

1. Effective (Isotropic) Radiated Power Output Data

1.1 Test Result

1.1.1 B4_1.4MHz_EIRP

Band: 4 / Bandwidth: 1.4MHz / NTNV								
Modulation	Frequency (MHz)	RB Allocation		Conducted Power (dBm)	Gain (dBi)	EIRP (dBm)		Verdict
		Size	Offset			Result	Limit	
QPSK	1710.7	1	0	22.10	3.50	25.60	<=30	Pass
			2	22.25	3.50	25.75	<=30	Pass
			5	22.18	3.50	25.68	<=30	Pass
		3	0	22.30	3.50	25.80	<=30	Pass
			2	22.30	3.50	25.80	<=30	Pass
			3	22.45	3.50	25.95	<=30	Pass
		6	0	21.45	3.50	24.95	<=30	Pass
	1732.5	1	0	22.09	3.50	25.59	<=30	Pass
			2	22.29	3.50	25.79	<=30	Pass
			5	22.16	3.50	25.66	<=30	Pass
		3	0	22.26	3.50	25.76	<=30	Pass
			2	22.18	3.50	25.68	<=30	Pass
			3	22.21	3.50	25.71	<=30	Pass
		6	0	21.37	3.50	24.87	<=30	Pass
	1754.3	1	0	22.15	3.50	25.65	<=30	Pass
			2	22.06	3.50	25.56	<=30	Pass
			5	22.14	3.50	25.64	<=30	Pass
		3	0	22.09	3.50	25.59	<=30	Pass
			2	22.20	3.50	25.70	<=30	Pass
			3	22.24	3.50	25.74	<=30	Pass
		6	0	21.26	3.50	24.76	<=30	Pass
16QAM	1710.7	1	0	22.08	3.50	25.58	<=30	Pass
			2	22.11	3.50	25.61	<=30	Pass
			5	21.78	3.50	25.28	<=30	Pass
		3	0	21.37	3.50	24.87	<=30	Pass
			2	21.34	3.50	24.84	<=30	Pass
			3	21.23	3.50	24.73	<=30	Pass
		6	0	20.35	3.50	23.85	<=30	Pass
	1732.5	1	0	21.07	3.50	24.57	<=30	Pass
			2	21.18	3.50	24.68	<=30	Pass
			5	21.07	3.50	24.57	<=30	Pass
		3	0	21.34	3.50	24.84	<=30	Pass
			2	21.52	3.50	25.02	<=30	Pass
			3	21.30	3.50	24.80	<=30	Pass
		6	0	20.35	3.50	23.85	<=30	Pass
	1754.3	1	0	21.79	3.50	25.29	<=30	Pass
			2	21.85	3.50	25.35	<=30	Pass
			5	21.62	3.50	25.12	<=30	Pass
		3	0	21.44	3.50	24.94	<=30	Pass
			2	21.50	3.50	25.00	<=30	Pass
			3	21.28	3.50	24.78	<=30	Pass
		6	0	20.31	3.50	23.81	<=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	22.19	3.50	25.69	<=30	Pass		
			7	22.35	3.50	25.85	<=30	Pass		
			14	22.46	3.50	25.96	<=30	Pass		
		8	0	21.47	3.50	24.97	<=30	Pass		
			4	21.40	3.50	24.90	<=30	Pass		
			7	21.43	3.50	24.93	<=30	Pass		
		15	0	21.34	3.50	24.84	<=30	Pass		
		1732.5	1	0	22.19	3.50	25.69	<=30	Pass	
				7	22.52	3.50	26.02	<=30	Pass	
	14			22.29	3.50	25.79	<=30	Pass		
	8		0	21.42	3.50	24.92	<=30	Pass		
			4	21.32	3.50	24.82	<=30	Pass		
			7	21.27	3.50	24.77	<=30	Pass		
	15		0	21.35	3.50	24.85	<=30	Pass		
	1753.5		1	0	22.16	3.50	25.66	<=30	Pass	
				7	22.13	3.50	25.63	<=30	Pass	
		14		22.38	3.50	25.88	<=30	Pass		
		8	0	21.31	3.50	24.81	<=30	Pass		
			4	21.22	3.50	24.72	<=30	Pass		
			7	21.20	3.50	24.70	<=30	Pass		
		15	0	21.17	3.50	24.67	<=30	Pass		
		16QAM	1711.5	1	0	21.91	3.50	25.41	<=30	Pass
					7	22.16	3.50	25.66	<=30	Pass
	14				21.76	3.50	25.26	<=30	Pass	
	8			0	20.35	3.50	23.85	<=30	Pass	
				4	20.32	3.50	23.82	<=30	Pass	
				7	20.52	3.50	24.02	<=30	Pass	
15	0			20.26	3.50	23.76	<=30	Pass		
1732.5	1			0	21.22	3.50	24.72	<=30	Pass	
				7	21.21	3.50	24.71	<=30	Pass	
			14	21.12	3.50	24.62	<=30	Pass		
	8		0	20.65	3.50	24.15	<=30	Pass		
			4	20.50	3.50	24.00	<=30	Pass		
			7	20.55	3.50	24.05	<=30	Pass		
	15		0	20.38	3.50	23.88	<=30	Pass		
	1753.5		1	0	21.65	3.50	25.15	<=30	Pass	
				7	22.05	3.50	25.55	<=30	Pass	
14				21.75	3.50	25.25	<=30	Pass		
8			0	20.40	3.50	23.90	<=30	Pass		
			4	20.39	3.50	23.89	<=30	Pass		
			7	20.37	3.50	23.87	<=30	Pass		
15			0	20.09	3.50	23.59	<=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	22.18	3.50	25.68	<=30	Pass		
			13	22.10	3.50	25.60	<=30	Pass		
			24	22.10	3.50	25.60	<=30	Pass		
		12	0	21.32	3.50	24.82	<=30	Pass		
			6	21.39	3.50	24.89	<=30	Pass		
			13	21.36	3.50	24.86	<=30	Pass		
		25	0	21.31	3.50	24.81	<=30	Pass		
		1732.5	1	0	22.09	3.50	25.59	<=30	Pass	
				13	21.83	3.50	25.33	<=30	Pass	
	24			22.09	3.50	25.59	<=30	Pass		
	12		0	21.24	3.50	24.74	<=30	Pass		
			6	21.18	3.50	24.68	<=30	Pass		
			13	21.17	3.50	24.67	<=30	Pass		
	25	0	21.26	3.50	24.76	<=30	Pass			
	1752.5	1	0	21.83	3.50	25.33	<=30	Pass		
			13	21.96	3.50	25.46	<=30	Pass		
			24	22.10	3.50	25.60	<=30	Pass		
		12	0	21.02	3.50	24.52	<=30	Pass		
			6	21.08	3.50	24.58	<=30	Pass		
			13	21.15	3.50	24.65	<=30	Pass		
		25	0	21.15	3.50	24.65	<=30	Pass		
		16QAM	1712.5	1	0	21.18	3.50	24.68	<=30	Pass
					13	21.80	3.50	25.30	<=30	Pass
	24				21.94	3.50	25.44	<=30	Pass	
	12			0	20.02	3.50	23.52	<=30	Pass	
				6	20.29	3.50	23.79	<=30	Pass	
				13	20.17	3.50	23.67	<=30	Pass	
25	0			20.30	3.50	23.80	<=30	Pass		
1732.5	1			0	21.14	3.50	24.64	<=30	Pass	
				13	21.35	3.50	24.85	<=30	Pass	
			24	21.15	3.50	24.65	<=30	Pass		
	12		0	20.27	3.50	23.77	<=30	Pass		
			6	20.24	3.50	23.74	<=30	Pass		
			13	20.19	3.50	23.69	<=30	Pass		
25	0		20.24	3.50	23.74	<=30	Pass			
1752.5	1		0	20.91	3.50	24.41	<=30	Pass		
			13	21.60	3.50	25.10	<=30	Pass		
			24	21.82	3.50	25.32	<=30	Pass		
	12		0	20.11	3.50	23.61	<=30	Pass		
			6	20.14	3.50	23.64	<=30	Pass		
			13	20.23	3.50	23.73	<=30	Pass		
	25		0	20.01	3.50	23.51	<=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	22.52	3.50	26.02	<=30	Pass	
			25	22.55	3.50	26.05	<=30	Pass	
			49	22.25	3.50	25.75	<=30	Pass	
		25	0	21.35	3.50	24.85	<=30	Pass	
			13	21.47	3.50	24.97	<=30	Pass	
			25	21.37	3.50	24.87	<=30	Pass	
		50	0	21.32	3.50	24.82	<=30	Pass	
		1732.5	1	0	22.26	3.50	25.76	<=30	Pass
				25	22.28	3.50	25.78	<=30	Pass
	49			22.21	3.50	25.71	<=30	Pass	
	25		0	21.30	3.50	24.80	<=30	Pass	
			13	21.25	3.50	24.75	<=30	Pass	
			25	21.20	3.50	24.70	<=30	Pass	
	50		0	21.38	3.50	24.88	<=30	Pass	
	1750		1	0	22.19	3.50	25.69	<=30	Pass
				25	22.40	3.50	25.90	<=30	Pass
		49		22.32	3.50	25.82	<=30	Pass	
		25	0	21.23	3.50	24.73	<=30	Pass	
			13	21.26	3.50	24.76	<=30	Pass	
			25	21.31	3.50	24.81	<=30	Pass	
		50	0	21.17	3.50	24.67	<=30	Pass	
Note1: EIRP=Conducted Power+Antenna Gain									

1.1.5 B4_15MHz_EIRP

Band: 4 / Bandwidth: 15MHz / NTVN									
Modulation	Frequency (MHz)	RB Allocation		Conducted Power (dBm)	Gain (dBi)	EIRP (dBm)		Verdict	
		Size	Offset			Result	Limit		
QPSK	1717.5	1	0	22.43	3.50	25.93	<=30	Pass	
			38	22.40	3.50	25.90	<=30	Pass	
			74	22.13	3.50	25.63	<=30	Pass	
		36	0	21.40	3.50	24.90	<=30	Pass	
			18	21.47	3.50	24.97	<=30	Pass	
			39	21.31	3.50	24.81	<=30	Pass	
		75	0	21.36	3.50	24.86	<=30	Pass	
		1732.5	1	0	22.35	3.50	25.85	<=30	Pass
				38	22.17	3.50	25.67	<=30	Pass
	74			22.05	3.50	25.55	<=30	Pass	
	36		0	21.34	3.50	24.84	<=30	Pass	
			18	21.36	3.50	24.86	<=30	Pass	
			39	21.25	3.50	24.75	<=30	Pass	
	75	0	21.27	3.50	24.77	<=30	Pass		
	1747.5	1	0	22.09	3.50	25.59	<=30	Pass	
			38	22.18	3.50	25.68	<=30	Pass	
			74	22.40	3.50	25.90	<=30	Pass	
		36	0	21.34	3.50	24.84	<=30	Pass	
			18	21.19	3.50	24.69	<=30	Pass	
			39	21.19	3.50	24.69	<=30	Pass	
		75	0	21.14	3.50	24.64	<=30	Pass	
Note1: EIRP=Conducted Power+Antenna Gain									

1.1.6 B4_20MHz_EIRP

Band: 4 / Bandwidth: 20MHz / NTV									
Modulation	Frequency (MHz)	RB Allocation		Conducted Power (dBm)	Gain (dBi)	EIRP (dBm)		Verdict	
		Size	Offset			Result	Limit		
QPSK	1720	1	0	22.33	3.50	25.83	<=30	Pass	
			50	22.52	3.50	26.02	<=30	Pass	
			99	22.13	3.50	25.63	<=30	Pass	
		50	0	21.32	3.50	24.82	<=30	Pass	
			25	21.41	3.50	24.91	<=30	Pass	
			50	21.33	3.50	24.83	<=30	Pass	
		100	0	21.29	3.50	24.79	<=30	Pass	
		1732.5	1	0	22.40	3.50	25.90	<=30	Pass
				50	22.26	3.50	25.76	<=30	Pass
	99			22.06	3.50	25.56	<=30	Pass	
	50		0	21.25	3.50	24.75	<=30	Pass	
			25	21.31	3.50	24.81	<=30	Pass	
			50	21.21	3.50	24.71	<=30	Pass	
	100	0	21.25	3.50	24.75	<=30	Pass		
	1745	1	0	22.23	3.50	25.73	<=30	Pass	
			50	22.53	3.50	26.03	<=30	Pass	
			99	22.26	3.50	25.76	<=30	Pass	
		50	0	21.33	3.50	24.83	<=30	Pass	
			25	21.23	3.50	24.73	<=30	Pass	
			50	21.12	3.50	24.62	<=30	Pass	
		100	0	21.25	3.50	24.75	<=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	10.2	0.601	0.0004	-2.5 to 2.5	Pass
					12	1.101	0.0006	-2.5 to 2.5	Pass
					13.8	0.844	0.0005	-2.5 to 2.5	Pass
				-30	12	0.658	0.0004	-2.5 to 2.5	Pass
				-20	12	1.745	0.0010	-2.5 to 2.5	Pass
				-10	12	2.418	0.0014	-2.5 to 2.5	Pass
				0	12	1.373	0.0008	-2.5 to 2.5	Pass
				10	12	1.373	0.0008	-2.5 to 2.5	Pass
				30	12	1.187	0.0007	-2.5 to 2.5	Pass
				40	12	0.958	0.0006	-2.5 to 2.5	Pass
				50	12	1.316	0.0008	-2.5 to 2.5	Pass
	1732.5	6	0	20	10.2	0.472	0.0003	-2.5 to 2.5	Pass
					12	-0.072	0.0000	-2.5 to 2.5	Pass
					13.8	1.059	0.0006	-2.5 to 2.5	Pass
				-30	12	0.372	0.0002	-2.5 to 2.5	Pass
				-20	12	0.787	0.0005	-2.5 to 2.5	Pass
				-10	12	0.987	0.0006	-2.5 to 2.5	Pass
				0	12	0.358	0.0002	-2.5 to 2.5	Pass
				10	12	1.044	0.0006	-2.5 to 2.5	Pass
				30	12	1.388	0.0008	-2.5 to 2.5	Pass
				40	12	0.873	0.0005	-2.5 to 2.5	Pass
				50	12	1.259	0.0007	-2.5 to 2.5	Pass
	1754.3	6	0	20	10.2	-3.304	-0.0019	-2.5 to 2.5	Pass
					12	-3.619	-0.0021	-2.5 to 2.5	Pass
					13.8	-3.133	-0.0018	-2.5 to 2.5	Pass
				-30	12	-2.432	-0.0014	-2.5 to 2.5	Pass
				-20	12	-3.333	-0.0019	-2.5 to 2.5	Pass
				-10	12	-2.475	-0.0014	-2.5 to 2.5	Pass
				0	12	-2.232	-0.0013	-2.5 to 2.5	Pass
				10	12	-2.747	-0.0016	-2.5 to 2.5	Pass
				30	12	-2.503	-0.0014	-2.5 to 2.5	Pass
				40	12	-2.432	-0.0014	-2.5 to 2.5	Pass
				50	12	-2.303	-0.0013	-2.5 to 2.5	Pass
16QAM	1710.7	6	0	20	10.2	1.574	0.0009	-2.5 to 2.5	Pass
					12	1.559	0.0009	-2.5 to 2.5	Pass
					13.8	1.402	0.0008	-2.5 to 2.5	Pass
				-30	12	0.544	0.0003	-2.5 to 2.5	Pass
				-20	12	1.416	0.0008	-2.5 to 2.5	Pass
				-10	12	0.544	0.0003	-2.5 to 2.5	Pass
				0	12	1.059	0.0006	-2.5 to 2.5	Pass
				10	12	1.230	0.0007	-2.5 to 2.5	Pass
				30	12	1.059	0.0006	-2.5 to 2.5	Pass
				40	12	0.644	0.0004	-2.5 to 2.5	Pass
				50	12	1.044	0.0006	-2.5 to 2.5	Pass
	1732.5	6	0	20	10.2	1.459	0.0008	-2.5 to 2.5	Pass
					12	1.059	0.0006	-2.5 to 2.5	Pass
					13.8	0.629	0.0004	-2.5 to 2.5	Pass
				-30	12	0.429	0.0002	-2.5 to 2.5	Pass
				-20	12	1.159	0.0007	-2.5 to 2.5	Pass
				-10	12	2.031	0.0012	-2.5 to 2.5	Pass

				0	12	1.473	0.0009	-2.5 to 2.5	Pass
				10	12	0.772	0.0004	-2.5 to 2.5	Pass
				30	12	1.860	0.0011	-2.5 to 2.5	Pass
				40	12	0.958	0.0006	-2.5 to 2.5	Pass
				50	12	0.944	0.0005	-2.5 to 2.5	Pass
	1754.3	6	0	20	10.2	-1.116	-0.0006	-2.5 to 2.5	Pass
					12	-1.202	-0.0007	-2.5 to 2.5	Pass
					13.8	-0.801	-0.0005	-2.5 to 2.5	Pass
				-30	12	-2.418	-0.0014	-2.5 to 2.5	Pass
				-20	12	-1.688	-0.0010	-2.5 to 2.5	Pass
				-10	12	-2.260	-0.0013	-2.5 to 2.5	Pass
				0	12	-1.731	-0.0010	-2.5 to 2.5	Pass
				10	12	-1.531	-0.0009	-2.5 to 2.5	Pass
				30	12	-1.702	-0.0010	-2.5 to 2.5	Pass
				40	12	-1.602	-0.0009	-2.5 to 2.5	Pass
				50	12	-2.146	-0.0012	-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	10.2	-0.157	-0.0001	-2.5 to 2.5	Pass
					12	0.787	0.0005	-2.5 to 2.5	Pass
					13.8	0.200	0.0001	-2.5 to 2.5	Pass
				-30	12	-0.186	-0.0001	-2.5 to 2.5	Pass
				-20	12	-0.172	-0.0001	-2.5 to 2.5	Pass
				-10	12	0.844	0.0005	-2.5 to 2.5	Pass
				0	12	-0.229	-0.0001	-2.5 to 2.5	Pass
				10	12	0.072	0.0000	-2.5 to 2.5	Pass
				30	12	-0.257	-0.0002	-2.5 to 2.5	Pass
				40	12	0.415	0.0002	-2.5 to 2.5	Pass
				50	12	0.672	0.0004	-2.5 to 2.5	Pass
	1732.5	15	0	20	10.2	0.014	0.0000	-2.5 to 2.5	Pass
					12	0.830	0.0005	-2.5 to 2.5	Pass
					13.8	0.901	0.0005	-2.5 to 2.5	Pass
				-30	12	1.502	0.0009	-2.5 to 2.5	Pass
				-20	12	0.987	0.0006	-2.5 to 2.5	Pass
				-10	12	0.873	0.0005	-2.5 to 2.5	Pass
				0	12	0.587	0.0003	-2.5 to 2.5	Pass
				10	12	1.116	0.0006	-2.5 to 2.5	Pass
				30	12	0.916	0.0005	-2.5 to 2.5	Pass
				40	12	0.529	0.0003	-2.5 to 2.5	Pass
				50	12	0.572	0.0003	-2.5 to 2.5	Pass
	1753.5	15	0	20	10.2	0.687	0.0004	-2.5 to 2.5	Pass
					12	0.129	0.0001	-2.5 to 2.5	Pass
					13.8	0.086	0.0000	-2.5 to 2.5	Pass
				-30	12	1.216	0.0007	-2.5 to 2.5	Pass
				-20	12	0.787	0.0004	-2.5 to 2.5	Pass
				-10	12	1.473	0.0008	-2.5 to 2.5	Pass
				0	12	0.958	0.0005	-2.5 to 2.5	Pass
				10	12	1.459	0.0008	-2.5 to 2.5	Pass
				30	12	0.644	0.0004	-2.5 to 2.5	Pass
				40	12	0.343	0.0002	-2.5 to 2.5	Pass
				50	12	0.486	0.0003	-2.5 to 2.5	Pass
16QAM	1711.5	15	0	20	10.2	0.343	0.0002	-2.5 to 2.5	Pass
					12	0.644	0.0004	-2.5 to 2.5	Pass
					13.8	-0.343	-0.0002	-2.5 to 2.5	Pass

				-30	12	-0.486	-0.0003	-2.5 to 2.5	Pass
				-20	12	0.415	0.0002	-2.5 to 2.5	Pass
				-10	12	0.815	0.0005	-2.5 to 2.5	Pass
				0	12	-0.358	-0.0002	-2.5 to 2.5	Pass
				10	12	-0.286	-0.0002	-2.5 to 2.5	Pass
				30	12	0.458	0.0003	-2.5 to 2.5	Pass
				40	12	0.000	0.0000	-2.5 to 2.5	Pass
				50	12	0.443	0.0003	-2.5 to 2.5	Pass
	1732.5	15	0	20	10.2	0.458	0.0003	-2.5 to 2.5	Pass
					12	1.388	0.0008	-2.5 to 2.5	Pass
					13.8	0.701	0.0004	-2.5 to 2.5	Pass
				-30	12	0.644	0.0004	-2.5 to 2.5	Pass
				-20	12	1.016	0.0006	-2.5 to 2.5	Pass
				-10	12	0.987	0.0006	-2.5 to 2.5	Pass
				0	12	-0.401	-0.0002	-2.5 to 2.5	Pass
				10	12	0.858	0.0005	-2.5 to 2.5	Pass
				30	12	0.057	0.0000	-2.5 to 2.5	Pass
				40	12	1.030	0.0006	-2.5 to 2.5	Pass
				50	12	0.186	0.0001	-2.5 to 2.5	Pass
	1753.5	15	0	20	10.2	0.772	0.0004	-2.5 to 2.5	Pass
					12	0.200	0.0001	-2.5 to 2.5	Pass
					13.8	0.544	0.0003	-2.5 to 2.5	Pass
				-30	12	0.858	0.0005	-2.5 to 2.5	Pass
				-20	12	1.216	0.0007	-2.5 to 2.5	Pass
				-10	12	0.200	0.0001	-2.5 to 2.5	Pass
				0	12	1.345	0.0008	-2.5 to 2.5	Pass
				10	12	0.930	0.0005	-2.5 to 2.5	Pass
				30	12	0.315	0.0002	-2.5 to 2.5	Pass
				40	12	-0.100	-0.0001	-2.5 to 2.5	Pass
				50	12	0.844	0.0005	-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	10.2	0.916	0.0005	-2.5 to 2.5	Pass
					12	2.203	0.0013	-2.5 to 2.5	Pass
					13.8	2.303	0.0013	-2.5 to 2.5	Pass
				-30	12	2.189	0.0013	-2.5 to 2.5	Pass
				-20	12	1.516	0.0009	-2.5 to 2.5	Pass
				-10	12	1.488	0.0009	-2.5 to 2.5	Pass
				0	12	2.260	0.0013	-2.5 to 2.5	Pass
				10	12	2.375	0.0014	-2.5 to 2.5	Pass
				30	12	1.616	0.0009	-2.5 to 2.5	Pass
				40	12	1.817	0.0011	-2.5 to 2.5	Pass
				50	12	2.275	0.0013	-2.5 to 2.5	Pass
	1732.5	25	0	20	10.2	-0.029	0.0000	-2.5 to 2.5	Pass
					12	0.057	0.0000	-2.5 to 2.5	Pass
					13.8	0.286	0.0002	-2.5 to 2.5	Pass
				-30	12	0.229	0.0001	-2.5 to 2.5	Pass
				-20	12	0.572	0.0003	-2.5 to 2.5	Pass
				-10	12	0.930	0.0005	-2.5 to 2.5	Pass
				0	12	-0.644	-0.0004	-2.5 to 2.5	Pass
				10	12	0.257	0.0001	-2.5 to 2.5	Pass
				30	12	0.458	0.0003	-2.5 to 2.5	Pass
				40	12	0.944	0.0005	-2.5 to 2.5	Pass
				50	12	1.187	0.0007	-2.5 to 2.5	Pass

	1752.5	25	0	20	10.2	-2.961	-0.0017	-2.5 to 2.5	Pass
					12	-1.659	-0.0009	-2.5 to 2.5	Pass
					13.8	-3.133	-0.0018	-2.5 to 2.5	Pass
				-30	12	-2.718	-0.0016	-2.5 to 2.5	Pass
				-20	12	-3.419	-0.0020	-2.5 to 2.5	Pass
				-10	12	-2.847	-0.0016	-2.5 to 2.5	Pass
				0	12	-1.860	-0.0011	-2.5 to 2.5	Pass
				10	12	-1.559	-0.0009	-2.5 to 2.5	Pass
				30	12	-2.389	-0.0014	-2.5 to 2.5	Pass
				40	12	-2.704	-0.0015	-2.5 to 2.5	Pass
16QAM	1712.5	25	0	20	10.2	1.988	0.0012	-2.5 to 2.5	Pass
					12	2.174	0.0013	-2.5 to 2.5	Pass
					13.8	1.459	0.0009	-2.5 to 2.5	Pass
				-30	12	1.988	0.0012	-2.5 to 2.5	Pass
				-20	12	2.475	0.0014	-2.5 to 2.5	Pass
				-10	12	1.788	0.0010	-2.5 to 2.5	Pass
				0	12	2.747	0.0016	-2.5 to 2.5	Pass
				10	12	2.332	0.0014	-2.5 to 2.5	Pass
				30	12	1.960	0.0011	-2.5 to 2.5	Pass
				40	12	2.217	0.0013	-2.5 to 2.5	Pass
				50	12	1.845	0.0011	-2.5 to 2.5	Pass
	1732.5	25	0	20	10.2	0.415	0.0002	-2.5 to 2.5	Pass
					12	1.945	0.0011	-2.5 to 2.5	Pass
					13.8	-0.086	0.0000	-2.5 to 2.5	Pass
				-30	12	0.014	0.0000	-2.5 to 2.5	Pass
				-20	12	0.944	0.0005	-2.5 to 2.5	Pass
				-10	12	0.930	0.0005	-2.5 to 2.5	Pass
				0	12	0.615	0.0004	-2.5 to 2.5	Pass
				10	12	0.644	0.0004	-2.5 to 2.5	Pass
				30	12	0.815	0.0005	-2.5 to 2.5	Pass
				40	12	0.429	0.0002	-2.5 to 2.5	Pass
				50	12	1.073	0.0006	-2.5 to 2.5	Pass
	1752.5	25	0	20	10.2	-2.518	-0.0014	-2.5 to 2.5	Pass
					12	-2.975	-0.0017	-2.5 to 2.5	Pass
					13.8	-2.975	-0.0017	-2.5 to 2.5	Pass
				-30	12	-2.317	-0.0013	-2.5 to 2.5	Pass
				-20	12	-2.160	-0.0012	-2.5 to 2.5	Pass
				-10	12	-2.847	-0.0016	-2.5 to 2.5	Pass
				0	12	-2.103	-0.0012	-2.5 to 2.5	Pass
				10	12	-2.589	-0.0015	-2.5 to 2.5	Pass
				30	12	-2.174	-0.0012	-2.5 to 2.5	Pass
				40	12	-2.289	-0.0013	-2.5 to 2.5	Pass
				50	12	-2.031	-0.0012	-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	10.2	-2.246	-0.0013	-2.5 to 2.5	Pass
					12	-2.518	-0.0015	-2.5 to 2.5	Pass
					13.8	-3.290	-0.0019	-2.5 to 2.5	Pass
				-30	12	-2.689	-0.0016	-2.5 to 2.5	Pass
				-20	12	-2.618	-0.0015	-2.5 to 2.5	Pass
				-10	12	-2.661	-0.0016	-2.5 to 2.5	Pass
				0	12	-2.704	-0.0016	-2.5 to 2.5	Pass
				10	12	-2.232	-0.0013	-2.5 to 2.5	Pass
				30	12	-2.475	-0.0014	-2.5 to 2.5	Pass
				40	12	-2.875	-0.0017	-2.5 to 2.5	Pass
				50	12	-2.775	-0.0016	-2.5 to 2.5	Pass
	1732.5	50	0	20	10.2	0.429	0.0002	-2.5 to 2.5	Pass
					12	0.529	0.0003	-2.5 to 2.5	Pass
					13.8	0.858	0.0005	-2.5 to 2.5	Pass
				-30	12	-0.029	0.0000	-2.5 to 2.5	Pass
				-20	12	0.486	0.0003	-2.5 to 2.5	Pass
				-10	12	0.544	0.0003	-2.5 to 2.5	Pass
				0	12	0.958	0.0006	-2.5 to 2.5	Pass
				10	12	0.644	0.0004	-2.5 to 2.5	Pass
				30	12	0.901	0.0005	-2.5 to 2.5	Pass
				40	12	0.787	0.0005	-2.5 to 2.5	Pass
				50	12	1.073	0.0006	-2.5 to 2.5	Pass
	1750	50	0	20	10.2	1.574	0.0009	-2.5 to 2.5	Pass
					12	1.631	0.0009	-2.5 to 2.5	Pass
					13.8	2.074	0.0012	-2.5 to 2.5	Pass
				-30	12	1.073	0.0006	-2.5 to 2.5	Pass
				-20	12	0.944	0.0005	-2.5 to 2.5	Pass
				-10	12	2.046	0.0012	-2.5 to 2.5	Pass
				0	12	1.903	0.0011	-2.5 to 2.5	Pass
				10	12	1.931	0.0011	-2.5 to 2.5	Pass
				30	12	1.287	0.0007	-2.5 to 2.5	Pass
				40	12	1.645	0.0009	-2.5 to 2.5	Pass
				50	12	2.031	0.0012	-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	10.2	0.186	0.0001	-2.5 to 2.5	Pass
					12	1.044	0.0006	-2.5 to 2.5	Pass
					13.8	-0.372	-0.0002	-2.5 to 2.5	Pass
				-30	12	0.887	0.0005	-2.5 to 2.5	Pass
				-20	12	0.057	0.0000	-2.5 to 2.5	Pass
				-10	12	0.587	0.0003	-2.5 to 2.5	Pass
				0	12	0.873	0.0005	-2.5 to 2.5	Pass
				10	12	0.815	0.0005	-2.5 to 2.5	Pass
				30	12	0.672	0.0004	-2.5 to 2.5	Pass
				40	12	0.858	0.0005	-2.5 to 2.5	Pass
				50	12	1.030	0.0006	-2.5 to 2.5	Pass
	1732.5	75	0	20	10.2	-0.215	-0.0001	-2.5 to 2.5	Pass
					12	-0.186	-0.0001	-2.5 to 2.5	Pass
					13.8	-0.014	0.0000	-2.5 to 2.5	Pass
				-30	12	0.401	0.0002	-2.5 to 2.5	Pass
				-20	12	1.373	0.0008	-2.5 to 2.5	Pass
				-10	12	0.200	0.0001	-2.5 to 2.5	Pass
				0	12	1.545	0.0009	-2.5 to 2.5	Pass
				10	12	0.844	0.0005	-2.5 to 2.5	Pass
				30	12	-0.029	0.0000	-2.5 to 2.5	Pass
				40	12	0.215	0.0001	-2.5 to 2.5	Pass
				50	12	0.844	0.0005	-2.5 to 2.5	Pass
	1747.5	75	0	20	10.2	0.672	0.0004	-2.5 to 2.5	Pass
					12	0.372	0.0002	-2.5 to 2.5	Pass
					13.8	-0.730	-0.0004	-2.5 to 2.5	Pass
				-30	12	-1.316	-0.0008	-2.5 to 2.5	Pass
				-20	12	-0.157	-0.0001	-2.5 to 2.5	Pass
				-10	12	0.057	0.0000	-2.5 to 2.5	Pass
				0	12	-0.157	-0.0001	-2.5 to 2.5	Pass
				10	12	0.186	0.0001	-2.5 to 2.5	Pass
				30	12	0.000	0.0000	-2.5 to 2.5	Pass
				40	12	0.114	0.0001	-2.5 to 2.5	Pass
				50	12	0.200	0.0001	-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	10.2	0.916	0.0005	-2.5 to 2.5	Pass
					12	1.559	0.0009	-2.5 to 2.5	Pass
					13.8	0.701	0.0004	-2.5 to 2.5	Pass
				-30	12	1.988	0.0012	-2.5 to 2.5	Pass
				-20	12	1.016	0.0006	-2.5 to 2.5	Pass
				-10	12	1.988	0.0012	-2.5 to 2.5	Pass
				0	12	1.345	0.0008	-2.5 to 2.5	Pass
				10	12	0.844	0.0005	-2.5 to 2.5	Pass
				30	12	1.516	0.0009	-2.5 to 2.5	Pass
				40	12	1.488	0.0009	-2.5 to 2.5	Pass
				50	12	0.844	0.0005	-2.5 to 2.5	Pass
	1732.5	100	0	20	10.2	0.186	0.0001	-2.5 to 2.5	Pass
					12	0.758	0.0004	-2.5 to 2.5	Pass
					13.8	0.558	0.0003	-2.5 to 2.5	Pass
				-30	12	0.215	0.0001	-2.5 to 2.5	Pass
				-20	12	-0.343	-0.0002	-2.5 to 2.5	Pass
				-10	12	-0.501	-0.0003	-2.5 to 2.5	Pass
				0	12	0.029	0.0000	-2.5 to 2.5	Pass
				10	12	-0.014	0.0000	-2.5 to 2.5	Pass
				30	12	0.157	0.0001	-2.5 to 2.5	Pass
				40	12	0.615	0.0004	-2.5 to 2.5	Pass
				50	12	-0.544	-0.0003	-2.5 to 2.5	Pass
	1745	100	0	20	10.2	-2.775	-0.0016	-2.5 to 2.5	Pass
					12	-2.532	-0.0015	-2.5 to 2.5	Pass
					13.8	-4.020	-0.0023	-2.5 to 2.5	Pass
				-30	12	-2.761	-0.0016	-2.5 to 2.5	Pass
				-20	12	-3.004	-0.0017	-2.5 to 2.5	Pass
				-10	12	-3.033	-0.0017	-2.5 to 2.5	Pass
				0	12	-3.891	-0.0022	-2.5 to 2.5	Pass
				10	12	-2.704	-0.0015	-2.5 to 2.5	Pass
				30	12	-3.204	-0.0018	-2.5 to 2.5	Pass
				40	12	-2.890	-0.0017	-2.5 to 2.5	Pass
				50	12	-2.589	-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 / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Modulation Characteristics		Verdict
		Size	Offset	Result	Limit	
QPSK	1732.5	6	0	Refer To Test Graph		Pass
16QAM	1732.5	6	0	Refer To Test Graph		Pass

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 / NTNV						
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 / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Modulation Characteristics		Verdict
		Size	Offset	Result	Limit	
QPSK	1732.5	50	0	Refer To Test Graph		Pass

3.1.5 B4_15MHz

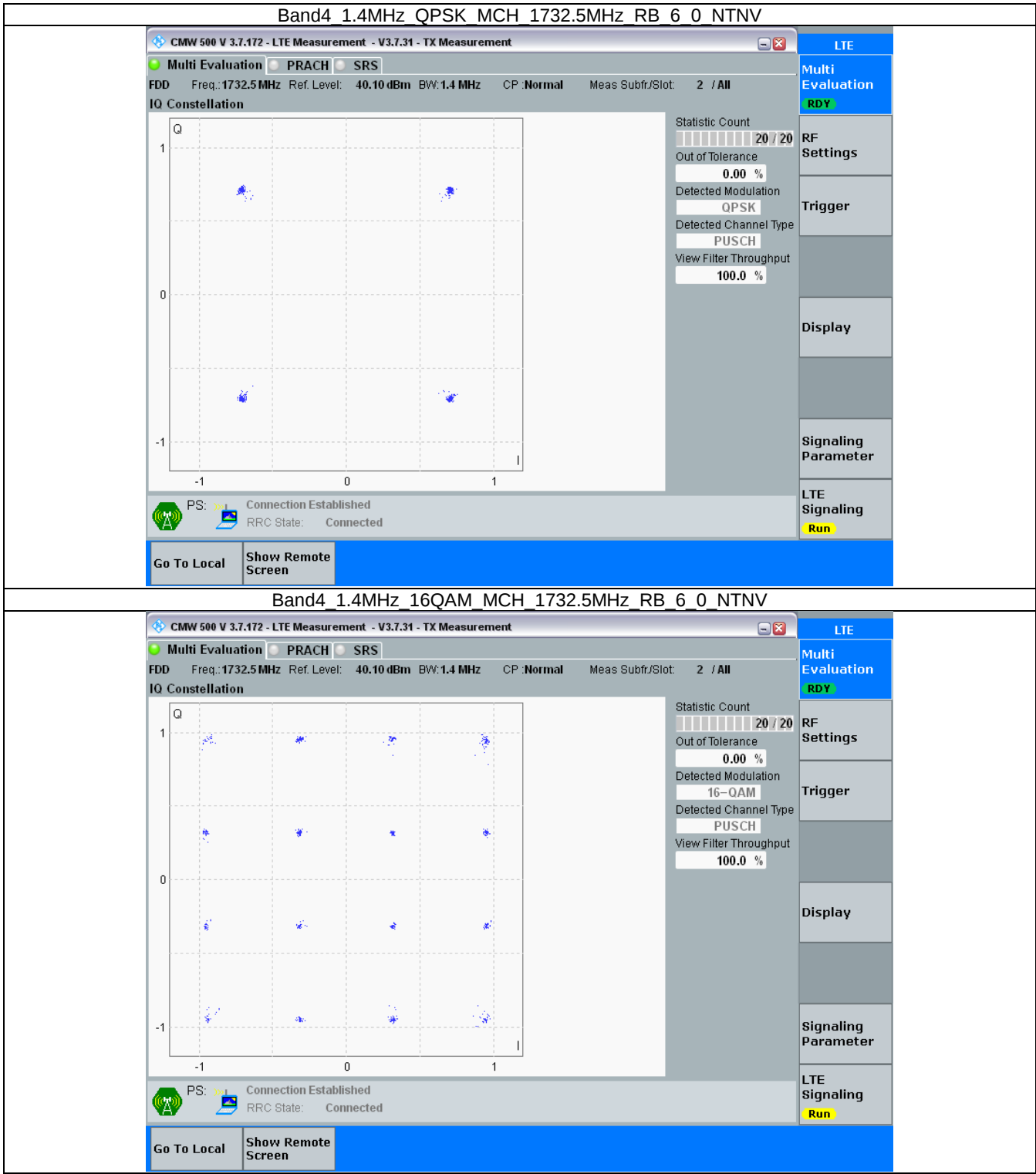
Band: 4 / Bandwidth: 15MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Modulation Characteristics		Verdict
		Size	Offset	Result	Limit	
QPSK	1732.5	75	0	Refer To Test Graph		Pass

3.1.6 B4_20MHz

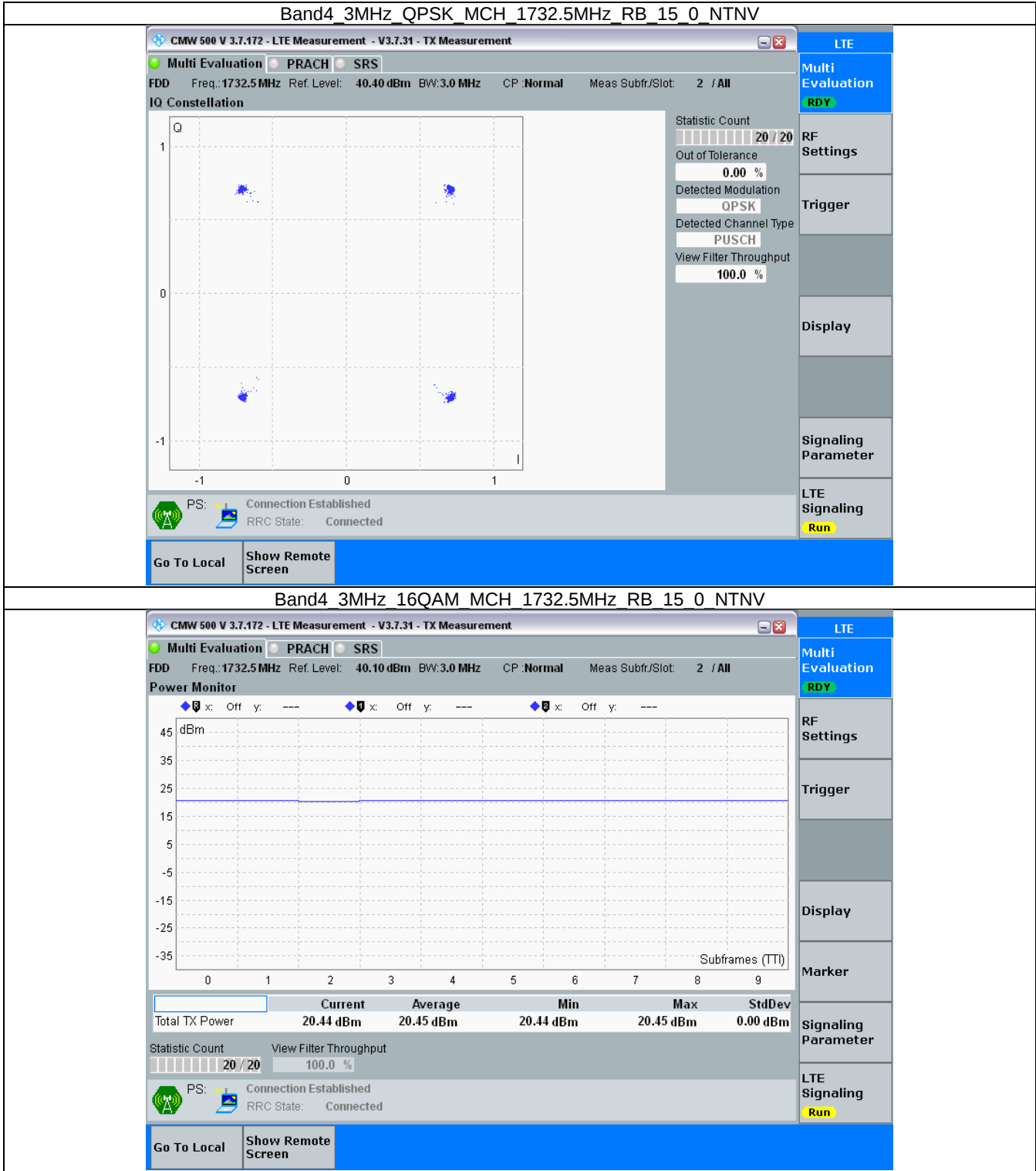
Band: 4 / Bandwidth: 20MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Modulation Characteristics		Verdict
		Size	Offset	Result	Limit	
QPSK	1732.5	100	0	Refer To Test Graph		Pass

3.2 Test Graph

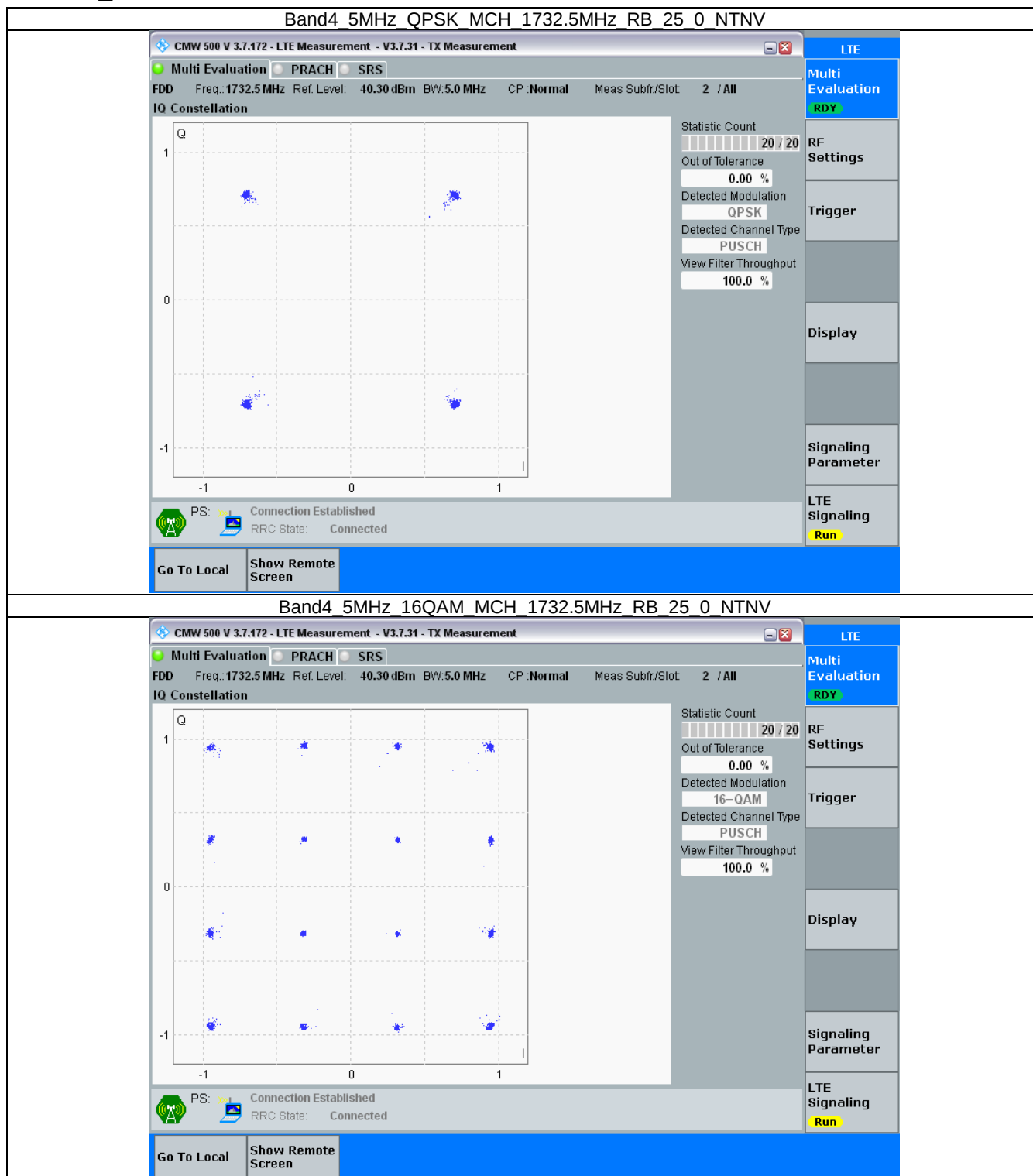
3.2.1 B4_1.4MHz



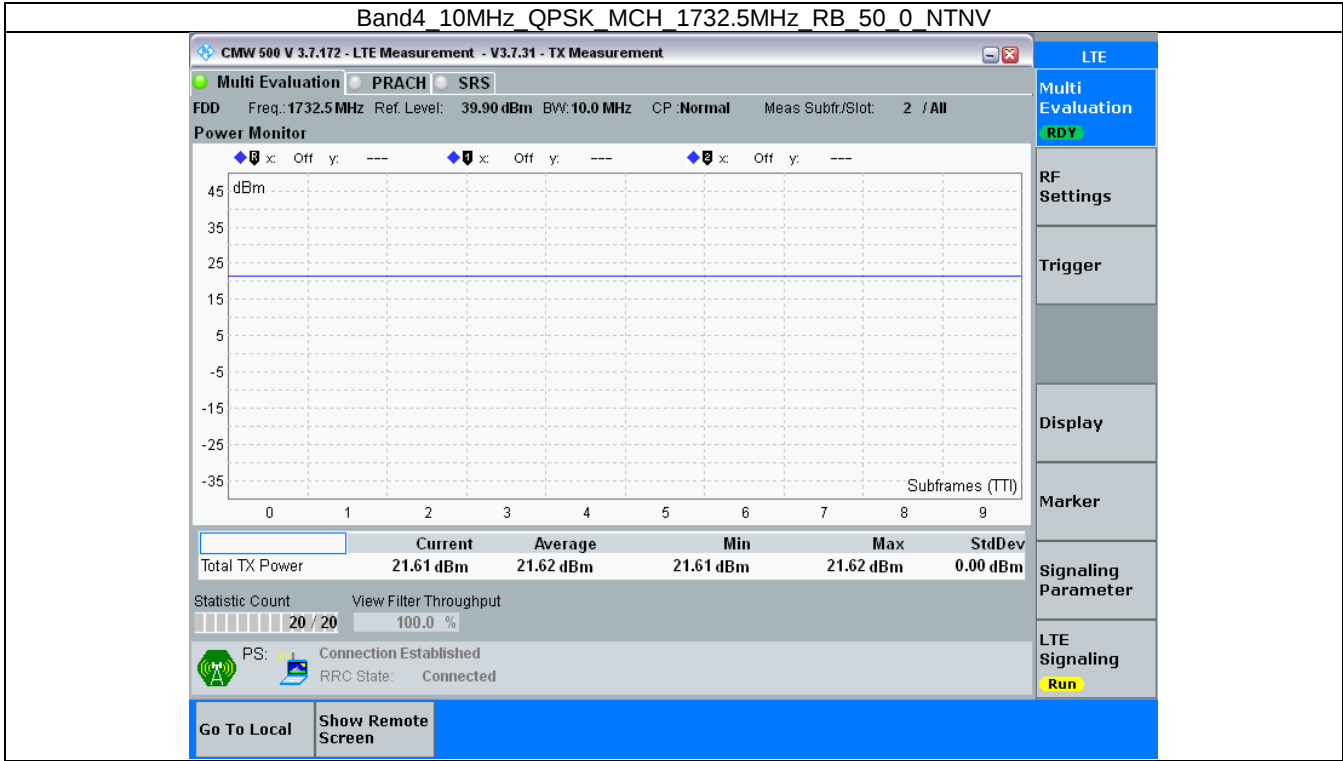
3.2.2 B4_3MHz



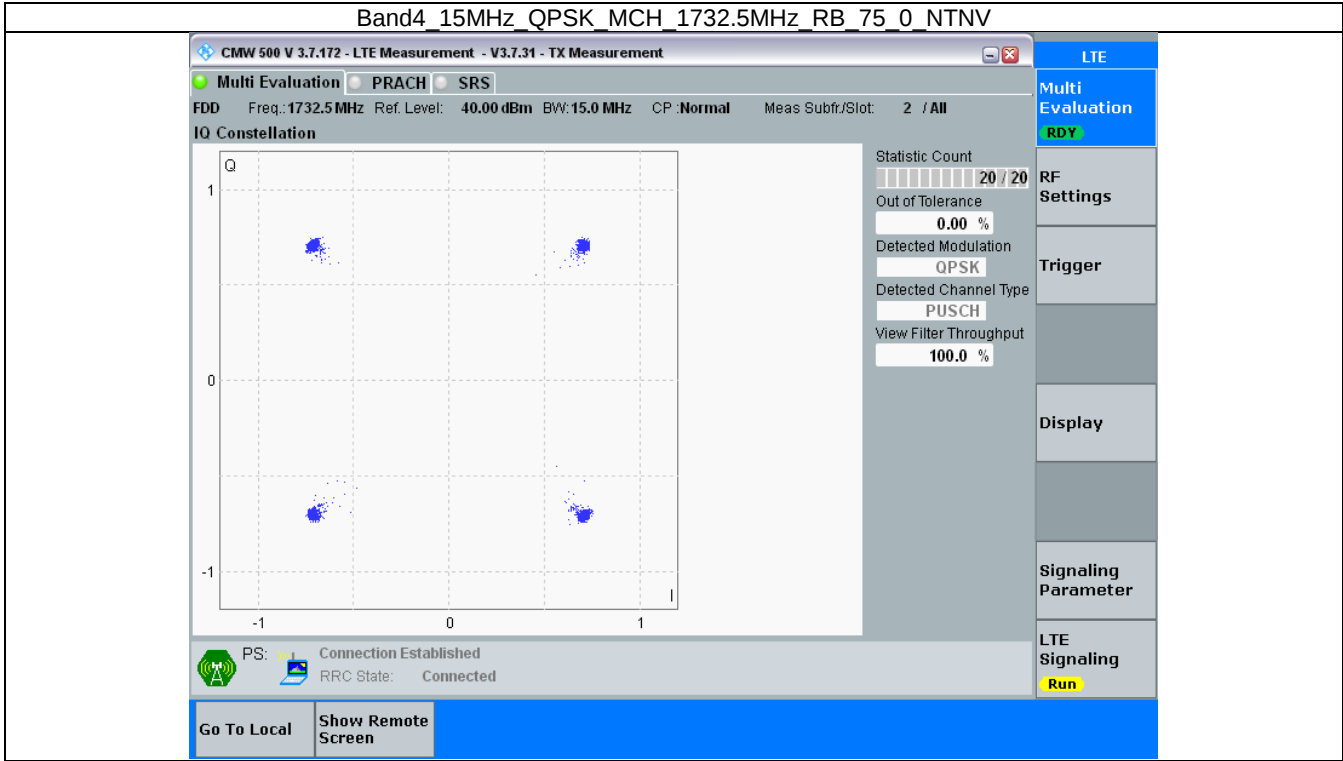
3.2.3 B4_5MHz



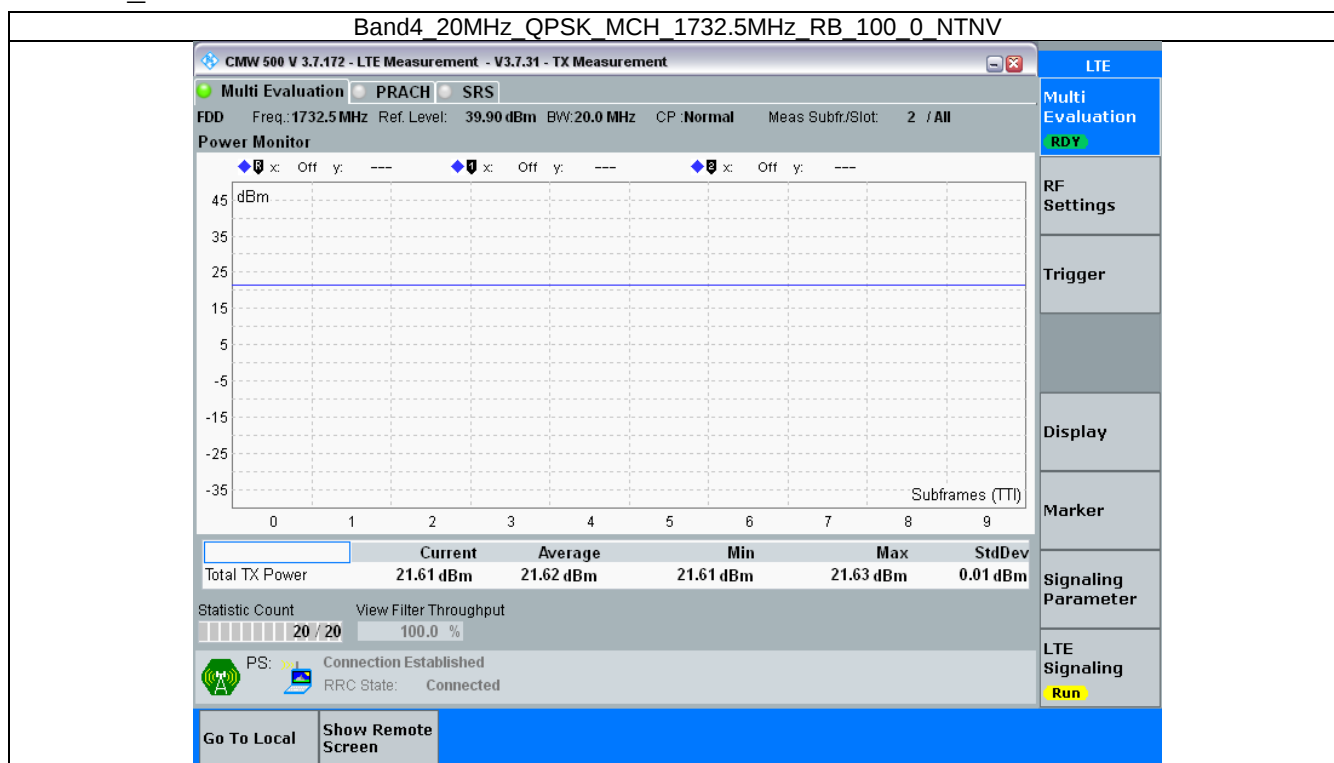
3.2.4 B4_10MHz



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	1.106	/	Pass
		1732.5	6	0	1.108	/	Pass
		1754.3	6	0	1.116	/	Pass
	16QAM	1710.7	6	0	1.111	/	Pass
		1732.5	6	0	1.111	/	Pass
		1754.3	6	0	1.110	/	Pass
3	QPSK	1711.5	15	0	2.748	/	Pass
		1732.5	15	0	2.760	/	Pass
		1753.5	15	0	2.739	/	Pass
	16QAM	1711.5	15	0	2.739	/	Pass
		1732.5	15	0	2.742	/	Pass
		1753.5	15	0	2.746	/	Pass
5	QPSK	1712.5	25	0	4.547	/	Pass
		1732.5	25	0	4.571	/	Pass
		1752.5	25	0	4.550	/	Pass
	16QAM	1712.5	25	0	4.568	/	Pass
		1732.5	25	0	4.539	/	Pass
		1752.5	25	0	4.556	/	Pass
10	QPSK	1715	50	0	9.015	/	Pass
		1732.5	50	0	9.030	/	Pass
		1750	50	0	9.018	/	Pass
15	QPSK	1717.5	75	0	13.514	/	Pass
		1732.5	75	0	13.567	/	Pass
		1747.5	75	0	13.541	/	Pass
20	QPSK	1720	100	0	18.000	/	Pass
		1732.5	100	0	18.048	/	Pass
		1745	100	0	18.084	/	Pass

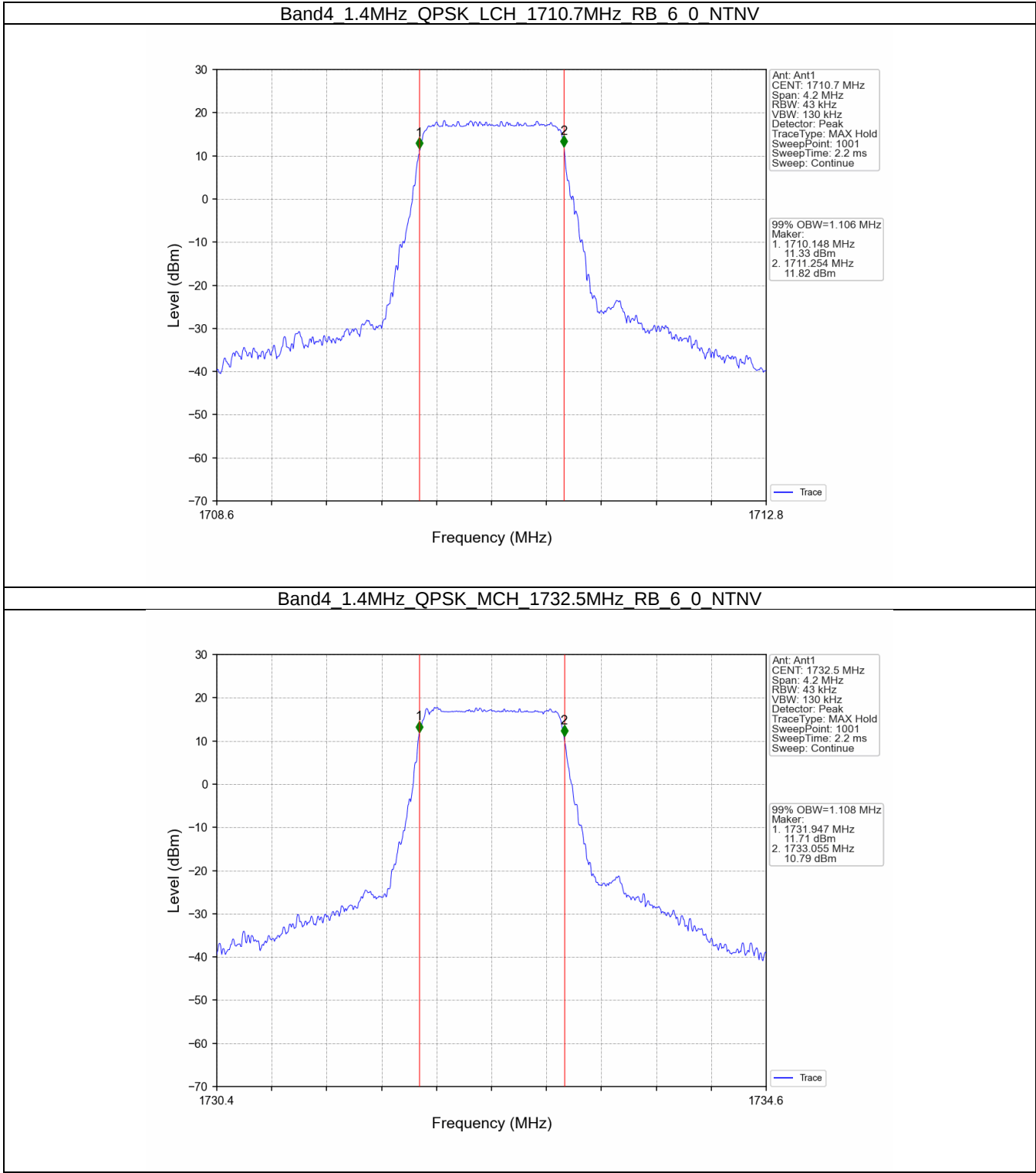
4.1.2 Band4_XDB

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	1.325	/	Pass
		1732.5	6	0	1.315	/	Pass
		1754.3	6	0	1.314	/	Pass
	16QAM	1710.7	6	0	1.312	/	Pass
		1732.5	6	0	1.326	/	Pass
		1754.3	6	0	1.329	/	Pass
3	QPSK	1711.5	15	0	3.065	/	Pass
		1732.5	15	0	3.071	/	Pass
		1753.5	15	0	3.041	/	Pass
	16QAM	1711.5	15	0	3.054	/	Pass
		1732.5	15	0	3.045	/	Pass
		1753.5	15	0	3.047	/	Pass
5	QPSK	1712.5	25	0	5.091	/	Pass
		1732.5	25	0	5.070	/	Pass
		1752.5	25	0	5.064	/	Pass
	16QAM	1712.5	25	0	5.076	/	Pass

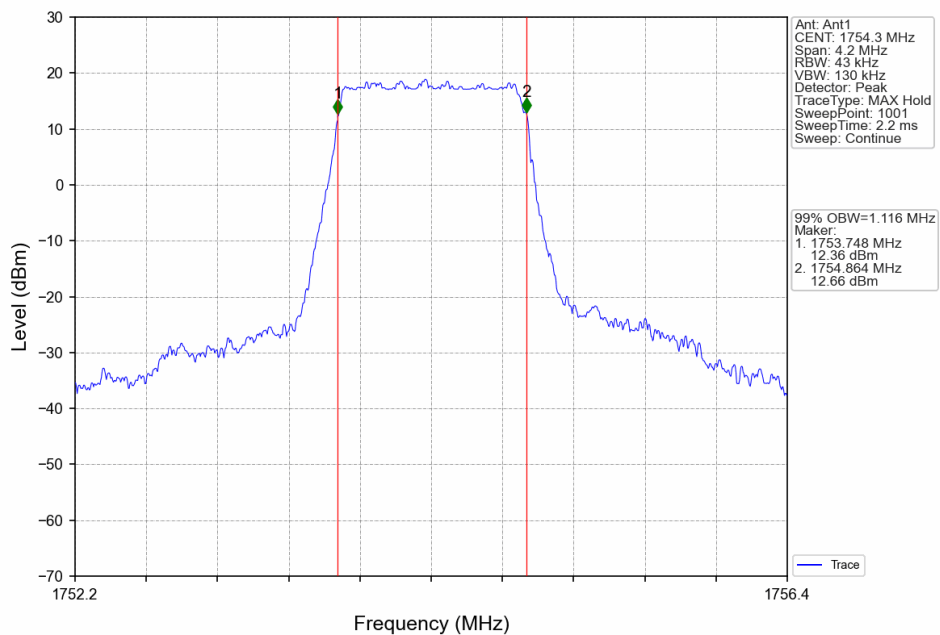
		1732.5	25	0	5.086	/	Pass
		1752.5	25	0	5.112	/	Pass
10	QPSK	1715	50	0	10.050	/	Pass
		1732.5	50	0	10.081	/	Pass
		1750	50	0	10.013	/	Pass
15	QPSK	1717.5	75	0	14.854	/	Pass
		1732.5	75	0	14.992	/	Pass
		1747.5	75	0	14.962	/	Pass
20	QPSK	1720	100	0	19.643	/	Pass
		1732.5	100	0	19.785	/	Pass
		1745	100	0	19.849	/	Pass

4.2 Test Graph

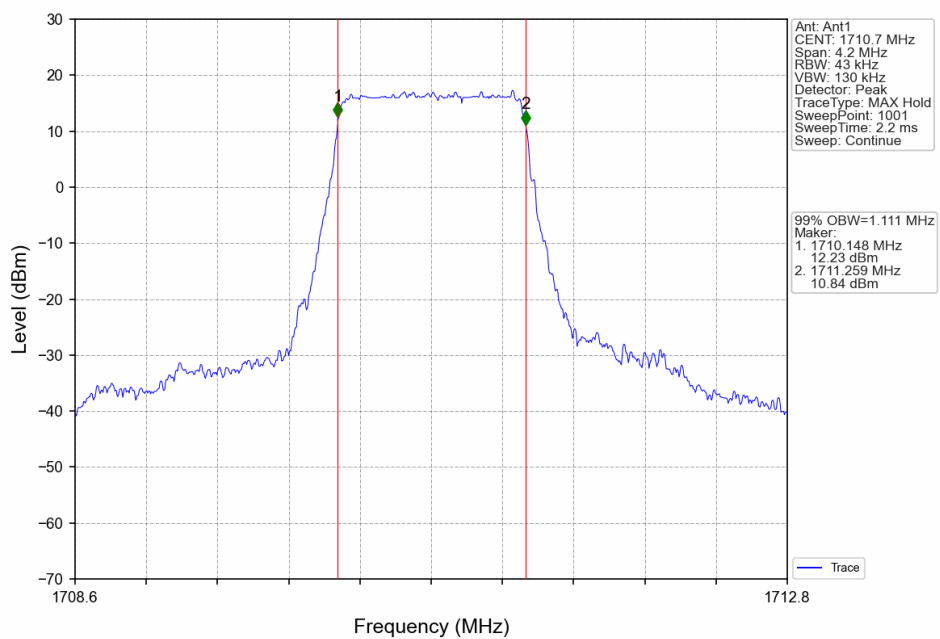
4.2.1 Band4_OBW



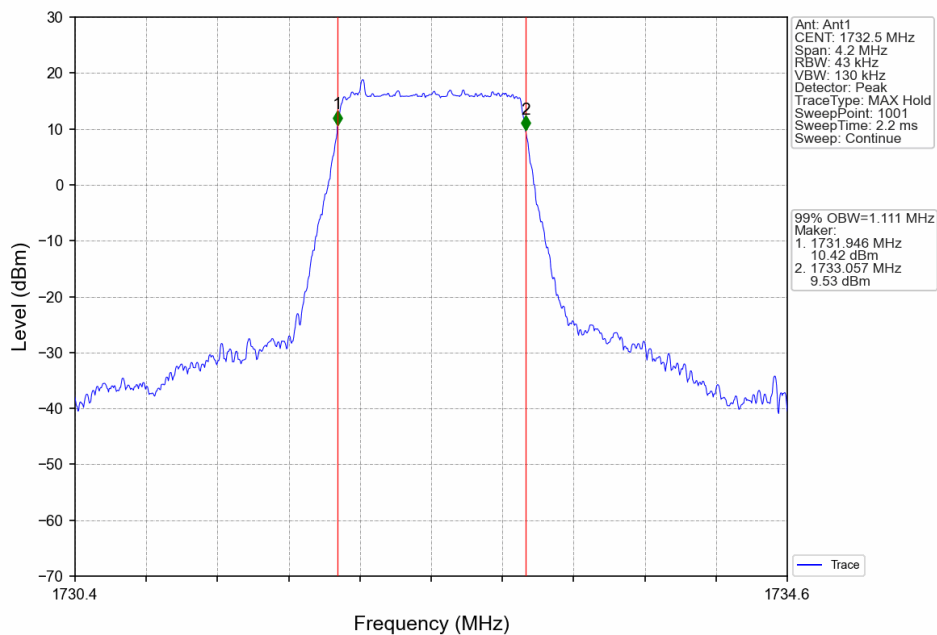
Band4 1.4MHz QPSK HCH 1754.3MHz RB 6 0 NTNV



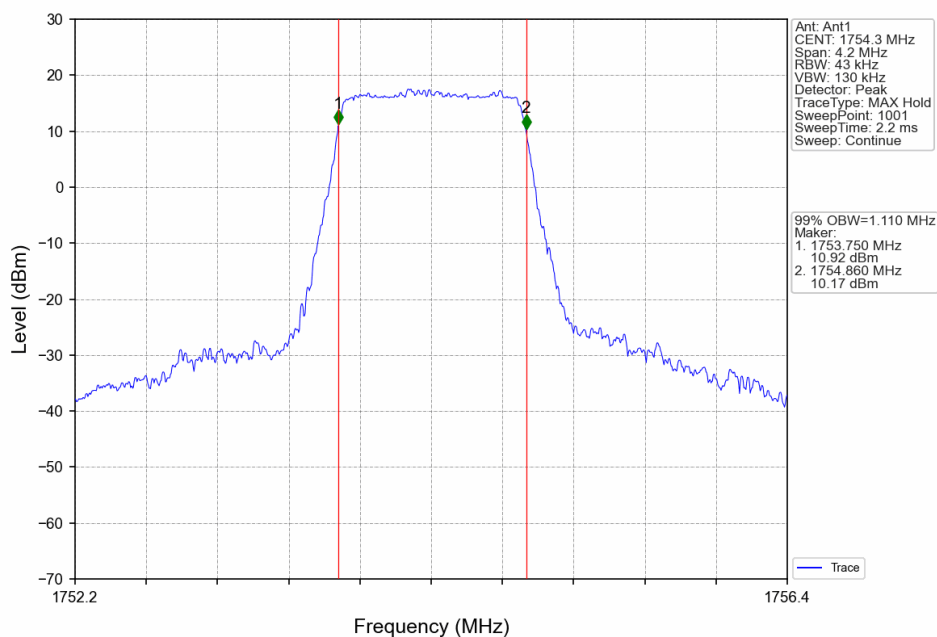
Band4 1.4MHz 16QAM LCH 1710.7MHz RB 6 0 NTNV



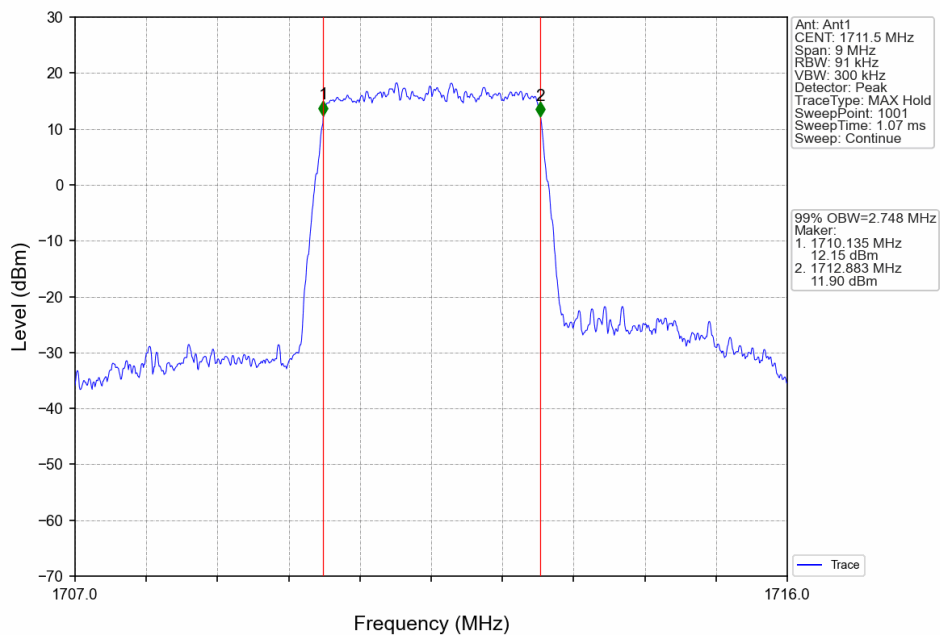
Band4 1.4MHz 16QAM MCH 1732.5MHz RB 6 0 NTNV



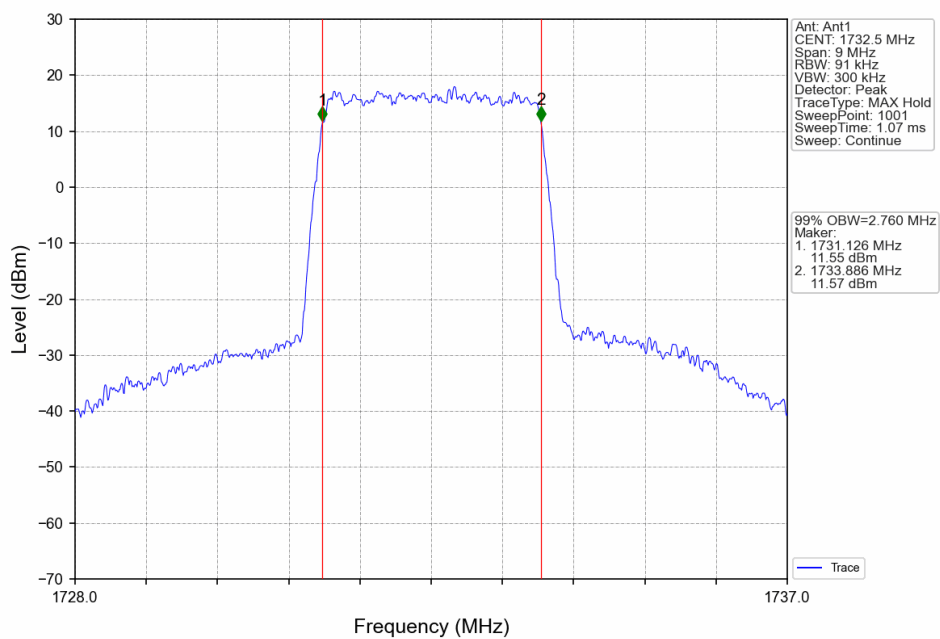
Band4 1.4MHz 16QAM HCH 1754.3MHz RB 6 0 NTNV



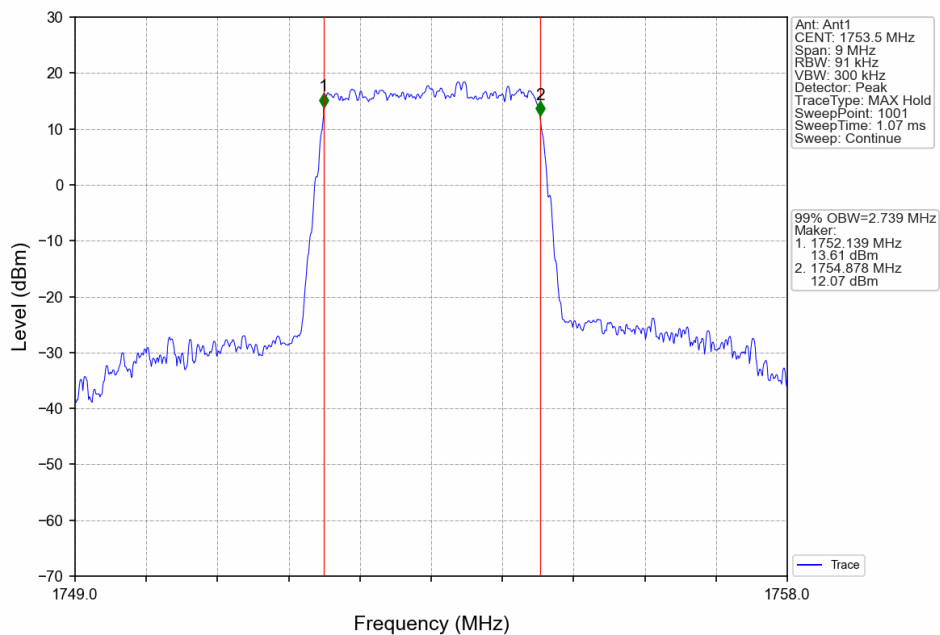
Band4 3MHz QPSK LCH 1711.5MHz RB 15 0 NTNV



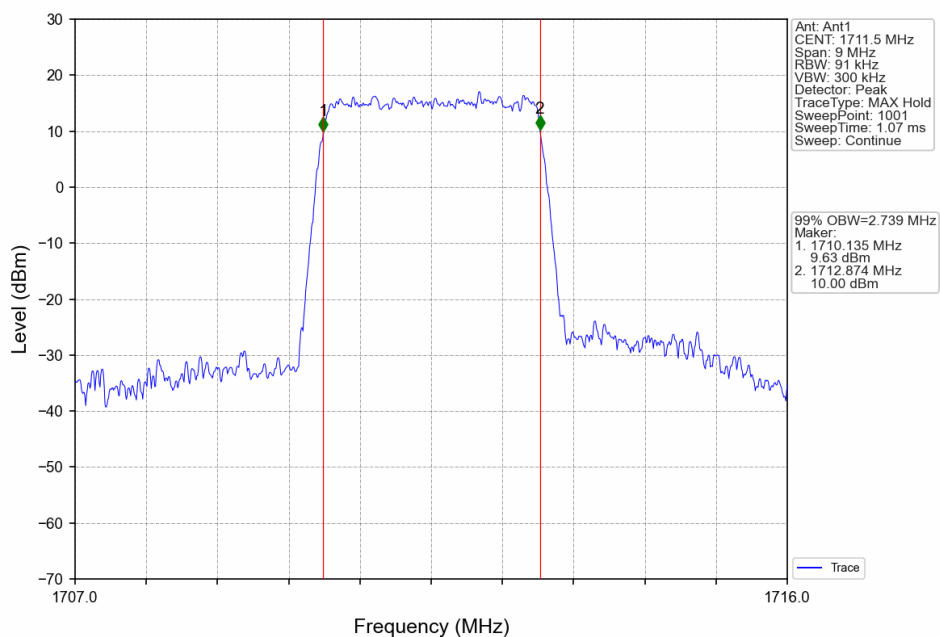
Band4 3MHz QPSK MCH 1732.5MHz RB 15 0 NTNV

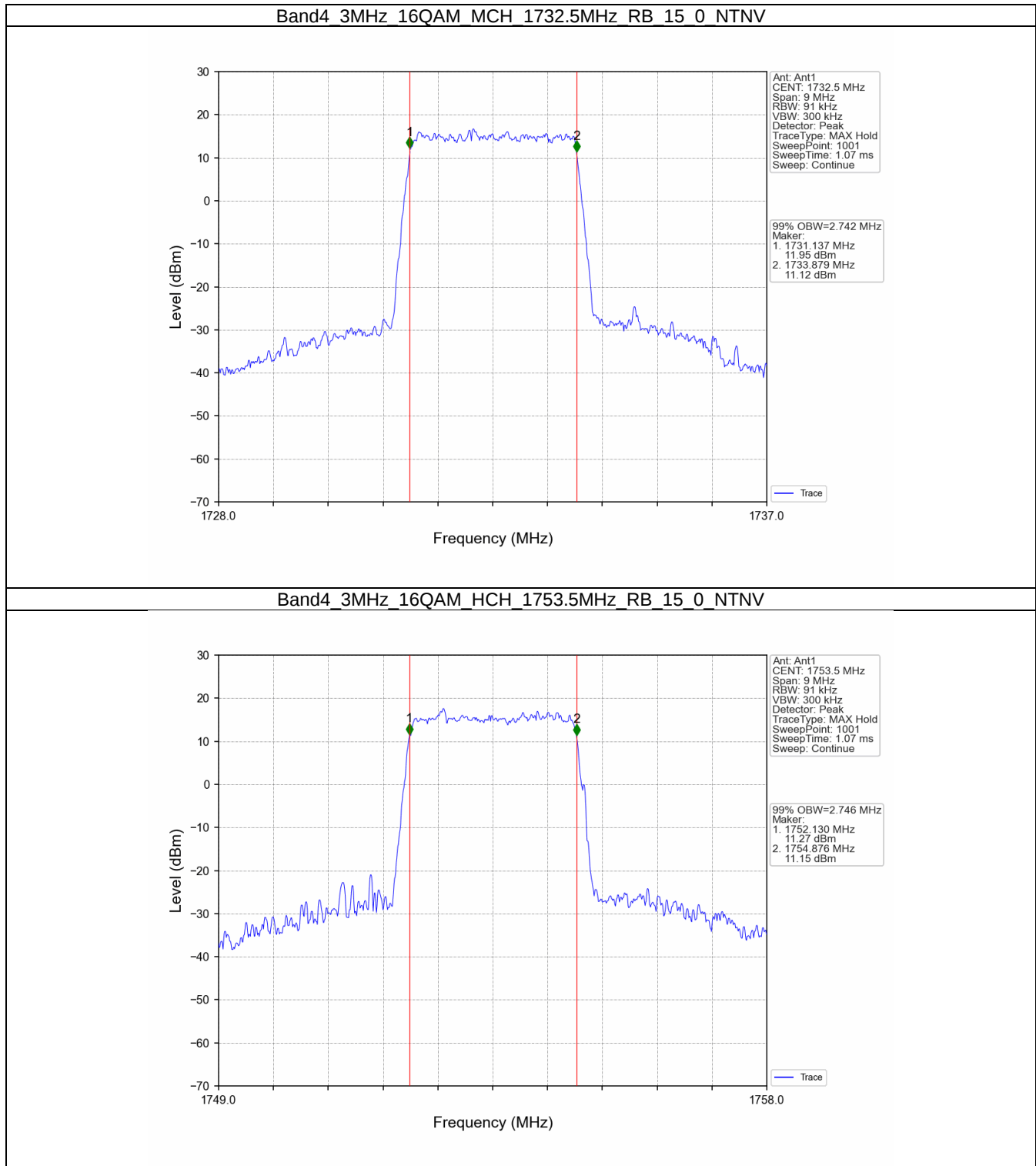


Band4 3MHz QPSK HCH 1753.5MHz RB 15 0 NTNV

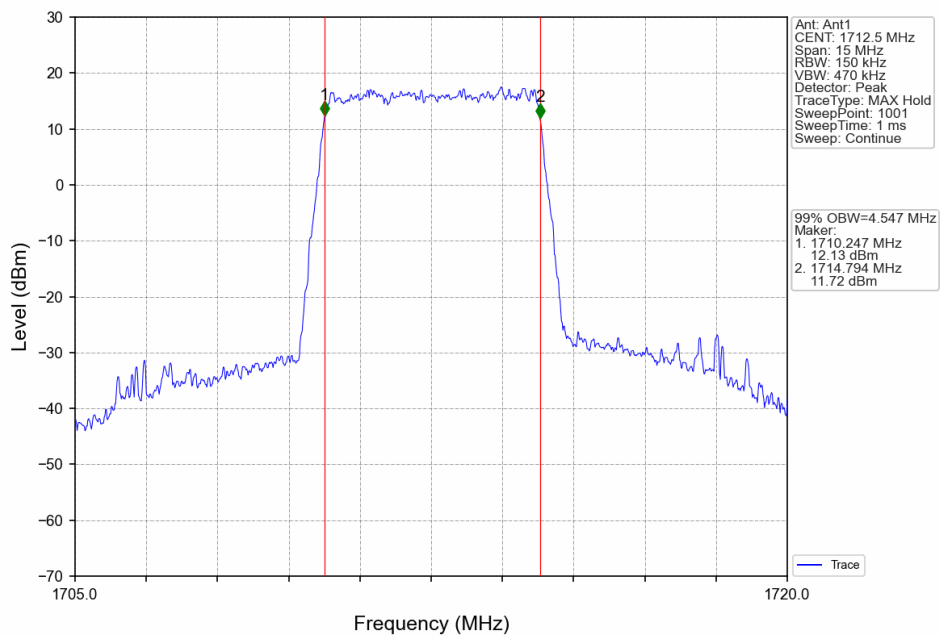


Band4 3MHz 16QAM LCH 1711.5MHz RB 15 0 NTNV

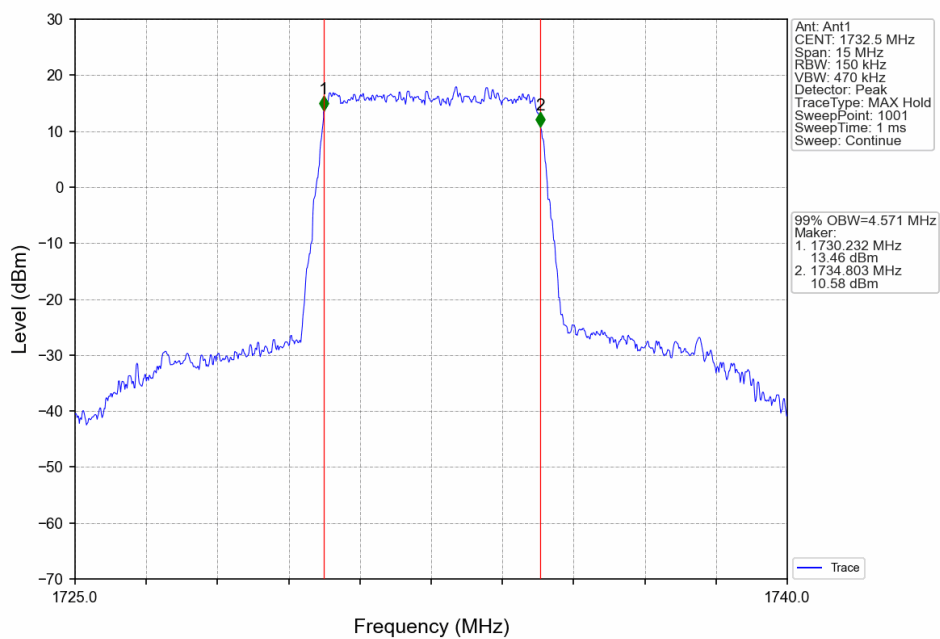




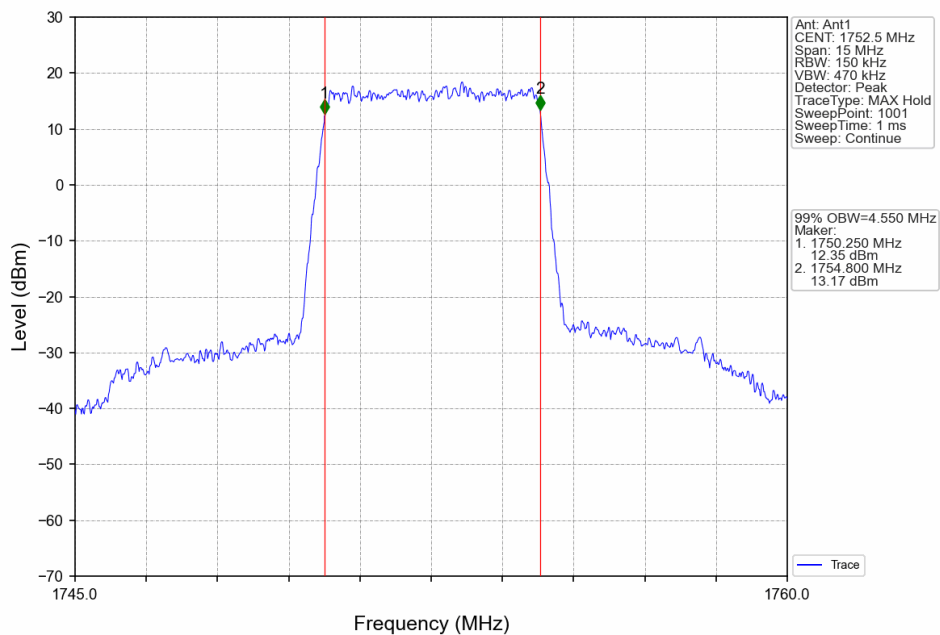
Band4 5MHz QPSK LCH 1712.5MHz RB 25 0 NTNV



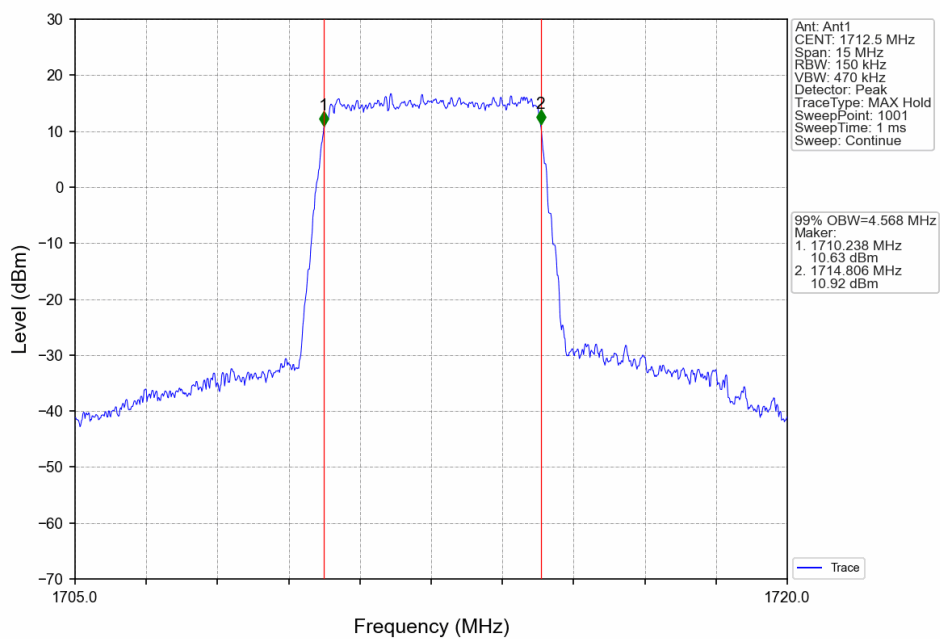
Band4 5MHz QPSK MCH 1732.5MHz RB 25 0 NTNV

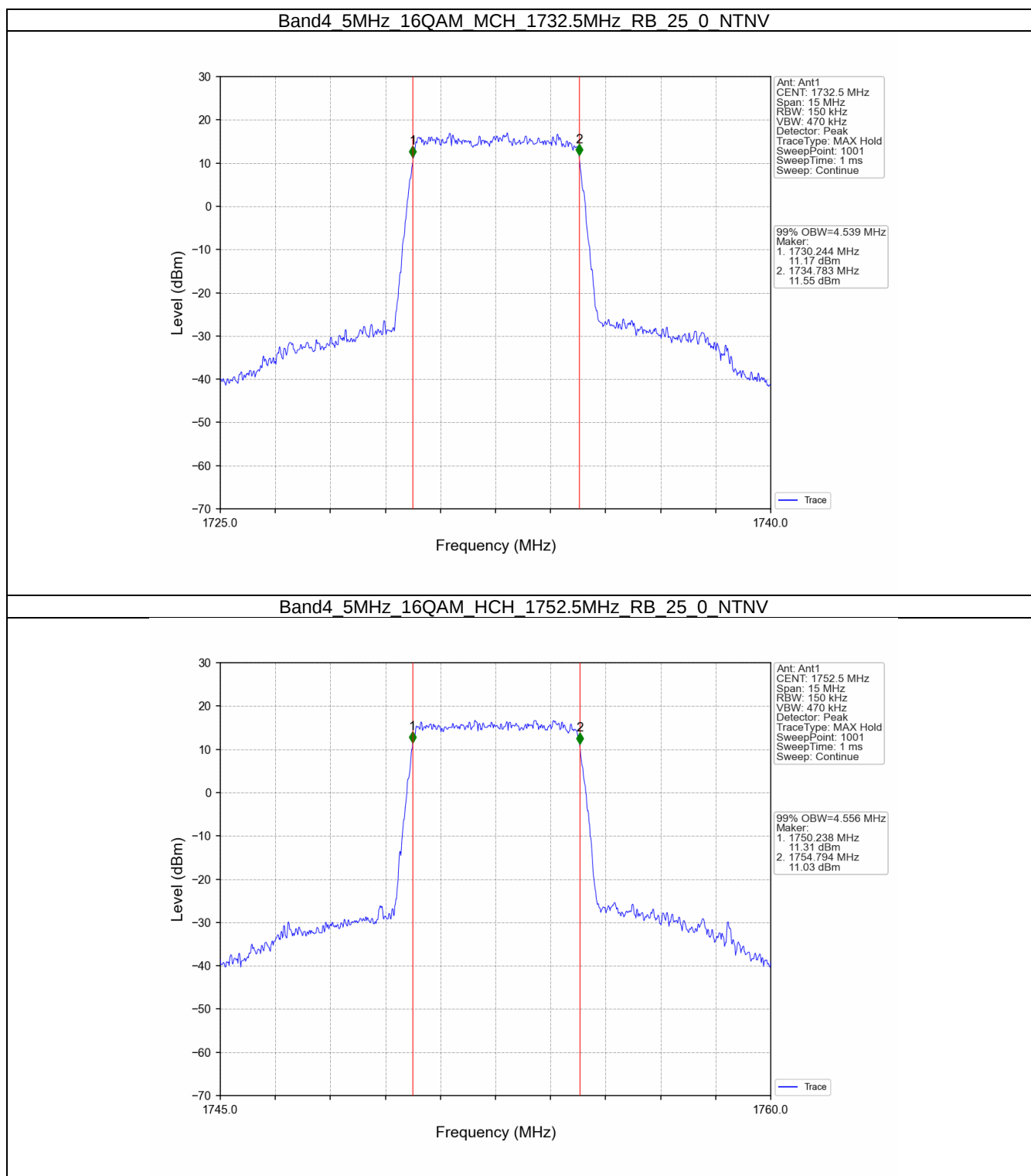


Band4 5MHz QPSK HCH 1752.5MHz RB 25 0 NTNV

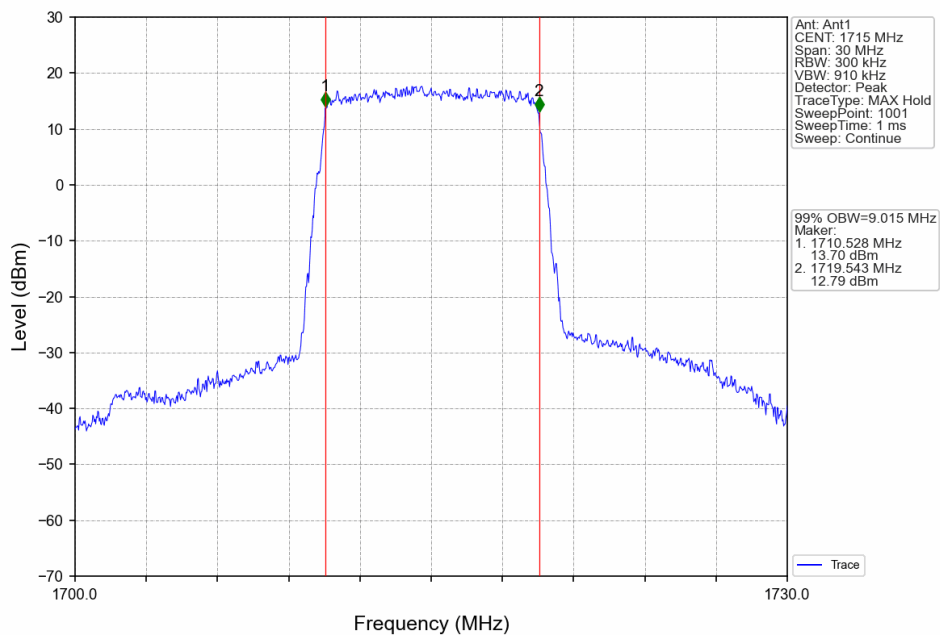


Band4 5MHz 16QAM LCH 1712.5MHz RB 25 0 NTNV

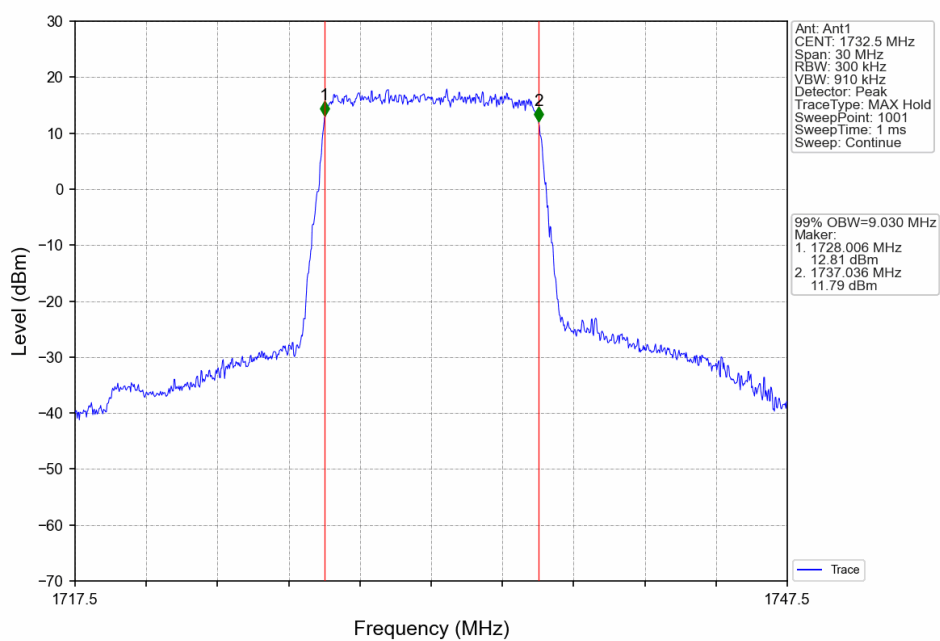




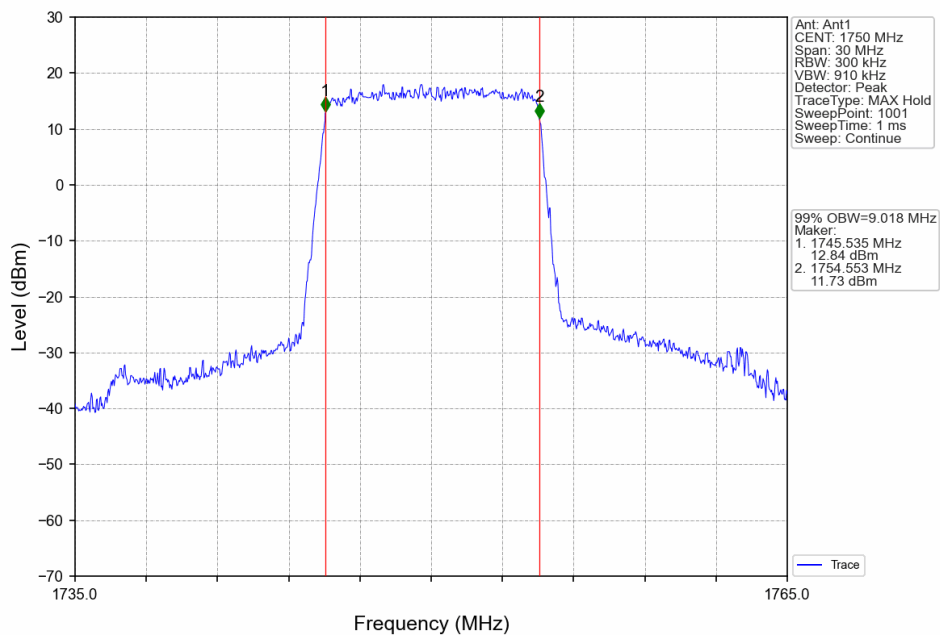
Band4 10MHz QPSK LCH 1715MHz RB 50 0 NTNV



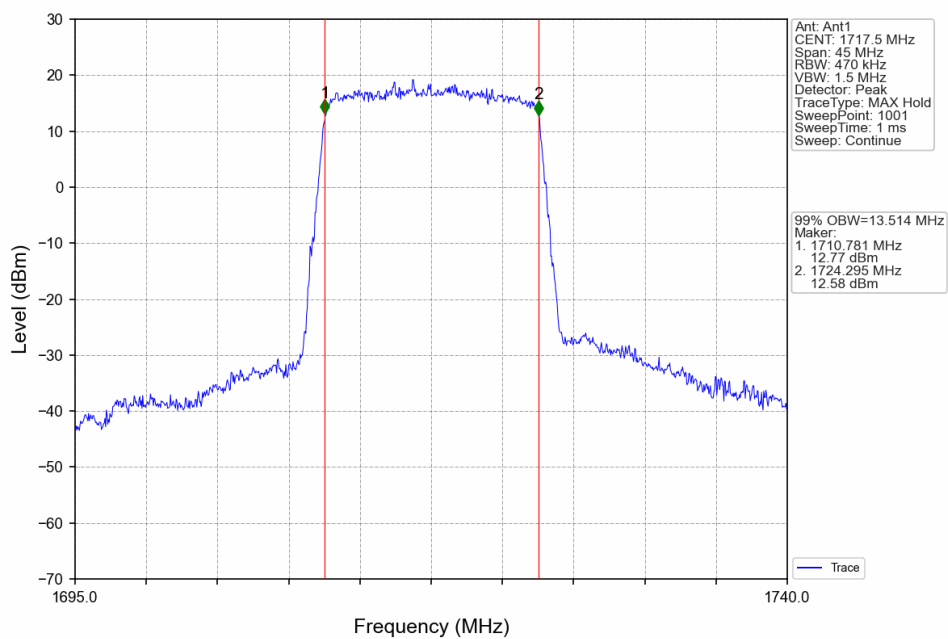
Band4 10MHz QPSK MCH 1732.5MHz RB 50 0 NTNV

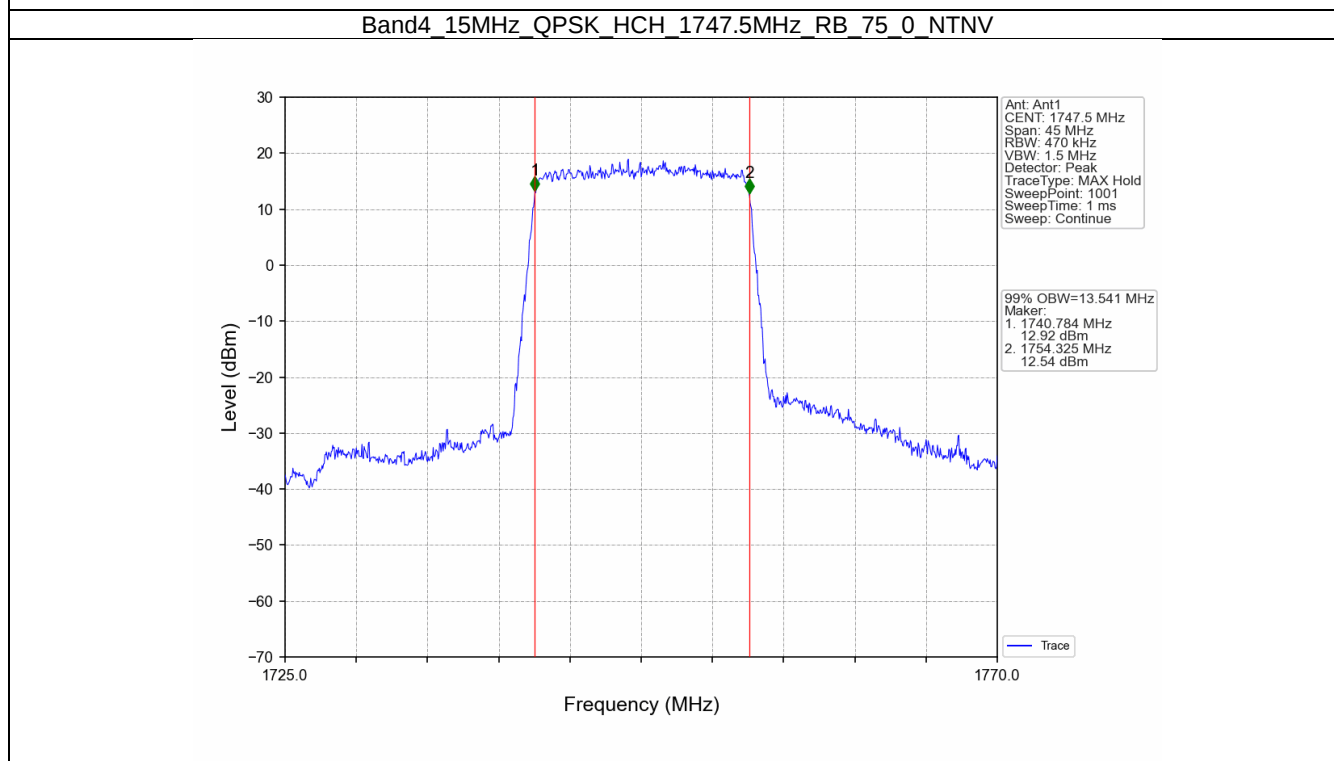
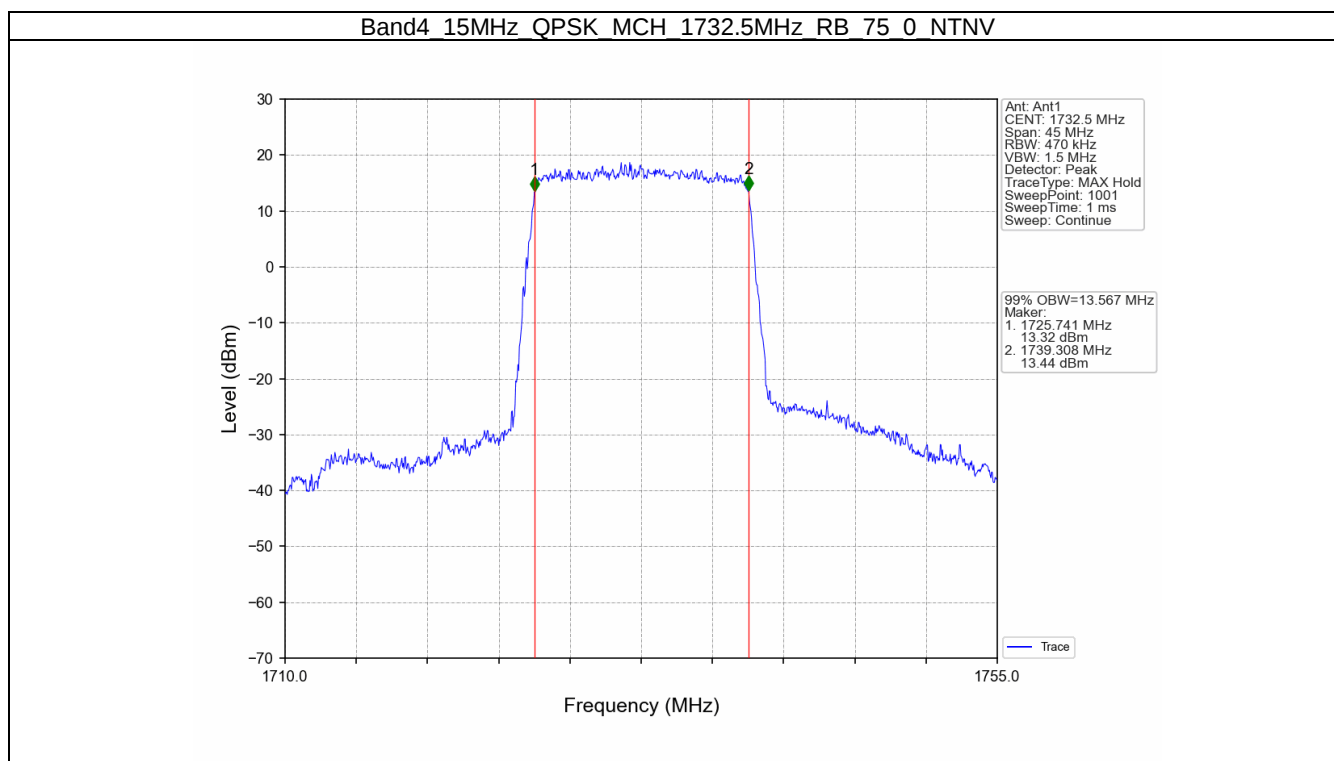


Band4 10MHz QPSK HCH 1750MHz RB 50 0 NTN

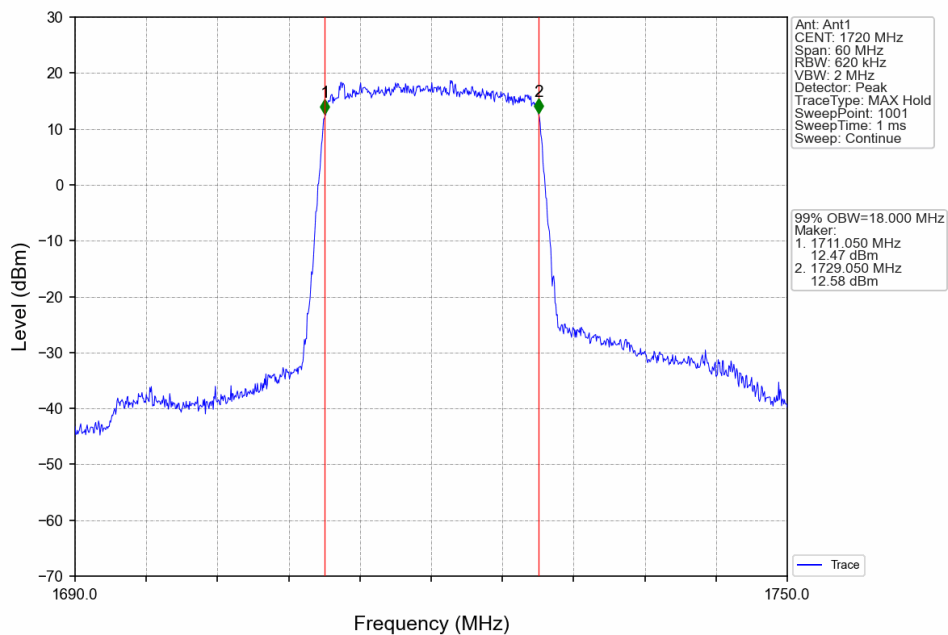


Band4 15MHz QPSK LCH 1717.5MHz RB 75 0 NTN

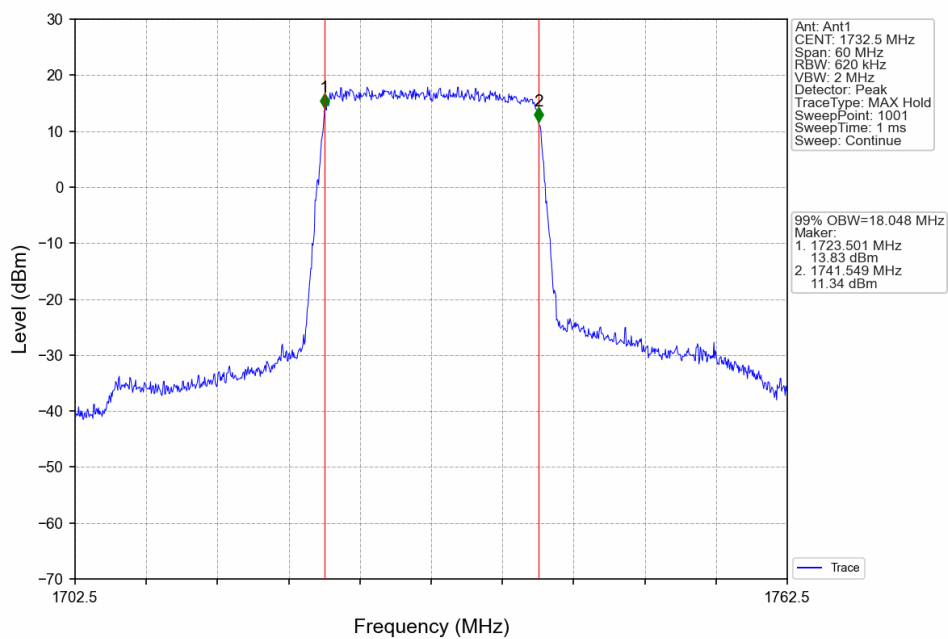


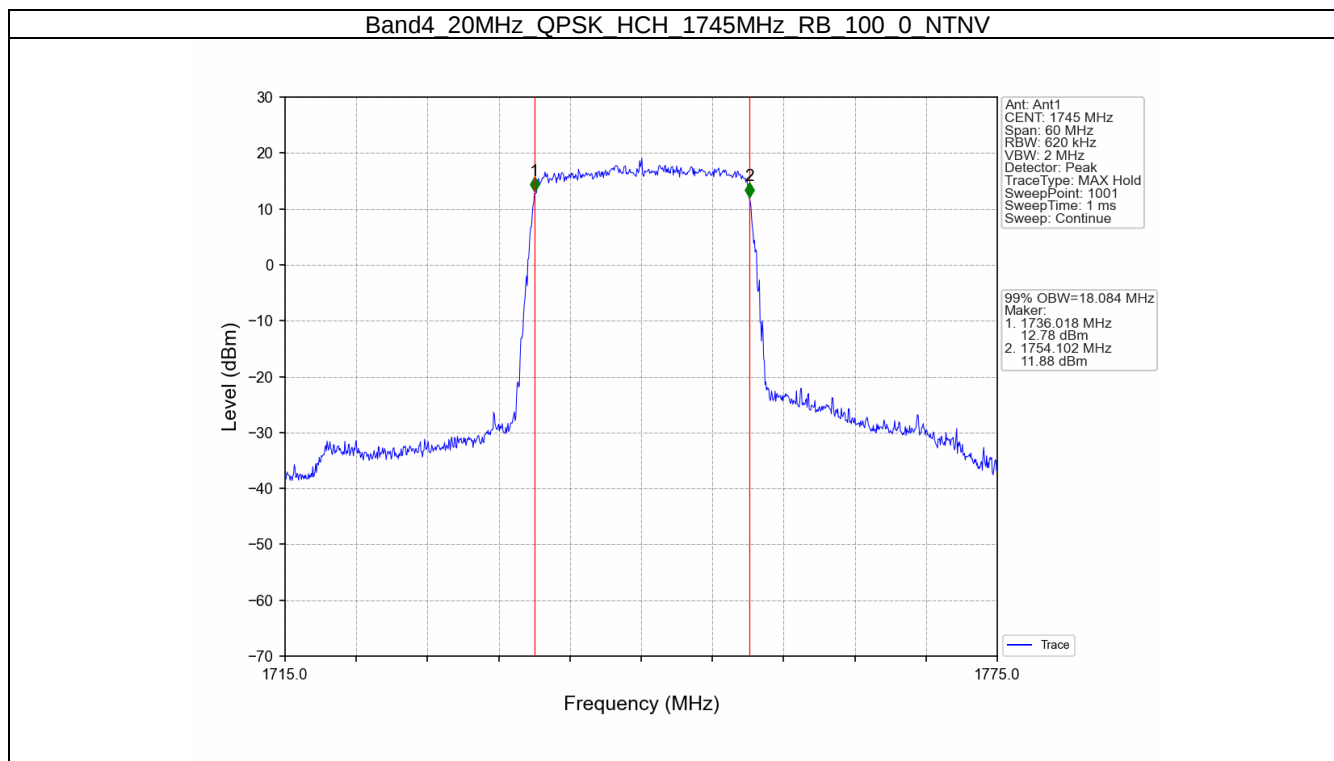


Band4_20MHz_QPSK_LCH_1720MHz_RB_100_0_NTNV

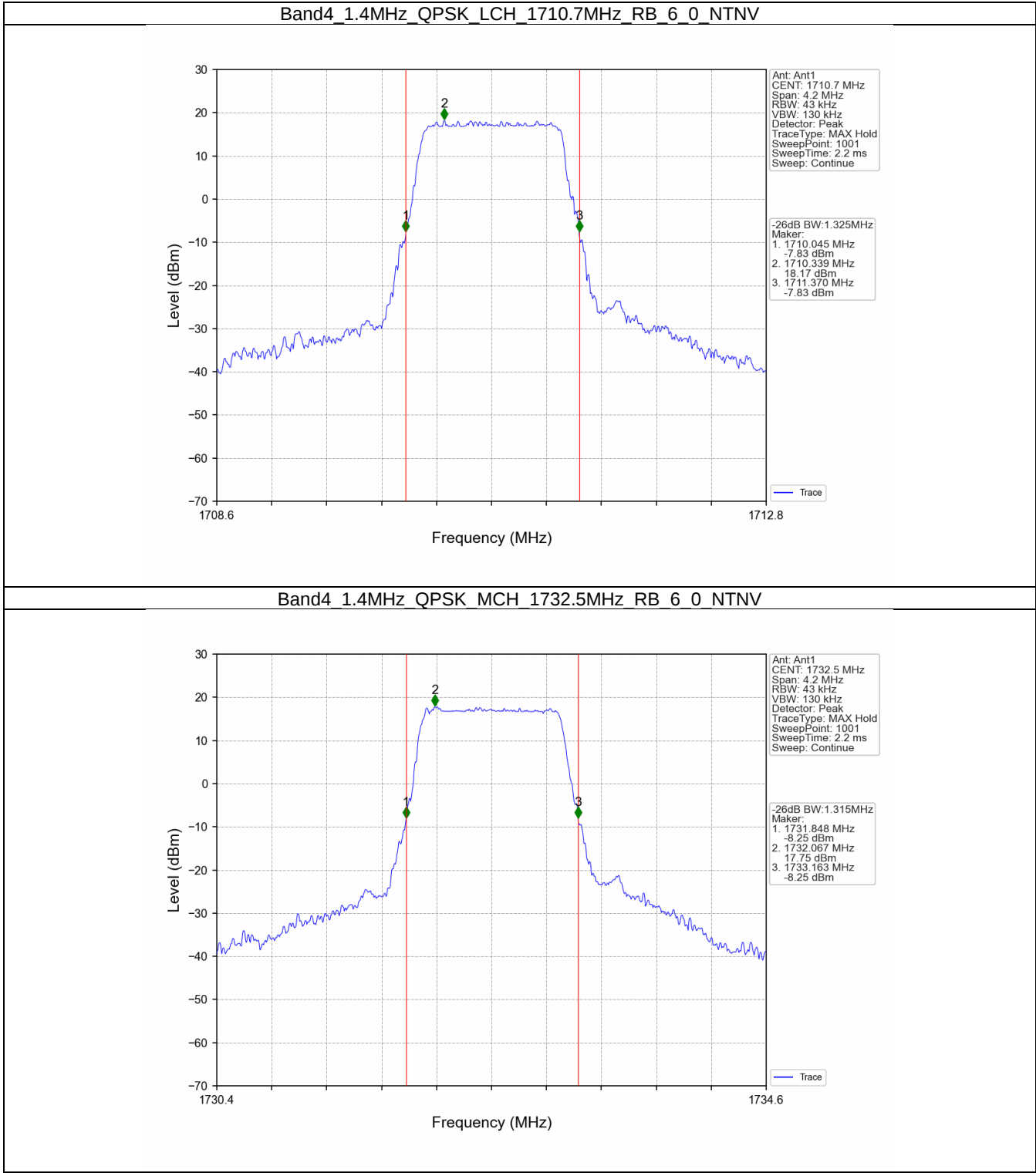


Band4_20MHz_QPSK_MCH_1732.5MHz_RB_100_0_NTNV

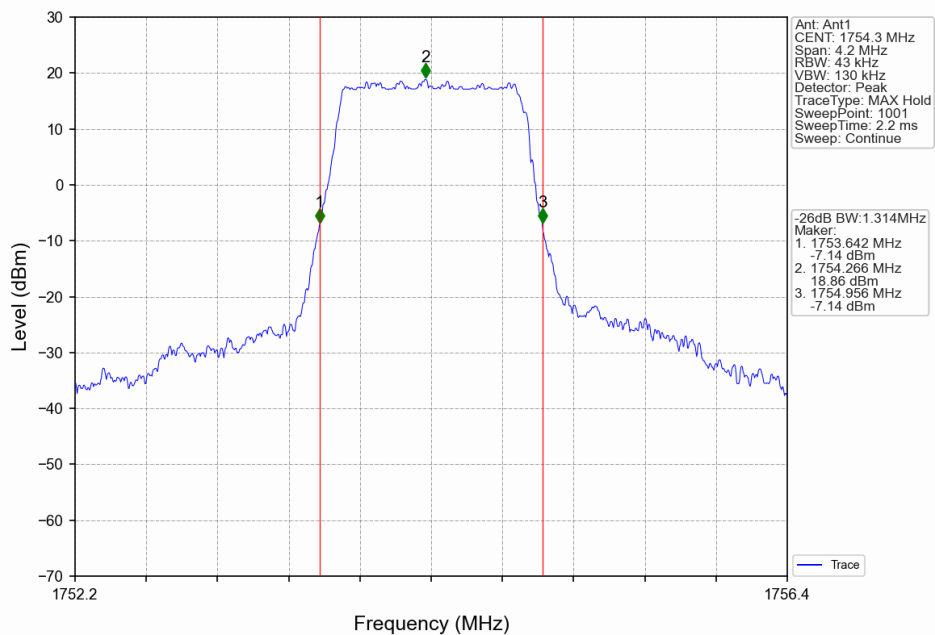




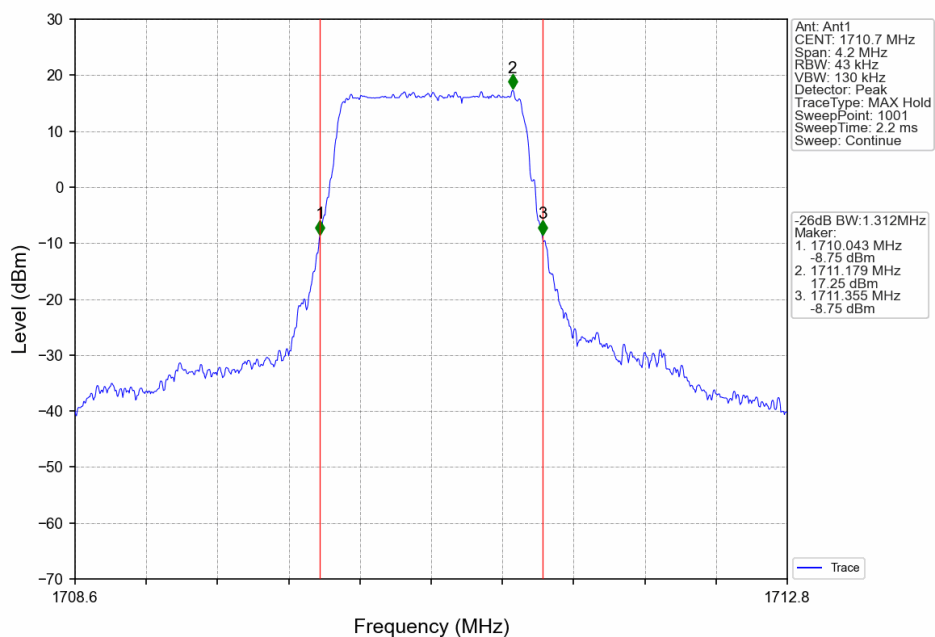
4.2.2 Band4_XDB

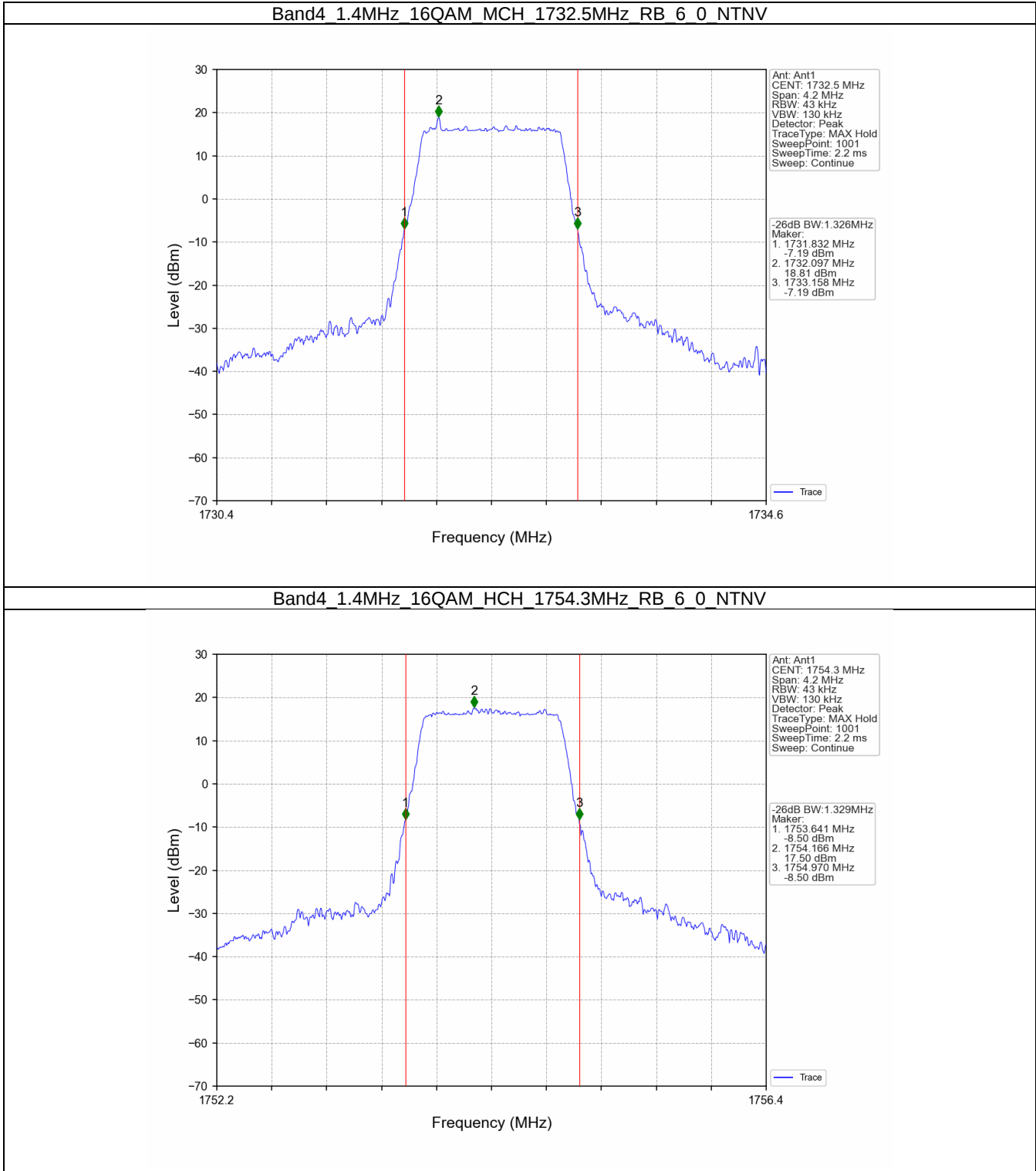


Band4 1.4MHz QPSK HCH 1754.3MHz RB 6 0 NTNV

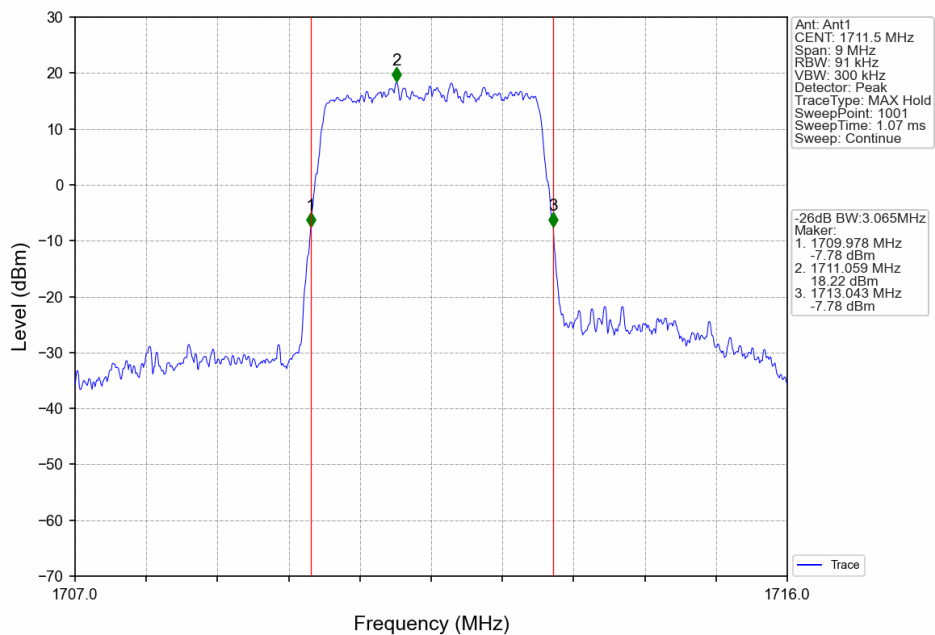


Band4 1.4MHz 16QAM LCH 1710.7MHz RB 6 0 NTNV

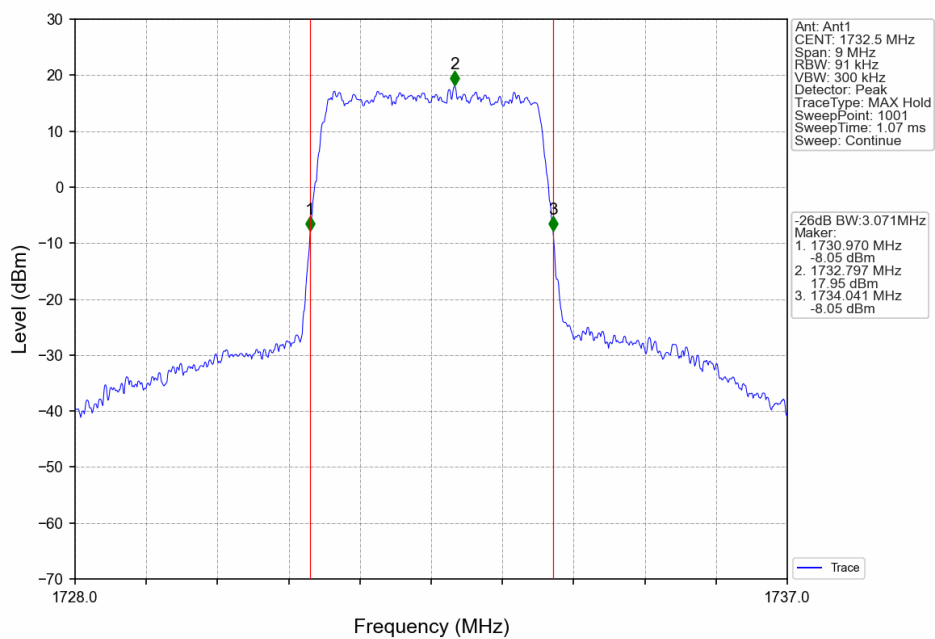


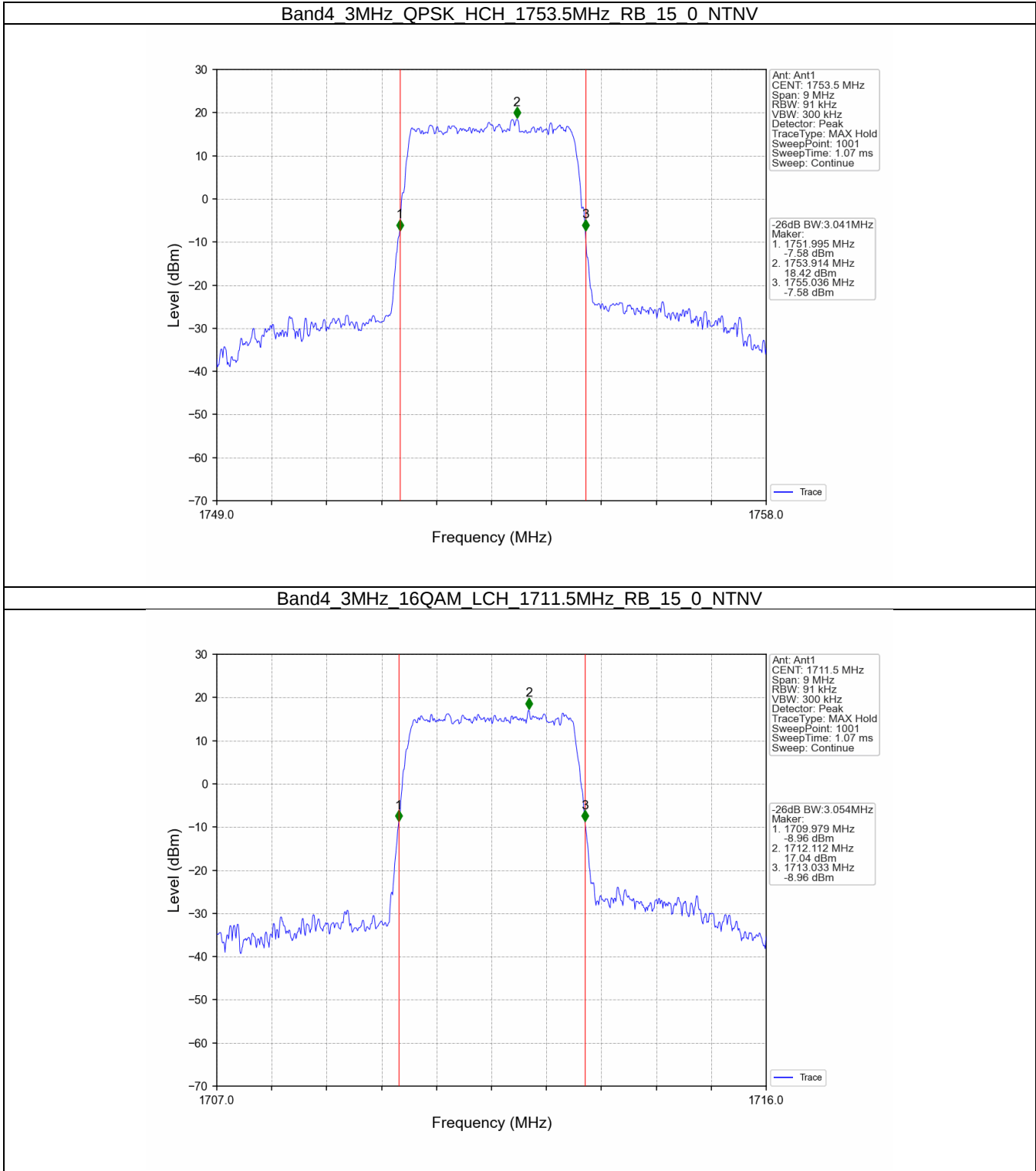


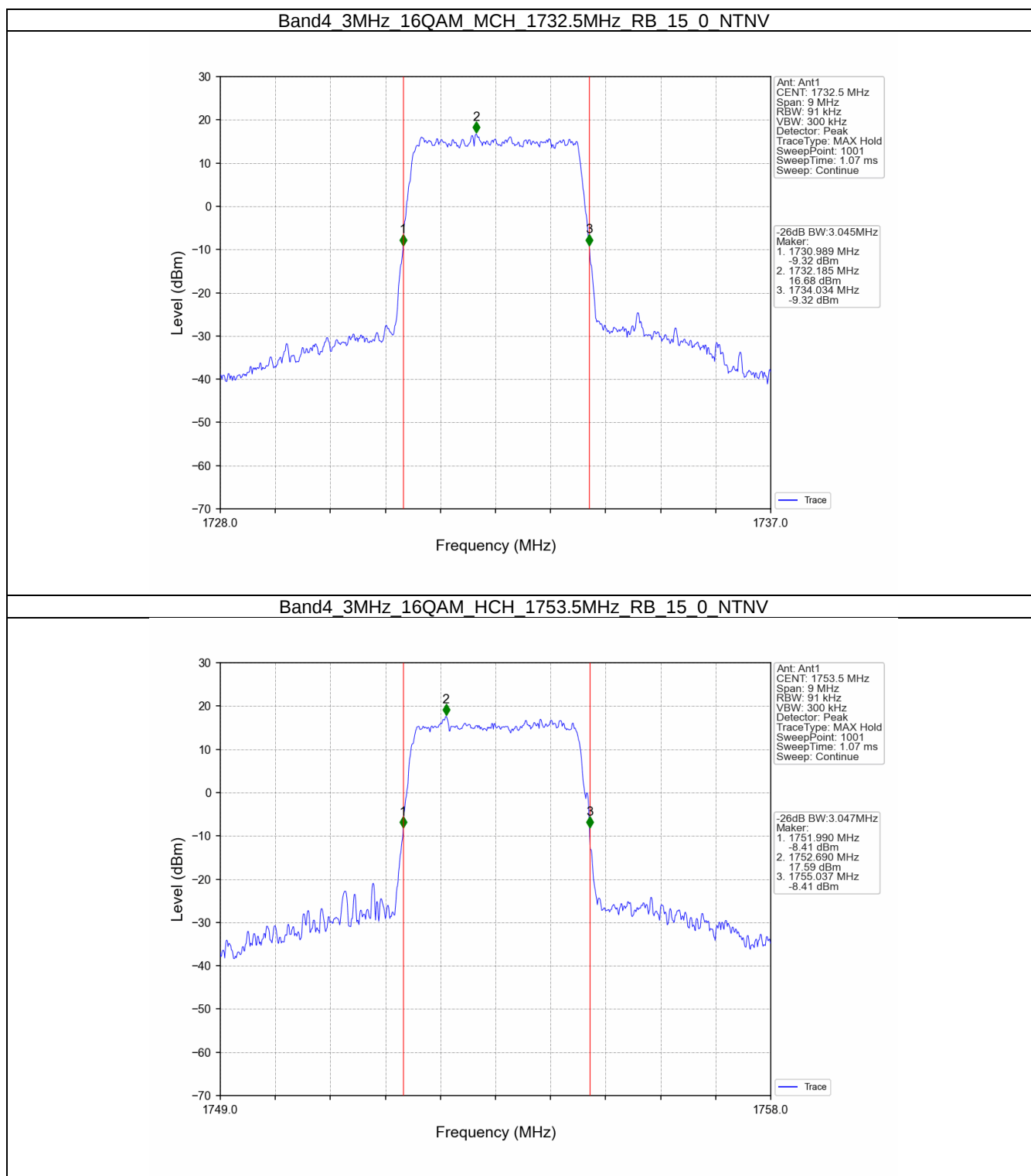
Band4 3MHz QPSK LCH 1711.5MHz RB 15 0 NTNV

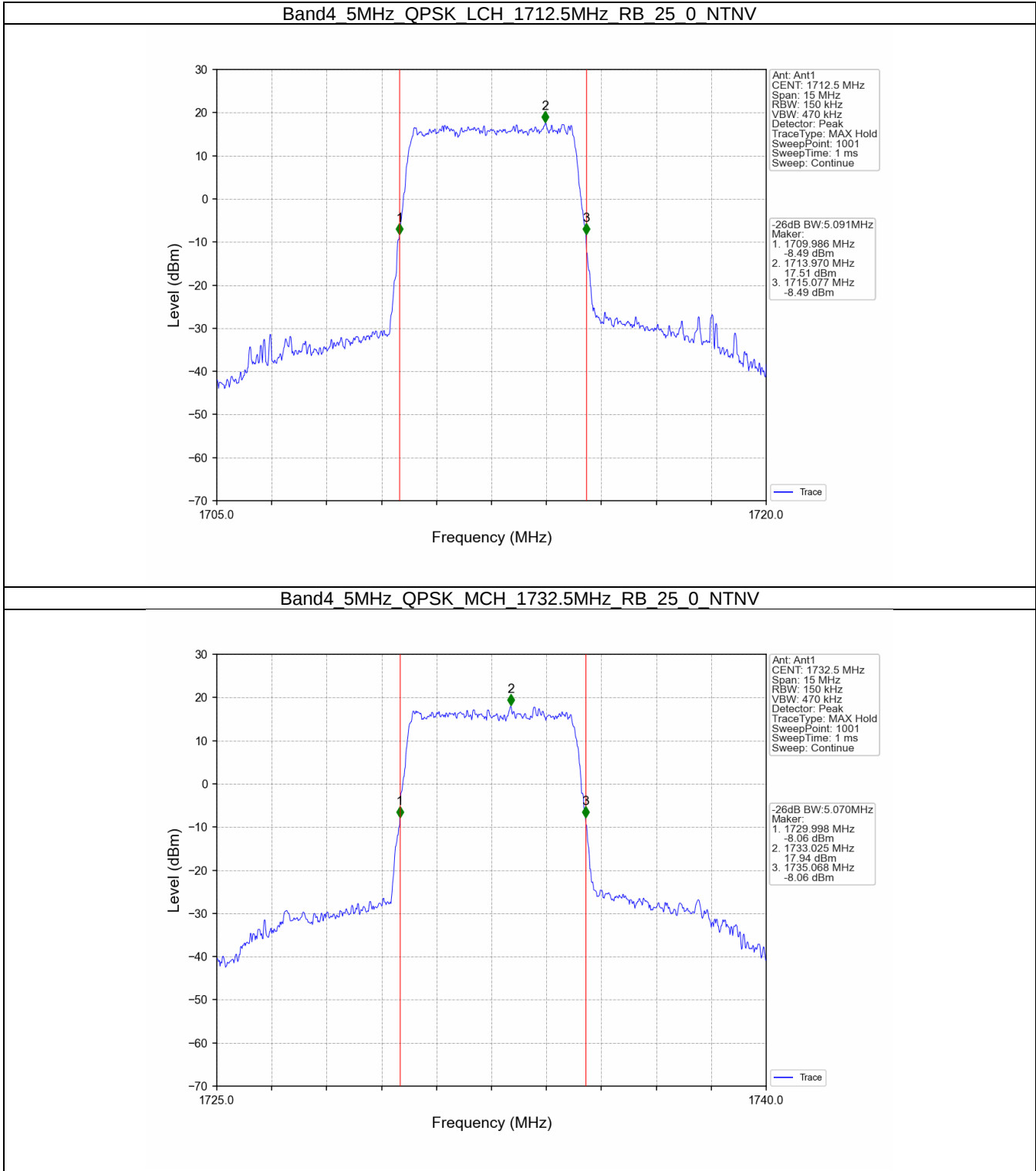


Band4 3MHz QPSK MCH 1732.5MHz RB 15 0 NTNV

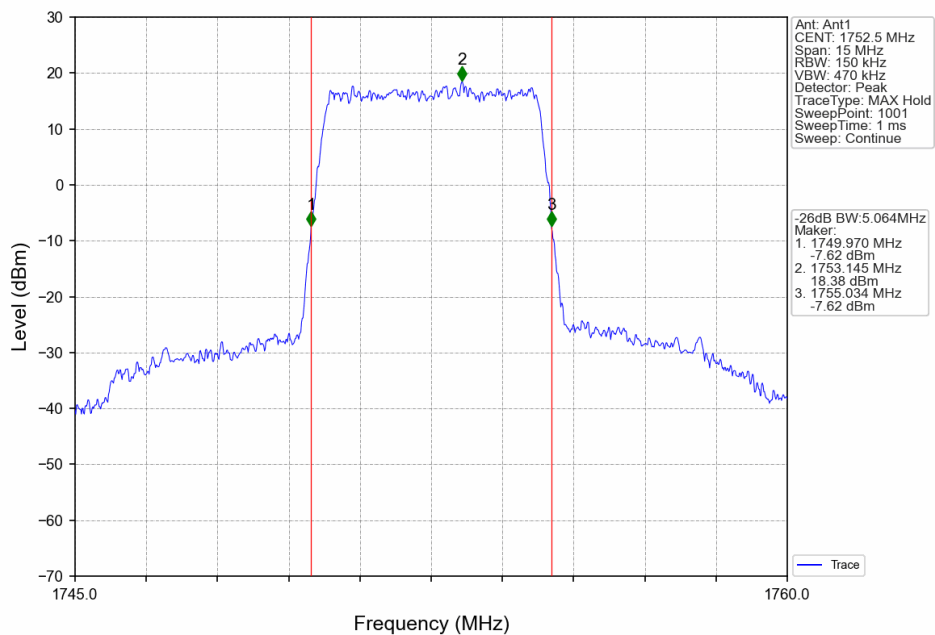




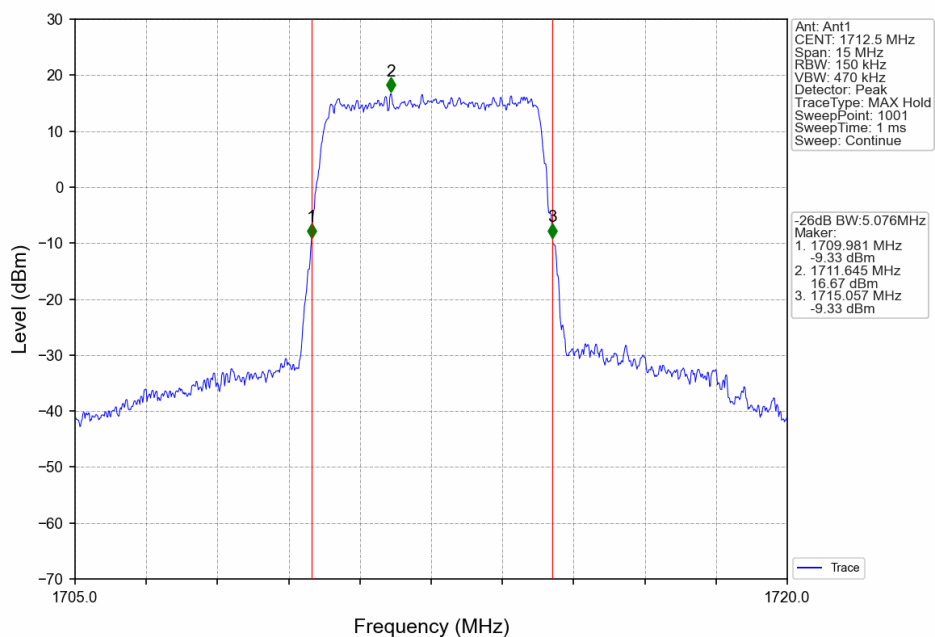


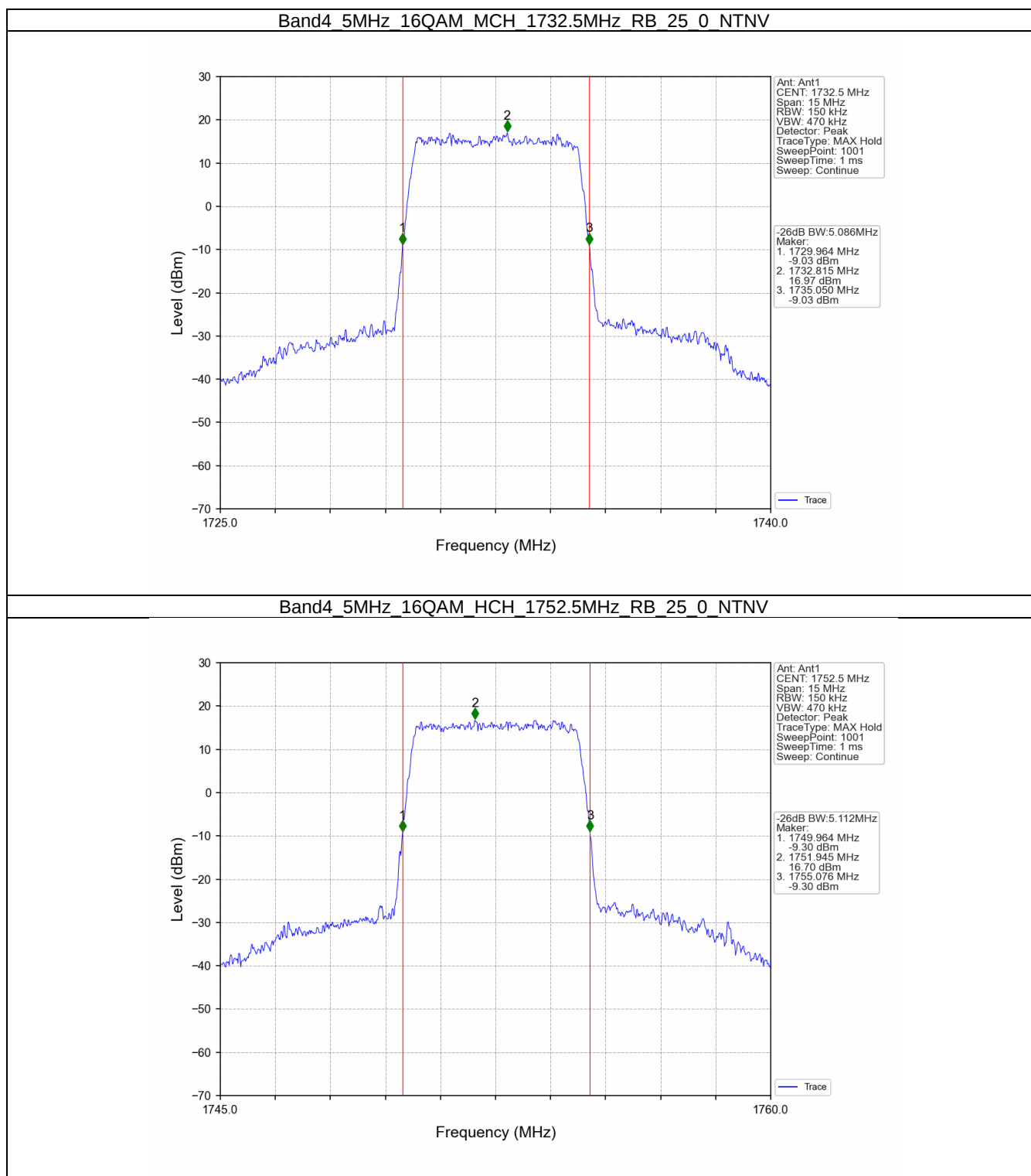


Band4 5MHz QPSK HCH 1752.5MHz RB 25 0 NTNV

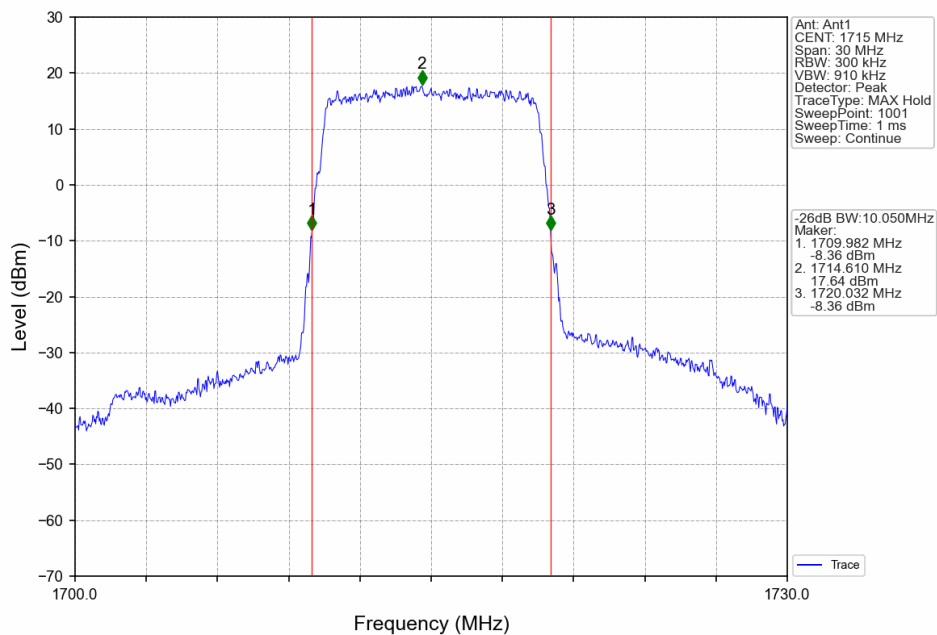


Band4 5MHz 16QAM LCH 1712.5MHz RB 25 0 NTNV

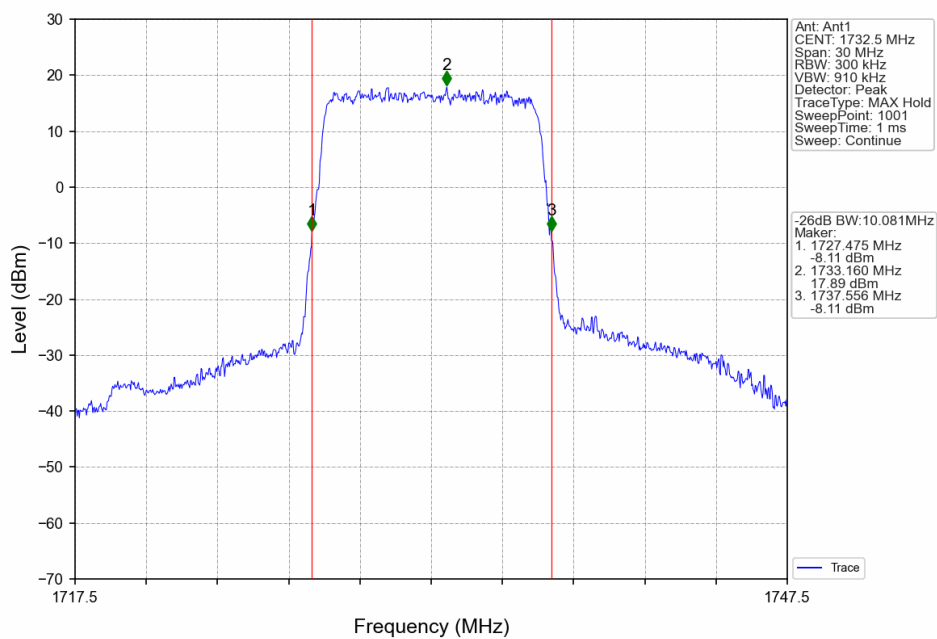




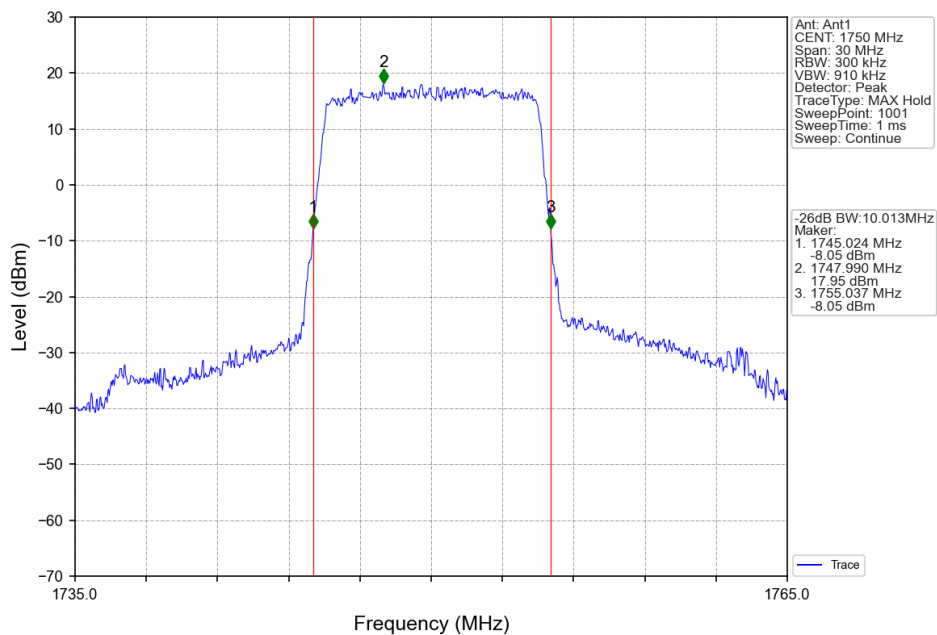
Band4 10MHz QPSK LCH 1715MHz RB 50 0 NTNV



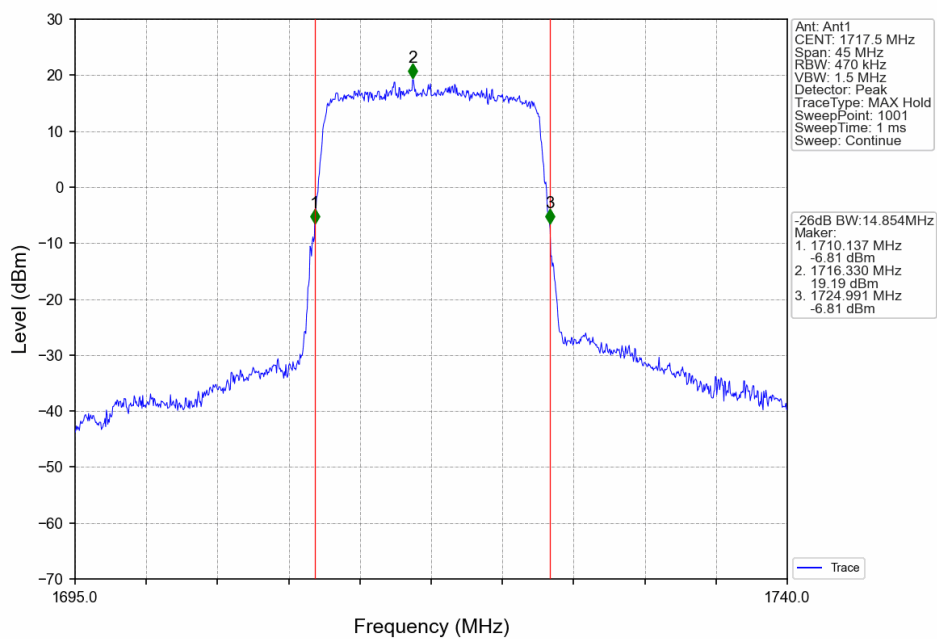
Band4 10MHz QPSK MCH 1732.5MHz RB 50 0 NTNV



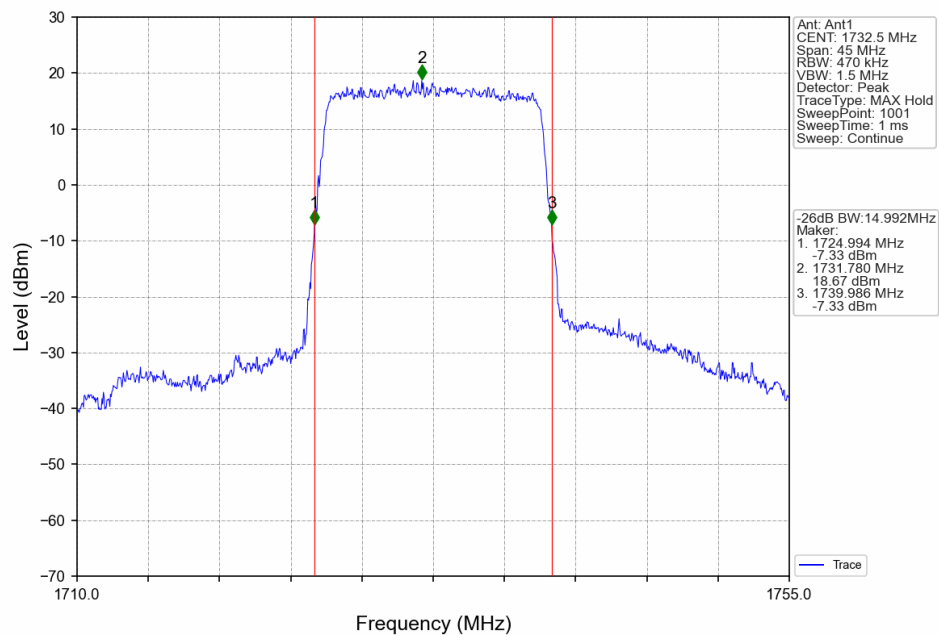
Band4 10MHz QPSK HCH 1750MHz RB 50 0 NTN



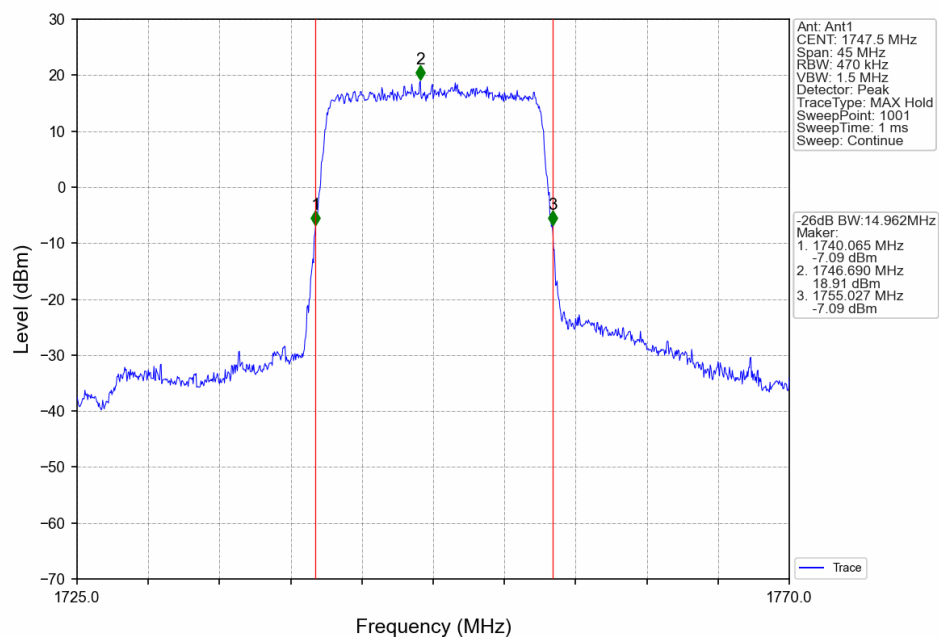
Band4 15MHz QPSK LCH 1717.5MHz RB 75 0 NTN



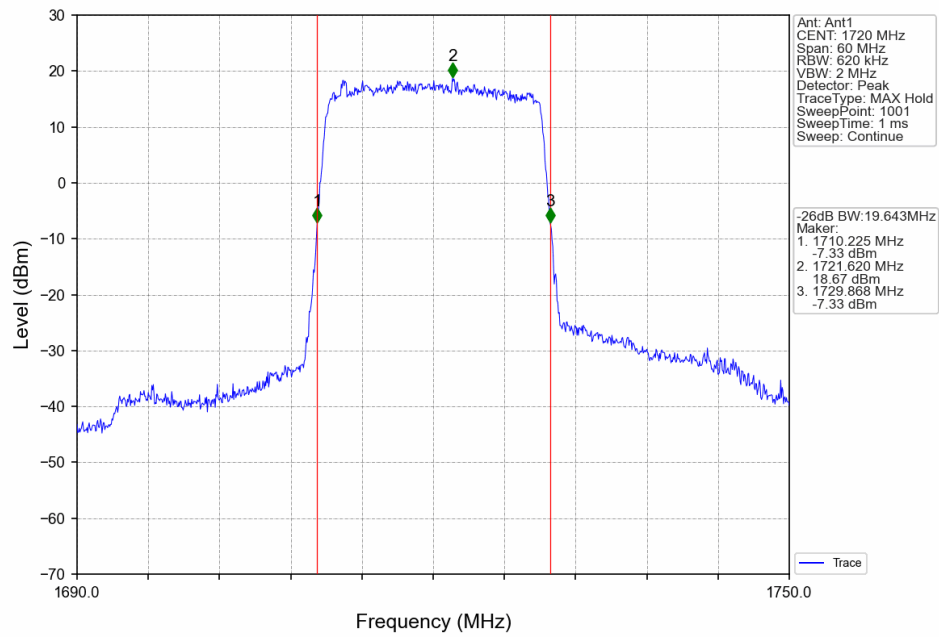
Band4 15MHz QPSK MCH 1732.5MHz RB 75 0 NTNV



Band4 15MHz QPSK HCH 1747.5MHz RB 75 0 NTNV



Band4 20MHz QPSK LCH 1720MHz RB 100 0 NTNV



Band4 20MHz QPSK MCH 1732.5MHz RB 100 0 NTNV

