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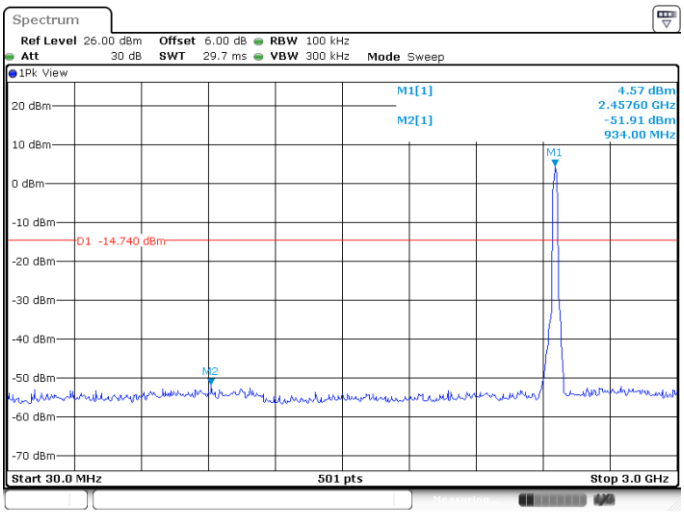

Date: 28.JUN.2022 11:49:40

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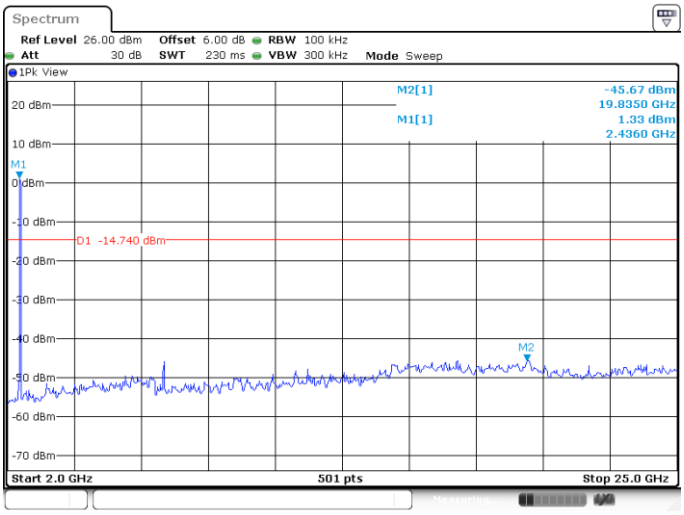
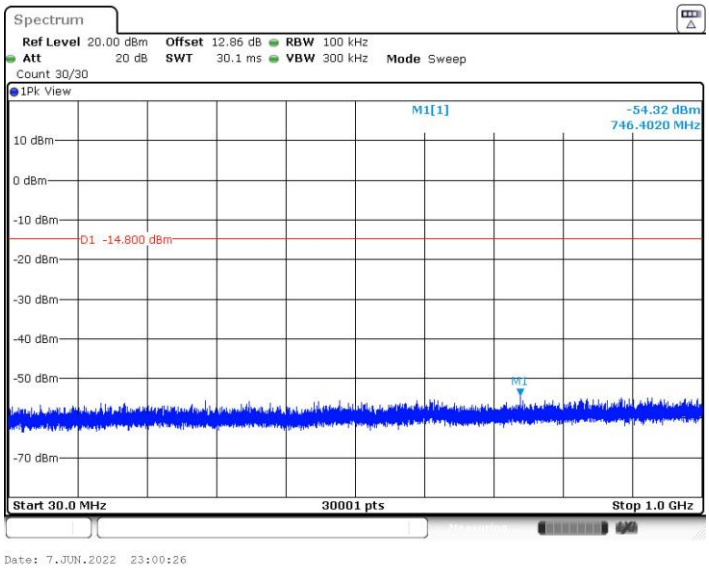
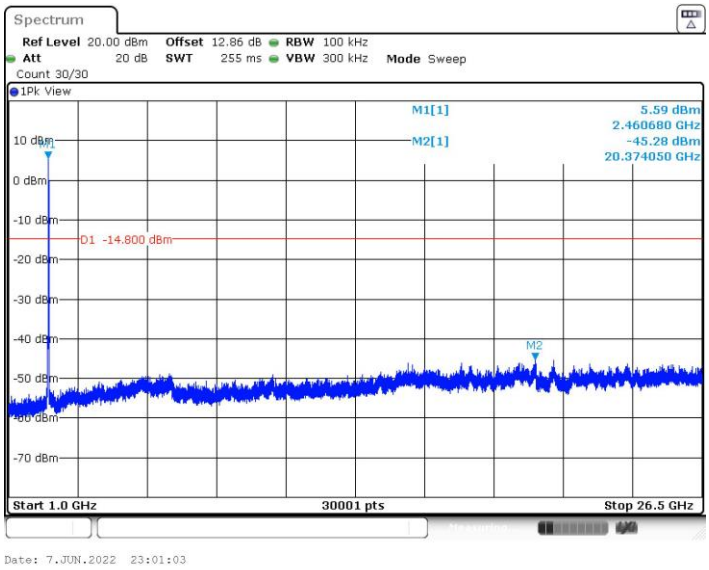


Date: 28.JUN.2022 11:50:00

11AX20MIMO_Ant1_2462_30~1000



11AX20MIMO_Ant1_2462_1000~26500



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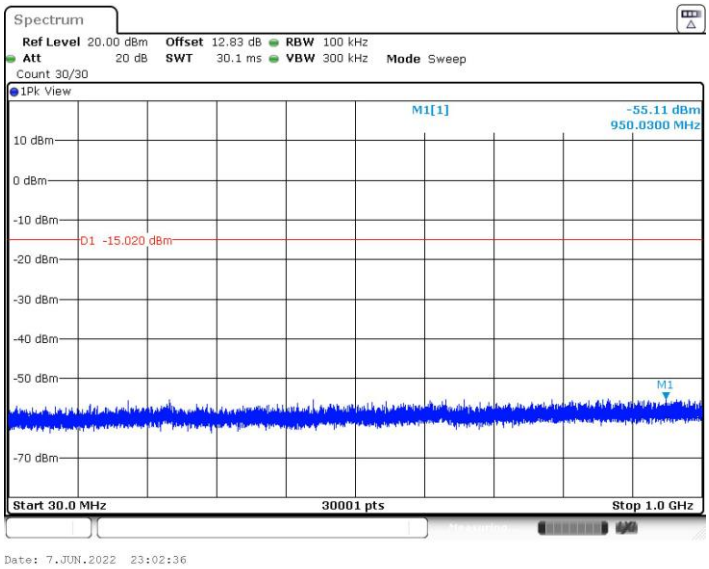
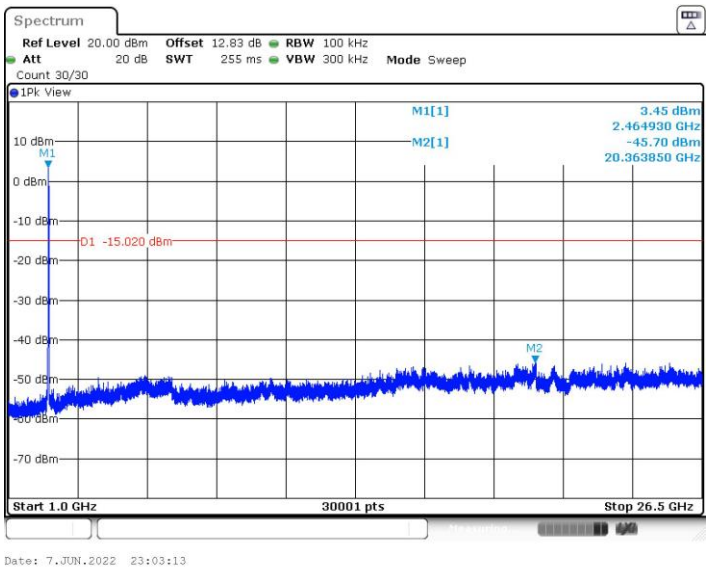


11AX20MIMO_Ant2_2462_1000~26500



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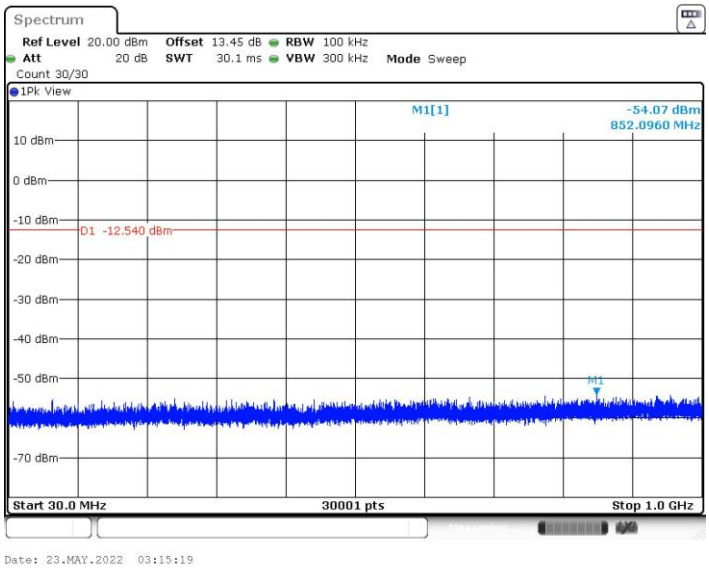

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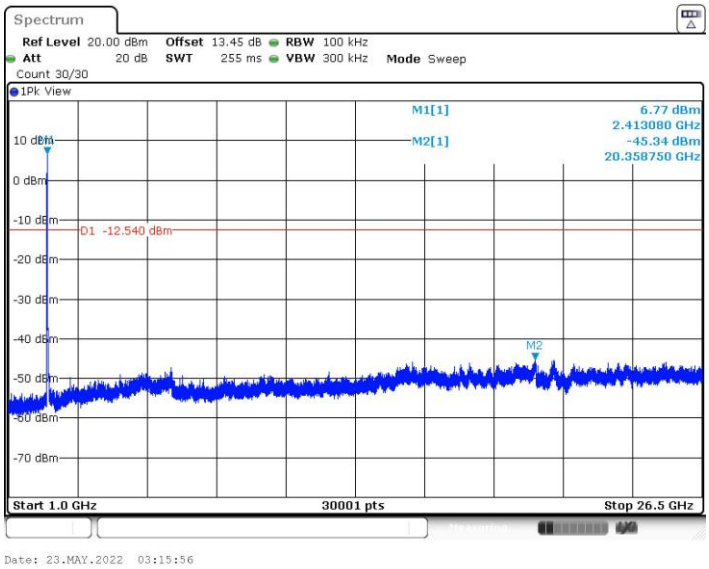
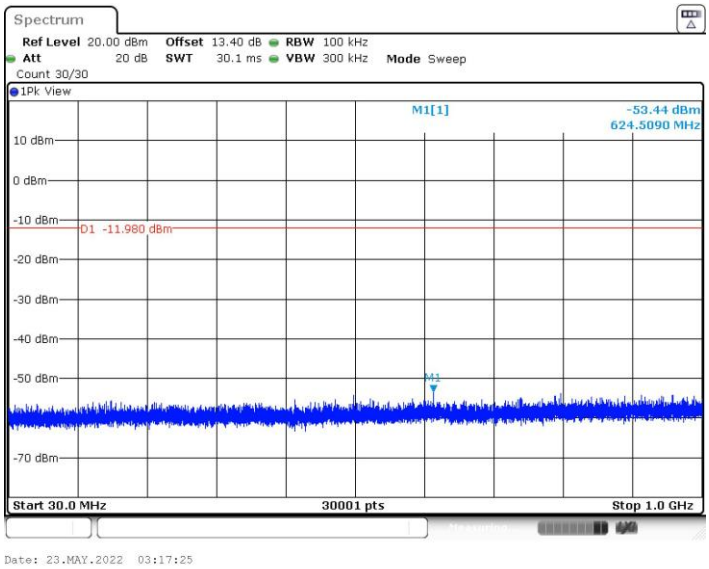


11AX20MIMO_Ant2_2412_30~1000



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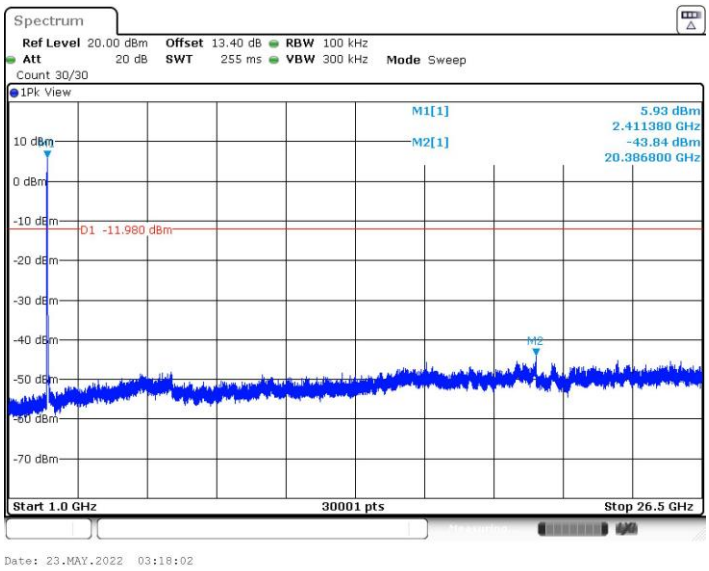

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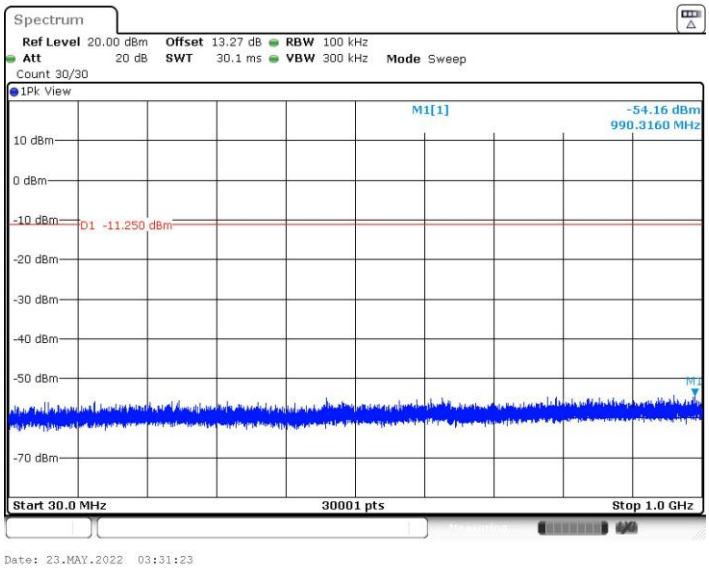

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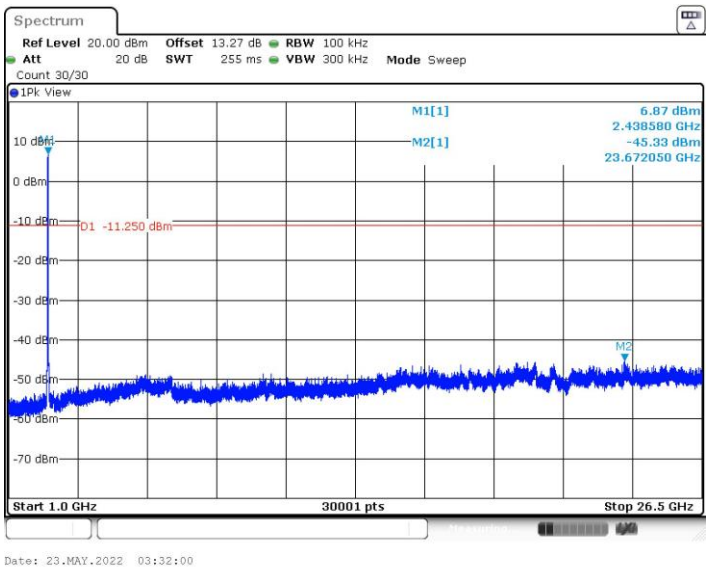

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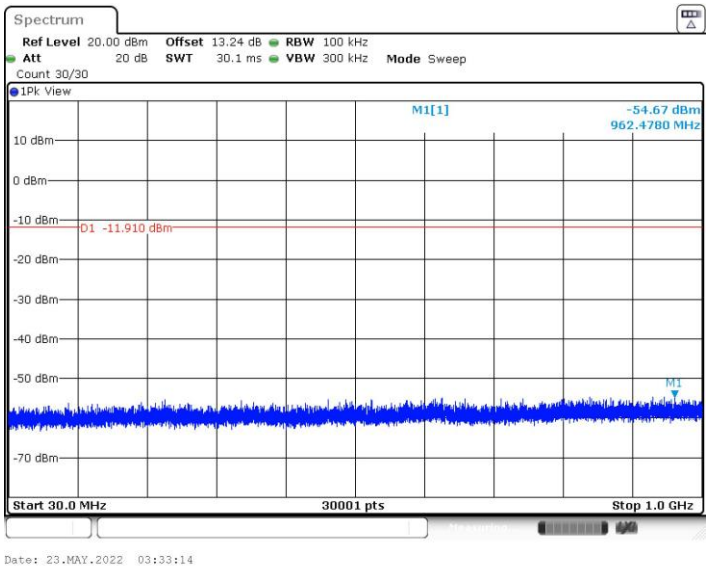

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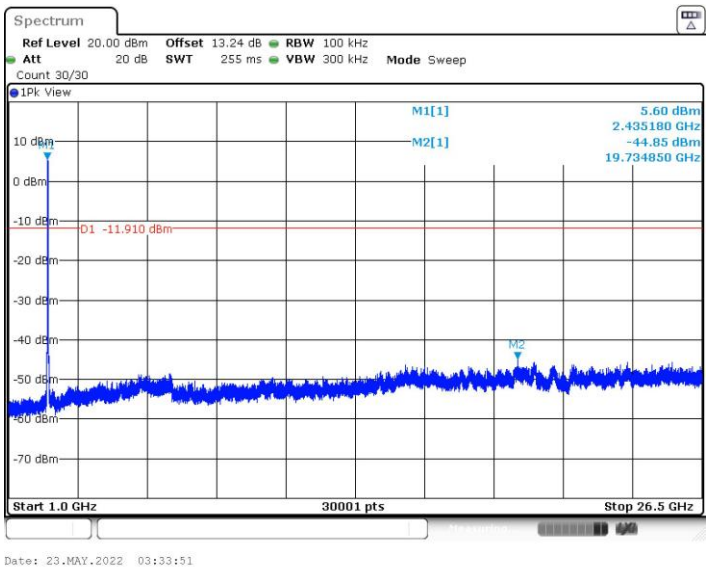
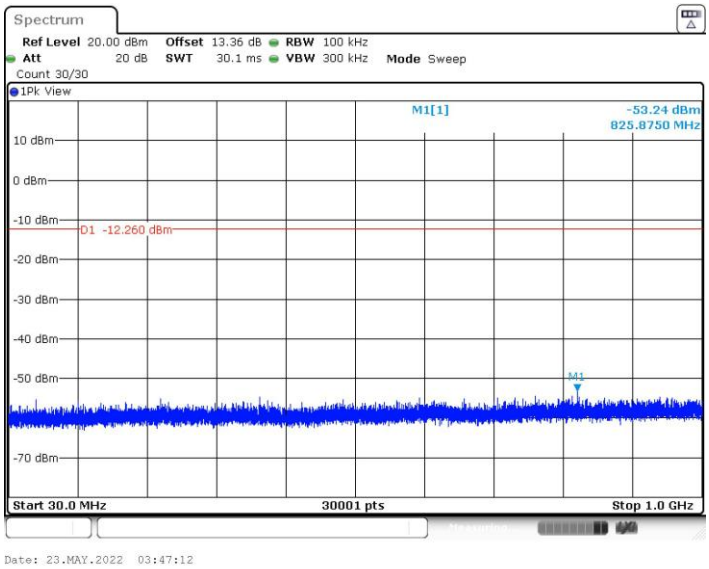
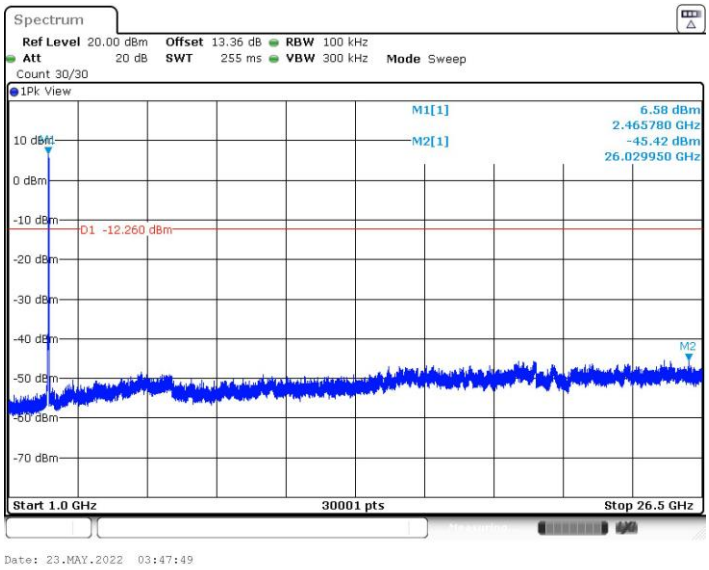


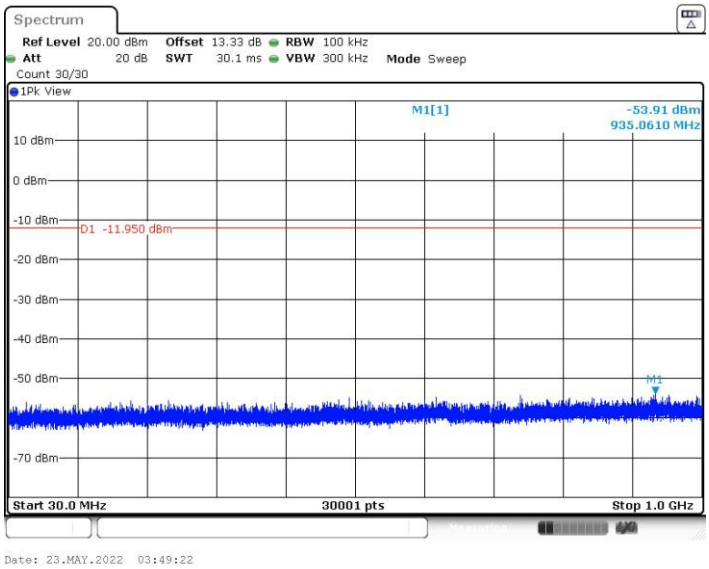
11AX20MIMO_Ant1_2462_30~1000



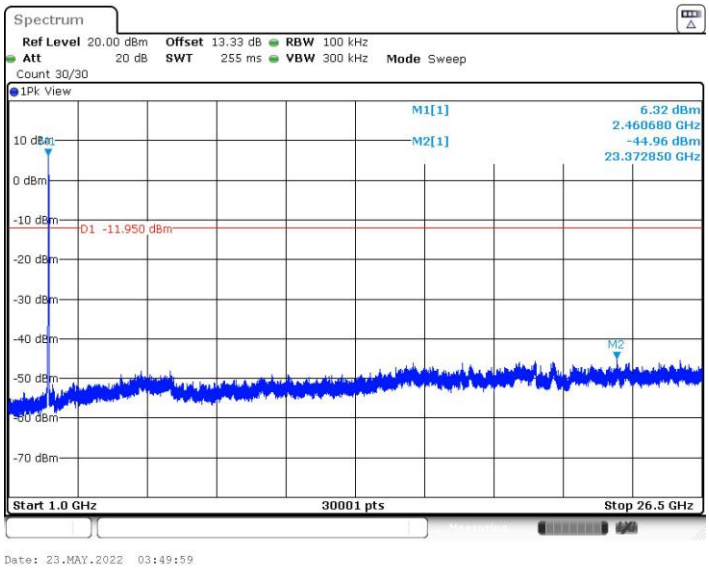
11AX20MIMO_Ant1_2462_1000~26500



11AX20MIMO_Ant2_2462_30~1000



11AX20MIMO_Ant2_2462_1000~26500



3.5 Radiated Band Edges and Spurious Emission Measurement

3.5.1 Limit of Radiated band edge and Spurious Emission Measurement

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

Frequency (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
0.009 – 0.490	2400/F(kHz)	300
0.490 – 1.705	24000/F(kHz)	30
1.705 – 30.0	30	30
30 – 88	100	3
88 – 216	150	3
216 - 960	200	3
Above 960	500	3

3.5.2 Measuring Instruments

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

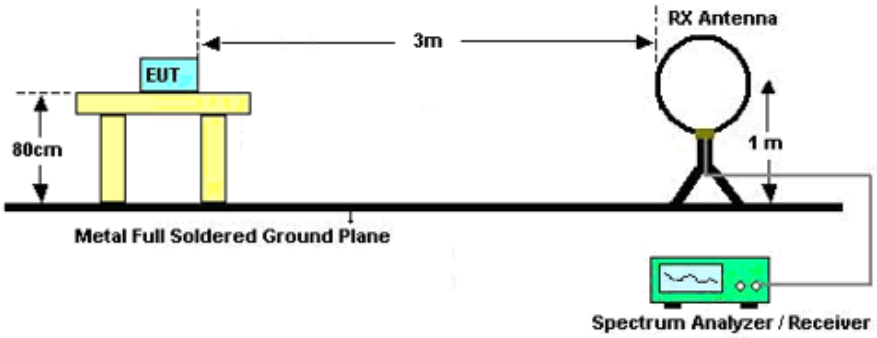
3.5.3 Test Procedures

1. The testing follows ANSI C63.10-2013 clause 11.11 & 11.12
2. The EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level.
3. The EUT was placed on a turntable with 0.8 meter for frequency below 1GHz and 1.5 meter for frequency above 1GHz respectively above ground.
4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
5. Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level
6. For testing below 1GHz, if the emission level of the EUT in peak mode was 3 dB lower than the limit specified, then peak values of EUT will be reported, otherwise, the emissions will be repeated one by one using the CISPR quasi-peak method and reported.
7. For testing above 1GHz, the emission level of the EUT in peak mode was 20dB lower than peak limit (that means the emission level in average mode also complies with the limit in average mode), then peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.
8. Use the following spectrum analyzer settings:
   (1) Span shall wide enough to fully capture the emission being measured;
   (2) Set RBW=100 kHz for f < 1 GHz; VBW ≥ RBW; Sweep = auto; Detector function = peak; Trace = max hold;
   (3) Set RBW = 1 MHz, VBW= 3MHz for f ≥ 1 GHz for peak measurement.
   For average measurement:
   - VBW = 10 Hz, when duty cycle is no less than 98 percent.
   - VBW ≥ 1/T, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.

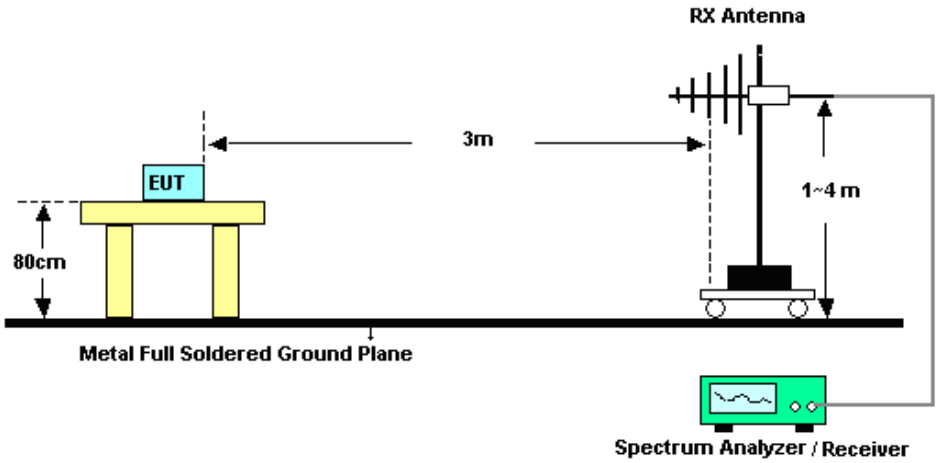
   For average measurement for Tx Beamforming mode:
   - RBW = 1 MHz, VBW= 3MHz
   - Detector = RMS.
   - If power averaging (rms) mode was used, then the applicable correction factor is [10 log (1 / D)], where D is the duty cycle.

3.5.4 Test Setup

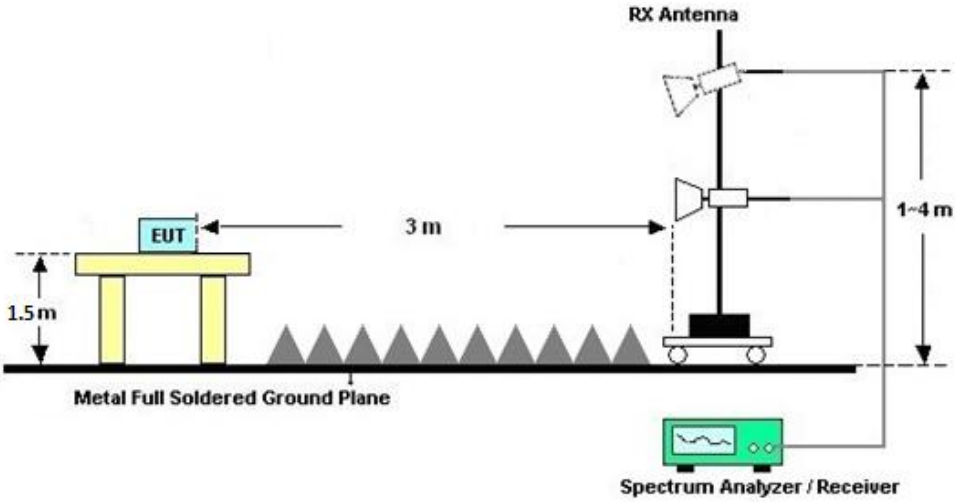
For radiated emissions below 30MHz



For radiated emissions from 30MHz to 1GHz



For radiated emissions above 1GHz



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

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

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

3.5.6 Test Result of Radiated Spurious at Band Edges

Please refer to Appendix B&C.

3.5.7 Duty Cycle

Please refer to Appendix D.

3.5.8 Test Result of Radiated Spurious Emission (30MHz ~ 10th Harmonic or 40GHz, whichever is lower)

Please refer to Appendix B&C.

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.

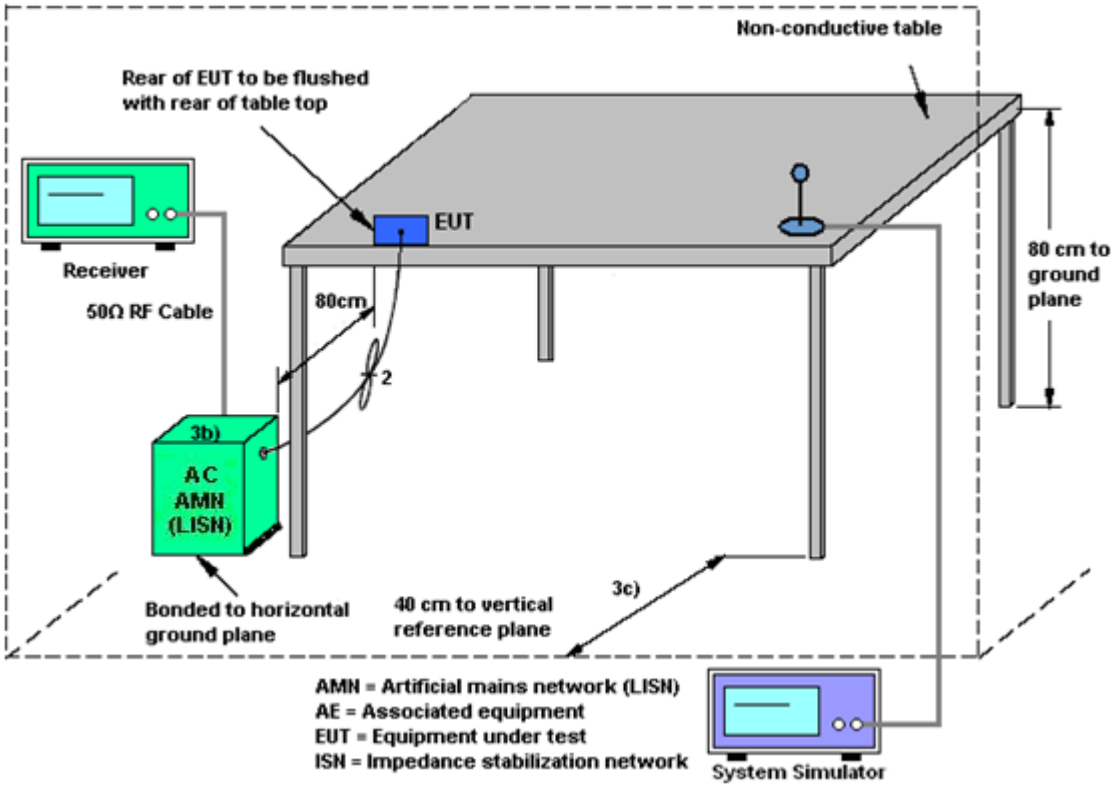
3.6.2 Measuring Instruments

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

3.6.3 Test Procedures

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

3.6.4 Test Setup



3.6.5 Test Result of AC Conducted Emission

Please refer to Appendix A.

3.7 Antenna Requirements

3.7.1 Standard Applicable

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

3.7.2 Antenna Anti-Replacement Construction

An embedded-in antenna design is used.

3.7.3 Antenna Gain

<CDD Modes >

FCC KDB 662911 D01 Multiple Transmitter Output v02r01

For CDD transmissions, directional gain is calculated as

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

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

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

For power measurements on IEEE 802.11 devices,

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

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

The EUT supports CDD mode.

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

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

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

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

<CDD Modes>

	Ant. 1 (dBi)	Ant. 2 (dBi)	DG for Power (dBi)	DG for PSD (dBi)	Power Limit Reduction (dB)	PSD Limit Reduction (dB)
2.4 GHz	0.90	1.20	1.20	4.06	0.00	0.00

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

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

TXBF modes

The directional gain calculation is following F)2)e)ii) of KDB 662911 D01 v02r01.

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

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

	Ant 1 (dBi)	Ant 2 (dBi)	DG for Power (dBi)	DG for PSD (dBi)	Power Limit Reduction (dB)	PSD Limit Reduction (dB)
2.4 GHz	0.90	1.20	4.06	4.06	0.00	0.00

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

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

4 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Spectrum Analyzer	R&S	FSV40	101040	10Hz~40GHz	Oct. 14, 2021	May 20, 2022~ Jul. 08, 2022	Oct. 13, 2022	Conducted (TH01-KS)
Pulse Power Senor	Anritsu	MA2411B	0917070	300MHz~40GHz	Jan. 05, 2022	May 20, 2022~ Jul. 08, 2022	Jan. 04, 2023	Conducted (TH01-KS)
Power Meter	Anritsu	ML2495A	1005002	50MHz Bandwidth	Jan. 05, 2022	May 20, 2022~ Jul. 08, 2022	Jan. 04, 2023	Conducted (TH01-KS)
EMI Test Receiver	Keysight	N9038A	MY56400004	3Hz~8.5GHz;Max 30dBm	Oct. 16, 2021	Jul. 17, 2022	Oct. 15, 2022	Radiation (03CH05-KS)
EXA Spectrum Analyzer	Keysight	N9010A	MY55150244	10Hz-44G,MAX 30dB	Mar. 24, 2022	Jul. 17, 2022	Mar. 23, 2023	Radiation (03CH05-KS)
Loop Antenna	R&S	HFH2-Z2	100321	9kHz~30MHz	Oct. 30, 2021	Jul. 17, 2022	Oct. 29, 2022	Radiation (03CH05-KS)
Bilog Antenna	TeseQ	CBL6111D	49922	30MHz-1GHz	Jun. 03 ,2022	Jul. 17, 2022	Jun. 02, 2023	Radiation (03CH05-KS)
Double Ridge Horn Antenna	ETS-Lindgren	3117	75957	1GHz~18GHz	Nov. 08, 2021	Jul. 17, 2022	Nov. 07, 2022	Radiation (03CH05-KS)
SHF-EHF Horn	Com-power	AH-840	101070	18GHz~40GHz	Jan. 05, 2022	Jul. 17, 2022	Jan. 04, 2023	Radiation (03CH05-KS)
Amplifier	SONOMA	310N	380826	9KHz-1GHz	Jul. 11, 2022	Jul. 17, 2022	Jul. 10, 2023	Radiation (03CH05-KS)
Amplifier	MITEQ	EM18G40GGA	060728	18~40GHz	Jan. 05, 2022	Jul. 17, 2022	Jan. 04, 2023	Radiation (03CH05-KS)
high gain Amplifier	MITEQ	AMF-7D-00101800-30-10P	2012228	1Ghz-18Ghz	Oct. 16, 2021	Jul. 17, 2022	Oct. 15, 2022	Radiation (03CH05-KS)
Amplifier	Keysight	83017A	MY53270316	500MHz~26.5GHz	Oct. 16, 2021	Jul. 17, 2022	Oct. 15, 2022	Radiation (03CH05-KS)
AC Power Source	Chroma	61601	F104090004	N/A	NCR	Jul. 17, 2022	NCR	Radiation (03CH05-KS)
Turn Table	ChamPro	EM 1000-T	060762-T	0~360 degree	NCR	Jul. 17, 2022	NCR	Radiation (03CH05-KS)
Antenna Mast	ChamPro	EM 1000-A	060762-A	1 m~4 m	NCR	Jul. 17, 2022	NCR	Radiation (03CH05-KS)
EMI Receiver	R&S	ESCI7	100768	9kHz~7GHz;	Apr. 20, 2022	Jul. 26, 2022	Apr. 19, 2023	Conduction (CO01-KS)
AC LISN (for auxiliary equipment)	MessTec	AN3016	060103	9kHz~30MHz	Oct. 14, 2021	Jul. 26, 2022	Oct. 13, 2022	Conduction (CO01-KS)
AC LISN	MessTec	AN3016	060105	9kHz~30MHz	Apr. 20, 2022	Jul. 26, 2022	Apr. 19, 2023	Conduction (CO01-KS)
AC Power Source	Chroma	61602	ABP000000811	AC 0V~300V, 45Hz~1000Hz	Oct. 14, 2021	Jul. 26, 2022	Oct. 13, 2022	Conduction (CO01-KS)

NCR: No Calibration Required

5 Uncertainty of Evaluation

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

Uncertainty of Conducted Measurement

Test Item	Uncertainty
Conducted Power	±0.56 dB
Conducted Emissions	±0.92 dB
Occupied Channel Bandwidth	±0.03 %
Conducted Power Spectral Density	±0.54 dB

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	2.94dB

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

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

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

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

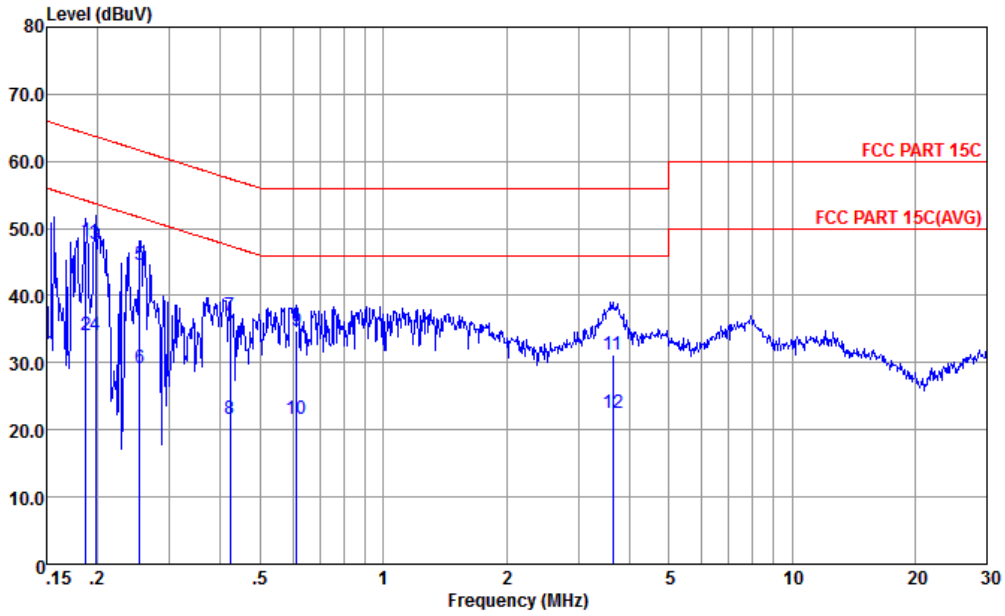
Uncertainty of Radiated Emission Measurement (18000 MHz ~ 40000 MHz)

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

---------- THE END ----------

Appendix A. AC Conducted Emission Test Results

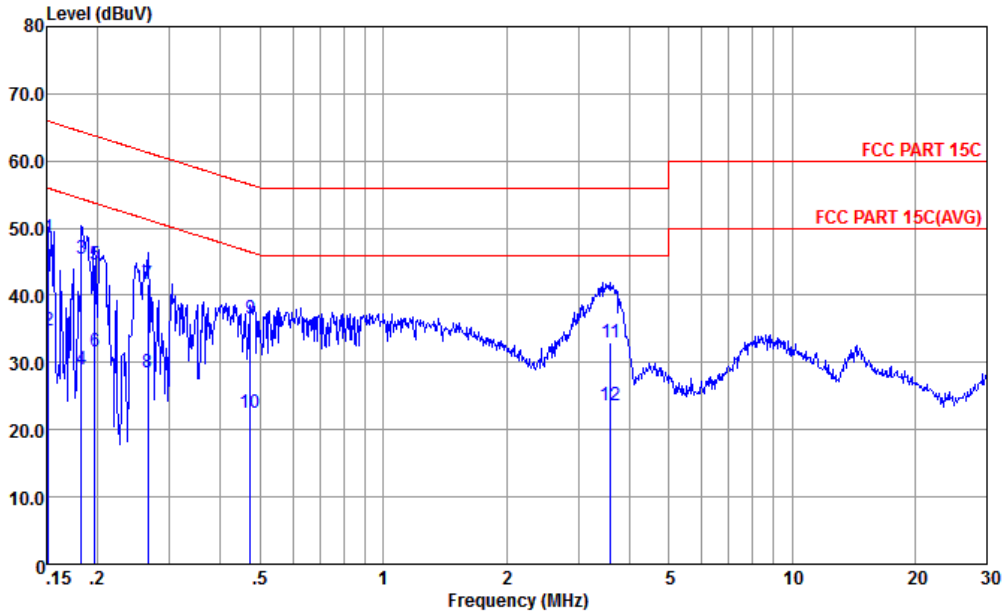
Test Engineer :	Amos Zhang	**Temperature :**	25.3~26.2℃
		Relative Humidity :	38~40%
Test Voltage :	120Vac / 60Hz	**Phase :**	Line
Remark :	All emissions not reported here are more than 10 dB below the prescribed limit.		



Site : CO01-KS
Condition : FCC PART 15C LISN-060105-L LINE

	Freq MHz	Level dBuV	Over Limit dB	Limit Line dBuV	Read Level dBuV	LISN Factor dB	Cable Loss dB	Remark
1 *	0.187	48.23	-15.92	64.15	37.80	0.04	10.39	QP
2	0.187	34.03	-20.12	54.15	23.60	0.04	10.39	Average
3	0.198	47.61	-16.10	63.71	37.20	0.04	10.37	QP
4	0.198	34.01	-19.70	53.71	23.60	0.04	10.37	Average
5	0.253	44.59	-17.05	61.64	34.20	0.06	10.33	QP
6	0.253	29.29	-22.35	51.64	18.90	0.06	10.33	Average
7	0.421	36.95	-20.47	57.42	26.60	0.09	10.26	QP
8	0.421	21.65	-25.77	47.42	11.30	0.09	10.26	Average
9	0.614	34.84	-21.16	56.00	24.49	0.11	10.24	QP
10	0.614	21.54	-24.46	46.00	11.19	0.11	10.24	Average
11	3.642	31.21	-24.79	56.00	20.80	0.16	10.25	QP
12	3.642	22.61	-23.39	46.00	12.20	0.16	10.25	Average

Test Engineer :	Amos Zhang	**Temperature :**	25.3~26.2℃
		Relative Humidity :	38~40%
Test Voltage :	120Vac / 60Hz	**Phase :**	Neutral
Remark :	All emissions not reported here are more than 10 dB below the prescribed limit.		



Site : CO01-KS
Condition : FCC PART 15C LISN-060105-N NEUTRAL

	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1 *	0.152	48.49	-17.42	65.91	37.90	0.11	10.48	QP
2	0.152	34.69	-21.22	55.91	24.10	0.11	10.48	Average
3	0.182	45.40	-18.97	64.37	34.90	0.10	10.40	QP
4	0.182	29.00	-25.37	54.37	18.50	0.10	10.40	Average
5	0.197	44.57	-19.19	63.76	34.10	0.10	10.37	QP
6	0.197	31.67	-22.09	53.76	21.20	0.10	10.37	Average
7	0.266	41.62	-19.63	61.25	31.20	0.10	10.32	QP
8	0.266	28.62	-22.63	51.25	18.20	0.10	10.32	Average
9	0.474	36.55	-19.90	56.45	26.20	0.11	10.24	QP
10	0.474	22.55	-23.90	46.45	12.20	0.11	10.24	Average
11	3.603	33.01	-22.99	56.00	22.60	0.16	10.25	QP
12	3.603	23.71	-22.29	46.00	13.30	0.16	10.25	Average

Note:

1. Level(dBμV) = Read Level(dBμV) + LISN Factor(dB) + Cable Loss(dB)
2. Over Limit(dB) = Level(dBμV) – Limit Line(dBμV)

Appendix B. Radiated Spurious Emission

2.4GHz 2400~2483.5MHz

WIFI 802.11b (Band Edge @ 3m)

WIFI Ant.	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
CDD 1+2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11b CH 01 2412MHz		2389.56	52.01	-21.99	74	48.89	32.88	7.1	36.86	391	63	P	H
		2389.95	42.11	-11.89	54	38.99	32.88	7.1	36.86	391	63	A	H
		2414	108.65	-	-	105.47	32.9	7.13	36.85	391	63	P	H
		2412	106.44	-	-	103.26	32.9	7.13	36.85	391	63	A	H
		2389.95	54.02	-19.98	74	50.9	32.88	7.1	36.86	100	288	P	V
		2389.95	47.29	-6.71	54	44.17	32.88	7.1	36.86	100	288	A	V
		2412	112.35	-	-	109.17	32.9	7.13	36.85	100	288	P	V
		2412	110.37	-	-	107.19	32.9	7.13	36.85	100	288	A	V
802.11b CH 06 2437MHz		2386.18	48.97	-25.03	74	45.85	32.88	7.1	36.86	273	129	P	H
		2388.26	39.27	-14.73	54	36.15	32.88	7.1	36.86	273	129	A	H
	*	2436	109.14	-	-	105.88	32.92	7.19	36.85	273	129	P	H
	*	2436	106.38	-	-	103.12	32.92	7.19	36.85	273	129	A	H
		2485.36	54.35	-19.65	74	50.94	32.98	7.25	36.82	273	129	P	H
		2485.48	46.45	-7.55	54	43.04	32.98	7.25	36.82	273	129	A	H
		2371.75	49.12	-24.88	74	46.06	32.86	7.07	36.87	100	287	P	V
		2389.95	38.91	-15.09	54	35.79	32.88	7.1	36.86	100	287	A	V
	*	2436	111.54	-	-	108.28	32.92	7.19	36.85	100	287	P	V
	*	2436	109.18	-	-	105.92	32.92	7.19	36.85	100	287	A	V
		2485.48	55.67	-18.33	74	52.26	32.98	7.25	36.82	100	287	P	V
		2485.36	49.21	-4.79	54	45.8	32.98	7.25	36.82	100	287	A	V

802.11b CH 11 2462MHz	*	2462	108.14	-	-	104.79	32.96	7.22	36.83	366	132	P	H
	*	2460	105.76	-	-	102.41	32.96	7.22	36.83	366	132	A	H
		2484.7	55.38	-18.62	74	51.97	32.98	7.25	36.82	366	131	P	H
		2485.66	51.08	-2.92	54	47.67	32.98	7.25	36.82	366	131	A	H
	*	2462	109.97	-	-	106.62	32.96	7.22	36.83	100	251	P	V
	*	2460	106.9	-	-	103.55	32.96	7.22	36.83	100	251	A	V
		2483.5	56.28	-17.72	74	52.87	32.98	7.25	36.82	100	251	P	V
		2483.5	52.35	-1.65	54	48.94	32.98	7.25	36.82	100	251	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

2.4GHz 2400~2483.5MHz

WIFI 802.11b (Harmonic @ 3m)

WIFI Ant. CDD 1+2	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		4830	40.24	-33.76	74	61.17	34.2	10.25	65.38	300	0	P	H
		4830	40.83	-33.17	74	61.76	34.2	10.25	65.38	100	0	P	V
802.11b CH 06 2437MHz		4875	42.06	-31.94	74	62.96	34.23	10.29	65.42	300	0	P	H
		7305	48.41	-25.59	74	65.74	35.86	12.72	65.91	300	0	P	H
		4875	40.71	-33.29	74	61.61	34.23	10.29	65.42	100	0	P	V
		7305	46.09	-27.91	74	63.42	35.86	12.72	65.91	100	0	P	V
802.11b CH 11 2462MHz		4920	40.37	-33.63	74	61.22	34.26	10.34	65.45	300	0	P	H
		7380	45.33	-28.67	74	62.83	35.88	12.73	66.11	300	0	P	H
		4920	41	-33	74	61.85	34.26	10.34	65.45	100	0	P	V
		7380	44.08	-29.92	74	61.58	35.88	12.73	66.11	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

2.4GHz 2400~2483.5MHz

WIFI 802.11g (Band Edge @ 3m)

WIFI Ant. CDD 1+2	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		2389.95	62.37	-11.63	74	59.25	32.88	7.1	36.86	334	123	P	H
		2389.95	49.14	-4.86	54	46.02	32.88	7.1	36.86	334	123	A	H
	*	2412	108.72	-	-	105.54	32.9	7.13	36.85	334	123	P	H
	*	2412	101.45	-	-	98.27	32.9	7.13	36.85	334	123	A	H
		2389.95	58.44	-15.56	74	55.32	32.88	7.1	36.86	100	287	P	V
		2389.95	47.06	-6.94	54	43.94	32.88	7.1	36.86	100	287	A	V
	*	2416	110.31	-	-	107.1	32.9	7.16	36.85	100	287	P	V
	*	2414	103.08	-	-	99.9	32.9	7.13	36.85	100	287	A	V
802.11g CH 06 2437MHz		2355.37	49.38	-24.62	74	46.39	32.83	7.04	36.88	292	121	P	H
		2389.95	39.08	-14.92	54	35.96	32.88	7.1	36.86	292	121	A	H
	*	2436	108.75	-	-	105.49	32.92	7.19	36.85	292	121	P	H
	*	2436	102.34	-	-	99.08	32.92	7.19	36.85	292	121	A	H
		2483.74	55.88	-18.12	74	52.47	32.98	7.25	36.82	292	121	P	H
		2483.68	44.59	-9.41	54	41.18	32.98	7.25	36.82	292	121	A	H
		2389.95	51.86	-22.14	74	48.74	32.88	7.1	36.86	130	96	P	V
		2389.95	39.45	-14.55	54	36.33	32.88	7.1	36.86	130	96	A	V
	*	2438	110.22	-	-	106.93	32.94	7.19	36.84	130	96	P	V
	*	2438	103.24	-	-	99.95	32.94	7.19	36.84	130	96	A	V
		2483.5	56.18	-17.82	74	52.77	32.98	7.25	36.82	130	96	P	V
		2483.5	43.22	-10.78	54	39.81	32.98	7.25	36.82	130	96	A	V

802.11g CH 10 2457MHz		2483.62	69.61	-4.39	74	66.2	32.98	7.25	36.82	300	16	P	H
		2483.56	50.39	-3.61	54	46.98	32.98	7.25	36.82	300	16	A	H
	*	2458	106.52	-	-	103.17	32.96	7.22	36.83	300	16	P	H
	*	2458	99.52	-	-	96.17	32.96	7.22	36.83	300	16	A	H
		2485.3	68.95	-5.05	74	65.54	32.98	7.25	36.82	100	2	P	V
		2484.88	51.08	-2.92	54	47.67	32.98	7.25	36.82	100	2	A	V
	*	2456	109.29	-	-	105.94	32.96	7.22	36.83	100	2	P	V
	*	2456	102.92	-	-	99.57	32.96	7.22	36.83	100	2	A	V
802.11g CH 11 2462MHz	*	2462	106.74	-	-	103.39	32.96	7.22	36.83	301	15	P	H
	*	2462	98.96	-	-	95.61	32.96	7.22	36.83	301	15	A	H
		2484.04	65.8	-8.2	74	62.39	32.98	7.25	36.82	301	15	P	H
		2483.5	49.51	-4.49	54	46.1	32.98	7.25	36.82	301	15	A	H
	*	2462	107.19	-	-	103.84	32.96	7.22	36.83	146	95	P	V
	*	2462	100.87	-	-	97.52	32.96	7.22	36.83	146	95	A	V
		2483.98	70.05	-3.95	74	66.64	32.98	7.25	36.82	146	95	P	V
		2483.5	52.53	-1.47	54	49.12	32.98	7.25	36.82	146	95	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

2.4GHz 2400~2483.5MHz

WIFI 802.11g (Harmonic @ 3m)

WIFI Ant. CDD 1+2	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		4830	40.89	-33.11	74	61.82	34.2	10.25	65.38	300	0	P	H
		4830	40.78	-33.22	74	61.71	34.2	10.25	65.38	100	0	P	V
802.11g CH 06 2437MHz		4875	41.23	-32.77	74	62.13	34.23	10.29	65.42	300	0	P	H
		7305	46.17	-27.83	74	63.5	35.86	12.72	65.91	300	0	P	H
		4875	41.15	-32.85	74	62.05	34.23	10.29	65.42	100	0	P	V
		7305	43.32	-30.68	74	60.65	35.86	12.72	65.91	100	0	P	V
802.11g CH 10 2457MHz		4920	40.2	-33.8	74	61.05	34.26	10.34	65.45	300	0	P	H
		7380	41.87	-32.13	74	59.37	35.88	12.73	66.11	300	0	P	H
		4920	40.7	-33.3	74	61.55	34.26	10.34	65.45	100	0	P	V
		7380	41.93	-32.07	74	59.43	35.88	12.73	66.11	100	0	P	V
802.11g CH 11 2462MHz		4920	40.82	-33.18	74	61.67	34.26	10.34	65.45	300	0	P	H
		7380	42.58	-31.42	74	60.08	35.88	12.73	66.11	300	0	P	H
		4920	39.77	-34.23	74	60.62	34.26	10.34	65.45	100	0	P	V
		7380	43.04	-30.96	74	60.54	35.88	12.73	66.11	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

2.4GHz 2400~2483.5MHz

WIFI 802.11 ax HE20 Full (Band Edge @ 3m)

WIFI Ant. CDD 1+2	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)
802.11ax HE20 Full CH 01 2412MHz		2388.78	64.31	-9.69	74	61.19	32.88	7.1	36.86	332	128	P	H
		2389.95	52.39	-1.61	54	49.27	32.88	7.1	36.86	332	128	A	H
	*	2412	110.19	-	-	107.01	32.9	7.13	36.85	332	128	P	H
	*	2412	100.66	-	-	97.48	32.9	7.13	36.85	332	128	A	H
		2389.3	62.07	-11.93	74	58.95	32.88	7.1	36.86	100	283	P	V
		2389.95	49.19	-4.81	54	46.07	32.88	7.1	36.86	100	283	A	V
	*	2414	112.24	-	-	109.06	32.9	7.13	36.85	100	283	P	V
	*	2412	102.99	-	-	99.81	32.9	7.13	36.85	100	283	A	V
802.11ax HE20 Full CH 06 2437MHz		2389.17	52.25	-21.75	74	49.13	32.88	7.1	36.86	340	65	P	H
		2389.95	40.2	-13.8	54	37.08	32.88	7.1	36.86	340	65	A	H
	*	2436	112.61	-	-	109.35	32.92	7.19	36.85	340	65	P	H
	*	2436	102.31	-	-	99.05	32.92	7.19	36.85	340	65	A	H
		2483.86	59.45	-14.55	74	56.04	32.98	7.25	36.82	340	65	P	H
		2483.5	45.32	-8.68	54	41.91	32.98	7.25	36.82	340	65	A	H
		2389.95	54.18	-19.82	74	51.06	32.88	7.1	36.86	148	97	P	V
		2389.95	41.87	-12.13	54	38.75	32.88	7.1	36.86	148	97	A	V
	*	2430	113.41	-	-	110.18	32.92	7.16	36.85	148	97	P	V
	*	2438	104.92	-	-	101.63	32.94	7.19	36.84	148	97	A	V
		2483.62	59.93	-14.07	74	56.52	32.98	7.25	36.82	148	97	P	V
		2483.5	47.33	-6.67	54	43.92	32.98	7.25	36.82	148	97	A	V

802.11ax HE20 Full CH 10 2457MHz		2483.5	68.22	-5.78	74	64.81	32.98	7.25	36.82	300	14	P	H
		2483.5	50.78	-3.22	54	47.37	32.98	7.25	36.82	300	14	A	H
	*	2458	108.32	-	-	104.97	32.96	7.22	36.83	300	14	P	H
	*	2458	98.75	-	-	95.4	32.96	7.22	36.83	300	14	A	H
		2483.5	68.69	-5.31	74	65.28	32.98	7.25	36.82	141	97	P	V
		2483.5	52.57	-1.43	54	49.16	32.98	7.25	36.82	141	97	A	V
	*	2458	111.9	-	-	108.55	32.96	7.22	36.83	141	97	P	V
	*	2458	102.25	-	-	98.9	32.96	7.22	36.83	141	97	A	V
8802.11ax HE20 Full CH 11 2462MHz	*	2464	106.85	-	-	103.5	32.96	7.22	36.83	299	15	P	H
	*	2460	97.67	-	-	94.32	32.96	7.22	36.83	299	15	A	H
		2485.6	66.55	-7.45	74	63.14	32.98	7.25	36.82	299	15	P	H
		2483.5	50.77	-3.23	54	47.36	32.98	7.25	36.82	299	15	A	H
	*	2464	108.51	-	-	105.16	32.96	7.22	36.83	144	93	P	V
	*	2462	99.16	-	-	95.81	32.96	7.22	36.83	144	93	A	V
		2483.56	69.33	-4.67	74	65.92	32.98	7.25	36.82	144	93	P	V
		2483.5	52.82	-1.18	54	49.41	32.98	7.25	36.82	144	93	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

2.4GHz 2400~2483.5MHz

WIFI 802.11 ax HE20 Full (Harmonic @ 3m)

WIFI Ant. CDD 1+2	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)
802.11ax HE20 Full CH 01 2412MHz		4830	40.59	-33.41	74	61.52	34.2	10.25	65.38	300	0	P	H
		4830	40.39	-33.61	74	61.32	34.2	10.25	65.38	100	0	P	V
802.11ax HE20 Full CH 06 2437MHz		4875	40.62	-33.38	74	61.52	34.23	10.29	65.42	300	0	P	H
		7305	46.05	-27.95	74	63.38	35.86	12.72	65.91	300	0	P	H
		4875	39.92	-34.08	74	60.82	34.23	10.29	65.42	100	0	P	V
		7305	44.52	-29.48	74	61.85	35.86	12.72	65.91	100	0	P	V
802.11ax HE20 Full CH 10 2462MHz		4920	40.5	-33.5	74	61.35	34.26	10.34	65.45	300	0	P	H
		7380	42.32	-31.68	74	59.82	35.88	12.73	66.11	300	0	P	H
		4920	40.45	-33.55	74	61.3	34.26	10.34	65.45	100	0	P	V
		7380	41.82	-32.18	74	59.32	35.88	12.73	66.11	100	0	P	V
802.11ax HE20 Full CH 11 2462MHz		4920	40.28	-33.72	74	61.13	34.26	10.34	65.45	300	0	P	H
		7380	42.72	-31.28	74	60.22	35.88	12.73	66.11	300	0	P	H
		4920	40.43	-33.57	74	61.28	34.26	10.34	65.45	100	0	P	V
		7380	42.58	-31.42	74	60.08	35.88	12.73	66.11	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

2.4GHz 2400~2483.5MHz

WIFI 802.11ax HE20 Partial 106 (Band Edge @ 3m)

WIFI Ant. CDD 1+2	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)
802.11ax HE20 Partial 106/53 CH 01 2412MHz		2389.82	55.95	-18.05	74	52.83	32.88	7.1	36.86	316	57	P	H
		2389.95	39.87	-14.13	54	36.75	32.88	7.1	36.86	316	57	A	H
		2406	109.18	-	-	106	32.9	7.13	36.85	316	57	P	H
		2404	100.11	-	-	96.93	32.9	7.13	36.85	316	57	A	H
		2389.82	52.68	-21.32	74	49.56	32.88	7.1	36.86	129	78	P	V
		2389.95	39.75	-14.25	54	36.63	32.88	7.1	36.86	129	78	A	V
		2404	110.41	-	-	107.23	32.9	7.13	36.85	129	78	P	V
		2404	100.83	-	-	97.65	32.9	7.13	36.85	129	78	A	V
802.11ax HE20 Partial 106/54 CH 11 2462MHz		2484.04	49.88	-24.12	74	46.47	32.98	7.25	36.82	338	60	P	H
		2483.5	38.94	-15.06	54	35.53	32.98	7.25	36.82	338	60	A	H
		2466	101.05	-	-	97.7	32.96	7.22	36.83	338	60	P	H
		2464	91.84	-	-	88.49	32.96	7.22	36.83	338	60	A	H
		2484.4	49.66	-24.34	74	46.25	32.98	7.25	36.82	147	106	P	V
		2483.5	39.02	-14.98	54	35.61	32.98	7.25	36.82	147	106	A	V
		2466	102.35	-	-	99	32.96	7.22	36.83	147	106	P	V
		2464	92.63	-	-	89.28	32.96	7.22	36.83	147	106	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

2.4GHz 2400~2483.5MHz

WIFI 802.11ax HE20 Partial 106 (Harmonic @ 3m)

WIFI Ant. CDD 1+2	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)
802.11ax HE20 Partial 106/53 CH 01 2412MHz		4830	41.26	-32.74	74	62.19	34.2	10.25	65.38	300	0	P	H
		4830	40.56	-33.44	74	61.49	34.2	10.25	65.38	100	0	P	V
802.11ax HE20 Partial 106/54 CH 11 2462MHz		4920	39.93	-34.07	74	60.78	34.26	10.34	65.45	300	0	P	H
		7380	41.86	-32.14	74	59.36	35.88	12.73	66.11	300	0	P	H
		4920	39.79	-34.21	74	60.64	34.26	10.34	65.45	100	0	P	V
		7380	42.51	-31.49	74	60.01	35.88	12.73	66.11	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

2.4GHz 2400~2483.5MHz

WIFI 802.11 ax HE20 Full (Band Edge @ 3m)

WIFI Ant. TXBF 1+2	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)
802.11ax HE20 Full CH 01 2412MHz		2388	57.29	-16.71	74	54.17	32.88	7.1	36.86	255	99	P	H
		2388.39	39.74	-14.26	54	36.62	32.88	7.1	36.86	255	99	A	H
	*	2412	106.53	-	-	103.35	32.9	7.13	36.85	255	99	P	H
	*	2412	96.7	-	-	93.52	32.9	7.13	36.85	255	99	A	H
		2388.91	60.11	-13.89	74	56.99	32.88	7.1	36.86	286	360	P	V
		2388.91	40.29	-13.71	54	37.17	32.88	7.1	36.86	286	360	A	V
	*	2412	111.1	-	-	107.92	32.9	7.13	36.85	286	360	P	V
	*	2410	100.22	-	-	97.04	32.9	7.13	36.85	286	360	A	V
802.11ax HE20 Full CH 06 2437MHz		2386.96	50.67	-23.33	74	47.55	32.88	7.1	36.86	100	360	P	H
		2388.65	39.2	-14.8	54	36.08	32.88	7.1	36.86	100	360	A	H
	*	2438	106.3	-	-	103.01	32.94	7.19	36.84	100	360	P	H
	*	2438	92.46	-	-	89.17	32.94	7.19	36.84	100	360	A	H
		2485.3	50.55	-23.45	74	47.14	32.98	7.25	36.82	100	360	P	H
		2497.84	39.43	-14.57	54	35.96	33	7.28	36.81	100	360	A	H
		2337.17	50.79	-23.21	74	47.86	32.81	7.01	36.89	394	280	P	V
		2383.84	39.04	-14.96	54	35.95	32.86	7.1	36.87	394	280	A	V
	*	2436	113.51	-	-	110.25	32.92	7.19	36.85	394	280	P	V
	*	2438	97.45	-	-	94.16	32.94	7.19	36.84	394	280	A	V
		2484.46	52.65	-21.35	74	49.24	32.98	7.25	36.82	394	280	P	V
		2483.56	39.79	-14.21	54	36.38	32.98	7.25	36.82	394	280	A	V

802.11ax HE20 Full CH 10 2457MHz		2483.5	62.47	-11.53	74	59.06	32.98	7.25	36.82	100	197	P	H
		2483.62	43.63	-10.37	54	40.22	32.98	7.25	36.82	100	197	A	H
	*	2458	108.6	-	-	105.25	32.96	7.22	36.83	100	197	P	H
	*	2456	102.25	-	-	98.9	32.96	7.22	36.83	100	197	A	H
		2483.5	60.82	-13.18	74	57.41	32.98	7.25	36.82	315	120	P	V
		2488.06	38.05	-15.95	54	34.61	33	7.25	36.81	315	120	A	V
	*	2458	117.55	-	-	114.2	32.96	7.22	36.83	315	120	P	V
	*	2458	99.84	-	-	96.49	32.96	7.22	36.83	315	120	A	V
8802.11ax HE20 Full CH 11 2462MHz	*	2462	105.62	-	-	102.27	32.96	7.22	36.83	100	360	P	H
	*	2464	90.05	-	-	86.7	32.96	7.22	36.83	100	360	A	H
		2484.76	61.46	-12.54	74	58.05	32.98	7.25	36.82	100	360	P	H
		2483.98	39.95	-14.05	54	36.54	32.98	7.25	36.82	100	360	A	H
	*	2456	110.01	-	-	106.66	32.96	7.22	36.83	261	246	P	V
	*	2458	95.42	-	-	92.07	32.96	7.22	36.83	261	246	A	V
		2485.42	69.22	-4.78	74	65.81	32.98	7.25	36.82	261	246	P	V
		2484.4	46.82	-7.18	54	43.41	32.98	7.25	36.82	261	246	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

2.4GHz 2400~2483.5MHz

WIFI 802.11 ax HE20 Full (Harmonic @ 3m)

WIFI Ant. TXBF 1+2	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)
802.11ax HE20 Full CH 01 2412MHz		4824	41.23	-32.77	74	62.19	34.2	10.22	65.38	300	0	P	H
		4824	41.15	-32.85	74	62.11	34.2	10.22	65.38	100	0	P	V
802.11ax HE20 Full CH 06 2437MHz		4875	39.93	-34.07	74	60.83	34.23	10.29	65.42	300	0	P	H
		7305	42.21	-31.79	74	59.54	35.86	12.72	65.91	300	0	P	H
		4875	40.67	-33.33	74	61.57	34.23	10.29	65.42	100	0	P	V
		7305	42.27	-31.73	74	59.6	35.86	12.72	65.91	100	0	P	V
802.11ax HE20 Full CH 10 2457MHz		4914	42.04	-31.96	74	62.89	34.25	10.34	65.44	300	0	P	H
		7371	42.17	-31.83	74	59.67	35.88	12.73	66.11	300	0	P	H
		4914	41.22	-32.78	74	62.07	34.25	10.34	65.44	100	0	P	V
		7371	41.93	-32.07	74	59.43	35.88	12.73	66.11	100	0	P	V
802.11ax HE20 Full CH 11 2462MHz		4920	42.79	-31.21	74	63.64	34.26	10.34	65.45	300	0	P	H
		7380	42.59	-31.41	74	60.09	35.88	12.73	66.11	300	0	P	H
		4920	43.08	-30.92	74	63.93	34.26	10.34	65.45	100	0	P	V
		7380	42.47	-31.53	74	59.97	35.88	12.73	66.11	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Emission below 1GHz

2.4GHz WIFI 802.11ax HE20 (LF)

WIFI Ant.	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
CDD 1+2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
2.4GHz 802.11ax HE20 LF		48.43	19.9	-20.1	40	36.05	15.77	1.05	32.97	-	-	P	H
		131.85	24.34	-19.16	43.5	37.72	17.72	1.74	32.84	-	-	P	H
		239.52	23.28	-22.72	46	35.28	18.74	2.36	33.1	-	-	P	H
		380.17	25.32	-20.68	46	33	22.19	2.97	32.84	-	-	P	H
		559.62	26.91	-19.09	46	30.06	25.82	3.61	32.58	-	-	P	H
		650.8	30.73	-15.27	46	33.64	25.9	3.89	32.7	-	-	P	H
		49.4	23.08	-16.92	40	39.63	15.38	1.05	32.98	-	-	P	V
		130.88	26.89	-16.61	43.5	40.26	17.73	1.74	32.84	-	-	P	V
		179.38	24.88	-18.62	43.5	39.04	16.79	2.03	32.98	-	-	P	V
		273.47	25.41	-20.59	46	36.12	19.78	2.52	33.01	-	-	P	V
		538.28	27.46	-18.54	46	31	25.57	3.54	32.65	-	-	P	V
		752.65	27.98	-18.02	46	29.95	26.52	4.2	32.69	-	-	P	V
Remark	1. No other spurious found. 2. All results are PASS against limit line.												

Co-location

2.4GHz 2400~2483.5MHz

WIFI 802.11 ax HE20 Full& LTE B48 CA_48C (Band Edge @ 3m)

WIFI Ant.	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
CDD 1+2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
8802.11ax HE20 Full CH 11 2462MHz	*	2483.86	72.14	-1.86	74	68.73	32.98	7.25	36.82	301	17	P	H
	*	2483.62	52.78	-1.22	54	49.37	32.98	7.25	36.82	301	17	A	H
		2460	106.29	-	-	102.94	32.96	7.22	36.83	301	17	P	H
		2460	97.74	-	-	94.39	32.96	7.22	36.83	301	17	A	H
	*	2483.5	64.92	-9.08	74	61.51	32.98	7.25	36.82	100	99	P	V
	*	2483.5	51.53	-2.47	54	48.12	32.98	7.25	36.82	100	99	A	V
		2456	106.9	-	-	103.55	32.96	7.22	36.83	100	99	P	V
		2460	98.75	-	-	95.4	32.96	7.22	36.83	100	99	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

2.4GHz 2400~2483.5MHz

WIFI 802.11 ax HE20 Full& LTE B48 CA_48C (Harmonic @ 3m)

WIFI Ant.	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
CDD 1+2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11ax HE20 Full CH 11 2462MHz		4920	41.64	-32.36	74	62.49	34.26	10.34	65.45	300	0	P	H
		7380	41.94	-32.06	74	59.44	35.88	12.73	66.11	300	0	P	H
		4920	40.98	-33.02	74	61.83	34.26	10.34	65.45	100	0	P	V
		7386	42.3	-31.7	74	59.85	35.88	12.73	66.16	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Note symbol

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

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

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

1. Path Loss(dB) = Cable loss(dB) + Filter loss(dB) + Attenuator loss(dB)
2. Level(dBμV/m) =

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

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

For Peak Limit @ 2390MHz:

1. Level(dBμV/m)

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

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

= 55.45 (dBμV/m)

2. Over Limit(dB)

= Level(dBμV/m) – Limit Line(dBμV/m)

= 55.45(dBμV/m) – 74(dBμV/m)

= -18.55(dB)

For Average Limit @ 2390MHz:

1. Level(dBμV/m)

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

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

= 43.54 (dBμV/m)

2. Over Limit(dB)

= Level(dBμV/m) – Limit Line(dBμV/m)

= 43.54(dBμV/m) – 54(dBμV/m)

= -10.46(dB)

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

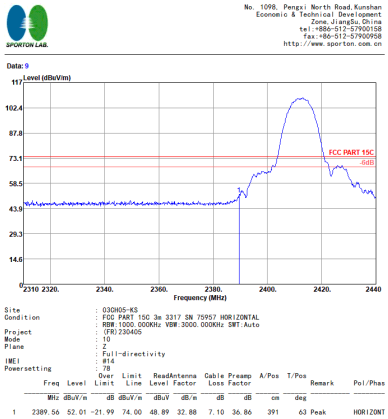
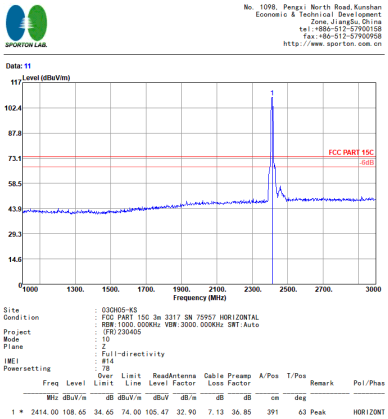
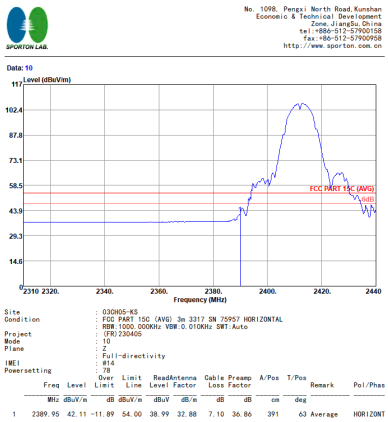
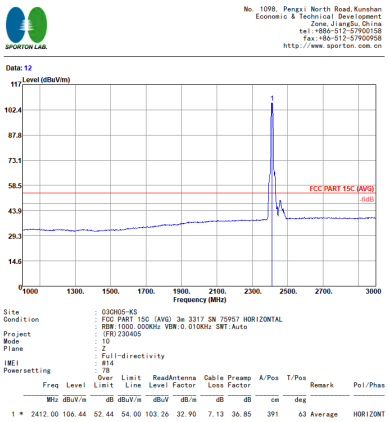
Appendix C. Radiated Spurious Emission Plots

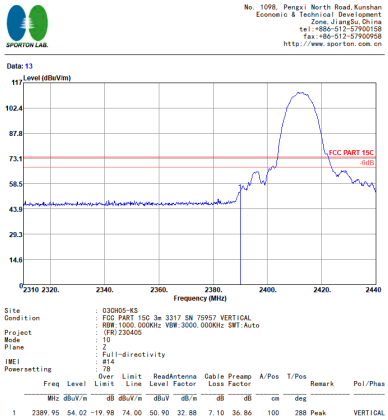
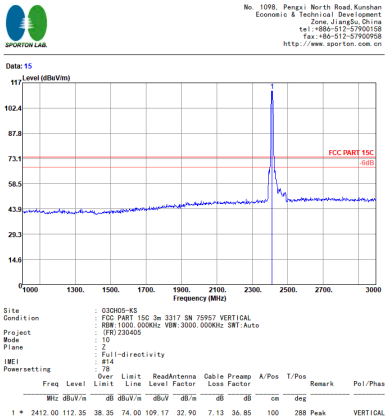
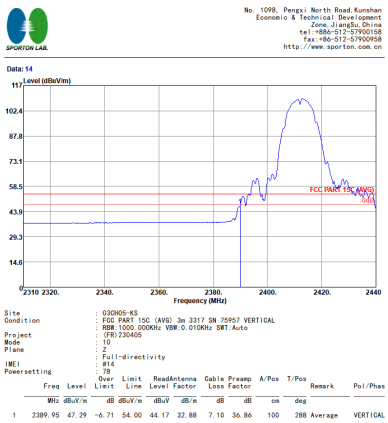
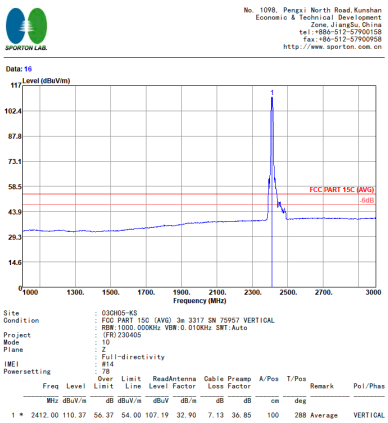
Note symbol

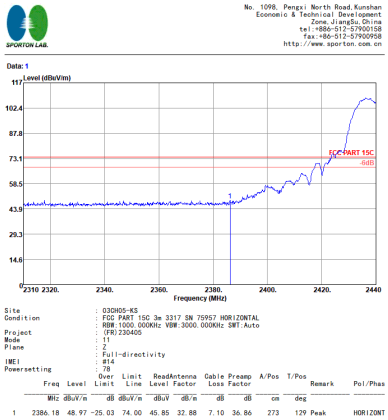
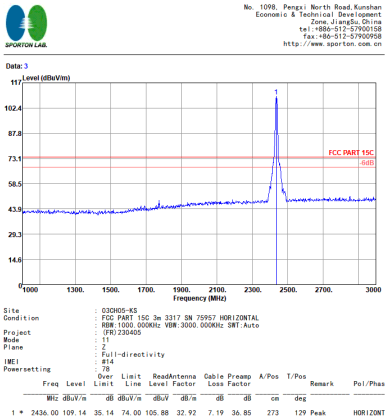
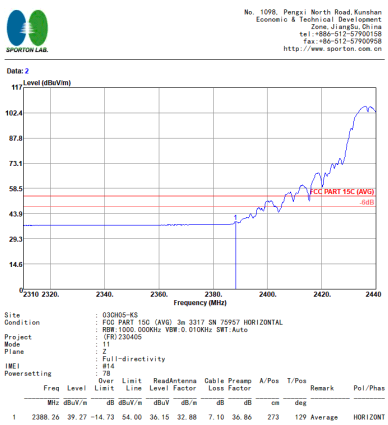
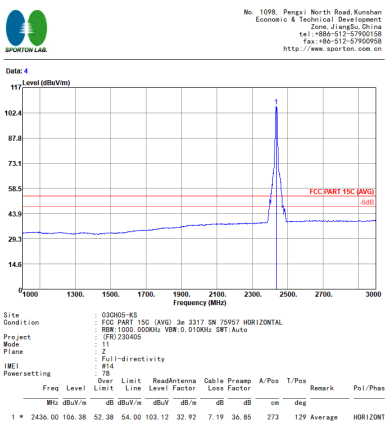
-L	**Low channel location**
-R	**High channel location**

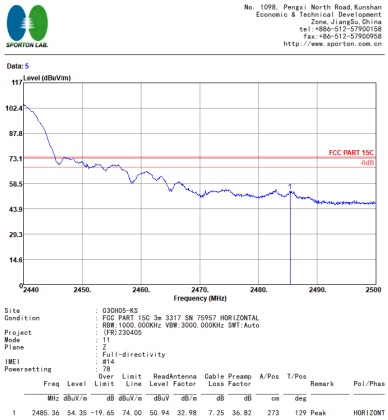
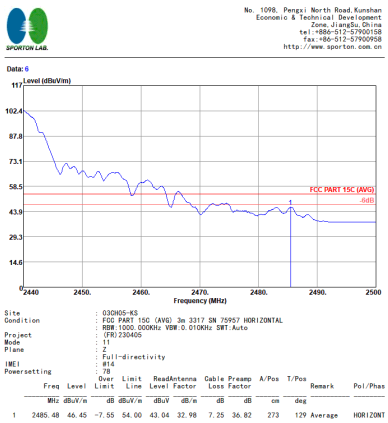
2.4GHz 2400~2483.5MHz

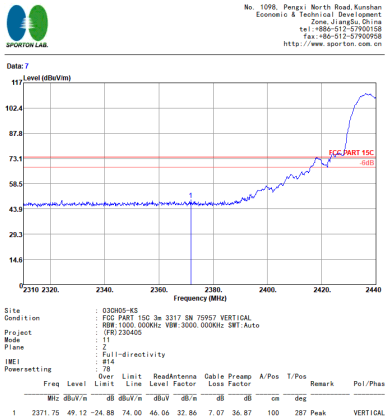
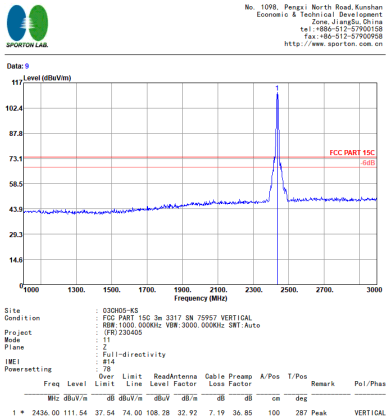
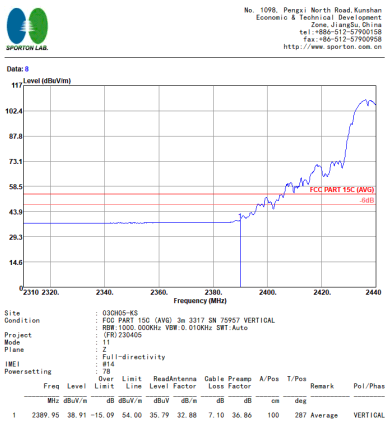
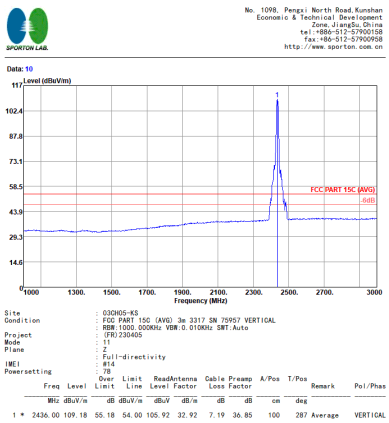
WIFI 802.11b (Band Edge @ 3m)

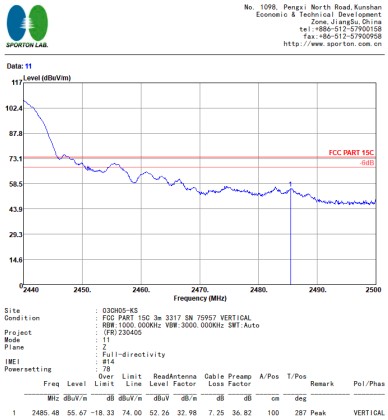
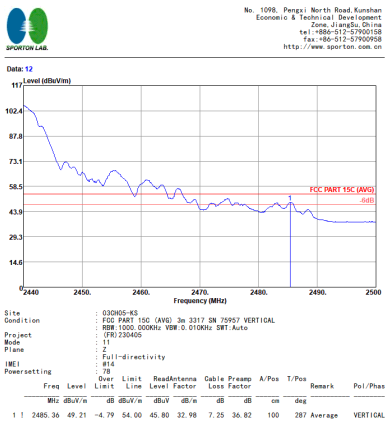
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH01 2412MHz	
CDD 1+2	Horizontal	Fundamental
Peak		
Avg.		

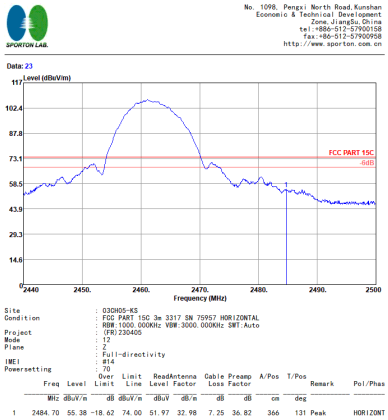
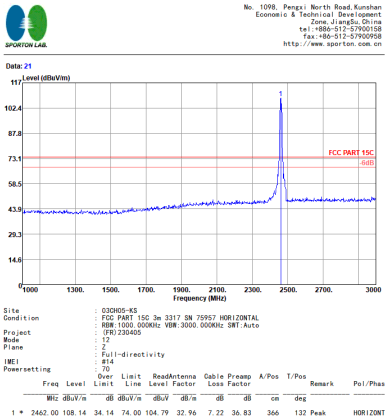
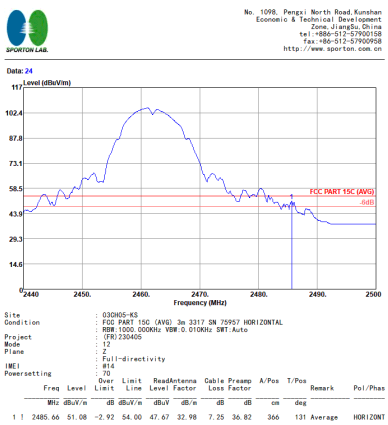
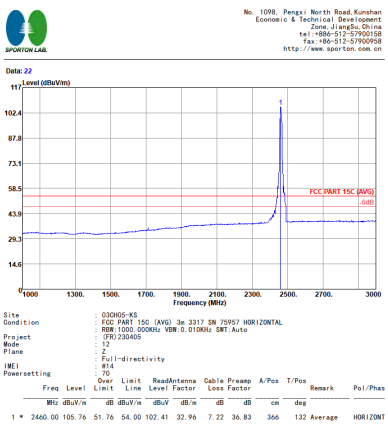
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH01 2412MHz	
CDD 1+2	Vertical	Fundamental
Peak		
Avg.		

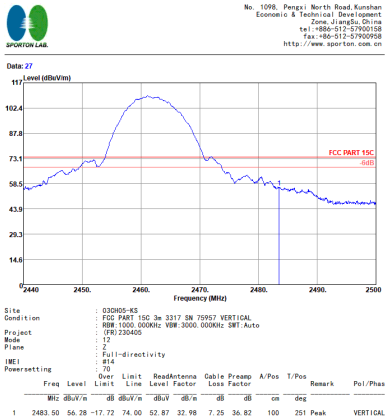
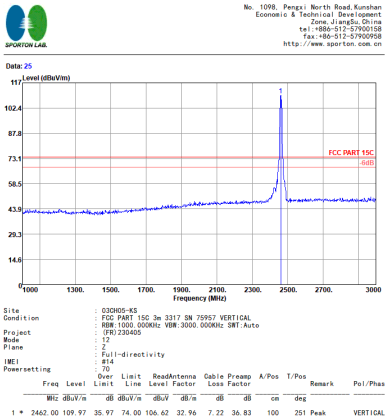
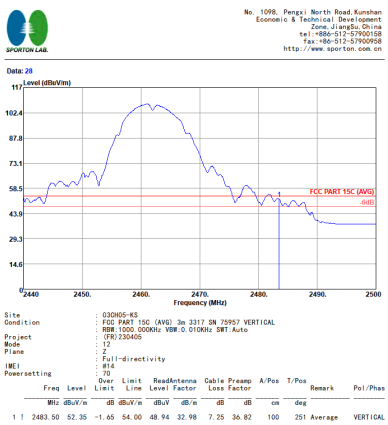
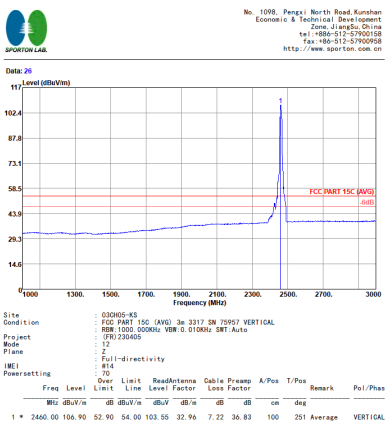
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH06 2437MHz - L	
CDD 1+2	Horizontal	Fundamental
Peak		
Avg.		

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

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

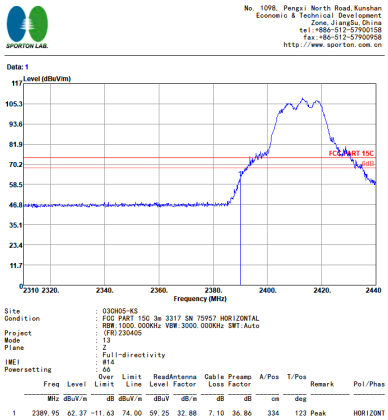
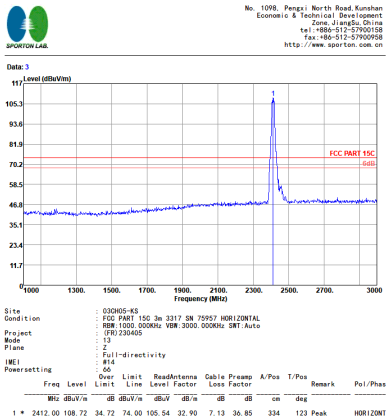
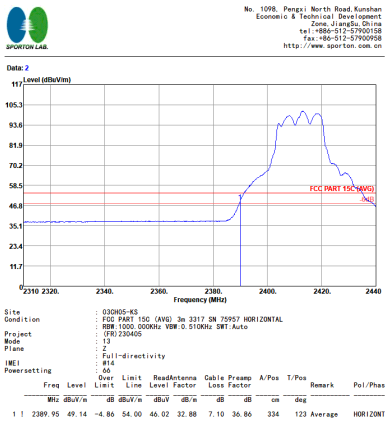
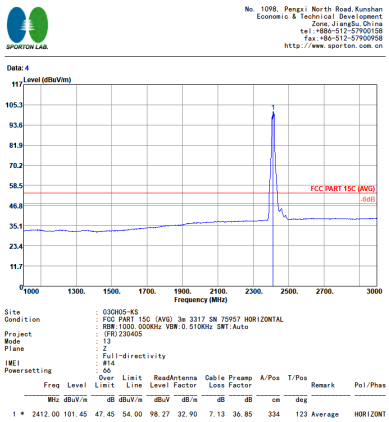
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH06 2437MHz - R	
CDD 1+2	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

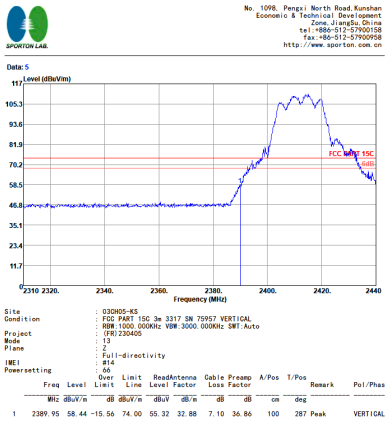
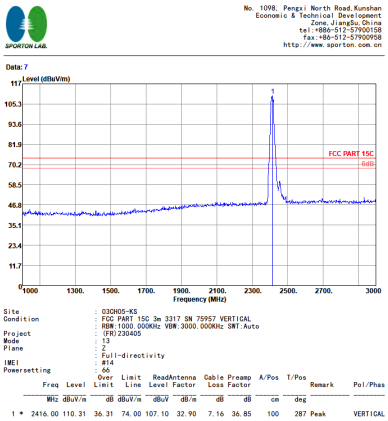
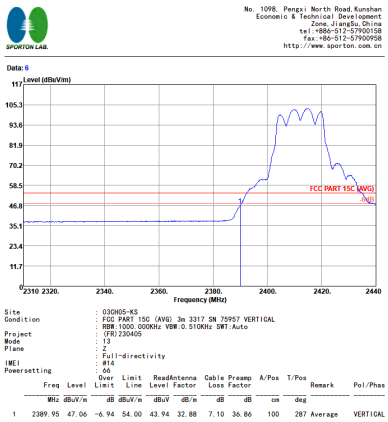
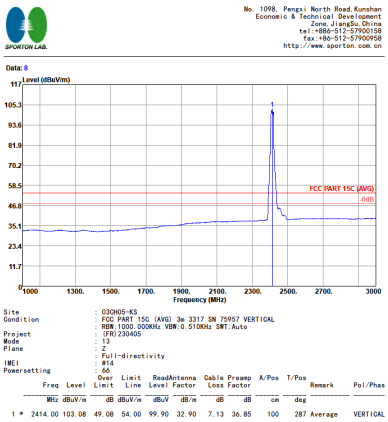
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH11 2462MHz	
CDD 1+2	Horizontal	Fundamental
Peak		
Avg.		

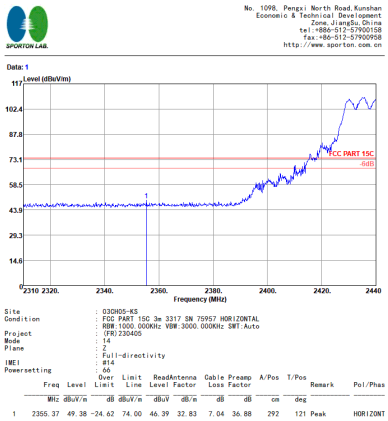
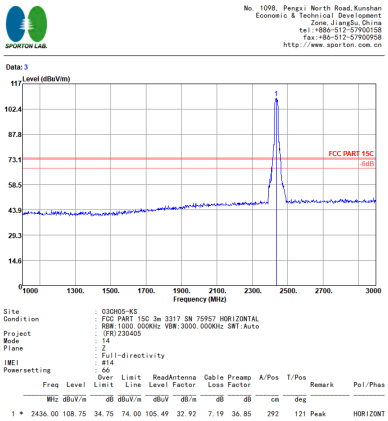
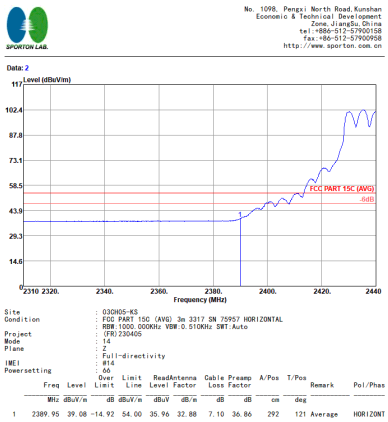
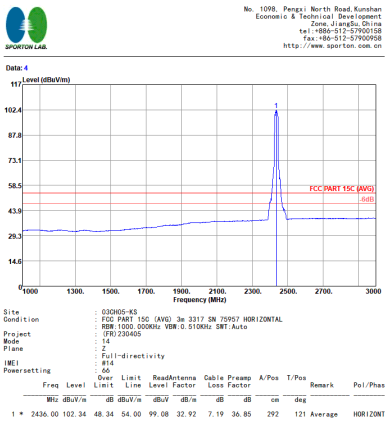
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH11 2462MHz	
CDD 1+2	Vertical	Fundamental
Peak		
Avg.		

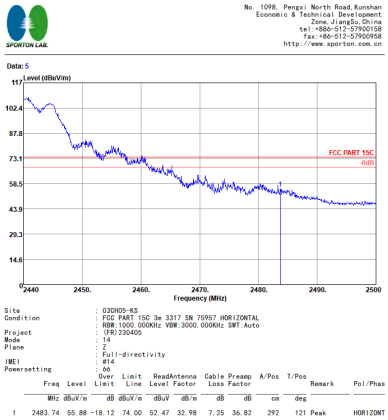
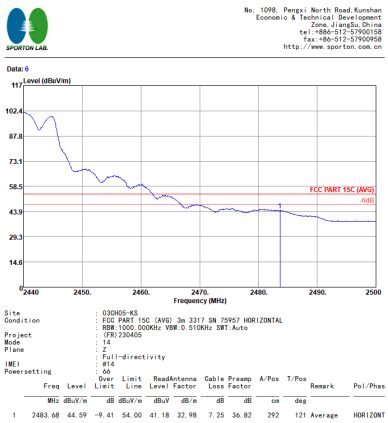
2.4GHz 2400~2483.5MHz

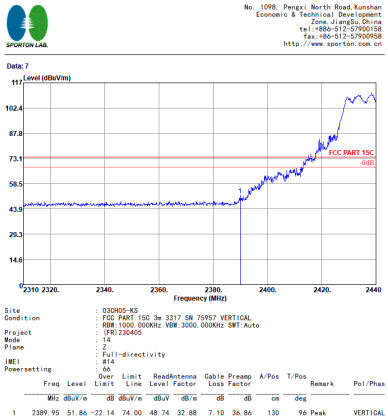
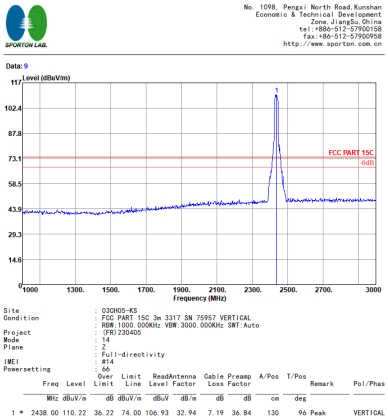
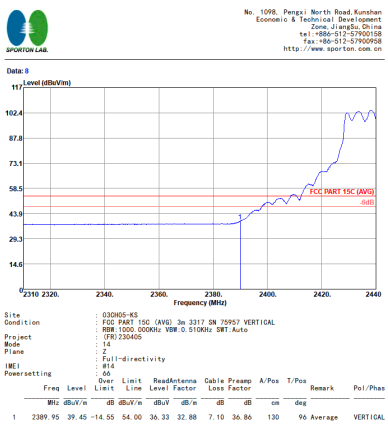
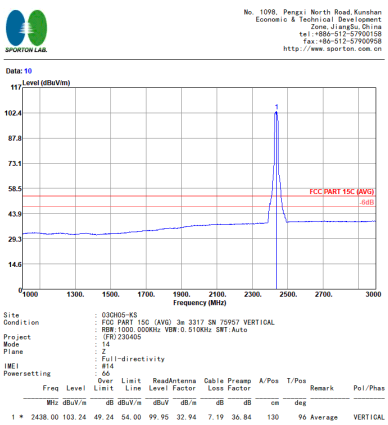
WIFI 802.11g (Band Edge @ 3m)

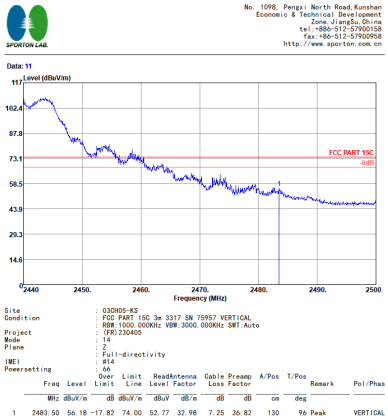
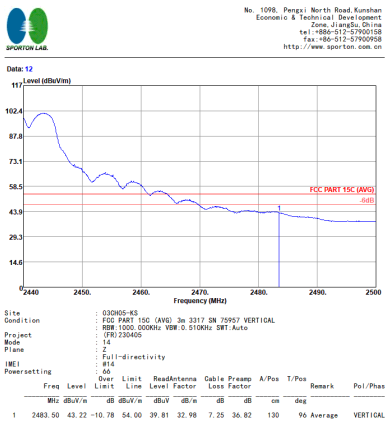
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH01 2412MHz	
CDD 1+2	Horizontal	Fundamental
Peak		
Avg.		

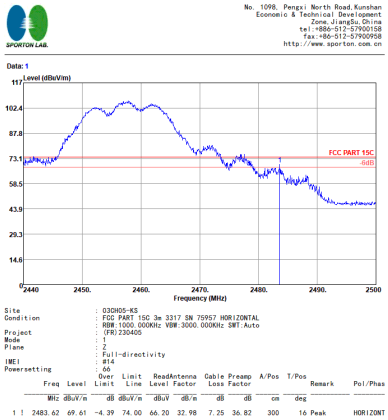
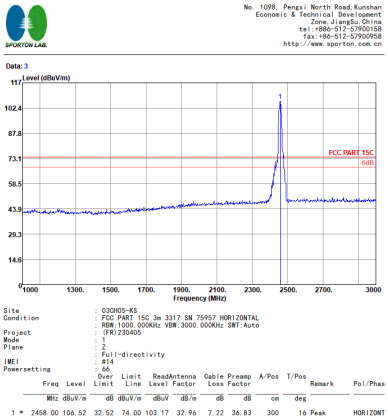
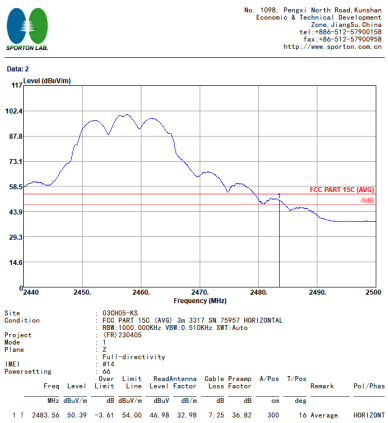
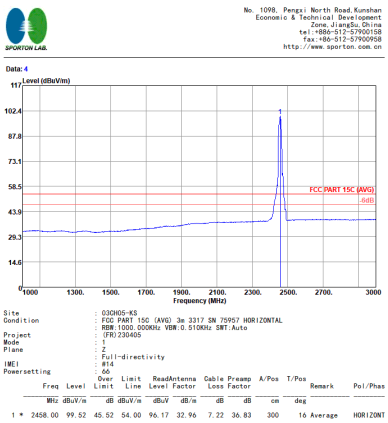
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH01 2412MHz	
CDD 1+2	Vertical	Fundamental
Peak	 No. 1098, Pengxi North Road,Kunshan Economic & Technical Development Zone,JiangSu,China tel:+886-512-57900158 fax:+86-512-57900958 http://www.sporton.com.cn Data: 5 Level (dBuV/m) FCC PART 15C -6dB Frequency (MHz) Site : 03CH05-KS Condition : FCC PART 15C 3m 3317 SN 75957 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : (FR)230405 Mode : 13 Plane : Z : Full-directivity IMEI : #14 Powersetting : 66 Freq Level Over Limit Limit Line Level ReadAntenna Factor Cable Loss Preamp Factor A/Pos T/Pos Remark Pol/Phas MHz dBuV/m dB dBuV/m dBuV dBuV dB/m dB dB cm deg 1 2389.95 58.44 -15.56 74.00 55.32 32.88 7.10 36.86 100 287 Peak VERTICAL	 No. 1098, Pengxi North Road,Kunshan Economic & Technical Development Zone,JiangSu,China tel:+886-512-57900158 fax:+86-512-57900958 http://www.sporton.com.cn Data: 7 Level (dBuV/m) FCC PART 15C -6dB Frequency (MHz) Site : 03CH05-KS Condition : FCC PART 15C 3m 3317 SN 75957 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : (FR)230405 Mode : 13 Plane : Z : Full-directivity IMEI : #14 Powersetting : 66 Freq Level Over Limit Limit Line Level ReadAntenna Factor Cable Loss Preamp Factor A/Pos T/Pos Remark Pol/Phas MHz dBuV/m dB dBuV/m dBuV dBuV dB/m dB dB cm deg 1 * 2416.00 110.31 36.31 74.00 107.10 32.90 7.16 36.85 100 287 Peak VERTICAL
Avg.	 No. 1098, Pengxi North Road,Kunshan Economic & Technical Development Zone,JiangSu,China tel:+886-512-57900158 fax:+86-512-57900958 http://www.sporton.com.cn Data: 6 Level (dBuV/m) FCC PART 15C (AVG) -9dB Frequency (MHz) Site : 03CH05-KS Condition : FCC PART 15C (AVG) 3m 3317 SN 75957 VERTICAL : RBW:1000.000KHz VBW:0.510KHz SWT:Auto Project : (FR)230405 Mode : 13 Plane : Z : Full-directivity IMEI : #14 Powersetting : 66 Freq Level Over Limit Limit Line Level ReadAntenna Factor Cable Loss Preamp Factor A/Pos T/Pos Remark Pol/Phas MHz dBuV/m dB dBuV/m dBuV dBuV dB/m dB dB cm deg 1 2389.95 47.06 -6.94 54.00 43.94 32.88 7.10 36.86 100 287 Average VERTICAL	 No. 1098, Pengxi North Road,Kunshan Economic & Technical Development Zone,JiangSu,China tel:+886-512-57900158 fax:+86-512-57900958 http://www.sporton.com.cn Data: 8 Level (dBuV/m) FCC PART 15C (AVG) -6dB Frequency (MHz) Site : 03CH05-KS Condition : FCC PART 15C (AVG) 3m 3317 SN 75957 VERTICAL : RBW:1000.000KHz VBW:0.510KHz SWT:Auto Project : (FR)230405 Mode : 13 Plane : Z : Full-directivity IMEI : #14 Powersetting : 66 Freq Level Over Limit Limit Line Level ReadAntenna Factor Cable Loss Preamp Factor A/Pos T/Pos Remark Pol/Phas MHz dBuV/m dB dBuV/m dBuV dBuV dB/m dB dB cm deg 1 * 2414.00 103.08 49.08 54.00 99.90 32.90 7.13 36.85 100 287 Average VERTICAL

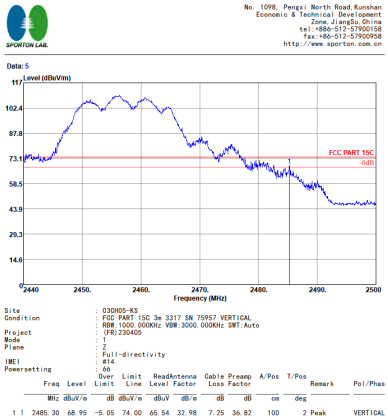
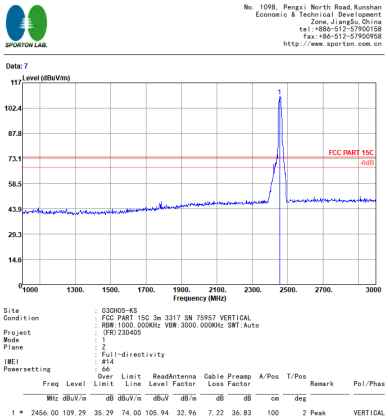
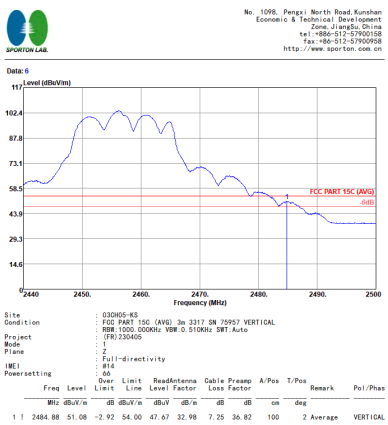
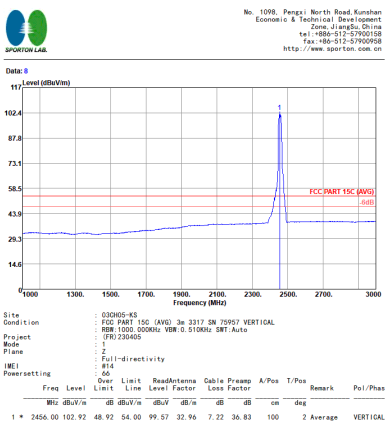
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH06 2437MHz - L	
CDD 1+2	Horizontal	Fundamental
Peak		
Avg.		

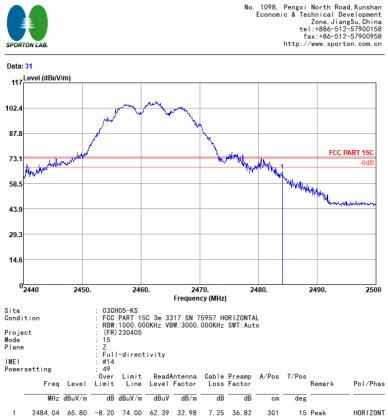
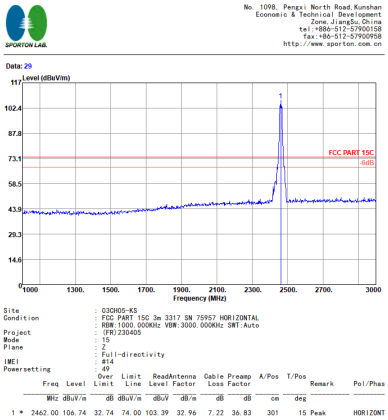
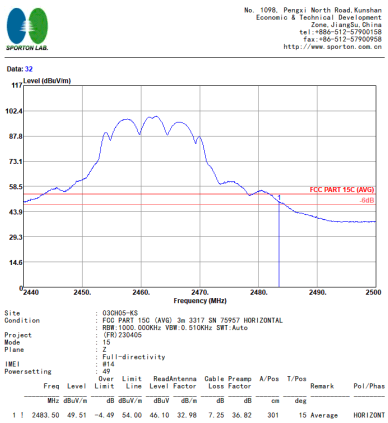
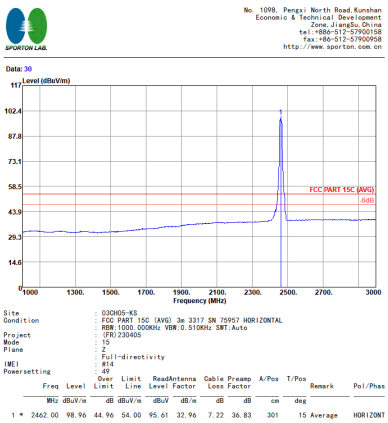
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH06 2437MHz - R	
CDD 1+2	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

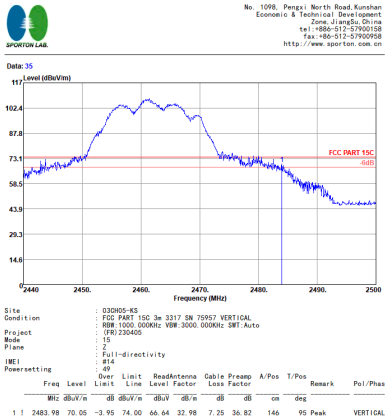
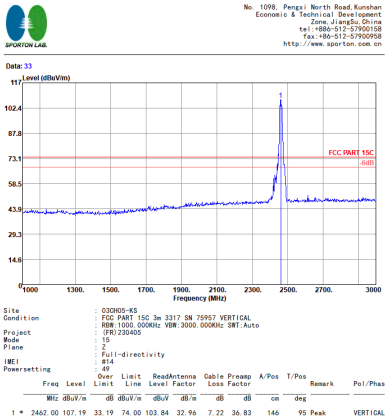
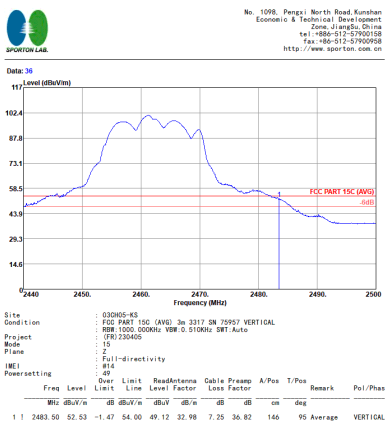
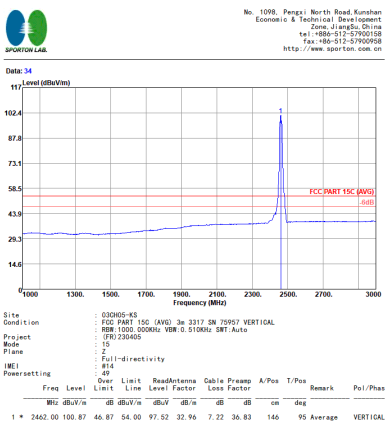
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH06 2437MHz - L	
CDD 1+2	Vertical	Fundamental
Peak		
Avg.		

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

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH10 2457MHz	
CDD 1+2	Horizontal	Fundamental
Peak		
Avg.		

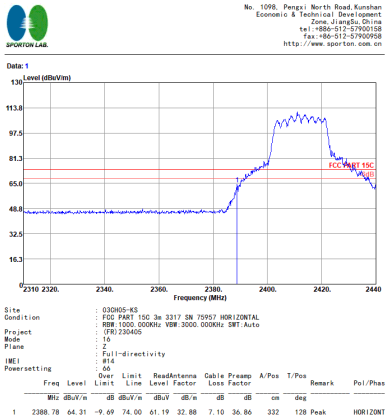
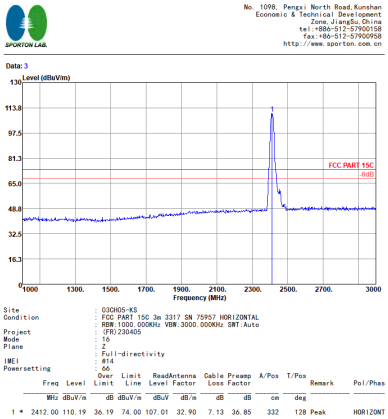
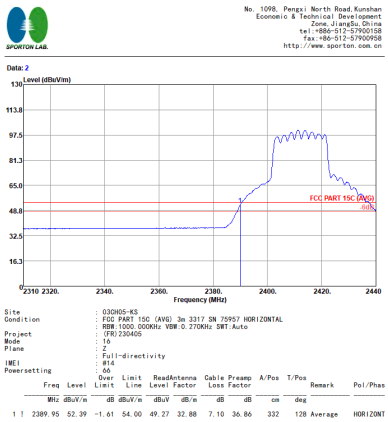
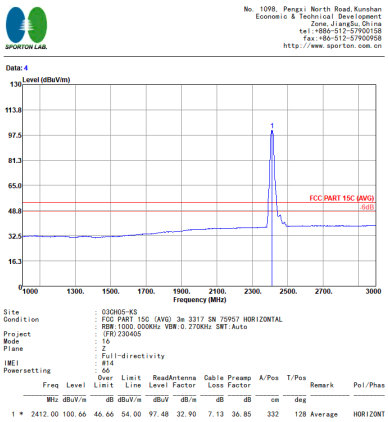
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH10 2457MHz	
CDD 1+2	Vertical	Fundamental
Peak		
Avg.		

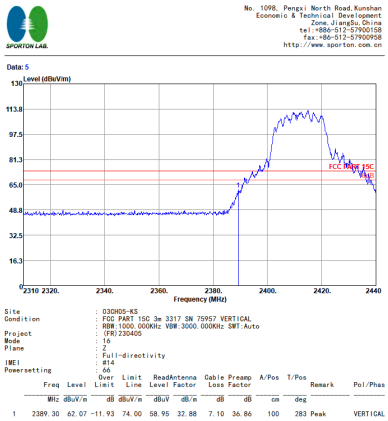
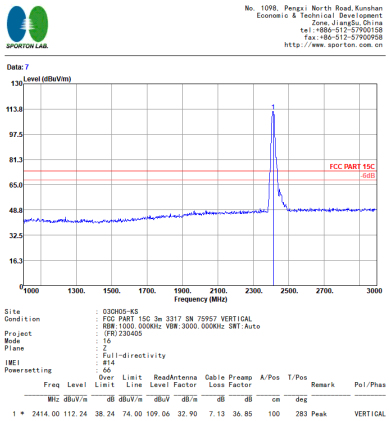
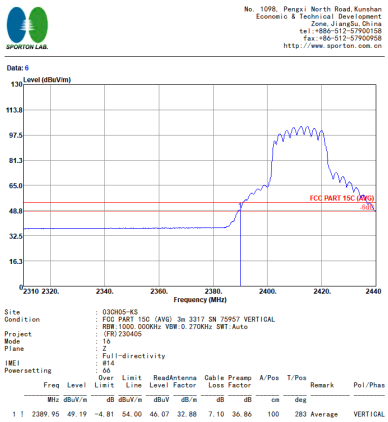
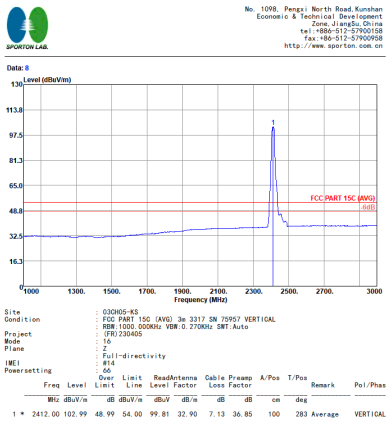
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH11 2462MHz	
CDD 1+2	Horizontal	Fundamental
Peak		
Avg.		

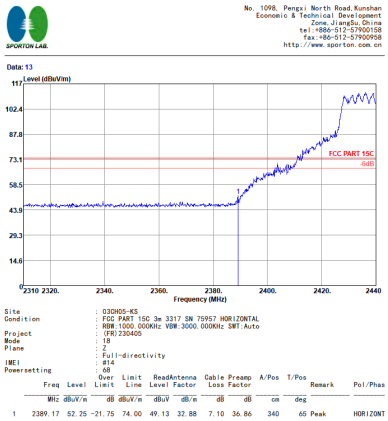
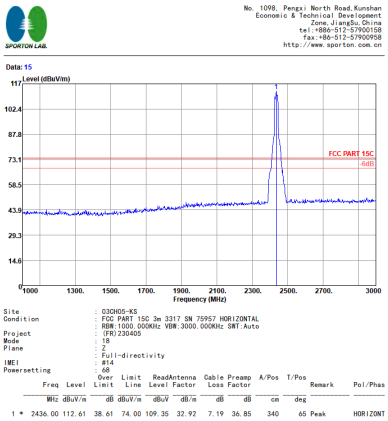
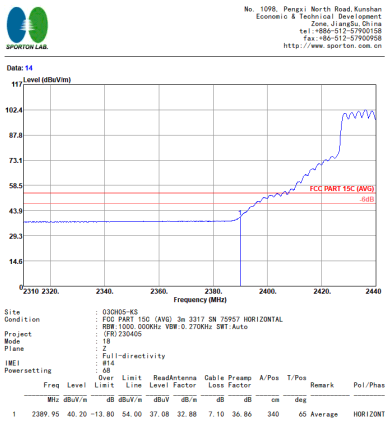
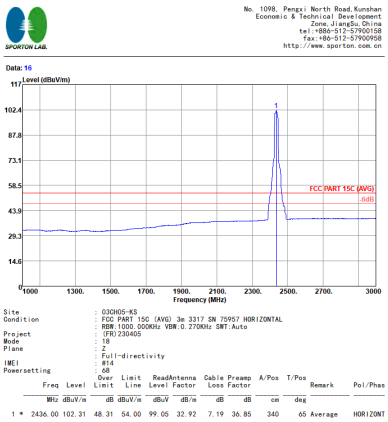
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH11 2462MHz	
CDD 1+2	Vertical	Fundamental
Peak		
Avg.		

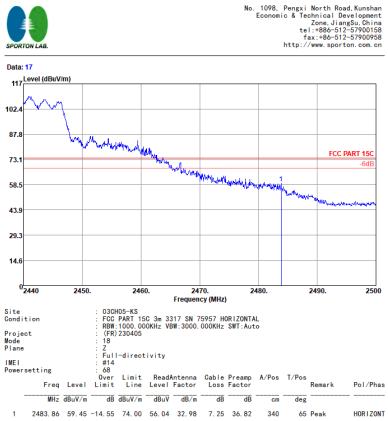
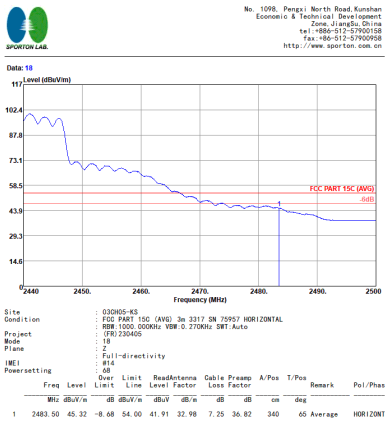
2.4GHz 2400~2483.5MHz

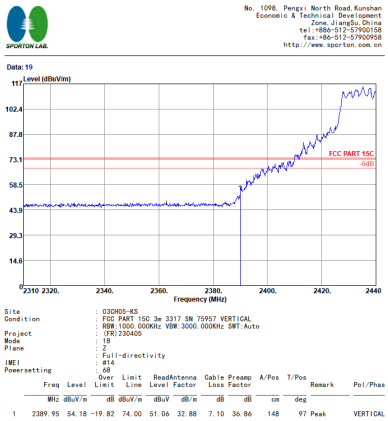
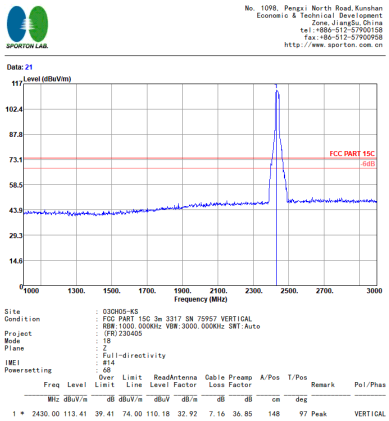
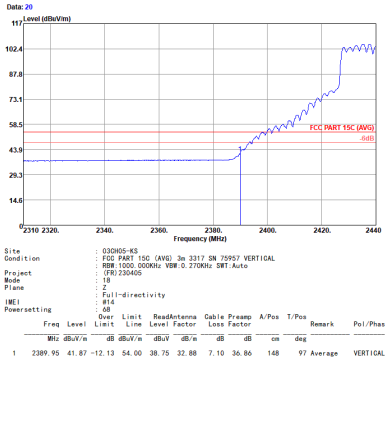
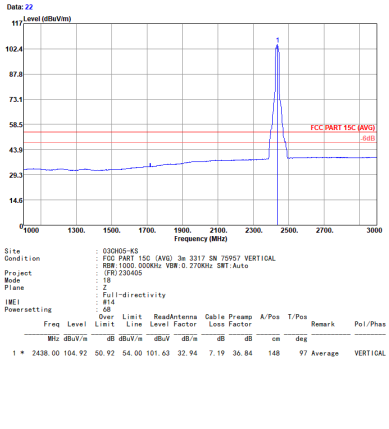
WIFI 802.11ax HE20 Full (Band Edge @ 3m)

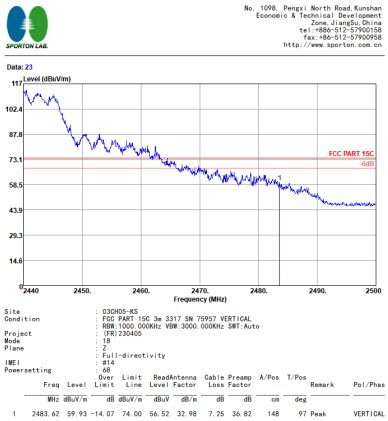
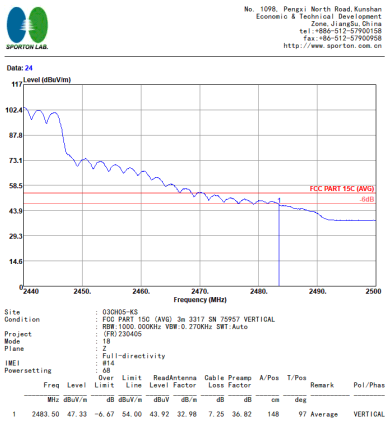
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH01 2412MHz	
CDD 1+2	Horizontal	Fundamental
Peak		
Avg.		

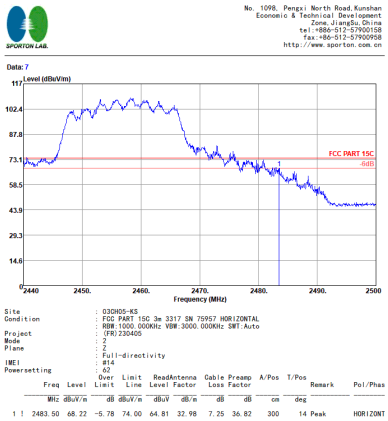
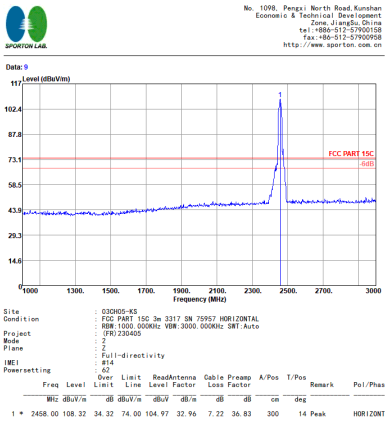
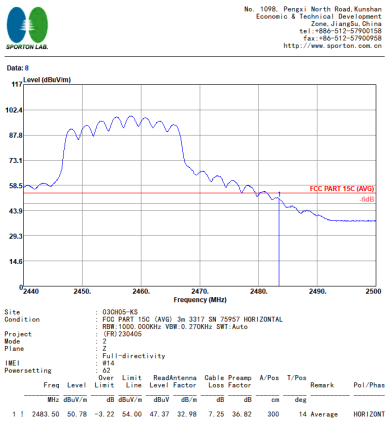
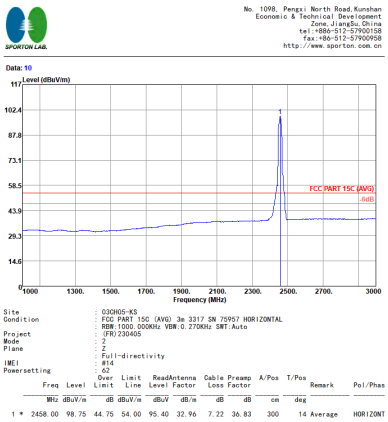
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH01 2412MHz	
CDD 1+2	Vertical	Fundamental
Peak	 Data: 5 Level (dBuV/m) FCC PART 15C -6dB Frequency (MHz) Site : 03CH05-KS Condition : FCC PART 15C 3m 3317 SN 75957 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : (FR)230405 Mode : 16 Plane : Z : Full-directivity IMEI : #14 Powersetting : 66 Freq Level Over Limit Limit Line ReadAntenna Level Factor Cable Loss Factor Preamp Factor A/Pos Remark T/Pos Pol/Phas MHz dBuV/m dB dBuV/m dBuV dB/m dB dB cm deg 1 2389.30 62.07 -11.93 74.00 58.95 32.88 7.10 36.86 100 283 Peak VERTICAL	 Data: 7 Level (dBuV/m) FCC PART 15C -6dB Frequency (MHz) Site : 03CH05-KS Condition : FCC PART 15C 3m 3317 SN 75957 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : (FR)230405 Mode : 16 Plane : Z : Full-directivity IMEI : #14 Powersetting : 66 Freq Level Over Limit Limit Line ReadAntenna Level Factor Cable Loss Factor Preamp Factor A/Pos Remark T/Pos Pol/Phas MHz dBuV/m dB dBuV/m dBuV dB/m dB dB cm deg 1 * 2414.00 112.24 38.24 74.00 109.06 32.90 7.13 36.85 100 283 Peak VERTICAL
Avg.	 Data: 6 Level (dBuV/m) FCC PART 15C (AVG) -6dB Frequency (MHz) Site : 03CH05-KS Condition : FCC PART 15C (AVG) 3m 3317 SN 75957 VERTICAL : RBW:1000.000KHz VBW:0.270KHz SWT:Auto Project : (FR)230405 Mode : 16 Plane : Z : Full-directivity IMEI : #14 Powersetting : 66 Freq Level Over Limit Limit Line ReadAntenna Level Factor Cable Loss Factor Preamp Factor A/Pos Remark T/Pos Pol/Phas MHz dBuV/m dB dBuV/m dBuV dB/m dB dB cm deg 1 ! 2389.95 49.19 -4.81 54.00 46.07 32.88 7.10 36.86 100 283 Average VERTICAL	 Data: 8 Level (dBuV/m) FCC PART 15C (AVG) -6dB Frequency (MHz) Site : 03CH05-KS Condition : FCC PART 15C (AVG) 3m 3317 SN 75957 VERTICAL : RBW:1000.000KHz VBW:0.270KHz SWT:Auto Project : (FR)230405 Mode : 16 Plane : Z : Full-directivity IMEI : #14 Powersetting : 66 Freq Level Over Limit Limit Line ReadAntenna Level Factor Cable Loss Factor Preamp Factor A/Pos Remark T/Pos Pol/Phas MHz dBuV/m dB dBuV/m dBuV dB/m dB dB cm deg 1 * 2412.00 102.99 48.99 54.00 99.81 32.90 7.13 36.85 100 283 Average VERTICAL

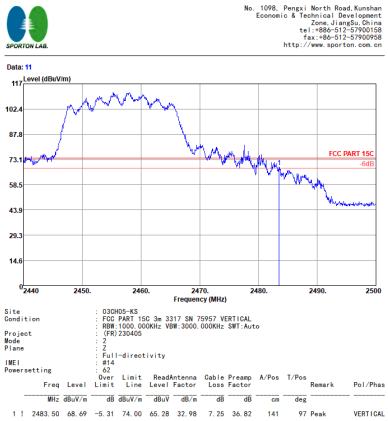
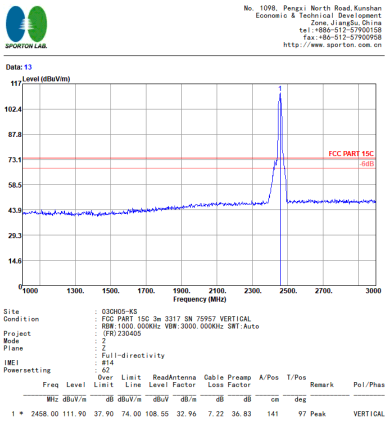
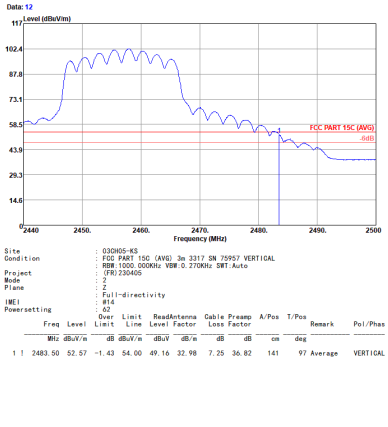
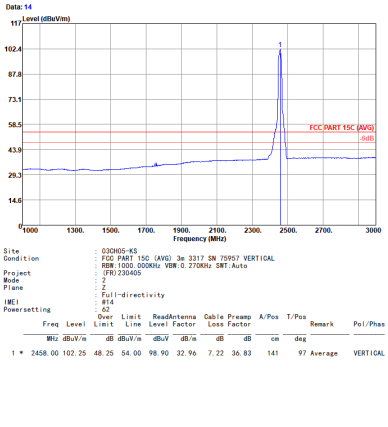
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH06 2437MHz - L	
CDD 1+2	Horizontal	Fundamental
Peak		
Avg.		

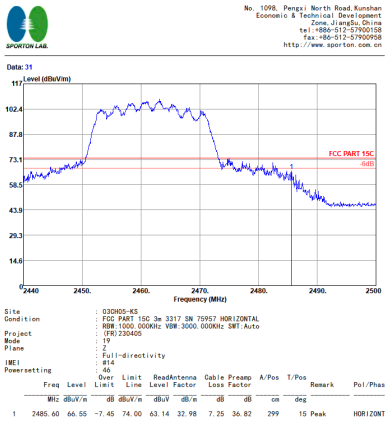
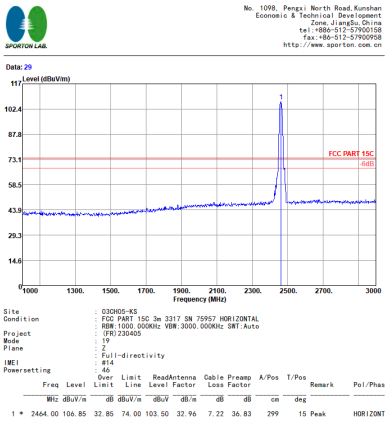
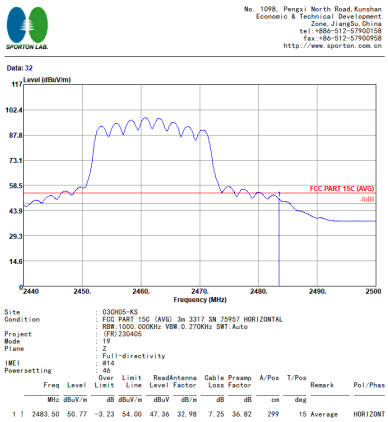
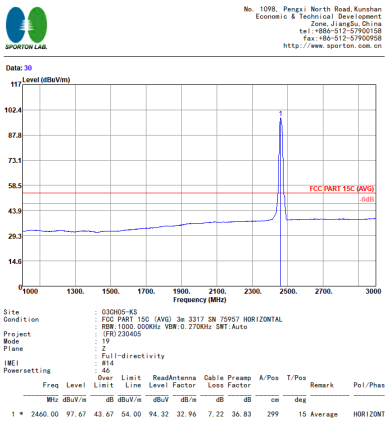
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH06 2437MHz - R	
CDD 1+2	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

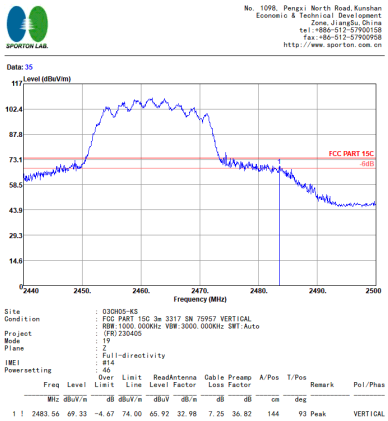
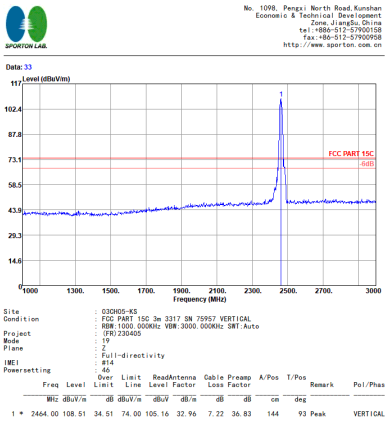
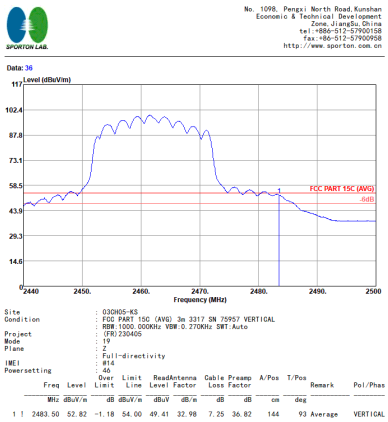
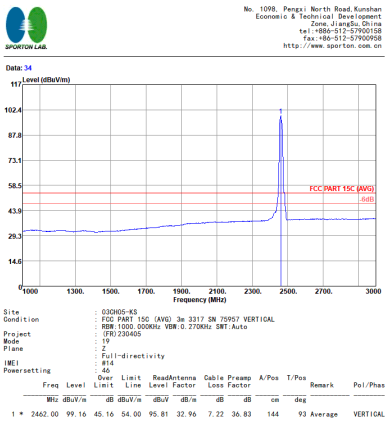
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH06 2437MHz - L	
CDD 1+2	Vertical	Fundamental
Peak	 No. 1098, Pengxi North Road,Kunshan Economic & Technical Development Zone,JiangSu,China tel:+86-512-57900158 fax:+86-512-57900958 http://www.sporton.com.cn Data: 19 Level (dBuV/m) FCC PART 15C -6dB Frequency (MHz) Site : 03CH05-KS Condition : FCC PART 15C 3m 3317 SN 75957 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : (FR)230405 Mode : 18 Plane : Z Full-directivity IMEI : #14 Powersetting : 68 Freq Level Over Limit Limit Line ReadAntenna Level Factor Cable Loss Preamp Factor A/Pos T/Pos Remark Pol/Phas MHz dBuV/m dB dBuV/m dBuV dBuV dB/m dB dB cm deg 1 2389.95 54.18 -19.82 74.00 51.06 32.88 7.10 36.86 148 97 Peak VERTICAL	 No. 1098, Pengxi North Road,Kunshan Economic & Technical Development Zone,JiangSu,China tel:+86-512-57900158 fax:+86-512-57900958 http://www.sporton.com.cn Data: 21 Level (dBuV/m) FCC PART 15C -6dB Frequency (MHz) Site : 03CH05-KS Condition : FCC PART 15C 3m 3317 SN 75957 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : (FR)230405 Mode : 18 Plane : Z Full-directivity IMEI : #14 Powersetting : 68 Freq Level Over Limit Limit Line ReadAntenna Level Factor Cable Loss Preamp Factor A/Pos T/Pos Remark Pol/Phas MHz dBuV/m dB dBuV/m dBuV dBuV dB/m dB dB cm deg 1 * 2430.00 113.41 39.41 74.00 110.18 32.92 7.16 36.85 148 97 Peak VERTICAL
Avg.	 No. 1098, Pengxi North Road,Kunshan Economic & Technical Development Zone,JiangSu,China tel:+86-512-57900158 fax:+86-512-57900958 http://www.sporton.com.cn Data: 20 Level (dBuV/m) FCC PART 15C (AVG) -6dB Frequency (MHz) Site : 03CH05-KS Condition : FCC PART 15C (AVG) 3m 3317 SN 75957 VERTICAL RBW:1000.000KHz VBW:0.270KHz SWT:Auto Project : (FR)230405 Mode : 18 Plane : Z Full-directivity IMEI : #14 Powersetting : 68 Freq Level Over Limit Limit Line ReadAntenna Level Factor Cable Loss Preamp Factor A/Pos T/Pos Remark Pol/Phas MHz dBuV/m dB dBuV/m dBuV dBuV dB/m dB dB cm deg 1 2389.95 41.87 -12.13 54.00 38.75 32.88 7.10 36.86 148 97 Average VERTICAL	 No. 1098, Pengxi North Road,Kunshan Economic & Technical Development Zone,JiangSu,China tel:+86-512-57900158 fax:+86-512-57900958 http://www.sporton.com.cn Data: 22 Level (dBuV/m) FCC PART 15C (AVG) -6dB Frequency (MHz) Site : 03CH05-KS Condition : FCC PART 15C (AVG) 3m 3317 SN 75957 VERTICAL RBW:1000.000KHz VBW:0.270KHz SWT:Auto Project : (FR)230405 Mode : 18 Plane : Z Full-directivity IMEI : #14 Powersetting : 68 Freq Level Over Limit Limit Line ReadAntenna Level Factor Cable Loss Preamp Factor A/Pos T/Pos Remark Pol/Phas MHz dBuV/m dB dBuV/m dBuV dBuV dB/m dB dB cm deg 1 * 2438.00 104.92 50.92 54.00 101.63 32.94 7.19 36.84 148 97 Average VERTICAL

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH06 2437MHz - R	
CDD 1+2	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH10 2457MHz	
CDD 1+2	Horizontal	Fundamental
Peak	 Data: 7 Level (dBuV/m) FCC PART 15C -6dB Frequency (MHz) Site : 03CH05-KS Condition : FCC PART 15C 3m 3317 SN 75957 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : (FR)230405 Mode : 2 Plane : Z Full-directivity IMEI : #14 Powersetting : 62 Freq Level Over Limit Limit Line ReadAntenna Level Factor Cable Loss Factor Preamp Factor A/Pos Remark T/Pos Pol/Phas MHz dBuV/m dB dBuV/m dBuV dB/m dB dB cm deg 1 ! 2483.50 68.22 -5.78 74.00 64.81 32.98 7.25 36.82 300 14 Peak HORIZONT	 Data: 9 Level (dBuV/m) FCC PART 15C -6dB Frequency (MHz) Site : 03CH05-KS Condition : FCC PART 15C 3m 3317 SN 75957 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : (FR)230405 Mode : 2 Plane : Z Full-directivity IMEI : #14 Powersetting : 62 Freq Level Over Limit Limit Line ReadAntenna Level Factor Cable Loss Factor Preamp Factor A/Pos Remark T/Pos Pol/Phas MHz dBuV/m dB dBuV/m dBuV dB/m dB dB cm deg 1 * 2458.00 108.32 34.32 74.00 104.97 32.96 7.22 36.83 300 14 Peak HORIZONT
Avg.	 Data: 8 Level (dBuV/m) FCC PART 15C (AVG) -6dB Frequency (MHz) Site : 03CH05-KS Condition : FCC PART 15C (AVG) 3m 3317 SN 75957 HORIZONTAL RBW:1000.000KHz VBW:0.270KHz SWT:Auto Project : (FR)230405 Mode : 2 Plane : Z Full-directivity IMEI : #14 Powersetting : 62 Freq Level Over Limit Limit Line ReadAntenna Level Factor Cable Loss Factor Preamp Factor A/Pos Remark T/Pos Pol/Phas MHz dBuV/m dB dBuV/m dBuV dB/m dB dB cm deg 1 ! 2483.50 50.78 -3.22 54.00 47.37 32.98 7.25 36.82 300 14 Average HORIZONT	 Data: 10 Level (dBuV/m) FCC PART 15C (AVG) -6dB Frequency (MHz) Site : 03CH05-KS Condition : FCC PART 15C (AVG) 3m 3317 SN 75957 HORIZONTAL RBW:1000.000KHz VBW:0.270KHz SWT:Auto Project : (FR)230405 Mode : 2 Plane : Z Full-directivity IMEI : #14 Powersetting : 62 Freq Level Over Limit Limit Line ReadAntenna Level Factor Cable Loss Factor Preamp Factor A/Pos Remark T/Pos Pol/Phas MHz dBuV/m dB dBuV/m dBuV dB/m dB dB cm deg 1 * 2458.00 98.75 44.75 54.00 95.40 32.96 7.22 36.83 300 14 Average HORIZONT

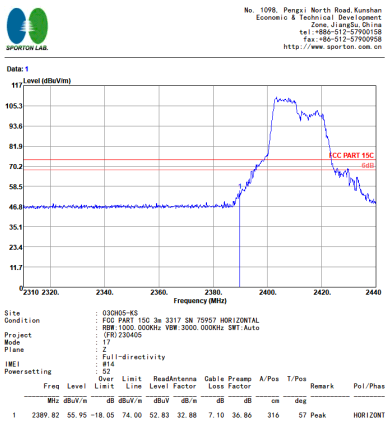
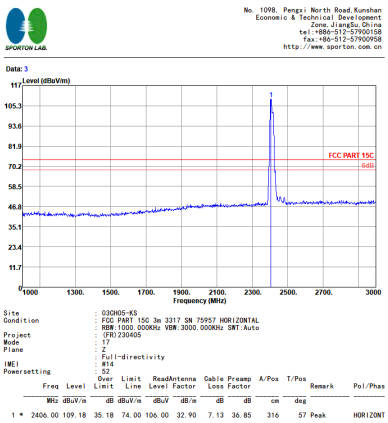
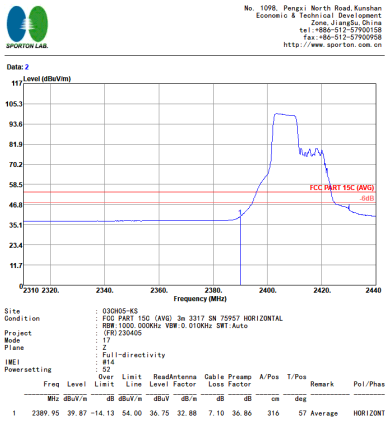
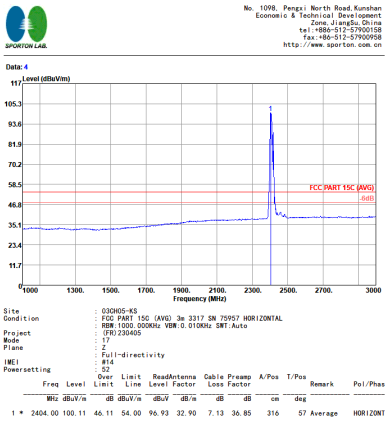
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH10 2457MHz	
CDD 1+2	Vertical	Fundamental
Peak	 No. 1098, Pengxi North Road,Kunshan Economic & Technical Development Zone,JiangSu,China tel:+86-512-57900158 fax:+86-512-57900958 http://www.sporton.com.cn Data: 11 Level (dBuV/m) FCC PART 15C -6dB Frequency (MHz) Site : 03CH05-KS Condition : FCC PART 15C 3m 3317 SN 75957 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : (FR)230405 Mode : 2 Plane : Z IMEI : Full-directivity Powersetting : #14 : 62 Freq Level Over Limit Limit Line ReadAntenna Level Factor Cable Loss Factor Preamp Factor A/Pos T/Pos Remark Pol/Phas MHz dBuV/m dB dBuV/m dBuV dBuV dB/m dB dB cm deg 1 ! 2483.50 68.69 -5.31 74.00 65.28 32.98 7.25 36.82 141 97 Peak VERTICAL	 No. 1098, Pengxi North Road,Kunshan Economic & Technical Development Zone,JiangSu,China tel:+86-512-57900158 fax:+86-512-57900958 http://www.sporton.com.cn Data: 13 Level (dBuV/m) FCC PART 15C -6dB Frequency (MHz) Site : 03CH05-KS Condition : FCC PART 15C 3m 3317 SN 75957 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : (FR)230405 Mode : 2 Plane : Z IMEI : Full-directivity Powersetting : #14 : 62 Freq Level Over Limit Limit Line ReadAntenna Level Factor Cable Loss Factor Preamp Factor A/Pos T/Pos Remark Pol/Phas MHz dBuV/m dB dBuV/m dBuV dBuV dB/m dB dB cm deg 1 * 2458.00 111.90 37.90 74.00 108.55 32.96 7.22 36.83 141 97 Peak VERTICAL
Avg.	 No. 1098, Pengxi North Road,Kunshan Economic & Technical Development Zone,JiangSu,China tel:+86-512-57900158 fax:+86-512-57900958 http://www.sporton.com.cn Data: 12 Level (dBuV/m) FCC PART 15C (AVG) -6dB Frequency (MHz) Site : 03CH05-KS Condition : FCC PART 15C (AVG) 3m 3317 SN 75957 VERTICAL RBW:1000.000KHz VBW:0.270KHz SWT:Auto Project : (FR)230405 Mode : 2 Plane : Z IMEI : Full-directivity Powersetting : #14 : 62 Freq Level Over Limit Limit Line ReadAntenna Level Factor Cable Loss Factor Preamp Factor A/Pos T/Pos Remark Pol/Phas MHz dBuV/m dB dBuV/m dBuV dBuV dB/m dB dB cm deg 1 ! 2483.50 52.57 -1.43 54.00 49.16 32.98 7.25 36.82 141 97 Average VERTICAL	 No. 1098, Pengxi North Road,Kunshan Economic & Technical Development Zone,JiangSu,China tel:+86-512-57900158 fax:+86-512-57900958 http://www.sporton.com.cn Data: 14 Level (dBuV/m) FCC PART 15C (AVG) -6dB Frequency (MHz) Site : 03CH05-KS Condition : FCC PART 15C (AVG) 3m 3317 SN 75957 VERTICAL RBW:1000.000KHz VBW:0.270KHz SWT:Auto Project : (FR)230405 Mode : 2 Plane : Z IMEI : Full-directivity Powersetting : #14 : 62 Freq Level Over Limit Limit Line ReadAntenna Level Factor Cable Loss Factor Preamp Factor A/Pos T/Pos Remark Pol/Phas MHz dBuV/m dB dBuV/m dBuV dBuV dB/m dB dB cm deg 1 * 2458.00 102.25 48.25 54.00 98.90 32.96 7.22 36.83 141 97 Average VERTICAL

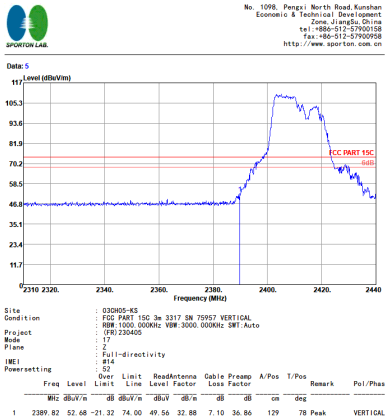
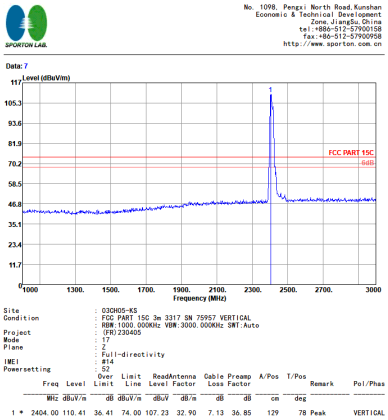
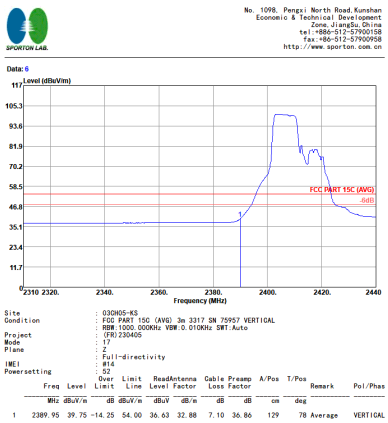
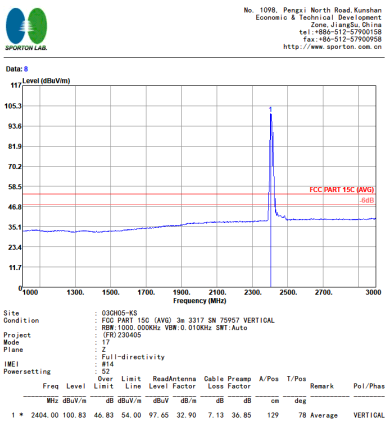
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH11 2462MHz	
CDD 1+2	Horizontal	Fundamental
Peak		
Avg.		

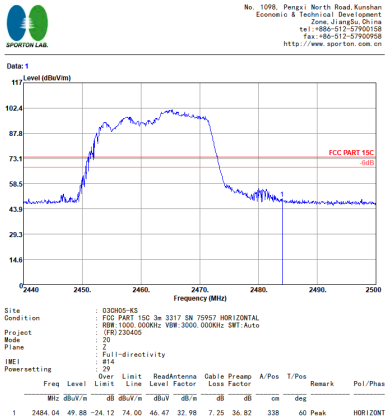
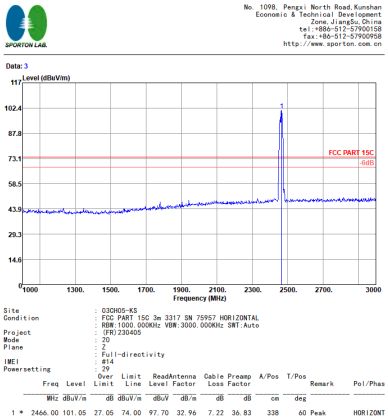
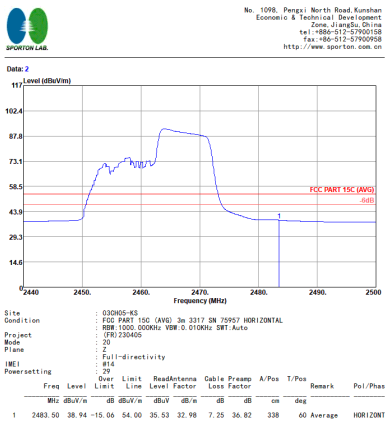
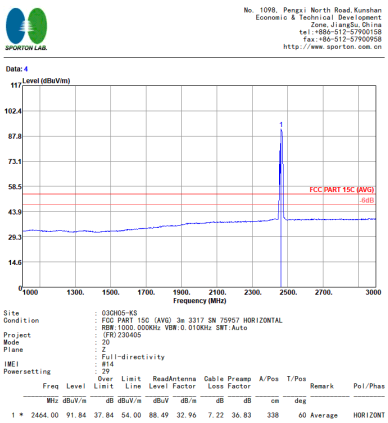
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH11 2462MHz	
CDD 1+2	Vertical	Fundamental
Peak		
Avg.		

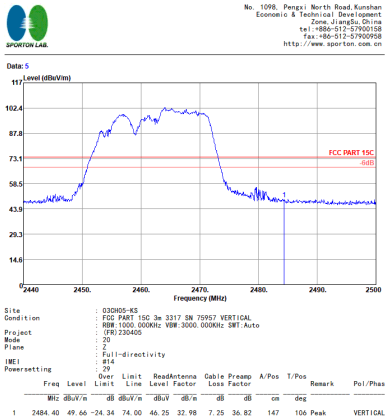
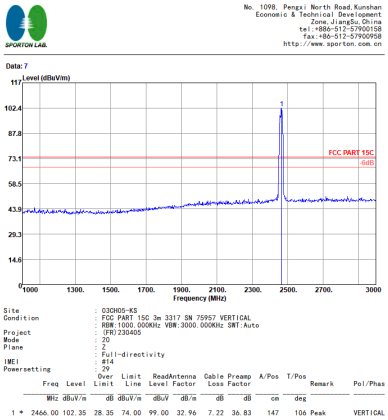
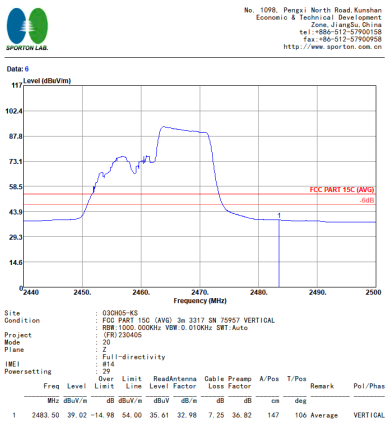
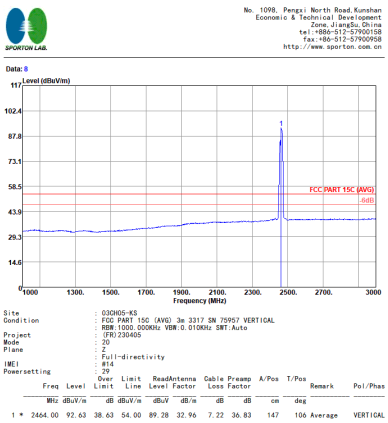
2.4GHz 2400~2483.5MHz

WIFI 802.11ax HE20 Partial 106 (Band Edge @ 3m)

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ax HE20 Partial 106/53 CH01 2412MHz	
CDD 1+2	Horizontal	Fundamental
Peak		
Avg.		

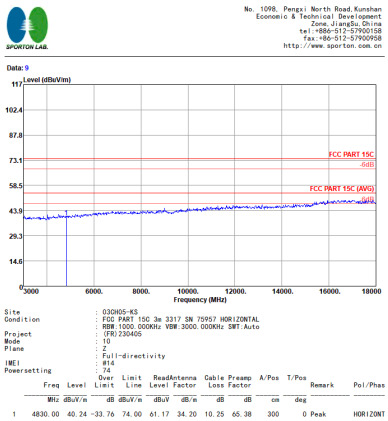
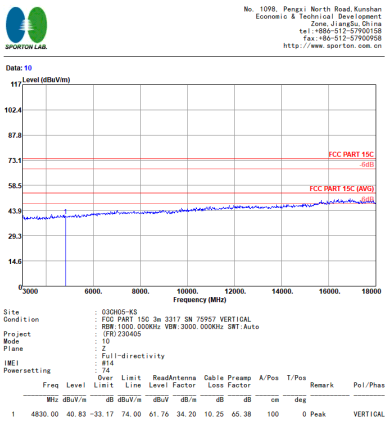
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ax HE20 Partial 106/53 CH01 2412MHz	
CDD 1+2	Vertical	Fundamental
Peak		
Avg.		

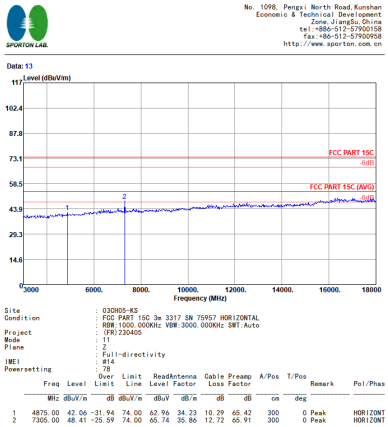
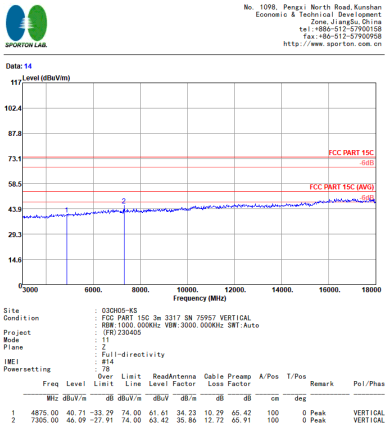
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ax HE20 Partial 106/54 CH11 2462MHz	
CDD 1+2	Horizontal	Fundamental
Peak		
Avg.		

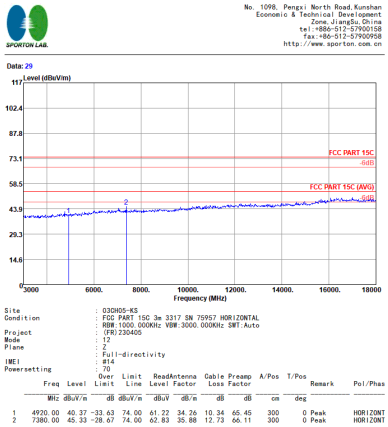
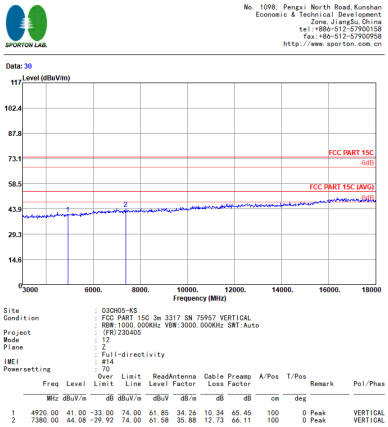
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ax HE20 Partial 106/54 CH11 2462MHz	
CDD 1+2	Vertical	Fundamental
Peak		
Avg.		

2.4GHz 2400~2483.5MHz

WIFI 802.11b (Harmonic @ 3m)

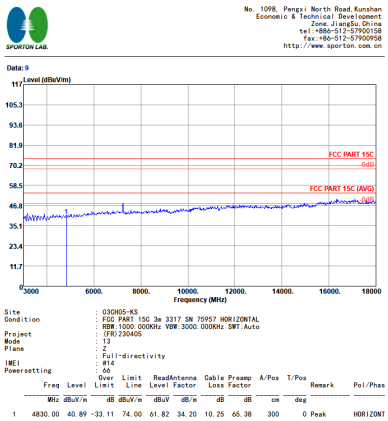
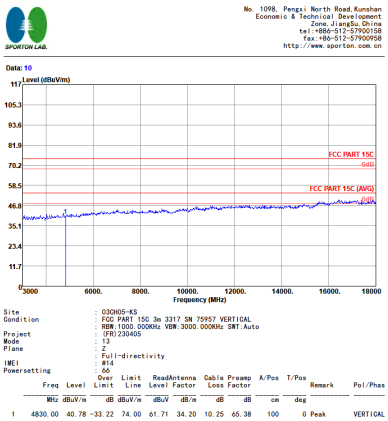
WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11b CH01 2412MHz	
CDD 1+2	Horizontal	Vertical
Peak Avg.		

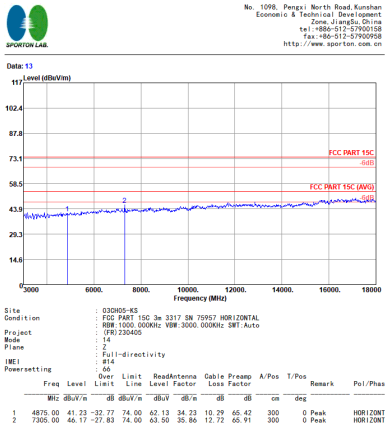
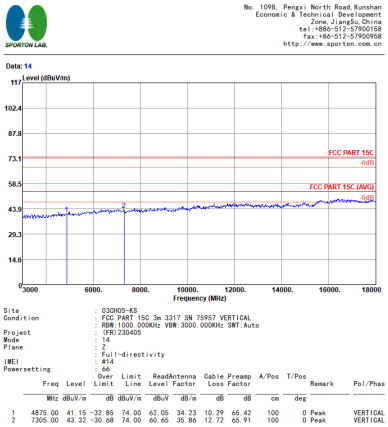
WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11b CH06 2437MHz	
CDD 1+2	Horizontal	Vertical
Peak Avg.	 No. 1098, Pengxi North Road,Kunshan Economic & Technical Development Zone,JiangSu,China tel:+886-512-57900158 fax:+86-512-57900958 http://www.sporton.com.cn Data: 13 Level (dBuV/m) 117 102.4 87.8 73.1 58.5 43.9 29.3 14.6 0 3000 6000. 8000. 10000. 12000. 14000. 16000. 18000 Frequency (MHz) FCC PART 15C -6dB FCC PART 15C (AVG) -6dB Site : 03CH05-KS Condition : FCC PART 15C 3m 3317 SN 75957 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : (FR)230405 Mode : 11 Plane : 2 : Full-directivity IMEI : #14 Powersetting : 78 Freq Level Over Limit Limit Line ReadAntenna Level Factor Cable Loss Factor Preamp Factor A/Pos T/Pos Remark Pol/Phas MHz dBuV/m dB dBuV/m dBuV dB/m dB dB cm deg 1 4875.00 42.06 -31.94 74.00 62.96 34.23 10.29 65.42 300 0 Peak HORIZONT 2 7305.00 48.41 -25.59 74.00 65.74 35.86 12.72 65.91 300 0 Peak HORIZONT	 No. 1098, Pengxi North Road,Kunshan Economic & Technical Development Zone,JiangSu,China tel:+886-512-57900158 fax:+86-512-57900958 http://www.sporton.com.cn Data: 14 Level (dBuV/m) 117 102.4 87.8 73.1 58.5 43.9 29.3 14.6 0 3000 6000. 8000. 10000. 12000. 14000. 16000. 18000 Frequency (MHz) FCC PART 15C -6dB FCC PART 15C (AVG) -6dB Site : 03CH05-KS Condition : FCC PART 15C 3m 3317 SN 75957 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : (FR)230405 Mode : 11 Plane : 2 : Full-directivity IMEI : #14 Powersetting : 78 Freq Level Over Limit Limit Line ReadAntenna Level Factor Cable Loss Factor Preamp Factor A/Pos T/Pos Remark Pol/Phas MHz dBuV/m dB dBuV/m dBuV dB/m dB dB cm deg 1 4875.00 40.71 -33.29 74.00 61.61 34.23 10.29 65.42 100 0 Peak VERTICAL 2 7305.00 46.09 -27.91 74.00 63.42 35.86 12.72 65.91 100 0 Peak VERTICAL

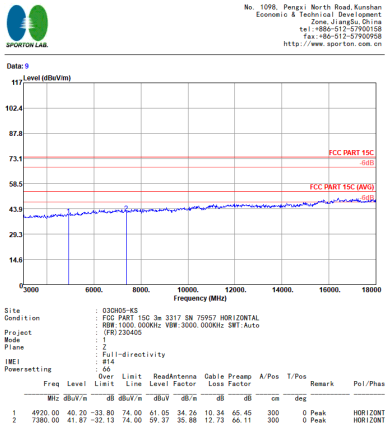
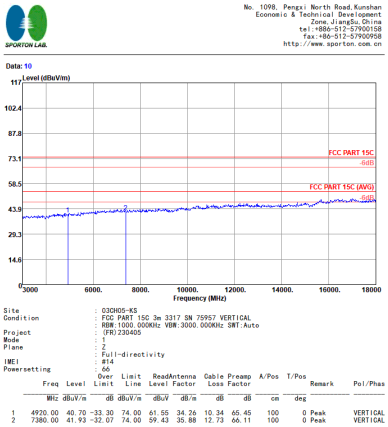
WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11b CH11 2462MHz	
CDD 1+2	Horizontal	Vertical
Peak Avg.	 No. 1098, Pengxi North Road,Kunshan Economic & Technical Development Zone,JiangSu,China tel:+886-512-57900158 fax:+86-512-57900958 http://www.sporton.com.cn Data: 29 Level (dBuV/m) FCC PART 15C -6dB FCC PART 15C (AVG) -6dB Frequency (MHz) Site : 03CH05-KS Condition : FCC PART 15C 3m 3317 SN 75957 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : (FR)230405 Mode : 12 Plane : Z : Full-directivity IMEI : #14 Powersetting : 70 Freq Level Over Limit Limit Line ReadAntenna Level Factor Cable Loss Factor Preamp Factor A/Pos Remark T/Pos Pol/Phas MHz dBuV/m dB dBuV/m dBuV dB/m dB dB cm deg 1 4920.00 40.37 -33.63 74.00 61.22 34.26 10.34 65.45 300 0 Peak HORIZONT 2 7380.00 45.33 -28.67 74.00 62.83 35.88 12.73 66.11 300 0 Peak HORIZONT	 No. 1098, Pengxi North Road,Kunshan Economic & Technical Development Zone,JiangSu,China tel:+886-512-57900158 fax:+86-512-57900958 http://www.sporton.com.cn Data: 30 Level (dBuV/m) FCC PART 15C -6dB FCC PART 15C (AVG) -6dB Frequency (MHz) Site : 03CH05-KS Condition : FCC PART 15C 3m 3317 SN 75957 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : (FR)230405 Mode : 12 Plane : Z : Full-directivity IMEI : #14 Powersetting : 70 Freq Level Over Limit Limit Line ReadAntenna Level Factor Cable Loss Factor Preamp Factor A/Pos Remark T/Pos Pol/Phas MHz dBuV/m dB dBuV/m dBuV dB/m dB dB cm deg 1 4920.00 41.00 -33.00 74.00 61.85 34.26 10.34 65.45 100 0 Peak VERTICAL 2 7380.00 44.08 -29.92 74.00 61.58 35.88 12.73 66.11 100 0 Peak VERTICAL

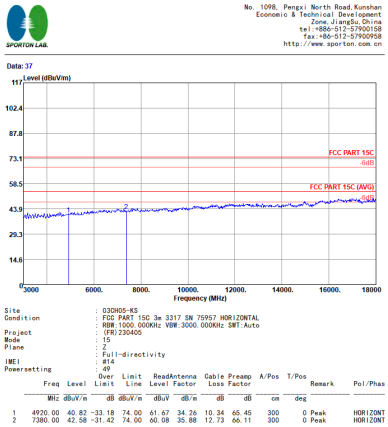
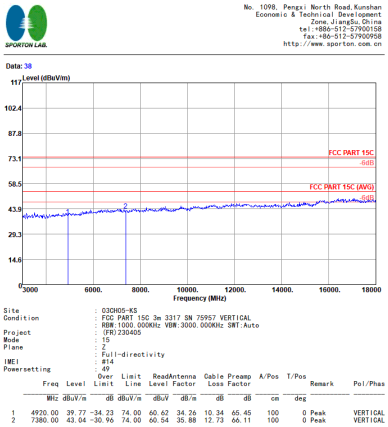
2.4GHz 2400~2483.5MHz

WIFI 802.11g (Harmonic @ 3m)

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

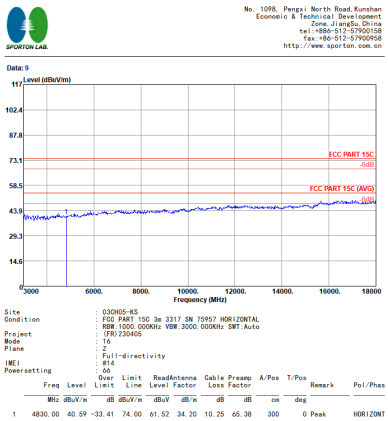
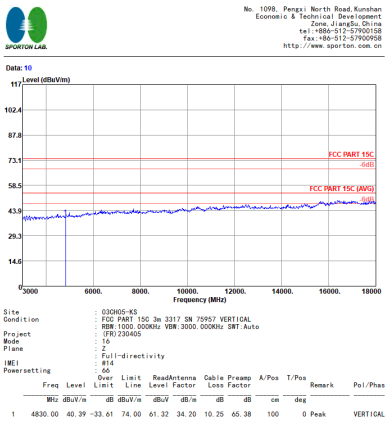
WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11g CH06 2437MHz	
CDD 1+2	Horizontal	Vertical
Peak Avg.	 	

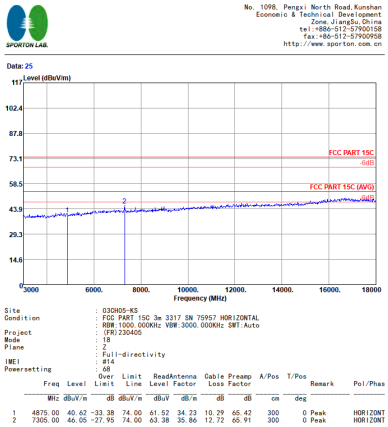
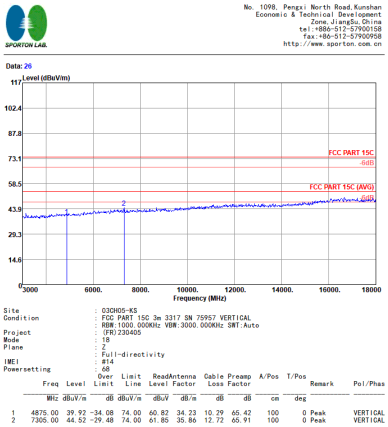
WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11g CH10 2457MHz	
CDD 1+2	Horizontal	Vertical
Peak Avg.		

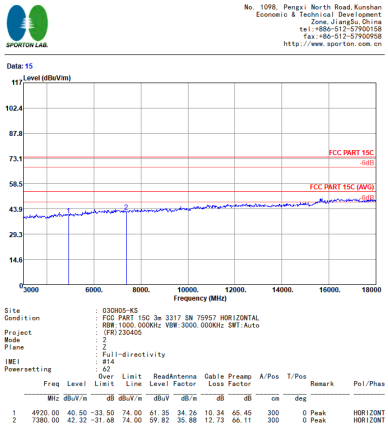
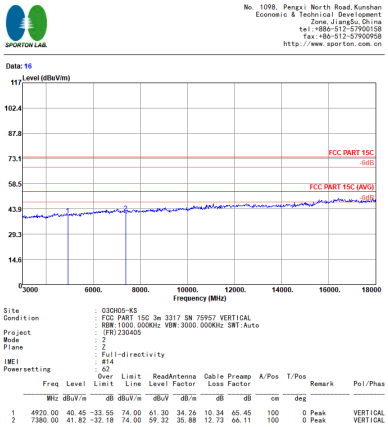
WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11g CH11 2462MHz	
CDD 1+2	Horizontal	Vertical
Peak Avg.		

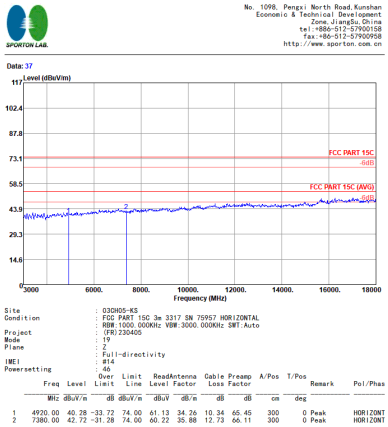
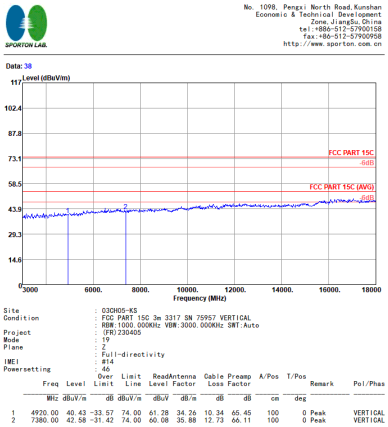
2.4GHz 2400~2483.5MHz

WIFI 802.11 ax HE20 Full (Harmonic @ 3m)

WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11 ax HE20 Full CH01 2412MHz	
CDD 1+2	Horizontal	Vertical
Peak Avg.		

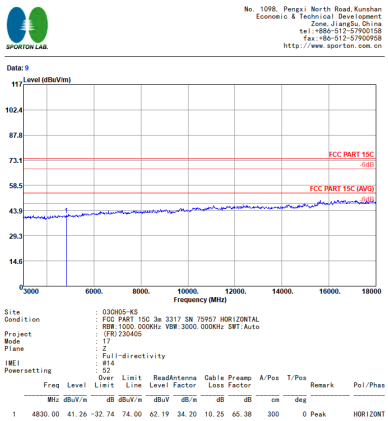
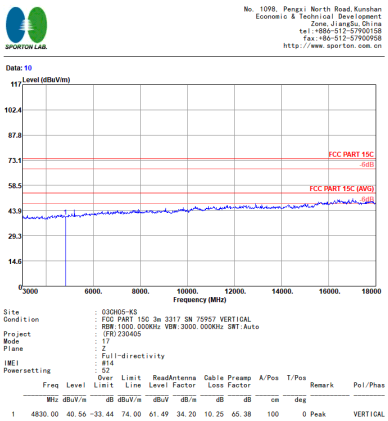
WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11 ax HE20 Full CH06 2437MHz	
CDD 1+2	Horizontal	Vertical
Peak Avg.		

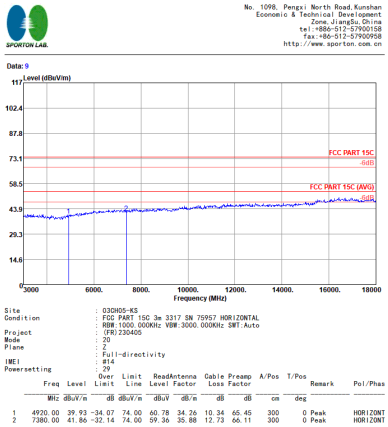
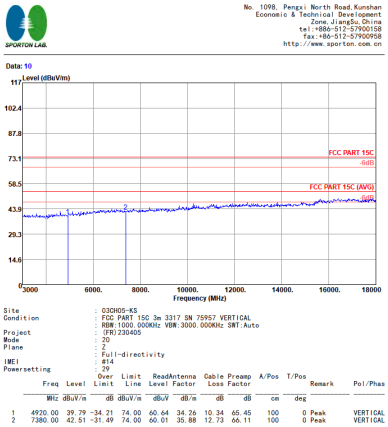
WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11 ax HE20 Full CH10 2457MHz	
CDD 1+2	Horizontal	Vertical
Peak Avg.	 No. 1098, Pengxi North Road,Kunshan Economic & Technical Development Zone,JiangSu,China tel:+886-512-57900158 fax:+86-512-57900958 http://www.sporton.com.cn Data: 15 Level (dBuV/m) 117 102.4 87.8 73.1 58.5 43.9 29.3 14.6 0 3000 6000. 8000. 10000. 12000. 14000. 16000. 18000 Frequency (MHz) FCC PART 15C -6dB FCC PART 15C (AVG) -6dB Site : 03CH05-KS Condition : FCC PART 15C 3m 3317 SN 75957 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : (FR)230405 Mode : 2 Plane : 2 : Full-directivity IMEI : #14 Powersetting : 62 Freq Level Over Limit Limit Line ReadAntenna Level Factor Cable Loss Factor Preamp Factor A/Pos T/Pos Remark Pol/Phas MHz dBuV/m dB dBuV/m dBuV dB/m dB dB cm deg 1 4920.00 40.50 -33.50 74.00 61.35 34.26 10.34 65.45 300 0 Peak HORIZONT 2 7380.00 42.32 -31.68 74.00 59.82 35.88 12.73 66.11 300 0 Peak HORIZONT	 No. 1098, Pengxi North Road,Kunshan Economic & Technical Development Zone,JiangSu,China tel:+886-512-57900158 fax:+86-512-57900958 http://www.sporton.com.cn Data: 16 Level (dBuV/m) 117 102.4 87.8 73.1 58.5 43.9 29.3 14.6 0 3000 6000. 8000. 10000. 12000. 14000. 16000. 18000 Frequency (MHz) FCC PART 15C -6dB FCC PART 15C (AVG) -6dB Site : 03CH05-KS Condition : FCC PART 15C 3m 3317 SN 75957 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : (FR)230405 Mode : 2 Plane : 2 : Full-directivity IMEI : #14 Powersetting : 62 Freq Level Over Limit Limit Line ReadAntenna Level Factor Cable Loss Factor Preamp Factor A/Pos T/Pos Remark Pol/Phas MHz dBuV/m dB dBuV/m dBuV dB/m dB dB cm deg 1 4920.00 40.45 -33.55 74.00 61.30 34.26 10.34 65.45 100 0 Peak VERTICAL 2 7380.00 41.82 -32.18 74.00 59.32 35.88 12.73 66.11 100 0 Peak VERTICAL

WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11 ax HE20 Full CH11 2462MHz	
CDD 1+2	Horizontal	Vertical
Peak Avg.		

2.4GHz 2400~2483.5MHz

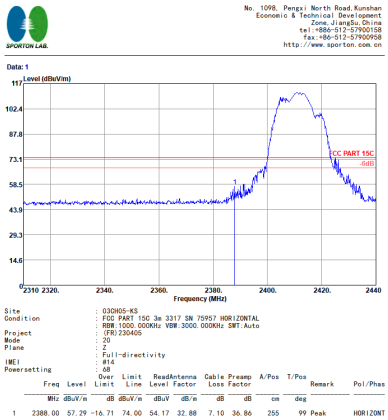
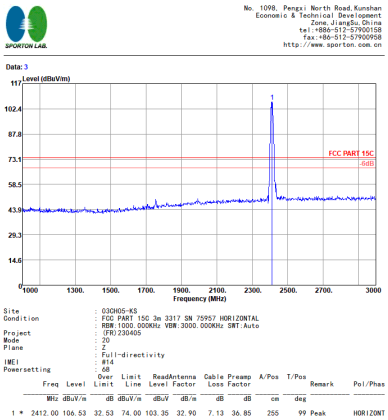
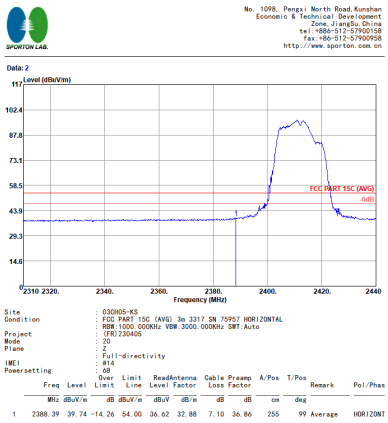
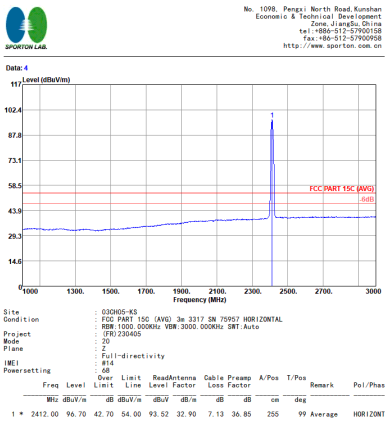
WIFI 802.11ax HE20 Partial 106 (Harmonic @ 3m)

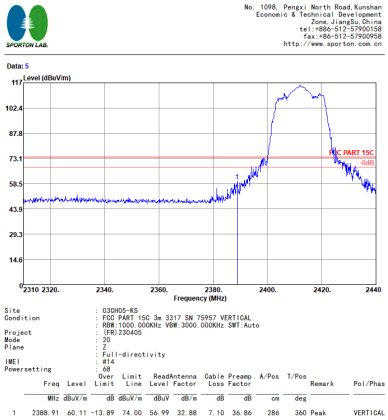
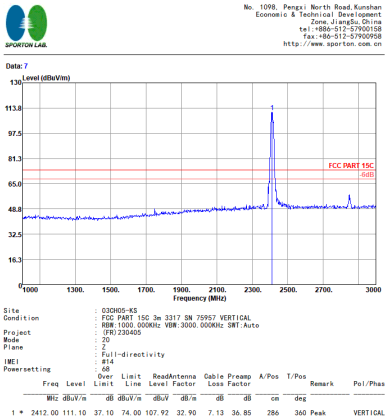
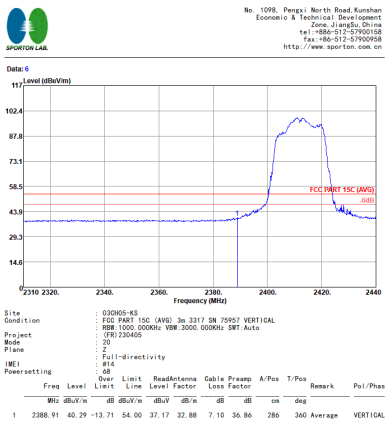
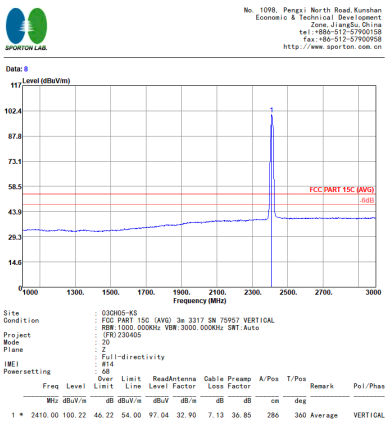
WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11ax HE20 Partial 106/53 CH01 2412MHz	
CDD 1+2	Horizontal	Vertical
Peak Avg.	 No. 1098, Pengxi North Road,Kunshan Economic & Technical Development Zone,JiangSu,China tel:+86-512-57900158 fax:+86-512-57900958 http://www.sporton.com.cn Data: 9 Level (dBuV/m) FCC PART 15C -6dB FCC PART 15C (AVG) -6dB Frequency (MHz) Site : 03CH05-KS Condition : FCC PART 15C 3m 3317 SN 75957 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : (FR)230405 Mode : 17 Plane : Z : Full-directivity IMEI : #14 Powersetting : S2 Freq Level Over Limit Limit Limit ReadAntenna Level Cable Factor Preamp Loss Factor A/Pos T/Pos Remark Pol/Phas MHz dBuV/m dB dBuV/m dBuV dBuV dB/m dB dB cm deg 1 4830.00 41.26 -32.74 74.00 62.19 34.20 10.25 65.38 300 0 Peak HORIZONT	 No. 1098, Pengxi North Road,Kunshan Economic & Technical Development Zone,JiangSu,China tel:+86-512-57900158 fax:+86-512-57900958 http://www.sporton.com.cn Data: 10 Level (dBuV/m) FCC PART 15C -6dB FCC PART 15C (AVG) -6dB Frequency (MHz) Site : 03CH05-KS Condition : FCC PART 15C 3m 3317 SN 75957 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : (FR)230405 Mode : 17 Plane : Z : Full-directivity IMEI : #14 Powersetting : S2 Freq Level Over Limit Limit Limit ReadAntenna Level Cable Factor Preamp Loss Factor A/Pos T/Pos Remark Pol/Phas MHz dBuV/m dB dBuV/m dBuV dBuV dB/m dB dB cm deg 1 4830.00 40.56 -33.44 74.00 61.49 34.20 10.25 65.38 100 0 Peak VERTICAL

WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11ax HE20 Partial 106/54 CH11 2462MHz	
CDD 1+2	Horizontal	Vertical
Peak Avg.	 No. 1098, Pengxi North Road,Kunshan Economic & Technical Development Zone,JiangSu,China tel:+886-512-57900158 fax:+86-512-57900958 http://www.sporton.com.cn Data: 9 Level (dBuV/m) FCC PART 15C -6dB FCC PART 15C (AVG) -6dB Frequency (MHz) Site : 03CH05-KS Condition : FCC PART 15C 3m 3317 SN 75957 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : (FR)230405 Mode : 20 Plane : Z : Full-directivity IMEI : #14 Powersetting : 29 Freq Level Over Limit Limit Line ReadAntenna Level Factor Cable Loss Factor Preamp Factor A/Pos Remark T/Pos Pol/Phas MHz dBuV/m dB dBuV/m dBuV dB/m dB dB cm deg 1 4920.00 39.93 -34.07 74.00 60.78 34.26 10.34 65.45 300 0 Peak HORIZONT 2 7380.00 41.86 -32.14 74.00 59.36 35.88 12.73 66.11 300 0 Peak HORIZONT	 No. 1098, Pengxi North Road,Kunshan Economic & Technical Development Zone,JiangSu,China tel:+886-512-57900158 fax:+86-512-57900958 http://www.sporton.com.cn Data: 10 Level (dBuV/m) FCC PART 15C -6dB FCC PART 15C (AVG) -6dB Frequency (MHz) Site : 03CH05-KS Condition : FCC PART 15C 3m 3317 SN 75957 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : (FR)230405 Mode : 20 Plane : Z : Full-directivity IMEI : #14 Powersetting : 29 Freq Level Over Limit Limit Line ReadAntenna Level Factor Cable Loss Factor Preamp Factor A/Pos Remark T/Pos Pol/Phas MHz dBuV/m dB dBuV/m dBuV dB/m dB dB cm deg 1 4920.00 39.79 -34.21 74.00 60.64 34.26 10.34 65.45 100 0 Peak VERTICAL 2 7380.00 42.51 -31.49 74.00 60.01 35.88 12.73 66.11 100 0 Peak VERTICAL

2.4GHz 2400~2483.5MHz

WIFI 802.11ax HE20 Full (Band Edge @ 3m)

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH01 2412MHz	
CDD 1+2	Horizontal	Fundamental
Peak		
Avg.		

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH01 2412MHz	
CDD 1+2	Vertical	Fundamental
Peak		
Avg.