



FCC RF Test Report

APPLICANT : LC Future Center
EQUIPMENT : Tablet PC
BRAND NAME : Lenovo
MODEL NAME : TP00089A
FCC ID : 2AJN7-TP00089ASI
STANDARD : FCC Part 15 Subpart C §15.247
CLASSIFICATION : (DTS) Digital Transmission System

The product were integrated the WWAN module (Model Name: EM7455, FCC ID: N7NEM7455) and the BT/WLAN module: 2x2 PCIe M.2 1216 SD adapter card (Brand Name: Intel, Model Name: 8265D2W, FCC ID: PD98265D2) during the test.

The product was received on Sep. 08, 2017 and testing was completed on Nov. 21, 2017. We, Sporton International (Kunshan) 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 (Kunshan) Inc., the test report shall not be reproduced except in full.



Approved by: James Huang / Manager

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China



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REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FR790812C	Rev. 01	Initial issue of report	Nov. 29, 2017



SUMMARY OF TEST RESULT

Report Section	FCC Rule	Description	Limit	Result	Remark
-	15.247(a)(2)	6dB Bandwidth	$\geq 0.5\text{MHz}$	Pass	1
-	-	99% Bandwidth	-	Pass	1
3.1	15.247(b)	Peak and Average Output Power	$\leq 30\text{dBm}$	Pass	-
-	15.247(e)	Power Spectral Density	$\leq 8\text{dBm}/3\text{kHz}$	Pass	1
-	15.247(d)	Conducted Band Edges	$\leq 20\text{dBc}$	Pass	1
		Conducted Spurious Emission		Pass	1
3.2	15.247(d)	Radiated Band Edges and Radiated Spurious Emission	15.209(a) & 15.247(d)	Pass	Under limit 1.16 dB at 2483.500 MHz
3.3	15.207	AC Conducted Emission	15.207(a)	Pass	Under limit 12.73 dB at 15.635 MHz
3.4	15.203 & 15.247(b)	Antenna Requirement	N/A	Pass	-

Remark: All conducted test items were leverage from module RF report which can refer to Report No. "160321-02.TR04".



1 General Description

1.1 Applicant

LC Future Center

7F., No.780,Beian Rd., Zhongshan Dist.,Taipei. Taiwan

1.2 Manufacturer

Lenovo PC HK Limited

23/F, Lincoln House, Taikoo Place 979 King's Road, Quarry Bay, HongKong

1.3 Product Feature of Equipment Under Test

Product Feature	
Equipment	Tablet PC
Brand Name	Lenovo
Model Name	TP00089A
FCC ID	2AJN7-TP00089ASI
EUT supports Radios application	WCDMA/HSPA/DC-HSDPA/ HSPA+ (16QAM uplink is not supported)/LTE WLAN 2.4GHz 802.11b/g/n HT20/HT40 WLAN 5GHz 802.11a/n HT20/HT40 WLAN 5GHz 802.11ac VHT20/VHT40/VHT80 Bluetooth v3.0+EDR/ Bluetooth v4.0 LE/ Bluetooth v4.1 LE
IMEI Code	Conducted/ Conduction: N/A Radiation: 014583000471168 for Sample 1 014583000471168 for Sample 2
HW Version	1.0
SW Version	Win 10 Pro 10.0.15063
EUT Stage	Identical Prototype

Remark:

1. The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.
2. There are two samples of EUT, the only difference between two samples are just for the WWAN antenna and WLAN/BT antenna with different suppliers, they are equivalent-type antennas , antenna type and gain are all the same between sample 1 and sample 2 . According to the difference, we evaluate sample 1 for full test, sample 2 only verified the worst cases of sample 1 for RSE test item.



1.4 Product Specification of Equipment Under Test

Standards-related Product Specification										
Tx/Rx Channel Frequency Range	2412 MHz ~ 2472 MHz									
Maximum (Peak) Output Power to antenna	<Ant. 1> 802.11b : 16.14 dBm (0.0411 W) 802.11g : 18.35 dBm (0.0684 W) 802.11n HT20 : 18.51 dBm (0.0710 W) 802.11n HT40 : 17.39 dBm (0.0548 W) <Ant. 2> 802.11b : 16.36 dBm (0.0433 W) 802.11g : 18.40 dBm (0.0692 W) 802.11n HT20 : 18.55 dBm (0.0716 W) 802.11n HT40 : 17.36 dBm (0.0545 W) MIMO <Ant. 1 + 2> 802.11n HT20 : 21.53 dBm (0.1422 W) 802.11n HT40 : 20.37 dBm (0.1089 W)									
Antenna Type / Gain	<Ant 1> PCB Antenna type with gain -0.5 dBi <Ant 2> PCB Antenna type with gain 0.5 dBi									
Type of Modulation	802.11b : DSSS (DBPSK / DQPSK / CCK) 802.11g/n : OFDM (BPSK / QPSK / 16QAM / 64QAM)									
Antenna Function for Transmitter	<table border="1"><thead><tr><th></th><th>Ant. 1</th><th>Ant. 2</th></tr></thead><tbody><tr><td>802.11 b/g/n</td><td>V</td><td>V</td></tr><tr><td>802.11 n MIMO</td><td>V</td><td>V</td></tr></tbody></table>		Ant. 1	Ant. 2	802.11 b/g/n	V	V	802.11 n MIMO	V	V
	Ant. 1	Ant. 2								
802.11 b/g/n	V	V								
802.11 n MIMO	V	V								

Note: MIMO Ant. 1+2 is a calculated result from sum of the power MIMO Ant. 1 and MIMO Ant. 2.

1.5 Modification of EUT

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



1.6 Testing Location

Sportun Lab is accredited to ISO 17025 by National Voluntary Laboratory Accreditation Program (NVLAP code: 600155-0) and the FCC designation No. is CN5013.

Test Site	Sportun International (Kunshan) Inc.		
Test Site Location	No.3-2 Ping-Xiang Rd, Kunshan Development Zone Kunshan City Jiangsu Province 215335 China TEL : +86-512-57900158 FAX : +86-512-57900958		
Test Site No.	Sportun Site No.		FCC Test Firm Registration No.
	TH01-KS	03CH03-KS	CO01-KS
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 C §15.247
- FCC KDB Publication No. 558074 D01 DTS Meas. Guidance v04
- FCC KDB 662911 D01 Multiple Transmitter Output v02r01.
- ANSI C63.10-2013

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



2 Test Configuration of Equipment Under Test

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 were recorded in this report.

2.1 Carrier Frequency and Channel

Frequency Band	Channel	Freq. (MHz)	Channel	Freq. (MHz)
2400-2483.5 MHz	1	2412	8	2447
	2	2417	9	2452
	3	2422	10	2457
	4	2427	11	2462
	5	2432	12	2467
	6	2437	13	2472
	7	2442	-	-



2.2 Test Mode

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

Single Antenna

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

MIMO Antenna

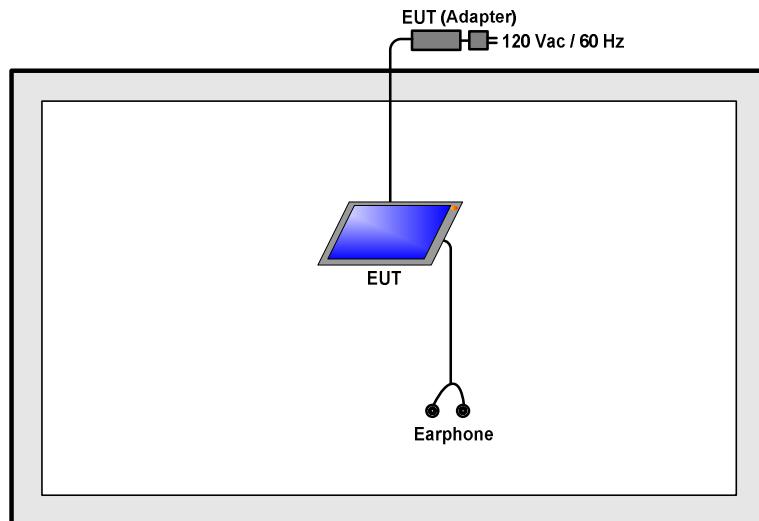
Modulation	Data Rate
802.11n HT20	MCS8
802.11n HT40	MCS8

Test Cases	
AC Conducted Emission	Mode 1 :WCDMA Band II Idle + Bluetooth Link + WLAN Link (2.4G) + Adaptor + display with type C cable + Earphone

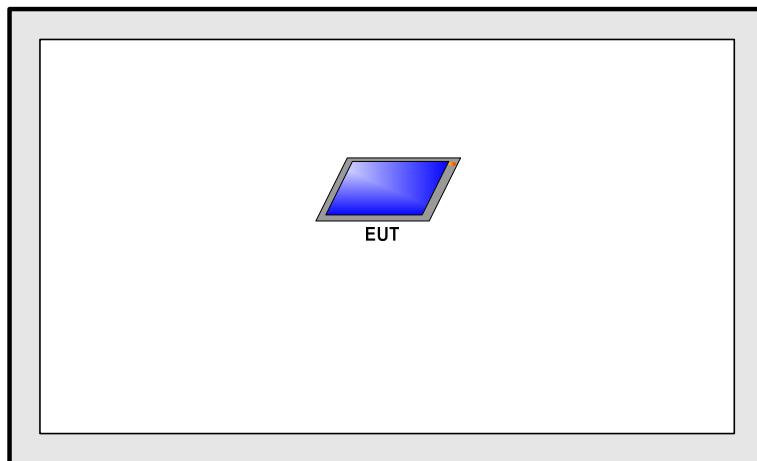


2.3 Connection Diagram of Test System

<WLAN 802.11b/g/n HT20 Tx Mode>

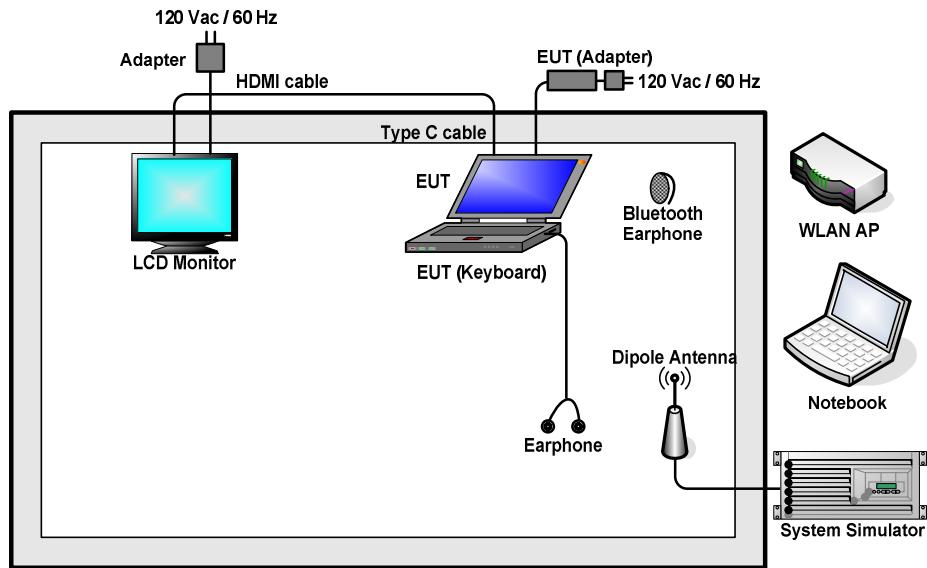


<WLAN 802.11n HT40 Tx Mode>





<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.	System Simulator	R&S	CMU 200	N/A	N/A	Unshielded, 1.8 m
2.	WLAN AP	LINKSYS	WRT600N	Q87-WRT600NV11	N/A	Unshielded, 1.8 m
3.	Notebook	Lenovo	G480	N/A	N/A	AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m
4.	LCD Monitor	Lenovo	6135-AB1	FCC DoC	N/A	Unshielded, 1.8 m
5.	Bluetooth Earphone	Lenovo	LBH308	N/A	N/A	N/A
6.	Earphone	Lenovo	LH102	N/A	Unshielded, 1.2m	N/A
7.	Type C cable	N/A	N/A	N/A	Unshielded, 0.2m	N/A
8.	HDMI cable	N/A	N/A	N/A	Shielded, 1.0 m	N/A

2.5 EUT Operation Test Setup

For WLAN RF test items, an 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 Peak and Average Output Power Measurement

3.1.1 Limit of Peak and Average Output Power

For systems using digital modulation in the 2400-2483.5MHz, the limit for peak output power is 30dBm. If transmitting antenna of directional gain greater than 6dBi are 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.

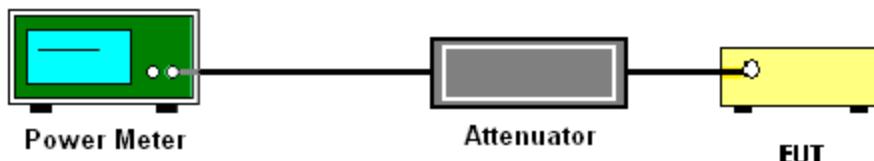
3.1.2 Measuring Instruments

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 FCC KDB No. 558074 DTS D01 Meas. Guidance v04 section 9.1.2 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

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
					Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	
11b	1Mbps	1	1	2412	16.13	16.28		30.00	30.00	-0.50	0.50	15.63	16.78	36.00	36.00	Pass
11b	1Mbps	1	7	2442	16.12	16.11		30.00	30.00	-0.50	0.50	15.62	16.61	36.00	36.00	Pass
11b	1Mbps	1	11	2462	16.14	16.36		30.00	30.00	-0.50	0.50	15.64	16.86	36.00	36.00	Pass
11b	1Mbps	1	12	2467	15.92	15.84		30.00	30.00	-0.50	0.50	15.42	16.34	36.00	36.00	Pass
11b	1Mbps	1	13	2472	11.13	11.16		30.00	30.00	-0.50	0.50	10.63	11.66	36.00	36.00	Pass
11g	6Mbps	1	1	2412	18.32	18.39		30.00	30.00	-0.50	0.50	17.82	18.89	36.00	36.00	Pass
11g	6Mbps	1	7	2442	18.18	18.36		30.00	30.00	-0.50	0.50	17.68	18.86	36.00	36.00	Pass
11g	6Mbps	1	11	2462	18.35	18.40		30.00	30.00	-0.50	0.50	17.85	18.90	36.00	36.00	Pass
11g	6Mbps	1	12	2467	16.73	16.21		30.00	30.00	-0.50	0.50	16.23	16.71	36.00	36.00	Pass
11g	6Mbps	1	13	2472	3.07	3.13		30.00	30.00	-0.50	0.50	2.57	3.63	36.00	36.00	Pass
HT20	MCS0	1	1	2412	18.46	18.55		30.00	30.00	-0.50	0.50	17.96	19.05	36.00	36.00	Pass
HT20	MCS0	1	7	2442	18.21	18.42		30.00	30.00	-0.50	0.50	17.71	18.92	36.00	36.00	Pass
HT20	MCS0	1	11	2462	18.51	18.52		30.00	30.00	-0.50	0.50	18.01	19.02	36.00	36.00	Pass
HT20	MCS0	1	12	2467	16.47	16.38		30.00	30.00	-0.50	0.50	15.97	16.88	36.00	36.00	Pass
HT20	MCS0	1	13	2472	3.31	3.12		30.00	30.00	-0.50	0.50	2.81	3.62	36.00	36.00	Pass
HT40	MCS0	1	3	2422	17.36	17.36		30.00	30.00	-0.50	0.50	16.86	17.86	36.00	36.00	Pass
HT40	MCS0	1	7	2442	17.16	17.31		30.00	30.00	-0.50	0.50	16.66	17.81	36.00	36.00	Pass
HT40	MCS0	1	9	2452	17.39	17.33		30.00	30.00	-0.50	0.50	16.89	17.83	36.00	36.00	Pass
HT40	MCS0	1	10	2457	17.19	17.35		30.00	30.00	-0.50	0.50	16.69	17.85	36.00	36.00	Pass
HT40	MCS0	1	11	2462	2.00	2.13		30.00	30.00	-0.50	0.50	1.50	2.63	36.00	36.00	Pass
HT20	MCS8	2	1	2412	18.46	18.55	21.52	30.00		0.50		22.02		36.00		Pass
HT20	MCS8	2	7	2442	18.21	18.42	21.33	30.00		0.50		21.83		36.00		Pass
HT20	MCS8	2	11	2462	18.51	18.52	21.53	30.00		0.50		22.03		36.00		Pass
HT20	MCS8	2	12	2467	16.47	16.38	19.44	30.00		0.50		19.94		36.00		Pass
HT20	MCS8	2	13	2472	3.31	3.12	6.23	30.00		0.50		6.73		36.00		Pass
HT40	MCS8	2	3	2422	17.36	17.36	20.37	30.00		0.50		20.87		36.00		Pass
HT40	MCS8	2	7	2442	17.16	17.31	20.25	30.00		0.50		20.75		36.00		Pass
HT40	MCS8	2	9	2452	17.39	17.33	20.37	30.00		0.50		20.87		36.00		Pass
HT40	MCS8	2	10	2457	17.19	17.35	20.28	30.00		0.50		20.78		36.00		Pass
HT40	MCS8	2	11	2462	2.00	2.13	5.08	30.00		0.50		5.58		36.00		Pass



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 FCC KDB Publication No. 558074 D01 DTS Meas. Guidance v04.
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 measurement below 1GHz, If the emission level of the EUT measured by the peak detector is 3 dB lower than the applicable limit, the peak emission level will be reported. Otherwise, the emission measurement will be repeated using the quasi-peak detector and reported.
7. 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:

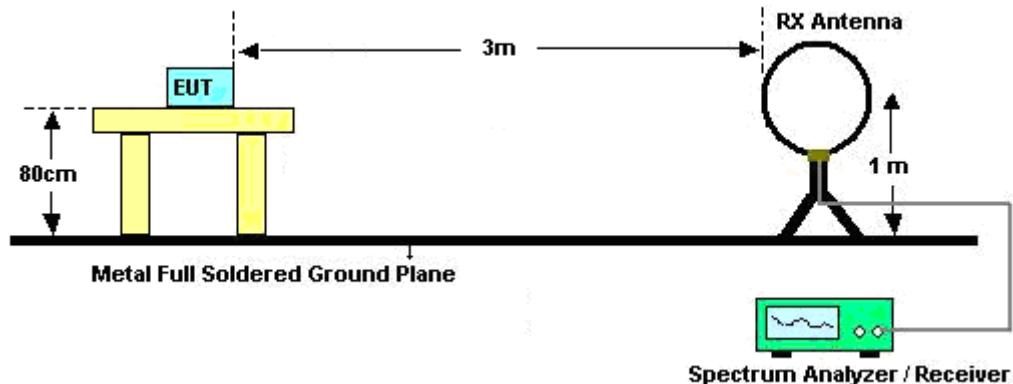
- VBW = 10 Hz, when duty cycle is no less than 98 percent.
- VBW $\geq 1/T$, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.

For average measurement:

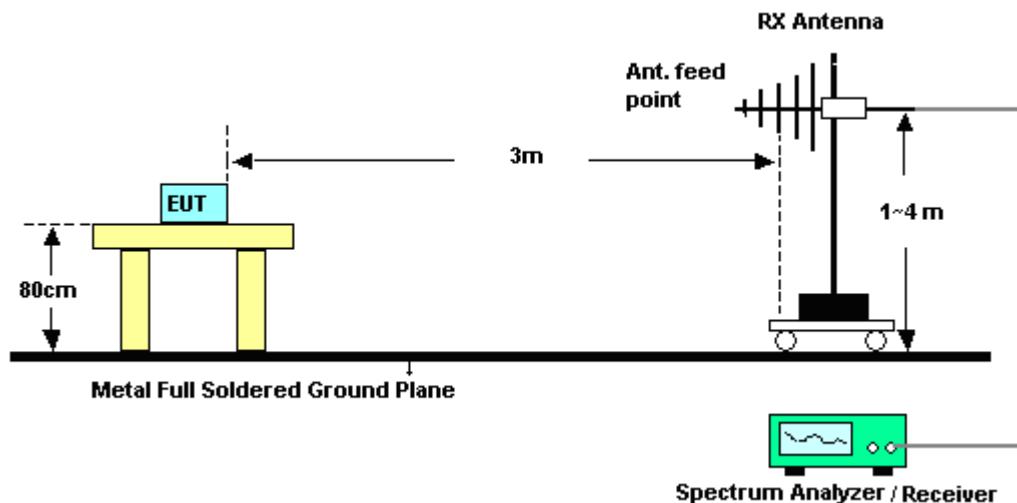
- Detector = power averaging (rms), set sweep point ≥ 2 span / RBW.
- Averaging type = power averaging(RMS)
- The correction factor shall be offset is $10 \log (1/x)$, where x is the duty cycle.

3.2.4 Test Setup

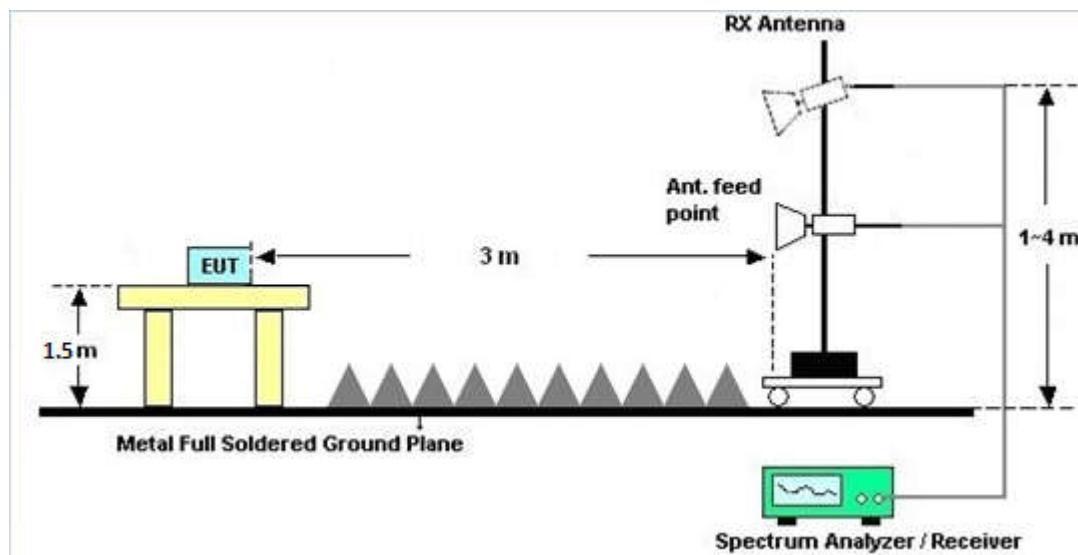
For radiated emissions below 30MHz



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.

3.2.6 Test Result of Radiated Spurious at Band Edges

Please refer to Appendix A and B.

3.2.7 Duty Cycle

Please refer to Appendix C.

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

Please refer to Appendix A and B.



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 (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.

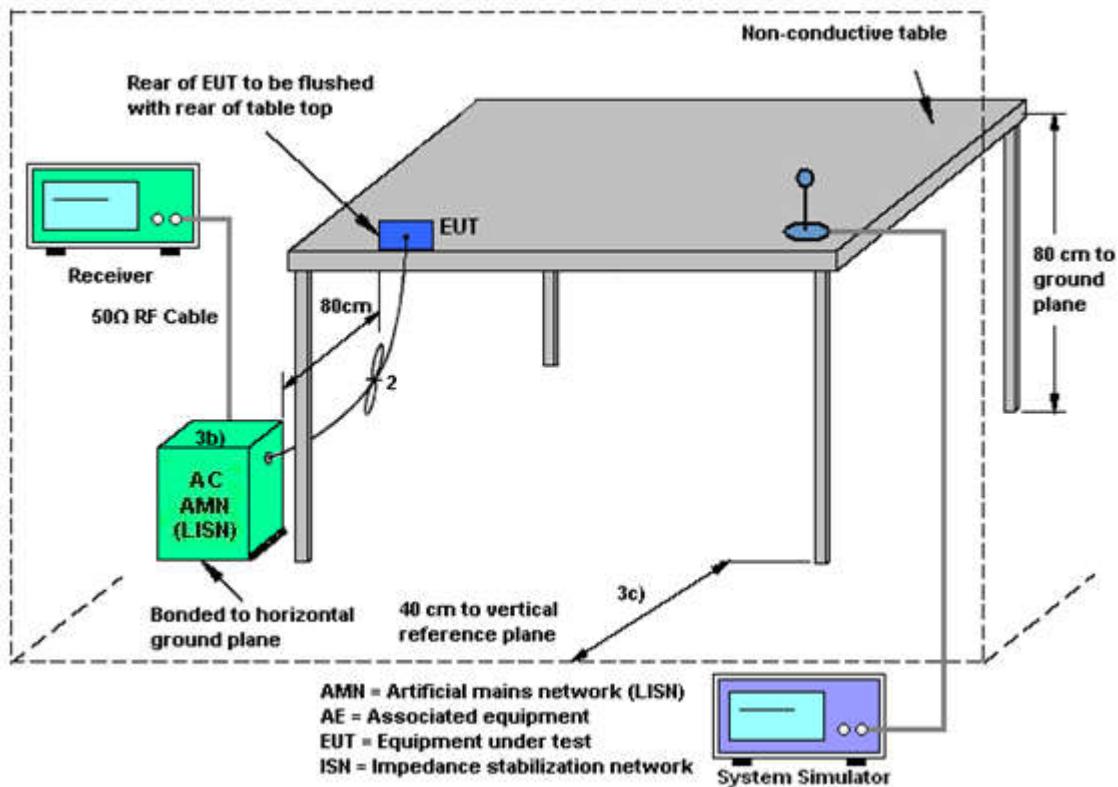
3.3.2 Measuring Instruments

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

3.3.3 Test Procedures

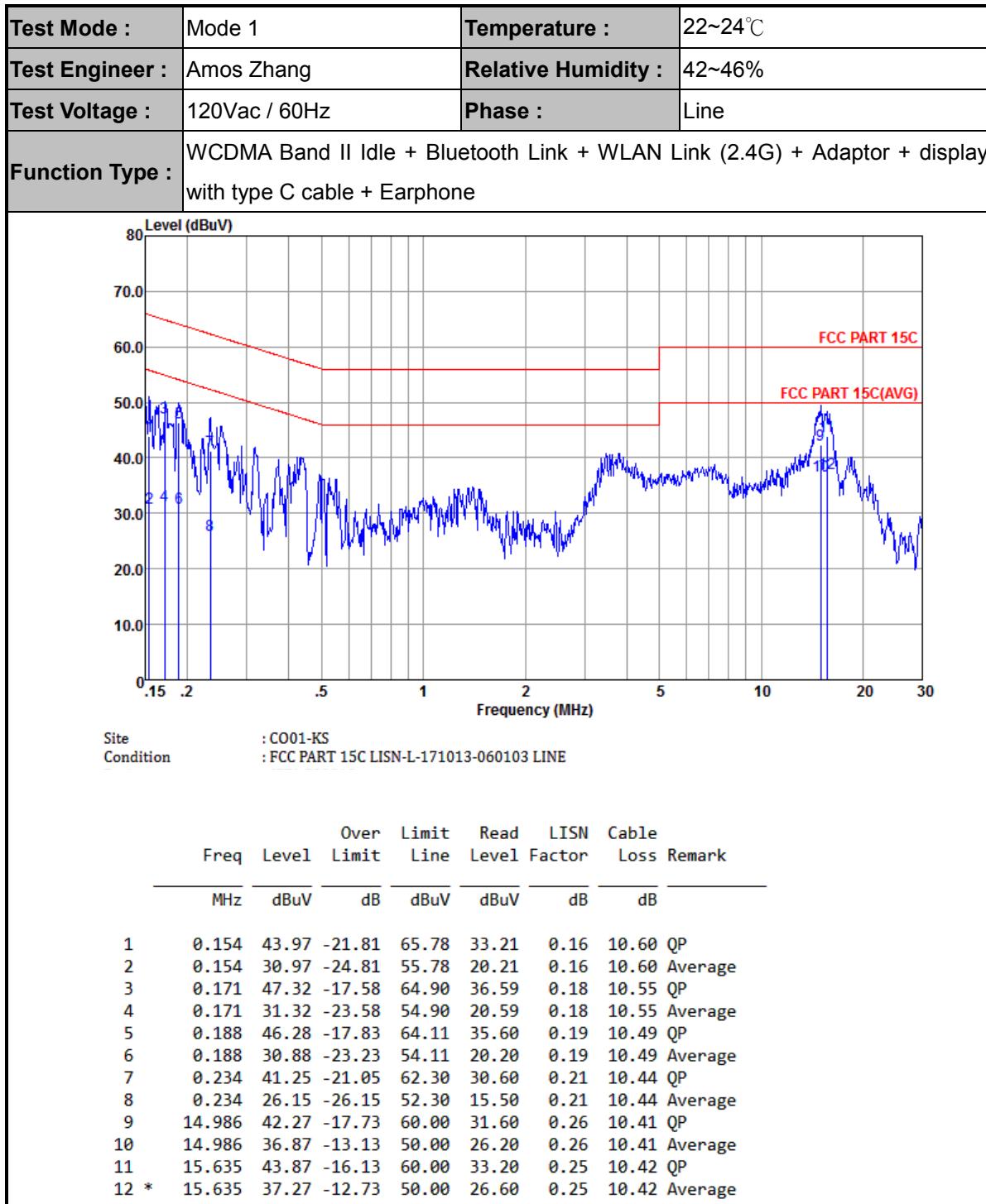
1. The EUT was placed 0.4 meter from the conducting wall of the shielding room, and it was kept at least 80 centimeters from any other grounded conducting surface.
2. Connect EUT to the power mains through a line impedance stabilization network (LISN).
3. All the support units are connecting to the other 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.

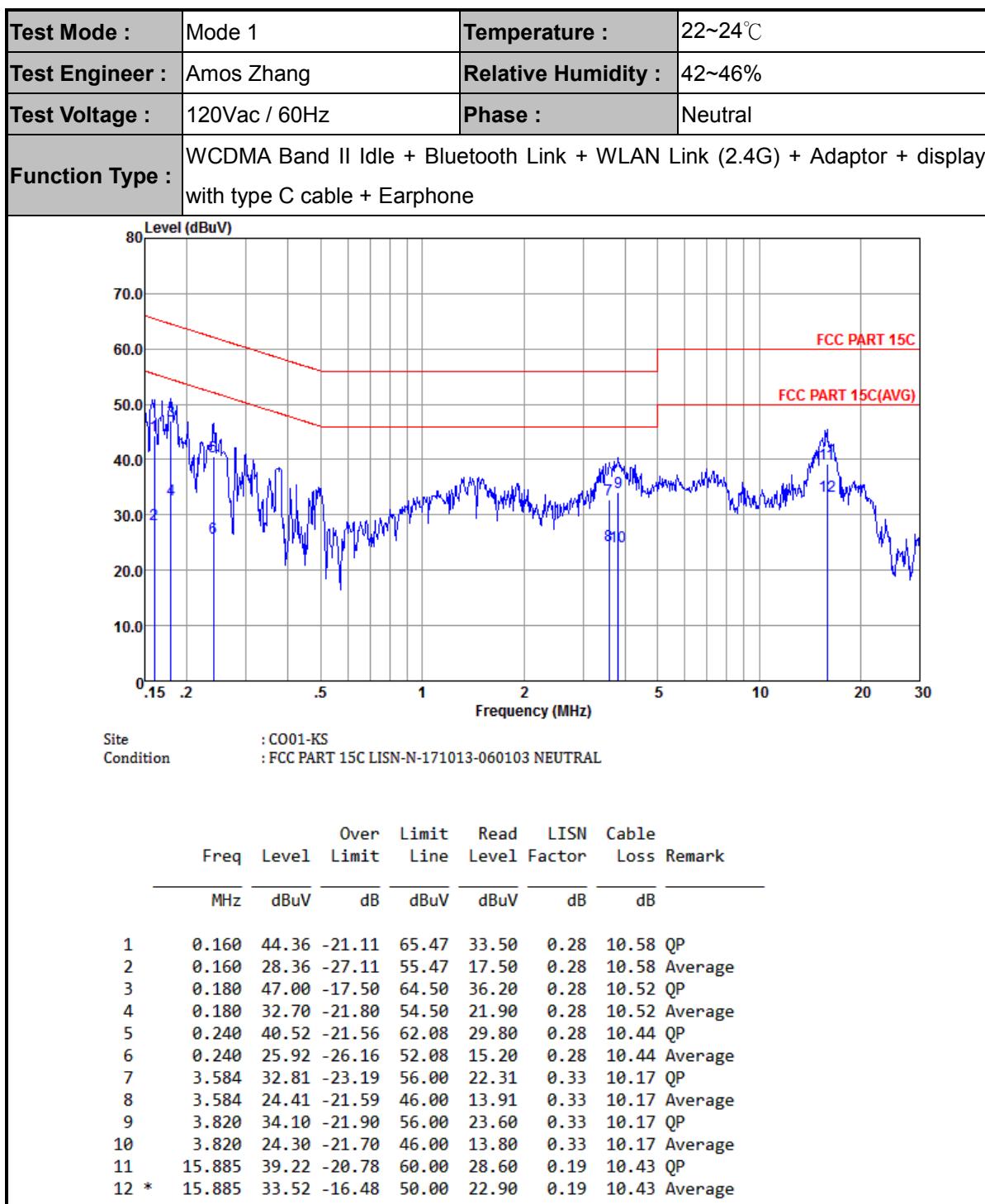
3.3.4 Test Setup





3.3.5 Test Result of AC Conducted Emission







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. For the fixed point-to-point operation, the power shall be reduced by one dB for every 3 dB that the directional gain of the Antenna exceeds 6 dBi. 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

FCC KDB 662911 D01 Multiple Transmitter Output v02r01

MIMO mode does not support Nss = 1

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

The power and PSD limit should be modified if the directional gain of EUT is over 6 dBi

The directional gain "DG" is calculated as following table.

			DG for Power	DG for PSD	Power Limit Reduction	PSD Limit Reduction
	Ant. 1 (dBi)	Ant. 2 (dBi)	(dBi)	(dBi)	(dB)	(dB)
2.4 GHz	-0.50	0.50	0.50	0.50	0.00	0.00

Power Limit Reduction = DG(Power) – 6dBi, (min = 0)

PSD Limit Reduction = DG(PSD) – 6dBi, (min = 0)



4 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Power Meter	Anritsu	ML2495A	1005002	50MHz Bandwidth	Jan. 19, 2017	Nov. 21, 2017	Jan. 18, 2018	Conducted (TH01-KS)
Pulse Power Senor	Anritsu	MA2411B	0917070	300MHz~40GHz	Jan. 19, 2017	Nov. 21, 2017	Jan. 18, 2018	Conducted (TH01-KS)
EMI Test Receiver	Keysight	N9038A	MY56400004	3Hz~8.5GHz; Max 30dBm	Oct. 19, 2017	Nov. 20, 2017	Oct. 18, 2018	Radiation (03CH03-KS)
EXA Spectrum Analyzer	Keysight	N9010A	MY55150244	10Hz~44GHz	Apr. 18, 2017	Nov. 20, 2017	Apr. 17, 2018	Radiation (03CH03-KS)
Loop Antenna	R&S	HFH2-Z2	100321	9kHz~30MHz	Nov. 23, 2016	Nov. 20, 2017	Nov. 22, 2017	Radiation (03CH03-KS)
Bilog Antenna	TeseQ	CBL6112D	35406	25MHz~2GHz	Apr. 22, 2017	Nov. 20, 2017	Apr. 21, 2018	Radiation (03CH03-KS)
Horn Antenna	Schwarzbeck	BBHA9120D	9120D-1356	1GHz~18GHz	Apr. 22, 2017	Nov. 20, 2017	Apr. 21, 2018	Radiation (03CH03-KS)
SHF-EHF Horn	Schwarzbeck	BBHA 9170	BBHA170249	15GHz~40GHz	Feb. 15, 2017	Nov. 20, 2017	Feb. 14, 2018	Radiation (03CH03-KS)
Amplifier	com-power	PA-103A	161069	1MHz~1000MHz / 32 dB	Apr. 18, 2017	Nov. 20, 2017	Apr. 17, 2018	Radiation (03CH03-KS)
Amplifier	MITEQ	TTA1840-35-HG	1887435	18GHz~40GHz	Oct. 12, 2017	Nov. 20, 2017	Oct. 11, 2018	Radiation (03CH03-KS)
high gain Amplifier	MITEQ	AMF-7D-001018 00-30-10P	2025788	1GHz~18GHz	Apr. 18. 2017	Nov. 20, 2017	Apr. 17, 2018	Radiation (03CH03-KS)
AC Power Source	Chroma	61601	F104090004	N/A	NCR	Nov. 20, 2017	NCR	Radiation (03CH03-KS)
Turn Table	ChamPro	EM 1000-T	060762-T	0~360 degree	NCR	Nov. 20, 2017	NCR	Radiation (03CH03-KS)
Antenna Mast	ChamPro	EM 1000-A	060762-A	1 m~4 m	NCR	Nov. 20, 2017	NCR	Radiation (03CH03-KS)
EMI Receiver	R&S	ESCI7	100768	9kHz~7GHz;	Apr. 20, 2017	Nov. 16, 2017	Apr. 19, 2018	Conduction (CO01-KS)
AC LISN	MessTec	AN3016	060103	9kHz~30MHz	Oct. 13, 2017	Nov. 16, 2017	Oct. 12, 2018	Conduction (CO01-KS)
AC LISN (for auxiliary equipment)	MessTec	AN3016	060105	9kHz~30MHz	Oct. 13, 2017	Nov. 16, 2017	Oct. 12, 2018	Conduction (CO01-KS)
AC Power Source	Chroma	61602	ABP0000008 11	AC 0V~300V, 45Hz~1000Hz	Oct. 12, 2017	Nov. 16, 2017	Oct. 11, 2018	Conduction (CO01-KS)

NCR: No Calibration Required



5 Uncertainty of Evaluation

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

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2U_{c(y)}$)	2.3dB
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Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2U_{c(y)}$)	4.6dB
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Uncertainty of Radiated Emission Measurement (1GHz ~ 18GHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2U_{c(y)}$)	4.5dB
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Uncertainty of Radiated Emission Measurement (18GHz ~ 40GHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2U_{c(y)}$)	4.7dB
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Appendix A. Radiated Spurious Emission

Sample 1

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	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
2		(MHz)	(dB μ V/m)	(dB)	(dB μ V/m)	(dB μ V)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11b CH 01 2412MHz		2388.52	48.38	-25.62	74	49.63	25.4	5.65	32.3	112	297	P	H
		2388.78	34.3	-19.7	54	35.55	25.4	5.65	32.3	112	297	A	H
	*	2414	98.75	-	-	99.85	25.54	5.67	32.31	112	297	P	H
	*	2414	95.86	-	-	96.96	25.54	5.67	32.31	112	297	A	H
		2387.48	41.83	-32.17	74	43.08	25.4	5.65	32.3	335	196	P	V
		2388.39	30.54	-23.46	54	31.79	25.4	5.65	32.3	335	196	A	V
	*	2414	95.3	-	-	96.4	25.54	5.67	32.31	335	196	P	V
	*	2414	92.33	-	-	93.43	25.54	5.67	32.31	335	196	A	V
802.11b CH 07 2442MHz		2387.48	40.9	-33.1	74	42.15	25.4	5.65	32.3	116	294	P	H
		2389.56	30.24	-23.76	54	31.49	25.4	5.65	32.3	116	294	A	H
	*	2440	98.56	-	-	99.36	25.83	5.71	32.34	116	294	P	H
	*	2440	94.97	-	-	95.77	25.83	5.71	32.34	116	294	A	H
		2486.5	41.64	-32.36	74	42.15	26.11	5.75	32.37	116	294	P	H
		2483.5	33.73	-20.27	54	34.24	26.11	5.75	32.37	116	294	A	H
		2389.56	40.54	-33.46	74	41.79	25.4	5.65	32.3	359	244	P	V
		2389.95	29.68	-24.32	54	30.93	25.4	5.65	32.3	359	244	A	V
	*	2440	96.81	-	-	97.61	25.83	5.71	32.34	359	244	P	V
	*	2444	93.34	-	-	94.14	25.83	5.71	32.34	359	244	A	V
		2486.14	42.63	-31.37	74	43.14	26.11	5.75	32.37	359	244	P	V
		2485.18	31.61	-22.39	54	32.12	26.11	5.75	32.37	359	244	A	V



802.11b CH 11 2462MHz		2483.92	43.91	-30.09	74	44.42	26.11	5.75	32.37	129	287	P	H
		2483.51	38.09	-15.91	54	38.6	26.11	5.75	32.37	129	287	A	H
	*	2460	102.67	-	-	103.33	25.97	5.73	32.36	129	287	P	H
	*	2460	97.22	-	-	97.88	25.97	5.73	32.36	129	287	A	H
		2483.62	53.16	-20.84	74	53.67	26.11	5.75	32.37	334	195	P	V
		2483.5	35.12	-18.88	54	35.63	26.11	5.75	32.37	334	195	A	V
	*	2460	99.34	-	-	100	25.97	5.73	32.36	334	195	P	V
	*	2460	94.09	-	-	94.75	25.97	5.73	32.36	334	195	A	V
802.11b CH 12 2467MHz		2483.98	56.76	-17.24	74	57.27	26.11	5.75	32.37	131	289	P	H
		2484.16	42.87	-11.13	54	43.38	26.11	5.75	32.37	131	289	A	H
	*	2464	99.55	-	-	100.21	25.97	5.73	32.36	131	289	P	H
	*	2464	95.87	-	-	96.53	25.97	5.73	32.36	131	289	A	H
		2483.8	49.59	-24.41	74	50.1	26.11	5.75	32.37	323	194	P	V
		2484.28	42.01	-11.99	54	42.52	26.11	5.75	32.37	323	194	A	V
	*	2464	97.88	-	-	98.54	25.97	5.73	32.36	323	194	P	V
	*	2464	94.23	-	-	94.89	25.97	5.73	32.36	323	194	A	V
802.11b CH 13 2472MHz		2485.3	49.73	-24.27	74	50.24	26.11	5.75	32.37	100	299	P	H
		2484.76	45.03	-8.97	54	45.54	26.11	5.75	32.37	100	299	A	H
	*	2470	93.06	-	-	93.72	25.97	5.73	32.36	100	299	P	H
	*	2470	89.83	-	-	90.49	25.97	5.73	32.36	100	299	A	H
		2484.94	49.56	-24.44	74	50.07	26.11	5.75	32.37	326	193	P	V
		2484.7	44.3	-9.7	54	44.81	26.11	5.75	32.37	326	193	A	V
	*	2470	91.54	-	-	92.2	25.97	5.73	32.36	326	193	P	V
	*	2470	88.23	-	-	88.89	25.97	5.73	32.36	326	193	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. 2	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	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	43.42	-30.58	74	65.97	30.9	7.86	61.31	100	360	P	H
		4824	41.1	-32.9	74	63.65	30.9	7.86	61.31	100	360	P	V
802.11b CH 07 2442MHz		4884	43.34	-30.66	74	65.63	31.01	7.9	61.2	100	360	P	H
		7326	41.11	-32.89	74	59.32	35.39	9.51	63.11	100	360	P	H
		4884	40.64	-33.36	74	62.93	31.01	7.9	61.2	100	360	P	V
		7326	41.12	-32.88	74	59.33	35.39	9.51	63.11	100	360	P	V
802.11b CH 11 2462MHz		4926	42.06	-31.94	74	64.08	31.12	7.94	61.08	100	360	P	H
		7386	40.72	-33.28	74	58.81	35.55	9.53	63.17	100	360	P	H
		4926	41.01	-32.99	74	63.03	31.12	7.94	61.08	100	360	P	V
		7386	41.63	-32.37	74	59.72	35.55	9.53	63.17	100	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 802.11b (Harmonic @ 3m)

WIFI Ant. 2	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	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 12 2467MHz		4932	38.93	-35.07	74	60.95	31.12	7.94	61.08	100	360	P	H
		7404	40.61	-33.39	74	58.67	35.59	9.54	63.19	100	360	P	H
		4932	38.62	-35.38	74	60.64	31.12	7.94	61.08	100	360	P	V
		7404	40.63	-33.37	74	58.69	35.59	9.54	63.19	100	360	P	V
802.11b CH 13 2472MHz		4944	41.15	-32.85	74	63.08	31.15	7.96	61.04	100	360	P	H
		7416	40.64	-33.36	74	58.7	35.59	9.54	63.19	100	360	P	H
		4944	39.82	-34.18	74	61.75	31.15	7.96	61.04	100	360	P	V
		7416	40.86	-33.14	74	58.92	35.59	9.54	63.19	100	360	P	V
Remark	3. No other spurious found. 4. All results are PASS against Peak and Average limit line.												



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

WIFI Ant. 2	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	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		2389.82	51.95	-22.05	74	53.2	25.4	5.65	32.3	116	294	P	H
		2389.95	40.87	-13.13	54	42.12	25.4	5.65	32.3	116	294	A	H
	*	2416	103.08	-	-	104.18	25.54	5.67	32.31	116	294	P	H
	*	2416	95.45	-	-	96.55	25.54	5.67	32.31	116	294	A	H
		2389.43	49.47	-24.53	74	50.72	25.4	5.65	32.3	376	243	P	V
		2389.95	37.61	-16.39	54	38.86	25.4	5.65	32.3	376	243	A	V
	*	2418	100.32	-	-	101.42	25.54	5.67	32.31	376	243	P	V
	*	2416	92.65	-	-	93.75	25.54	5.67	32.31	376	243	A	V
802.11g CH 07 2442MHz		2389.95	42.21	-31.79	74	43.46	25.4	5.65	32.3	111	295	P	H
		2389.95	33.25	-20.75	54	34.5	25.4	5.65	32.3	111	295	A	H
	*	2446	101.83	-	-	102.63	25.83	5.71	32.34	111	295	P	H
	*	2438	93.92	-	-	94.72	25.83	5.71	32.34	111	295	A	H
		2483.56	46.51	-27.49	74	47.02	26.11	5.75	32.37	111	295	P	H
		2483.5	35.29	-18.71	54	35.8	26.11	5.75	32.37	111	295	A	H
		2373.96	41.23	-32.77	74	42.53	25.35	5.63	32.28	332	195	P	V
		2389.95	30.88	-23.12	54	32.13	25.4	5.65	32.3	332	195	A	V
	*	2448	98.79	-	-	99.59	25.83	5.71	32.34	332	195	P	V
	*	2446	90.74	-	-	91.54	25.83	5.71	32.34	332	195	A	V
		2483.62	46.9	-27.1	74	47.41	26.11	5.75	32.37	332	195	P	V
		2483.5	34.23	-19.77	54	34.74	26.11	5.75	32.37	332	195	A	V



802.11g CH 11 2462MHz		2485.18	49.84	-24.16	74	50.35	26.11	5.75	32.37	102	281	P	H
		2483.5	37.68	-16.32	54	38.19	26.11	5.75	32.37	102	281	A	H
	*	2458	102.38	-	-	103.04	25.97	5.73	32.36	102	281	P	H
	*	2458	95.02	-	-	95.68	25.97	5.73	32.36	102	281	A	H
		2483.68	49.63	-24.37	74	50.14	26.11	5.75	32.37	330	194	P	V
		2483.5	36.36	-17.64	54	36.87	26.11	5.75	32.37	330	194	A	V
	*	2458	100.4	-	-	101.06	25.97	5.73	32.36	330	194	P	V
	*	2458	92.46	-	-	93.12	25.97	5.73	32.36	330	194	A	V
802.11g CH 12 2467MHz	*	2462	101.3	-	-	101.96	25.97	5.73	32.36	113	295	P	H
	*	2462	93.38	-	-	94.04	25.97	5.73	32.36	113	295	A	H
		2483.74	61.31	-12.69	74	61.82	26.11	5.75	32.37	113	295	P	H
		2483.5	47.62	-6.38	54	48.13	26.11	5.75	32.37	113	295	A	H
	*	2464	98.42	-	-	99.08	25.97	5.73	32.36	325	193	P	V
	*	2462	90.81	-	-	91.47	25.97	5.73	32.36	325	193	A	V
		2483.62	60.33	-13.67	74	60.84	26.11	5.75	32.37	325	193	P	V
		2483.5	46.19	-7.81	54	46.7	26.11	5.75	32.37	325	193	A	V
802.11g CH 13 2472MHz	*	2468	84.84	-	-	85.5	25.97	5.73	32.36	116	300	P	H
	*	2468	76.82	-	-	77.48	25.97	5.73	32.36	116	300	A	H
		2483.68	62.17	-11.83	74	62.68	26.11	5.75	32.37	116	300	P	H
		2483.5	49.12	-4.88	54	49.63	26.11	5.75	32.37	116	300	A	H
	*	2468	82.64	-	-	83.3	25.97	5.73	32.36	325	195	P	V
	*	2468	74.67	-	-	75.33	25.97	5.73	32.36	325	195	A	V
		2483.5	62.24	-11.76	74	62.75	26.11	5.75	32.37	325	195	P	V
		2483.56	47.85	-6.15	54	48.36	26.11	5.75	32.37	325	195	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. 2	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	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	40.66	-33.34	74	63.21	30.9	7.86	61.31	100	360	P	H
		4824	40.49	-33.51	74	63.04	30.9	7.86	61.31	100	360	P	V
802.11g CH 07 2442MHz		4884	39.51	-34.49	74	61.8	31.01	7.9	61.2	100	0	P	H
		7326	40.08	-33.92	74	58.29	35.39	9.51	63.11	100	0	P	H
		4884	37.73	-36.27	74	60.02	31.01	7.9	61.2	100	360	P	V
		7326	39.09	-34.91	74	57.3	35.39	9.51	63.11	100	360	P	V
802.11g CH 11 2462MHz		4926	40.01	-33.99	74	62.03	31.12	7.94	61.08	100	4	P	H
		7386	40.38	-33.62	74	58.47	35.55	9.53	63.17	100	4	P	H
		4926	40.27	-33.73	74	62.29	31.12	7.94	61.08	100	352	P	V
		7386	39.81	-34.19	74	57.9	35.55	9.53	63.17	100	352	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 (Harmonic @ 3m)

WIFI Ant. 2	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	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 12 2467MHz		4932	40.62	-33.38	74	62.64	31.12	7.94	61.08	100	0	P	H
		7404	41.23	-32.77	74	59.29	35.59	9.54	63.19	100	0	P	H
		4932	39.51	-34.49	74	61.53	31.12	7.94	61.08	100	360	P	V
		7404	40.02	-33.98	74	58.08	35.59	9.54	63.19	100	360	P	V
802.11g CH 13 2472MHz		4944	38.96	-35.04	74	60.89	31.15	7.96	61.04	100	360	P	H
		7416	39.6	-34.4	74	57.66	35.59	9.54	63.19	100	360	P	H
		4944	38.58	-35.42	74	60.51	31.15	7.96	61.04	100	0	P	V
		7416	38.6	-35.4	74	56.66	35.59	9.54	63.19	100	0	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 802.11b (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.	
802.11b CH 13 2472MHz	1	(MHz)	(dB μ V/m)	(dB)	(dB μ V/m)	(dB μ V)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)	
		2484.94	48.56	-25.44	74	49.07	26.11	5.75	32.37	118	234	P	H	
		2484.82	42.96	-11.04	54	43.47	26.11	5.75	32.37	118	234	A	H	
	*	2470	92.51	-	-	93.17	25.97	5.73	32.36	118	234	P	H	
	*	2470	89.14	-	-	89.8	25.97	5.73	32.36	118	234	A	H	
		2484.94	50.85	-23.15	74	51.36	26.11	5.75	32.37	295	287	P	V	
		2484.76	46.02	-7.98	54	46.53	26.11	5.75	32.37	295	287	A	V	
	*	2470	94.57	-	-	95.23	25.97	5.73	32.36	295	287	P	V	
	*	2470	91.24	-	-	91.9	25.97	5.73	32.36	295	287	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 (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	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 13 2472MHz		4944	39.6	-34.4	74	61.53	31.15	7.96	61.04	100	360	P	H
		7416	41.17	-32.83	74	59.23	35.59	9.54	63.19	100	360	P	H
		4944	39.95	-34.05	74	61.88	31.15	7.96	61.04	100	360	P	V
		7416	40.97	-33.03	74	59.03	35.59	9.54	63.19	100	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 802.11g (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	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 13 2472MHz	*	2468	83.3	-	-	83.96	25.97	5.73	32.36	287	232	P	H
	*	2468	75.72	-	-	76.38	25.97	5.73	32.36	287	232	A	H
		2483.5	58.74	-15.26	74	59.25	26.11	5.75	32.37	287	232	P	H
		2483.5	45.65	-8.35	54	46.16	26.11	5.75	32.37	287	232	A	H
	*	2468	84.98	-	-	85.64	25.97	5.73	32.36	294	289	P	V
	*	2468	77.05	-	-	77.71	25.97	5.73	32.36	294	289	A	V
		2483.62	61.25	-12.75	74	61.76	26.11	5.75	32.37	294	289	P	V
		2483.5	47.8	-6.2	54	48.31	26.11	5.75	32.37	294	289	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	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak (P/A)	Pol. (H/V)
802.11g CH 13 2472MHz	Ant.			Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
	1	4944	39.23	-34.77	74	61.16	31.15	7.96	61.04	100	0	P	H
		7416	40.36	-33.64	74	58.42	35.59	9.54	63.19	100	0	P	H
		4944	40.06	-33.94	74	61.99	31.15	7.96	61.04	100	7	P	V
		7416	39.28	-34.72	74	57.34	35.59	9.54	63.19	100	7	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	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1+2		(MHz)	(dB μ V/m)	(dB)	(dB μ V/m)	(dB μ V)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11n		2389.82	53.54	-20.46	74	54.79	25.4	5.65	32.3	100	285	P	H
		2389.95	41.36	-12.64	54	42.61	25.4	5.65	32.3	100	285	A	H
HT20	*	2416	104.63	-	-	105.73	25.54	5.67	32.31	100	285	P	H
CH 01	*	2416	93.31	-	-	94.41	25.54	5.67	32.31	100	285	A	H
2412MHz		2389.82	53.61	-20.39	74	54.86	25.4	5.65	32.3	347	194	P	V
		2389.82	41.57	-12.43	54	42.82	25.4	5.65	32.3	347	194	A	V
802.11n	*	2414	101.91	-	-	103.01	25.54	5.67	32.31	347	194	P	V
	*	2416	93.09	-	-	94.19	25.54	5.67	32.31	347	194	A	V
802.11n		2389.95	44.02	-29.98	74	45.27	25.4	5.65	32.3	116	303	P	H
		2389.82	34.33	-19.67	54	35.58	25.4	5.65	32.3	116	303	A	H
HT20	*	2440	106.03	-	-	106.83	25.83	5.71	32.34	116	303	P	H
CH 07	*	2438	98.39	-	-	99.19	25.83	5.71	32.34	116	303	A	H
2442MHz		2483.56	53.29	-20.71	74	53.8	26.11	5.75	32.37	116	303	P	H
		2483.5	37.19	-16.81	54	37.7	26.11	5.75	32.37	116	303	A	H
802.11n		2386.7	41.98	-32.02	74	43.23	25.4	5.65	32.3	380	184	P	V
		2389.95	32.35	-21.65	54	33.6	25.4	5.65	32.3	380	184	A	V
HT20	*	2442	103.83	-	-	104.63	25.83	5.71	32.34	380	184	P	V
CH 07	*	2440	95.68	-	-	96.48	25.83	5.71	32.34	380	184	A	V
2442MHz		2484.1	48.48	-25.52	74	48.99	26.11	5.75	32.37	380	184	P	V
		2483.56	35.47	-18.53	54	35.98	26.11	5.75	32.37	380	184	A	V



		2483.92	53.49	-20.51	74	54	26.11	5.75	32.37	100	289	P	H
		2484.1	43.42	-10.58	54	43.93	26.11	5.75	32.37	100	289	A	H
802.11n	*	2458	104.89	-	-	105.55	25.97	5.73	32.36	100	289	P	H
HT20	*	2458	96.25	-	-	96.91	25.97	5.73	32.36	100	289	A	H
CH 11		2483.5	49.38	-24.62	74	49.89	26.11	5.75	32.37	379	192	P	V
2462MHz		2483.8	38.72	-15.28	54	39.23	26.11	5.75	32.37	379	192	A	V
	*	2464	102.41	-	-	103.07	25.97	5.73	32.36	379	192	P	V
	*	2458	92.03	-	-	92.69	25.97	5.73	32.36	379	192	A	V
		2483.98	66.08	-7.92	74	66.59	26.11	5.75	32.37	113	307	P	H
802.11n		2483.5	52.84	-1.16	54	53.35	26.11	5.75	32.37	113	307	A	H
HT20	*	2462	106.98	-	-	107.64	25.97	5.73	32.36	113	307	P	H
CH 12	*	2462	99.25	-	-	99.91	25.97	5.73	32.36	113	307	A	H
2467MHz		2483.74	65.76	-8.24	74	66.27	26.11	5.75	32.37	355	246	P	V
		2483.5	49.94	-4.06	54	50.45	26.11	5.75	32.37	355	246	A	V
	*	2462	102.9	-	-	103.56	25.97	5.73	32.36	355	246	P	V
	*	2462	95.21	-	-	95.87	25.97	5.73	32.36	355	246	A	V
		2483.74	65.03	-8.97	74	65.54	26.11	5.75	32.37	100	301	P	H
802.11n		2483.5	51.27	-2.73	54	51.78	26.11	5.75	32.37	100	301	A	H
HT20	*	2468	87.72	-	-	88.38	25.97	5.73	32.36	100	301	P	H
CH 13	*	2468	80.09	-	-	80.75	25.97	5.73	32.36	100	301	A	H
2472MHz		2483.62	62.63	-11.37	74	63.14	26.11	5.75	32.37	346	135	P	V
		2483.5	48.94	-5.06	54	49.45	26.11	5.75	32.37	346	135	A	V
	*	2468	86.75	-	-	87.41	25.97	5.73	32.36	346	135	P	V
	*	2468	78.98	-	-	79.64	25.97	5.73	32.36	346	135	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+2	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	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	44.62	-29.38	74	67.17	30.9	7.86	61.31	100	360	P	H
		4824	40.72	-33.28	74	63.27	30.9	7.86	61.31	100	360	P	V
		4884	40.89	-33.11	74	63.18	31.01	7.9	61.2	100	360	P	H
		7326	40.74	-33.26	74	58.95	35.39	9.51	63.11	100	360	P	H
802.11n HT20 CH 07 2442MHz		4884	39.43	-34.57	74	61.72	31.01	7.9	61.2	100	360	P	V
		7326	40.98	-33.02	74	59.19	35.39	9.51	63.11	100	360	P	V
		4926	41.35	-32.65	74	63.37	31.12	7.94	61.08	100	360	P	H
		7386	41.34	-32.66	74	59.43	35.55	9.53	63.17	100	360	P	H
802.11n HT20 CH 11 2462MHz		4926	39.7	-34.3	74	61.72	31.12	7.94	61.08	100	360	P	V
		7386	41.57	-32.43	74	59.66	35.55	9.53	63.17	100	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 (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	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		4932	43.56	-30.44	74	65.58	31.12	7.94	61.08	100	360	P	H
	HT20	7404	41.51	-32.49	74	59.57	35.59	9.54	63.19	100	360	P	H
CH 12		4932	40.62	-33.38	74	62.64	31.12	7.94	61.08	100	360	P	V
	2467MHz	7404	41.08	-32.92	74	59.14	35.59	9.54	63.19	100	360	P	V
802.11n		4944	39.4	-34.6	74	61.33	31.15	7.96	61.04	100	360	P	H
	HT20	7416	40.68	-33.32	74	58.74	35.59	9.54	63.19	100	360	P	H
CH 13		4944	39.02	-34.98	74	60.95	31.15	7.96	61.04	100	360	P	V
	2472MHz	7416	42.06	-31.94	74	60.12	35.59	9.54	63.19	100	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 HT40 (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	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		2389.04	50.66	-23.34	74	51.91	25.4	5.65	32.3	100	308	P	H
		2388.78	41.8	-12.2	54	43.05	25.4	5.65	32.3	100	308	A	H
	*	2430	100.72	-	-	101.67	25.69	5.69	32.33	100	308	P	H
	*	2424	91.93	-	-	92.88	25.69	5.69	32.33	100	308	A	H
		2486.44	48.59	-25.41	74	49.1	26.11	5.75	32.37	100	308	P	H
		2483.92	39.54	-14.46	54	40.05	26.11	5.75	32.37	100	308	A	H
		2388.65	51.63	-22.37	74	52.88	25.4	5.65	32.3	277	284	P	V
		2389.43	40.73	-13.27	54	41.98	25.4	5.65	32.3	277	284	A	V
	*	2430	102.19	-	-	103.14	25.69	5.69	32.33	277	284	P	V
	*	2424	93.56	-	-	94.51	25.69	5.69	32.33	277	284	A	V
802.11n HT40 CH 07 2442MHz		2484.64	49.44	-24.56	74	49.95	26.11	5.75	32.37	277	284	P	V
		2483.56	39.54	-14.46	54	40.05	26.11	5.75	32.37	277	284	A	V
		2359.66	47.65	-26.35	74	49.01	25.29	5.61	32.26	100	305	P	H
		2389.82	37.91	-16.09	54	39.16	25.4	5.65	32.3	100	305	A	H
	*	2452	98.89	-	-	99.69	25.83	5.71	32.34	100	305	P	H
	*	2454	90.71	-	-	91.37	25.97	5.73	32.36	100	305	A	H
		2483.5	50.8	-23.2	74	51.31	26.11	5.75	32.37	100	305	P	H
		2483.62	40.71	-13.29	54	41.22	26.11	5.75	32.37	100	305	A	H
		2373.31	47.69	-26.31	74	48.99	25.35	5.63	32.28	274	279	P	V
		2389.82	38.06	-15.94	54	39.31	25.4	5.65	32.3	274	279	A	V
802.11n HT40 CH 07 2442MHz	*	2432	101.01	-	-	101.96	25.69	5.69	32.33	274	279	P	V
	*	2430	92.91	-	-	93.86	25.69	5.69	32.33	274	279	A	V
		2483.56	50.62	-23.38	74	51.13	26.11	5.75	32.37	274	279	P	V
		2483.5	41.91	-12.09	54	42.42	26.11	5.75	32.37	274	279	A	V



802.11n HT40 CH 09 2452MHz	2362.39	47.75	-26.25	74	49.11	25.29	5.61	32.26	100	310	P	H	
	2388.39	37.79	-16.21	54	39.04	25.4	5.65	32.3	100	310	A	H	
	*	2458	100.09	-	-	100.75	25.97	5.73	32.36	100	310	P	H
	*	2458	91.8	-	-	92.46	25.97	5.73	32.36	100	310	A	H
		2483.56	53.52	-20.48	74	54.03	26.11	5.75	32.37	100	310	P	H
		2483.5	44.27	-9.73	54	44.78	26.11	5.75	32.37	100	310	A	H
		2389.82	47.44	-26.56	74	48.69	25.4	5.65	32.3	261	283	P	V
		2389.69	38.12	-15.88	54	39.37	25.4	5.65	32.3	261	283	A	V
	*	2458	102.16	-	-	102.82	25.97	5.73	32.36	261	283	P	V
	*	2458	93.36	-	-	94.02	25.97	5.73	32.36	261	283	A	V
802.11n HT40 CH10 2457MHz		2483.62	53.13	-20.87	74	53.64	26.11	5.75	32.37	261	283	P	V
		2483.5	44.55	-9.45	54	45.06	26.11	5.75	32.37	261	283	A	V
		2377.08	47.27	-26.73	74	48.57	25.35	5.63	32.28	101	309	P	H
		2389.43	37.66	-16.34	54	38.91	25.4	5.65	32.3	101	309	A	H
	*	2462	101.23	-	-	101.89	25.97	5.73	32.36	101	309	P	H
	*	2460	92.41	-	-	93.07	25.97	5.73	32.36	101	309	A	H
		2483.62	57.79	-16.21	74	58.3	26.11	5.75	32.37	101	309	P	H
		2483.5	48.53	-5.47	54	49.04	26.11	5.75	32.37	101	309	A	H
		2389.82	46.98	-27.02	74	48.23	25.4	5.65	32.3	261	277	P	V
		2389.69	38.08	-15.92	54	39.33	25.4	5.65	32.3	261	277	A	V
802.11n HT40 CH 11 2462MHz	*	2460	102.01	-	-	102.67	25.97	5.73	32.36	261	277	P	V
	*	2458	93.89	-	-	94.55	25.97	5.73	32.36	261	277	A	V
		2483.5	58.4	-15.6	74	58.91	26.11	5.75	32.37	261	277	P	V
		2483.5	50.06	-3.94	54	50.57	26.11	5.75	32.37	261	277	A	V
		2360.57	48	-26	74	49.36	25.29	5.61	32.26	100	308	P	H
		2389.04	37.51	-16.49	54	38.76	25.4	5.65	32.3	100	308	A	H
	*	2454	93.08	-	-	93.74	25.97	5.73	32.36	100	308	P	H
	*	2458	77.21	-	-	77.87	25.97	5.73	32.36	100	308	A	H
		2483.62	58.48	-15.52	74	58.99	26.11	5.75	32.37	100	308	P	H
		2483.5	48.53	-5.47	54	49.04	26.11	5.75	32.37	100	308	A	H
2462MHz		2330.8	47.45	-26.55	74	48.93	25.18	5.57	32.23	291	278	P	V
		2363.69	37.5	-16.5	54	38.86	25.29	5.61	32.26	291	278	A	V
	*	2456	99.52	-	-	100.18	25.97	5.73	32.36	291	278	P	V
	*	2460	78.56	-	-	79.22	25.97	5.73	32.36	291	278	A	V



		2483.98	58.03	-15.97	74	58.54	26.11	5.75	32.37	291	278	P	V
		2483.5	49.72	-4.28	54	50.23	26.11	5.75	32.37	291	278	A	V

Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.
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2.4GHz 2400~2483.5MHz

WIFI 802.11n HT40 (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	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		4842	39.78	-34.22	74	62.25	30.93	7.87	61.27	100	360	P	H
		7266	40.28	-33.72	74	58.6	35.26	9.48	63.06	100	360	P	H
		4842	39.6	-34.4	74	62.07	30.93	7.87	61.27	100	360	P	V
		7266	40.82	-33.18	74	59.14	35.26	9.48	63.06	100	360	P	V
802.11n HT40 CH 07 2442MHz		4884	38.91	-35.09	74	61.2	31.01	7.9	61.2	100	360	P	H
		7326	40.4	-33.6	74	58.61	35.39	9.51	63.11	100	360	P	H
		4884	39.26	-34.74	74	61.55	31.01	7.9	61.2	100	360	P	V
		7326	41.5	-32.5	74	59.71	35.39	9.51	63.11	100	360	P	V
802.11n HT40 CH 09 2452MHz		4902	38.6	-35.4	74	60.71	31.08	7.93	61.12	100	360	P	H
		7356	41.64	-32.36	74	59.79	35.47	9.52	63.14	100	360	P	H
		4902	39.09	-34.91	74	61.2	31.08	7.93	61.12	100	360	P	V
		7356	40.82	-33.18	74	58.97	35.47	9.52	63.14	100	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 HT40 (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	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 10 2457MHz		4914	38.19	-35.81	74	60.3	31.08	7.93	61.12	100	360	P	H
		7368	41.79	-32.21	74	59.91	35.51	9.53	63.16	100	360	P	H
		4914	38.58	-35.42	74	60.69	31.08	7.93	61.12	100	360	P	V
		7368	42.23	-31.77	74	60.35	35.51	9.53	63.16	100	360	P	V
802.11n HT40 CH 11 2462MHz		4926	39.53	-34.47	74	61.55	31.12	7.94	61.08	100	360	P	H
		7386	40.84	-33.16	74	58.93	35.55	9.53	63.17	100	360	P	H
		4926	38.5	-35.5	74	60.52	31.12	7.94	61.08	100	360	P	V
		7386	41.07	-32.93	74	59.16	35.55	9.53	63.17	100	360	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Sample 2

2.4GHz 2400~2483.5MHz

WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1+2		(MHz)	(dB μ V/m)	(dB)	(dB μ V/m)	(dB μ V)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11n		2462	104.37	-	-	105.03	25.97	5.73	32.36	100	283	P	H
		2462	92.47	-	-	93.13	25.97	5.73	32.36	100	283	A	H
HT20		2483.56	64.2	-9.8	74	64.71	26.11	5.75	32.37	100	283	P	H
		2483.5	46.48	-7.52	54	46.99	26.11	5.75	32.37	100	283	A	H
CH 12		2462	100.88	-	-	101.54	25.97	5.73	32.36	371	201	P	V
		2462	93.09	-	-	93.75	25.97	5.73	32.36	371	201	A	V
2467MHz		2483.56	63.62	-10.38	74	64.13	26.11	5.75	32.37	371	201	P	V
		2483.5	47.06	-6.94	54	47.57	26.11	5.75	32.37	371	201	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	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1+2		(MHz)	(dB μ V/m)	(dB)	(dB μ V/m)	(dB μ V)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11n		4932	42.24	-31.76	74	64.26	31.12	7.94	61.08	100	360	P	H
		7404	41.37	-32.63	74	59.43	35.59	9.54	63.19	100	360	P	H
HT20		4932	38.86	-35.14	74	60.88	31.12	7.94	61.08	100	360	P	V
		7404	41.02	-32.98	74	59.08	35.59	9.54	63.19	100	360	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Emission below 1GHz

2.4GHz WIFI 802.11n HT20 (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+2		(MHz)	(dB μ V/m)	(dB)	(dB μ V/m)	(dB μ V)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
2.4GHz 802.11n HT20 LF		30	30.99	-9.01	40	35.22	26.3	0.57	31.1	103	287	P	H
		58.13	29.01	-10.99	40	46.98	12.76	0.83	31.56	-	-	P	H
		74.62	29.88	-10.12	40	45.76	14.6	0.92	31.4	-	-	P	H
		93.05	22.54	-20.96	43.5	35.07	17.14	1.05	30.72	-	-	P	H
		249.22	25.87	-20.13	46	37.49	17.86	1.72	31.2	-	-	P	H
		296.75	25.14	-20.86	46	35.23	19.5	1.89	31.48	-	-	P	H
		30	34.71	-5.29	40	38.94	26.3	0.57	31.1	100	215	P	V
		58.13	33.21	-6.79	40	51.18	12.76	0.83	31.56	-	-	P	V
		74.62	34.19	-5.81	40	50.07	14.6	0.92	31.4	-	-	P	V
		92.08	26.38	-17.12	43.5	38.95	17.06	1.05	30.68	-	-	P	V
		223.03	28.88	-17.12	46	41.7	16.72	1.61	31.15	-	-	P	V
		561.56	28.6	-17.4	46	32.52	24.96	2.62	31.5	-	-	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	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.	
2		(MHz)	(dB μ V/m)	(dB)	(dB μ V/m)	(dB μ V)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11b CH 01 2412MHz		2390	55.45	-18.55	74	54.51	32.22	4.58	35.86	103	308	P	H
		2390	43.54	-10.46	54	42.6	32.22	4.58	35.86	103	308	A	H

$$1. \text{ Level(dB}\mu\text{V/m)} =$$

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

$$2. \text{ Over Limit(dB)} = \text{Level(dB}\mu\text{V/m)} - \text{Limit Line(dB}\mu\text{V/m)}$$

For Peak Limit @ 2390MHz:

$$1. \text{ Level(dB}\mu\text{V/m)}$$

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

$$= 32.22(\text{dB}/\text{m}) + 4.58(\text{dB}) + 54.51(\text{dB}\mu\text{V}) - 35.86 (\text{dB})$$

$$= 55.45 (\text{dB}\mu\text{V}/\text{m})$$

$$2. \text{ Over Limit(dB)}$$

= Level(dB μ V/m) - Limit Line(dB μ V/m)

$$= 55.45(\text{dB}\mu\text{V}/\text{m}) - 74(\text{dB}\mu\text{V}/\text{m})$$

$$= -18.55(\text{dB})$$

For Average Limit @ 2390MHz:

$$1. \text{ Level(dB}\mu\text{V/m)}$$

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

$$= 32.22(\text{dB}/\text{m}) + 4.58(\text{dB}) + 42.6(\text{dB}\mu\text{V}) - 35.86 (\text{dB})$$

$$= 43.54 (\text{dB}\mu\text{V}/\text{m})$$

$$2. \text{ Over Limit(dB)}$$

= Level(dB μ V/m) - Limit Line(dB μ V/m)

$$= 43.54(\text{dB}\mu\text{V}/\text{m}) - 54(\text{dB}\mu\text{V}/\text{m})$$

$$= -10.46(\text{dB})$$

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



Appendix B. Radiated Spurious Emission Plots

Note symbol

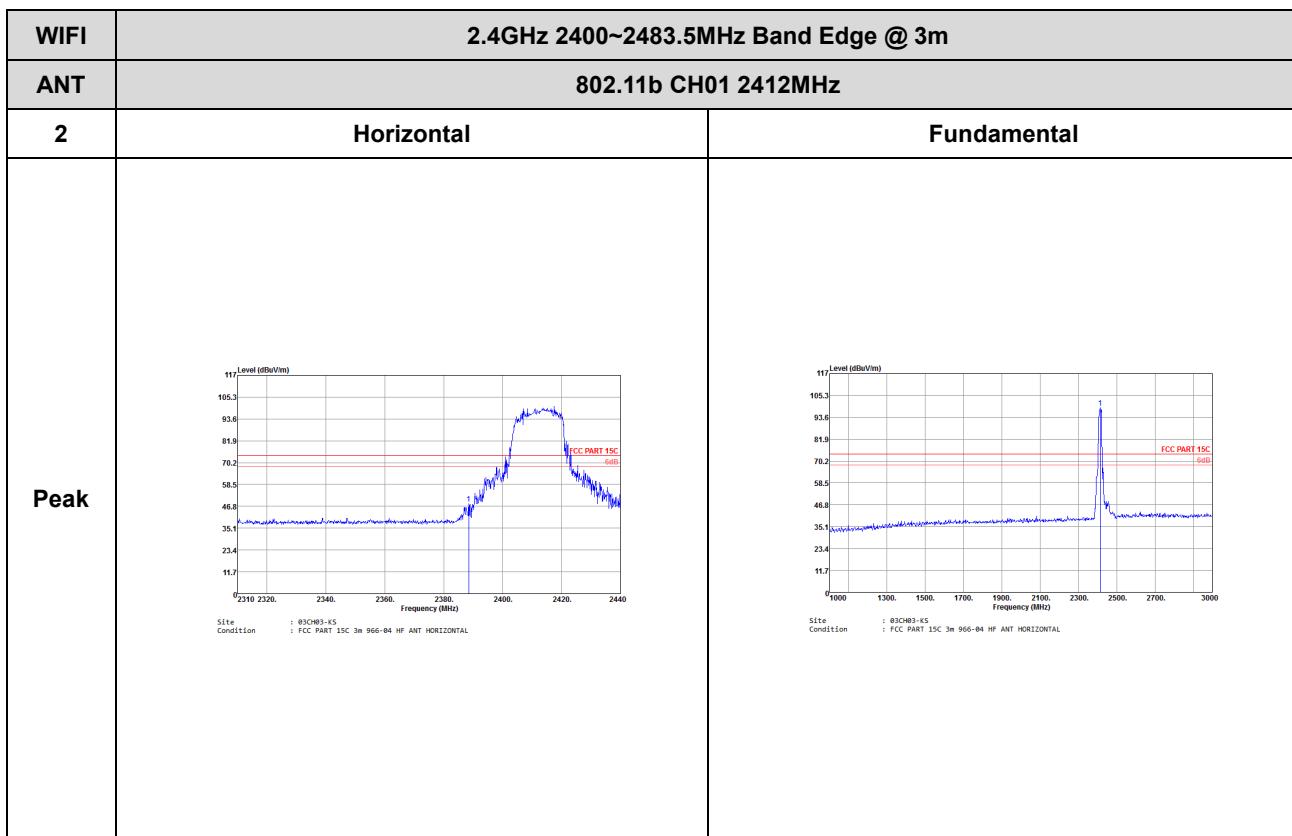
-L	Low channel location
-R	High channel location

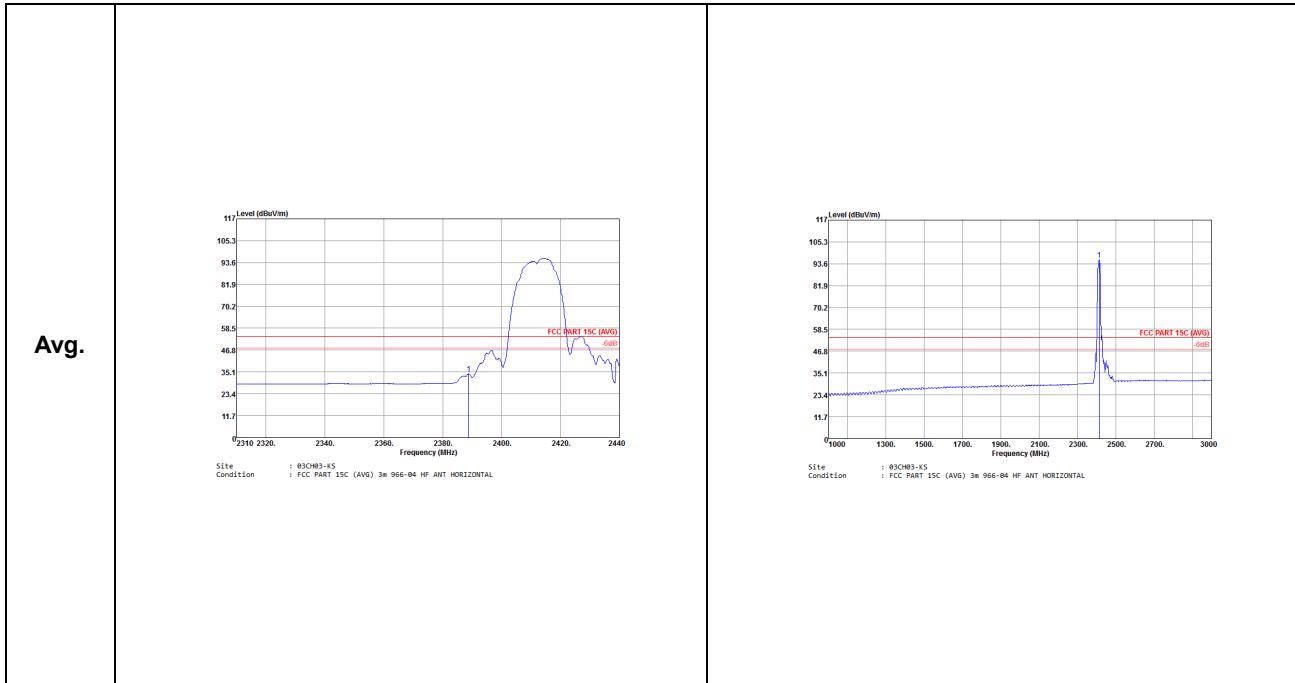


Sample 1

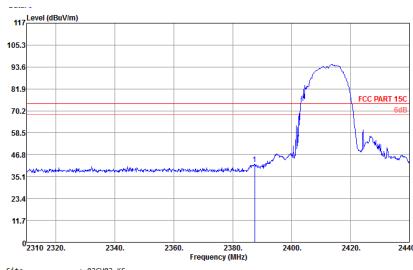
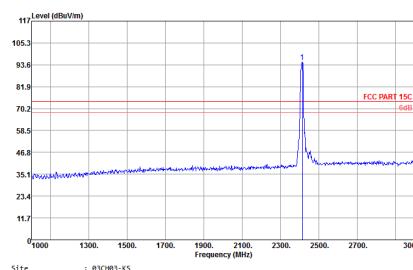
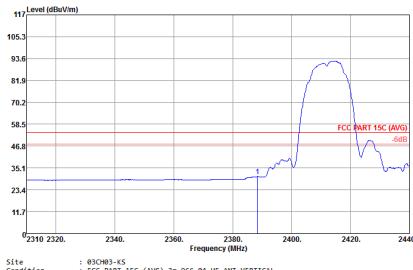
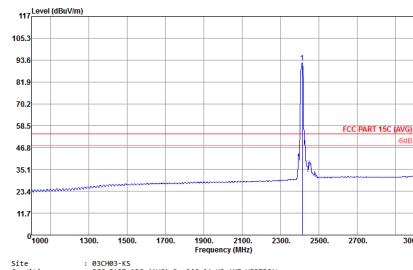
2.4GHz 2400~2483.5MHz

WIFI 802.11b (Band Edge @ 3m)

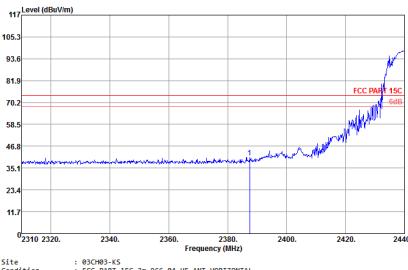
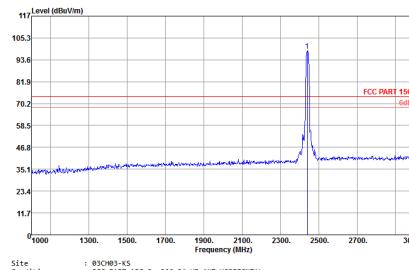
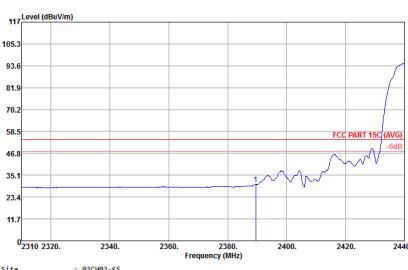
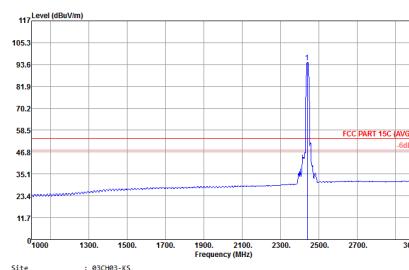




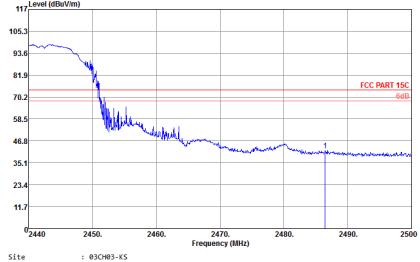
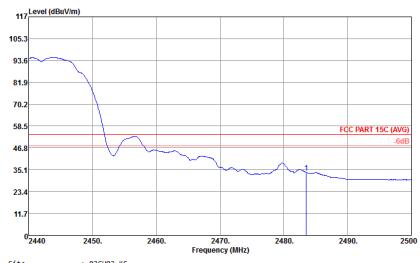


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH01 2412MHz	
2	Vertical	Fundamental
Peak	 Site Condition : 03CH01-K5 : FCC PART 15C 3m 966-04 HF ANT VERTICAL	 Site Condition : 03CH01-K5 : FCC PART 15C 3m 966-04 HF ANT VERTICAL
Avg.	 Site Condition : 03CH01-K5 : FCC PART 15C (AVG) 3m 966-04 HF ANT VERTICAL	 Site Condition : 03CH01-K5 : FCC PART 15C (AVG) 3m 966-04 HF ANT VERTICAL

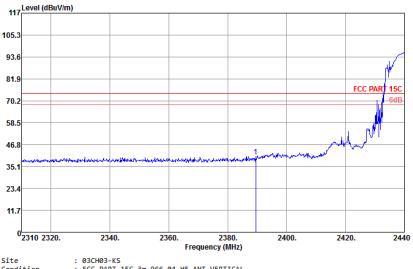
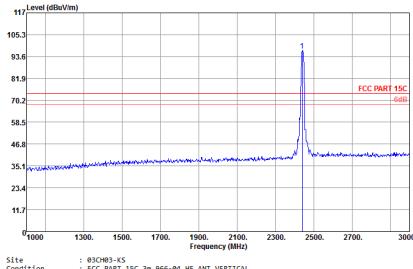
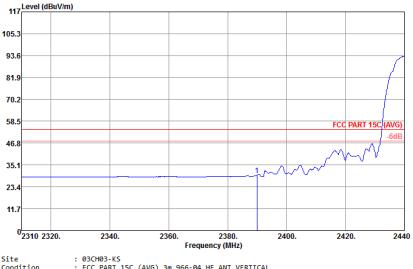
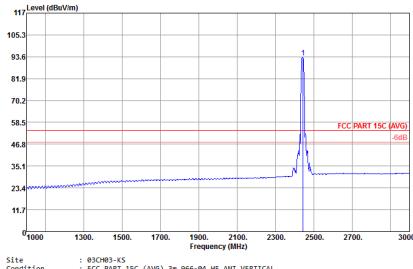


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH07 2442MHz - L	
2	Horizontal	Fundamental
Peak	 Site : 03CH03-K5 Condition : FCC PART 15C 3m 966-04 HF ANT HORIZONTAL	 Site : 03CH03-K5 Condition : FCC PART 15C 3m 966-04 HF ANT HORIZONTAL
Avg.	 Site : 03CH03-K5 Condition : FCC PART 15C (AVG) 3m 966-04 HF ANT HORIZONTAL	 Site : 03CH03-K5 Condition : FCC PART 15C (AVG) 3m 966-04 HF ANT HORIZONTAL

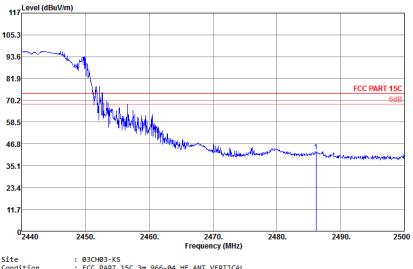
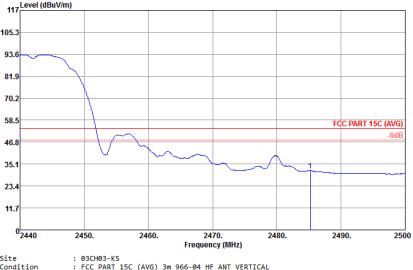


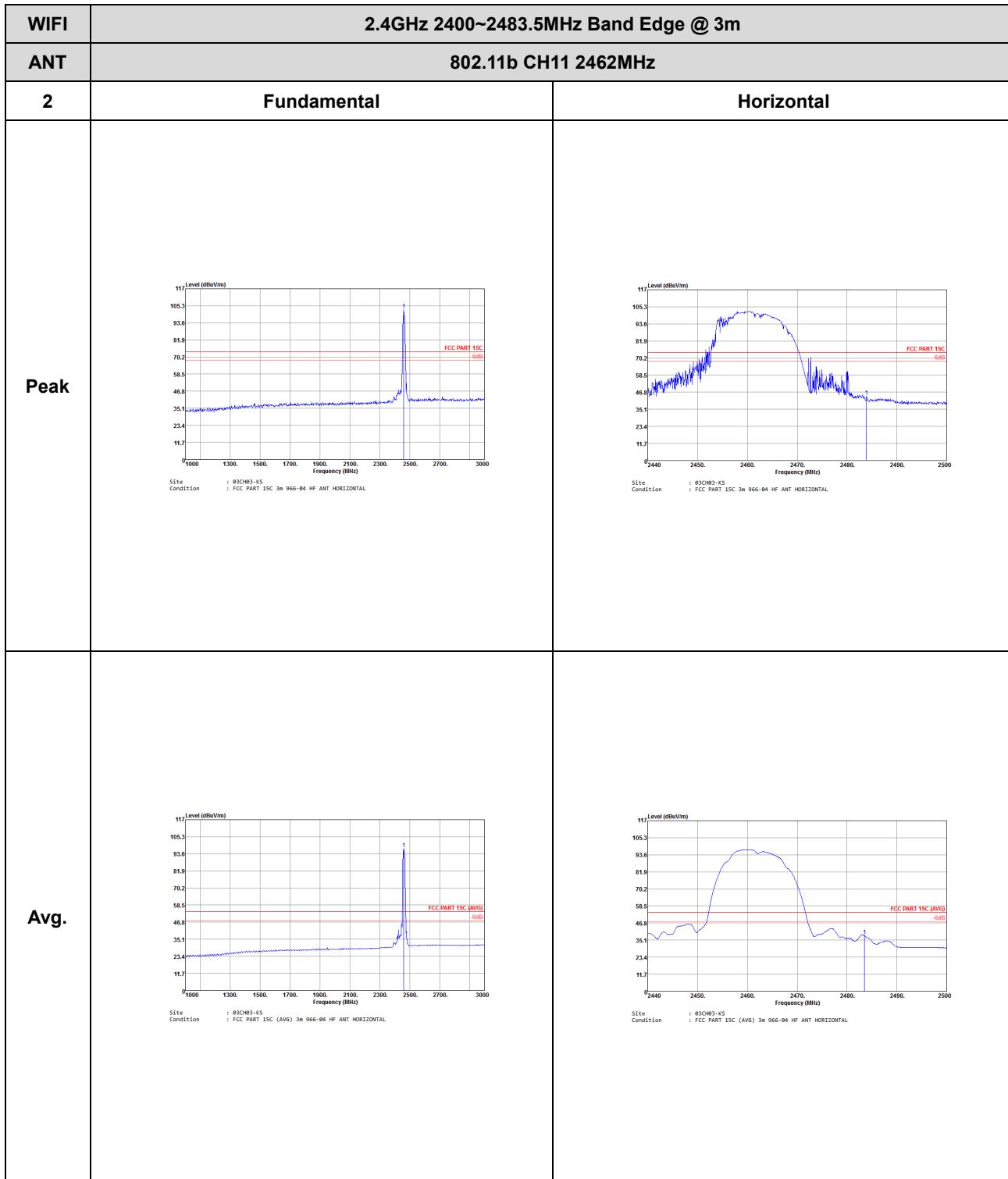
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH07 2442MHz - R	
2	Horizontal	
Peak	 <p>Site : 03CH03-KS Condition : FCC PART 15C 3m 966-94 HF ANT HORIZONTAL</p> A RF spectrum plot showing the power spectral density (Level in dBuV/m) versus frequency (Frequency in MHz). The x-axis ranges from 2440 to 2500 MHz, and the y-axis ranges from 11.7 to 111 dBuV/m. A blue line represents the measured signal, which starts at approximately 105.3 dBuV/m at 2440 MHz, drops sharply to about 48.8 dBuV/m at 2442 MHz, and then remains relatively flat. Two red horizontal lines indicate the FCC PART 15C limits at 70.2 dBuV/m. A vertical blue bar is present at 2442 MHz.	
Avg.	 <p>Site : 03CH03-KS Condition : FCC PART 15C (AVG) 3m 966-94 HF ANT HORIZONTAL</p> A RF spectrum plot showing the power spectral density (Level in dBuV/m) versus frequency (Frequency in MHz). The x-axis ranges from 2440 to 2500 MHz, and the y-axis ranges from 11.7 to 111 dBuV/m. A blue line represents the measured signal, which starts at approximately 105.3 dBuV/m at 2440 MHz, drops sharply to about 46.8 dBuV/m at 2442 MHz, and then remains relatively flat. Two red horizontal lines indicate the FCC PART 15C limits at 70.2 dBuV/m. A vertical blue bar is present at 2442 MHz.	

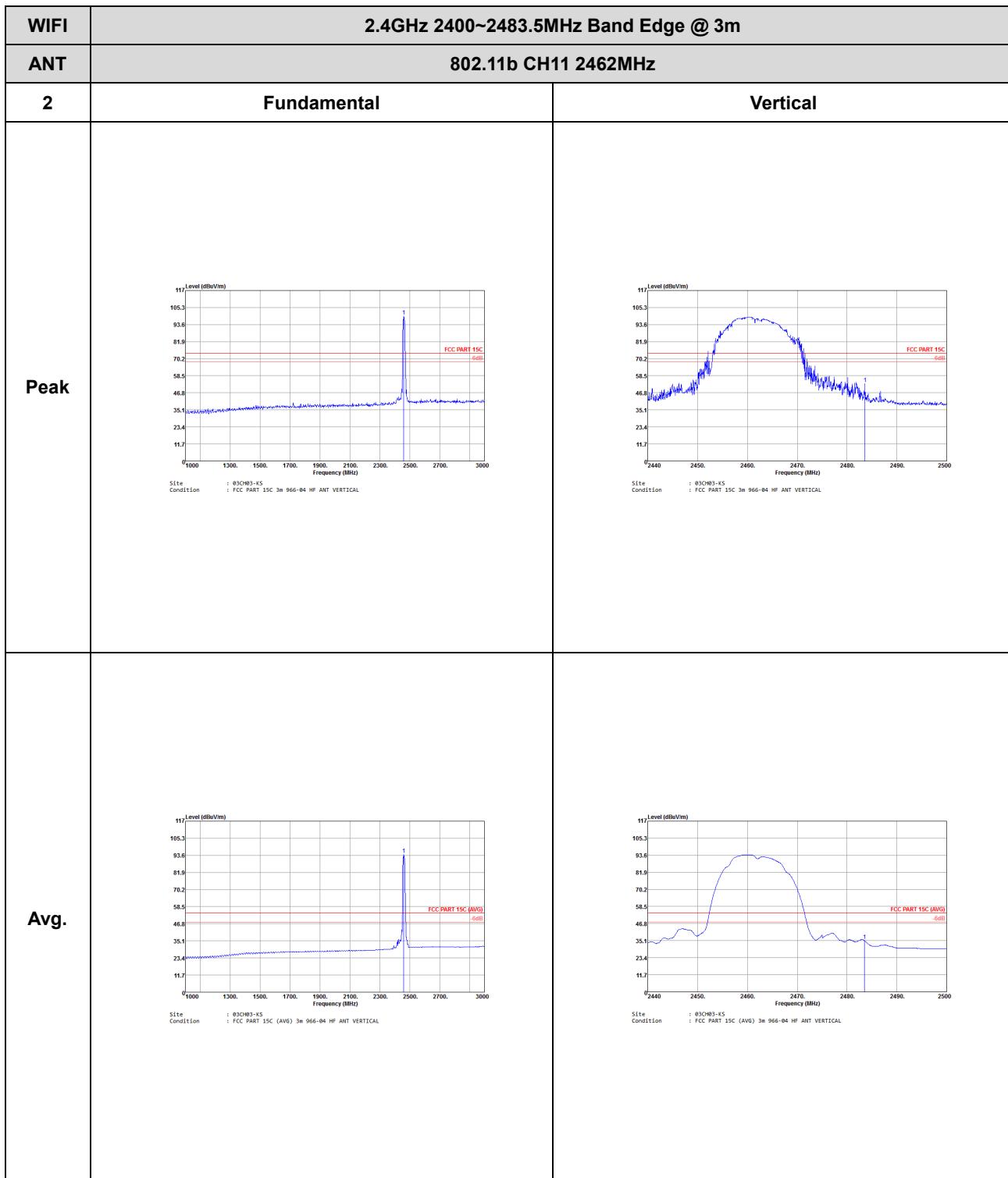


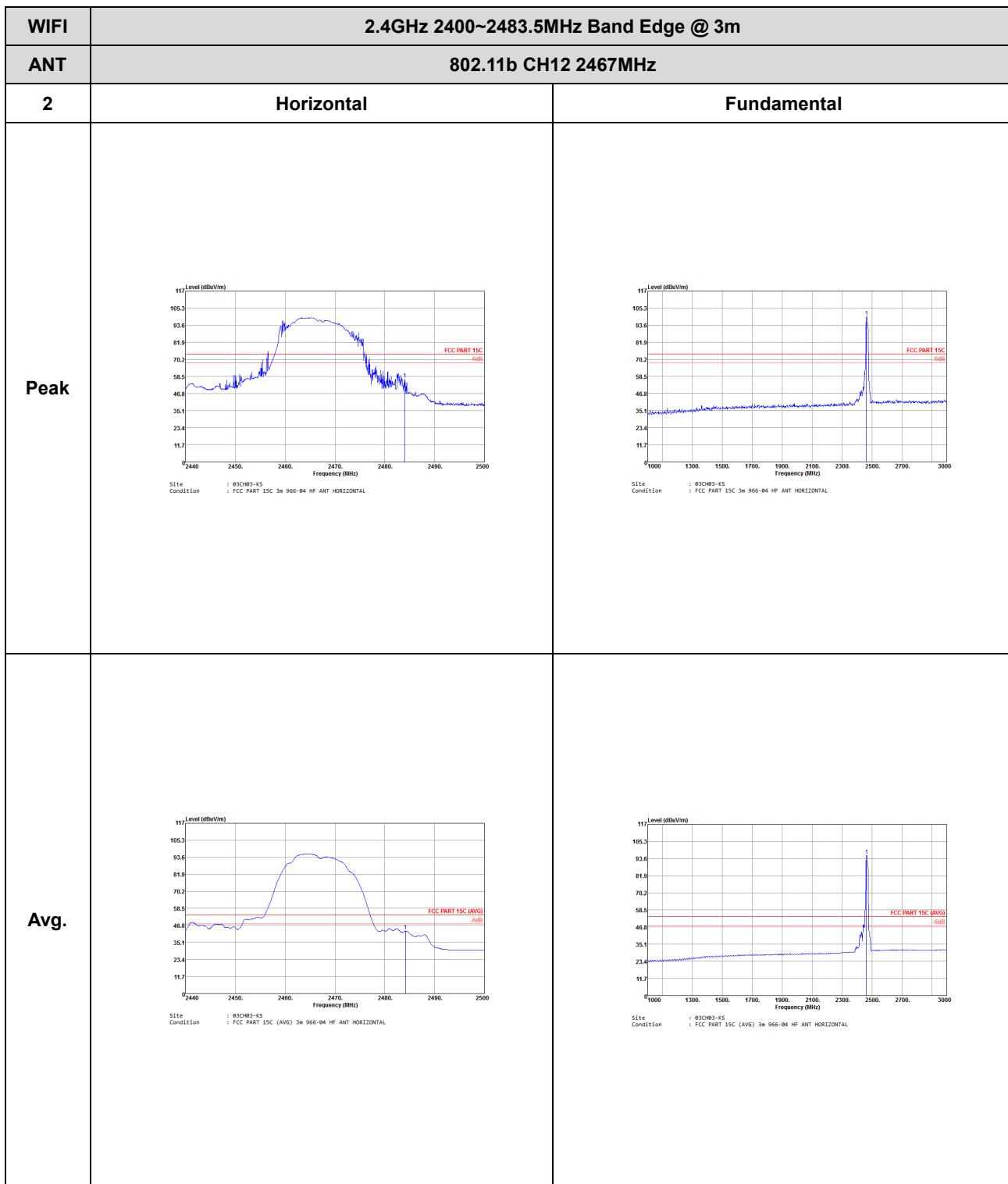
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH07 2442MHz - L	
2	Vertical	Fundamental
Peak	 <p>Site Condition : 03CH03-KS : FCC PART 15C 3m 966-04 HF ANT VERTICAL</p>	 <p>Site Condition : 03CH03-KS : FCC PART 15C 3m 966-04 HF ANT VERTICAL</p>
Avg.	 <p>Site Condition : 03CH03-KS : FCC PART 15C (AVG) 3m 966-04 HF ANT VERTICAL</p>	 <p>Site Condition : 03CH03-KS : FCC PART 15C (AVG) 3m 966-04 HF ANT VERTICAL</p>

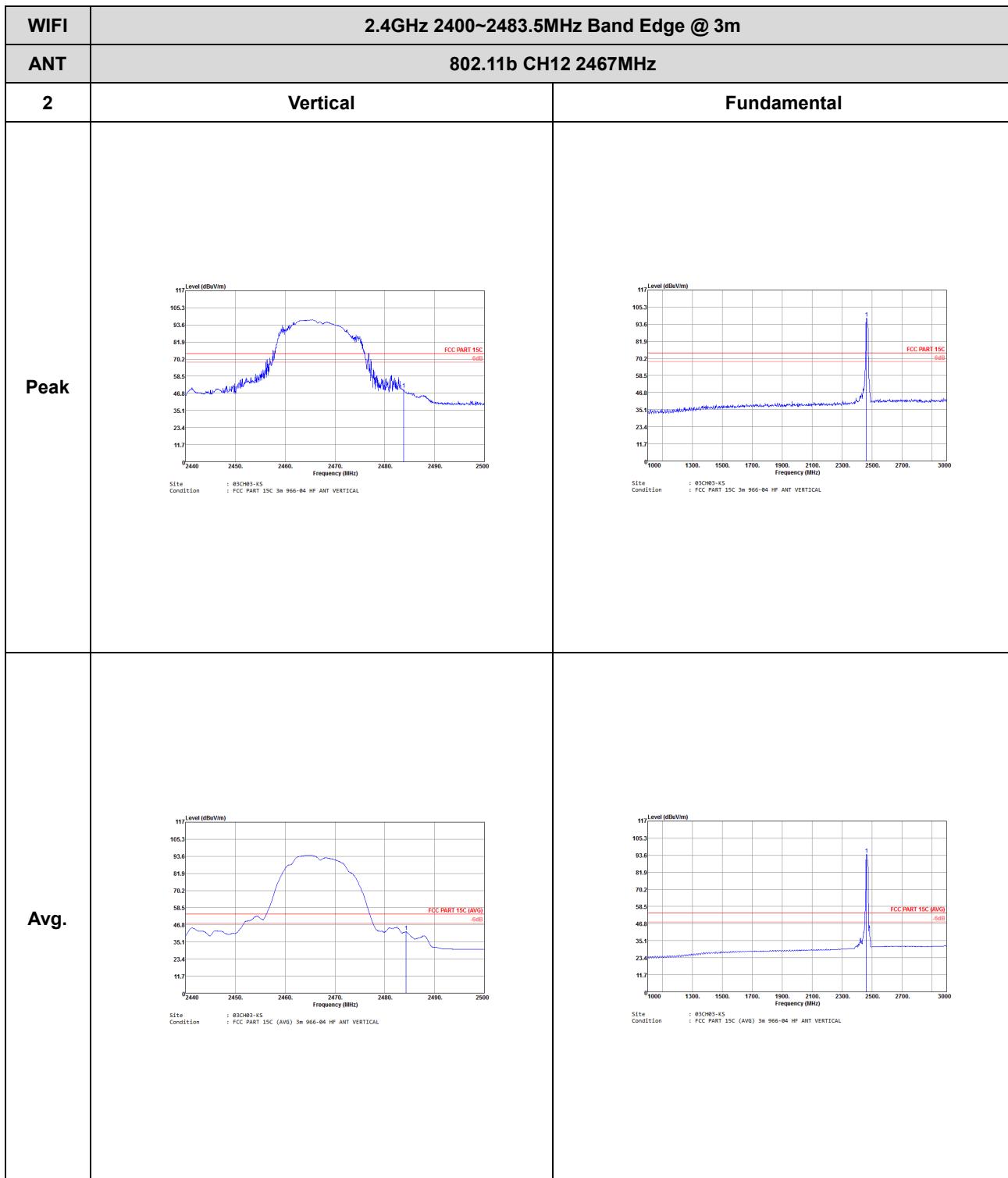


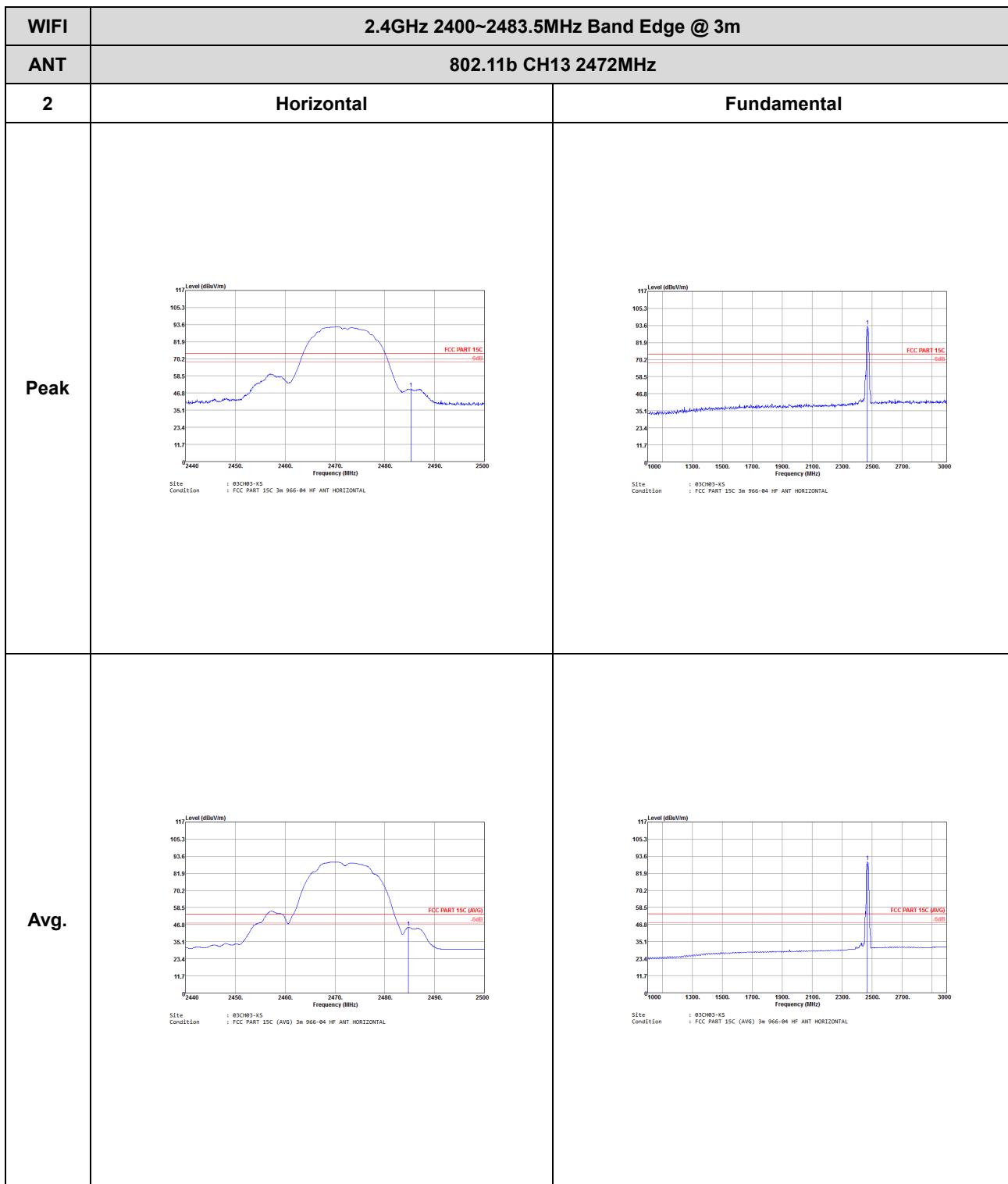
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH07 2442MHz - R	
2	Vertical	
Peak	 <p>Site Condition : 03CH03-X5 : FCC PART 15C 3m 966-04 HF ANT VERTICAL</p>	
Avg.	 <p>Site Condition : 03CH03-X5 : FCC PART 15C (AVG) 3m 966-04 HF ANT VERTICAL</p>	



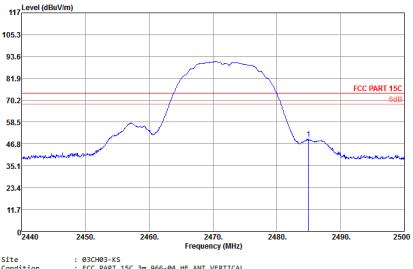
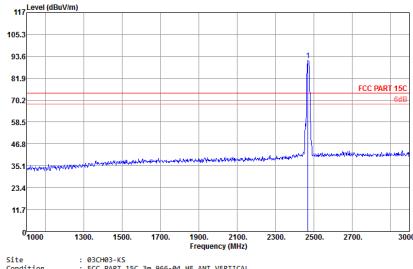
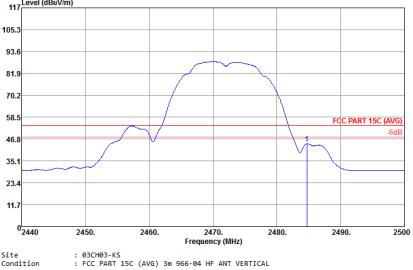
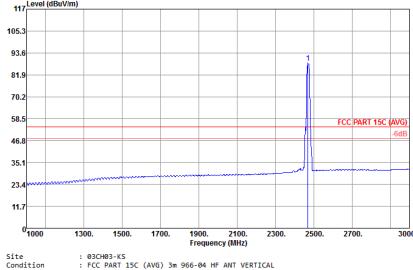








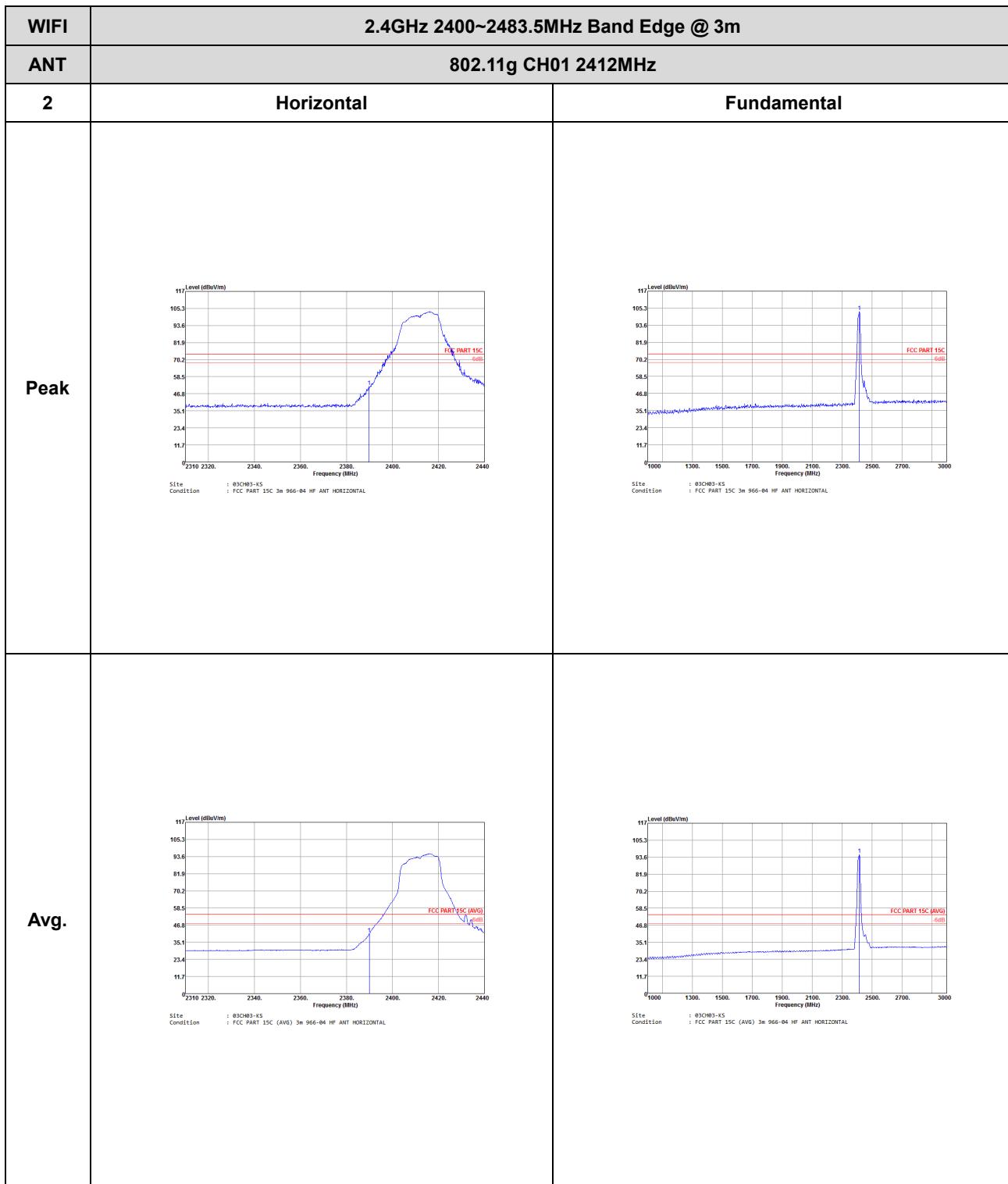


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH13 2472MHz	
2	Vertical	Fundamental
Peak	 Site Condition : 03CH03-KS : FCC PART 15C 3m 966-04 HF ANT VERTICAL	 Site Condition : 03CH03-KS : FCC PART 15C 3m 966-04 HF ANT VERTICAL
Avg.	 Site Condition : 03CH03-KS : FCC PART 15C (AVG) 3m 966-04 HF ANT VERTICAL	 Site Condition : 03CH03-KS : FCC PART 15C (AVG) 3m 966-04 HF ANT VERTICAL

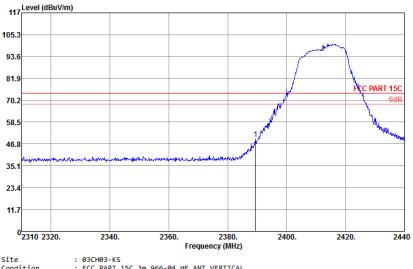
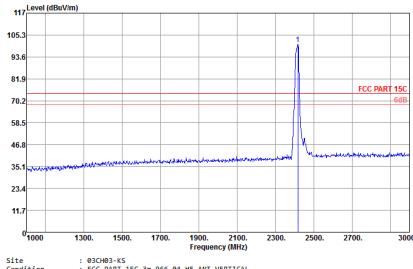
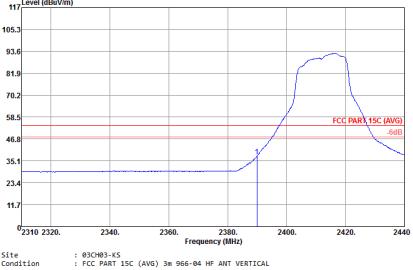
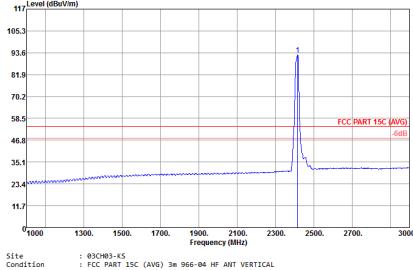


2.4GHz 2400~2483.5MHz

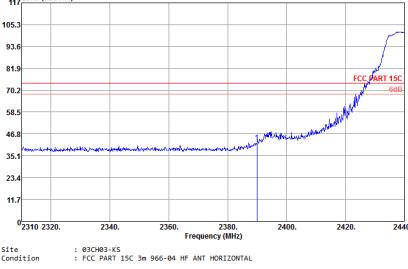
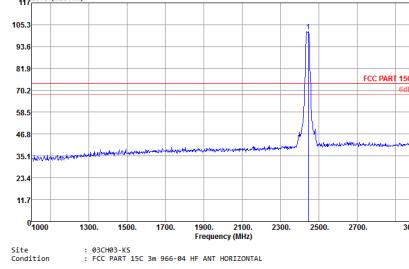
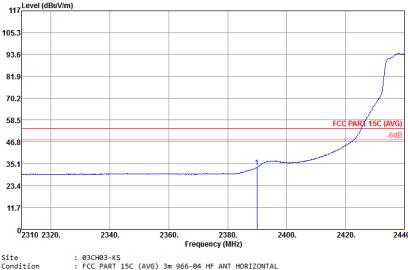
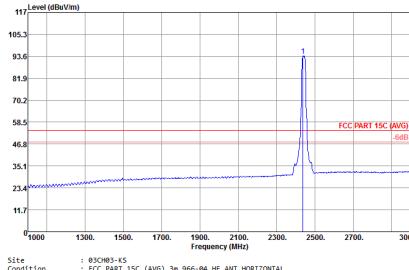
WIFI 802.11g (Band Edge @ 3m)





WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH01 2412MHz	
2	Vertical	Fundamental
Peak	 Site Condition : 03CH03-KS : FCC PART 15C 3m 966-04 HF ANT VERTICAL	 Site Condition : 03CH03-KS : FCC PART 15C 3m 966-04 HF ANT VERTICAL
Avg.	 Site Condition : 03CH03-KS : FCC PART 15C (AVG) 3m 966-04 HF ANT VERTICAL	 Site Condition : 03CH03-KS : FCC PART 15C (AVG) 3m 966-04 HF ANT VERTICAL



WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH07 2442MHz - L	
2	Horizontal	Fundamental
Peak	 Site : 03CH03-KS Condition : FCC PART 15C 3m 966-04 HF ANT HORIZONTAL	 Site : 03CH03-KS Condition : FCC PART 15C 3m 966-04 HF ANT HORIZONTAL
Avg.	 Site : 03CH03-KS Condition : FCC PART 15C (AVG) 3m 966-04 HF ANT HORIZONTAL	 Site : 03CH03-KS Condition : FCC PART 15C (AVG) 3m 966-04 HF ANT HORIZONTAL



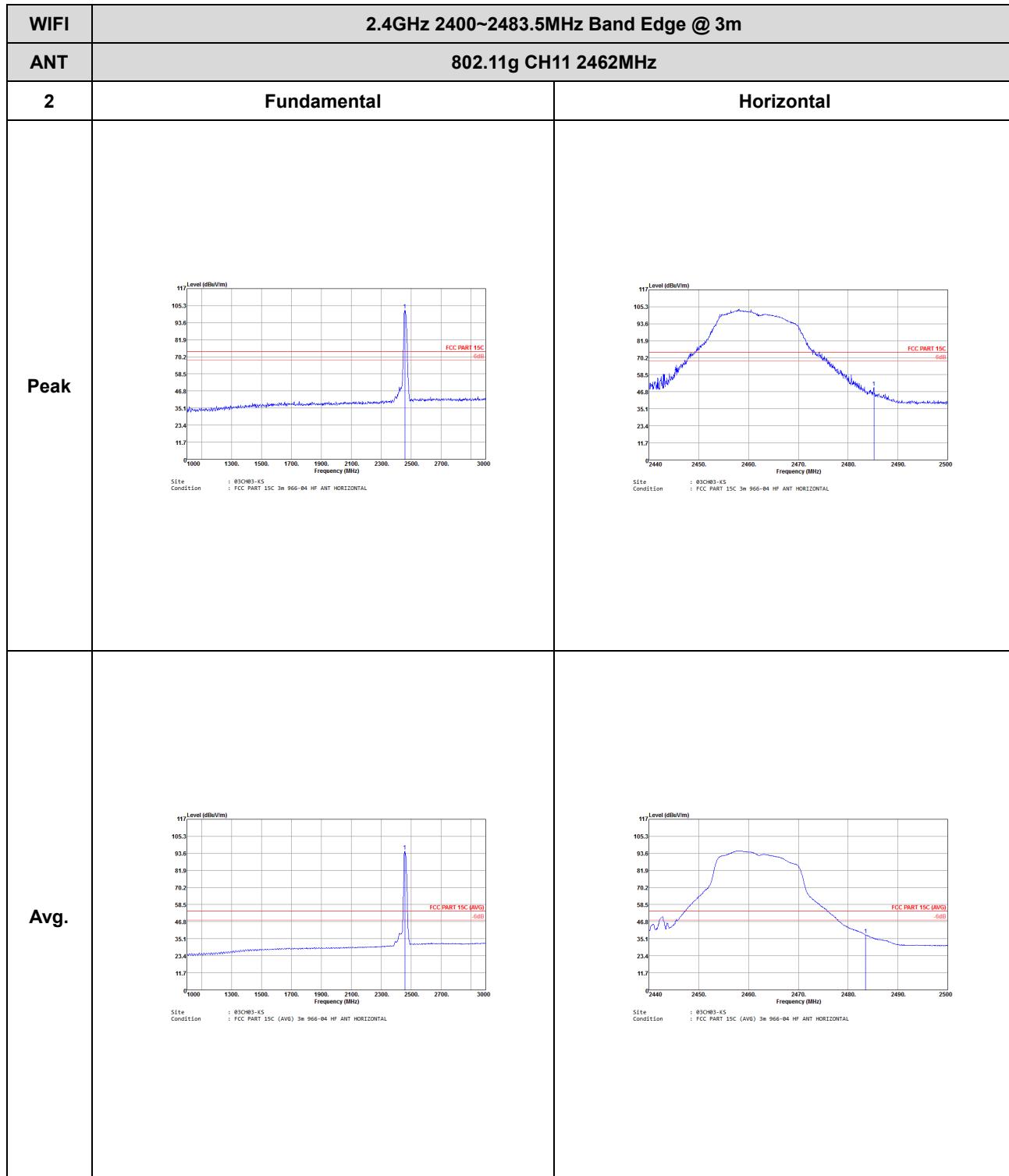
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH07 2442MHz - R	
2	Horizontal	
Peak	<p>Site Condition : 03CH03-KS Condition : FCC PART 15C 3m 966-04 HF ANT HORIZONTAL</p>	
Avg.	<p>Site Condition : 03CH03-KS Condition : FCC PART 15C (AVG) 3m 966-04 HF ANT HORIZONTAL</p>	

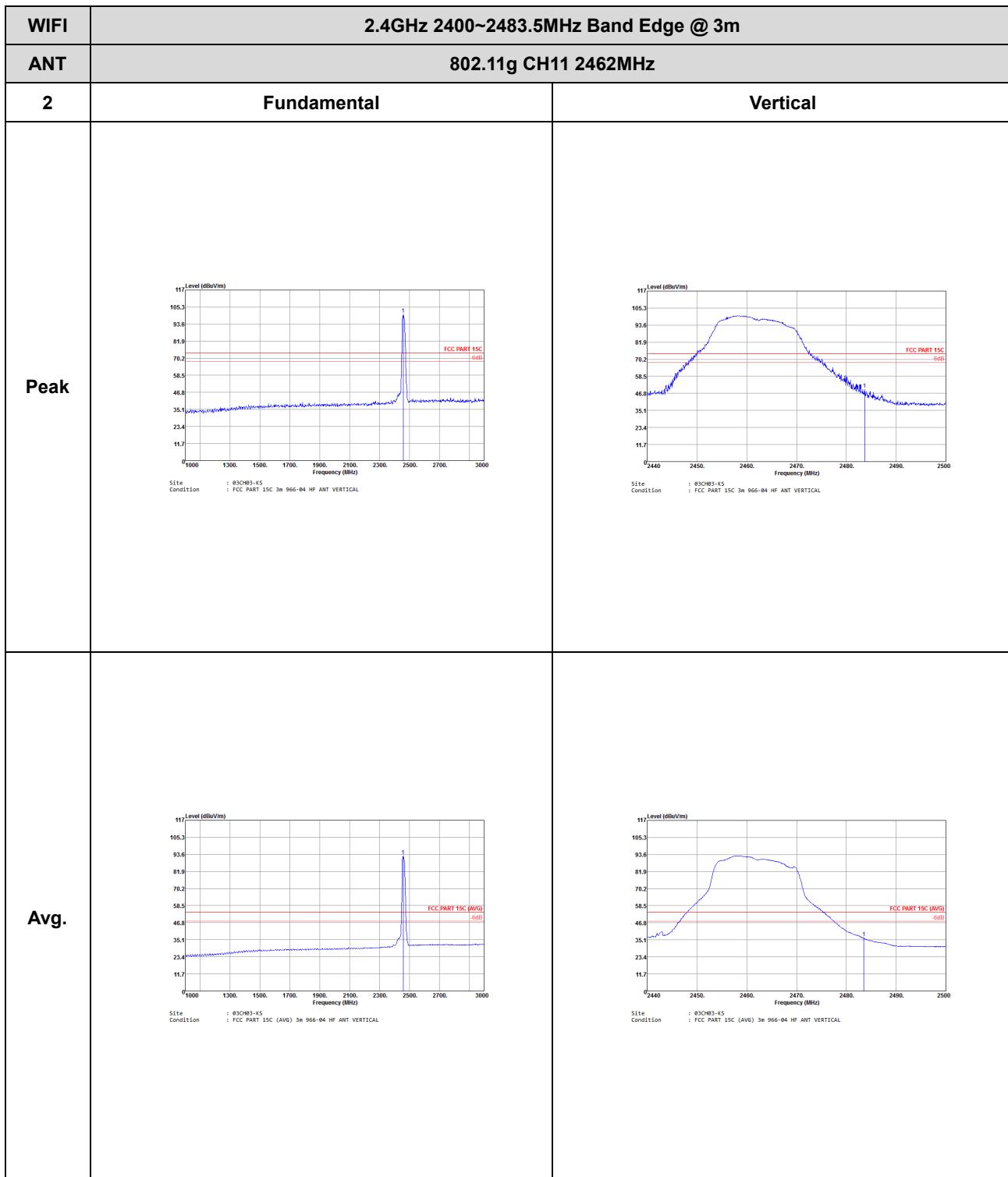


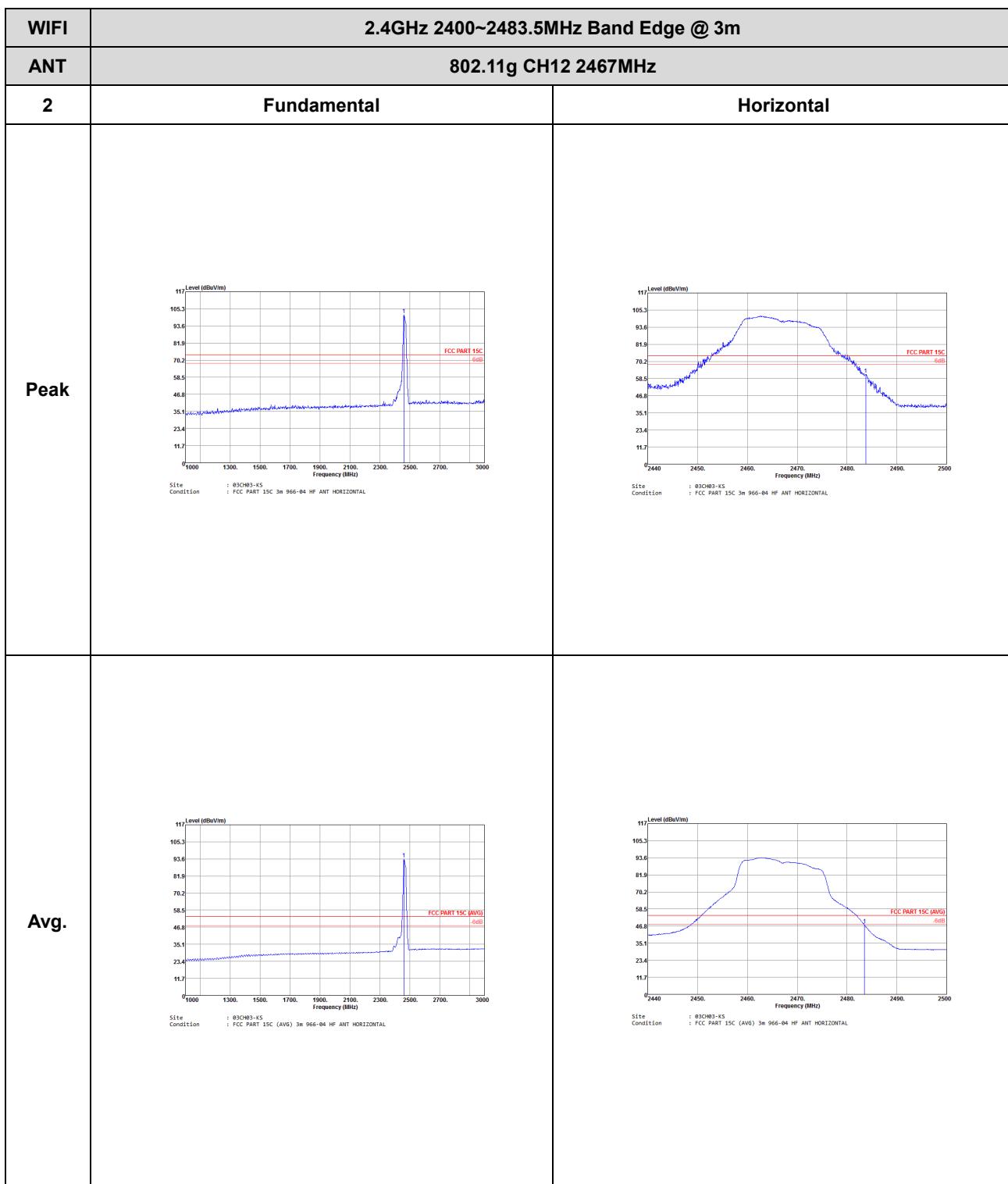
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH07 2442MHz - L	
2	Vertical	Fundamental
Peak	 Site Condition : 03CHB3-KS : FCC PART 15C 3m 966-04 HF ANT VERTICAL	 Site Condition : 03CHB3-KS : FCC PART 15C 3m 966-04 HF ANT VERTICAL
Avg.	 Site Condition : 03CHB3-KS : FCC PART 15C (AVG) 3m 966-04 HF ANT VERTICAL	 Site Condition : 03CHB3-KS : FCC PART 15C (AVG) 3m 966-04 HF ANT VERTICAL

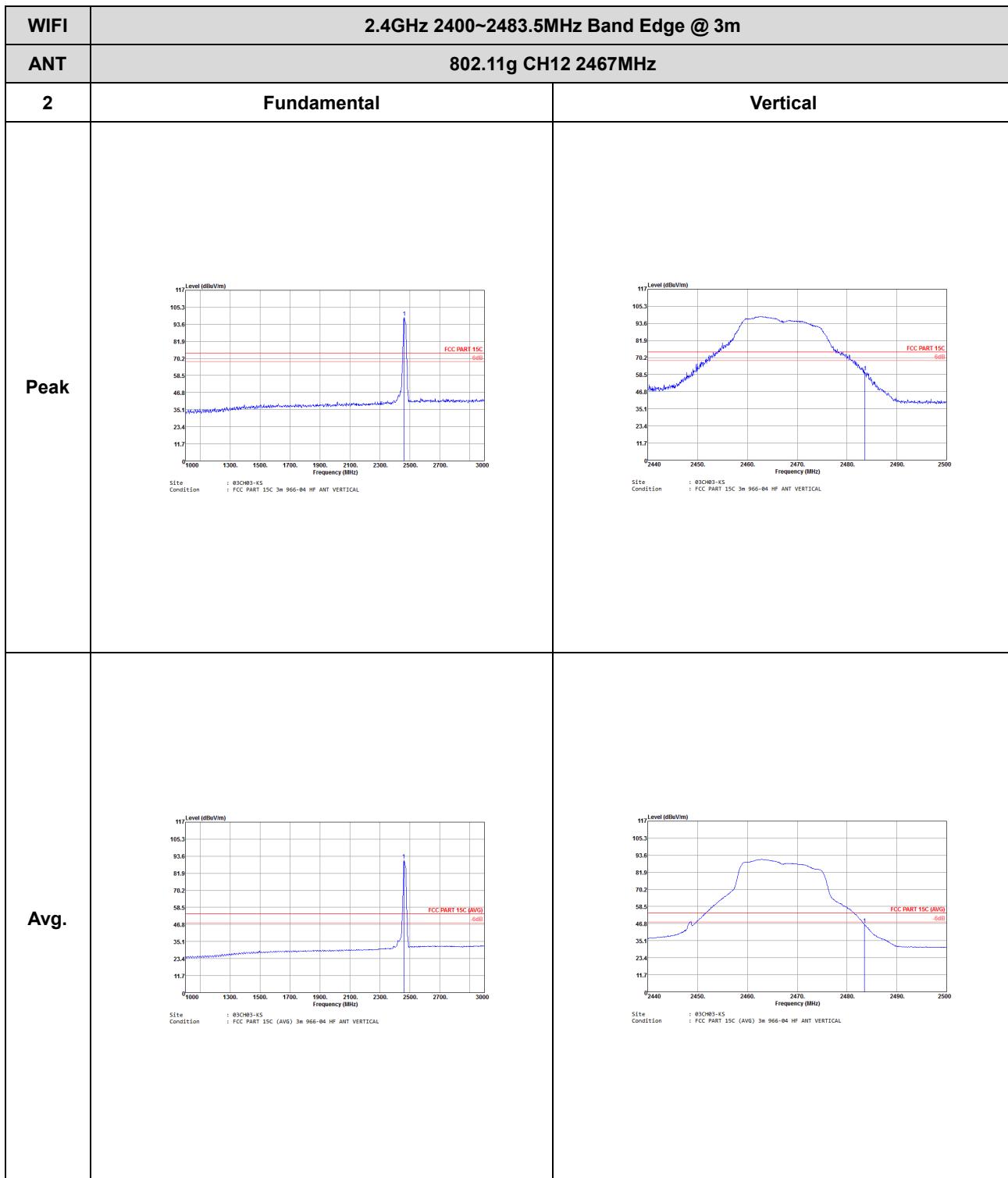


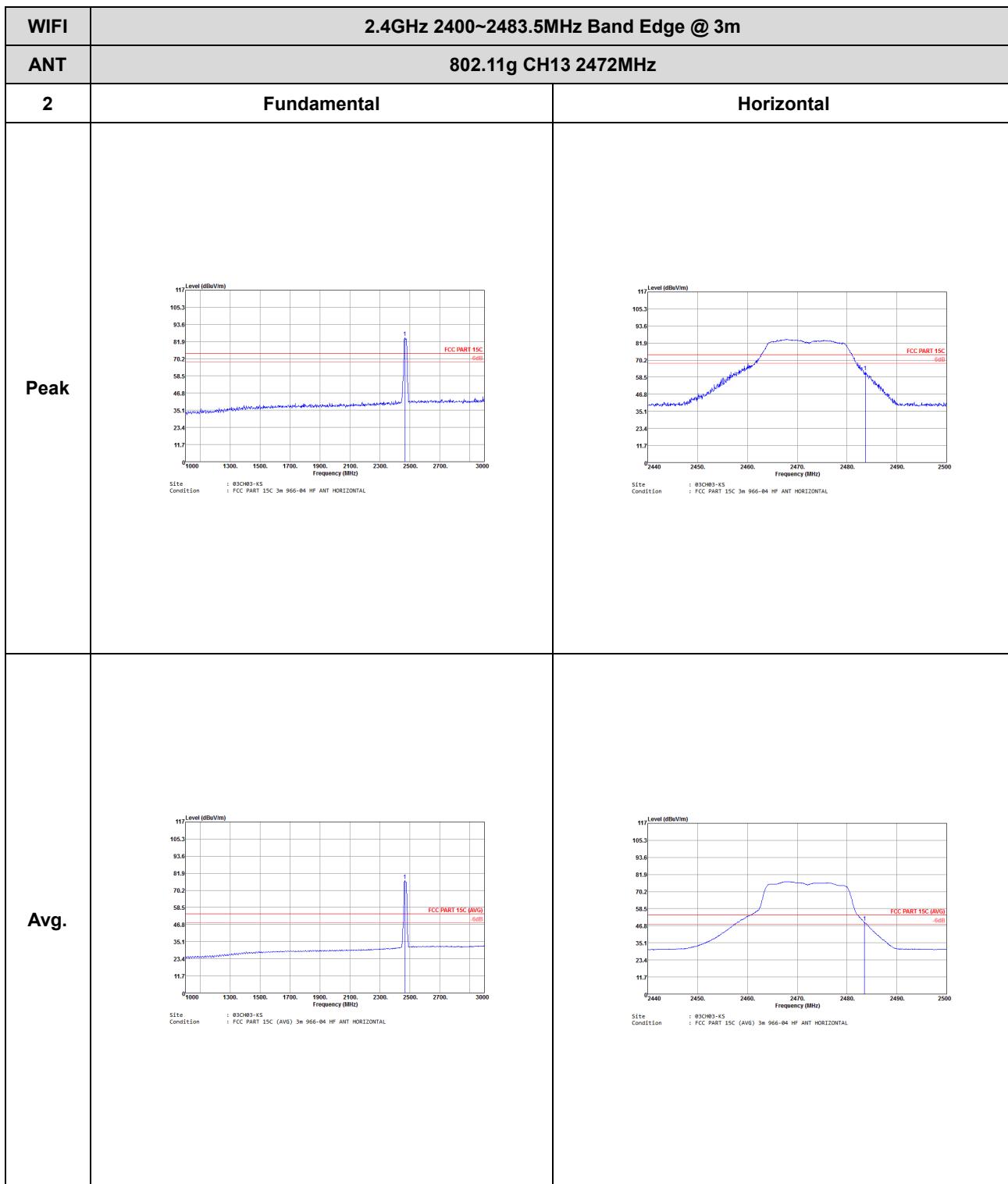
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH07 2442MHz - R	
2	Vertical	
Peak	<p>Site Condition : 03CH03-KS : FCC PART 15C 3m 966-04 HF ANT VERTICAL</p>	
Avg.	<p>Site Condition : 03CH03-KS : FCC PART 15C (AVG) 3m 966-04 HF ANT VERTICAL</p>	

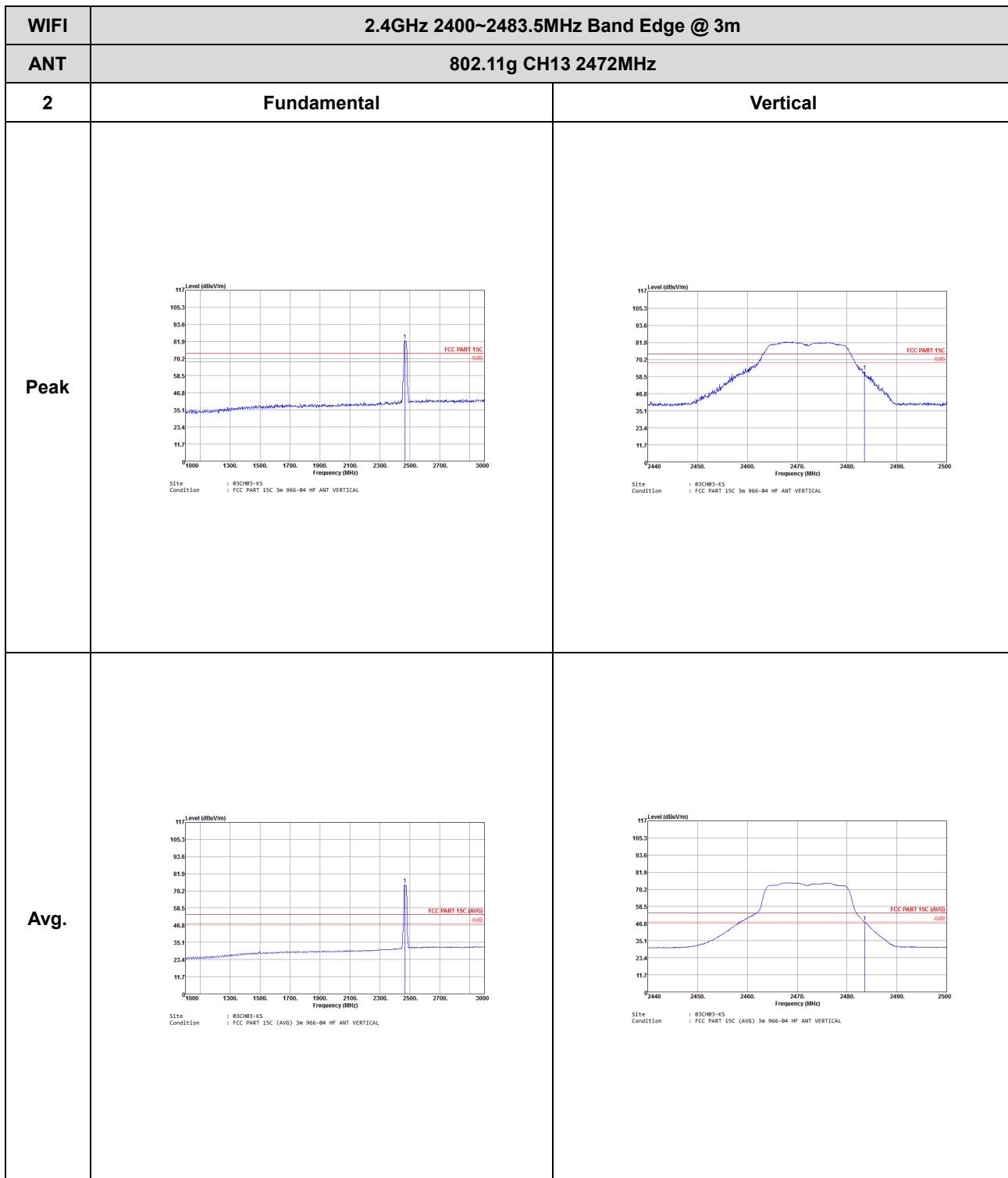








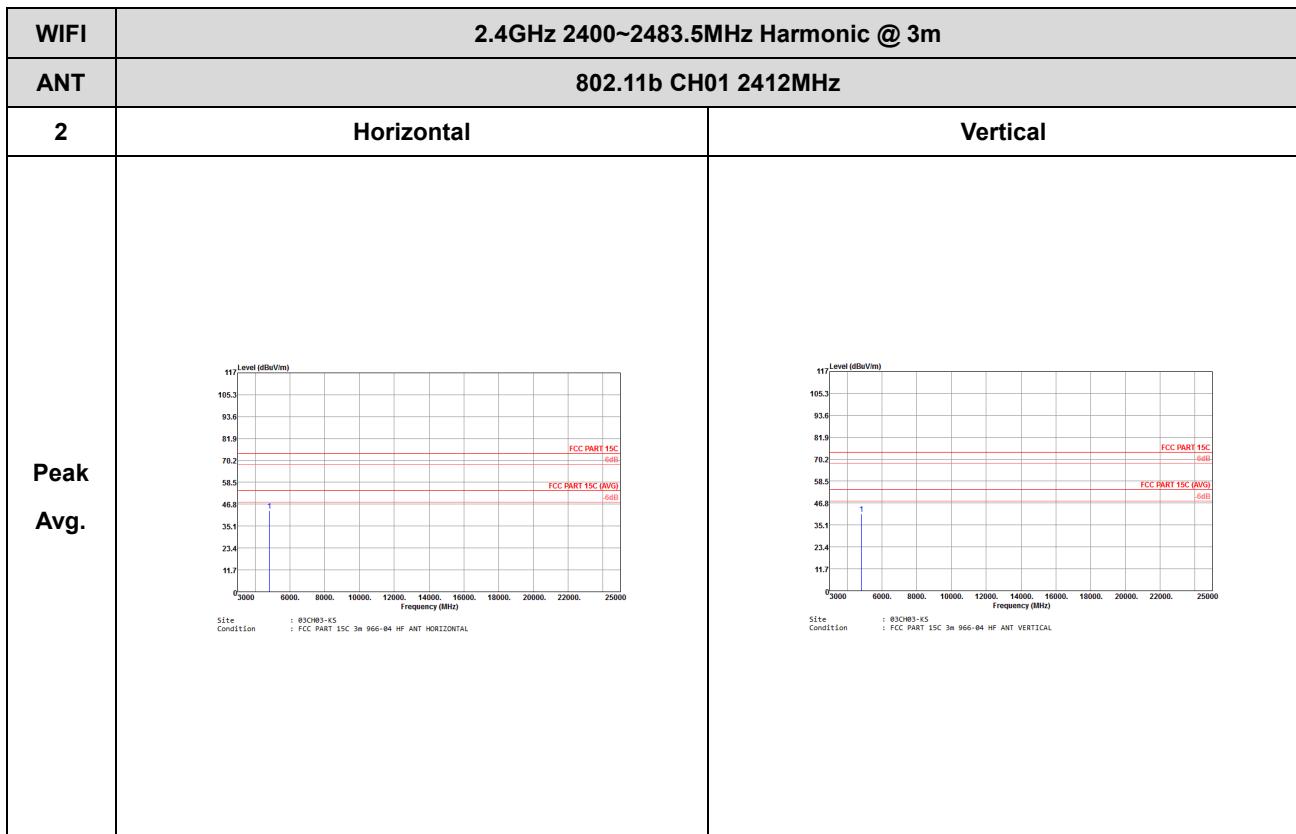


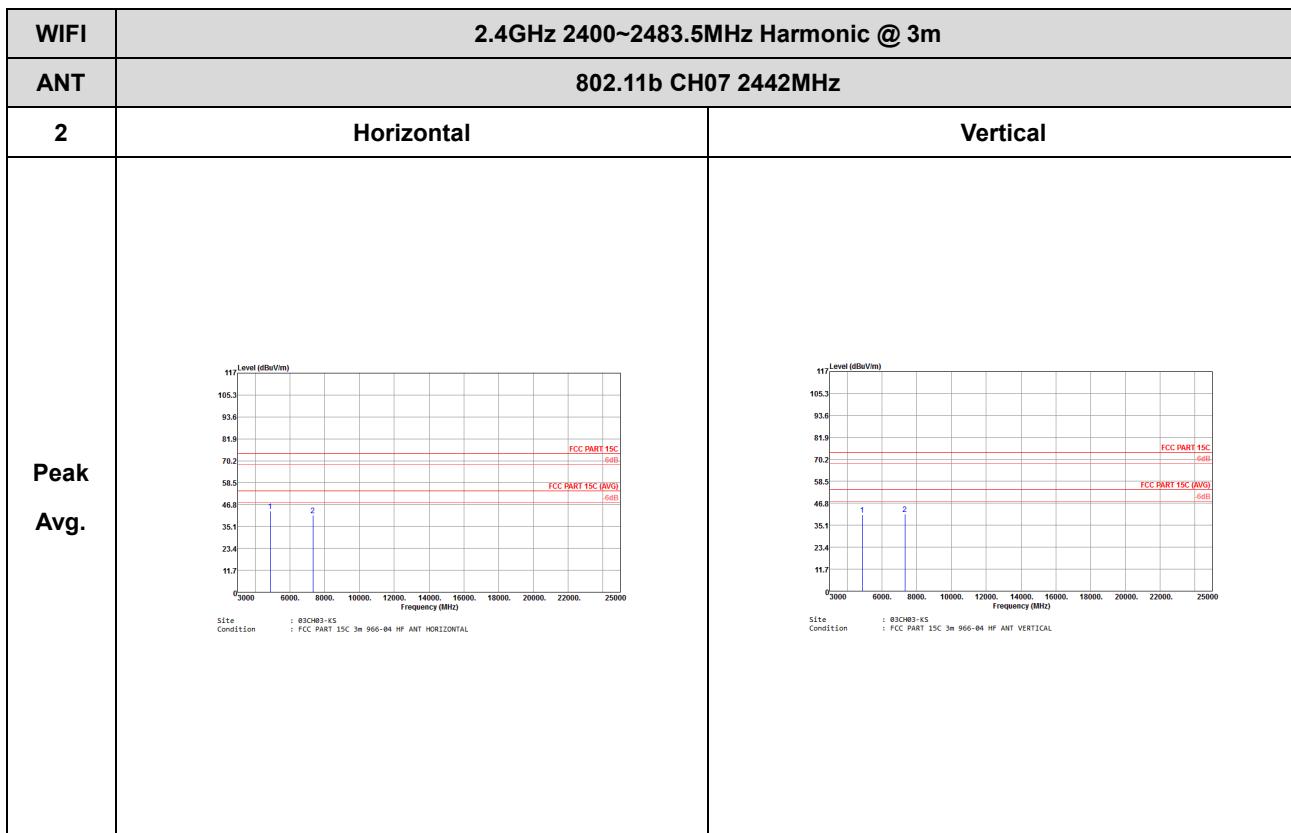


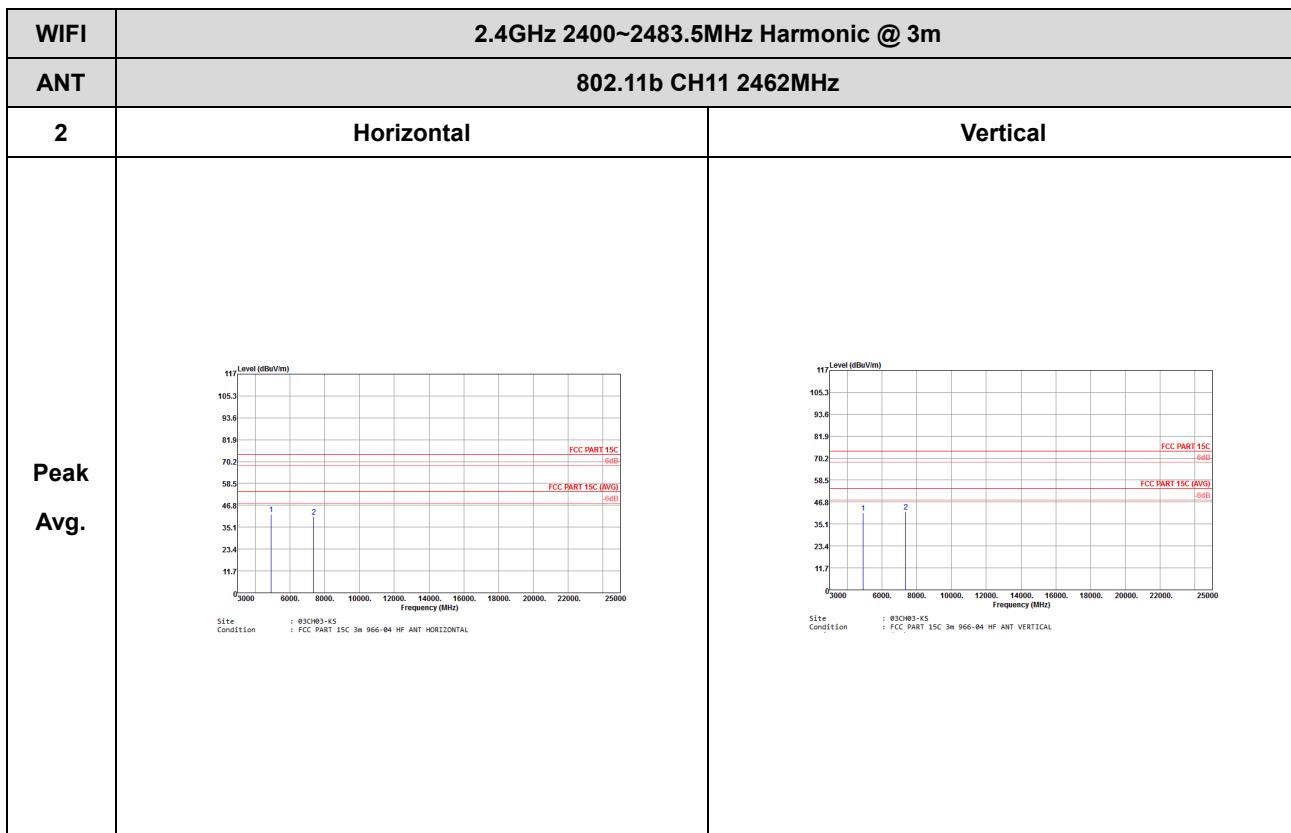


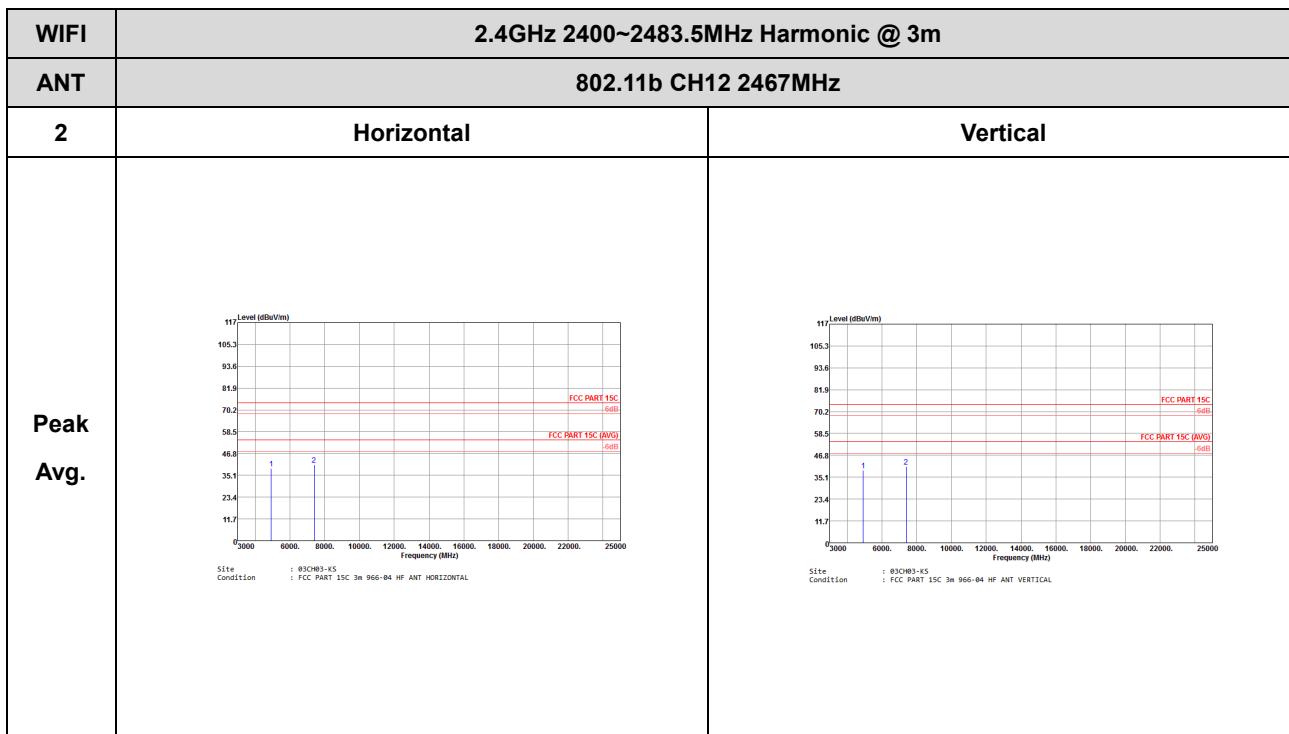
2.4GHz 2400~2483.5MHz

WIFI 802.11b (Harmonic @ 3m)

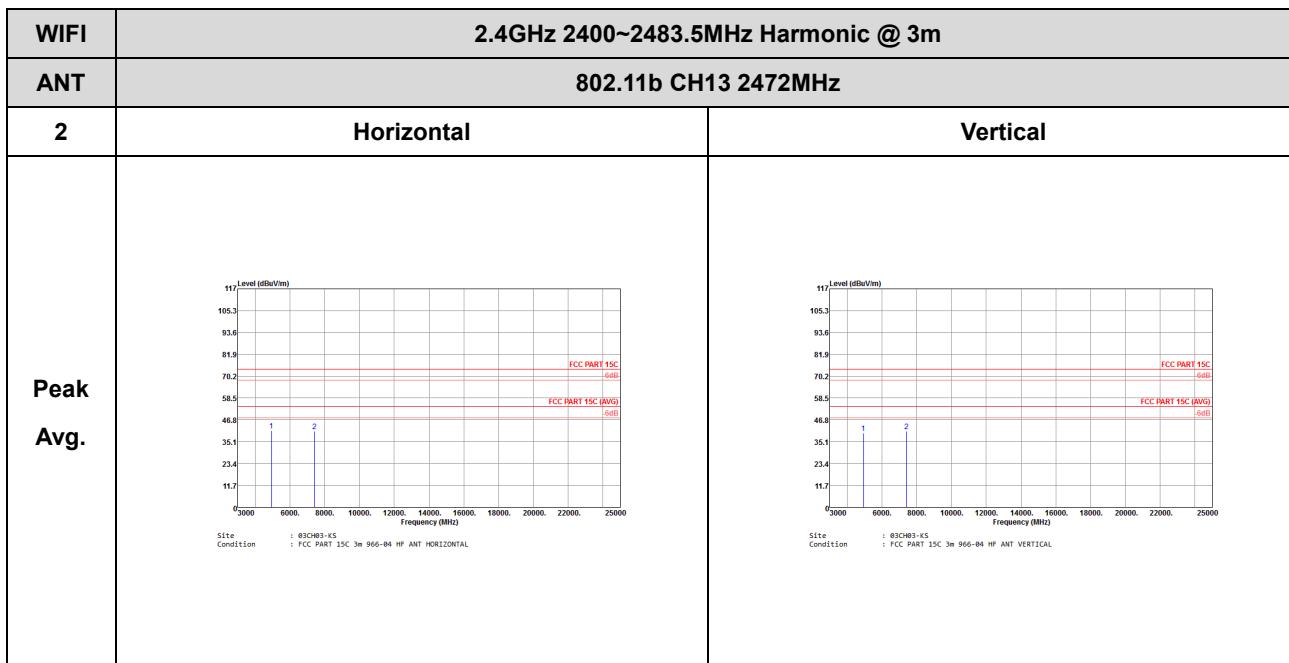








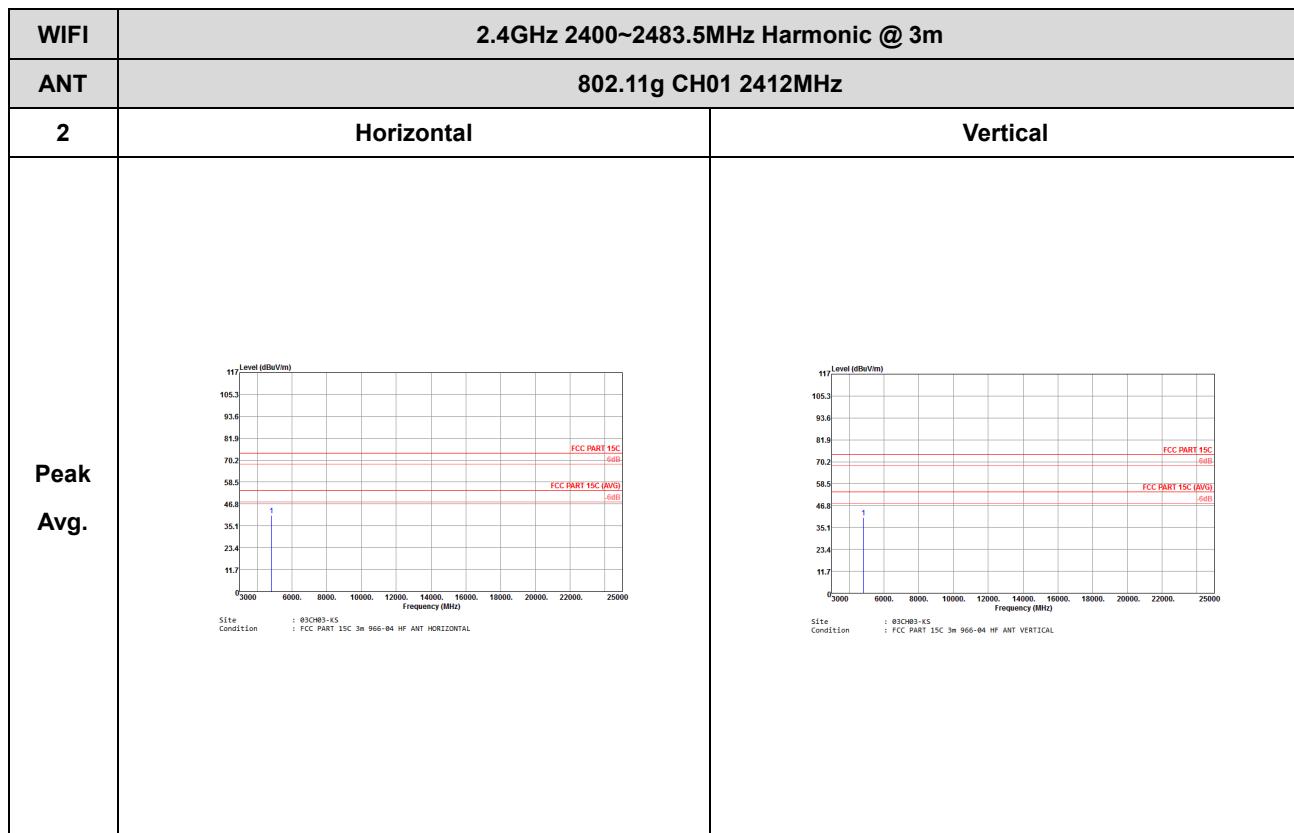
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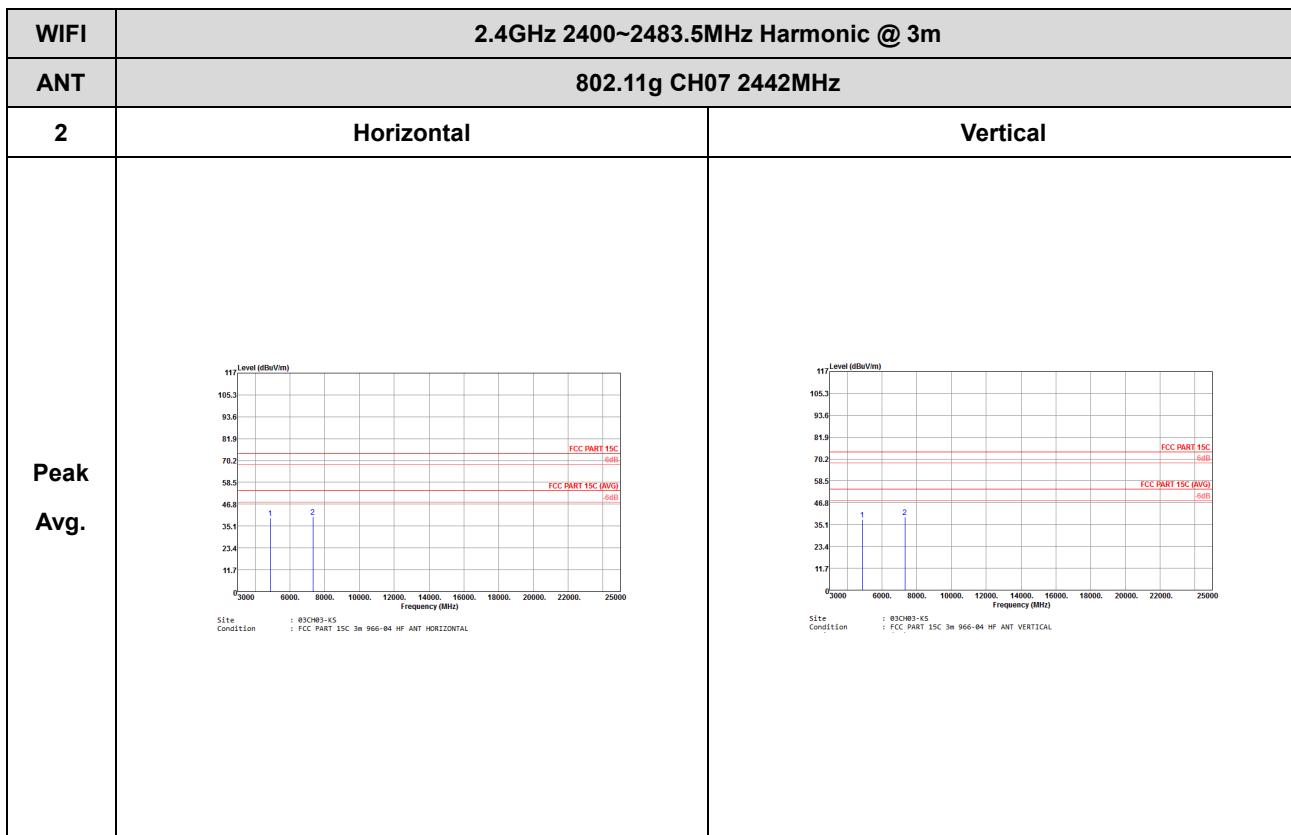




2.4GHz 2400~2483.5MHz

WIFI 802.11g (Harmonic @ 3m)



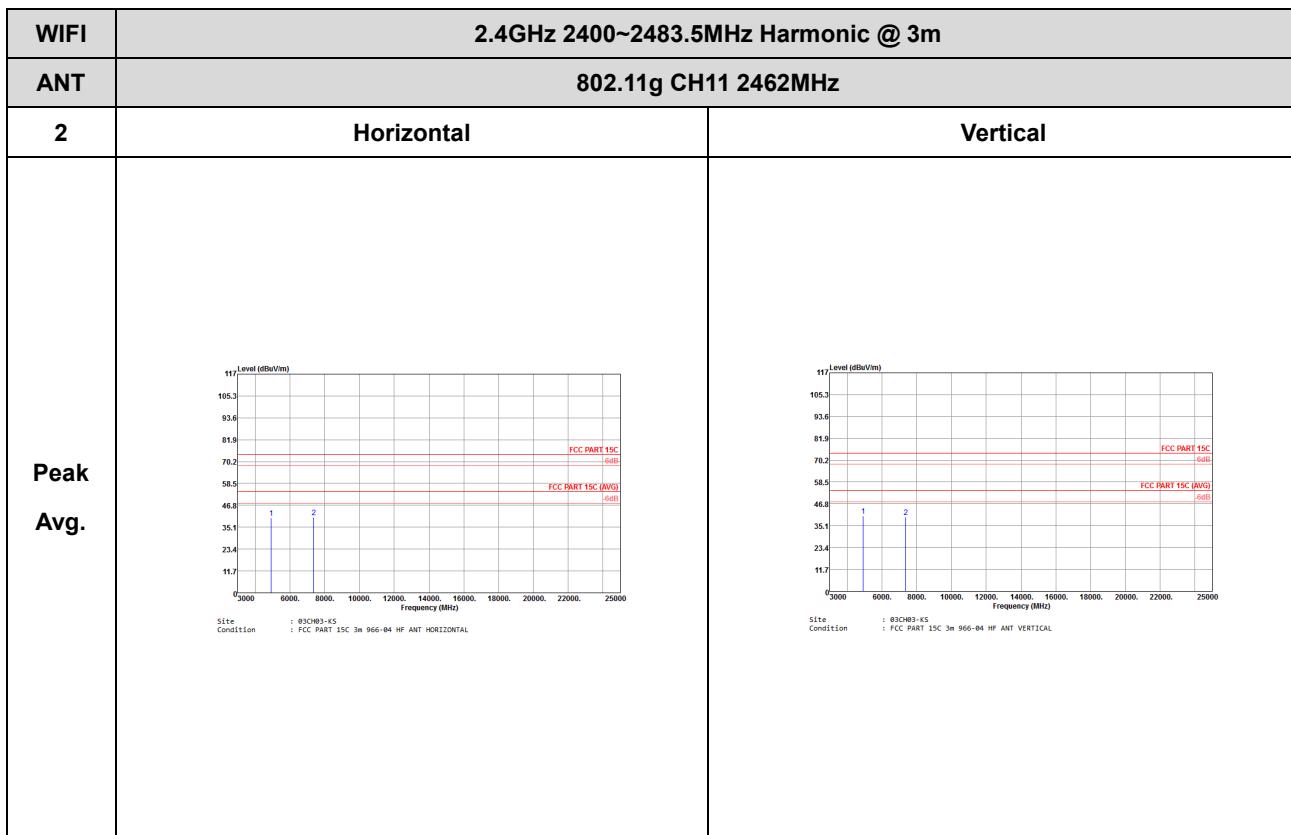


Site Condition : 03CHB3-K5

Condition : FCC PART 15C 3m 966-04 HF ANT HORIZONTAL

Site Condition : 03CHB3-K5

Condition : FCC PART 15C 3m 966-04 HF ANT VERTICAL





WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11g CH12 2467MHz	
2	Horizontal	Vertical
Peak Avg.	 Site Condition : 03CH03-KS : FCC PART 15C 3m 966-04 HF ANT HORIZONTAL	 Site Condition : 03CH03-KS : FCC PART 15C 3m 966-04 HF ANT VERTICAL

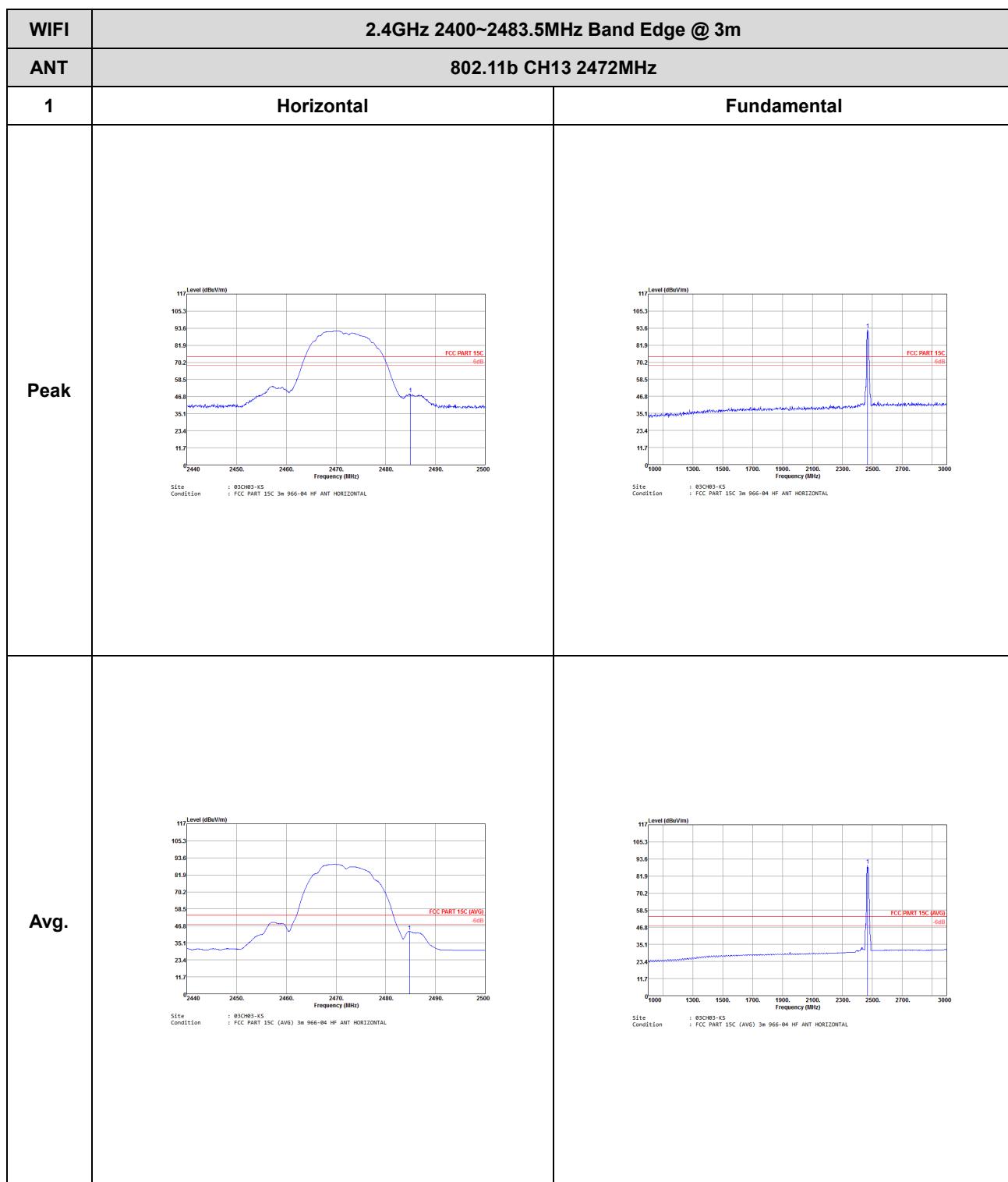


WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11g CH13 2472MHz	
2	Horizontal	Vertical
Peak Avg.	 Site Condition : 03CH03-KS : FCC PART 15C 3m 966-04 HF ANT HORIZONTAL	 Site Condition : 03CH03-KS : FCC PART 15C 3m 966-04 HF ANT VERTICAL

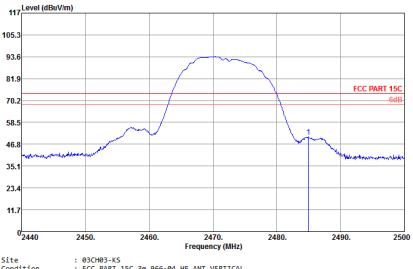
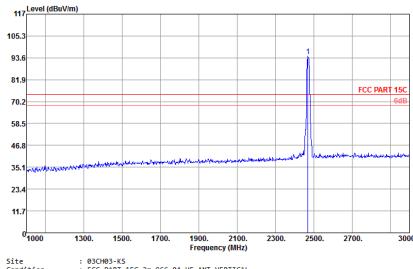
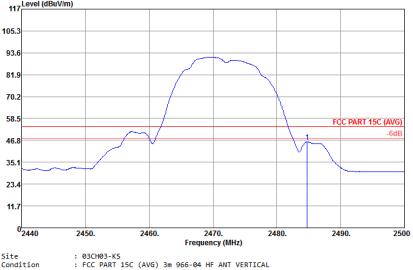
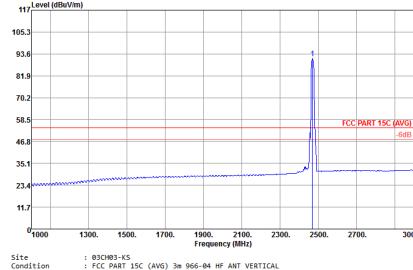


2.4GHz 2400~2483.5MHz

WIFI 802.11b (Band Edge @ 3m)



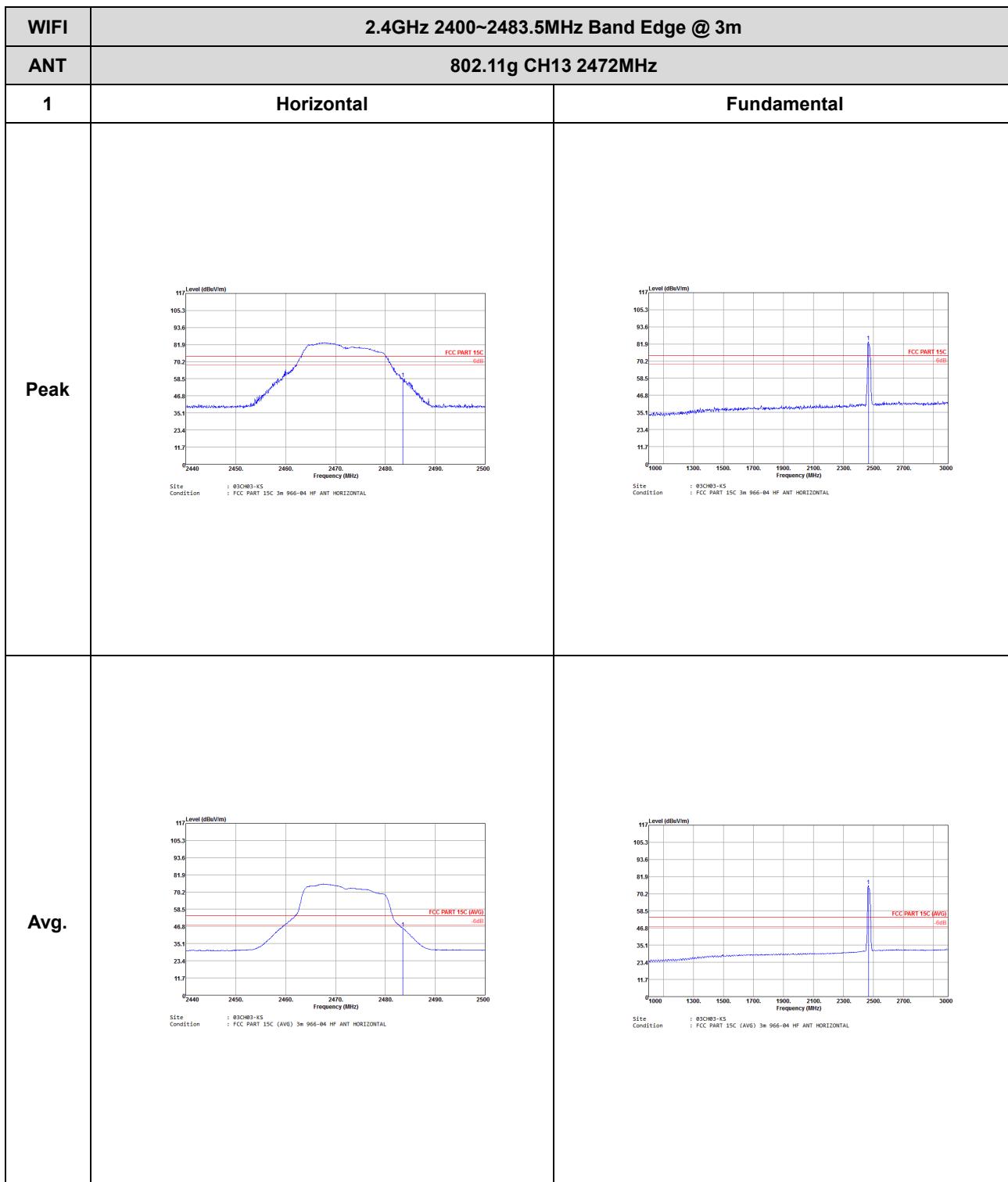


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH13 2472MHz	
1	Vertical	Fundamental
Peak	 <p>Site Condition : 03CH03-K5 : FCC PART 15C 3m 966-04 HF ANT VERTICAL</p>	 <p>Site Condition : 03CH03-K5 : FCC PART 15C 3m 966-04 HF ANT VERTICAL</p>
Avg.	 <p>Site Condition : 03CH03-K5 : FCC PART 15C (AVG) 3m 966-04 HF ANT VERTICAL</p>	 <p>Site Condition : 03CH03-K5 : FCC PART 15C (AVG) 3m 966-04 HF ANT VERTICAL</p>

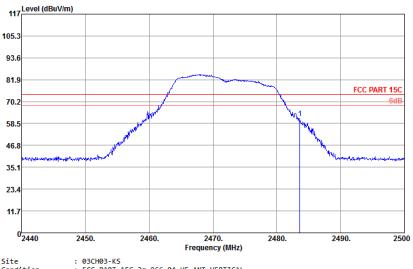
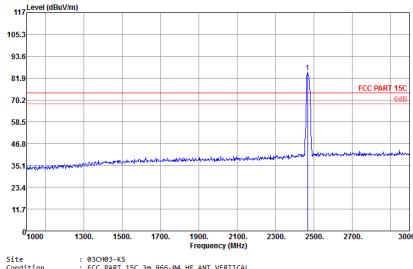
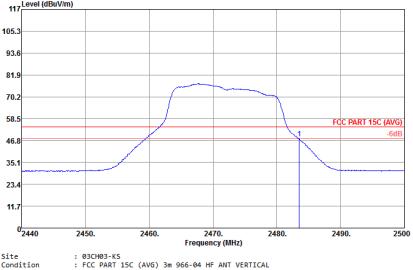
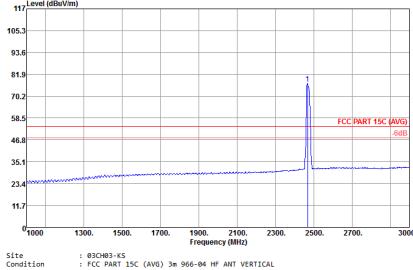


2.4GHz 2400~2483.5MHz

WIFI 802.11g (Band Edge @ 3m)



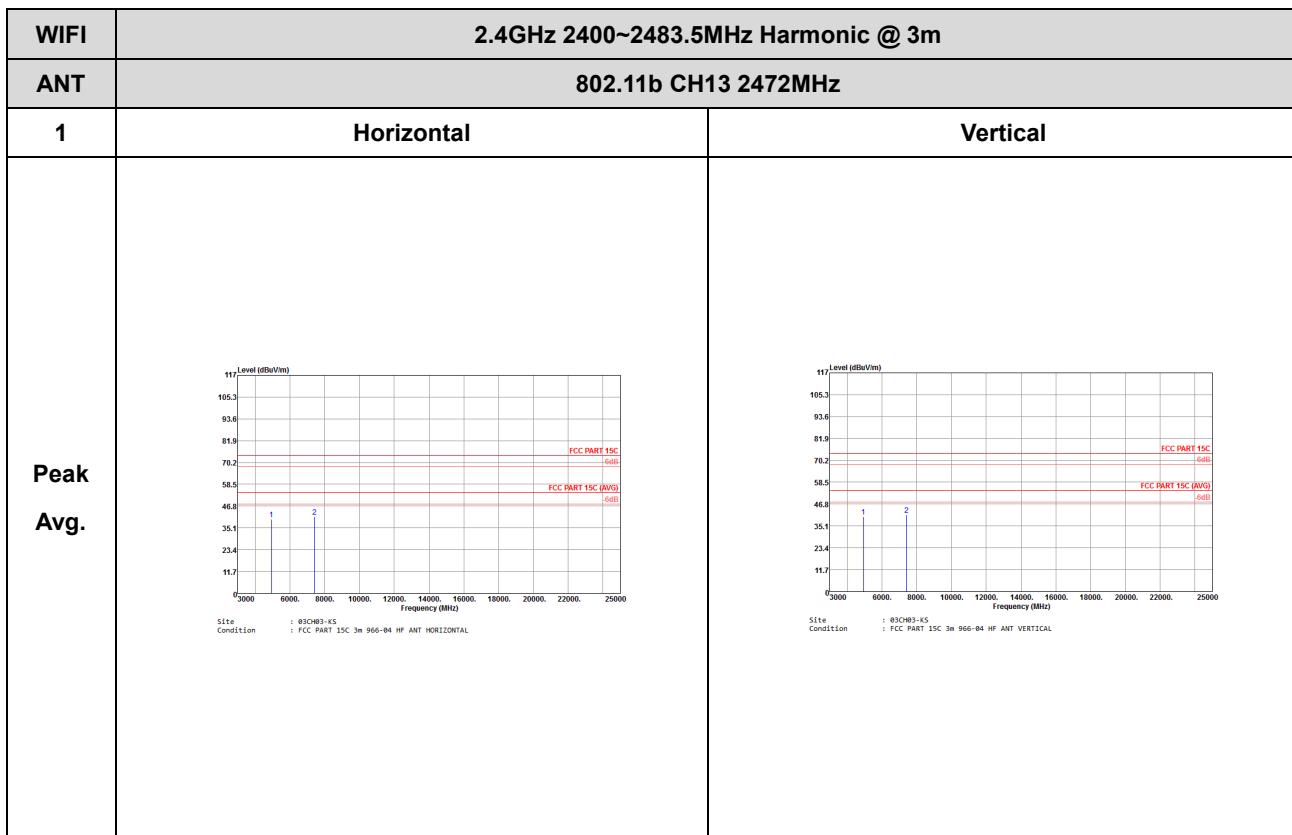


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH13 2472MHz	
1	Vertical	Fundamental
Peak	 <p>Site Condition : 03CHB3-K5 : FCC PART 15C 3m 966-04 HF ANT VERTICAL</p>	 <p>Site Condition : 03CHB3-K5 : FCC PART 15C 3m 966-04 HF ANT VERTICAL</p>
Avg.	 <p>Site Condition : 03CHB3-K5 : FCC PART 15C (AVG) 3m 966-04 HF ANT VERTICAL</p>	 <p>Site Condition : 03CHB3-K5 : FCC PART 15C (AVG) 3m 966-04 HF ANT VERTICAL</p>



2.4GHz 2400~2483.5MHz

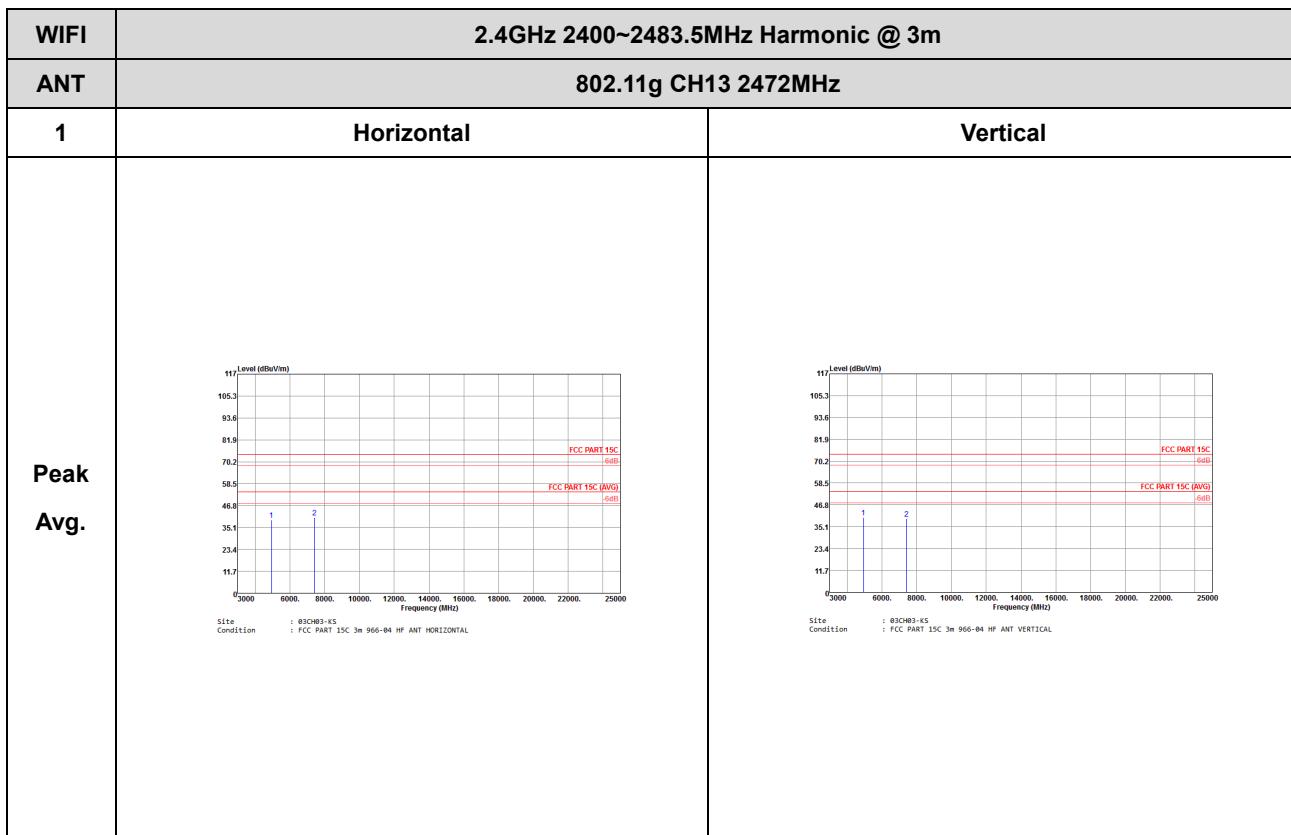
WIFI 802.11b (Harmonic @ 3m)





2.4GHz 2400~2483.5MHz

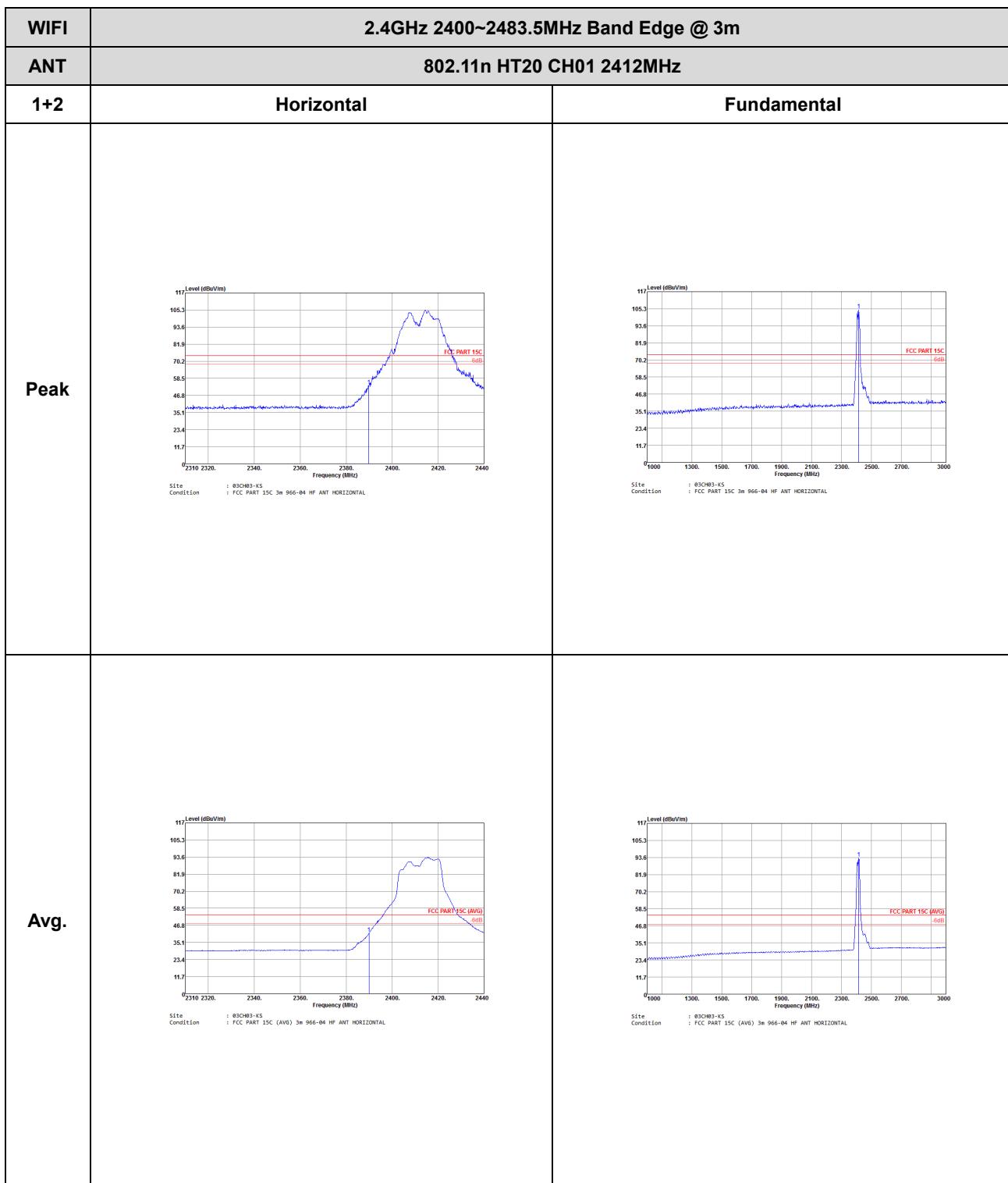
WIFI 802.11g (Harmonic @ 3m)





2.4GHz 2400~2483.5MHz

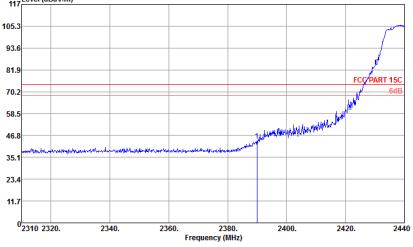
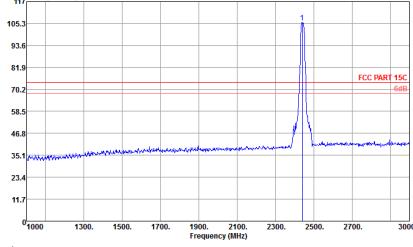
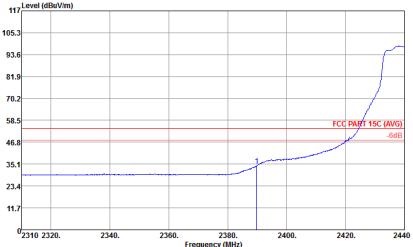
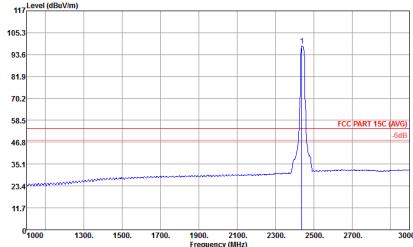
WIFI 802.11n HT20 (Band Edge @ 3m)



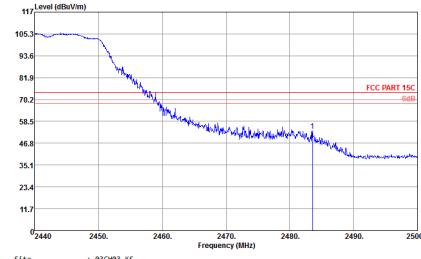
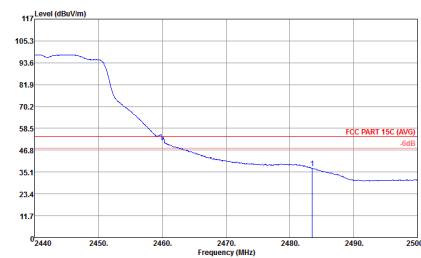


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH01 2412MHz	
1+2	Vertical	Fundamental
Peak	 Site Condition : 03CH03-K5 : FCC PART 15C 3m 966-04 HF ANT VERTICAL	 Site Condition : 03CH03-K5 : FCC PART 15C 3m 966-04 HF ANT VERTICAL
Avg.	 Site Condition : 03CH03-K5 : FCC PART 15C (AVG) 3m 966-04 HF ANT VERTICAL	 Site Condition : 03CH03-K5 : FCC PART 15C (AVG) 3m 966-04 HF ANT VERTICAL



WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH07 2442MHz - L	
1+2	Horizontal	Fundamental
Peak	 Site Condition : 03CH03-K5 : FCC PART 15C 3m 966-04 HF ANT HORIZONTAL	 Site Condition : 03CH03-K5 : FCC PART 15C 966-04 HF ANT HORIZONTAL
Avg.	 Site Condition : 03CH03-K5 : FCC PART 15C (AVG) 3m 966-04 HF ANT HORIZONTAL	 Site Condition : 03CH03-K5 : FCC PART 15C (AVG) 3m 966-04 HF ANT HORIZONTAL



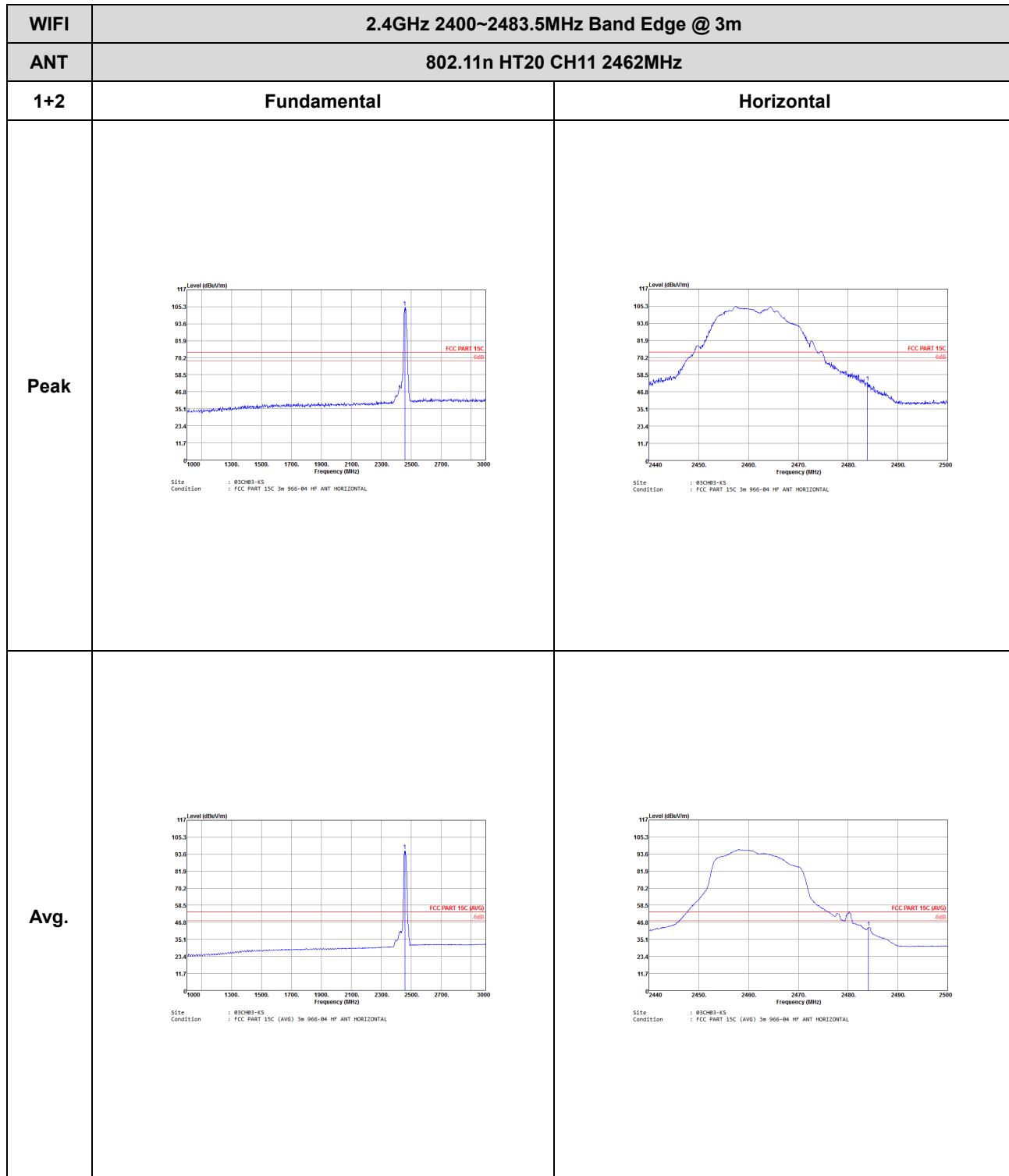
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH07 2442MHz - R	
1+2	Horizontal	
Peak		
Avg.		

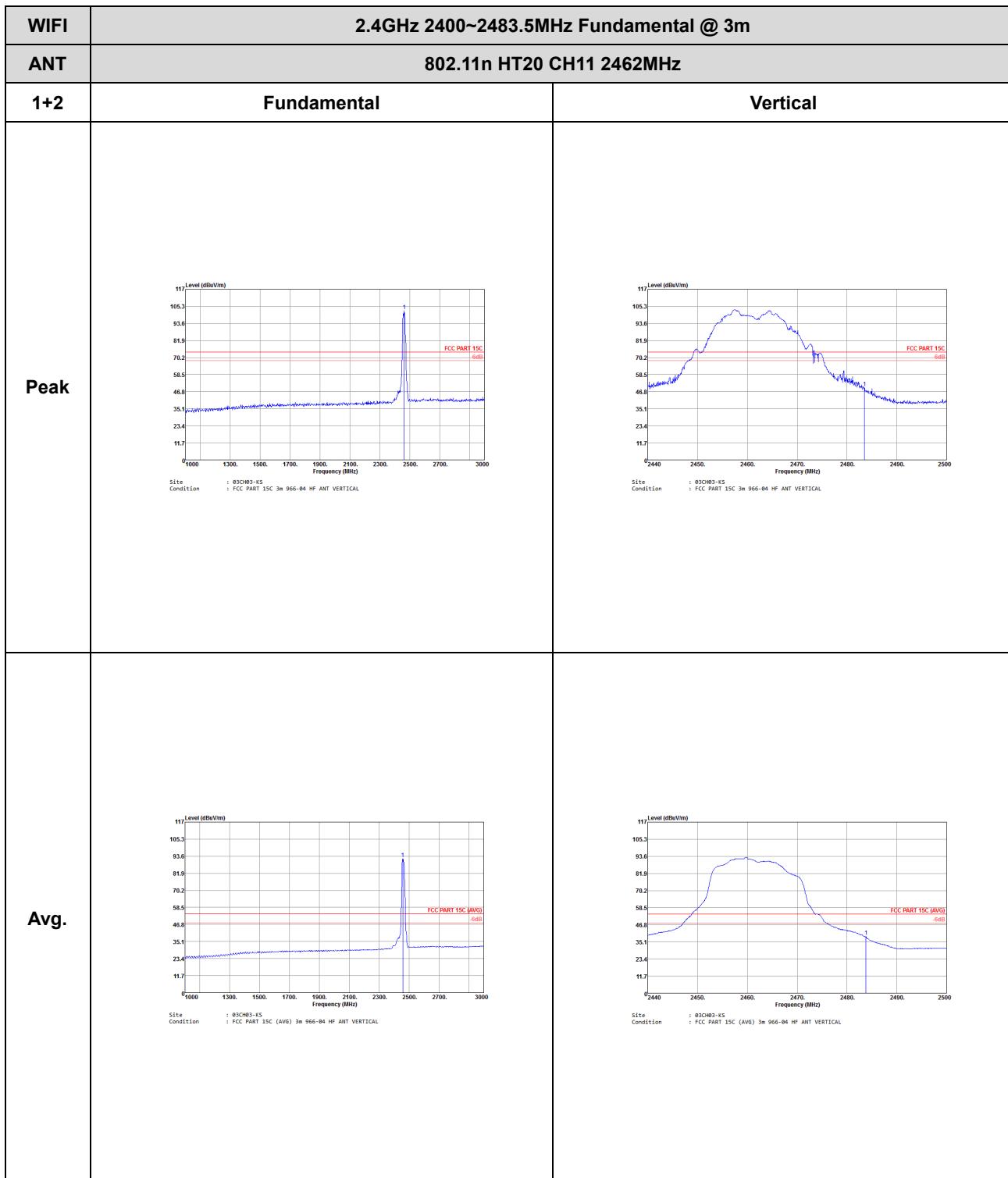


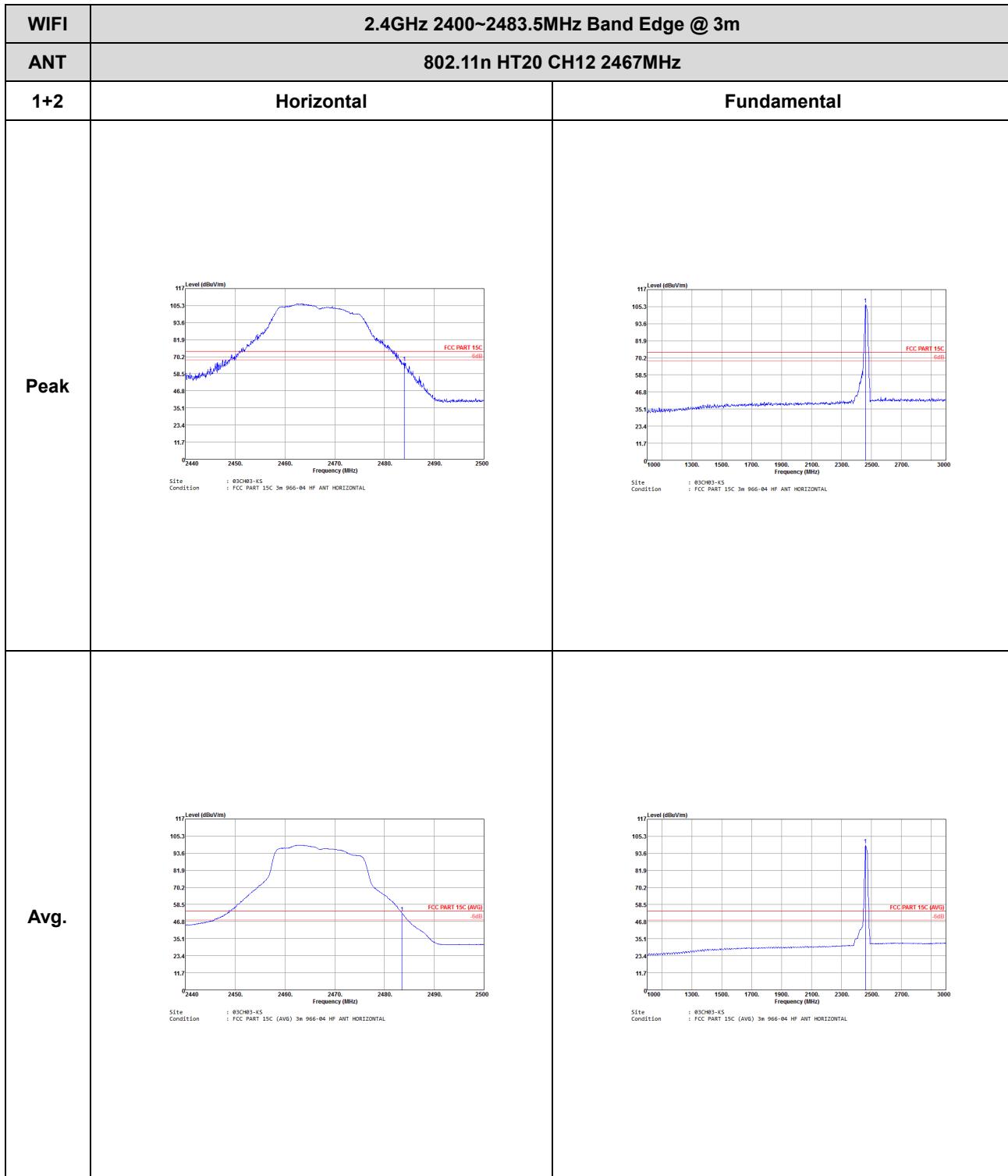
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH07 2442MHz - L	
1+2	Vertical	Fundamental
Peak		
Avg.		



WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH07 2442MHz - R	
1+2	Vertical	
Peak	<p>Site Condition : 03CH03-K5 : FCC PART 15C 3m 966-04 HF ANT VERTICAL</p>	
Avg.	<p>Site Condition : 03CH03-K5 : FCC PART 15C (AVG) 3m 966-04 HF ANT VERTICAL</p>	



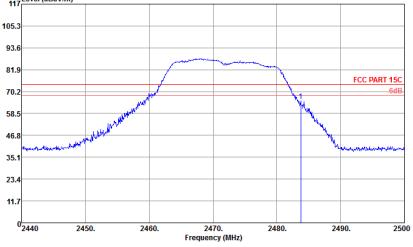
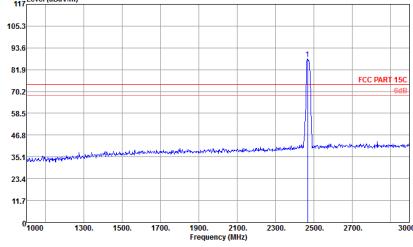
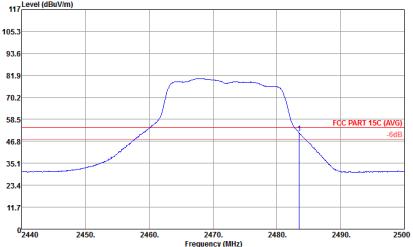
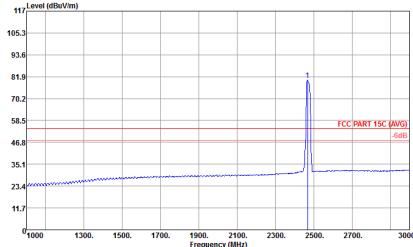




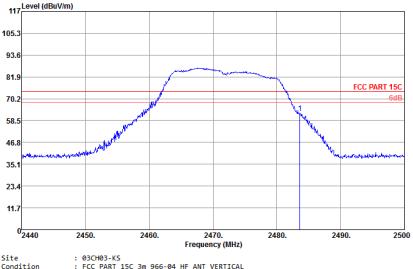
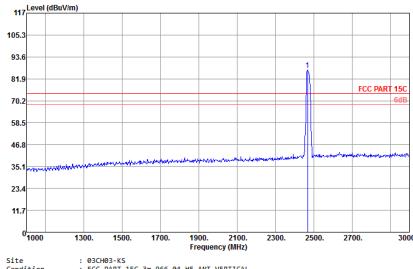
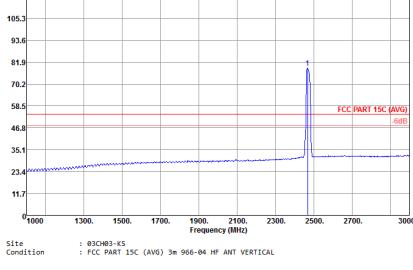


WIFI	2.4GHz 2400~2483.5MHz Fundamental @ 3m	
ANT	802.11n HT20 CH12 2467MHz	
1+2	Vertical	Fundamental
Peak	 Site Condition : 03CH03-KS : FCC PART 15C 3m 966-04 HF ANT VERTICAL	 Site Condition : 03CH03-KS : FCC PART 15C 3m 966-04 HF ANT VERTICAL
Avg.	 Site Condition : 03CH03-KS : FCC PART 15C (AVG) 3m 966-04 HF ANT VERTICAL	 Site Condition : 03CH03-KS : FCC PART 15C (AVG) 3m 966-04 HF ANT VERTICAL



WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH13 2472MHz	
1+2	Horizontal	Fundamental
Peak	 Site Condition : 03CH03-KS : FCC PART 15C 3m 966-04 HF ANT HORIZONTAL	 Site Condition : 03CH03-KS : FCC PART 15C 3m 966-04 HF ANT HORIZONTAL
Avg.	 Site Condition : 03CH03-KS : FCC PART 15C (AVG) 3m 966-04 HF ANT HORIZONTAL	 Site Condition : 03CH03-KS : FCC PART 15C (AVG) 3m 966-04 HF ANT HORIZONTAL

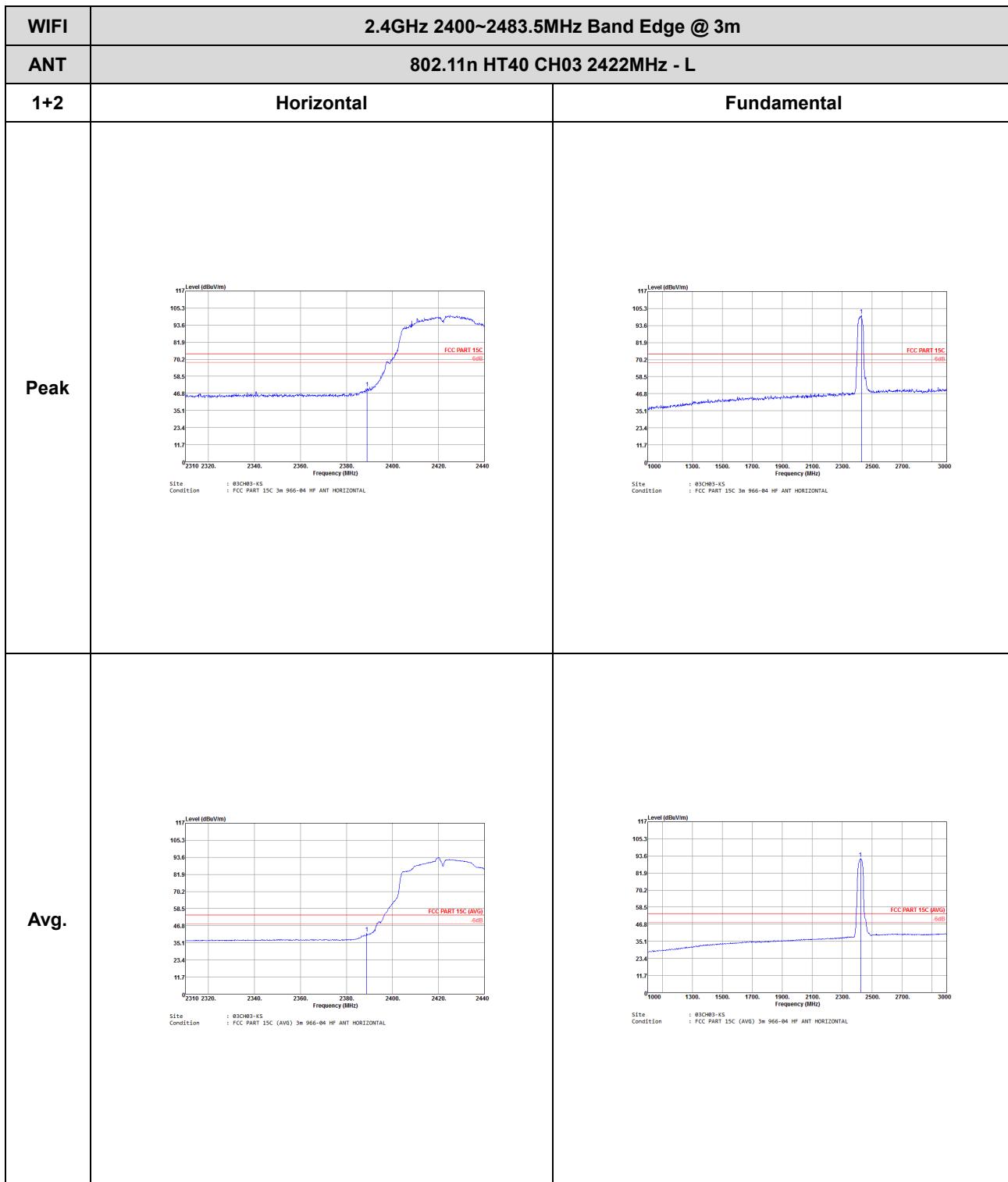


WIFI	2.4GHz 2400~2483.5MHz Fundamental @ 3m	
ANT	802.11n HT20 CH13 2472MHz	
1+2	Vertical	Fundamental
Peak	 Site Condition : 03CHB3-KS : FCC PART 15C 3m 966-04 HF ANT VERTICAL	 Site Condition : 03CHB3-KS : FCC PART 15C 3m 966-04 HF ANT VERTICAL
Avg.	 Site Condition : 03CHB3-KS : FCC PART 15C (AVG) 3m 966-04 HF ANT VERTICAL	 Site Condition : 03CHB3-KS : FCC PART 15C (AVG) 3m 966-04 HF ANT VERTICAL



2.4GHz 2400~2483.5MHz

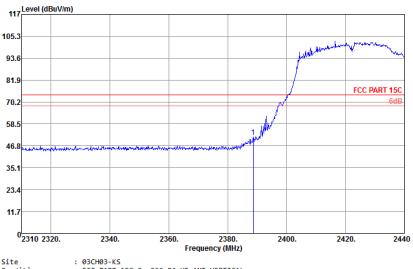
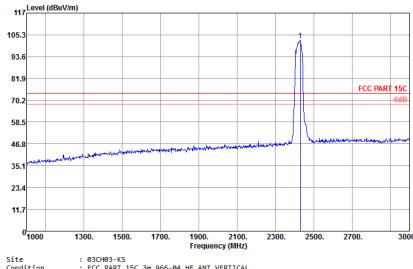
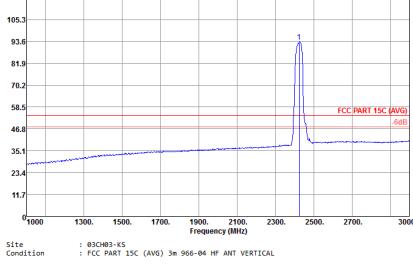
WIFI 802.11n HT40 (Band Edge @ 3m)





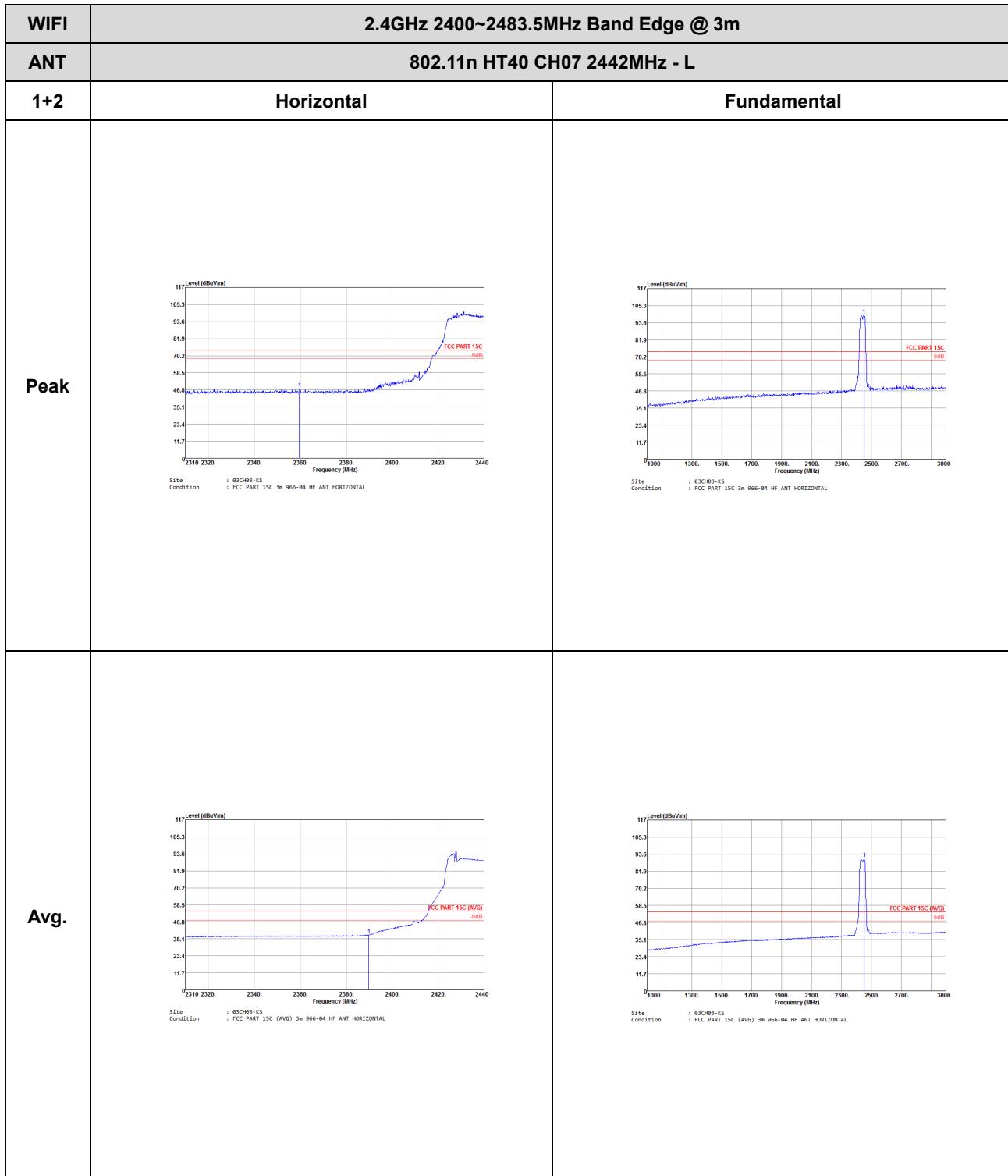
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT40 CH03 2422MHz - R	
1+2	Horizontal	
Peak	<p>Site Condition : 03CH03-KS : FCC PART 15C 3m 966-04 HF ANT HORIZONTAL</p>	
Avg.	<p>Site Condition : 03CH03-KS : FCC PART 15C (AVG) 3m 966-04 HF ANT HORIZONTAL</p>	



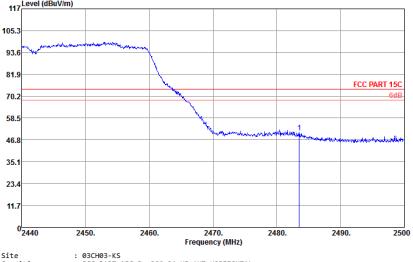
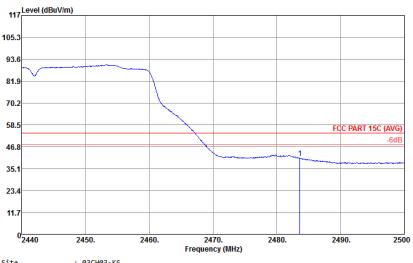
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT40 CH03 2422MHz - L	
1+2	Vertical	Fundamental
Peak	 Site Condition : 03CH03-K5 : FCC PART 15C 3m 966-04 HF ANT VERTICAL	 Site Condition : 03CH03-K5 : FCC PART 15C 3m 966-04 HF ANT VERTICAL
Avg.	 Site Condition : 03CH03-K5 : FCC PART 15C (AVG) 3m 966-04 HF ANT VERTICAL	 Site Condition : 03CH03-K5 : FCC PART 15C (AVG) 3m 966-04 HF ANT VERTICAL



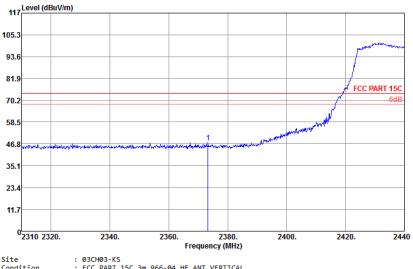
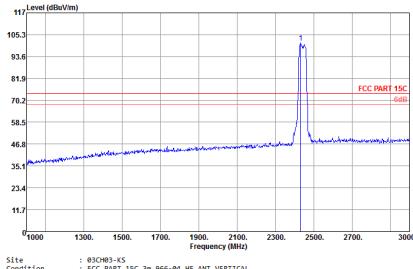
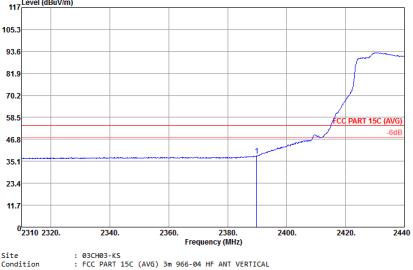
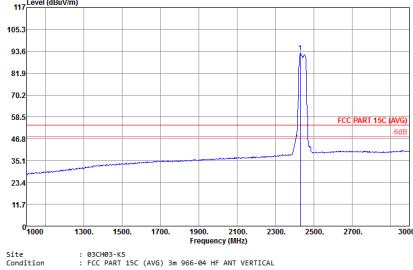
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT40 CH03 2422MHz - R	
1+2	Vertical	
Peak	<p>Site Condition : 03CH03-K5 : FCC PART 15C 3m 966-04 HF ANT VERTICAL</p>	
Avg.	<p>Site Condition : 03CH03-K5 : FCC PART 15C (AVG) 3m 966-04 HF ANT VERTICAL</p>	





WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT40 CH07 2442MHz - R	
1+2	Horizontal	
Peak	 <p>Site Condition : 03CH03-KS Condition : FCC PART 15C 3m 966-04 HF ANT HORIZONTAL</p>	
Avg.	 <p>Site Condition : 03CH03-KS Condition : FCC PART 15C (AVG) 3m 966-04 HF ANT HORIZONTAL</p>	

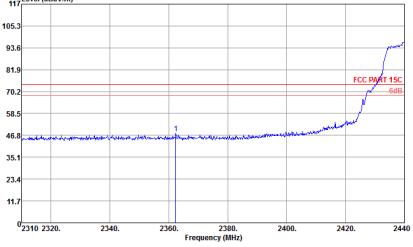
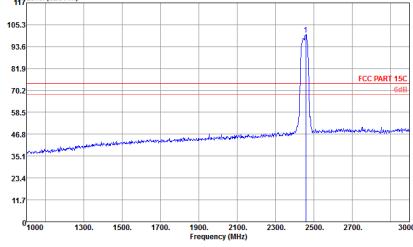
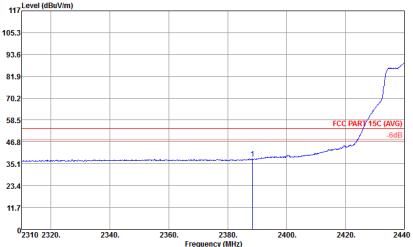
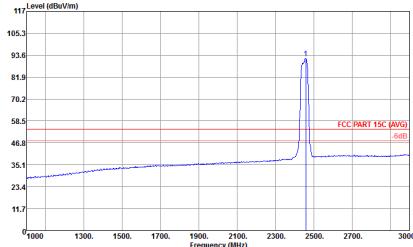


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT40 CH07 2442MHz - L	
1+2	Vertical	Fundamental
Peak	 Site Condition : 03CHB3-KS : FCC PART 15C 3m 966-04 HF ANT VERTICAL	 Site Condition : 03CHB3-KS : FCC PART 15C 3m 966-04 HF ANT VERTICAL
Avg.	 Site Condition : 03CHB3-KS : FCC PART 15C (AVG) 3m 966-04 HF ANT VERTICAL	 Site Condition : 03CHB3-KS : FCC PART 15C (AVG) 3m 966-04 HF ANT VERTICAL



WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT40 CH07 2442MHz - R	
1+2	Horizontal	
Peak	<p>Site Condition : 03CHB3-K5 : FCC PART 15C 3m 966-04 HF ANT VERTICAL</p>	
Avg.	<p>Site Condition : 03CHB3-K5 : FCC PART 15C (AVG) 3m 966-04 HF ANT VERTICAL</p>	

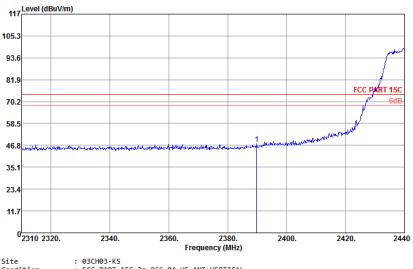
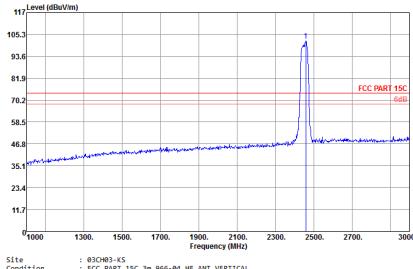
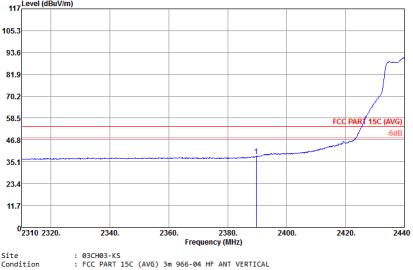
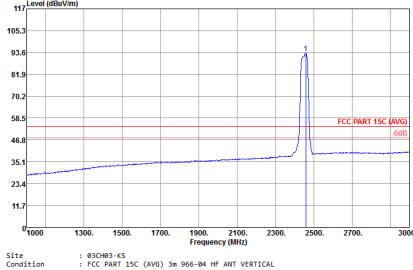


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT40 CH09 2452MHz - L	
1+2	Horizontal	Fundamental
Peak	 Site Condition : 03CH03-KS : FCC PART 15C 3m 966-04 HF ANT HORIZONTAL	 Site Condition : 03CH03-KS : FCC PART 15C 3m 966-04 HF ANT HORIZONTAL
Avg.	 Site Condition : 03CH03-KS : FCC PART 15C (AVG) 3m 966-04 HF ANT HORIZONTAL	 Site Condition : 03CH03-KS : FCC PART 15C (AVG) 3m 966-04 HF ANT HORIZONTAL



WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT40 CH09 2452MHz - R	
1+2	Horizontal	
Peak	<p>Site Condition : 03CH03-KS : FCC PART 15C 3m 966-04 HF ANT HORIZONTAL</p>	
Avg.	<p>Site Condition : 03CH03-KS : FCC PART 15C (AVG) 3m 966-04 HF ANT HORIZONTAL</p>	

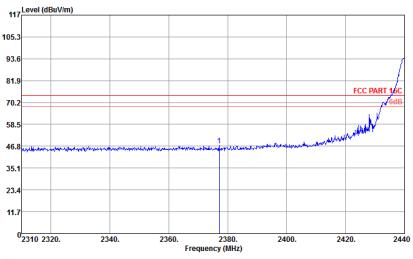
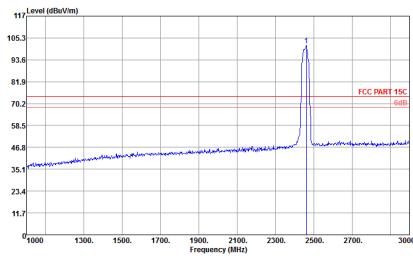
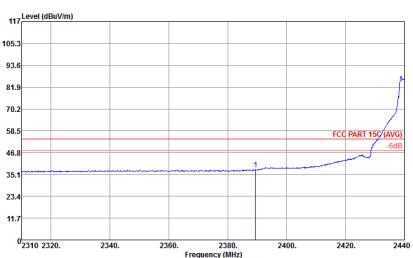
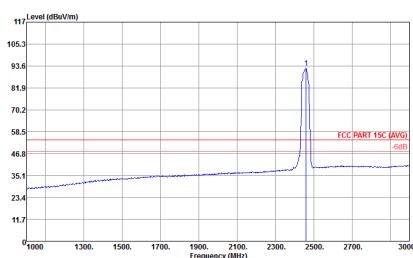


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT40 CH09 2452MHz - L	
1+2	Vertical	Fundamental
Peak	 <p>Site Condition : 03CHB3-KS : FCC PART 15C 3m 966-04 HF ANT VERTICAL</p>	 <p>Site Condition : 03CHB3-KS : FCC PART 15C 3m 966-04 HF ANT VERTICAL</p>
Avg.	 <p>Site Condition : 03CHB3-KS : FCC PART 15C (AVG) 3m 966-04 HF ANT VERTICAL</p>	 <p>Site Condition : 03CHB3-KS : FCC PART 15C (AVG) 3m 966-04 HF ANT VERTICAL</p>

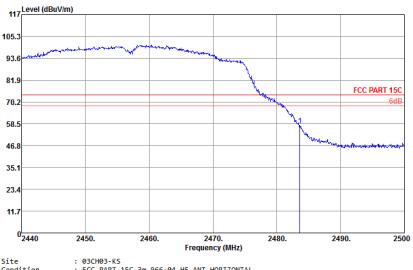
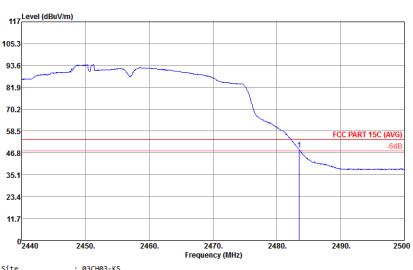


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT40 CH09 2452MHz - R	
1+2	Vertical	
Peak	<p>Site Condition : 03CH03-KS : FCC PART 15C 3m 966-04 HF ANT VERTICAL</p>	
Avg.	<p>Site Condition : 03CH03-KS : FCC PART 15C (AVG) 3m 966-04 HF ANT VERTICAL</p>	



WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT40 CH10 2457MHz - L	
1+2	Horizontal	Fundamental
Peak	 Site : 03CH03-K5 Condition : FCC PART 15C 3m 966-04 HF ANT HORIZONTAL	 Site : 03CH03-K5 Condition : FCC PART 15C 3m 966-04 HF ANT HORIZONTAL
Avg.	 Site : 03CH03-K5 Condition : FCC PART 15C (AVG) 3m 966-04 HF ANT HORIZONTAL	 Site : 03CH03-K5 Condition : FCC PART 15C (AVG) 3m 966-04 HF ANT HORIZONTAL



WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT40 CH10 2457MHz - R	
1+2	Horizontal	
Peak	 <p>Site Condition : 03CH03-KS : FCC PART 15C 3m 966-04 HF ANT HORIZONTAL</p>	
Avg.	 <p>Site Condition : 03CH03-KS : FCC PART 15C (AVG) 3m 966-04 HF ANT HORIZONTAL</p>	

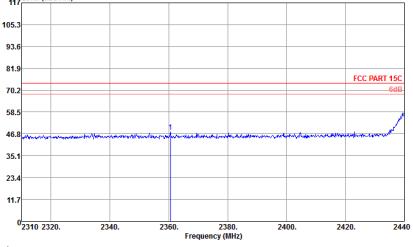
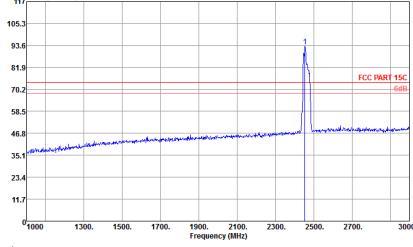
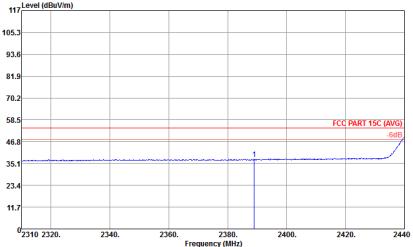
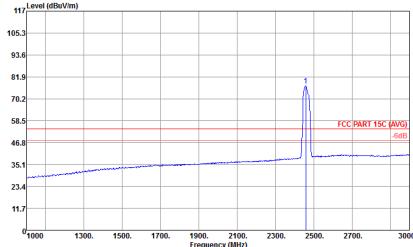


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT40 CH10 2457MHz - L	
1+2	Vertical	Fundamental
Peak	 Site Condition : 03CH03-K5 : FCC PART 15C 3m 966-04 HF ANT VERTICAL	 Site Condition : 03CH03-K5 : FCC PART 15C 3m 966-04 HF ANT VERTICAL
Avg.	 Site Condition : 03CH03-K5 : FCC PART 15C (AVG) 3m 966-04 HF ANT VERTICAL	 Site Condition : 03CH03-K5 : FCC PART 15C (AVG) 3m 966-04 HF ANT VERTICAL

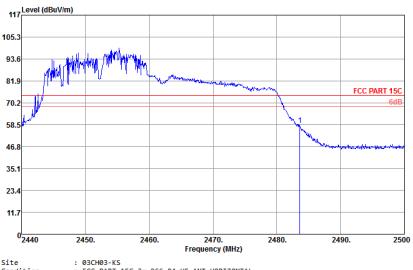
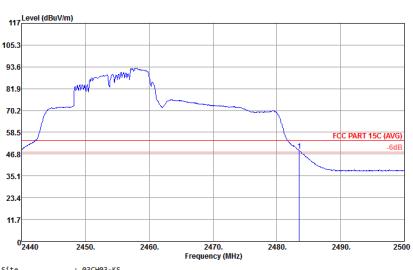


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT40 CH10 2457MHz - R	
1+2	Vertical	
Peak	<p>Site Condition : 03CH03-KS : FCC PART 15C 3m 966-04 HF ANT VERTICAL</p>	
Avg.	<p>Site Condition : 03CH03-KS : FCC PART 15C (AVG) 3m 966-04 HF ANT VERTICAL</p>	



WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT40 CH11 2462MHz - L	
1+2	Horizontal	Fundamental
Peak	 Site : 03CH03-K5 Condition : FCC PART 15C 3m 966-04 HF ANT HORIZONTAL	 Site : 03CH03-K5 Condition : FCC PART 15C 3m 966-04 HF ANT HORIZONTAL
Avg.	 Site : 03CH03-K5 Condition : FCC PART 15C (AVG) 3m 966-04 HF ANT HORIZONTAL	 Site : 03CH03-K5 Condition : FCC PART 15C (AVG) 3m 966-04 HF ANT HORIZONTAL

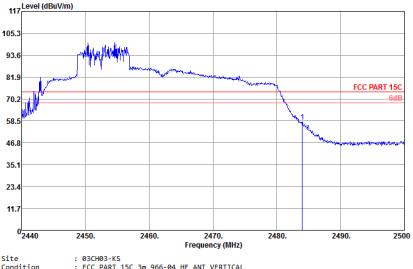
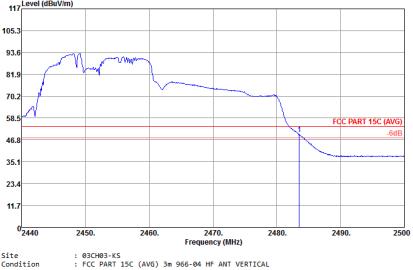


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT40 CH11 2462MHz - R	
1+2	Horizontal	
Peak	 <p>Site Condition : 03CH03-KS : FCC PART 15C 3m 966-04 HF ANT HORIZONTAL</p>	
Avg.	 <p>Site Condition : 03CH03-KS : FCC PART 15C (AVG) 3m 966-04 HF ANT HORIZONTAL</p>	



WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT40 CH11 2462MHz - L	
1+2	Vertical	Fundamental
Peak	 Site Condition : 03CHB3-KS : FCC PART 15C 3m 966-04 HF ANT VERTICAL	 Site Condition : 03CHB3-KS : FCC PART 15C 3m 966-04 HF ANT VERTICAL
Avg.	 Site Condition : 03CHB3-KS : FCC PART 15C (AVG) 3m 966-04 HF ANT VERTICAL	 Site Condition : 03CHB3-KS : FCC PART 15C (AVG) 3m 966-04 HF ANT VERTICAL

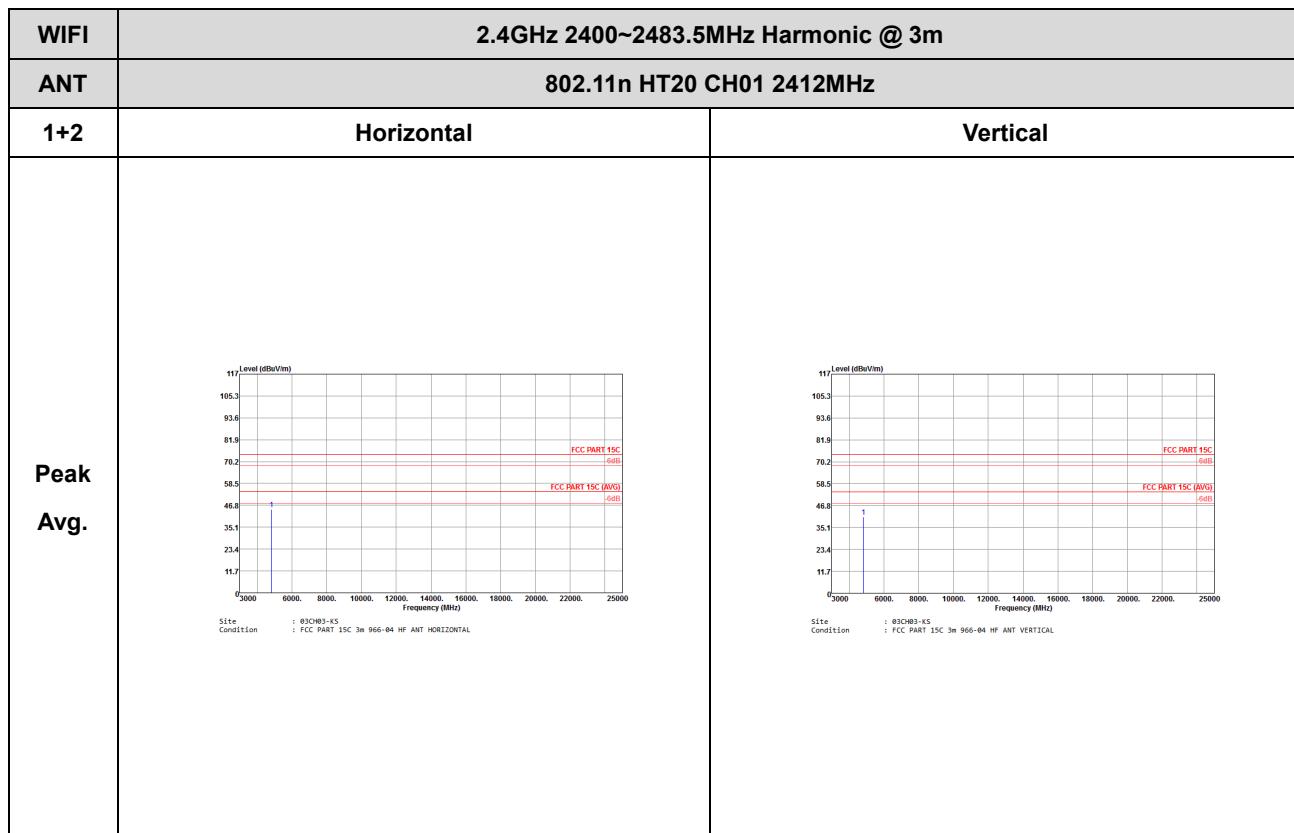


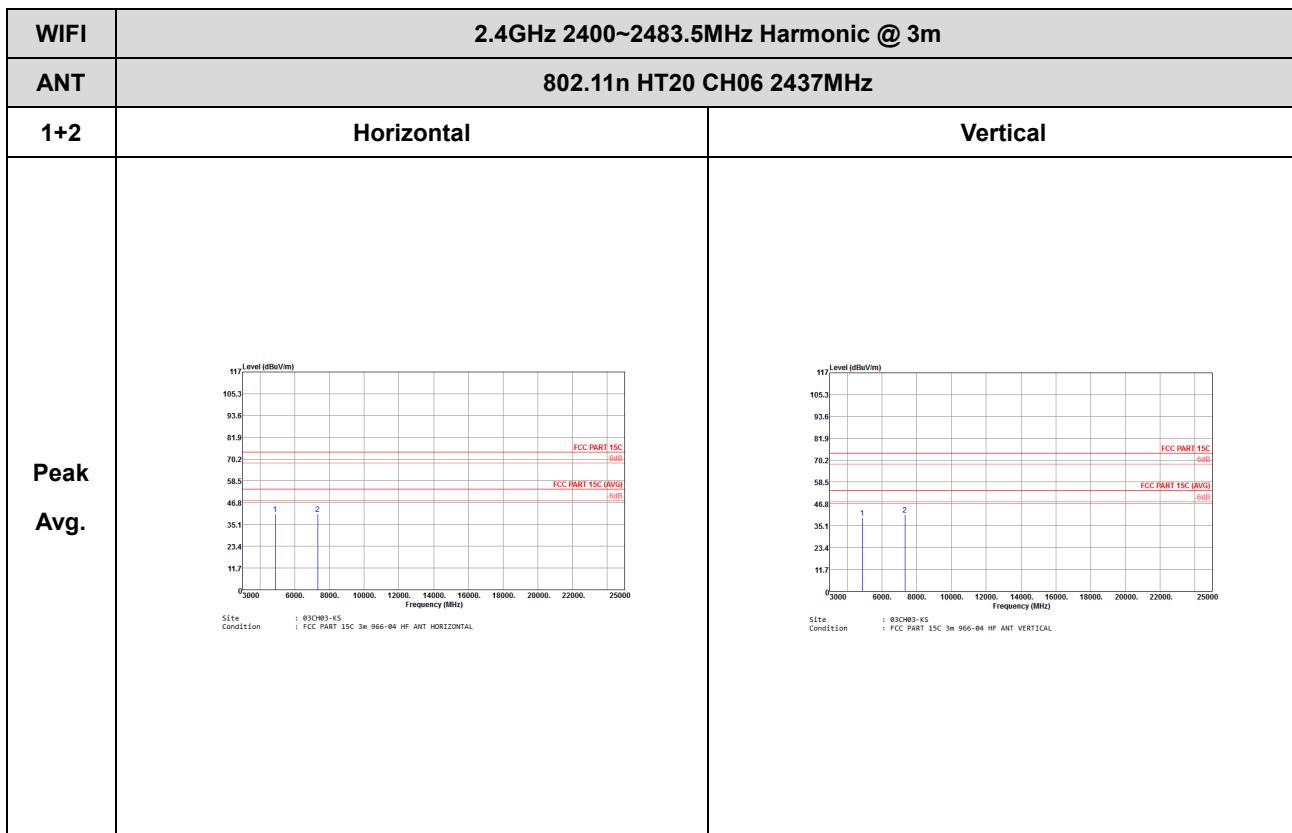
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT40 CH11 2462MHz - R	
1+2	Vertical	
Peak	 <p>Site Condition : 03CH03-KS : FCC PART 15C 3m 966-04 HF ANT VERTICAL</p>	
Avg.	 <p>Site Condition : 03CH03-KS : FCC PART 15C (AVG) 3m 966-04 HF ANT VERTICAL</p>	



2.4GHz 2400~2483.5MHz

WIFI 802.11n HT20 (Harmonic @ 3m)



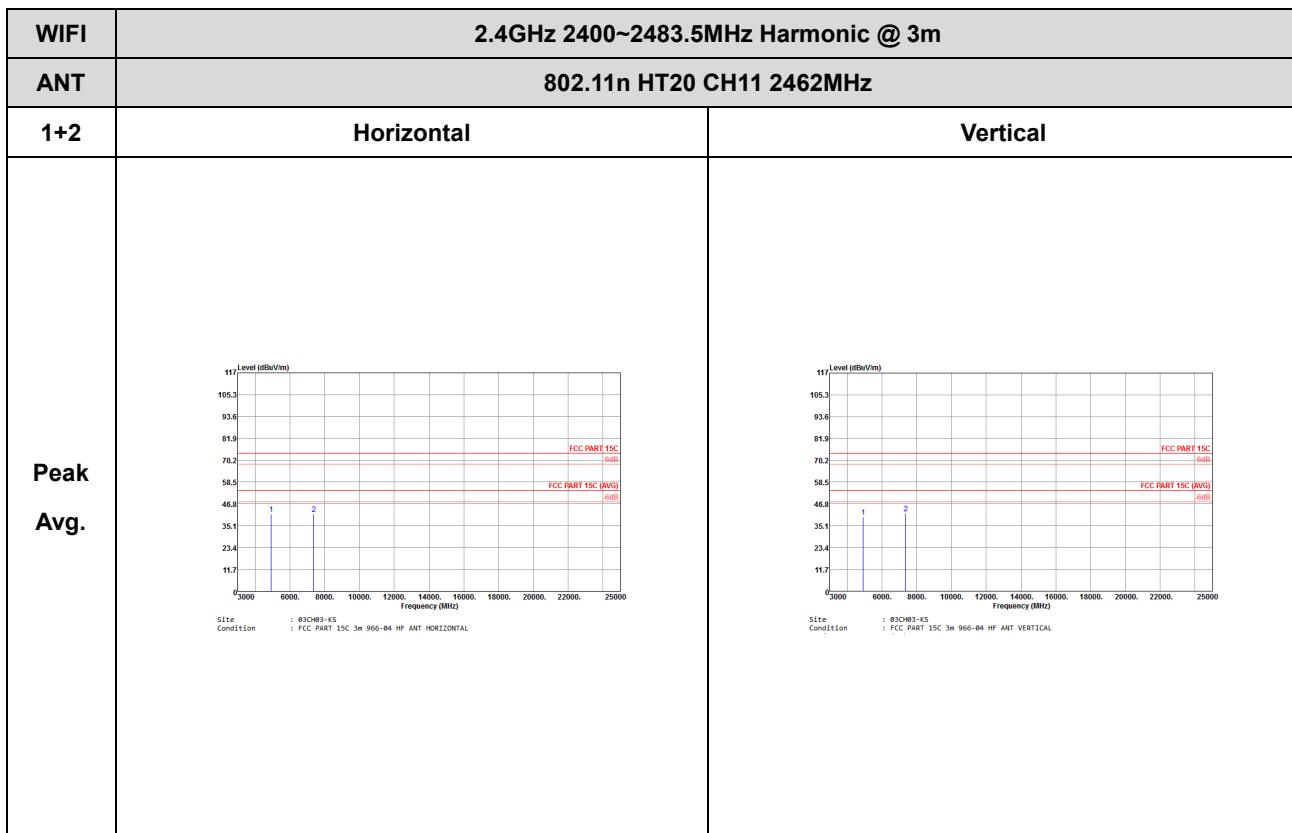


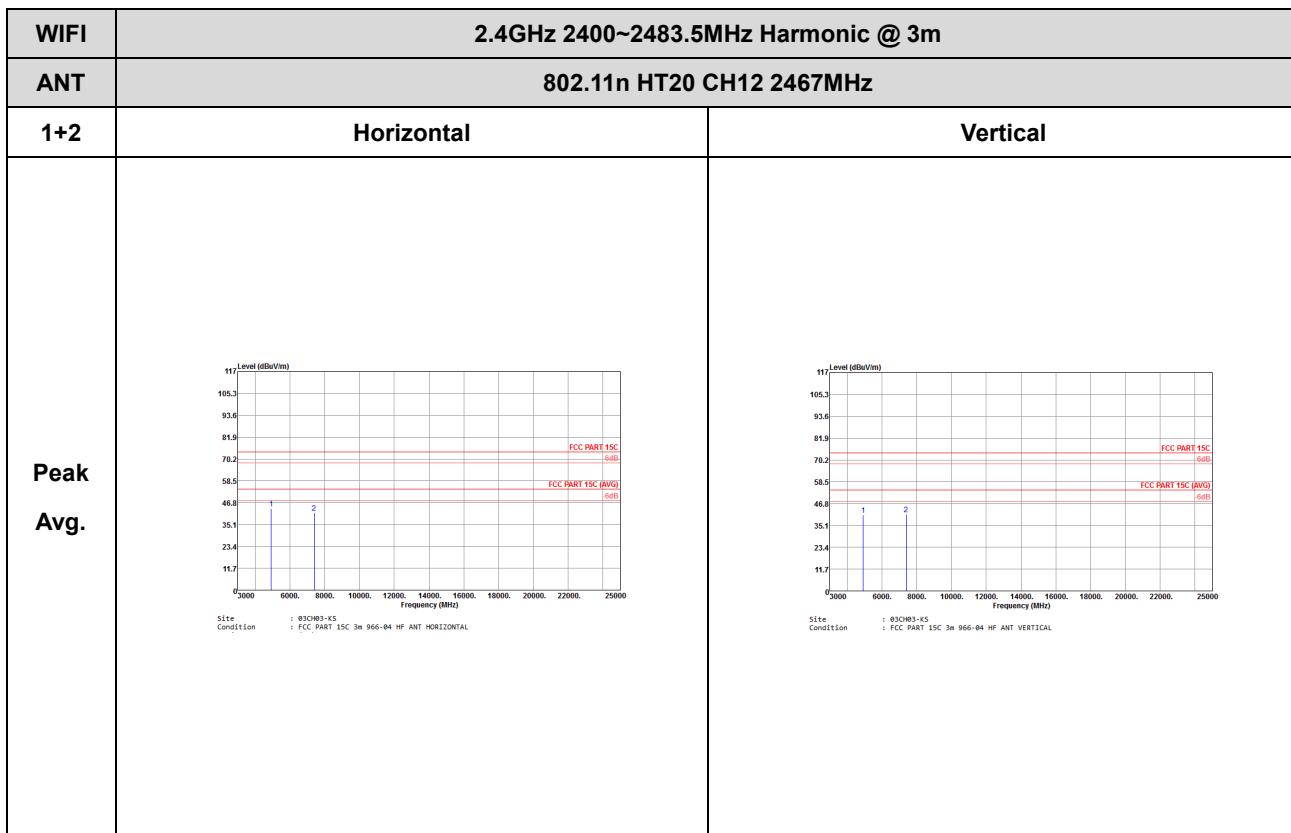
Site Condition : 80CH03-KS

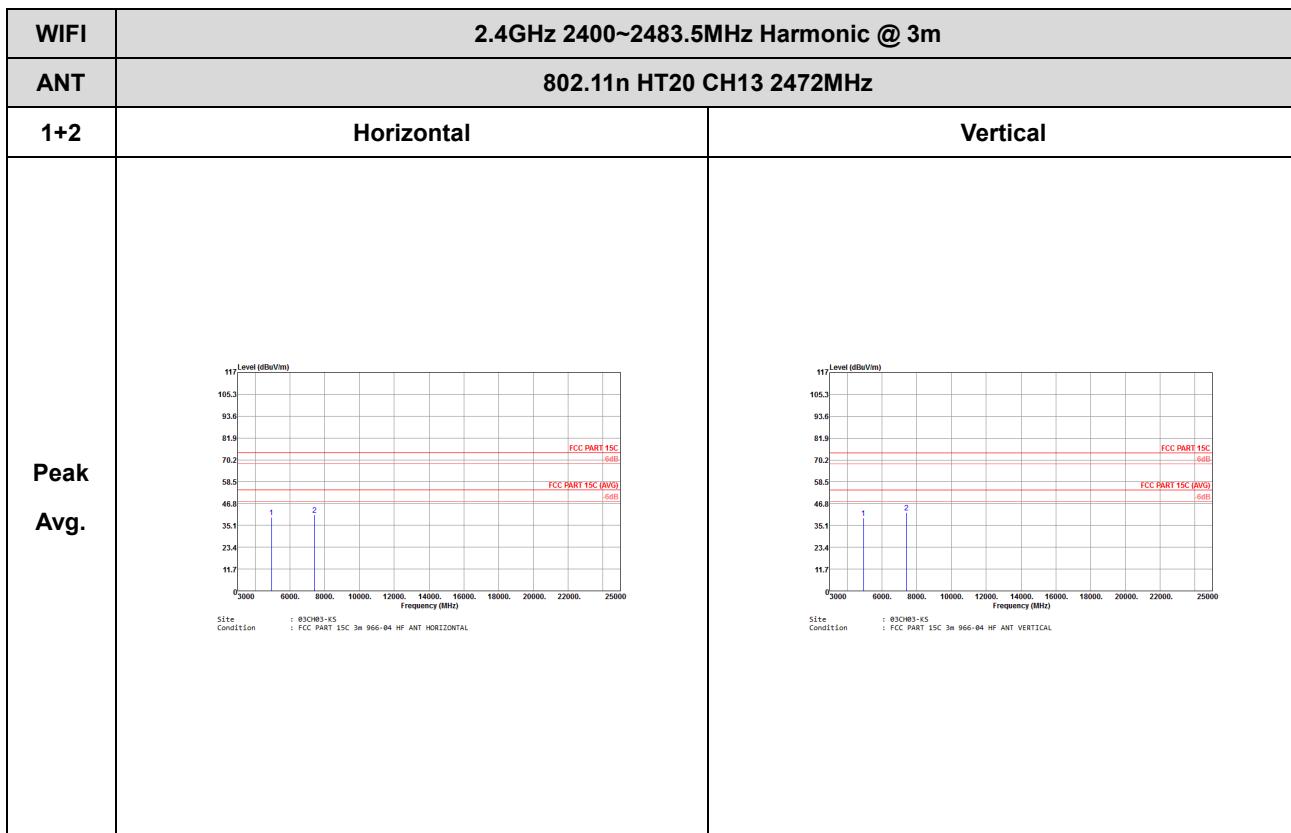
: FCC PART 15C 3m 966-04 HF ANT HORIZONTAL

Site Condition : 80CH03-KS

: FCC PART 15C 3m 966-04 HF ANT VERTICAL



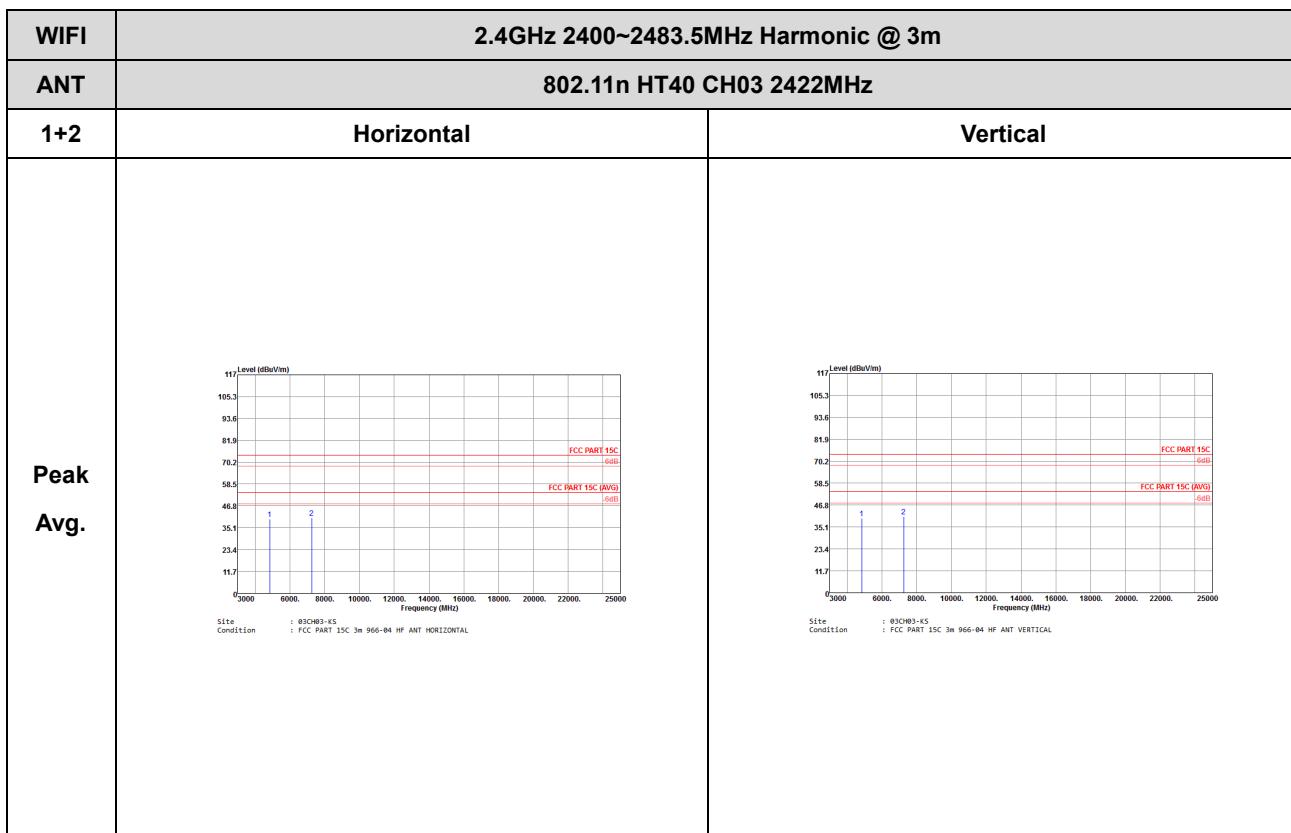


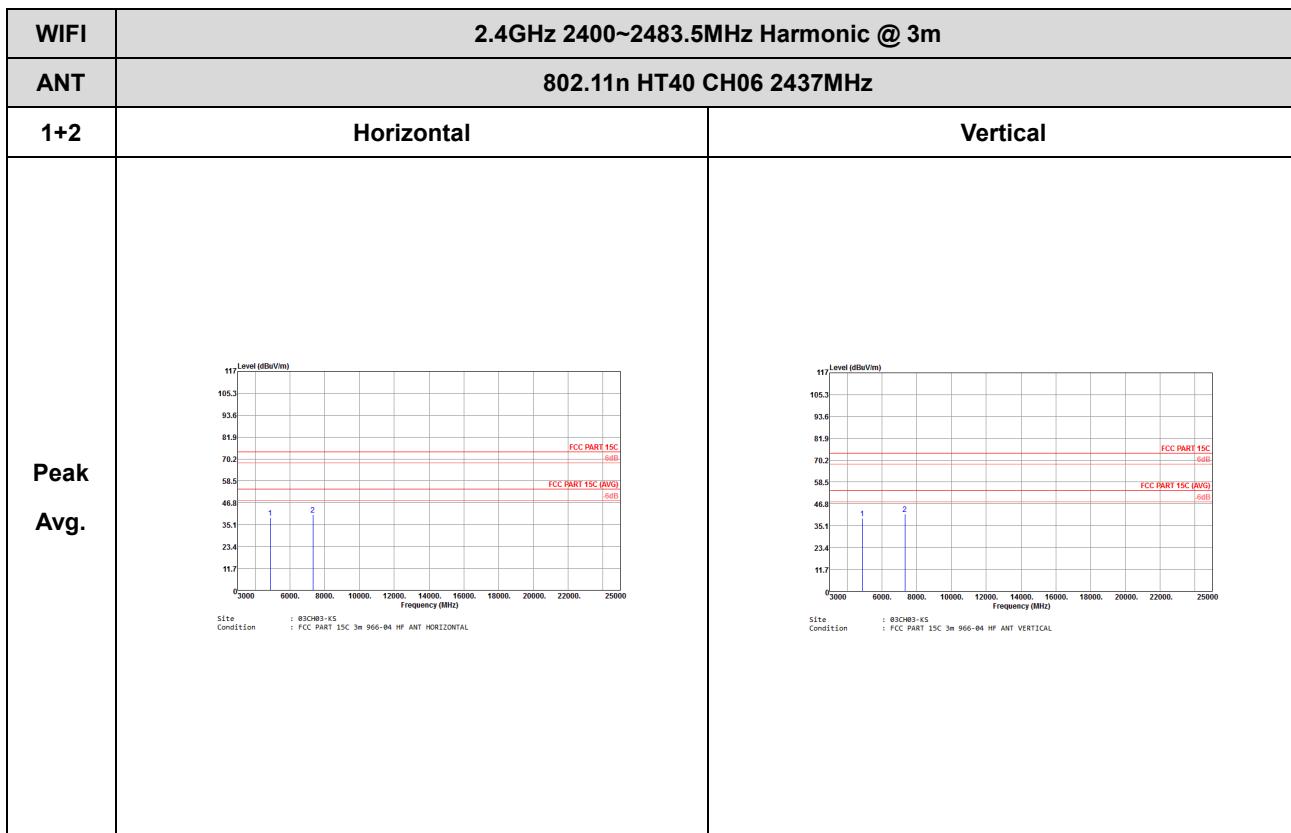


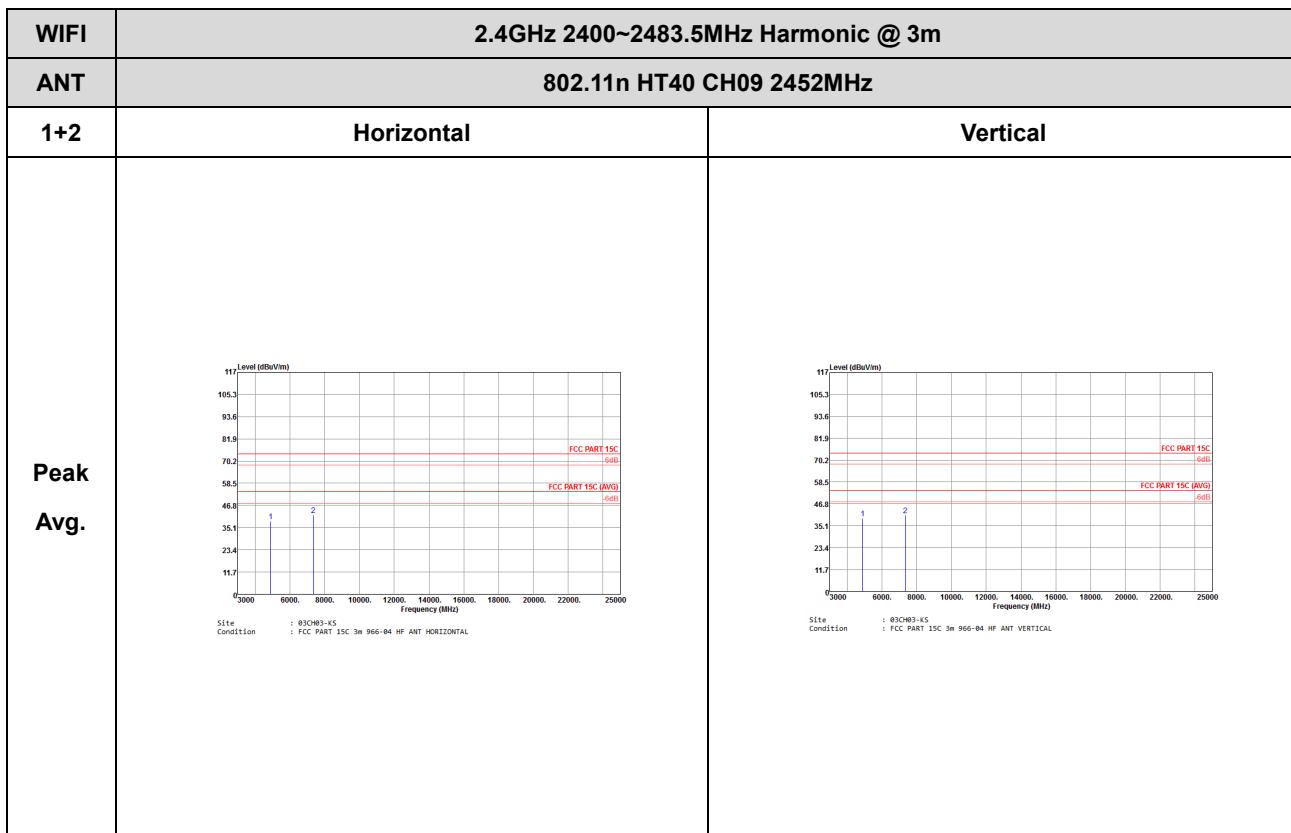


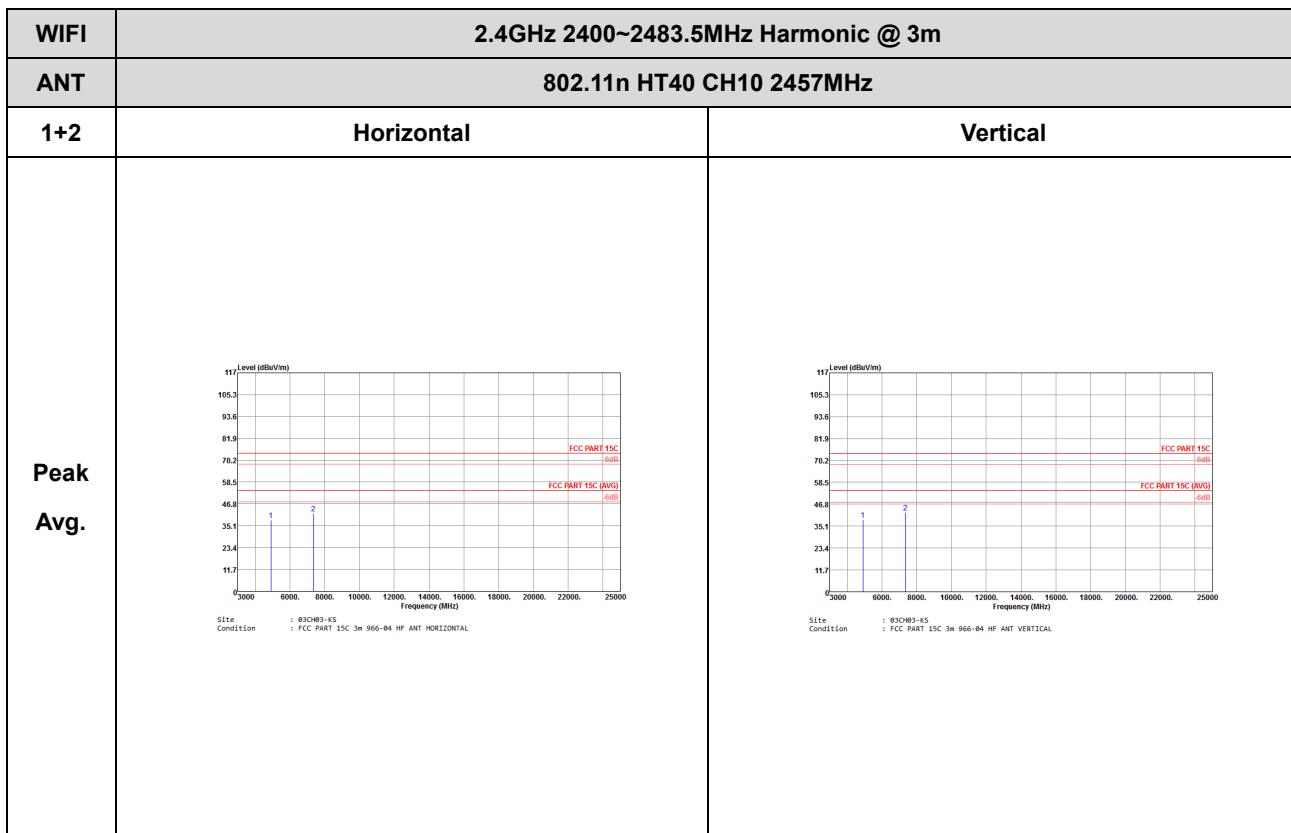
2.4GHz 2400~2483.5MHz

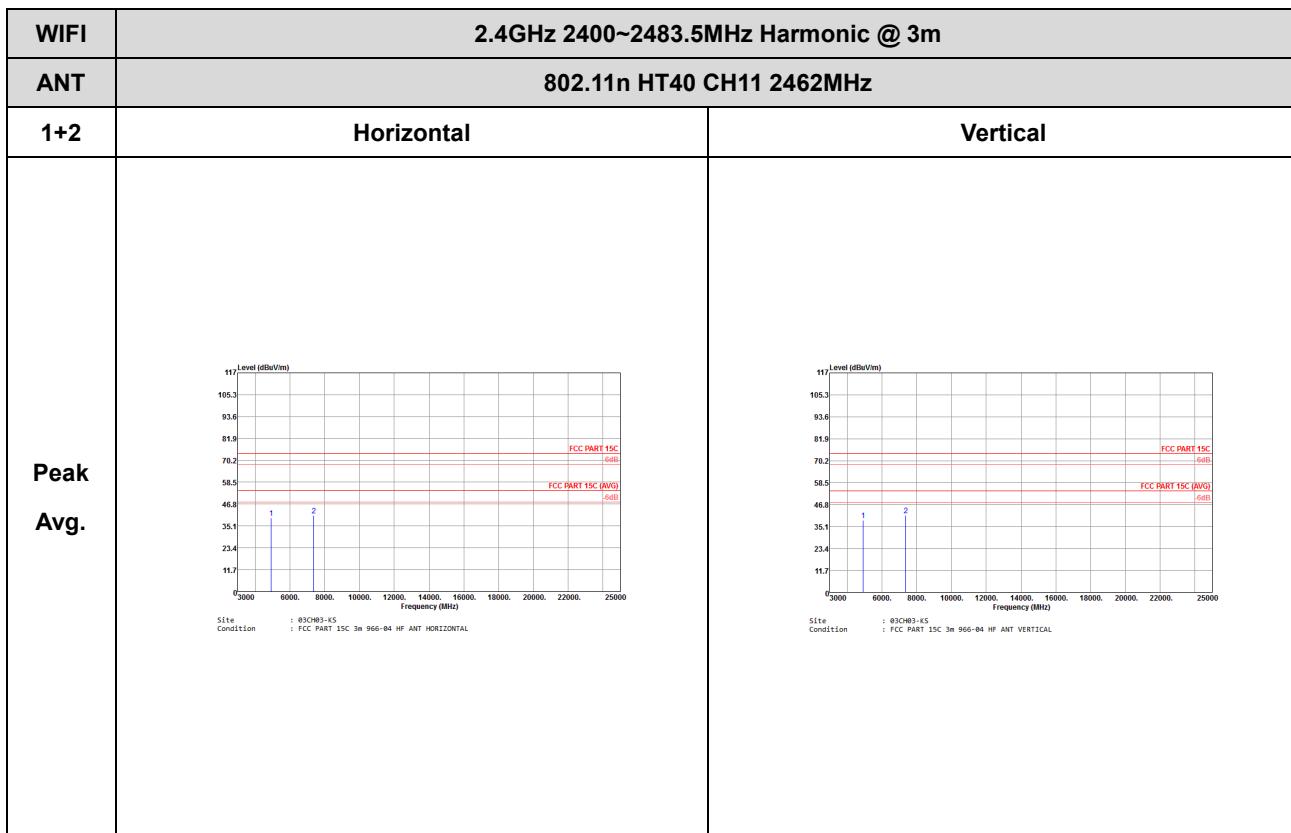
WIFI 802.11n HT40 (Harmonic @ 3m)







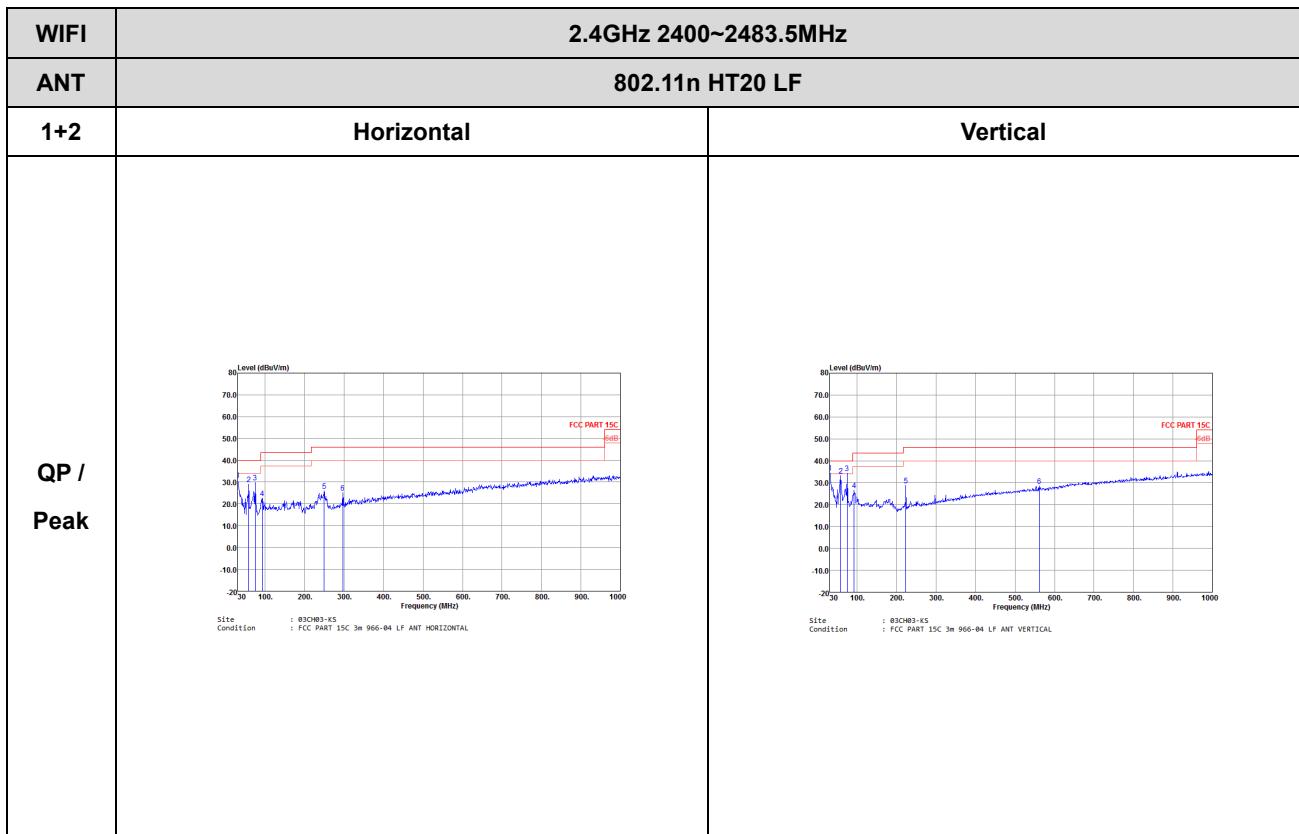






Emission below 1GHz

2.4GHz WIFI 802.11n HT20 (LF)

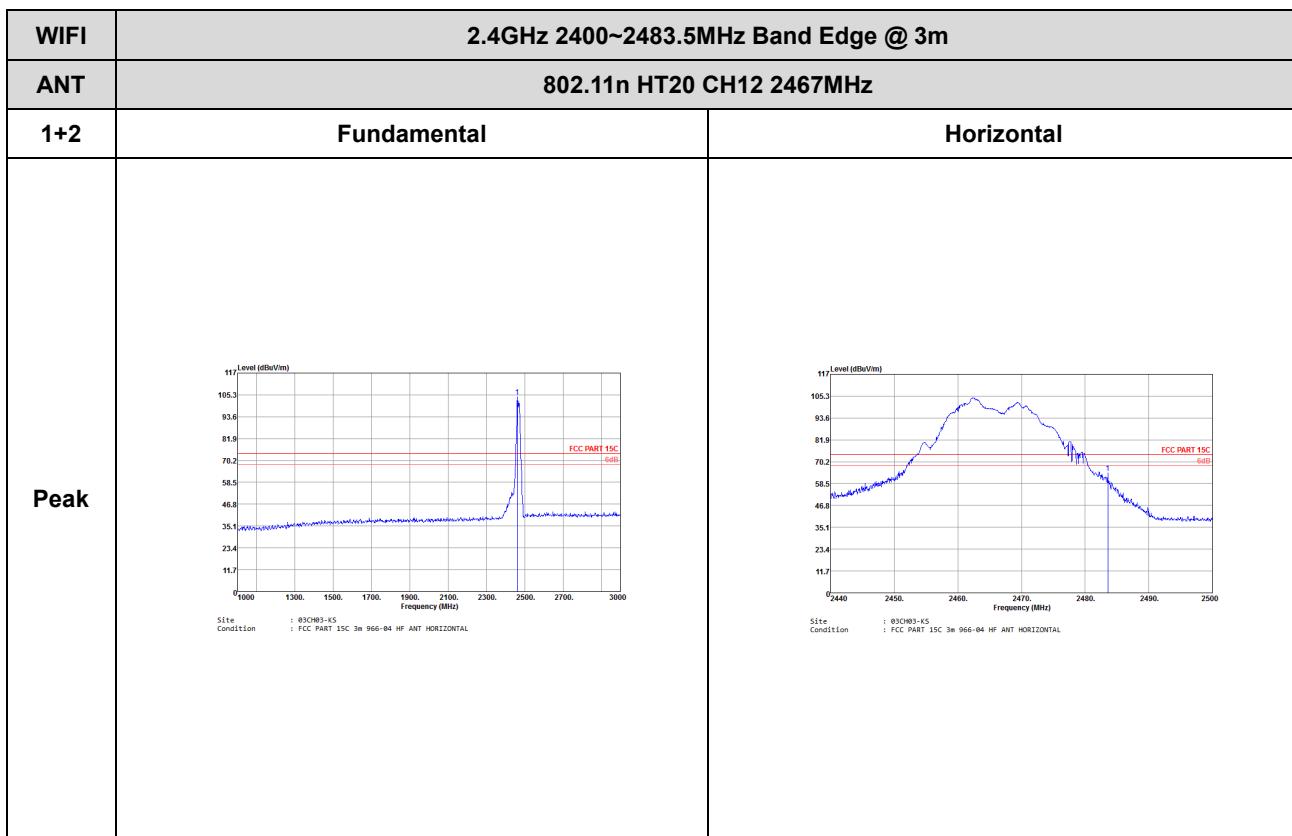


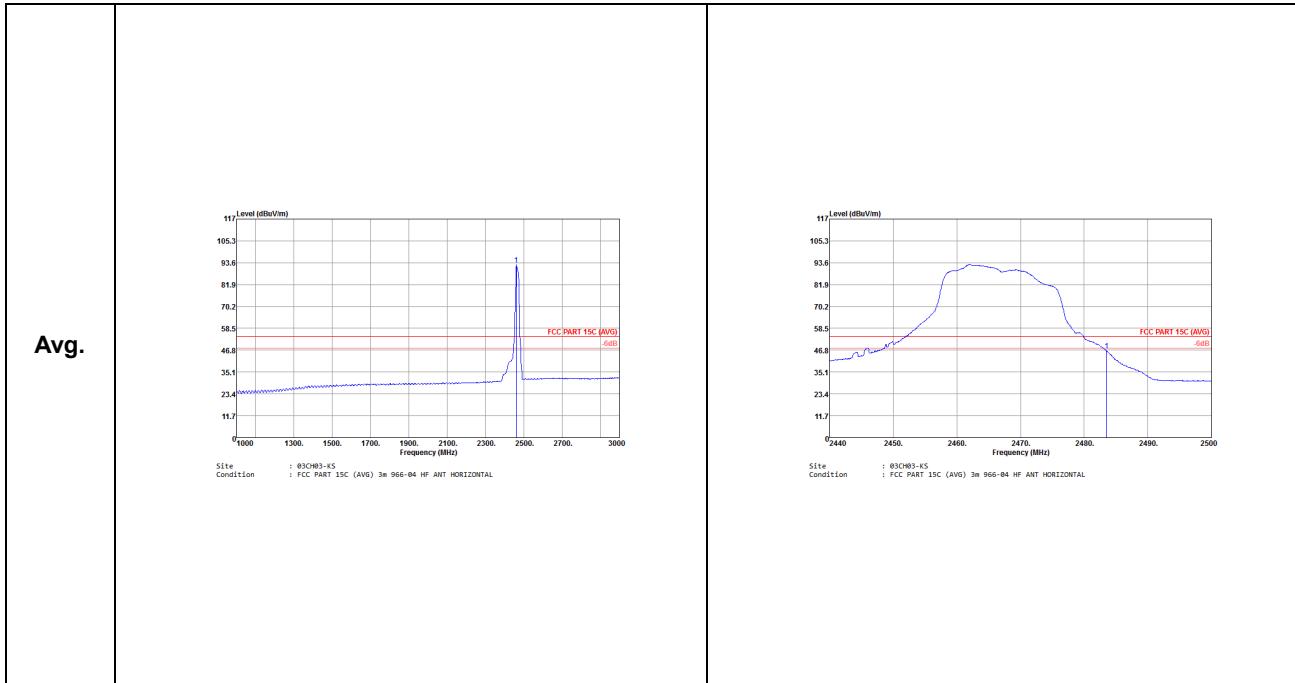


Sample 2

2.4GHz 2400~2483.5MHz

WIFI 802.11n HT20 (Band Edge @ 3m)





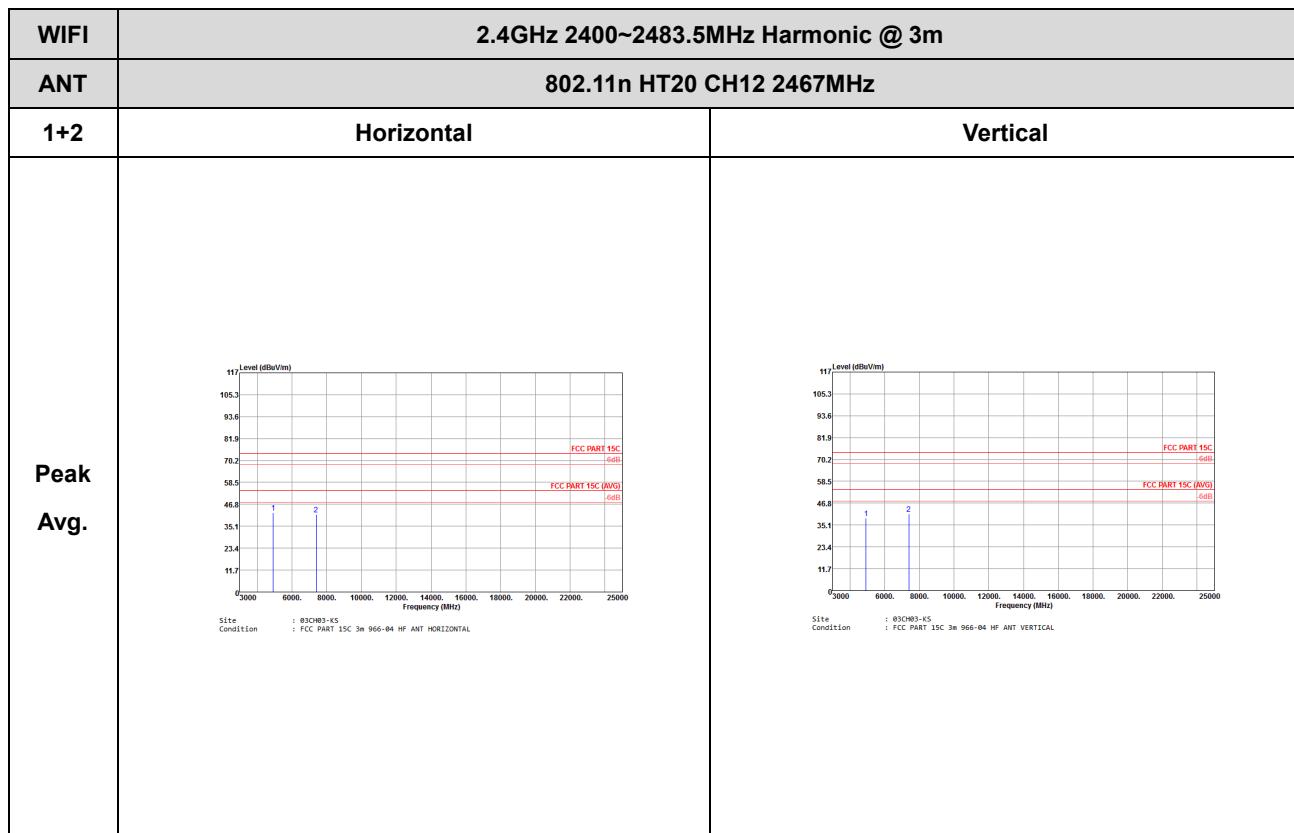


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH12 2467MHz	
1+2	Fundamental	Vertical
Peak	 Site Condition : 03CH03-K5 : FCC PART 15C 3m 966-04 HF ANT VERTICAL	 Site Condition : 03CH03-K5 : FCC PART 15C 3m 966-04 HF ANT VERTICAL
Avg.	 Site Condition : 03CH03-K5 : FCC PART 15C (AVG) 3m 966-04 HF ANT VERTICAL	 Site Condition : 03CH03-K5 : FCC PART 15C (AVG) 3m 966-04 HF ANT VERTICAL



2.4GHz 2400~2483.5MHz

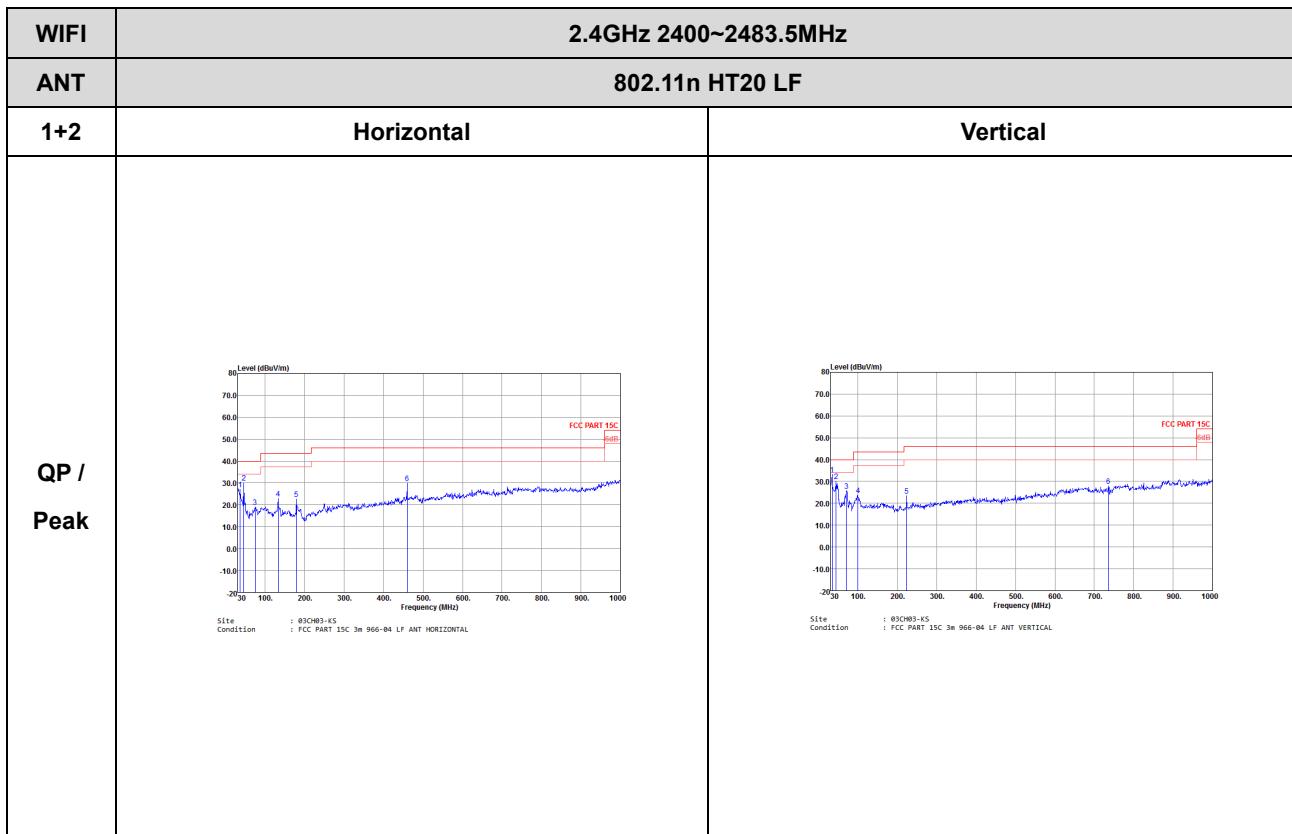
WIFI 802.11n HT20 (Harmonic @ 3m)





Emission below 1GHz

2.4GHz WIFI 802.11n HT20 (LF)

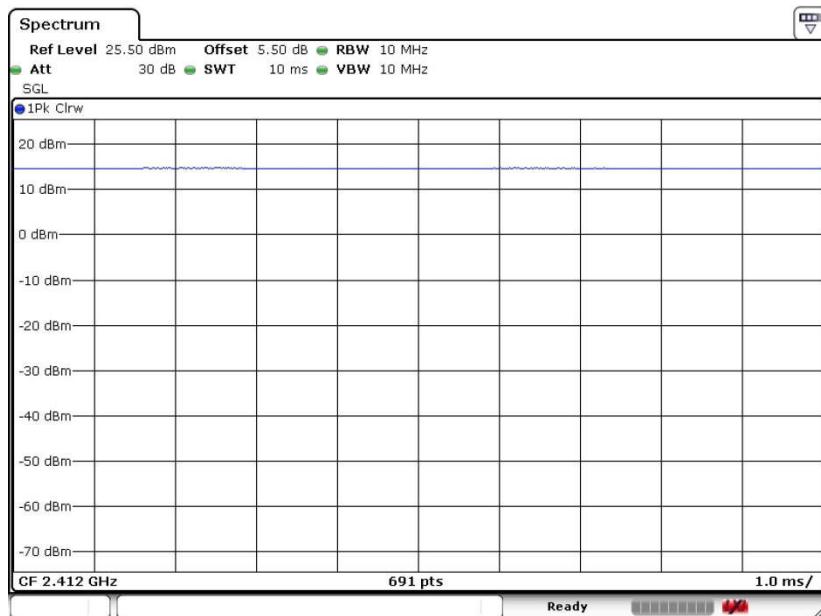




Appendix C. Duty Cycle Plots

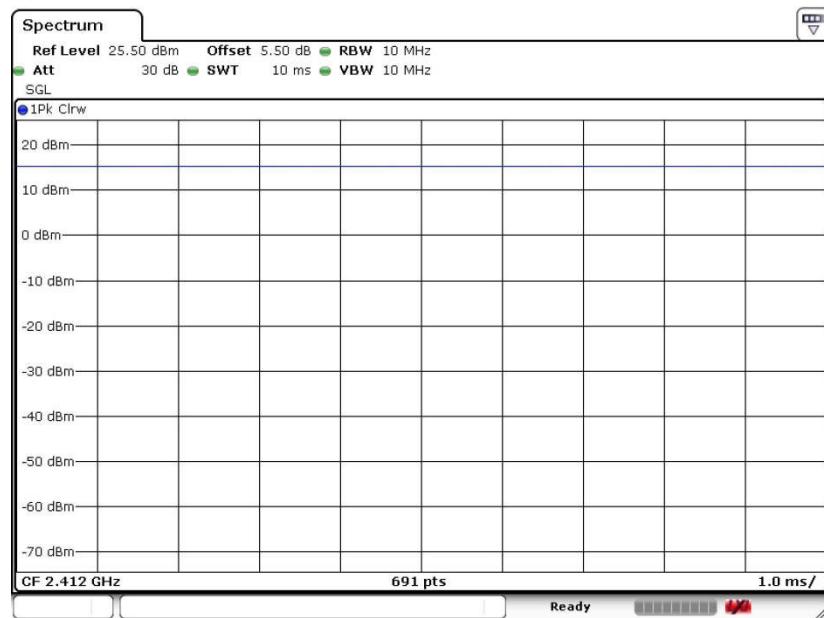
Antenna	Band	Duty Cycle(%)	T(ms)	1/T(kHz)	VBW Setting
1	802.11b	100	-	-	10Hz
2	802.11b	100	-	-	10Hz
1	802.11g	94.63	2.044	0.489	1kHz
2	802.11g	94.63	2.044	0.489	1kHz
1+2	802.11n HT20	95.65	1.913	0.523	1kHz
1+2	802.11n HT40	84.31	0.935	1.070	3kHz

802.11b Ant.1

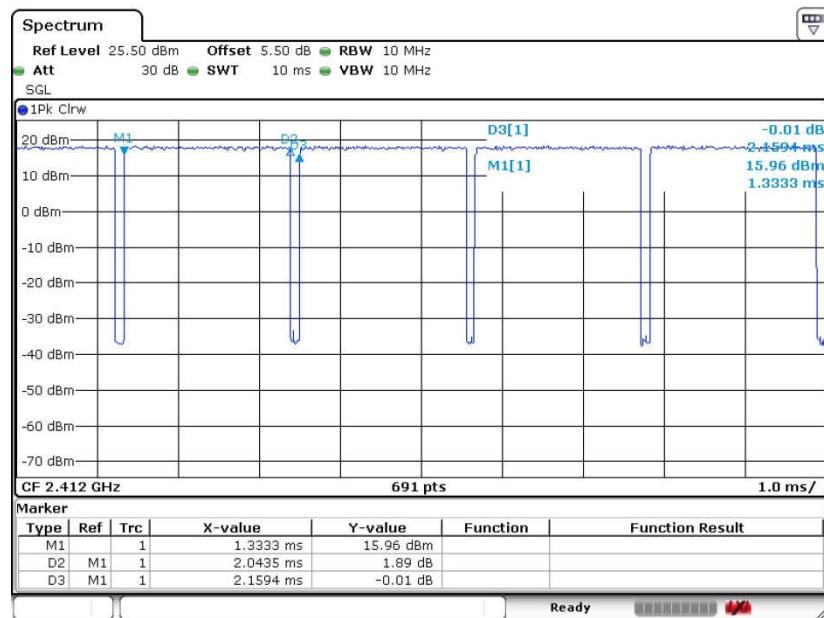




802.11b Ant.2

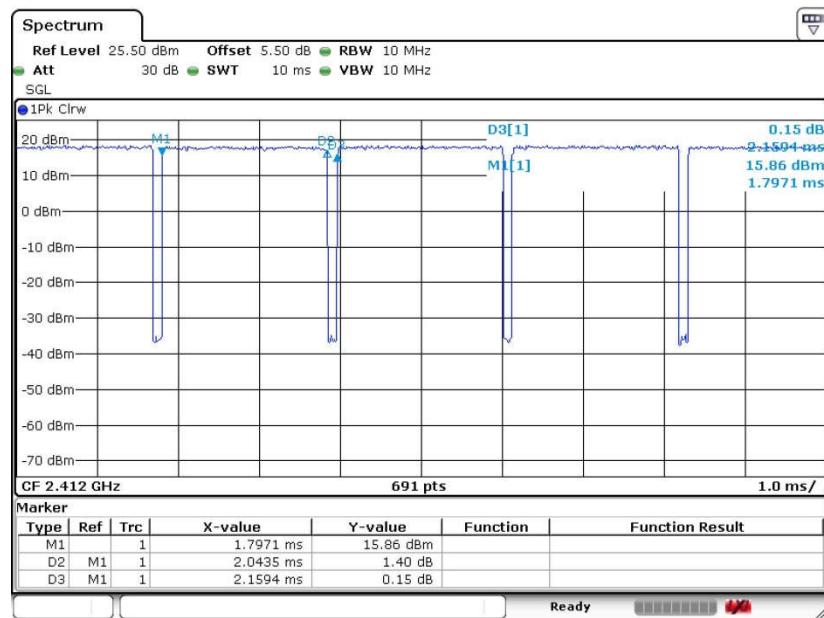


802.11g Ant.1



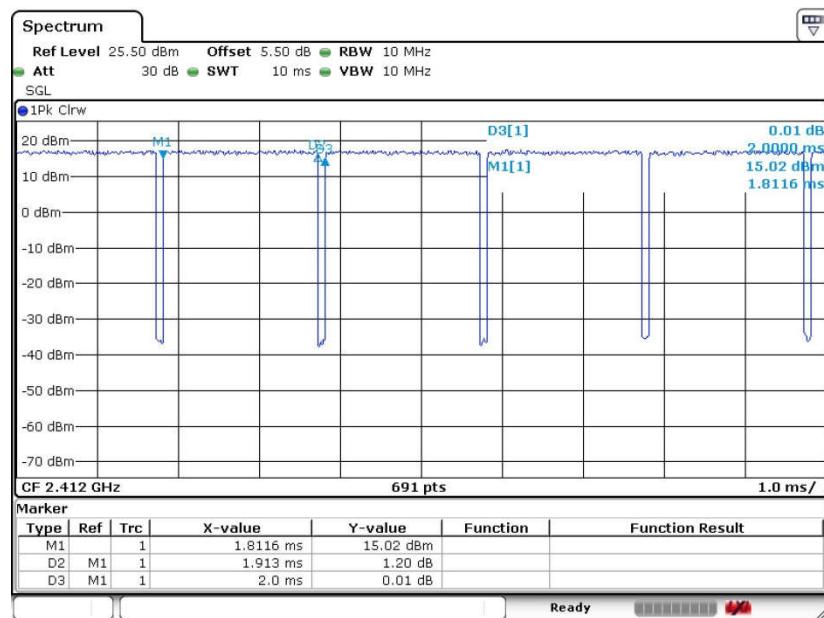


802.11g Ant.2





802.11n HT20 Ant. 1+2





802.11n HT40 Ant. 1+2

