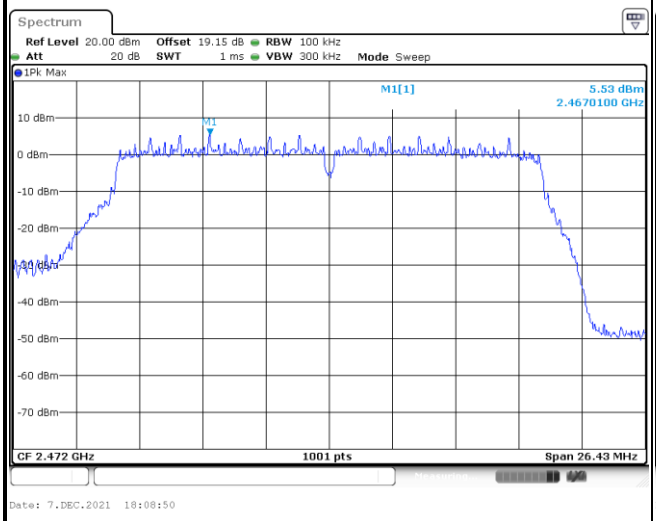
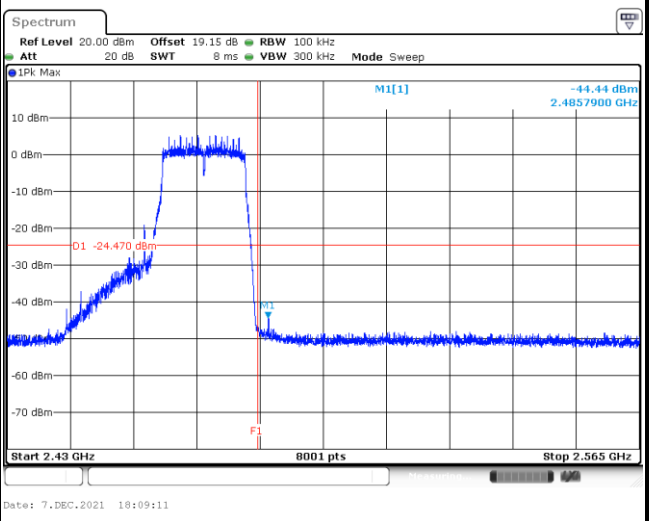
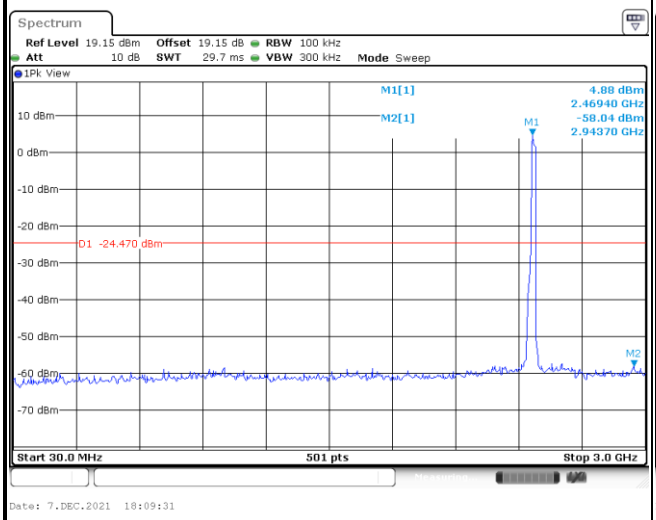
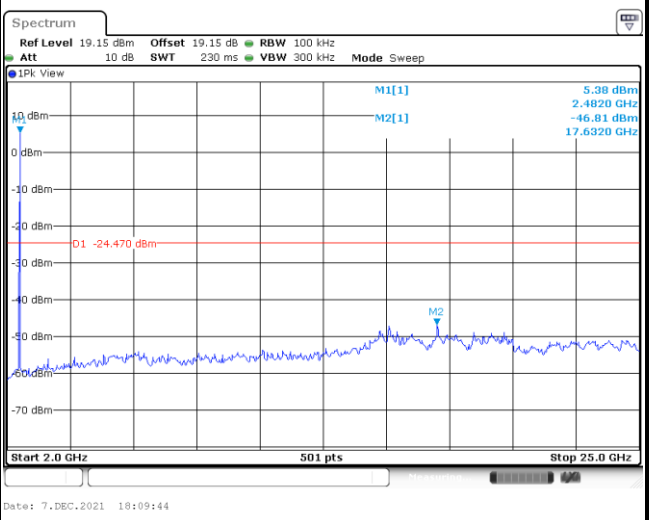
Test Mode :	802.11n HT20	Test Channel :	13

100kHz PSD reference Level	High 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 is 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

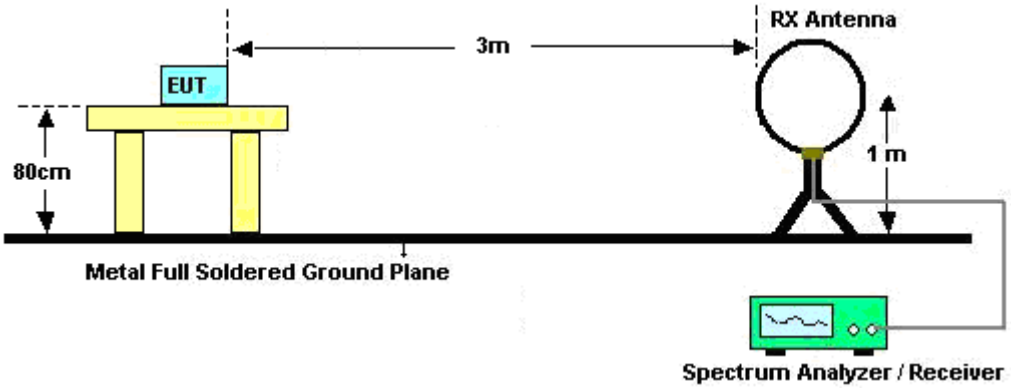
Please refer to the measuring equipment list in this test report.

3.5.3 Test Procedures

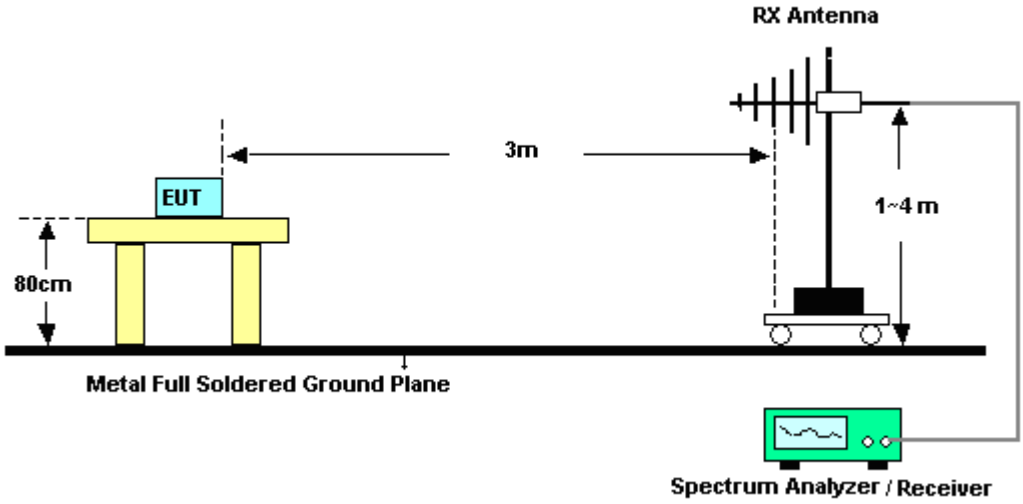
1. The testing follows the ANSI C63.10 Section 11.12.1 Radiated emission measurements.
2. The EUT is arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level.
3. The EUT is placed on a turntable with 0.8 meter for frequency below 1 GHz and 1.5 meter for frequency above 1 GHz respectively above ground.
4. The EUT is set 3 meters away from the receiving antenna, which is mounted on the top of a variable height antenna tower.
5. Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level
6. Radiated testing below 1 GHz is performed by adjusting the antenna tower from 1 m to 4 m and by rotating the turn table from 0 degree to 360 degrees to find the peak maximum hold reading. When there is no suspected emission found and the emission level is with at least 6 dB margin against QP limit line, the position is marked as "-".
7. Radiated testing above 1 GHz is performed by adjusting the antenna tower from 1 m to 4 m and by rotating the turn table from 0 degree to 360 degrees to find the peak maximum hold reading for scanning all frequencies. When there is no suspected emission found and the harmonic emission level is with at least 6 dB margin against average limit line, the position is marked as "-".
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= 3 MHz 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

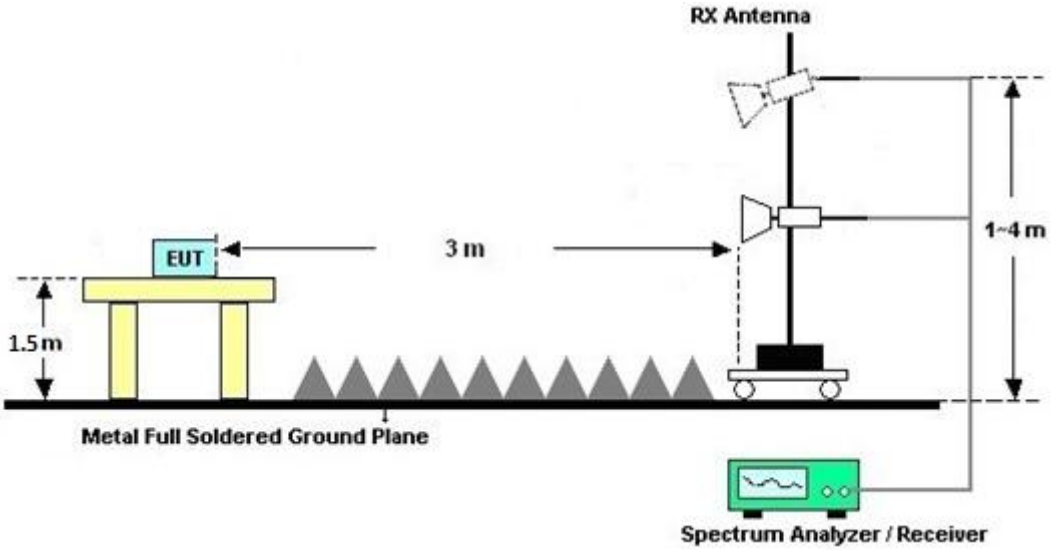
For radiated emissions below 30MHz



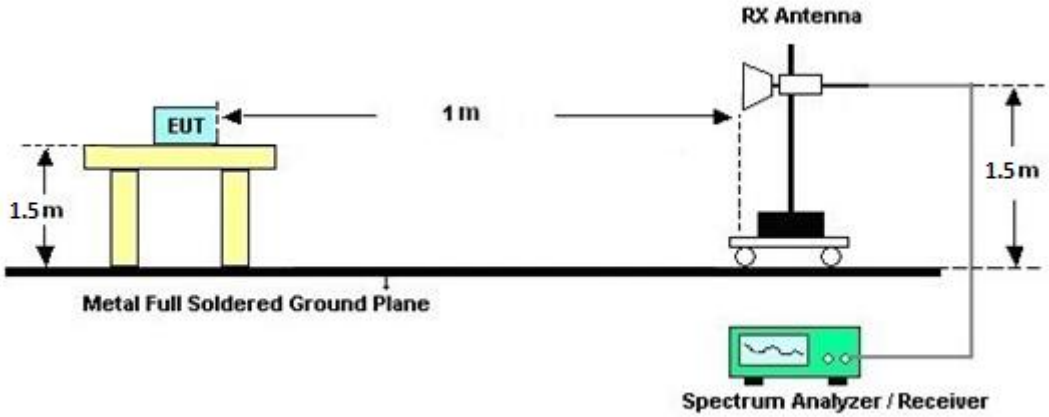
For radiated emissions from 30MHz to 1GHz



For radiated test from 1GHz to 18GHz



For radiated test above 18GHz



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

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

There is adequate comparison measurement of both open-field test site and alternative test site - semi-Anechoic chamber according to 414788 D01 Radiated Test Site v01r01, and the result comes out very similar.

3.5.6 Test Results of Radiated Spurious Emissions (above 18 GHz)

For frequency above 18GHz, the pre-scanned result is 20dB lower than the limit line is not reported.

3.5.7 Test Result of Radiated Spurious at Band Edges

Please refer to Appendix C and D.

3.5.8 Duty Cycle

Please refer to Appendix E.

3.5.9 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.

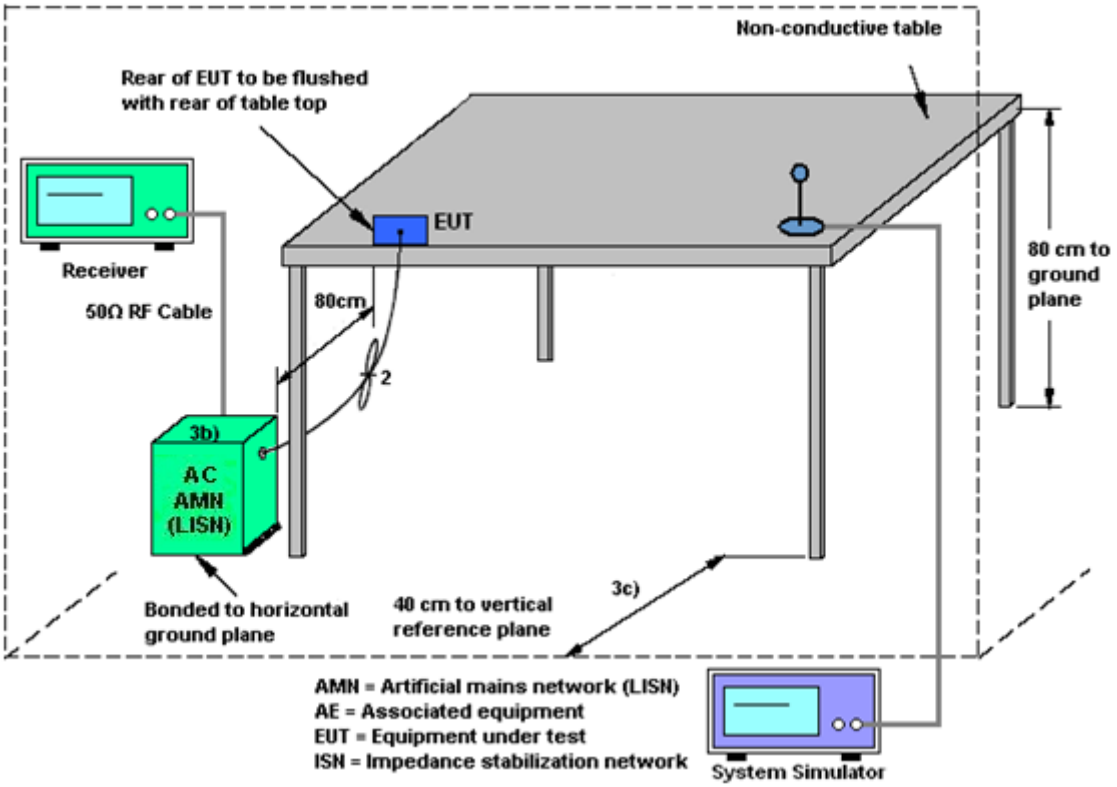
3.6.2 Measuring Instruments

Please refer to the measuring equipment list in this test report.

3.6.3 Test Procedures

1. The EUT is placed 0.4 meter away from the conducting wall of the shielding room, and is 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 shall be used.
6. Both Line and Neutral shall be tested in order to find out the maximum conducted emission.
7. The frequency range from 150 kHz to 30 MHz is scanned.
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 6 dBi, the power shall be reduced by the same level in dB comparing to gain minus 6 dBi. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the rule.

3.7.2 Antenna Anti-Replacement Construction

An embedded-in antenna design is used.

3.7.3 Antenna Gain

<CDD Modes >

For power measurements on IEEE 802.11 devices,

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

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

G_{ANT} is set equal to the gain of the antenna having the highest gain.

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

$$DirectionalGain = 10 \cdot \log \left[\frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right]$$

where

Each antenna is driven by no more than one spatial stream;

N_{SS} = the number of independent spatial streams of data;

N_{ANT} = the total number of antennas

$g_{j,k} = 10^{G_k/20}$ if the kth antenna is being fed by spatial stream j, or zero if it is not;

G_k is the gain in dBi of the kth antenna.

As minimum N_{SS}=1 is supported by EUT, the formula can be simplified as:

Directional gain = $10*\log[(10^{G1/20} + 10^{G2/20} + \ldots + 10^{GN/20})^2 / N_{ANT}]$ dBi

Where G1, G2….GN denote single antenna gain.

For example: If a device has two antenna, G_{ANT1}= 3.6dBi; G_{ANT2}=4.2dBi

Directional gain of power measurement = max(3.6, 4.2) + 0 = 4.2 dBi

Directional gain of PSD measurement = $10 * \log[(10^{3.6/20} + 10^{4.2/20})^2 / 2]$ = 6.92 dBi

<CDD Modes>						
	Ant. 4 (dBi)	Ant. 3 (dBi)	DG for Power (dBi)	DG for PSD (dBi)	Power Limit Reduction (dB)	PSD Limit Reduction (dB)
2.4 GHz	-0.20	-0.40	-0.20	2.71	0.00	0.00

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

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

Calculation example:

The DG for PSD is derived from formula is

10 x log { { [10^ (-0.20 dBi / 20) + 10^ (-0.40 dBi / 20)] ^ 2 } / 2 }

= 2.71 dBi

4 List of Measuring Equipment

Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Loop Antenna	Rohde & Schwarz	HFH2-Z2	100488	9 kHz~30 MHz	Sep. 07, 2021	Nov. 25, 2021~ Dec. 15, 2021	Sep. 06, 2022	Radiation (03CH16-HY)
Bilog Antenna	TESEQ	CBL 6111D & 00802N1D01N -06	47020 & 06	30MHz to 1GHz	Oct. 09, 2021	Nov. 25, 2021~ Dec. 15, 2021	Oct. 08, 2022	Radiation (03CH16-HY)
Horn Antenna	SCHWARZBECK	BBHA 9120 D	9120D-1522	1G~18GHz	Oct. 12, 2021	Nov. 25, 2021~ Dec. 15, 2021	Oct. 11, 2022	Radiation (03CH16-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	00991	18GHz ~40GHz	May 12, 2021	Nov. 25, 2021~ Dec. 15, 2021	May 11, 2022	Radiation (03CH16-HY)
Amplifier	SONOMA	310N	371607	9kHz~1G	Jul. 05, 2021	Nov. 25, 2021~ Dec. 15, 2021	Jul. 04, 2022	Radiation (03CH16-HY)
Amplifier	Jet-Power	JPA0118-55-303	171000180005 4001	1-18GHz	Jun. 16, 2021	Nov. 25, 2021~ Dec. 15, 2021	Jun. 15, 2022	Radiation (03CH16-HY)
Preamplifier	EMEC	EM18G40G	060801	18GHz~40GHz	Jun. 22, 2021	Nov. 25, 2021~ Dec. 15, 2021	Jun. 21, 2022	Radiation (03CH16-HY)
Preamplifier	Keysight	83017A	MY53270264	1GHz~26.5GHz	Dec. 10, 2020	Nov. 25, 2021~ Dec. 08, 2021	Dec. 09, 2021	Radiation (03CH16-HY)
Preamplifier	Keysight	83017A	MY53270264	1GHz~26.5GHz	Dec. 09, 2021	Dec. 09, 2021~ Dec. 15, 2021	Dec. 08, 2022	Radiation (03CH16-HY)
EMI Test Receiver	Keysight	N9038A(MXE)	MY57290111	3Hz~26.5GHz	Dec. 11, 2020	Nov. 25, 2021~ Dec. 09, 2021	Dec. 10, 2021	Radiation (03CH16-HY)
EMI Test Receiver	Keysight	N9038A(MXE)	MY59053012	3Hz~26.5GHz	Nov. 18, 2021	Dec. 09, 2021~ Dec. 15, 2021	Nov. 17, 2022	Radiation (03CH16-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY11680/4PE	NA	Aug. 28, 2021	Nov. 25, 2021~ Dec. 15, 2021	Aug. 27, 2022	Radiation (03CH16-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY11688/4PE	NA	Aug. 28, 2021	Nov. 25, 2021~ Dec. 15, 2021	Aug. 27, 2022	Radiation (03CH16-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	EC-A5-300-5757	NA	Aug. 28, 2021	Nov. 25, 2021~ Dec. 15, 2021	Aug. 27, 2022	Radiation (03CH16-HY)
Software	Audix	E3 6.2009-8-24	RK-001136	N/A	N/A	Nov. 25, 2021~ Dec. 15, 2021	N/A	Radiation (03CH16-HY)
Controller	ChainTek	3000-1	N/A	Control Turn table & Ant Mast	N/A	Nov. 25, 2021~ Dec. 15, 2021	N/A	Radiation (03CH16-HY)
Antenna Mast	ChainTek	MBS-520-1	N/A	1m~4m	N/A	Nov. 25, 2021~ Dec. 15, 2021	N/A	Radiation (03CH16-HY)
Turn Table	ChainTek	T-200-S-1	N/A	0~360 Degree	N/A	Nov. 25, 2021~ Dec. 15, 2021	N/A	Radiation (03CH16-HY)
Hygrometer	TECPEL	DTM-303A	TP201996	N/A	Nov. 16, 2021	Nov. 22, 2021~ Jan. 10, 2022	Nov. 15, 2022	Conducted (TH05-HY)
Power Meter	DARE	RPR3006W	13I00030SNO31(NO:182)	10MHz~6GHz	Dec. 30, 2020	Nov. 22, 2021~ Dec. 23, 2021	Dec. 29, 2021	Conducted (TH05-HY)
Power Meter	DARE	RPR3006W	16I00054SNO10 (NO:131)	10MHz~6GHz	Dec. 16, 2021	Jan. 10, 2022	Dec. 15, 2022	Conducted (TH05-HY)
Signal Analyzer	Rohde & Schwarz	FSV40	101566	10Hz~40GHz	Aug. 30, 2021	Nov. 22, 2021~ Jan. 10, 2022	Aug. 29, 2022	Conducted (TH05-HY)
Switch Control Manframe	E-IUSTRUMENT	ETF-1405-0	EC1900067 (BOX7)	N/A	Aug. 12, 2021	Nov. 22, 2021~ Jan. 10, 2022	Aug. 11, 2022	Conducted (TH05-HY)

Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
AC Power Source	ChainTek	APC-1000W	N/A	N/A	N/A	Nov. 16, 2021	N/A	Conduction (CO05-HY)
EMI Test Receiver	Rohde & Schwarz	ESR3	102388	9kHz~3.6GHz	Nov. 30, 2020	Nov. 16, 2021	Nov. 29, 2021	Conduction (CO05-HY)
Hygrometer	TECPEL	DTM-303A	TP201973	N/A	Oct. 22, 2021	Nov. 16, 2021	Oct. 21, 2022	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100080	9kHz~30MHz	Dec. 01, 2020	Nov. 16, 2021	Nov. 30, 2021	Conduction (CO05-HY)
Software	Rohde & Schwarz	EMC32 V10.30	N/A	N/A	N/A	Nov. 16, 2021	N/A	Conduction (CO05-HY)
Pulse Limiter	SCHWARZBECK	VTSD 9561-F N	00691	N/A	Jul. 28, 2021	Nov. 16, 2021	Jul. 27, 2022	Conduction (CO05-HY)
LISN Cable	MVE	RG-400	260260	N/A	Dec. 31, 2020	Nov. 16, 2021	Dec. 30, 2021	Conduction (CO05-HY)

5 Uncertainty of Evaluation

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**3.1 dB**

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**5.8 dB**

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**5.2 dB**

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**5.8 dB**

Appendix A. Test Result of Conducted Test Items

Test Engineer:	Ching Chen and Richard Qiu	Temperature:	21~25	°C
Test Date:	2021/11/22-2022/01/10	Relative Humidity:	51~54	%

TEST RESULTS DATA
6dB and 99% Occupied Bandwidth

2.4GHz Band Single Antenna										
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	99% Occupied BW (MHz)		6dB BW (MHz)		6dB BW Limit (MHz)	Pass/Fail
					Ant4	Ant3	Ant4	Ant3		
11b	1Mbps	1	1	2412	13.34	13.29	8.60	8.10	0.50	Pass
11b	1Mbps	1	6	2437	13.24	13.29	8.10	8.10	0.50	Pass
11b	1Mbps	1	11	2462	13.24	13.29	8.58	8.60	0.50	Pass
11b	1Mbps	1	12	2467	13.44	13.44	9.08	8.60	0.50	Pass
11b	1Mbps	1	13	2472	13.44	13.44	8.58	8.10	0.50	Pass

2.4GHz Band MIMO										
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	99% Occupied BW (MHz)		6dB BW (MHz)		6dB BW Limit (MHz)	Pass/Fail
					Ant4	Ant3	Ant4	Ant3		
11g	6Mbps	2	1	2412	18.53	18.28	16.06	16.38	0.50	Pass
11g	6Mbps	2	6	2437	19.73	19.33	16.38	16.36	0.50	Pass
11g	6Mbps	2	11	2462	18.43	18.33	15.76	15.76	0.50	Pass
11g	6Mbps	2	12	2467	18.58	18.53	16.12	16.36	0.50	Pass
11g	6Mbps	2	13	2472	18.23	17.98	16.38	16.40	0.50	Pass
HT20	MCS0	2	1	2412	19.28	18.78	17.36	17.62	0.50	Pass
HT20	MCS0	2	6	2437	20.53	19.48	17.60	17.62	0.50	Pass
HT20	MCS0	2	11	2462	19.13	18.93	16.72	17.00	0.50	Pass
HT20	MCS0	2	12	2467	19.33	19.08	16.98	17.64	0.50	Pass
HT20	MCS0	2	13	2472	18.93	18.58	17.62	17.62	0.50	Pass

TEST RESULTS DATA
Average Output Power

2.4GHz Band Single Antenna																
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
					Ant4	Ant3	SUM	Ant4	Ant3	Ant4	Ant3	Ant4	Ant3	Ant4	Ant3	
11b	1Mbps	1	1	2412	21.55	21.75		30.00	30.00	-0.20	-0.40	21.35	21.35	36.00	36.00	Pass
11b	1Mbps	1	6	2437	21.55	21.85		30.00	30.00	-0.20	-0.40	21.35	21.45	36.00	36.00	Pass
11b	1Mbps	1	11	2462	21.75	21.75		30.00	30.00	-0.20	-0.40	21.55	21.35	36.00	36.00	Pass
11b	1Mbps	1	12	2467	21.75	21.75		30.00	30.00	-0.20	-0.40	21.55	21.35	36.00	36.00	Pass
11b	1Mbps	1	13	2472	21.75	21.95		30.00	30.00	-0.20	-0.40	21.55	21.55	36.00	36.00	Pass

2.4GHz Band MIMO																
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
					Ant4	Ant3	SUM	Ant4	Ant3	Ant4	Ant3	Ant4	Ant3	Ant4	Ant3	
11g	6Mbps	2	1	2412	17.95	17.55	20.76	30.00		-0.20		20.56		36.00		Pass
11g	6Mbps	2	6	2437	20.95	21.25	24.11	30.00		-0.20		23.91		36.00		Pass
11g	6Mbps	2	11	2462	19.25	19.35	22.31	30.00		-0.20		22.11		36.00		Pass
11g	6Mbps	2	12	2467	18.35	18.95	21.67	30.00		-0.20		21.47		36.00		Pass
11g	6Mbps	2	13	2472	17.15	17.05	20.11	30.00		-0.20		19.91		36.00		Pass
HT20	MCS0	2	1	2412	18.05	17.35	20.72	30.00		-0.20		20.52		36.00		Pass
HT20	MCS0	2	6	2437	20.55	20.55	23.56	30.00		-0.20		23.36		36.00		Pass
HT20	MCS0	2	11	2462	18.45	18.95	21.72	30.00		-0.20		21.52		36.00		Pass
HT20	MCS0	2	12	2467	18.55	18.85	21.71	30.00		-0.20		21.51		36.00		Pass
HT20	MCS0	2	13	2472	17.15	17.05	20.11	30.00		-0.20		19.91		36.00		Pass
VHT20	MCS0	2	1	2412	17.95	17.25	20.62	30.00		-0.20		20.42		36.00		Pass
VHT20	MCS0	2	6	2437	20.45	20.45	23.46	30.00		-0.20		23.26		36.00		Pass
VHT20	MCS0	2	11	2462	18.35	18.85	21.62	30.00		-0.20		21.42		36.00		Pass
VHT20	MCS0	2	12	2467	18.45	18.75	21.61	30.00		-0.20		21.41		36.00		Pass
VHT20	MCS0	2	13	2472	17.05	16.95	20.01	30.00		-0.20		19.81		36.00		Pass

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

TEST RESULTS DATA
Peak Power Spectral Density

2.4GHz Band Single Antenna												
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Peak PSD (dBm/3kHz)			DG (dBi)		Peak PSD Limit (dBm/3kHz)		Pass/Fail
					Ant4	Ant3	Worse + 3.01	Ant4	Ant3	Ant4	Ant3	
11b	1Mbps	1	1	2412	-0.93	-0.59		-0.20	-0.40	8.00	8.00	Pass
11b	1Mbps	1	6	2437	-1.32	-0.58		-0.20	-0.40	8.00	8.00	Pass
11b	1Mbps	1	11	2462	-0.95	-0.56		-0.20	-0.40	8.00	8.00	Pass
11b	1Mbps	1	12	2467	-0.79	0.03		-0.20	-0.40	8.00	8.00	Pass
11b	1Mbps	1	13	2472	-1.05	-0.68		-0.20	-0.40	8.00	8.00	Pass

2.4GHz Band MIMO												
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Peak PSD (dBm/3kHz)			DG (dBi)		Peak PSD Limit (dBm/3kHz)		Pass/Fail
					Ant4	Ant3	Worse + 3.01	Ant4	Ant3	Ant4	Ant3	
11g	6Mbps	2	1	2412	-7.93	-8.30	-4.92	2.71		8.00		Pass
11g	6Mbps	2	6	2437	-4.43	-4.84	-1.42	2.71		8.00		Pass
11g	6Mbps	2	11	2462	-6.05	-6.14	-3.04	2.71		8.00		Pass
11g	6Mbps	2	12	2467	-6.90	-6.80	-3.79	2.71		8.00		Pass
11g	6Mbps	2	13	2472	-8.48	-8.52	-5.47	2.71		8.00		Pass
HT20	MCS0	2	1	2412	-8.15	-7.95	-4.94	2.71		8.00		Pass
HT20	MCS0	2	6	2437	-5.38	-5.37	-2.36	2.71		8.00		Pass
HT20	MCS0	2	11	2462	-7.23	-6.83	-3.82	2.71		8.00		Pass
HT20	MCS0	2	12	2467	-7.75	-6.82	-3.81	2.71		8.00		Pass
HT20	MCS0	2	13	2472	-8.86	-8.77	-5.76	2.71		8.00		Pass

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

TEST RESULTS DATA
6dB and 99% Occupied Bandwidth

2.4GHz Band MIMO											
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config.	99% Occupied BW (MHz)		6dB BW (MHz)		6dB BW Limit (MHz)	Pass/Fail
						Ant4	Ant3	Ant4	Ant3		
HE20	MCS0	2	1	2412	Full	-	-	18.58	18.68	0.50	Pass
HE20	MCS0	2	6	2437	Full	-	-	19.03	18.38	0.50	Pass
HE20	MCS0	2	11	2462	Full	-	-	18.88	18.13	0.50	Pass
HE20	MCS0	2	12	2467	Full	-	-	18.90	18.75	0.50	Pass
HE20	MCS0	2	13	2472	Full	-	-	18.60	18.10	0.50	Pass

TEST RESULTS DATA
Average Output Power

2.4GHz Band MIMO																	
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config.	Average Conducted Power (dBm)			Conducted Power Limit (dBm)		DG (dBi)		EIRP Power (dBm)		EIRP Power Limit (dBm)		Pass /Fail
						Ant4	Ant3	SUM	Ant4	Ant3	Ant4	Ant3	Ant4	Ant3	Ant4	Ant3	
HE20	MCS0	2	1	2412	Full	17.75	17.25	20.52	30.00		-0.20		20.32		36.00		Pass
HE20	MCS0	2	1	2412	26/0	10.35	10.25	13.31	30.00		-0.20		13.11		36.00		Pass
HE20	MCS0	2	1	2412	52/37	12.35	12.05	15.21	30.00		-0.20		15.01		36.00		Pass
HE20	MCS0	2	1	2412	106/53	15.05	14.95	18.01	30.00		-0.20		17.81		36.00		Pass
HE20	MCS0	2	6	2437	Full	20.25	20.25	23.26	30.00		-0.20		23.06		36.00		Pass
HE20	MCS0	2	6	2437	26/4	12.15	11.75	14.96	30.00		-0.20		14.76		36.00		Pass
HE20	MCS0	2	6	2437	52/39	14.15	14.35	17.26	30.00		-0.20		17.06		36.00		Pass
HE20	MCS0	2	6	2437	106/53	17.85	17.35	20.62	30.00		-0.20		20.42		36.00		Pass
HE20	MCS0	2	11	2462	Full	18.45	18.55	21.51	30.00		-0.20		21.31		36.00		Pass
HE20	MCS0	2	11	2462	26/8	10.95	11.45	14.22	30.00		-0.20		14.02		36.00		Pass
HE20	MCS0	2	11	2462	52/40	12.95	13.55	16.27	30.00		-0.20		16.07		36.00		Pass
HE20	MCS0	2	11	2462	106/54	15.85	16.25	19.06	30.00		-0.20		18.86		36.00		Pass
HE20	MCS0	2	12	2467	Full	18.35	18.65	21.51	30.00		-0.20		21.31		36.00		Pass
HE20	MCS0	2	12	2467	26/8	11.05	11.55	14.32	30.00		-0.20		14.12		36.00		Pass
HE20	MCS0	2	12	2467	52/40	13.25	13.85	16.57	30.00		-0.20		16.37		36.00		Pass
HE20	MCS0	2	12	2467	106/54	15.85	16.35	19.12	30.00		-0.20		18.92		36.00		Pass
HE20	MCS0	2	13	2472	Full	16.85	16.85	19.86	30.00		-0.20		19.66		36.00		Pass
HE20	MCS0	2	13	2472	26/8	8.85	8.55	11.71	30.00		-0.20		11.51		36.00		Pass
HE20	MCS0	2	13	2472	52/40	11.75	11.15	14.47	30.00		-0.20		14.27		36.00		Pass
HE20	MCS0	2	13	2472	106/54	14.15	13.85	17.01	30.00		-0.20		16.81		36.00		Pass

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

TEST RESULTS DATA
Peak Power Spectral Density

2.4GHz Band MIMO													
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config.	Peak PSD (dBm/3kHz)			DG (dBi)		Peak PSD Limit (dBm/3kHz)		Pass/Fail
						Ant4	Ant3	Worse + 3.01	Ant4	Ant3	Ant4	Ant3	
HE20	MCS0	2	1	2412	Full	-7.95	-7.95	-4.94	2.71		8.00		Pass
HE20	MCS0	2	1	2412	26/0	-8.17	-8.09	-5.08	2.71		8.00		Pass
HE20	MCS0	2	1	2412	52/37	-8.06	-8.20	-5.05	2.71		8.00		Pass
HE20	MCS0	2	1	2412	106/53	-8.44	-8.16	-5.15	2.71		8.00		Pass
HE20	MCS0	2	6	2437	Full	-5.31	-4.95	-1.94	2.71		8.00		Pass
HE20	MCS0	2	6	2437	26/4	-6.10	-5.66	-2.65	2.71		8.00		Pass
HE20	MCS0	2	6	2437	52/39	-5.40	-5.74	-2.39	2.71		8.00		Pass
HE20	MCS0	2	6	2437	106/53	-5.49	-5.42	-2.41	2.71		8.00		Pass
HE20	MCS0	2	11	2462	Full	-6.81	-6.79	-3.78	2.71		8.00		Pass
HE20	MCS0	2	11	2462	26/8	-7.06	-7.26	-4.05	2.71		8.00		Pass
HE20	MCS0	2	11	2462	52/40	-7.64	-7.18	-4.17	2.71		8.00		Pass
HE20	MCS0	2	11	2462	106/54	-6.87	-7.06	-3.86	2.71		8.00		Pass
HE20	MCS0	2	12	2467	Full	-6.90	-6.71	-3.70	2.71		8.00		Pass
HE20	MCS0	2	12	2467	26/8	-7.31	-7.29	-4.28	2.71		8.00		Pass
HE20	MCS0	2	12	2467	52/40	-6.96	-6.89	-3.88	2.71		8.00		Pass
HE20	MCS0	2	12	2467	106/54	-6.99	-6.90	-3.89	2.71		8.00		Pass
HE20	MCS0	2	13	2472	Full	-8.82	-8.88	-5.81	2.71		8.00		Pass
HE20	MCS0	2	13	2472	26/8	-8.98	-9.96	-5.97	2.71		8.00		Pass
HE20	MCS0	2	13	2472	52/40	-8.98	-8.99	-5.97	2.71		8.00		Pass
HE20	MCS0	2	13	2472	106/54	-8.99	-9.15	-5.98	2.71		8.00		Pass

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

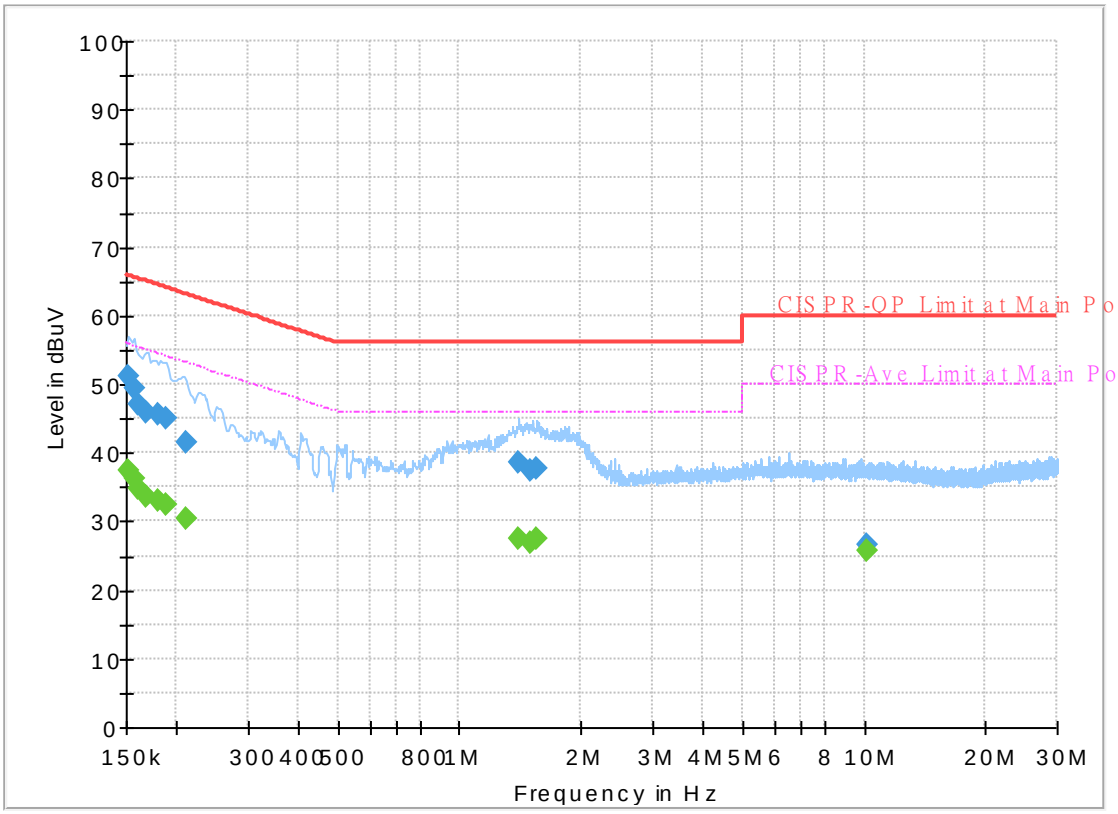
Appendix B. AC Conducted Emission Test Results

Test Engineer :	Calvin Wang	**Temperature :**	23~26℃
		Relative Humidity :	45~55%

EUT Information

Report NO :	161608-05
Test Mode :	Mode 1
Test Voltage :	120Vac/60Hz
Phase :	Line

Full Spectrum



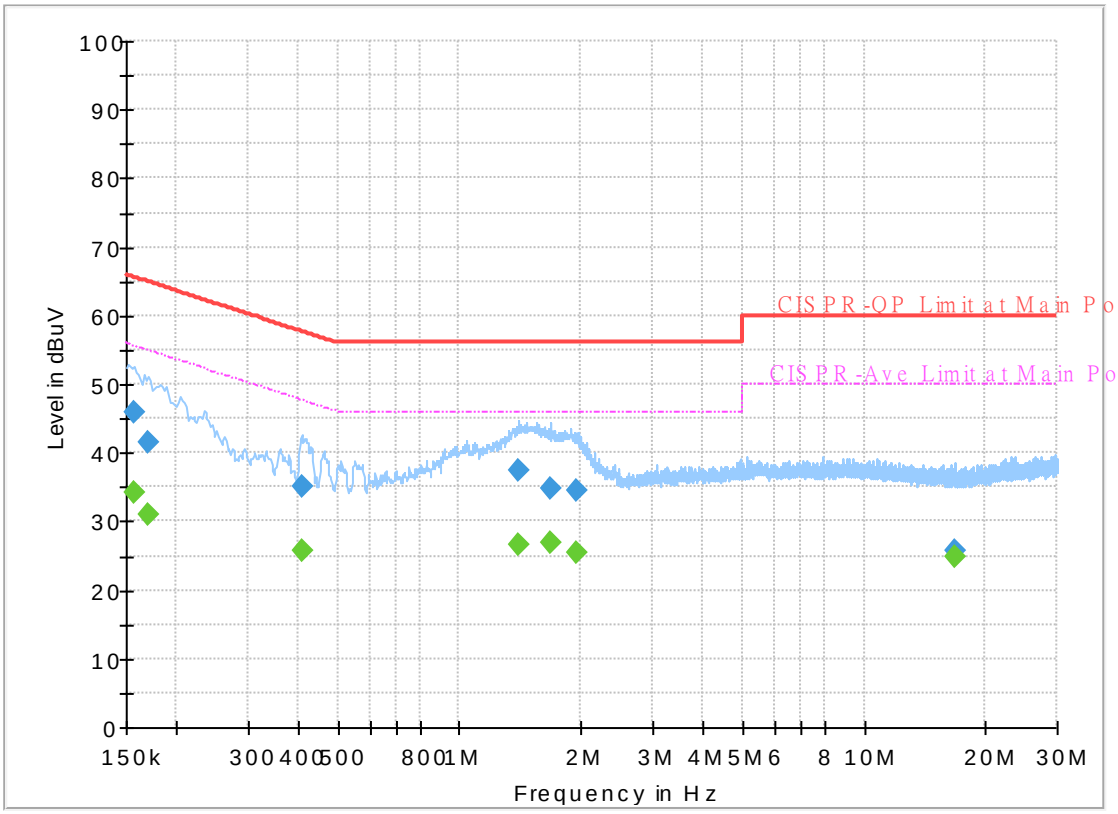
Final_Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.152250	---	37.57	55.88	18.31	L1	OFF	19.7
0.152250	51.20	---	65.88	14.68	L1	OFF	19.7
0.156750	---	36.37	55.63	19.26	L1	OFF	19.7
0.156750	49.47	---	65.63	16.16	L1	OFF	19.7
0.161250	---	34.88	55.40	20.52	L1	OFF	19.7
0.161250	47.20	---	65.40	18.20	L1	OFF	19.7
0.168000	---	33.68	55.06	21.38	L1	OFF	19.7
0.168000	46.01	---	65.06	19.05	L1	OFF	19.7
0.179250	---	33.02	54.52	21.50	L1	OFF	19.7
0.179250	45.60	---	64.52	18.92	L1	OFF	19.7
0.188250	---	32.59	54.11	21.52	L1	OFF	19.7
0.188250	45.04	---	64.11	19.07	L1	OFF	19.7
0.210750	---	30.41	53.18	22.77	L1	OFF	19.7
0.210750	41.39	---	63.18	21.79	L1	OFF	19.7
1.403250	---	27.60	46.00	18.40	L1	OFF	20.2
1.403250	38.52	---	56.00	17.48	L1	OFF	20.2
1.491000	---	26.93	46.00	19.07	L1	OFF	20.2
1.491000	37.47	---	56.00	18.53	L1	OFF	20.2
1.556250	---	27.56	46.00	18.44	L1	OFF	20.2
1.556250	37.70	---	56.00	18.30	L1	OFF	20.2
10.212000	---	25.71	50.00	24.29	L1	OFF	20.2
10.212000	26.71	---	60.00	33.29	L1	OFF	20.2

EUT Information

Report NO :	161608-05
Test Mode :	Mode 1
Test Voltage :	120Vac/60Hz
Phase :	Neutral

Full Spectrum



Final_Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.156750	---	34.16	55.63	21.47	N	OFF	19.7
0.156750	45.99	---	65.63	19.64	N	OFF	19.7
0.170250	---	30.85	54.95	24.10	N	OFF	19.7
0.170250	41.66	---	64.95	23.29	N	OFF	19.7
0.408750	---	25.86	47.67	21.81	N	OFF	19.7
0.408750	35.23	---	57.67	22.44	N	OFF	19.7
1.403250	---	26.51	46.00	19.49	N	OFF	20.2
1.403250	37.47	---	56.00	18.53	N	OFF	20.2
1.675500	---	26.77	46.00	19.23	N	OFF	20.2
1.675500	34.84	---	56.00	21.16	N	OFF	20.2
1.938750	---	25.55	46.00	20.45	N	OFF	20.2
1.938750	34.54	---	56.00	21.46	N	OFF	20.2
16.818000	---	24.75	50.00	25.25	N	OFF	20.5
16.818000	25.82	---	60.00	34.18	N	OFF	20.5

Appendix C. Radiated Spurious Emission

Test Engineer :	Karl Hou and Andy Yang	Temperature :	20~25°C
		Relative Humidity :	50~65%

2.4GHz 2400~2483.5MHz

WIFI 802.11b (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
4		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11b CH 01 2412MHz		2385.6	57.24	-16.76	74	41.72	27.59	18.21	30.28	135	241	P	H
		2387.175	44.46	-9.54	54	28.95	27.58	18.21	30.28	135	241	A	H
	*	2412	109.82	-	-	94.35	27.48	18.26	30.27	135	241	P	H
	*	2412	106.93	-	-	91.46	27.48	18.26	30.27	135	241	A	H
													H
													H
		2388.75	56.76	-17.24	74	41.25	27.57	18.22	30.28	332	122	P	V
		2385.495	43.99	-10.01	54	28.47	27.59	18.21	30.28	332	122	A	V
	*	2412	103.68	-	-	88.21	27.48	18.26	30.27	332	122	P	V
	*	2412	100.69	-	-	85.22	27.48	18.26	30.27	332	122	A	V
													V
													V
802.11b CH 06 2437MHz		2361.8	57.83	-16.17	74	42.23	27.73	18.16	30.29	107	236	P	H
		2354.1	44.02	-9.98	54	28.38	27.78	18.15	30.29	107	236	A	H
	*	2437	110.54	-	-	95.07	27.43	18.31	30.27	107	236	P	H
	*	2437	107.25	-	-	91.78	27.43	18.31	30.27	107	236	A	H
		2487.4	56.45	-17.55	74	40.9	27.4	18.4	30.25	107	236	P	H
		2494.75	44.2	-9.8	54	28.64	27.4	18.41	30.25	107	236	A	H
		2372.3	57.14	-16.86	74	41.58	27.67	18.18	30.29	330	122	P	V
		2360.26	44.02	-9.98	54	28.41	27.74	18.16	30.29	330	122	A	V
	*	2437	102.8	-	-	87.33	27.43	18.31	30.27	330	122	P	V
	*	2437	99.42	-	-	83.95	27.43	18.31	30.27	330	122	A	V
		2494.33	56.01	-17.99	74	40.45	27.4	18.41	30.25	330	122	P	V
		2492.44	44.17	-9.83	54	28.61	27.4	18.41	30.25	330	122	A	V

802.11b CH 11 2462MHz	*	2462	111.38	-	-	95.89	27.4	18.35	30.26	109	243	P	H
	*	2462	108.09	-	-	92.6	27.4	18.35	30.26	109	243	A	H
		2491.4	56.49	-17.51	74	40.94	27.4	18.4	30.25	109	243	P	H
		2484.76	44.46	-9.54	54	28.92	27.4	18.39	30.25	109	243	A	H
													H
													H
	*	2462	104.83	-	-	89.34	27.4	18.35	30.26	322	120	P	V
	*	2462	101.52	-	-	86.03	27.4	18.35	30.26	322	120	A	V
		2488.72	56.24	-17.76	74	40.69	27.4	18.4	30.25	322	120	P	V
		2491.28	44.22	-9.78	54	28.67	27.4	18.4	30.25	322	120	A	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

WIFI Ant. 4	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11b CH 12 2467MHz	*	2467	111.66	-	-	96.16	27.4	18.36	30.26	104	240	P	H
	*	2467	108.5	-	-	93	27.4	18.36	30.26	104	240	A	H
		2484	57.83	-16.17	74	42.29	27.4	18.39	30.25	104	240	P	H
		2484.04	48.39	-5.61	54	32.85	27.4	18.39	30.25	104	240	A	H
													H
													H
	*	2467	104.37	-	-	88.87	27.4	18.36	30.26	324	120	P	V
	*	2467	101.29	-	-	85.79	27.4	18.36	30.26	324	120	A	V
		2485.4	56.15	-17.85	74	40.61	27.4	18.39	30.25	324	120	P	V
		2484	45.37	-8.63	54	29.83	27.4	18.39	30.25	324	120	A	V
													V
													V
802.11b CH 13 2472MHz	*	2472	112	-	-	96.49	27.4	18.37	30.26	102	240	P	H
	*	2472	108.88	-	-	93.37	27.4	18.37	30.26	102	240	A	H
		2484.8	57.59	-16.41	74	42.05	27.4	18.39	30.25	102	240	P	H
		2485.64	47.26	-6.74	54	31.72	27.4	18.39	30.25	102	240	A	H
													H
													H
	*	2472	103.91	-	-	88.4	27.4	18.37	30.26	315	118	P	V
	*	2472	100.89	-	-	85.38	27.4	18.37	30.26	315	118	A	V
		2483.96	56.89	-17.11	74	41.35	27.4	18.39	30.25	315	118	P	V
		2485.52	44.97	-9.03	54	29.43	27.4	18.39	30.25	315	118	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. 4	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11b CH 01 2412MHz		4824	42.49	-31.51	74	57.07	31.15	12.34	58.07	-	-	P	H
		10875	52.36	-21.64	74	54.17	40.33	19.44	61.58	-	-	P	H
		10875	41.7	-12.3	54	43.51	40.33	19.44	61.58	-	-	A	H
		14491	52.83	-21.17	74	49.63	42	22.01	60.81	-	-	P	H
		14491	42.66	-11.34	54	39.46	42	22.01	60.81	-	-	A	H
		17985	61.44	-12.56	74	44.37	48.85	25.04	56.82	-	-	P	H
		17985	47.73	-6.27	54	30.66	48.85	25.04	56.82	-	-	A	H
													H
													H
													H
													H
													H
		4824	42.06	-31.94	74	56.64	31.15	12.34	58.07	-	-	P	V
		10880	51.85	-22.15	74	53.64	40.34	19.44	61.57	-	-	P	V
		10880	42.06	-11.94	54	43.85	40.34	19.44	61.57	-	-	A	V
		14490	52.87	-21.13	74	49.67	42	22.01	60.81	-	-	P	V
		14490	42.87	-11.13	54	39.67	42	22.01	60.81	-	-	A	V
		17970	61.32	-12.68	74	44.62	48.51	25.03	56.84	-	-	P	V
		17970	47.58	-6.42	54	30.88	48.51	25.03	56.84	-	-	A	V
													V
													V
													V
													V
													V

WIFI Ant. 4	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		4874	42.25	-31.75	74	56.78	31.2	12.32	58.05	-	-	P	H
		7311	47.72	-26.28	74	53.45	36.4	15.83	57.96	-	-	P	H
		10875	52.01	-21.99	74	53.82	40.33	19.44	61.58	-	-	P	H
		10875	41.54	-12.46	54	43.35	40.33	19.44	61.58	-	-	A	H
		14491	53.21	-20.79	74	50.01	42	22.01	60.81	-	-	P	H
		14491	43.08	-10.92	54	39.88	42	22.01	60.81	-	-	A	H
		17985	61.17	-12.83	74	44.1	48.85	25.04	56.82	-	-	P	H
		17985	47.81	-6.19	54	30.74	48.85	25.04	56.82	-	-	A	H
													H
													H
													H
802.11b CH 06 2437MHz													H
		4874	41.8	-32.2	74	56.33	31.2	12.32	58.05	-	-	P	V
		7311	47.96	-26.04	74	53.69	36.4	15.83	57.96	-	-	P	V
		10880	52.09	-21.91	74	53.88	40.34	19.44	61.57	-	-	P	V
		10880	41.86	-12.14	54	43.65	40.34	19.44	61.57	-	-	A	V
		14490	52.45	-21.55	74	49.25	42	22.01	60.81	-	-	P	V
		14490	42.9	-11.1	54	39.7	42	22.01	60.81	-	-	A	V
		17970	61.06	-12.94	74	44.36	48.51	25.03	56.84	-	-	P	V
		17970	47.63	-6.37	54	30.93	48.51	25.03	56.84	-	-	A	V
													V
													V
													V
													V

WIFI Ant. 4	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		4924	41.99	-32.01	74	56.37	31.35	12.3	58.03	-	-	P	H
		7386	50.19	-23.81	74	55.66	36.26	16.25	57.98	100	304	P	H
		7386	41.57	-12.43	54	47.04	36.26	16.25	57.98	100	304	A	H
		10875	52.48	-21.52	74	54.29	40.33	19.44	61.58	-	-	P	H
		10875	41.78	-12.22	54	43.59	40.33	19.44	61.58	-	-	A	H
		14491	53.02	-20.98	74	49.82	42	22.01	60.81	-	-	P	H
		14491	42.92	-11.08	54	39.72	42	22.01	60.81	-	-	A	H
		17985	61.58	-12.42	74	44.51	48.85	25.04	56.82	-	-	P	H
		17985	47.68	-6.32	54	30.61	48.85	25.04	56.82	-	-	A	H
													H
													H
802.11b CH 11 2462MHz													H
		4924	42.1	-31.9	74	56.48	31.35	12.3	58.03	-	-	P	V
		7386	51.37	-22.63	74	56.84	36.26	16.25	57.98	100	257	P	V
		7386	43.75	-10.25	54	49.22	36.26	16.25	57.98	100	257	A	V
		10880	52.94	-21.06	74	54.73	40.34	19.44	61.57	-	-	P	V
		10880	42.12	-11.88	54	43.91	40.34	19.44	61.57	-	-	A	V
		14490	53.02	-20.98	74	49.82	42	22.01	60.81	-	-	P	V
		14490	42.66	-11.34	54	39.46	42	22.01	60.81	-	-	A	V
		17985	61.64	-12.36	74	44.57	48.85	25.04	56.82	-	-	P	V
		17985	47.52	-6.48	54	30.45	48.85	25.04	56.82	-	-	A	V
													V
													V
													V

Remark

1. No other spurious found.
2. All results are PASS against Peak and Average limit line.
3. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only.
4. The emission level close to 18GHz is checked that the average emission level is noise floor only.

WIFI Ant. 4	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		4934	41.89	-32.11	74	56.26	31.37	12.29	58.03	-	-	P	H
		7401	47.9	-26.1	74	53.35	36.21	16.32	57.98	-	-	P	H
		10875	52.37	-21.63	74	54.18	40.33	19.44	61.58	-	-	P	H
		10875	41.76	-12.24	54	43.57	40.33	19.44	61.58	-	-	A	H
		14491	52.97	-21.03	74	49.77	42	22.01	60.81	-	-	P	H
		14491	43.16	-10.84	54	39.96	42	22.01	60.81	-	-	A	H
		17970	61.06	-12.94	74	44.36	48.51	25.03	56.84	-	-	P	H
		17970	47.54	-6.46	54	30.84	48.51	25.03	56.84	-	-	A	H
													H
													H
													H
802.11b CH 12 2467MHz													H
		4934	41.33	-32.67	74	55.7	31.37	12.29	58.03	-	-	P	V
		7401	50.69	-23.31	74	56.14	36.21	16.32	57.98	100	259	P	V
		7401	44.41	-9.59	54	49.86	36.21	16.32	57.98	100	259	A	V
		10880	52.66	-21.34	74	54.45	40.34	19.44	61.57	-	-	P	V
		10880	42.06	-11.94	54	43.85	40.34	19.44	61.57	-	-	A	V
		14490	53.36	-20.64	74	50.16	42	22.01	60.81	-	-	P	V
		14490	42.67	-11.33	54	39.47	42	22.01	60.81	-	-	A	V
		18000	61.39	-12.61	74	43.95	49.2	25.04	56.8	-	-	P	V
		18000	47.74	-6.26	54	30.3	49.2	25.04	56.8	-	-	A	V
													V
													V
													V

WIFI Ant. 4	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		4944	41.34	-32.66	74	55.68	31.39	12.29	58.02	-	-	P	H
		7416	50.01	-23.99	74	55.42	36.3	16.27	57.98	105	307	P	H
		7416	41.33	-12.67	54	46.74	36.3	16.27	57.98	105	307	A	H
		10875	52.99	-21.01	74	54.8	40.33	19.44	61.58	-	-	P	H
		10875	42.02	-11.98	54	43.83	40.33	19.44	61.58	-	-	A	H
		14491	52.73	-21.27	74	49.53	42	22.01	60.81	-	-	P	H
		14491	42.86	-11.14	54	39.66	42	22.01	60.81	-	-	A	H
		17970	60.89	-13.11	74	44.19	48.51	25.03	56.84	-	-	P	H
		17970	47.22	-6.78	54	30.52	48.51	25.03	56.84	-	-	A	H
													H
													H
802.11b CH 13 2472MHz													H
		4944	42.23	-31.77	74	56.57	31.39	12.29	58.02	-	-	P	V
		7416	51.58	-22.42	74	56.99	36.3	16.27	57.98	100	257	P	V
		7416	44.26	-9.74	54	49.67	36.3	16.27	57.98	100	257	A	V
		10880	52.73	-21.27	74	54.52	40.34	19.44	61.57	-	-	P	V
		10880	42.26	-11.74	54	44.05	40.34	19.44	61.57	-	-	A	V
		14490	52.27	-21.73	74	49.07	42	22.01	60.81	-	-	P	V
		14490	42.99	-11.01	54	39.79	42	22.01	60.81	-	-	A	V
		17985	61.81	-12.19	74	44.74	48.85	25.04	56.82	-	-	P	V
		17985	47.56	-6.44	54	30.49	48.85	25.04	56.82	-	-	A	V
													V
													V
													V

Remark

1. No other spurious found.
2. All results are PASS against Peak and Average limit line.
3. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only.
4. The emission level close to 18GHz is checked that the average emission level is noise floor only.

2.4GHz 2400~2483.5MHz

WIFI 802.11b (Band Edge @ 3m)

WIFI Ant. 3	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11b CH 01 2412MHz		2366.91	56.13	-17.87	74	40.55	27.7	18.17	30.29	109	68	P	H
		2387.175	44.77	-9.23	54	29.26	27.58	18.21	30.28	109	68	A	H
	*	2412	109.58	-	-	94.11	27.48	18.26	30.27	109	68	P	H
	*	2412	106.53	-	-	91.06	27.48	18.26	30.27	109	68	A	H
													H
													H
		2332.575	56.16	-17.84	74	40.55	27.8	18.11	30.3	376	45	P	V
		2387.175	44.33	-9.67	54	28.82	27.58	18.21	30.28	376	45	A	V
	*	2412	105.47	-	-	90	27.48	18.26	30.27	376	45	P	V
	*	2412	102.49	-	-	87.02	27.48	18.26	30.27	376	45	A	V
													V
													V
802.11b CH 06 2437MHz		2345.56	56.38	-17.62	74	40.74	27.8	18.13	30.29	108	67	P	H
		2349.9	44.06	-9.94	54	28.41	27.8	18.14	30.29	108	67	A	H
	*	2437	108.63	-	-	93.16	27.43	18.31	30.27	108	67	P	H
	*	2437	105.5	-	-	90.03	27.43	18.31	30.27	108	67	A	H
		2490.06	56.61	-17.39	74	41.06	27.4	18.4	30.25	108	67	P	H
		2498.18	44.27	-9.73	54	28.7	27.4	18.42	30.25	108	67	A	H
		2322.18	56.01	-17.99	74	40.43	27.8	18.08	30.3	362	111	P	V
		2350.46	44.08	-9.92	54	28.43	27.8	18.14	30.29	362	111	A	V
	*	2437	106.53	-	-	91.06	27.43	18.31	30.27	362	111	P	V
	*	2437	103.49	-	-	88.02	27.43	18.31	30.27	362	111	A	V
		2491.53	56.37	-17.63	74	40.82	27.4	18.4	30.25	362	111	P	V
		2491.04	44.29	-9.71	54	28.74	27.4	18.4	30.25	362	111	A	V

802.11b CH 11 2462MHz	*	2462	111.04	-	-	95.55	27.4	18.35	30.26	105	67	P	H
	*	2462	107.92	-	-	92.43	27.4	18.35	30.26	105	67	A	H
		2488.16	56.53	-17.47	74	40.98	27.4	18.4	30.25	105	67	P	H
		2486.32	44.41	-9.59	54	28.86	27.4	18.4	30.25	105	67	A	H
													H
													H
	*	2462	109.42	-	-	93.93	27.4	18.35	30.26	400	110	P	V
	*	2462	106.3	-	-	90.81	27.4	18.35	30.26	400	110	A	V
		2487.04	57.01	-16.99	74	41.46	27.4	18.4	30.25	400	110	P	V
		2484.88	44.32	-9.68	54	28.78	27.4	18.39	30.25	400	110	A	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

WIFI Ant. 3	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11b CH 12 2467MHz	*	2467	110.28	-	-	94.78	27.4	18.36	30.26	100	67	P	H
	*	2467	107.2	-	-	91.7	27.4	18.36	30.26	100	67	A	H
		2486.64	56.01	-17.99	74	40.46	27.4	18.4	30.25	100	67	P	H
		2483.68	45.29	-8.71	54	29.75	27.4	18.39	30.25	100	67	A	H
													H
													H
	*	2467	109.2	-	-	93.7	27.4	18.36	30.26	400	110	P	V
	*	2467	106.09	-	-	90.59	27.4	18.36	30.26	400	110	A	V
		2493.28	56.75	-17.25	74	41.19	27.4	18.41	30.25	400	110	P	V
		2483.8	44.9	-9.1	54	29.36	27.4	18.39	30.25	400	110	A	V
													V
													V
802.11b CH 13 2472MHz	*	2472	110.3	-	-	94.79	27.4	18.37	30.26	108	67	P	H
	*	2472	107.2	-	-	91.69	27.4	18.37	30.26	108	67	A	H
		2484.8	59.83	-14.17	74	44.29	27.4	18.39	30.25	108	67	P	H
		2483.52	50.78	-3.22	54	35.24	27.4	18.39	30.25	108	67	A	H
													H
													H
	*	2472	108.6	-	-	93.09	27.4	18.37	30.26	400	112	P	V
	*	2472	105.42	-	-	89.91	27.4	18.37	30.26	400	112	A	V
		2483.6	58.81	-15.19	74	43.27	27.4	18.39	30.25	400	112	P	V
		2483.52	49.38	-4.62	54	33.84	27.4	18.39	30.25	400	112	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. 3	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11b CH 01 2412MHz		4824	44.63	-29.37	74	59.21	31.15	12.34	58.07	-	-	P	H
		10875	52.09	-21.91	74	53.9	40.33	19.44	61.58	-	-	P	H
		10875	42.08	-11.92	54	43.89	40.33	19.44	61.58	-	-	A	H
		14491	53.15	-20.85	74	49.95	42	22.01	60.81	-	-	P	H
		14491	43.12	-10.88	54	39.92	42	22.01	60.81	-	-	A	H
		18000	61.72	-12.28	74	44.28	49.2	25.04	56.8	-	-	P	H
		18000	47.85	-6.15	54	30.41	49.2	25.04	56.8	-	-	A	H
													H
													H
													H
													H
													H
		4824	41.98	-32.02	74	56.56	31.15	12.34	58.07	-	-	P	V
		10880	53.42	-20.58	74	55.21	40.34	19.44	61.57	-	-	P	V
		10880	42.33	-11.67	54	44.12	40.34	19.44	61.57	-	-	A	V
		14490	52.32	-21.68	74	49.12	42	22.01	60.81	-	-	P	V
		14490	43.01	-10.99	54	39.81	42	22.01	60.81	-	-	A	V
		18000	61.47	-12.53	74	44.03	49.2	25.04	56.8	-	-	P	V
		18000	47.79	-6.21	54	30.35	49.2	25.04	56.8	-	-	A	V
													V
													V
													V
													V
													V

WIFI Ant. 3	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		4874	44.3	-29.7	74	58.83	31.2	12.32	58.05	-	-	P	H
		7311	47.6	-26.4	74	53.33	36.4	15.83	57.96	-	-	P	H
		10875	52.06	-21.94	74	53.87	40.33	19.44	61.58	-	-	P	H
		10875	42.04	-11.96	54	43.85	40.33	19.44	61.58	-	-	A	H
		14491	53.53	-20.47	74	50.33	42	22.01	60.81	-	-	P	H
		14491	43.13	-10.87	54	39.93	42	22.01	60.81	-	-	A	H
		18000	61.72	-12.28	74	44.28	49.2	25.04	56.8	-	-	P	H
		18000	47.81	-6.19	54	30.37	49.2	25.04	56.8	-	-	A	H
													H
													H
													H
802.11b CH 06 2437MHz													H
		4874	41.05	-32.95	74	55.58	31.2	12.32	58.05	-	-	P	V
		7311	47.88	-26.12	74	53.61	36.4	15.83	57.96	-	-	P	V
		10880	52.17	-21.83	74	53.96	40.34	19.44	61.57	-	-	P	V
		10880	42.08	-11.92	54	43.87	40.34	19.44	61.57	-	-	A	V
		14490	53.17	-20.83	74	49.97	42	22.01	60.81	-	-	P	V
		14490	42.92	-11.08	54	39.72	42	22.01	60.81	-	-	A	V
		18000	60.91	-13.09	74	43.47	49.2	25.04	56.8	-	-	P	V
		18000	47.9	-6.1	54	30.46	49.2	25.04	56.8	-	-	A	V
													V
													V
													V
													V

WIFI Ant. 3	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		4924	44.94	-29.06	74	59.32	31.35	12.3	58.03	-	-	P	H
		7386	50.15	-23.85	74	55.62	36.26	16.25	57.98	100	177	P	H
		7386	39.88	-14.12	54	45.35	36.26	16.25	57.98	100	177	A	H
		10875	52.65	-21.35	74	54.46	40.33	19.44	61.58	-	-	P	H
		10875	42.24	-11.76	54	44.05	40.33	19.44	61.58	-	-	A	H
		14491	53.97	-20.03	74	50.77	42	22.01	60.81	-	-	P	H
		14491	43.07	-10.93	54	39.87	42	22.01	60.81	-	-	A	H
		17970	62.06	-11.94	74	45.36	48.51	25.03	56.84	-	-	P	H
		17970	47.59	-6.41	54	30.89	48.51	25.03	56.84	-	-	A	H
													H
													H
802.11b CH 11 2462MHz													H
		4924	44.23	-29.77	74	58.61	31.35	12.3	58.03	-	-	P	V
		7386	49.13	-24.87	74	54.6	36.26	16.25	57.98	100	70	P	V
		7386	42.2	-11.8	54	47.67	36.26	16.25	57.98	100	70	A	V
		10880	52.99	-21.01	74	54.78	40.34	19.44	61.57	-	-	P	V
		10880	42.41	-11.59	54	44.2	40.34	19.44	61.57	-	-	A	V
		14490	53.45	-20.55	74	50.25	42	22.01	60.81	-	-	P	V
		14490	43.14	-10.86	54	39.94	42	22.01	60.81	-	-	A	V
		18000	62.44	-11.56	74	45	49.2	25.04	56.8	-	-	P	V
		18000	47.68	-6.32	54	30.24	49.2	25.04	56.8	-	-	A	V
													V
													V
													V

Remark

1. No other spurious found.
2. All results are PASS against Peak and Average limit line.
3. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only.
4. The emission level close to 18GHz is checked that the average emission level is noise floor only.

WIFI Ant. 3	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		4934	43.57	-30.43	74	57.94	31.37	12.29	58.03	-	-	P	H
		7401	47.35	-26.65	74	52.8	36.21	16.32	57.98	-	-	P	H
		10875	52.34	-21.66	74	54.15	40.33	19.44	61.58	-	-	P	H
		10875	42.05	-11.95	54	43.86	40.33	19.44	61.58	-	-	A	H
		14491	53.18	-20.82	74	49.98	42	22.01	60.81	-	-	P	H
		14491	43.12	-10.88	54	39.92	42	22.01	60.81	-	-	A	H
		18000	61.65	-12.35	74	44.21	49.2	25.04	56.8	-	-	P	H
		18000	47.69	-6.31	54	30.25	49.2	25.04	56.8	-	-	A	H
													H
													H
													H
802.11b CH 12 2467MHz													H
		4934	42.85	-31.15	74	57.22	31.37	12.29	58.03	-	-	P	V
		7401	49.52	-24.48	74	54.97	36.21	16.32	57.98	100	72	P	V
		7401	40.95	-13.05	54	46.4	36.21	16.32	57.98	100	72	A	V
		10880	52.09	-21.91	74	53.88	40.34	19.44	61.57	-	-	P	V
		10880	42.19	-11.81	54	43.98	40.34	19.44	61.57	-	-	A	V
		14490	53.78	-20.22	74	50.58	42	22.01	60.81	-	-	P	V
		14490	43.04	-10.96	54	39.84	42	22.01	60.81	-	-	A	V
		17985	62.44	-11.56	74	45.37	48.85	25.04	56.82	-	-	P	V
		17985	47.58	-6.42	54	30.51	48.85	25.04	56.82	-	-	A	V
													V
													V
													V

WIFI Ant. 3	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		4944	44.39	-29.61	74	58.73	31.39	12.29	58.02	-	-	P	H
		7416	47.89	-26.11	74	53.3	36.3	16.27	57.98	-	-	P	H
		10875	52.94	-21.06	74	54.75	40.33	19.44	61.58	-	-	P	H
		10875	42.28	-11.72	54	44.09	40.33	19.44	61.58	-	-	A	H
		14491	53.53	-20.47	74	50.33	42	22.01	60.81	-	-	P	H
		14491	43.19	-10.81	54	39.99	42	22.01	60.81	-	-	A	H
		17970	62.42	-11.58	74	45.72	48.51	25.03	56.84	-	-	P	H
		17970	47.62	-6.38	54	30.92	48.51	25.03	56.84	-	-	A	H
													H
													H
													H
802.11b													H
CH 13		4944	42.62	-31.38	74	56.96	31.39	12.29	58.02	-	-	P	V
2472MHz		7416	47.83	-26.17	74	53.24	36.3	16.27	57.98	-	-	P	V
		10880	52.1	-21.9	74	53.89	40.34	19.44	61.57	-	-	P	V
		10880	42.32	-11.68	54	44.11	40.34	19.44	61.57	-	-	A	V
		14490	53	-21	74	49.8	42	22.01	60.81	-	-	P	V
		14490	42.98	-11.02	54	39.78	42	22.01	60.81	-	-	A	V
		17985	62.38	-11.62	74	45.31	48.85	25.04	56.82	-	-	P	V
		17985	47.75	-6.25	54	30.68	48.85	25.04	56.82	-	-	A	V
													V
													V
													V
													V

Remark

1. No other spurious found.
2. All results are PASS against Peak and Average limit line.
3. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only.
4. The emission level close to 18GHz is checked that the average emission level is noise floor only.

2.4GHz 2400~2483.5MHz

WIFI 802.11g (Band Edge @ 3m)

WIFI Ant. 4+3	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11g CH 01 2412MHz		2389.695	61.56	-12.44	74	46.06	27.56	18.22	30.28	104	241	P	H
		2389.905	51.58	-2.42	54	36.08	27.56	18.22	30.28	104	241	P	H
	*	2412	112.49	-	-	97.02	27.48	18.26	30.27	104	241	P	H
	*	2412	104.32	-	-	88.85	27.48	18.26	30.27	104	241	A	H
													H
													H
		2389.8	60.15	-13.85	74	44.65	27.56	18.22	30.28	377	114	P	V
		2389.905	48.76	-5.24	54	33.26	27.56	18.22	30.28	377	114	A	V
	*	2412	110.03	-	-	94.56	27.48	18.26	30.27	377	114	P	V
	*	2412	101.72	-	-	86.25	27.48	18.26	30.27	377	114	A	V
													V
													V
802.11g CH 06 2437MHz		2368.24	56.41	-17.59	74	40.83	27.69	18.18	30.29	100	237	P	H
		2389.24	45.75	-8.25	54	30.25	27.56	18.22	30.28	100	237	A	H
	*	2437	114.76	-	-	99.29	27.43	18.31	30.27	100	237	P	H
	*	2437	107.28	-	-	91.81	27.43	18.31	30.27	100	237	A	H
		2483.5	57.6	-16.4	74	42.06	27.4	18.39	30.25	100	237	P	H
		2483.5	46.16	-7.84	54	30.62	27.4	18.39	30.25	100	237	A	H
		2362.08	56.58	-17.42	74	40.98	27.73	18.16	30.29	366	112	P	V
		2361.66	45.7	-8.3	54	30.1	27.73	18.16	30.29	366	112	A	V
	*	2437	111.77	-	-	96.3	27.43	18.31	30.27	366	112	P	V
	*	2437	104.28	-	-	88.81	27.43	18.31	30.27	366	112	A	V
		2498.67	57.24	-16.76	74	41.67	27.4	18.42	30.25	366	112	P	V
		2483.83	45.76	-8.24	54	30.22	27.4	18.39	30.25	366	112	A	V

802.11g CH 11 2462MHz	*	2462	115	-	-	99.51	27.4	18.35	30.26	100	238	P	H
	*	2462	107.13	-	-	91.64	27.4	18.35	30.26	100	238	A	H
		2483.68	60.78	-13.22	74	45.24	27.4	18.39	30.25	100	238	P	H
		2483.52	50.81	-3.19	54	35.27	27.4	18.39	30.25	100	238	A	H
													H
													H
	*	2462	111.72	-	-	96.23	27.4	18.35	30.26	400	115	P	V
	*	2462	104.96	-	-	89.47	27.4	18.35	30.26	400	115	A	V
		2483.8	58.98	-15.02	74	43.44	27.4	18.39	30.25	400	115	P	V
		2483.52	48.78	-5.22	54	33.24	27.4	18.39	30.25	400	115	A	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

WIFI Ant. 4+3	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11g CH 12 2467MHz	*	2467	113.43	-	-	97.93	27.4	18.36	30.26	104	237	P	H
	*	2467	105.53	-	-	90.03	27.4	18.36	30.26	104	237	A	H
		2483.52	62.82	-11.18	74	47.28	27.4	18.39	30.25	104	237	P	H
		2483.6	51.67	-2.33	54	36.13	27.4	18.39	30.25	104	237	A	H
													H
													H
	*	2467	110.22	-	-	94.72	27.4	18.36	30.26	361	96	P	V
	*	2467	102.4	-	-	86.9	27.4	18.36	30.26	361	96	A	V
		2483.76	59.52	-14.48	74	43.98	27.4	18.39	30.25	361	96	P	V
		2483.52	49.33	-4.67	54	33.79	27.4	18.39	30.25	361	96	A	V
													V
													V
802.11g CH 13 2472MHz	*	2472	111.25	-	-	95.74	27.4	18.37	30.26	100	234	P	H
	*	2472	103.57	-	-	88.06	27.4	18.37	30.26	100	234	A	H
		2483.56	62.41	-11.59	74	46.87	27.4	18.39	30.25	100	234	P	H
		2483.52	51.95	-2.05	54	36.41	27.4	18.39	30.25	100	234	A	H
													H
													H
	*	2472	107.8	-	-	92.29	27.4	18.37	30.26	395	107	P	V
	*	2472	100.18	-	-	84.67	27.4	18.37	30.26	395	107	A	V
		2483.64	60.03	-13.97	74	44.49	27.4	18.39	30.25	395	107	P	V
		2483.56	50.02	-3.98	54	34.48	27.4	18.39	30.25	395	107	A	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

2.4GHz 2400~2483.5MHz

WIFI 802.11g (Harmonic @ 3m)

WIFI Ant. 4+3	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		4824	42.07	-31.93	74	56.65	31.15	12.34	58.07	-	-	P	H
		10950	52.33	-21.67	74	53.91	40.4	19.49	61.47	-	-	P	H
		10950	42.38	-11.62	54	43.96	40.4	19.49	61.47	-	-	A	H
		14505	52.57	-21.43	74	49.34	42.01	22.02	60.8	-	-	P	H
		14505	43.4	-10.6	54	40.17	42.01	22.02	60.8	-	-	A	H
		18000	60.46	-13.54	74	43.02	49.2	25.04	56.8	-	-	P	H
		18000	47.58	-6.42	54	30.14	49.2	25.04	56.8	-	-	A	H
													H
													H
													H
													H
802.11g CH 01 2412MHz													H
		4824	42.11	-31.89	74	56.69	31.15	12.34	58.07	-	-	P	V
		11070	52.43	-21.57	74	53.98	40.12	19.62	61.29	-	-	P	V
		11070	42.04	-11.96	54	43.59	40.12	19.62	61.29	-	-	A	V
		14490	53.07	-20.93	74	49.87	42	22.01	60.81	-	-	P	V
		14490	43.36	-10.64	54	40.16	42	22.01	60.81	-	-	A	V
		17985	60.53	-13.47	74	43.46	48.85	25.04	56.82	-	-	P	V
		17985	47.82	-6.18	54	30.75	48.85	25.04	56.82	-	-	A	V
													V
													V
													V
													V
													V

WIFI Ant. 4+3	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		4874	43.61	-30.39	74	58.14	31.2	12.32	58.05	-	-	P	H
		7311	50.68	-23.32	74	56.41	36.4	15.83	57.96	100	77	P	H
		7311	40.87	-13.13	54	46.6	36.4	15.83	57.96	100	77	A	H
		10875	52.79	-21.21	74	54.6	40.33	19.44	61.58	-	-	P	H
		10875	42.21	-11.79	54	44.02	40.33	19.44	61.58	-	-	A	H
		14491	53	-21	74	49.8	42	22.01	60.81	-	-	P	H
		14491	43.08	-10.92	54	39.88	42	22.01	60.81	-	-	A	H
		18000	61.57	-12.43	74	44.13	49.2	25.04	56.8	-	-	P	H
		18000	47.8	-6.2	54	30.36	49.2	25.04	56.8	-	-	A	H
													H
													H
802.11g CH 06 2437MHz													H
		4874	42.52	-31.48	74	57.05	31.2	12.32	58.05	-	-	P	V
		7311	55.22	-18.78	74	60.95	36.4	15.83	57.96	100	236	P	V
		7311	44.04	-9.96	54	49.77	36.4	15.83	57.96	100	236	A	V
		10880	52.85	-21.15	74	54.64	40.34	19.44	61.57	-	-	P	V
		10880	42.07	-11.93	54	43.86	40.34	19.44	61.57	-	-	A	V
		14490	53.88	-20.12	74	50.68	42	22.01	60.81	-	-	P	V
		14490	43.32	-10.68	54	40.12	42	22.01	60.81	-	-	A	V
		17985	61.52	-12.48	74	44.45	48.85	25.04	56.82	-	-	P	V
		17985	47.61	-6.39	54	30.54	48.85	25.04	56.82	-	-	A	V
													V
													V
													V

WIFI Ant. 4+3	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		4924	42.64	-31.36	74	57.02	31.35	12.3	58.03	-	-	P	H
		7386	48.11	-25.89	74	53.58	36.26	16.25	57.98	-	-	P	H
		7386	40.67	-13.33	54	46.14	36.26	16.25	57.98	300	243	A	H
		10890	52.43	-21.57	74	54.16	40.37	19.45	61.55	-	-	P	H
		10890	41.83	-12.17	54	43.56	40.37	19.45	61.55	-	-	A	H
		14490	53.37	-20.63	74	50.17	42	22.01	60.81	-	-	P	H
		14490	43.73	-10.27	54	40.53	42	22.01	60.81	-	-	A	H
		17985	60.97	-13.03	74	43.9	48.85	25.04	56.82	-	-	P	H
		17985	47.21	-6.79	54	30.14	48.85	25.04	56.82	-	-	A	H
													H
													H
802.11g CH 11 2462MHz													H
		4920	41.95	-32.05	74	56.34	31.34	12.3	58.03	-	-	P	V
		7386	56.22	-17.78	74	61.69	36.26	16.25	57.98	100	280	P	V
		7386	45.46	-8.54	54	50.93	36.26	16.25	57.98	100	280	A	V
		10860	52.09	-21.91	74	53.98	40.28	19.43	61.6	-	-	P	V
		10860	41.71	-12.29	54	43.6	40.28	19.43	61.6	-	-	A	V
		14490	53.09	-20.91	74	49.89	42	22.01	60.81	-	-	P	V
		14490	43.77	-10.23	54	40.57	42	22.01	60.81	-	-	A	V
		17985	60.75	-13.25	74	43.68	48.85	25.04	56.82	-	-	P	V
		17985	47.67	-6.33	54	30.6	48.85	25.04	56.82	-	-	A	V
													V
													V
													V

Remark

1. No other spurious found.
2. All results are PASS against Peak and Average limit line.
3. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only.
4. The emission level close to 18GHz is checked that the average emission level is noise floor only.

WIFI Ant. 4+3	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		4934	42.52	-31.48	74	56.89	31.37	12.29	58.03	-	-	P	H
		7401	48.06	-25.94	74	53.51	36.21	16.32	57.98	300	239	P	H
		7401	40.4	-13.6	54	45.85	36.21	16.32	57.98	300	239	A	H
		10755	52.66	-21.34	74	55.09	39.97	19.34	61.74	-	-	P	H
		10755	41.31	-12.69	54	43.74	39.97	19.34	61.74	-	-	A	H
		14490	52.6	-21.4	74	49.4	42	22.01	60.81	-	-	P	H
		14490	43.73	-10.27	54	40.53	42	22.01	60.81	-	-	A	H
		18000	60.43	-13.57	74	42.99	49.2	25.04	56.8	-	-	P	H
		18000	47.97	-6.03	54	30.53	49.2	25.04	56.8	-	-	A	H
													H
													H
802.11g CH 12 2467MHz													H
		4934	41.39	-32.61	74	55.76	31.37	12.29	58.03	-	-	P	V
		7401	55.43	-18.57	74	60.88	36.21	16.32	57.98	100	279	P	V
		7401	43.8	-10.2	54	49.25	36.21	16.32	57.98	100	279	A	V
		11415	52.33	-21.67	74	52.97	40.1	20	60.74	-	-	P	V
		11415	43.19	-10.81	54	43.83	40.1	20	60.74	-	-	A	V
		14490	53.25	-20.75	74	50.05	42	22.01	60.81	-	-	P	V
		14490	43.62	-10.38	54	40.42	42	22.01	60.81	-	-	A	V
		18000	60.74	-13.26	74	43.3	49.2	25.04	56.8	-	-	P	V
		18000	47.67	-6.33	54	30.23	49.2	25.04	56.8	-	-	A	V
													V
													V
													V

WIFI Ant. 4+3	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		4944	41.98	-32.02	74	56.32	31.39	12.29	58.02	-	-	P	H
		7416	48.85	-25.15	74	54.26	36.3	16.27	57.98	300	243	P	H
		7416	39.29	-14.71	54	44.7	36.3	16.27	57.98	300	243	A	H
		11445	52.18	-21.82	74	52.74	40.1	20.03	60.69	-	-	P	H
		11445	42.97	-11.03	54	43.53	40.1	20.03	60.69	-	-	A	H
		14505	52.54	-21.46	74	49.31	42.01	22.02	60.8	-	-	P	H
		14505	43.39	-10.61	54	40.16	42.01	22.02	60.8	-	-	A	H
		18000	60.91	-13.09	74	43.47	49.2	25.04	56.8	-	-	P	H
		18000	47.68	-6.32	54	30.24	49.2	25.04	56.8	-	-	A	H
													H
													H
802.11g CH 13 2472MHz													H
		4944	41.37	-32.63	74	55.71	31.39	12.29	58.02	-	-	P	V
		7416	53.55	-20.45	74	58.96	36.3	16.27	57.98	100	279	P	V
		7416	42.3	-11.7	54	47.71	36.3	16.27	57.98	100	279	A	V
		10830	52.3	-21.7	74	54.35	40.19	19.4	61.64	-	-	P	V
		10830	41.13	-12.87	54	43.18	40.19	19.4	61.64	-	-	A	V
		14475	53.28	-20.72	74	50.11	42	22	60.83	-	-	P	V
		14475	43.73	-10.27	54	40.56	42	22	60.83	-	-	A	V
		17985	60.6	-13.4	74	43.53	48.85	25.04	56.82	-	-	P	V
		17985	47.96	-6.04	54	30.89	48.85	25.04	56.82	-	-	A	V
													V
													V
													V

Remark

1. No other spurious found.
2. All results are PASS against Peak and Average limit line.
3. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only.
4. The emission level close to 18GHz is checked that the average emission level is noise floor only.

2.4GHz 2400~2483.5MHz

WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI Ant. 4+3	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		2389.065	61.99	-12.01	74	46.48	27.57	18.22	30.28	105	241	P	H
		2389.485	51.87	-2.13	54	36.37	27.56	18.22	30.28	105	241	A	H
	*	2412	110.83	-	-	95.36	27.48	18.26	30.27	105	241	P	H
	*	2412	103.36	-	-	87.89	27.48	18.26	30.27	105	241	A	H
802.11n													H
HT20													H
CH 01		2389.59	60.12	-13.88	74	44.62	27.56	18.22	30.28	377	112	P	V
2412MHz		2389.485	49.02	-4.98	54	33.52	27.56	18.22	30.28	377	112	A	V
	*	2412	108.1	-	-	92.63	27.48	18.26	30.27	377	112	P	V
	*	2412	100.63	-	-	85.16	27.48	18.26	30.27	377	112	A	V
													V
													V
		2389.52	60.27	-13.73	74	44.77	27.56	18.22	30.28	100	239	P	H
		2385.32	45.79	-8.21	54	30.27	27.59	18.21	30.28	100	239	A	H
	*	2437	113.53	-	-	98.06	27.43	18.31	30.27	100	239	P	H
	*	2437	105.62	-	-	90.15	27.43	18.31	30.27	100	239	A	H
802.11n		2484.18	56.58	-17.42	74	41.04	27.4	18.39	30.25	100	239	P	H
HT20		2485.09	46.03	-7.97	54	30.49	27.4	18.39	30.25	100	239	A	H
CH 06		2316.44	57.73	-16.27	74	42.16	27.8	18.07	30.3	362	110	P	V
2437MHz		2352.28	45.84	-8.16	54	30.2	27.79	18.14	30.29	362	110	A	V
	*	2437	109.68	-	-	94.21	27.43	18.31	30.27	362	110	P	V
	*	2437	102.74	-	-	87.27	27.43	18.31	30.27	362	110	A	V
		2486.91	56.09	-17.91	74	40.54	27.4	18.4	30.25	362	110	P	V
		2483.55	45.92	-8.08	54	30.38	27.4	18.39	30.25	362	110	A	V

	*	2462	111.86	-	-	96.37	27.4	18.35	30.26	100	238	P	H
	*	2462	104.71	-	-	89.22	27.4	18.35	30.26	100	238	A	H
		2483.72	59.25	-14.75	74	43.71	27.4	18.39	30.25	100	238	P	H
		2483.52	50.18	-3.82	54	34.64	27.4	18.39	30.25	100	238	A	H
802.11n													H
HT20													H
CH 11	*	2462	111	-	-	95.51	27.4	18.35	30.26	400	112	P	V
2462MHz	*	2462	102.88	-	-	87.39	27.4	18.35	30.26	400	112	A	V
		2483.52	59.44	-14.56	74	43.9	27.4	18.39	30.25	400	112	P	V
		2483.6	48.16	-5.84	54	32.62	27.4	18.39	30.25	400	112	A	V
													V
													V

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

WIFI Ant. 4+3	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
	*	2467	111.83	-	-	96.33	27.4	18.36	30.26	100	238	P	H
	*	2467	104.54	-	-	89.04	27.4	18.36	30.26	100	238	A	H
		2483.72	61.78	-12.22	74	46.24	27.4	18.39	30.25	100	238	P	H
		2483.56	51.4	-2.6	54	35.86	27.4	18.39	30.25	100	238	A	H
802.11n													H
HT20													H
CH 12	*	2467	110.03	-	-	94.53	27.4	18.36	30.26	400	111	P	V
2467MHz	*	2467	102.47	-	-	86.97	27.4	18.36	30.26	400	111	A	V
		2484.2	58.72	-15.28	74	43.18	27.4	18.39	30.25	400	111	P	V
		2483.84	48.92	-5.08	54	33.38	27.4	18.39	30.25	400	111	A	V
													V
													V
	*	2472	110.41	-	-	94.9	27.4	18.37	30.26	100	236	P	H
	*	2472	102.88	-	-	87.37	27.4	18.37	30.26	100	236	A	H
		2483.68	60.65	-13.35	74	45.11	27.4	18.39	30.25	100	236	P	H
		2483.52	51.43	-2.57	54	35.89	27.4	18.39	30.25	100	236	A	H
802.11n													H
HT20													H
CH 13	*	2472	107.44	-	-	91.93	27.4	18.37	30.26	400	111	P	V
2472MHz	*	2472	100.31	-	-	84.8	27.4	18.37	30.26	400	111	A	V
		2483.64	58.55	-15.45	74	43.01	27.4	18.39	30.25	400	111	P	V
		2484	48.98	-5.02	54	33.44	27.4	18.39	30.25	400	111	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. 4+3	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		4824	42.07	-31.93	74	56.65	31.15	12.34	58.07	-	-	P	H
		11430	52.37	-21.63	74	52.97	40.1	20.01	60.71	-	-	P	H
		11430	43	-11	54	43.6	40.1	20.01	60.71	-	-	A	H
		14490	52.64	-21.36	74	49.44	42	22.01	60.81	-	-	P	H
		14490	43.8	-10.2	54	40.6	42	22.01	60.81	-	-	A	H
		18000	60.39	-13.61	74	42.95	49.2	25.04	56.8	-	-	P	H
		18000	60.39	-13.61	74	42.95	49.2	25.04	56.8	-	-	P	H
		18000	47.97	-6.03	54	30.53	49.2	25.04	56.8	-	-	A	H
													H
													H
802.11n													H
HT20													H
CH 01		4824	41.42	-32.58	74	56	31.15	12.34	58.07	-	-	P	V
2412MHz		10695	52.06	-21.94	74	54.79	39.81	19.29	61.83	-	-	P	V
		10695	41.09	-12.91	54	43.82	39.81	19.29	61.83	-	-	A	V
		14475	52.69	-21.31	74	49.52	42	22	60.83	-	-	P	V
		14475	43.7	-10.3	54	40.53	42	22	60.83	-	-	A	V
		17970	60.87	-13.13	74	44.17	48.51	25.03	56.84	-	-	P	V
		17970	47.71	-6.29	54	31.01	48.51	25.03	56.84	-	-	A	V
													V
													V
													V
													V
													V

WIFI Ant. 4+3	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		4874	41.75	-32.25	74	56.28	31.2	12.32	58.05	-	-	P	H
		7311	52.8	-21.2	74	58.57	36.4	15.79	57.96	400	280	P	H
		7311	42.61	-11.39	54	48.38	36.4	15.79	57.96	400	280	A	H
		11325	52.08	-21.92	74	53.11	39.95	19.9	60.88	-	-	P	H
		11325	42.48	-11.52	54	43.51	39.95	19.9	60.88	-	-	A	H
		14490	51.8	-22.2	74	48.6	42	22.01	60.81	-	-	P	H
		14490	44.02	-9.98	54	40.82	42	22.01	60.81	-	-	A	H
		18000	60.36	-13.64	74	42.92	49.2	25.04	56.8	-	-	P	H
		18000	47.68	-6.32	54	30.24	49.2	25.04	56.8	-	-	A	H
													H
802.11n													H
HT20													H
CH 06		4874	42.42	-31.58	74	56.95	31.2	12.32	58.05	-	-	P	V
2437MHz		7311	56.99	-17.01	74	62.72	36.4	15.83	57.96	100	86	P	V
		7311	45.38	-8.62	54	51.11	36.4	15.83	57.96	100	86	A	V
		10935	52.44	-21.56	74	54.04	40.4	19.49	61.49	-	-	P	V
		10935	41.92	-12.08	54	43.52	40.4	19.49	61.49	-	-	A	V
		14475	52.25	-21.75	74	49.08	42	22	60.83	-	-	P	V
		14475	43.63	-10.37	54	40.46	42	22	60.83	-	-	A	V
		18000	60.06	-13.94	74	42.62	49.2	25.04	56.8	-	-	P	V
		18000	47.59	-6.41	54	30.15	49.2	25.04	56.8	-	-	A	V
													V
													V
													V

WIFI Ant. 4+3	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		4924	41.82	-32.18	74	56.2	31.35	12.3	58.03	-	-	P	H
		7386	47.77	-26.23	74	53.24	36.26	16.25	57.98	-	-	P	H
		11445	52.37	-21.63	74	52.93	40.1	20.03	60.69	-	-	P	H
		11445	42.97	-11.03	54	43.53	40.1	20.03	60.69	-	-	A	H
		14490	52.35	-21.65	74	49.15	42	22.01	60.81	-	-	P	H
		14490	43.73	-10.27	54	40.53	42	22.01	60.81	-	-	A	H
		18000	61.19	-12.81	74	43.75	49.2	25.04	56.8	-	-	P	H
		18000	47.96	-6.04	54	30.52	49.2	25.04	56.8	-	-	A	H
													H
													H
802.11n													H
HT20													H
CH 11		4924	41.79	-32.21	74	56.17	31.35	12.3	58.03	-	-	P	V
2462MHz		7386	55.87	-18.13	74	61.34	36.26	16.25	57.98	100	77	P	V
		7386	43.86	-10.14	54	49.33	36.26	16.25	57.98	100	77	A	V
		11460	51.9	-22.1	74	52.42	40.1	20.04	60.66	-	-	P	V
		11460	43.1	-10.9	54	43.62	40.1	20.04	60.66	-	-	A	V
		14475	52.64	-21.36	74	49.47	42	22	60.83	-	-	P	V
		14475	43.95	-10.05	54	40.78	42	22	60.83	-	-	A	V
		17985	60.1	-13.9	74	43.03	48.85	25.04	56.82	-	-	P	V
		17985	47.31	-6.69	54	30.24	48.85	25.04	56.82	-	-	A	V
													V
													V
													V

Remark

1. No other spurious found.
2. All results are PASS against Peak and Average limit line.
3. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only.
4. The emission level close to 18GHz is checked that the average emission level is noise floor only.

WIFI Ant. 4+3	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		4934	42.05	-31.95	74	56.42	31.37	12.29	58.03	-	-	P	H
		7401	48.91	-25.09	74	54.36	36.21	16.32	57.98	400	280	P	H
		7401	38.74	-15.26	54	44.19	36.21	16.32	57.98	400	280	A	H
		11610	53.18	-20.82	74	53.88	39.76	20.21	60.67	-	-	P	H
		11610	42.83	-11.17	54	43.53	39.76	20.21	60.67	-	-	A	H
		14475	54.04	-19.96	74	50.87	42	22	60.83	-	-	P	H
		14475	44.13	-9.87	54	40.96	42	22	60.83	-	-	A	H
		17985	60.99	-13.01	74	43.92	48.85	25.04	56.82	-	-	P	H
		17985	47.83	-6.17	54	30.76	48.85	25.04	56.82	-	-	A	H
													H
802.11n													H
HT20													H
CH 12		4934	42.84	-31.16	74	57.21	31.37	12.29	58.03	-	-	P	V
2467MHz		7401	52.52	-21.48	74	57.97	36.21	16.32	57.98	100	81	P	V
		7401	41.54	-12.46	54	46.99	36.21	16.32	57.98	100	81	A	V
		10605	52.73	-21.27	74	55.47	39.99	19.22	61.95	-	-	P	V
		10605	40.78	-13.22	54	43.52	39.99	19.22	61.95	-	-	A	V
		14475	52.83	-21.17	74	49.66	42	22	60.83	-	-	P	V
		14475	43.7	-10.3	54	40.53	42	22	60.83	-	-	A	V
		17985	61.74	-12.26	74	44.67	48.85	25.04	56.82	-	-	P	V
		17985	47.7	-6.3	54	30.63	48.85	25.04	56.82	-	-	A	V
													V
													V
													V

WIFI Ant. 4+3	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		4944	41.37	-32.63	74	55.71	31.39	12.29	58.02	-	-	P	H
		7416	46.96	-27.04	74	52.37	36.3	16.27	57.98	-	-	P	H
		11490	52.83	-21.17	74	53.27	40.1	20.08	60.62	-	-	P	H
		11490	42.7	-11.3	54	43.14	40.1	20.08	60.62	-	-	A	H
		14490	52.44	-21.56	74	49.24	42	22.01	60.81	-	-	P	H
		14490	44.13	-9.87	54	40.93	42	22.01	60.81	-	-	A	H
		18000	59.62	-14.38	74	42.18	49.2	25.04	56.8	-	-	P	H
		18000	47.6	-6.4	54	30.16	49.2	25.04	56.8	-	-	A	H
													H
													H
802.11n													H
HT20													H
CH 13		4944	41.08	-32.92	74	55.42	31.39	12.29	58.02	-	-	P	V
2472MHz		7416	49.49	-24.51	74	54.9	36.3	16.27	57.98	100	82	P	V
		7416	39.85	-14.15	54	45.26	36.3	16.27	57.98	100	82	A	V
		10935	52.03	-21.97	74	53.63	40.4	19.49	61.49	-	-	P	V
		10935	41.92	-12.08	54	43.52	40.4	19.49	61.49	-	-	A	V
		14490	51.67	-22.33	74	48.47	42	22.01	60.81	-	-	P	V
		14490	43.73	-10.27	54	40.53	42	22.01	60.81	-	-	A	V
		17970	59.38	-14.62	74	42.68	48.51	25.03	56.84	-	-	P	V
		17970	47.56	-6.44	54	30.86	48.51	25.03	56.84	-	-	A	V
													V
													V
													V

Remark

1. No other spurious found.
2. All results are PASS against Peak and Average limit line.
3. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only.
4. The emission level close to 18GHz is checked that the average emission level is noise floor only.

Emission below 1GHz

2.4GHz WIFI 802.11g (LF)

WIFI Ant. 4+3	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
2.4GHz 802.11g LF		94.02	33.18	-10.32	43.5	48.71	15.03	1.75	32.31	-	-	P	H
		156.1	26.52	-16.98	43.5	39.66	16.83	2.28	32.25	-	-	P	H
		187.14	22.59	-20.91	43.5	37.52	14.83	2.47	32.23	-	-	P	H
		426.73	24.11	-21.89	46	29.9	22.99	3.63	32.41	-	-	P	H
		561.56	27.73	-18.27	46	29.94	26.08	4.15	32.44	-	-	P	H
		720.64	31.43	-14.57	46	31.94	27.19	4.67	32.37	-	-	P	H
													H
													H
													H
													H
													H
													H
		33.88	25.65	-14.35	40	34.29	22.77	0.9	32.31	-	-	P	V
		159.98	27.65	-15.85	43.5	41.08	16.51	2.31	32.25	-	-	P	V
		183.26	26.28	-17.22	43.5	41.16	14.9	2.45	32.23	-	-	P	V
		281.23	20.71	-25.29	46	31.09	18.92	2.97	32.27	-	-	P	V
		522.76	26.43	-19.57	46	30.75	24.02	4.03	32.37	-	-	P	V
		741.98	31.74	-14.26	46	31.31	28.05	4.73	32.35	-	-	P	V
													V
													V
													V
													V
													V
													V

Remark

1. No other spurious found.
2. All results are PASS against limit line.
3. The emission level is with at least 6 dB margin against limit line, the position is marked as “-“

Note symbol

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

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

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
4+3		(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

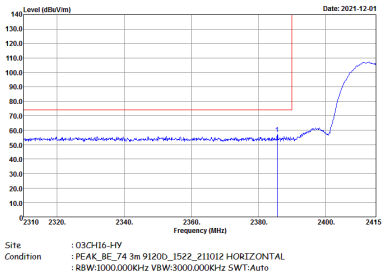
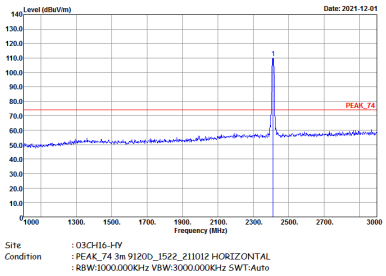
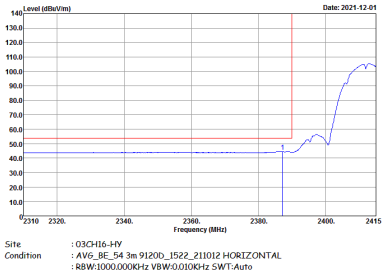
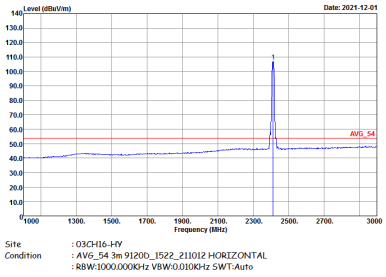
Test Engineer :	Karl Hou and Andy Yang	**Temperature :**	20~25°C
		Relative Humidity :	50~65%

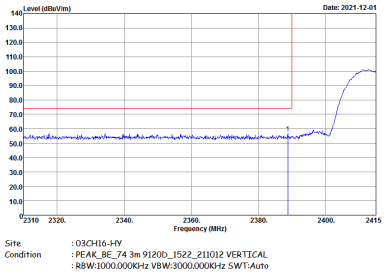
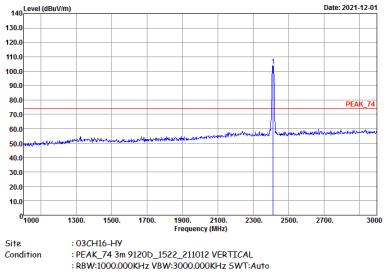
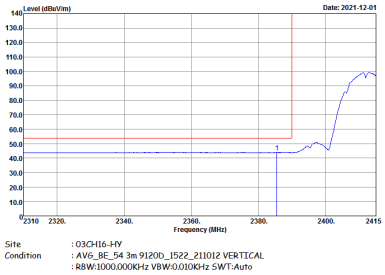
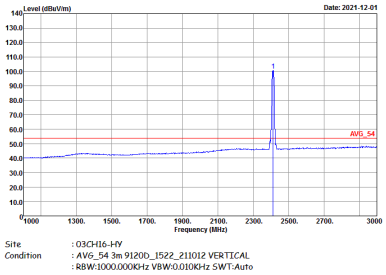
Note symbol

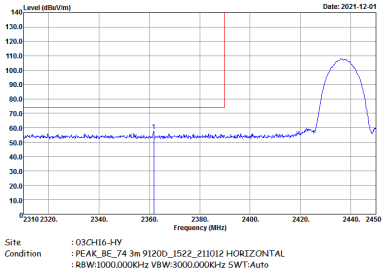
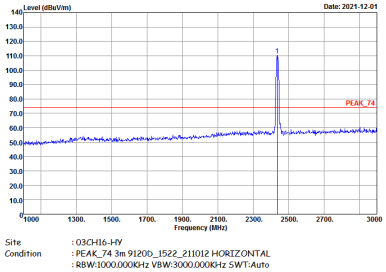
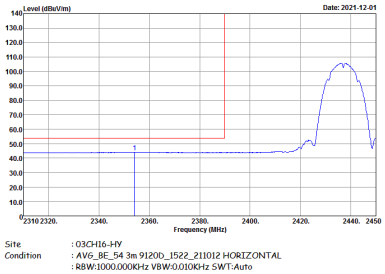
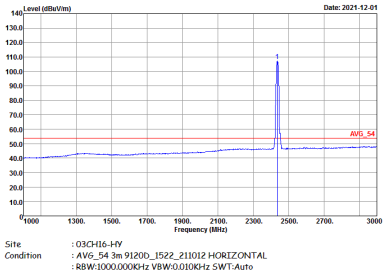
-L	**Low channel location**
-R	**High channel location**

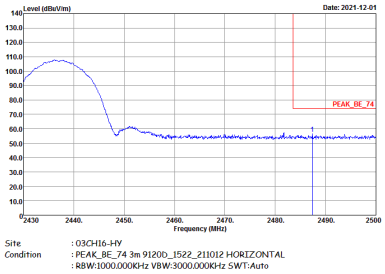
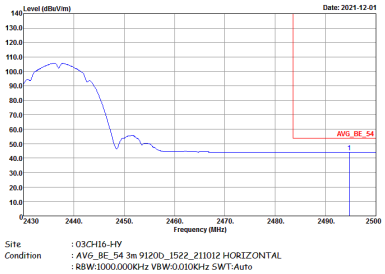
2.4GHz 2400~2483.5MHz

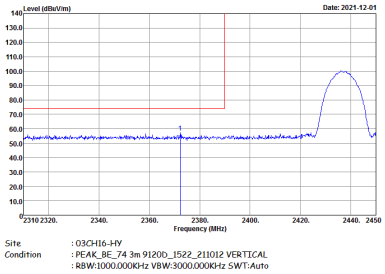
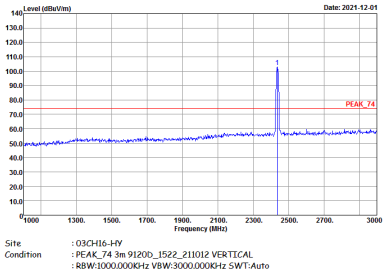
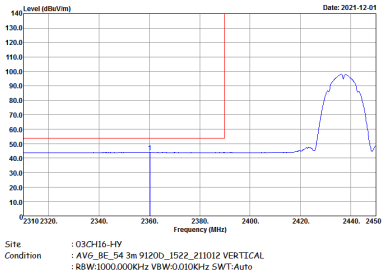
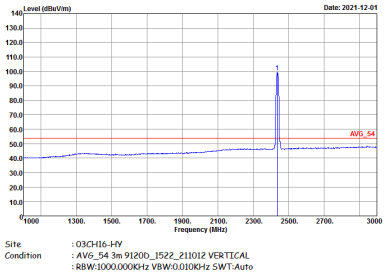
WIFI 802.11b (Band Edge @ 3m)

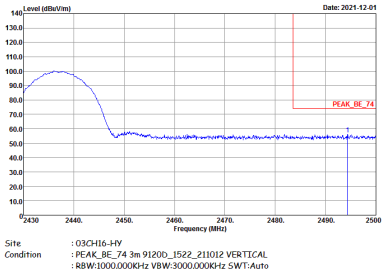
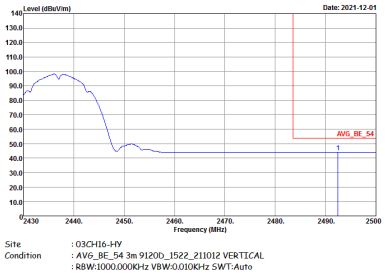
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH01 2412MHz	
4	Horizontal	Fundamental
Peak		
Avg.		

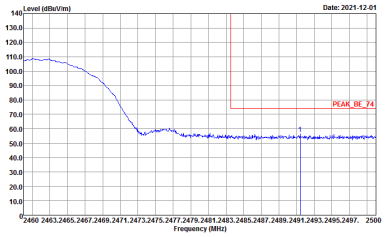
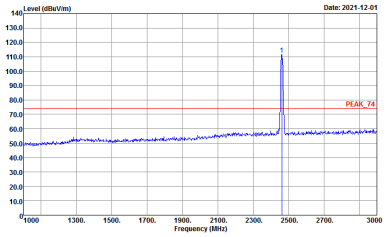
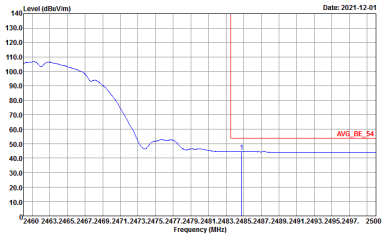
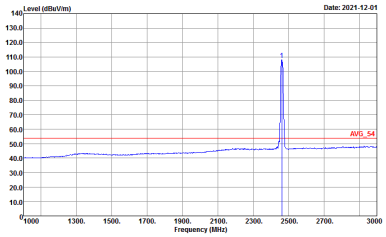
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH01 2412MHz	
4	Vertical	Fundamental
Peak		
Avg.		

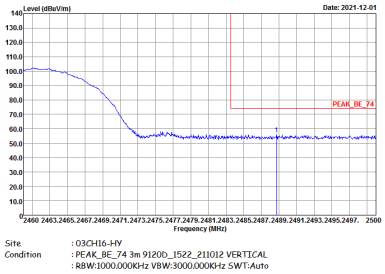
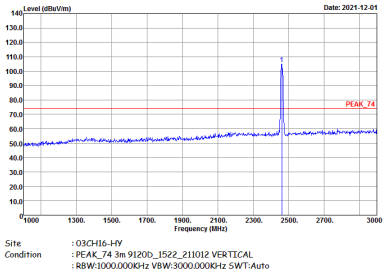
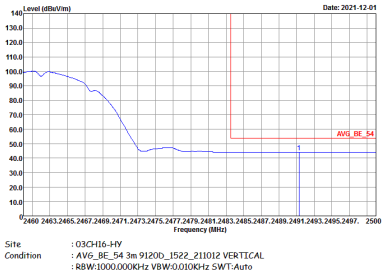
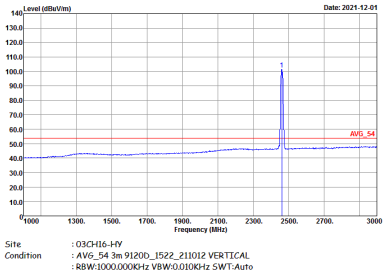
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH06 2437MHz - L	
4	Horizontal	Fundamental
Peak	 Site : 03CH16-HV Condition : PEAK_BE_74 3m 9120D_1522_211012 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH16-HV Condition : PEAK_74 3m 9120D_1522_211012 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH16-HV Condition : AVG_BE_54 3m 9120D_1522_211012 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto	 Site : 03CH16-HV Condition : AVG_54 3m 9120D_1522_211012 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto

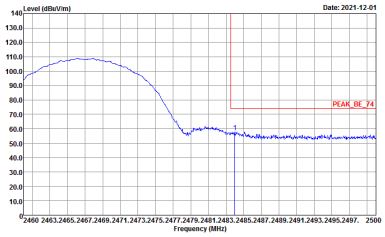
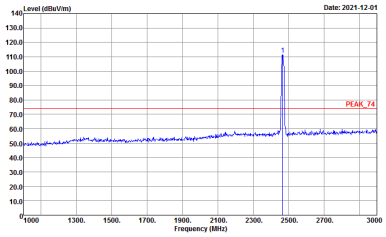
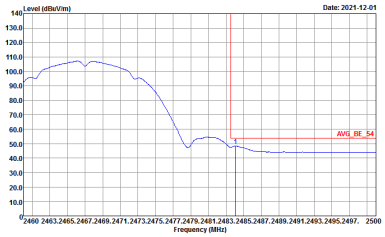
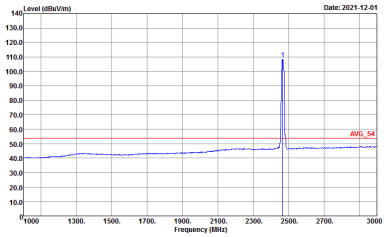
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH06 2437MHz - R	
4	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

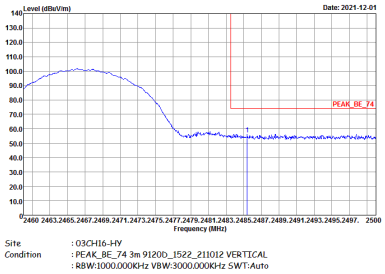
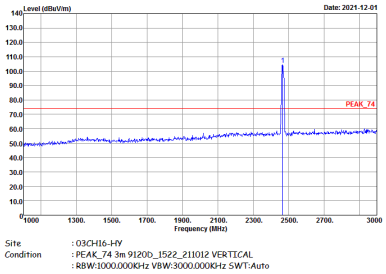
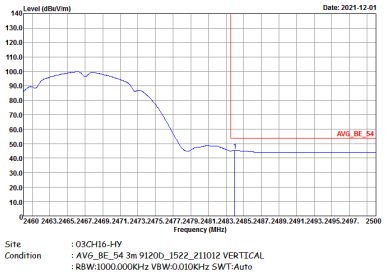
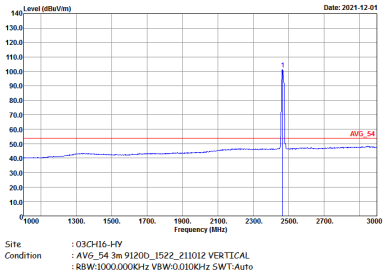
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH06 2437MHz - L	
4	Vertical	Fundamental
Peak		
Avg.		

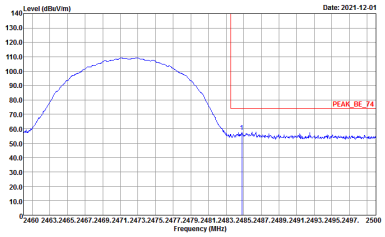
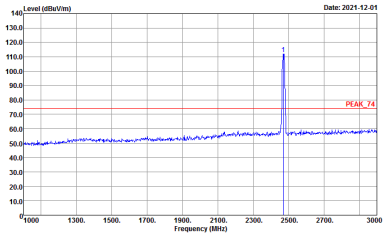
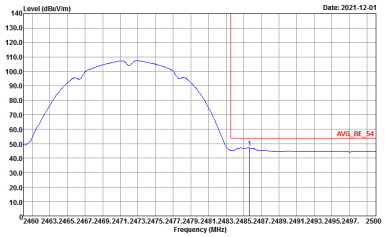
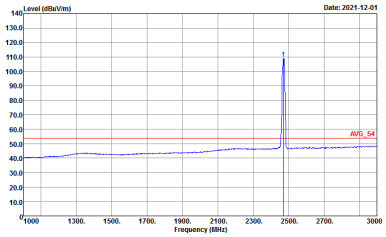
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH06 2437MHz - R	
4	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

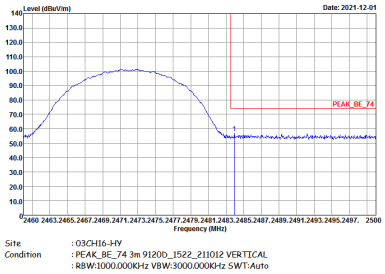
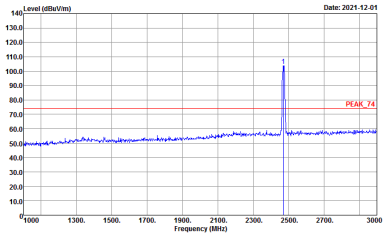
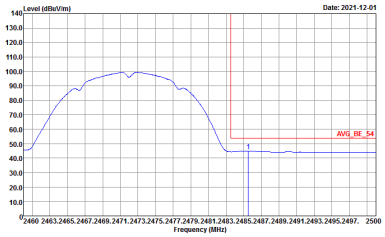
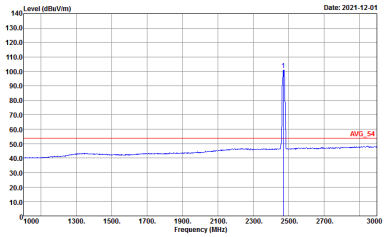
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH11 2462MHz	
4	Horizontal	Fundamental
Peak	 Site : 03CH16-HY Condition : PEAK_BE_74 3m 9120D_1522_211012 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH16-HY Condition : PEAK_74 3m 9120D_1522_211012 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH16-HY Condition : AVG_BE_54 3m 9120D_1522_211012 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto	 Site : 03CH16-HY Condition : AVG_54 3m 9120D_1522_211012 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH11 2462MHz	
4	Vertical	Fundamental
Peak	 Site : 03CH16-HV Condition : PEAK_BE_74 3m 9120D_1522_211012 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH16-HV Condition : PEAK_74 3m 9120D_1522_211012 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH16-HV Condition : AVG_BE_54 3m 9120D_1522_211012 VERTICAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto	 Site : 03CH16-HV Condition : AVG_54 3m 9120D_1522_211012 VERTICAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH12 2467MHz	
4	Horizontal	Fundamental
Peak	 Site : 03CH16-HV Condition : PEAK_BE_74 3m 9120D_1522_211012 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH16-HV Condition : PEAK_74 3m 9120D_1522_211012 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH16-HV Condition : AVG_BE_54 3m 9120D_1522_211012 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto	 Site : 03CH16-HV Condition : AVG_54 3m 9120D_1522_211012 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto

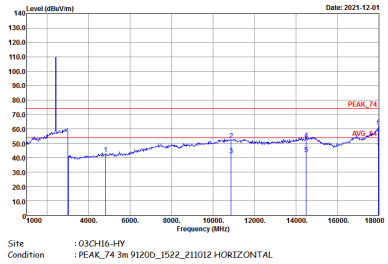
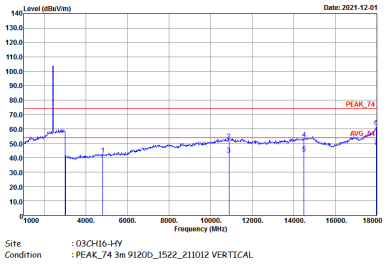
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH12 2467MHz	
4	Vertical	Fundamental
Peak	 Site : 03CH16-HV Condition : PEAK_BE_74 3m 9120D_1522_211012 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH16-HV Condition : PEAK_74 3m 9120D_1522_211012 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH16-HV Condition : AVG_BE_54 3m 9120D_1522_211012 VERTICAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto	 Site : 03CH16-HV Condition : AVG_54 3m 9120D_1522_211012 VERTICAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto

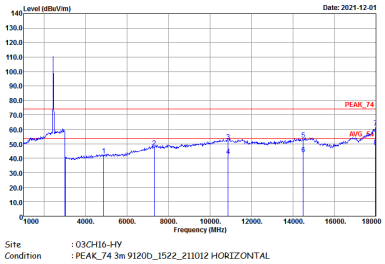
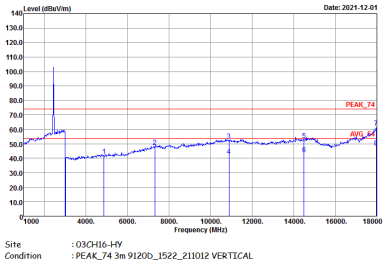
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH13 2472MHz	
4	Horizontal	Fundamental
Peak	 Site : 03CH16-HV Condition : PEAK_BE_74 3m 9120D_1522_211012 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH16-HV Condition : PEAK_74 3m 9120D_1522_211012 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH16-HV Condition : AVG_BE_54 3m 9120D_1522_211012 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto	 Site : 03CH16-HV Condition : AVG_54 3m 9120D_1522_211012 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto

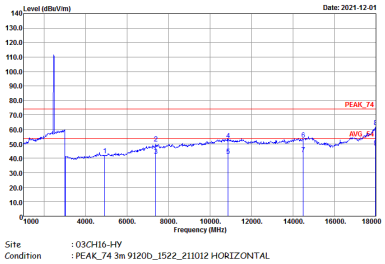
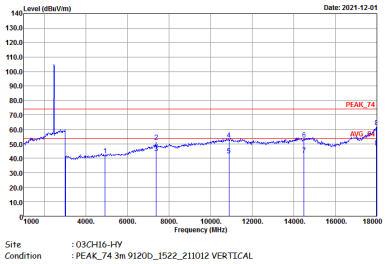
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH13 2472MHz	
4	Vertical	Fundamental
Peak	 Site : 03CH16-HV Condition : PEAK_BE_74 3m 9120D_1522_211012 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH16-HV Condition : PEAK_74 3m 9120D_1522_211012 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH16-HV Condition : AVG_BE_54 3m 9120D_1522_211012 VERTICAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto	 Site : 03CH16-HV Condition : AVG_54 3m 9120D_1522_211012 VERTICAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto

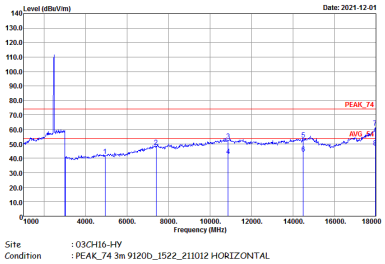
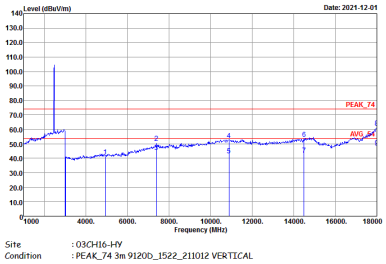
2.4GHz 2400~2483.5MHz

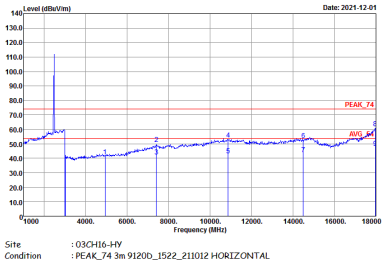
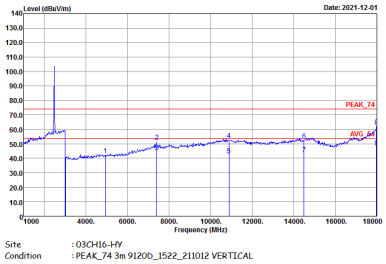
WIFI 802.11b (Harmonic @ 3m)

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

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

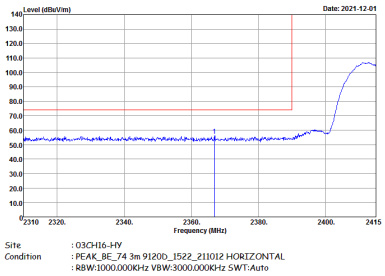
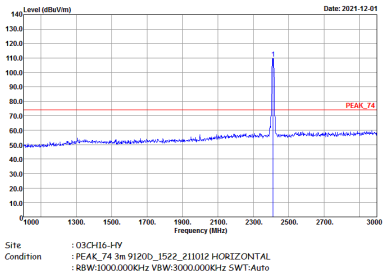
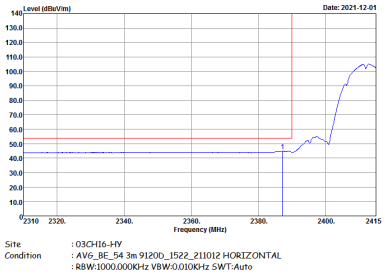
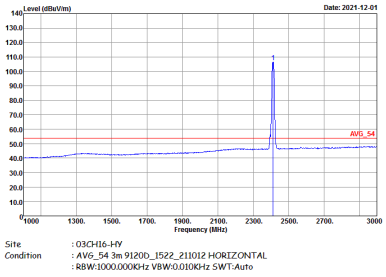
WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11b CH11 2462MHz	
4	Horizontal	Vertical
Peak Avg.		

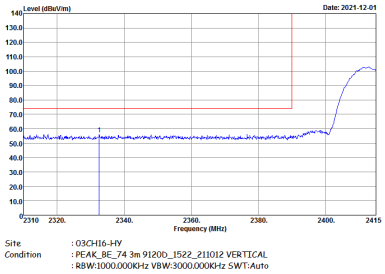
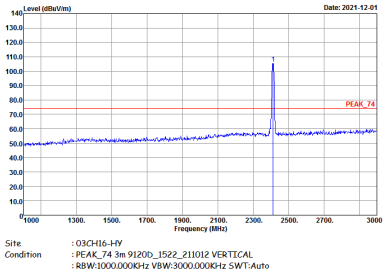
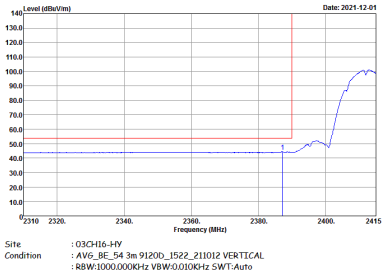
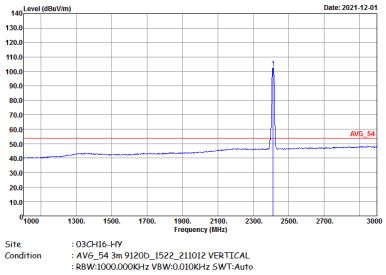
WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11b CH12 2467MHz	
4	Horizontal	Vertical
Peak Avg.		

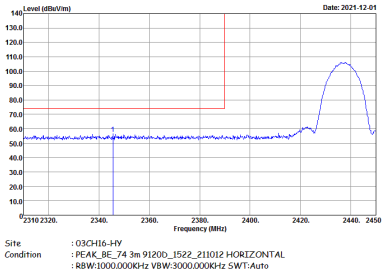
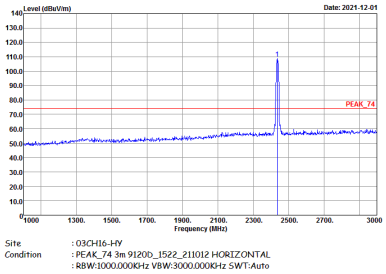
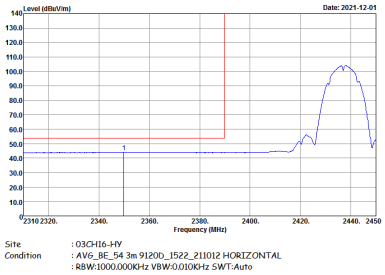
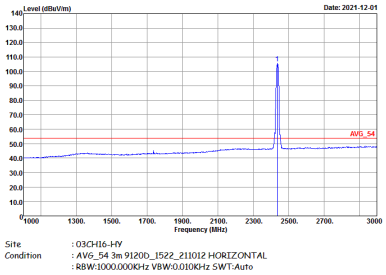
WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11b CH13 2472MHz	
4	Horizontal	Vertical
Peak Avg.		

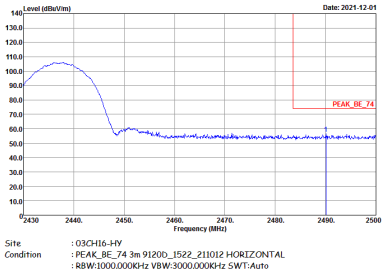
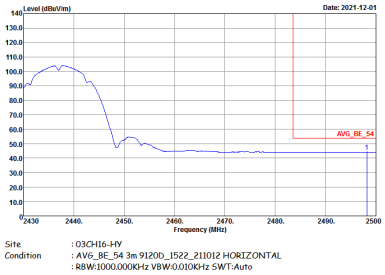
2.4GHz 2400~2483.5MHz

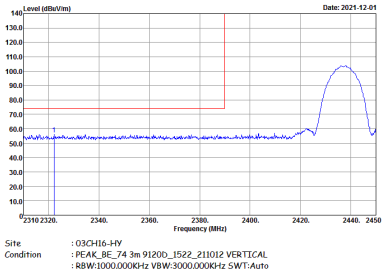
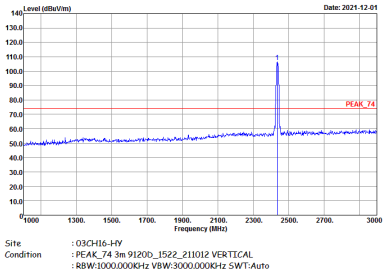
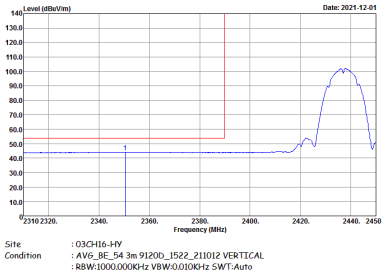
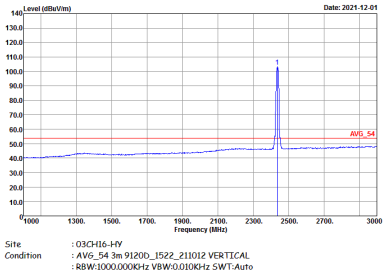
WIFI 802.11b (Band Edge @ 3m)

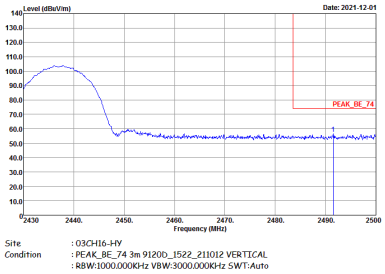
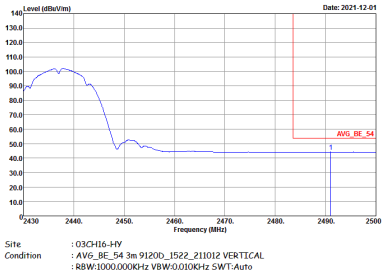
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH01 2412MHz	
3	Horizontal	Fundamental
Peak		
Avg.		

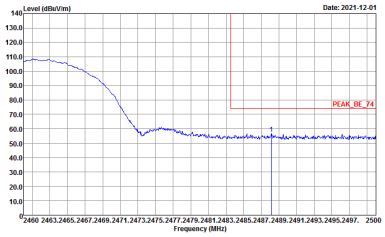
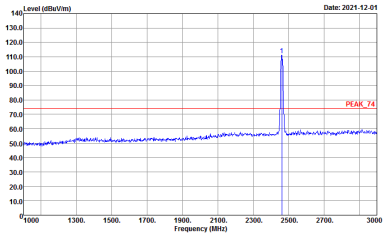
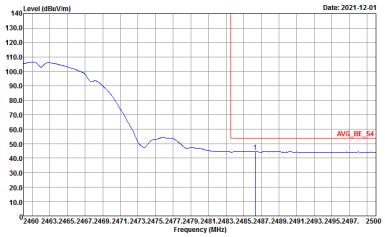
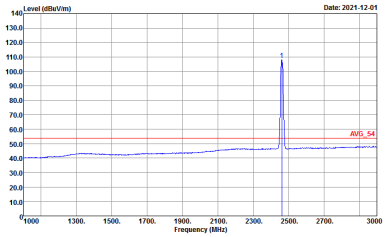
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH01 2412MHz	
3	Vertical	Fundamental
Peak		
Avg.		

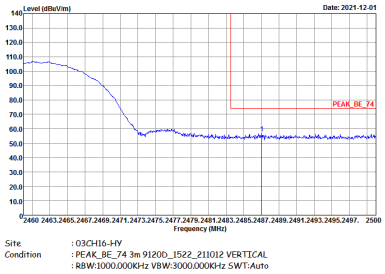
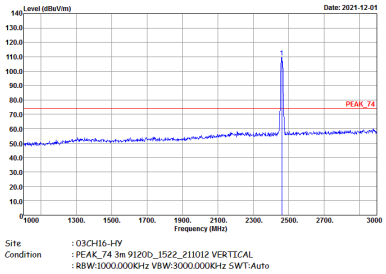
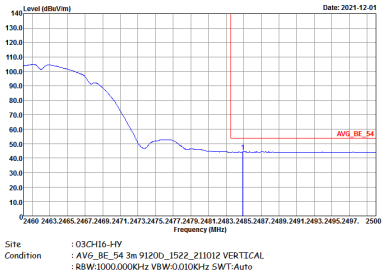
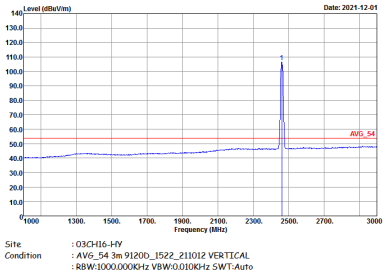
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH06 2437MHz - L	
3	Horizontal	Fundamental
Peak	 Site : 03CH16-HV Condition : PEAK_BE_74 3m 9120D_1522_211012 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH16-HV Condition : PEAK_74 3m 9120D_1522_211012 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH16-HV Condition : AVG_BE_54 3m 9120D_1522_211012 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto	 Site : 03CH16-HV Condition : AVG_54 3m 9120D_1522_211012 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto

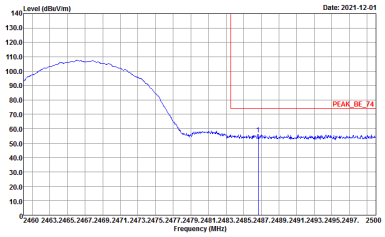
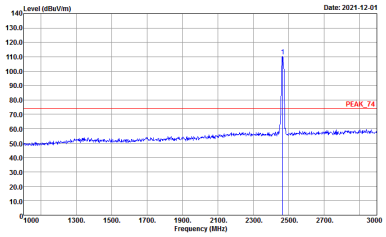
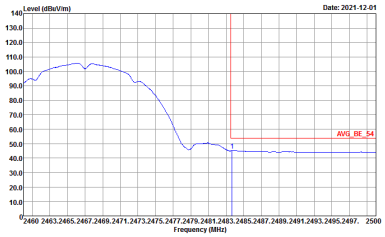
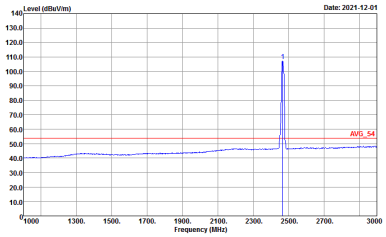
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH06 2437MHz - R	
3	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

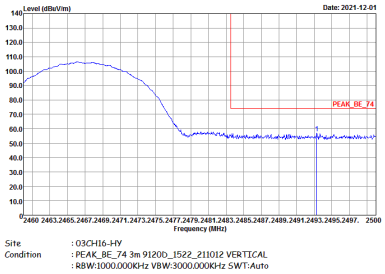
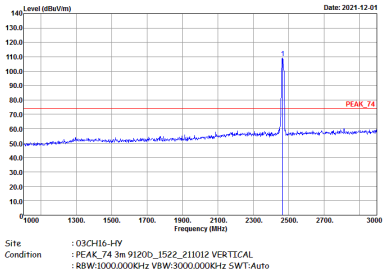
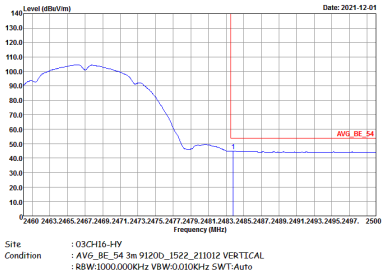
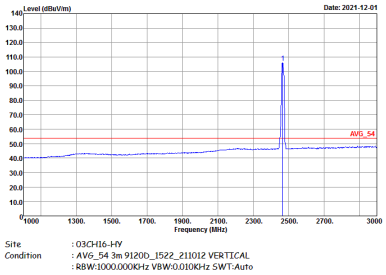
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH06 2437MHz - L	
3	Vertical	Fundamental
Peak		
Avg.		

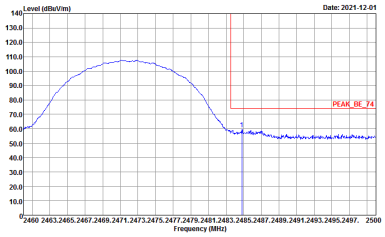
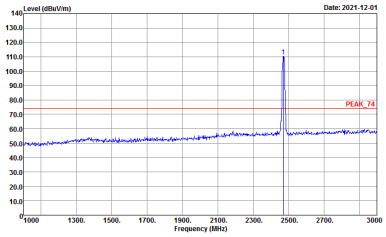
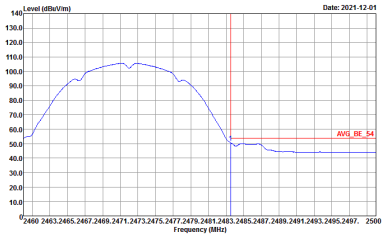
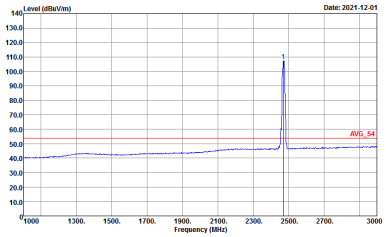
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH06 2437MHz - R	
3	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

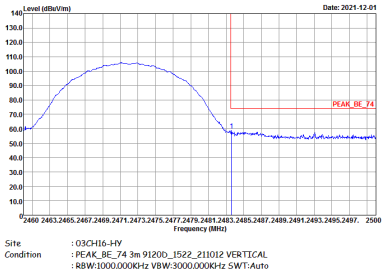
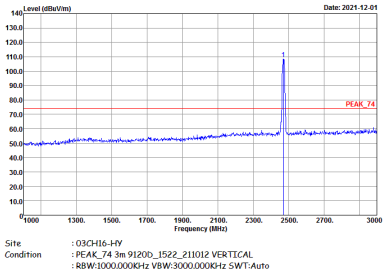
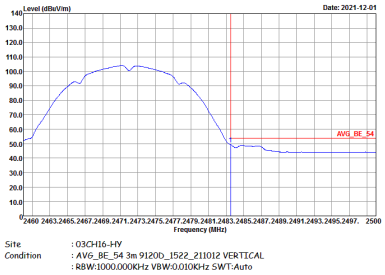
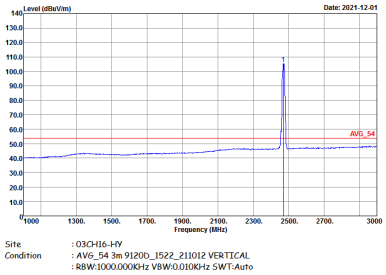
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH11 2462MHz	
3	Horizontal	Fundamental
Peak	 Site : 03CH16-HV Condition : PEAK_BE_74 3m 9120D_1522_211012 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH16-HV Condition : PEAK_74 3m 9120D_1522_211012 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH16-HV Condition : AVG_BE_54 3m 9120D_1522_211012 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto	 Site : 03CH16-HV Condition : AVG_54 3m 9120D_1522_211012 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH11 2462MHz	
3	Vertical	Fundamental
Peak	 Site : 03CH16-HV Condition : PEAK_BE_74 3m 9120D_1522_211012 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH16-HV Condition : PEAK_74 3m 9120D_1522_211012 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH16-HV Condition : AVG_BE_54 3m 9120D_1522_211012 VERTICAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto	 Site : 03CH16-HV Condition : AVG_54 3m 9120D_1522_211012 VERTICAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH12 2467MHz	
3	Horizontal	Fundamental
Peak	 Site : 03CH16-HV Condition : PEAK_BE_74 3m 9120D_1522_211012 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH16-HV Condition : PEAK_74 3m 9120D_1522_211012 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH16-HV Condition : AVG_BE_54 3m 9120D_1522_211012 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto	 Site : 03CH16-HV Condition : AVG_54 3m 9120D_1522_211012 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto

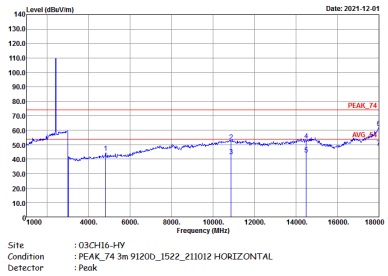
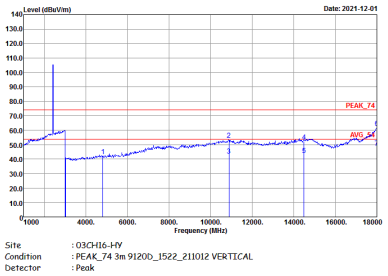
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH12 2467MHz	
3	Vertical	Fundamental
Peak	 Site : 03CH16-HV Condition : PEAK_BE_74 3m 9120D_1522_211012 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH16-HV Condition : PEAK_74 3m 9120D_1522_211012 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH16-HV Condition : AVG_BE_54 3m 9120D_1522_211012 VERTICAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto	 Site : 03CH16-HV Condition : AVG_54 3m 9120D_1522_211012 VERTICAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto

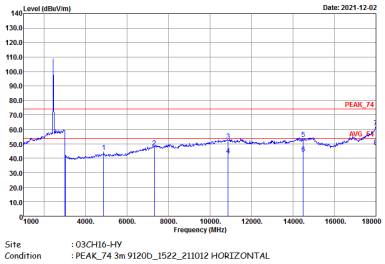
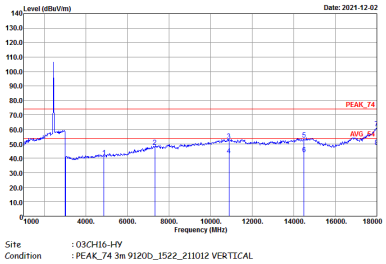
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH13 2472MHz	
3	Horizontal	Fundamental
Peak	 Site : 03CH16-HV Condition : PEAK_BE_74 3m 9120D_1522_211012 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH16-HV Condition : PEAK_74 3m 9120D_1522_211012 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH16-HV Condition : AVG_BE_54 3m 9120D_1522_211012 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto	 Site : 03CH16-HV Condition : AVG_54 3m 9120D_1522_211012 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto

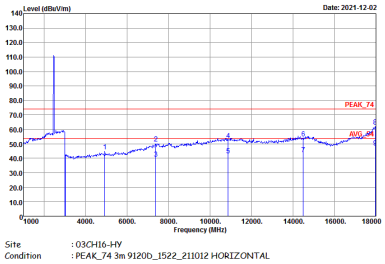
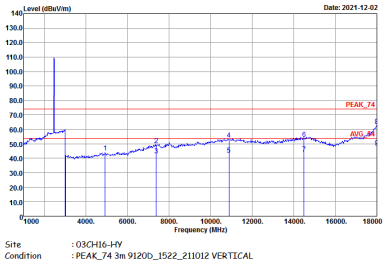
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH13 2472MHz	
3	Vertical	Fundamental
Peak	 Site : 03CH16-HV Condition : PEAK_BE_74 3m 9120D_1522_211012 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH16-HV Condition : PEAK_74 3m 9120D_1522_211012 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH16-HV Condition : AVG_BE_54 3m 9120D_1522_211012 VERTICAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto	 Site : 03CH16-HV Condition : AVG_54 3m 9120D_1522_211012 VERTICAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto

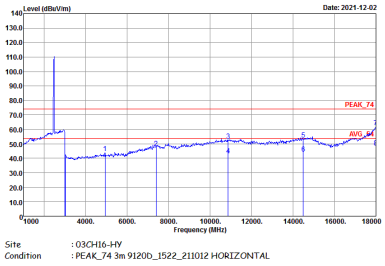
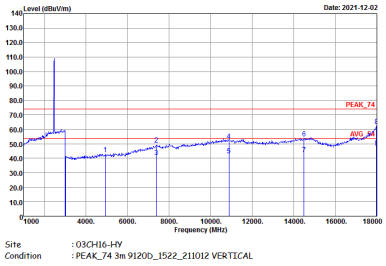
2.4GHz 2400~2483.5MHz

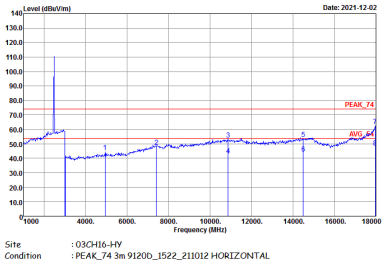
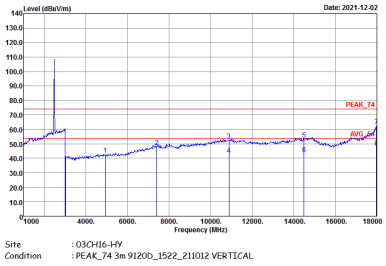
WIFI 802.11b (Harmonic @ 3m)

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

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

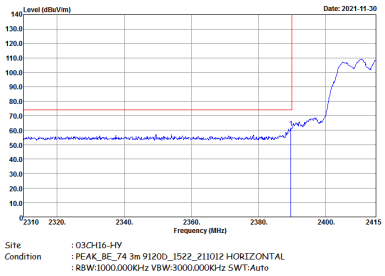
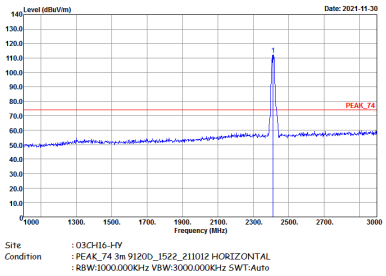
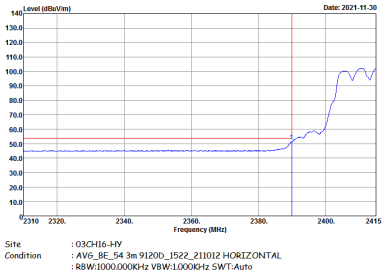
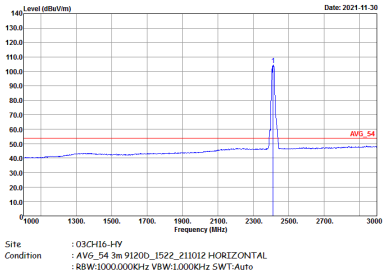
WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11b CH11 2462MHz	
3	Horizontal	Vertical
Peak Avg.		

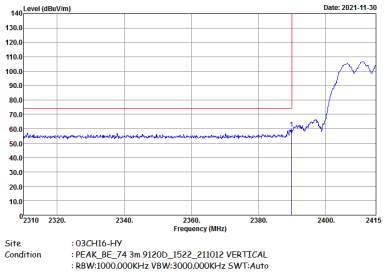
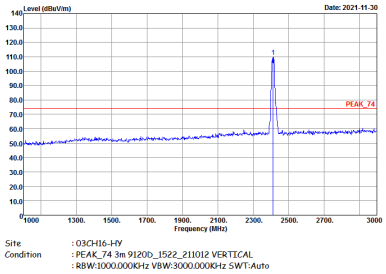
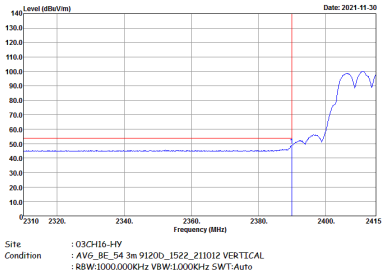
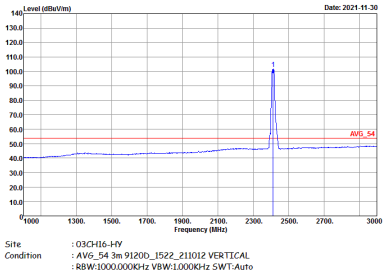
WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11b CH12 2467MHz	
3	Horizontal	Vertical
Peak Avg.		

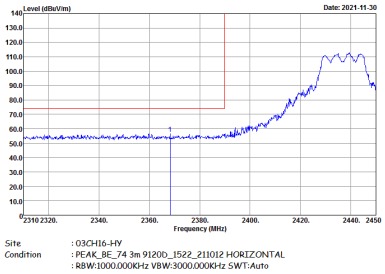
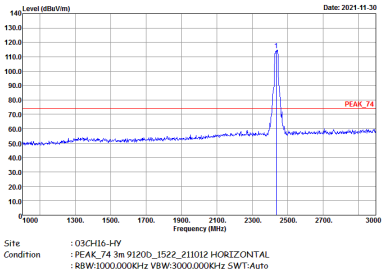
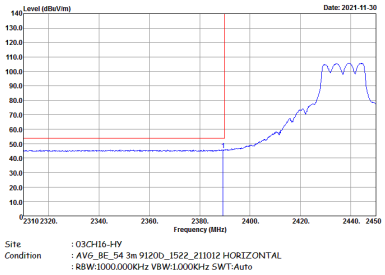
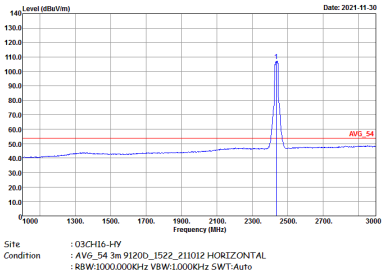
WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11b CH13 2472MHz	
3	Horizontal	Vertical
Peak Avg.		

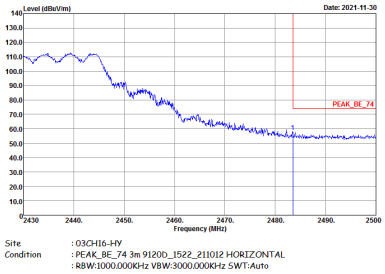
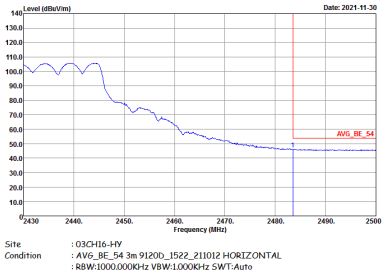
2.4GHz 2400~2483.5MHz

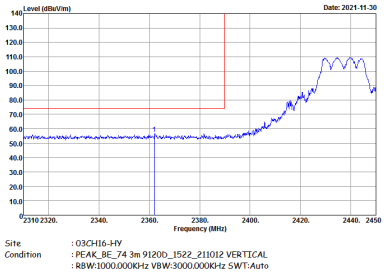
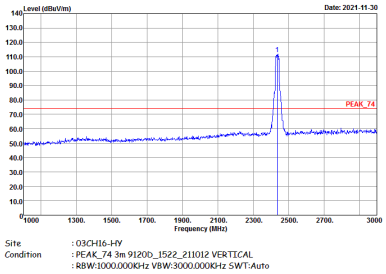
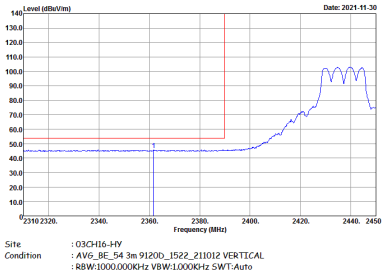
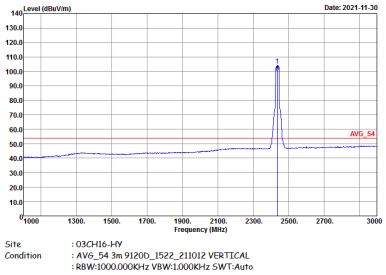
WIFI 802.11g (Band Edge @ 3m)

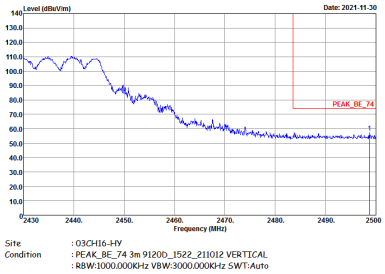
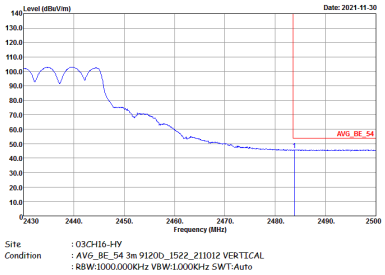
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH01 2412MHz	
4+3	Horizontal	Fundamental
Peak		
Avg.		

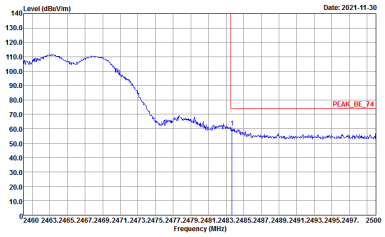
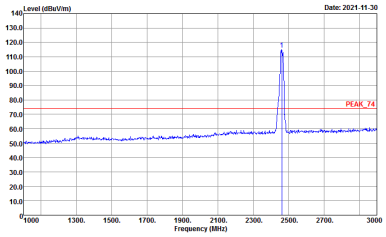
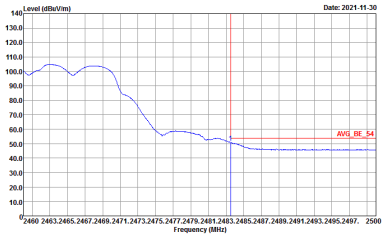
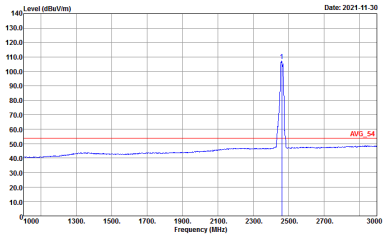
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH01 2412MHz	
4+3	Vertical	Fundamental
Peak		
Avg.		

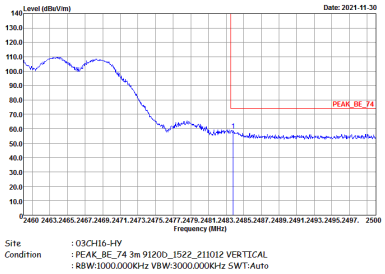
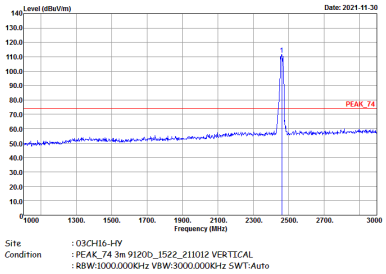
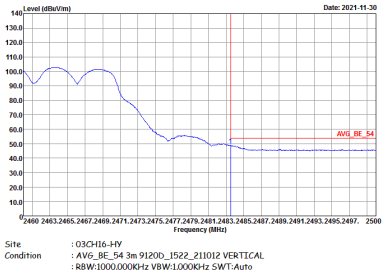
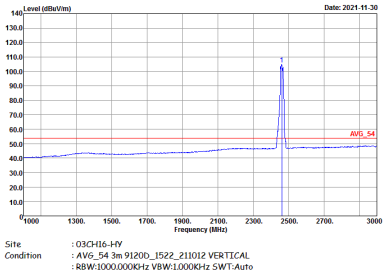
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH06 2437MHz - L	
4+3	Horizontal	Fundamental
Peak		
Avg.		

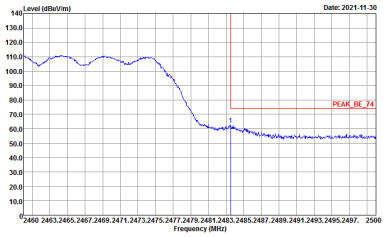
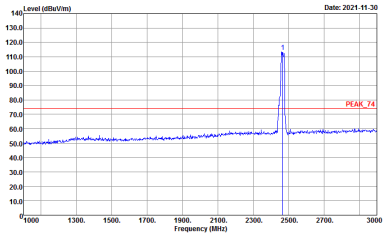
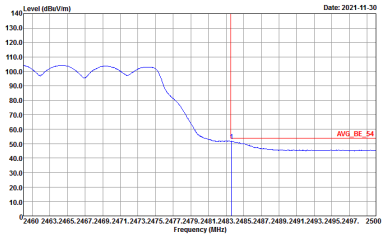
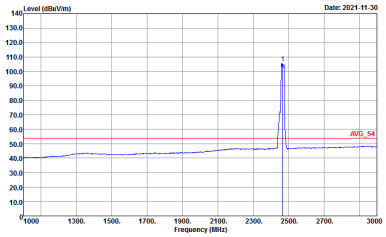
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH06 2437MHz - R	
4+3	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

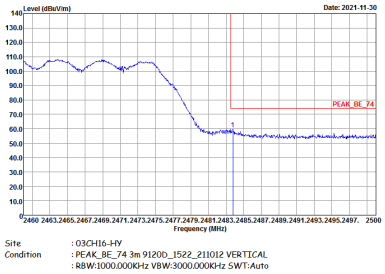
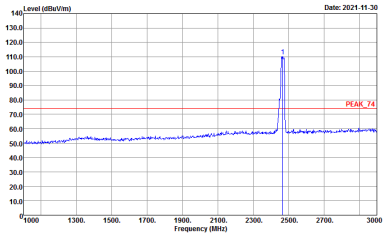
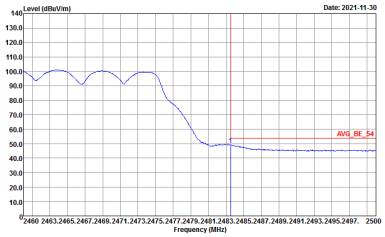
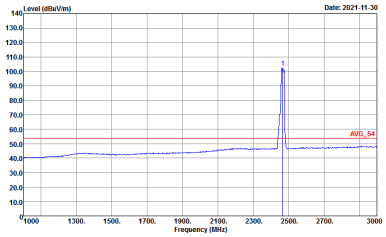
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH06 2437MHz - L	
4+3	Vertical	Fundamental
Peak		
Avg.		

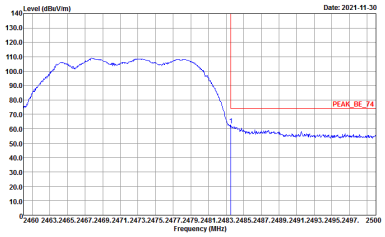
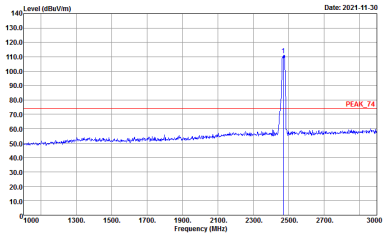
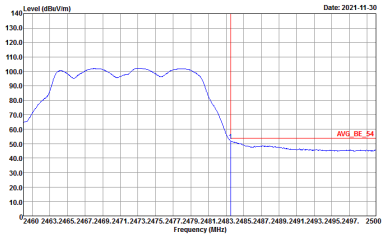
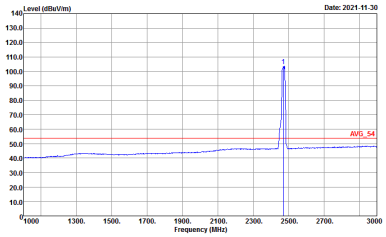
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH06 2437MHz - R	
4+3	Vertical	Fundamental
Peak		Left Blank
Avg.		Left Blank

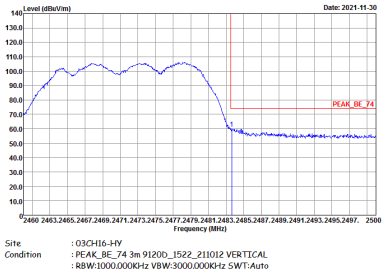
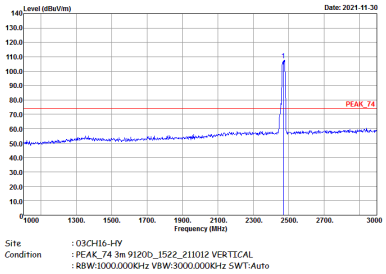
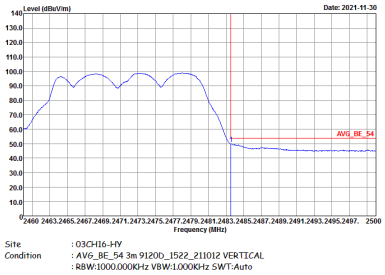
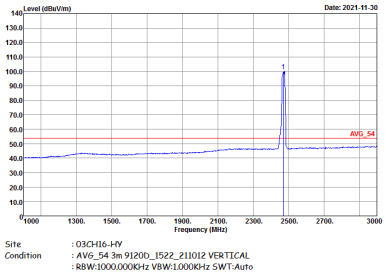
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH11 2462MHz	
4+3	Horizontal	Fundamental
Peak	 Site : 03CH16-HV Condition : PEAK_BE_74 3m 9120D_1522_211012 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH16-HV Condition : PEAK_74 3m 9120D_1522_211012 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH16-HV Condition : AVG_BE_54 3m 9120D_1522_211012 HORIZONTAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto	 Site : 03CH16-HV Condition : AVG_54 3m 9120D_1522_211012 HORIZONTAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH11 2462MHz	
4+3	Vertical	Fundamental
Peak	 Site : 03CH16-HV Condition : PEAK_BE_74 3m 9120D_1522_211012 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH16-HV Condition : PEAK_74 3m 9120D_1522_211012 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH16-HV Condition : AVG_BE_54 3m 9120D_1522_211012 VERTICAL : RBW:1000.000KHz VBW:1000KHz SWT:Auto	 Site : 03CH16-HV Condition : AVG_54 3m 9120D_1522_211012 VERTICAL : RBW:1000.000KHz VBW:1000KHz SWT:Auto

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH12 2467MHz	
4+3	Horizontal	Fundamental
Peak	 Site : 03CH16-HV Condition : PEAK_BE_74 3m 9120D_1522_211012 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH16-HV Condition : PEAK_74 3m 9120D_1522_211012 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH16-HV Condition : AVG_BE_54 3m 9120D_1522_211012 HORIZONTAL : RBW:1000.000KHz VBW:1000KHz SWT:Auto	 Site : 03CH16-HV Condition : AVG_54 3m 9120D_1522_211012 HORIZONTAL : RBW:1000.000KHz VBW:1000KHz SWT:Auto

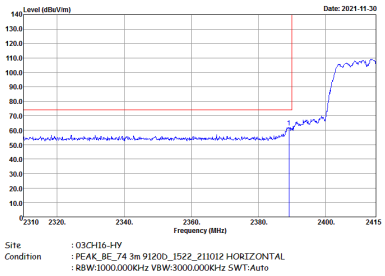
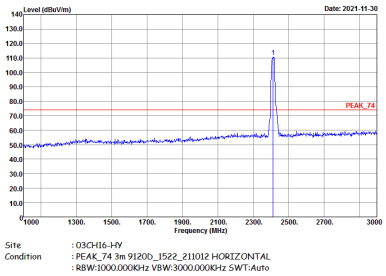
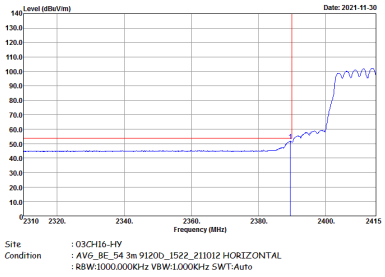
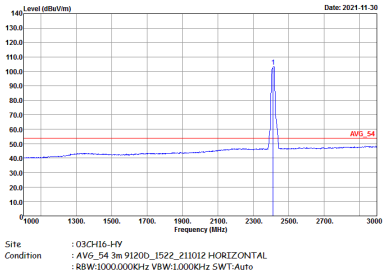
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH12 2467MHz	
4+3	Vertical	Fundamental
Peak	 Site : 03CH16-HY Condition : PEAK_BE_74 3m 9120D_1522_211012 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH16-HY Condition : PEAK_74 3m 9120D_1522_211012 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH16-HY Condition : AVG_BE_54 3m 9120D_1522_211012 VERTICAL : RBW:1000.000KHz VBW:1000KHz SWT:Auto	 Site : 03CH16-HY Condition : AVG_54 3m 9120D_1522_211012 VERTICAL : RBW:1000.000KHz VBW:1000KHz SWT:Auto

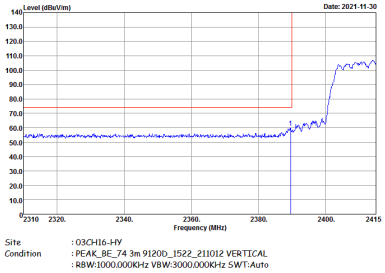
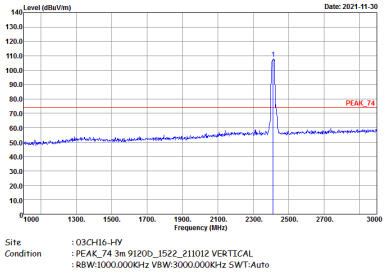
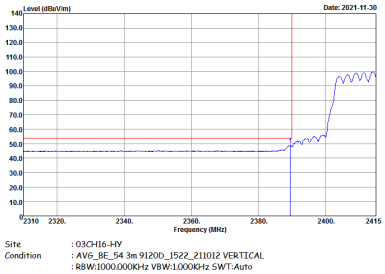
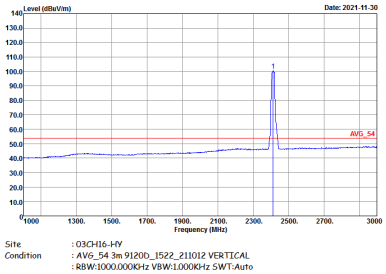
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH13 2472MHz	
4+3	Horizontal	Fundamental
Peak	 Site : 03CH16-HY Condition : PEAK_BE_74 3m 9120D_1522_211012 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH16-HY Condition : PEAK_74 3m 9120D_1522_211012 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH16-HY Condition : AVG_BE_54 3m 9120D_1522_211012 HORIZONTAL : RBW:1000.000KHz VBW:1000KHz SWT:Auto	 Site : 03CH16-HY Condition : AVG_54 3m 9120D_1522_211012 HORIZONTAL : RBW:1000.000KHz VBW:1000KHz SWT:Auto

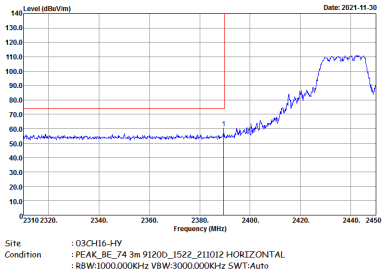
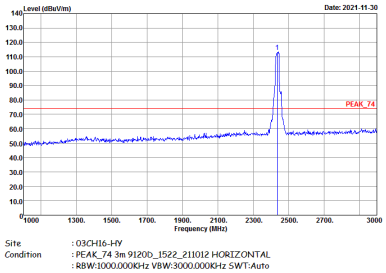
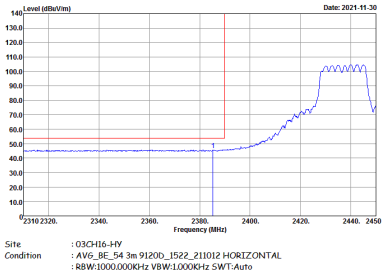
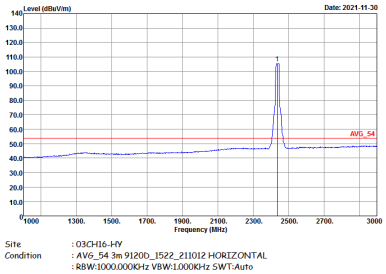
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH13 2472MHz	
4+3	Vertical	Fundamental
Peak	 Site : 03CH16-HV Condition : PEAK_BE_74 3m 9120D_1522_211012 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH16-HV Condition : PEAK_74 3m 9120D_1522_211012 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH16-HV Condition : AVG_BE_54 3m 9120D_1522_211012 VERTICAL : RBW:1000.000KHz VBW:1000KHz SWT:Auto	 Site : 03CH16-HV Condition : AVG_54 3m 9120D_1522_211012 VERTICAL : RBW:1000.000KHz VBW:1000KHz SWT:Auto

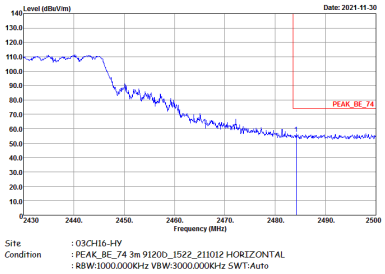
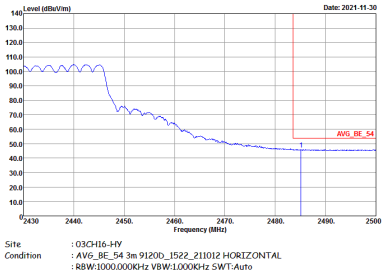
2.4GHz 2400~2483.5MHz

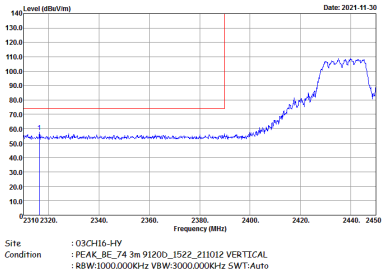
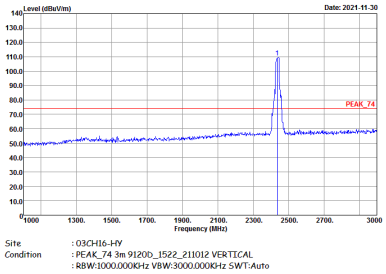
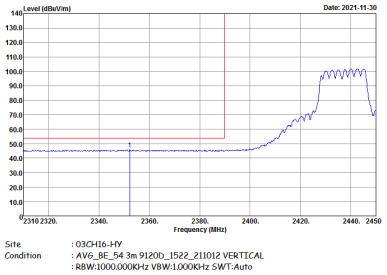
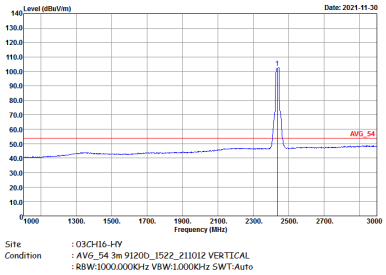
WIFI 802.11n HT20 (Band Edge @ 3m)

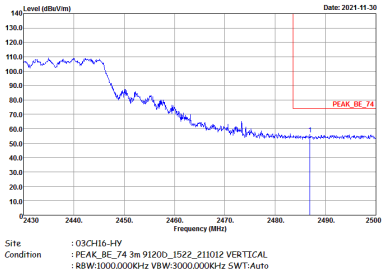
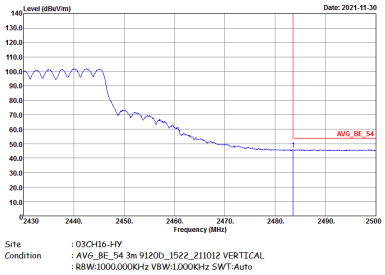
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH01 2412MHz	
4+3	Horizontal	Fundamental
Peak		
Avg.		

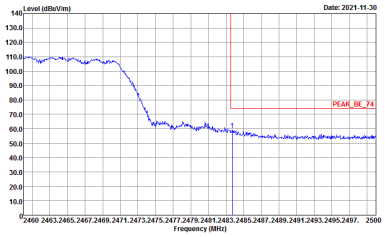
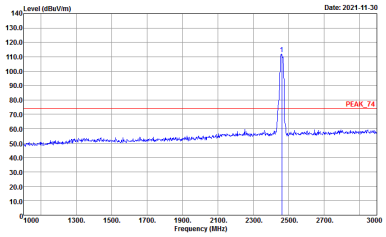
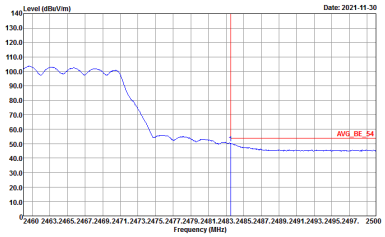
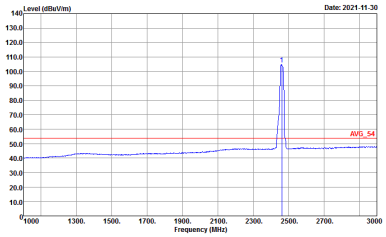
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH01 2412MHz	
4+3	Vertical	Fundamental
Peak		
Avg.		

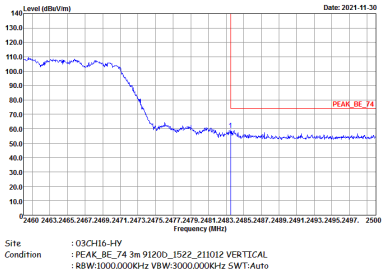
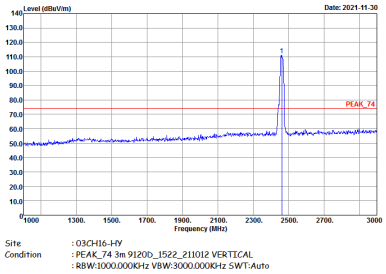
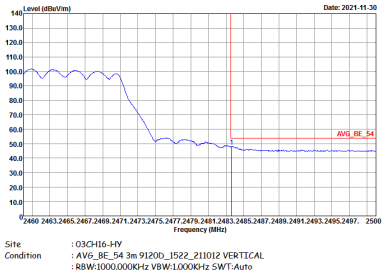
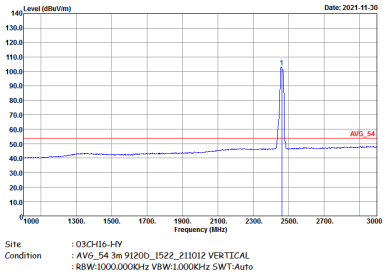
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH06 2437MHz - L	
4+3	Horizontal	Fundamental
Peak		
Avg.		

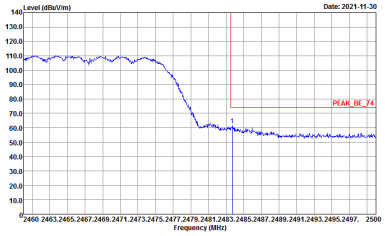
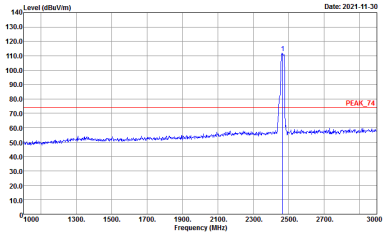
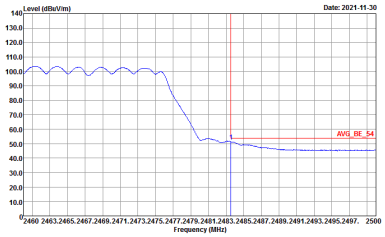
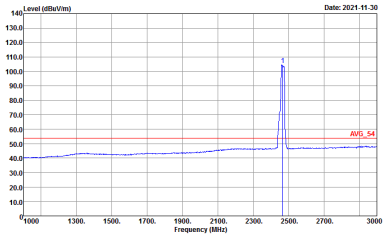
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH06 2437MHz - R	
4+3	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

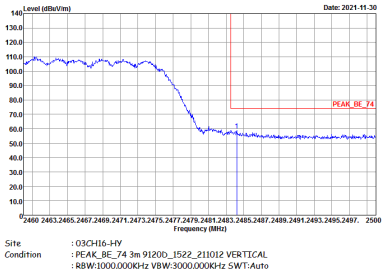
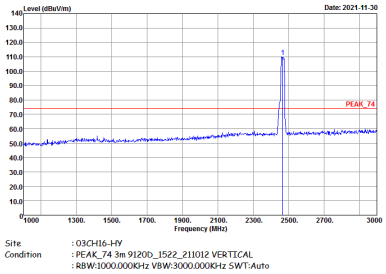
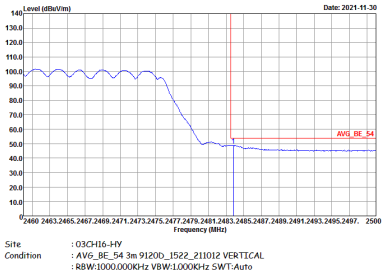
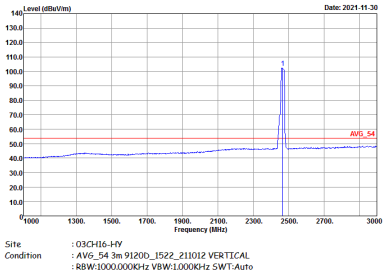
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH06 2437MHz - L	
4+3	Vertical	Fundamental
Peak		
Avg.		

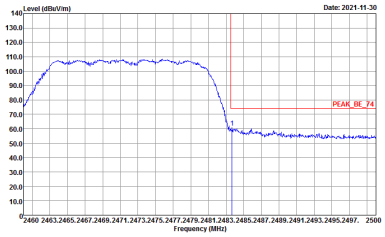
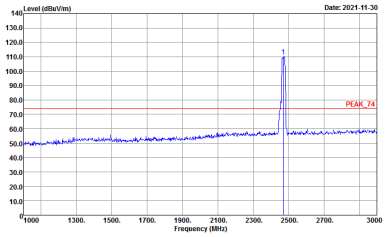
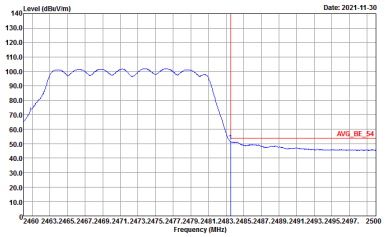
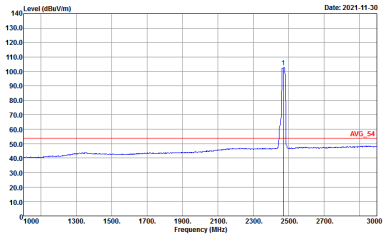
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH06 2437MHz - R	
4+3	Vertical	Fundamental
Peak		Left Blank
Avg.		Left Blank

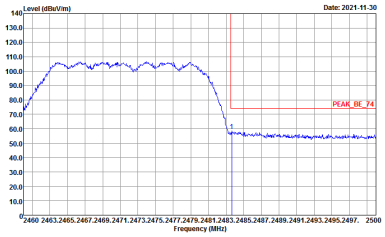
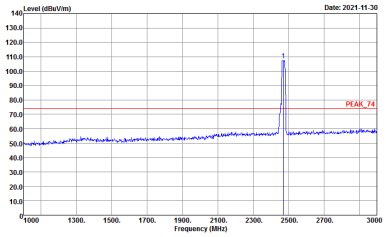
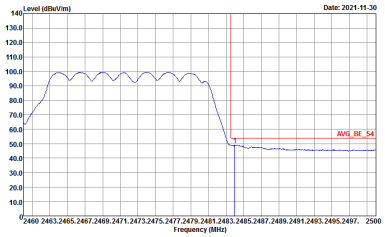
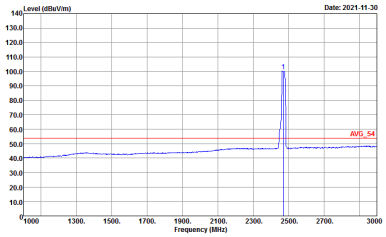
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH11 2462MHz	
4+3	Horizontal	Fundamental
Peak	 Site : 03CH16-HV Condition : PEAK_BE_74 3m 9120D_1522_211012 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH16-HV Condition : PEAK_74 3m 9120D_1522_211012 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH16-HV Condition : AVG_BE_54 3m 9120D_1522_211012 HORIZONTAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto	 Site : 03CH16-HV Condition : AVG_54 3m 9120D_1522_211012 HORIZONTAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto

WIFI	2.4GHz 2400~2483.5MHz Fundamental @ 3m	
ANT	802.11n HT20 CH11 2462MHz	
4+3	Vertical	Fundamental
Peak	 Site : 03CH16-HV Condition : PEAK_BE_74 3m 9120D_1522_211012 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH16-HV Condition : PEAK_74 3m 9120D_1522_211012 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH16-HV Condition : AVG_BE_54 3m 9120D_1522_211012 VERTICAL : RBW:1000.000KHz VBW:1000KHz SWT:Auto	 Site : 03CH16-HV Condition : AVG_54 3m 9120D_1522_211012 VERTICAL : RBW:1000.000KHz VBW:1000KHz SWT:Auto

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH12 2467MHz	
4+3	Horizontal	Fundamental
Peak	 Site : 03CH16-HY Condition : PEAK_BE_74 3m 9120D_1522_211012 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH16-HY Condition : PEAK_74 3m 9120D_1522_211012 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH16-HY Condition : AVG_BE_54 3m 9120D_1522_211012 HORIZONTAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto	 Site : 03CH16-HY Condition : AVG_54 3m 9120D_1522_211012 HORIZONTAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto

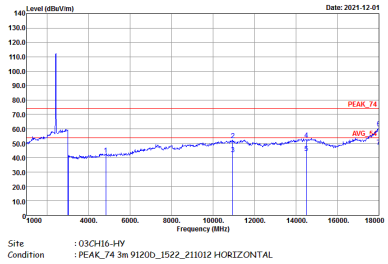
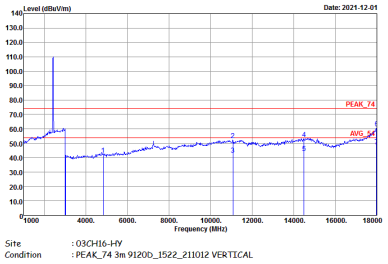
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH12 2467MHz	
4+3	Vertical	Fundamental
Peak	 Site : 03CH16-HY Condition : PEAK_BE_74 3m 9120D_1522_211012 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH16-HY Condition : PEAK_74 3m 9120D_1522_211012 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH16-HY Condition : AVG_BE_54 3m 9120D_1522_211012 VERTICAL : RBW:1000.000KHz VBW:1000KHz SWT:Auto	 Site : 03CH16-HY Condition : AVG_54 3m 9120D_1522_211012 VERTICAL : RBW:1000.000KHz VBW:1000KHz SWT:Auto

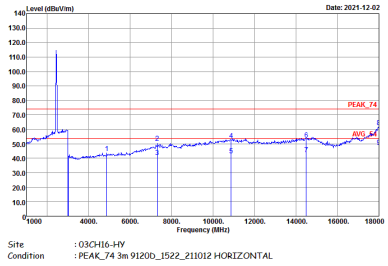
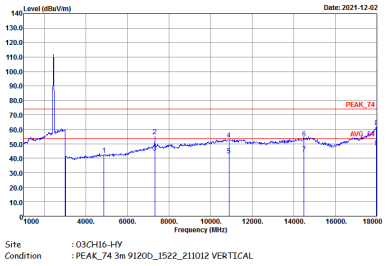
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH13 2472MHz	
4+3	Horizontal	Fundamental
Peak	 Site : 03CH16-HV Condition : PEAK_BE_74 3m 9120D_1522_211012 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH16-HV Condition : PEAK_74 3m 9120D_1522_211012 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH16-HV Condition : AVG_BE_54 3m 9120D_1522_211012 HORIZONTAL : RBW:1000.000KHz VBW:1000KHz SWT:Auto	 Site : 03CH16-HV Condition : AVG_54 3m 9120D_1522_211012 HORIZONTAL : RBW:1000.000KHz VBW:1000KHz SWT:Auto

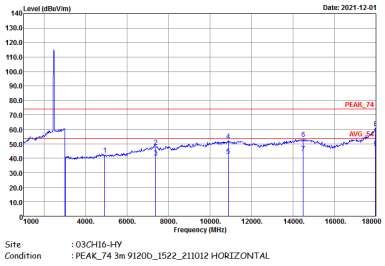
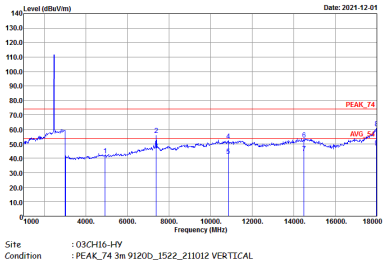
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH13 2472MHz	
4+3	Vertical	Fundamental
Peak	 Site : 03CH16-HV Condition : PEAK_BE_74 3m 9120D_1522_211012 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH16-HV Condition : PEAK_74 3m 9120D_1522_211012 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH16-HV Condition : AVG_BE_54 3m 9120D_1522_211012 VERTICAL : RBW:1000.000KHz VBW:1000KHz SWT:Auto	 Site : 03CH16-HV Condition : AVG_54 3m 9120D_1522_211012 VERTICAL : RBW:1000.000KHz VBW:1000KHz SWT:Auto

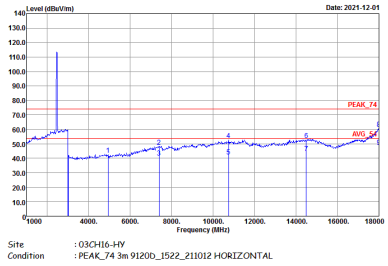
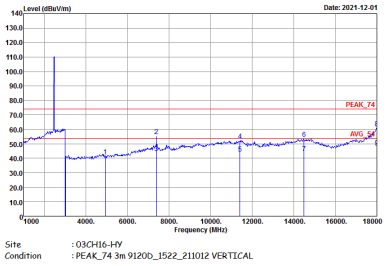
2.4GHz 2400~2483.5MHz

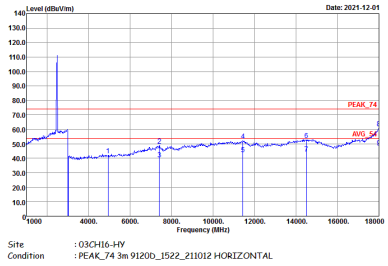
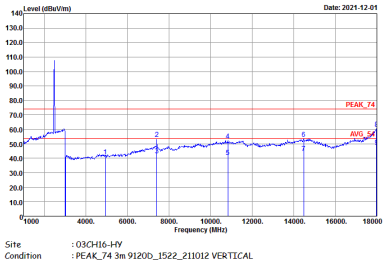
WIFI 802.11g (Harmonic @ 3m)

WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11g CH01 2412MHz	
4+3	Horizontal	Vertical
Peak Avg.		

WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11g CH06 2437MHz	
4+3	Horizontal	Vertical
Peak Avg.		

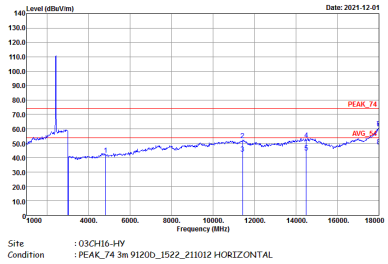
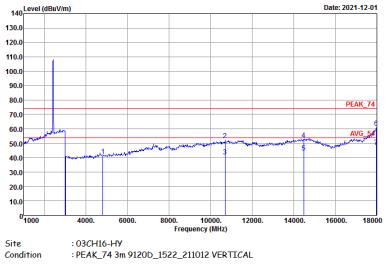
WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11g CH11 2462MHz	
4+3	Horizontal	Vertical
Peak Avg.		

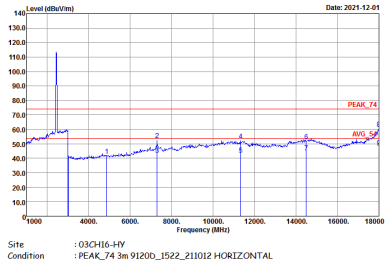
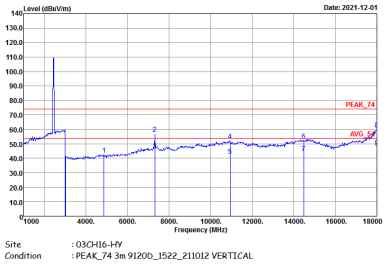
WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11g CH12 2467MHz	
4+3	Horizontal	Vertical
Peak Avg.		

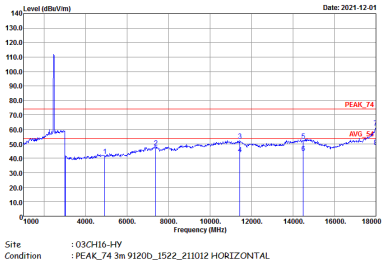
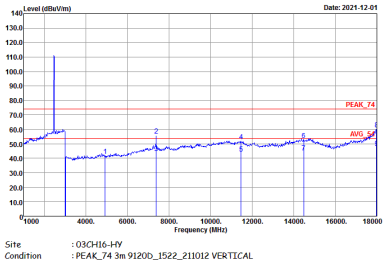
WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11g CH13 2472MHz	
4+3	Horizontal	Vertical
Peak Avg.		

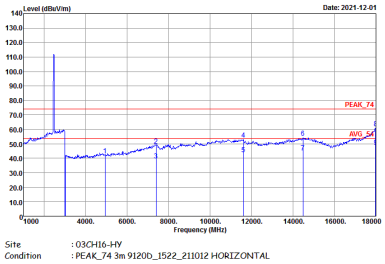
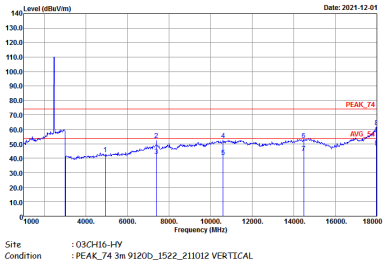
2.4GHz 2400~2483.5MHz

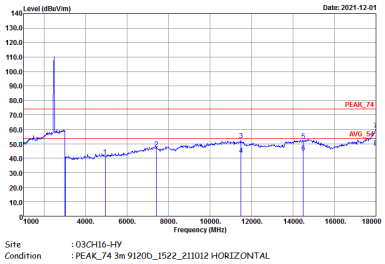
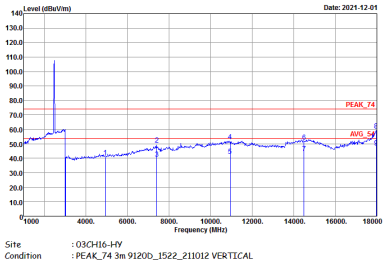
WIFI 802.11n HT20 (Harmonic @ 3m)

WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11n HT20 CH01 2412MHz	
4+3	Horizontal	Vertical
Peak Avg.		

WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11n HT20 CH06 2437MHz	
4+3	Horizontal	Vertical
Peak Avg.		

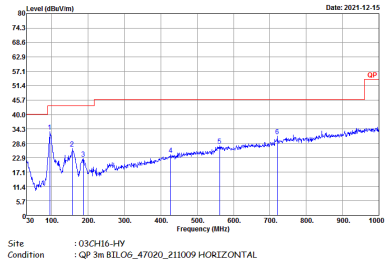
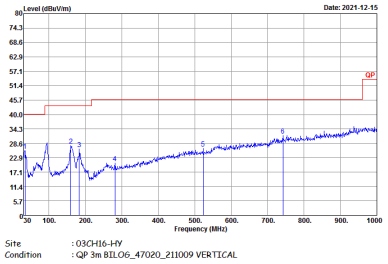
WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11n HT20 CH11 2462MHz	
4+3	Horizontal	Vertical
Peak Avg.		

WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11n HT20 CH12 2462MHz	
4+3	Horizontal	Vertical
Peak Avg.		

WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11n HT20 CH13 2472MHz	
4+3	Horizontal	Vertical
Peak Avg.		

Emission below 1GHz

2.4GHz WIFI 802.11g (LF)

WIFI	2.4GHz 2400~2483.5MHz	
ANT	802.11g LF	
4+3	Horizontal	Vertical
QP / Peak		

Appendix E. Duty Cycle Plots

Antenna	Band	Duty Cycle(%)	T(us)	1/T(kHz)	VBW Setting
4	802.11b	98.97	-	-	10Hz
3	802.11b	98.85	-	-	10Hz
4+3	802.11g	93.46	1430	0.70	1kHz
4+3	2.4GHz 802.11n HT20	93.03	1335	0.75	1kHz

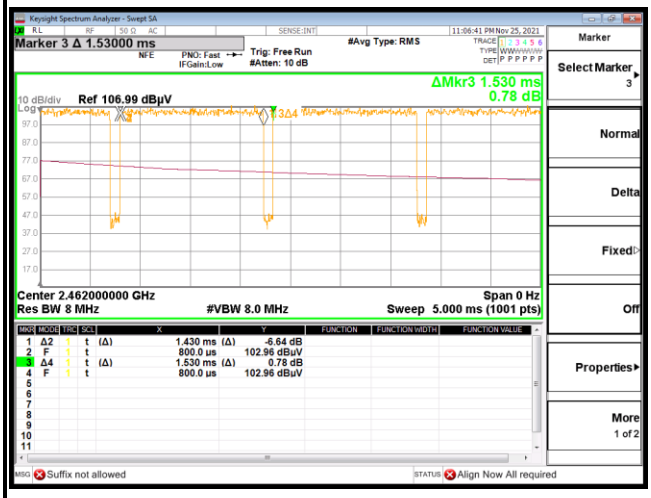
<Ant. 4>

802.11b

<Ant. 3>

802.11b

MIMO<Ant. 4+3>

802.11g	802.11n HT20
	

———THE END———