



FCC RADIO TEST REPORT

FCC ID : PPD-QCNFA435
Equipment : Single Stream 802.11a/b/g/n/ac + BT 4.1 M.2 Type Card
Brand Name : Qualcomm Atheros
Model Name : QCNFA435
Applicant : Qualcomm Atheros, Inc.
1700 Technology Drive, San Jose, CA 95110
Manufacturer : Qualcomm Atheros, Inc.
1700 Technology Drive, San Jose, CA 95110
Standard : FCC Part 15 Subpart C §15.247

The product was received on Mar. 15, 2018 and testing was started from Mar. 15, 2018 and completed on May 04, 2018. We, SPORTON INTERNATIONAL INC., would like to declare that the tested sample has been evaluated in accordance with the test procedures and has been in compliance with the applicable technical standards.

The report must not be used by the client to claim product certification, approval, or endorsement by TAF or any agency of government.

The test results in this partial report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory, the test report shall not be reproduced except in full.

Approved by: Jones Tsai

SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory

No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.)



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History of this test report

Report No.	Version	Description	Issued Date
FR773113-03C	01	Initial issue of report	May 22, 2018
FR773113-03C	02	1. Revise connection diagram of test system 2. Add the remark description in summary 3. Add test procedures for output power	May 31, 2018



Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
3.1	15.247(b)	Power Output Measurement	Pass	-
3.2	15.247(d)	Radiated Band Edges and Radiated Spurious Emission	Pass	Under limit 3.01 dB at 2485.930 MHz
3.3	15.203 & 15.247(b)	Antenna Requirement	Pass	-
Remark: The reported TX power in EMC report is per actual shipping power setting and measured in this unit. This has considered the actual shipping power during the measurement.				

Reviewed by: Joseph Lin

Report Producer: Yuping Lin

1 General Description

1.1 Product Feature of Equipment Under Test

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

Product Specification subjective to this standard	
Sample 1	EUT with Portable Computer (HONGBO Antenna)
Sample 2	EUT with Portable Computer (ACON Antenna)

Remark: All the tests were performed with Sample 1.

The product was installed into Portable Computer (Brand Name: DELL, Model Name: P88G, P88G001) during test, and the antenna information was recorded in the following table.

Antenna Information					
Manufacturer	HONGBO			Manufacturer	ACON
Model Name	260-26161			Model Name	ANF6Y-200019
Ant. Type	PIFA			Ant. Type	PIFA
Peak Gain (dBi)	2.4GHz WLAN	Main:0.89 Aux:-2.1	Peak Gain (dBi)	2.4GHz WLAN	Main:-0.02 Aux:-2.43
	5GHz WLAN	Main:1.39 Aux:-1.59		5GHz WLAN	Main:-1.86 Aux:-2.26

1.2 Modification of EUT

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

1.3 Testing Location

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

Test Site	SPORTON INTERNATIONAL INC.	
Test Site Location	No.52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.) TEL: +886-3-327-3456 FAX: +886-3-328-4978	
Test Site No.	Sporton Site No.	
	TH05-HY	03CH07-HY

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



1.4 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
- ♦ 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:, radiation emission (9 kHz to the 10th harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower).

2.1 Carrier Frequency and Channel

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

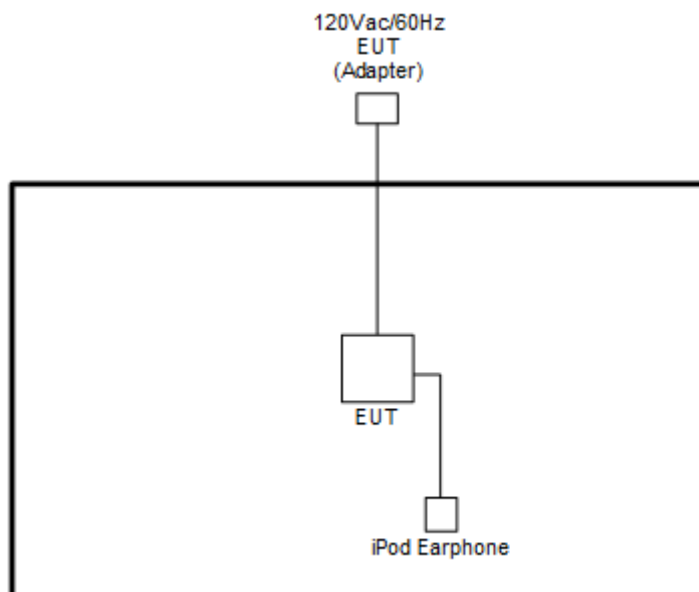
2.2 Test Mode

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

Modulation	Data Rate
802.11b	1 Mbps
802.11g	6 Mbps
802.11n HT20	MCS0
802.11n HT40	MCS0
802.11ac VHT20	MCS0
802.11ac VHT40	MCS0

Remark: The Radiated Spurious Emission test has only performed the test cases which chosen from module supplier.

2.3 Connection Diagram of Test System



2.4 Support Unit used in test configuration and system

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

2.5 EUT Operation Test Setup

The RF test items, utility "QRCT" was installed in Portable Computer which was programmed in order to make the EUT get into the engineering modes to provide channel selection, power level, data rate and the application type and for continuous transmitting signals.

3 Test Result

3.1 Output Power Measurement

3.1.1 Limit of Output Power

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

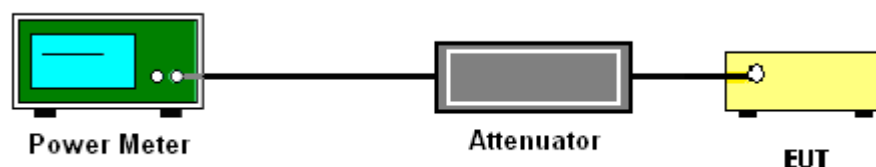
3.1.2 Measuring Instruments

See list of measuring equipment of this test report.

3.1.3 Test Procedures

1. For Peak Output Power, the testing follows the Measurement Procedure of FCC KDB No. 558074 DTS D01 Meas. Guidance v04 section 9.1.3 PKPM1 Peak power meter method.
2. For Average Output Power, the testing follows the Measurement Procedure of FCC KDB No. 558074 DTS D01 Meas. Guidance v04 section 9.2.3.2 Method AVGPM-G.
3. 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.
4. Set to the maximum power setting and enable the EUT transmit continuously.
5. 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

Please refer to Appendix A.

3.1.6 Test Result of Average output Power (Reporting Only)

Please refer to Appendix A.



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

See list of measuring equipment of this test report.

3.2.3 Test Procedures

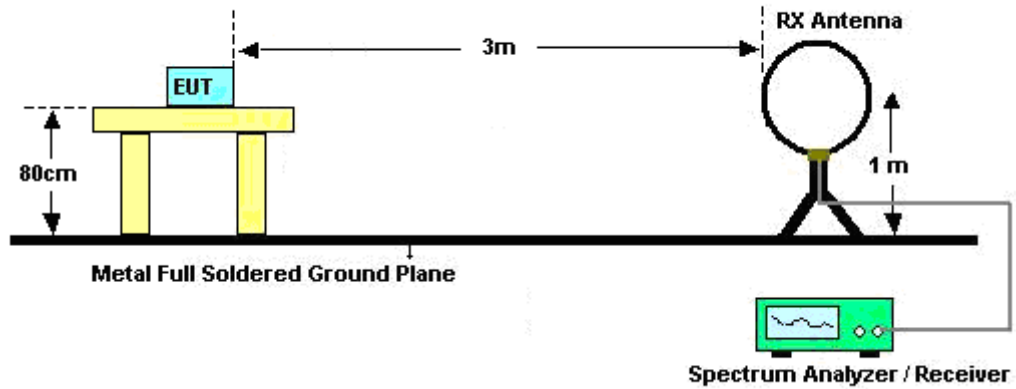
1. The testing follows FCC KDB Publication No. 558074 D01 DTS Meas. Guidance v04.
2. The EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test 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 testing below 1GHz, if the emission level of the EUT in peak mode was 3 dB lower than the limit specified, then peak values of EUT will be reported, otherwise, the emissions will be repeated one by one using the CISPR quasi-peak method and reported.
7. For testing above 1GHz, the emission level of the EUT in peak mode was 20dB lower than average limit (that means the emission level in average mode also complies with the limit in average mode), then peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.
8. Use the following spectrum analyzer settings:
 - (1) Span shall wide enough to fully capture the emission being measured;
 - (2) Set RBW=100 kHz for $f < 1$ GHz; VBW $\geq$ RBW; Sweep = auto; Detector function = peak; Trace = max hold;
 - (3) Set RBW = 1 MHz, VBW= 3MHz for $f \geq 1$ GHz for peak measurement.

For average measurement:

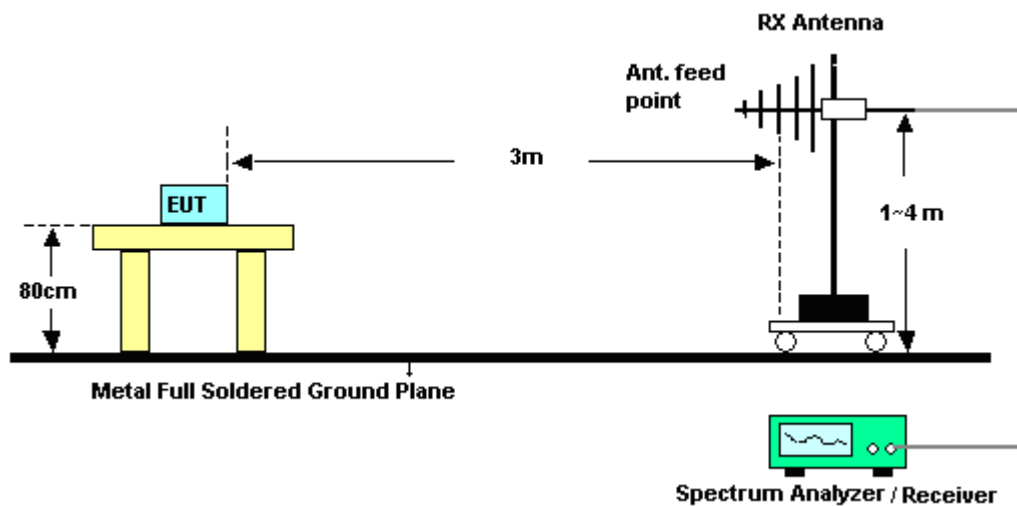
 - VBW = 10 Hz, when duty cycle is no less than 98 percent.
 - VBW $\geq 1/T$, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.

3.2.4 Test Setup

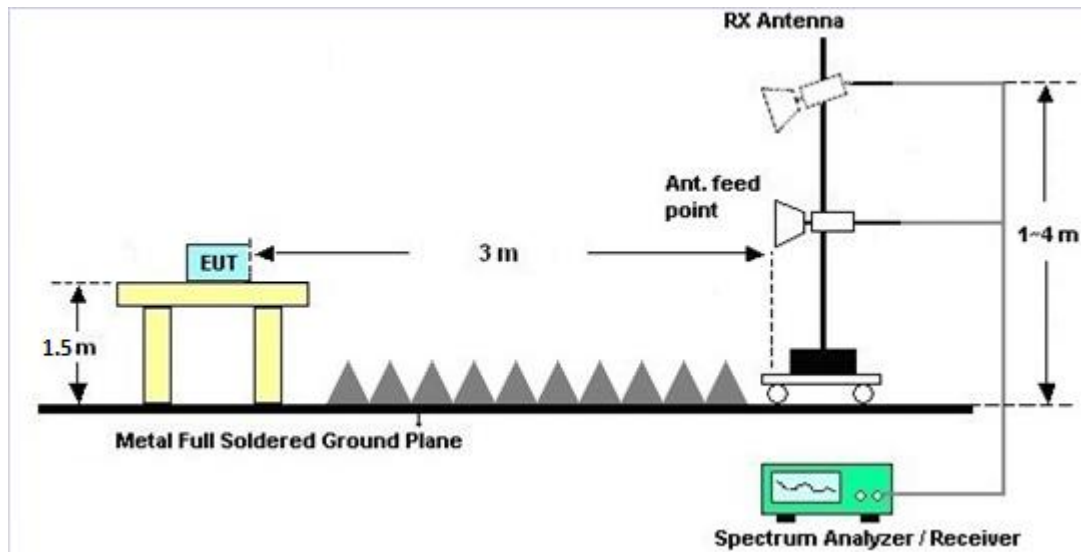
For radiated emissions below 30MHz



For radiated emissions from 30MHz to 1GHz



For radiated emissions above 1GHz



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

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

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

3.2.6 Test Result of Radiated Spurious at Band Edges

Please refer to Appendix B and C.

3.2.7 Duty Cycle

Please refer to Appendix D.

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

Please refer to Appendix B and C.



3.3 Antenna Requirements

3.3.1 Standard Applicable

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

3.3.2 Antenna Anti-Replacement Construction

An embedded-in antenna design is used.

3.3.3 Antenna Gain

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



4 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Power Meter	Anritsu	ML2495A	1240001	N/A	Sep. 07, 2017	Mar. 15, 2018 ~ May 04, 2018	Sep. 06, 2018	Conducted (TH05-HY)
Power Sensor	Anritsu	MA2411B	1207349	300MHz~40GHz	Sep. 07, 2017	Mar. 15, 2018 ~ May 04, 2018	Sep. 06, 2018	Conducted (TH05-HY)
Spectrum Analyzer	Rohde & Schwarz	FSP40	100055	9kHz~40GHz	Jun. 20, 2017	Mar. 15, 2018 ~ May 04, 2018	Jun. 19, 2018	Conducted (TH05-HY)
Bilog Antenna	TESEQ	CBL 6111D&00800 N1D01N-06	35419&03	30MHz to 1GHz	Dec. 18, 2017	Mar. 30, 2018 ~ Apr. 30, 2018	Dec. 17, 2018	Radiation (03CH07-HY)
Double Ridge Horn Antenna	ESCO	3117	00075962	1GHz ~ 18GHz	Aug. 23, 2017	Mar. 30, 2018 ~ Apr. 30, 2018	Aug. 22, 2018	Radiation (03CH07-HY)
Loop Antenna	Rohde & Schwarz	HFH2-Z2	100315	9 kHz~30 MHz	Nov. 10, 2017	Mar. 30, 2018 ~ Apr. 30, 2018	Nov. 09, 2018	Radiation (03CH07-HY)
Preamplifier	MITEQ	AMF-7D-0010 1800-30-10P	1590075	1GHz ~ 18GHz	Mar. 25, 2018	Mar. 30, 2018 ~ Apr. 30, 2018	Mar. 24, 2019	Radiation (03CH07-HY)
Preamplifier	Agilent	8449B	3008A023 62	1GHz~ 26.5GHz	Oct. 30, 2017	Mar. 30, 2018 ~ Apr. 30, 2018	Oct. 29, 2018	Radiation (03CH07-HY)
Controller	ChainTek	Chaintek 3000	N/A	Control Turn table	N/A	Mar. 30, 2018 ~ Apr. 30, 2018	N/A	Radiation (03CH07-HY)
Controller	Max-Full	MF7802	MF780208 368	Control Ant Mast	N/A	Mar. 30, 2018 ~ Apr. 30, 2018	N/A	Radiation (03CH07-HY)
Antenna Mast	Max-Full	MFA520BS	N/A	1m~4m	N/A	Mar. 30, 2018 ~ Apr. 30, 2018	N/A	Radiation (03CH07-HY)
Turn Table	ChainTek	Chaintek 3000	N/A	0~360 Degree	N/A	Mar. 30, 2018 ~ Apr. 30, 2018	N/A	Radiation (03CH07-HY)
Amplifier	MITEQ	TTA1840-35-HG	1871923	18GHz~40GHz, VSWR : 2.5:1 max	Jul. 18, 2017	Mar. 30, 2018 ~ Apr. 30, 2018	Jul. 17, 2018	Radiation (03CH07-HY)
Spectrum Analyzer	Keysight	N9010A	MY542004 85	10Hz ~ 44GHz	Oct. 31, 2017	Mar. 30, 2018 ~ Apr. 30, 2018	Oct. 30, 2018	Radiation (03CH07-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170 251	18GHz- 40GHz	Nov. 10, 2017	Mar. 30, 2018 ~ Apr. 30, 2018	Nov. 09, 2018	Radiation (03CH07-HY)
Amplifier	SONOMA	310N	187231	9kHz~1GHz	Jan. 08, 2018	Mar. 30, 2018 ~ Apr. 30, 2018	Jan. 07, 2019	Radiation (03CH07-HY)
EMI Test Receiver	Agilent	N9038A (MXE)	MY532900 53	20Hz to 26.5GHz	Jan. 16, 2018	Mar. 30, 2018 ~ Apr. 30, 2018	Jan. 15, 2019	Radiation (03CH07-HY)
Software	Audix	E3 6.2009-8-24	N/A	N/A	N/A	Mar. 30, 2018 ~ Apr. 30, 2018	N/A	Radiation (03CH07-HY)



5 Uncertainty of Evaluation

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

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	5.7
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Uncertainty of Radiated Emission Measurement (1000 MHz ~ 18000 MHz)

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

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

Test Engineer:	Ethan Lin/Lena Lo	Temperature:	21~25	°C
Test Date:	2018/03/15~2018/05/04	Relative Humidity:	51~54	%

TEST RESULTS DATA
Peak Output Power

2.4GHz Band						
Mod.	Data Rate	Ntx	CH.	Freq. (MHz)	Peak Conducted Power (dBm)	Conducted Power Limit (dBm)
					Ant 1	Ant 1
11b	1Mbps	1	1	2412	18.16	30.00
11b	1Mbps	1	6	2437	21.69	30.00
11b	1Mbps	1	11	2462	21.70	30.00
11g	6Mbps	1	1	2412	20.27	30.00
11g	6Mbps	1	6	2437	23.31	30.00
11g	6Mbps	1	11	2462	22.13	30.00
HT20	MCS0	1	1	2412	19.03	30.00
HT20	MCS0	1	6	2437	23.81	30.00
HT20	MCS0	1	11	2462	21.67	30.00
HT40	MCS0	1	3	2422	15.38	30.00
HT40	MCS0	1	6	2437	19.69	30.00
HT40	MCS0	1	9	2452	19.96	30.00
VHT20	MCS0	1	1	2412	17.96	30.00
VHT20	MCS0	1	6	2437	23.80	30.00
VHT20	MCS0	1	11	2462	21.65	30.00
VHT40	MCS0	1	3	2422	14.91	30.00
VHT40	MCS0	1	6	2437	20.64	30.00
VHT40	MCS0	1	9	2452	20.05	30.00

Note: Measured power (dBm) has offset with cable loss.

TEST RESULTS DATA
Average Output Power

2.4GHz Band						
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Duty Factor (dB)	Average Conducted Power (dBm)
					Ant 1	Ant 1
11b	1Mbps	1	1	2412	0.05	15.72
11b	1Mbps	1	6	2437	0.05	18.98
11b	1Mbps	1	11	2462	0.05	18.99
11g	6Mbps	1	1	2412	0.22	14.14
11g	6Mbps	1	6	2437	0.22	17.77
11g	6Mbps	1	11	2462	0.22	16.19
HT20	MCS0	1	1	2412	0.25	12.56
HT20	MCS0	1	6	2437	0.25	17.92
HT20	MCS0	1	11	2462	0.25	15.41
HT40	MCS0	1	3	2422	0.51	9.08
HT40	MCS0	1	6	2437	0.51	13.05
HT40	MCS0	1	9	2452	0.51	13.29
VHT20	MCS0	1	1	2412	0.27	11.50
VHT20	MCS0	1	6	2437	0.27	17.93
VHT20	MCS0	1	11	2462	0.27	15.42
VHT40	MCS0	1	3	2422	0.52	8.66
VHT40	MCS0	1	6	2437	0.52	13.95
VHT40	MCS0	1	9	2452	0.52	13.42

Note: Measured power (dBm) has offset with cable loss.



Appendix B. Radiated Spurious Emission

Test Engineer :	Jesse Wang, Stan Hsieh, and Lance Chiang	Temperature :	22~24°C
		Relative Humidity :	51~53%

2.4GHz 2400~2483.5MHz

WIFI 802.11b (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11b CH 01 2412MHz		2389.38	56.15	-17.85	74	41.81	31.95	17.43	35.04	327	222	P	H
		2390	45.25	-8.75	54	30.92	31.95	17.43	35.05	327	222	A	H
	*	2412	103.75	-	-	89.38	31.99	17.43	35.05	327	222	P	H
	*	2412	96.38	-	-	82.01	31.99	17.43	35.05	327	222	A	H
													H
													H
		2389.905	62.59	-11.41	74	48.26	31.95	17.43	35.05	339	188	P	V
		2390	50.92	-3.08	54	36.59	31.95	17.43	35.05	339	188	A	V
	*	2412	111.22	-	-	96.85	31.99	17.43	35.05	339	188	P	V
	*	2412	103.69	-	-	89.32	31.99	17.43	35.05	339	188	A	V
													V
													V
802.11b CH 06 2437MHz		2371.32	55.29	-18.71	74	41.05	31.91	17.37	35.04	329	218	P	H
		2389.52	44.26	-9.74	54	29.92	31.95	17.43	35.04	329	218	A	H
	*	2437	104.61	-	-	90.1	32.08	17.49	35.06	329	218	P	H
	*	2437	101.37	-	-	86.86	32.08	17.49	35.06	329	218	A	H
		2489.71	55.22	-18.78	74	40.54	32.2	17.55	35.07	329	218	P	H
		2485.02	44.32	-9.68	54	29.68	32.16	17.55	35.07	329	218	A	H
		2382.1	58.15	-15.85	74	43.85	31.91	17.43	35.04	298	206	P	V
		2386.86	47.78	-6.22	54	33.44	31.95	17.43	35.04	298	206	A	V
	*	2437	111.22	-	-	96.71	32.08	17.49	35.06	298	206	P	V
	*	2437	108.08	-	-	93.57	32.08	17.49	35.06	298	206	A	V
		2483.69	56.48	-17.52	74	41.84	32.16	17.55	35.07	298	206	P	V
		2487.12	46.07	-7.93	54	31.43	32.16	17.55	35.07	298	206	A	V



802.11b CH 11 2462MHz	*	2462	107.89	-	-	93.28	32.12	17.55	35.06	331	112	P	H
	*	2462	100	-	-	85.39	32.12	17.55	35.06	331	112	A	H
		2485.12	56.64	-17.36	74	42	32.16	17.55	35.07	331	112	P	H
		2483.52	46.32	-7.68	54	31.68	32.16	17.55	35.07	331	112	A	H
													H
													H
	*	2462	113.68	-	-	99.07	32.12	17.55	35.06	284	207	P	V
	*	2462	105.66	-	-	91.05	32.12	17.55	35.06	284	207	A	V
		2484.48	62.12	-11.88	74	47.48	32.16	17.55	35.07	284	207	P	V
		2483.52	50.61	-3.39	54	35.97	32.16	17.55	35.07	284	207	A	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



2.4GHz 2400~2483.5MHz

WIFI 802.11b (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11b CH 01 2412MHz		4824	43.64	-30.36	74	57.67	34.23	11.12	59.38	100	0	P	H
													H
													H
													H
		4824	44.58	-29.42	74	58.61	34.23	11.12	59.38	100	0	P	V
													V
													V
													V
802.11b CH 06 2437MHz		4874	43.62	-30.38	74	57.53	34.22	11.16	59.29	100	0	P	H
		7311	42.42	-31.58	74	51.15	35.71	13.61	58.05	100	0	P	H
													H
													H
		4874	46.95	-27.05	74	60.86	34.22	11.16	59.29	100	0	P	V
		7311	42.26	-31.74	74	50.99	35.71	13.61	58.05	100	0	P	V
													V
													V
802.11b CH 11 2462MHz		4924	45.25	-28.75	74	59.03	34.21	11.22	59.21	100	0	P	H
		7386	43.48	-30.52	74	52.25	35.66	13.69	58.12	100	0	P	H
													H
													H
		4924	48.21	-25.79	74	61.99	34.21	11.22	59.21	100	0	P	V
		7386	43.39	-30.61	74	52.16	35.66	13.69	58.12	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



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

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11g CH 01 2412MHz		2388.75	56.05	-17.95	74	41.71	31.95	17.43	35.04	315	218	P	H
		2390	47.06	-6.94	54	32.73	31.95	17.43	35.05	315	218	A	H
	*	2412	104.5	-	-	90.13	31.99	17.43	35.05	315	218	P	H
	*	2412	96.79	-	-	82.42	31.99	17.43	35.05	315	218	A	H
													H
													H
		2389.275	60.27	-13.73	74	45.93	31.95	17.43	35.04	311	202	P	V
		2389.905	50.6	-3.4	54	36.27	31.95	17.43	35.05	311	202	A	V
	*	2412	111.18	-	-	96.81	31.99	17.43	35.05	311	202	P	V
	*	2412	103.31	-	-	88.94	31.99	17.43	35.05	311	202	A	V
													V
													V
802.11g CH 06 2437MHz		2386.02	55.27	-18.73	74	40.93	31.95	17.43	35.04	336	111	P	H
		2389.8	45.31	-8.69	54	30.98	31.95	17.43	35.05	336	111	A	H
	*	2437	106.8	-	-	92.29	32.08	17.49	35.06	336	111	P	H
	*	2437	98.98	-	-	84.47	32.08	17.49	35.06	336	111	A	H
		2484.95	54.92	-19.08	74	40.28	32.16	17.55	35.07	336	111	P	H
		2488.66	45.08	-8.92	54	30.4	32.2	17.55	35.07	336	111	A	H
		2386.86	56.78	-17.22	74	42.44	31.95	17.43	35.04	304	178	P	V
		2388.26	48.58	-5.42	54	34.24	31.95	17.43	35.04	304	178	A	V
	*	2437	112.43	-	-	97.92	32.08	17.49	35.06	304	178	P	V
	*	2437	104.34	-	-	89.83	32.08	17.49	35.06	304	178	A	V
		2493.28	55.56	-18.44	74	40.89	32.2	17.55	35.08	304	178	P	V
		2484.11	46.09	-7.91	54	31.45	32.16	17.55	35.07	304	178	A	V



802.11g CH 11 2462MHz	*	2462	104.56	-	-	89.95	32.12	17.55	35.06	343	216	P	H
	*	2462	96.49	-	-	81.88	32.12	17.55	35.06	343	216	A	H
		2499.8	55.27	-18.73	74	40.6	32.2	17.55	35.08	343	216	P	H
		2484.68	45.4	-8.6	54	30.76	32.16	17.55	35.07	343	216	A	H
													H
													H
	*	2462	110.68	-	-	96.07	32.12	17.55	35.06	310	202	P	V
	*	2462	103	-	-	88.39	32.12	17.55	35.06	310	202	A	V
		2484.2	59.05	-14.95	74	44.41	32.16	17.55	35.07	310	202	P	V
		2483.52	48.51	-5.49	54	33.87	32.16	17.55	35.07	310	202	A	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



2.4GHz 2400~2483.5MHz

WIFI 802.11g (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11g CH 01 2412MHz		4824	41.9	-32.1	74	55.93	34.23	11.12	59.38	100	0	P	H
													H
													H
													H
		4824	43.2	-30.8	74	57.23	34.23	11.12	59.38	100	0	P	V
													V
													V
													V
802.11g CH 06 2437MHz		4874	41.82	-32.18	74	55.73	34.22	11.16	59.29	100	0	P	H
		7311	42.26	-31.74	74	50.99	35.71	13.61	58.05	100	0	P	H
													H
													H
		4874	45.22	-28.78	74	59.13	34.22	11.16	59.29	100	0	P	V
		7311	43.33	-30.67	74	52.06	35.71	13.61	58.05	100	0	P	V
													V
													V
802.11g CH 11 2462MHz		4924	43.71	-30.29	74	57.49	34.21	11.22	59.21	100	0	P	H
		7386	43.87	-30.13	74	52.64	35.66	13.69	58.12	100	0	P	H
													H
													H
		4924	44.31	-29.69	74	58.09	34.21	11.22	59.21	100	0	P	V
		7386	43.26	-30.74	74	52.03	35.66	13.69	58.12	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



2.4GHz 2400~2483.5MHz

WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 01 2412MHz		2389.17	56.19	-17.81	74	41.85	31.95	17.43	35.04	315	218	P	H
		2389.59	46.95	-7.05	54	32.61	31.95	17.43	35.04	315	218	A	H
	*	2412	102.75	-	-	88.38	31.99	17.43	35.05	315	218	P	H
	*	2412	94.85	-	-	80.48	31.99	17.43	35.05	315	218	A	H
													H
													H
		2388.96	59.77	-14.23	74	45.43	31.95	17.43	35.04	272	201	P	V
		2390	50.89	-3.11	54	36.56	31.95	17.43	35.05	272	201	A	V
	*	2412	108.95	-	-	94.58	31.99	17.43	35.05	272	201	P	V
	*	2412	101.07	-	-	86.7	31.99	17.43	35.05	272	201	A	V
													V
													V
802.11n HT20 CH 06 2437MHz		2383.78	56.01	-17.99	74	41.71	31.91	17.43	35.04	335	112	P	H
		2389.24	45.09	-8.91	54	30.75	31.95	17.43	35.04	335	112	A	H
	*	2437	107.38	-	-	92.87	32.08	17.49	35.06	335	112	P	H
	*	2437	99.36	-	-	84.85	32.08	17.49	35.06	335	112	A	H
		2491.53	54.89	-19.11	74	40.21	32.2	17.55	35.07	335	112	P	H
		2484.95	45.15	-8.85	54	30.51	32.16	17.55	35.07	335	112	A	H
		2388.54	57.3	-16.7	74	42.96	31.95	17.43	35.04	306	180	P	V
		2386.86	48.33	-5.67	54	33.99	31.95	17.43	35.04	306	180	A	V
	*	2437	112.66	-	-	98.15	32.08	17.49	35.06	306	180	P	V
	*	2437	105.05	-	-	90.54	32.08	17.49	35.06	306	180	A	V
		2490.13	55.69	-18.31	74	41.01	32.2	17.55	35.07	306	180	P	V
		2484.18	46.15	-7.85	54	31.51	32.16	17.55	35.07	306	180	A	V



802.11n HT20 CH 11 2462MHz	*	2462	103.63	-	-	89.02	32.12	17.55	35.06	343	216	P	H
	*	2462	95.65	-	-	81.04	32.12	17.55	35.06	343	216	A	H
		2499.6	54.71	-19.29	74	40.04	32.2	17.55	35.08	343	216	P	H
		2483.6	45.55	-8.45	54	30.91	32.16	17.55	35.07	343	216	A	H
													H
													H
	*	2462	110.47	-	-	95.86	32.12	17.55	35.06	268	201	P	V
	*	2462	102.37	-	-	87.76	32.12	17.55	35.06	268	201	A	V
		2483.56	59.62	-14.38	74	44.98	32.16	17.55	35.07	268	201	P	V
		2483.56	49.87	-4.13	54	35.23	32.16	17.55	35.07	268	201	A	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



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

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path 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	41.01	-32.99	74	55.04	34.23	11.12	59.38	100	0	P	H
													H
													H
													H
		4824	41.85	-32.15	74	55.88	34.23	11.12	59.38	100	0	P	V
													V
													V
													V
802.11n HT20 CH 06 2437MHz		4874	41.57	-32.43	74	55.48	34.22	11.16	59.29	100	0	P	H
		7311	43.32	-30.68	74	52.05	35.71	13.61	58.05	100	0	P	H
													H
													H
		4874	44.54	-29.46	74	58.45	34.22	11.16	59.29	100	0	P	V
		7311	42.95	-31.05	74	51.68	35.71	13.61	58.05	100	0	P	V
													V
													V
802.11n HT20 CH 11 2462MHz		4924	43.21	-30.79	74	56.99	34.21	11.22	59.21	100	0	P	H
		7386	42.79	-31.21	74	51.56	35.66	13.69	58.12	100	0	P	H
													H
													H
		4924	41.87	-32.13	74	55.66	34.21	11.21	59.21	100	0	P	V
		7386	42.96	-31.04	74	51.73	35.66	13.69	58.12	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



2.4GHz 2400~2483.5MHz

WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 CH 03 2422MHz		2386.44	56.17	-17.83	74	41.83	31.95	17.43	35.04	397	221	P	H
		2386.44	45.68	-8.32	54	31.34	31.95	17.43	35.04	397	221	A	H
	*	2422	95.38	-	-	80.92	32.03	17.49	35.06	397	221	P	H
	*	2422	87.56	-	-	73.1	32.03	17.49	35.06	397	221	A	H
		2490.69	54.7	-19.3	74	40.02	32.2	17.55	35.07	397	221	P	H
		2485.93	45.35	-8.65	54	30.71	32.16	17.55	35.07	397	221	P	H
		2389.38	64.9	-9.1	74	50.56	31.95	17.43	35.04	305	203	P	V
		2387.98	50.36	-3.64	54	36.02	31.95	17.43	35.04	305	203	A	V
	*	2422	102.4	-	-	87.94	32.03	17.49	35.06	305	203	P	V
	*	2422	94.54	-	-	80.08	32.03	17.49	35.06	305	203	A	V
		2485.44	55.54	-18.46	74	40.9	32.16	17.55	35.07	305	203	P	V
		2485.23	46.3	-7.7	54	31.66	32.16	17.55	35.07	305	203	A	V
802.11n HT40 CH 06 2437MHz		2386.86	58.15	-15.85	74	43.81	31.95	17.43	35.04	337	110	P	H
		2387.84	46.53	-7.47	54	32.19	31.95	17.43	35.04	337	110	A	H
	*	2437	98.61	-	-	84.1	32.08	17.49	35.06	337	110	P	H
	*	2437	90.92	-	-	76.41	32.08	17.49	35.06	337	110	A	H
		2489.99	55.02	-18.98	74	40.34	32.2	17.55	35.07	337	110	P	H
		2486.49	45.9	-8.1	54	31.26	32.16	17.55	35.07	337	110	A	H
		2374.4	63.91	-10.09	74	49.67	31.91	17.37	35.04	257	208	P	V
		2389.1	50.49	-3.51	54	36.15	31.95	17.43	35.04	257	208	A	V
	*	2437	104.64	-	-	90.13	32.08	17.49	35.06	257	208	P	V
	*	2437	96.76	-	-	82.25	32.08	17.49	35.06	257	208	A	V
		2486.91	58.11	-15.89	74	43.47	32.16	17.55	35.07	257	208	P	V
		2488.38	48.21	-5.79	54	33.53	32.2	17.55	35.07	257	208	A	V



802.11n HT40 CH 09 2452MHz		2336.88	55.97	-18.03	74	41.85	31.83	17.31	35.02	384	216	P	H
		2354.66	45.35	-8.65	54	31.14	31.87	17.37	35.03	384	216	A	H
	*	2452	99.13	-	-	84.62	32.08	17.49	35.06	384	216	P	H
	*	2452	91.04	-	-	76.53	32.08	17.49	35.06	384	216	A	H
		2484.53	57.02	-16.98	74	42.38	32.16	17.55	35.07	384	216	P	H
		2483.5	46.5	-7.5	54	31.86	32.16	17.55	35.07	384	216	A	H
		2385.46	65.48	-8.52	74	51.18	31.91	17.43	35.04	274	202	P	V
		2386.16	50.95	-3.05	54	36.61	31.95	17.43	35.04	274	202	A	V
	*	2452	104.94	-	-	90.43	32.08	17.49	35.06	274	202	P	V
	*	2452	97.47	-	-	82.96	32.08	17.49	35.06	274	202	A	V
		2486.42	63.72	-10.28	74	49.08	32.16	17.55	35.07	274	202	P	V
		2485.93	50.99	-3.01	54	36.35	32.16	17.55	35.07	274	202	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 HT40 (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 CH 03 2422MHz		4844	41.68	-32.32	74	55.68	34.23	11.12	59.35	100	0	P	H
		7266	41.92	-32.08	74	50.63	35.73	13.58	58.02	100	0	P	H
													H
													H
		4844	41.6	-32.4	74	55.6	34.23	11.12	59.35	100	0	P	V
		7266	41.86	-32.14	74	50.57	35.73	13.58	58.02	100	0	P	V
													V
													V
802.11n HT40 CH 06 2437MHz		4874	42.14	-31.86	74	56.05	34.22	11.16	59.29	100	0	P	H
		7311	41.81	-32.19	74	50.54	35.71	13.61	58.05	100	0	P	H
													H
													H
		4874	41.77	-32.23	74	55.68	34.22	11.16	59.29	100	0	P	V
		7311	42.37	-31.63	74	51.1	35.71	13.61	58.05	100	0	P	V
													V
													V
802.11n HT40 CH 09 2452MHz		4904	41.33	-32.67	74	55.13	34.22	11.22	59.24	100	0	P	H
		7356	42.87	-31.13	74	51.63	35.68	13.65	58.09	100	0	P	H
													H
													H
		4904	41.05	-32.95	74	54.85	34.22	11.22	59.24	100	0	P	V
		7356	42.22	-31.78	74	50.98	35.68	13.65	58.09	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



2.4GHz 2400~2483.5MHz
WIFI 802.11ac VHT20 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT20 CH 01 2412MHz		2386.545	56.39	-17.61	74	42.05	31.95	17.43	35.04	315	218	P	H
		2389.38	46.49	-7.51	54	32.15	31.95	17.43	35.04	315	218	A	H
	*	2412	101.76	-	-	87.39	31.99	17.43	35.05	315	218	P	H
	*	2412	93.88	-	-	79.51	31.99	17.43	35.05	315	218	A	H
													H
													H
		2384.235	59.73	-14.27	74	45.43	31.91	17.43	35.04	288	201	P	V
		2389.8	50.75	-3.25	54	36.42	31.95	17.43	35.05	288	201	P	V
	*	2412	108.55	-	-	94.18	31.99	17.43	35.05	288	201	P	V
	*	2412	100.64	-	-	86.27	31.99	17.43	35.05	288	201	A	V
													V
													V
802.11ac VHT20 CH 06 2437MHz		2382.38	55.26	-18.74	74	40.96	31.91	17.43	35.04	336	112	P	H
		2388.54	45.35	-8.65	54	31.01	31.95	17.43	35.04	336	112	A	H
	*	2437	107.31	-	-	92.8	32.08	17.49	35.06	336	112	P	H
	*	2437	99.09	-	-	84.58	32.08	17.49	35.06	336	112	A	H
		2488.17	55.35	-18.65	74	40.67	32.2	17.55	35.07	336	112	P	H
		2484.67	45.18	-8.82	54	30.54	32.16	17.55	35.07	336	112	A	H
		2386.3	56.95	-17.05	74	42.61	31.95	17.43	35.04	303	180	P	V
		2389.52	48.12	-5.88	54	33.78	31.95	17.43	35.04	303	180	A	V
	*	2437	112.63	-	-	98.12	32.08	17.49	35.06	303	180	P	V
	*	2437	104.47	-	-	89.96	32.08	17.49	35.06	303	180	A	V
		2486.21	55.41	-18.59	74	40.77	32.16	17.55	35.07	303	180	P	V
		2483.5	46.09	-7.91	54	31.45	32.16	17.55	35.07	303	180	A	V



802.11ac VHT20 CH 11 2462MHz	*	2462	102.3	-	-	87.69	32.12	17.55	35.06	345	216	P	H
	*	2462	94.33	-	-	79.72	32.12	17.55	35.06	345	216	A	H
		2486.72	55.57	-18.43	74	40.93	32.16	17.55	35.07	345	216	P	H
		2483.52	45.15	-8.85	54	30.51	32.16	17.55	35.07	345	216	A	H
													H
													H
	*	2462	109.51	-	-	94.9	32.12	17.55	35.06	268	201	P	V
	*	2462	101.15	-	-	86.54	32.12	17.55	35.06	268	201	A	V
		2485.44	58.56	-15.44	74	43.92	32.16	17.55	35.07	268	201	P	V
		2483.52	48.69	-5.31	54	34.05	32.16	17.55	35.07	268	201	A	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



2.4GHz 2400~2483.5MHz

WIFI 802.11ac VHT20 (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT20 CH 01 2412MHz		4824	41.65	-32.35	74	55.68	34.23	11.12	59.38	100	0	P	H
													H
													H
													H
		4824	43.3	-30.7	74	57.33	34.23	11.12	59.38	100	0	P	V
													V
													V
													V
802.11ac VHT20 CH 06 2437MHz		4874	42	-32	74	55.91	34.22	11.16	59.29	100	0	P	H
		7311	42.07	-31.93	74	50.8	35.71	13.61	58.05	100	0	P	H
													H
													H
		4874	44.09	-29.91	74	58	34.22	11.16	59.29	100	0	P	V
		7311	41.45	-32.55	74	50.18	35.71	13.61	58.05	100	0	P	V
													V
													V
802.11ac VHT20 CH 11 2462MHz		4924	42.28	-31.72	74	56.06	34.21	11.22	59.21	100	0	P	H
		7386	43.1	-30.9	74	51.87	35.66	13.69	58.12	100	0	P	H
													H
													H
		4924	42.74	-31.26	74	56.52	34.21	11.22	59.21	100	0	P	V
		7386	42.8	-31.2	74	51.57	35.66	13.69	58.12	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



2.4GHz 2400~2483.5MHz

WIFI 802.11ac VHT40 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT40 CH 03 2422MHz		2387.7	56.02	-17.98	74	41.68	31.95	17.43	35.04	399	215	P	H
		2385.88	46.1	-7.9	54	31.76	31.95	17.43	35.04	399	215	A	H
	*	2422	94.58	-	-	80.12	32.03	17.49	35.06	399	215	P	H
	*	2422	87.31	-	-	72.85	32.03	17.49	35.06	399	215	A	H
		2495.24	54.91	-19.09	74	40.24	32.2	17.55	35.08	399	215	P	H
		2496.57	45.59	-8.41	54	30.92	32.2	17.55	35.08	399	215	A	H
		2371.46	63.14	-10.86	74	48.9	31.91	17.37	35.04	306	200	P	V
		2387.14	50.6	-3.4	54	36.26	31.95	17.43	35.04	306	200	A	V
	*	2422	102.11	-	-	87.65	32.03	17.49	35.06	306	200	P	V
	*	2422	94.21	-	-	79.75	32.03	17.49	35.06	306	200	A	V
		2486.56	56.25	-17.75	74	41.61	32.16	17.55	35.07	306	200	P	V
		2489.64	46.57	-7.43	54	31.89	32.2	17.55	35.07	306	200	A	V
802.11ac VHT40 CH 06 2437MHz		2388.4	56.94	-17.06	74	42.6	31.95	7.44	35.04	338	113	P	H
		2389.94	46.73	-7.27	54	32.4	31.95	7.44	35.05	338	113	A	H
	*	2437	99.86	-	-	85.35	32.08	7.5	35.06	338	113	P	H
	*	2437	91.66	-	-	77.15	32.08	7.5	35.06	338	113	A	H
		2497.97	55.15	-18.85	74	40.48	32.2	7.56	35.08	338	113	P	H
		2490.55	45.72	-8.28	54	31.04	32.2	7.56	35.07	338	113	A	H
		2385.32	66.41	-7.59	74	52.11	31.91	7.44	35.04	304	185	P	V
		2387	50.49	-3.51	54	36.15	31.95	7.44	35.04	304	185	A	V
	*	2437	105.48	-	-	90.97	32.08	7.5	35.06	304	185	P	V
	*	2437	97.76	-	-	83.25	32.08	7.5	35.06	304	185	A	V
		2489.5	57.41	-16.59	74	42.73	32.2	7.56	35.07	304	185	P	V
		2486.21	47.28	-6.72	54	32.64	32.16	7.56	35.07	304	185	A	V



802.11ac VHT40 CH 09 2452MHz		2361.24	54.89	-19.11	74	40.68	31.87	17.37	35.03	384	217	P	H
		2386.86	45.82	-8.18	54	31.48	31.95	17.43	35.04	384	217	A	H
	*	2452	98.96	-	-	84.45	32.08	17.49	35.06	384	217	P	H
	*	2452	91.15	-	-	76.64	32.08	17.49	35.06	384	217	A	H
		2485.37	56.17	-17.83	74	41.53	32.16	17.55	35.07	384	217	P	H
		2485.09	46.4	-7.6	54	31.76	32.16	17.55	35.07	384	217	A	H
		2380	64.47	-9.53	74	50.23	31.91	17.37	35.04	274	198	P	V
		2389.8	50.77	-3.23	54	36.44	31.95	17.43	35.05	274	198	A	V
	*	2452	105.01	-	-	90.5	32.08	17.49	35.06	274	198	P	V
	*	2452	97.44	-	-	82.93	32.08	17.49	35.06	274	198	A	V
		2486.7	62.94	-11.06	74	48.3	32.16	17.55	35.07	274	198	P	V
		2484.6	50.62	-3.38	54	35.98	32.16	17.55	35.07	274	198	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 802.11ac VHT40 (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT40 CH 03 2422MHz		4844	41.97	-32.03	74	55.97	34.23	11.12	59.35	100	0	P	H
		7266	41.87	-32.13	74	50.58	35.73	13.58	58.02	100	0	P	H
													H
													H
		4844	41.72	-32.28	74	55.72	34.23	11.12	59.35	100	0	P	V
		7266	42.76	-31.24	74	51.47	35.73	13.58	58.02	100	0	P	V
													V
													V
802.11ac VHT40 CH 06 2437MHz		4874	41.61	-32.39	74	55.52	34.22	11.16	59.29	100	0	P	H
		7311	42.13	-31.87	74	50.86	35.71	13.61	58.05	100	0	P	H
													H
													H
		4874	41.11	-32.89	74	55.02	34.22	11.16	59.29	100	0	P	V
		7311	41.85	-32.15	74	50.58	35.71	13.61	58.05	100	0	P	V
													V
													V
802.11ac VHT40 CH 09 2452MHz		4904	41.13	-32.87	74	54.93	34.22	11.22	59.24	100	0	P	H
		7356	41.79	-32.21	74	50.55	35.68	13.65	58.09	100	0	P	H
													H
													H
		4904	42.43	-31.57	74	56.23	34.22	11.22	59.24	100	0	P	V
		7356	43.32	-30.68	74	52.08	35.68	13.65	58.09	100	0	P	V
													V
													V
Remark	3. No other spurious found. 4. All results are PASS against Peak and Average limit line.												



Emission below 1GHz

2.4GHz WIFI 802.11n HT40 (LF)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
2.4GHz 802.11n HT40 LF		41.34	32.6	-7.4	40	44.93	18.28	1.2	31.81	-	-	P	H
		179.58	37.51	-5.99	43.5	52.1	15.04	2.06	31.69	100	0	P	H
		186.6	35.57	-7.93	43.5	50.3	14.78	2.18	31.69	-	-	P	H
		432.3	38.37	-7.63	46	44.06	22.73	3.24	31.66	-	-	P	H
		554.1	36.61	-9.39	46	39.46	25.33	3.57	31.75	-	-	P	H
		638.8	38.02	-7.98	46	39.76	26.2	3.89	31.83	-	-	P	H
													H
													H
													H
													H
													H
													H
		103.98	26.5	-17	43.5	40.03	16.39	1.83	31.75	-	-	P	V
		180.66	23.53	-19.97	43.5	38.04	15	2.18	31.69	-	-	P	V
		257.88	24.44	-21.56	46	34.36	19.31	2.42	31.65	-	-	P	V
		318.2	36.58	-9.42	46	46.05	19.39	2.76	31.62	-	-	P	V
		446.3	36.91	-9.09	46	42.41	22.92	3.24	31.66	100	0	P	V
		562.5	36.06	-9.94	46	38.43	25.82	3.57	31.76	-	-	P	V
													V
													V
													V
													V
													V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against limit line.												



Note symbol

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

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

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11b		2390	55.45	-18.55	74	54.51	32.22	4.58	35.86	103	308	P	H
CH 01													
2412MHz		2390	43.54	-10.46	54	42.6	32.22	4.58	35.86	103	308	A	H

1. Path Loss(dB) = Cable loss(dB) + Filter loss(dB) + Attenuator loss(dB)

2. Level(dBμV/m) =

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

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

For Peak Limit @ 2390MHz:

1. Level(dBμV/m)

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

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

= 55.45 (dBμV/m)

2. Over Limit(dB)

= Level(dBμV/m) – Limit Line(dBμV/m)

= 55.45(dBμV/m) – 74(dBμV/m)

= -18.55(dB)

For Average Limit @ 2390MHz:

1. Level(dBμV/m)

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

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

= 43.54 (dBμV/m)

2. Over Limit(dB)

= Level(dBμV/m) – Limit Line(dBμV/m)

= 43.54(dBμV/m) – 54(dBμV/m)

= -10.46(dB)

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



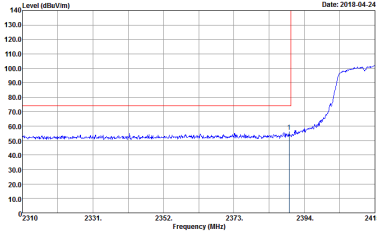
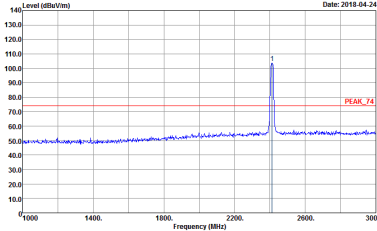
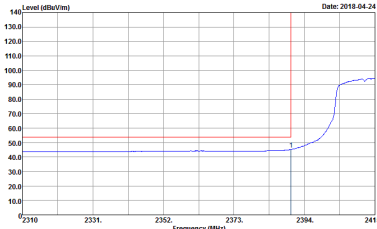
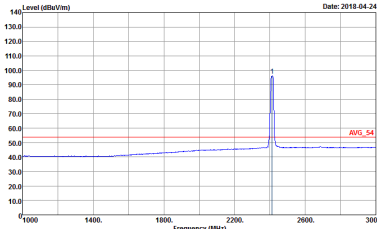
Appendix C. Radiated Spurious Emission Plots

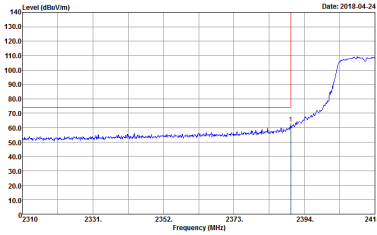
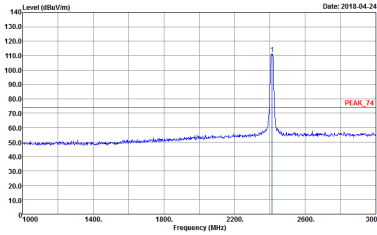
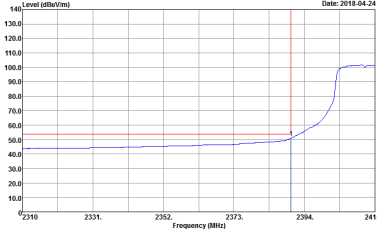
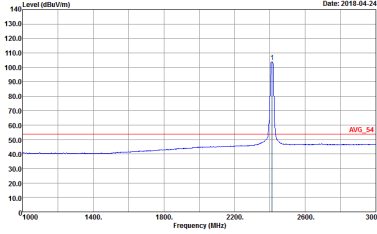
Test Engineer :	Jesse Wang, Stan Hsieh, and Lance Chiang	Temperature :	22~24°C
		Relative Humidity :	51~53%

Note symbol

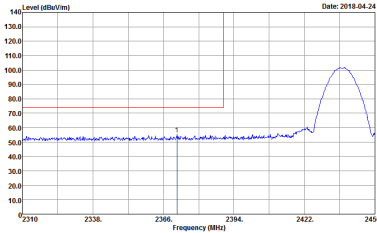
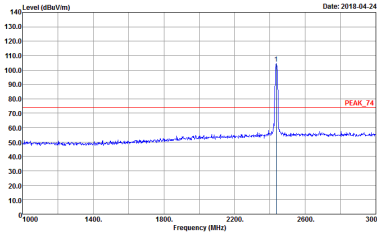
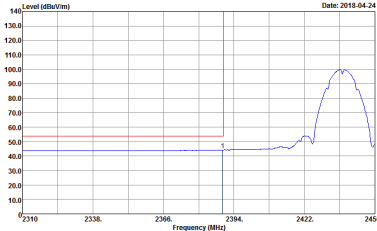
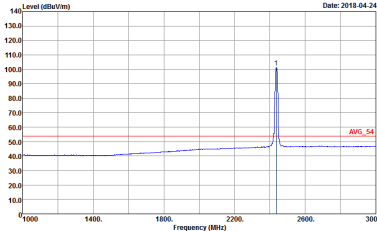
-L	Low channel location
-R	High channel location

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

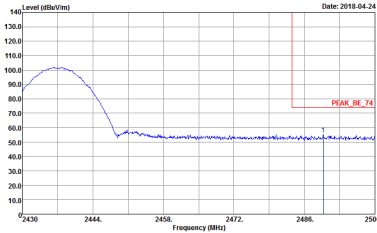
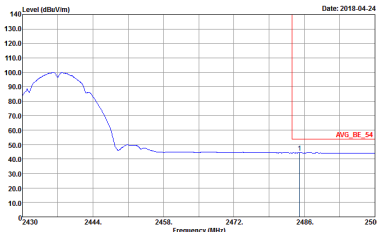
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH01 2412MHz	
1	Horizontal	Fundamental
Peak	 Site : 03CH07-4Y Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak	 Site : 03CH07-4Y Condition : PEAK_74 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak
	 Site : 03CH07-4Y Condition : AV6_BE_54 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak	 Site : 03CH07-4Y Condition : AV6_54 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak

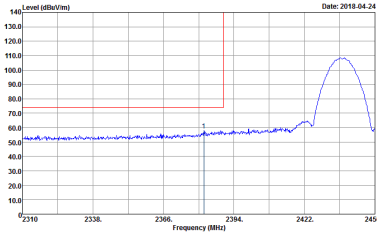
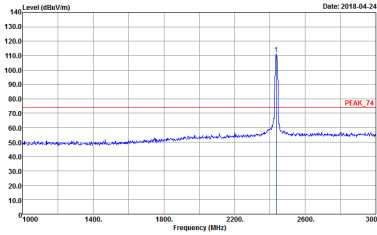
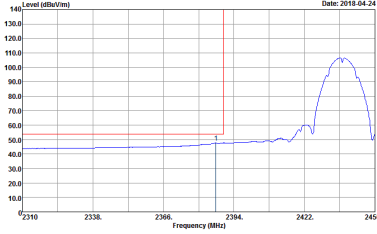
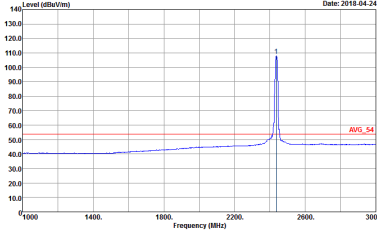
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH01 2412MHz	
1	Vertical	Fundamental
Peak	 Site : 03CH07-4Y Condition : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak	 Site : 03CH07-4Y Condition : PEAK_74 3m HF_ANT_00075962 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak
Avg.	 Site : 03CH07-4Y Condition : AVG_BE_54 3m HF_ANT_00075962 VERTICAL Detector : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak	 Site : 03CH07-4Y Condition : AVG_54 3m HF_ANT_00075962 VERTICAL Detector : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak



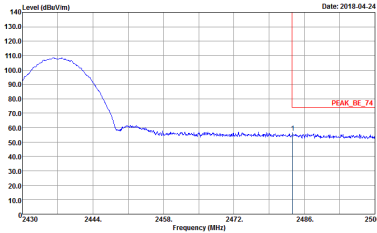
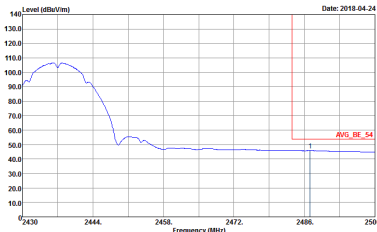
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH06 2437MHz - L	
1	Horizontal	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak	 Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak
Avg.	 Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak	 Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak

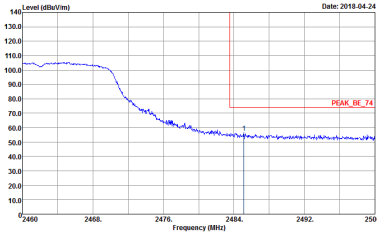
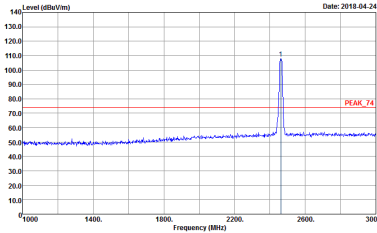
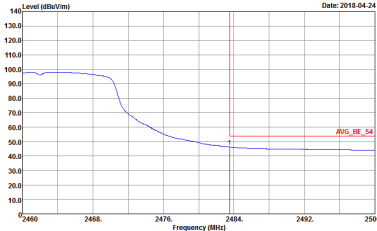
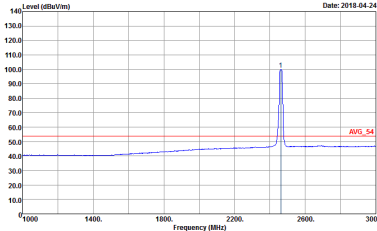


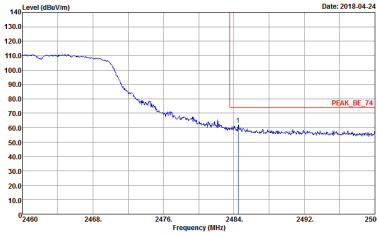
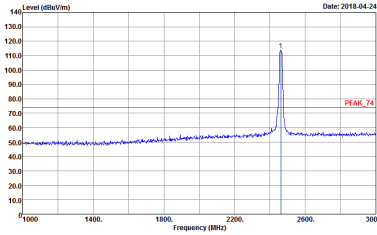
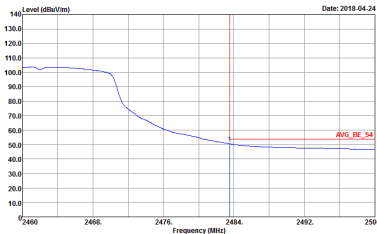
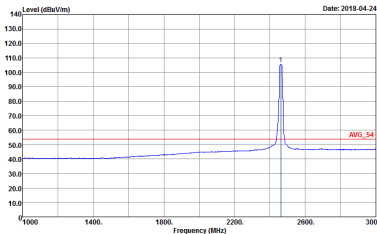
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH06 2437MHz - R	
1	Horizontal	Fundamental
Peak	 Site : 03CH07-HV Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak	Left blank
Avg.	 Site : 03CH07-HV Condition : AVG_BE_54 3m HF_ANT_00075962 HORIZONTAL RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak	Left blank

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH06 2437MHz - L	
1	Vertical	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak	 Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00075962 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak
	 Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 VERTICAL Detector : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak	 Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 VERTICAL Detector : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak

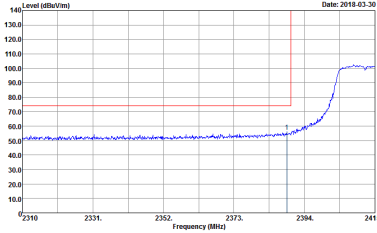
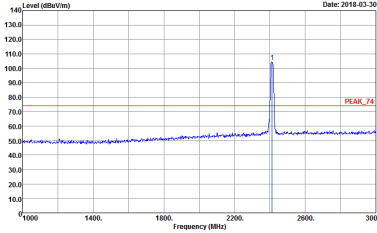
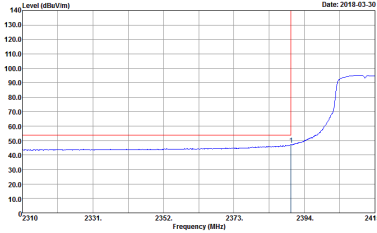
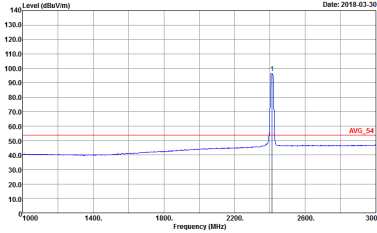


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH06 2437MHz - R	
1	Vertical	Fundamental
Peak	 Site : 03CH07-HV Condition : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak	Left blank
Avg.	 Site : 03CH07-HV Condition : AVG_BE_54 3m HF_ANT_00075962 VERTICAL RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak	Left blank

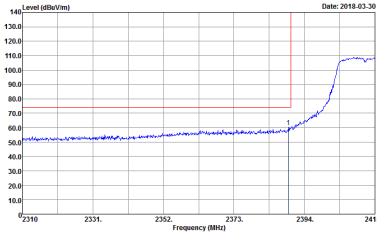
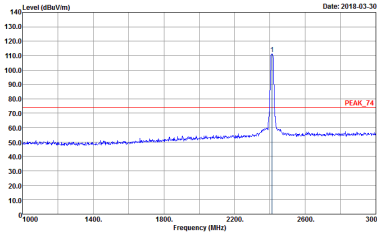
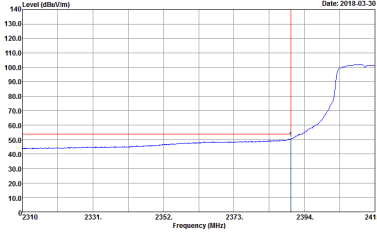
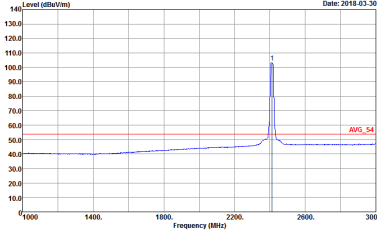
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH11 2462MHz	
1	Horizontal	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak	 Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak
	 Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak	 Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH11 2462MHz	
1	Vertical	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak	 Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00075962 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak
	 Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 VERTICAL RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak	 Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 VERTICAL RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak

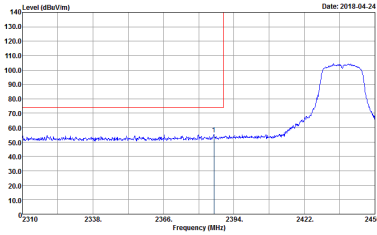
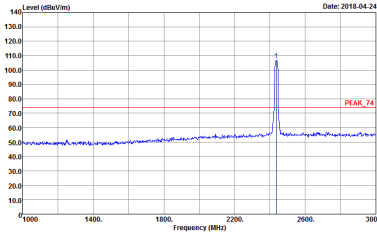
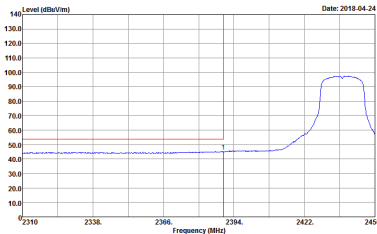
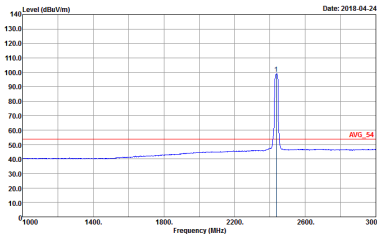
2.4GHz 2400~2483.5MHz
WIFI 802.11g (Band Edge @ 3m)

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH01 2412MHz	
1	Horizontal	Fundamental
Peak	 Site : 03CH07-4Y Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL Detector : Peak Project : 773113-01	 Site : 03CH07-4Y Condition : PEAK_74 3m HF_ANT_00075962 HORIZONTAL Detector : Peak Project : 773113-01
	 Site : 03CH07-4Y Condition : AVG_BE_54 3m HF_ANT_00075962 HORIZONTAL Detector : Peak Project : 773113-01	 Site : 03CH07-4Y Condition : AVG_54 3m HF_ANT_00075962 HORIZONTAL Detector : Peak Project : 773113-01

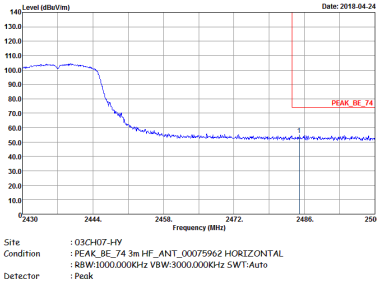
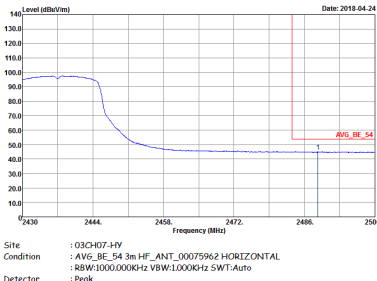


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH01 2412MHz	
1	Vertical	Fundamental
Peak	 Site : 03CH07-4Y Condition : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL Detector : Peak Project : 773113-01	 Site : 03CH07-4Y Condition : PEAK_74 3m HF_ANT_00075962 VERTICAL Detector : Peak Project : 773113-01
Avg.	 Site : 03CH07-4Y Condition : AVG_BE_54 3m HF_ANT_00075962 VERTICAL Detector : Peak Project : 773113-01	 Site : 03CH07-4Y Condition : AVG_54 3m HF_ANT_00075962 VERTICAL Detector : Peak Project : 773113-01

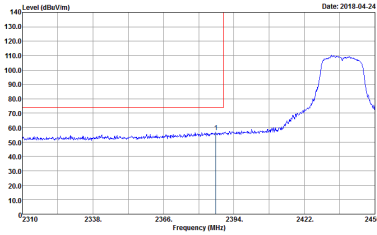
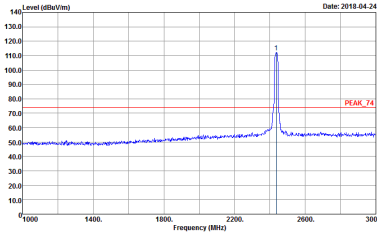
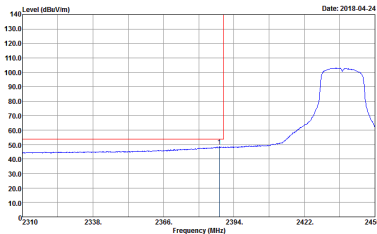
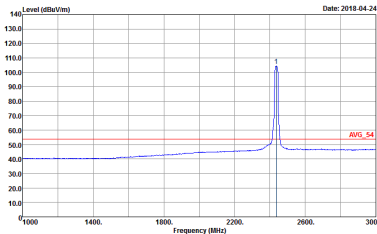


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH06 2437MHz - L	
1	Horizontal	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak	 Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak
Avg.	 Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000KHz VBW:1000KHz SWT:Auto Detector : Peak	 Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000KHz VBW:1000KHz SWT:Auto Detector : Peak

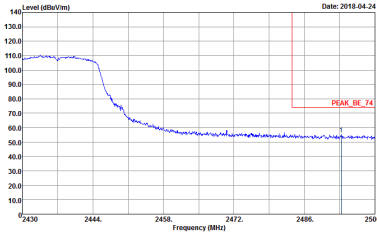
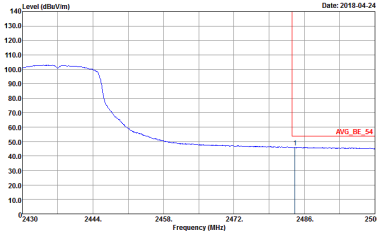


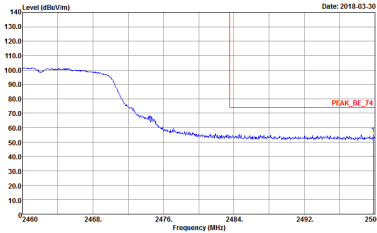
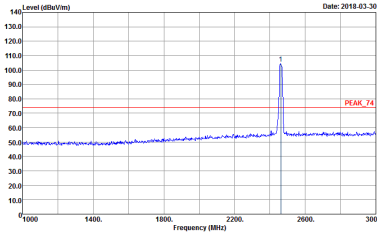
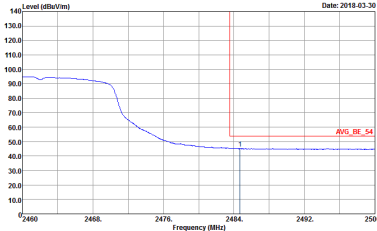
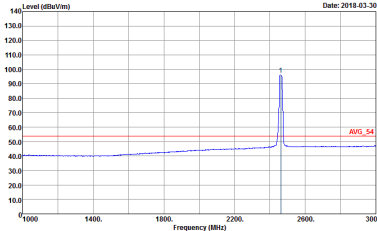
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH06 2437MHz - R	
1	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

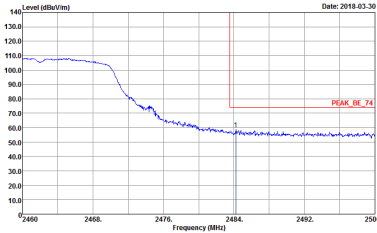
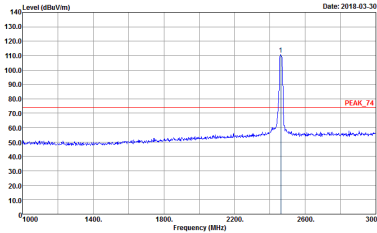
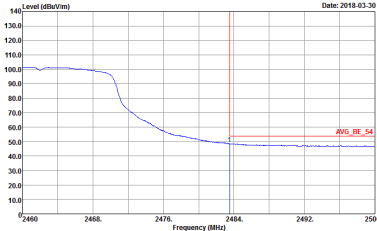
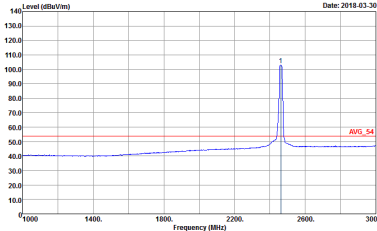


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH06 2437MHz - L	
1	Vertical	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak	 Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00075962 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak
Avg.	 Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 VERTICAL Detector : RBW:1000.000KHz VBW:1000KHz SWT:Auto Detector : Peak	 Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 VERTICAL Detector : RBW:1000.000KHz VBW:1000KHz SWT:Auto Detector : Peak



WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH06 2437MHz - R	
1	Vertical	Fundamental
Peak	 Site : 03CH07-HV Condition : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak	Left Blank
Avg.	 Site : 03CH07-HV Condition : AVG_BE_54 3m HF_ANT_00075962 VERTICAL RBW:1000.000KHz VBW:1000KHz SWT:Auto Detector : Peak	Left Blank

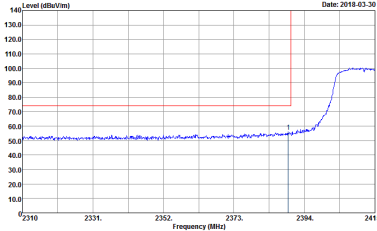
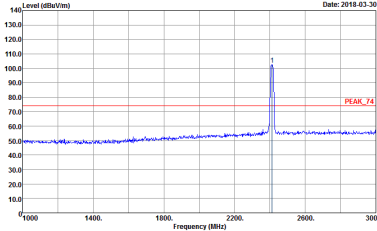
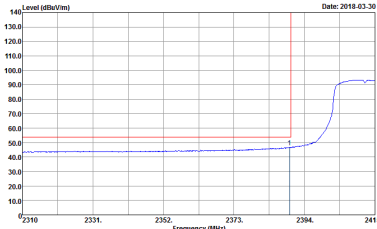
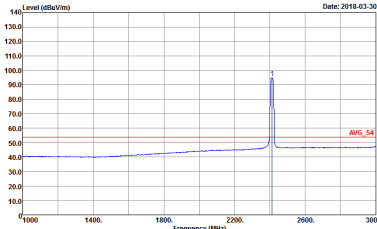
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH11 2462MHz	
1	Horizontal	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak	 Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak
	 Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000KHz VBW:1000KHz SWT:Auto Detector : Peak	 Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000KHz VBW:1000KHz SWT:Auto Detector : Peak

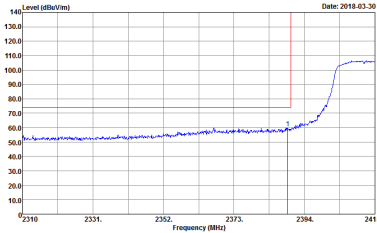
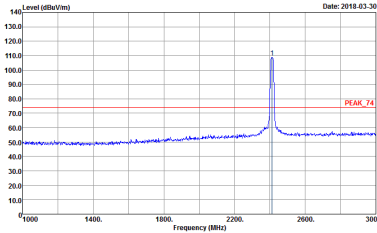
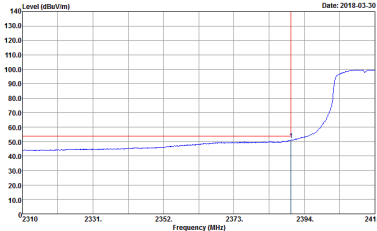
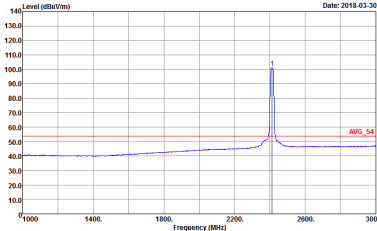
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH11 2462MHz	
1	Vertical	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak	 Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00075962 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak
	 Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 VERTICAL Detector : RBW:1000.000KHz VBW:1000KHz SWT:Auto Detector : Peak	 Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 VERTICAL Detector : RBW:1000.000KHz VBW:1000KHz SWT:Auto Detector : Peak

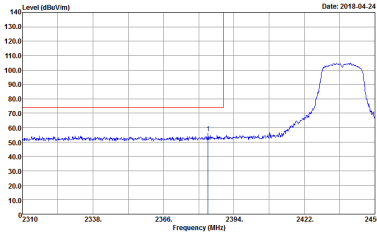
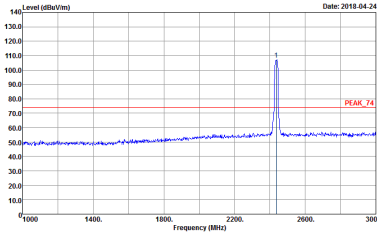
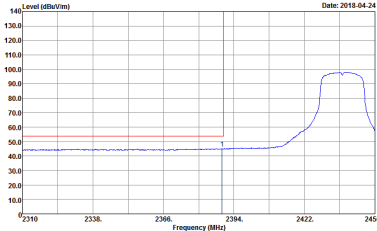
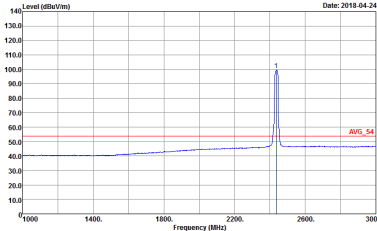


2.4GHz 2400~2483.5MHz

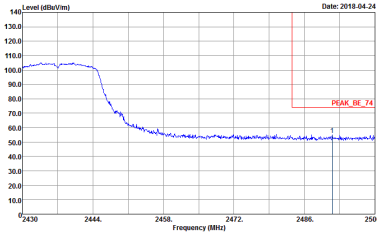
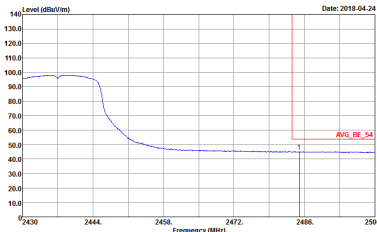
WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH01 2412MHz	
1	Horizontal	Fundamental
Peak	 Site : 03CH07-4Y Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak	 Site : 03CH07-4Y Condition : PEAK_74 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak
Avg.	 Site : 03CH07-4Y Condition : AVG_BE_54 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000KHz VBW:1.000KHz SWT:Auto Detector : Peak	 Site : 03CH07-4Y Condition : AVG_54 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000KHz VBW:1.000KHz SWT:Auto Detector : Peak

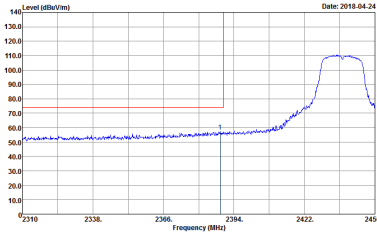
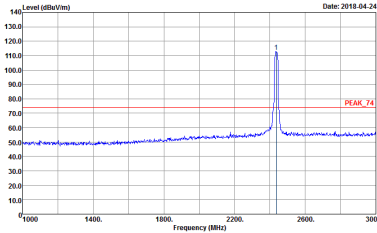
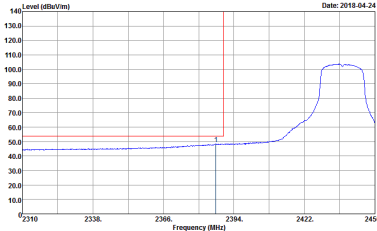
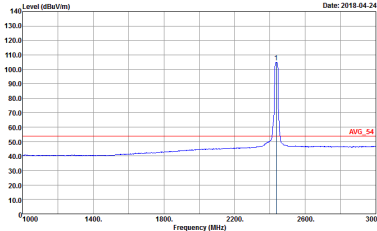
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH01 2412MHz	
1	Vertical	Fundamental
Peak	 Site : 03CH07-4Y Condition : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak	 Site : 03CH07-4Y Condition : PEAK_74 3m HF_ANT_00075962 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak
	 Site : 03CH07-4Y Condition : AVG_BE_54 3m HF_ANT_00075962 VERTICAL Detector : RBW:1000.000KHz VBW:1000KHz SWT:Auto Detector : Peak	 Site : 03CH07-4Y Condition : AVG_54 3m HF_ANT_00075962 VERTICAL Detector : RBW:1000.000KHz VBW:1000KHz SWT:Auto Detector : Peak

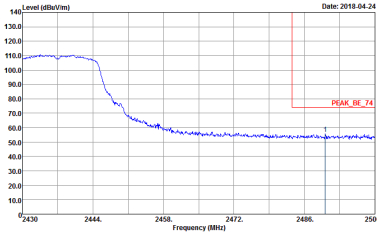
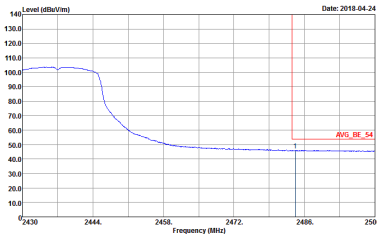
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH06 2437MHz - L	
1	Horizontal	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak	 Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak
Avg.	 Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000KHz VBW:1000KHz SWT:Auto Detector : Peak	 Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000KHz VBW:1000KHz SWT:Auto Detector : Peak

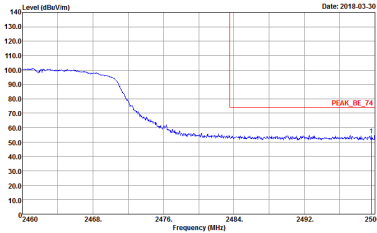
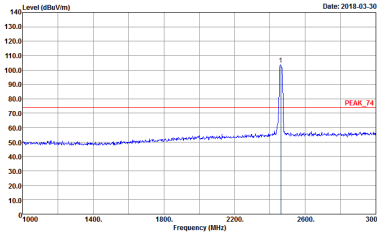
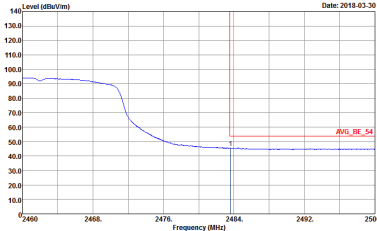
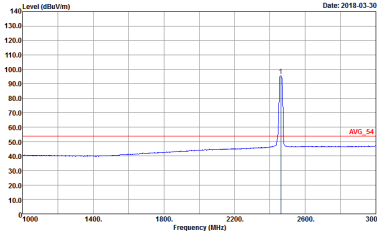


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH06 2437MHz - R	
1	Horizontal	Fundamental
Peak	 Site : 03CH07-HV Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak	Left blank
Avg.	 Site : 03CH07-HV Condition : AVG_BE_54 3m HF_ANT_00075962 HORIZONTAL RBW:1000.000KHz VBW:1000KHz SWT:Auto Detector : Peak	Left blank

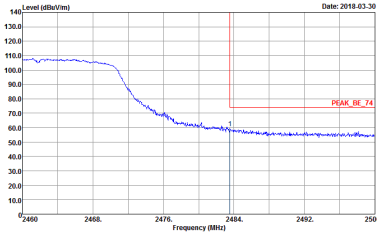
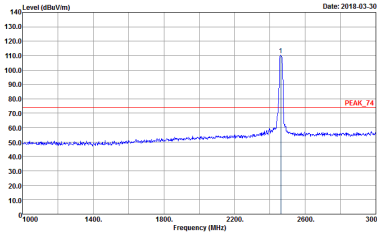
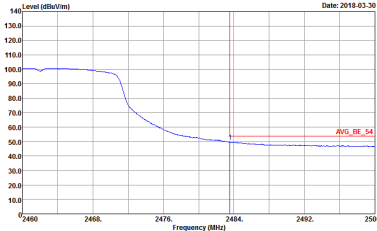
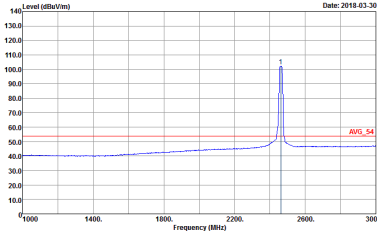


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH06 2437MHz - L	
1	Vertical	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak	 Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00075962 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak
Avg.	 Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 VERTICAL Detector : RBW:1000.000KHz VBW:1000KHz SWT:Auto Detector : Peak	 Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 VERTICAL Detector : RBW:1000.000KHz VBW:1000KHz SWT:Auto Detector : Peak

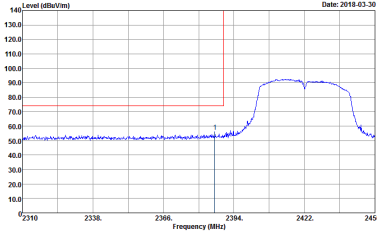
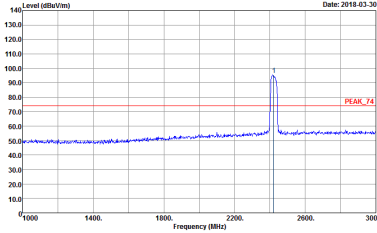
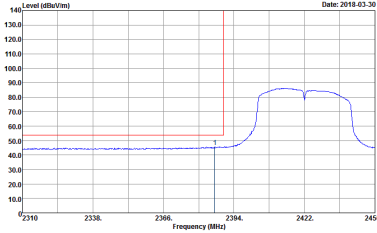
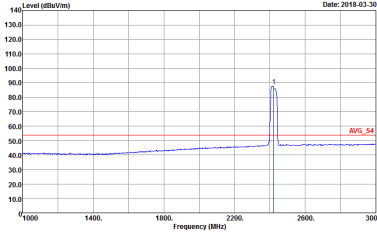
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH06 2437MHz - R	
1	Vertical	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto : Peak	Left Blank
Avg.	 Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 VERTICAL Detector : RBW:1000.000KHz VBW:1000KHz SWT:Auto : Peak	Left Blank

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH11 2462MHz	
1	Horizontal	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak	 Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak
	 Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000KHz VBW:1000KHz SWT:Auto Detector : Peak	 Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000KHz VBW:1000KHz SWT:Auto Detector : Peak

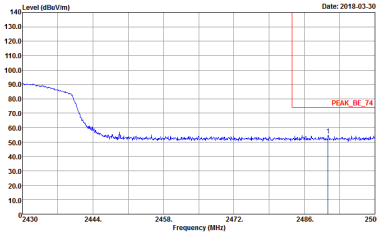
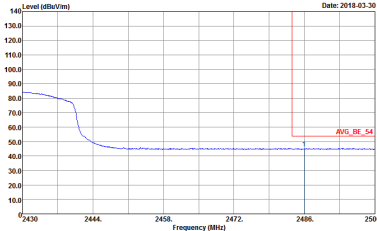


WIFI	2.4GHz 2400~2483.5MHz Fundamental @ 3m	
ANT	802.11n HT20 CH11 2462MHz	
1	Vertical	Fundamental
Peak	 Site : 03CH07-4Y Condition : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak	 Site : 03CH07-4Y Condition : PEAK_74 3m HF_ANT_00075962 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak
Avg.	 Site : 03CH07-4Y Condition : AVG_BE_54 3m HF_ANT_00075962 VERTICAL RBW:1000.000KHz VBW:1000KHz SWT:Auto Detector : Peak	 Site : 03CH07-4Y Condition : AVG_54 3m HF_ANT_00075962 VERTICAL RBW:1000.000KHz VBW:1000KHz SWT:Auto Detector : Peak

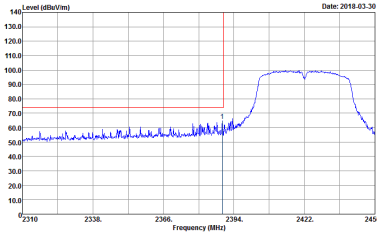
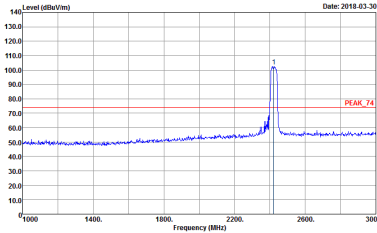
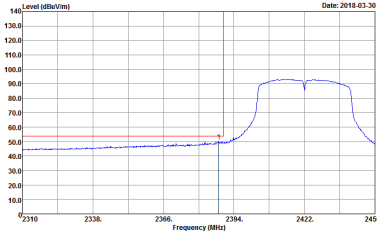
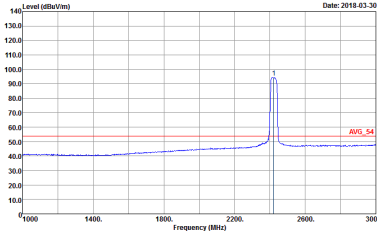
2.4GHz 2400~2483.5MHz
WIFI 802.11n HT40 (Band Edge @ 3m)

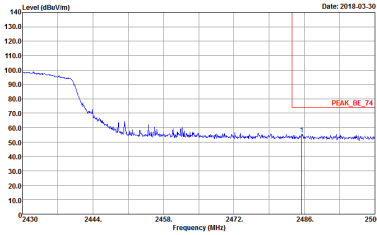
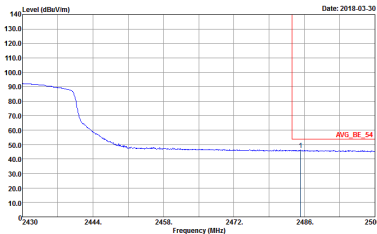
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT40 CH03 2422MHz - L	
1	Horizontal	Fundamental
Peak	 Site : 03CH07-4Y Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak	 Site : 03CH07-4Y Condition : PEAK_74 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak
	 Site : 03CH07-4Y Condition : AV6_BE_54 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000KHz VBW:3.000KHz SWT:Auto Detector : Peak	 Site : 03CH07-4Y Condition : AV6_54 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000KHz VBW:3.000KHz SWT:Auto Detector : Peak



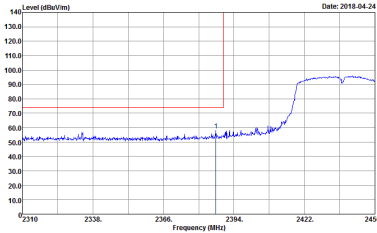
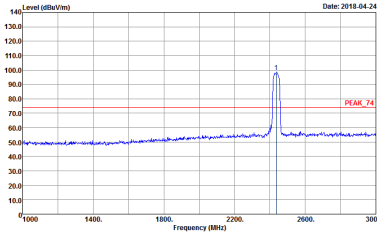
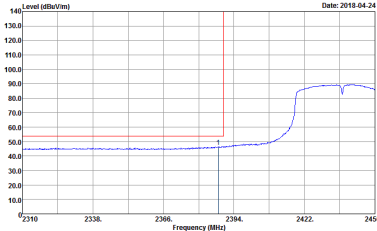
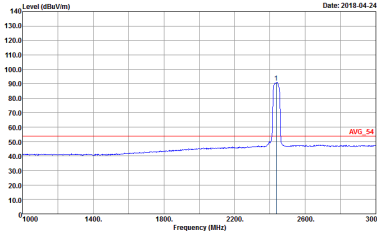
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT40 CH03 2422MHz - R	
1	Horizontal	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak	Left Blank
Avg.	 Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak	Left Blank

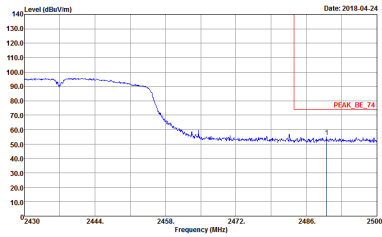
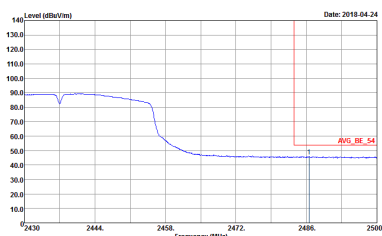


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT40 CH03 2422MHz - L	
1	Vertical	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak	 Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00075962 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak
Avg.	 Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak	 Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak

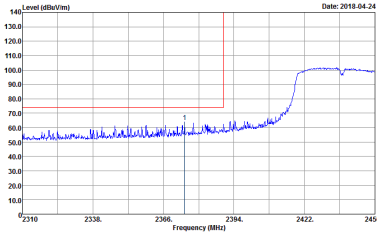
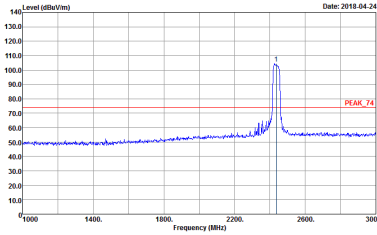
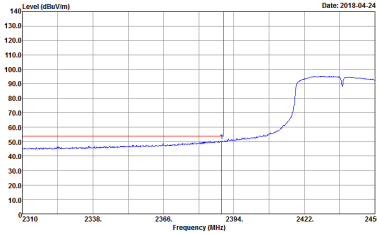
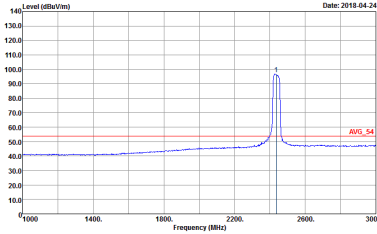
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT40 CH03 2422MHz - R	
1	Vertical	Fundamental
Peak	 Site : 03CH07-HV Condition : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak	Left blank
Avg.	 Site : 03CH07-HV Condition : AVG_BE_54 3m HF_ANT_00075962 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak	Left blank

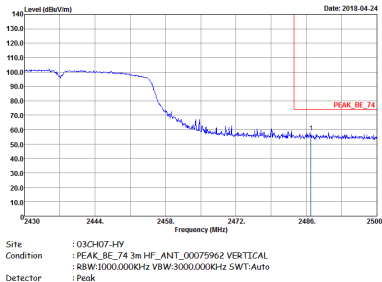
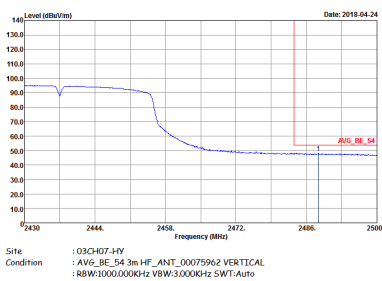


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT40 CH06 2437MHz - L	
1	Horizontal	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak	 Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak
Avg.	 Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak	 Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak

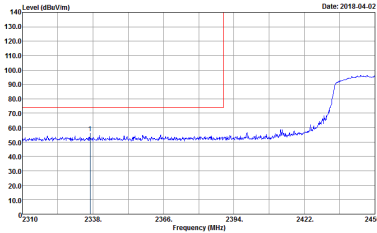
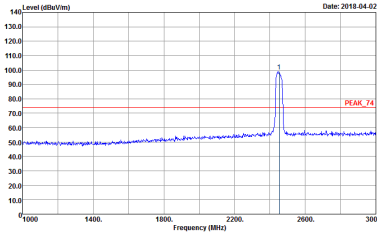
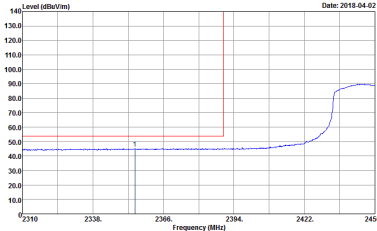
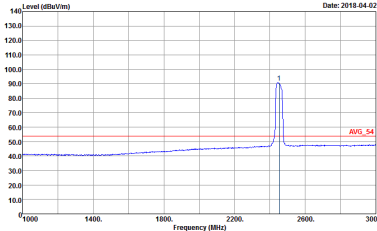
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT40 CH06 2437MHz - R	
1	Horizontal	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto : Peak	Left blank
Avg.	 Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto : Peak	Left blank

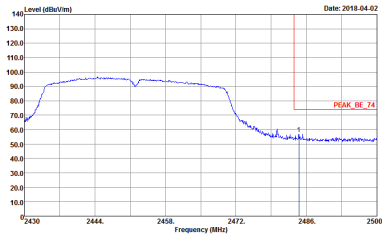
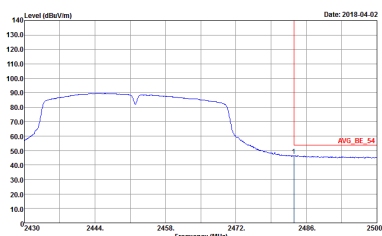


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT40 CH06 2437MHz - L	
1	Vertical	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak	 Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00075962 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak
Avg.	 Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak	 Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak

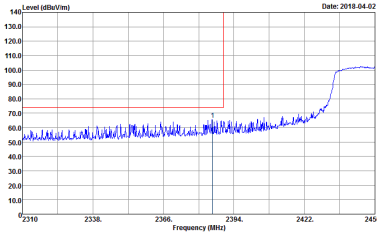
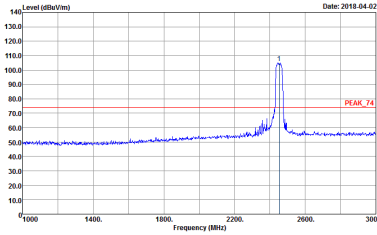
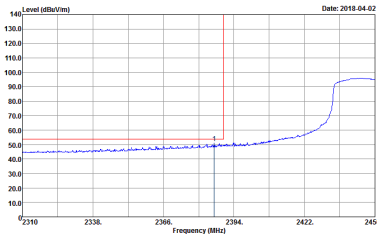
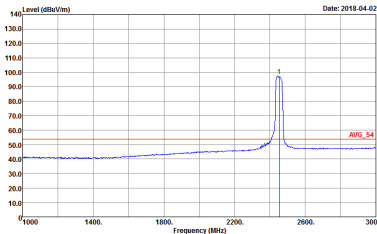
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT40 CH06 2437MHz - R	
1	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

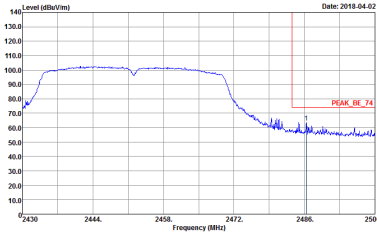
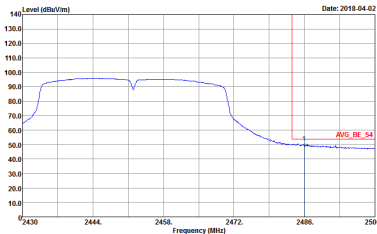


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT40 CH09 2452MHz - L	
1	Horizontal	Fundamental
Peak	 Level (dBuV/m) Frequency (MHz) Date: 2018-04-02 Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak	 Level (dBuV/m) Frequency (MHz) Date: 2018-04-02 Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00075962 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak
Avg.	 Level (dBuV/m) Frequency (MHz) Date: 2018-04-02 Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak	 Level (dBuV/m) Frequency (MHz) Date: 2018-04-02 Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT40 CH09 2452MHz - R	
1	Horizontal	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak	Left blank
Avg.	 Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak	Left blank



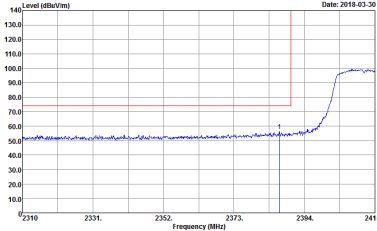
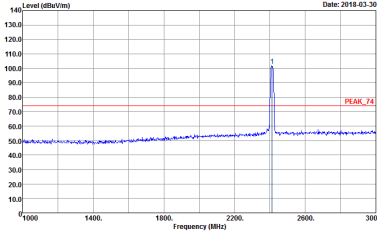
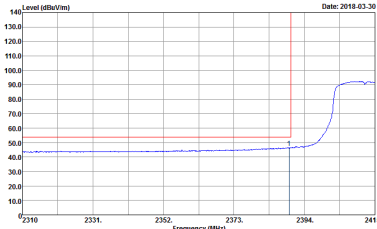
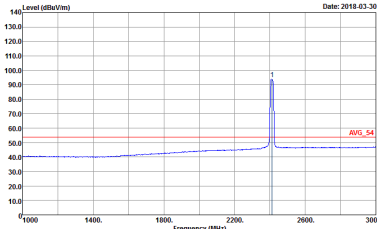
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT40 CH09 2452MHz - L	
1	Vertical	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak	 Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00075962 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak
Avg.	 Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak	 Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT40 CH09 2452MHz - R	
1	Vertical	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak	Left blank
Avg.	 Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak	Left blank



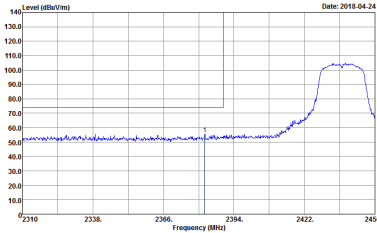
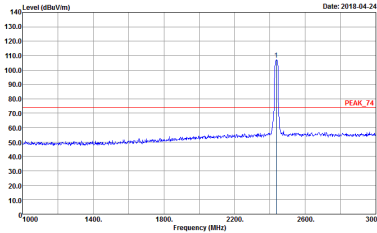
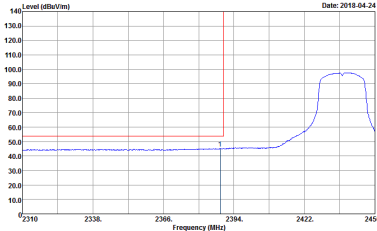
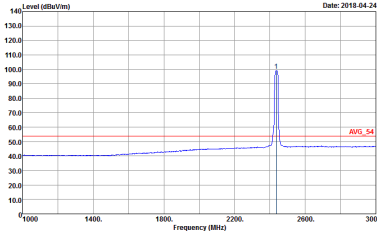
2.4GHz 2400~2483.5MHz

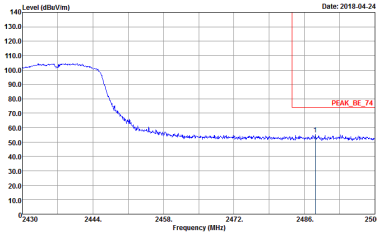
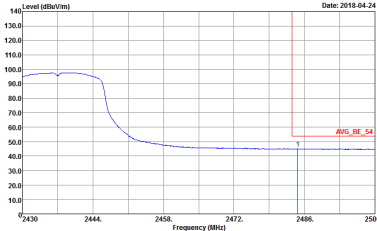
WIFI 802.11ac VHT20 (Band Edge @ 3m)

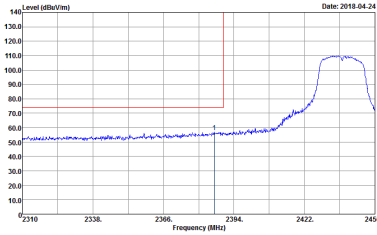
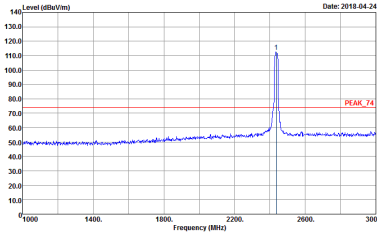
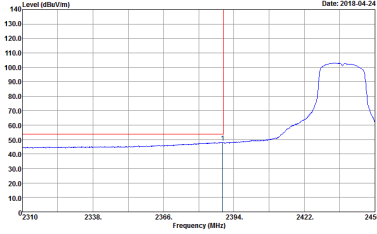
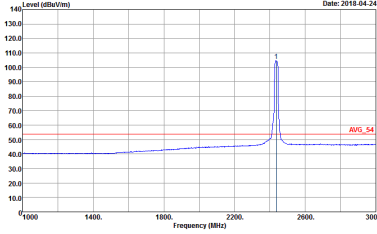
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH01 2412MHz	
1	Horizontal	Fundamental
Peak	 Site : 03CH07-4Y Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak	 Site : 03CH07-4Y Condition : PEAK_74 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak
Avg.	 Site : 03CH07-4Y Condition : AVG_BE_54 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000KHz VBW:1.000KHz SWT:Auto Detector : Peak	 Site : 03CH07-4Y Condition : AVG_54 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000KHz VBW:1.000KHz SWT:Auto Detector : Peak



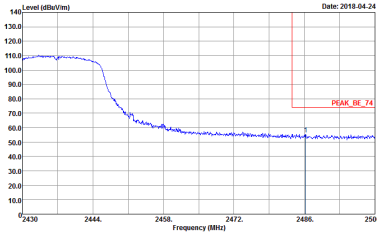
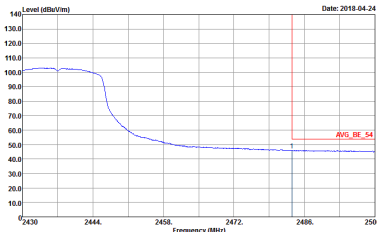
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH01 2412MHz	
1	Vertical	Fundamental
Peak	Site : 03CH07-4Y Condition : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak	Site : 03CH07-4Y Condition : PEAK_74 3m HF_ANT_00075962 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak
Avg.	Site : 03CH07-4Y Condition : AVG_BE_54 3m HF_ANT_00075962 VERTICAL Detector : RBW:1000.000KHz VBW:1000KHz SWT:Auto Detector : Peak	Site : 03CH07-4Y Condition : AVG_54 3m HF_ANT_00075962 VERTICAL Detector : RBW:1000.000KHz VBW:1000KHz SWT:Auto Detector : Peak

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH06 2437MHz - L	
1	Horizontal	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak	 Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak
Avg.	 Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000KHz VBW:1000KHz SWT:Auto Detector : Peak	 Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000KHz VBW:1000KHz SWT:Auto Detector : Peak

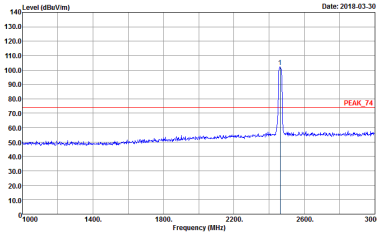
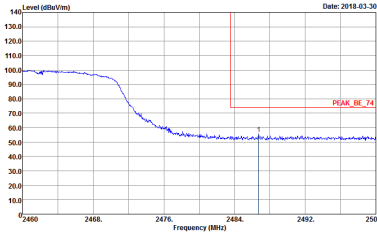
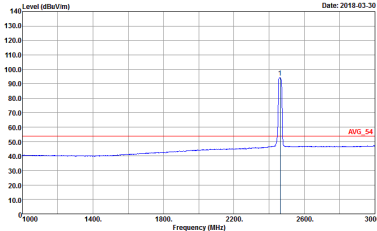
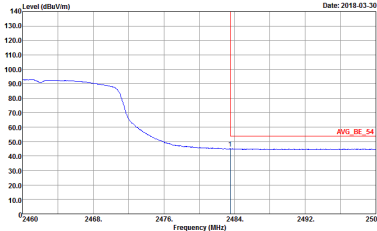
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ac VH20 CH06 2437MHz - R	
1	Horizontal	Fundamental
Peak	 Site : 03CH07-HV Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak	Left blank
Avg.	 Site : 03CH07-HV Condition : AVG_BE_54 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000KHz VBW:1000KHz SWT:Auto Detector : Peak	Left blank

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ac VH20 CH06 2437MHz - L	
1	Vertical	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak	 Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00075962 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak
Avg.	 Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 VERTICAL Detector : RBW:1000.000KHz VBW:1000KHz SWT:Auto Detector : Peak	 Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 VERTICAL Detector : RBW:1000.000KHz VBW:1000KHz SWT:Auto Detector : Peak

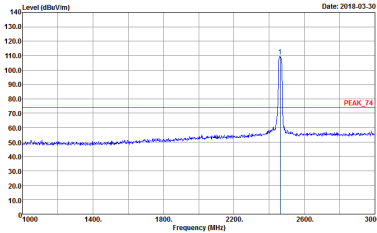
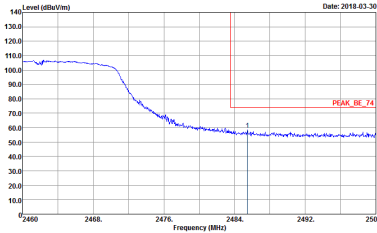
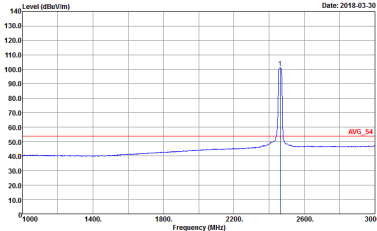
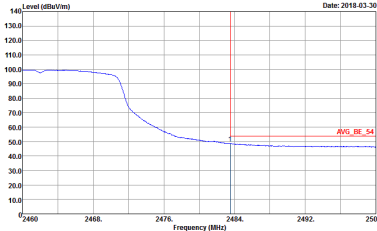


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ac VH20 CH06 2437MHz - R	
1	Vertical	Fundamental
Peak	 Site : 03CH07-HV Condition : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak	Left blank
Avg.	 Site : 03CH07-HV Condition : AVG_BE_54 3m HF_ANT_00075962 VERTICAL RBW:1000.000KHz VBW:1000KHz SWT:Auto Detector : Peak	Left blank

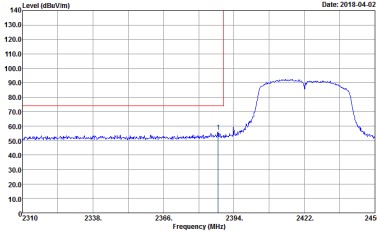
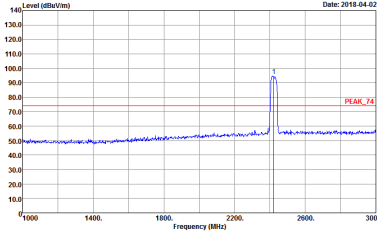
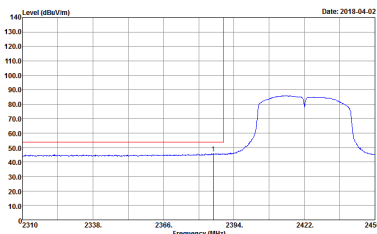
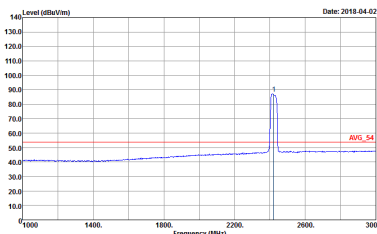


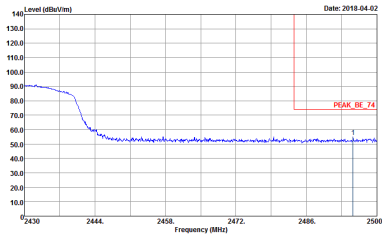
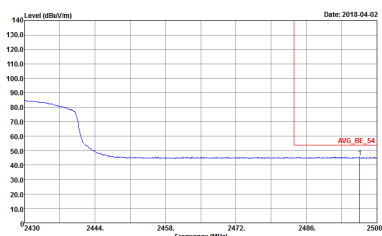
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ac VH20 CH11 2462MHz	
1	Horizontal	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00075962 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak	 Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak
Avg.	 Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 HORIZONTAL RBW:1000.000KHz VBW:1000KHz SWT:Auto Detector : Peak	 Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 HORIZONTAL RBW:1000.000KHz VBW:1000KHz SWT:Auto Detector : Peak



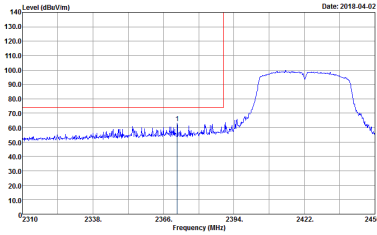
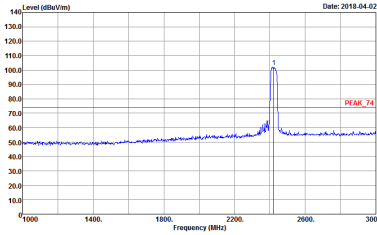
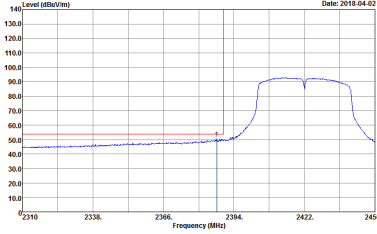
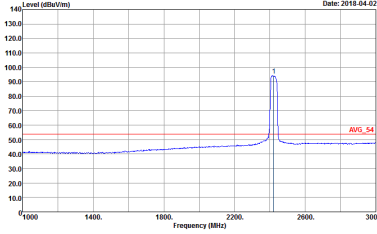
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ac VH20 CH11 2462MHz	
1	Vertical	Fundamental
Peak	 Site : 03CH07-4Y Condition : PEAK_74 3m HF_ANT_00075962 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak	 Site : 03CH07-4Y Condition : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak
Avg.	 Site : 03CH07-4Y Condition : AVG_54 3m HF_ANT_00075962 VERTICAL RBW:1000.000KHz VBW:1000KHz SWT:Auto Detector : Peak	 Site : 03CH07-4Y Condition : AVG_BE_54 3m HF_ANT_00075962 VERTICAL RBW:1000.000KHz VBW:1000KHz SWT:Auto Detector : Peak

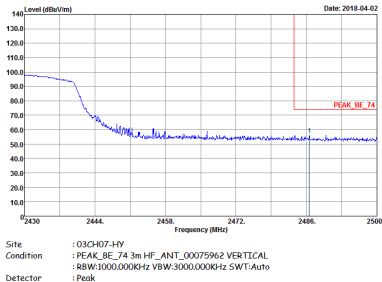
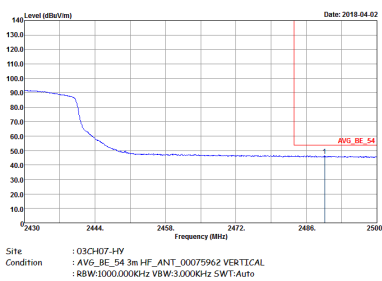
2.4GHz 2400~2483.5MHz
WIFI 802.11ac VHT40 (Band Edge @ 3m)

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ac VH40 CH03 2422MHz - L	
1	Horizontal	Fundamental
Peak	 Site : 03CH07-4Y Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak	 Site : 03CH07-4Y Condition : PEAK_74 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak
	 Site : 03CH07-4Y Condition : AVG_BE_54 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak	 Site : 03CH07-4Y Condition : AVG_54 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak

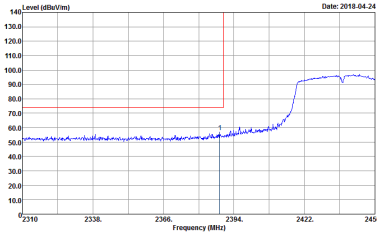
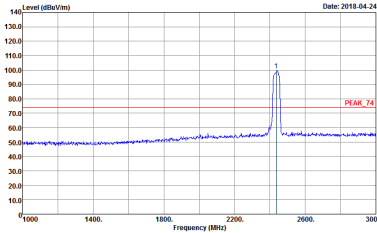
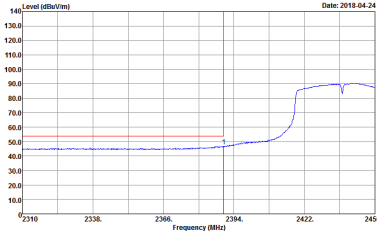
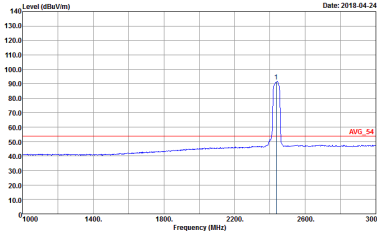
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ac VH40 CH03 2422MHz - R	
1	Horizontal	Fundamental
Peak	 Site : 03CH07-HV Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak	Left blank
Avg.	 Site : 03CH07-HV Condition : AVG_BE_54 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak	Left blank

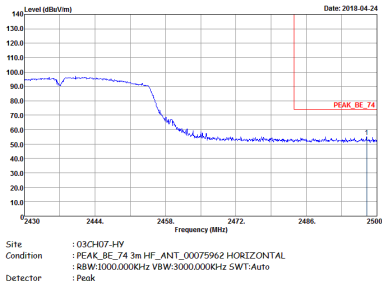
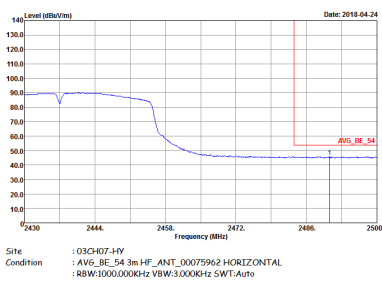


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ac VH40 CH03 2422MHz - L	
1	Vertical	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak	 Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00075962 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak
Avg.	 Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak	 Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak

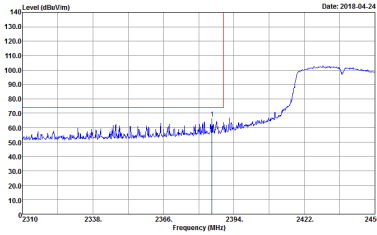
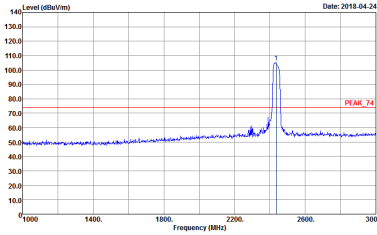
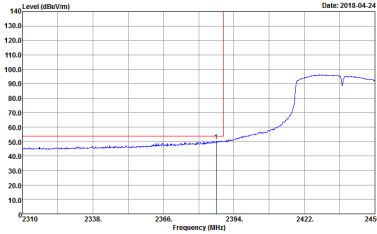
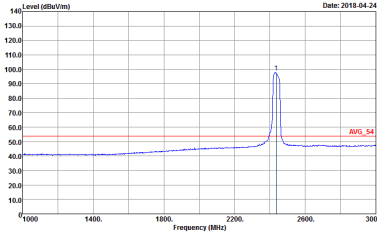
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ac VH40 CH03 2422MHz - R	
1	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank



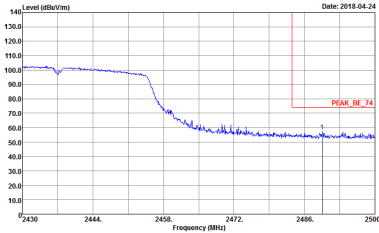
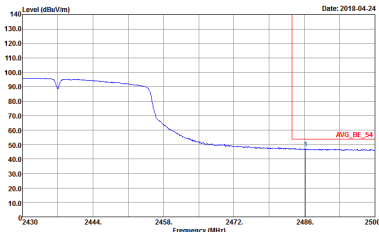
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ac VH40 CH06 2437MHz - L	
1	Horizontal	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak	 Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak
Avg.	 Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000KHz VBW:3.000KHz SWT:Auto Detector : Peak	 Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000KHz VBW:3.000KHz SWT:Auto Detector : Peak

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ac VH40 CH06 2437MHz - R	
1	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

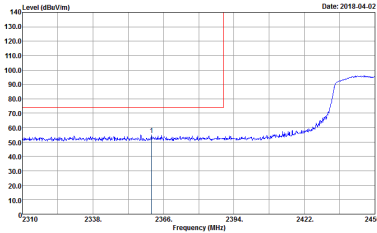
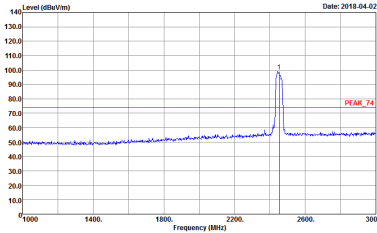
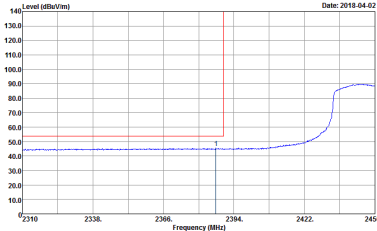
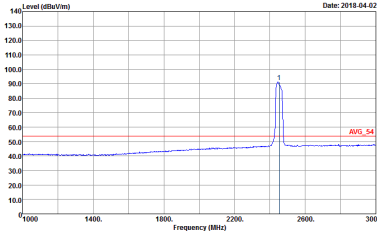


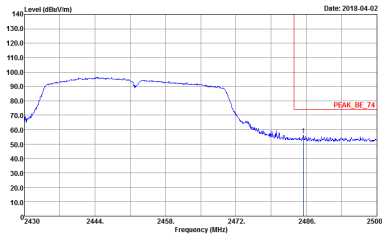
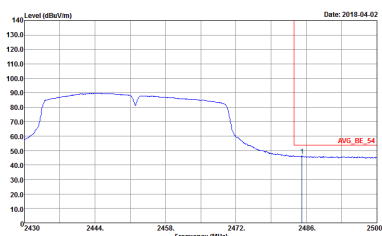
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ac VH40 CH06 2437MHz - L	
1	Vertical	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak	 Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00075962 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak
Avg.	 Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 VERTICAL RBW:1000.000KHz VBW:3.000KHz SWT:Auto Detector : Peak	 Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 VERTICAL RBW:1000.000KHz VBW:3.000KHz SWT:Auto Detector : Peak

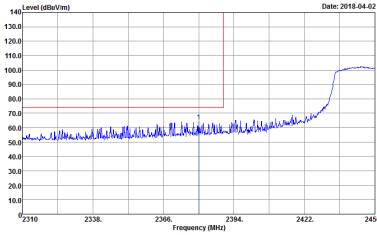
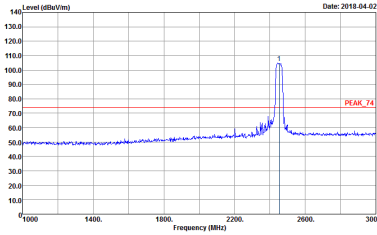
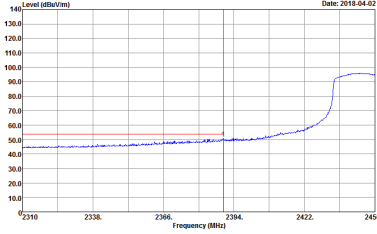
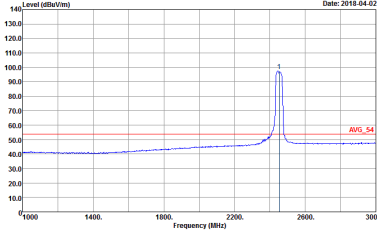


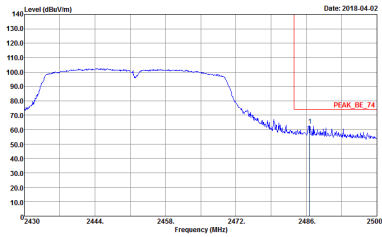
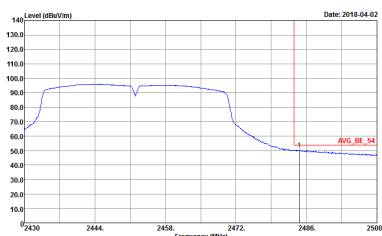
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ac VH40 CH06 2437MHz - R	
1	Vertical	Fundamental
Peak	 Site : 03CH07-HV Condition : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak	Left blank
Avg.	 Site : 03CH07-HV Condition : AVG_BE_54 3m HF_ANT_00075962 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak	Left blank



WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ac VH40 CH09 2452MHz - L	
1	Horizontal	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak	 Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak
Avg.	 Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000KHz VBW:3.000KHz SWT:Auto Detector : Peak	 Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000KHz VBW:3.000KHz SWT:Auto Detector : Peak

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ac VH40 CH09 2452MHz - R	
1	Horizontal	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak	Left blank
Avg.	 Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak	Left blank

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ac VH40 CH09 2452MHz - L	
1	Vertical	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak	 Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00075962 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak
Avg.	 Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak	 Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ac VH40 CH09 2452MHz - R	
1	Vertical	Fundamental
Peak	 Site : 03CH07-HV Condition : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak	Left blank
Avg.	 Site : 03CH07-HV Condition : AVG_BE_54 3m HF_ANT_00075962 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak	Left blank



2.4GHz 2400~2483.5MHz

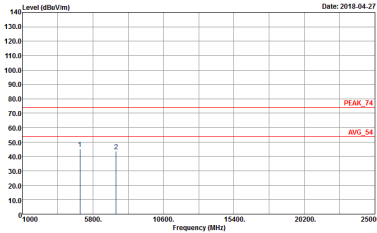
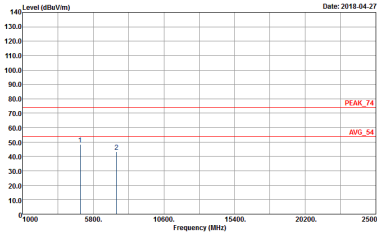
WIFI 802.11b (Harmonic @ 3m)

WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11b CH01 2412MHz	
1	Horizontal	Vertical
Peak	Level (dBuV/m) Date: 2018-04-27 Site : 03CH07-4Y Condition : PEAK_74 3m SHF-EHF_131029 HORIZONTAL Detector : Peak Project : 773113-01	Level (dBuV/m) Date: 2018-04-27 Site : 03CH07-4Y Condition : PEAK_74 3m SHF-EHF_131029 VERTICAL Detector : Peak Project : 773113-01



WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11b CH06 2437MHz	
1	Horizontal	Vertical
Peak	Site : 03CH07-4HY Condition : PEAK_74 3m SHF-EHF_131029 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak	Site : 03CH07-4HY Condition : PEAK_74 3m SHF-EHF_131029 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak

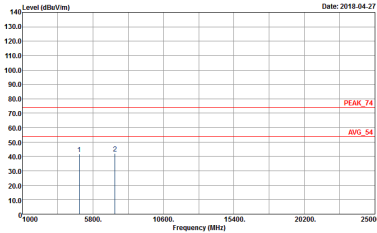
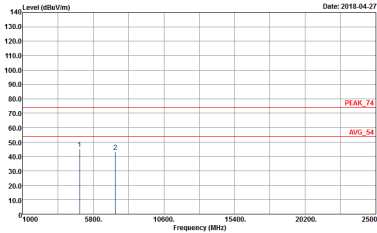


WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11b CH11 2462MHz	
1	Horizontal	Vertical
Peak	 Site : 03CH07-4Y Condition : PEAK_74 3m SHF-EHF_131029 HORIZONTAL Detector : Peak Project : 773113-01	 Site : 03CH07-4Y Condition : PEAK_74 3m SHF-EHF_131029 VERTICAL Detector : Peak Project : 773113-01

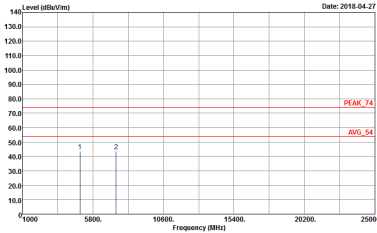
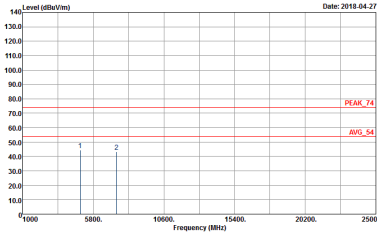
**2.4GHz 2400~2483.5MHz****WIFI 802.11g (Harmonic @ 3m)**

WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11g CH01 2412MHz	
1	Horizontal	Vertical
Peak	Site : 03CH07-4Y Condition : PEAK_74 3m SHF-EHF_131029 HORIZONTAL Detector : Peak Project : 773113-01	Site : 03CH07-4Y Condition : PEAK_74 3m SHF-EHF_131029 VERTICAL Detector : Peak Project : 773113-01



WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11g CH06 2437MHz	
1	Horizontal	Vertical
Peak	 Site : 03CH07-4HY Condition : PEAK_74 3m SHF-EHF_131029 HORIZONTAL Detector : Peak Project : 773113-01	 Site : 03CH07-4HY Condition : PEAK_74 3m SHF-EHF_131029 VERTICAL Detector : Peak Project : 773113-01



WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11g CH11 2462MHz	
1	Horizontal	Vertical
Peak	 Site : 03CH07-4HY Condition : PEAK_74 3m SHF-EHF_131029 HORIZONTAL Detector : Peak Project : 773113-01	 Site : 03CH07-4HY Condition : PEAK_74 3m SHF-EHF_131029 VERTICAL Detector : Peak Project : 773113-01

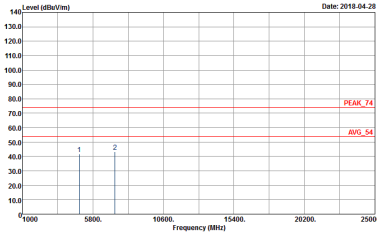
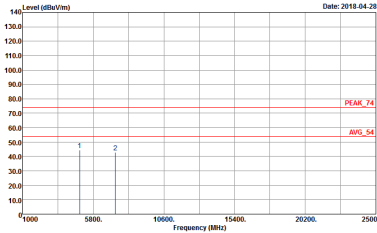


2.4GHz 2400~2483.5MHz

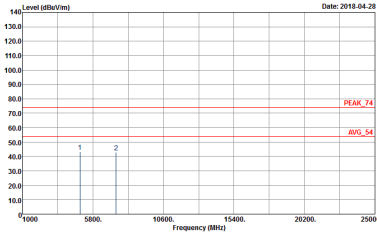
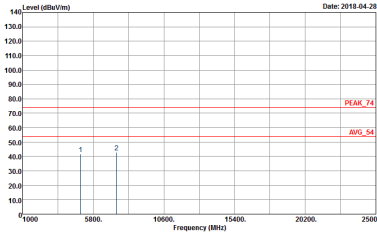
WIFI 802.11n HT20 (Harmonic @ 3m)

WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11n HT20 CH01 2412MHz	
1	Horizontal	Vertical
Peak	Site : 03CH07-4Y Condition : PEAK_74 3m SHF-EHF_131029 HORIZONTAL Detector : Peak Project : 773113-01	Site : 03CH07-4Y Condition : PEAK_74 3m SHF-EHF_131029 VERTICAL Detector : Peak Project : 773113-01

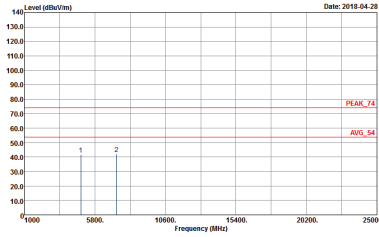
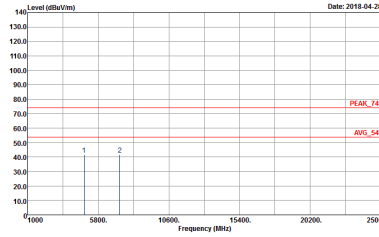


WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11n HT20 CH06 2437MHz	
1	Horizontal	Vertical
Peak	 Site : 03CH07-4Y Condition : PEAK_74 3m SHF-EHF_131029 HORIZONTAL Detector : Peak Project : 773113-01	 Site : 03CH07-4Y Condition : PEAK_74 3m SHF-EHF_131029 VERTICAL Detector : Peak Project : 773113-01



WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11n HT20 CH11 2462MHz	
1	Horizontal	Vertical
Peak	 Site : 03CH07-4HY Condition : PEAK_74 3m SHF-EHF_131029 HORIZONTAL Detector : Peak Project : 773113-01	 Site : 03CH07-4HY Condition : PEAK_74 3m SHF-EHF_131029 VERTICAL Detector : Peak Project : 773113-01

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

WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11n HT40 CH03 2422MHz	
1	Horizontal	Vertical
Peak	 Site : 03CH07-4Y Condition : PEAK_74 3m SHF-EHF_131029 HORIZONTAL Detector : Peak Project : 773113-01	 Site : 03CH07-4Y Condition : PEAK_74 3m SHF-EHF_131029 VERTICAL Detector : Peak Project : 773113-01



WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11n HT40 CH06 2437MHz	
1	Horizontal	Vertical
Peak	Site : 03CH07-4HY Condition : PEAK_74 3m SHF-EHF_131029 HORIZONTAL Detector : Peak Project : 773113-01	Site : 03CH07-4HY Condition : PEAK_74 3m SHF-EHF_131029 VERTICAL Detector : Peak Project : 773113-01

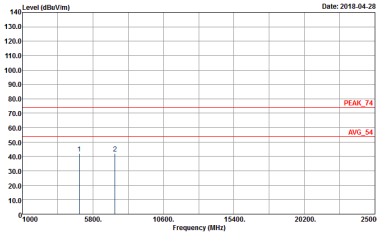
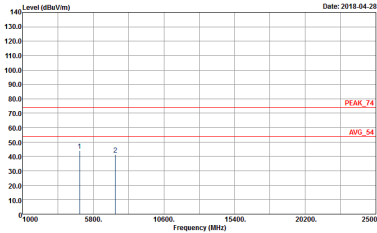


WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11n HT40 CH09 2452MHz	
1	Horizontal	Vertical
Peak	Site : 03CH07-4HY Condition : PEAK_74 3m SHF-EHF_131029 HORIZONTAL Detector : Peak Project : 773113-01	Site : 03CH07-4HY Condition : PEAK_74 3m SHF-EHF_131029 VERTICAL Detector : Peak Project : 773113-01

**2.4GHz 2400~2483.5MHz****WIFI 802.11ac VHT20 (Harmonic @ 3m)**

WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11ac VHT20 CH01 2412MHz	
1	Horizontal	Vertical
Peak	Site : 03CH07-4Y Condition : PEAK_74 3m SHF-EHF_131029 HORIZONTAL Detector : Peak Project : 773113-01	Site : 03CH07-4Y Condition : PEAK_74 3m SHF-EHF_131029 VERTICAL Detector : Peak Project : 773113-01

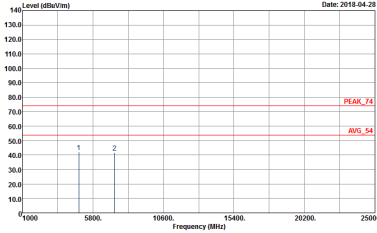
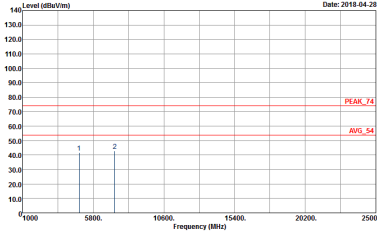


WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11ac VHT20 CH06 2437MHz	
1	Horizontal	Vertical
Peak	 Site : 03CH07-4HY Condition : PEAK_74 3m SHF-EHF_131029 HORIZONTAL Detector : Peak Project : 773113-01	 Site : 03CH07-4HY Condition : PEAK_74 3m SHF-EHF_131029 VERTICAL Detector : Peak Project : 773113-01



WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11ac VHT20 CH11 2462MHz	
1	Horizontal	Vertical
Peak	Site : 03CH07-4Y Condition : PEAK_74 3m SHF-EHF_131029 HORIZONTAL Detector : Peak Project : 773113-01	Site : 03CH07-4Y Condition : PEAK_74 3m SHF-EHF_131029 VERTICAL Detector : Peak Project : 773113-01

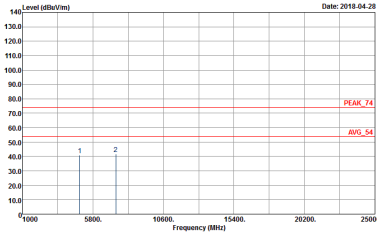
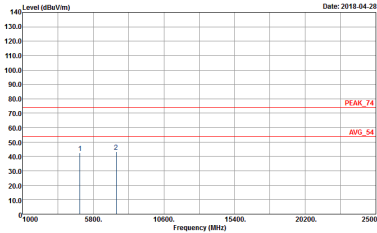
**2.4GHz 2400~2483.5MHz****WIFI 802.11ac VHT40 (Harmonic @ 3m)**

WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11ac VHT40 CH03 2422MHz	
1	Horizontal	Vertical
Peak	 Site : 03CH07-4Y Condition : PEAK_74 3m SHF-EHF_131029 HORIZONTAL Detector : Peak Project : 773113-01	 Site : 03CH07-4Y Condition : PEAK_74 3m SHF-EHF_131029 VERTICAL Detector : Peak Project : 773113-01

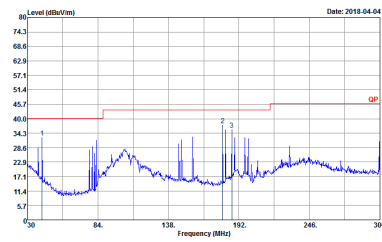
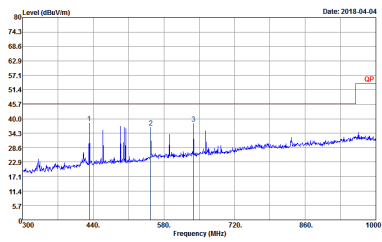


WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11ac VHT40 CH06 2437MHz	
1	Horizontal	Vertical
Peak	Site : 03CH07-4HY Condition : PEAK_74 3m SHF-EHF_131029 HORIZONTAL Detector : Peak Project : 773113-01	Site : 03CH07-4HY Condition : PEAK_74 3m SHF-EHF_131029 VERTICAL Detector : Peak Project : 773113-01



WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11ac VHT40 CH09 2452MHz	
1	Horizontal	Vertical
Peak	 Site : 03CH07-4Y Condition : PEAK_74 3m SHF-EHF_131029 HORIZONTAL Detector : Peak Project : 773113-01	 Site : 03CH07-4Y Condition : PEAK_74 3m SHF-EHF_131029 VERTICAL Detector : Peak Project : 773113-01

Emission below 1GHz
2.4GHz WIFI 802.11n HT40 (LF)

WIFI	2.4GHz 2400~2483.5MHz	
ANT	802.11n HT40 LF	
1	Horizontal	Vertical
QP / Peak	 Site : 03CH07-4V Condition : QP 3m LF-ANT-35419(s) HORIZONTAL Detector : RBW120.000KHz VBW-300.000KHz SWT0.500sec Peak	 Site : 03CH07-4V Condition : QP 3m LF-ANT-35419(s) HORIZONTAL Detector : RBW120.000KHz VBW-300.000KHz SWT0.500sec Peak



Band	Duty Cycle (%)	T(us)	1/T(kHz)	VBW Setting	Duty Factor (dB)
802.11b	98.96	-	-	10Hz	0.05
802.11g	95.00	2065.22	0.48	1kHz	0.22
2.4GHz 802.11n HT20	94.33	1927.54	0.52	1kHz	0.25
2.4GHz 802.11n HT40	89.02	952.17	1.05	3kHz	0.51
2.4GHz 802.11ac VHT20	93.88	1932.00	0.52	1kHz	0.27
2.4GHz 802.11ac VHT40	88.81	952.00	1.05	3kHz	0.52

Spectrum

Ref Level 30.00 dBm Offset 25.20 dB RBW 10 MHz 12.565 ms

Att 30 dB SWT 30 ms VBW 10 MHz

SGL

1Pk Max

20 dBm M1

10 dB D3[1] -0.02 dB 12.5652 ms

0 dB M1[1] 15.73 dBm 2.3043 ms

-10 dB

-20 dB

-30 dB

-40 dB

-50 dB

-60 dB

CF 2.412 GHz 691 pts 3.0 ms/

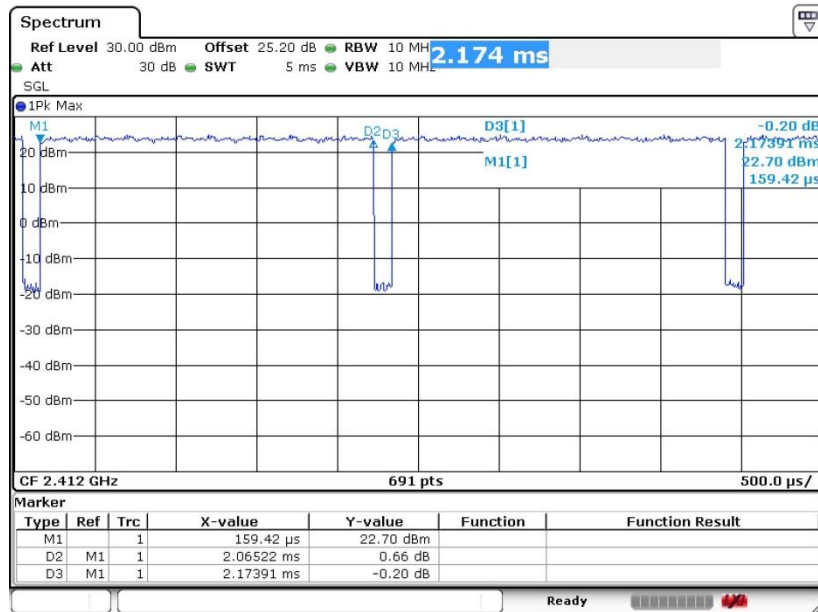
Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	2.3043 ms	15.73 dBm		
D2	M1	1	12.4348 ms	-0.03 dB		
D3	M1	1	12.5652 ms	-0.02 dB		

Ready

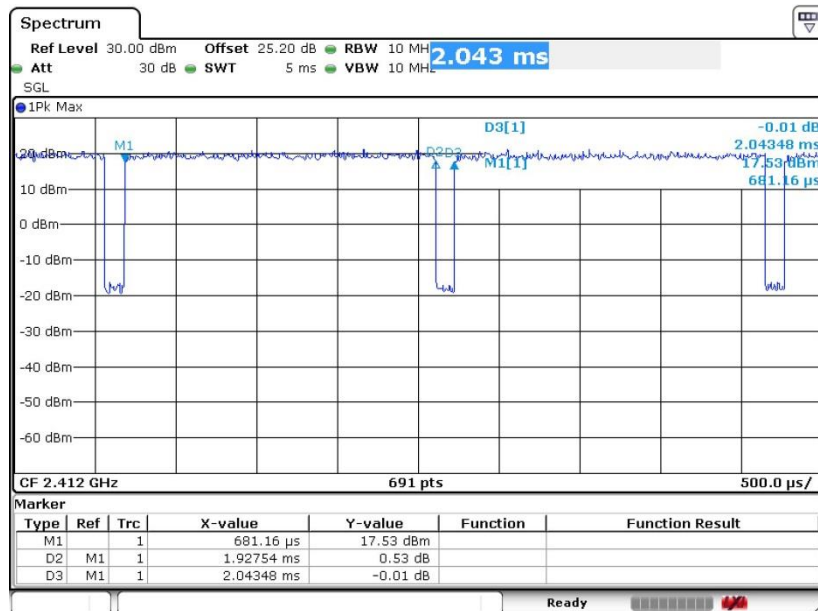
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802.11g



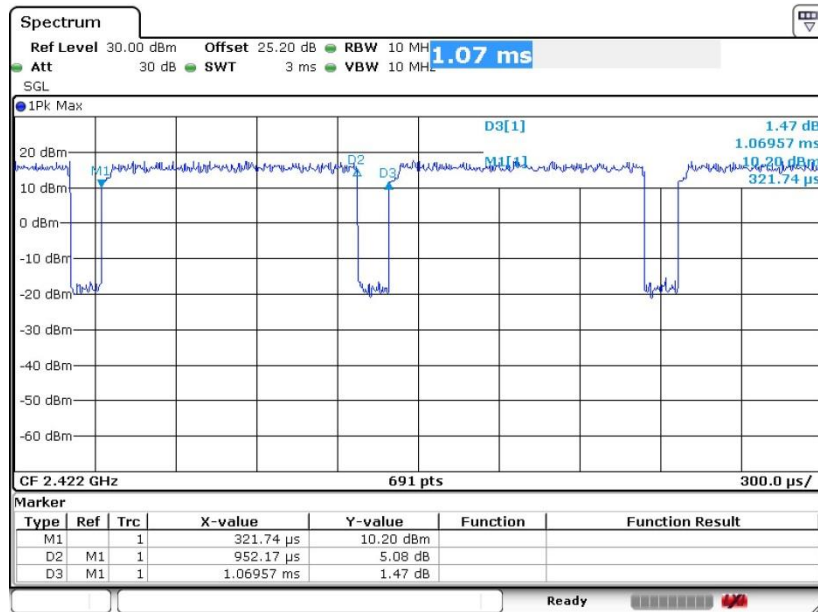
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802.11n HT20



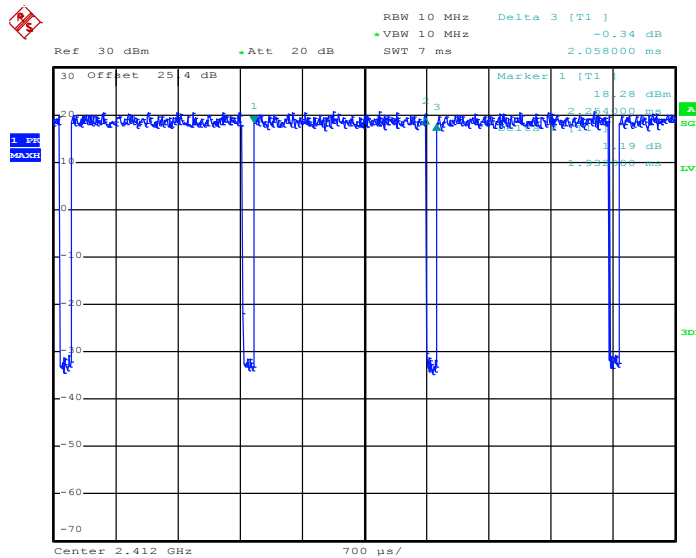
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802.11n HT40



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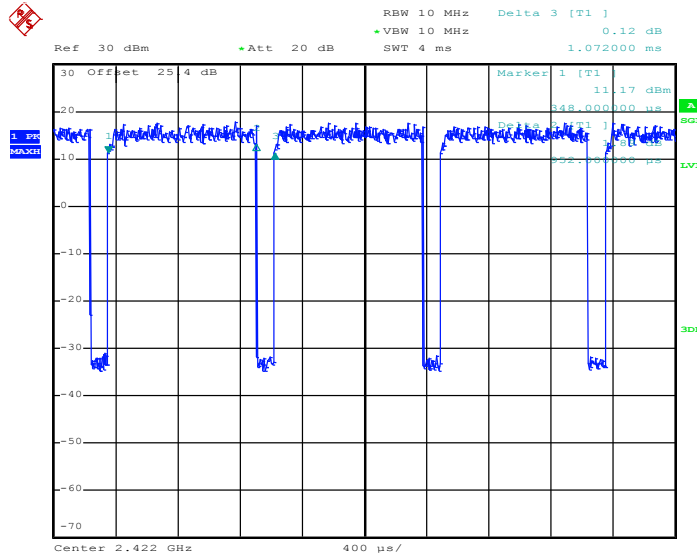
802.11ac VHT20



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802.11ac VHT40



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