



Shenzhen CTL Testing Technology Co., Ltd.

Floor 1-A, Baisha Technology Park, No.3011, Shahexi Road, Nanshan District, Shenzhen, China 518055

Tel: +86-755-89486194 E-mail: ctl@ctl-lab.com

Annex for 5G Wi-Fi BAND 3

Test Report No.: CTL2506266011-WF02

TABLE OF CONTENTS

1. Duty Cycle.....3

 1.1 Test Result.....3

 1.1.1 Ant1.....3

 1.2 Test Graph.....4

 1.2.1 Ant1.....4

2. Bandwidth.....14

 2.1 Test Result.....14

 2.1.1 OBW.....14

 2.1.2 6dB BW.....14

 2.2 Test Graph.....15

 2.2.1 OBW.....15

 2.2.2 6dB BW.....25

3. Maximum Conducted Output Power.....35

 3.1 Test Result.....35

FCC ID: SMQUWM2

3.1.1 Power.....	35
3.2 Test Graph.....	36
3.2.1 Power.....	36
4. Maximum Power Spectral Density.....	46
4.1 Test Result.....	46
4.1.1 PSD-Band3.....	46
4.2 Test Graph.....	47
4.2.1 PSD-Band3.....	47
5. Frequency Stability.....	57
5.1 Test Result.....	57
5.1.1 Ant1.....	57

FCC ID: SMQUWM2

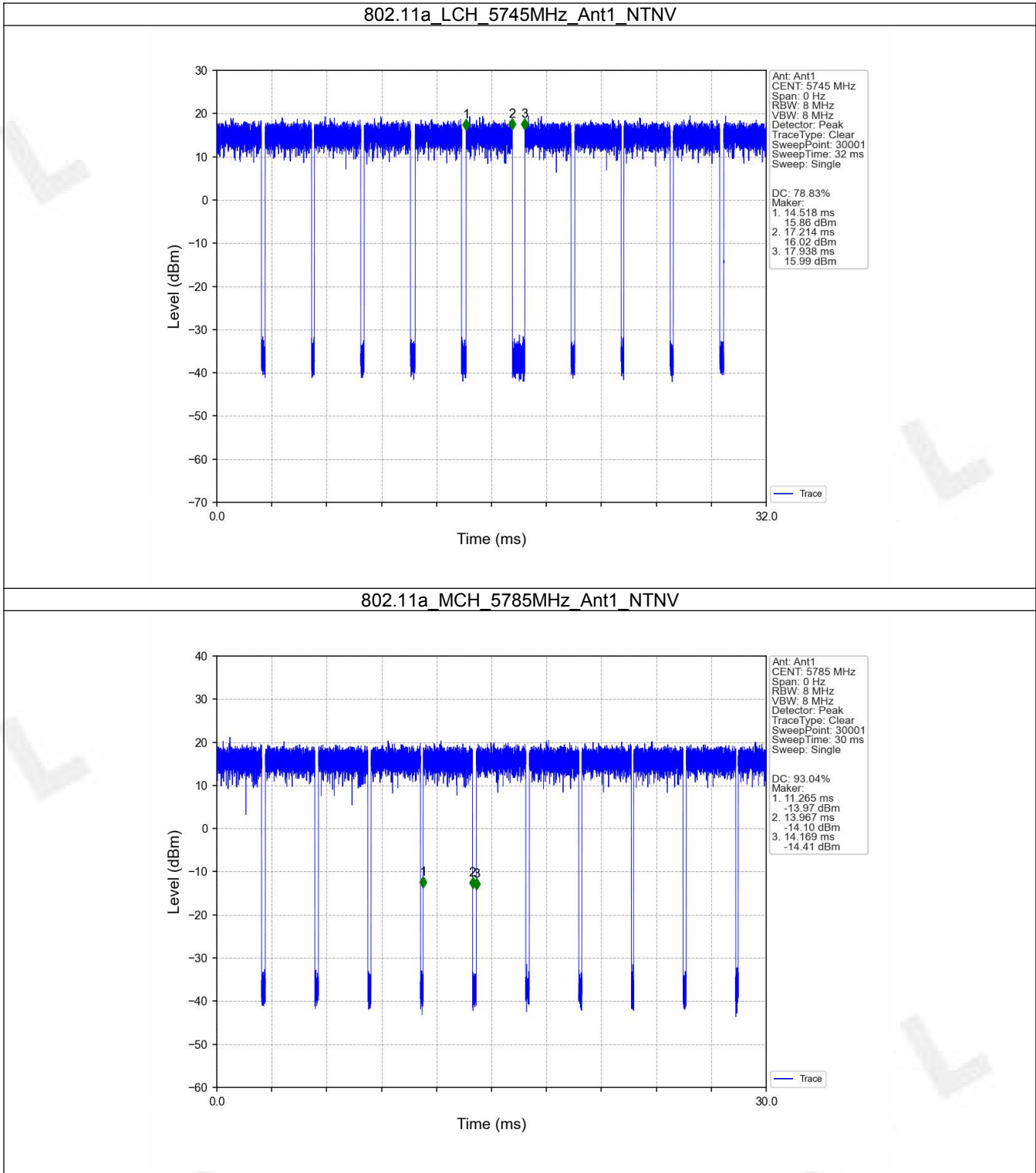
1. Duty Cycle**1.1 Test Result****1.1.1 Ant1**

Ant1									
Mode	Tx Type	Frequency (MHz)	RU	RU Pos	T_on (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	Max. DC Variation (%)
802.11a	SISO	5745	/	/	2.696	3.420	78.83	1.03	15.65
		5785	/	/	2.702	2.904	93.04	0.31	2.64
		5825	/	/	2.702	2.895	93.33	0.30	3.31
802.11n (HT20)	SISO	5745	/	/	2.525	2.960	85.30	0.69	11.82
		5785	/	/	2.523	2.699	93.48	0.29	3.28
		5825	/	/	2.513	2.783	90.30	0.44	4.32
802.11n (HT40)	SISO	5755	/	/	1.228	1.444	85.04	0.70	4.46
		5795	/	/	1.232	1.416	87.01	0.60	5.91
802.11ac (VHT20)	SISO	5745	/	/	2.523	2.734	92.28	0.35	3.79
		5785	/	/	2.522	2.725	92.55	0.34	3.49
		5825	/	/	2.522	2.734	92.25	0.35	3.81
802.11ac (VHT40)	SISO	5755	/	/	1.236	1.633	75.69	1.21	17.80
		5795	/	/	1.236	1.439	85.89	0.66	7.62
802.11ac (VHT80)	SISO	5775	/	/	0.595	0.807	73.73	1.32	13.68
802.11ax (HEW20)	SISO	5745	SU	/	1.918	2.394	80.12	0.96	15.36
		5785	SU	/	1.917	2.293	83.60	0.78	11.86
		5825	SU	/	1.917	2.116	90.60	0.43	3.22
802.11ax (HEW40)	SISO	5755	SU	/	0.979	1.195	81.92	0.87	8.13
		5795	SU	/	0.979	1.826	53.61	2.71	35.07
802.11ax (HEW80)	SISO	5775	SU	/	0.489	0.695	70.36	1.53	12.97

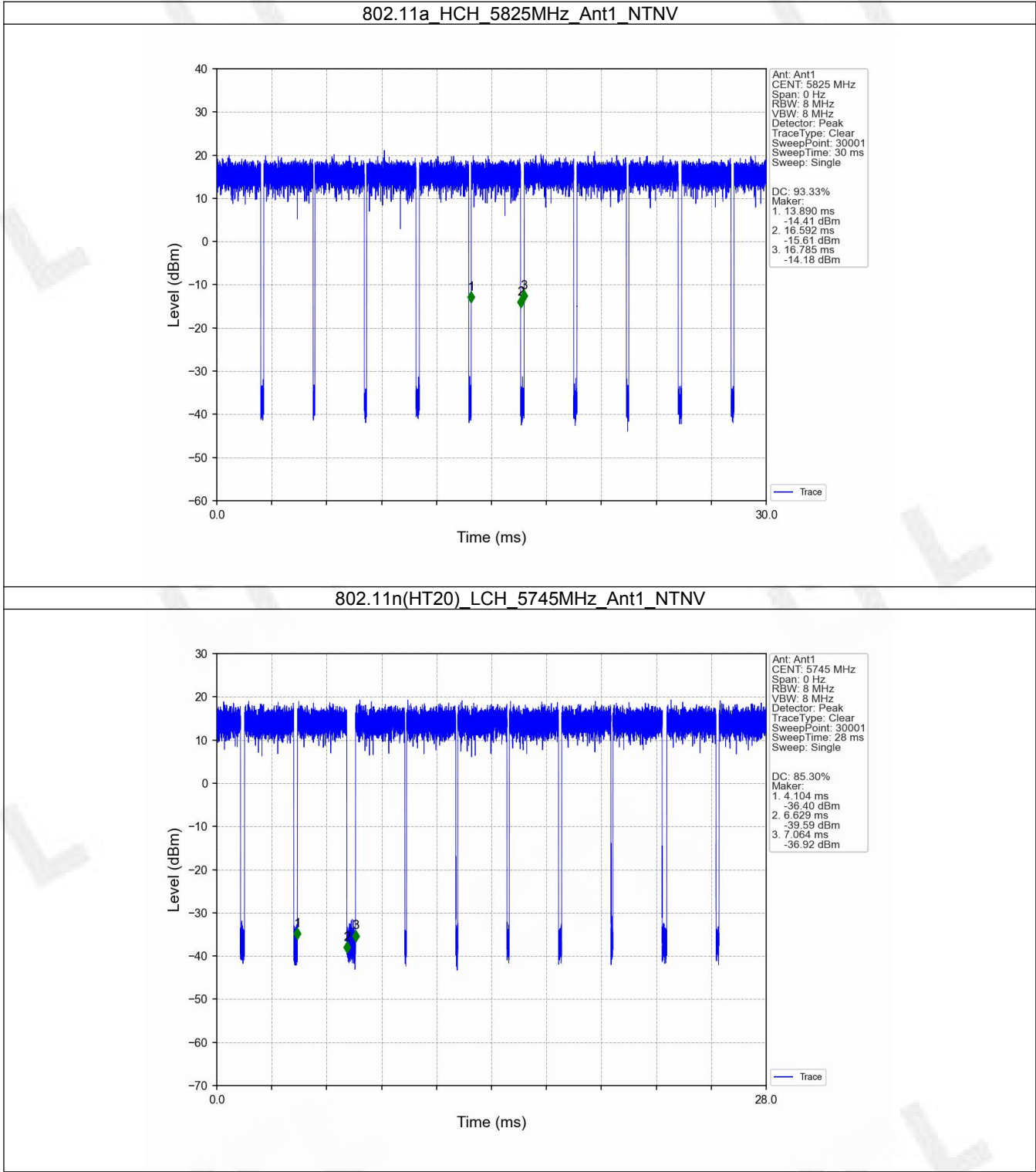
FCC ID: SMQUWM2

1.2 Test Graph

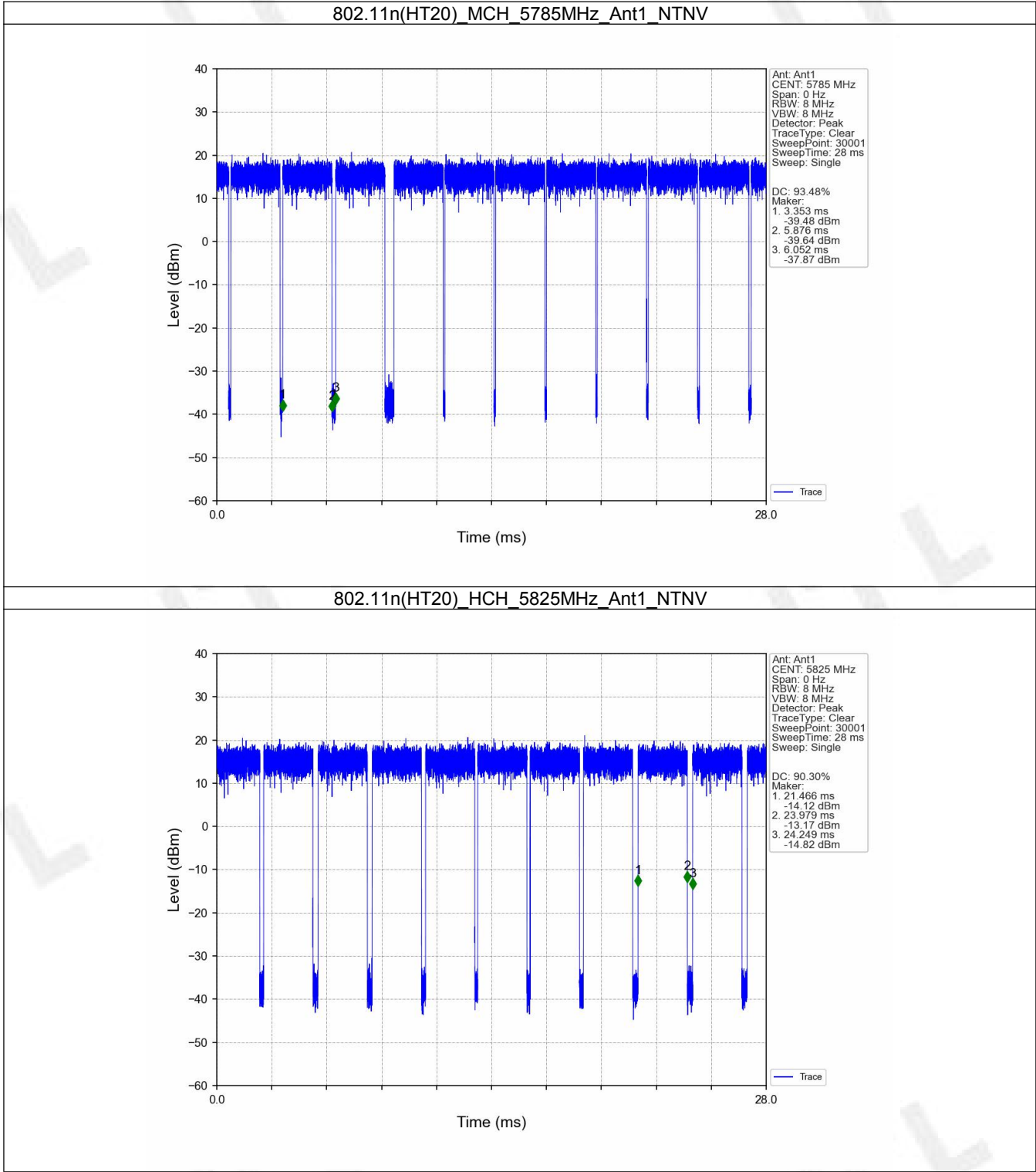
1.2.1 Ant1



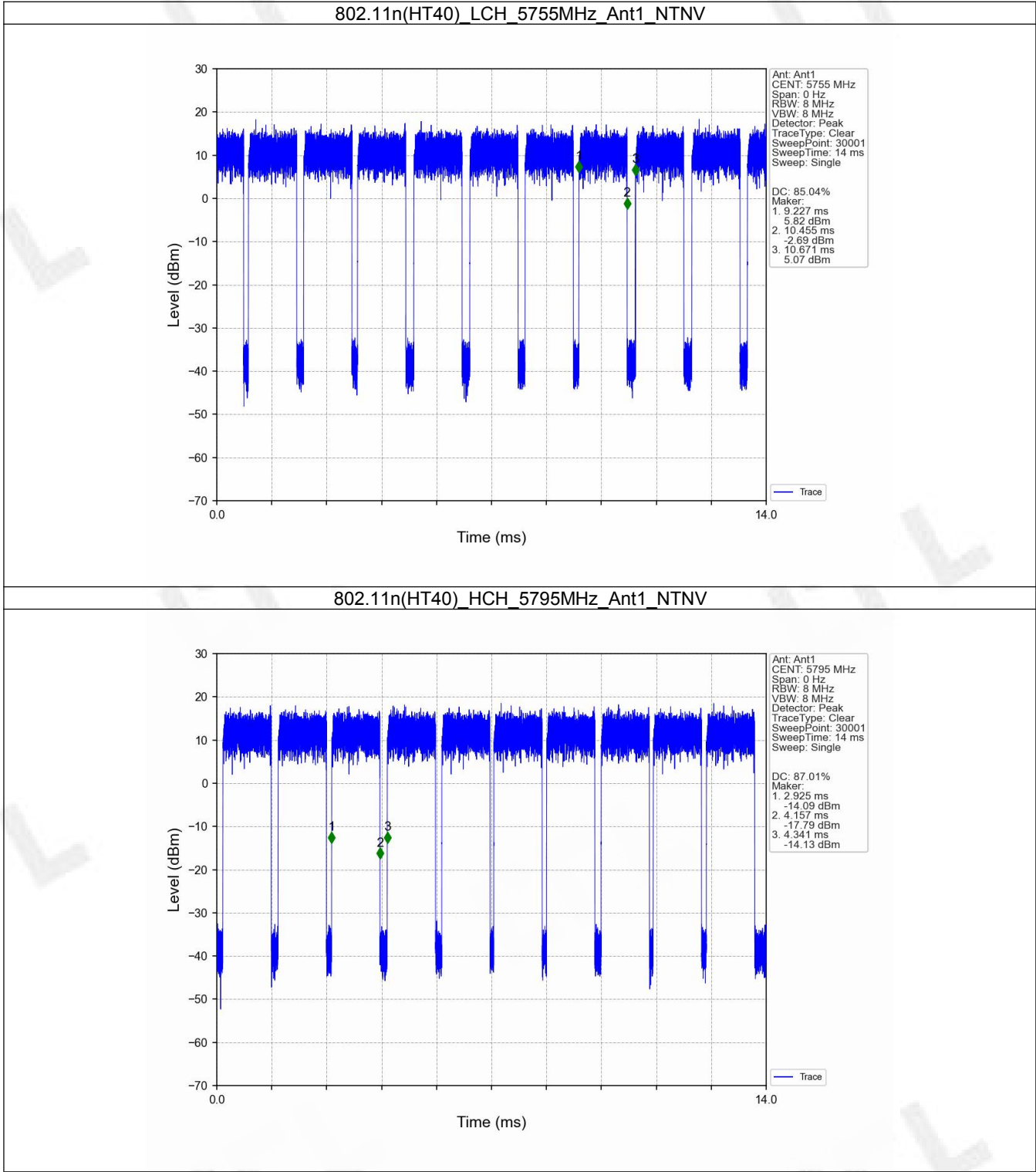
FCC ID: SMQUWM2



FCC ID: SMQUWM2

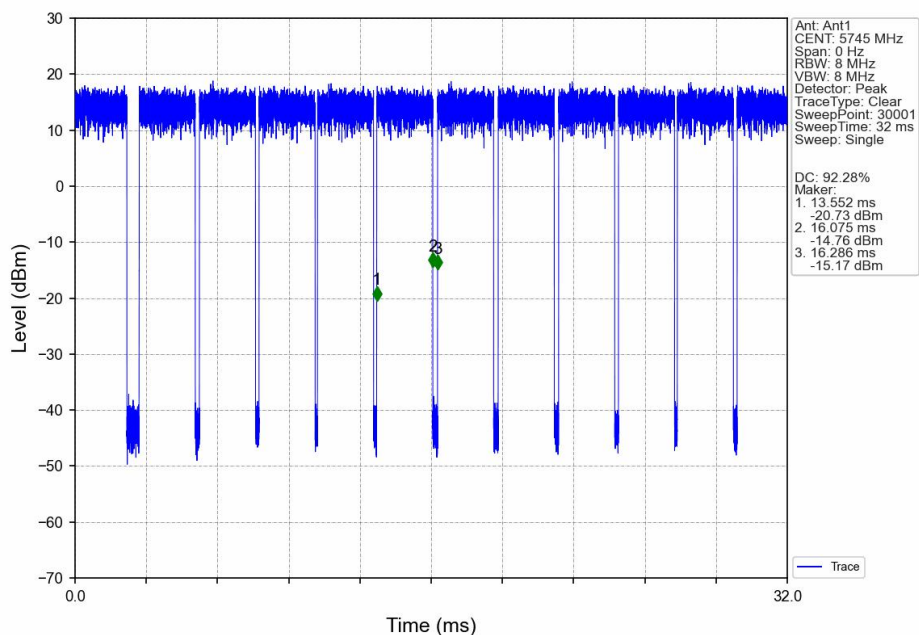


FCC ID: SMQUWM2

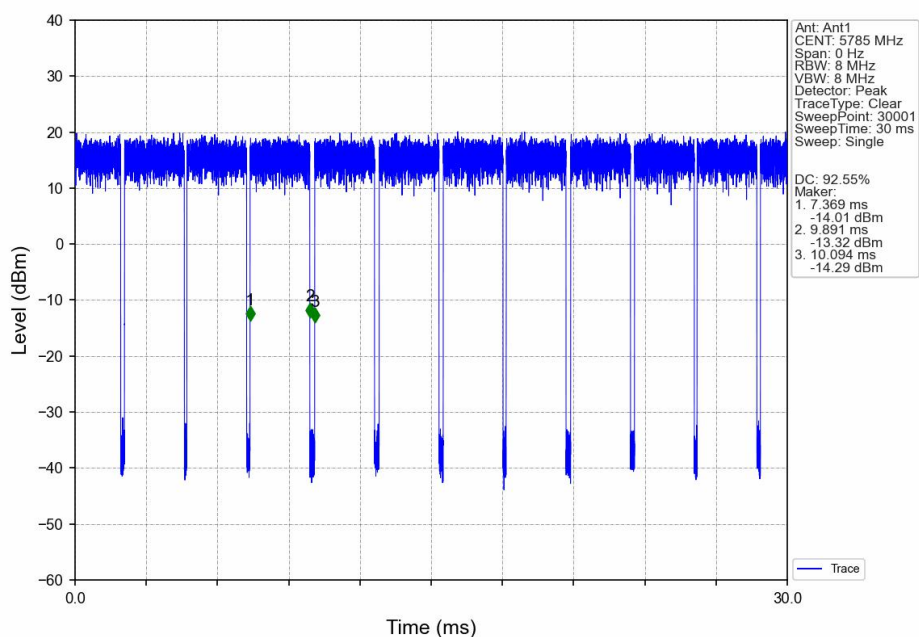


FCC ID: SMQUWM2

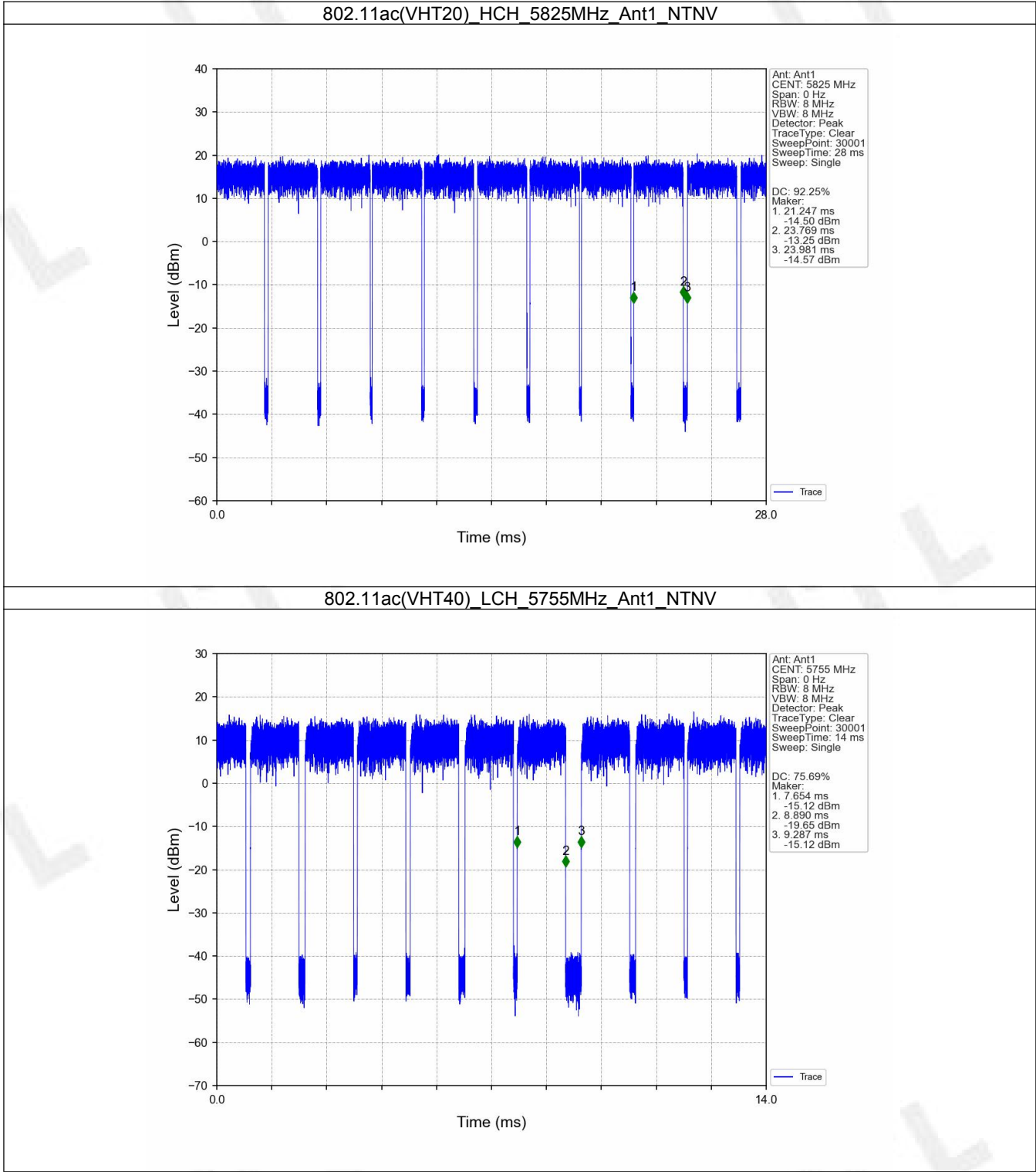
802.11ac(VHT20)_LCH_5745MHz_Ant1_NTNV



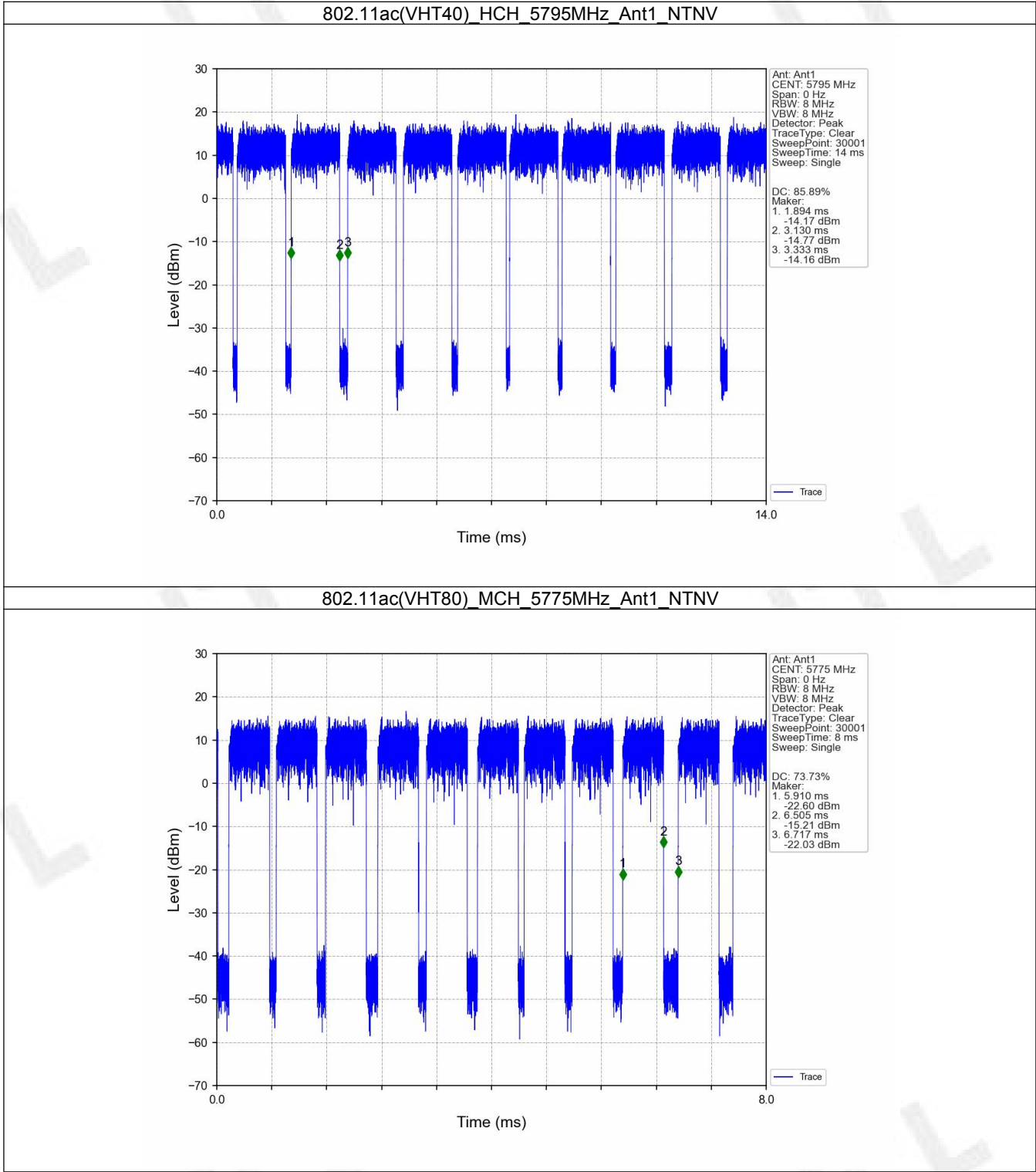
802.11ac(VHT20)_MCH_5785MHz_Ant1_NTNV



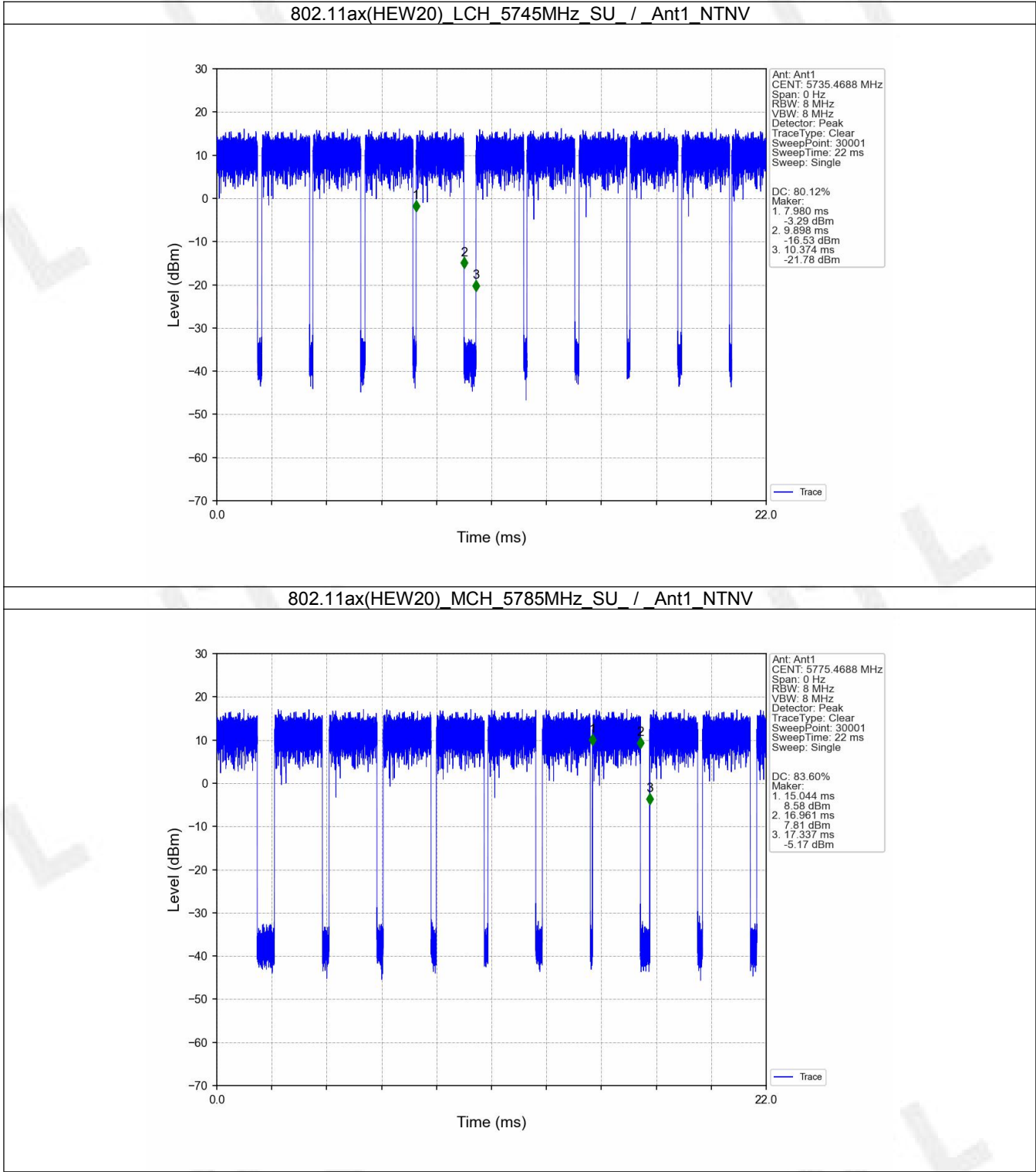
FCC ID: SMQUWM2



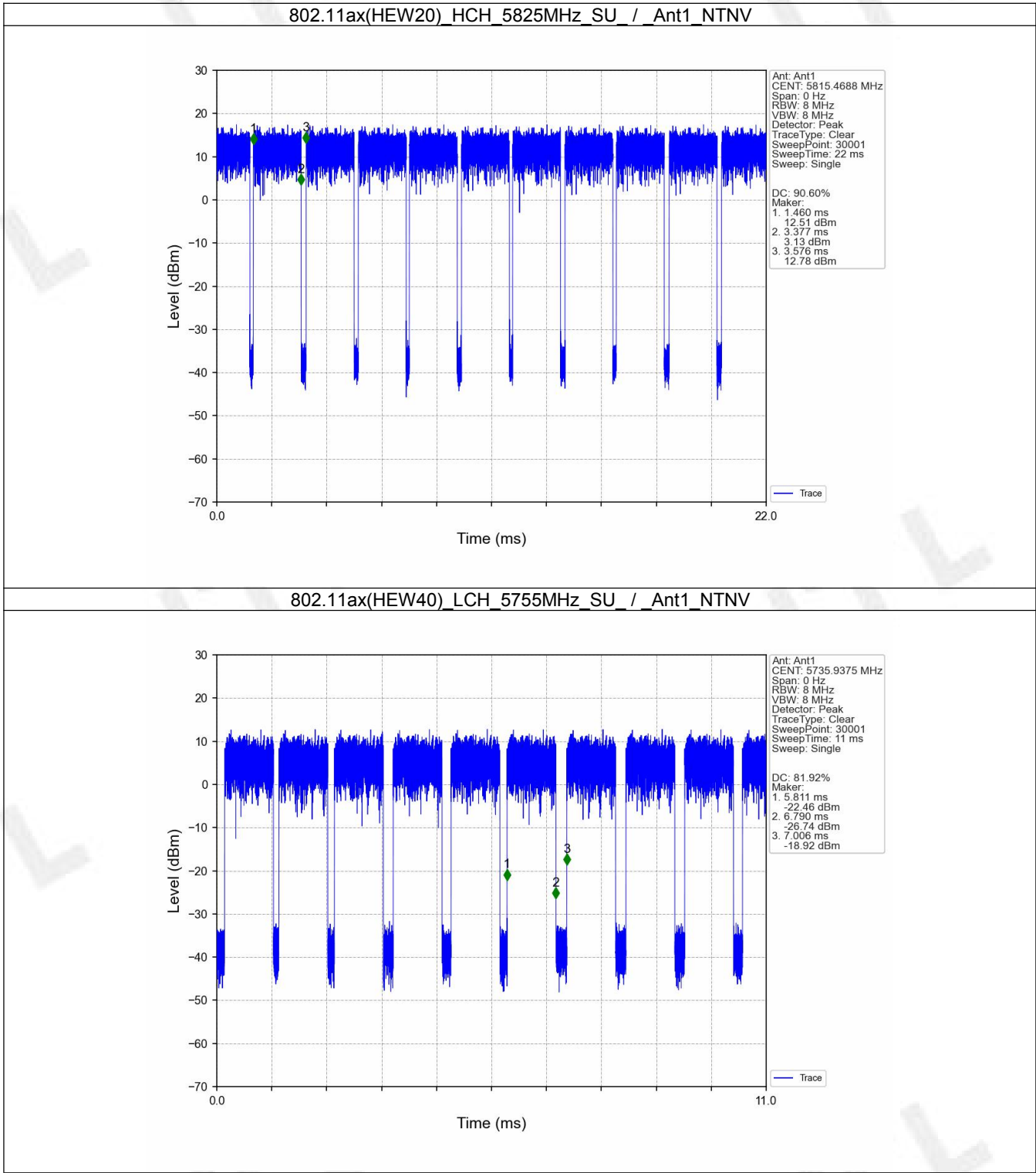
FCC ID: SMQUWM2



FCC ID: SMQUWM2

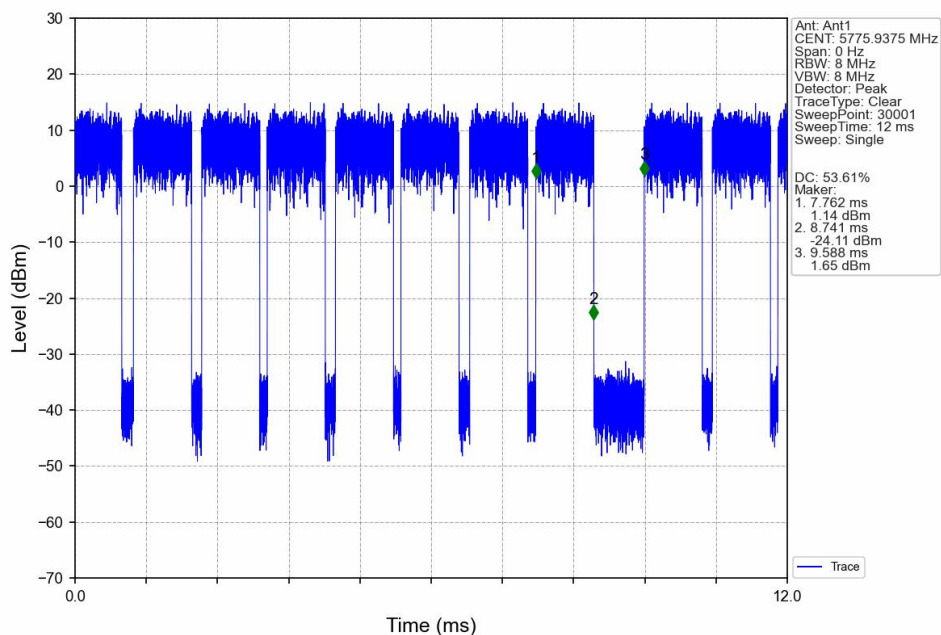


FCC ID: SMQUWM2

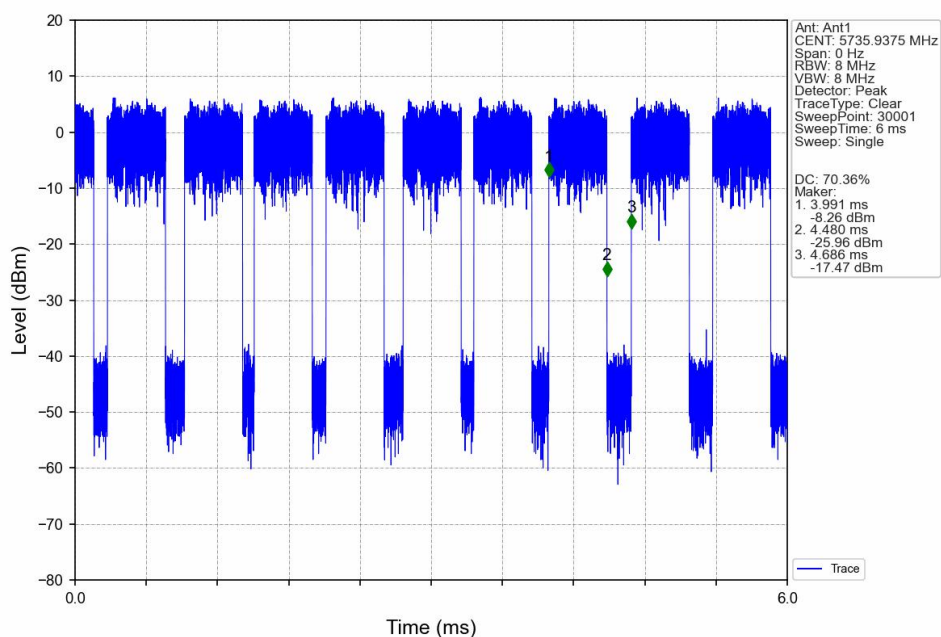


FCC ID: SMQUWM2

802.11ax(HEW40)_HCH_5795MHz_SU_ / Ant1_NTNV



802.11ax(HEW80)_MCH_5775MHz_SU_ / Ant1_NTNV



FCC ID: SMQUWM2

2. Bandwidth**2.1 Test Result****2.1.1 OBW**

Mode	TX Type	Frequency (MHz)	RU	RU Pos	ANT	99% Occupied Bandwidth (MHz)		Verdict
						Result	Limit	
802.11a	SISO	5745	/	/	1	17.570	/	Pass
		5785	/	/	1	17.620	/	Pass
		5825	/	/	1	17.663	/	Pass
802.11n (HT20)	SISO	5745	/	/	1	18.577	/	Pass
		5785	/	/	1	18.536	/	Pass
		5825	/	/	1	18.564	/	Pass
802.11n (HT40)	SISO	5755	/	/	1	37.261	/	Pass
		5795	/	/	1	37.016	/	Pass
802.11ac (VHT20)	SISO	5745	/	/	1	18.399	/	Pass
		5785	/	/	1	18.549	/	Pass
		5825	/	/	1	18.530	/	Pass
802.11ac (VHT40)	SISO	5755	/	/	1	37.209	/	Pass
		5795	/	/	1	37.326	/	Pass
802.11ac (VHT80)	SISO	5775	/	/	1	75.250	/	Pass
802.11ax (HEW20)	SISO	5745	SU	/	1	19.353	/	Pass
		5785	SU	/	1	19.362	/	Pass
		5825	SU	/	1	19.317	/	Pass
802.11ax (HEW40)	SISO	5755	SU	/	1	38.273	/	Pass
		5795	SU	/	1	38.323	/	Pass
802.11ax (HEW80)	SISO	5775	SU	/	1	76.791	/	Pass

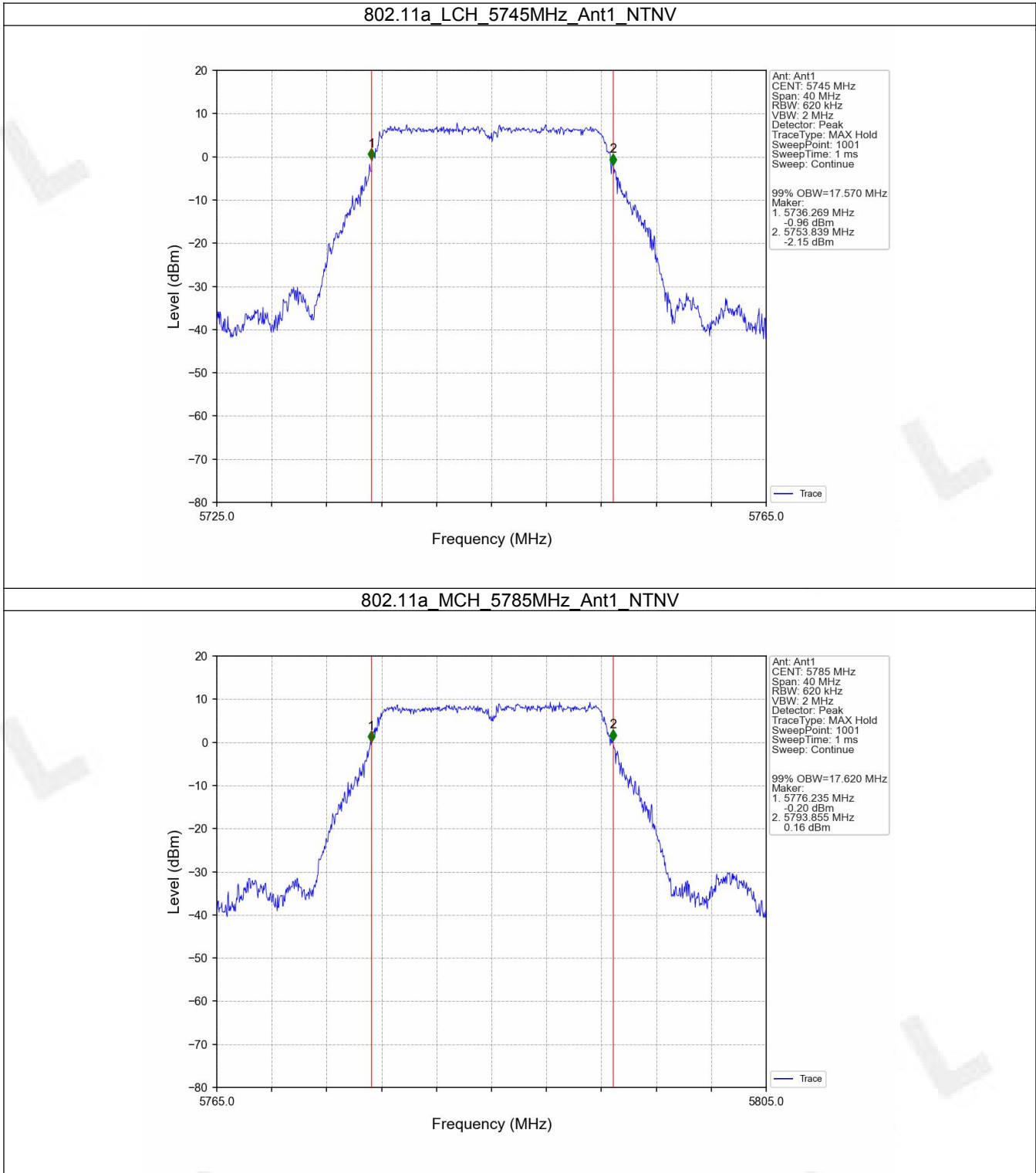
2.1.2 6dB BW

Mode	TX Type	Frequency (MHz)	RU	RU Pos	ANT	6dB Bandwidth (MHz)		Verdict
						Result	Limit	
802.11a	SISO	5745	/	/	1	16.366	>=0.5	Pass
		5785	/	/	1	16.397	>=0.5	Pass
		5825	/	/	1	16.423	>=0.5	Pass
802.11n (HT20)	SISO	5745	/	/	1	17.607	>=0.5	Pass
		5785	/	/	1	17.587	>=0.5	Pass
		5825	/	/	1	17.641	>=0.5	Pass
802.11n (HT40)	SISO	5755	/	/	1	36.412	>=0.5	Pass
		5795	/	/	1	36.376	>=0.5	Pass
802.11ac (VHT20)	SISO	5745	/	/	1	17.606	>=0.5	Pass
		5785	/	/	1	17.606	>=0.5	Pass
		5825	/	/	1	17.602	>=0.5	Pass
802.11ac (VHT40)	SISO	5755	/	/	1	36.426	>=0.5	Pass
		5795	/	/	1	36.379	>=0.5	Pass
802.11ac (VHT80)	SISO	5775	/	/	1	72.572	>=0.5	Pass
802.11ax (HEW20)	SISO	5745	SU	/	1	18.625	>=0.5	Pass
		5785	SU	/	1	18.580	>=0.5	Pass
		5825	SU	/	1	18.750	>=0.5	Pass
802.11ax (HEW40)	SISO	5755	SU	/	1	37.888	>=0.5	Pass
		5795	SU	/	1	37.750	>=0.5	Pass
802.11ax (HEW80)	SISO	5775	SU	/	1	65.043	>=0.5	Pass

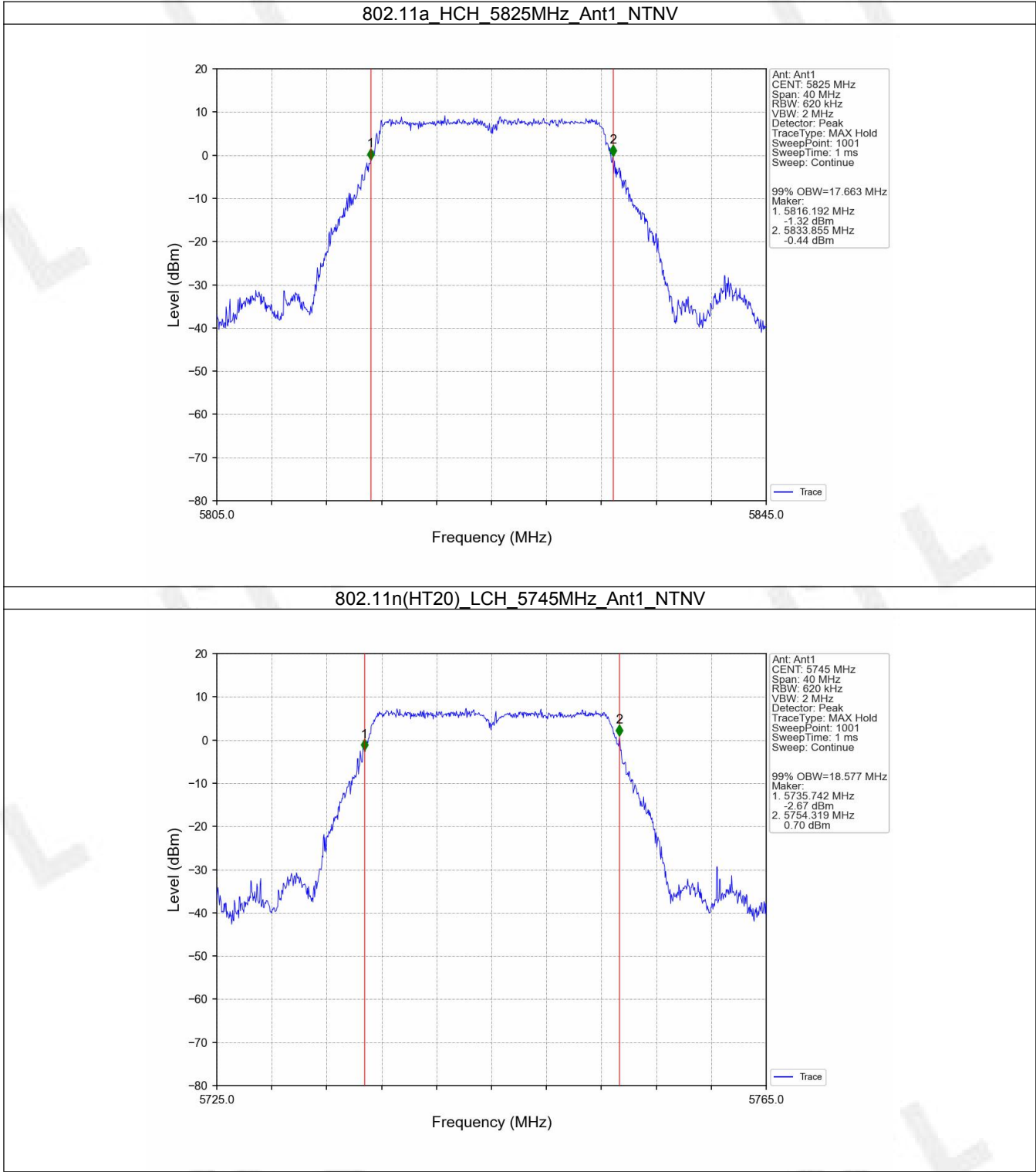
FCC ID: SMQUWM2

2.2 Test Graph

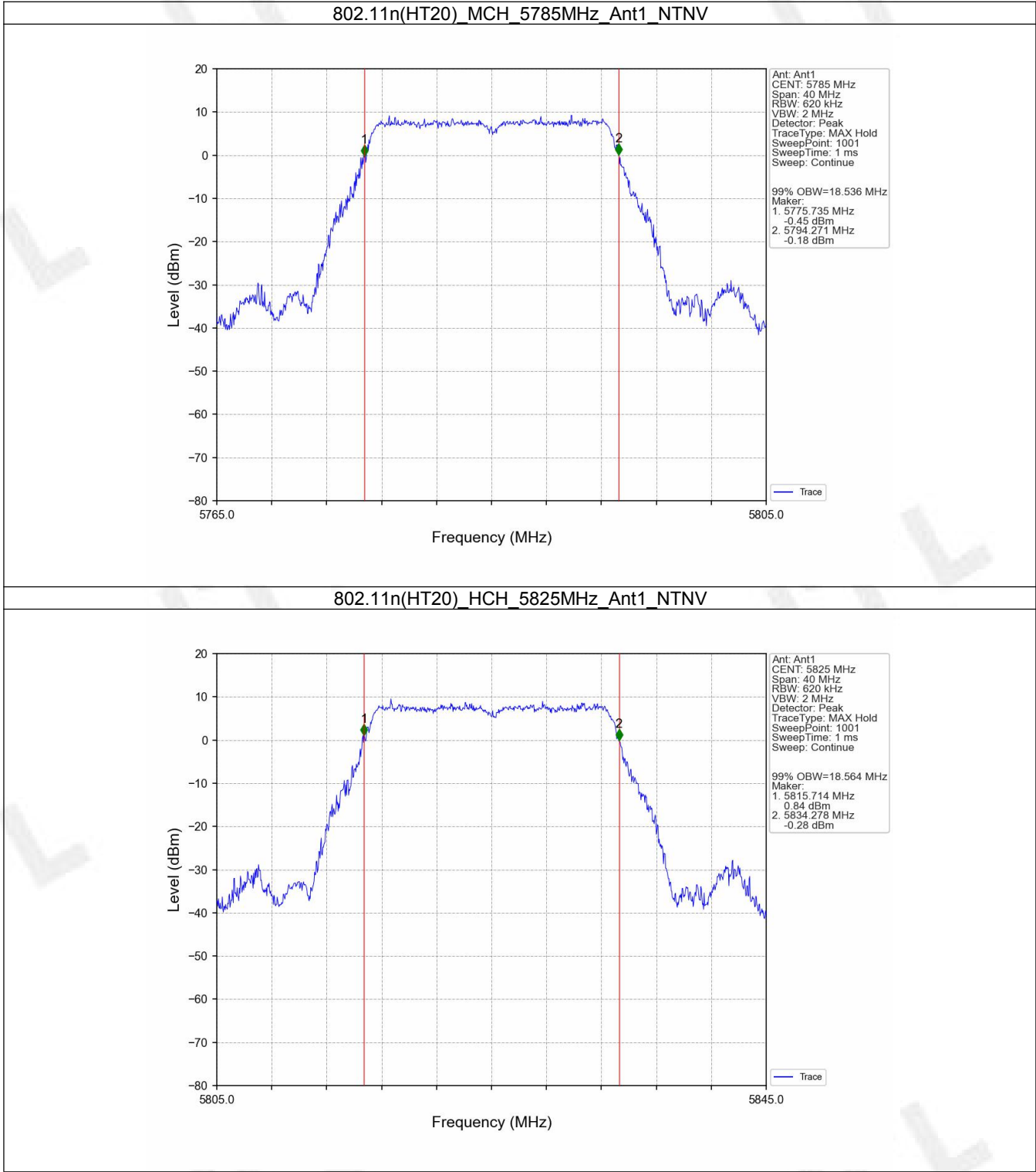
2.2.1 OBW



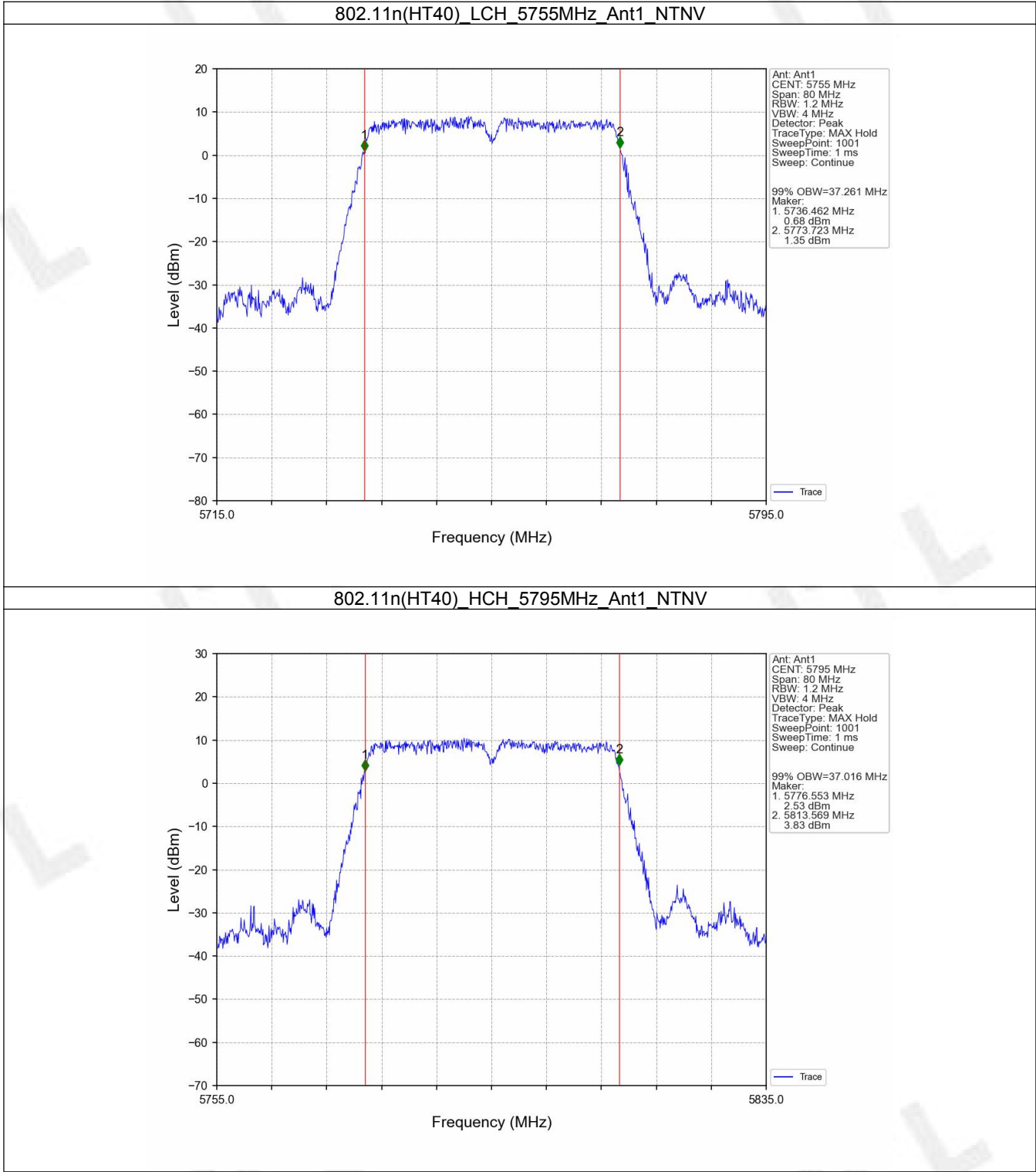
FCC ID: SMQUWM2



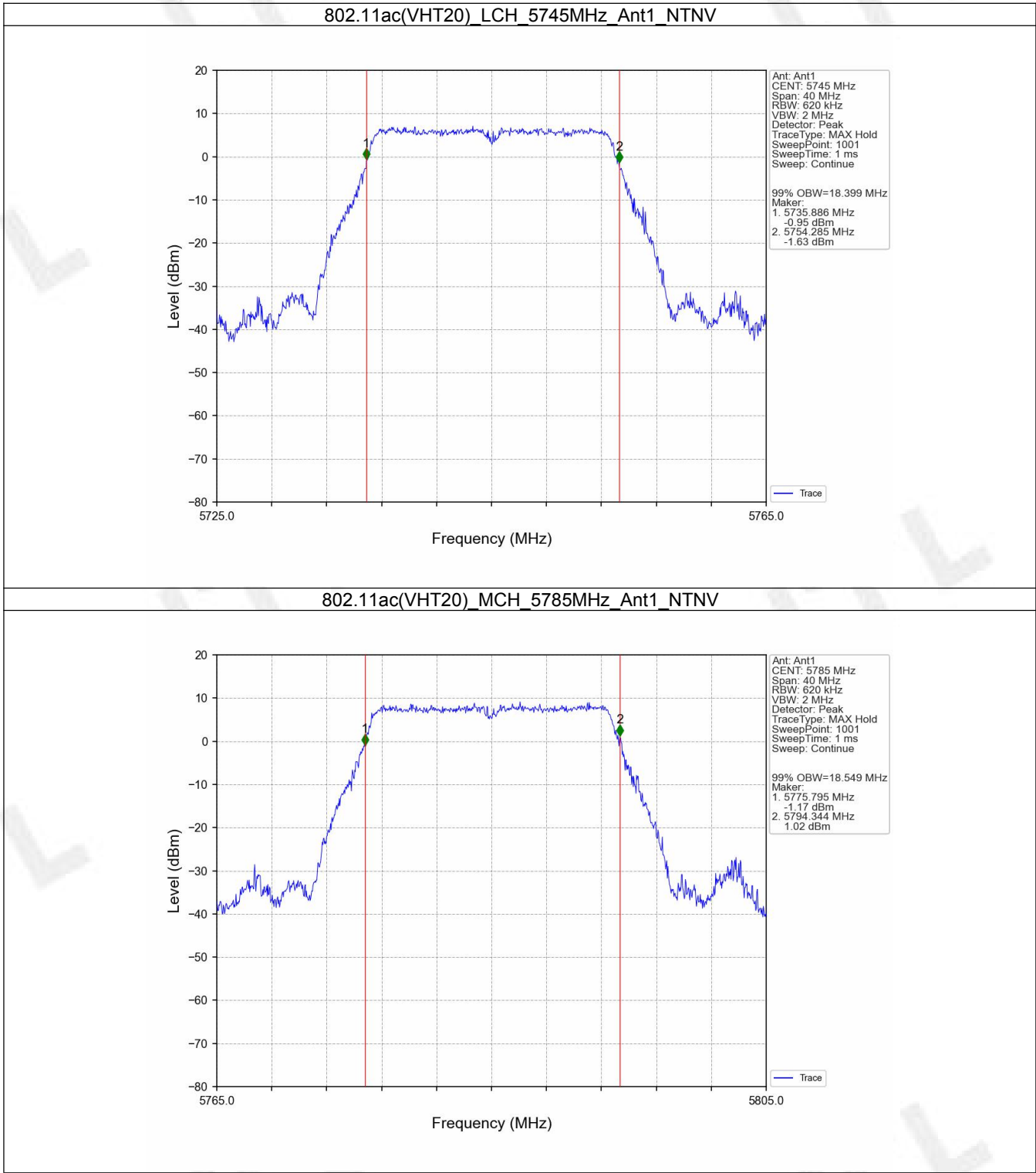
FCC ID: SMQUWM2



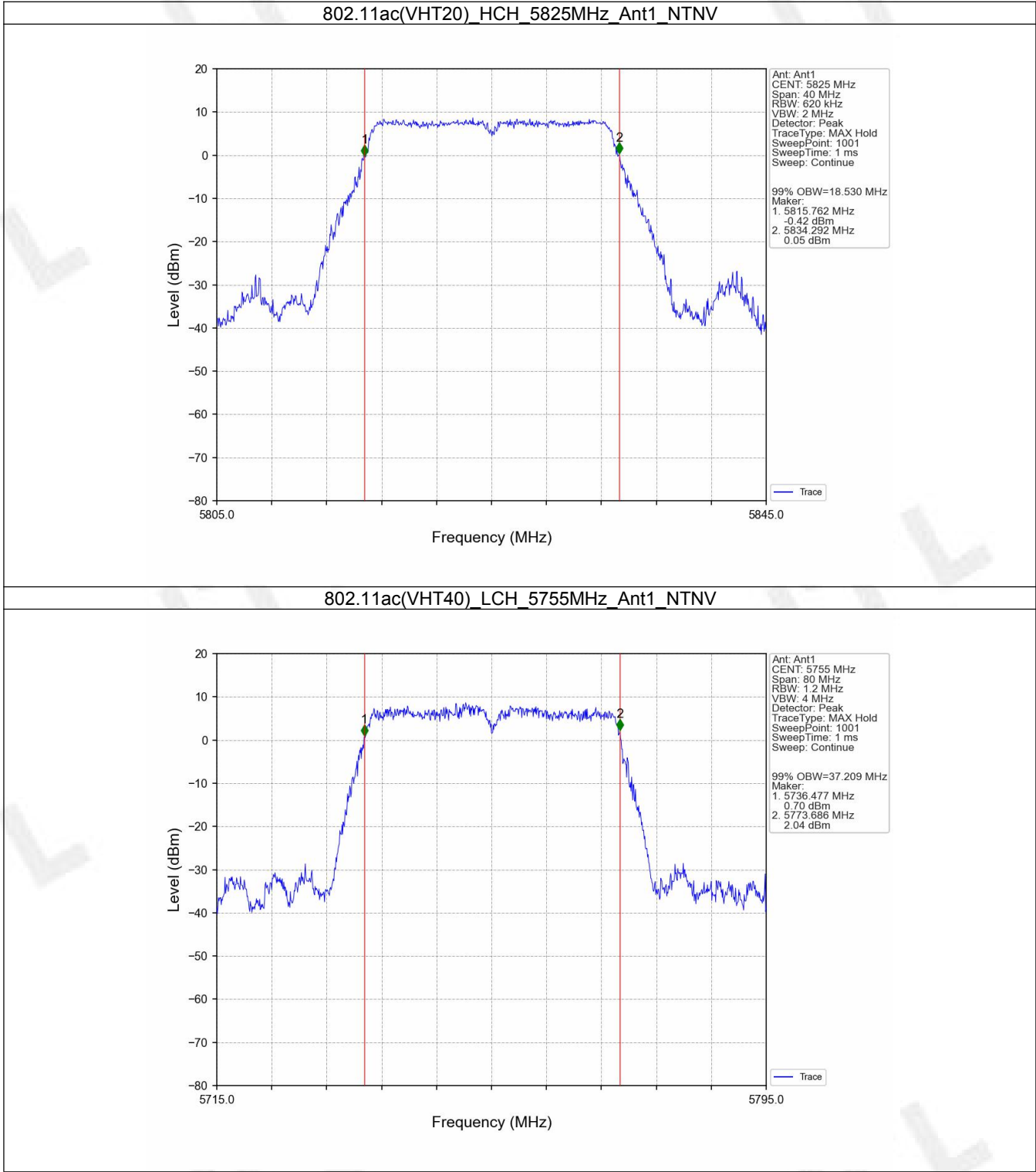
FCC ID: SMQUWM2



FCC ID: SMQUWM2

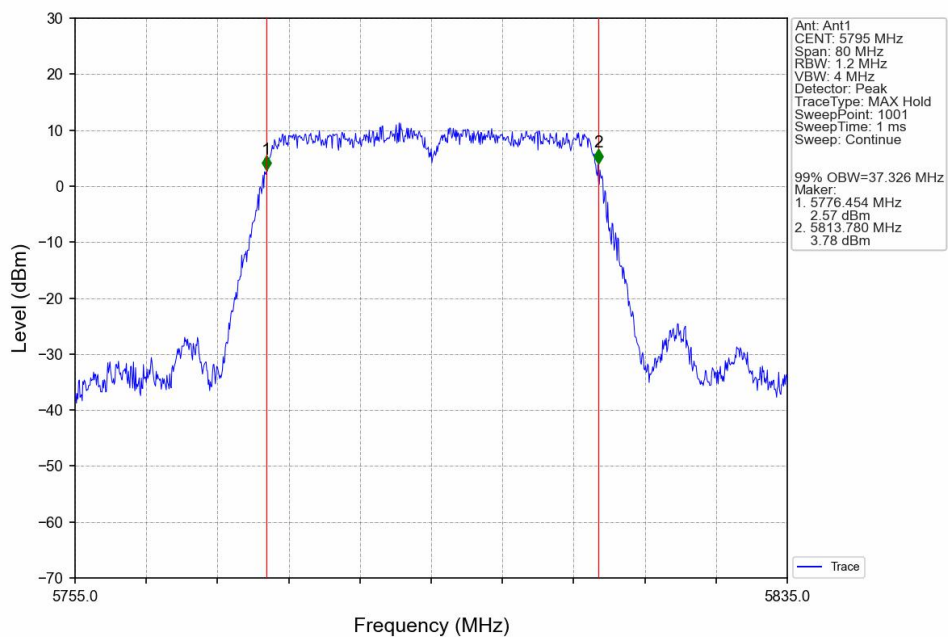


FCC ID: SMQUWM2

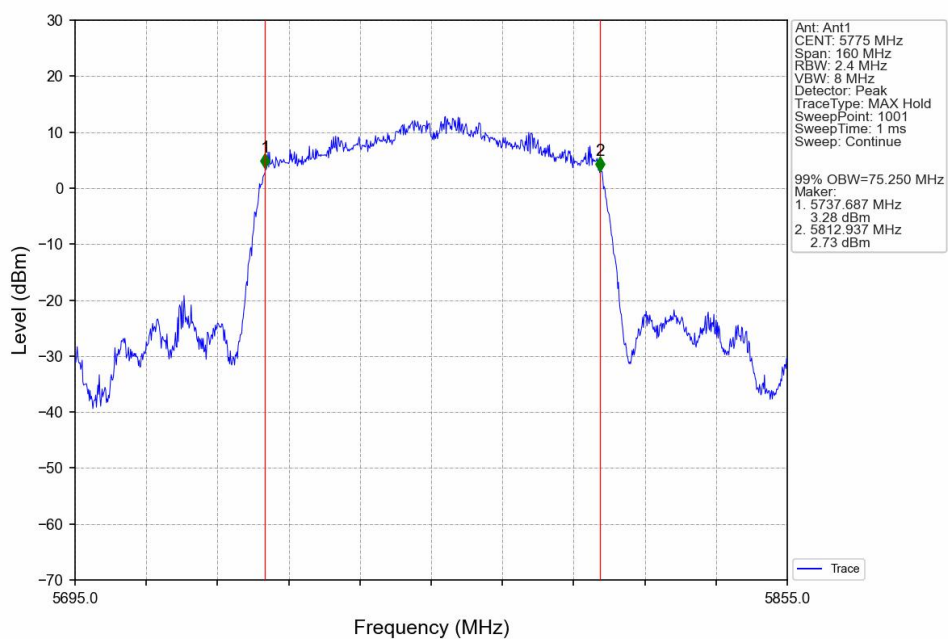


FCC ID: SMQUWM2

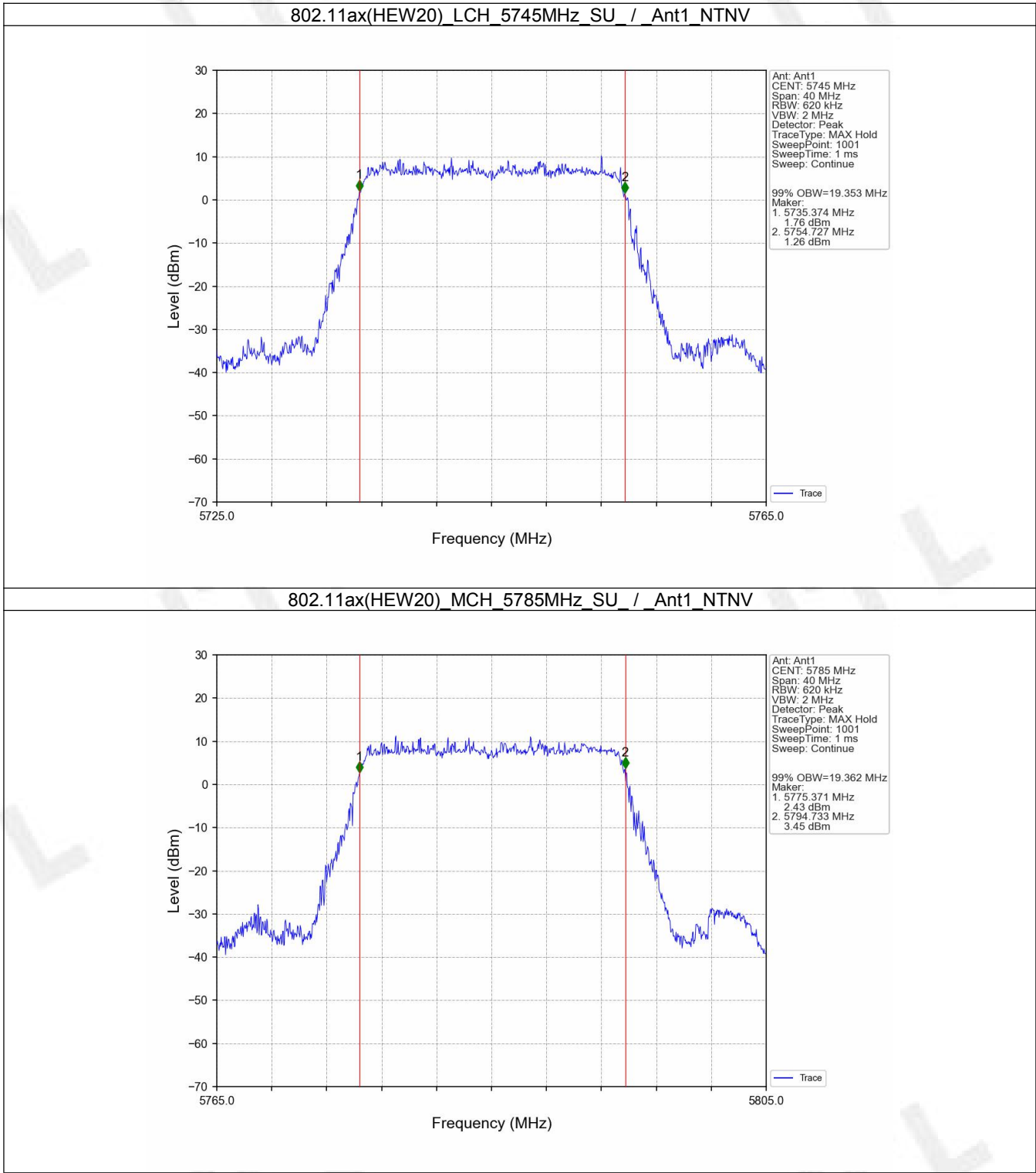
802.11ac(VHT40) HCH 5795MHz Ant1_NTNV



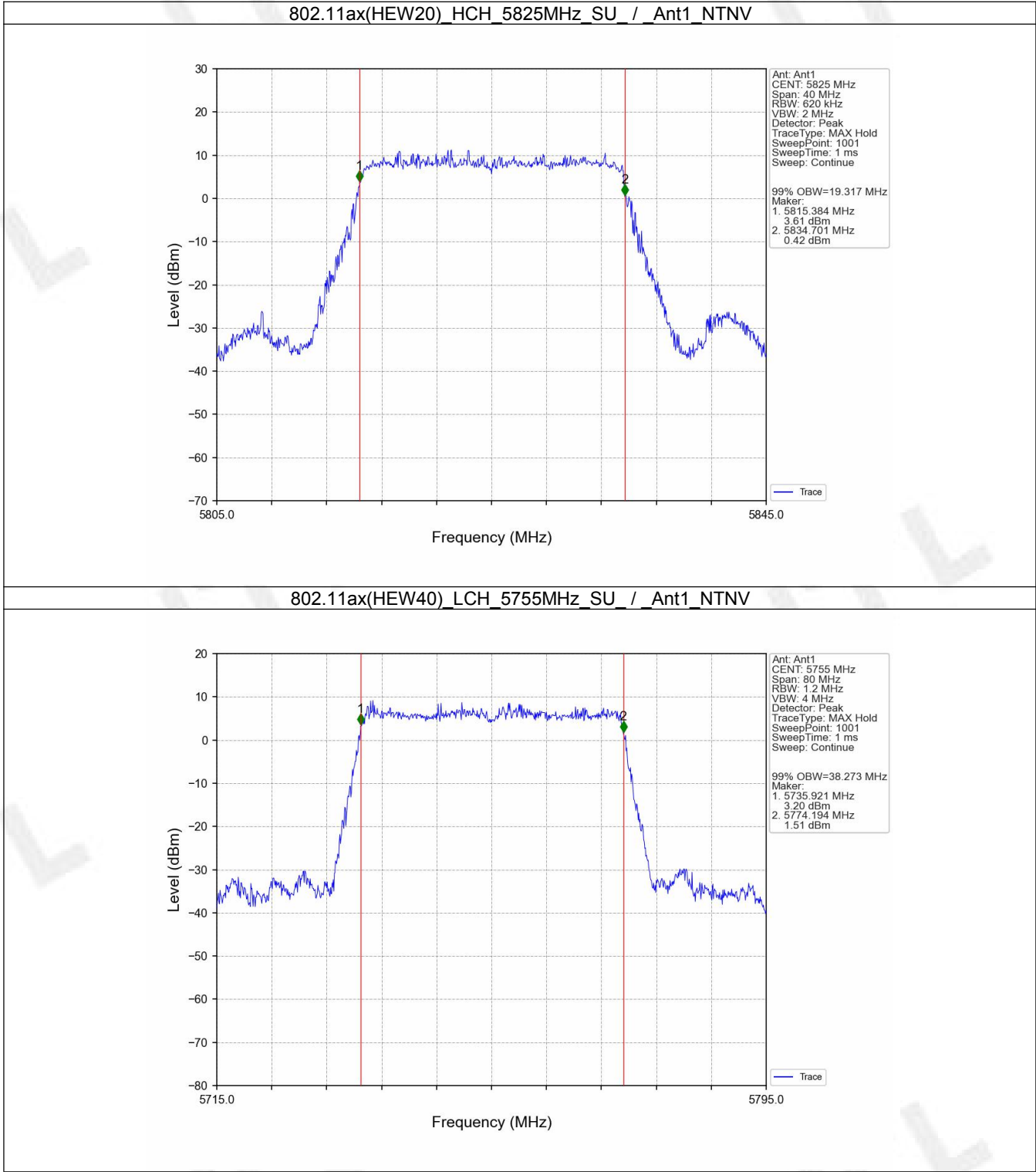
802.11ac(VHT80) MCH 5775MHz Ant1_NTNV



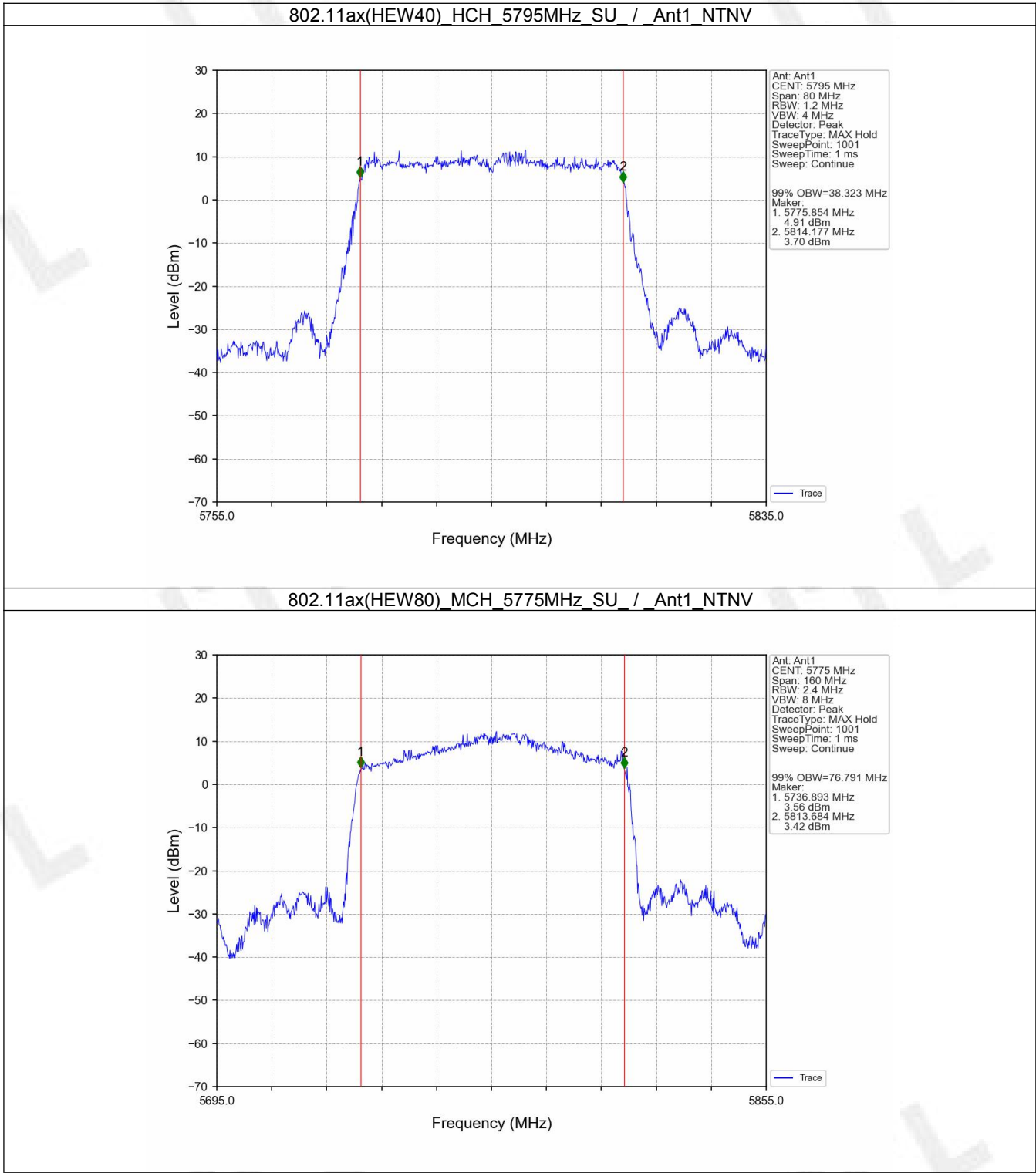
FCC ID: SMQUWM2



FCC ID: SMQUWM2

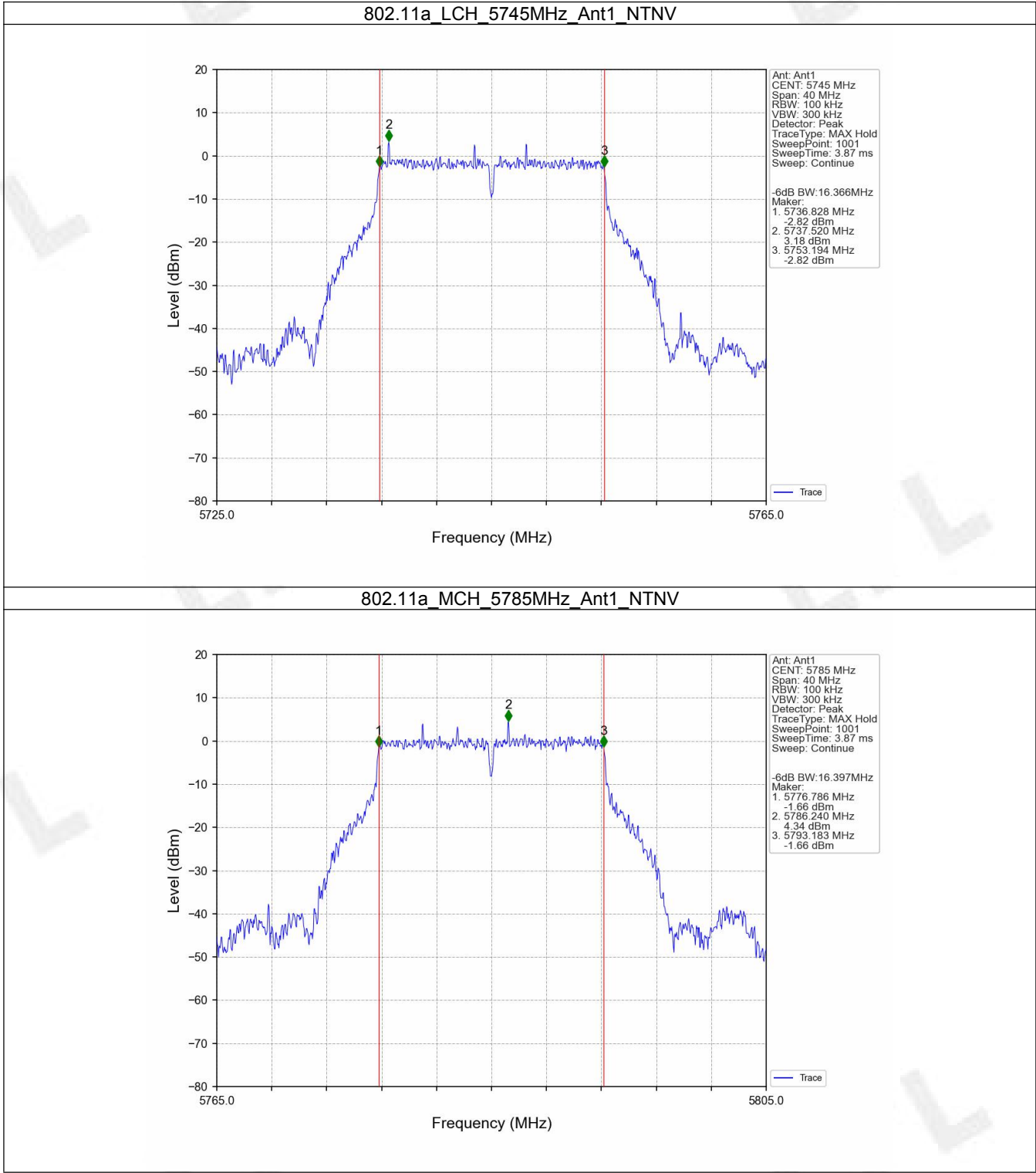


FCC ID: SMQUWM2

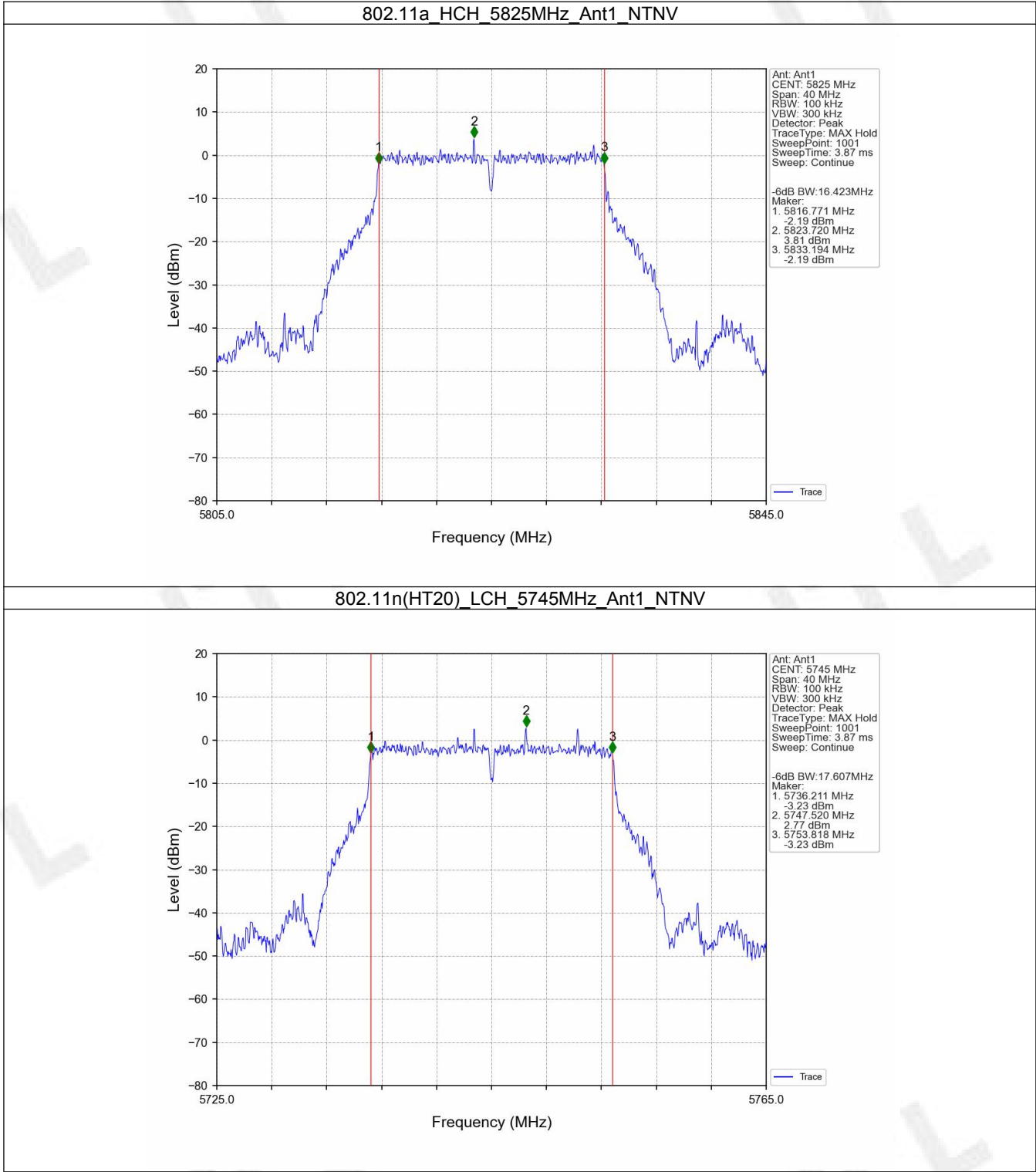


FCC ID: SMQUWM2

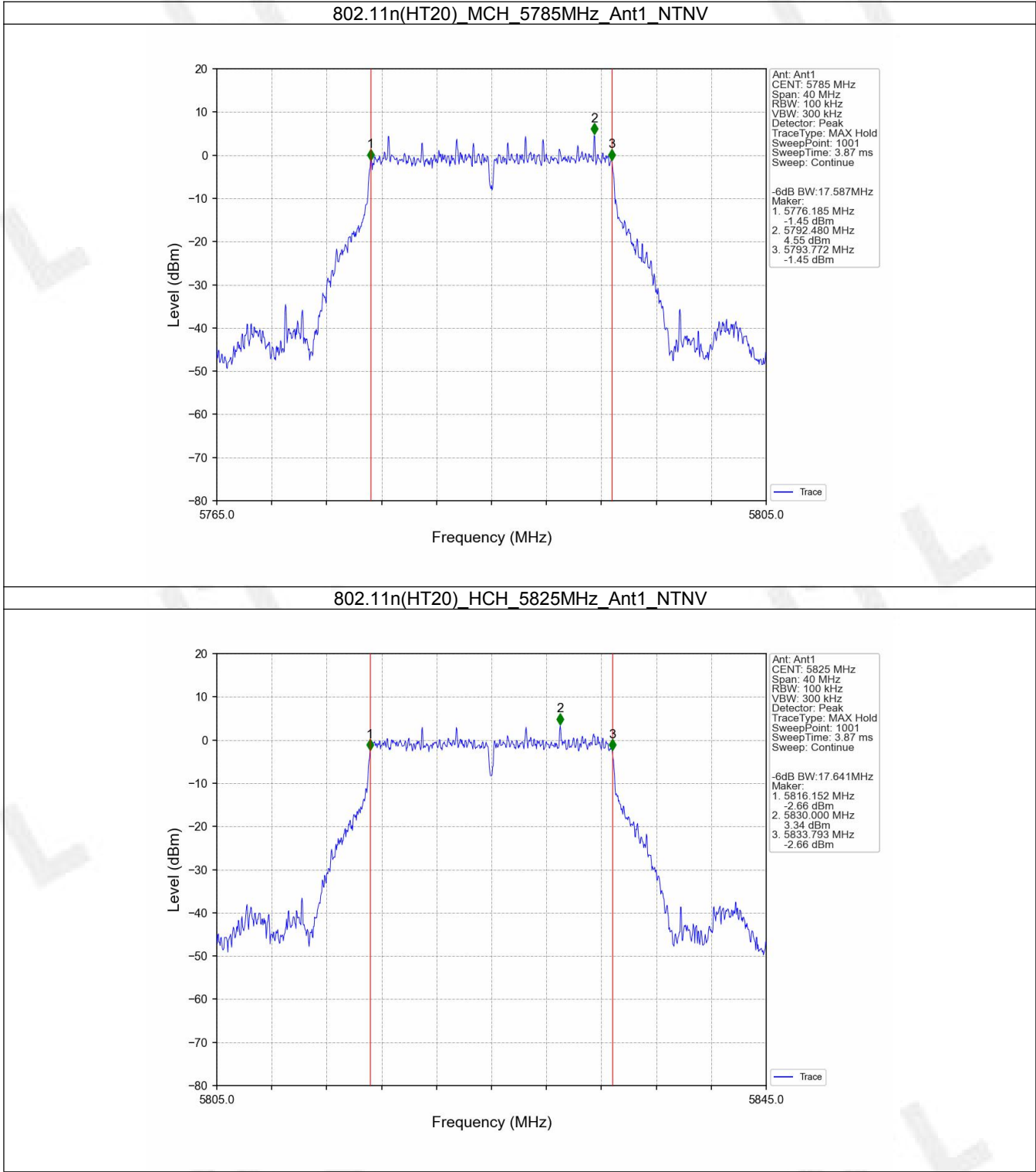
2.2.2 6dB BW



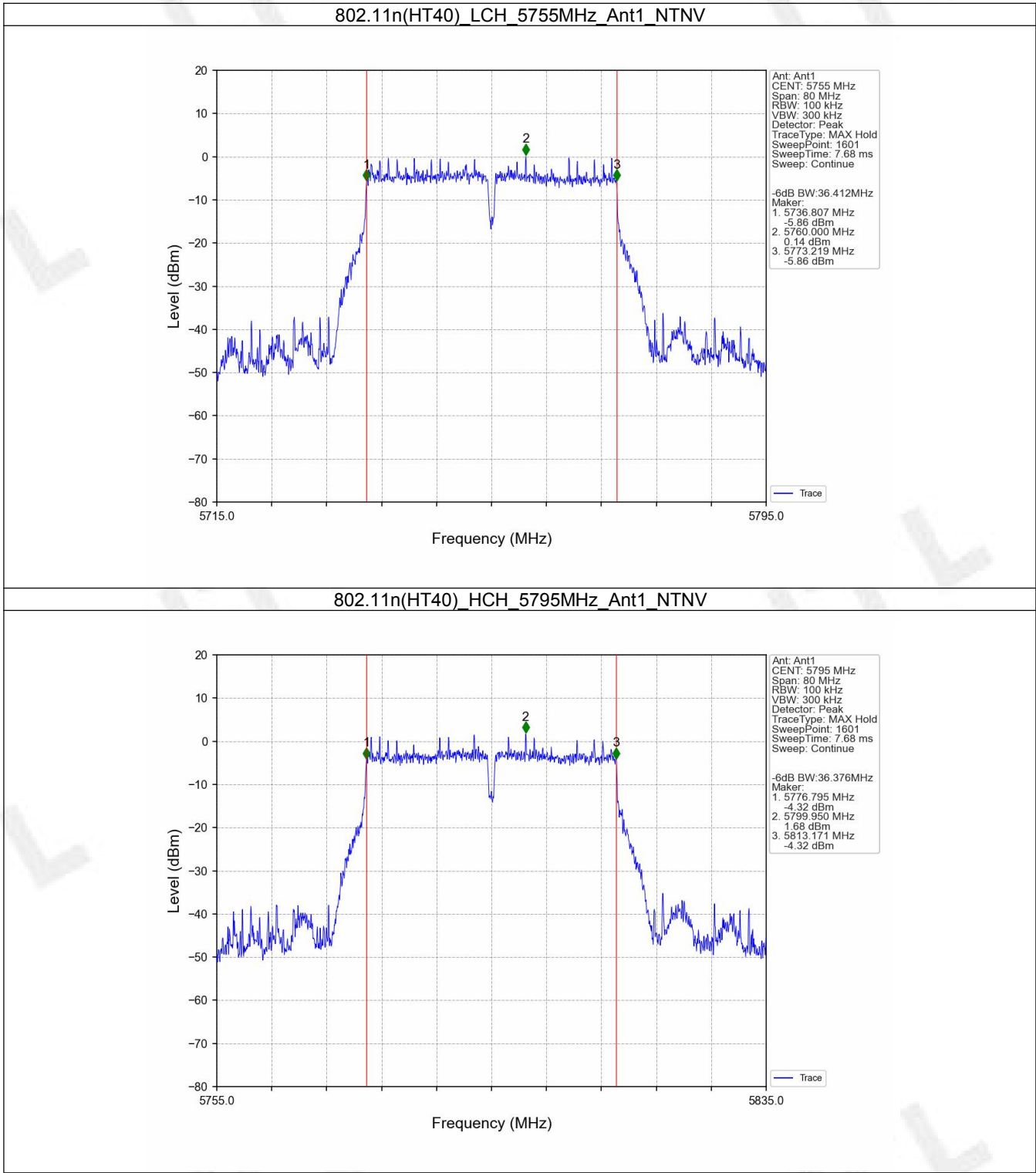
FCC ID: SMQUWM2



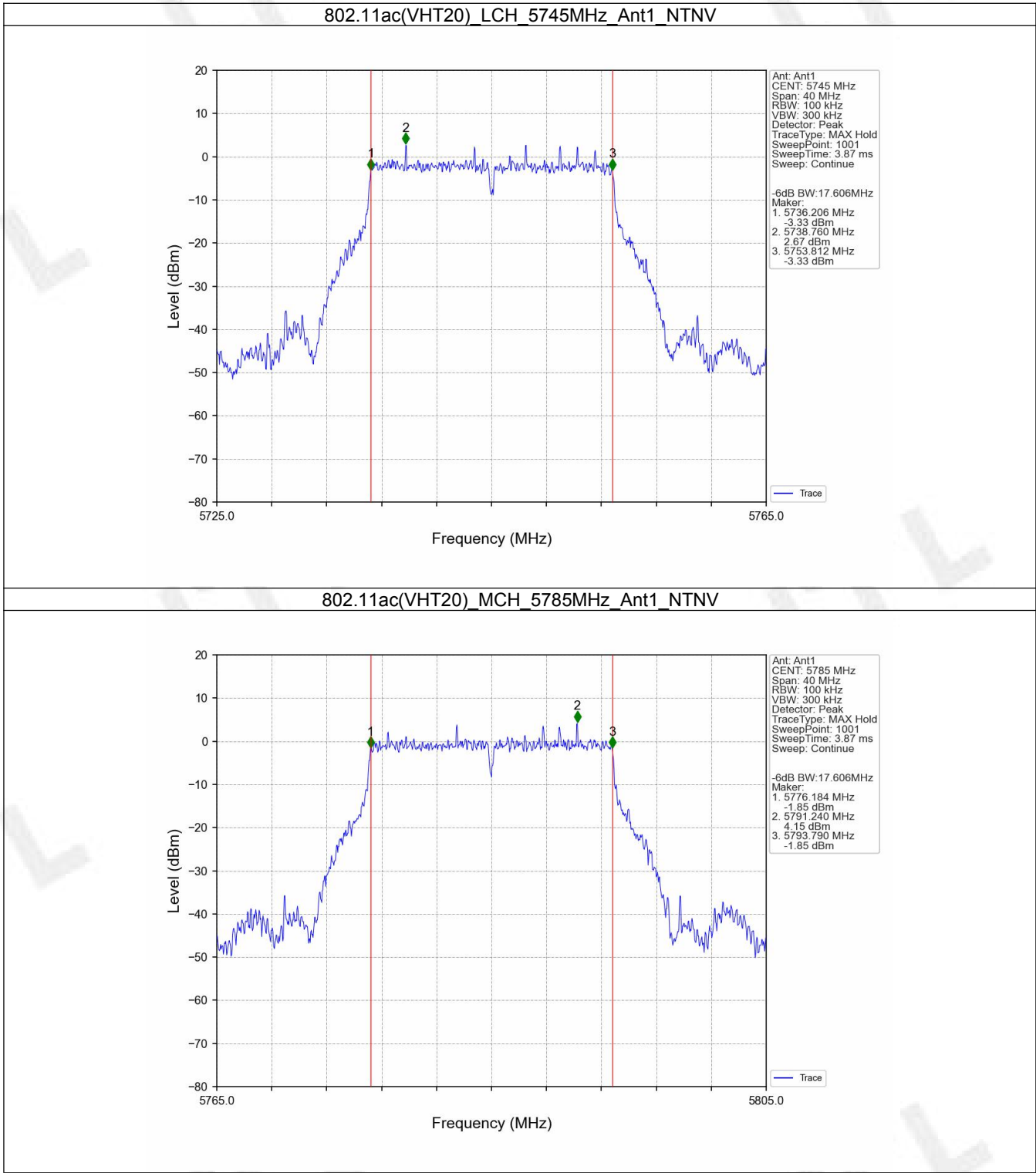
FCC ID: SMQUWM2



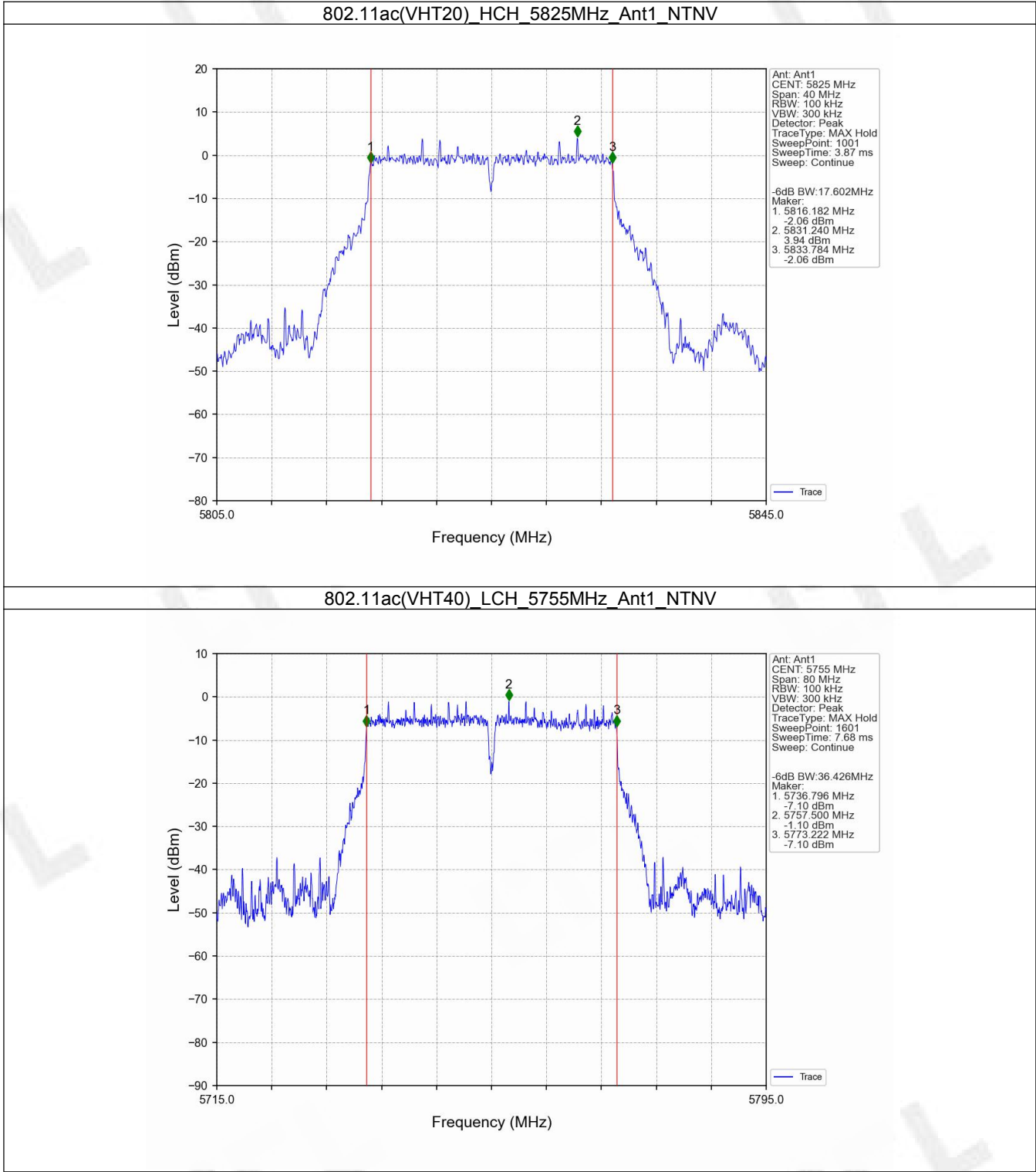
FCC ID: SMQUWM2



FCC ID: SMQUWM2



FCC ID: SMQUWM2



FCC ID: SMQUWM2

