Appendix C. Radiated Spurious Emission

Test Engineer :	Henry Li	Temperature :	22~23°C
		Relative Humidity :	41~42%

Note: All modes had been tested and only the worst channel test data of each bandwidth shown in the report

U-NII 5 - 5925-6425MHzMHz

WIFI 802.11ax HE20 Partial 106 (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+2		(MHz)	(dBµV/m)	(dB)	(dBµV/m)	(dBµV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11ax HE20 Partial 106/53 CH 02 5935MHz		5924.54	67.74	-20.56	88.3	58.01	35.14	11.4	36.81	105	116	P	H
		5924.96	64.75	-3.55	68.3	55.02	35.14	11.4	36.81	105	116	A	H
		5932	82.51	-	-	72.76	35.14	11.42	36.81	105	116	P	H
		5923	76.73	-	-	67	35.14	11.4	36.81	105	116	A	H
		5924.96	67.27	-21.03	88.3	57.54	35.14	11.4	36.81	299	107	P	V
		5924.96	60.72	-7.58	68.3	50.99	35.14	11.4	36.81	299	107	A	V
		5923	77.32	-	-	67.59	35.14	11.4	36.81	299	107	P	V
		5923	71.9	-	-	62.17	35.14	11.4	36.81	299	107	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

U-NII 5 5925~6425MHz

WIFI 802.11ax HE40 Full (Band Edge @ 3m)

WIFI Ant. 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 HE40 Full CH 03 5965MHz		5916.56	63.29	-25.01	88.3	53.57	35.11	11.4	36.79	108	117	P	H
		5918.1	51.95	-16.35	68.3	42.23	35.11	11.4	36.79	108	117	A	H
	*	5977	104.93	-	-	95.11	35.23	11.45	36.86	108	117	P	H
		5959	99.6	-	-	89.81	35.2	11.43	36.84	108	117	A	H
		5917.12	60.28	-28.02	88.3	50.56	35.11	11.4	36.79	301	92	P	V
		5924.96	48.47	-19.83	68.3	38.74	35.14	11.4	36.81	301	92	A	V
	*	5950	103.84	-	-	94.07	35.17	11.43	36.83	301	92	P	V
		5950	97.51	-	-	87.74	35.17	11.43	36.83	301	92	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

U-NII 5 5925~6425MHz

WIFI 802.11ax HE40 Full (Harmonic @ 3m)

WIFI Ant. 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 HE40 Full CH 03 5965MHz		11928	42.82	-31.18	74	53.63	38.65	16.63	66.09	300	0	P	H
		11928	43.21	-30.79	74	54.02	38.65	16.63	66.09	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

U-NII 5 5925~6425MHz

WIFI 802.11ax HE80 Full (Band Edge @ 3m)

WIFI Ant. 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 HE80 Full CH 07 5985MHz		5916.04	65.63	-22.67	88.3	55.91	35.11	11.4	36.79	104	115	P	H
		5915.4	54.97	-13.33	68.3	45.25	35.11	11.4	36.79	104	115	A	H
	*	5959	102.15	-	-	92.36	35.2	11.43	36.84	104	115	P	H
		5959	96.38	-	-	86.59	35.2	11.43	36.84	104	115	A	H
		5914.76	63.07	-25.23	88.3	53.35	35.11	11.4	36.79	301	87	P	V
		5912.84	52	-16.3	68.3	42.28	35.11	11.4	36.79	301	87	A	V
	*	5950	100.52	-	-	90.75	35.17	11.43	36.83	301	87	P	V
		5950	93.95	-	-	84.18	35.17	11.43	36.83	301	87	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

U-NII 5 5925~6425MHz

WIFI 802.11ax HE80 Full (Harmonic @ 3m)

WIFI Ant. 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 HE80 Full CH 07 5985MHz		11968	42.81	-31.19	74	53.54	38.67	16.66	66.06	300	0	P	H
		11968	43.41	-30.59	74	54.14	38.67	16.66	66.06	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

U-NII 5 5925~6425MHz

WIFI 802.11ax HE160 Full (Band Edge @ 3m)

WIFI Ant. 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 HE160 Full CH 15 6025MHz		5914.6	64.32	-23.98	88.3	54.6	35.11	11.4	36.79	106	114	P	H
		5917.48	55.61	-12.69	68.3	45.89	35.11	11.4	36.79	106	114	A	H
	*	5950	101.43	-	-	91.66	35.17	11.43	36.83	106	114	P	H
		5950	93.83	-	-	84.06	35.17	11.43	36.83	106	114	A	H
		5909.48	61.6	-26.7	88.3	51.9	35.11	11.38	36.79	300	87	P	V
		5914.92	52.46	-15.84	68.3	42.74	35.11	11.4	36.79	300	87	A	V
	*	5950	97.55	-	-	87.78	35.17	11.43	36.83	300	87	P	V
		5950	91.13	-	-	81.36	35.17	11.43	36.83	300	87	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

U-NII 5 5925~6425MHz

WIFI 802.11ax HE160 Full (Harmonic @ 3m)

WIFI Ant. 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 HE160 Full CH 15 6025MHz		12048	42.88	-31.12	74	53.47	38.72	16.7	66.01	300	0	P	H
		12048	43.44	-30.56	74	54.03	38.72	16.7	66.01	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

U-NII 8 - 6875-7125MHzMHz

WIFI 802.11a (Band Edge @ 3m)

WIFI Ant. 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)
802.11a CH 233 7115MHz		7125.16	73.01	-15.29	88.3	61.79	35.72	12.61	37.11	100	242	P	H
		7125	65.03	-3.27	68.3	53.81	35.72	12.61	37.11	100	242	A	H
	*	7111	94.81	-	-	83.59	35.72	12.61	37.11	100	242	P	H
		7111	89.54	-	-	78.32	35.72	12.61	37.11	100	242	A	H
		7125.16	73.76	-14.54	88.3	62.54	35.72	12.61	37.11	100	18	P	V
		7125	61.29	-7.01	68.3	50.07	35.72	12.61	37.11	100	18	A	V
	*	7111	92.59	-	-	81.37	35.72	12.61	37.11	100	18	P	V
		7111	87.8	-	-	76.58	35.72	12.61	37.11	100	18	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

U-NII 8 6875~7125MHz

WIFI 802.11a (Harmonic @ 3m)

WIFI Ant. 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)
802.11a CH 233 7115MHz		14232	43.57	-44.73	88.3	51.48	38.82	18.19	64.92	300	0	P	H
		14232	46.12	-42.18	88.3	54.03	38.82	18.19	64.92	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

U-NII 8 - 6875-7125MHzMHz
WIFI 802.11ax HE20 Full (Band Edge @ 3m)

WIFI Ant. 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 233 7115MHz		7125.16	70.75	-17.55	88.3	59.53	35.72	12.61	37.11	110	243	P	H
		7125	64.32	-3.98	68.3	53.1	35.72	12.61	37.11	110	243	A	H
	*	7111	83.19	-	-	71.97	35.72	12.61	37.11	110	243	P	H
		7111	76.64	-	-	65.42	35.72	12.61	37.11	110	243	A	H
		7125	71.3	-17	88.3	60.08	35.72	12.61	37.11	100	8	P	V
		7125	65.1	-3.2	68.3	53.88	35.72	12.61	37.11	100	8	A	V
	*	7120	81.65	-	-	70.43	35.72	12.61	37.11	100	8	P	V
		7120	75.67	-	-	64.45	35.72	12.61	37.11	100	8	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

U-NII 8 6875~7125MHz
WIFI 802.11ax HE20 Full (Harmonic @ 3m)

WIFI Ant. 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 233 7115MHz		14232	43.07	-45.23	88.3	50.98	38.82	18.19	64.92	300	0	P	H
		14232	43.93	-44.37	88.3	51.84	38.82	18.19	64.92	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Emission below 1GHz

WIFI 802.11ax HE20 Full (LF @ 3m)

WIFI Ant.	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
1+2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11ax HE20 Full LF		40.67	29.12	-10.88	40	42.45	18.66	0.96	32.95	-	-	P	H
		79.47	25.03	-14.97	40	43.31	13.15	1.34	32.77	-	-	P	H
		127.97	20.77	-22.73	43.5	35.19	16.7	1.72	32.84	-	-	P	H
		345.25	26.18	-19.82	46	35.95	20.32	2.83	32.92	-	-	P	H
		421.88	25.38	-20.62	46	33.13	22.05	3.13	32.93	-	-	P	H
		795.33	27.67	-18.33	46	29.88	26.22	4.31	32.74	-	-	P	H
		40.67	34	-6	40	47.33	18.66	0.96	32.95	-	-	P	V
		77.53	25.35	-14.65	40	43.83	12.97	1.33	32.78	-	-	P	V
		132.82	26.25	-17.25	43.5	40.7	16.64	1.75	32.84	-	-	P	V
		267.65	24.84	-21.16	46	36.39	18.74	2.5	32.79	-	-	P	V
		579.99	22.34	-23.66	46	26.74	25.01	3.68	33.09	-	-	P	V
		799.21	26.49	-19.51	46	28.66	26.25	4.32	32.74	-	-	P	V
Remark	1. No other spurious found. 2. All results are PASS against limit line.												

Co-location

WIFI 6E 802.11ax HE20 Full + BLE(2M)_CH39 + LTE Band 48 BW20M

2.4GHz 2400~2483.5MHz

BLE(2M) (Band Edge @ 3m)

BLE Ant.	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
1+2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
BLE CH 39 2480MHz		2483.5	63.73	-10.27	74	61.16	32.34	7.25	37.02	142	304	P	H
		2483.56	48.47	-5.53	54	45.9	32.34	7.25	37.02	142	304	A	H
		2480	106.81	-	-	104.24	32.34	7.25	37.02	142	304	P	H
		2480	105.04	-	-	102.47	32.34	7.25	37.02	142	304	A	H
		2483.5	62.74	-11.26	74	60.17	32.34	7.25	37.02	296	23	P	V
		2483.5	47.47	-6.53	54	44.9	32.34	7.25	37.02	296	23	A	V
		2480	105.1	-	-	102.53	32.34	7.25	37.02	296	23	P	V
		2480	103.21	-	-	100.64	32.34	7.25	37.02	296	23	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

2.4GHz 2400~2483.5MHz

BLE(2M) (Harmonic @ 3m)

BLE Ant.	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
1+2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
BLE CH 39 2480MHz		4965	40.28	-33.72	74	61.19	34	10.41	65.32	100	0	P	H
		7440	40.12	-33.88	74	58.68	35.79	12.79	67.14	100	0	P	H
		4965	39.49	-34.51	74	60.4	34	10.41	65.32	100	360	P	V
		7440	41.13	-32.87	74	59.69	35.79	12.79	67.14	100	360	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

U-NII 8 - 6875-7125MHzMHz

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

WIFI Ant. 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 233 7115MHz		7125	71.01	-17.29	88.3	60.54	35.72	12.61	37.86	101	286	P	H
		7125	64.2	-4.1	68.3	53.73	35.72	12.61	37.86	101	286	A	H
	*	7111	84.68	-	-	74.22	35.72	12.61	37.87	101	286	P	H
	*	7111	74.38	-	-	63.92	35.72	12.61	37.87	101	286	A	H
		7125	69.65	-18.65	88.3	59.18	35.72	12.61	37.86	100	344	P	V
		7125	62.18	-6.12	68.3	51.71	35.72	12.61	37.86	100	344	A	V
	*	7111	80.93	-	-	70.47	35.72	12.61	37.87	100	344	P	V
	*	7111	73.56	-	-	63.1	35.72	12.61	37.87	100	344	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

U-NII 8 6875~7125MHz

WIFI 802.11ax HE20 Full (Harmonic @ 3m)

WIFI Ant. 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 233 7115MHz		14232	43.75	-44.55	88.3	51.71	38.82	18.19	64.97	300	0	P	H
		14232	43.33	-44.97	88.3	51.29	38.82	18.19	64.97	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

WIFI 6E 802.11ax HE20 Full + WIFI 2.4G 11b CH06 + LTE Band 48 BW20M

2.4GHz 2400~2483.5MHz

WIFI 2.4G 11b (Band Edge @ 3m)

WIFI Ant. MIMO	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 06 2437MHz		2389.95	48.27	-25.73	74	45.28	32.4	7.1	36.51	105	42	P	H
		2389.95	37.84	-16.16	54	34.85	32.4	7.1	36.51	105	42	A	H
		2498.2	48.28	-25.72	74	45.8	32.33	7.28	37.13	105	42	P	H
		2483.98	37.76	-16.24	54	35.19	32.34	7.25	37.02	105	42	A	H
	*	2436	108.69	-	-	105.84	32.38	7.19	36.72	105	42	P	H
	*	2436	106.11	-	-	103.26	32.38	7.19	36.72	105	42	A	H
		2353.55	48.19	-25.81	74	45.51	32.22	7.04	36.58	346	69	P	V
		2389.95	37.51	-16.49	54	34.52	32.4	7.1	36.51	346	69	A	V
		2494.9	47.41	-26.59	74	44.93	32.33	7.28	37.13	346	69	P	V
		2499.82	36.68	-17.32	54	34.2	32.33	7.28	37.13	346	69	A	V
	*	2436	106.72	-	-	103.87	32.38	7.19	36.72	346	69	P	V
	*	2436	104.05	-	-	101.2	32.38	7.19	36.72	346	69	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 2.4G 11b (Harmonic @ 3m)

WIFI Ant. MIMO	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 06 2437MHz		4875	42.12	-31.88	74	63.11	34	10.29	65.28	300	0	P	H
		7305	48.41	-25.59	74	66.61	35.76	12.72	66.68	300	0	P	H
		4875	42.12	-31.88	74	63.11	34	10.29	65.28	100	0	P	V
		7305	52.06	-21.94	74	70.26	35.76	12.72	66.68	158	47	P	V
		7305	49.49	-4.51	54	67.69	35.76	12.72	66.68	158	47	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

U-NII 8 - 6875-7125MHzMHz

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

WIFI Ant. 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 233 7115MHz		7125.16	58.4	-29.9	88.3	47.93	35.72	12.61	37.86	100	218	P	H
		7125	50.01	-18.29	68.3	39.54	35.72	12.61	37.86	100	218	A	H
	*	7111	79.14	-	-	68.68	35.72	12.61	37.87	100	218	P	H
	*	7111	70.97	-	-	60.51	35.72	12.61	37.87	100	218	A	H
		7125.16	69.63	-18.67	88.3	59.16	35.72	12.61	37.86	100	15	P	V
		7125	63.34	-4.96	68.3	52.87	35.72	12.61	37.86	100	15	A	V
	*	7120	79.78	-	-	69.31	35.72	12.61	37.86	100	15	P	V
	*	7120	73.47	-	-	63	35.72	12.61	37.86	100	15	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

U-NII 8 6875~7125MHz

WIFI 802.11ax HE20 Full (Harmonic @ 3m)

WIFI Ant. 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 233 7115MHz		14232	41.3	-47	88.3	49.26	38.82	18.19	64.97	300	0	P	H
		14232	40.79	-47.51	88.3	48.75	38.82	18.19	64.97	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.	
5+7		(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”.

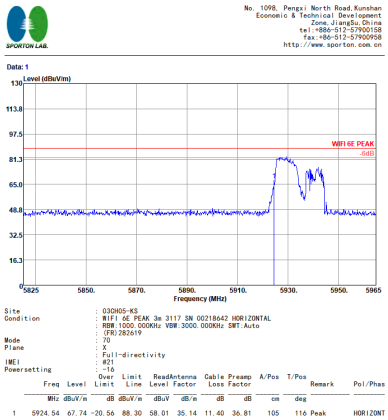
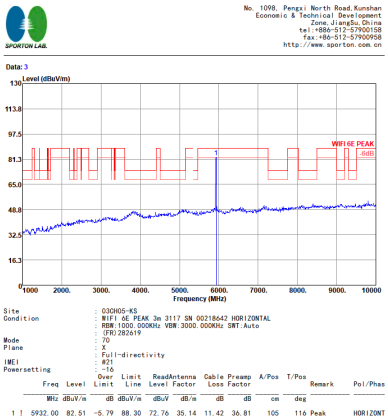
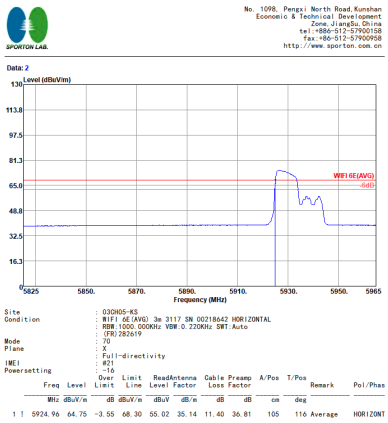
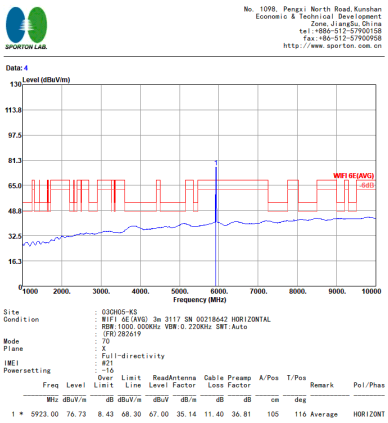
Appendix D. Radiated Spurious Emission

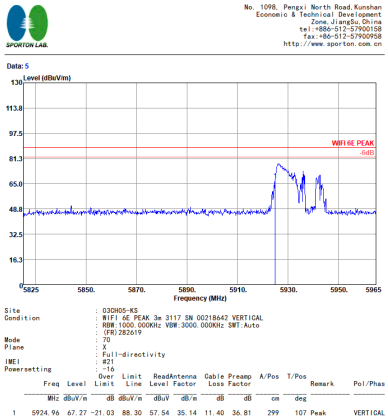
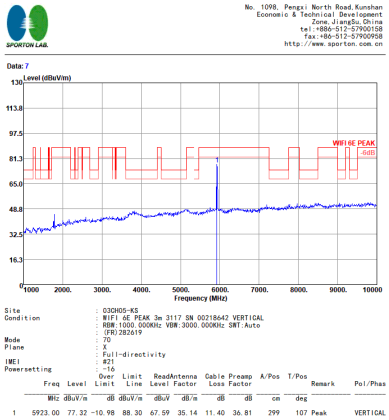
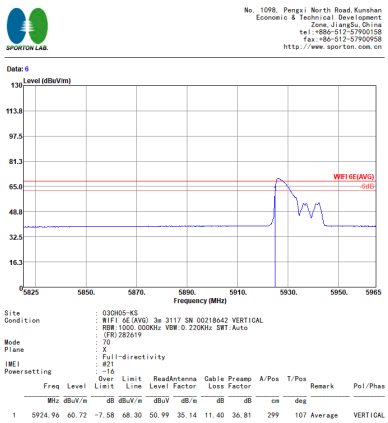
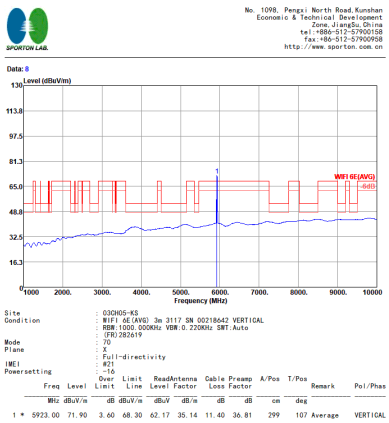
Note symbol

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

U-NII 5 - 5925-6425MHzMHz

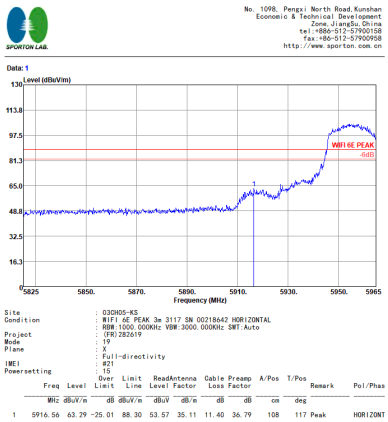
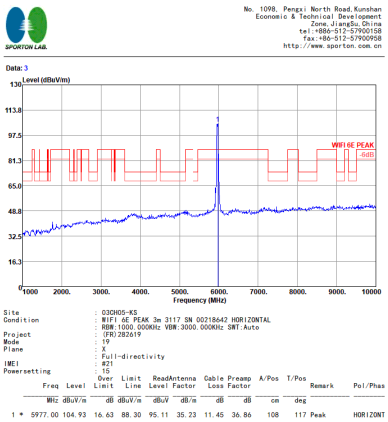
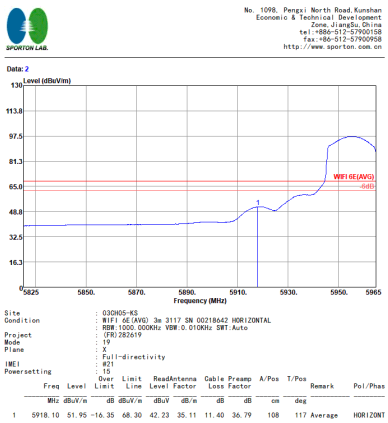
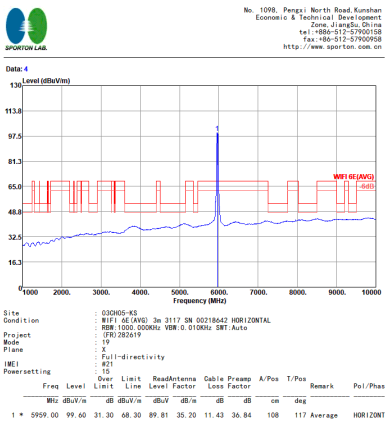
WIFI 802.11ax HE20 Partial 106 (Band Edge @ 3m)

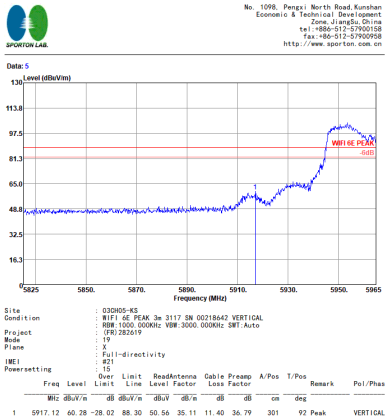
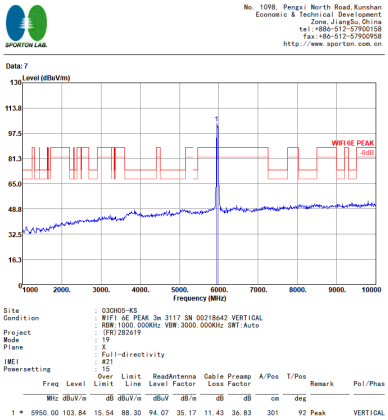
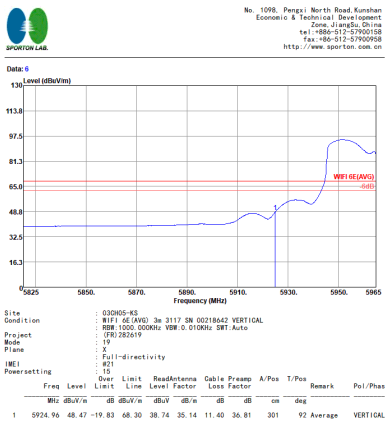
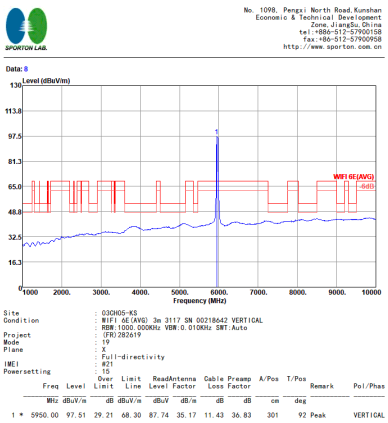
WIFI	U-NII 5 - 5925-6425MHz Band Edge @ 3m	
ANT	802.11ax HE20 Partial 106/53 CH02 5935MHz	
1+2	Horizontal	Fundamental
Peak		
Avg.		

WIFI	U-NII 5 - 5925-6425MHz Band Edge @ 3m	
ANT	802.11ax HE20 Partial 106/53 CH02 5935MHz	
1+2	Vertical	Fundamental
Peak		
Avg.		

U-NII 5 - 5925-6425MHzMHz

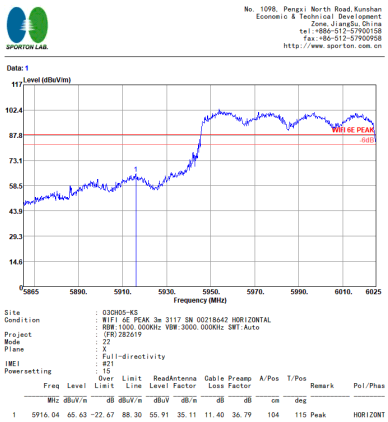
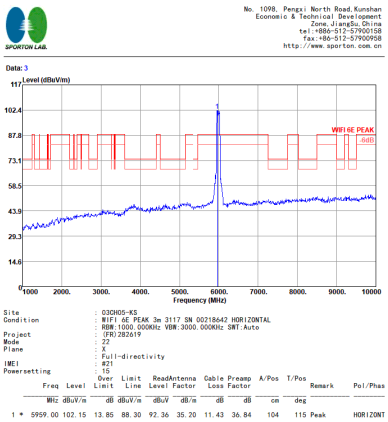
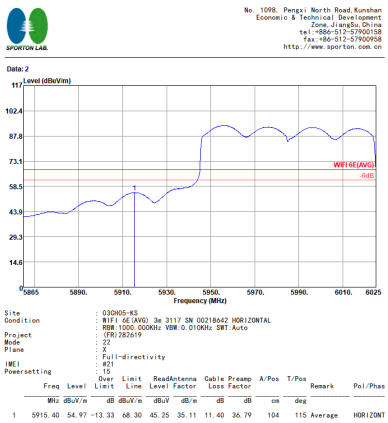
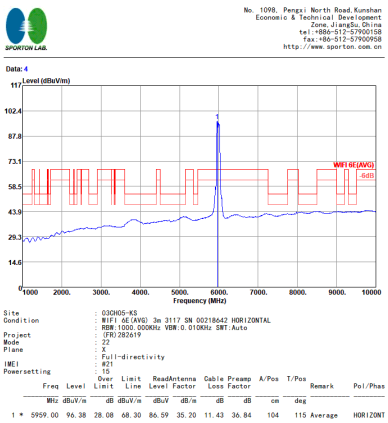
WIFI 802.11ax HE40 Full (Band Edge @ 3m)

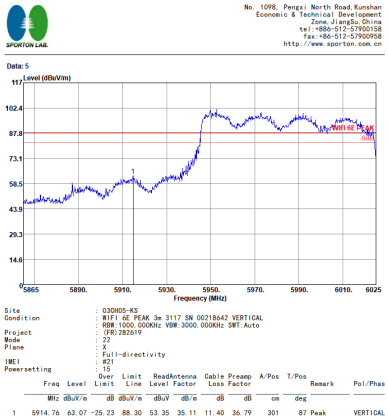
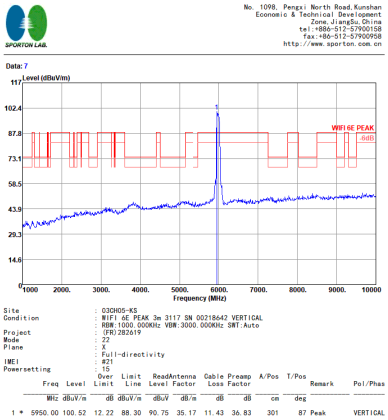
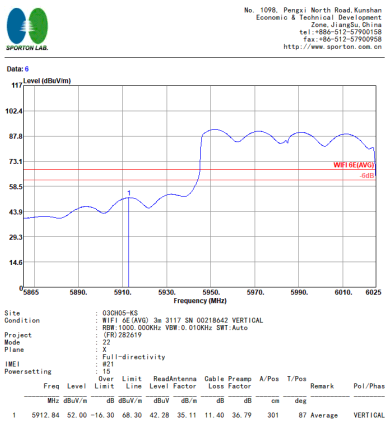
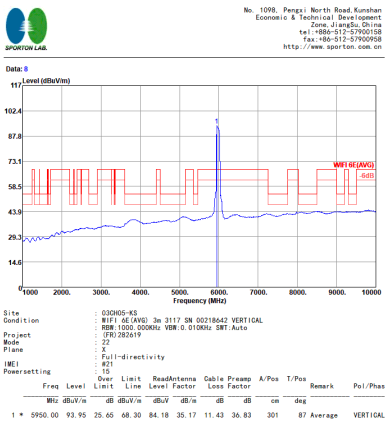
WIFI	U-NII 5 - 5925-6425MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full CH03 5965MHz	
1+2	Horizontal	Fundamental
Peak		
Avg.		

WIFI	U-NII 5 - 5925-6425MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full H03 5965MHz	
1+2	Vertical	Fundamental
Peak		
Avg.		

U-NII 5 - 5925-6425MHzMHz

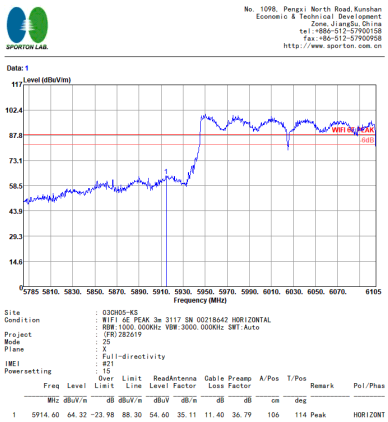
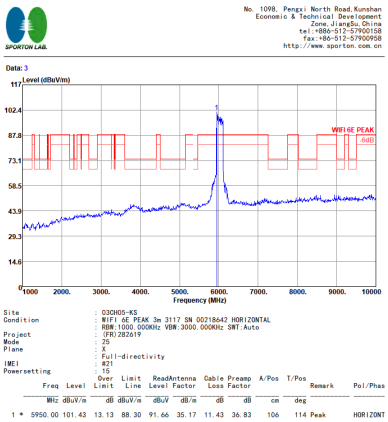
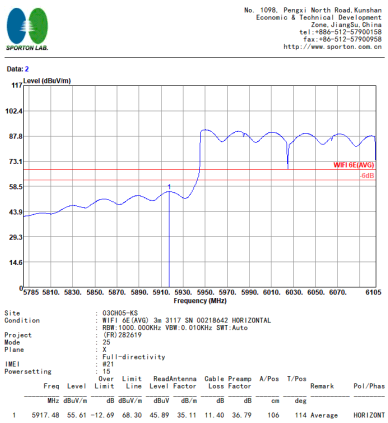
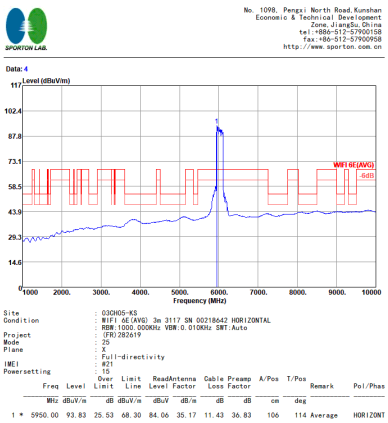
WIFI 802.11ax HE80 Full (Band Edge @ 3m)

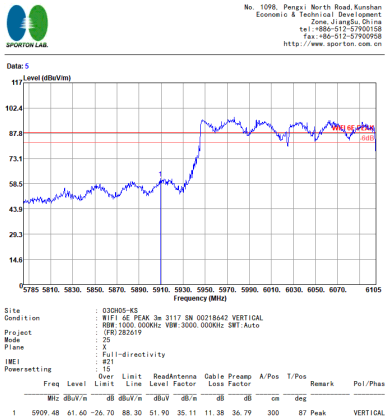
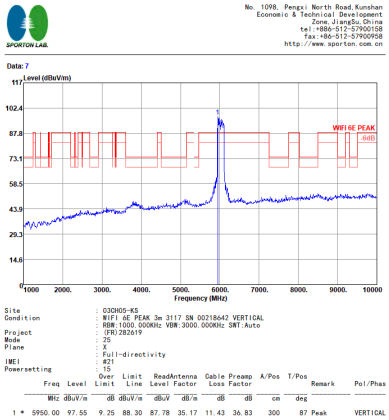
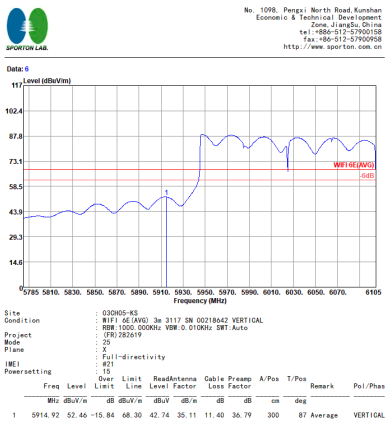
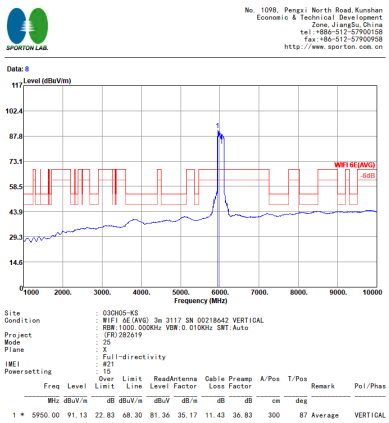
WIFI	U-NII 5 - 5925-6425MHz Band Edge @ 3m	
ANT	802.11ax HE80 Full CH07 5985MHz	
1+2	Horizontal	Fundamental
Peak		
Avg.		

WIFI	U-NII 5 - 5925-6425MHz Band Edge @ 3m	
ANT	802.11ax HE80 Full CH07 5985MHz	
1+2	Vertical	Fundamental
Peak		
Avg.		

U-NII 5 - 5925-6425MHzMHz

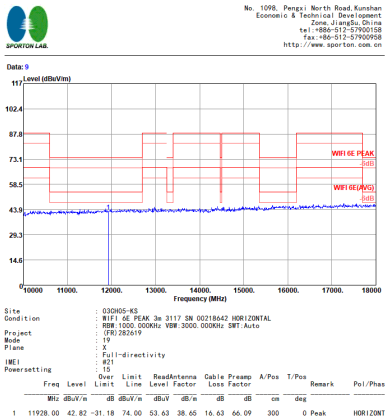
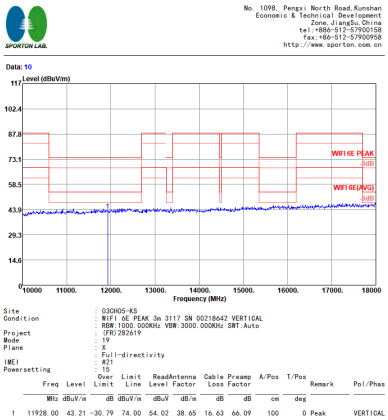
WIFI 802.11ax HE160 Full (Band Edge @ 3m)

WIFI	U-NII 5 - 5925-6425MHz Band Edge @ 3m	
ANT	802.11ax HE160 Full CH15 6025MHz	
1+2	Horizontal	Fundamental
Peak		
Avg.		

WIFI	U-NII 5 - 5925-6425MHz Band Edge @ 3m	
ANT	802.11ax HE160 Full CH15 6025MHz	
1+2	Vertical	Fundamental
Peak		
Avg.		

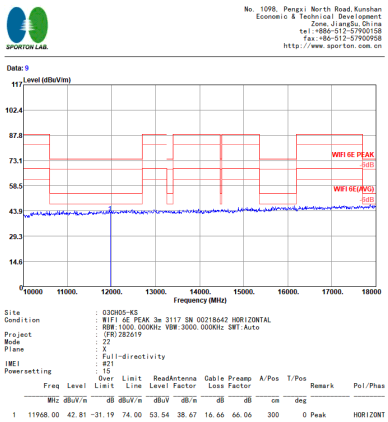
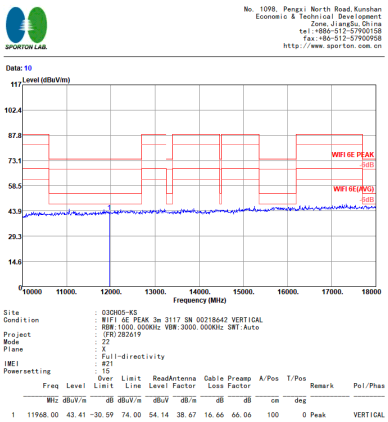
U-NII 5 - 5925-6425MHzMHz

WIFI 802.11ax HE40 Full (Harmonic @ 3m)

WIFI	U-NII 5 - 5925-6425MHzMHz Harmonic @ 3m	
ANT	802.11ax HE40 Full CH03 5965MHz	
1+2	Horizontal	Vertical
Peak Avg.			

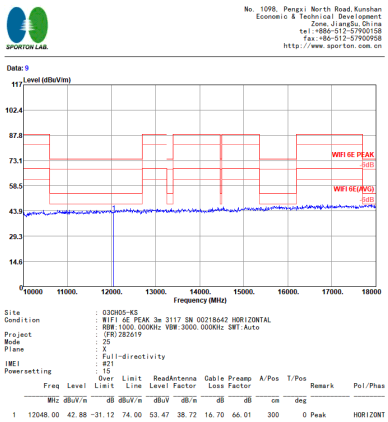
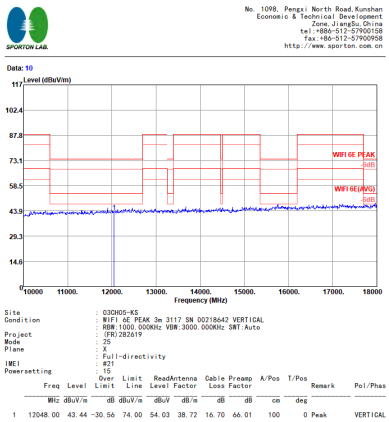
U-NII 5 - 5925-6425MHzMHz

WIFI 802.11ax HE80 Full (Harmonic @ 3m)

WIFI	U-NII 5 - 5925-6425MHzMHz Harmonic @ 3m	
ANT	802.11ax HE80 Full CH07 5985MHz	
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) 117 102.4 87.8 73.1 58.5 43.9 29.3 14.6 0 10000 11000. 12000. 13000. 14000. 15000. 16000. 17000. 18000 Frequency (MHz) WIFI 6E PEAK -5dB WIFI 6E(AVG) -5dB Site : 03CH05-KS Condition : WIFI 6E PEAK 3m 3117 SN 00218642 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : (FR)282619 Mode : 22 Plane : X : Full-directivity IMEI : #21 Powersetting : 15 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 dB/m dB dB cm deg 1 11968.00 42.81 -31.19 74.00 53.54 38.67 16.66 66.06 300 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) 117 102.4 87.8 73.1 58.5 43.9 29.3 14.6 0 10000 11000. 12000. 13000. 14000. 15000. 16000. 17000. 18000 Frequency (MHz) WIFI 6E PEAK -5dB WIFI 6E(AVG) -5dB Site : 03CH05-KS Condition : WIFI 6E PEAK 3m 3117 SN 00218642 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : (FR)282619 Mode : 22 Plane : X : Full-directivity IMEI : #21 Powersetting : 15 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 dB/m dB dB cm deg 1 11968.00 43.41 -30.59 74.00 54.14 38.67 16.66 66.06 100 0 Peak VERTICAL

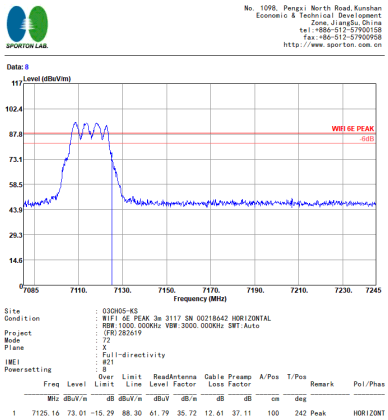
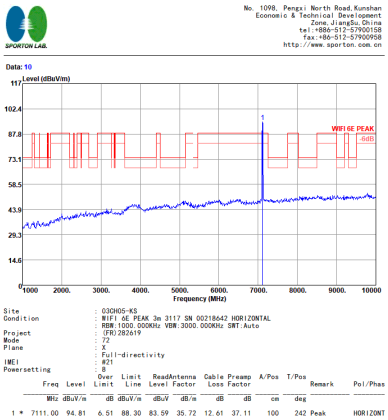
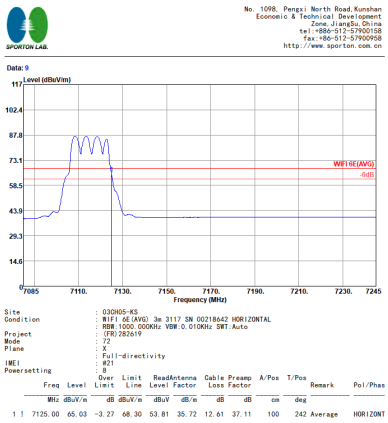
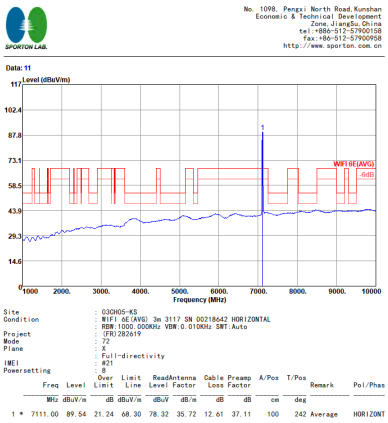
U-NII 5 - 5925-6425MHzMHz

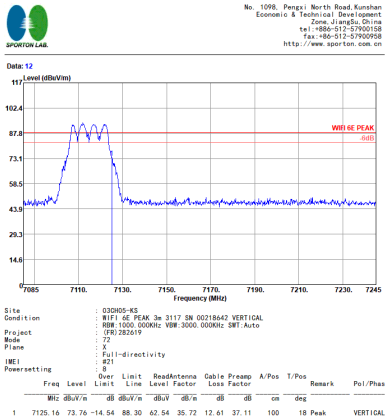
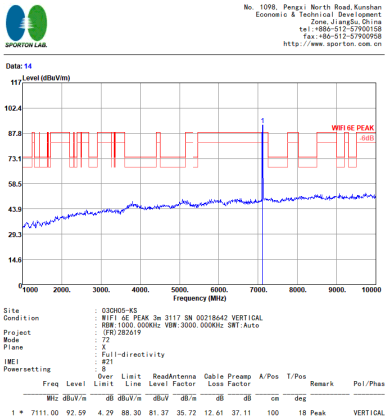
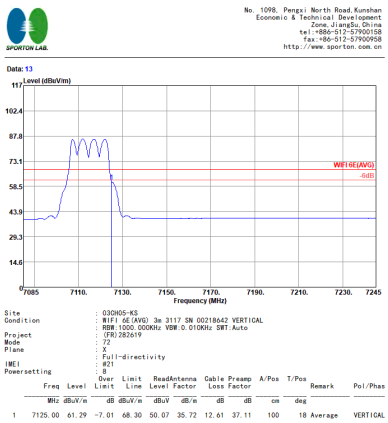
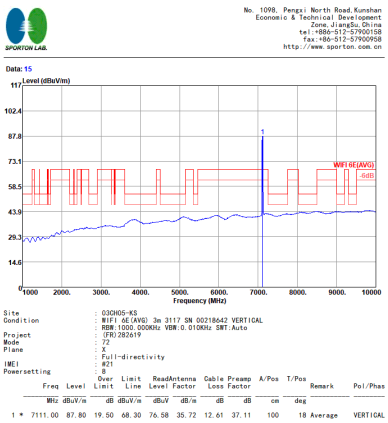
WIFI 802.11ax HE160 Full (Harmonic @ 3m)

WIFI	U-NII 5 - 5925-6425MHzMHz Harmonic @ 3m	
ANT	802.11ax HE160 Full CH15 6025MHz	
1+2	Horizontal	Vertical
Peak Avg.		

U-NII 8 - 6875-7125MHzMHz

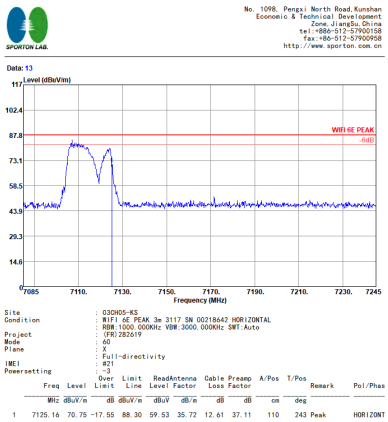
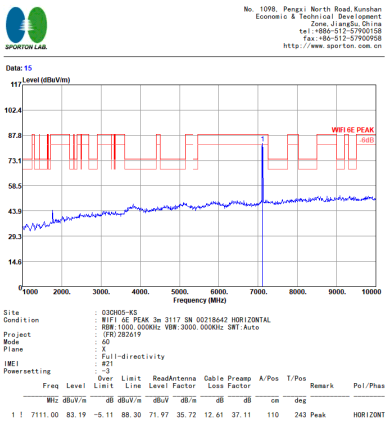
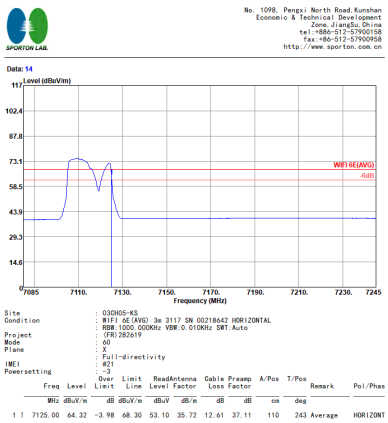
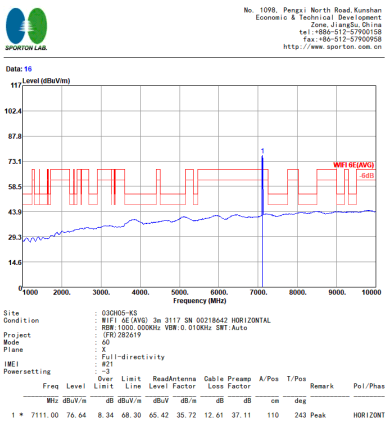
WIFI 802.11a (Band Edge @ 3m)

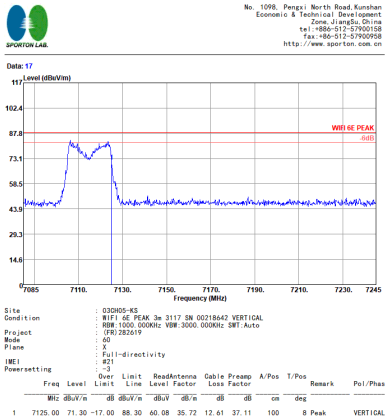
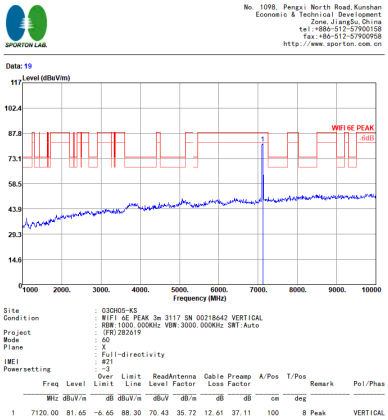
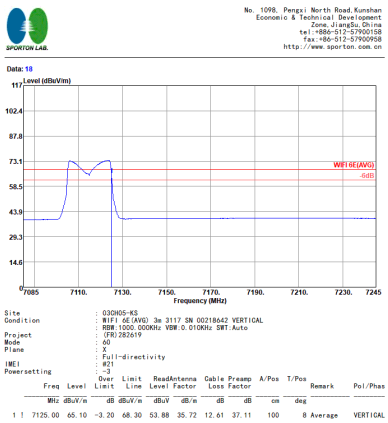
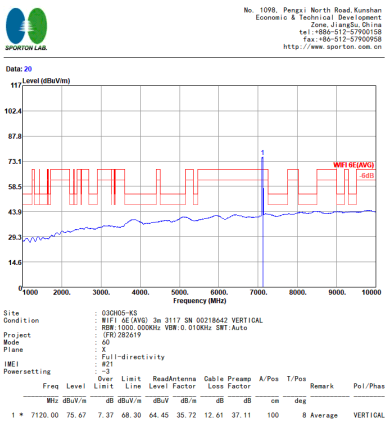
WIFI	U-NII 8 - 6875-7125MHz Band Edge @ 3m	
ANT	802.11a CH233 7115MHz	
1+2	Horizontal	Fundamental
Peak		
Avg.		

WIFI	U-NII 8 - 6875-7125MHz Band Edge @ 3m	
ANT	802.11a CH233 7115MHz	
1+2	Vertical	Fundamental
Peak		
Avg.		

U-NII 8 - 6875-7125MHzMHz

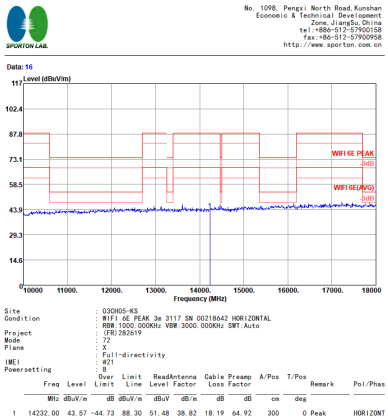
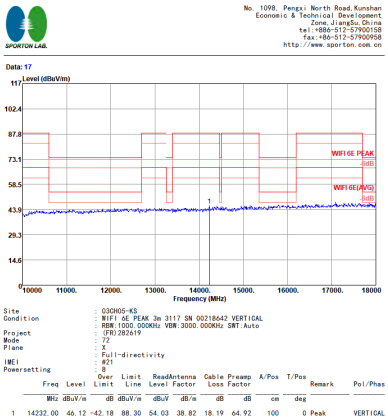
WIFI 802.11ax HE20 Full (Band Edge @ 3m)

WIFI	U-NII 8 - 6875-7125MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH233 7115MHz	
1+2	Horizontal	Fundamental
Peak		
Avg.		

WIFI	U-NII 8 - 6875-7125MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH233 7115MHz	
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: 17 Level (dBuV/m) WIFI 6E PEAK -6dB Frequency (MHz) Site : 03CH05-KS Condition : WIFI 6E PEAK_3m 3117 SN 00218642 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : (FR)282619 Mode : 60 Plane : X : Full-directivity IMEI : #21 Powersetting : -3 Freq Level Over Limit Limit Line ReadAntenna Level Factor Cable Preamp Loss Factor A/Pos T/Pos Remark Pol/Phas MHz dBuV/m dB dBuV/m dBuV dB/m dB dB cm deg 1 7125.00 71.30 -17.00 88.30 60.08 35.72 12.61 37.11 100 8 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: 19 Level (dBuV/m) WIFI 6E PEAK -6dB Frequency (MHz) Site : 03CH05-KS Condition : WIFI 6E PEAK_3m 3117 SN 00218642 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : (FR)282619 Mode : 60 Plane : X : Full-directivity IMEI : #21 Powersetting : -3 Freq Level Over Limit Limit Line ReadAntenna Level Factor Cable Preamp Loss Factor A/Pos T/Pos Remark Pol/Phas MHz dBuV/m dB dBuV/m dBuV dB/m dB dB cm deg 1 7120.00 81.65 -6.65 88.30 70.43 35.72 12.61 37.11 100 8 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: 18 Level (dBuV/m) WIFI 6E(AVG) -6dB Frequency (MHz) Site : 03CH05-KS Condition : WIFI 6E(AVG) 3m 3117 SN 00218642 VERTICAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Project : (FR)282619 Mode : 60 Plane : X : Full-directivity IMEI : #21 Powersetting : -3 Freq Level Over Limit Limit Line ReadAntenna Level Factor Cable Preamp Loss Factor A/Pos T/Pos Remark Pol/Phas MHz dBuV/m dB dBuV/m dBuV dB/m dB dB cm deg 1 ! 7125.00 65.10 -3.20 68.30 53.88 35.72 12.61 37.11 100 8 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: 20 Level (dBuV/m) WIFI 6E(AVG) -6dB Frequency (MHz) Site : 03CH05-KS Condition : WIFI 6E(AVG) 3m 3117 SN 00218642 VERTICAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Project : (FR)282619 Mode : 60 Plane : X : Full-directivity IMEI : #21 Powersetting : -3 Freq Level Over Limit Limit Line ReadAntenna Level Factor Cable Preamp Loss Factor A/Pos T/Pos Remark Pol/Phas MHz dBuV/m dB dBuV/m dBuV dB/m dB dB cm deg 1 * 7120.00 75.67 7.37 68.30 64.45 35.72 12.61 37.11 100 8 Average VERTICAL

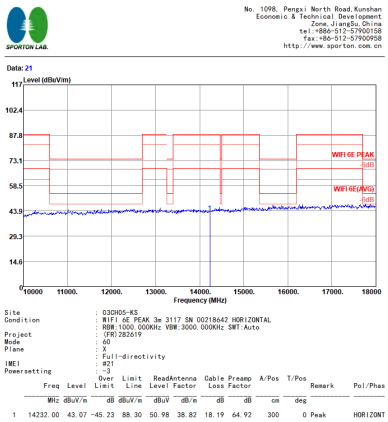
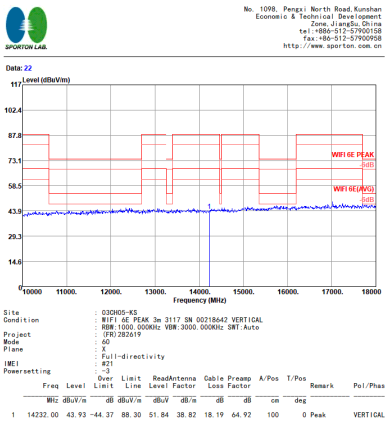
U-NII 8 - 6875-7125MHzMHz

WIFI 802.11a (Harmonic @ 3m)

WIFI	U-NII 8 - 6875-7125MHz Harmonic @ 3m	
ANT	802.11a CH233 7115MHz	
1+2	Horizontal	Vertical
Peak Avg.		

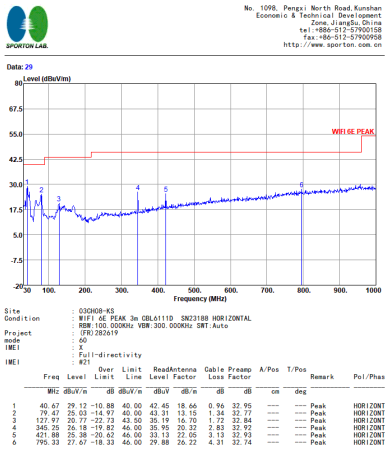
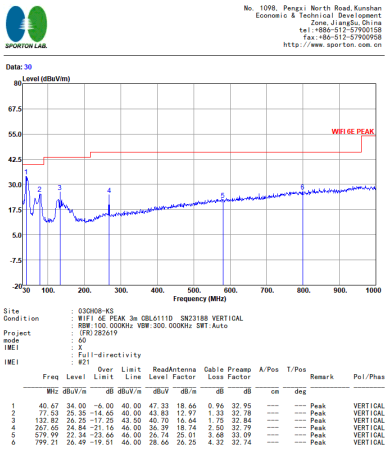
U-NII 8 - 6875-7125MHz

WIFI 802.11ax HE20 Full (Harmonic @ 3m)

WIFI	U-NII 8 - 6875-7125MHz Harmonic @ 3m	
ANT	802.11ax HE20 Full CH233 7115MHz	
1+2	Horizontal	Vertical
Peak Avg.		

Emission below 1GHz

5GHz WIFI 802.11ax HE20 Full (LF)

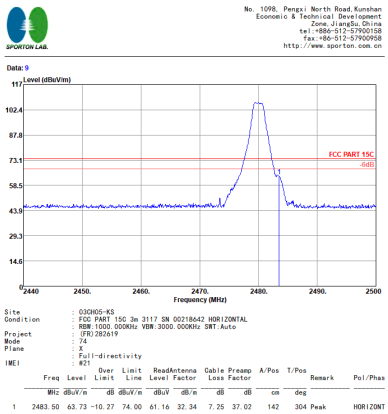
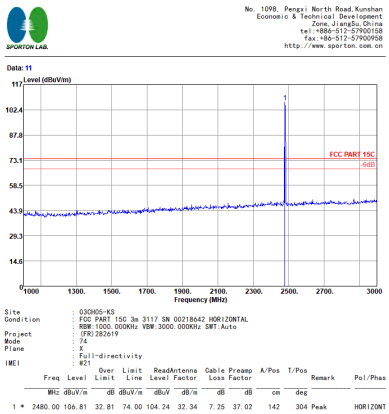
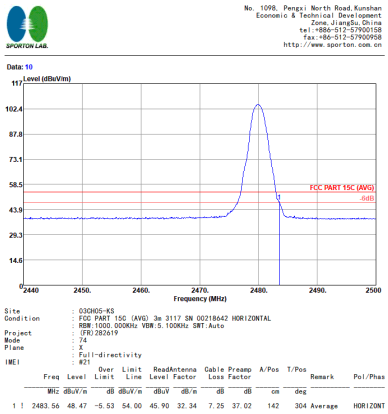
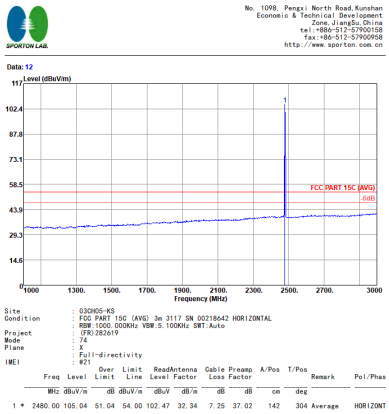
WIFI	5GHz WIFI	
ANT	802.11ax HE20 Full LF	
1+2	Horizontal	Vertical
QP / Peak			

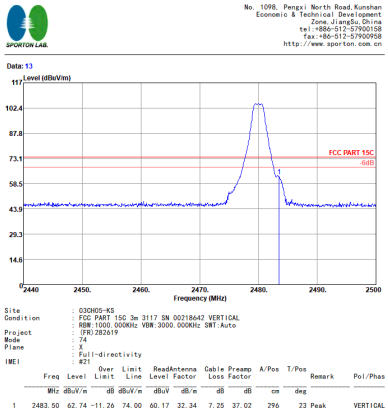
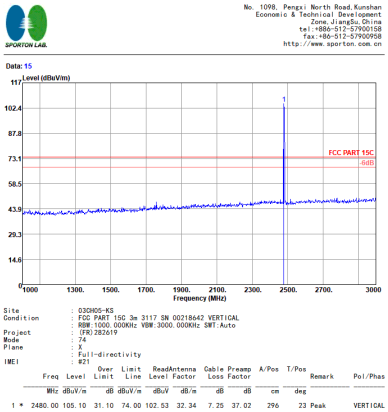
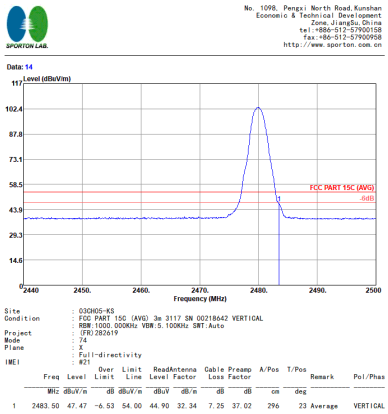
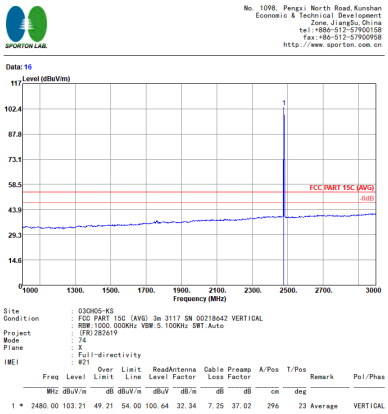
Co-location

WIFI 6E 802.11ax HE20 Full + BLE(2M)_CH39 + LTE Band 48 BW20M

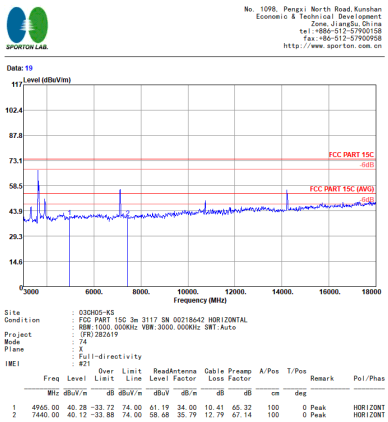
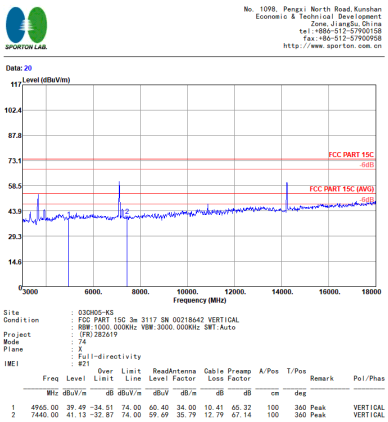
2.4GHz 2400~2483.5MHz

BLE(2M) (Band Edge @ 3m)

BLE	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	BLE CH39 2480MHz	
1+2	Horizontal	Fundamental
Peak		
Avg.		

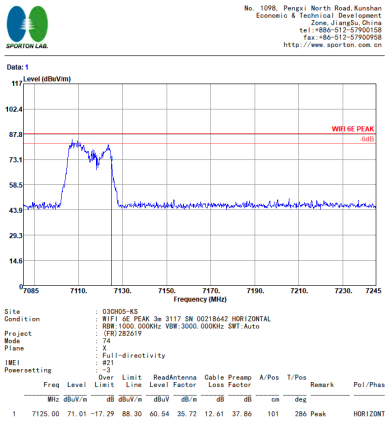
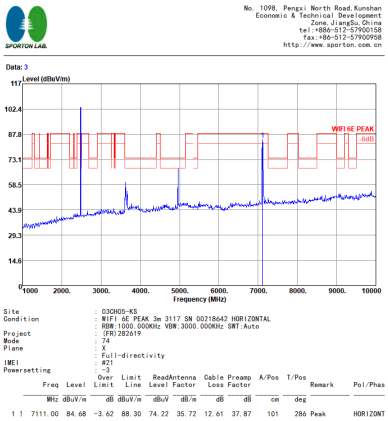
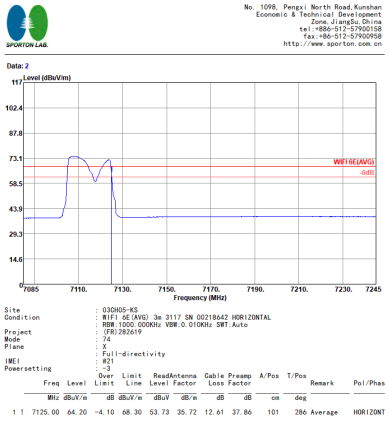
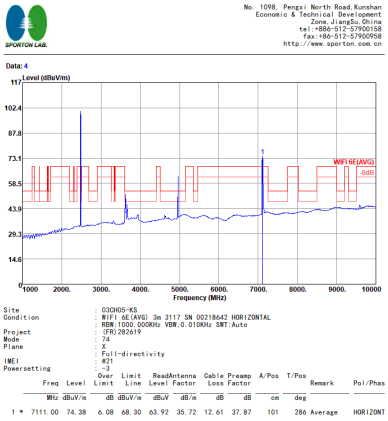
BLE	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	BLE CH39 2480MHz	
1+2	Vertical	Fundamental
Peak		
Avg.		

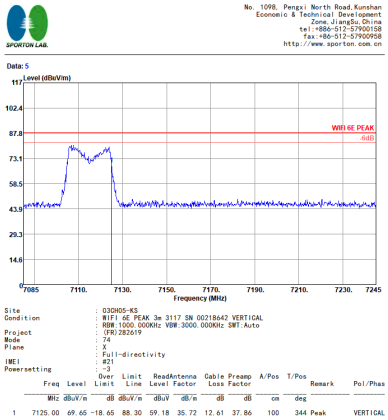
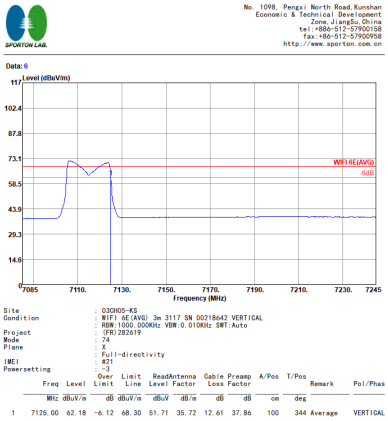
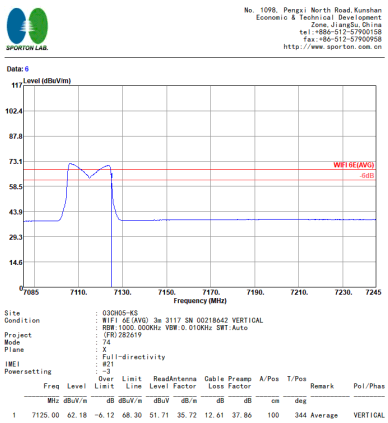
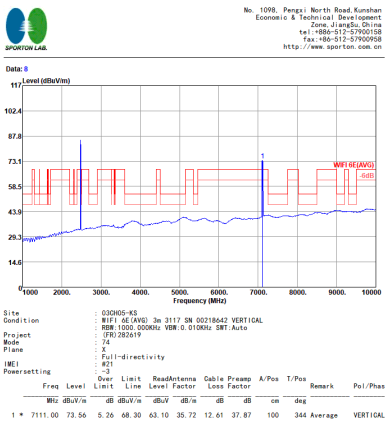
BLE(2M) (Harmonic @ 3m)

BLE	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	BLE CH39 2480MHz	
1+2	Horizontal	Vertical
Peak		

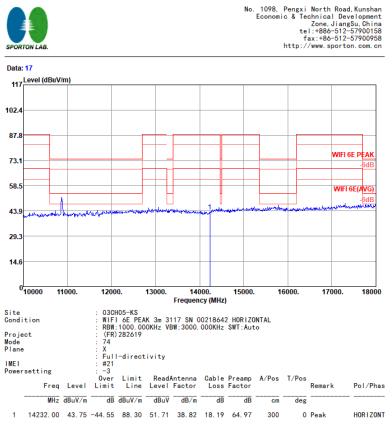
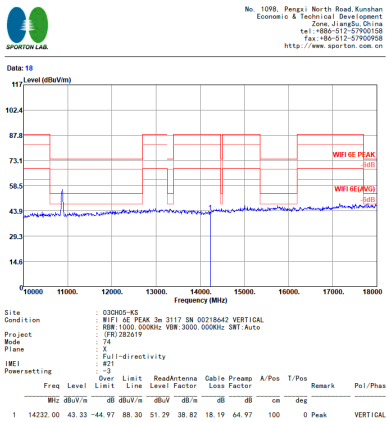
U-NII 8 - 6875-7125MHzMHz

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

WIFI	U-NII 8 - 6875-7125MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH233 7115MHz	
1+2	Horizontal	Fundamental
Peak		
Avg.		

WIFI	U-NII 8 - 6875-7125MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH233 7115MHz	
1+2	Vertical	Fundamental
Peak		
Avg.		

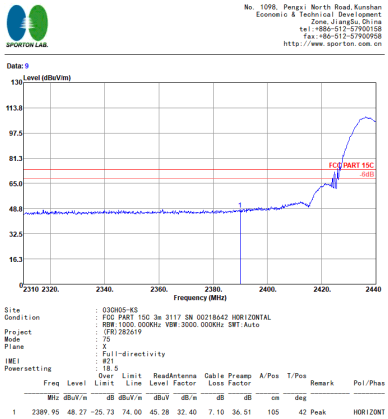
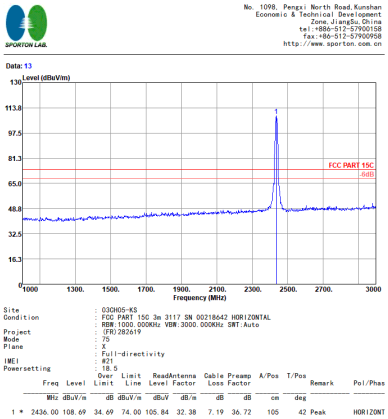
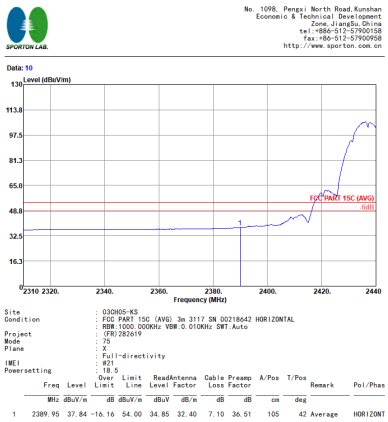
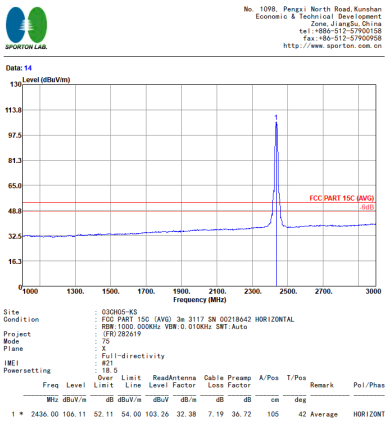
WIFI 802.11ax HE20 Full (Harmonic @ 3m)

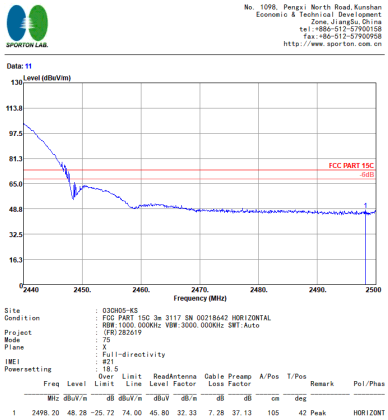
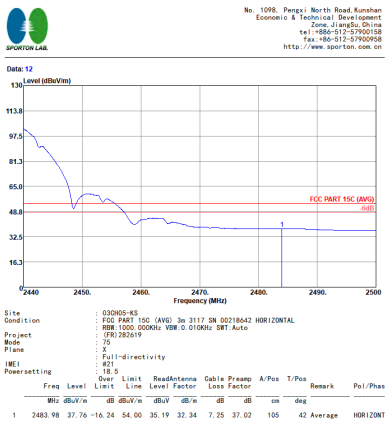
WIFI	U-NII 8 - 6875-7125MHz Harmonic @ 3m	
ANT	802.11ax HE20 Full CH233 7115MHz	
1+2	Horizontal	Vertical
Peak Avg.		

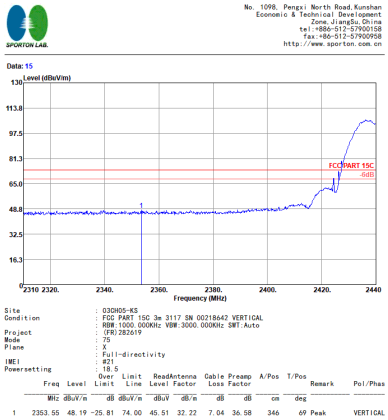
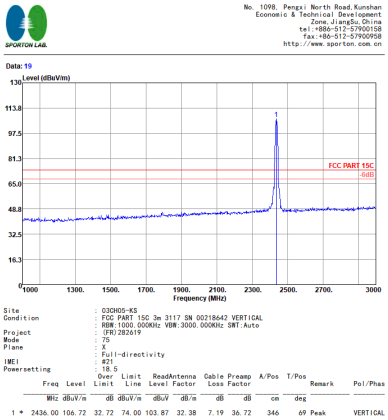
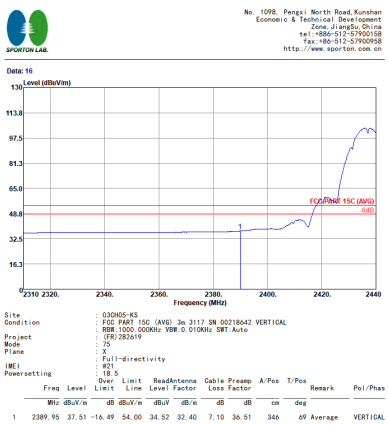
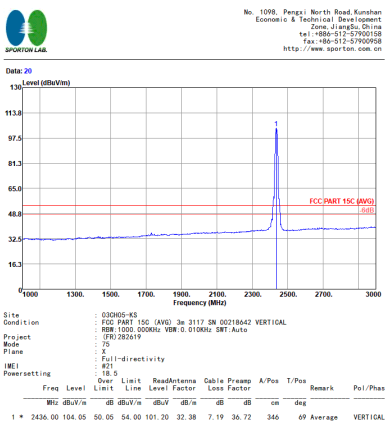
WIFI 6E 802.11ax HE20 Full + WIFI 2.4G 11b CH06 + LTE Band 48 BW20M

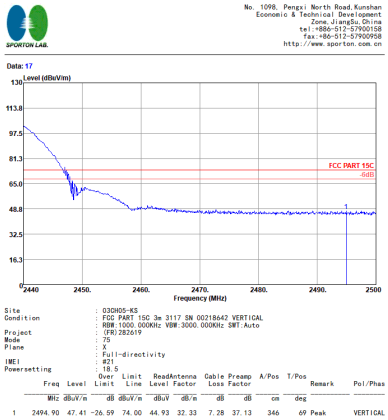
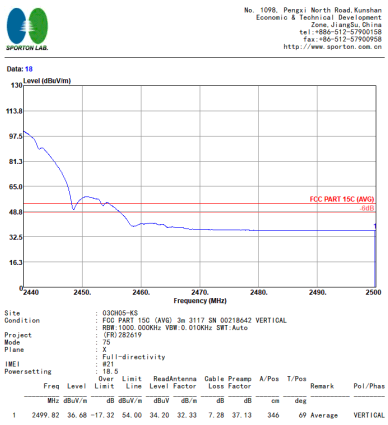
2.4GHz 2400~2483.5MHz

WIFI 2.4G 11b (Band Edge @ 3m)

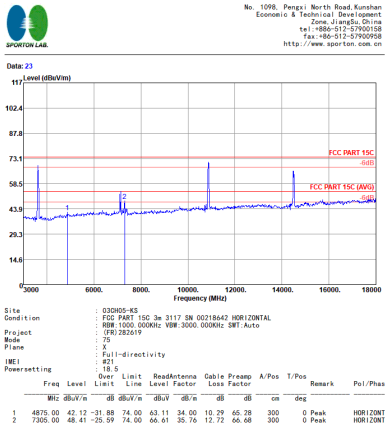
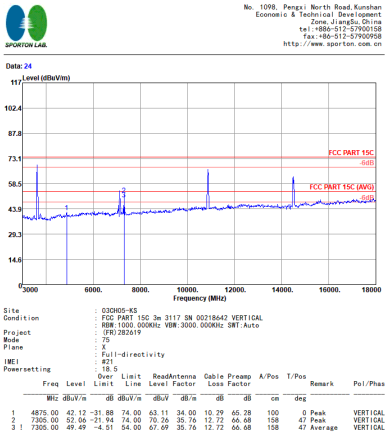
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH06 2437MHz	
MIMO	Horizontal	Fundamental
Peak		
Avg.		

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH06 2437MHz	
MIMO	Horizontal	Fundamental
Peak		/
Avg.		/

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

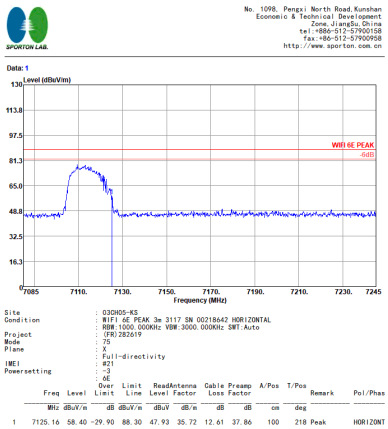
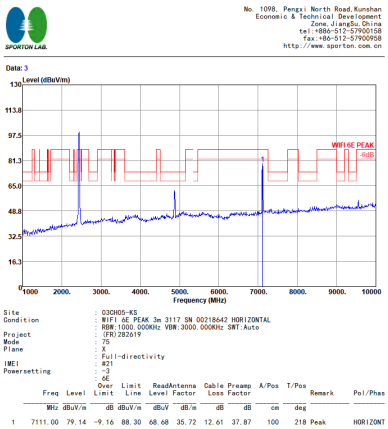
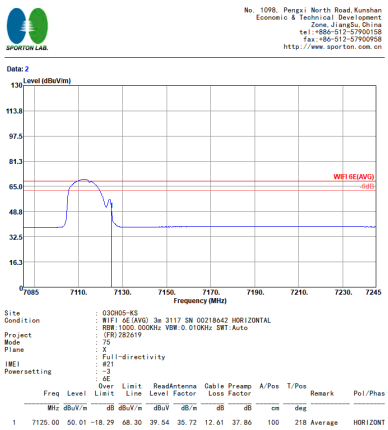
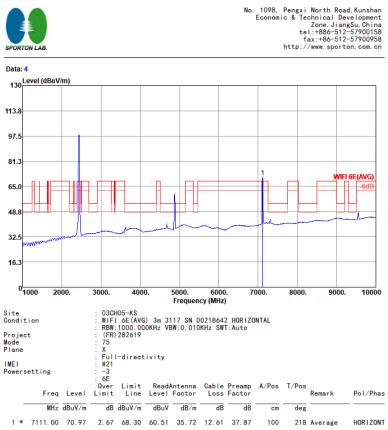
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH06 2437MHz	
MIMO	Vertical	Fundamental
Peak		/
Avg.		/

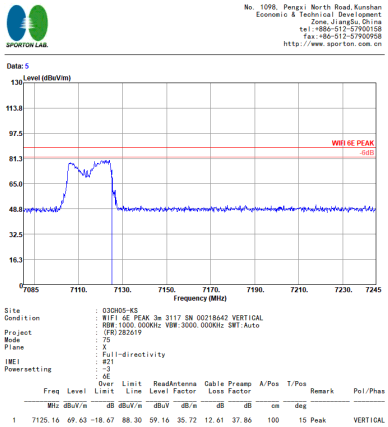
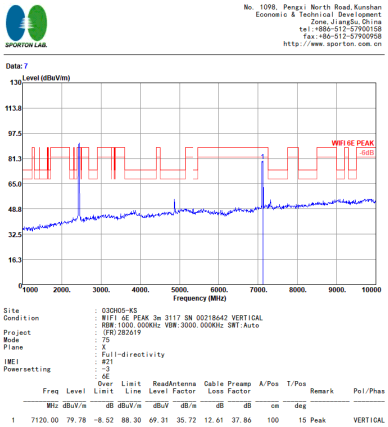
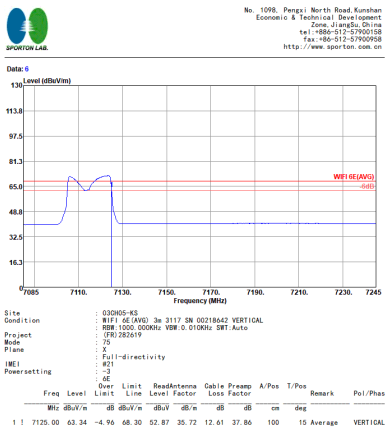
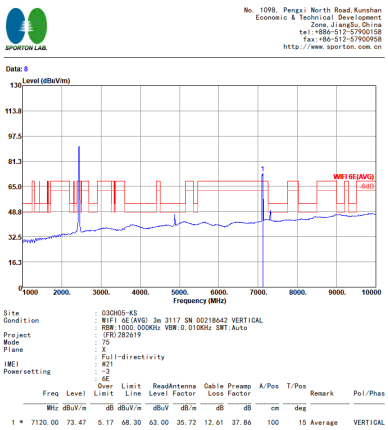
WIFI 2.4G 11b (Harmonic @ 3m)

WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11b CH06 2437MHz	
MIMO	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: 23 Level (dBuV/m) FCC PART 15C -6dB FCC PART 15C (AVG) -6dB Frequency (MHz) Site : 03CH05-KS Condition : FCC PART 15C 3m 3117 SN 00218642 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : (FR)282619 Mode : 75 Plane : X : Full-directivity IMEI : #21 Powersetting : 18.5 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 4875.00 42.12 -31.88 74.00 63.11 34.00 10.29 65.28 300 0 Peak HORIZONT 2 7305.00 48.41 -25.59 74.00 66.61 35.76 12.72 66.68 300 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: 24 Level (dBuV/m) FCC PART 15C -6dB FCC PART 15C (AVG) -6dB Frequency (MHz) Site : 03CH05-KS Condition : FCC PART 15C 3m 3117 SN 00218642 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : (FR)282619 Mode : 75 Plane : X : Full-directivity IMEI : #21 Powersetting : 18.5 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 4875.00 42.12 -31.88 74.00 63.11 34.00 10.29 65.28 100 0 Peak VERTICAL 2 7305.00 52.06 -21.94 74.00 70.26 35.76 12.72 66.68 158 47 Peak VERTICAL 3 ! 7305.00 49.49 -4.51 54.00 67.69 35.76 12.72 66.68 158 47 Average VERTICAL

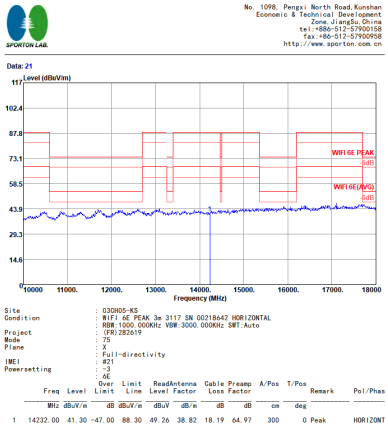
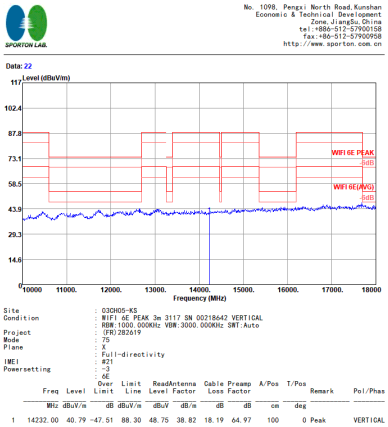
U-NII 8 - 6875-7125MHzMHz

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

WIFI	U-NII 8 - 6875-7125MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH233 7115MHz	
1+2	Horizontal	Fundamental
Peak		
Avg.		

WIFI	U-NII 8 - 6875-7125MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH233 7115MHz	
1+2	Vertical	Fundamental
Peak		
Avg.		

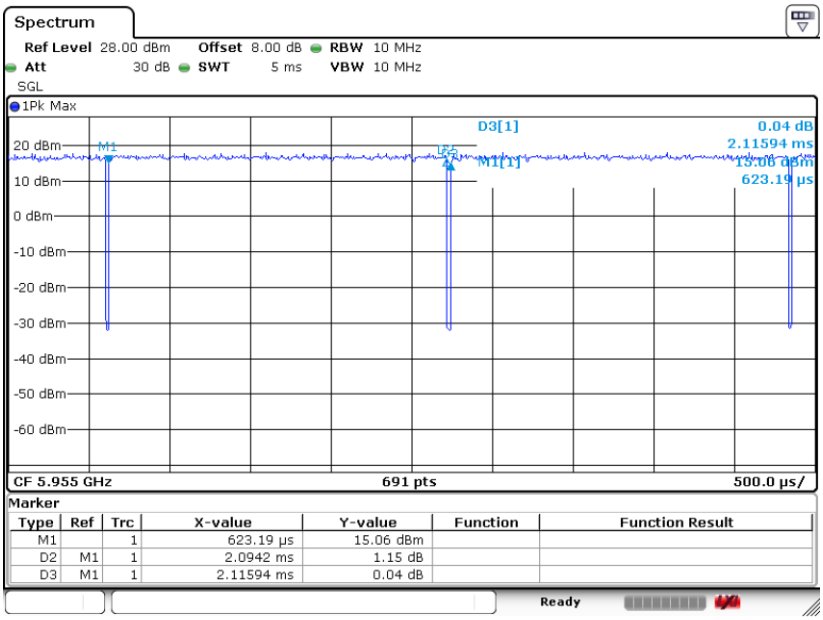
WIFI 802.11ax HE20 Full (Harmonic @ 3m)

WIFI	U-NII 8 - 6875-7125MHz Harmonic @ 3m	
ANT	802.11ax HE20 Full CH233 7115MHz	
1+2	Horizontal	Vertical
Peak Avg.		

Appendix E. Duty Cycle Plots

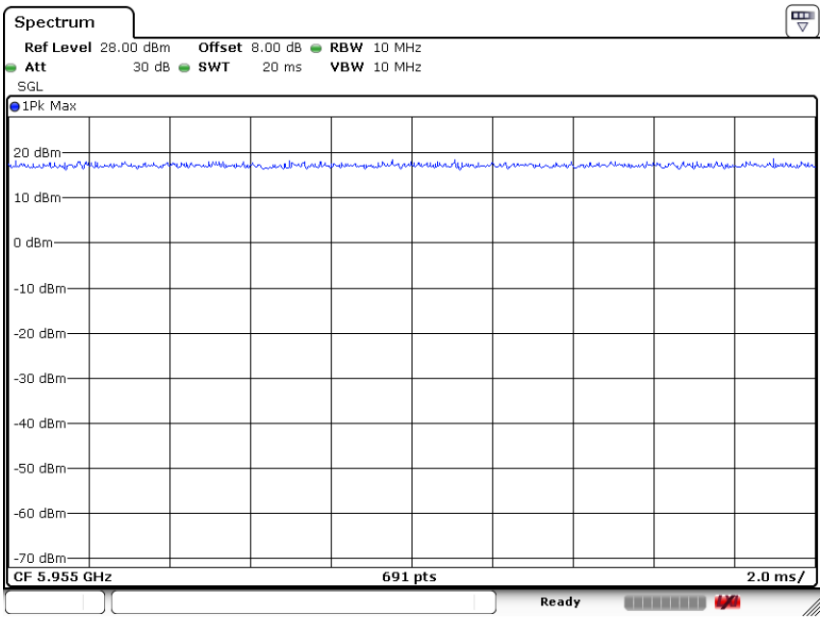
Antenna	Band	Duty Cycle(%)	T(ms)	1/T(kHz)	VBW Setting
1/2	802.11a	98.97	-	-	10Hz
1/2	802.11ax HE20-Full RU	100	-	-	10Hz
1/2	802.11ax HE20-RU26	96.17	5.101	0.196	0.2kHz
1/2	802.11ax HE20-RU52	96.68	5.073	0.197	0.2kHz
1/2	802.11ax HE20-RU106	96.68	4.754	0.210	0.22kHz
1/2	802.11ax HE40-Full RU	100	-	-	10Hz
1/2	802.11ax HE80-Full RU	100	-	-	10Hz
1/2	802.11ax HE160-Full RU	100	-	-	10Hz

802.11a



Date: 6.SEP.2022 14:21:40

802.11ax HE20-Full RU



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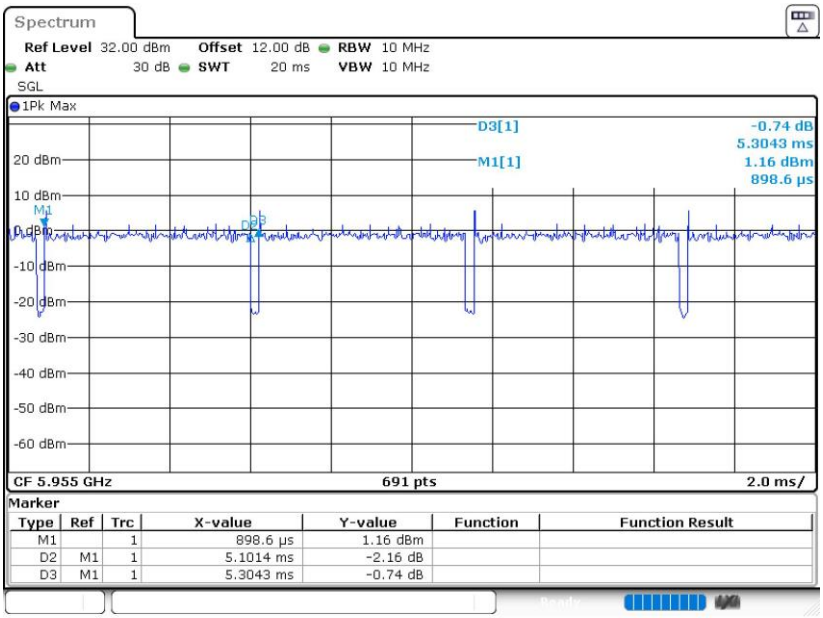
802.11ax HE20-RU26



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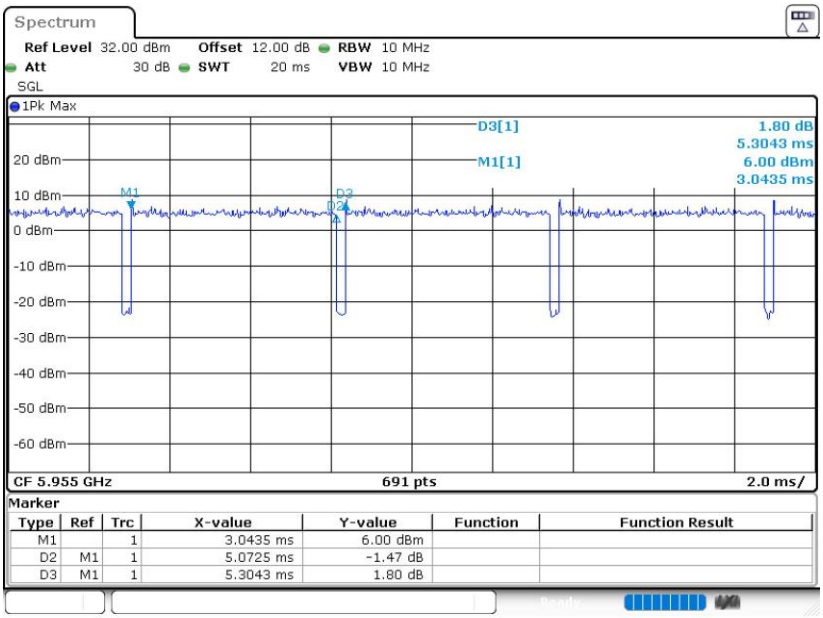
802.11ax HE20-RU52



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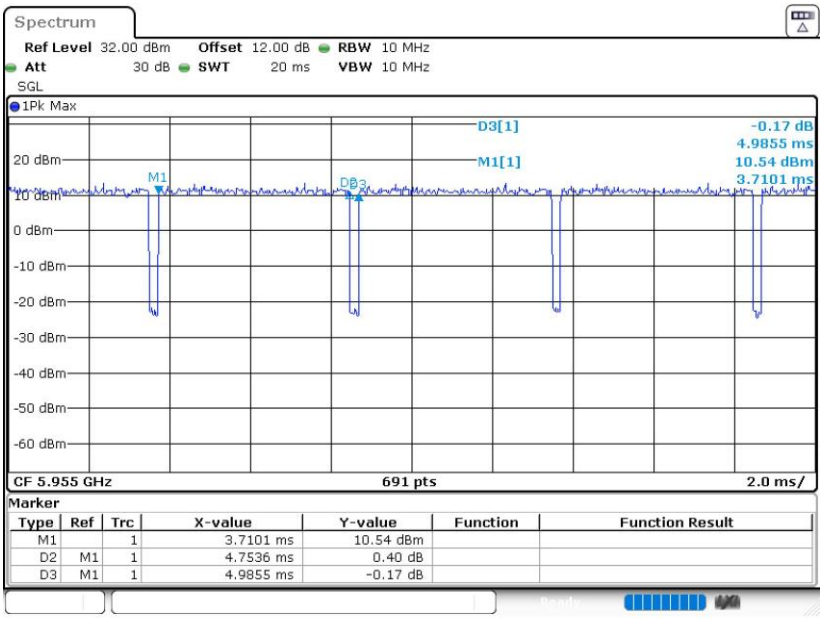
802.11ax HE20-RU106



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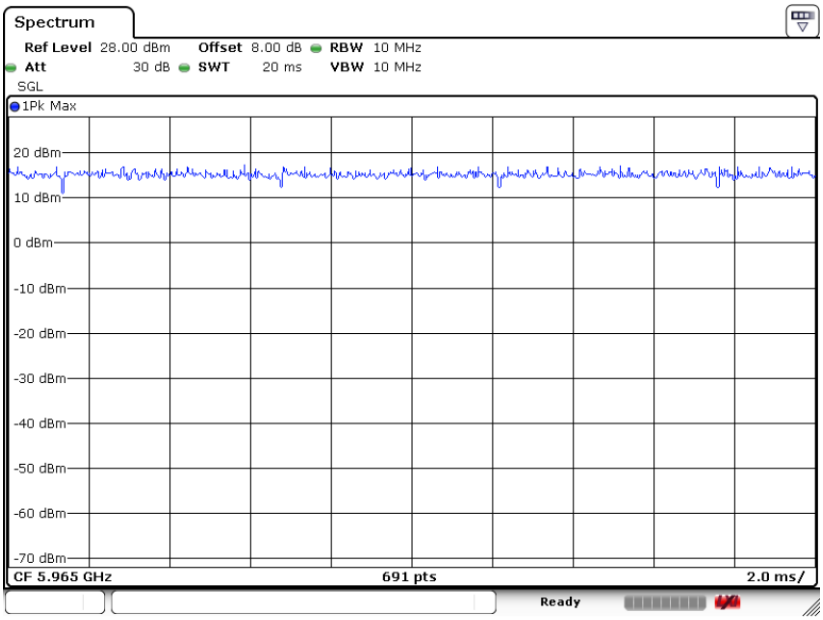
802.11ax HE40-Full RU



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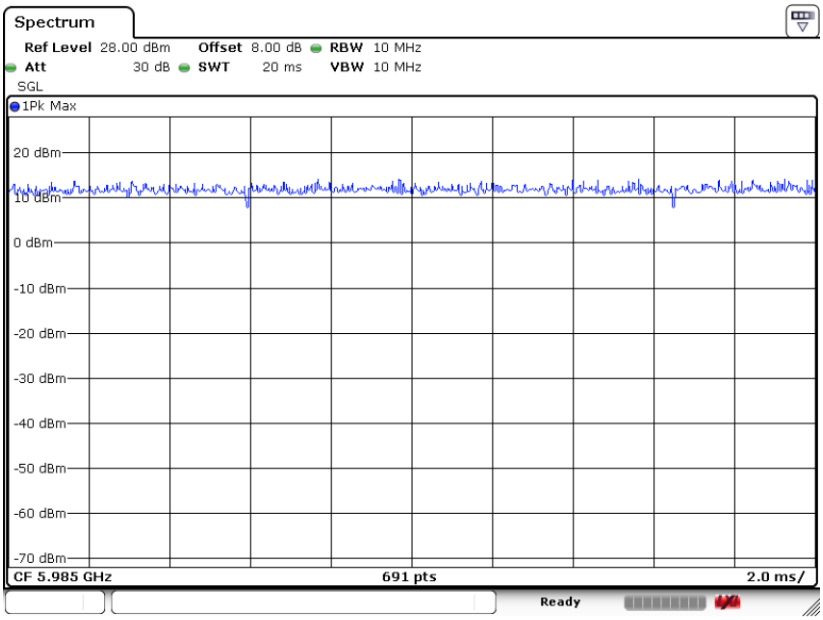
802.11ax HE80-Full RU



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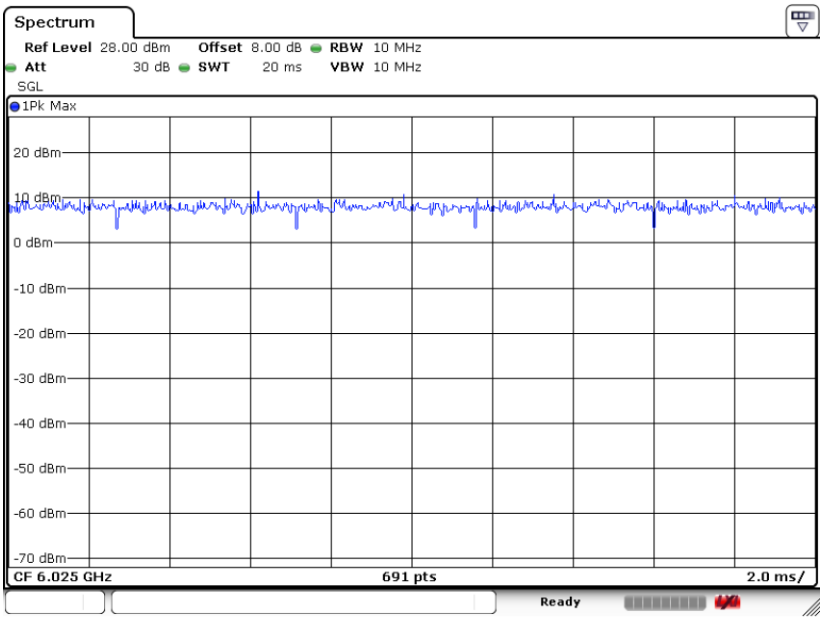
802.11ax HE160-Full RU



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