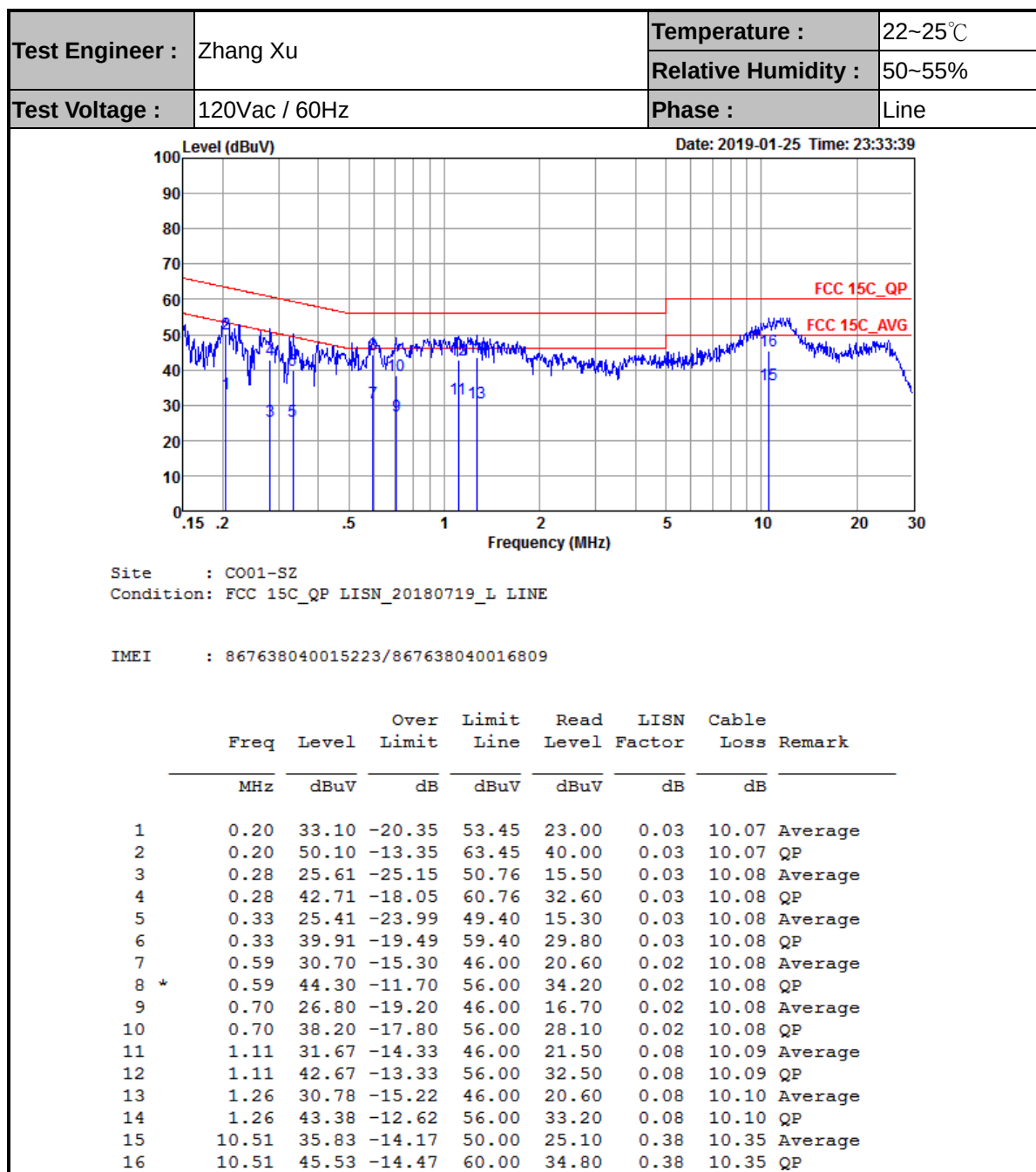
Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	5.0dB
---	-------

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

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	4.3dB
---	-------

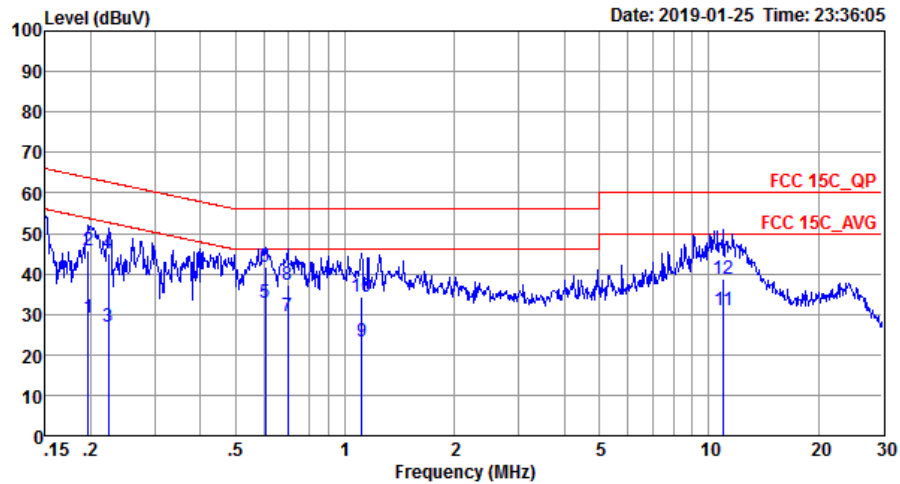


Appendix A. AC Conducted Emission Test Results





Test Engineer :	Zhang Xu	Temperature :	22~25℃
		Relative Humidity :	50~55%
Test Voltage :	120Vac / 60Hz	Phase :	Neutral



Site : CO01-SZ
Condition: FCC 15C_QP LISN_20180719_N NEUTRAL

IMEI : 867638040015223/867638040016809

	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.20	29.10	-24.66	53.76	19.00	0.03	10.07	Average
2	0.20	45.60	-18.16	63.76	35.50	0.03	10.07	QP
3	0.22	27.00	-25.70	52.70	16.90	0.03	10.07	Average
4	0.22	44.90	-17.80	62.70	34.80	0.03	10.07	QP
5 *	0.60	33.00	-13.00	46.00	22.90	0.02	10.08	Average
6	0.60	41.60	-14.40	56.00	31.50	0.02	10.08	QP
7	0.70	29.40	-16.60	46.00	19.30	0.02	10.08	Average
8	0.70	37.20	-18.80	56.00	27.10	0.02	10.08	QP
9	1.11	23.34	-22.66	46.00	13.20	0.05	10.09	Average
10	1.11	34.44	-21.56	56.00	24.30	0.05	10.09	QP
11	10.96	31.15	-18.85	50.00	20.60	0.20	10.35	Average
12	10.96	38.65	-21.35	60.00	28.10	0.20	10.35	QP



Appendix B. Radiated Spurious Emission

2.4GHz 2400~2483.5MHz

WIFI 802.11b (Band Edge @ 3m)

WIFI Ant.	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamplifier Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11b CH 01 2412MHz		2381.82	50.29	-23.71	74	45.04	31.52	6.73	33	367	193	P	H
		2387.7	39.85	-14.15	54	34.54	31.5	6.81	33	367	193	A	H
	*	2412	100.83	-	-	95.45	31.57	6.81	33	367	193	P	H
	*	2412	99.23	-	-	93.85	31.57	6.81	33	367	193	A	H
		2354.415	50.89	-23.11	74	45.62	31.54	6.73	33	100	342	P	V
		2385.285	40.08	-13.92	54	34.75	31.52	6.81	33	100	342	A	V
	*	2412	97.91	-	-	92.53	31.57	6.81	33	100	342	P	V
	*	2412	96.29	-	-	90.91	31.57	6.81	33	100	342	A	V
802.11b CH 06 2437MHz		2348.22	50.94	-23.06	74	45.66	31.55	6.73	33	385	164	P	H
		2388.4	39.99	-14.01	54	34.68	31.5	6.81	33	385	164	A	H
	*	2437	103.46	-	-	97.89	31.71	6.86	33	385	164	P	H
	*	2437	101.74	-	-	96.17	31.71	6.86	33	385	164	A	H
		2491.11	51.47	-22.53	74	45.63	31.93	6.91	33	385	164	P	H
		2488.17	40.38	-13.62	54	34.54	31.93	6.91	33	385	164	A	H
		2320.22	50.52	-23.48	74	45.3	31.57	6.65	33	100	342	P	V
		2389.52	39.86	-14.14	54	34.55	31.5	6.81	33	100	342	A	V
	*	2437	99.11	-	-	93.54	31.71	6.86	33	100	342	P	V
	*	2437	97.32	-	-	91.75	31.71	6.86	33	100	342	A	V
		2488.31	50.32	-23.68	74	44.48	31.93	6.91	33	100	342	P	V
		2487.89	40.55	-13.45	54	34.71	31.93	6.91	33	100	342	A	V



802.11b CH 11 2462MHz	*	2462	100.24	-	-	94.59	31.79	6.86	33	367	193	P	H
	*	2462	98.62	-	-	92.97	31.79	6.86	33	367	193	A	H
		2488.44	51.77	-22.23	74	45.93	31.93	6.91	33	367	193	P	H
		2487.68	41.36	-12.64	54	35.52	31.93	6.91	33	367	193	A	H
	*	2462	97.33	-	-	91.68	31.79	6.86	33	100	342	P	V
	*	2462	95.78	-	-	90.13	31.79	6.86	33	100	342	A	V
		2487.48	50.95	-23.05	74	45.18	31.86	6.91	33	100	342	P	V
		2487.72	40.94	-13.06	54	35.1	31.93	6.91	33	100	342	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



2.4GHz 2400~2483.5MHz

WIFI 802.11b (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)
802.11b CH 01 2412MHz		4824	45.5	-28.5	74	58.32	33.77	10.89	57.48	185	255	P	H
		4824	43.58	-30.42	74	57.11	33.77	10.89	58.19	185	255	P	V
802.11b CH 06 2437MHz		4874	44.17	-29.83	74	57.02	33.75	10.92	57.52	165	106	P	H
		7311	47.49	-26.51	74	57.66	35.46	13.29	58.92	174	100	P	H
		4874	42.78	-31.22	74	56.21	33.75	10.92	58.1	165	106	P	V
		7311	47.9	-26.1	74	57.07	35.46	13.29	57.92	174	100	P	V
802.11b CH 11 2462MHz		4924	43.25	-30.75	74	56.08	33.73	10.99	57.55	150	285	P	H
		7386	46.81	-27.19	74	57.04	35.61	13.12	58.96	155	274	P	H
		4924	43.75	-30.25	74	57.05	33.73	10.99	58.02	150	285	P	V
		7386	47.73	-26.27	74	56.65	35.61	13.12	57.65	155	274	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



2.4GHz 2400~2483.5MHz
WIFI 802.11g (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)
802.11g CH 01 2412MHz		2390	52.02	-21.98	74	46.71	31.5	6.81	33	167	14	P	H
		2389.59	43.16	-10.84	54	37.85	31.5	6.81	33	167	14	A	H
	*	2412	100.93	-	-	95.55	31.57	6.81	33	167	14	P	H
	*	2412	93.98	-	-	88.6	31.57	6.81	33	167	14	A	H
		2375.63	50.72	-23.28	74	45.47	31.52	6.73	33	100	342	P	V
		2389.7	40.92	-13.08	54	35.61	31.5	6.81	33	100	342	A	V
	*	2412	95.09	-	-	89.71	31.57	6.81	33	100	342	P	V
	*	2412	88.74	-	-	83.36	31.57	6.81	33	100	342	A	V
802.11g CH 06 2437MHz		2369.78	50.83	-23.17	74	45.58	31.52	6.73	33	386	165	P	H
		2390	41.79	-12.21	54	36.48	31.5	6.81	33	386	165	A	H
	*	2437	104.02	-	-	98.45	31.71	6.86	33	386	165	P	H
	*	2437	97.09	-	-	91.52	31.71	6.86	33	386	165	A	H
		2488.59	50.66	-23.34	74	44.82	31.93	6.91	33	386	165	P	H
		2488.87	42.45	-11.55	54	36.61	31.93	6.91	33	386	165	A	H
		2360.4	50.58	-23.42	74	45.31	31.54	6.73	33	100	342	P	V
		2389.1	40.95	-13.05	54	35.64	31.5	6.81	33	100	342	A	V
	*	2437	99.94	-	-	94.37	31.71	6.86	33	100	342	P	V
	*	2437	93.42	-	-	87.85	31.71	6.86	33	100	342	A	V
		2488.03	51.58	-22.42	74	45.74	31.93	6.91	33	100	342	P	V
		2488.94	41.73	-12.27	54	35.89	31.93	6.91	33	100	342	A	V



802.11g CH 11 2462MHz	*	2462	101.21	-	-	95.56	31.79	6.86	33	368	190	P	H
	*	2462	94.16	-	-	88.51	31.79	6.86	33	368	190	A	H
		2483.84	60.28	-13.72	74	54.51	31.86	6.91	33	368	190	P	H
		2483.52	45.36	-8.64	54	39.59	31.86	6.91	33	368	190	A	H
	*	2462	95.89	-	-	90.24	31.79	6.86	33	100	342	P	V
	*	2462	89.48	-	-	83.83	31.79	6.86	33	100	342	A	V
		2483.56	55.18	-18.82	74	49.41	31.86	6.91	33	100	342	P	V
		2483.52	42.67	-11.33	54	36.9	31.86	6.91	33	100	342	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



2.4GHz 2400~2483.5MHz

WIFI 802.11g (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)
802.11g CH 01 2412MHz		4824	45.54	-28.46	74	58.36	33.77	10.89	57.48	185	255	P	H
		4824	43.54	-30.46	74	57.07	33.77	10.89	58.19	168	154	P	V
802.11g CH 06 2437MHz		4874	44.44	-29.56	74	57.29	33.75	10.92	57.52	165	106	P	H
		7311	47.45	-26.55	74	57.62	35.46	13.29	58.92	174	100	P	H
		4874	43.17	-30.83	74	56.6	33.75	10.92	58.1	147	215	P	V
		7311	47.78	-26.22	74	56.95	35.46	13.29	57.92	161	360	P	V
802.11g CH 11 2462MHz		4924	44.18	-29.82	74	57.01	33.73	10.99	57.55	150	285	P	H
		7386	47.72	-26.28	74	57.95	35.61	13.12	58.96	155	274	P	H
		4924	42.7	-31.3	74	56	33.73	10.99	58.02	119	263	P	V
		7386	47.08	-26.92	74	56	35.61	13.12	57.65	161	360	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



2.4GHz 2400~2483.5MHz

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 01 2412MHz		2389.8	51.13	-22.87	74	45.82	31.5	6.81	33	393	163	P	H
		2389.8	42.39	-11.61	54	37.08	31.5	6.81	33	393	163	A	H
	*	2412	99.63	-	-	94.25	31.57	6.81	33	393	163	P	H
	*	2412	93.37	-	-	87.99	31.57	6.81	33	393	163	A	H
		2389.7	52.61	-21.39	74	47.3	31.5	6.81	33	100	342	P	V
		2389.59	41.2	-12.8	54	35.89	31.5	6.81	33	100	342	A	V
	*	2412	95.09	-	-	89.71	31.57	6.81	33	100	342	P	V
	*	2412	88.61	-	-	83.23	31.57	6.81	33	100	342	A	V
802.11n HT20 CH 06 2437MHz		2344.02	50.4	-23.6	74	45.2	31.55	6.65	33	393	163	P	H
		2389.1	41.37	-12.63	54	36.06	31.5	6.81	33	393	163	A	H
	*	2437	103.13	-	-	97.56	31.71	6.86	33	393	163	P	H
	*	2437	96.7	-	-	91.13	31.71	6.86	33	393	163	A	H
		2488.59	51.2	-22.8	74	45.36	31.93	6.91	33	393	163	P	H
		2488.8	41.56	-12.44	54	35.72	31.93	6.91	33	393	163	A	H
		2385.6	50.54	-23.46	74	45.23	31.5	6.81	33	100	343	P	V
		2383.78	40.95	-13.05	54	35.7	31.52	6.73	33	100	343	A	V
	*	2437	99.52	-	-	93.95	31.71	6.86	33	100	343	P	V
	*	2437	92.61	-	-	87.04	31.71	6.86	33	100	343	A	V
		2486.7	51	-23	74	45.23	31.86	6.91	33	100	343	P	V
		2488.8	41.54	-12.46	54	35.7	31.93	6.91	33	100	343	A	V



802.11n HT20 CH 11 2462MHz	*	2462	101.26	-	-	95.61	31.79	6.86	33	367	190	P	H
	*	2462	94.64	-	-	88.99	31.79	6.86	33	367	190	A	H
		2483.72	61.69	-12.31	74	55.92	31.86	6.91	33	367	190	P	H
		2483.72	46.84	-7.16	54	41.07	31.86	6.91	33	367	190	A	H
	*	2462	94.8	-	-	89.15	31.79	6.86	33	100	341	P	V
	*	2462	88.4	-	-	82.75	31.79	6.86	33	100	341	A	V
		2483.88	60.28	-13.72	74	54.51	31.86	6.91	33	100	341	P	V
		2483.68	43.67	-10.33	54	37.9	31.86	6.91	33	100	341	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



2.4GHz 2400~2483.5MHz
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 01 2412MHz		4824	44.47	-29.53	74	57.29	33.77	10.89	57.48	185	255	P	H
		4824	44.11	-29.89	74	57.64	33.77	10.89	58.19	194	214	P	V
802.11n HT20 CH 06 2437MHz		4874	44.53	-29.47	74	57.38	33.75	10.92	57.52	165	106	P	H
		7311	47.41	-26.59	74	57.58	35.46	13.29	58.92	161	245	P	H
		4874	42.7	-31.3	74	56.13	33.75	10.92	58.1	167	125	P	V
		7311	47.58	-26.42	74	56.75	35.46	13.29	57.92	161	360	P	V
802.11n HT20 CH 11 2462MHz		4924	43.54	-30.46	74	56.37	33.73	10.99	57.55	150	285	P	H
		7386	47	-27	74	57.23	35.61	13.12	58.96	155	274	P	H
		4924	42.89	-31.11	74	56.19	33.73	10.99	58.02	150	285	P	V
		7386	47.69	-26.31	74	56.61	35.61	13.12	57.65	161	274	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



2.4GHz 2400~2483.5MHz

WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 CH 03 2422MHz		2388.4	59.21	-14.79	74	53.9	31.5	6.81	33	393	163	P	H
		2388.12	44.64	-9.36	54	39.33	31.5	6.81	33	393	163	A	H
	*	2422	99.41	-	-	93.96	31.64	6.81	33	393	163	P	H
	*	2422	91.21	-	-	85.76	31.64	6.81	33	393	163	A	H
		2496.08	50.45	-23.55	74	44.61	31.93	6.91	33	393	163	P	H
		2488.73	41.22	-12.78	54	35.38	31.93	6.91	33	393	163	A	H
		2387.7	58.89	-15.11	74	53.58	31.5	6.81	33	100	341	P	V
		2388.12	44.25	-9.75	54	38.94	31.5	6.81	33	100	341	A	V
	*	2422	94.38	-	-	88.88	31.64	6.86	33	100	341	P	V
	*	2422	87.47	-	-	81.97	31.64	6.86	33	100	341	A	V
		2489.92	51.31	-22.69	74	45.47	31.93	6.91	33	100	341	P	V
		2487.61	41.23	-12.77	54	35.39	31.93	6.91	33	100	341	A	V
802.11n HT40 CH 06 2437MHz		2389.1	59.66	-14.34	74	54.35	31.5	6.81	33	393	163	P	H
		2389.1	45.93	-8.07	54	40.62	31.5	6.81	33	393	163	A	H
	*	2437	100.64	-	-	95.07	31.71	6.86	33	393	163	P	H
	*	2437	93	-	-	87.43	31.71	6.86	33	393	163	A	H
		2487.54	55.03	-18.97	74	49.19	31.93	6.91	33	393	163	P	H
		2488.1	41.8	-12.2	54	35.96	31.93	6.91	33	393	163	A	H
		2388.26	58.56	-15.44	74	53.25	31.5	6.81	33	100	340	P	V
		2389.94	44	-10	54	38.69	31.5	6.81	33	100	340	A	V
	*	2437	96.44	-	-	90.87	31.71	6.86	33	100	340	P	V
	*	2437	89.63	-	-	84.06	31.71	6.86	33	100	340	A	V
		2484.53	57.21	-16.79	74	51.44	31.86	6.91	33	100	340	P	V
		2487.89	43.26	-10.74	54	37.42	31.93	6.91	33	100	340	A	V



802.11n HT40 CH 09 2452MHz		2351.3	51.01	-22.99	74	45.73	31.55	6.73	33	180	145	P	H
		2377.62	41.35	-12.65	54	36.1	31.52	6.73	33	180	145	A	H
	*	2452	97.9	-	-	92.33	31.71	6.86	33	180	145	P	H
	*	2452	90.95	-	-	85.38	31.71	6.86	33	180	145	A	H
		2487.26	61.76	-12.24	74	55.99	31.86	6.91	33	180	145	P	H
		2488.38	49.93	-4.07	54	44.09	31.93	6.91	33	180	145	A	H
		2328.2	51.09	-22.91	74	45.87	31.57	6.65	33	100	340	P	V
		2352.84	40.58	-13.42	54	35.31	31.54	6.73	33	100	340	A	V
	*	2452	94.16	-	-	88.59	31.71	6.86	33	100	340	P	V
	*	2452	87.09	-	-	81.52	31.71	6.86	33	100	340	A	V
		2486.35	58.43	-15.57	74	52.66	31.86	6.91	33	100	340	P	V
		2489.01	45.76	-8.24	54	39.92	31.93	6.91	33	100	340	A	V
Remark	3. No other spurious found. 4. All results are PASS against Peak and Average limit line.												



2.4GHz 2400~2483.5MHz
WIFI 802.11n HT40 (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n		4844	44.64	-29.36	74	57.44	33.77	10.92	57.49	150	350	P	H
HT40		7266	47.62	-26.38	74	57.75	35.4	13.38	58.91	200	360	P	H
CH 03		4844	44.45	-29.55	74	57.92	33.77	10.92	58.16	150	350	P	V
2422MHz		7266	47.97	-26.03	74	57.22	35.4	13.38	58.03	194	164	P	V
802.11n		4874	45.67	-28.33	74	58.52	33.75	10.92	57.52	165	230	P	H
HT40		7311	47.22	-26.78	74	57.39	35.46	13.29	58.92	186	323	P	H
CH 06		4874	43.4	-30.6	74	56.83	33.75	10.92	58.1	165	230	P	V
2437MHz		7311	47.59	-26.41	74	56.76	35.46	13.29	57.92	119	147	P	V
802.11n		4904	44.38	-29.62	74	57.23	33.74	10.95	57.54	164	175	P	H
HT40		7356	47.18	-26.82	74	57.36	35.55	13.21	58.94	136	147	P	H
CH 09		4904	44.8	-29.2	74	58.15	33.74	10.95	58.04	164	245	P	V
2452MHz		7356	47.66	-26.34	74	56.66	35.55	13.21	57.76	194	147	P	V
Remark	3. No other spurious found. 4. All results are PASS against Peak and Average limit line.												



Emission below 1GHz

2.4GHz WIFI 802.11g (LF)

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)
2.4GHz 802.11g LF		30.97	27.16	-12.84	40	34.39	23.82	0.25	31.3	165	184	P	H
		60.07	22.24	-17.76	40	40.85	12.5	0.49	31.6	-	-	P	H
		95.96	22.84	-20.66	43.5	37.74	15.9	0.8	31.6	-	-	P	H
		152.22	25.49	-18.01	43.5	39.03	16.53	1.32	31.39	-	-	P	H
		399.57	25.34	-20.66	46	32.74	21.6	2.39	31.39	-	-	P	H
		999.03	31.79	-22.21	54	31.41	27.39	4.2	31.21	-	-	P	H
		30	29.38	-10.62	40	36.05	24.4	0.23	31.3	116	184	P	V
		43.58	29.04	-10.96	40	43.16	16.96	0.42	31.5	-	-	P	V
		55.22	26.92	-13.08	40	44.72	13.3	0.5	31.6	-	-	P	V
		95.96	22.93	-20.57	43.5	37.83	15.9	0.8	31.6	-	-	P	V
		234.67	23.85	-22.15	46	36.84	16.8	1.79	31.58	-	-	P	V
		939.86	32.06	-13.94	46	32.63	26.86	3.92	31.35	-	-	P	V
Remark	1. No other spurious found. 2. All results are PASS against limit line.												



Note symbol

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



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

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	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”.



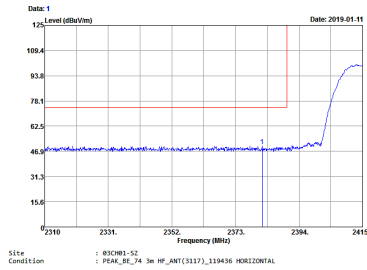
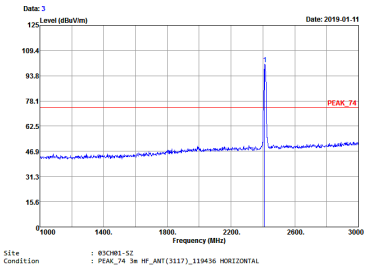
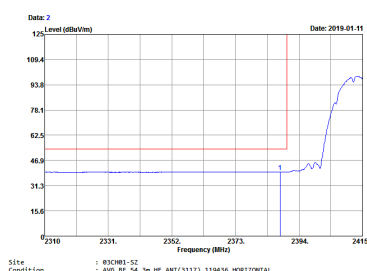
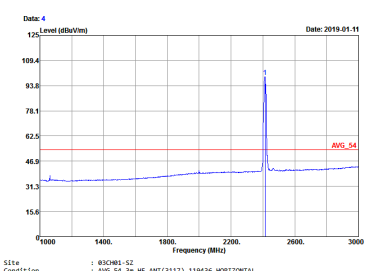
Appendix C. Radiated Spurious Emission Plots

Note symbol

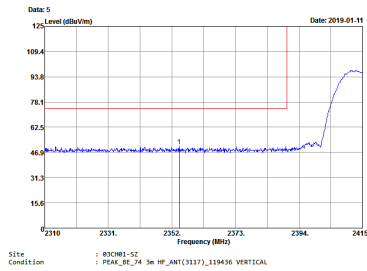
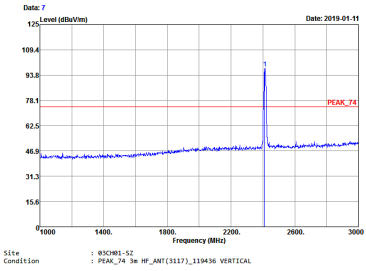
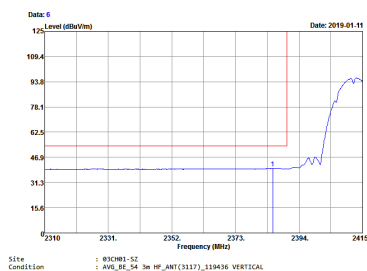
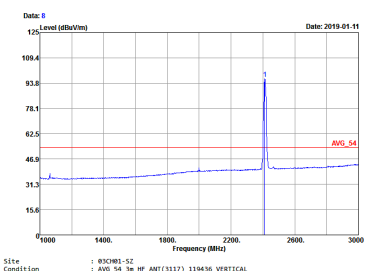
-L	Low channel location
-R	High channel location



2.4GHz 2400~2483.5MHz
WIFI 802.11b (Band Edge @ 3m)

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH01 2412MHz	
1	Horizontal	Fundamental
Peak	 Site : 802.11b-S2 Condition : PEAK_74 3m HP_ANT(3117)_119436 HORIZONTAL	 Site : 802.11b-S2 Condition : PEAK_74 3m HP_ANT(3117)_119436 HORIZONTAL
Avg.	 Site : 802.11b-S2 Condition : AVG_54 3m HP_ANT(3117)_119436 HORIZONTAL	 Site : 802.11b-S2 Condition : AVG_54 3m HP_ANT(3117)_119436 HORIZONTAL

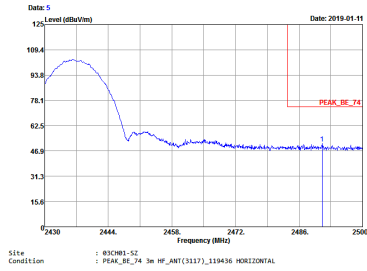
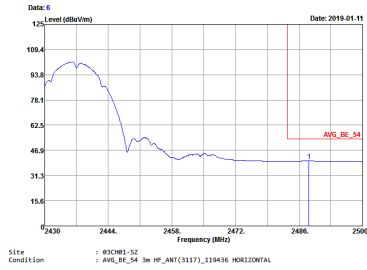


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH01 2412MHz	
1	Vertical	Fundamental
Peak		
Avg.		

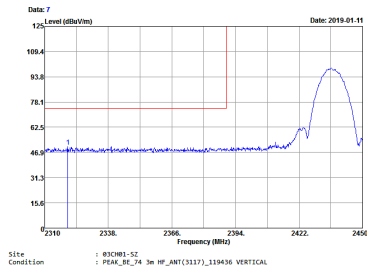
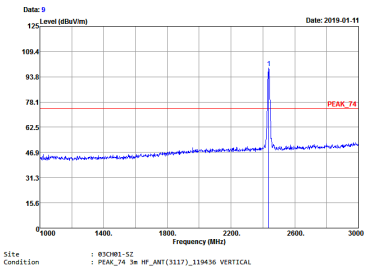
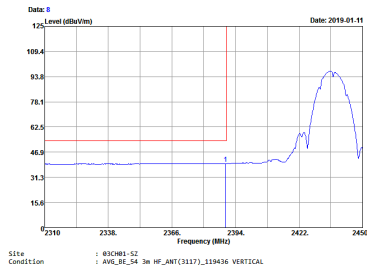
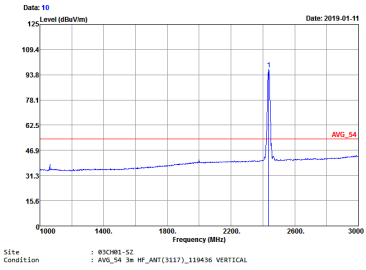


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH06 2437MHz - L	
1	Horizontal	Fundamental
Peak		
Avg.		

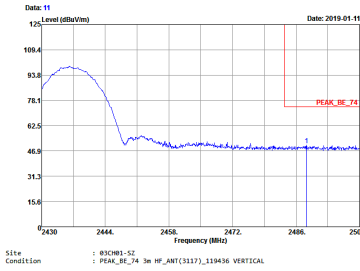
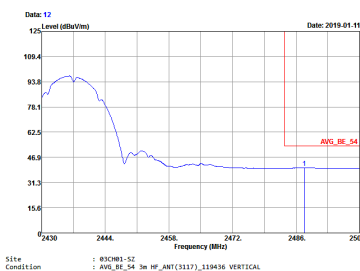


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH06 2437MHz - R	
1	Horizontal	Fundamental
Peak	 Site : RSCMB1-SZ Condition : PEAK_BE_74 3m HP_ANT(3117)_119436 HORIZONTAL	
Avg.	 Site : RSCMB1-SZ Condition : AVG_BE_54 3m HP_ANT(3117)_119436 HORIZONTAL	

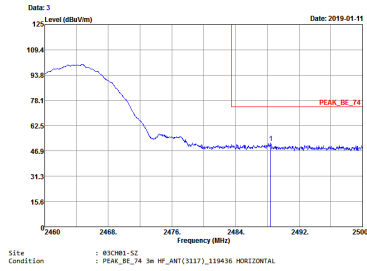
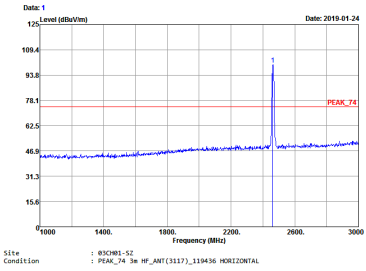
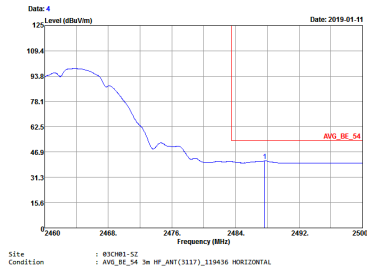
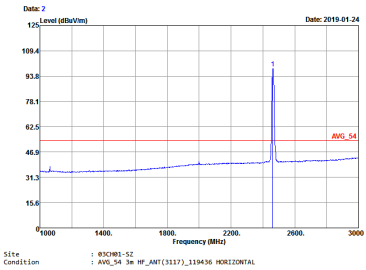


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH06 2437MHz - L	
1	Vertical	Fundamental
Peak		
Avg.		



WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH06 2437MHz - R	
1	Vertical	Fundamental
Peak		
Avg.		



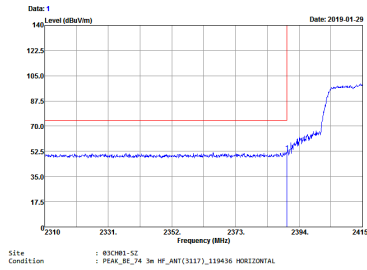
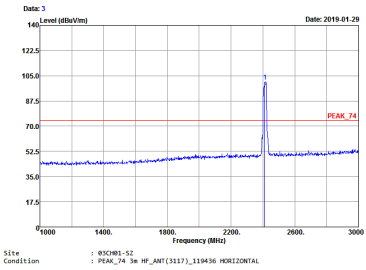
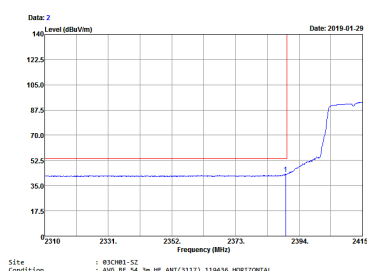
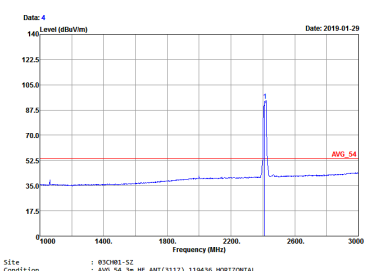
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH11 2462MHz	
1	Horizontal	Fundamental
Peak	 Site Condition : 83CH01-S2 : PEAK_BE_74 3m HP_ANT(3117)_119436 HORIZONTAL	 Site Condition : 83CH01-S2 : PEAK_74 3m HP_ANT(3117)_119436 HORIZONTAL
Avg.	 Site Condition : 83CH01-S2 : AVG_BE_54 3m HP_ANT(3117)_119436 HORIZONTAL	 Site Condition : 83CH01-S2 : AVG_54 3m HP_ANT(3117)_119436 HORIZONTAL



WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH11 2462MHz	
1	Vertical	Fundamental
Peak		
Avg.		



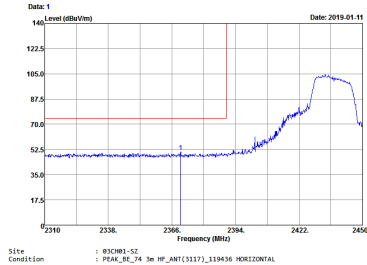
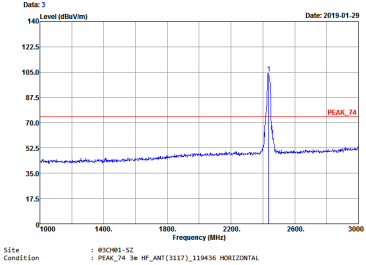
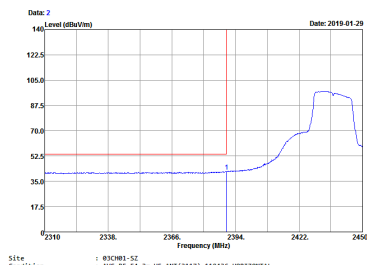
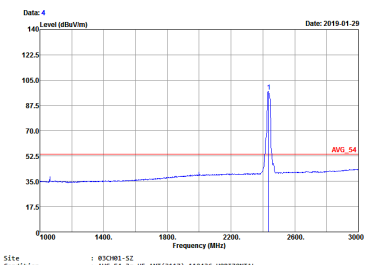
2.4GHz 2400~2483.5MHz
WIFI 802.11g (Band Edge @ 3m)

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH01 2412MHz	
1	Horizontal	Fundamental
Peak	 Site Condition : 802.11g-S2 : PEAK_BE_74 3m HP_ANT(3117)_119436 HORIZONTAL	 Site Condition : 802.11g-S2 : PEAK_F4 3m HP_ANT(3117)_119436 HORIZONTAL
Avg.	 Site Condition : 802.11g-S2 : AVG_BE_54 3m HP_ANT(3117)_119436 HORIZONTAL	 Site Condition : 802.11g-S2 : AVG_F4 3m HP_ANT(3117)_119436 HORIZONTAL

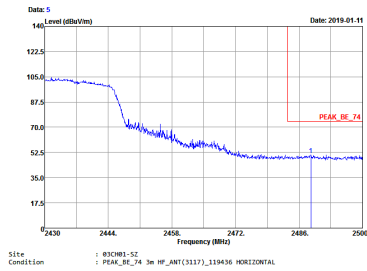
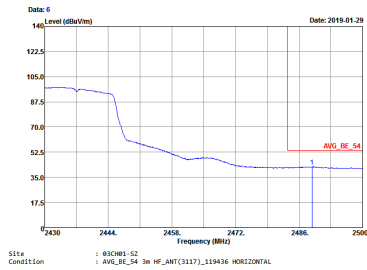


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH01 2412MHz	
1	Vertical	Fundamental
Peak		
Avg.		



WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH06 2437MHz - L	
1	Horizontal	Fundamental
Peak	 Site Condition : 83CH01-S2 : PEAK_RE_74 3m HP_ANT(3117)_119436 HORIZONTAL	 Site Condition : 83CH01-S2 : PEAK_74 3m HP_ANT(3117)_119436 HORIZONTAL
Avg.	 Site Condition : 83CH01-S2 : AVG_RE_54 3m HP_ANT(3117)_119436 HORIZONTAL	 Site Condition : 83CH01-S2 : AVG_54 3m HP_ANT(3117)_119436 HORIZONTAL

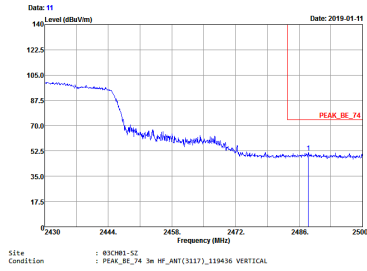
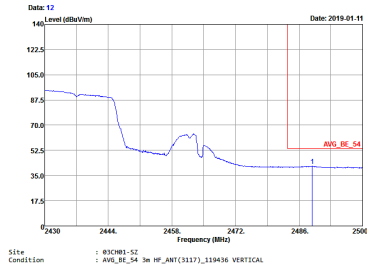


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH06 2437MHz - R	
1	Horizontal	Fundamental
Peak	 Site Condition : 802.11g-52 : PEAK_BE_74 3m HP_ANT(3117)_119436 HORIZONTAL	
Avg.	 Site Condition : 802.11g-52 : AVG_BE_54 3m HP_ANT(3117)_119436 HORIZONTAL	

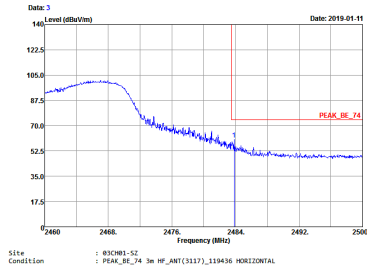
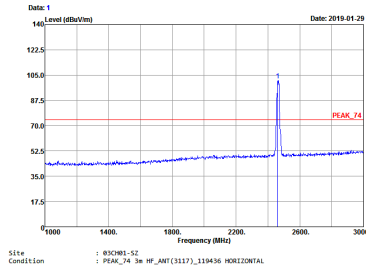
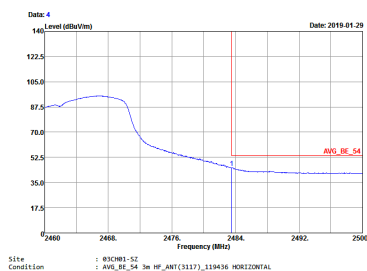
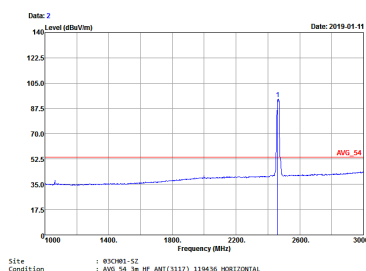


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH06 2437MHz - L	
1	Vertical	Fundamental
Peak		
Avg.		

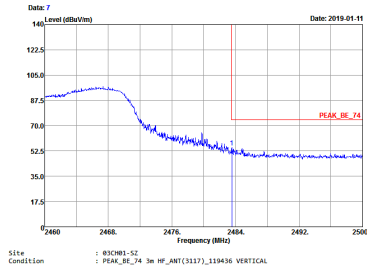
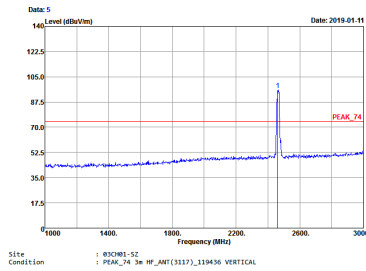
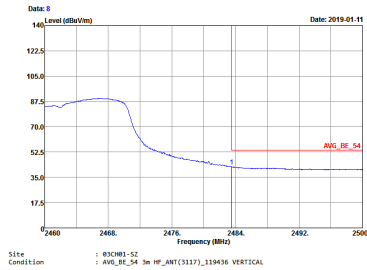
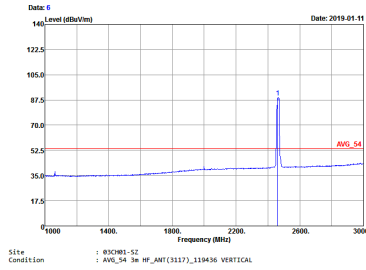


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH06 2437MHz - R	
1	Vertical	Fundamental
Peak	 Site Condition : RSCM1-SZ : PEAK_BE_74 3m HP_ANT(3117)_119436 VERTICAL	
Avg.	 Site Condition : RSCM1-SZ : AVG_BE_54 3m HP_ANT(3117)_119436 VERTICAL	



WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH11 2462MHz	
1	Horizontal	Fundamental
Peak	 Site Condition : 83CH01-S2 : PEAK_BE_74 3m HP_ANT(3117)_119436 HORIZONTAL	 Site Condition : 83CH01-S2 : PEAK_74 3m HP_ANT(3117)_119436 HORIZONTAL
Avg.	 Site Condition : 83CH01-S2 : AVG_BE_54 3m HP_ANT(3117)_119436 HORIZONTAL	 Site Condition : 83CH01-S2 : AVG_54 3m HP_ANT(3117)_119436 HORIZONTAL



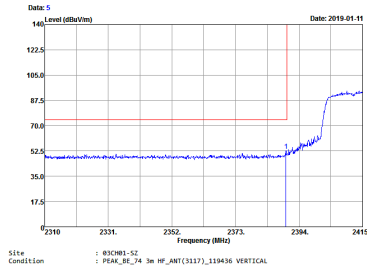
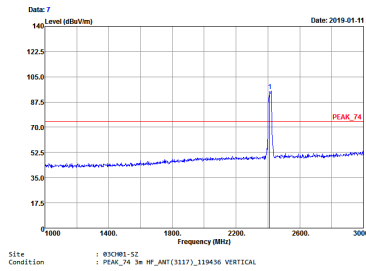
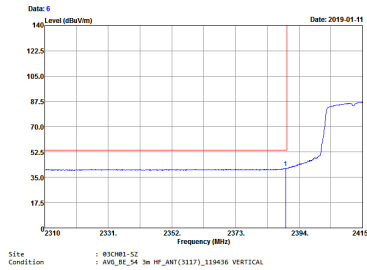
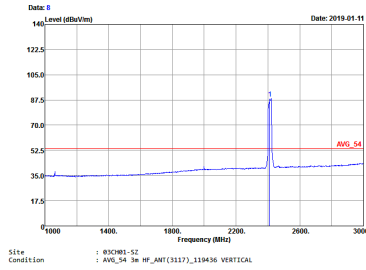
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH11 2462MHz	
1	Vertical	Fundamental
Peak		
Avg.		



2.4GHz 2400~2483.5MHz
WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH01 2412MHz	
1	Horizontal	Fundamental
Peak	Site Condition : 83CH01-S2 : PEAK_RE_F4 3m HP_ANT(3117)_119436 HORIZONTAL	Site Condition : 83CH01-S2 : PEAK_F4 3m HP_ANT(3117)_119436 HORIZONTAL
Avg.	Site Condition : 83CH01-S2 : AVG_RE_S4 3m HP_ANT(3117)_119436 HORIZONTAL	Site Condition : 83CH01-S2 : AVG_F4 3m HP_ANT(3117)_119436 HORIZONTAL

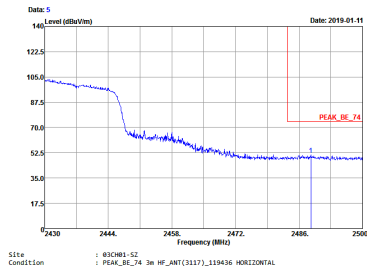
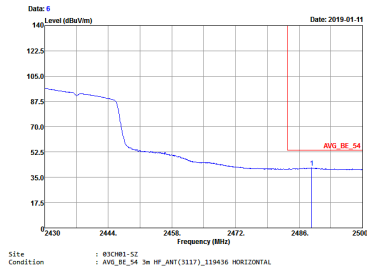


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH01 2412MHz	
1	Vertical	Fundamental
Peak		
Avg.		

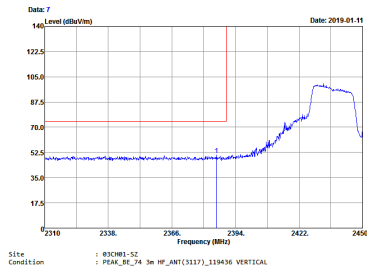
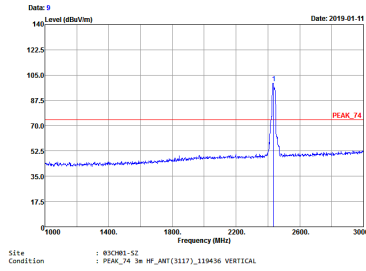
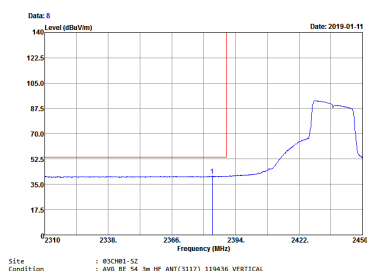
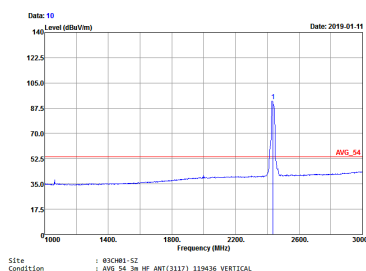


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH06 2437MHz - L	
1	Horizontal	Fundamental
Peak	Site Condition : 83CMB1-S2 : PEAK_BE_74 3m HP_ANT(3117)_119436 HORIZONTAL	Site Condition : 83CMB1-S2 : PEAK_74 3m HP_ANT(3117)_119436 HORIZONTAL
Avg.	Site Condition : 83CMB1-S2 : AVG_BE_54 3m HP_ANT(3117)_119436 HORIZONTAL	Site Condition : 83CMB1-S2 : AVG_54 3m HP_ANT(3117)_119436 HORIZONTAL

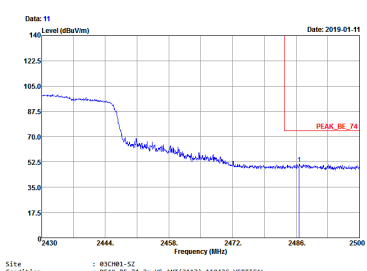
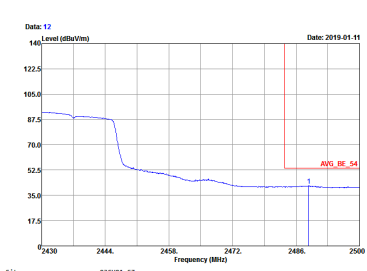


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH06 2437MHz - R	
1	Horizontal	Fundamental
Peak	 Site Condition : 802.11n-52 : PEAK_BE_74 3m HP_ANT(3117)_119436 HORIZONTAL	
Avg.	 Site Condition : 802.11n-52 : AVG_BE_54 3m HP_ANT(3117)_119436 HORIZONTAL	

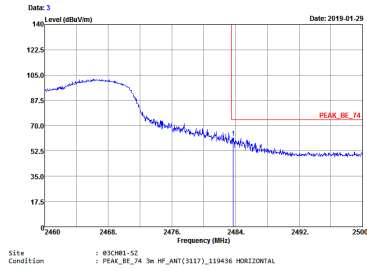
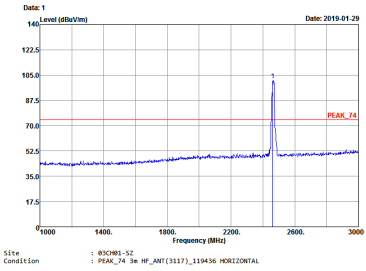
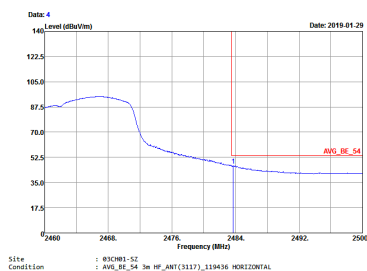
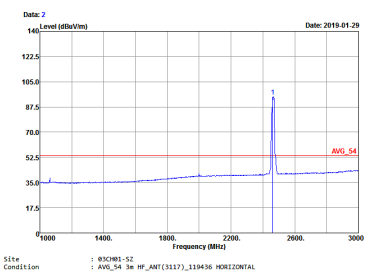


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH06 2437MHz - L	
1	Vertical	Fundamental
Peak		
Avg.		

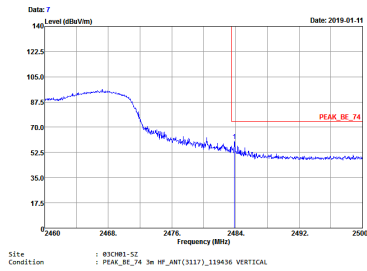
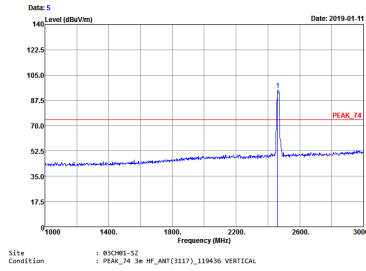
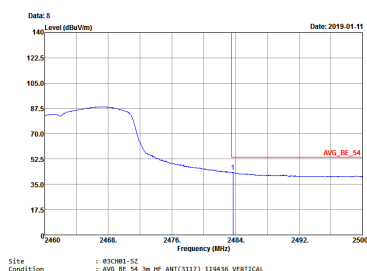
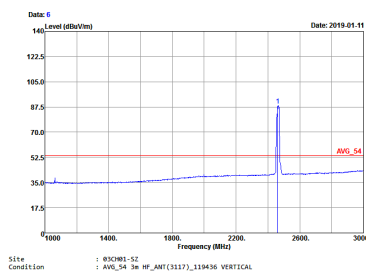


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH06 2437MHz - R	
1	Vertical	Fundamental
Peak	 Site Condition : RSCM1-52 PEAK_BE_74 3m HP_ANT(3117)_119436 VERTICAL	
Avg.	 Site Condition : RSCM1-52 AVG_BE_54 3m HP_ANT(3117)_119436 VERTICAL	



WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH11 2462MHz	
1	Horizontal	Fundamental
Peak	 Site Condition : 83CH01-S2 : PEAK_BE_74 3m HP_ANT(3117)_119436 HORIZONTAL	 Site Condition : 83CH01-S2 : PEAK_74 3m HP_ANT(3117)_119436 HORIZONTAL
Avg.	 Site Condition : 83CH01-S2 : AVG_BE_54 3m HP_ANT(3117)_119436 HORIZONTAL	 Site Condition : 83CH01-S2 : AVG_54 3m HP_ANT(3117)_119436 HORIZONTAL

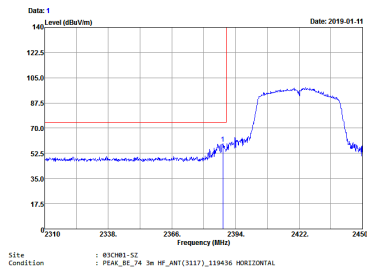
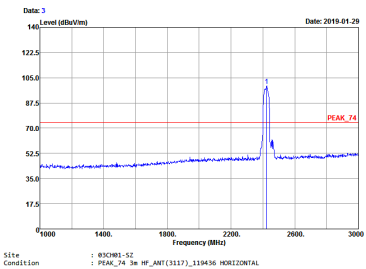
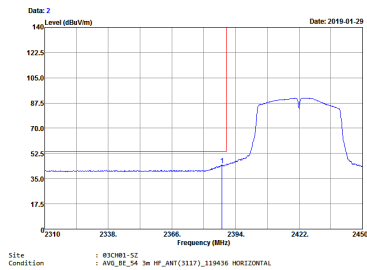
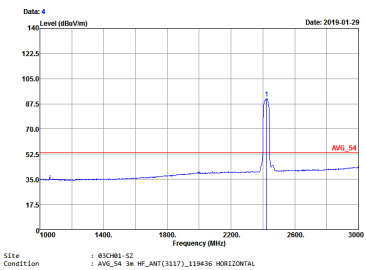


WIFI	2.4GHz 2400~2483.5MHz Fundamental @ 3m	
ANT	802.11n HT20 CH11 2462MHz	
1	Vertical	Fundamental
Peak		
Avg.		

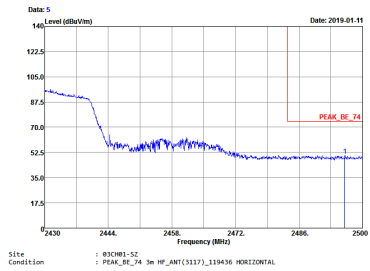
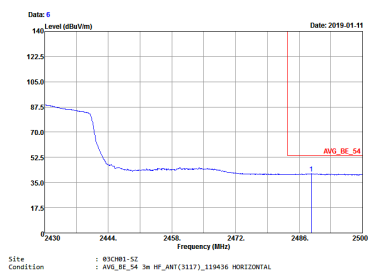


2.4GHz 2400~2483.5MHz

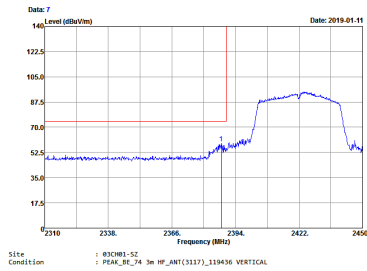
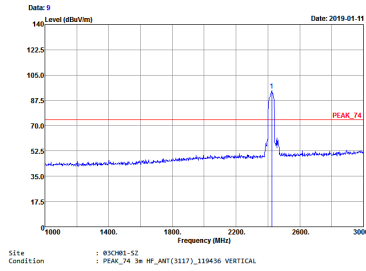
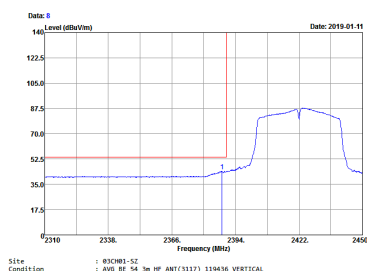
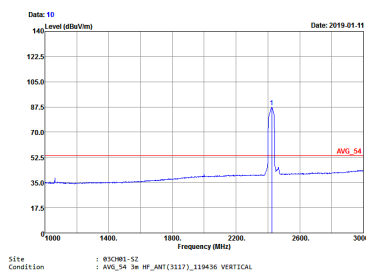
WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT40 CH03 2422MHz - L	
1	Horizontal	Fundamental
Peak		
Avg.		

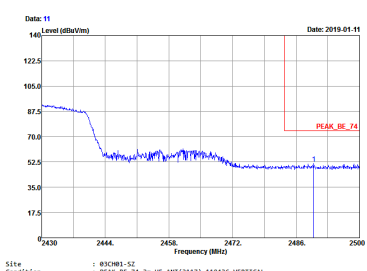
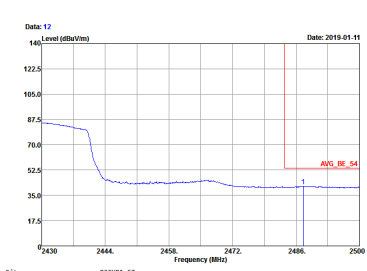


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT40 CH03 2422MHz - R	
1	Horizontal	Fundamental
Peak		
Avg.		

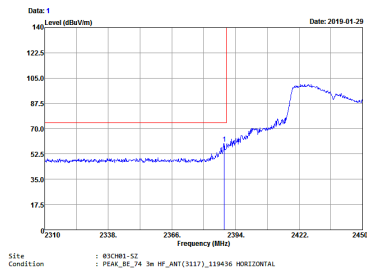
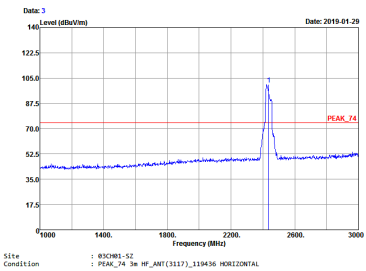
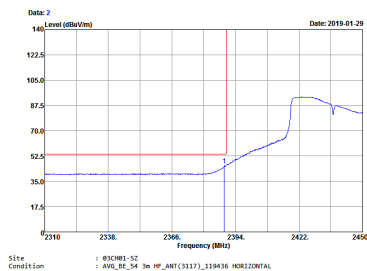
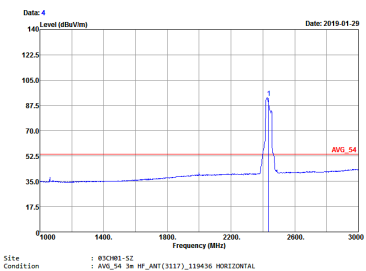


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT40 CH03 2422MHz - L	
1	Vertical	Fundamental
Peak		
Avg.		

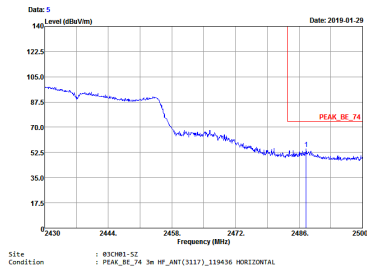
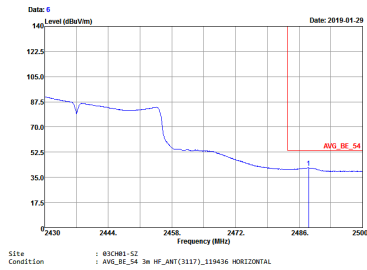


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT40 CH03 2422MHz - R	
1	Vertical	Fundamental
Peak	 Site Condition : RSCM1-S2 PEAK_BE_74 3m HP_ANT(3117)_119436 VERTICAL	
Avg.	 Site Condition : RSCM1-S2 AVG_BE_54 3m HP_ANT(3117)_119436 VERTICAL	



WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT40 CH06 2437MHz - L	
1	Horizontal	Fundamental
Peak	 Site : 83CH01-S2 Condition : PEAK_RE_74 3m HP_ANT(3117)_119436 HORIZONTAL	 Site : 83CH01-S2 Condition : PEAK_74 3m HP_ANT(3117)_119436 HORIZONTAL
Avg.	 Site : 83CH01-S2 Condition : AVG_RE_54 3m HP_ANT(3117)_119436 HORIZONTAL	 Site : 83CH01-S2 Condition : AVG_54 3m HP_ANT(3117)_119436 HORIZONTAL

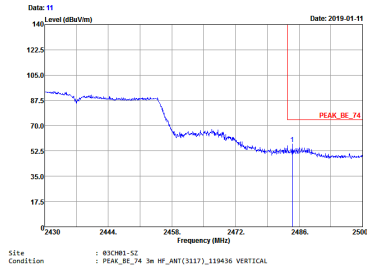
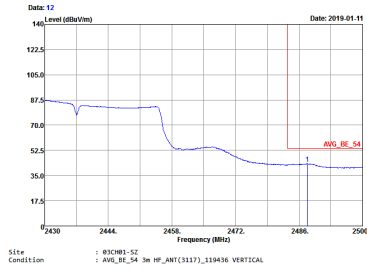


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT40 CH06 2437MHz - R	
1	Horizontal	Fundamental
Peak	 Site Condition : 802.11n-52 : PEAK_BE_74 3m HP_ANT(3117)_119436 HORIZONTAL	
Avg.	 Site Condition : 802.11n-52 : AVG_BE_54 3m HP_ANT(3117)_119436 HORIZONTAL	

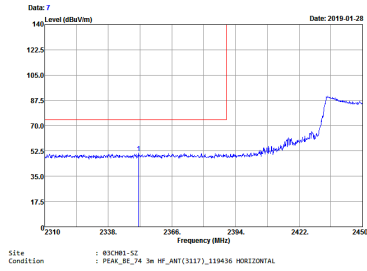
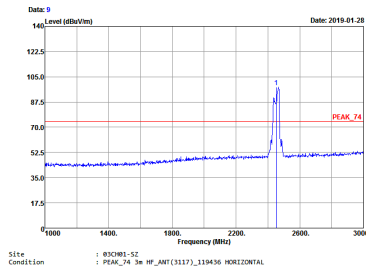
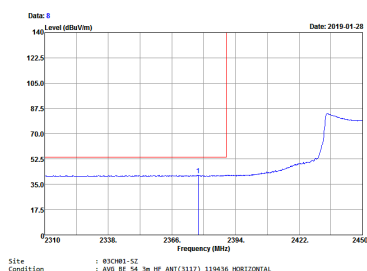
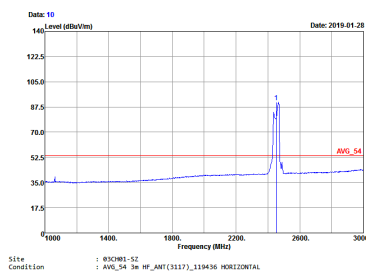


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT40 CH06 2437MHz - L	
1	Vertical	Fundamental
Peak		
Avg.		

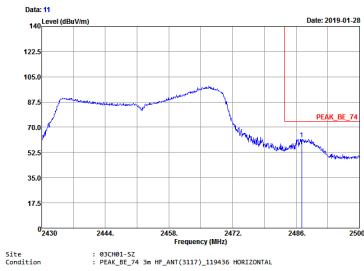
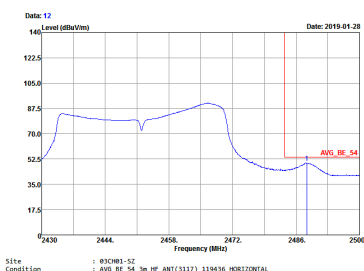


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT40 CH06 2437MHz - R	
1	Horizontal	Fundamental
Peak	 Site Condition : RSCM1-SZ : PEAK_BE_74 3m HP_ANT(3117)_119436 VERTICAL	
Avg.	 Site Condition : RSCM1-SZ : AVG_BE_54 3m HP_ANT(3117)_119436 VERTICAL	

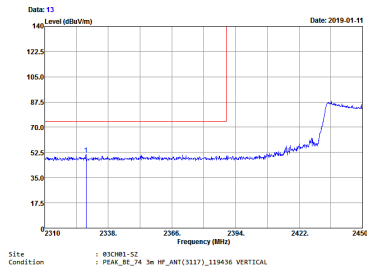
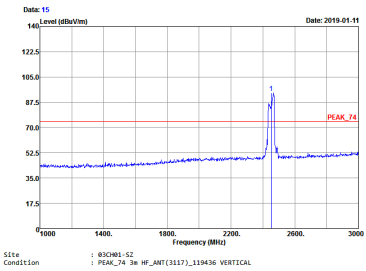
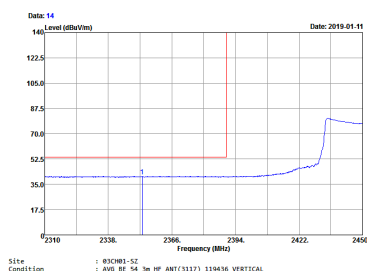
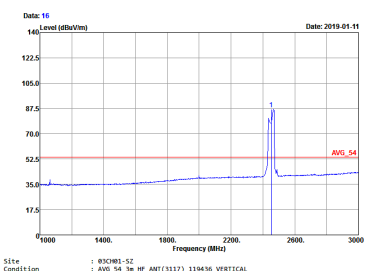


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT40 CH09 2452MHz - L	
1	Horizontal	Fundamental
Peak		
Avg.		

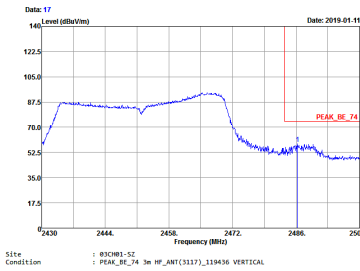
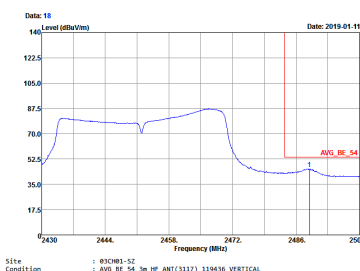


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT40 CH09 2452MHz - R	
1	Horizontal	Fundamental
Peak	 Date: 19 Level (dBuV/m) Date: 2019-01-28 Site Condition : RICHM1-SZ PEAK_BE_74 3m HP_ANT(3117)_119436 HORIZONTAL	
Avg.	 Date: 17 Level (dBuV/m) Date: 2019-01-28 Site Condition : RICHM1-SZ AVG_BE_54 3m HP_ANT(3117)_119436 HORIZONTAL	



WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT40 CH09 2452MHz - L	
1	Vertical	Fundamental
Peak		
Avg.		



WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT40 CH09 2452MHz - R	
1	Vertical	Fundamental
Peak		
Avg.		



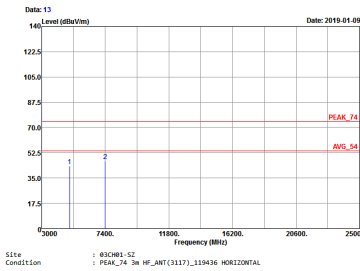
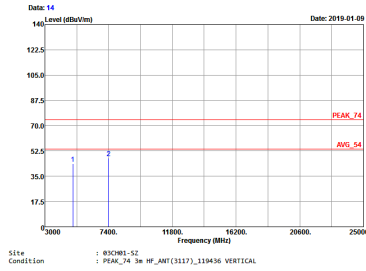
2.4GHz 2400~2483.5MHz
WIFI 802.11b (Harmonic @ 3m)

WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11b CH01 2412MHz	
1	Horizontal	Vertical
Peak Avg.	Date: 13 Level (dBuV/m) Site : 83CH01-SZ Condition : PEAK_74 3m HP_ANT(1117)_119436 HORIZONTAL	Date: 14 Level (dBuV/m) Site : 83CH01-SZ Condition : PEAK_74 3m HP_ANT(1117)_119436 VERTICAL



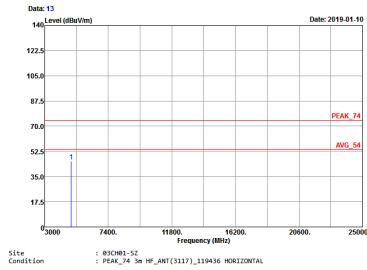
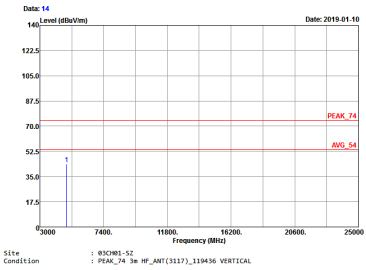
WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11b CH06 2437MHz	
1	Horizontal	Vertical
Peak Avg.	Site Condition : 83CH01-S2 : PEAK_74 3m HP_ANT(3117)_119436 HORIZONTAL	Site Condition : 83CH01-S2 : PEAK_74 3m HP_ANT(3117)_119436 VERTICAL



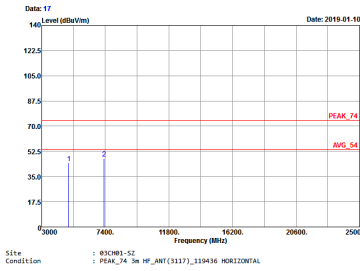
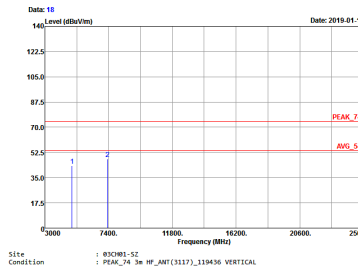
WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11b CH11 2462MHz	
1	Horizontal	Vertical
Peak Avg.	 Site Condition : 83CH01-S2 : PEAK_74 3m HP_ANT(3117)_119436 HORIZONTAL	 Site Condition : 83CH01-S2 : PEAK_74 3m HP_ANT(3117)_119436 VERTICAL



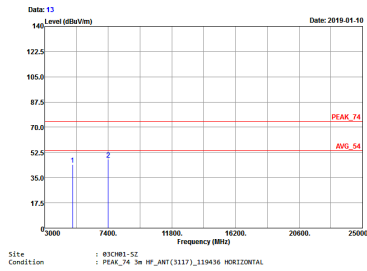
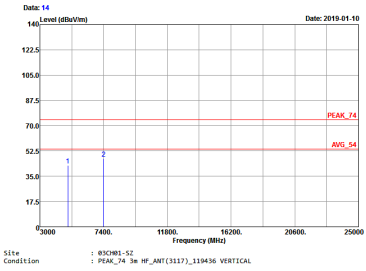
2.4GHz 2400~2483.5MHz
WIFI 802.11g (Harmonic @ 3m)

WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11g CH01 2412MHz	
1	Horizontal	Vertical
Peak Avg.	 Site Condition : 802.11g-52 : PEAK_74 3m HP_ANT(3117)_119436 HORIZONTAL	 Site Condition : 802.11g-52 : PEAK_74 3m HP_ANT(3117)_119436 VERTICAL



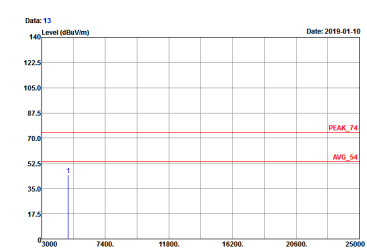
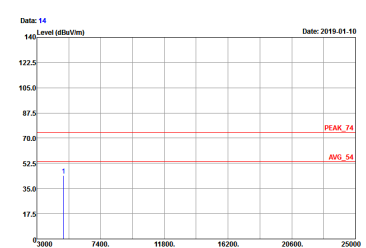
WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11g CH06 2437MHz	
1	Horizontal	Vertical
Peak Avg.	 Site Condition : 83CH01-S2 : PEAK_74 3m HP_ANT(3317)_119436 HORIZONTAL	 Site Condition : 83CH01-S2 : PEAK_74 3m HP_ANT(3317)_119436 VERTICAL



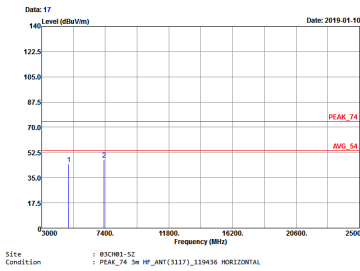
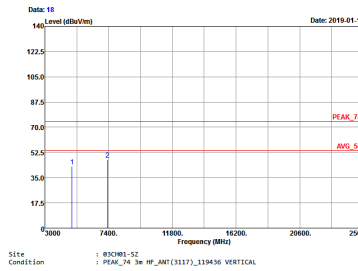
WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11g CH11 2462MHz	
1	Horizontal	Vertical
Peak Avg.	 Date: 13 Date: 2019-01-10 Level (dBuV/m) Frequency (MHz) PEAK_74 AVG_54 Site Condition : 83CH01-S2 : PEAK_74 3m HP_ANT(3117)_119436 HORIZONTAL	 Date: 14 Date: 2019-01-10 Level (dBuV/m) Frequency (MHz) PEAK_74 AVG_54 Site Condition : 83CH01-S2 : PEAK_74 3m HP_ANT(3117)_119436 VERTICAL



2.4GHz 2400~2483.5MHz
WIFI 802.11n HT20 (Harmonic @ 3m)

WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11n HT20 CH01 2412MHz	
1	Horizontal	Vertical
Peak Avg.	Date: 13 Level (dBm/Vm) Date: 2019-01-10  Site : 03CH01-SZ Condition : PEAK_F4 3m HP_ANT(3117)_119436 HORIZONTAL	Date: 14 Level (dBm/Vm) Date: 2019-01-10  Site : 03CH01-SZ Condition : PEAK_F4 3m HP_ANT(3117)_119436 VERTICAL



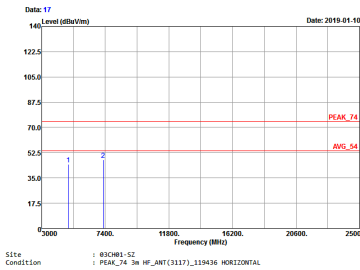
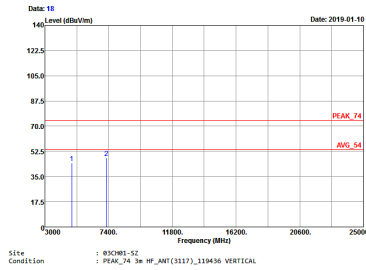
WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11n HT20 CH06 2437MHz	
1	Horizontal	Vertical
Peak Avg.	 Site Condition : 83CH01-SZ : PEAK_74 3m HP_ANT(3317)_119436 HORIZONTAL	 Site Condition : 83CH01-SZ : PEAK_74 3m HP_ANT(3317)_119436 VERTICAL



WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11n HT20 CH11 2462MHz	
1	Horizontal	Vertical
Peak Avg.	Horizontal Peak and Average spectrum plot. The y-axis is Level (dBm/100kHz) from 17.5 to 140. The x-axis is Frequency (MHz) from 3000 to 25000. Two peaks are labeled 1 and 2. A red line indicates PEAK_14 and a red line indicates AVG_04. The plot is dated 2019-01-10.	Vertical Peak and Average spectrum plot. The y-axis is Level (dBm/100kHz) from 17.5 to 140. The x-axis is Frequency (MHz) from 3000 to 25000. Two peaks are labeled 1 and 2. A red line indicates PEAK_14 and a red line indicates AVG_04. The plot is dated 2019-01-10.



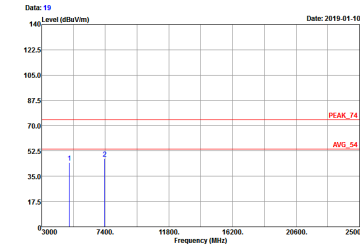
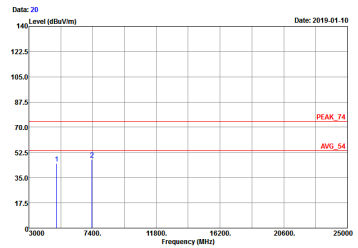
2.4GHz 2400~2483.5MHz
WIFI 802.11n HT40 (Harmonic @ 3m)

WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11n HT40 CH03 2422MHz	
1	Horizontal	Vertical
Peak Avg.		



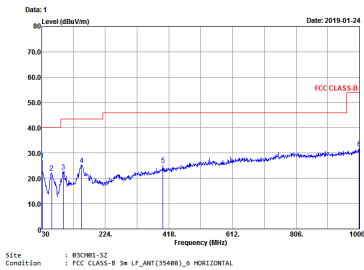
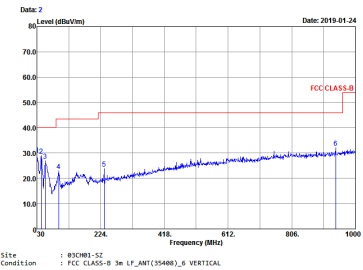
WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11n HT40 CH06 2437MHz	
1	Horizontal	Vertical
Peak Avg.	Site Condition : 83CH01-S2 : PEAK_74 3m HP_ANT(3317)_119436 HORIZONTAL	Site Condition : 83CH01-S2 : PEAK_74 3m HP_ANT(3317)_119436 VERTICAL



WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11n HT40 CH09 2452MHz	
1	Horizontal	Vertical
Peak Avg.	 Site Condition : 83CH01-S2 : PEAK_74 3m HP_ANT(3317)_119436 HORIZONTAL	 Site Condition : 83CH01-S2 : PEAK_74 3m HP_ANT(3317)_119436 VERTICAL



Emission below 1GHz
2.4GHz WIFI 802.11g (LF)

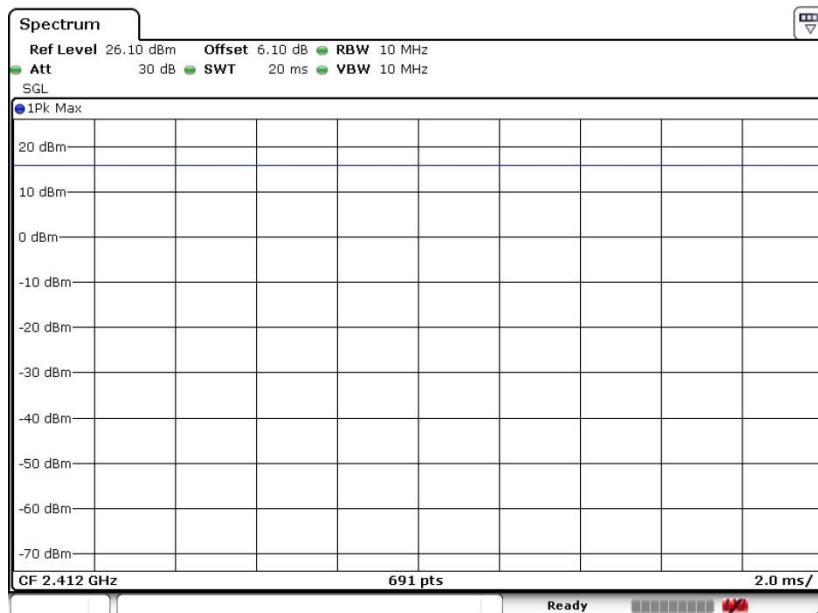
WIFI	2.4GHz 2400~2483.5MHz	
ANT	802.11g LF	
1	Horizontal	Vertical
QP / Peak		



Appendix C. Duty Cycle Plots

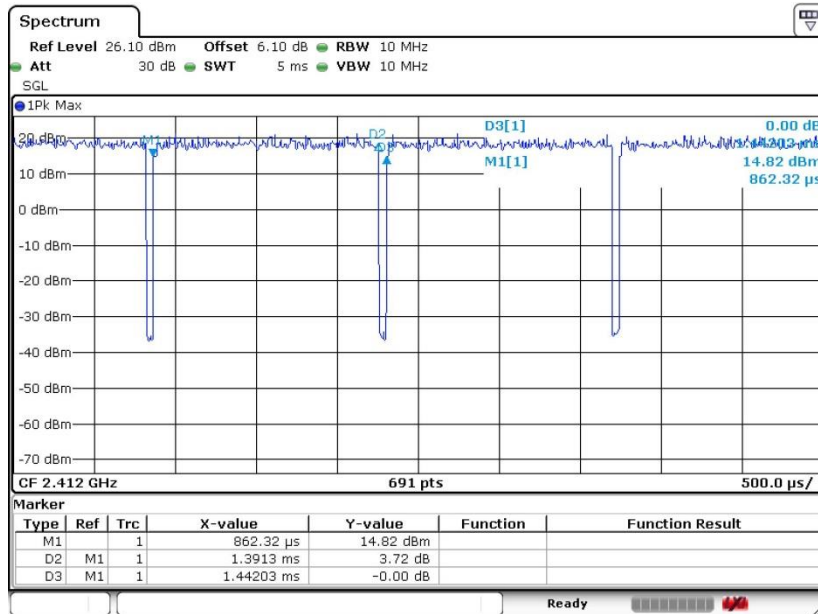
Band	Duty Cycle(%)	T(ms)	1/T(kHz)	VBW Setting
802.11b	100	-	-	10Hz
802.11g	96.48	1.391	0.719	1KHz
802.11n HT20	96.77	1.304	0.767	1KHz
802.11n HT40	93.73	0.649	1.540	3KHz

802.11b

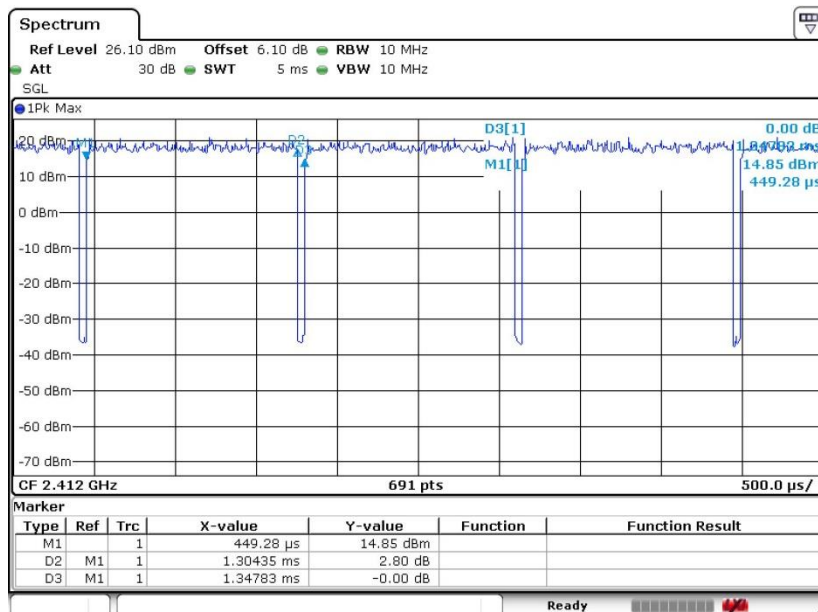




802.11g



802.11n HT20





802.11n HT40

