

1. Effective (Isotropic) Radiated Power Output Data

1.1 Test Result

1.1.1 B12_1.4MHz_ERP

Band: 12 / Bandwidth: 1.4MHz / NTNV								
Modulation	Frequency (MHz)	RB Allocation		Conducted Power (dBm)	Gain (dBi)	ERP (dBm)		Verdict
		Size	Offset			Result	Limit	
64QAM	699.7	1	0	22.28	3.00	23.13	<=34.77	Pass
			2	22.36	3.00	23.21	<=34.77	Pass
			5	22.22	3.00	23.07	<=34.77	Pass
		3	0	22.47	3.00	23.32	<=34.77	Pass
			2	22.48	3.00	23.33	<=34.77	Pass
			3	22.42	3.00	23.27	<=34.77	Pass
		6	0	21.44	3.00	22.29	<=34.77	Pass
	707.5	1	0	22.03	3.00	22.88	<=34.77	Pass
			2	22.09	3.00	22.94	<=34.77	Pass
			5	22.05	3.00	22.90	<=34.77	Pass
		3	0	22.17	3.00	23.02	<=34.77	Pass
			2	22.23	3.00	23.08	<=34.77	Pass
			3	22.21	3.00	23.06	<=34.77	Pass
		6	0	21.24	3.00	22.09	<=34.77	Pass
	715.3	1	0	22.57	3.00	23.42	<=34.77	Pass
			2	22.65	3.00	23.50	<=34.77	Pass
			5	22.56	3.00	23.41	<=34.77	Pass
		3	0	22.48	3.00	23.33	<=34.77	Pass
			2	22.62	3.00	23.47	<=34.77	Pass
			3	22.50	3.00	23.35	<=34.77	Pass
		6	0	21.31	3.00	22.16	<=34.77	Pass

Note1: ERP=Conducted Power+Antenna Gain-2.15

1.1.2 B12_3MHz_ERP

Band: 12 / Bandwidth: 3MHz / NTNV								
Modulation	Frequency (MHz)	RB Allocation		Conducted Power (dBm)	Gain (dBi)	ERP (dBm)		Verdict
		Size	Offset			Result	Limit	
64QAM	700.5	1	0	22.49	3.00	23.34	<=34.77	Pass
			7	22.55	3.00	23.40	<=34.77	Pass
			14	22.45	3.00	23.30	<=34.77	Pass
		8	0	21.46	3.00	22.31	<=34.77	Pass
			4	21.49	3.00	22.34	<=34.77	Pass
			7	21.39	3.00	22.24	<=34.77	Pass
		15	0	21.33	3.00	22.18	<=34.77	Pass
	707.5	1	0	22.34	3.00	23.19	<=34.77	Pass
			7	22.40	3.00	23.25	<=34.77	Pass
			14	22.27	3.00	23.12	<=34.77	Pass
		8	0	21.22	3.00	22.07	<=34.77	Pass
			4	21.22	3.00	22.07	<=34.77	Pass
			7	21.16	3.00	22.01	<=34.77	Pass
		15	0	21.44	3.00	22.29	<=34.77	Pass
	714.5	1	0	22.12	3.00	22.97	<=34.77	Pass
			7	22.25	3.00	23.10	<=34.77	Pass
			14	22.16	3.00	23.01	<=34.77	Pass

		8	0	21.30	3.00	22.15	<=34.77	Pass
			4	21.45	3.00	22.30	<=34.77	Pass
			7	21.41	3.00	22.26	<=34.77	Pass
		15	0	21.39	3.00	22.24	<=34.77	Pass

Note1: ERP=Conducted Power+Antenna Gain-2.15

1.1.3 B12_5MHz_ERP

Band: 12 / Bandwidth: 5MHz / NTNV								
Modulation	Frequency (MHz)	RB Allocation		Conducted Power (dBm)	Gain (dBi)	ERP (dBm)		Verdict
		Size	Offset			Result	Limit	
64QAM	701.5	1	0	22.25	3.00	23.10	<=34.77	Pass
			13	22.27	3.00	23.12	<=34.77	Pass
			24	22.22	3.00	23.07	<=34.77	Pass
		12	0	21.34	3.00	22.19	<=34.77	Pass
			6	21.29	3.00	22.14	<=34.77	Pass
			13	21.37	3.00	22.22	<=34.77	Pass
		25	0	21.42	3.00	22.27	<=34.77	Pass
	707.5	1	0	22.42	3.00	23.27	<=34.77	Pass
			13	22.51	3.00	23.36	<=34.77	Pass
			24	22.37	3.00	23.22	<=34.77	Pass
		12	0	21.36	3.00	22.21	<=34.77	Pass
			6	21.35	3.00	22.20	<=34.77	Pass
			13	21.30	3.00	22.15	<=34.77	Pass
		25	0	21.36	3.00	22.21	<=34.77	Pass
	713.5	1	0	22.46	3.00	23.31	<=34.77	Pass
			13	22.45	3.00	23.30	<=34.77	Pass
			24	22.47	3.00	23.32	<=34.77	Pass
		12	0	21.51	3.00	22.36	<=34.77	Pass
			6	21.53	3.00	22.38	<=34.77	Pass
			13	21.46	3.00	22.31	<=34.77	Pass
		25	0	21.39	3.00	22.24	<=34.77	Pass

Note1: ERP=Conducted Power+Antenna Gain-2.15

1.1.4 B12_10MHz_ERP

Band: 12 / Bandwidth: 10MHz / NTNV								
Modulation	Frequency (MHz)	RB Allocation		Conducted Power (dBm)	Gain (dBi)	ERP (dBm)		Verdict
		Size	Offset			Result	Limit	
64QAM	704	1	0	22.51	3.00	23.36	<=34.77	Pass
			25	22.50	3.00	23.35	<=34.77	Pass
			49	22.44	3.00	23.29	<=34.77	Pass
		25	0	21.44	3.00	22.29	<=34.77	Pass
			13	21.48	3.00	22.33	<=34.77	Pass
			25	21.37	3.00	22.22	<=34.77	Pass
		50	0	21.45	3.00	22.30	<=34.77	Pass
	707.5	1	0	22.29	3.00	23.14	<=34.77	Pass
			25	22.55	3.00	23.40	<=34.77	Pass
			49	22.48	3.00	23.33	<=34.77	Pass
		25	0	21.43	3.00	22.28	<=34.77	Pass
			13	21.35	3.00	22.20	<=34.77	Pass
			25	21.29	3.00	22.14	<=34.77	Pass
		50	0	21.36	3.00	22.21	<=34.77	Pass

	711	1	0	22.58	3.00	23.43	<=34.77	Pass
			25	22.56	3.00	23.41	<=34.77	Pass
			49	22.59	3.00	23.44	<=34.77	Pass
		25	0	21.36	3.00	22.21	<=34.77	Pass
			13	21.31	3.00	22.16	<=34.77	Pass
			25	21.40	3.00	22.25	<=34.77	Pass
		50	0	21.29	3.00	22.14	<=34.77	Pass
		Note1: ERP=Conducted Power+Antenna Gain-2.15						

2. Frequency Stability

2.1 Test Result

2.1.1 B12_1.4MHz

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	
64QAM	699.7	6	0	20	3.27	-18.969	-0.0271	-2.5 to 2.5	Pass
					3.85	-16.894	-0.0241	-2.5 to 2.5	Pass
					4.43	-6.223	-0.0089	-2.5 to 2.5	Pass
				-30	3.85	-4.892	-0.0070	-2.5 to 2.5	Pass
				-20	3.85	-5.507	-0.0079	-2.5 to 2.5	Pass
				-10	3.85	2.575	0.0037	-2.5 to 2.5	Pass
				0	3.85	-2.003	-0.0029	-2.5 to 2.5	Pass
				10	3.85	-0.272	-0.0004	-2.5 to 2.5	Pass
				30	3.85	1.187	0.0017	-2.5 to 2.5	Pass
				40	3.85	-4.048	-0.0058	-2.5 to 2.5	Pass
				50	3.85	0.358	0.0005	-2.5 to 2.5	Pass
	707.5	6	0	20	3.27	-20.099	-0.0284	-2.5 to 2.5	Pass
					3.85	-12.074	-0.0171	-2.5 to 2.5	Pass
					4.43	-7.195	-0.0102	-2.5 to 2.5	Pass
				-30	3.85	-2.403	-0.0034	-2.5 to 2.5	Pass
				-20	3.85	-1.531	-0.0022	-2.5 to 2.5	Pass
				-10	3.85	1.059	0.0015	-2.5 to 2.5	Pass
				0	3.85	1.216	0.0017	-2.5 to 2.5	Pass
				10	3.85	-6.480	-0.0092	-2.5 to 2.5	Pass
				30	3.85	-4.163	-0.0059	-2.5 to 2.5	Pass
				40	3.85	-1.960	-0.0028	-2.5 to 2.5	Pass
				50	3.85	-0.186	-0.0003	-2.5 to 2.5	Pass
	715.3	6	0	20	3.27	-9.656	-0.0135	-2.5 to 2.5	Pass
					3.85	-22.831	-0.0319	-2.5 to 2.5	Pass
					4.43	-12.517	-0.0175	-2.5 to 2.5	Pass
				-30	3.85	-7.067	-0.0099	-2.5 to 2.5	Pass
				-20	3.85	-0.243	-0.0003	-2.5 to 2.5	Pass
				-10	3.85	-3.433	-0.0048	-2.5 to 2.5	Pass
				0	3.85	-1.416	-0.0020	-2.5 to 2.5	Pass
				10	3.85	-5.164	-0.0072	-2.5 to 2.5	Pass
				30	3.85	-1.345	-0.0019	-2.5 to 2.5	Pass
				40	3.85	-2.646	-0.0037	-2.5 to 2.5	Pass
				50	3.85	1.016	0.0014	-2.5 to 2.5	Pass

2.1.2 B12_3MHz

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	
64QAM	700.5	15	0	20	3.27	-2.403	-0.0034	-2.5 to 2.5	Pass
					3.85	-2.832	-0.0040	-2.5 to 2.5	Pass
					4.43	3.133	0.0045	-2.5 to 2.5	Pass
				-30	3.85	0.014	0.0000	-2.5 to 2.5	Pass
				-20	3.85	0.572	0.0008	-2.5 to 2.5	Pass
				-10	3.85	1.144	0.0016	-2.5 to 2.5	Pass
				0	3.85	0.629	0.0009	-2.5 to 2.5	Pass
				10	3.85	2.446	0.0035	-2.5 to 2.5	Pass
				30	3.85	-0.243	-0.0003	-2.5 to 2.5	Pass
				40	3.85	0.958	0.0014	-2.5 to 2.5	Pass
				50	3.85	3.376	0.0048	-2.5 to 2.5	Pass
	707.5	15	0	20	3.27	-1.731	-0.0024	-2.5 to 2.5	Pass
					3.85	-6.351	-0.0090	-2.5 to 2.5	Pass
					4.43	-3.247	-0.0046	-2.5 to 2.5	Pass
				-30	3.85	-3.562	-0.0050	-2.5 to 2.5	Pass
				-20	3.85	-2.360	-0.0033	-2.5 to 2.5	Pass
				-10	3.85	-4.320	-0.0061	-2.5 to 2.5	Pass
				0	3.85	-4.120	-0.0058	-2.5 to 2.5	Pass
				10	3.85	-0.730	-0.0010	-2.5 to 2.5	Pass
				30	3.85	-0.744	-0.0011	-2.5 to 2.5	Pass
				40	3.85	-5.379	-0.0076	-2.5 to 2.5	Pass
				50	3.85	-2.289	-0.0032	-2.5 to 2.5	Pass
	714.5	15	0	20	3.27	3.562	0.0050	-2.5 to 2.5	Pass
					3.85	5.150	0.0072	-2.5 to 2.5	Pass
					4.43	6.709	0.0094	-2.5 to 2.5	Pass
				-30	3.85	7.138	0.0100	-2.5 to 2.5	Pass
				-20	3.85	4.292	0.0060	-2.5 to 2.5	Pass
				-10	3.85	4.063	0.0057	-2.5 to 2.5	Pass
				0	3.85	5.836	0.0082	-2.5 to 2.5	Pass
				10	3.85	6.022	0.0084	-2.5 to 2.5	Pass
				30	3.85	0.787	0.0011	-2.5 to 2.5	Pass
				40	3.85	3.290	0.0046	-2.5 to 2.5	Pass
				50	3.85	7.710	0.0108	-2.5 to 2.5	Pass

2.1.3 B12_5MHz

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	
64QAM	701.5	25	0	20	3.27	0.386	0.0006	-2.5 to 2.5	Pass
					3.85	0.143	0.0002	-2.5 to 2.5	Pass
					4.43	-1.731	-0.0025	-2.5 to 2.5	Pass
				-30	3.85	-4.277	-0.0061	-2.5 to 2.5	Pass
				-20	3.85	0.944	0.0013	-2.5 to 2.5	Pass
				-10	3.85	-0.758	-0.0011	-2.5 to 2.5	Pass
				0	3.85	-1.059	-0.0015	-2.5 to 2.5	Pass
				10	3.85	3.018	0.0043	-2.5 to 2.5	Pass
				30	3.85	-1.144	-0.0016	-2.5 to 2.5	Pass
				40	3.85	0.329	0.0005	-2.5 to 2.5	Pass
				50	3.85	-3.462	-0.0049	-2.5 to 2.5	Pass

	707.5	25	0	20	3.27	-1.402	-0.0020	-2.5 to 2.5	Pass
					3.85	-1.988	-0.0028	-2.5 to 2.5	Pass
					4.43	-3.476	-0.0049	-2.5 to 2.5	Pass
				-30	3.85	0.858	0.0012	-2.5 to 2.5	Pass
				-20	3.85	-0.744	-0.0011	-2.5 to 2.5	Pass
				-10	3.85	0.329	0.0005	-2.5 to 2.5	Pass
				0	3.85	0.443	0.0006	-2.5 to 2.5	Pass
				10	3.85	-6.452	-0.0091	-2.5 to 2.5	Pass
				30	3.85	-2.303	-0.0033	-2.5 to 2.5	Pass
				40	3.85	-4.263	-0.0060	-2.5 to 2.5	Pass
				50	3.85	-7.882	-0.0111	-2.5 to 2.5	Pass
	713.5	25	0	20	3.27	-5.121	-0.0072	-2.5 to 2.5	Pass
					3.85	-3.490	-0.0049	-2.5 to 2.5	Pass
					4.43	-3.548	-0.0050	-2.5 to 2.5	Pass
				-30	3.85	-1.945	-0.0027	-2.5 to 2.5	Pass
				-20	3.85	-1.616	-0.0023	-2.5 to 2.5	Pass
				-10	3.85	-5.922	-0.0083	-2.5 to 2.5	Pass
				0	3.85	-5.150	-0.0072	-2.5 to 2.5	Pass
				10	3.85	-3.891	-0.0055	-2.5 to 2.5	Pass
				30	3.85	-1.717	-0.0024	-2.5 to 2.5	Pass
				40	3.85	-2.861	-0.0040	-2.5 to 2.5	Pass
				50	3.85	-1.059	-0.0015	-2.5 to 2.5	Pass

2.1.4 B12_10MHz

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	
64QAM	704	50	0	20	3.27	3.905	0.0055	-2.5 to 2.5	Pass
					3.85	2.561	0.0036	-2.5 to 2.5	Pass
					4.43	4.191	0.0060	-2.5 to 2.5	Pass
				-30	3.85	5.336	0.0076	-2.5 to 2.5	Pass
				-20	3.85	0.558	0.0008	-2.5 to 2.5	Pass
				-10	3.85	1.230	0.0017	-2.5 to 2.5	Pass
				0	3.85	0.029	0.0000	-2.5 to 2.5	Pass
				10	3.85	1.087	0.0015	-2.5 to 2.5	Pass
				30	3.85	3.018	0.0043	-2.5 to 2.5	Pass
				40	3.85	-0.215	-0.0003	-2.5 to 2.5	Pass
				50	3.85	3.920	0.0056	-2.5 to 2.5	Pass
	707.5	50	0	20	3.27	-0.501	-0.0007	-2.5 to 2.5	Pass
					3.85	0.329	0.0005	-2.5 to 2.5	Pass
					4.43	-0.429	-0.0006	-2.5 to 2.5	Pass
				-30	3.85	-7.038	-0.0099	-2.5 to 2.5	Pass
				-20	3.85	-6.509	-0.0092	-2.5 to 2.5	Pass
				-10	3.85	-2.532	-0.0036	-2.5 to 2.5	Pass
				0	3.85	1.717	0.0024	-2.5 to 2.5	Pass
				10	3.85	-6.351	-0.0090	-2.5 to 2.5	Pass
				30	3.85	-5.865	-0.0083	-2.5 to 2.5	Pass
				40	3.85	-1.273	-0.0018	-2.5 to 2.5	Pass
				50	3.85	0.744	0.0011	-2.5 to 2.5	Pass
	711	50	0	20	3.27	1.545	0.0022	-2.5 to 2.5	Pass
					3.85	-2.389	-0.0034	-2.5 to 2.5	Pass
					4.43	1.774	0.0025	-2.5 to 2.5	Pass
				-30	3.85	1.130	0.0016	-2.5 to 2.5	Pass
				-20	3.85	-3.748	-0.0053	-2.5 to 2.5	Pass

				-10	3.85	-0.143	-0.0002	-2.5 to 2.5	Pass
				0	3.85	1.202	0.0017	-2.5 to 2.5	Pass
				10	3.85	2.489	0.0035	-2.5 to 2.5	Pass
				30	3.85	-0.443	-0.0006	-2.5 to 2.5	Pass
				40	3.85	3.176	0.0045	-2.5 to 2.5	Pass
				50	3.85	3.247	0.0046	-2.5 to 2.5	Pass

3. 99% & 26dB Bandwidth

3.1 Test Result

3.1.1 Band12_OBW

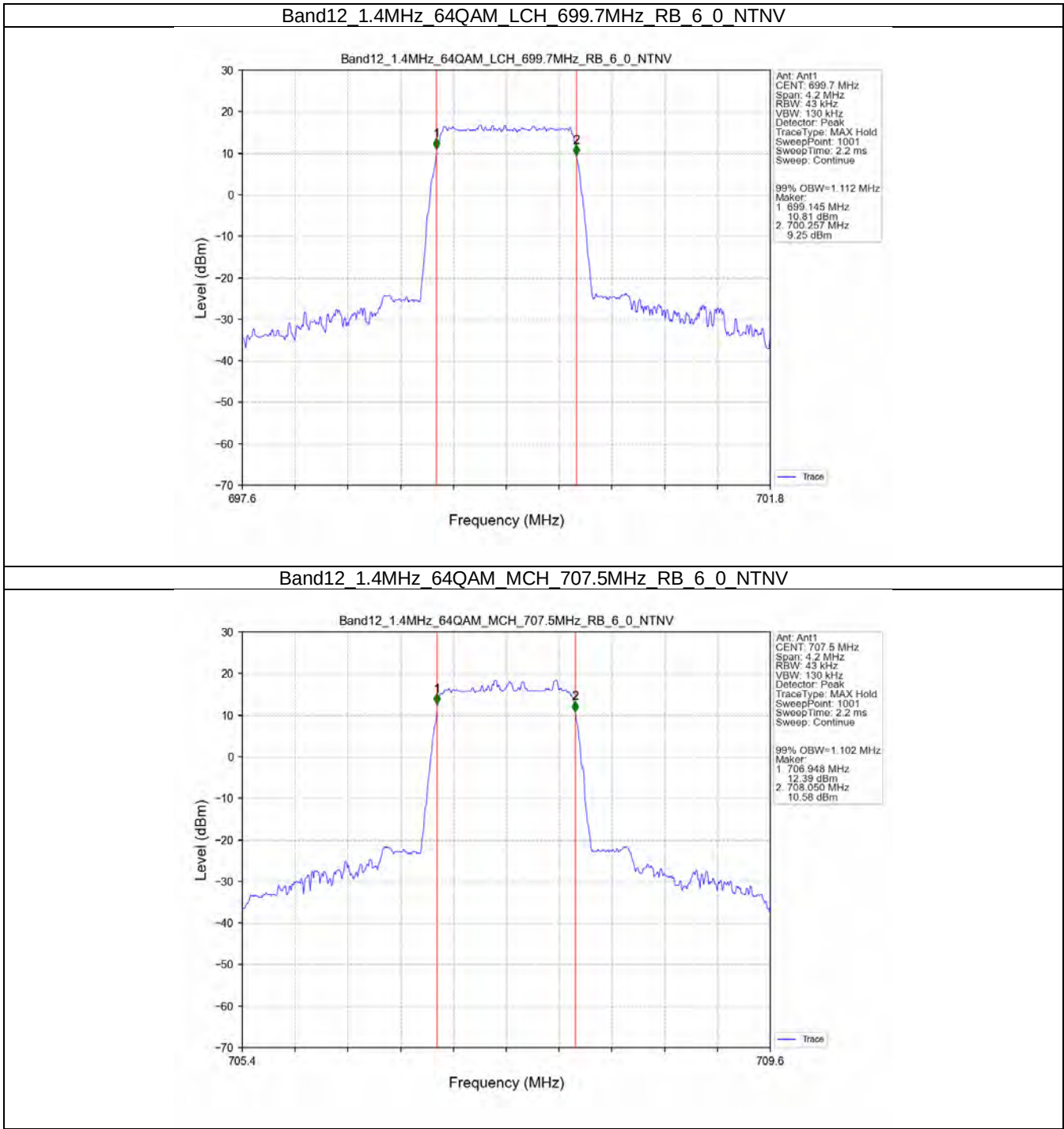
Band: 12 / NTNV							
Bandwidth (MHz)	Modulation	Frequency (MHz)	RB Allocation		99% Occupied Bandwidth (MHz)		Verdict
			Size	Offset	Result	Limit	
1.4	64QAM	699.7	6	0	1.112	/	Pass
		707.5	6	0	1.102	/	Pass
		715.3	6	0	1.104	/	Pass
3	64QAM	700.5	15	0	2.744	/	Pass
		707.5	15	0	2.736	/	Pass
		714.5	15	0	2.735	/	Pass
5	64QAM	701.5	25	0	4.532	/	Pass
		707.5	25	0	4.553	/	Pass
		713.5	25	0	4.543	/	Pass
10	64QAM	704	50	0	9.054	/	Pass
		707.5	50	0	9.027	/	Pass
		711	50	0	9.033	/	Pass

3.1.2 Band12_XDB

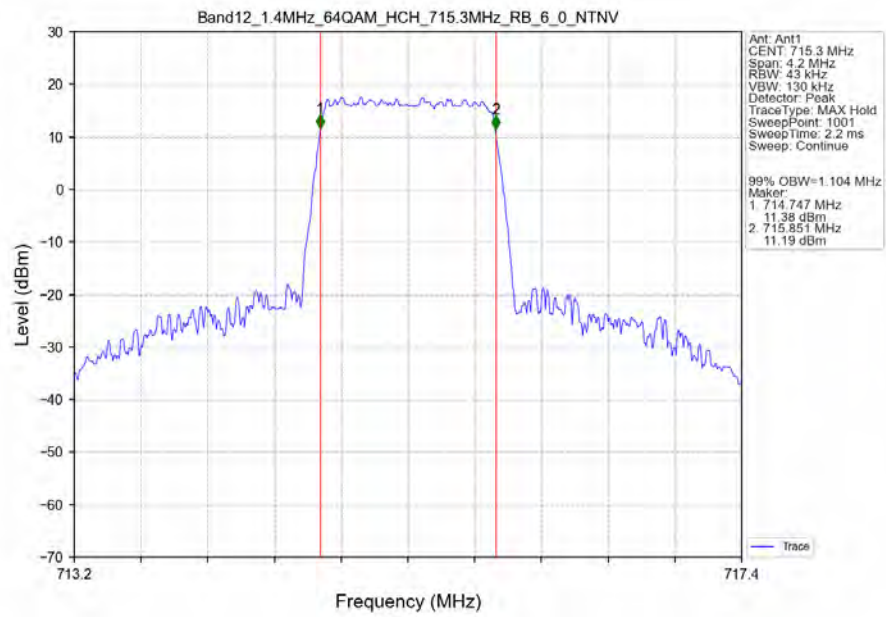
Band: 12 / NTNV							
Bandwidth (MHz)	Modulation	Frequency (MHz)	RB Allocation		26dB Bandwidth (MHz)		Verdict
			Size	Offset	Result	Limit	
1.4	64QAM	699.7	6	0	1.273	/	Pass
		707.5	6	0	1.250	/	Pass
		715.3	6	0	1.262	/	Pass
3	64QAM	700.5	15	0	3.074	/	Pass
		707.5	15	0	3.067	/	Pass
		714.5	15	0	3.052	/	Pass
5	64QAM	701.5	25	0	5.017	/	Pass
		707.5	25	0	5.066	/	Pass
		713.5	25	0	5.045	/	Pass
10	64QAM	704	50	0	9.890	/	Pass
		707.5	50	0	9.972	/	Pass
		711	50	0	10.002	/	Pass

3.2 Test Graph

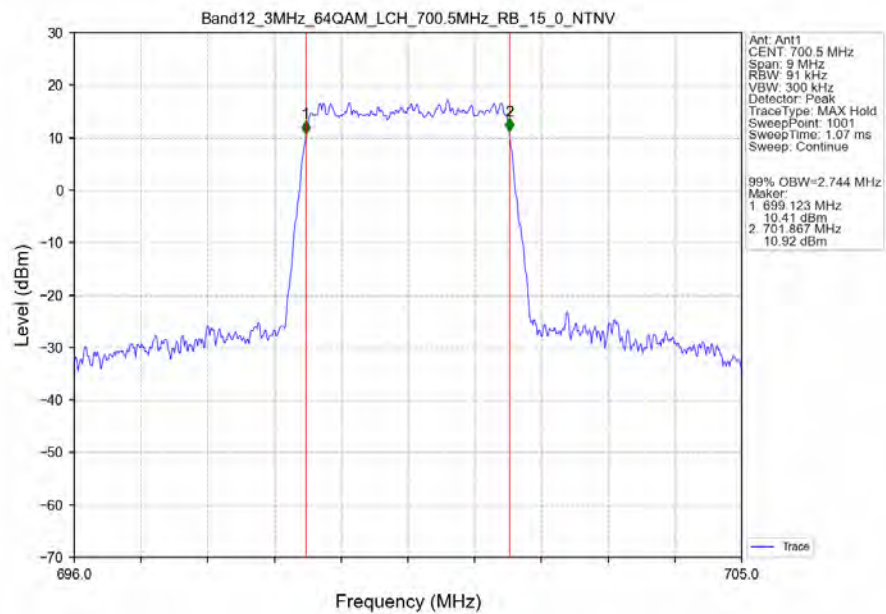
3.2.1 Band12_OBW



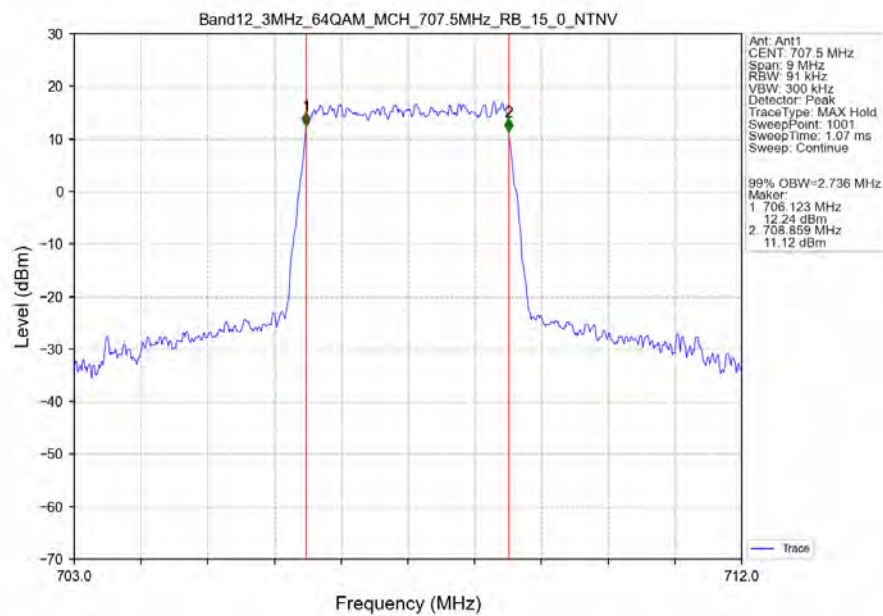
Band12_1.4MHz_64QAM_HCH_715.3MHz_RB_6_0_NTNV



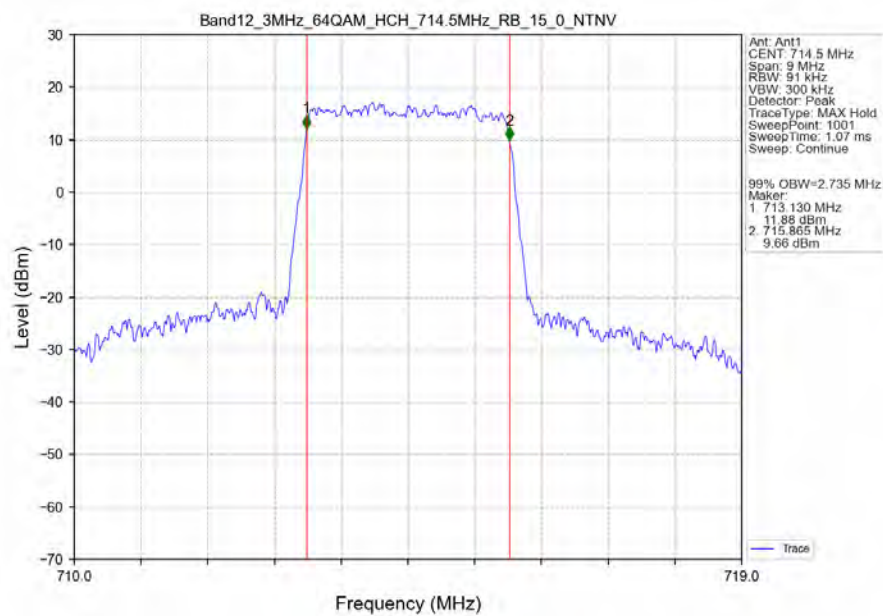
Band12_3MHz_64QAM_LCH_700.5MHz_RB_15_0_NTNV



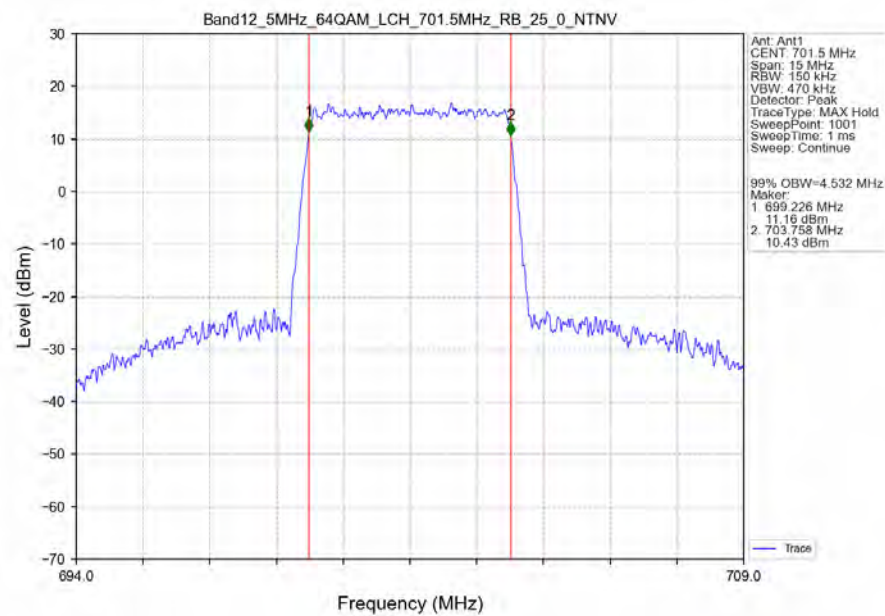
Band12_3MHz_64QAM_MCH_707.5MHz_RB_15_0_NTNV



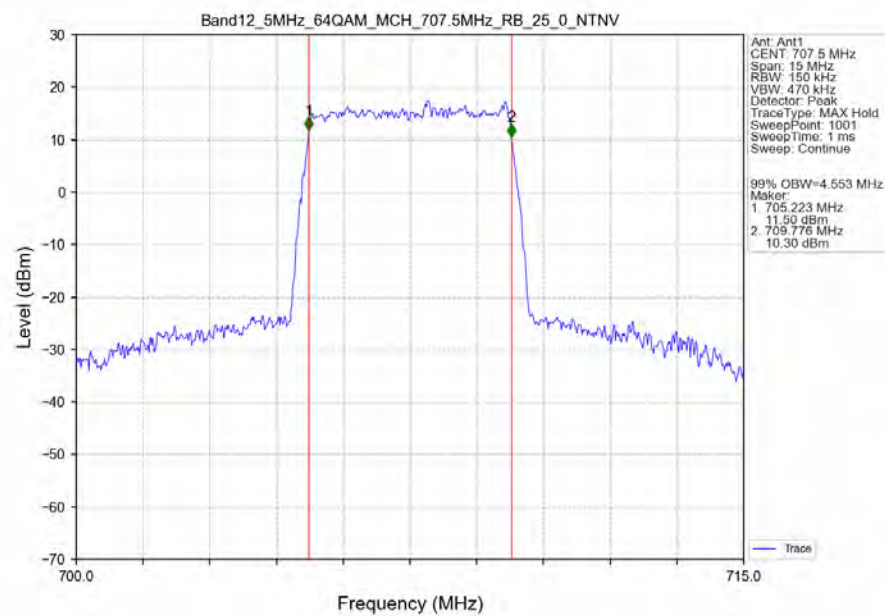
Band12_3MHz_64QAM_HCH_714.5MHz_RB_15_0_NTNV



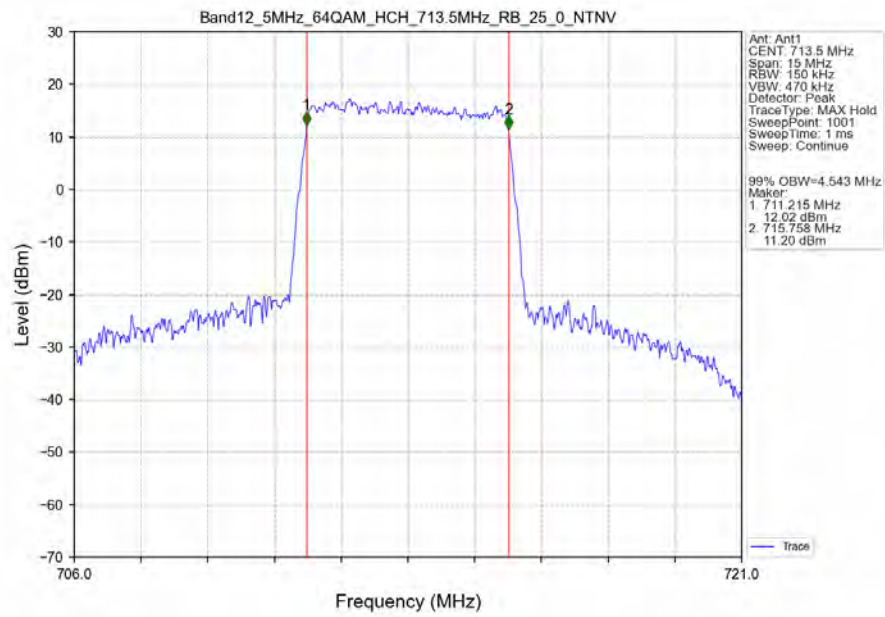
Band12_5MHz_64QAM_LCH_701.5MHz_RB_25_0_NTNV



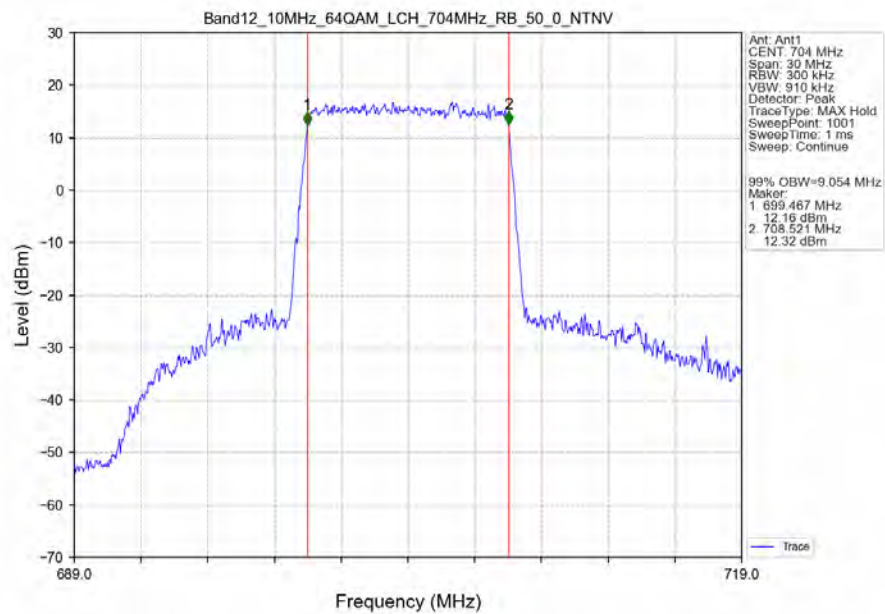
Band12_5MHz_64QAM_MCH_707.5MHz_RB_25_0_NTNV



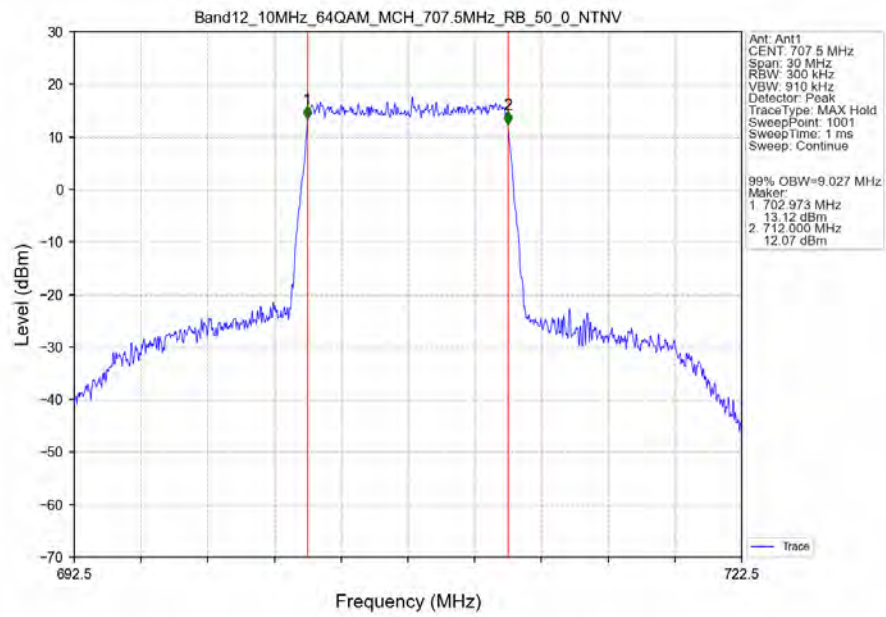
Band12_5MHz_64QAM_HCH_713.5MHz_RB_25_0_NTNV



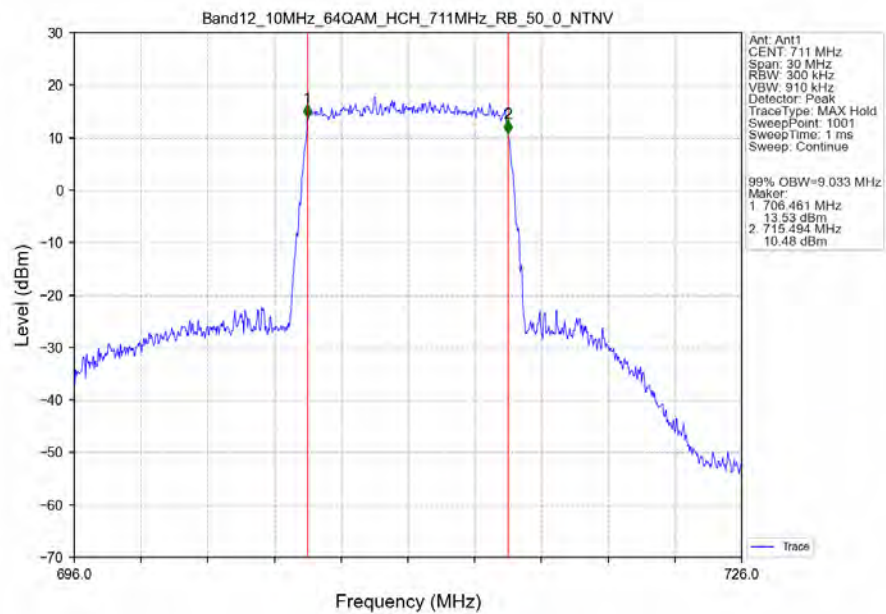
Band12_10MHz_64QAM_LCH_704MHz_RB_50_0_NTNV



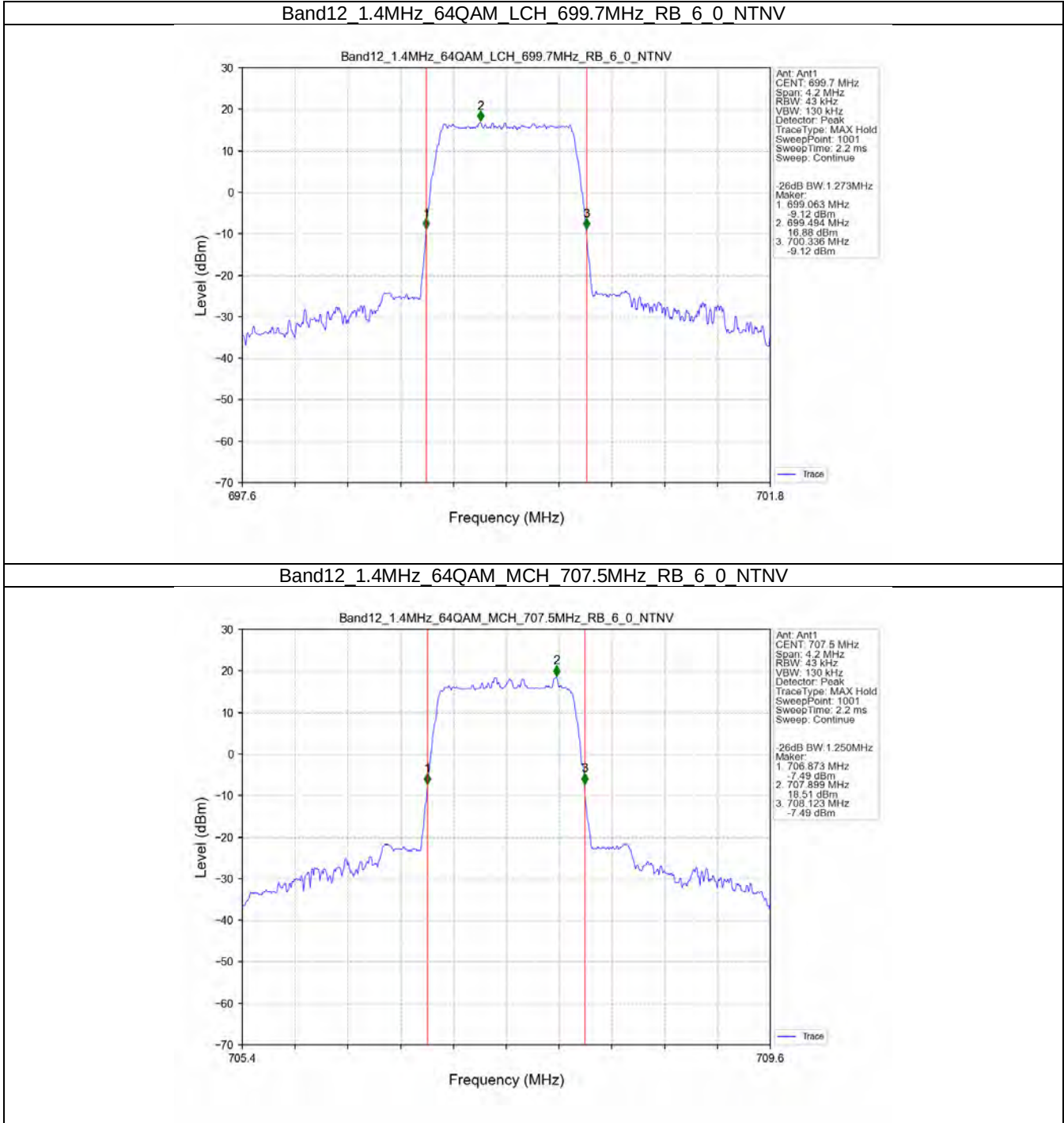
Band12_10MHz_64QAM_MCH_707.5MHz_RB_50_0_NTNV



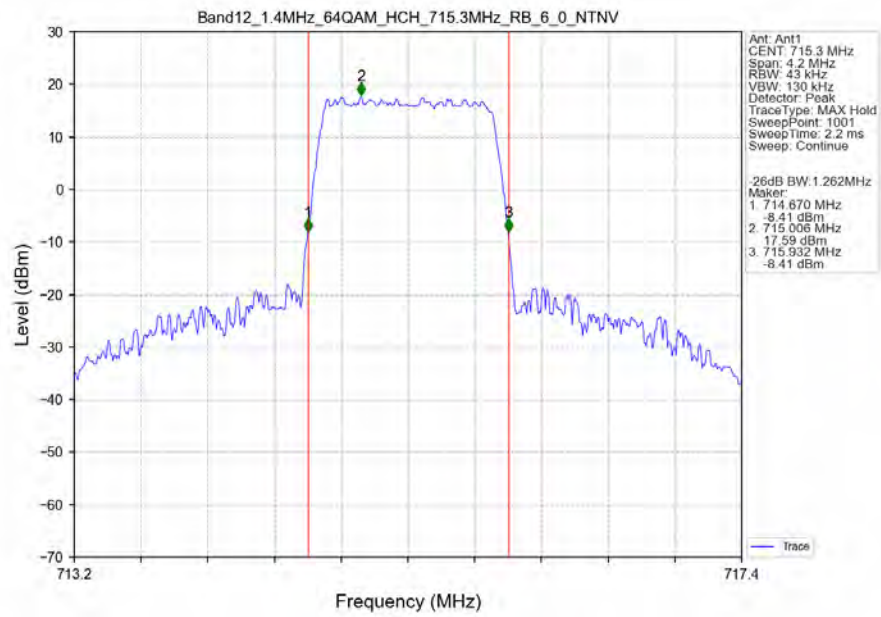
Band12_10MHz_64QAM_HCH_711MHz_RB_50_0_NTNV



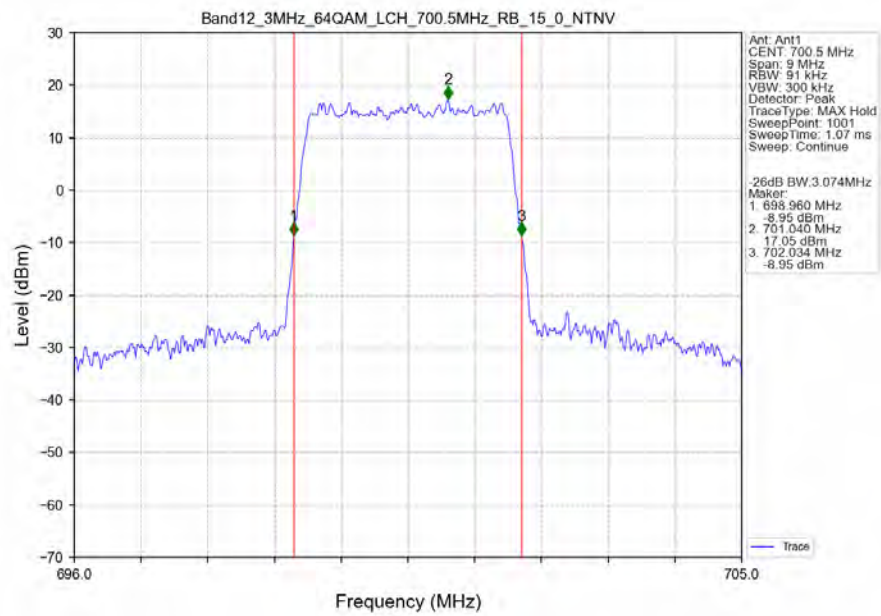
3.2.2 Band12_XDB



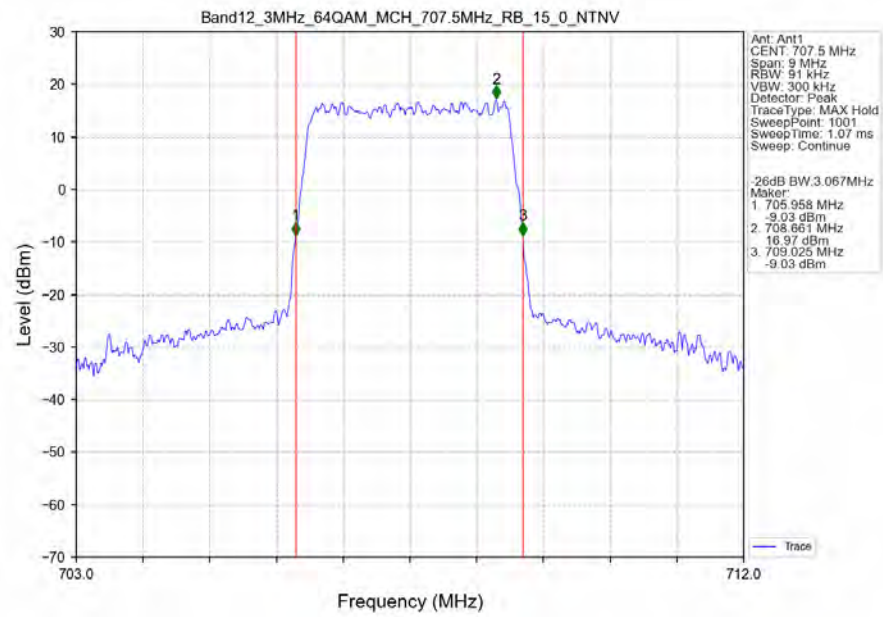
Band12_1.4MHz_64QAM_HCH_715.3MHz_RB_6_0_NTNV



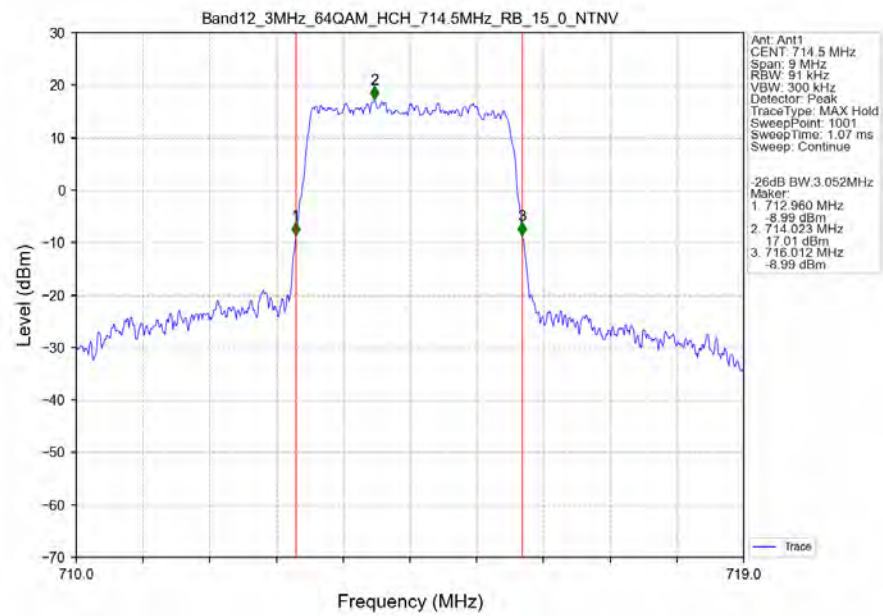
Band12_3MHz_64QAM_LCH_700.5MHz_RB_15_0_NTNV



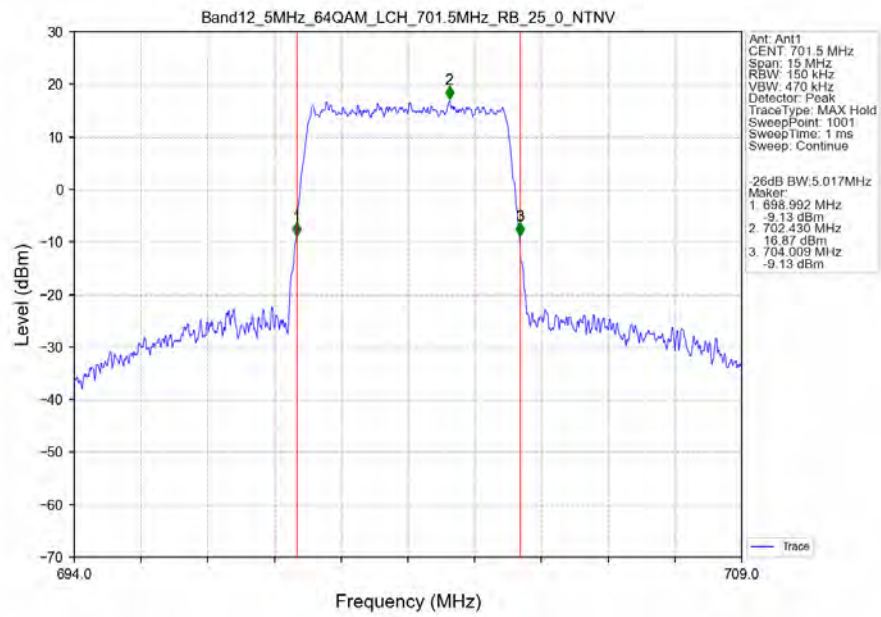
Band12_3MHz_64QAM_MCH_707.5MHz_RB_15_0_NTNV



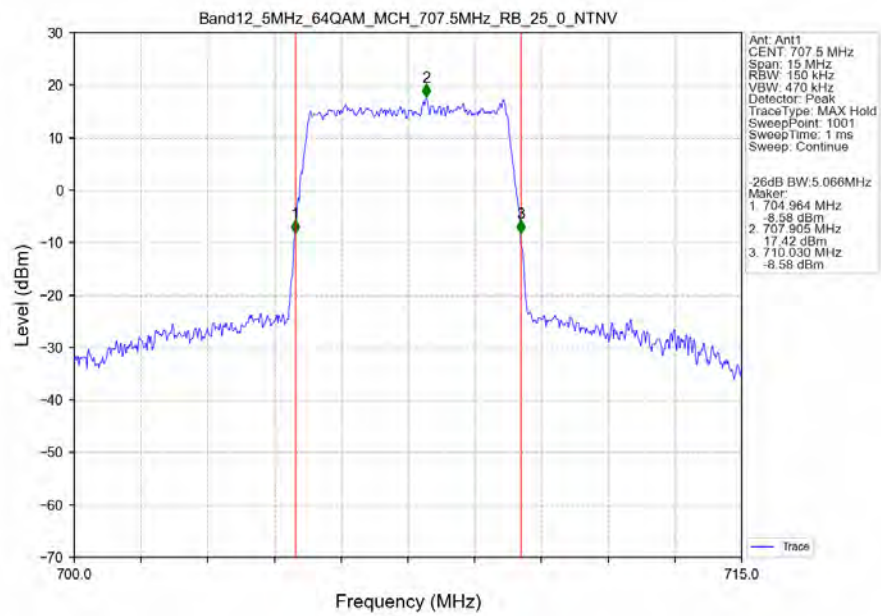
Band12_3MHz_64QAM_HCH_714.5MHz_RB_15_0_NTNV



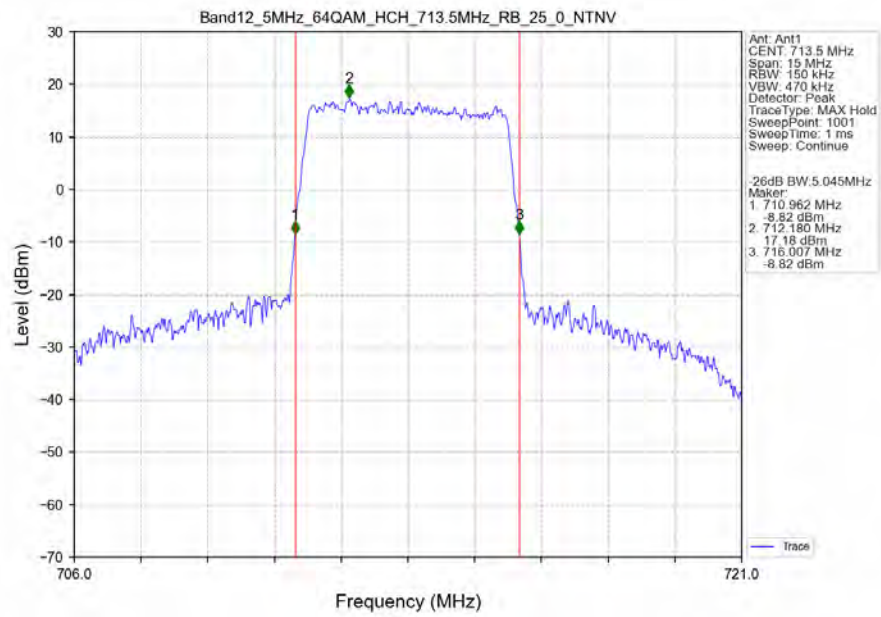
Band12_5MHz_64QAM_LCH_701.5MHz_RB_25_0_NTNV



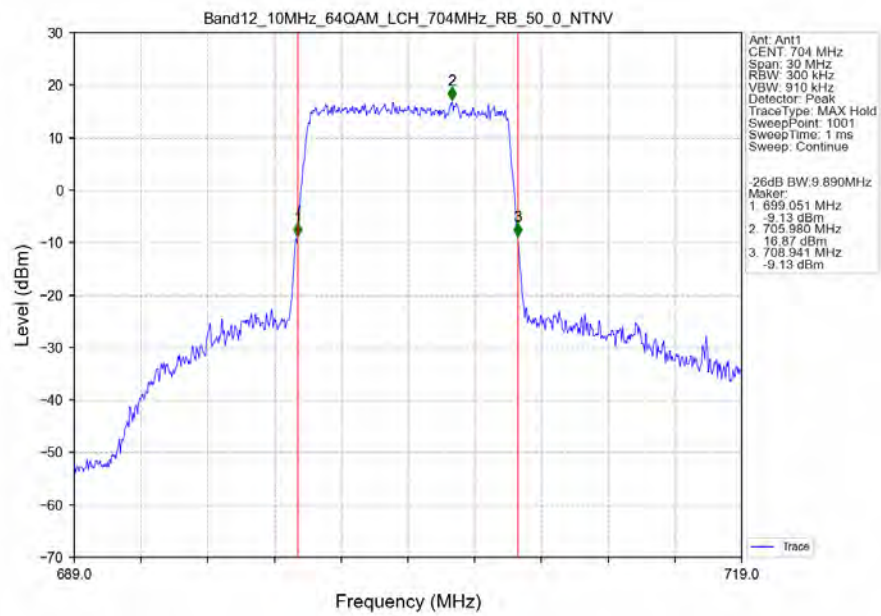
Band12_5MHz_64QAM_MCH_707.5MHz_RB_25_0_NTNV



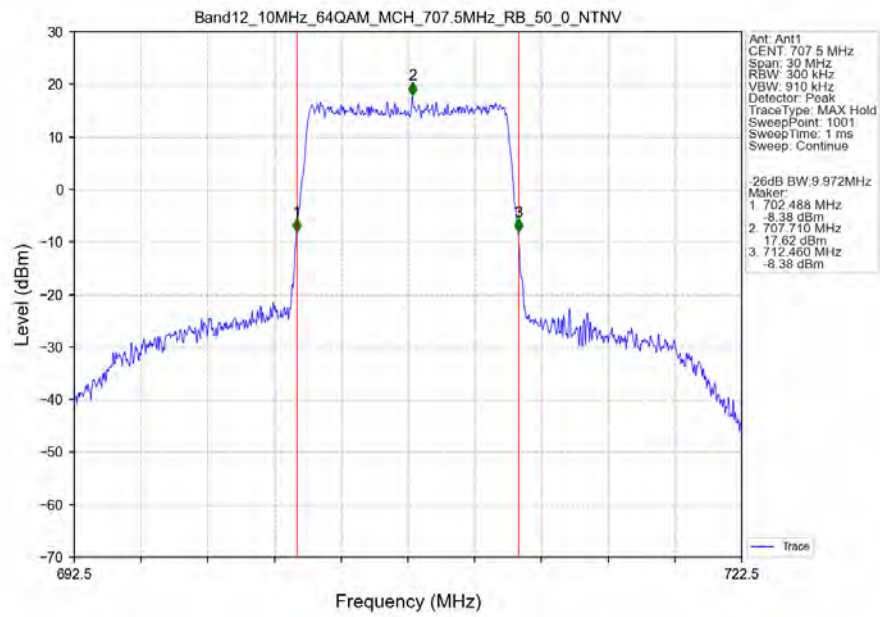
Band12_5MHz_64QAM_HCH_713.5MHz_RB_25_0_NTNV



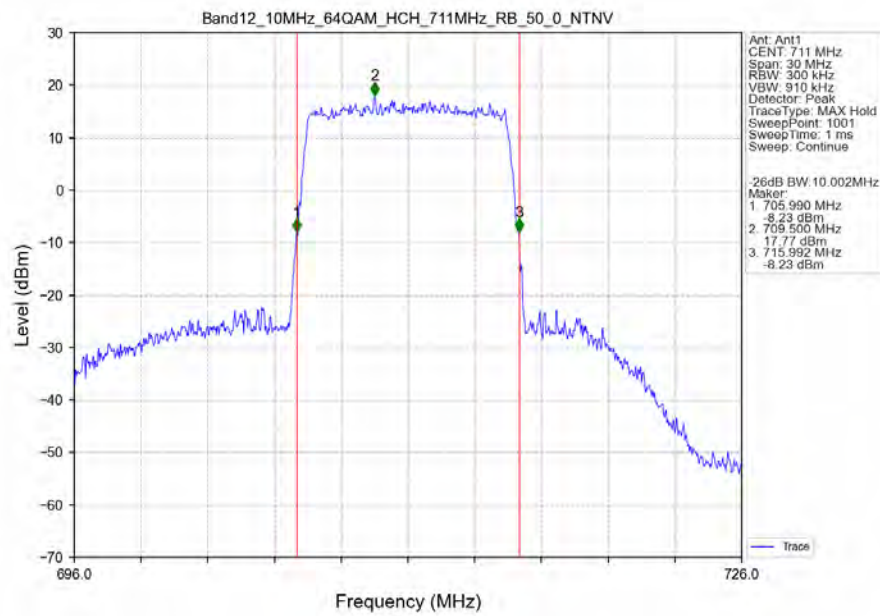
Band12_10MHz_64QAM_LCH_704MHz_RB_50_0_NTNV



Band12_10MHz_64QAM_MCH_707.5MHz_RB_50_0_NTNV



Band12_10MHz_64QAM_HCH_711MHz_RB_50_0_NTNV



4. Peak-Average Ratio

4.1 Test Result

4.1.1 B12_1.4MHz

Band: 12 / Bandwidth: 1.4MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Peak-Average Ratio (dB)		Verdict
		Size	Offset	Result	Limit	
64QAM	699.7	6	0	6.39	<=13	Pass
	707.5	6	0	6.97	<=13	Pass
	715.3	6	0	6.49	<=13	Pass

4.1.2 B12_3MHz

Band: 12 / Bandwidth: 3MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Peak-Average Ratio (dB)		Verdict
		Size	Offset	Result	Limit	
64QAM	700.5	15	0	6.51	<=13	Pass
	707.5	15	0	6.76	<=13	Pass
	714.5	15	0	6.51	<=13	Pass

4.1.3 B12_5MHz

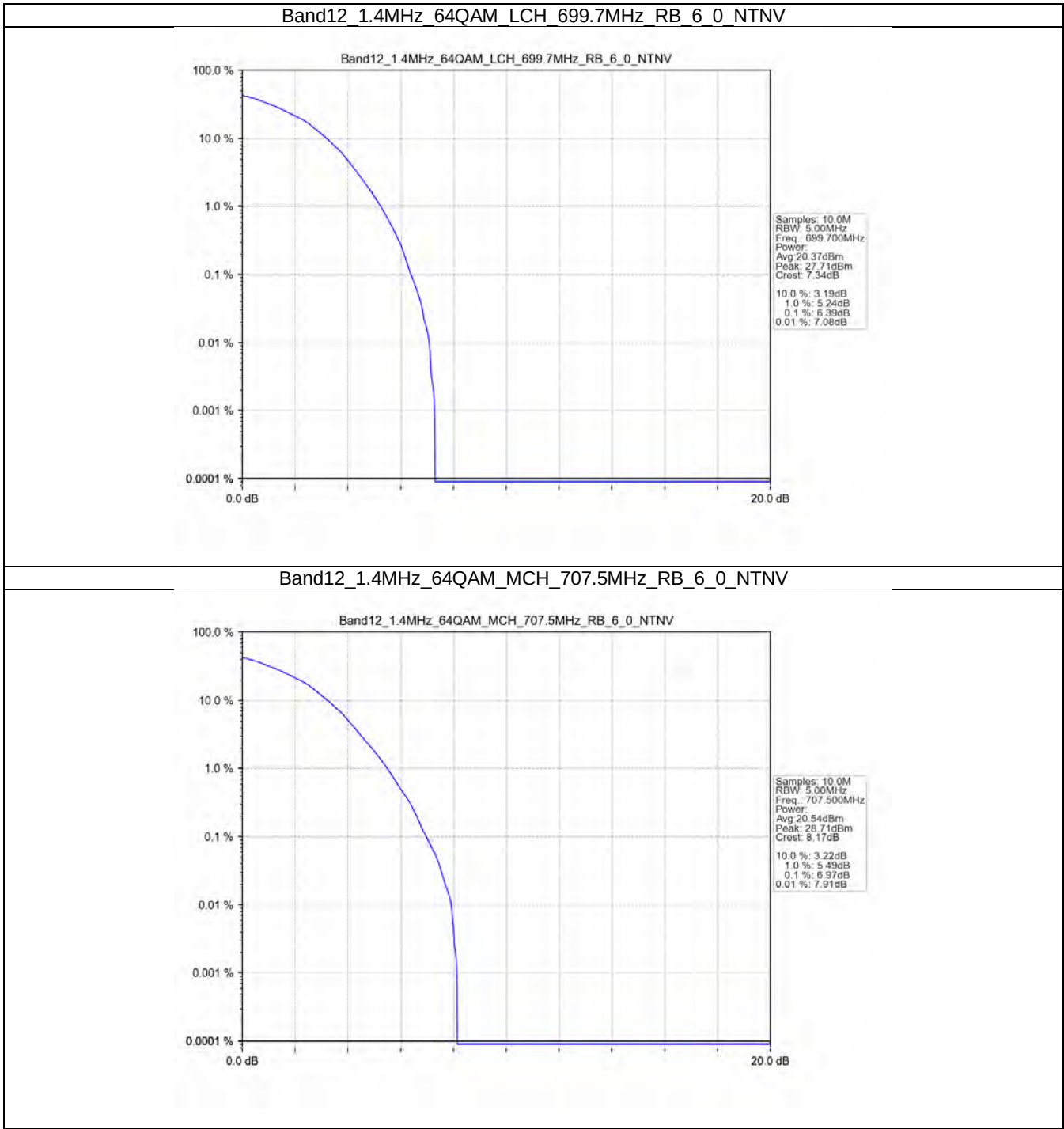
Band: 12 / Bandwidth: 5MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Peak-Average Ratio (dB)		Verdict
		Size	Offset	Result	Limit	
64QAM	701.5	25	0	6.45	<=13	Pass
	707.5	25	0	6.71	<=13	Pass
	713.5	25	0	6.45	<=13	Pass

4.1.4 B12_10MHz

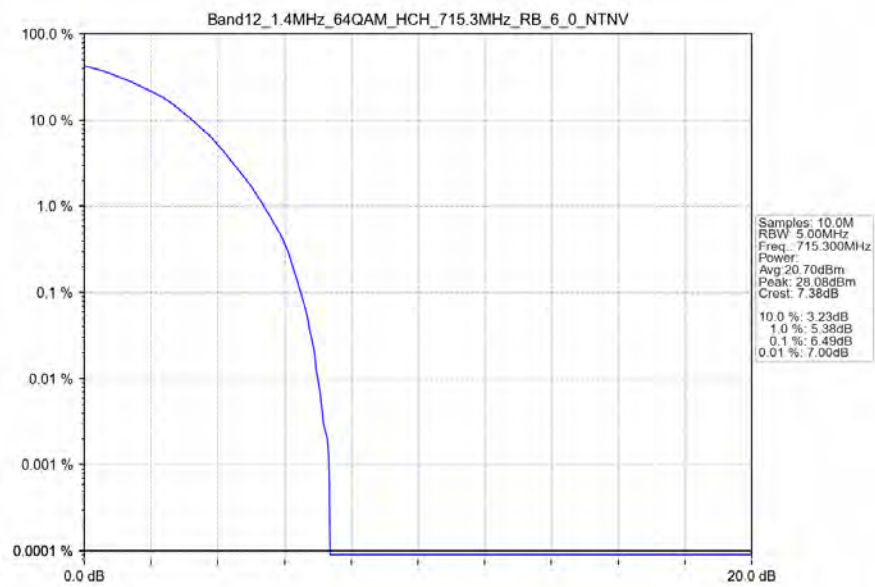
Band: 12 / Bandwidth: 10MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Peak-Average Ratio (dB)		Verdict
		Size	Offset	Result	Limit	
64QAM	704	50	0	6.58	<=13	Pass
	707.5	50	0	6.66	<=13	Pass
	711	50	0	6.51	<=13	Pass

4.2 Test Graph

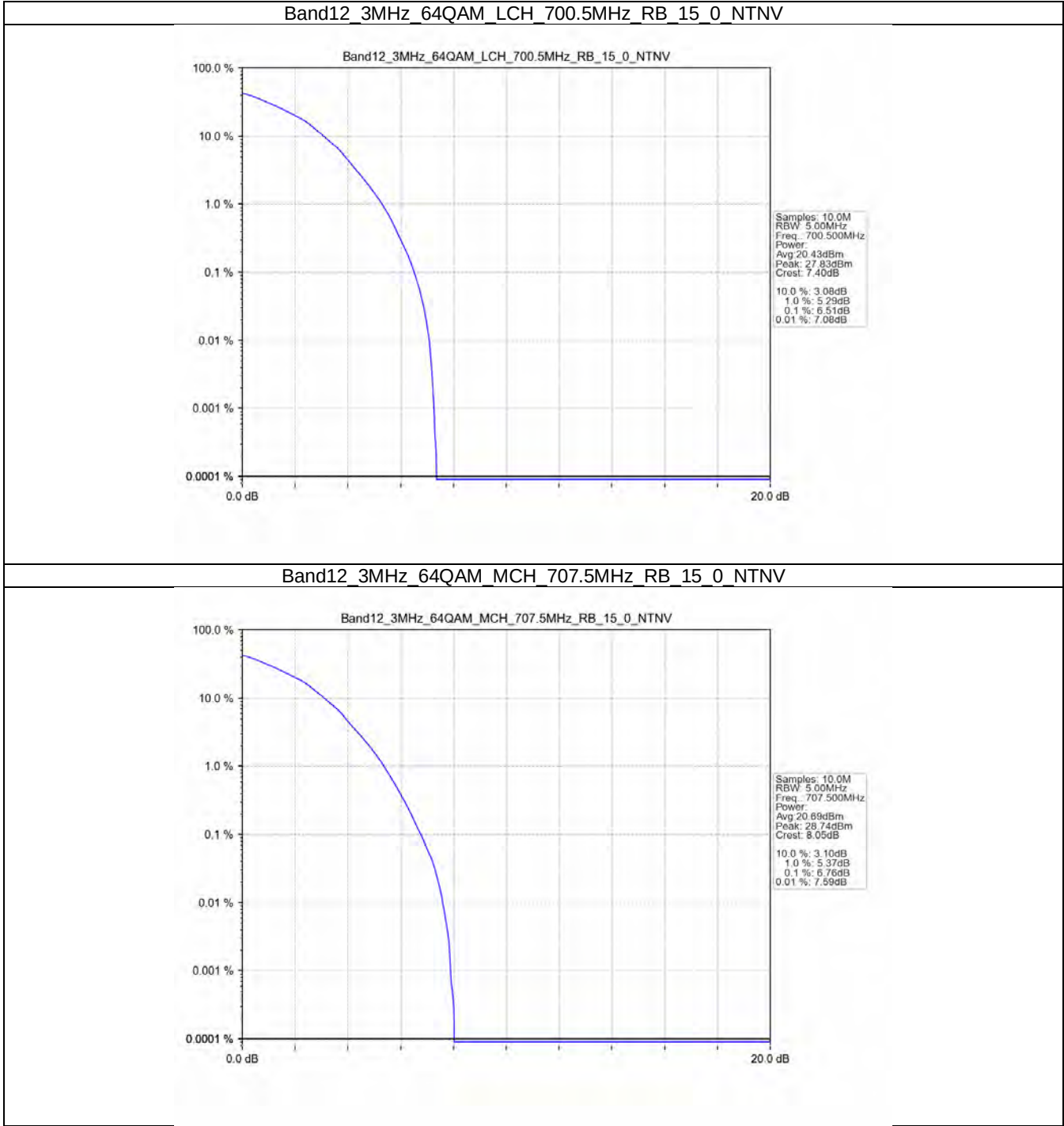
4.2.1 B12_1.4MHz



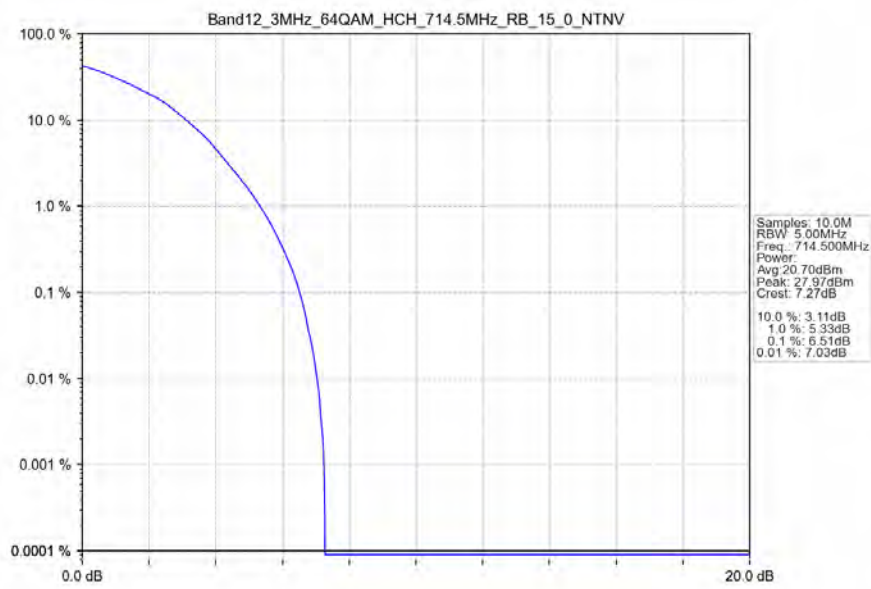
Band12 1.4MHz 64QAM HCH 715.3MHz RB 6.0 NTNV



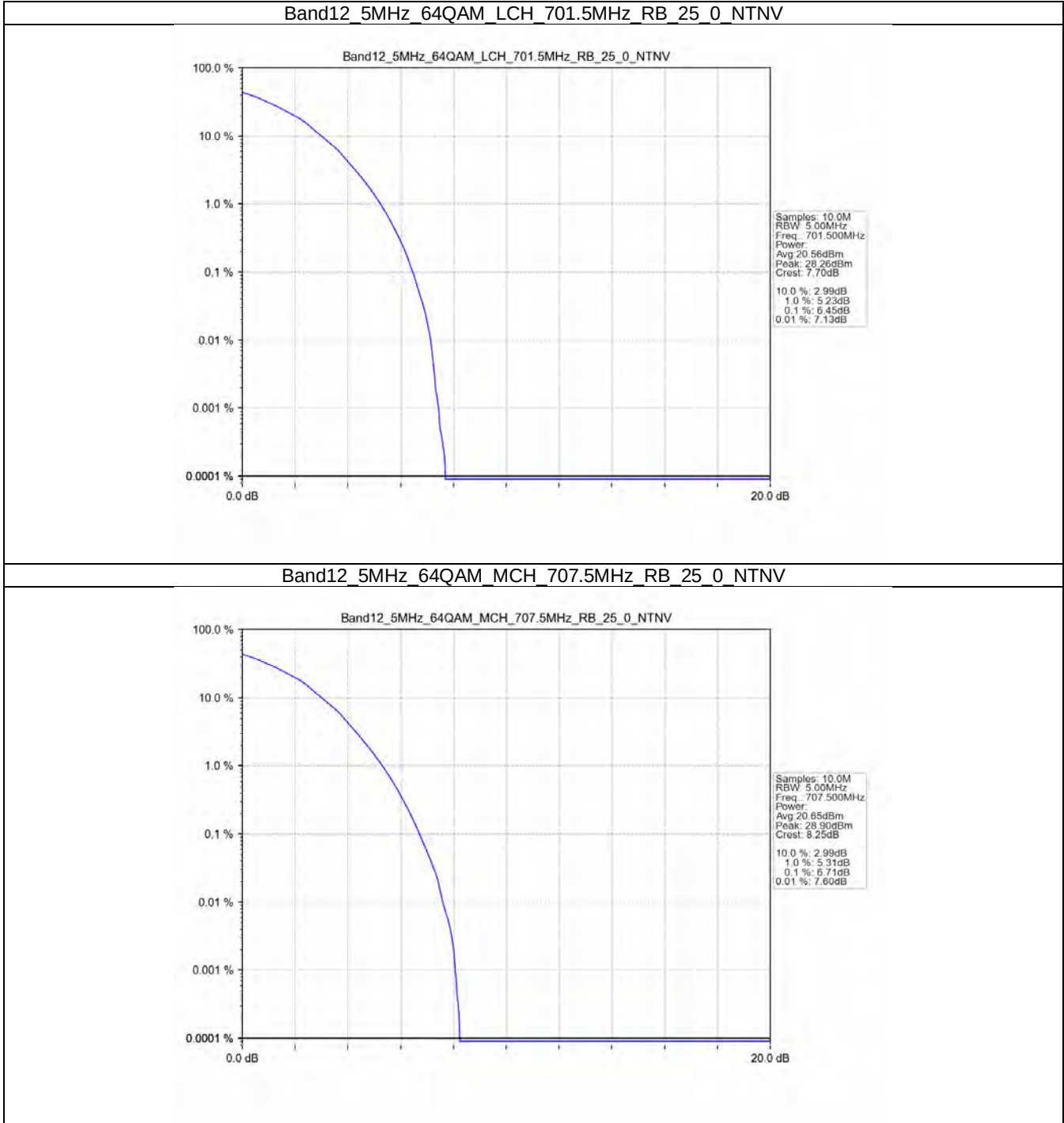
4.2.2 B12_3MHz



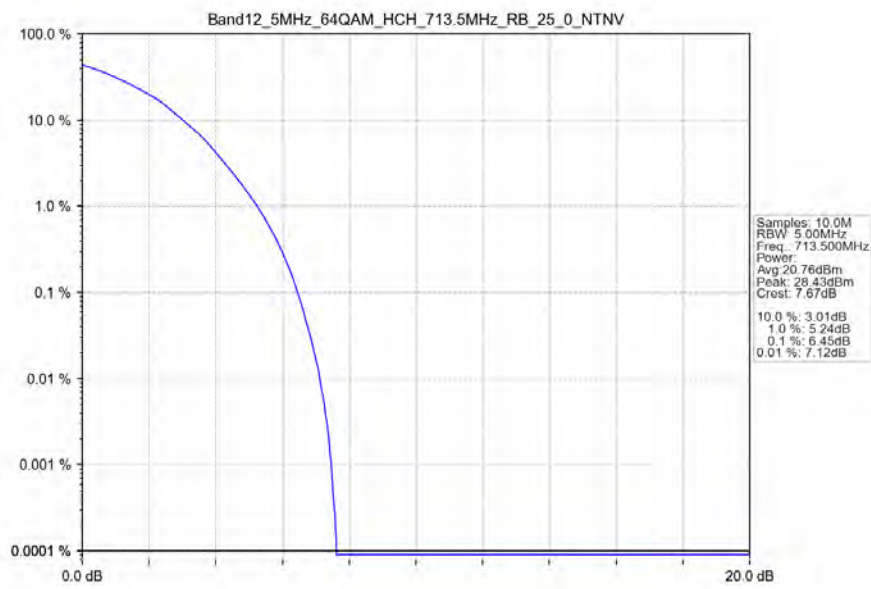
Band12_3MHz_64QAM_HCH_714.5MHz_RB_15_0_NTNV



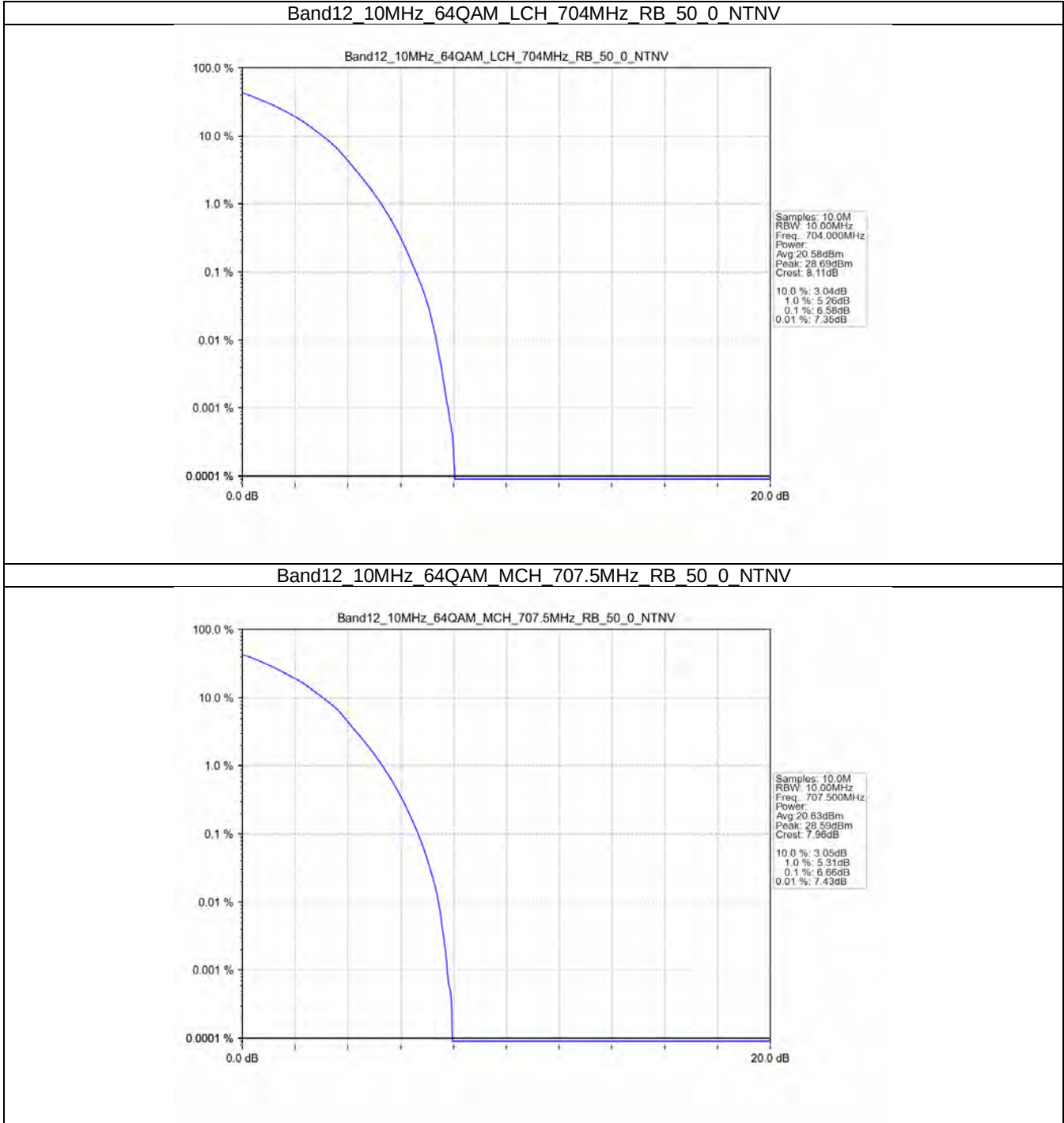
4.2.3 B12_5MHz



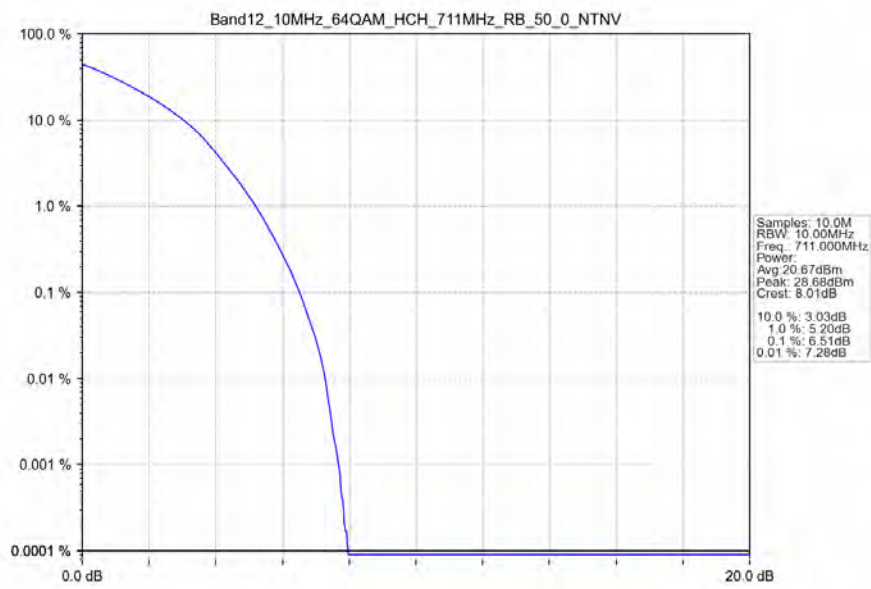
Band12_5MHz_64QAM_HCH_713.5MHz_RB_25_0_NTNV



4.2.4 B12_10MHz



Band12_10MHz_64QAM_HCH_711MHz_RB_50_0_NTNV



5. Spurious Emission

5.1 Test Result

5.1.1 B12_1.4MHz

Band: 12 / Bandwidth: 1.4MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission		Verdict
		Size	Offset	Result	Limit	
64QAM	699.7	1	0	Refer To Test Graph		Pass
		6	0	Refer To Test Graph		Pass
	707.5	1	0	Refer To Test Graph		Pass
		715.3	1	0	Refer To Test Graph	
	5			Refer To Test Graph		Pass
	6		0	Refer To Test Graph		Pass

5.1.2 B12_3MHz

Band: 12 / Bandwidth: 3MHz / NTVN						
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission		Verdict
		Size	Offset	Result	Limit	
64QAM	700.5	1	0	Refer To Test Graph		Pass
		15	0	Refer To Test Graph		Pass
	707.5	1	0	Refer To Test Graph		Pass
	714.5	1	0	Refer To Test Graph		Pass
			14	Refer To Test Graph		Pass
		15	0	Refer To Test Graph		Pass

5.1.3 B12_5MHz

Band: 12 / Bandwidth: 5MHz / NTVN						
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission		Verdict
		Size	Offset	Result	Limit	
64QAM	701.5	1	0	Refer To Test Graph		Pass
		25	0	Refer To Test Graph		Pass
	707.5	1	0	Refer To Test Graph		Pass
	713.5	1	0	Refer To Test Graph		Pass
			24	Refer To Test Graph		Pass
		25	0	Refer To Test Graph		Pass

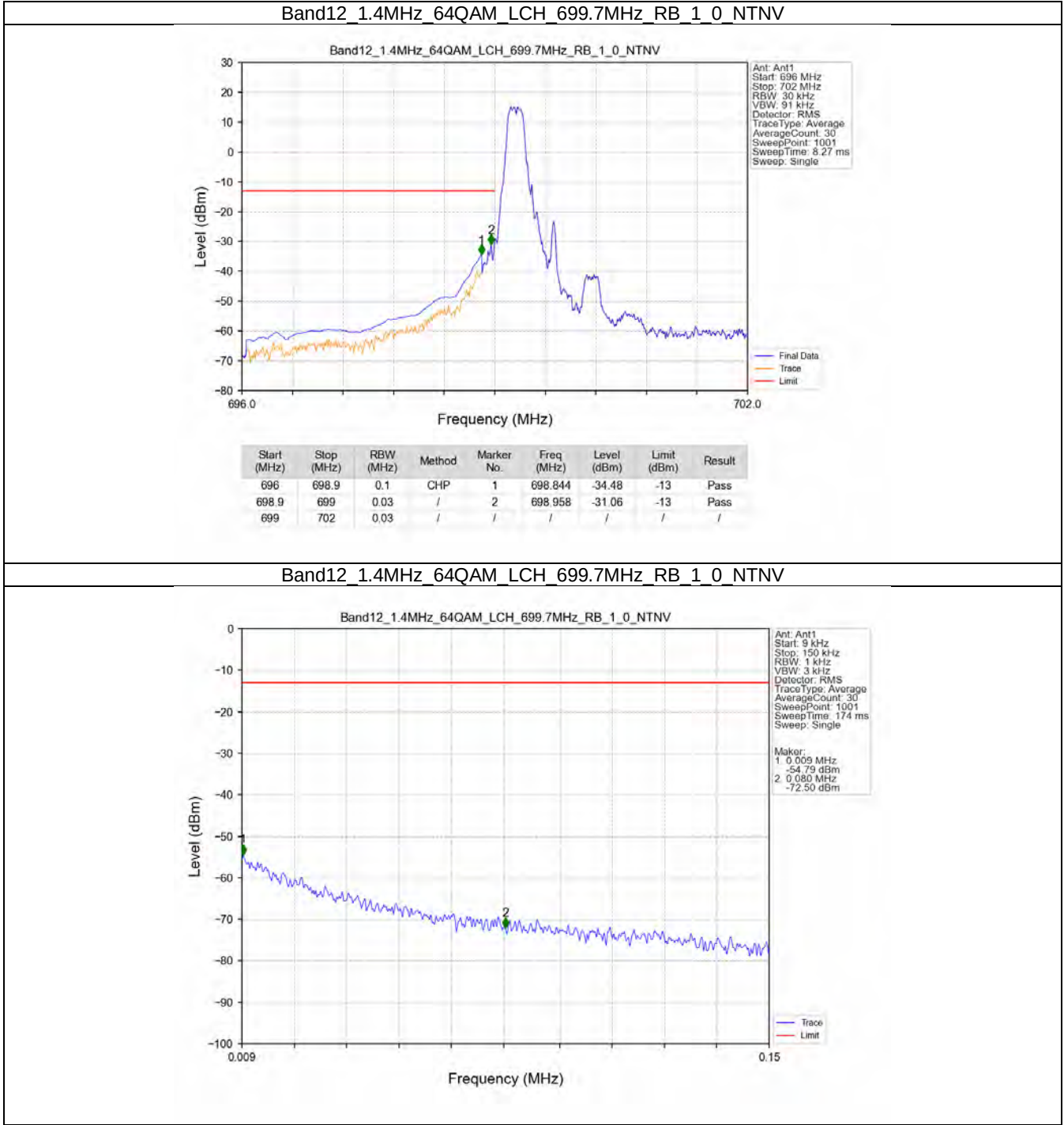
5.1.4 B12_10MHz

Band: 12 / Bandwidth: 10MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission		Verdict
		Size	Offset	Result	Limit	
64QAM	704	1	0	Refer To Test Graph		Pass
		50	0	Refer To Test Graph		Pass
	707.5	1	0	Refer To Test Graph		Pass

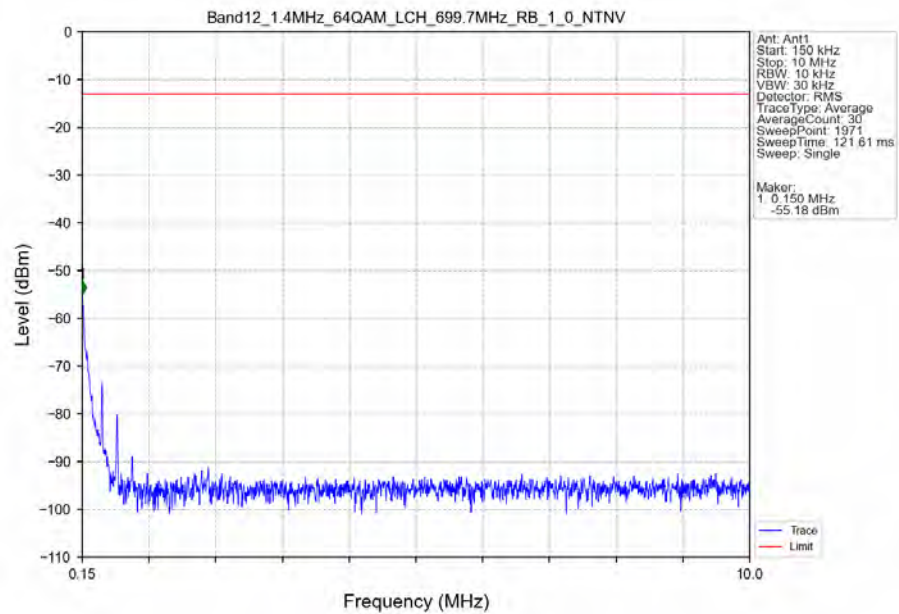
	711	1	0	Refer To Test Graph	Pass
			49	Refer To Test Graph	Pass
		50	0	Refer To Test Graph	Pass

5.2 Test Graph

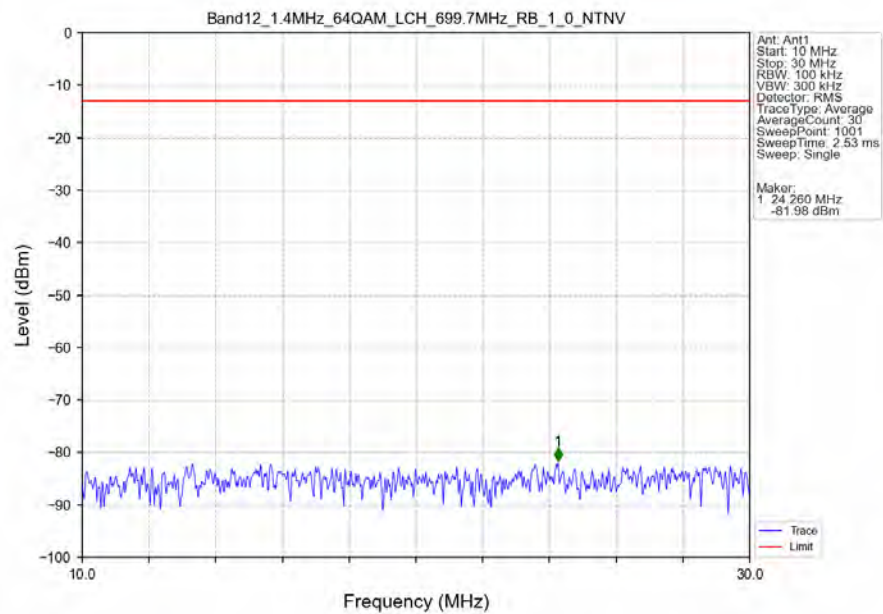
5.2.1 B12_1.4MHz



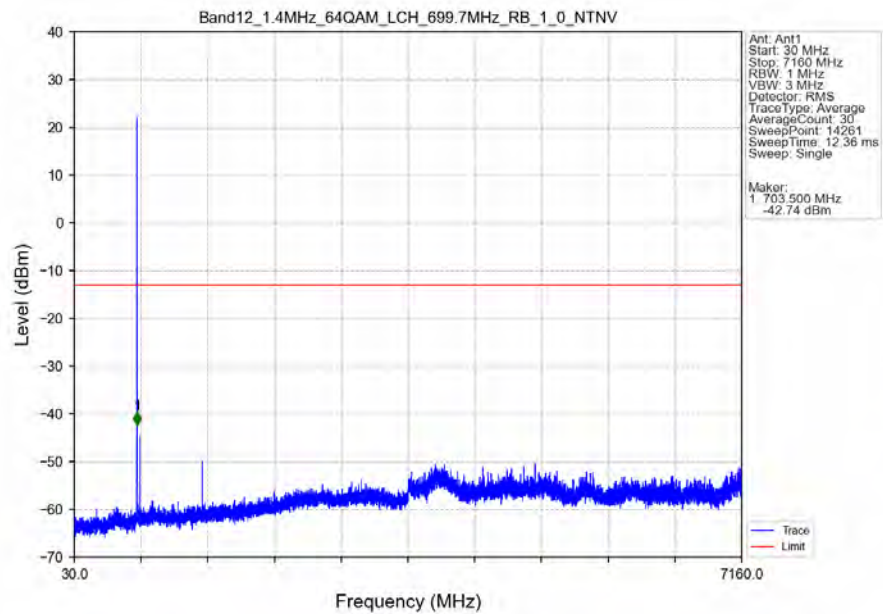
Band12_1.4MHz_64QAM_LCH_699.7MHz_RB_1_0_NTNV



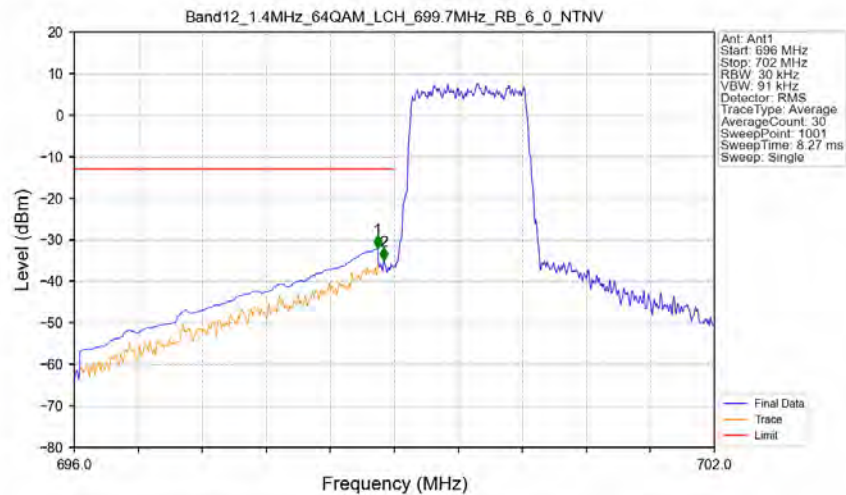
Band12_1.4MHz_64QAM_LCH_699.7MHz_RB_1_0_NTNV



Band12_1.4MHz_64QAM_LCH_699.7MHz_RB_1_0_NTNV

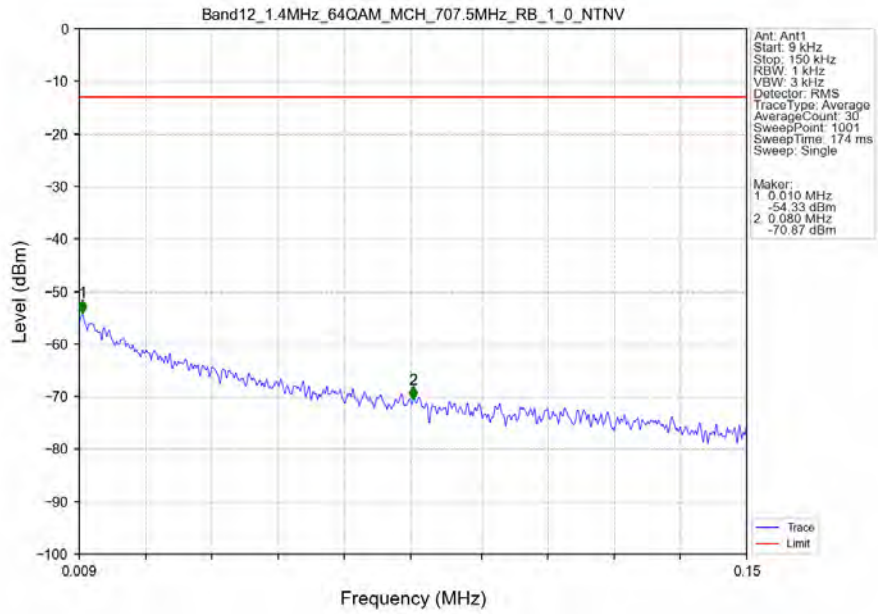


Band12_1.4MHz_64QAM_LCH_699.7MHz_RB_6_0_NTNV

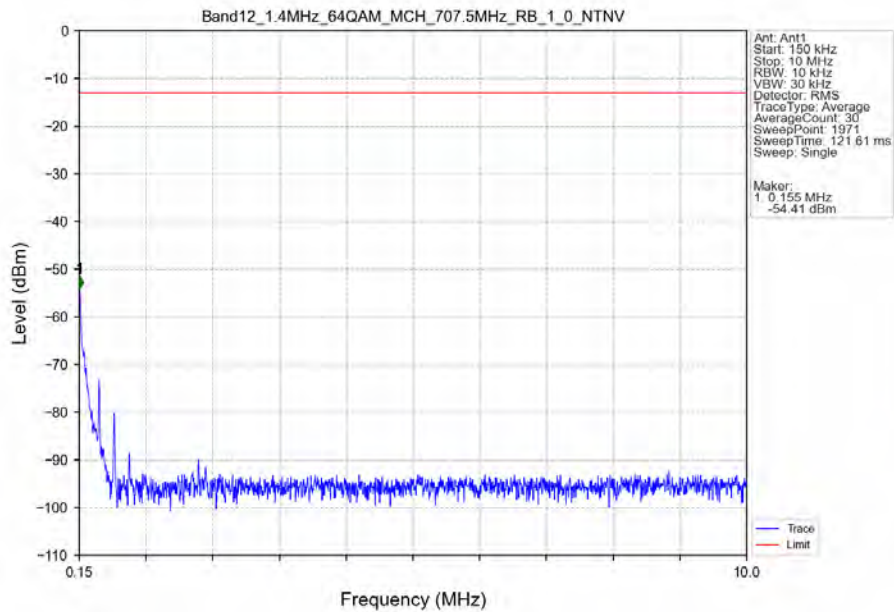


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
696	698.9	0.1	CHP	1	698.844	-32.09	-13	Pass
698.9	699	0.03	/	2	698.904	-34.90	-13	Pass
699	702	0.03	/	/	/	/	/	/

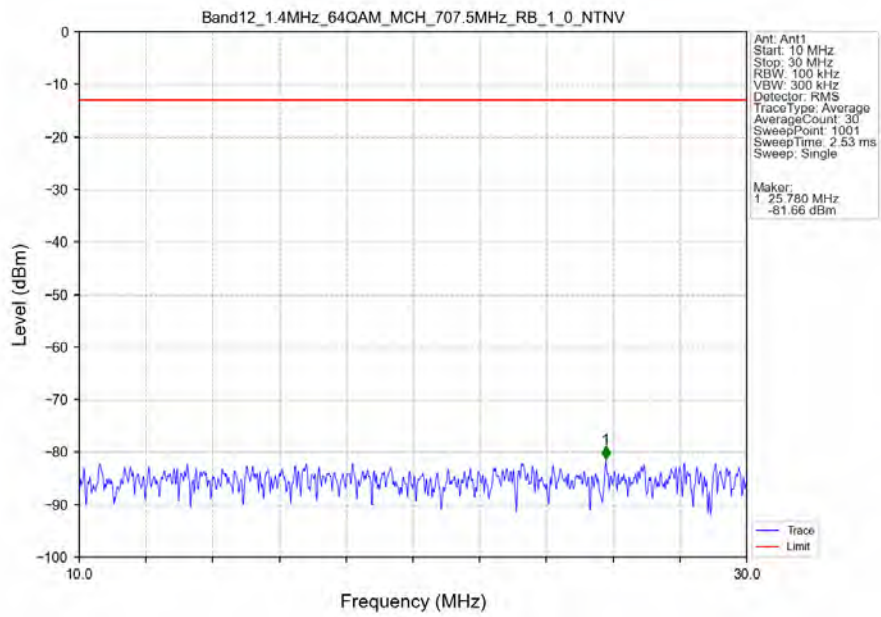
Band12_1.4MHz_64QAM_MCH_707.5MHz_RB_1_0_NTNV



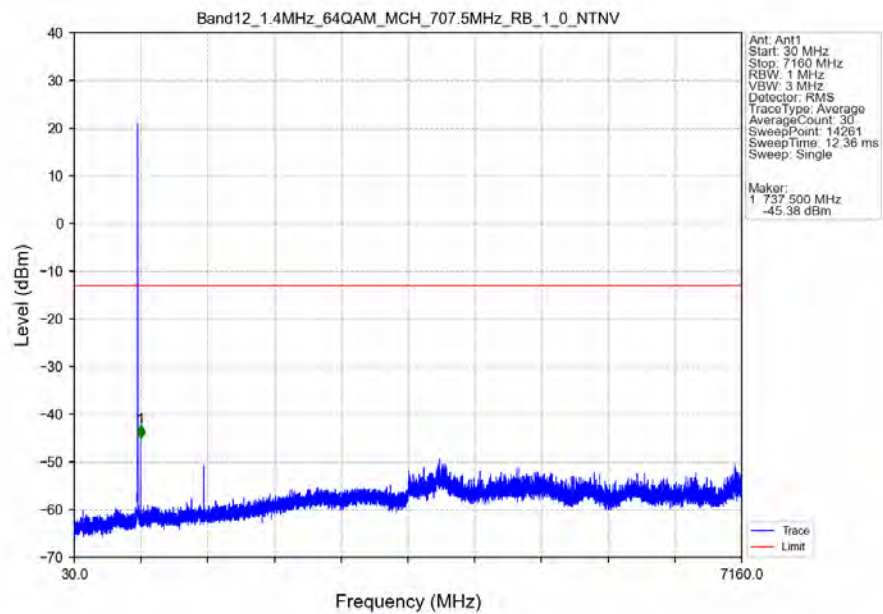
Band12_1.4MHz_64QAM_MCH_707.5MHz_RB_1_0_NTNV



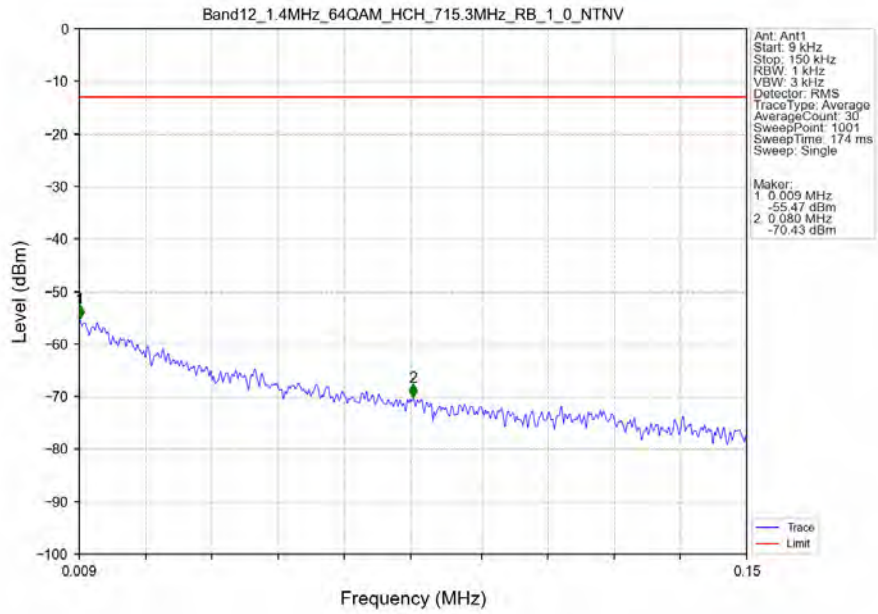
Band12_1.4MHz_64QAM_MCH_707.5MHz_RB_1_0_NTNV



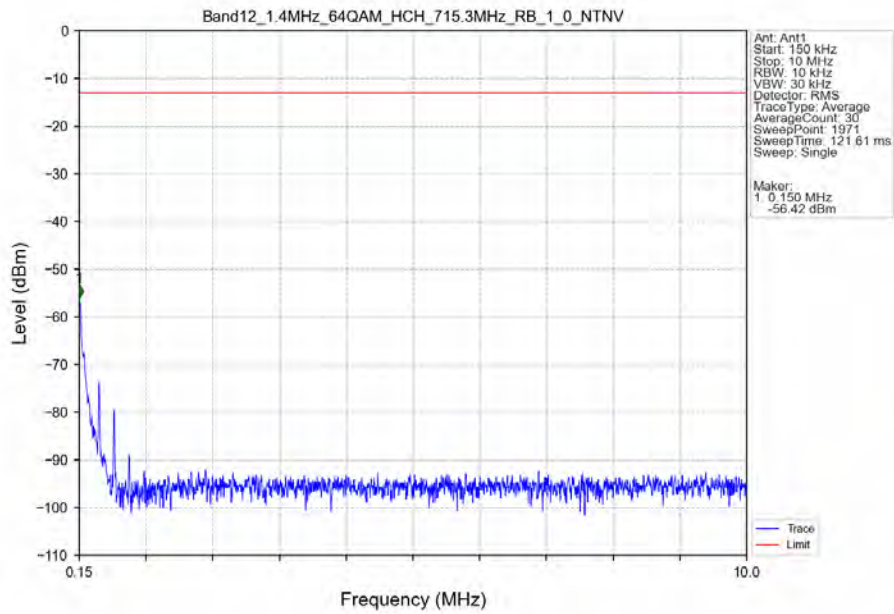
Band12_1.4MHz_64QAM_MCH_707.5MHz_RB_1_0_NTNV



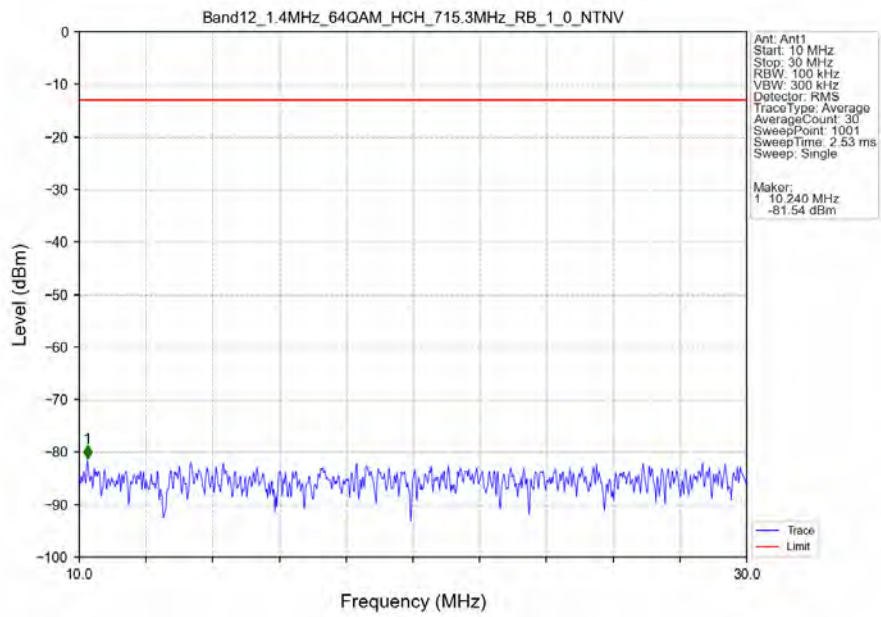
Band12_1.4MHz_64QAM_HCH_715.3MHz_RB_1_0_NTNV



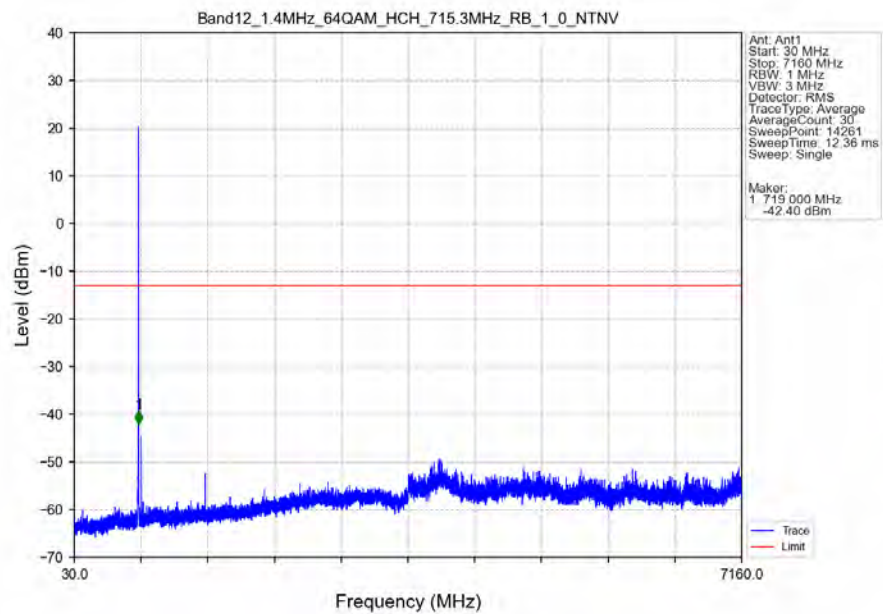
Band12_1.4MHz_64QAM_HCH_715.3MHz_RB_1_0_NTNV



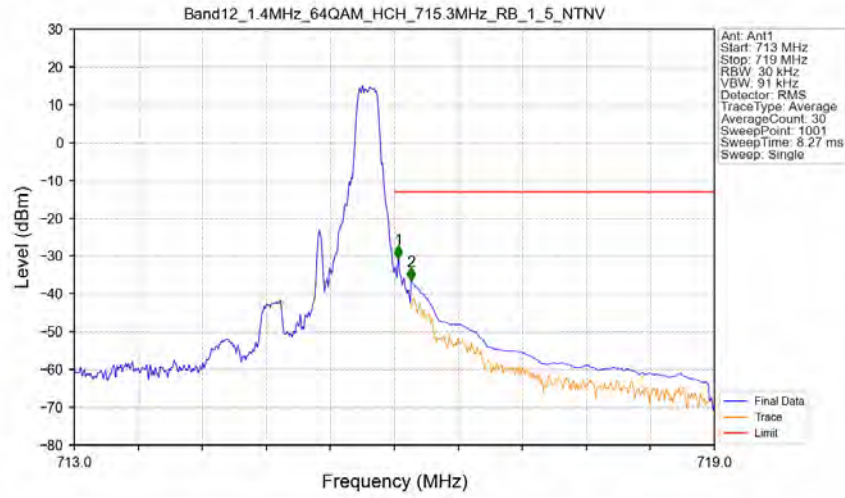
Band12 1.4MHz 64QAM HCH 715.3MHz RB 1 0 NTNV



Band12 1.4MHz 64QAM HCH 715.3MHz RB 1 0 NTNV

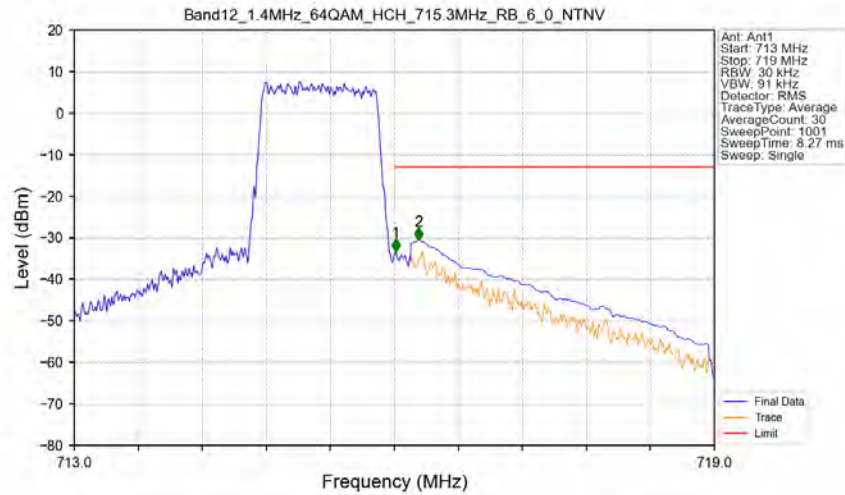


Band12 1.4MHz 64QAM HCH 715.3MHz RB 1 5 NTN



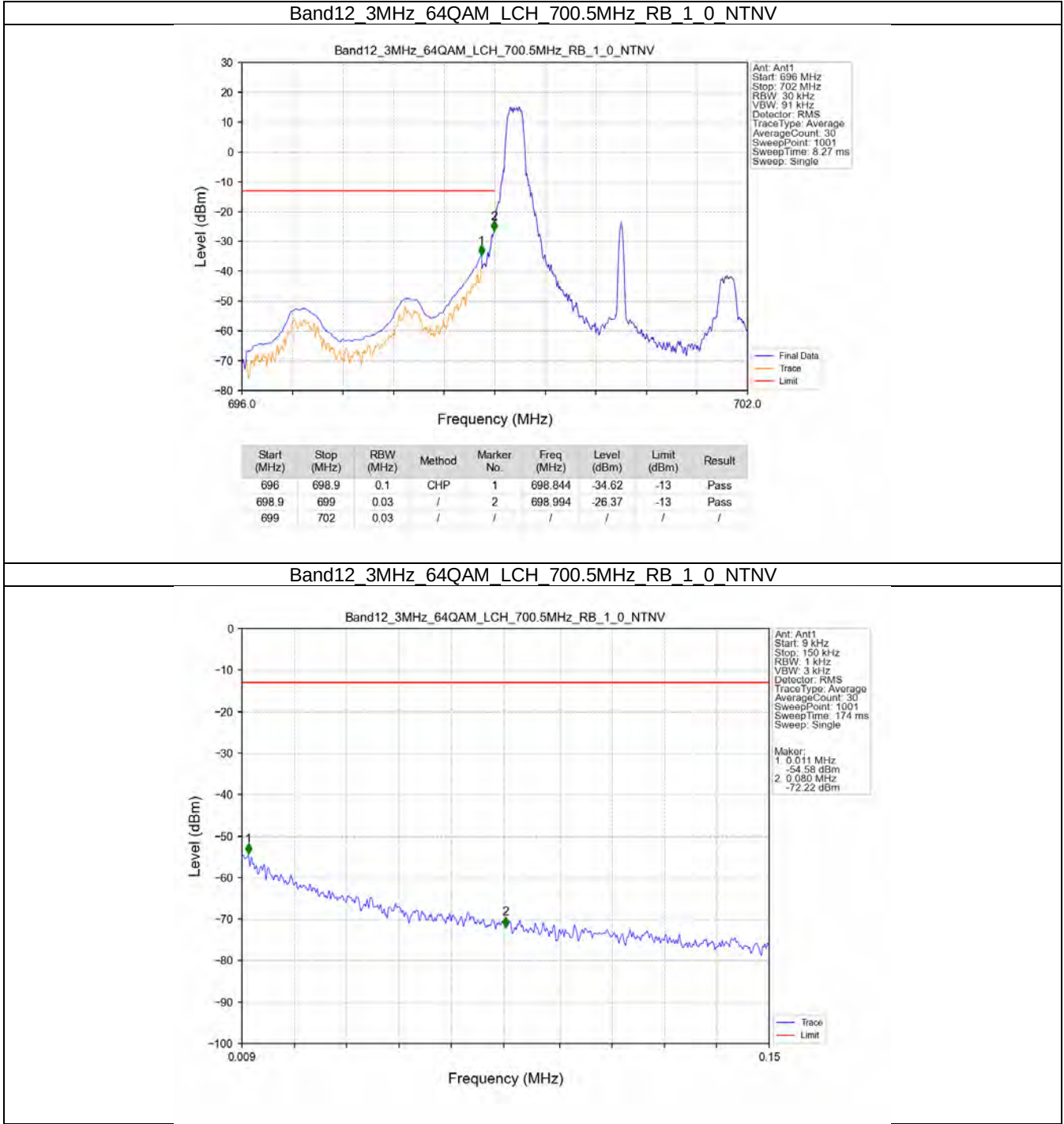
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
713	716	0.03	/	/	/	/	/	/
716	716.1	0.03	/	1	716.036	-30.64	-13	Pass
716.1	719	0.1	CHP	2	716.156	-36.38	-13	Pass

Band12 1.4MHz 64QAM HCH 715.3MHz RB 6 0 NTN

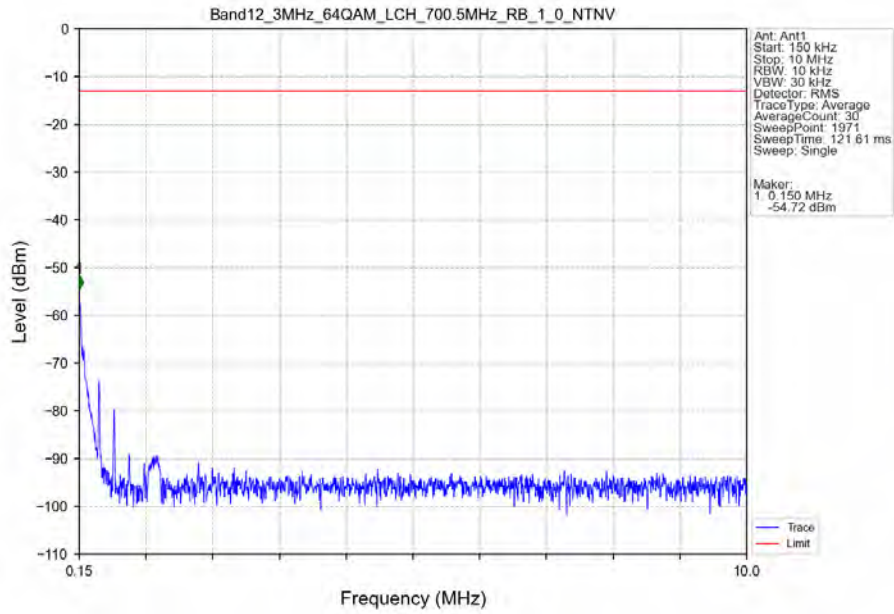


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
713	716	0.03	/	/	/	/	/	/
716	716.1	0.03	/	1	716.012	-33.33	-13	Pass
716.1	719	0.1	CHP	2	716.228	-30.66	-13	Pass

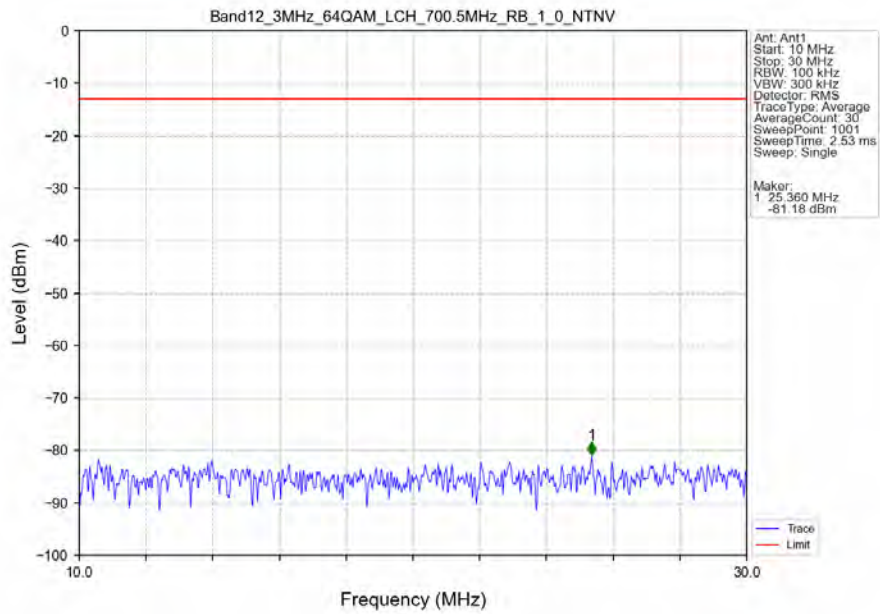
5.2.2 B12_3MHz



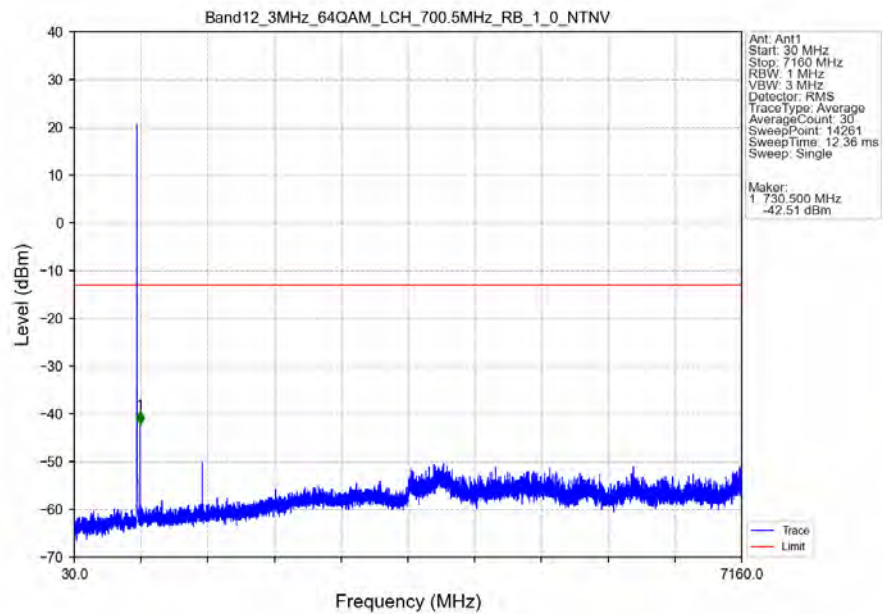
Band12_3MHz_64QAM_LCH_700.5MHz_RB_1_0_NTNV



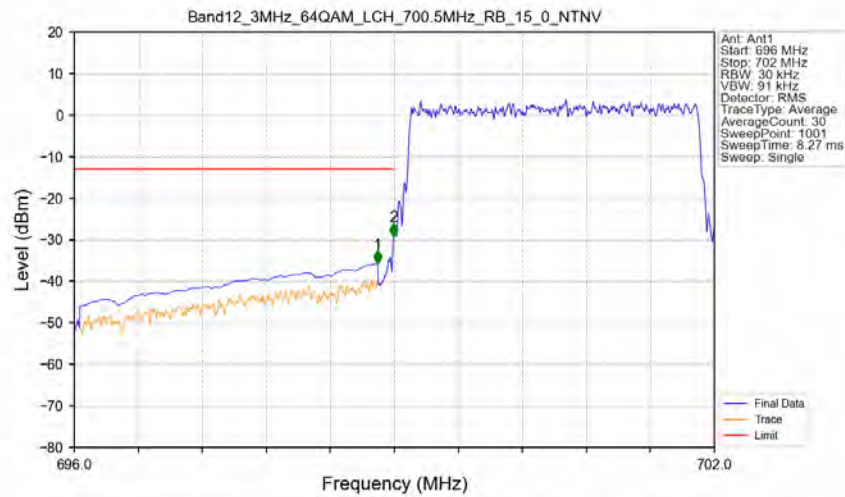
Band12_3MHz_64QAM_LCH_700.5MHz_RB_1_0_NTNV



Band12_3MHz_64QAM_LCH_700.5MHz_RB_1_0_NTNV

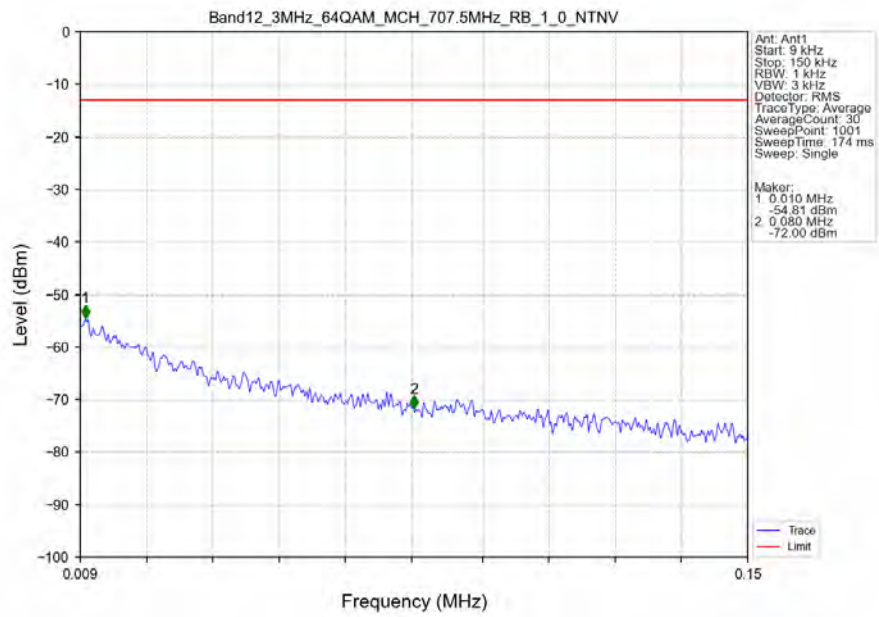


Band12_3MHz_64QAM_LCH_700.5MHz_RB_15_0_NTNV

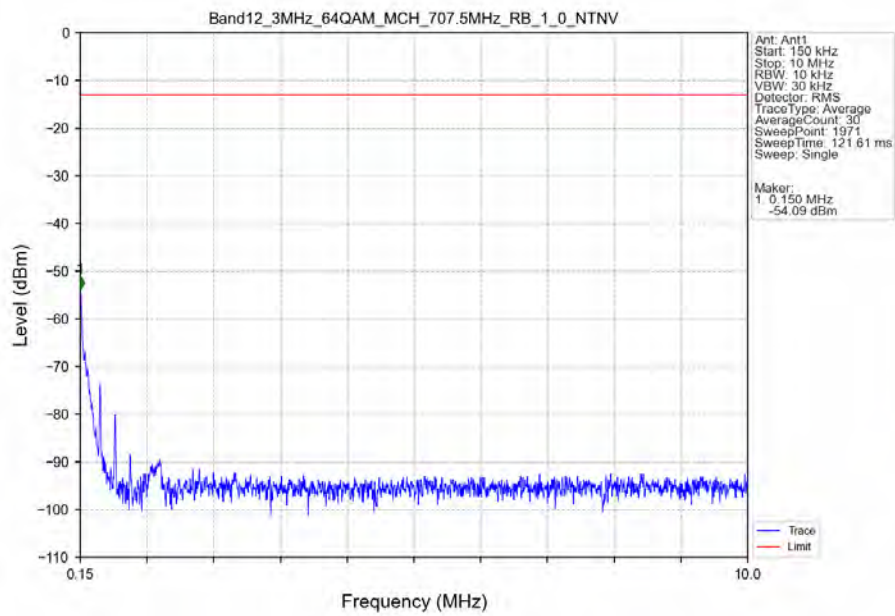


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
696	698.9	0.1	CHP	1	698.844	-35.73	-13	Pass
698.9	699	0.03	/	2	698.994	-29.04	-13	Pass
699	702	0.03	/	/	/	/	/	/

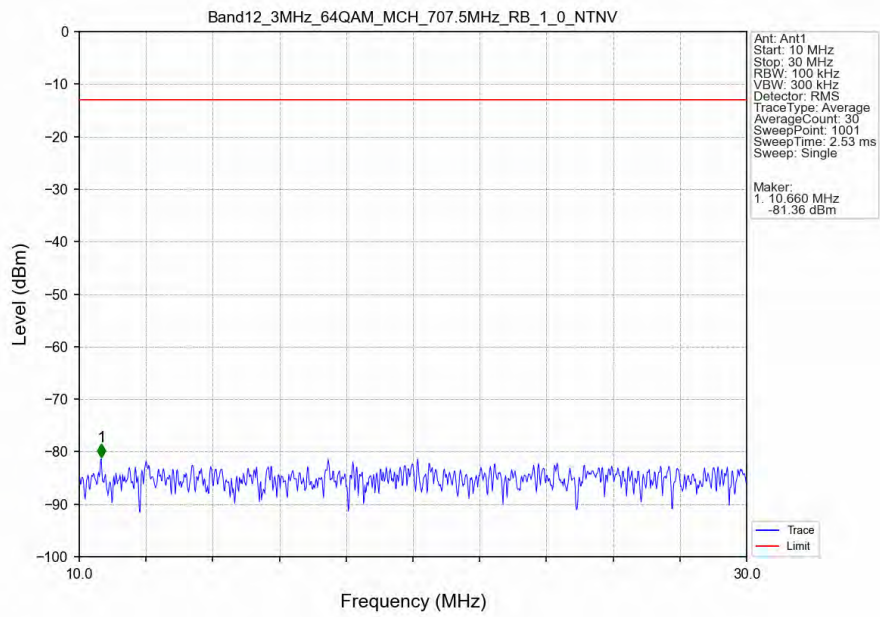
Band12_3MHz_64QAM_MCH_707.5MHz_RB_1_0_NTNV



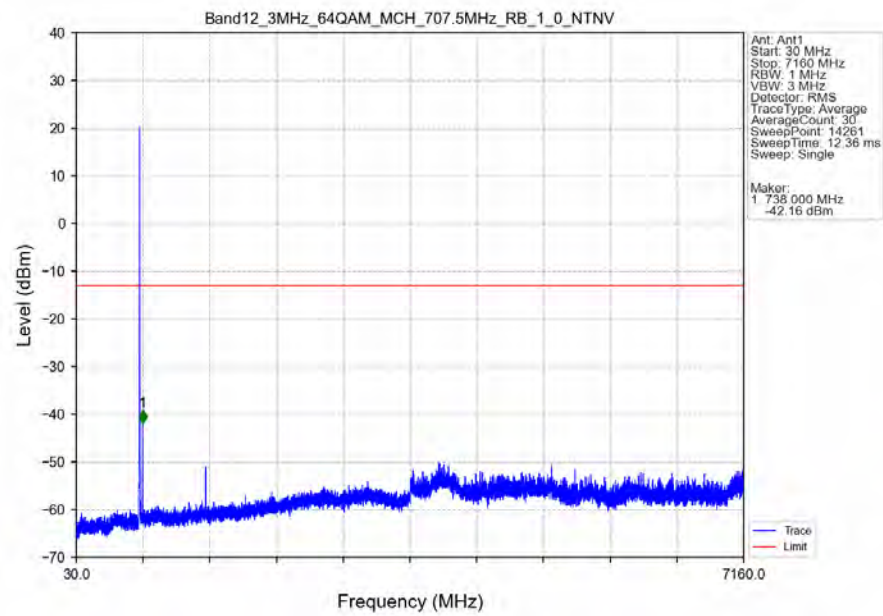
Band12_3MHz_64QAM_MCH_707.5MHz_RB_1_0_NTNV



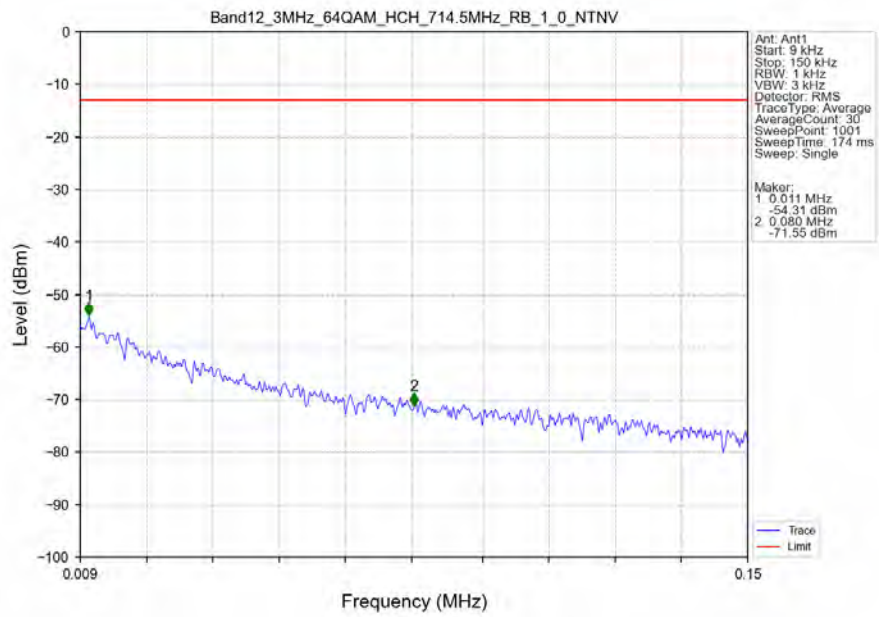
Band12_3MHz_64QAM_MCH_707.5MHz_RB_1_0_NTNV



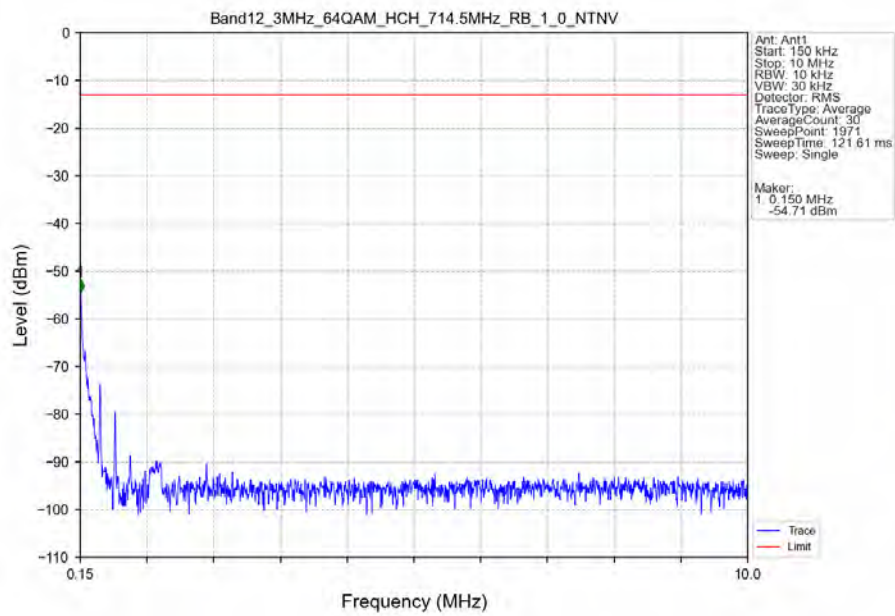
Band12_3MHz_64QAM_MCH_707.5MHz_RB_1_0_NTNV



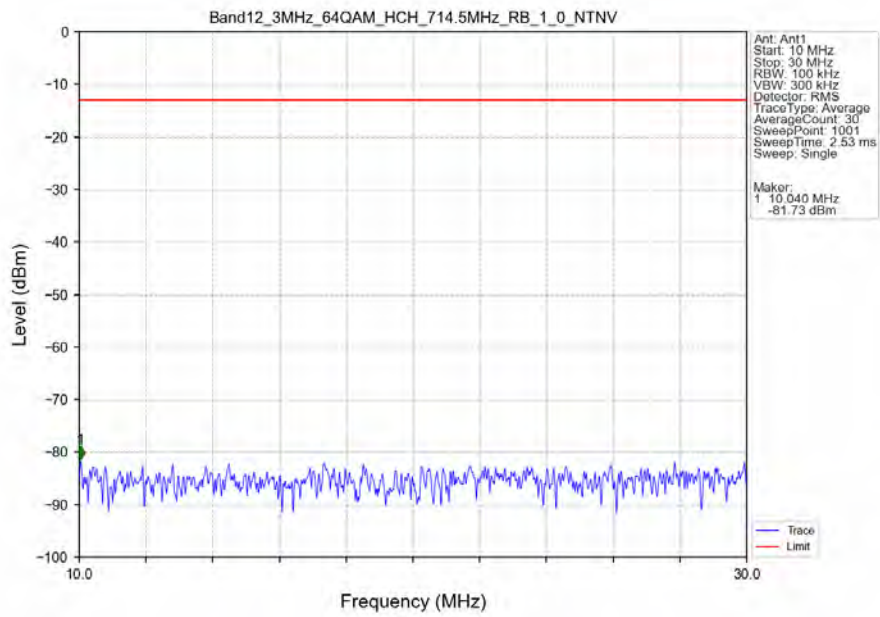
Band12_3MHz_64QAM_HCH_714.5MHz_RB_1_0_NTNV



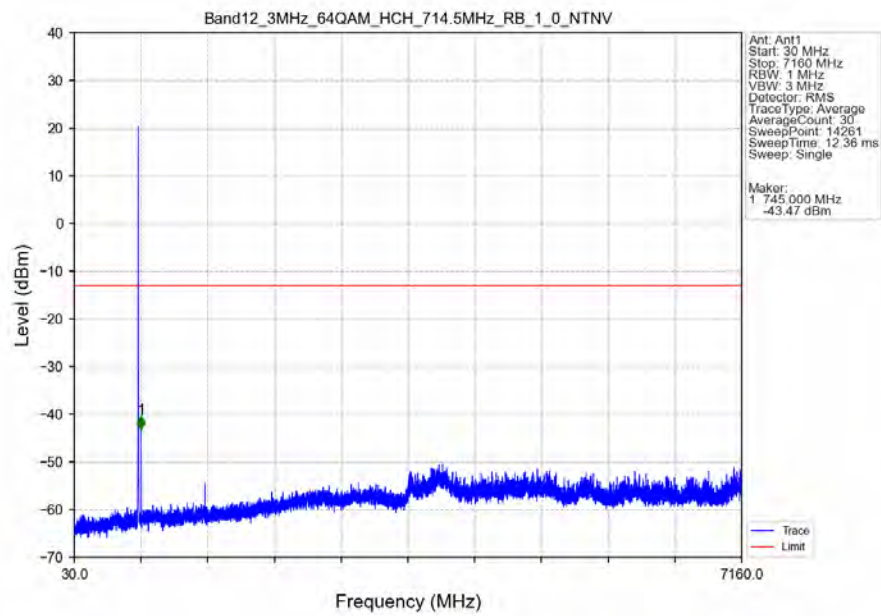
Band12_3MHz_64QAM_HCH_714.5MHz_RB_1_0_NTNV



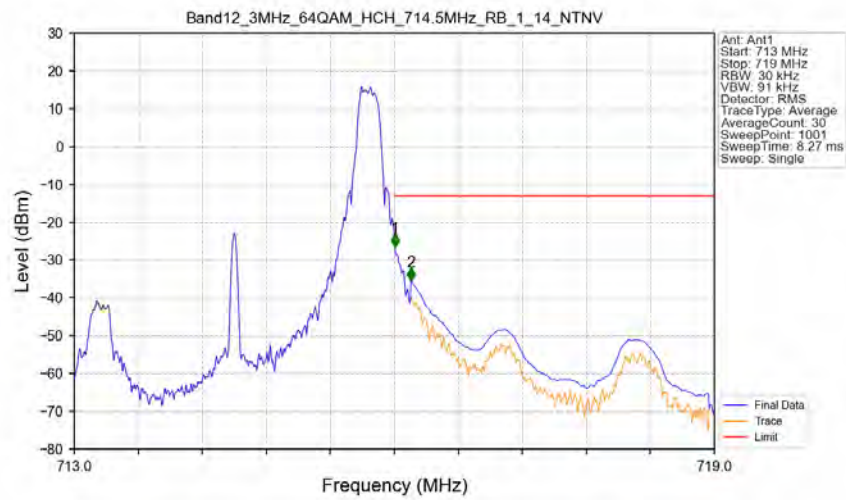
Band12_3MHz_64QAM_HCH_714.5MHz_RB_1_0_NTNV



Band12_3MHz_64QAM_HCH_714.5MHz_RB_1_0_NTNV

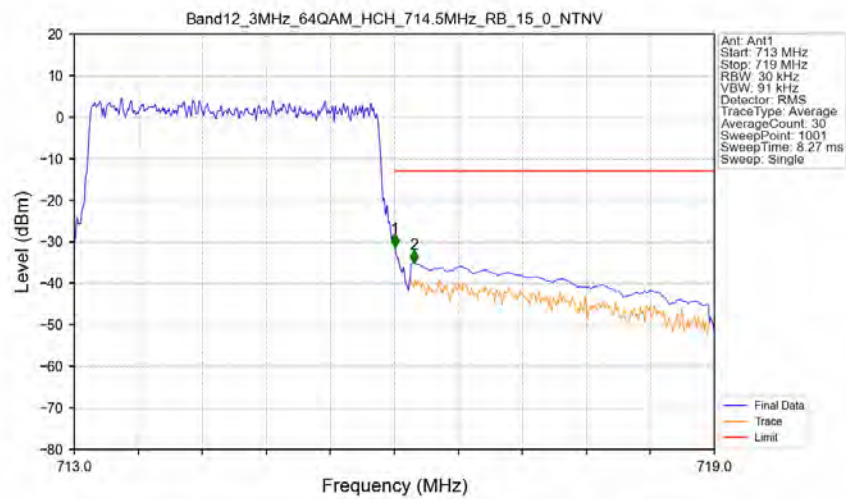


Band12_3MHz_64QAM_HCH_714.5MHz_RB_1_14_NTNV



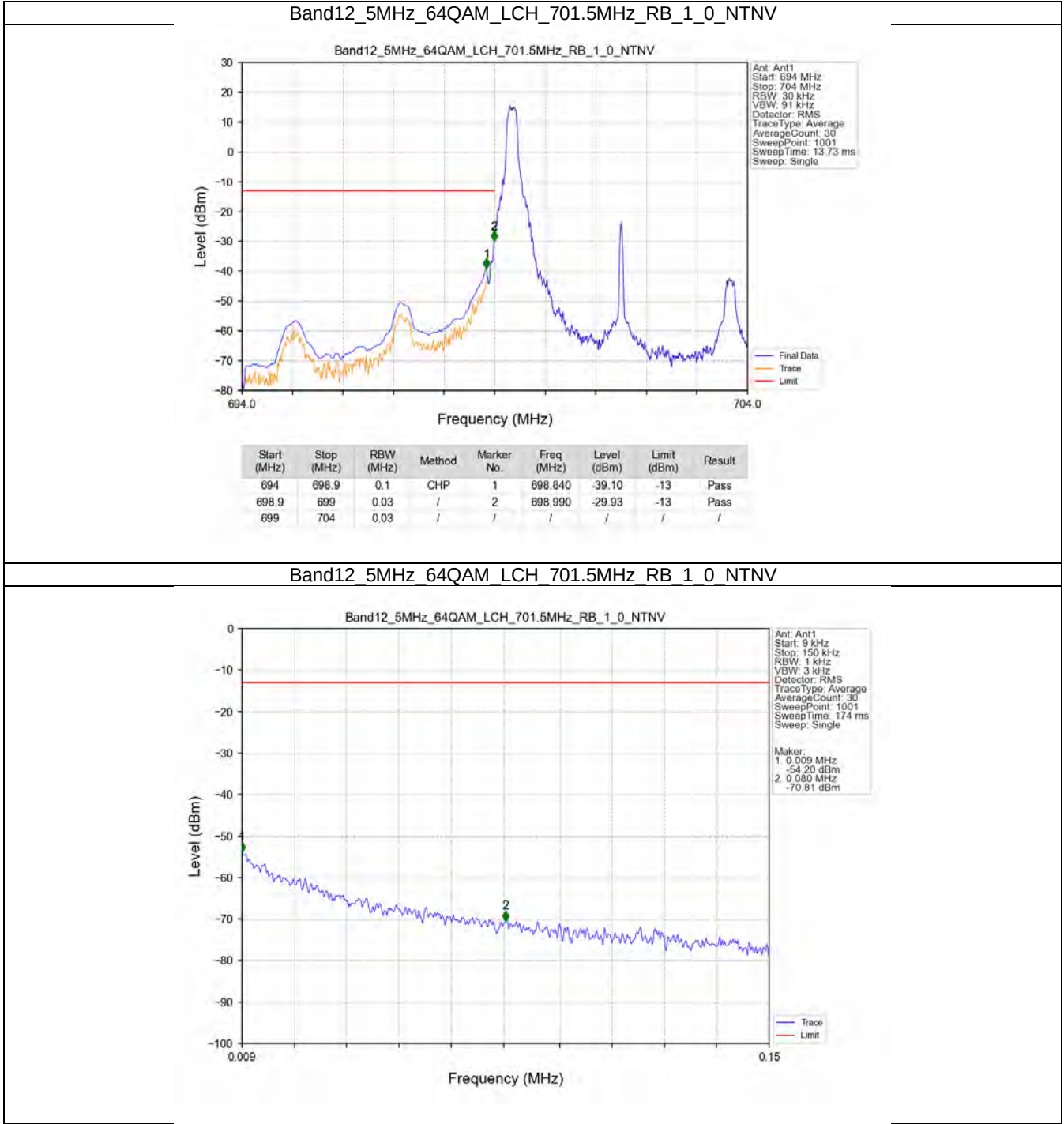
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
713	716	0.03	/	/	/	/	/	/
716	716.1	0.03	/	1	716.006	-26.43	-13	Pass
716.1	719	0.1	CHP	2	716.156	-35.48	-13	Pass

Band12_3MHz_64QAM_HCH_714.5MHz_RB_15_0_NTNV

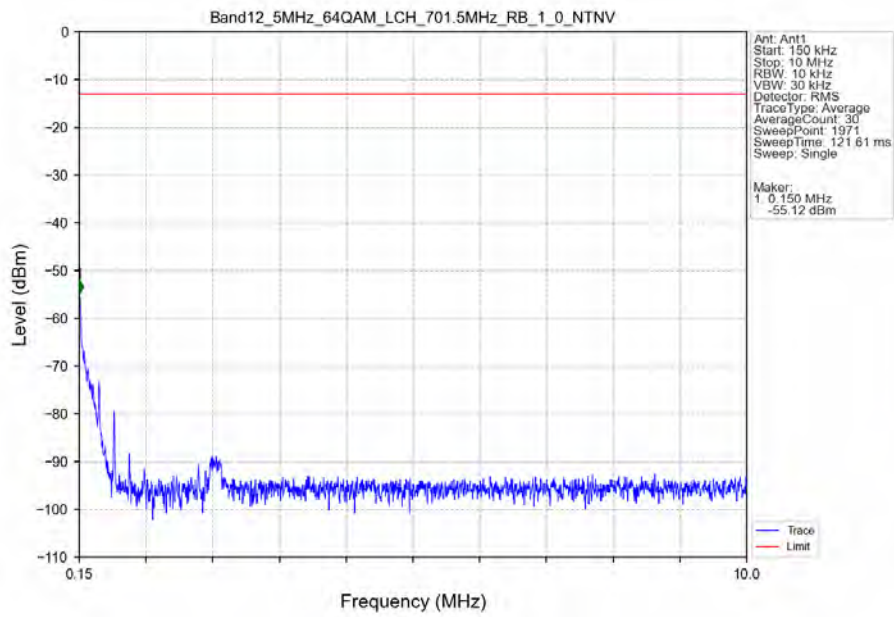


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
713	716	0.03	/	/	/	/	/	/
716	716.1	0.03	/	1	716.006	-31.38	-13	Pass
716.1	719	0.1	CHP	2	716.186	-35.07	-13	Pass

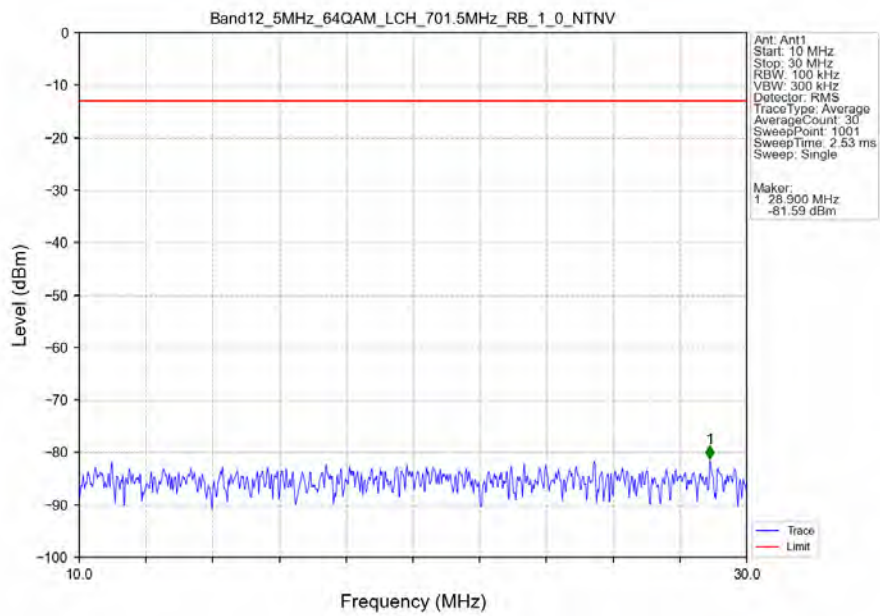
5.2.3 B12_5MHz



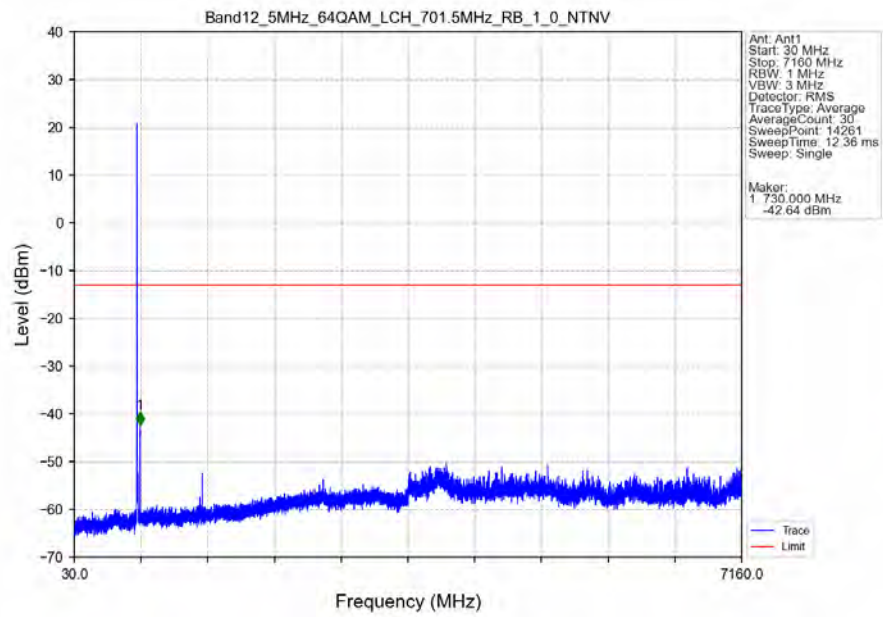
Band12_5MHz_64QAM_LCH_701.5MHz_RB_1_0_NTNV



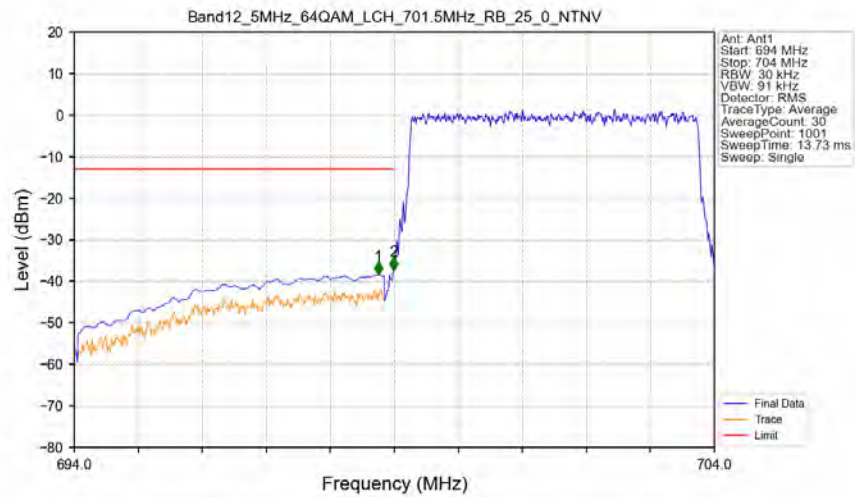
Band12_5MHz_64QAM_LCH_701.5MHz_RB_1_0_NTNV



Band12_5MHz_64QAM_LCH_701.5MHz_RB_1_0_NTNV

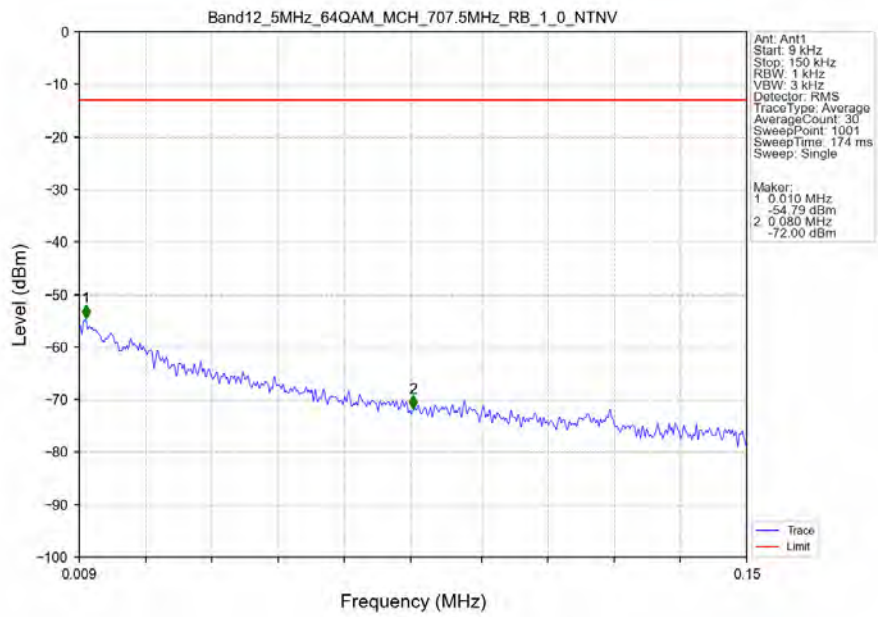


Band12_5MHz_64QAM_LCH_701.5MHz_RB_25_0_NTNV

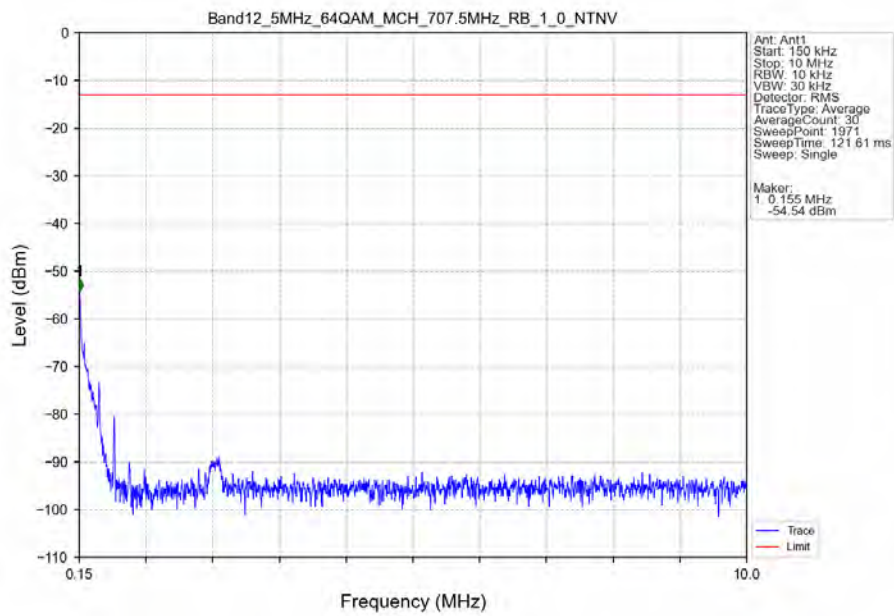


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
694	698.9	0.1	CHP	1	698.750	-38.48	-13	Pass
698.9	699	0.03	/	2	698.990	-37.31	-13	Pass
699	704	0.03	/	/	/	/	/	/

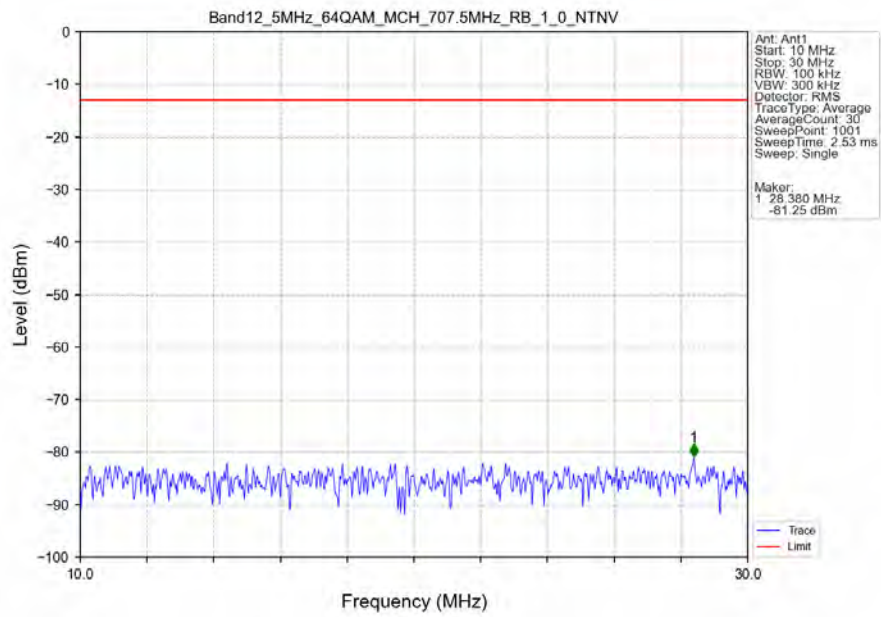
Band12_5MHz_64QAM_MCH_707.5MHz_RB_1_0_NTNV



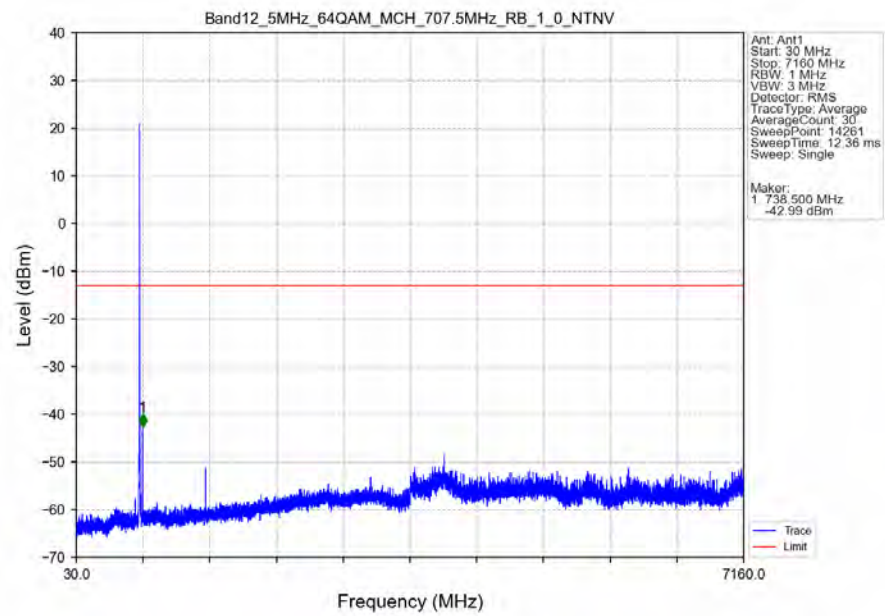
Band12_5MHz_64QAM_MCH_707.5MHz_RB_1_0_NTNV



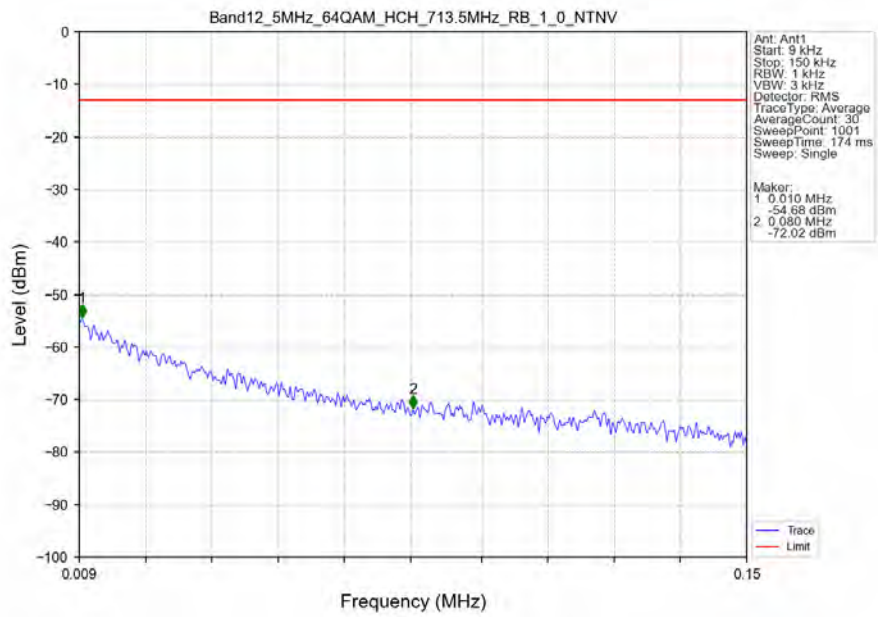
Band12_5MHz_64QAM_MCH_707.5MHz_RB_1_0_NTNV



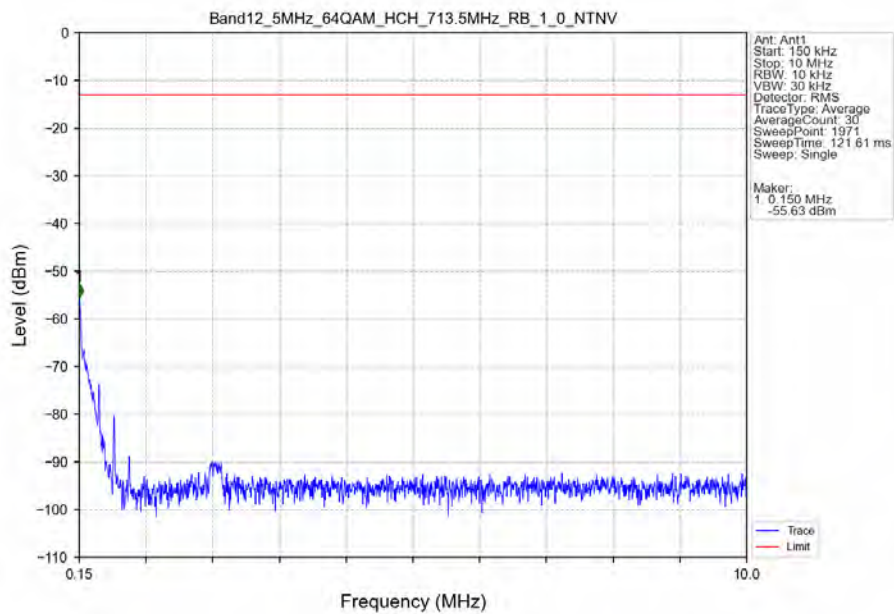
Band12_5MHz_64QAM_MCH_707.5MHz_RB_1_0_NTNV



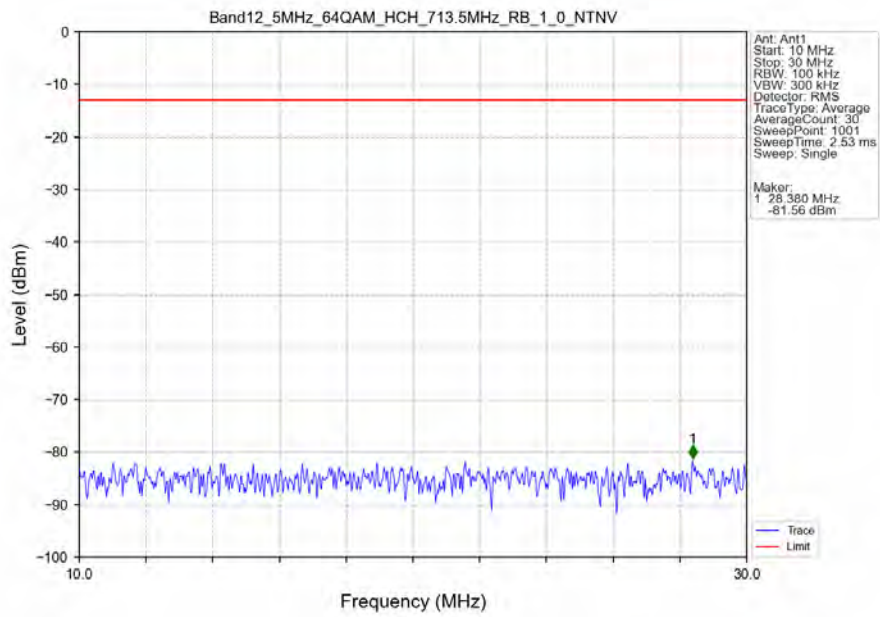
Band12_5MHz_64QAM_HCH_713.5MHz_RB_1_0_NTNV



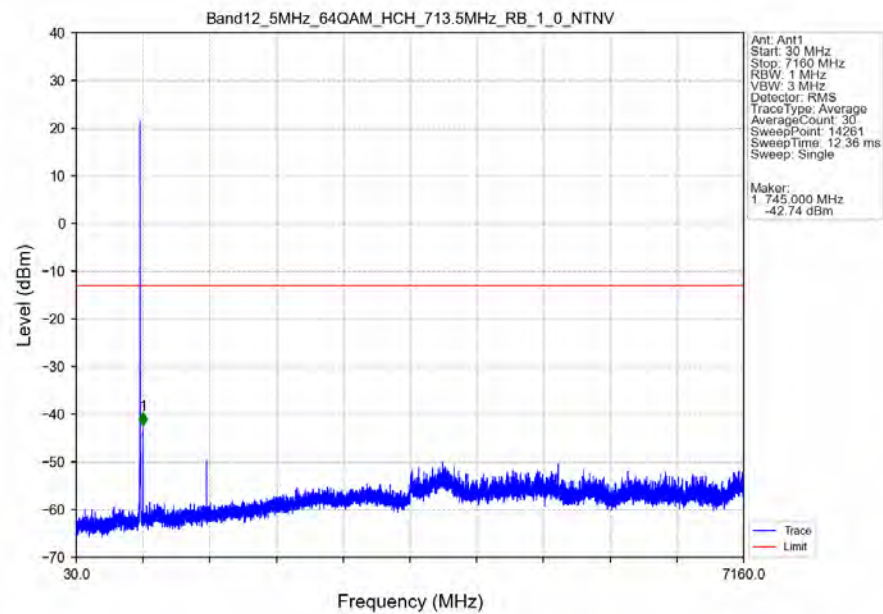
Band12_5MHz_64QAM_HCH_713.5MHz_RB_1_0_NTNV



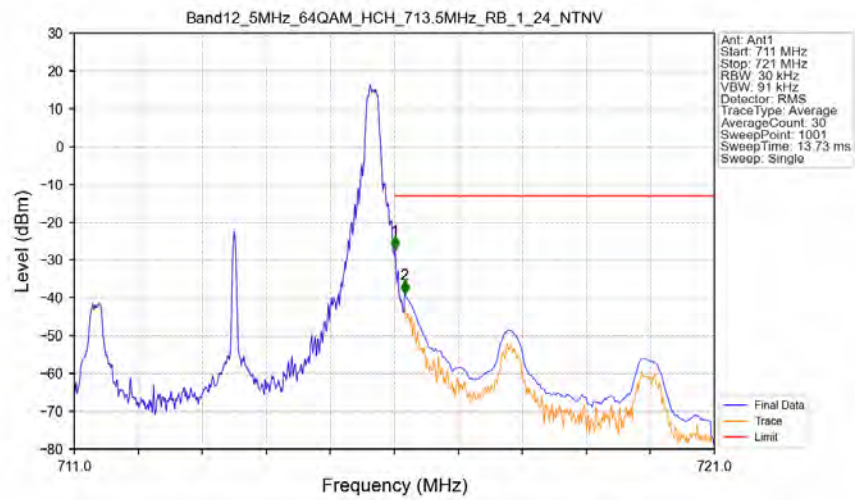
Band12_5MHz_64QAM_HCH_713.5MHz_RB_1_0_NTNV



Band12_5MHz_64QAM_HCH_713.5MHz_RB_1_0_NTNV

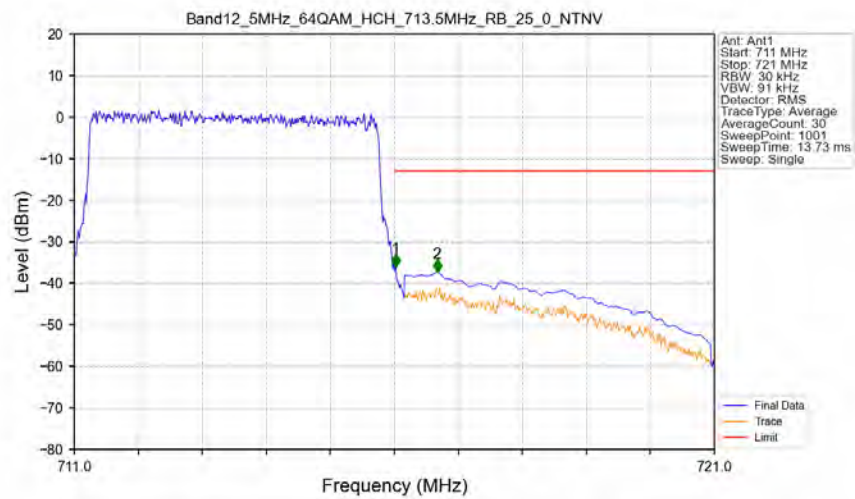


Band12 5MHz 64QAM HCH 713.5MHz RB 1 24 NTV



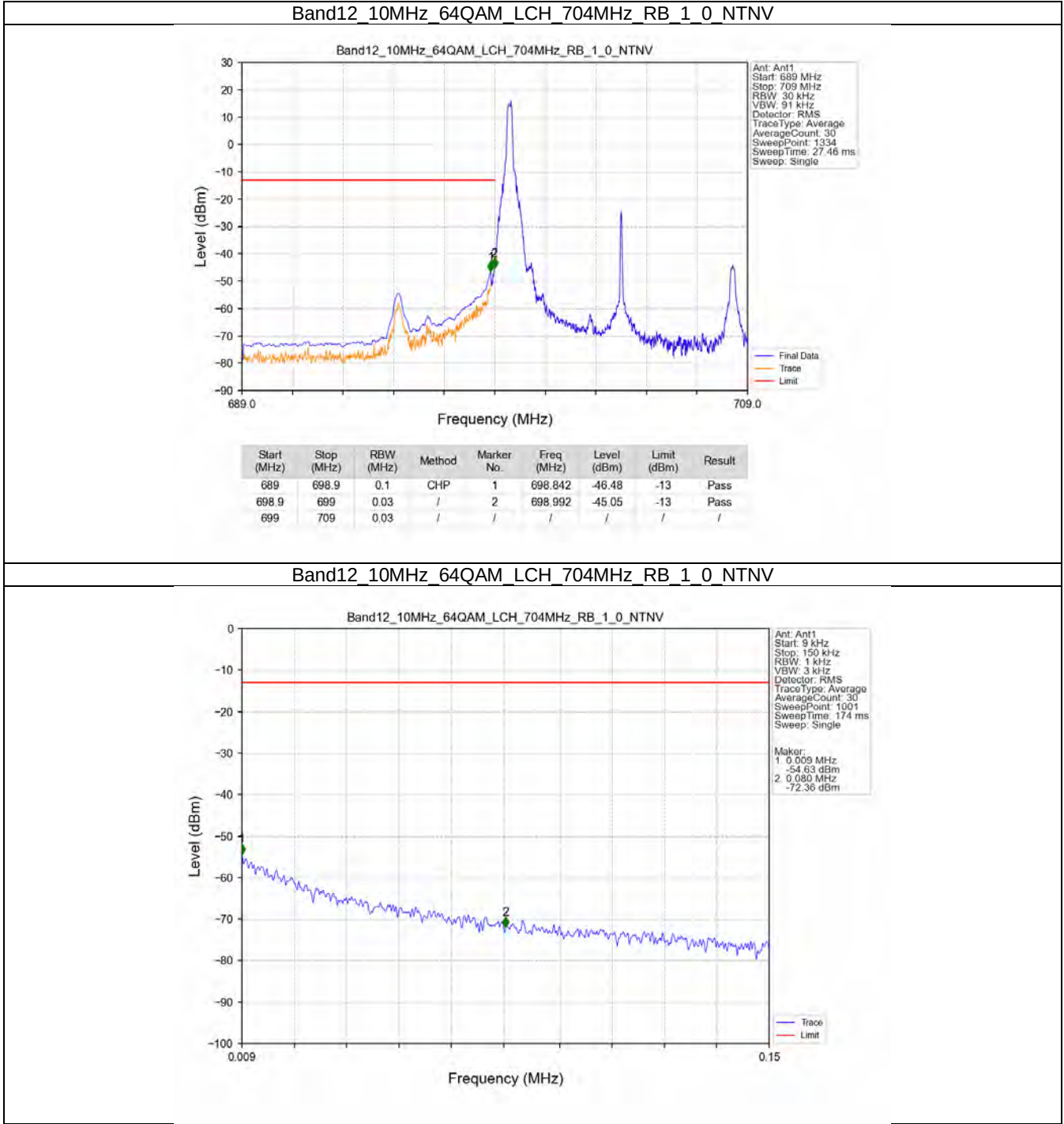
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
711	716	0.03	/	/	/	/	/	/
716	716.1	0.03	/	1	716.010	-27.33	-13	Pass
716.1	721	0.1	CHP	2	716.160	-38.84	-13	Pass

Band12 5MHz 64QAM HCH 713.5MHz RB 25 0 NTV

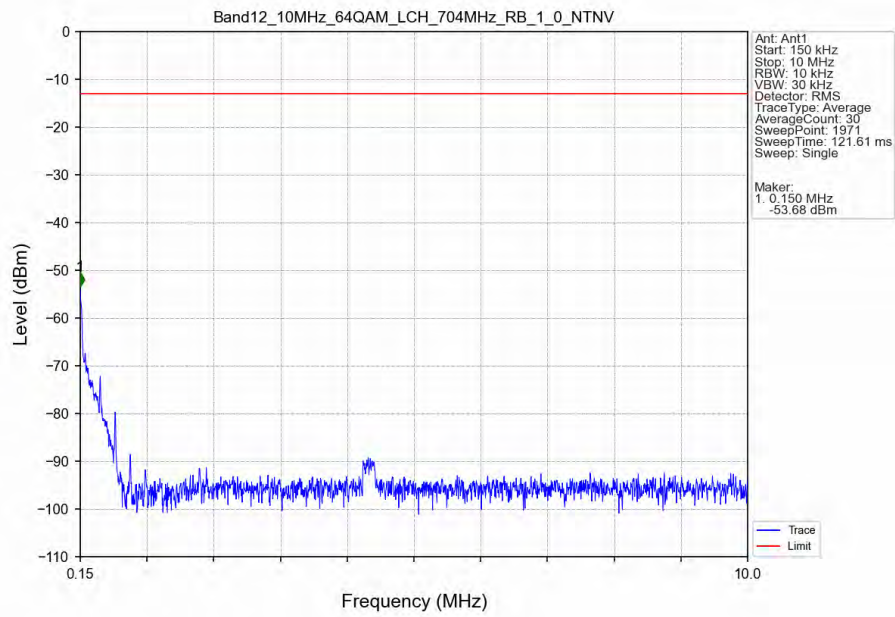


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
711	716	0.03	/	/	/	/	/	/
716	716.1	0.03	/	1	716.020	-36.06	-13	Pass
716.1	721	0.1	CHP	2	716.670	-37.36	-13	Pass

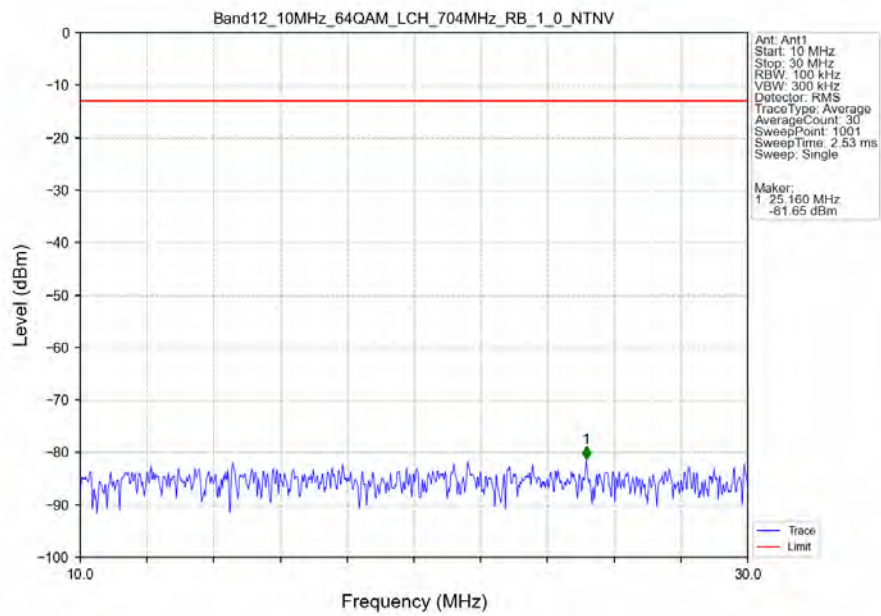
5.2.4 B12_10MHz



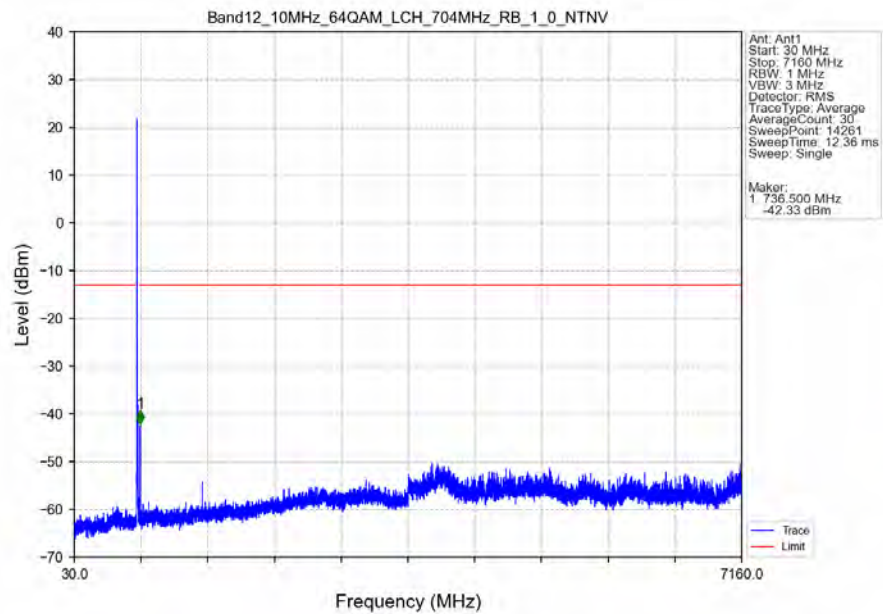
Band12_10MHz_64QAM_LCH_704MHz_RB_1_0_NTNV



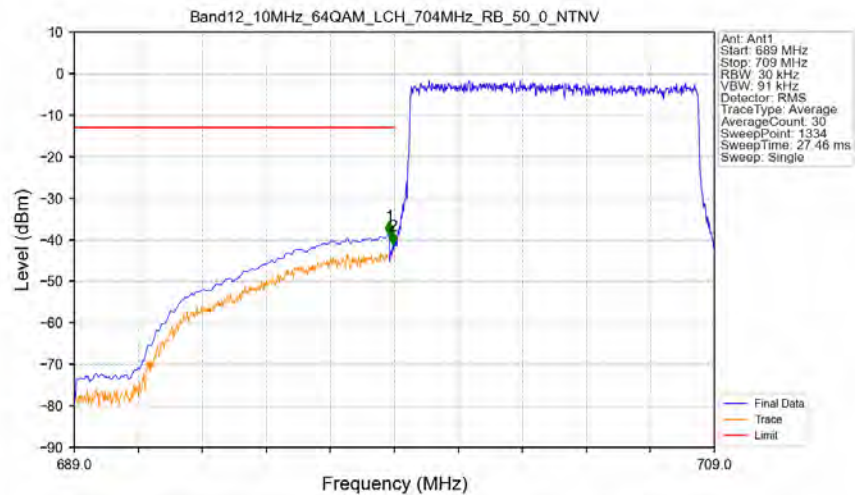
Band12_10MHz_64QAM_LCH_704MHz_RB_1_0_NTNV



Band12_10MHz_64QAM_LCH_704MHz_RB_1_0_NTNV

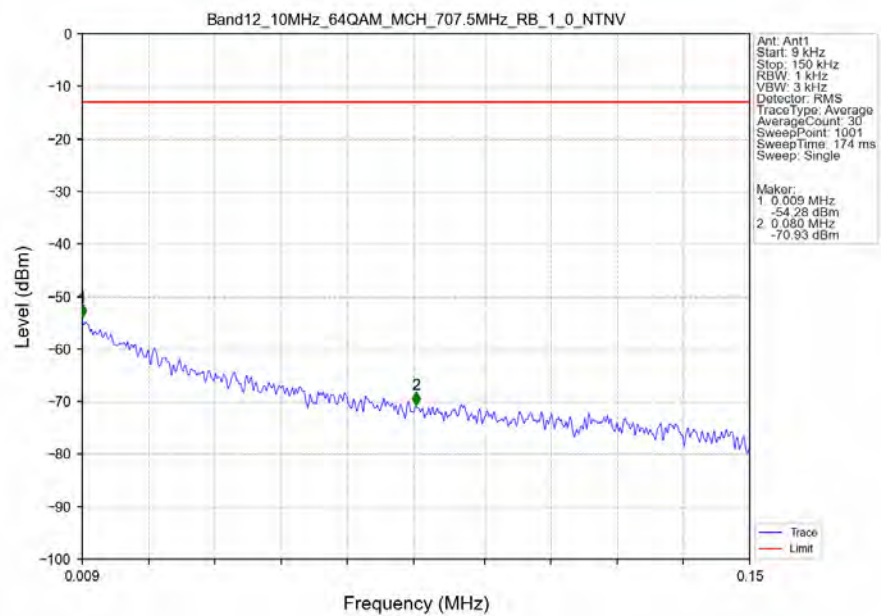


Band12_10MHz_64QAM_LCH_704MHz_RB_50_0_NTNV

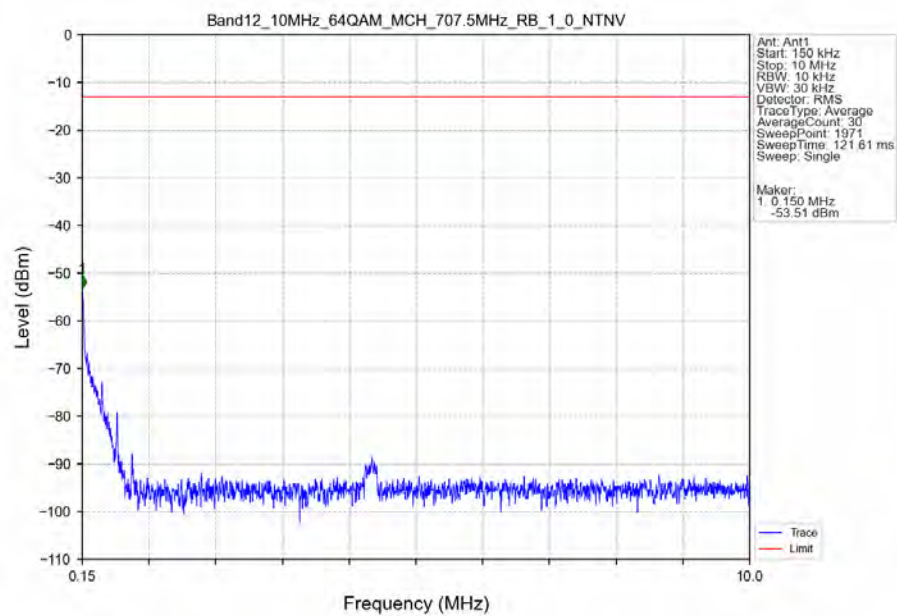


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
689	698.9	0.1	CHP	1	698.842	-38.74	-13	Pass
698.9	699	0.03	/	2	698.962	-41.13	-13	Pass
699	709	0.03	/	/	/	/	/	/

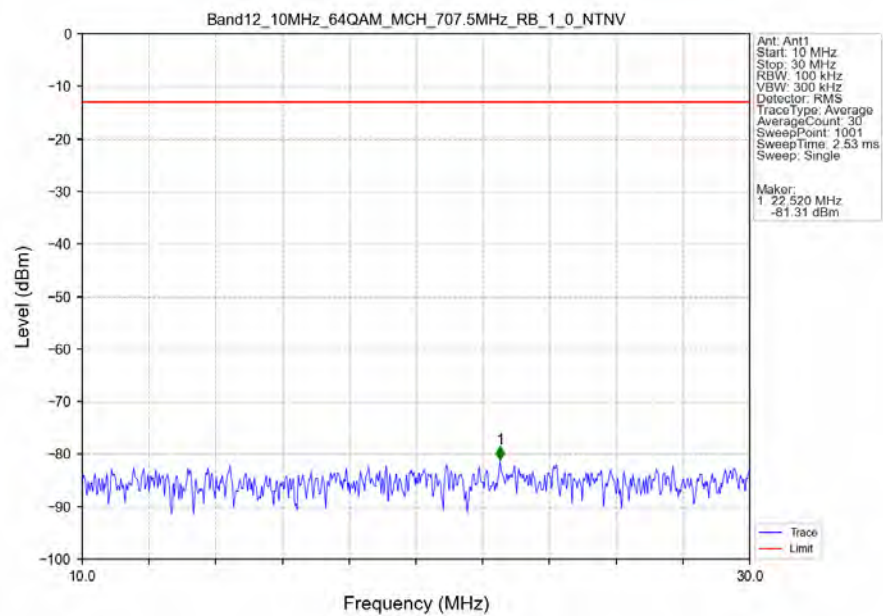
Band12_10MHz_64QAM_MCH_707.5MHz_RB_1_0_NTNV



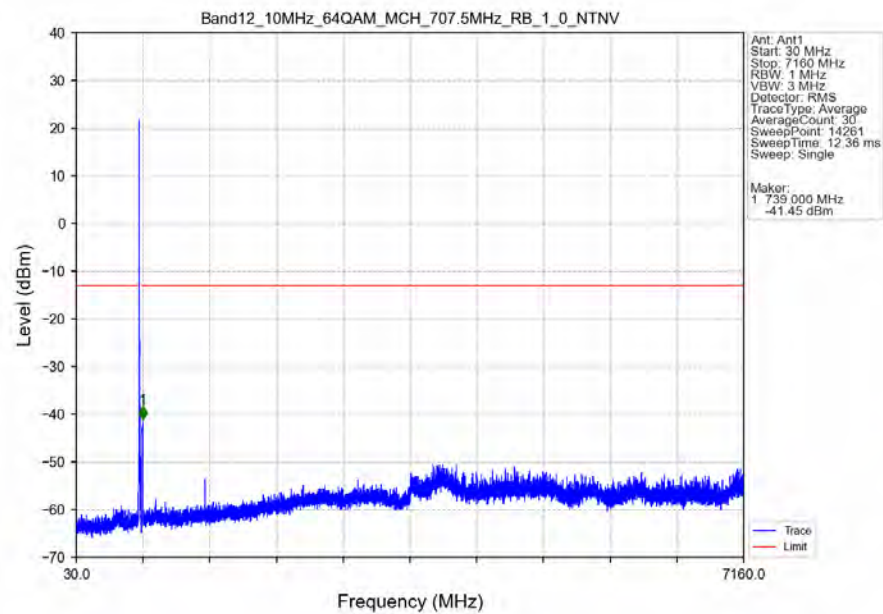
Band12_10MHz_64QAM_MCH_707.5MHz_RB_1_0_NTNV



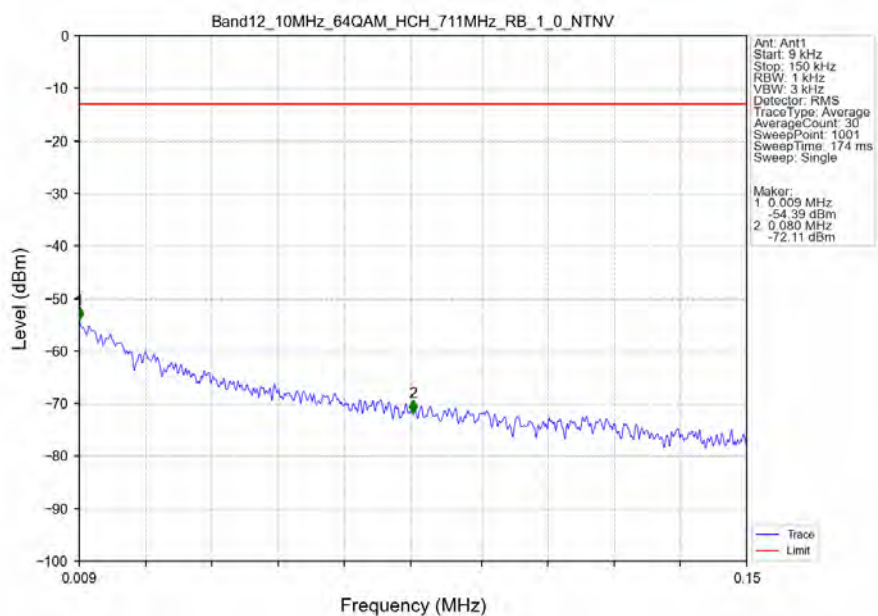
Band12_10MHz_64QAM_MCH_707.5MHz_RB_1_0_NTNV



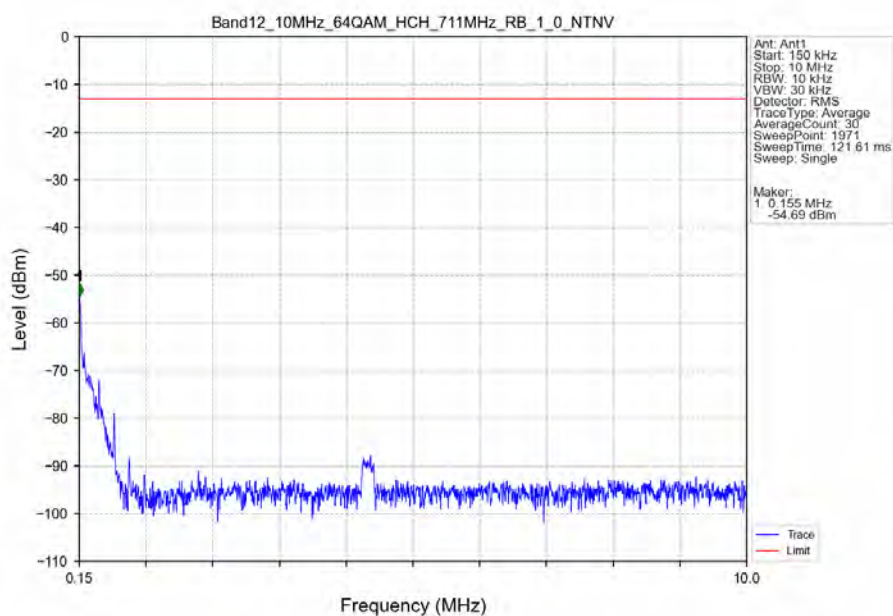
Band12_10MHz_64QAM_MCH_707.5MHz_RB_1_0_NTNV



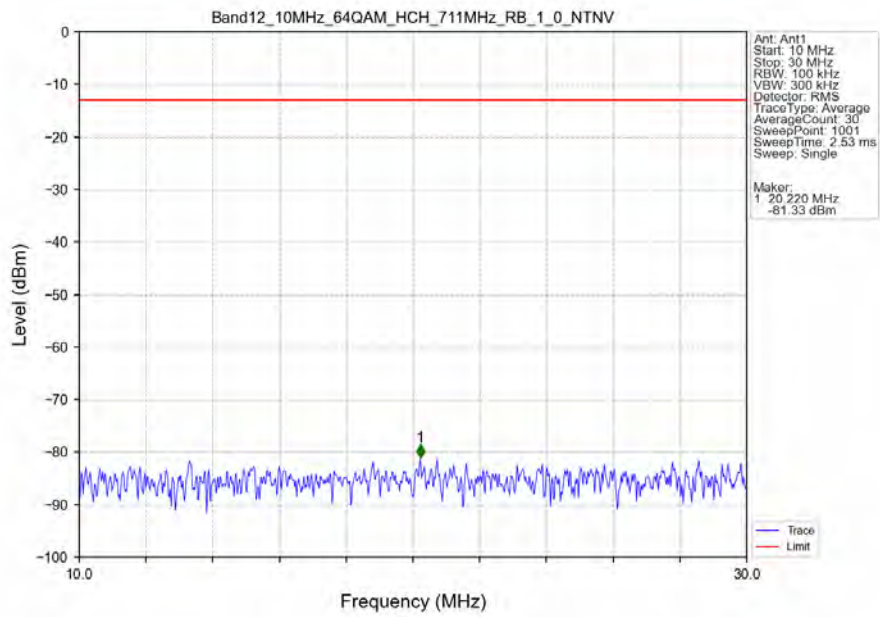
Band12_10MHz_64QAM_HCH_711MHz_RB_1_0_NTNV



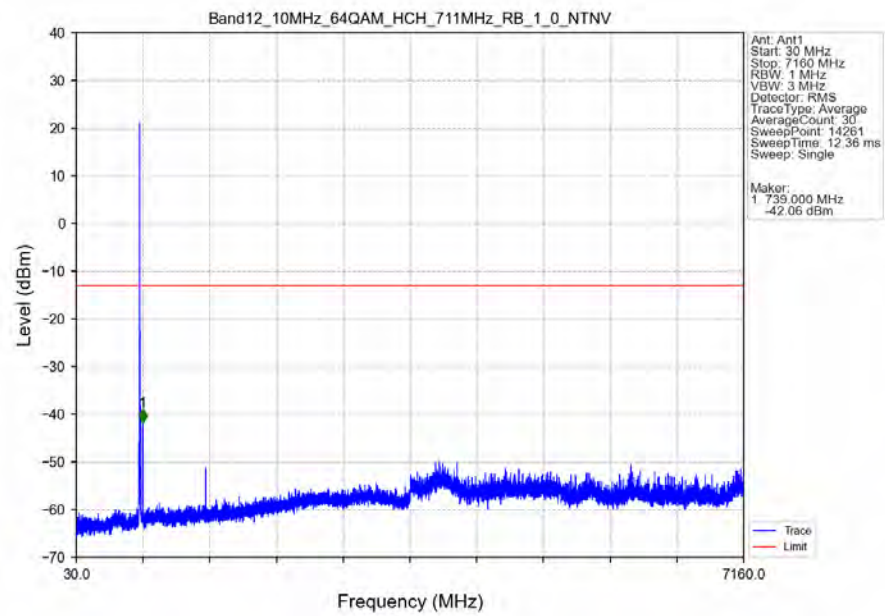
Band12_10MHz_64QAM_HCH_711MHz_RB_1_0_NTNV



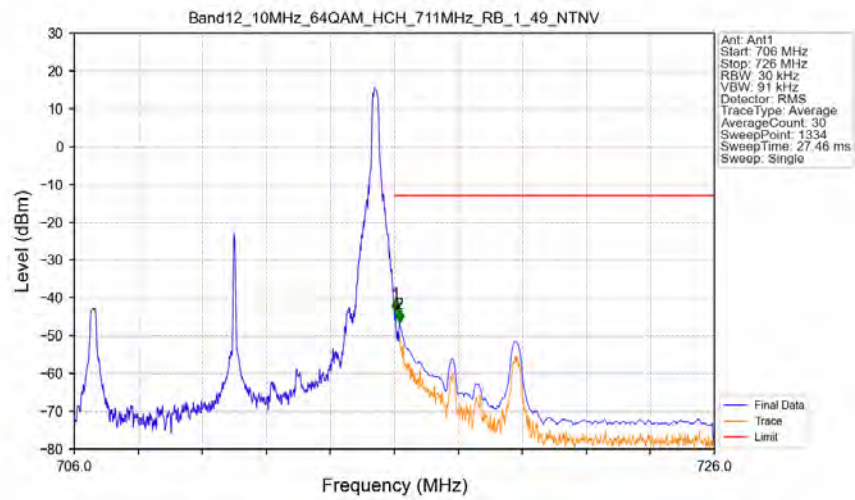
Band12_10MHz_64QAM_HCH_711MHz_RB_1_0_NTNV



Band12_10MHz_64QAM_HCH_711MHz_RB_1_0_NTNV

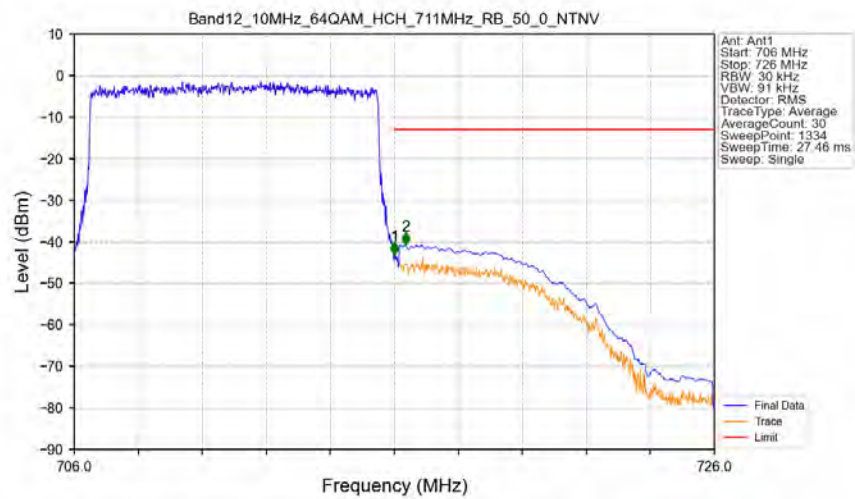


Band12_10MHz_64QAM_HCH_711MHz_RB_1_49_NTNV



Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
706	716	0.03	/	/	/	/	/	/
716	716.1	0.03	/	1	716.038	-43.67	-13	Pass
716.1	726	0.1	CHP	2	716.158	-46.49	-13	Pass

Band12_10MHz_64QAM_HCH_711MHz_RB_50_0_NTNV



Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
706	716	0.03	/	/	/	/	/	/
716	716.1	0.03	/	1	716.008	-43.06	-13	Pass
716.1	726	0.1	CHP	2	716.353	-40.77	-13	Pass

6. Field Strength of Spurious Radiation

LTE Band 12-Low channel								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable Loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
1399.0	-67.83	-13	-54.83	-70.6	2.47	5.24	Horizontal	Pass
2098.5	-70.11	-13	-57.11	-72.18	2.79	4.86	Horizontal	Pass
2798.0	-68.38	-13	-55.38	-71.74	3.12	6.48	Horizontal	Pass
1399.0	-69.93	-13	-56.93	-72.7	2.47	5.24	Vertical	Pass
2098.5	-70.22	-13	-57.22	-72.29	2.79	4.86	Vertical	Pass
2798.0	-68.58	-13	-55.58	-71.94	3.12	6.48	Vertical	Pass

LTE Band 12-Middle channel								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable Loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
1406.0	-66.89	-13	-53.89	-69.69	2.48	5.28	Horizontal	Pass
2109.0	-69.58	-13	-56.58	-71.66	2.8	4.88	Horizontal	Pass
2812.0	-68.89	-13	-55.89	-72.28	3.12	6.51	Horizontal	Pass
1406.0	-70.36	-13	-57.36	-73.16	2.48	5.28	Vertical	Pass
2109.0	-70.19	-13	-57.19	-72.27	2.8	4.88	Vertical	Pass
2812.0	-68.63	-13	-55.63	-72.02	3.12	6.51	Vertical	Pass

LTE Band 12-High channel								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable Loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
1413.0	-70.65	-13	-57.65	-73.49	2.49	5.33	Horizontal	Pass
2119.5	-70.24	-13	-57.24	-72.34	2.81	4.91	Horizontal	Pass
2826.0	-68.88	-13	-55.88	-72.29	3.13	6.54	Horizontal	Pass
1413.0	-70.37	-13	-57.37	-73.21	2.49	5.33	Vertical	Pass
2119.5	-70.3	-13	-57.3	-72.4	2.81	4.91	Vertical	Pass
2826.0	-68.82	-13	-55.82	-72.23	3.13	6.54	Vertical	Pass