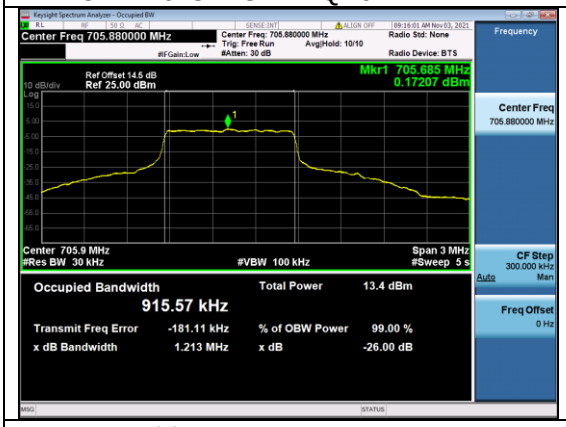
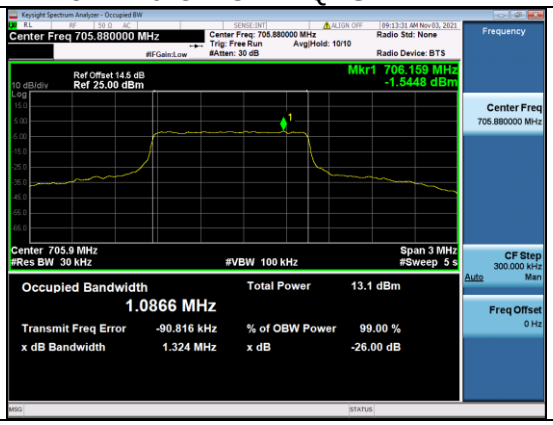
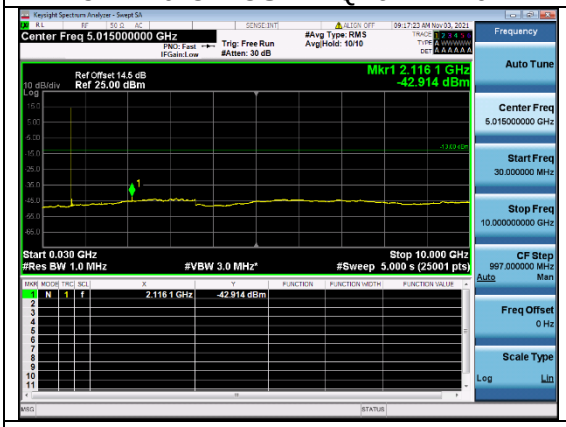
B12-5M-Mid CH-OBW-Q16



B12-5M-Mid CH-OBW-QPSK

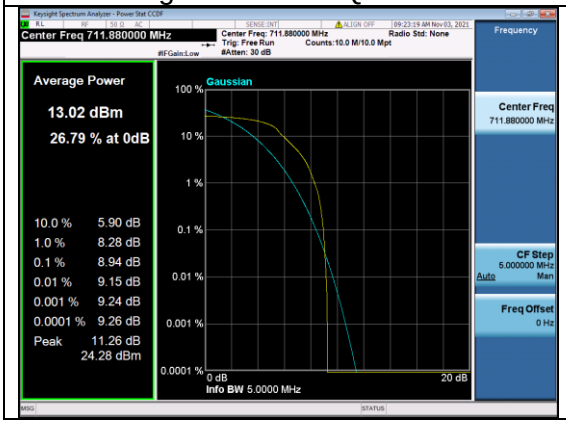


B12-5M-Mid CH-CSE-1-Q16-1 RB 0

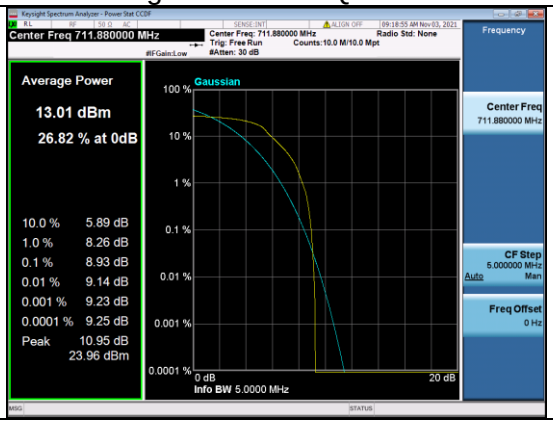


B12-5M-Mid CH-CSE-1-QPSK-1 RB 0

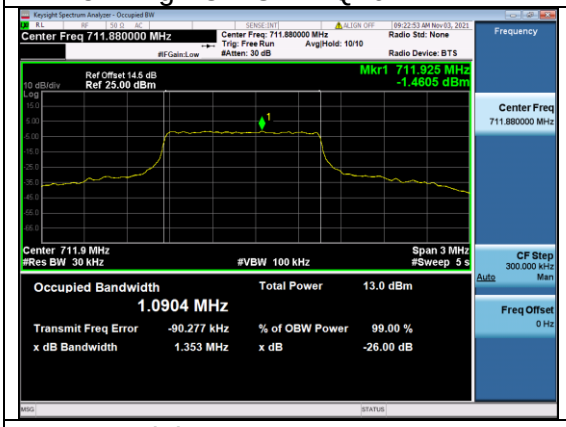
B12-5M-High CH-PAPR-Q16



B12-5M-High CH-PAPR-QPSK

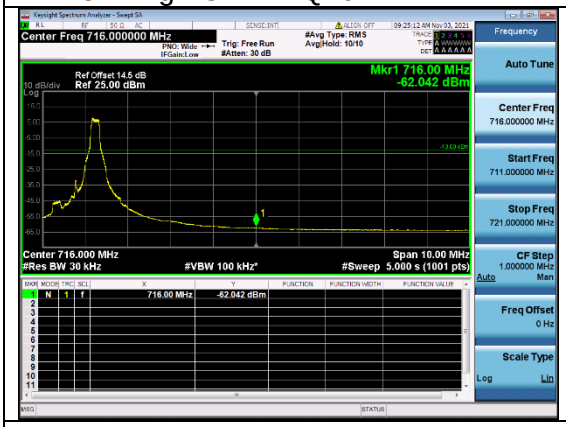


B12-5M-High CH-OBW-Q16



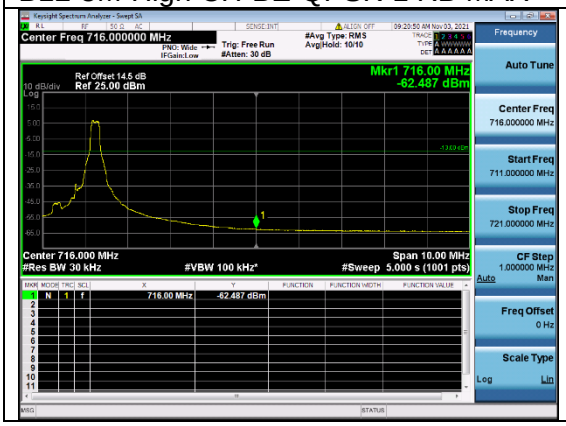
B12-5M-High CH-OBW-QPSK

B12-5M-High CH-BE-Q16-1 RB MAX

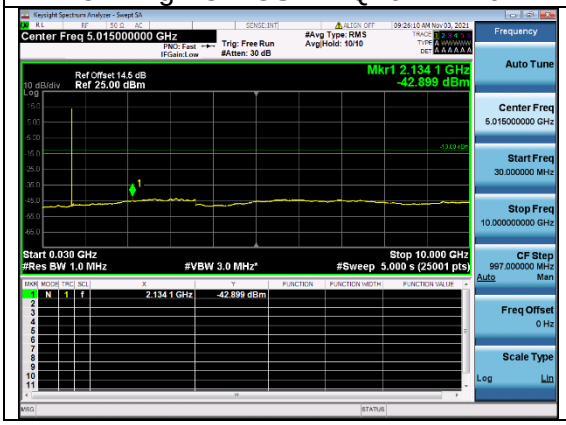
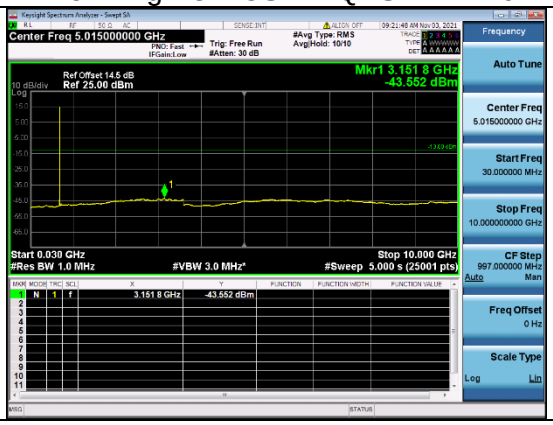


B12-5M-High CH-BE-Q16-Full RB 0

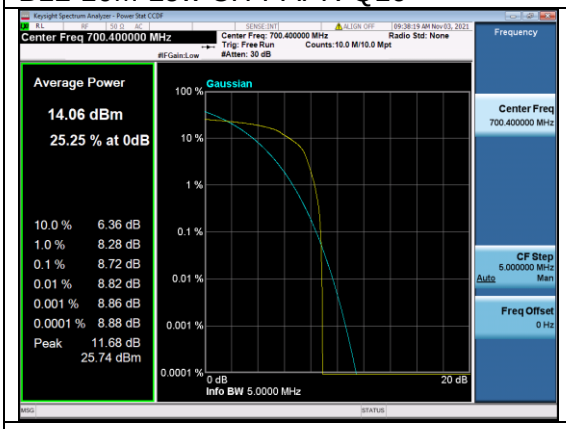
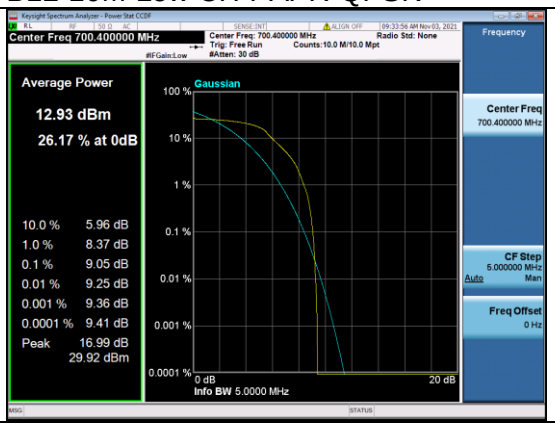
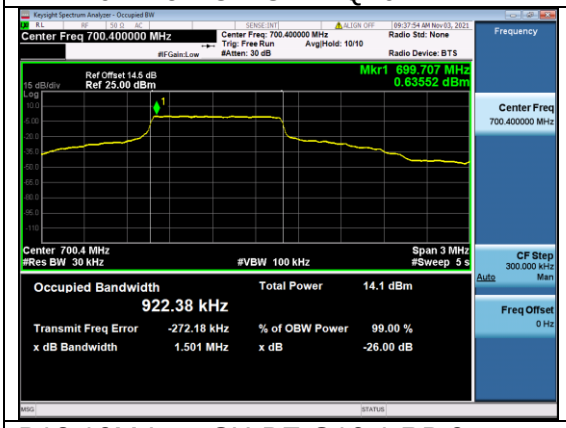
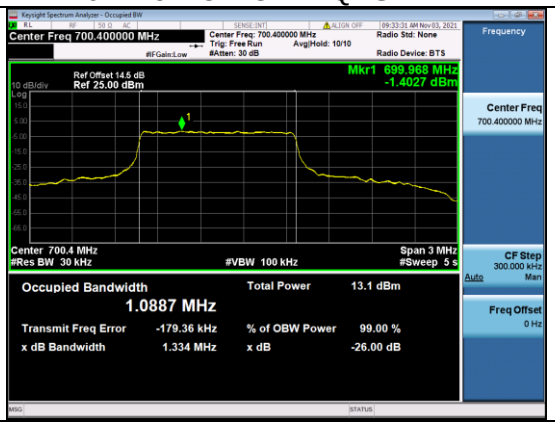
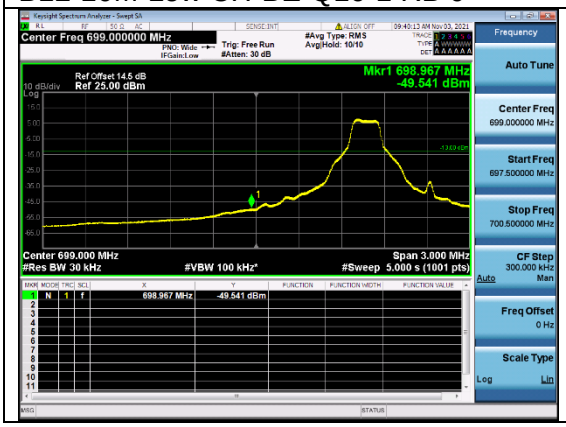
B12-5M-High CH-BE-QPSK-1 RB MAX



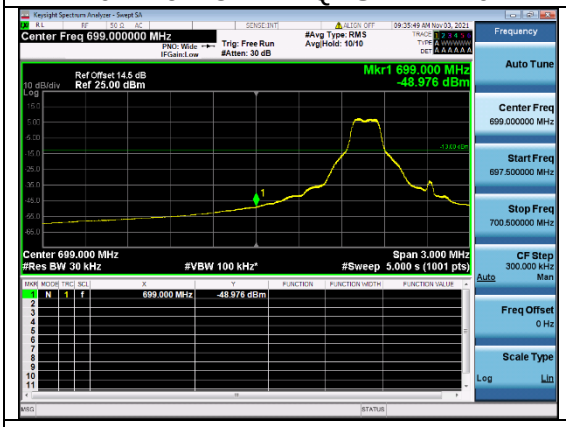
B12-5M-High CH-BE-QPSK-Full RB 0

B12-5M-High CH-CSE-1-Q16-1 RB 0	B12-5M-High CH-CSE-1-QPSK-1 RB 0
	

10M

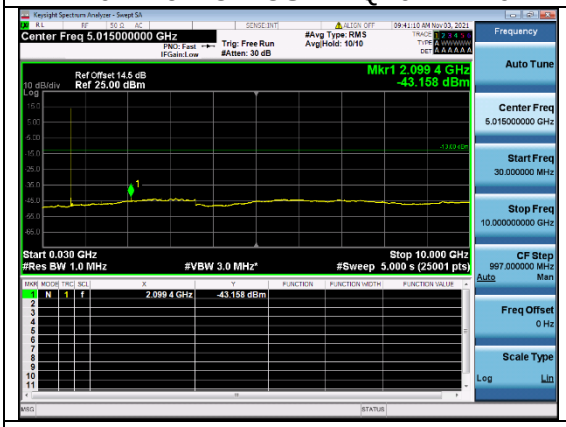
B12-10M-Low CH-PAPR-Q16	B12-10M-Low CH-PAPR-QPSK
	
B12-10M-Low CH-OBW-Q16	B12-10M-Low CH-OBW-QPSK
	
B12-10M-Low CH-BE-Q16-1 RB 0	B12-10M-Low CH-BE-Q16-Full RB 0
	

B12-10M-Low CH-BE-QPSK-1 RB 0

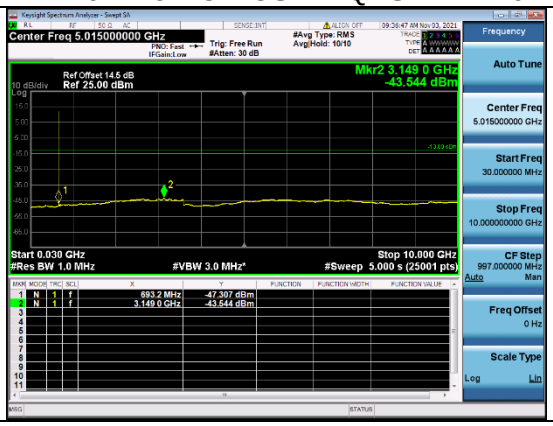


B12-10M-Low CH-BE-QPSK-Full RB 0

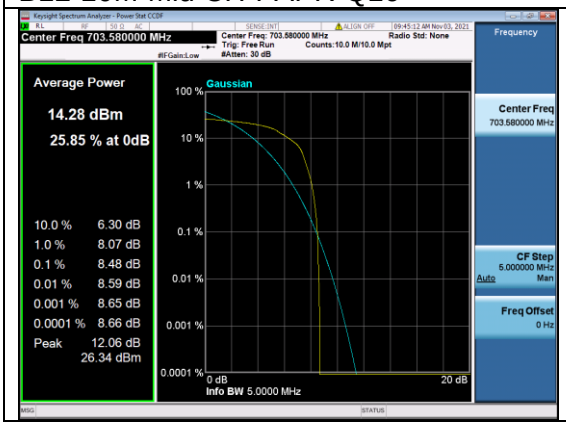
B12-10M-Low CH-CSE-1-Q16-1 RB 0



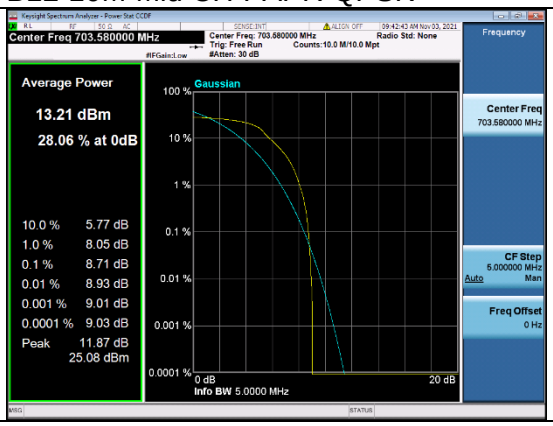
B12-10M-Low CH-CSE-1-QPSK-1 RB 0



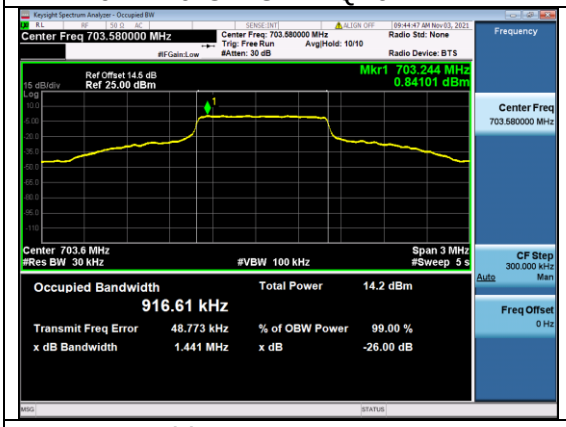
B12-10M-Mid CH-PAPR-Q16



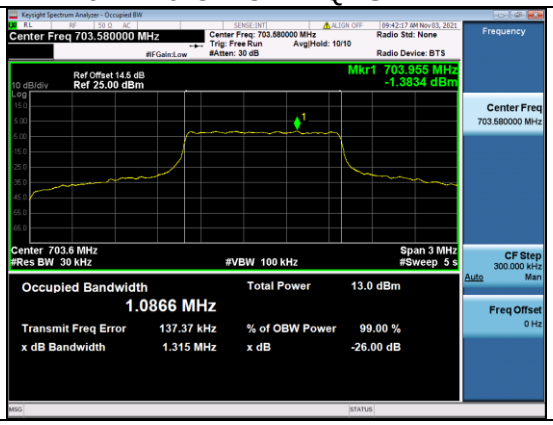
B12-10M-Mid CH-PAPR-QPSK



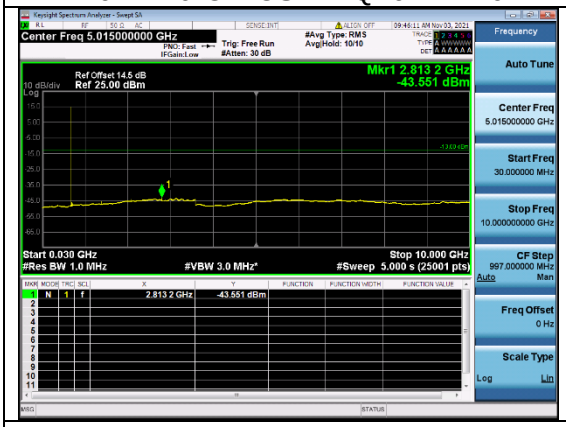
B12-10M-Mid CH-OBW-Q16



B12-10M-Mid CH-OBW-QPSK

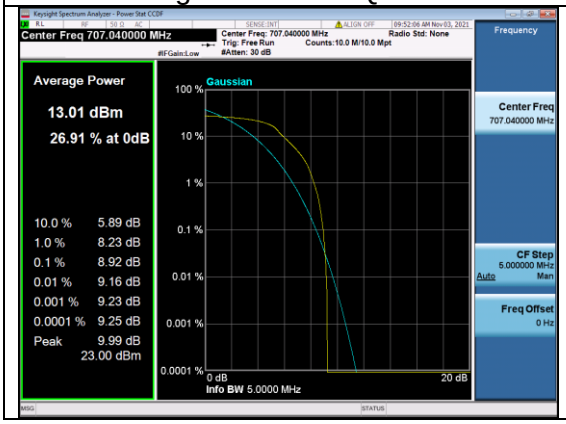


B12-10M-Mid CH-CSE-1-Q16-1 RB 0

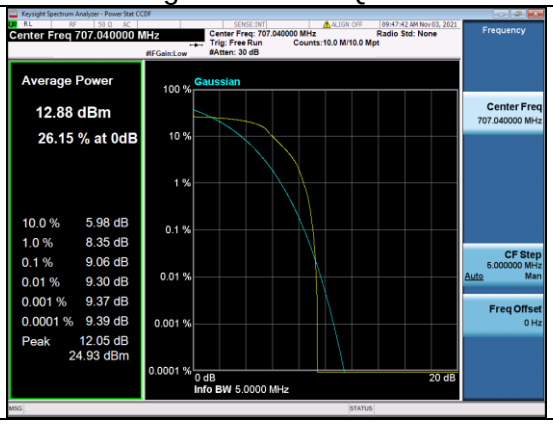


B12-10M-Mid CH-CSE-1-QPSK-1 RB 0

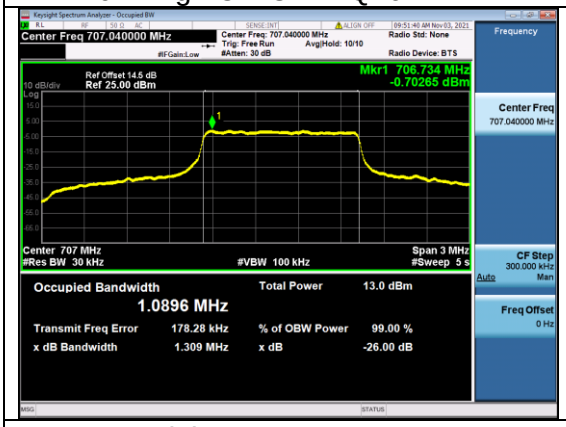
B12-10M-High CH-PAPR-Q16



B12-10M-High CH-PAPR-QPSK

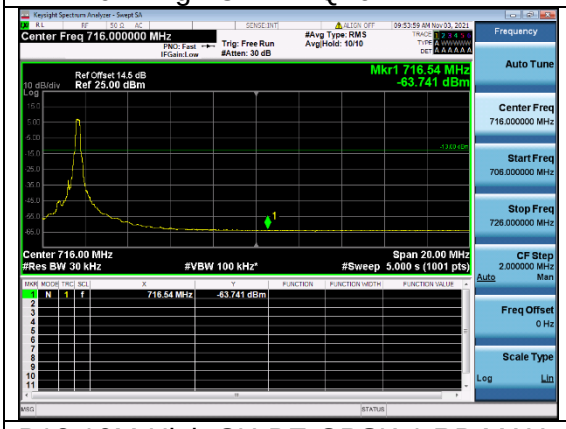


B12-10M-High CH-OBW-Q16



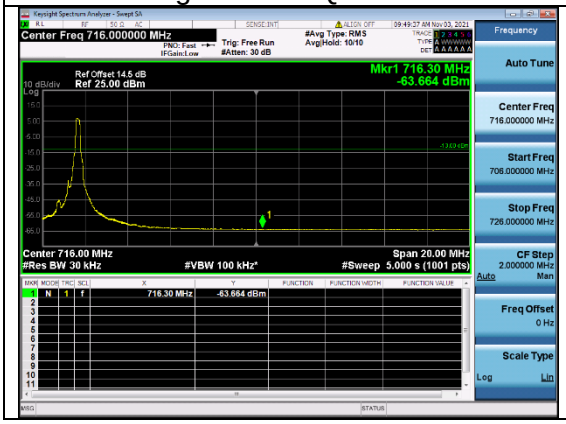
B12-10M-High CH-OBW-QPSK

B12-10M-High CH-BE-Q16-1 RB MAX

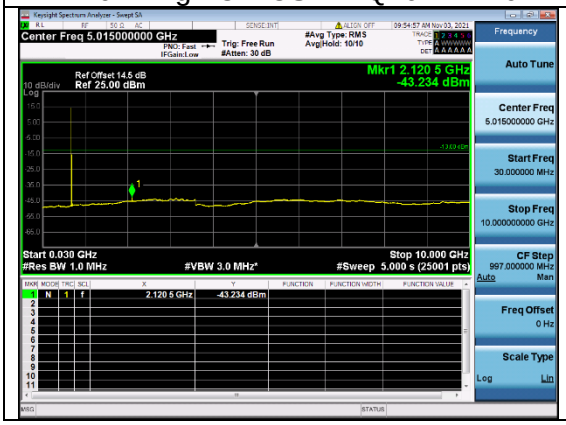


B12-10M-High CH-BE-Q16-Full RB 0

B12-10M-High CH-BE-QPSK-1 RB MAX



B12-10M-High CH-BE-QPSK-Full RB 0

B12-10M-High CH-CSE-1-Q16-1 RB 0	B12-10M-High CH-CSE-1-QPSK-1 RB 0
	

3.Frequency Stability

3.1 B12_1.4MHz

3.1.1 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	5.4	-17.238	-0.0246	-2.5 to 2.5	Pass
					6.0	-17.509	-0.0250	-2.5 to 2.5	Pass
					6.6	-16.222	-0.0232	-2.5 to 2.5	Pass
				-30	6.0	-15.020	-0.0215	-2.5 to 2.5	Pass
				-20	6.0	-13.347	-0.0191	-2.5 to 2.5	Pass
				-10	6.0	-11.816	-0.0169	-2.5 to 2.5	Pass
				0	6.0	-10.457	-0.0149	-2.5 to 2.5	Pass
				10	6.0	-8.984	-0.0128	-2.5 to 2.5	Pass
				30	6.0	-7.539	-0.0108	-2.5 to 2.5	Pass
				40	6.0	-6.309	-0.0090	-2.5 to 2.5	Pass
				50	6.0	-4.964	-0.0071	-2.5 to 2.5	Pass
	707.5	6	0	20	5.4	-6.666	-0.0094	-2.5 to 2.5	Pass
					6.0	-7.639	-0.0108	-2.5 to 2.5	Pass
					6.6	-6.537	-0.0092	-2.5 to 2.5	Pass
				-30	6.0	-5.579	-0.0079	-2.5 to 2.5	Pass
				-20	6.0	-4.277	-0.0060	-2.5 to 2.5	Pass
				-10	6.0	-3.347	-0.0047	-2.5 to 2.5	Pass
				0	6.0	-2.089	-0.0030	-2.5 to 2.5	Pass
				10	6.0	-0.372	-0.0005	-2.5 to 2.5	Pass
				30	6.0	0.873	0.0012	-2.5 to 2.5	Pass
				40	6.0	2.332	0.0033	-2.5 to 2.5	Pass
				50	6.0	3.691	0.0052	-2.5 to 2.5	Pass

	715.3	6	0	20	5.4	-4.306	-0.0060	-2.5 to 2.5	Pass
					6.0	-4.377	-0.0061	-2.5 to 2.5	Pass
					6.6	-4.005	-0.0056	-2.5 to 2.5	Pass
				-30	6.0	-2.217	-0.0031	-2.5 to 2.5	Pass
				-20	6.0	-0.801	-0.0011	-2.5 to 2.5	Pass
				-10	6.0	1.059	0.0015	-2.5 to 2.5	Pass
				0	6.0	2.389	0.0033	-2.5 to 2.5	Pass
				10	6.0	4.077	0.0057	-2.5 to 2.5	Pass
				30	6.0	5.107	0.0071	-2.5 to 2.5	Pass
				40	6.0	7.210	0.0101	-2.5 to 2.5	Pass
				50	6.0	8.440	0.0118	-2.5 to 2.5	Pass
16QAM	699.7	6	0	20	5.4	-3.290	-0.0047	-2.5 to 2.5	Pass
					6.0	-1.702	-0.0024	-2.5 to 2.5	Pass
					6.6	-0.787	-0.0011	-2.5 to 2.5	Pass
				-30	6.0	0.257	0.0004	-2.5 to 2.5	Pass
				-20	6.0	1.144	0.0016	-2.5 to 2.5	Pass
				-10	6.0	2.189	0.0031	-2.5 to 2.5	Pass
				0	6.0	2.689	0.0038	-2.5 to 2.5	Pass
				10	6.0	3.018	0.0043	-2.5 to 2.5	Pass
				30	6.0	3.963	0.0057	-2.5 to 2.5	Pass
				40	6.0	3.991	0.0057	-2.5 to 2.5	Pass
				50	6.0	5.322	0.0076	-2.5 to 2.5	Pass
	707.5	6	0	20	5.4	5.736	0.0081	-2.5 to 2.5	Pass
					6.0	6.366	0.0090	-2.5 to 2.5	Pass
					6.6	7.825	0.0111	-2.5 to 2.5	Pass
				-30	6.0	8.755	0.0124	-2.5 to 2.5	Pass
				-20	6.0	10.300	0.0146	-2.5 to 2.5	Pass
				-10	6.0	11.072	0.0156	-2.5 to 2.5	Pass

				0	6.0	11.501	0.0163	-2.5 to 2.5	Pass
				10	6.0	12.202	0.0172	-2.5 to 2.5	Pass
				30	6.0	12.703	0.0180	-2.5 to 2.5	Pass
				40	6.0	13.561	0.0192	-2.5 to 2.5	Pass
				50	6.0	14.219	0.0201	-2.5 to 2.5	Pass
	715.3	6	0	20	5.4	10.414	0.0146	-2.5 to 2.5	Pass
					6.0	11.988	0.0168	-2.5 to 2.5	Pass
					6.6	13.232	0.0185	-2.5 to 2.5	Pass
				-30	6.0	14.405	0.0201	-2.5 to 2.5	Pass
				-20	6.0	15.607	0.0218	-2.5 to 2.5	Pass
				-10	6.0	16.551	0.0231	-2.5 to 2.5	Pass
				0	6.0	17.624	0.0246	-2.5 to 2.5	Pass
				10	6.0	17.967	0.0251	-2.5 to 2.5	Pass
				30	6.0	18.969	0.0265	-2.5 to 2.5	Pass
				40	6.0	19.555	0.0273	-2.5 to 2.5	Pass
				50	6.0	20.041	0.0280	-2.5 to 2.5	Pass

3.2 B12_3MHz

3.2.1 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	6	0	20	5.4	-6.824	-0.0097	-2.5 to 2.5	Pass
					6.0	-7.010	-0.0100	-2.5 to 2.5	Pass
					6.6	-5.622	-0.0080	-2.5 to 2.5	Pass
				-30	6.0	-4.406	-0.0063	-2.5 to 2.5	Pass
				-20	6.0	-2.847	-0.0041	-2.5 to 2.5	Pass
				-10	6.0	-1.431	-0.0020	-2.5 to 2.5	Pass

				0	6.0	-0.343	-0.0005	-2.5 to 2.5	Pass
				10	6.0	1.202	0.0017	-2.5 to 2.5	Pass
				30	6.0	2.518	0.0036	-2.5 to 2.5	Pass
				40	6.0	4.249	0.0061	-2.5 to 2.5	Pass
				50	6.0	5.121	0.0073	-2.5 to 2.5	Pass
	707.5	6	0	20	5.4	0.944	0.0013	-2.5 to 2.5	Pass
					6.0	0.086	0.0001	-2.5 to 2.5	Pass
					6.6	0.544	0.0008	-2.5 to 2.5	Pass
				-30	6.0	1.016	0.0014	-2.5 to 2.5	Pass
				-20	6.0	1.187	0.0017	-2.5 to 2.5	Pass
				-10	6.0	1.273	0.0018	-2.5 to 2.5	Pass
				0	6.0	1.645	0.0023	-2.5 to 2.5	Pass
				10	6.0	1.516	0.0021	-2.5 to 2.5	Pass
				30	6.0	1.845	0.0026	-2.5 to 2.5	Pass
				40	6.0	2.003	0.0028	-2.5 to 2.5	Pass
				50	6.0	2.074	0.0029	-2.5 to 2.5	Pass
	714.5	6	0	20	5.4	-5.693	-0.0080	-2.5 to 2.5	Pass
					6.0	-6.766	-0.0095	-2.5 to 2.5	Pass
					6.6	-6.638	-0.0093	-2.5 to 2.5	Pass
				-30	6.0	-5.894	-0.0082	-2.5 to 2.5	Pass
				-20	6.0	-5.465	-0.0076	-2.5 to 2.5	Pass
				-10	6.0	-4.463	-0.0062	-2.5 to 2.5	Pass
				0	6.0	-3.619	-0.0051	-2.5 to 2.5	Pass
				10	6.0	-2.575	-0.0036	-2.5 to 2.5	Pass
				30	6.0	-1.216	-0.0017	-2.5 to 2.5	Pass
				40	6.0	-0.558	-0.0008	-2.5 to 2.5	Pass
				50	6.0	0.200	0.0003	-2.5 to 2.5	Pass
16QAM	700.5	6	0	20	5.4	6.266	0.0089	-2.5 to 2.5	Pass

					6.0	7.854	0.0112	-2.5 to 2.5	Pass
					6.6	9.012	0.0129	-2.5 to 2.5	Pass
				-30	6.0	10.157	0.0145	-2.5 to 2.5	Pass
				-20	6.0	10.986	0.0157	-2.5 to 2.5	Pass
				-10	6.0	11.630	0.0166	-2.5 to 2.5	Pass
				0	6.0	12.274	0.0175	-2.5 to 2.5	Pass
				10	6.0	12.703	0.0181	-2.5 to 2.5	Pass
				30	6.0	13.618	0.0194	-2.5 to 2.5	Pass
				40	6.0	14.234	0.0203	-2.5 to 2.5	Pass
				50	6.0	14.749	0.0211	-2.5 to 2.5	Pass
	707.5	6	0	20	5.4	1.931	0.0027	-2.5 to 2.5	Pass
					6.0	2.017	0.0029	-2.5 to 2.5	Pass
					6.6	1.903	0.0027	-2.5 to 2.5	Pass
				-30	6.0	2.232	0.0032	-2.5 to 2.5	Pass
				-20	6.0	2.489	0.0035	-2.5 to 2.5	Pass
				-10	6.0	2.232	0.0032	-2.5 to 2.5	Pass
				0	6.0	2.546	0.0036	-2.5 to 2.5	Pass
				10	6.0	2.432	0.0034	-2.5 to 2.5	Pass
				30	6.0	2.403	0.0034	-2.5 to 2.5	Pass
				40	6.0	2.460	0.0035	-2.5 to 2.5	Pass
				50	6.0	2.604	0.0037	-2.5 to 2.5	Pass
	714.5	6	0	20	5.4	1.545	0.0022	-2.5 to 2.5	Pass
					6.0	2.131	0.0030	-2.5 to 2.5	Pass
					6.6	3.190	0.0045	-2.5 to 2.5	Pass
				-30	6.0	4.048	0.0057	-2.5 to 2.5	Pass
				-20	6.0	4.992	0.0070	-2.5 to 2.5	Pass
				-10	6.0	5.765	0.0081	-2.5 to 2.5	Pass
				0	6.0	6.080	0.0085	-2.5 to 2.5	Pass

				10	6.0	6.924	0.0097	-2.5 to 2.5	Pass
				30	6.0	7.639	0.0107	-2.5 to 2.5	Pass
				40	6.0	7.882	0.0110	-2.5 to 2.5	Pass
				50	6.0	8.311	0.0116	-2.5 to 2.5	Pass

3.3 B12_5MHz

3.3.1 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	6	0	20	5.4	-13.018	-0.0186	-2.5 to 2.5	Pass
					6.0	-13.919	-0.0198	-2.5 to 2.5	Pass
					6.6	-13.776	-0.0196	-2.5 to 2.5	Pass
				-30	6.0	-13.804	-0.0197	-2.5 to 2.5	Pass
				-20	6.0	-14.019	-0.0200	-2.5 to 2.5	Pass
				-10	6.0	-13.847	-0.0197	-2.5 to 2.5	Pass
				0	6.0	-13.375	-0.0191	-2.5 to 2.5	Pass
				10	6.0	-13.146	-0.0187	-2.5 to 2.5	Pass
				30	6.0	-12.546	-0.0179	-2.5 to 2.5	Pass
				40	6.0	-12.159	-0.0173	-2.5 to 2.5	Pass
				50	6.0	-12.016	-0.0171	-2.5 to 2.5	Pass
	707.5	6	0	20	5.4	-1.216	-0.0017	-2.5 to 2.5	Pass
					6.0	-2.103	-0.0030	-2.5 to 2.5	Pass
					6.6	-1.187	-0.0017	-2.5 to 2.5	Pass
				-30	6.0	-0.029	0.0000	-2.5 to 2.5	Pass
				-20	6.0	0.772	0.0011	-2.5 to 2.5	Pass
				-10	6.0	2.203	0.0031	-2.5 to 2.5	Pass
				0	6.0	3.147	0.0044	-2.5 to 2.5	Pass

				10	6.0	4.892	0.0069	-2.5 to 2.5	Pass
				30	6.0	6.466	0.0091	-2.5 to 2.5	Pass
				40	6.0	7.753	0.0110	-2.5 to 2.5	Pass
				50	6.0	8.454	0.0119	-2.5 to 2.5	Pass
	713.5	6	0	20	5.4	-13.132	-0.0184	-2.5 to 2.5	Pass
					6.0	-13.933	-0.0195	-2.5 to 2.5	Pass
					6.6	-13.676	-0.0192	-2.5 to 2.5	Pass
				-30	6.0	-13.003	-0.0182	-2.5 to 2.5	Pass
				-20	6.0	-12.646	-0.0177	-2.5 to 2.5	Pass
				-10	6.0	-12.388	-0.0174	-2.5 to 2.5	Pass
				0	6.0	-12.231	-0.0171	-2.5 to 2.5	Pass
				10	6.0	-11.845	-0.0166	-2.5 to 2.5	Pass
				30	6.0	-11.115	-0.0156	-2.5 to 2.5	Pass
				40	6.0	-10.772	-0.0151	-2.5 to 2.5	Pass
				50	6.0	-10.743	-0.0151	-2.5 to 2.5	Pass
16QAM	701.5	6	0	20	5.4	-11.115	-0.0158	-2.5 to 2.5	Pass
					6.0	-10.414	-0.0148	-2.5 to 2.5	Pass
					6.6	-9.899	-0.0141	-2.5 to 2.5	Pass
				-30	6.0	-9.727	-0.0139	-2.5 to 2.5	Pass
				-20	6.0	-9.112	-0.0130	-2.5 to 2.5	Pass
				-10	6.0	-8.969	-0.0128	-2.5 to 2.5	Pass
				0	6.0	-8.826	-0.0126	-2.5 to 2.5	Pass
				10	6.0	-8.483	-0.0121	-2.5 to 2.5	Pass
				30	6.0	-8.254	-0.0118	-2.5 to 2.5	Pass
				40	6.0	-8.111	-0.0116	-2.5 to 2.5	Pass
				50	6.0	-7.811	-0.0111	-2.5 to 2.5	Pass
	707.5	6	0	20	5.4	9.942	0.0141	-2.5 to 2.5	Pass
					6.0	10.872	0.0154	-2.5 to 2.5	Pass

					6.6	12.231	0.0173	-2.5 to 2.5	Pass
				-30	6.0	13.218	0.0187	-2.5 to 2.5	Pass
				-20	6.0	14.319	0.0202	-2.5 to 2.5	Pass
				-10	6.0	15.736	0.0222	-2.5 to 2.5	Pass
				0	6.0	16.036	0.0227	-2.5 to 2.5	Pass
				10	6.0	16.694	0.0236	-2.5 to 2.5	Pass
				30	6.0	17.037	0.0241	-2.5 to 2.5	Pass
				40	6.0	17.738	0.0251	-2.5 to 2.5	Pass
				50	6.0	18.096	0.0256	-2.5 to 2.5	Pass
	713.5	6	0	20	5.4	-10.057	-0.0141	-2.5 to 2.5	Pass
					6.0	-9.828	-0.0138	-2.5 to 2.5	Pass
					6.6	-9.313	-0.0131	-2.5 to 2.5	Pass
				-30	6.0	-8.826	-0.0124	-2.5 to 2.5	Pass
				-20	6.0	-8.440	-0.0118	-2.5 to 2.5	Pass
				-10	6.0	-8.483	-0.0119	-2.5 to 2.5	Pass
				0	6.0	-8.240	-0.0115	-2.5 to 2.5	Pass
				10	6.0	-7.968	-0.0112	-2.5 to 2.5	Pass
				30	6.0	-8.039	-0.0113	-2.5 to 2.5	Pass
				40	6.0	-7.825	-0.0110	-2.5 to 2.5	Pass
				50	6.0	-7.796	-0.0109	-2.5 to 2.5	Pass

3.4 B12_10MHz

3.4.1 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	6	0	20	5.4	-8.769	-0.0125	-2.5 to 2.5	Pass
					6.0	-9.899	-0.0141	-2.5 to 2.5	Pass

					6.6	-9.627	-0.0137	-2.5 to 2.5	Pass
				-30	6.0	-9.828	-0.0140	-2.5 to 2.5	Pass
				-20	6.0	-9.413	-0.0134	-2.5 to 2.5	Pass
				-10	6.0	-8.812	-0.0125	-2.5 to 2.5	Pass
				0	6.0	-8.497	-0.0121	-2.5 to 2.5	Pass
				10	6.0	-7.939	-0.0113	-2.5 to 2.5	Pass
				30	6.0	-7.768	-0.0110	-2.5 to 2.5	Pass
				40	6.0	-7.324	-0.0104	-2.5 to 2.5	Pass
				50	6.0	-6.409	-0.0091	-2.5 to 2.5	Pass
	707.5	6	0	20	5.4	-2.432	-0.0034	-2.5 to 2.5	Pass
					6.0	-2.561	-0.0036	-2.5 to 2.5	Pass
					6.6	-0.815	-0.0012	-2.5 to 2.5	Pass
				-30	6.0	0.887	0.0013	-2.5 to 2.5	Pass
				-20	6.0	3.147	0.0044	-2.5 to 2.5	Pass
				-10	6.0	4.978	0.0070	-2.5 to 2.5	Pass
				0	6.0	6.709	0.0095	-2.5 to 2.5	Pass
				10	6.0	8.698	0.0123	-2.5 to 2.5	Pass
				30	6.0	10.357	0.0146	-2.5 to 2.5	Pass
				40	6.0	11.859	0.0168	-2.5 to 2.5	Pass
				50	6.0	13.304	0.0188	-2.5 to 2.5	Pass
	711	6	0	20	5.4	-6.795	-0.0096	-2.5 to 2.5	Pass
					6.0	-6.995	-0.0098	-2.5 to 2.5	Pass
					6.6	-6.895	-0.0097	-2.5 to 2.5	Pass
				-30	6.0	-6.824	-0.0096	-2.5 to 2.5	Pass
				-20	6.0	-6.824	-0.0096	-2.5 to 2.5	Pass
				-10	6.0	-6.452	-0.0091	-2.5 to 2.5	Pass
				0	6.0	-5.822	-0.0082	-2.5 to 2.5	Pass
				10	6.0	-5.708	-0.0080	-2.5 to 2.5	Pass

				30	6.0	-5.379	-0.0076	-2.5 to 2.5	Pass
				40	6.0	-5.136	-0.0072	-2.5 to 2.5	Pass
				50	6.0	-5.078	-0.0071	-2.5 to 2.5	Pass
16QAM	704	6	0	20	5.4	-6.537	-0.0093	-2.5 to 2.5	Pass
					6.0	-5.836	-0.0083	-2.5 to 2.5	Pass
					6.6	-5.622	-0.0080	-2.5 to 2.5	Pass
				-30	6.0	-5.407	-0.0077	-2.5 to 2.5	Pass
				-20	6.0	-5.322	-0.0076	-2.5 to 2.5	Pass
				-10	6.0	-4.992	-0.0071	-2.5 to 2.5	Pass
				0	6.0	-4.778	-0.0068	-2.5 to 2.5	Pass
				10	6.0	-4.807	-0.0068	-2.5 to 2.5	Pass
				30	6.0	-4.678	-0.0066	-2.5 to 2.5	Pass
				40	6.0	-4.506	-0.0064	-2.5 to 2.5	Pass
				50	6.0	-4.649	-0.0066	-2.5 to 2.5	Pass
	707.5	6	0	20	5.4	14.319	0.0202	-2.5 to 2.5	Pass
					6.0	15.607	0.0221	-2.5 to 2.5	Pass
					6.6	16.851	0.0238	-2.5 to 2.5	Pass
				-30	6.0	17.653	0.0250	-2.5 to 2.5	Pass
				-20	6.0	18.454	0.0261	-2.5 to 2.5	Pass
				-10	6.0	19.097	0.0270	-2.5 to 2.5	Pass
				0	6.0	19.484	0.0275	-2.5 to 2.5	Pass
				10	6.0	19.813	0.0280	-2.5 to 2.5	Pass
				30	6.0	20.614	0.0291	-2.5 to 2.5	Pass
				40	6.0	20.943	0.0296	-2.5 to 2.5	Pass
				50	6.0	21.029	0.0297	-2.5 to 2.5	Pass
	711	6	0	20	5.4	-4.363	-0.0061	-2.5 to 2.5	Pass
					6.0	-4.234	-0.0060	-2.5 to 2.5	Pass
					6.6	-4.048	-0.0057	-2.5 to 2.5	Pass

				-30	6.0	-3.633	-0.0051	-2.5 to 2.5	Pass
				-20	6.0	-3.719	-0.0052	-2.5 to 2.5	Pass
				-10	6.0	-3.748	-0.0053	-2.5 to 2.5	Pass
				0	6.0	-3.834	-0.0054	-2.5 to 2.5	Pass
				10	6.0	-3.719	-0.0052	-2.5 to 2.5	Pass
				30	6.0	-3.376	-0.0047	-2.5 to 2.5	Pass
				40	6.0	-3.619	-0.0051	-2.5 to 2.5	Pass
				50	6.0	-3.419	-0.0048	-2.5 to 2.5	Pass