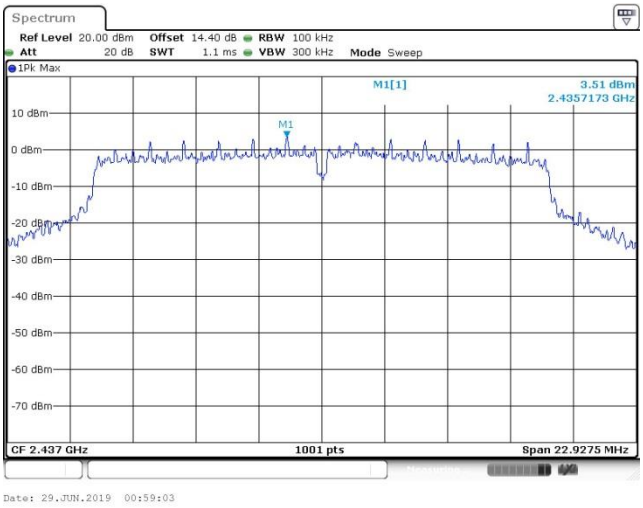
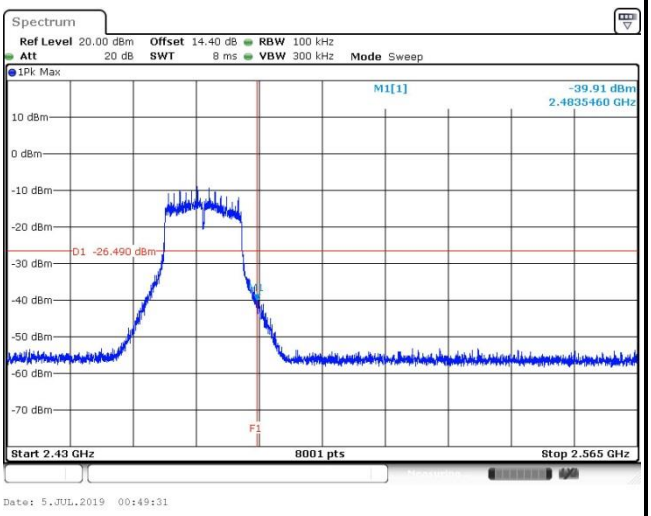
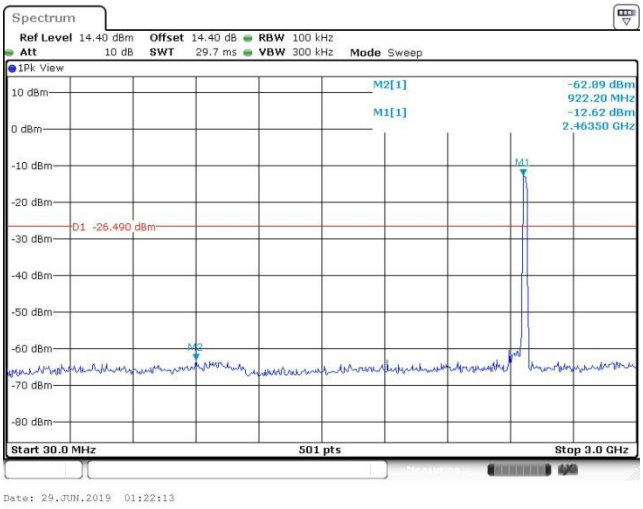
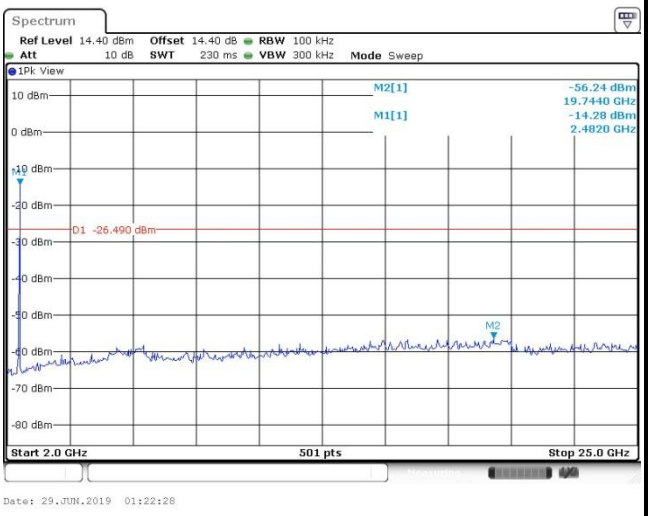
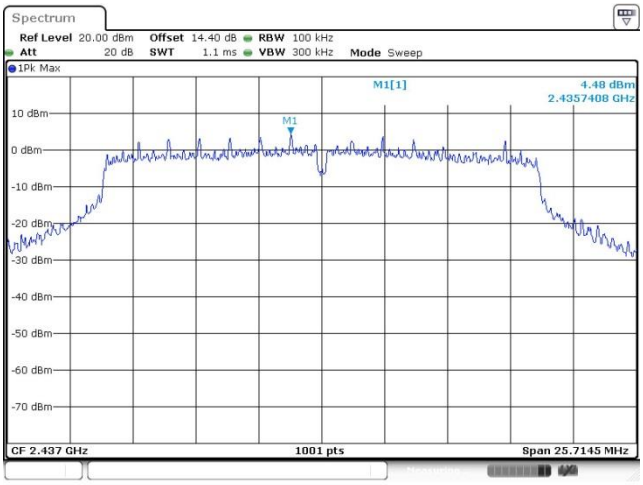
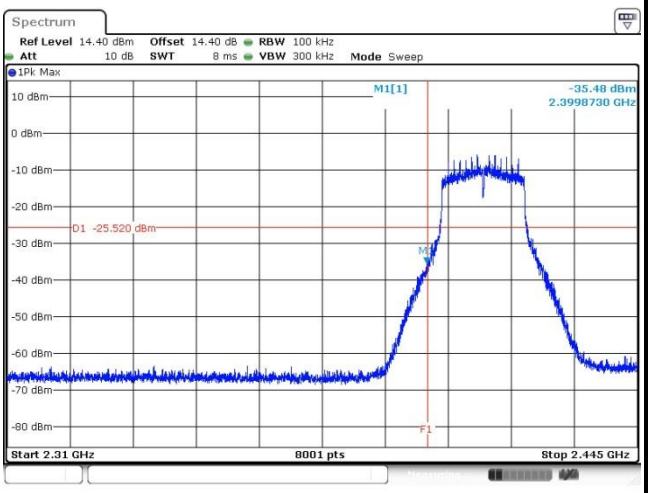
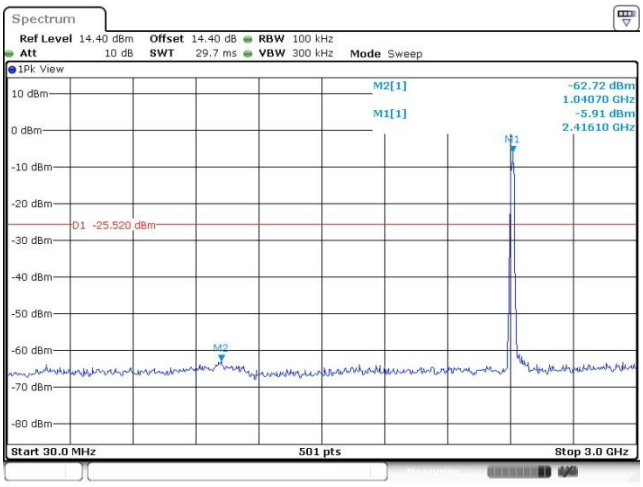
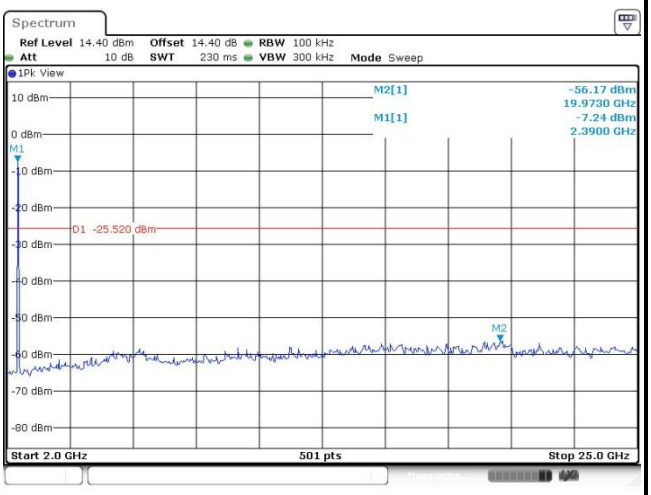
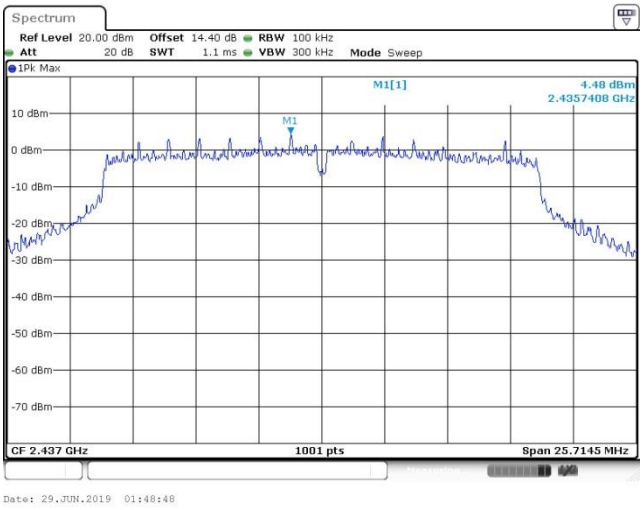
Test Mode :	802.11g	Test Channel :	13

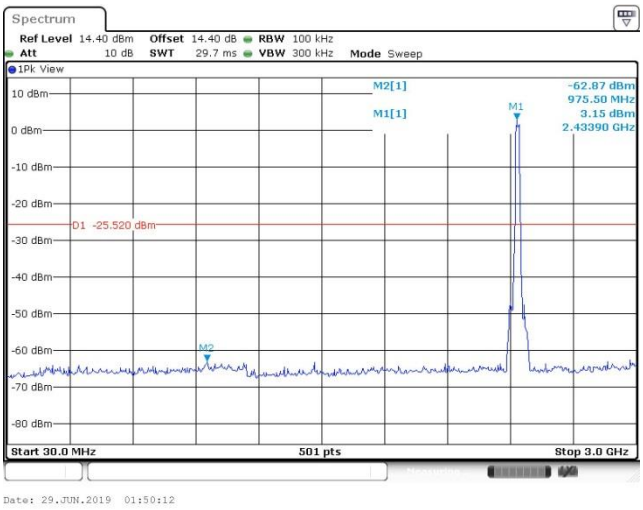
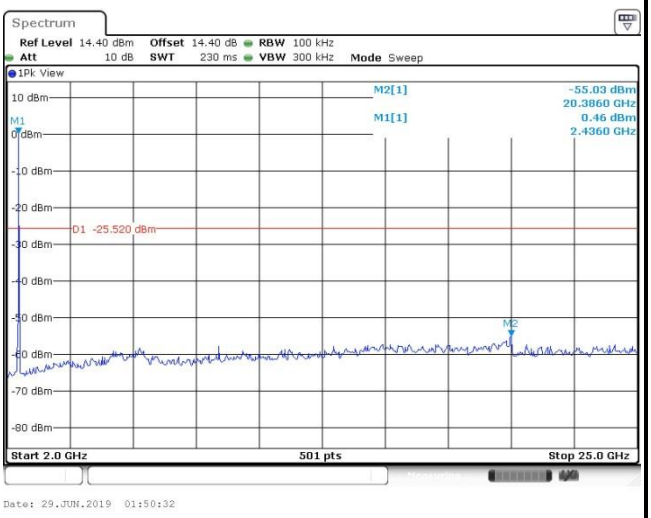
100kHz PSD reference Level	Channel Plot
	
Spurious Emission 30MHz~3GHz	**Spurious Emission 2GHz~25GHz**
	

Test Mode :	802.11n HT20	Test Channel :	01

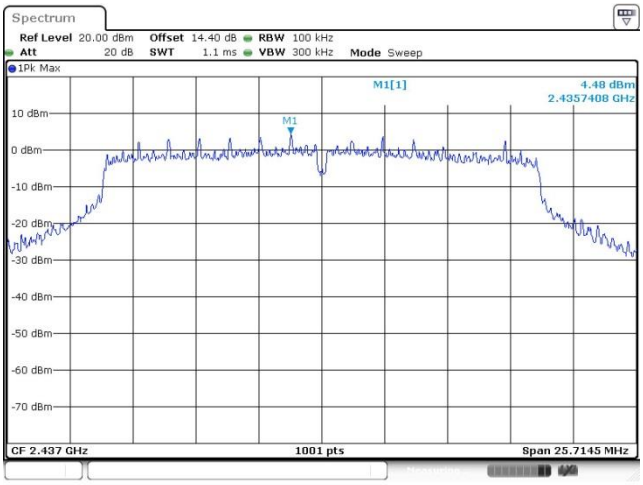
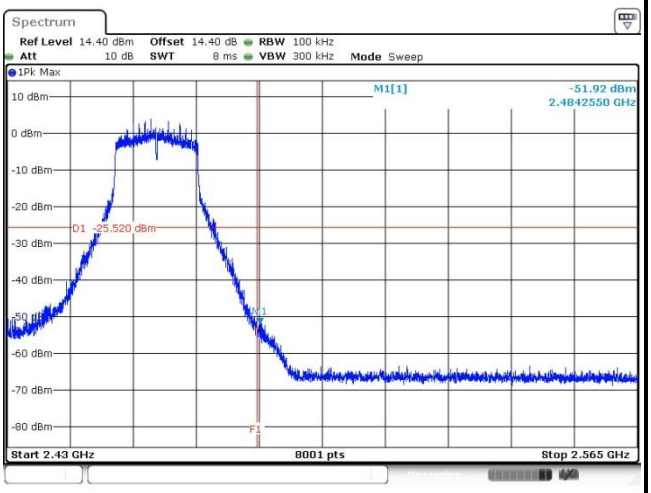
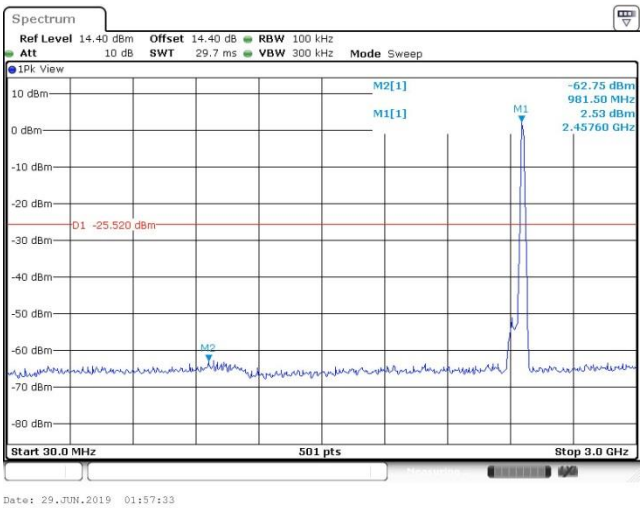
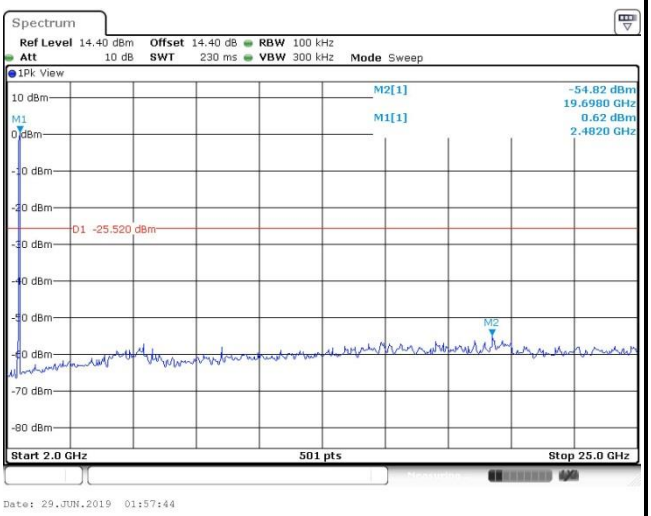
100kHz PSD reference Level	Channel Plot
	
Spurious Emission 30MHz~3GHz	**Spurious Emission 2GHz~25GHz**
	

Test Mode :	802.11n HT20	Test Channel :	06

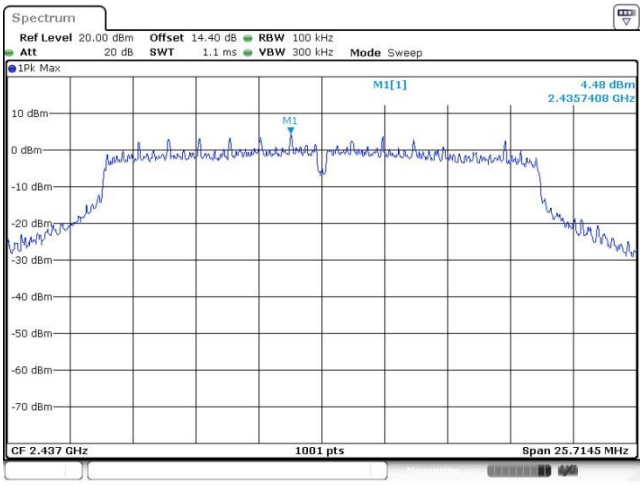
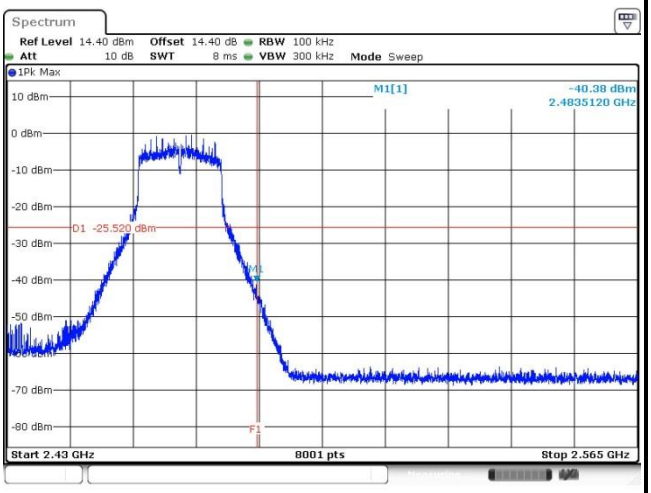
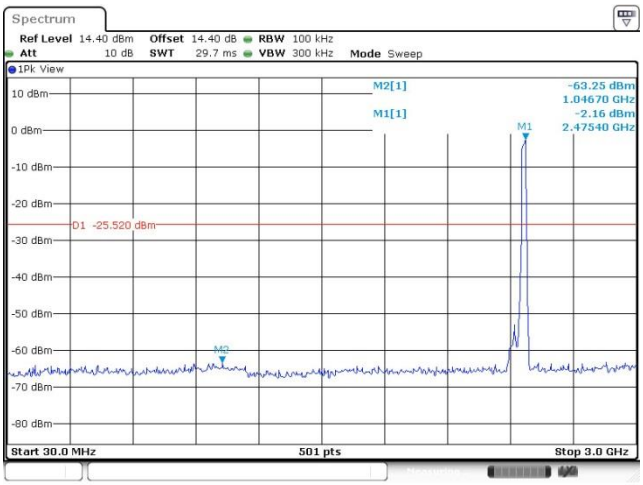
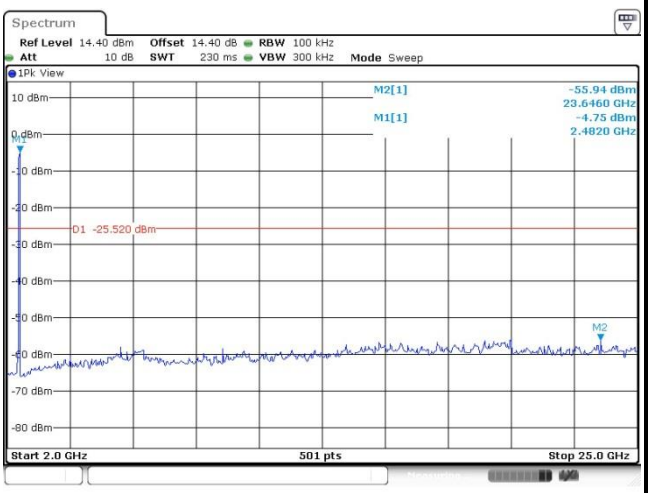
100kHz PSD reference Level	Channel Plot
	

Spurious Emission 30MHz~3GHz	Spurious Emission 2GHz~25GHz
	

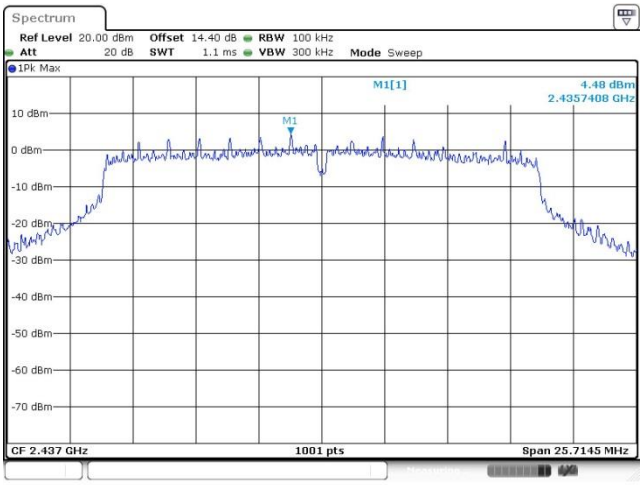
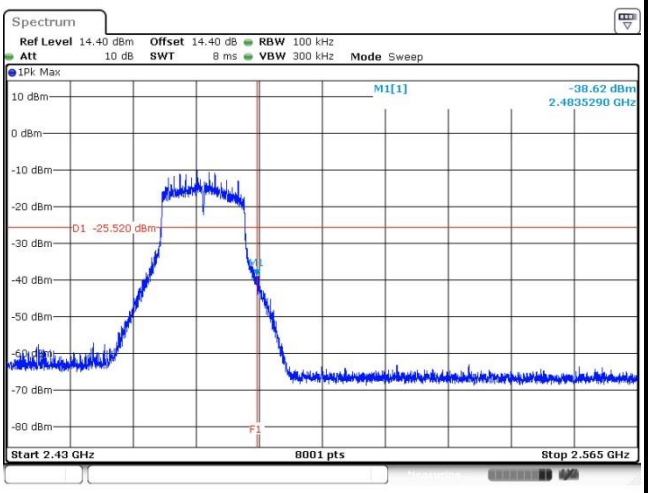
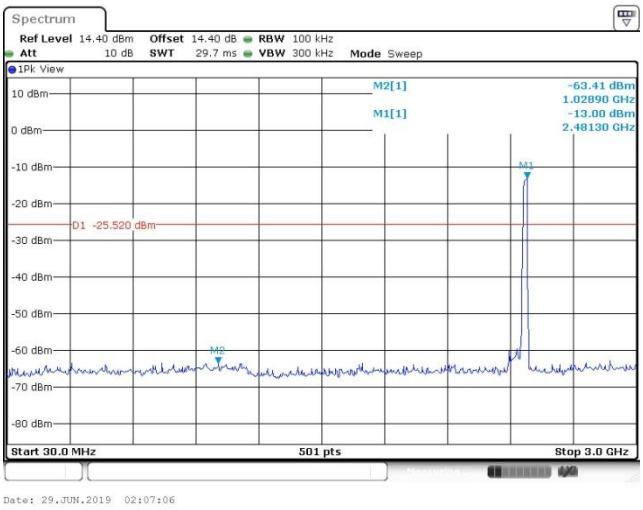
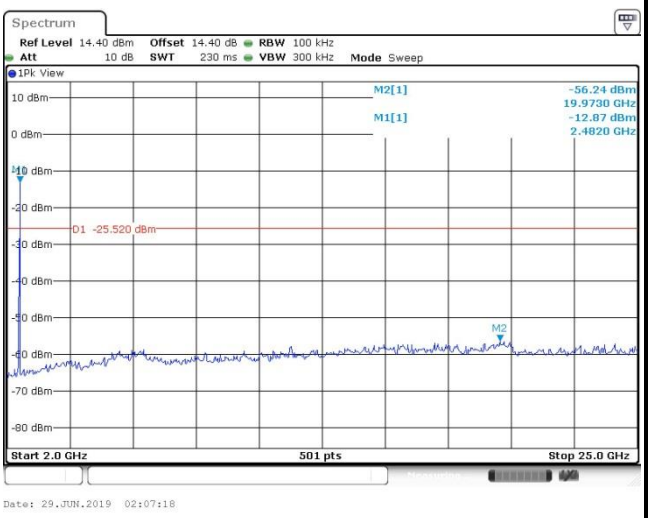
Test Mode :	802.11n HT20	Test Channel :	11

100kHz PSD reference Level	Channel Plot
	
Spurious Emission 30MHz~3GHz	**Spurious Emission 2GHz~25GHz**
	

Test Mode :	802.11n HT20	Test Channel :	12

100kHz PSD reference Level	Channel Plot
	
Spurious Emission 30MHz~3GHz	**Spurious Emission 2GHz~25GHz**
	

Test Mode :	802.11n HT20	Test Channel :	13

100kHz PSD reference Level	Channel Plot
	
Spurious Emission 30MHz~3GHz	**Spurious Emission 2GHz~25GHz**
	

3.5 Radiated Band Edges and Spurious Emission Measurement

3.5.1 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

3.5.2 Measuring Instruments

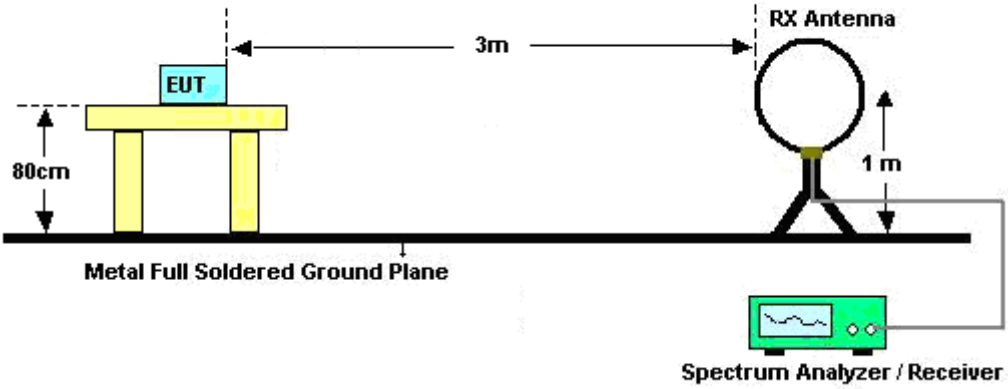
See list of measuring equipment of this test report.

3.5.3 Test Procedures

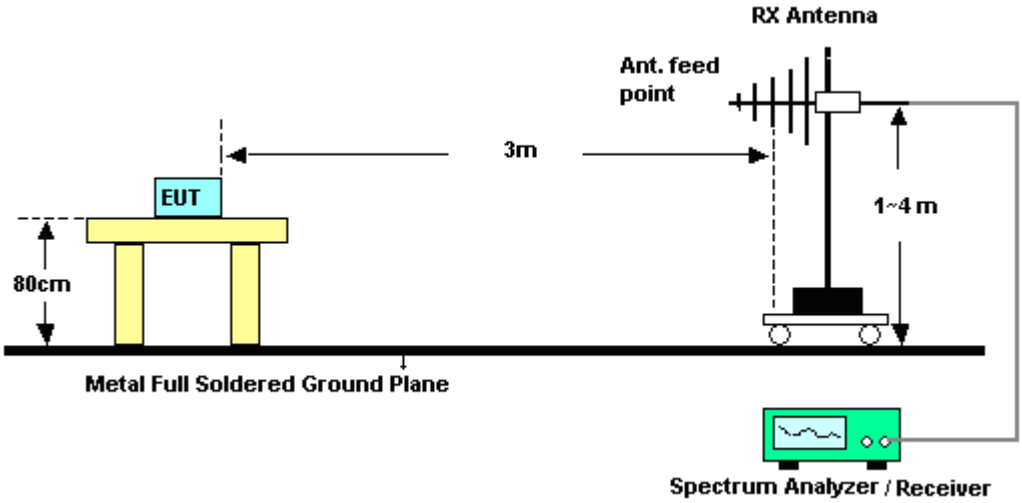
1. The testing follows the ANSI C63.10 Section 11.12.1 Radiated emission measurements.
2. The EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the 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 ≥ RBW; Sweep = auto; Detector function = peak; Trace = max hold;
   (3) Set RBW = 1 MHz, VBW= 3MHz for f ≥ 1 GHz for peak measurement.
   For average measurement:
   - VBW = 10 Hz, when duty cycle is no less than 98 percent.
   - VBW ≥ 1/T, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.

3.5.4 Test Setup

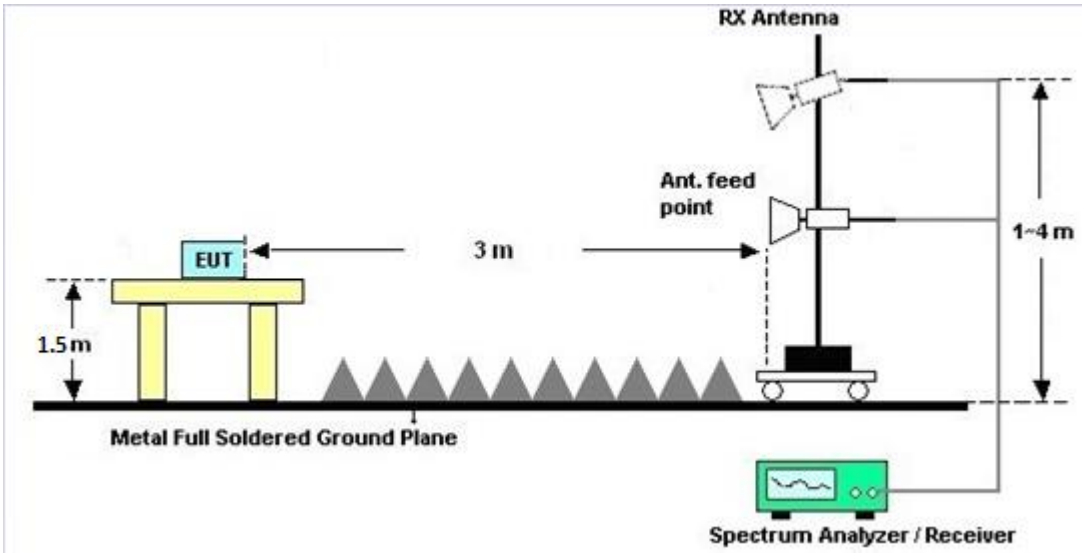
For radiated emissions below 30MHz



For radiated emissions from 30MHz to 1GHz



For radiated emissions above 1GHz



3.5.5 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 alternative test site - semi-Anechoic chamber according to 414788 D01 Radiated Test Site v01r01, and the result came out very similar.

3.5.6 Test Result of Radiated Spurious at Band Edges

Please refer to Appendix C and D.

3.5.7 Duty Cycle

Please refer to Appendix E.

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

Please refer to Appendix C and D.

3.6 AC Conducted Emission Measurement

3.6.1 Limit of AC Conducted Emission

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

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

*Decreases with the logarithm of the frequency.

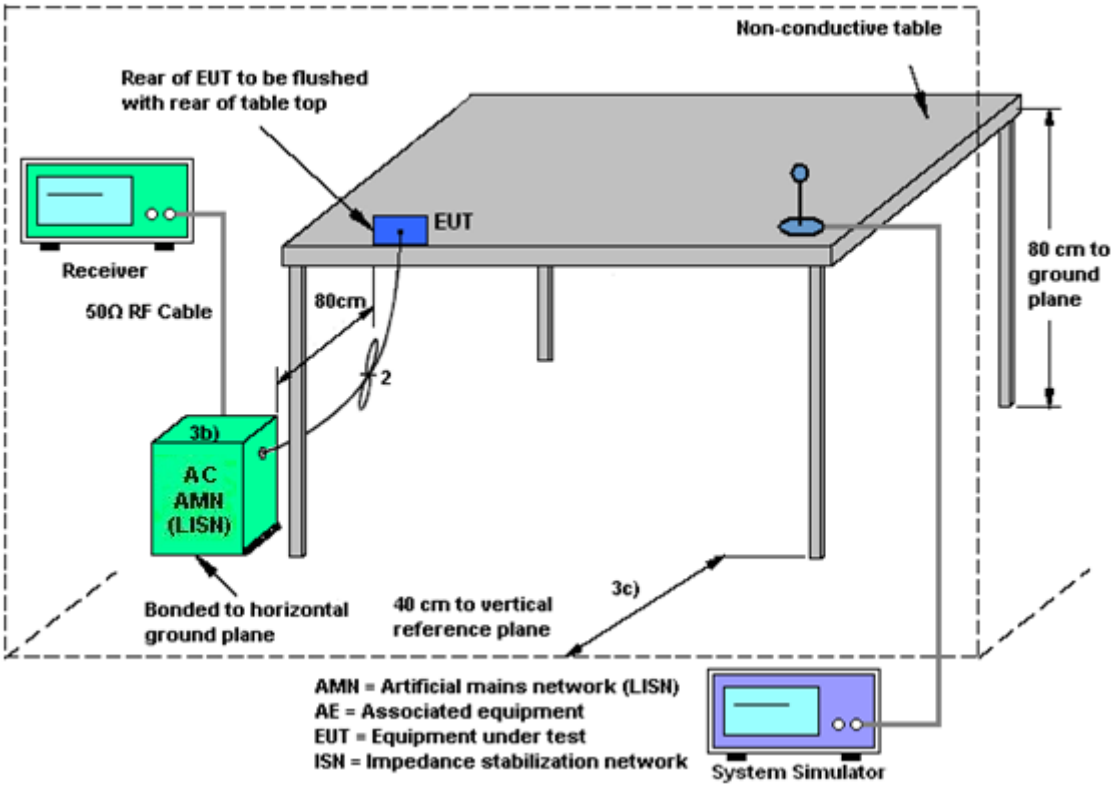
3.6.2 Measuring Instruments

See list of measuring equipment of this test report.

3.6.3 Test Procedures

1. The EUT was placed 0.4 meter from the conducting wall of the shielding room, and it was kept at least 80 centimeters from any other grounded conducting surface.
2. Connect EUT to the power mains through a line impedance stabilization network (LISN).
3. All the support units are connecting to the other LISN.
4. The LISN provides 50 ohm coupling impedance for the measuring instrument.
5. The FCC states that a 50 ohm, 50 microhenry LISN should be used.
6. Both sides of AC line were checked for maximum conducted interference.
7. The frequency range from 150 kHz to 30 MHz was searched.
8. Set the test-receiver system to Peak Detect Function and specified bandwidth (IF bandwidth = 9kHz) with Maximum Hold Mode.

3.6.4 Test Setup



3.6.5 Test Result of AC Conducted Emission

Please refer to Appendix B.

3.7 Antenna Requirements

3.7.1 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.

3.7.2 Antenna Anti-Replacement Construction

An embedded-in antenna design is used.

3.7.3 Antenna Gain

<CDD Modes >

FCC KDB 662911 D01 Multiple Transmitter Output v02r01

For CDD transmissions, directional gain is calculated as

Directional gain = G_{ANT} + Array Gain, where Array Gain is as follows.

For power spectral density (PSD) measurements on all devices,

Array Gain = 10 log(N_{ANT}/N_{SS}=1) dB.

For power measurements on IEEE 802.11 devices,

Array Gain = 0 dB (i.e., no array gain) for $N_{ANT} \leq 4$.

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

The EUT supports CDD mode.

For power, the directional gain G_{ANT} is set equal to the antenna having the highest gain, i.e., F)2)f)i).

For PSD, the directional gain calculation is following F)2)f)ii) of KDB 662911 D01 v02r01.

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

The directional gain “DG” is calculated as following table.

<CDD Modes>

	Ant. 1 (dBi)	Ant. 2 (dBi)	DG for Power (dBi)	DG for PSD (dBi)	Power Limit Reduction (dB)	PSD Limit Reduction (dB)
2.4 GHz	-2.60	-6.80	-2.60	-1.44	0.00	0.00

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

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

4 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Hygrometer	Testo	DTM-303A	TP157075	N/A	Nov. 05, 2018	Jun. 11, 2019~ Jun. 24, 2019	Nov. 04, 2019	Conducted (TH05-HY)
Power Sensor	DARE	RPR3006W	16I00054SNO10	10MHz~6GHz	Dec. 19, 2018	Jun. 11, 2019~ Jun. 24, 2019	Dec. 18 2019	Conducted (TH05-HY)
Signal Analyzer	Rohde & Schwarz	FSV40	101397	10Hz~40GHz	Nov. 13, 2018	Jun. 11, 2019~ Jun. 24, 2019	Nov. 12, 2019	Conducted (TH05-HY)
Switch Box & RF Cable	Burgeon	ETF-058	EC1208382	N/A	Mar. 27, 2019	Jun. 11, 2019~ Jun. 24, 2019	Mar. 26, 2020	Conducted (TH05-HY)
AC Power Source	ChainTek	APC-1000W	N/A	N/A	N/A	Jun. 21, 2019	N/A	Conduction (CO05-HY)
EMI Test Receiver	Rohde & Schwarz	ESR3	102388	9kHz~3.6GHz	Nov. 12, 2018	Jun. 21, 2019	Nov. 11, 2019	Conduction (CO05-HY)
Hygrometer	Testo	608-H1	34913912	N/A	Mar. 19, 2019	Jun. 21, 2019	Mar. 18, 2020	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100080	9kHz~30MHz	Nov. 14, 2018	Jun. 21, 2019	Nov. 13, 2019	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100081	9kHz~30MHz	Nov. 09, 2018	Jun. 21, 2019	Nov. 08, 2019	Conduction (CO05-HY)
Software	Rohde & Schwarz	EMC32 V10.30	N/A	N/A	N/A	Jun. 21, 2019	N/A	Conduction (CO05-HY)
LF Cable	HUBER + SUHNER	RG-214/U	LF01	N/A	Dec. 31, 2018	Jun. 21, 2019	Dec. 30, 2019	Conduction (CO05-HY)
Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100851	N/A	Dec. 31, 2018	Jun. 21, 2019	Dec. 30, 2019	Conduction (CO05-HY)
Loop Antenna	Rohde & Schwarz	HFH2-Z2	100488	9 kHz~30 MHz	Jan. 07, 2019	Jun. 25, 2019~ Jun. 29, 2019	Jan. 06, 2020	Radiation (03CH11-HY)
Bilog Antenna	TESEQ	CBL 6111D &N-6-06	35414&AT-N0602	30MHz~1GHz	Oct. 13, 2018	Jun. 25, 2019~ Jun. 29, 2019	Oct. 12, 2019	Radiation (03CH11-HY)
Horn Antenna	SCHWARZBECK	BBHA 9120 D	9120D-1326	1GHz ~ 18GHz	Oct. 30, 2018	Jun. 25, 2019~ Jun. 29, 2019	Oct. 29, 2019	Radiation (03CH11-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170584	18GHz- 40GHz	Dec. 05, 2018	Jun. 25, 2019~ Jun. 29, 2019	Dec. 04, 2019	Radiation (03CH11-HY)
Amplifier	SONOMA	310N	187312	9kHz~1GHz	Dec. 04, 2018	Jun. 25, 2019~ Jun. 29, 2019	Dec. 03, 2019	Radiation (03CH11-HY)
Preamplifier	Jet-Power	JPA0118-55-303	1710001800055007	1GHz~18GHz	Apr. 01, 2019	Jun. 25, 2019~ Jun. 29, 2019	Mar. 31, 2020	Radiation (03CH11-HY)
Preamplifier	Keysight	83017A	MY53270080	1GHz~26.5GHz	Nov. 14, 2018	Jun. 25, 2019~ Jun. 29, 2019	Nov. 13, 2020	Radiation (03CH11-HY)
Amplifier	MITEQ	TTA1840-35-HG	1871923	18GHz~40GHz, VSWR : 2.5:1 max	Jul. 16, 2018	Jun. 25, 2019~ Jun. 29, 2019	Jul. 15, 2019	Radiation (03CH11-HY)
Spectrum Analyzer	Keysight	N9010A	MY54200486	10Hz ~ 44GHz	Oct. 19, 2018	Jun. 25, 2019~ Jun. 29, 2019	Oct. 18, 2019	Radiation (03CH11-HY)

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Hygrometer	TECPEL	DTN-303B	TP140325	N/A	Nov. 05, 2018	Jun. 25, 2019~ Jun. 29, 2019	Nov. 04, 2019	Radiation (03CH11-HY)
Filter	Wainwright	WLK4-1000-1530-8000-40SS	SN11	1G Low Pass	Sep. 16, 2018	Jun. 25, 2019~ Jun. 29, 2019	Sep. 17, 2019	Radiation (03CH11-HY)
Filter	Wainwright	WHKX12-2700-3000-18000-60SS	SN3	2.7G High Pass	Sep. 16, 2018	Jun. 25, 2019~ Jun. 29, 2019	Sep. 17, 2019	Radiation (03CH11-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY9837/4PE	9kHz-30MHz	Mar. 13, 2019	Jun. 25, 2019~ Jun. 29, 2019	Mar. 12, 2020	Radiation (03CH11-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	MY2859/2	30MHz-40GHz	Mar. 13, 2019	Jun. 25, 2019~ Jun. 29, 2019	Mar. 12, 2020	Radiation (03CH11-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY9837/4PE	30M-18G	Mar. 13, 2019	Jun. 25, 2019~ Jun. 29, 2019	Mar. 12, 2020	Radiation (03CH11-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	MY4274/2	30MHz-40GHz	Mar. 13, 2019	Jun. 25, 2019~ Jun. 29, 2019	Mar. 12, 2020	Radiation (03CH11-HY)
Controller	EMEC	EM 1000	N/A	Control Turn table & Ant Mast	N/A	Jun. 25, 2019~ Jun. 29, 2019	N/A	Radiation (03CH11-HY)
Antenna Mast	EMEC	AM-BS-4500-B	N/A	1~4m	N/A	Jun. 25, 2019~ Jun. 29, 2019	N/A	Radiation (03CH11-HY)
Turn Table	EMEC	TT 2000	N/A	0~360 Degree	N/A	Jun. 25, 2019~ Jun. 29, 2019	N/A	Radiation (03CH11-HY)
Software	Audix	E3 6.2009-8-24	RK-001042	N/A	N/A	Jun. 25, 2019~ Jun. 29, 2019	N/A	Radiation (03CH11-HY)

5 Uncertainty of Evaluation

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	2.20

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	5.20

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	5.50

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	5.20

Appendix A. Test Result of Conducted Test Items

Test Engineer:	Leo Li	Temperature:	21~25	°C
Test Date:	2019/6/7~2019/7/5	Relative Humidity:	51~54	%

TEST RESULTS DATA
6dB and 99% Occupied Bandwidth

2.4GHz Band										
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	99% Occupied BW (MHz)		6dB BW (MHz)		6dB BW Limit (MHz)	Pass/Fail
					Ant 1	Ant 2	Ant 1	Ant 2		
11b	1Mbps	2	1	2412	13.69	13.94	8.55	9.01	0.50	Pass
11b	1Mbps	2	6	2437	13.94	13.89	8.57	8.57	0.50	Pass
11b	1Mbps	2	11	2462	13.89	13.94	8.55	9.03	0.50	Pass
11b	1Mbps	2	12	2467	13.89	13.94	8.57	8.57	0.50	Pass
11b	1Mbps	2	13	2472	13.59	13.69	8.53	8.53	0.50	Pass
11g	6Mbps	2	1	2412	16.68	16.63	15.29	15.13	0.50	Pass
11g	6Mbps	2	6	2437	16.93	16.78	16.04	15.29	0.50	Pass
11g	6Mbps	2	11	2462	16.83	16.73	15.31	16.30	0.50	Pass
11g	6Mbps	2	12	2467	16.78	16.73	16.04	15.90	0.50	Pass
11g	6Mbps	2	13	2472	16.63	16.63	15.68	15.68	0.50	Pass
HT20	MCS0	2	1	2412	17.83	17.78	15.41	15.62	0.50	Pass
HT20	MCS0	2	6	2437	18.03	17.88	16.92	17.14	0.50	Pass
HT20	MCS0	2	11	2462	17.93	17.83	16.78	16.30	0.50	Pass
HT20	MCS0	2	12	2467	17.93	17.83	15.41	16.90	0.50	Pass
HT20	MCS0	2	13	2472	17.83	17.78	15.64	16.92	0.50	Pass

Report Number : FR940901-03C

TEST RESULTS DATA
Average Output Power

2.4GHz Band																
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Average Conducted Power (dBm)			Conducted Power Limit (dBm)		DG (dBi)		EIRP Power (dBm)		EIRP Power Limit (dBm)		Pass /Fail
					Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	
11b	1Mbps	1	1	2412	12.50	13.10	-	30.00	30.00	-2.60	-6.80	9.90	6.30	36.00	36.00	Pass
11b	1Mbps	1	6	2437	12.50	13.00		30.00	30.00	-2.60	-6.80	9.90	6.20	36.00	36.00	Pass
11b	1Mbps	1	11	2462	12.30	13.00		30.00	30.00	-2.60	-6.80	9.70	6.20	36.00	36.00	Pass
11b	1Mbps	1	12	2467	12.20	13.10		30.00	30.00	-2.60	-6.80	9.60	6.30	36.00	36.00	Pass
11b	1Mbps	1	13	2472	10.30	10.70		30.00	30.00	-2.60	-6.80	7.70	3.90	36.00	36.00	Pass
11g	6Mbps	1	1	2412	8.60	8.40		30.00	30.00	-2.60	-6.80	6.00	1.60	36.00	36.00	Pass
11g	6Mbps	1	6	2437	12.30	13.10		30.00	30.00	-2.60	-6.80	9.70	6.30	36.00	36.00	Pass
11g	6Mbps	1	11	2462	12.40	13.10		30.00	30.00	-2.60	-6.80	9.80	6.30	36.00	36.00	Pass
11g	6Mbps	1	12	2467	11.00	10.90		30.00	30.00	-2.60	-6.80	8.40	4.10	36.00	36.00	Pass
11g	6Mbps	1	13	2472	-0.50	-0.60		30.00	30.00	-2.60	-6.80	-3.10	-7.40	36.00	36.00	Pass
HT20	MCS0	1	1	2412	3.00	2.90		30.00	30.00	-2.60	-6.80	0.40	-3.90	36.00	36.00	Pass
HT20	MCS0	1	6	2437	12.20	13.20		30.00	30.00	-2.60	-6.80	9.60	6.40	36.00	36.00	Pass
HT20	MCS0	1	11	2462	12.30	13.10		30.00	30.00	-2.60	-6.80	9.70	6.30	36.00	36.00	Pass
HT20	MCS0	1	12	2467	9.00	9.00		30.00	30.00	-2.60	-6.80	6.40	2.20	36.00	36.00	Pass
HT20	MCS0	1	13	2472	-1.20	-1.50		30.00	30.00	-2.60	-6.80	-3.80	-8.30	36.00	36.00	Pass
11b	1Mbps	2	1	2412	12.70	13.30	16.02	30.00		-2.60		13.42		36.00		Pass
11b	1Mbps	2	6	2437	12.60	13.10	15.87	30.00		-2.60		13.27		36.00		Pass
11b	1Mbps	2	11	2462	12.40	13.20	15.83	30.00		-2.60		13.23		36.00		Pass
11b	1Mbps	2	12	2467	12.50	13.20	15.87	30.00		-2.60		13.27		36.00		Pass
11b	1Mbps	2	13	2472	10.40	10.80	13.61	30.00		-2.60		11.01		36.00		Pass
11g	6Mbps	2	1	2412	8.70	8.50	11.61	30.00		-2.60		9.01		36.00		Pass
11g	6Mbps	2	6	2437	12.40	13.20	15.83	30.00		-2.60		13.23		36.00		Pass
11g	6Mbps	2	11	2462	12.50	13.20	15.87	30.00		-2.60		13.27		36.00		Pass
11g	6Mbps	2	12	2467	11.10	11.00	14.06	30.00		-2.60		11.46		36.00		Pass
11g	6Mbps	2	13	2472	-0.40	-0.50	2.56	30.00		-2.60		-0.04		36.00		Pass
HT20	MCS0	2	1	2412	3.10	3.00	6.06	30.00		-2.60		3.46		36.00		Pass
HT20	MCS0	2	6	2437	12.30	13.30	15.84	30.00		-2.60		13.24		36.00		Pass
HT20	MCS0	2	11	2462	12.40	13.20	15.83	30.00		-2.60		13.23		36.00		Pass
HT20	MCS0	2	12	2467	9.10	9.10	12.11	30.00		-2.60		9.51		36.00		Pass
HT20	MCS0	2	13	2472	-1.10	-1.40	1.76	30.00		-2.60		-0.84		36.00		Pass

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

Report Number : FR940901-03C

TEST RESULTS DATA
Peak Power Spectral Density

2.4GHz Band												
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Peak PSD (dBm/3kHz)			DG (dBi)		Peak PSD Limit (dBm/3kHz)		Pass/Fail
					Ant 1	Ant 2	Worse + 3.01	Ant 1	Ant 2	Ant 1	Ant 2	
11b	1Mbps	2	1	2412	-9.21	-8.95	-5.94	-1.44		8.00		Pass
11b	1Mbps	2	6	2437	-9.33	-9.27	-6.26	-1.44		8.00		Pass
11b	1Mbps	2	11	2462	-9.07	-9.78	-6.06	-1.44		8.00		Pass
11b	1Mbps	2	12	2467	-8.64	-8.64	-5.63	-1.44		8.00		Pass
11b	1Mbps	2	13	2472	-10.99	-11.83	-7.98	-1.44		8.00		Pass
11g	6Mbps	2	1	2412	-13.45	-16.11	-10.44	-1.44		8.00		Pass
11g	6Mbps	2	6	2437	-10.25	-11.79	-7.24	-1.44		8.00		Pass
11g	6Mbps	2	11	2462	-9.88	-11.27	-6.87	-1.44		8.00		Pass
11g	6Mbps	2	12	2467	-12.26	-12.55	-9.25	-1.44		8.00		Pass
11g	6Mbps	2	13	2472	-24.19	-23.76	-20.75	-1.44		8.00		Pass
HT20	MCS0	2	1	2412	-19.08	-20.20	-16.07	-1.44		8.00		Pass
HT20	MCS0	2	6	2437	-11.09	-10.81	-7.80	-1.44		8.00		Pass
HT20	MCS0	2	11	2462	-10.10	-10.20	-7.09	-1.44		8.00		Pass
HT20	MCS0	2	12	2467	-15.45	-14.08	-11.07	-1.44		8.00		Pass
HT20	MCS0	2	13	2472	-23.71	-25.74	-20.70	-1.44		8.00		Pass

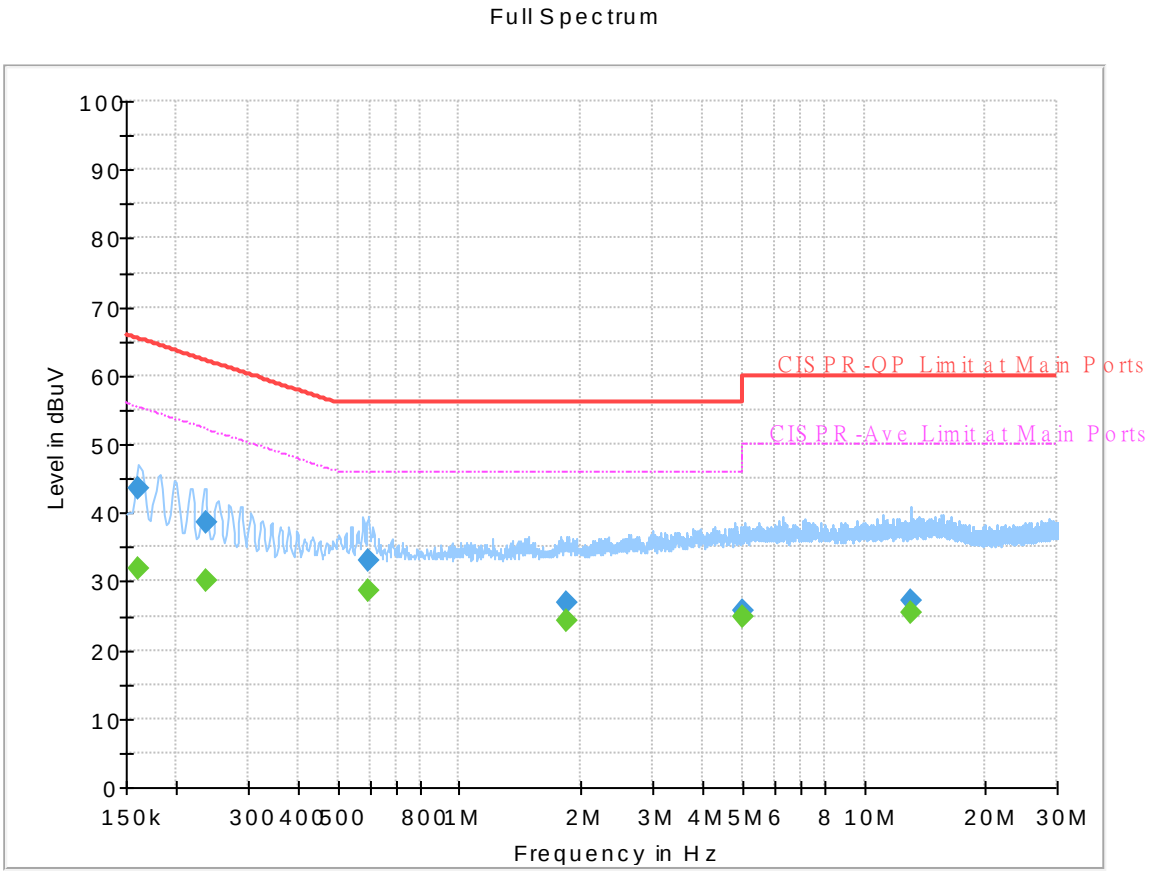
Measured power density (dBm) has offset with cable loss.

Appendix B. AC Conducted Emission Test Results

Test Engineer :	Jimmy Chang	**Temperature :**	24~26℃
		Relative Humidity :	51~53%

EUT Information

Report NO :	940901-03
Test Mode :	Mode 1
Test Voltage :	120Vac/60Hz
Phase :	Line

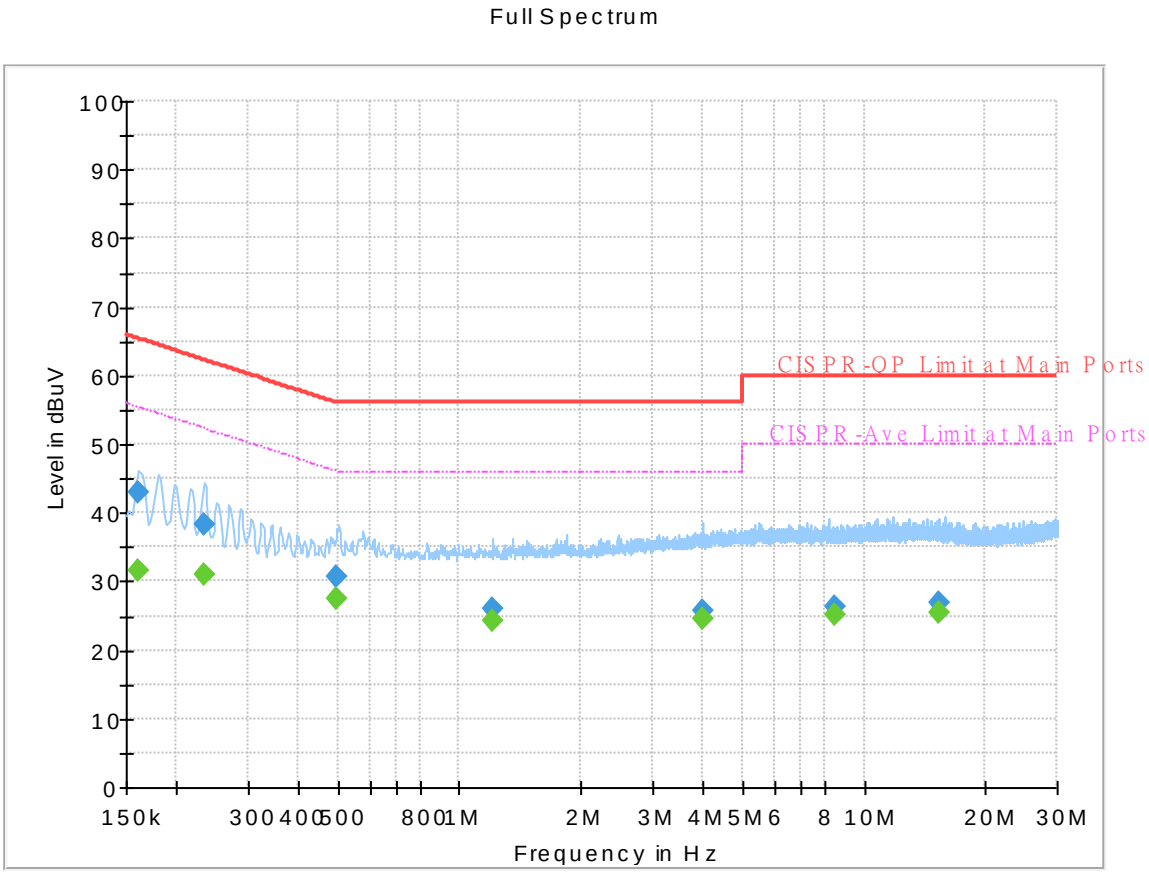


Final_Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.161250	---	31.93	55.40	23.47	L1	OFF	19.5
0.161250	43.49	---	65.40	21.91	L1	OFF	19.5
0.235500	---	30.16	52.25	22.09	L1	OFF	19.5
0.235500	38.73	---	62.25	23.52	L1	OFF	19.5
0.595500	---	28.76	46.00	17.24	L1	OFF	19.5
0.595500	33.14	---	56.00	22.86	L1	OFF	19.5
1.837500	---	24.36	46.00	21.64	L1	OFF	19.6
1.837500	26.76	---	56.00	29.24	L1	OFF	19.6
5.005500	---	24.87	50.00	25.13	L1	OFF	19.7
5.005500	25.82	---	60.00	34.18	L1	OFF	19.7
12.993000	---	25.50	50.00	24.50	L1	OFF	20.0
12.993000	27.25	---	60.00	32.75	L1	OFF	20.0

EUT Information

Report NO :	940901-03
Test Mode :	Mode 1
Test Voltage :	120Vac/60Hz
Phase :	Neutral



Final_Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.161250	---	31.54	55.40	23.86	N	OFF	19.5
0.161250	42.99	---	65.40	22.41	N	OFF	19.5
0.233250	---	30.88	52.33	21.45	N	OFF	19.5
0.233250	38.42	---	62.33	23.91	N	OFF	19.5
0.498750	---	27.56	46.02	18.46	N	OFF	19.5
0.498750	30.61	---	56.02	25.41	N	OFF	19.5
1.209750	---	24.23	46.00	21.77	N	OFF	19.6
1.209750	26.16	---	56.00	29.84	N	OFF	19.6
3.984000	---	24.61	46.00	21.39	N	OFF	19.7
3.984000	25.79	---	56.00	30.21	N	OFF	19.7
8.499750	---	25.07	50.00	24.93	N	OFF	19.9
8.499750	26.29	---	60.00	33.71	N	OFF	19.9
15.315000	---	25.34	50.00	24.66	N	OFF	20.1
15.315000	27.03	---	60.00	32.97	N	OFF	20.1

Appendix C. Radiated Spurious Emission

Test Engineer :	HAO Xu, Fu Chen, and Troye Hsieh	Temperature :	21~25°C
		Relative Humidity :	50~56%

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. 1+2		(MHz)	(dBμV/m)	Limit (dB)	Line (dBμV/m)	Level (dBμV)	Factor (dB/m)	Loss (dB)	Factor (dB)	Pos (cm)	Pos (deg)	Avg. (P/A)	(H/V)
802.11b CH 01 2412MHz		2379.3	52.06	-21.94	74	41.58	27.48	16.63	33.63	100	58	P	H
		2390	42.4	-11.6	54	31.95	27.44	16.64	33.63	100	58	A	H
	*	2412	104.06	-	-	93.64	27.38	16.66	33.62	100	58	P	H
	*	2412	96.66	-	-	86.24	27.38	16.66	33.62	100	58	A	H
													H
		2344.755	52.16	-21.84	74	41.6	27.62	16.59	33.65	109	94	P	V
		2315.775	41.35	-12.65	54	30.72	27.74	16.55	33.66	109	94	A	V
	*	2412	97.17	-	-	86.75	27.38	16.66	33.62	109	94	P	V
	*	2412	93.99	-	-	83.57	27.38	16.66	33.62	109	94	P	V
													V
802.11b CH 06 2437MHz		2362.64	53.17	-20.83	74	42.65	27.55	16.61	33.64	100	58	P	H
		2310.32	41.38	-12.62	54	30.73	27.76	16.55	33.66	100	58	A	H
	*	2437	104.66	-	-	94.25	27.33	16.69	33.61	100	58	P	H
	*	2437	101.47	-	-	91.06	27.33	16.69	33.61	100	58	P	H
		2493.52	51.7	-22.3	74	41.24	27.3	16.75	33.59	100	58	P	H
		2486.48	41.44	-12.56	54	30.99	27.3	16.74	33.59	100	58	A	H
		2320.08	52.47	-21.53	74	41.84	27.72	16.56	33.65	100	150	P	V
		2313.2	41.37	-12.63	54	30.73	27.75	16.55	33.66	100	150	A	V
	*	2437	98.38	-	-	87.97	27.33	16.69	33.61	100	150	P	V
	*	2437	95.17	-	-	84.76	27.33	16.69	33.61	100	150	P	V
		2488.88	51.86	-22.14	74	41.41	27.3	16.74	33.59	100	150	P	V
		2486.88	41.33	-12.67	54	30.88	27.3	16.74	33.59	100	150	A	V

802.11b CH 11 2462MHz	*	2462	104.91	-	-	94.49	27.3	16.72	33.6	113	47	P	H
	*	2462	101.75	-	-	91.33	27.3	16.72	33.6	113	47	A	H
		2484.32	52.45	-21.55	74	42.01	27.3	16.74	33.6	113	47	P	H
		2485.44	41.58	-12.42	54	31.14	27.3	16.74	33.6	113	47	A	H
													H
													H
	*	2462	98.98	-	-	88.56	27.3	16.72	33.6	100	105	P	V
	*	2462	95.79	-	-	85.37	27.3	16.72	33.6	100	105	A	V
		2495	52.19	-21.81	74	41.73	27.3	16.75	33.59	100	105	P	V
		2487.4	41.34	-12.66	54	30.89	27.3	16.74	33.59	100	105	A	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

WIFI Ant.	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
1+2		(MHz)	(dBµV/m)	(dB)	(dBµV/m)	(dBµV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11b CH 12 2467MHz	*	2467	104.52	-	-	94.1	27.3	16.72	33.6	144	32	P	H
	*	2467	101.59	-	-	91.17	27.3	16.72	33.6	144	32	A	H
		2484.12	53.59	-20.41	74	43.15	27.3	16.74	33.6	144	32	P	H
		2484.2	44.35	-9.65	54	33.91	27.3	16.74	33.6	144	32	A	H
													H
													H
	*	2467	98.97	-	-	88.55	27.3	16.72	33.6	100	104	P	V
	*	2467	95.77	-	-	85.35	27.3	16.72	33.6	100	104	A	V
		2486.16	52.71	-21.29	74	42.26	27.3	16.74	33.59	100	104	P	V
		2484.04	42.47	-11.53	54	32.03	27.3	16.74	33.6	100	104	A	V
													V
													V
802.11b CH 13 2472MHz	*	2472	103.14	-	-	92.71	27.3	16.73	33.6	135	48	P	H
	*	2472	99.96	-	-	89.53	27.3	16.73	33.6	135	48	A	H
		2483.52	54.95	-19.05	74	44.51	27.3	16.74	33.6	135	48	P	H
		2483.52	45.69	-8.31	54	35.25	27.3	16.74	33.6	135	48	A	H
													H
													H
	*	2472	96.87	-	-	86.44	27.3	16.73	33.6	100	105	P	V
	*	2472	93.6	-	-	83.17	27.3	16.73	33.6	100	105	A	V
		2498	52.38	-21.62	74	41.92	27.3	16.75	33.59	100	105	P	V
		2486.72	42.57	-11.43	54	32.12	27.3	16.74	33.59	100	105	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.	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
1+2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11b CH 01 2412MHz		4824	37.05	-36.95	74	54.09	31.1	11.02	59.16	100	0	P	H
													H
													H
													H
		4824	36.84	-37.16	74	53.88	31.1	11.02	59.16	100	0	P	V
													V
													V
													V
802.11b CH 06 2437MHz		4874	36.86	-37.14	74	53.92	31.05	11.06	59.17	100	0	P	H
		7311	41.72	-32.28	74	50.72	36.52	13.66	59.18	100	0	P	H
													H
													H
		4874	36.94	-37.06	74	54	31.05	11.06	59.17	100	0	P	V
		7311	40.98	-33.02	74	49.98	36.52	13.66	59.18	100	0	P	V
													V
													V
802.11b CH 11 2462MHz		4924	37.57	-36.43	74	54.52	31.14	11.09	59.18	100	0	P	H
		7386	41.1	-32.9	74	50.21	36.46	13.58	59.15	100	0	P	H
													H
													H
		4924	37.62	-36.38	74	54.57	31.14	11.09	59.18	100	0	P	V
		7386	40.09	-33.91	74	49.2	36.46	13.58	59.15	100	0	P	V
													V
													V

Remark

1. No other spurious found.
2. All results are PASS against Peak and Average limit line.

WIFI Ant.	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
1+2		(MHz)	(dBµV/m)	(dB)	(dBµV/m)	(dBµV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11b CH 12 2467MHz		4934	38.58	-35.42	74	55.47	31.2	11.1	59.19	100	0	P	H
		7401	40.54	-33.46	74	49.72	36.4	13.56	59.14	100	0	P	H
													H
													H
		4934	38.17	-35.83	74	55.06	31.2	11.1	59.19	100	0	P	V
		7401	40.57	-33.43	74	49.75	36.4	13.56	59.14	100	0	P	V
													V
													V
802.11b CH 13 2472MHz		4944	39.06	-34.94	74	55.88	31.26	11.11	59.19	100	0	P	H
		7416	41.15	-32.85	74	50.26	36.43	13.59	59.13	100	0	P	H
													H
													H
		4944	38.13	-35.87	74	54.95	31.26	11.11	59.19	100	0	P	V
		7416	41.72	-32.28	74	50.83	36.43	13.59	59.13	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	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant. 1+2		(MHz)	(dBμV/m)	Limit (dB)	Line (dBμV/m)	Level (dBμV)	Factor (dB/m)	Loss (dB)	Factor (dB)	Pos (cm)	Pos (deg)	Avg. (P/A)	(H/V)
802.11g CH 01 2412MHz		2329.425	53.05	-20.95	74	42.45	27.68	16.57	33.65	119	17	P	H
		2314.83	41.43	-12.57	54	30.8	27.74	16.55	33.66	119	17	A	H
	*	2412	102.29	-	-	91.87	27.38	16.66	33.62	119	17	P	H
	*	2412	94.23	-	-	83.81	27.38	16.66	33.62	119	17	A	H
													H
													H
		2352	52.75	-21.25	74	42.21	27.59	16.59	33.64	395	128	P	V
		2316.3	41.41	-12.59	54	30.79	27.73	16.55	33.66	395	128	A	V
	*	2412	97.48	-	-	87.06	27.38	16.66	33.62	395	128	P	V
	*	2412	89.16	-	-	78.74	27.38	16.66	33.62	395	128	A	V
													V
													V
802.11g CH 06 2437MHz		2310.48	53.42	-20.58	74	42.77	27.76	16.55	33.66	140	46	P	H
		2390	41.49	-12.51	54	31.04	27.44	16.64	33.63	140	46	A	H
	*	2437	105.72	-	-	95.31	27.33	16.69	33.61	140	46	P	H
	*	2437	97.85	-	-	87.44	27.33	16.69	33.61	140	46	A	H
		2486.96	52.07	-21.93	74	41.62	27.3	16.74	33.59	140	46	P	H
		2484.56	41.93	-12.07	54	31.49	27.3	16.74	33.6	140	46	A	H
		2316.88	52.15	-21.85	74	41.53	27.73	16.55	33.66	388	127	P	V
		2310.8	41.4	-12.6	54	30.75	27.76	16.55	33.66	388	127	A	V
	*	2437	102.17	-	-	91.76	27.33	16.69	33.61	388	127	P	V
	*	2437	93.94	-	-	83.53	27.33	16.69	33.61	388	127	A	V
		2484.64	51.82	-22.18	74	41.38	27.3	16.74	33.6	388	127	P	V
		2485.12	41.44	-12.56	54	31	27.3	16.74	33.6	388	127	A	V

802.11g CH 11 2462MHz	*	2462	105.95	-	-	95.53	27.3	16.72	33.6	145	29	P	H
	*	2462	98.04	-	-	87.62	27.3	16.72	33.6	145	29	A	H
		2487.8	55.12	-18.88	74	44.67	27.3	16.74	33.59	145	29	P	H
		2483.52	43.32	-10.68	54	32.88	27.3	16.74	33.6	145	29	A	H
													H
													H
	*	2462	100.73	-	-	90.31	27.3	16.72	33.6	370	75	P	V
	*	2462	93.17	-	-	82.75	27.3	16.72	33.6	370	75	A	V
		2492.2	53.2	-20.8	74	42.74	27.3	16.75	33.59	370	75	P	V
		2485.36	41.7	-12.3	54	31.26	27.3	16.74	33.6	370	75	A	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

WIFI Ant.	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
1+2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11g CH 12 2467MHz	*	2467	102.77	-	-	92.35	27.3	16.72	33.6	100	38	P	H
	*	2467	95.62	-	-	85.2	27.3	16.72	33.6	100	38	A	H
		2483.56	60.75	-13.25	74	50.31	27.3	16.74	33.6	100	38	P	H
		2483.52	48.99	-5.01	54	38.55	27.3	16.74	33.6	100	38	A	H
													H
													H
	*	2467	98.61	-	-	88.19	27.3	16.72	33.6	369	76	P	V
	*	2467	90.98	-	-	80.56	27.3	16.72	33.6	369	76	A	V
		2485.68	54.43	-19.57	74	43.99	27.3	16.74	33.6	369	76	P	V
		2485.2	43.56	-10.44	54	33.12	27.3	16.74	33.6	369	76	A	V
													V
													V
802.11g CH 13 2472MHz	*	2472	90.17	-	-	79.74	27.3	16.73	33.6	293	323	P	H
	*	2472	82.13	-	-	71.7	27.3	16.73	33.6	293	323	A	H
		2483.84	60.4	-13.6	74	49.96	27.3	16.74	33.6	293	323	P	H
		2483.52	48.93	-5.07	54	38.49	27.3	16.74	33.6	293	323	A	H
													H
													H
	*	2472	93.1	-	-	82.67	27.3	16.73	33.6	219	59	P	V
	*	2472	85.42	-	-	74.99	27.3	16.73	33.6	219	59	A	V
		2483.84	63.15	-10.85	74	52.71	27.3	16.74	33.6	219	59	P	V
		2483.76	50.05	-3.95	54	39.61	27.3	16.74	33.6	219	59	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 (Harmonic @ 3m)

WIFI Ant.	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
1+2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11g CH 01 2412MHz		4824	36.6	-37.4	74	53.64	31.1	11.02	59.16	100	0	P	H
													H
													H
													H
		4824	38.02	-35.98	74	55.06	31.1	11.02	59.16	100	0	P	V
													V
													V
													V
802.11g CH 06 2437MHz		4874	36.95	-37.05	74	54.01	31.05	11.06	59.17	100	0	P	H
		7311	40.89	-33.11	74	49.89	36.52	13.66	59.18	100	0	P	H
													H
													H
		4874	36.8	-37.2	74	53.86	31.05	11.06	59.17	100	0	P	V
		7311	40.64	-33.36	74	49.64	36.52	13.66	59.18	100	0	P	V
													V
													V
802.11g CH 11 2462MHz		4924	37.13	-36.87	74	54.08	31.14	11.09	59.18	100	0	P	H
		7386	40.4	-33.6	74	49.51	36.46	13.58	59.15	100	0	P	H
													H
													H
		4924	38	-36	74	54.95	31.14	11.09	59.18	100	0	P	V
		7386	40.36	-33.64	74	49.47	36.46	13.58	59.15	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

WIFI Ant.	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
1+2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11g CH 12 2467MHz		4934	37.5	-36.5	74	54.39	31.2	11.1	59.19	100	0	P	H
		7401	40.91	-33.09	74	50.09	36.4	13.56	59.14	100	0	P	H
													H
													H
		4934	37.58	-36.42	74	54.47	31.2	11.1	59.19	100	0	P	V
		7401	40.48	-33.52	74	49.66	36.4	13.56	59.14	100	0	P	V
													V
													V
802.11g CH 13 2472MHz		4944	38.06	-35.94	74	54.88	31.26	11.11	59.19	100	0	P	H
		7416	40.73	-33.27	74	49.84	36.43	13.59	59.13	100	0	P	H
													H
													H
		4944	38.07	-35.93	74	54.89	31.26	11.11	59.19	100	0	P	V
		7416	40.94	-33.06	74	50.05	36.43	13.59	59.13	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	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant. 1+2		(MHz)	(dBμV/m)	Limit (dB)	Line (dBμV/m)	Level (dBμV)	Factor (dB/m)	Loss (dB)	Factor (dB)	Pos (cm)	Pos (deg)	Avg. (P/A)	(H/V)
802.11n HT20 CH 01 2412MHz		2349.9	52.28	-21.72	74	41.73	27.6	16.59	33.64	124	47	P	H
		2313.255	41.4	-12.6	54	30.76	27.75	16.55	33.66	124	47	A	H
	*	2412	95.55	-	-	85.13	27.38	16.66	33.62	124	47	P	H
	*	2412	87.33	-	-	76.91	27.38	16.66	33.62	124	47	A	H
													H
													H
		2355.99	52.39	-21.61	74	41.85	27.58	16.6	33.64	343	109	P	V
		2321.235	41.37	-12.63	54	30.74	27.72	16.56	33.65	343	109	A	V
	*	2412	91.19	-	-	80.77	27.38	16.66	33.62	343	109	P	V
	*	2412	82.96	-	-	72.54	27.38	16.66	33.62	343	109	A	V
													V
													V
802.11n HT20 CH 06 2437MHz		2387.6	52.14	-21.86	74	41.68	27.45	16.64	33.63	100	48	P	H
		2390	41.69	-12.31	54	31.24	27.44	16.64	33.63	100	48	A	H
	*	2437	104.85	-	-	94.44	27.33	16.69	33.61	100	48	P	H
	*	2437	96.82	-	-	86.41	27.33	16.69	33.61	100	48	A	H
		2487.84	52.93	-21.07	74	42.48	27.3	16.74	33.59	100	48	P	H
		2484.32	42.24	-11.76	54	31.8	27.3	16.74	33.6	100	48	A	H
		2312.24	53.29	-20.71	74	42.65	27.75	16.55	33.66	338	106	P	V
		2314.16	41.39	-12.61	54	30.76	27.74	16.55	33.66	338	106	A	V
	*	2437	100.09	-	-	89.68	27.33	16.69	33.61	338	106	P	V
	*	2437	92.14	-	-	81.73	27.33	16.69	33.61	338	106	A	V
		2495.84	52.07	-21.93	74	41.61	27.3	16.75	33.59	338	106	P	V
		2485.44	41.51	-12.49	54	31.07	27.3	16.74	33.6	338	106	A	V

	*	2462	104.46	-	-	94.04	27.3	16.72	33.6	113	48	P	H
	*	2462	96.58	-	-	86.16	27.3	16.72	33.6	113	48	A	H
		2484.08	53.75	-20.25	74	43.31	27.3	16.74	33.6	113	48	P	H
		2483.52	43.96	-10.04	54	33.52	27.3	16.74	33.6	113	48	A	H
802.11n													H
HT20													H
CH 11	*	2462	99.09	-	-	88.67	27.3	16.72	33.6	333	104	P	V
2462MHz	*	2462	90.77	-	-	80.35	27.3	16.72	33.6	333	104	A	V
		2484.92	52.18	-21.82	74	41.74	27.3	16.74	33.6	333	104	P	V
		2483.52	42.12	-11.88	54	31.68	27.3	16.74	33.6	333	104	A	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

WIFI Ant.	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
1+2		(MHz)	(dBµV/m)	(dB)	(dBµV/m)	(dBµV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
	*	2467	101.04	-	-	90.62	27.3	16.72	33.6	113	48	P	H
	*	2467	93	-	-	82.58	27.3	16.72	33.6	113	48	A	H
		2483.88	60.79	-13.21	74	50.35	27.3	16.74	33.6	113	48	P	H
		2483.52	48.75	-5.25	54	38.31	27.3	16.74	33.6	113	48	A	H
802.11n													H
HT20													H
CH 12	*	2467	94.58	-	-	84.16	27.3	16.72	33.6	294	101	P	V
2467MHz	*	2467	86.9	-	-	76.48	27.3	16.72	33.6	294	101	A	V
		2483.64	58.09	-15.91	74	47.65	27.3	16.74	33.6	294	101	P	V
		2483.52	44.57	-9.43	54	34.13	27.3	16.74	33.6	294	101	A	V
													V
													V
	*	2472	87.55	-	-	77.12	27.3	16.73	33.6	295	339	P	H
	*	2472	79.6	-	-	69.17	27.3	16.73	33.6	295	339	A	H
		2483.52	58	-16	74	47.56	27.3	16.74	33.6	295	339	P	H
		2483.52	47.07	-6.93	54	36.63	27.3	16.74	33.6	295	339	A	H
802.11n													H
HT20													H
CH 13	*	2472	90.63	-	-	80.2	27.3	16.73	33.6	219	56	P	V
2472MHz	*	2472	83.32	-	-	72.89	27.3	16.73	33.6	219	56	A	V
		2483.52	60.72	-13.28	74	50.28	27.3	16.74	33.6	219	56	P	V
		2483.52	50	-4	54	39.56	27.3	16.74	33.6	219	56	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.	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
1+2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11n HT20 CH 01 2412MHz		4824	36.43	-37.57	74	53.47	31.1	11.02	59.16	100	0	P	H
													H
													H
													H
		4824	36.75	-37.25	74	53.79	31.1	11.02	59.16	100	0	P	V
													V
													V
													V
802.11n HT20 CH 06 2437MHz		4874	37.18	-36.82	74	54.24	31.05	11.06	59.17	100	0	P	H
		7311	40.59	-33.41	74	49.59	36.52	13.66	59.18	100	0	P	H
													H
													H
		4874	37.67	-36.33	74	54.73	31.05	11.06	59.17	100	0	P	V
		7311	40.82	-33.18	74	49.82	36.52	13.66	59.18	100	0	P	V
													V
													V
802.11n HT20 CH 11 2462MHz		4924	37.51	-36.49	74	54.46	31.14	11.09	59.18	100	0	P	H
		7386	40.32	-33.68	74	49.43	36.46	13.58	59.15	100	0	P	H
													H
													H
		4924	37.32	-36.68	74	54.27	31.14	11.09	59.18	100	0	P	V
		7386	40.91	-33.09	74	50.02	36.46	13.58	59.15	100	0	P	V
													V
													V

Remark

1. No other spurious found.
2. All results are PASS against Peak and Average limit line.

WIFI Ant.	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
1+2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11n HT20 CH 12 2467MHz		4934	38.08	-35.92	74	54.97	31.2	11.1	59.19	100	0	P	H
		7401	40.91	-33.09	74	50.09	36.4	13.56	59.14	100	0	P	H
													H
													H
		4934	38.12	-35.88	74	55.01	31.2	11.1	59.19	100	0	P	V
		7401	40.5	-33.5	74	49.68	36.4	13.56	59.14	100	0	P	V
													V
													V
802.11n HT20 CH 13 2472MHz		4944	37.62	-36.38	74	54.44	31.26	11.11	59.19	100	0	P	H
		7416	41.06	-32.94	74	50.17	36.43	13.59	59.13	100	0	P	H
													H
													H
		4944	37.81	-36.19	74	54.63	31.26	11.11	59.19	100	0	P	V
		7416	40.69	-33.31	74	49.8	36.43	13.59	59.13	100	0	P	V
													V
													V

Remark

1. No other spurious found.
2. All results are PASS against Peak and Average limit line.

Emission below 1GHz

2.4GHz WIFI 802.11g (LF)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant. 1+2		(MHz)	(dBμV/m)	Limit (dB)	Line (dBμV/m)	Level (dBμV)	Factor (dB/m)	Loss (dB)	Factor (dB)	Pos (cm)	Pos (deg)	Avg. (P/A)	(H/V)
2.4GHz 802.11g LF		97.9	23.65	-19.85	43.5	39.19	15.45	1.33	32.32	-	-	P	H
		142.52	30.96	-12.54	43.5	44.54	17.11	1.6	32.29	-	-	P	H
		177.44	29.26	-14.24	43.5	44.71	14.93	1.88	32.26	-	-	P	H
		810.85	30.77	-15.23	46	30.48	28.16	3.95	31.82	-	-	P	H
		856.44	32.33	-13.67	46	30.57	29.25	4.09	31.58	-	-	P	H
		958.29	33.59	-12.41	46	29.13	30.93	4.34	30.81	100	0	P	H
													H
													H
													H
													H
													H
													H
		40.67	30.18	-9.82	40	43.01	18.7	0.84	32.37	100	0	P	V
		105.66	26.79	-16.71	43.5	41.24	16.49	1.38	32.32	-	-	P	V
		176.47	29.85	-13.65	43.5	45.25	14.99	1.87	32.26	-	-	P	V
		734.22	30.47	-15.53	46	31.17	27.58	3.76	32.04	-	-	P	V
		853.53	32.15	-13.85	46	30.48	29.19	4.08	31.6	-	-	P	V
		957.32	33.46	-12.54	46	29.05	30.89	4.34	30.82	-	-	P	V
													V
													V
													V
													V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against limit line.												

Note symbol

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

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

WIFI Ant.	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
1+2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11b CH 01 2412MHz		2390	55.45	-18.55	74	54.51	32.22	4.58	35.86	103	308	P	H
		2390	43.54	-10.46	54	42.6	32.22	4.58	35.86	103	308	A	H

1. 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 D. Radiated Spurious Emission Plots

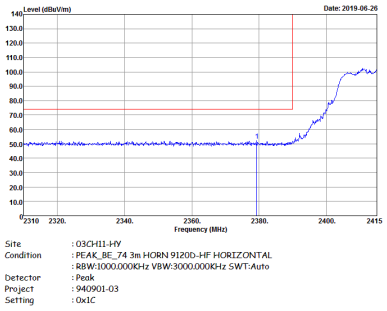
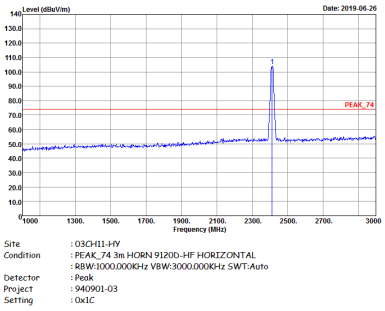
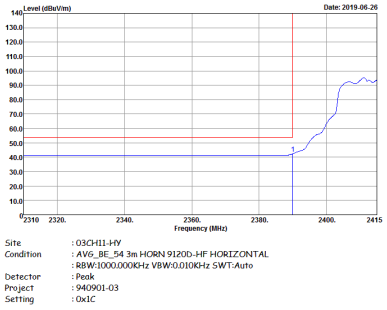
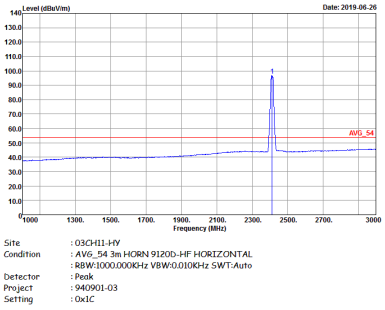
Test Engineer :	HAO Xu, Fu Chen, and Troye Hsieh	**Temperature :**	21~25°C
		Relative Humidity :	50~56%

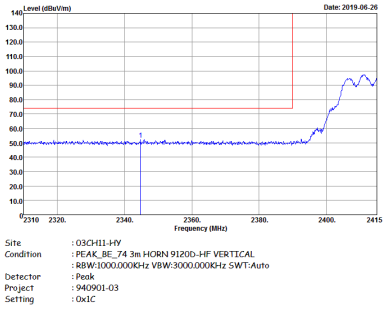
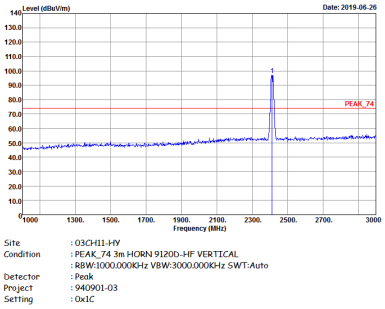
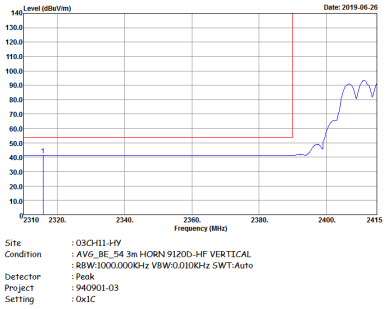
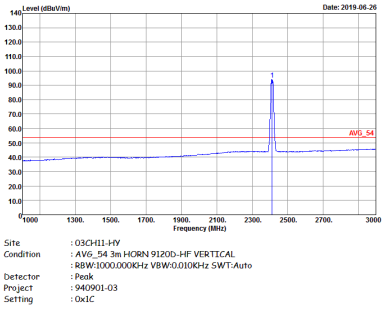
Note symbol

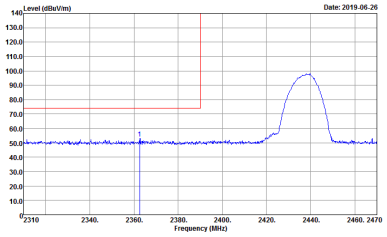
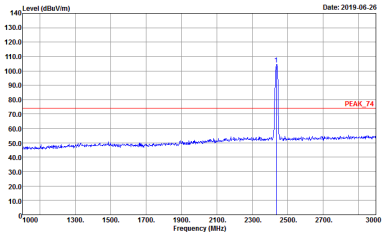
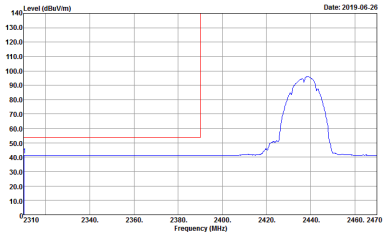
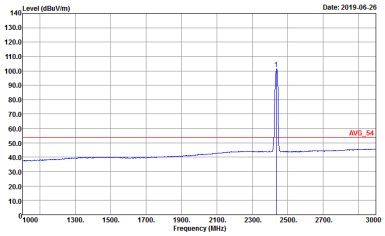
-L	**Low channel location**
-R	**High channel location**

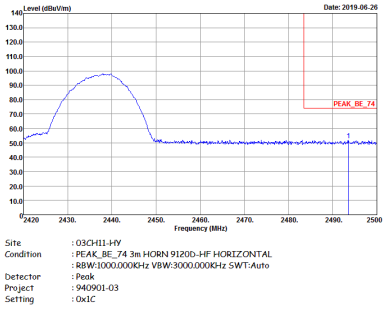
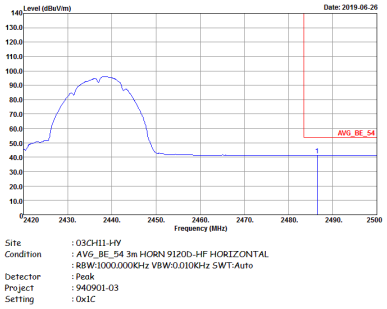
2.4GHz 2400~2483.5MHz

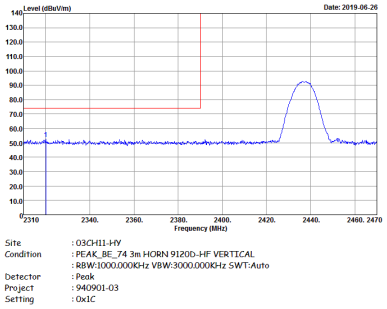
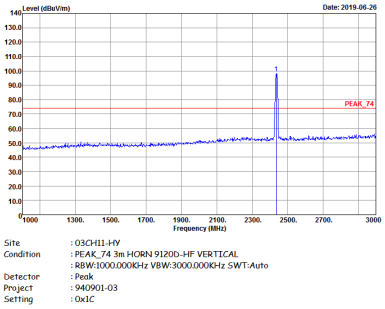
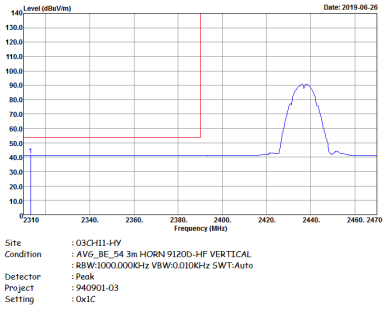
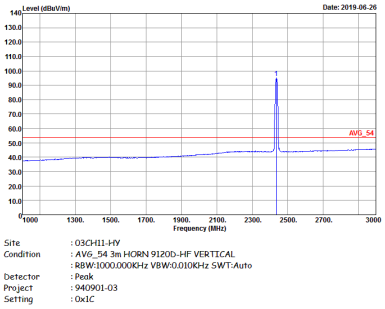
WIFI 802.11b (Band Edge @ 3m)

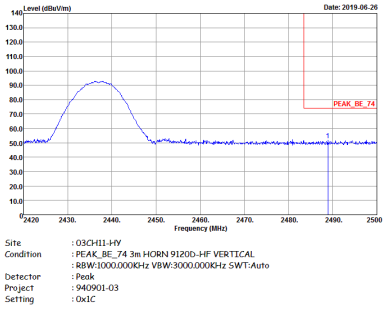
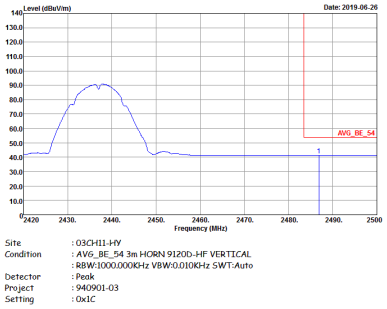
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH01 2412MHz	
1+2	Horizontal	Fundamental
Peak		
Avg.		

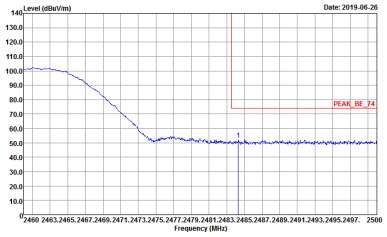
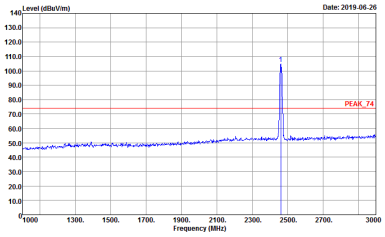
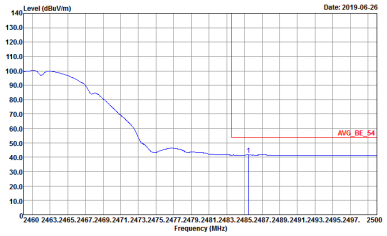
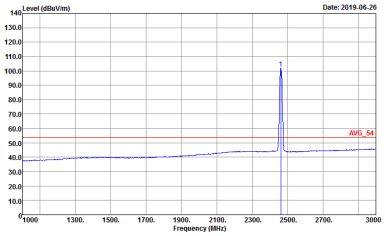
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH01 2412MHz	
1+2	Vertical	Fundamental
Peak		
Avg.		

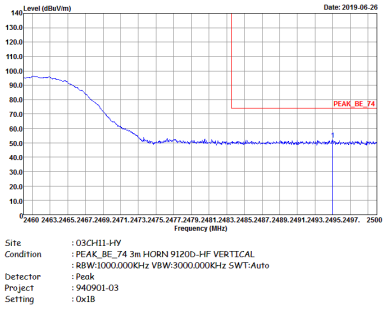
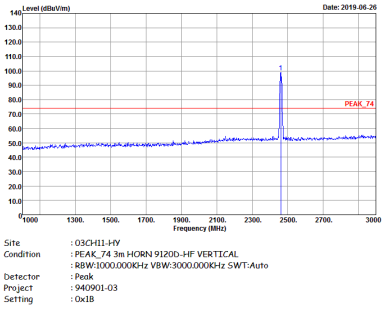
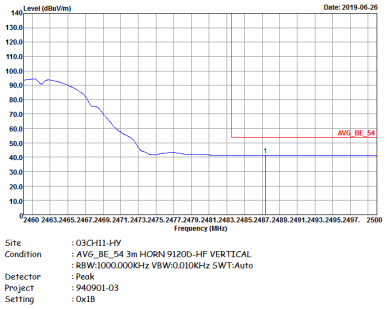
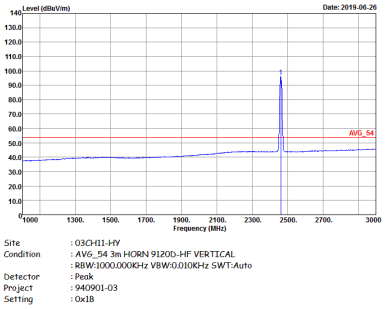
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH06 2437MHz - L	
1+2	Horizontal	Fundamental
Peak	 Site : 03CH11-HY Condition : PEAK_BE_74 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 940901-03 Setting : 0x1C	 Site : 03CH11-HY Condition : PEAK_74 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 940901-03 Setting : 0x1C
Avg.	 Site : 03CH11-HY Condition : AVG_BE_54 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak Project : 940901-03 Setting : 0x1C	 Site : 03CH11-HY Condition : AVG_54 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak Project : 940901-03 Setting : 0x1C

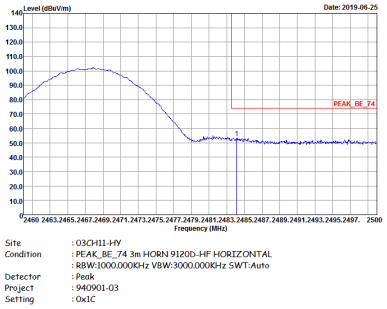
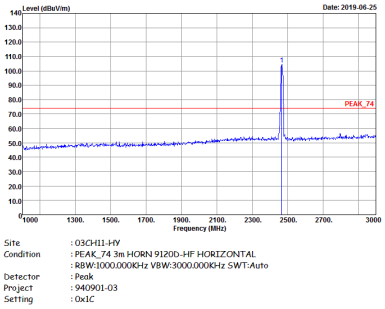
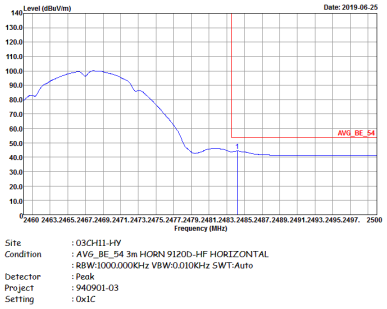
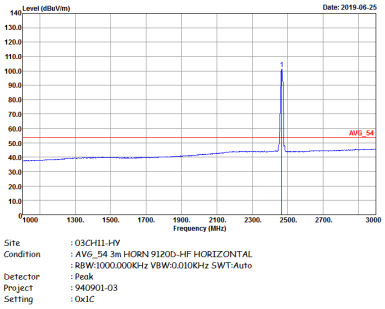
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH06 2437MHz - R	
1+2	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

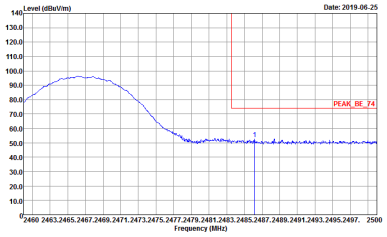
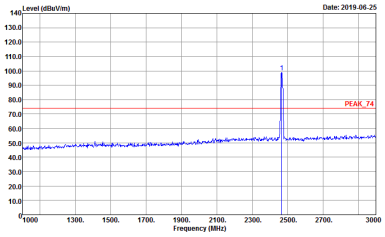
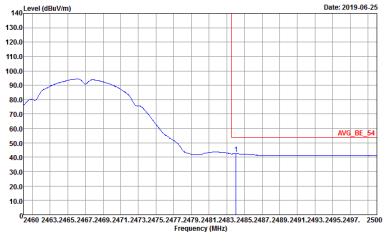
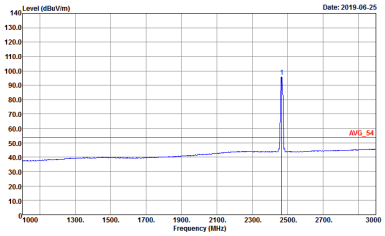
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH06 2437MHz - L	
1+2	Vertical	Fundamental
Peak		
Avg.		

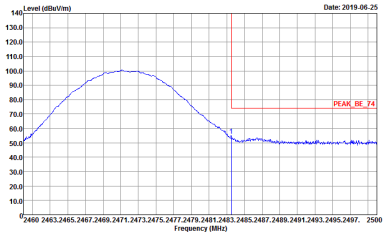
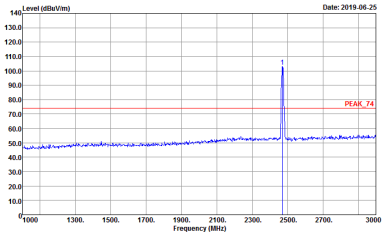
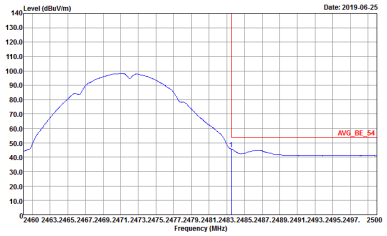
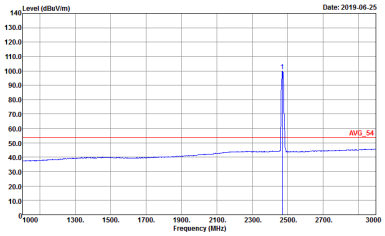
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH06 2437MHz - R	
1+2	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

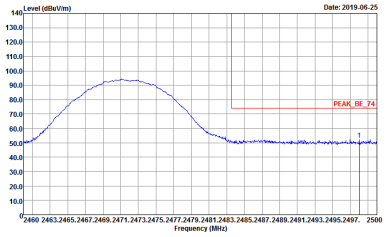
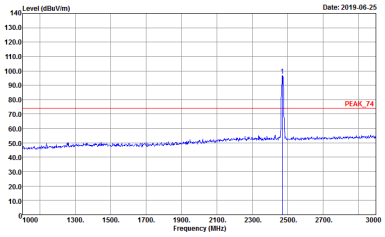
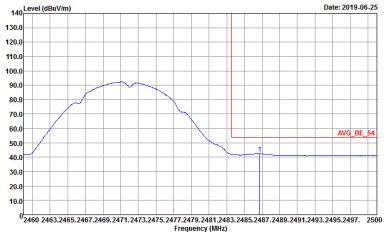
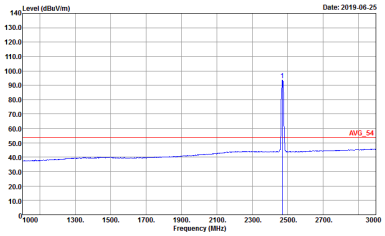
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH11 2462MHz	
1+2	Horizontal	Fundamental
Peak	 Site : 03CH11-HY Condition : PEAK_BE_74 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 940901-03 Setting : 0x1B	 Site : 03CH11-HY Condition : PEAK_74 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 940901-03 Setting : 0x1B
Avg.	 Site : 03CH11-HY Condition : AVG_BE_54 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak Project : 940901-03 Setting : 0x1B	 Site : 03CH11-HY Condition : AVG_54 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak Project : 940901-03 Setting : 0x1B

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH11 2462MHz	
1+2	Vertical	Fundamental
Peak		
Avg.		

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH12 2467MHz	
1+2	Horizontal	Fundamental
Peak		
Avg.		

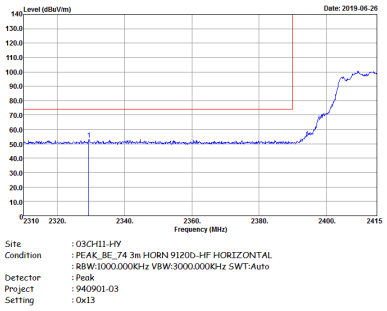
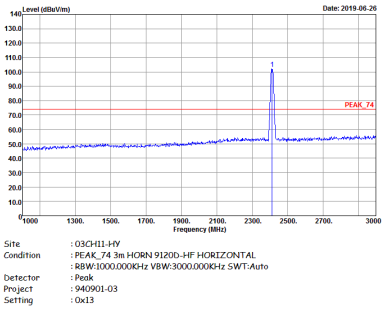
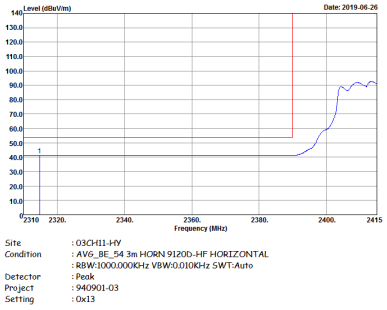
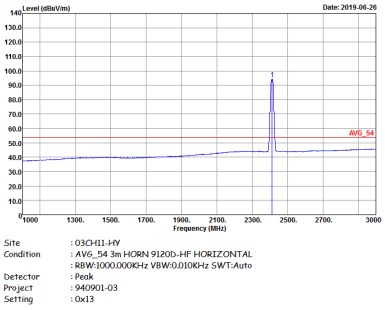
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH12 2467MHz	
1+2	Vertical	Fundamental
Peak	 Site : 03CH11-HY Condition : PEAK_BE_74 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 940901-03 Setting : 0x1C	 Site : 03CH11-HY Condition : PEAK_74 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 940901-03 Setting : 0x1C
Avg.	 Site : 03CH11-HY Condition : AVG_BE_54 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak Project : 940901-03 Setting : 0x1C	 Site : 03CH11-HY Condition : AVG_54 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak Project : 940901-03 Setting : 0x1C

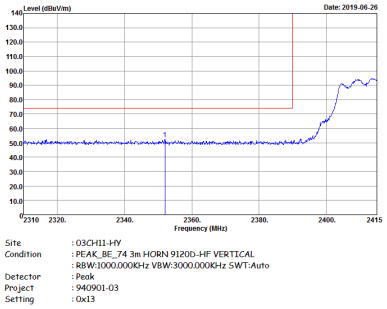
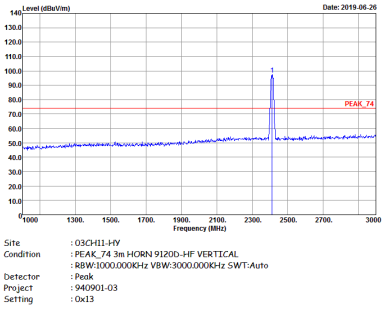
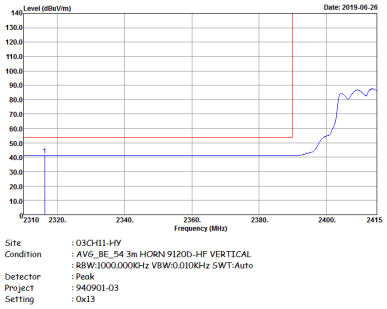
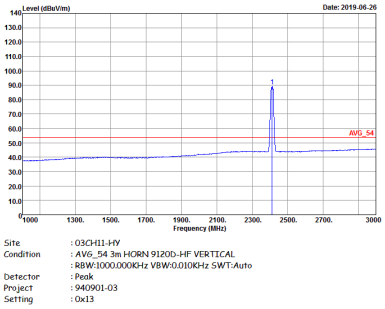
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH13 2472MHz	
1+2	Horizontal	Fundamental
Peak	 Site : 03CH11-HY Condition : PEAK_BE_74 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 940901-03 Setting : 0x17	 Site : 03CH11-HY Condition : PEAK_74 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 940901-03 Setting : 0x17
Avg.	 Site : 03CH11-HY Condition : AVG_BE_54 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak Project : 940901-03 Setting : 0x17	 Site : 03CH11-HY Condition : AVG_54 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak Project : 940901-03 Setting : 0x17

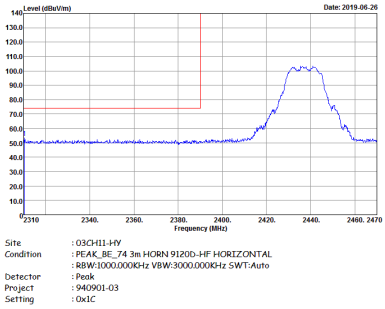
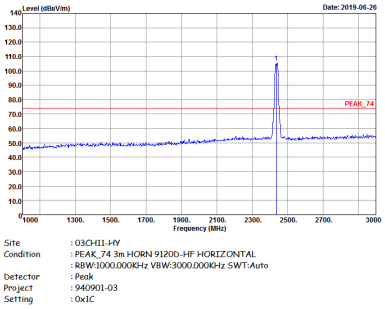
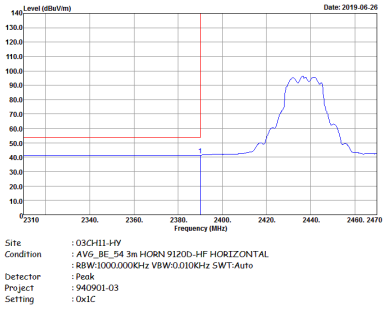
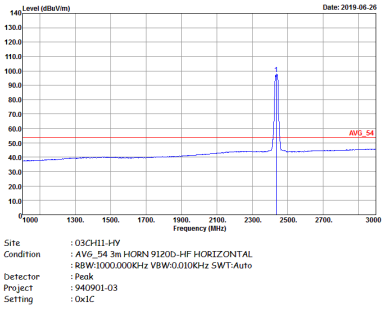
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH13 2472MHz	
1+2	Vertical	Fundamental
Peak	 Site : 03CH11-HY Condition : PEAK_BE_74 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 940901-03 Setting : 0x17	 Site : 03CH11-HY Condition : PEAK_74 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 940901-03 Setting : 0x17
Avg.	 Site : 03CH11-HY Condition : AVG_BE_54 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak Project : 940901-03 Setting : 0x17	 Site : 03CH11-HY Condition : AVG_54 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak Project : 940901-03 Setting : 0x17

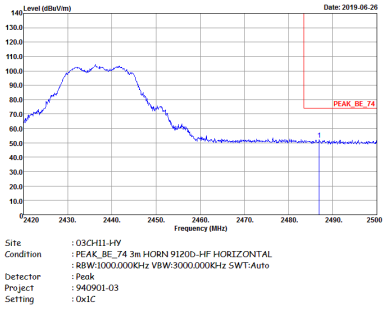
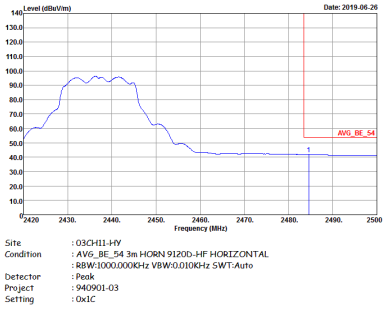
2.4GHz 2400~2483.5MHz

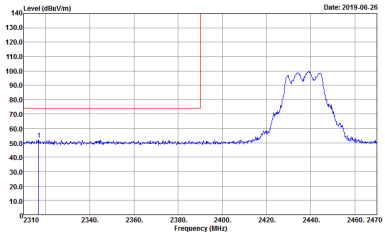
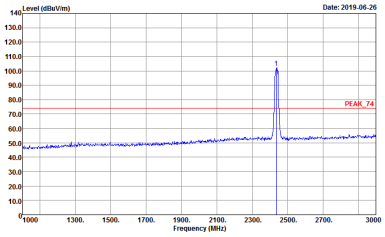
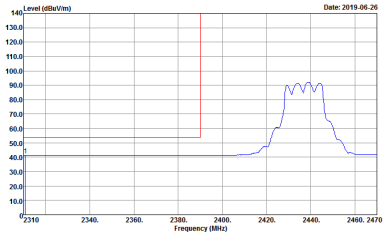
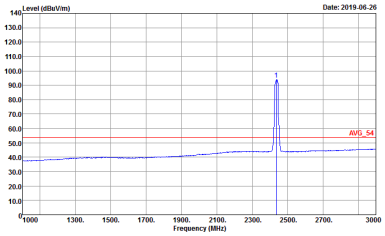
WIFI 802.11g (Band Edge @ 3m)

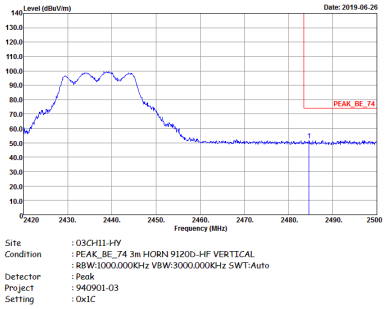
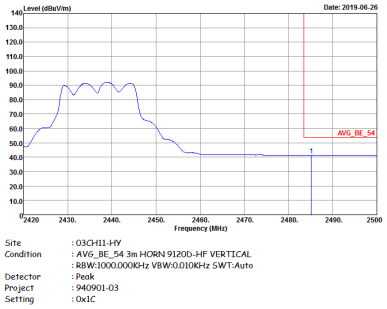
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH01 2412MHz	
1+2	Horizontal	Fundamental
Peak		
Avg.		

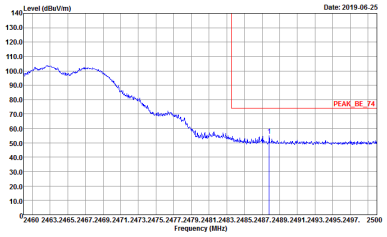
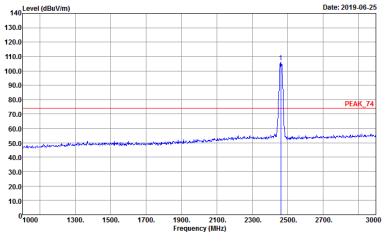
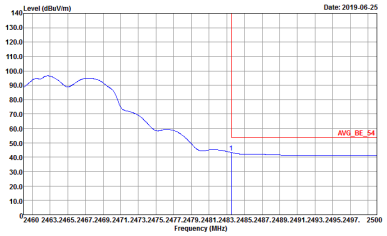
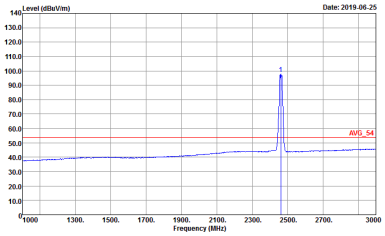
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH01 2412MHz	
1+2	Vertical	Fundamental
Peak		
Avg.		

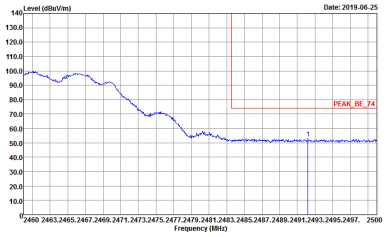
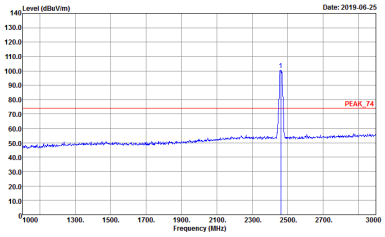
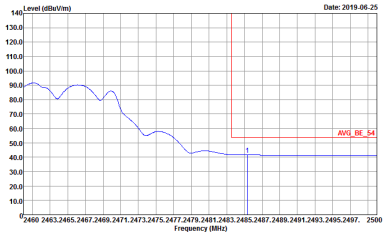
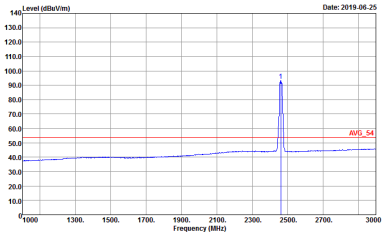
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH06 2437MHz - L	
1+2	Horizontal	Fundamental
Peak		
Avg.		

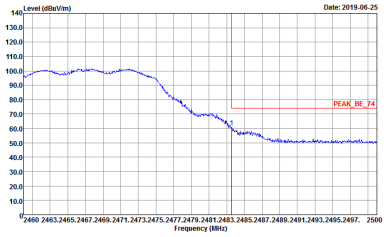
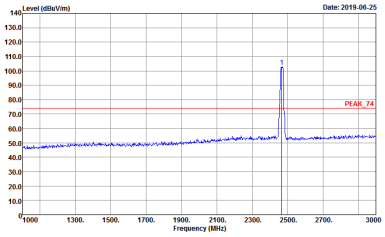
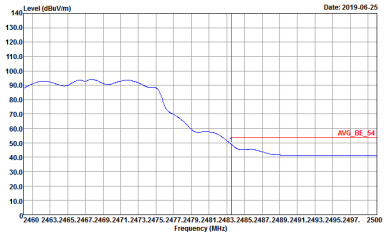
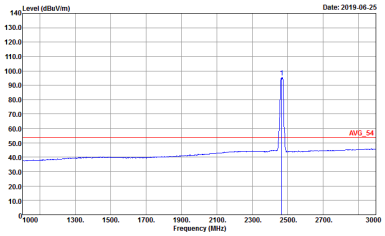
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH06 2437MHz - R	
1+2	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

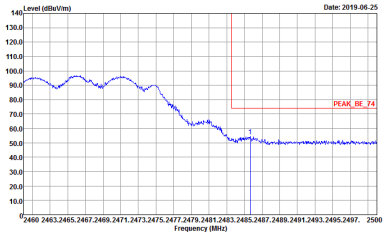
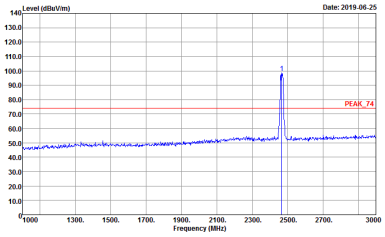
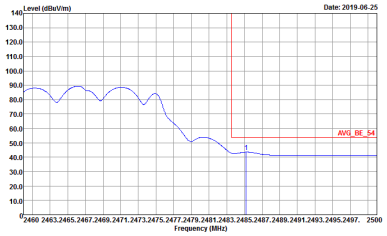
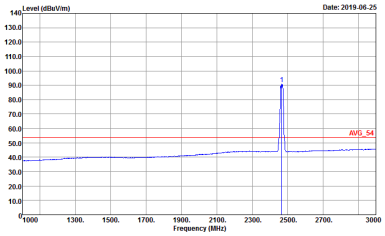
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH06 2437MHz - L	
1+2	Vertical	Fundamental
Peak	 Site : 03CH11-HY Condition : PEAK_BE_74 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 940901-03 Setting : 0x1C	 Site : 03CH11-HY Condition : PEAK_74 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 940901-03 Setting : 0x1C
Avg.	 Site : 03CH11-HY Condition : AVG_BE_54 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak Project : 940901-03 Setting : 0x1C	 Site : 03CH11-HY Condition : AVG_54 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak Project : 940901-03 Setting : 0x1C

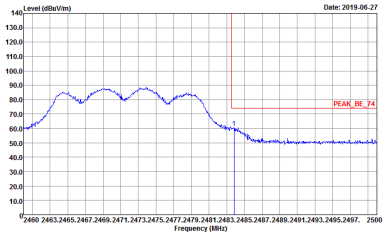
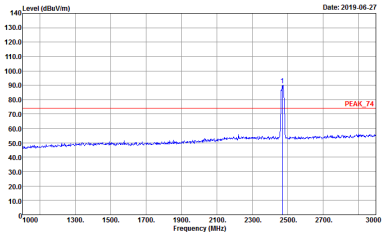
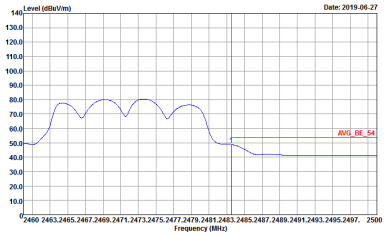
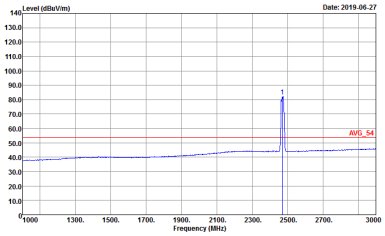
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH06 2437MHz - R	
1+2	Vertical	Fundamental
Peak		Left Blank
Avg.		Left Blank

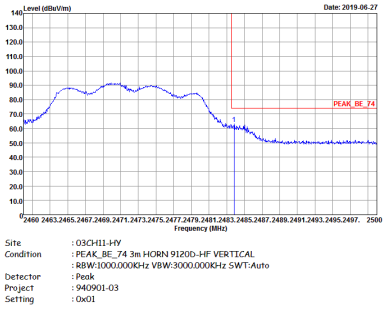
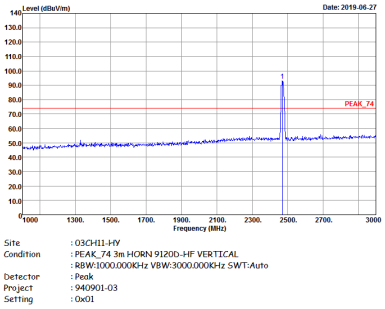
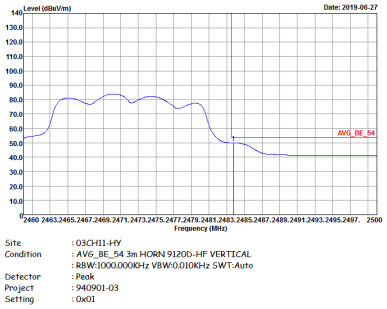
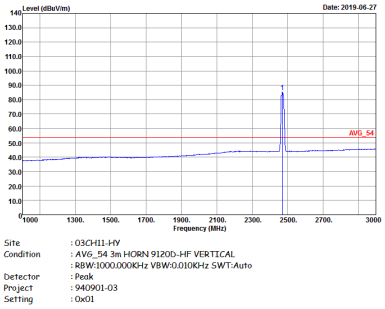
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH11 2462MHz	
1+2	Horizontal	Fundamental
Peak	 Site : 03CH11-HY Condition : PEAK_BE_74 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 940901-03	 Site : 03CH11-HY Condition : PEAK_74 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 940901-03
Avg.	 Site : 03CH11-HY Condition : AVG_BE_54 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak Project : 940901-03	 Site : 03CH11-HY Condition : AVG_54 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak Project : 940901-03

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH11 2462MHz	
1+2	Vertical	Fundamental
Peak	 Site : 03CH11-HY Condition : PEAK_BE_74 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 940901-03	 Site : 03CH11-HY Condition : PEAK_74 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 940901-03
Avg.	 Site : 03CH11-HY Condition : AVG_BE_54 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak Project : 940901-03	 Site : 03CH11-HY Condition : AVG_54 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak Project : 940901-03

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH12 2467MHz	
1+2	Horizontal	Fundamental
Peak	 Site : 03CH11-HY Condition : PEAK_BE_74 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 940901-03	 Site : 03CH11-HY Condition : PEAK_74 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 940901-03
Avg.	 Site : 03CH11-HY Condition : AVG_BE_54 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak Project : 940901-03	 Site : 03CH11-HY Condition : AVG_54 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak Project : 940901-03

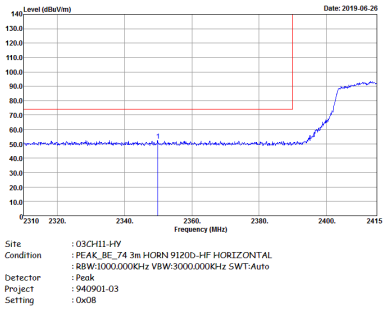
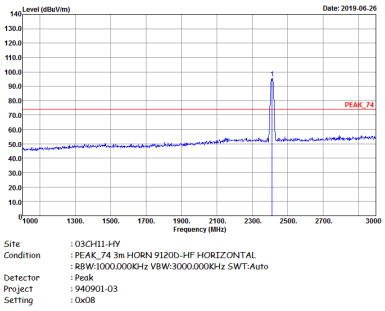
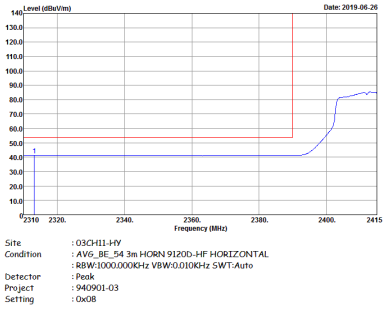
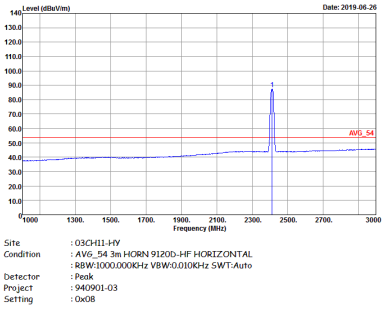
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH12 2467MHz	
1+2	Vertical	Fundamental
Peak	 Site : 03CH11-HY Condition : PEAK_BE_74 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 940901-03	 Site : 03CH11-HY Condition : PEAK_74 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 940901-03
Avg.	 Site : 03CH11-HY Condition : AVG_BE_54 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak Project : 940901-03	 Site : 03CH11-HY Condition : AVG_54 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak Project : 940901-03

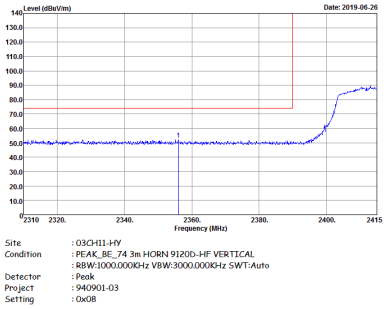
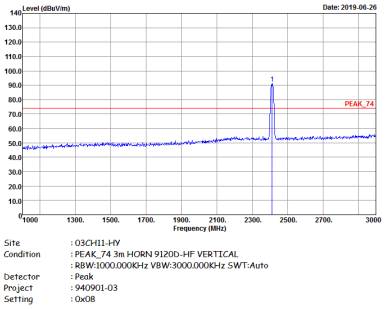
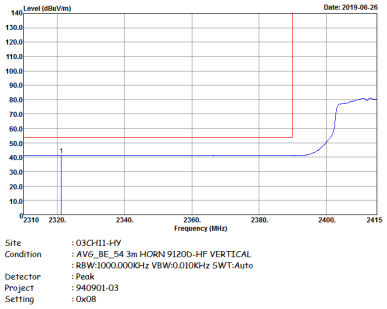
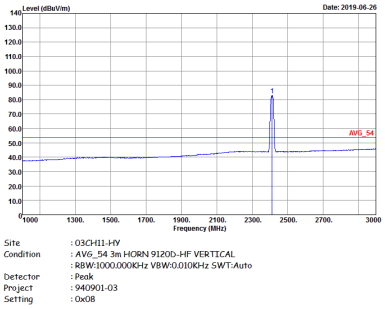
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH13 2472MHz	
1+2	Horizontal	Fundamental
Peak	 Site : 03CH11-HY Condition : PEAK_BE_74 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 940901-03 Setting : 0x01	 Site : 03CH11-HY Condition : PEAK_74 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 940901-03 Setting : 0x01
Avg.	 Site : 03CH11-HY Condition : AVG_BE_54 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak Project : 940901-03 Setting : 0x01	 Site : 03CH11-HY Condition : AVG_54 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak Project : 940901-03 Setting : 0x01

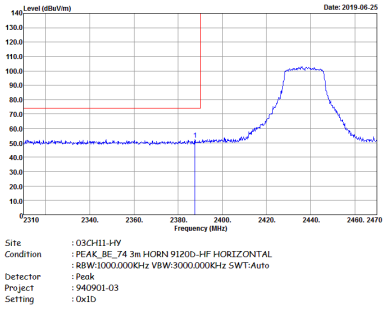
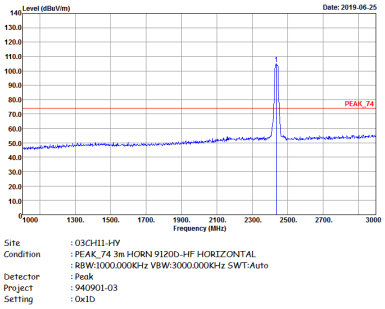
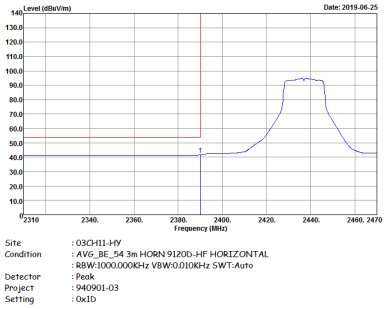
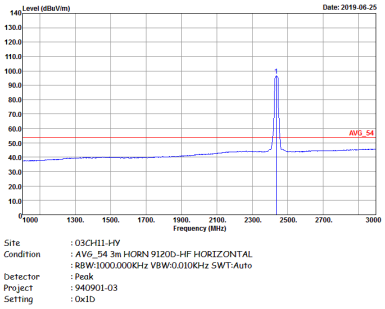
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH13 2472MHz	
1+2	Vertical	Fundamental
Peak		
Avg.		

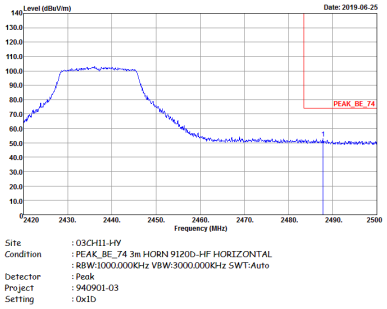
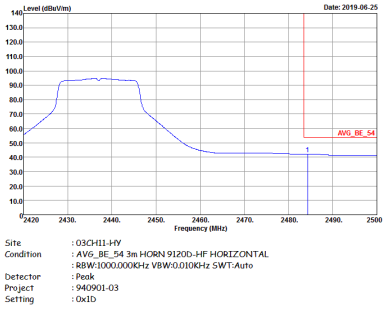
2.4GHz 2400~2483.5MHz

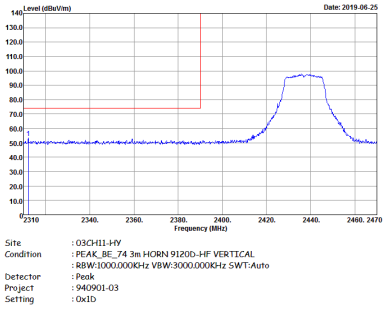
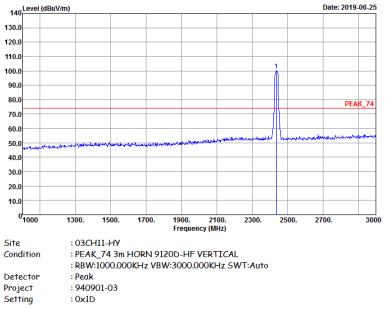
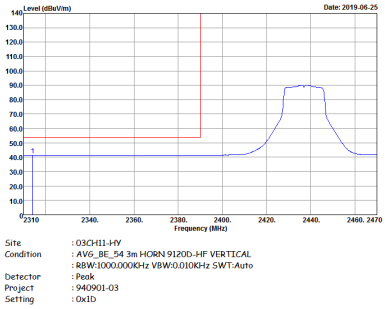
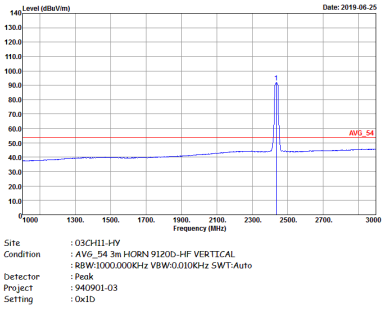
WIFI 802.11n HT20 (Band Edge @ 3m)

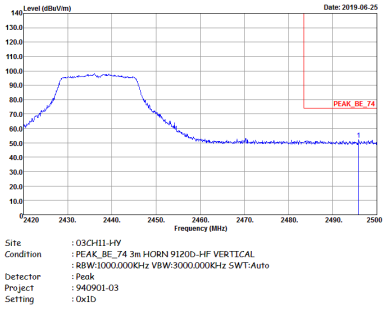
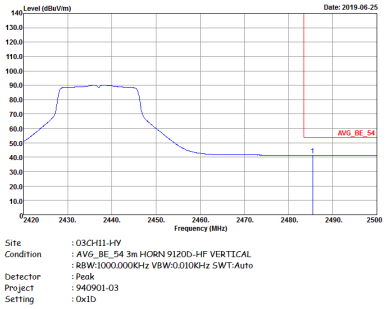
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH01 2412MHz	
1+2	Horizontal	Fundamental
Peak		
Avg.		

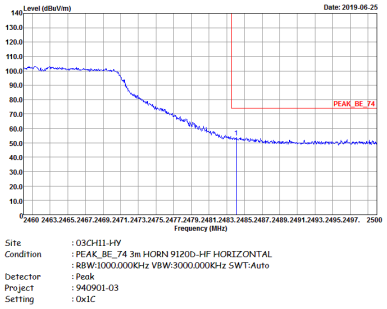
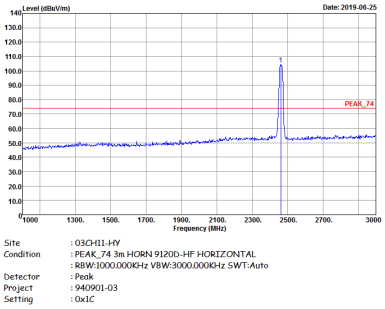
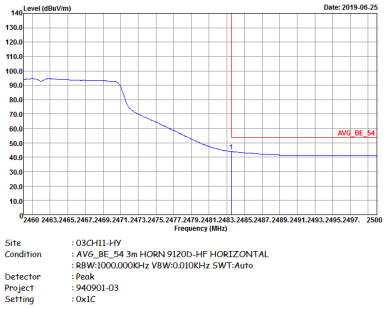
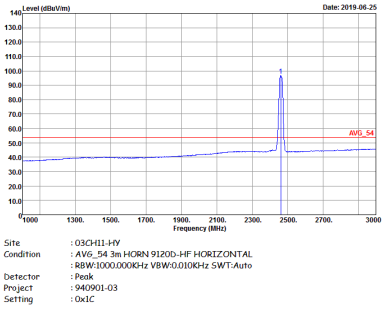
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH01 2412MHz	
1+2	Vertical	Fundamental
Peak		
Avg.		

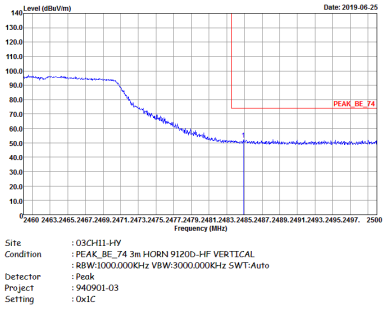
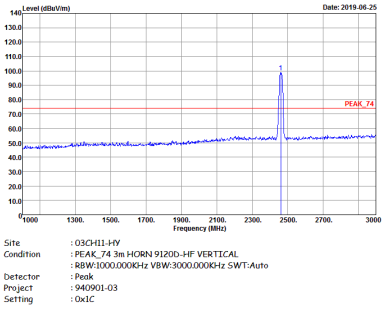
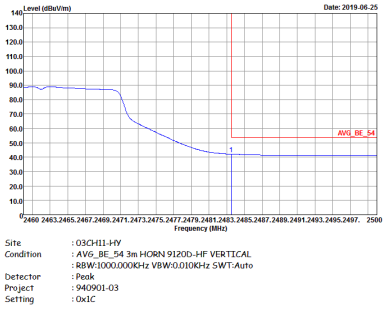
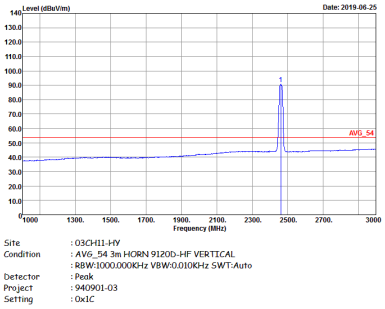
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH06 2437MHz - L	
1+2	Horizontal	Fundamental
Peak		
Avg.		

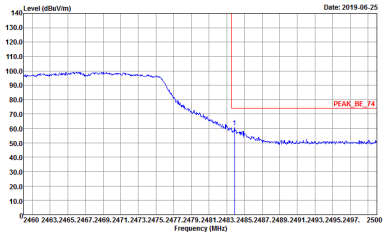
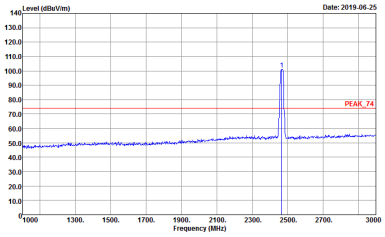
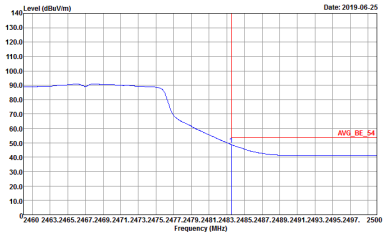
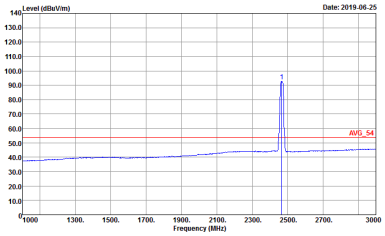
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH06 2437MHz - R	
1+2	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

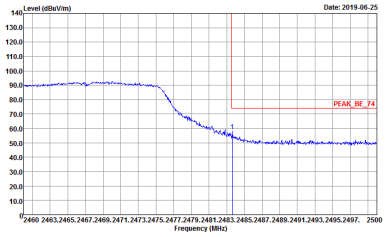
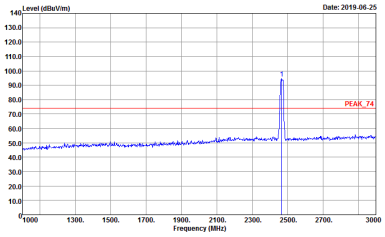
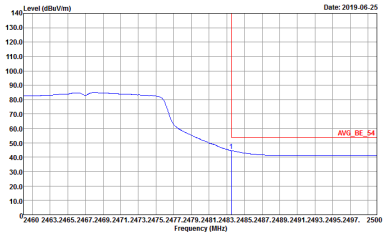
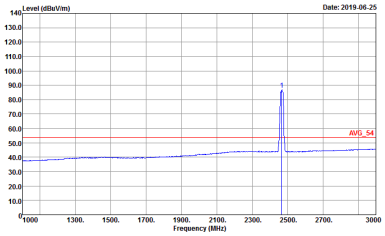
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH06 2437MHz - L	
1+2	Vertical	Fundamental
Peak		
Avg.		

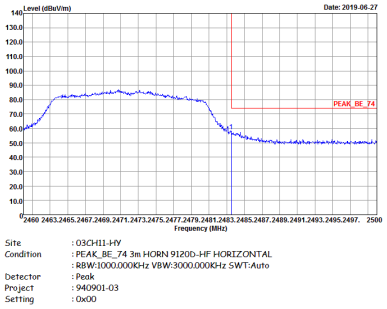
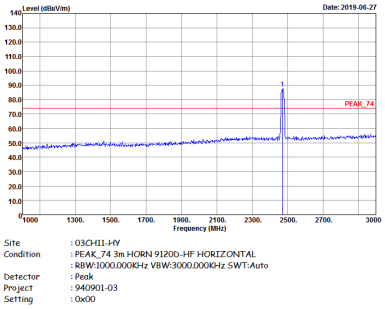
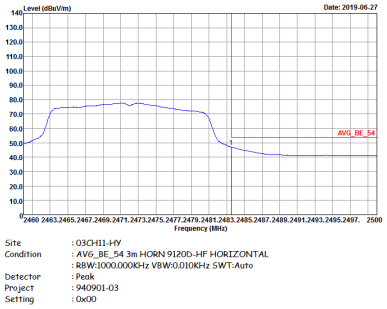
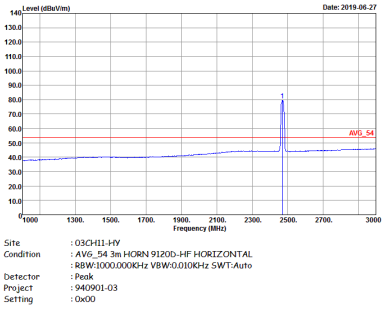
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH06 2437MHz - R	
1+2	Vertical	Fundamental
Peak		Left Blank
Avg.		Left Blank

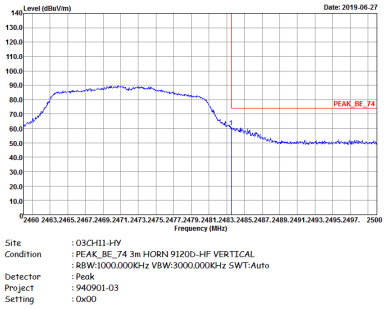
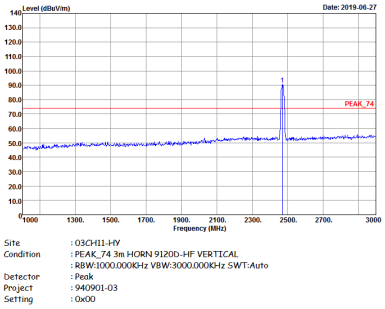
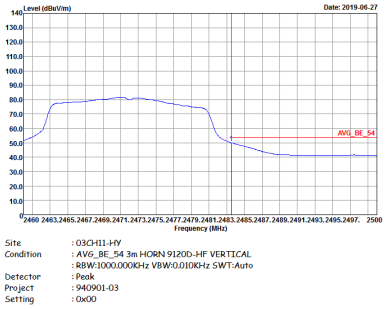
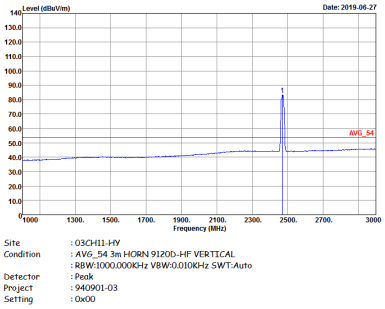
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH11 2462MHz	
1+2	Horizontal	Fundamental
Peak		
Avg.		

WIFI	2.4GHz 2400~2483.5MHz Fundamental @ 3m	
ANT	802.11n HT20 CH11 2462MHz	
1+2	Vertical	Fundamental
Peak		
Avg.		

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH12 2467MHz	
1+2	Horizontal	Fundamental
Peak	 Site : 03CH11-HY Condition : PEAK_BE_74 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 940901-03 Setting : 0x14	 Site : 03CH11-HY Condition : PEAK_74 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 940901-03 Setting : 0x14
Avg.	 Site : 03CH11-HY Condition : AVG_BE_54 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak Project : 940901-03 Setting : 0x14	 Site : 03CH11-HY Condition : AVG_54 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak Project : 940901-03 Setting : 0x14

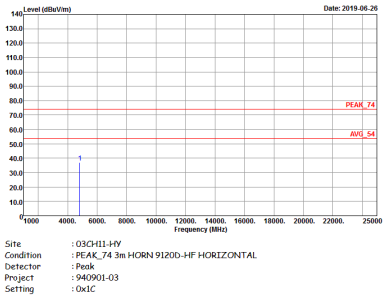
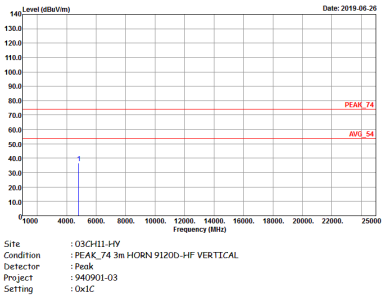
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH12 2467MHz	
1+2	Vertical	Fundamental
Peak	 Site : 03CH11-HY Condition : PEAK_BE_74 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 940901-03 Setting : 0x14	 Site : 03CH11-HY Condition : PEAK_74 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 940901-03 Setting : 0x14
Avg.	 Site : 03CH11-HY Condition : AVG_BE_54 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak Project : 940901-03 Setting : 0x14	 Site : 03CH11-HY Condition : AVG_54 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak Project : 940901-03 Setting : 0x14

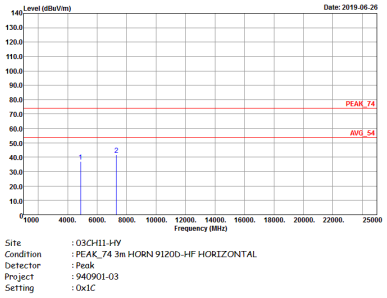
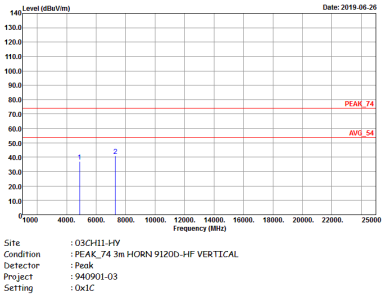
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH13 2472MHz	
1+2	Horizontal	Fundamental
Peak		
Avg.		

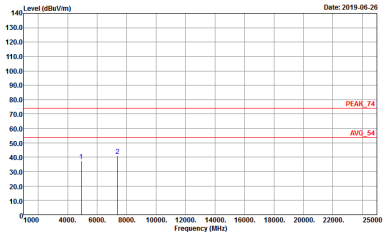
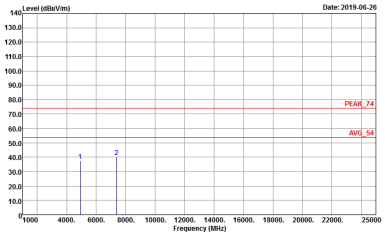
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH13 2472MHz	
1+2	Vertical	Fundamental
Peak		
Avg.		

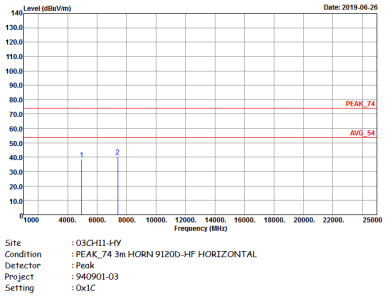
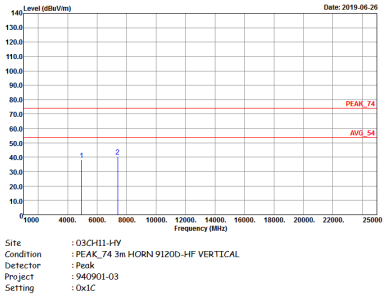
2.4GHz 2400~2483.5MHz

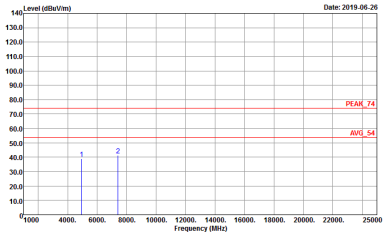
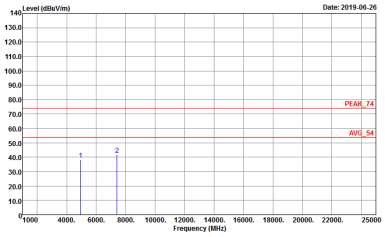
WIFI 802.11b (Harmonic @ 3m)

WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11b CH01 2412MHz	
1+2	Horizontal	Vertical
Peak Avg.		

WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11b CH06 2437MHz	
1+2	Horizontal	Vertical
Peak Avg.		

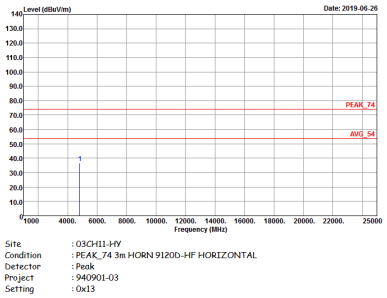
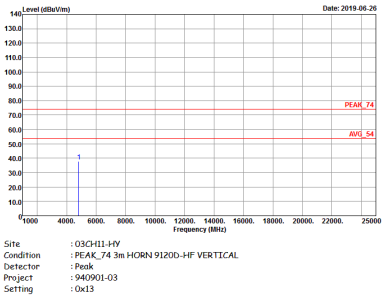
WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11b CH11 2462MHz	
1+2	Horizontal	Vertical
Peak Avg.	 Site : 03CH11-HY Condition : PEAK_74 3m HORN 9120D-HF HORIZONTAL Detector : Peak Project : 940901-03 Setting : 0x1B	 Site : 03CH11-HY Condition : PEAK_74 3m HORN 9120D-HF VERTICAL Detector : Peak Project : 940901-03 Setting : 0x1B

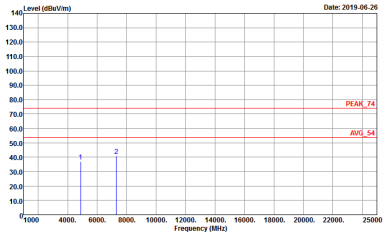
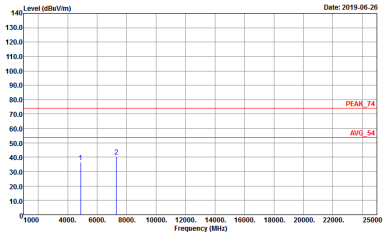
WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11b CH12 2467MHz	
1+2	Horizontal	Vertical
Peak Avg.		

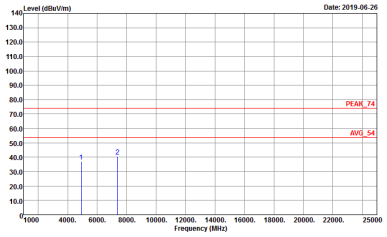
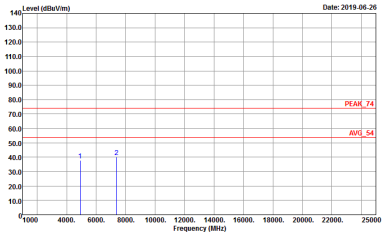
WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11b CH13 2472MHz	
1+2	Horizontal	Vertical
Peak Avg.	 Site : 03CH11-HY Condition : PEAK_74 3m HORN 9120D-HF HORIZONTAL Detector : Peak Project : 940901-03 Setting : 0x17	 Site : 03CH11-HY Condition : PEAK_74 3m HORN 9120D-HF VERTICAL Detector : Peak Project : 940901-03 Setting : 0x17

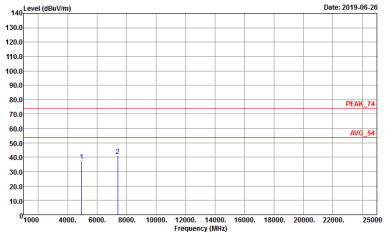
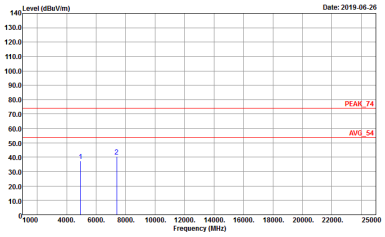
2.4GHz 2400~2483.5MHz

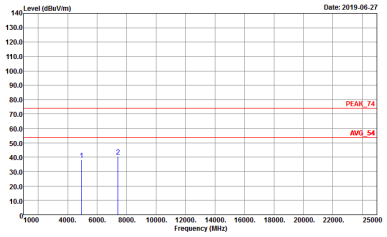
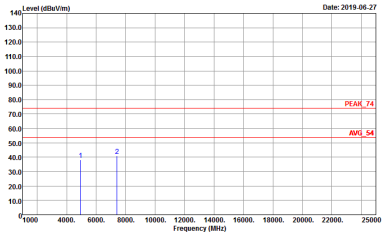
WIFI 802.11g (Harmonic @ 3m)

WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11g CH01 2412MHz	
1+2	Horizontal	Vertical
Peak Avg.		

WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11g CH06 2437MHz	
1+2	Horizontal	Vertical
Peak Avg.	 Site : 03CH11-HY Condition : PEAK_74 3m HORN 9120D-HF HORIZONTAL Detector : Peak Project : 940901-03 Setting : 0x1C	 Site : 03CH11-HY Condition : PEAK_74 3m HORN 9120D-HF VERTICAL Detector : Peak Project : 940901-03 Setting : 0x1C

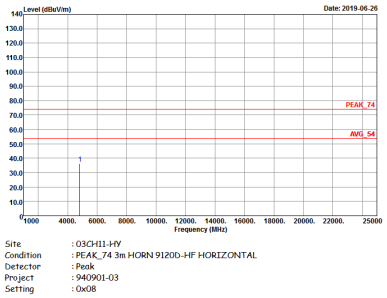
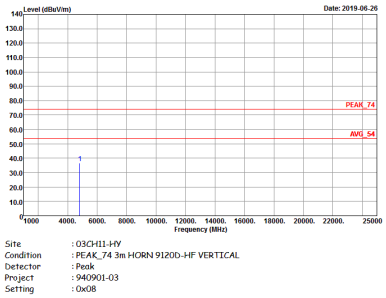
WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11g CH11 2462MHz	
1+2	Horizontal	Vertical
Peak Avg.	 Site : 03CH11-HY Condition : PEAK_74 3m HORN 9120D-HF HORIZONTAL Detector : Peak Project : 940901-03 Setting : 0x1C	 Site : 03CH11-HY Condition : PEAK_74 3m HORN 9120D-HF VERTICAL Detector : Peak Project : 940901-03 Setting : 0x1C

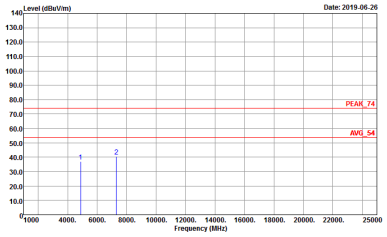
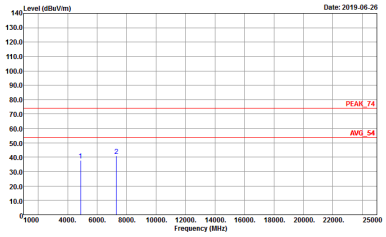
WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11g CH12 2467MHz	
1+2	Horizontal	Vertical
Peak Avg.	 Site : 03CH11-HY Condition : PEAK_74 3m HORN 9120D-HF HORIZONTAL Detector : Peak Project : 940901-03 Setting : 0x18	 Site : 03CH11-HY Condition : PEAK_74 3m HORN 9120D-HF VERTICAL Detector : Peak Project : 940901-03 Setting : 0x18

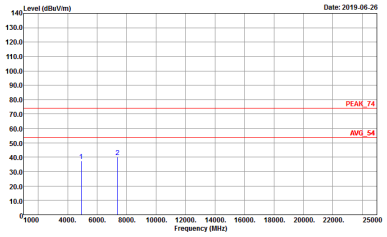
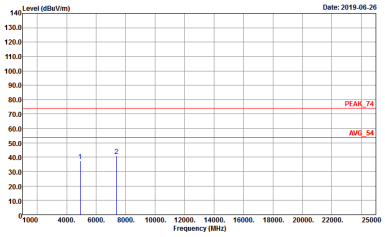
WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11g CH13 2472MHz	
1+2	Horizontal	Vertical
Peak Avg.	 Site : 03CH11-HY Condition : PEAK_74 3m HORN 9120D-HF HORIZONTAL Detector : Peak Project : 940901-03 Setting : 0x01	 Site : 03CH11-HY Condition : PEAK_74 3m HORN 9120D-HF VERTICAL Detector : Peak Project : 940901-03 Setting : 0x01

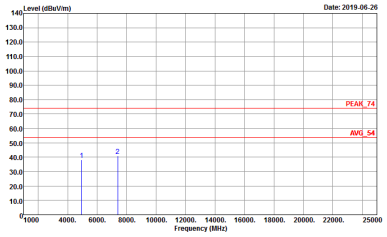
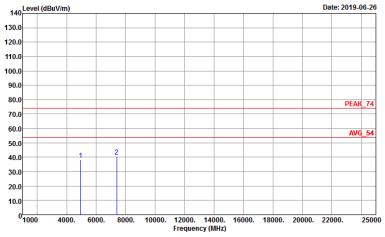
2.4GHz 2400~2483.5MHz

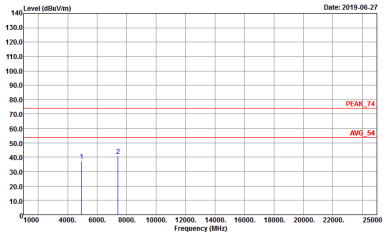
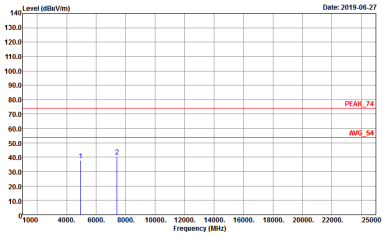
WIFI 802.11n HT20 (Harmonic @ 3m)

WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11n HT20 CH01 2412MHz	
1+2	Horizontal	Vertical
Peak Avg.		

WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11n HT20 CH06 2437MHz	
1+2	Horizontal	Vertical
Peak Avg.	 Site : 03CH11-HY Condition : PEAK_74 3m HORN 9120D-HF HORIZONTAL Detector : Peak Project : 940901-03 Setting : 0x1D	 Site : 03CH11-HY Condition : PEAK_74 3m HORN 9120D-HF VERTICAL Detector : Peak Project : 940901-03 Setting : 0x1D

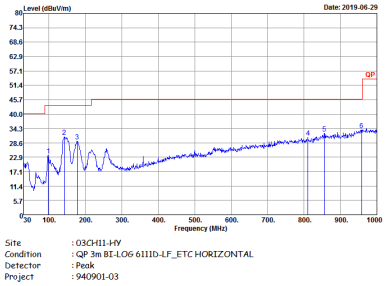
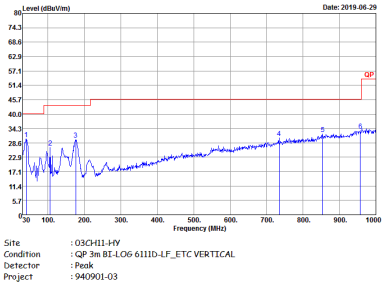
WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11n HT20 CH11 2462MHz	
1+2	Horizontal	Vertical
Peak Avg.	 Site : 03CH11-HY Condition : PEAK_74 3m HORN 9120D-HF HORIZONTAL Detector : Peak Project : 940901-03 Setting : 0x1C	 Site : 03CH11-HY Condition : PEAK_74 3m HORN 9120D-HF VERTICAL Detector : Peak Project : 940901-03 Setting : 0x1C

WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11n HT20 CH12 2462MHz	
1+2	Horizontal	Vertical
Peak Avg.	 Site : 03CH11-HY Condition : PEAK_74 3m HORN 9120D-HF HORIZONTAL Detector : Peak Project : 940901-03 Setting : 0x14	 Site : 03CH11-HY Condition : PEAK_74 3m HORN 9120D-HF VERTICAL Detector : Peak Project : 940901-03 Setting : 0x14

WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11n HT20 CH13 2472MHz	
1+2	Horizontal	Vertical
Peak Avg.	 Site : 03CH11-HY Condition : PEAK_74 3m HORN 9120D-HF HORIZONTAL Detector : Peak Project : 940901-03 Setting : 0x00	 Site : 03CH11-HY Condition : PEAK_74 3m HORN 9120D-HF VERTICAL Detector : Peak Project : 940901-03 Setting : 0x00

Emission below 1GHz

2.4GHz WIFI 802.11g (LF)

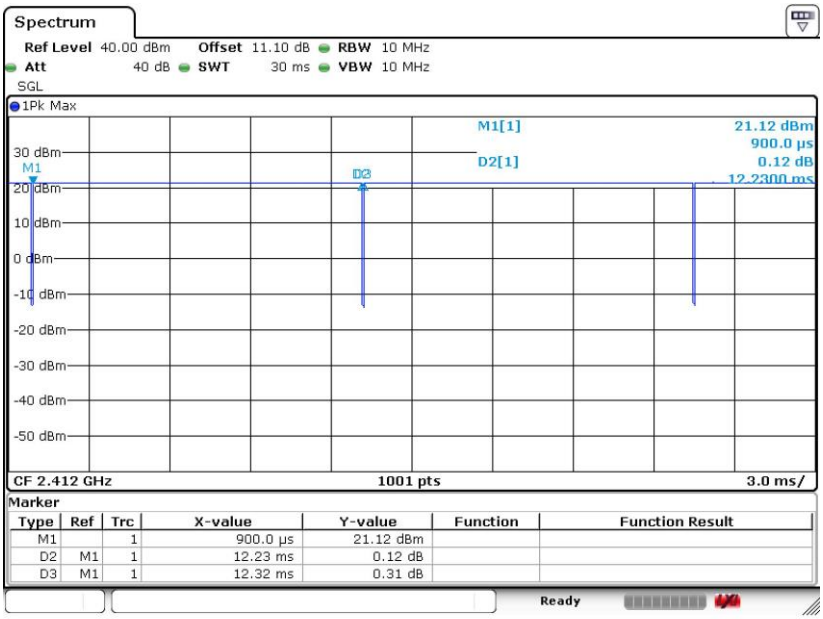
WIFI	2.4GHz 2400~2483.5MHz	
ANT	802.11g LF	
1+2	Horizontal	Vertical
QP / Peak		

Appendix E. Duty Cycle Plots

Antenna	Band	Duty Cycle(%)	T(us)	1/T(kHz)	VBW Setting	Duty Factor(dB)
1	802.11b	99.27	-	-	10Hz	0.03
2	802.11b	99.07	-	-	10Hz	0.04
1+2	802.11b for Ant. 1	99.27	-	-	10Hz	0.03
1+2	802.11b for Ant. 2	99.27	-	-	10Hz	0.03
1	802.11g	98.31	-	-	10Hz	0.07
2	802.11g	98.31	-	-	10Hz	0.07
1+2	802.11g for Ant. 1	98.31	-	-	10Hz	0.07
1+2	802.11g for Ant. 2	98.31	-	-	10Hz	0.07
1	2.4GHz 802.11n HT20	99.50	-	-	10Hz	0.02
2	2.4GHz 802.11n HT20	99.60	-	-	10Hz	0.02
1+2	2.4GHz 802.11n HT20 for Ant. 1	98.43	-	-	10Hz	0.07
1+2	2.4GHz 802.11n HT20 for Ant. 2	98.63	-	-	10Hz	0.06

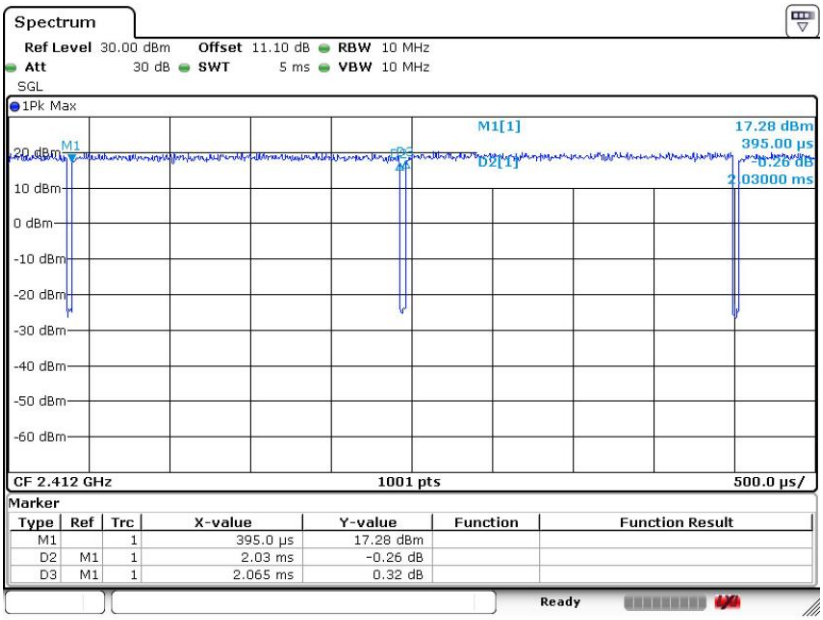
<Ant. 1>

802.11b



Date: 8.JUN.2019 08:53:02

802.11g



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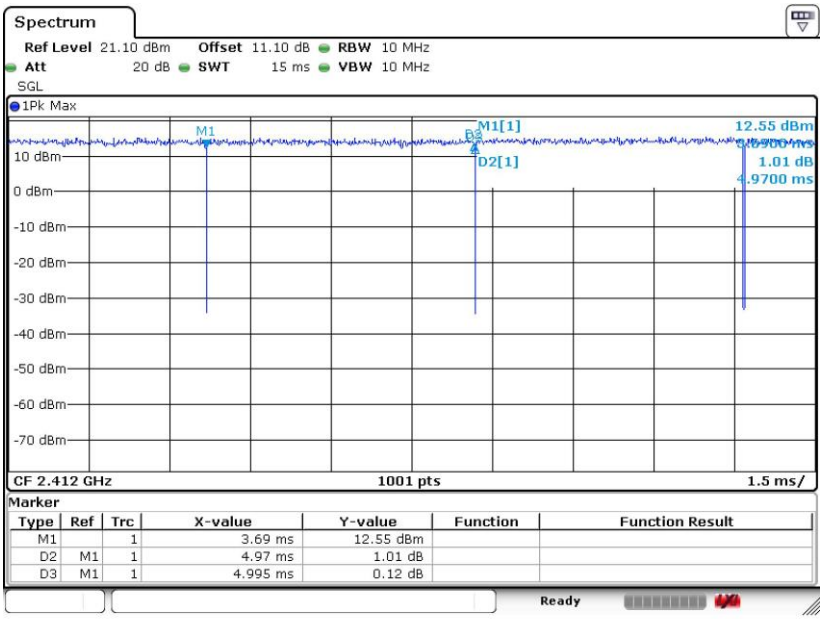

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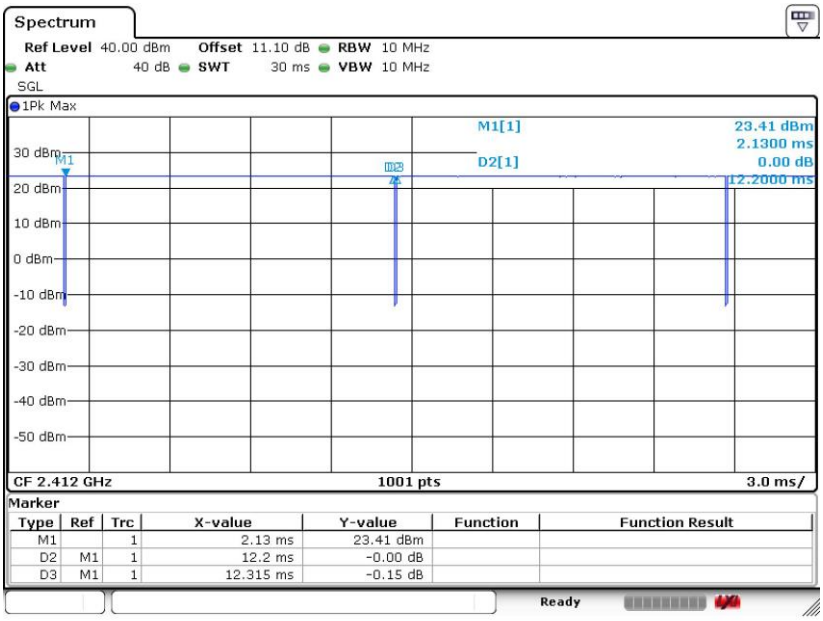

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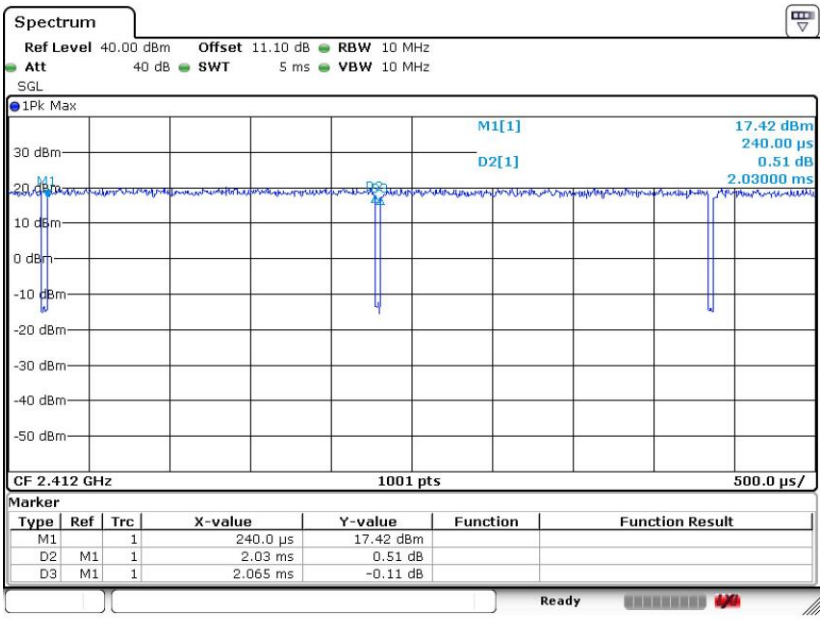

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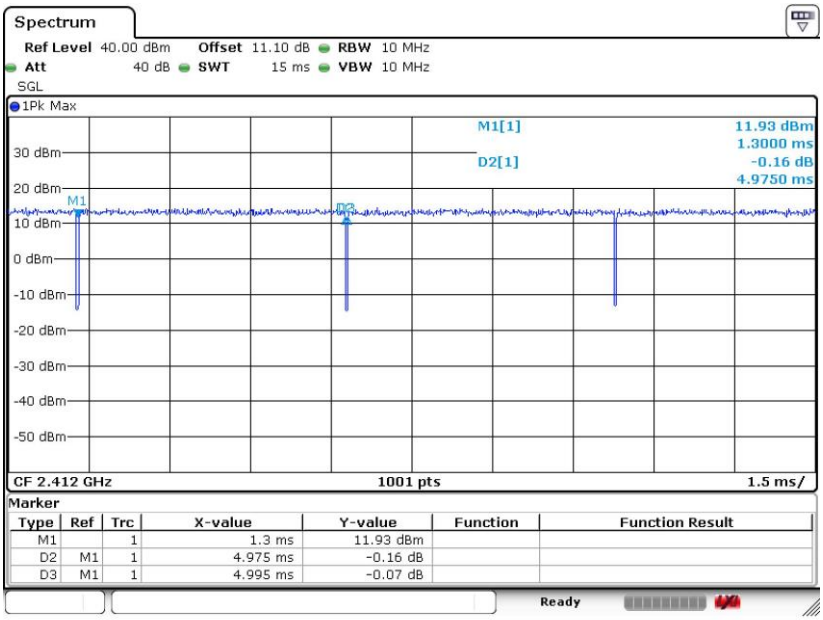

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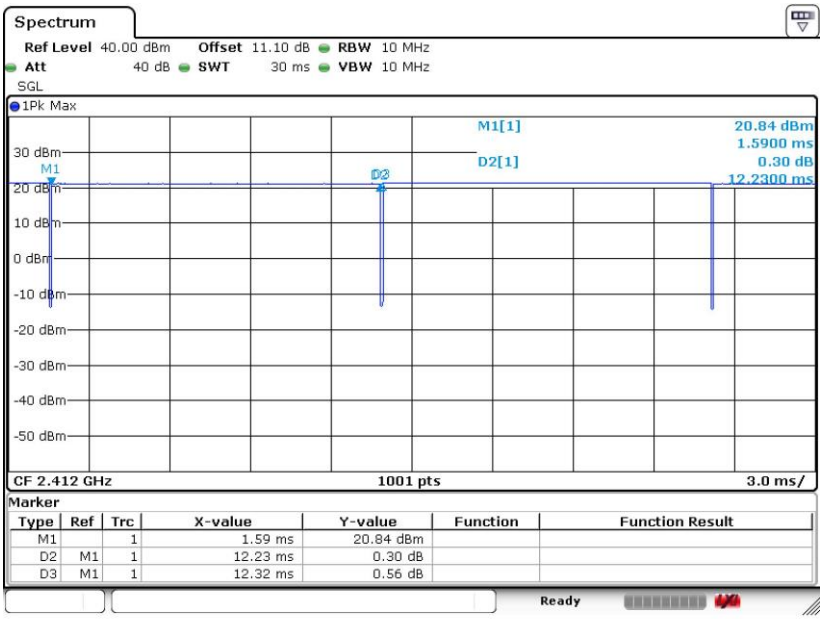

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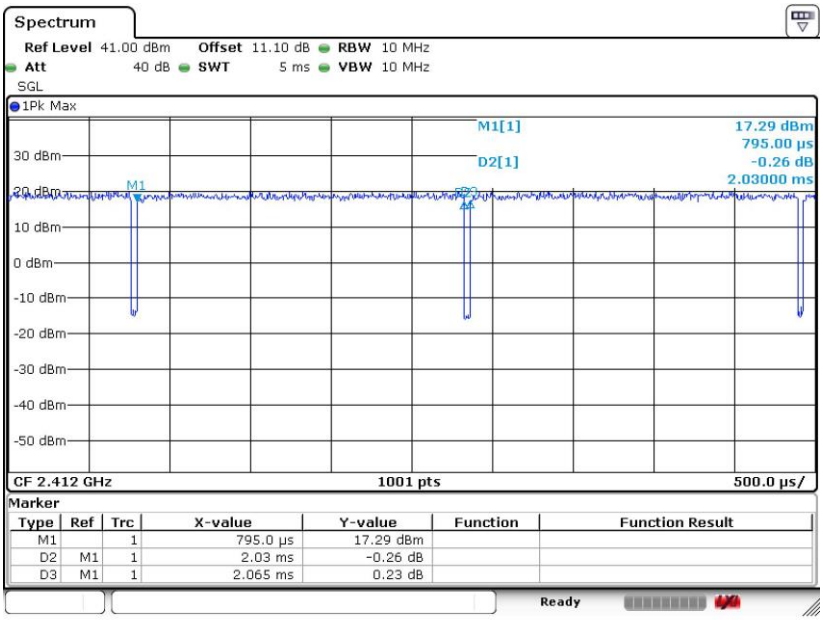

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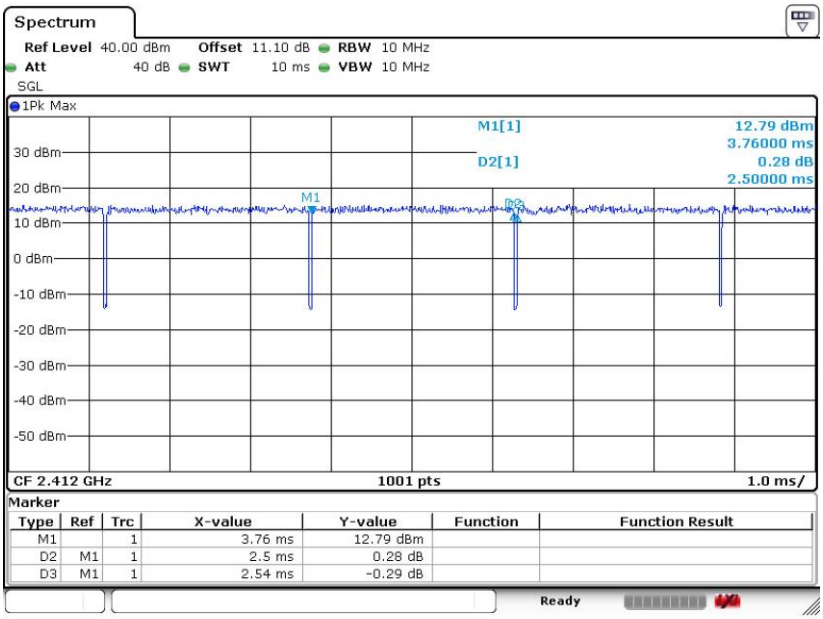

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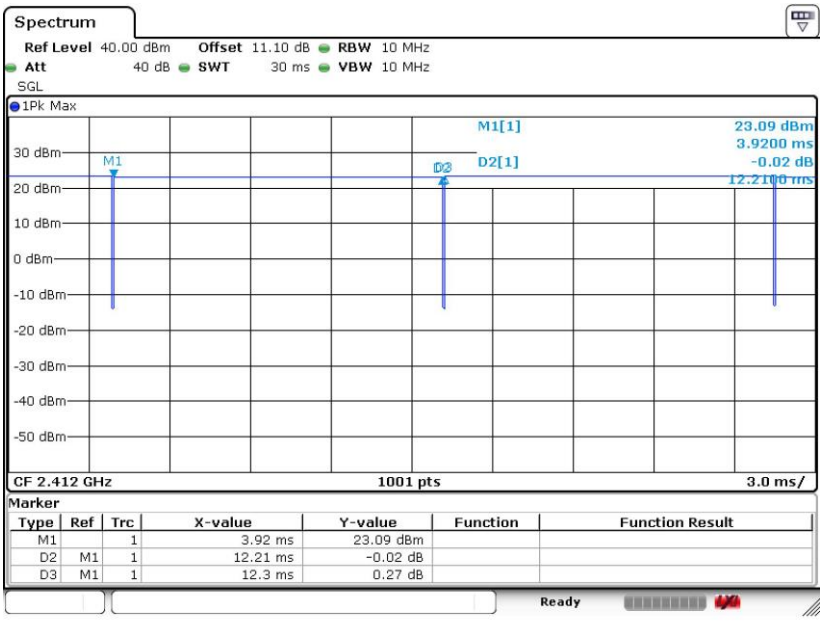

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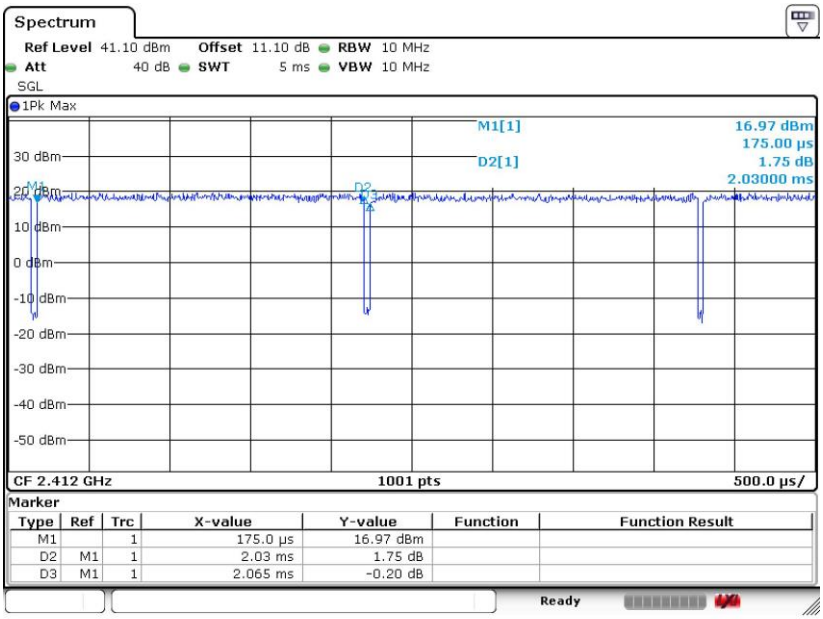

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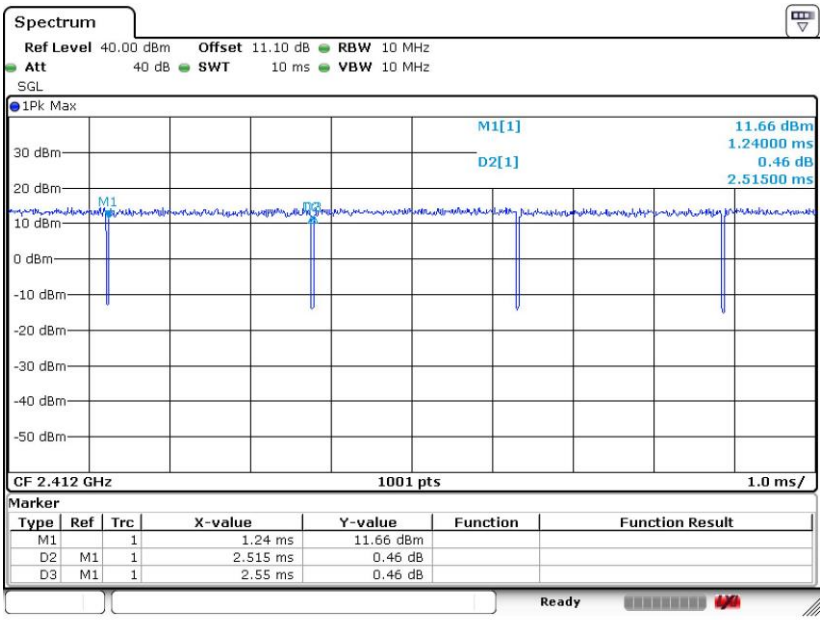

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