

1. Bandwidth

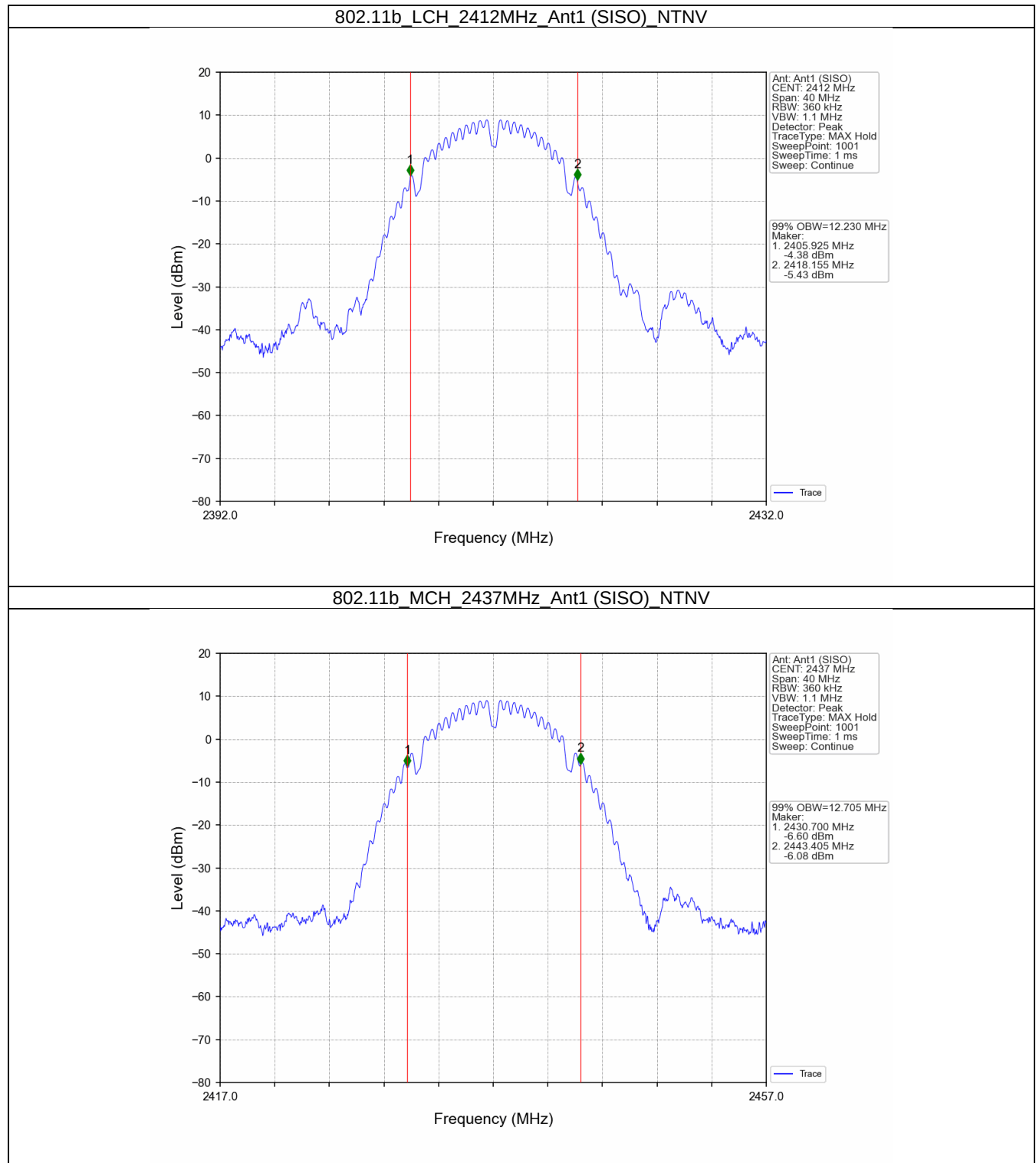
1.1 OBW

1.1.1 Test Result

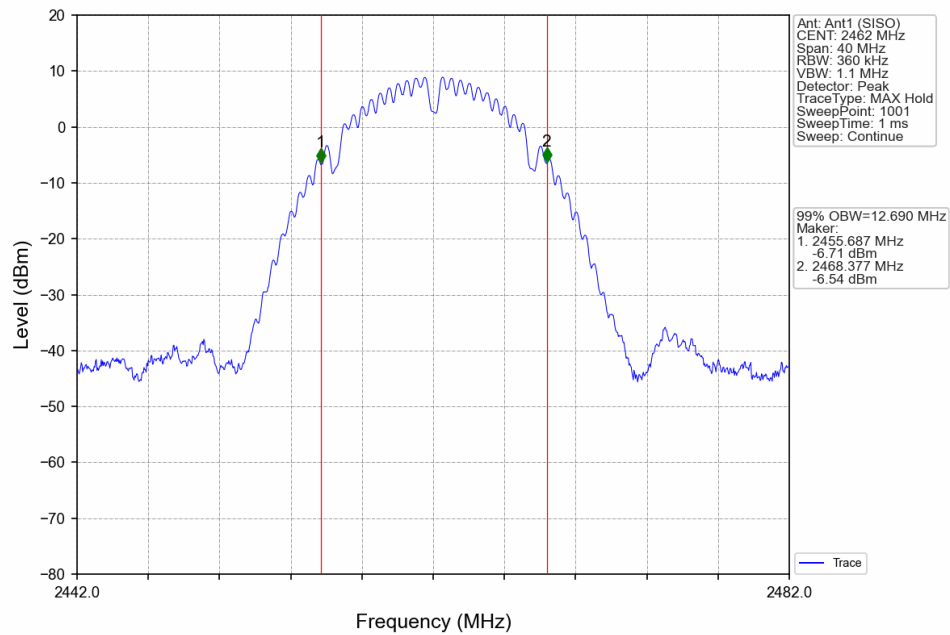
Mode	Frequency (MHz)	ANT	99% Occupied Bandwidth (MHz)	Verdict
			Result	
802.11b	2412	1	12.230	Pass
	2437	1	12.705	Pass
	2462	1	12.690	Pass
802.11g	2412	1	17.418	Pass
	2437	1	19.446	Pass
	2462	1	19.631	Pass
802.11n (HT20)	2412	1	18.150	Pass
	2437	1	20.277	Pass
	2462	1	20.462	Pass
802.11n (HT40)	2422	1	36.360	Pass
	2437	1	36.213	Pass
	2452	1	36.301	Pass

Note: For Bandwidth test both antenna has been tested, only worst result antenna 1 reported.

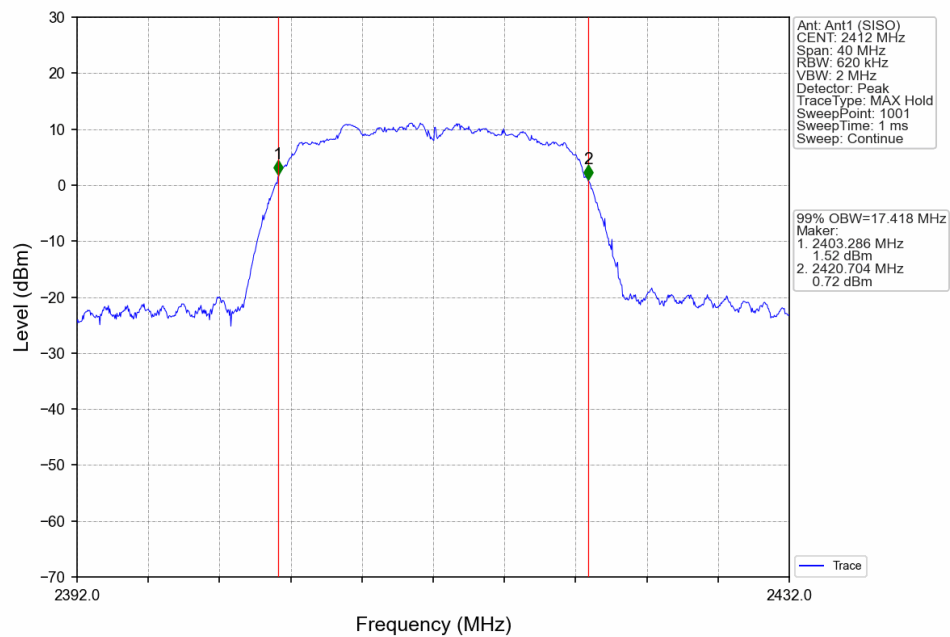
1.1.2 Test Graph



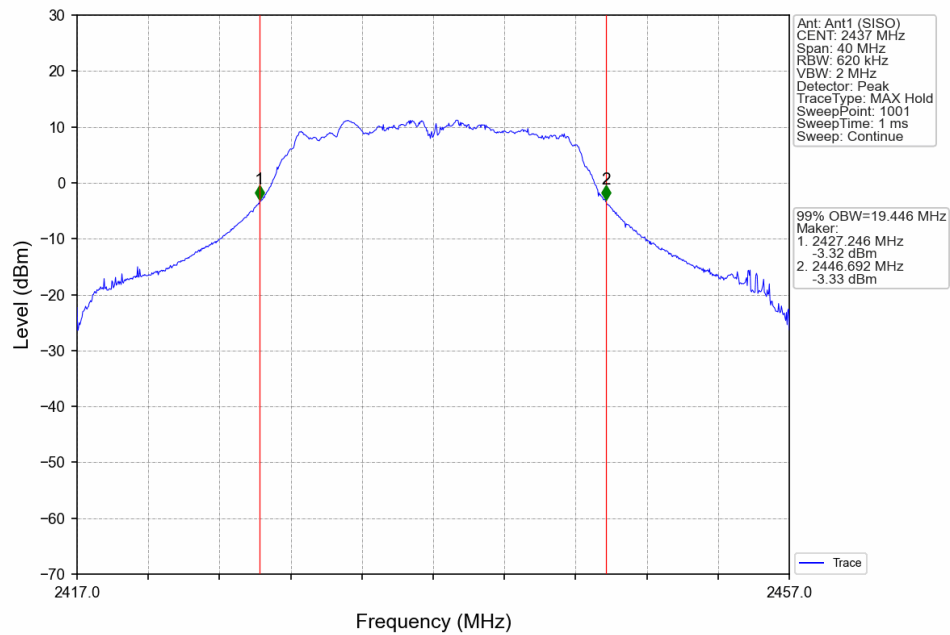
802.11b HCH 2462MHz Ant1 (SISO) NTN



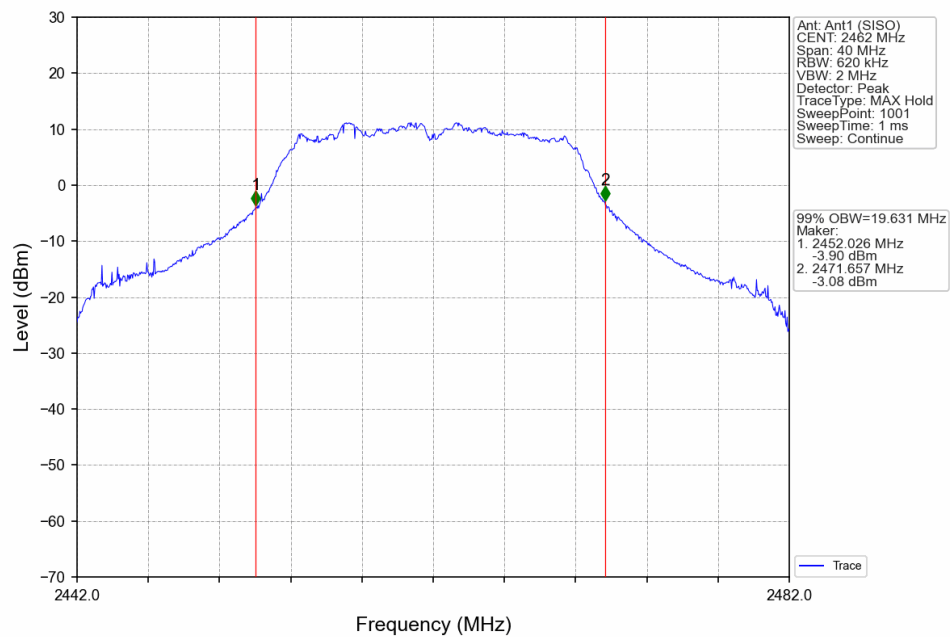
802.11g LCH 2412MHz Ant1 (SISO) NTN



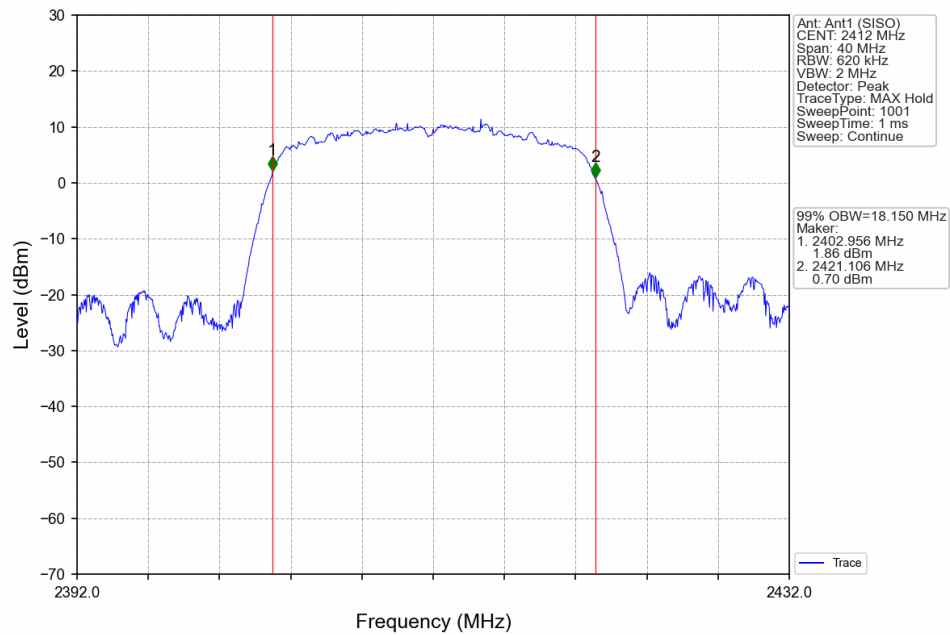
802.11g MCH 2437MHz Ant1 (SISO) NTN



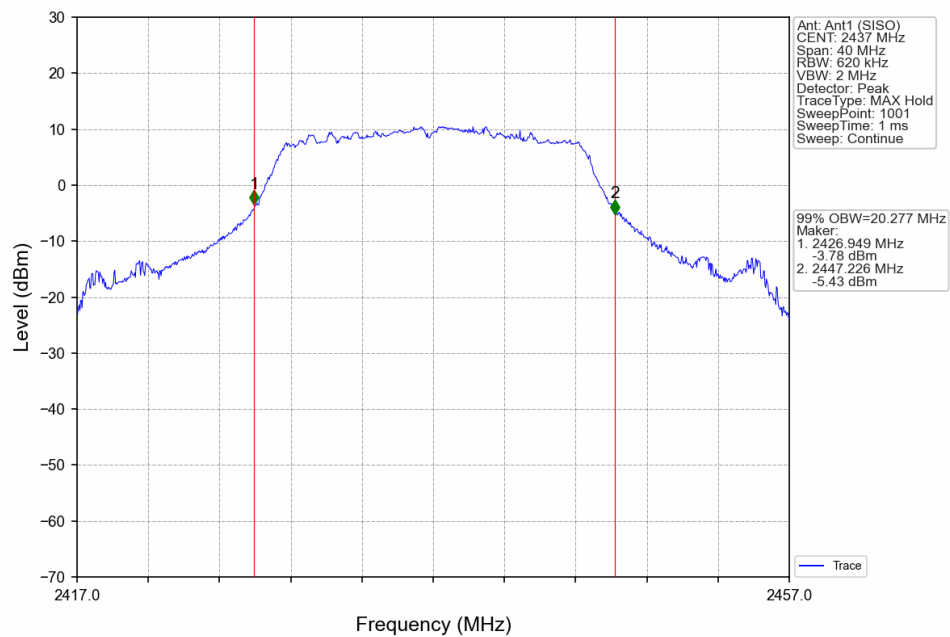
802.11g HCH 2462MHz Ant1 (SISO) NTN



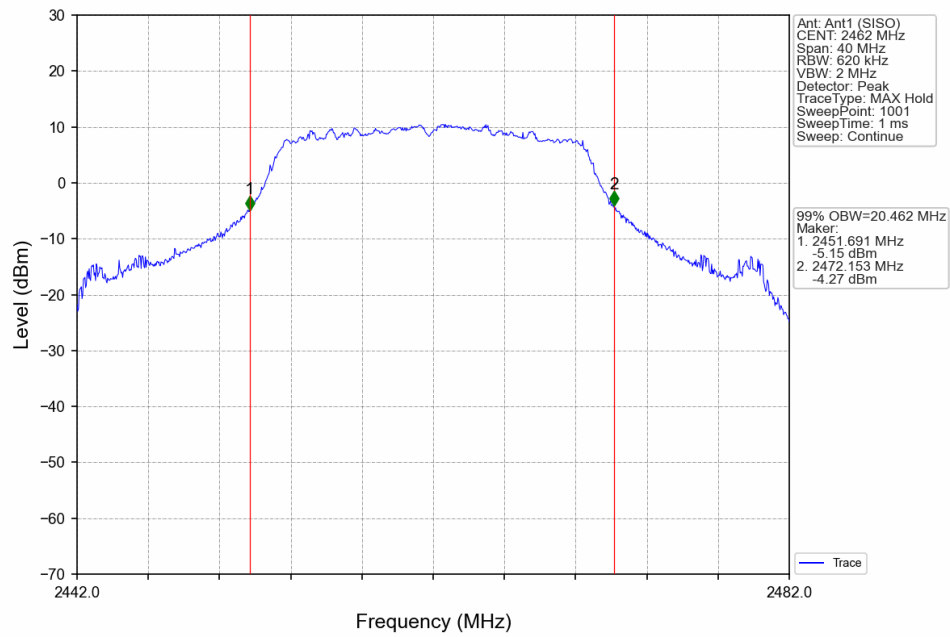
802.11n(HT20) LCH 2412MHz Ant1 (SISO) NTNV



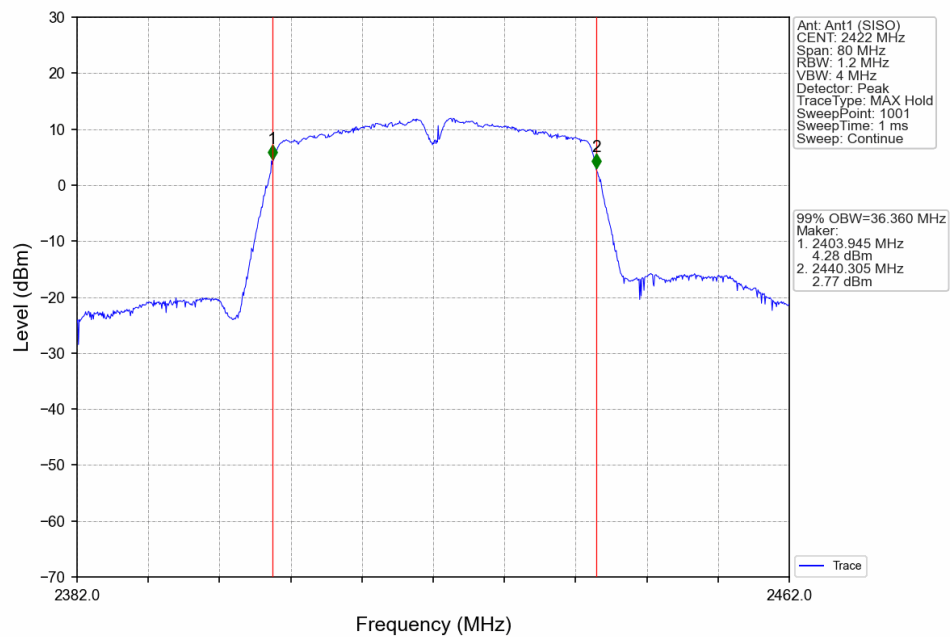
802.11n(HT20) MCH 2437MHz Ant1 (SISO) NTNV



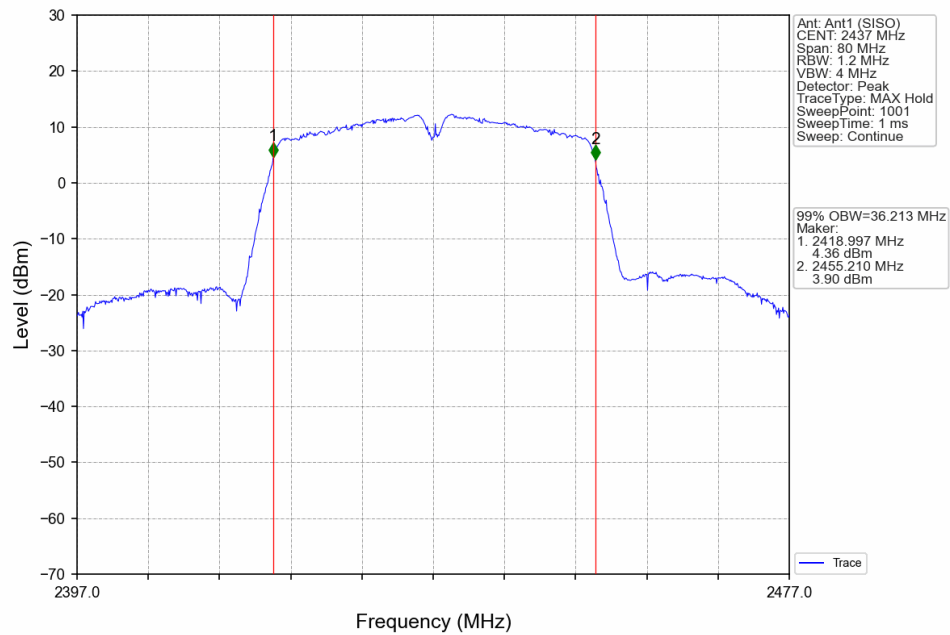
802.11n(HT20) HCH 2462MHz Ant1 (SISO) NTNV



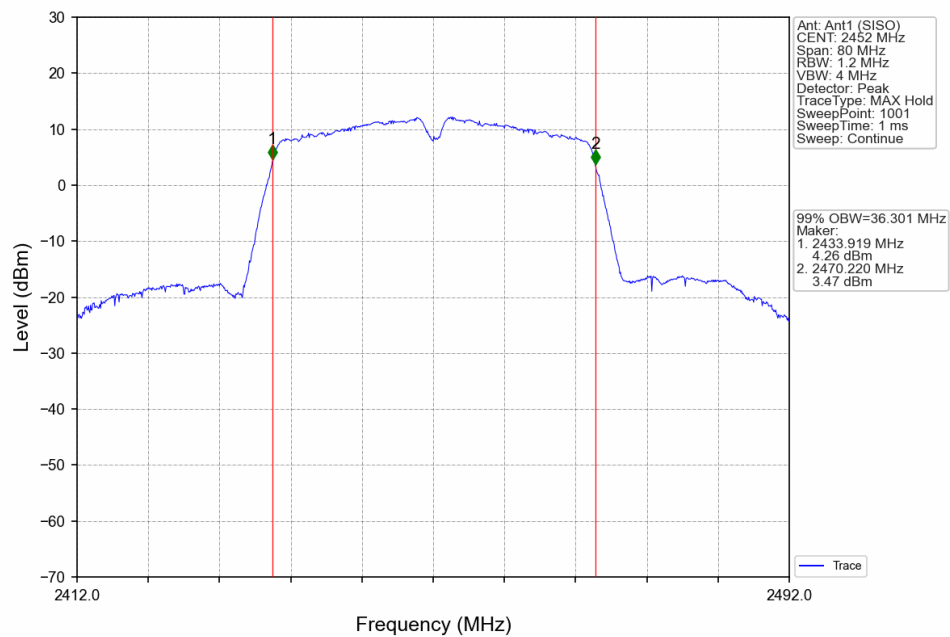
802.11n(HT40) LCH 2422MHz Ant1 (SISO) NTNV



802.11n(HT40) MCH_2437MHz_Ant1 (SISO) NTN



802.11n(HT40) HCH_2452MHz_Ant1 (SISO) NTN



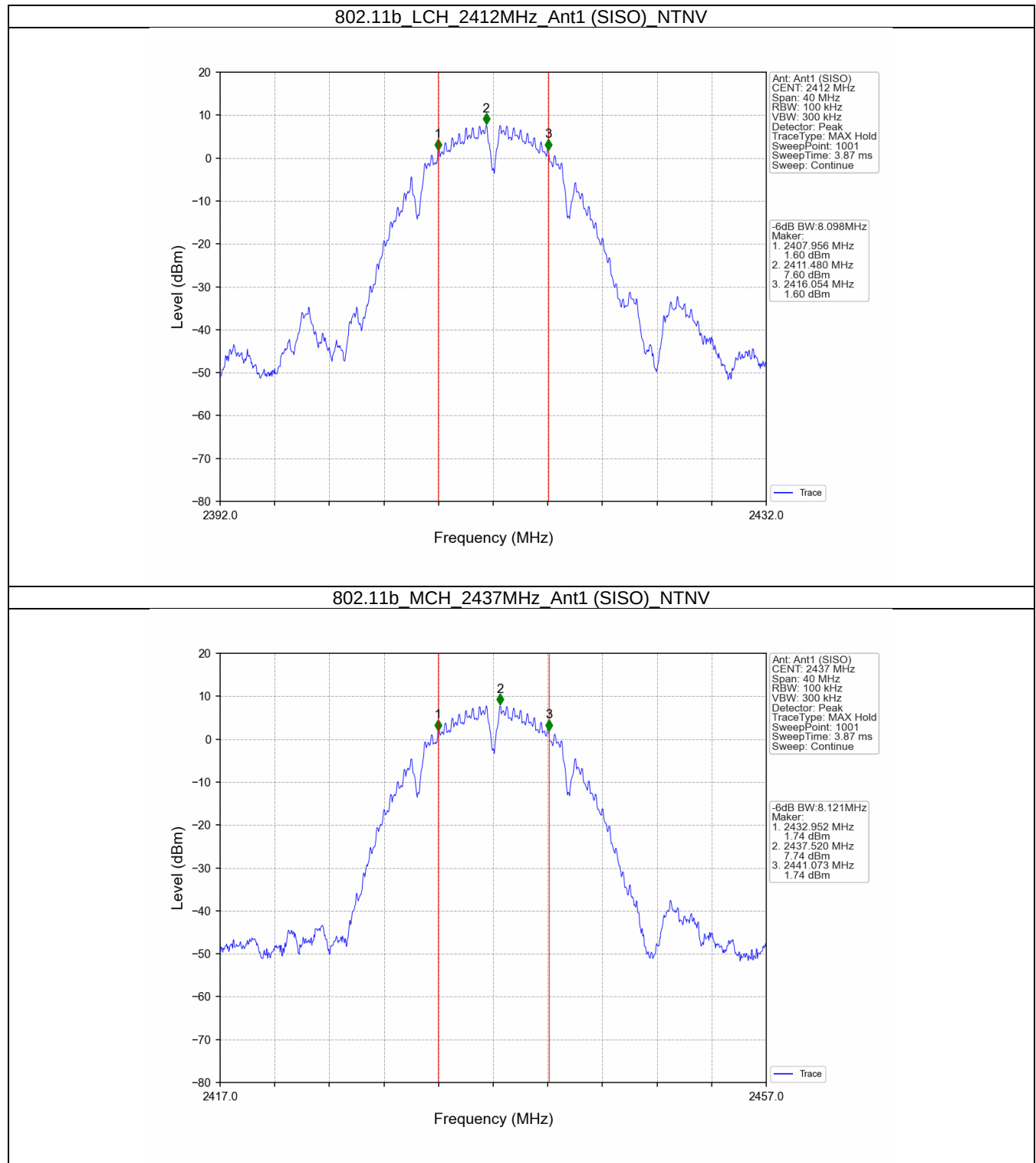
1.2 6dB BW

1.2.1 Test Result

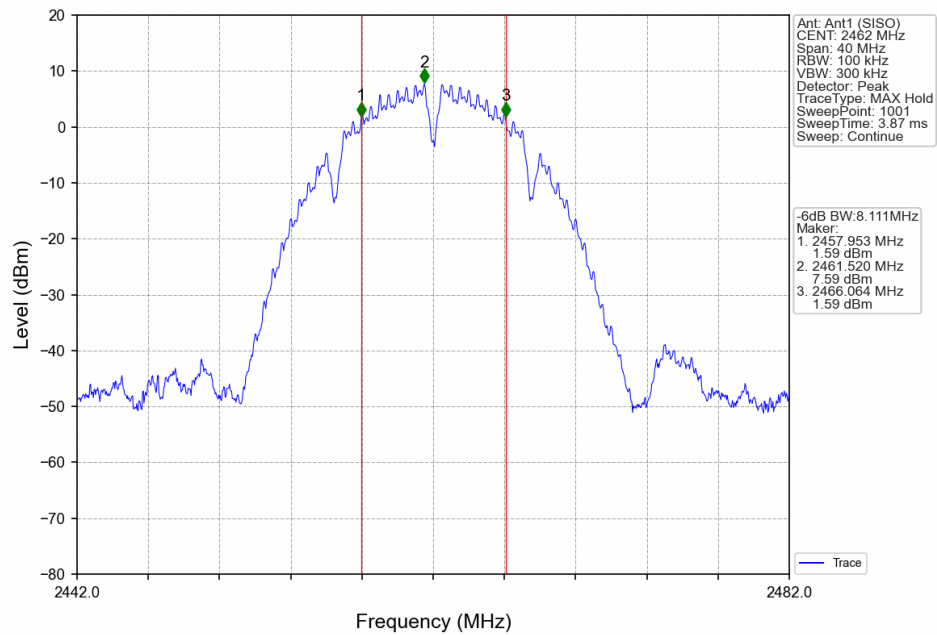
Mode	Frequency (MHz)	ANT	6dB Bandwidth (MHz)		Verdict
			Result	Limit	
802.11b	2412	1	8.098	≥ 0.5	Pass
	2437	1	8.121	≥ 0.5	Pass
	2462	1	8.111	≥ 0.5	Pass
802.11g	2412	1	15.145	≥ 0.5	Pass
	2437	1	15.178	≥ 0.5	Pass
	2462	1	15.174	≥ 0.5	Pass
802.11n (HT20)	2412	1	15.155	≥ 0.5	Pass
	2437	1	15.177	≥ 0.5	Pass
	2462	1	15.175	≥ 0.5	Pass
802.11n (HT40)	2422	1	35.155	≥ 0.5	Pass
	2437	1	35.143	≥ 0.5	Pass
	2452	1	35.146	≥ 0.5	Pass

Note: For Bandwidth test both antenna has been tested, only worst result antenna 1 reported.

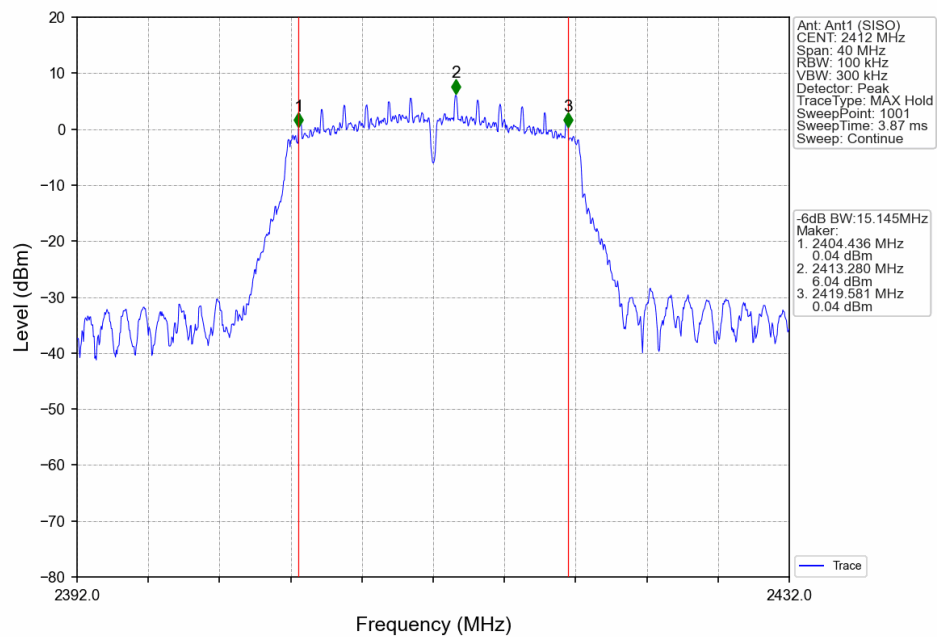
1.2.2 Test Graph



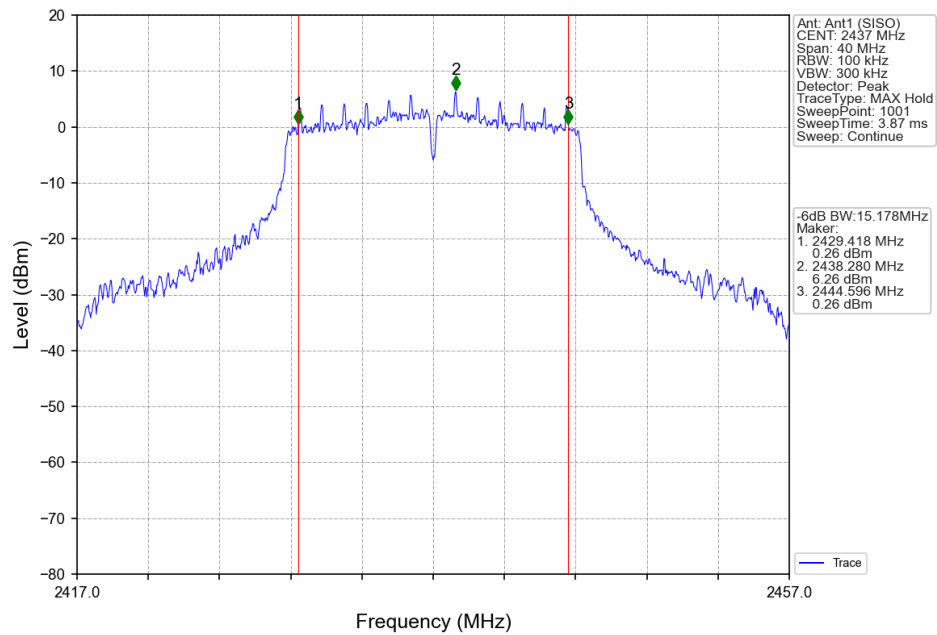
802.11b HCH 2462MHz Ant1 (SISO) NTN



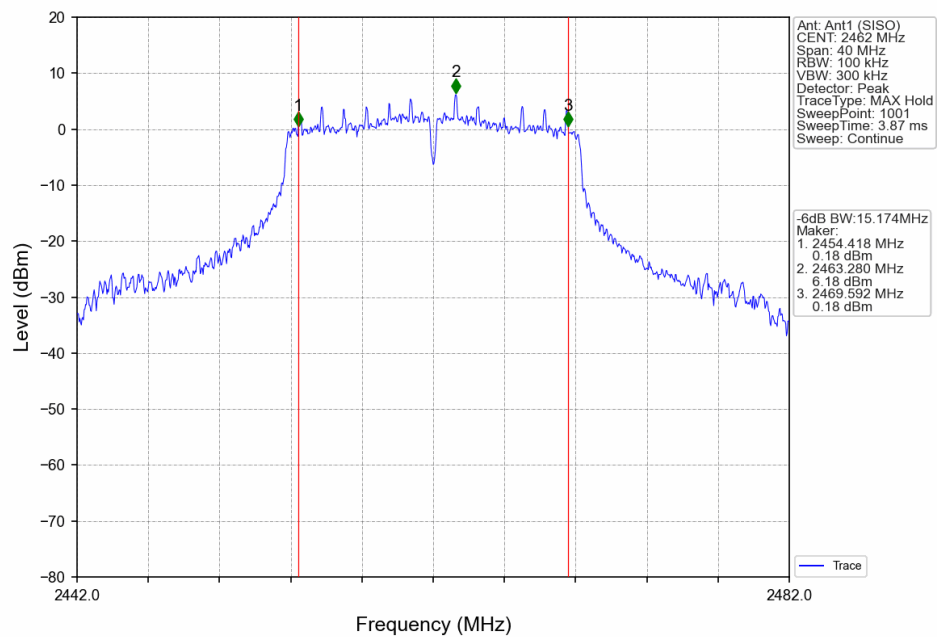
802.11g LCH 2412MHz Ant1 (SISO) NTN



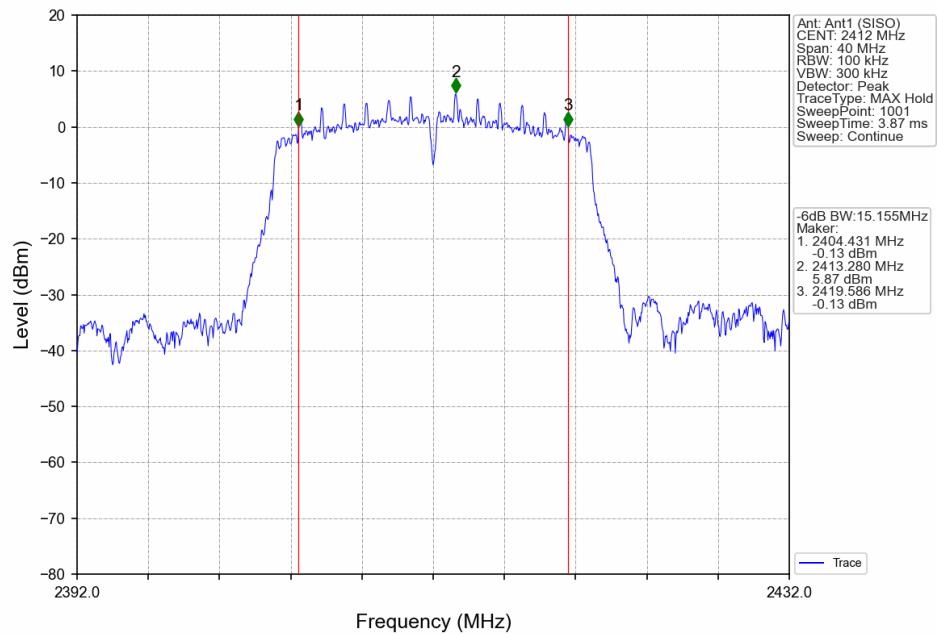
802.11g_MCH_2437MHz_Ant1 (SISO)_NTNV



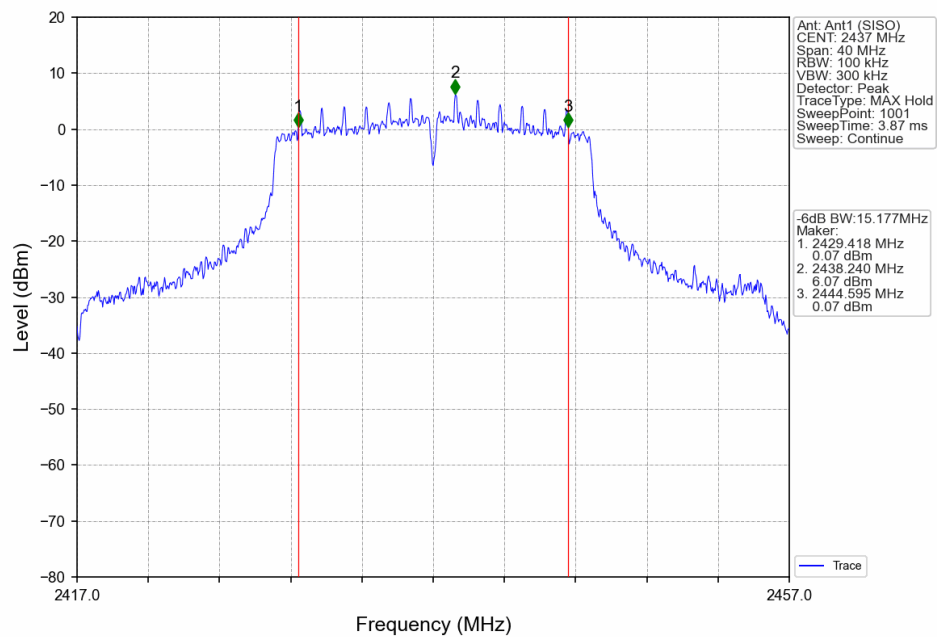
802.11g_HCH_2462MHz_Ant1 (SISO)_NTNV



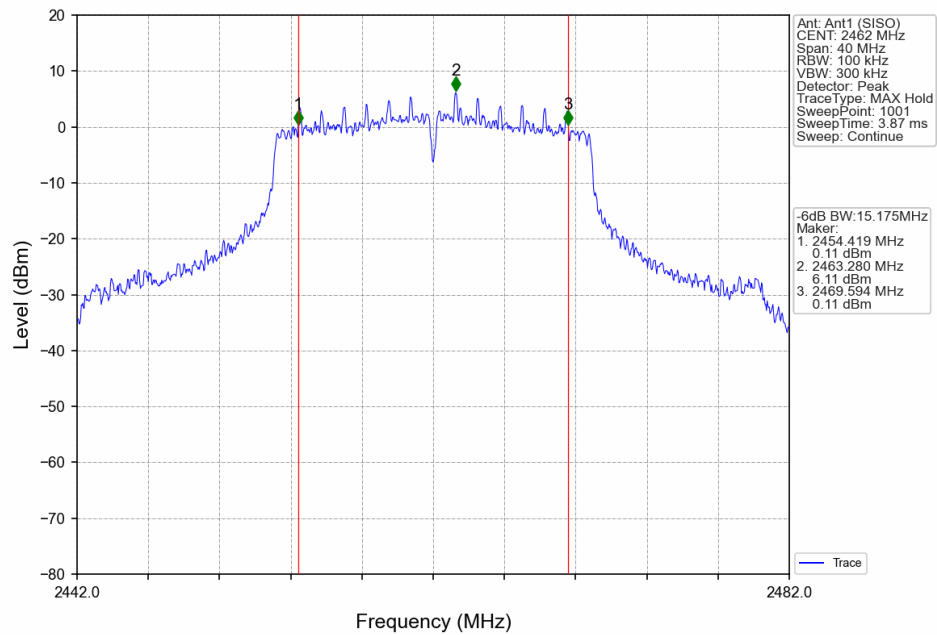
802.11n(HT20) LCH 2412MHz Ant1 (SISO) NTN



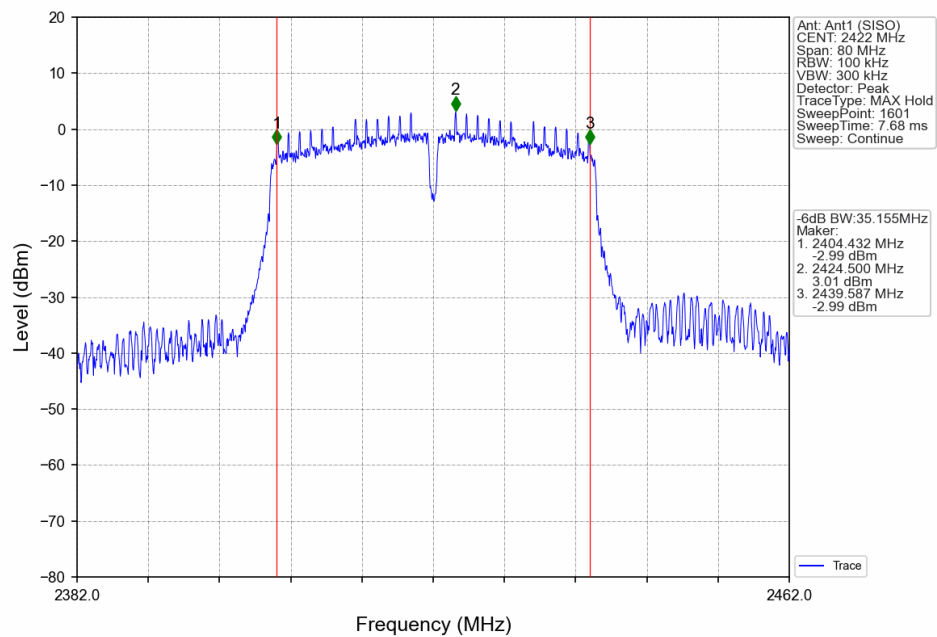
802.11n(HT20) MCH 2437MHz Ant1 (SISO) NTN



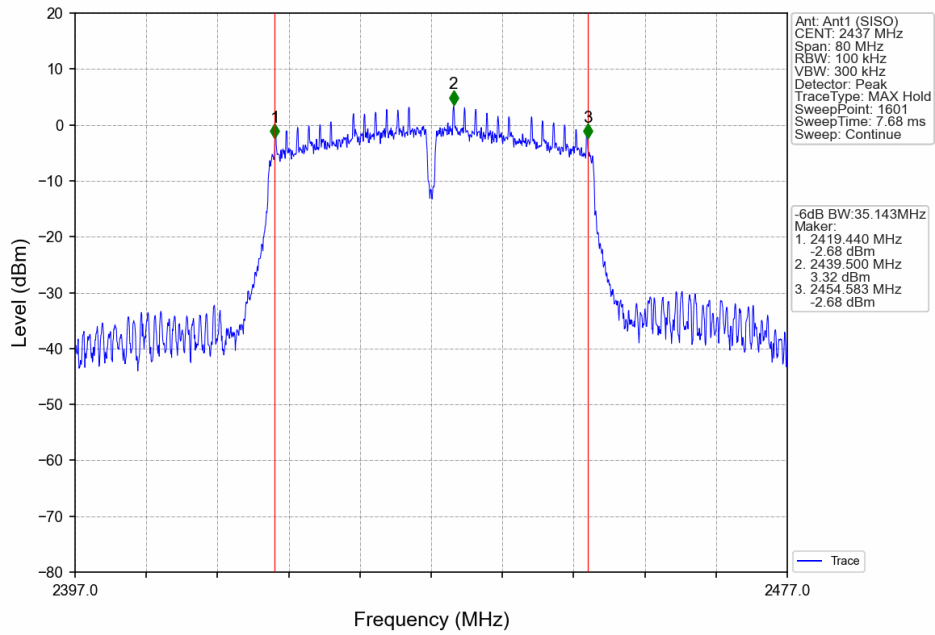
802.11n(HT20) HCH 2462MHz Ant1 (SISO) NTNV



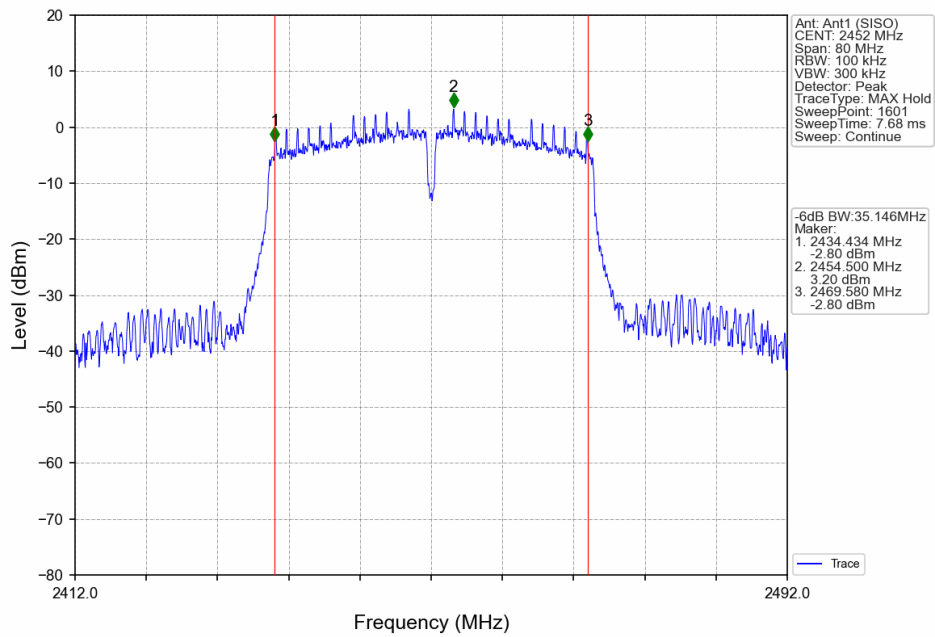
802.11n(HT40) LCH 2422MHz Ant1 (SISO) NTNV



802.11n(HT40) MCH_2437MHz_Ant1 (SISO) NTN



802.11n(HT40) HCH_2452MHz_Ant1 (SISO) NTN



2. Maximum Conducted Output Power

2.1 Power

2.1.1 Test Result

Maximum Average Conducted Output Power

Mode	TX Type	Frequency (MHz)	Maximum Average Conducted Output Power (dBm)				Verdict
			ANT1	ANT2	MIMO	Limit	
802.11b	SISO	2412	16.28	14.82	/	<=30	Pass
		2437	16.70	15.22	/	<=30	Pass
		2462	16.51	14.99	/	<=30	Pass
802.11g	SISO	2412	16.07	14.94	/	<=30	Pass
		2437	16.33	15.27	/	<=30	Pass
		2462	16.19	15.39	/	<=30	Pass
802.11n (HT20)	SISO	2412	15.71	14.80	/	<=30	Pass
		2437	15.94	15.28	/	<=30	Pass
		2462	16.00	15.15	/	<=30	Pass
802.11n (HT40)	SISO	2422	16.01	15.09	/	<=30	Pass
		2437	16.18	15.21	/	<=30	Pass
		2452	16.15	15.11	/	<=30	Pass
802.11n (HT20)	MIMO	2412	15.77	15.23	18.52	<=30	Pass
		2437	16.19	15.68	18.95	<=30	Pass
		2462	16.26	15.45	18.88	<=30	Pass
802.11n (HT40)	MIMO	2422	16.35	15.36	18.89	<=30	Pass
		2437	16.56	15.47	19.06	<=30	Pass
		2452	16.67	15.43	19.10	<=30	Pass

Note1: Antenna Gain: Ant1: 2.99dBi; Ant2: 2.82dBi;
Note2: Directional Gain: 6.0dBi

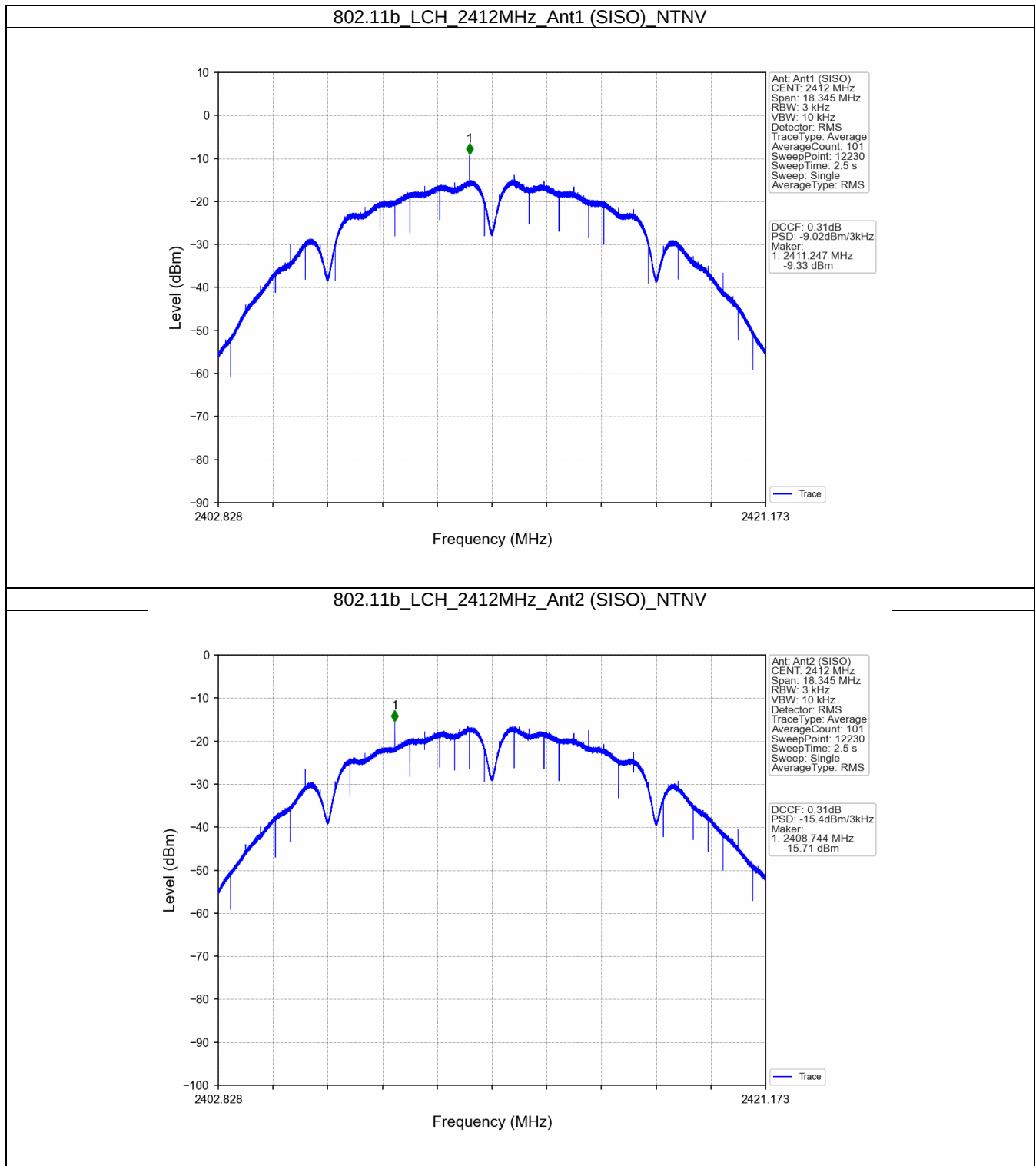
EIPR

Mode	TX Type	Frequency (MHz)	Maximum Average Conducted Output Power (dBm)			E.I.R.P			Limit	Verdict
			ANT1	ANT2	MIMO	ANT1	ANT2	MIMO		
802.11b	SISO	2412	16.28	14.82	/	19.27	17.64	/	<=36.02	Pass
		2437	16.70	15.22	/	19.69	18.04	/	<=36.02	Pass
		2462	16.51	14.99	/	19.50	17.81	/	<=36.02	Pass
802.11g	SISO	2412	16.07	14.94	/	19.06	17.76	/	<=36.02	Pass
		2437	16.33	15.27	/	19.32	18.09	/	<=36.02	Pass
		2462	16.19	15.39	/	19.18	18.21	/	<=36.02	Pass
802.11n (HT20)	SISO	2412	15.71	14.80	/	18.70	17.62	/	<=36.02	Pass
		2437	15.94	15.28	/	18.93	18.10	/	<=36.02	Pass
		2462	16.00	15.15	/	18.99	17.97	/	<=36.02	Pass
802.11n (HT40)	SISO	2422	16.01	15.09	/	19.00	17.91	/	<=36.02	Pass
		2437	16.18	15.21	/	19.17	18.03	/	<=36.02	Pass
		2452	16.15	15.11	/	19.14	17.93	/	<=36.02	Pass
802.11n (HT20)	MIMO	2412	15.77	15.23	18.52	/	/	24.52	<=36.02	Pass
		2437	16.19	15.68	18.95	/	/	24.95	<=36.02	Pass
		2462	16.26	15.45	18.88	/	/	24.88	<=36.02	Pass
802.11n (HT40)	MIMO	2422	16.35	15.36	18.89	/	/	24.89	<=36.02	Pass
		2437	16.56	15.47	19.06	/	/	25.06	<=36.02	Pass
		2452	16.67	15.43	19.10	/	/	25.10	<=36.02	Pass

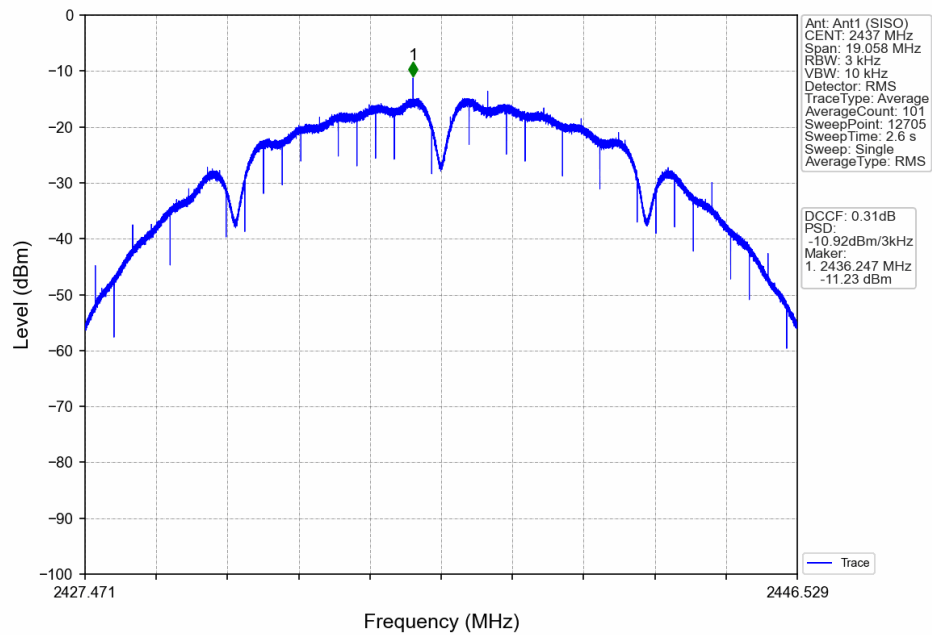
Note1: Antenna Gain: Ant1: 2.99dBi; Ant2: 2.82dBi;
Note2: Directional Gain: 6.0dBi
Note3: For SISO mode eirp= Maximum Average Conducted Output Power (dBm)+ independent Antenna Gain.
For MIMO mode eirp= Total Conducted Output Power (dBm)+ Directional Gain.

Mode	TX Type	Frequency (MHz)	Maximum PSD (dBm/3kHz)				Verdict
			ANT1	ANT2	MIMO	Limit	
802.11b	SISO	2412	-9.02	-15.40	/	<=8	Pass
		2437	-10.92	-12.21	/	<=8	Pass
		2462	-11.95	-12.31	/	<=8	Pass
802.11g	SISO	2412	-15.42	-15.95	/	<=8	Pass
		2437	-14.97	-16.44	/	<=8	Pass
		2462	-14.93	-15.85	/	<=8	Pass
802.11n (HT20)	SISO	2412	-15.95	-16.80	/	<=8	Pass
		2437	-16.00	-16.77	/	<=8	Pass
		2462	-15.48	-16.70	/	<=8	Pass
802.11n (HT40)	SISO	2422	-17.83	-19.09	/	<=8	Pass
		2437	-17.75	-18.96	/	<=8	Pass
		2452	-17.75	-18.72	/	<=8	Pass
802.11n (HT20)	MIMO	2412	-16.18	-16.33	-13.43	<=8	Pass
		2437	-15.62	-16.34	-12.97	<=8	Pass
		2462	-15.79	-15.84	-12.90	<=8	Pass
802.11n (HT40)	MIMO	2422	-17.77	-18.49	-15.64	<=8	Pass
		2437	-17.03	-18.84	-15.19	<=8	Pass
		2452	-17.49	-17.70	-14.96	<=8	Pass
Note1: Antenna Gain: Ant1: 2.99dBi; Ant2: 2.82dBi; Note2: Directional Gain: 6.0dBi							

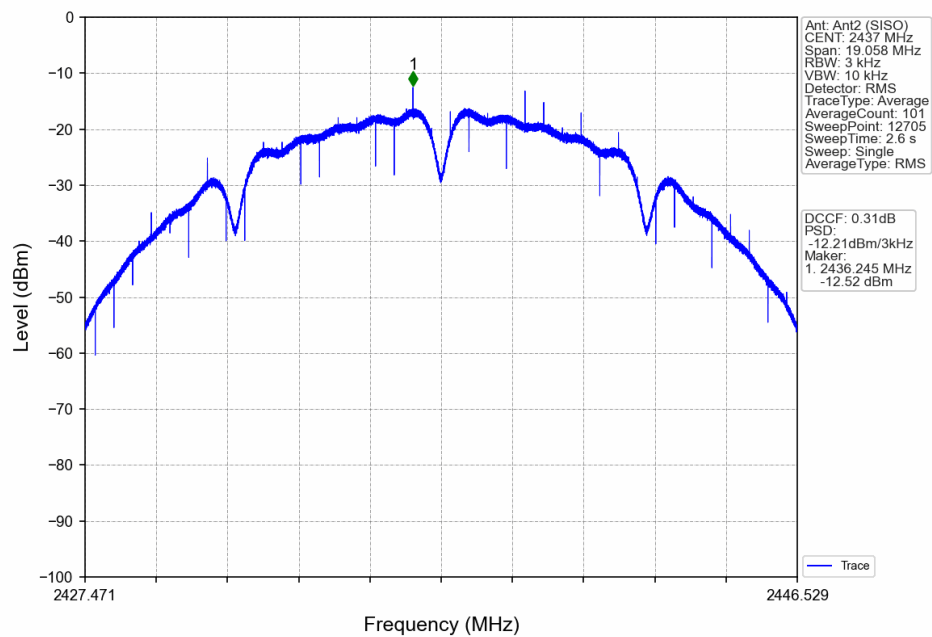
3.1.2 Test Graph



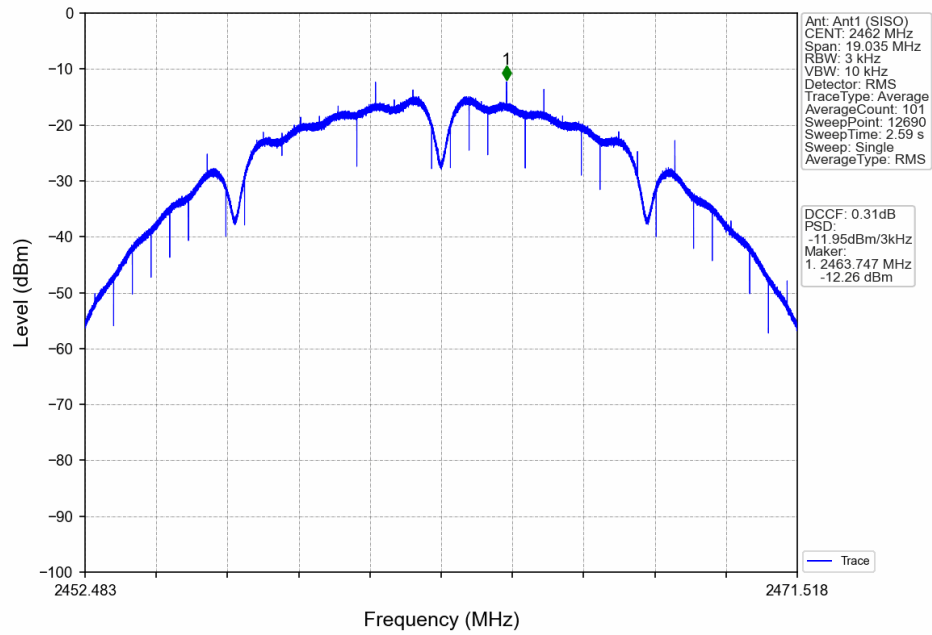
802.11b MCH 2437MHz Ant1 (SISO) NTN



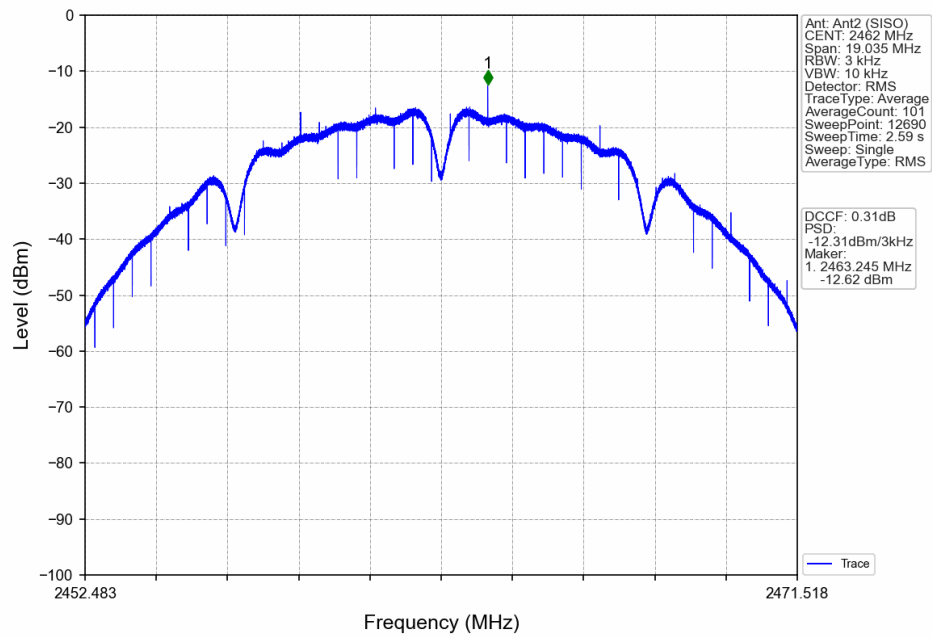
802.11b MCH 2437MHz Ant2 (SISO) NTN



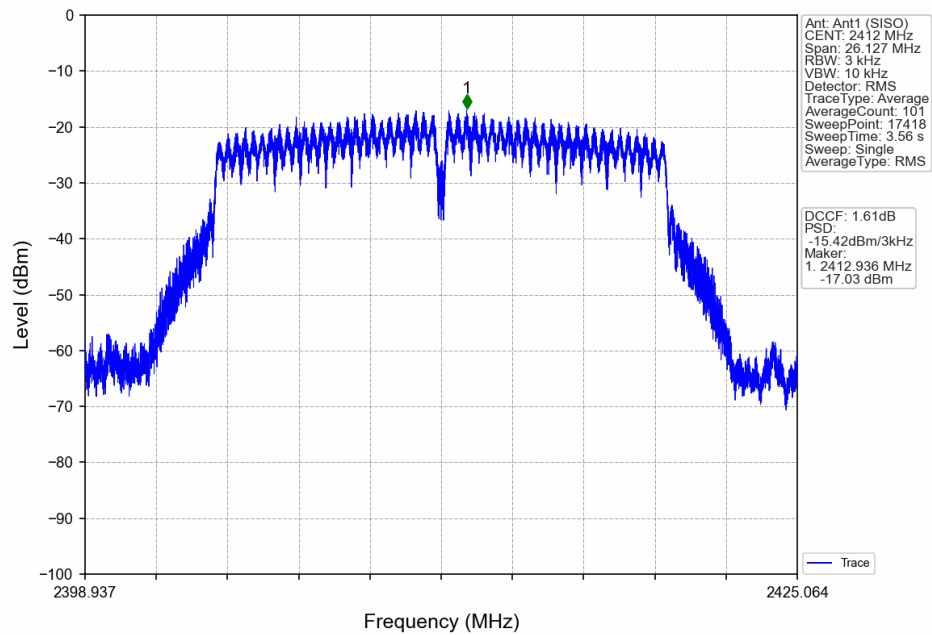
802.11b_HCH_2462MHz_Ant1 (SISO)_NTNV



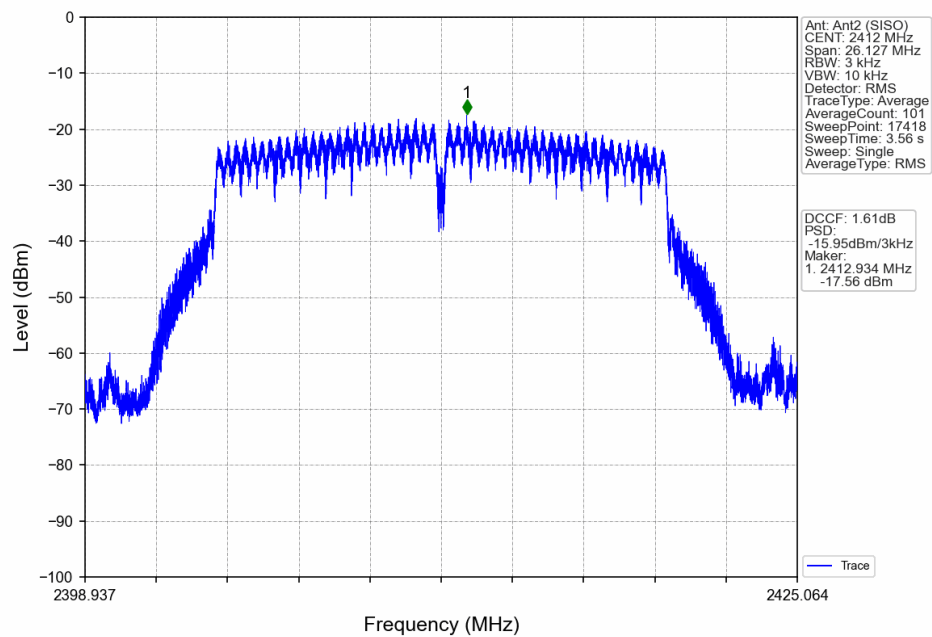
802.11b_HCH_2462MHz_Ant2 (SISO)_NTNV



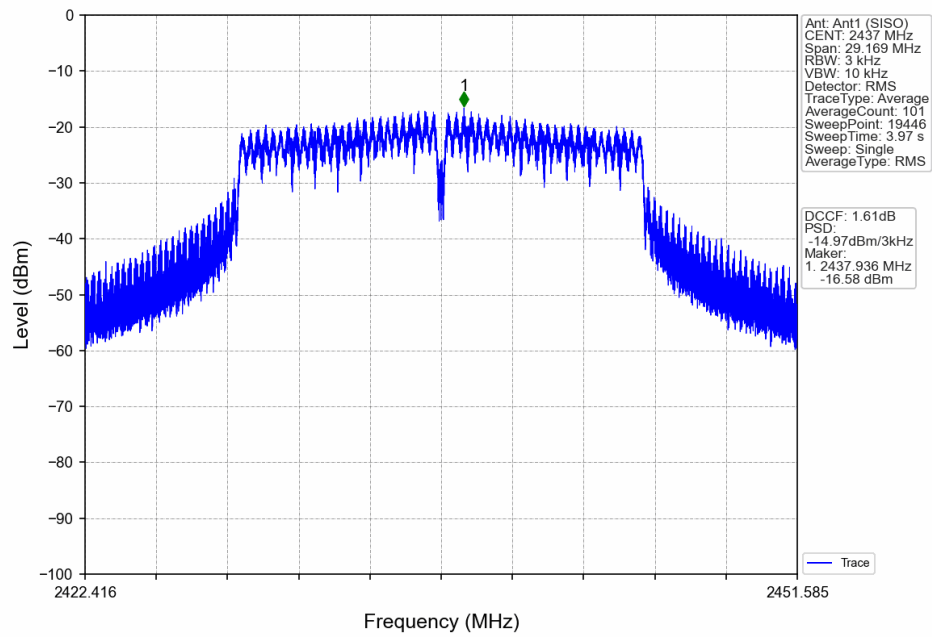
802.11g_LCH_2412MHz_Ant1 (SISO) NTN



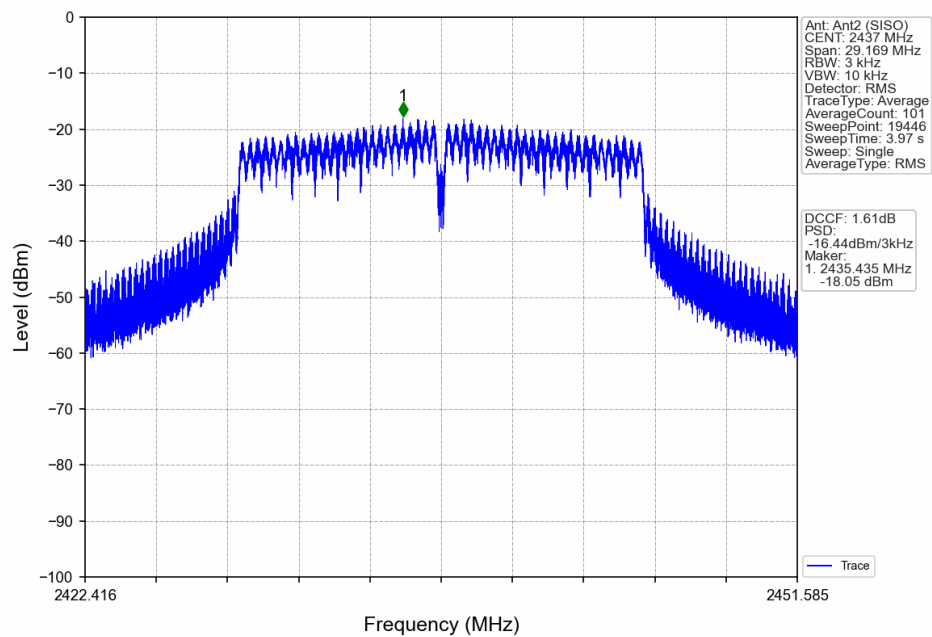
802.11g_LCH_2412MHz_Ant2 (SISO) NTN



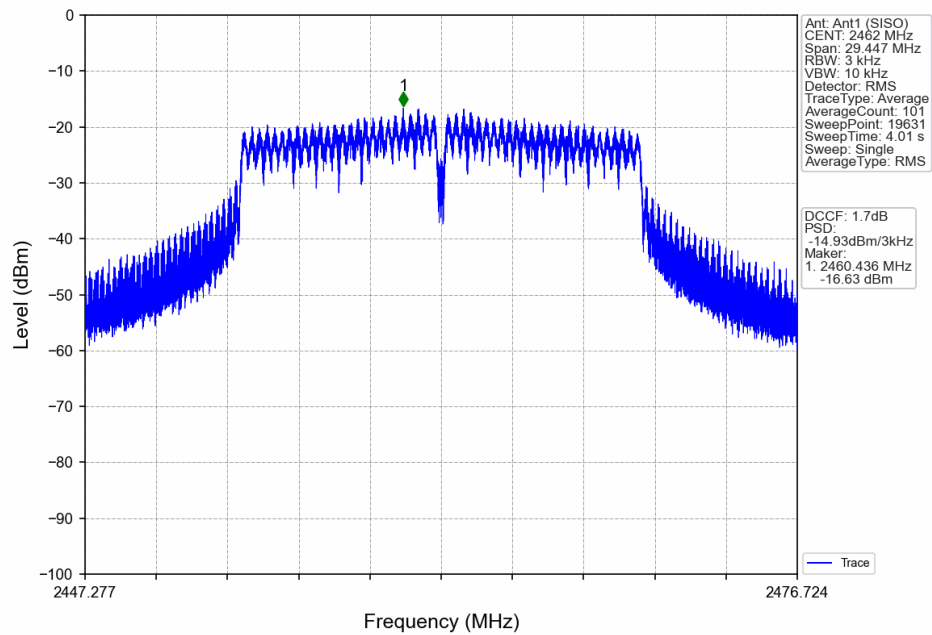
802.11g MCH 2437MHz Ant1 (SISO) NTN



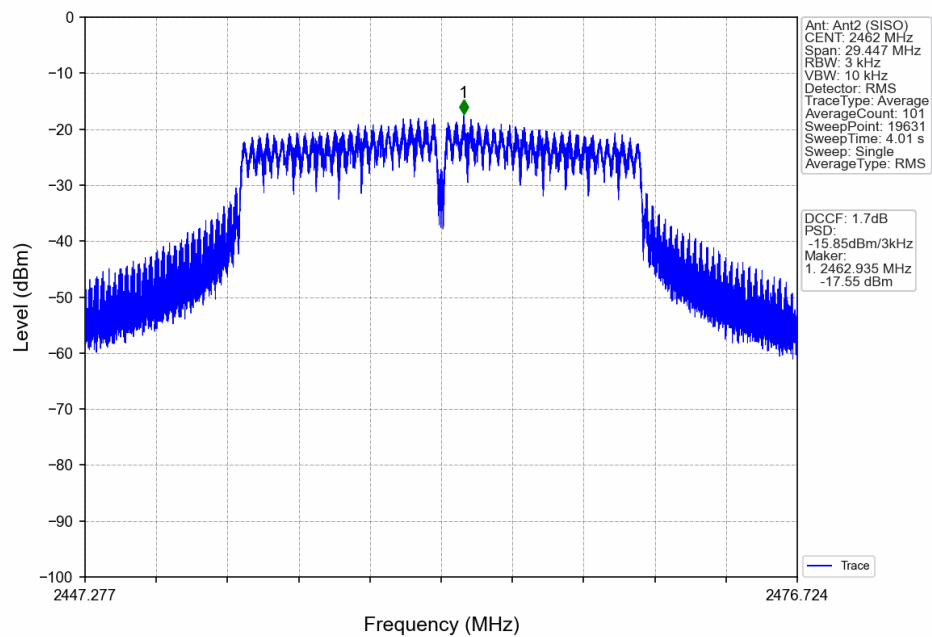
802.11g MCH 2437MHz Ant2 (SISO) NTN



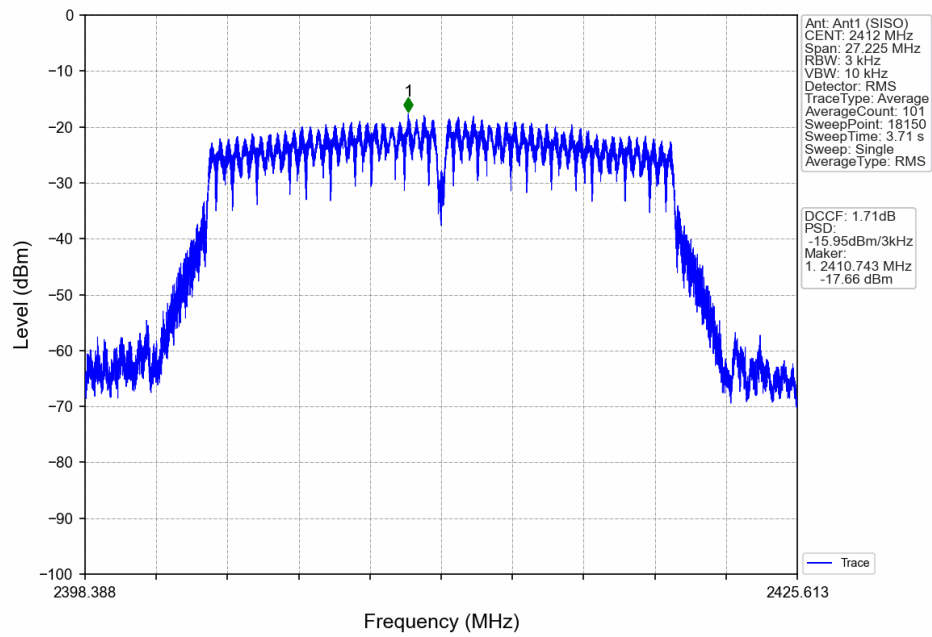
802.11g_HCH_2462MHz_Ant1 (SISO)_NTNV



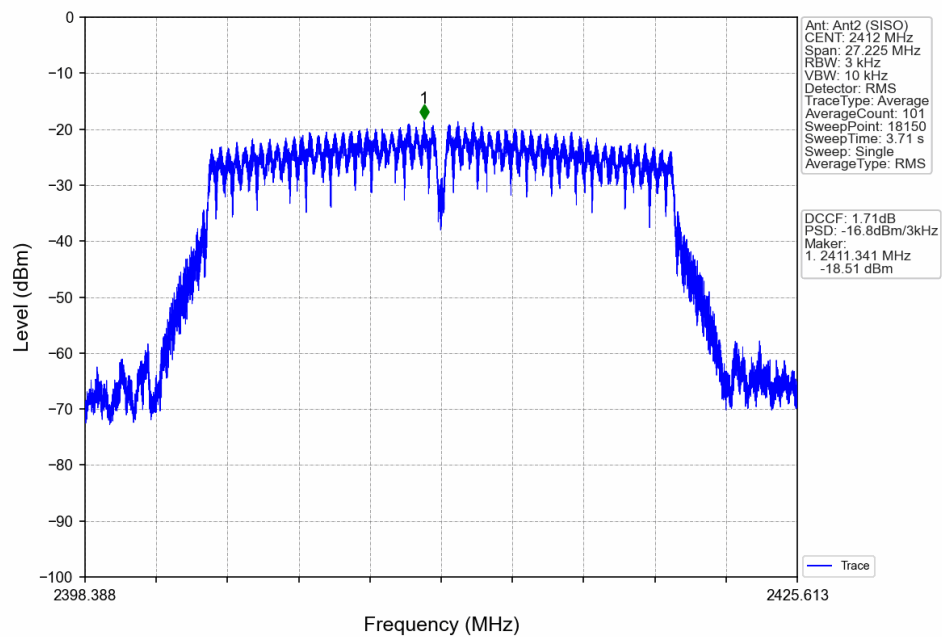
802.11g_HCH_2462MHz_Ant2 (SISO)_NTNV



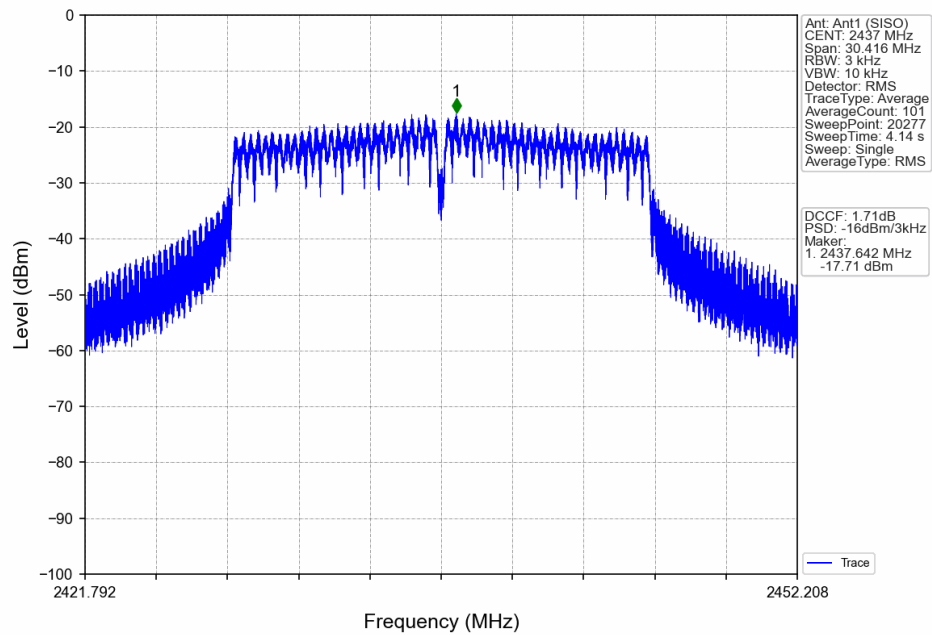
802.11n(HT20) LCH 2412MHz Ant1 (SISO) NTN



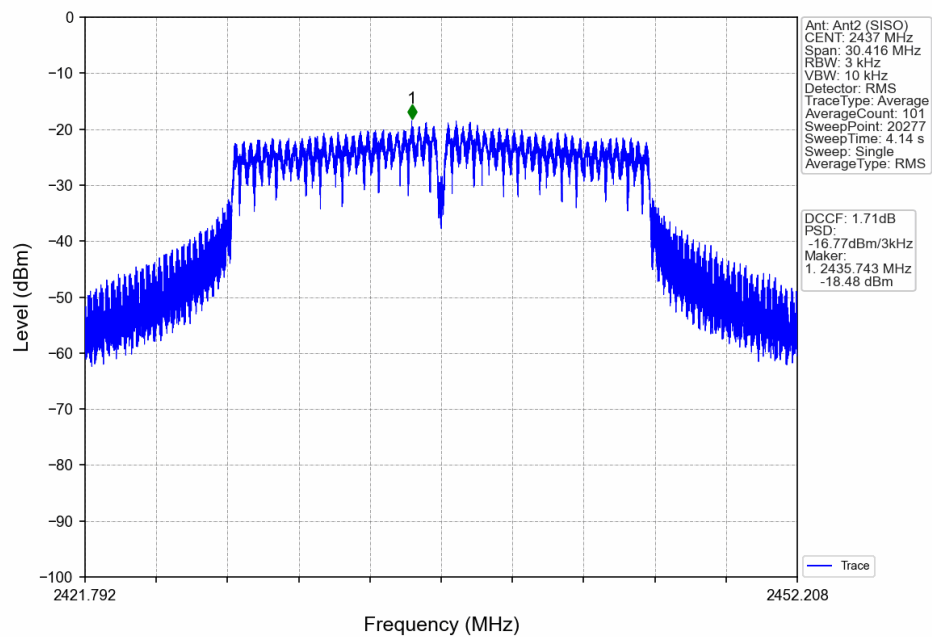
802.11n(HT20) LCH 2412MHz Ant2 (SISO) NTN



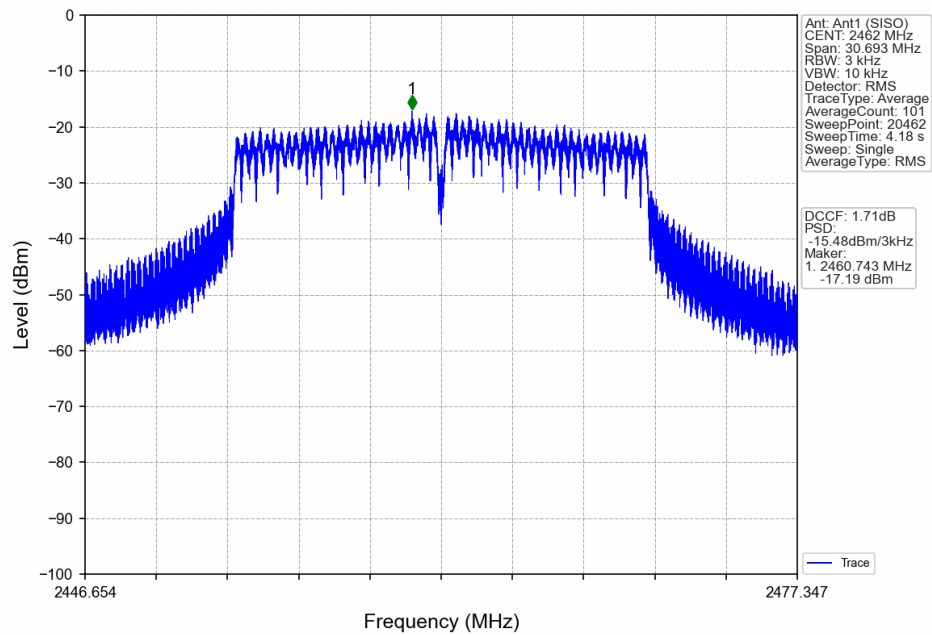
802.11n(HT20)_MCH_2437MHz_Ant1 (SISO)_NTNV



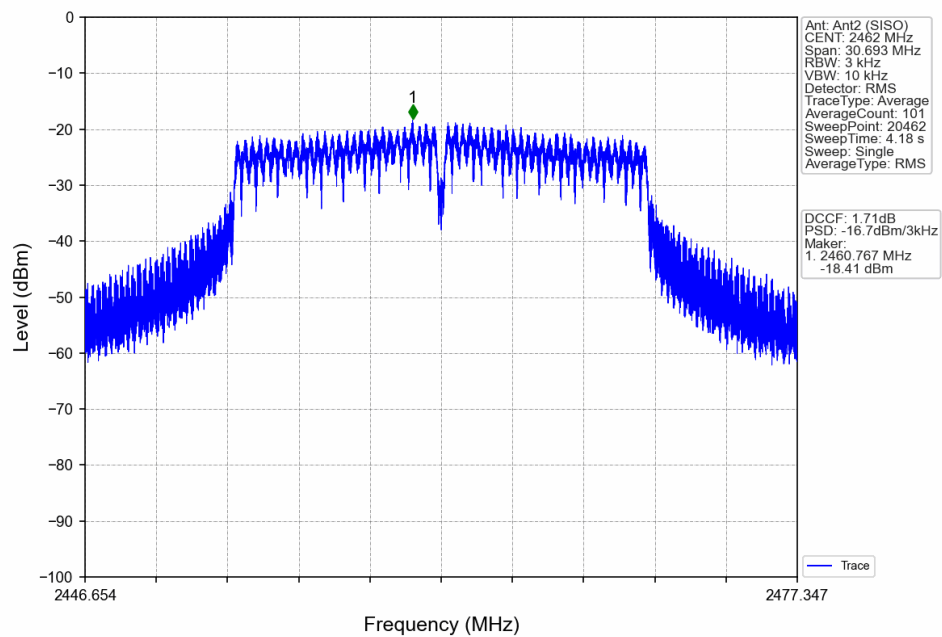
802.11n(HT20)_MCH_2437MHz_Ant2 (SISO)_NTNV



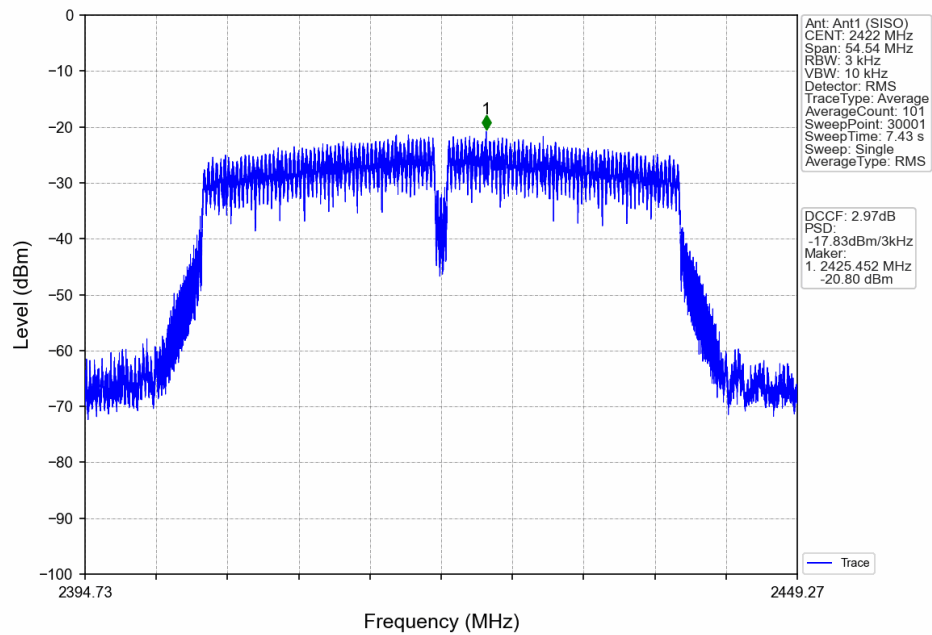
802.11n(HT20) HCH 2462MHz Ant1 (SISO) NTN



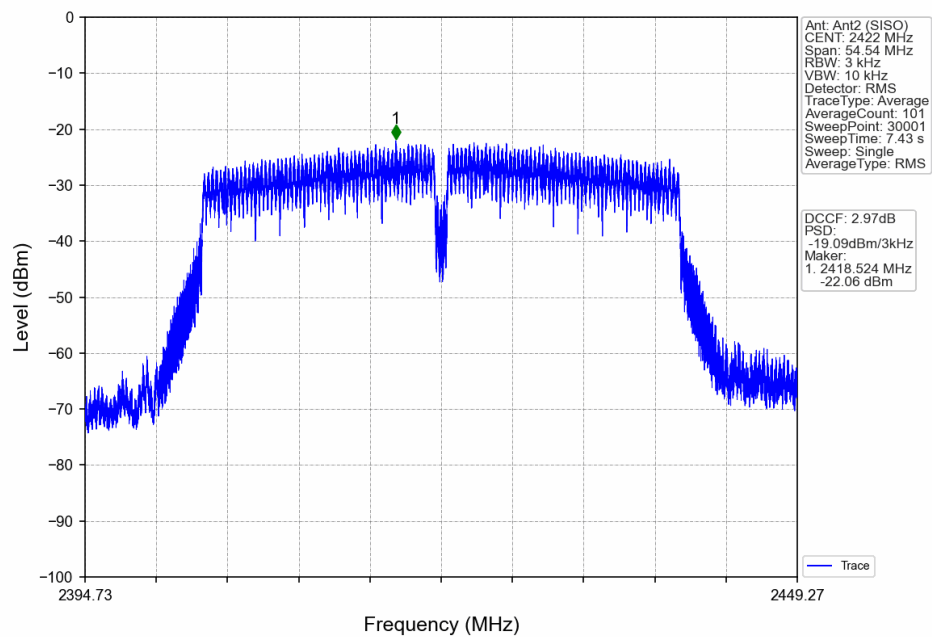
802.11n(HT20) HCH 2462MHz Ant2 (SISO) NTN



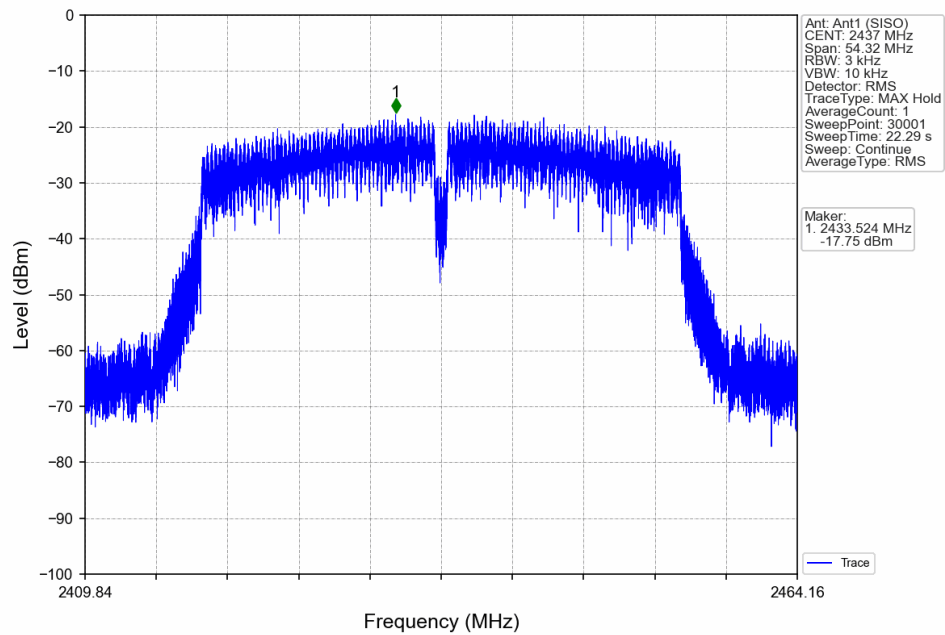
802.11n(HT40) LCH 2422MHz Ant1 (SISO) NTNV



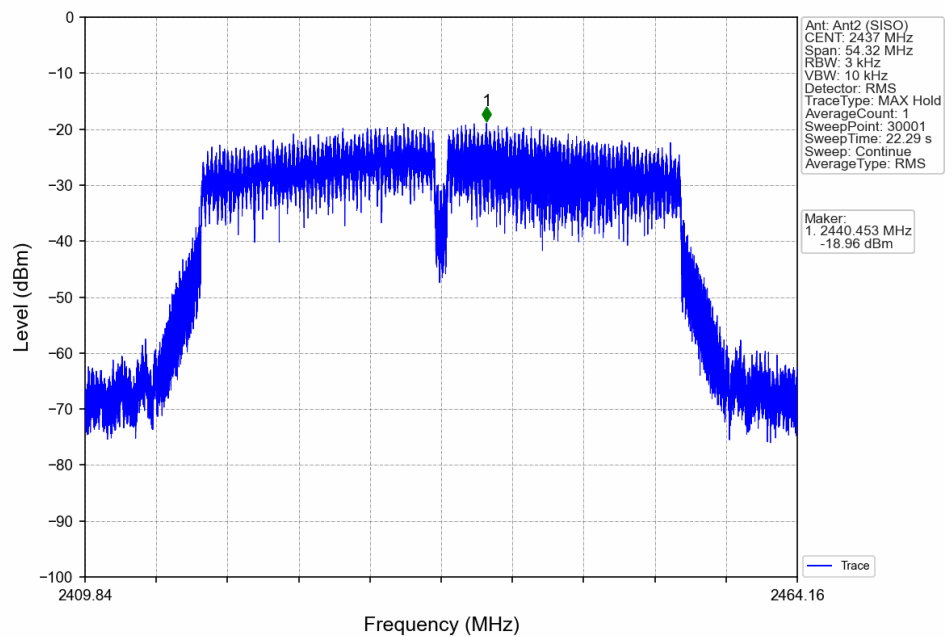
802.11n(HT40) LCH 2422MHz Ant2 (SISO) NTNV



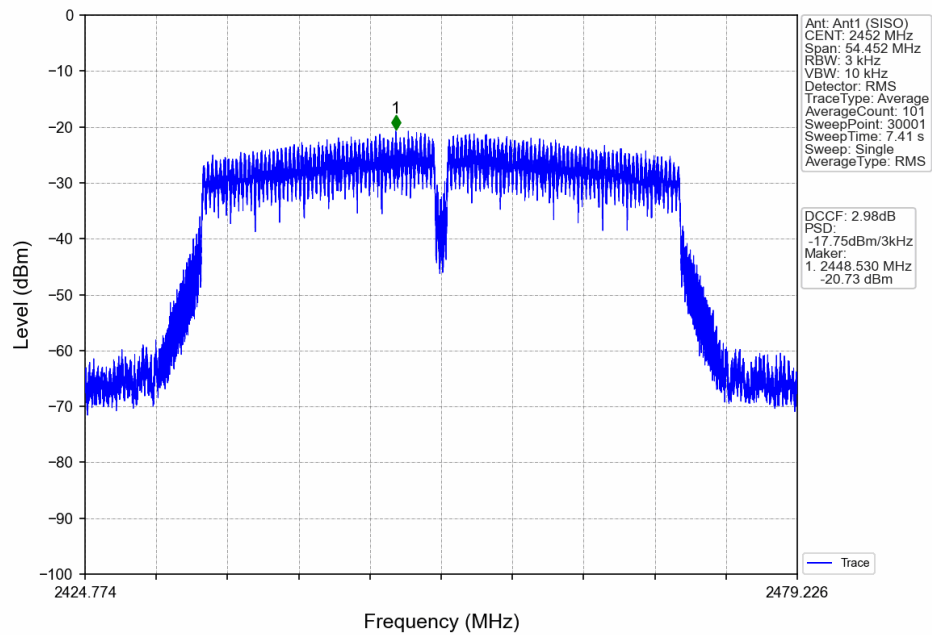
802.11n(HT40) MCH_2437MHz_Ant1 (SISO) NTNV



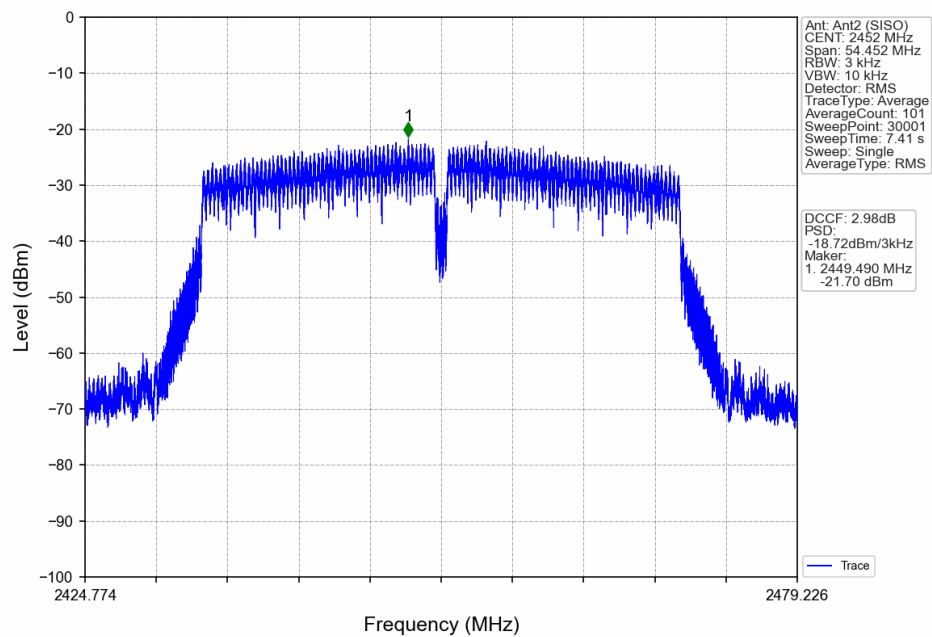
802.11n(HT40) MCH_2437MHz_Ant2 (SISO) NTNV



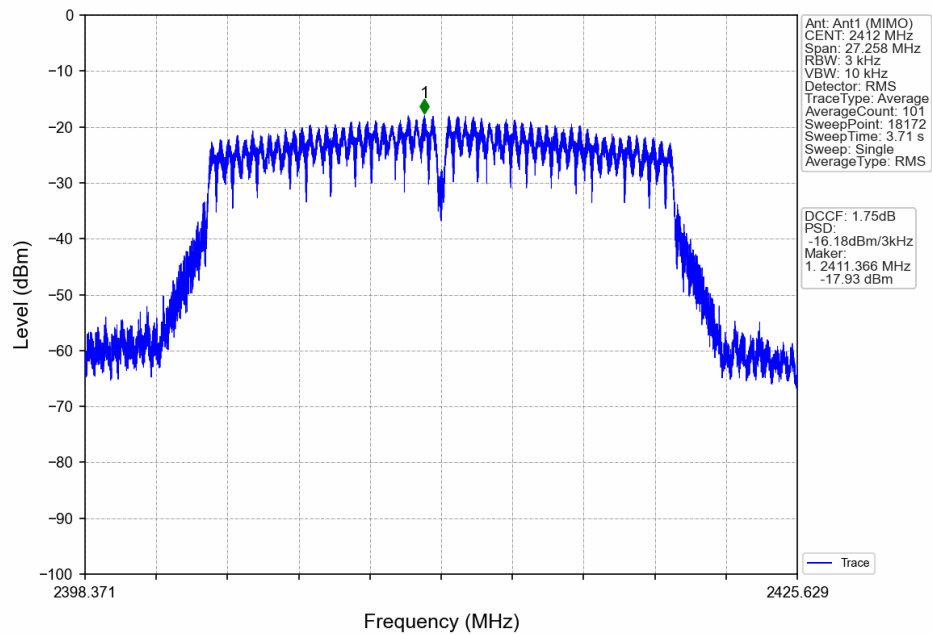
802.11n(HT40) HCH 2452MHz Ant1 (SISO) NTNV



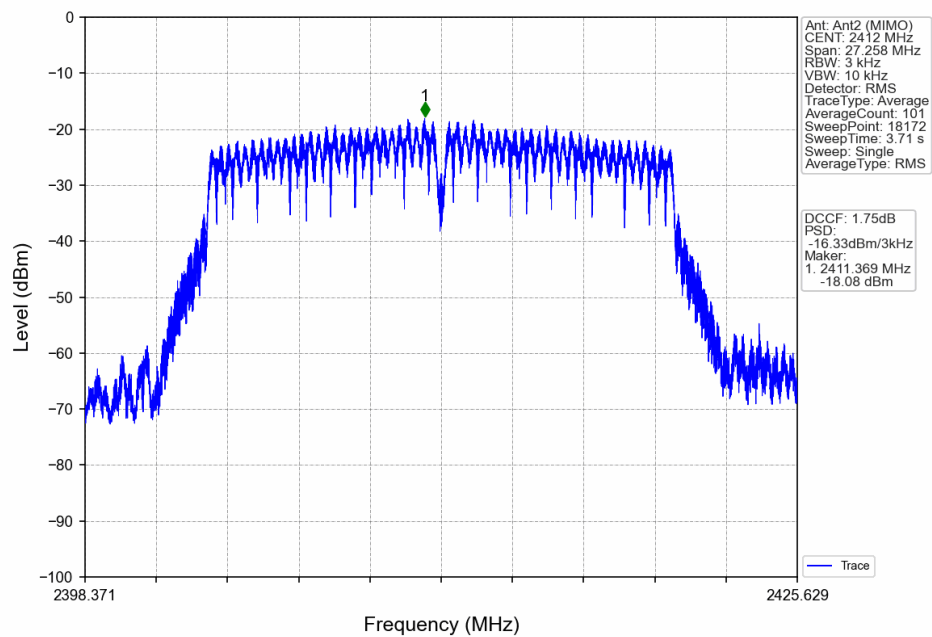
802.11n(HT40) HCH 2452MHz Ant2 (SISO) NTNV



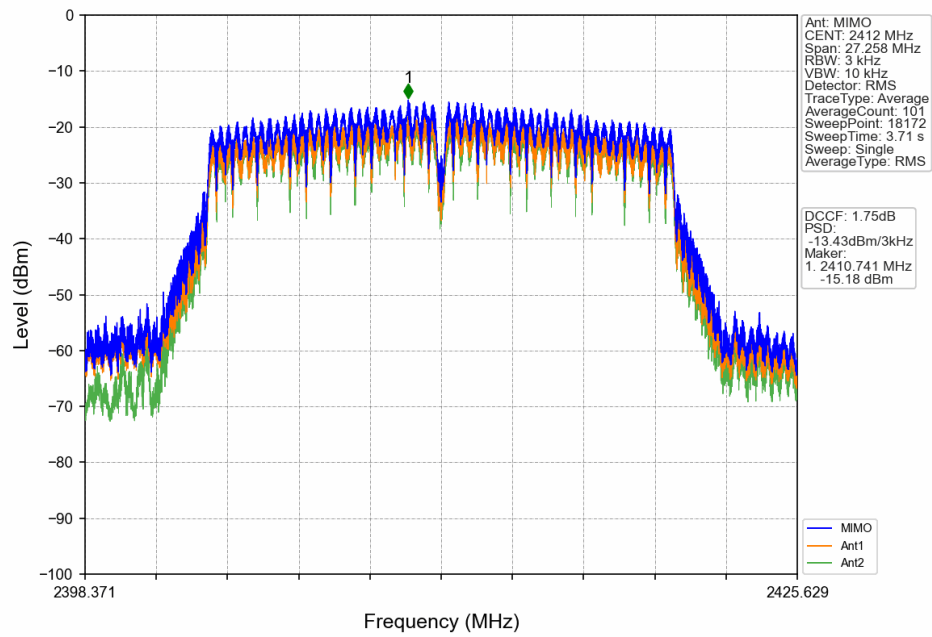
802.11n(HT20) LCH 2412MHz Ant1 (MIMO) NTN



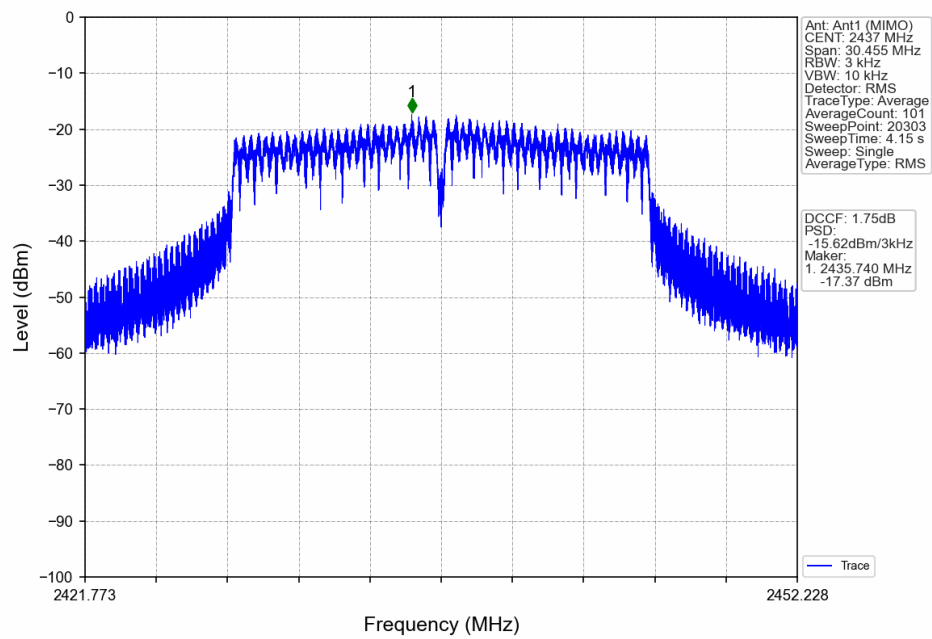
802.11n(HT20) LCH 2412MHz Ant2 (MIMO) NTN



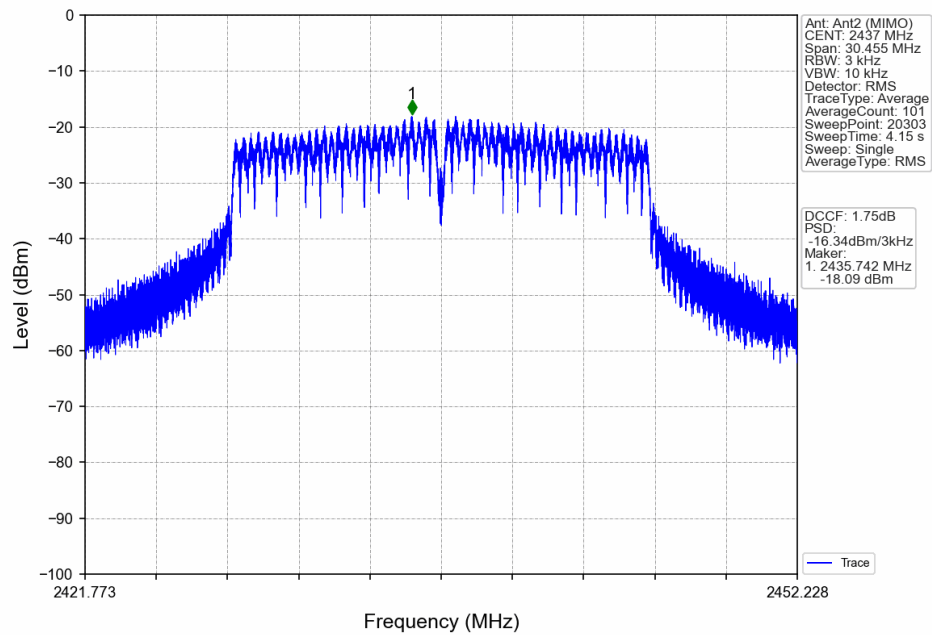
802.11n(HT20) LCH 2412MHz MIMO NTN



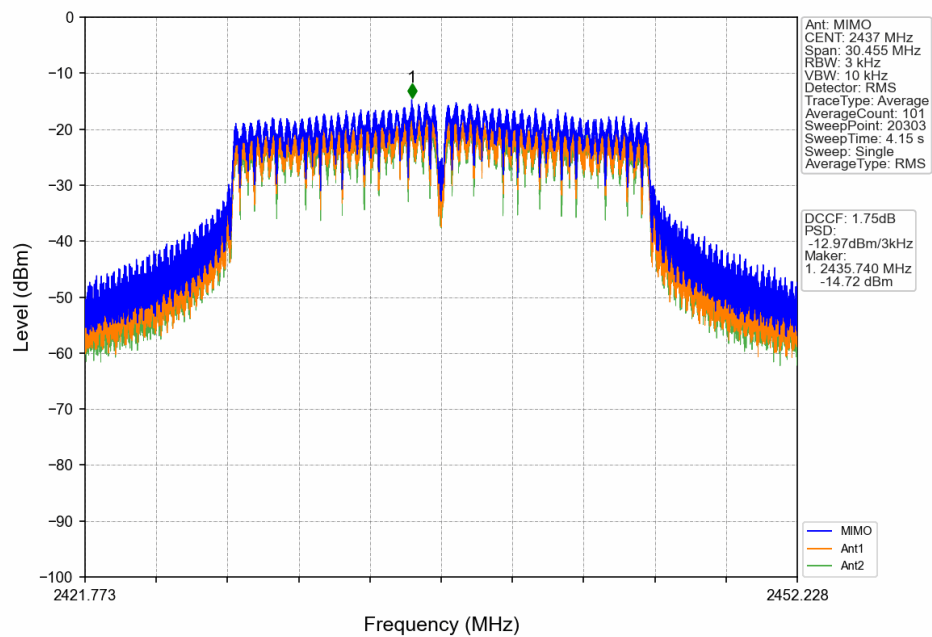
802.11n(HT20) MCH 2437MHz_Ant1 (MIMO)_NTNV



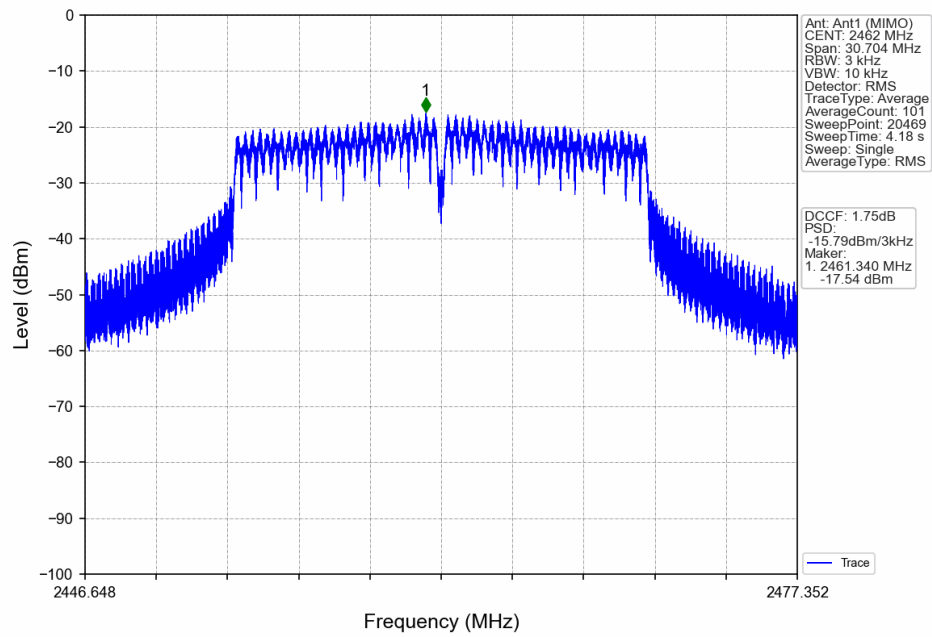
802.11n(HT20) MCH 2437MHz Ant2 (MIMO) NTN



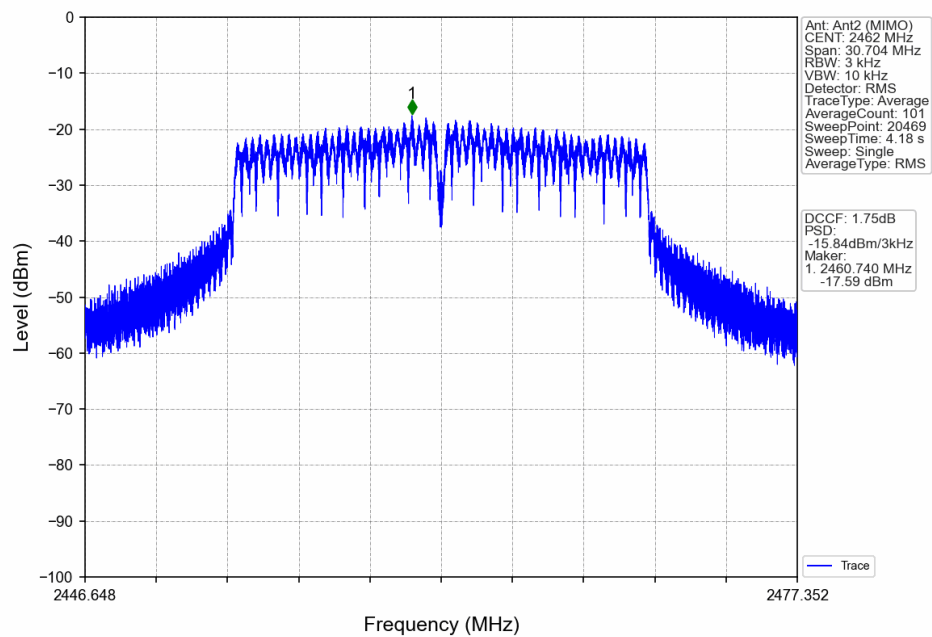
802.11n(HT20) MCH 2437MHz MIMO NTN



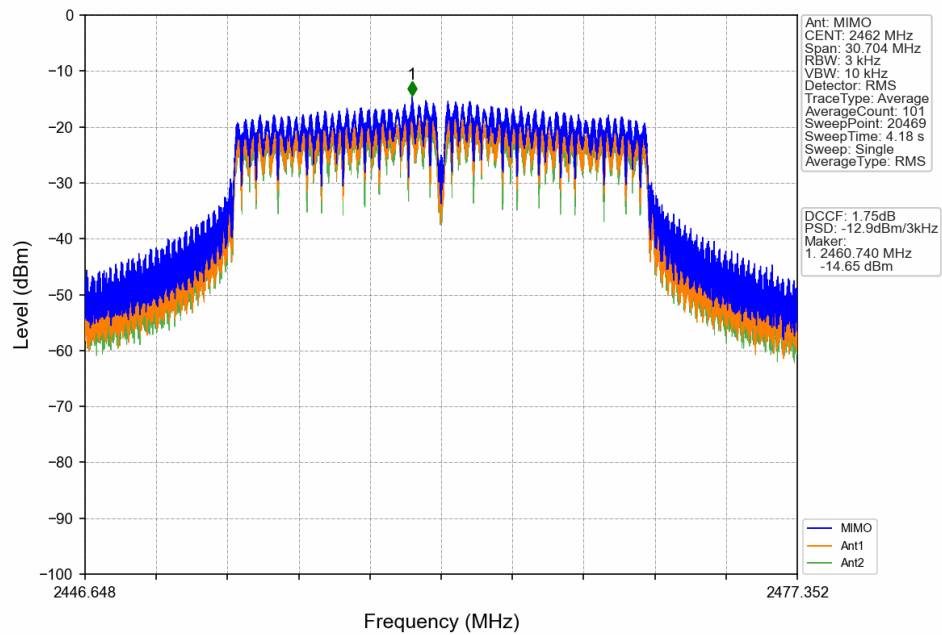
802.11n(HT20) HCH 2462MHz Ant1 (MIMO) NTN



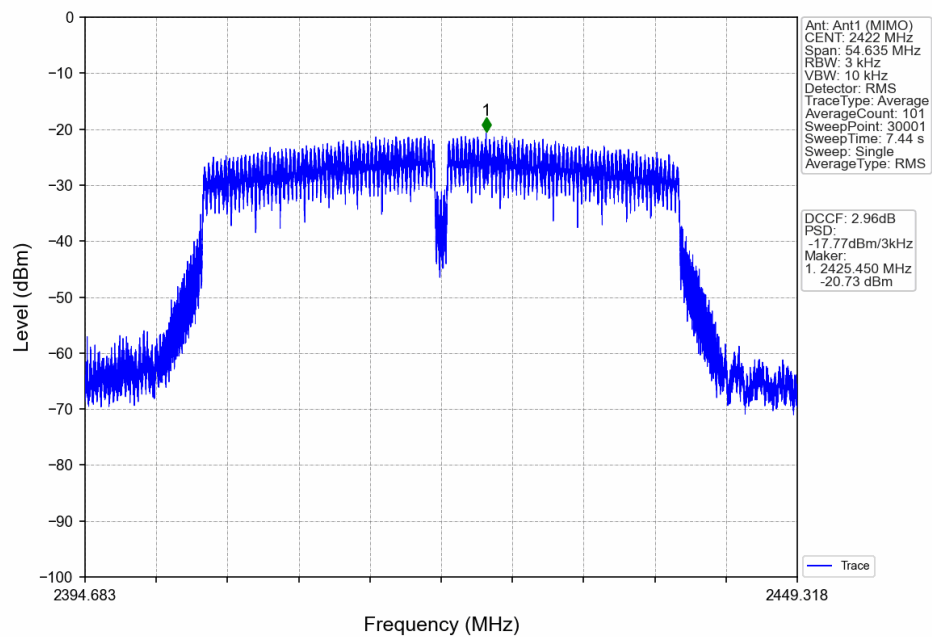
802.11n(HT20) HCH 2462MHz Ant2 (MIMO) NTN



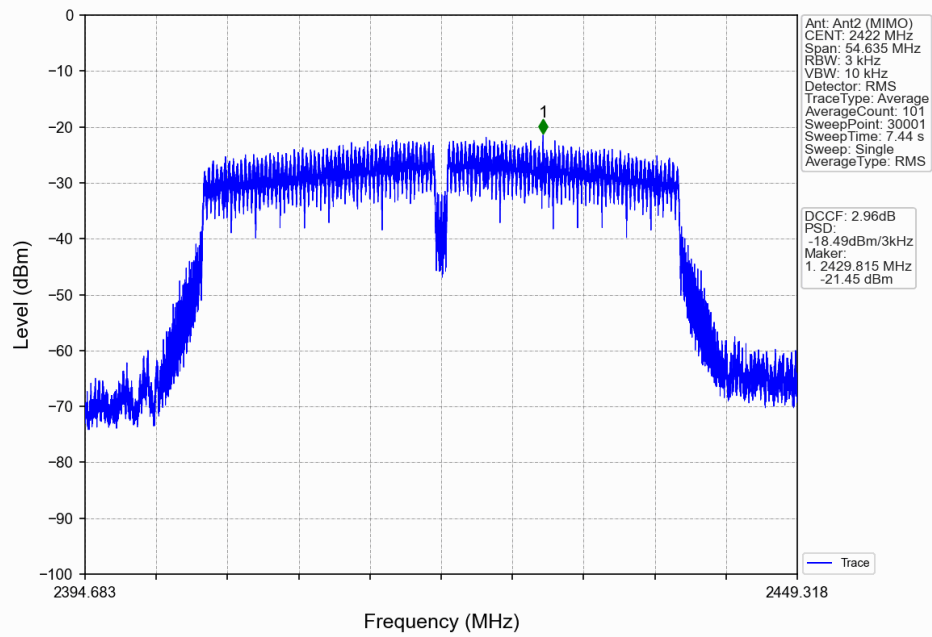
802.11n(HT20) HCH 2462MHz MIMO NTN



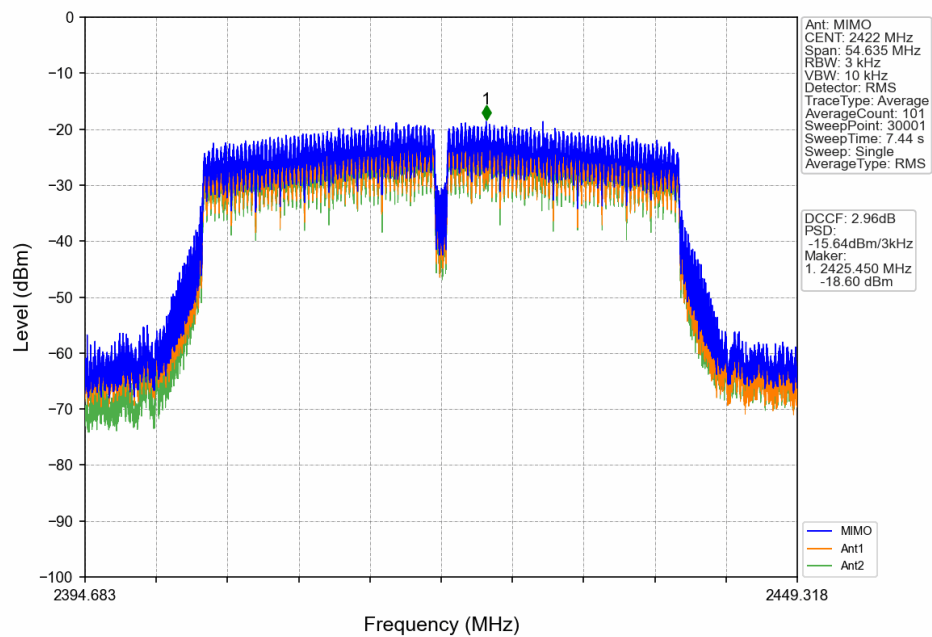
802.11n(HT40) LCH 2422MHz_Ant1 (MIMO)_NTN



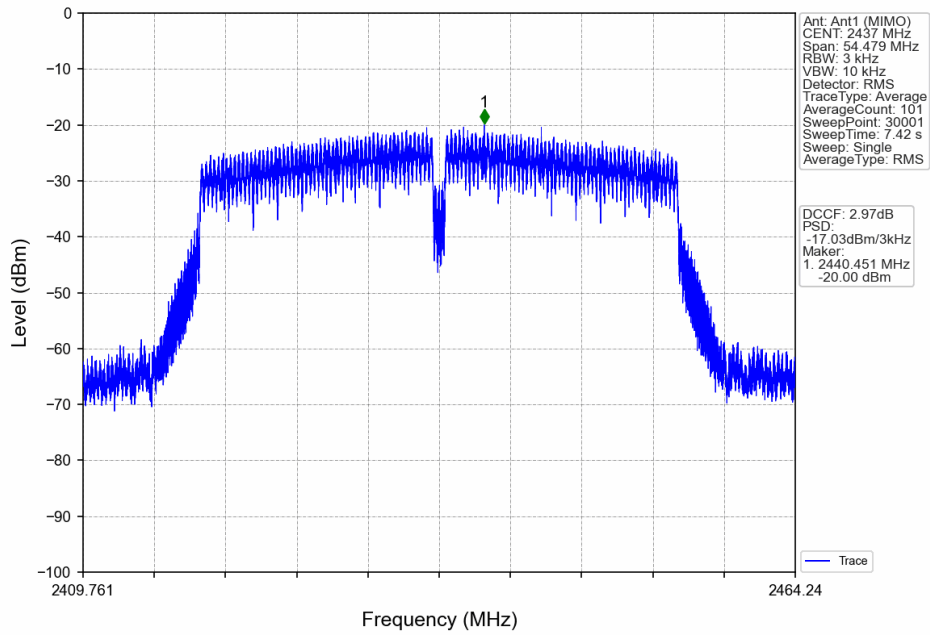
802.11n(HT40) LCH 2422MHz Ant2 (MIMO) NTN



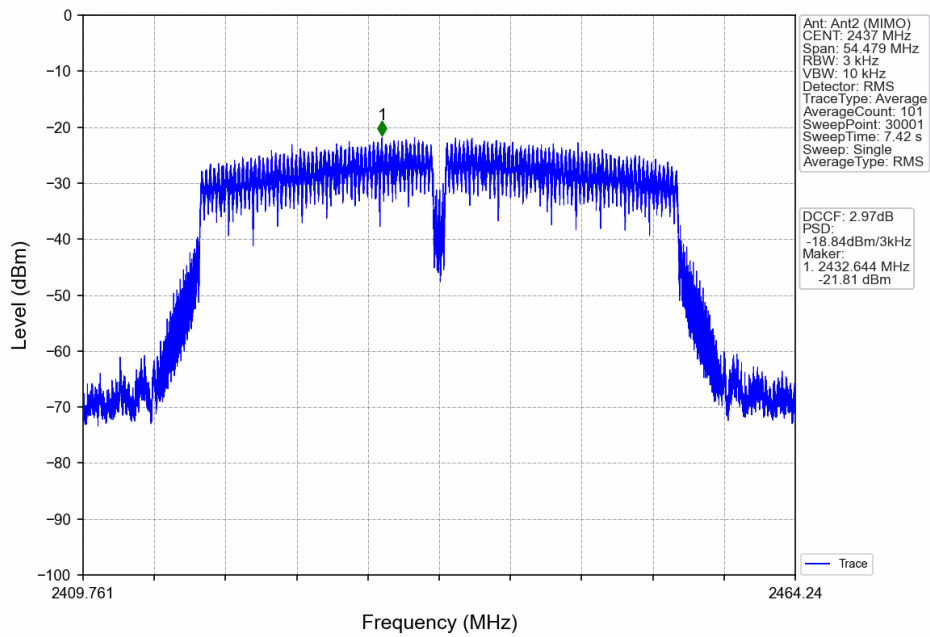
802.11n(HT40) LCH 2422MHz MIMO NTN



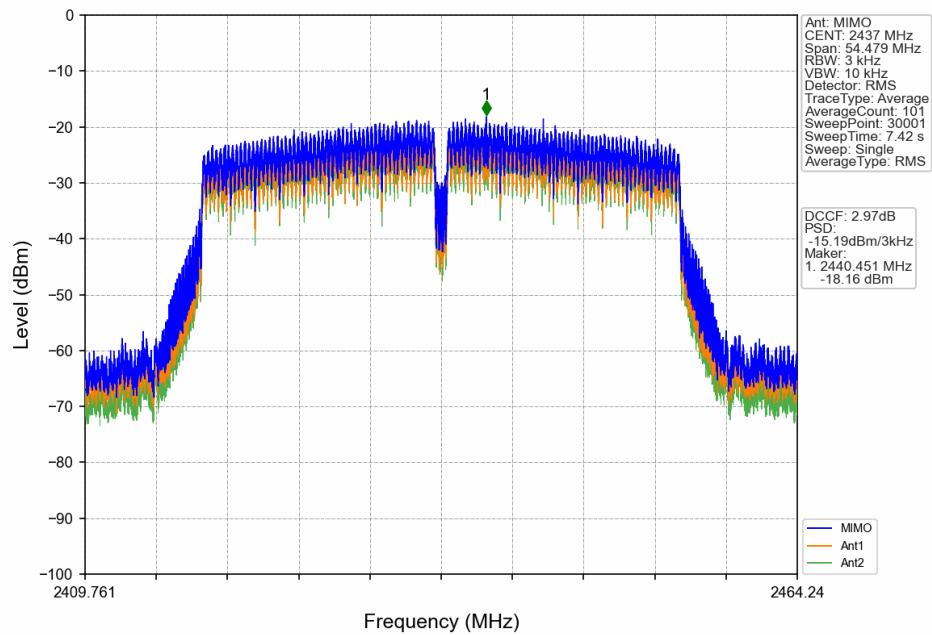
802.11n(HT40) MCH 2437MHz Ant1 (MIMO) NTN



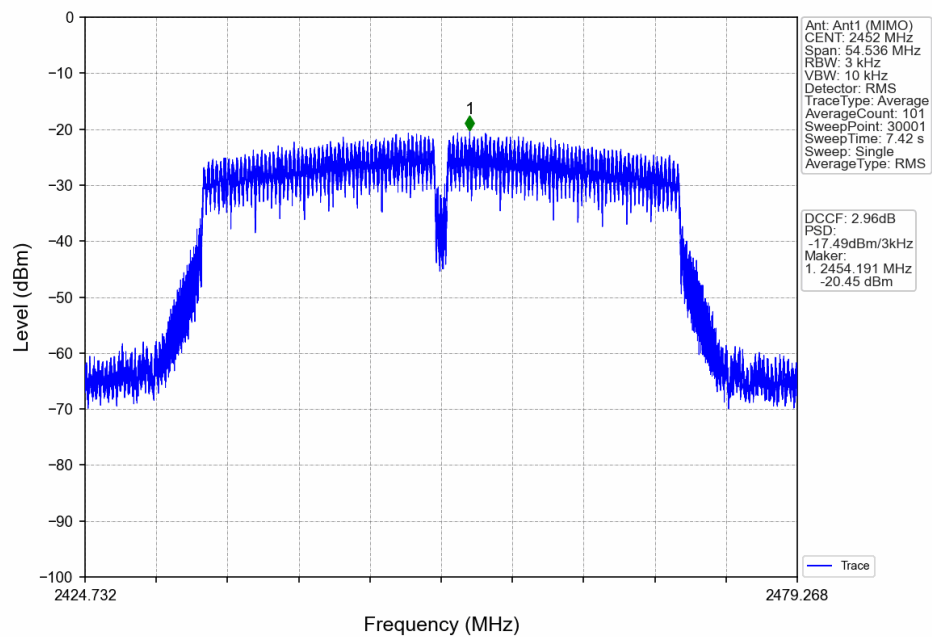
802.11n(HT40) MCH 2437MHz Ant2 (MIMO) NTN



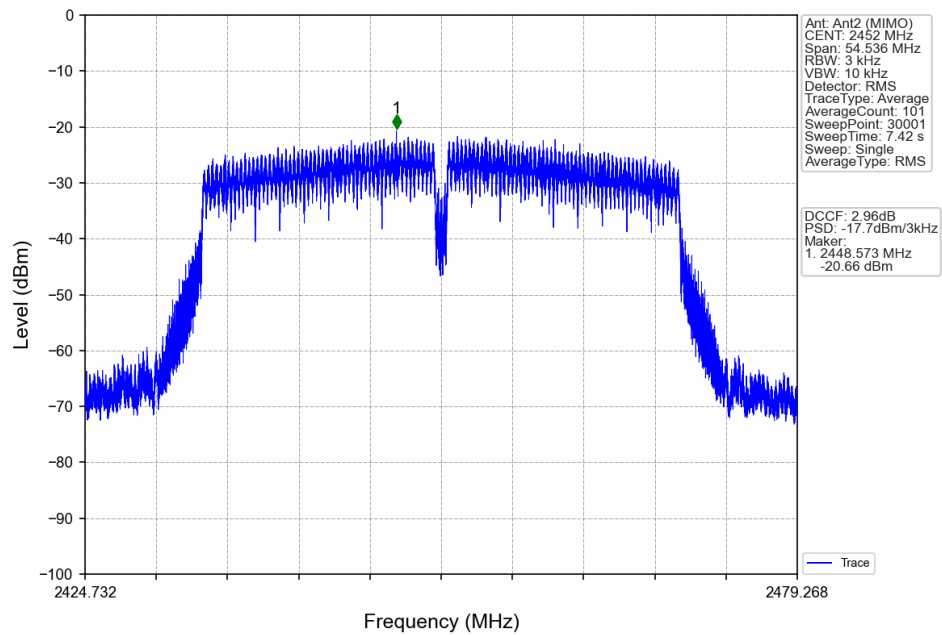
802.11n(HT40) MCH_2437MHz MIMO NTN



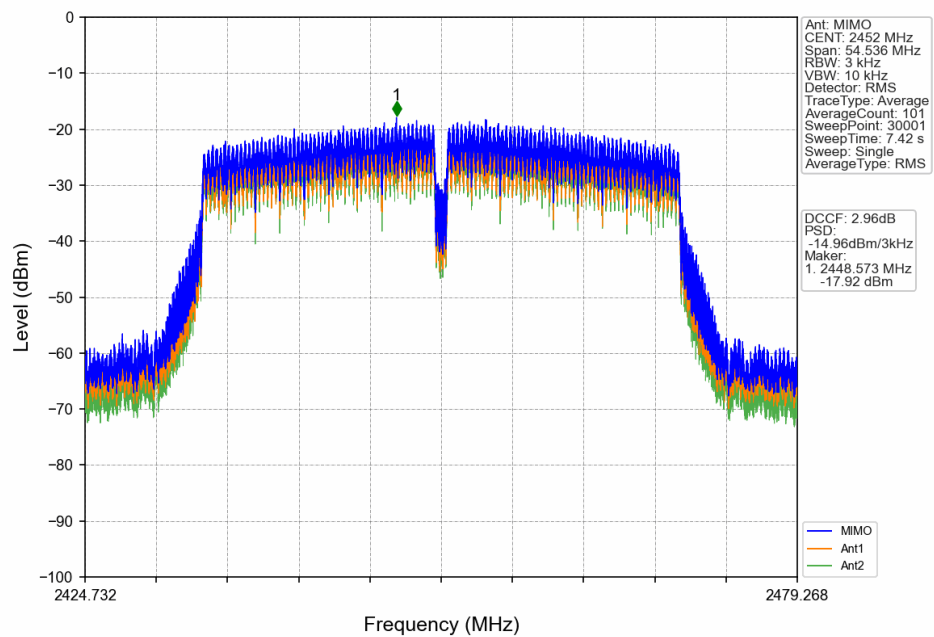
802.11n(HT40) HCH_2452MHz_Ant1 (MIMO)_NTN



802.11n(HT40) HCH 2452MHz Ant2 (MIMO) NTN



802.11n(HT40) HCH 2452MHz MIMO NTN



4. Unwanted Emissions In Non-restricted Frequency Bands

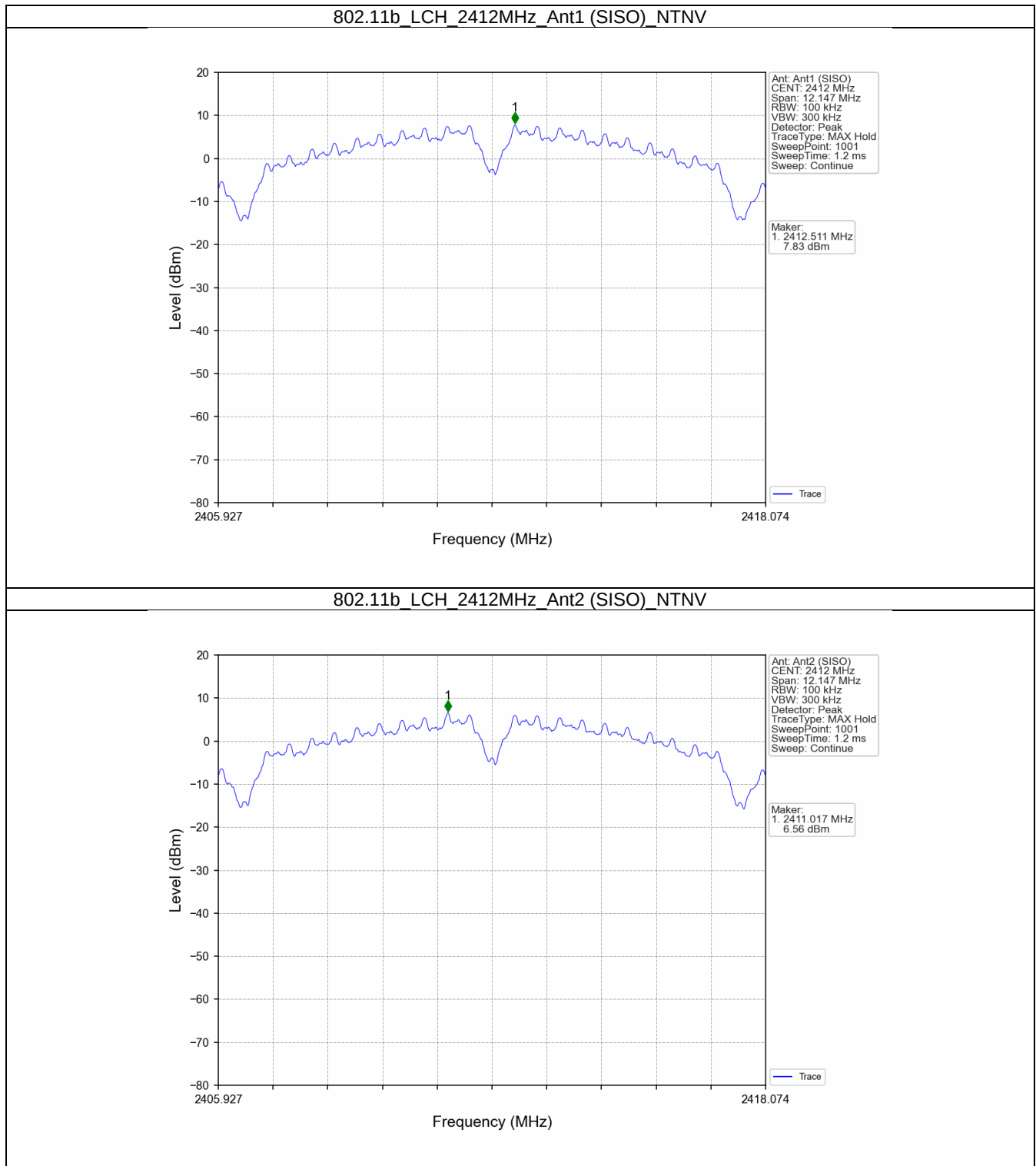
4.1 Ref

4.1.1 Test Result

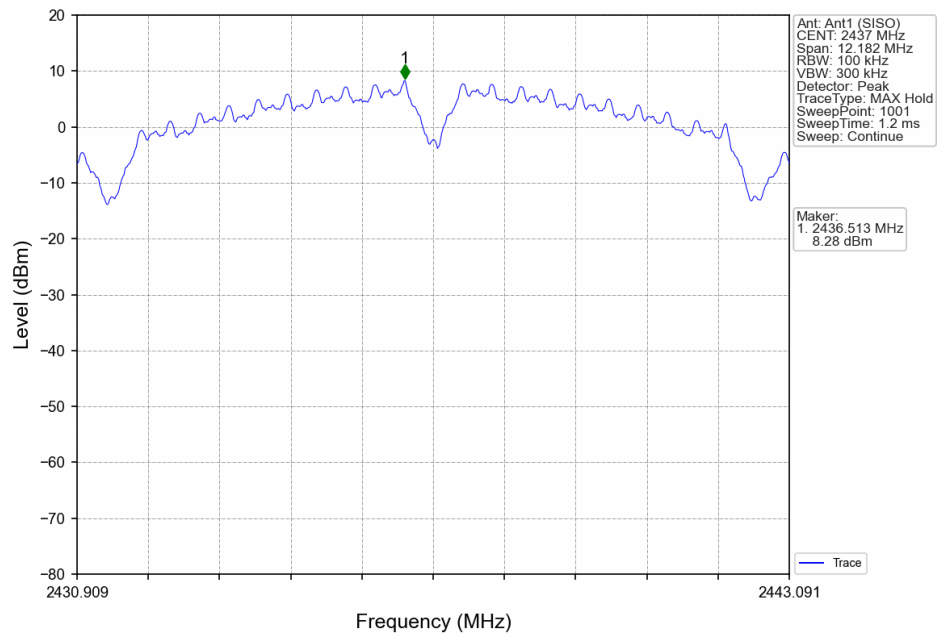
Mode	Tx Type	Frequency (MHz)	ANT	Level of Reference (dBm)
802.11b	SISO	2412	1	7.83
			2	6.56
		2437	1	8.28
			2	6.29
		2462	1	7.67
			2	6.04
802.11g	SISO	2412	1	5.89
			2	4.39
		2437	1	6.07
			2	5.03
		2462	1	5.51
			2	5.31
802.11n (HT20)	SISO	2412	1	5.35
			2	4.91
		2437	1	6.11
			2	5.11
		2462	1	5.49
			2	5.30
802.11n (HT40)	SISO	2422	1	3.05
			2	1.99
		2437	1	3.31
			2	2.25
		2452	1	3.18
			2	2.12
802.11n (HT20)	MIMO	2412	1	5.95
			2	4.79
		2437	1	5.88
			2	5.19
		2462	1	5.55
			2	4.43
802.11n (HT40)	MIMO	2422	1	2.78
			2	2.52
		2437	1	3.44
			2	2.42
		2452	1	3.60
			2	2.62

Note1: Refer to FCC Part 15.247 (d) and ANSI C63.10-2013, the channel contains the maximum PSD level was used to establish the reference level.

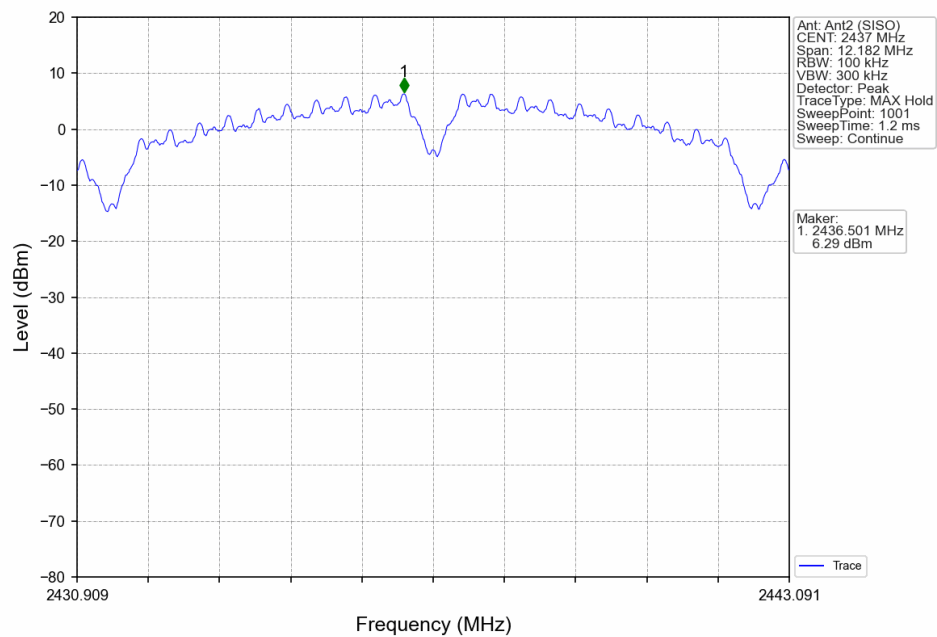
4.1.2 Test Graph



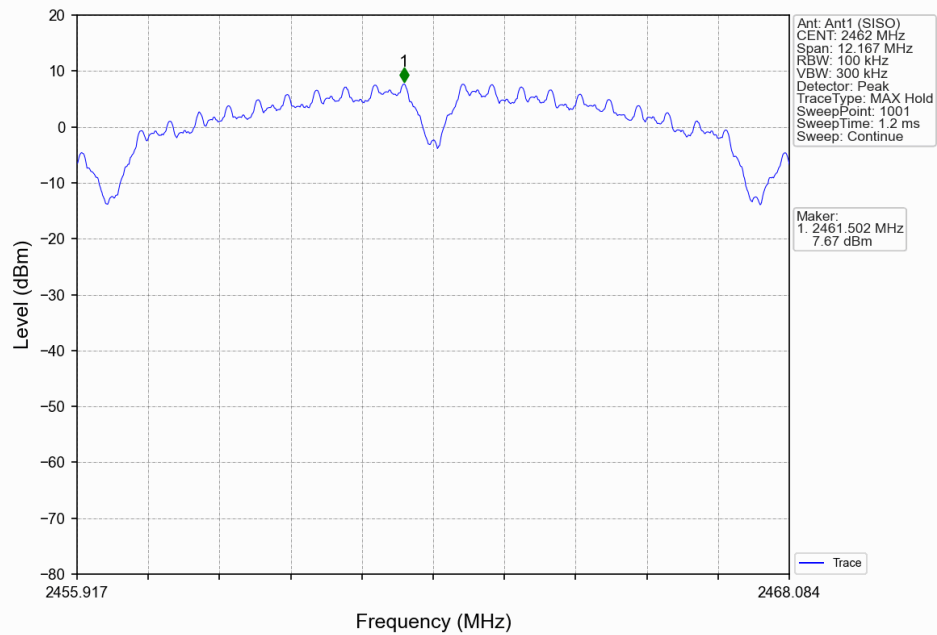
802.11b MCH 2437MHz Ant1 (SISO) NTN



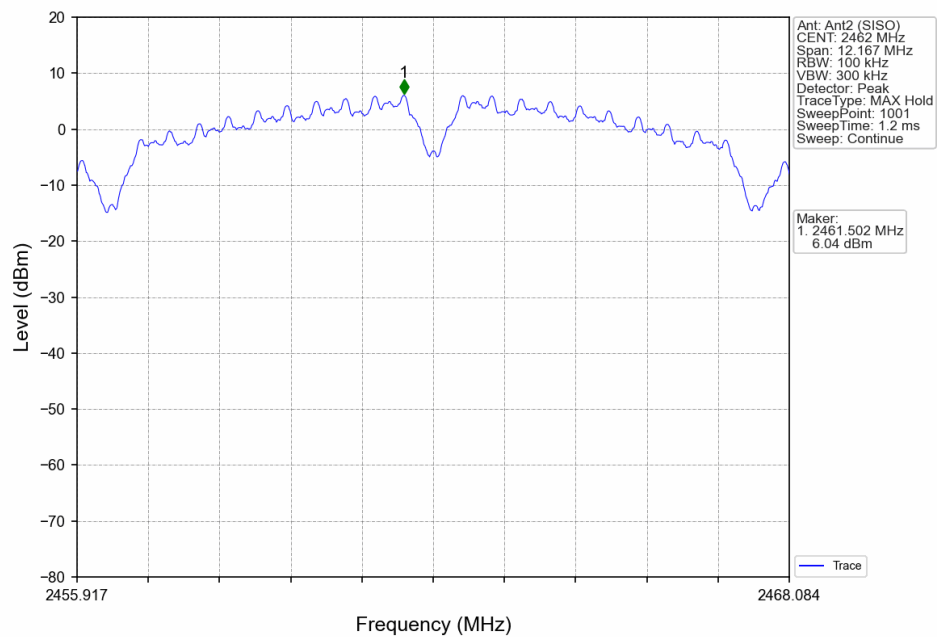
802.11b MCH 2437MHz Ant2 (SISO) NTN



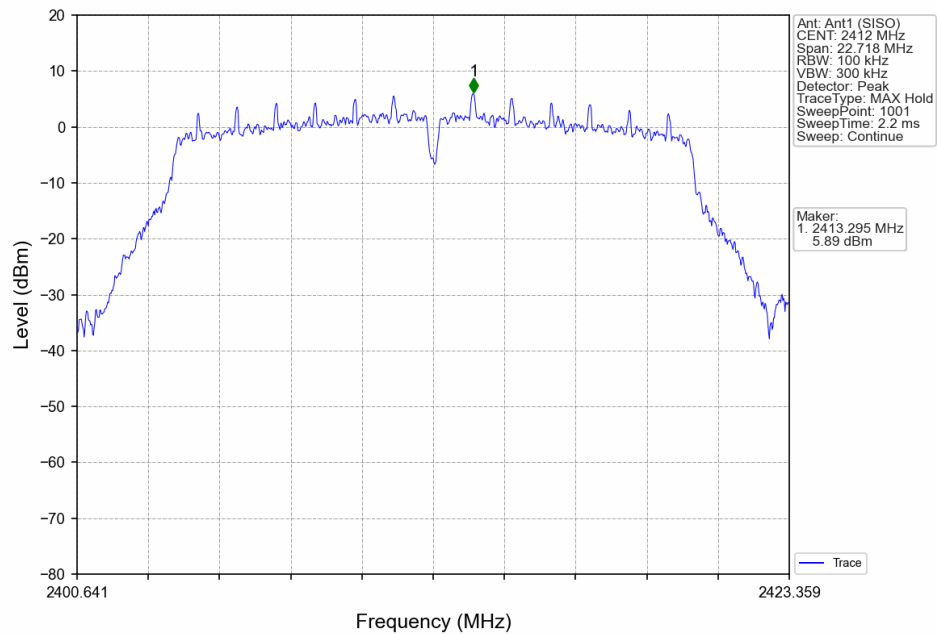
802.11b HCH 2462MHz Ant1 (SISO) NTN



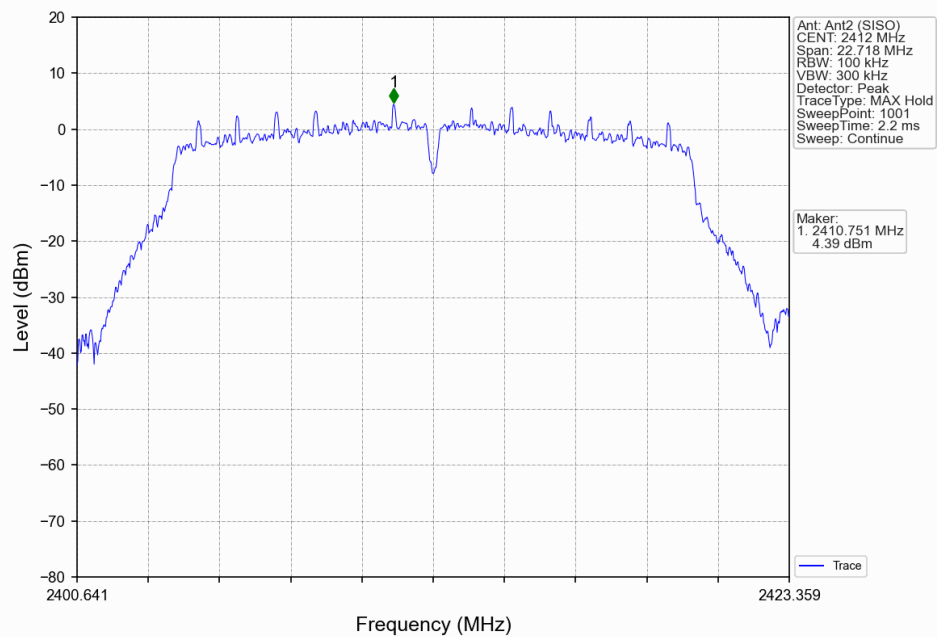
802.11b HCH 2462MHz Ant2 (SISO) NTN



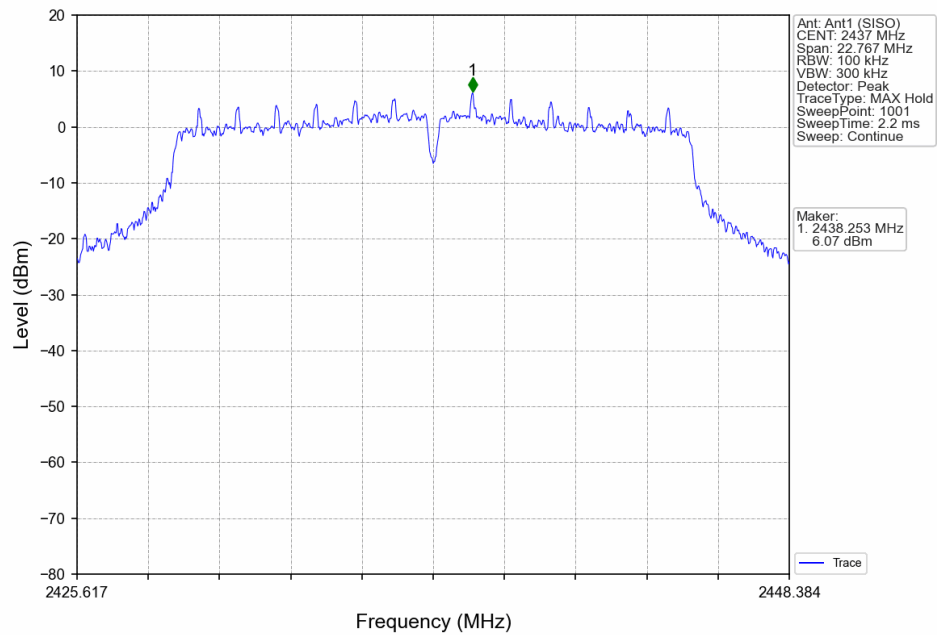
802.11g_LCH_2412MHz_Ant1 (SISO) NTN



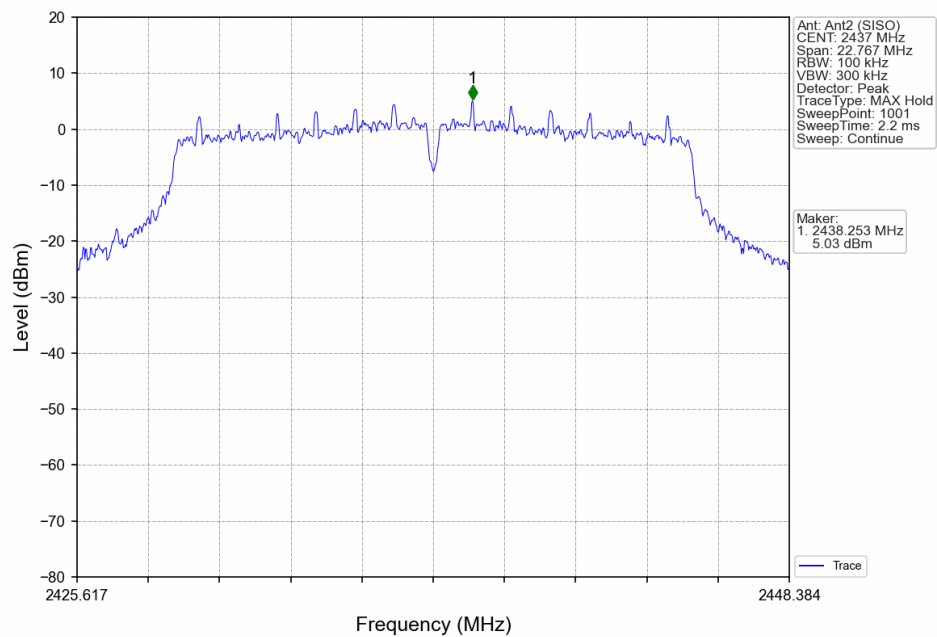
802.11g_LCH_2412MHz_Ant2 (SISO) NTN



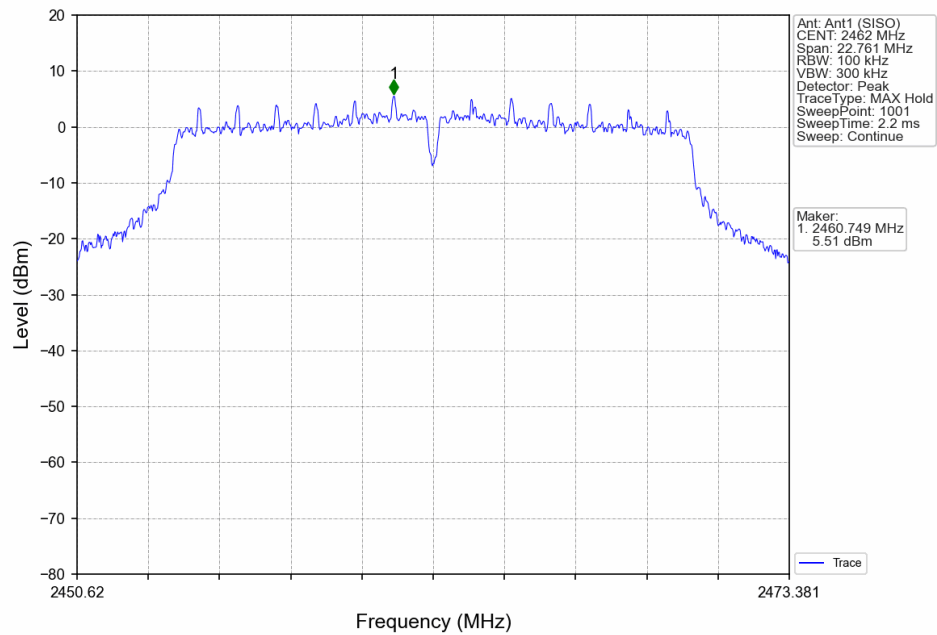
802.11g MCH 2437MHz Ant1 (SISO) NTN



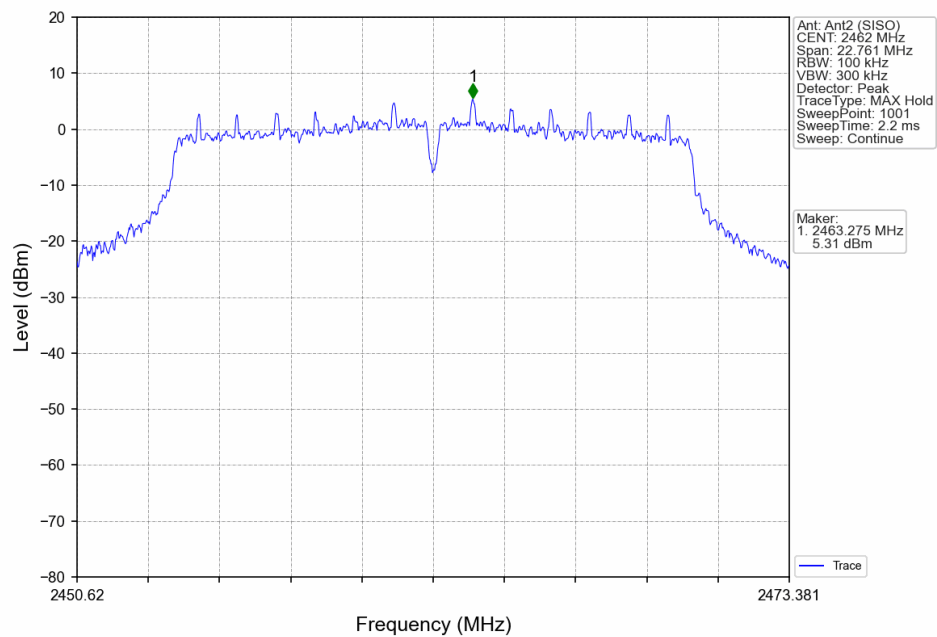
802.11g MCH 2437MHz Ant2 (SISO) NTN



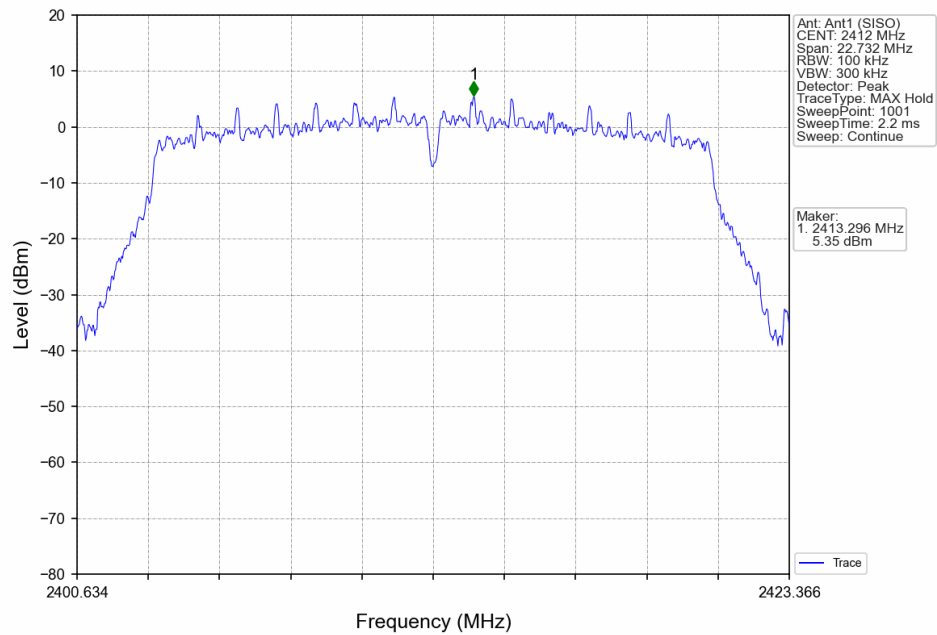
802.11g HCH 2462MHz Ant1 (SISO) NTN



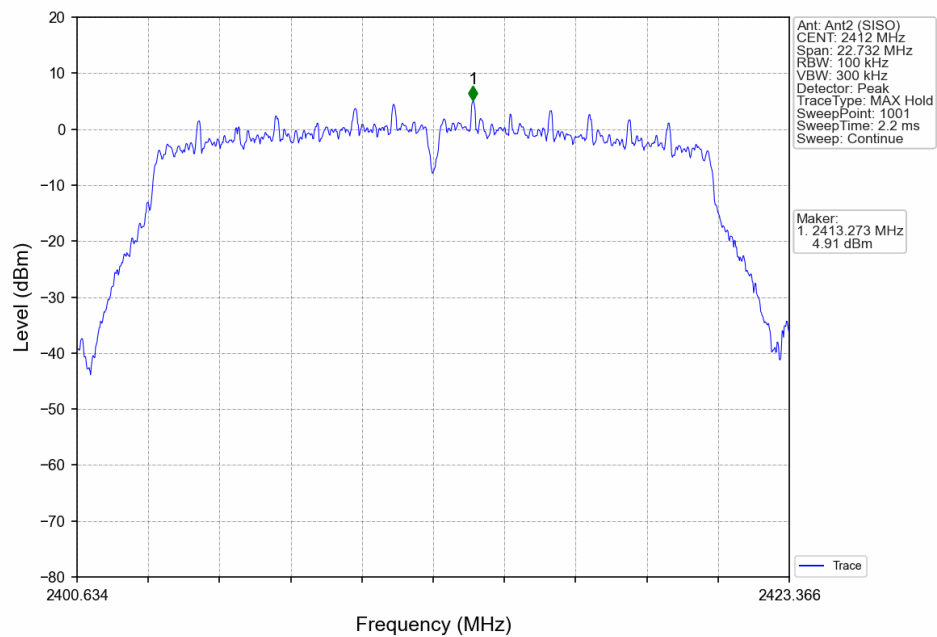
802.11g HCH 2462MHz Ant2 (SISO) NTN



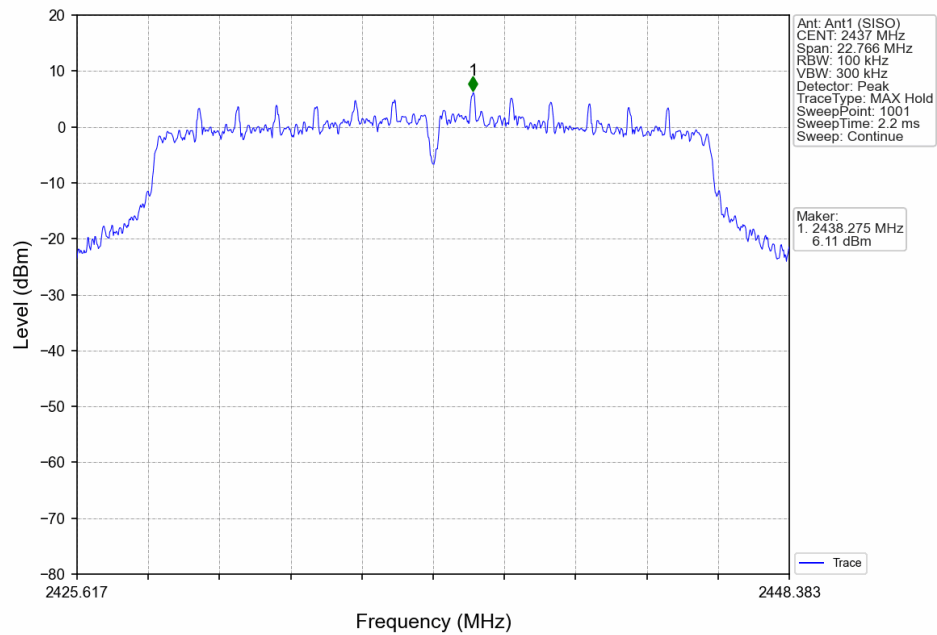
802.11n(HT20) LCH_2412MHz_Ant1 (SISO) NTN



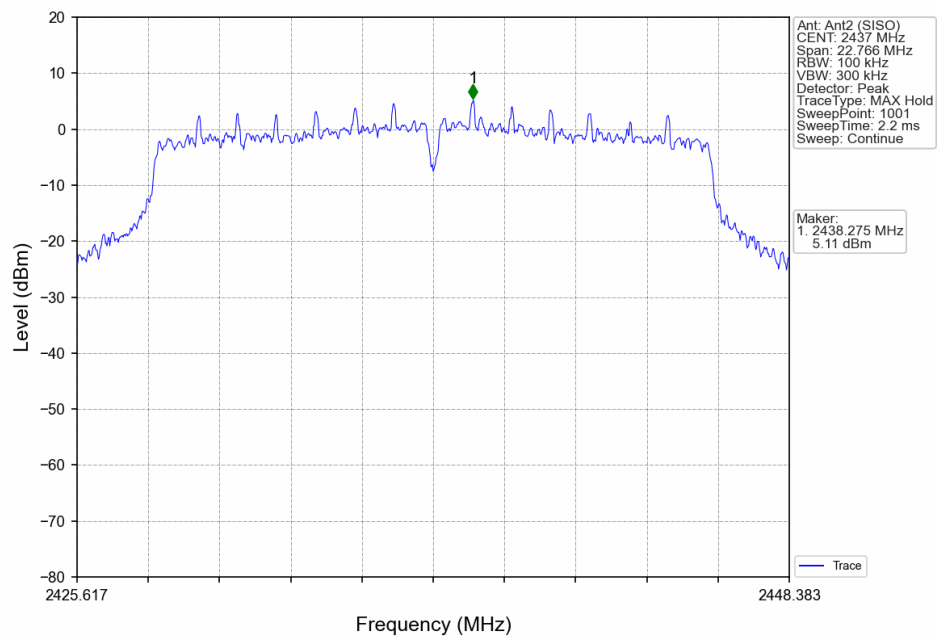
802.11n(HT20) LCH_2412MHz_Ant2 (SISO) NTN



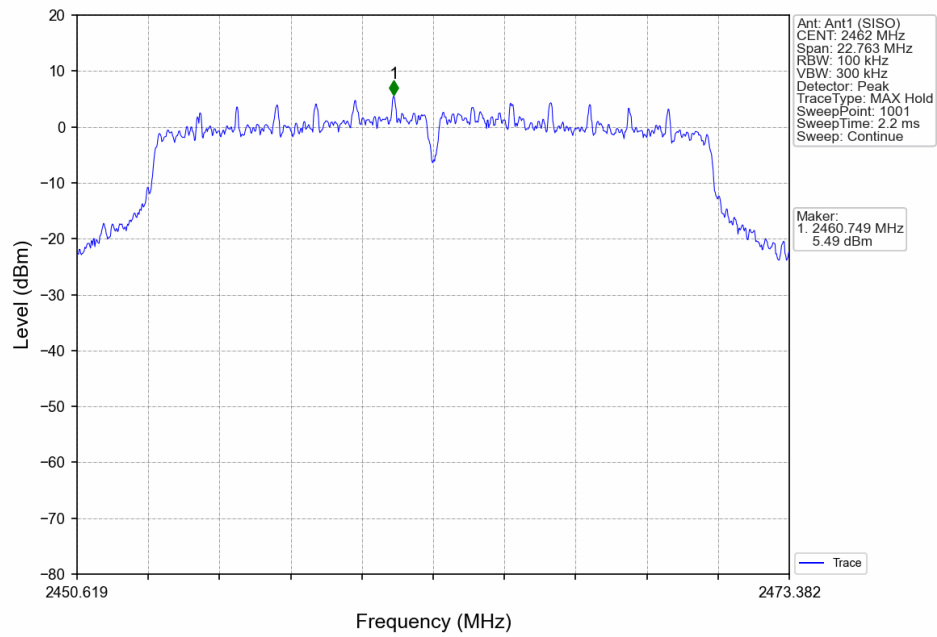
802.11n(HT20) MCH_2437MHz_Ant1 (SISO) NTN



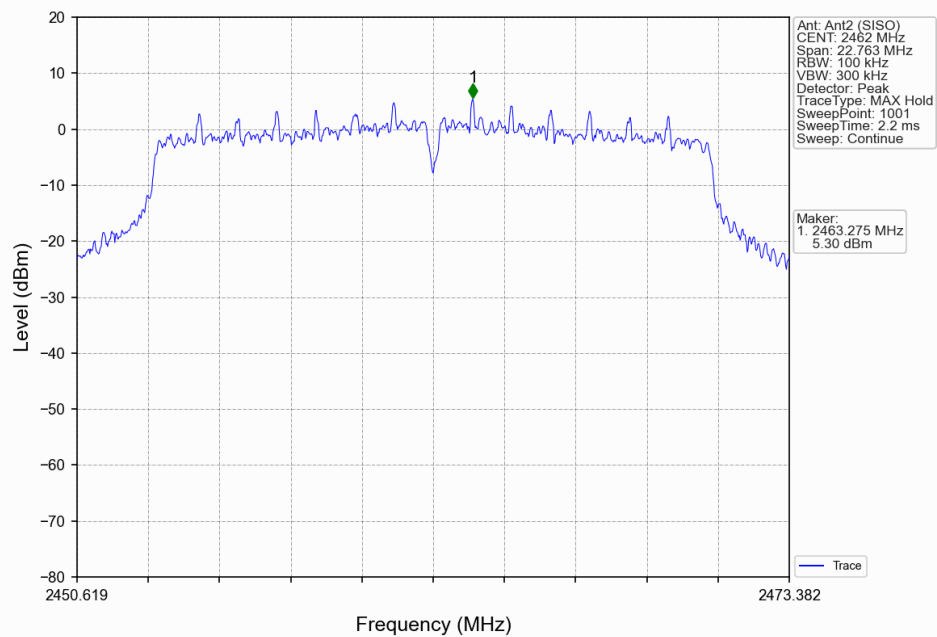
802.11n(HT20) MCH_2437MHz_Ant2 (SISO) NTN



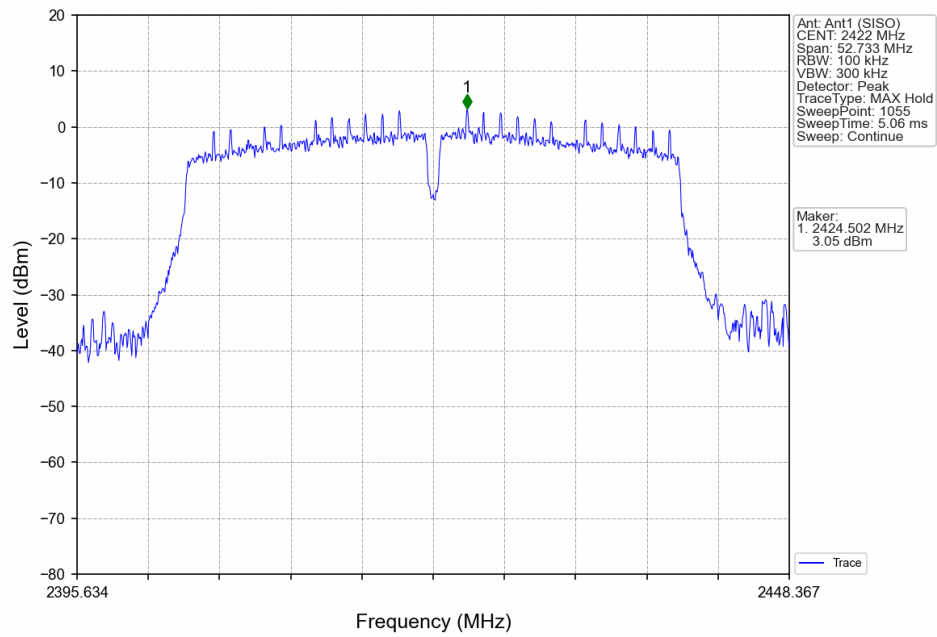
802.11n(HT20) HCH 2462MHz Ant1 (SISO) NTN



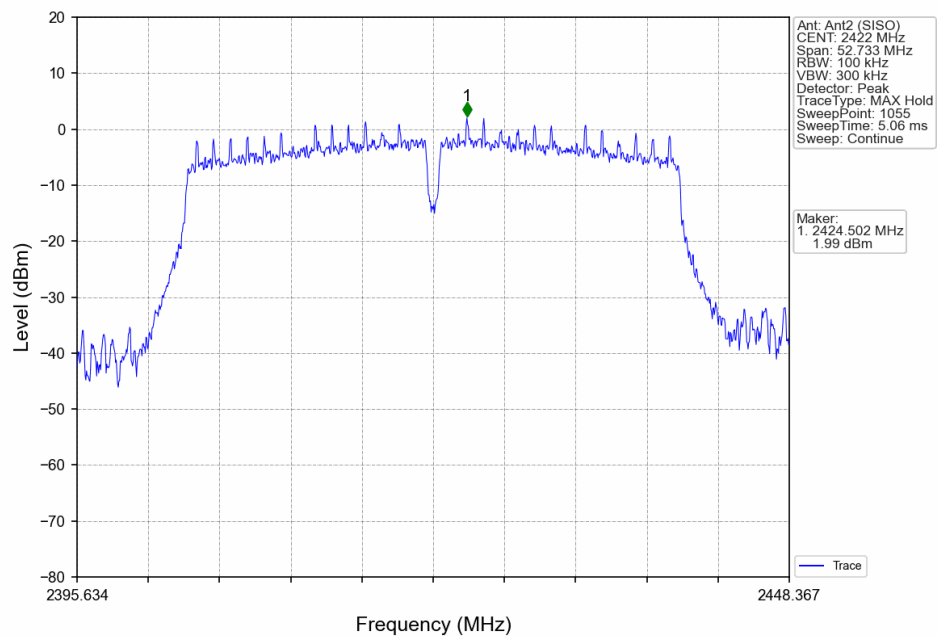
802.11n(HT20) HCH 2462MHz Ant2 (SISO) NTN



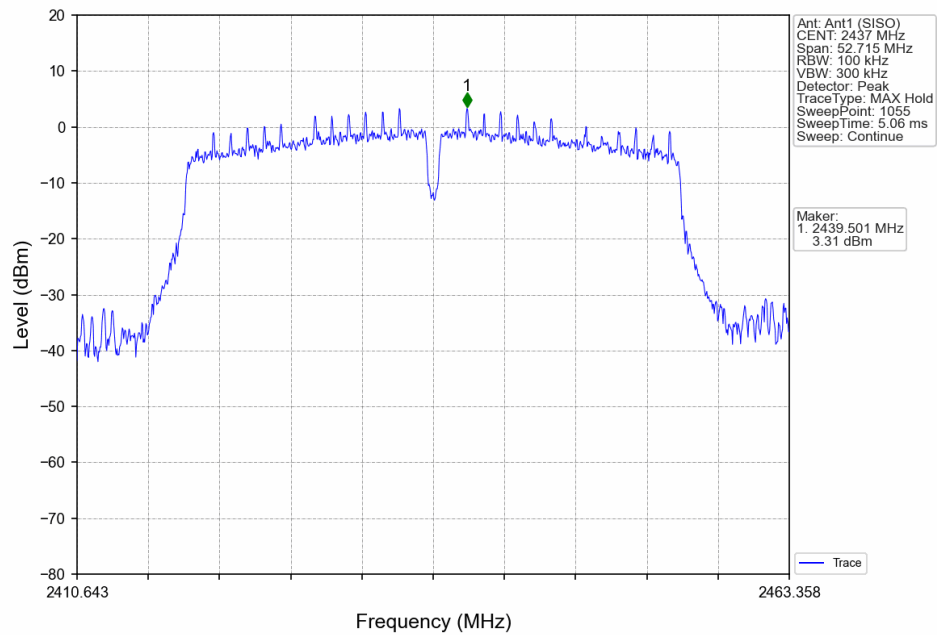
802.11n(HT40) LCH 2422MHz Ant1 (SISO) NTN



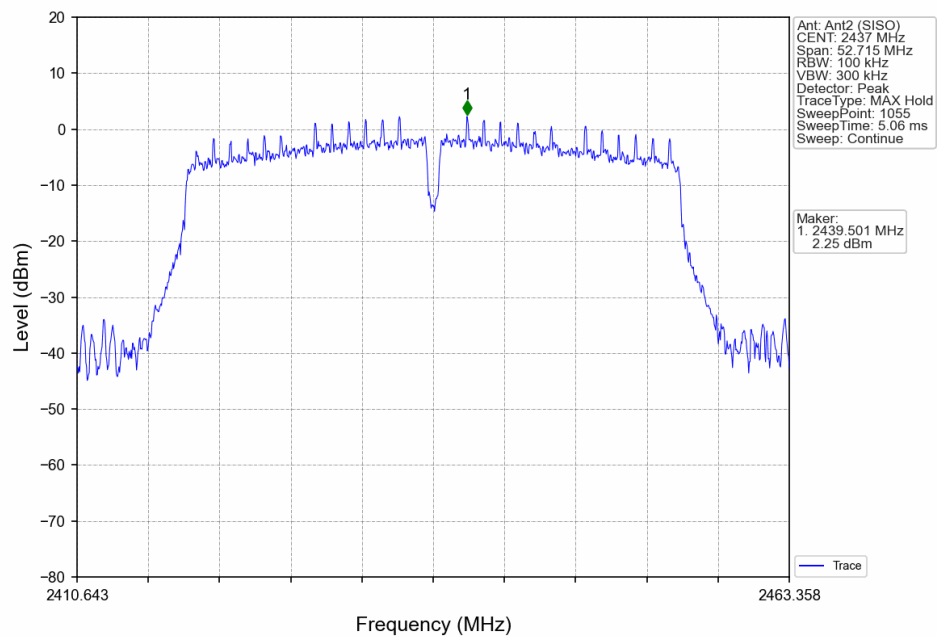
802.11n(HT40) LCH 2422MHz Ant2 (SISO) NTN



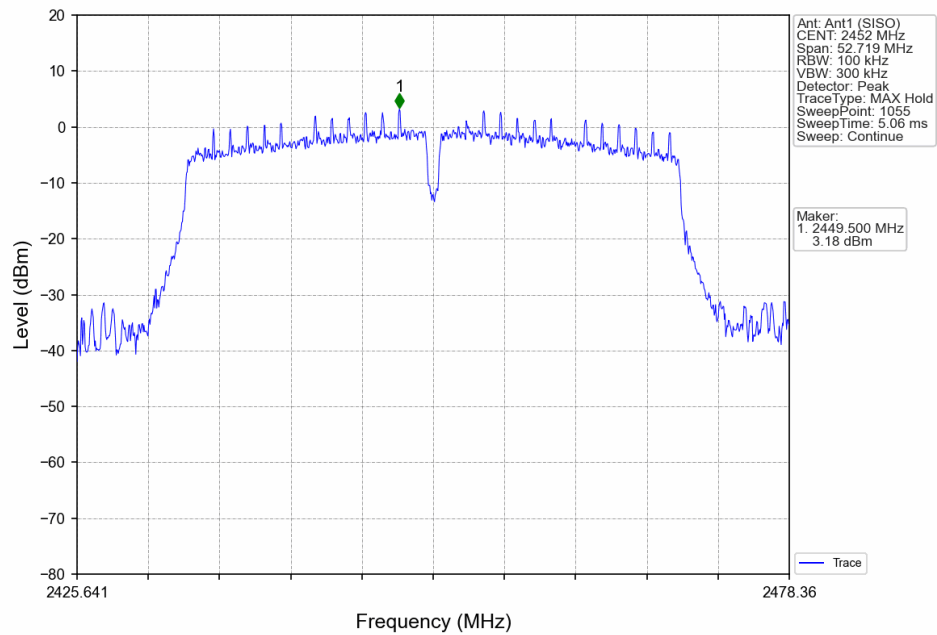
802.11n(HT40) MCH_2437MHz_Ant1 (SISO) NTN



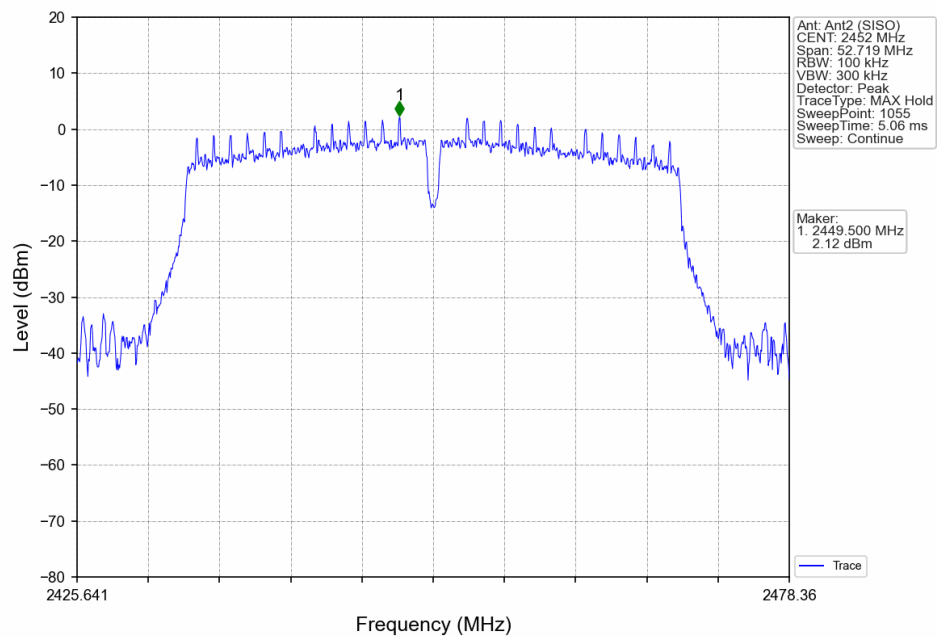
802.11n(HT40) MCH_2437MHz_Ant2 (SISO) NTN



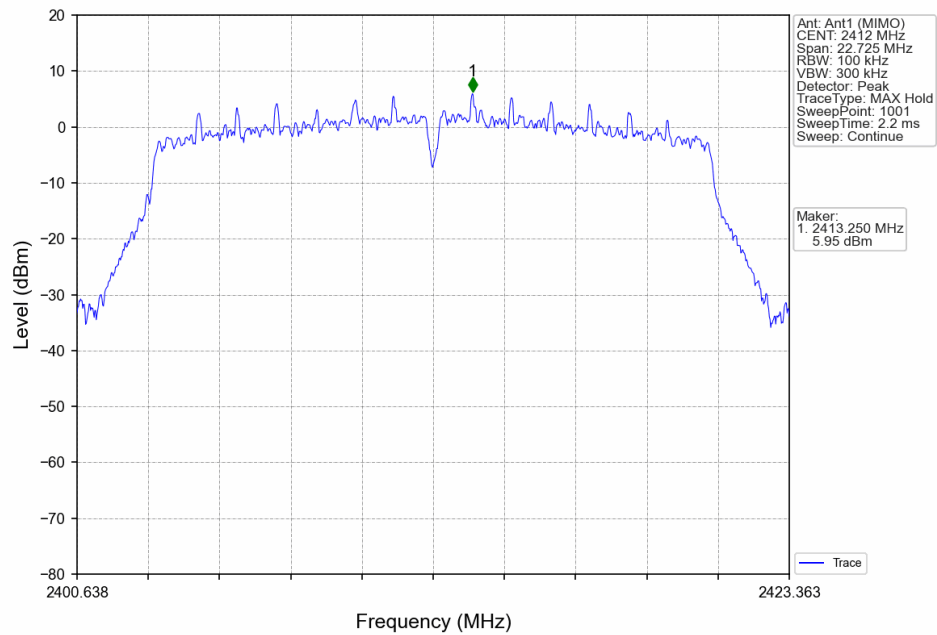
802.11n(HT40) HCH 2452MHz Ant1 (SISO) NTNV



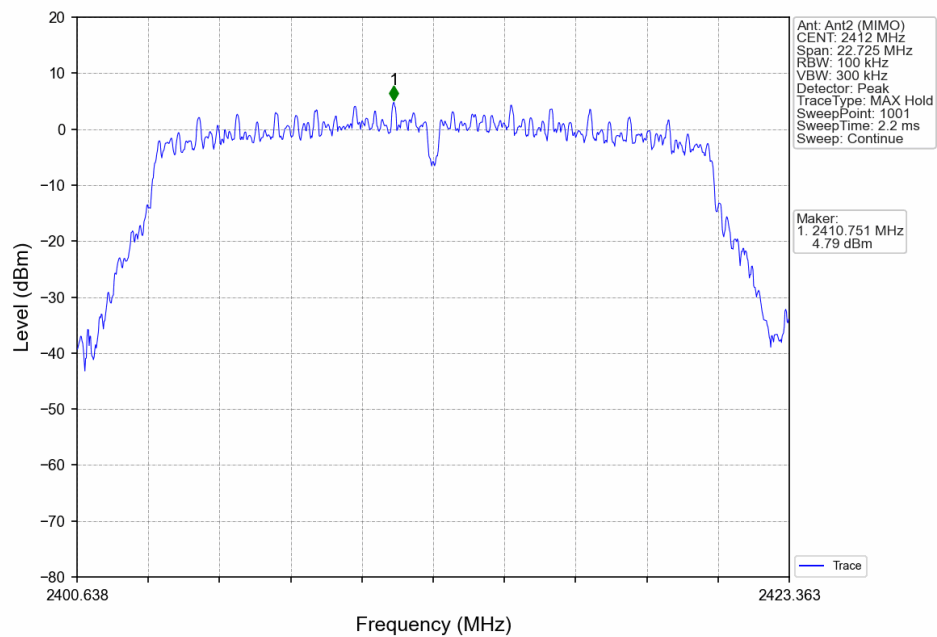
802.11n(HT40) HCH 2452MHz Ant2 (SISO) NTNV



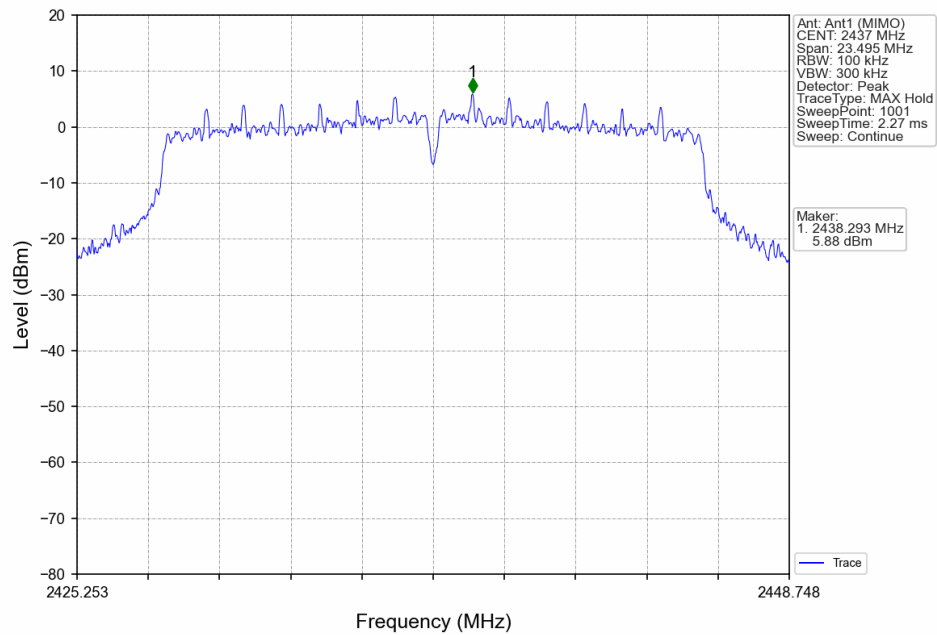
802.11n(HT20) LCH 2412MHz Ant1 (MIMO) NTN



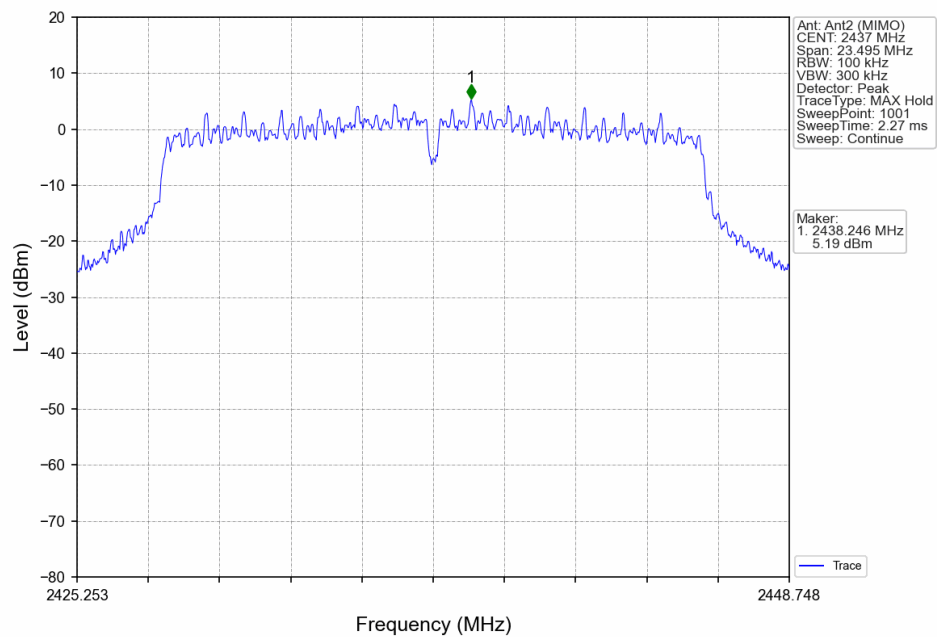
802.11n(HT20) LCH 2412MHz Ant2 (MIMO) NTN



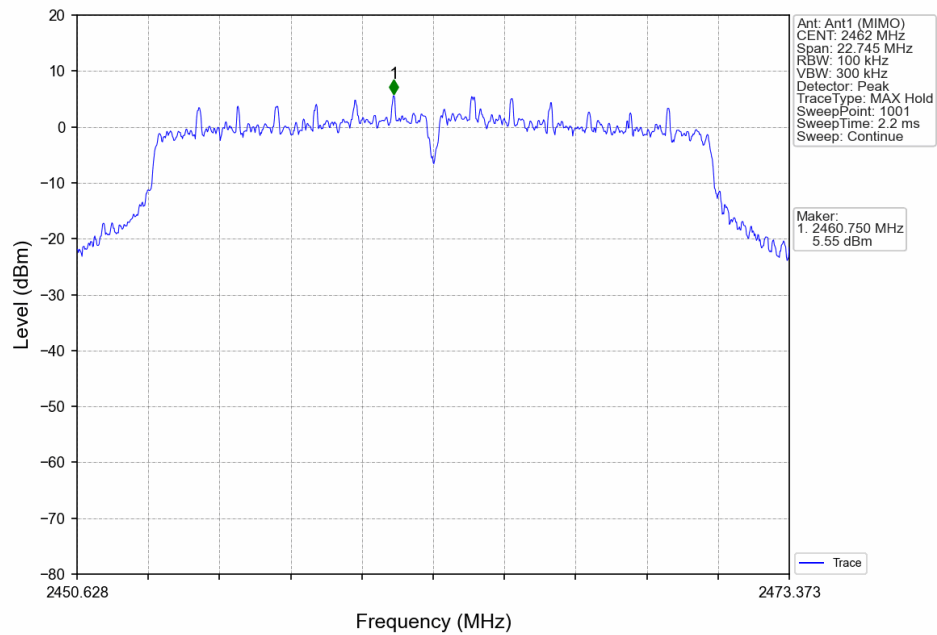
802.11n(HT20) MCH_2437MHz_Ant1 (MIMO) NTN



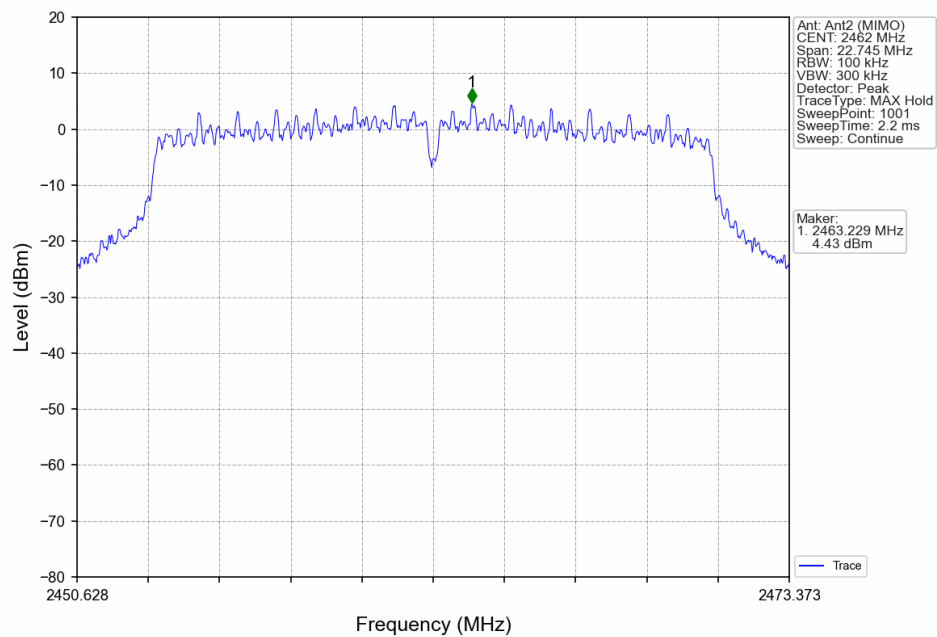
802.11n(HT20) MCH_2437MHz_Ant2 (MIMO) NTN



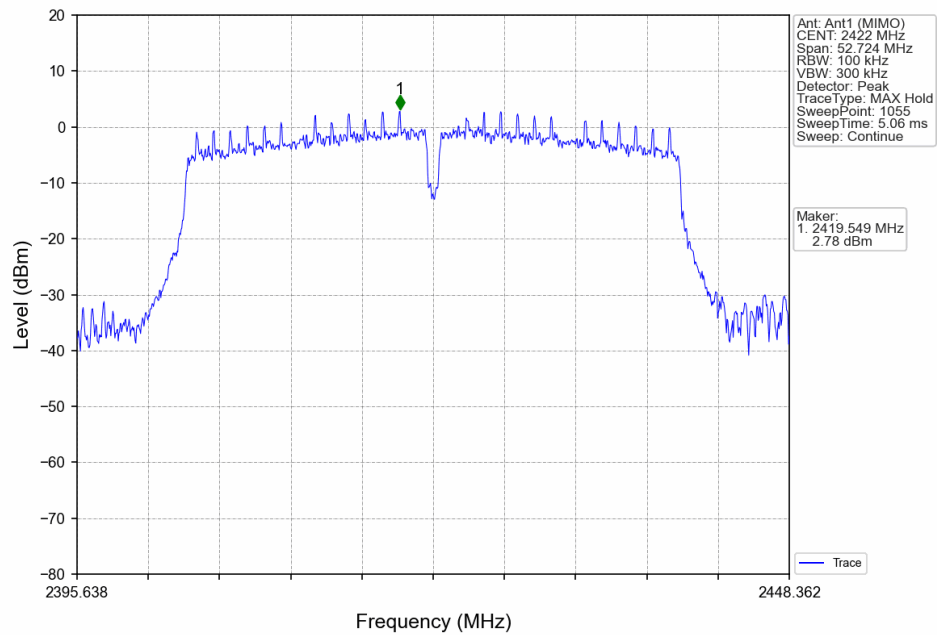
802.11n(HT20) HCH 2462MHz Ant1 (MIMO) NTNV



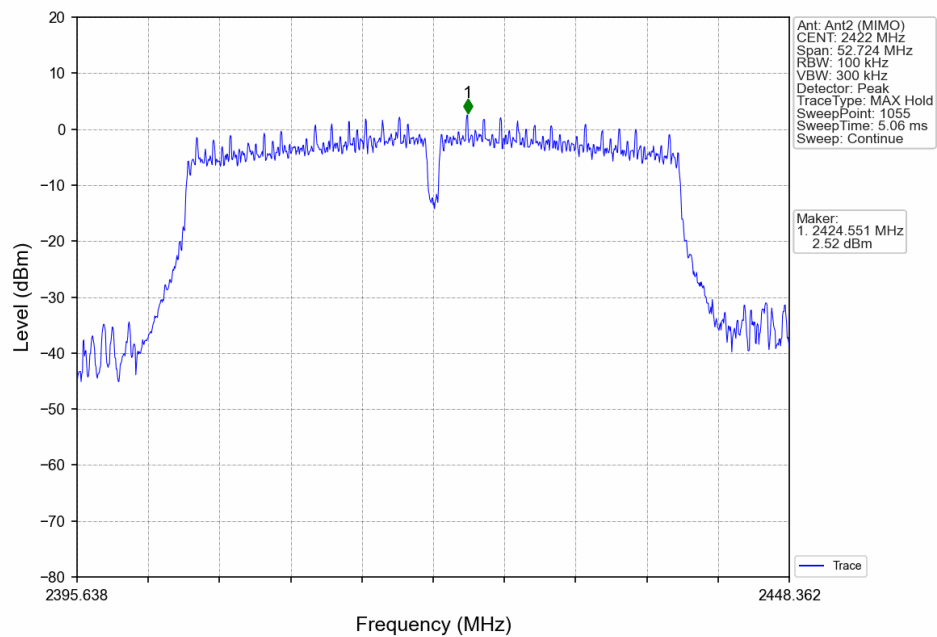
802.11n(HT20) HCH 2462MHz Ant2 (MIMO) NTNV



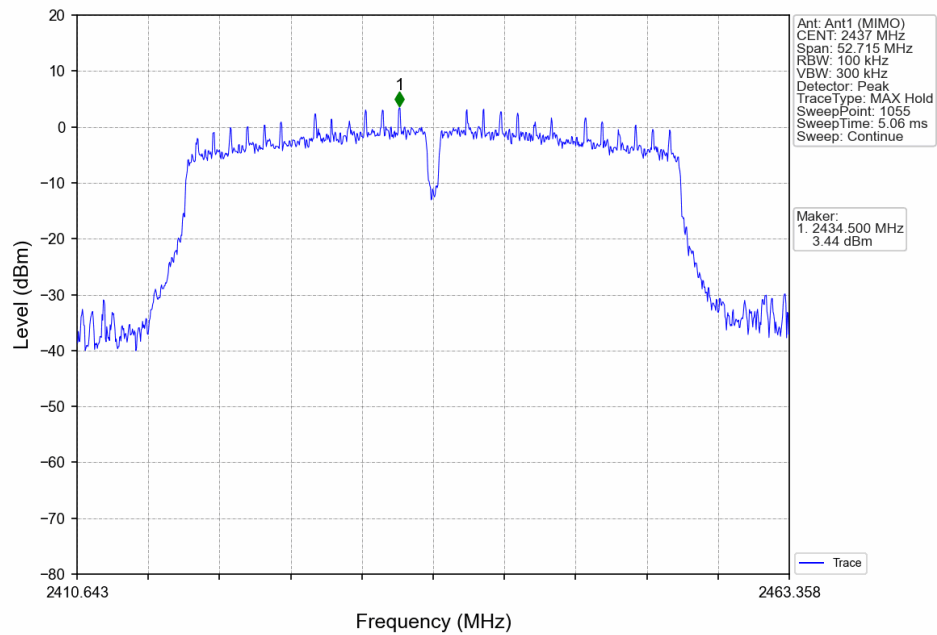
802.11n(HT40) LCH 2422MHz Ant1 (MIMO) NTNV



802.11n(HT40) LCH 2422MHz Ant2 (MIMO) NTNV



802.11n(HT40) MCH 2437MHz Ant1 (MIMO) NTN



802.11n(HT40) MCH 2437MHz Ant2 (MIMO) NTN

