

Appendix: 5G Wi-Fi W52

Content

1. Frequency Error.....	4
1.1 Test Result.....	4
1.1.1 Ant1.....	4
1.2 Test Graph.....	5
1.2.1 Ant1.....	5
2. Occupied Bandwidth.....	8
2.1 Test Result.....	8
2.1.1 OBW.....	8
2.2 Test Graph.....	9
2.2.1 OBW.....	9
3. Antenna Power.....	19
3.1 Test Result.....	19
3.1.1 Power_NTNV.....	19
3.1.2 EIRP_NTNV.....	20
3.2 Test Graph.....	21
3.2.1 Power_NTNV.....	21
4. Adjacent Channel Leakage Power.....	41
4.1 Test Result.....	41
4.1.1 ACLR_NTNV_SISO.....	41
4.2 Test Graph.....	43
4.2.1 ACLR_NTNV_SISO.....	43
5. Out Of Bands Leakage Power.....	53
5.1 Test Result.....	53
5.1.1 OOB_NTNV_SISO.....	53

Report No. : EED32S80600604

Page 3 of 190

5.2 Test Graph	57
5.2.1 OOB_NTNV_SISO	57
6. Transmission Burst Length	77
6.1 Test Result	77
6.1.1 Ant1_NTNV	77
6.2 Test Graph	78
6.2.1 Ant1_NTNV	78
7. Spurious Emission Intensity	88
7.1 Test Result	88
7.1.1 TxSe_NTNV_SISO	88
7.2 Test Graph	91
7.2.1 TxSe_NTNV_SISO	91
8. Secondary Radiated Emission	111
8.1 Test Result	111
8.1.1 RxSe_NTNV_SISO	111
8.2 Test Graph	118
8.2.1 RxSe_NTNV_SISO	118
9. Carrier Sense	189
9.1 Test Result	189
9.2 Test Graph	190

1. Frequency Error

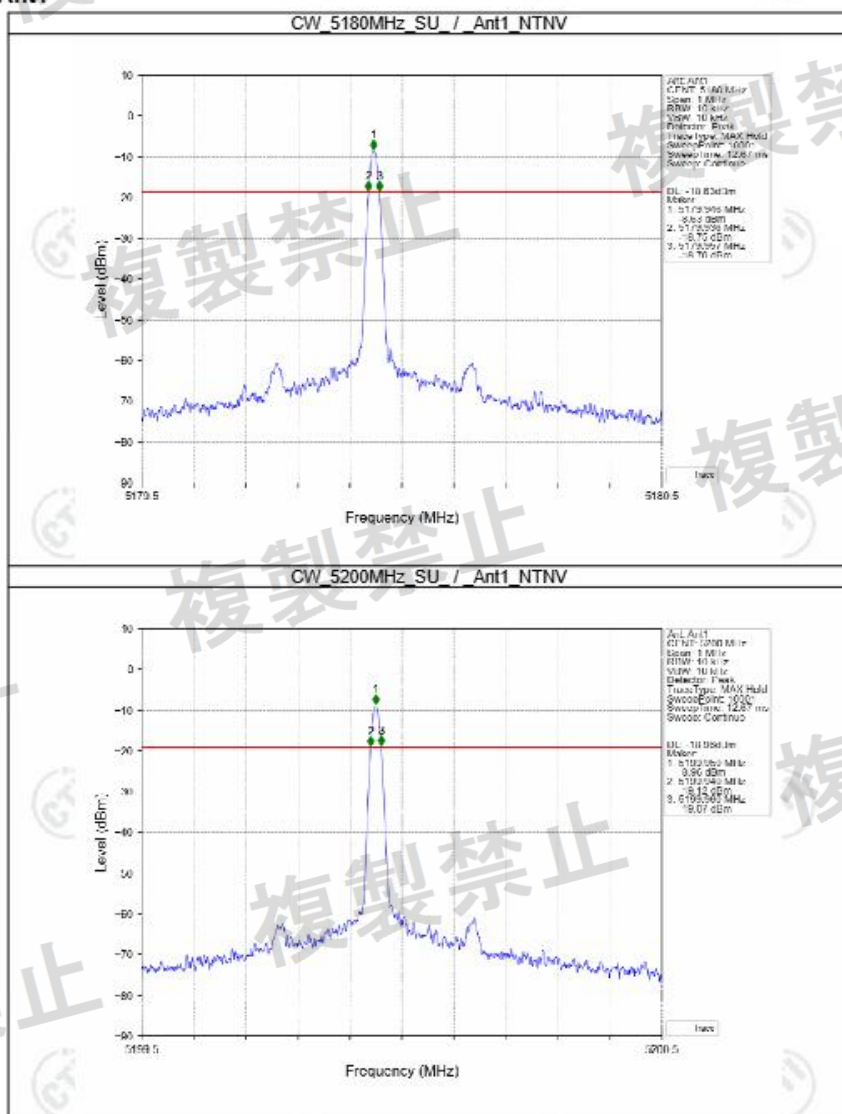
1.1 Test Result

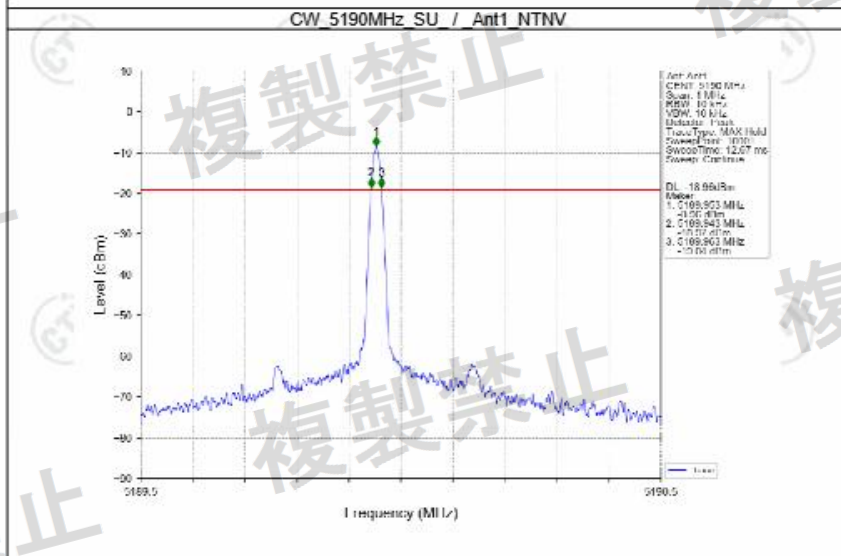
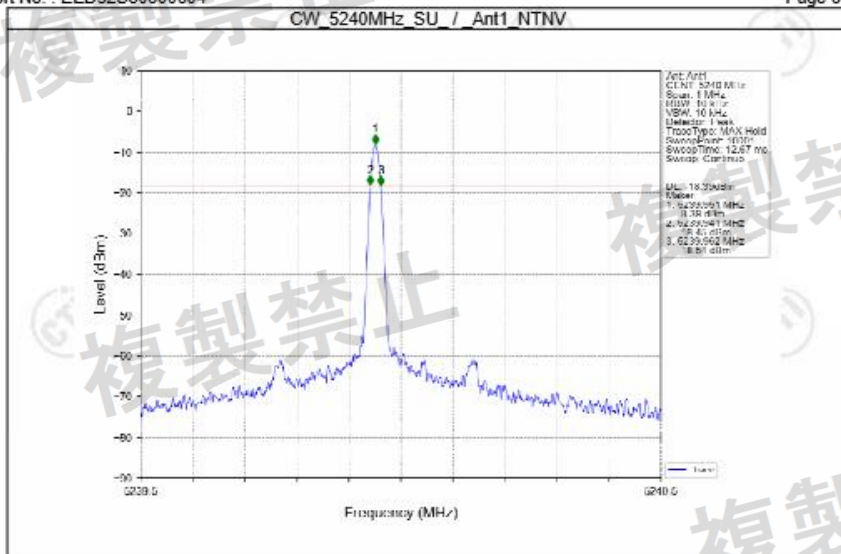
1.1.1 Ant1

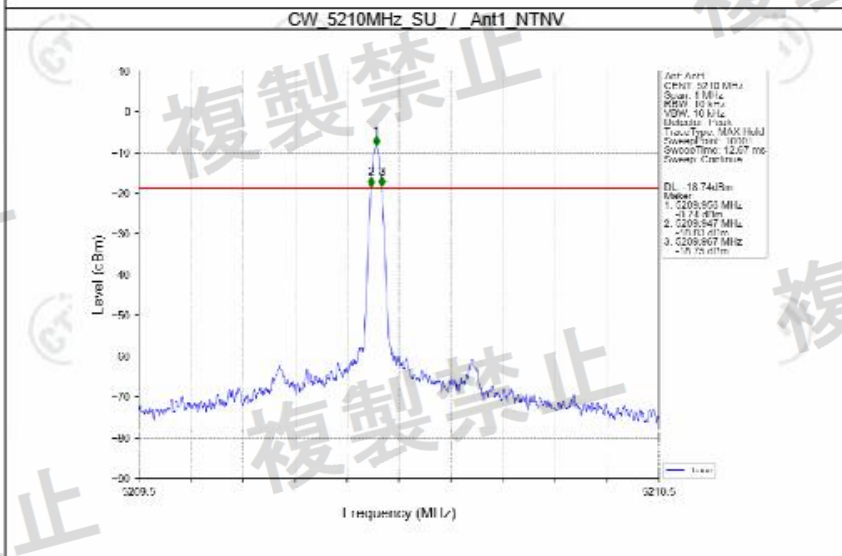
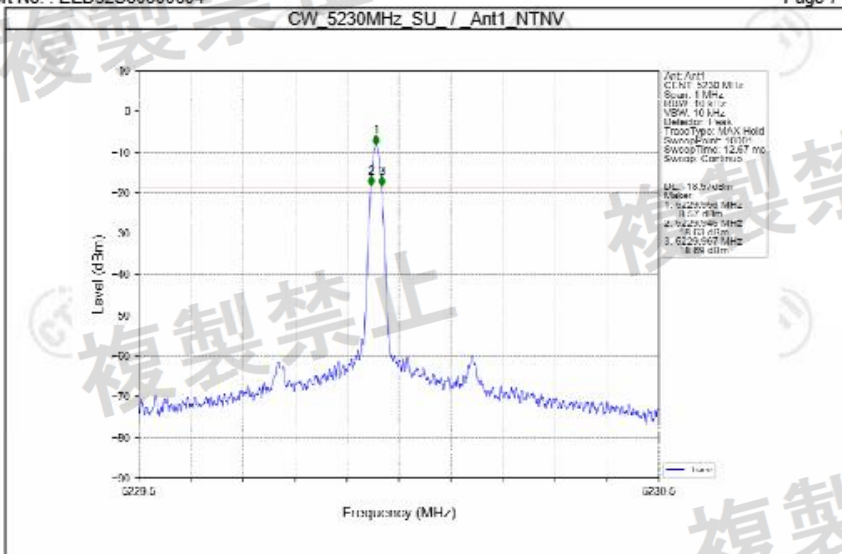
ENV	Mode	TX Type	Frequency (MHz)	RU	RU Pos	Measured Frequency (MHz)	Tolerance (ppm)		Verdict
							Result	Limit	
NTNV	CW	SISO	5180	SU	/	5179.946	-10.36	-20 to 20	Pass
			5200	SU	/	5199.950	-9.60	-20 to 20	Pass
			5240	SU	/	5239.951	-9.27	-20 to 20	Pass
		SISO	5190	SU	/	5189.953	-9.07	-20 to 20	Pass
			5230	SU	/	5229.957	-8.30	-20 to 20	Pass
		SISO	5210	SU	/	5209.957	-8.31	-20 to 20	Pass

1.2 Test Graph

1.2.1 Ant1





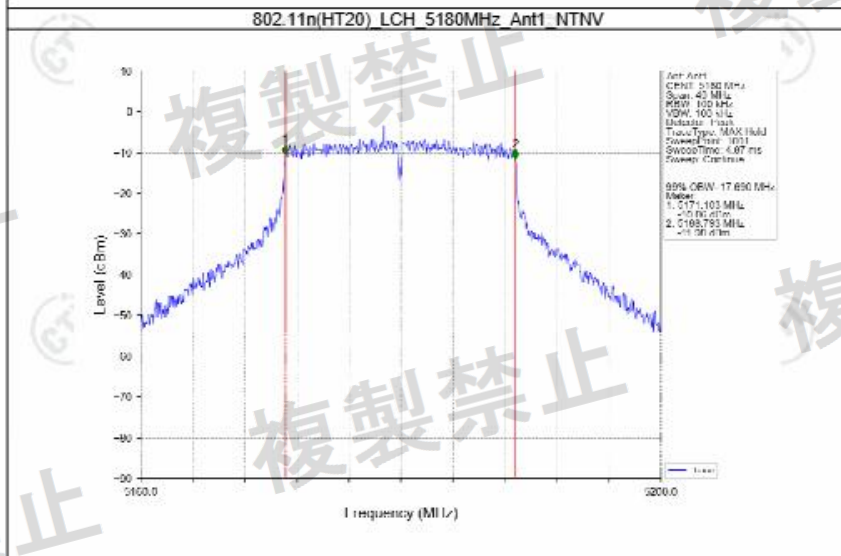
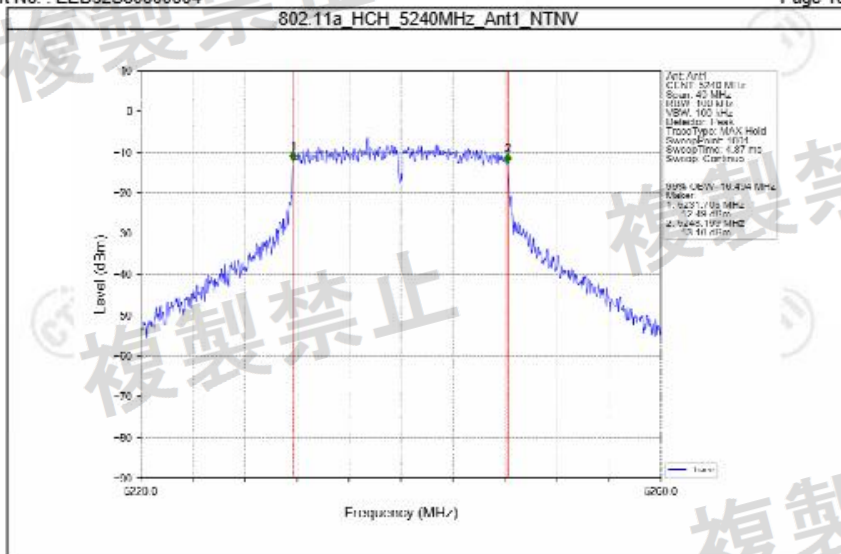


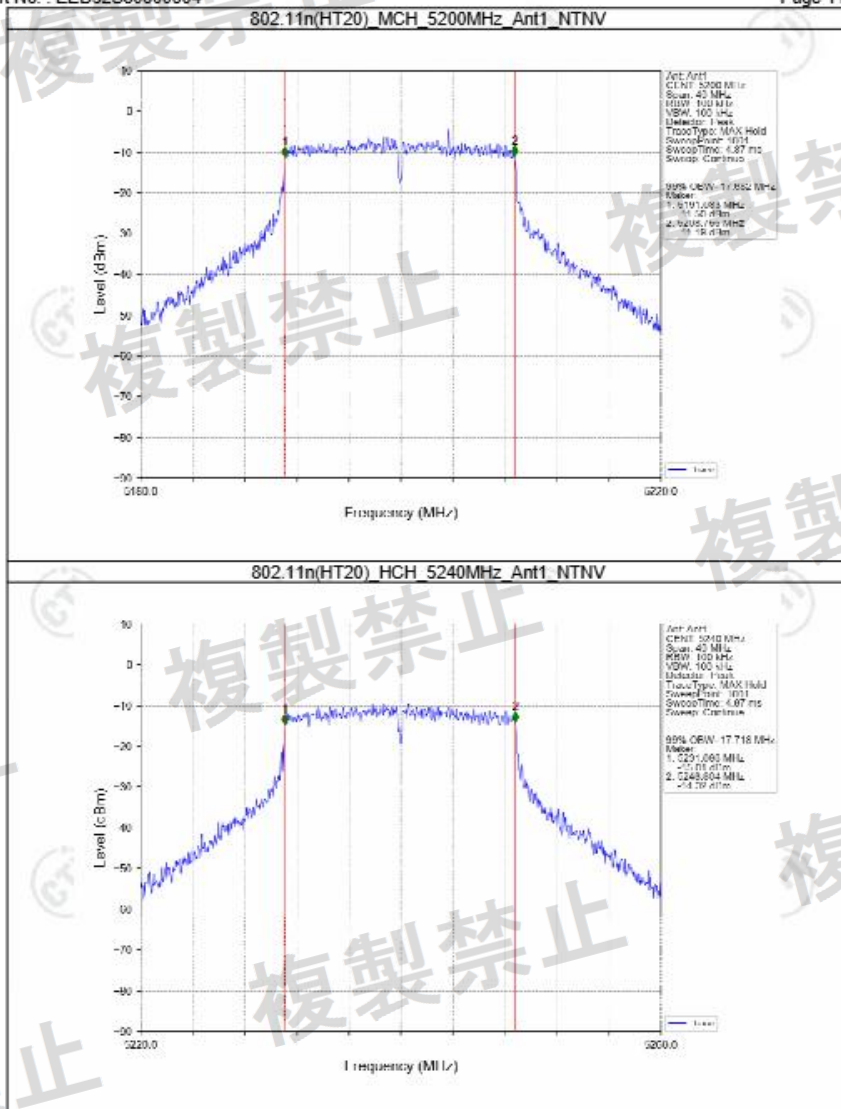
2. Occupied Bandwidth

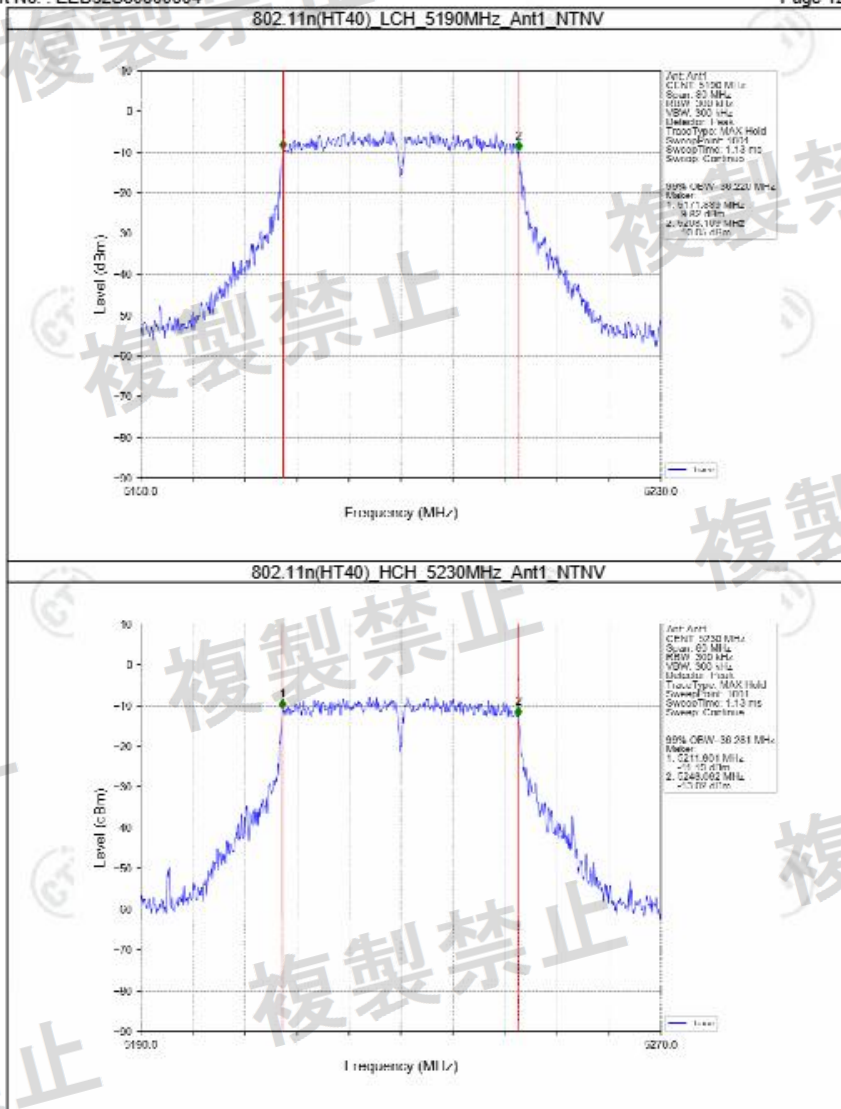
2.1 Test Result

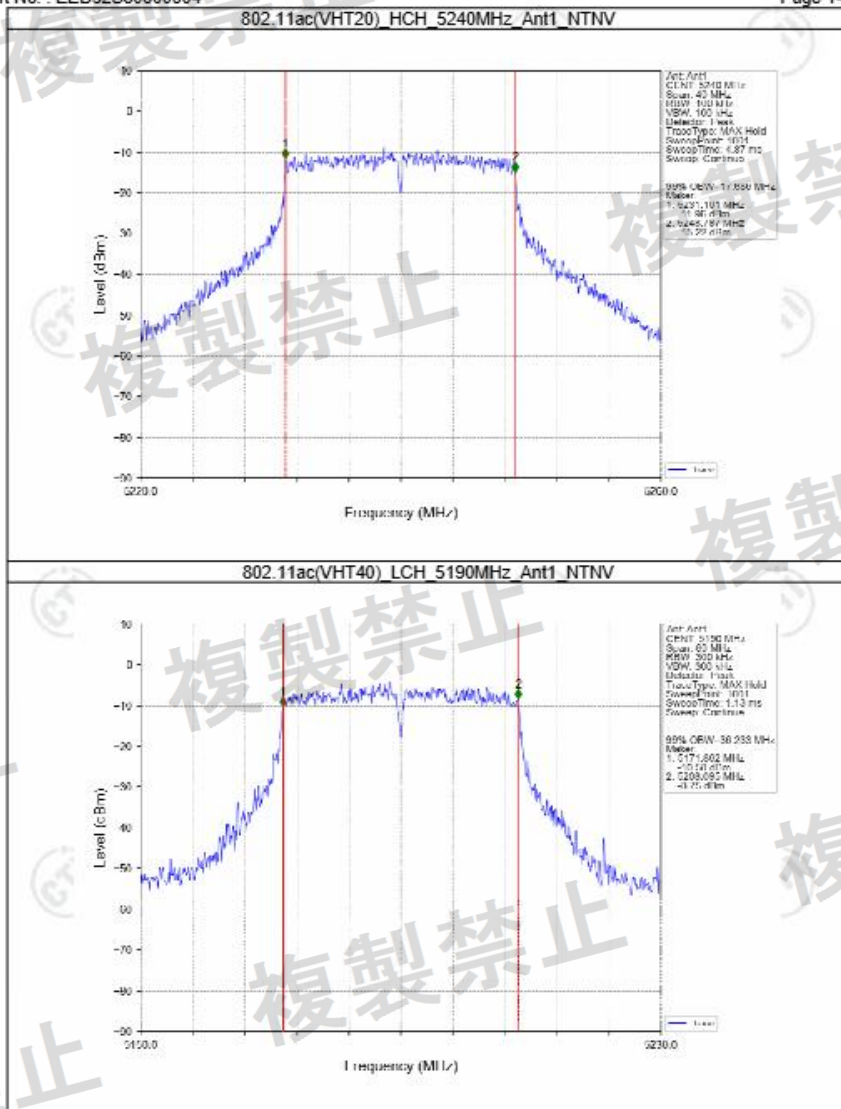
2.1.1 OBW

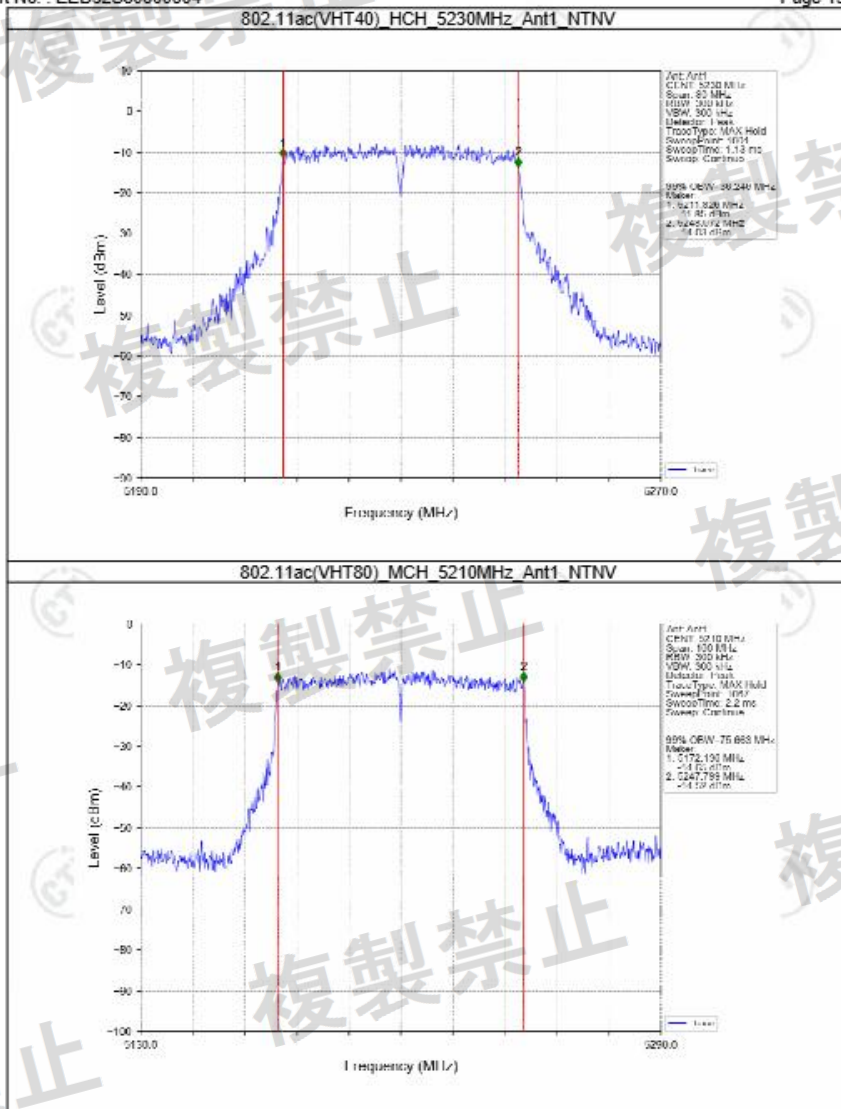
ENV	Mode	TX Type	Frequency (MHz)	RU	RU Pos	99% Occupied Bandwidth (MHz)		Verdict
						ANT1	Limit	
NTNV	802.11a	SISO	5180	/	/	16.479	<=20	Pass
			5200	/	/	16.468	<=20	Pass
			5240	/	/	16.494	<=20	Pass
	802.11n (HT20)	SISO	5180	/	/	17.690	<=20	Pass
			5200	/	/	17.682	<=20	Pass
			5240	/	/	17.718	<=20	Pass
	802.11n (HT40)	SISO	5190	/	/	36.220	<=40	Pass
			5230	/	/	36.281	<=40	Pass
	802.11ac (VHT20)	SISO	5180	/	/	17.701	<=20	Pass
			5200	/	/	17.736	<=20	Pass
			5240	/	/	17.686	<=20	Pass
	802.11ac (VHT40)	SISO	5190	/	/	36.233	<=40	Pass
			5230	/	/	36.246	<=40	Pass
	802.11ac (VHT80)	SISO	5210	/	/	75.663	<=80	Pass
	802.11ax (HEW20)	SISO	5180	SU	/	19.018	<=20	Pass
			5200	SU	/	18.941	<=20	Pass
			5240	SU	/	18.984	<=20	Pass
	802.11ax (HEW40)	SISO	5190	SU	/	37.842	<=40	Pass
			5230	SU	/	37.748	<=40	Pass
	802.11ax (HEW80)	SISO	5210	SU	/	77.275	<=80	Pass

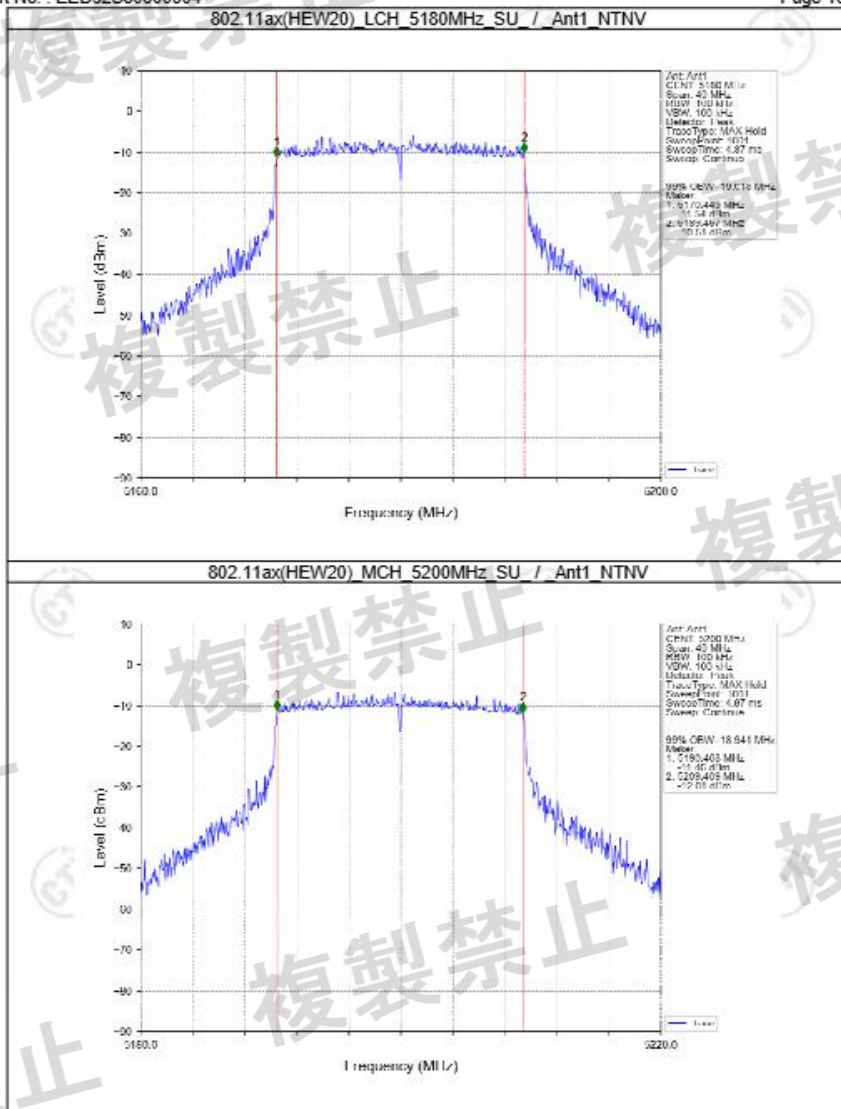


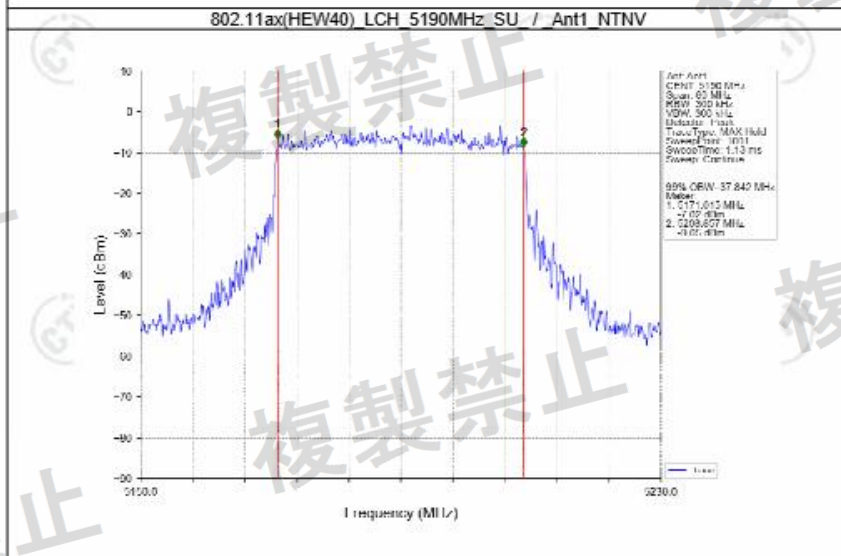
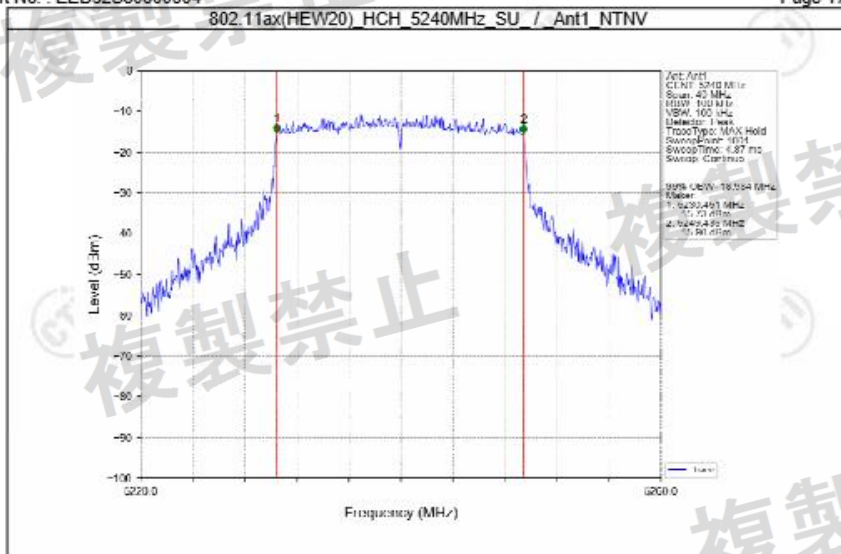


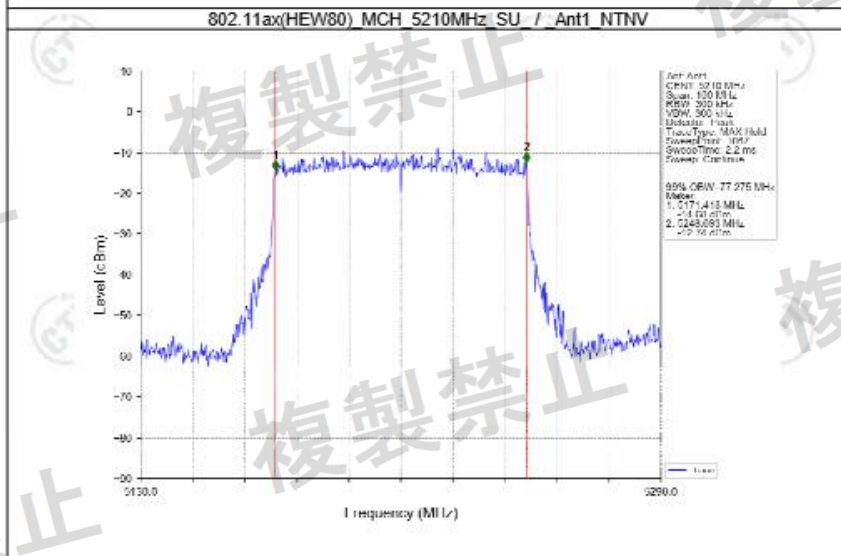
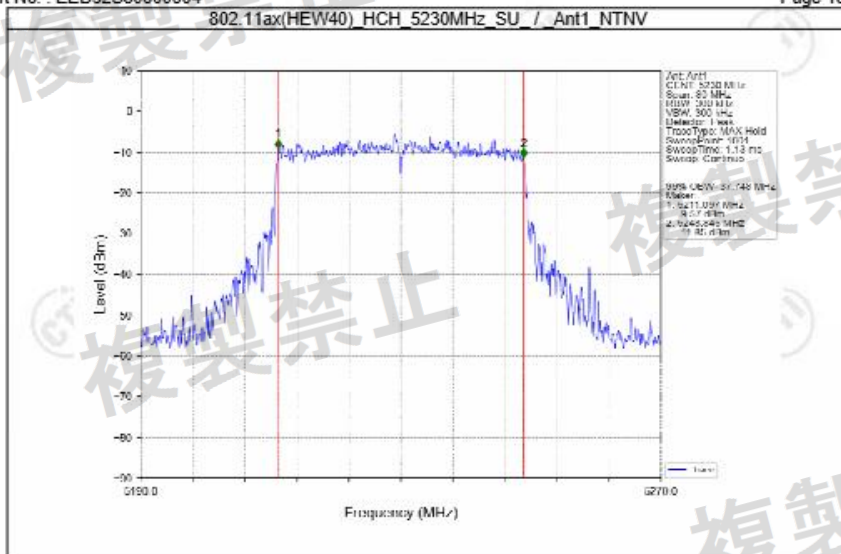












3. Antenna Power

3.1 Test Result

3.1.1 Power_NTNV

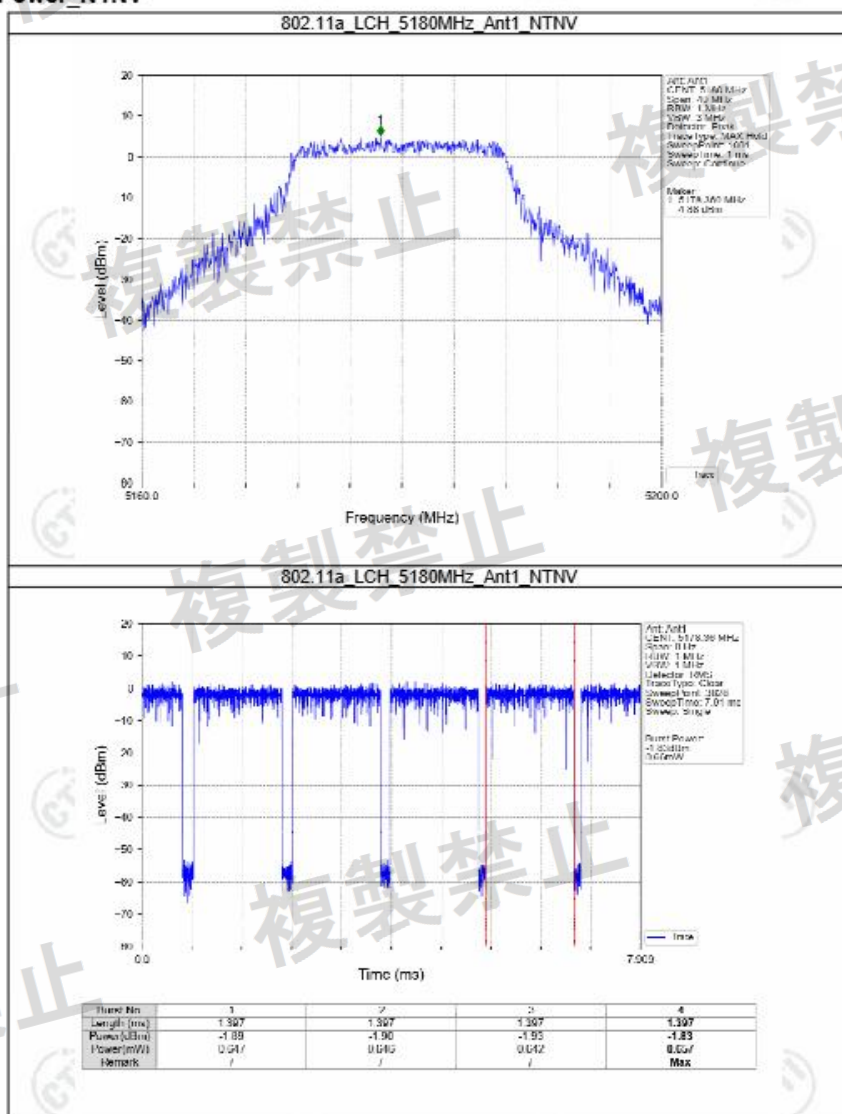
NTNV											
Mode	TX Type	Frequency (MHz)	RU	RU Pos	ANT	Antenna Power (mW/MHz)		Nominal Power (mW/MHz)	Tolerance (%)		Verdict
						Measured	Limit		Measured	Limit	
802.11a	SISO	5180	/	/	1	0.657	<=10.00	0.660	-0.45	-80 to 20	Pass
		5200	/	/	1	0.598	<=10.00	0.660	-9.39	-80 to 20	Pass
		5240	/	/	1	0.324	<=10.00	0.660	-50.91	-80 to 20	Pass
802.11n (HT20)	SISO	5180	/	/	1	0.464	<=10.00	0.460	0.87	-80 to 20	Pass
		5200	/	/	1	0.451	<=10.00	0.460	-1.96	-80 to 20	Pass
		5240	/	/	1	0.227	<=10.00	0.460	-50.65	-80 to 20	Pass
802.11n (HT40)	SISO	5190	/	/	1	0.183	<=5.00	0.180	1.67	-80 to 20	Pass
		5230	/	/	1	0.120	<=5.00	0.180	-33.33	-80 to 20	Pass
802.11ac (VHT20)	SISO	5180	/	/	1	0.460	<=10.00	0.460	0.00	-80 to 20	Pass
		5200	/	/	1	0.452	<=10.00	0.460	-1.74	-80 to 20	Pass
		5240	/	/	1	0.213	<=10.00	0.460	-53.70	-80 to 20	Pass
802.11ac (VHT40)	SISO	5190	/	/	1	0.233	<=5.00	0.230	1.30	-80 to 20	Pass
		5230	/	/	1	0.115	<=5.00	0.230	-50.00	-80 to 20	Pass
802.11ac (VHT80)	SISO	5210	/	/	1	0.049	<=2.50	0.049	0.00	-80 to 20	Pass
802.11ax (HEW20)	SISO	5180	SU	/	1	0.444	<=10.00	0.440	0.91	-80 to 20	Pass
		5200	SU	/	1	0.404	<=10.00	0.440	-8.18	-80 to 20	Pass
		5240	SU	/	1	0.136	<=10.00	0.440	-69.09	-80 to 20	Pass
802.11ax (HEW40)	SISO	5190	SU	/	1	0.209	<=5.00	0.210	-0.48	-80 to 20	Pass
		5230	SU	/	1	0.116	<=5.00	0.210	-44.76	-80 to 20	Pass
802.11ax (HEW80)	SISO	5210	SU	/	1	0.045	<=2.50	0.045	0.00	-80 to 20	Pass

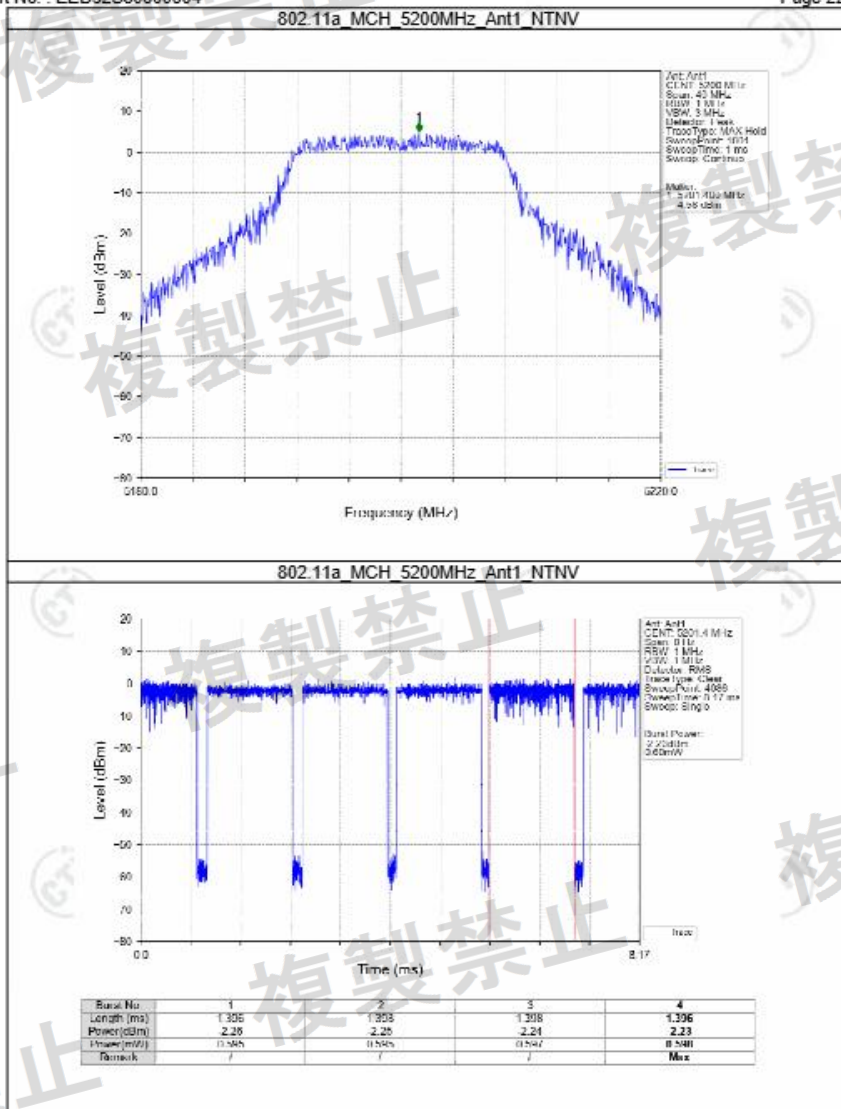
3.1.2 EIRP_NTNV

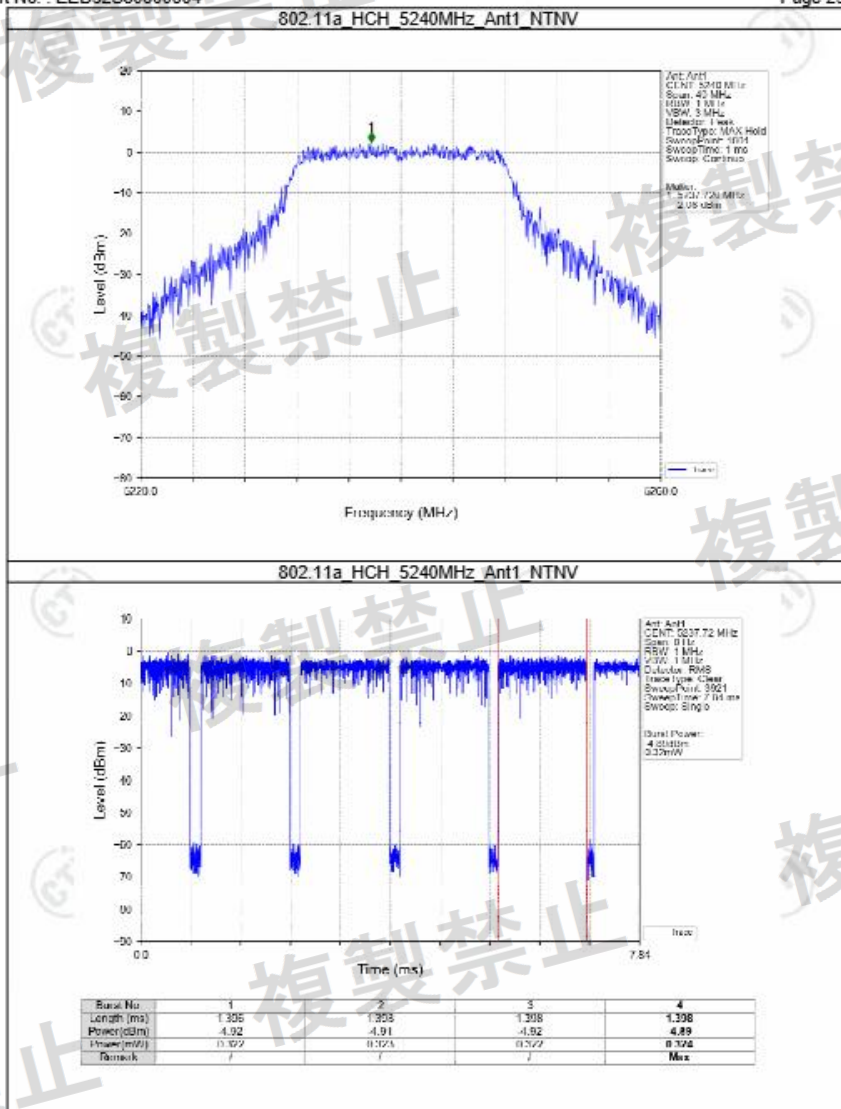
Mode	TX Type	Frequency (MHz)	RU	RU Pos	ANT	Gain (dBi)	EIRP (mW/MHz)		Verdict
							Result	Limit	
802.11a	SISO	5180	/	/	1	1.71	0.97	<=10	Pass
		5200	/	/	1	1.71	0.89	<=10	Pass
		5240	/	/	1	1.71	0.48	<=10	Pass
802.11n (HT20)	SISO	5180	/	/	1	1.71	0.69	<=10	Pass
		5200	/	/	1	1.71	0.67	<=10	Pass
		5240	/	/	1	1.71	0.34	<=10	Pass
802.11n (HT40)	SISO	5190	/	/	1	1.71	0.27	<=5	Pass
		5230	/	/	1	1.71	0.18	<=5	Pass
802.11ac (VHT20)	SISO	5180	/	/	1	1.71	0.68	<=10	Pass
		5200	/	/	1	1.71	0.67	<=10	Pass
		5240	/	/	1	1.71	0.32	<=10	Pass
802.11ac (VHT40)	SISO	5190	/	/	1	1.71	0.34	<=5	Pass
		5230	/	/	1	1.71	0.17	<=5	Pass
802.11ac (VHT80)	SISO	5210	/	/	1	1.71	0.07	<=2.5	Pass
802.11ax (HEW20)	SISO	5180	SU	/	1	1.71	0.66	<=10	Pass
		5200	SU	/	1	1.71	0.60	<=10	Pass
		5240	SU	/	1	1.71	0.20	<=10	Pass
802.11ax (HEW40)	SISO	5190	SU	/	1	1.71	0.31	<=5	Pass
		5230	SU	/	1	1.71	0.17	<=5	Pass
802.11ax (HEW80)	SISO	5210	SU	/	1	1.71	0.07	<=2.5	Pass

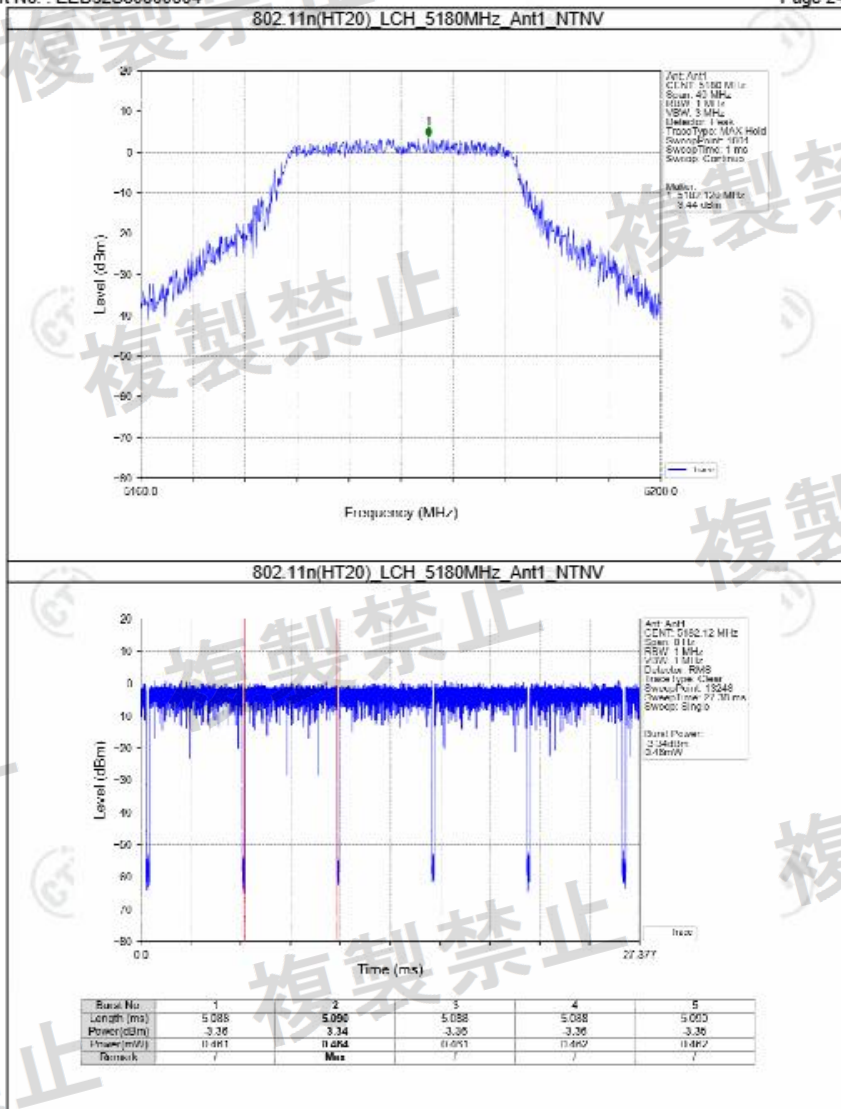
3.2 Test Graph

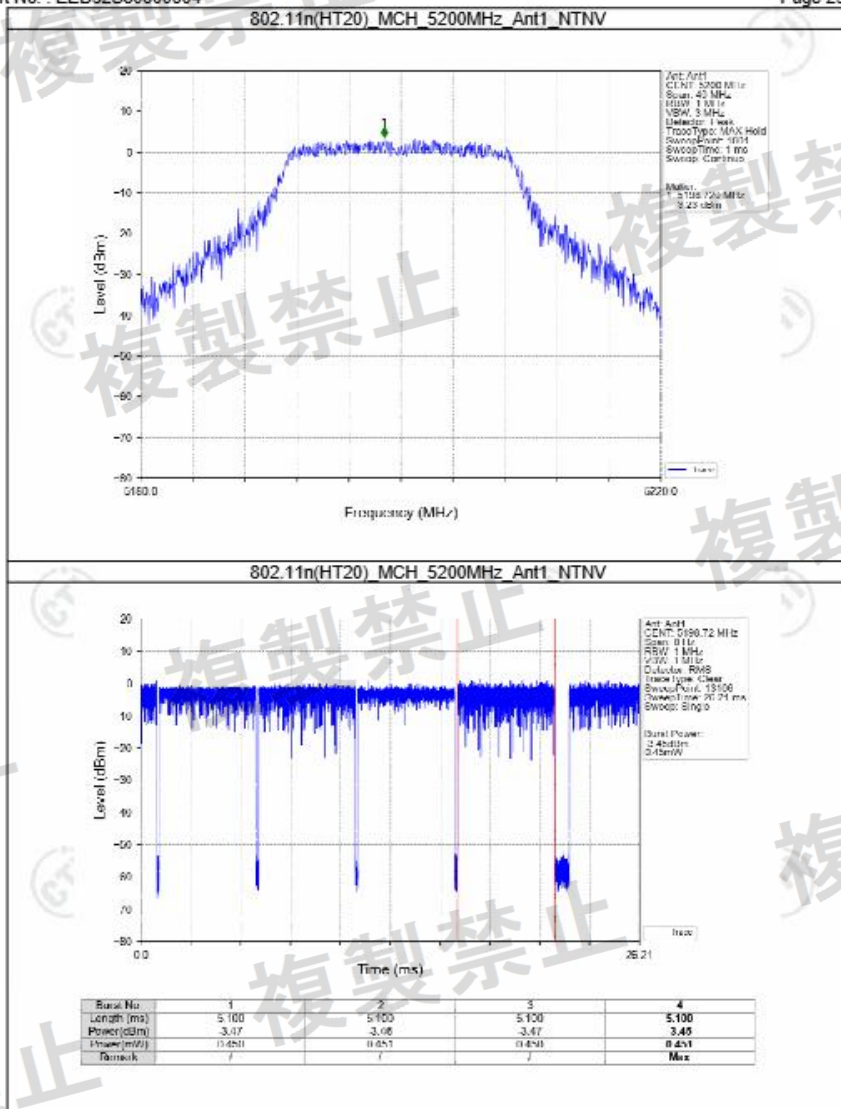
3.2.1 Power_NTNV

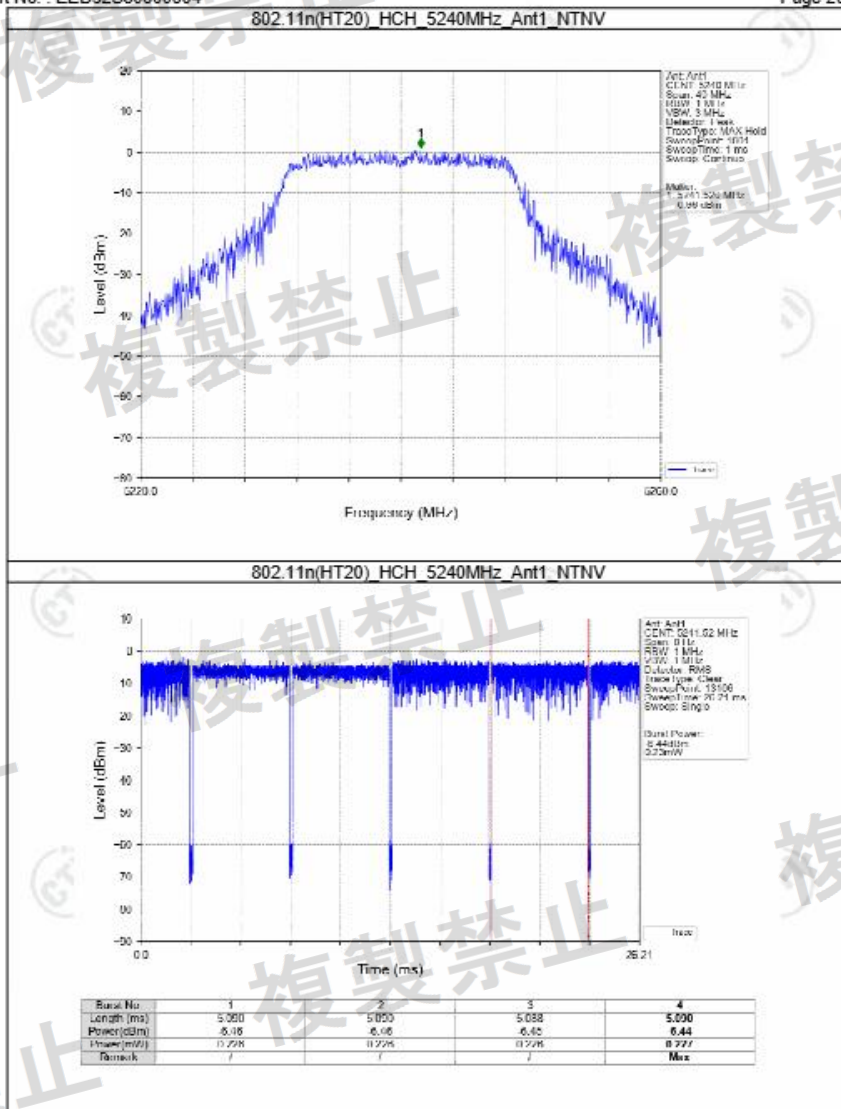


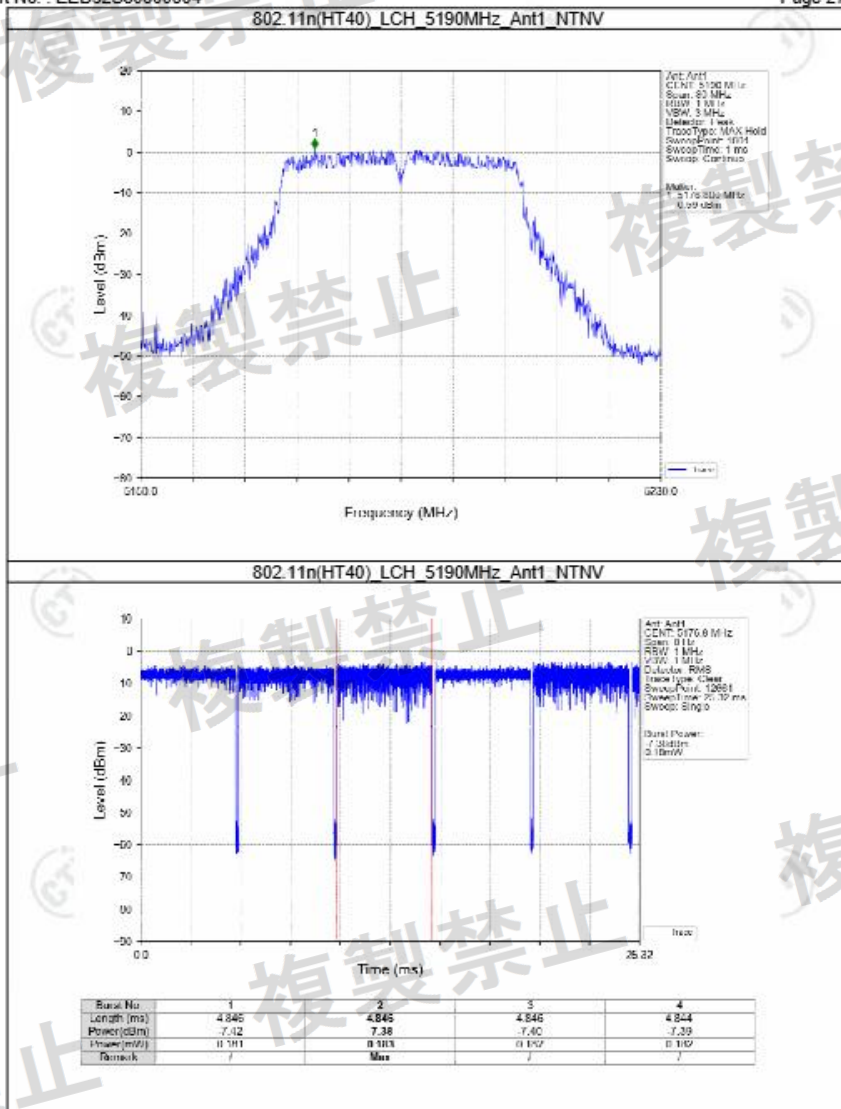


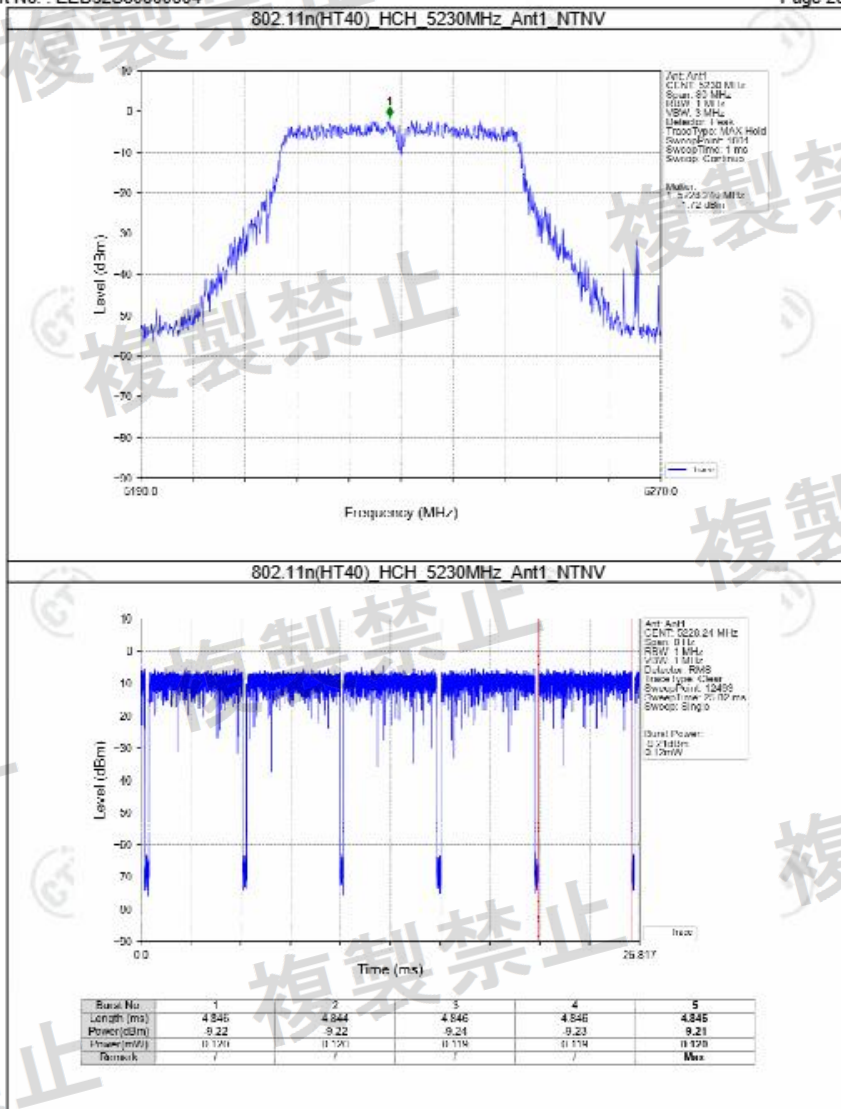


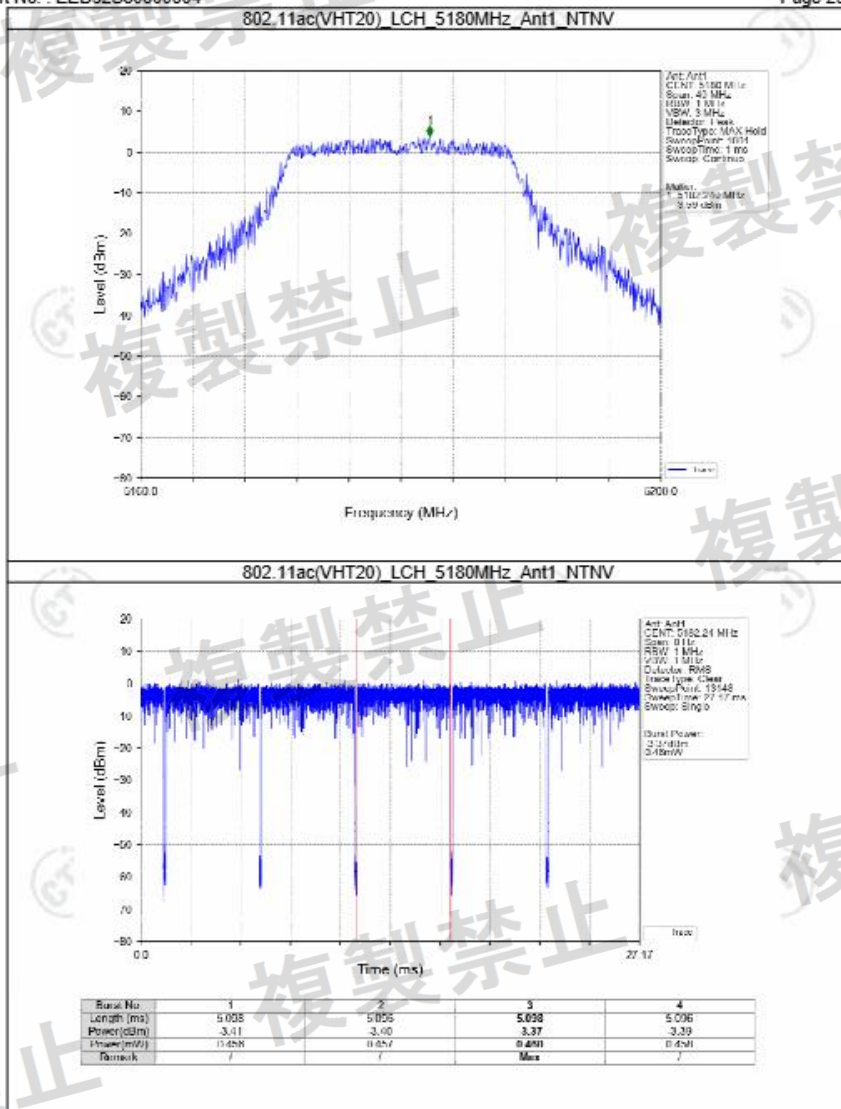


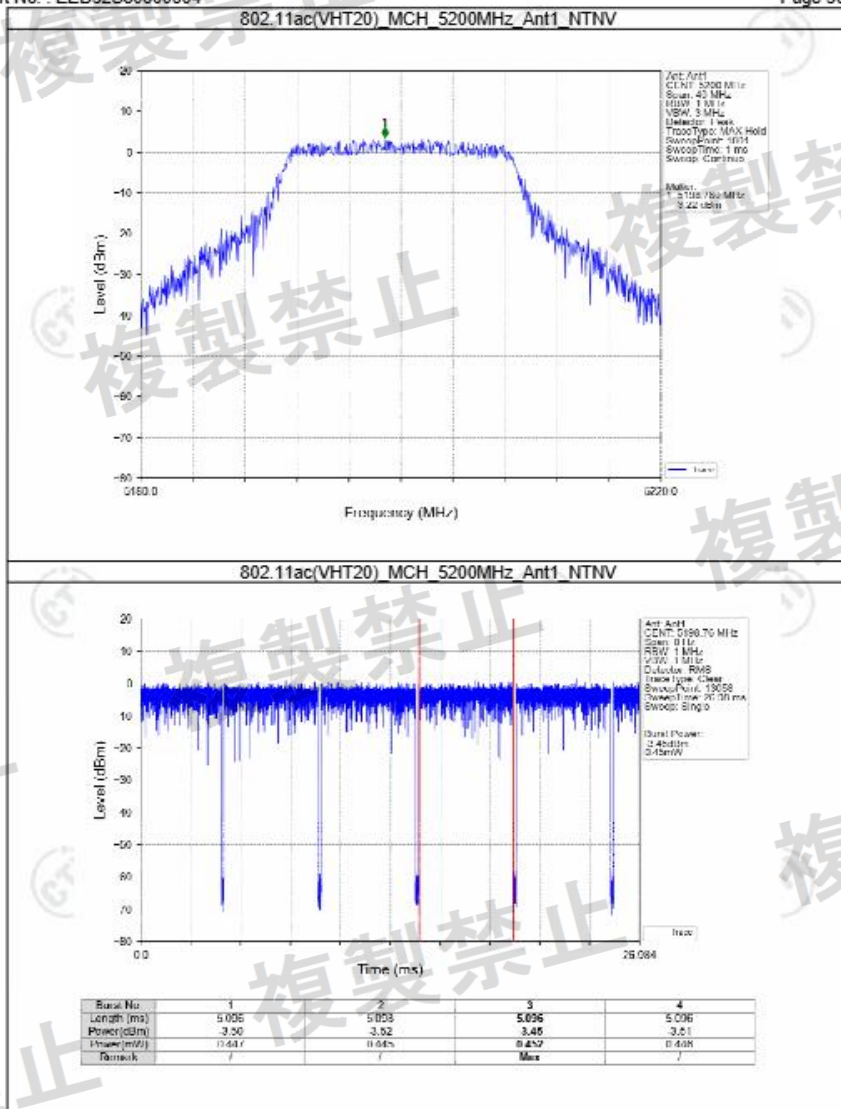


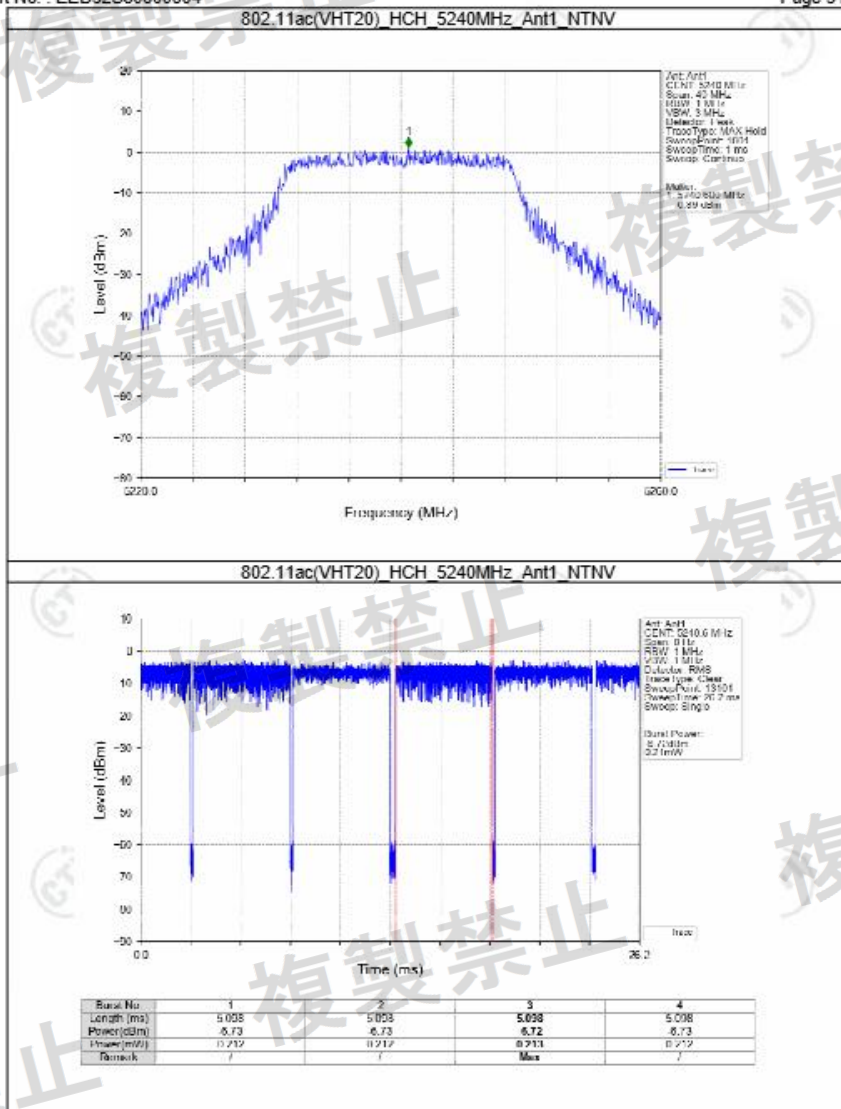


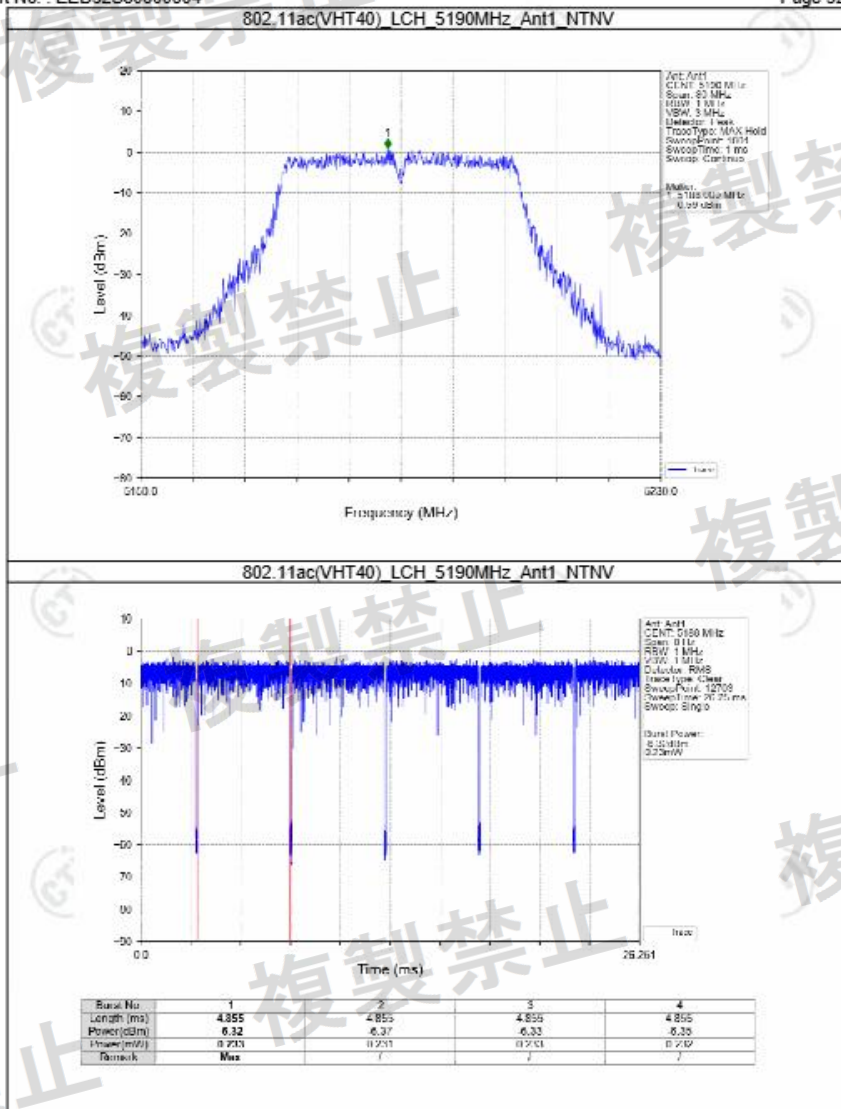


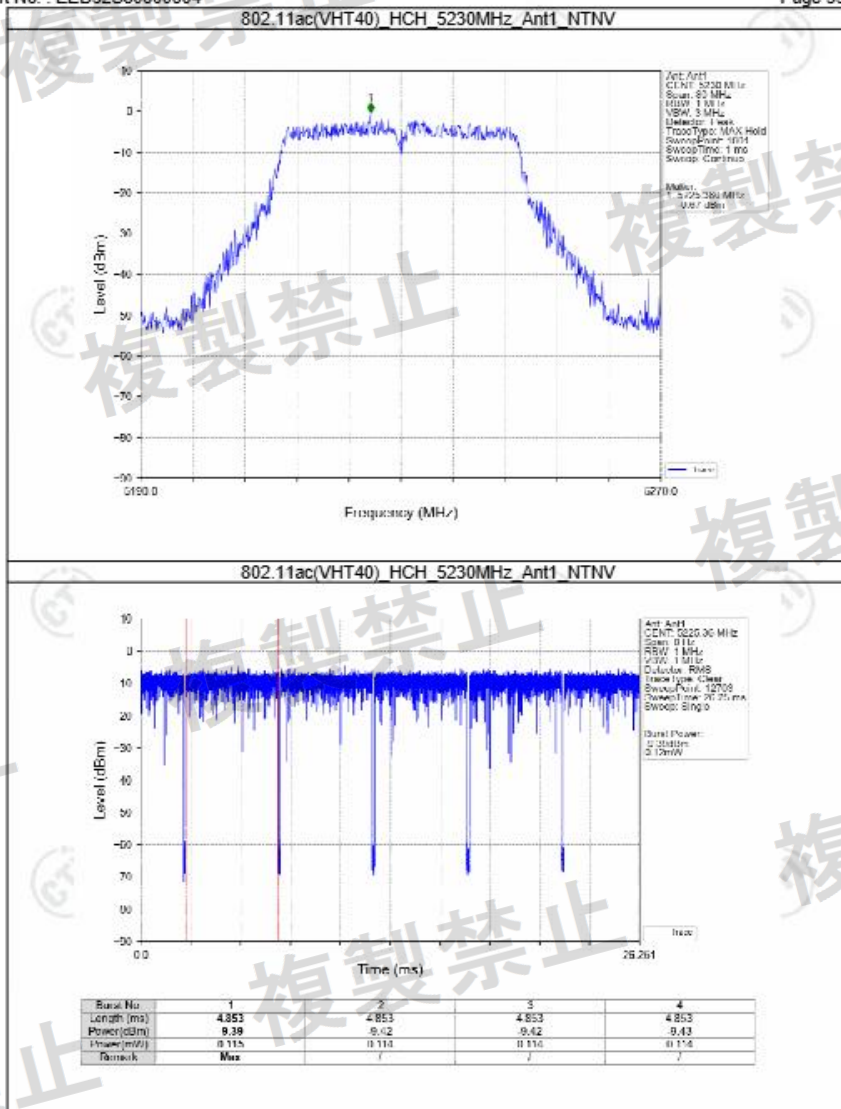


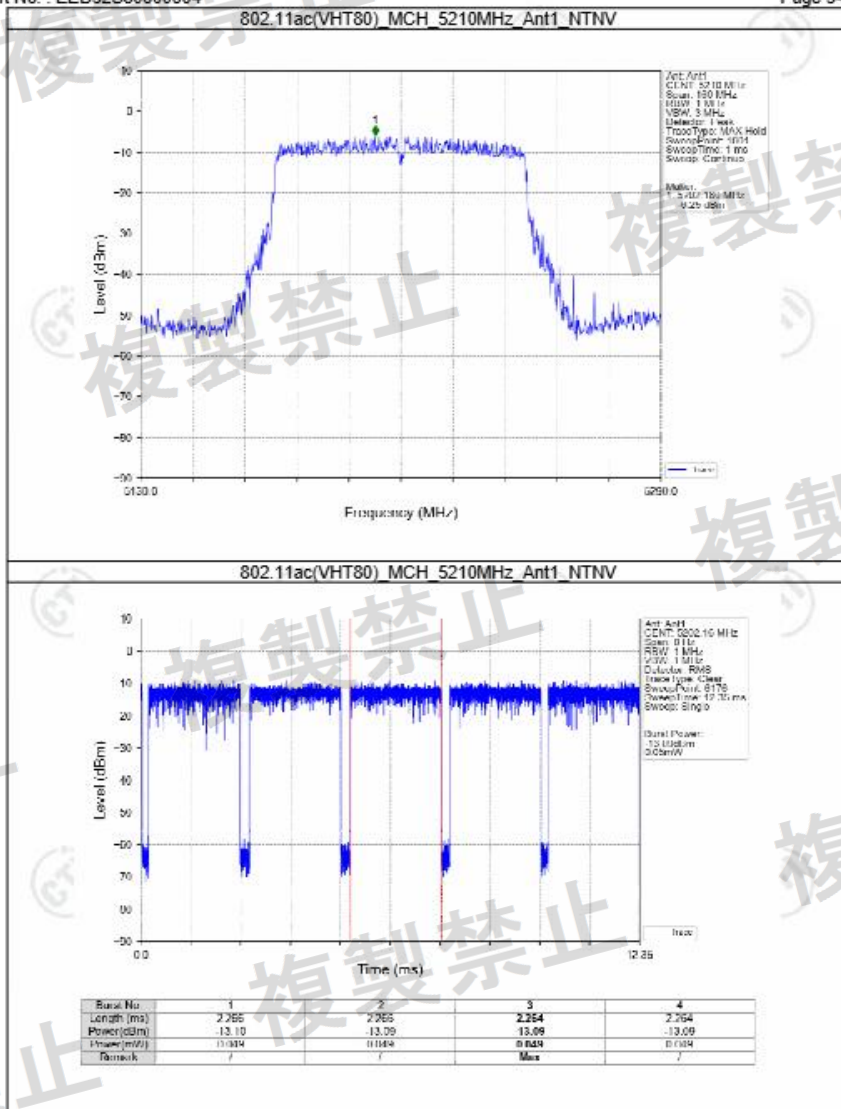


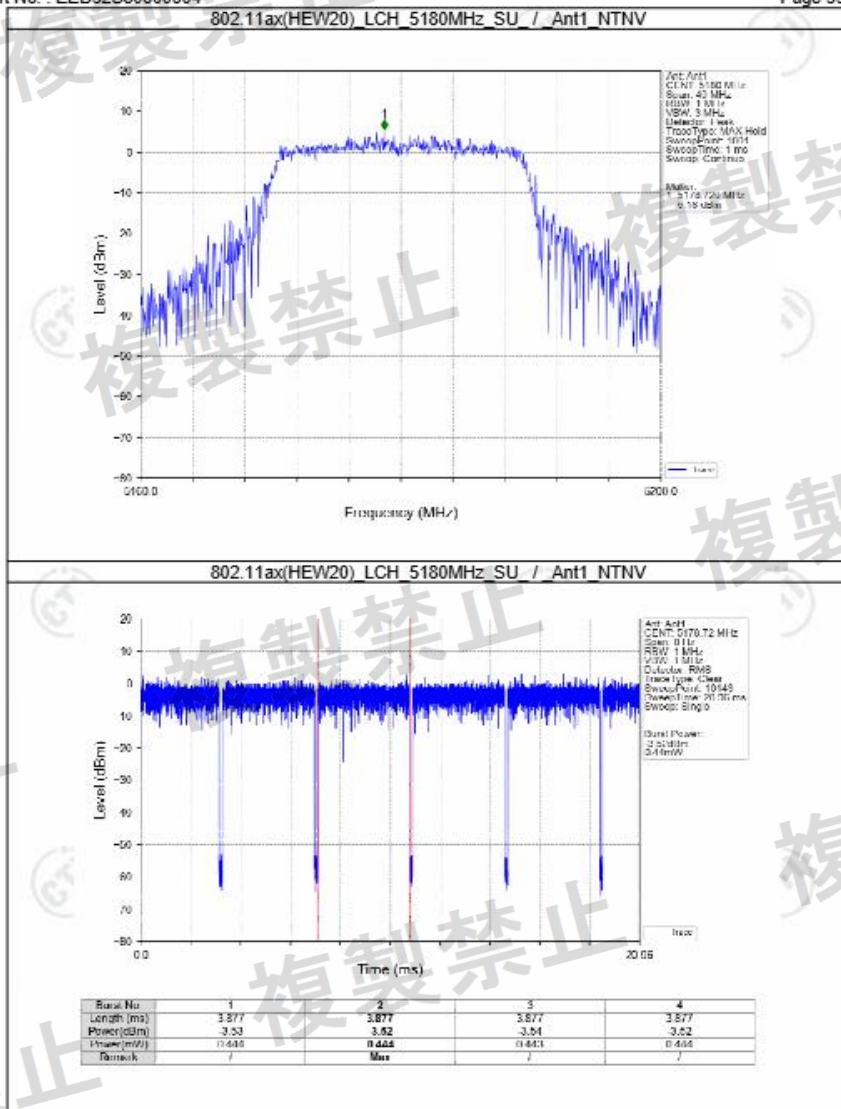


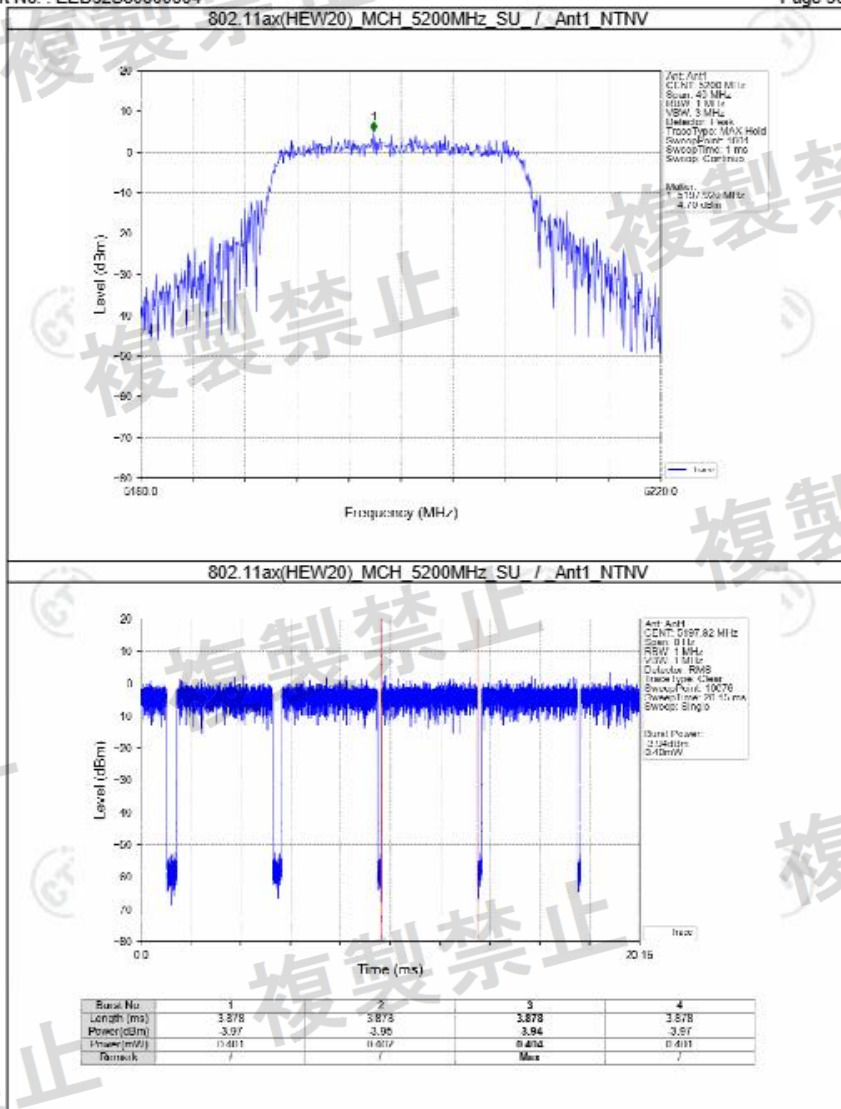


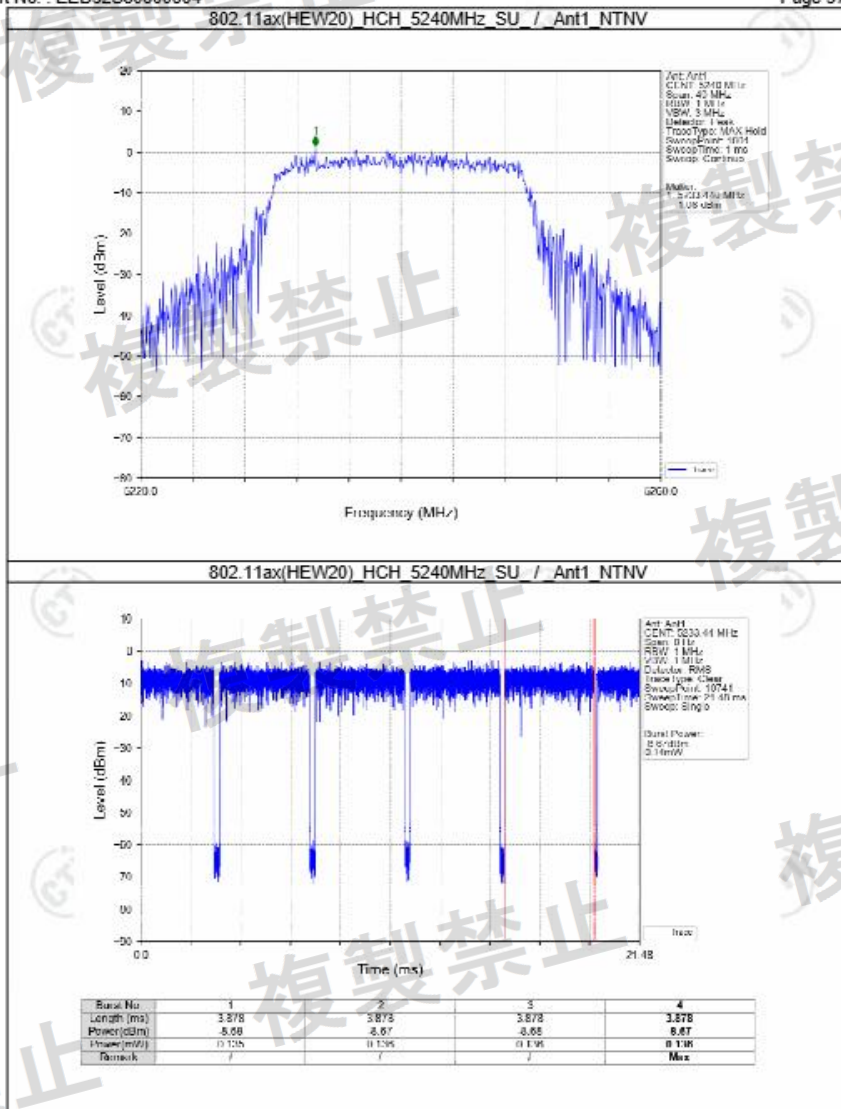


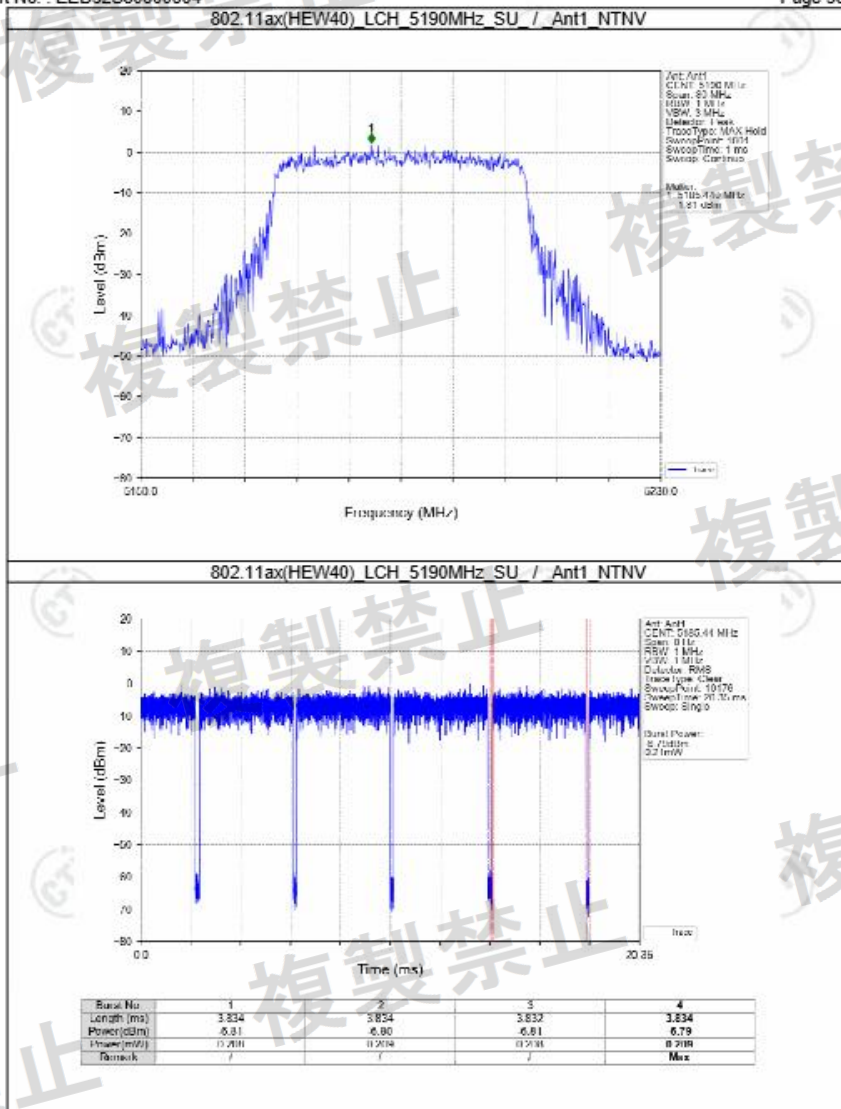


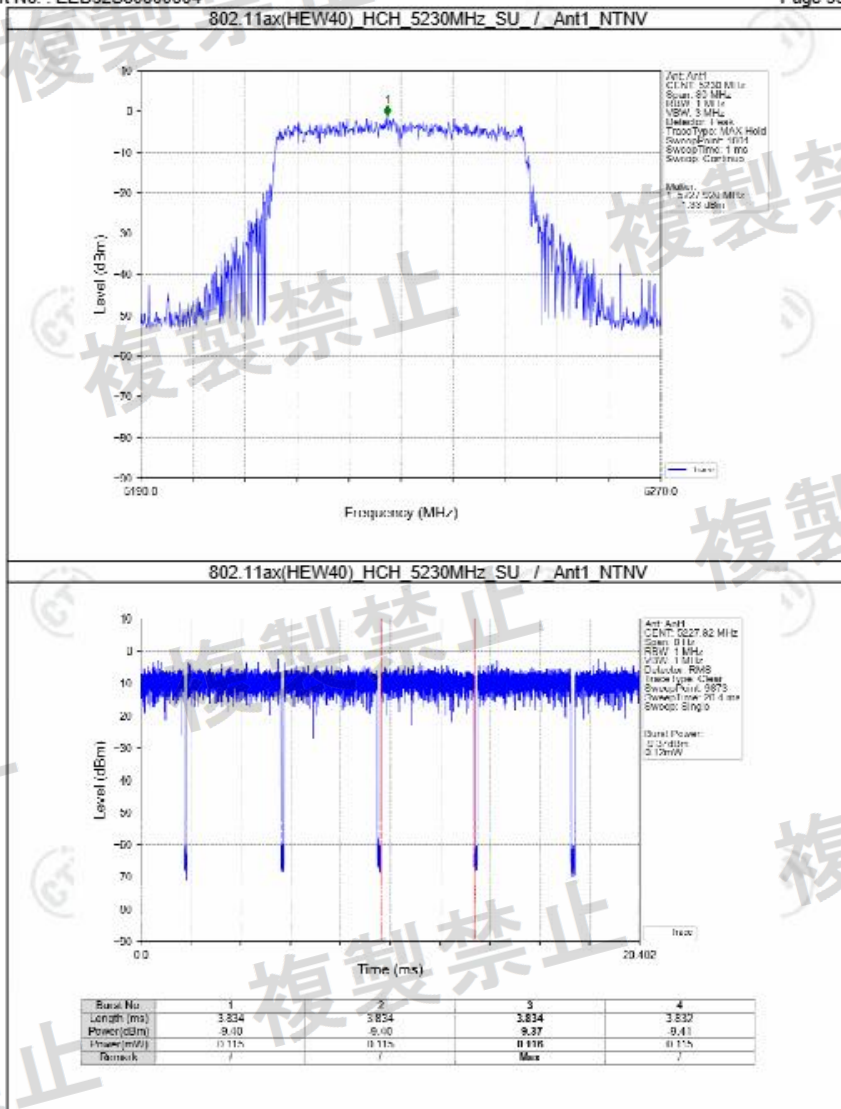


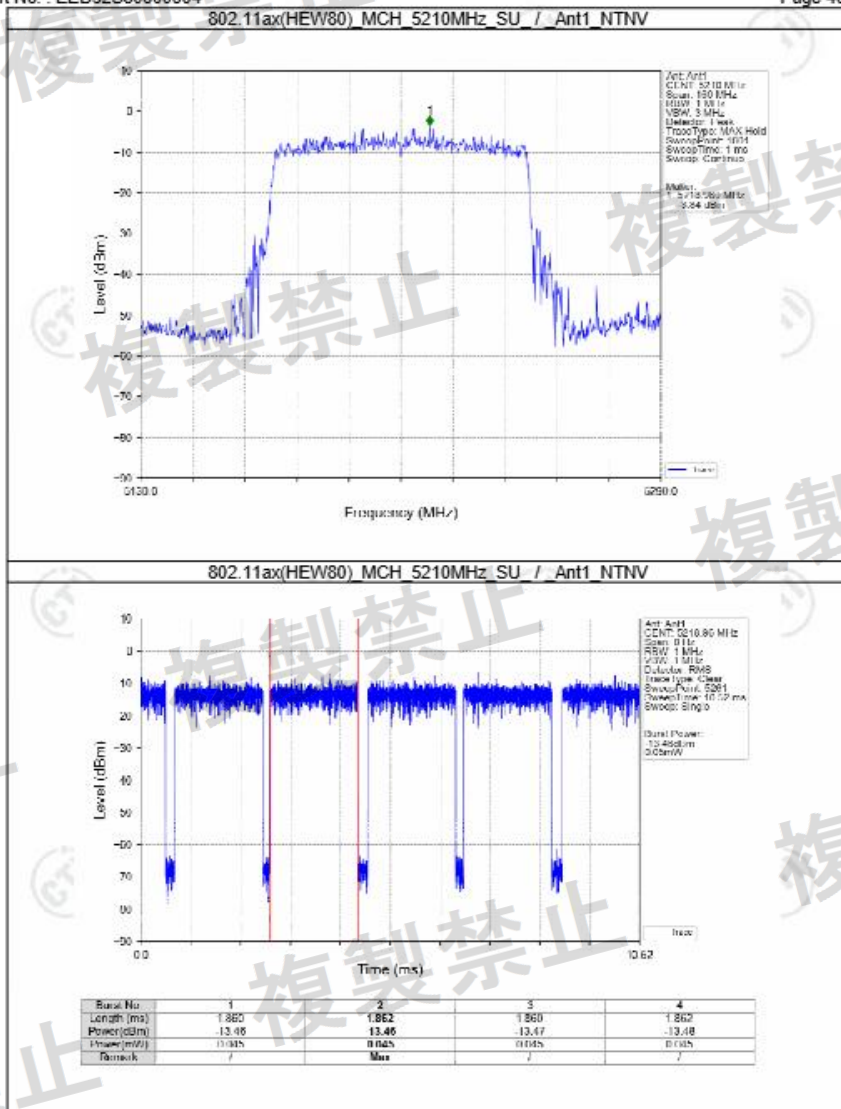












4. Adjacent Channel Leakage Power

4.1 Test Result

4.1.1 ACLR_NTNV_SISO

NTNV											
Mode	Tx Type	Frequency (MHz)	RU	RU Pos	ANT	Offset (MHz)	Integ BW (MHz)	Power (dBm)	Result (dBc)	Limit (dBc)	Verdict
802.11a	SISO	5180	/	/	1	-40	18	-35.81	-50.03	<=-40	Pass
						-20	18	-16.51	-30.73	<=-25	Pass
						0	18	14.22	/	/	/
						20	18	-17.73	-31.95	<=-25	Pass
						40	18	-36.58	-50.80	<=-40	Pass
						-40	18	-36.01	-49.70	<=-40	Pass
		5200	/	/	1	-20	18	-17.37	-31.06	<=-25	Pass
						0	18	13.69	/	/	/
						20	18	-18.22	-31.91	<=-25	Pass
						40	18	-37.12	-50.81	<=-40	Pass
						-40	18	-39.96	-51.53	<=-40	Pass
						-20	18	-19.50	-31.07	<=-25	Pass
802.11n (HT20)	SISO	5180	/	/	1	0	18	11.57	/	/	/
						20	18	-20.17	-31.74	<=-25	Pass
						40	18	-40.34	-51.91	<=-40	Pass
						-40	18	-36.32	-49.32	<=-40	Pass
						-20	18	-17.22	-30.22	<=-25	Pass
						0	18	13.00	/	/	/
		5200	/	/	1	20	18	-17.73	-30.73	<=-25	Pass
						40	18	-37.37	-50.37	<=-40	Pass
						-40	18	-36.05	-48.85	<=-40	Pass
						-20	18	-17.44	-30.24	<=-25	Pass
						0	18	12.80	/	/	/
						20	18	-18.33	-31.13	<=-25	Pass
802.11n (HT40)	SISO	5190	/	/	1	40	18	-37.10	-49.90	<=-40	Pass
						-40	18	-41.56	-51.77	<=-40	Pass
						-20	18	-20.05	-30.26	<=-25	Pass
						0	18	10.21	/	/	/
						20	18	-19.82	-30.03	<=-25	Pass
						40	18	-42.13	-52.34	<=-40	Pass
		5230	/	/	1	-80	40	-33.01	-46.13	<=-40	Pass
						-40	40	-19.10	-32.22	<=-25	Pass
						0	40	13.12	/	/	/
						40	40	-20.94	-34.06	<=-25	Pass
						80	40	-34.95	-48.07	<=-40	Pass
						-80	40	-41.89	-52.41	<=-40	Pass
802.11ac (VHT20)	SISO	5180	/	/	1	-40	40	-21.77	-32.29	<=-25	Pass
						0	40	10.52	/	/	/
						40	40	-22.89	-33.41	<=-25	Pass
						80	40	-43.09	-53.61	<=-40	Pass
						-40	18	-35.85	-48.61	<=-40	Pass
						-20	18	-17.30	-30.06	<=-25	Pass
						0	18	12.76	/	/	/
						20	18	-18.55	-31.31	<=-25	Pass

Report No.: EED32S80600604

Page 42 of 190

802.11 ac (VHT4 0)	SISO	5200	/	/	1	40	18	-36.34	-49.10	<=-40	Pass
						-40	18	-39.11	-52.04	<=-40	Pass
						-20	18	-17.23	-30.16	<=-25	Pass
						0	18	12.93	/	/	/
						20	18	-17.76	-30.69	<=-25	Pass
						40	18	-40.08	-53.01	<=-40	Pass
		5240	/	/	1	-40	18	-40.03	-50.25	<=-40	Pass
						-20	18	-20.72	-30.94	<=-25	Pass
						0	18	10.22	/	/	/
						20	18	-21.07	-31.29	<=-25	Pass
						40	18	-40.36	-50.58	<=-40	Pass
						-80	40	-32.93	-46.02	<=-40	Pass
802.11 ac (VHT8 0)	SISO	5190	/	/	1	-40	40	-19.77	-32.86	<=-25	Pass
						0	40	13.09	/	/	/
						40	40	-20.65	-33.74	<=-25	Pass
						80	40	-34.79	-47.88	<=-40	Pass
						-80	40	-38.74	-48.87	<=-40	Pass
						-40	40	-22.52	-32.65	<=-25	Pass
		5230	/	/	1	0	40	10.13	/	/	/
						40	40	-22.85	-32.98	<=-25	Pass
						80	40	-40.06	-50.19	<=-40	Pass
						-80	80	-25.75	-35.58	<=-25	Pass
						0	80	9.83	/	/	/
						80	80	-26.55	-36.38	<=-25	Pass
802.11 ax (HEW 20)	SISO	5180	SU	/	1	-40	20	-36.24	-50.07	<=-40	Pass
						-20	20	-14.64	-28.47	<=-25	Pass
						0	20	13.83	/	/	/
						20	20	-14.31	-28.14	<=-25	Pass
						40	20	-37.30	-51.13	<=-40	Pass
						-40	20	-35.81	-49.24	<=-40	Pass
		5200	SU	/	1	-20	20	-14.55	-27.98	<=-25	Pass
						0	20	13.43	/	/	/
						20	20	-16.18	-29.61	<=-25	Pass
						40	20	-37.14	-50.57	<=-40	Pass
						-40	20	-40.71	-50.81	<=-40	Pass
						-20	20	-18.14	-28.24	<=-25	Pass
802.11 ax (HEW 40)	SISO	5240	SU	/	1	0	20	10.10	/	/	/
						20	20	-19.29	-29.39	<=-25	Pass
						40	20	-41.54	-51.64	<=-40	Pass
						-80	40	-37.50	-51.48	<=-40	Pass
						-40	40	-19.38	-33.36	<=-25	Pass
						0	40	13.98	/	/	/
		5190	SU	/	1	40	40	-19.39	-33.37	<=-25	Pass
						80	40	-39.15	-53.13	<=-40	Pass
						-80	40	-38.78	-49.92	<=-40	Pass
						-40	40	-21.92	-33.06	<=-25	Pass
						0	40	11.14	/	/	/
						40	40	-22.60	-33.74	<=-25	Pass
802.11 ax (HEW 80)	SISO	5230	SU	/	1	80	40	-39.90	-51.04	<=-40	Pass
						-80	80	-26.02	-36.49	<=-25	Pass
						0	80	10.47	/	/	/
		5210	SU	/	1	80	80	-26.16	-36.63	<=-25	Pass

4.2 Test Graph

4.2.1 ACLR_NTV_SISO

