

## Test Data for 5G\_BAND2A

Product Name: RZBoard V2L

Test Model(HVIN): AES-RZB-V2L-SK-G

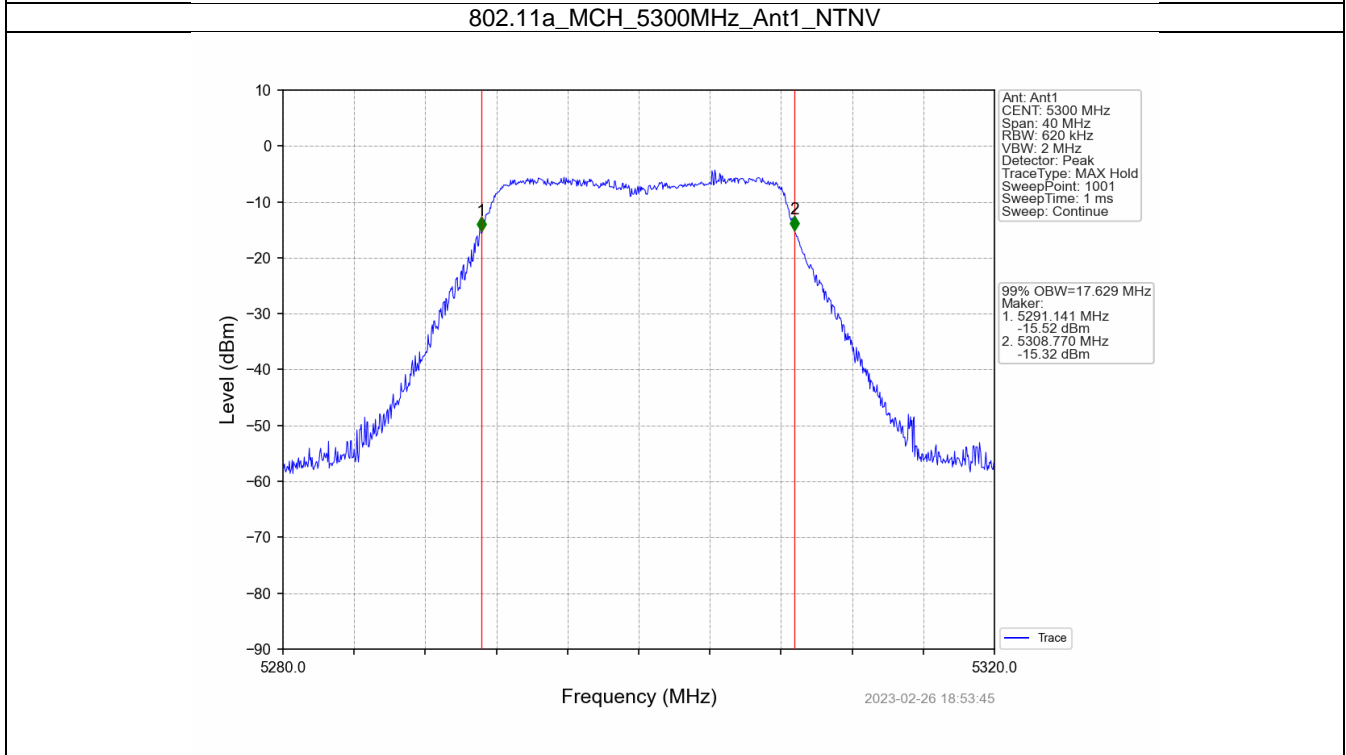
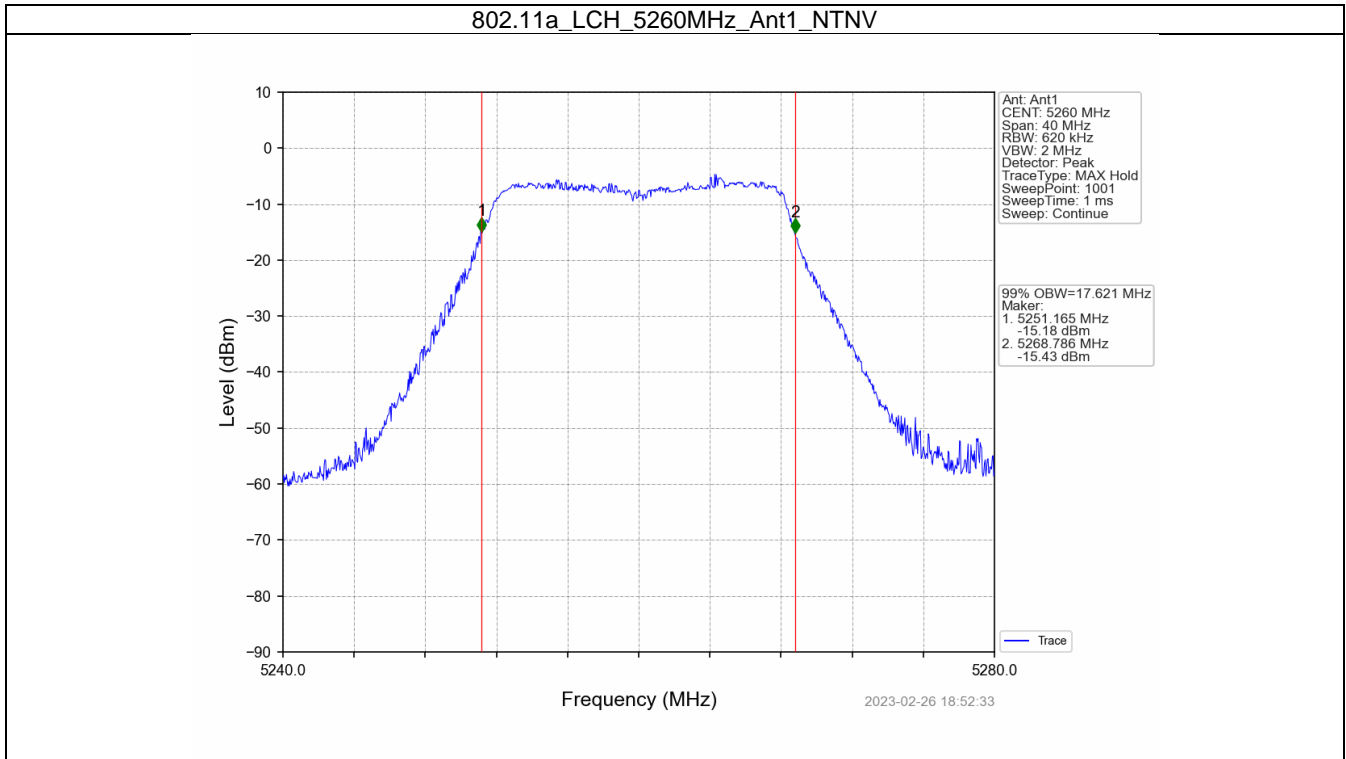
### 1. Bandwidth

#### 1.1 OBW

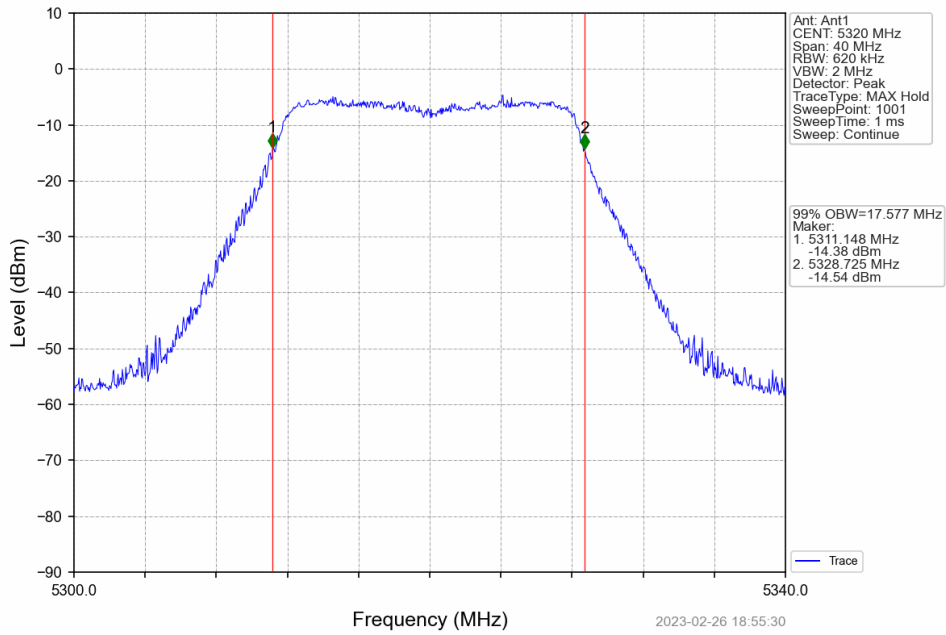
##### 1.1.1 Test Result

Mode	TX Type	Frequency (MHz)	ANT	99% Occupied Bandwidth (MHz)	Verdict
				Result	
802.11a	SISO	5260	1	17.621	Pass
		5300	1	17.629	Pass
		5320	1	17.577	Pass
802.11n (HT20)	SISO	5260	1	18.518	Pass
		5300	1	18.479	Pass
		5320	1	18.405	Pass
802.11n (HT40)	SISO	5270	1	36.801	Pass
		5310	1	36.855	Pass
802.11ac (VHT20)	SISO	5260	1	18.302	Pass
		5300	1	18.139	Pass
		5320	1	18.329	Pass
802.11ac (VHT40)	SISO	5270	1	36.941	Pass
		5310	1	36.865	Pass
802.11ac (VHT80)	SISO	5290	1	76.320	Pass

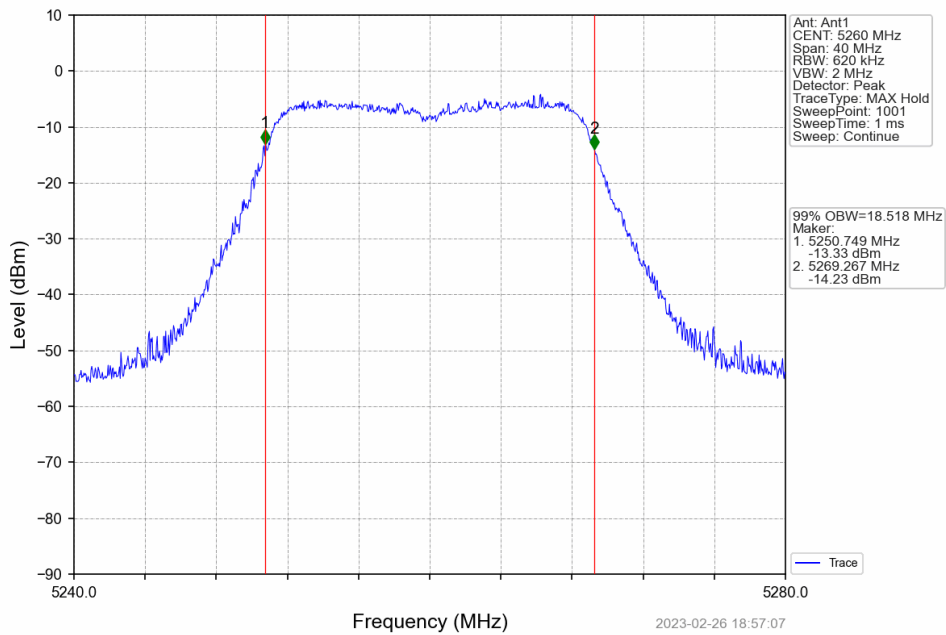
1.1.2 Test Graph



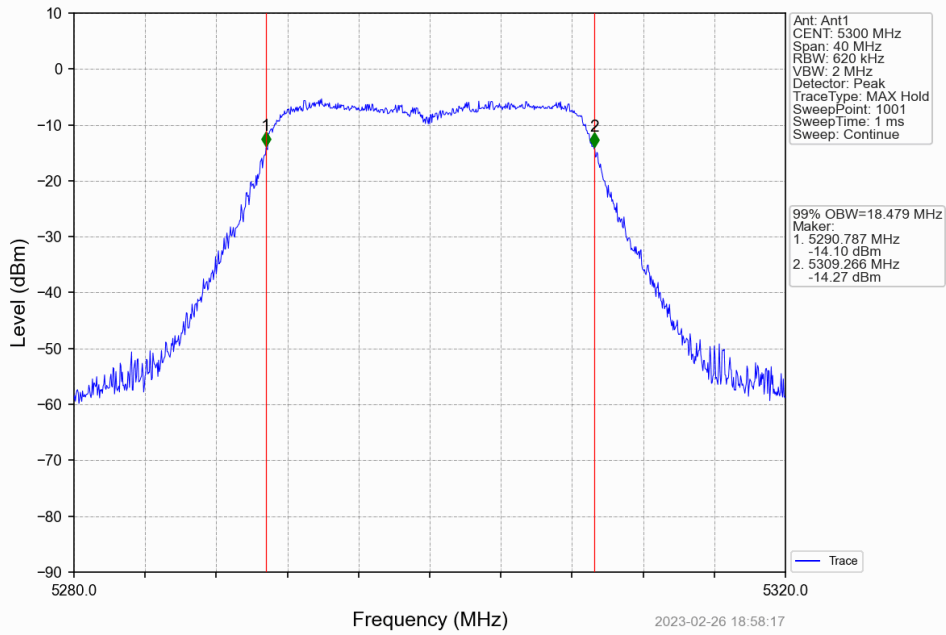
802.11a\_HCH\_5320MHz\_Ant1\_NTNV



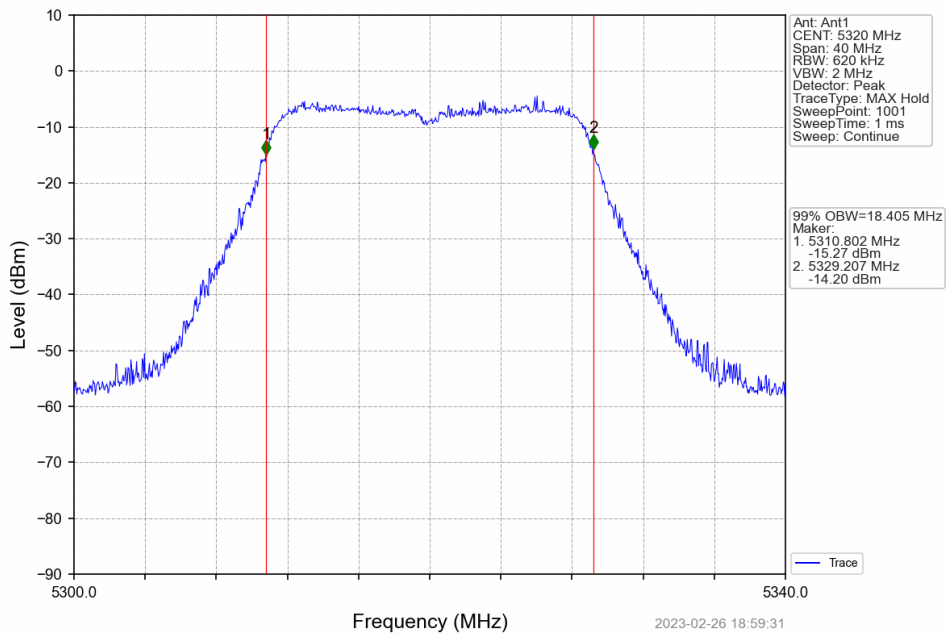
802.11n(HT20)\_LCH\_5260MHz\_Ant1\_NTNV



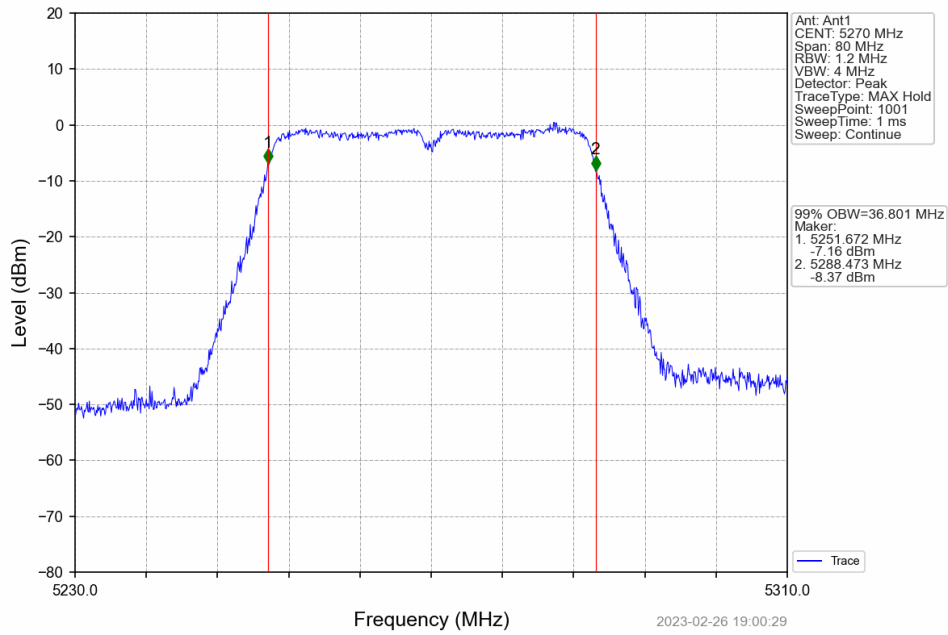
802.11n(HT20)\_MCH\_5300MHz\_Ant1\_NTNV



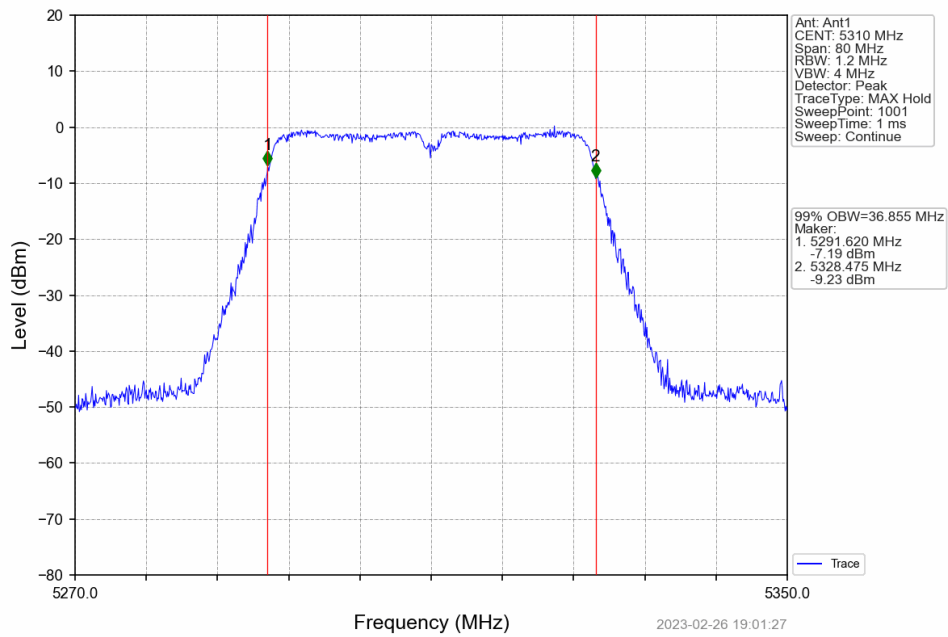
802.11n(HT20)\_HCH\_5320MHz\_Ant1\_NTNV



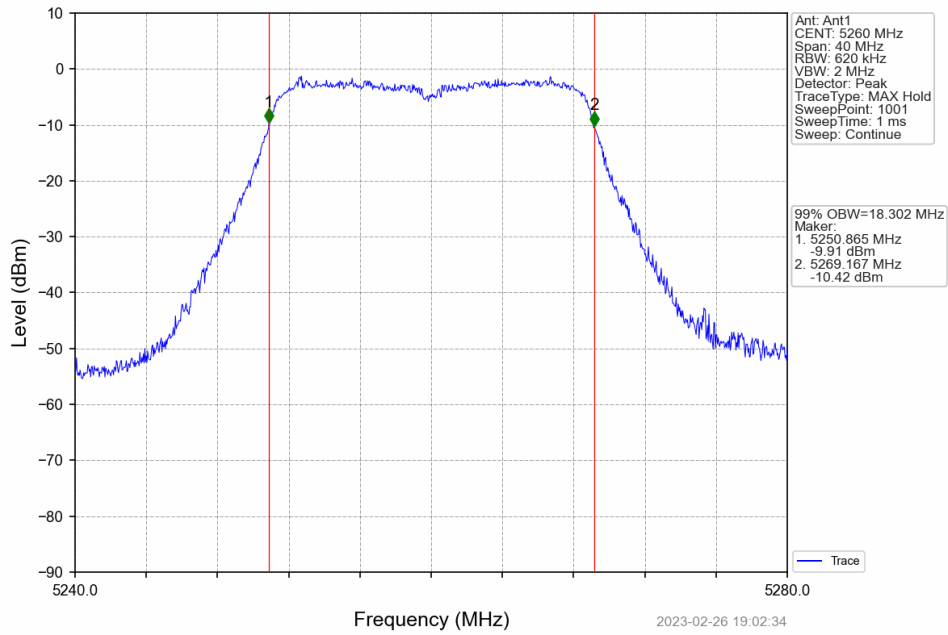
802.11n(HT40)\_LCH\_5270MHz\_Ant1\_NTNV



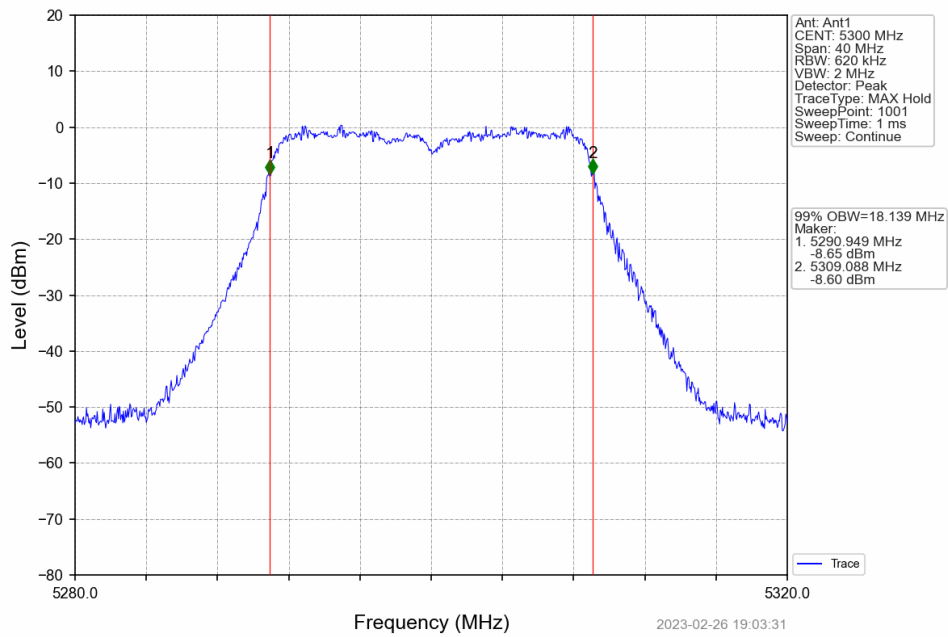
802.11n(HT40)\_HCH\_5310MHz\_Ant1\_NTNV



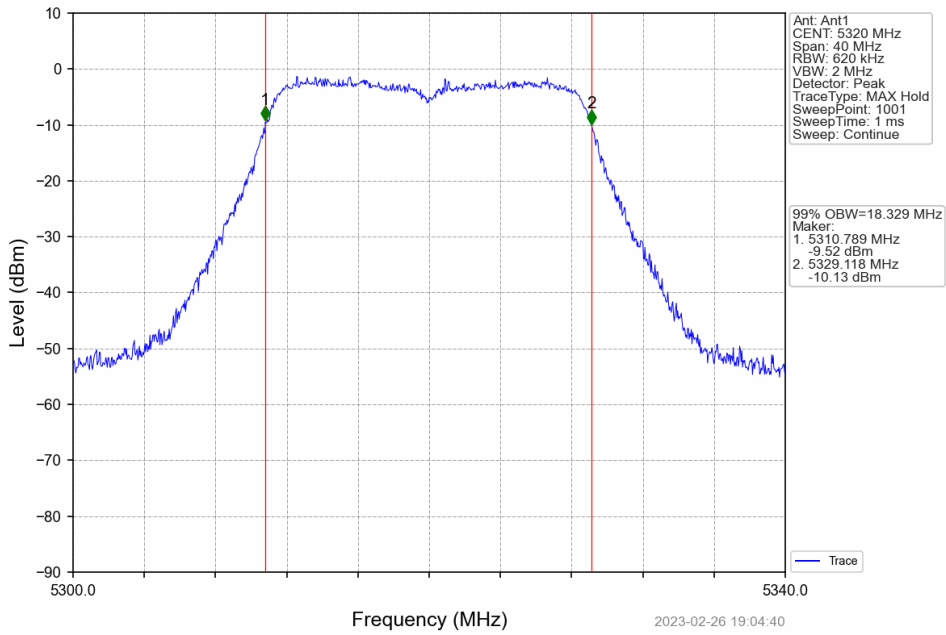
802.11ac(VHT20)\_LCH\_5260MHz\_Ant1\_NTNV



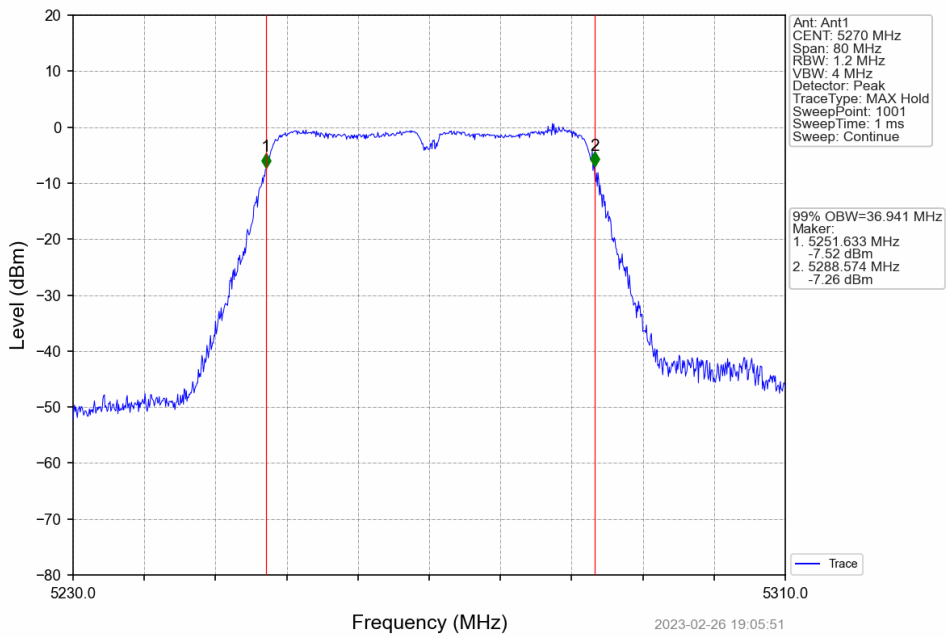
802.11ac(VHT20)\_MCH\_5300MHz\_Ant1\_NTNV



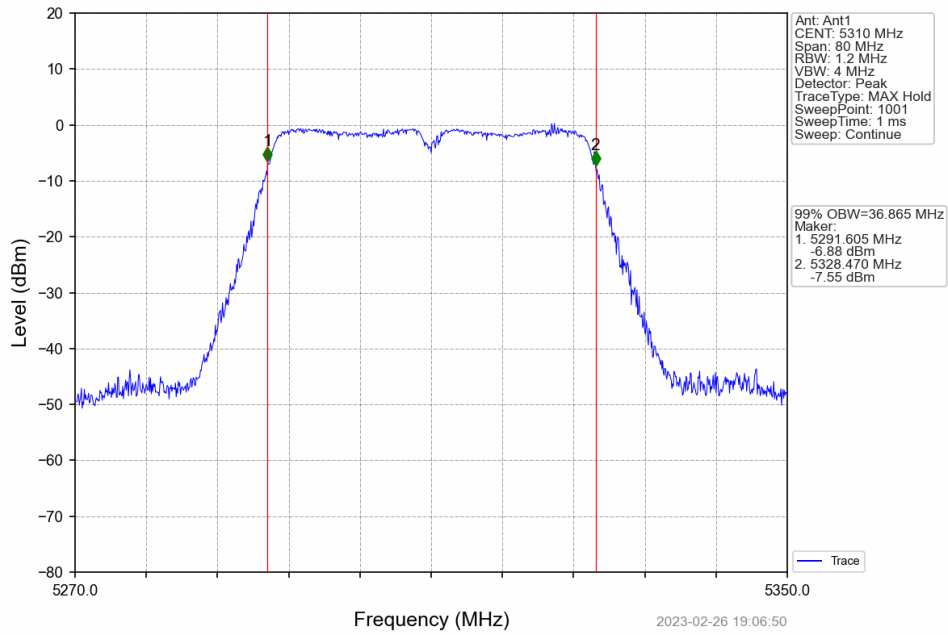
802.11ac(VHT20)\_HCH\_5320MHz\_Ant1\_NTNV



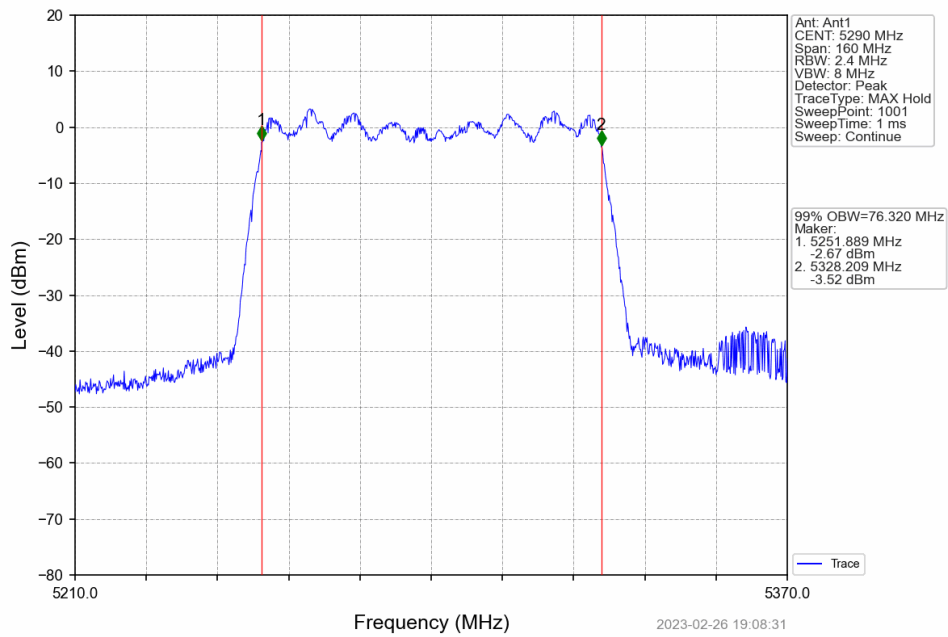
802.11ac(VHT40)\_LCH\_5270MHz\_Ant1\_NTNV



802.11ac(VHT40)\_HCH\_5310MHz\_Ant1\_NTNV



802.11ac(VHT80)\_MCH\_5290MHz\_Ant1\_NTNV



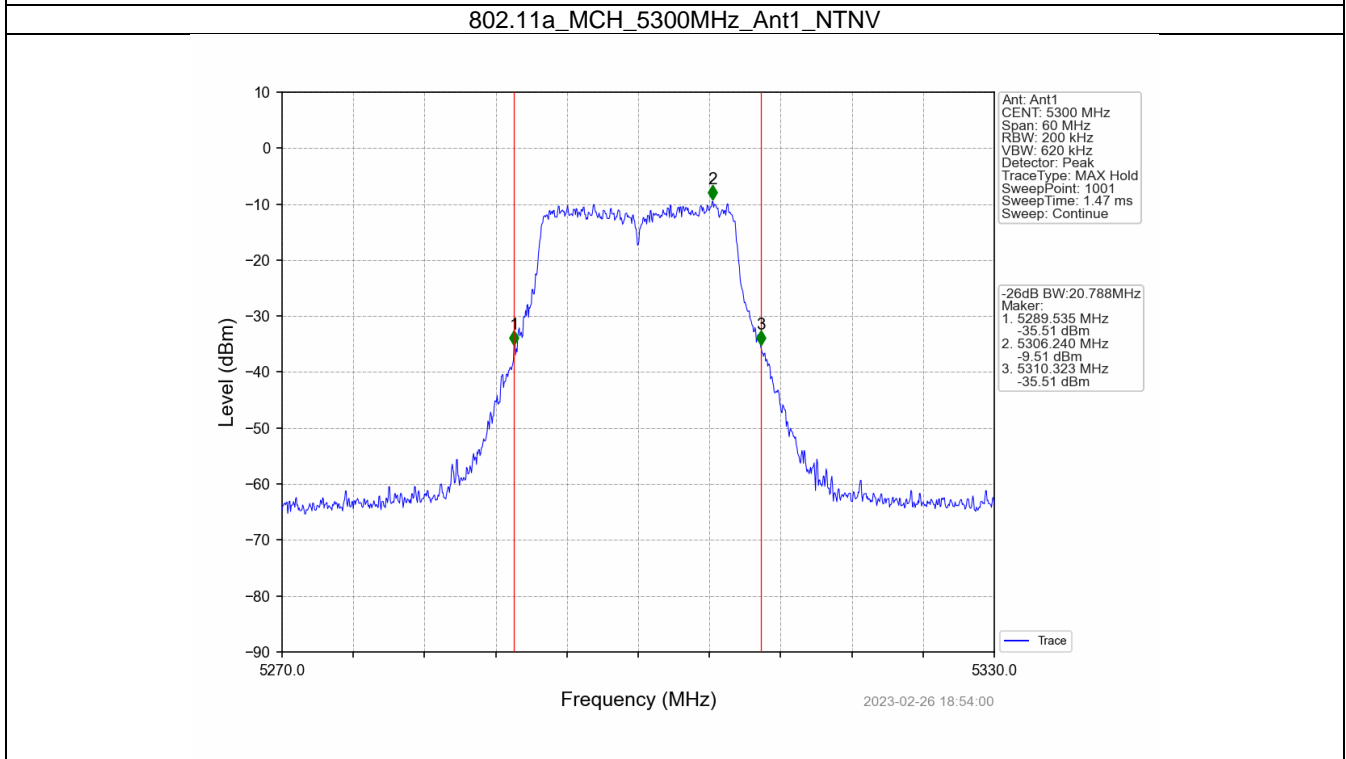
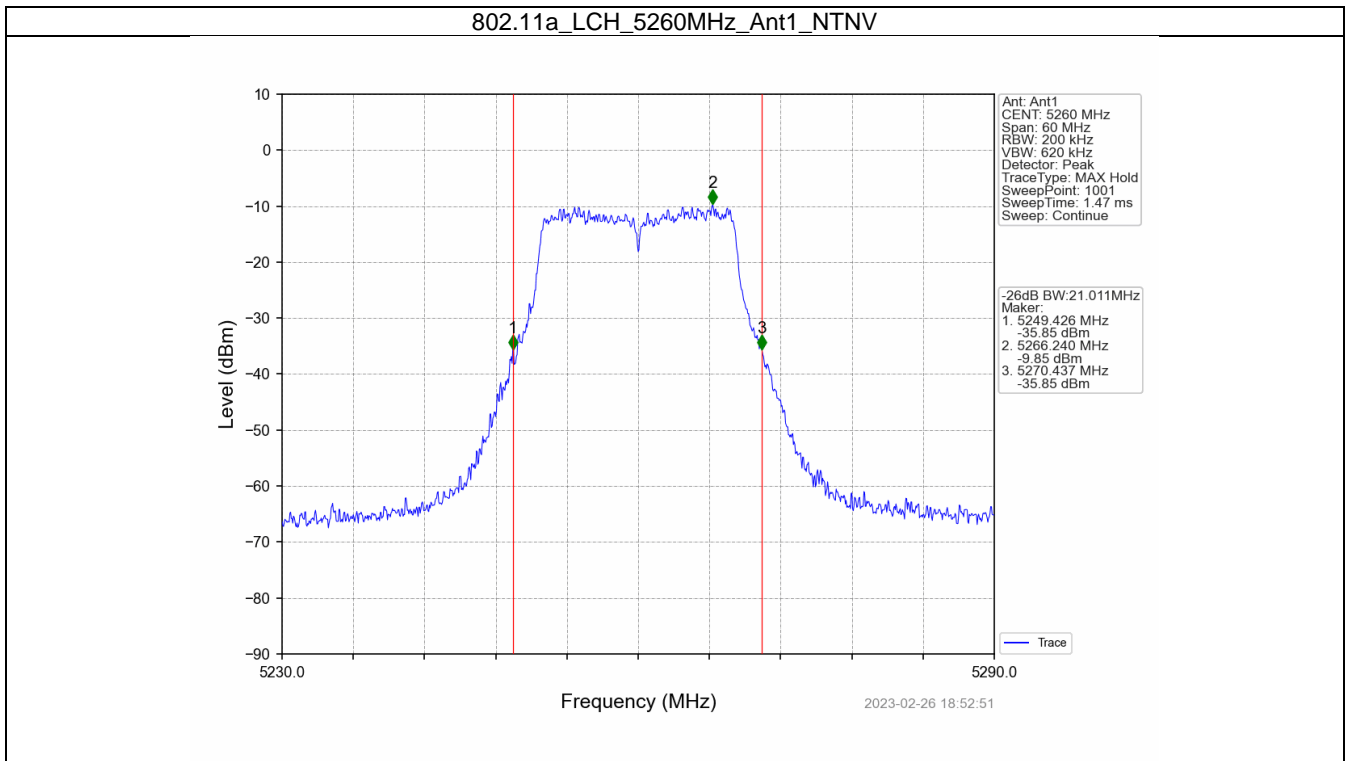


1.2 26dB BW

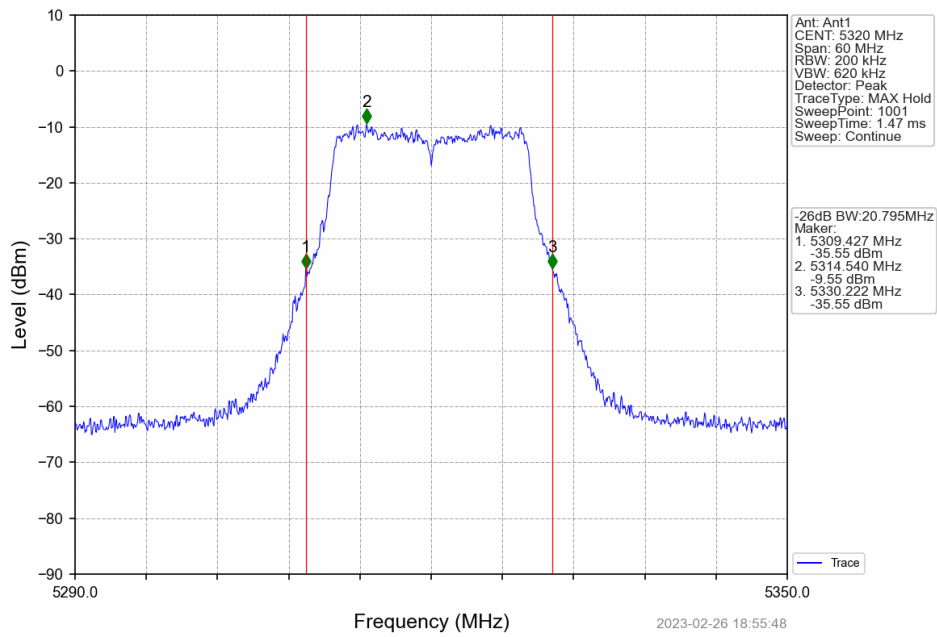
1.2.1 Test Result

Mode	TX Type	Frequency (MHz)	ANT	26dB Bandwidth (MHz)	Verdict
				Result	
802.11a	SISO	5260	1	21.011	Pass
		5300	1	20.788	Pass
		5320	1	20.795	Pass
802.11n (HT20)	SISO	5260	1	21.379	Pass
		5300	1	21.327	Pass
		5320	1	21.433	Pass
802.11n (HT40)	SISO	5270	1	41.503	Pass
		5310	1	42.243	Pass
802.11ac (VHT20)	SISO	5260	1	20.838	Pass
		5300	1	20.508	Pass
		5320	1	20.888	Pass
802.11ac (VHT40)	SISO	5270	1	41.778	Pass
		5310	1	41.668	Pass
802.11ac (VHT80)	SISO	5290	1	81.947	Pass

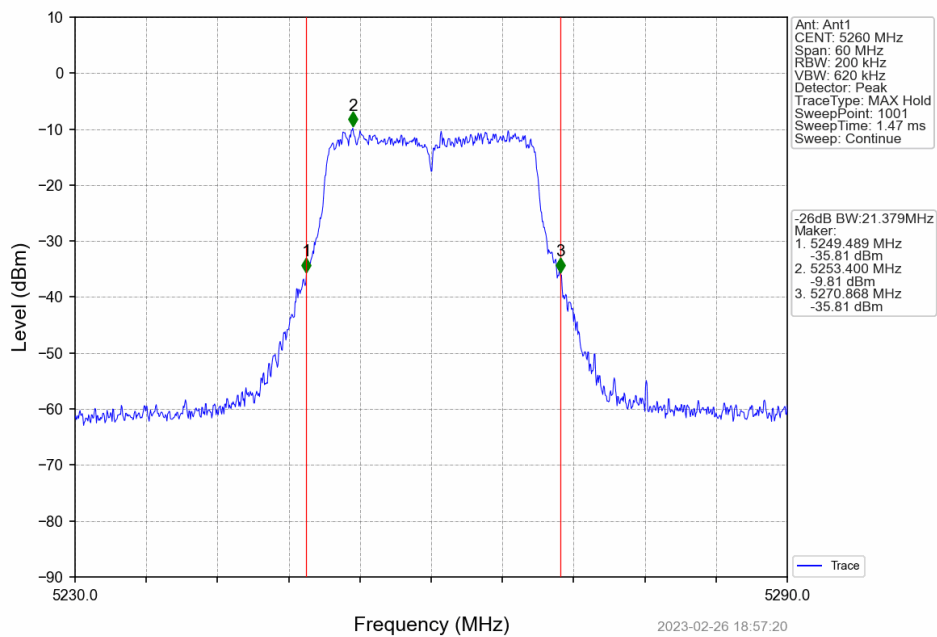
1.2.2 Test Graph



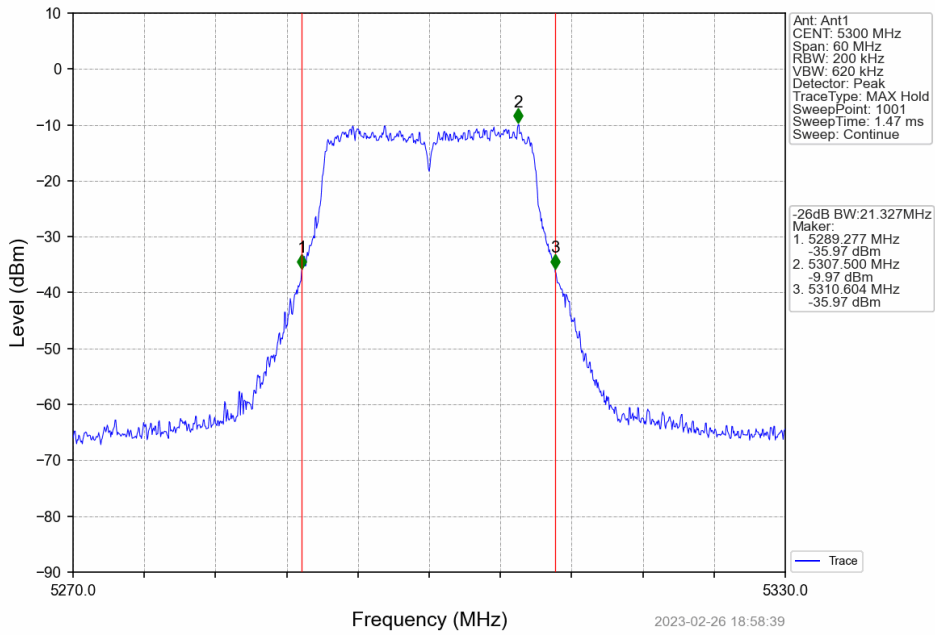
802.11a\_HCH\_5320MHz\_Ant1\_NTNV



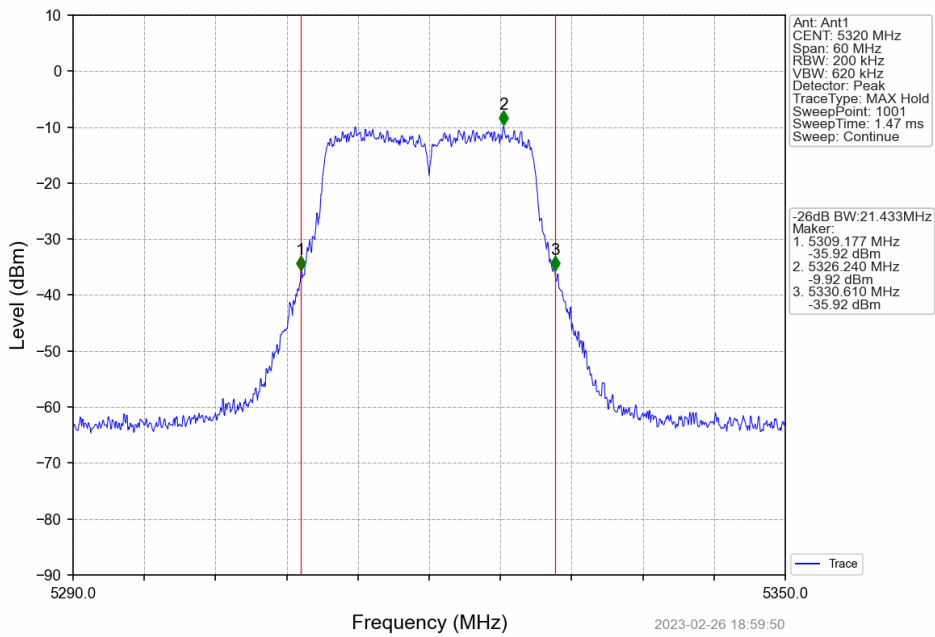
802.11n(HT20)\_LCH\_5260MHz\_Ant1\_NTNV



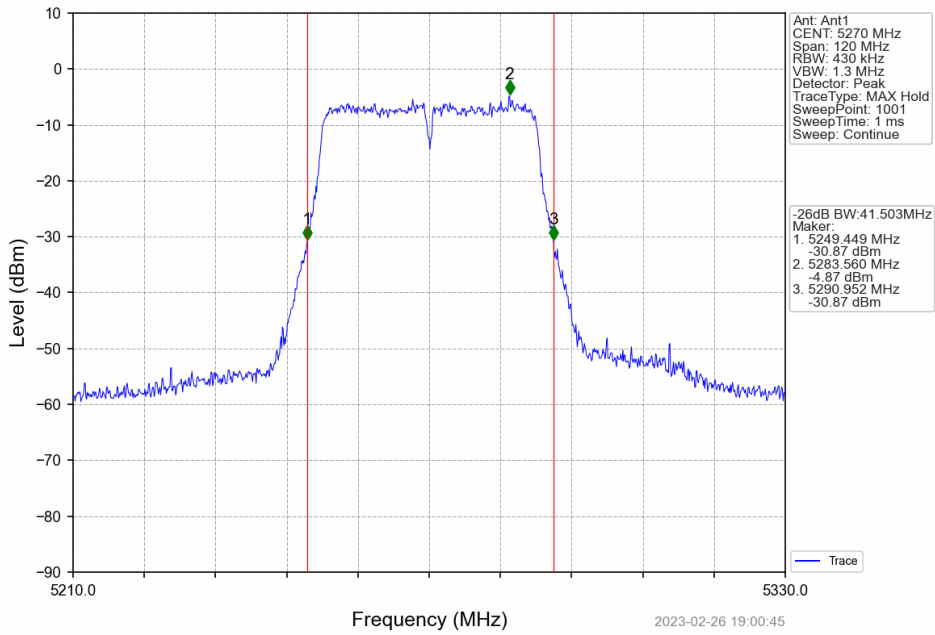
802.11n(HT20)\_MCH\_5300MHz\_Ant1\_NTNV



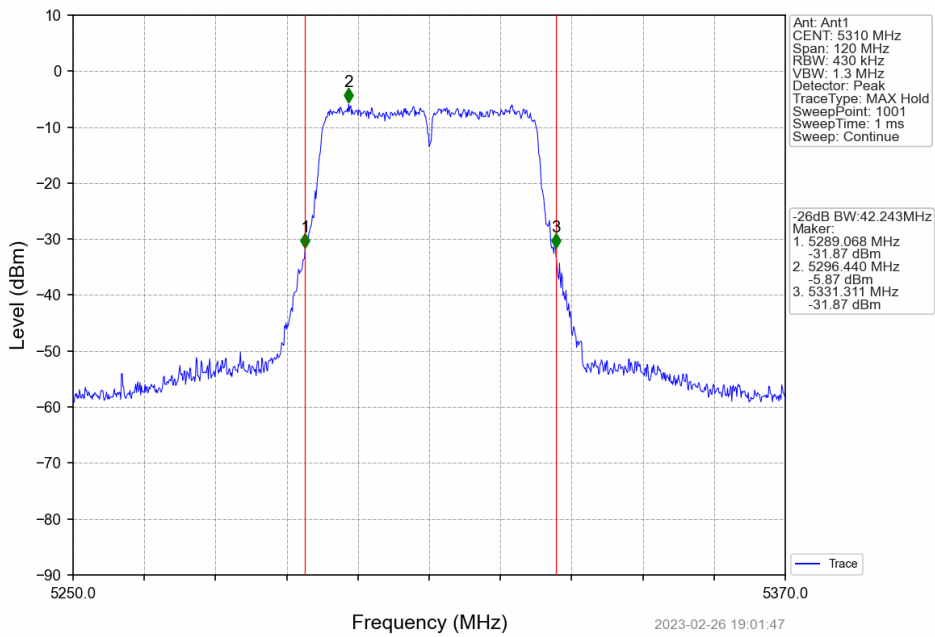
802.11n(HT20)\_HCH\_5320MHz\_Ant1\_NTNV



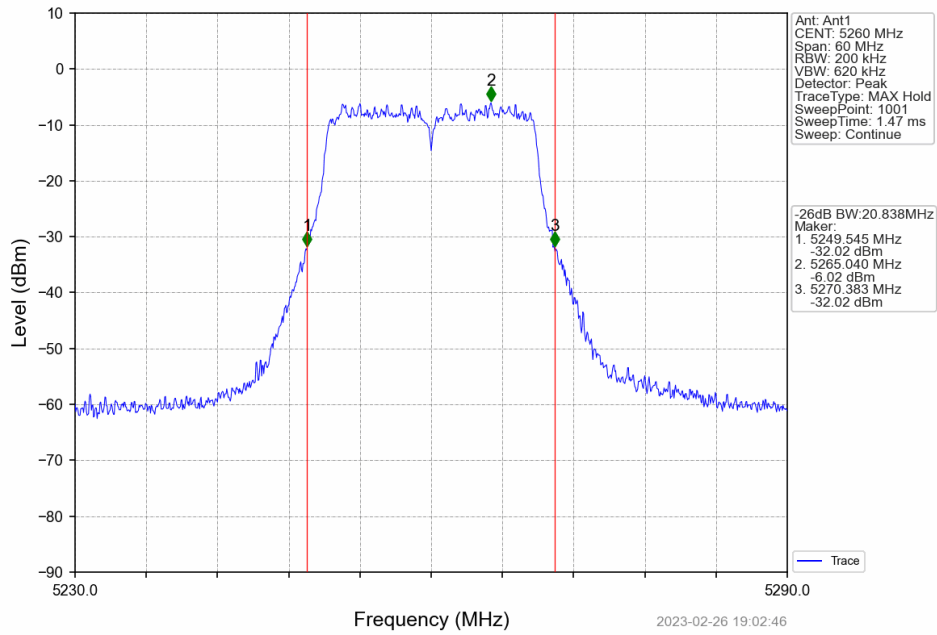
802.11n(HT40)\_LCH\_5270MHz\_Ant1\_NTNV



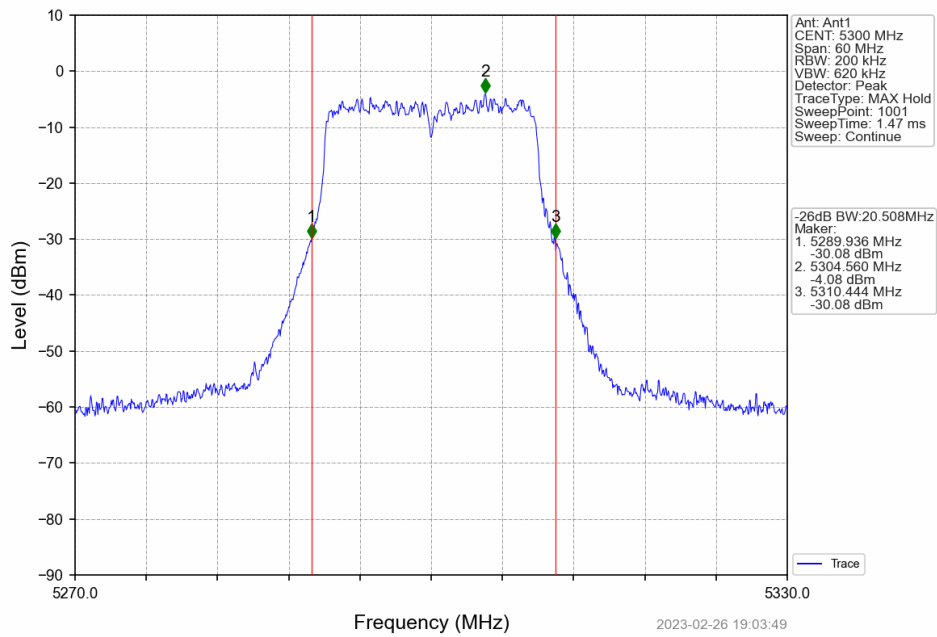
802.11n(HT40)\_HCH\_5310MHz\_Ant1\_NTNV



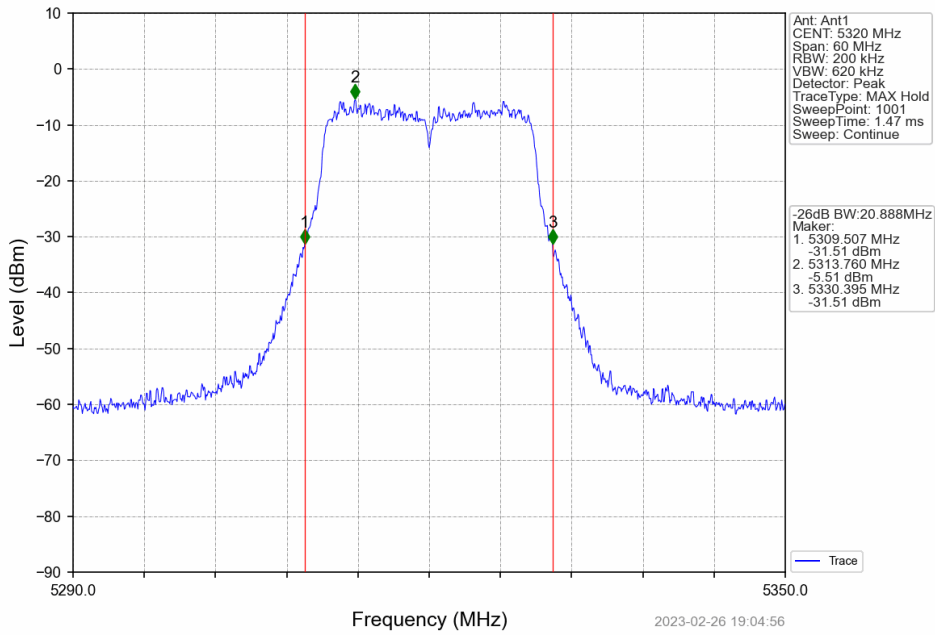
802.11ac(VHT20)\_LCH\_5260MHz\_Ant1\_NTNV



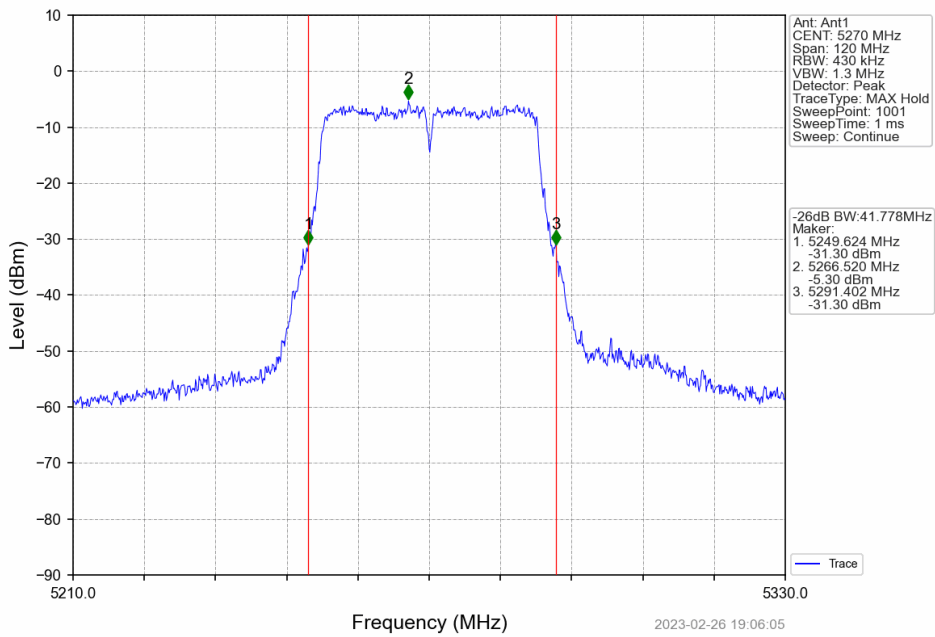
802.11ac(VHT20)\_MCH\_5300MHz\_Ant1\_NTNV



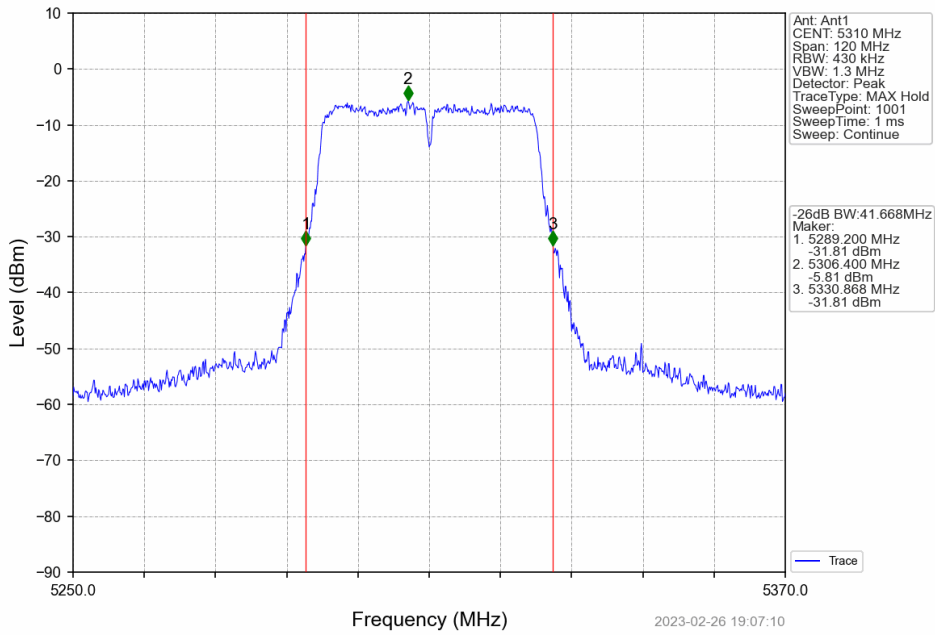
802.11ac(VHT20)\_HCH\_5320MHz\_Ant1\_NTNV



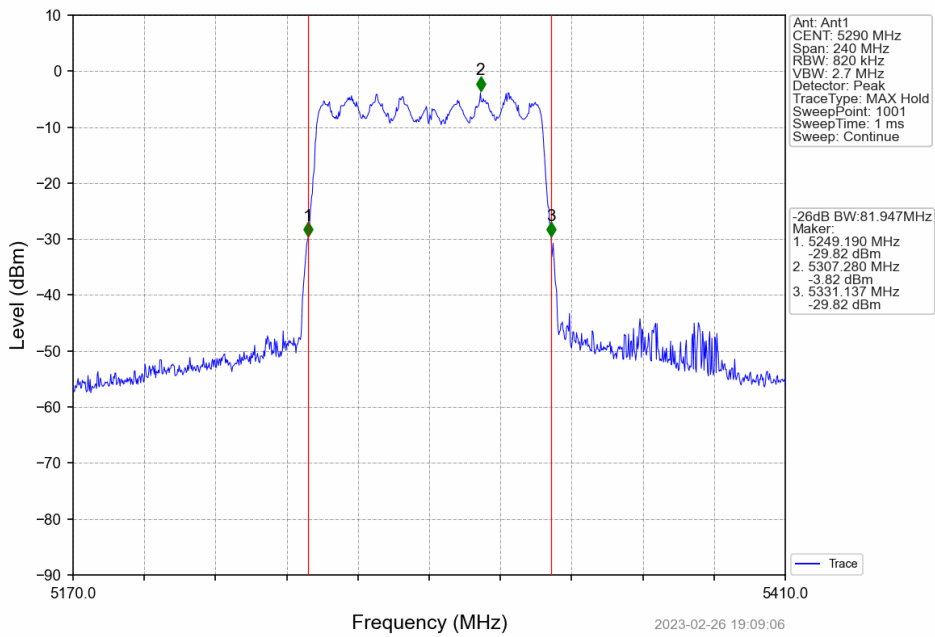
802.11ac(VHT40)\_LCH\_5270MHz\_Ant1\_NTNV



802.11ac(VHT40)\_HCH\_5310MHz\_Ant1\_NTNV



802.11ac(VHT80)\_MCH\_5290MHz\_Ant1\_NTNV





## 2. Maximum Conducted Output Power

### 2.1 Power

#### 2.1.1 Test Result

Mode	TX Type	Frequency (MHz)	Maximum Average Conducted Output Power (dBm)					Verdict
			AVG Conducted Power (dBm)	Limit	Duty Cycle Factor(dB)	EIRP	Limit	
802.11a	SISO	5260	11.08	<=23.98	0.00	15.33	<=30	Pass
		5300	10.78	<=23.98	0.00	15.03	<=30	Pass
		5320	11.12	<=23.98	0.00	15.37	<=30	Pass
802.11n (HT20)	SISO	5260	10.83	<=23.98	0.00	15.08	<=30	Pass
		5300	10.92	<=23.98	0.00	15.17	<=30	Pass
		5320	10.66	<=23.98	0.00	14.91	<=30	Pass
802.11n (HT40)	SISO	5270	11.39	<=23.98	0.00	15.64	<=30	Pass
		5310	11.35	<=23.98	0.00	15.60	<=30	Pass
802.11ac (VHT20)	SISO	5260	11.24	<=23.98	0.00	15.49	<=30	Pass
		5300	11.36	<=23.98	0.00	15.61	<=30	Pass
		5320	11.19	<=23.98	0.00	15.44	<=30	Pass
802.11ac (VHT40)	SISO	5270	11.49	<=23.98	0.00	15.74	<=30	Pass
		5310	11.40	<=23.98	0.00	15.65	<=30	Pass
802.11ac (VHT80)	SISO	5290	12.09	<=23.98	0.00	16.34	<=30	Pass

Note1: Antenna Gain: Ant1: 4.25dBi;  
 Note2: The Duty Cycle Factor and RBW Factor is compensated in the graph.

### 3. Maximum Power Spectral Density

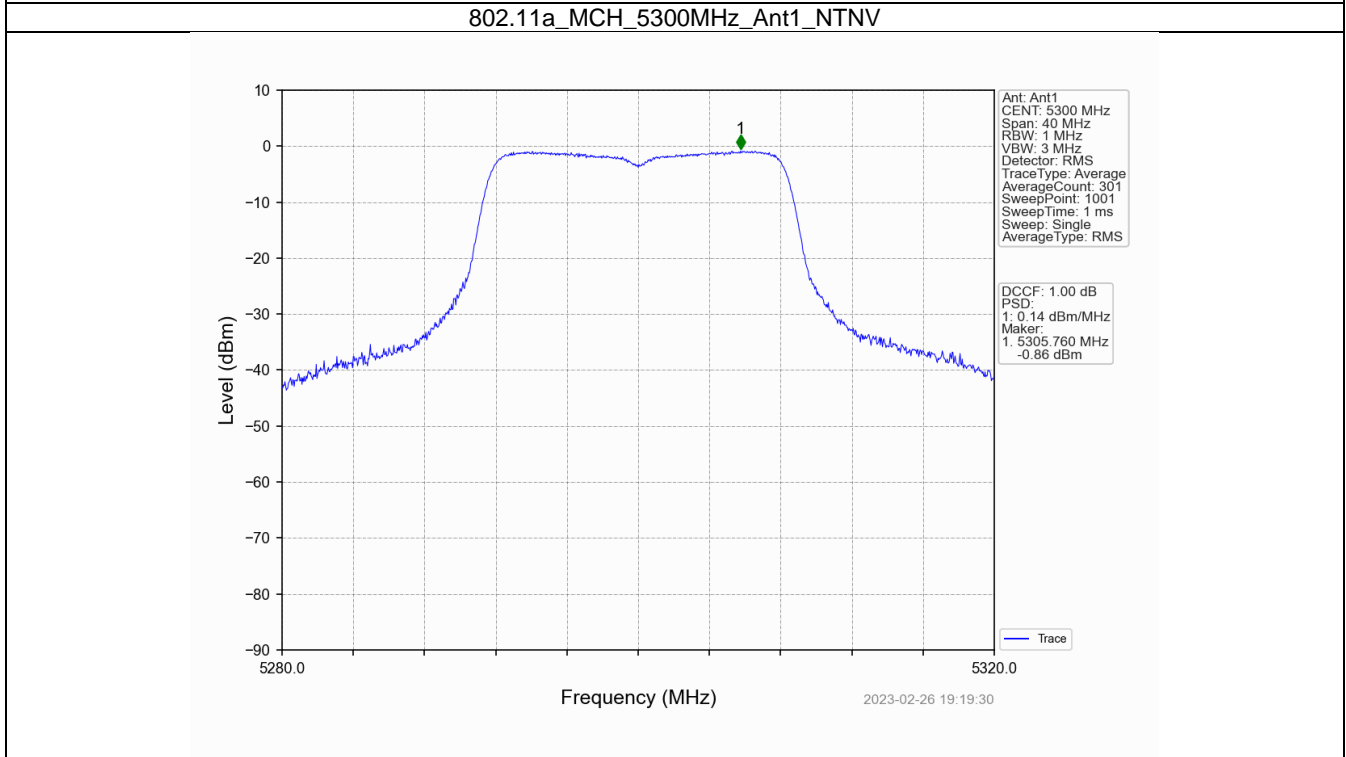
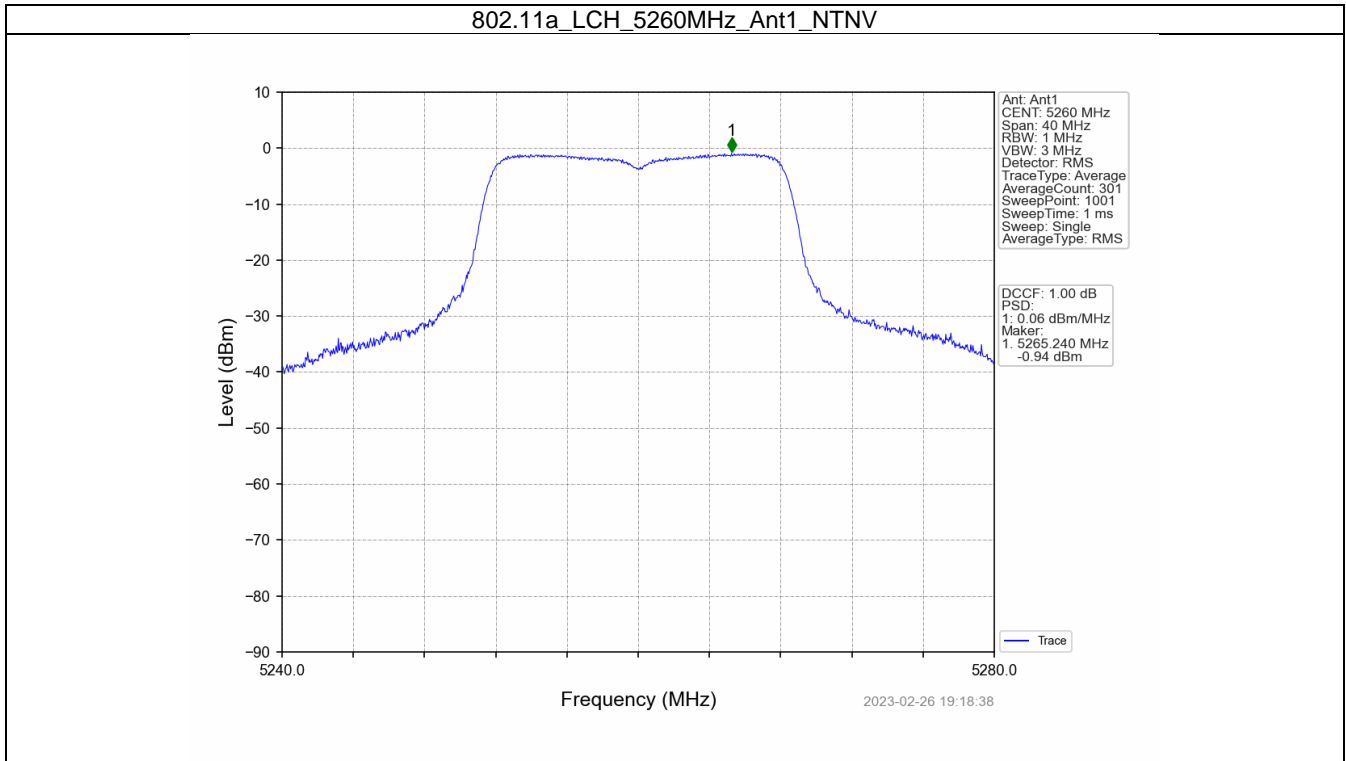
#### 3.1 PSD

##### 3.1.1 Test Result

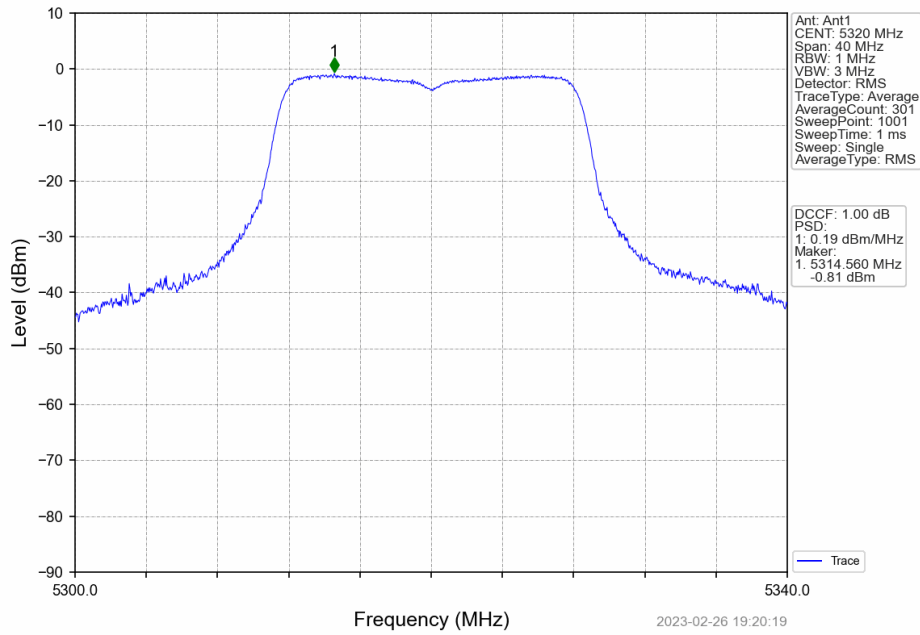
Mode	TX Type	Frequency (MHz)	Maximum PSD (dBm/MHz)				Verdict
			Report Power Density [dBm/3KHz]	Duty Cycle Factor(dB)	Report Power Density [dBm/3KHz]	Limit	
802.11a	SISO	5260	0.06	0.00	0.06	<=11	Pass
		5300	0.14	0.00	0.14	<=11	Pass
		5320	0.19	0.00	0.19	<=11	Pass
802.11n (HT20)	SISO	5260	-0.34	0.00	-0.34	<=11	Pass
		5300	-0.47	0.00	-0.47	<=11	Pass
		5320	-0.57	0.00	-0.57	<=11	Pass
802.11n (HT40)	SISO	5270	-2.98	0.00	-2.98	<=11	Pass
		5310	-3.15	0.00	-3.15	<=11	Pass
802.11ac (VHT20)	SISO	5260	-0.04	0.00	-0.04	<=11	Pass
		5300	0.20	0.00	0.20	<=11	Pass
		5320	-0.02	0.00	-0.02	<=11	Pass
802.11ac (VHT40)	SISO	5270	-2.82	0.00	-2.82	<=11	Pass
		5310	-2.89	0.00	-2.89	<=11	Pass
802.11ac (VHT80)	SISO	5290	-4.21	0.00	-4.21	<=11	Pass

Note1: Antenna Gain: Ant1: 4.25dBi;  
 Note2: The Duty Cycle Factor and RBW Factor is compensated in the result;.

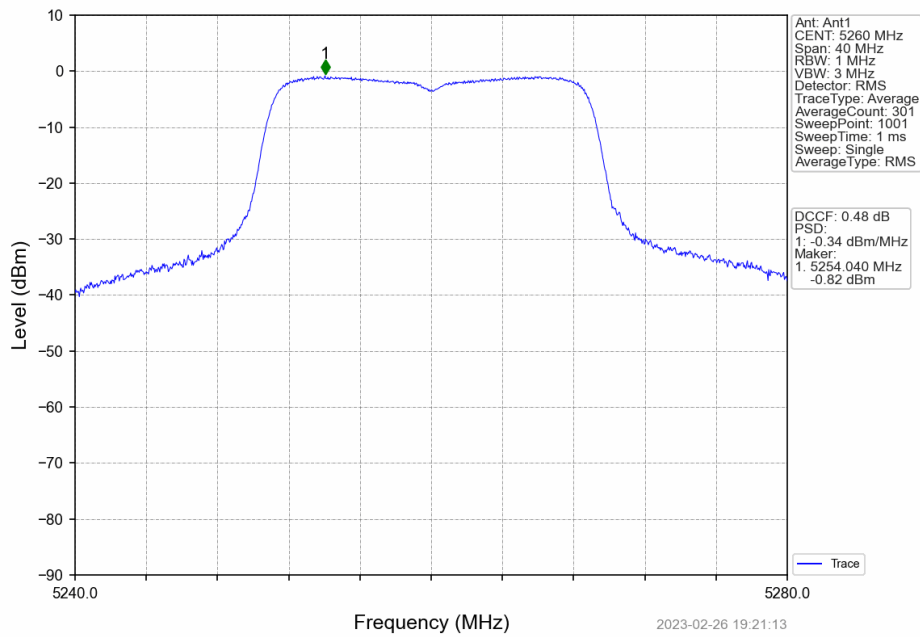
3.1.2 Test Graph



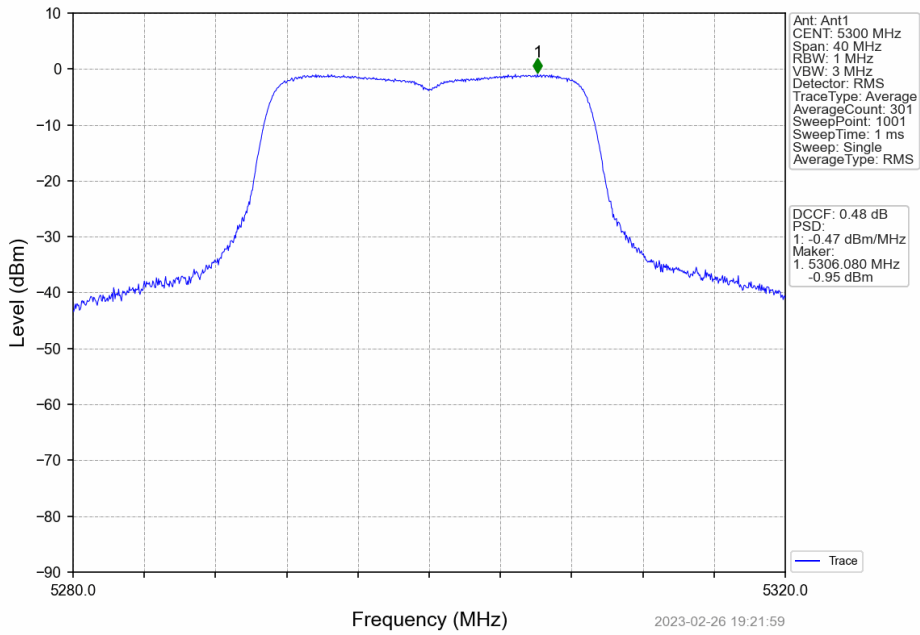
802.11a\_HCH\_5320MHz\_Ant1\_NTNV



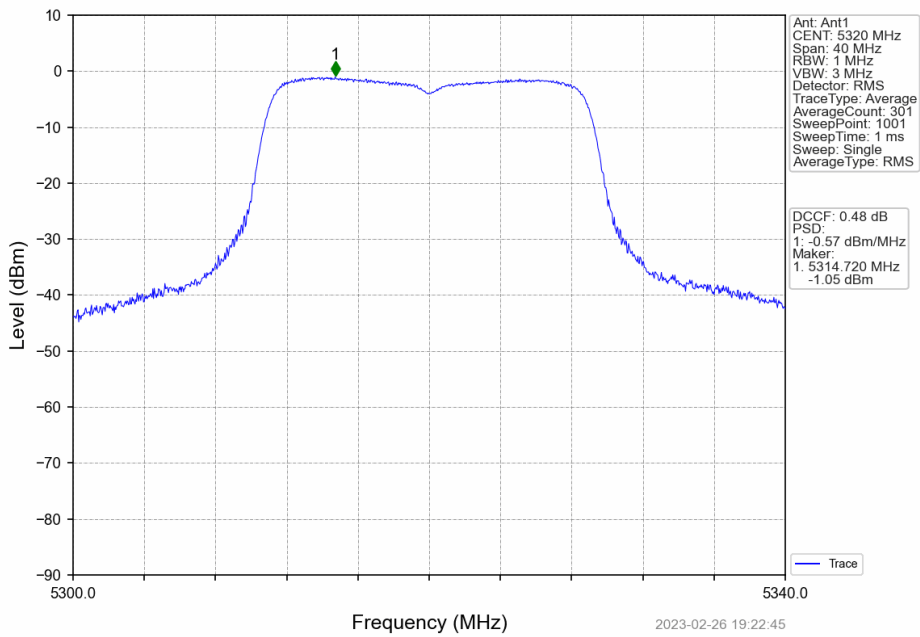
802.11n(HT20)\_LCH\_5260MHz\_Ant1\_NTNV



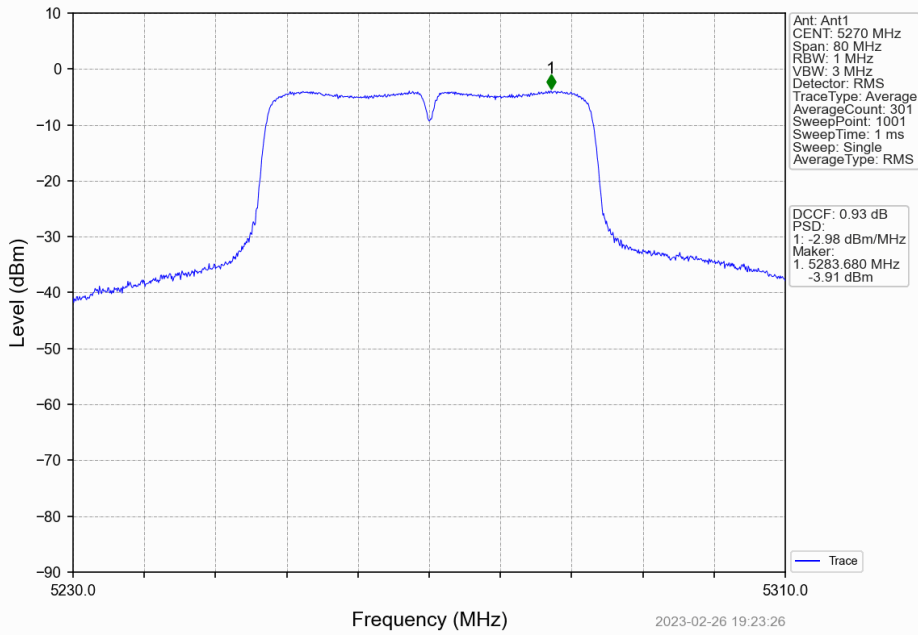
802.11n(HT20)\_MCH\_5300MHz\_Ant1\_NTNV



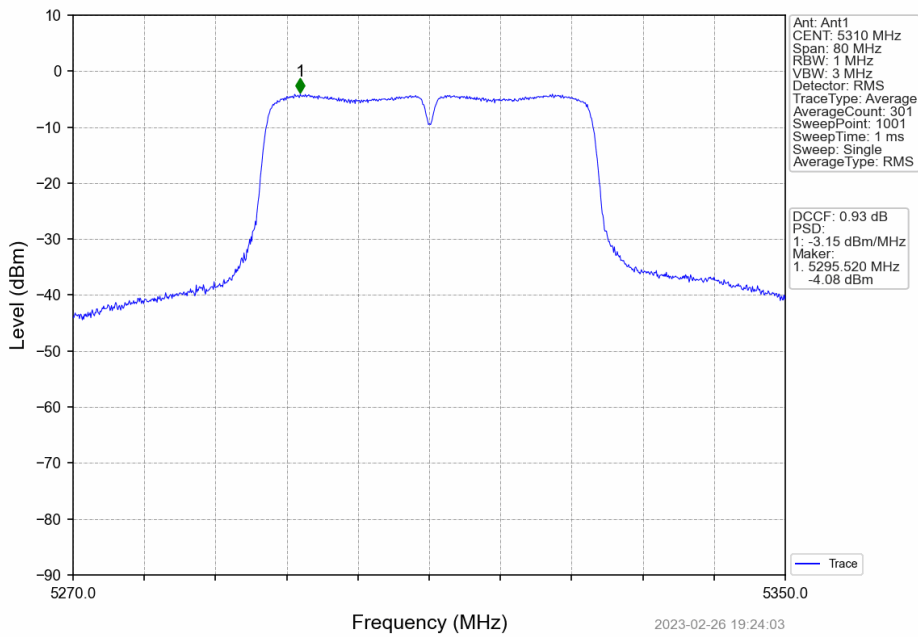
802.11n(HT20)\_HCH\_5320MHz\_Ant1\_NTNV



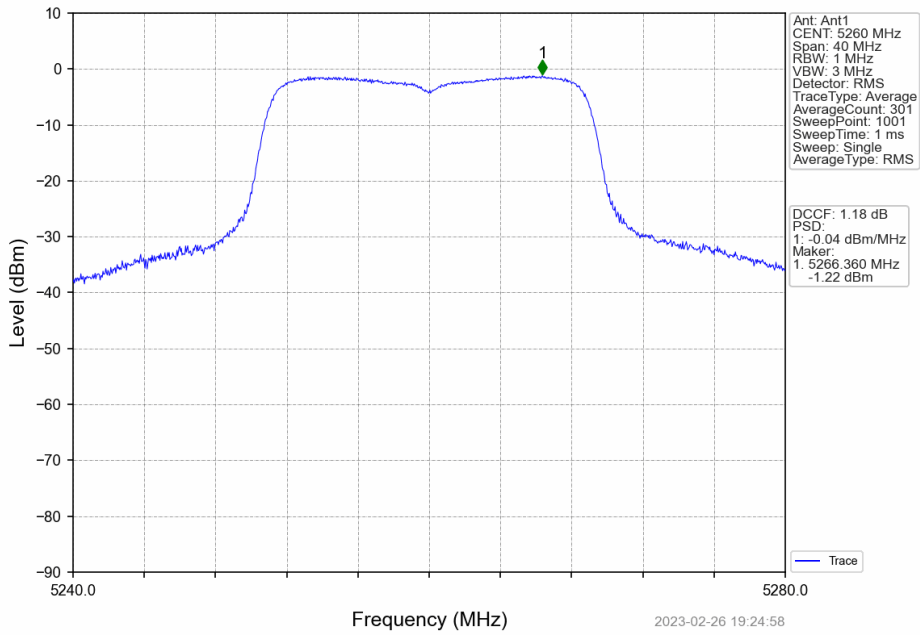
802.11n(HT40)\_LCH\_5270MHz\_Ant1\_NTNV



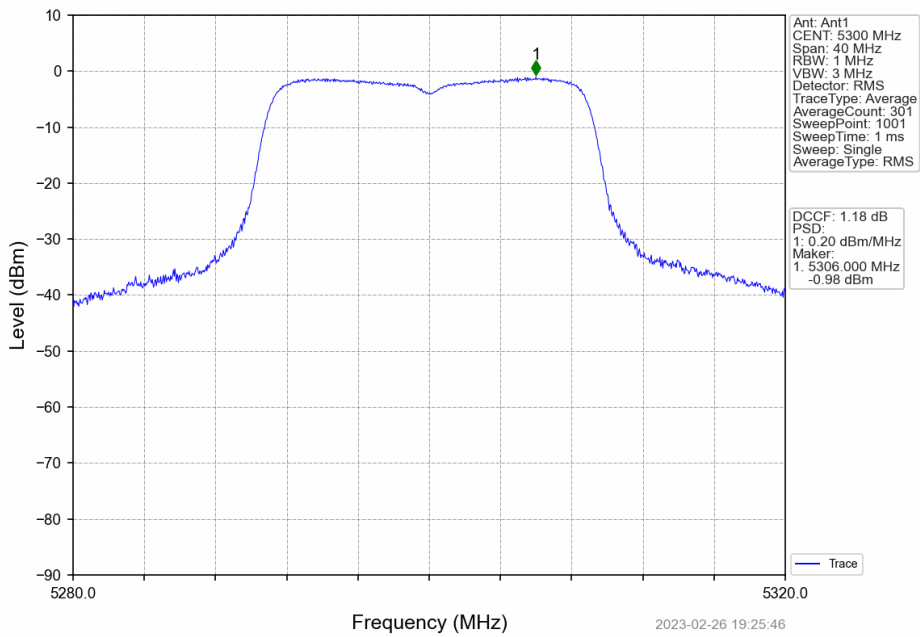
802.11n(HT40)\_HCH\_5310MHz\_Ant1\_NTNV



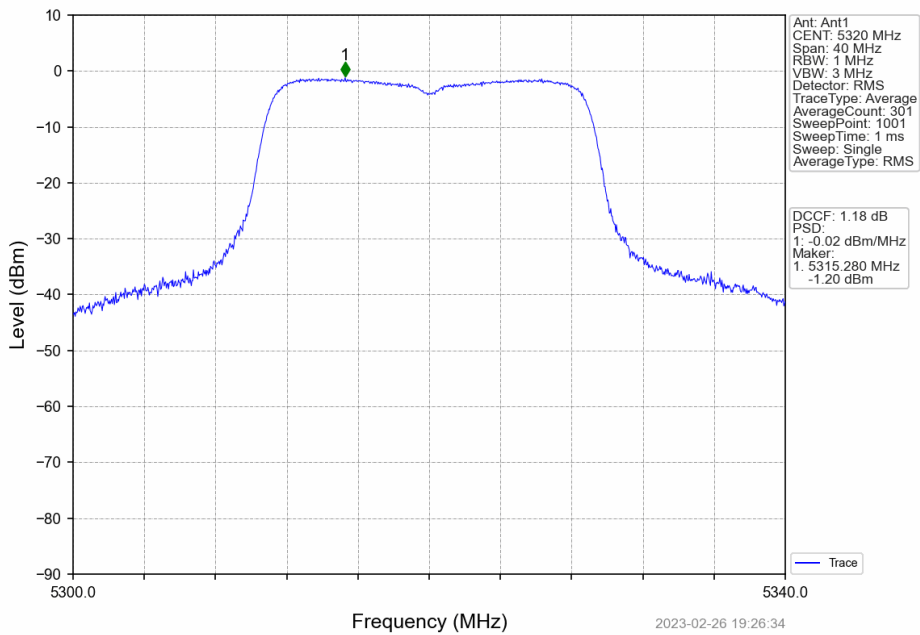
802.11ac(VHT20)\_LCH\_5260MHz\_Ant1\_NTNV



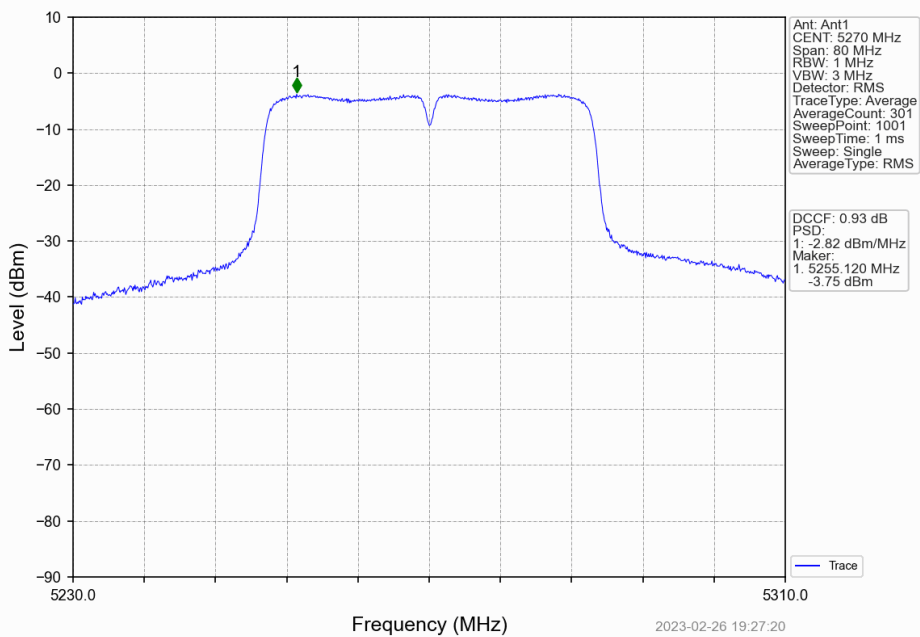
802.11ac(VHT20)\_MCH\_5300MHz\_Ant1\_NTNV



802.11ac(VHT20)\_HCH\_5320MHz\_Ant1\_NTNV

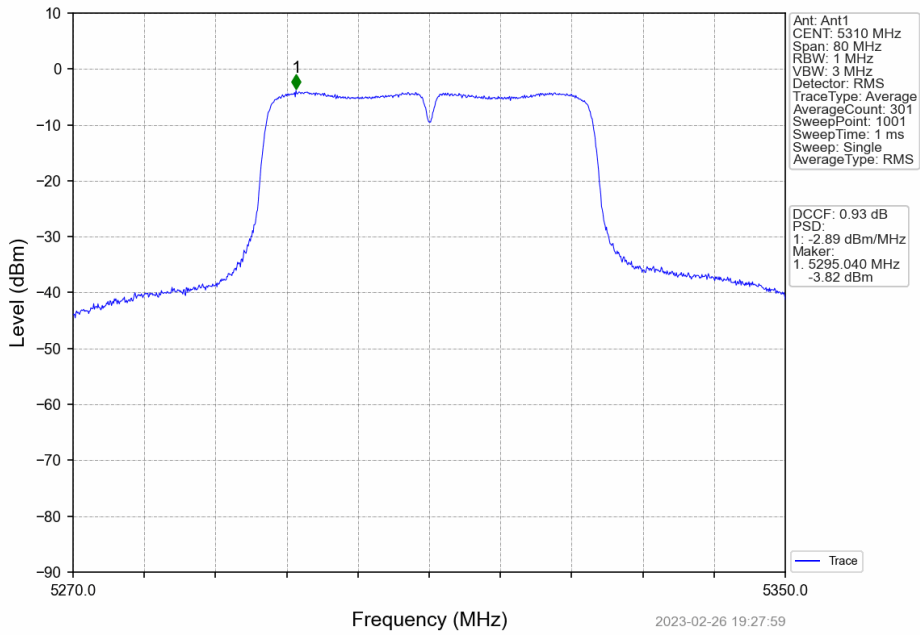


802.11ac(VHT40)\_LCH\_5270MHz\_Ant1\_NTNV

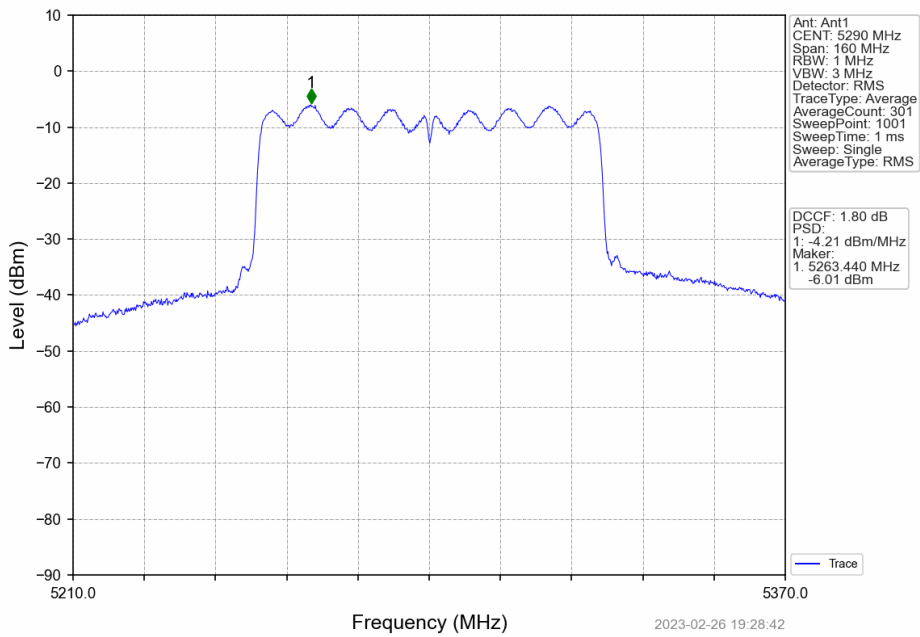




802.11ac(VHT40)\_HCH\_5310MHz\_Ant1\_NTNV



802.11ac(VHT80)\_MCH\_5290MHz\_Ant1\_NTNV



### 4. Frequency Stability

#### 4.1 Ant1

##### 4.1.1 Test Result

Ant1							
Mode	TX Type	Frequency (MHz)	Temperature (°C)	Voltage (VAC)	Measured Frequency (MHz)	Limit (MHz)	Verdict
Carrier Wave	SISO	5260	20	102	5259.967	5250 to 5350	Pass
				120	5259.967	5250 to 5350	Pass
				138	5259.967	5250 to 5350	Pass
			-30	120	5259.967	5250 to 5350	Pass
			-20	120	5259.967	5250 to 5350	Pass
			-10	120	5259.967	5250 to 5350	Pass
			0	120	5259.967	5250 to 5350	Pass
			10	120	5259.967	5250 to 5350	Pass
			30	120	5259.967	5250 to 5350	Pass
			40	120	5259.967	5250 to 5350	Pass
			85	120	5259.967	5250 to 5350	Pass
			5300	20	102	5299.966	5250 to 5350
		120			5299.967	5250 to 5350	Pass
		138			5299.967	5250 to 5350	Pass
		-30		120	5299.967	5250 to 5350	Pass
		-20		120	5299.967	5250 to 5350	Pass
		-10		120	5299.967	5250 to 5350	Pass
		0		120	5299.967	5250 to 5350	Pass
		10		120	5299.967	5250 to 5350	Pass
		30		120	5299.967	5250 to 5350	Pass
		40		120	5299.967	5250 to 5350	Pass
		85		120	5299.967	5250 to 5350	Pass
		5320		20	102	5319.966	5250 to 5350
			120		5319.966	5250 to 5350	Pass
			138		5319.966	5250 to 5350	Pass
			-30	120	5319.967	5250 to 5350	Pass
			-20	120	5319.967	5250 to 5350	Pass
			-10	120	5319.967	5250 to 5350	Pass
			0	120	5319.967	5250 to 5350	Pass
			10	120	5319.967	5250 to 5350	Pass
			30	120	5319.967	5250 to 5350	Pass
			40	120	5319.967	5250 to 5350	Pass
			85	120	5319.967	5250 to 5350	Pass
			5270	20	102	5269.967	5250 to 5350
		120			5269.967	5250 to 5350	Pass
		138			5269.967	5250 to 5350	Pass
		-30		120	5269.967	5250 to 5350	Pass
		-20		120	5269.967	5250 to 5350	Pass
		-10		120	5269.967	5250 to 5350	Pass
		0		120	5269.967	5250 to 5350	Pass
		10		120	5269.967	5250 to 5350	Pass
		30		120	5269.967	5250 to 5350	Pass
		40		120	5269.967	5250 to 5350	Pass
		85		120	5269.967	5250 to 5350	Pass
		5310		20	102	5309.966	5250 to 5350
			120		5309.967	5250 to 5350	Pass
			138		5309.967	5250 to 5350	Pass
			-30	120	5309.967	5250 to 5350	Pass
-20	120		5309.967	5250 to 5350	Pass		

			-10	120	5309.967	5250 to 5350	Pass
			0	120	5309.967	5250 to 5350	Pass
			10	120	5309.967	5250 to 5350	Pass
			30	120	5309.967	5250 to 5350	Pass
			40	120	5309.967	5250 to 5350	Pass
		85	120	5309.967	5250 to 5350	Pass	
		5290	20	102	5289.967	5250 to 5350	Pass
				120	5289.967	5250 to 5350	Pass
				138	5289.967	5250 to 5350	Pass
			-30	120	5289.967	5250 to 5350	Pass
			-20	120	5289.967	5250 to 5350	Pass
			-10	120	5289.967	5250 to 5350	Pass
			0	120	5289.967	5250 to 5350	Pass
			10	120	5289.967	5250 to 5350	Pass
			30	120	5289.967	5250 to 5350	Pass
			40	120	5289.967	5250 to 5350	Pass
			85	120	5289.967	5250 to 5350	Pass