

1. Effective (Isotropic) Radiated Power Output Data

1.1 B12_1.4MHz_ERP

1.1.1 Test Result

Band: 12 / Bandwidth: 1.4MHz / NTNV										
Modulation	Frequency (MHz)	RB Allocation		Conducted Power (dBm)	Gain (dBi)	ERP (dBm)		Verdict		
		Size	Offset			Result	Limit			
QPSK	699.7	1	0	22.58	-1.42	19.01	<=34.77	Pass		
			2	22.70	-1.42	19.13	<=34.77	Pass		
			5	22.63	-1.42	19.06	<=34.77	Pass		
		3	0	22.59	-1.42	19.02	<=34.77	Pass		
			2	22.63	-1.42	19.06	<=34.77	Pass		
			3	22.67	-1.42	19.10	<=34.77	Pass		
		6	0	21.63	-1.42	18.06	<=34.77	Pass		
		707.5	1	0	22.21	-1.42	18.64	<=34.77	Pass	
				2	22.34	-1.42	18.77	<=34.77	Pass	
	5			22.22	-1.42	18.65	<=34.77	Pass		
	3		0	22.25	-1.42	18.68	<=34.77	Pass		
			2	22.30	-1.42	18.73	<=34.77	Pass		
			3	22.24	-1.42	18.67	<=34.77	Pass		
	6		0	21.32	-1.42	17.75	<=34.77	Pass		
	715.3		1	0	22.38	-1.42	18.81	<=34.77	Pass	
				2	22.57	-1.42	19.00	<=34.77	Pass	
		5		22.45	-1.42	18.88	<=34.77	Pass		
		3	0	22.27	-1.42	18.70	<=34.77	Pass		
			2	22.33	-1.42	18.76	<=34.77	Pass		
			3	22.25	-1.42	18.68	<=34.77	Pass		
		6	0	21.52	-1.42	17.95	<=34.77	Pass		
		16QAM	699.7	1	0	21.50	-1.42	17.93	<=34.77	Pass
					2	21.37	-1.42	17.80	<=34.77	Pass
	5				21.07	-1.42	17.50	<=34.77	Pass	
	3			0	21.15	-1.42	17.58	<=34.77	Pass	
				2	21.14	-1.42	17.57	<=34.77	Pass	
				3	21.14	-1.42	17.57	<=34.77	Pass	
6	0			20.02	-1.42	16.45	<=34.77	Pass		
707.5	1			0	21.28	-1.42	17.71	<=34.77	Pass	
				2	21.41	-1.42	17.84	<=34.77	Pass	
			5	21.31	-1.42	17.74	<=34.77	Pass		
	3		0	21.16	-1.42	17.59	<=34.77	Pass		
			2	21.20	-1.42	17.63	<=34.77	Pass		
			3	21.18	-1.42	17.61	<=34.77	Pass		
	6		0	20.24	-1.42	16.67	<=34.77	Pass		
	715.3		1	0	21.12	-1.42	17.55	<=34.77	Pass	
				2	21.25	-1.42	17.68	<=34.77	Pass	
5				21.16	-1.42	17.59	<=34.77	Pass		
3			0	21.33	-1.42	17.76	<=34.77	Pass		
			2	21.39	-1.42	17.82	<=34.77	Pass		
			3	21.34	-1.42	17.77	<=34.77	Pass		
6			0	20.29	-1.42	16.72	<=34.77	Pass		

Note1: ERP=Conducted Power+Antenna Gain-2.15

1.2 B12_3MHz_ERP

1.2.1 Test Result

Band: 12 / Bandwidth: 3MHz / NTV										
Modulation	Frequency (MHz)	RB Allocation		Conducted Power (dBm)	Gain (dBi)	ERP (dBm)		Verdict		
		Size	Offset			Result	Limit			
QPSK	700.5	1	0	22.62	-1.42	19.05	<=34.77	Pass		
			7	22.79	-1.42	19.22	<=34.77	Pass		
			14	22.17	-1.42	18.60	<=34.77	Pass		
		8	0	21.09	-1.42	17.52	<=34.77	Pass		
			4	21.15	-1.42	17.58	<=34.77	Pass		
			7	21.12	-1.42	17.55	<=34.77	Pass		
		15	0	21.06	-1.42	17.49	<=34.77	Pass		
		707.5	1	0	22.21	-1.42	18.64	<=34.77	Pass	
				7	22.38	-1.42	18.81	<=34.77	Pass	
	14			22.25	-1.42	18.68	<=34.77	Pass		
	8		0	21.23	-1.42	17.66	<=34.77	Pass		
			4	21.29	-1.42	17.72	<=34.77	Pass		
			7	21.25	-1.42	17.68	<=34.77	Pass		
	15		0	21.20	-1.42	17.63	<=34.77	Pass		
	714.5		1	0	22.37	-1.42	18.80	<=34.77	Pass	
				7	22.53	-1.42	18.96	<=34.77	Pass	
		14		22.49	-1.42	18.92	<=34.77	Pass		
		8	0	21.34	-1.42	17.77	<=34.77	Pass		
			4	21.41	-1.42	17.84	<=34.77	Pass		
			7	21.44	-1.42	17.87	<=34.77	Pass		
		15	0	21.27	-1.42	17.70	<=34.77	Pass		
		16QAM	700.5	1	0	21.05	-1.42	17.48	<=34.77	Pass
					7	21.26	-1.42	17.69	<=34.77	Pass
	14				21.11	-1.42	17.54	<=34.77	Pass	
	8			0	20.07	-1.42	16.50	<=34.77	Pass	
				4	20.16	-1.42	16.59	<=34.77	Pass	
				7	20.13	-1.42	16.56	<=34.77	Pass	
15	0			20.08	-1.42	16.51	<=34.77	Pass		
707.5	1			0	21.29	-1.42	17.72	<=34.77	Pass	
				7	21.47	-1.42	17.90	<=34.77	Pass	
			14	21.37	-1.42	17.80	<=34.77	Pass		
	8		0	20.13	-1.42	16.56	<=34.77	Pass		
			4	20.19	-1.42	16.62	<=34.77	Pass		
			7	20.17	-1.42	16.60	<=34.77	Pass		
	15		0	20.13	-1.42	16.56	<=34.77	Pass		
	714.5		1	0	21.67	-1.42	18.10	<=34.77	Pass	
				7	21.73	-1.42	18.16	<=34.77	Pass	
14				21.61	-1.42	18.04	<=34.77	Pass		
8			0	20.35	-1.42	16.78	<=34.77	Pass		
			4	20.41	-1.42	16.84	<=34.77	Pass		
			7	20.37	-1.42	16.80	<=34.77	Pass		
15			0	20.23	-1.42	16.66	<=34.77	Pass		

Note1: ERP=Conducted Power+Antenna Gain-2.15

1.3 B12_5MHz_ERP

1.3.1 Test Result

Band: 12 / Bandwidth: 5MHz / NTV										
Modulation	Frequency (MHz)	RB Allocation		Conducted Power (dBm)	Gain (dBi)	ERP (dBm)		Verdict		
		Size	Offset			Result	Limit			
QPSK	701.5	1	0	22.49	-1.42	18.92	<=34.77	Pass		
			13	22.25	-1.42	18.68	<=34.77	Pass		
			24	22.08	-1.42	18.51	<=34.77	Pass		
		12	0	21.12	-1.42	17.55	<=34.77	Pass		
			6	21.15	-1.42	17.58	<=34.77	Pass		
			13	21.05	-1.42	17.48	<=34.77	Pass		
		25	0	21.10	-1.42	17.53	<=34.77	Pass		
		707.5	1	0	22.07	-1.42	18.50	<=34.77	Pass	
				13	22.28	-1.42	18.71	<=34.77	Pass	
	24			22.17	-1.42	18.60	<=34.77	Pass		
	12		0	21.18	-1.42	17.61	<=34.77	Pass		
			6	21.25	-1.42	17.68	<=34.77	Pass		
			13	21.19	-1.42	17.62	<=34.77	Pass		
	25		0	21.20	-1.42	17.63	<=34.77	Pass		
	713.5		1	0	22.17	-1.42	18.60	<=34.77	Pass	
				13	22.41	-1.42	18.84	<=34.77	Pass	
		24		22.37	-1.42	18.80	<=34.77	Pass		
		12	0	21.31	-1.42	17.74	<=34.77	Pass		
			6	21.30	-1.42	17.73	<=34.77	Pass		
			13	21.20	-1.42	17.63	<=34.77	Pass		
		25	0	21.26	-1.42	17.69	<=34.77	Pass		
		16QAM	701.5	1	0	21.02	-1.42	17.45	<=34.77	Pass
					13	21.23	-1.42	17.66	<=34.77	Pass
	24				21.09	-1.42	17.52	<=34.77	Pass	
12	0			20.08	-1.42	16.51	<=34.77	Pass		
	6			20.12	-1.42	16.55	<=34.77	Pass		
	13			20.06	-1.42	16.49	<=34.77	Pass		
25	0			20.06	-1.42	16.49	<=34.77	Pass		
707.5	1			0	21.22	-1.42	17.65	<=34.77	Pass	
				13	21.44	-1.42	17.87	<=34.77	Pass	
			24	21.35	-1.42	17.78	<=34.77	Pass		
	12		0	20.14	-1.42	16.57	<=34.77	Pass		
			6	20.21	-1.42	16.64	<=34.77	Pass		
			13	20.19	-1.42	16.62	<=34.77	Pass		
	25		0	20.12	-1.42	16.55	<=34.77	Pass		
	713.5		1	0	20.97	-1.42	17.40	<=34.77	Pass	
				13	21.12	-1.42	17.55	<=34.77	Pass	
24				21.01	-1.42	17.44	<=34.77	Pass		
12			0	20.28	-1.42	16.71	<=34.77	Pass		
			6	20.25	-1.42	16.68	<=34.77	Pass		
			13	20.14	-1.42	16.57	<=34.77	Pass		
25			0	20.23	-1.42	16.66	<=34.77	Pass		

Note1: ERP=Conducted Power+Antenna Gain-2.15

1.4 B12_10MHz_ERP

1.4.1 Test Result

Band: 12 / Bandwidth: 10MHz / NTV										
Modulation	Frequency (MHz)	RB Allocation		Conducted Power (dBm)	Gain (dBi)	ERP (dBm)		Verdict		
		Size	Offset			Result	Limit			
QPSK	704	1	0	22.58	-1.42	19.01	<=34.77	Pass		
			25	22.33	-1.42	18.76	<=34.77	Pass		
			49	22.31	-1.42	18.74	<=34.77	Pass		
		25	0	21.21	-1.42	17.64	<=34.77	Pass		
			13	21.18	-1.42	17.61	<=34.77	Pass		
			25	21.22	-1.42	17.65	<=34.77	Pass		
		50	0	21.22	-1.42	17.65	<=34.77	Pass		
		707.5	1	0	22.07	-1.42	18.50	<=34.77	Pass	
				25	22.34	-1.42	18.77	<=34.77	Pass	
	49			22.30	-1.42	18.73	<=34.77	Pass		
	25		0	21.15	-1.42	17.58	<=34.77	Pass		
			13	21.26	-1.42	17.69	<=34.77	Pass		
			25	21.20	-1.42	17.63	<=34.77	Pass		
	50		0	21.18	-1.42	17.61	<=34.77	Pass		
	711		1	0	22.20	-1.42	18.63	<=34.77	Pass	
				25	22.43	-1.42	18.86	<=34.77	Pass	
		49		22.53	-1.42	18.96	<=34.77	Pass		
		25	0	21.22	-1.42	17.65	<=34.77	Pass		
			13	21.25	-1.42	17.68	<=34.77	Pass		
			25	21.23	-1.42	17.66	<=34.77	Pass		
		50	0	21.23	-1.42	17.66	<=34.77	Pass		
		16QAM	704	1	0	21.01	-1.42	17.44	<=34.77	Pass
					25	21.26	-1.42	17.69	<=34.77	Pass
	49				21.20	-1.42	17.63	<=34.77	Pass	
25	0			20.23	-1.42	16.66	<=34.77	Pass		
	13			20.19	-1.42	16.62	<=34.77	Pass		
	25			20.24	-1.42	16.67	<=34.77	Pass		
50	0			20.18	-1.42	16.61	<=34.77	Pass		
707.5	1			0	21.18	-1.42	17.61	<=34.77	Pass	
				25	21.44	-1.42	17.87	<=34.77	Pass	
			49	21.39	-1.42	17.82	<=34.77	Pass		
	25		0	20.10	-1.42	16.53	<=34.77	Pass		
			13	20.21	-1.42	16.64	<=34.77	Pass		
			25	20.16	-1.42	16.59	<=34.77	Pass		
	50		0	20.13	-1.42	16.56	<=34.77	Pass		
	711		1	0	21.56	-1.42	17.99	<=34.77	Pass	
				25	21.84	-1.42	18.27	<=34.77	Pass	
49				21.64	-1.42	18.07	<=34.77	Pass		
25			0	20.28	-1.42	16.71	<=34.77	Pass		
			13	20.25	-1.42	16.68	<=34.77	Pass		
			25	20.23	-1.42	16.66	<=34.77	Pass		
50			0	20.17	-1.42	16.60	<=34.77	Pass		

Note1: ERP=Conducted Power+Antenna Gain-2.15

2. Frequency Stability

2.1 B12_1.4MHz

2.1.1 Test Result

Band: 12 / 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	699.7	6	0	20	3.27	-5.250	-0.0075	-2.5 to 2.5	Pass
					3.85	-7.110	-0.0102	-2.5 to 2.5	Pass
					4.43	-9.327	-0.0133	-2.5 to 2.5	Pass
				-30	3.85	-8.698	-0.0124	-2.5 to 2.5	Pass
				-20	3.85	-6.366	-0.0091	-2.5 to 2.5	Pass
				-10	3.85	-7.467	-0.0107	-2.5 to 2.5	Pass
				0	3.85	-7.925	-0.0113	-2.5 to 2.5	Pass
				10	3.85	-9.899	-0.0141	-2.5 to 2.5	Pass
				30	3.85	-7.210	-0.0103	-2.5 to 2.5	Pass
				40	3.85	-8.426	-0.0120	-2.5 to 2.5	Pass
	50	3.85	-3.891	-0.0056	-2.5 to 2.5	Pass			
	707.5	6	0	20	3.27	-9.913	-0.0140	-2.5 to 2.5	Pass
					3.85	-5.236	-0.0074	-2.5 to 2.5	Pass
					4.43	-0.572	-0.0008	-2.5 to 2.5	Pass
				-30	3.85	-0.229	-0.0003	-2.5 to 2.5	Pass
				-20	3.85	-0.887	-0.0013	-2.5 to 2.5	Pass
				-10	3.85	-7.625	-0.0108	-2.5 to 2.5	Pass
				0	3.85	-4.420	-0.0062	-2.5 to 2.5	Pass
				10	3.85	-7.396	-0.0105	-2.5 to 2.5	Pass
				30	3.85	-3.076	-0.0043	-2.5 to 2.5	Pass
				40	3.85	-2.246	-0.0032	-2.5 to 2.5	Pass
	50	3.85	-2.575	-0.0036	-2.5 to 2.5	Pass			
	715.3	6	0	20	3.27	-7.167	-0.0100	-2.5 to 2.5	Pass
					3.85	-4.478	-0.0063	-2.5 to 2.5	Pass
					4.43	-2.031	-0.0028	-2.5 to 2.5	Pass
				-30	3.85	-5.651	-0.0079	-2.5 to 2.5	Pass
				-20	3.85	-5.236	-0.0073	-2.5 to 2.5	Pass
				-10	3.85	-2.217	-0.0031	-2.5 to 2.5	Pass
				0	3.85	-4.835	-0.0068	-2.5 to 2.5	Pass
				10	3.85	-3.977	-0.0056	-2.5 to 2.5	Pass
30				3.85	-7.067	-0.0099	-2.5 to 2.5	Pass	
40				3.85	-4.320	-0.0060	-2.5 to 2.5	Pass	
50	3.85	-6.680	-0.0093	-2.5 to 2.5	Pass				
16QAM	699.7	6	0	20	3.27	-3.333	-0.0048	-2.5 to 2.5	Pass
					3.85	-3.333	-0.0048	-2.5 to 2.5	Pass
					4.43	-7.524	-0.0108	-2.5 to 2.5	Pass
				-30	3.85	-10.157	-0.0145	-2.5 to 2.5	Pass
				-20	3.85	-3.963	-0.0057	-2.5 to 2.5	Pass
				-10	3.85	-3.862	-0.0055	-2.5 to 2.5	Pass
				0	3.85	-4.563	-0.0065	-2.5 to 2.5	Pass
				10	3.85	-7.653	-0.0109	-2.5 to 2.5	Pass
				30	3.85	-7.854	-0.0112	-2.5 to 2.5	Pass
	40	3.85	-10.486	-0.0150	-2.5 to 2.5	Pass			
	50	3.85	-7.424	-0.0106	-2.5 to 2.5	Pass			
	707.5	6	0	20	3.27	0.186	0.0003	-2.5 to 2.5	Pass
					3.85	-6.652	-0.0094	-2.5 to 2.5	Pass
					4.43	-9.956	-0.0141	-2.5 to 2.5	Pass
				-30	3.85	-10.357	-0.0146	-2.5 to 2.5	Pass
				-20	3.85	-9.227	-0.0130	-2.5 to 2.5	Pass
				-10	3.85	-4.306	-0.0061	-2.5 to 2.5	Pass
				0	3.85	-8.368	-0.0118	-2.5 to 2.5	Pass
10				3.85	-6.881	-0.0097	-2.5 to 2.5	Pass	

	715.3	6	0	30	3.85	-3.791	-0.0054	-2.5 to 2.5	Pass
				40	3.85	-6.924	-0.0098	-2.5 to 2.5	Pass
				50	3.85	-6.881	-0.0097	-2.5 to 2.5	Pass
				20	3.27	-4.320	-0.0060	-2.5 to 2.5	Pass
					3.85	-4.292	-0.0060	-2.5 to 2.5	Pass
					4.43	-7.854	-0.0110	-2.5 to 2.5	Pass
				-30	3.85	-3.862	-0.0054	-2.5 to 2.5	Pass
				-20	3.85	-3.719	-0.0052	-2.5 to 2.5	Pass
				-10	3.85	-1.116	-0.0016	-2.5 to 2.5	Pass
				0	3.85	-0.501	-0.0007	-2.5 to 2.5	Pass
				10	3.85	-6.166	-0.0086	-2.5 to 2.5	Pass
				30	3.85	-10.085	-0.0141	-2.5 to 2.5	Pass
				40	3.85	-2.375	-0.0033	-2.5 to 2.5	Pass
				50	3.85	-6.723	-0.0094	-2.5 to 2.5	Pass

2.2 B12_3MHz

2.2.1 Test Result

Band: 12 / Bandwidth: 3MHz												
Modulation	Frequency (MHz)	RB Allocation		Temp. (°C)	Voltage (VDC)	Freq. Error (Hz)	Freq. vs. Rated (ppm)		Verdict			
		Size	Offset				Result	Limit				
QPSK	700.5	15	0	20	3.27	-6.294	-0.0090	-2.5 to 2.5	Pass			
					3.85	-9.813	-0.0140	-2.5 to 2.5	Pass			
					4.43	-8.955	-0.0128	-2.5 to 2.5	Pass			
				-30	3.85	-9.084	-0.0130	-2.5 to 2.5	Pass			
				-20	3.85	-6.723	-0.0096	-2.5 to 2.5	Pass			
				-10	3.85	-9.127	-0.0130	-2.5 to 2.5	Pass			
				0	3.85	-9.384	-0.0134	-2.5 to 2.5	Pass			
				10	3.85	-9.742	-0.0139	-2.5 to 2.5	Pass			
				30	3.85	-4.792	-0.0068	-2.5 to 2.5	Pass			
				40	3.85	-4.463	-0.0064	-2.5 to 2.5	Pass			
				50	3.85	-5.322	-0.0076	-2.5 to 2.5	Pass			
				707.5	15	0	20	3.27	-10.457	-0.0148	-2.5 to 2.5	Pass
								3.85	-5.336	-0.0075	-2.5 to 2.5	Pass
								4.43	-1.931	-0.0027	-2.5 to 2.5	Pass
							-30	3.85	-1.574	-0.0022	-2.5 to 2.5	Pass
	-20	3.85	-1.059				-0.0015	-2.5 to 2.5	Pass			
	-10	3.85	-1.345				-0.0019	-2.5 to 2.5	Pass			
	0	3.85	-7.238				-0.0102	-2.5 to 2.5	Pass			
	10	3.85	-4.048				-0.0057	-2.5 to 2.5	Pass			
	30	3.85	-8.497				-0.0120	-2.5 to 2.5	Pass			
	714.5	15	0	20	3.27	-5.665	-0.0079	-2.5 to 2.5	Pass			
					3.85	-5.264	-0.0074	-2.5 to 2.5	Pass			
					4.43	-0.615	-0.0009	-2.5 to 2.5	Pass			
				-30	3.85	-3.090	-0.0043	-2.5 to 2.5	Pass			
				-20	3.85	-6.952	-0.0097	-2.5 to 2.5	Pass			
				-10	3.85	-6.781	-0.0095	-2.5 to 2.5	Pass			
				0	3.85	-3.247	-0.0045	-2.5 to 2.5	Pass			
				10	3.85	-5.879	-0.0082	-2.5 to 2.5	Pass			

				30	3.85	-3.219	-0.0045	-2.5 to 2.5	Pass
				40	3.85	-3.147	-0.0044	-2.5 to 2.5	Pass
				50	3.85	-7.982	-0.0112	-2.5 to 2.5	Pass
16QAM	700.5	15	0	20	3.27	-0.744	-0.0011	-2.5 to 2.5	Pass
					3.85	-0.172	-0.0002	-2.5 to 2.5	Pass
					4.43	-0.272	-0.0004	-2.5 to 2.5	Pass
				-30	3.85	-0.815	-0.0012	-2.5 to 2.5	Pass
				-20	3.85	-4.420	-0.0063	-2.5 to 2.5	Pass
				-10	3.85	-1.817	-0.0026	-2.5 to 2.5	Pass
				0	3.85	-5.264	-0.0075	-2.5 to 2.5	Pass
				10	3.85	-5.350	-0.0076	-2.5 to 2.5	Pass
				30	3.85	-7.725	-0.0110	-2.5 to 2.5	Pass
				40	3.85	-11.816	-0.0169	-2.5 to 2.5	Pass
	50	3.85	-11.544	-0.0165	-2.5 to 2.5	Pass			
	707.5	15	0	20	3.27	-6.137	-0.0087	-2.5 to 2.5	Pass
					3.85	-2.017	-0.0029	-2.5 to 2.5	Pass
					4.43	-4.950	-0.0070	-2.5 to 2.5	Pass
				-30	3.85	-0.300	-0.0004	-2.5 to 2.5	Pass
				-20	3.85	0.014	0.0000	-2.5 to 2.5	Pass
				-10	3.85	-0.243	-0.0003	-2.5 to 2.5	Pass
				0	3.85	-4.549	-0.0064	-2.5 to 2.5	Pass
				10	3.85	-3.333	-0.0047	-2.5 to 2.5	Pass
				30	3.85	-3.591	-0.0051	-2.5 to 2.5	Pass
				40	3.85	-2.117	-0.0030	-2.5 to 2.5	Pass
	50	3.85	-3.791	-0.0054	-2.5 to 2.5	Pass			
	714.5	15	0	20	3.27	-3.290	-0.0046	-2.5 to 2.5	Pass
					3.85	-4.592	-0.0064	-2.5 to 2.5	Pass
					4.43	-5.364	-0.0075	-2.5 to 2.5	Pass
				-30	3.85	-9.356	-0.0131	-2.5 to 2.5	Pass
				-20	3.85	-1.888	-0.0026	-2.5 to 2.5	Pass
				-10	3.85	-4.964	-0.0069	-2.5 to 2.5	Pass
				0	3.85	-2.346	-0.0033	-2.5 to 2.5	Pass
				10	3.85	-2.661	-0.0037	-2.5 to 2.5	Pass
30				3.85	-3.433	-0.0048	-2.5 to 2.5	Pass	
40				3.85	-7.339	-0.0103	-2.5 to 2.5	Pass	
50	3.85	-6.924	-0.0097	-2.5 to 2.5	Pass				

2.3 B12_5MHz

2.3.1 Test Result

Band: 12 / Bandwidth: 5MHz									
Modulation	Frequency (MHz)	RB Allocation		Temp. (°C)	Voltage (VDC)	Freq. Error (Hz)	Freq. vs. Rated (ppm)		Verdict
		Size	Offset				Result	Limit	
QPSK	701.5	25	0	20	3.27	-2.117	-0.0030	-2.5 to 2.5	Pass
					3.85	-1.945	-0.0028	-2.5 to 2.5	Pass
					4.43	-3.991	-0.0057	-2.5 to 2.5	Pass
				-30	3.85	-2.847	-0.0041	-2.5 to 2.5	Pass
				-20	3.85	-4.377	-0.0062	-2.5 to 2.5	Pass
				-10	3.85	-1.273	-0.0018	-2.5 to 2.5	Pass
				0	3.85	-4.263	-0.0061	-2.5 to 2.5	Pass
				10	3.85	-8.054	-0.0115	-2.5 to 2.5	Pass

	707.5	25	0	30	3.85	-8.411	-0.0120	-2.5 to 2.5	Pass				
				40	3.85	-7.610	-0.0108	-2.5 to 2.5	Pass				
				50	3.85	-4.406	-0.0063	-2.5 to 2.5	Pass				
				20	3.27	-6.194	-0.0088	-2.5 to 2.5	Pass				
					3.85	-4.864	-0.0069	-2.5 to 2.5	Pass				
					4.43	-4.263	-0.0060	-2.5 to 2.5	Pass				
				-30	3.85	-6.108	-0.0086	-2.5 to 2.5	Pass				
				-20	3.85	-6.824	-0.0096	-2.5 to 2.5	Pass				
				-10	3.85	-2.947	-0.0042	-2.5 to 2.5	Pass				
				0	3.85	-2.589	-0.0037	-2.5 to 2.5	Pass				
				10	3.85	-1.402	-0.0020	-2.5 to 2.5	Pass				
				30	3.85	-2.561	-0.0036	-2.5 to 2.5	Pass				
				40	3.85	-2.589	-0.0037	-2.5 to 2.5	Pass				
				50	3.85	1.187	0.0017	-2.5 to 2.5	Pass				
				713.5	25	0	20	3.27	-6.237	-0.0087	-2.5 to 2.5	Pass	
	3.85	-5.751	-0.0081					-2.5 to 2.5	Pass				
	4.43	-5.765	-0.0081					-2.5 to 2.5	Pass				
	-30	3.85	-1.874				-0.0026	-2.5 to 2.5	Pass				
	-20	3.85	-1.988				-0.0028	-2.5 to 2.5	Pass				
	-10	3.85	-7.825				-0.0110	-2.5 to 2.5	Pass				
	0	3.85	-7.510				-0.0105	-2.5 to 2.5	Pass				
	10	3.85	-6.552				-0.0092	-2.5 to 2.5	Pass				
	30	3.85	-2.861				-0.0040	-2.5 to 2.5	Pass				
	40	3.85	-8.497				-0.0119	-2.5 to 2.5	Pass				
	50	3.85	-7.496				-0.0105	-2.5 to 2.5	Pass				
	16QAM	701.5	25				0	20	3.27	-3.791	-0.0054	-2.5 to 2.5	Pass
									3.85	-2.832	-0.0040	-2.5 to 2.5	Pass
									4.43	-9.255	-0.0132	-2.5 to 2.5	Pass
								-30	3.85	-9.370	-0.0134	-2.5 to 2.5	Pass
				-20	3.85	-9.069		-0.0129	-2.5 to 2.5	Pass			
-10				3.85	-6.623	-0.0094		-2.5 to 2.5	Pass				
0				3.85	-5.407	-0.0077		-2.5 to 2.5	Pass				
10				3.85	-5.121	-0.0073		-2.5 to 2.5	Pass				
30				3.85	-4.721	-0.0067		-2.5 to 2.5	Pass				
40				3.85	-4.764	-0.0068		-2.5 to 2.5	Pass				
50				3.85	-5.593	-0.0080		-2.5 to 2.5	Pass				
707.5				25	0	20		3.27	-7.982	-0.0113	-2.5 to 2.5	Pass	
								3.85	-8.411	-0.0119	-2.5 to 2.5	Pass	
								4.43	-9.799	-0.0139	-2.5 to 2.5	Pass	
						-30		3.85	-8.097	-0.0114	-2.5 to 2.5	Pass	
		-20	3.85			-8.311	-0.0117	-2.5 to 2.5	Pass				
		-10	3.85			-8.540	-0.0121	-2.5 to 2.5	Pass				
		0	3.85			-7.510	-0.0106	-2.5 to 2.5	Pass				
		10	3.85			-7.024	-0.0099	-2.5 to 2.5	Pass				
		30	3.85			-9.785	-0.0138	-2.5 to 2.5	Pass				
		40	3.85			-10.157	-0.0144	-2.5 to 2.5	Pass				
		50	3.85			-9.270	-0.0131	-2.5 to 2.5	Pass				
		713.5	25			0	20	3.27	-4.992	-0.0070	-2.5 to 2.5	Pass	
								3.85	-2.503	-0.0035	-2.5 to 2.5	Pass	
								4.43	-3.419	-0.0048	-2.5 to 2.5	Pass	
							-30	3.85	-3.104	-0.0044	-2.5 to 2.5	Pass	
-20				3.85	-13.103		-0.0184	-2.5 to 2.5	Pass				
-10				3.85	-6.838		-0.0096	-2.5 to 2.5	Pass				
0				3.85	-9.670		-0.0136	-2.5 to 2.5	Pass				
10				3.85	-9.627		-0.0135	-2.5 to 2.5	Pass				

				30	3.85	-10.471	-0.0147	-2.5 to 2.5	Pass
				40	3.85	-11.172	-0.0157	-2.5 to 2.5	Pass
				50	3.85	-8.197	-0.0115	-2.5 to 2.5	Pass

2.4 B12_10MHz

2.4.1 Test Result

Band: 12 / Bandwidth: 10MHz										
Modulation	Frequency (MHz)	RB Allocation		Temp. (°C)	Voltage (VDC)	Freq. Error (Hz)	Freq. vs. Rated (ppm)		Verdict	
		Size	Offset				Result	Limit		
QPSK	704	50	0	20	3.27	-8.440	-0.0120	-2.5 to 2.5	Pass	
					3.85	-6.623	-0.0094	-2.5 to 2.5	Pass	
					4.43	-6.638	-0.0094	-2.5 to 2.5	Pass	
				-30	3.85	-4.621	-0.0066	-2.5 to 2.5	Pass	
					-20	3.85	-2.446	-0.0035	-2.5 to 2.5	Pass
						3.85	-3.018	-0.0043	-2.5 to 2.5	Pass
				0	3.85	-8.097	-0.0115	-2.5 to 2.5	Pass	
					10	3.85	-5.908	-0.0084	-2.5 to 2.5	Pass
				30	3.85	-2.418	-0.0034	-2.5 to 2.5	Pass	
	40	3.85	-6.552		-0.0093	-2.5 to 2.5	Pass			
	50	3.85	-7.982	-0.0113	-2.5 to 2.5	Pass				
	707.5	50	0	20	3.27	-8.440	-0.0119	-2.5 to 2.5	Pass	
					3.85	-9.456	-0.0134	-2.5 to 2.5	Pass	
					4.43	-9.527	-0.0135	-2.5 to 2.5	Pass	
				-30	3.85	-6.838	-0.0097	-2.5 to 2.5	Pass	
					-20	3.85	-7.324	-0.0104	-2.5 to 2.5	Pass
						3.85	-7.024	-0.0099	-2.5 to 2.5	Pass
				0	3.85	-8.254	-0.0117	-2.5 to 2.5	Pass	
					10	3.85	-4.992	-0.0071	-2.5 to 2.5	Pass
				30	3.85	-4.549	-0.0064	-2.5 to 2.5	Pass	
	40	3.85	-5.865		-0.0083	-2.5 to 2.5	Pass			
	50	3.85	-4.778	-0.0068	-2.5 to 2.5	Pass				
	711	50	0	20	3.27	-6.437	-0.0091	-2.5 to 2.5	Pass	
					3.85	-6.437	-0.0091	-2.5 to 2.5	Pass	
					4.43	-3.119	-0.0044	-2.5 to 2.5	Pass	
				-30	3.85	-2.689	-0.0038	-2.5 to 2.5	Pass	
					-20	3.85	-3.662	-0.0052	-2.5 to 2.5	Pass
3.85						-2.704	-0.0038	-2.5 to 2.5	Pass	
0				3.85	-2.732	-0.0038	-2.5 to 2.5	Pass		
				10	3.85	-3.905	-0.0055	-2.5 to 2.5	Pass	
30				3.85	-1.545	-0.0022	-2.5 to 2.5	Pass		
	40	3.85	-1.574	-0.0022	-2.5 to 2.5	Pass				
50	3.85	-6.752	-0.0095	-2.5 to 2.5	Pass					
16QAM	704	50	0	20	3.27	-4.334	-0.0062	-2.5 to 2.5	Pass	
					3.85	-1.402	-0.0020	-2.5 to 2.5	Pass	
					4.43	-2.489	-0.0035	-2.5 to 2.5	Pass	
				-30	3.85	-3.061	-0.0043	-2.5 to 2.5	Pass	
					3.85	-10.300	-0.0146	-2.5 to 2.5	Pass	
				-10	3.85	-8.140	-0.0116	-2.5 to 2.5	Pass	
0	3.85	-6.552	-0.0093	-2.5 to 2.5	Pass					
10	3.85	-6.909	-0.0098	-2.5 to 2.5	Pass					

	707.5	50	0	30	3.85	-8.597	-0.0122	-2.5 to 2.5	Pass
				40	3.85	-4.721	-0.0067	-2.5 to 2.5	Pass
				50	3.85	-4.950	-0.0070	-2.5 to 2.5	Pass
				20	3.27	-0.544	-0.0008	-2.5 to 2.5	Pass
					3.85	-9.670	-0.0137	-2.5 to 2.5	Pass
					4.43	-8.483	-0.0120	-2.5 to 2.5	Pass
				-30	3.85	-3.233	-0.0046	-2.5 to 2.5	Pass
				-20	3.85	-2.346	-0.0033	-2.5 to 2.5	Pass
				-10	3.85	-2.446	-0.0035	-2.5 to 2.5	Pass
				0	3.85	-5.307	-0.0075	-2.5 to 2.5	Pass
				10	3.85	-5.465	-0.0077	-2.5 to 2.5	Pass
				30	3.85	-4.177	-0.0059	-2.5 to 2.5	Pass
	40	3.85	-3.777	-0.0053	-2.5 to 2.5	Pass			
	50	3.85	-5.565	-0.0079	-2.5 to 2.5	Pass			
	711	50	0	20	3.27	-7.367	-0.0104	-2.5 to 2.5	Pass
					3.85	-7.410	-0.0104	-2.5 to 2.5	Pass
					4.43	-6.466	-0.0091	-2.5 to 2.5	Pass
				-30	3.85	-9.398	-0.0132	-2.5 to 2.5	Pass
				-20	3.85	-9.270	-0.0130	-2.5 to 2.5	Pass
				-10	3.85	-9.899	-0.0139	-2.5 to 2.5	Pass
				0	3.85	-9.212	-0.0130	-2.5 to 2.5	Pass
				10	3.85	-1.473	-0.0021	-2.5 to 2.5	Pass
				30	3.85	-1.903	-0.0027	-2.5 to 2.5	Pass
				40	3.85	-2.217	-0.0031	-2.5 to 2.5	Pass
50				3.85	-1.674	-0.0024	-2.5 to 2.5	Pass	

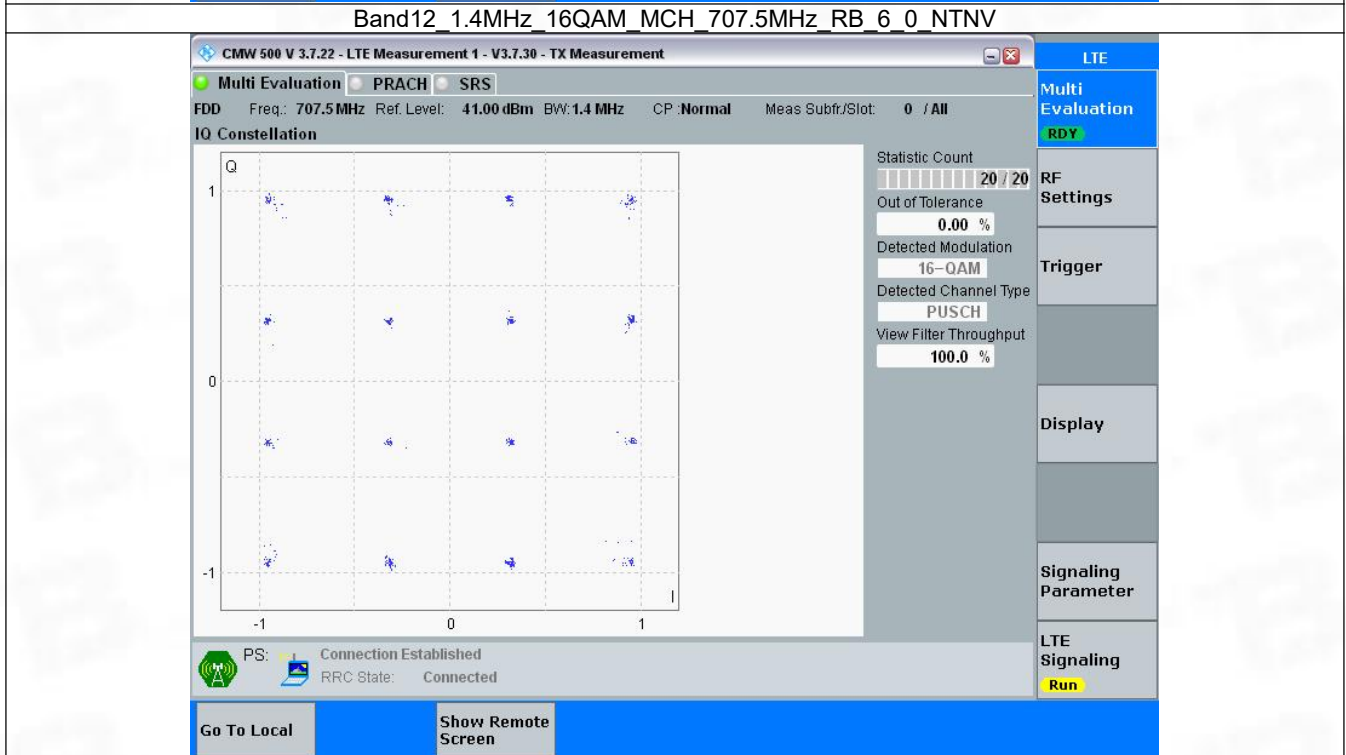
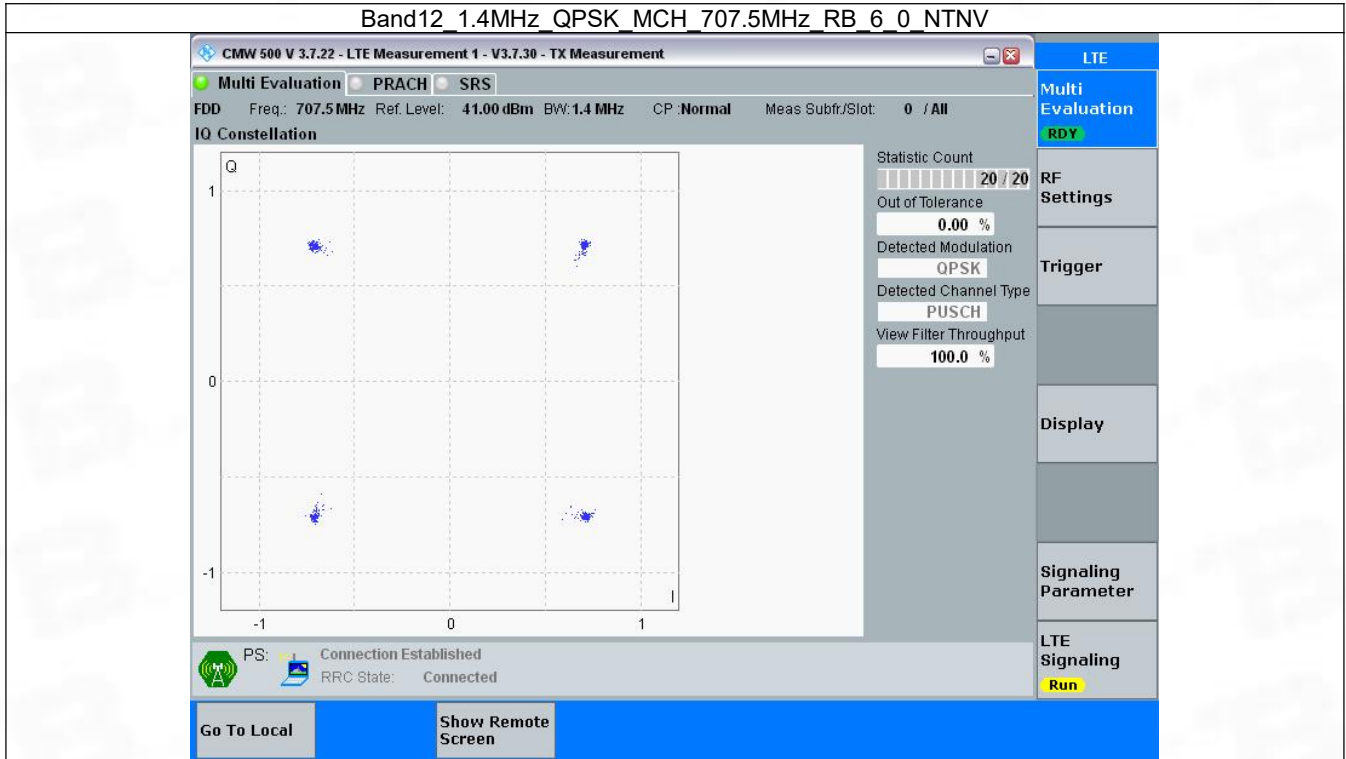
3. Modulation Characteristics

3.1 B12_1.4MHz

3.1.1 Test Result

Band: 12 / Bandwidth: 1.4MHz / NTV						
Modulation	Frequency (MHz)	RB Allocation		Modulation Characteristics		Verdict
		Size	Offset	Result	Limit	
QPSK	707.5	6	0	Refer To Test Graph		Pass
16QAM	707.5	6	0	Refer To Test Graph		Pass

3.1.2 Test Graph

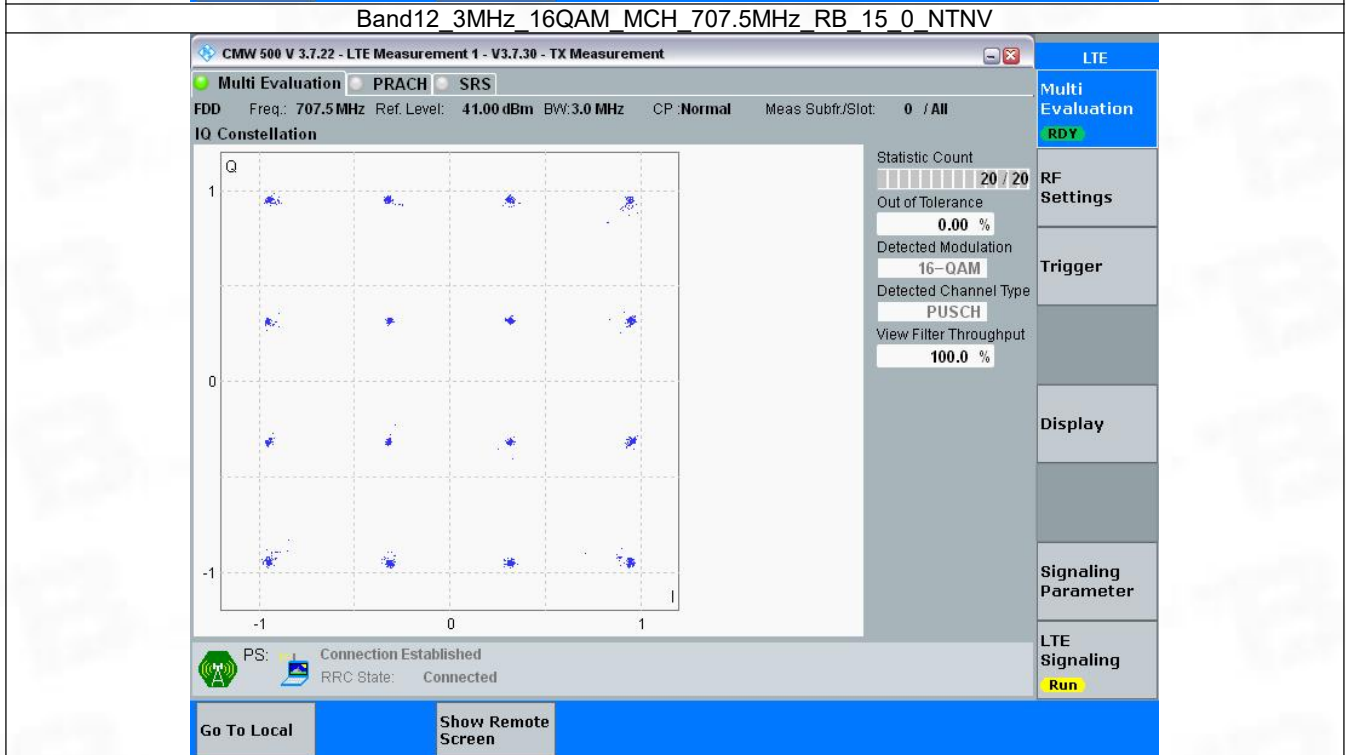
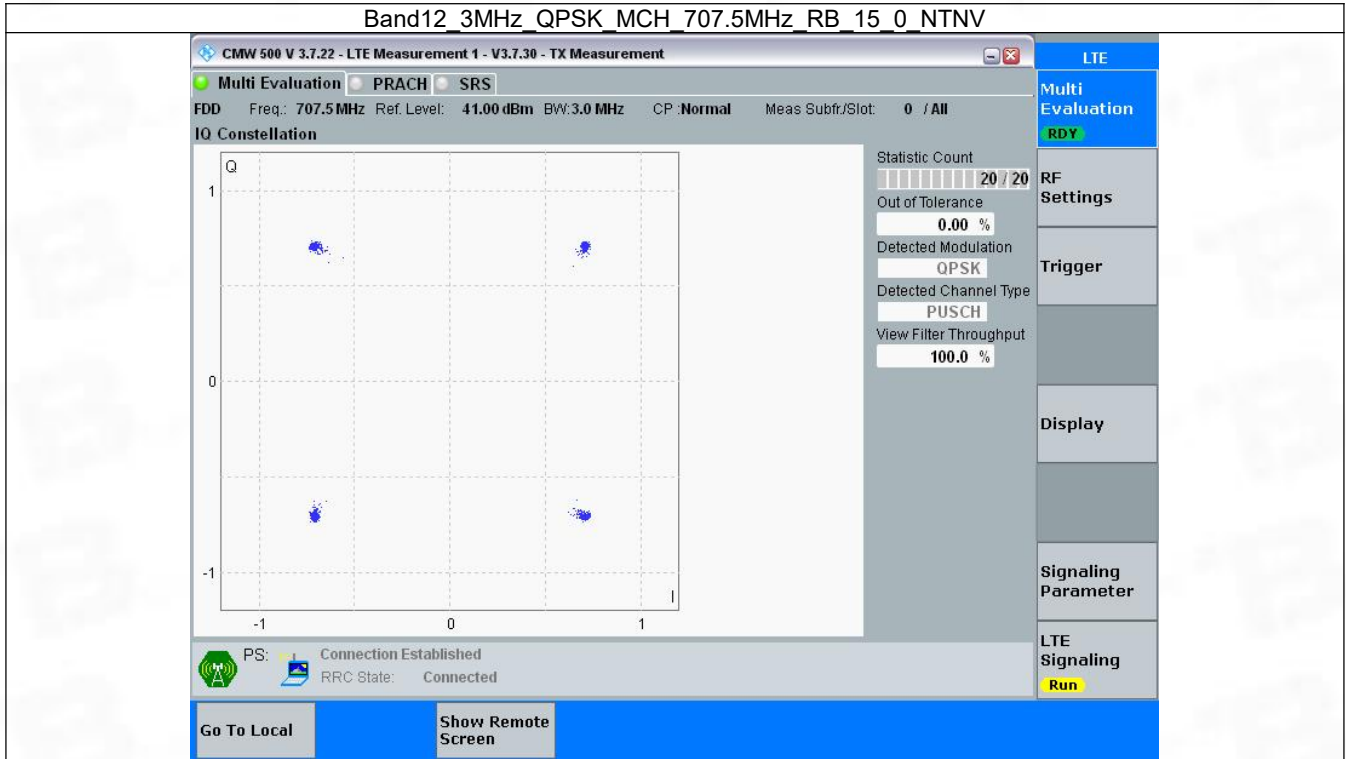


3.2 B12_3MHz

3.2.1 Test Result

Band: 12 / Bandwidth: 3MHz / NTV						
Modulation	Frequency (MHz)	RB Allocation		Modulation Characteristics		Verdict
		Size	Offset	Result	Limit	
QPSK	707.5	15	0	Refer To Test Graph		Pass
16QAM	707.5	15	0	Refer To Test Graph		Pass

3.2.2 Test Graph

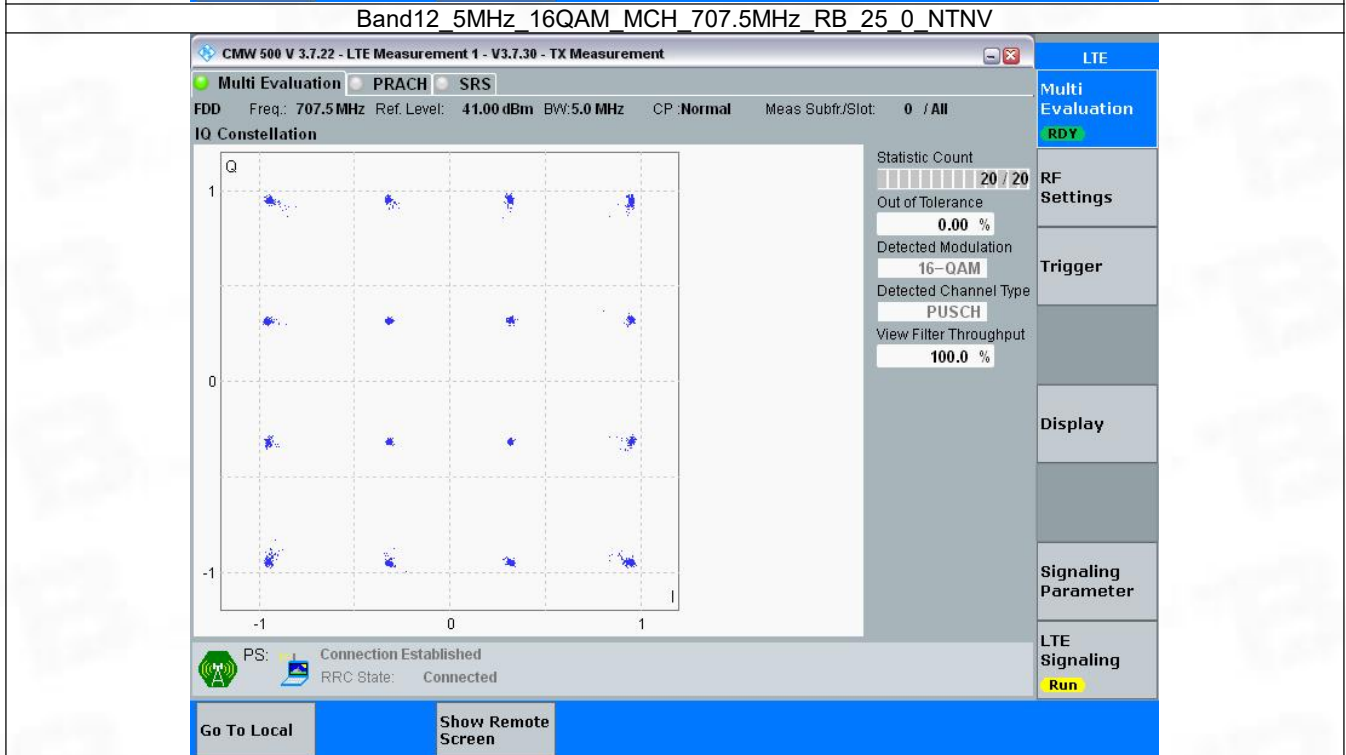
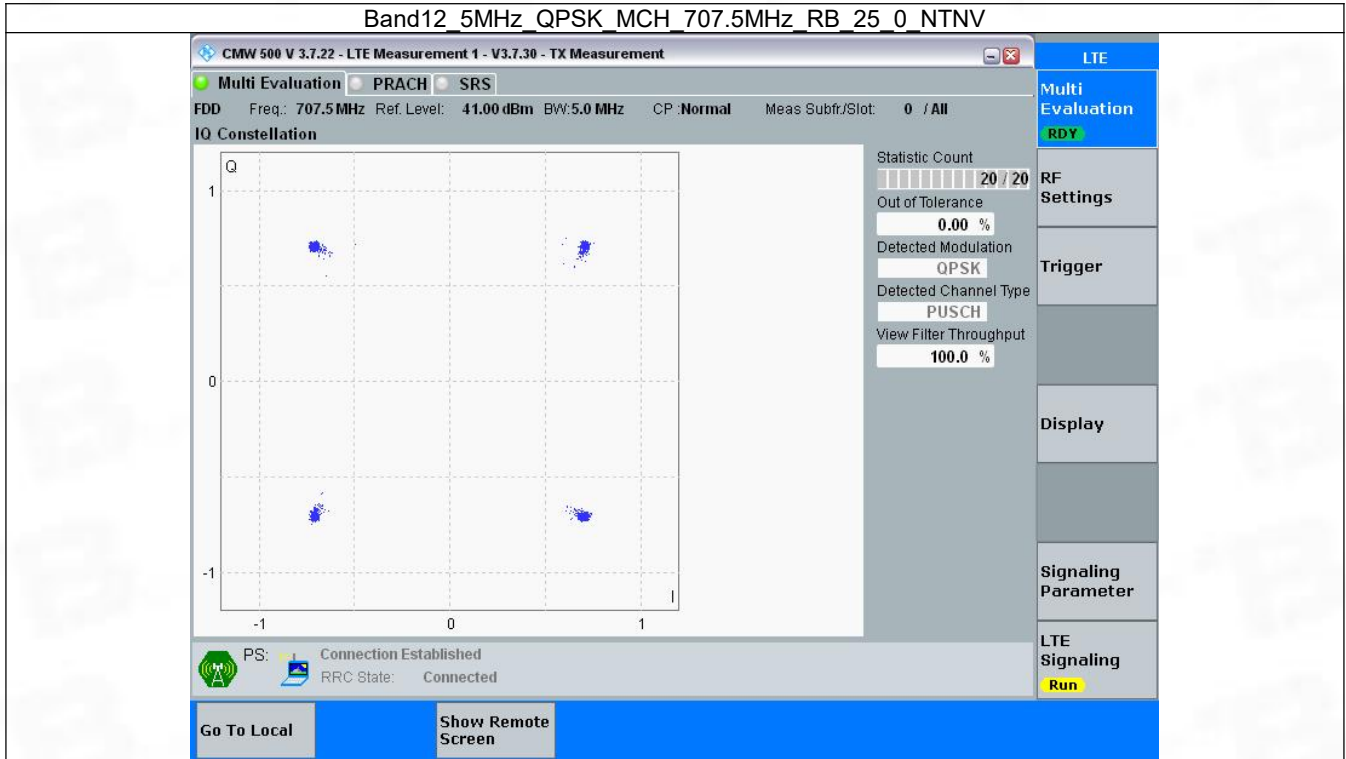


3.3 B12_5MHz

3.3.1 Test Result

Band: 12 / Bandwidth: 5MHz / NTV						
Modulation	Frequency (MHz)	RB Allocation		Modulation Characteristics		Verdict
		Size	Offset	Result	Limit	
QPSK	707.5	25	0	Refer To Test Graph		Pass
16QAM	707.5	25	0	Refer To Test Graph		Pass

3.3.2 Test Graph

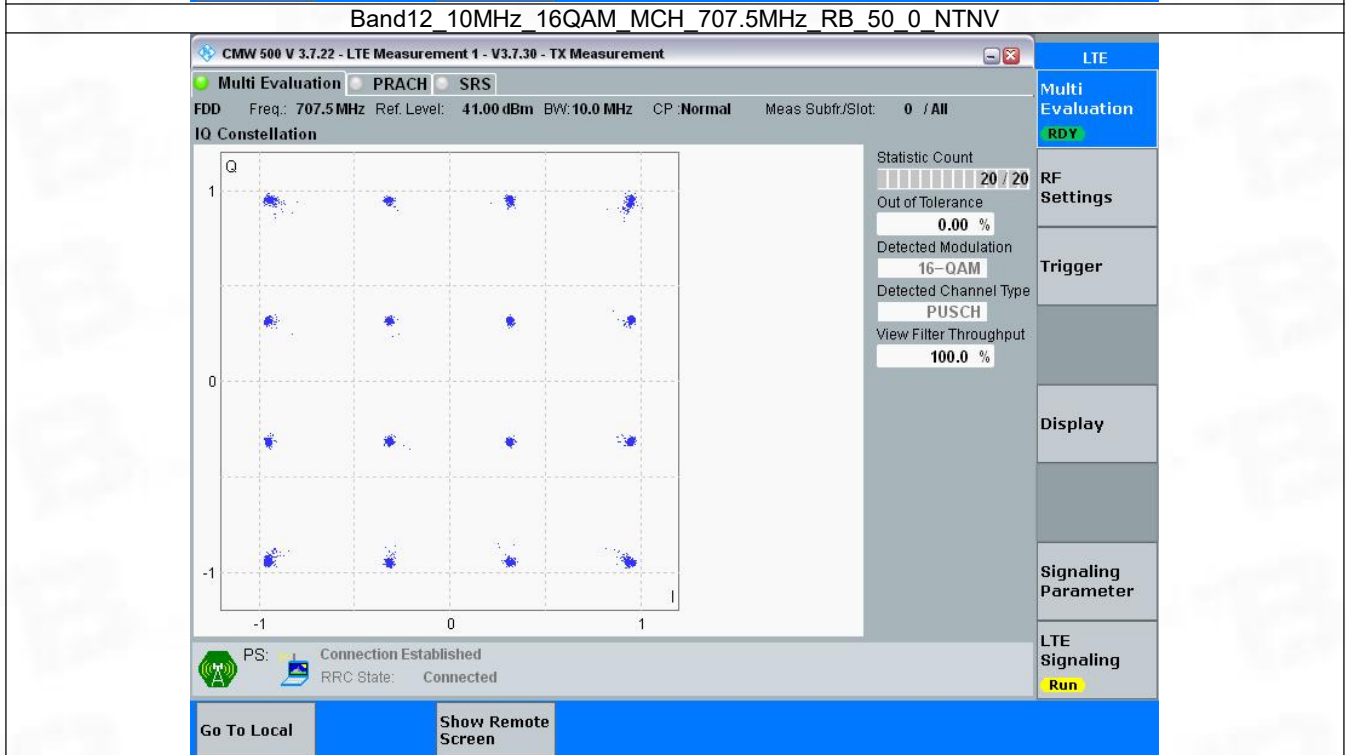
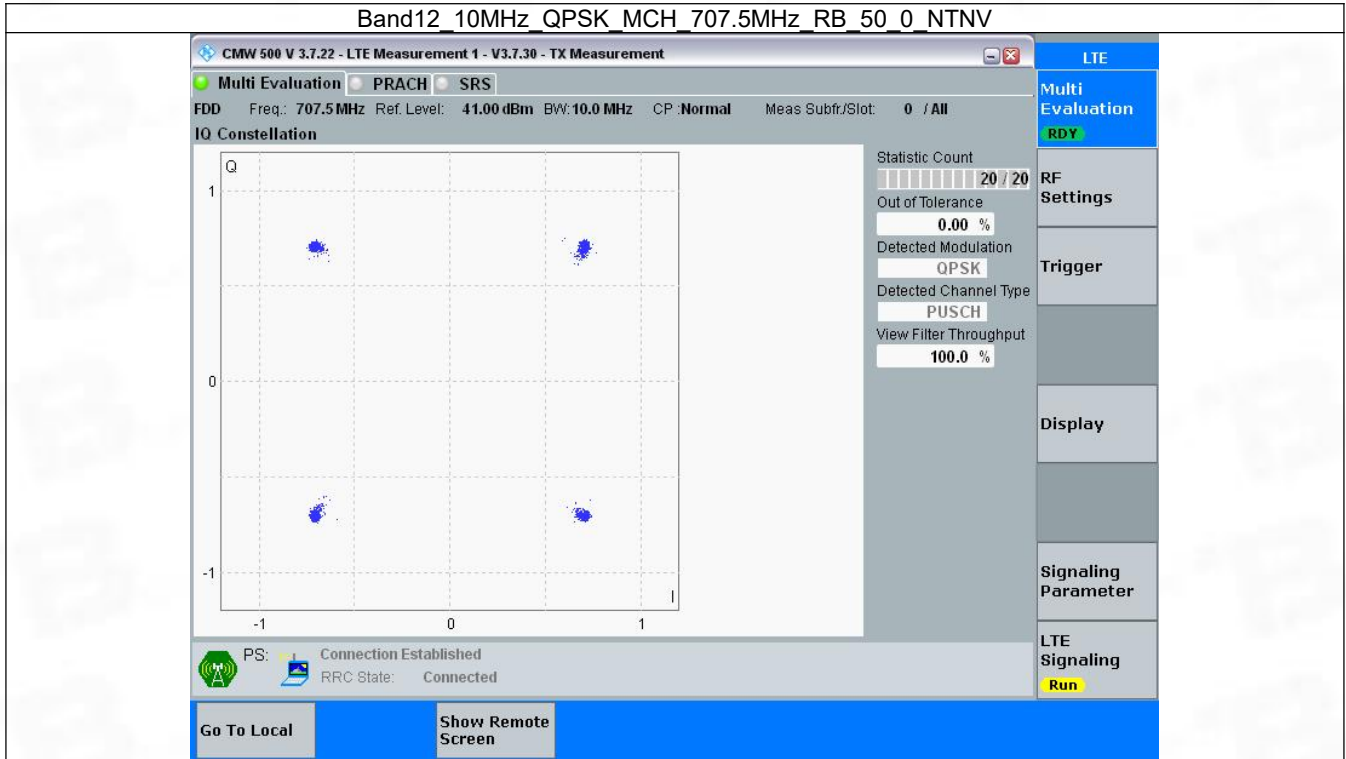


3.4 B12_10MHz

3.4.1 Test Result

Band: 12 / Bandwidth: 10MHz / NTN						
Modulation	Frequency (MHz)	RB Allocation		Modulation Characteristics		Verdict
		Size	Offset	Result	Limit	
QPSK	707.5	50	0	Refer To Test Graph		Pass
16QAM	707.5	50	0	Refer To Test Graph		Pass

3.4.2 Test Graph



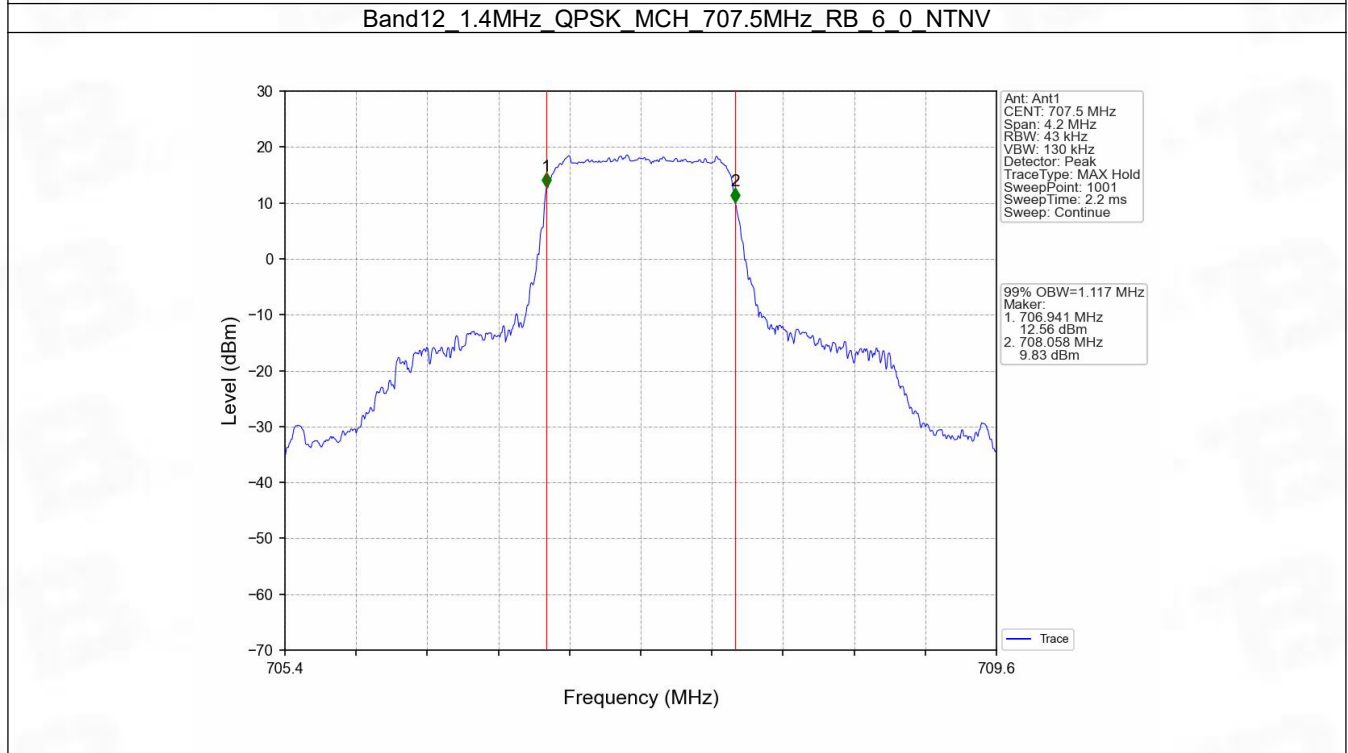
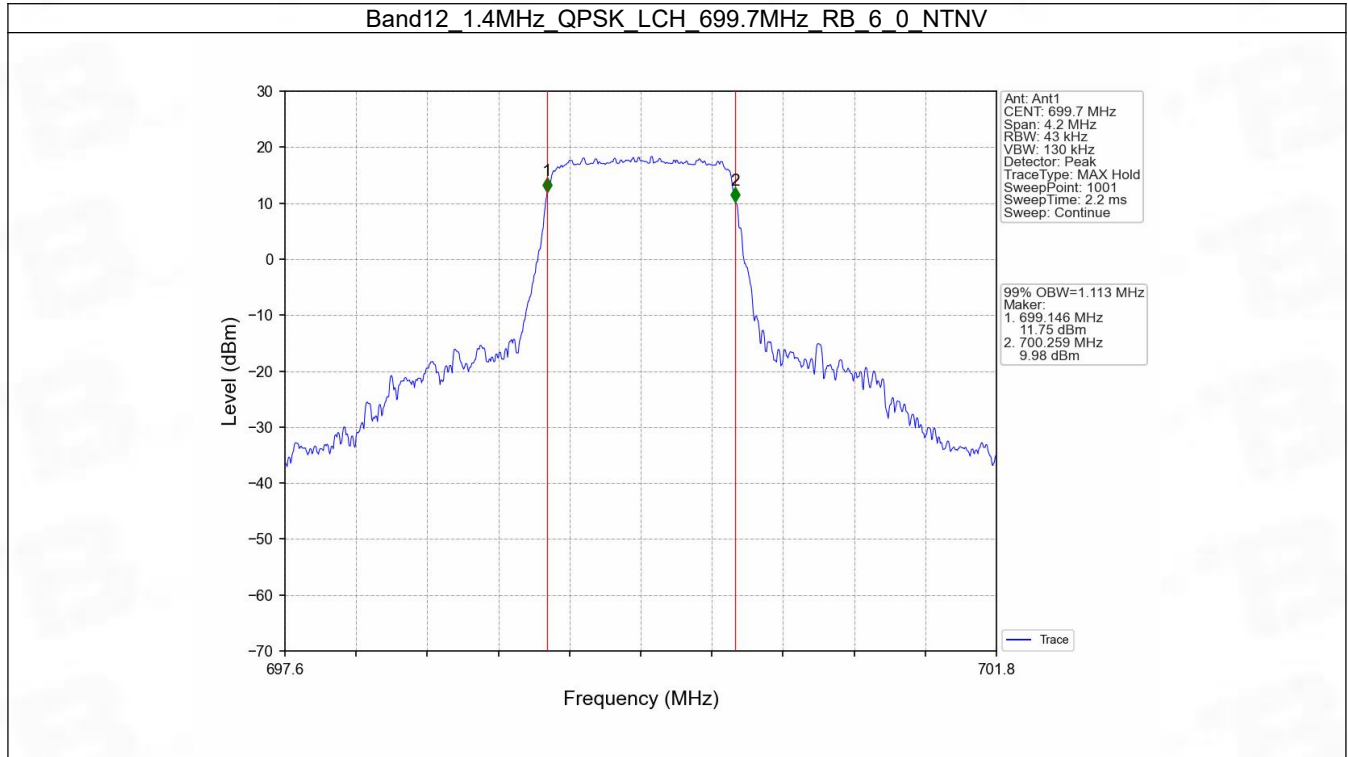
4. 99% & 26dB Bandwidth

4.1 Band12_OBW

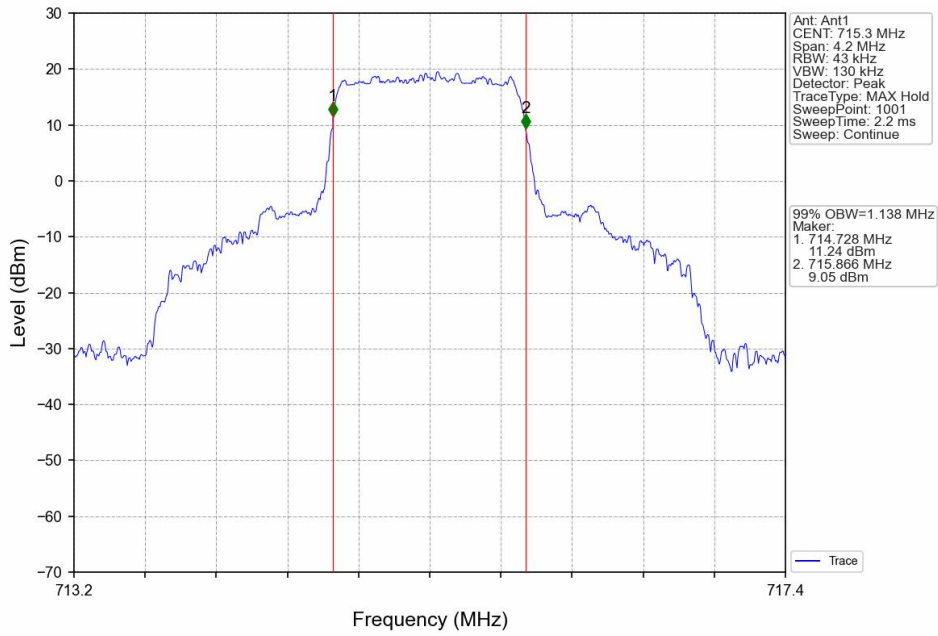
4.1.1 Test Result

Band: 12 / NTV						
Bandwidth (MHz)	Modulation	Frequency (MHz)	RB Allocation		99% Occupied Bandwidth (MHz)	Verdict
			Size	Offset	Result	
1.4	QPSK	699.7	6	0	1.113	Pass
		707.5	6	0	1.117	Pass
		715.3	6	0	1.138	Pass
	16QAM	699.7	6	0	1.101	Pass
		707.5	6	0	1.116	Pass
		715.3	6	0	1.116	Pass
3	QPSK	700.5	15	0	2.732	Pass
		707.5	15	0	2.734	Pass
		714.5	15	0	2.733	Pass
	16QAM	700.5	15	0	2.725	Pass
		707.5	15	0	2.730	Pass
		714.5	15	0	2.725	Pass
5	QPSK	701.5	25	0	4.574	Pass
		707.5	25	0	4.571	Pass
		713.5	25	0	4.605	Pass
	16QAM	701.5	25	0	4.622	Pass
		707.5	25	0	4.611	Pass
		713.5	25	0	4.595	Pass
10	QPSK	704	50	0	9.100	Pass
		707.5	50	0	9.057	Pass
		711	50	0	9.084	Pass
	16QAM	704	50	0	9.111	Pass
		707.5	50	0	9.055	Pass
		711	50	0	9.083	Pass

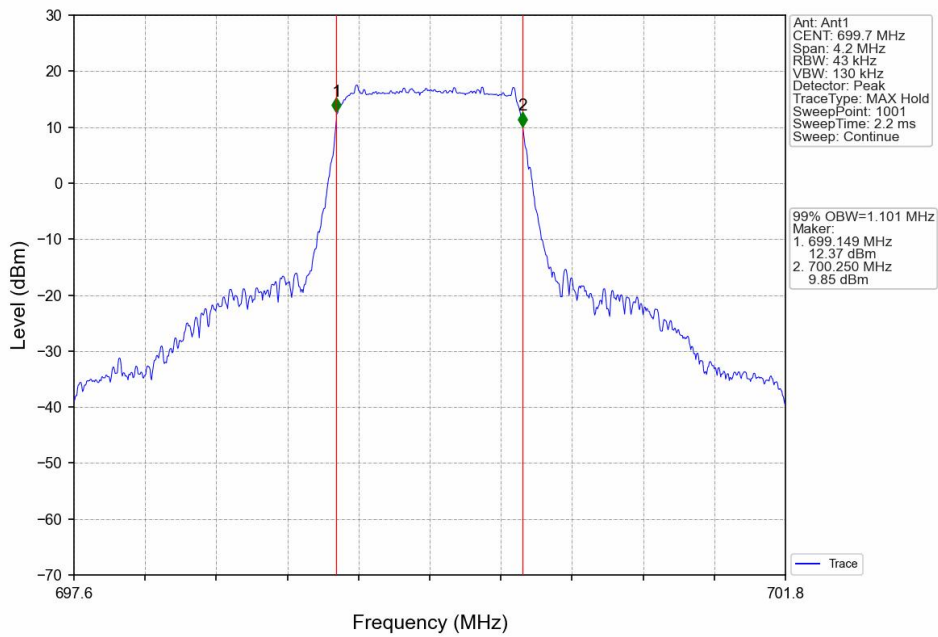
4.1.2 Test Graph



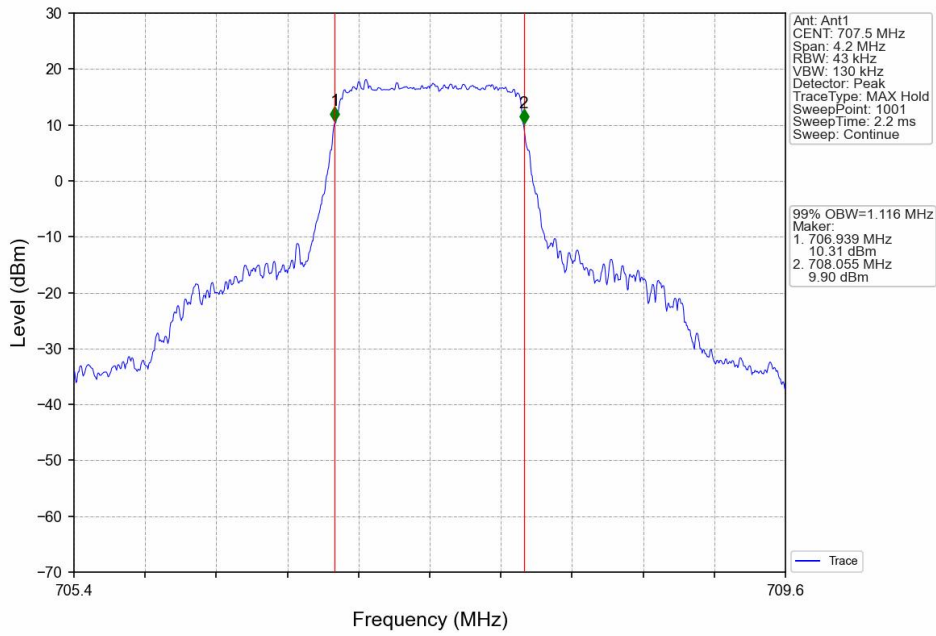
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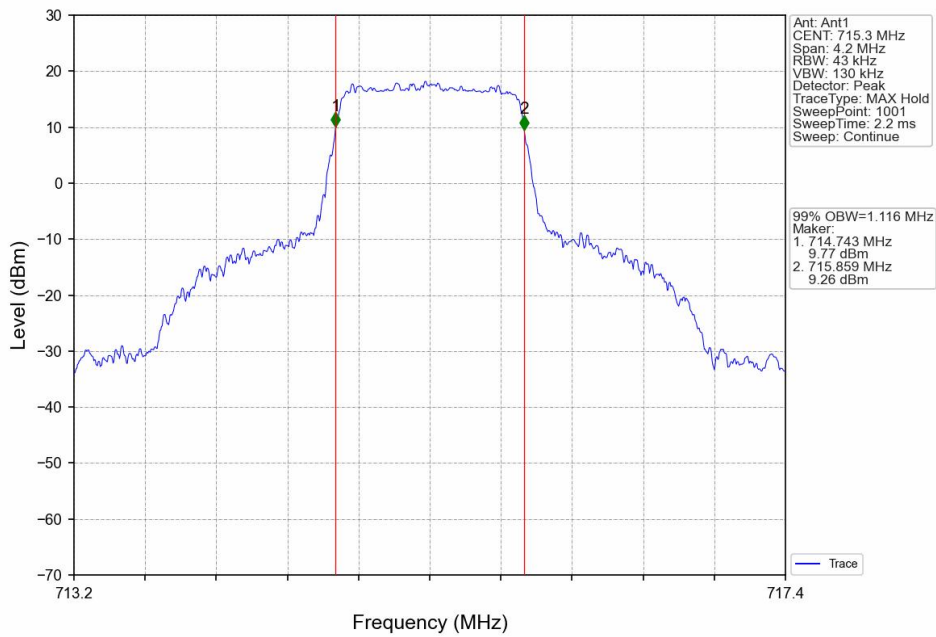
Band12_1.4MHz_16QAM_LCH_699.7MHz_RB_6_0_NTNV



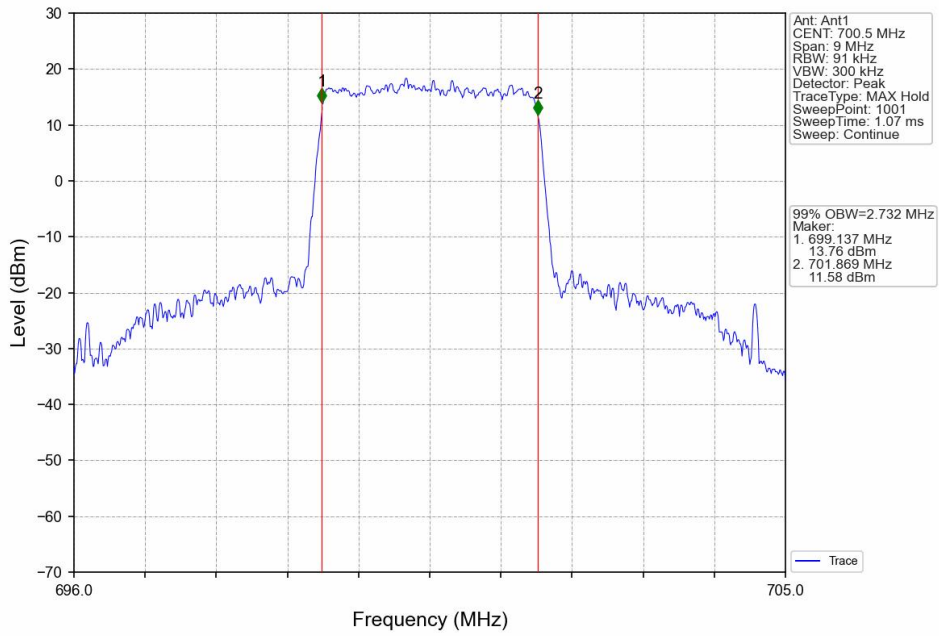
Band12 1.4MHz 16QAM MCH 707.5MHz RB 6 0 NTN



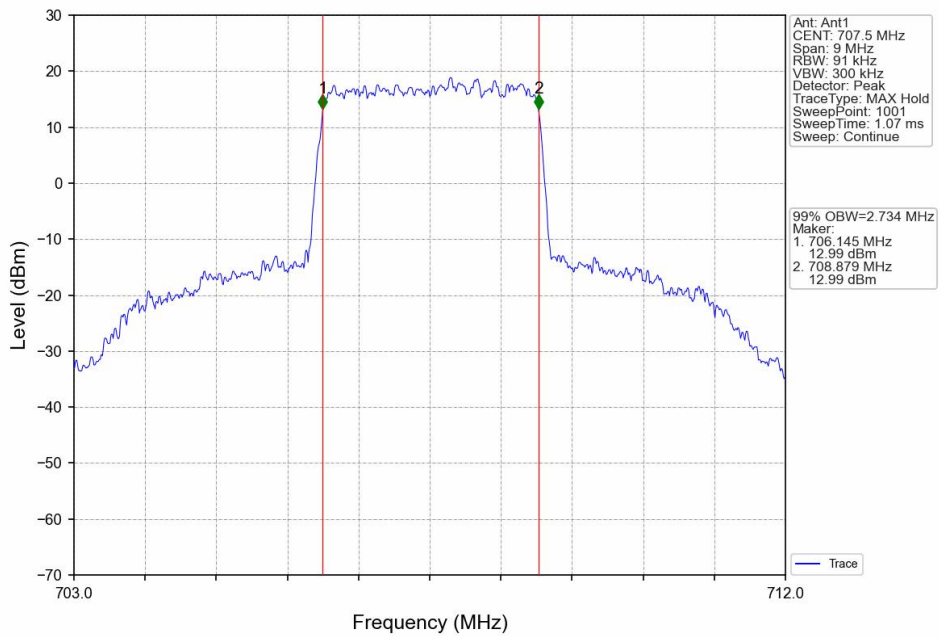
Band12 1.4MHz 16QAM HCH 715.3MHz RB 6 0 NTN



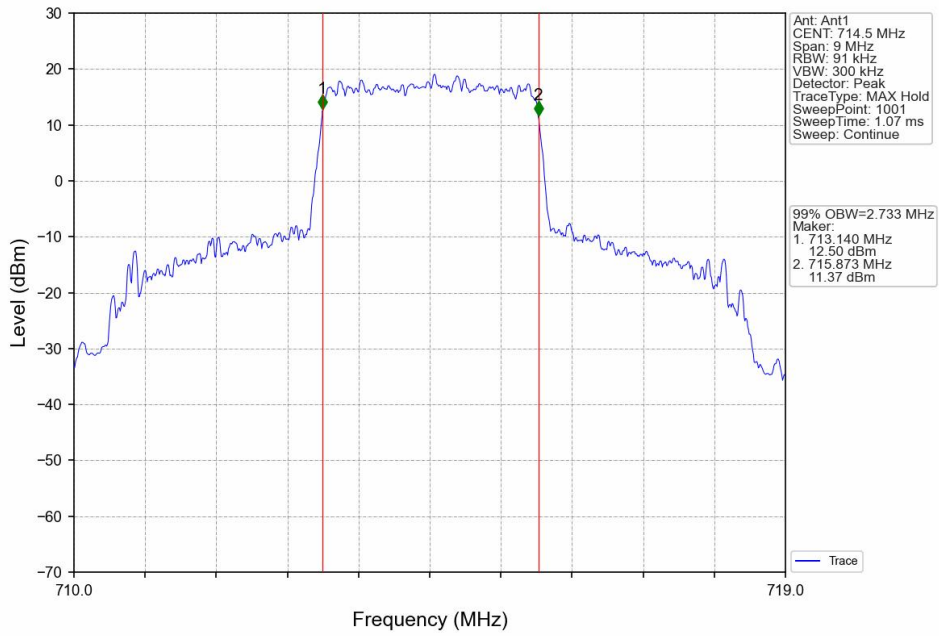
Band12_3MHz_QPSK_LCH_700.5MHz_RB_15_0_NTNV



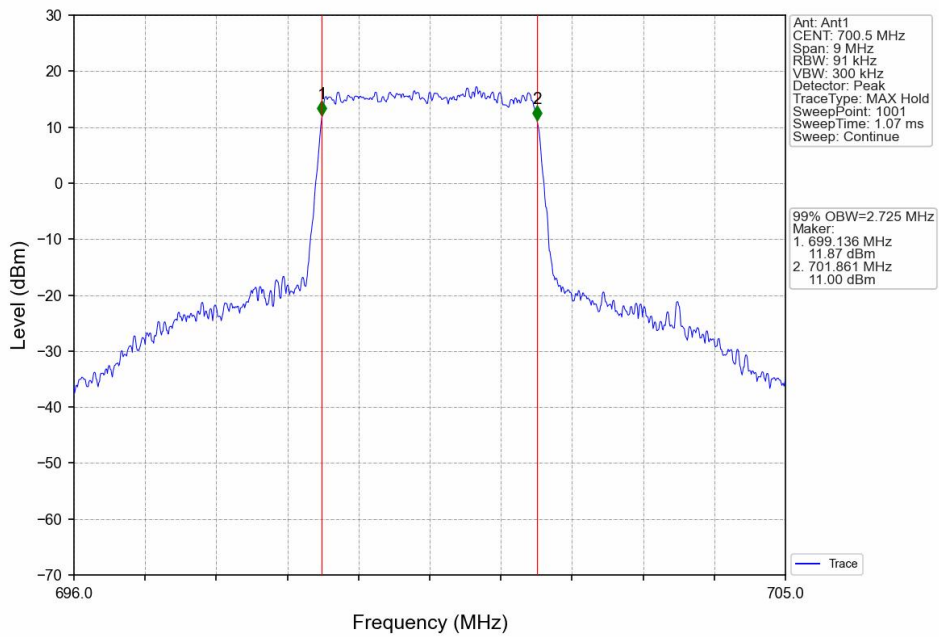
Band12_3MHz_QPSK_MCH_707.5MHz_RB_15_0_NTNV



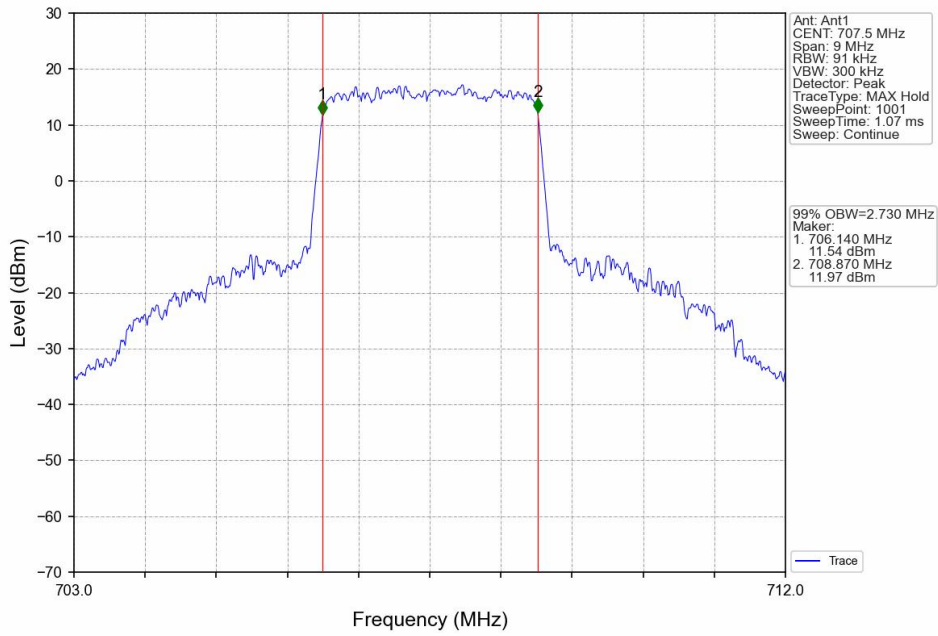
Band12_3MHz_QPSK_HCH_714.5MHz_RB_15_0_NTNV



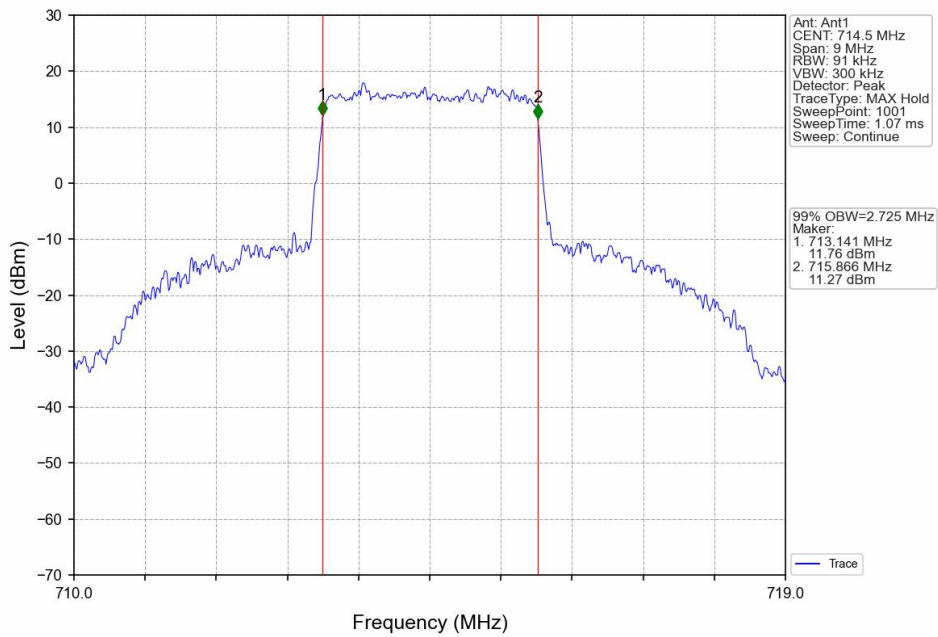
Band12_3MHz_16QAM_LCH_700.5MHz_RB_15_0_NTNV



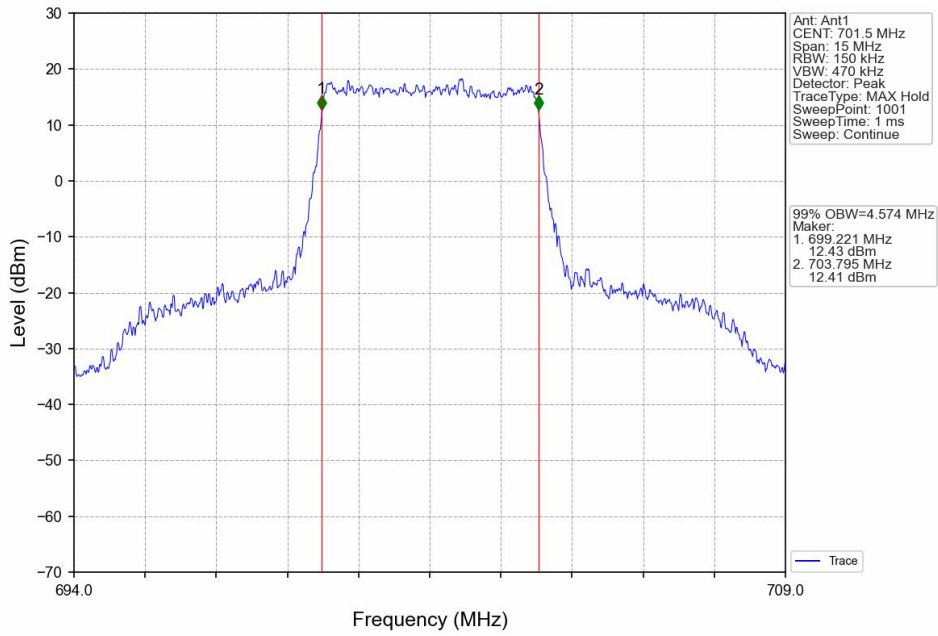
Band12_3MHz_16QAM_MCH_707.5MHz_RB_15_0_NTNV



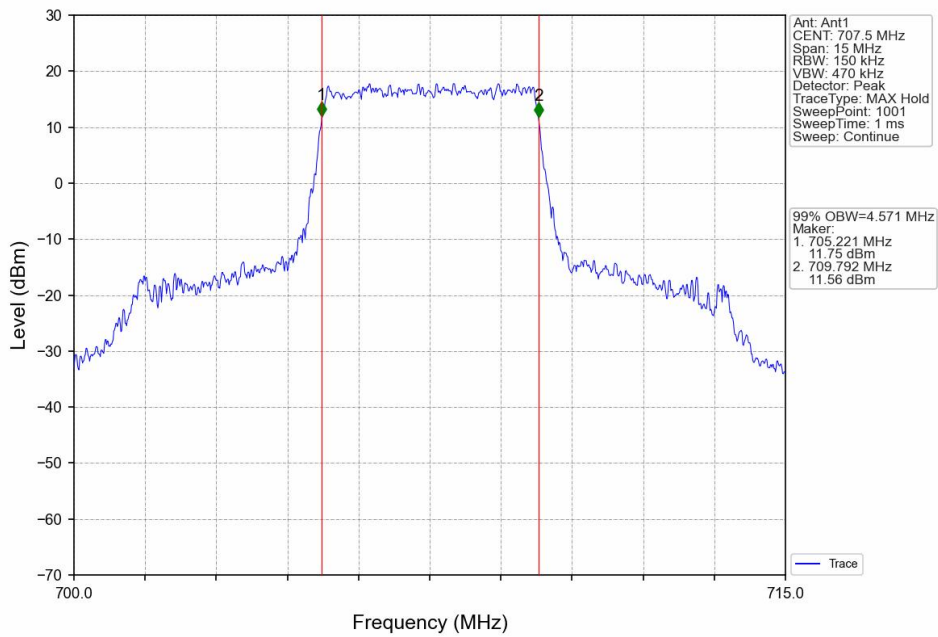
Band12_3MHz_16QAM_HCH_714.5MHz_RB_15_0_NTNV



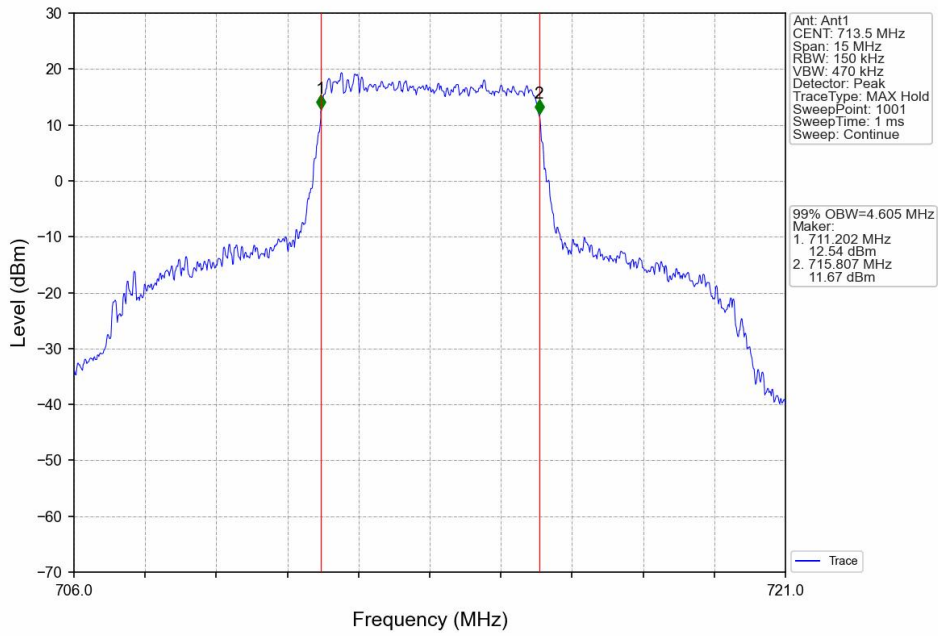
Band12_5MHz_QPSK_LCH_701.5MHz_RB_25_0_NTNV



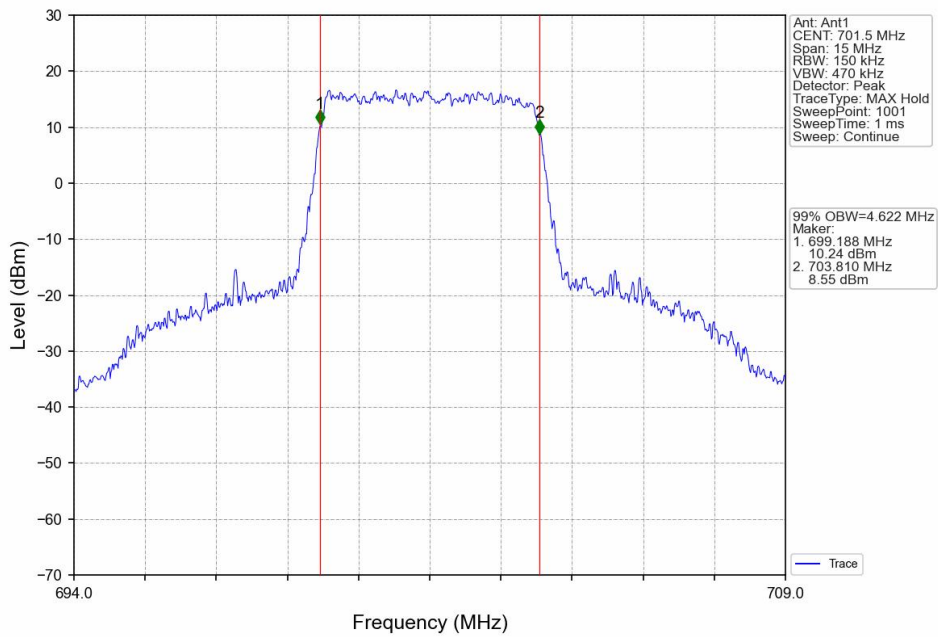
Band12_5MHz_QPSK_MCH_707.5MHz_RB_25_0_NTNV



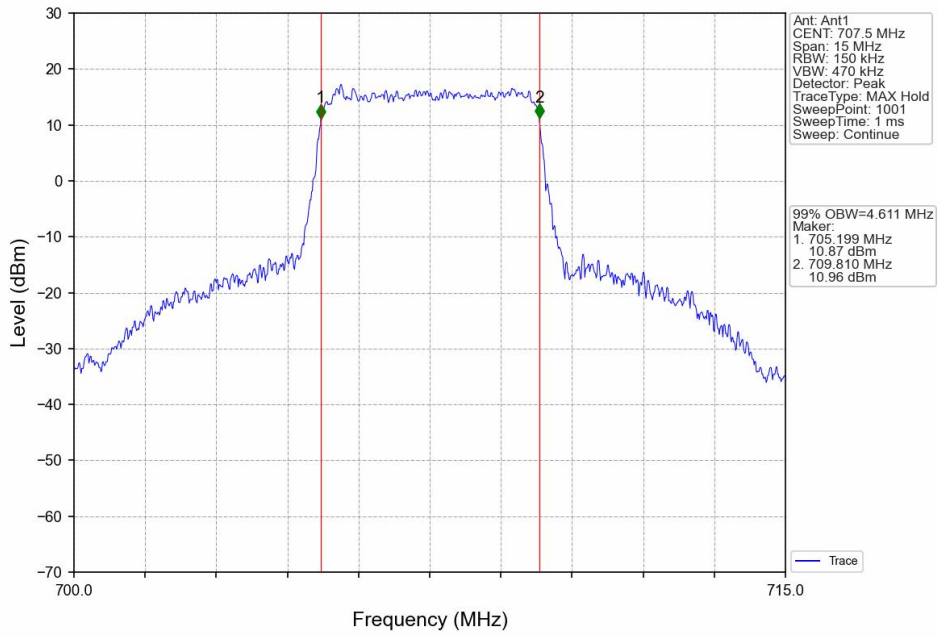
Band12_5MHz_QPSK_HCH_713.5MHz_RB_25_0_NTNV



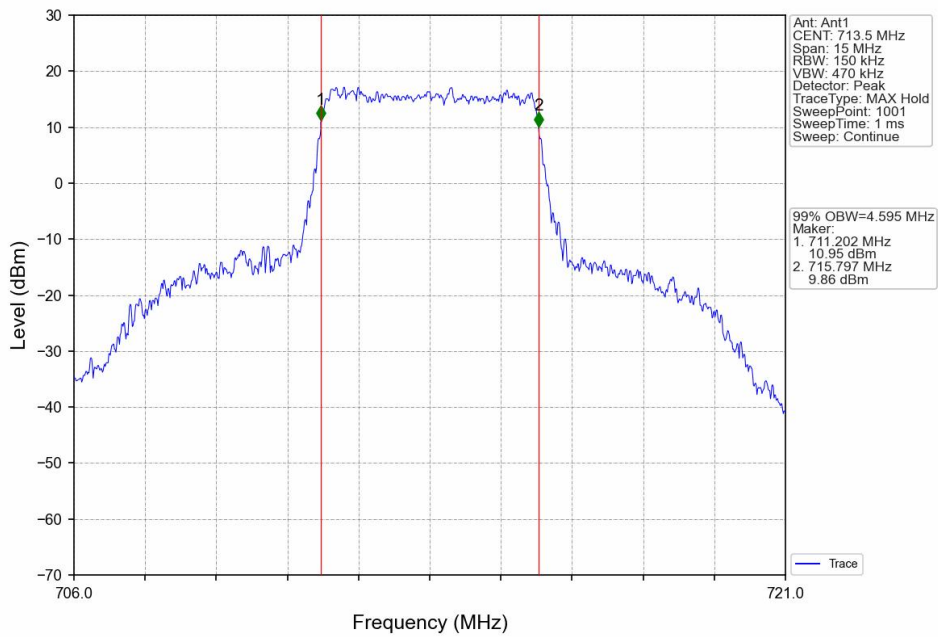
Band12_5MHz_16QAM_LCH_701.5MHz_RB_25_0_NTNV



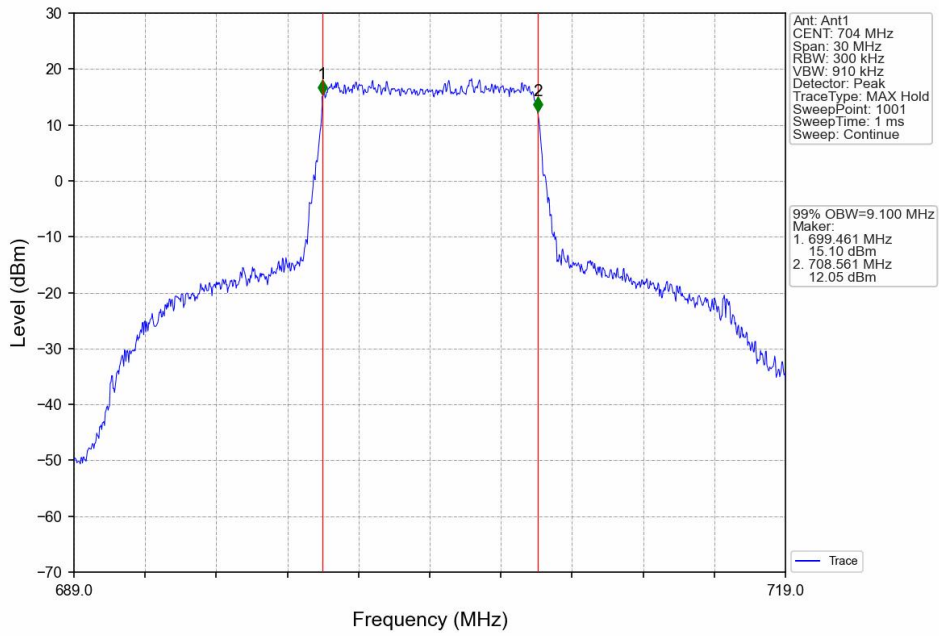
Band12_5MHz_16QAM_MCH_707.5MHz_RB_25_0_NTNV



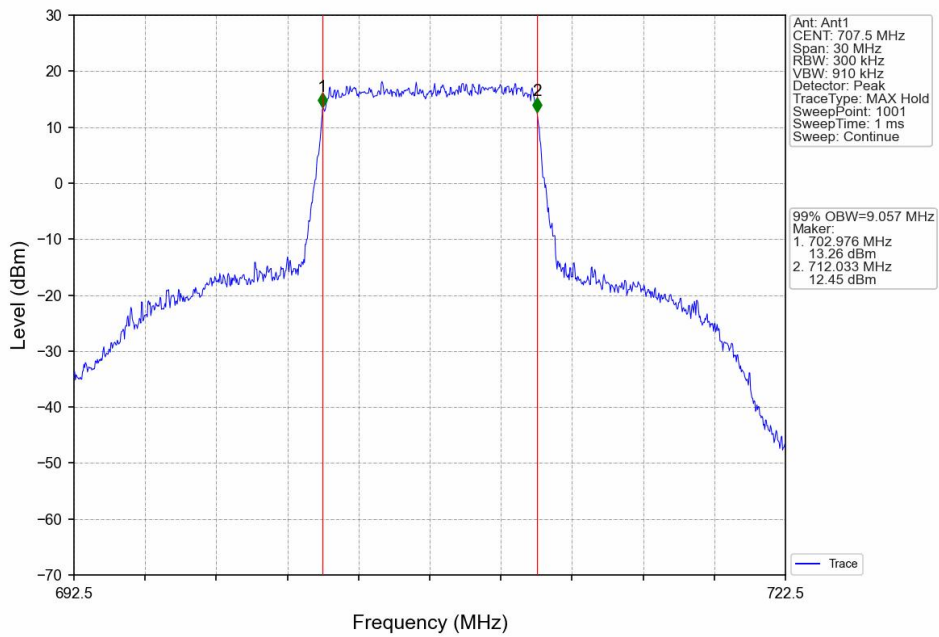
Band12_5MHz_16QAM_HCH_713.5MHz_RB_25_0_NTNV



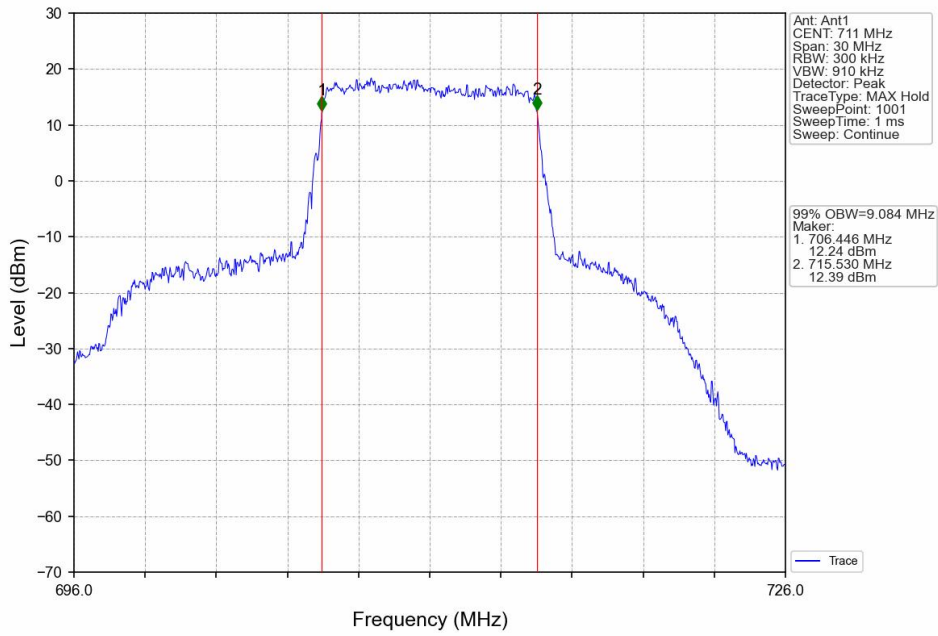
Band12_10MHz_QPSK_LCH_704MHz_RB_50_0_NTNV



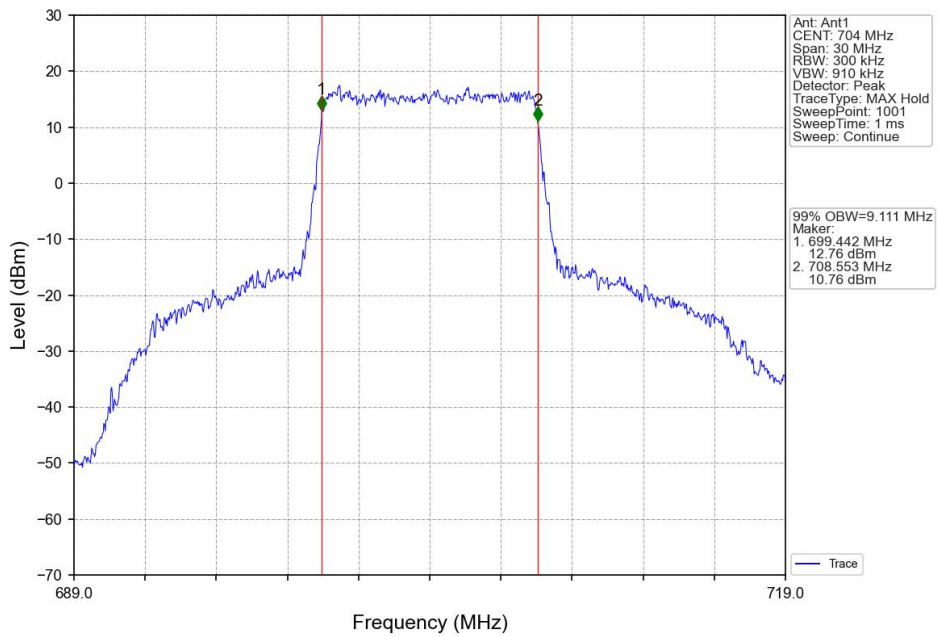
Band12_10MHz_QPSK_MCH_707.5MHz_RB_50_0_NTNV



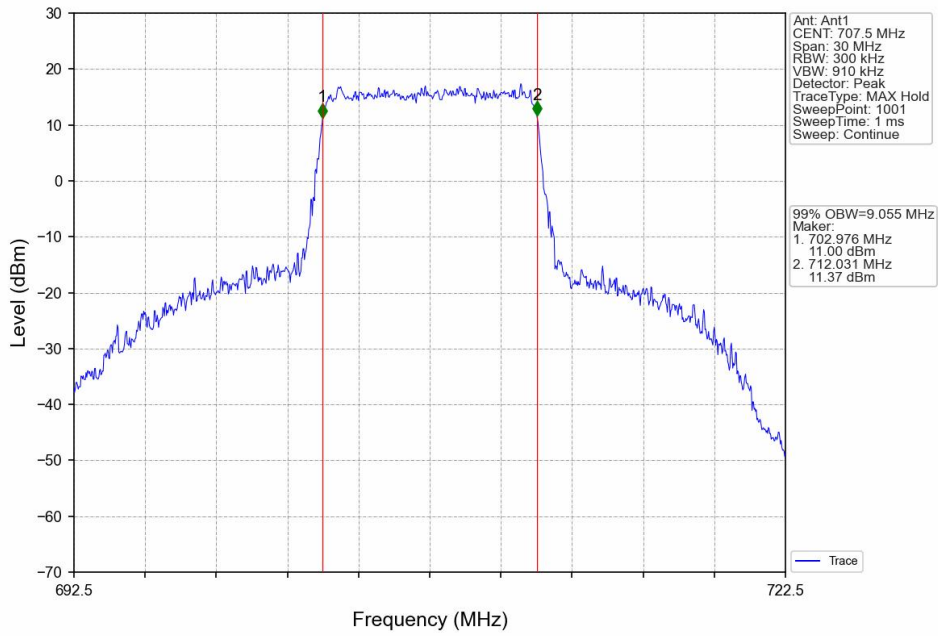
Band12_10MHz_QPSK_HCH_711MHz_RB_50_0_NTNV



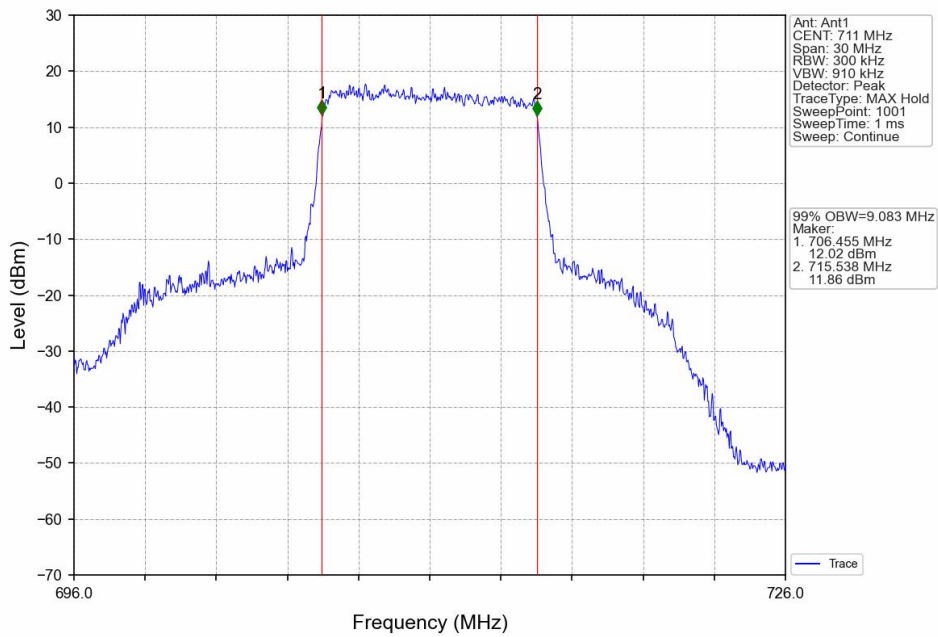
Band12_10MHz_16QAM_LCH_704MHz_RB_50_0_NTNV



Band12_10MHz_16QAM_MCH_707.5MHz_RB_50_0_NTNV



Band12_10MHz_16QAM_HCH_711MHz_RB_50_0_NTNV

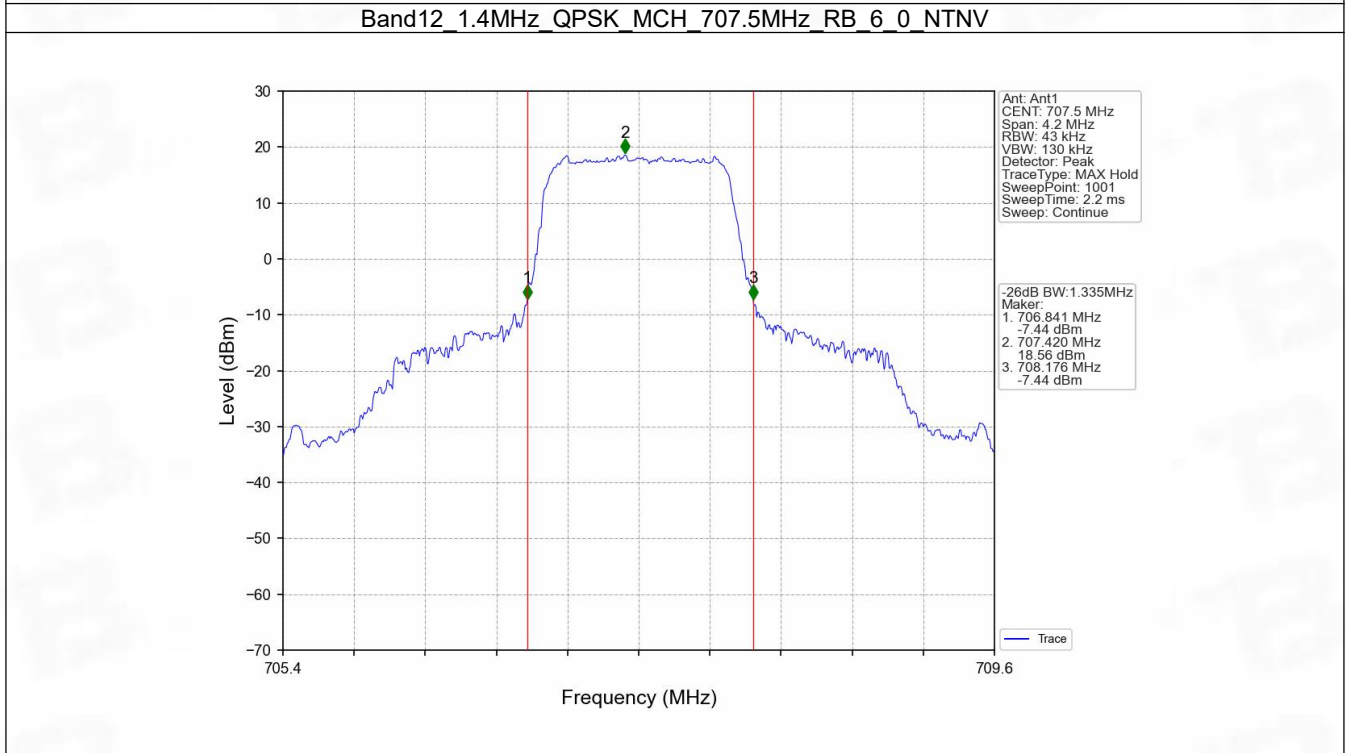
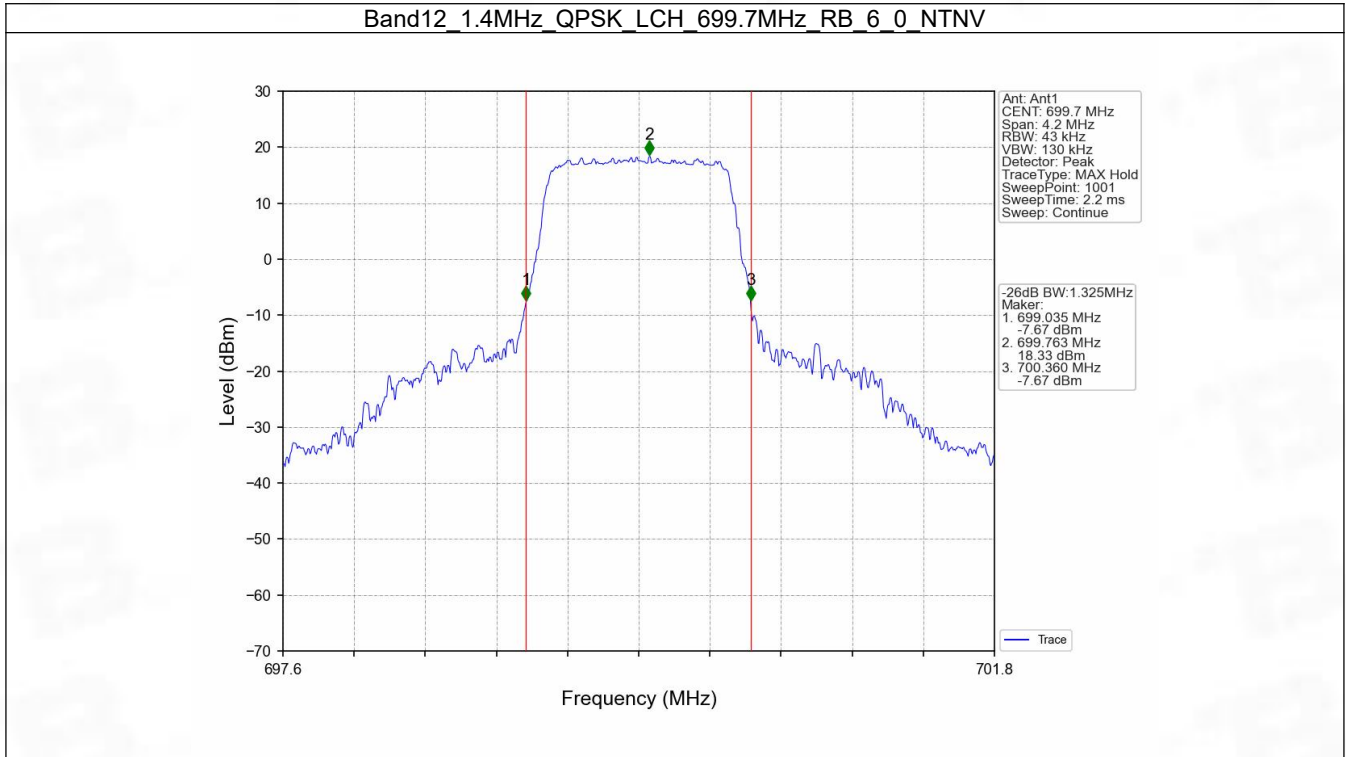


4.2 Band12_XDB

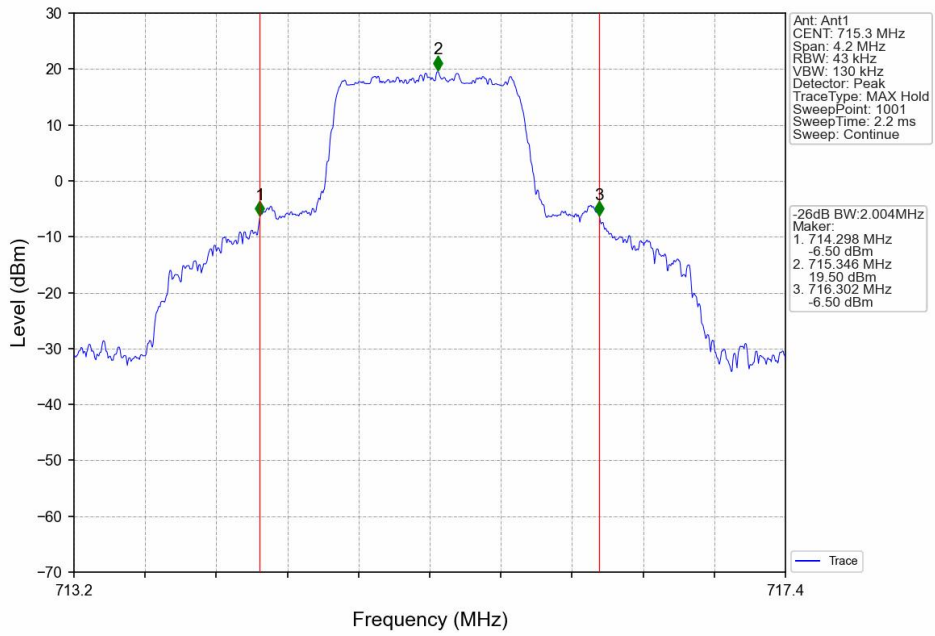
4.2.1 Test Result

Band: 12 / NTNV						
Bandwidth (MHz)	Modulation	Frequency (MHz)	RB Allocation		26dB Bandwidth (MHz)	Verdict
			Size	Offset	Result	
1.4	QPSK	699.7	6	0	1.325	Pass
		707.5	6	0	1.335	Pass
		715.3	6	0	2.004	Pass
	16QAM	699.7	6	0	1.302	Pass
		707.5	6	0	1.332	Pass
		715.3	6	0	1.357	Pass
3	QPSK	700.5	15	0	3.010	Pass
		707.5	15	0	2.982	Pass
		714.5	15	0	3.015	Pass
	16QAM	700.5	15	0	2.999	Pass
		707.5	15	0	2.999	Pass
		714.5	15	0	3.020	Pass
5	QPSK	701.5	25	0	5.253	Pass
		707.5	25	0	5.307	Pass
		713.5	25	0	5.227	Pass
	16QAM	701.5	25	0	5.263	Pass
		707.5	25	0	5.279	Pass
		713.5	25	0	5.417	Pass
10	QPSK	704	50	0	10.263	Pass
		707.5	50	0	10.290	Pass
		711	50	0	10.383	Pass
	16QAM	704	50	0	10.155	Pass
		707.5	50	0	10.279	Pass
		711	50	0	10.205	Pass

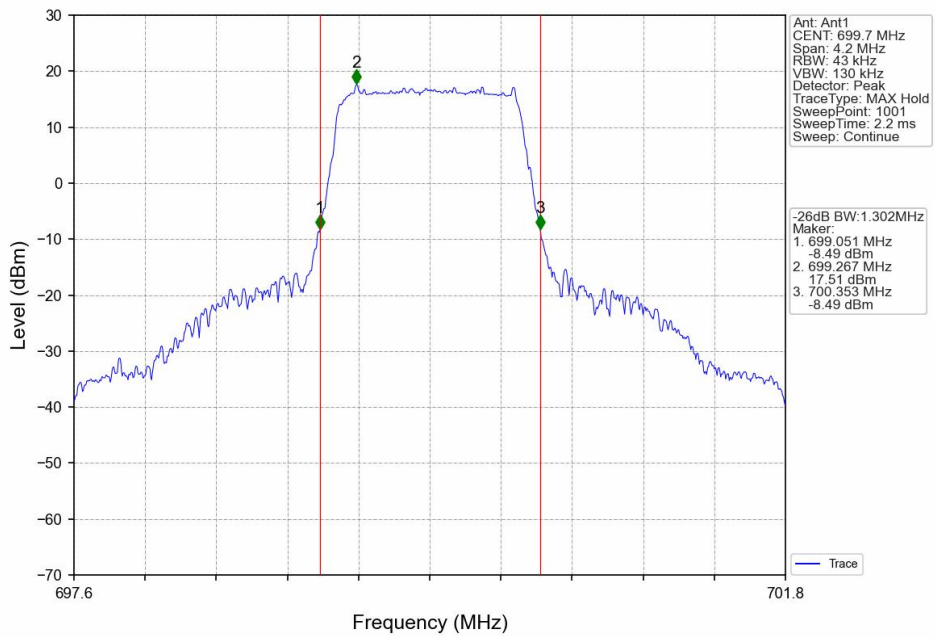
4.2.2 Test Graph



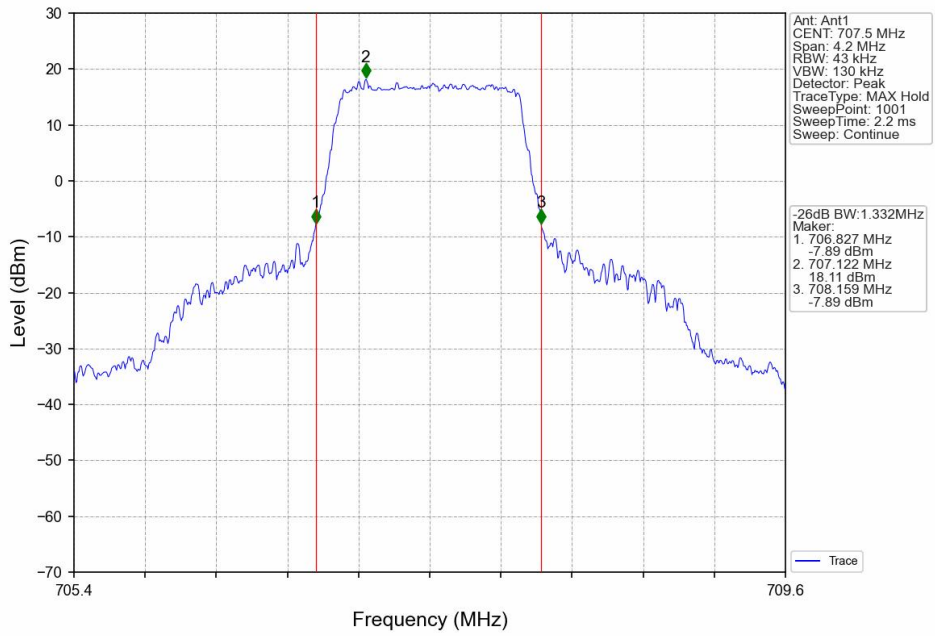
Band12_1.4MHz_QPSK_HCH_715.3MHz_RB_6_0_NTNV



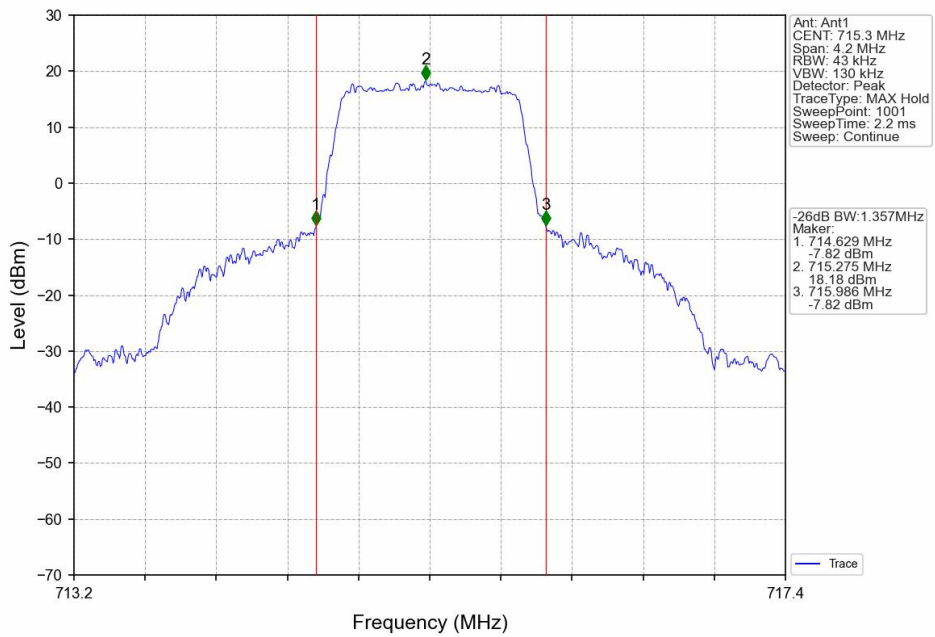
Band12_1.4MHz_16QAM_LCH_699.7MHz_RB_6_0_NTNV



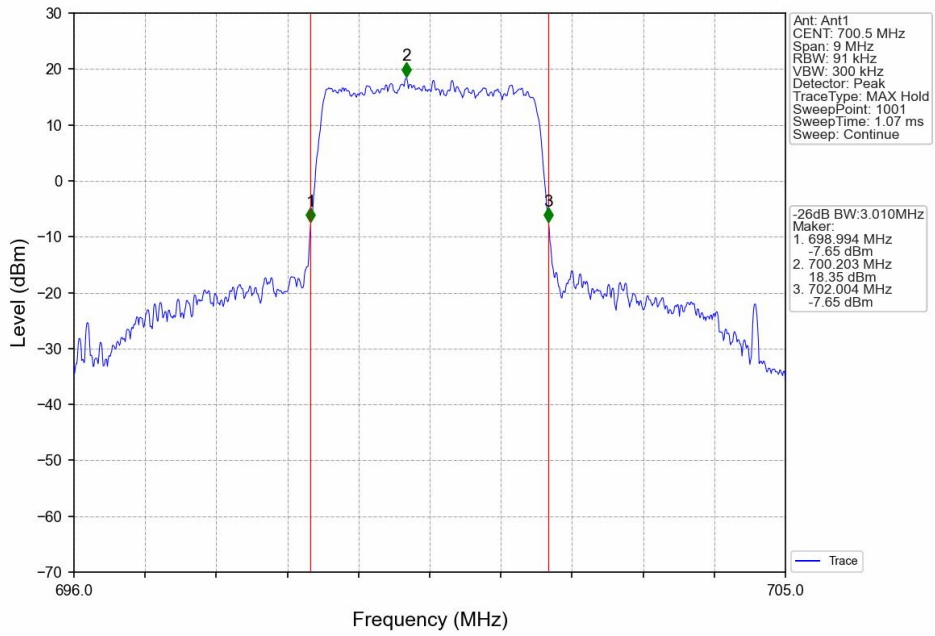
Band12 1.4MHz 16QAM MCH 707.5MHz RB 6 0 NTN



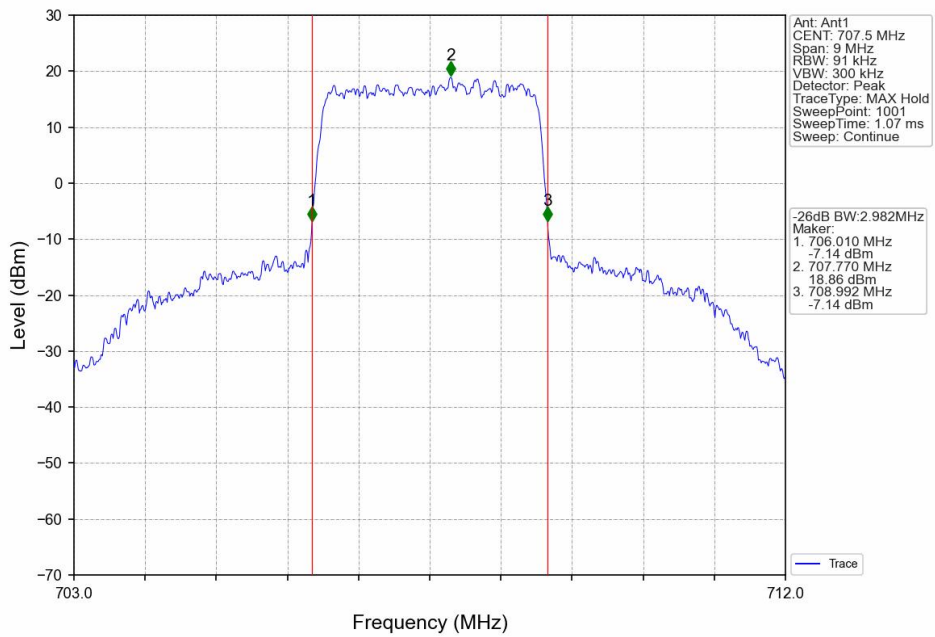
Band12 1.4MHz 16QAM HCH 715.3MHz RB 6 0 NTN



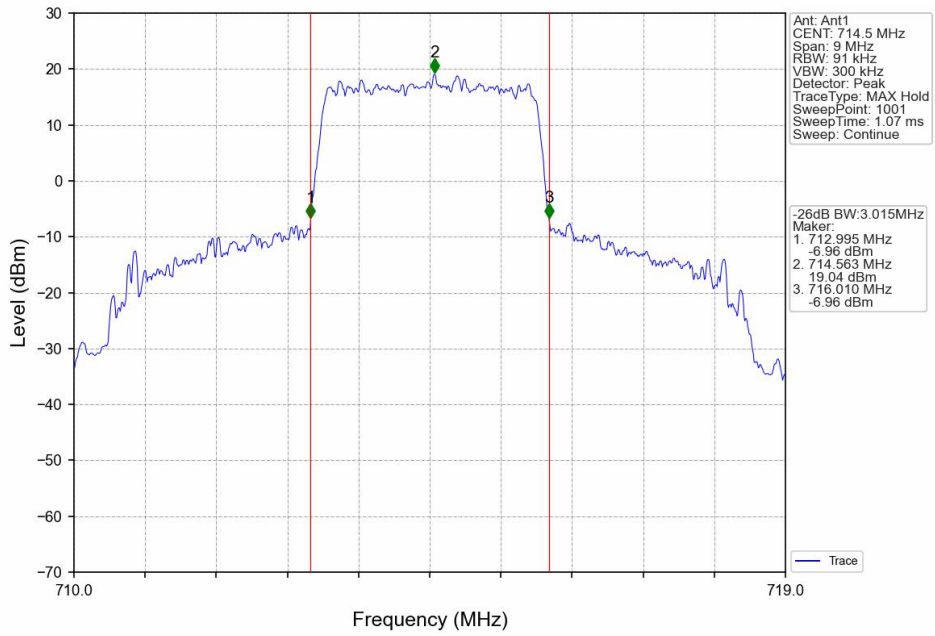
Band12_3MHz_QPSK_LCH_700.5MHz_RB_15_0_NTNV



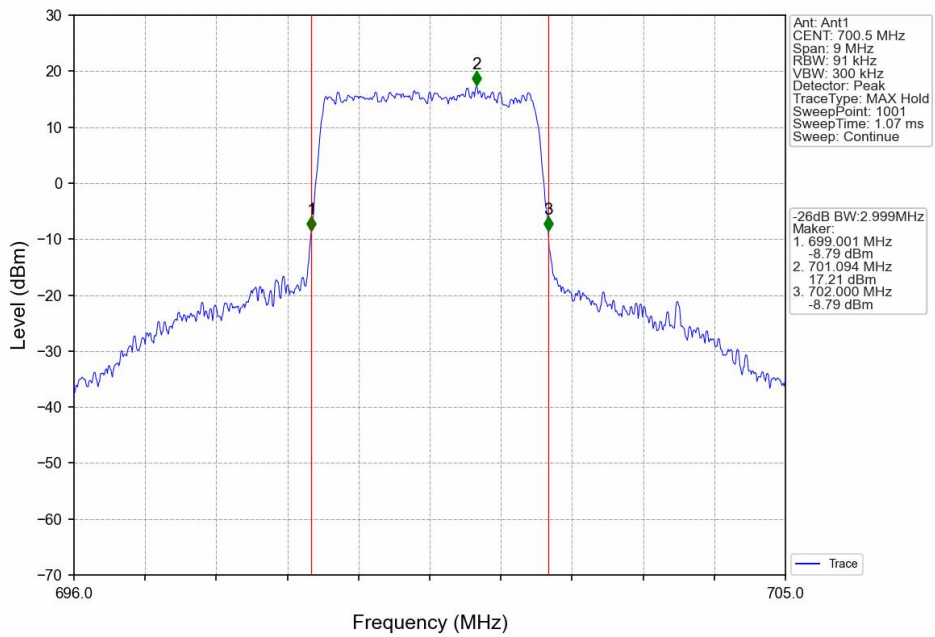
Band12_3MHz_QPSK_MCH_707.5MHz_RB_15_0_NTNV



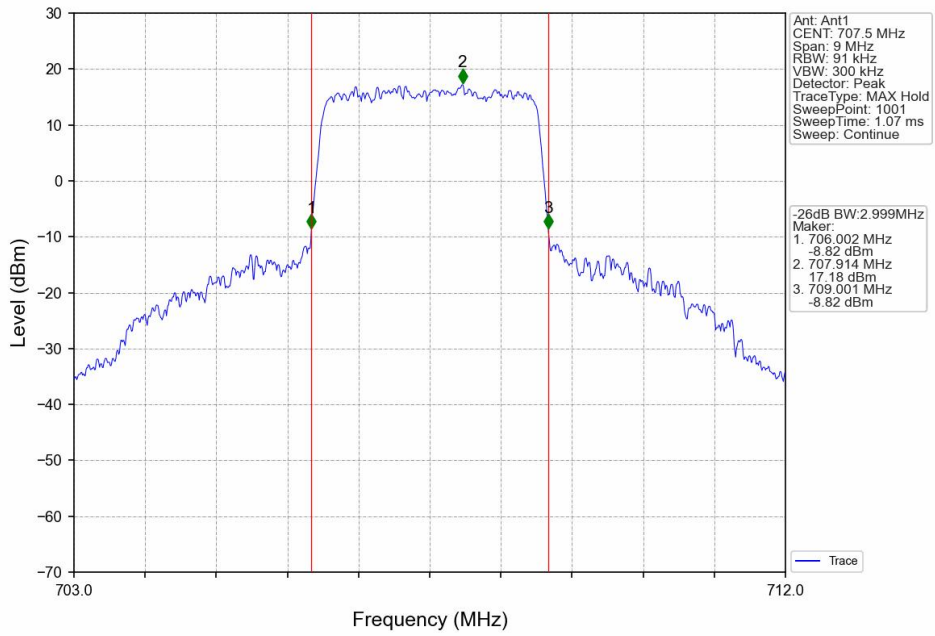
Band12_3MHz_QPSK_HCH_714.5MHz_RB_15_0_NTNV



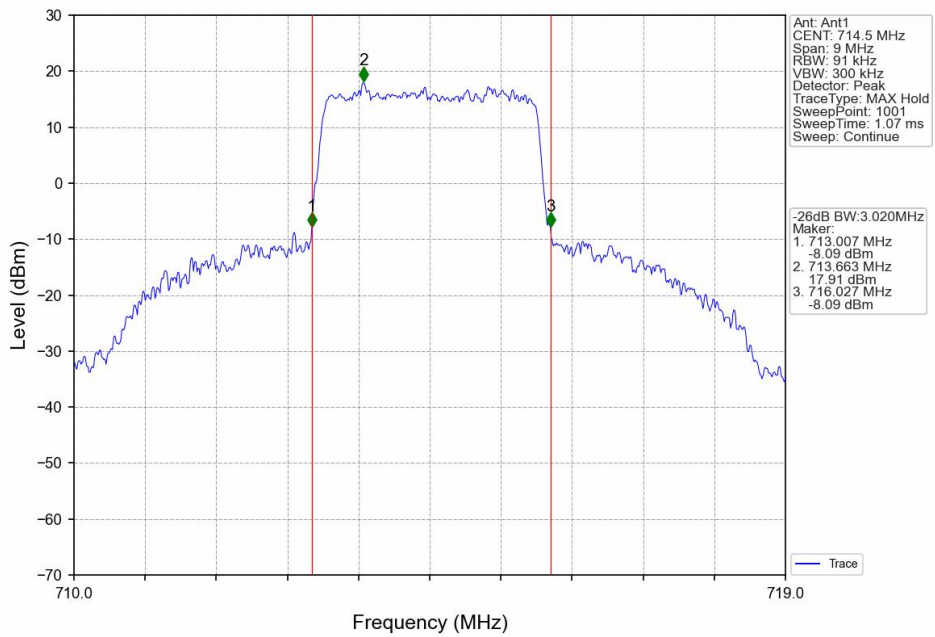
Band12_3MHz_16QAM_LCH_700.5MHz_RB_15_0_NTNV



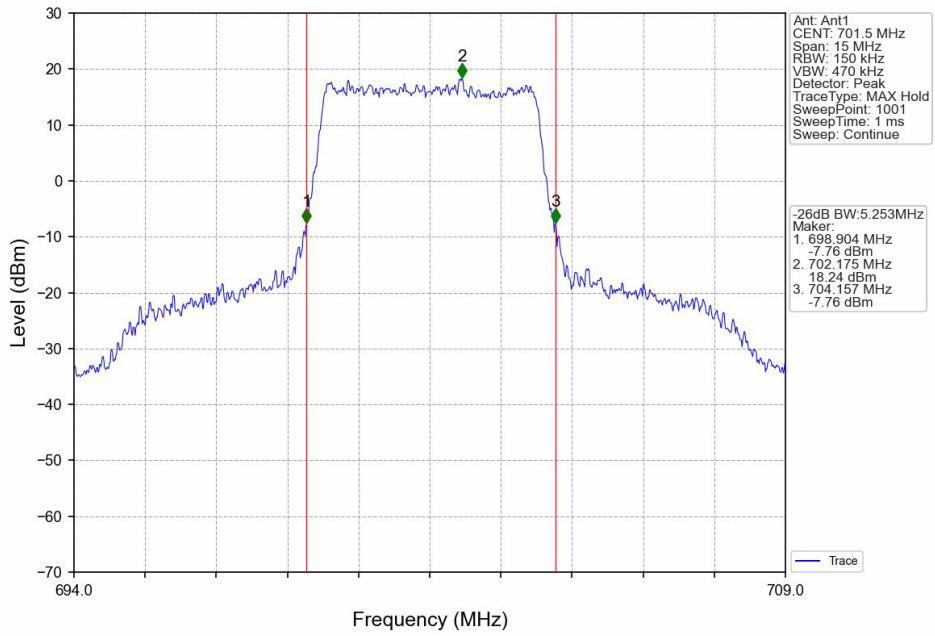
Band12_3MHz_16QAM_MCH_707.5MHz_RB_15_0_NTNV



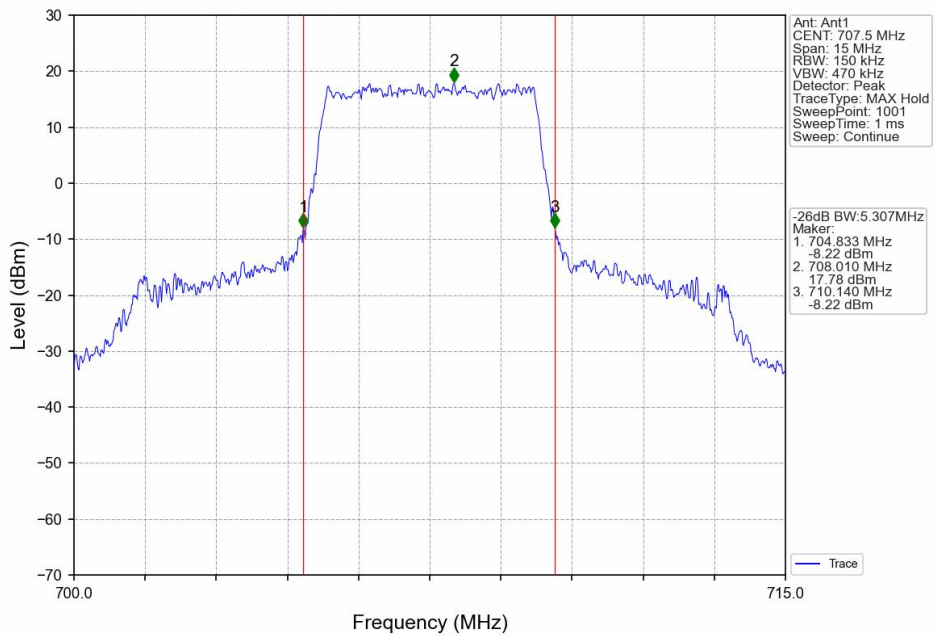
Band12_3MHz_16QAM_HCH_714.5MHz_RB_15_0_NTNV



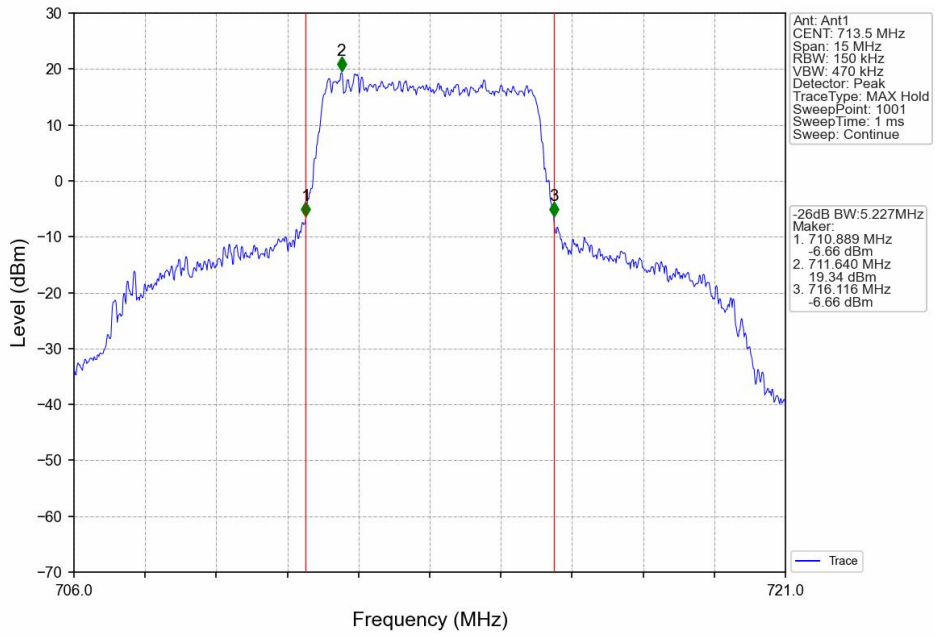
Band12_5MHz_QPSK_LCH_701.5MHz_RB_25_0_NTNV



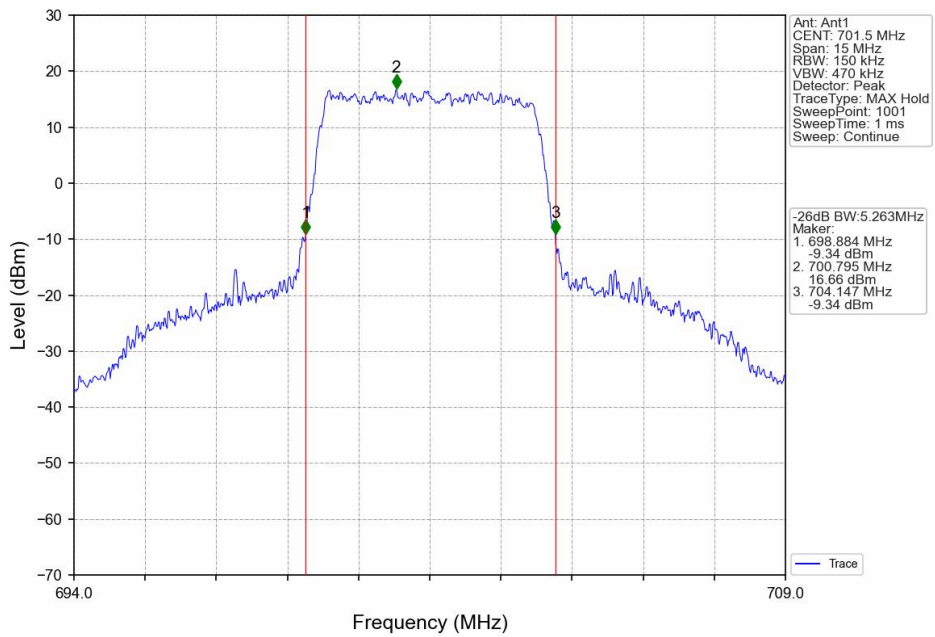
Band12_5MHz_QPSK_MCH_707.5MHz_RB_25_0_NTNV



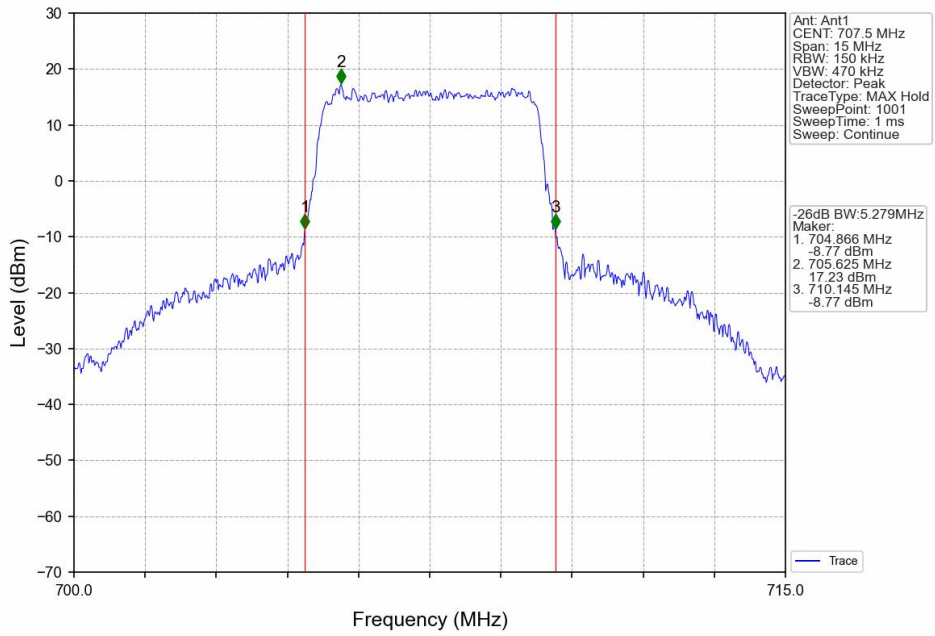
Band12_5MHz_QPSK_HCH_713.5MHz_RB_25_0_NTNV



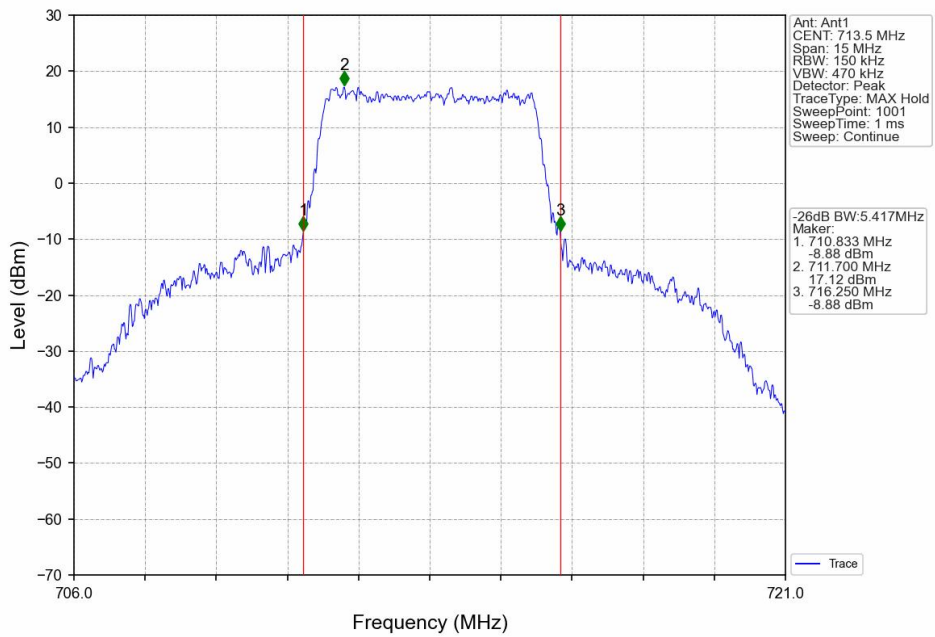
Band12_5MHz_16QAM_LCH_701.5MHz_RB_25_0_NTNV



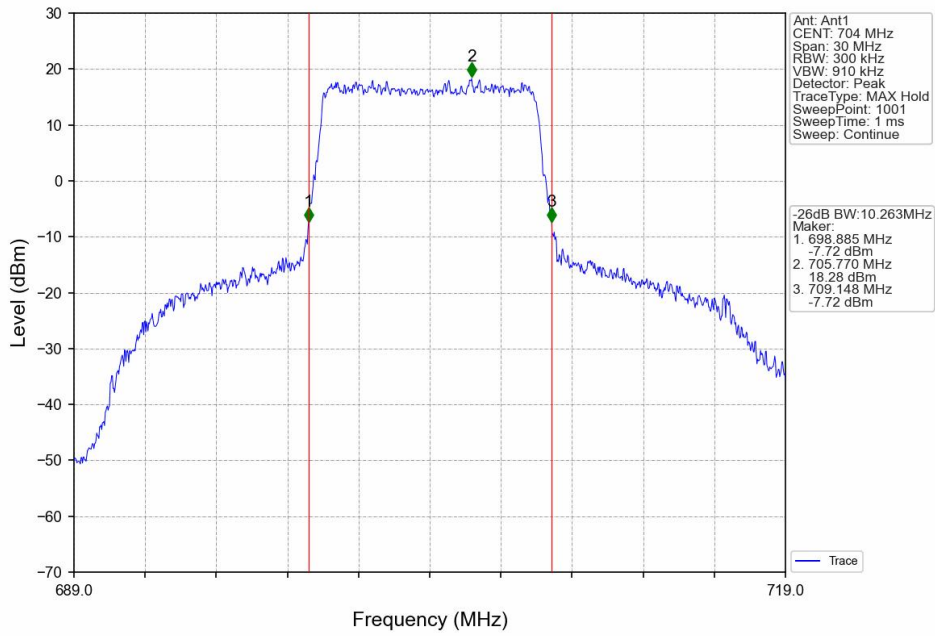
Band12_5MHz_16QAM_MCH_707.5MHz_RB_25_0_NTNV



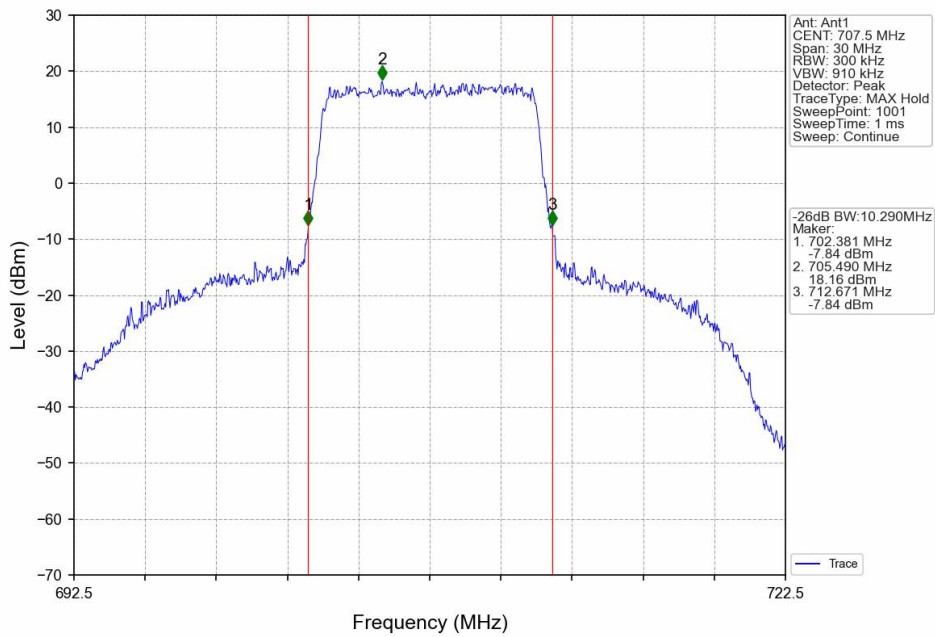
Band12_5MHz_16QAM_HCH_713.5MHz_RB_25_0_NTNV



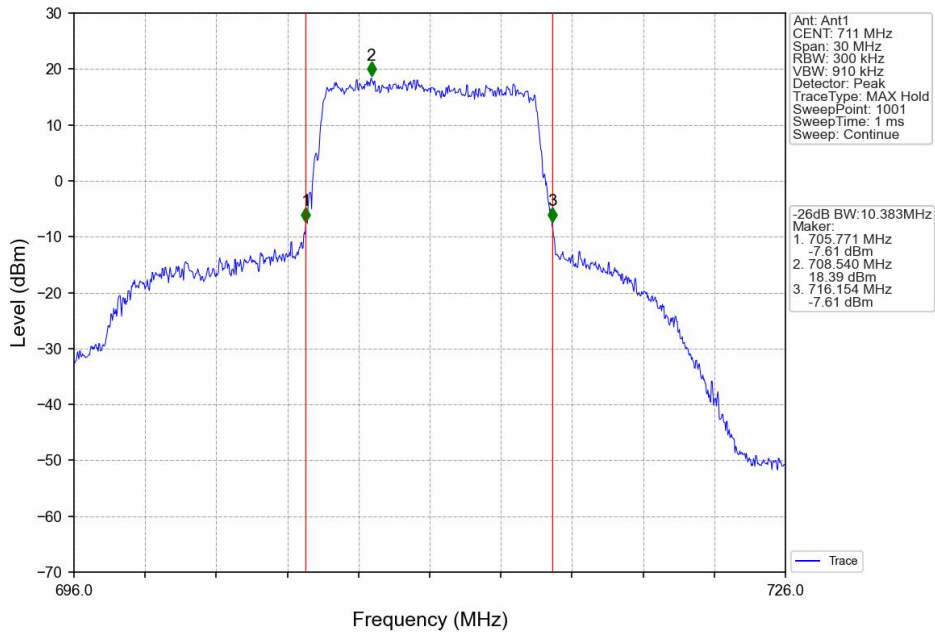
Band12_10MHz_QPSK_LCH_704MHz_RB_50_0_NTNV



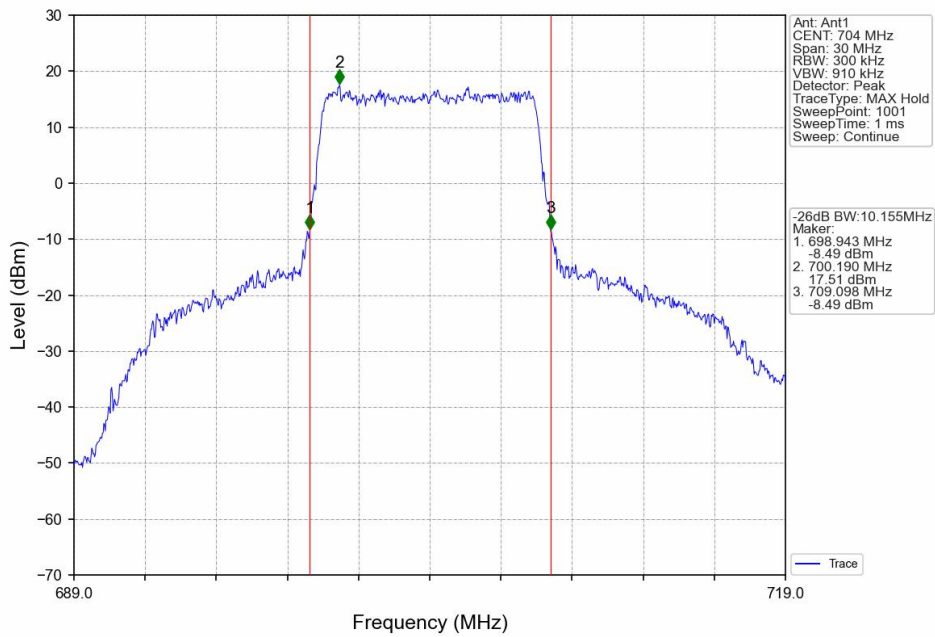
Band12_10MHz_QPSK_MCH_707.5MHz_RB_50_0_NTNV



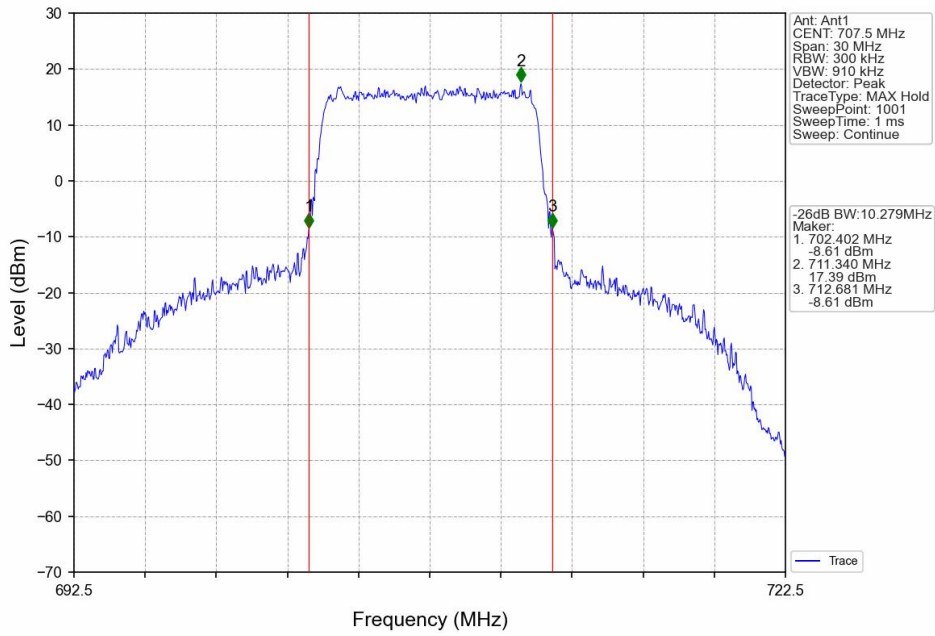
Band12_10MHz_QPSK_HCH_711MHz_RB_50_0_NTNV



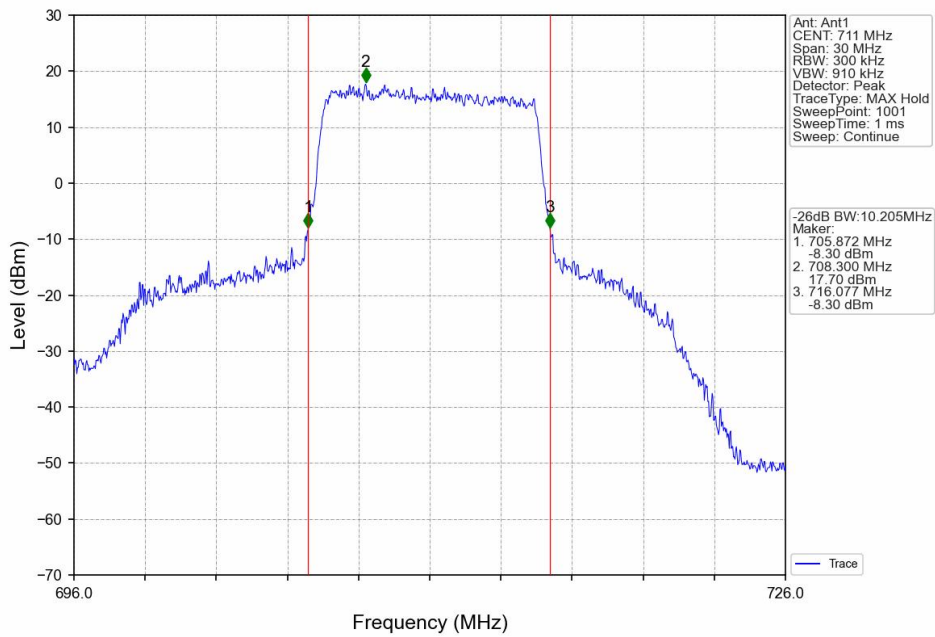
Band12_10MHz_16QAM_LCH_704MHz_RB_50_0_NTNV



Band12_10MHz_16QAM_MCH_707.5MHz_RB_50_0_NTNV



Band12_10MHz_16QAM_HCH_711MHz_RB_50_0_NTNV



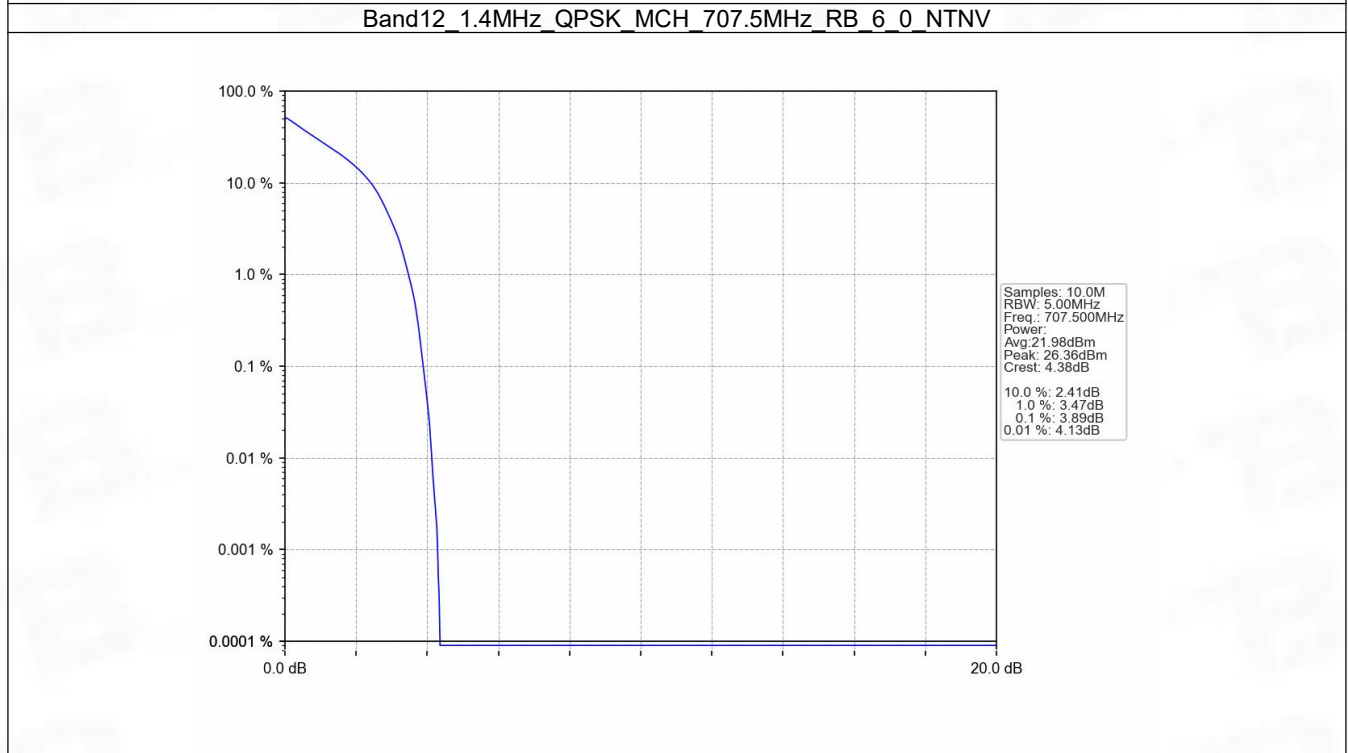
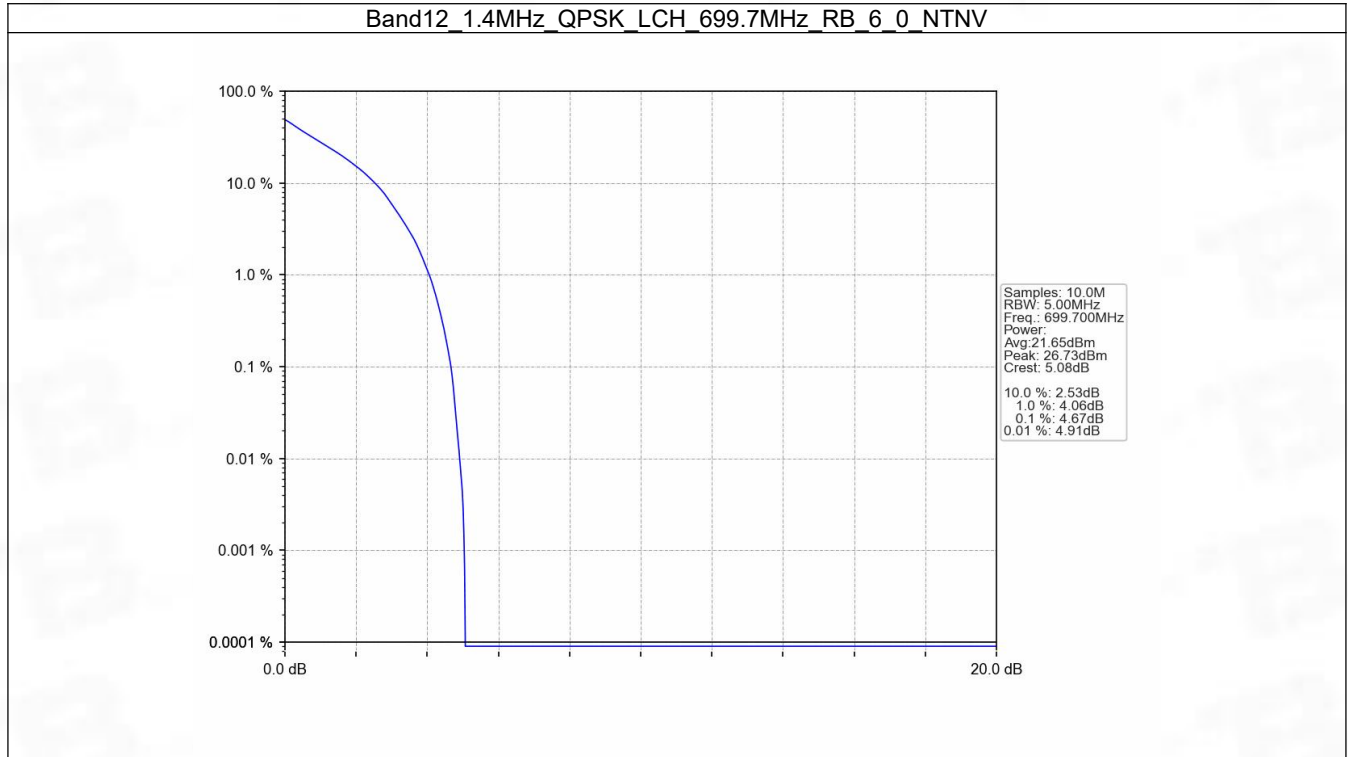
5. Peak-Average Ratio

5.1 B12_1.4MHz

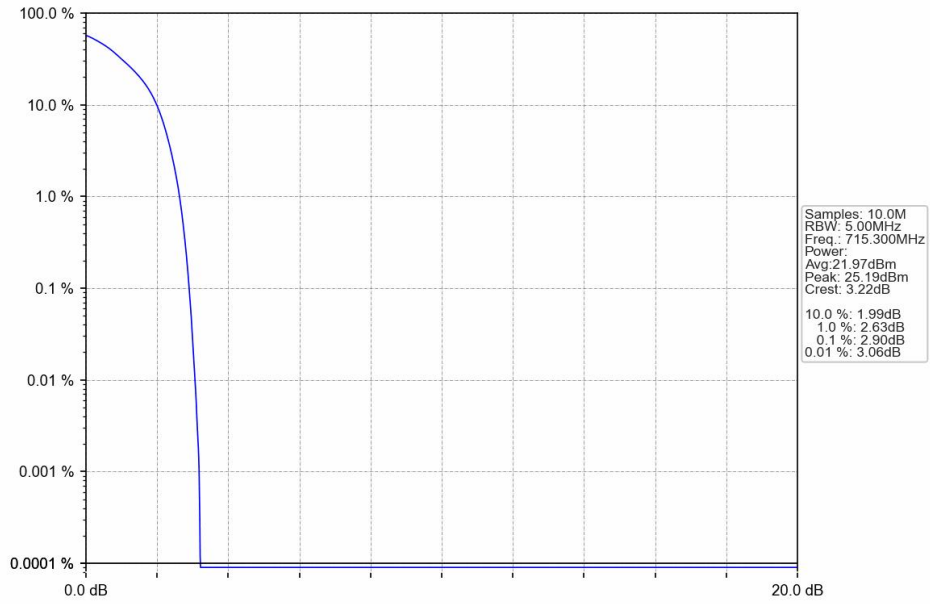
5.1.1 Test Result

Band: 12 / Bandwidth: 1.4MHz / NTN						
Modulation	Frequency (MHz)	RB Allocation		Peak-Average Ratio (dB)		Verdict
		Size	Offset	Result	Limit	
QPSK	699.7	6	0	4.67	<=13	Pass
	707.5	6	0	3.89	<=13	Pass
	715.3	6	0	2.90	<=13	Pass
16QAM	699.7	6	0	5.53	<=13	Pass
	707.5	6	0	4.84	<=13	Pass
	715.3	6	0	4.12	<=13	Pass

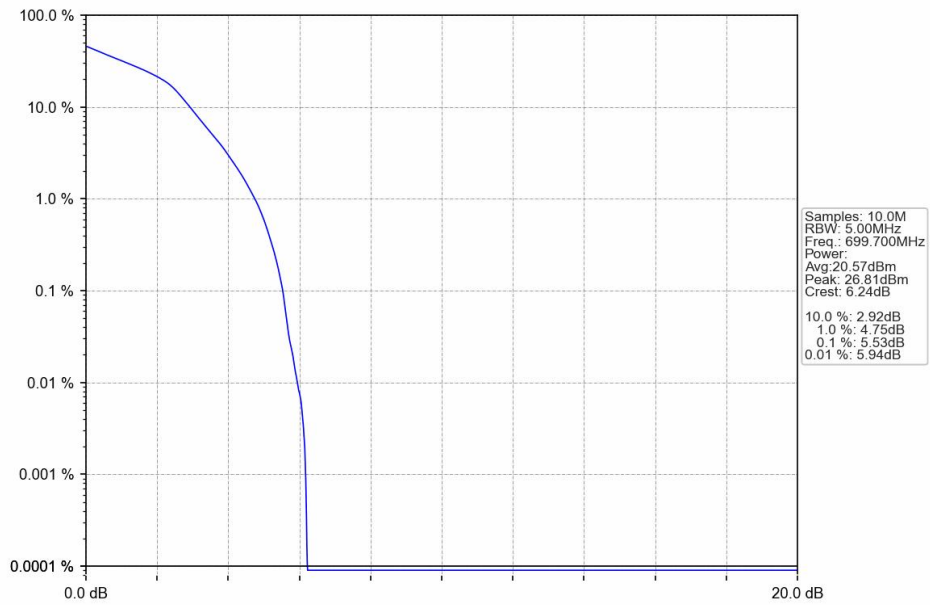
5.1.2 Test Graph



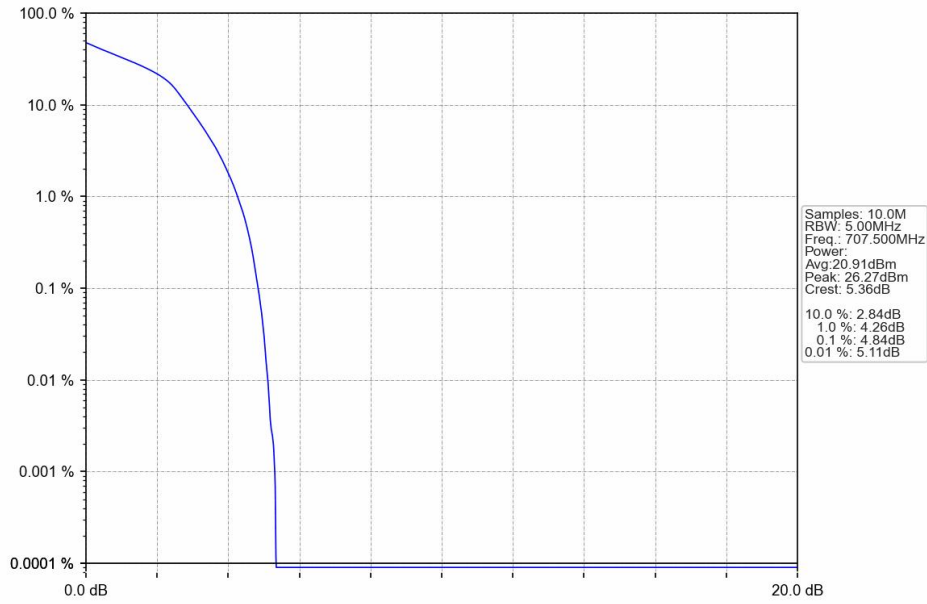
Band12_1.4MHz_QPSK_HCH_715.3MHz_RB_6_0_NTNV



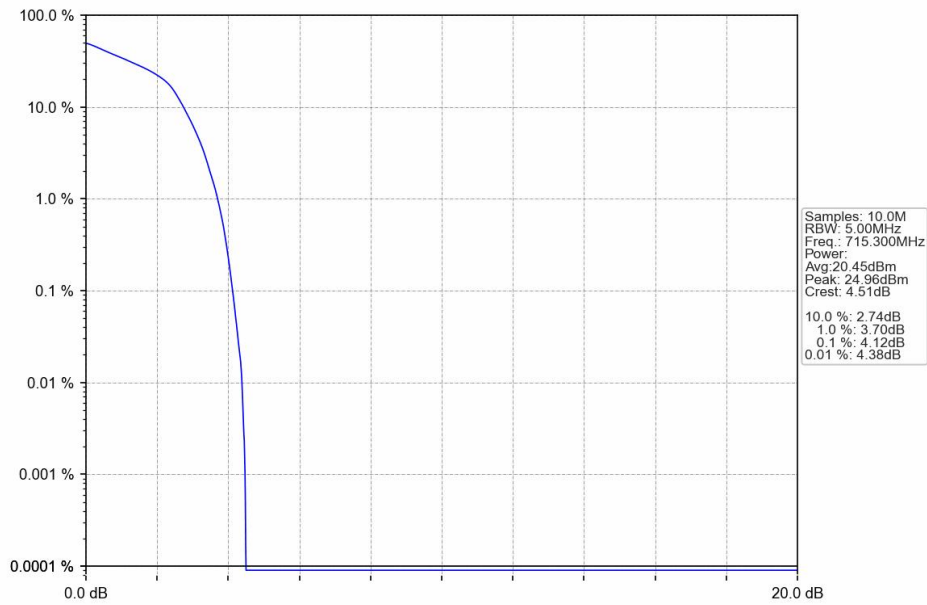
Band12_1.4MHz_16QAM_LCH_699.7MHz_RB_6_0_NTNV



Band12 1.4MHz 16QAM MCH 707.5MHz RB 6 0 NTN



Band12 1.4MHz 16QAM HCH 715.3MHz RB 6 0 NTN



5.2 B12_3MHz

5.2.1 Test Result

Band: 12 / Bandwidth: 3MHz / NTV						
Modulation	Frequency (MHz)	RB Allocation		Peak-Average Ratio (dB)		Verdict
		Size	Offset	Result	Limit	
QPSK	700.5	15	0	4.81	<=13	Pass
	707.5	15	0	4.37	<=13	Pass
	714.5	15	0	3.69	<=13	Pass
16QAM	700.5	15	0	5.64	<=13	Pass
	707.5	15	0	5.34	<=13	Pass
	714.5	15	0	4.65	<=13	Pass