

1. Effective (Isotropic) Radiated Power Output Data

1.1 B4_1.4MHz_EIRP

1.1.1 Test Result

Band: 4 / Bandwidth: 1.4MHz / NTV									
Modulation	Frequency (MHz)	RB Allocation		Conducted Power (dBm)	Gain (dBi)	EIRP (dBm)		Verdict	
		Size	Offset			Result	Limit		
QPSK	1710.7	1	0	22.57	-1.83	20.74	<=30	Pass	
			2	22.63	-1.83	20.80	<=30	Pass	
			5	22.60	-1.83	20.77	<=30	Pass	
		3	0	22.70	-1.83	20.87	<=30	Pass	
			2	22.72	-1.83	20.89	<=30	Pass	
			3	22.69	-1.83	20.86	<=30	Pass	
	6	0	21.71	-1.83	19.88	<=30	Pass		
	1732.5	1	0	22.86	-1.83	21.03	<=30	Pass	
			2	22.92	-1.83	21.09	<=30	Pass	
			5	22.89	-1.83	21.06	<=30	Pass	
		3	0	23.01	-1.83	21.18	<=30	Pass	
			2	23.07	-1.83	21.24	<=30	Pass	
			3	23.02	-1.83	21.19	<=30	Pass	
	6	0	22.06	-1.83	20.23	<=30	Pass		
	1754.3	1	0	23.09	-1.83	21.26	<=30	Pass	
			2	23.18	-1.83	21.35	<=30	Pass	
			5	23.13	-1.83	21.30	<=30	Pass	
		3	0	23.17	-1.83	21.34	<=30	Pass	
			2	23.19	-1.83	21.36	<=30	Pass	
			3	23.20	-1.83	21.37	<=30	Pass	
	6	0	22.20	-1.83	20.37	<=30	Pass		
	16QAM	1710.7	1	0	21.67	-1.83	19.84	<=30	Pass
				2	21.76	-1.83	19.93	<=30	Pass
				5	21.65	-1.83	19.82	<=30	Pass
3			0	21.63	-1.83	19.80	<=30	Pass	
			2	21.63	-1.83	19.80	<=30	Pass	
			3	21.64	-1.83	19.81	<=30	Pass	
6		0	20.76	-1.83	18.93	<=30	Pass		
1732.5		1	0	21.84	-1.83	20.01	<=30	Pass	
			2	21.90	-1.83	20.07	<=30	Pass	
			5	21.85	-1.83	20.02	<=30	Pass	
		3	0	22.21	-1.83	20.38	<=30	Pass	
			2	22.26	-1.83	20.43	<=30	Pass	
			3	22.22	-1.83	20.39	<=30	Pass	
6		0	21.11	-1.83	19.28	<=30	Pass		
1754.3		1	0	22.05	-1.83	20.22	<=30	Pass	
			2	22.11	-1.83	20.28	<=30	Pass	
			5	22.08	-1.83	20.25	<=30	Pass	
		3	0	22.21	-1.83	20.38	<=30	Pass	
			2	22.23	-1.83	20.40	<=30	Pass	
			3	22.23	-1.83	20.40	<=30	Pass	
6		0	21.16	-1.83	19.33	<=30	Pass		

Note1: EIRP=Conducted Power+Antenna Gain

1.2 B4_3MHz_EIRP

1.2.1 Test Result

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	22.48	-1.83	20.65	<=30	Pass		
			7	22.61	-1.83	20.78	<=30	Pass		
			14	22.50	-1.83	20.67	<=30	Pass		
		8	0	21.66	-1.83	19.83	<=30	Pass		
			4	21.69	-1.83	19.86	<=30	Pass		
			7	21.62	-1.83	19.79	<=30	Pass		
		15	0	21.59	-1.83	19.76	<=30	Pass		
		1732.5	1	0	22.72	-1.83	20.89	<=30	Pass	
				7	22.86	-1.83	21.03	<=30	Pass	
	14			22.73	-1.83	20.90	<=30	Pass		
	8		0	21.98	-1.83	20.15	<=30	Pass		
			4	22.00	-1.83	20.17	<=30	Pass		
			7	21.97	-1.83	20.14	<=30	Pass		
	15		0	21.94	-1.83	20.11	<=30	Pass		
	1753.5		1	0	22.87	-1.83	21.04	<=30	Pass	
				7	23.02	-1.83	21.19	<=30	Pass	
		14		22.92	-1.83	21.09	<=30	Pass		
		8	0	22.14	-1.83	20.31	<=30	Pass		
			4	22.19	-1.83	20.36	<=30	Pass		
			7	22.12	-1.83	20.29	<=30	Pass		
		15	0	22.14	-1.83	20.31	<=30	Pass		
		16QAM	1711.5	1	0	21.41	-1.83	19.58	<=30	Pass
					7	21.55	-1.83	19.72	<=30	Pass
	14				21.46	-1.83	19.63	<=30	Pass	
8	0			20.71	-1.83	18.88	<=30	Pass		
	4			20.76	-1.83	18.93	<=30	Pass		
	7			20.64	-1.83	18.81	<=30	Pass		
15	0			20.66	-1.83	18.83	<=30	Pass		
1732.5	1			0	21.88	-1.83	20.05	<=30	Pass	
				7	22.03	-1.83	20.20	<=30	Pass	
			14	21.90	-1.83	20.07	<=30	Pass		
	8		0	20.94	-1.83	19.11	<=30	Pass		
			4	21.02	-1.83	19.19	<=30	Pass		
			7	20.93	-1.83	19.10	<=30	Pass		
	15		0	20.91	-1.83	19.08	<=30	Pass		
	1753.5		1	0	22.36	-1.83	20.53	<=30	Pass	
				7	22.53	-1.83	20.70	<=30	Pass	
14				22.34	-1.83	20.51	<=30	Pass		
8			0	21.30	-1.83	19.47	<=30	Pass		
			4	21.36	-1.83	19.53	<=30	Pass		
			7	21.31	-1.83	19.48	<=30	Pass		
15			0	21.20	-1.83	19.37	<=30	Pass		

Note1: EIRP=Conducted Power+Antenna Gain

1.3 B4_5MHz_EIRP

1.3.1 Test Result

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	22.71	-1.83	20.88	<=30	Pass		
			13	22.88	-1.83	21.05	<=30	Pass		
			24	22.76	-1.83	20.93	<=30	Pass		
		12	0	21.71	-1.83	19.88	<=30	Pass		
			6	21.75	-1.83	19.92	<=30	Pass		
			13	21.70	-1.83	19.87	<=30	Pass		
		25	0	21.70	-1.83	19.87	<=30	Pass		
		1732.5	1	0	22.98	-1.83	21.15	<=30	Pass	
				13	23.13	-1.83	21.30	<=30	Pass	
	24			23.04	-1.83	21.21	<=30	Pass		
	12		0	21.95	-1.83	20.12	<=30	Pass		
			6	22.05	-1.83	20.22	<=30	Pass		
			13	22.04	-1.83	20.21	<=30	Pass		
	25		0	22.06	-1.83	20.23	<=30	Pass		
	1752.5		1	0	23.13	-1.83	21.30	<=30	Pass	
				13	23.28	-1.83	21.45	<=30	Pass	
		24		23.17	-1.83	21.34	<=30	Pass		
		12	0	22.15	-1.83	20.32	<=30	Pass		
			6	22.23	-1.83	20.40	<=30	Pass		
			13	22.20	-1.83	20.37	<=30	Pass		
		25	0	22.20	-1.83	20.37	<=30	Pass		
		16QAM	1712.5	1	0	21.72	-1.83	19.89	<=30	Pass
					13	21.90	-1.83	20.07	<=30	Pass
	24				21.78	-1.83	19.95	<=30	Pass	
12	0			20.66	-1.83	18.83	<=30	Pass		
	6			20.72	-1.83	18.89	<=30	Pass		
	13			20.74	-1.83	18.91	<=30	Pass		
25	0			20.80	-1.83	18.97	<=30	Pass		
1732.5	1			0	22.29	-1.83	20.46	<=30	Pass	
				13	22.37	-1.83	20.54	<=30	Pass	
			24	22.26	-1.83	20.43	<=30	Pass		
	12		0	20.99	-1.83	19.16	<=30	Pass		
			6	21.14	-1.83	19.31	<=30	Pass		
			13	21.11	-1.83	19.28	<=30	Pass		
	25		0	21.11	-1.83	19.28	<=30	Pass		
	1752.5		1	0	21.97	-1.83	20.14	<=30	Pass	
				13	22.08	-1.83	20.25	<=30	Pass	
24				22.04	-1.83	20.21	<=30	Pass		
12			0	21.21	-1.83	19.38	<=30	Pass		
			6	21.29	-1.83	19.46	<=30	Pass		
			13	21.27	-1.83	19.44	<=30	Pass		
25			0	21.26	-1.83	19.43	<=30	Pass		

Note1: EIRP=Conducted Power+Antenna Gain

1.4 B4_10MHz_EIRP

1.4.1 Test Result

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	22.81	-1.83	20.98	<=30	Pass
			25	22.93	-1.83	21.10	<=30	Pass

		25	49	22.99	-1.83	21.16	<=30	Pass		
			0	21.75	-1.83	19.92	<=30	Pass		
			13	21.82	-1.83	19.99	<=30	Pass		
			25	21.83	-1.83	20.00	<=30	Pass		
		50	0	21.84	-1.83	20.01	<=30	Pass		
			1	0	23.05	-1.83	21.22	<=30	Pass	
				25	23.09	-1.83	21.26	<=30	Pass	
		49		23.08	-1.83	21.25	<=30	Pass		
		1732.5	25	0	21.95	-1.83	20.12	<=30	Pass	
	13			22.09	-1.83	20.26	<=30	Pass		
	25			22.10	-1.83	20.27	<=30	Pass		
	50		0	22.07	-1.83	20.24	<=30	Pass		
	1750		1	0	23.16	-1.83	21.33	<=30	Pass	
				25	23.25	-1.83	21.42	<=30	Pass	
		49		23.27	-1.83	21.44	<=30	Pass		
		25	0	22.14	-1.83	20.31	<=30	Pass		
			13	22.24	-1.83	20.41	<=30	Pass		
			25	22.23	-1.83	20.40	<=30	Pass		
		50	0	22.21	-1.83	20.38	<=30	Pass		
		16QAM	1715	1	0	21.73	-1.83	19.90	<=30	Pass
					25	21.86	-1.83	20.03	<=30	Pass
	49				21.94	-1.83	20.11	<=30	Pass	
	25			0	20.86	-1.83	19.03	<=30	Pass	
				13	20.94	-1.83	19.11	<=30	Pass	
				25	20.99	-1.83	19.16	<=30	Pass	
	50			0	20.87	-1.83	19.04	<=30	Pass	
	1732.5			1	0	22.23	-1.83	20.40	<=30	Pass
25					22.27	-1.83	20.44	<=30	Pass	
49			22.27		-1.83	20.44	<=30	Pass		
25			0	21.03	-1.83	19.20	<=30	Pass		
			13	21.17	-1.83	19.34	<=30	Pass		
			25	21.19	-1.83	19.36	<=30	Pass		
50			0	21.13	-1.83	19.30	<=30	Pass		
1750			1	0	22.63	-1.83	20.80	<=30	Pass	
				25	22.72	-1.83	20.89	<=30	Pass	
	49			22.69	-1.83	20.86	<=30	Pass		
	25		0	21.25	-1.83	19.42	<=30	Pass		
			13	21.32	-1.83	19.49	<=30	Pass		
			25	21.32	-1.83	19.49	<=30	Pass		
	50		0	21.26	-1.83	19.43	<=30	Pass		
	Note1: EIRP=Conducted Power+Antenna Gain									

1.5 B4_15MHz_EIRP

1.5.1 Test Result

Band: 4 / Bandwidth: 15MHz / NTNv								
Modulation	Frequency (MHz)	RB Allocation		Conducted Power (dBm)	Gain (dBi)	EIRP (dBm)		Verdict
		Size	Offset			Result	Limit	
QPSK	1717.5	1	0	22.77	-1.83	20.94	<=30	Pass
			38	22.94	-1.83	21.11	<=30	Pass
			74	22.98	-1.83	21.15	<=30	Pass
		36	0	21.87	-1.83	20.04	<=30	Pass
			18	21.95	-1.83	20.12	<=30	Pass
			39	22.01	-1.83	20.18	<=30	Pass

16QAM	1732.5	75	0	21.97	-1.83	20.14	<=30	Pass		
			1	0	22.96	-1.83	21.13	<=30	Pass	
				38	23.14	-1.83	21.31	<=30	Pass	
		74		23.12	-1.83	21.29	<=30	Pass		
		36	0	21.96	-1.83	20.13	<=30	Pass		
			18	22.15	-1.83	20.32	<=30	Pass		
			39	22.15	-1.83	20.32	<=30	Pass		
		75	0	22.14	-1.83	20.31	<=30	Pass		
			1747.5	1	0	23.10	-1.83	21.27	<=30	Pass
					38	23.26	-1.83	21.43	<=30	Pass
		74			23.22	-1.83	21.39	<=30	Pass	
		36	0	22.19	-1.83	20.36	<=30	Pass		
	18		22.27	-1.83	20.44	<=30	Pass			
	39		22.22	-1.83	20.39	<=30	Pass			
	75	0	22.25	-1.83	20.42	<=30	Pass			
		1717.5	1	0	22.00	-1.83	20.17	<=30	Pass	
				38	22.26	-1.83	20.43	<=30	Pass	
	74			22.32	-1.83	20.49	<=30	Pass		
	36	0	20.82	-1.83	18.99	<=30	Pass			
		18	20.90	-1.83	19.07	<=30	Pass			
		39	21.00	-1.83	19.17	<=30	Pass			
	75	0	20.96	-1.83	19.13	<=30	Pass			
		1732.5	1	0	22.13	-1.83	20.30	<=30	Pass	
				38	22.28	-1.83	20.45	<=30	Pass	
74	22.24			-1.83	20.41	<=30	Pass			
36	0	20.99	-1.83	19.16	<=30	Pass				
	18	21.14	-1.83	19.31	<=30	Pass				
	39	21.16	-1.83	19.33	<=30	Pass				
75	0	21.10	-1.83	19.27	<=30	Pass				
	1747.5	1	0	22.59	-1.83	20.76	<=30	Pass		
			38	22.73	-1.83	20.90	<=30	Pass		
74			22.68	-1.83	20.85	<=30	Pass			
36	0	21.24	-1.83	19.41	<=30	Pass				
	18	21.27	-1.83	19.44	<=30	Pass				
	39	21.26	-1.83	19.43	<=30	Pass				
75	0	21.26	-1.83	19.43	<=30	Pass				

Note1: EIRP=Conducted Power+Antenna Gain

1.6 B4_20MHz_EIRP

1.6.1 Test Result

Band: 4 / Bandwidth: 20MHz / NTNV									
Modulation	Frequency (MHz)	RB Allocation		Conducted Power (dBm)	Gain (dBi)	EIRP (dBm)		Verdict	
		Size	Offset			Result	Limit		
QPSK	1720	1	0	22.65	-1.83	20.82	<=30	Pass	
			50	22.98	-1.83	21.15	<=30	Pass	
			99	22.98	-1.83	21.15	<=30	Pass	
		50	0	21.90	-1.83	20.07	<=30	Pass	
			25	22.02	-1.83	20.19	<=30	Pass	
			50	22.19	-1.83	20.36	<=30	Pass	
	1732.5	100	0	21.97	-1.83	20.14	<=30	Pass	
			1	0	22.89	-1.83	21.06	<=30	Pass
				50	23.14	-1.83	21.31	<=30	Pass
		99		23.15	-1.83	21.32	<=30	Pass	

		50	0	21.90	-1.83	20.07	<=30	Pass		
			25	22.13	-1.83	20.30	<=30	Pass		
			50	22.09	-1.83	20.26	<=30	Pass		
		100	0	22.00	-1.83	20.17	<=30	Pass		
			1	0	22.94	-1.83	21.11	<=30	Pass	
				50	23.25	-1.83	21.42	<=30	Pass	
		99		23.21	-1.83	21.38	<=30	Pass		
		50	0	22.19	-1.83	20.36	<=30	Pass		
			25	22.24	-1.83	20.41	<=30	Pass		
	50		22.18	-1.83	20.35	<=30	Pass			
	100	0	22.21	-1.83	20.38	<=30	Pass			
	16QAM	1720	1	0	22.11	-1.83	20.28	<=30	Pass	
				50	22.46	-1.83	20.63	<=30	Pass	
				99	22.47	-1.83	20.64	<=30	Pass	
			50	0	20.90	-1.83	19.07	<=30	Pass	
25				21.02	-1.83	19.19	<=30	Pass		
50				21.19	-1.83	19.36	<=30	Pass		
100			0	21.03	-1.83	19.20	<=30	Pass		
1732.5			1	0	22.05	-1.83	20.22	<=30	Pass	
				50	22.33	-1.83	20.50	<=30	Pass	
		99		22.29	-1.83	20.46	<=30	Pass		
		50	0	20.94	-1.83	19.11	<=30	Pass		
			25	21.18	-1.83	19.35	<=30	Pass		
			50	21.13	-1.83	19.30	<=30	Pass		
		100	0	21.03	-1.83	19.20	<=30	Pass		
		1745	1	0	22.20	-1.83	20.37	<=30	Pass	
				50	22.51	-1.83	20.68	<=30	Pass	
99				22.43	-1.83	20.60	<=30	Pass		
50			0	21.26	-1.83	19.43	<=30	Pass		
			25	21.27	-1.83	19.44	<=30	Pass		
			50	21.22	-1.83	19.39	<=30	Pass		
100			0	21.23	-1.83	19.40	<=30	Pass		
Note1: EIRP=Conducted Power+Antenna Gain										

2. Frequency Stability

2.1 B4_1.4MHz

2.1.1 Test Result

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	-1.116	-0.0007	-2.5 to 2.5	Pass	
					3.85	7.610	0.0044	-2.5 to 2.5	Pass	
					4.43	-6.552	-0.0038	-2.5 to 2.5	Pass	
				-30	3.85	-9.799	-0.0057	-2.5 to 2.5	Pass	
					-20	3.85	4.249	0.0025	-2.5 to 2.5	Pass
					-10	3.85	4.277	0.0025	-2.5 to 2.5	Pass
				0	3.85	4.077	0.0024	-2.5 to 2.5	Pass	
					10	3.85	-5.193	-0.0030	-2.5 to 2.5	Pass
					30	3.85	1.302	0.0008	-2.5 to 2.5	Pass
				40	3.85	3.290	0.0019	-2.5 to 2.5	Pass	
					50	3.85	0.701	0.0004	-2.5 to 2.5	Pass

2.2 B4_3MHz

2.2.1 Test Result

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	11.058	0.0065	-2.5 to 2.5	Pass
					3.85	-9.871	-0.0058	-2.5 to 2.5	Pass
					4.43	-5.865	-0.0034	-2.5 to 2.5	Pass
				-30	3.85	-6.895	-0.0040	-2.5 to 2.5	Pass
				-20	3.85	-7.052	-0.0041	-2.5 to 2.5	Pass
				-10	3.85	-2.232	-0.0013	-2.5 to 2.5	Pass
				0	3.85	-7.310	-0.0043	-2.5 to 2.5	Pass
				10	3.85	-6.495	-0.0038	-2.5 to 2.5	Pass
				30	3.85	-1.330	-0.0008	-2.5 to 2.5	Pass
	40	3.85	-9.270	-0.0054	-2.5 to 2.5	Pass			
	50	3.85	3.233	0.0019	-2.5 to 2.5	Pass			
	1732.5	15	0	20	3.27	8.912	0.0051	-2.5 to 2.5	Pass
					3.85	0.944	0.0005	-2.5 to 2.5	Pass
					4.43	-5.350	-0.0031	-2.5 to 2.5	Pass
				-30	3.85	-11.172	-0.0064	-2.5 to 2.5	Pass
				-20	3.85	-1.903	-0.0011	-2.5 to 2.5	Pass
				-10	3.85	-5.565	-0.0032	-2.5 to 2.5	Pass
				0	3.85	3.576	0.0021	-2.5 to 2.5	Pass
				10	3.85	-1.173	-0.0007	-2.5 to 2.5	Pass
				30	3.85	3.433	0.0020	-2.5 to 2.5	Pass
	40	3.85	0.186	0.0001	-2.5 to 2.5	Pass			
	50	3.85	-0.744	-0.0004	-2.5 to 2.5	Pass			
	1753.5	15	0	20	3.27	1.101	0.0006	-2.5 to 2.5	Pass
					3.85	-5.636	-0.0032	-2.5 to 2.5	Pass
					4.43	-0.358	-0.0002	-2.5 to 2.5	Pass
				-30	3.85	-1.302	-0.0007	-2.5 to 2.5	Pass
				-20	3.85	-1.087	-0.0006	-2.5 to 2.5	Pass
-10				3.85	-1.817	-0.0010	-2.5 to 2.5	Pass	
0				3.85	-2.832	-0.0016	-2.5 to 2.5	Pass	
10				3.85	-3.247	-0.0019	-2.5 to 2.5	Pass	
30				3.85	-10.171	-0.0058	-2.5 to 2.5	Pass	
40	3.85	-5.922	-0.0034	-2.5 to 2.5	Pass				
50	3.85	1.917	0.0011	-2.5 to 2.5	Pass				
16QAM	1711.5	15	0	20	3.27	-10.343	-0.0060	-2.5 to 2.5	Pass
					3.85	3.877	0.0023	-2.5 to 2.5	Pass
					4.43	1.001	0.0006	-2.5 to 2.5	Pass
				-30	3.85	1.216	0.0007	-2.5 to 2.5	Pass
				-20	3.85	-4.506	-0.0026	-2.5 to 2.5	Pass
				-10	3.85	-3.619	-0.0021	-2.5 to 2.5	Pass
				0	3.85	-0.572	-0.0003	-2.5 to 2.5	Pass
				10	3.85	2.089	0.0012	-2.5 to 2.5	Pass
				30	3.85	-3.176	-0.0019	-2.5 to 2.5	Pass
	40	3.85	-0.114	-0.0001	-2.5 to 2.5	Pass			
	50	3.85	-2.174	-0.0013	-2.5 to 2.5	Pass			
	1732.5	15	0	20	3.27	0.100	0.0001	-2.5 to 2.5	Pass
					3.85	-3.490	-0.0020	-2.5 to 2.5	Pass
					4.43	-3.905	-0.0023	-2.5 to 2.5	Pass
				-30	3.85	-1.173	-0.0007	-2.5 to 2.5	Pass
-20				3.85	-3.490	-0.0020	-2.5 to 2.5	Pass	

				-10	3.85	-3.190	-0.0018	-2.5 to 2.5	Pass
				0	3.85	0.758	0.0004	-2.5 to 2.5	Pass
				10	3.85	3.433	0.0020	-2.5 to 2.5	Pass
				30	3.85	1.974	0.0011	-2.5 to 2.5	Pass
				40	3.85	4.606	0.0027	-2.5 to 2.5	Pass
				50	3.85	0.443	0.0003	-2.5 to 2.5	Pass
	1753.5	15	0	20	3.27	-0.114	-0.0001	-2.5 to 2.5	Pass
					3.85	-1.917	-0.0011	-2.5 to 2.5	Pass
					4.43	3.805	0.0022	-2.5 to 2.5	Pass
				-30	3.85	-3.576	-0.0020	-2.5 to 2.5	Pass
				-20	3.85	1.445	0.0008	-2.5 to 2.5	Pass
				-10	3.85	0.572	0.0003	-2.5 to 2.5	Pass
				0	3.85	-2.675	-0.0015	-2.5 to 2.5	Pass
				10	3.85	-0.029	0.0000	-2.5 to 2.5	Pass
				30	3.85	-3.362	-0.0019	-2.5 to 2.5	Pass
				40	3.85	-3.505	-0.0020	-2.5 to 2.5	Pass
				50	3.85	-3.233	-0.0018	-2.5 to 2.5	Pass

2.3 B4_5MHz

2.3.1 Test Result

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	5.078	0.0030	-2.5 to 2.5	Pass
					3.85	-1.817	-0.0011	-2.5 to 2.5	Pass
					4.43	1.831	0.0011	-2.5 to 2.5	Pass
				-30	3.85	3.905	0.0023	-2.5 to 2.5	Pass
				-20	3.85	2.203	0.0013	-2.5 to 2.5	Pass
				-10	3.85	-2.661	-0.0016	-2.5 to 2.5	Pass
				0	3.85	-7.668	-0.0045	-2.5 to 2.5	Pass
				10	3.85	0.501	0.0003	-2.5 to 2.5	Pass
				30	3.85	-0.830	-0.0005	-2.5 to 2.5	Pass
				40	3.85	-4.063	-0.0024	-2.5 to 2.5	Pass
				50	3.85	1.831	0.0011	-2.5 to 2.5	Pass
				1732.5	25	0	20	3.27	5.150
	3.85	-4.921	-0.0028					-2.5 to 2.5	Pass
	4.43	-0.300	-0.0002					-2.5 to 2.5	Pass
	-30	3.85	4.578				0.0026	-2.5 to 2.5	Pass
	-20	3.85	2.890				0.0017	-2.5 to 2.5	Pass
	-10	3.85	-2.518				-0.0015	-2.5 to 2.5	Pass
	0	3.85	3.233				0.0019	-2.5 to 2.5	Pass
	10	3.85	0.701				0.0004	-2.5 to 2.5	Pass
	30	3.85	-2.131				-0.0012	-2.5 to 2.5	Pass
	40	3.85	-5.794				-0.0033	-2.5 to 2.5	Pass
	50	3.85	0.987				0.0006	-2.5 to 2.5	Pass
	1752.5	25	0				20	3.27	4.191
				3.85	-1.001	-0.0006		-2.5 to 2.5	Pass
				4.43	1.187	0.0007		-2.5 to 2.5	Pass
				-30	3.85	0.029	0.0000	-2.5 to 2.5	Pass
				-20	3.85	-0.587	-0.0003	-2.5 to 2.5	Pass
				-10	3.85	1.359	0.0008	-2.5 to 2.5	Pass
				0	3.85	2.174	0.0012	-2.5 to 2.5	Pass
				10	3.85	-0.486	-0.0003	-2.5 to 2.5	Pass

				30	3.85	0.114	0.0001	-2.5 to 2.5	Pass
				40	3.85	-0.601	-0.0003	-2.5 to 2.5	Pass
				50	3.85	-0.429	-0.0002	-2.5 to 2.5	Pass
16QAM	1712.5	25	0	20	3.27	-3.662	-0.0021	-2.5 to 2.5	Pass
					3.85	-2.904	-0.0017	-2.5 to 2.5	Pass
					4.43	-3.362	-0.0020	-2.5 to 2.5	Pass
				-30	3.85	-2.875	-0.0017	-2.5 to 2.5	Pass
				-20	3.85	-0.100	-0.0001	-2.5 to 2.5	Pass
				-10	3.85	-3.777	-0.0022	-2.5 to 2.5	Pass
				0	3.85	-2.275	-0.0013	-2.5 to 2.5	Pass
				10	3.85	-0.329	-0.0002	-2.5 to 2.5	Pass
				30	3.85	-0.558	-0.0003	-2.5 to 2.5	Pass
				40	3.85	0.000	0.0000	-2.5 to 2.5	Pass
	50	3.85	-1.473	-0.0009	-2.5 to 2.5	Pass			
	1732.5	25	0	20	3.27	-2.332	-0.0013	-2.5 to 2.5	Pass
					3.85	2.418	0.0014	-2.5 to 2.5	Pass
					4.43	-1.187	-0.0007	-2.5 to 2.5	Pass
				-30	3.85	-0.486	-0.0003	-2.5 to 2.5	Pass
				-20	3.85	1.388	0.0008	-2.5 to 2.5	Pass
				-10	3.85	-5.794	-0.0033	-2.5 to 2.5	Pass
				0	3.85	0.873	0.0005	-2.5 to 2.5	Pass
				10	3.85	0.815	0.0005	-2.5 to 2.5	Pass
				30	3.85	1.273	0.0007	-2.5 to 2.5	Pass
				40	3.85	0.458	0.0003	-2.5 to 2.5	Pass
	50	3.85	-1.144	-0.0007	-2.5 to 2.5	Pass			
	1752.5	25	0	20	3.27	-1.817	-0.0010	-2.5 to 2.5	Pass
					3.85	-11.759	-0.0067	-2.5 to 2.5	Pass
					4.43	-0.157	-0.0001	-2.5 to 2.5	Pass
				-30	3.85	-0.815	-0.0005	-2.5 to 2.5	Pass
				-20	3.85	-1.473	-0.0008	-2.5 to 2.5	Pass
				-10	3.85	-4.764	-0.0027	-2.5 to 2.5	Pass
				0	3.85	-2.732	-0.0016	-2.5 to 2.5	Pass
				10	3.85	-1.159	-0.0007	-2.5 to 2.5	Pass
30				3.85	3.519	0.0020	-2.5 to 2.5	Pass	
40				3.85	-0.315	-0.0002	-2.5 to 2.5	Pass	
50	3.85	-2.017	-0.0012	-2.5 to 2.5	Pass				

2.4 B4_10MHz

2.4.1 Test Result

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	-1.259	-0.0007	-2.5 to 2.5	Pass
					3.85	3.562	0.0021	-2.5 to 2.5	Pass
					4.43	-2.618	-0.0015	-2.5 to 2.5	Pass
				-30	3.85	1.645	0.0010	-2.5 to 2.5	Pass
				-20	3.85	-4.535	-0.0026	-2.5 to 2.5	Pass
				-10	3.85	-1.559	-0.0009	-2.5 to 2.5	Pass
				0	3.85	-1.588	-0.0009	-2.5 to 2.5	Pass
				10	3.85	-1.917	-0.0011	-2.5 to 2.5	Pass
				30	3.85	-2.246	-0.0013	-2.5 to 2.5	Pass
				40	3.85	-4.520	-0.0026	-2.5 to 2.5	Pass
50	3.85	-1.945	-0.0011	-2.5 to 2.5	Pass				

	1732.5	50	0	20	3.27	1.073	0.0006	-2.5 to 2.5	Pass	
					3.85	1.731	0.0010	-2.5 to 2.5	Pass	
					4.43	2.732	0.0016	-2.5 to 2.5	Pass	
				-30	3.85	-3.076	-0.0018	-2.5 to 2.5	Pass	
					-20	3.85	2.661	0.0015	-2.5 to 2.5	Pass
						-10	3.85	0.730	0.0004	-2.5 to 2.5
				0	3.85	-2.847	-0.0016	-2.5 to 2.5	Pass	
					10	3.85	-1.445	-0.0008	-2.5 to 2.5	Pass
					30	3.85	-1.245	-0.0007	-2.5 to 2.5	Pass
	40	3.85	-0.401		-0.0002	-2.5 to 2.5	Pass			
	50	3.85	0.644		0.0004	-2.5 to 2.5	Pass			
		3.85	0.644		0.0004	-2.5 to 2.5	Pass			
	1750	50	0	20	3.27	-1.502	-0.0009	-2.5 to 2.5	Pass	
					3.85	1.187	0.0007	-2.5 to 2.5	Pass	
					4.43	0.272	0.0002	-2.5 to 2.5	Pass	
				-30	3.85	0.429	0.0002	-2.5 to 2.5	Pass	
					-20	3.85	-0.172	-0.0001	-2.5 to 2.5	Pass
						-10	3.85	1.459	0.0008	-2.5 to 2.5
0				3.85	-0.200	-0.0001	-2.5 to 2.5	Pass		
				10	3.85	-1.059	-0.0006	-2.5 to 2.5	Pass	
				30	3.85	-3.791	-0.0022	-2.5 to 2.5	Pass	
	40	3.85	-4.649	-0.0027	-2.5 to 2.5	Pass				
	50	3.85	-3.433	-0.0020	-2.5 to 2.5	Pass				
		3.85	-3.433	-0.0020	-2.5 to 2.5	Pass				
16QAM	1715	50	0	20	3.27	-2.546	-0.0015	-2.5 to 2.5	Pass	
					3.85	-3.176	-0.0019	-2.5 to 2.5	Pass	
					4.43	-5.579	-0.0033	-2.5 to 2.5	Pass	
				-30	3.85	-2.918	-0.0017	-2.5 to 2.5	Pass	
					-20	3.85	-3.147	-0.0018	-2.5 to 2.5	Pass
						-10	3.85	-3.576	-0.0021	-2.5 to 2.5
				0	3.85	-3.290	-0.0019	-2.5 to 2.5	Pass	
					10	3.85	-2.303	-0.0013	-2.5 to 2.5	Pass
					30	3.85	-3.219	-0.0019	-2.5 to 2.5	Pass
	40	3.85	-2.718		-0.0016	-2.5 to 2.5	Pass			
	50	3.85	-2.732		-0.0016	-2.5 to 2.5	Pass			
		3.85	-2.732		-0.0016	-2.5 to 2.5	Pass			
	1732.5	50	0	20	3.27	-0.672	-0.0004	-2.5 to 2.5	Pass	
					3.85	-0.401	-0.0002	-2.5 to 2.5	Pass	
					4.43	0.072	0.0000	-2.5 to 2.5	Pass	
				-30	3.85	-0.901	-0.0005	-2.5 to 2.5	Pass	
					-20	3.85	-0.601	-0.0003	-2.5 to 2.5	Pass
						-10	3.85	-2.174	-0.0013	-2.5 to 2.5
0				3.85	1.445	0.0008	-2.5 to 2.5	Pass		
				10	3.85	-0.215	-0.0001	-2.5 to 2.5	Pass	
				30	3.85	0.558	0.0003	-2.5 to 2.5	Pass	
	40	3.85	-2.561	-0.0015	-2.5 to 2.5	Pass				
	50	3.85	-1.287	-0.0007	-2.5 to 2.5	Pass				
		3.85	-1.287	-0.0007	-2.5 to 2.5	Pass				
1750	50	0	20	3.27	-1.931	-0.0011	-2.5 to 2.5	Pass		
				3.85	-4.549	-0.0026	-2.5 to 2.5	Pass		
				4.43	-2.718	-0.0016	-2.5 to 2.5	Pass		
			-30	3.85	-3.147	-0.0018	-2.5 to 2.5	Pass		
				-20	3.85	-4.134	-0.0024	-2.5 to 2.5	Pass	
					-10	3.85	-2.174	-0.0012	-2.5 to 2.5	Pass
			0	3.85	-1.545	-0.0009	-2.5 to 2.5	Pass		
				10	3.85	-2.375	-0.0014	-2.5 to 2.5	Pass	
				30	3.85	-2.046	-0.0012	-2.5 to 2.5	Pass	
40	3.85	-1.473		-0.0008	-2.5 to 2.5	Pass				
50	3.85	-1.245		-0.0007	-2.5 to 2.5	Pass				
	3.85	-1.245		-0.0007	-2.5 to 2.5	Pass				

2.5 B4_15MHz

2.5.1 Test Result

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	-2.375	-0.0014	-2.5 to 2.5	Pass
					3.85	0.830	0.0005	-2.5 to 2.5	Pass
					4.43	-1.931	-0.0011	-2.5 to 2.5	Pass
				-30	3.85	-2.360	-0.0014	-2.5 to 2.5	Pass
				-20	3.85	-3.119	-0.0018	-2.5 to 2.5	Pass
				-10	3.85	-0.601	-0.0003	-2.5 to 2.5	Pass
				0	3.85	1.659	0.0010	-2.5 to 2.5	Pass
				10	3.85	-3.133	-0.0018	-2.5 to 2.5	Pass
				30	3.85	-2.460	-0.0014	-2.5 to 2.5	Pass
	40	3.85	-1.874	-0.0011	-2.5 to 2.5	Pass			
	50	3.85	-2.131	-0.0012	-2.5 to 2.5	Pass			
	1732.5	75	0	20	3.27	-1.488	-0.0009	-2.5 to 2.5	Pass
					3.85	4.964	0.0029	-2.5 to 2.5	Pass
					4.43	1.216	0.0007	-2.5 to 2.5	Pass
				-30	3.85	-3.161	-0.0018	-2.5 to 2.5	Pass
				-20	3.85	-0.243	-0.0001	-2.5 to 2.5	Pass
				-10	3.85	-0.815	-0.0005	-2.5 to 2.5	Pass
				0	3.85	1.245	0.0007	-2.5 to 2.5	Pass
				10	3.85	11.401	0.0066	-2.5 to 2.5	Pass
				30	3.85	1.087	0.0006	-2.5 to 2.5	Pass
	40	3.85	1.373	0.0008	-2.5 to 2.5	Pass			
	50	3.85	1.445	0.0008	-2.5 to 2.5	Pass			
	1747.5	75	0	20	3.27	0.901	0.0005	-2.5 to 2.5	Pass
					3.85	0.143	0.0001	-2.5 to 2.5	Pass
					4.43	1.516	0.0009	-2.5 to 2.5	Pass
				-30	3.85	0.300	0.0002	-2.5 to 2.5	Pass
				-20	3.85	7.253	0.0042	-2.5 to 2.5	Pass
-10				3.85	0.143	0.0001	-2.5 to 2.5	Pass	
0				3.85	2.375	0.0014	-2.5 to 2.5	Pass	
10				3.85	-0.229	-0.0001	-2.5 to 2.5	Pass	
30				3.85	-1.473	-0.0008	-2.5 to 2.5	Pass	
40	3.85	1.130	0.0006	-2.5 to 2.5	Pass				
50	3.85	-0.844	-0.0005	-2.5 to 2.5	Pass				
16QAM	1717.5	75	0	20	3.27	1.473	0.0009	-2.5 to 2.5	Pass
					3.85	1.788	0.0010	-2.5 to 2.5	Pass
					4.43	1.659	0.0010	-2.5 to 2.5	Pass
				-30	3.85	0.358	0.0002	-2.5 to 2.5	Pass
				-20	3.85	-0.072	0.0000	-2.5 to 2.5	Pass
				-10	3.85	-2.003	-0.0012	-2.5 to 2.5	Pass
				0	3.85	-2.975	-0.0017	-2.5 to 2.5	Pass
				10	3.85	0.129	0.0001	-2.5 to 2.5	Pass
				30	3.85	-2.317	-0.0013	-2.5 to 2.5	Pass
	40	3.85	-2.160	-0.0013	-2.5 to 2.5	Pass			
	50	3.85	-3.648	-0.0021	-2.5 to 2.5	Pass			
	1732.5	75	0	20	3.27	-0.257	-0.0001	-2.5 to 2.5	Pass
					3.85	0.043	0.0000	-2.5 to 2.5	Pass
					4.43	3.319	0.0019	-2.5 to 2.5	Pass
				-30	3.85	10.872	0.0063	-2.5 to 2.5	Pass
-20				3.85	2.060	0.0012	-2.5 to 2.5	Pass	

				-10	3.85	0.629	0.0004	-2.5 to 2.5	Pass
				0	3.85	0.873	0.0005	-2.5 to 2.5	Pass
				10	3.85	-1.974	-0.0011	-2.5 to 2.5	Pass
				30	3.85	-0.558	-0.0003	-2.5 to 2.5	Pass
				40	3.85	-1.588	-0.0009	-2.5 to 2.5	Pass
				50	3.85	0.358	0.0002	-2.5 to 2.5	Pass
	1747.5	75	0	20	3.27	2.732	0.0016	-2.5 to 2.5	Pass
					3.85	3.605	0.0021	-2.5 to 2.5	Pass
					4.43	-0.658	-0.0004	-2.5 to 2.5	Pass
				-30	3.85	-1.488	-0.0009	-2.5 to 2.5	Pass
				-20	3.85	-2.861	-0.0016	-2.5 to 2.5	Pass
				-10	3.85	-2.432	-0.0014	-2.5 to 2.5	Pass
				0	3.85	-1.974	-0.0011	-2.5 to 2.5	Pass
				10	3.85	-2.704	-0.0015	-2.5 to 2.5	Pass
				30	3.85	-2.017	-0.0012	-2.5 to 2.5	Pass
				40	3.85	-1.373	-0.0008	-2.5 to 2.5	Pass
				50	3.85	0.257	0.0001	-2.5 to 2.5	Pass

2.6 B4_20MHz

2.6.1 Test Result

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	-5.894	-0.0034	-2.5 to 2.5	Pass			
					3.85	-4.592	-0.0027	-2.5 to 2.5	Pass			
					4.43	-1.545	-0.0009	-2.5 to 2.5	Pass			
				-30	3.85	-5.665	-0.0033	-2.5 to 2.5	Pass			
				-20	3.85	-1.402	-0.0008	-2.5 to 2.5	Pass			
				-10	3.85	0.486	0.0003	-2.5 to 2.5	Pass			
				0	3.85	0.715	0.0004	-2.5 to 2.5	Pass			
				10	3.85	3.262	0.0019	-2.5 to 2.5	Pass			
				30	3.85	-0.858	-0.0005	-2.5 to 2.5	Pass			
				40	3.85	-3.018	-0.0018	-2.5 to 2.5	Pass			
				50	3.85	1.287	0.0007	-2.5 to 2.5	Pass			
				1732.5	100	0	20	3.27	-0.730	-0.0004	-2.5 to 2.5	Pass
								3.85	0.329	0.0002	-2.5 to 2.5	Pass
								4.43	-4.148	-0.0024	-2.5 to 2.5	Pass
							-30	3.85	2.289	0.0013	-2.5 to 2.5	Pass
	-20	3.85	6.509				0.0038	-2.5 to 2.5	Pass			
	-10	3.85	-4.978				-0.0029	-2.5 to 2.5	Pass			
	0	3.85	-0.744				-0.0004	-2.5 to 2.5	Pass			
	10	3.85	2.375				0.0014	-2.5 to 2.5	Pass			
	30	3.85	4.177				0.0024	-2.5 to 2.5	Pass			
	40	3.85	3.548	0.0020	-2.5 to 2.5	Pass						
	50	3.85	-0.386	-0.0002	-2.5 to 2.5	Pass						
	1745	100	0	20	3.27	-5.851	-0.0034	-2.5 to 2.5	Pass			
					3.85	0.501	0.0003	-2.5 to 2.5	Pass			
					4.43	-0.858	-0.0005	-2.5 to 2.5	Pass			
				-30	3.85	-1.245	-0.0007	-2.5 to 2.5	Pass			
				-20	3.85	-0.157	-0.0001	-2.5 to 2.5	Pass			
				-10	3.85	-1.888	-0.0011	-2.5 to 2.5	Pass			
				0	3.85	0.415	0.0002	-2.5 to 2.5	Pass			
				10	3.85	3.247	0.0019	-2.5 to 2.5	Pass			

				30	3.85	3.104	0.0018	-2.5 to 2.5	Pass
				40	3.85	3.290	0.0019	-2.5 to 2.5	Pass
				50	3.85	-4.234	-0.0024	-2.5 to 2.5	Pass
16QAM	1720	100	0	20	3.27	-0.401	-0.0002	-2.5 to 2.5	Pass
					3.85	-0.472	-0.0003	-2.5 to 2.5	Pass
					4.43	-5.150	-0.0030	-2.5 to 2.5	Pass
				-30	3.85	-2.918	-0.0017	-2.5 to 2.5	Pass
				-20	3.85	-2.518	-0.0015	-2.5 to 2.5	Pass
				-10	3.85	-0.930	-0.0005	-2.5 to 2.5	Pass
				0	3.85	0.043	0.0000	-2.5 to 2.5	Pass
				10	3.85	0.558	0.0003	-2.5 to 2.5	Pass
				30	3.85	-5.207	-0.0030	-2.5 to 2.5	Pass
	40	3.85	-1.702	-0.0010	-2.5 to 2.5	Pass			
	50	3.85	0.215	0.0001	-2.5 to 2.5	Pass			
	1732.5	100	0	20	3.27	-1.931	-0.0011	-2.5 to 2.5	Pass
					3.85	-0.415	-0.0002	-2.5 to 2.5	Pass
					4.43	0.501	0.0003	-2.5 to 2.5	Pass
				-30	3.85	-0.443	-0.0003	-2.5 to 2.5	Pass
				-20	3.85	-0.429	-0.0002	-2.5 to 2.5	Pass
				-10	3.85	0.844	0.0005	-2.5 to 2.5	Pass
				0	3.85	2.031	0.0012	-2.5 to 2.5	Pass
				10	3.85	-1.574	-0.0009	-2.5 to 2.5	Pass
				30	3.85	-1.087	-0.0006	-2.5 to 2.5	Pass
	40	3.85	0.930	0.0005	-2.5 to 2.5	Pass			
	50	3.85	1.588	0.0009	-2.5 to 2.5	Pass			
	1745	100	0	20	3.27	-1.001	-0.0006	-2.5 to 2.5	Pass
					3.85	-2.289	-0.0013	-2.5 to 2.5	Pass
					4.43	-1.774	-0.0010	-2.5 to 2.5	Pass
				-30	3.85	-2.003	-0.0011	-2.5 to 2.5	Pass
				-20	3.85	-0.730	-0.0004	-2.5 to 2.5	Pass
-10				3.85	-1.931	-0.0011	-2.5 to 2.5	Pass	
0				3.85	-1.845	-0.0011	-2.5 to 2.5	Pass	
10				3.85	-1.516	-0.0009	-2.5 to 2.5	Pass	
30				3.85	-1.688	-0.0010	-2.5 to 2.5	Pass	
40	3.85	-1.116	-0.0006	-2.5 to 2.5	Pass				
50	3.85	-0.443	-0.0003	-2.5 to 2.5	Pass				

3. Modulation Characteristics

3.1 B4_1.4MHz

3.1.1 Test Result

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 Test Graph

Band4_1.4MHz_QPSK_MCH_1732.5MHz_RB_6_0_NTNV

CMW 500 V 3.7.160 - LTE Measurement - V3.7.70 - TX Measurement

Multi Evaluation PRACH SRS

FDD Freq.: 1732.5MHz Ref. Level: 41.00 dBm BW: 1.4 MHz CP: Normal Meas Subfr./Slot: 0 / All

IQ Constellation

Statistic Count: 20 / 20
 Out of Tolerance: 0.00 %
 Detected Modulation: QPSK
 Detected Channel Type: PUSCH
 View Filter Throughput: 100.0 %

PS: Connection Established RRC State: Connected

Go To Local Show Remote Screen

LTE Multi Evaluation RDY RF Settings Trigger Display Signaling Parameter LTE Signaling Run

Band4_1.4MHz_16QAM_MCH_1732.5MHz_RB_6_0_NTNV

CMW 500 V 3.7.160 - LTE Measurement - V3.7.70 - TX Measurement

Multi Evaluation PRACH SRS

FDD Freq.: 1732.5MHz Ref. Level: 41.00 dBm BW: 1.4 MHz CP: Normal Meas Subfr./Slot: 0 / All

IQ Constellation

Statistic Count: 20 / 20
 Out of Tolerance: 0.00 %
 Detected Modulation: 16-QAM
 Detected Channel Type: PUSCH
 View Filter Throughput: 100.0 %

PS: Connection Established RRC State: Connected

Go To Local Show Remote Screen

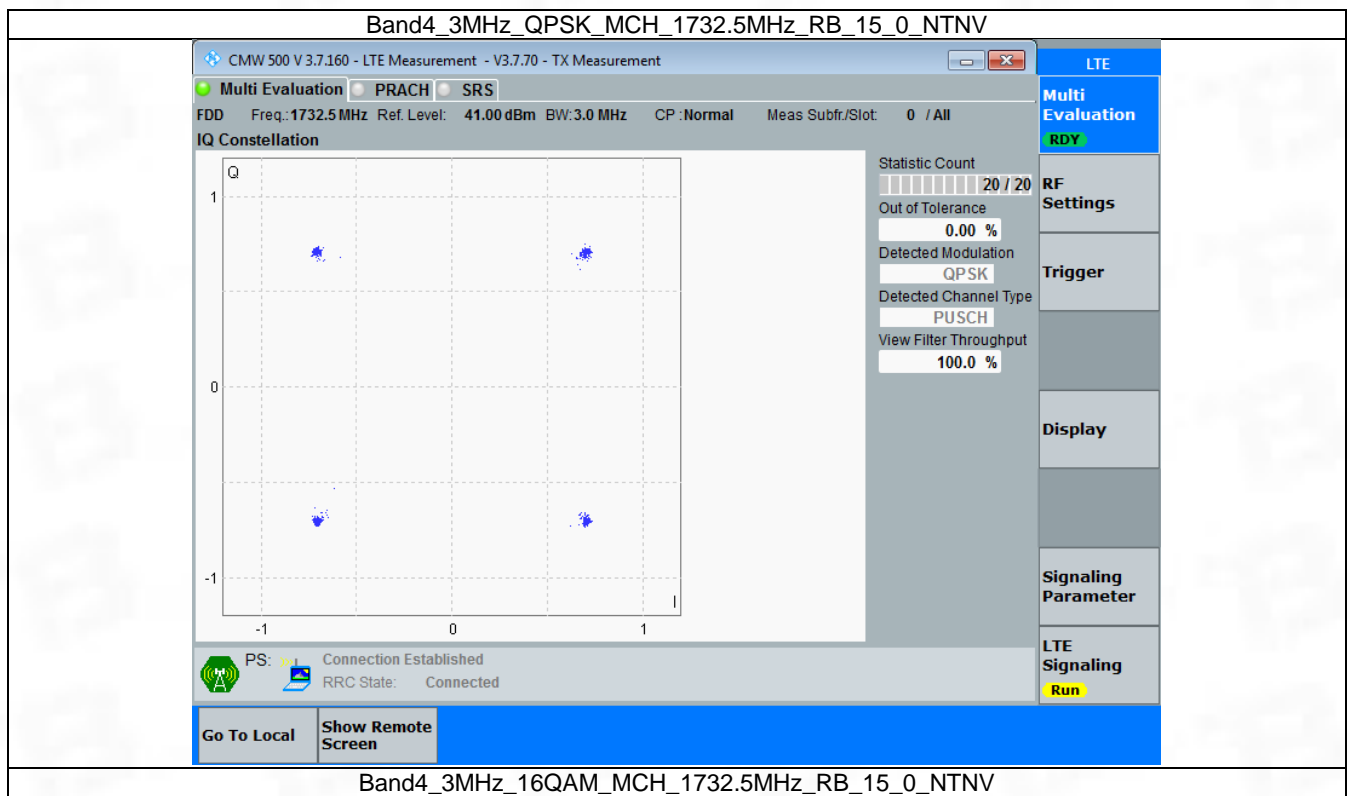
LTE Multi Evaluation RDY RF Settings Trigger Display Signaling Parameter LTE Signaling Run

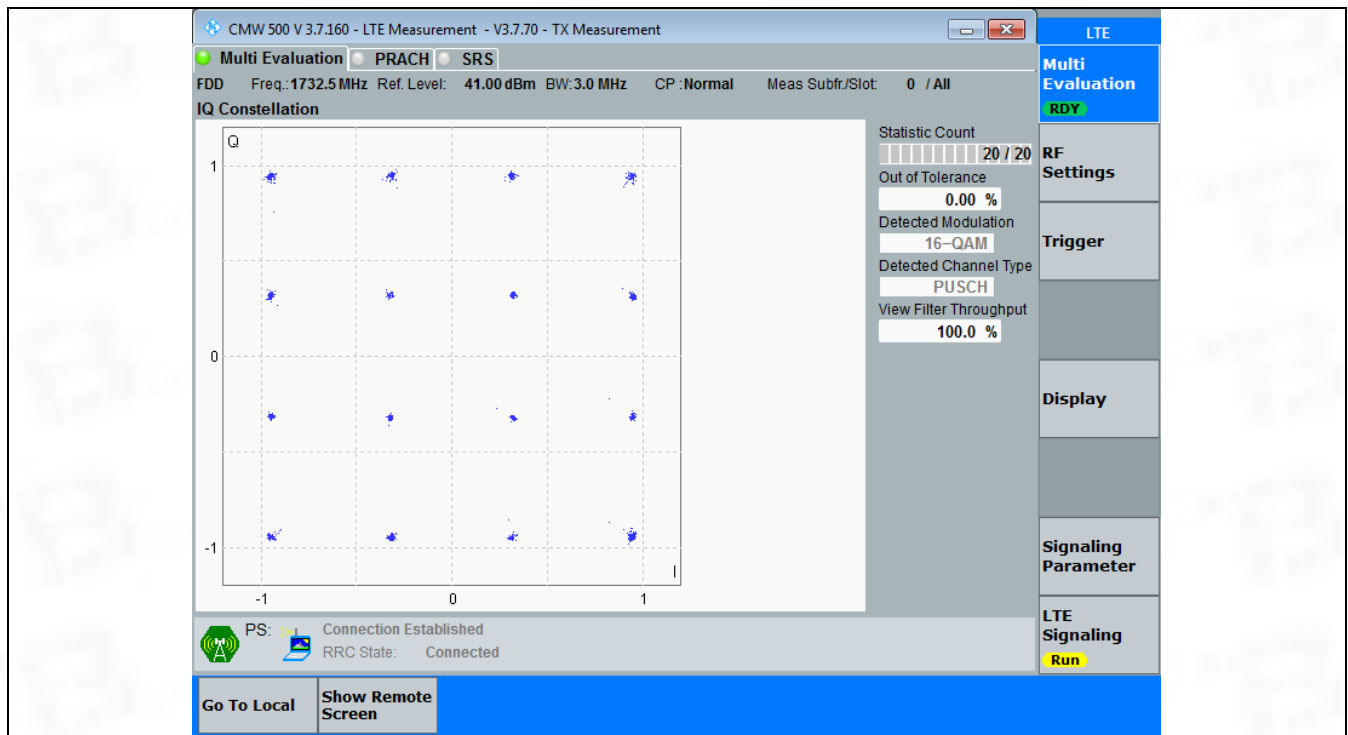
3.2 B4_3MHz

3.2.1 Test Result

Band: 4 / Bandwidth: 3MHz / NTN						
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

3.2.2 Test Graph





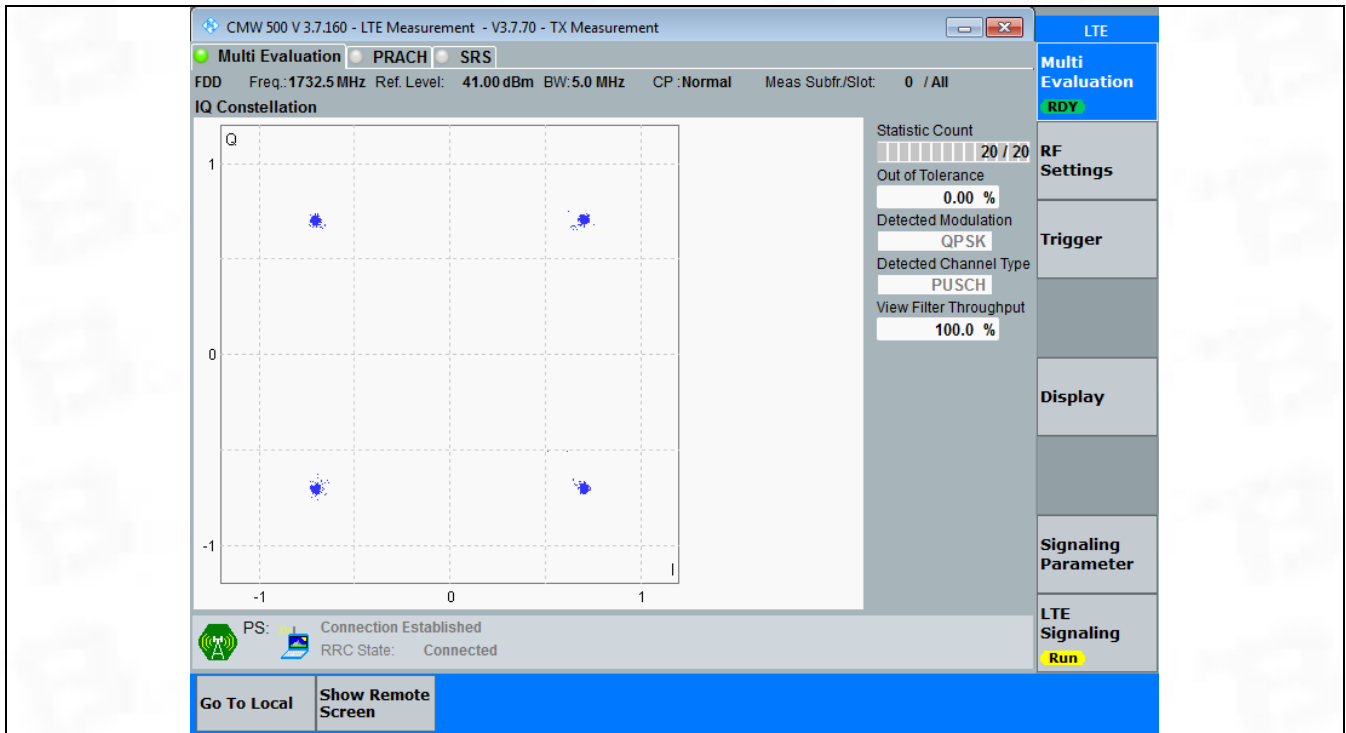
3.3 B4_5MHz

3.3.1 Test Result

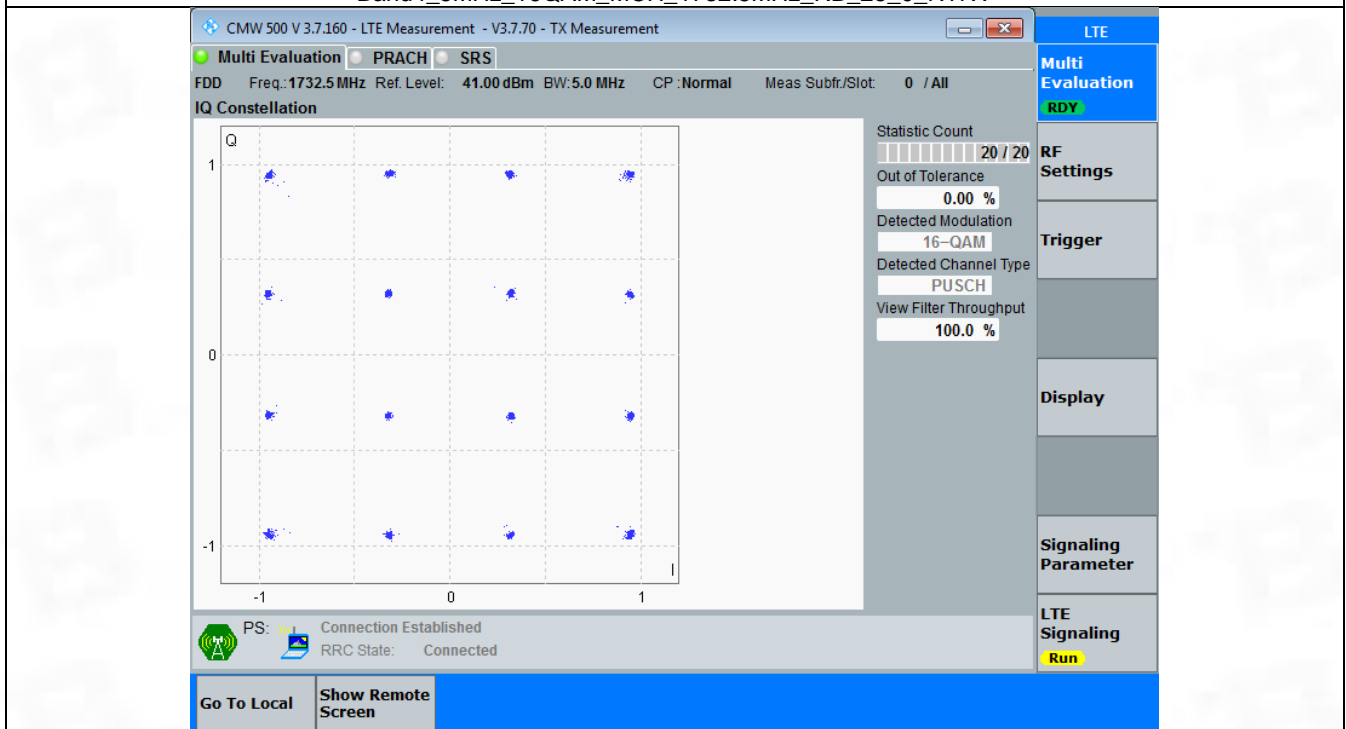
Band: 4 / Bandwidth: 5MHz / NTV						
Modulation	Frequency (MHz)	RB Allocation		Modulation Characteristics		Verdict
		Size	Offset	Result	Limit	
QPSK	1732.5	25	0	Refer To Test Graph		Pass
16QAM	1732.5	25	0	Refer To Test Graph		Pass

3.3.2 Test Graph

Band4_5MHz_QPSK_MCH_1732.5MHz_RB_25_0_NTV



Band4_5MHz_16QAM_MCH_1732.5MHz_RB_25_0_NTNV

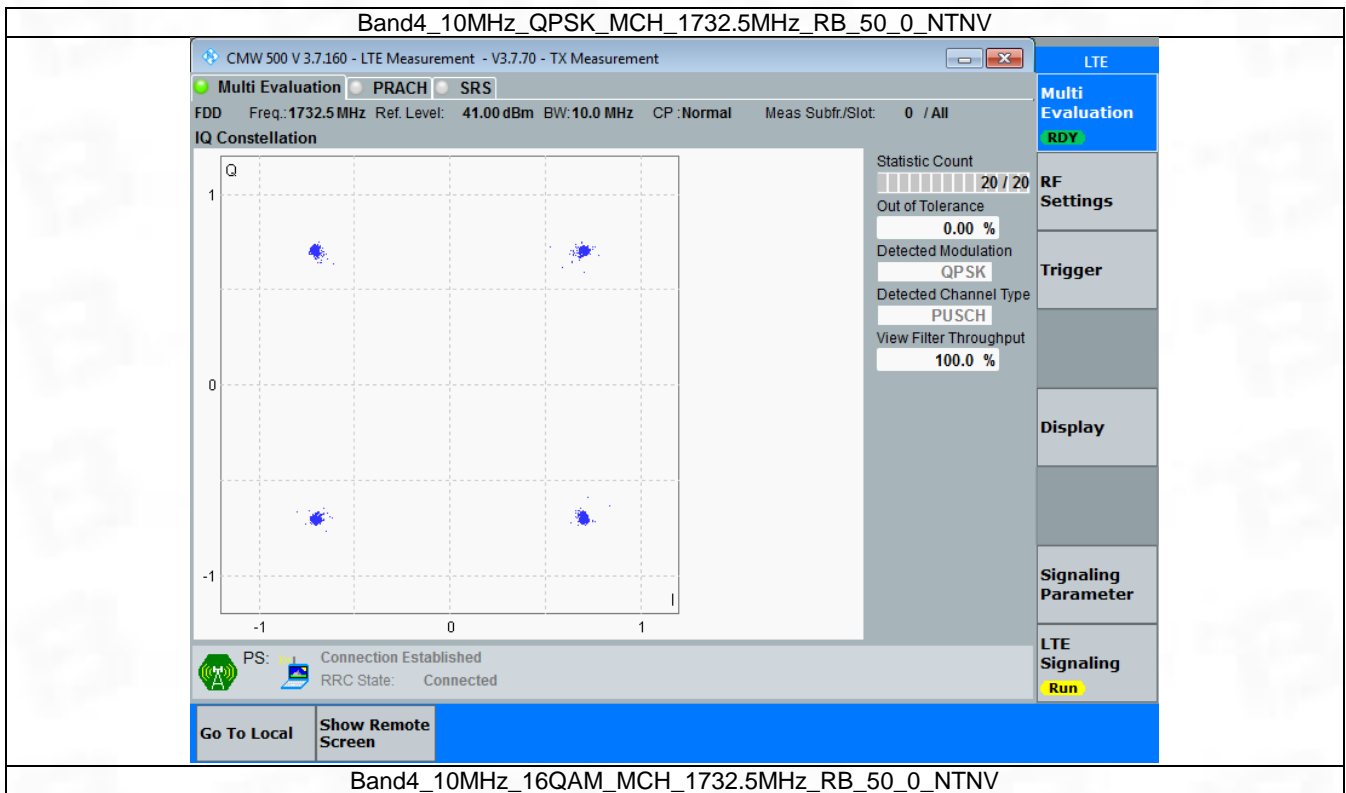


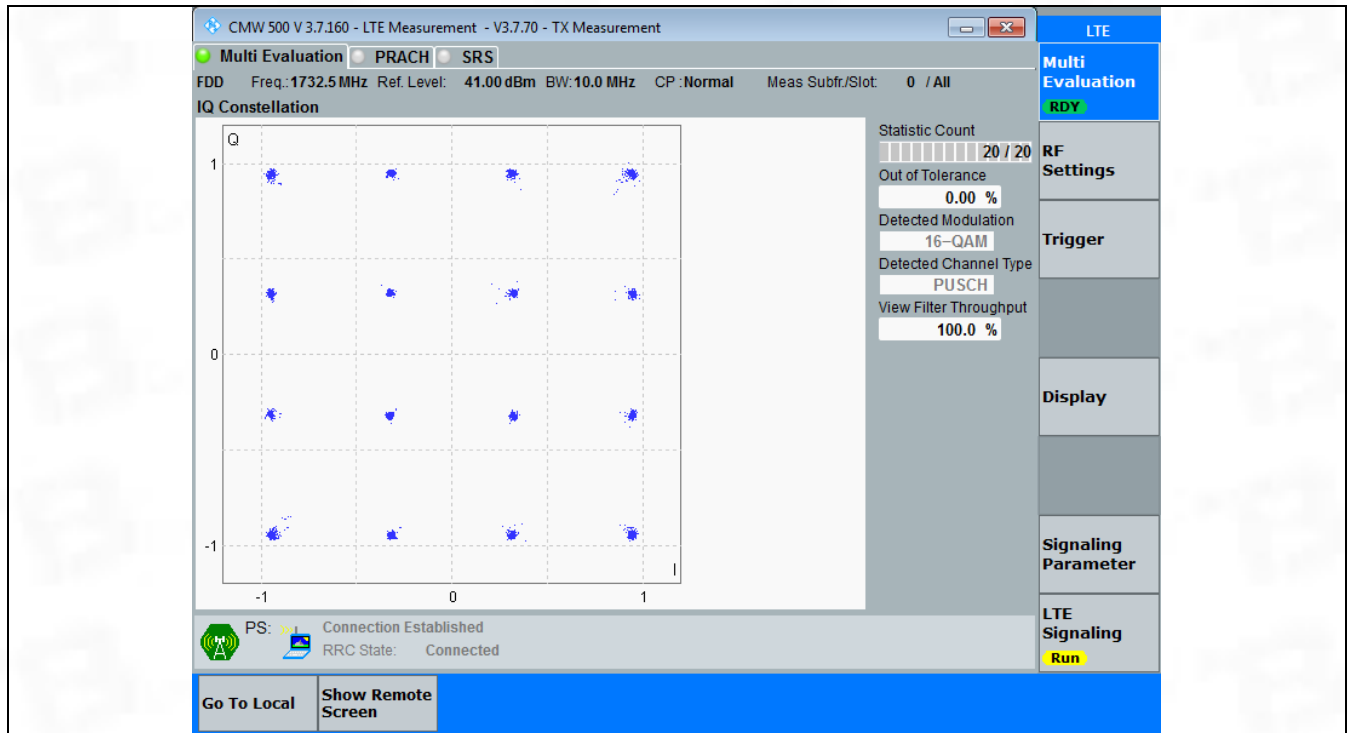
3.4 B4_10MHz

3.4.1 Test Result

Band: 4 / Bandwidth: 10MHz / NTN						
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	50	0	Refer To Test Graph		Pass

3.4.2 Test Graph





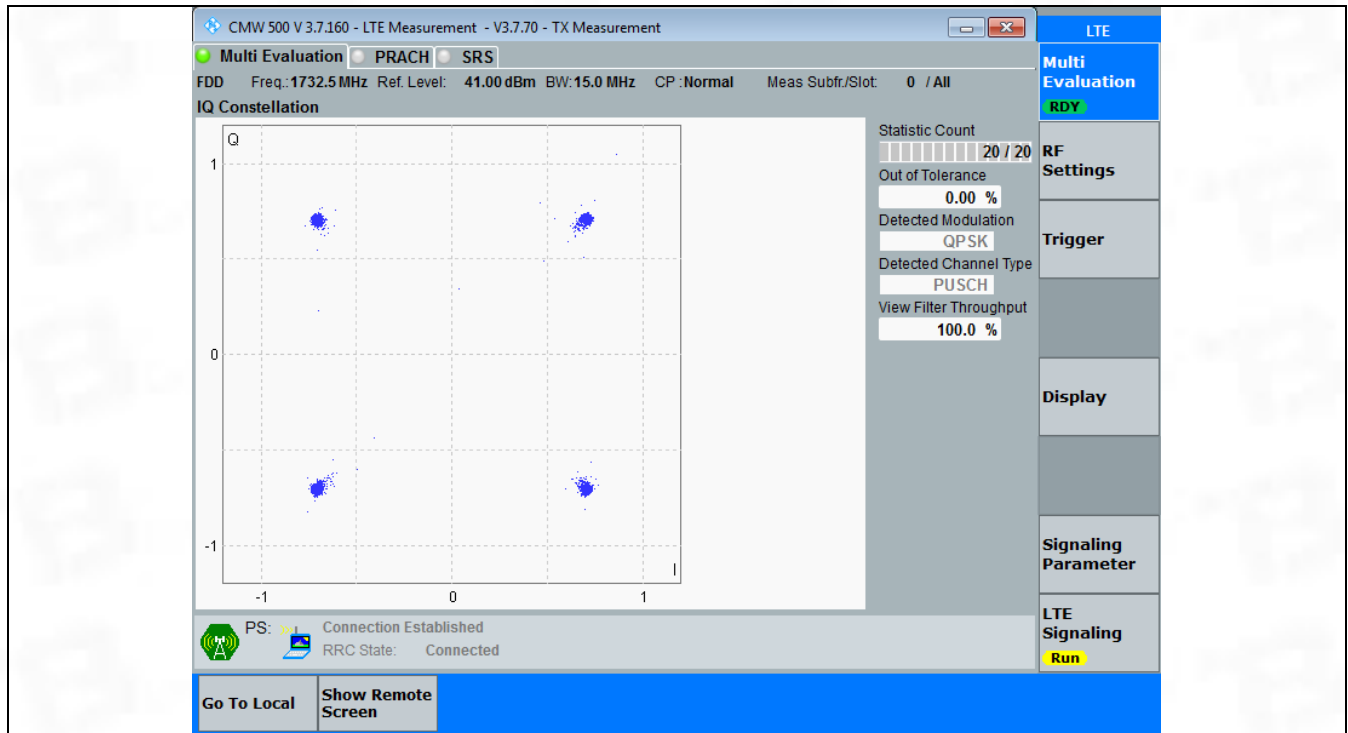
3.5 B4_15MHz

3.5.1 Test Result

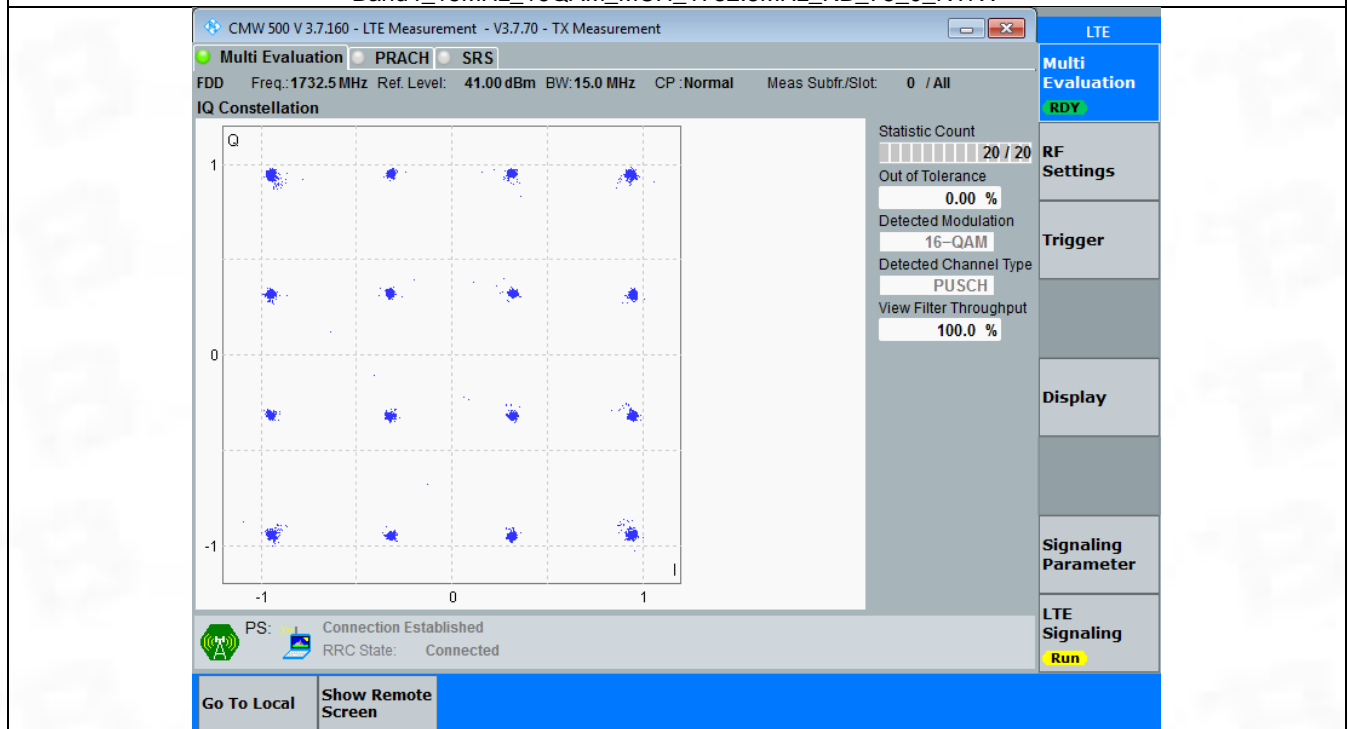
Band: 4 / Bandwidth: 15MHz / NTN						
Modulation	Frequency (MHz)	RB Allocation		Modulation Characteristics		Verdict
		Size	Offset	Result	Limit	
QPSK	1732.5	75	0	Refer To Test Graph		Pass
16QAM	1732.5	75	0	Refer To Test Graph		Pass

3.5.2 Test Graph

Band4_15MHz_QPSK_MCH_1732.5MHz_RB_75_0_NTNV



Band4_15MHz_16QAM_MCH_1732.5MHz_RB_75_0_NTNV

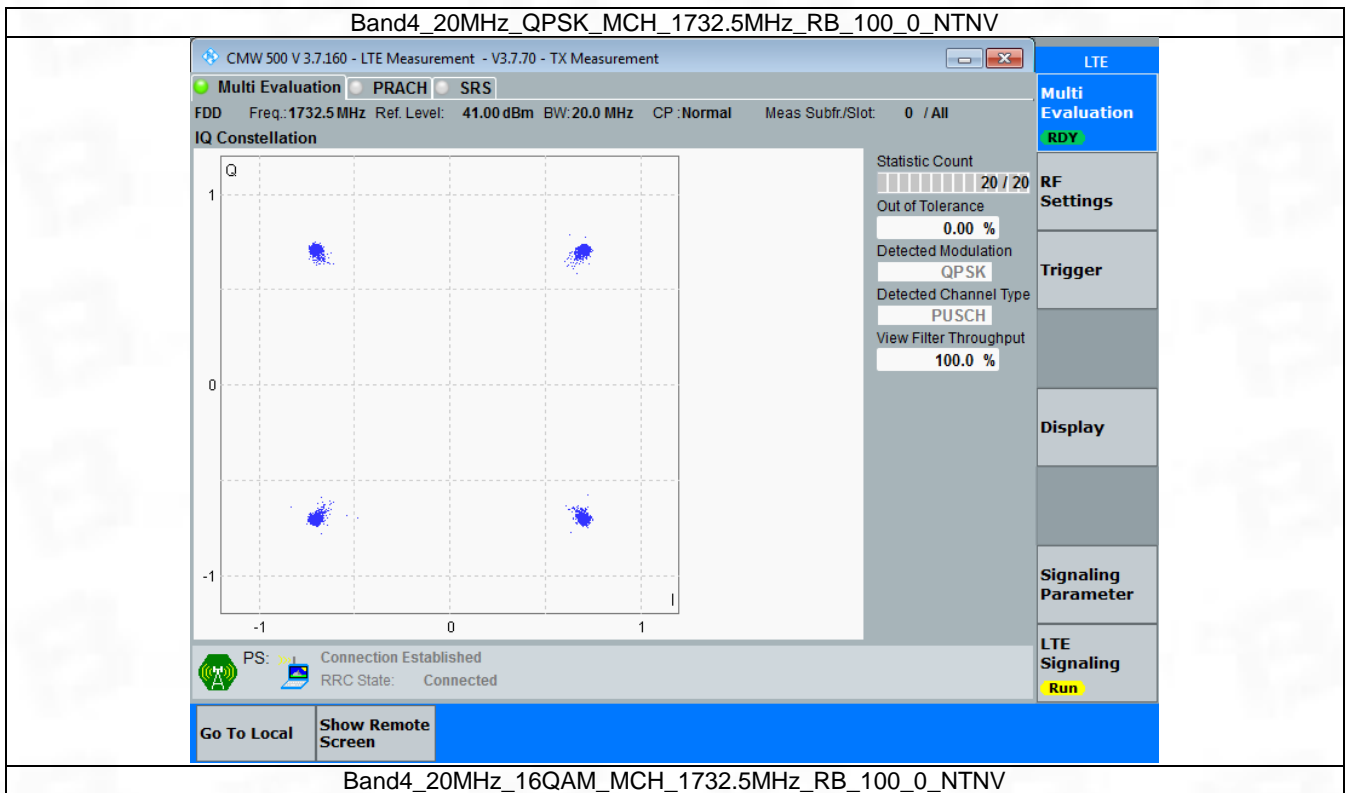


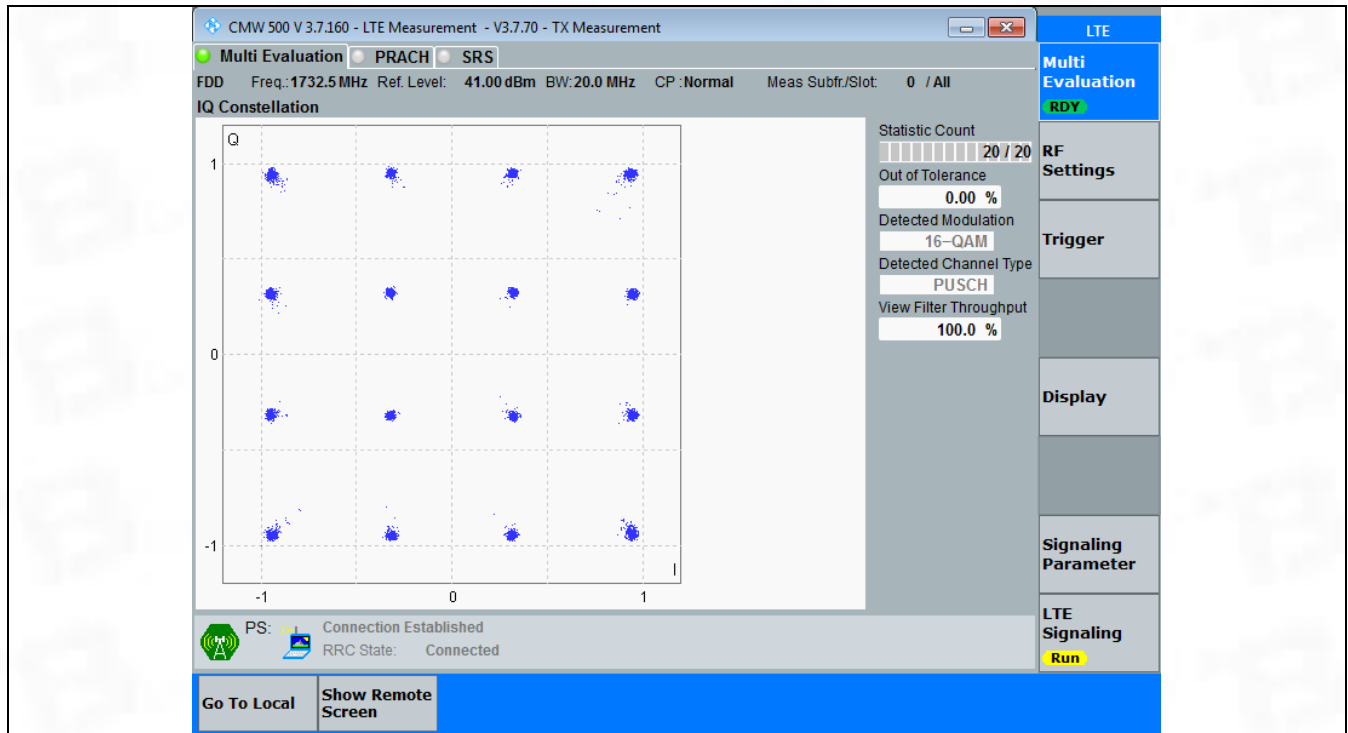
3.6 B4_20MHz

3.6.1 Test Result

Band: 4 / Bandwidth: 20MHz / NTN						
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	100	0	Refer To Test Graph		Pass

3.6.2 Test Graph





4. 99% & 26dB Bandwidth

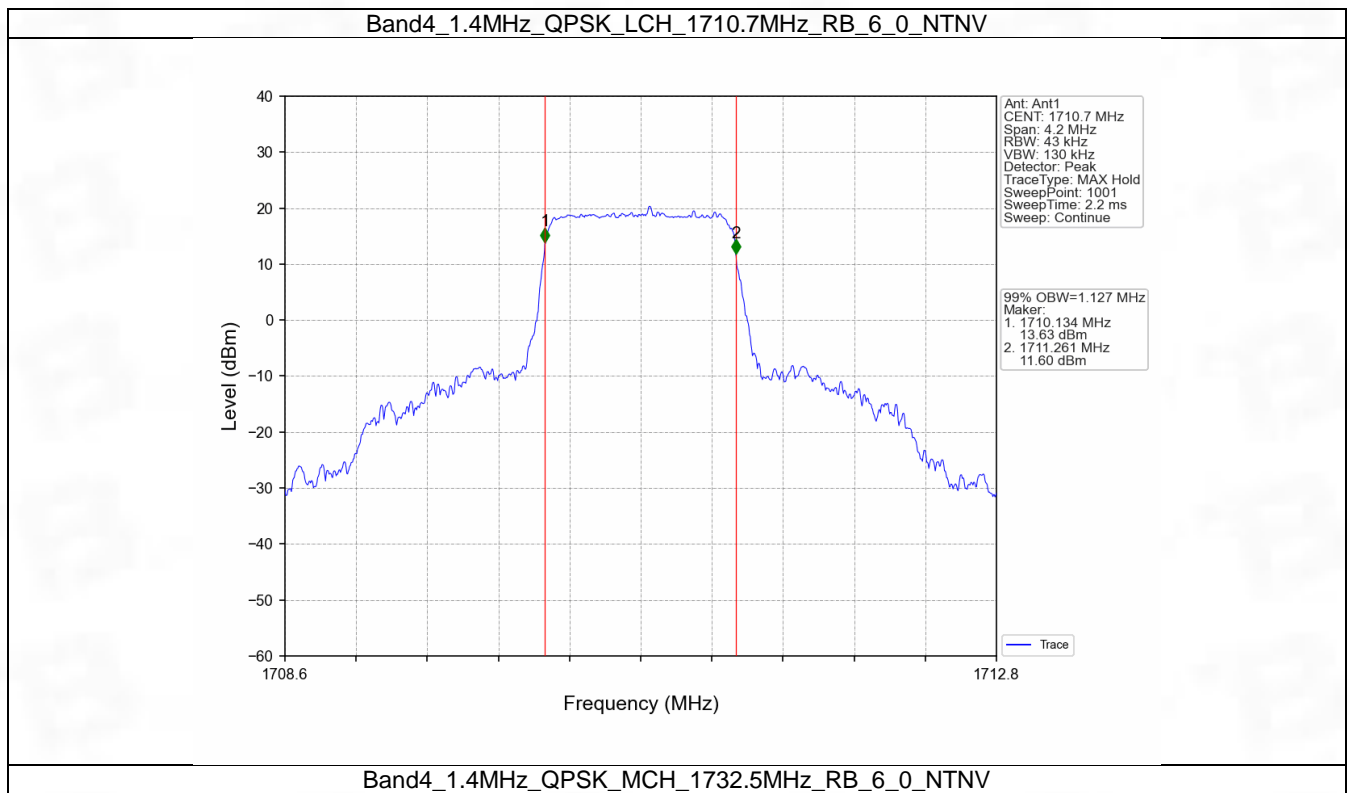
4.1 Band4_OBW

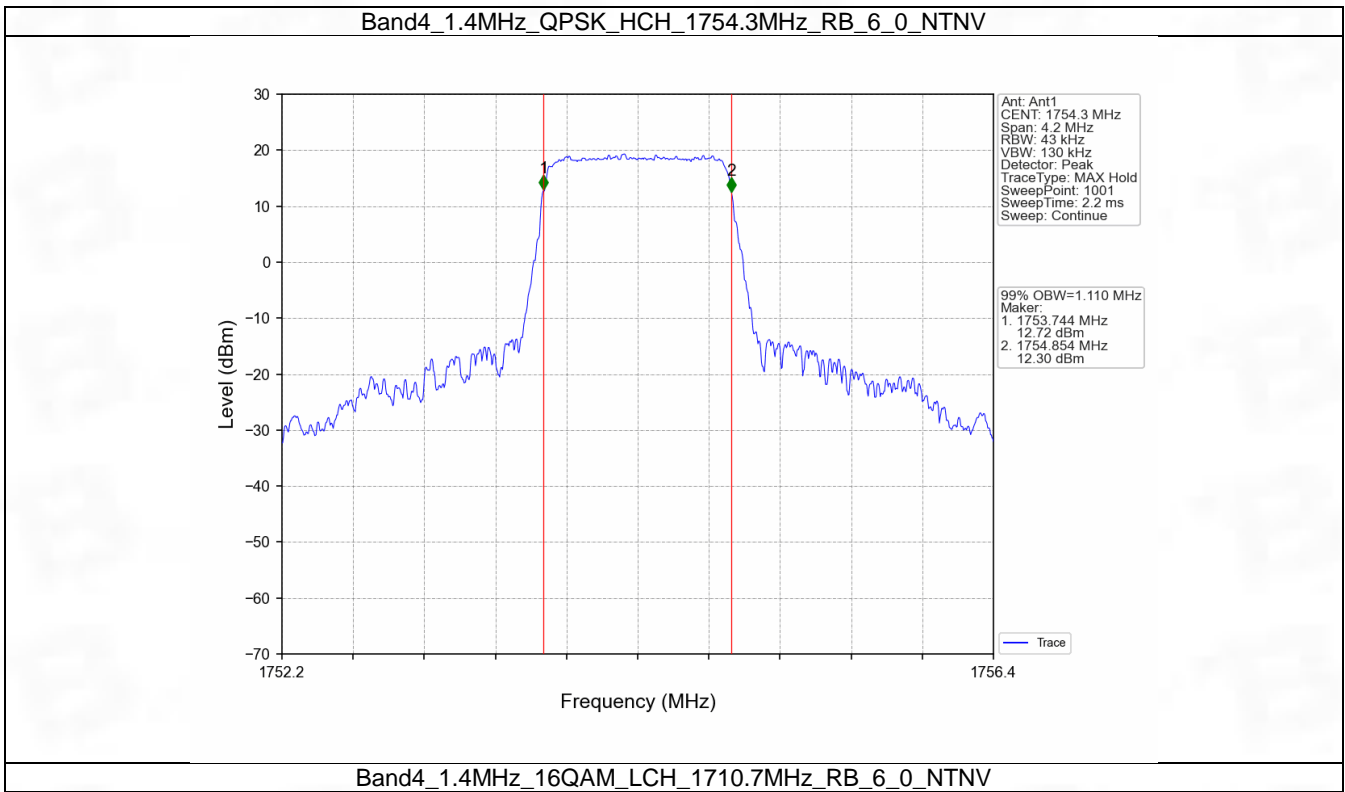
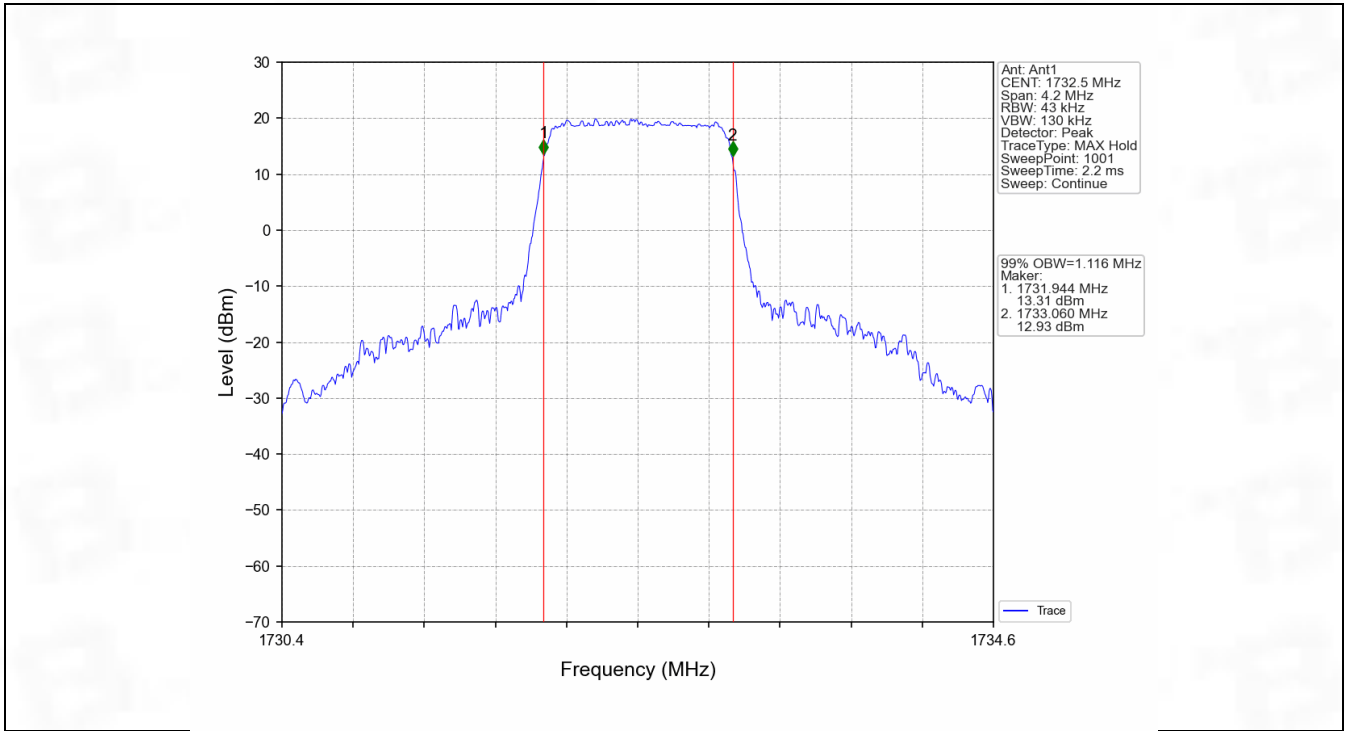
4.1.1 Test Result

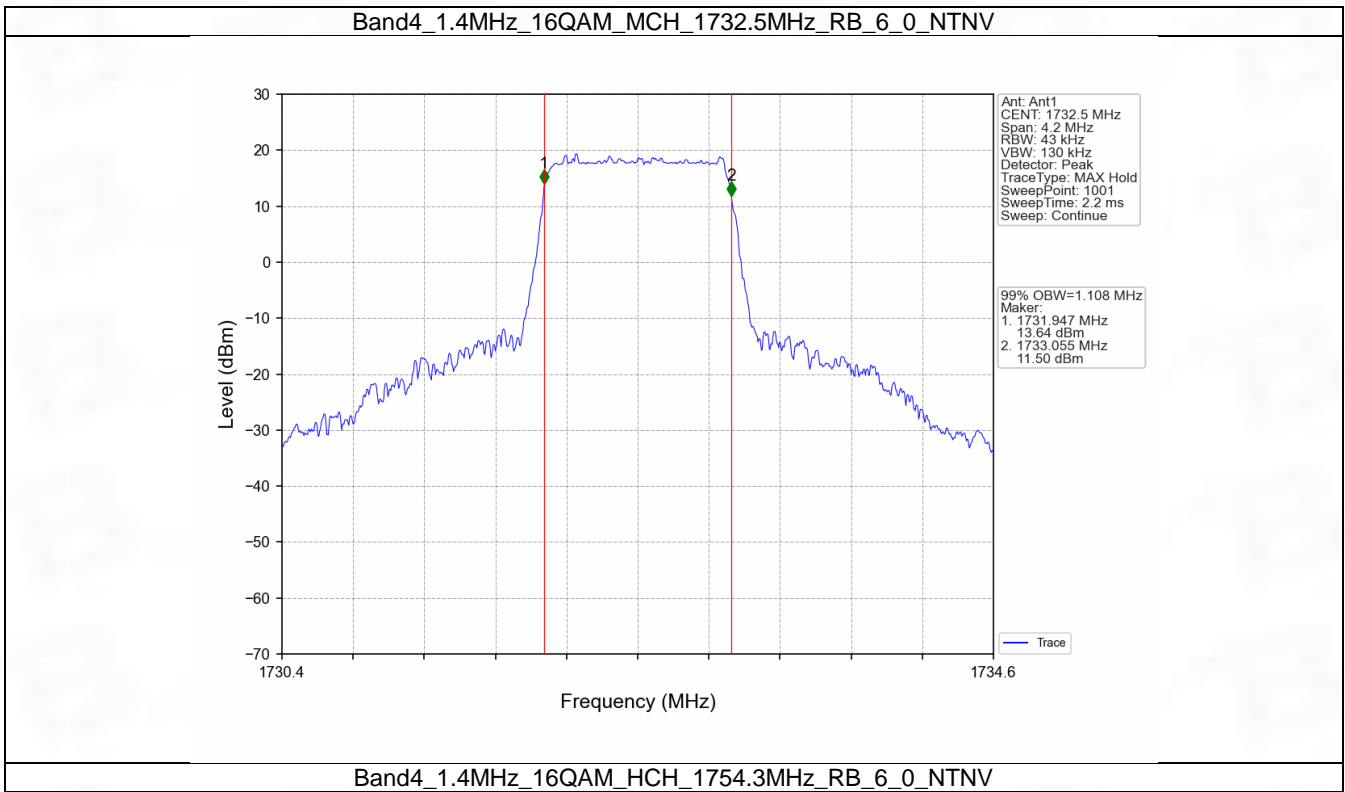
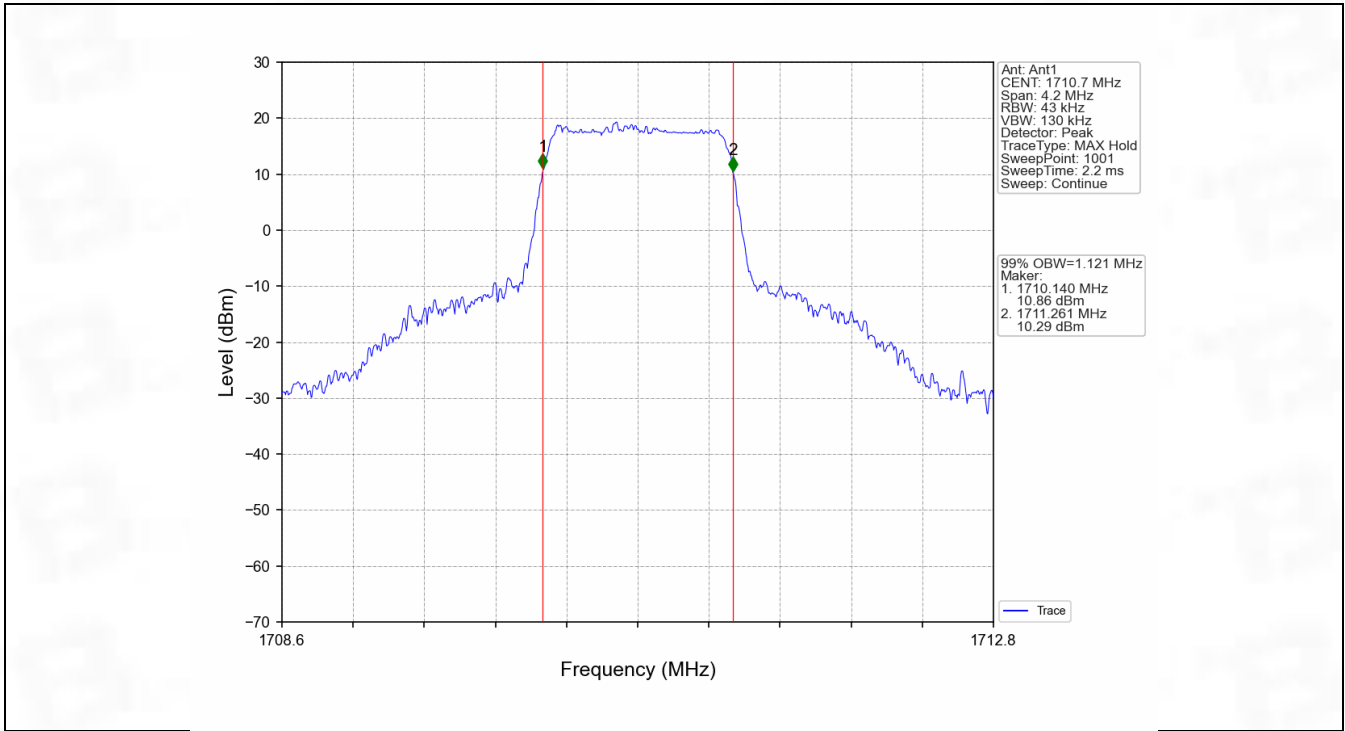
Band: 4 / NTN						
Bandwidth (MHz)	Modulation	Frequency (MHz)	RB Allocation		99% Occupied Bandwidth (MHz)	Verdict
			Size	Offset	Result	
1.4	QPSK	1710.7	6	0	1.127	Pass
		1732.5	6	0	1.116	Pass
		1754.3	6	0	1.110	Pass
	16QAM	1710.7	6	0	1.121	Pass
		1732.5	6	0	1.108	Pass
		1754.3	6	0	1.118	Pass
3	QPSK	1711.5	15	0	2.743	Pass
		1732.5	15	0	2.736	Pass
		1753.5	15	0	2.732	Pass
	16QAM	1711.5	15	0	2.738	Pass
		1732.5	15	0	2.726	Pass
		1753.5	15	0	2.730	Pass
5	QPSK	1712.5	25	0	4.557	Pass
		1732.5	25	0	4.545	Pass
		1752.5	25	0	4.561	Pass
	16QAM	1712.5	25	0	4.569	Pass
		1732.5	25	0	4.562	Pass
		1752.5	25	0	4.534	Pass
10	QPSK	1715	50	0	9.068	Pass

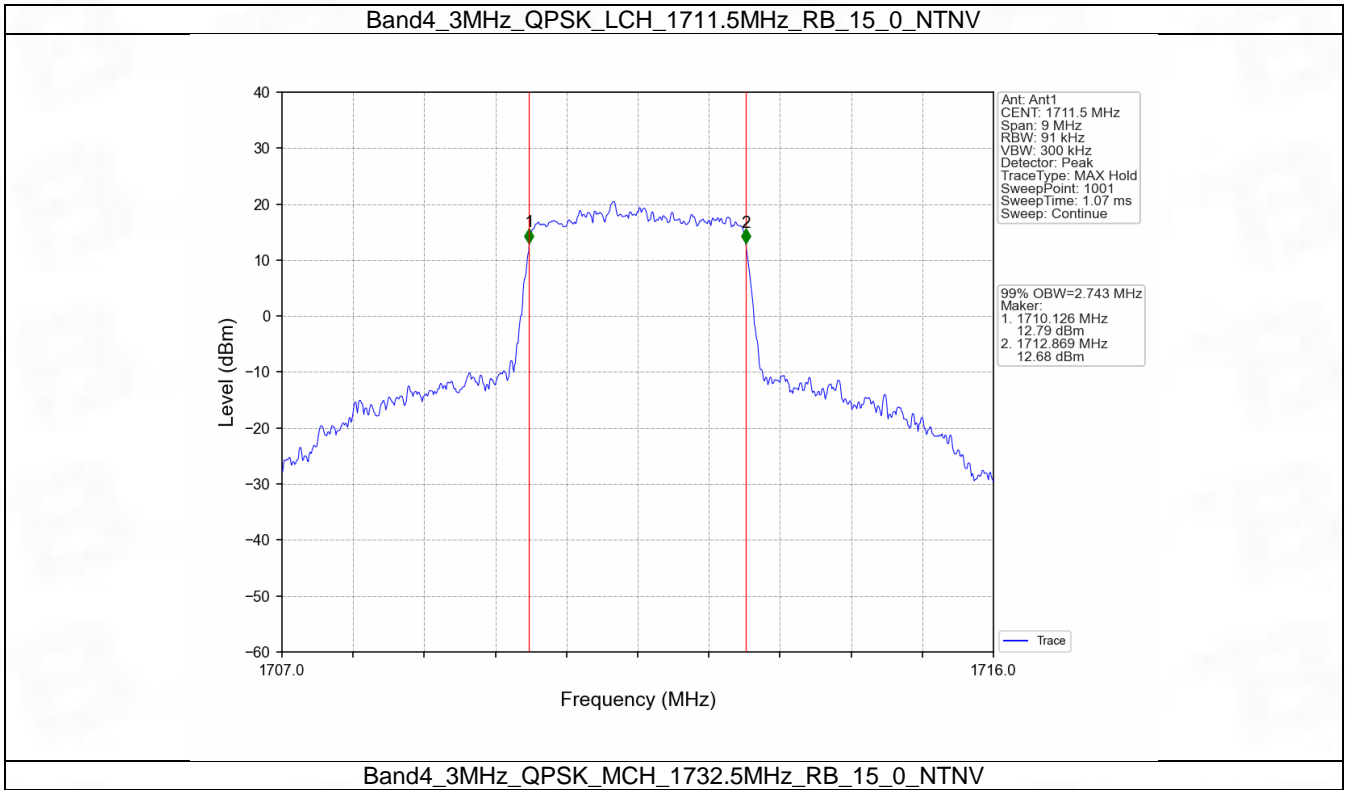
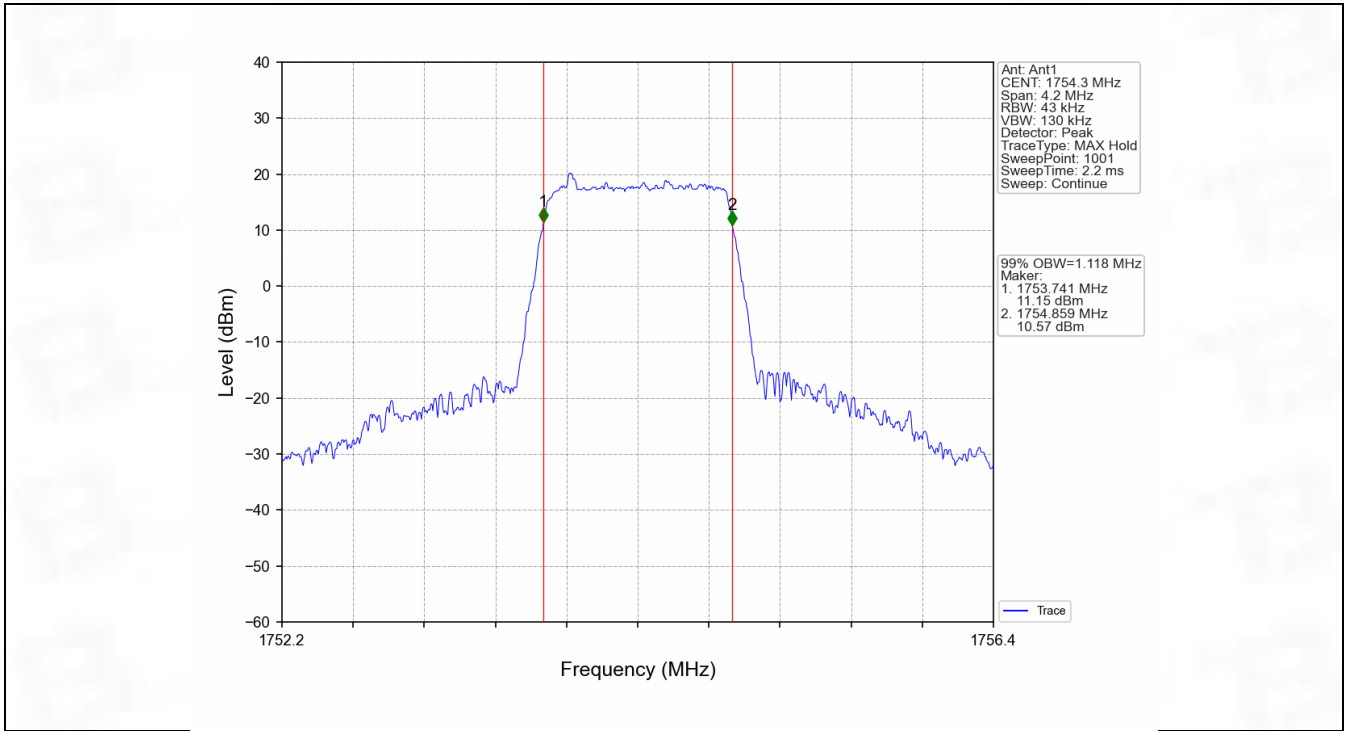
	16QAM	1732.5	50	0	9.022	Pass
		1750	50	0	9.067	Pass
		1715	50	0	9.069	Pass
		1732.5	50	0	9.013	Pass
		1750	50	0	9.087	Pass
15	QPSK	1717.5	75	0	13.661	Pass
		1732.5	75	0	13.490	Pass
		1747.5	75	0	13.613	Pass
	16QAM	1717.5	75	0	13.650	Pass
		1732.5	75	0	13.498	Pass
20	QPSK	1720	100	0	18.152	Pass
		1732.5	100	0	18.004	Pass
		1745	100	0	18.159	Pass
	16QAM	1720	100	0	18.184	Pass
		1732.5	100	0	17.948	Pass
		1745	100	0	18.212	Pass

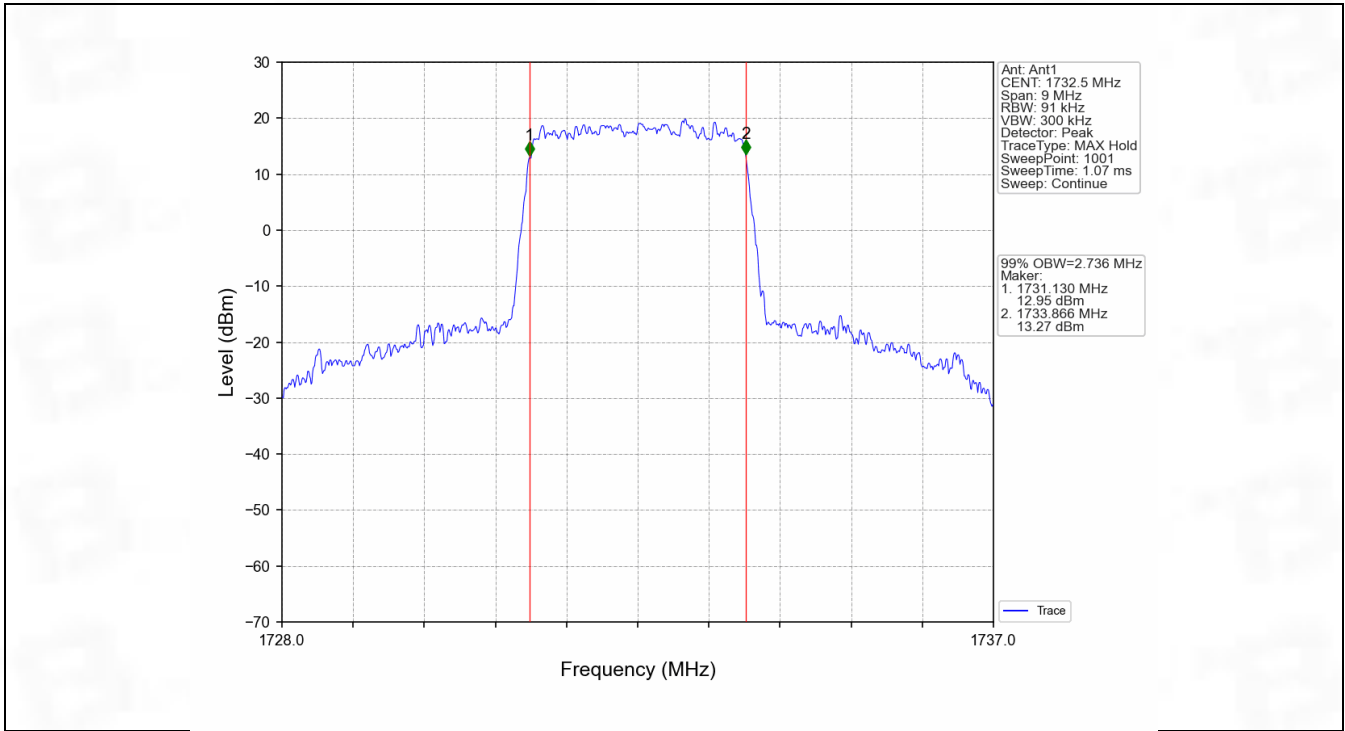
4.1.2 Test Graph



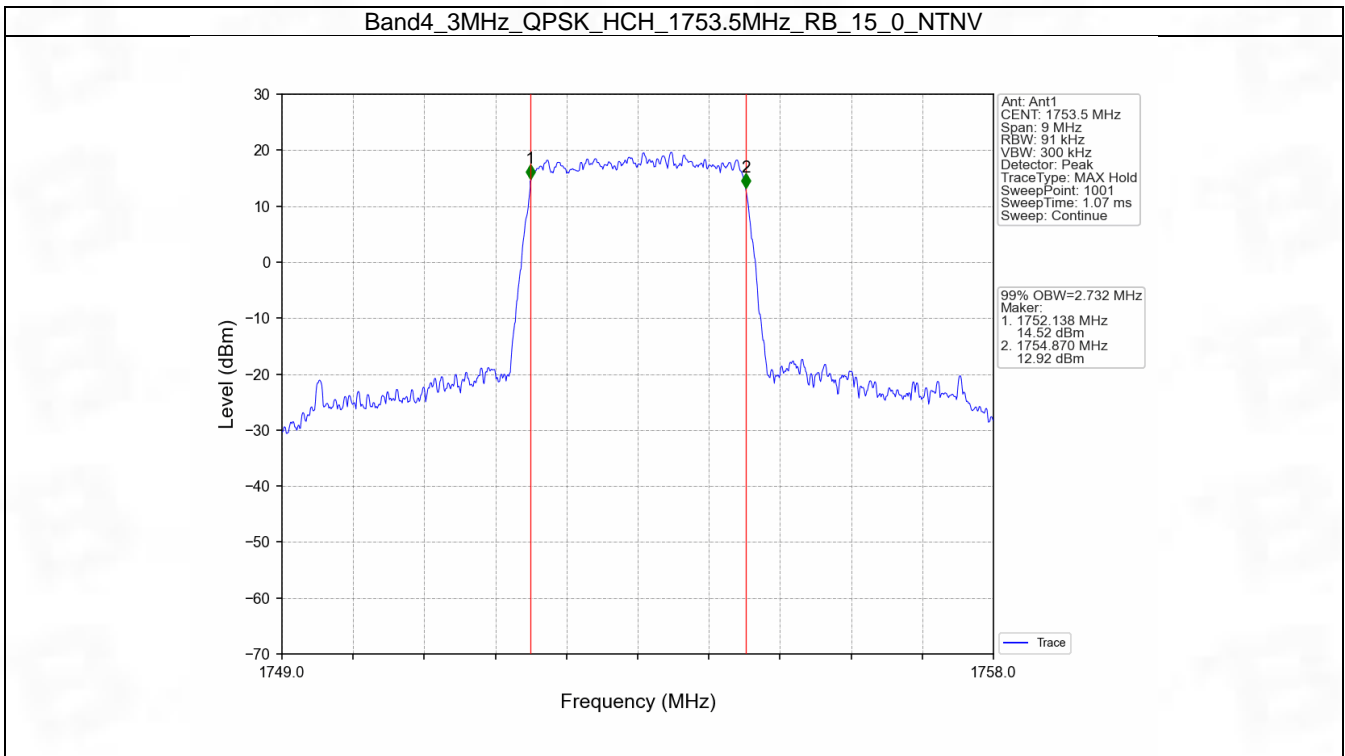




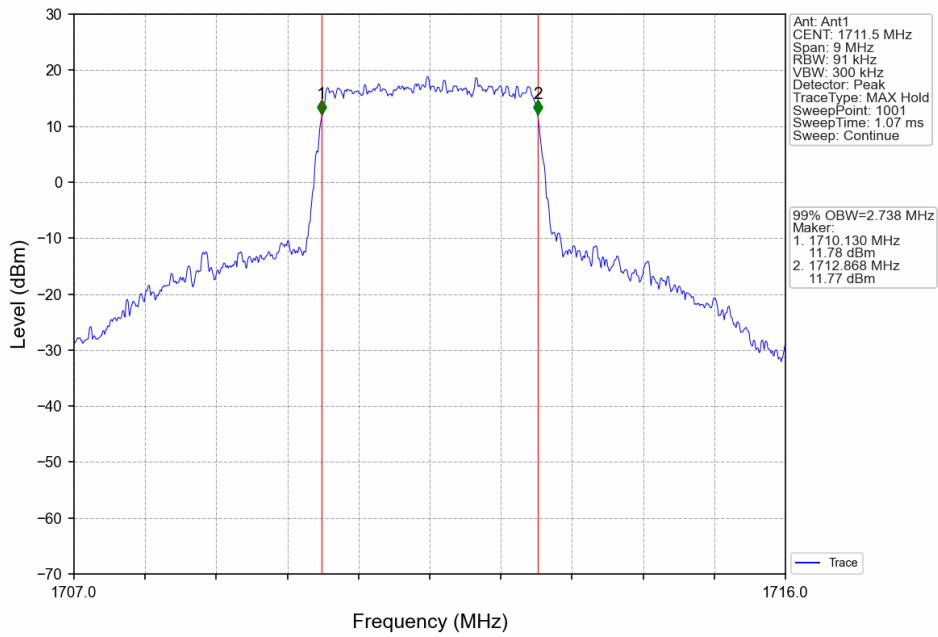




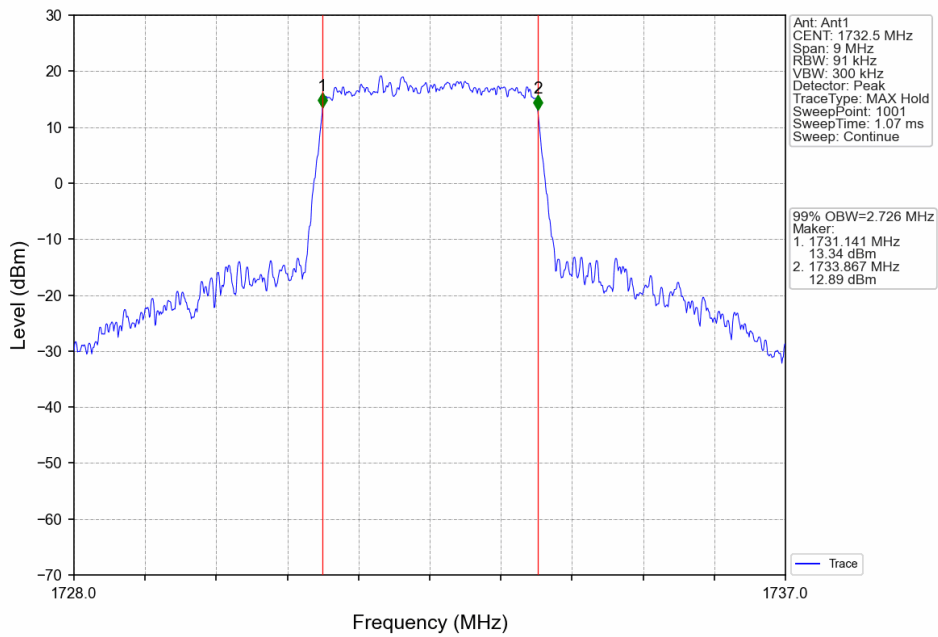
Band4_3MHz_QPSK_HCH_1753.5MHz_RB_15_0_NTNV



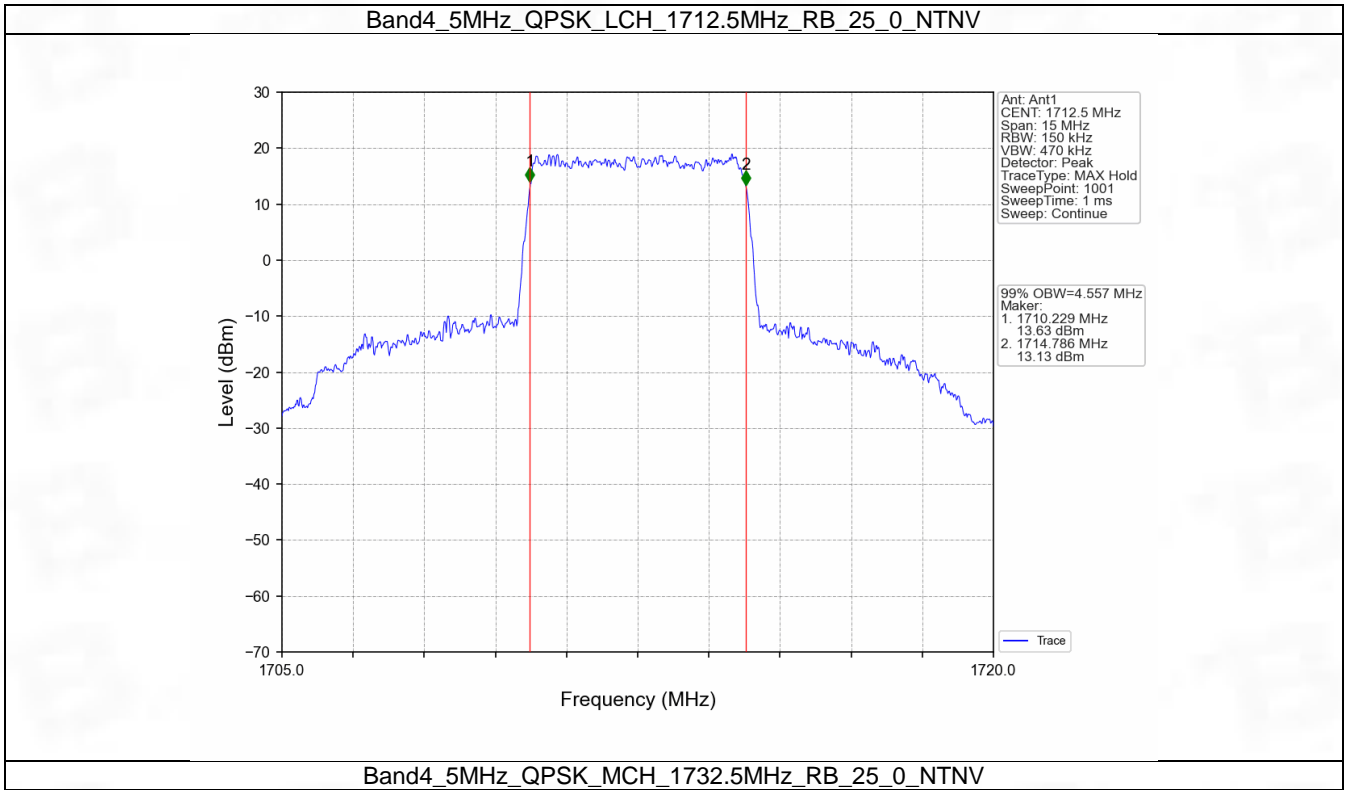
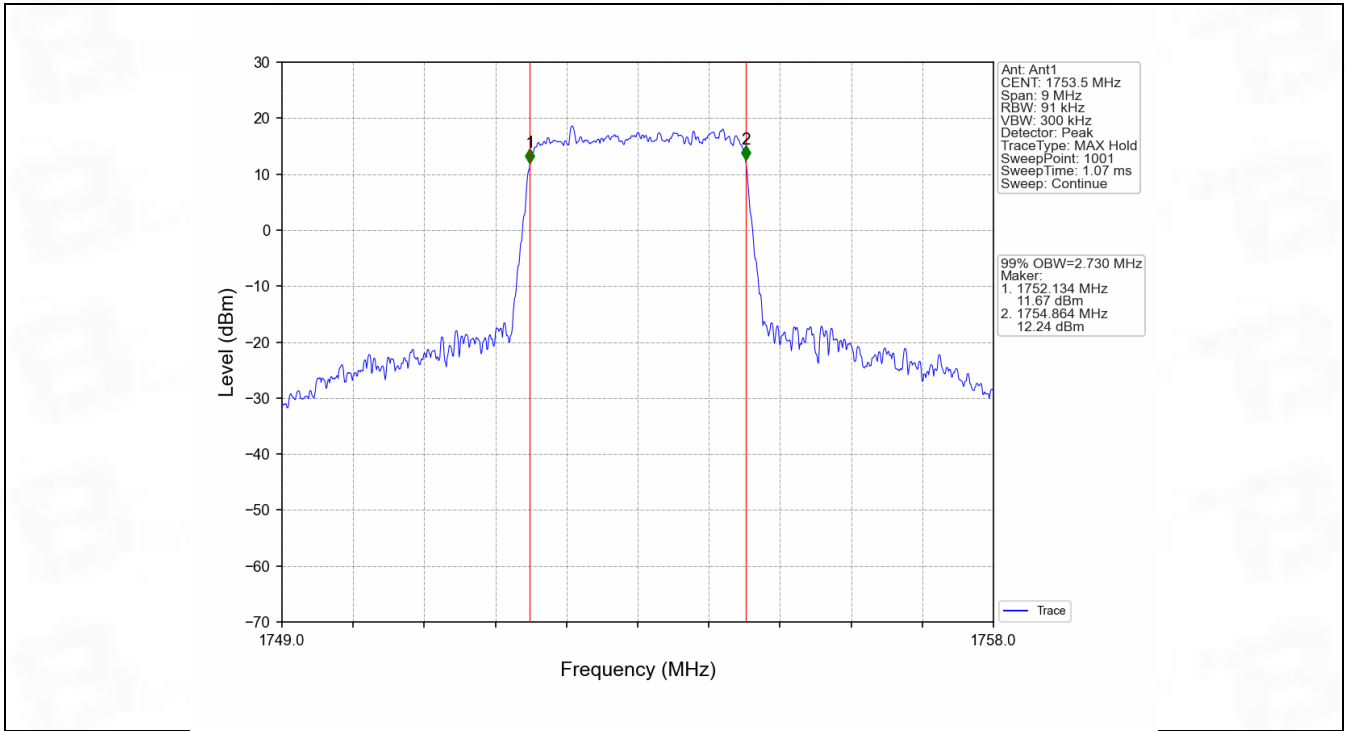
Band4_3MHz_16QAM_LCH_1711.5MHz_RB_15_0_NTNV

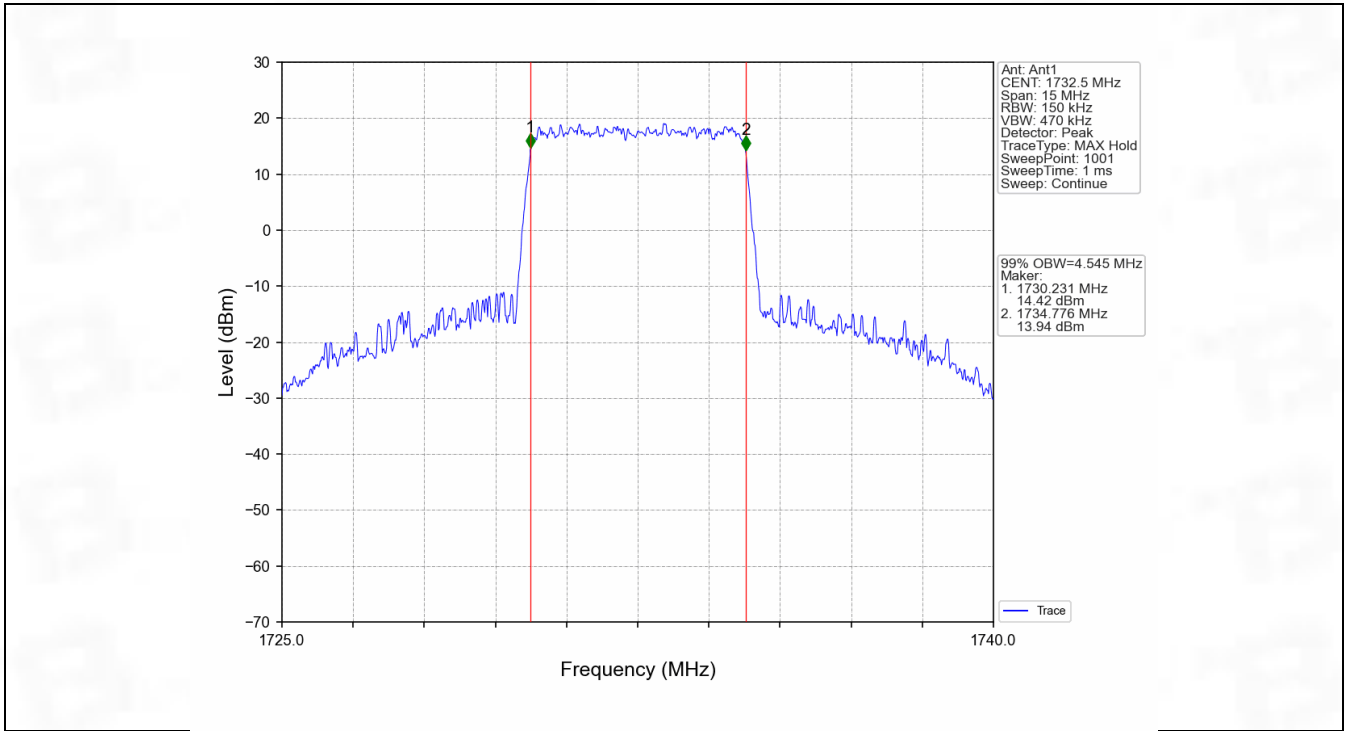


Band4_3MHz_16QAM_MCH_1732.5MHz_RB_15_0_NTNV

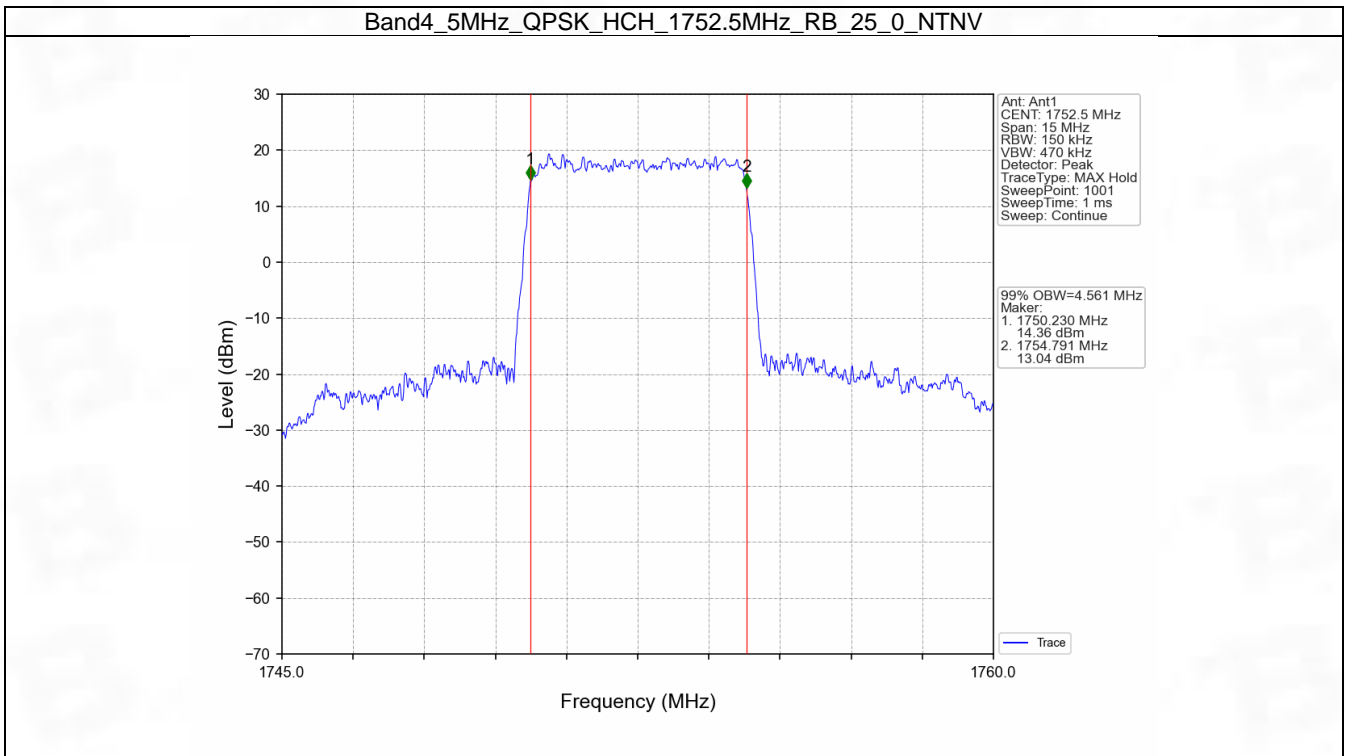


Band4_3MHz_16QAM_HCH_1753.5MHz_RB_15_0_NTNV

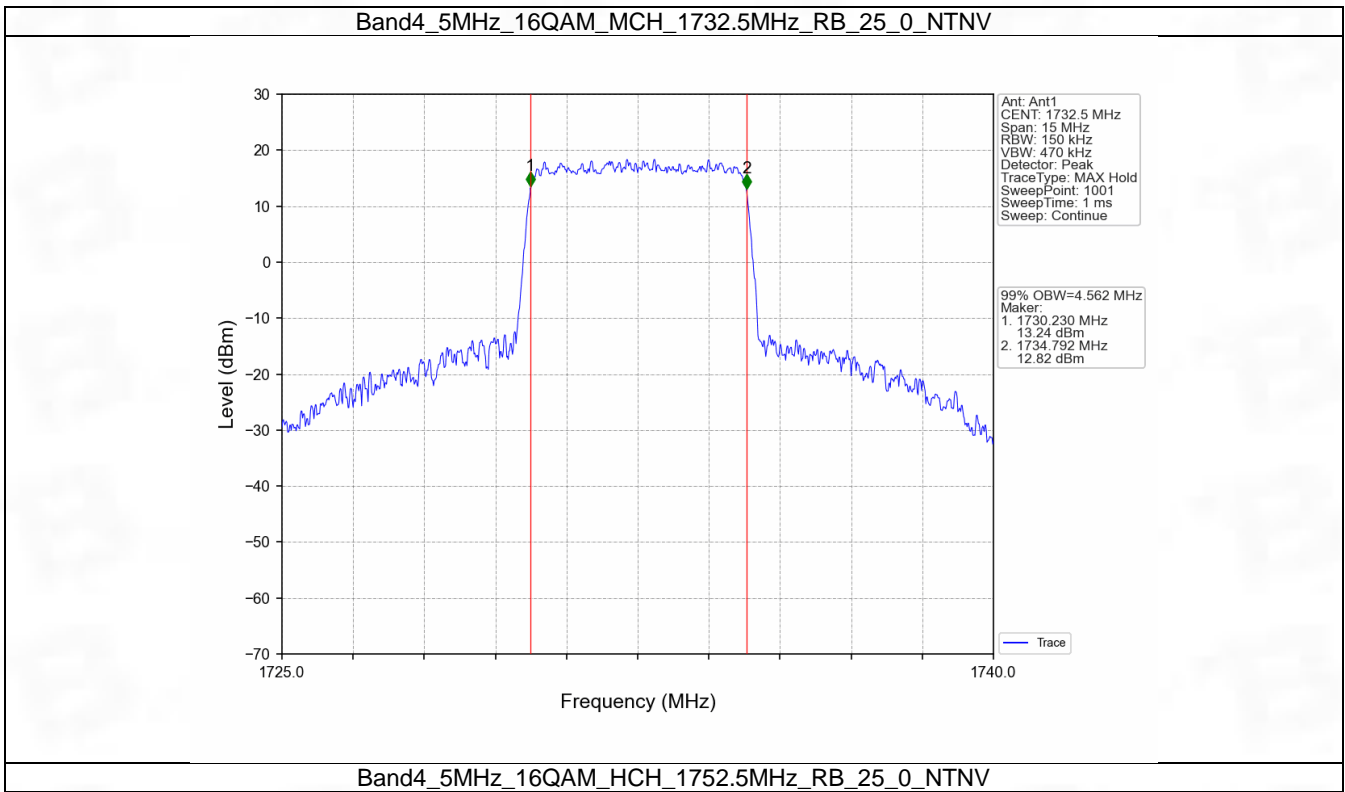
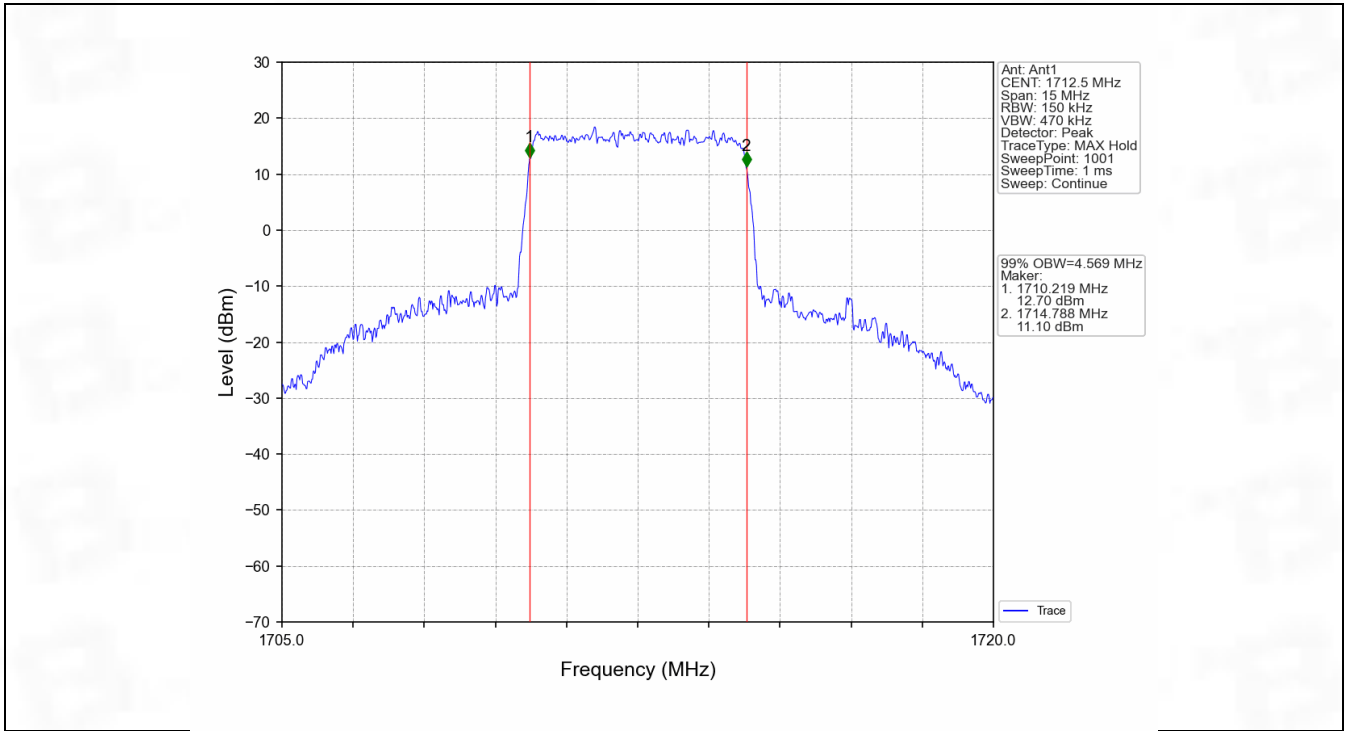


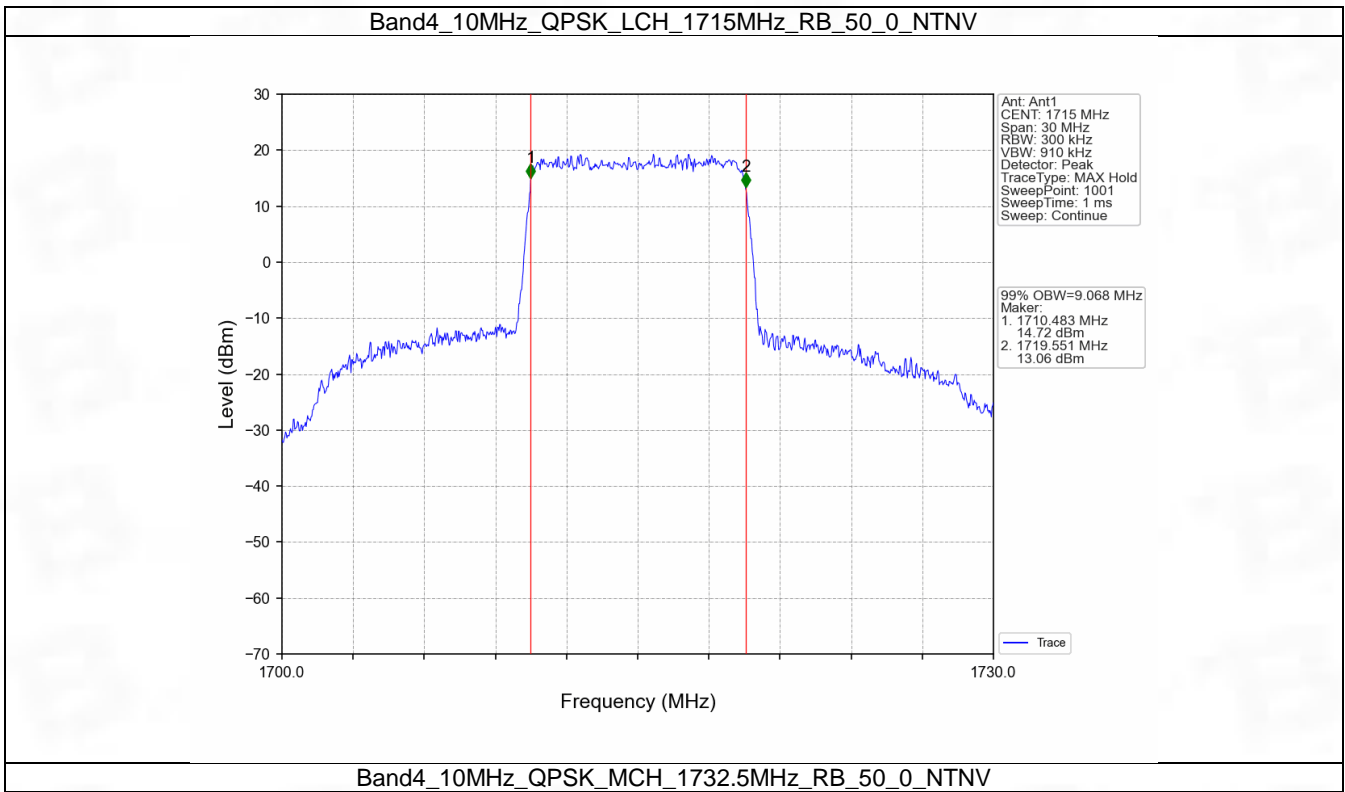
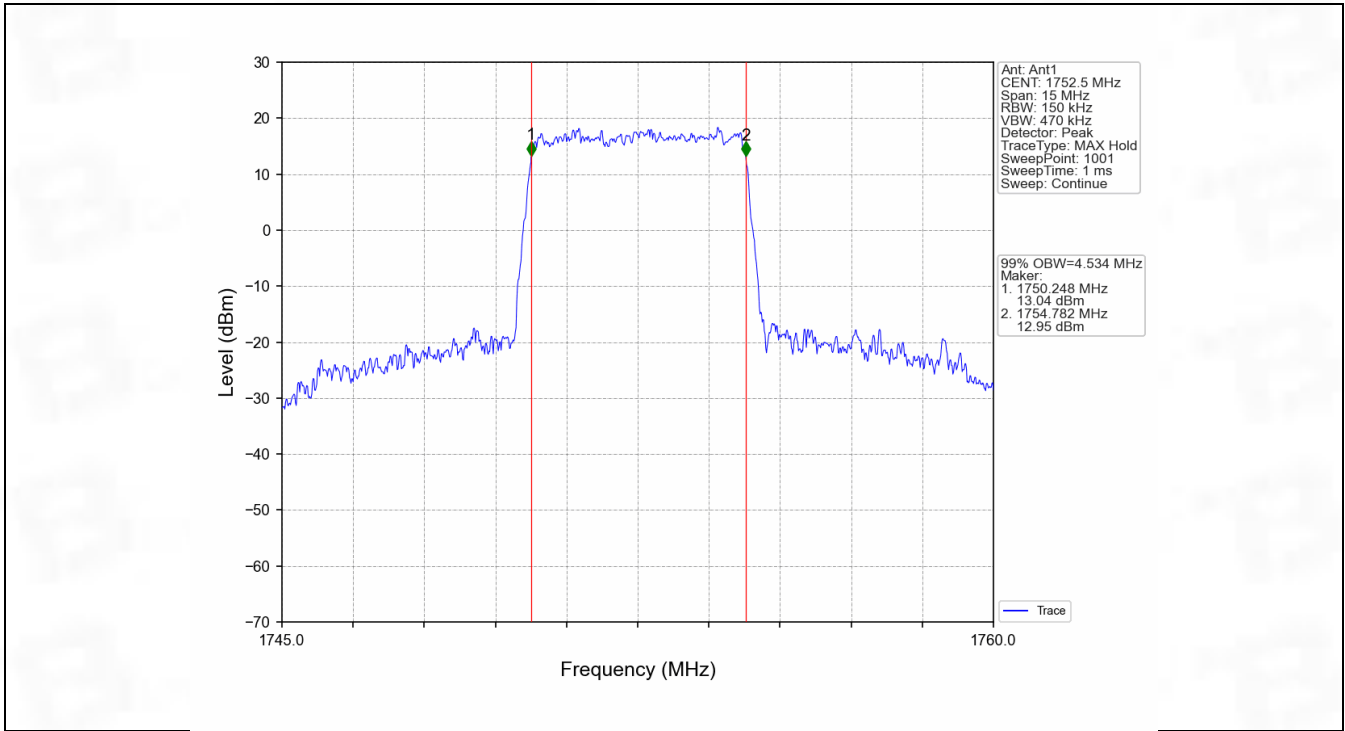


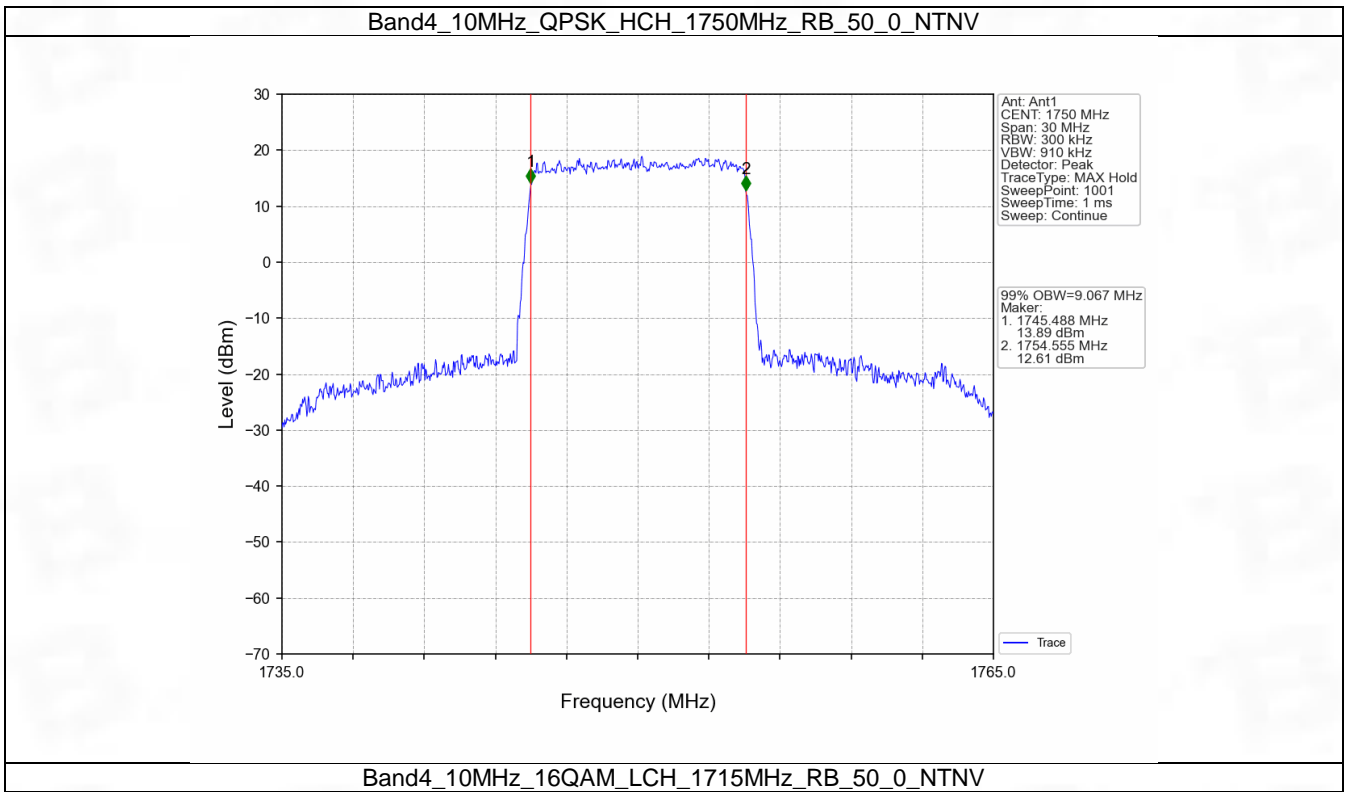
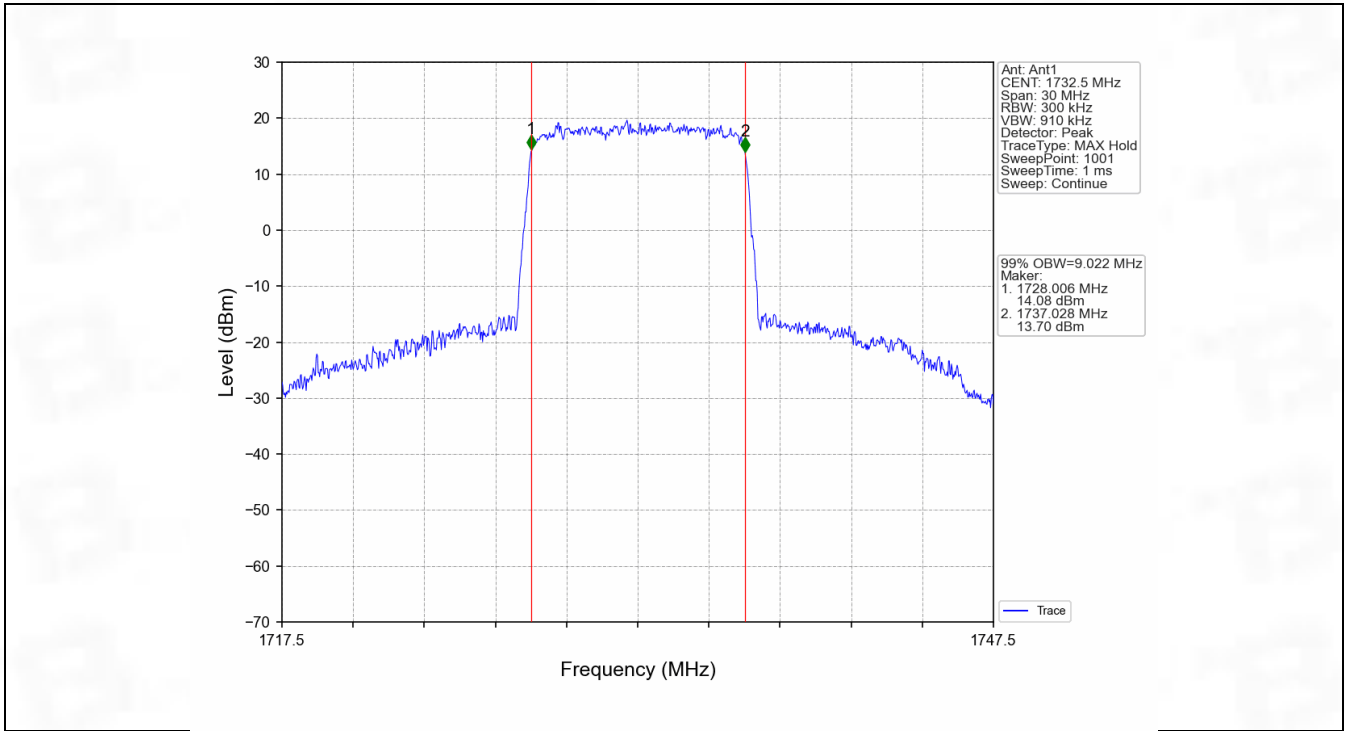
Band4_5MHz_QPSK_HCH_1752.5MHz_RB_25_0_NTNV

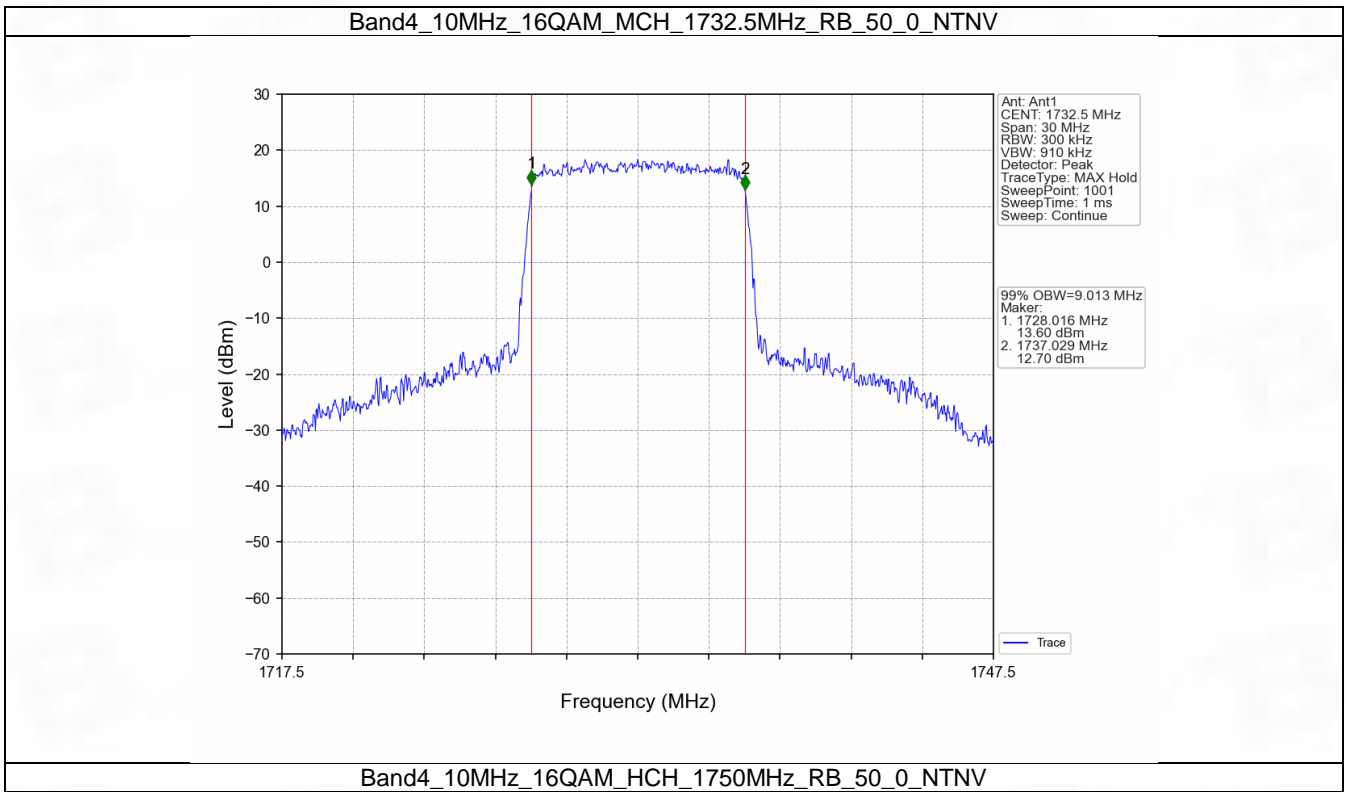
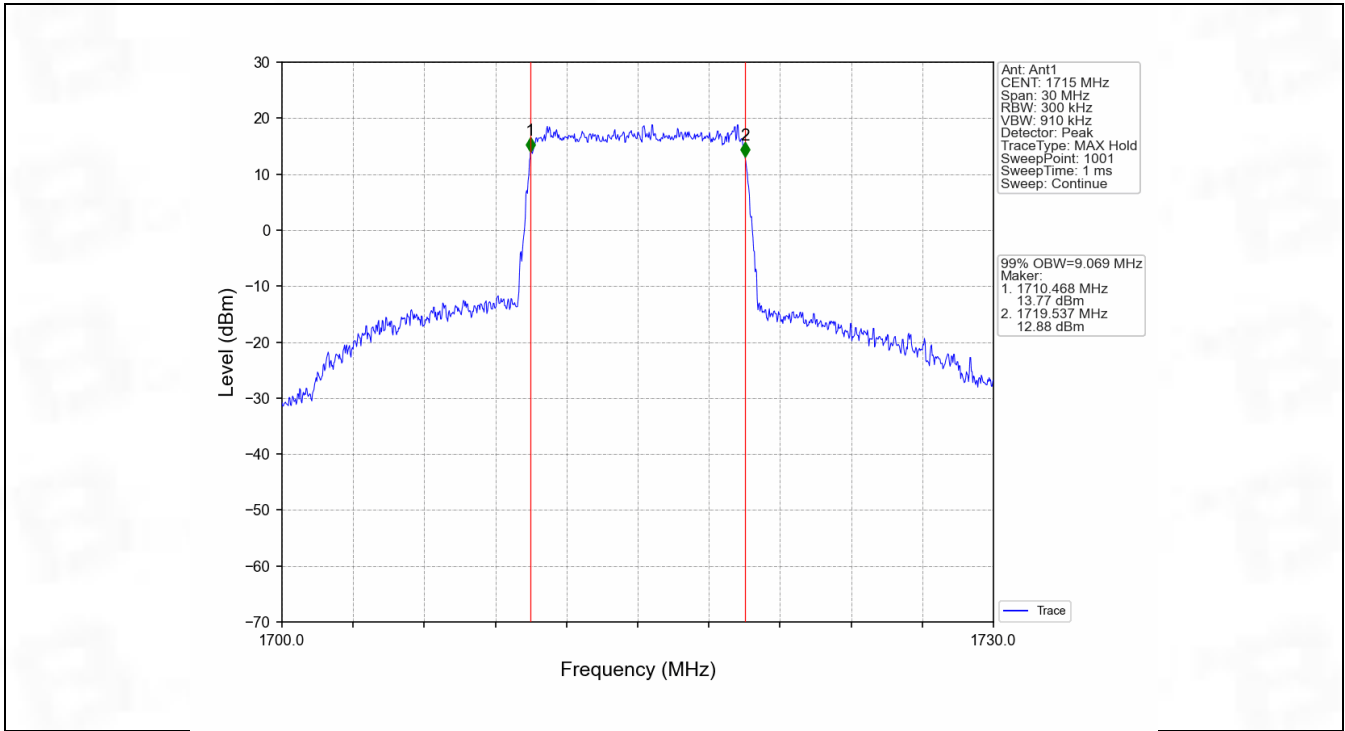


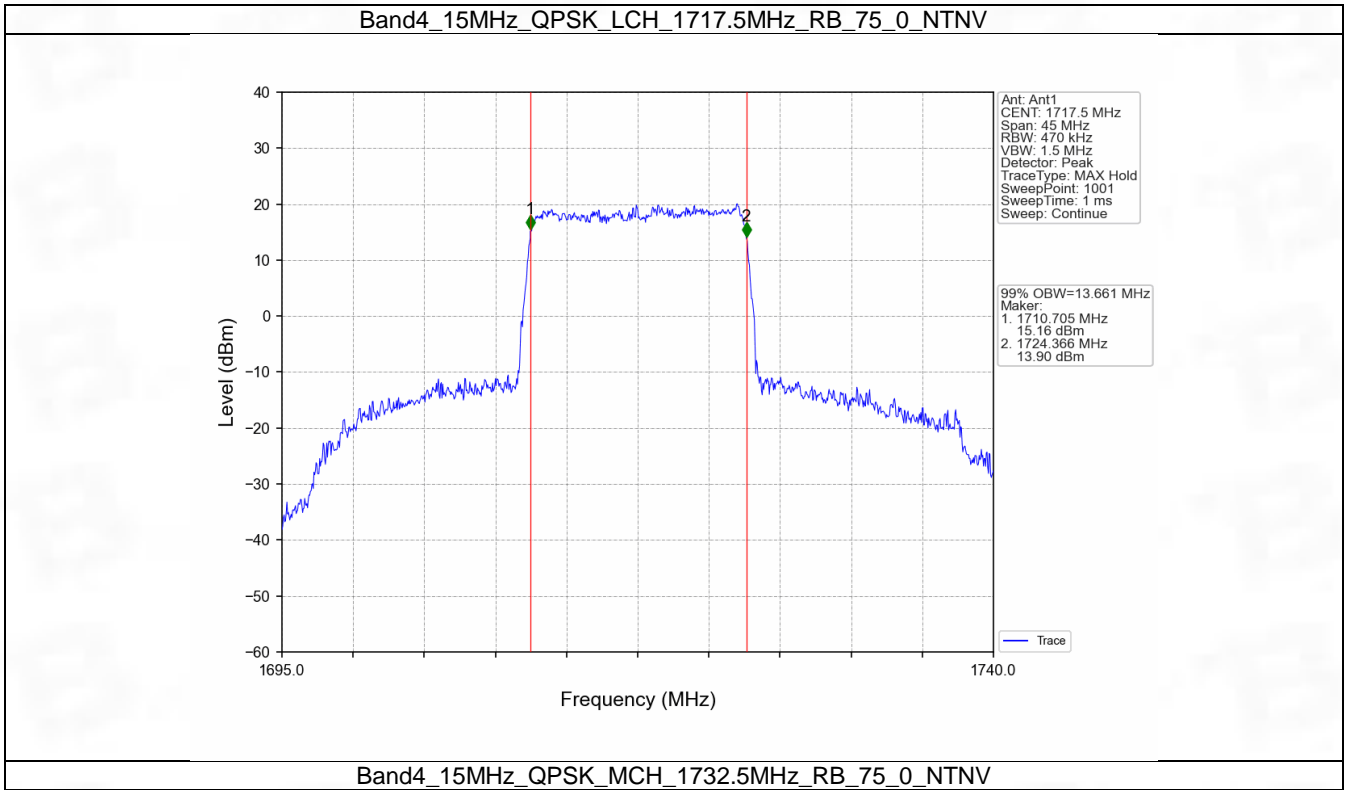
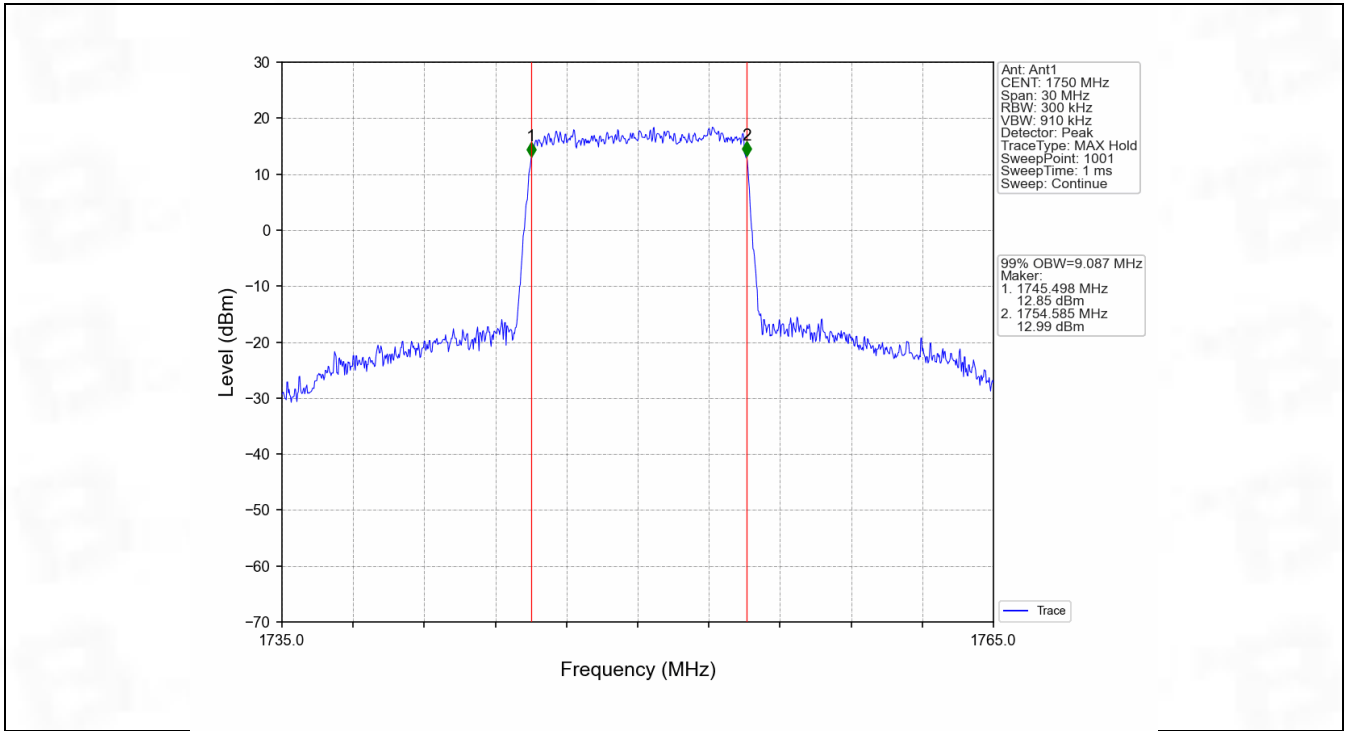
Band4_5MHz_16QAM_LCH_1712.5MHz_RB_25_0_NTNV

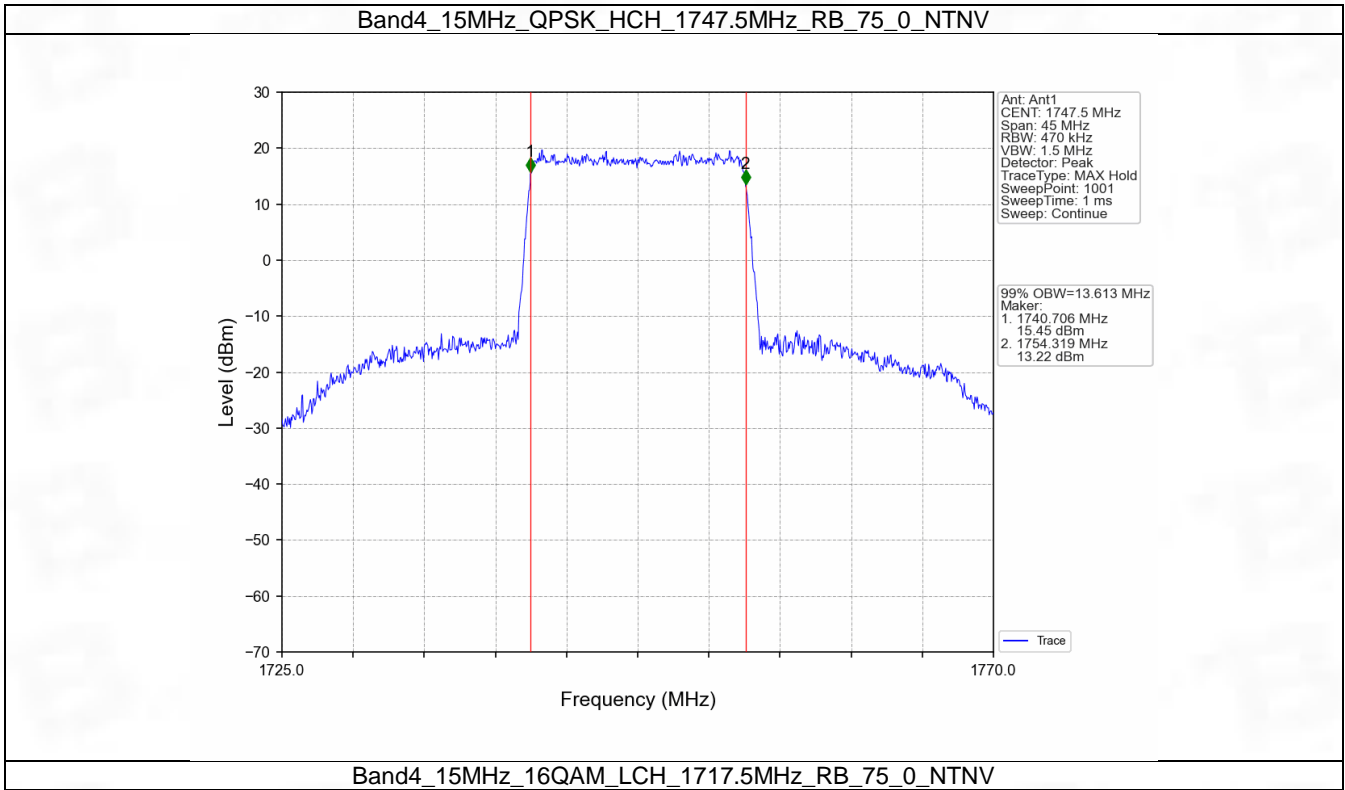
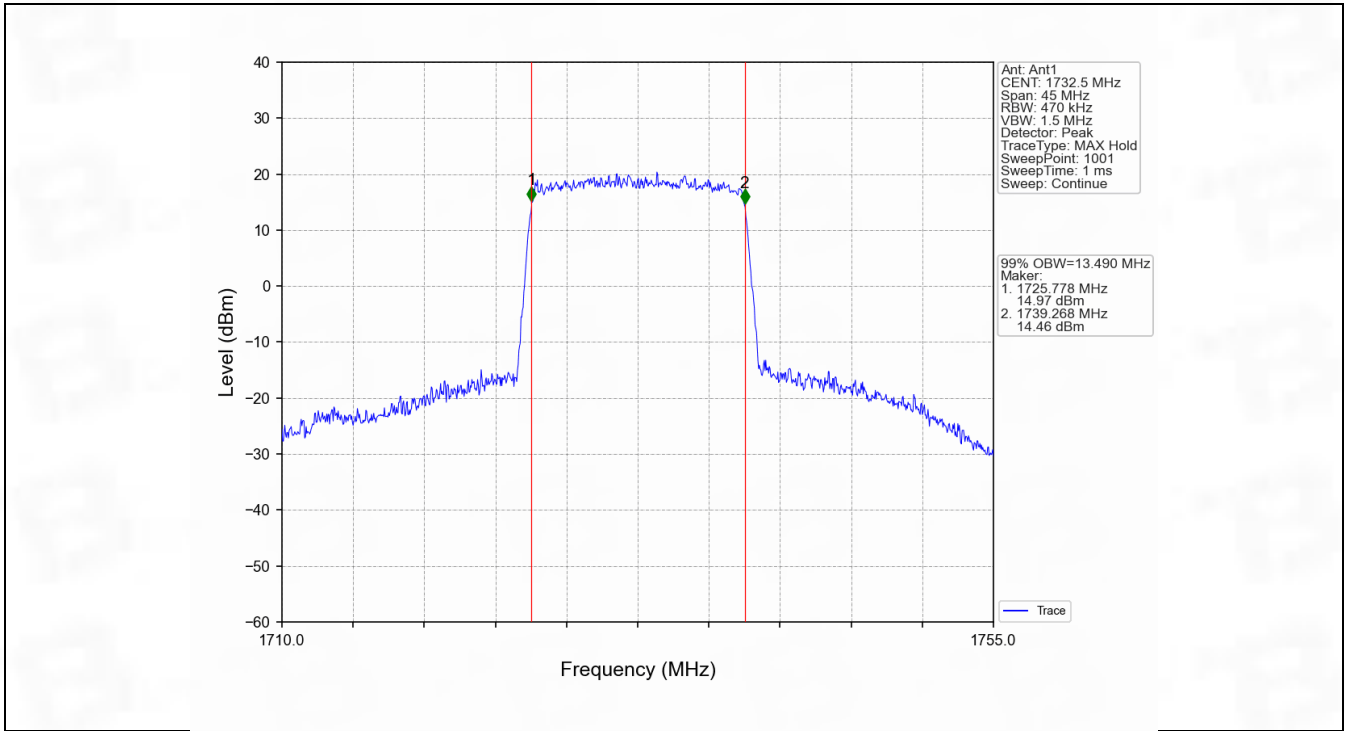


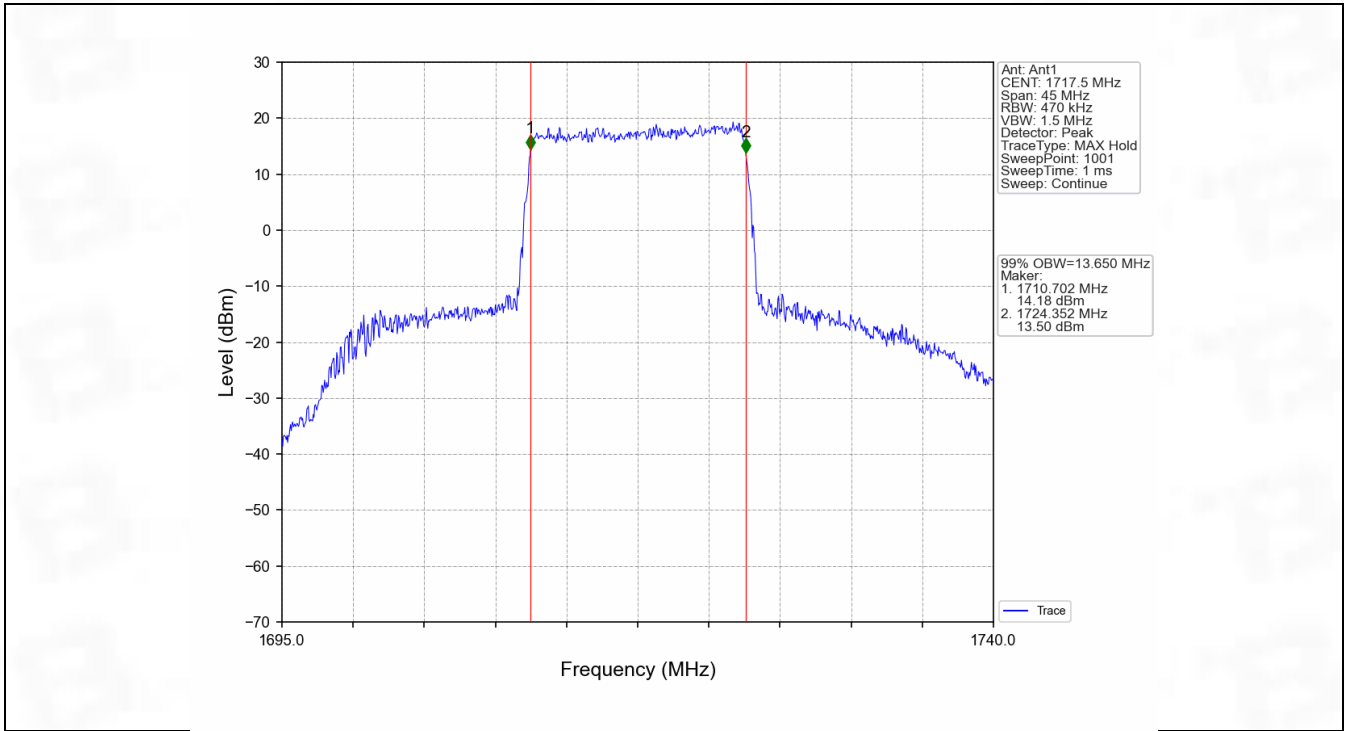




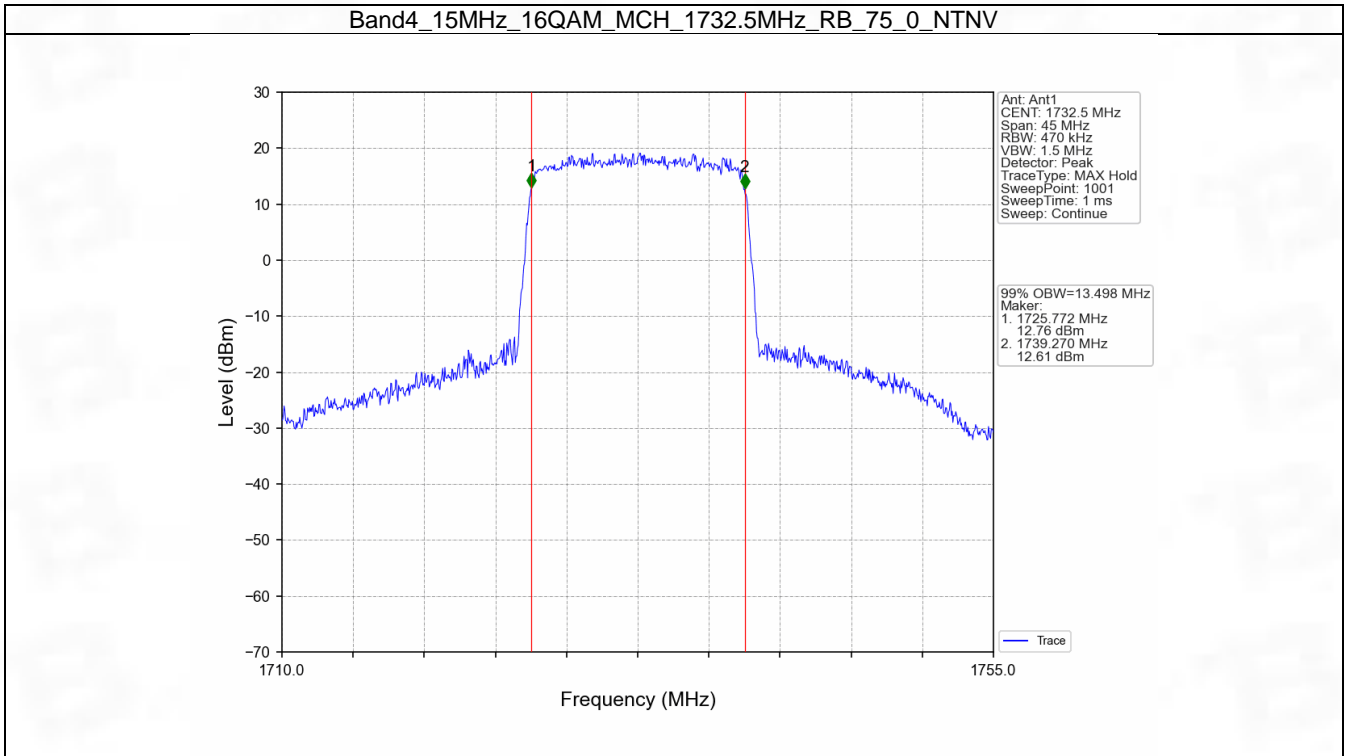




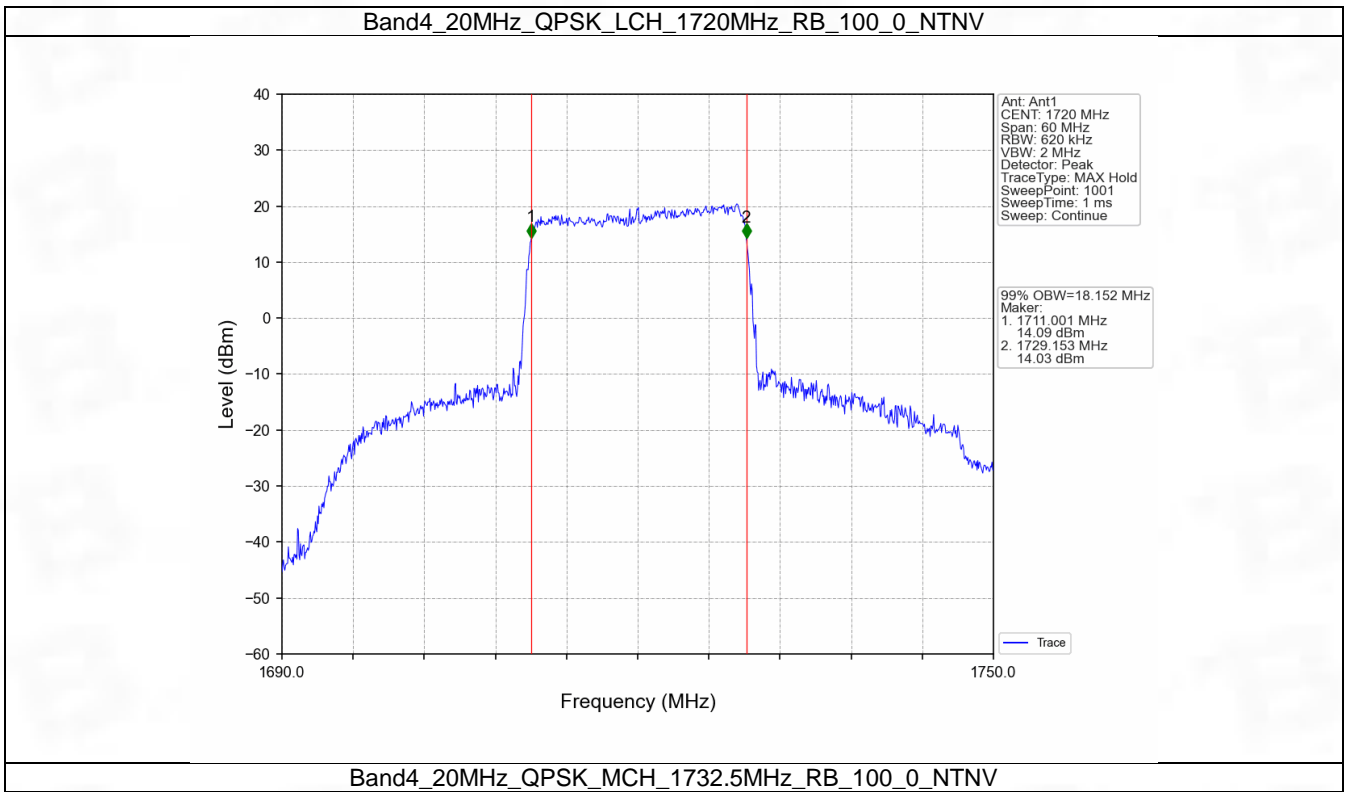
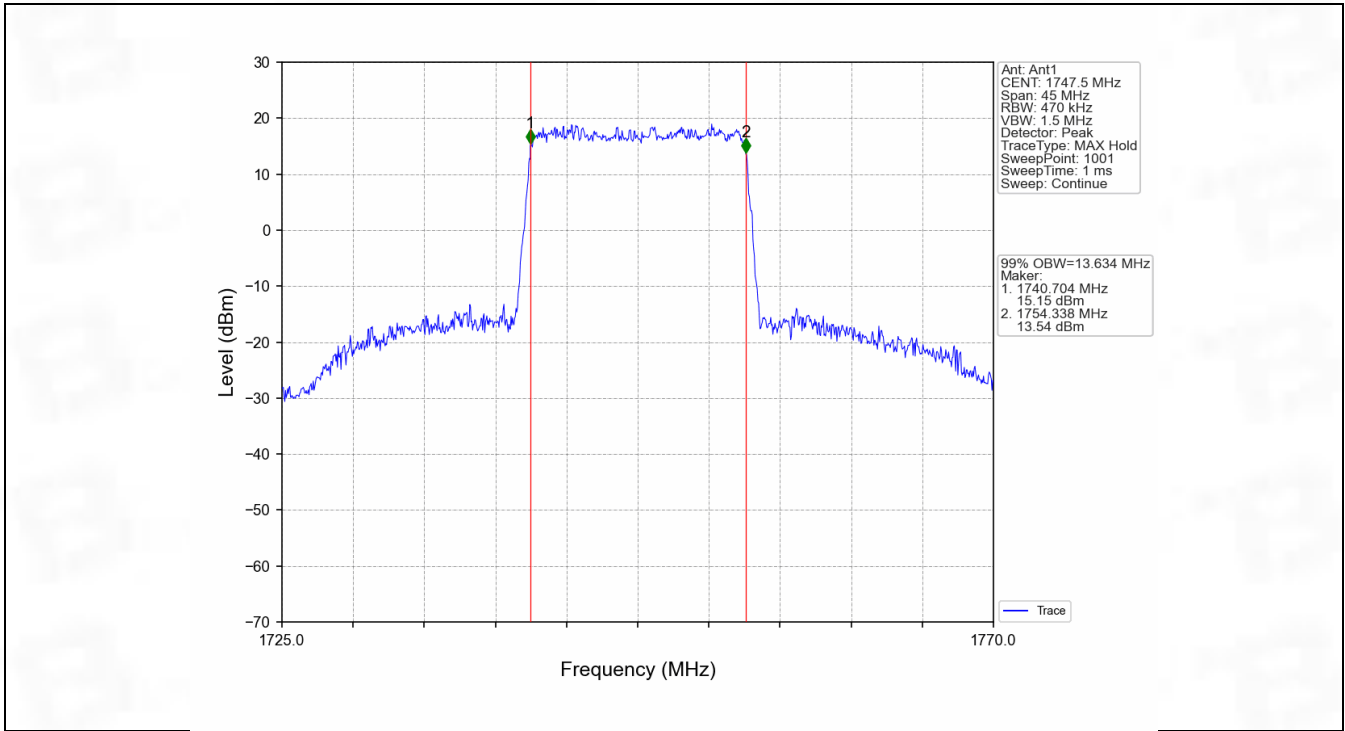


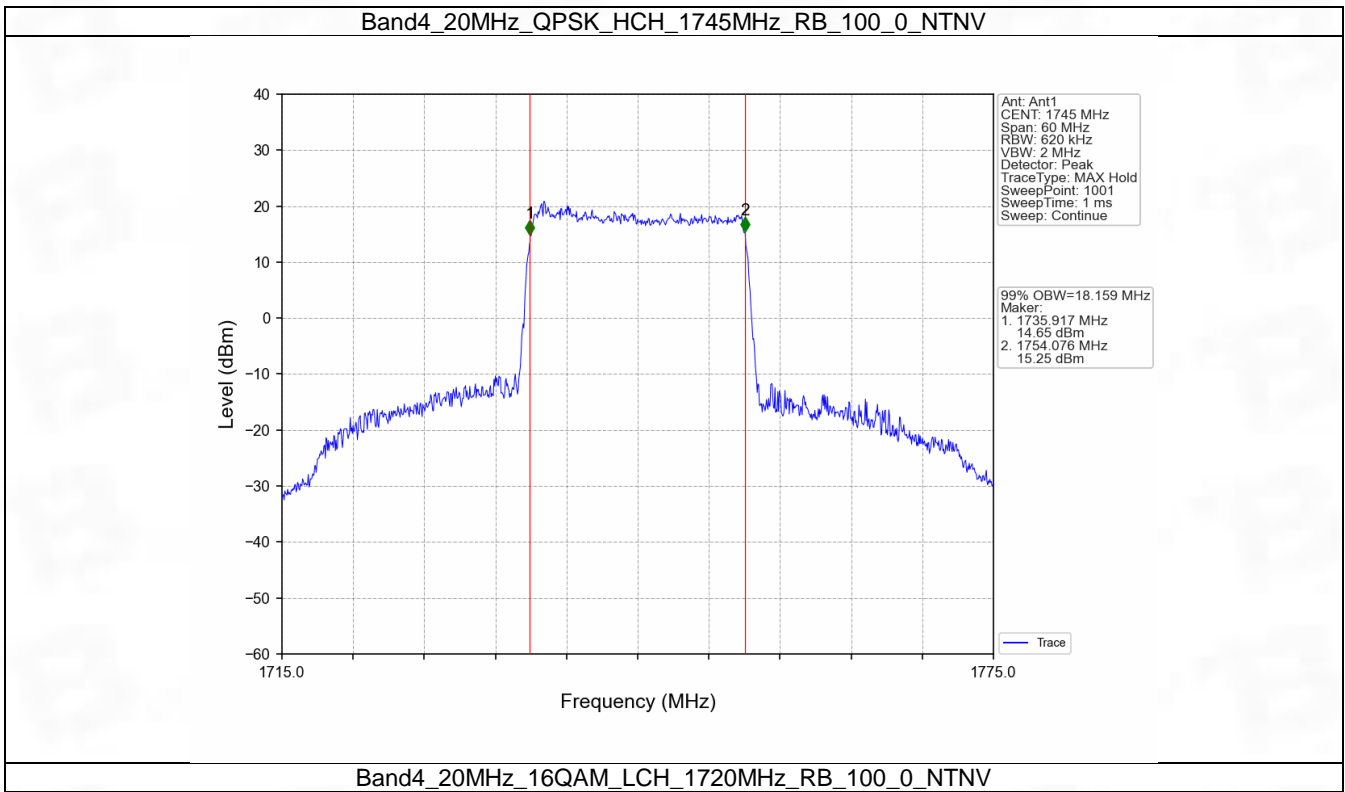
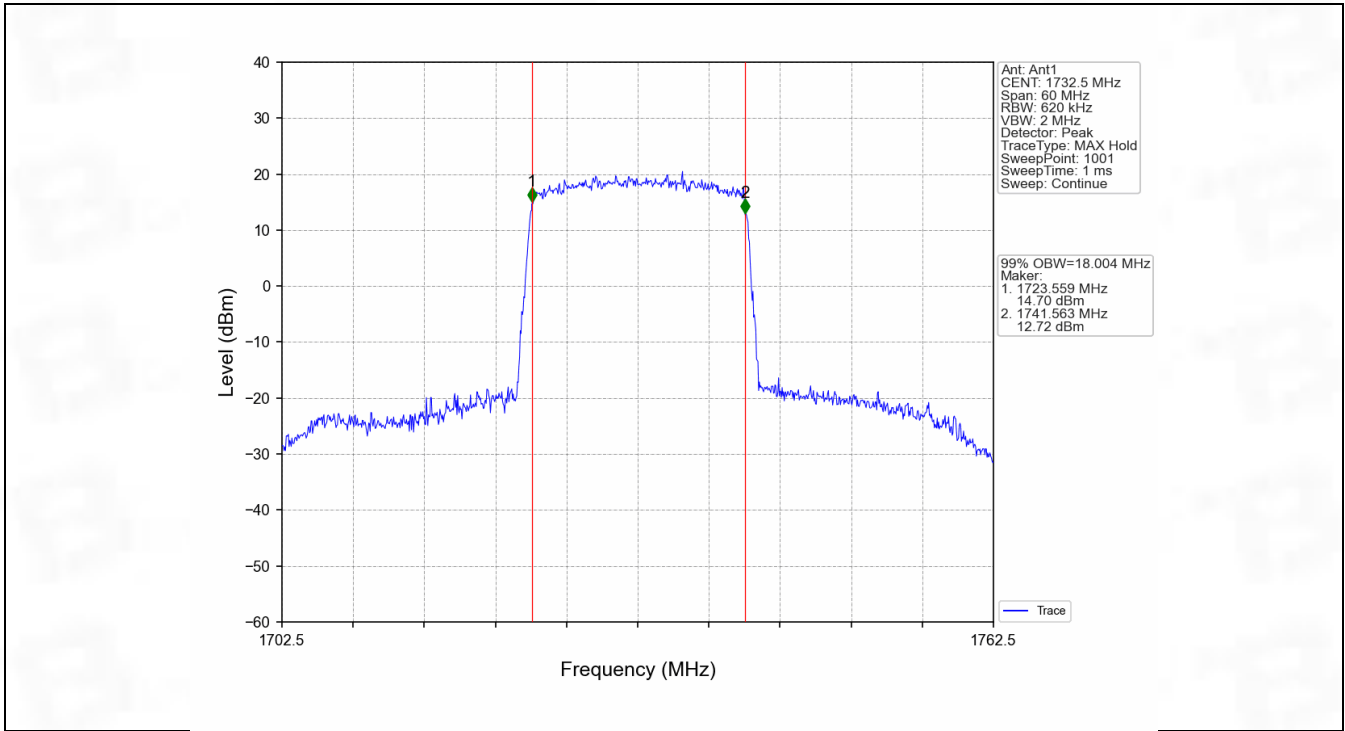


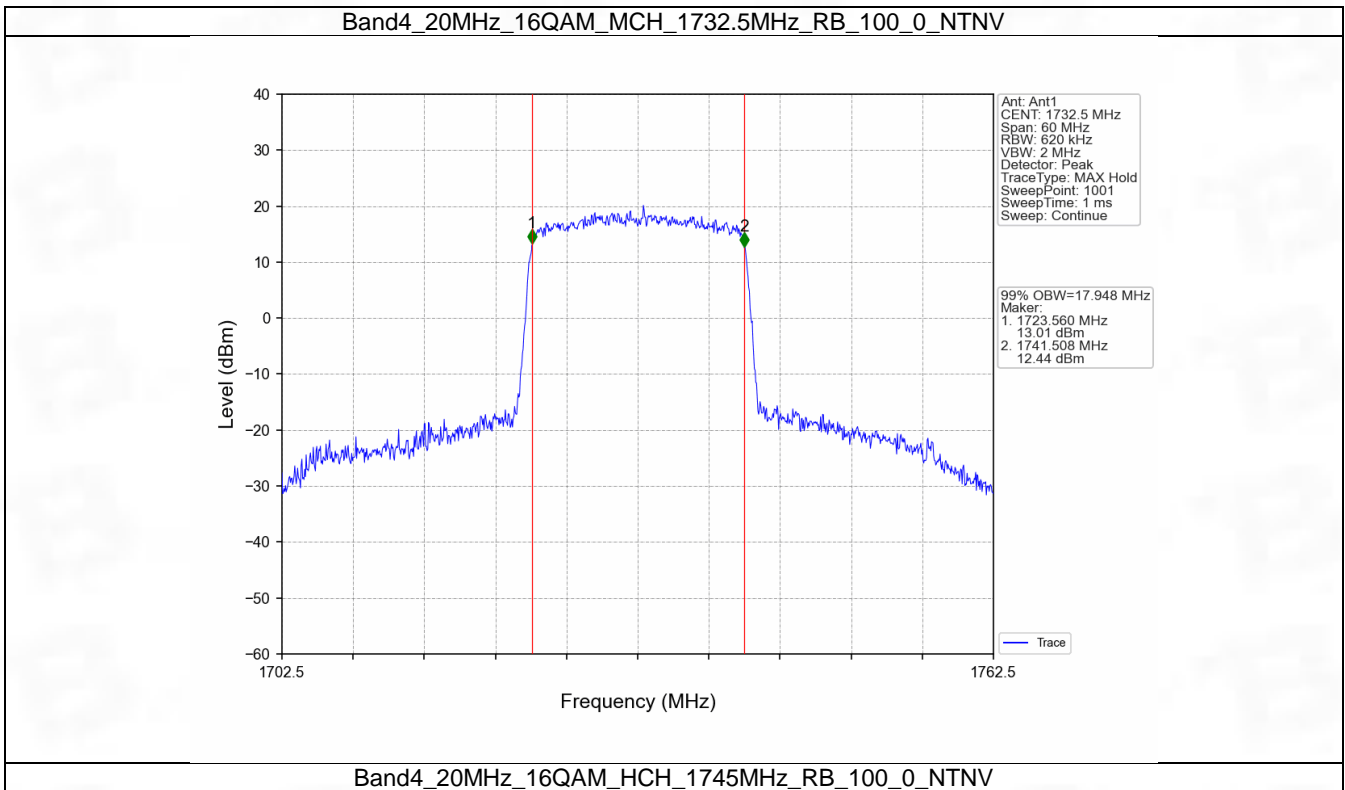
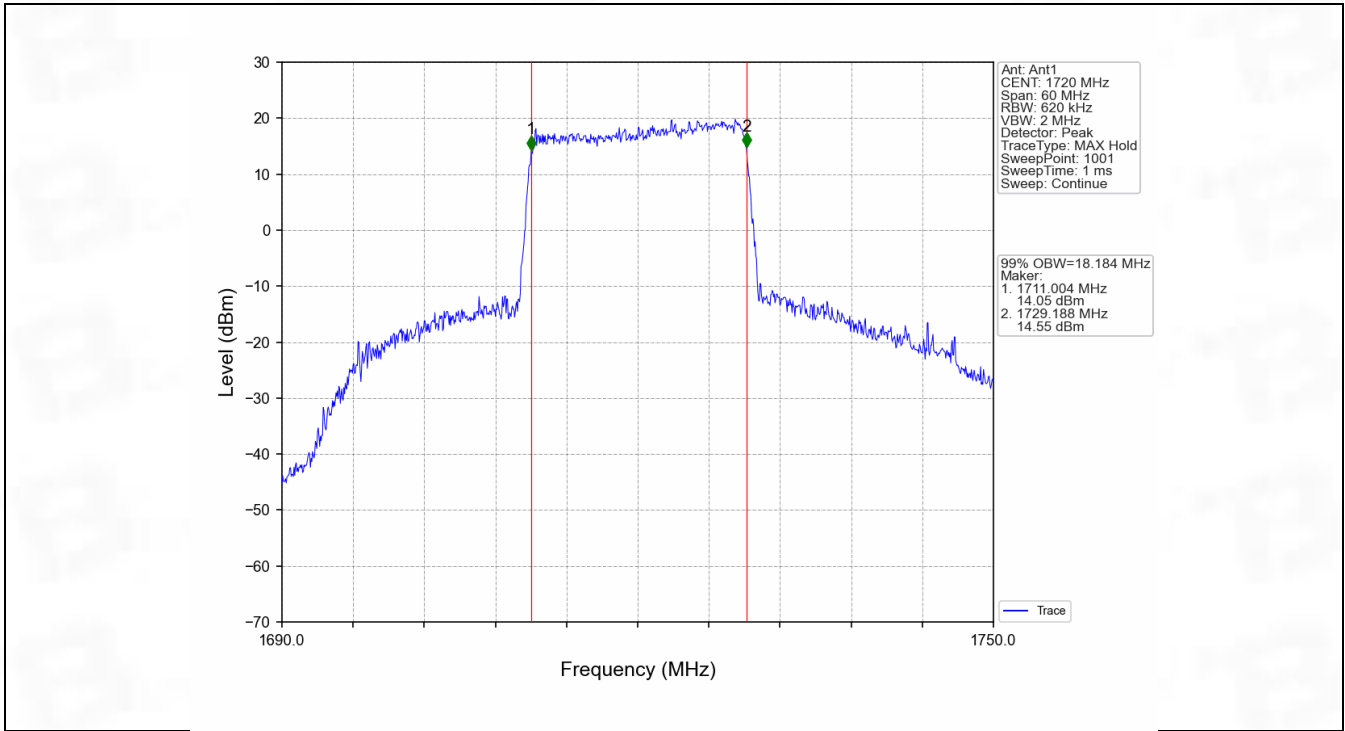
Band4_15MHz_16QAM_MCH_1732.5MHz_RB_75_0_NTNV

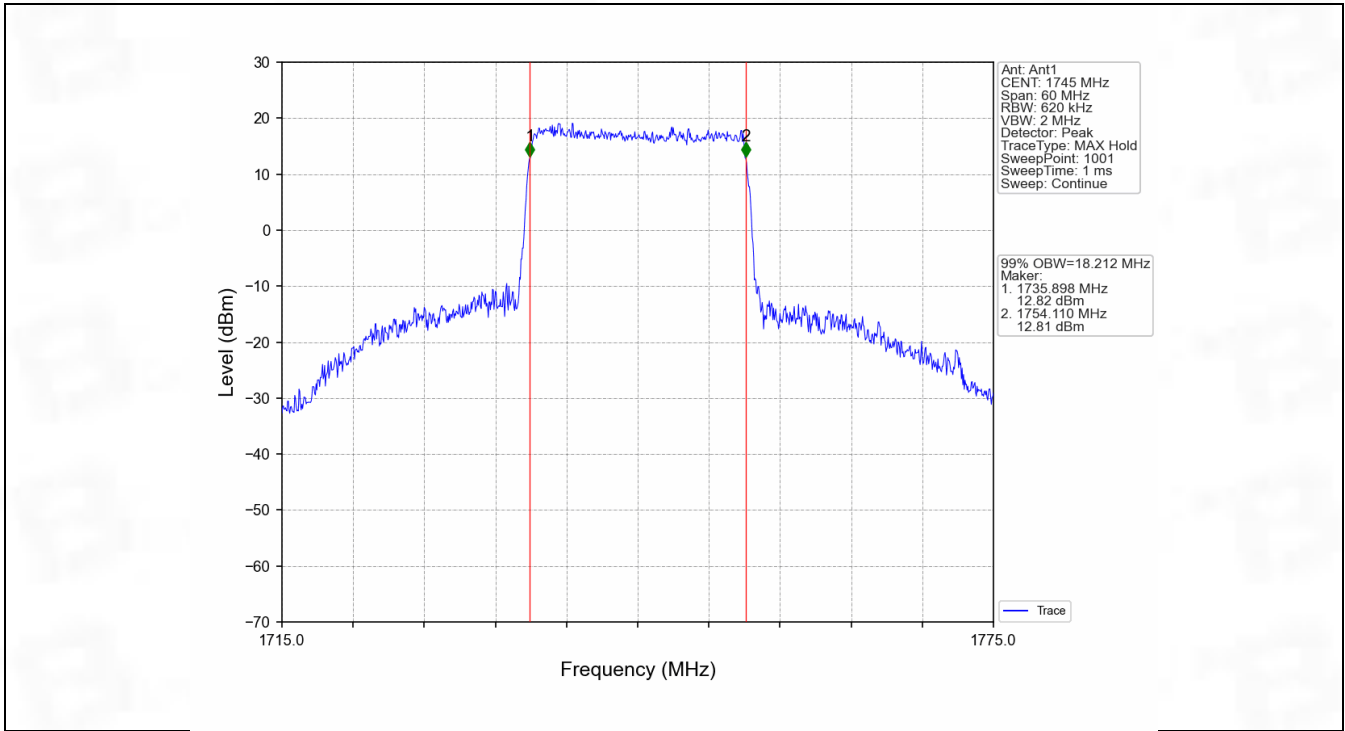


Band4_15MHz_16QAM_HCH_1747.5MHz_RB_75_0_NTNV









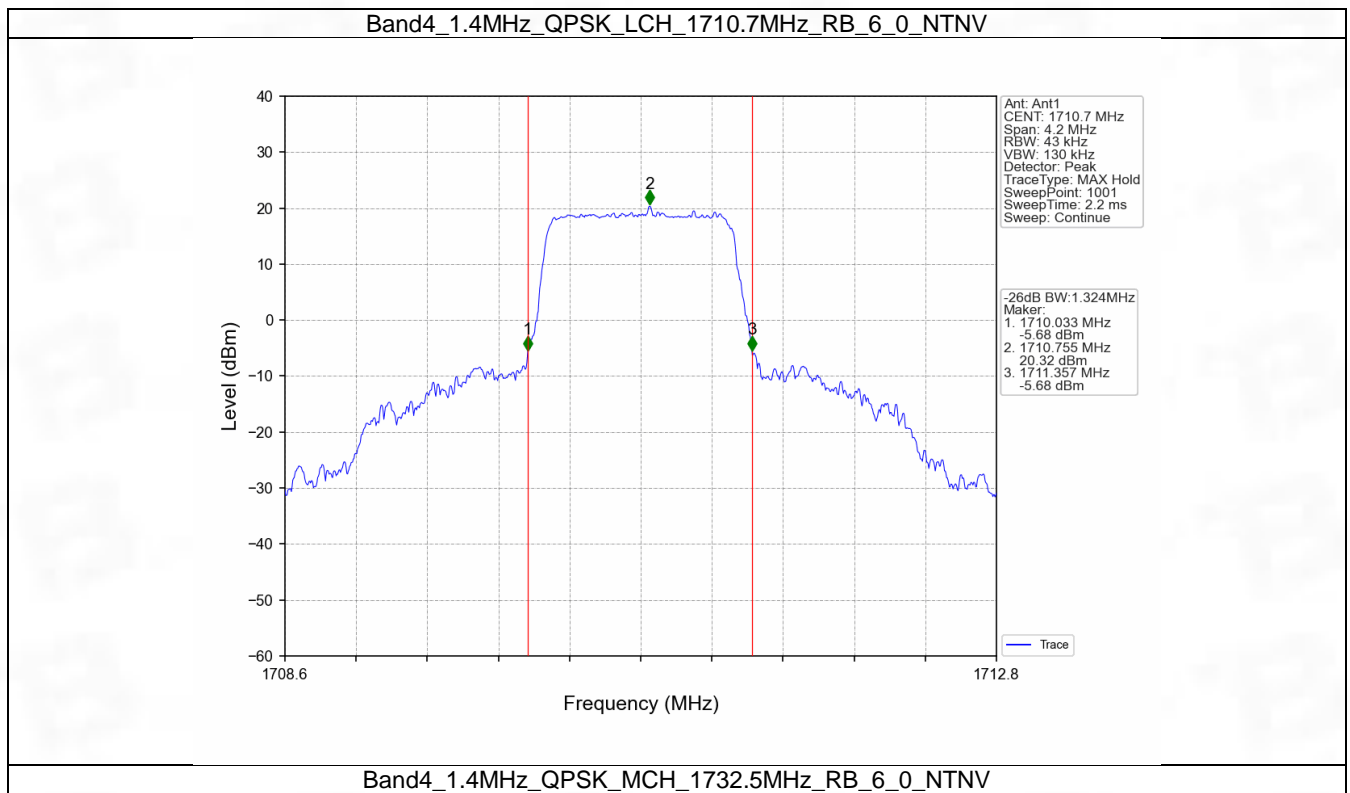
4.2 Band4_XDB

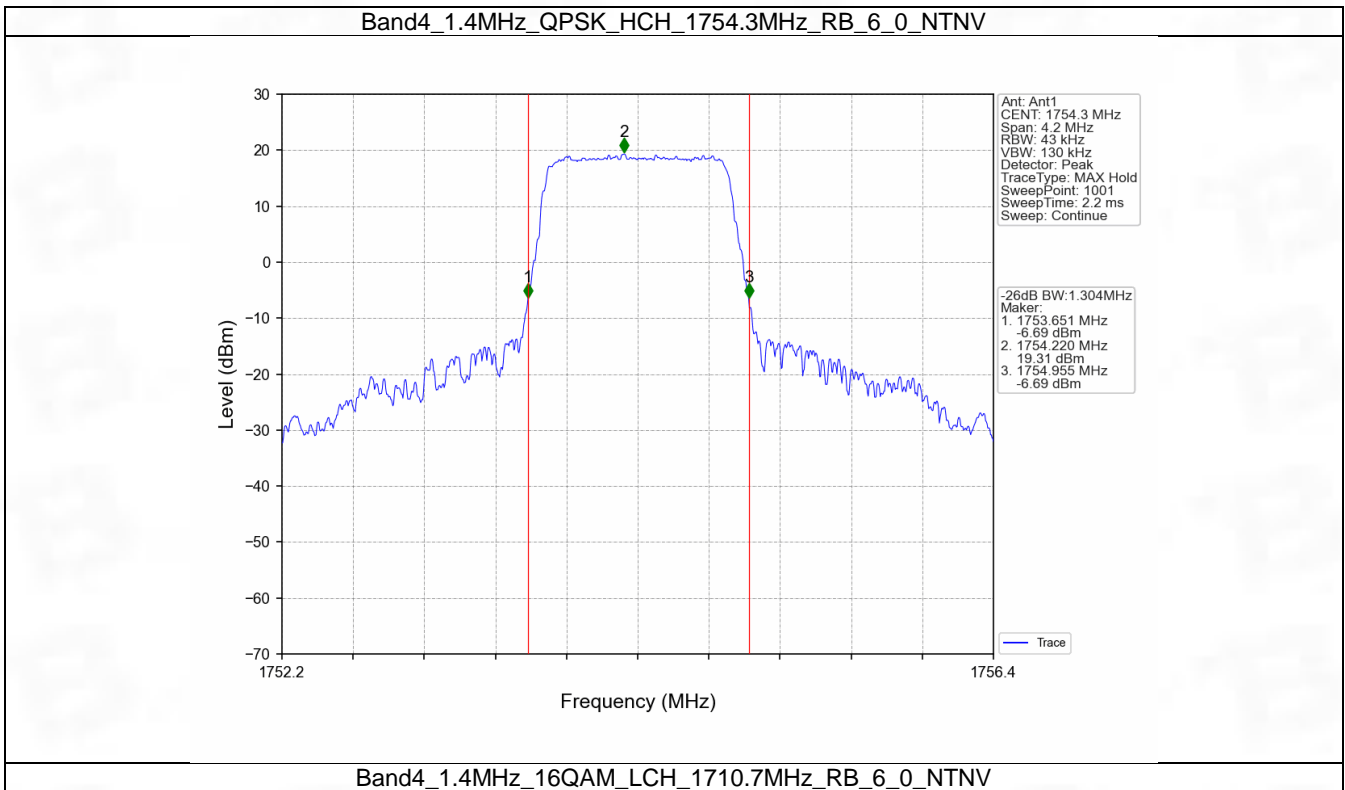
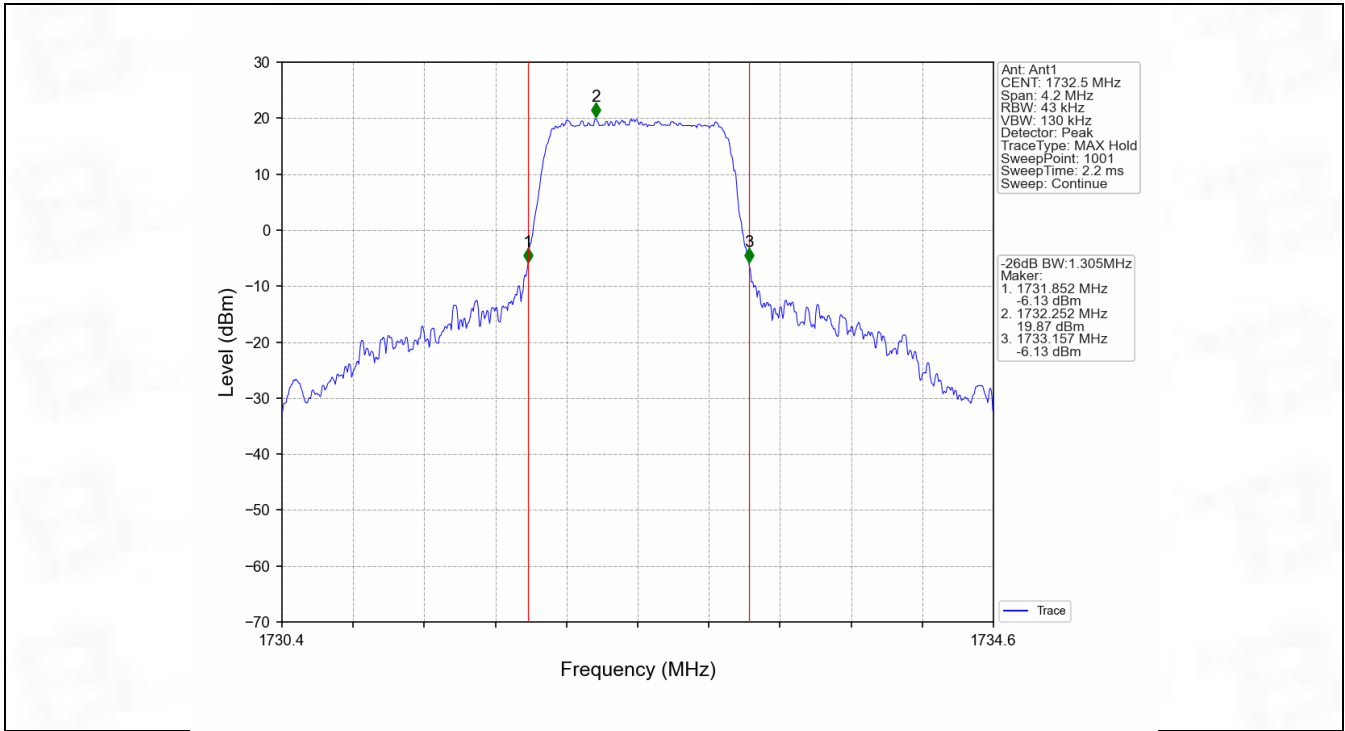
4.2.1 Test Result

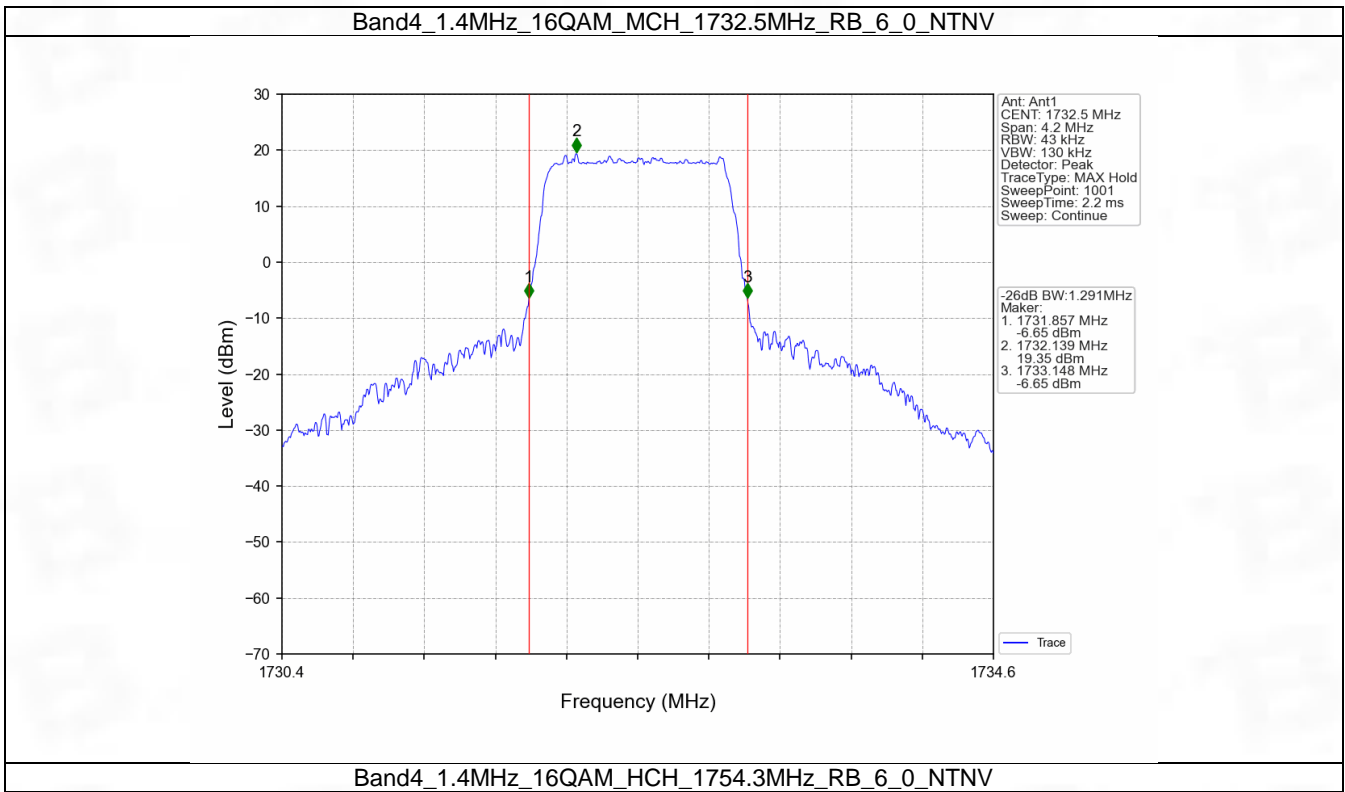
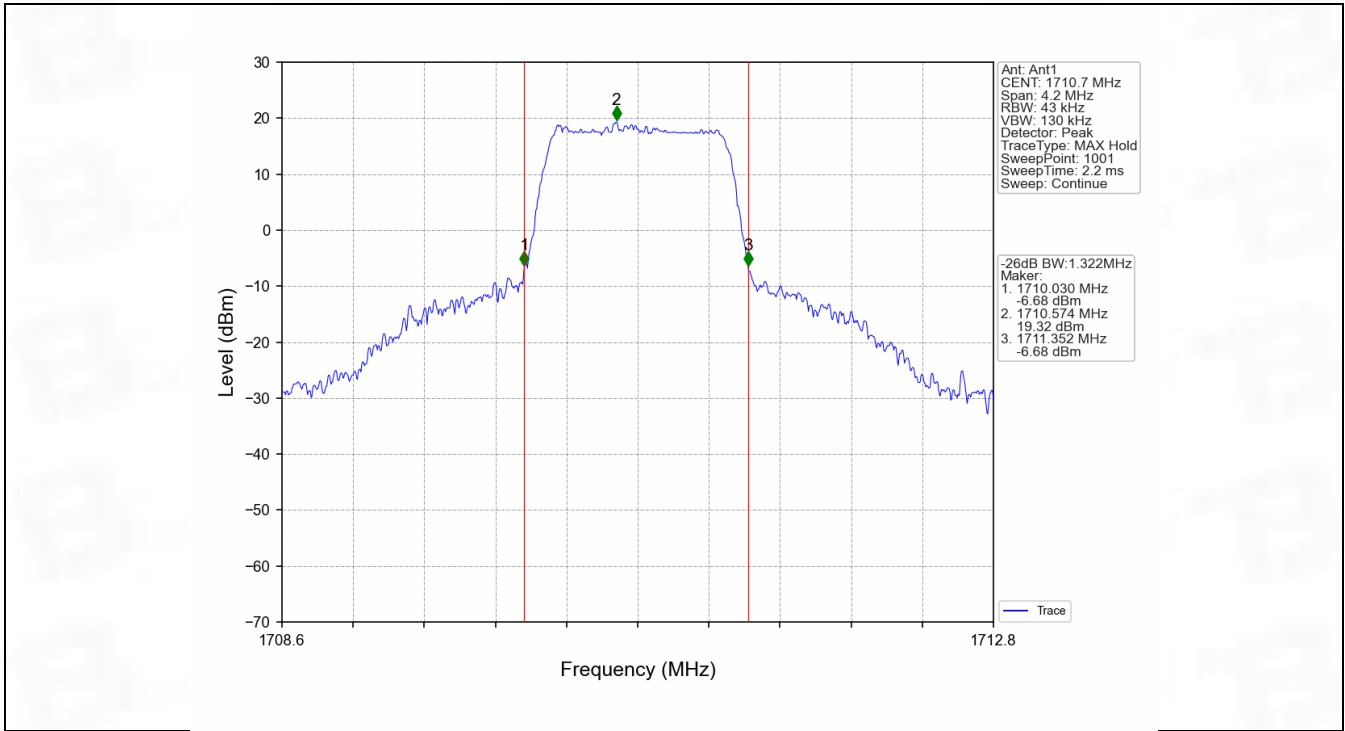
Band: 4 / NTV						
Bandwidth (MHz)	Modulation	Frequency (MHz)	RB Allocation		26dB Bandwidth (MHz)	Verdict
			Size	Offset	Result	
1.4	QPSK	1710.7	6	0	1.324	Pass
		1732.5	6	0	1.305	Pass
		1754.3	6	0	1.304	Pass
	16QAM	1710.7	6	0	1.322	Pass
		1732.5	6	0	1.291	Pass
		1754.3	6	0	1.314	Pass
3	QPSK	1711.5	15	0	3.055	Pass
		1732.5	15	0	3.046	Pass
		1753.5	15	0	3.041	Pass
	16QAM	1711.5	15	0	3.037	Pass
		1732.5	15	0	3.027	Pass
		1753.5	15	0	3.034	Pass
5	QPSK	1712.5	25	0	4.999	Pass
		1732.5	25	0	4.999	Pass
		1752.5	25	0	5.003	Pass
	16QAM	1712.5	25	0	5.017	Pass
		1732.5	25	0	4.996	Pass
		1752.5	25	0	5.011	Pass
10	QPSK	1715	50	0	9.949	Pass

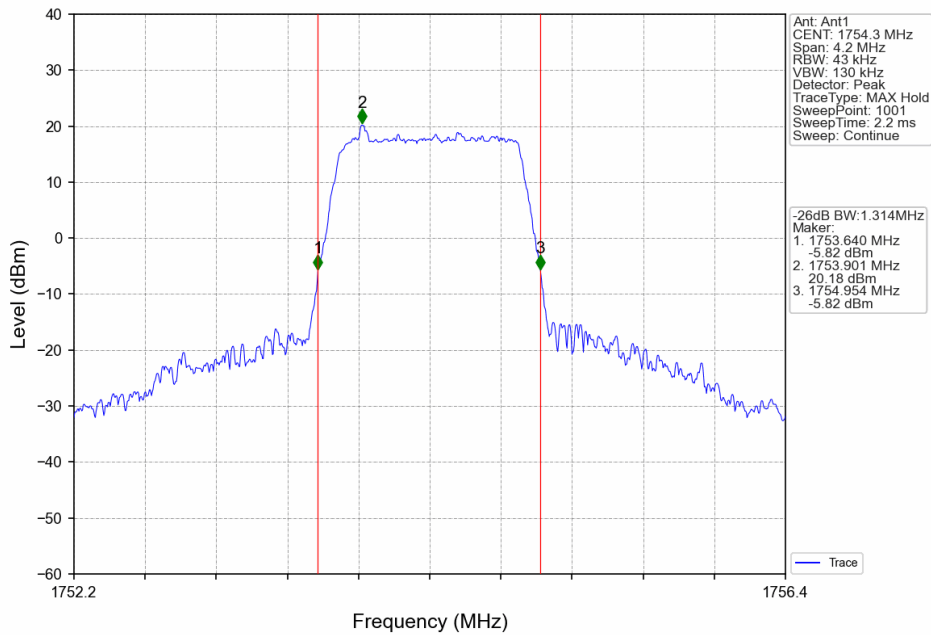
	16QAM	1732.5	50	0	9.878	Pass
		1750	50	0	9.895	Pass
		1715	50	0	9.974	Pass
		1732.5	50	0	9.934	Pass
		1750	50	0	9.907	Pass
15	QPSK	1717.5	75	0	14.869	Pass
		1732.5	75	0	14.791	Pass
		1747.5	75	0	14.901	Pass
	16QAM	1717.5	75	0	14.908	Pass
		1732.5	75	0	14.808	Pass
20	QPSK	1720	100	0	19.764	Pass
		1732.5	100	0	19.660	Pass
		1745	100	0	19.659	Pass
	16QAM	1720	100	0	19.837	Pass
		1732.5	100	0	19.453	Pass
		1745	100	0	19.693	Pass

4.2.2 Test Graph

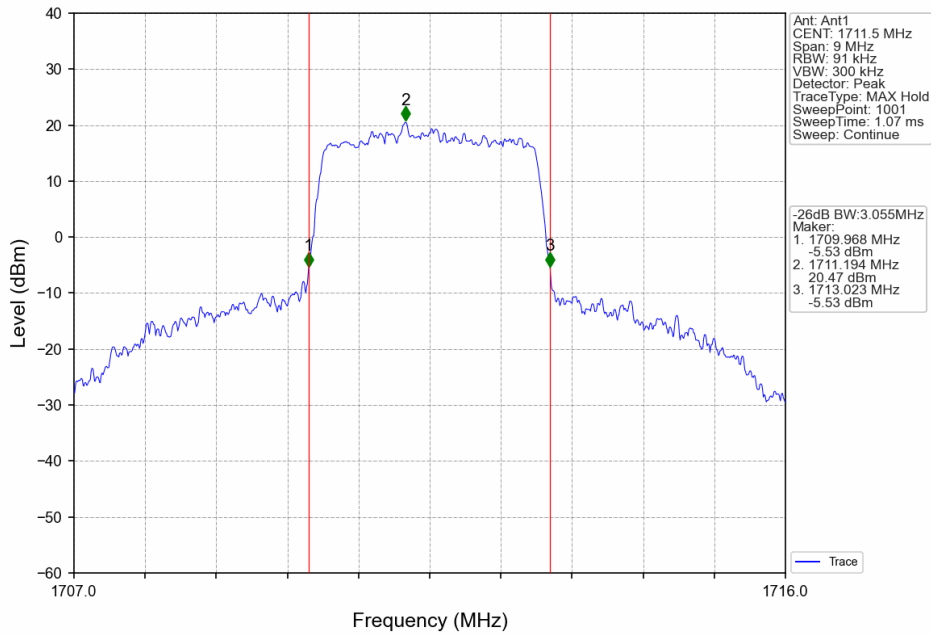




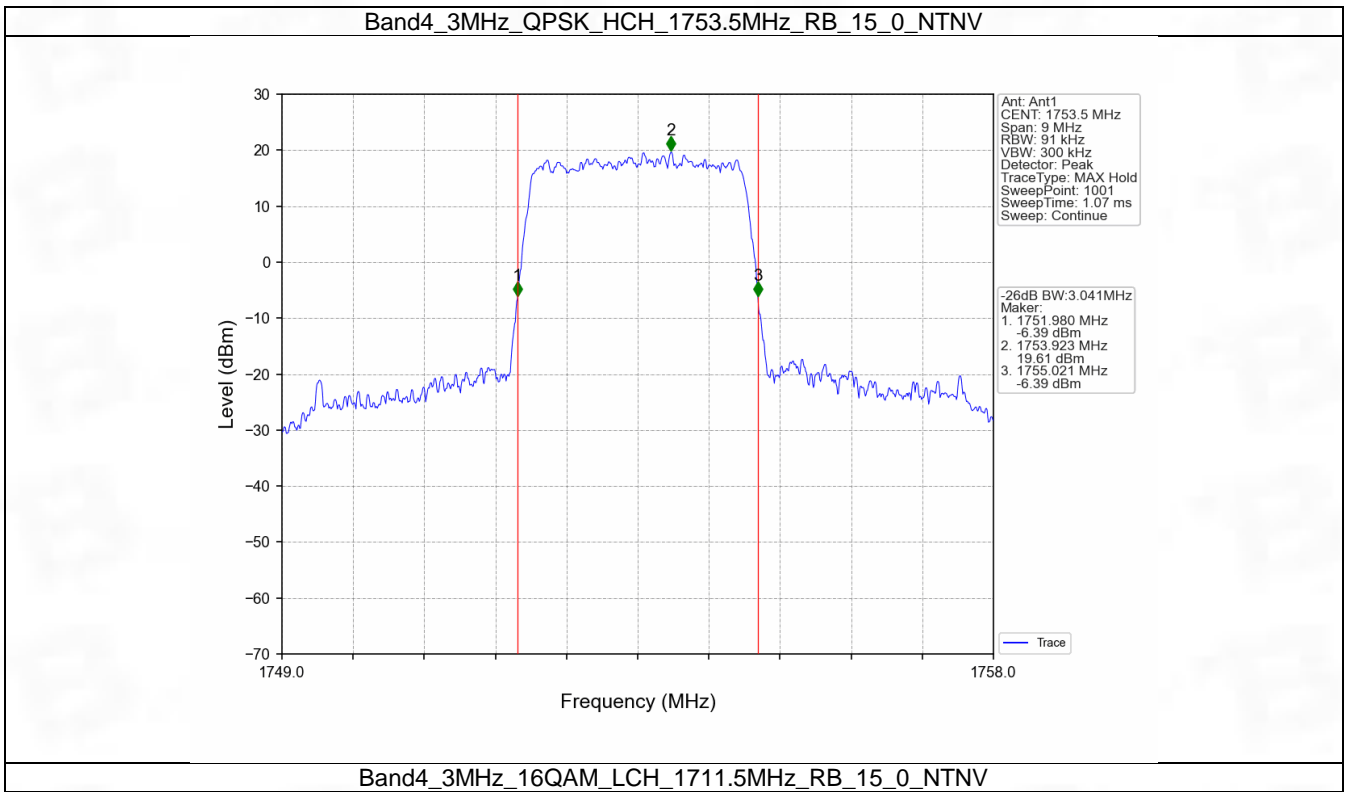
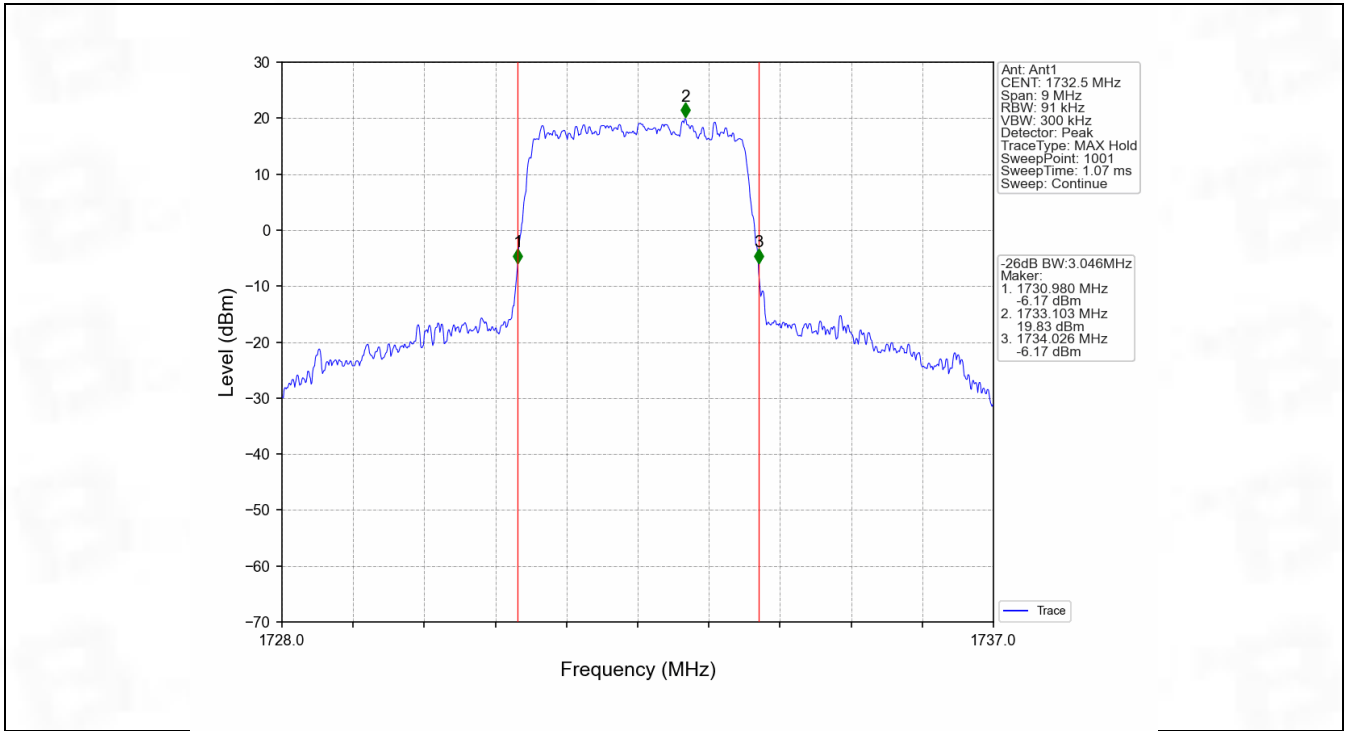


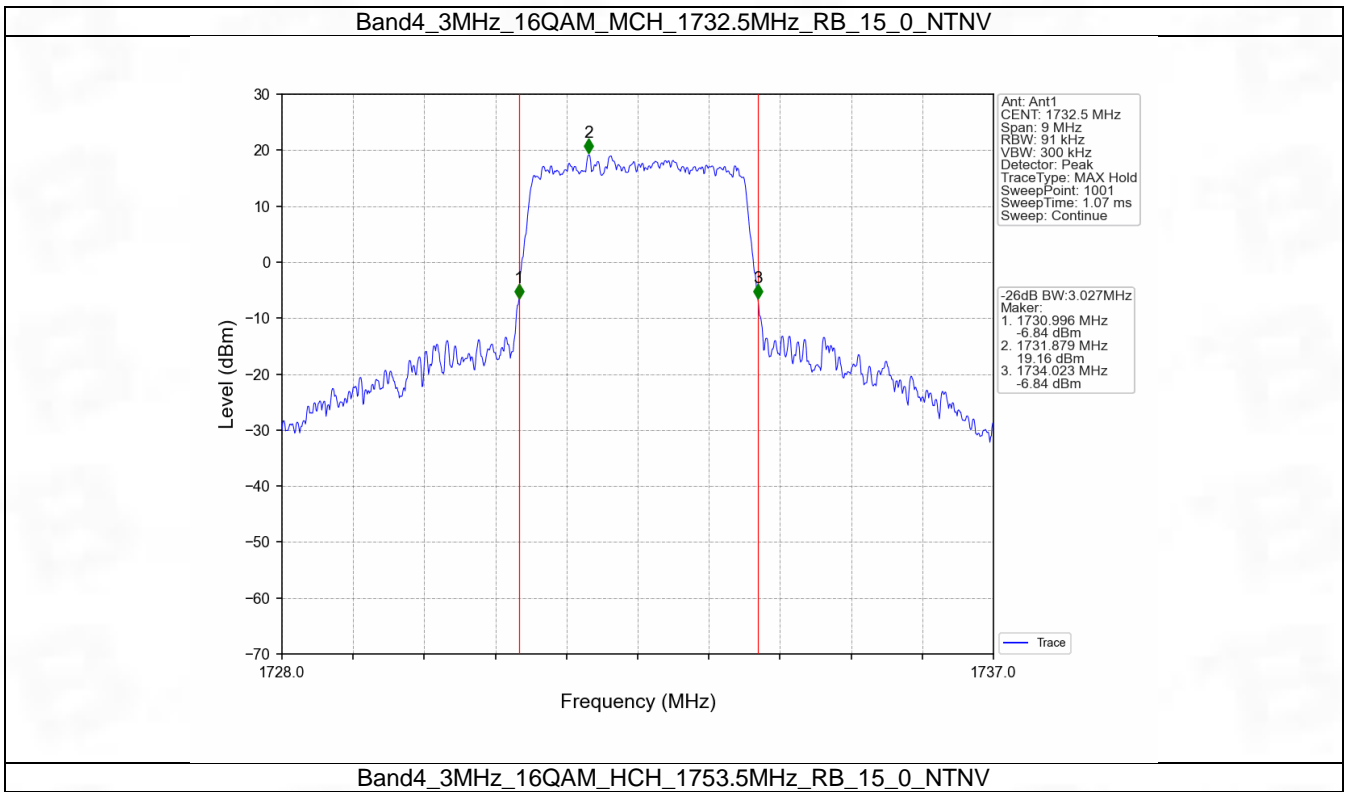
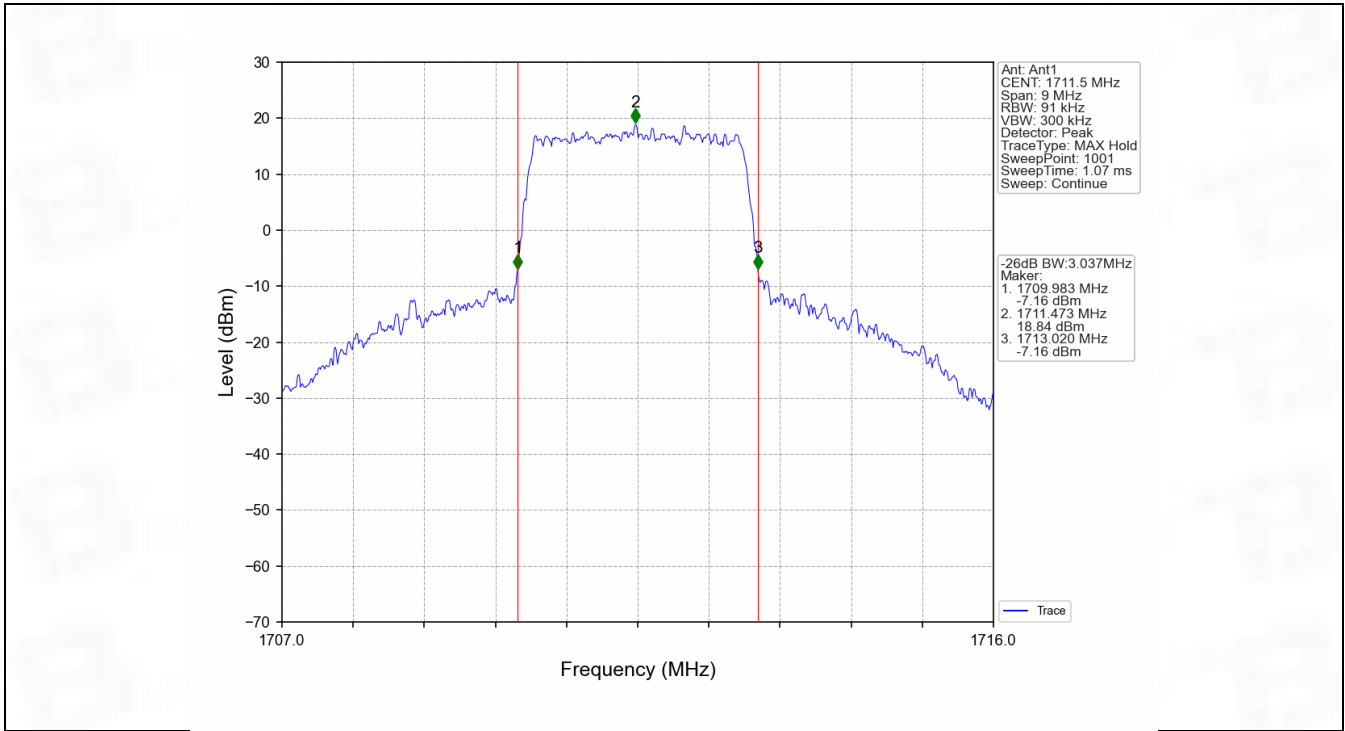


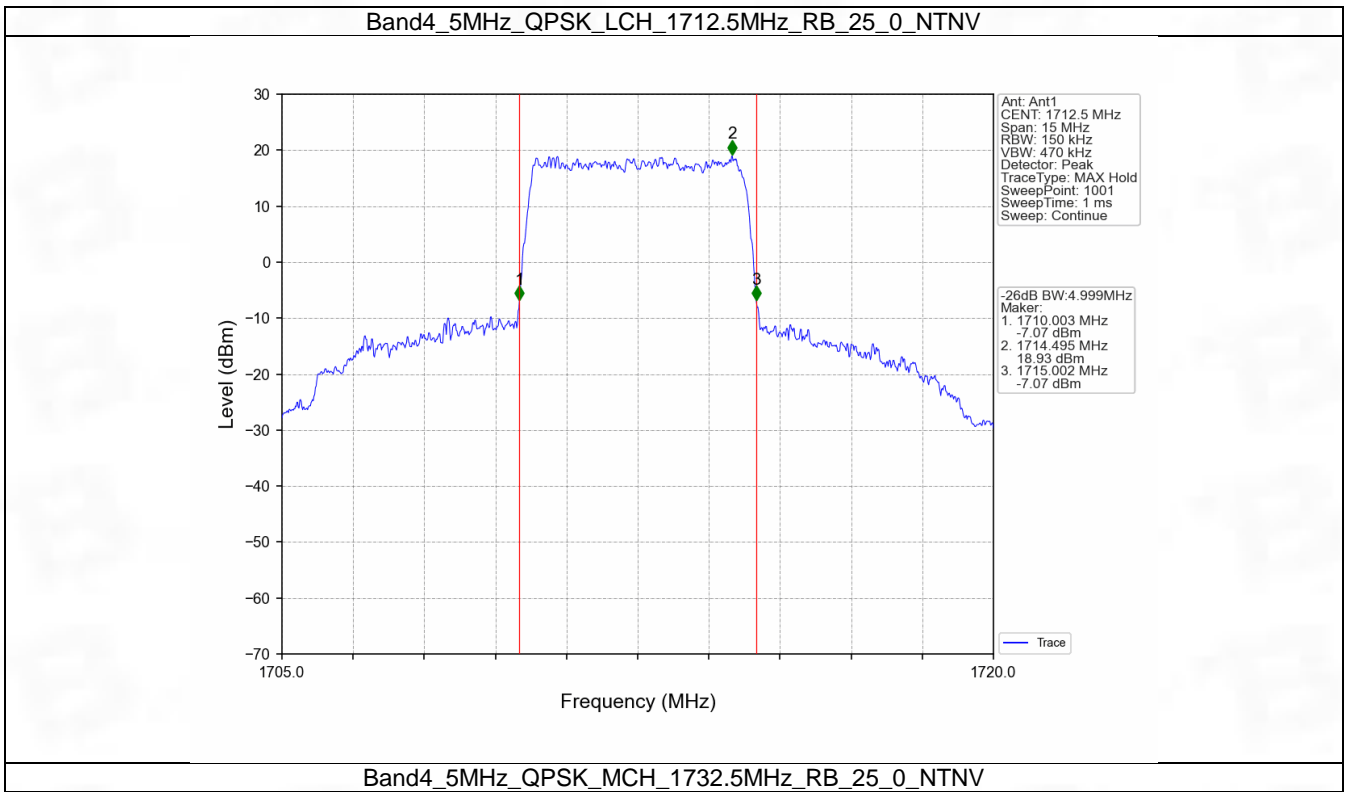
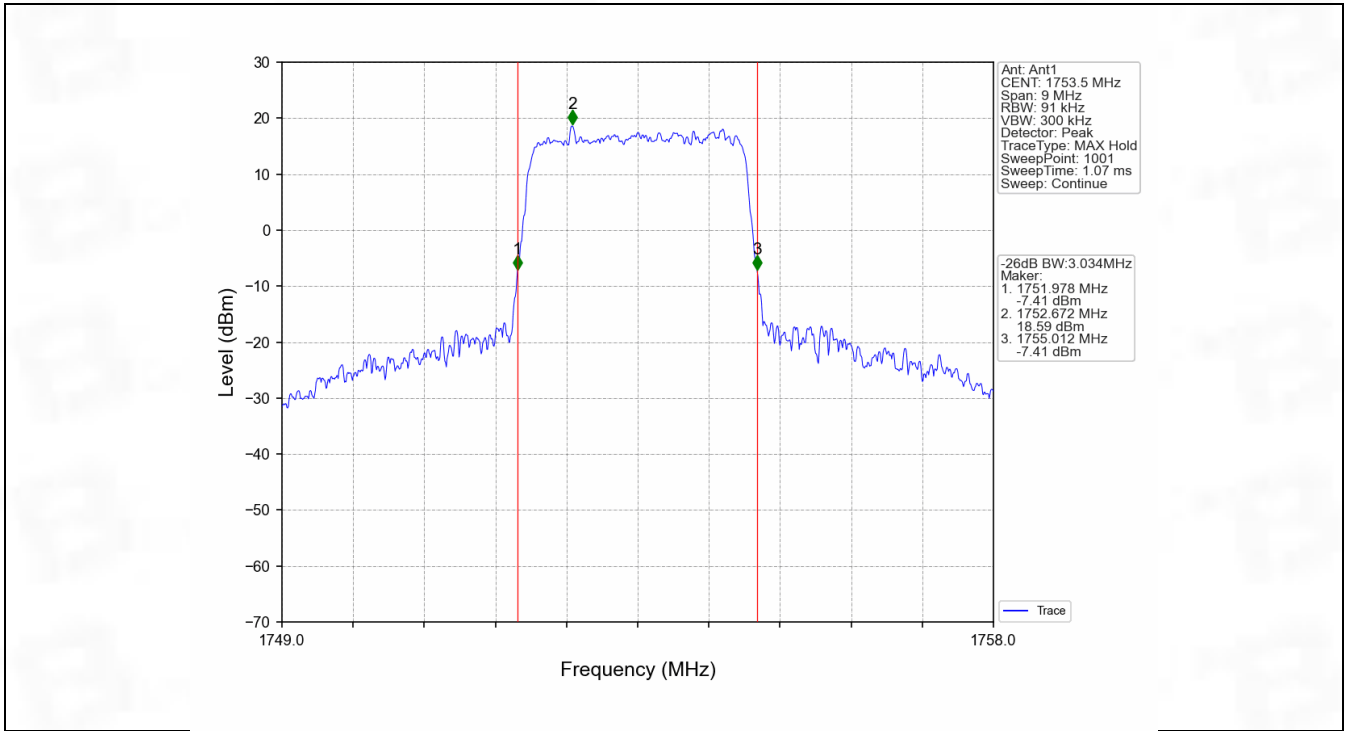
Band4_3MHz_QPSK_LCH_1711.5MHz_RB_15_0_NTNV

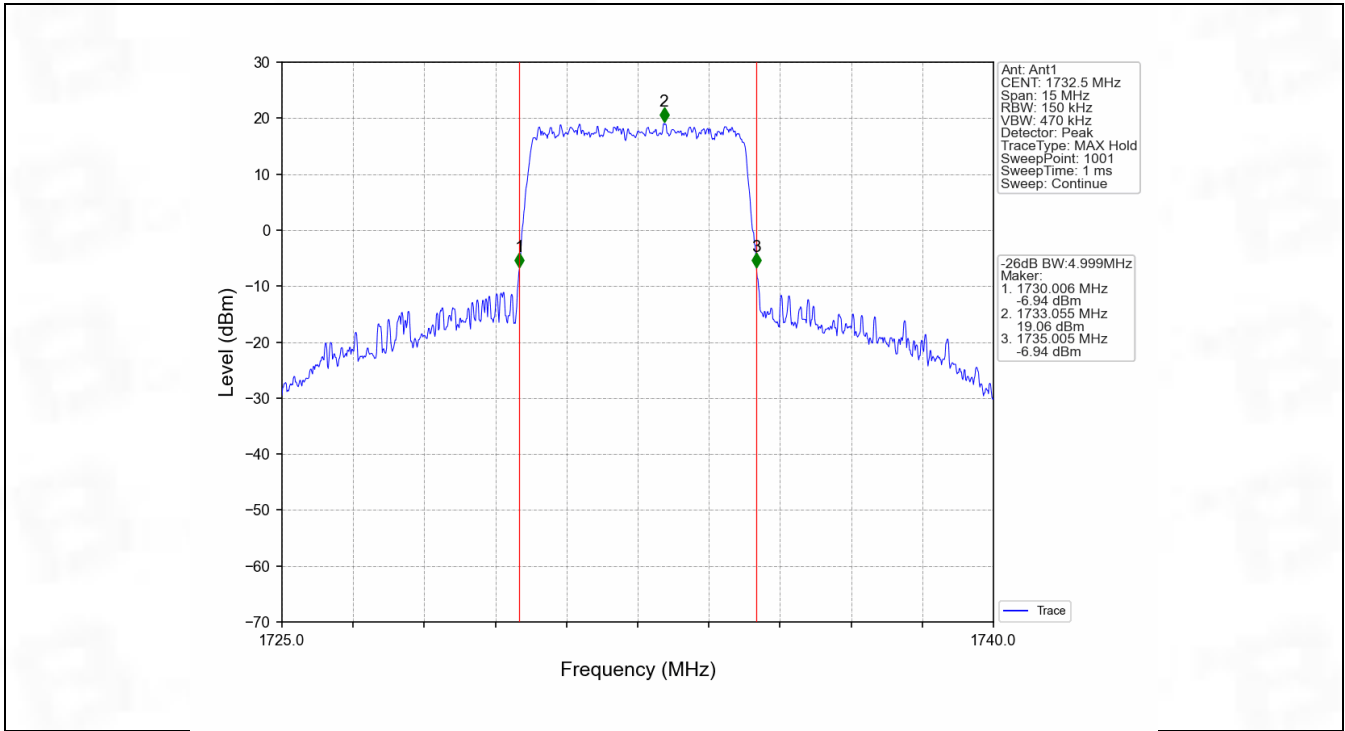


Band4_3MHz_QPSK_MCH_1732.5MHz_RB_15_0_NTNV

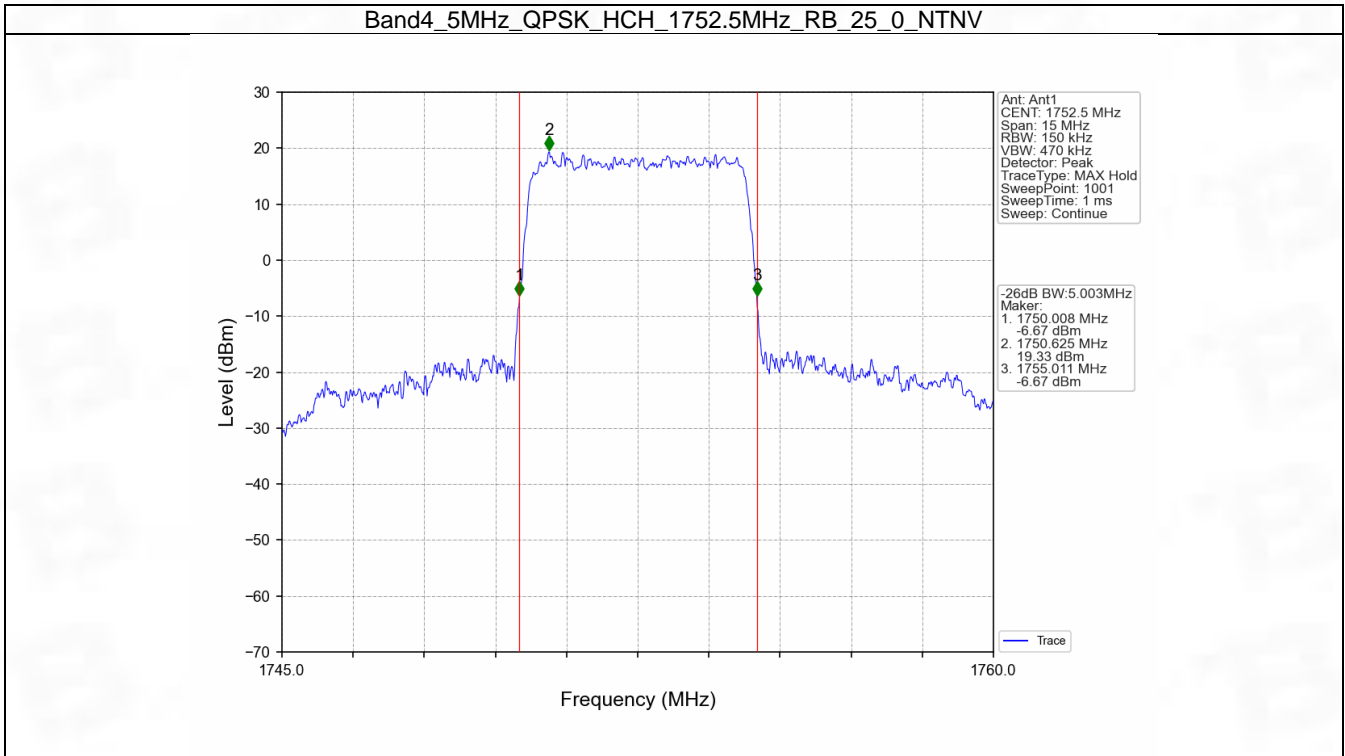




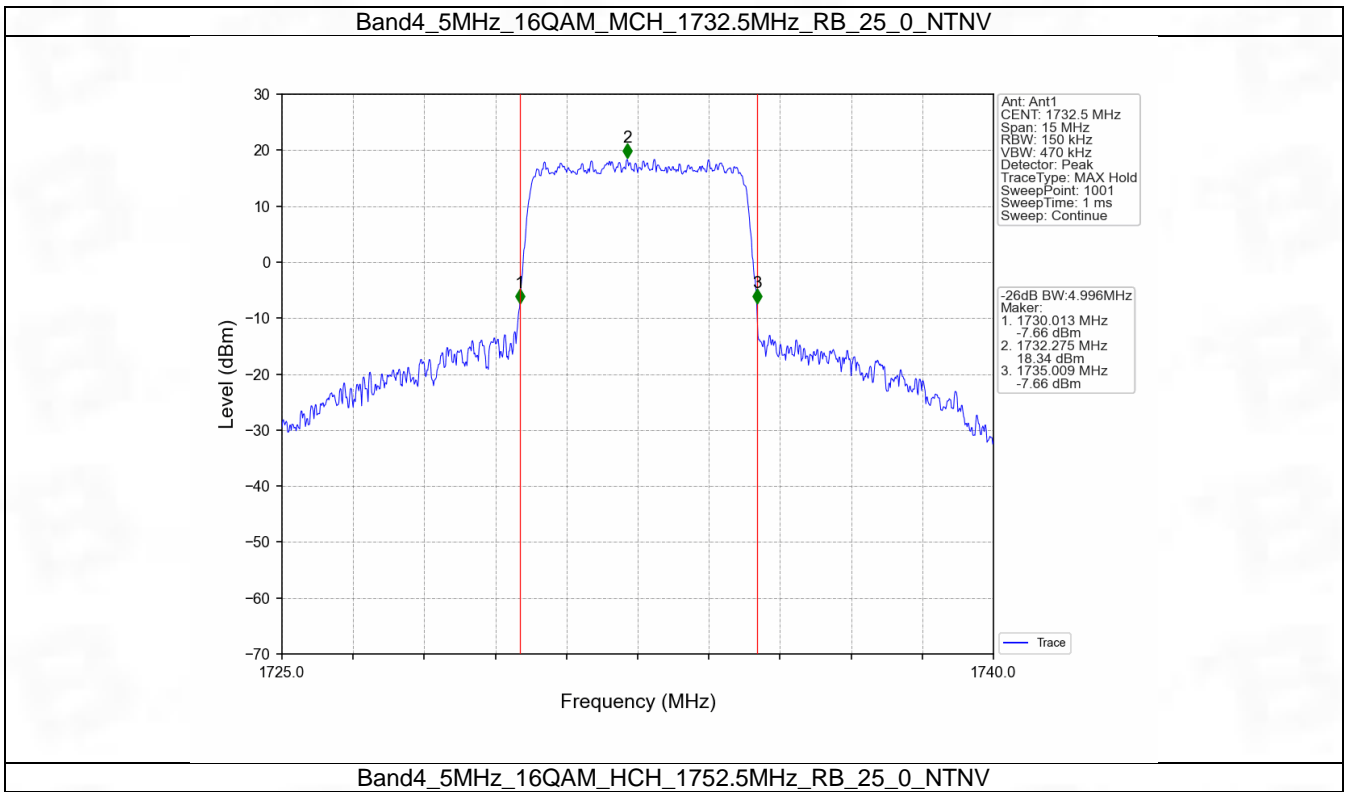
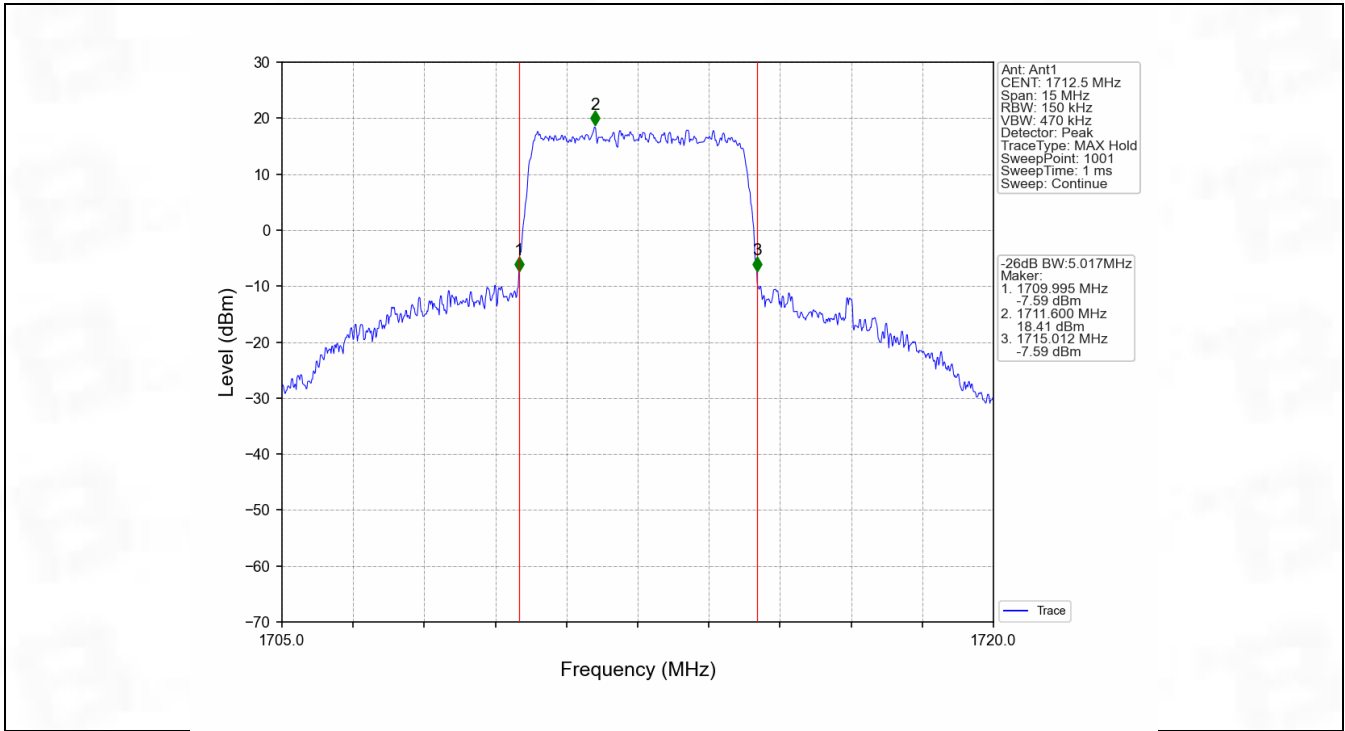


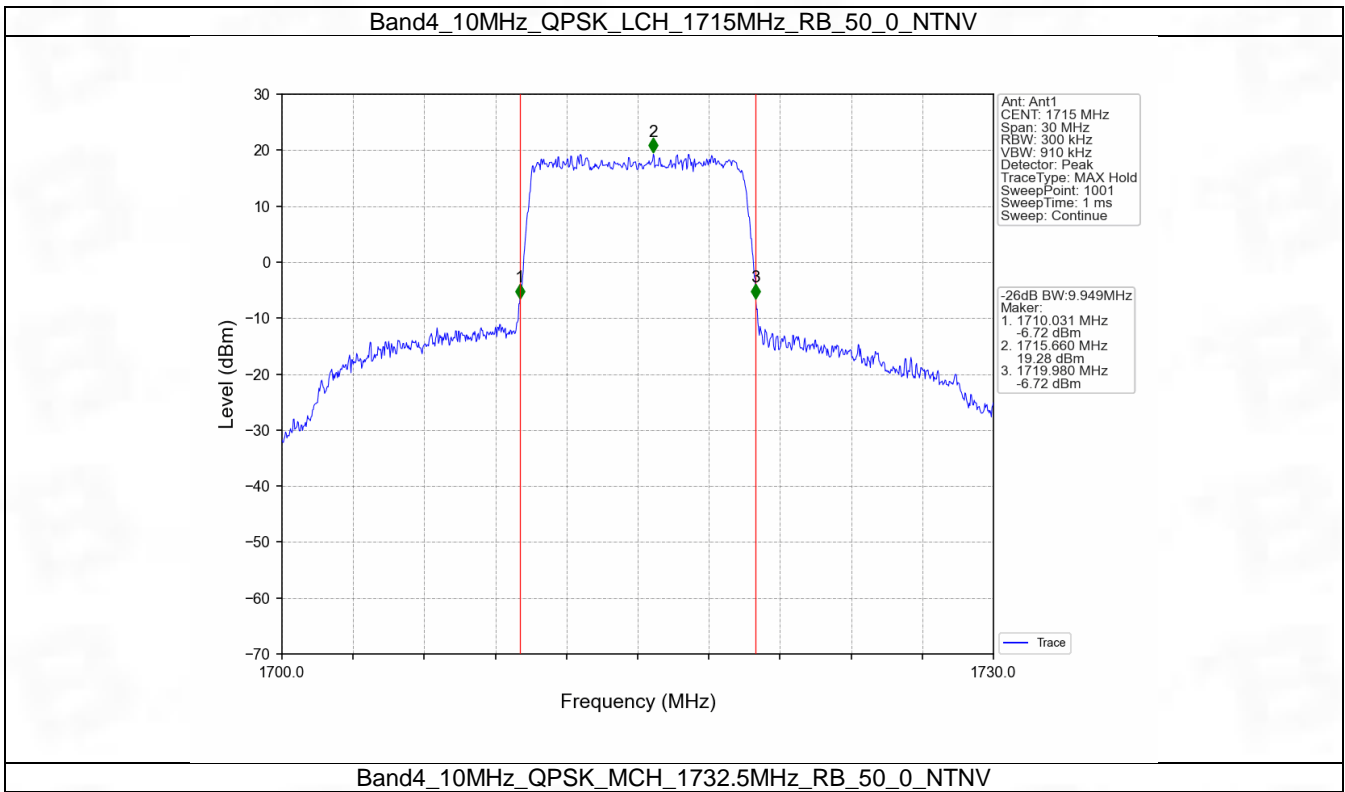
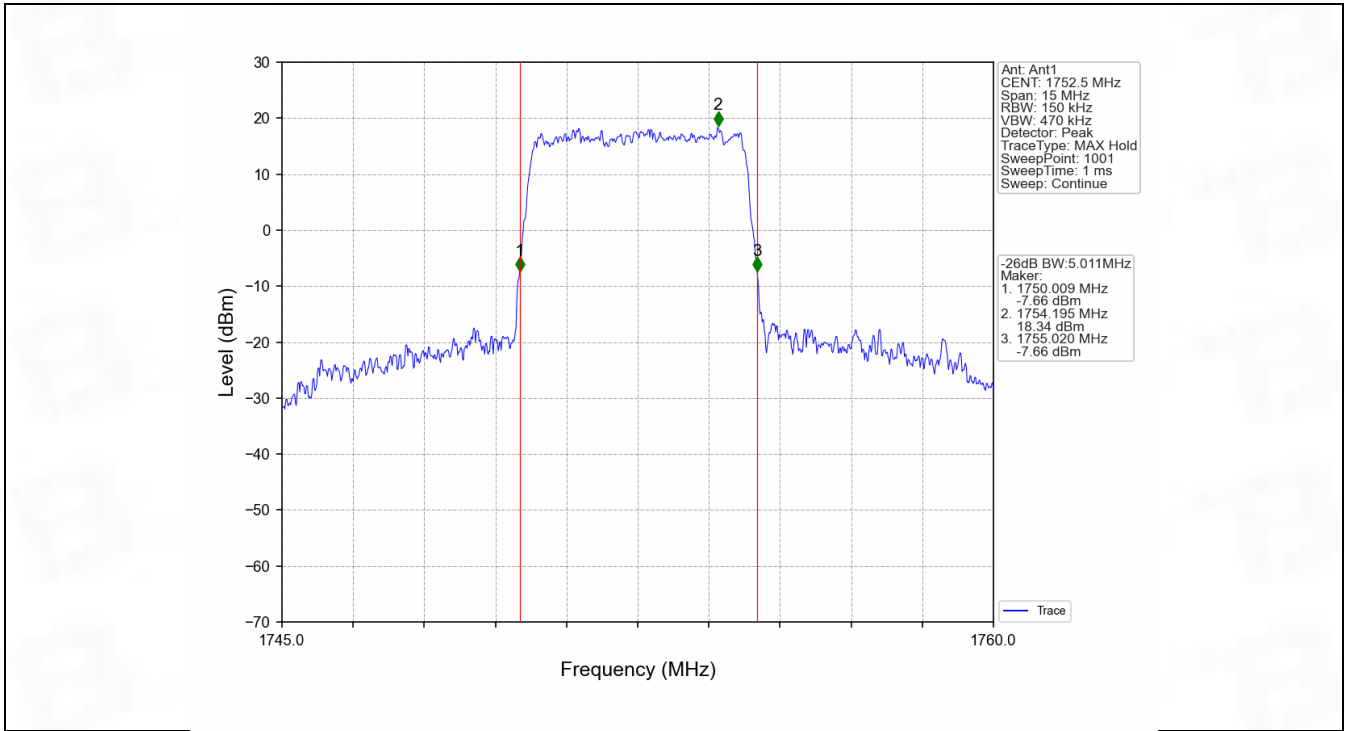


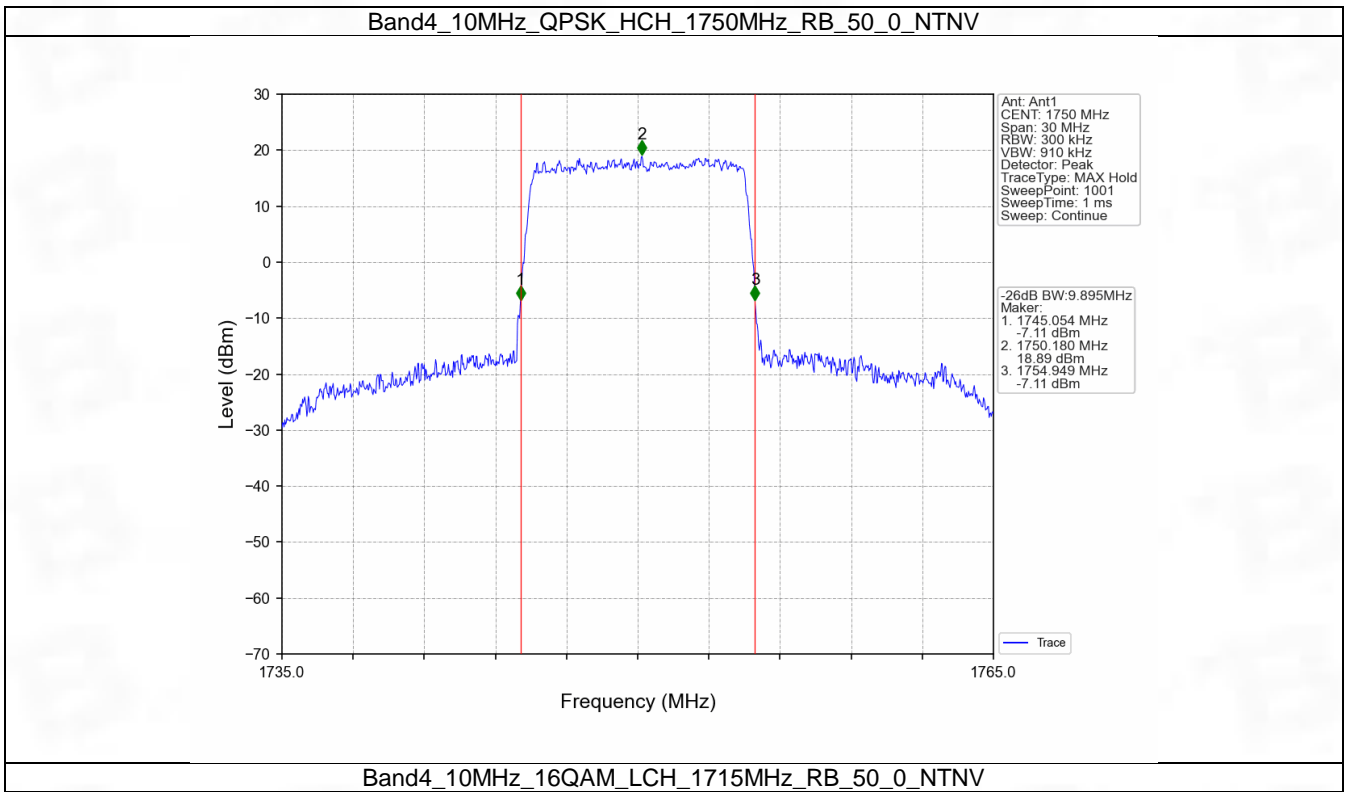
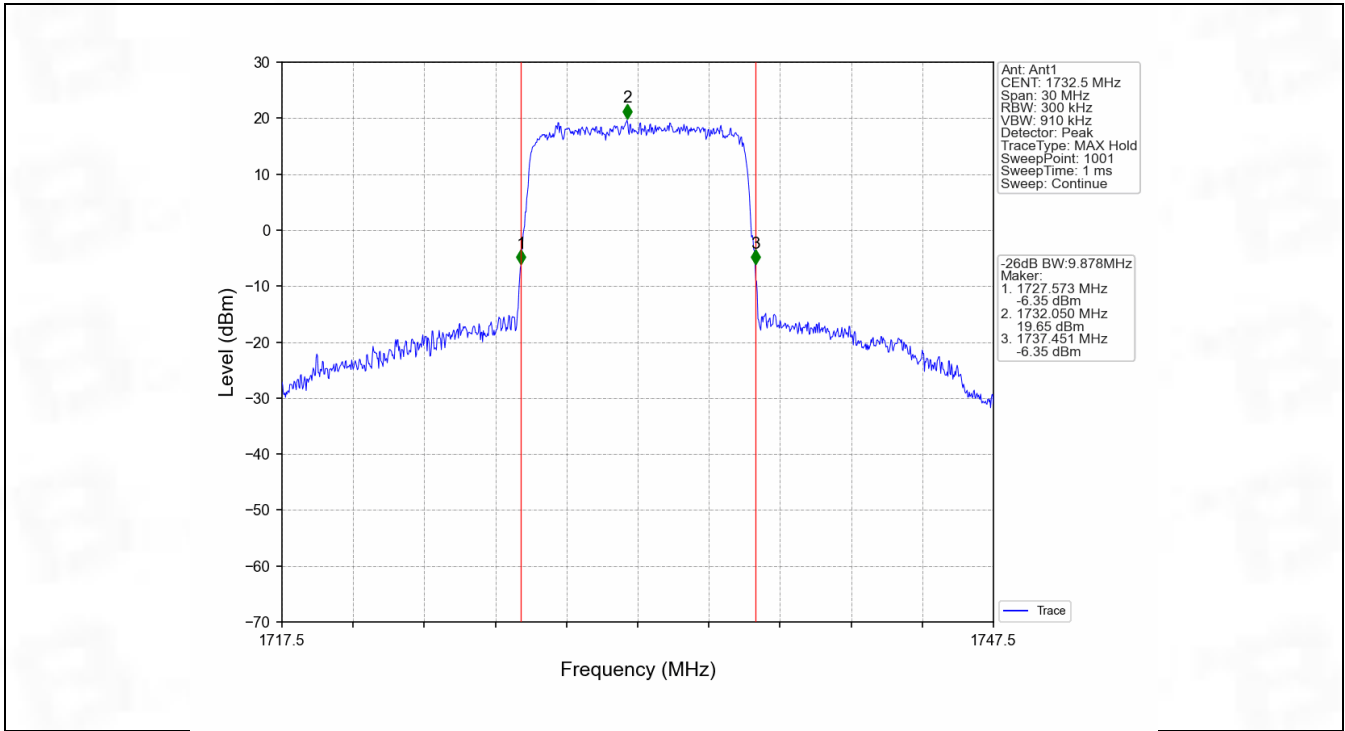
Band4_5MHz_QPSK_HCH_1752.5MHz_RB_25_0_NTNV

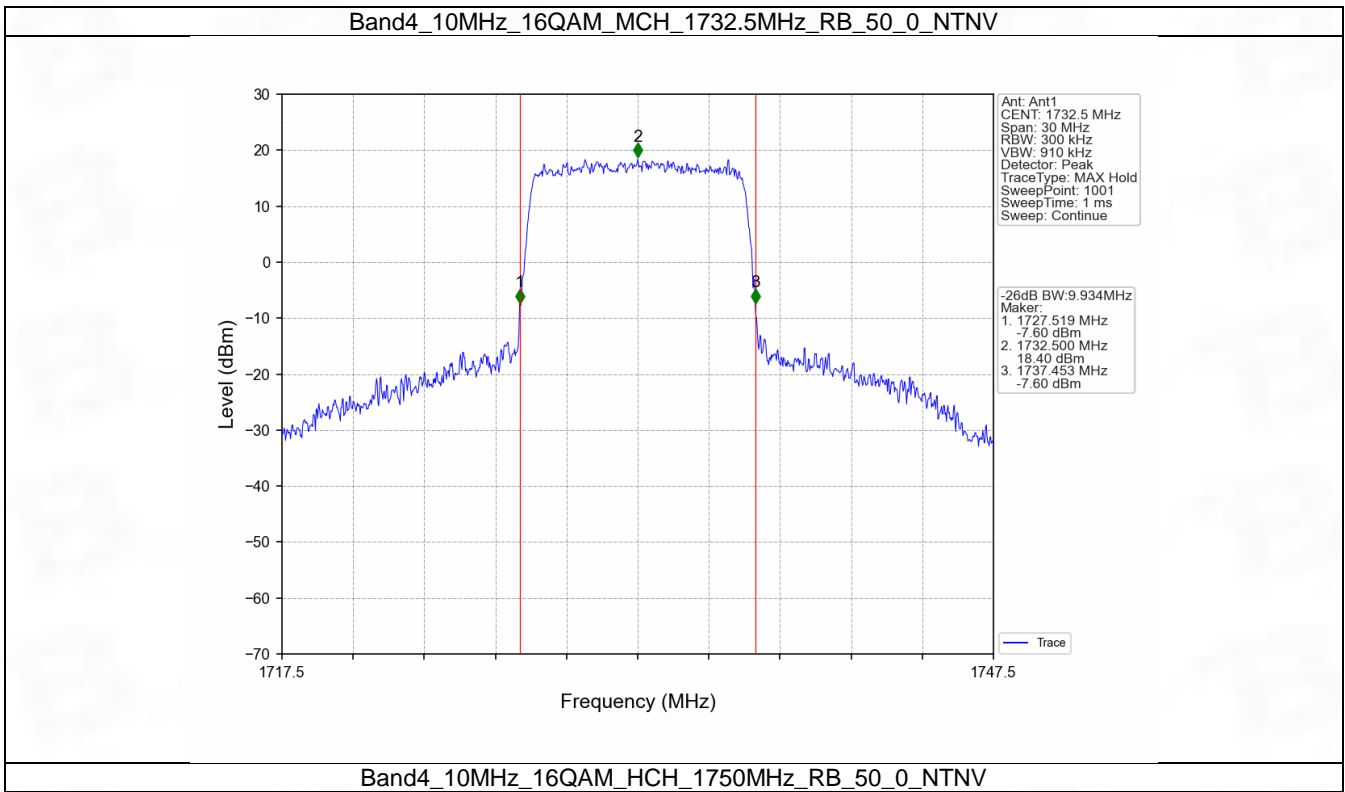
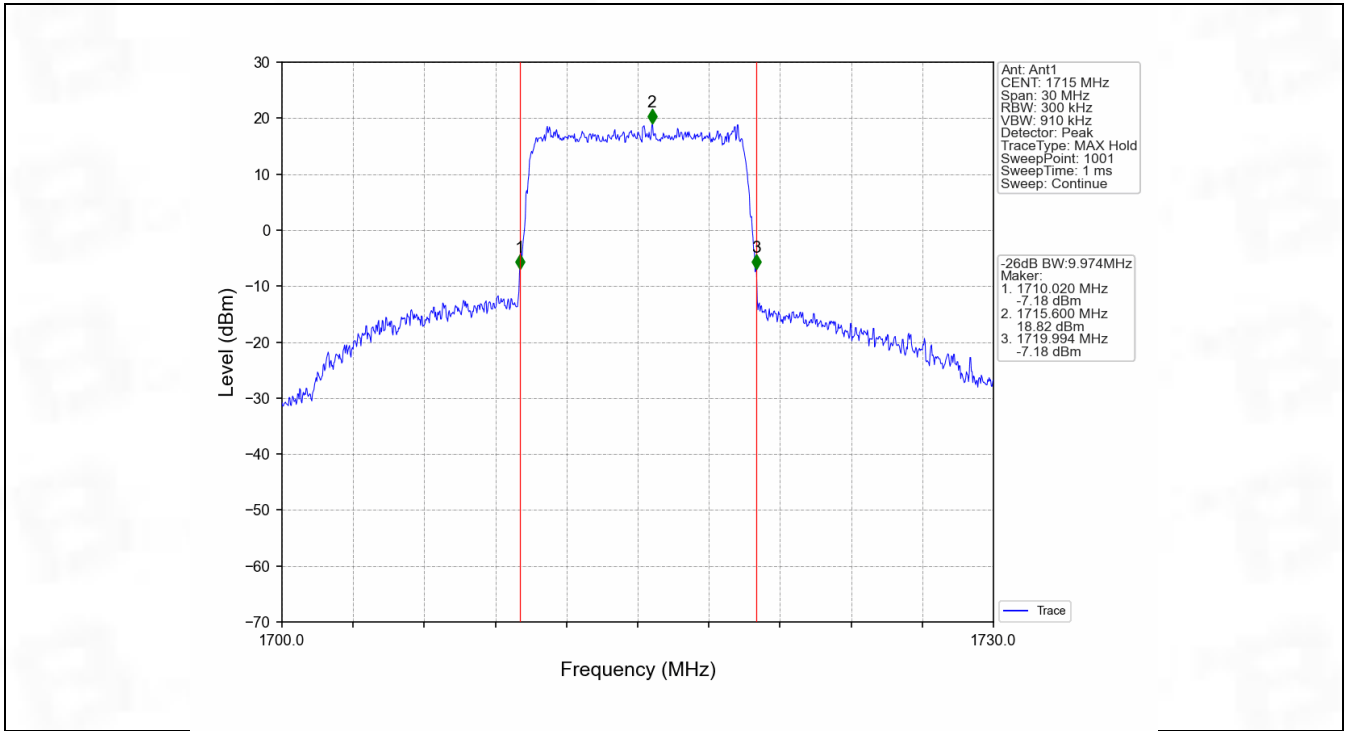


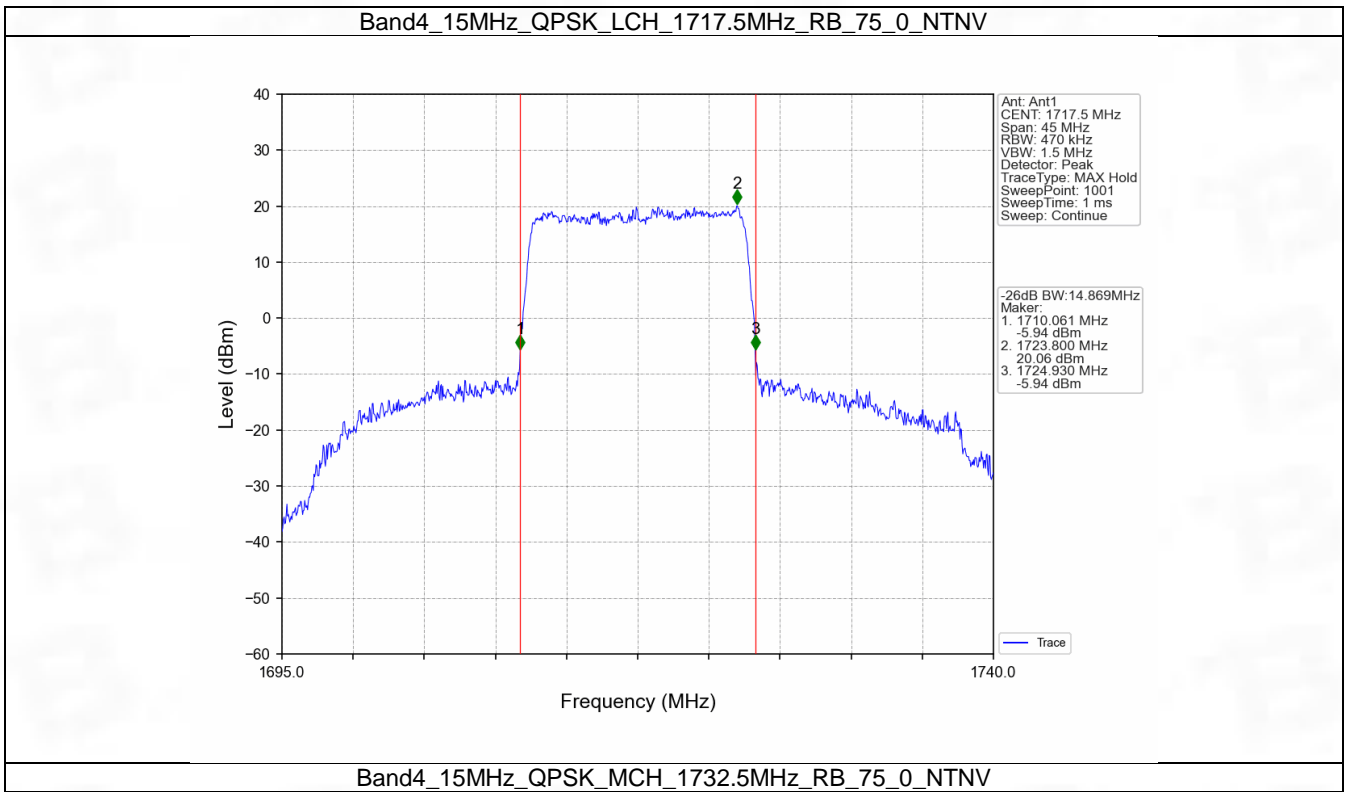
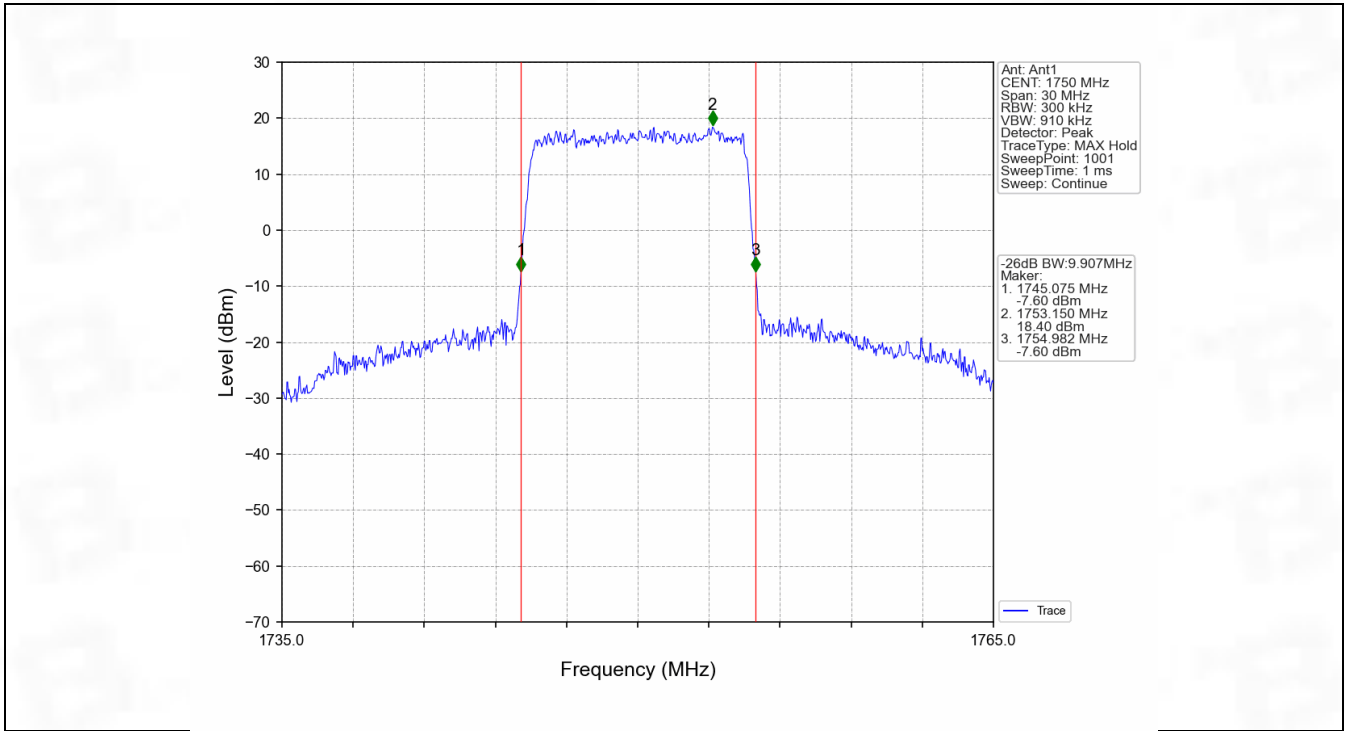
Band4_5MHz_16QAM_LCH_1712.5MHz_RB_25_0_NTNV

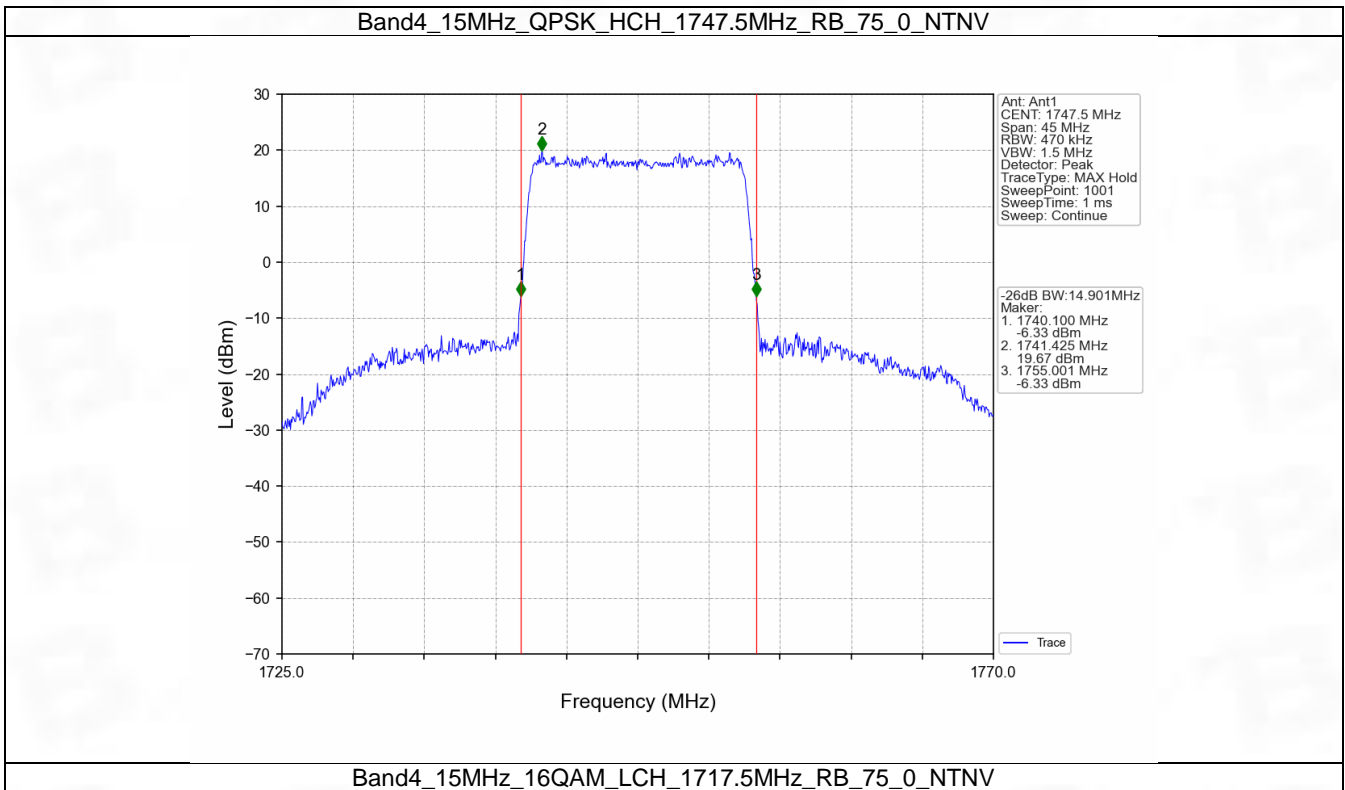
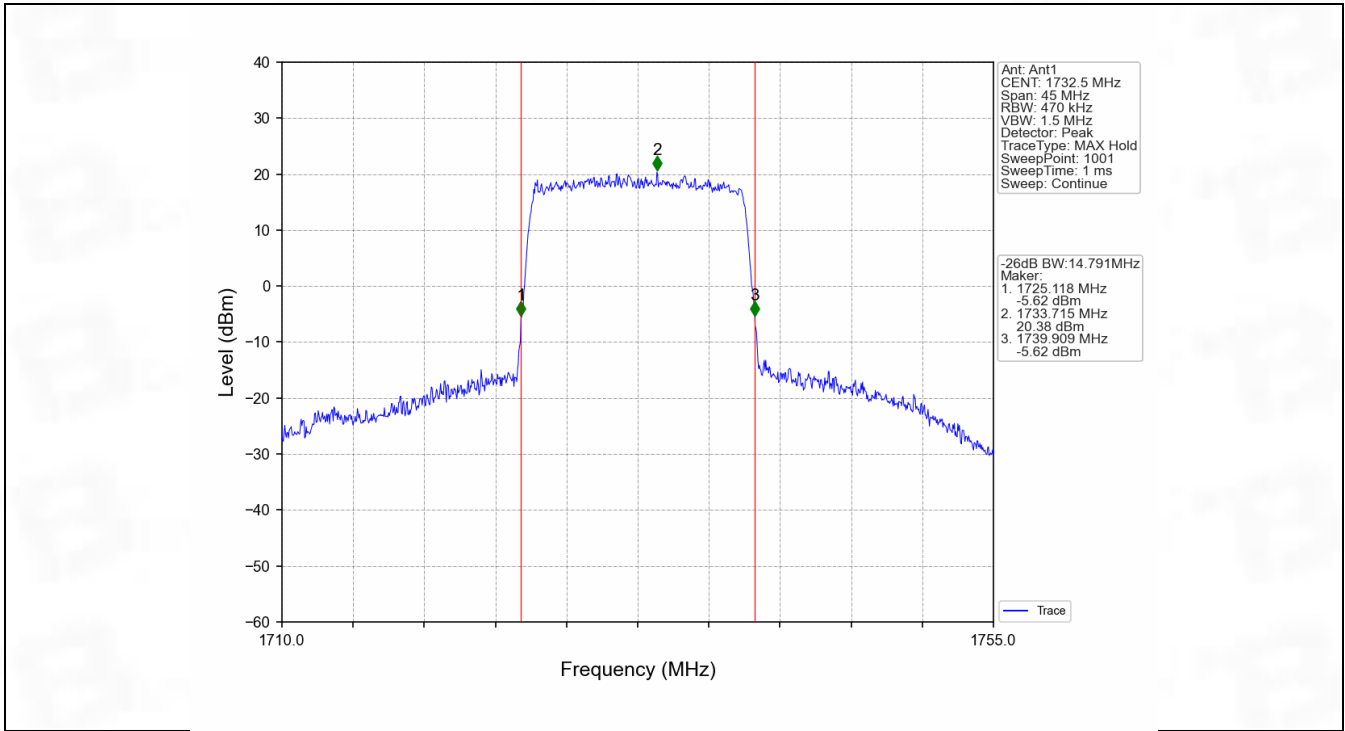


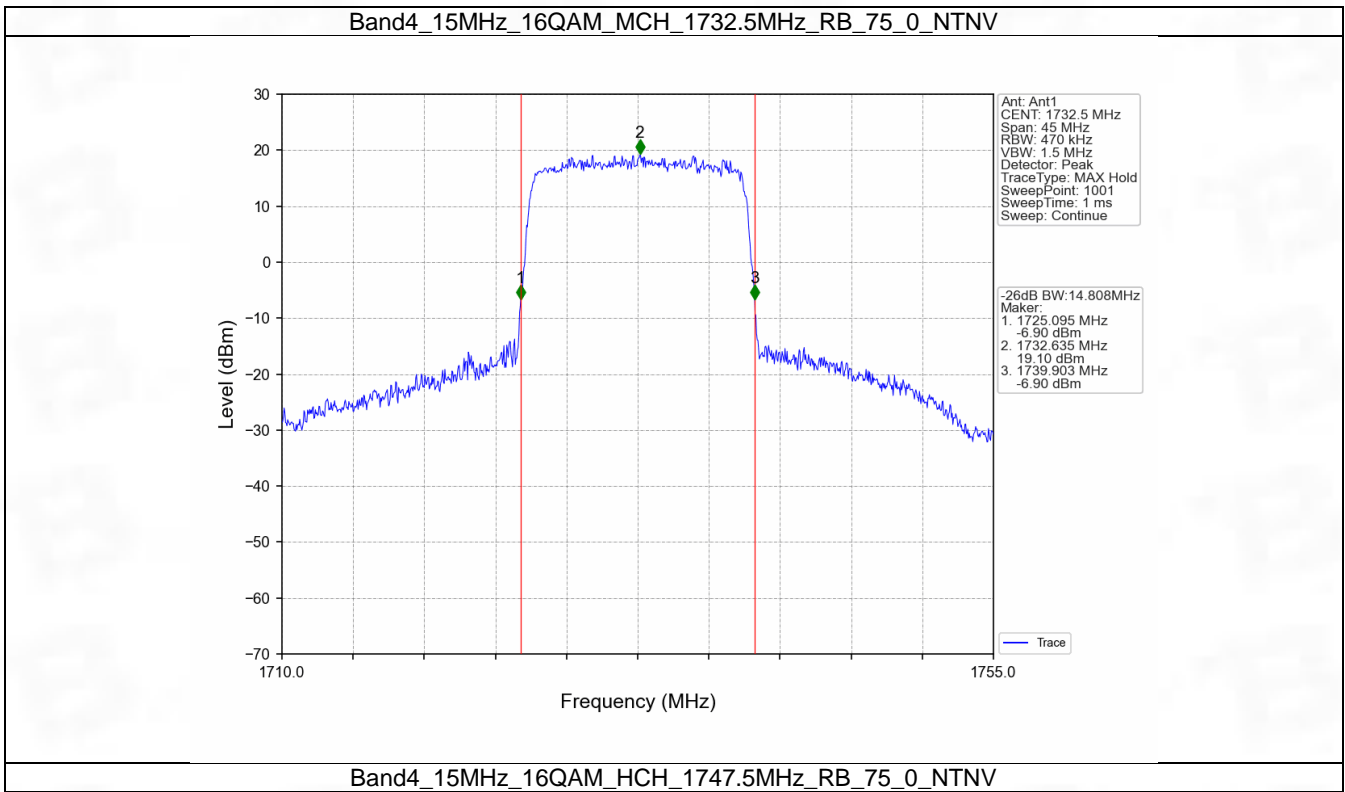
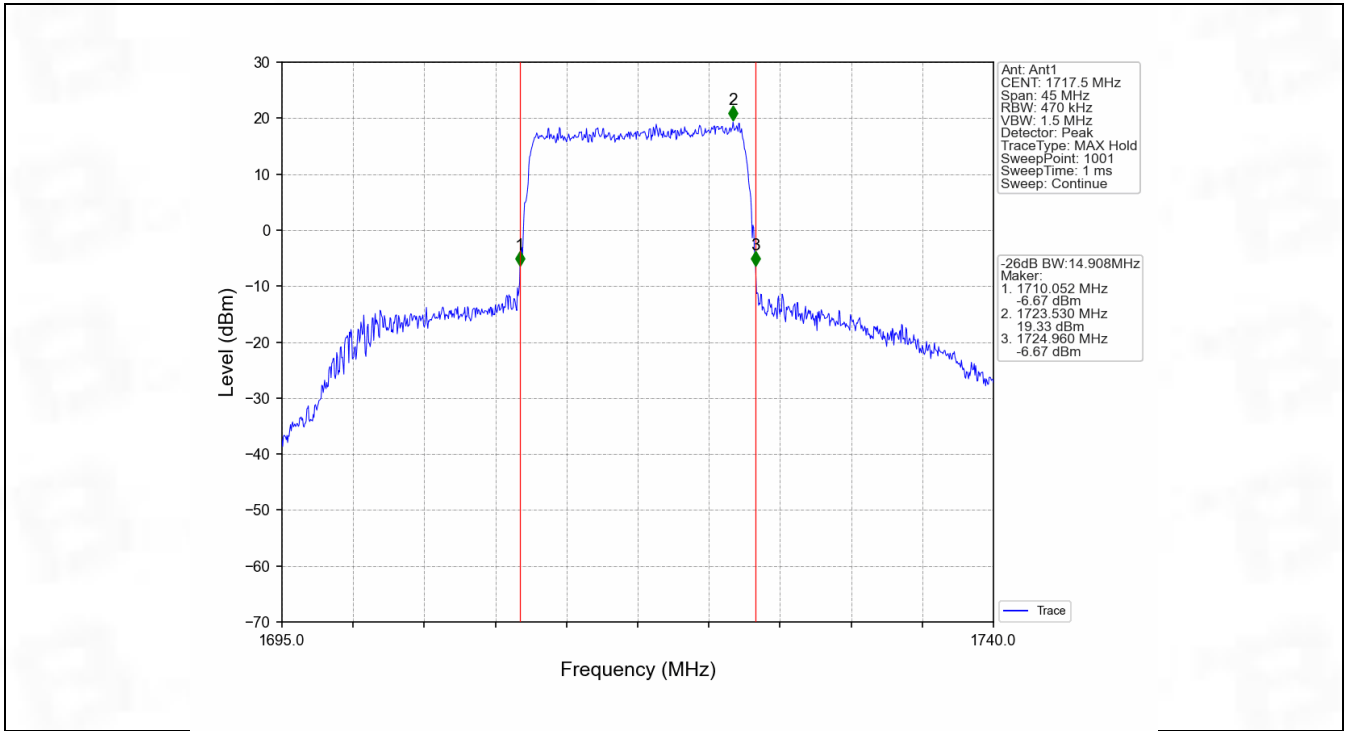


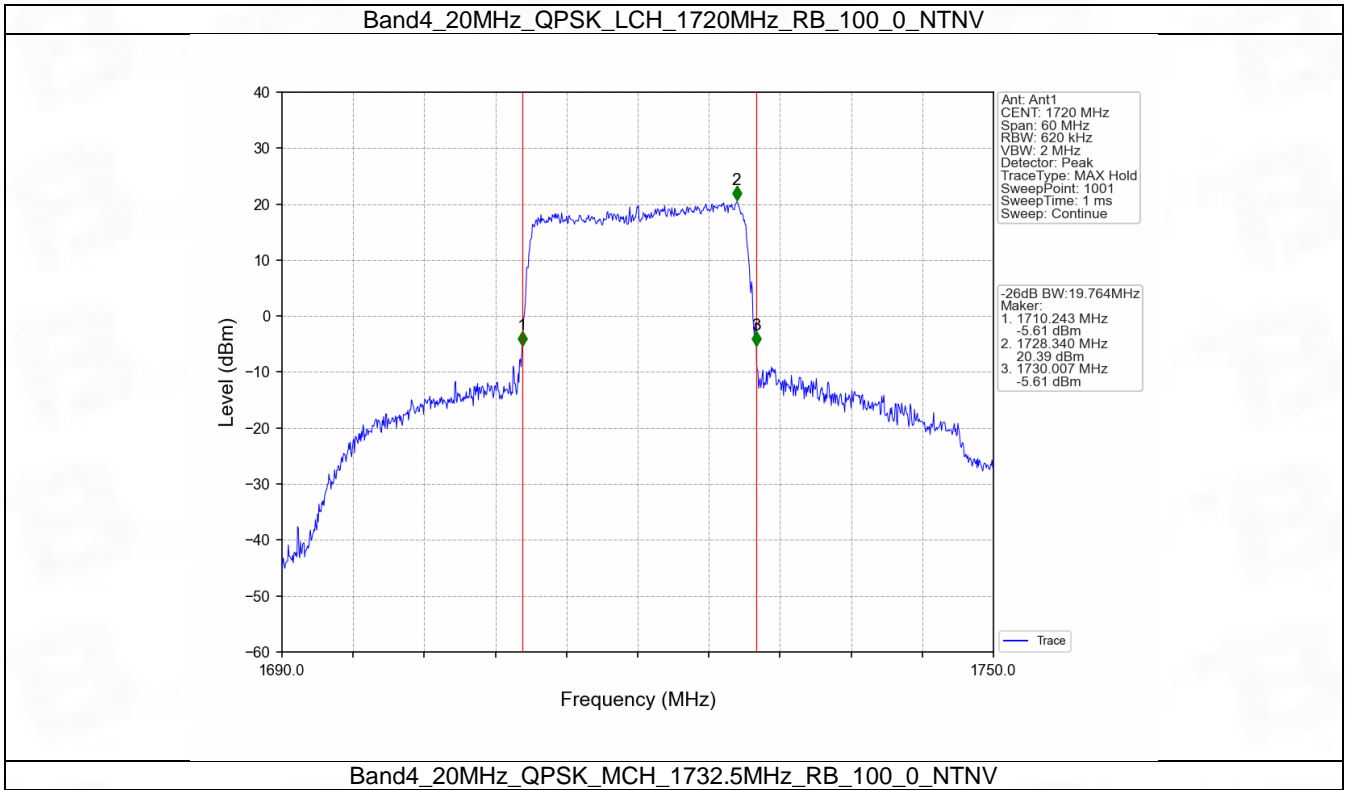
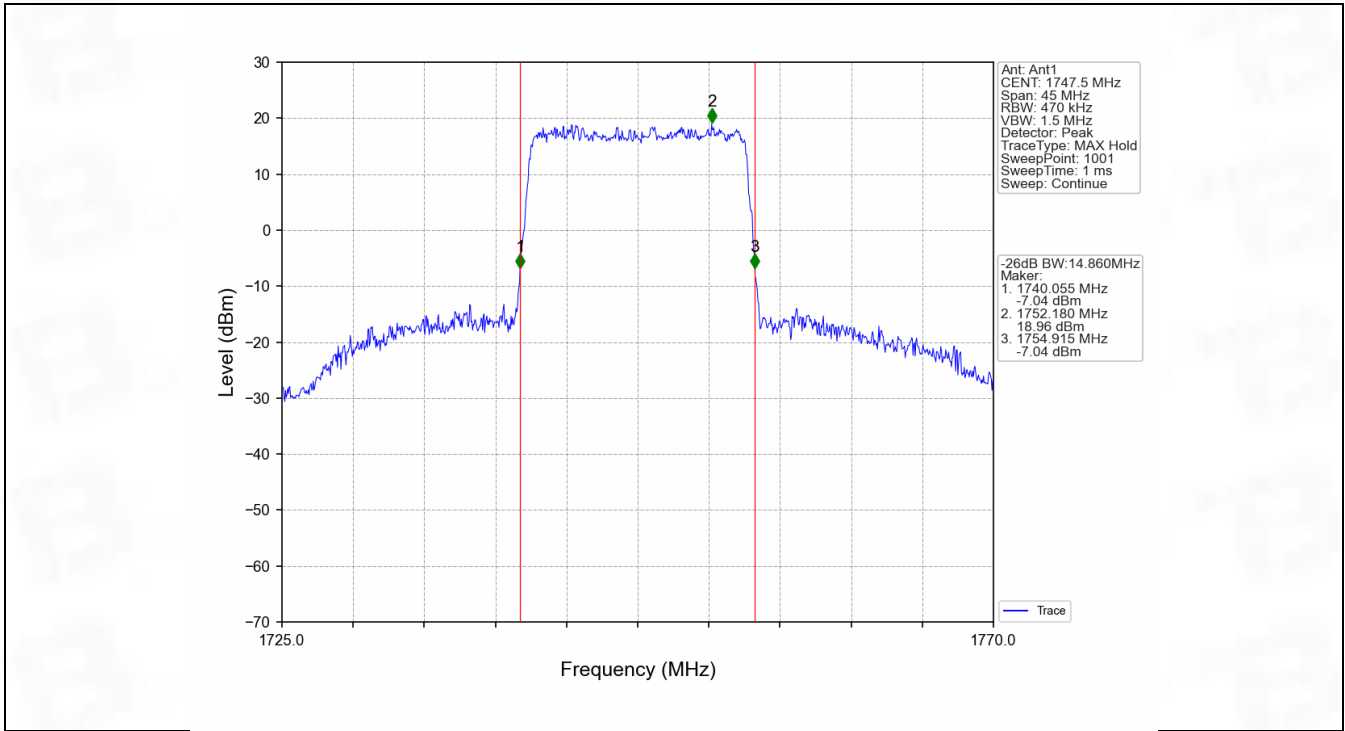


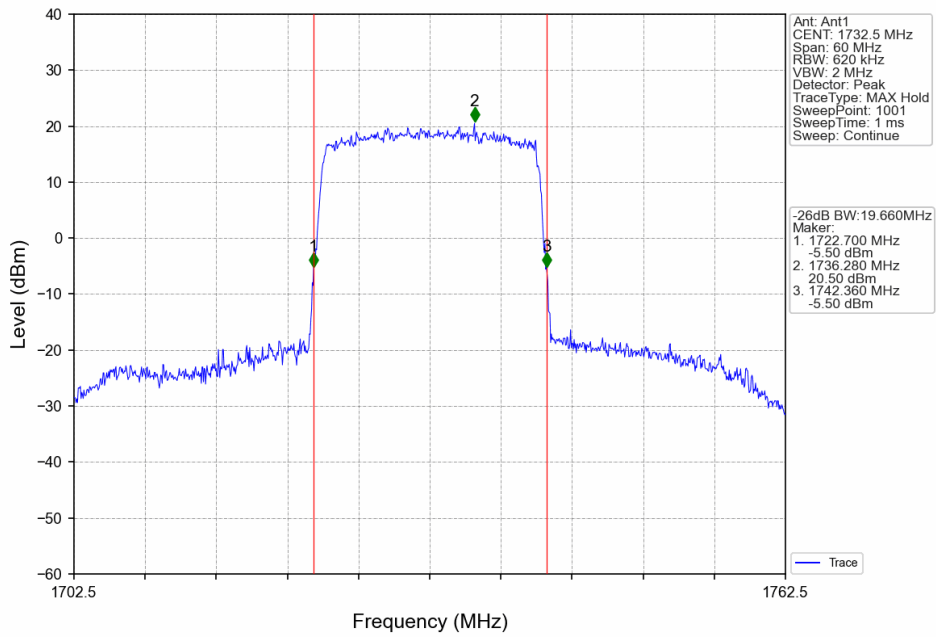




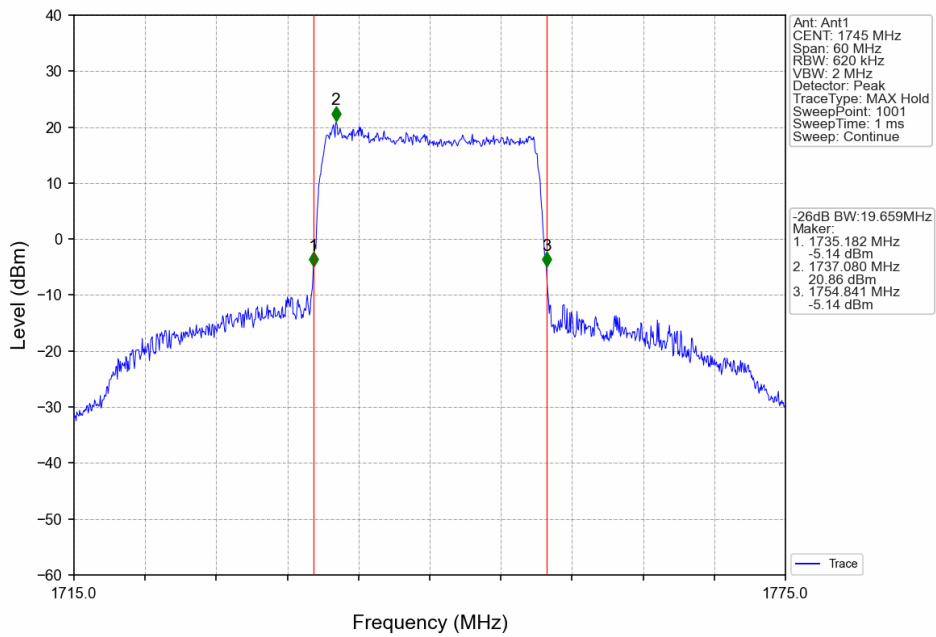




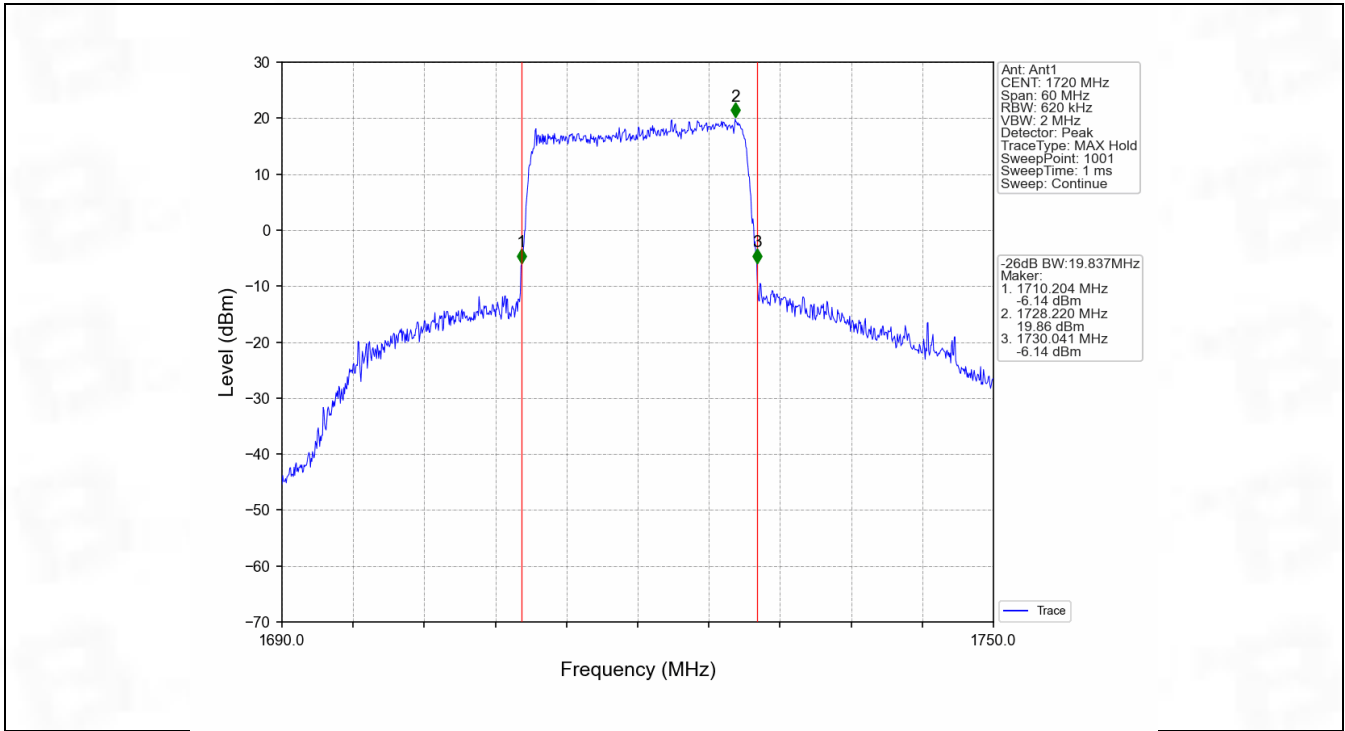




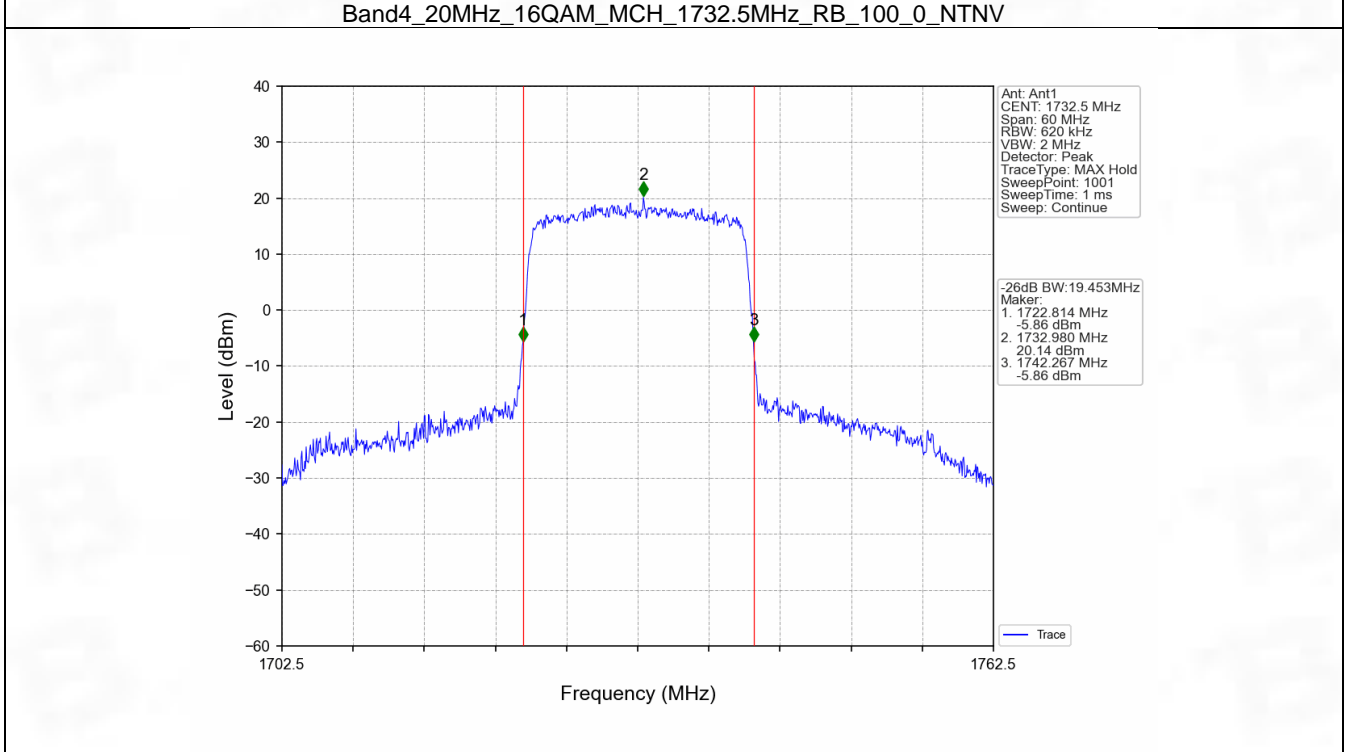
Band4_20MHz_QPSK_HCH_1745MHz_RB_100_0_NTNV



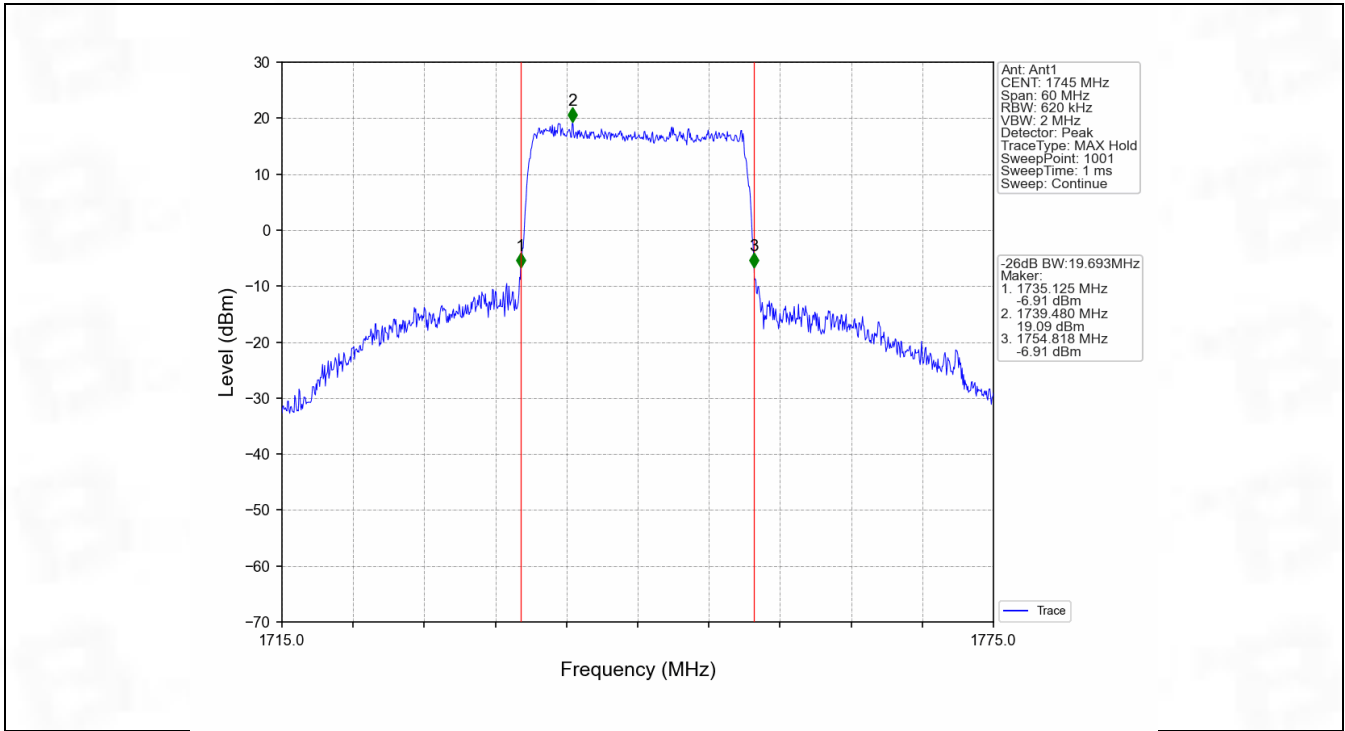
Band4_20MHz_16QAM_LCH_1720MHz_RB_100_0_NTNV



Band4_20MHz_16QAM_MCH_1732.5MHz_RB_100_0_NTNV



Band4_20MHz_16QAM_HCH_1745MHz_RB_100_0_NTNV



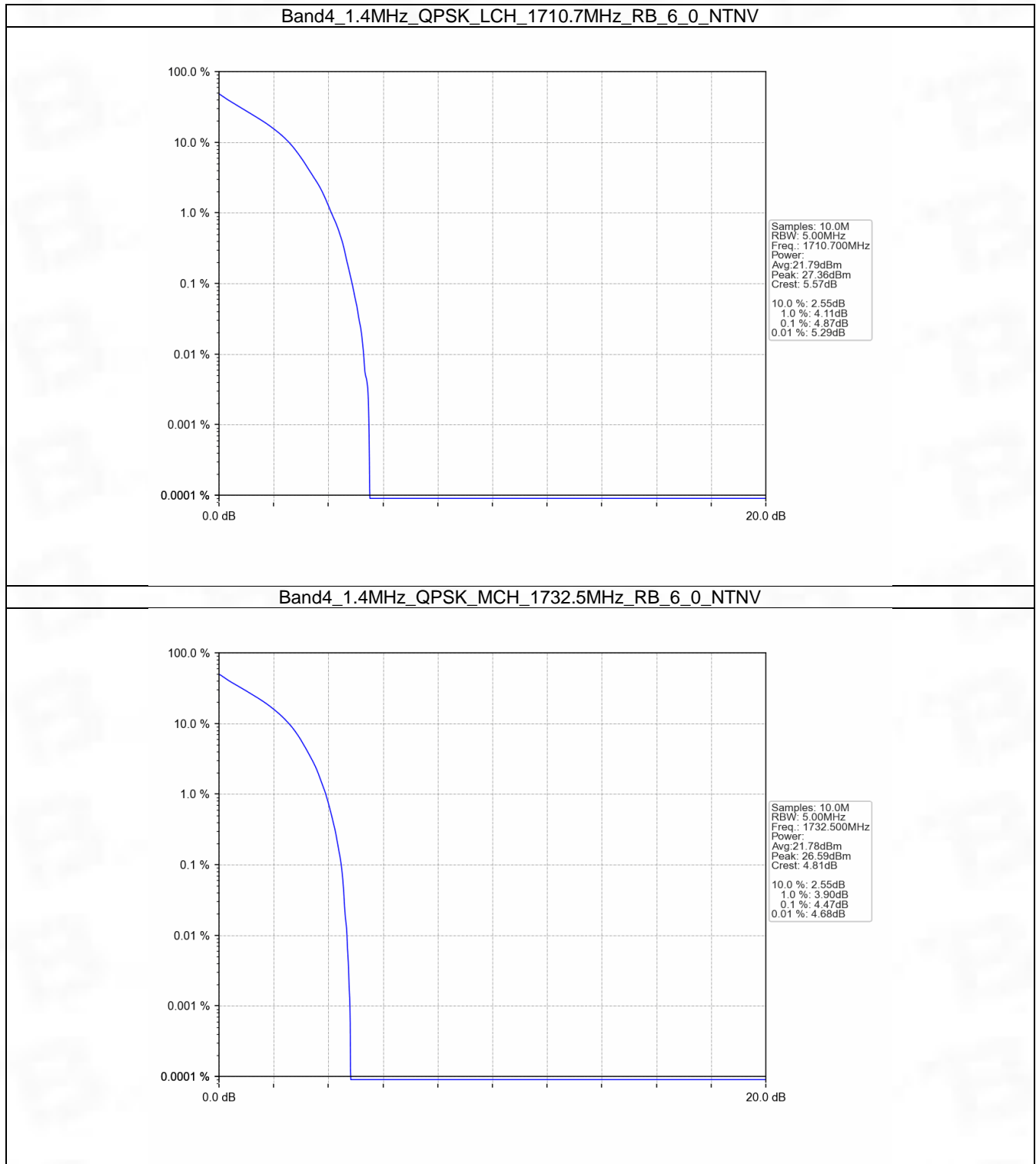
5. Peak-Average Ratio

5.1 B4_1.4MHz

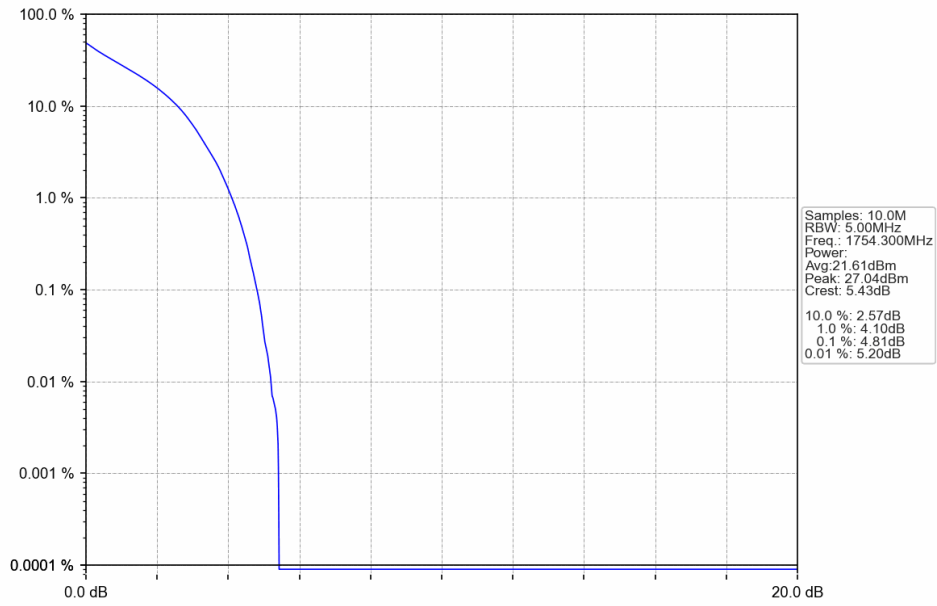
5.1.1 Test Result

Band: 4 / Bandwidth: 1.4MHz / NTV						
Modulation	Frequency (MHz)	RB Allocation		Peak-Average Ratio (dB)		Verdict
		Size	Offset	Result	Limit	
QPSK	1710.7	6	0	4.87	<=13	Pass
	1732.5	6	0	4.47	<=13	Pass
	1754.3	6	0	4.81	<=13	Pass
16QAM	1710.7	6	0	5.65	<=13	Pass
	1732.5	6	0	5.22	<=13	Pass
	1754.3	6	0	5.61	<=13	Pass

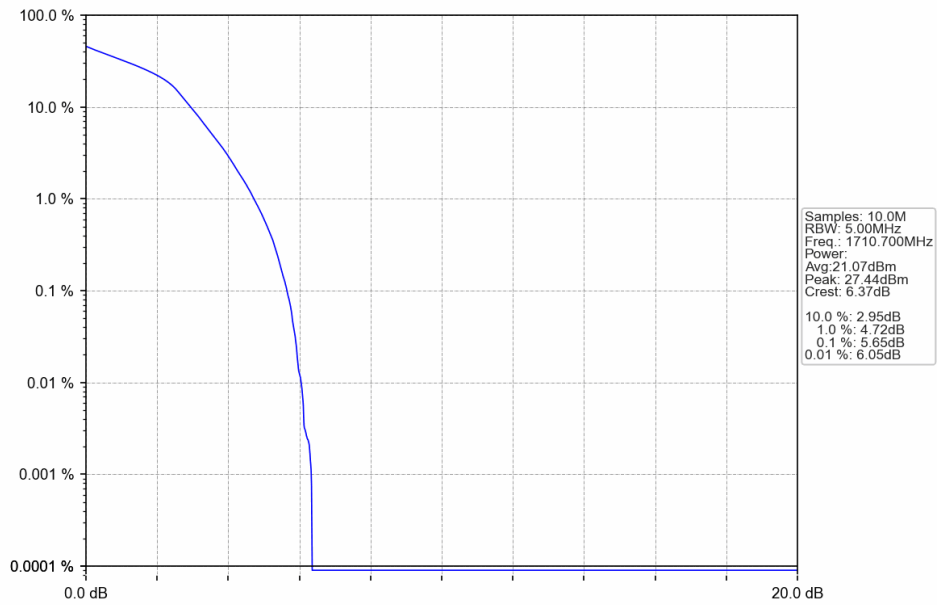
5.1.2 Test Graph



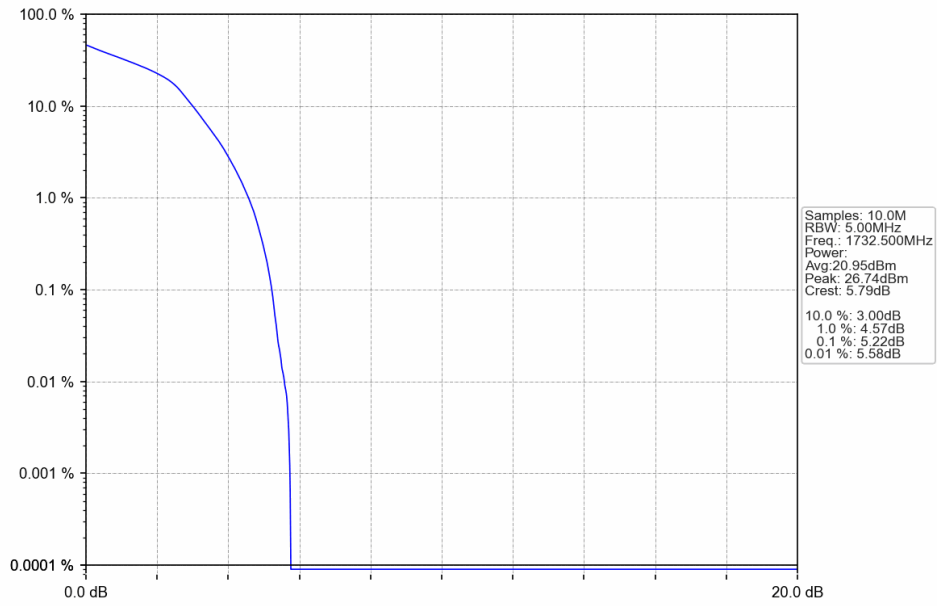
Band4_1.4MHz_QPSK_HCH_1754.3MHz_RB_6_0_NTNV



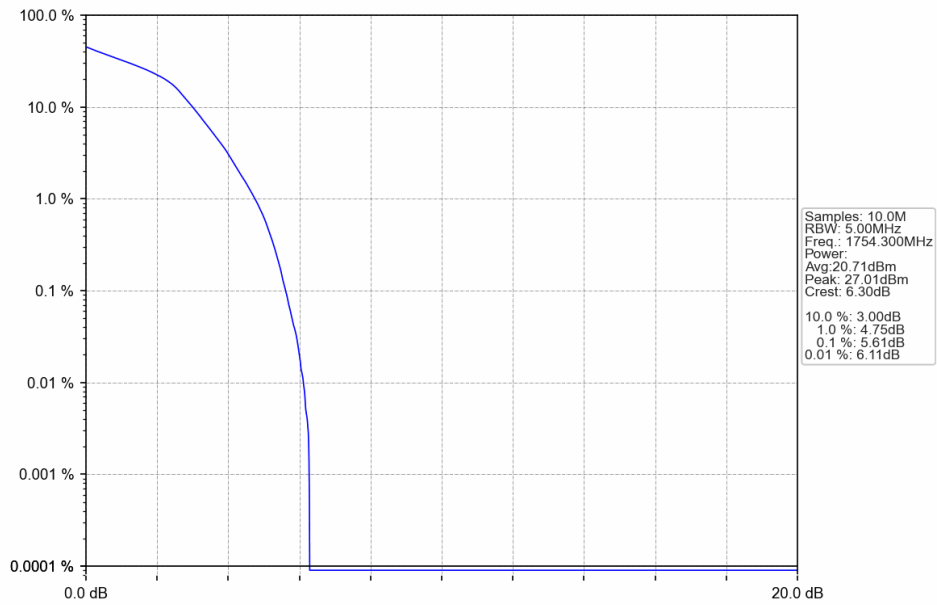
Band4_1.4MHz_16QAM_LCH_1710.7MHz_RB_6_0_NTNV



Band4_1.4MHz_16QAM_MCH_1732.5MHz_RB_6_0_NTNV



Band4_1.4MHz_16QAM_HCH_1754.3MHz_RB_6_0_NTNV

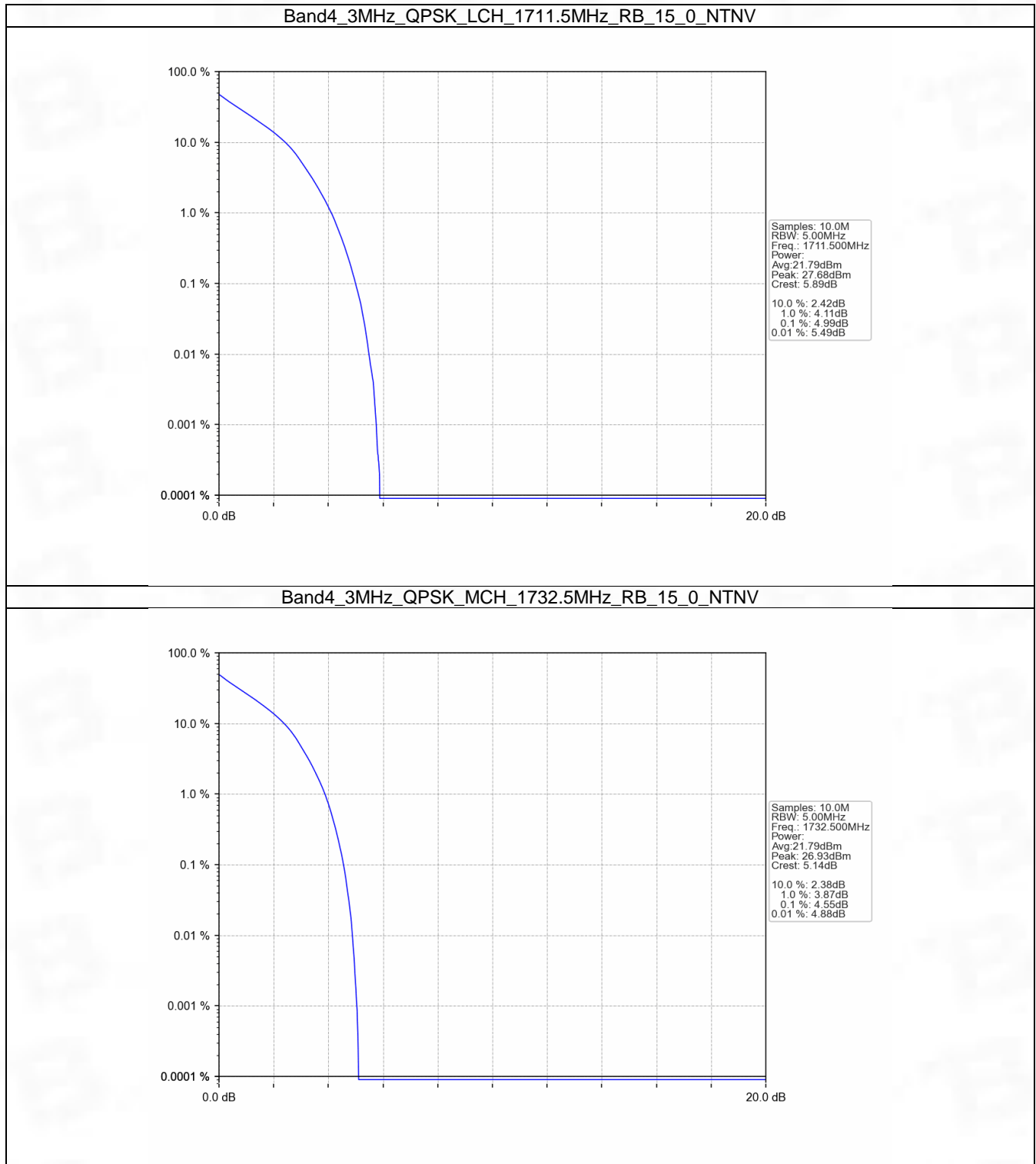


5.2 B4_3MHz

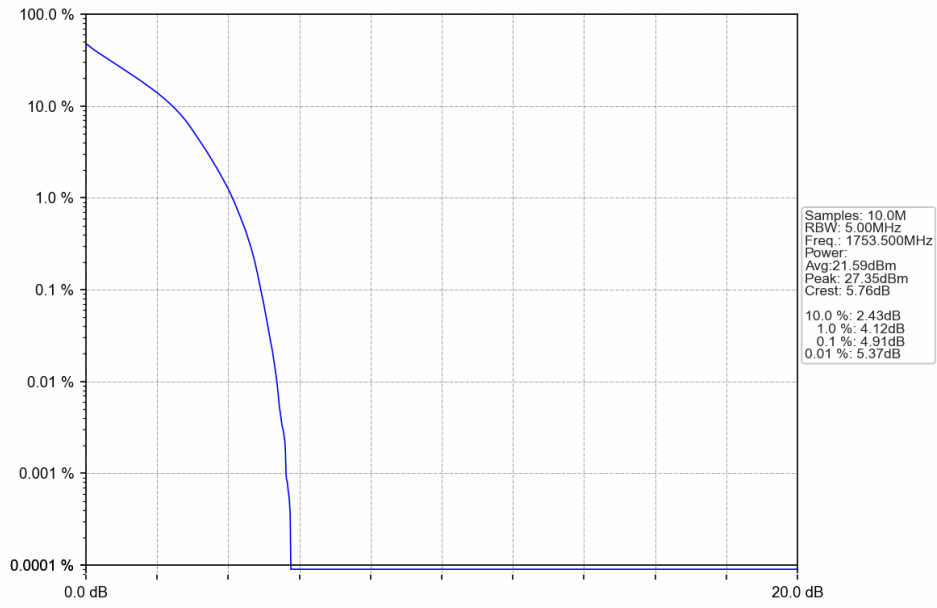
5.2.1 Test Result

Band: 4 / Bandwidth: 3MHz / NTN						
Modulation	Frequency (MHz)	RB Allocation		Peak-Average Ratio (dB)		Verdict
		Size	Offset	Result	Limit	
QPSK	1711.5	15	0	4.99	<=13	Pass
	1732.5	15	0	4.55	<=13	Pass
	1753.5	15	0	4.91	<=13	Pass
16QAM	1711.5	15	0	5.81	<=13	Pass
	1732.5	15	0	5.35	<=13	Pass
	1753.5	15	0	5.75	<=13	Pass

5.2.2 Test Graph



Band4_3MHz_QPSK_HCH_1753.5MHz_RB_15_0_NTNV



Band4_3MHz_16QAM_LCH_1711.5MHz_RB_15_0_NTNV

