

Appendix RF test data for LTE_band_4

1. Effective (Isotropic) Radiated Power Output Data

1.1 Test Result

1.1.1 B4_1.4MHz_EIRP

Band: 4 / Bandwidth: 1.4MHz / NTN								
Modulation	Frequency (MHz)	RB Allocation		Conducted Power (dBm)	Gain (dBi)	EIRP (dBm)		Verdict
		Size	Offset			Result	Limit	
QPSK	1710.7	1	0	23.86	1.27	25.13	<=30	Pass
			2	23.88	1.27	25.15	<=30	Pass
			5	23.85	1.27	25.12	<=30	Pass
		3	0	23.84	1.27	25.11	<=30	Pass
			2	23.84	1.27	25.11	<=30	Pass
			3	23.86	1.27	25.13	<=30	Pass
		6	0	22.84	1.27	24.11	<=30	Pass
	1732.5	1	0	23.75	1.27	25.02	<=30	Pass
			2	23.76	1.27	25.03	<=30	Pass
			5	23.76	1.27	25.03	<=30	Pass
		3	0	23.76	1.27	25.03	<=30	Pass
			2	23.74	1.27	25.01	<=30	Pass
			3	23.72	1.27	24.99	<=30	Pass
		6	0	22.82	1.27	24.09	<=30	Pass
	1754.3	1	0	23.75	1.27	25.02	<=30	Pass
			2	23.76	1.27	25.03	<=30	Pass
			5	23.72	1.27	24.99	<=30	Pass
		3	0	23.81	1.27	25.08	<=30	Pass
			2	23.80	1.27	25.07	<=30	Pass
			3	23.78	1.27	25.05	<=30	Pass
		6	0	22.82	1.27	24.09	<=30	Pass
16QAM	1710.7	1	0	22.90	1.27	24.17	<=30	Pass
			2	22.92	1.27	24.19	<=30	Pass
			5	22.92	1.27	24.19	<=30	Pass
		3	0	22.87	1.27	24.14	<=30	Pass
			2	22.87	1.27	24.14	<=30	Pass
			3	22.87	1.27	24.14	<=30	Pass
		6	0	21.76	1.27	23.03	<=30	Pass
	1732.5	1	0	22.97	1.27	24.24	<=30	Pass
			2	22.97	1.27	24.24	<=30	Pass
			5	22.95	1.27	24.22	<=30	Pass
		3	0	22.80	1.27	24.07	<=30	Pass
			2	22.76	1.27	24.03	<=30	Pass
			3	22.76	1.27	24.03	<=30	Pass
		6	0	21.80	1.27	23.07	<=30	Pass
	1754.3	1	0	22.75	1.27	24.02	<=30	Pass
			2	22.76	1.27	24.03	<=30	Pass
			5	22.77	1.27	24.04	<=30	Pass
		3	0	22.96	1.27	24.23	<=30	Pass
			2	22.99	1.27	24.26	<=30	Pass
			3	23.01	1.27	24.28	<=30	Pass
		6	0	21.79	1.27	23.06	<=30	Pass

Note1: EIRP=Conducted Power+Antenna Gain

**1.1.2 B4_3MHz_EIRP**

Band: 4 / Bandwidth: 3MHz / NTNV								
Modulation	Frequency (MHz)	RB Allocation		Conducted Power (dBm)	Gain (dBi)	EIRP (dBm)		Verdict
		Size	Offset			Result	Limit	
QPSK	1711.5	1	0	23.90	1.27	25.17	<=30	Pass
			7	23.82	1.27	25.09	<=30	Pass
			14	23.78	1.27	25.05	<=30	Pass
		8	0	22.80	1.27	24.07	<=30	Pass
			4	22.80	1.27	24.07	<=30	Pass
			7	22.81	1.27	24.08	<=30	Pass
		15	0	22.82	1.27	24.09	<=30	Pass
	1732.5	1	0	23.78	1.27	25.05	<=30	Pass
			7	23.76	1.27	25.03	<=30	Pass
			14	23.73	1.27	25.00	<=30	Pass
		8	0	22.75	1.27	24.02	<=30	Pass
			4	22.71	1.27	23.98	<=30	Pass
			7	22.72	1.27	23.99	<=30	Pass
		15	0	22.71	1.27	23.98	<=30	Pass
	1753.5	1	0	23.73	1.27	25.00	<=30	Pass
			7	23.81	1.27	25.08	<=30	Pass
			14	23.75	1.27	25.02	<=30	Pass
		8	0	22.81	1.27	24.08	<=30	Pass
			4	22.81	1.27	24.08	<=30	Pass
			7	22.81	1.27	24.08	<=30	Pass
		15	0	22.83	1.27	24.10	<=30	Pass
16QAM	1711.5	1	0	23.45	1.27	24.72	<=30	Pass
			7	23.35	1.27	24.62	<=30	Pass
			14	23.35	1.27	24.62	<=30	Pass
		8	0	21.97	1.27	23.24	<=30	Pass
			4	21.97	1.27	23.24	<=30	Pass
			7	21.96	1.27	23.23	<=30	Pass
		15	0	21.87	1.27	23.14	<=30	Pass
	1732.5	1	0	22.81	1.27	24.08	<=30	Pass
			7	22.82	1.27	24.09	<=30	Pass
			14	22.78	1.27	24.05	<=30	Pass
		8	0	21.79	1.27	23.06	<=30	Pass
			4	21.77	1.27	23.04	<=30	Pass
			7	21.76	1.27	23.03	<=30	Pass
		15	0	21.76	1.27	23.03	<=30	Pass
	1753.5	1	0	22.97	1.27	24.24	<=30	Pass
			7	23.03	1.27	24.30	<=30	Pass
			14	22.96	1.27	24.23	<=30	Pass
		8	0	21.78	1.27	23.05	<=30	Pass
			4	21.78	1.27	23.05	<=30	Pass
			7	21.79	1.27	23.06	<=30	Pass
		15	0	21.74	1.27	23.01	<=30	Pass
Note1: EIRP=Conducted Power+Antenna Gain								

1.1.3 B4_5MHz_EIRP

Band: 4 / Bandwidth: 5MHz / NTNV								
Modulation	Frequency (MHz)	RB Allocation		Conducted Power (dBm)	Gain (dBi)	EIRP (dBm)		Verdict
		Size	Offset			Result	Limit	
QPSK	1712.5	1	0	24.06	1.27	25.33	<=30	Pass
			13	23.97	1.27	25.24	<=30	Pass
			24	23.94	1.27	25.21	<=30	Pass



		12	0	22.80	1.27	24.07	<=30	Pass
			6	22.83	1.27	24.10	<=30	Pass
			13	22.81	1.27	24.08	<=30	Pass
		25	0	22.81	1.27	24.08	<=30	Pass
	1732.5	1	0	23.88	1.27	25.15	<=30	Pass
			13	23.82	1.27	25.09	<=30	Pass
			24	23.83	1.27	25.10	<=30	Pass
		12	0	22.79	1.27	24.06	<=30	Pass
			6	22.76	1.27	24.03	<=30	Pass
			13	22.78	1.27	24.05	<=30	Pass
		25	0	22.79	1.27	24.06	<=30	Pass
	1752.5	1	0	23.81	1.27	25.08	<=30	Pass
			13	23.83	1.27	25.10	<=30	Pass
			24	23.92	1.27	25.19	<=30	Pass
		12	0	22.85	1.27	24.12	<=30	Pass
			6	22.85	1.27	24.12	<=30	Pass
			13	22.76	1.27	24.03	<=30	Pass
		25	0	22.85	1.27	24.12	<=30	Pass
16QAM	1712.5	1	0	22.77	1.27	24.04	<=30	Pass
			13	22.68	1.27	23.95	<=30	Pass
			24	22.71	1.27	23.98	<=30	Pass
		12	0	21.79	1.27	23.06	<=30	Pass
			6	21.79	1.27	23.06	<=30	Pass
			13	21.78	1.27	23.05	<=30	Pass
		25	0	21.83	1.27	23.10	<=30	Pass
	1732.5	1	0	22.90	1.27	24.17	<=30	Pass
			13	22.87	1.27	24.14	<=30	Pass
			24	22.88	1.27	24.15	<=30	Pass
		12	0	21.74	1.27	23.01	<=30	Pass
			6	21.74	1.27	23.01	<=30	Pass
			13	21.72	1.27	22.99	<=30	Pass
		25	0	21.78	1.27	23.05	<=30	Pass
	1752.5	1	0	23.08	1.27	24.35	<=30	Pass
			13	23.11	1.27	24.38	<=30	Pass
			24	23.14	1.27	24.41	<=30	Pass
		12	0	21.86	1.27	23.13	<=30	Pass
			6	21.83	1.27	23.10	<=30	Pass
			13	21.81	1.27	23.08	<=30	Pass
		25	0	21.81	1.27	23.08	<=30	Pass

Note1: EIRP=Conducted Power+Antenna Gain

1.1.4 B4_10MHz_EIRP

Band: 4 / Bandwidth: 10MHz / NTNV								
Modulation	Frequency (MHz)	RB Allocation		Conducted Power (dBm)	Gain (dBi)	EIRP (dBm)		Verdict
		Size	Offset			Result	Limit	
QPSK	1715	1	0	23.88	1.27	25.15	<=30	Pass
			25	23.90	1.27	25.17	<=30	Pass
			49	23.87	1.27	25.14	<=30	Pass
		25	0	22.81	1.27	24.08	<=30	Pass
			13	22.83	1.27	24.10	<=30	Pass
			25	22.79	1.27	24.06	<=30	Pass
		50	0	22.78	1.27	24.05	<=30	Pass
	1732.5	1	0	23.79	1.27	25.06	<=30	Pass
			25	23.81	1.27	25.08	<=30	Pass
			49	23.78	1.27	25.05	<=30	Pass
		25	0	22.74	1.27	24.01	<=30	Pass
			13	22.77	1.27	24.04	<=30	Pass



	1750	50	25	22.79	1.27	24.06	<=30	Pass
			0	22.81	1.27	24.08	<=30	Pass
			0	23.70	1.27	24.97	<=30	Pass
		1	25	23.75	1.27	25.02	<=30	Pass
			49	23.80	1.27	25.07	<=30	Pass
			0	22.77	1.27	24.04	<=30	Pass
		25	13	22.75	1.27	24.02	<=30	Pass
			25	22.78	1.27	24.05	<=30	Pass
			0	22.78	1.27	24.05	<=30	Pass
		50	0	22.78	1.27	24.05	<=30	Pass
16QAM	1715	1	0	23.44	1.27	24.71	<=30	Pass
			25	23.44	1.27	24.71	<=30	Pass
			49	23.41	1.27	24.68	<=30	Pass
		12	0	22.80	1.27	24.07	<=30	Pass
			19	22.88	1.27	24.15	<=30	Pass
			38	22.87	1.27	24.14	<=30	Pass
		27	0	21.76	1.27	23.03	<=30	Pass
	1732.5	1	0	22.82	1.27	24.09	<=30	Pass
			25	22.83	1.27	24.10	<=30	Pass
			49	22.78	1.27	24.05	<=30	Pass
		12	0	22.84	1.27	24.11	<=30	Pass
			19	22.84	1.27	24.11	<=30	Pass
			38	22.79	1.27	24.06	<=30	Pass
		27	0	21.71	1.27	22.98	<=30	Pass
	1750	1	0	22.88	1.27	24.15	<=30	Pass
			25	22.94	1.27	24.21	<=30	Pass
			49	22.96	1.27	24.23	<=30	Pass
		12	0	22.71	1.27	23.98	<=30	Pass
			19	22.75	1.27	24.02	<=30	Pass
			38	22.78	1.27	24.05	<=30	Pass
		27	23	21.81	1.27	23.08	<=30	Pass

Note1: EIRP=Conducted Power+Antenna Gain

1.1.5 B4_15MHz_EIRP

Band: 4 / Bandwidth: 15MHz / NTN								
Modulation	Frequency (MHz)	RB Allocation		Conducted Power (dBm)	Gain (dBi)	EIRP (dBm)		Verdict
		Size	Offset			Result	Limit	
QPSK	1717.5	1	0	23.80	1.27	25.07	<=30	Pass
			38	23.80	1.27	25.07	<=30	Pass
			74	23.72	1.27	24.99	<=30	Pass
		36	0	22.81	1.27	24.08	<=30	Pass
			18	22.84	1.27	24.11	<=30	Pass
			39	22.78	1.27	24.05	<=30	Pass
		75	0	22.81	1.27	24.08	<=30	Pass
	1732.5	1	0	23.69	1.27	24.96	<=30	Pass
			38	23.69	1.27	24.96	<=30	Pass
			74	23.61	1.27	24.88	<=30	Pass
		36	0	22.71	1.27	23.98	<=30	Pass
			18	22.72	1.27	23.99	<=30	Pass
			39	22.78	1.27	24.05	<=30	Pass
		75	0	22.77	1.27	24.04	<=30	Pass
	1747.5	1	0	23.67	1.27	24.94	<=30	Pass
			38	23.71	1.27	24.98	<=30	Pass
			74	23.73	1.27	25.00	<=30	Pass
		36	0	22.70	1.27	23.97	<=30	Pass
			18	22.74	1.27	24.01	<=30	Pass
			39	22.71	1.27	23.98	<=30	Pass
		75	0	22.71	1.27	23.98	<=30	Pass



16QAM	1717.5	1	0	23.42	1.27	24.69	<=30	Pass
			38	23.37	1.27	24.64	<=30	Pass
			74	23.29	1.27	24.56	<=30	Pass
		12	0	22.83	1.27	24.10	<=30	Pass
			31	22.87	1.27	24.14	<=30	Pass
			63	22.80	1.27	24.07	<=30	Pass
		27	0	21.74	1.27	23.01	<=30	Pass
	1732.5	1	0	23.13	1.27	24.40	<=30	Pass
			38	23.16	1.27	24.43	<=30	Pass
			74	23.04	1.27	24.31	<=30	Pass
		12	0	22.68	1.27	23.95	<=30	Pass
			31	22.69	1.27	23.96	<=30	Pass
			63	22.66	1.27	23.93	<=30	Pass
		27	0	21.72	1.27	22.99	<=30	Pass
	1747.5	1	0	22.83	1.27	24.10	<=30	Pass
			38	22.89	1.27	24.16	<=30	Pass
			74	22.91	1.27	24.18	<=30	Pass
		12	0	22.65	1.27	23.92	<=30	Pass
			31	22.70	1.27	23.97	<=30	Pass
			63	22.74	1.27	24.01	<=30	Pass
		27	48	21.80	1.27	23.07	<=30	Pass

Note1: EIRP=Conducted Power+Antenna Gain

1.1.6 B4_20MHz_EIRP

Band: 4 / Bandwidth: 20MHz / NTN								
Modulation	Frequency (MHz)	RB Allocation		Conducted Power (dBm)	Gain (dBi)	EIRP (dBm)		Verdict
		Size	Offset			Result	Limit	
QPSK	1720	1	0	23.79	1.27	25.06	<=30	Pass
			50	23.89	1.27	25.16	<=30	Pass
			99	23.76	1.27	25.03	<=30	Pass
		50	0	22.88	1.27	24.15	<=30	Pass
			25	22.83	1.27	24.10	<=30	Pass
			50	22.82	1.27	24.09	<=30	Pass
		100	0	22.81	1.27	24.08	<=30	Pass
	1732.5	1	0	23.69	1.27	24.96	<=30	Pass
			50	23.77	1.27	25.04	<=30	Pass
			99	23.69	1.27	24.96	<=30	Pass
		50	0	22.71	1.27	23.98	<=30	Pass
			25	22.78	1.27	24.05	<=30	Pass
			50	22.84	1.27	24.11	<=30	Pass
		100	0	22.77	1.27	24.04	<=30	Pass
	1745	1	0	23.70	1.27	24.97	<=30	Pass
			50	23.77	1.27	25.04	<=30	Pass
			99	23.80	1.27	25.07	<=30	Pass
		50	0	22.72	1.27	23.99	<=30	Pass
			25	22.80	1.27	24.07	<=30	Pass
			50	22.68	1.27	23.95	<=30	Pass
		100	0	22.70	1.27	23.97	<=30	Pass
16QAM	1720	1	0	23.34	1.27	24.61	<=30	Pass
			50	23.40	1.27	24.67	<=30	Pass
			99	23.29	1.27	24.56	<=30	Pass
		12	0	22.71	1.27	23.98	<=30	Pass
			44	22.83	1.27	24.10	<=30	Pass
			88	22.75	1.27	24.02	<=30	Pass
		27	0	21.77	1.27	23.04	<=30	Pass
	1732.5	1	0	22.88	1.27	24.15	<=30	Pass
			50	23.02	1.27	24.29	<=30	Pass



		12	99	22.88	1.27	24.15	<=30	Pass
			0	22.61	1.27	23.88	<=30	Pass
			44	22.75	1.27	24.02	<=30	Pass
			88	22.65	1.27	23.92	<=30	Pass
	1745	27	0	21.68	1.27	22.95	<=30	Pass
			0	22.97	1.27	24.24	<=30	Pass
			50	23.07	1.27	24.34	<=30	Pass
		1	99	23.07	1.27	24.34	<=30	Pass
			0	22.70	1.27	23.97	<=30	Pass
			44	22.78	1.27	24.05	<=30	Pass
		12	88	22.77	1.27	24.04	<=30	Pass
			73	21.62	1.27	22.89	<=30	Pass

Note1: EIRP=Conducted Power+Antenna Gain

2. Frequency Stability

2.1 Test Result

2.1.1 B4_1.4MHz

Band: 4 / Bandwidth: 1.4MHz									
Modulation	Frequency (MHz)	RB Allocation		Temp. (°C)	Voltage (VDC)	Freq. Error (Hz)	Freq. vs. Rated (ppm)		Verdict
		Size	Offset				Result	Limit	
QPSK	1710.7	6	0	20	3.27	-0.057	0.0000	-2.5 to 2.5	Pass
					3.85	0.758	0.0004	-2.5 to 2.5	Pass
					4.43	7.997	0.0047	-2.5 to 2.5	Pass
				-30	3.85	2.232	0.0013	-2.5 to 2.5	Pass
					-20	3.85	0.0024	-2.5 to 2.5	Pass
				-10	3.85	3.805	0.0022	-2.5 to 2.5	Pass
					0	3.85	0.0017	-2.5 to 2.5	Pass
				10	3.85	1.860	0.0011	-2.5 to 2.5	Pass
					30	3.85	0.0033	-2.5 to 2.5	Pass
				40	3.85	0.815	0.0005	-2.5 to 2.5	Pass
					50	3.85	0.0030	-2.5 to 2.5	Pass
	1732.5	6	0	20	3.27	0.558	0.0003	-2.5 to 2.5	Pass
					3.85	2.103	0.0012	-2.5 to 2.5	Pass
					4.43	3.805	0.0022	-2.5 to 2.5	Pass
				-30	3.85	0.830	0.0005	-2.5 to 2.5	Pass
					-20	3.85	0.0008	-2.5 to 2.5	Pass
				-10	3.85	1.831	0.0011	-2.5 to 2.5	Pass
					0	3.85	0.0053	-2.5 to 2.5	Pass
				10	3.85	4.363	0.0025	-2.5 to 2.5	Pass
					30	3.85	0.0008	-2.5 to 2.5	Pass
				40	3.85	5.822	0.0034	-2.5 to 2.5	Pass
					50	3.85	0.0016	-2.5 to 2.5	Pass
	1754.3	6	0	20	3.27	4.635	0.0026	-2.5 to 2.5	Pass
					3.85	-2.174	-0.0012	-2.5 to 2.5	Pass
					4.43	3.834	0.0022	-2.5 to 2.5	Pass
				-30	3.85	5.336	0.0030	-2.5 to 2.5	Pass
					-20	3.85	0.0030	-2.5 to 2.5	Pass
				-10	3.85	2.275	0.0013	-2.5 to 2.5	Pass
					0	3.85	0.0046	-2.5 to 2.5	Pass
				10	3.85	1.502	0.0009	-2.5 to 2.5	Pass
					30	3.85	-1.674	-2.5 to 2.5	Pass
				40	3.85	3.748	0.0021	-2.5 to 2.5	Pass
					50	3.85	-2.360	-2.5 to 2.5	Pass



16QAM	1710.7	6	0	20	3.27	2.546	0.0015	-2.5 to 2.5	Pass
					3.85	-2.632	-0.0015	-2.5 to 2.5	Pass
					4.43	-1.044	-0.0006	-2.5 to 2.5	Pass
				-30	3.85	7.982	0.0047	-2.5 to 2.5	Pass
				-20	3.85	-1.774	-0.0010	-2.5 to 2.5	Pass
				-10	3.85	0.515	0.0003	-2.5 to 2.5	Pass
				0	3.85	0.529	0.0003	-2.5 to 2.5	Pass
				10	3.85	0.687	0.0004	-2.5 to 2.5	Pass
				30	3.85	-2.990	-0.0017	-2.5 to 2.5	Pass
				40	3.85	4.535	0.0027	-2.5 to 2.5	Pass
				50	3.85	-4.120	-0.0024	-2.5 to 2.5	Pass
	1732.5	6	0	20	3.27	2.332	0.0013	-2.5 to 2.5	Pass
					3.85	0.887	0.0005	-2.5 to 2.5	Pass
					4.43	-1.802	-0.0010	-2.5 to 2.5	Pass
				-30	3.85	-2.861	-0.0017	-2.5 to 2.5	Pass
				-20	3.85	0.787	0.0005	-2.5 to 2.5	Pass
				-10	3.85	-4.735	-0.0027	-2.5 to 2.5	Pass
				0	3.85	3.462	0.0020	-2.5 to 2.5	Pass
				10	3.85	-0.644	-0.0004	-2.5 to 2.5	Pass
				30	3.85	2.418	0.0014	-2.5 to 2.5	Pass
				40	3.85	-2.546	-0.0015	-2.5 to 2.5	Pass
				50	3.85	2.289	0.0013	-2.5 to 2.5	Pass
	1754.3	6	0	20	3.27	0.615	0.0004	-2.5 to 2.5	Pass
					3.85	3.448	0.0020	-2.5 to 2.5	Pass
					4.43	-4.950	-0.0028	-2.5 to 2.5	Pass
				-30	3.85	-1.330	-0.0008	-2.5 to 2.5	Pass
				-20	3.85	1.760	0.0010	-2.5 to 2.5	Pass
				-10	3.85	3.276	0.0019	-2.5 to 2.5	Pass
				0	3.85	-4.663	-0.0027	-2.5 to 2.5	Pass
				10	3.85	-2.174	-0.0012	-2.5 to 2.5	Pass
				30	3.85	-5.078	-0.0029	-2.5 to 2.5	Pass
				40	3.85	-0.100	-0.0001	-2.5 to 2.5	Pass
				50	3.85	1.159	0.0007	-2.5 to 2.5	Pass

2.1.2 B4_3MHz

Band: 4 / Bandwidth: 3MHz									
Modulation	Frequency (MHz)	RB Allocation		Temp. (°C)	Voltage (VDC)	Freq. Error (Hz)	Freq. vs. Rated (ppm)		Verdict
		Size	Offset				Result	Limit	
QPSK	1711.5	15	0	20	3.27	-6.323	-0.0037	-2.5 to 2.5	Pass
					3.85	-3.662	-0.0021	-2.5 to 2.5	Pass
					4.43	-1.059	-0.0006	-2.5 to 2.5	Pass
				-30	3.85	-2.618	-0.0015	-2.5 to 2.5	Pass
				-20	3.85	-0.086	-0.0001	-2.5 to 2.5	Pass
				-10	3.85	-1.903	-0.0011	-2.5 to 2.5	Pass
				0	3.85	6.967	0.0041	-2.5 to 2.5	Pass
				10	3.85	1.373	0.0008	-2.5 to 2.5	Pass
				30	3.85	2.575	0.0015	-2.5 to 2.5	Pass
				40	3.85	-5.436	-0.0032	-2.5 to 2.5	Pass
				50	3.85	-0.987	-0.0006	-2.5 to 2.5	Pass
	1732.5	15	0	20	3.27	2.947	0.0017	-2.5 to 2.5	Pass
					3.85	1.144	0.0007	-2.5 to 2.5	Pass
					4.43	8.154	0.0047	-2.5 to 2.5	Pass
				-30	3.85	2.475	0.0014	-2.5 to 2.5	Pass
				-20	3.85	0.944	0.0005	-2.5 to 2.5	Pass
				-10	3.85	1.602	0.0009	-2.5 to 2.5	Pass
				0	3.85	0.057	0.0000	-2.5 to 2.5	Pass
				10	3.85	4.206	0.0024	-2.5 to 2.5	Pass



	1753.5	15	0	30	3.85	-2.503	-0.0014	-2.5 to 2.5	Pass
				40	3.85	1.459	0.0008	-2.5 to 2.5	Pass
				50	3.85	1.259	0.0007	-2.5 to 2.5	Pass
				20	3.27	5.522	0.0031	-2.5 to 2.5	Pass
					3.85	2.203	0.0013	-2.5 to 2.5	Pass
					4.43	2.389	0.0014	-2.5 to 2.5	Pass
				-30	3.85	5.350	0.0031	-2.5 to 2.5	Pass
				-20	3.85	-0.658	-0.0004	-2.5 to 2.5	Pass
				-10	3.85	1.802	0.0010	-2.5 to 2.5	Pass
				0	3.85	4.249	0.0024	-2.5 to 2.5	Pass
				10	3.85	5.379	0.0031	-2.5 to 2.5	Pass
				30	3.85	-0.958	-0.0005	-2.5 to 2.5	Pass
				40	3.85	-1.073	-0.0006	-2.5 to 2.5	Pass
				50	3.85	0.873	0.0005	-2.5 to 2.5	Pass
16QAM	1711.5	15	0	20	3.27	0.401	0.0002	-2.5 to 2.5	Pass
					3.85	1.431	0.0008	-2.5 to 2.5	Pass
					4.43	1.030	0.0006	-2.5 to 2.5	Pass
				-30	3.85	1.974	0.0012	-2.5 to 2.5	Pass
				-20	3.85	-3.648	-0.0021	-2.5 to 2.5	Pass
				-10	3.85	-2.675	-0.0016	-2.5 to 2.5	Pass
				0	3.85	-0.830	-0.0005	-2.5 to 2.5	Pass
				10	3.85	3.262	0.0019	-2.5 to 2.5	Pass
				30	3.85	-0.372	-0.0002	-2.5 to 2.5	Pass
				40	3.85	1.616	0.0009	-2.5 to 2.5	Pass
				50	3.85	-2.246	-0.0013	-2.5 to 2.5	Pass
	1732.5	15	0	20	3.27	0.644	0.0004	-2.5 to 2.5	Pass
					3.85	4.377	0.0025	-2.5 to 2.5	Pass
					4.43	-0.315	-0.0002	-2.5 to 2.5	Pass
				-30	3.85	3.290	0.0019	-2.5 to 2.5	Pass
				-20	3.85	-2.275	-0.0013	-2.5 to 2.5	Pass
				-10	3.85	3.619	0.0021	-2.5 to 2.5	Pass
				0	3.85	-0.458	-0.0003	-2.5 to 2.5	Pass
				10	3.85	-2.031	-0.0012	-2.5 to 2.5	Pass
				30	3.85	1.230	0.0007	-2.5 to 2.5	Pass
				40	3.85	0.958	0.0006	-2.5 to 2.5	Pass
				50	3.85	2.246	0.0013	-2.5 to 2.5	Pass
	1753.5	15	0	20	3.27	-0.587	-0.0003	-2.5 to 2.5	Pass
					3.85	-0.072	0.0000	-2.5 to 2.5	Pass
					4.43	0.343	0.0002	-2.5 to 2.5	Pass
				-30	3.85	2.389	0.0014	-2.5 to 2.5	Pass
				-20	3.85	5.422	0.0031	-2.5 to 2.5	Pass
				-10	3.85	3.347	0.0019	-2.5 to 2.5	Pass
				0	3.85	0.443	0.0003	-2.5 to 2.5	Pass
				10	3.85	-3.176	-0.0018	-2.5 to 2.5	Pass
				30	3.85	7.968	0.0045	-2.5 to 2.5	Pass
				40	3.85	-3.963	-0.0023	-2.5 to 2.5	Pass
				50	3.85	0.515	0.0003	-2.5 to 2.5	Pass

2.1.3 B4_5MHz

Band: 4 / Bandwidth: 5MHz									
Modulation	Frequency (MHz)	RB Allocation		Temp. (°C)	Voltage (VDC)	Freq. Error (Hz)	Freq. vs. Rated (ppm)		Verdict
		Size	Offset				Result	Limit	
QPSK	1712.5	25	0	20	3.27	3.204	0.0019	-2.5 to 2.5	Pass
					3.85	-3.047	-0.0018	-2.5 to 2.5	Pass
					4.43	-3.448	-0.0020	-2.5 to 2.5	Pass
				-30	3.85	4.549	0.0027	-2.5 to 2.5	Pass
				-20	3.85	-0.730	-0.0004	-2.5 to 2.5	Pass



				-10	3.85	-1.273	-0.0007	-2.5 to 2.5	Pass	
				0	3.85	1.388	0.0008	-2.5 to 2.5	Pass	
				10	3.85	-1.259	-0.0007	-2.5 to 2.5	Pass	
				30	3.85	2.460	0.0014	-2.5 to 2.5	Pass	
				40	3.85	5.593	0.0033	-2.5 to 2.5	Pass	
				50	3.85	0.830	0.0005	-2.5 to 2.5	Pass	
	1732.5	25	0	20	3.27	0.515	0.0003	-2.5 to 2.5	Pass	
					3.85	-1.187	-0.0007	-2.5 to 2.5	Pass	
					4.43	3.047	0.0018	-2.5 to 2.5	Pass	
				-30	3.85	3.662	0.0021	-2.5 to 2.5	Pass	
				-20	3.85	-3.877	-0.0022	-2.5 to 2.5	Pass	
				-10	3.85	1.073	0.0006	-2.5 to 2.5	Pass	
				0	3.85	-0.930	-0.0005	-2.5 to 2.5	Pass	
				10	3.85	-1.860	-0.0011	-2.5 to 2.5	Pass	
				30	3.85	0.758	0.0004	-2.5 to 2.5	Pass	
				40	3.85	-2.389	-0.0014	-2.5 to 2.5	Pass	
				50	3.85	-1.760	-0.0010	-2.5 to 2.5	Pass	
				1752.5	25	0	20	3.27	-1.044	-0.0006
	3.85	-0.014	0.0000					-2.5 to 2.5	Pass	
	4.43	2.446	0.0014					-2.5 to 2.5	Pass	
	-30	3.85	2.217				0.0013	-2.5 to 2.5	Pass	
	-20	3.85	-0.129				-0.0001	-2.5 to 2.5	Pass	
	-10	3.85	-0.930				-0.0005	-2.5 to 2.5	Pass	
	0	3.85	4.764				0.0027	-2.5 to 2.5	Pass	
	10	3.85	1.030				0.0006	-2.5 to 2.5	Pass	
	30	3.85	1.016				0.0006	-2.5 to 2.5	Pass	
	40	3.85	-1.173				-0.0007	-2.5 to 2.5	Pass	
	50	3.85	-2.346				-0.0013	-2.5 to 2.5	Pass	
	16QAM	1712.5	25				0	20	3.27	-4.220
				3.85	1.230	0.0007			-2.5 to 2.5	Pass
4.43				2.475	0.0014	-2.5 to 2.5			Pass	
-30				3.85	-1.559	-0.0009		-2.5 to 2.5	Pass	
-20				3.85	0.672	0.0004		-2.5 to 2.5	Pass	
-10				3.85	1.974	0.0012		-2.5 to 2.5	Pass	
0				3.85	0.343	0.0002		-2.5 to 2.5	Pass	
10				3.85	-2.475	-0.0014		-2.5 to 2.5	Pass	
30				3.85	3.877	0.0023		-2.5 to 2.5	Pass	
40				3.85	1.817	0.0011		-2.5 to 2.5	Pass	
50				3.85	-2.861	-0.0017		-2.5 to 2.5	Pass	
1732.5				25	0	20		3.27	-1.159	-0.0007
		3.85	-3.104				-0.0018	-2.5 to 2.5	Pass	
		4.43	-3.533				-0.0020	-2.5 to 2.5	Pass	
		-30	3.85			-2.875	-0.0017	-2.5 to 2.5	Pass	
		-20	3.85			-0.615	-0.0004	-2.5 to 2.5	Pass	
		-10	3.85			1.245	0.0007	-2.5 to 2.5	Pass	
		0	3.85			-4.263	-0.0025	-2.5 to 2.5	Pass	
		10	3.85			-1.259	-0.0007	-2.5 to 2.5	Pass	
		30	3.85			-0.558	-0.0003	-2.5 to 2.5	Pass	
		40	3.85			-3.347	-0.0019	-2.5 to 2.5	Pass	
		50	3.85			5.264	0.0030	-2.5 to 2.5	Pass	
		1752.5	25			0	20	3.27	-1.144	-0.0007
3.85				-0.815	-0.0005			-2.5 to 2.5	Pass	
4.43				3.490	0.0020			-2.5 to 2.5	Pass	
-30				3.85	0.000		0.0000	-2.5 to 2.5	Pass	
-20				3.85	-0.858		-0.0005	-2.5 to 2.5	Pass	
-10				3.85	-5.550		-0.0032	-2.5 to 2.5	Pass	
0				3.85	-0.072		0.0000	-2.5 to 2.5	Pass	
10				3.85	2.017		0.0012	-2.5 to 2.5	Pass	
30	3.85			0.401	0.0002		-2.5 to 2.5	Pass		



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				40	3.85	0.887	0.0005	-2.5 to 2.5	Pass
				50	3.85	5.493	0.0031	-2.5 to 2.5	Pass

2.1.4 B4_10MHz

Band: 4 / Bandwidth: 10MHz									
Modulation	Frequency (MHz)	RB Allocation		Temp. (°C)	Voltage (VDC)	Freq. Error (Hz)	Freq. vs. Rated (ppm)		Verdict
		Size	Offset				Result	Limit	
QPSK	1715	50	0	20	3.27	1.345	0.0008	-2.5 to 2.5	Pass
					3.85	0.458	0.0003	-2.5 to 2.5	Pass
					4.43	-1.545	-0.0009	-2.5 to 2.5	Pass
				-30	3.85	0.715	0.0004	-2.5 to 2.5	Pass
				-20	3.85	-0.429	-0.0003	-2.5 to 2.5	Pass
				-10	3.85	3.076	0.0018	-2.5 to 2.5	Pass
				0	3.85	-0.544	-0.0003	-2.5 to 2.5	Pass
				10	3.85	-1.659	-0.0010	-2.5 to 2.5	Pass
				30	3.85	1.802	0.0011	-2.5 to 2.5	Pass
				40	3.85	2.904	0.0017	-2.5 to 2.5	Pass
				50	3.85	-1.001	-0.0006	-2.5 to 2.5	Pass
	1732.5	50	0	20	3.27	0.200	0.0001	-2.5 to 2.5	Pass
					3.85	1.688	0.0010	-2.5 to 2.5	Pass
					4.43	-0.200	-0.0001	-2.5 to 2.5	Pass
				-30	3.85	-4.148	-0.0024	-2.5 to 2.5	Pass
				-20	3.85	-0.901	-0.0005	-2.5 to 2.5	Pass
				-10	3.85	-0.701	-0.0004	-2.5 to 2.5	Pass
				0	3.85	2.103	0.0012	-2.5 to 2.5	Pass
				10	3.85	-0.744	-0.0004	-2.5 to 2.5	Pass
				30	3.85	1.602	0.0009	-2.5 to 2.5	Pass
				40	3.85	2.217	0.0013	-2.5 to 2.5	Pass
				50	3.85	1.345	0.0008	-2.5 to 2.5	Pass
	1750	50	0	20	3.27	3.004	0.0017	-2.5 to 2.5	Pass
					3.85	3.662	0.0021	-2.5 to 2.5	Pass
					4.43	6.852	0.0039	-2.5 to 2.5	Pass
				-30	3.85	5.379	0.0031	-2.5 to 2.5	Pass
				-20	3.85	5.651	0.0032	-2.5 to 2.5	Pass
				-10	3.85	5.393	0.0031	-2.5 to 2.5	Pass
				0	3.85	5.379	0.0031	-2.5 to 2.5	Pass
				10	3.85	5.307	0.0030	-2.5 to 2.5	Pass
				30	3.85	2.117	0.0012	-2.5 to 2.5	Pass
				40	3.85	6.723	0.0038	-2.5 to 2.5	Pass
16QAM	1715	27	0	20	3.85	3.276	0.0019	-2.5 to 2.5	Pass
					3.27	5.436	0.0032	-2.5 to 2.5	Pass
					4.43	0.887	0.0005	-2.5 to 2.5	Pass
				-30	3.85	3.247	0.0019	-2.5 to 2.5	Pass
				-20	3.85	3.662	0.0021	-2.5 to 2.5	Pass
				-10	3.85	2.604	0.0015	-2.5 to 2.5	Pass
				0	3.85	2.875	0.0017	-2.5 to 2.5	Pass
				10	3.85	2.918	0.0017	-2.5 to 2.5	Pass
				30	3.85	1.917	0.0011	-2.5 to 2.5	Pass
				40	3.85	0.629	0.0004	-2.5 to 2.5	Pass
				50	3.85	2.661	0.0016	-2.5 to 2.5	Pass
	1732.5	27	0	20	3.27	1.802	0.0010	-2.5 to 2.5	Pass
					3.85	1.888	0.0011	-2.5 to 2.5	Pass
					4.43	1.760	0.0010	-2.5 to 2.5	Pass
				-30	3.85	-0.873	-0.0005	-2.5 to 2.5	Pass
				-20	3.85	-3.905	-0.0023	-2.5 to 2.5	Pass
				-10	3.85	1.445	0.0008	-2.5 to 2.5	Pass



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				0	3.85	1.388	0.0008	-2.5 to 2.5	Pass
				10	3.85	0.916	0.0005	-2.5 to 2.5	Pass
				30	3.85	-0.930	-0.0005	-2.5 to 2.5	Pass
				40	3.85	2.947	0.0017	-2.5 to 2.5	Pass
				50	3.85	1.502	0.0009	-2.5 to 2.5	Pass
	1750	27	23	20	3.27	6.938	0.0040	-2.5 to 2.5	Pass
					3.85	2.732	0.0016	-2.5 to 2.5	Pass
					4.43	7.052	0.0040	-2.5 to 2.5	Pass
				-30	3.85	4.649	0.0027	-2.5 to 2.5	Pass
				-20	3.85	6.795	0.0039	-2.5 to 2.5	Pass
				-10	3.85	6.824	0.0039	-2.5 to 2.5	Pass
				0	3.85	4.520	0.0026	-2.5 to 2.5	Pass
				10	3.85	3.448	0.0020	-2.5 to 2.5	Pass
				30	3.85	4.835	0.0028	-2.5 to 2.5	Pass
				40	3.85	5.078	0.0029	-2.5 to 2.5	Pass
				50	3.85	5.121	0.0029	-2.5 to 2.5	Pass

2.1.5 B4_15MHz

Band: 4 / Bandwidth: 15MHz									
Modulation	Frequency (MHz)	RB Allocation		Temp. (°C)	Voltage (VDC)	Freq. Error (Hz)	Freq. vs. Rated (ppm)		Verdict
		Size	Offset				Result	Limit	
QPSK	1717.5	75	0	20	3.27	3.791	0.0022	-2.5 to 2.5	Pass
					3.85	5.450	0.0032	-2.5 to 2.5	Pass
					4.43	4.020	0.0023	-2.5 to 2.5	Pass
				-30	3.85	2.217	0.0013	-2.5 to 2.5	Pass
				-20	3.85	4.077	0.0024	-2.5 to 2.5	Pass
				-10	3.85	3.877	0.0023	-2.5 to 2.5	Pass
				0	3.85	3.119	0.0018	-2.5 to 2.5	Pass
				10	3.85	5.207	0.0030	-2.5 to 2.5	Pass
				30	3.85	6.280	0.0037	-2.5 to 2.5	Pass
				40	3.85	1.960	0.0011	-2.5 to 2.5	Pass
				50	3.85	4.206	0.0024	-2.5 to 2.5	Pass
	1732.5	75	0	20	3.27	1.245	0.0007	-2.5 to 2.5	Pass
					3.85	5.035	0.0029	-2.5 to 2.5	Pass
					4.43	1.745	0.0010	-2.5 to 2.5	Pass
				-30	3.85	2.460	0.0014	-2.5 to 2.5	Pass
				-20	3.85	3.147	0.0018	-2.5 to 2.5	Pass
				-10	3.85	3.633	0.0021	-2.5 to 2.5	Pass
				0	3.85	3.448	0.0020	-2.5 to 2.5	Pass
				10	3.85	4.020	0.0023	-2.5 to 2.5	Pass
				30	3.85	3.777	0.0022	-2.5 to 2.5	Pass
				40	3.85	3.877	0.0022	-2.5 to 2.5	Pass
				50	3.85	2.890	0.0017	-2.5 to 2.5	Pass
	1747.5	75	0	20	3.27	1.659	0.0009	-2.5 to 2.5	Pass
					3.85	3.777	0.0022	-2.5 to 2.5	Pass
					4.43	2.217	0.0013	-2.5 to 2.5	Pass
				-30	3.85	3.877	0.0022	-2.5 to 2.5	Pass
				-20	3.85	3.548	0.0020	-2.5 to 2.5	Pass
				-10	3.85	1.273	0.0007	-2.5 to 2.5	Pass
				0	3.85	4.263	0.0024	-2.5 to 2.5	Pass
				10	3.85	1.988	0.0011	-2.5 to 2.5	Pass
				30	3.85	3.562	0.0020	-2.5 to 2.5	Pass
				40	3.85	4.878	0.0028	-2.5 to 2.5	Pass
				50	3.85	1.931	0.0011	-2.5 to 2.5	Pass
16QAM	1717.5	27	0	20	3.27	4.621	0.0027	-2.5 to 2.5	Pass
					3.85	3.190	0.0019	-2.5 to 2.5	Pass
					4.43	7.167	0.0042	-2.5 to 2.5	Pass



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				-30	3.85	5.450	0.0032	-2.5 to 2.5	Pass
				-20	3.85	7.038	0.0041	-2.5 to 2.5	Pass
				-10	3.85	5.951	0.0035	-2.5 to 2.5	Pass
				0	3.85	5.479	0.0032	-2.5 to 2.5	Pass
				10	3.85	3.877	0.0023	-2.5 to 2.5	Pass
				30	3.85	4.621	0.0027	-2.5 to 2.5	Pass
				40	3.85	4.649	0.0027	-2.5 to 2.5	Pass
				50	3.85	3.705	0.0022	-2.5 to 2.5	Pass
	1732.5	27	0	20	3.27	1.116	0.0006	-2.5 to 2.5	Pass
					3.85	0.772	0.0004	-2.5 to 2.5	Pass
					4.43	-0.029	0.0000	-2.5 to 2.5	Pass
				-30	3.85	2.217	0.0013	-2.5 to 2.5	Pass
				-20	3.85	1.860	0.0011	-2.5 to 2.5	Pass
				-10	3.85	2.704	0.0016	-2.5 to 2.5	Pass
				0	3.85	-0.744	-0.0004	-2.5 to 2.5	Pass
				10	3.85	0.515	0.0003	-2.5 to 2.5	Pass
				30	3.85	3.033	0.0018	-2.5 to 2.5	Pass
				40	3.85	2.804	0.0016	-2.5 to 2.5	Pass
				50	3.85	2.117	0.0012	-2.5 to 2.5	Pass
	1747.5	27	48	20	3.27	0.501	0.0003	-2.5 to 2.5	Pass
					3.85	3.190	0.0018	-2.5 to 2.5	Pass
					4.43	1.130	0.0006	-2.5 to 2.5	Pass
				-30	3.85	2.375	0.0014	-2.5 to 2.5	Pass
				-20	3.85	0.944	0.0005	-2.5 to 2.5	Pass
				-10	3.85	4.191	0.0024	-2.5 to 2.5	Pass
				0	3.85	2.789	0.0016	-2.5 to 2.5	Pass
				10	3.85	5.722	0.0033	-2.5 to 2.5	Pass
				30	3.85	-0.272	-0.0002	-2.5 to 2.5	Pass
				40	3.85	1.531	0.0009	-2.5 to 2.5	Pass
				50	3.85	1.202	0.0007	-2.5 to 2.5	Pass

2.1.6 B4_20MHz

Band: 4 / Bandwidth: 20MHz									
Modulation	Frequency (MHz)	RB Allocation		Temp. (°C)	Voltage (VDC)	Freq. Error (Hz)	Freq. vs. Rated (ppm)		Verdict
		Size	Offset				Result	Limit	
QPSK	1720	100	0	20	3.27	-0.243	-0.0001	-2.5 to 2.5	Pass
					3.85	0.987	0.0006	-2.5 to 2.5	Pass
					4.43	0.429	0.0002	-2.5 to 2.5	Pass
				-30	3.85	-1.316	-0.0008	-2.5 to 2.5	Pass
				-20	3.85	0.873	0.0005	-2.5 to 2.5	Pass
				-10	3.85	-0.501	-0.0003	-2.5 to 2.5	Pass
				0	3.85	-0.143	-0.0001	-2.5 to 2.5	Pass
				10	3.85	1.431	0.0008	-2.5 to 2.5	Pass
				30	3.85	0.744	0.0004	-2.5 to 2.5	Pass
				40	3.85	-0.415	-0.0002	-2.5 to 2.5	Pass
				50	3.85	-1.302	-0.0008	-2.5 to 2.5	Pass
	1732.5	100	0	20	3.27	-1.488	-0.0009	-2.5 to 2.5	Pass
					3.85	-1.388	-0.0008	-2.5 to 2.5	Pass
					4.43	1.287	0.0007	-2.5 to 2.5	Pass
				-30	3.85	0.601	0.0003	-2.5 to 2.5	Pass
				-20	3.85	-1.888	-0.0011	-2.5 to 2.5	Pass
				-10	3.85	-0.744	-0.0004	-2.5 to 2.5	Pass
				0	3.85	0.415	0.0002	-2.5 to 2.5	Pass
				10	3.85	-0.515	-0.0003	-2.5 to 2.5	Pass
				30	3.85	0.787	0.0005	-2.5 to 2.5	Pass
				40	3.85	1.330	0.0008	-2.5 to 2.5	Pass
				50	3.85	-0.715	-0.0004	-2.5 to 2.5	Pass

	1745	100	0	20	3.27	-3.190	-0.0018	-2.5 to 2.5	Pass
					3.85	-1.059	-0.0006	-2.5 to 2.5	Pass
					4.43	-1.245	-0.0007	-2.5 to 2.5	Pass
				-30	3.85	-3.762	-0.0022	-2.5 to 2.5	Pass
				-20	3.85	-3.347	-0.0019	-2.5 to 2.5	Pass
				-10	3.85	0.901	0.0005	-2.5 to 2.5	Pass
				0	3.85	0.100	0.0001	-2.5 to 2.5	Pass
				10	3.85	-1.760	-0.0010	-2.5 to 2.5	Pass
				30	3.85	-0.372	-0.0002	-2.5 to 2.5	Pass
				40	3.85	-0.243	-0.0001	-2.5 to 2.5	Pass
				50	3.85	-2.975	-0.0017	-2.5 to 2.5	Pass
16QAM	1720	27	0	20	3.27	0.615	0.0004	-2.5 to 2.5	Pass
					3.85	1.559	0.0009	-2.5 to 2.5	Pass
					4.43	0.014	0.0000	-2.5 to 2.5	Pass
				-30	3.85	-0.629	-0.0004	-2.5 to 2.5	Pass
				-20	3.85	-0.672	-0.0004	-2.5 to 2.5	Pass
				-10	3.85	0.730	0.0004	-2.5 to 2.5	Pass
				0	3.85	-2.089	-0.0012	-2.5 to 2.5	Pass
				10	3.85	-1.316	-0.0008	-2.5 to 2.5	Pass
				30	3.85	4.621	0.0027	-2.5 to 2.5	Pass
				40	3.85	2.618	0.0015	-2.5 to 2.5	Pass
				50	3.85	5.965	0.0035	-2.5 to 2.5	Pass
	1732.5	27	0	20	3.27	1.087	0.0006	-2.5 to 2.5	Pass
					3.85	0.315	0.0002	-2.5 to 2.5	Pass
					4.43	-1.044	-0.0006	-2.5 to 2.5	Pass
				-30	3.85	-0.458	-0.0003	-2.5 to 2.5	Pass
				-20	3.85	0.672	0.0004	-2.5 to 2.5	Pass
				-10	3.85	-0.143	-0.0001	-2.5 to 2.5	Pass
				0	3.85	3.018	0.0017	-2.5 to 2.5	Pass
				10	3.85	-0.916	-0.0005	-2.5 to 2.5	Pass
				30	3.85	-0.229	-0.0001	-2.5 to 2.5	Pass
				40	3.85	0.057	0.0000	-2.5 to 2.5	Pass
				50	3.85	-1.345	-0.0008	-2.5 to 2.5	Pass
	1745	27	73	20	3.27	0.529	0.0003	-2.5 to 2.5	Pass
					3.85	-0.401	-0.0002	-2.5 to 2.5	Pass
					4.43	-1.316	-0.0008	-2.5 to 2.5	Pass
				-30	3.85	0.558	0.0003	-2.5 to 2.5	Pass
				-20	3.85	-0.043	0.0000	-2.5 to 2.5	Pass
				-10	3.85	-1.817	-0.0010	-2.5 to 2.5	Pass
				0	3.85	-1.817	-0.0010	-2.5 to 2.5	Pass
				10	3.85	-3.519	-0.0020	-2.5 to 2.5	Pass
				30	3.85	-1.774	-0.0010	-2.5 to 2.5	Pass
				40	3.85	-2.732	-0.0016	-2.5 to 2.5	Pass
				50	3.85	2.575	0.0015	-2.5 to 2.5	Pass

3. Modulation Characteristics

3.1 Test Result

3.1.1 B4_1.4MHz

Band: 4 / Bandwidth: 1.4MHz / NTN					
Modulation	Frequency (MHz)	RB Allocation		Modulation Characteristics	
		Size	Offset	Result	Limit
QPSK	1732.5	6	0	Refer To Test Graph	
					Pass



4

16QAM	1732.5	6	0	Refer To Test Graph	Pass
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3.1.2 B4_3MHz

Band: 4 / Bandwidth: 3MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Modulation Characteristics		Verdict
		Size	Offset	Result	Limit	
QPSK	1732.5	15	0	Refer To Test Graph		Pass
16QAM	1732.5	15	0	Refer To Test Graph		Pass

3.1.3 B4_5MHz

Band: 4 / Bandwidth: 5MHz / NTV						
Modulation	Frequency (MHz)	RB Allocation		Modulation Characteristics		Verdict
		Size	Offset	Result	Limit	
QPSK	1732.5	25	0	Refer To Test Graph		Pass
16QAM	1732.5	25	0	Refer To Test Graph		Pass

3.1.4 B4_10MHz

Band: 4 / Bandwidth: 10MHz / NTV						
Modulation	Frequency (MHz)	RB Allocation		Modulation Characteristics		Verdict
		Size	Offset	Result	Limit	
QPSK	1732.5	50	0	Refer To Test Graph		Pass
16QAM	1732.5	27	0	Refer To Test Graph		Pass

3.1.5 B4_15MHz

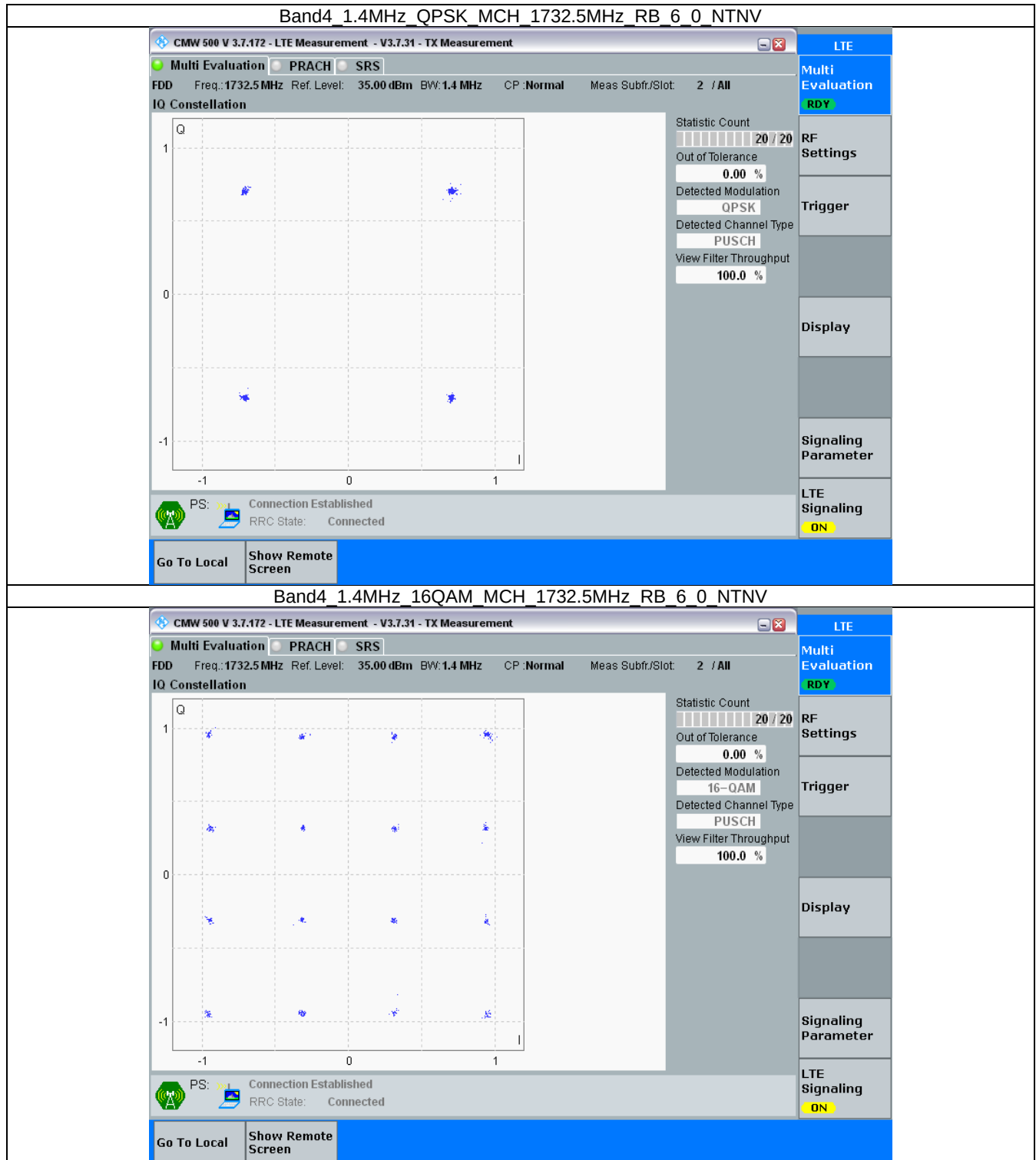
Band: 4 / Bandwidth: 15MHz / NTV						
Modulation	Frequency (MHz)	RB Allocation		Modulation Characteristics		Verdict
		Size	Offset	Result	Limit	
QPSK	1732.5	75	0	Refer To Test Graph		Pass
16QAM	1732.5	27	0	Refer To Test Graph		Pass

3.1.6 B4_20MHz

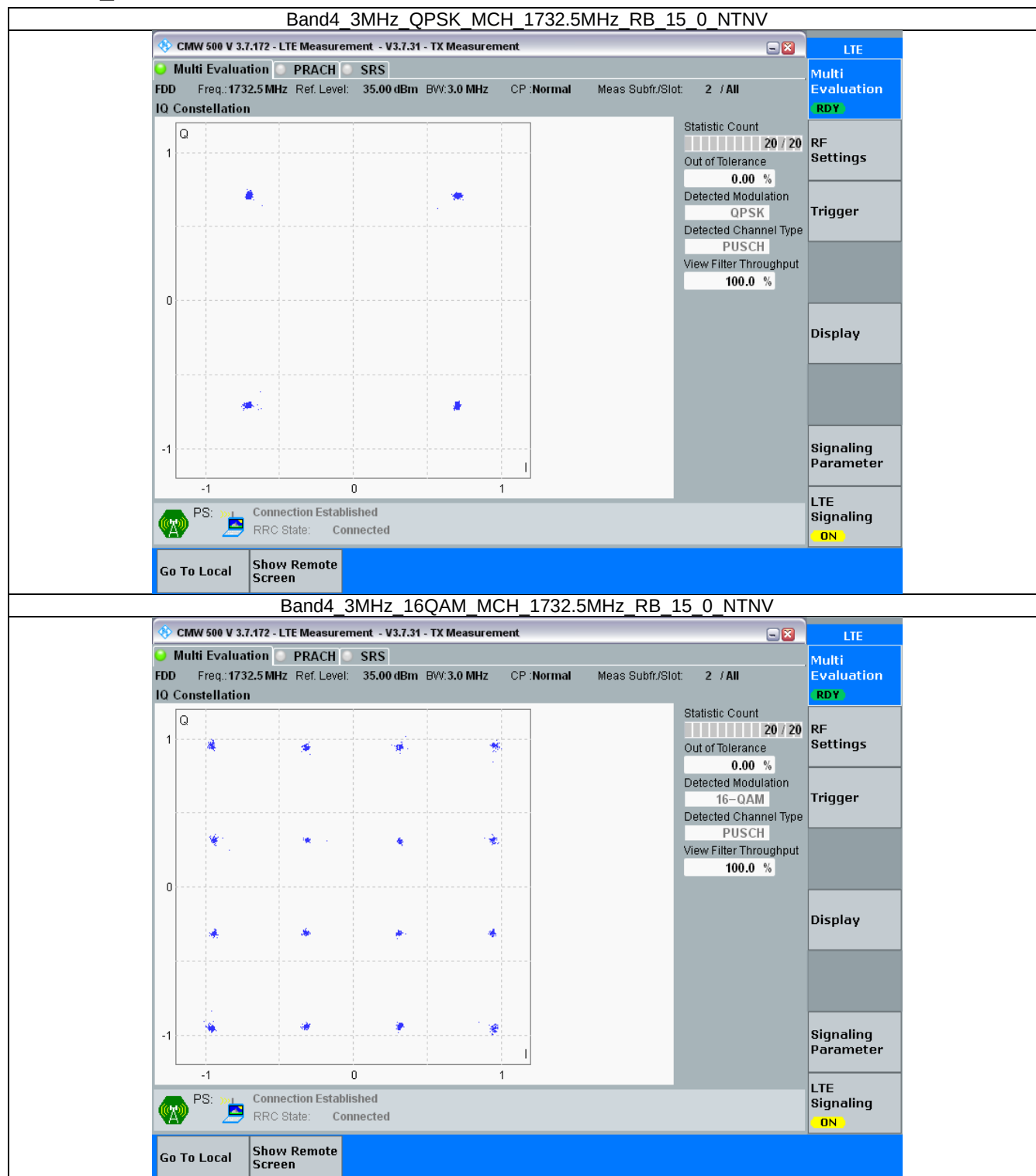
Band: 4 / Bandwidth: 20MHz / NTV						
Modulation	Frequency (MHz)	RB Allocation		Modulation Characteristics		Verdict
		Size	Offset	Result	Limit	
QPSK	1732.5	100	0	Refer To Test Graph		Pass
16QAM	1732.5	27	0	Refer To Test Graph		Pass

3.2 Test Graph

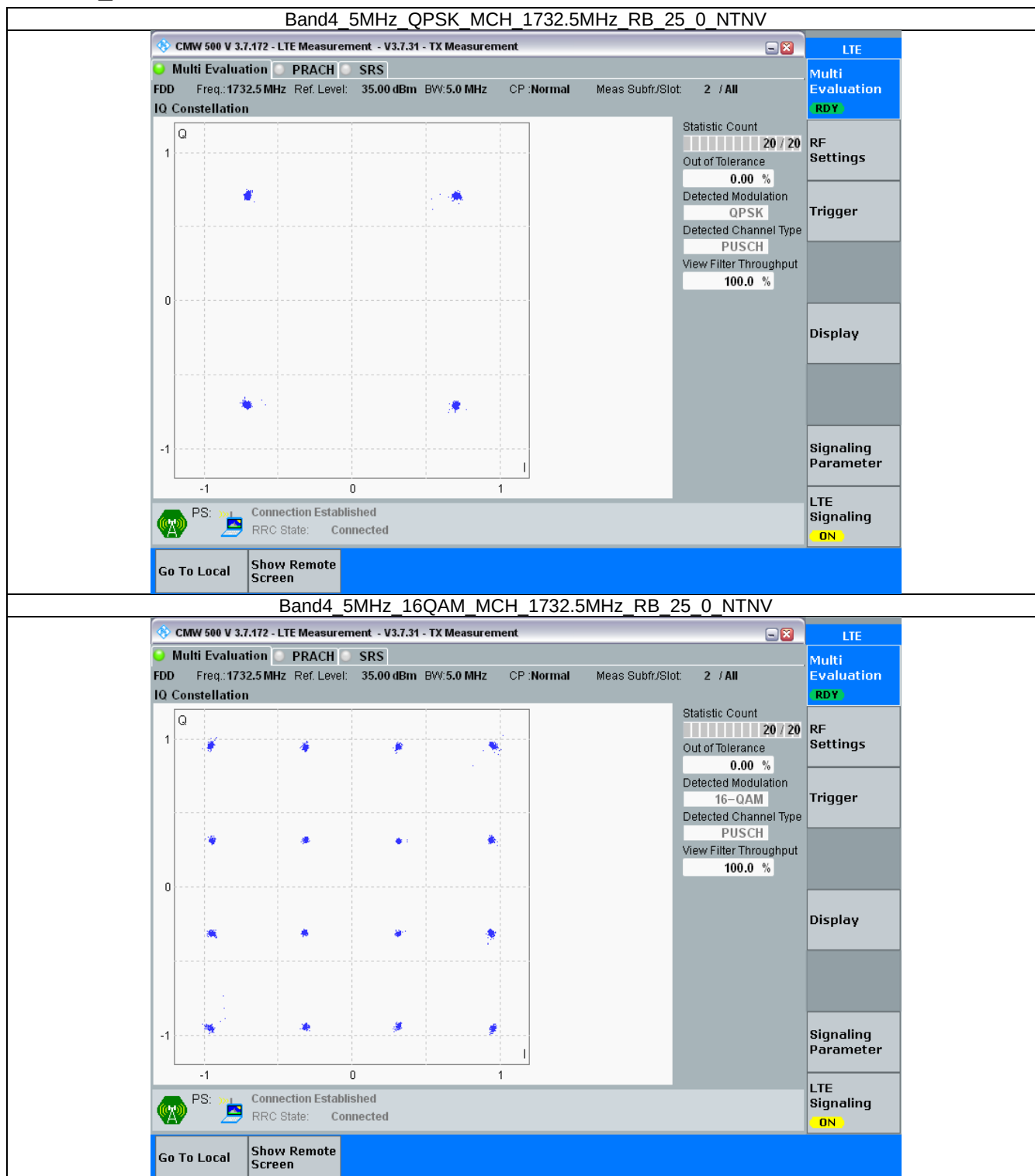
3.2.1 B4_1.4MHz



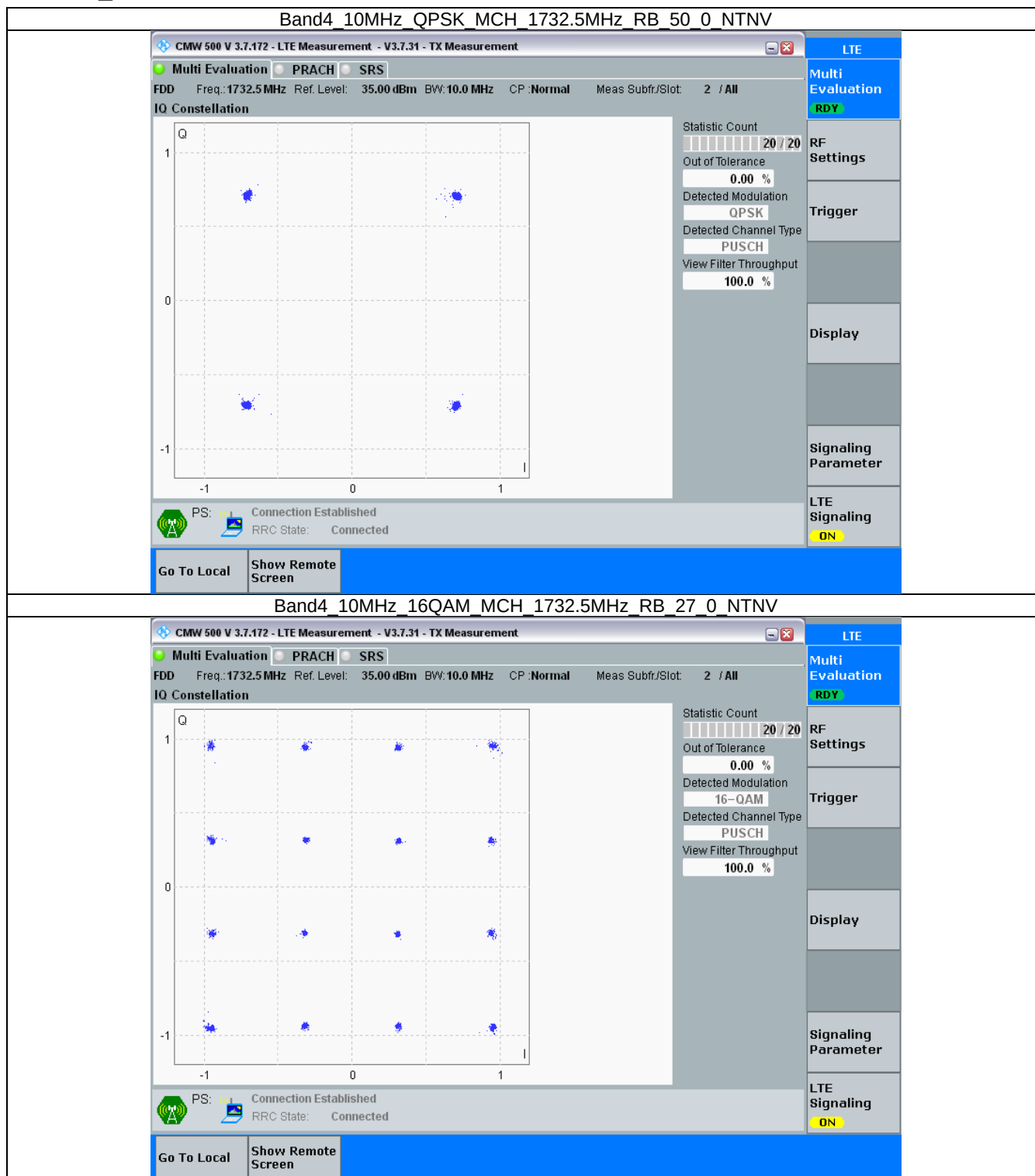
3.2.2 B4_3MHz



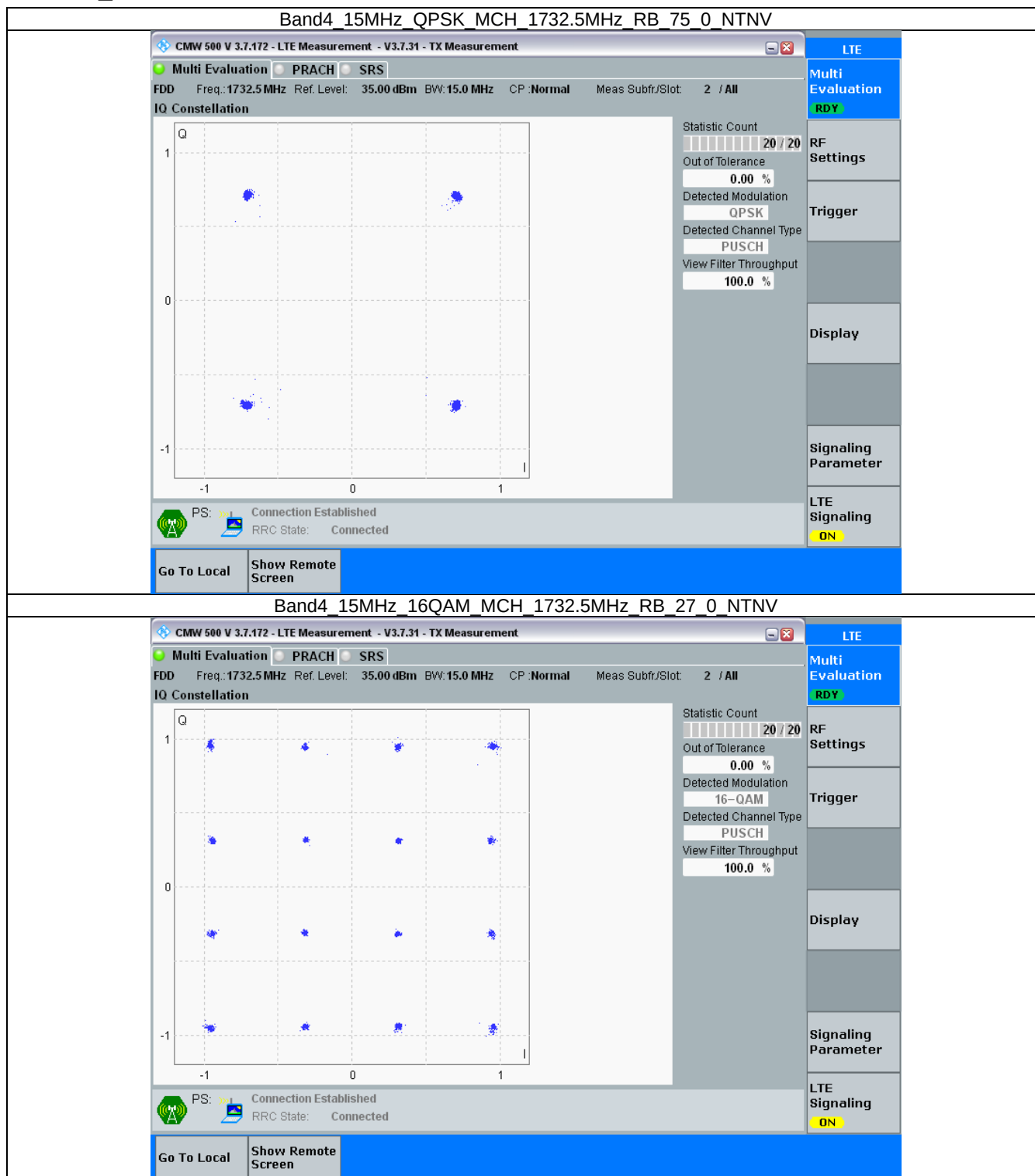
3.2.3 B4_5MHz



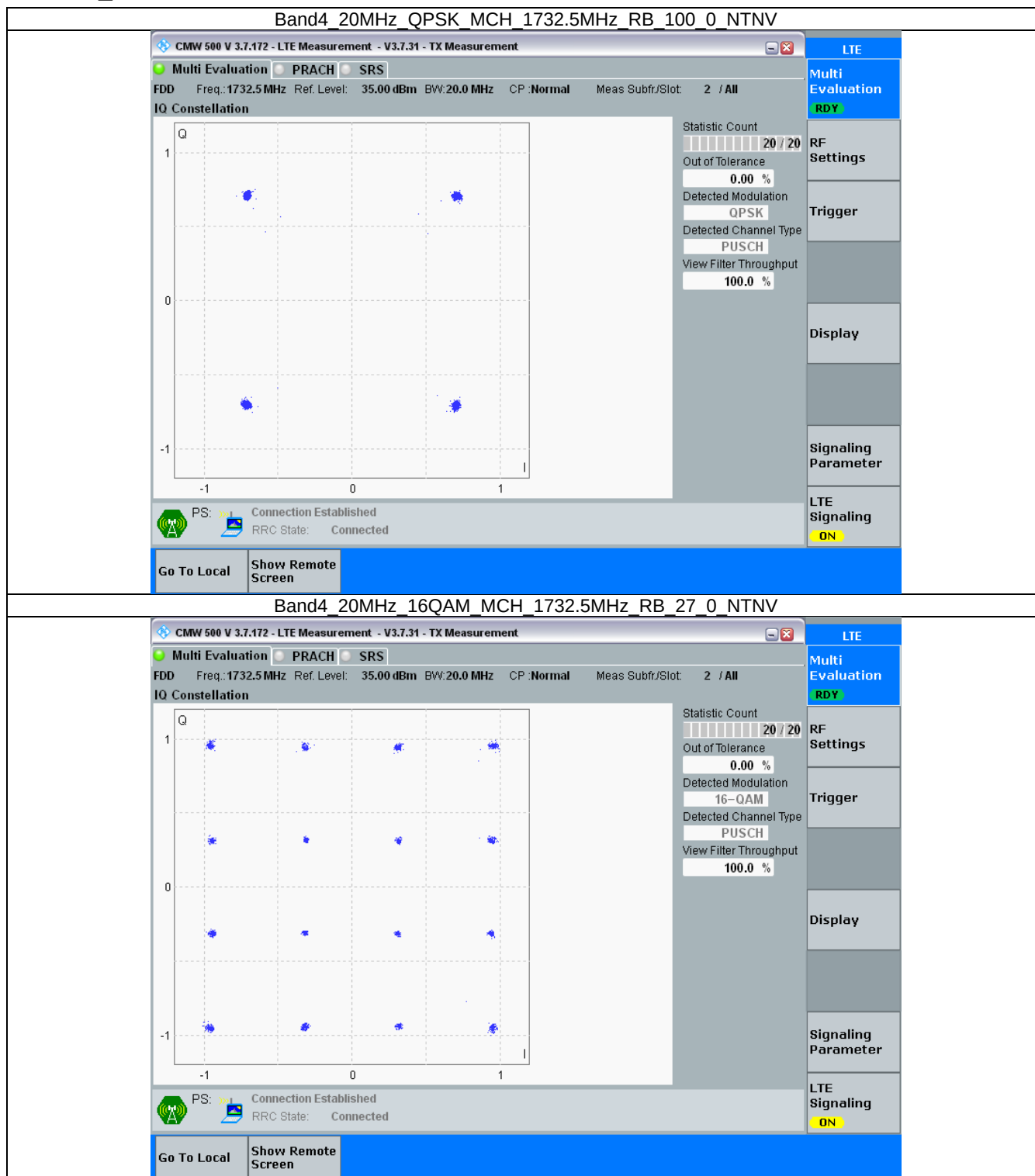
3.2.4 B4_10MHz



3.2.5 B4_15MHz



3.2.6 B4_20MHz



4. 99% & 26dB Bandwidth

4.1 Test Result

4.1.1 Band4_OBW

Band: 4 / NTNV							
Bandwidth (MHz)	Modulation	Frequency (MHz)	RB Allocation		99% Occupied Bandwidth (MHz)		Verdict
			Size	Offset	Result	Limit	
1.4	QPSK	1710.7	6	0	1.109	/	Pass
		1732.5	6	0	1.116	/	Pass
		1754.3	6	0	1.115	/	Pass
	16QAM	1710.7	6	0	1.118	/	Pass
		1732.5	6	0	1.112	/	Pass
		1754.3	6	0	1.104	/	Pass
3	QPSK	1711.5	15	0	2.729	/	Pass
		1732.5	15	0	2.731	/	Pass
		1753.5	15	0	2.730	/	Pass
	16QAM	1711.5	15	0	2.728	/	Pass
		1732.5	15	0	2.722	/	Pass
		1753.5	15	0	2.727	/	Pass
5	QPSK	1712.5	25	0	4.532	/	Pass
		1732.5	25	0	4.552	/	Pass
		1752.5	25	0	4.546	/	Pass
	16QAM	1712.5	25	0	4.560	/	Pass
		1732.5	25	0	4.541	/	Pass
		1752.5	25	0	4.538	/	Pass
10	QPSK	1715	50	0	9.044	/	Pass
		1732.5	50	0	9.065	/	Pass
		1750	50	0	9.030	/	Pass
	16QAM	1715	27	0	5.104	/	Pass
		1732.5	27	0	5.096	/	Pass
		1750	27	23	5.107	/	Pass
15	QPSK	1717.5	75	0	13.582	/	Pass
		1732.5	75	0	13.560	/	Pass
		1747.5	75	0	13.580	/	Pass
	16QAM	1717.5	27	0	5.325	/	Pass
		1732.5	27	0	5.332	/	Pass
		1747.5	27	48	5.304	/	Pass
20	QPSK	1720	100	0	18.068	/	Pass
		1732.5	100	0	18.103	/	Pass
		1745	100	0	18.047	/	Pass
	16QAM	1720	27	0	5.504	/	Pass
		1732.5	27	0	5.542	/	Pass
		1745	27	73	5.454	/	Pass

4.1.2 Band4_XDB

Band: 4 / NTNV							
Bandwidth (MHz)	Modulation	Frequency (MHz)	RB Allocation		26dB Bandwidth (MHz)		Verdict
			Size	Offset	Result	Limit	
1.4	QPSK	1710.7	6	0	1.314	/	Pass
		1732.5	6	0	1.319	/	Pass
		1754.3	6	0	1.345	/	Pass



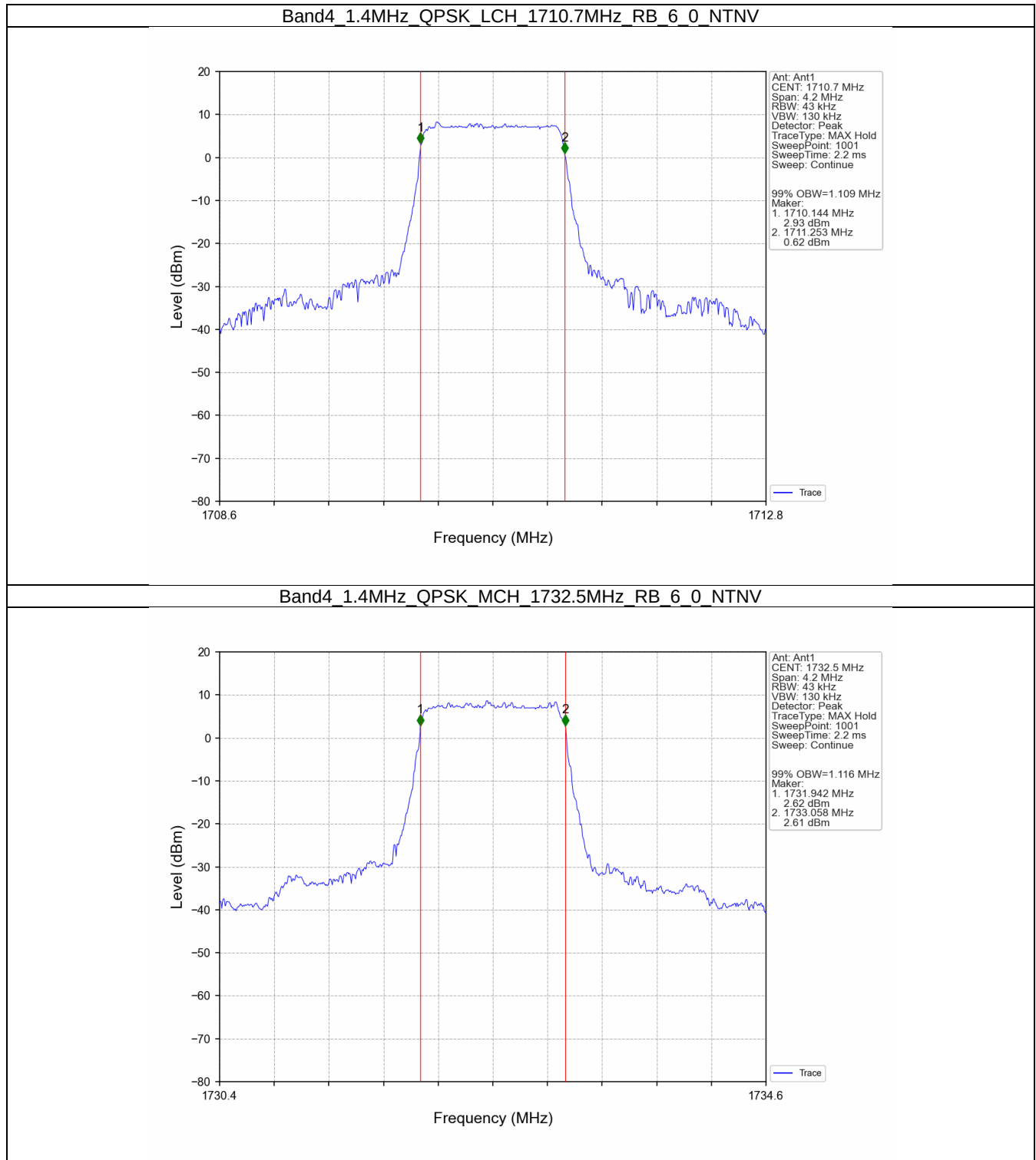
	16QAM	1710.7	6	0	1.337	/	Pass
		1732.5	6	0	1.311	/	Pass
		1754.3	6	0	1.325	/	Pass
3	QPSK	1711.5	15	0	3.009	/	Pass
		1732.5	15	0	3.003	/	Pass
		1753.5	15	0	3.007	/	Pass
	16QAM	1711.5	15	0	3.024	/	Pass
		1732.5	15	0	3.022	/	Pass
		1753.5	15	0	3.015	/	Pass
5	QPSK	1712.5	25	0	5.066	/	Pass
		1732.5	25	0	5.040	/	Pass
		1752.5	25	0	5.065	/	Pass
	16QAM	1712.5	25	0	5.038	/	Pass
		1732.5	25	0	5.003	/	Pass
		1752.5	25	0	5.119	/	Pass
10	QPSK	1715	50	0	9.986	/	Pass
		1732.5	50	0	9.990	/	Pass
		1750	50	0	9.975	/	Pass
	16QAM	1715	27	0	6.106	/	Pass
		1732.5	27	0	6.191	/	Pass
		1750	27	23	6.084	/	Pass
15	QPSK	1717.5	75	0	14.951	/	Pass
		1732.5	75	0	15.053	/	Pass
		1747.5	75	0	14.921	/	Pass
	16QAM	1717.5	27	0	6.772	/	Pass
		1732.5	27	0	6.641	/	Pass
		1747.5	27	48	6.574	/	Pass
20	QPSK	1720	100	0	19.721	/	Pass
		1732.5	100	0	19.681	/	Pass
		1745	100	0	19.771	/	Pass
	16QAM	1720	27	0	6.781	/	Pass
		1732.5	27	0	7.117	/	Pass
		1745	27	73	7.099	/	Pass



4

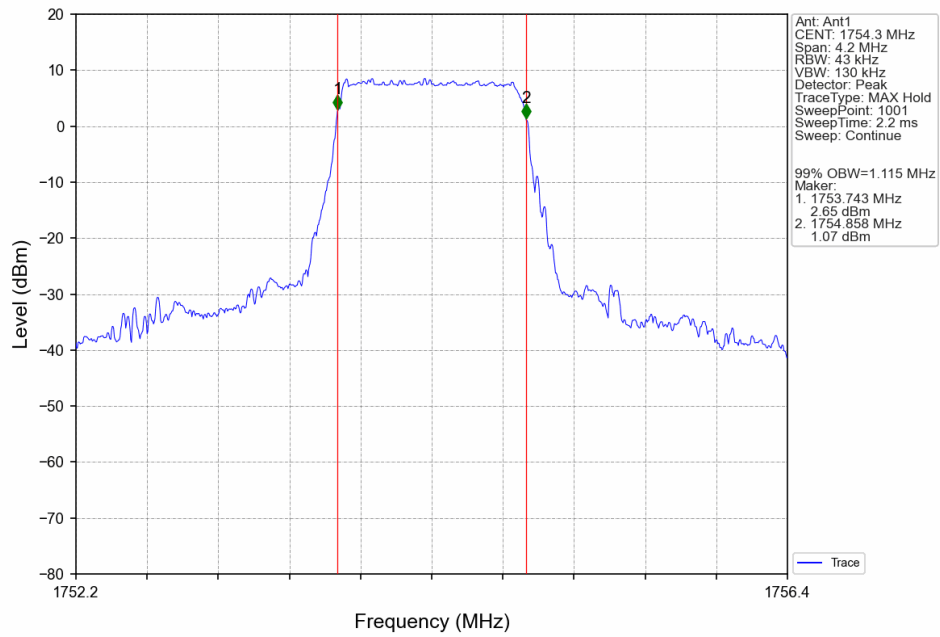
4.2 Test Graph

4.2.1 Band4_OBW

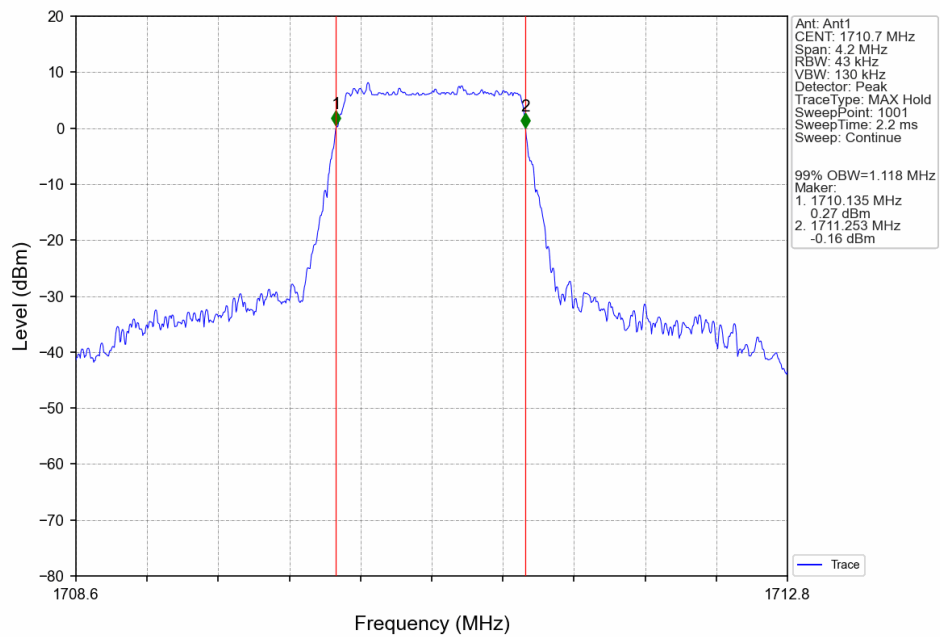




Band4_1.4MHz_QPSK_HCH_1754.3MHz_RB_6_0_NTNV

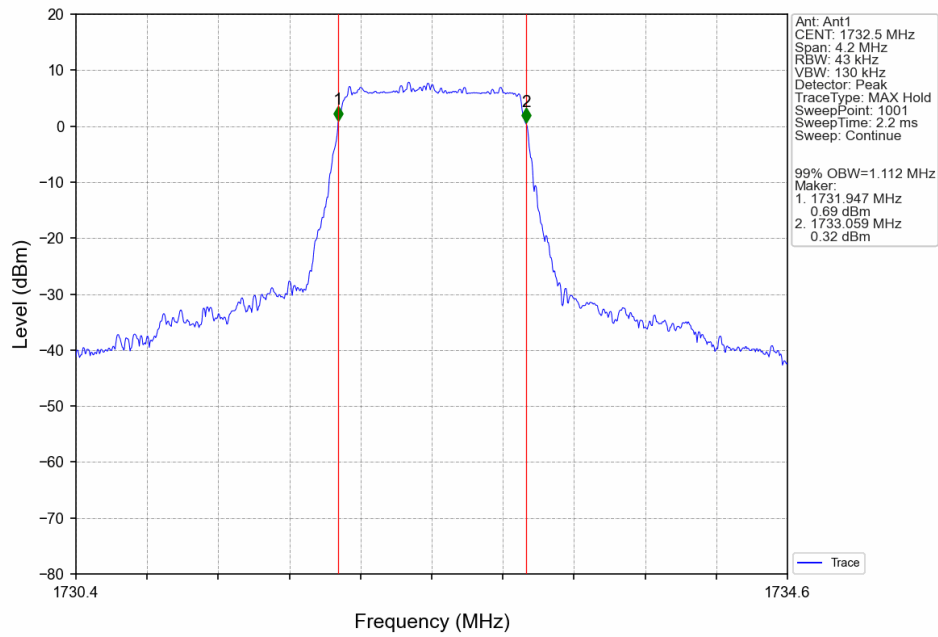


Band4_1.4MHz_16QAM_LCH_1710.7MHz_RB_6_0_NTNV

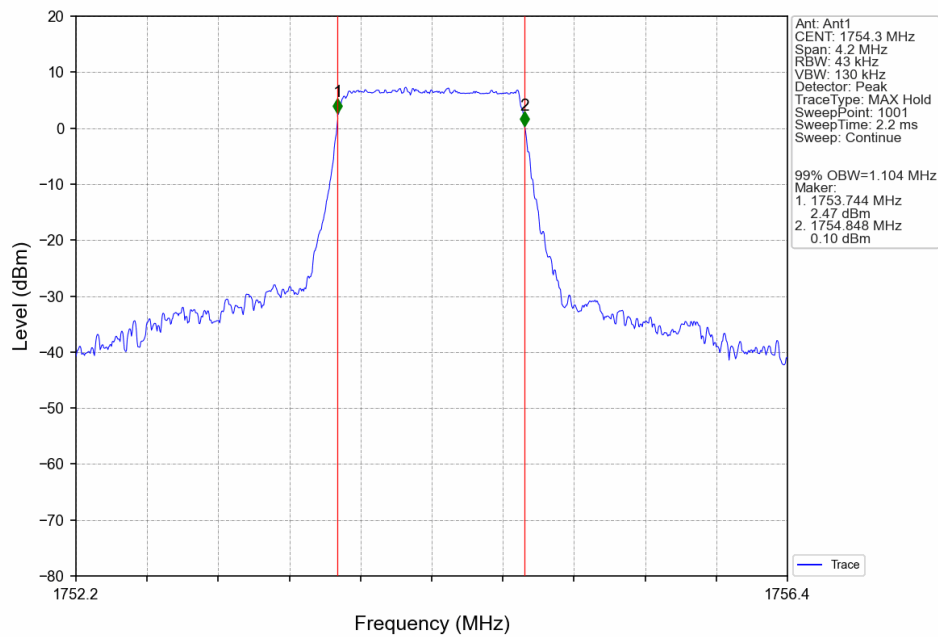




Band4_1.4MHz_16QAM_MCH_1732.5MHz_RB_6_0_NTNV

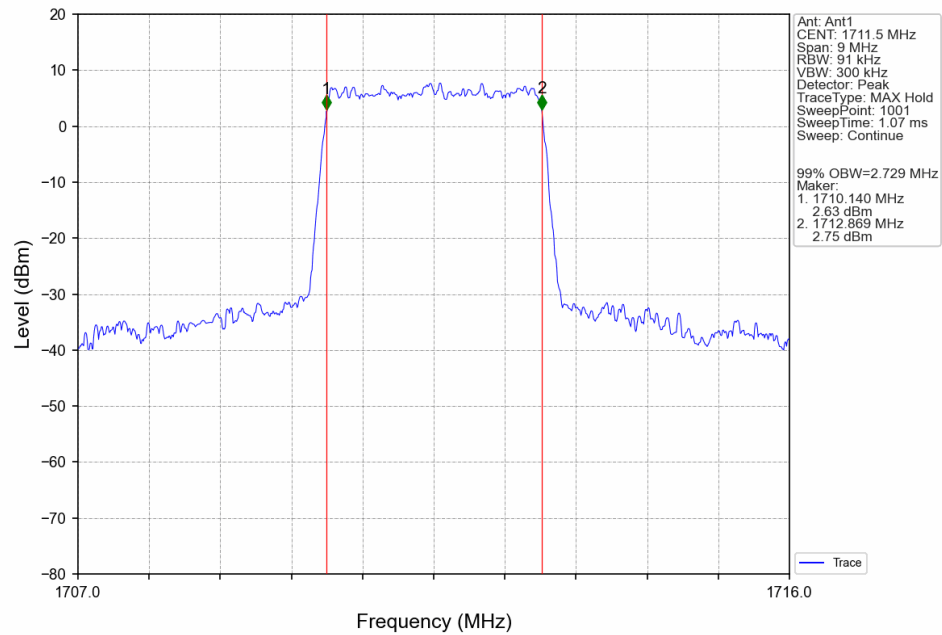


Band4_1.4MHz_16QAM_HCH_1754.3MHz_RB_6_0_NTNV

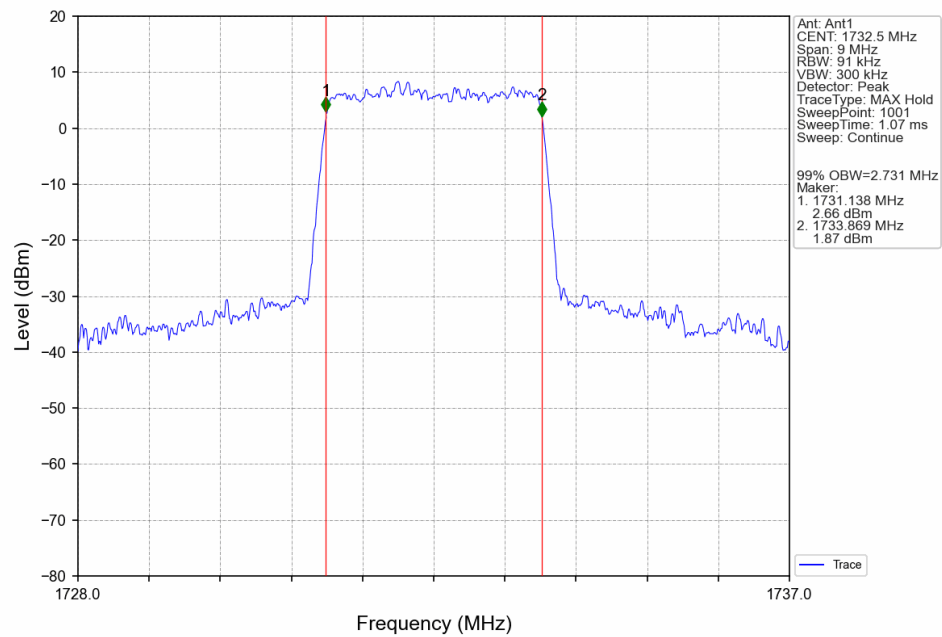




Band4_3MHz_QPSK_LCH_1711.5MHz_RB_15_0_NTNV

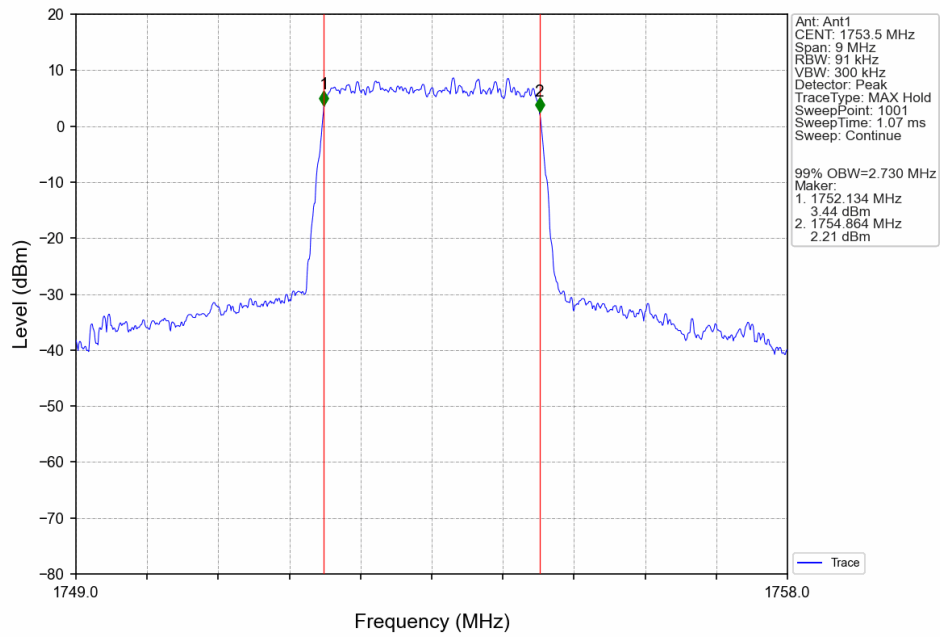


Band4_3MHz_QPSK_MCH_1732.5MHz_RB_15_0_NTNV

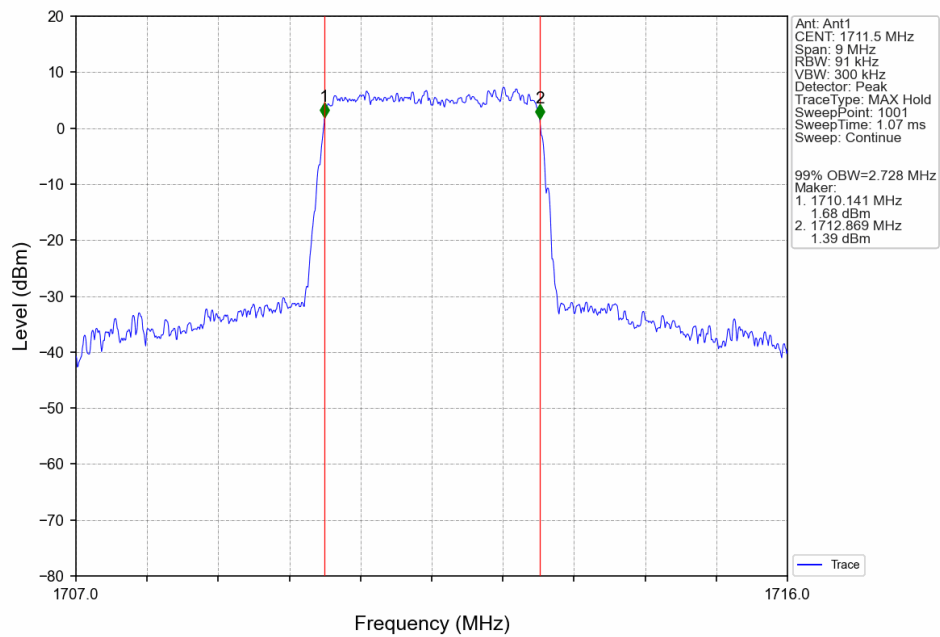




Band4_3MHz_QPSK_HCH_1753.5MHz_RB_15_0_NTNV

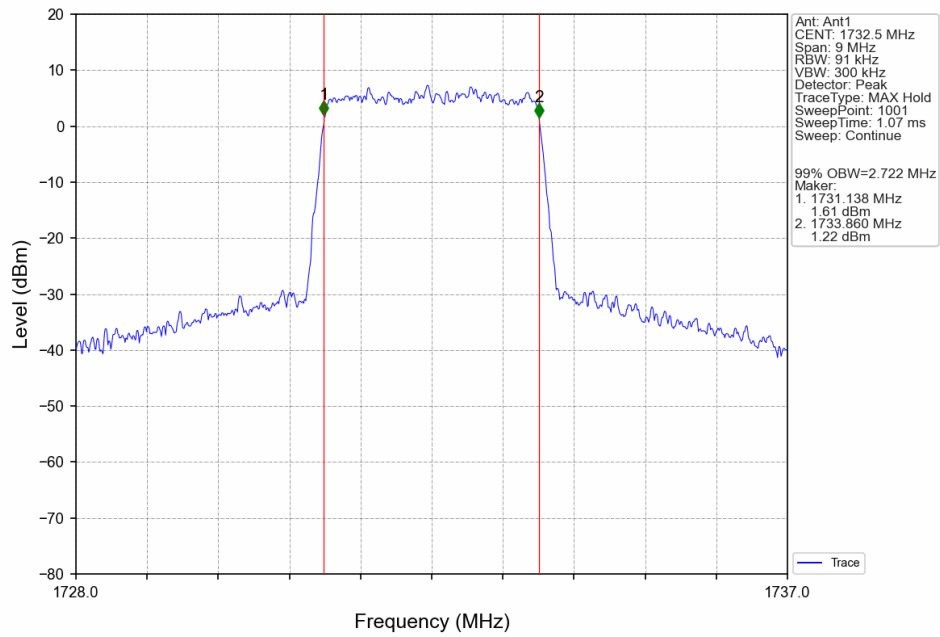


Band4_3MHz_16QAM_LCH_1711.5MHz_RB_15_0_NTNV

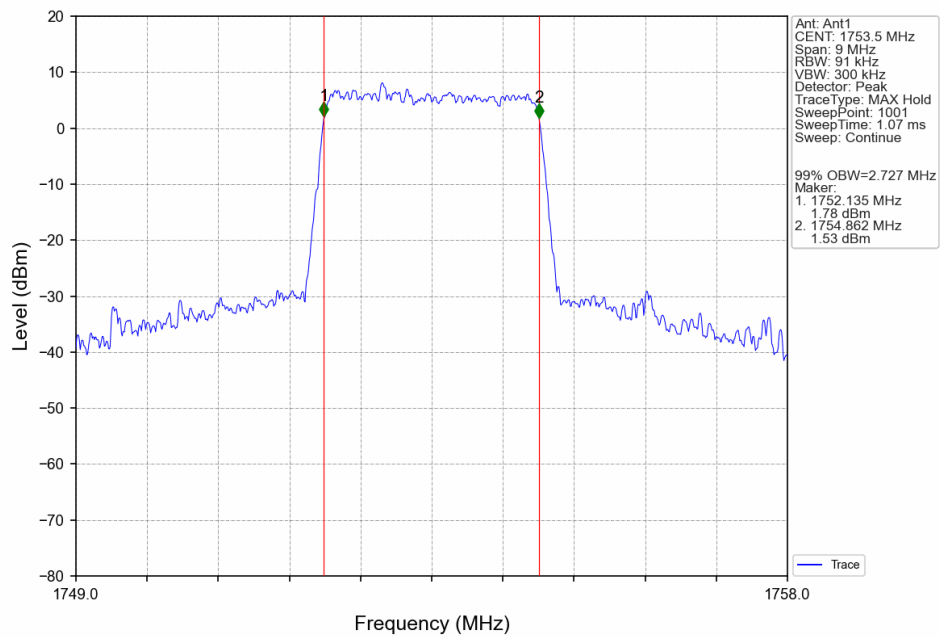




Band4_3MHz_16QAM_MCH_1732.5MHz_RB_15_0_NTNV

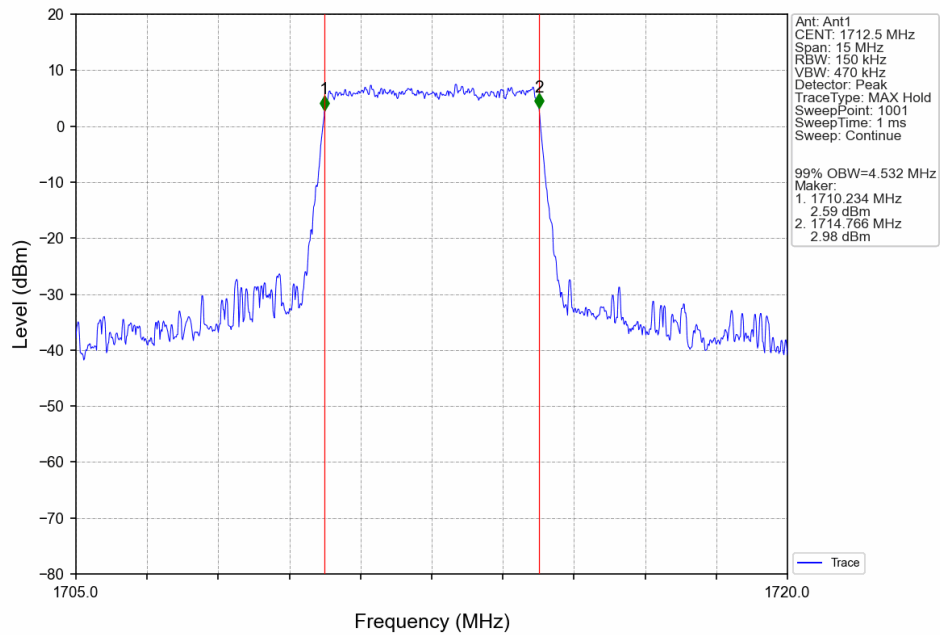


Band4_3MHz_16QAM_HCH_1753.5MHz_RB_15_0_NTNV

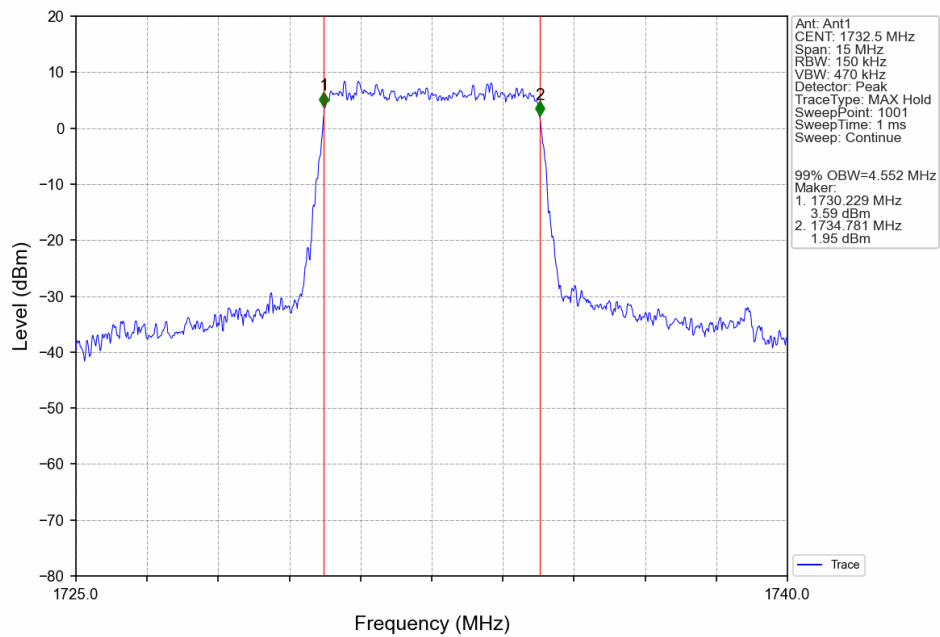




Band4_5MHz_QPSK_LCH_1712.5MHz_RB_25_0_NTNV

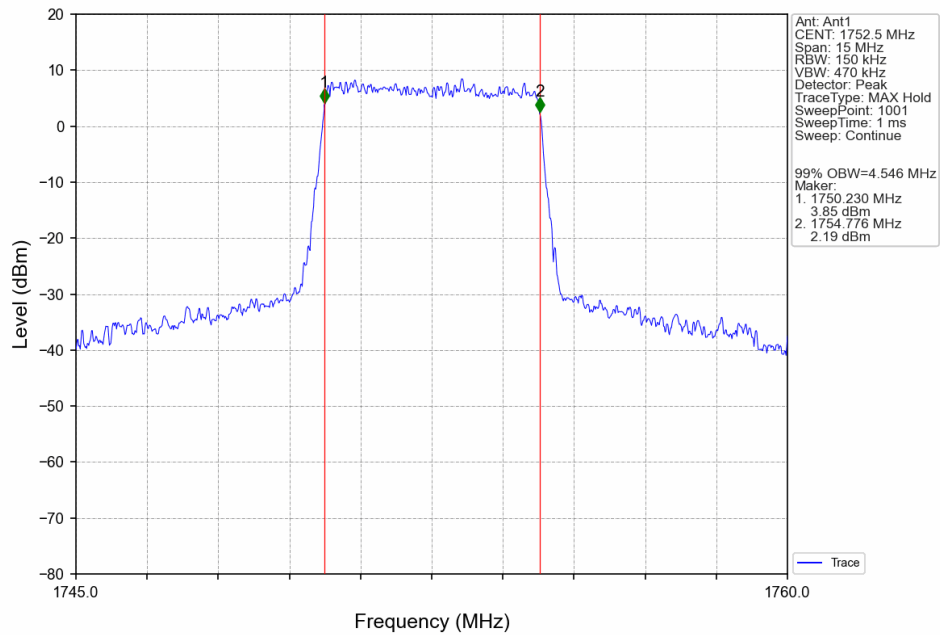


Band4_5MHz_QPSK_MCH_1732.5MHz_RB_25_0_NTNV

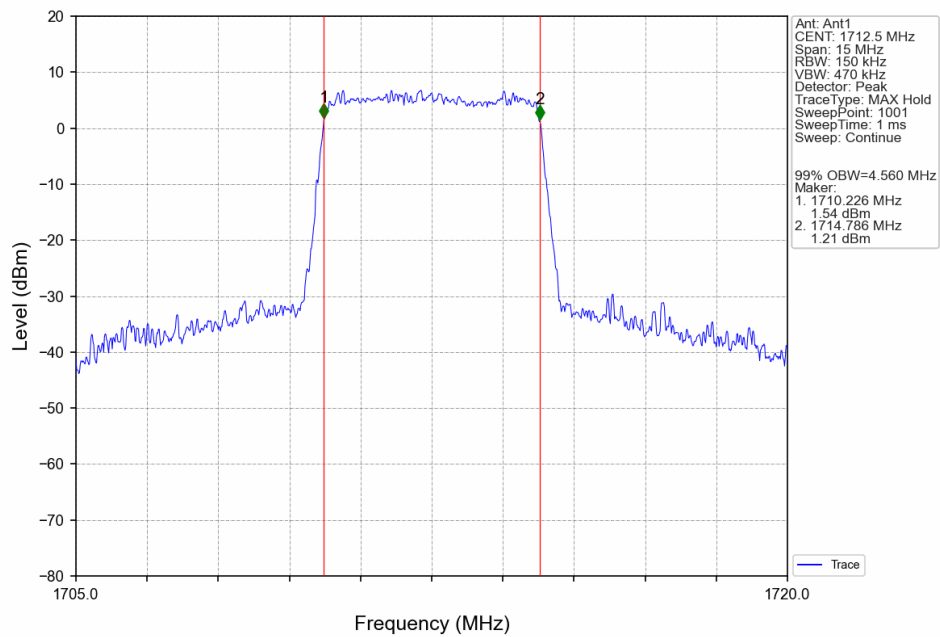




Band4_5MHz_QPSK_HCH_1752.5MHz_RB_25_0_NTNV

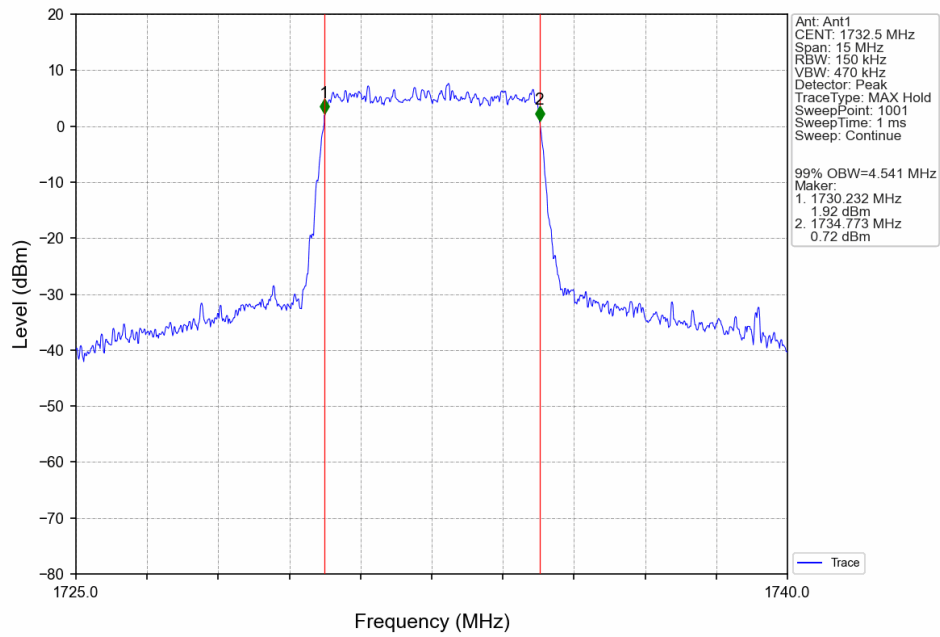


Band4_5MHz_16QAM_LCH_1712.5MHz_RB_25_0_NTNV

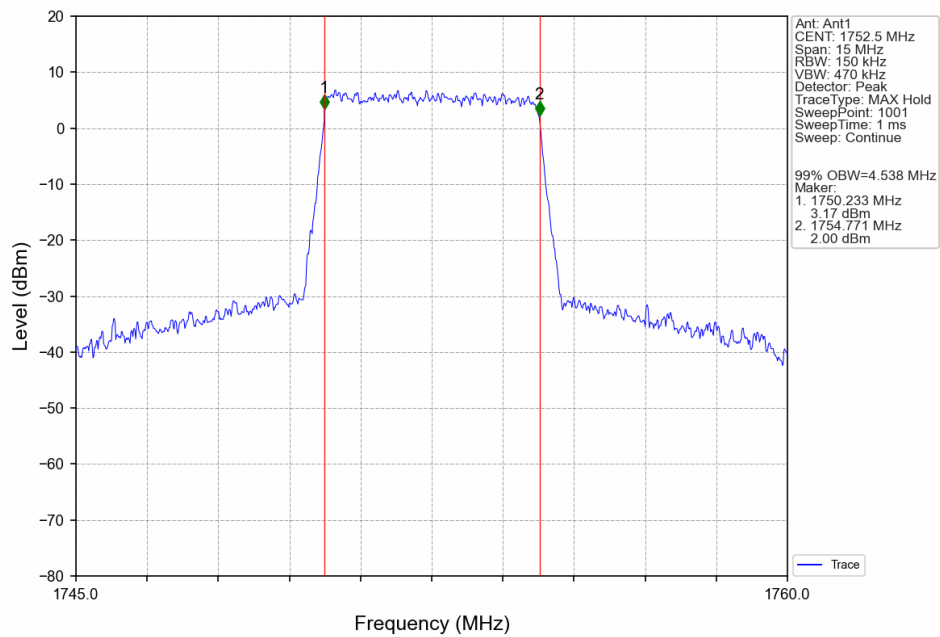




Band4_5MHz_16QAM_MCH_1732.5MHz_RB_25_0_NTNV

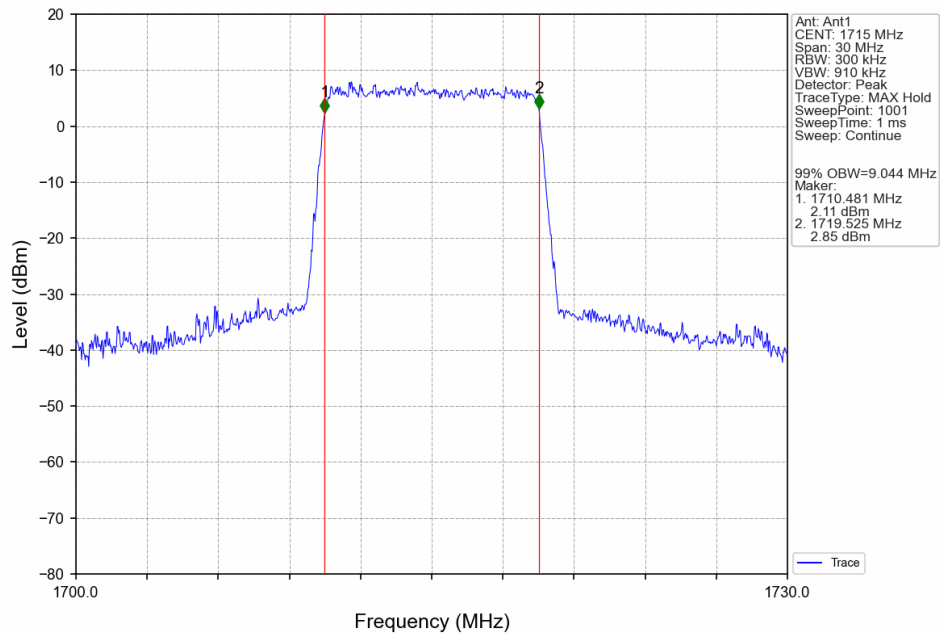


Band4_5MHz_16QAM_HCH_1752.5MHz_RB_25_0_NTNV

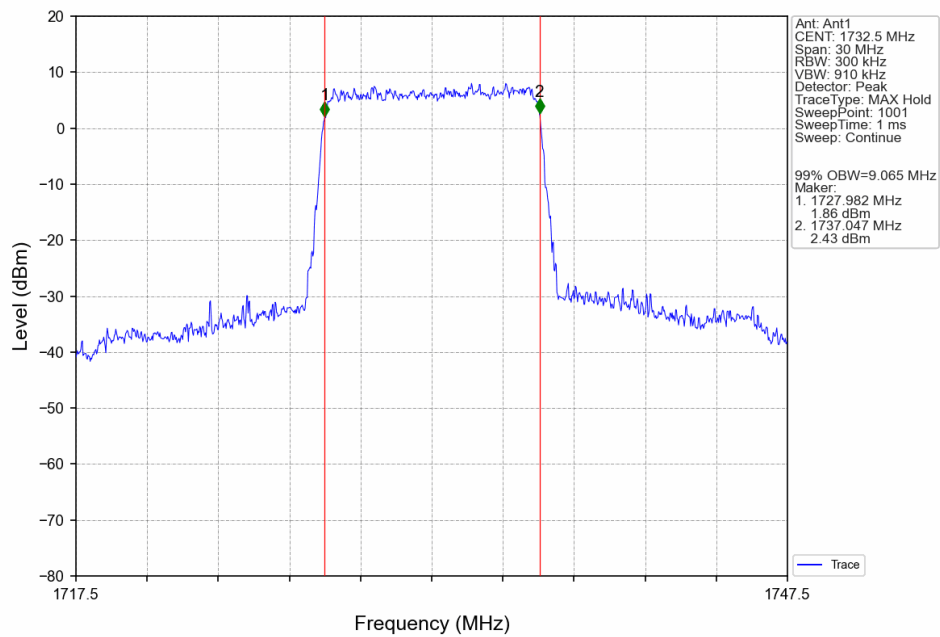




Band4_10MHz_QPSK_LCH_1715MHz_RB_50_0_NTNV

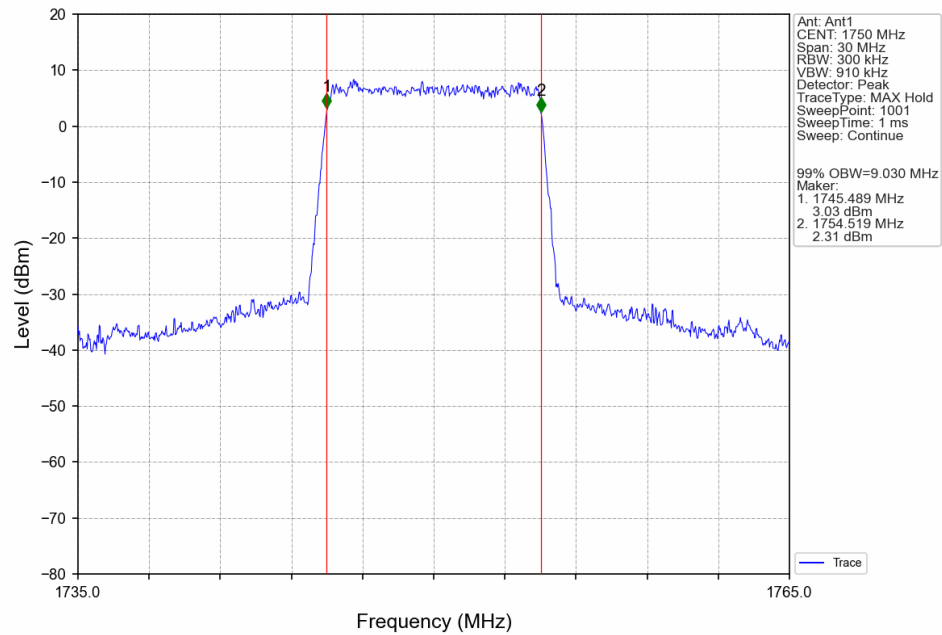


Band4_10MHz_QPSK_MCH_1732.5MHz_RB_50_0_NTNV

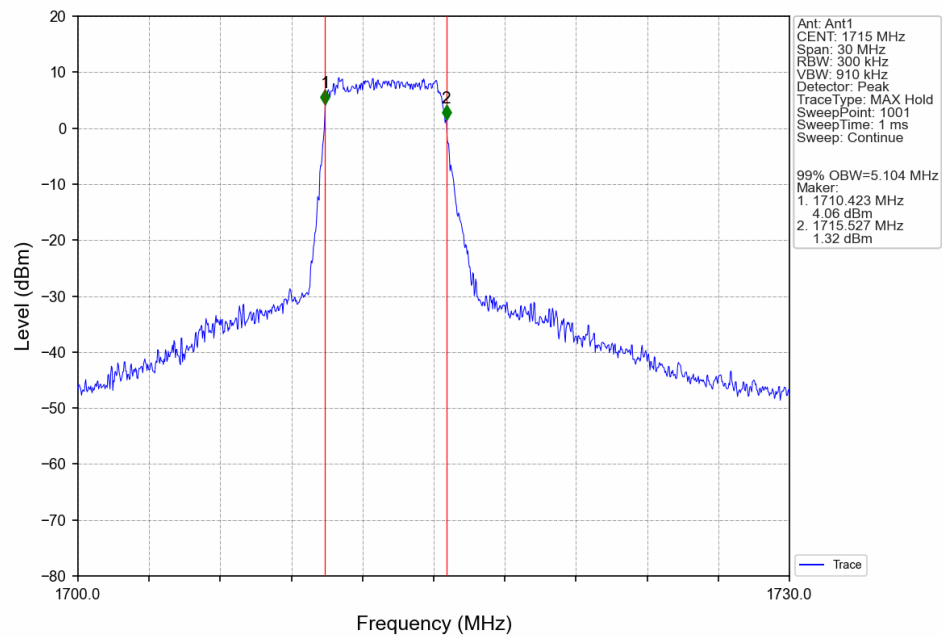




Band4_10MHz_QPSK_HCH_1750MHz_RB_50_0_NTNV

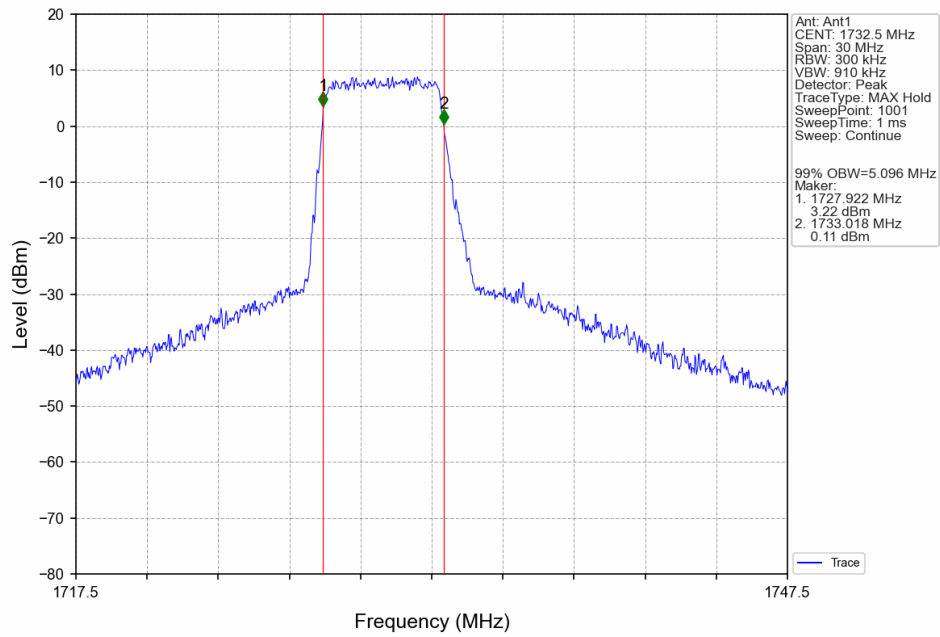


Band4_10MHz_16QAM_LCH_1715MHz_RB_27_0_NTNV

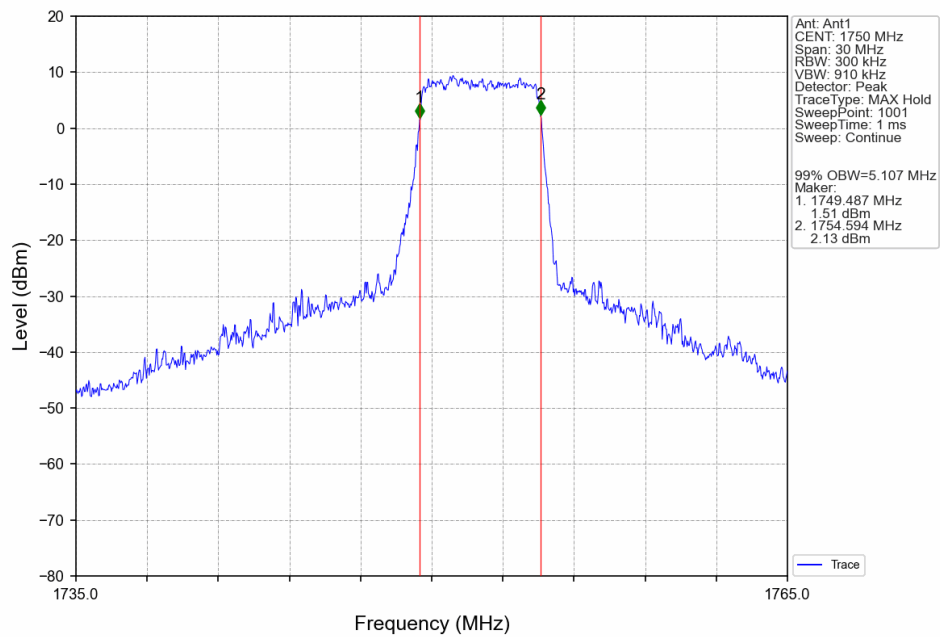




Band4_10MHz_16QAM_MCH_1732.5MHz_RB_27_0_NTNV

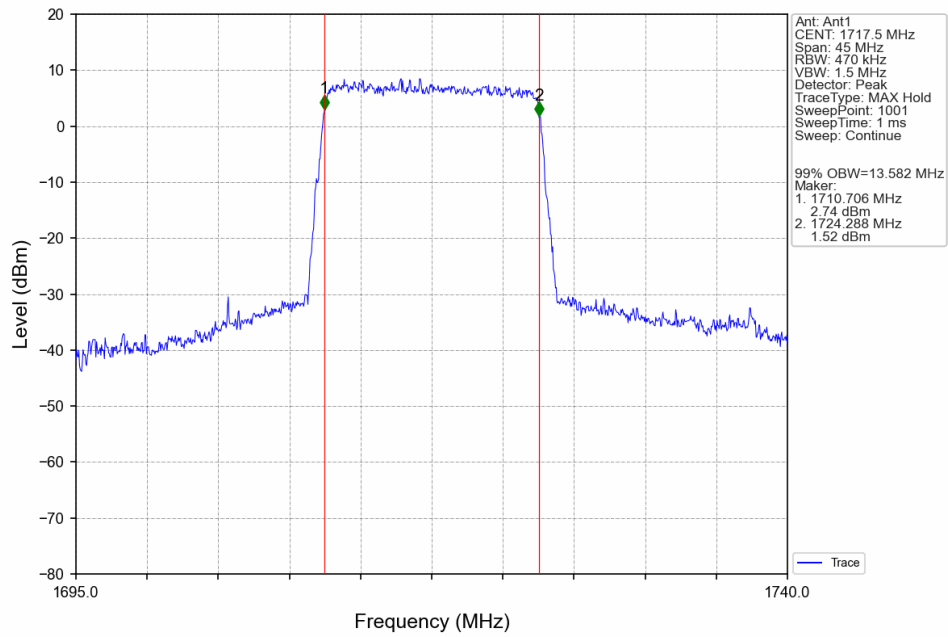


Band4_10MHz_16QAM_HCH_1750MHz_RB_27_23_NTNV

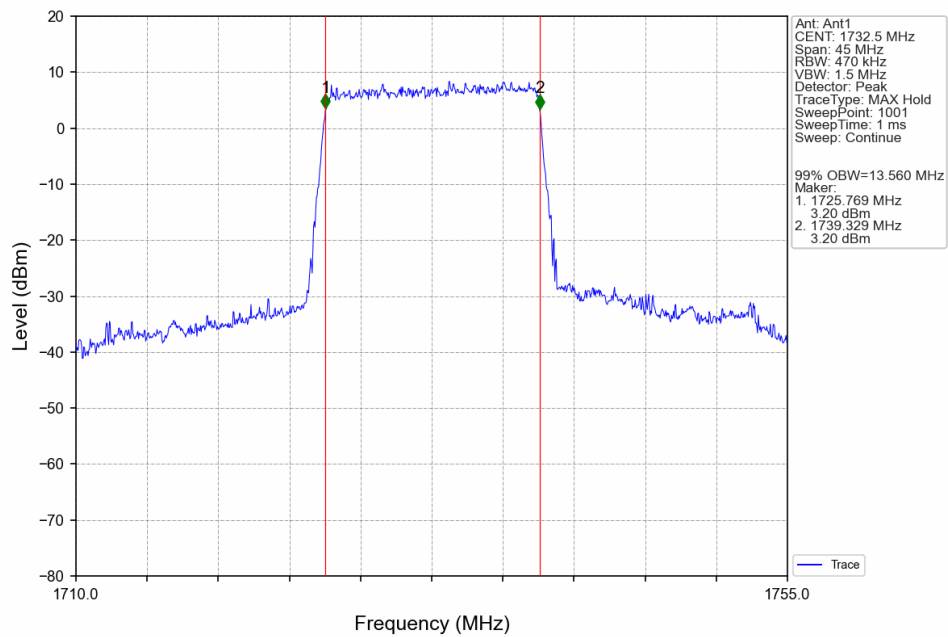




Band4_15MHz_QPSK_LCH_1717.5MHz_RB_75_0_NTNV

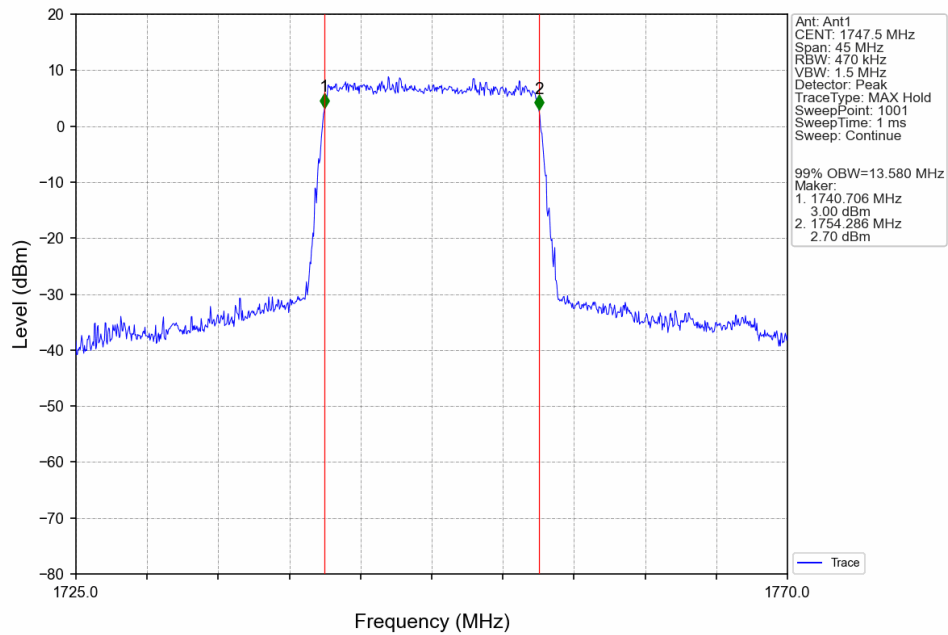


Band4_15MHz_QPSK_MCH_1732.5MHz_RB_75_0_NTNV

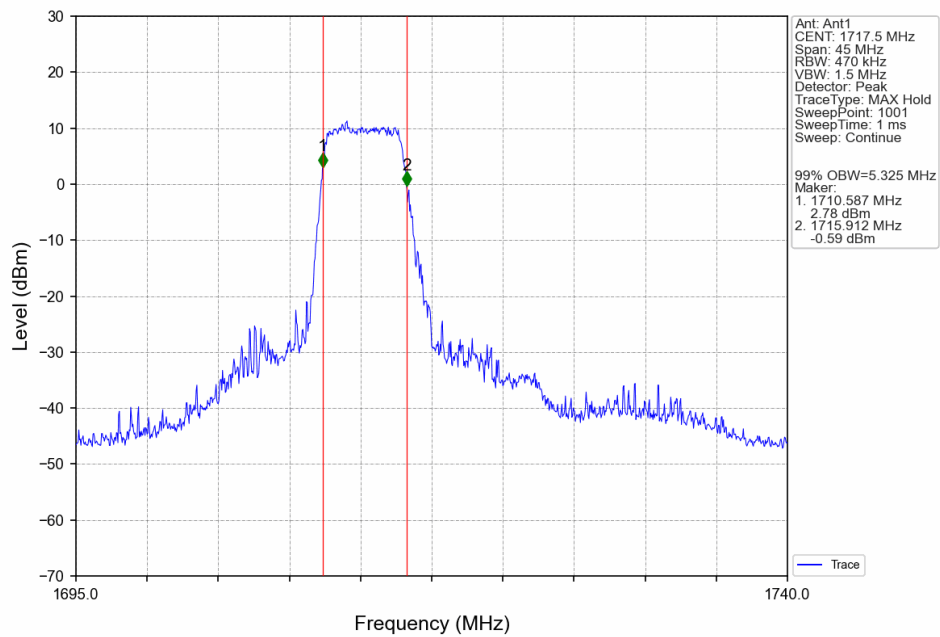




Band4_15MHz_QPSK_HCH_1747.5MHz_RB_75_0_NTNV

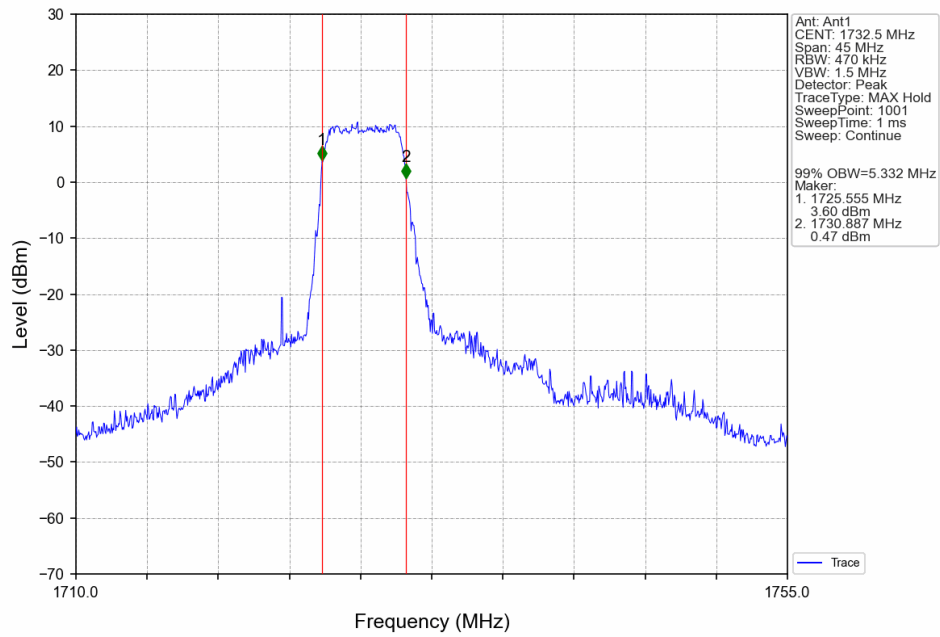


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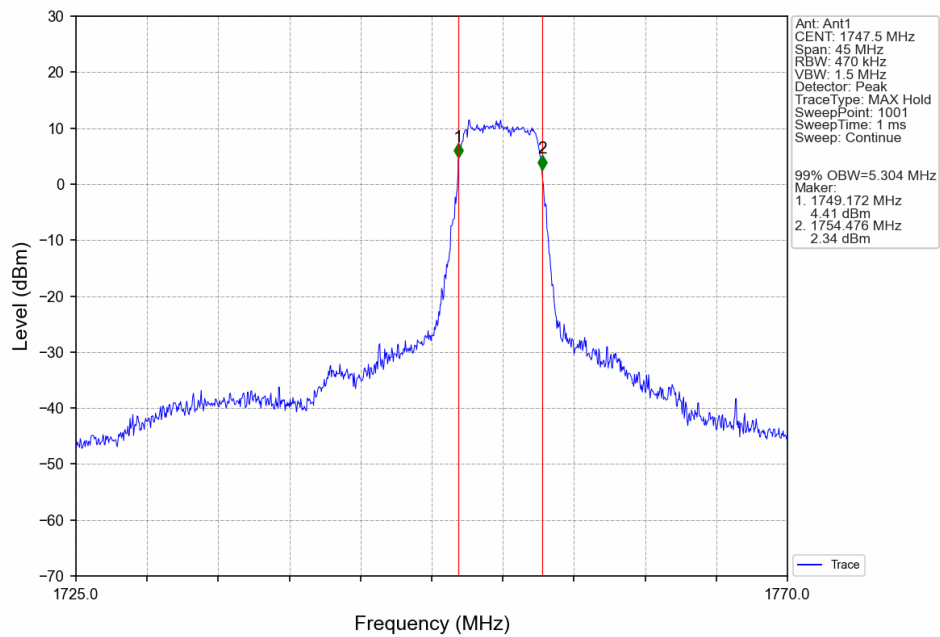




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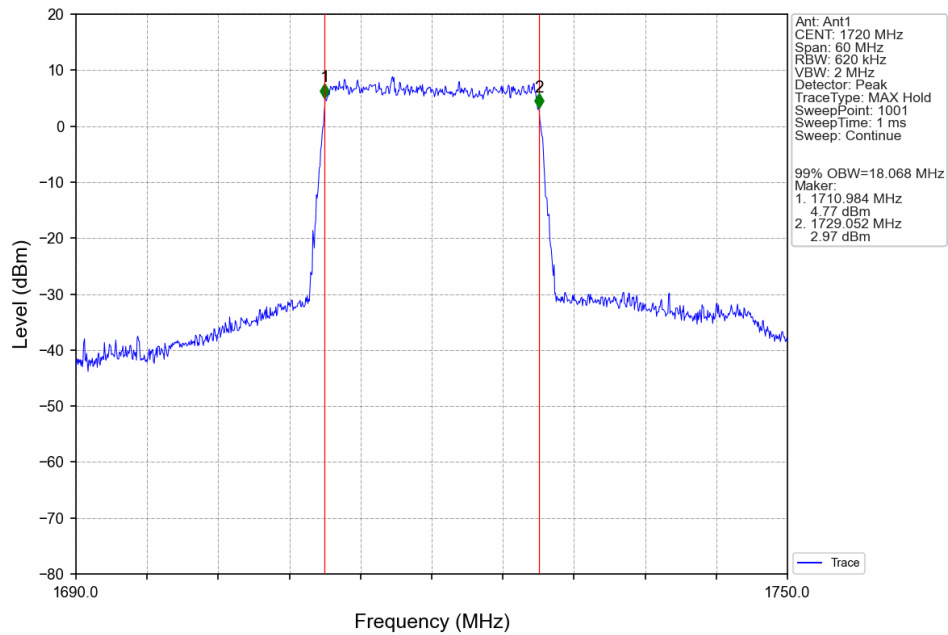


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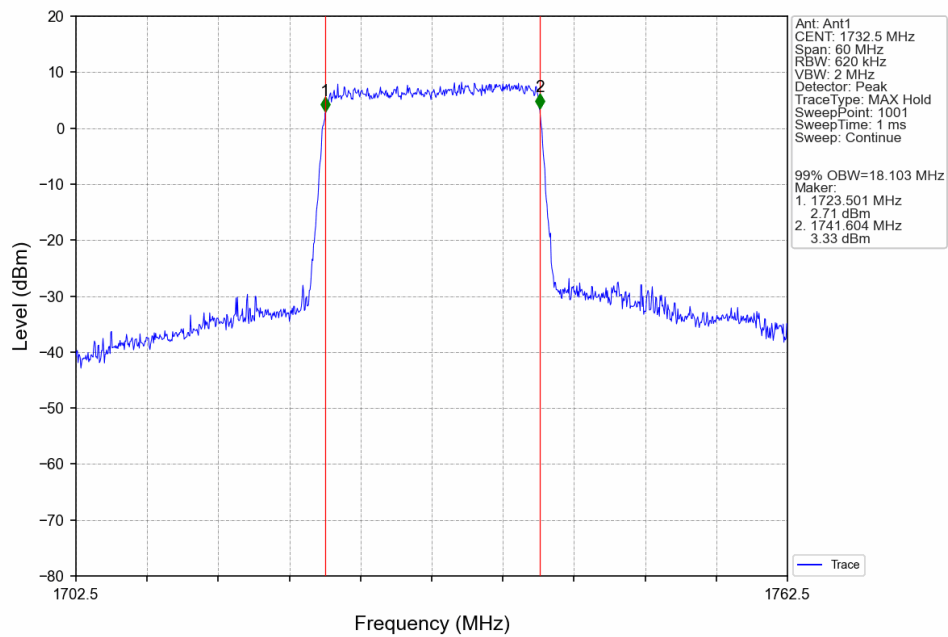




Band4_20MHz_QPSK_LCH_1720MHz_RB_100_0_NTNV



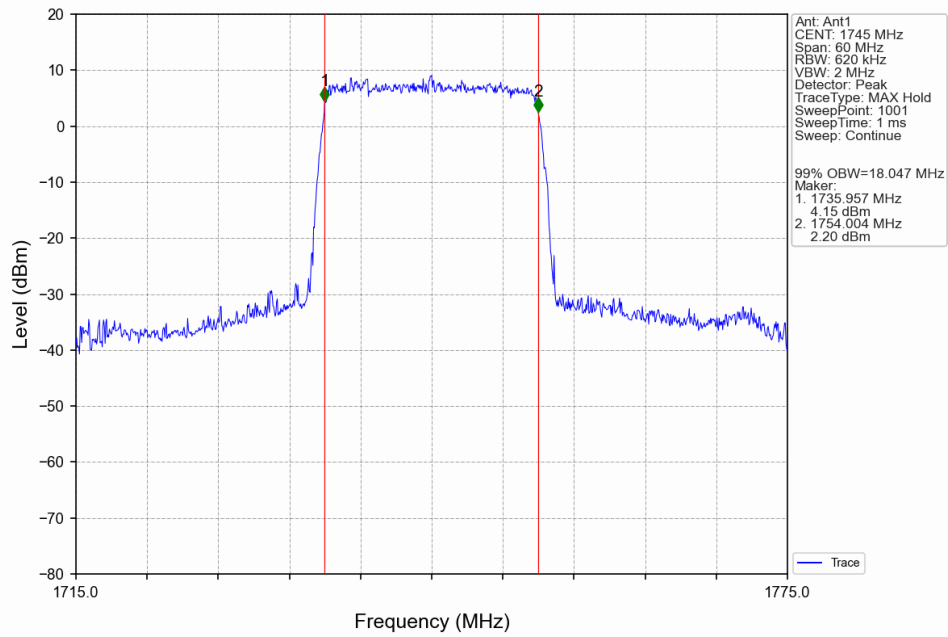
Band4_20MHz_QPSK_MCH_1732.5MHz_RB_100_0_NTNV



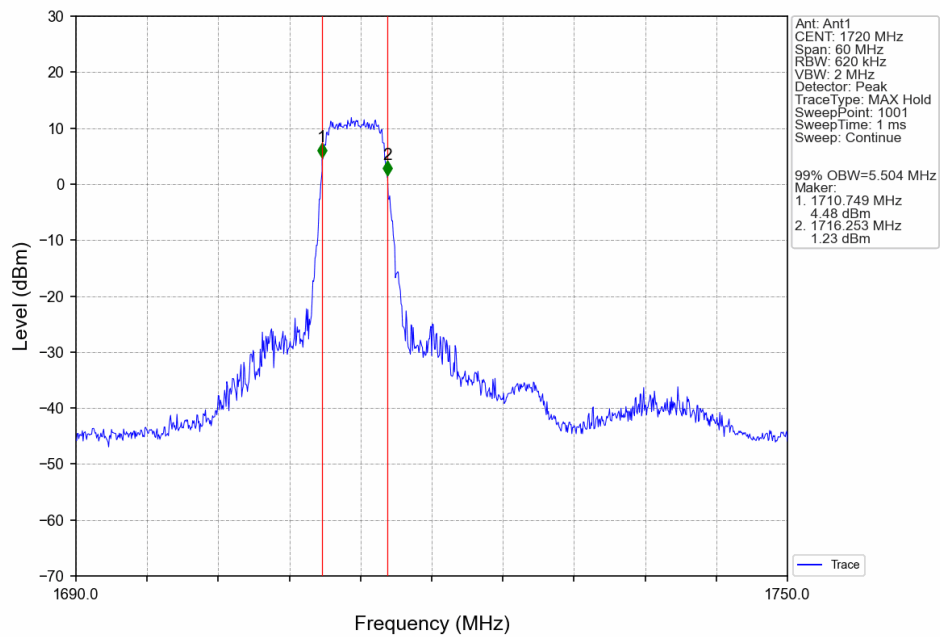


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Band4_20MHz_QPSK_HCH_1745MHz_RB_100_0_NTNV

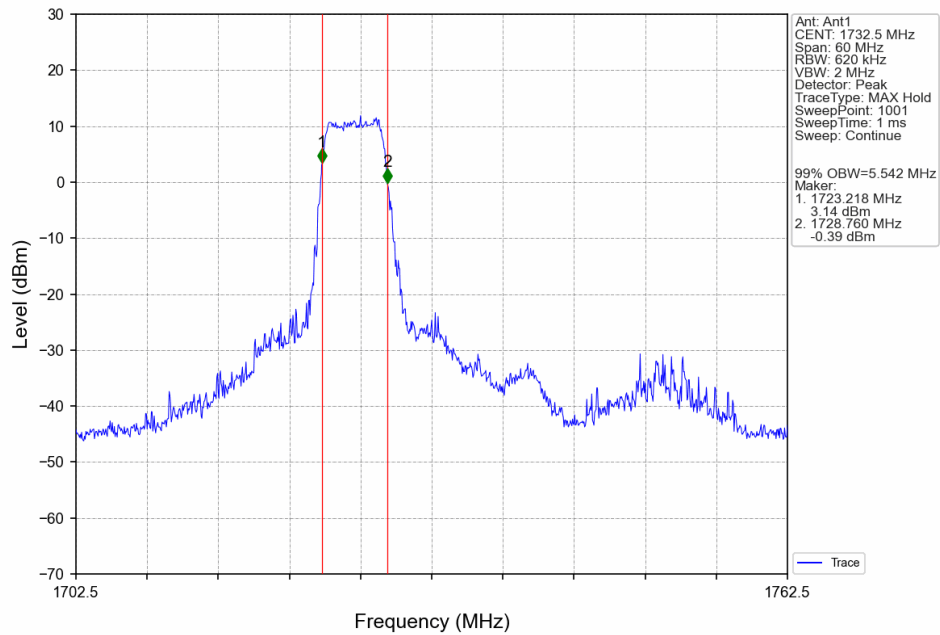


Band4_20MHz_16QAM_LCH_1720MHz_RB_27_0_NTNV

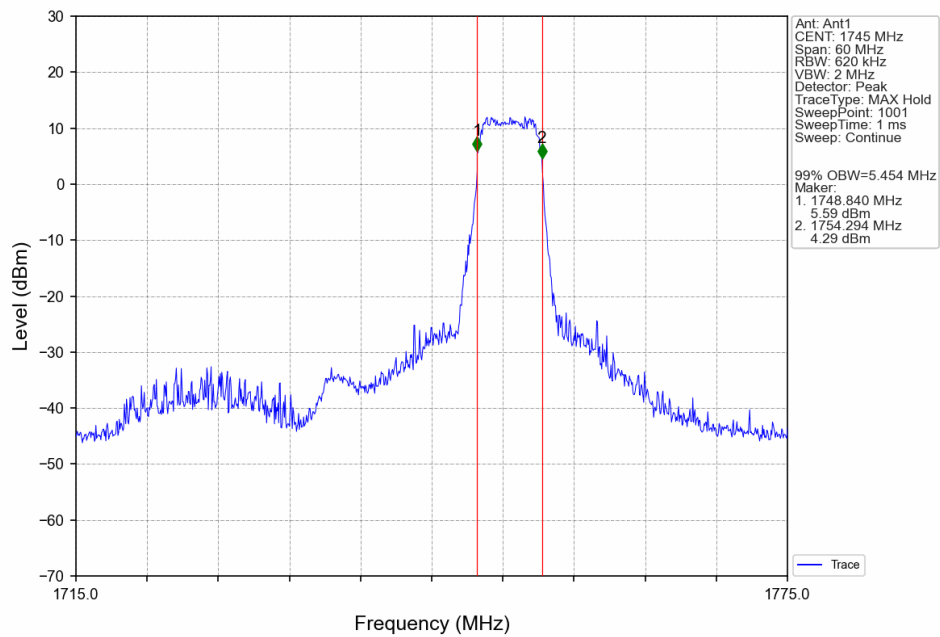




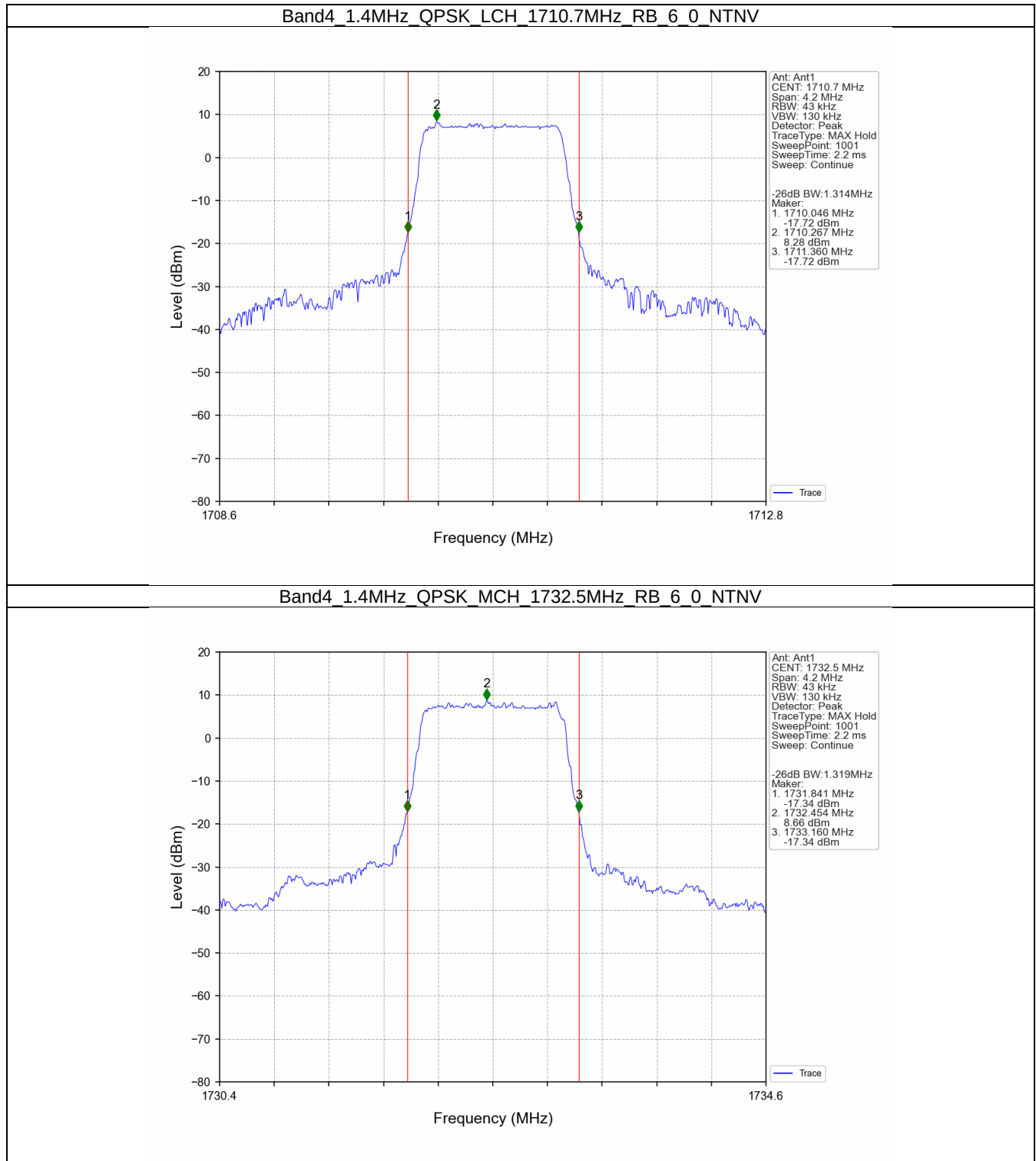
Band4_20MHz_16QAM_MCH_1732.5MHz_RB_27_0_NTNV



Band4_20MHz_16QAM_HCH_1745MHz_RB_27_73_NTNV

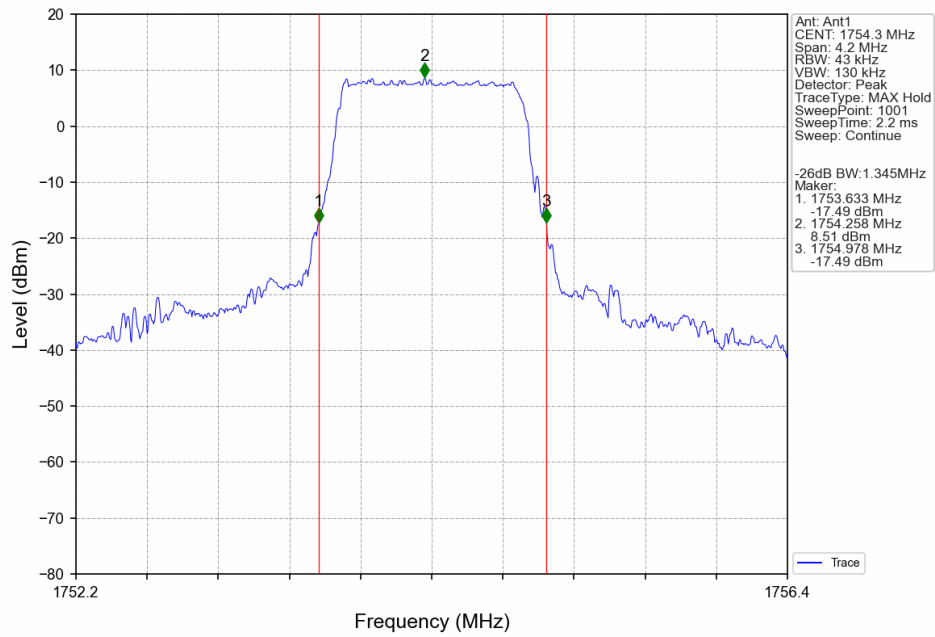


4.2.2 Band4_XDB

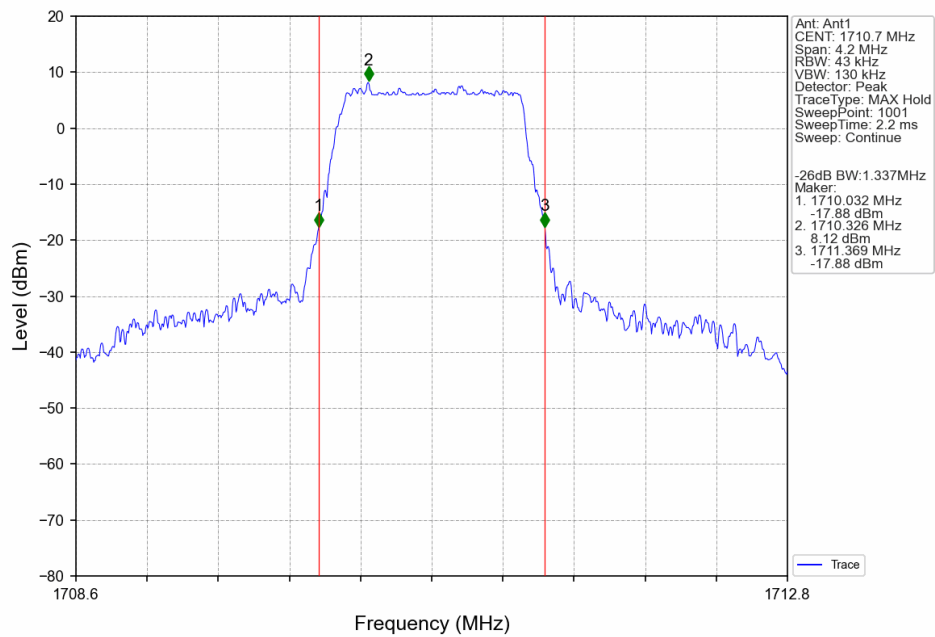




Band4_1.4MHz_QPSK_HCH_1754.3MHz_RB_6_0_NTNV

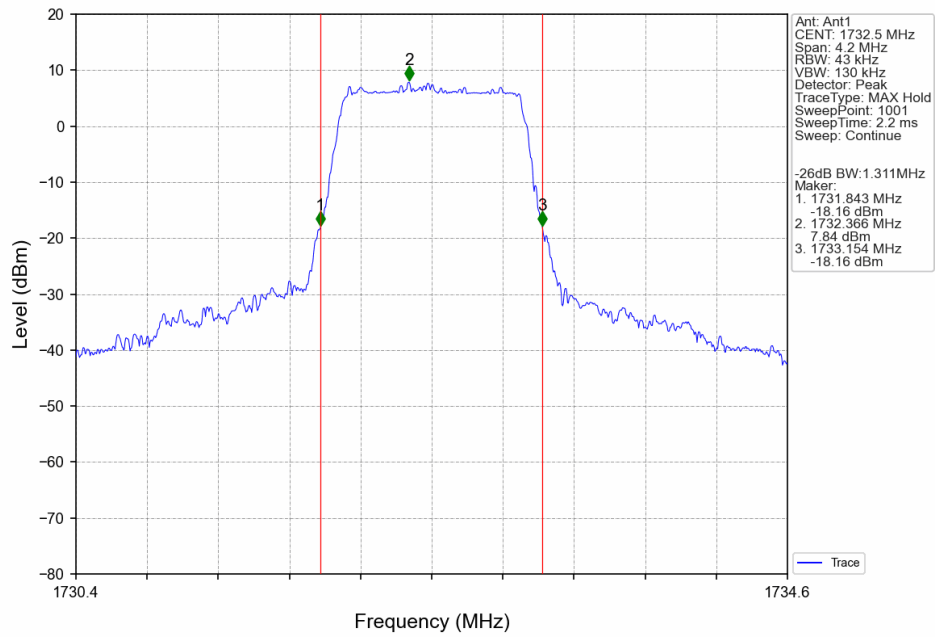


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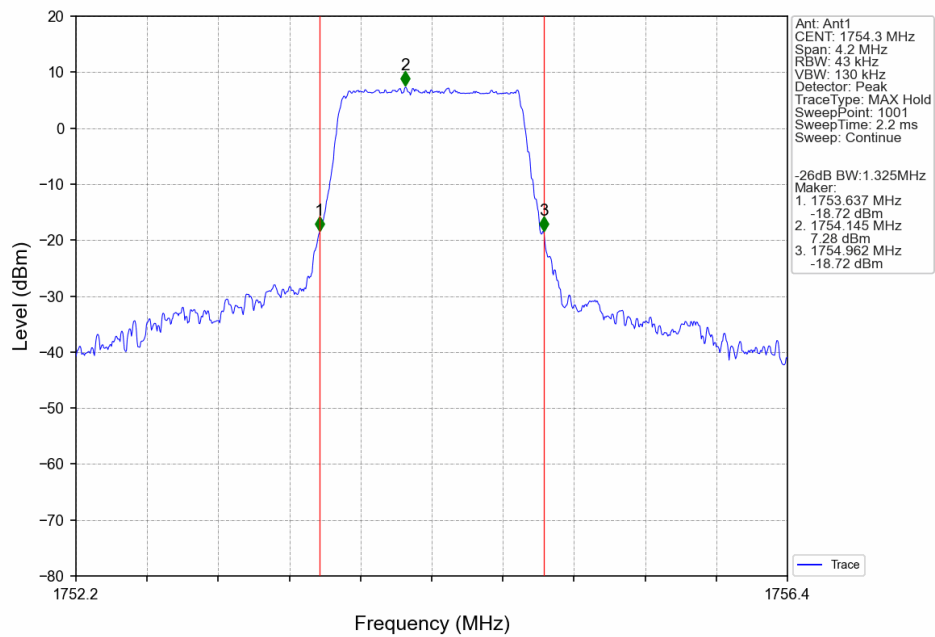




Band4 1.4MHz 16QAM MCH 1732.5MHz RB 6 0 NTNV

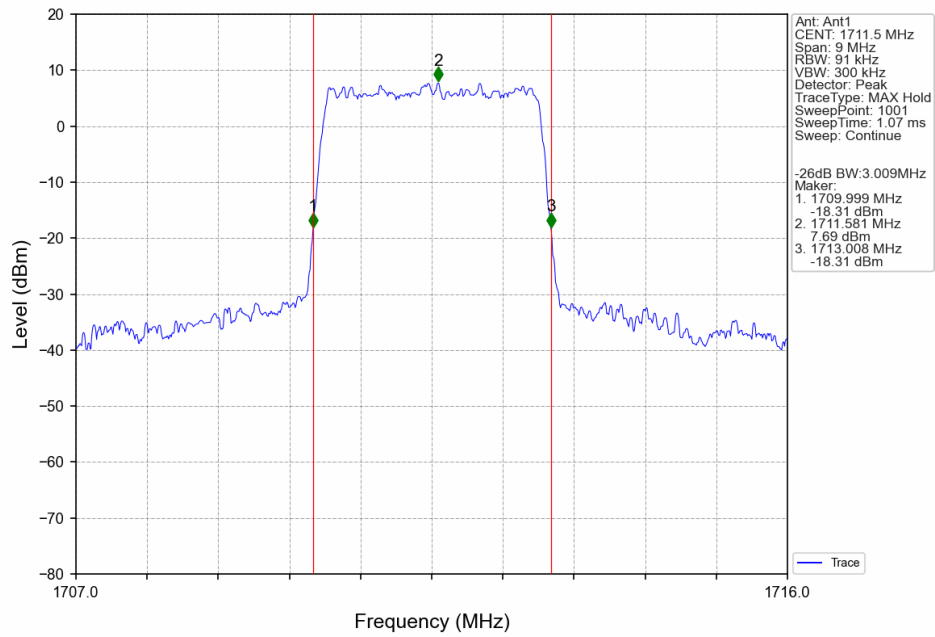


Band4 1.4MHz 16QAM HCH 1754.3MHz RB 6 0 NTNV

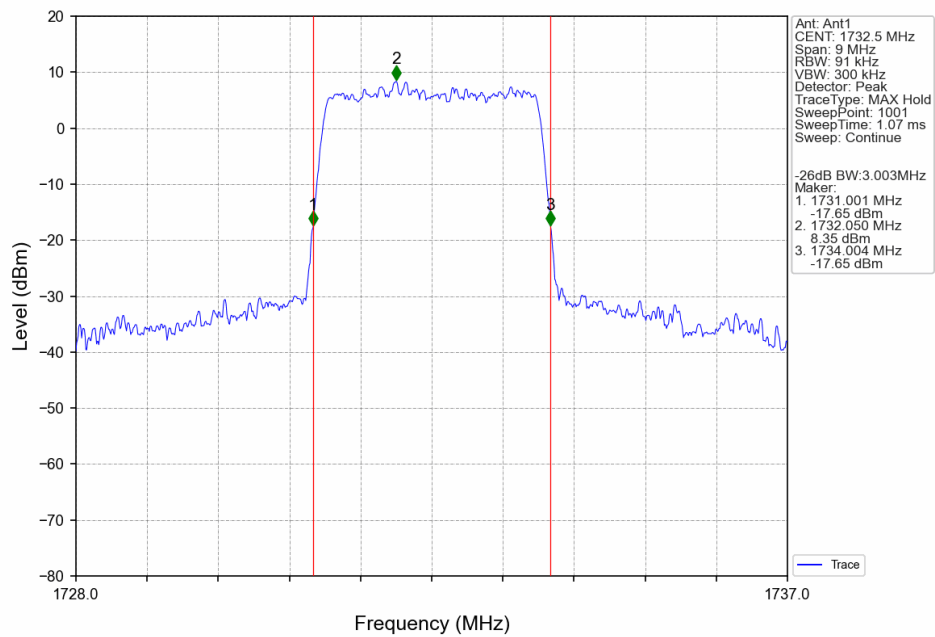




Band4_3MHz_QPSK_LCH_1711.5MHz_RB_15_0_NTNV

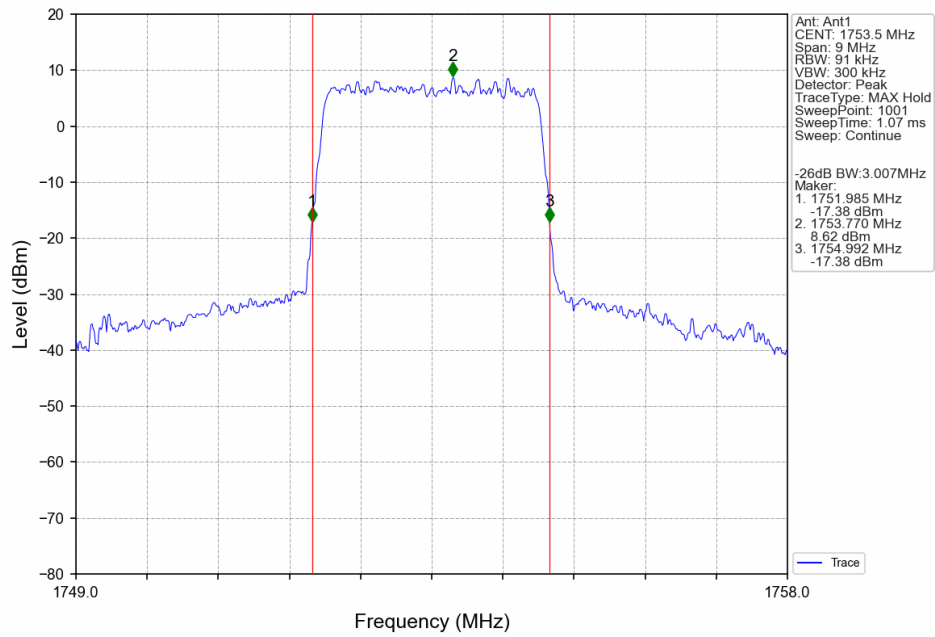


Band4_3MHz_QPSK_MCH_1732.5MHz_RB_15_0_NTNV

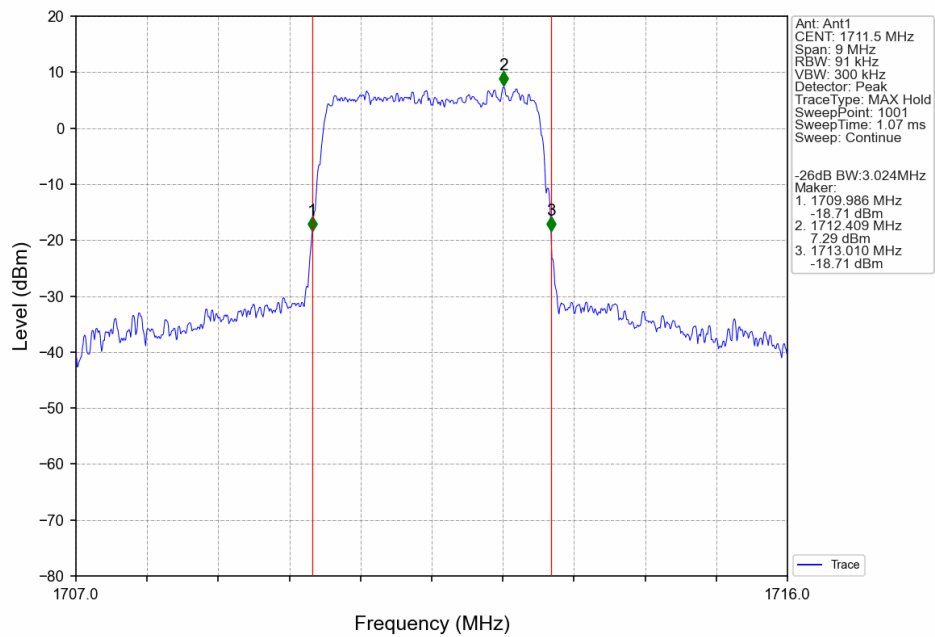




Band4_3MHz_QPSK_HCH_1753.5MHz_RB_15_0_NTNV

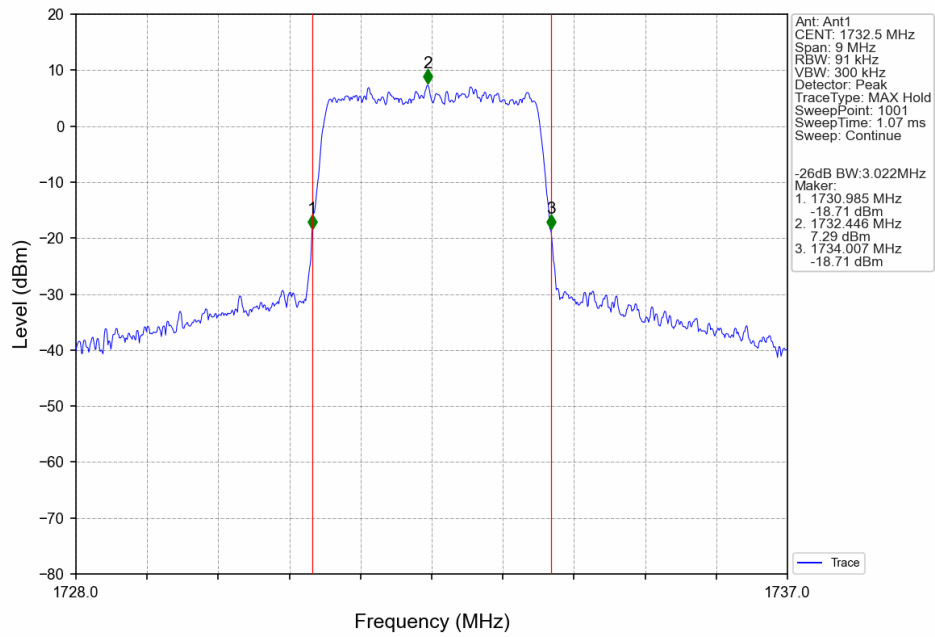


Band4_3MHz_16QAM_LCH_1711.5MHz_RB_15_0_NTNV

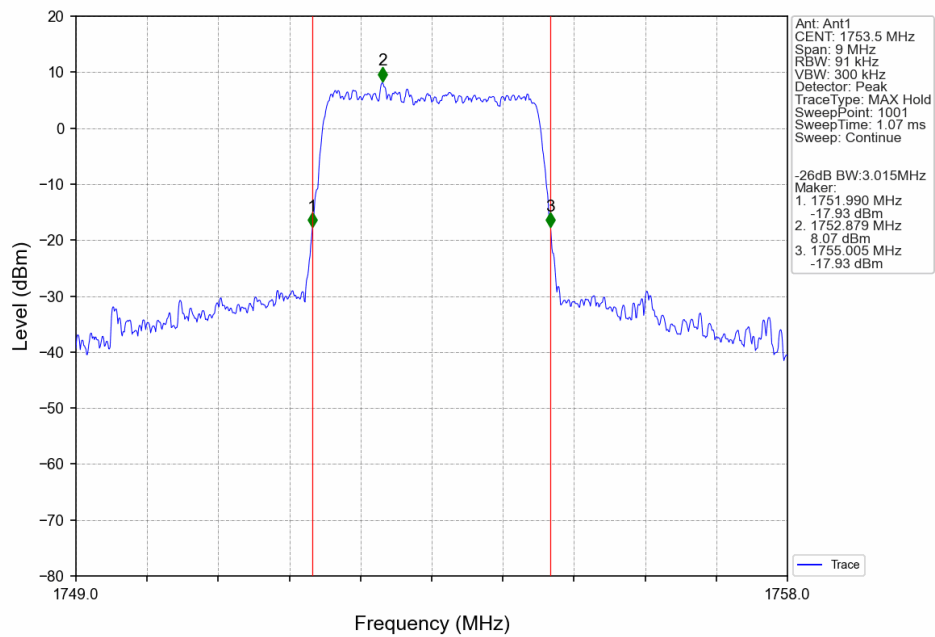




Band4_3MHz_16QAM_MCH_1732.5MHz_RB_15_0_NTNV



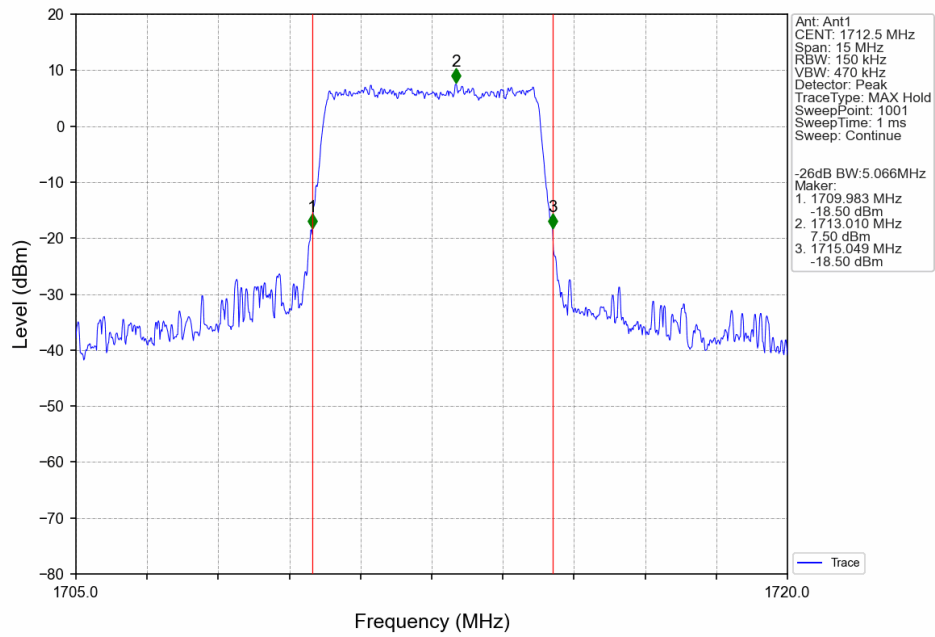
Band4_3MHz_16QAM_HCH_1753.5MHz_RB_15_0_NTNV



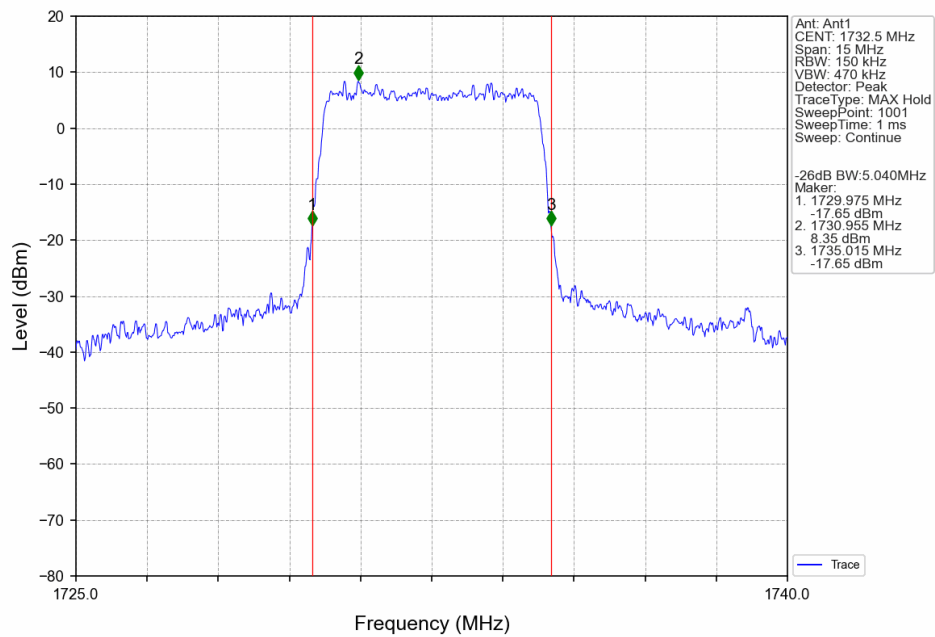


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Band4_5MHz_QPSK_LCH_1712.5MHz_RB_25_0_NTNV

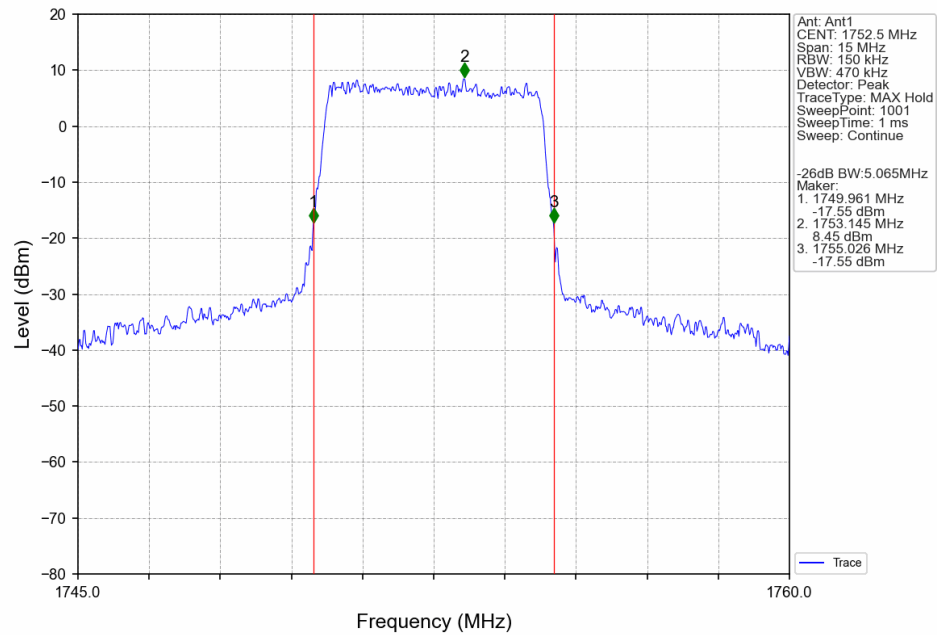


Band4_5MHz_QPSK_MCH_1732.5MHz_RB_25_0_NTNV

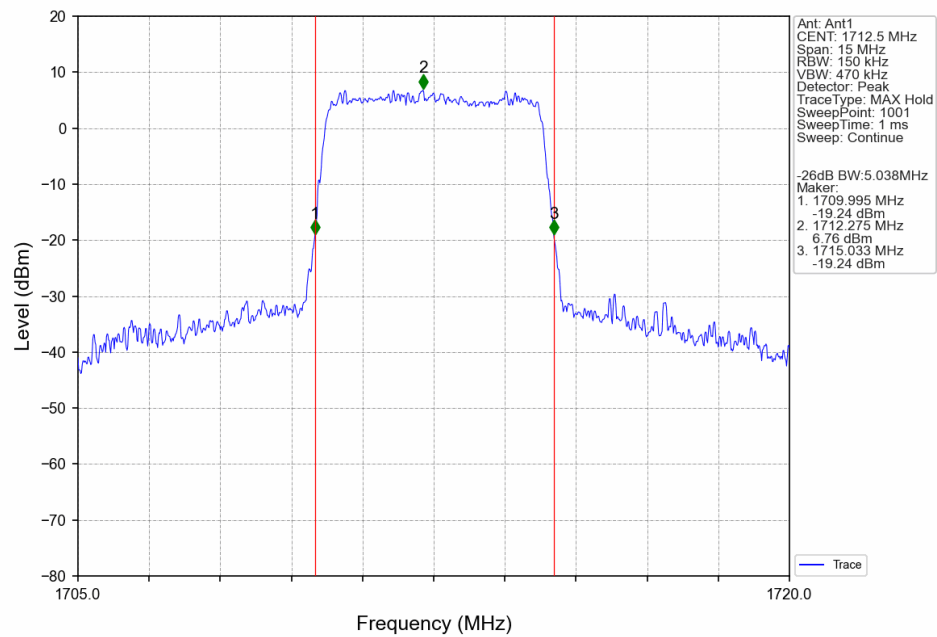




Band4_5MHz_QPSK_HCH_1752.5MHz_RB_25_0_NTNV

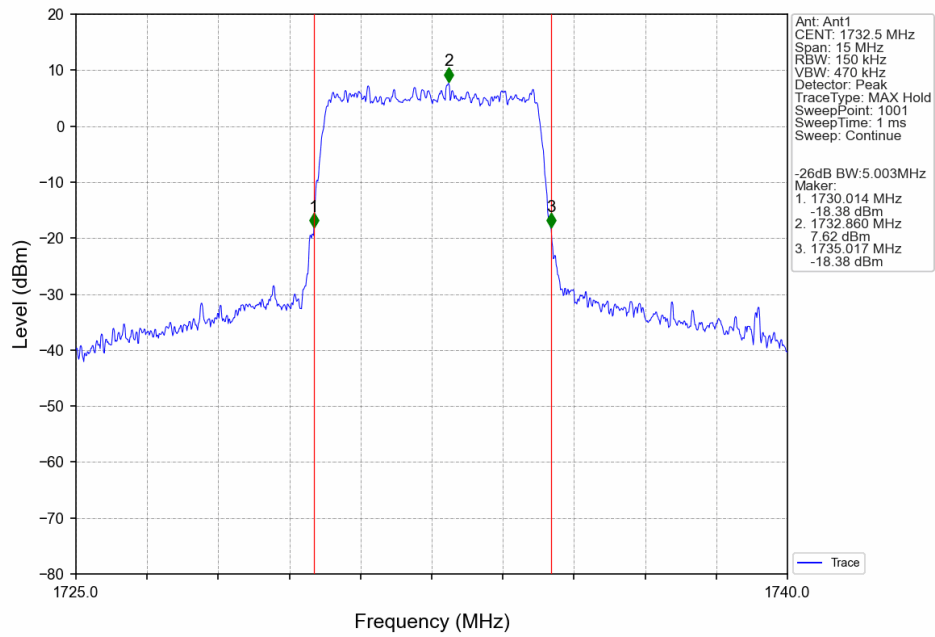


Band4_5MHz_16QAM_LCH_1712.5MHz_RB_25_0_NTNV

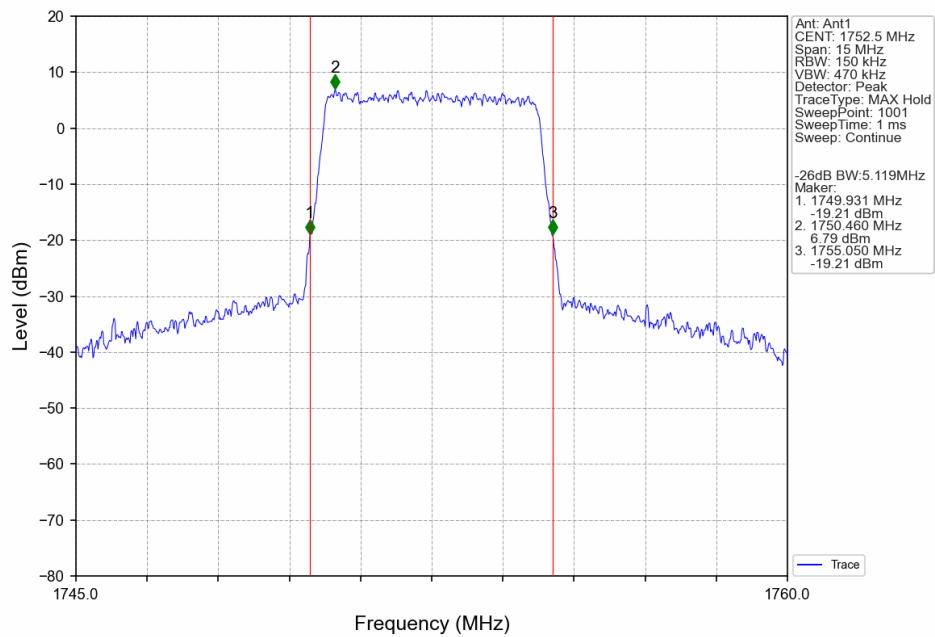




Band4_5MHz_16QAM_MCH_1732.5MHz_RB_25_0_NTNV



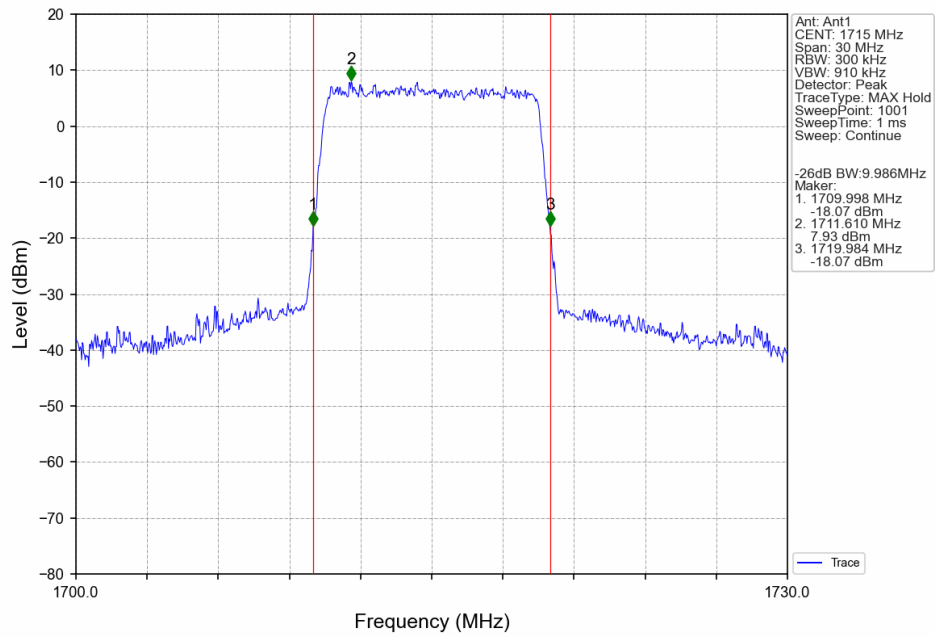
Band4_5MHz_16QAM_HCH_1752.5MHz_RB_25_0_NTNV



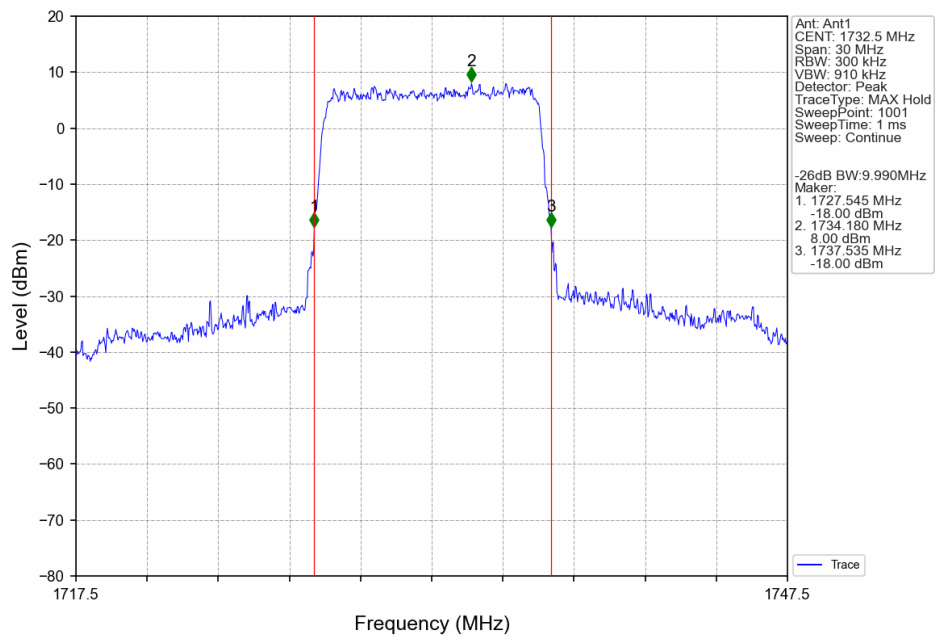


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Band4_10MHz_QPSK_LCH_1715MHz_RB_50_0_NTNV

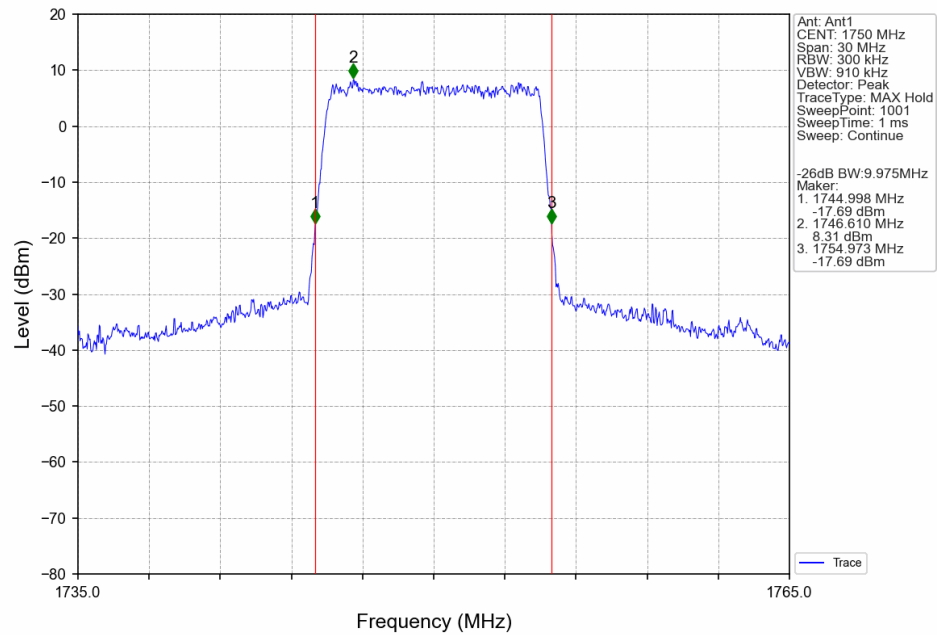


Band4_10MHz_QPSK_MCH_1732.5MHz_RB_50_0_NTNV

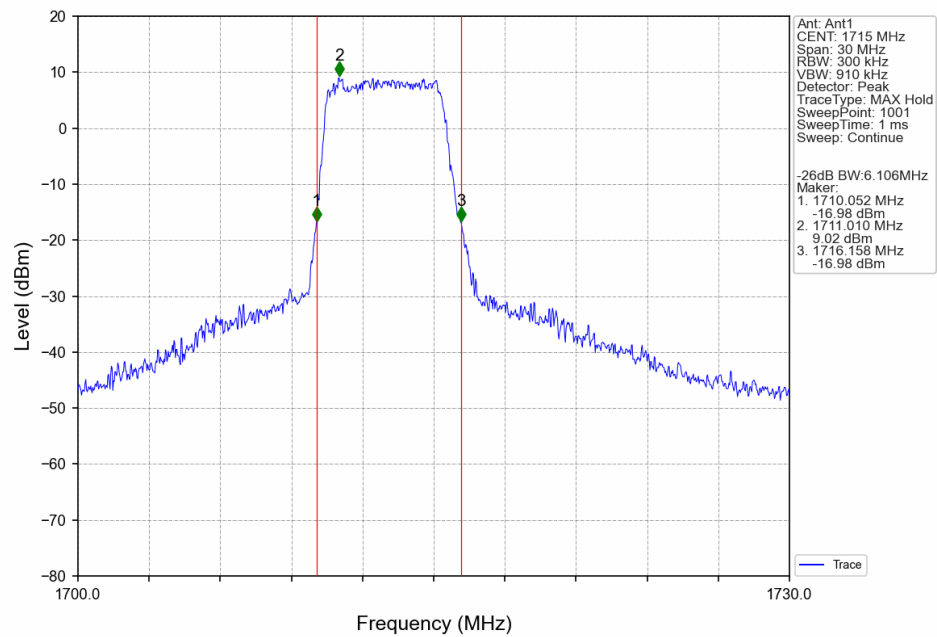




Band4_10MHz_QPSK_HCH_1750MHz_RB_50_0_NTNV

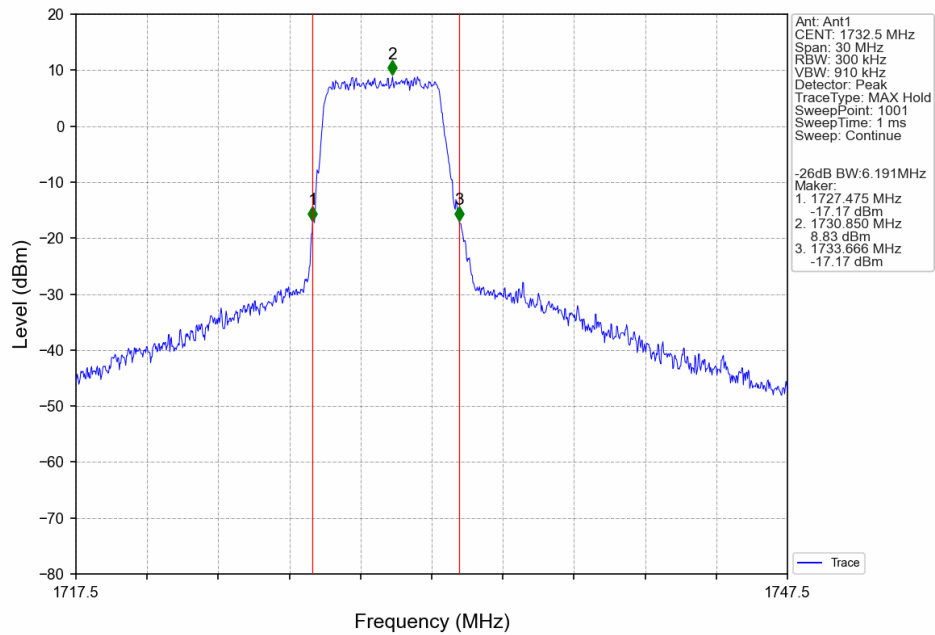


Band4_10MHz_16QAM_LCH_1715MHz_RB_27_0_NTNV

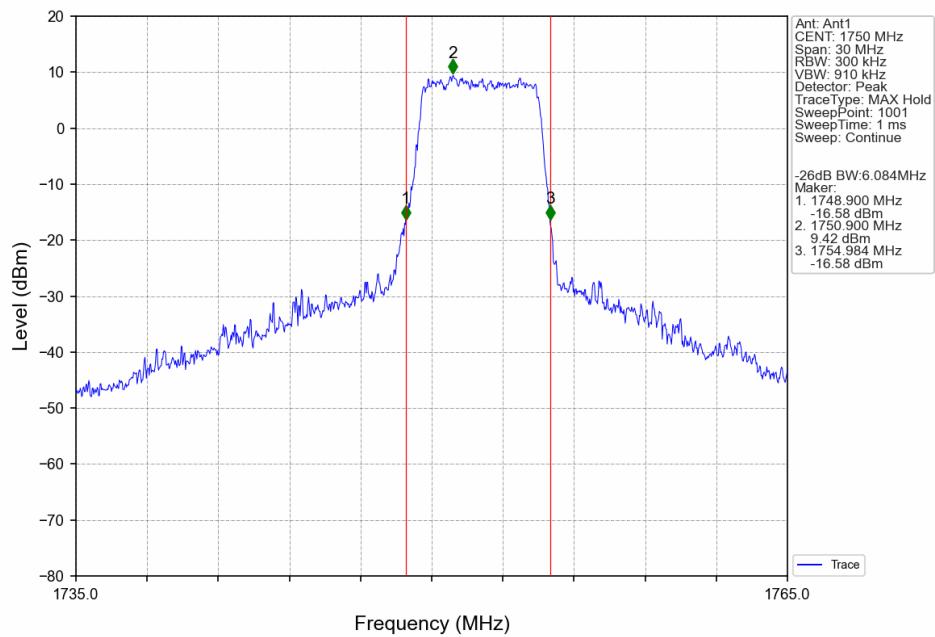




Band4_10MHz_16QAM_MCH_1732.5MHz_RB_27_0_NTNV

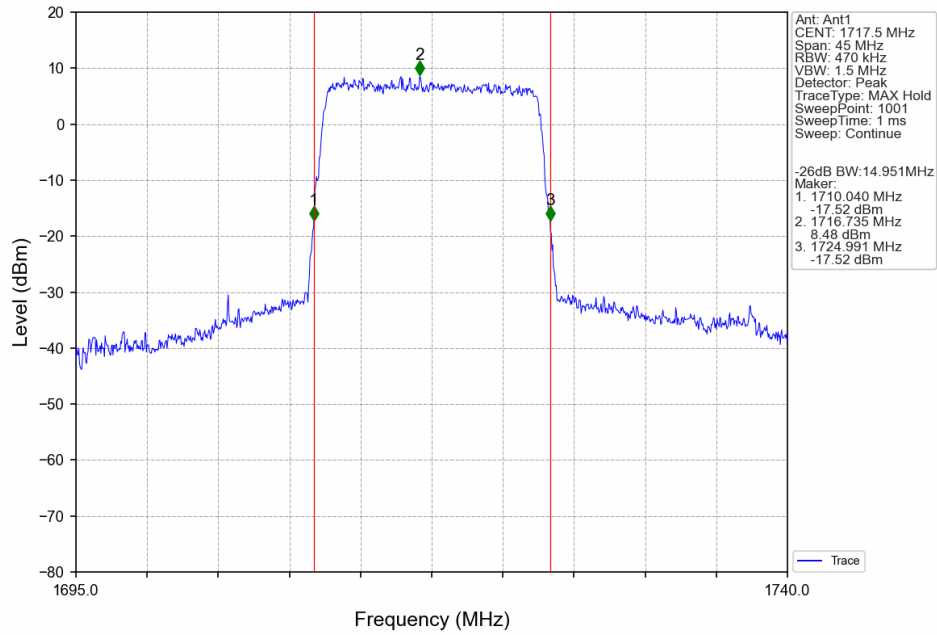


Band4_10MHz_16QAM_HCH_1750MHz_RB_27_23_NTNV





Band4_15MHz_QPSK_LCH_1717.5MHz_RB_75_0_NTNV



Band4_15MHz_QPSK_MCH_1732.5MHz_RB_75_0_NTNV

