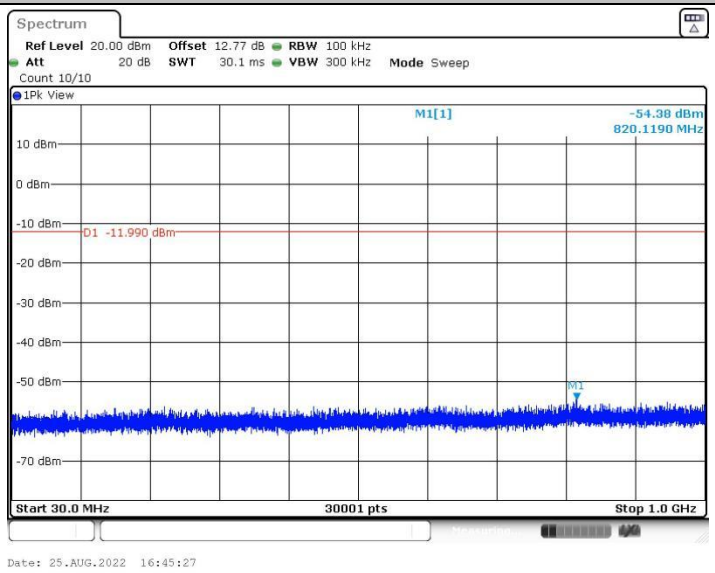
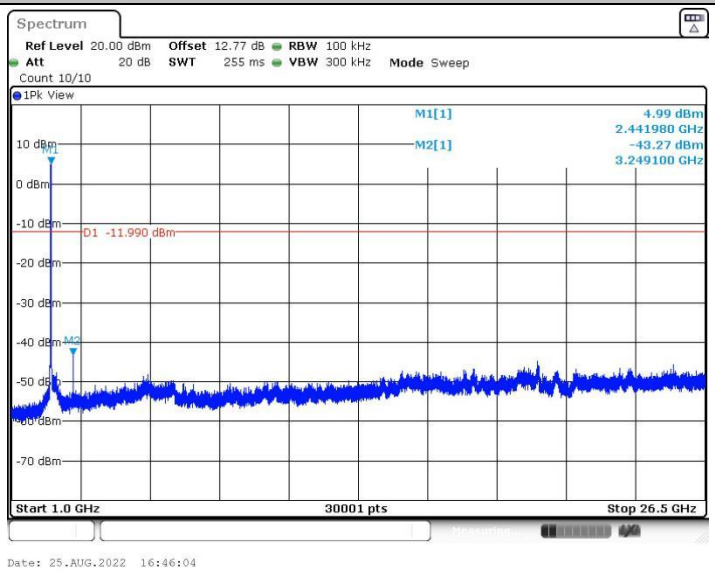
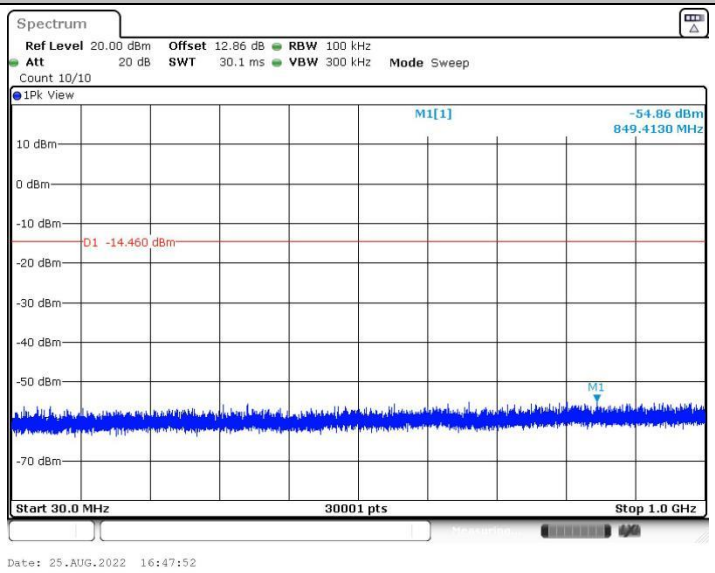
11G_Ant1_2437_30~1000



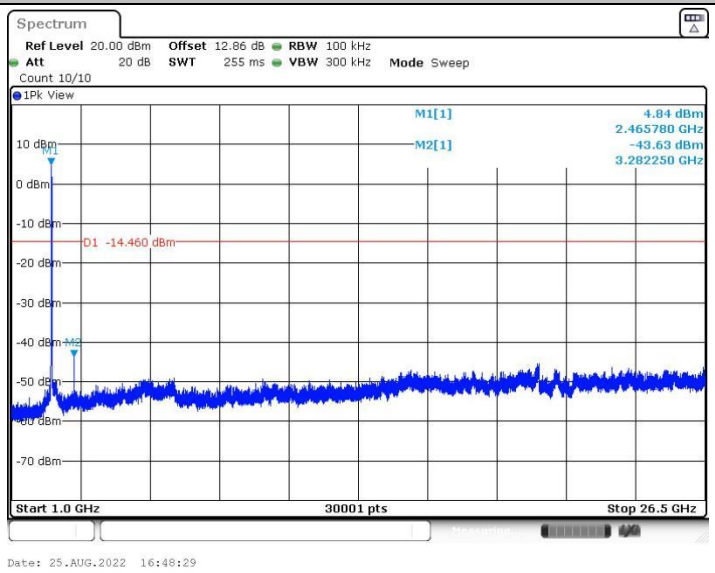
11G_Ant1_2437_1000~26500



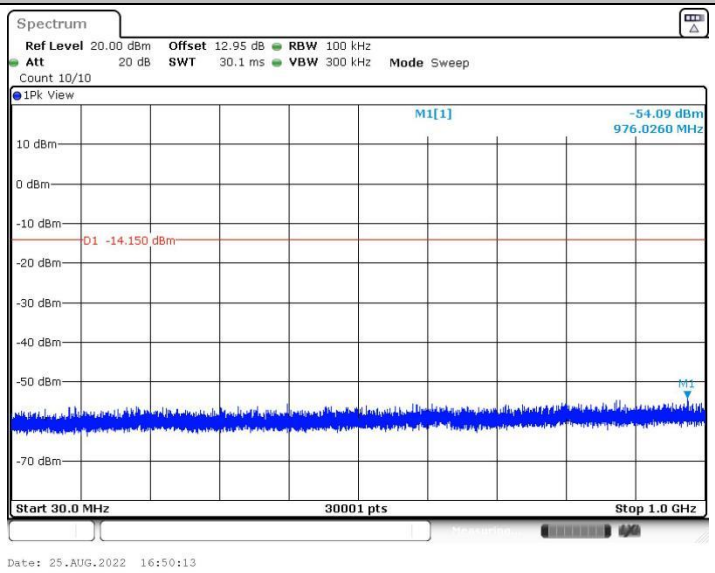
11G_Ant1_2462_30~1000



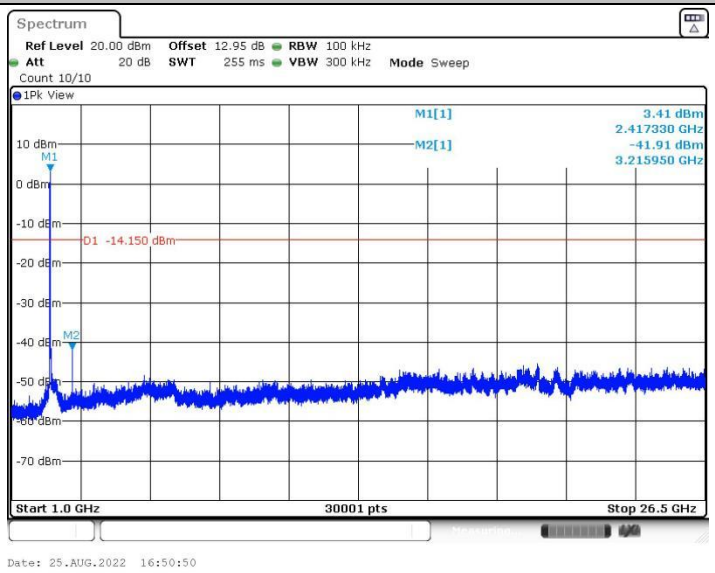
11G_Ant1_2462_1000~26500



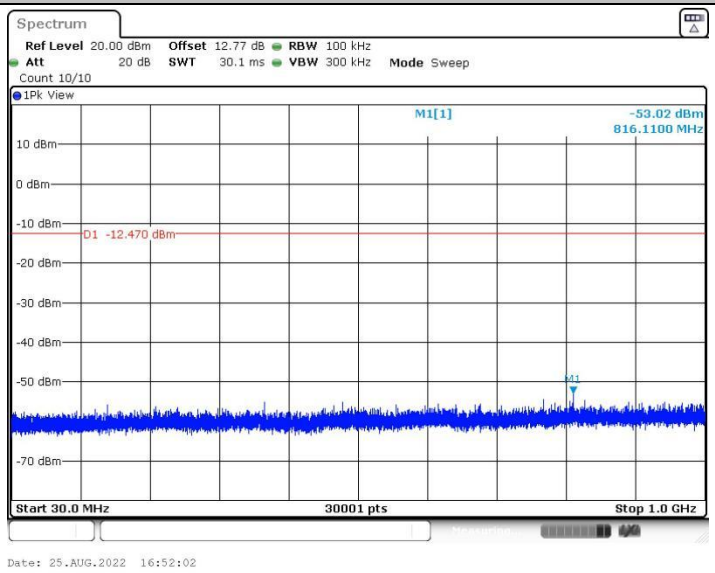
11N20SISO_Ant1_2412_30~1000



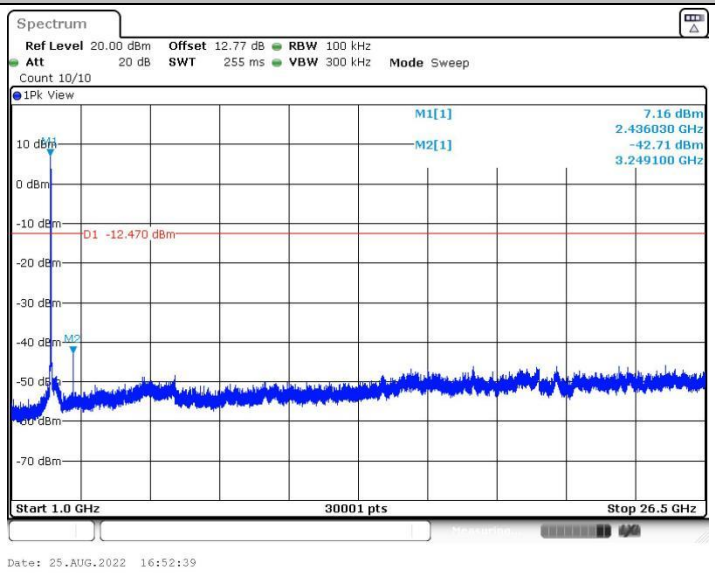
11N20SISO_Ant1_2412_1000~26500



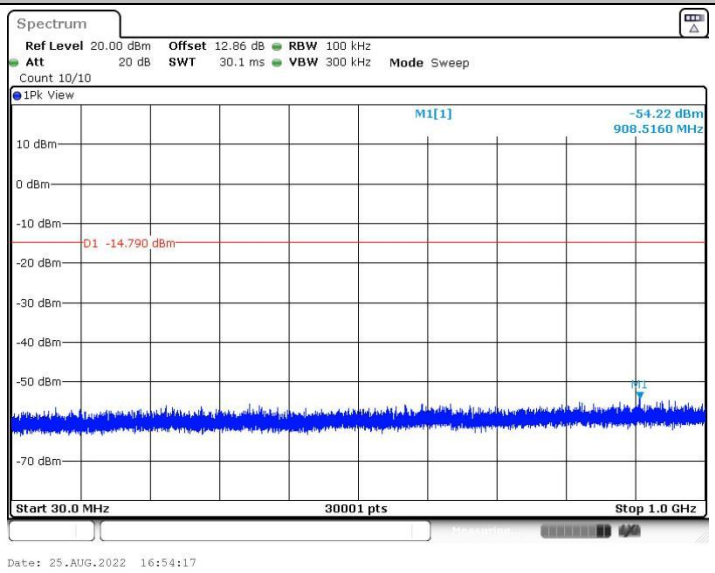
11N20SISO_Ant1_2437_30~1000



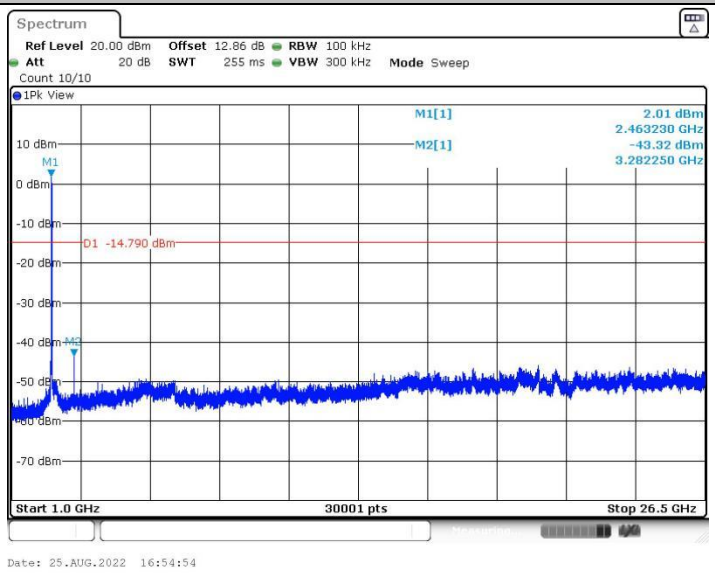
11N20SISO_Ant1_2437_1000~26500



11N20SISO_Ant1_2462_30~1000

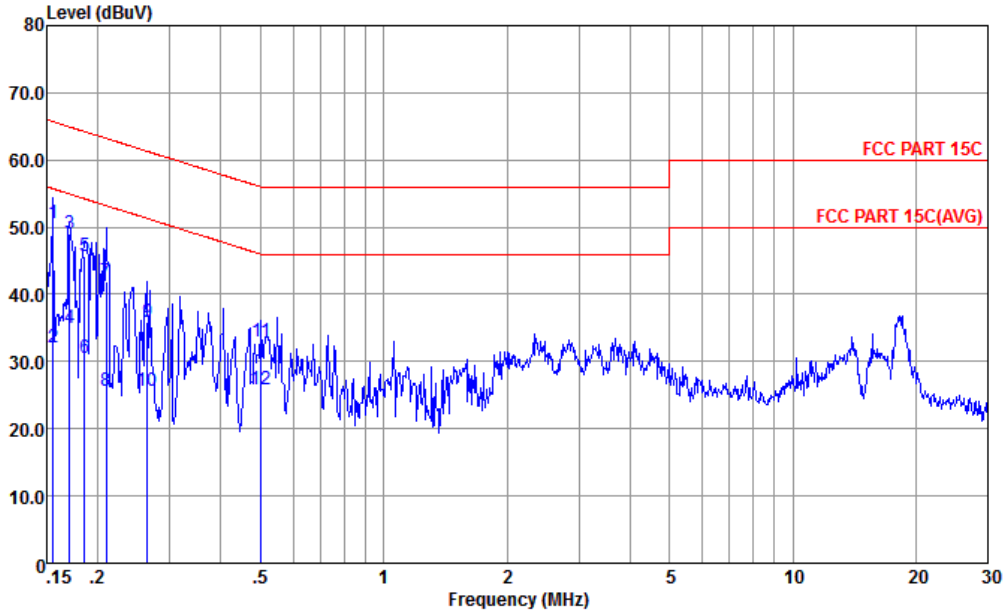


11N20SISO_Ant1_2462_1000~26500



Appendix B. AC Conducted Emission Test Results

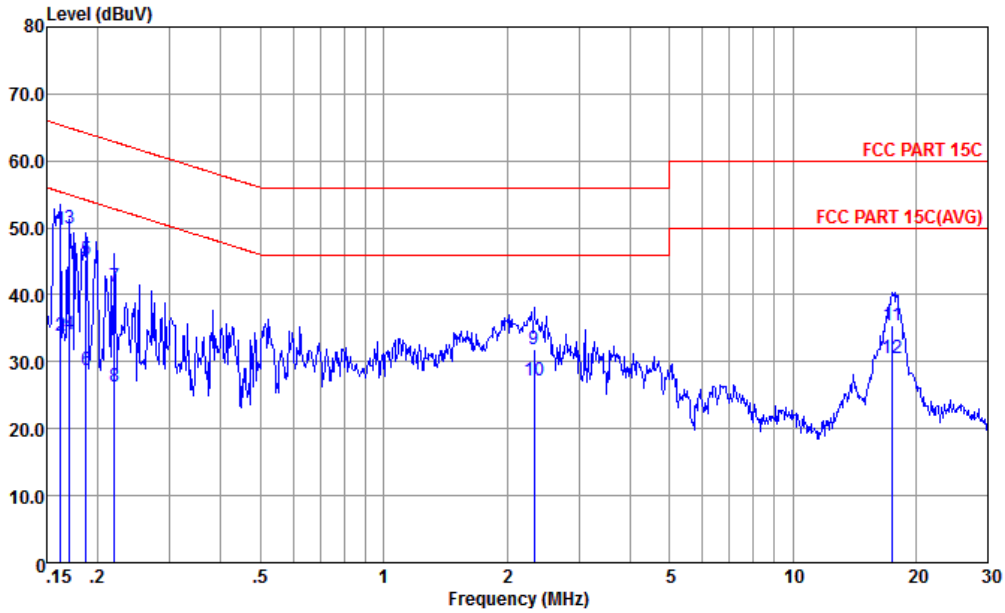
Test Engineer :	Amos Zhang	**Temperature :**	25.3~26.2℃
		Relative Humidity :	38~40%
Test Voltage :	120Vac / 60Hz	**Phase :**	Line
Remark :	All emissions not reported here are more than 10 dB below the prescribed limit.		



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 *	0.156	50.69	-15.00	65.69	40.20	0.02	10.47	QP
2	0.156	32.09	-23.60	55.69	21.60	0.02	10.47	Average
3	0.170	48.96	-15.98	64.94	38.50	0.03	10.43	QP
4	0.170	34.96	-19.98	54.94	24.50	0.03	10.43	Average
5	0.185	45.63	-18.61	64.24	35.21	0.03	10.39	QP
6	0.185	30.63	-23.61	54.24	20.21	0.03	10.39	Average
7	0.209	41.90	-21.33	63.23	31.50	0.04	10.36	QP
8	0.209	25.60	-27.63	53.23	15.20	0.04	10.36	Average
9	0.264	35.89	-25.40	61.29	25.51	0.06	10.32	QP
10	0.264	25.59	-25.70	51.29	15.21	0.06	10.32	Average
11	0.502	32.94	-23.06	56.00	22.60	0.10	10.24	QP
12	0.502	25.94	-20.06	46.00	15.60	0.10	10.24	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		0.162	49.75	-15.59	65.34	39.19	0.11	10.45	QP
2		0.162	33.85	-21.49	55.34	23.29	0.11	10.45	Average
3	*	0.170	49.83	-15.11	64.94	39.29	0.11	10.43	QP
4		0.170	34.03	-20.91	54.94	23.49	0.11	10.43	Average
5		0.187	45.29	-18.86	64.15	34.80	0.10	10.39	QP
6		0.187	28.69	-25.46	54.15	18.20	0.10	10.39	Average
7		0.220	41.25	-21.58	62.83	30.80	0.10	10.35	QP
8		0.220	26.25	-26.58	52.83	15.80	0.10	10.35	Average
9		2.334	31.98	-24.02	56.00	21.61	0.14	10.23	QP
10		2.334	27.28	-18.72	46.00	16.91	0.14	10.23	Average
11		17.568	35.47	-24.53	60.00	24.60	0.42	10.45	QP
12		17.568	30.47	-19.53	50.00	19.60	0.42	10.45	Average

Note:

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

Appendix C. Radiated Spurious Emission

Channel	Power setting
11b CH01	1
11b CH06	6
11b CH11	12
11g CH01	7
11g CH06	0
11g CH11	12
11n20 CH01	4
11n20 CH06	0
11n20 CH11	11

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.
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11b CH 01 2412MHz		2386.44	55.16	-18.84	74	52.04	32.88	7.1	36.86	134	108	P	H
		2385.92	46.82	-7.18	54	43.7	32.88	7.1	36.86	134	108	A	H
	*	2414	109.04	-	-	105.86	32.9	7.13	36.85	134	108	P	H
	*	2412	106.61	-	-	103.43	32.9	7.13	36.85	134	108	A	H
		2387.09	53.82	-20.18	74	50.7	32.88	7.1	36.86	391	75	P	V
		2385.92	45.01	-8.99	54	41.89	32.88	7.1	36.86	391	75	A	V
	*	2412	106.29	-	-	103.11	32.9	7.13	36.85	391	75	P	V
	*	2412	103.74	-	-	100.56	32.9	7.13	36.85	391	75	A	V
802.11b CH 11 2462MHz		2483.68	58.23	-15.77	74	54.82	32.98	7.25	36.82	377	106	P	H
		2483.5	47.22	-6.78	54	43.81	32.98	7.25	36.82	377	106	A	H
	*	2462	108.89	-	-	105.54	32.96	7.22	36.83	377	106	P	H
	*	2462	106.31	-	-	102.96	32.96	7.22	36.83	377	106	A	H
		2488.18	57.32	-16.68	74	53.88	33	7.25	36.81	378	40	P	V
		2487.76	47.71	-6.29	54	44.27	33	7.25	36.81	378	40	A	V
	*	2462	107.01	-	-	103.66	32.96	7.22	36.83	378	40	P	V
	*	2462	104.44	-	-	101.09	32.96	7.22	36.83	378	40	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

2.4GHz 2400~2483.5MHz

WIFI 802.11b (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (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		3210	56.29	-29.57	85.86	79.7	33.02	8.3	64.73	300	0	P	H
		4830	52.14	-21.86	74	73.07	34.2	10.25	65.38	100	118	P	H
		4830	50.57	-3.43	54	71.5	34.2	10.25	65.38	100	118	A	H
		3210	50.86	-32.36	83.22	74.27	33.02	8.3	64.73	100	0	P	V
		4830	45.93	-28.07	74	66.86	34.2	10.25	65.38	100	0	P	V
802.11b CH 06 2437MHz		3255	58.97	-26.48	85.45	82.31	33	8.37	64.71	300	0	P	H
		4875	52.18	-21.82	74	73.08	34.23	10.29	65.42	117	118	P	H
		4875	50.46	-3.54	54	71.36	34.23	10.29	65.42	117	118	A	H
		7305	44.83	-29.17	74	62.16	35.86	12.72	65.91	300	0	P	H
		3255	54.93	-25.79	80.72	78.27	33	8.37	64.71	100	0	P	V
		4875	46.39	-27.61	74	67.29	34.23	10.29	65.42	100	0	P	V
		7305	44.65	-29.35	74	61.98	35.86	12.72	65.91	100	0	P	V
802.11b CH 11 2462MHz		3285	56.34	-30.43	86.77	79.67	32.99	8.39	64.71	300	0	P	H
		4920	52.31	-21.69	74	73.16	34.26	10.34	65.45	100	119	P	H
		4920	50.45	-3.55	54	71.3	34.26	10.34	65.45	100	119	A	H
		7380	43.94	-30.06	74	61.44	35.88	12.73	66.11	300	0	P	H
		3285	52.23	-31.78	84.01	75.56	32.99	8.39	64.71	100	0	P	V
		4920	47.92	-26.08	74	68.77	34.26	10.34	65.45	100	0	P	V
		7380	43.31	-30.69	74	60.81	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. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11g CH 01 2412MHz		2389.95	69.79	-4.21	74	66.67	32.88	7.1	36.86	134	110	P	H
		2389.95	52.3	-1.7	54	49.18	32.88	7.1	36.86	134	110	A	H
	*	2416	111.58	-	-	108.37	32.9	7.16	36.85	134	110	P	H
	*	2416	102.99	-	-	99.78	32.9	7.16	36.85	134	110	A	H
		2389.95	67.44	-6.56	74	64.32	32.88	7.1	36.86	392	74	P	V
		2389.95	50.55	-3.45	54	47.43	32.88	7.1	36.86	392	74	A	V
	*	2418	106.67	-	-	103.46	32.9	7.16	36.85	392	74	P	V
	*	2412	98.99	-	-	95.81	32.9	7.13	36.85	392	74	A	V
802.11g CH 11 2462MHz		2483.62	70.72	-3.28	74	67.31	32.98	7.25	36.82	100	102	P	H
		2483.5	52.69	-1.31	54	49.28	32.98	7.25	36.82	100	102	A	H
	*	2468	109.5	-	-	106.15	32.96	7.22	36.83	100	102	P	H
	*	2468	101.99	-	-	98.64	32.96	7.22	36.83	100	102	A	H
		2483.56	68.64	-5.36	74	65.23	32.98	7.25	36.82	387	16	P	V
		2483.5	51.62	-2.38	54	48.21	32.98	7.25	36.82	387	16	A	V
	*	2454	108.04	-	-	104.69	32.96	7.22	36.83	387	16	P	V
	*	2456	100.52	-	-	97.17	32.96	7.22	36.83	387	16	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. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11g CH 01 2412MHz		3210	58.32	-22.85	81.17	81.73	33.02	8.3	64.73	300	0	P	H
		4830	47.62	-26.38	74	68.55	34.2	10.25	65.38	300	0	P	H
		3210	51.89	-22.12	74.01	75.3	33.02	8.3	64.73	100	0	P	V
		4830	43.78	-30.22	74	64.71	34.2	10.25	65.38	100	0	P	V
802.11g CH 06 2437MHz		3255	58.3	-23.52	81.82	81.64	33	8.37	64.71	300	0	P	H
		4875	50.36	-23.64	74	71.26	34.23	10.29	65.42	252	36	P	H
		4875	38.68	-15.32	54	59.58	34.23	10.29	65.42	252	36	A	H
		7305	50.49	-23.51	74	67.82	35.86	12.72	65.91	100	200	P	H
		3255	55.18	-23.34	78.52	78.52	33	8.37	64.71	100	0	P	V
		4875	45.91	-28.09	74	66.81	34.23	10.29	65.42	100	0	P	V
		7305	51	-23	74	68.33	35.86	12.72	65.91	158	331	P	V
		7305	39.6	-14.4	54	56.93	35.86	12.72	65.91	158	331	A	V
802.11g CH 11 2462MHz		3285	55.79	-24.27	80.06	79.12	32.99	8.39	64.71	300	0	P	H
		4920	48.03	-25.97	74	68.88	34.26	10.34	65.45	300	0	P	H
		7380	47.52	-26.48	74	65.02	35.88	12.73	66.11	300	0	P	H
		3285	51.92	-26.27	78.19	75.25	32.99	8.39	64.71	100	0	P	V
		4920	44.34	-29.66	74	65.19	34.26	10.34	65.45	100	0	P	V
		7380	46.23	-27.77	74	63.73	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 802.11n HT20 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 01 2412MHz		2389.82	67.01	-6.99	74	63.89	32.88	7.1	36.86	135	110	P	H
		2389.95	52.06	-1.94	54	48.94	32.88	7.1	36.86	135	110	A	H
	*	2416	110.23	-	-	107.02	32.9	7.16	36.85	135	110	P	H
	*	2416	102.54	-	-	99.33	32.9	7.16	36.85	135	110	A	H
		2389.43	64.68	-9.32	74	61.56	32.88	7.1	36.86	392	73	P	V
		2389.95	50.03	-3.97	54	46.91	32.88	7.1	36.86	392	73	A	V
	*	2418	106.67	-	-	103.46	32.9	7.16	36.85	392	73	P	V
	*	2408	98.71	-	-	95.53	32.9	7.13	36.85	392	73	A	V
802.11n HT20 CH 11 2462MHz		2483.68	68.71	-5.29	74	65.3	32.98	7.25	36.82	100	103	P	H
		2483.5	52.53	-1.47	54	49.12	32.98	7.25	36.82	100	103	A	H
	*	2466	109.71	-	-	106.36	32.96	7.22	36.83	100	103	P	H
	*	2466	102.22	-	-	98.87	32.96	7.22	36.83	100	103	A	H
		2483.62	69.54	-4.46	74	66.13	32.98	7.25	36.82	378	26	P	V
		2483.5	52.9	-1.1	54	49.49	32.98	7.25	36.82	378	26	A	V
	*	2468	108.71	-	-	105.36	32.96	7.22	36.83	378	26	P	V
	*	2466	100.26	-	-	96.91	32.96	7.22	36.83	378	26	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

2.4GHz 2400~2483.5MHz

WIFI 802.11n HT20 (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 01 2412MHz		3210	58.01	-22.59	80.6	81.42	33.02	8.3	64.73	300	0	P	H
		4830	47.02	-26.98	74	67.95	34.2	10.25	65.38	300	0	P	H
		3210	52.03	-25.21	77.24	75.44	33.02	8.3	64.73	100	0	P	V
		4830	43.08	-30.92	74	64.01	34.2	10.25	65.38	100	0	P	V
802.11n HT20 CH 06 2437MHz		3255	59.48	-24.15	83.63	82.82	33	8.37	64.71	300	0	P	H
		4875	51.59	-22.41	74	72.49	34.23	10.29	65.42	106	118	P	H
		4875	41.12	-12.88	54	62.02	34.23	10.29	65.42	106	118	A	H
		7305	48.69	-25.31	74	66.02	35.86	12.72	65.91	300	0	P	H
		3255	54.95	-24.61	79.56	78.29	33	8.37	64.71	100	0	P	V
		4875	46.14	-27.86	74	67.04	34.23	10.29	65.42	100	0	P	V
		7305	48.54	-25.46	74	65.87	35.86	12.72	65.91	100	0	P	V
802.11n HT20 CH 11 2462MHz		3285	56.87	-24.36	81.23	80.2	32.99	8.39	64.71	300	0	P	H
		4920	47.84	-26.16	74	68.69	34.26	10.34	65.45	300	0	P	H
		7380	46.66	-27.34	74	64.16	35.88	12.73	66.11	300	0	P	H
		3285	52.37	-27.34	79.71	75.7	32.99	8.39	64.71	100	0	P	V
		4920	43.74	-30.26	74	64.59	34.26	10.34	65.45	100	0	P	V
		7380	47.46	-26.54	74	64.96	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

Emission below 1GHz

2.4GHz WIFI 802.11g (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.
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
2.4GHz 802.11g LF		120.21	28.81	-14.69	43.5	42.15	17.86	1.66	32.86	-	-	P	H
		191.99	27.82	-15.68	43.5	42.27	16.49	2.11	33.05	-	-	P	H
		320.03	30.14	-15.86	46	39.64	20.68	2.72	32.9	-	-	P	H
		456.8	23.28	-22.72	46	29.01	23.72	3.26	32.71	-	-	P	H
		632.37	25.95	-20.05	46	28.98	25.76	3.84	32.63	-	-	P	H
		820.55	29.11	-16.89	46	30.26	27.02	4.37	32.54	-	-	P	H
		34.85	26.88	-13.12	40	35.97	22.9	0.71	32.7	-	-	P	V
		76.56	22.42	-17.58	40	40.29	13.71	1.32	32.9	-	-	P	V
		120.21	23.16	-20.34	43.5	36.5	17.86	1.66	32.86	-	-	P	V
		191.99	21.66	-21.84	43.5	36.11	16.49	2.11	33.05	-	-	P	V
		320.03	20.99	-25.01	46	30.49	20.68	2.72	32.9	-	-	P	V
		670.2	27.71	-18.29	46	30.68	25.82	3.95	32.74	-	-	P	V
Remark	1. No other spurious found. 2. All results are PASS against limit line.												

Note symbol

*	**Fundamental Frequency** which can be ignored. However, the level of any unwanted emissions shall not exceed the level of the fundamental frequency.
!	Test result is **over limit** line.
P/A	**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.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11b CH 01 2412MHz		2390	55.45	-18.55	74	54.51	32.22	4.58	35.86	103	308	P	H
		2390	43.54	-10.46	54	42.6	32.22	4.58	35.86	103	308	A	H

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

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

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

For Peak Limit @ 2390MHz:

1. Level(dBμV/m)

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

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

= 55.45 (dBμV/m)

2. Over Limit(dB)

= Level(dBμV/m) – Limit Line(dBμV/m)

= 55.45(dBμV/m) – 74(dBμV/m)

= -18.55(dB)

For Average Limit @ 2390MHz:

1. Level(dBμV/m)

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

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

= 43.54 (dBμV/m)

2. Over Limit(dB)

= Level(dBμV/m) – Limit Line(dBμV/m)

= 43.54(dBμV/m) – 54(dBμV/m)

= -10.46(dB)

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

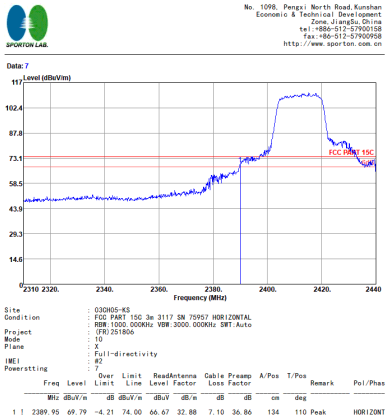
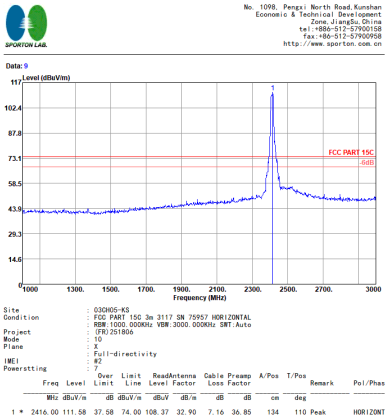
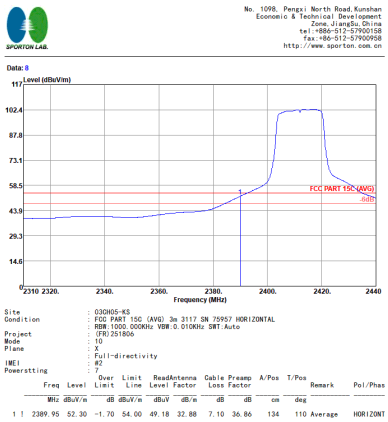
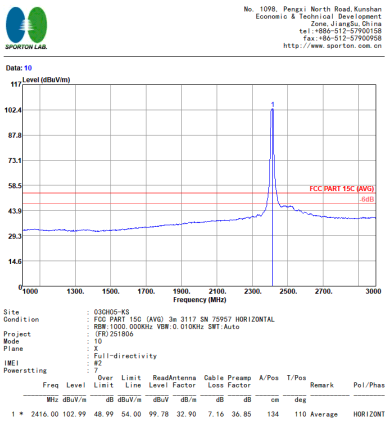
Appendix D. Radiated Spurious Emission Plots

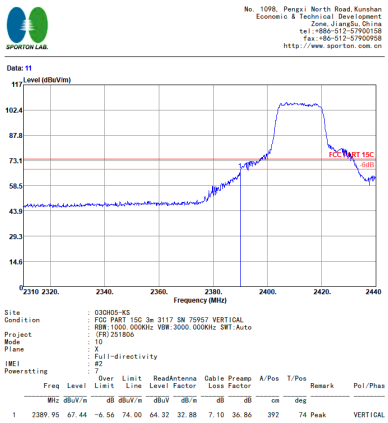
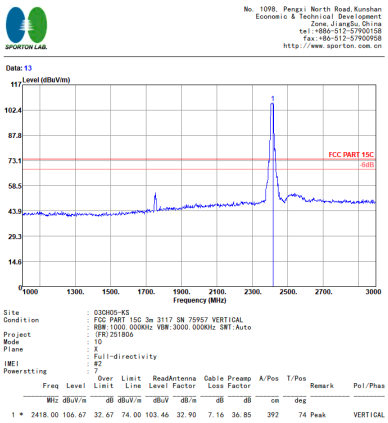
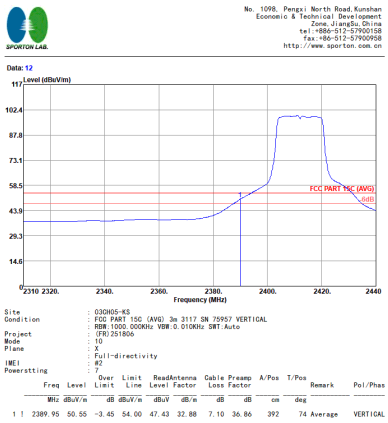
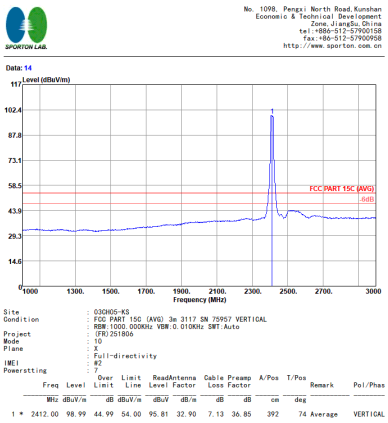
Note symbol

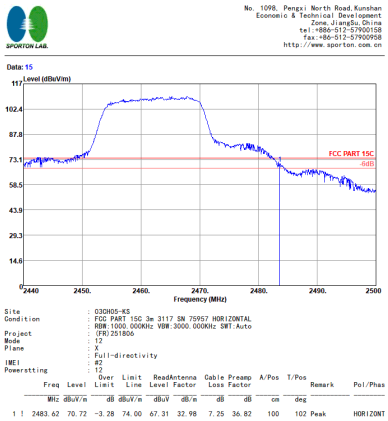
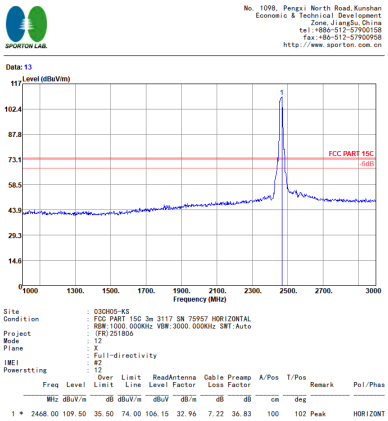
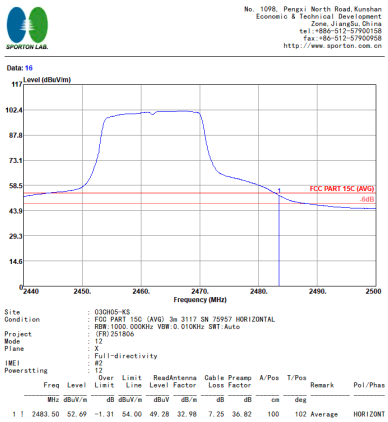
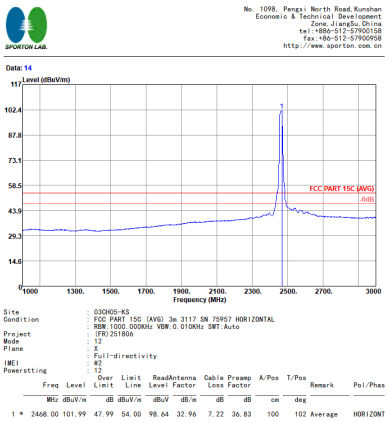
-L	**Low channel location**
-R	**High channel location**

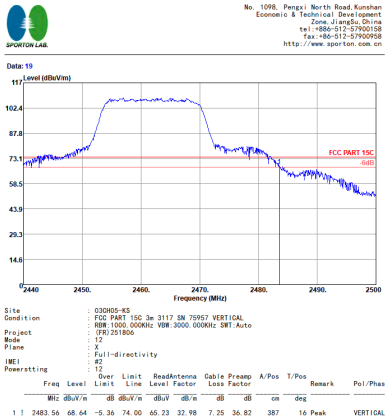
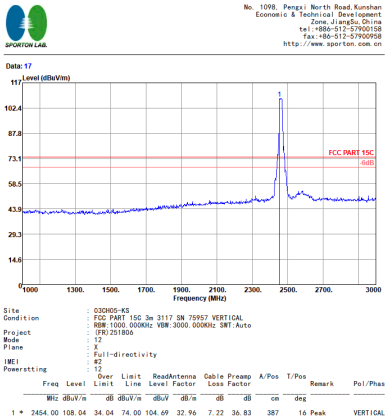
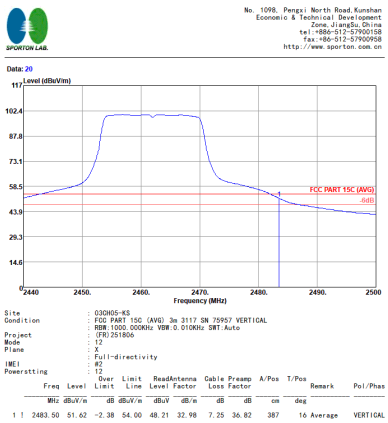
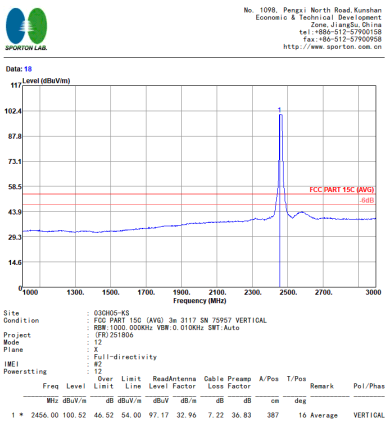
2.4GHz 2400~2483.5MHz

WIFI 802.11g (Band Edge @ 3m)

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

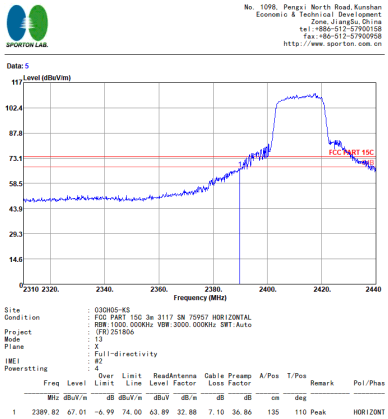
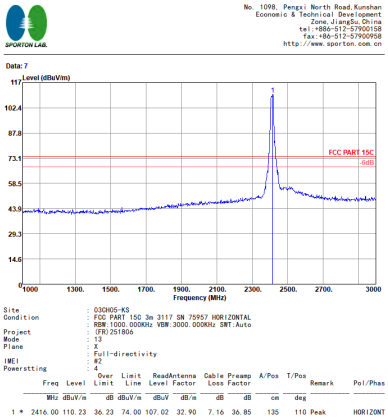
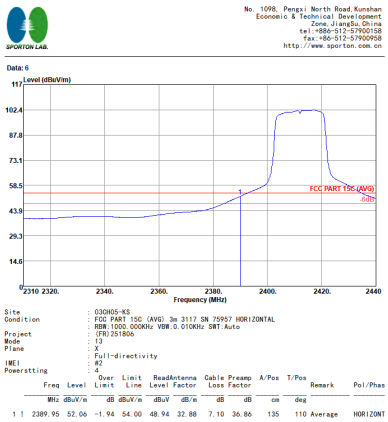
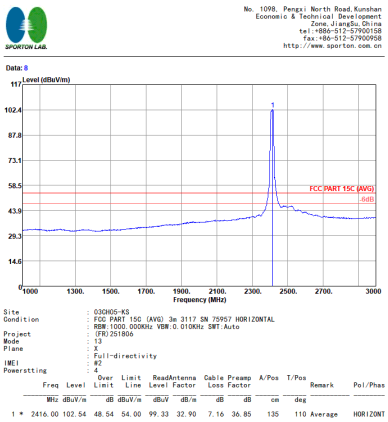
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH01 2412MHz	
1	Vertical	Fundamental
Peak		
Avg.		

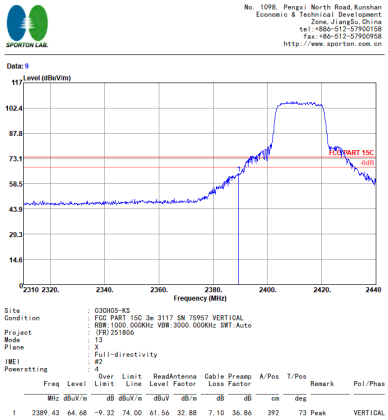
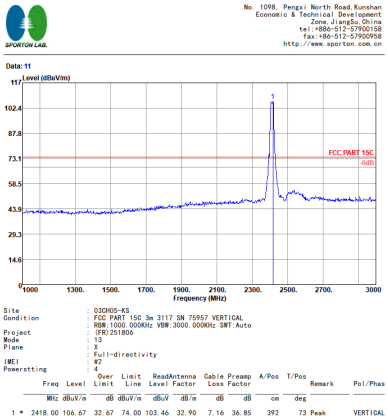
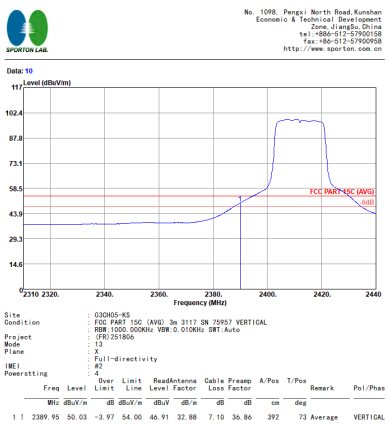
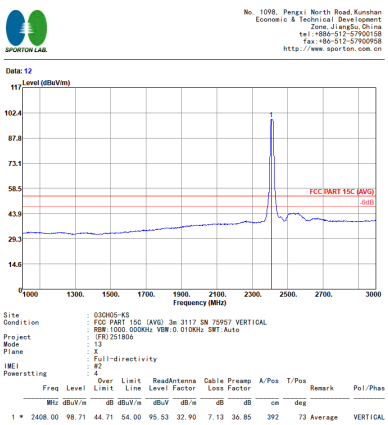
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH11 2462MHz	
1	Horizontal	Fundamental
Peak		
Avg.		

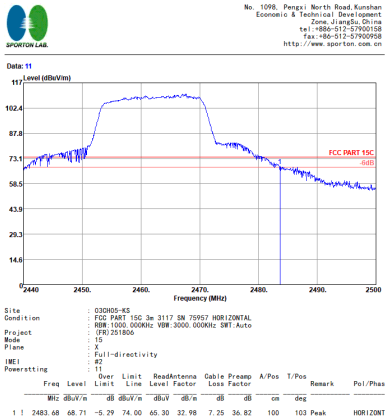
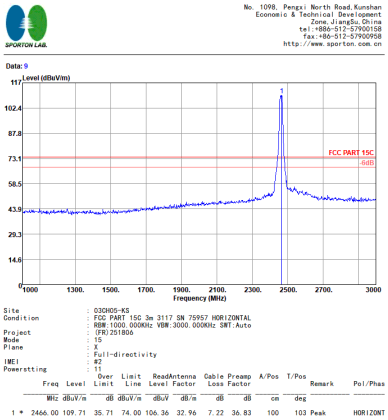
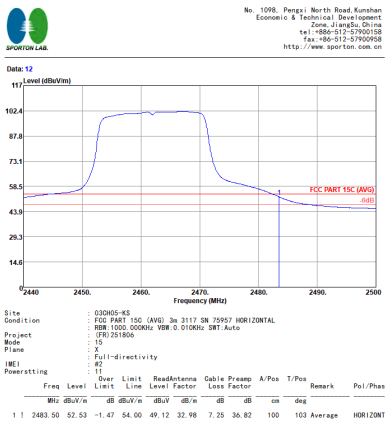
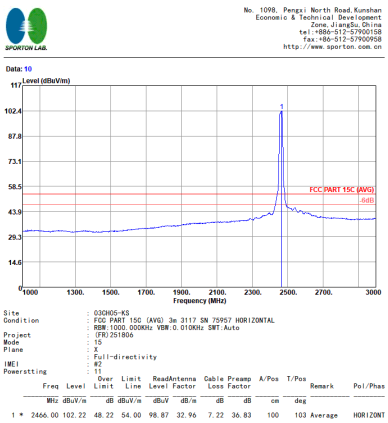
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH11 2462MHz	
1	Vertical	Fundamental
Peak		
Avg.		

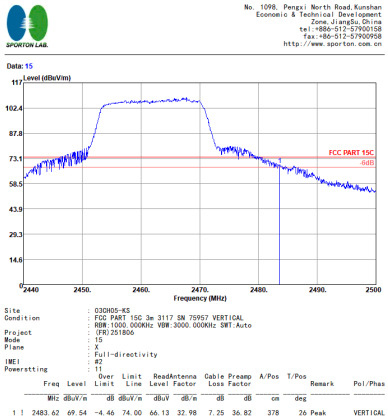
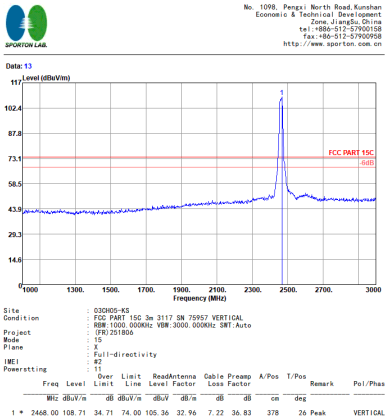
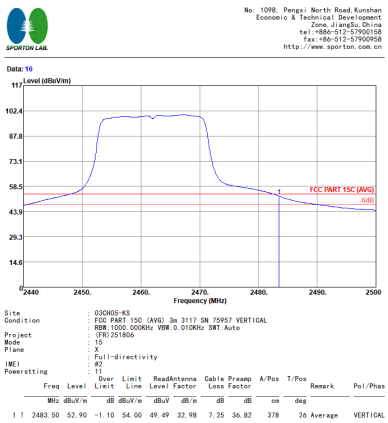
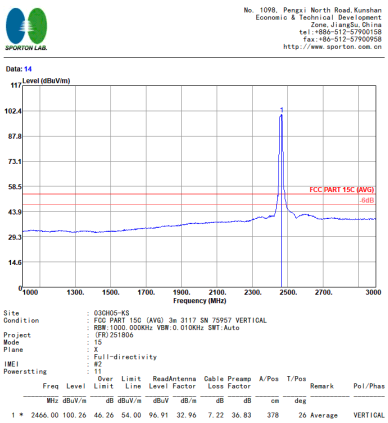
2.4GHz 2400~2483.5MHz

WIFI 802.11n HT20 (Band Edge @ 3m)

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

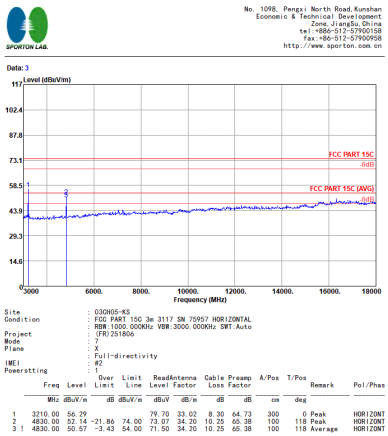
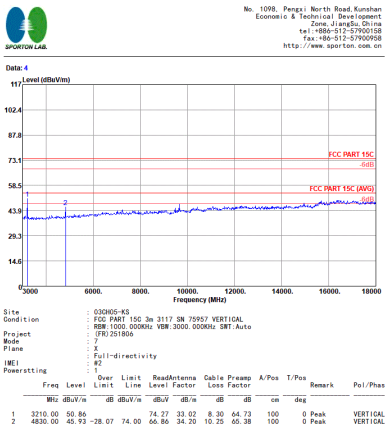
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH01 2412MHz	
1	Vertical	Fundamental
Peak		
Avg.		

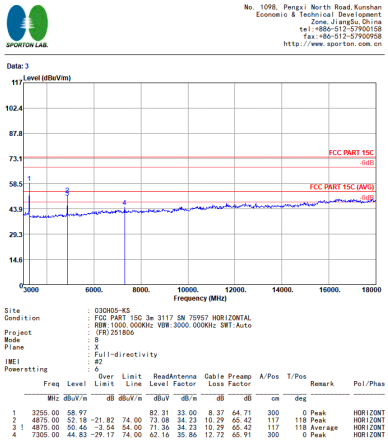
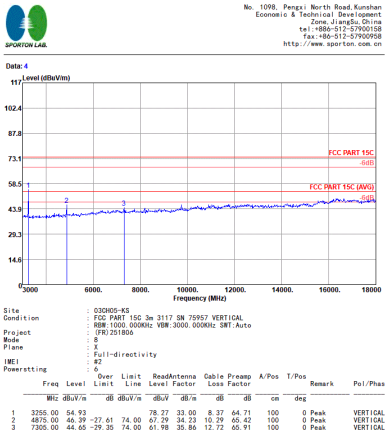
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH11 2462MHz	
1	Horizontal	Fundamental
Peak		
Avg.		

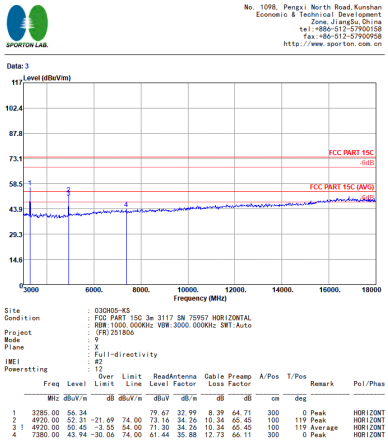
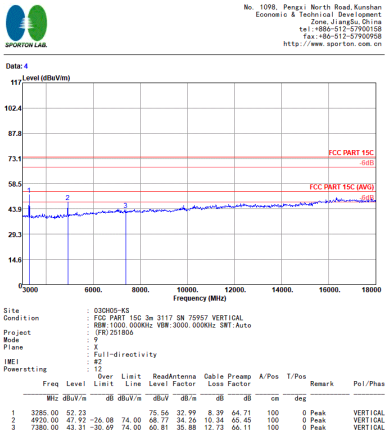
WIFI	2.4GHz 2400~2483.5MHz Fundamental @ 3m	
ANT	802.11n HT20 CH11 2462MHz	
1	Vertical	Fundamental
Peak		
Avg.		

2.4GHz 2400~2483.5MHz

WIFI 802.11b (Harmonic @ 3m)

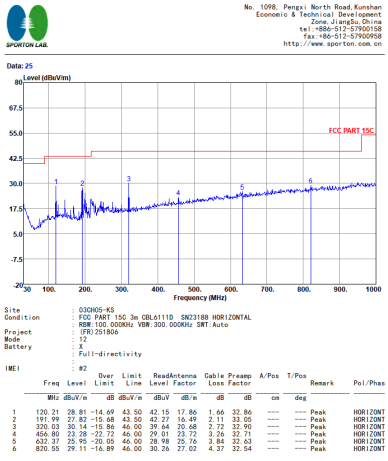
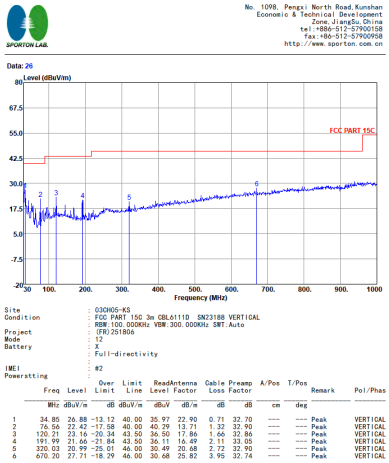
WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11b CH01 2412MHz	
1	Horizontal	Vertical
Peak Avg.	 No. 1098, Pengxi North Road,Kunshan Economic & Technical Development Zone,JiangSu,China tel:+86-512-57900158 fax:+86-512-57900958 http://www.sporton.com.cn Data: 3 Level (dBuV/m) FCC PART 15C -6dB FCC PART 15C (AVG) -6dB Frequency (MHz) Site : 03CH05-KS Condition : FCC PART 15C 3m 3117 SN 75957 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : (FR)251806 Mode : 7 Plane : X : Full-directivity IMEI : #2 Powersrtting : 1 Freq Level Over Limit Limit Line ReadAntenna Level Cable Loss Preamp Factor A/Pos T/Pos Remark Pol/Phas MHz dBuV/m dB dBuV/m dBuV dB/m dB dB cm deg 1 3210.00 56.29 79.70 33.02 8.30 64.73 300 0 Peak HORIZONT 2 4830.00 52.14 -21.86 74.00 73.07 34.20 10.25 65.38 100 118 Peak HORIZONT 3 ! 4830.00 50.57 -3.43 54.00 71.50 34.20 10.25 65.38 100 118 Average 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: 4 Level (dBuV/m) FCC PART 15C -6dB FCC PART 15C (AVG) -6dB Frequency (MHz) Site : 03CH05-KS Condition : FCC PART 15C 3m 3117 SN 75957 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : (FR)251806 Mode : 7 Plane : X : Full-directivity IMEI : #2 Powersrtting : 1 Freq Level Over Limit Limit Line ReadAntenna Level Cable Loss Preamp Factor A/Pos T/Pos Remark Pol/Phas MHz dBuV/m dB dBuV/m dBuV dB/m dB dB cm deg 1 3210.00 50.86 74.27 33.02 8.30 64.73 100 0 Peak VERTICAL 2 4830.00 45.93 -28.07 74.00 66.86 34.20 10.25 65.38 100 0 Peak VERTICAL

WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11b CH06 2437MHz	
1	Horizontal	Vertical
Peak Avg.	 Site : 03CH05-KS Condition : FCC PART 15C 3m 3117 SN 75957 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : (FR)251806 Mode : 8 Plane : X : Full-directivity IMEI : #2 Powerstting : 6 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 3255.00 58.97 82.31 33.00 8.37 64.71 300 0 Peak HORIZONT 2 4875.00 52.18 -21.82 74.00 73.08 34.23 10.29 65.42 117 118 Peak HORIZONT 3 1 4875.00 50.46 -3.54 54.00 71.36 34.23 10.29 65.42 117 118 Average HORIZONT 4 7305.00 44.83 -29.17 74.00 62.16 35.86 12.72 65.91 300 0 Peak HORIZONT	 Site : 03CH05-KS Condition : FCC PART 15C 3m 3117 SN 75957 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : (FR)251806 Mode : 8 Plane : Z : Full-directivity IMEI : #2 Powerstting : 6 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 3255.00 54.93 78.27 33.00 8.37 64.71 100 0 Peak VERTICAL 2 4875.00 46.39 -27.61 74.00 67.29 34.23 10.29 65.42 100 0 Peak VERTICAL 3 7305.00 44.65 -29.35 74.00 61.98 35.86 12.72 65.91 100 0 Peak VERTICAL

WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11b CH11 2462MHz	
1	Horizontal	Vertical
Peak Avg.	 Site : 03CH05-KS Condition : FCC PART 15C 3m 3117 SN 75957 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : (FR)251806 Mode : 9 Plane : X : Full-directivity IMEI : #2 Powerstting : 12 Freq Level Over Limit Limit Line ReadAntenna Level Factor Cable Loss Factor Preamp Factor A/Pos cm T/Pos deg Remark Pol/Phas MHz dBuV/m dB dBuV/m dBuV dB/m dB dB 1 3285.00 56.34 79.67 32.99 8.39 64.71 300 0 Peak HORIZONT 2 4920.00 52.31 -21.69 74.00 73.16 34.26 10.34 65.45 100 119 Peak HORIZONT 3 1 4920.00 50.45 -3.55 54.00 71.30 34.26 10.34 65.45 100 119 Average HORIZONT 4 7380.00 43.94 -30.06 74.00 61.44 35.88 12.73 66.11 300 0 Peak HORIZONT	 Site : 03CH05-KS Condition : FCC PART 15C 3m 3117 SN 75957 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : (FR)251806 Mode : 9 Plane : X : Full-directivity IMEI : #2 Powerstting : 12 Freq Level Over Limit Limit Line ReadAntenna Level Factor Cable Loss Factor Preamp Factor A/Pos cm T/Pos deg Remark Pol/Phas MHz dBuV/m dB dBuV/m dBuV dB/m dB dB 1 3285.00 52.23 75.56 32.99 8.39 64.71 100 0 Peak VERTICAL 2 4920.00 47.92 -26.08 74.00 68.77 34.26 10.34 65.45 100 0 Peak VERTICAL 3 7380.00 43.31 -30.69 74.00 60.81 35.88 12.73 66.11 100 0 Peak VERTICAL

Emission below 1GHz

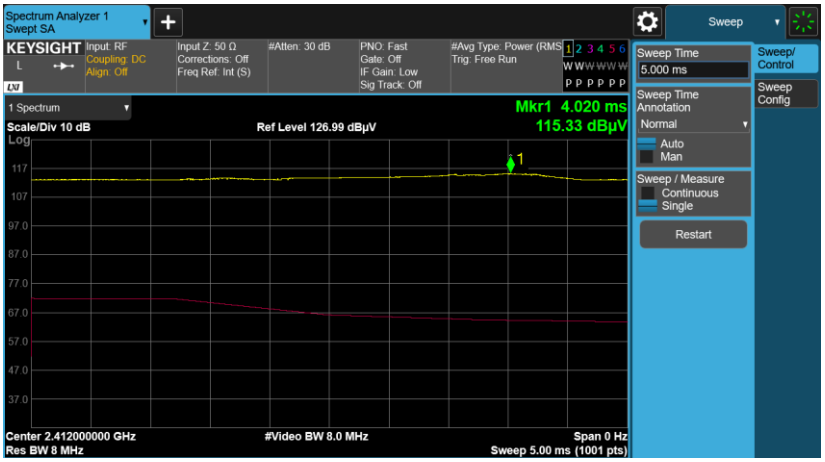
2.4GHz WIFI 802.11g (LF)

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

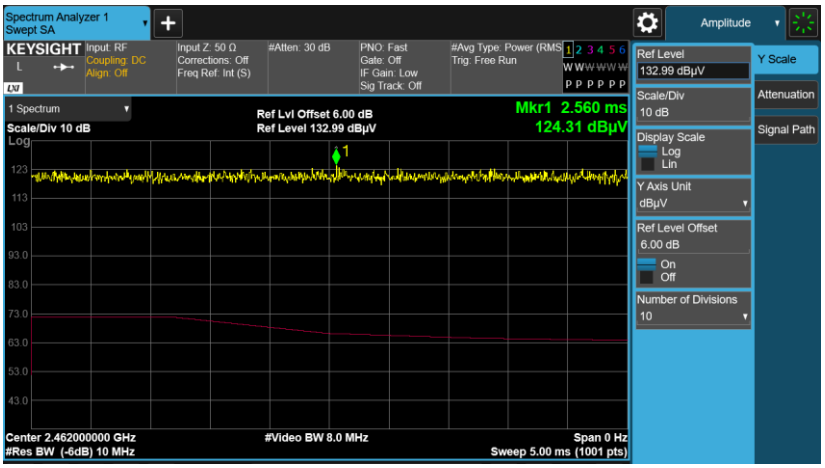
Appendix E. Duty Cycle Plots

Band	Duty Cycle(%)	T(ms)	1/T(kHz)	VBW Setting
802.11b	100	-	-	10Hz
802.11g	100	-	-	10Hz
802.11n HT20	100	-	-	10Hz

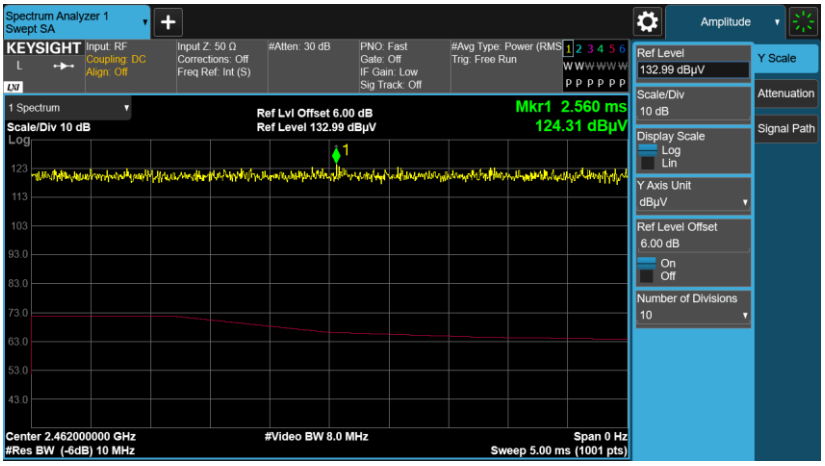
802.11b



802.11g



802.11n HT20


Spectrum Analyzer 1
Swept SA
KEYSIGHT
Input: RF
Coupling: DC
Align: Off
Input Z: 50 Ω
Corrections: Off
Freq Ref: Int (S)
#Atten: 30 dB
PNO: Fast
Gate: Off
IF Gain: Low
Sig Track: Off
#Avg Type: Power (RMS)
Trig: Free Run
1 Spectrum
Scale/Div 10 dB
Ref Lvl Offset 6.00 dB
Ref Level 132.99 dBµV
Mkr1 2.560 ms
124.31 dBµV
Log
123
113
103
93.0
83.0
73.0
63.0
53.0
43.0
Center 2.462000000 GHz
#Res BW (-6dB) 10 MHz
#Video BW 8.0 MHz
Span 0 Hz
Sweep 5.00 ms (1001 pts)
Amplitude
Ref Level
132.99 dBµV
Scale/Div
10 dB
Display Scale
Log
Lin
Y Axis Unit
dBµV
Ref Level Offset
6.00 dB
On
Off
Number of Divisions
10
Y Scale
Attenuation
Signal Path