

1. Effective (Isotropic) Radiated Power Output Data

1.1 15k_SISO_10MHz_NTNV_EIRP

1.1.1 Test Result

5G NR n30 SCS=15kHz SISO 10MHz NTNv										
Modulation	Frequency (MHz)	RB Allocation	Conducted Power(dBm)			EIRP(dBm)				Verdict
			Ant2	Ant2*	Sum	Ant2	Ant2*	Sum	Limit	
DFT-s-OFDM PI/2 BPSK	2310	Edge_1RB_Left	23.24	/	/	23.54	/	/	<=23.98	Pass
		Edge_1RB_Right	23.13	/	/	23.43	/	/	<=23.98	Pass
		Outer_Full	23.25	/	/	23.55	/	/	<=23.98	Pass
		Inner_Full	23.35	/	/	23.65	/	/	<=23.98	Pass
		Inner_1RB_Left	23.18	/	/	23.48	/	/	<=23.98	Pass
		Inner_1RB_Right	23.23	/	/	23.53	/	/	<=23.98	Pass
DFT-s-OFDM QPSK	2310	Edge_1RB_Left	23.28	/	/	23.58	/	/	<=23.98	Pass
		Edge_1RB_Right	23.43	/	/	23.73	/	/	<=23.98	Pass
		Outer_Full	23.12	/	/	23.42	/	/	<=23.98	Pass
		Inner_Full	23.22	/	/	23.52	/	/	<=23.98	Pass
		Inner_1RB_Left	23.12	/	/	23.42	/	/	<=23.98	Pass
		Inner_1RB_Right	23.30	/	/	23.60	/	/	<=23.98	Pass
DFT-s-OFDM 16 QAM	2310	Edge_1RB_Left	22.12	/	/	22.42	/	/	<=23.98	Pass
		Edge_1RB_Right	22.14	/	/	22.44	/	/	<=23.98	Pass
		Outer_Full	22.26	/	/	22.56	/	/	<=23.98	Pass
		Inner_Full	23.30	/	/	23.60	/	/	<=23.98	Pass
		Inner_1RB_Left	23.13	/	/	23.43	/	/	<=23.98	Pass
		Inner_1RB_Right	23.16	/	/	23.46	/	/	<=23.98	Pass
DFT-s-OFDM 64 QAM	2310	Edge_1RB_Left	21.90	/	/	22.20	/	/	<=23.98	Pass
		Edge_1RB_Right	21.95	/	/	22.25	/	/	<=23.98	Pass
		Outer_Full	21.86	/	/	22.16	/	/	<=23.98	Pass
		Inner_Full	21.81	/	/	22.11	/	/	<=23.98	Pass
		Inner_1RB_Left	21.95	/	/	22.25	/	/	<=23.98	Pass
		Inner_1RB_Right	21.92	/	/	22.22	/	/	<=23.98	Pass
DFT-s-OFDM 256 QAM	2310	Edge_1RB_Left	19.17	/	/	19.47	/	/	<=23.98	Pass
		Edge_1RB_Right	19.17	/	/	19.47	/	/	<=23.98	Pass
		Outer_Full	19.80	/	/	20.10	/	/	<=23.98	Pass
		Inner_Full	19.75	/	/	20.05	/	/	<=23.98	Pass
		Inner_1RB_Left	19.14	/	/	19.44	/	/	<=23.98	Pass
		Inner_1RB_Right	19.20	/	/	19.50	/	/	<=23.98	Pass
CP-OFDM QPSK	2310	Edge_1RB_Left	21.09	/	/	21.39	/	/	<=23.98	Pass
		Edge_1RB_Right	21.57	/	/	21.87	/	/	<=23.98	Pass
		Outer_Full	21.26	/	/	21.56	/	/	<=23.98	Pass
		Inner_Full	22.74	/	/	23.04	/	/	<=23.98	Pass
		Inner_1RB_Left	22.50	/	/	22.80	/	/	<=23.98	Pass
		Inner_1RB_Right	22.72	/	/	23.02	/	/	<=23.98	Pass
CP-OFDM 16 QAM	2310	Edge_1RB_Left	21.32	/	/	21.62	/	/	<=23.98	Pass
		Edge_1RB_Right	21.33	/	/	21.63	/	/	<=23.98	Pass
		Outer_Full	21.19	/	/	21.49	/	/	<=23.98	Pass
		Inner_Full	22.26	/	/	22.56	/	/	<=23.98	Pass
		Inner_1RB_Left	22.37	/	/	22.67	/	/	<=23.98	Pass
		Inner_1RB_Right	22.39	/	/	22.69	/	/	<=23.98	Pass
CP-OFDM 64 QAM	2310	Edge_1RB_Left	20.90	/	/	21.20	/	/	<=23.98	Pass
		Edge_1RB_Right	20.99	/	/	21.29	/	/	<=23.98	Pass
		Outer_Full	20.72	/	/	21.02	/	/	<=23.98	Pass
		Inner_Full	20.81	/	/	21.11	/	/	<=23.98	Pass
		Inner_1RB_Left	20.79	/	/	21.09	/	/	<=23.98	Pass
		Inner_1RB_Right	20.90	/	/	21.20	/	/	<=23.98	Pass
CP-OFDM 256 QAM	2310	Edge_1RB_Left	17.33	/	/	17.63	/	/	<=23.98	Pass

		Edge 1RB Right	17.30	/	/	17.60	/	/	<=23.98	Pass
		Outer Full	17.61	/	/	17.91	/	/	<=23.98	Pass
		Inner Full	17.74	/	/	18.04	/	/	<=23.98	Pass
		Inner 1RB Left	17.30	/	/	17.60	/	/	<=23.98	Pass
		Inner 1RB Right	17.23	/	/	17.53	/	/	<=23.98	Pass
Note1: Antenna Gain: Ant2: 0.30dBi; Note2: EIRP=Conducted Power+Antenna Gain										

1.2 15k_SISO_10MHz_NTNV_EIRP(dBm/5MHz)

1.2.1 Test Result

5G NR n30 SCS=15kHz SISO 10MHz NTN										
Modulation	Frequency (MHz)	RB Allocation	Conducted Power(dBm/5MHz)			EIRP(dBm/5MHz)				Verdict
			Ant2	Ant2*	Sum	Ant2	Ant2*	Sum	Limit	
DFT-s-OFDM PI/2 BPSK	2310	Edge 1RB Left	22.94	/	/	23.24	/	/	<=23.98	Pass
		Edge 1RB Right	22.47	/	/	22.77	/	/	<=23.98	Pass
		Outer Full	22.70	/	/	23.00	/	/	<=23.98	Pass
		Inner Full	23.04	/	/	23.34	/	/	<=23.98	Pass
		Inner 1RB Left	22.82	/	/	23.12	/	/	<=23.98	Pass
		Inner 1RB Right	22.64	/	/	22.94	/	/	<=23.98	Pass
DFT-s-OFDM QPSK	2310	Edge 1RB Left	23.04	/	/	23.34	/	/	<=23.98	Pass
		Edge 1RB Right	22.63	/	/	22.93	/	/	<=23.98	Pass
		Outer Full	22.69	/	/	22.99	/	/	<=23.98	Pass
		Inner Full	22.68	/	/	22.98	/	/	<=23.98	Pass
		Inner 1RB Left	22.79	/	/	23.09	/	/	<=23.98	Pass
		Inner 1RB Right	22.67	/	/	22.97	/	/	<=23.98	Pass
DFT-s-OFDM 16 QAM	2310	Edge 1RB Left	21.98	/	/	22.28	/	/	<=23.98	Pass
		Edge 1RB Right	21.43	/	/	21.73	/	/	<=23.98	Pass
		Outer Full	21.56	/	/	21.86	/	/	<=23.98	Pass
		Inner Full	22.75	/	/	23.05	/	/	<=23.98	Pass
		Inner 1RB Left	22.87	/	/	23.17	/	/	<=23.98	Pass
		Inner 1RB Right	22.51	/	/	22.81	/	/	<=23.98	Pass
DFT-s-OFDM 64 QAM	2310	Edge 1RB Left	21.71	/	/	22.01	/	/	<=23.98	Pass
		Edge 1RB Right	21.10	/	/	21.40	/	/	<=23.98	Pass
		Outer Full	21.37	/	/	21.67	/	/	<=23.98	Pass
		Inner Full	21.22	/	/	21.52	/	/	<=23.98	Pass
		Inner 1RB Left	21.53	/	/	21.83	/	/	<=23.98	Pass
		Inner 1RB Right	21.22	/	/	21.52	/	/	<=23.98	Pass
DFT-s-OFDM 256 QAM	2310	Edge 1RB Left	18.93	/	/	19.23	/	/	<=23.98	Pass
		Edge 1RB Right	18.57	/	/	18.87	/	/	<=23.98	Pass
		Outer Full	19.25	/	/	19.55	/	/	<=23.98	Pass
		Inner Full	19.26	/	/	19.56	/	/	<=23.98	Pass
		Inner 1RB Left	18.90	/	/	19.20	/	/	<=23.98	Pass
		Inner 1RB Right	18.61	/	/	18.91	/	/	<=23.98	Pass
CP-OFDM QPSK	2310	Edge 1RB Left	20.90	/	/	21.20	/	/	<=23.98	Pass
		Edge 1RB Right	20.87	/	/	21.17	/	/	<=23.98	Pass
		Outer Full	20.81	/	/	21.11	/	/	<=23.98	Pass
		Inner Full	22.33	/	/	22.63	/	/	<=23.98	Pass
		Inner 1RB Left	22.42	/	/	22.72	/	/	<=23.98	Pass
		Inner 1RB Right	22.24	/	/	22.54	/	/	<=23.98	Pass
CP-OFDM 16 QAM	2310	Edge 1RB Left	21.37	/	/	21.67	/	/	<=23.98	Pass
		Edge 1RB Right	20.67	/	/	20.97	/	/	<=23.98	Pass
		Outer Full	20.75	/	/	21.05	/	/	<=23.98	Pass
		Inner Full	21.80	/	/	22.10	/	/	<=23.98	Pass
		Inner 1RB Left	21.89	/	/	22.19	/	/	<=23.98	Pass
		Inner 1RB Right	21.92	/	/	22.22	/	/	<=23.98	Pass

CP-OFDM 64 QAM	2310	Edge_1RB_Left	20.64	/	/	20.94	/	/	<=23.98	Pass
		Edge_1RB_Right	20.43	/	/	20.73	/	/	<=23.98	Pass
		Outer_Full	20.29	/	/	20.59	/	/	<=23.98	Pass
		Inner_Full	20.31	/	/	20.61	/	/	<=23.98	Pass
		Inner_1RB_Left	20.55	/	/	20.85	/	/	<=23.98	Pass
		Inner_1RB_Right	20.15	/	/	20.45	/	/	<=23.98	Pass
CP-OFDM 256 QAM	2310	Edge_1RB_Left	17.28	/	/	17.58	/	/	<=23.98	Pass
		Edge_1RB_Right	16.65	/	/	16.95	/	/	<=23.98	Pass
		Outer_Full	17.12	/	/	17.42	/	/	<=23.98	Pass
		Inner_Full	17.16	/	/	17.46	/	/	<=23.98	Pass
		Inner_1RB_Left	16.83	/	/	17.13	/	/	<=23.98	Pass
		Inner_1RB_Right	16.48	/	/	16.78	/	/	<=23.98	Pass
Note1: Antenna Gain: Ant2: 0.30dBi; Note2: EIRP=Conducted Power+Antenna Gain										

2. Frequency Stability

2.1 15k_SISO_10MHz

2.1.1 Test Result

5G NR n30 SCS=15kHz SISO 10MHz								
Modulation	Frequency (MHz)	RB Allocation	Temp. (°C)	Volt.	Freq. Error (Hz)	Freq. vs. rated (ppm)		Verdict
						Result	Limit	
DFT-s-OFDM PI/2 BPSK	2310	Outer_Full	20	LV	-9.60	-0.0042	>=-2.5 & <=2.5	Pass
				HV	-9.00	-0.0039	>=-2.5 & <=2.5	Pass
			-30	NV	-7.80	-0.0034	>=-2.5 & <=2.5	Pass
			-20	NV	-8.60	-0.0037	>=-2.5 & <=2.5	Pass
			-10	NV	-5.50	-0.0024	>=-2.5 & <=2.5	Pass
			0	NV	-6.90	-0.0030	>=-2.5 & <=2.5	Pass
			10	NV	-7.70	-0.0033	>=-2.5 & <=2.5	Pass
			20	NV	-8.30	-0.0036	>=-2.5 & <=2.5	Pass
			30	NV	-7.20	-0.0031	>=-2.5 & <=2.5	Pass
			40	NV	-8.80	-0.0038	>=-2.5 & <=2.5	Pass
DFT-s-OFDM QPSK	2310	Outer_Full	20	LV	-7.10	-0.0031	>=-2.5 & <=2.5	Pass
				HV	-6.10	-0.0026	>=-2.5 & <=2.5	Pass
			-30	NV	-5.40	-0.0023	>=-2.5 & <=2.5	Pass
			-20	NV	-7.00	-0.0030	>=-2.5 & <=2.5	Pass
			-10	NV	-9.50	-0.0041	>=-2.5 & <=2.5	Pass
			0	NV	-6.50	-0.0028	>=-2.5 & <=2.5	Pass
			10	NV	-8.00	-0.0035	>=-2.5 & <=2.5	Pass
			20	NV	-3.60	-0.0016	>=-2.5 & <=2.5	Pass
			30	NV	-6.00	-0.0026	>=-2.5 & <=2.5	Pass
			40	NV	-7.70	-0.0033	>=-2.5 & <=2.5	Pass
DFT-s-OFDM 16 QAM	2310	Outer_Full	20	LV	-5.50	-0.0024	>=-2.5 & <=2.5	Pass
				HV	-6.40	-0.0028	>=-2.5 & <=2.5	Pass
			-30	NV	-3.10	-0.0013	>=-2.5 & <=2.5	Pass
			-20	NV	-9.10	-0.0039	>=-2.5 & <=2.5	Pass
			-10	NV	-4.30	-0.0019	>=-2.5 & <=2.5	Pass
			0	NV	-4.30	-0.0019	>=-2.5 & <=2.5	Pass
			10	NV	-5.80	-0.0025	>=-2.5 & <=2.5	Pass
			20	NV	-6.20	-0.0027	>=-2.5 & <=2.5	Pass

			30	NV	-5.00	-0.0022	≥ -2.5 & ≤ 2.5	Pass
			40	NV	-1.50	-0.0006	≥ -2.5 & ≤ 2.5	Pass
			50	NV	-7.00	-0.0030	≥ -2.5 & ≤ 2.5	Pass
DFT-s-OFDM 64 QAM	2310	Outer_Full	20	LV	-7.70	-0.0033	≥ -2.5 & ≤ 2.5	Pass
				HV	-6.10	-0.0026	≥ -2.5 & ≤ 2.5	Pass
			-30	NV	-5.10	-0.0022	≥ -2.5 & ≤ 2.5	Pass
			-20	NV	-7.80	-0.0034	≥ -2.5 & ≤ 2.5	Pass
			-10	NV	-9.60	-0.0042	≥ -2.5 & ≤ 2.5	Pass
			0	NV	-8.90	-0.0039	≥ -2.5 & ≤ 2.5	Pass
			10	NV	-5.40	-0.0023	≥ -2.5 & ≤ 2.5	Pass
			20	NV	1.30	0.0006	≥ -2.5 & ≤ 2.5	Pass
			30	NV	-10.30	-0.0045	≥ -2.5 & ≤ 2.5	Pass
			40	NV	-7.30	-0.0032	≥ -2.5 & ≤ 2.5	Pass
			50	NV	-8.40	-0.0036	≥ -2.5 & ≤ 2.5	Pass
DFT-s-OFDM 256 QAM	2310	Outer_Full	20	LV	-4.90	-0.0021	≥ -2.5 & ≤ 2.5	Pass
				HV	-4.50	-0.0019	≥ -2.5 & ≤ 2.5	Pass
			-30	NV	-9.20	-0.0040	≥ -2.5 & ≤ 2.5	Pass
			-20	NV	-4.80	-0.0021	≥ -2.5 & ≤ 2.5	Pass
			-10	NV	-5.60	-0.0024	≥ -2.5 & ≤ 2.5	Pass
			0	NV	-7.70	-0.0033	≥ -2.5 & ≤ 2.5	Pass
			10	NV	-5.30	-0.0023	≥ -2.5 & ≤ 2.5	Pass
			20	NV	-4.20	-0.0018	≥ -2.5 & ≤ 2.5	Pass
			30	NV	-7.30	-0.0032	≥ -2.5 & ≤ 2.5	Pass
			40	NV	-7.30	-0.0032	≥ -2.5 & ≤ 2.5	Pass
			50	NV	-5.20	-0.0023	≥ -2.5 & ≤ 2.5	Pass
CP-OFDM QPSK	2310	Outer_Full	20	LV	-7.20	-0.0031	≥ -2.5 & ≤ 2.5	Pass
				HV	-7.80	-0.0034	≥ -2.5 & ≤ 2.5	Pass
			-30	NV	-7.20	-0.0031	≥ -2.5 & ≤ 2.5	Pass
			-20	NV	-8.30	-0.0036	≥ -2.5 & ≤ 2.5	Pass
			-10	NV	-3.70	-0.0016	≥ -2.5 & ≤ 2.5	Pass
			0	NV	-9.40	-0.0041	≥ -2.5 & ≤ 2.5	Pass
			10	NV	-4.40	-0.0019	≥ -2.5 & ≤ 2.5	Pass
			20	NV	-7.90	-0.0034	≥ -2.5 & ≤ 2.5	Pass
			30	NV	-8.00	-0.0035	≥ -2.5 & ≤ 2.5	Pass
			40	NV	-6.30	-0.0027	≥ -2.5 & ≤ 2.5	Pass
			50	NV	-3.40	-0.0015	≥ -2.5 & ≤ 2.5	Pass
CP-OFDM 16 QAM	2310	Outer_Full	20	LV	-6.80	-0.0029	≥ -2.5 & ≤ 2.5	Pass
				HV	-7.30	-0.0032	≥ -2.5 & ≤ 2.5	Pass
			-30	NV	-8.50	-0.0037	≥ -2.5 & ≤ 2.5	Pass
			-20	NV	-6.00	-0.0026	≥ -2.5 & ≤ 2.5	Pass
			-10	NV	-6.80	-0.0029	≥ -2.5 & ≤ 2.5	Pass
			0	NV	-8.70	-0.0038	≥ -2.5 & ≤ 2.5	Pass
			10	NV	-9.20	-0.0040	≥ -2.5 & ≤ 2.5	Pass
			20	NV	-9.30	-0.0040	≥ -2.5 & ≤ 2.5	Pass
			30	NV	-4.00	-0.0017	≥ -2.5 & ≤ 2.5	Pass
			40	NV	-6.50	-0.0028	≥ -2.5 & ≤ 2.5	Pass
			50	NV	-9.70	-0.0042	≥ -2.5 & ≤ 2.5	Pass
CP-OFDM 64 QAM	2310	Outer_Full	20	LV	-4.00	-0.0017	≥ -2.5 & ≤ 2.5	Pass
				HV	-4.80	-0.0021	≥ -2.5 & ≤ 2.5	Pass
			-30	NV	-2.60	-0.0011	≥ -2.5 & ≤ 2.5	Pass
			-20	NV	-4.70	-0.0020	≥ -2.5 & ≤ 2.5	Pass
			-10	NV	-5.70	-0.0025	≥ -2.5 & ≤ 2.5	Pass
			0	NV	-7.20	-0.0031	≥ -2.5 & ≤ 2.5	Pass
			10	NV	-4.40	-0.0019	≥ -2.5 & ≤ 2.5	Pass
			20	NV	-9.80	-0.0042	≥ -2.5 & ≤ 2.5	Pass
			30	NV	-2.90	-0.0013	≥ -2.5 & ≤ 2.5	Pass
			40	NV	-6.30	-0.0027	≥ -2.5 & ≤ 2.5	Pass
			50	NV	-4.20	-0.0018	≥ -2.5 & ≤ 2.5	Pass
CP-OFDM 256 QAM	2310	Outer_Full	20	LV	-9.00	-0.0039	≥ -2.5 & ≤ 2.5	Pass

				HV	-7.40	-0.0032	≥ -2.5 & ≤ 2.5	Pass
			-30	NV	-4.30	-0.0019	≥ -2.5 & ≤ 2.5	Pass
			-20	NV	-8.90	-0.0039	≥ -2.5 & ≤ 2.5	Pass
			-10	NV	-8.40	-0.0036	≥ -2.5 & ≤ 2.5	Pass
			0	NV	-7.10	-0.0031	≥ -2.5 & ≤ 2.5	Pass
			10	NV	-7.70	-0.0033	≥ -2.5 & ≤ 2.5	Pass
			20	NV	-6.10	-0.0026	≥ -2.5 & ≤ 2.5	Pass
			30	NV	-3.70	-0.0016	≥ -2.5 & ≤ 2.5	Pass
			40	NV	-5.20	-0.0023	≥ -2.5 & ≤ 2.5	Pass
			50	NV	-6.90	-0.0030	≥ -2.5 & ≤ 2.5	Pass

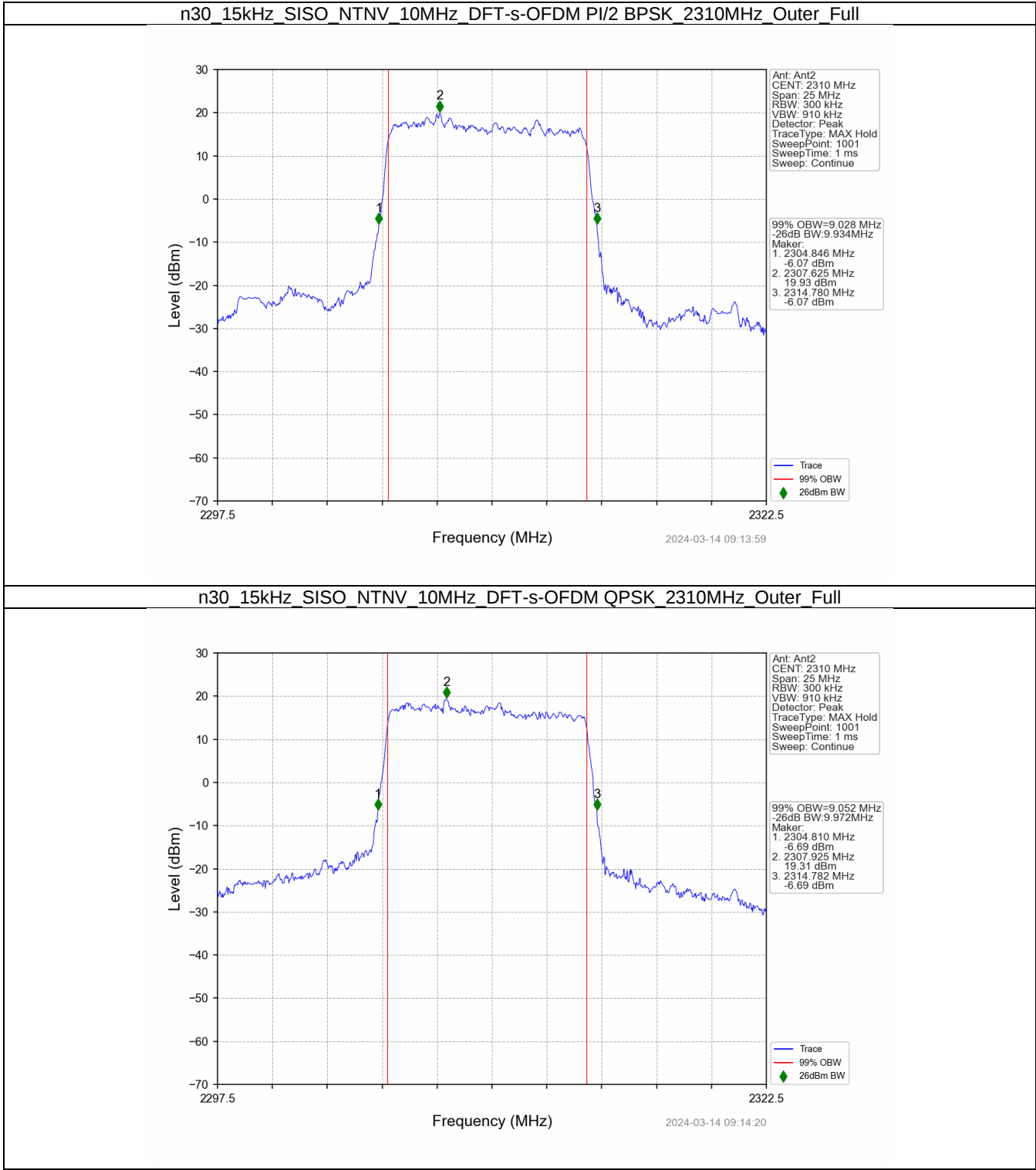
3. 99% & 26dB Bandwidth

3.1 15k_SISO_10MHz_NTNV

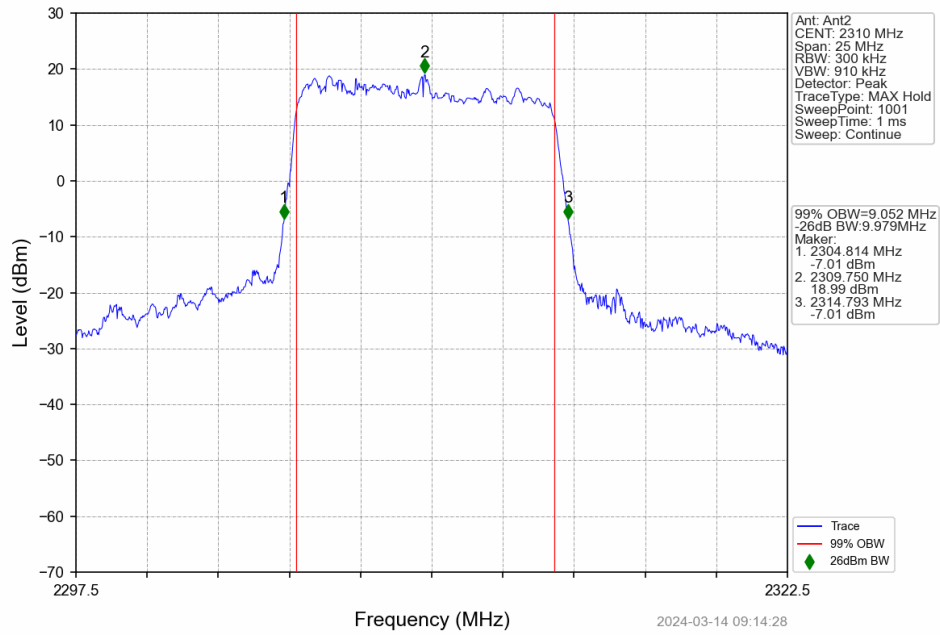
3.1.1 Test Result

5G NR n30 SCS=15kHz SISO 10MHz NTN						
Modulation	Frequency (MHz)	RB Allocation	99% Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
DFT-s-OFDM PI/2 BPSK	2310	Outer_Full	9.03	9.93	/	Pass
DFT-s-OFDM QPSK	2310	Outer_Full	9.05	9.97	/	Pass
DFT-s-OFDM 16 QAM	2310	Outer_Full	9.05	9.98	/	Pass
DFT-s-OFDM 64 QAM	2310	Outer_Full	9.03	9.95	/	Pass
DFT-s-OFDM 256 QAM	2310	Outer_Full	9.07	9.97	/	Pass
CP-OFDM QPSK	2310	Outer_Full	9.39	10.51	/	Pass
CP-OFDM 16 QAM	2310	Outer_Full	9.39	10.46	/	Pass
CP-OFDM 64 QAM	2310	Outer_Full	9.36	10.36	/	Pass
CP-OFDM 256 QAM	2310	Outer_Full	9.41	10.39	/	Pass

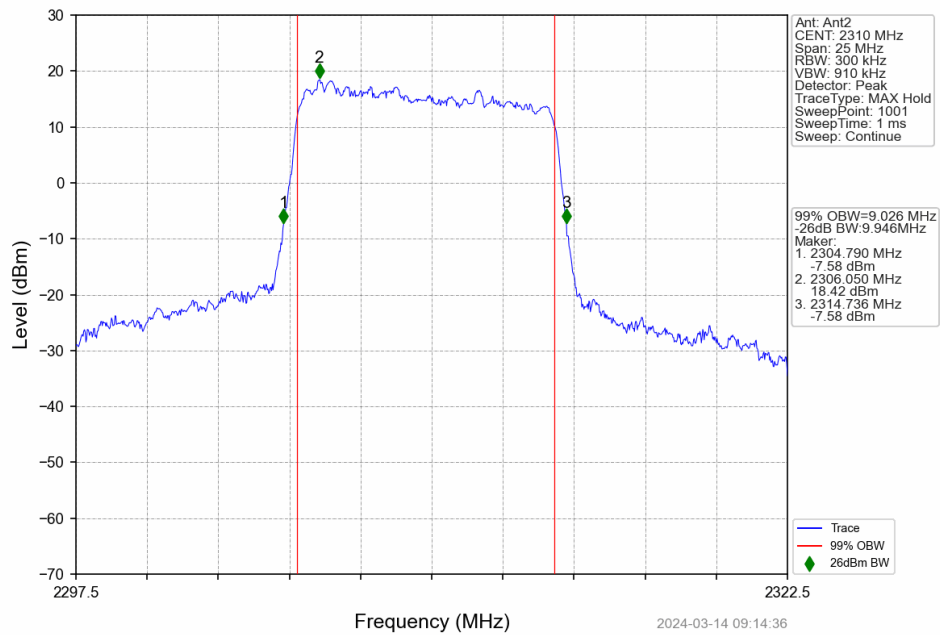
3.1.2 Test Graph



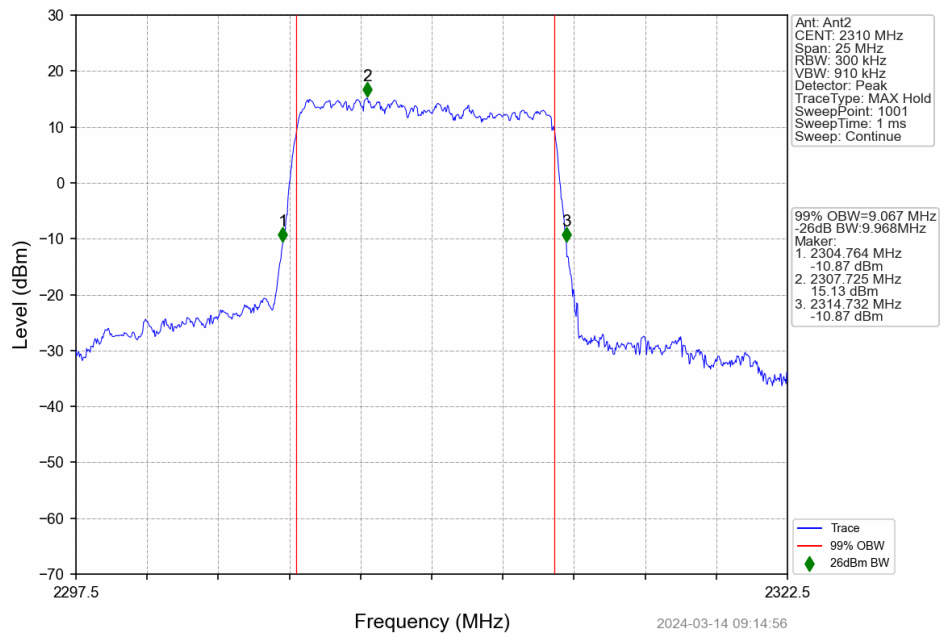
n30 15kHz SISO NTN 10MHz DFT-s-OFDM 16 QAM 2310MHz Outer Full



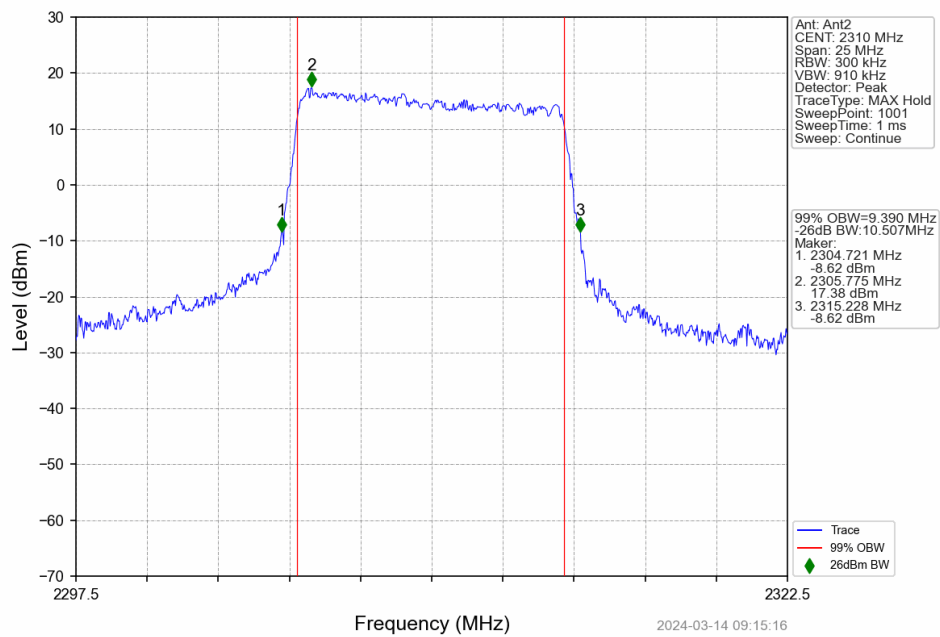
n30 15kHz SISO NTN 10MHz DFT-s-OFDM 64 QAM 2310MHz Outer Full



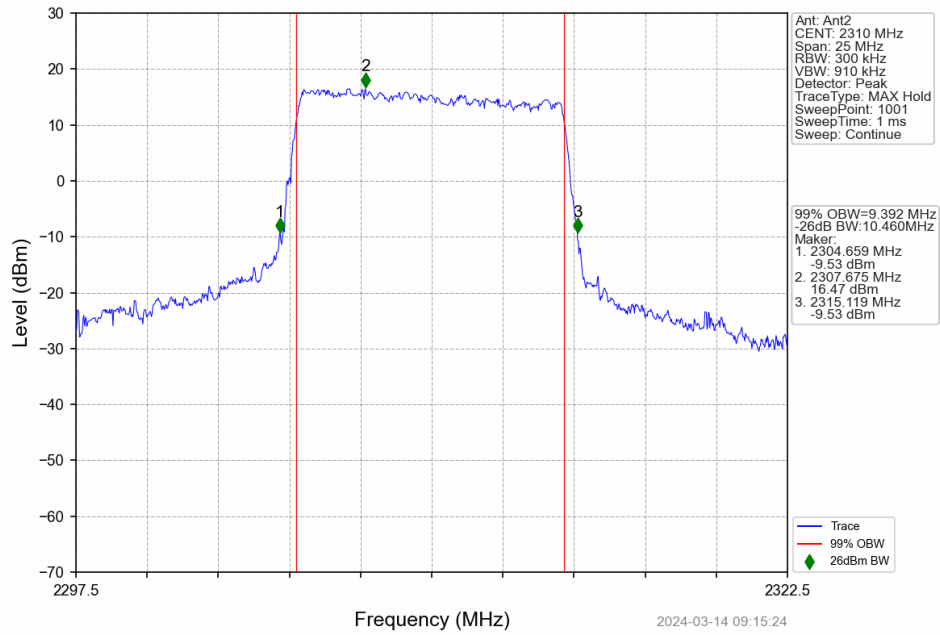
n30 15kHz SISO NTNv 10MHz DFT-s-OFDM 256 QAM 2310MHz Outer Full



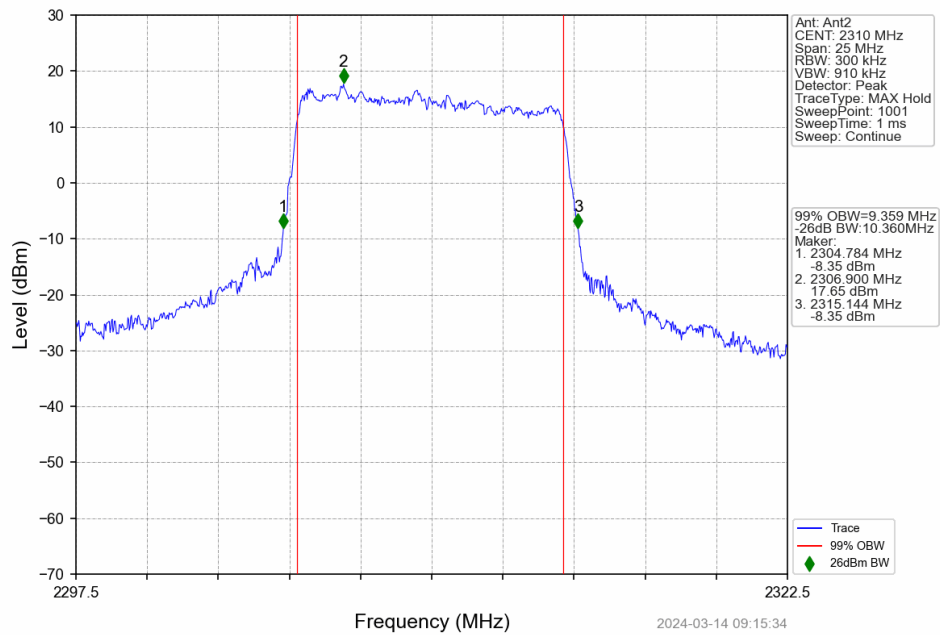
n30 15kHz SISO NTNv 10MHz CP-OFDM QPSK 2310MHz Outer Full

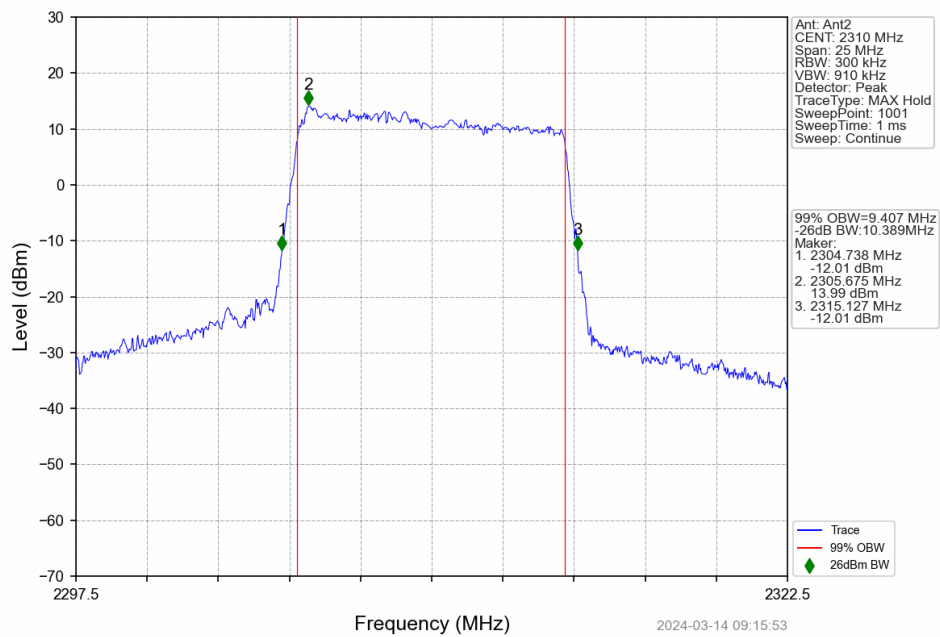


n30 15kHz SISO NTV 10MHz CP-OFDM 16 QAM 2310MHz Outer Full



n30 15kHz SISO NTV 10MHz CP-OFDM 64 QAM 2310MHz Outer Full





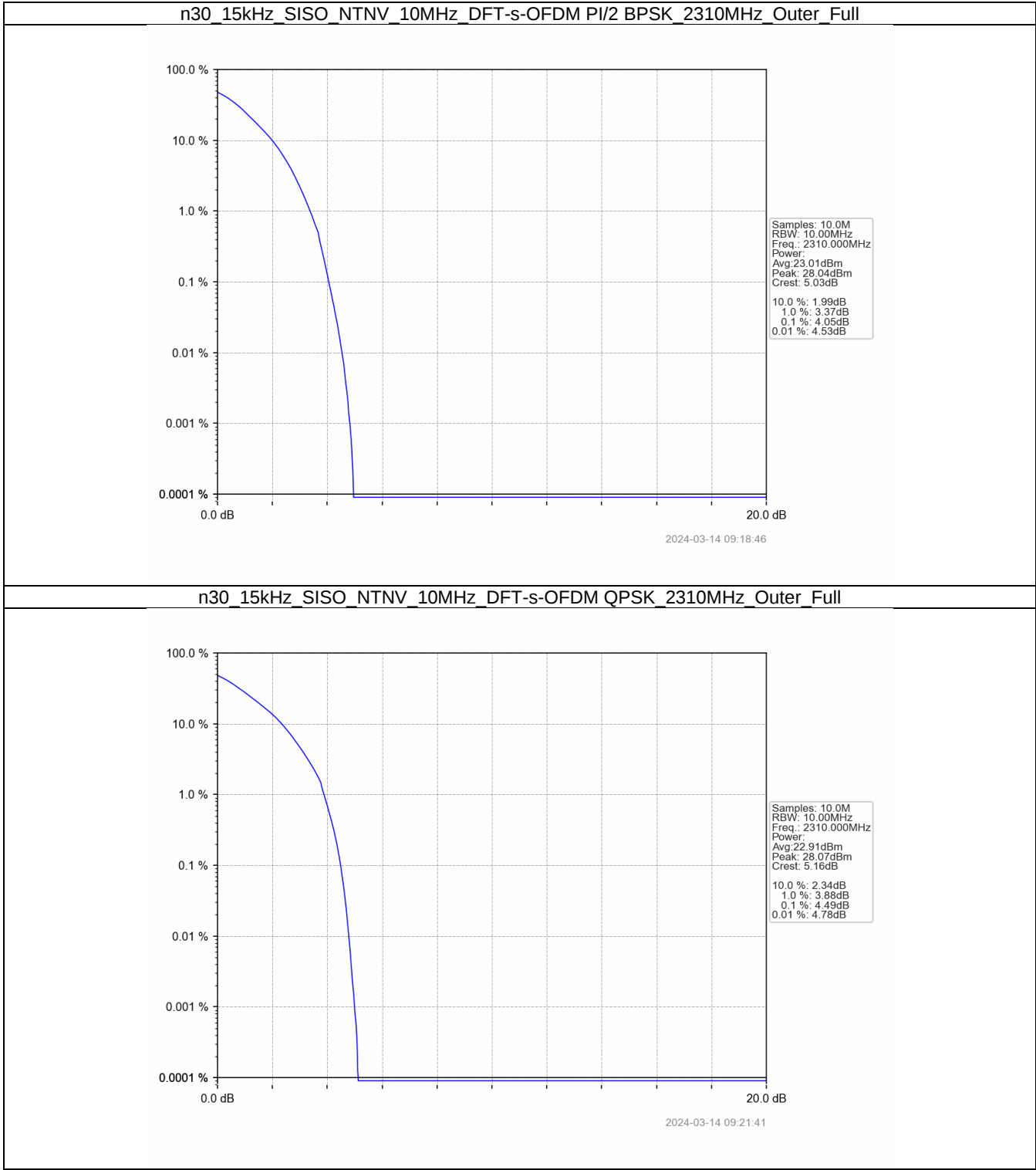
4. Peak-Average Ratio

4.1 15k_SISO_10MHz_NTNV

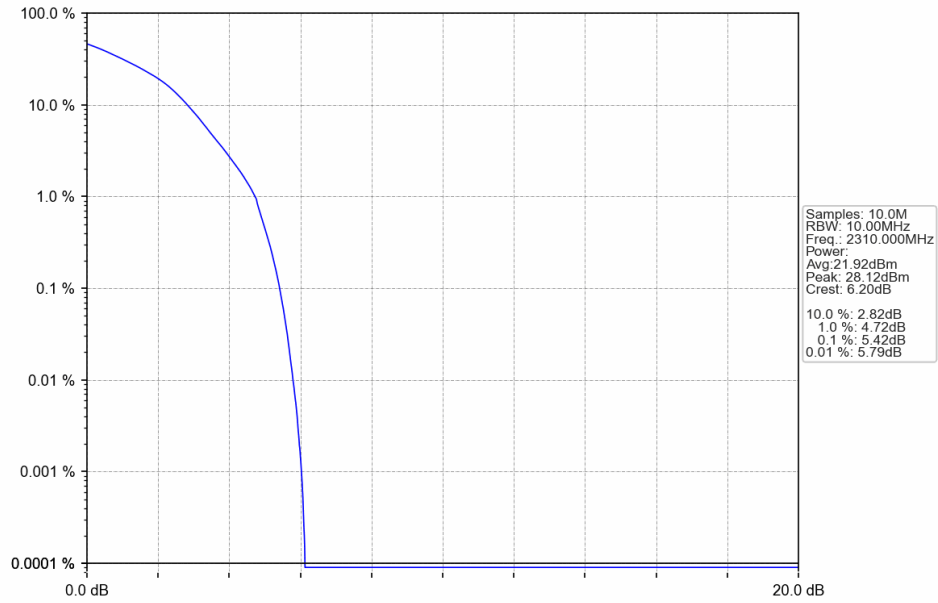
4.1.1 Test Result

5G NR n30 SCS=15kHz SISO 10MHz NTN							
Modulation	Frequency (MHz)	RB Allocation	Peak-Average Ratio (dB)				Verdict
			Ant2	Ant2*	Sum	Limit	
DFT-s-OFDM PI/2 BPSK	2310	Outer_Full	4.05	/	/	<=13	Pass
DFT-s-OFDM QPSK	2310	Outer_Full	4.49	/	/	<=13	Pass
DFT-s-OFDM 16 QAM	2310	Outer_Full	5.42	/	/	<=13	Pass
DFT-s-OFDM 64 QAM	2310	Outer_Full	5.71	/	/	<=13	Pass
DFT-s-OFDM 256 QAM	2310	Outer_Full	6.46	/	/	<=13	Pass
CP-OFDM QPSK	2310	Outer_Full	6.63	/	/	<=13	Pass
CP-OFDM 16 QAM	2310	Outer_Full	6.66	/	/	<=13	Pass
CP-OFDM 64 QAM	2310	Outer_Full	7.01	/	/	<=13	Pass
CP-OFDM 256 QAM	2310	Outer_Full	8.54	/	/	<=13	Pass

3.1.2 Test Graph

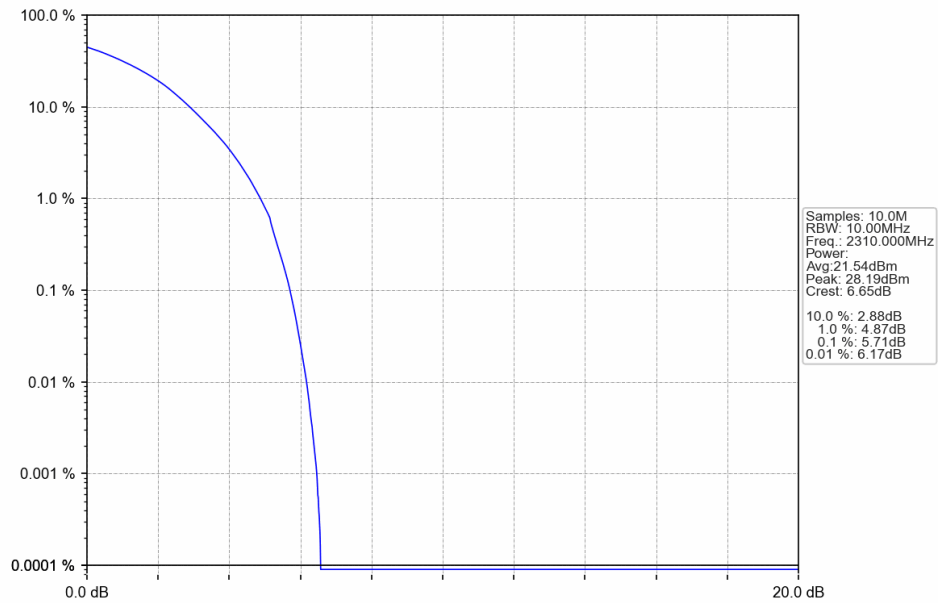


n30 15kHz SISO NTN 10MHz DFT-s-OFDM 16 QAM 2310MHz Outer Full



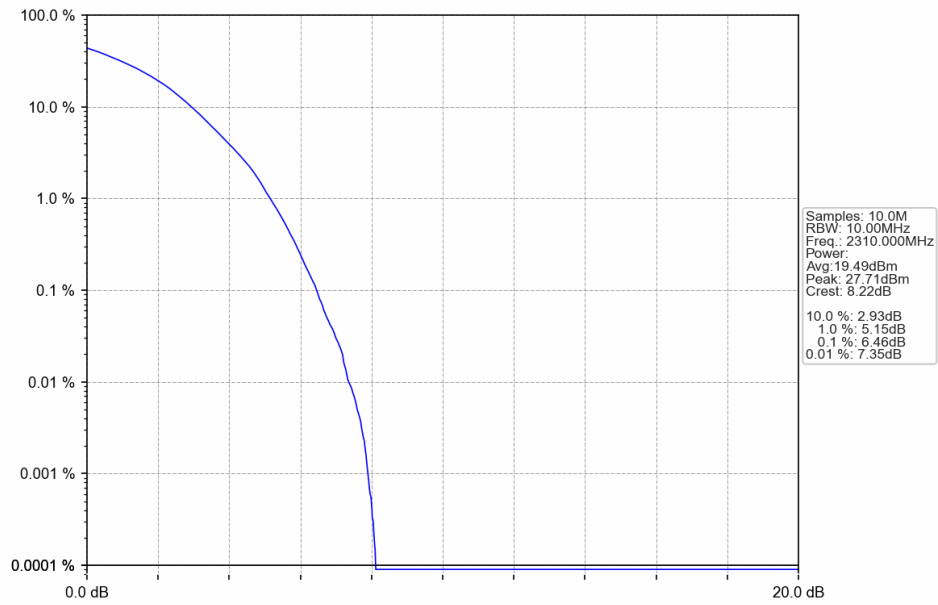
2024-03-14 09:22:34

n30 15kHz SISO NTN 10MHz DFT-s-OFDM 64 QAM 2310MHz Outer Full



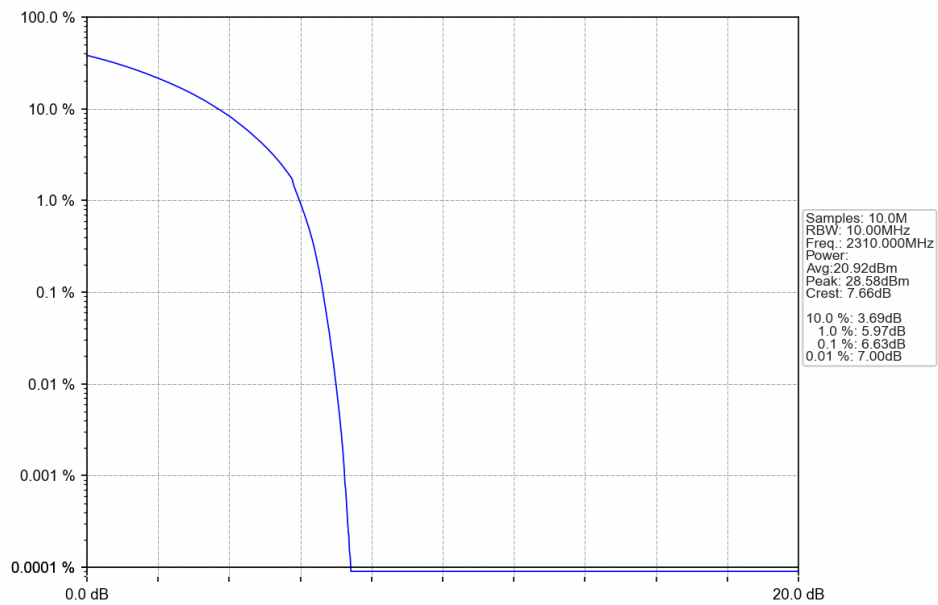
2024-03-14 09:23:13

n30 15kHz SISO NTN 10MHz DFT-s-OFDM 256 QAM 2310MHz Outer Full



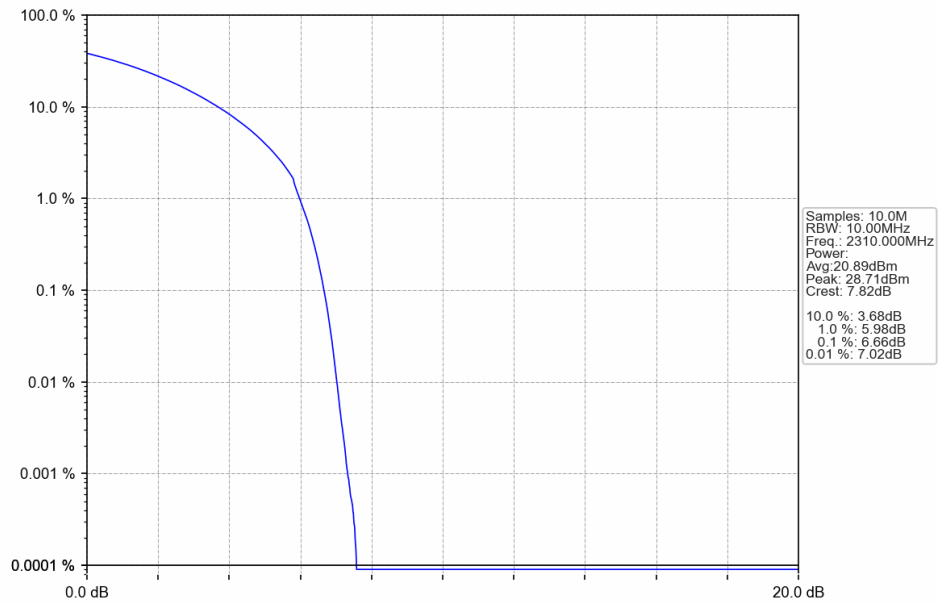
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n30 15kHz SISO NTN 10MHz CP-OFDM QPSK 2310MHz Outer Full



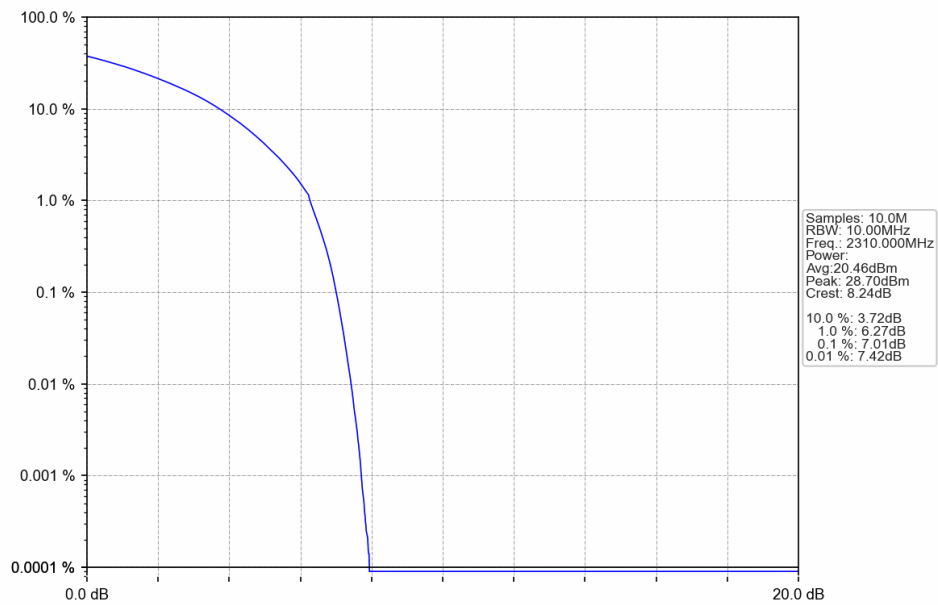
2024-03-14 09:26:53

n30 15kHz SISO NTV 10MHz CP-OFDM 16 QAM 2310MHz Outer Full

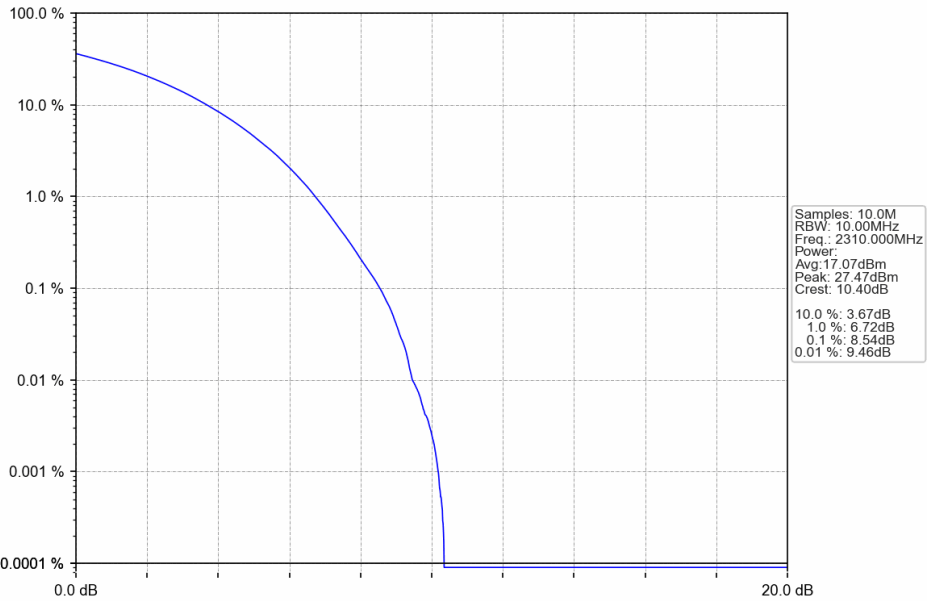


2024-03-14 09:31:22

n30 15kHz SISO NTV 10MHz CP-OFDM 64 QAM 2310MHz Outer Full



2024-03-14 09:32:12



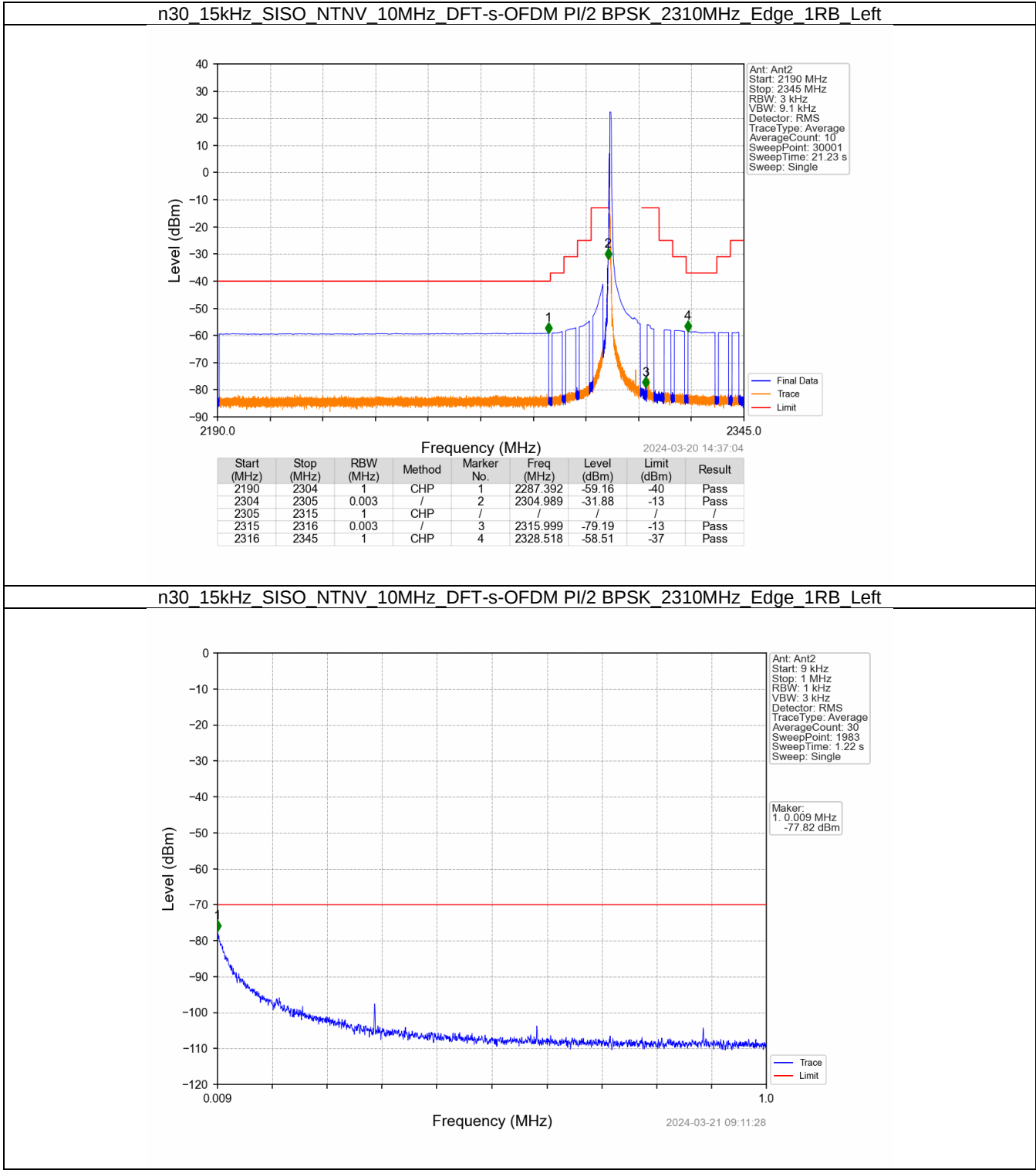
5. Spurious Emission

5.1 15k_SISO_10MHz_NTNV

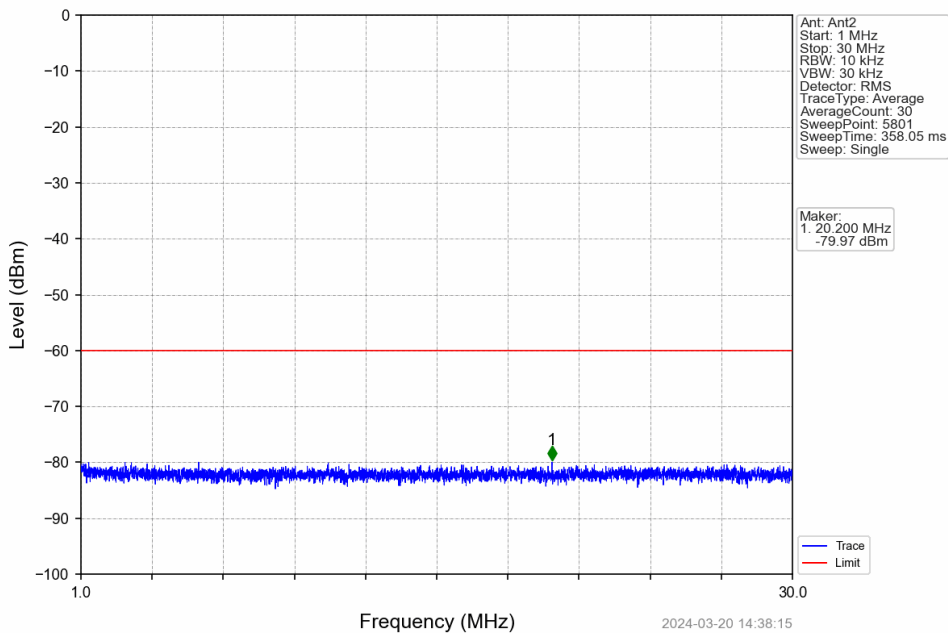
5.1.1 Test Result

5G NR n30 SCS=15kHz SISO 10MHz NTN							
Modulation	Frequency (MHz)	RB Allocation	Spurious Emission				Verdict
			Ant2	Ant2*	Sum	Limit	
DFT-s-OFDM PI/2 BPSK	2310	Edge 1RB Left	Refer To Test Graph				Pass
		Outer Full	Refer To Test Graph				Pass
		Inner 1RB Left	Refer To Test Graph				Pass
	2310	Edge 1RB Left	Refer To Test Graph				Pass
		Edge 1RB Right	Refer To Test Graph				Pass
		Outer Full	Refer To Test Graph				Pass
		Inner 1RB Right	Refer To Test Graph				Pass
DFT-s-OFDM QPSK	2310	Edge 1RB Left	Refer To Test Graph				Pass
		Outer Full	Refer To Test Graph				Pass
		Inner 1RB Left	Refer To Test Graph				Pass
	2310	Edge 1RB Left	Refer To Test Graph				Pass
		Edge 1RB Right	Refer To Test Graph				Pass
		Outer Full	Refer To Test Graph				Pass
		Inner 1RB Right	Refer To Test Graph				Pass

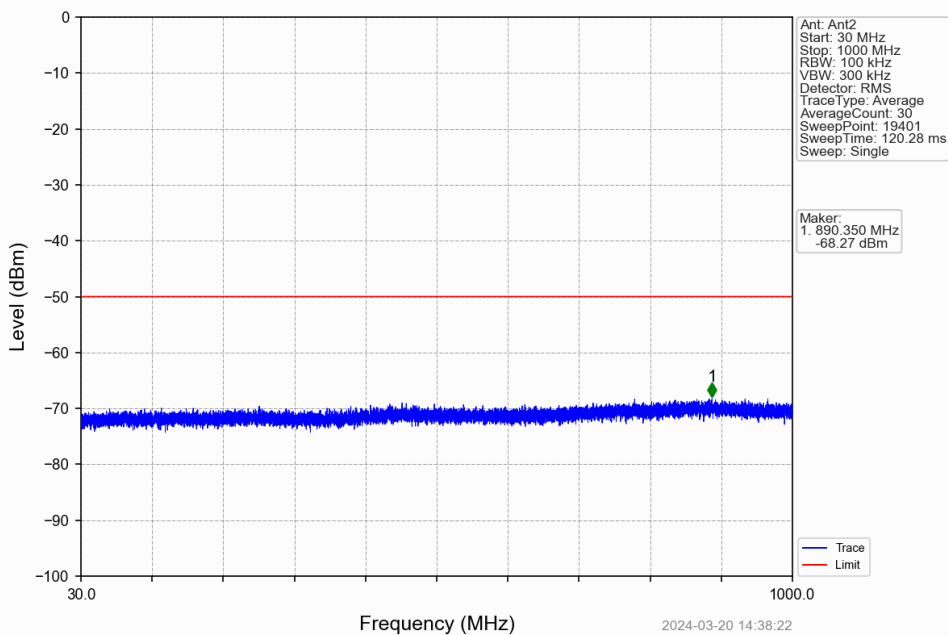
4.1.2 Test Graph



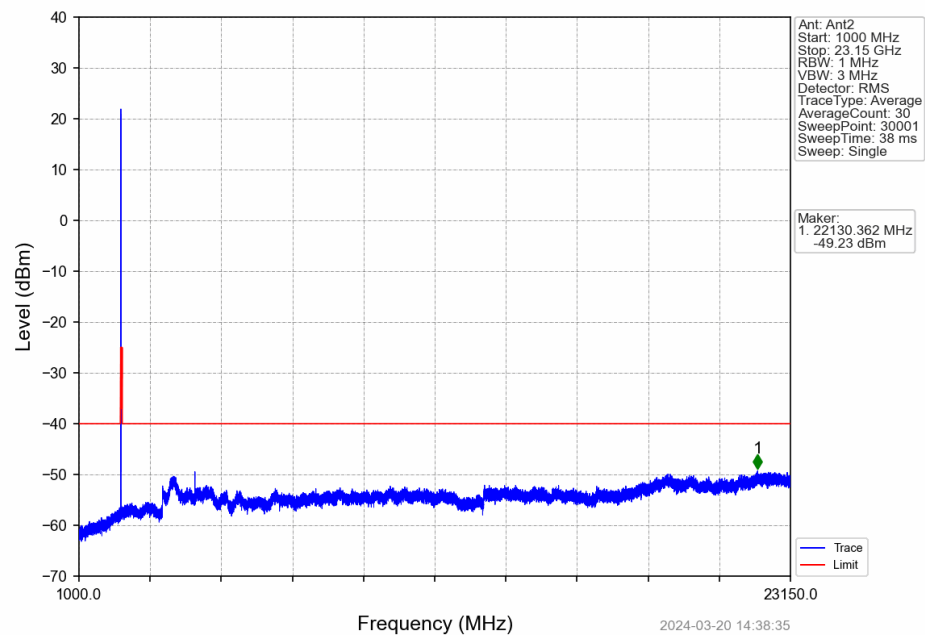
n30 15kHz SISO NTN 10MHz DFT-s-OFDM PI/2 BPSK 2310MHz Edge 1RB Left



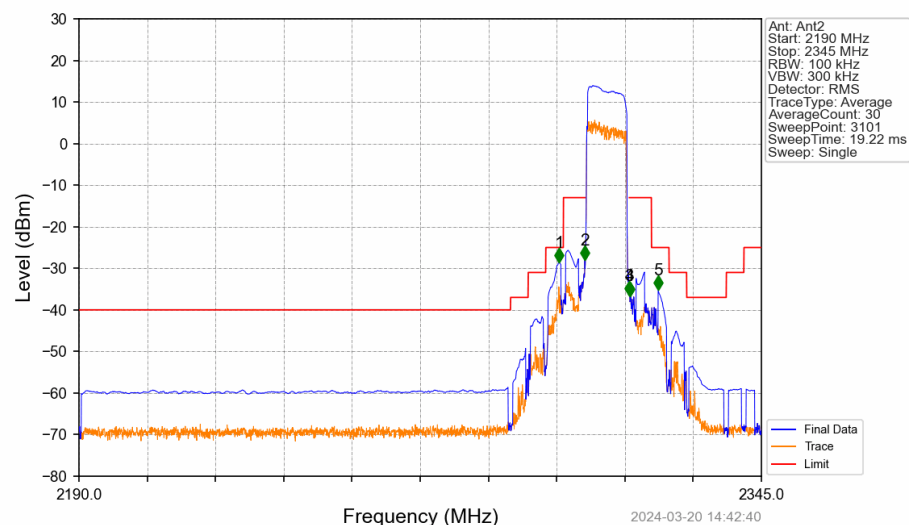
n30 15kHz SISO NTN 10MHz DFT-s-OFDM PI/2 BPSK 2310MHz Edge 1RB Left



n30 15kHz SISO NTN 10MHz DFT-s-OFDM PI/2 BPSK 2310MHz Edge 1RB Left

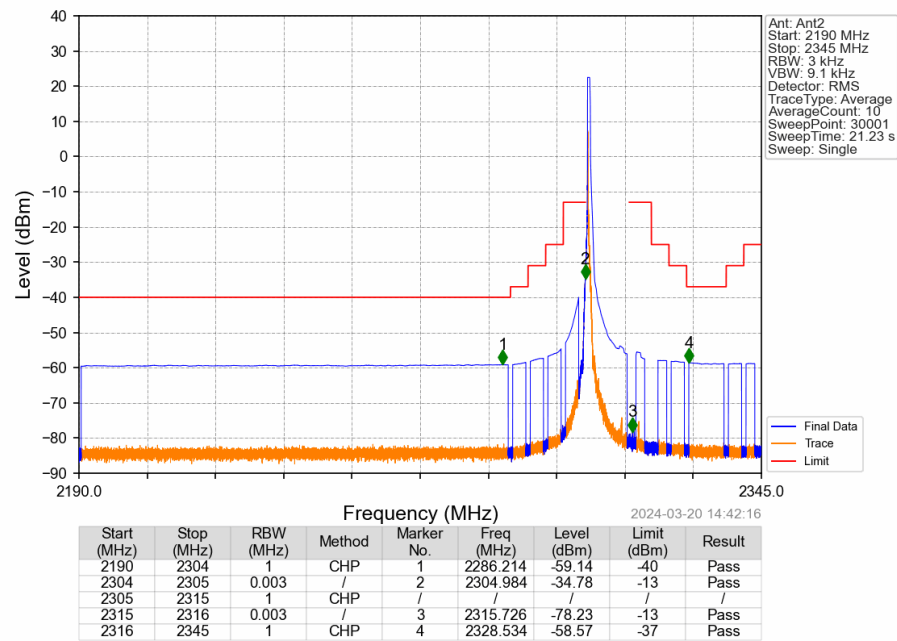


n30 15kHz SISO NTN 10MHz DFT-s-OFDM PI/2 BPSK 2310MHz Outer Full

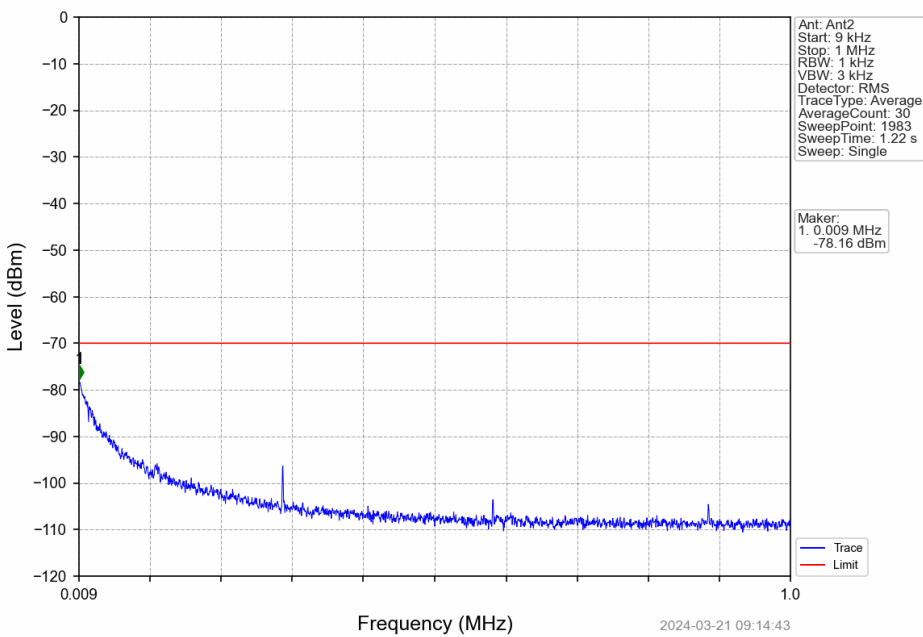


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
2190	2304	1	CHP	1	2299.050	-28.62	-25	Pass
2304	2305	0.1	/	2	2304.900	-28.00	-13	Pass
2305	2315	1	CHP	/	/	/	/	/
2315	2315	1	CHP	3	2315.000	-36.53	-13	Pass
2315	2316	0.1	/	4	2315.050	-36.66	-13	Pass
2316	2345	1	CHP	5	2321.550	-35.25	-25	Pass

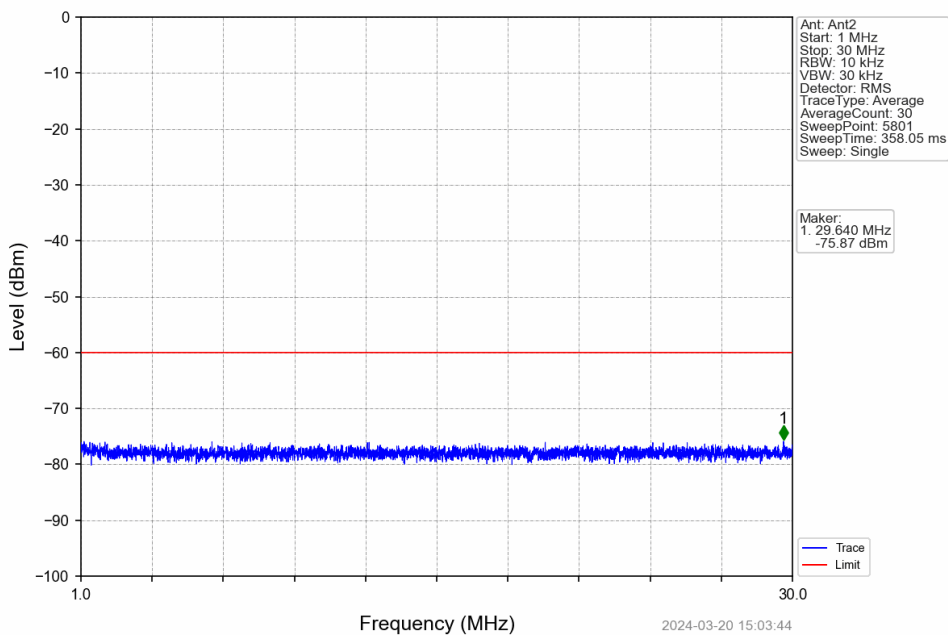
n30 15kHz SISO NTN 10MHz DFT-s-OFDM PI/2 BPSK 2310MHz Inner 1RB Left



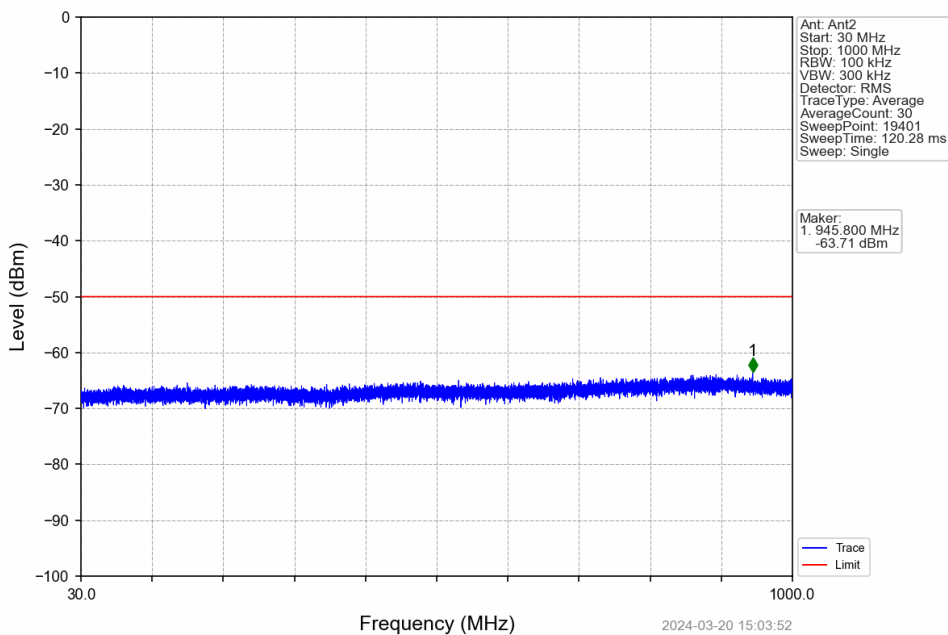
n30 15kHz SISO NTN 10MHz DFT-s-OFDM PI/2 BPSK 2310MHz Edge 1RB Left



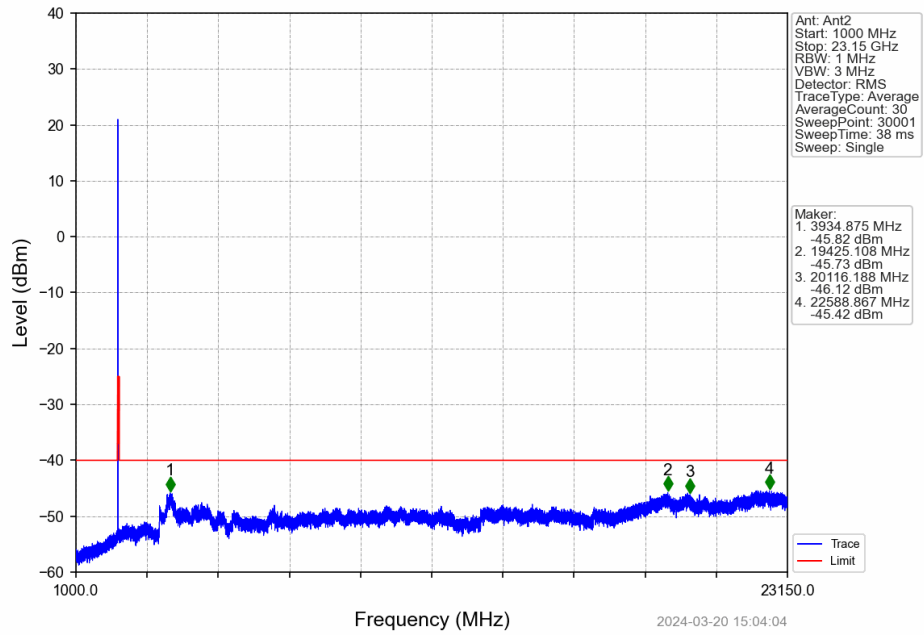
n30 15kHz SISO NTN 10MHz DFT-s-OFDM PI/2 BPSK 2310MHz Edge 1RB Left



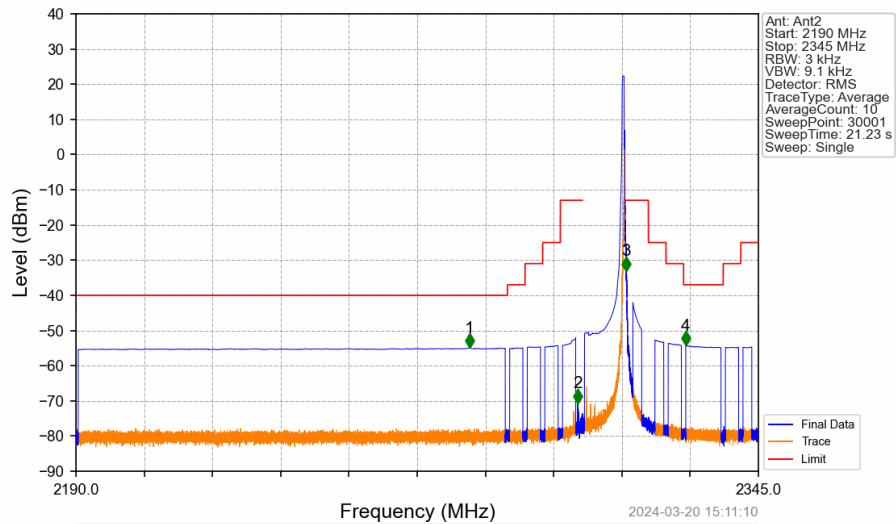
n30 15kHz SISO NTN 10MHz DFT-s-OFDM PI/2 BPSK 2310MHz Edge 1RB Left



n30 15kHz SISO NTN 10MHz DFT-s-OFDM PI/2 BPSK 2310MHz Edge 1RB Left

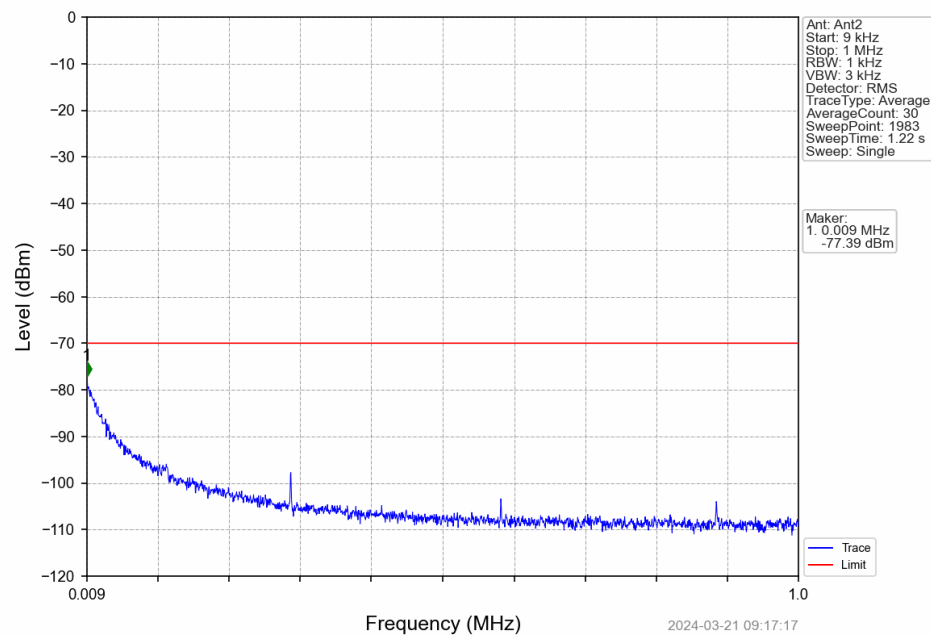


n30 15kHz SISO NTN 10MHz DFT-s-OFDM PI/2 BPSK 2310MHz Edge 1RB Right

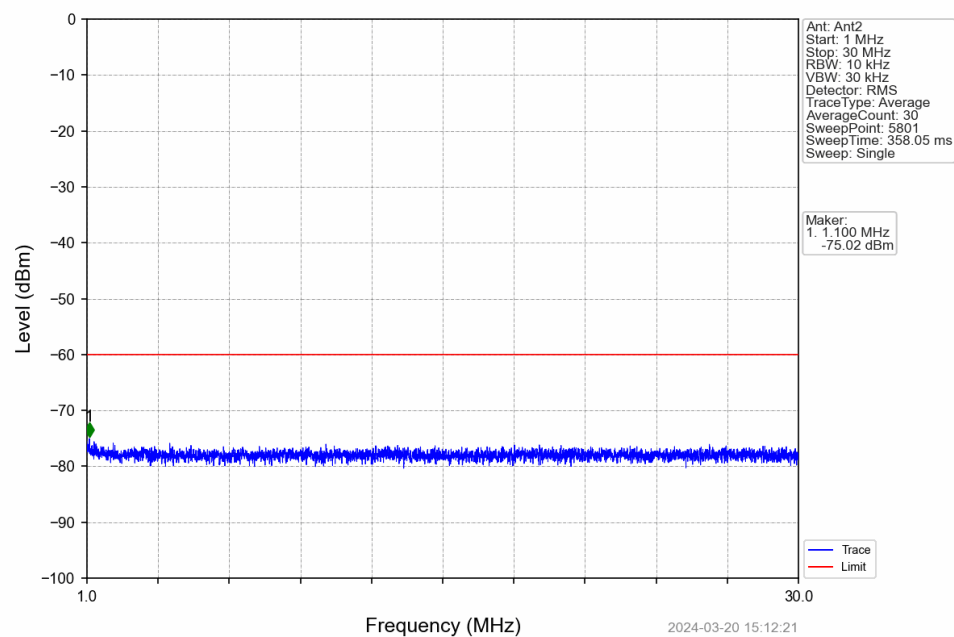


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
2190	2304	1	CHP	1	2279.419	-55.00	-40	Pass
2304	2305	0.003	/	2	2304.028	-70.64	-13	Pass
2305	2315	1	CHP	/	/	/	/	/
2315	2316	0.003	/	3	2315.008	-33.03	-13	Pass
2316	2345	1	CHP	4	2328.503	-54.34	-37	Pass

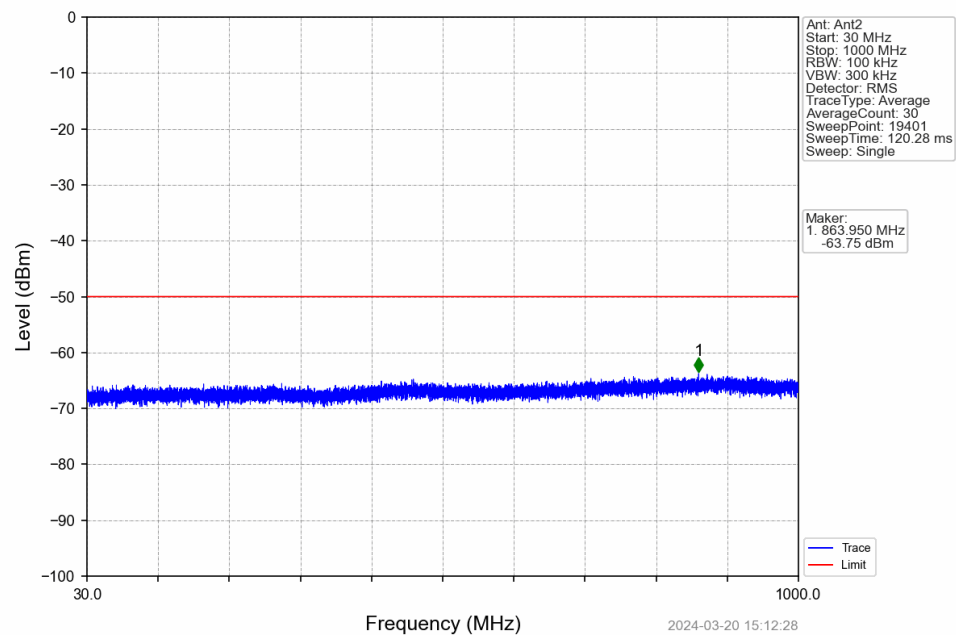
n30 15kHz SISO NTNv 10MHz DFT-s-OFDM PI/2 BPSK 2310MHz Edge 1RB Right



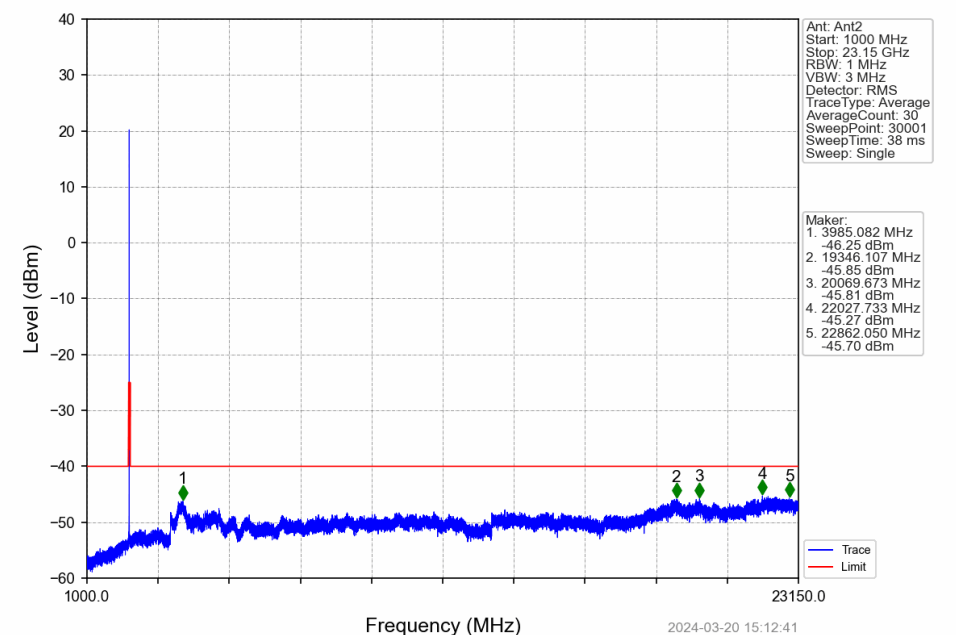
n30 15kHz SISO NTNv 10MHz DFT-s-OFDM PI/2 BPSK 2310MHz Edge 1RB Right



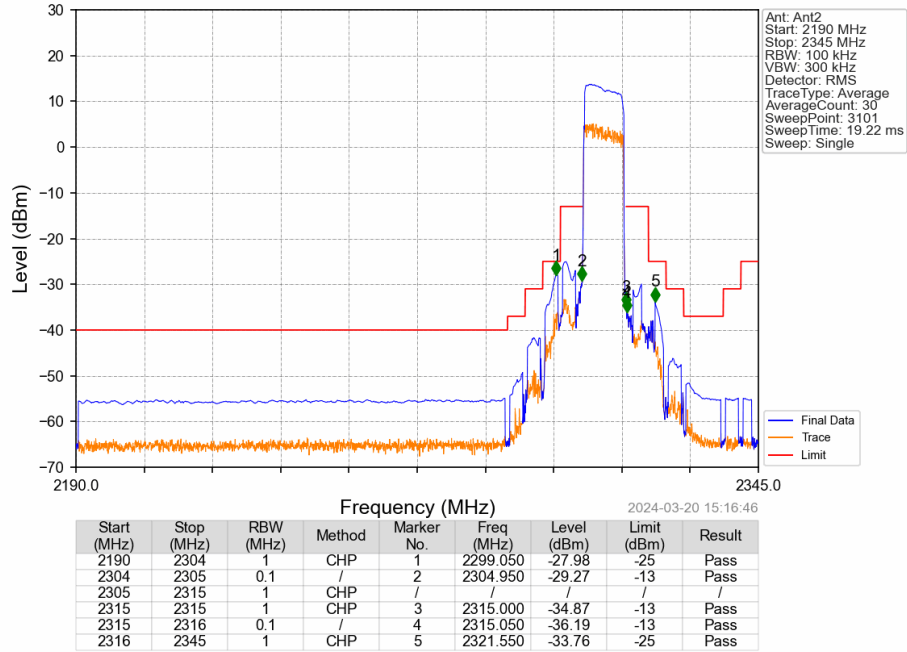
n30 15kHz SISO NTN 10MHz DFT-s-OFDM PI/2 BPSK 2310MHz Edge 1RB Right



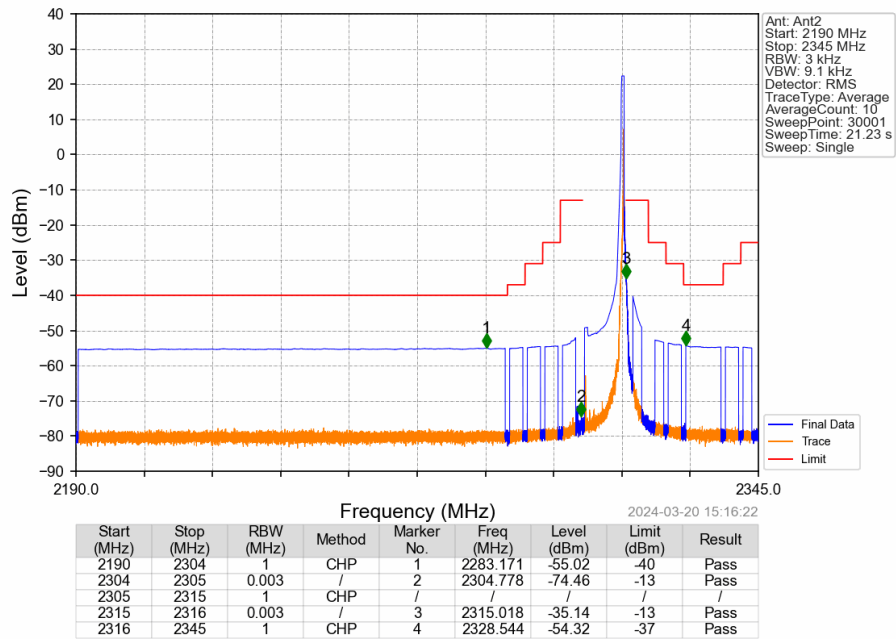
n30 15kHz SISO NTN 10MHz DFT-s-OFDM PI/2 BPSK 2310MHz Edge 1RB Right



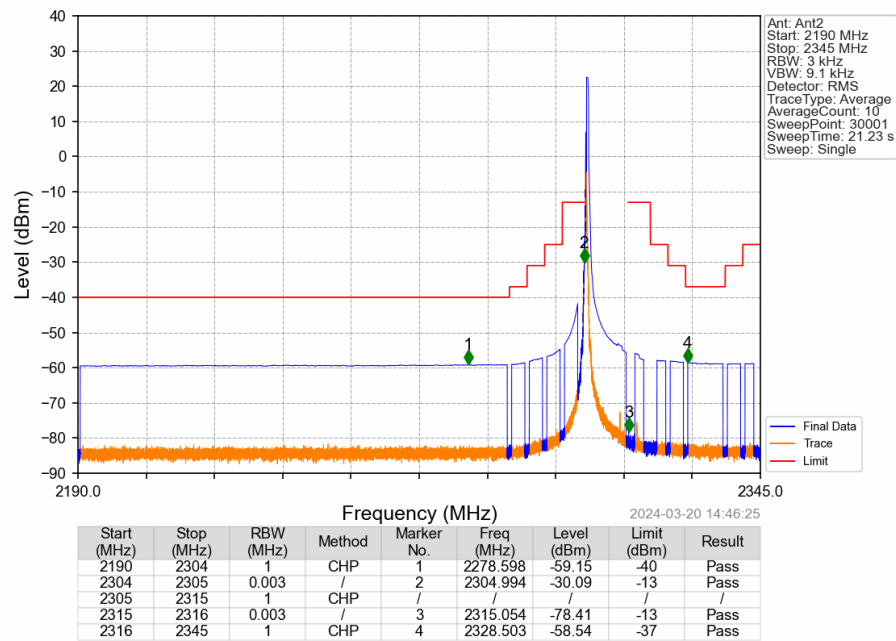
n30 15kHz SISO NTN 10MHz DFT-s-OFDM PI/2 BPSK 2310MHz Outer Full



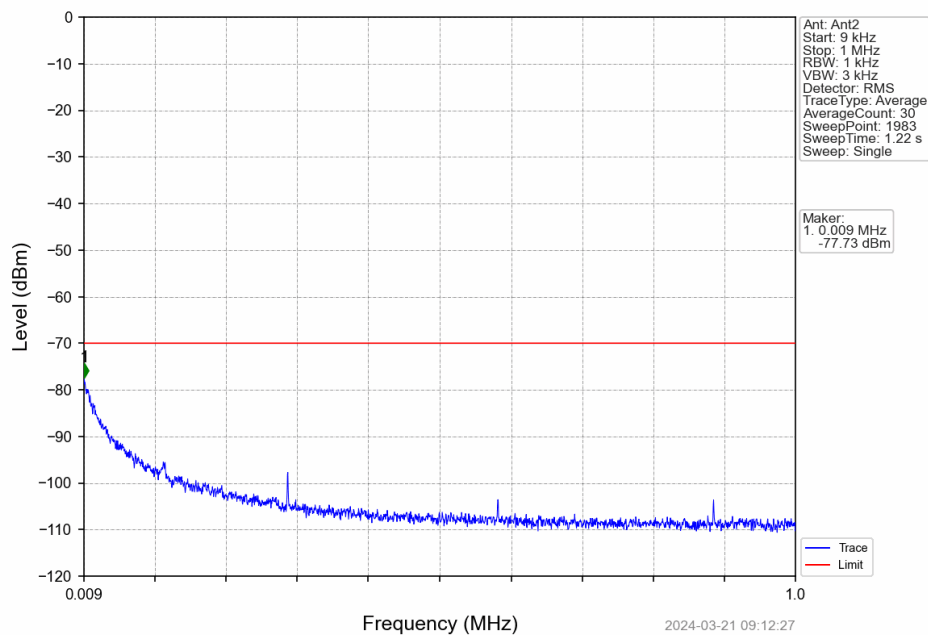
n30 15kHz SISO NTN 10MHz DFT-s-OFDM PI/2 BPSK 2310MHz Inner 1RB Right



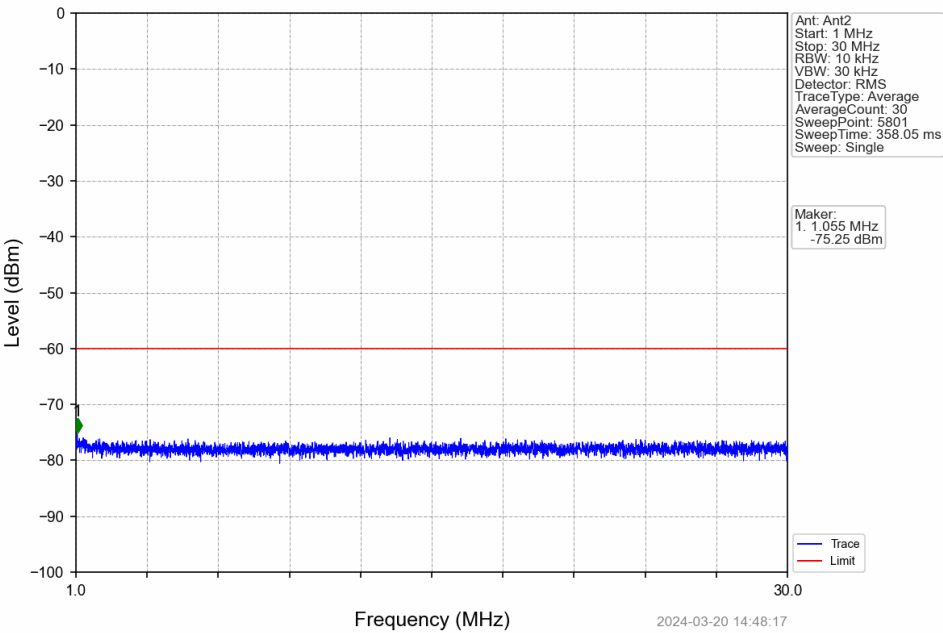
n30 15kHz SISO NTN 10MHz DFT-s-OFDM QPSK 2310MHz Edge 1RB Left



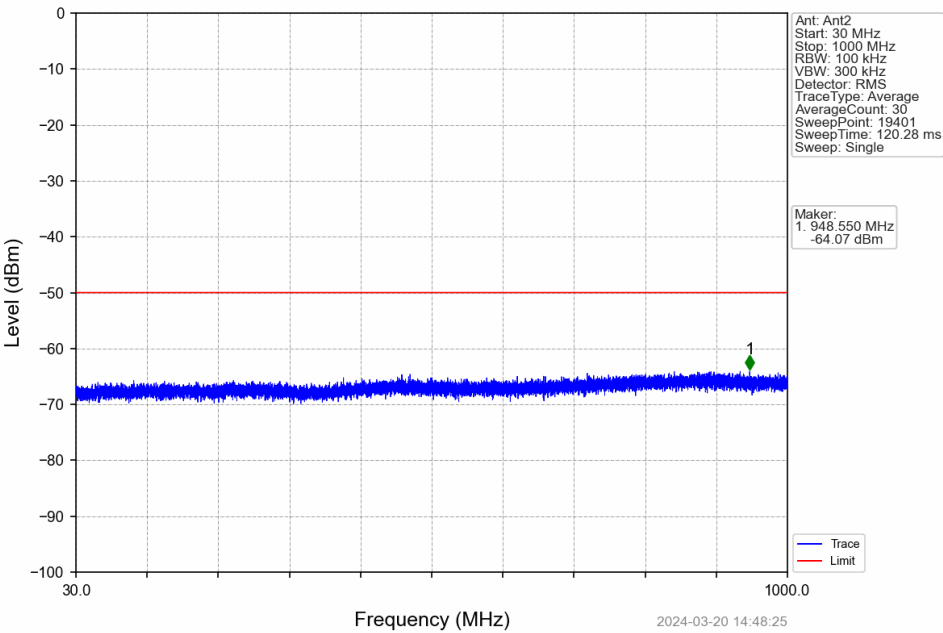
n30 15kHz SISO NTN 10MHz DFT-s-OFDM QPSK 2310MHz Edge 1RB Left



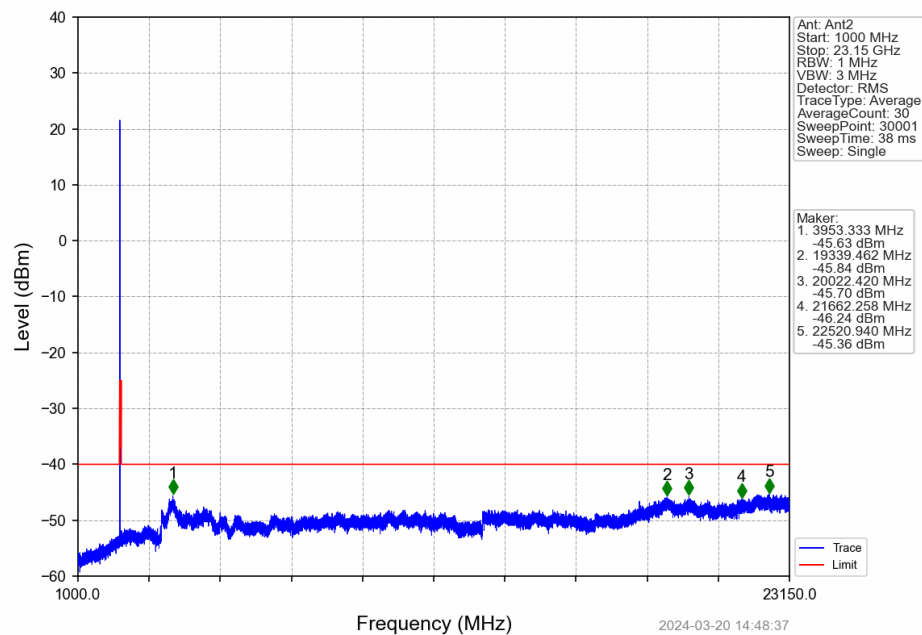
n30 15kHz SISO NTV 10MHz DFT-s-OFDM QPSK 2310MHz Edge 1RB Left



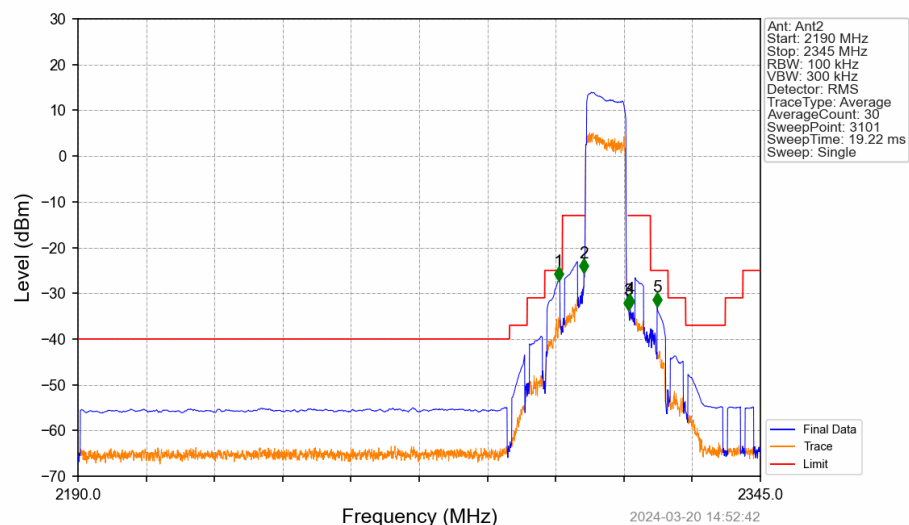
n30 15kHz SISO NTV 10MHz DFT-s-OFDM QPSK 2310MHz Edge 1RB Left



n30 15kHz SISO NTV 10MHz DFT-s-OFDM QPSK 2310MHz Edge 1RB Left

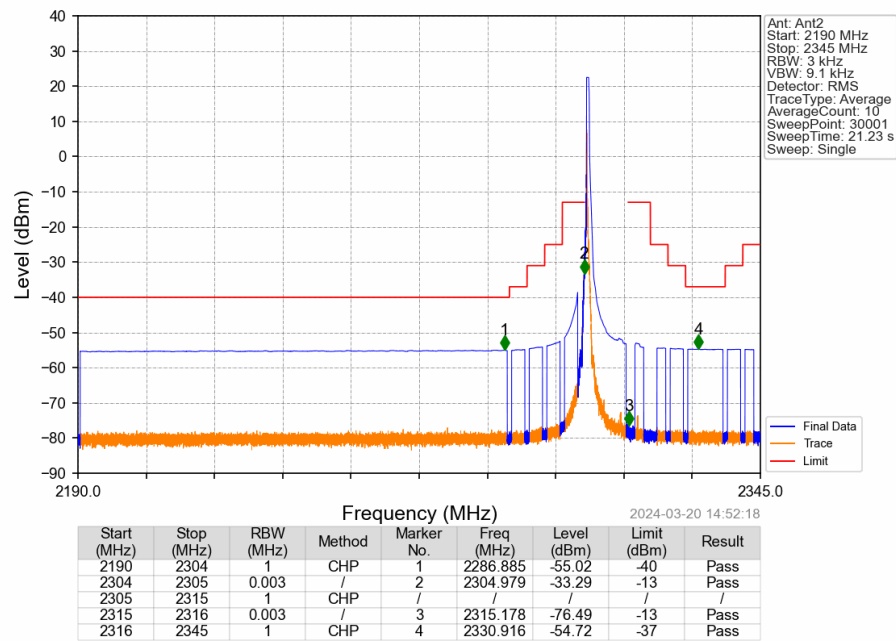


n30 15kHz SISO NTV 10MHz DFT-s-OFDM QPSK 2310MHz Outer Full

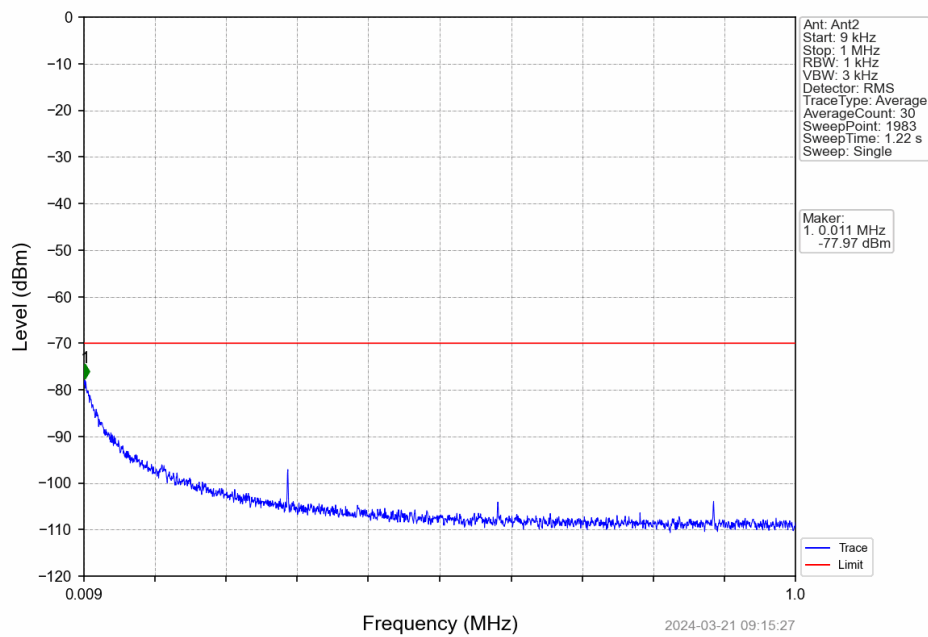


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
2190	2304	1	CHP	1	2299.150	-27.27	-25	Pass
2304	2305	0.1	/	2	2304.950	-25.51	-13	Pass
2305	2315	1	CHP	/	/	/	/	/
2315	2315	1	CHP	3	2315.000	-33.70	-13	Pass
2315	2316	0.1	/	4	2315.400	-33.39	-13	Pass
2316	2345	1	CHP	5	2321.550	-33.02	-25	Pass

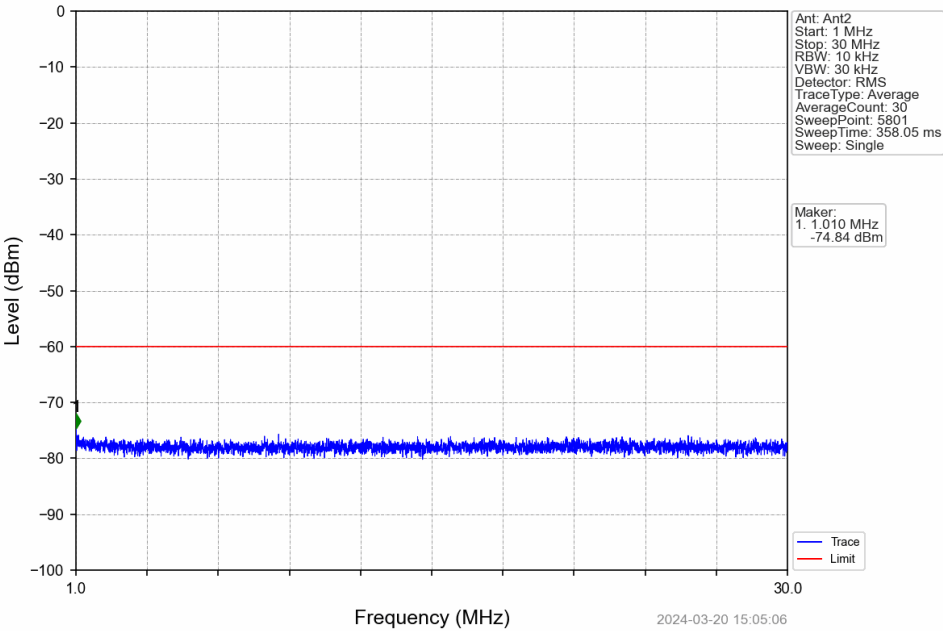
n30 15kHz SISO NTV 10MHz DFT-s-OFDM QPSK 2310MHz Inner 1RB Left



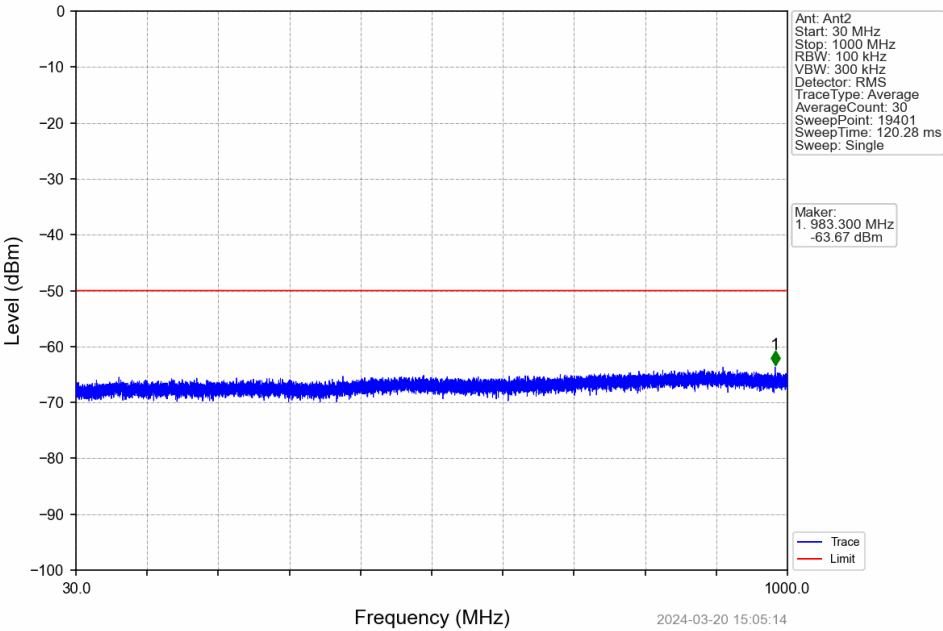
n30 15kHz SISO NTV 10MHz DFT-s-OFDM QPSK 2310MHz Edge 1RB Left



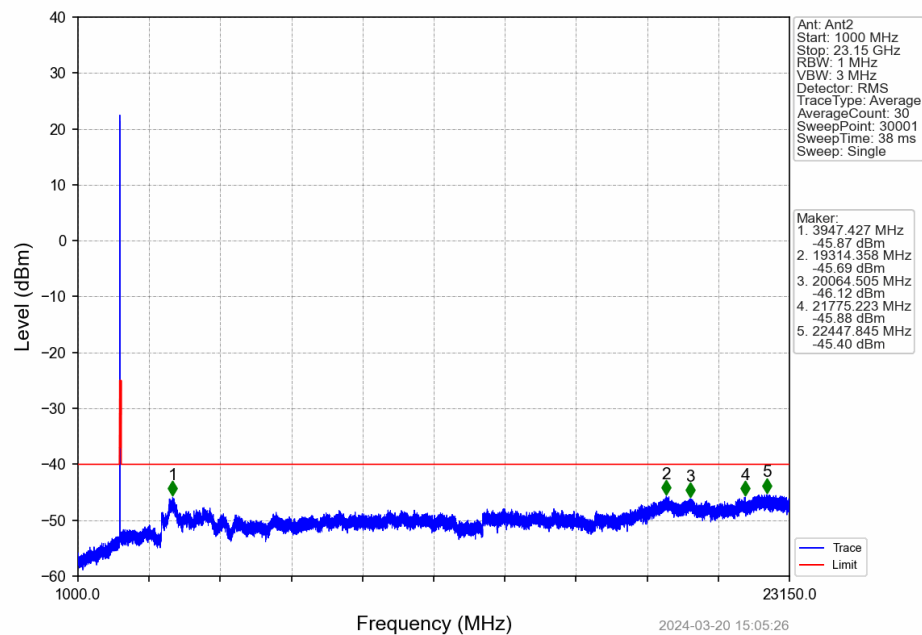
n30 15kHz SISO NTV 10MHz DFT-s-OFDM QPSK 2310MHz Edge 1RB Left



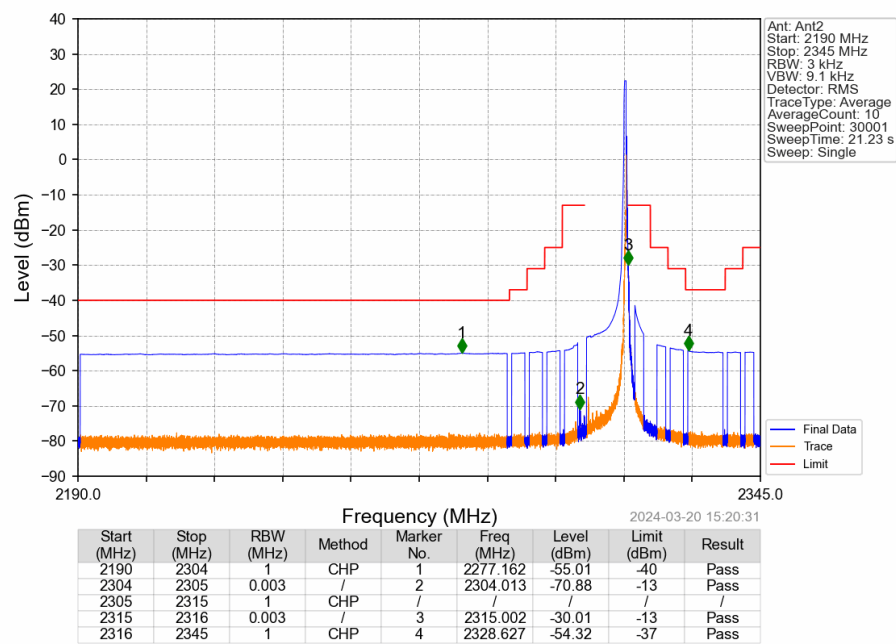
n30 15kHz SISO NTV 10MHz DFT-s-OFDM QPSK 2310MHz Edge 1RB Left



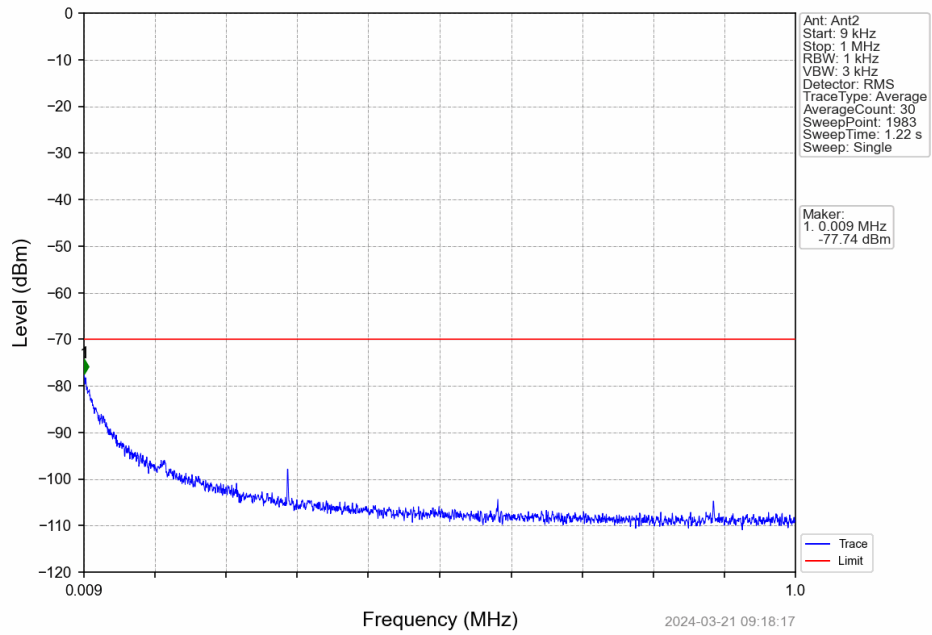
n30 15kHz SISO NTN 10MHz DFT-s-OFDM QPSK 2310MHz Edge 1RB Left



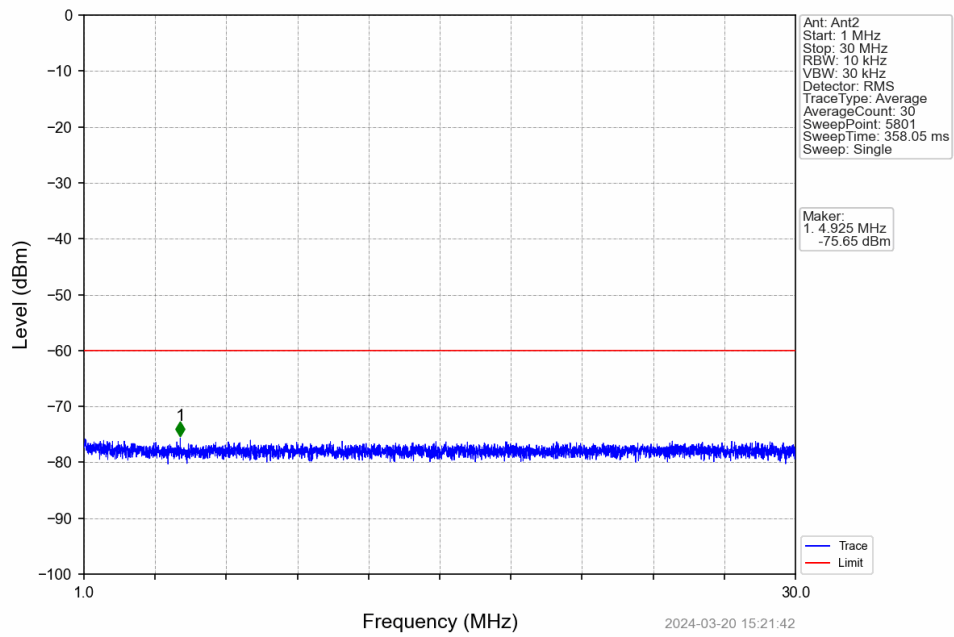
n30 15kHz SISO NTN 10MHz DFT-s-OFDM QPSK 2310MHz Edge 1RB Right



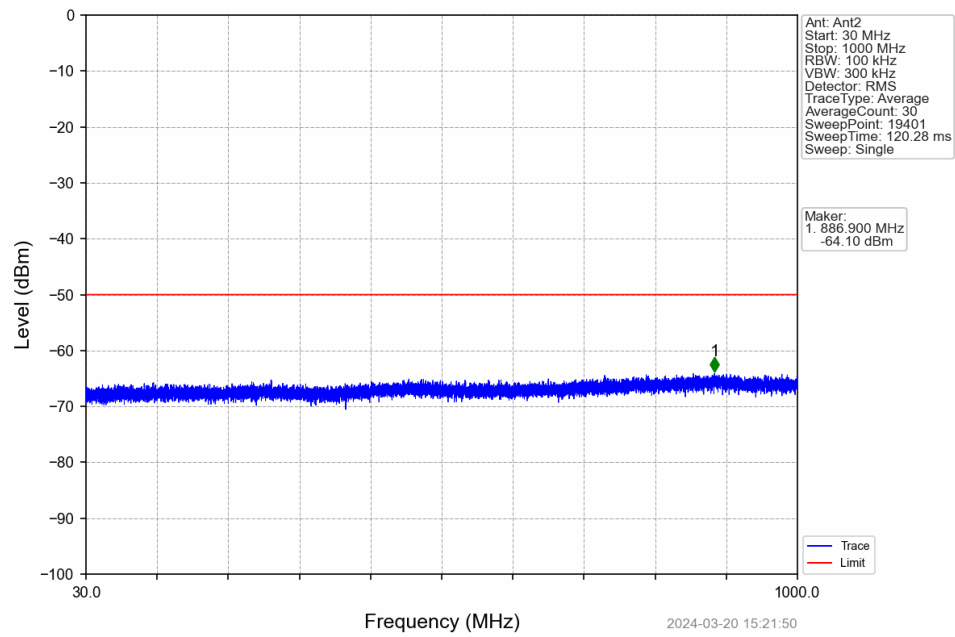
n30 15kHz SISO NTN 10MHz DFT-s-OFDM QPSK 2310MHz Edge 1RB Right



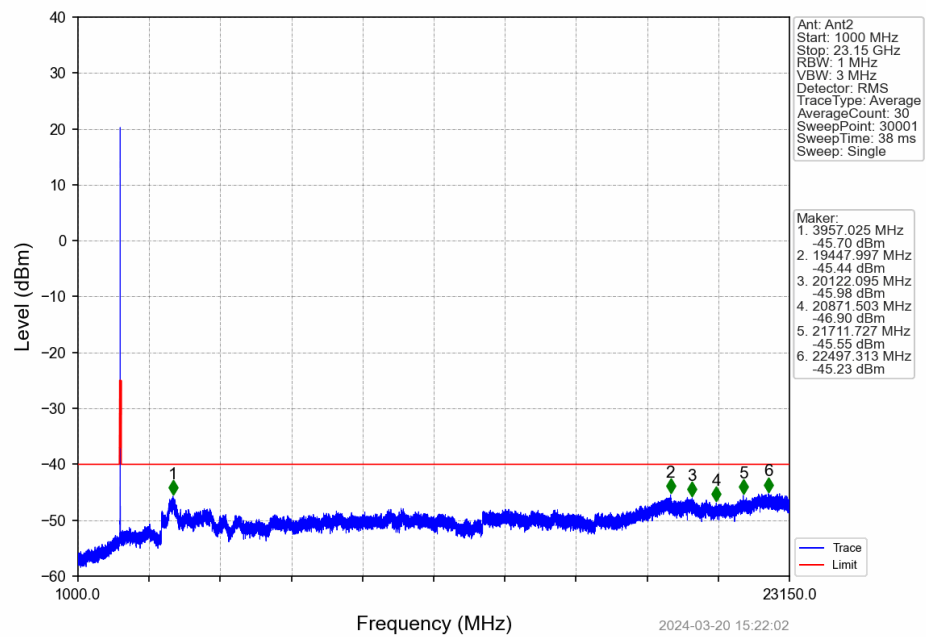
n30 15kHz SISO NTN 10MHz DFT-s-OFDM QPSK 2310MHz Edge 1RB Right



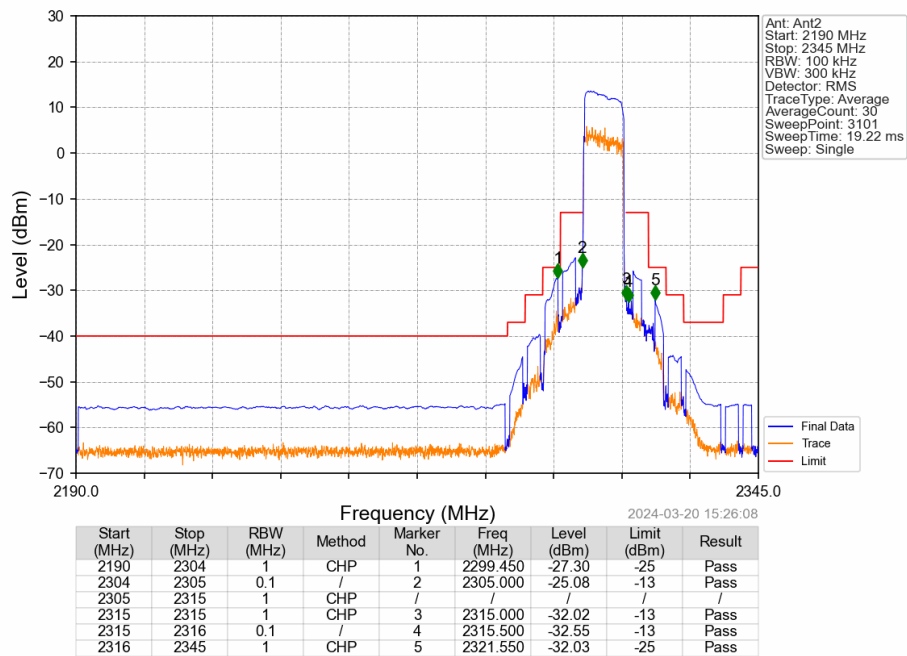
n30 15kHz SISO NTN 10MHz DFT-s-OFDM QPSK 2310MHz Edge 1RB Right



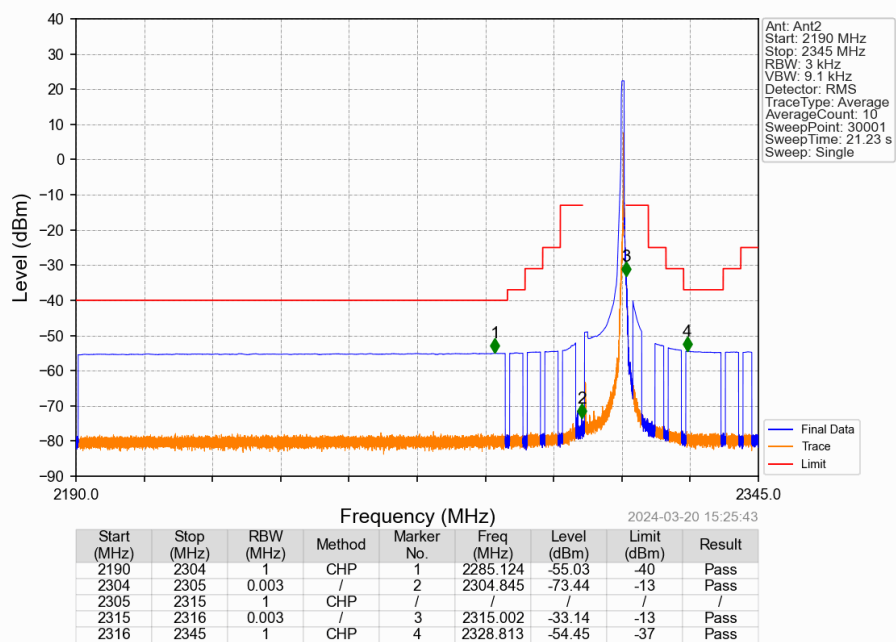
n30 15kHz SISO NTN 10MHz DFT-s-OFDM QPSK 2310MHz Edge 1RB Right



n30 15kHz SISO NTN 10MHz DFT-s-OFDM QPSK 2310MHz Outer Full



n30 15kHz SISO NTN 10MHz DFT-s-OFDM QPSK 2310MHz Inner 1RB Right



6. Field Strength of Spurious Radiation

SA Band 30- Middle channel								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable Loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
4611.0	-64.15	-40	-24.15	-69.31	4.4	9.56	Horizontal	Pass
6916.5	-54.88	-40	-14.88	-60.99	4.91	11.02	Horizontal	Pass
9222.0	-58.11	-40	-18.11	-66.09	5.24	13.22	Horizontal	Pass
4611.0	-61.2	-40	-21.2	-66.36	4.4	9.56	Vertical	Pass
6916.5	-51.42	-40	-11.42	-57.53	4.91	11.02	Vertical	Pass
9222.0	-57.77	-40	-17.77	-65.75	5.24	13.22	Vertical	Pass