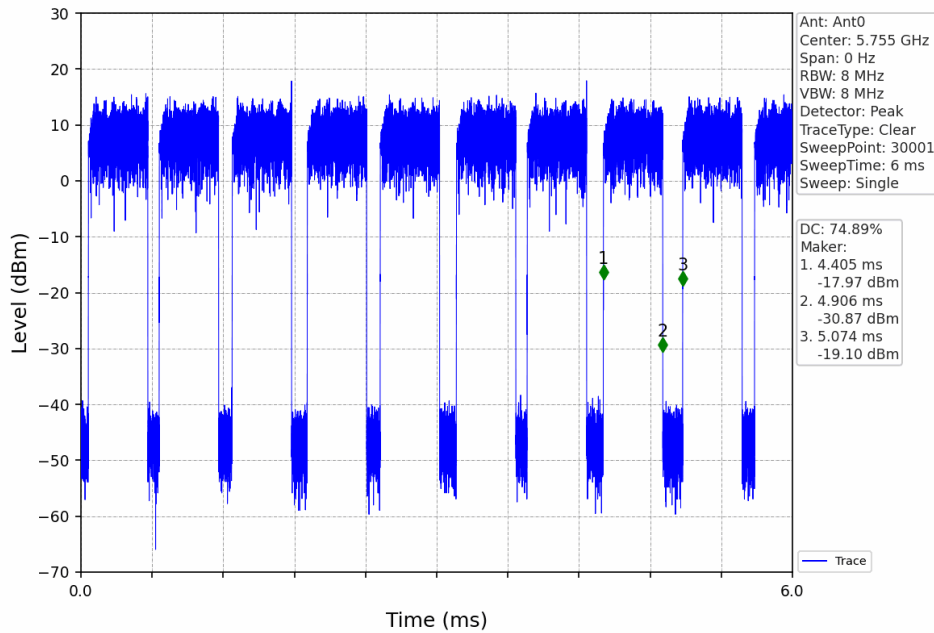
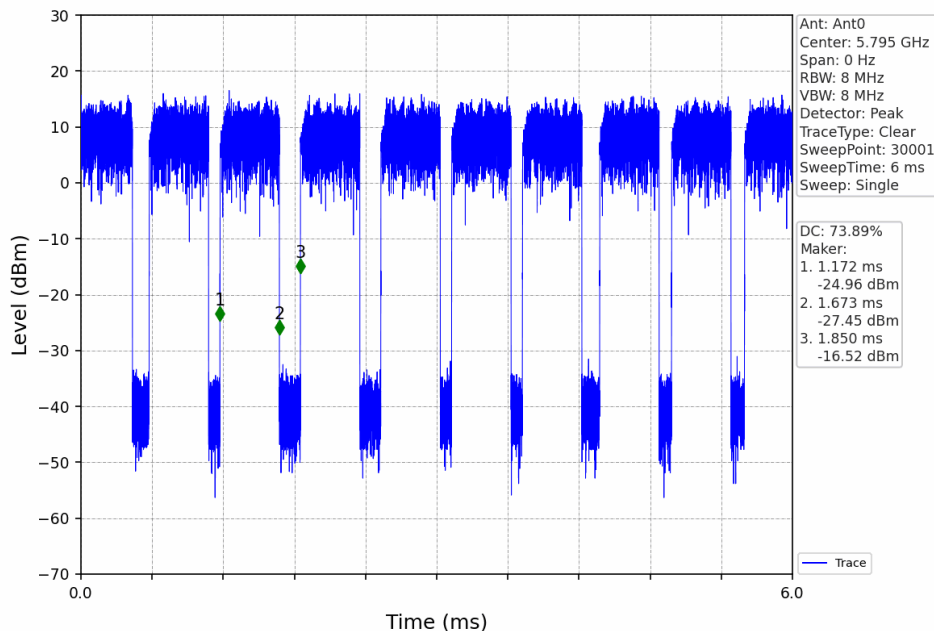


802.11ac(VHT40)\_LCH\_5755MHz\_Ant0\_NTNV



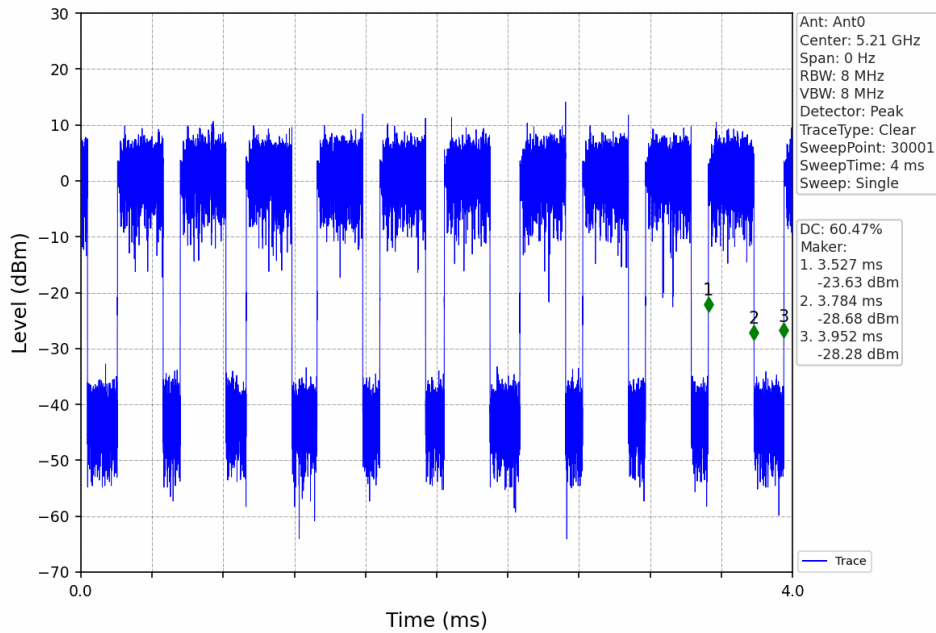
802.11ac(VHT40)\_HCH\_5795MHz\_Ant0\_NTNV



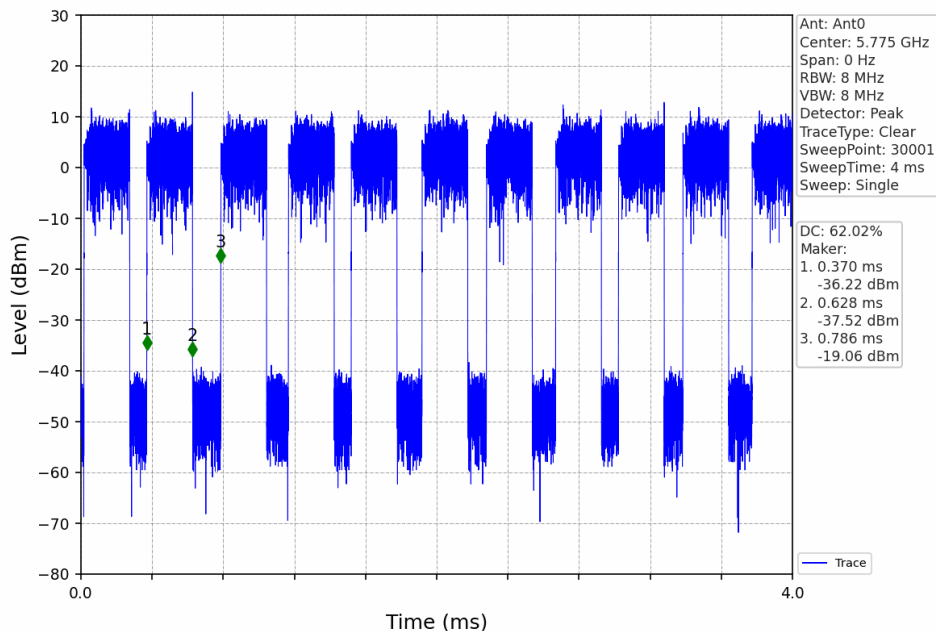
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)

802.11ac(VHT80)\_MCH\_5210MHz\_Ant0\_NTNV



802.11ac(VHT80)\_MCH\_5775MHz\_Ant0\_NTNV



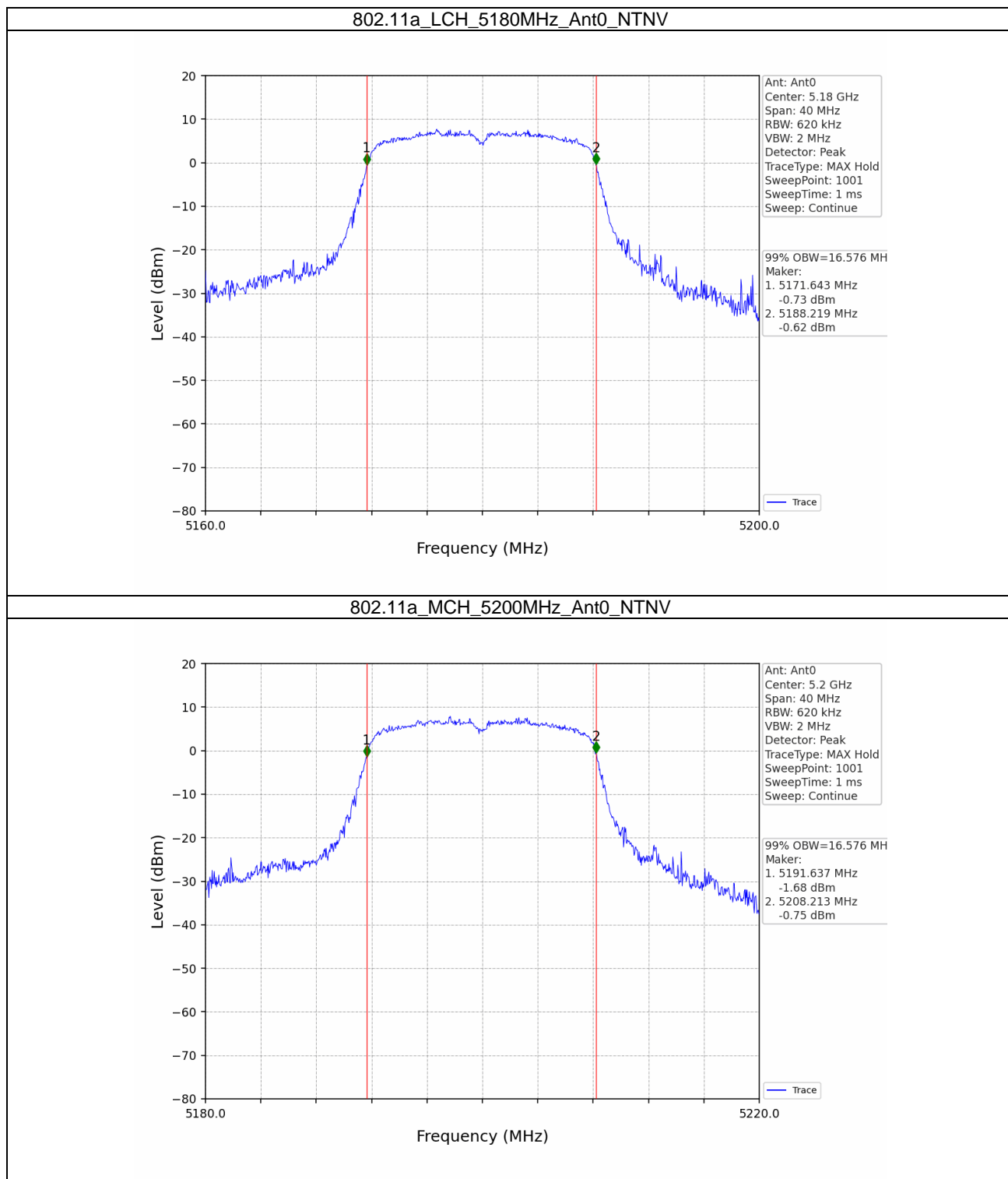
## 2. Bandwidth

## 2.1 OBW

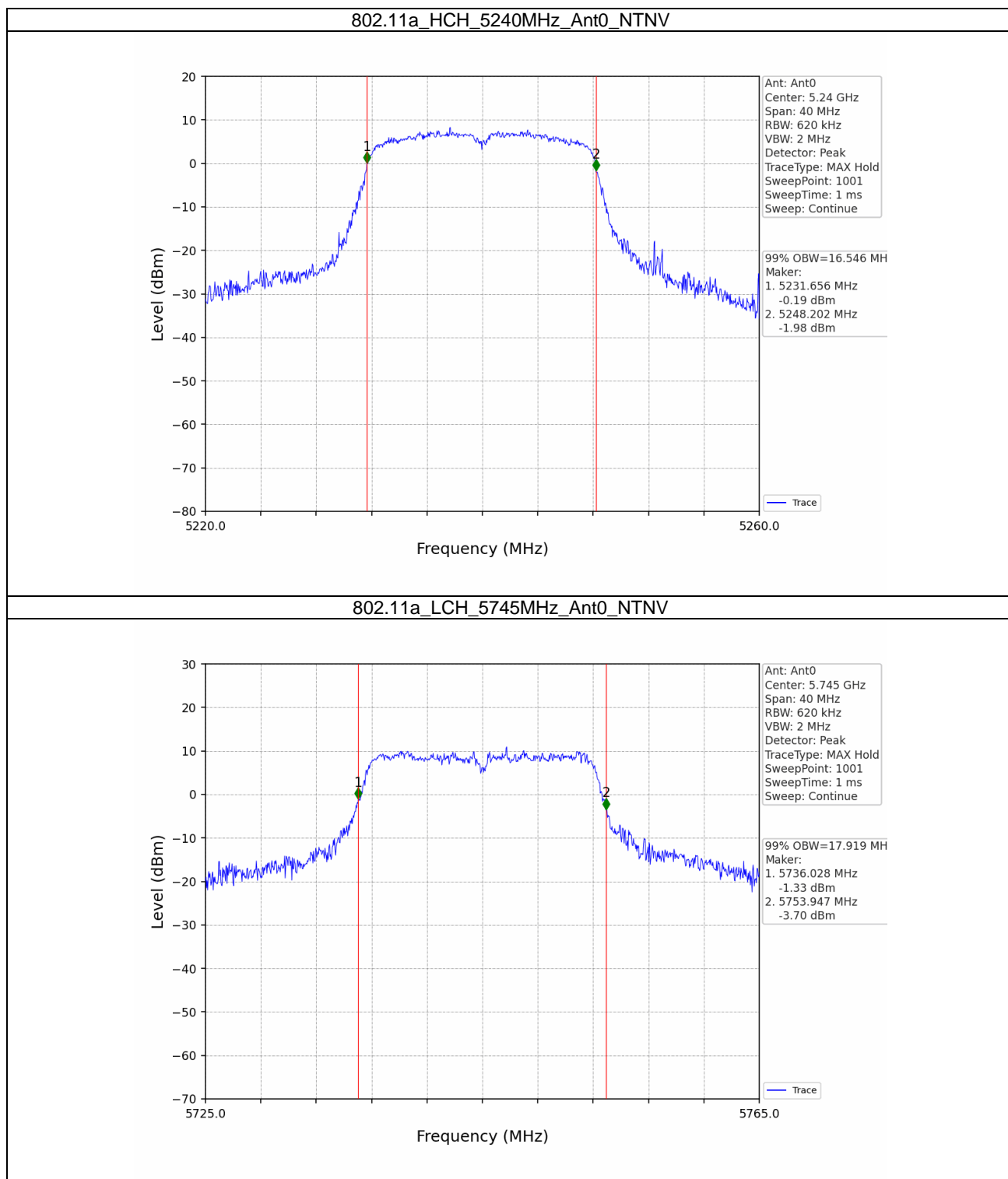
## 2.1.1 Test Result

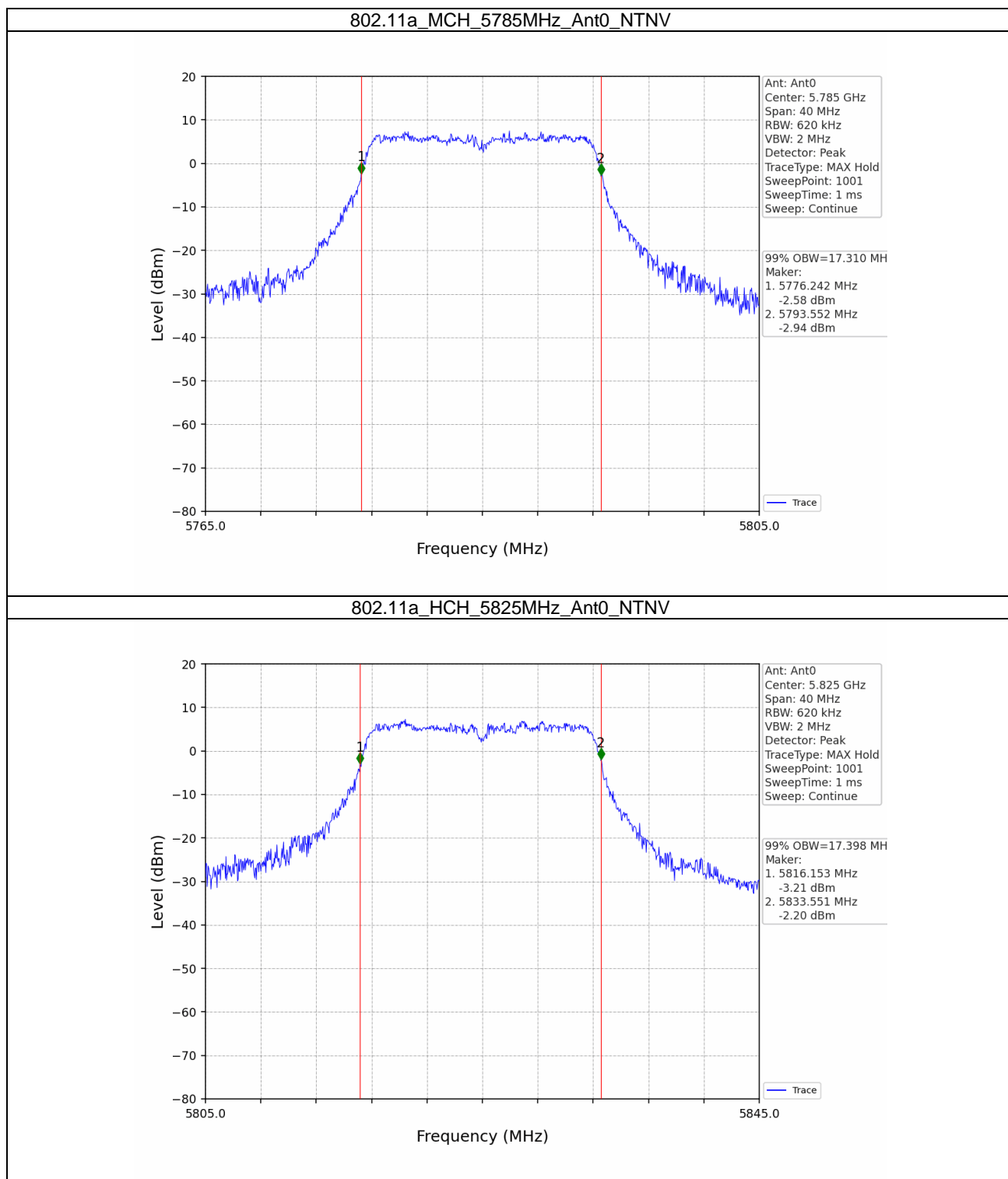
Mode	TX Type	Frequency (MHz)	ANT	99% Occupied Bandwidth (MHz)	Verdict
				Result	
802.11a	SISO	5180	0	16.576	Pass
		5200	0	16.576	Pass
		5240	0	16.546	Pass
		5745	0	17.919	Pass
		5785	0	17.310	Pass
		5825	0	17.398	Pass
802.11n (HT20)	MIMO	5180	0	17.596	Pass
		5200	0	17.592	Pass
		5240	0	17.591	Pass
		5745	0	17.584	Pass
		5785	0	17.586	Pass
		5825	0	17.574	Pass
802.11n (HT40)	MIMO	5190	0	36.188	Pass
		5230	0	36.204	Pass
		5755	0	36.107	Pass
		5795	0	36.157	Pass
802.11ac (VHT20)	MIMO	5180	0	17.567	Pass
		5200	0	17.632	Pass
		5240	0	17.594	Pass
		5745	0	17.646	Pass
		5785	0	17.595	Pass
		5825	0	17.579	Pass
802.11ac (VHT40)	MIMO	5190	0	35.995	Pass
		5230	0	36.011	Pass
		5755	0	36.050	Pass
		5795	0	35.957	Pass
802.11ac (VHT80)	MIMO	5210	0	75.481	Pass
		5775	0	75.242	Pass

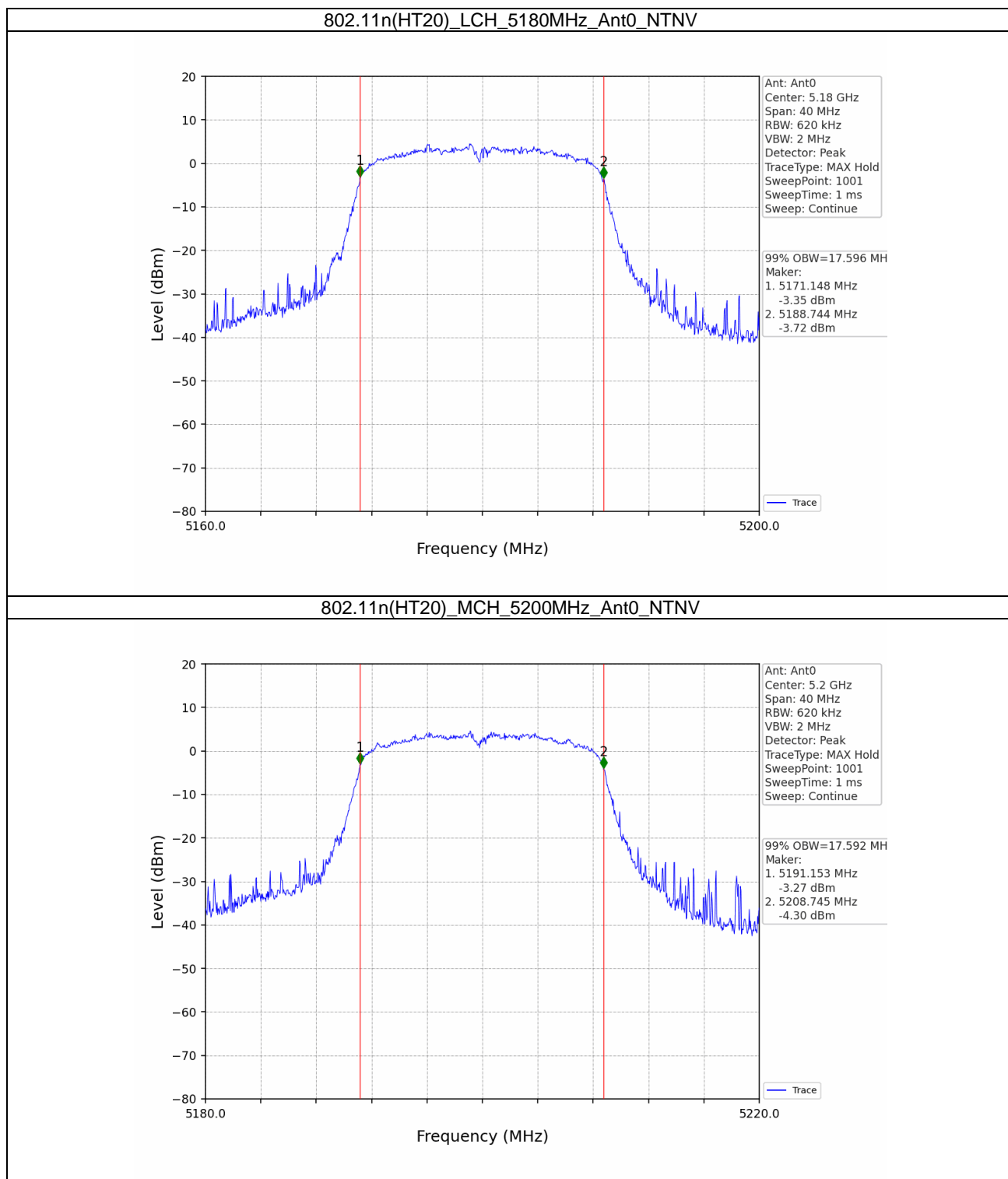
### 2.1.2 Test Graph

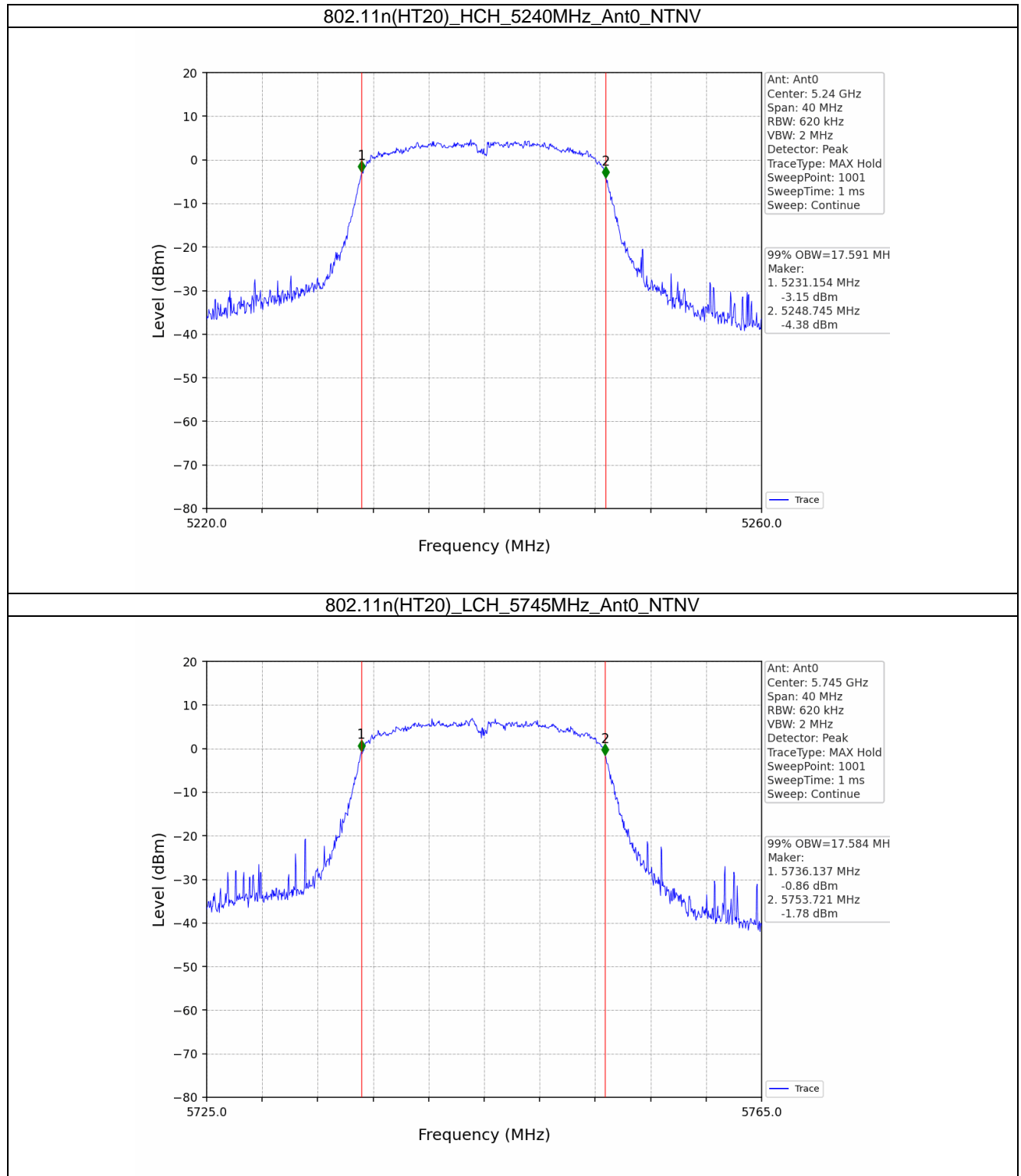




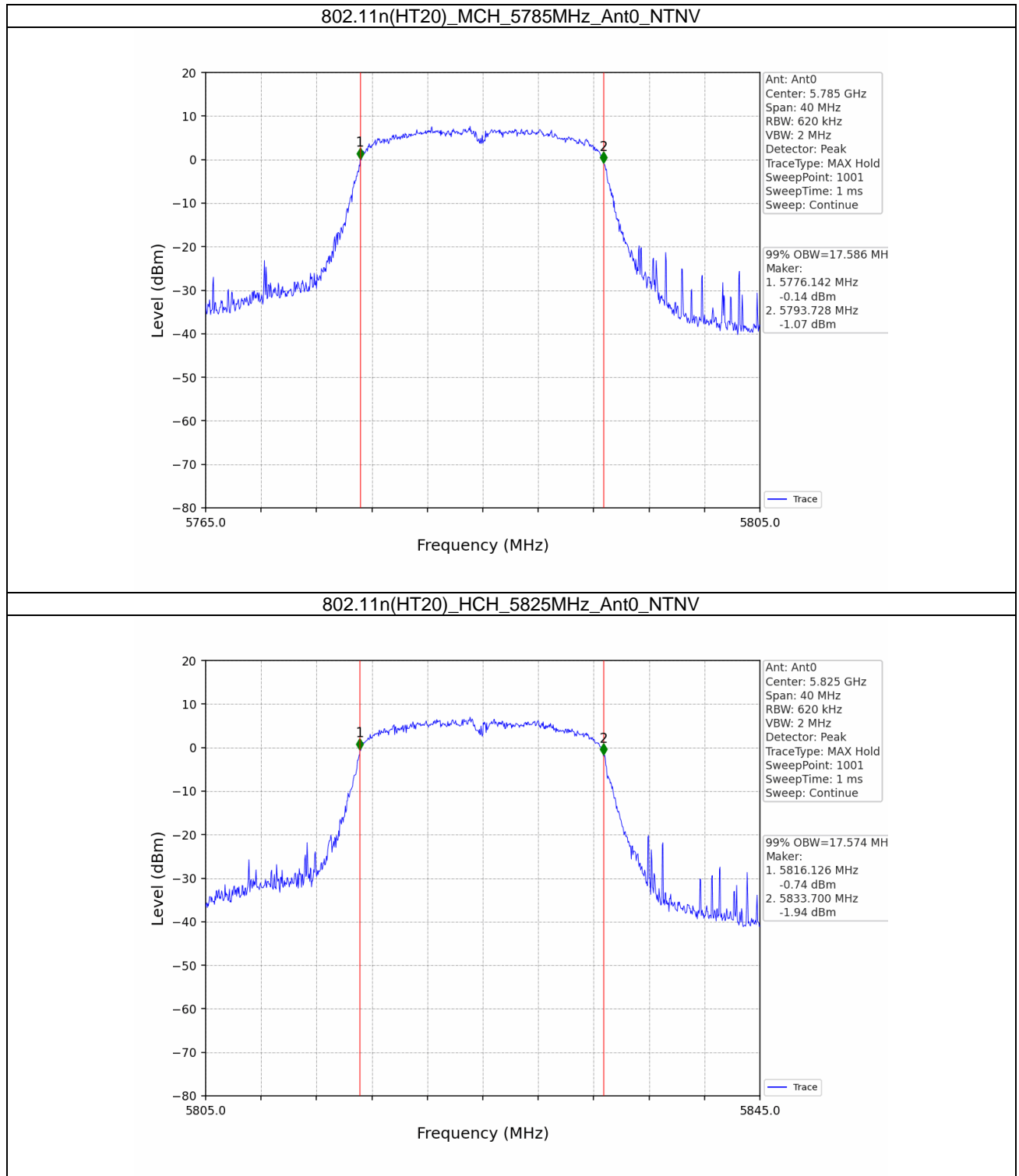


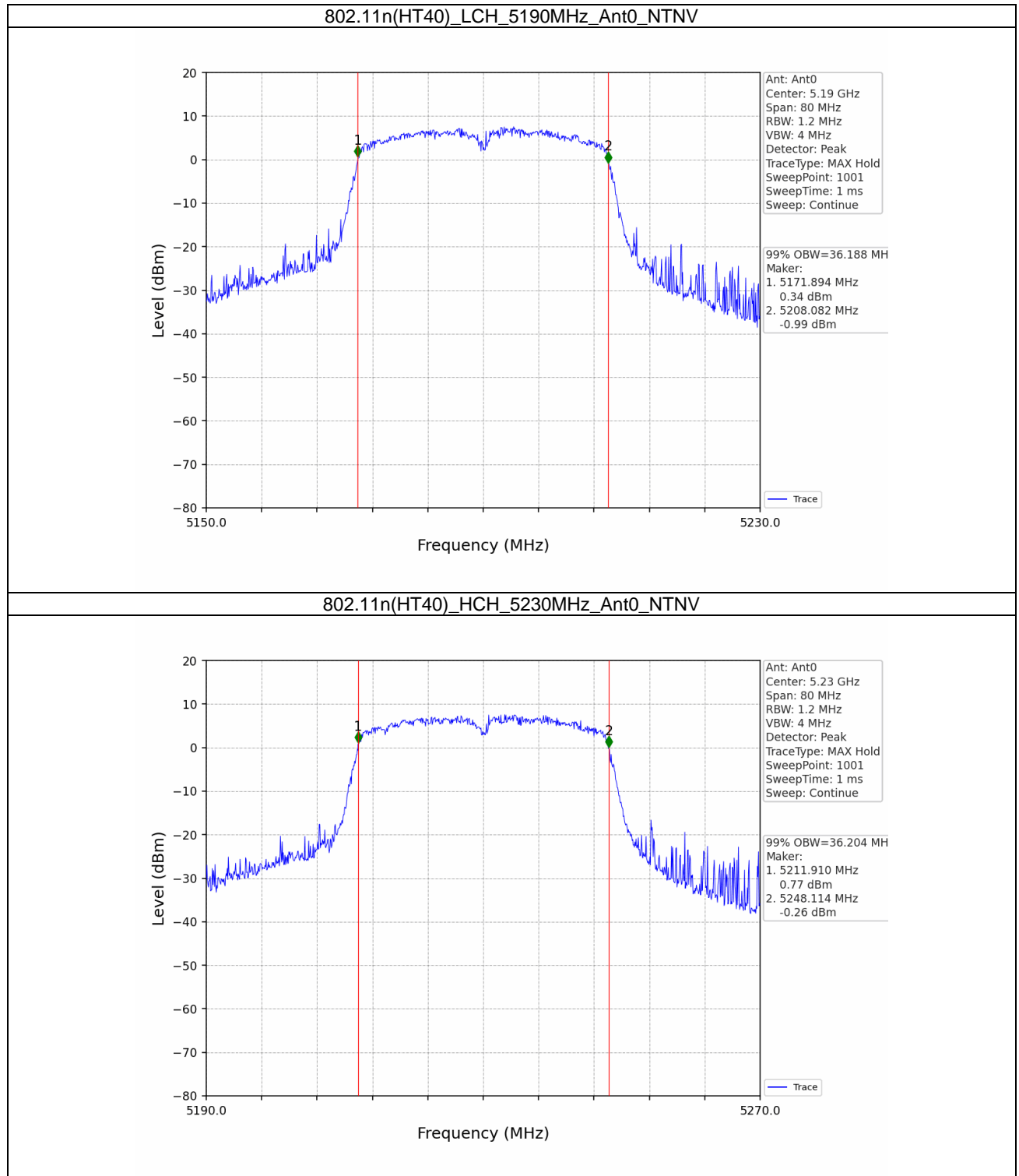




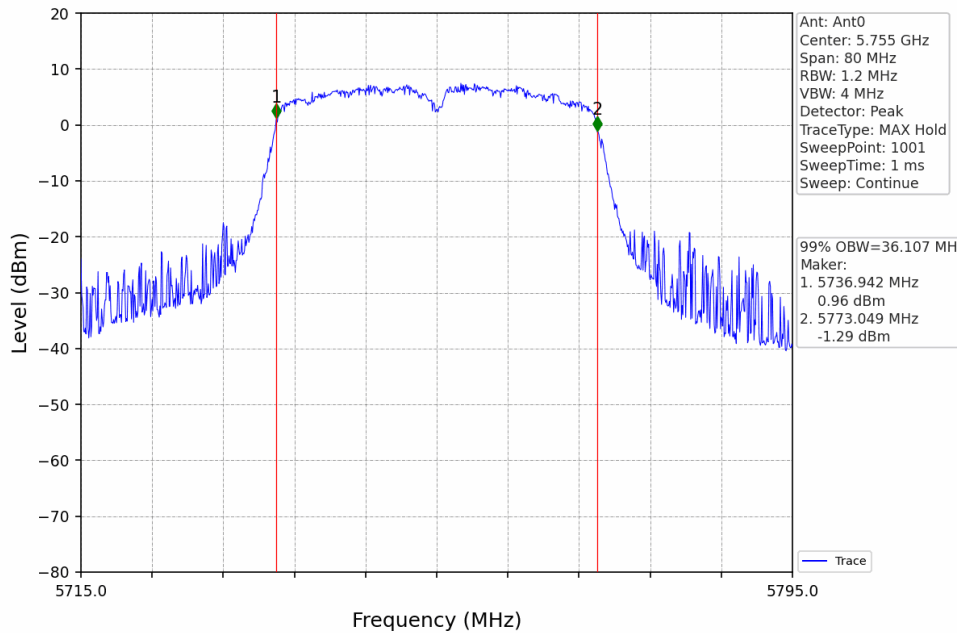




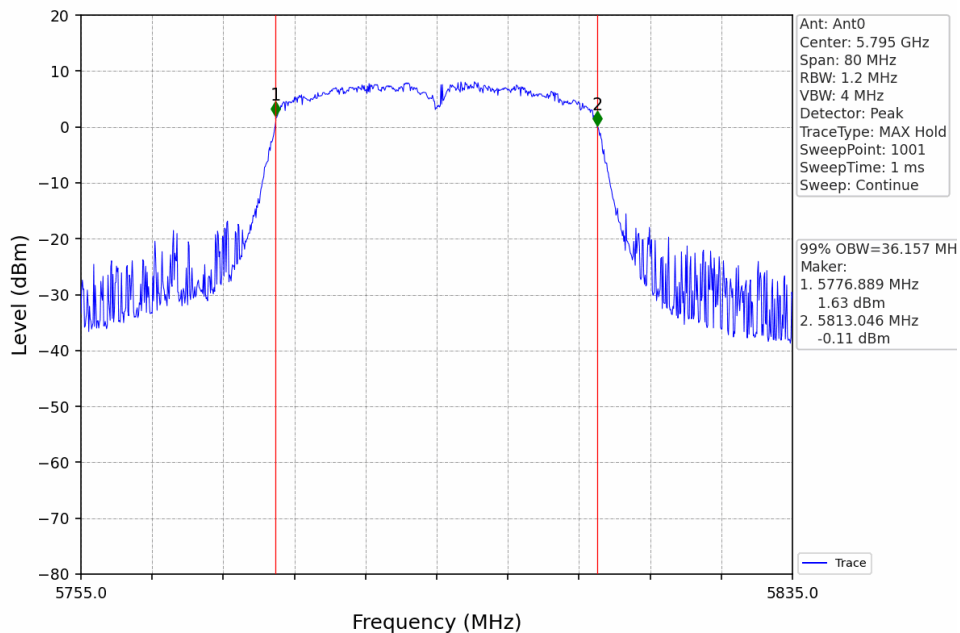




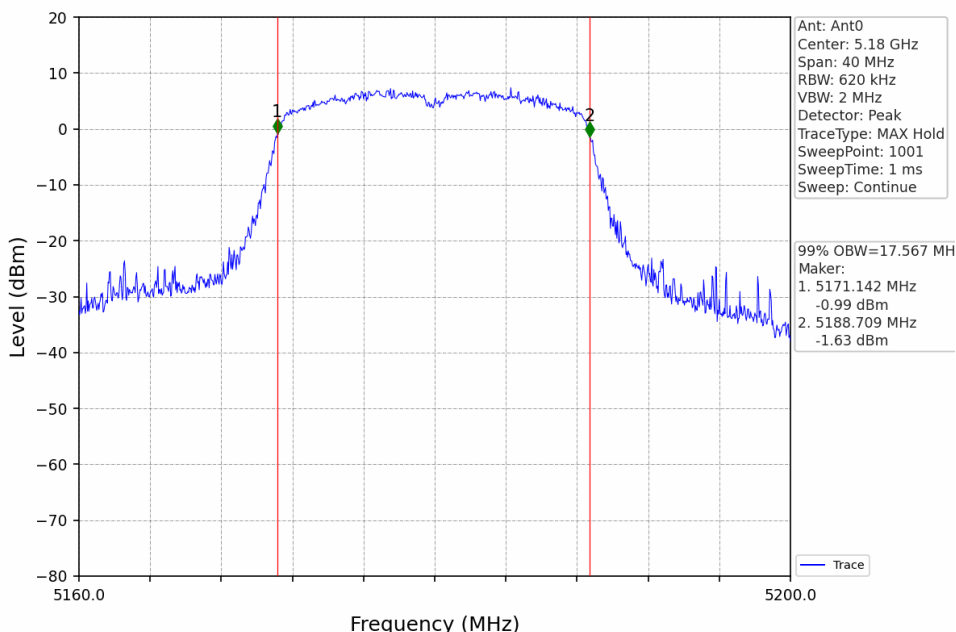
802.11n(HT40)\_LCH\_5755MHz\_Ant0\_NTNV



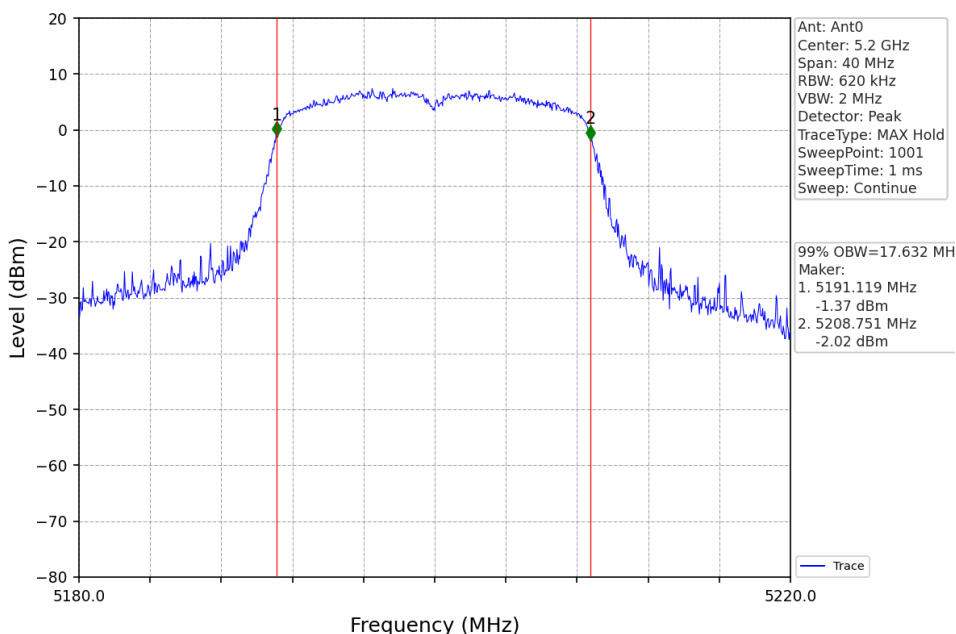
802.11n(HT40)\_HCH\_5795MHz\_Ant0\_NTNV



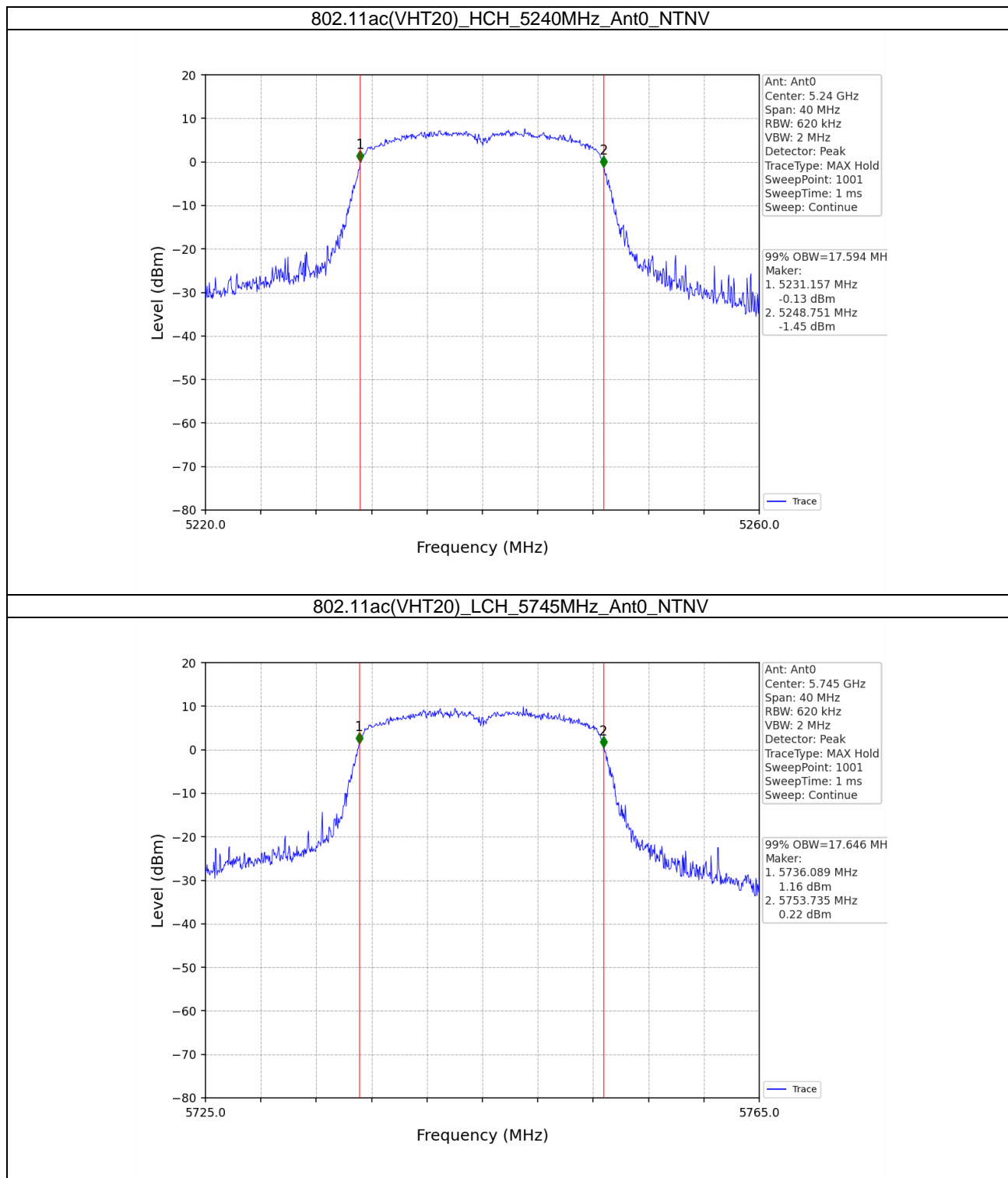
802.11ac(VHT20)\_LCH\_5180MHz\_Ant0\_NTNV

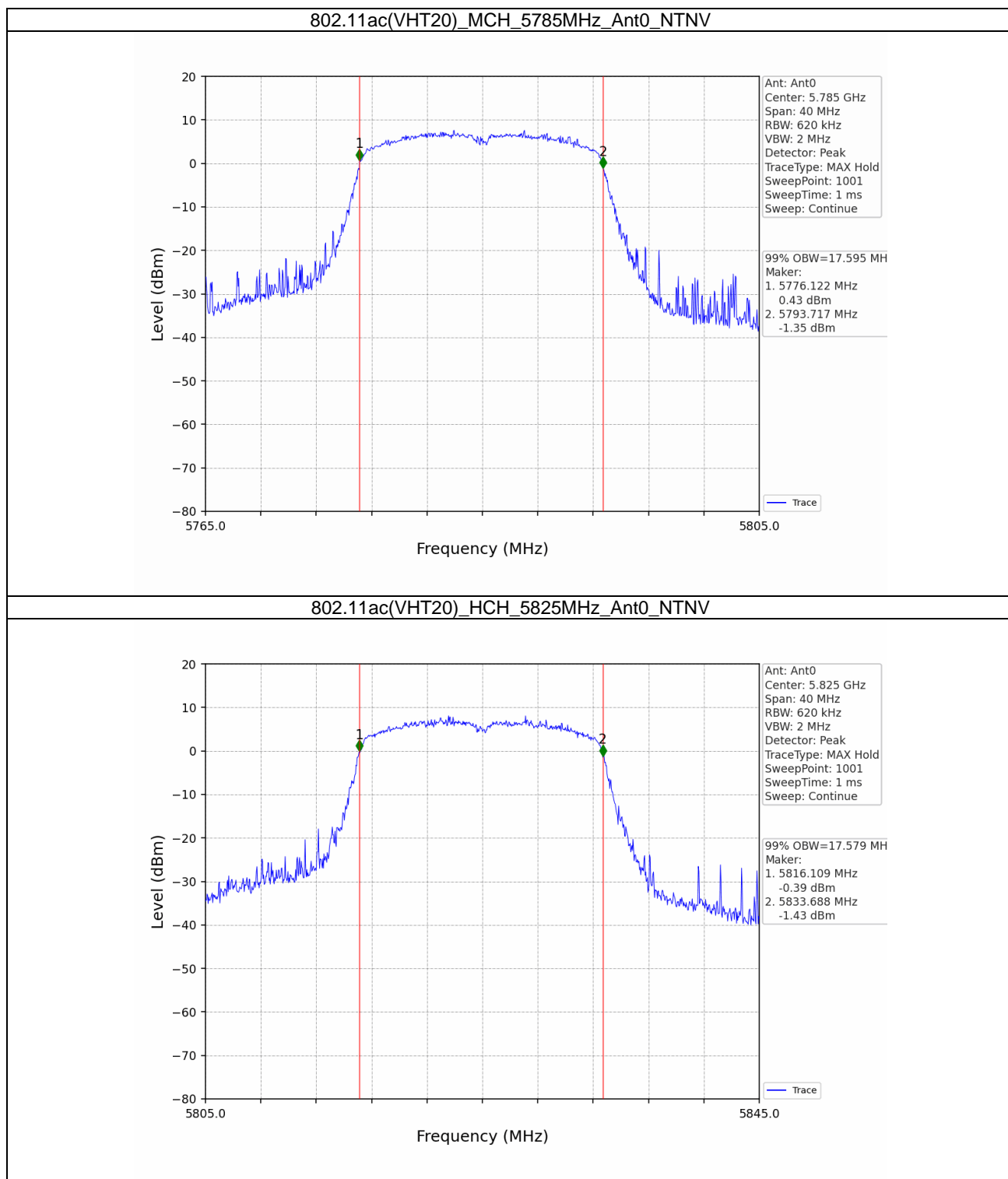


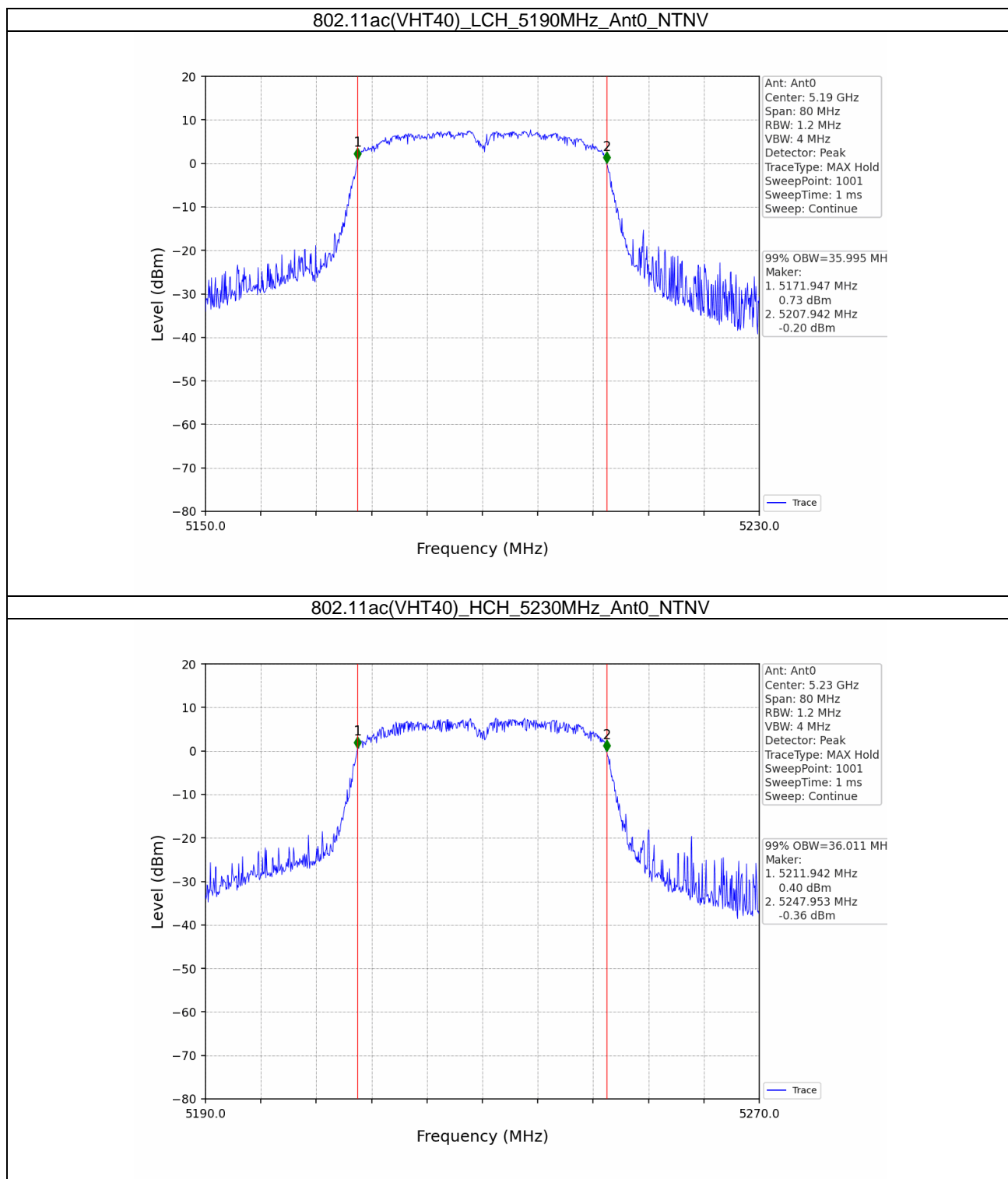
802.11ac(VHT20)\_MCH\_5200MHz\_Ant0\_NTNV



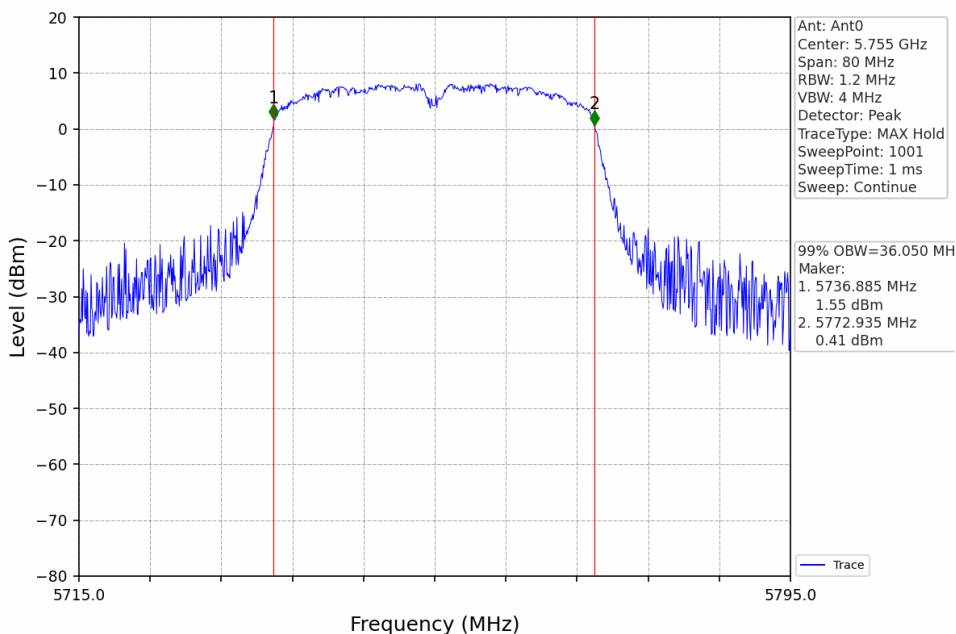




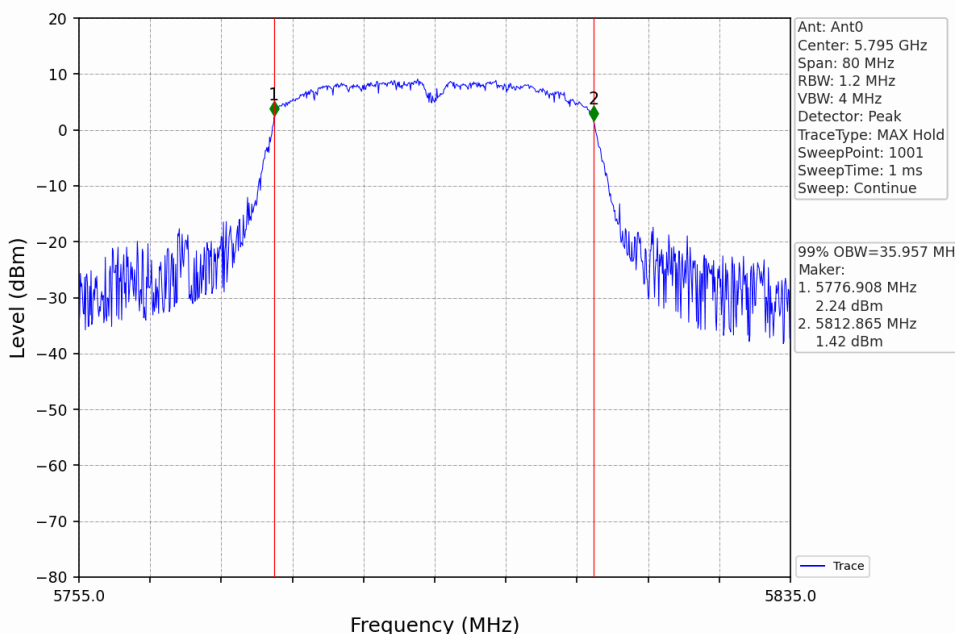




802.11ac(VHT40)\_LCH\_5755MHz\_Ant0\_NTNV

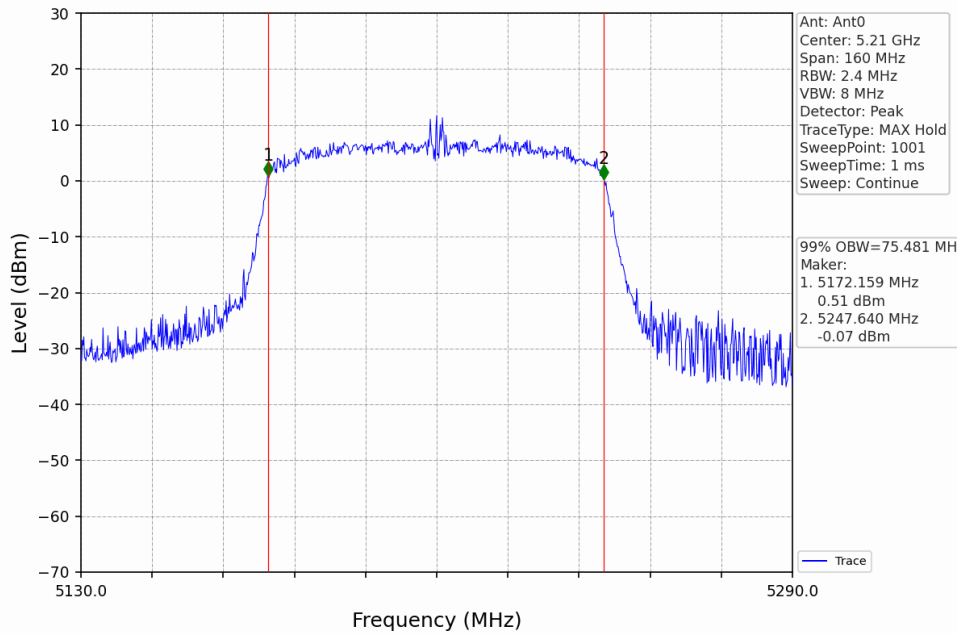


802.11ac(VHT40)\_HCH\_5795MHz\_Ant0\_NTNV

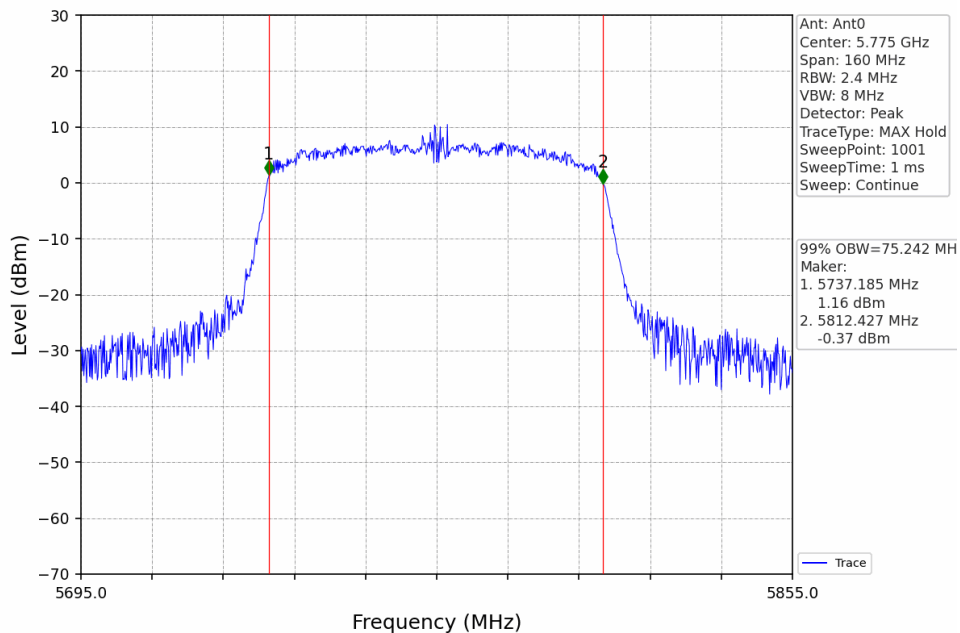




802.11ac(VHT80)\_MCH\_5210MHz\_Ant0\_NTNV



802.11ac(VHT80)\_MCH\_5775MHz\_Ant0\_NTNV



## 2.2 6dB BW

## 2.2.1 Test Result

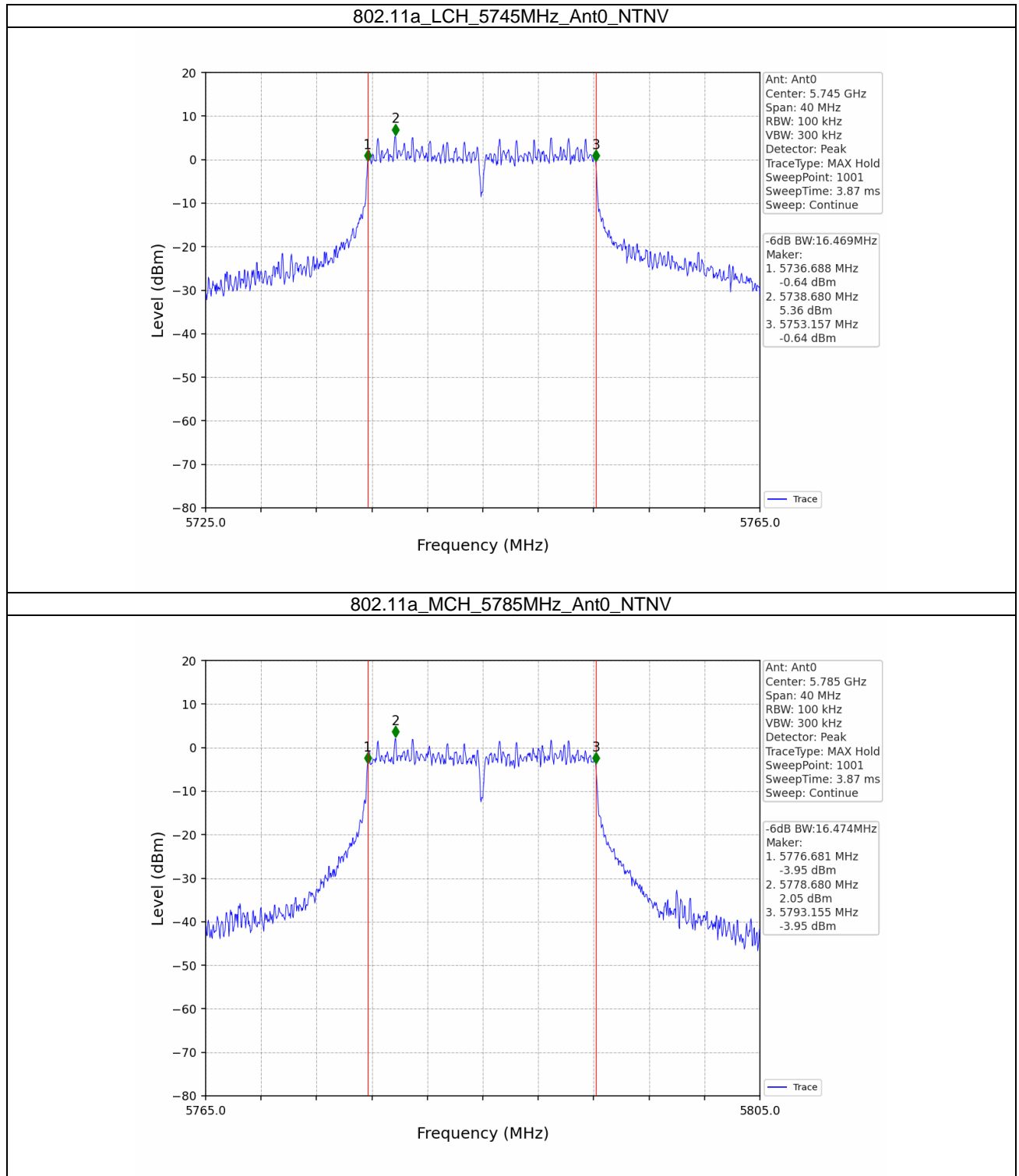
Mode	TX Type	Frequency (MHz)	ANT	6dB Bandwidth (MHz)		Verdict
				Result	Limit	
802.11a	SISO	5745	0	16.469	$\geq 0.5$	Pass
		5785	0	16.474	$\geq 0.5$	Pass
		5825	0	16.510	$\geq 0.5$	Pass
802.11n (HT20)	MIMO	5745	0	15.430	$\geq 0.5$	Pass
		5785	0	14.992	$\geq 0.5$	Pass
		5825	0	14.234	$\geq 0.5$	Pass
802.11n (HT40)	MIMO	5755	0	35.112	$\geq 0.5$	Pass
		5795	0	35.030	$\geq 0.5$	Pass
802.11ac (VHT20)	MIMO	5745	0	15.185	$\geq 0.5$	Pass
		5785	0	15.149	$\geq 0.5$	Pass
		5825	0	15.071	$\geq 0.5$	Pass
802.11ac (VHT40)	MIMO	5755	0	35.141	$\geq 0.5$	Pass
		5795	0	35.154	$\geq 0.5$	Pass
802.11ac (VHT80)	MIMO	5775	0	75.114	$\geq 0.5$	Pass

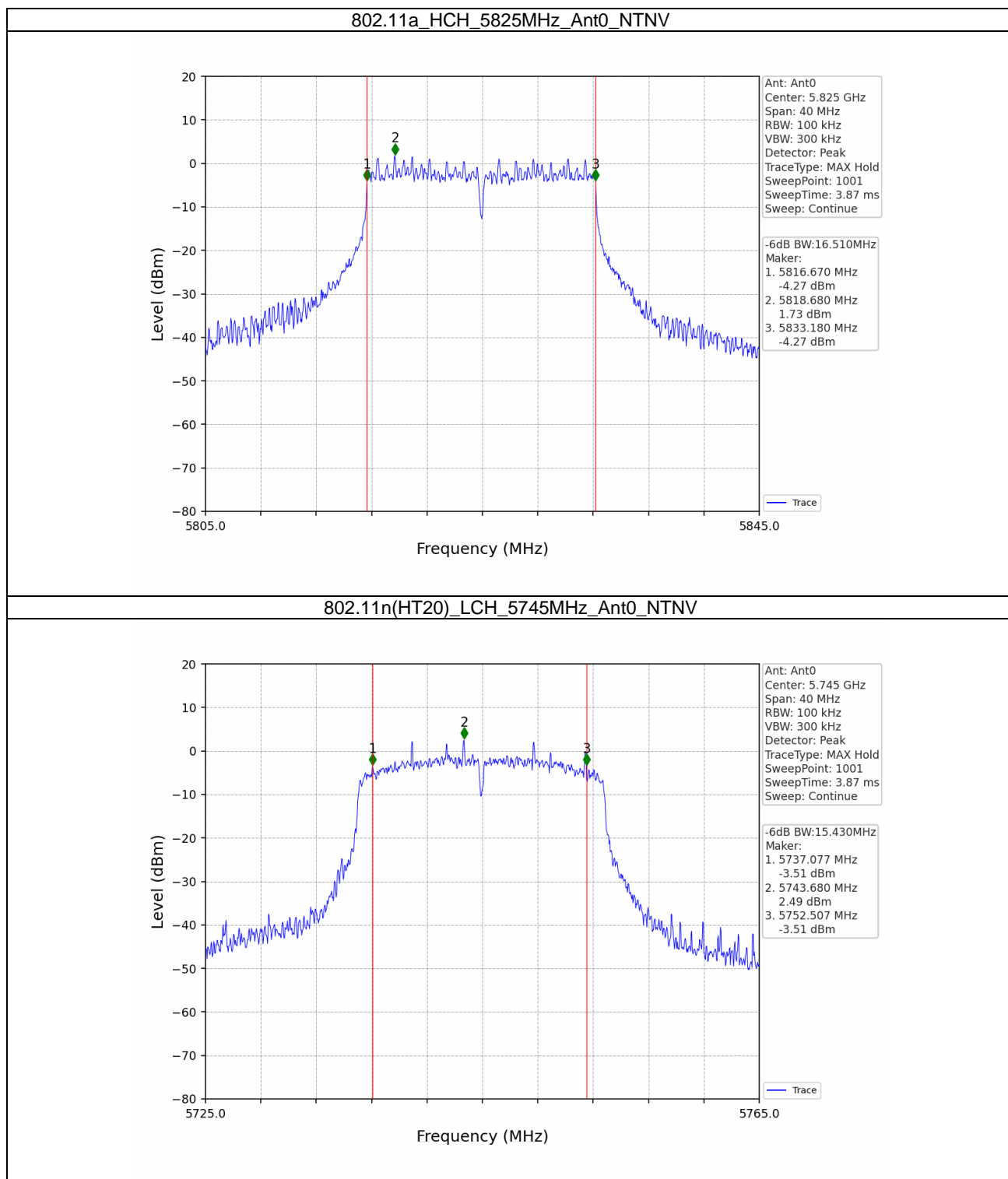


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Documents.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

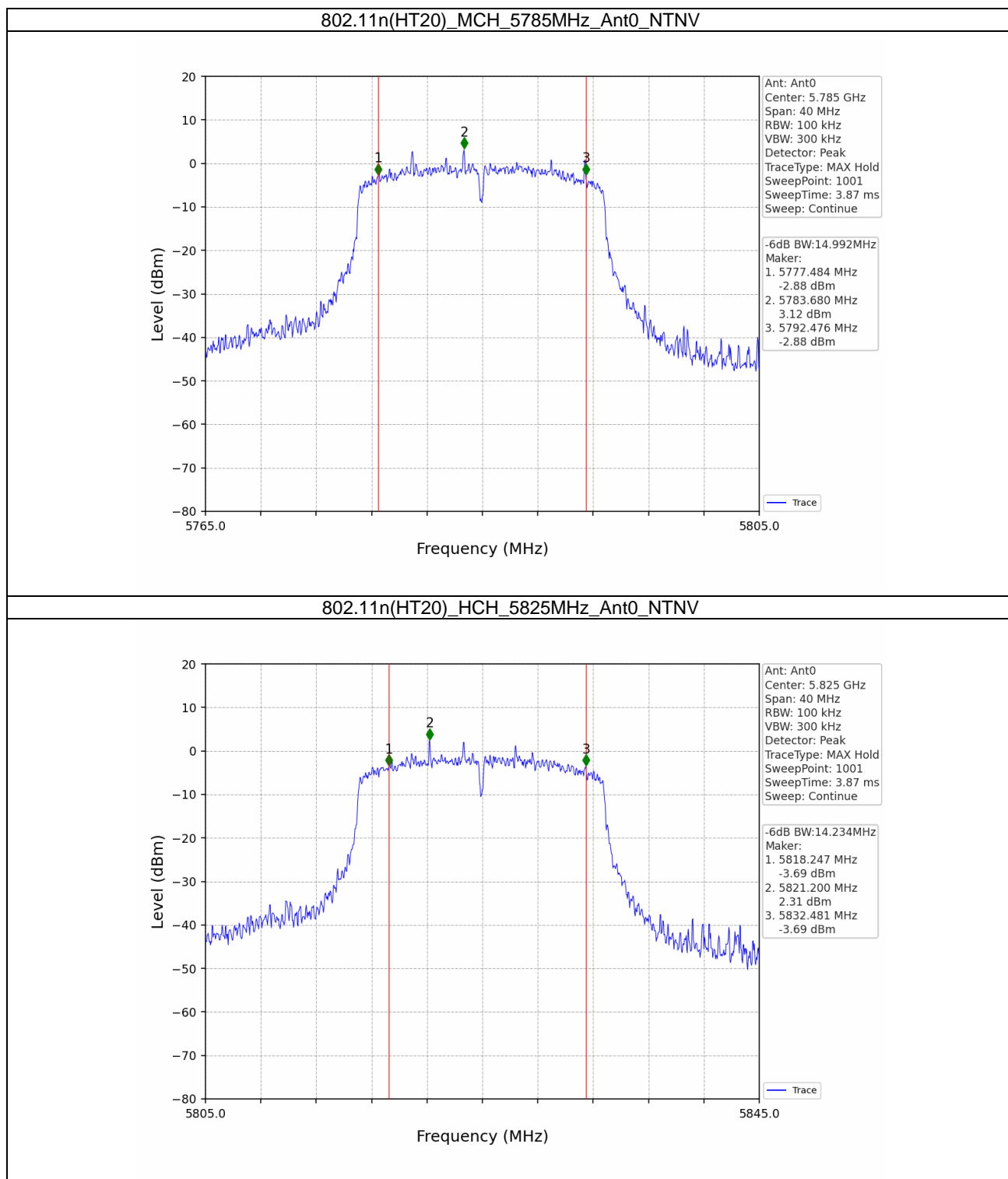
Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)

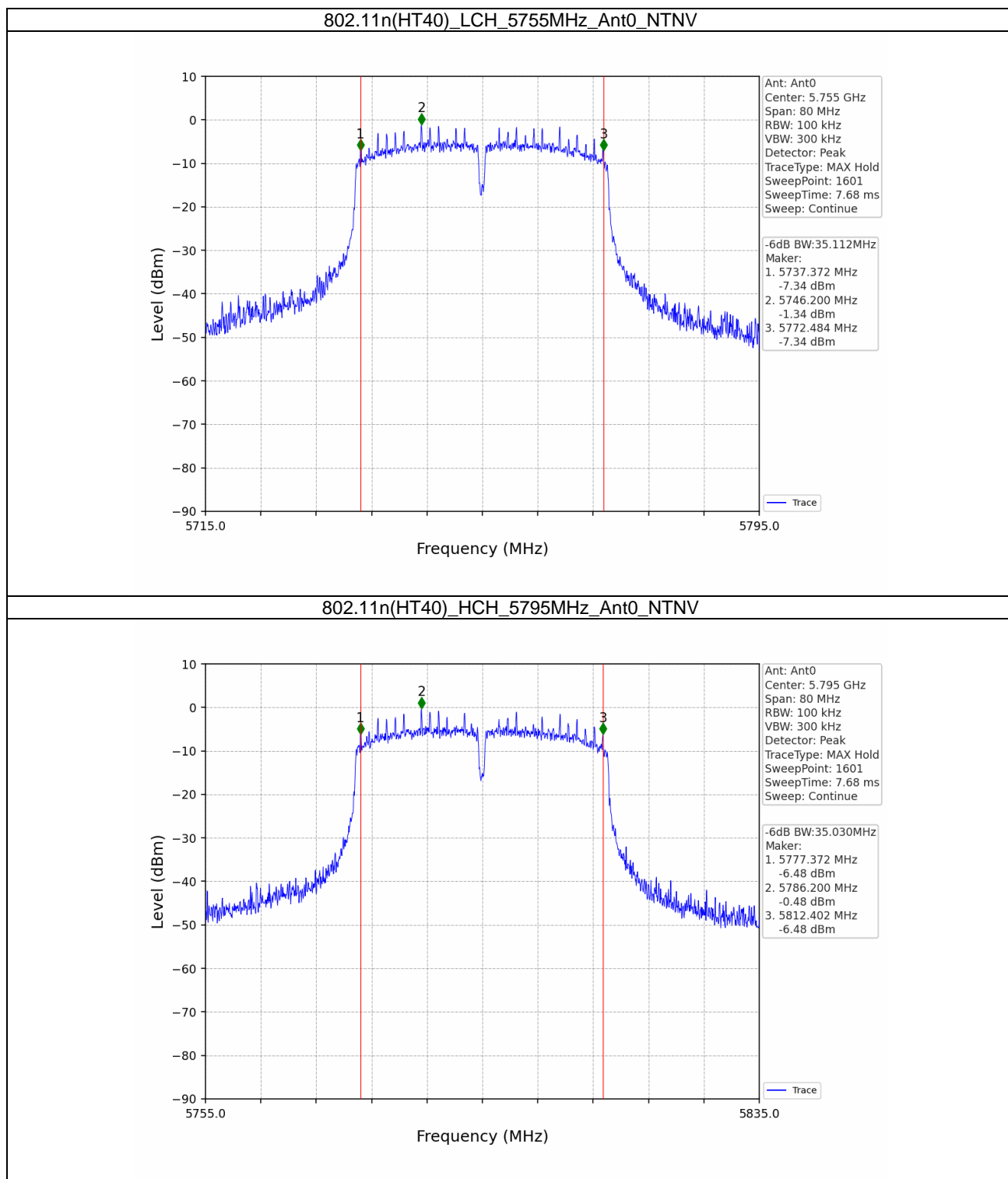
### 2.2.2 Test Graph



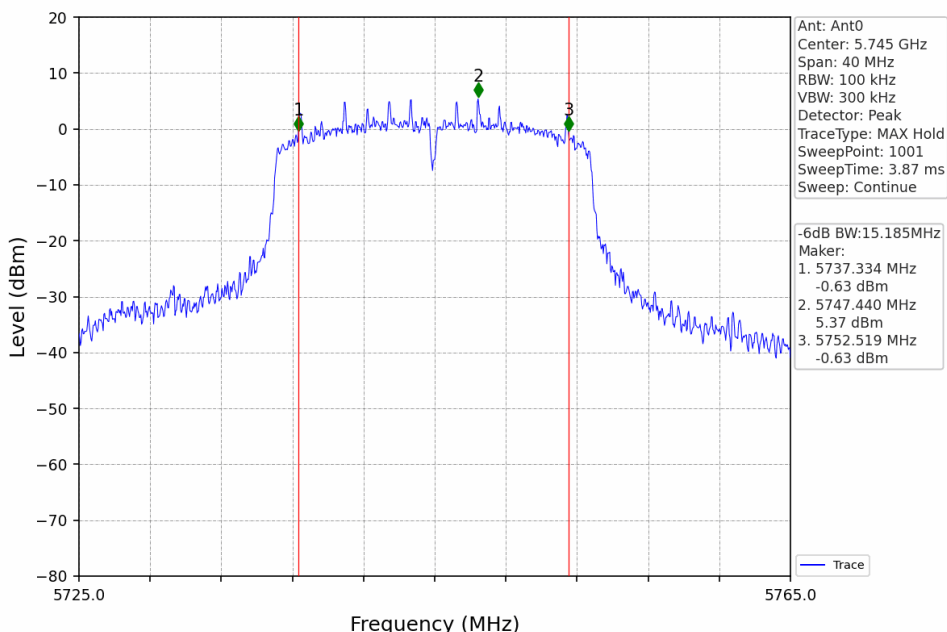




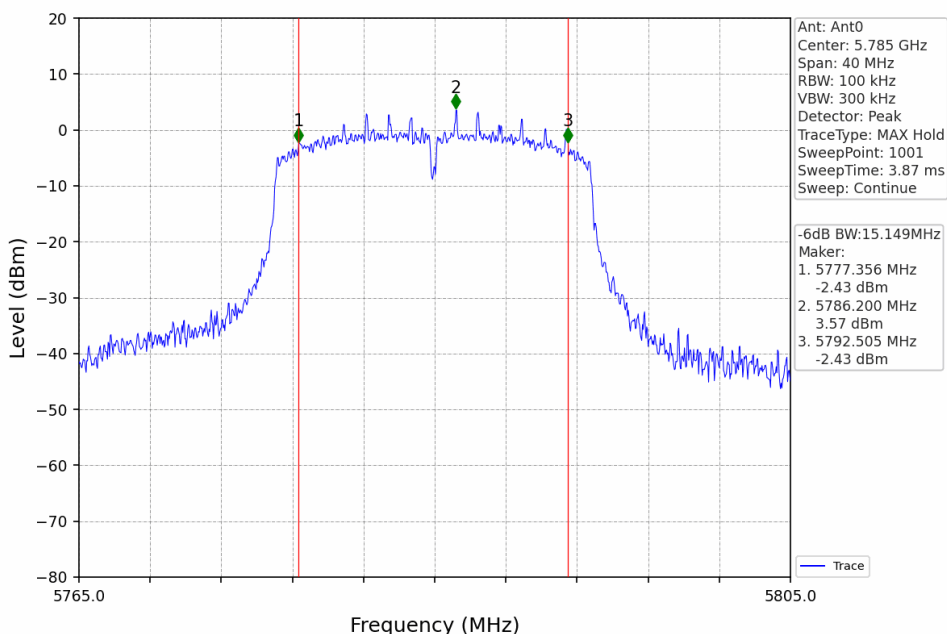


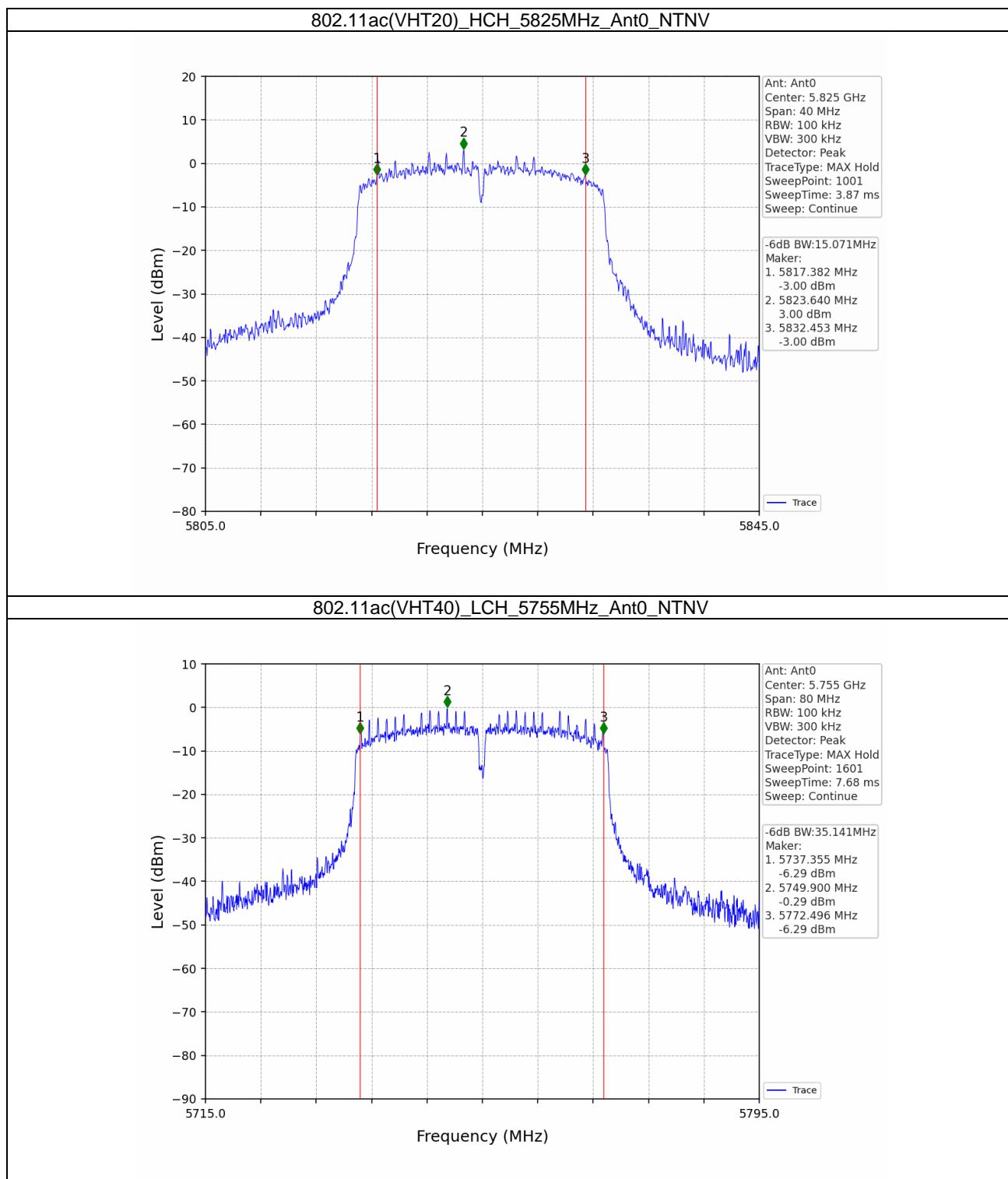


802.11ac(VHT20)\_LCH\_5745MHz\_Ant0\_NTNV



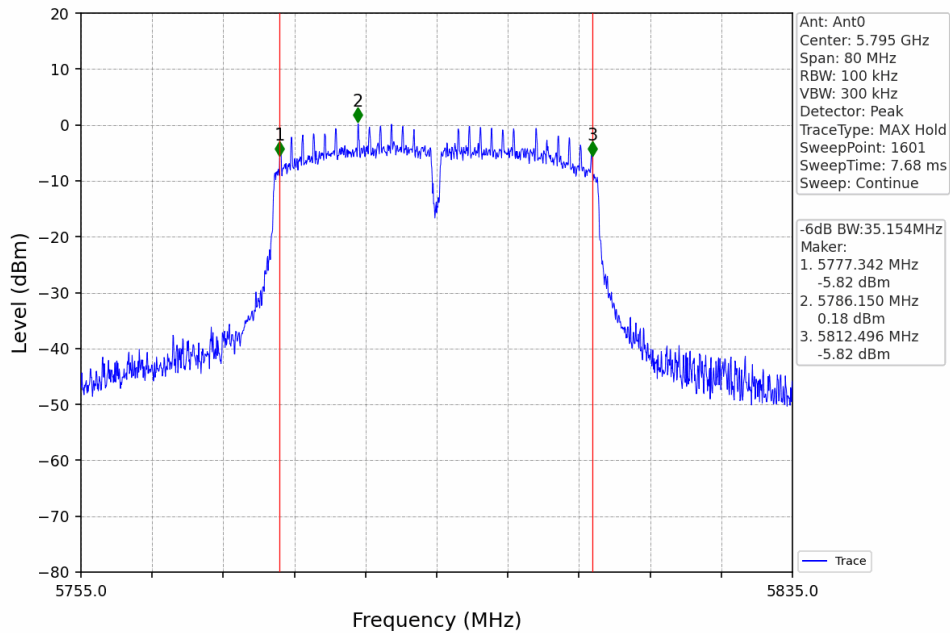
802.11ac(VHT20)\_MCH\_5785MHz\_Ant0\_NTNV



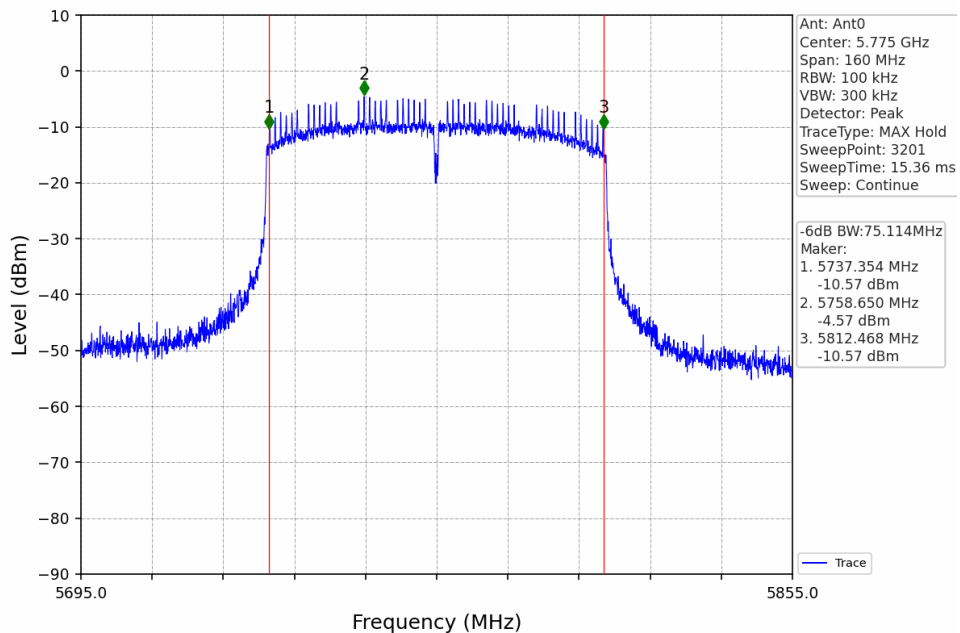




802.11ac(VHT40)\_HCH\_5795MHz\_Ant0\_NTNV



802.11ac(VHT80)\_MCH\_5775MHz\_Ant0\_NTNV

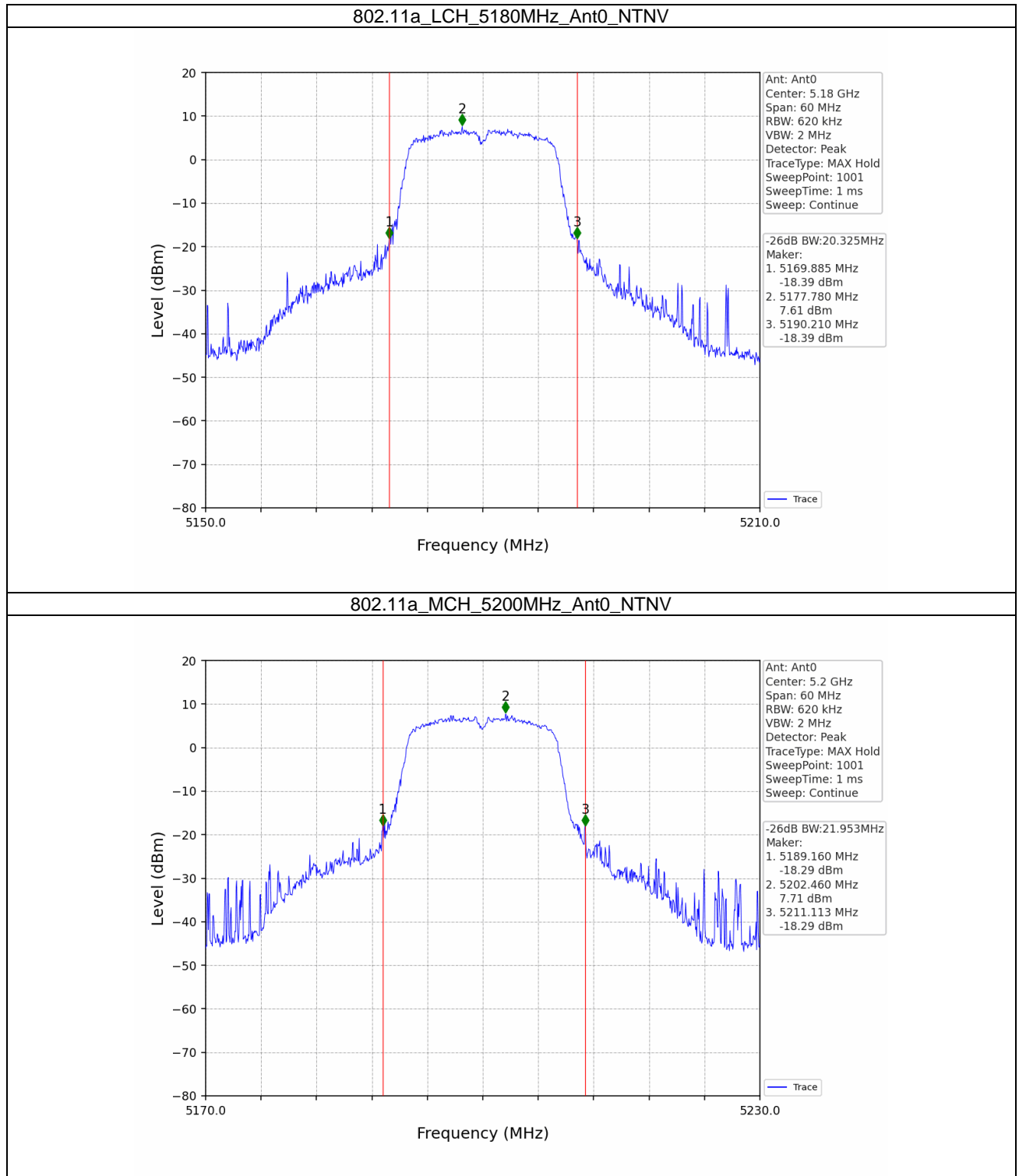


## 2.3 26dB BW

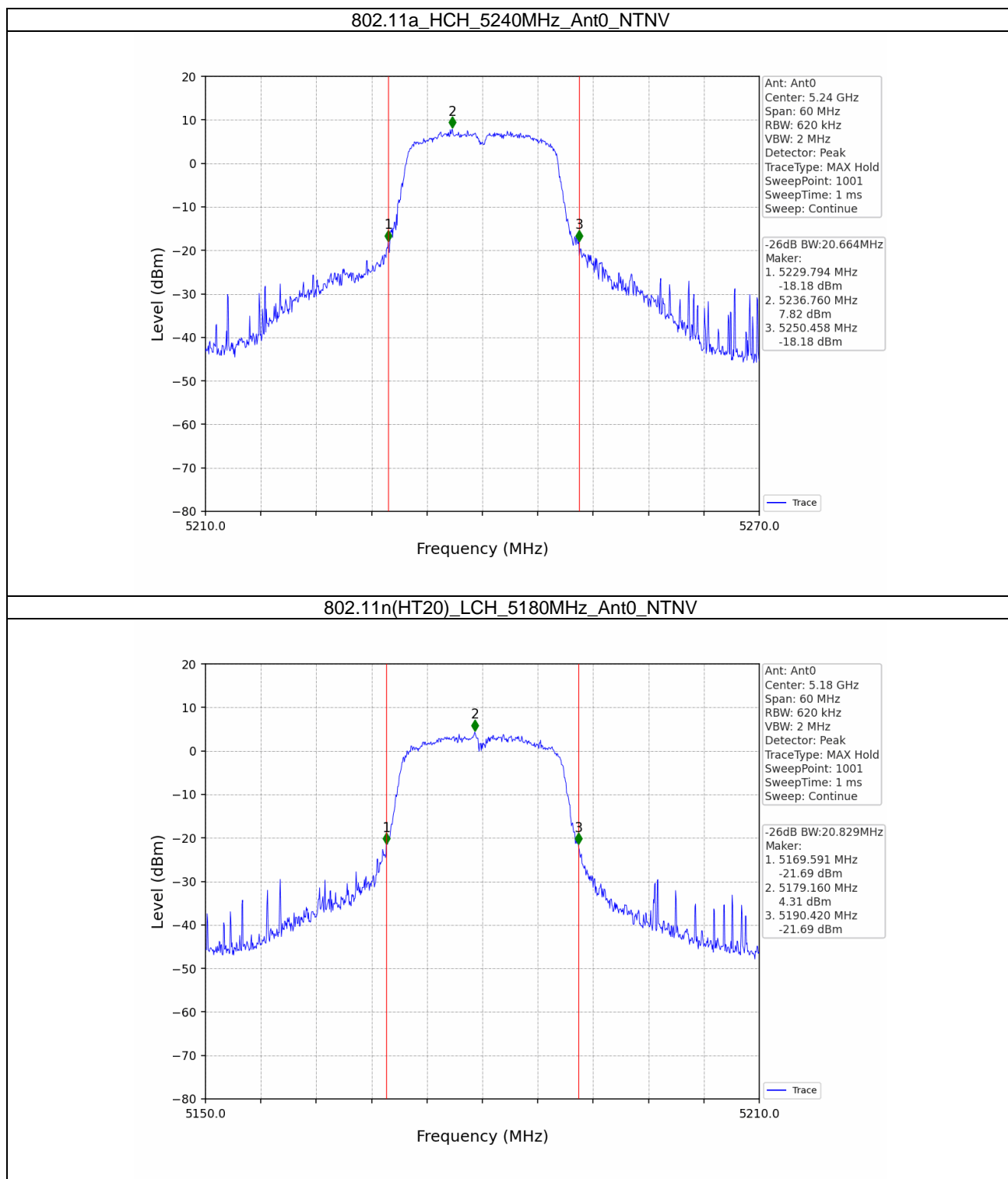
### 2.3.1 Test Result

Mode	TX Type	Frequency (MHz)	ANT	26dB Bandwidth (MHz)	Verdict
				Result	
802.11a	SISO	5180	0	20.325	Pass
		5200	0	21.953	Pass
		5240	0	20.664	Pass
802.11n (HT20)	MIMO	5180	0	20.829	Pass
		5200	0	20.829	Pass
		5240	0	20.871	Pass
802.11n (HT40)	MIMO	5190	0	52.696	Pass
		5230	0	44.494	Pass
802.11ac (VHT20)	MIMO	5180	0	21.005	Pass
		5200	0	21.058	Pass
		5240	0	20.820	Pass
802.11ac (VHT40)	MIMO	5190	0	47.472	Pass
		5230	0	47.227	Pass
802.11ac (VHT80)	MIMO	5210	0	83.122	Pass

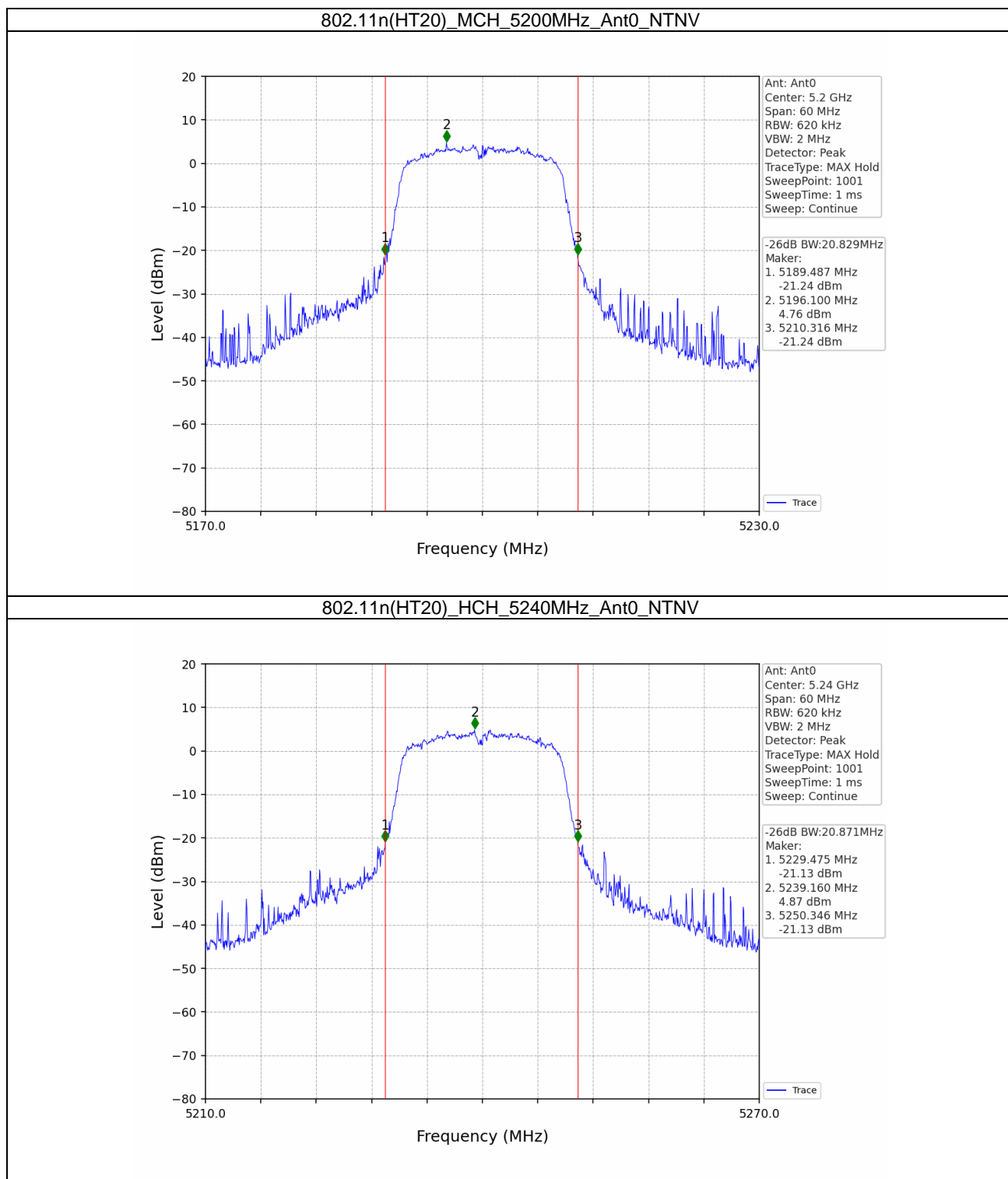
### 2.3.2 Test Graph

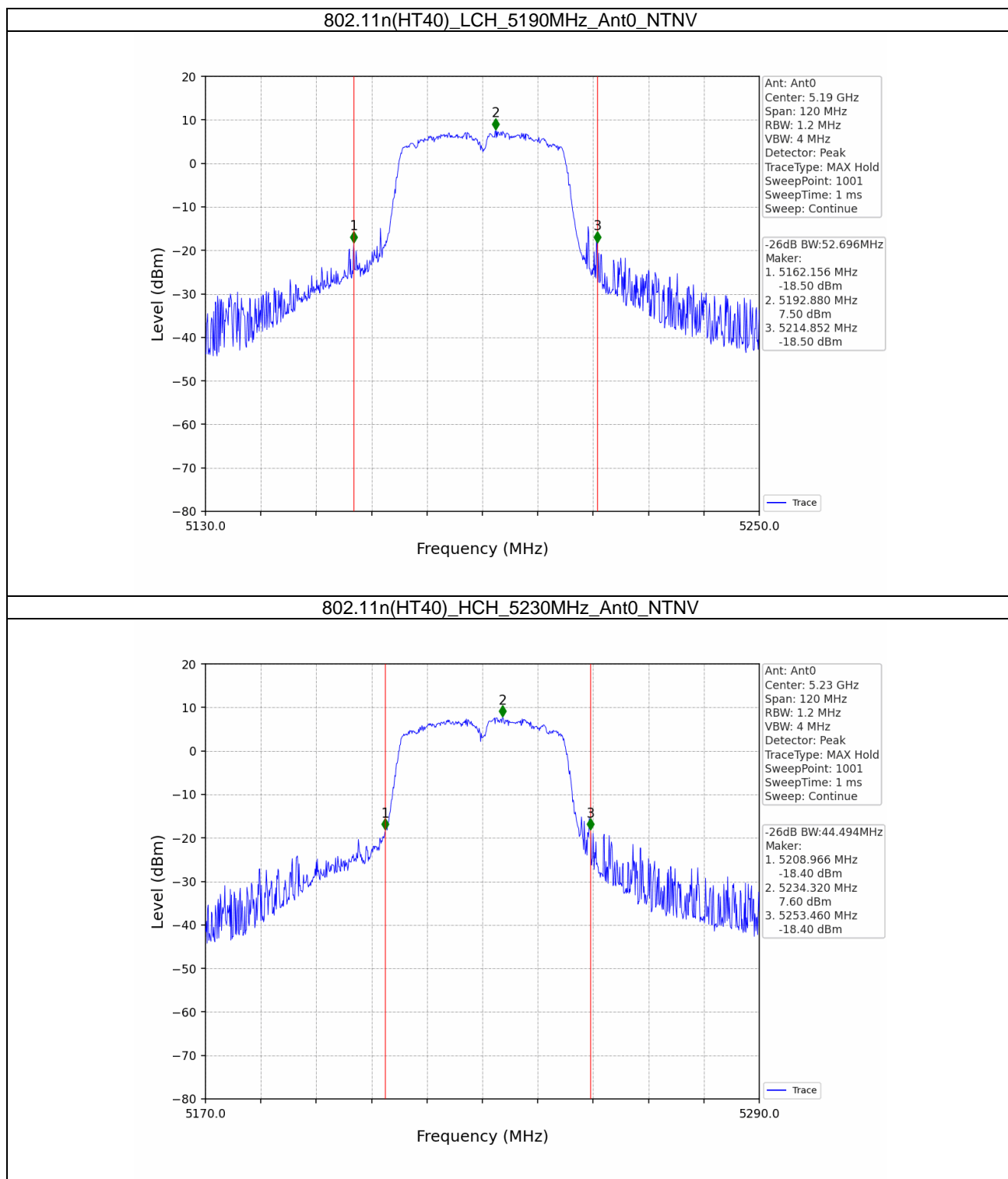


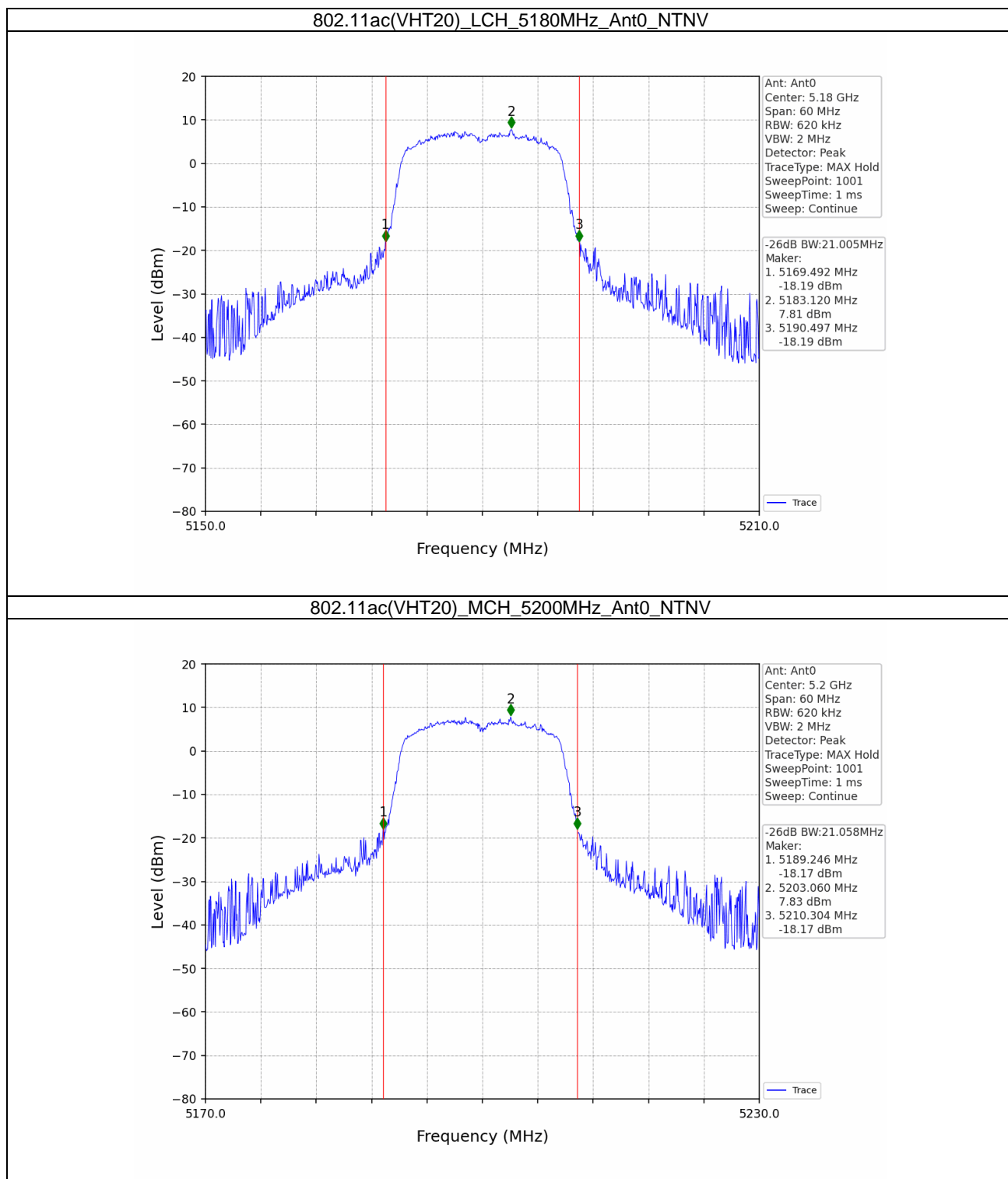
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

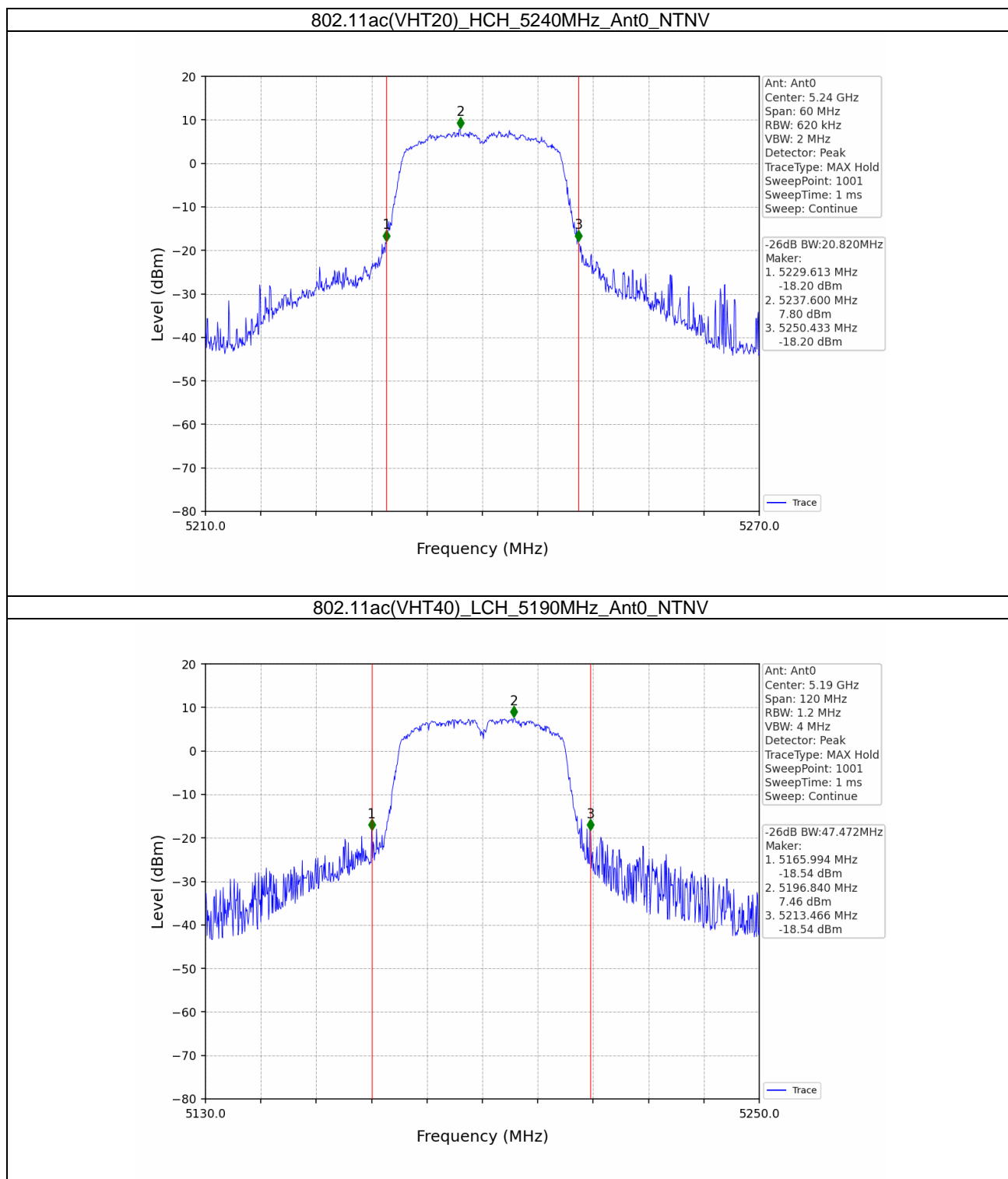




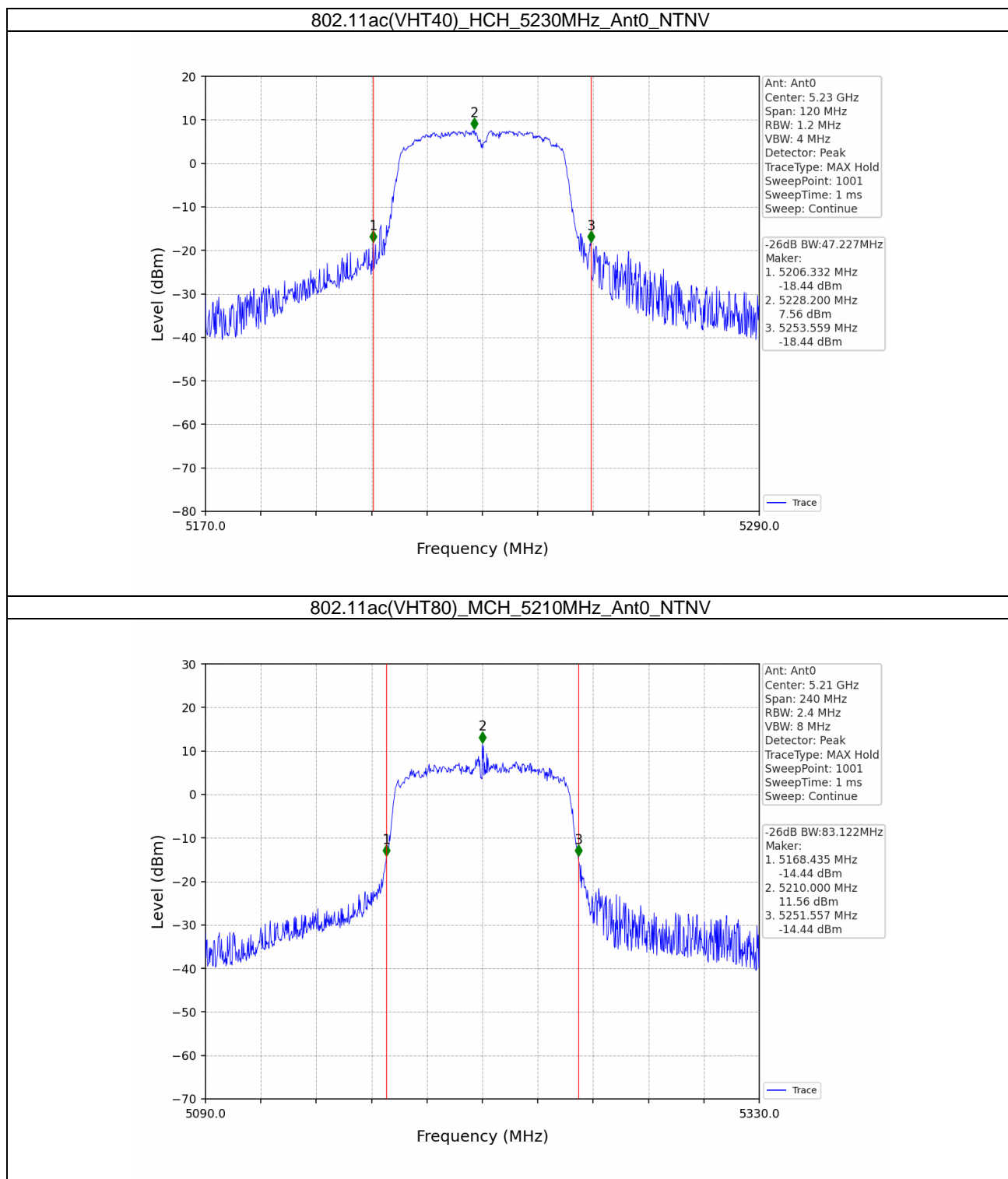












## 3. Maximum Conducted Output Power

## 3.1 Power

## 3.1.1 Test Result

Mode	TX Type	Frequency (MHz)	Maximum Average Conducted Output Power (dBm)				Verdict
			ANT0	ANT1	MIMO	Limit	
802.11a	SISO	5180	10.79	10.68	/	≤23.98	Pass
		5200	10.96	10.79	/	≤23.98	Pass
		5240	11.03	11.03	/	≤23.98	Pass
		5745	9.78	9.62	/	≤30	Pass
		5785	9.57	9.75	/	≤30	Pass
		5825	9.74	9.66	/	≤30	Pass
802.11n (HT20)	MIMO	5180	11.11	10.65	13.90	≤23.97	Pass
		5200	10.67	11.12	13.91	≤23.97	Pass
		5240	11.05	10.80	13.94	≤23.97	Pass
		5745	9.65	9.66	12.67	≤27.99	Pass
		5785	9.83	9.83	12.84	≤27.99	Pass
		5825	9.78	9.79	12.80	≤27.99	Pass
802.11n (HT40)	MIMO	5190	10.10	10.21	13.17	≤23.97	Pass
		5230	10.33	10.18	13.27	≤23.97	Pass
		5755	9.08	9.13	12.12	≤27.99	Pass
		5795	9.19	9.05	12.13	≤27.99	Pass
802.11ac (VHT20)	MIMO	5180	10.94	10.67	13.82	≤23.97	Pass
		5200	10.44	10.28	13.37	≤23.97	Pass
		5240	10.67	10.70	13.70	≤23.97	Pass
		5745	9.71	9.56	12.65	≤27.99	Pass
		5785	9.54	9.55	12.56	≤27.99	Pass
		5825	9.68	9.62	12.66	≤27.99	Pass
802.11ac (VHT40)	MIMO	5190	10.04	10.13	13.10	≤23.97	Pass
		5230	10.02	10.07	13.06	≤23.97	Pass
		5755	8.95	8.81	11.89	≤27.99	Pass
		5795	8.94	9.03	12.00	≤27.99	Pass
802.11ac (VHT80)	MIMO	5210	10.33	10.51	13.43	≤23.97	Pass
		5775	9.30	9.45	12.39	≤27.99	Pass

Note1:

U-NII-1 Antenna Gain: Antenna0&amp;1: 3dBi, U-NII-3 Antenna Gain: Antenna0&amp;1: 5dBi.

Note2:

U-NII-1 Directional Gain= $G_{Ant}+10\log(N_{Ant})$  dBi =  $3+10\log(2)$  dBi = 6.01dBi.U-NII-3 Directional Gain= $G_{Ant}+10\log(N_{Ant})$  dBi =  $5+10\log(2)$  dBi = 8.01dBi.

## 4. Maximum Power Spectral Density

## 4.1 PSD: U-NII-1

## 4.1.1 Test Result

Mode	TX Type	Frequency (MHz)	Maximum PSD (dBm/MHz)				Verdict
			ANT0	ANT1	MIMO	Limit	
802.11a	SISO	5180	-0.11	0.41	/	<=11	Pass
		5200	-0.04	0.05	/	<=11	Pass
		5240	0.41	0.55	/	<=11	Pass
802.11n (HT20)	MIMO	5180	-0.93	-1.00	2.03	<=10.99	Pass
		5200	-0.47	-0.70	2.41	<=10.99	Pass
		5240	-1.10	-0.83	2.02	<=10.99	Pass
802.11n (HT40)	MIMO	5190	-4.54	-4.84	-1.70	<=10.99	Pass
		5230	-4.75	-4.76	-1.75	<=10.99	Pass
802.11ac (VHT20)	MIMO	5180	-0.93	-1.61	1.71	<=10.99	Pass
		5200	0.07	-0.44	2.82	<=10.99	Pass
		5240	-1.26	-1.50	1.62	<=10.99	Pass
802.11ac (VHT40)	MIMO	5190	-4.46	-5.18	-1.83	<=10.99	Pass
		5230	-4.65	-5.09	-1.86	<=10.99	Pass
802.11ac (VHT80)	MIMO	5210	-8.38	-9.15	-5.75	<=10.99	Pass

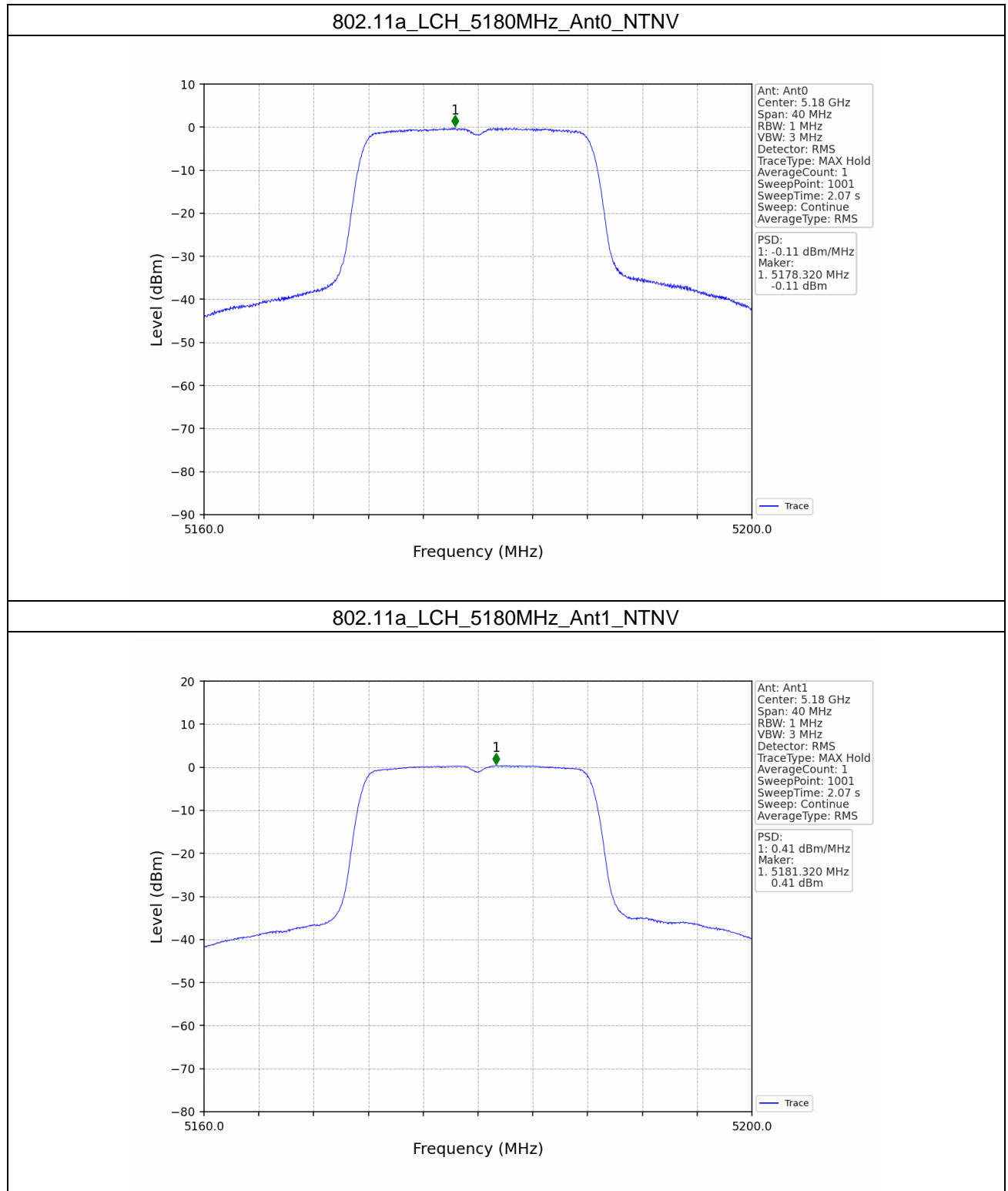
Note1:

U-NII-1 Antenna Gain: Antenna0&amp;1: 3dBi, U-NII-3 Antenna Gain: Antenna0&amp;1: 5dBi.

Note2:

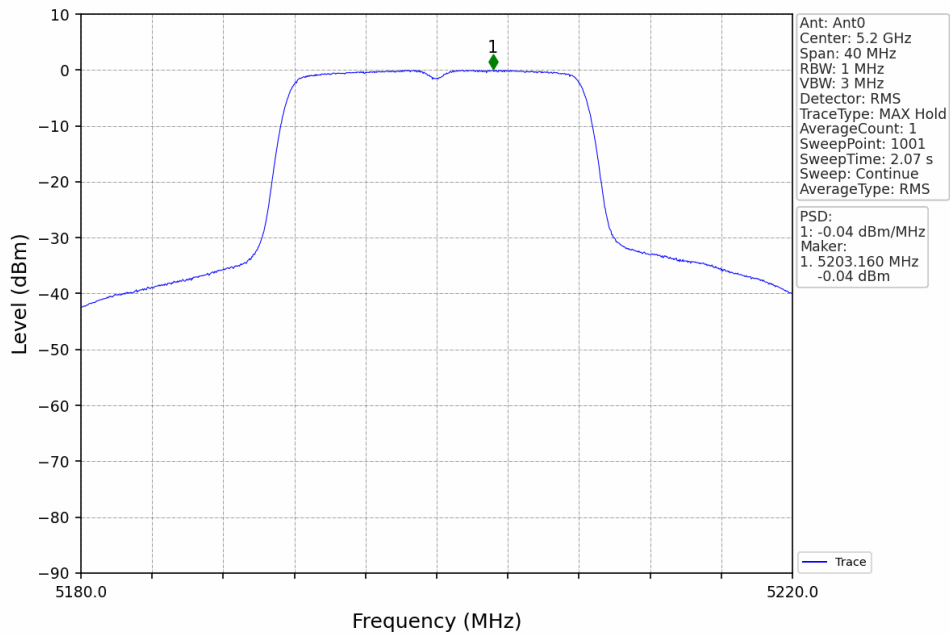
U-NII-1 Directional Gain= $G_{Ant}+10\log(N_{Ant})$  dBi = 3+10log (2) dBi = 6.01dBi.U-NII-3 Directional Gain= $G_{Ant}+10\log(N_{Ant})$  dBi = 5+10log (2) dBi = 8.01dBi.

### 4.1.2 Test Graph

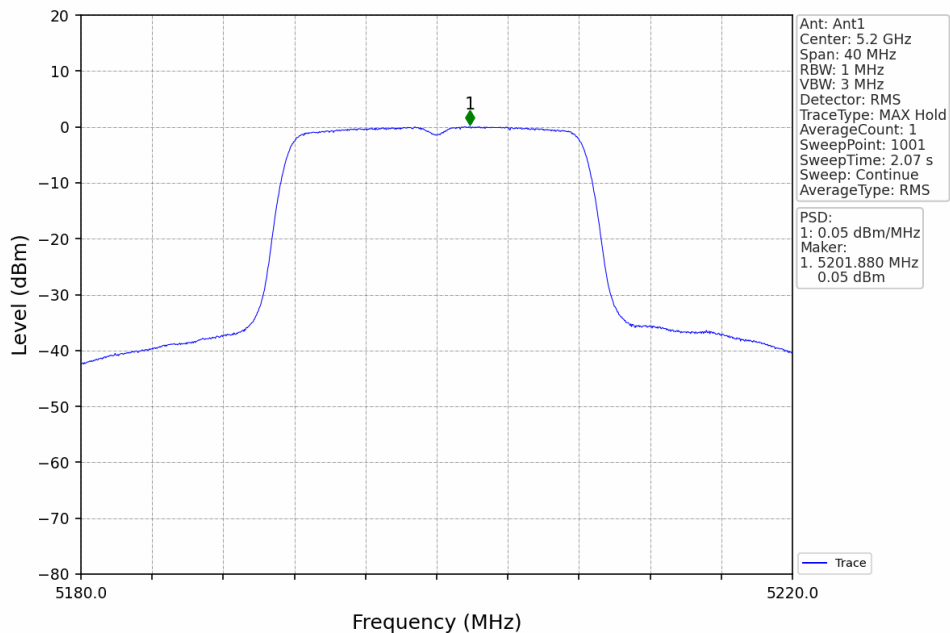




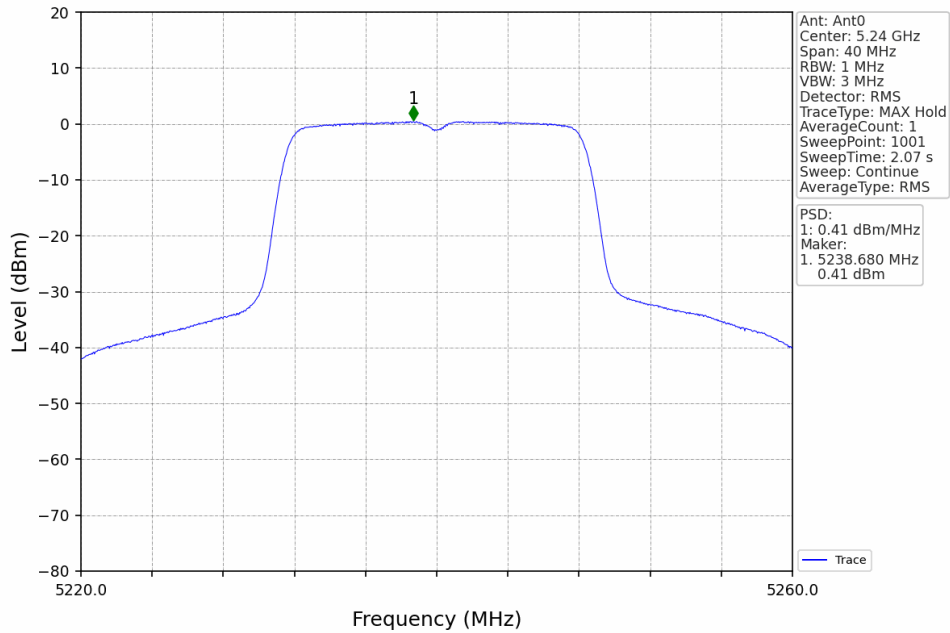
802.11a\_MCH\_5200MHz\_Ant0\_NTNV



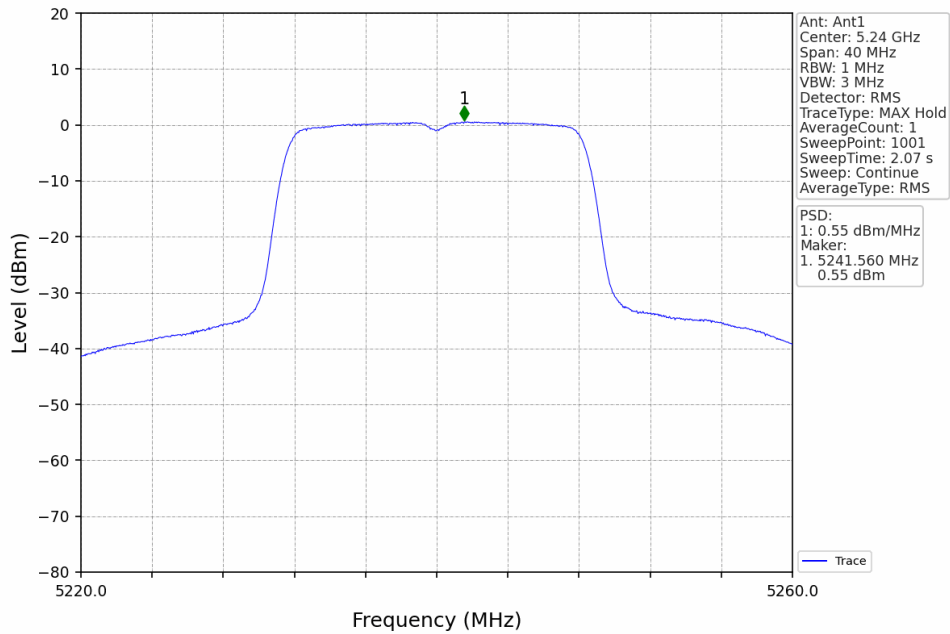
802.11a\_MCH\_5200MHz\_Ant1\_NTNV



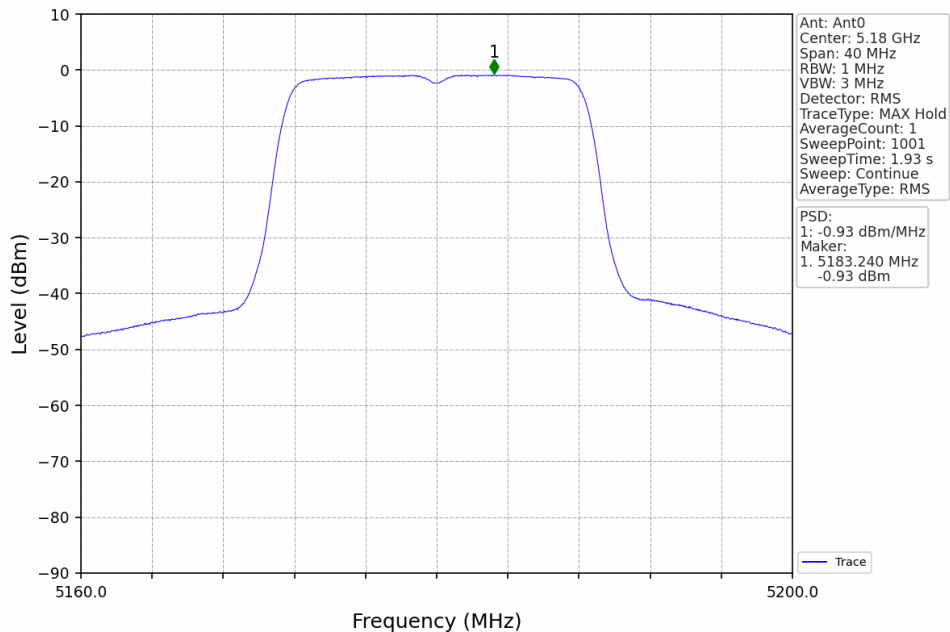
802.11a\_HCH\_5240MHz\_Ant0\_NTNV



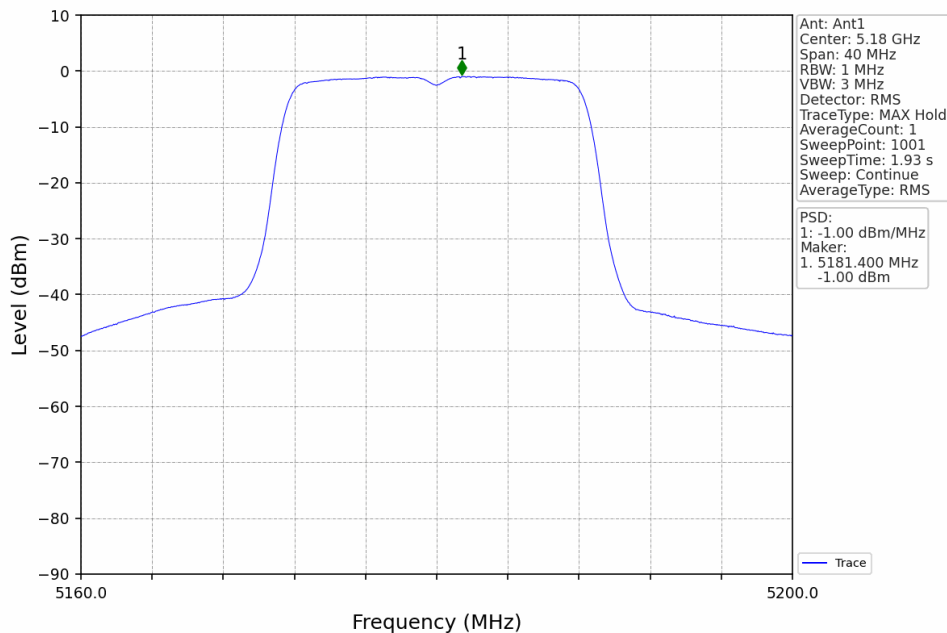
802.11a\_HCH\_5240MHz\_Ant1\_NTNV



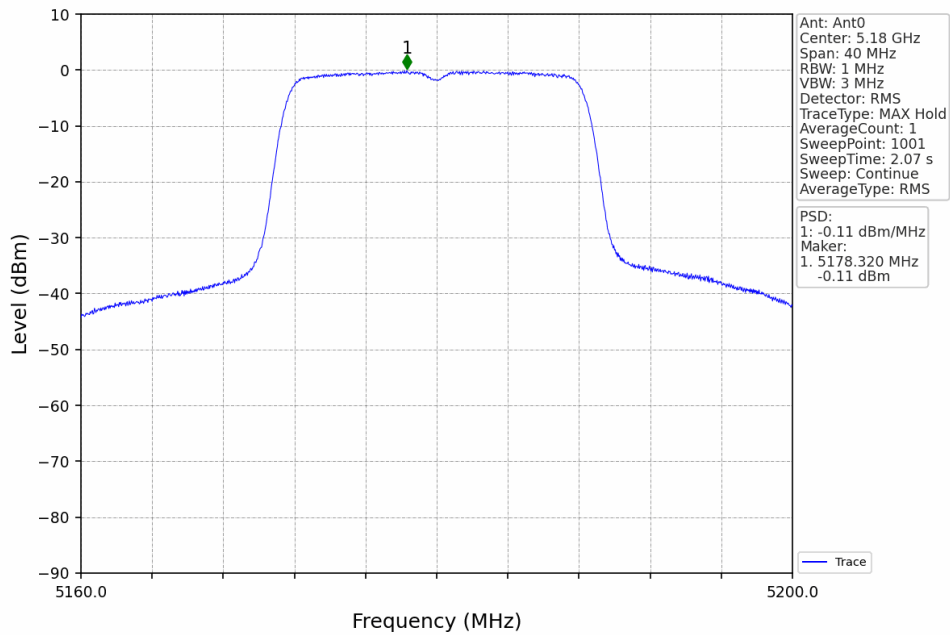
802.11n(HT20)\_LCH\_5180MHz\_Ant0\_NTNV



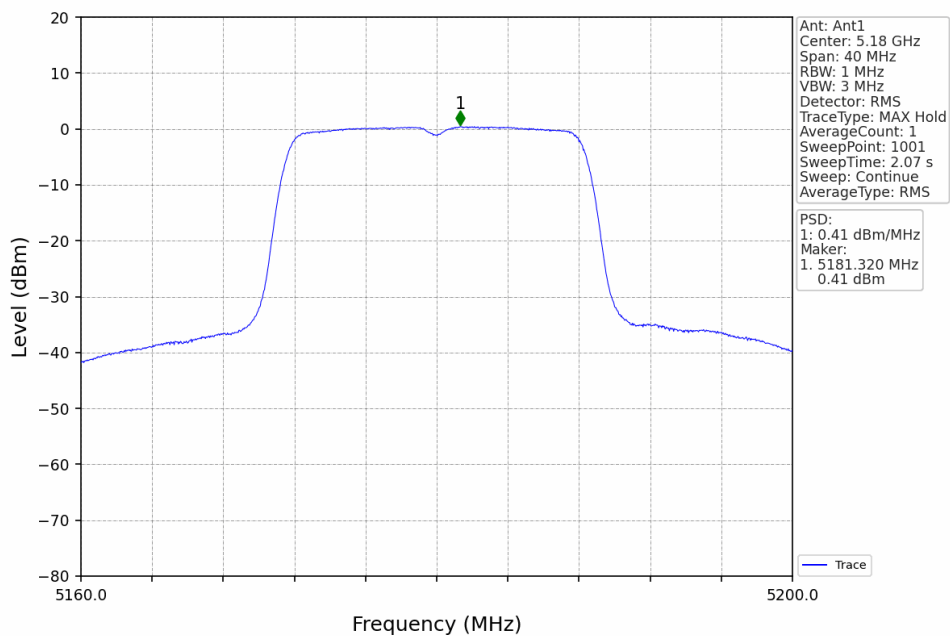
802.11n(HT20)\_LCH\_5180MHz\_Ant1\_NTNV



802.11a\_LCH\_5180MHz\_Ant0\_NTNV

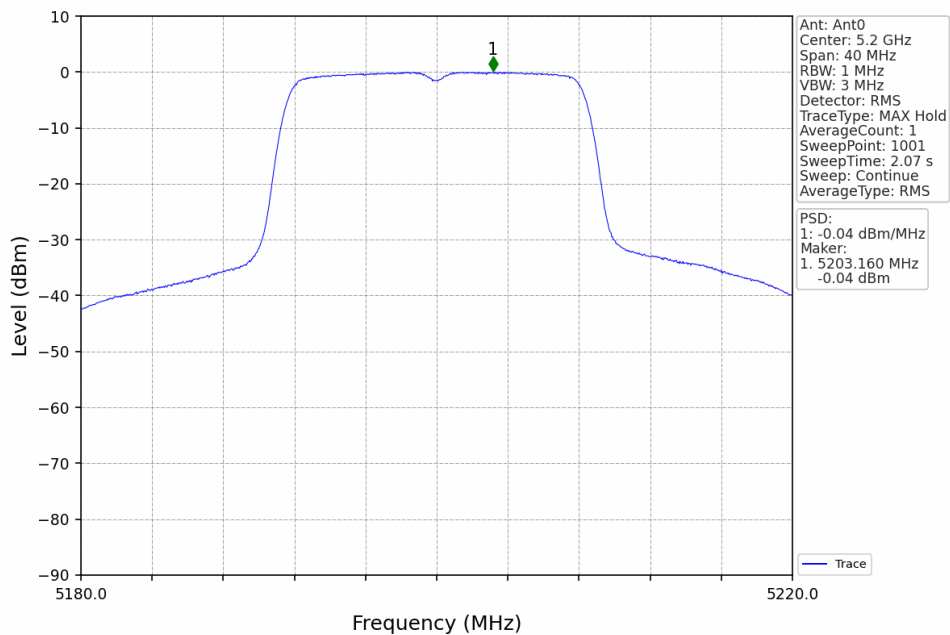


802.11a\_LCH\_5180MHz\_Ant1\_NTNV

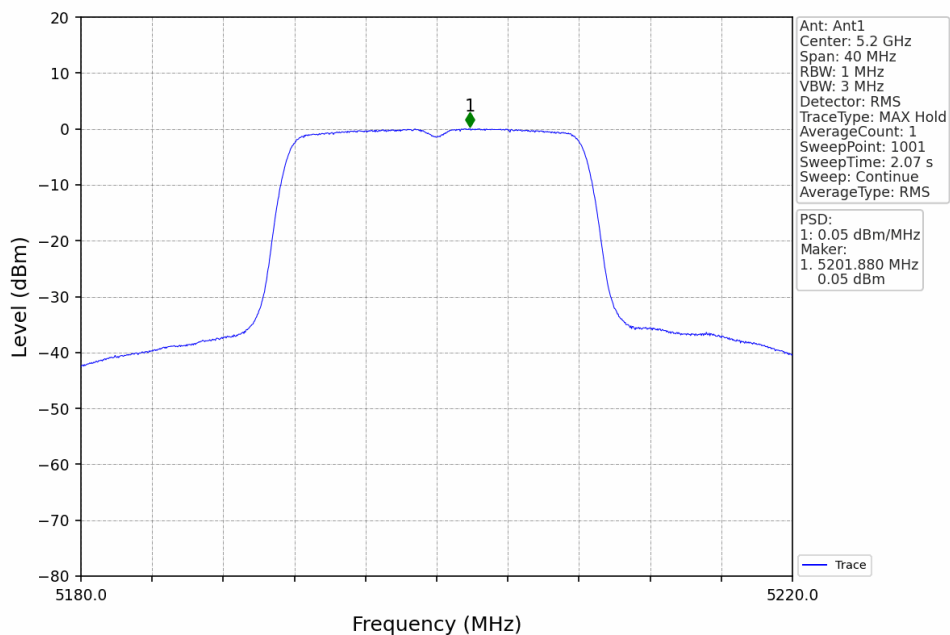




802.11a\_MCH\_5200MHz\_Ant0\_NTNV

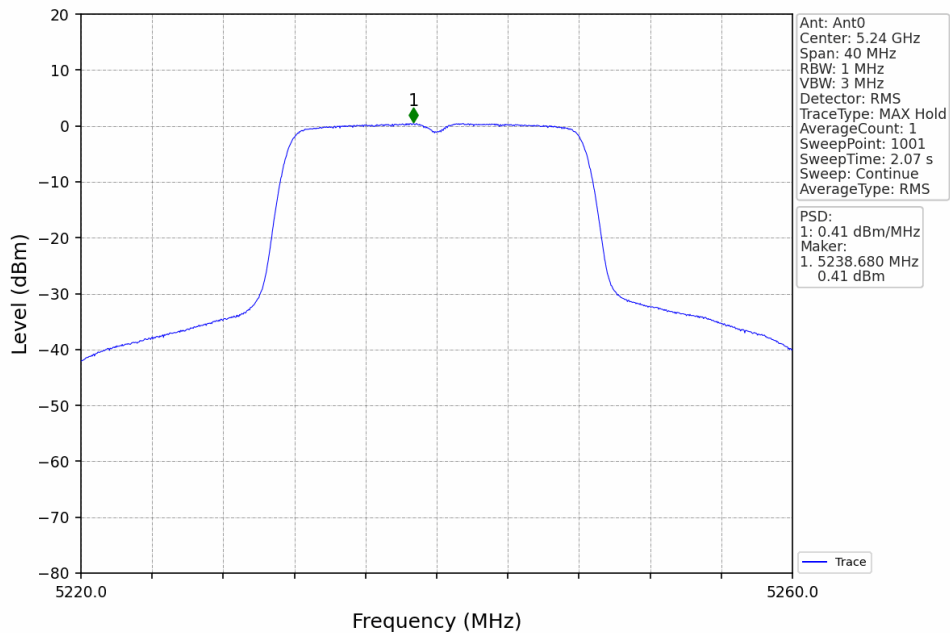


802.11a\_MCH\_5200MHz\_Ant1\_NTNV



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

### 802.11a\_HCH\_5240MHz\_Ant0\_NTNV



### 802.11a\_HCH\_5240MHz\_Ant1\_NTNV

