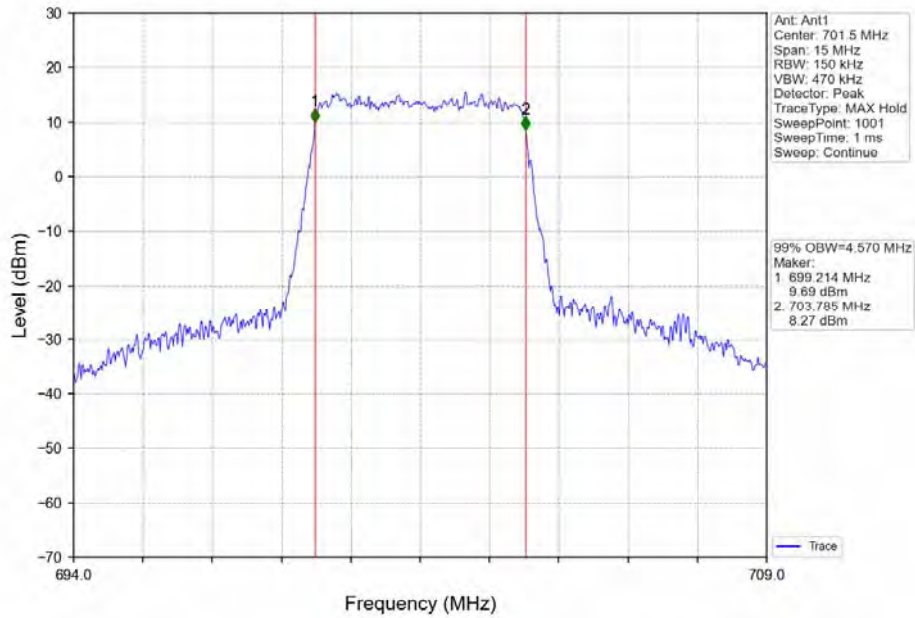
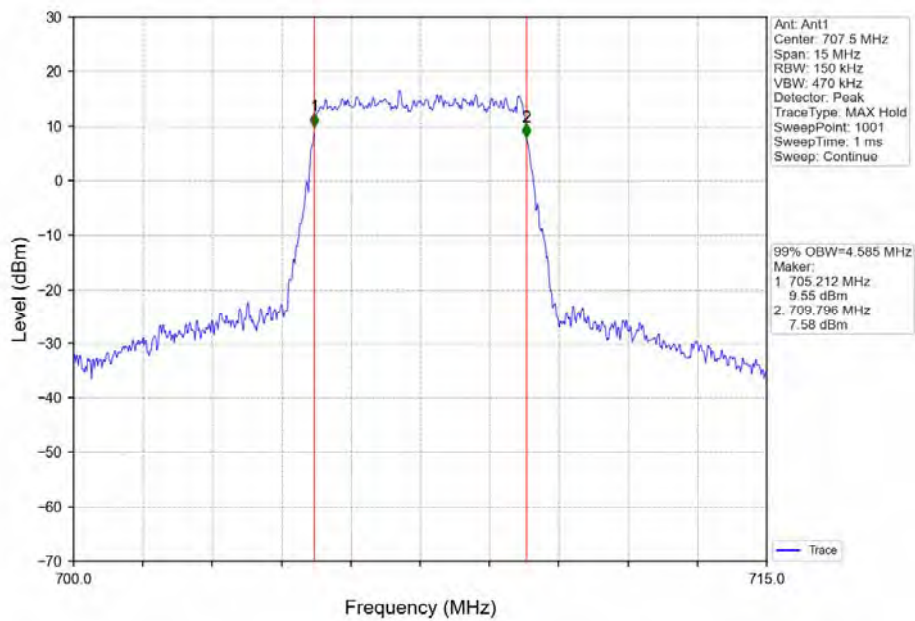


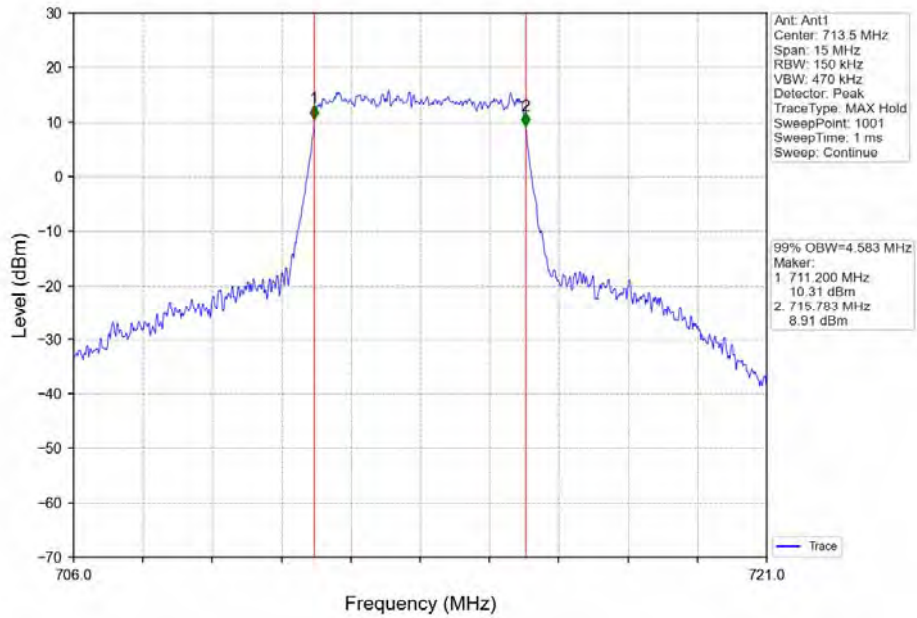
Band12_5MHz_64QAM_LCH_701.5MHz_RB_25_0_NTNV



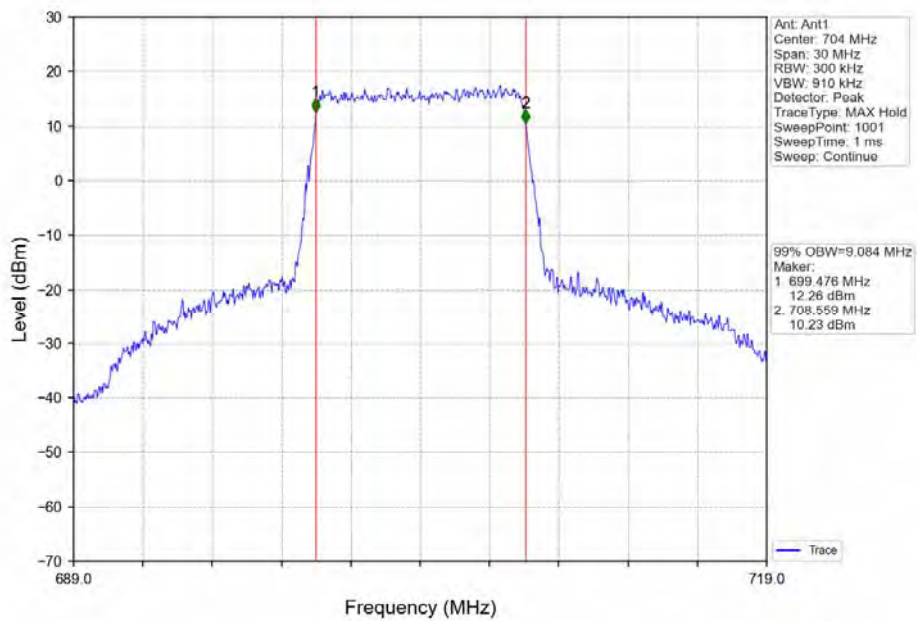
Band12_5MHz_64QAM_MCH_707.5MHz_RB_25_0_NTNV



Band12_5MHz_64QAM_HCH_713.5MHz_RB_25_0_NTNV

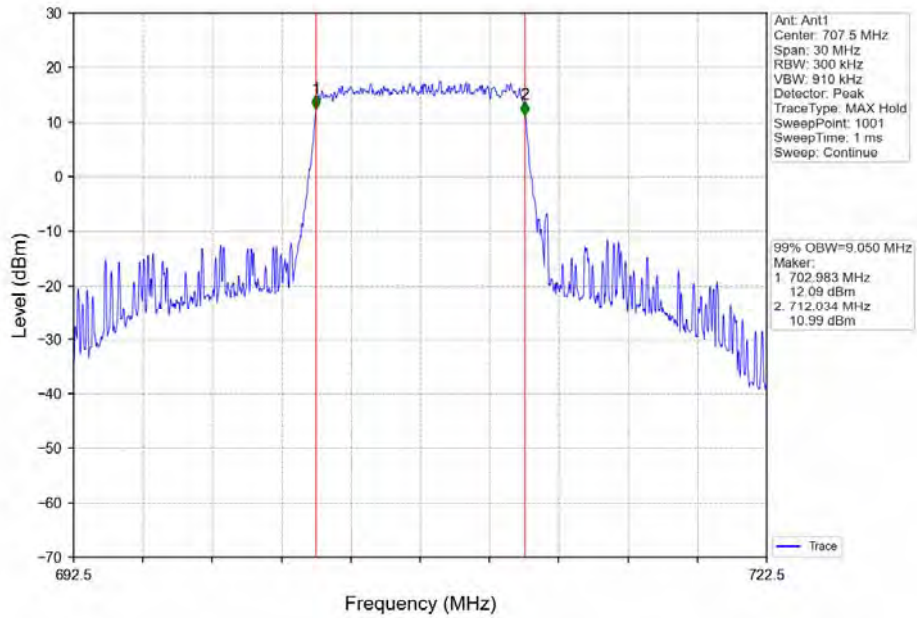


Band12_10MHz_QPSK_LCH_704MHz_RB_50_0_NTNV

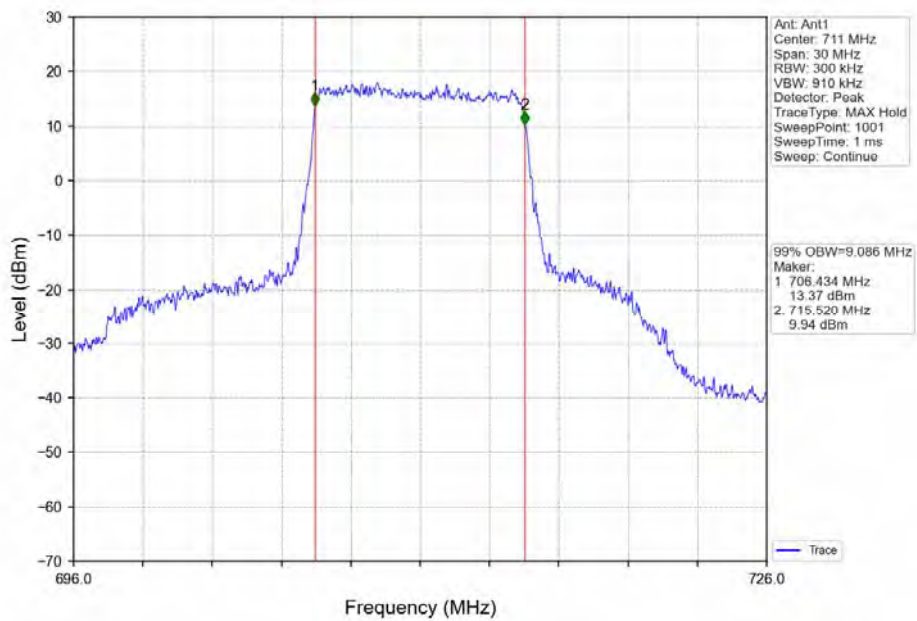




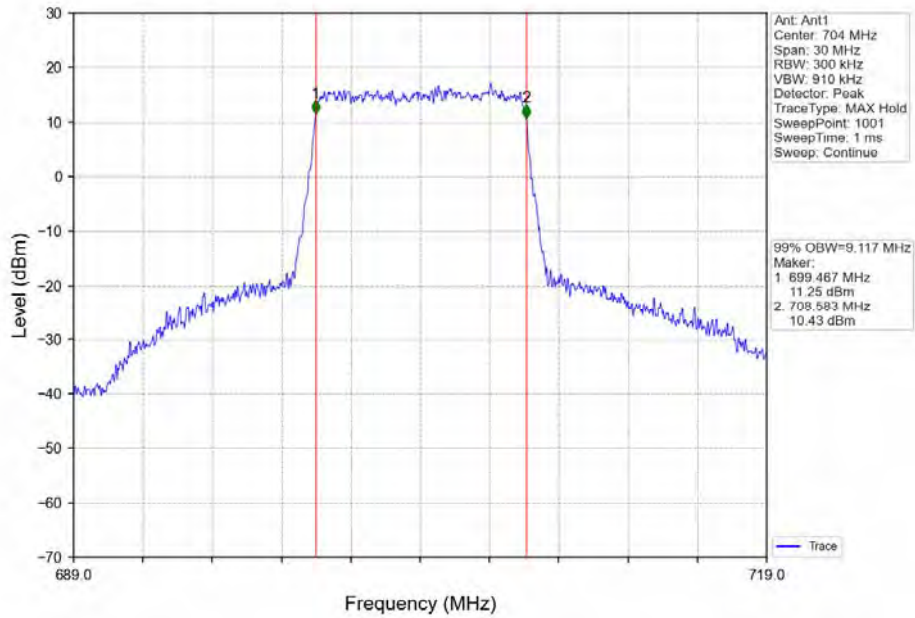
Band12_10MHz_QPSK_MCH_707.5MHz_RB_50_0_NTNV



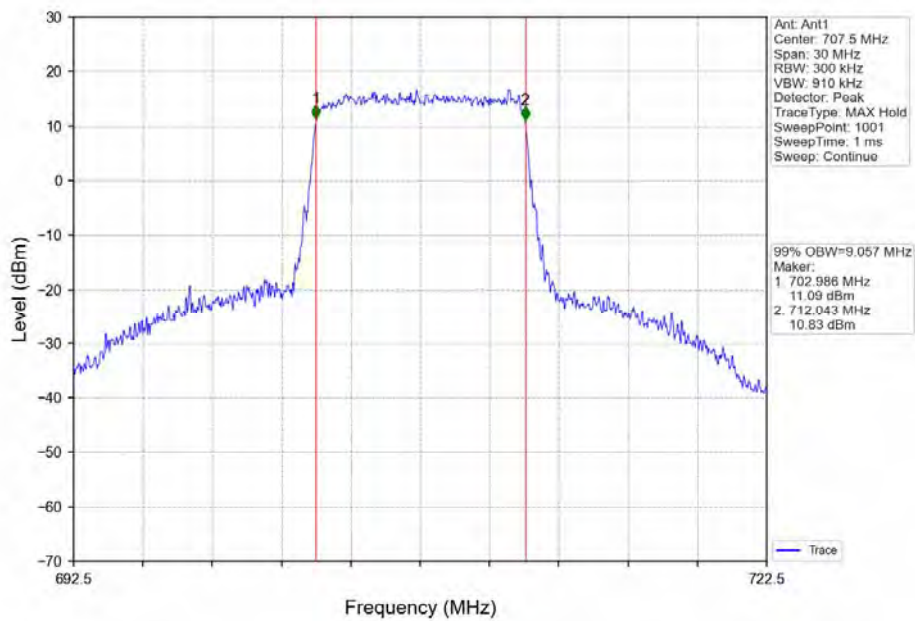
Band12_10MHz_QPSK_HCH_711MHz_RB_50_0_NTNV



Band12_10MHz_16QAM_LCH_704MHz_RB_50_0_NTNV

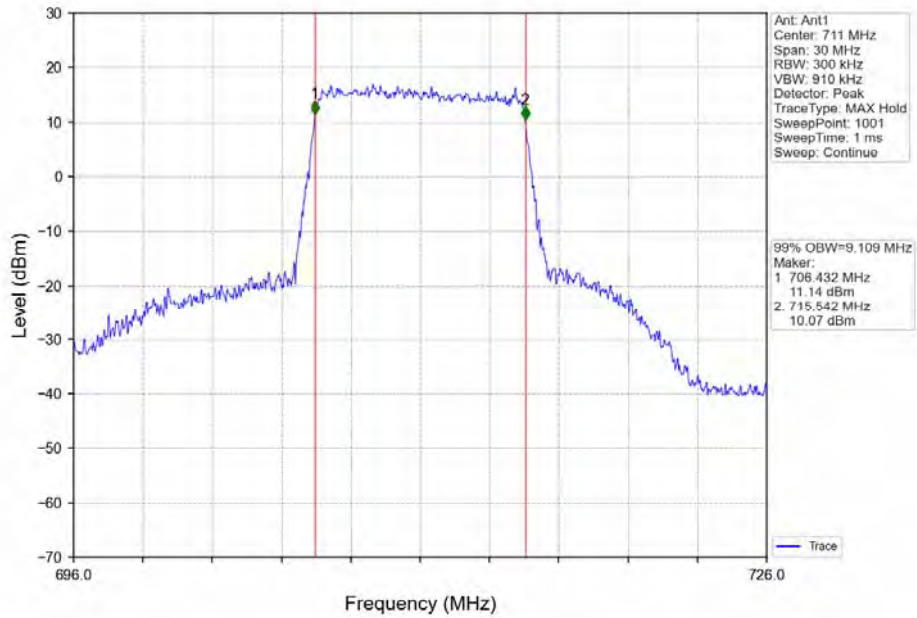


Band12_10MHz_16QAM_MCH_707.5MHz_RB_50_0_NTNV

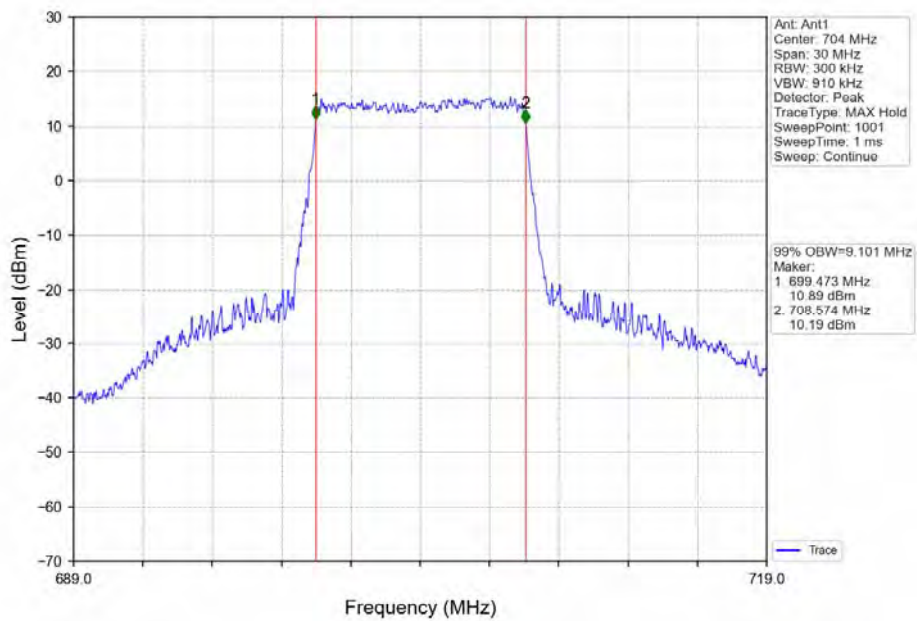




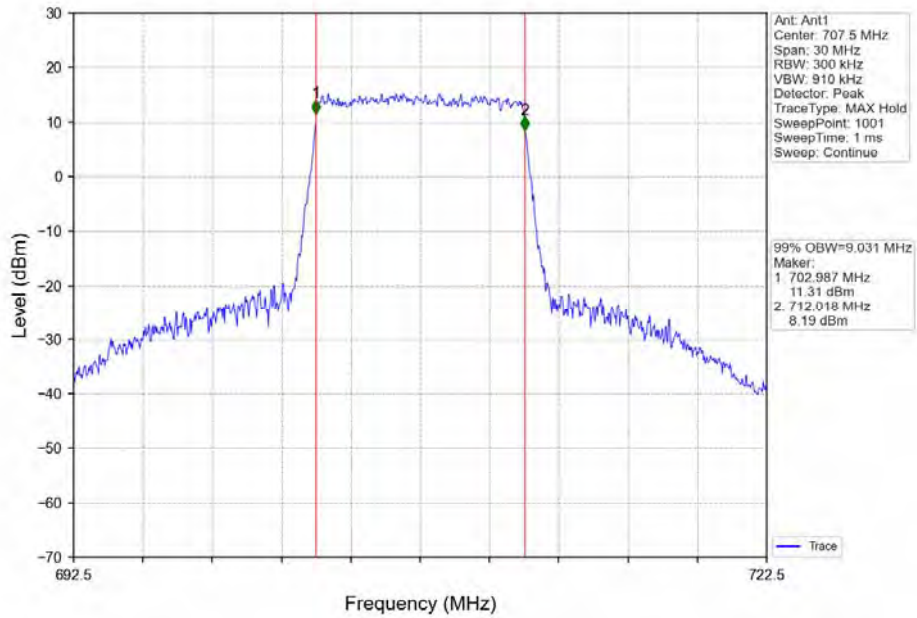
Band12_10MHz_16QAM_HCH_711MHz_RB_50_0_NTNV



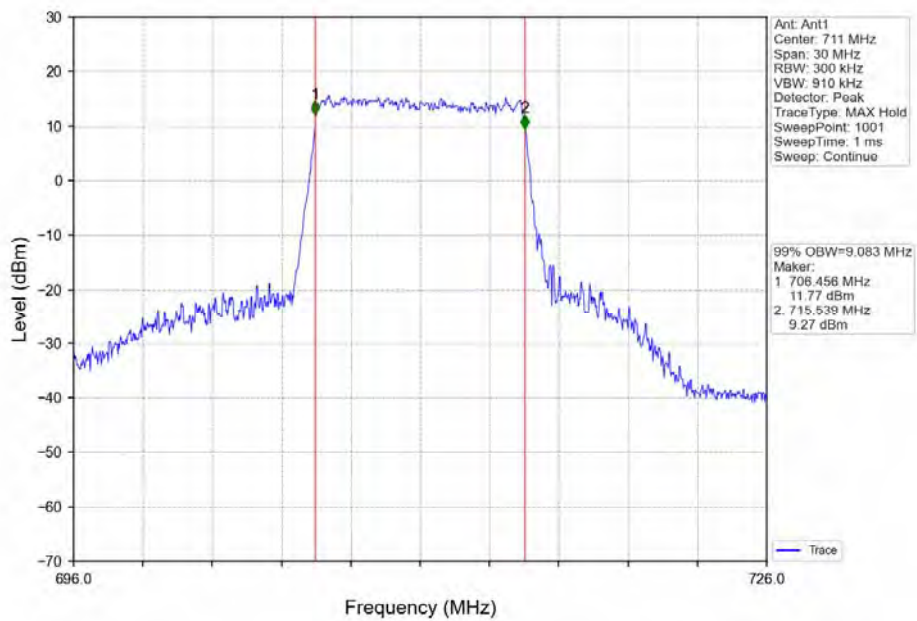
Band12_10MHz_64QAM_LCH_704MHz_RB_50_0_NTNV



Band12_10MHz_64QAM_MCH_707.5MHz_RB_50_0_NTNV



Band12_10MHz_64QAM_HCH_711MHz_RB_50_0_NTNV





26DB_BW

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	1.326	Pass
		707.5	6	0	1.307	Pass
		715.3	6	0	1.378	Pass
	16QAM	699.7	6	0	1.313	Pass
		707.5	6	0	1.309	Pass
		715.3	6	0	1.320	Pass
	64QAM	699.7	6	0	1.331	Pass
		707.5	6	0	1.316	Pass
		715.3	6	0	1.317	Pass
3	QPSK	700.5	15	0	2.996	Pass
		707.5	15	0	2.998	Pass
		714.5	15	0	2.981	Pass
	16QAM	700.5	15	0	2.971	Pass
		707.5	15	0	2.987	Pass
		714.5	15	0	3.005	Pass
	64QAM	700.5	15	0	2.982	Pass
		707.5	15	0	2.982	Pass
		714.5	15	0	3.002	Pass
5	QPSK	701.5	25	0	5.257	Pass

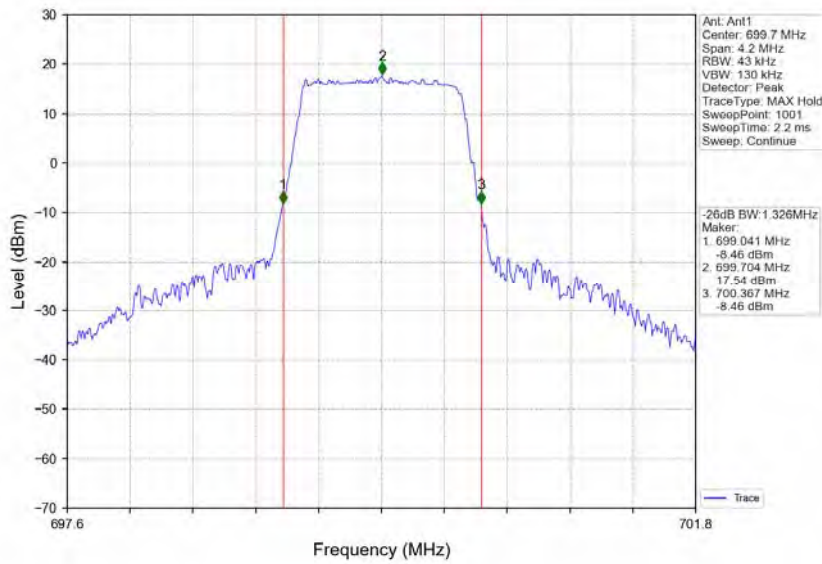


		707.5	25	0	5.277	Pass
		713.5	25	0	5.302	Pass
	16QAM	701.5	25	0	5.291	Pass
		707.5	25	0	5.230	Pass
		713.5	25	0	5.310	Pass
	64QAM	701.5	25	0	5.269	Pass
		707.5	25	0	5.281	Pass
		713.5	25	0	5.289	Pass
	10	QPSK	704	50	0	10.312
707.5			50	0	10.588	Pass
711			50	0	10.274	Pass
16QAM		704	50	0	10.198	Pass
		707.5	50	0	10.157	Pass
		711	50	0	10.321	Pass
64QAM		704	50	0	10.262	Pass
		707.5	50	0	10.148	Pass
		711	50	0	10.296	Pass

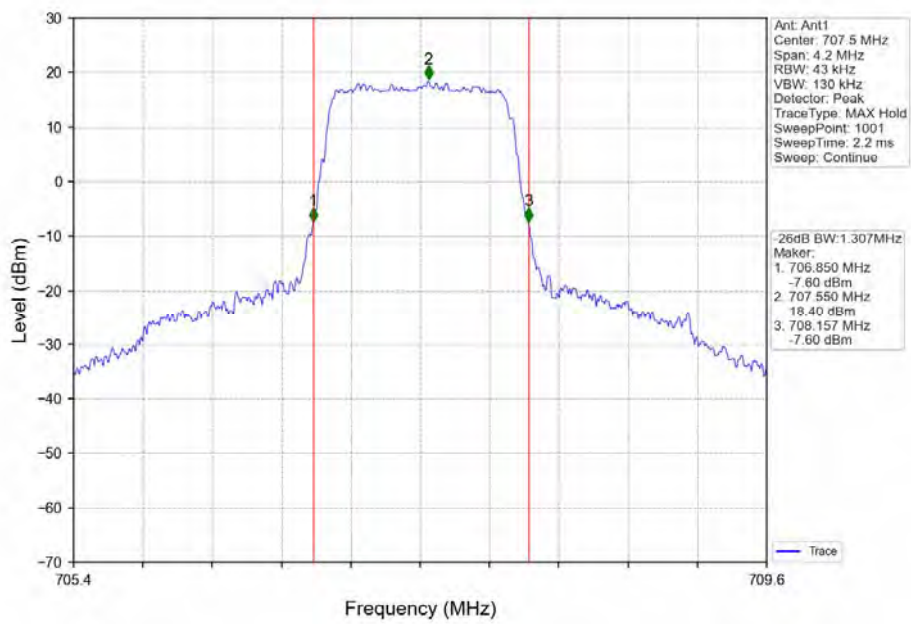


Test Graph

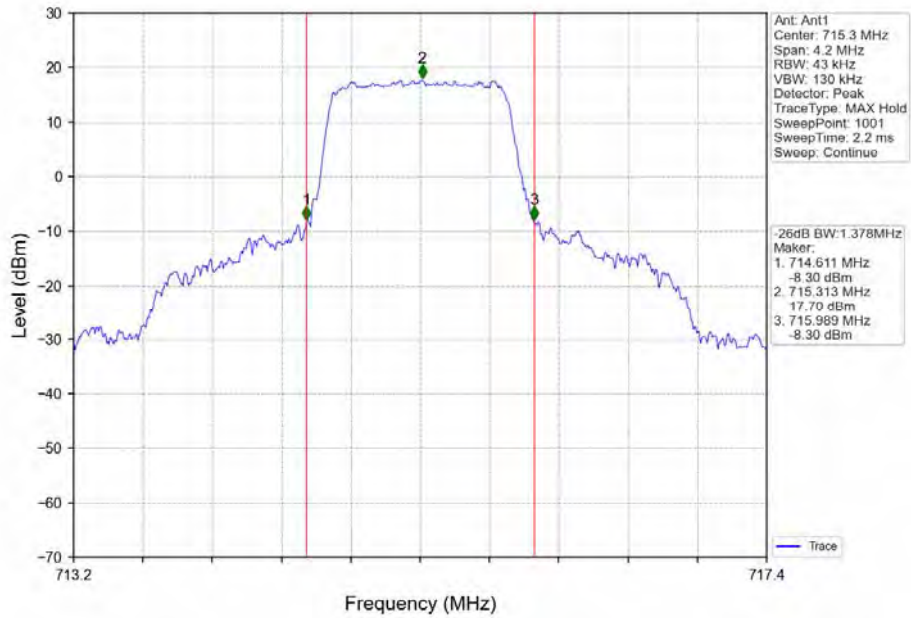
Band12_1.4MHz_QPSK_LCH_699.7MHz_RB_6_0_NTNV



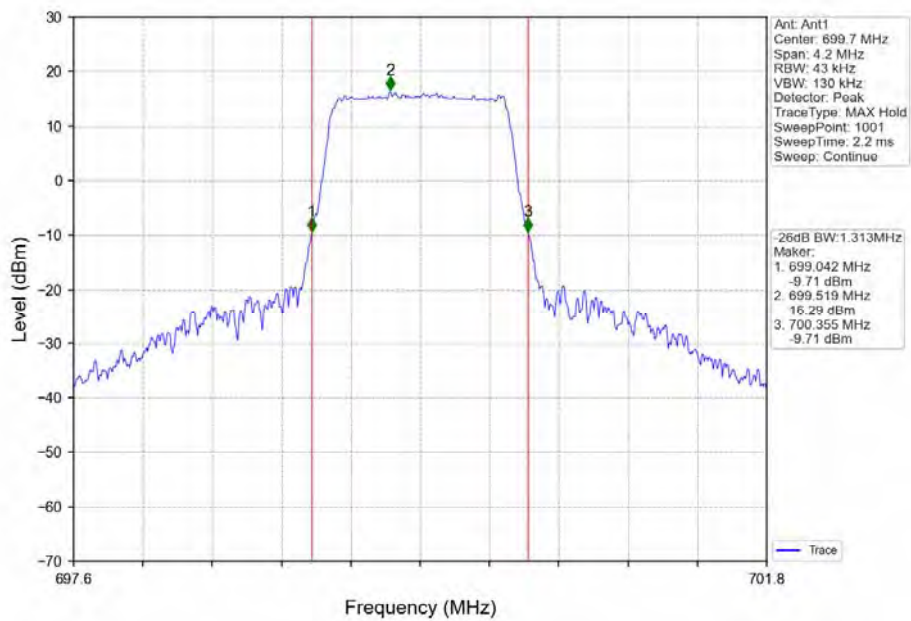
Band12_1.4MHz_QPSK_MCH_707.5MHz_RB_6_0_NTNV



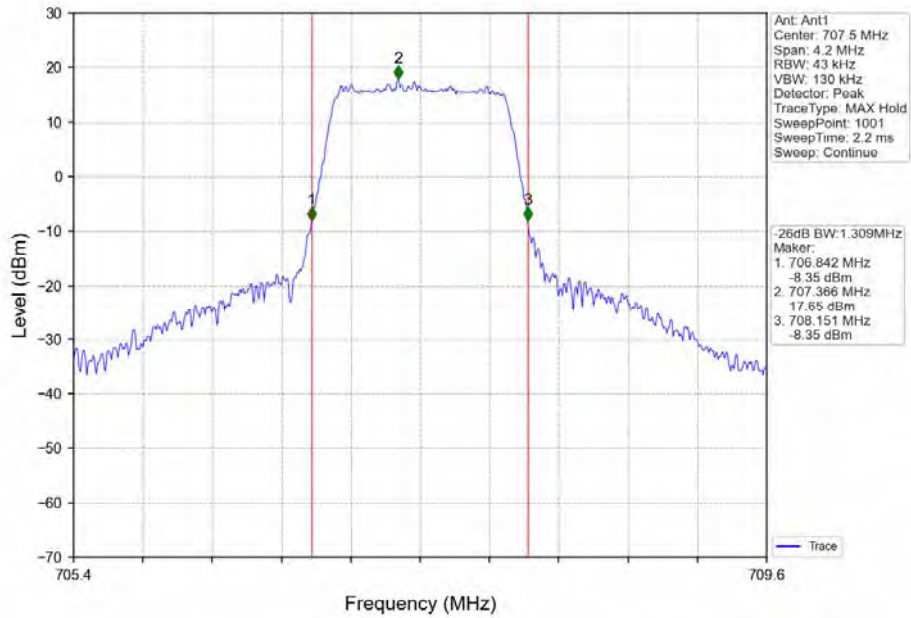
and12_1.4MHz_QPSK_HCH_715.3MHz_RB_6_0_NTNV



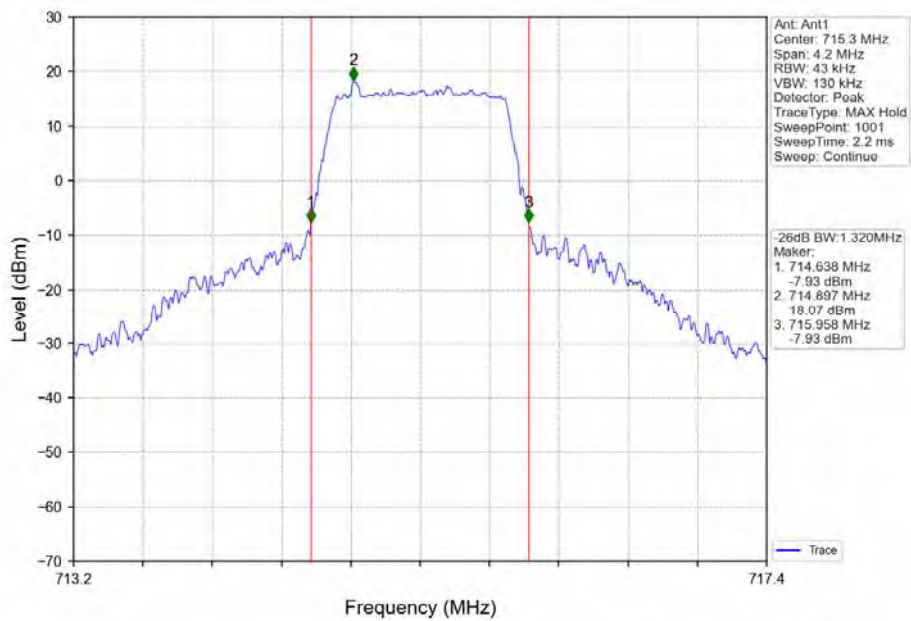
Band12_1.4MHz_16QAM_LCH_699.7MHz_RB_6_0_NTNV



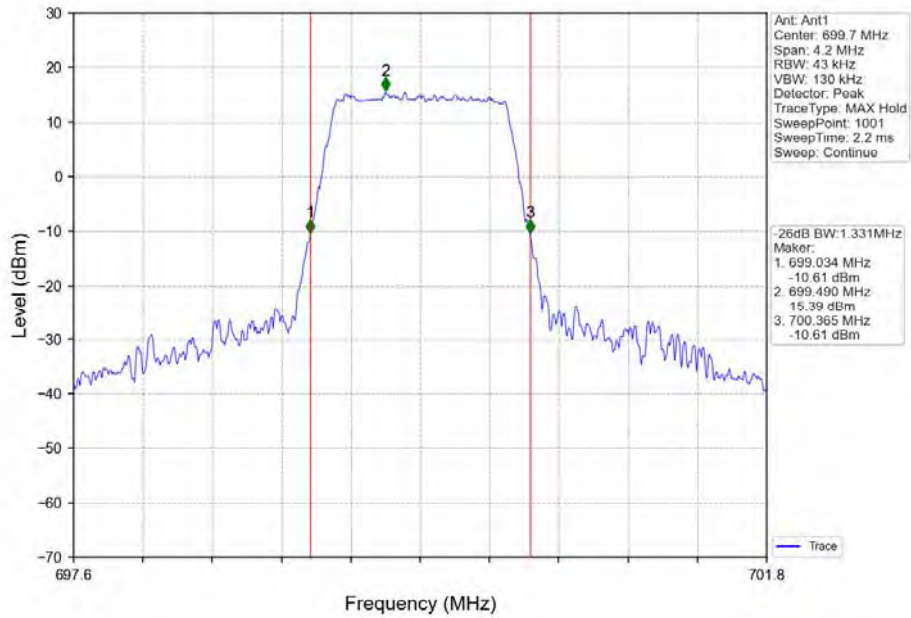
Band12_1.4MHz_16QAM_MCH_707.5MHz_RB_6_0_NTNV



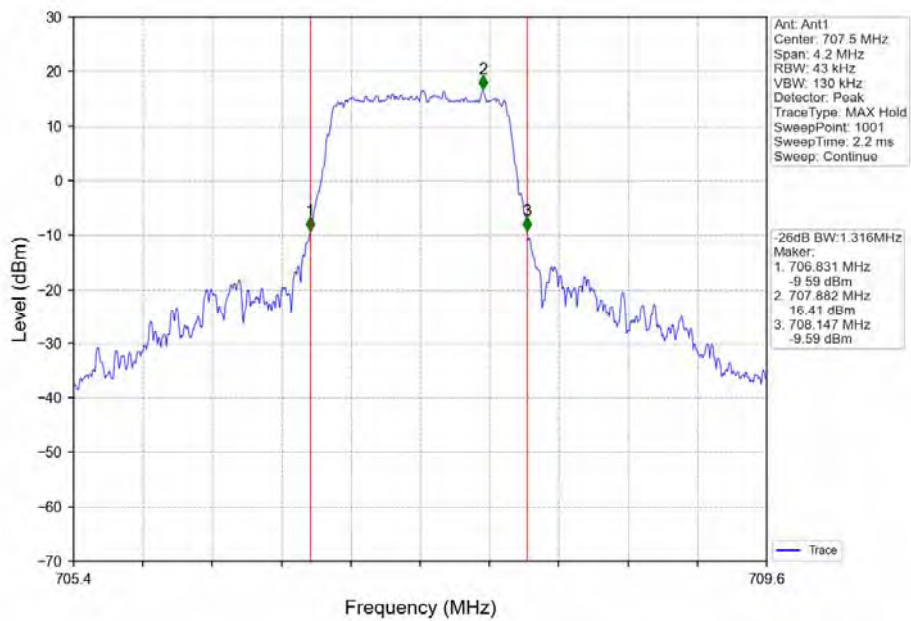
Band12_1.4MHz_16QAM_HCH_715.3MHz_RB_6_0_NTNV



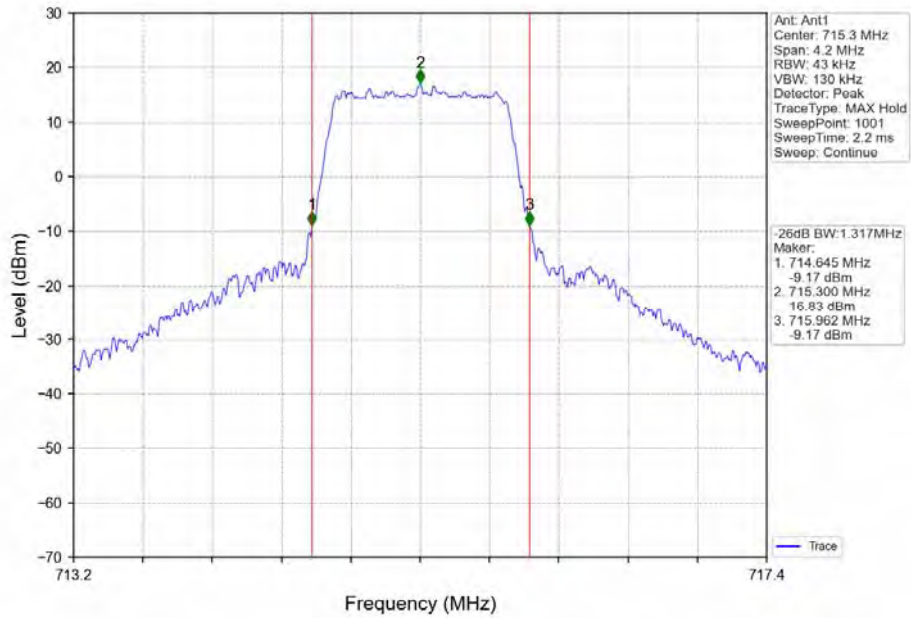
Band12_1.4MHz_64QAM_LCH_699.7MHz_RB_6_0_NTNV



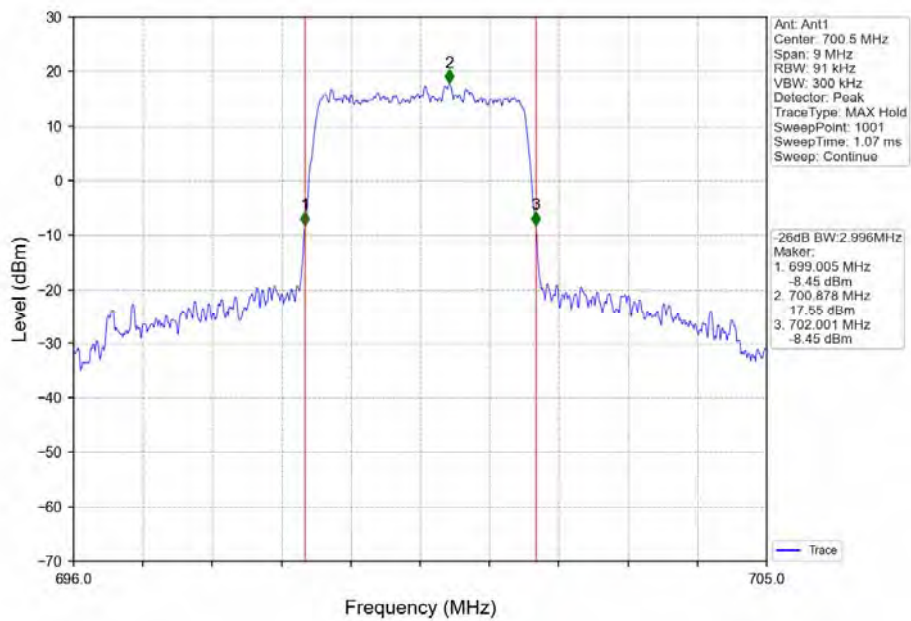
Band12_1.4MHz_64QAM_MCH_707.5MHz_RB_6_0_NTNV



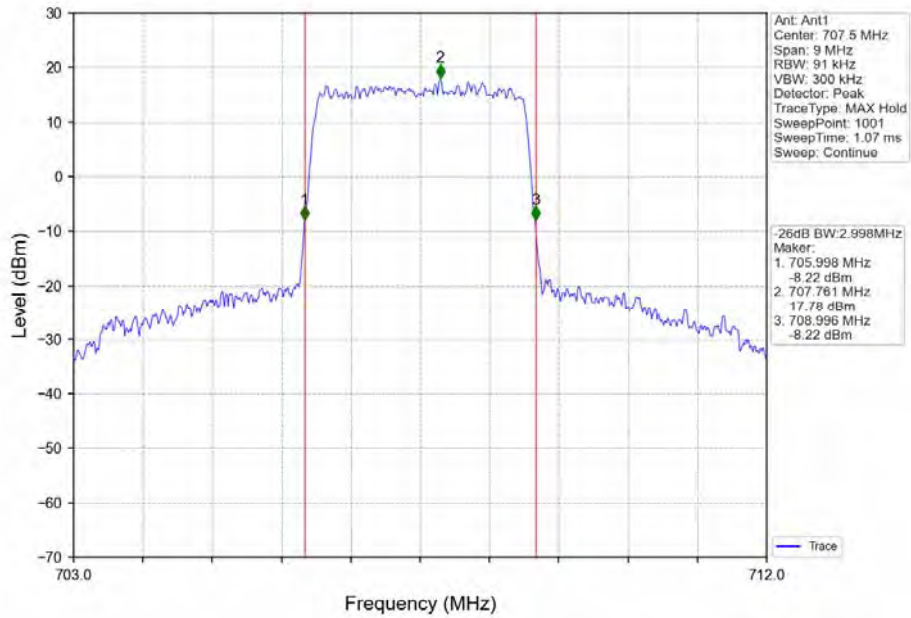
Band12_1.4MHz_64QAM_HCH_715.3MHz_RB_6_0_NTNV



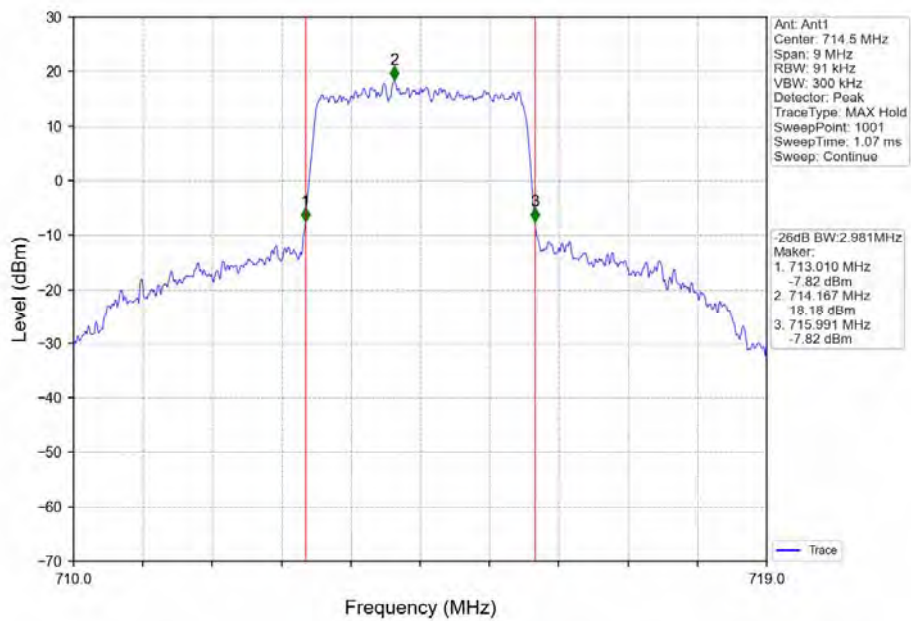
Band12_3MHz_QPSK_LCH_700.5MHz_RB_15_0_NTNV



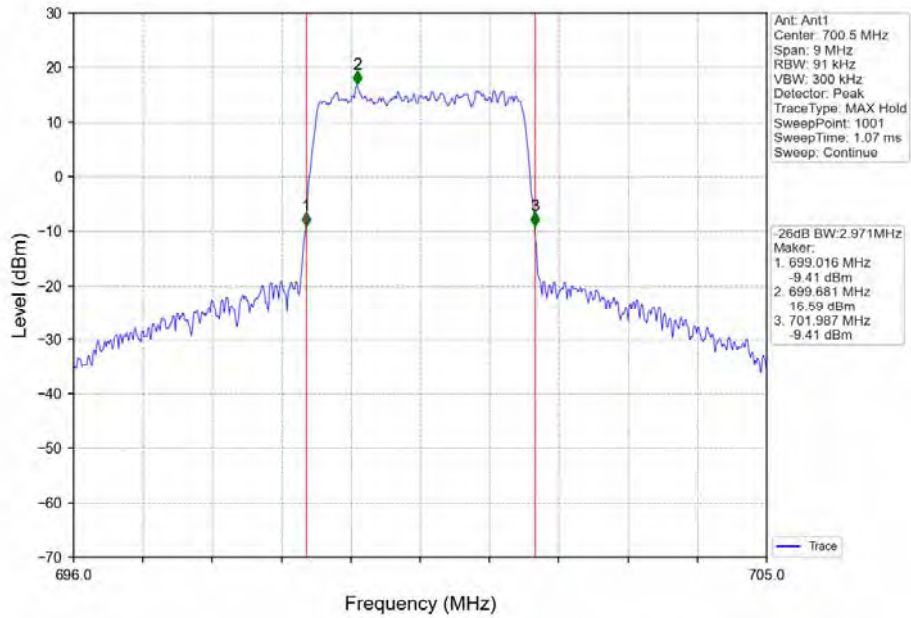
Band12_3MHz_QPSK_MCH_707.5MHz_RB_15_0_NTNV



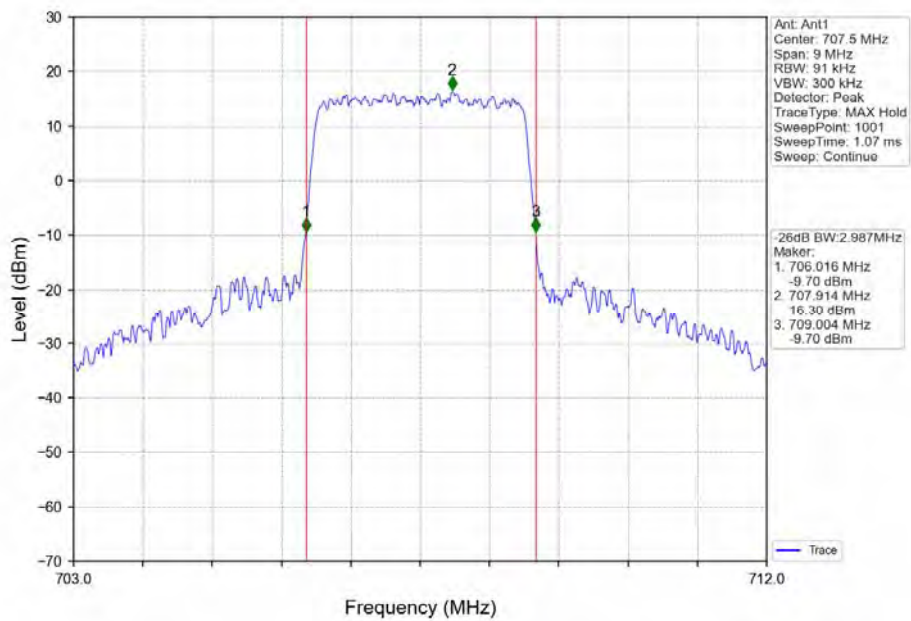
Band12_3MHz_QPSK_HCH_714.5MHz_RB_15_0_NTNV



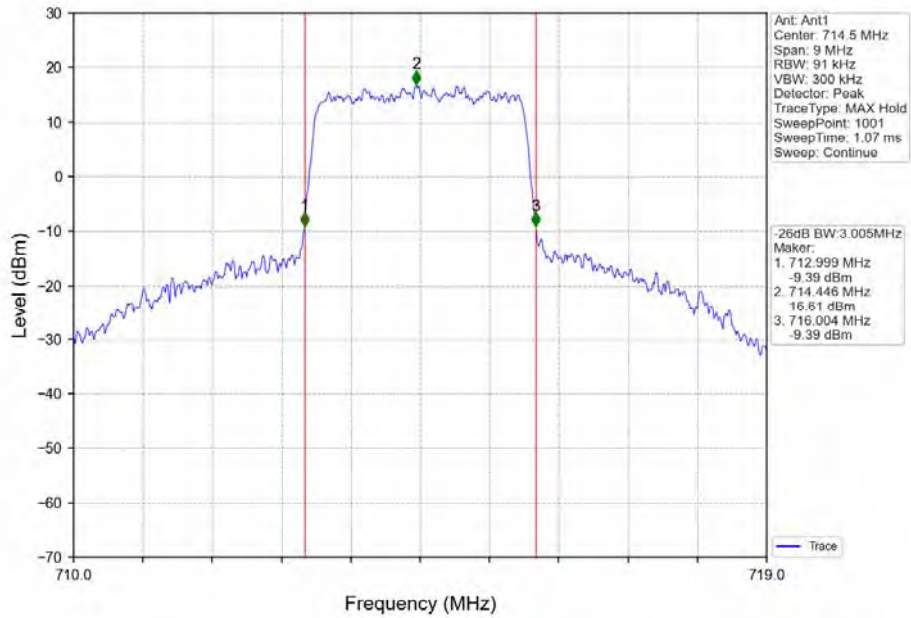
Band12_3MHz_16QAM_LCH_700.5MHz_RB_15_0_NTNV



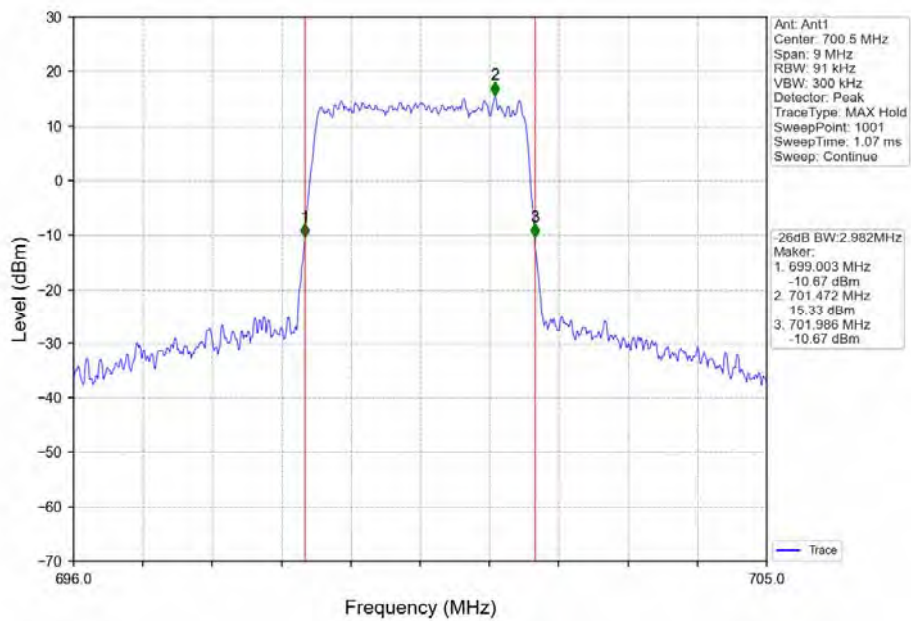
Band12_3MHz_16QAM_MCH_707.5MHz_RB_15_0_NTNV



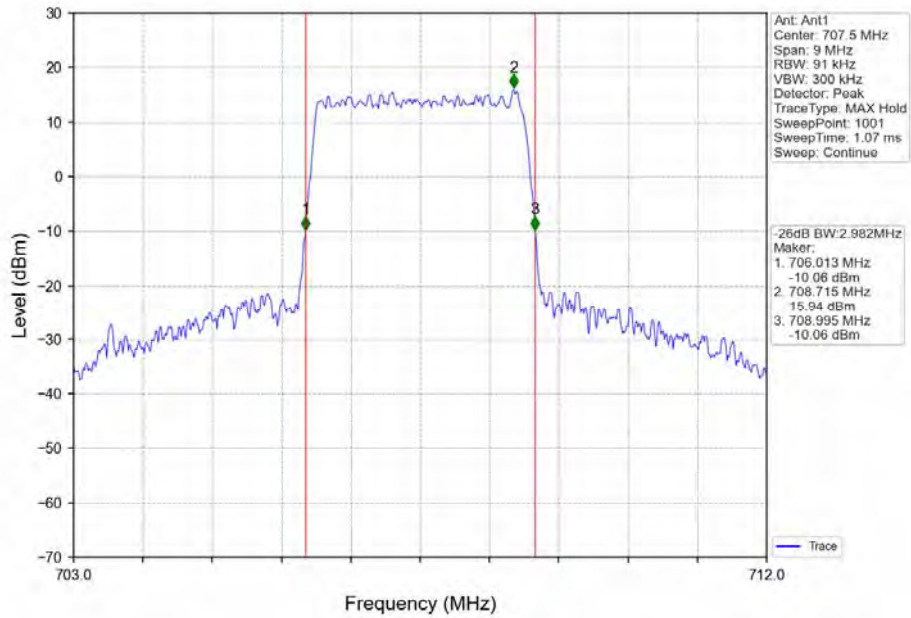
Band12_3MHz_16QAM_HCH_714.5MHz_RB_15_0_NTNV



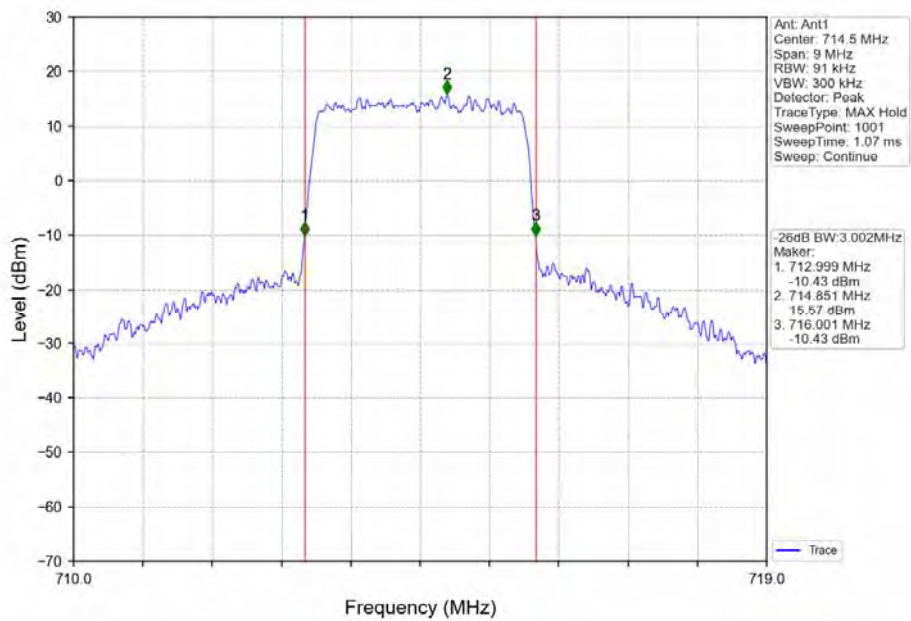
Band12_3MHz_64QAM_LCH_700.5MHz_RB_15_0_NTNV



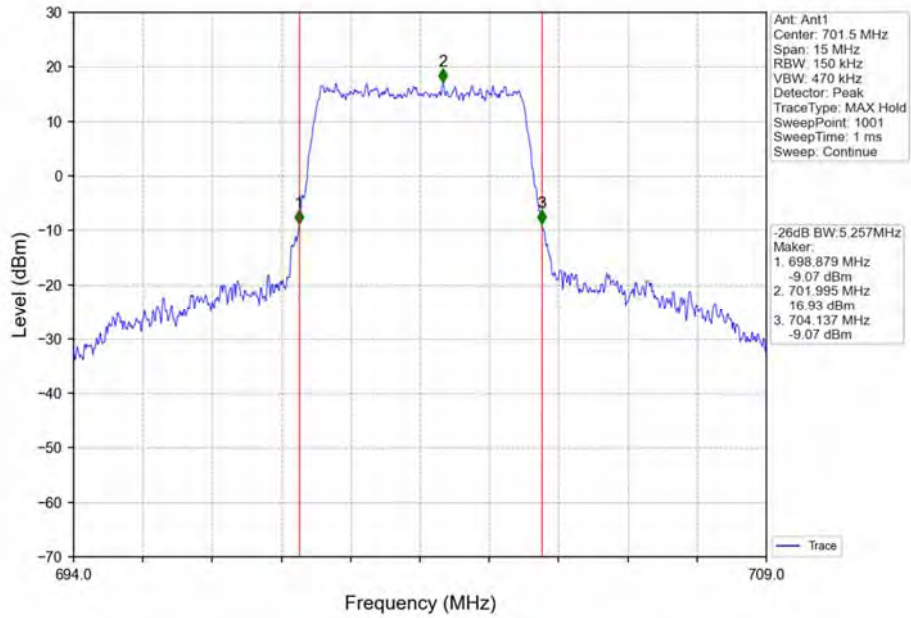
Band12_3MHz_64QAM_MCH_707.5MHz_RB_15_0_NTNV



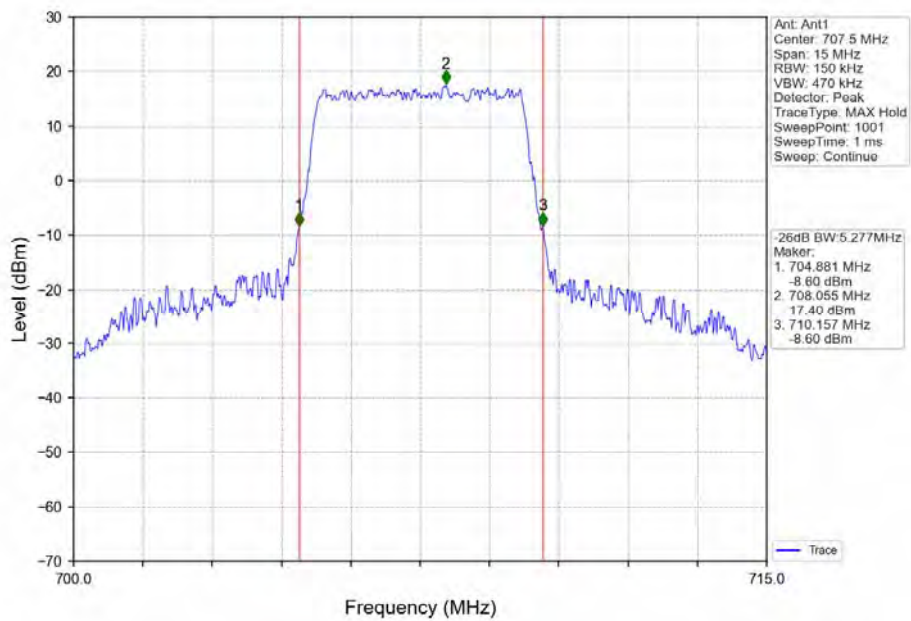
Band12_3MHz_64QAM_HCH_714.5MHz_RB_15_0_NTNV



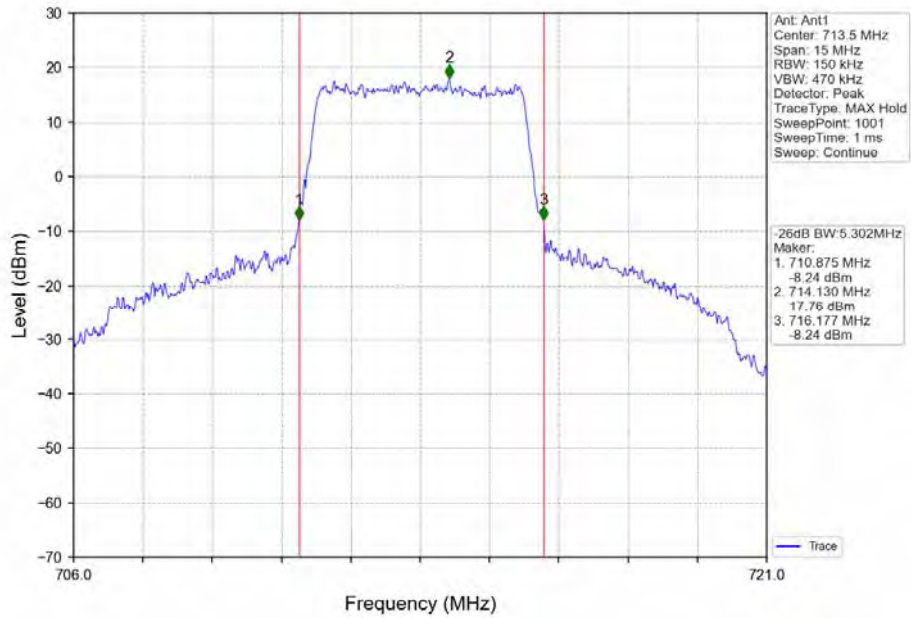
Band12_5MHz_QPSK_LCH_701.5MHz_RB_25_0_NTNV



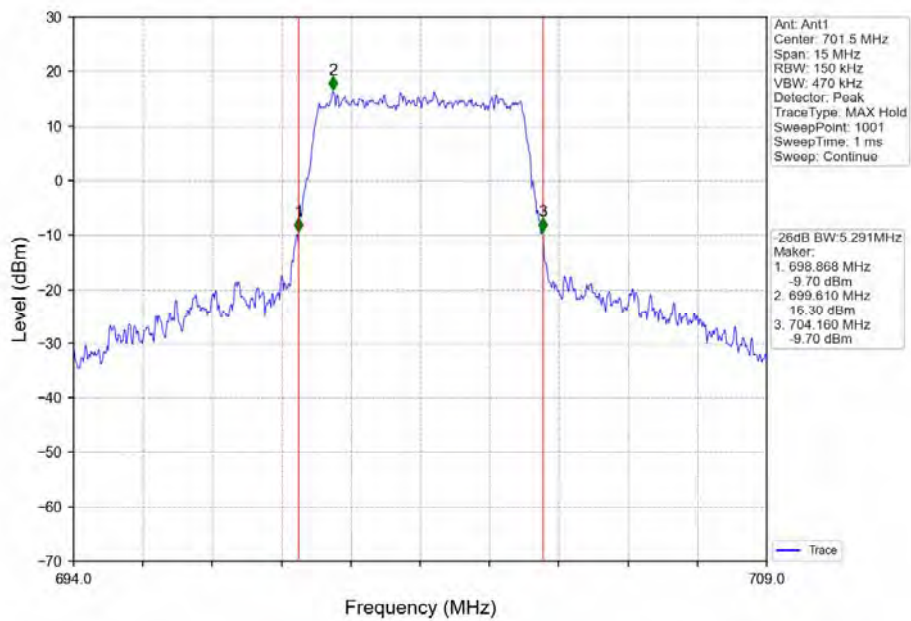
Band12_5MHz_QPSK_MCH_707.5MHz_RB_25_0_NTNV



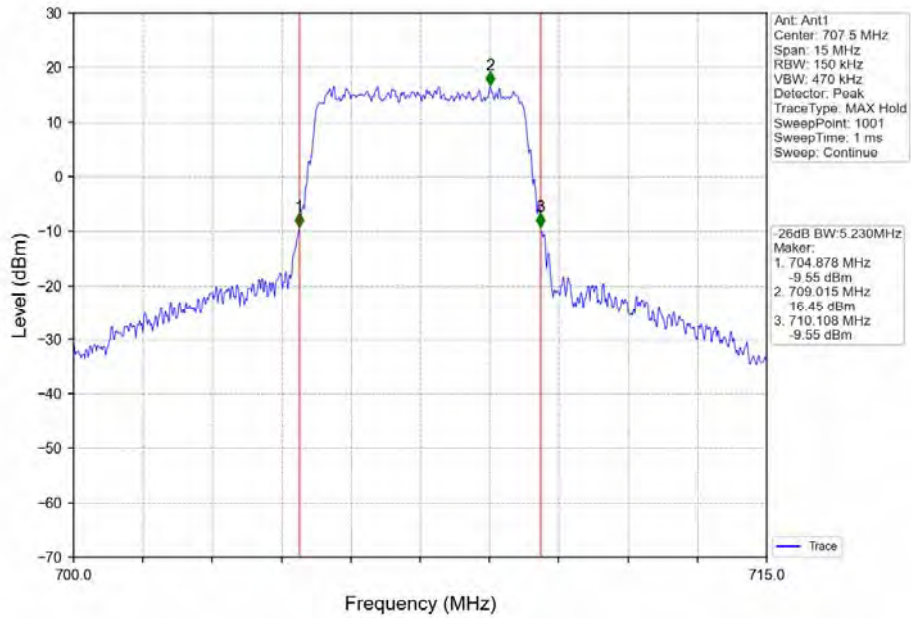
Band12_5MHz_QPSK_HCH_713.5MHz_RB_25_0_NTNV



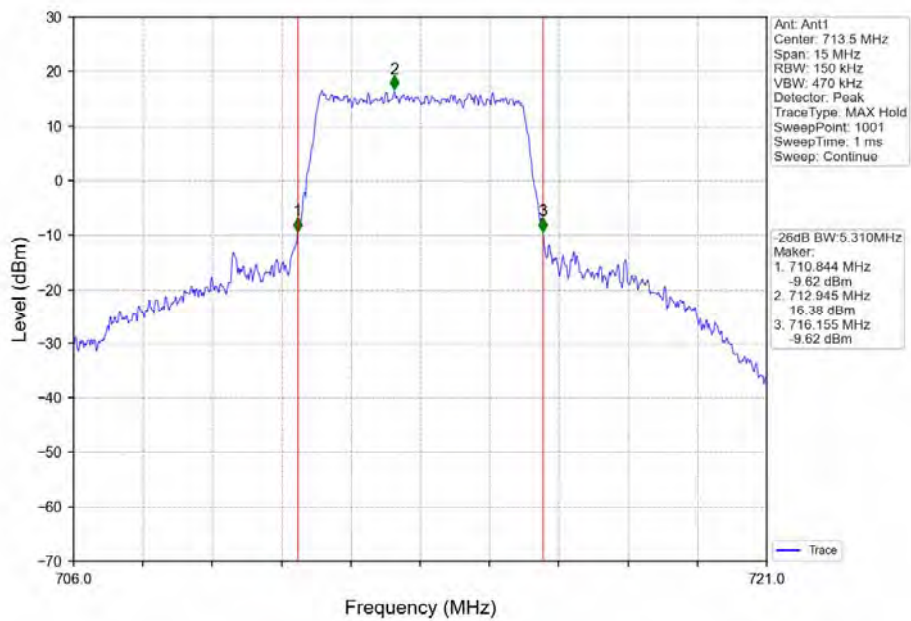
Band12_5MHz_16QAM_LCH_701.5MHz_RB_25_0_NTNV



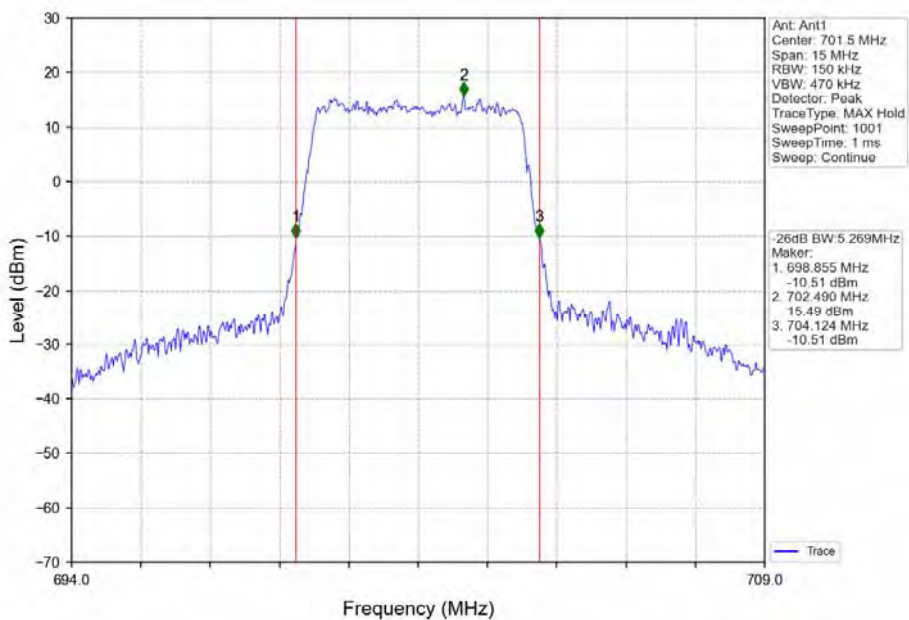
Band12_5MHz_16QAM_MCH_707.5MHz_RB_25_0_NTNV



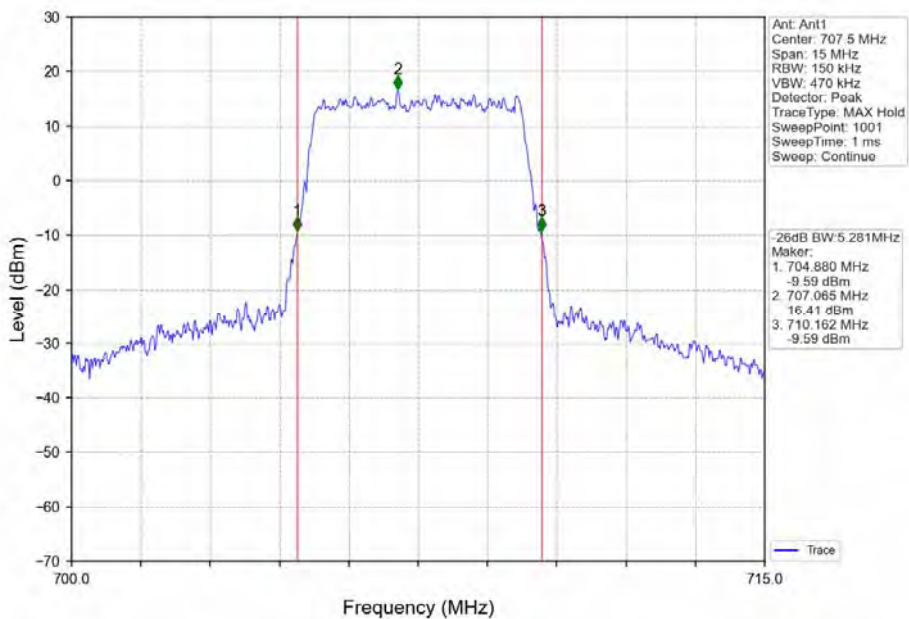
Band12_5MHz_16QAM_HCH_713.5MHz_RB_25_0_NTNV



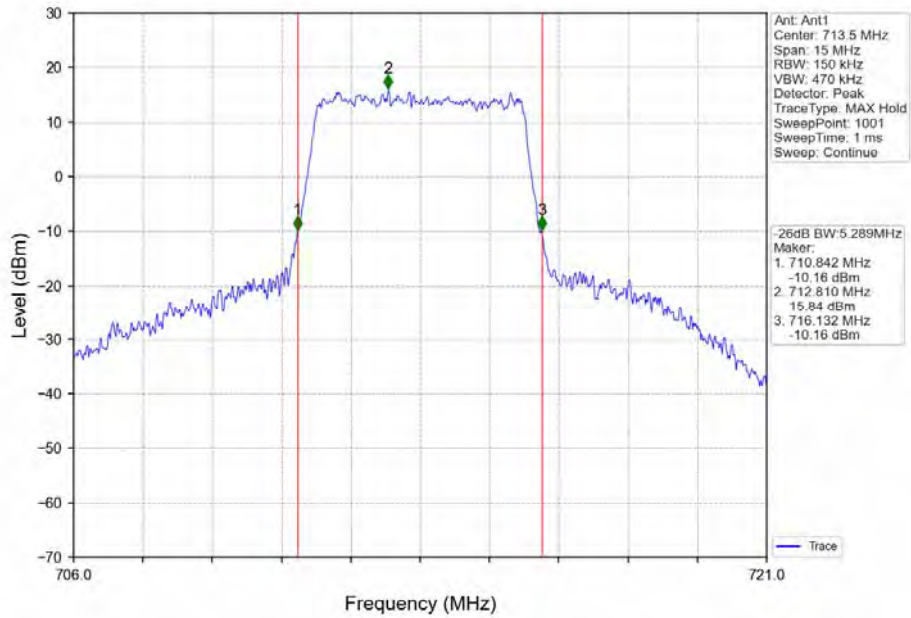
Band12_5MHz_64QAM_LCH_701.5MHz_RB_25_0_NTNV



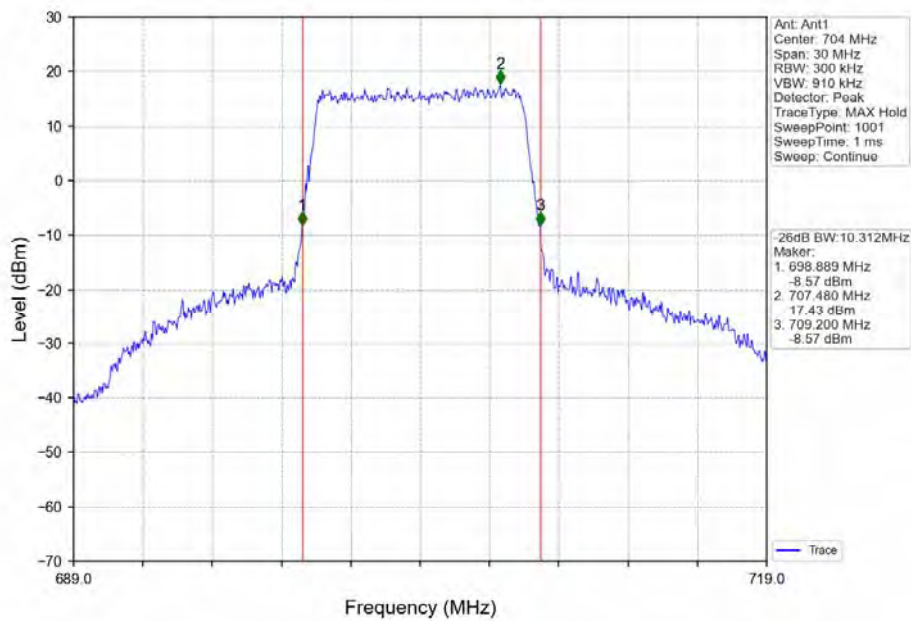
Band12_5MHz_64QAM_MCH_707.5MHz_RB_25_0_NTNV



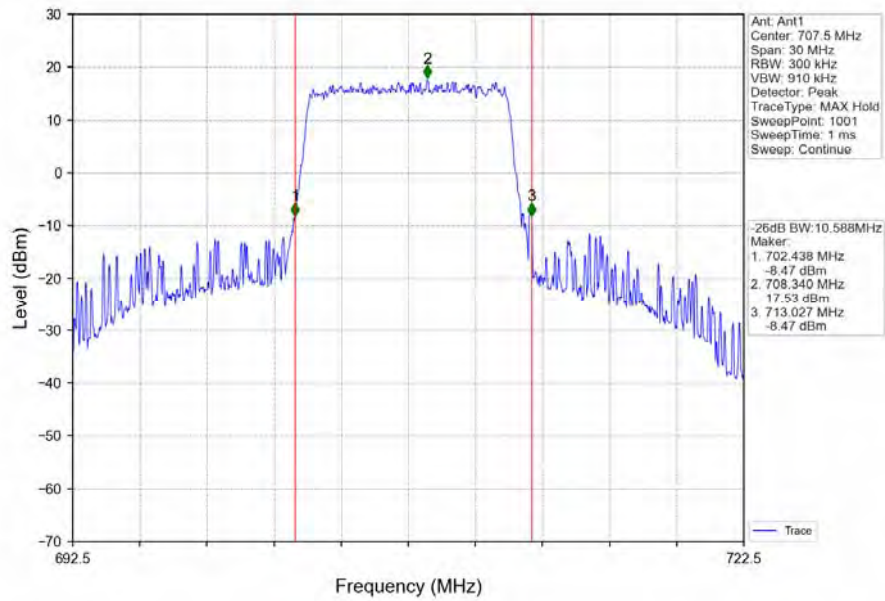
Band12_5MHz_64QAM_HCH_713.5MHz_RB_25_0_NTNV



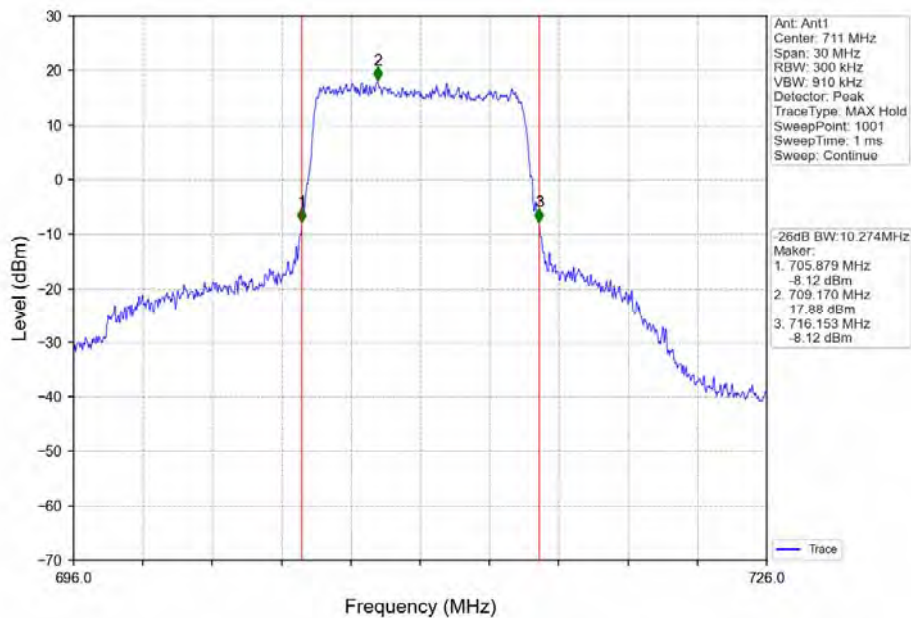
Band12_10MHz_QPSK_LCH_704MHz_RB_50_0_NTNV



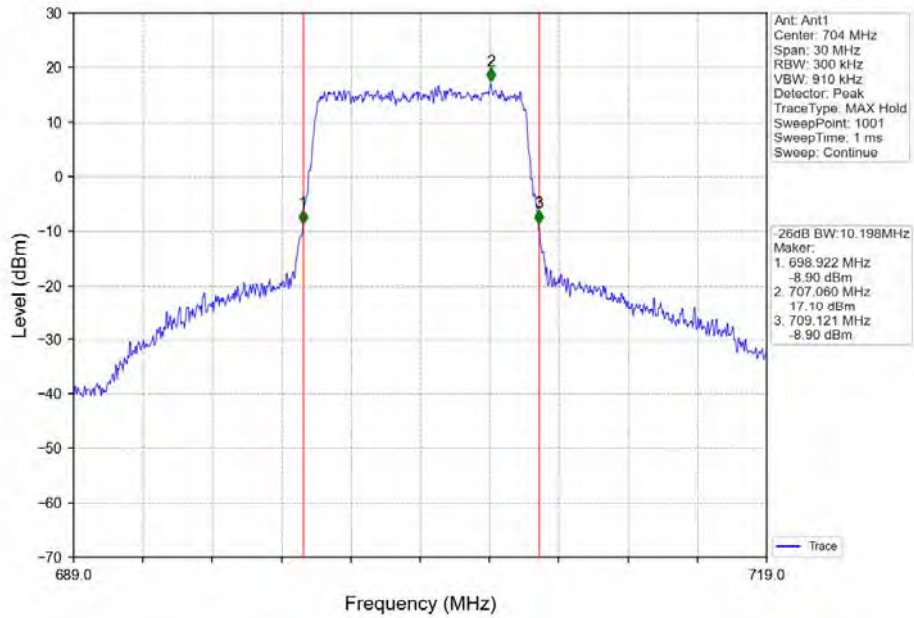
Band12_10MHz_QPSK_MCH_707.5MHz_RB_50_0_NTNV



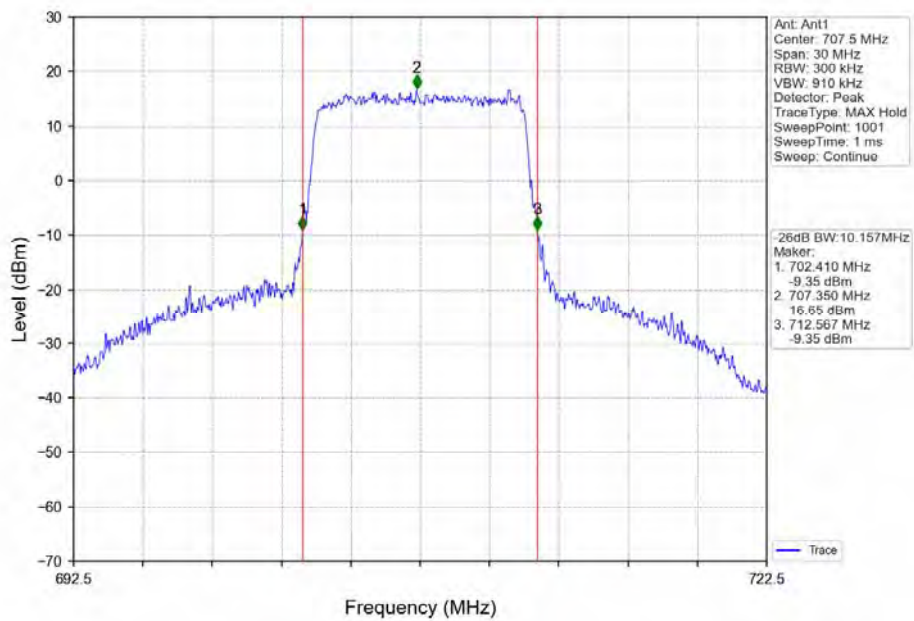
Band12_10MHz_QPSK_HCH_711MHz_RB_50_0_NTNV



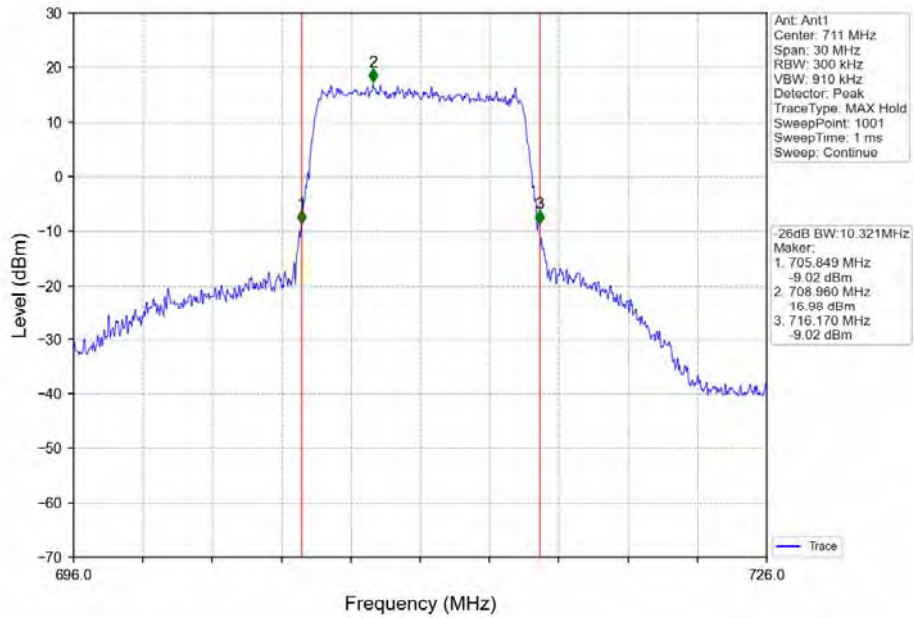
Band12_10MHz_16QAM_LCH_704MHz_RB_50_0_NTNV



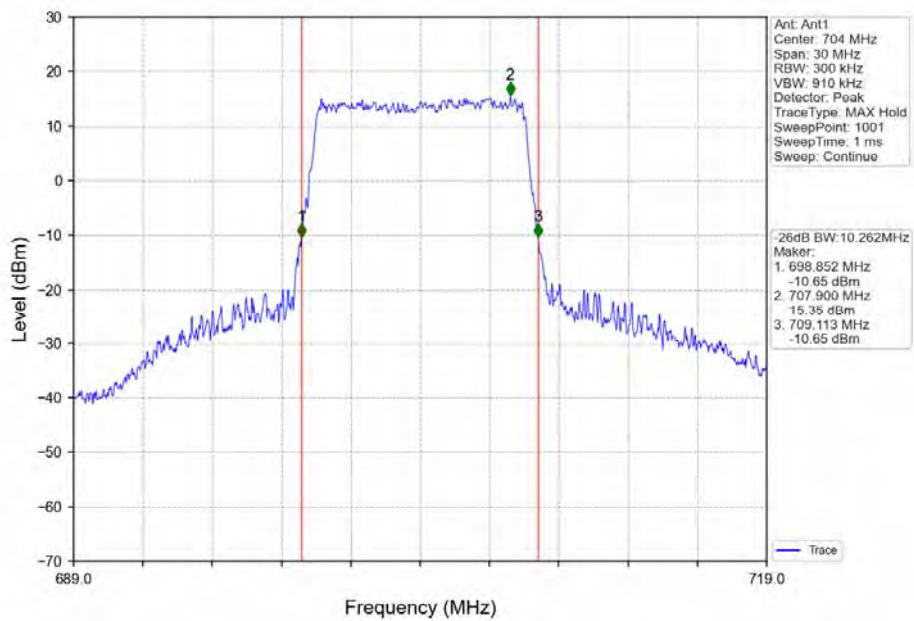
Band12_10MHz_16QAM_MCH_707.5MHz_RB_50_0_NTNV



Band12_10MHz_16QAM_HCH_711MHz_RB_50_0_NTNV

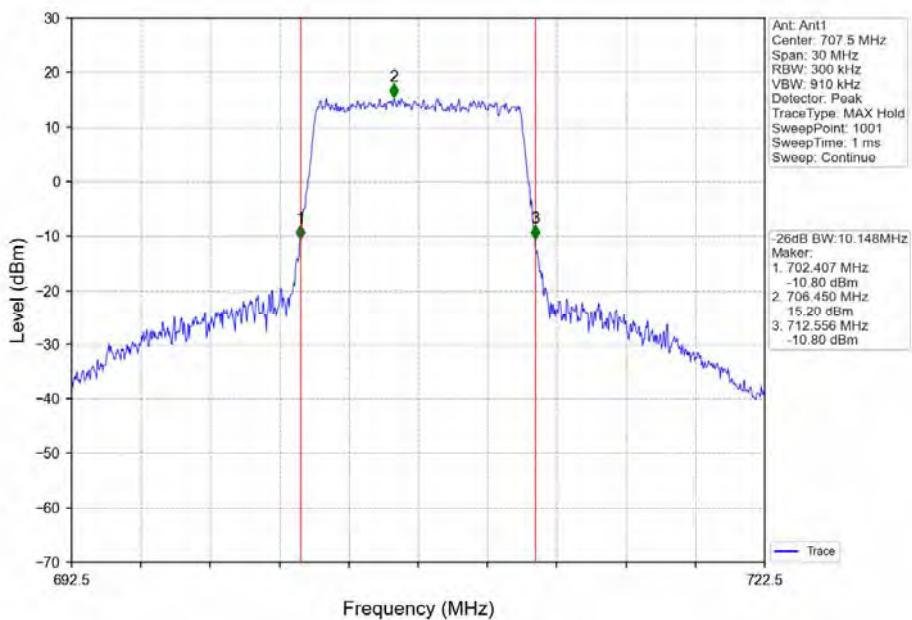


Band12_10MHz_64QAM_LCH_704MHz_RB_50_0_NTNV

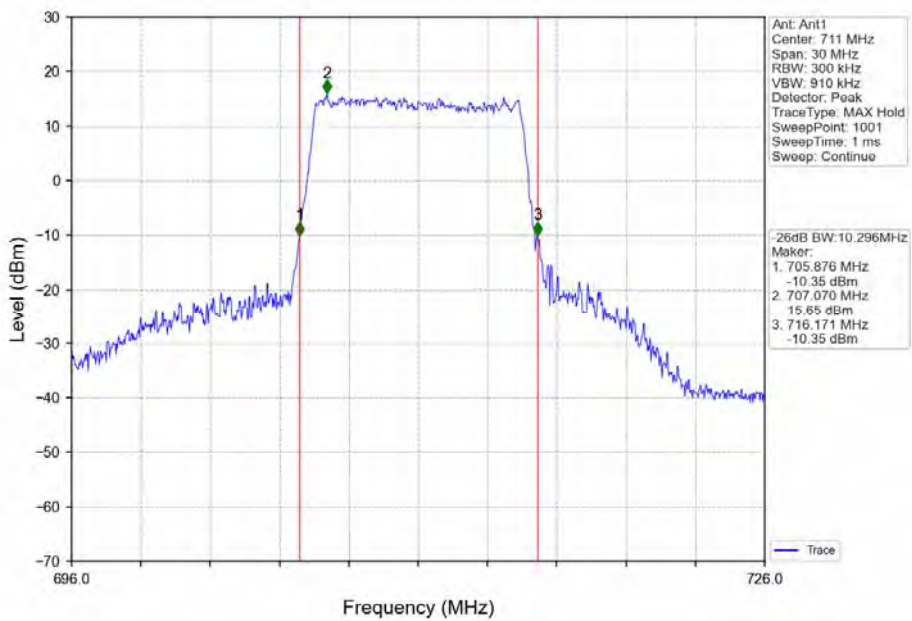




Band12_10MHz_64QAM_MCH_707.5MHz_RB_50_0_NTNV



Band12_10MHz_64QAM_HCH_711MHz_RB_50_0_NTNV





Peak-Average Ratio

B12_1.4MHz

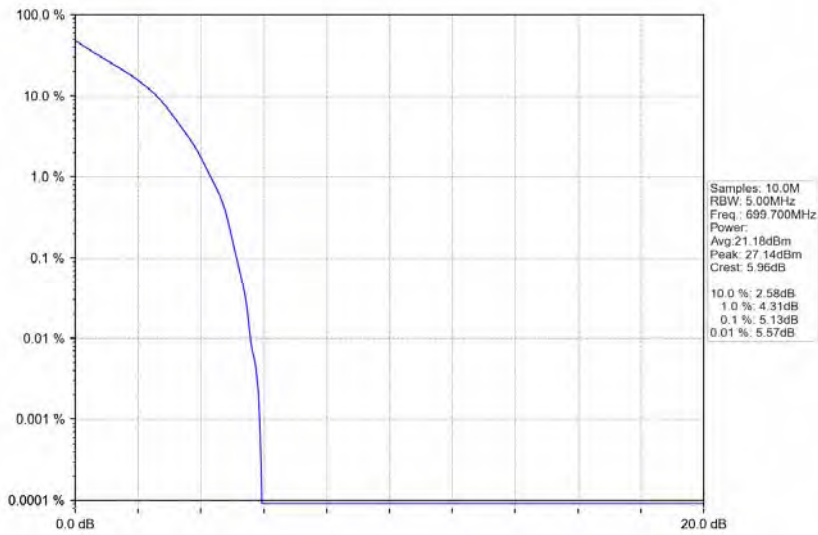
Test Result

Band: 12 / Bandwidth: 1.4MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Peak-Average Ratio (dB)		Verdict
		Size	Offset	Result	Limit	
QPSK	699.7	6	0	5.13	<=13	Pass
	707.5	6	0	4.85	<=13	Pass
	715.3	6	0	3.56	<=13	Pass
16QAM	699.7	6	0	6.02	<=13	Pass
	707.5	6	0	5.72	<=13	Pass
	715.3	6	0	4.52	<=13	Pass
64QAM	699.7	6	0	6.20	<=13	Pass
	707.5	6	0	6.37	<=13	Pass
	715.3	6	0	5.20	<=13	Pass

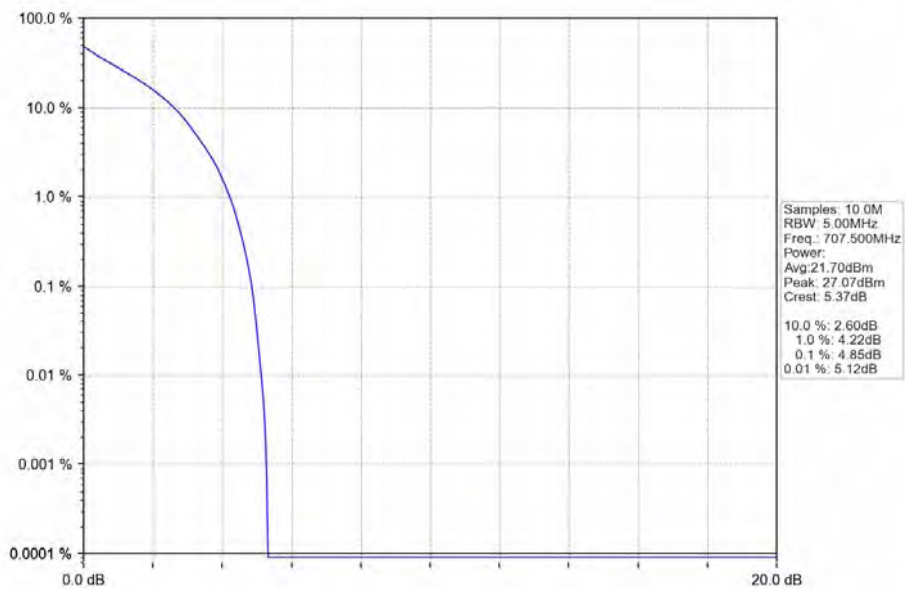


Test Graph

Band12_1.4MHz_QPSK_LCH_699.7MHz_RB_6_0_NTNV

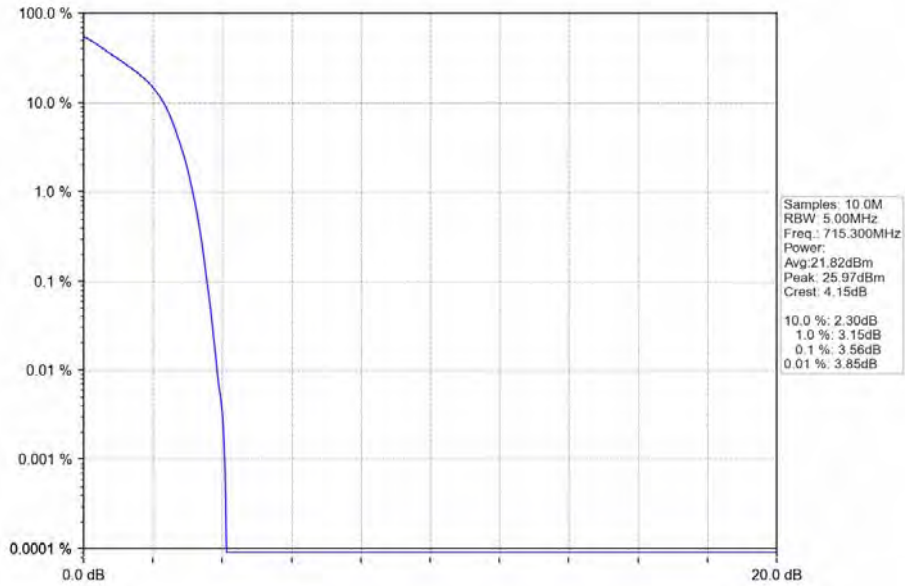


Band12_1.4MHz_QPSK_MCH_707.5MHz_RB_6_0_NTNV

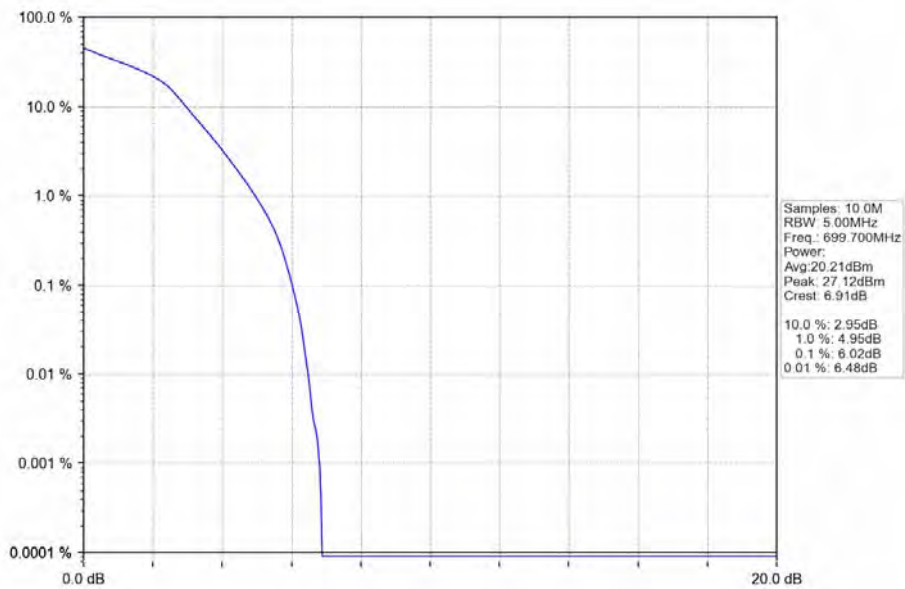




Band12_1.4MHz_QPSK_HCH_715.3MHz_RB_6_0_NTNV

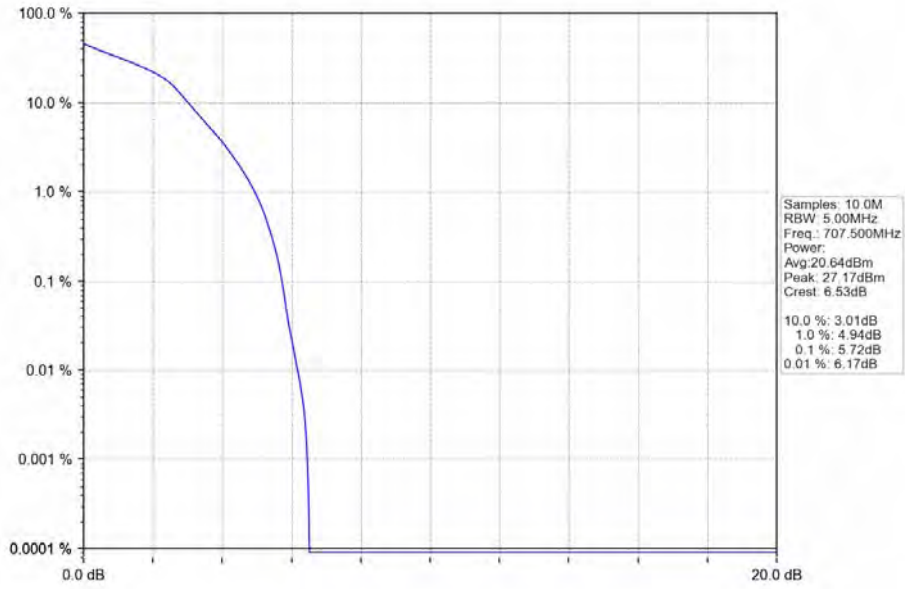


Band12_1.4MHz_16QAM_LCH_699.7MHz_RB_6_0_NTNV

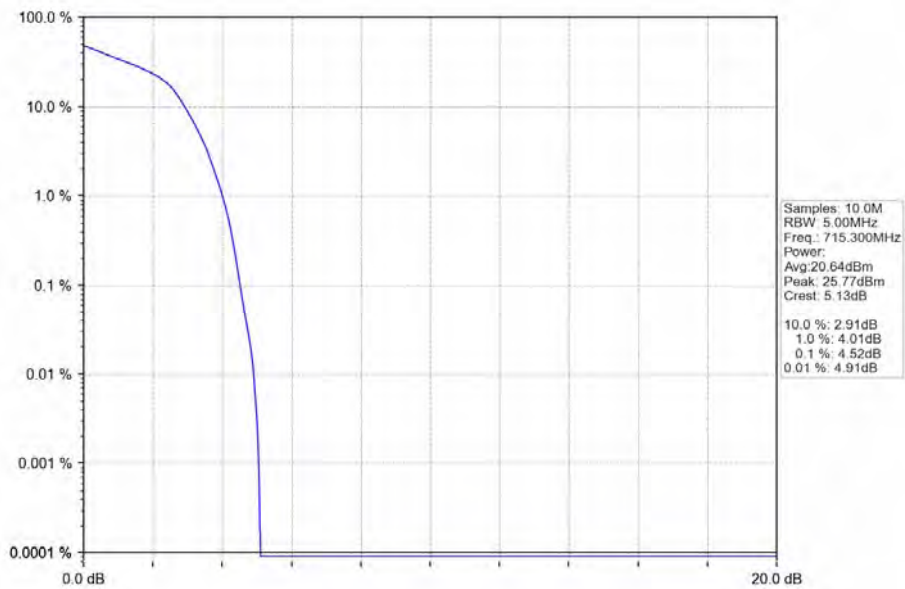




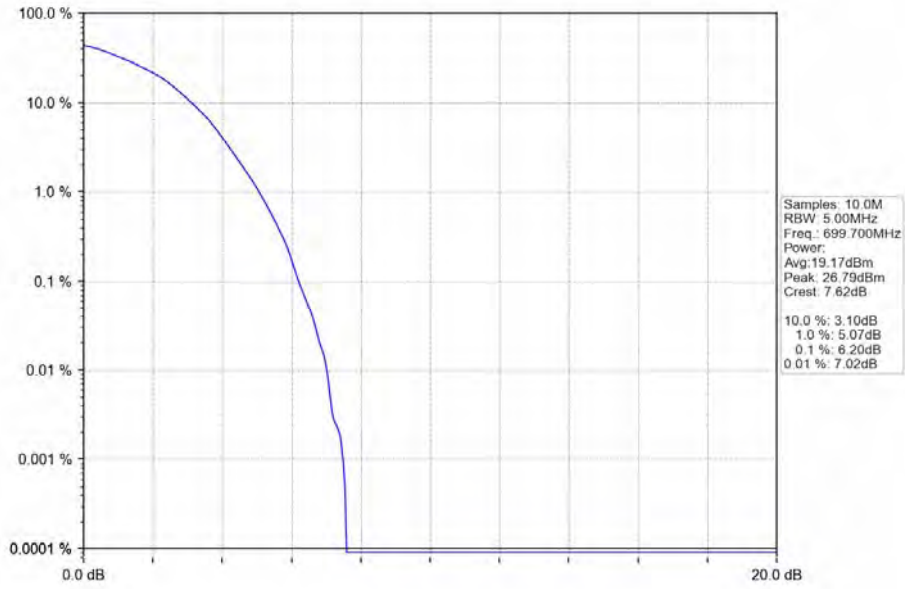
Band12_1.4MHz_16QAM_MCH_707.5MHz_RB_6_0_NTNV



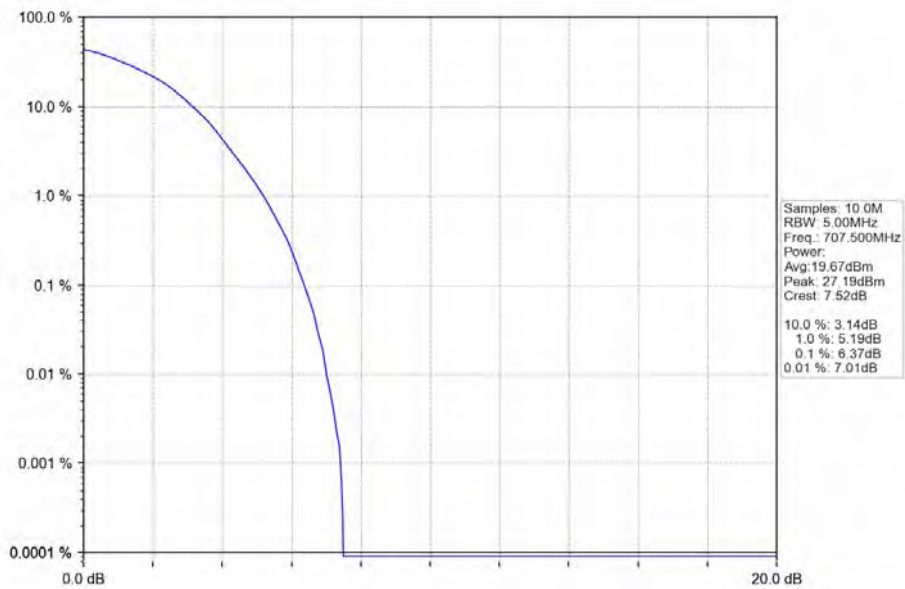
Band12_1.4MHz_16QAM_HCH_715.3MHz_RB_6_0_NTNV



Band12_1.4MHz_64QAM_LCH_699.7MHz_RB_6_0_NTNV

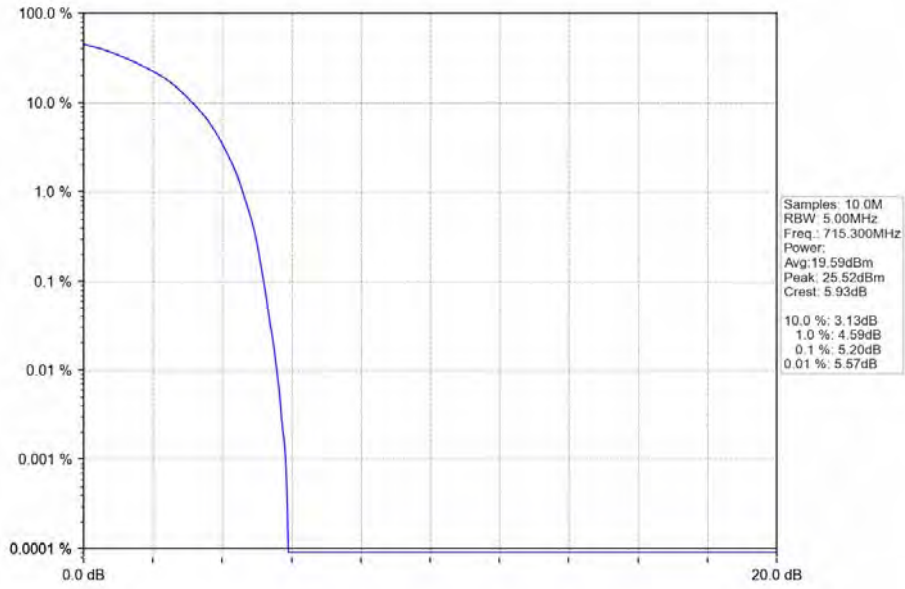


Band12_1.4MHz_64QAM_MCH_707.5MHz_RB_6_0_NTNV





Band12_1.4MHz_64QAM_HCH_715.3MHz_RB_6_0_NTNV





B12_3MHz

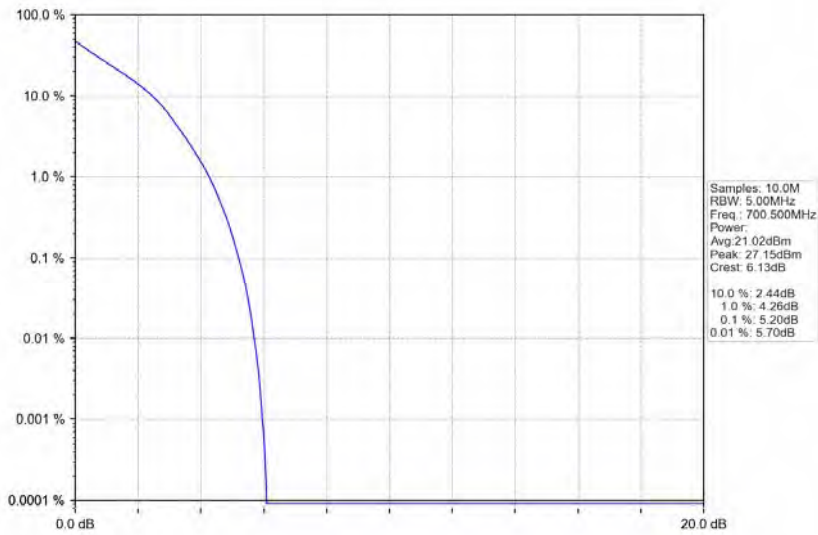
Test Result

Band: 12 / Bandwidth: 3MHz / NTN						
Modulation	Frequency (MHz)	RB Allocation		Peak-Average Ratio (dB)		Verdict
		Size	Offset	Result	Limit	
QPSK	700.5	15	0	5.20	<=13	Pass
	707.5	15	0	4.99	<=13	Pass
	714.5	15	0	3.96	<=13	Pass
16QAM	700.5	15	0	6.04	<=13	Pass
	707.5	15	0	5.87	<=13	Pass
	714.5	15	0	4.86	<=13	Pass
64QAM	700.5	15	0	6.43	<=13	Pass
	707.5	15	0	6.29	<=13	Pass
	714.5	15	0	5.54	<=13	Pass

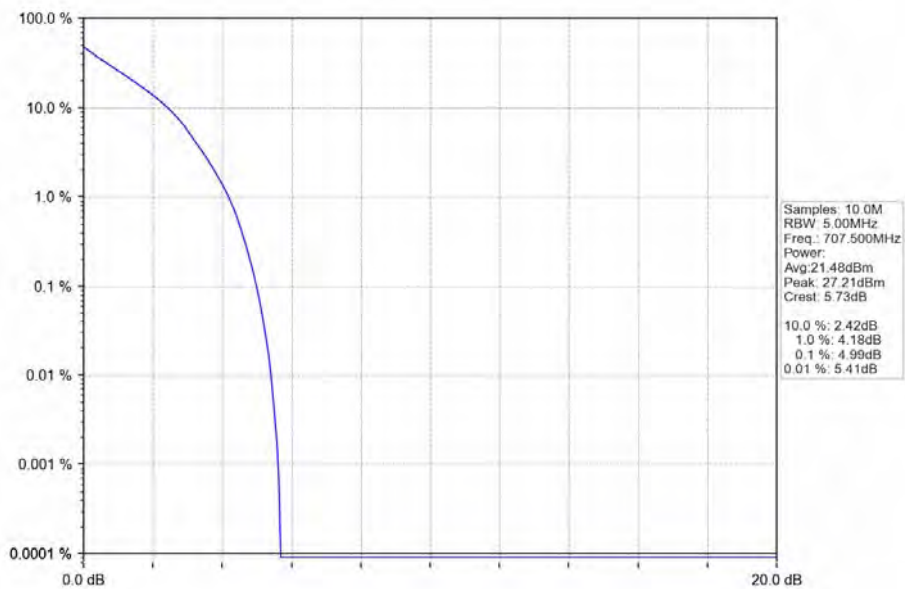


Test Graph

Band12_3MHz_QPSK_LCH_700.5MHz_RB_15_0_NTNV

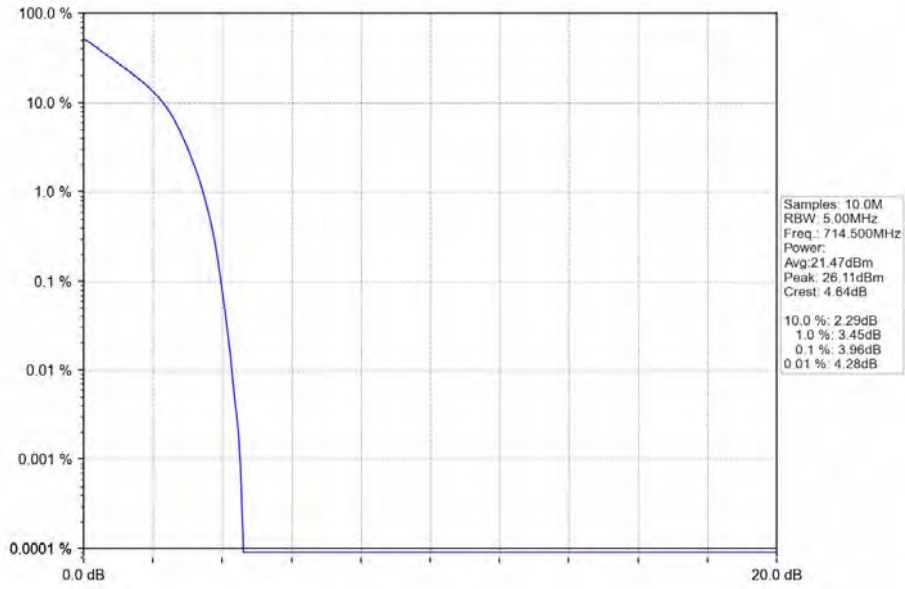


Band12_3MHz_QPSK_MCH_707.5MHz_RB_15_0_NTNV

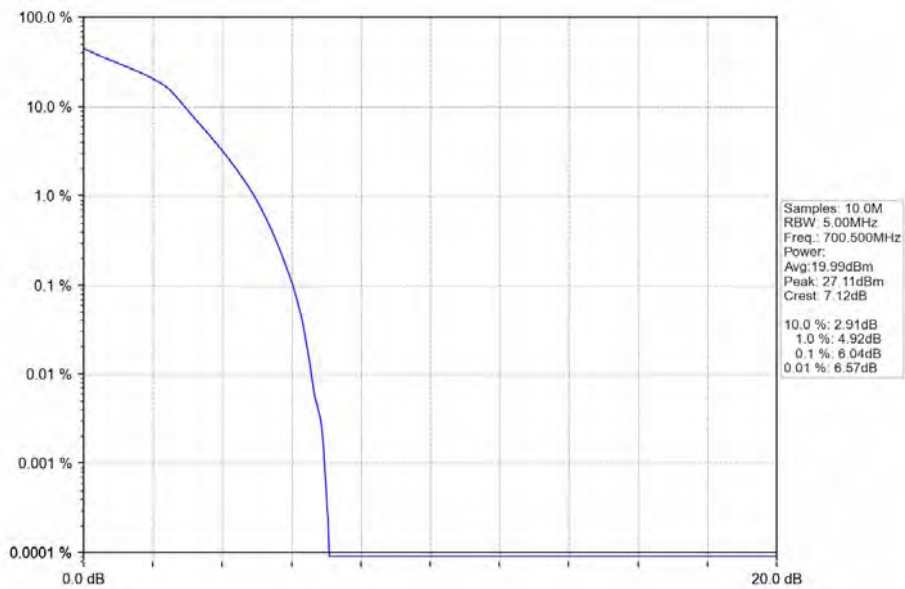




Band12_3MHz_QPSK_HCH_714.5MHz_RB_15_0_NTNV

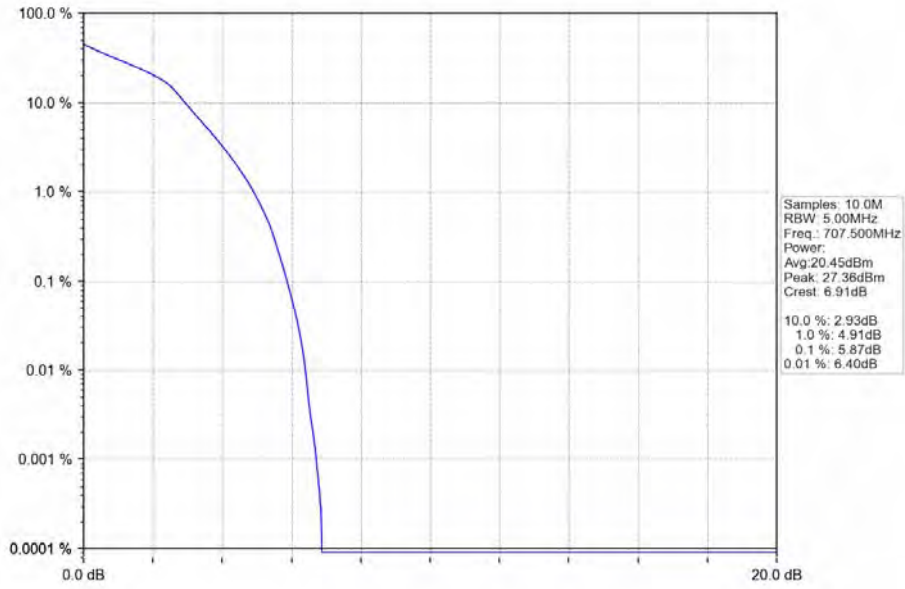


Band12_3MHz_16QAM_LCH_700.5MHz_RB_15_0_NTNV

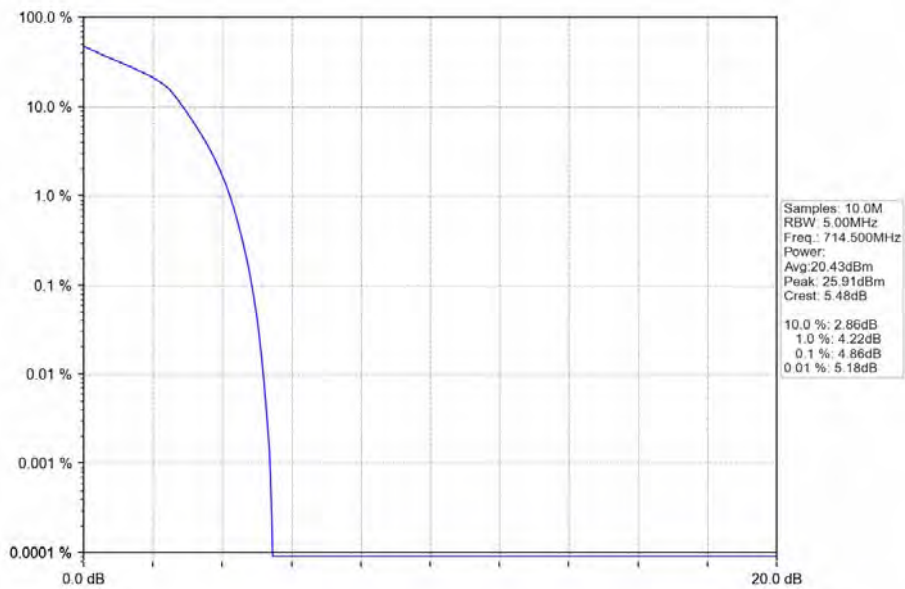




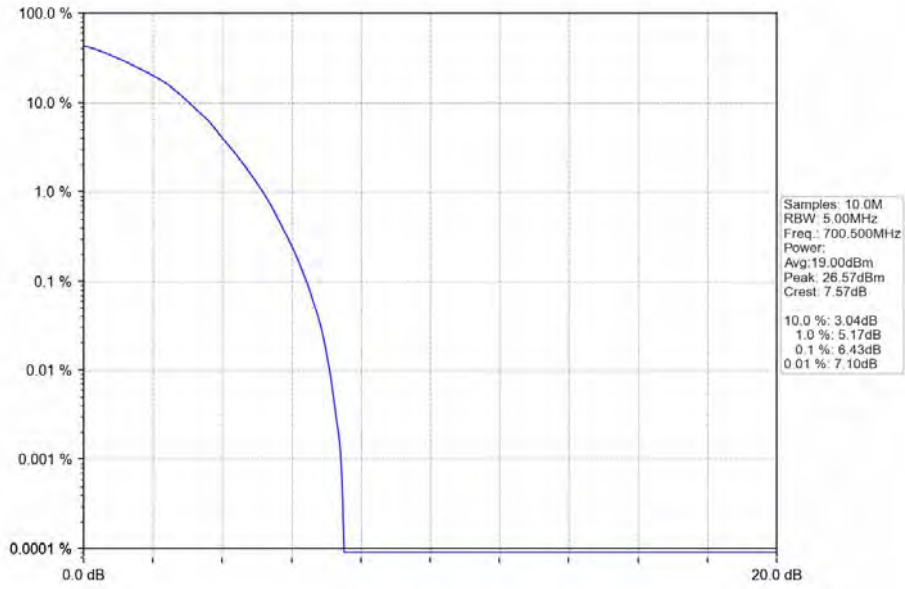
Band12_3MHz_16QAM_MCH_707.5MHz_RB_15_0_NTNV



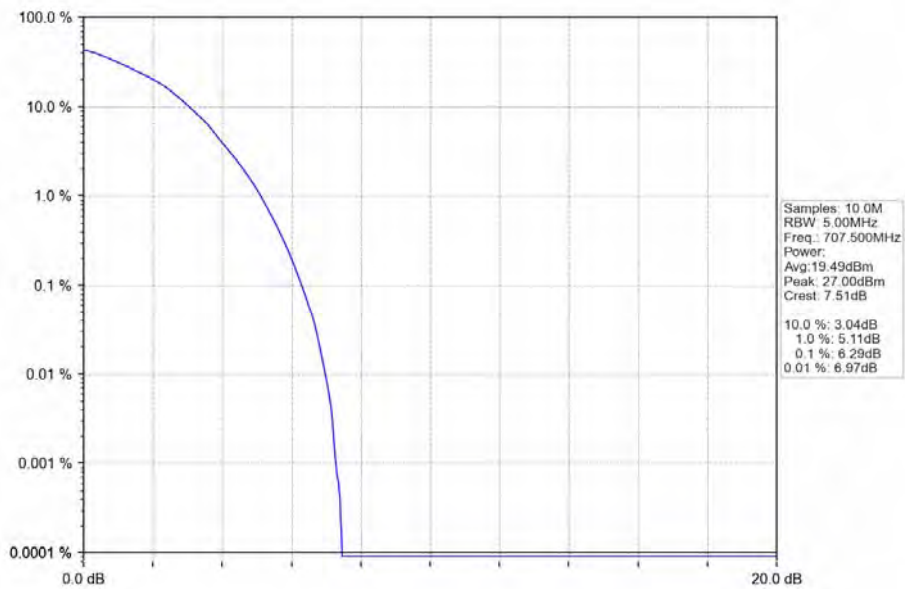
Band12_3MHz_16QAM_HCH_714.5MHz_RB_15_0_NTNV



Band12_3MHz_64QAM_LCH_700.5MHz_RB_15_0_NTNV

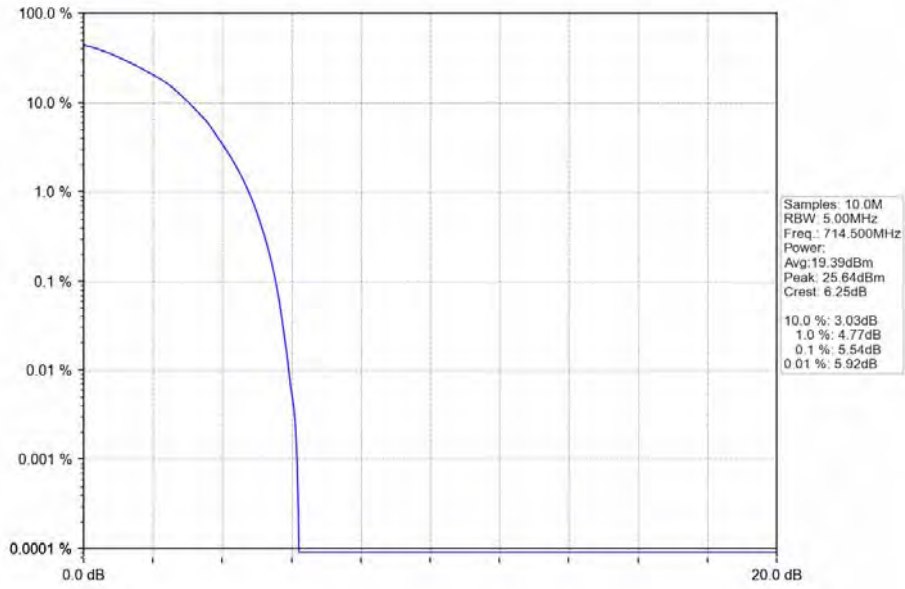


Band12_3MHz_64QAM_MCH_707.5MHz_RB_15_0_NTNV





Band12_3MHz_64QAM_HCH_714.5MHz_RB_15_0_NTNV





B12_5MHz

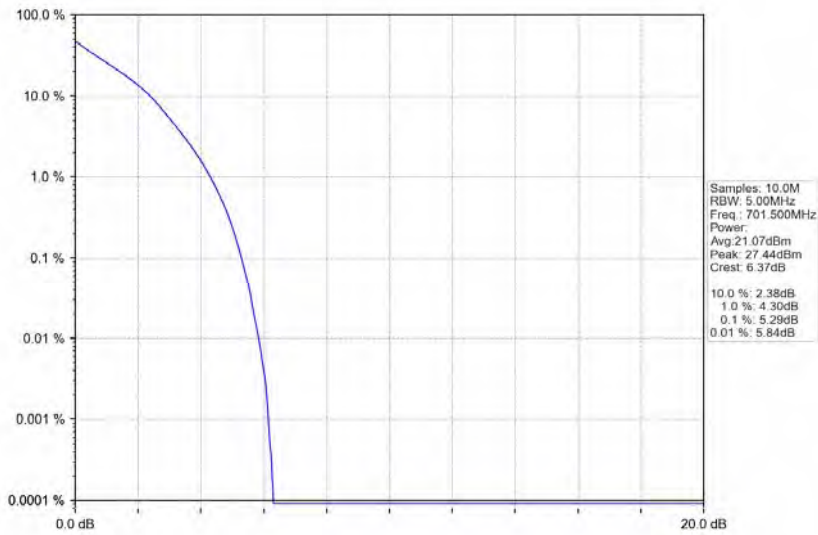
Test Result

Band: 12 / Bandwidth: 5MHz / NTN						
Modulation	Frequency (MHz)	RB Allocation		Peak-Average Ratio (dB)		Verdict
		Size	Offset	Result	Limit	
QPSK	701.5	25	0	5.29	<=13	Pass
	707.5	25	0	5.26	<=13	Pass
	713.5	25	0	4.73	<=13	Pass
16QAM	701.5	25	0	6.01	<=13	Pass
	707.5	25	0	5.99	<=13	Pass
	713.5	25	0	5.52	<=13	Pass
64QAM	701.5	25	0	6.38	<=13	Pass
	707.5	25	0	6.38	<=13	Pass
	713.5	25	0	5.99	<=13	Pass

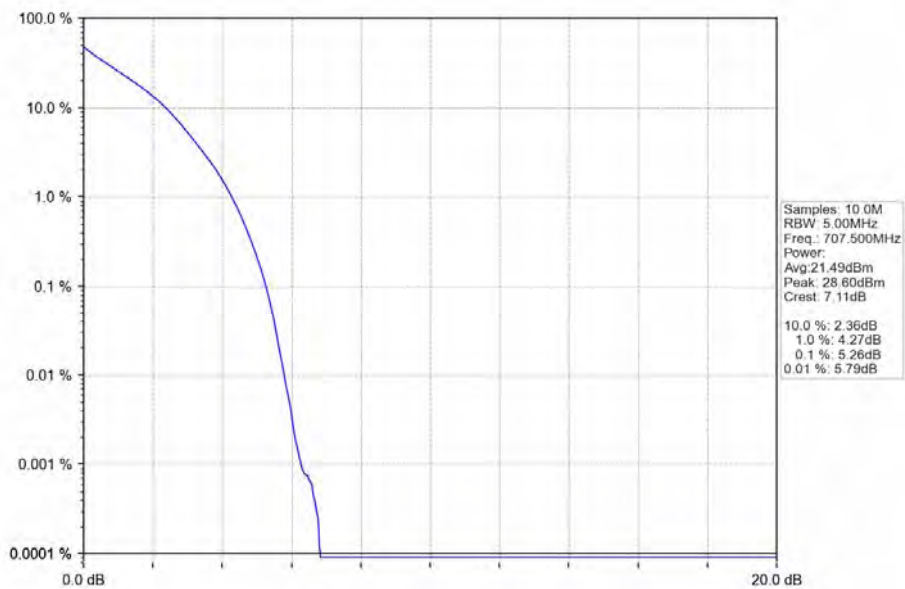


Test Graph

Band12_5MHz_QPSK_LCH_701.5MHz_RB_25_0_NTNV

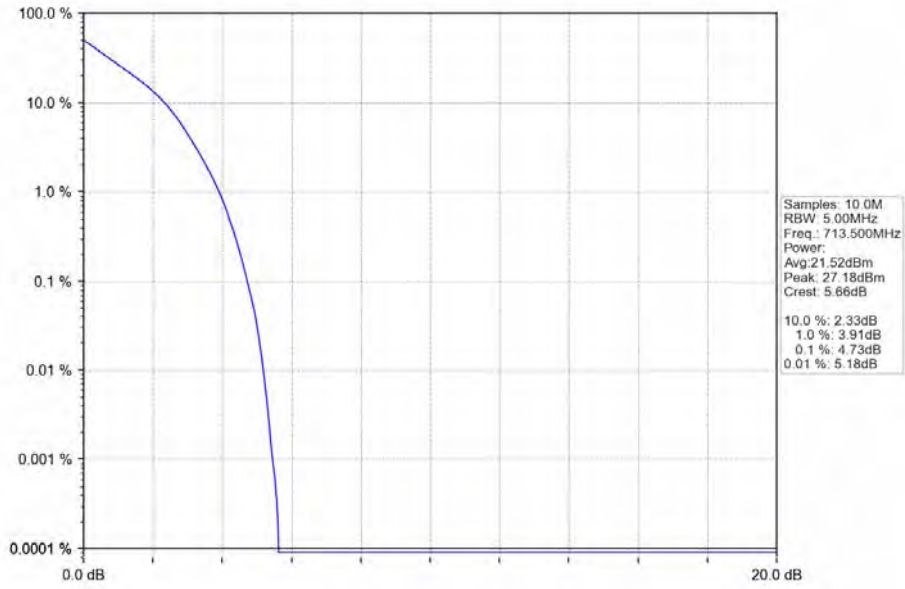


Band12_5MHz_QPSK_MCH_707.5MHz_RB_25_0_NTNV

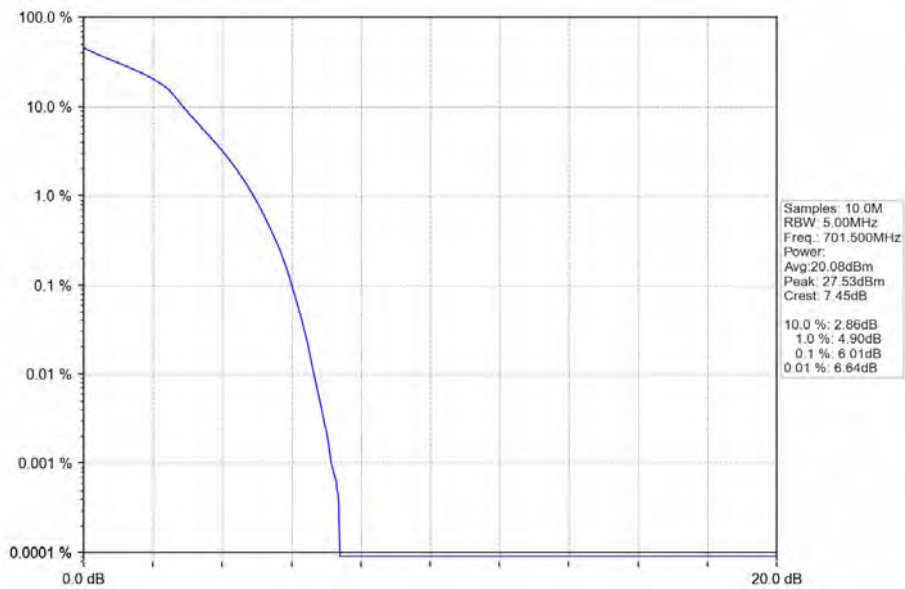




Band12_5MHz_QPSK_HCH_713.5MHz_RB_25_0_NTNV

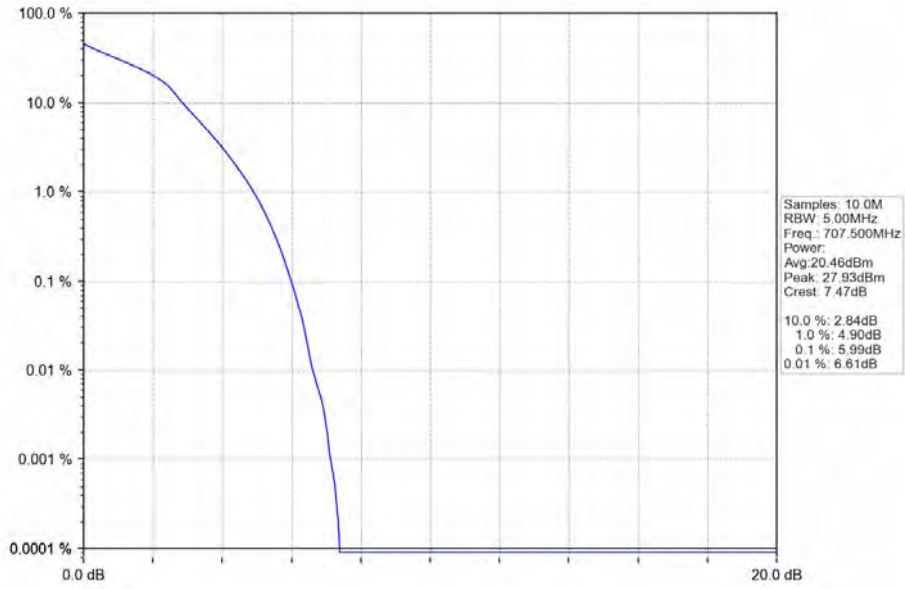


Band12_5MHz_16QAM_LCH_701.5MHz_RB_25_0_NTNV

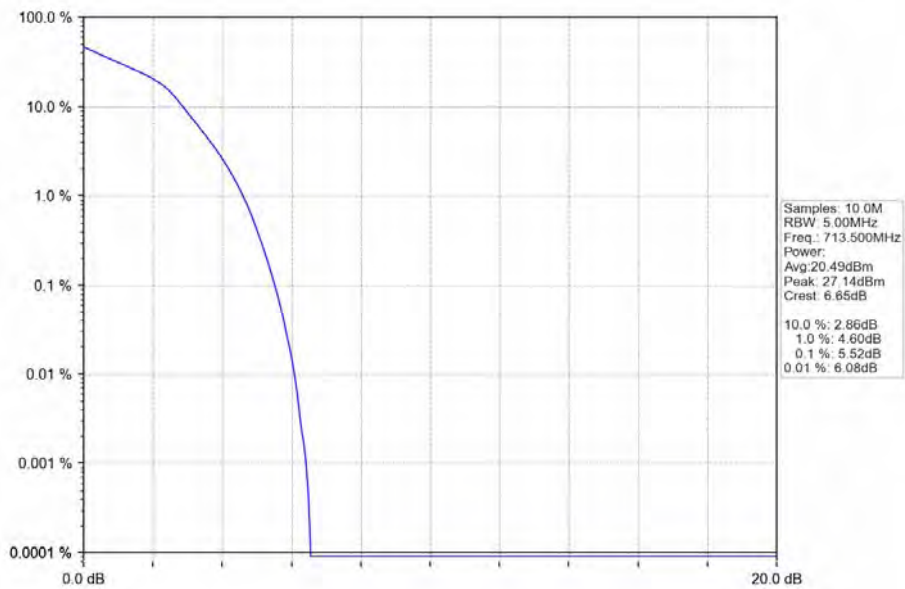




Band12_5MHz_16QAM_MCH_707.5MHz_RB_25_0_NTNV

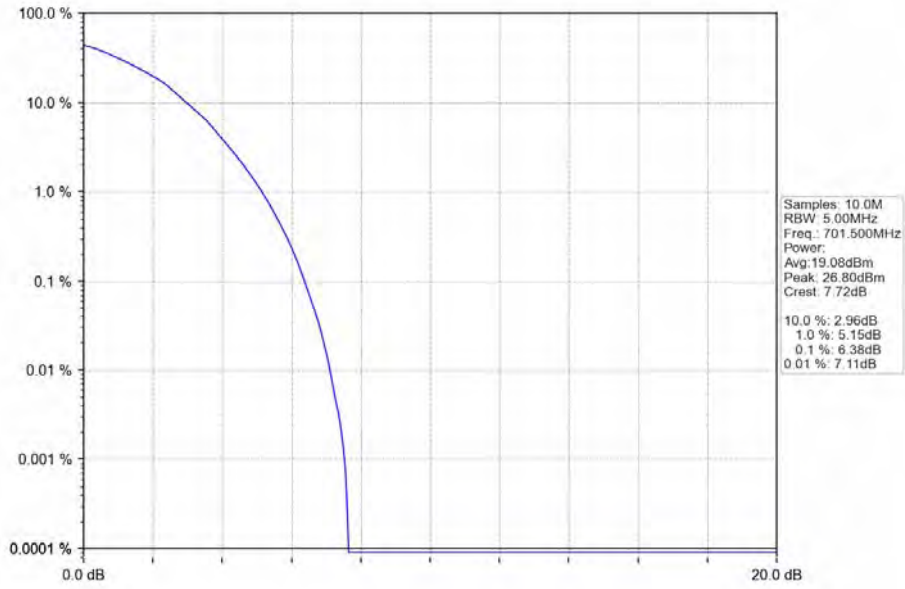


Band12_5MHz_16QAM_HCH_713.5MHz_RB_25_0_NTNV

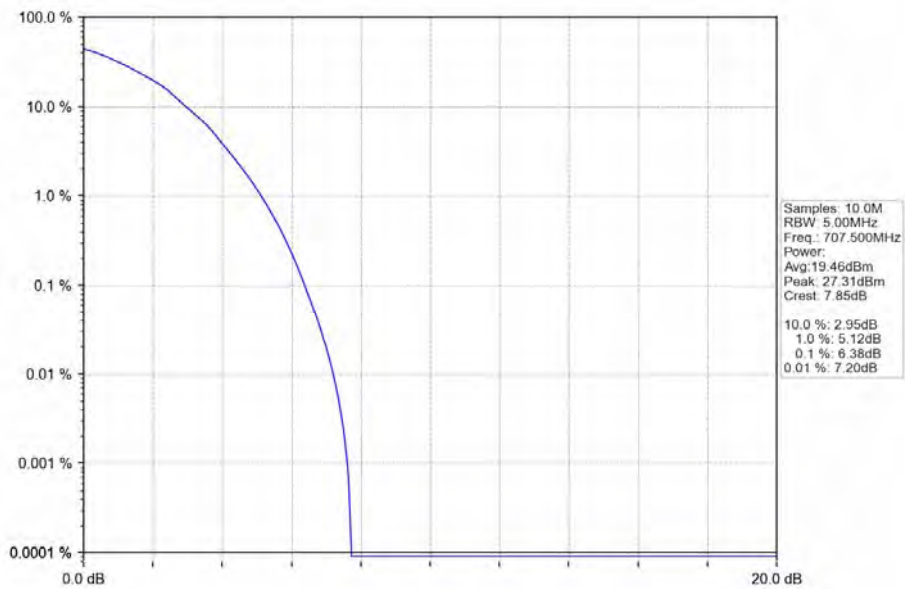




Band12_5MHz_64QAM_LCH_701.5MHz_RB_25_0_NTNV

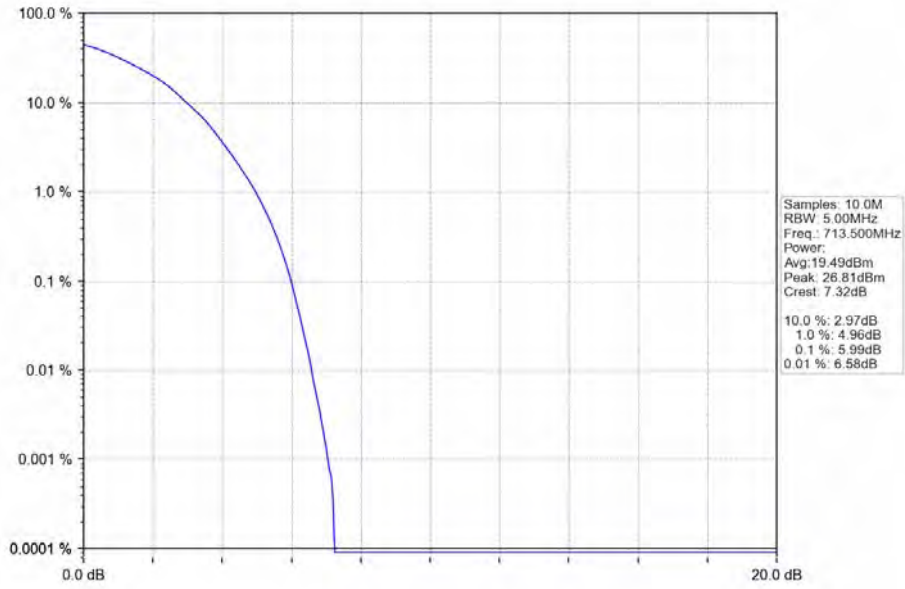


Band12_5MHz_64QAM_MCH_707.5MHz_RB_25_0_NTNV





Band12_5MHz_64QAM_HCH_713.5MHz_RB_25_0_NTNV





B12_10MHz

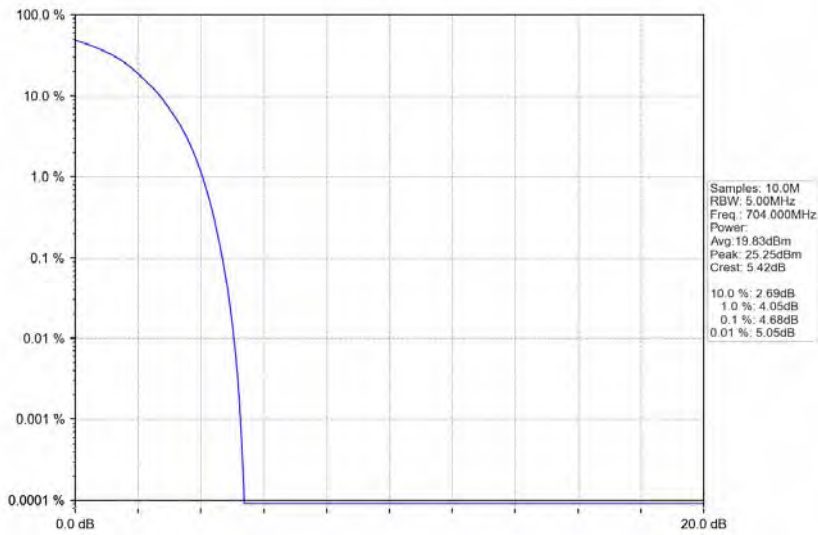
Test Result

Band: 12 / Bandwidth: 10MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Peak-Average Ratio (dB)		Verdict
		Size	Offset	Result	Limit	
QPSK	704	50	0	4.68	<=13	Pass
	707.5	50	0	4.65	<=13	Pass
	711	50	0	4.63	<=13	Pass
16QAM	704	50	0	6.05	<=13	Pass
	707.5	50	0	6.02	<=13	Pass
	711	50	0	6.05	<=13	Pass
64QAM	704	50	0	6.36	<=13	Pass
	707.5	50	0	6.35	<=13	Pass
	711	50	0	6.37	<=13	Pass

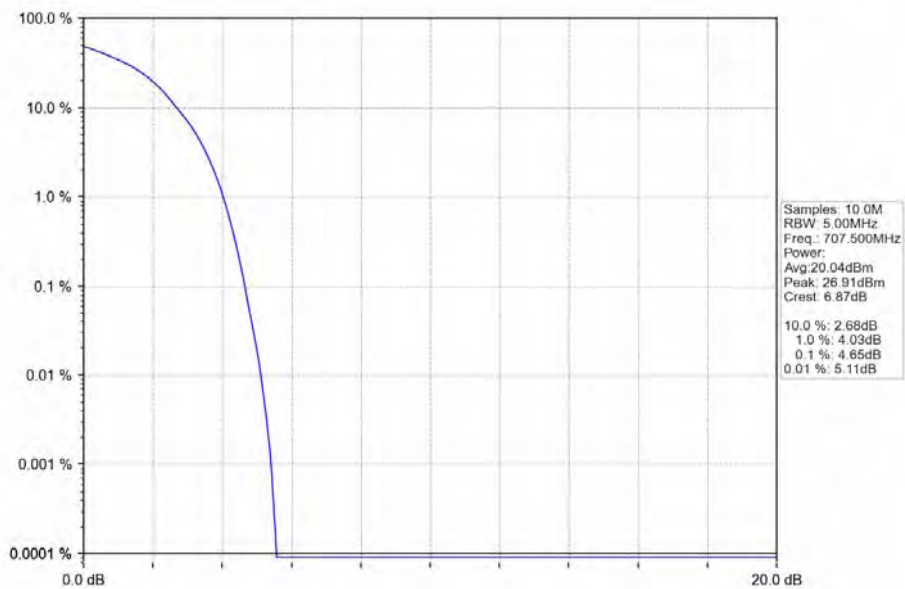


Test Graph

Band12_10MHz_QPSK_LCH_704MHz_RB_50_0_NTNV

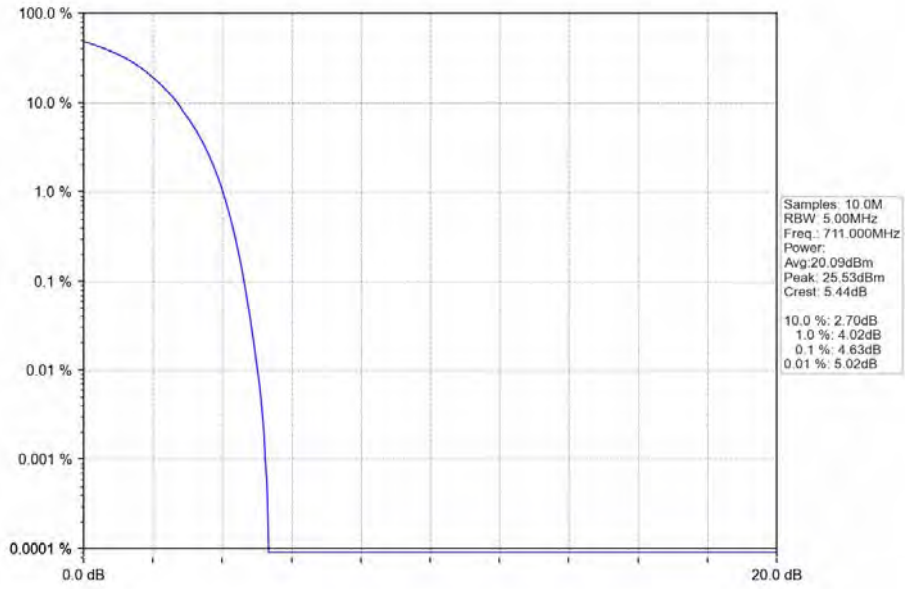


Band12_10MHz_QPSK_MCH_707.5MHz_RB_50_0_NTNV

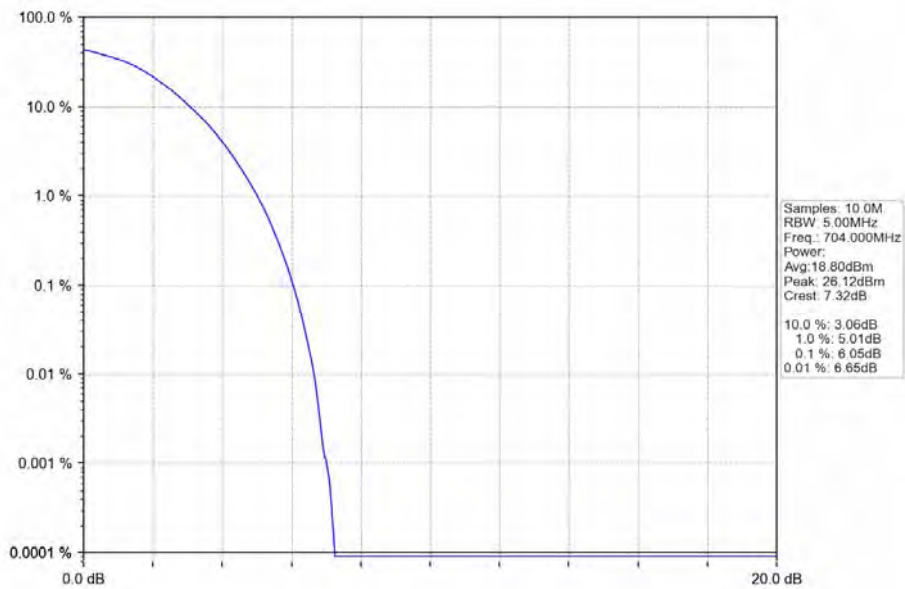




Band12_10MHz_QPSK_HCH_711MHz_RB_50_0_NTNV

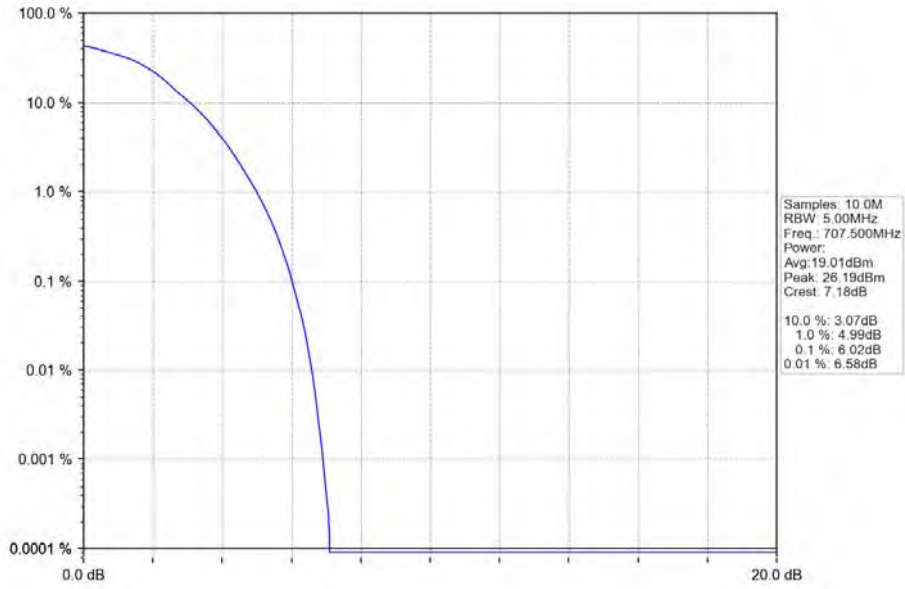


Band12_10MHz_16QAM_LCH_704MHz_RB_50_0_NTNV

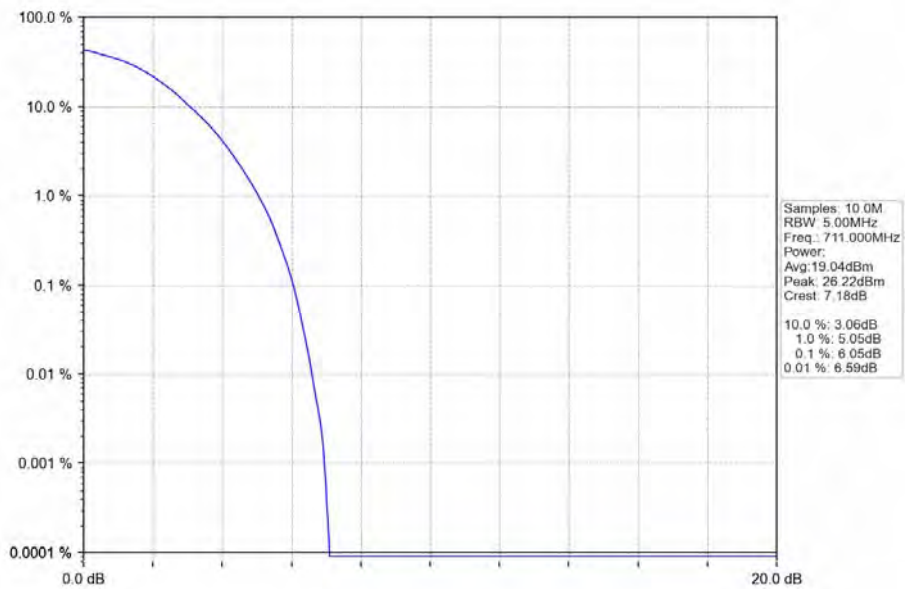




Band12_10MHz_16QAM_MCH_707.5MHz_RB_50_0_NTNV

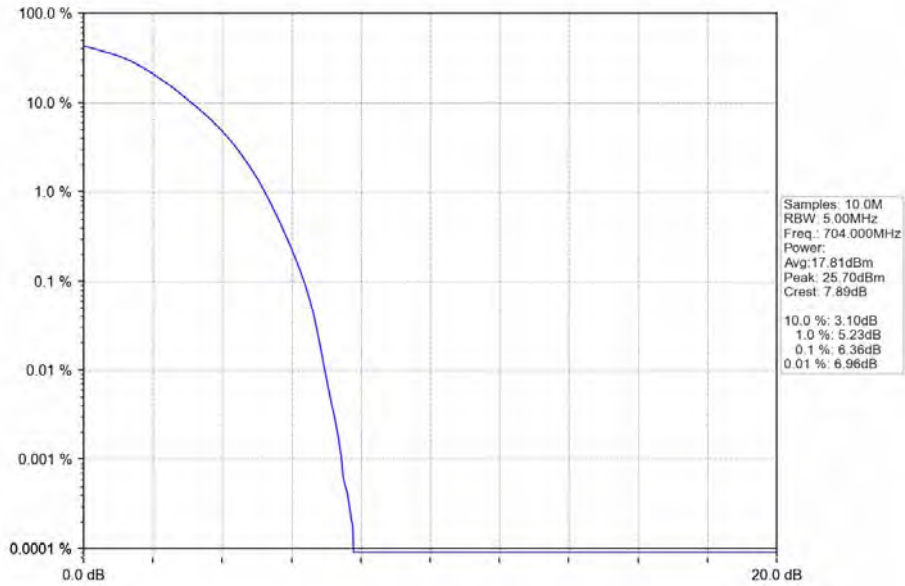


Band12_10MHz_16QAM_HCH_711MHz_RB_50_0_NTNV

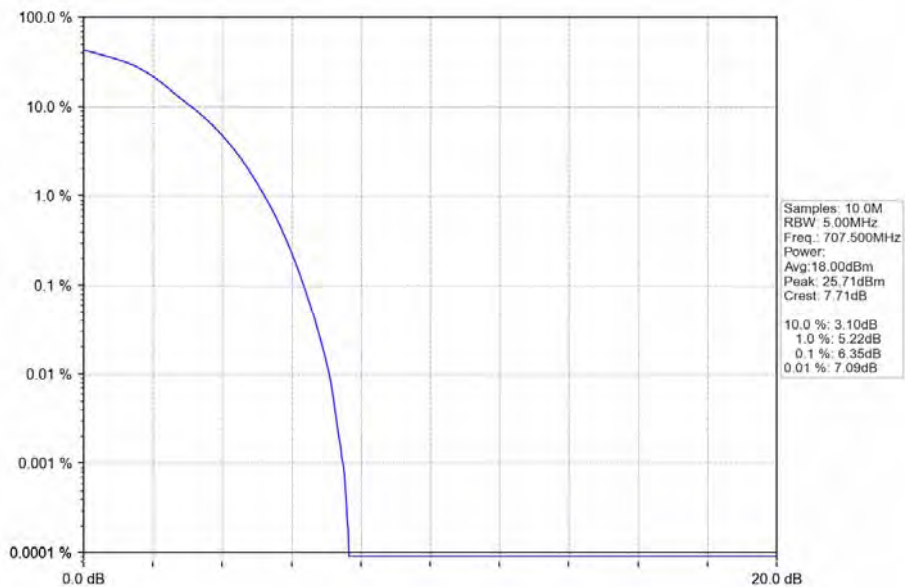




Band12_10MHz_64QAM_LCH_704MHz_RB_50_0_NTNV

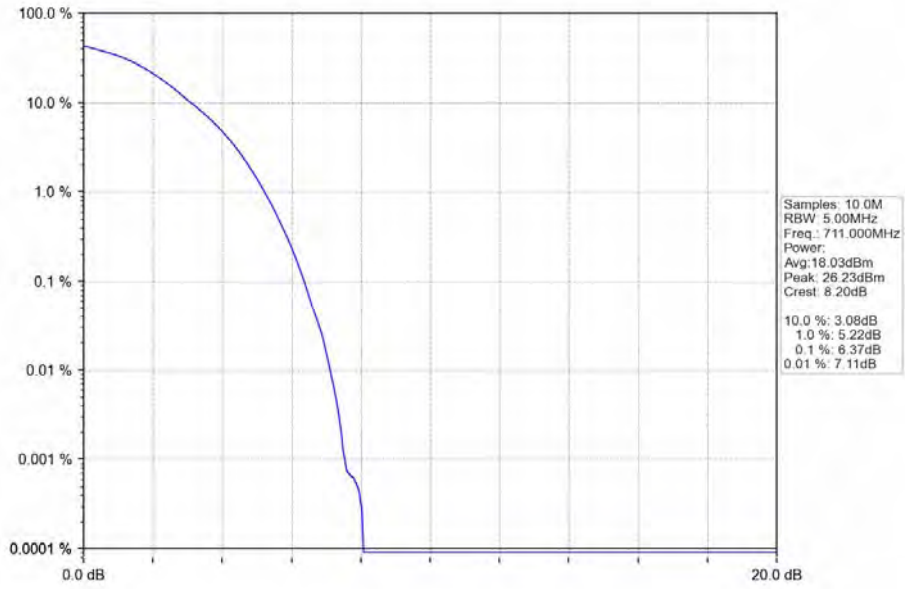


Band12_10MHz_64QAM_MCH_707.5MHz_RB_50_0_NTNV





Band12_10MHz_64QAM_HCH_711MHz_RB_50_0_NTNV





Spurious Emission

B12_1.4MHz

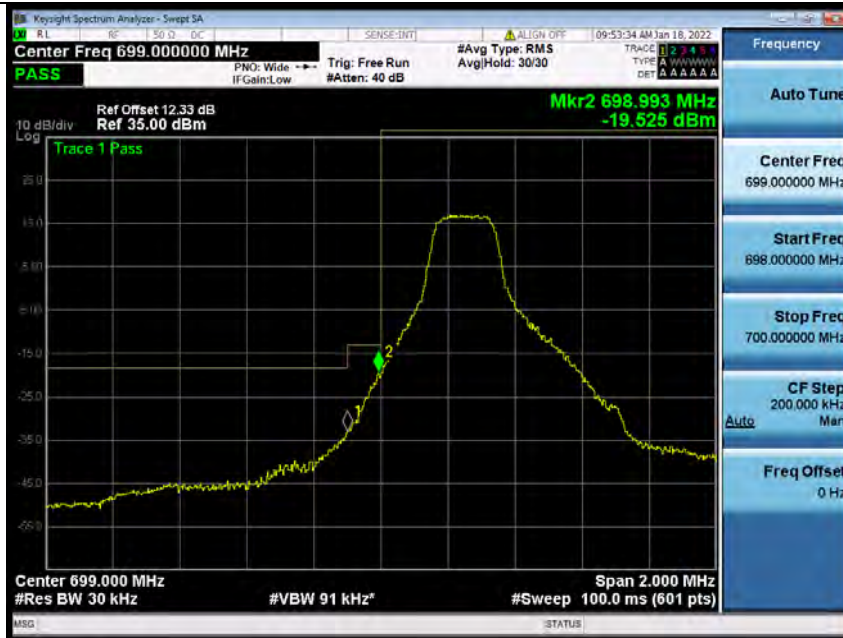
Test Result

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

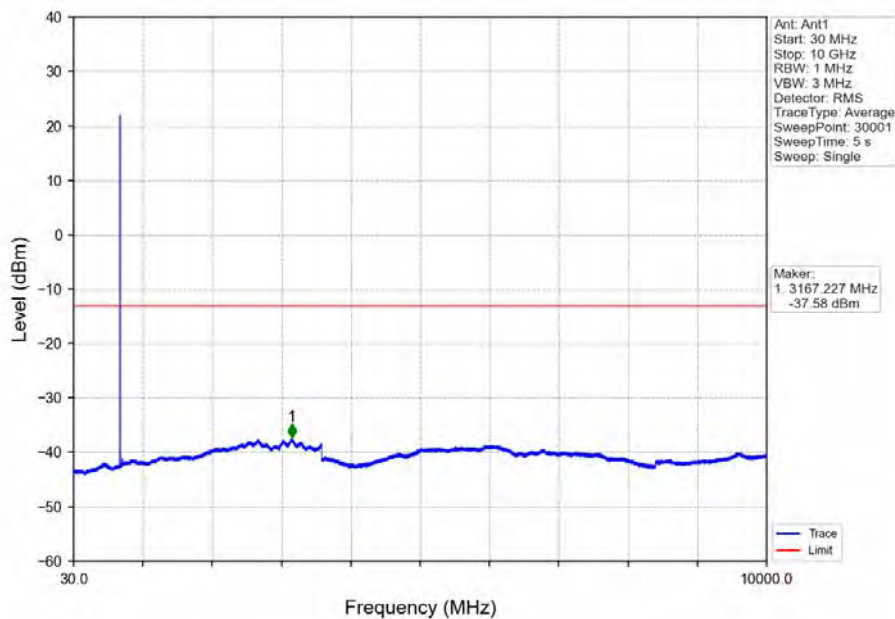


Test Graph

Band12_1.4MHz_QPSK_LCH_699.7MHz_RB_1_0_NTNV

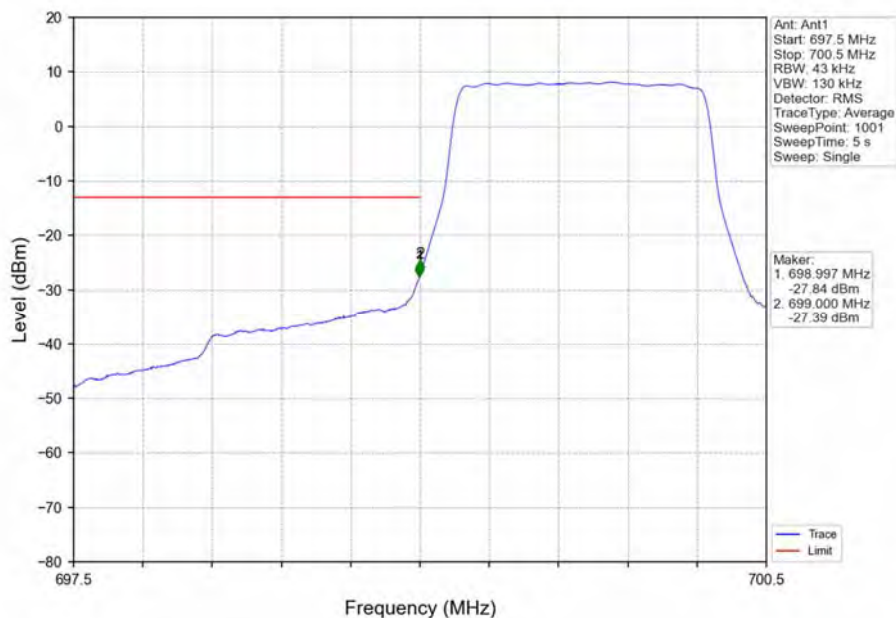


Band12_1.4MHz_QPSK_LCH_699.7MHz_RB_1_0_NTNV

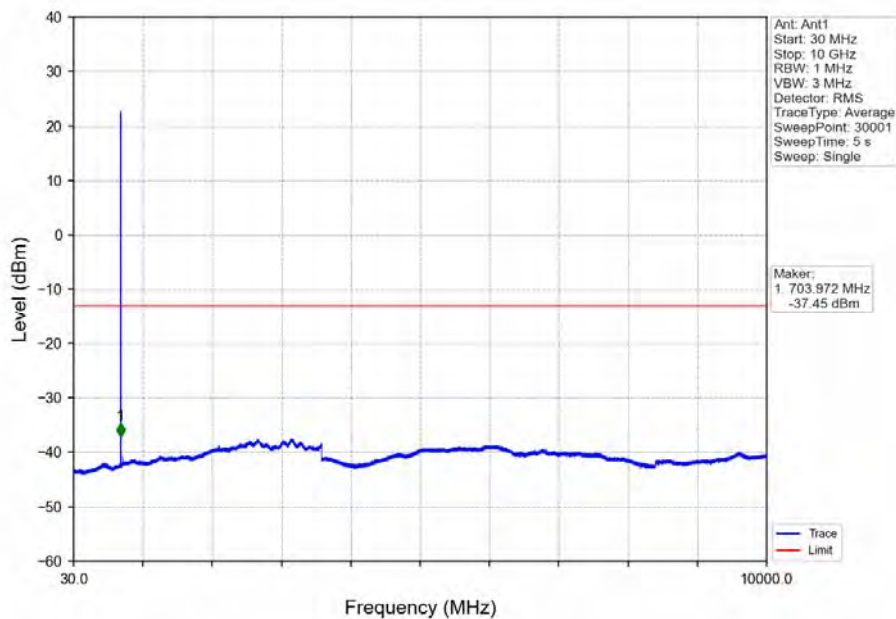




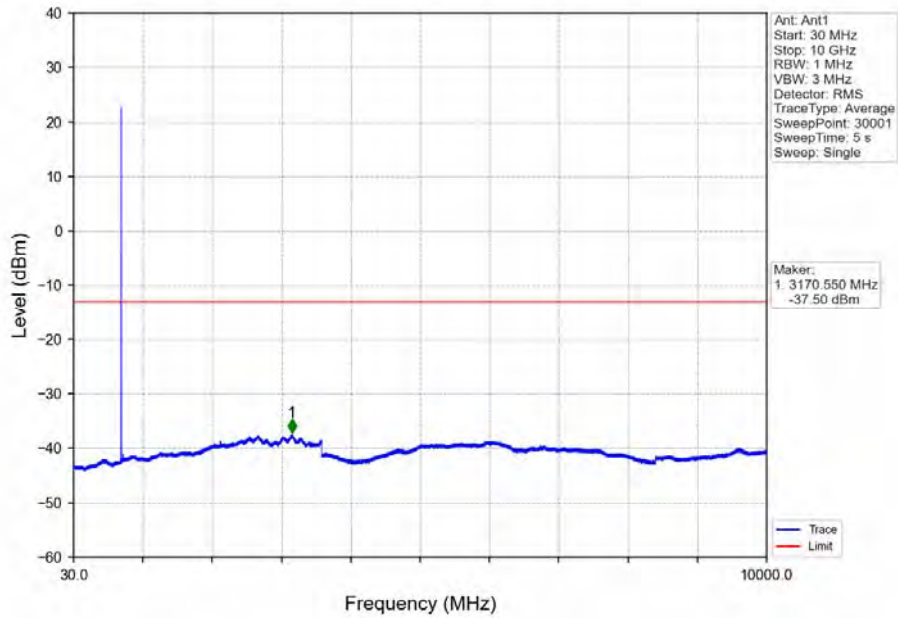
Band12_1.4MHz_QPSK_LCH_699.7MHz_RB_6_0_NTNV



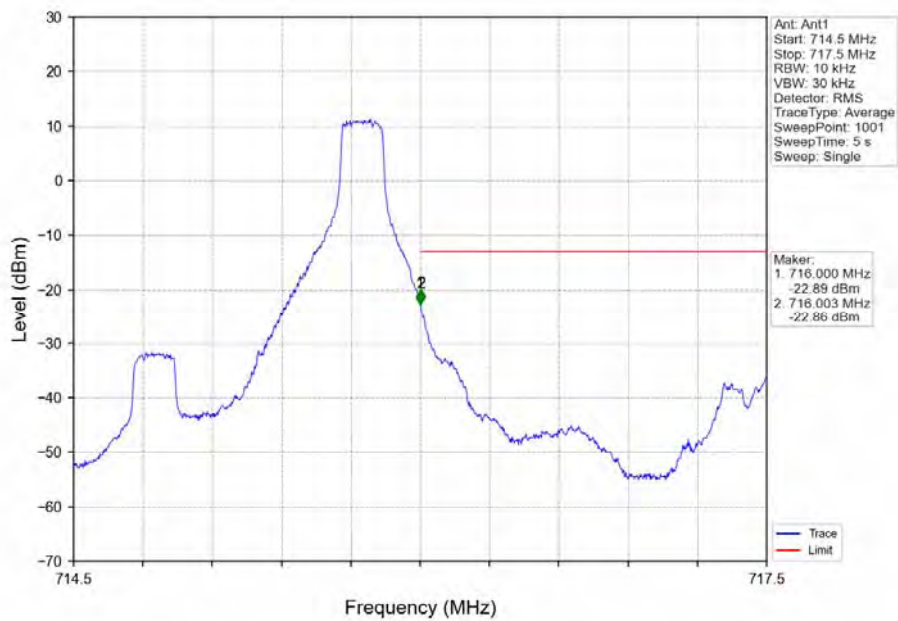
Band12_1.4MHz_QPSK_MCH_707.5MHz_RB_1_0_NTNV



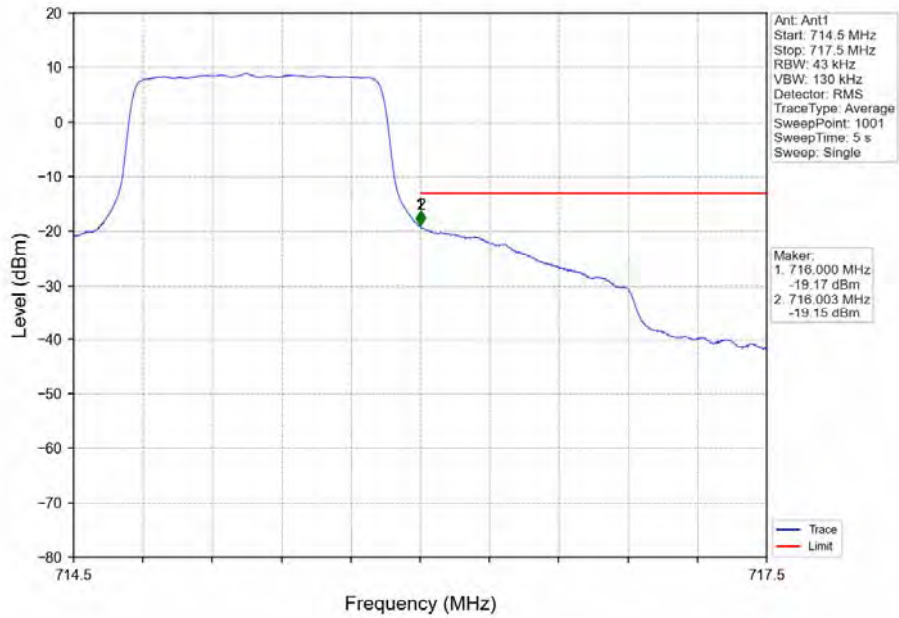
Band12_1.4MHz_QPSK_HCH_715.3MHz_RB_1_0_NTNV



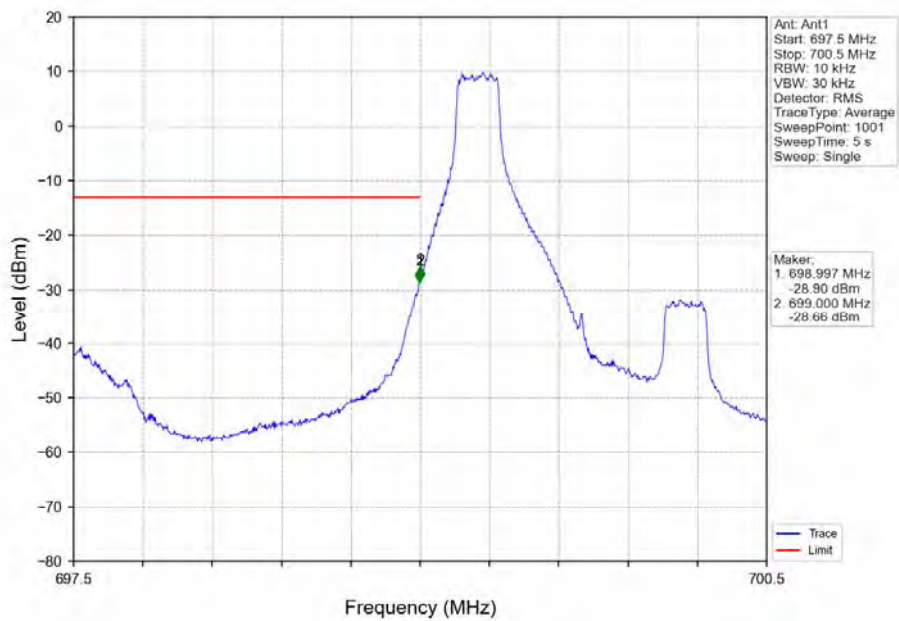
Band12_1.4MHz_QPSK_HCH_715.3MHz_RB_1_5_NTNV



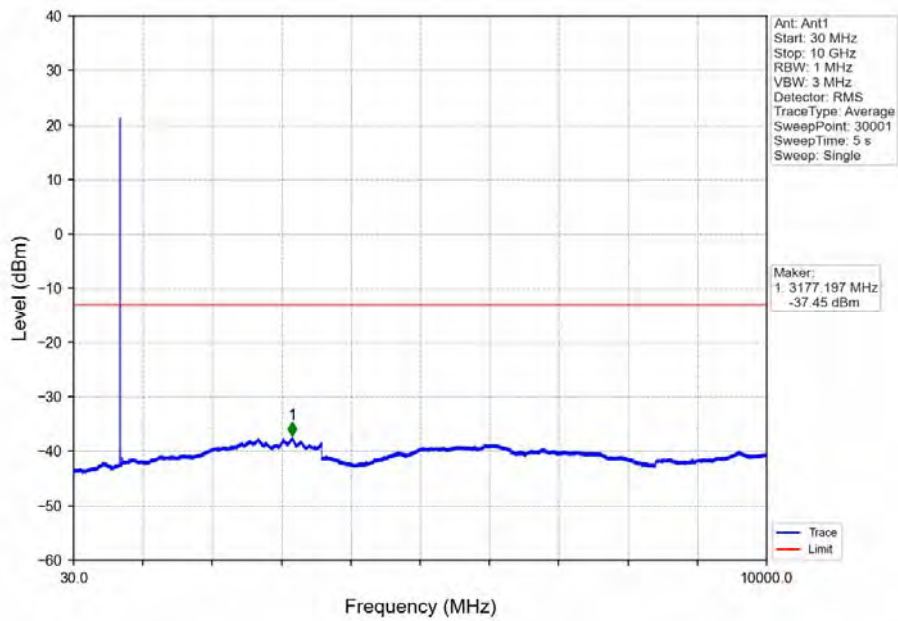
Band12_1.4MHz_QPSK_HCH_715.3MHz_RB_6_0_NTNV



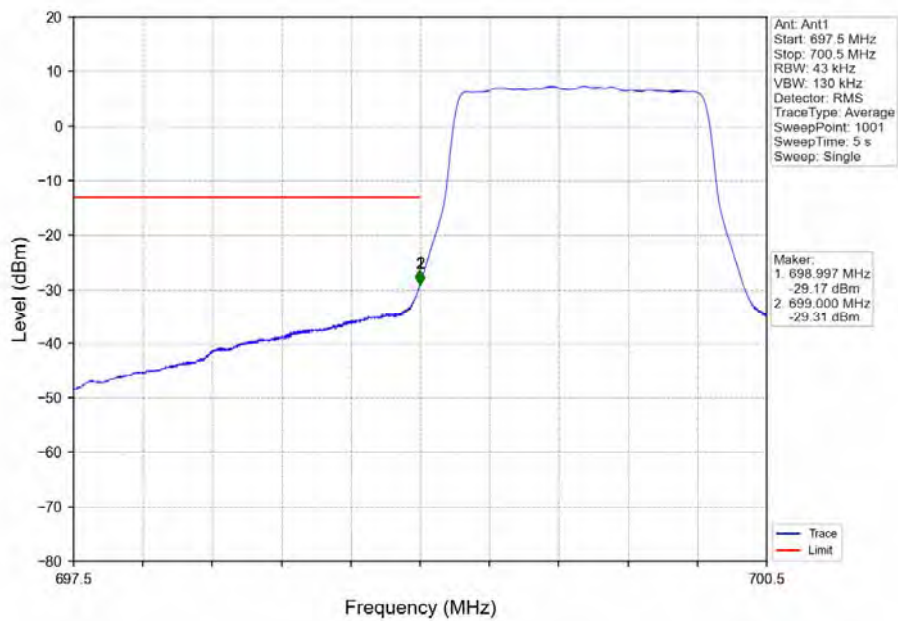
Band12_1.4MHz_16QAM_LCH_699.7MHz_RB_1_0_NTNV



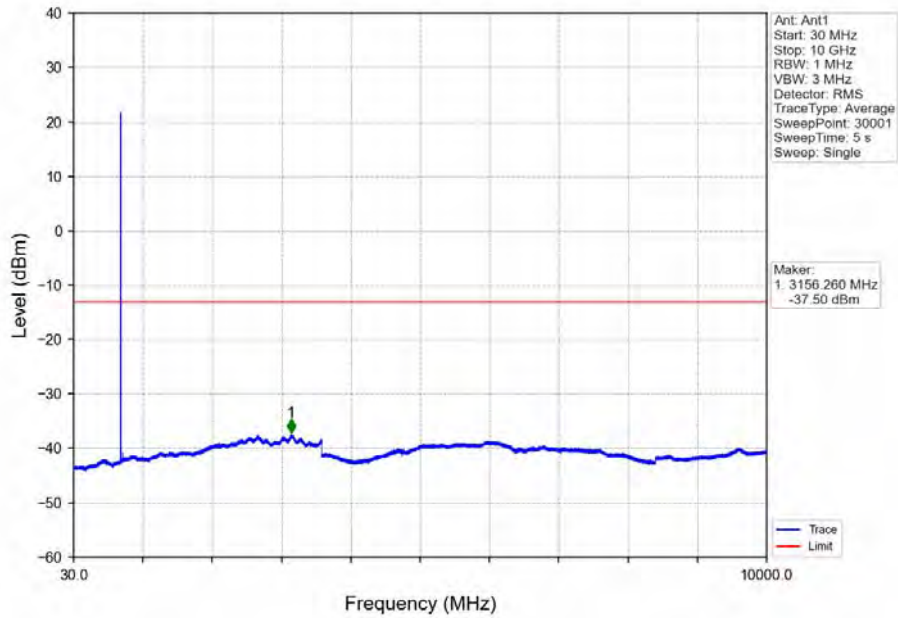
Band12_1.4MHz_16QAM_LCH_699.7MHz_RB_1_0_NTNV



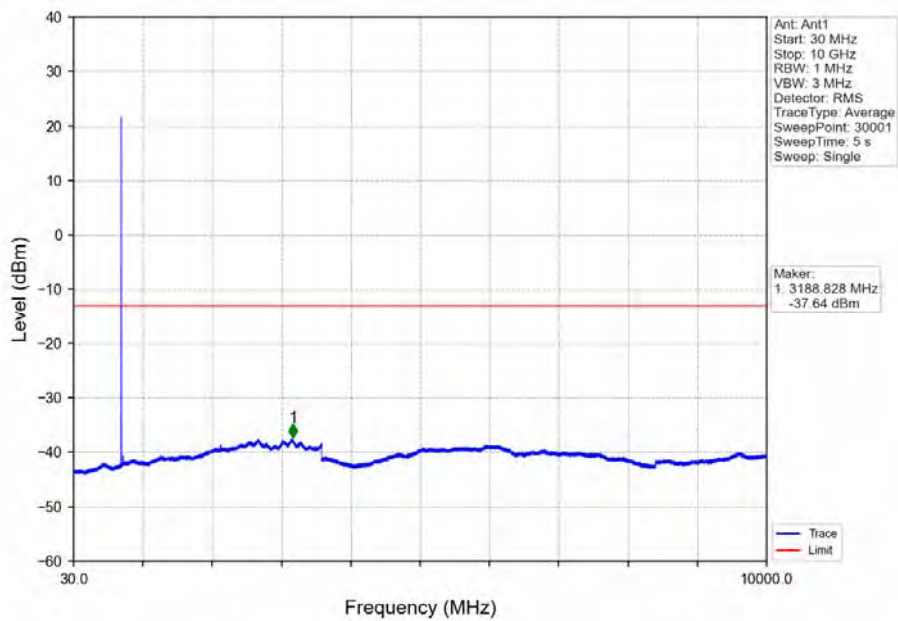
Band12_1.4MHz_16QAM_LCH_699.7MHz_RB_6_0_NTNV



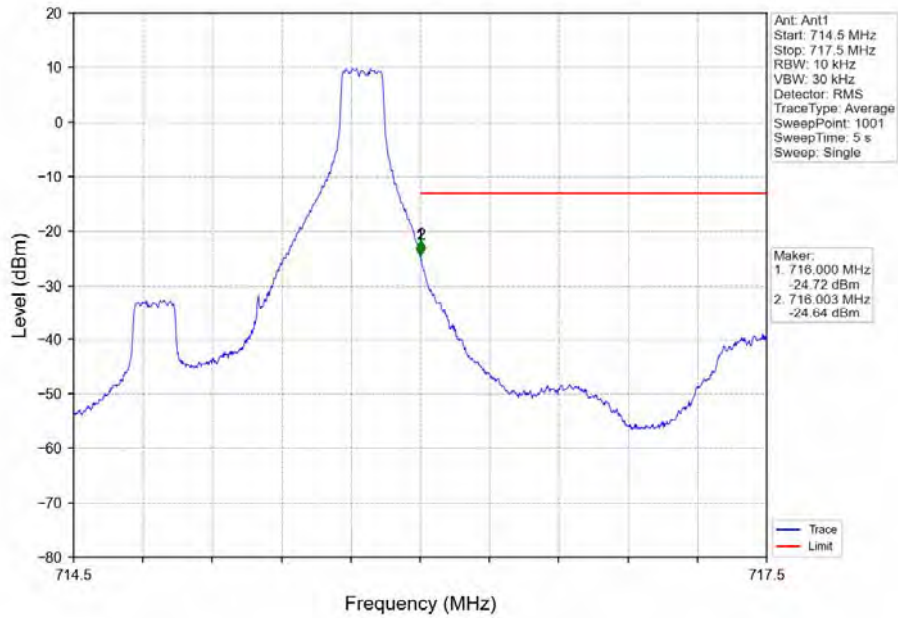
Band12_1.4MHz_16QAM_MCH_707.5MHz_RB_1_0_NTNV



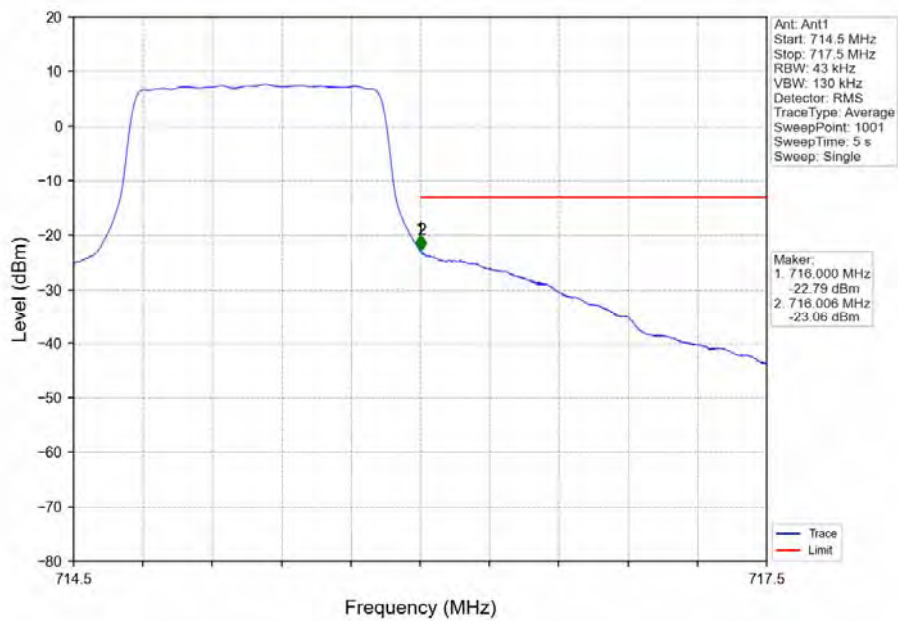
Band12_1.4MHz_16QAM_HCH_715.3MHz_RB_1_0_NTNV



Band12_1.4MHz_16QAM_HCH_715.3MHz_RB_1_5_NTNV

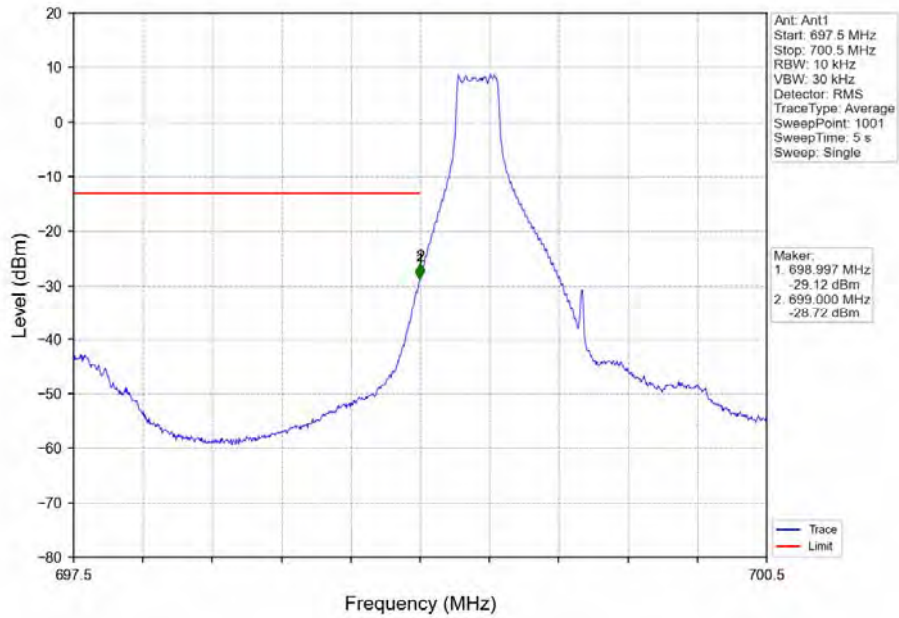


Band12_1.4MHz_16QAM_HCH_715.3MHz_RB_6_0_NTNV

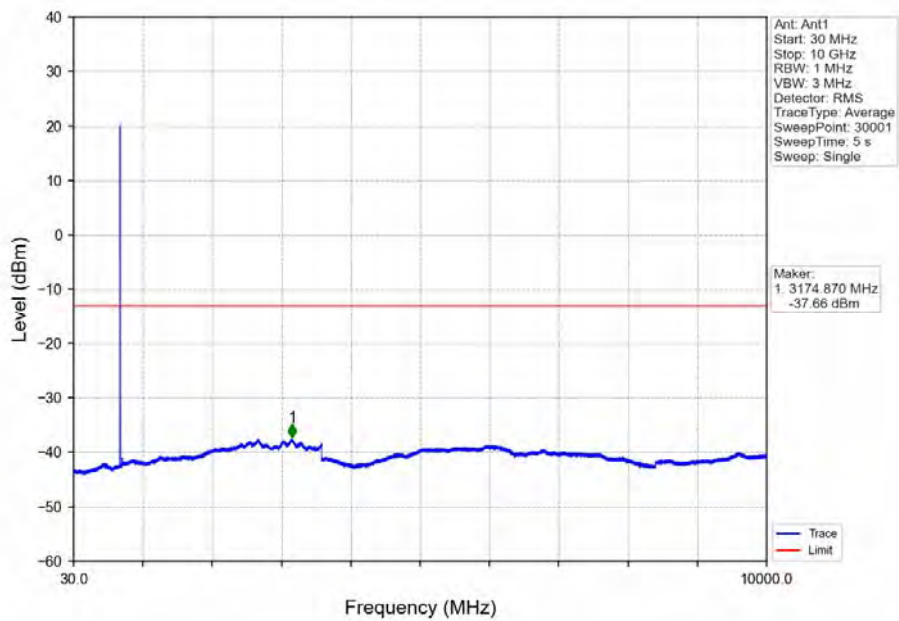




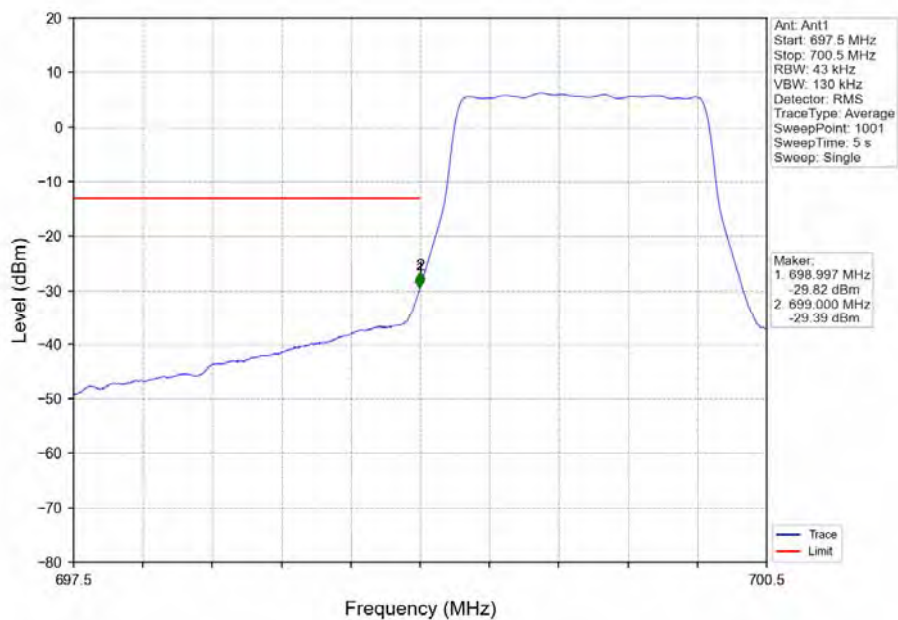
Band12_1.4MHz_64QAM_LCH_699.7MHz_RB_1_0_NTNV



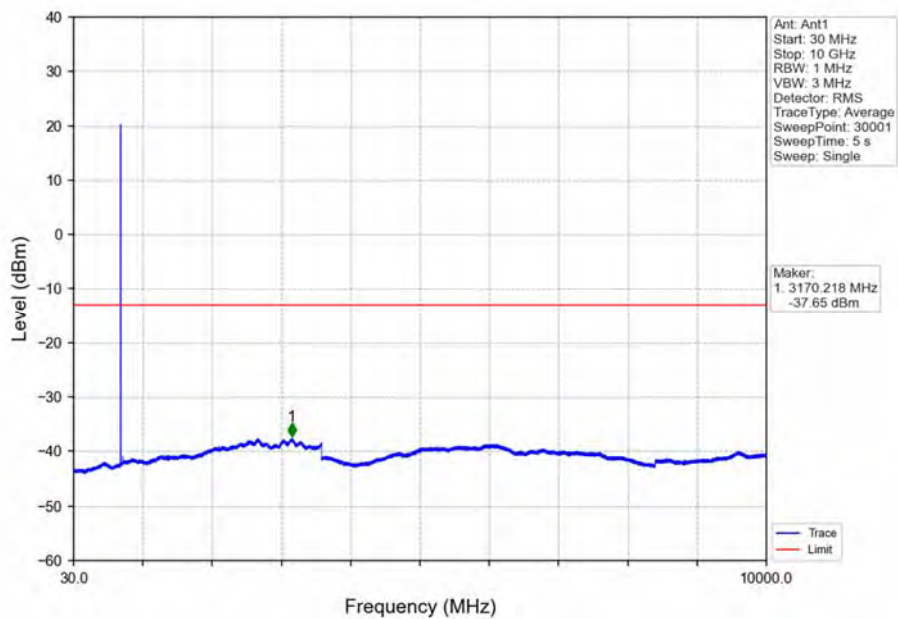
Band12_1.4MHz_64QAM_LCH_699.7MHz_RB_1_0_NTNV



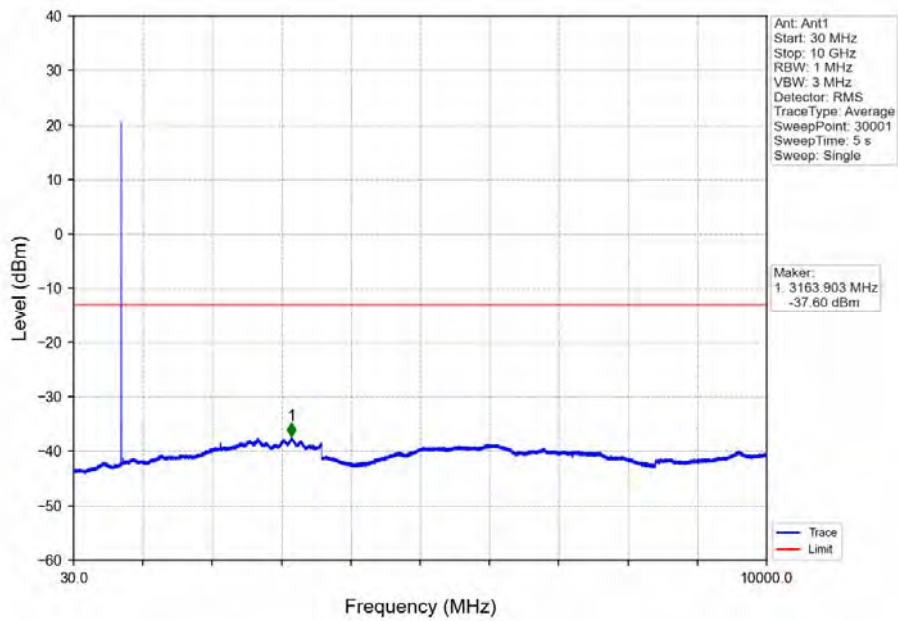
Band12_1.4MHz_64QAM_LCH_699.7MHz_RB_6_0_NTNV



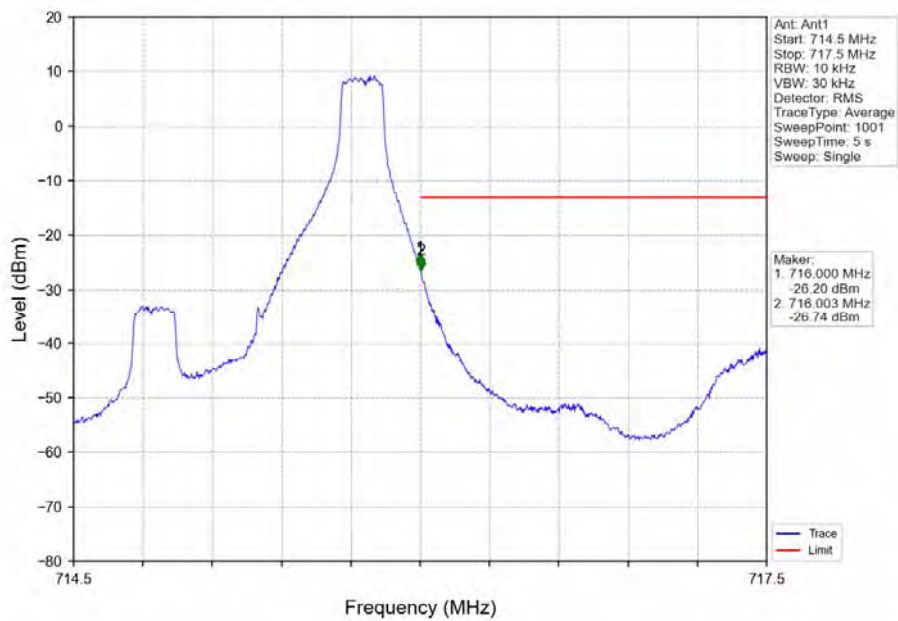
Band12_1.4MHz_64QAM_MCH_707.5MHz_RB_1_0_NTNV



Band12_1.4MHz_64QAM_HCH_715.3MHz_RB_1_0_NTNV

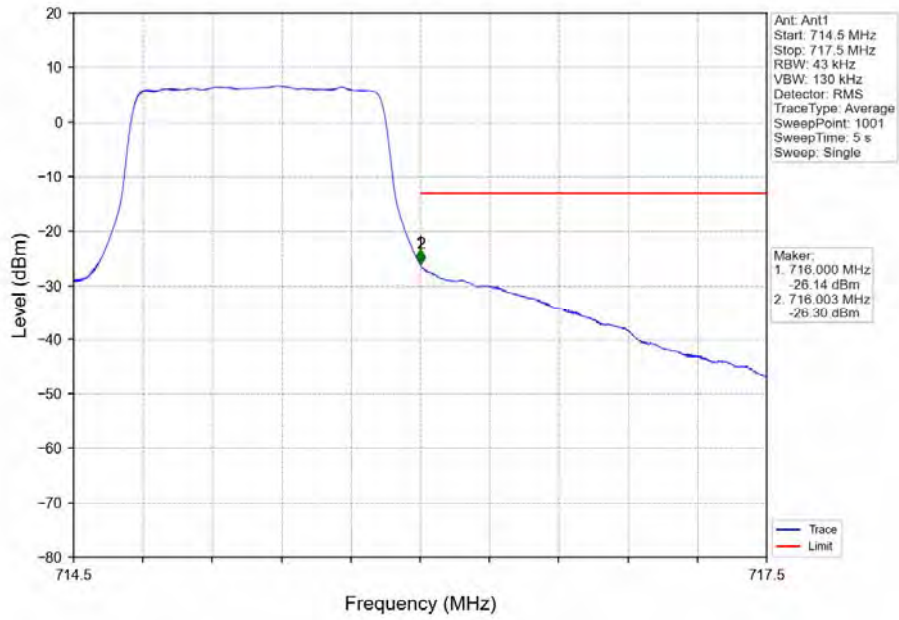


Band12_1.4MHz_64QAM_HCH_715.3MHz_RB_1_5_NTNV





Band12_1.4MHz_64QAM_HCH_715.3MHz_RB_6_0_NTNV





B12_3MHz

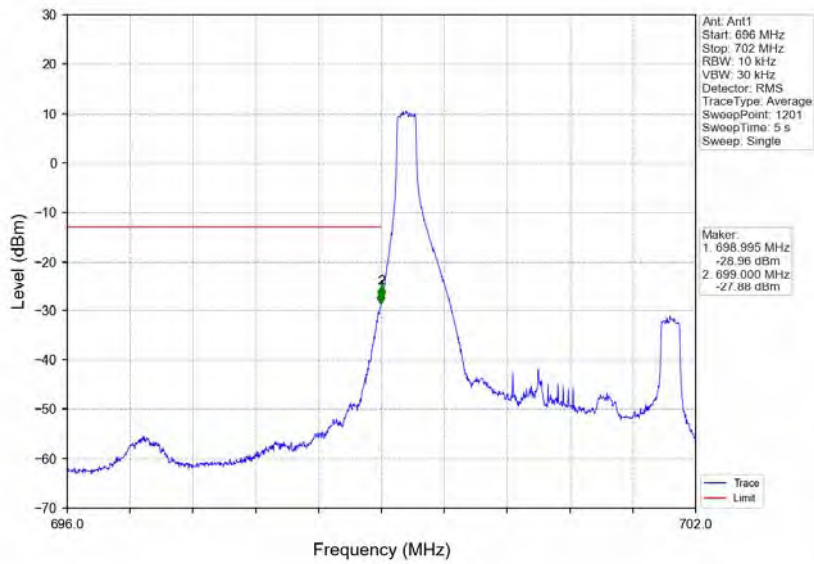
Test Result

Band: 12 / Bandwidth: 3MHz / NTN						
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission		Verdict
		Size	Offset	Result	Limit	
QPSK	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
16QAM	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
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

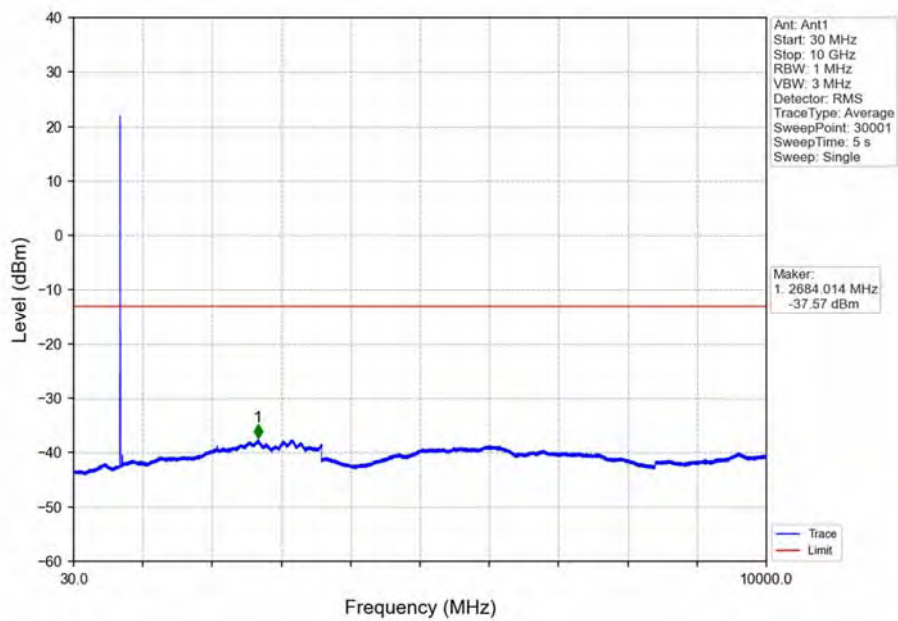


Test Graph

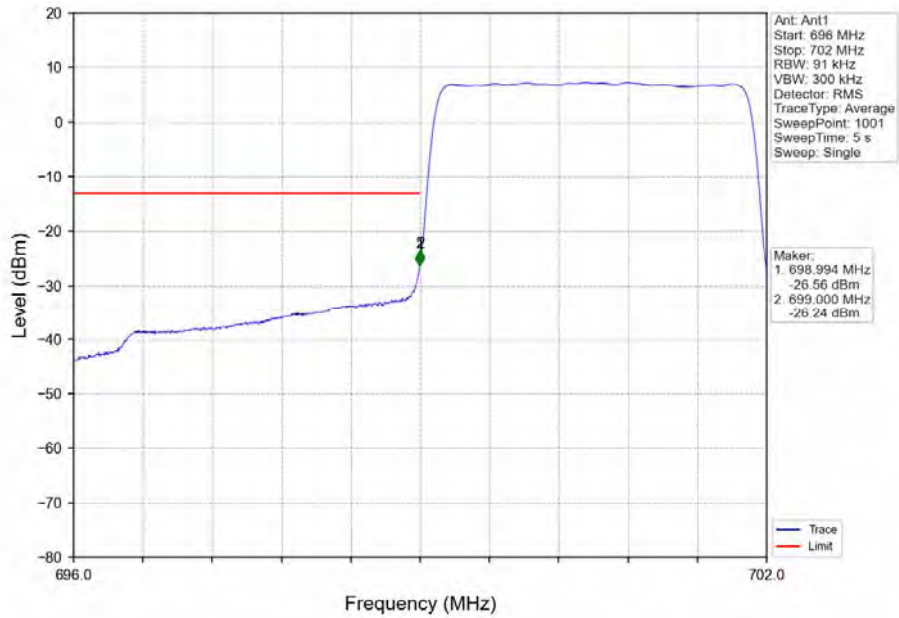
Band12_3MHz_QPSK_LCH_700.5MHz_RB_1_0_NTNV



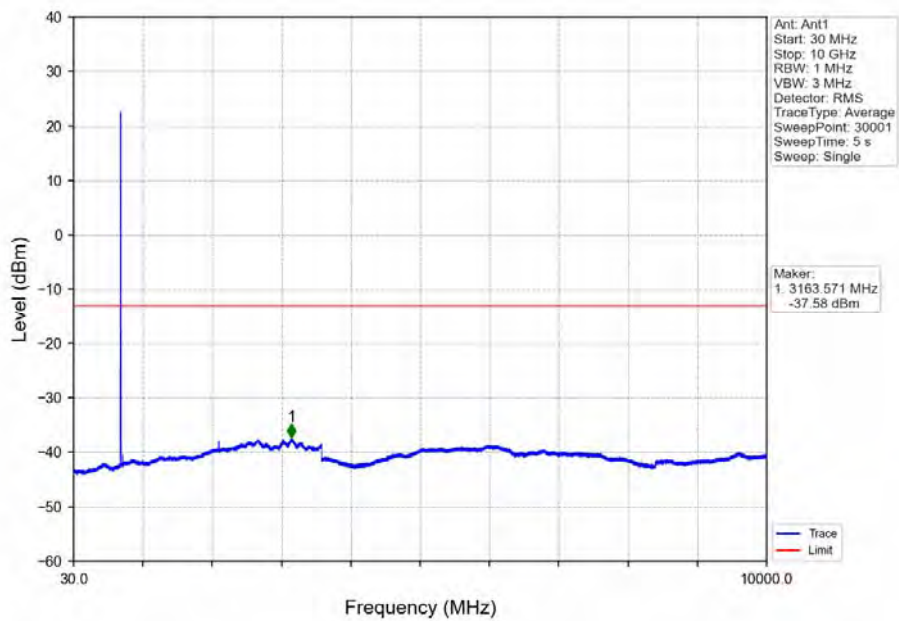
Band12_3MHz_QPSK_LCH_700.5MHz_RB_1_0_NTNV



Band12_3MHz_QPSK_LCH_700.5MHz_RB_15_0_NTNV

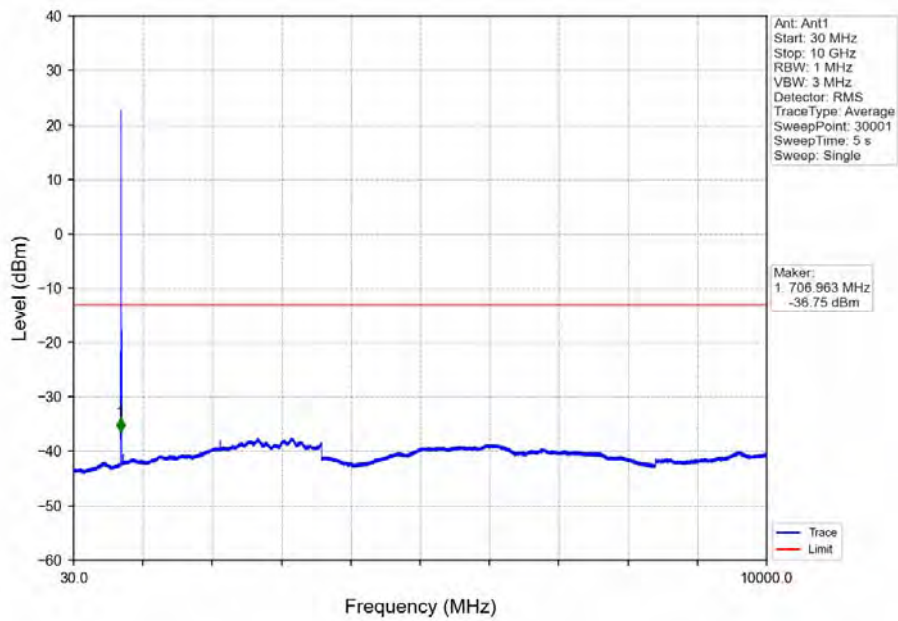


Band12_3MHz_QPSK_MCH_707.5MHz_RB_1_0_NTNV

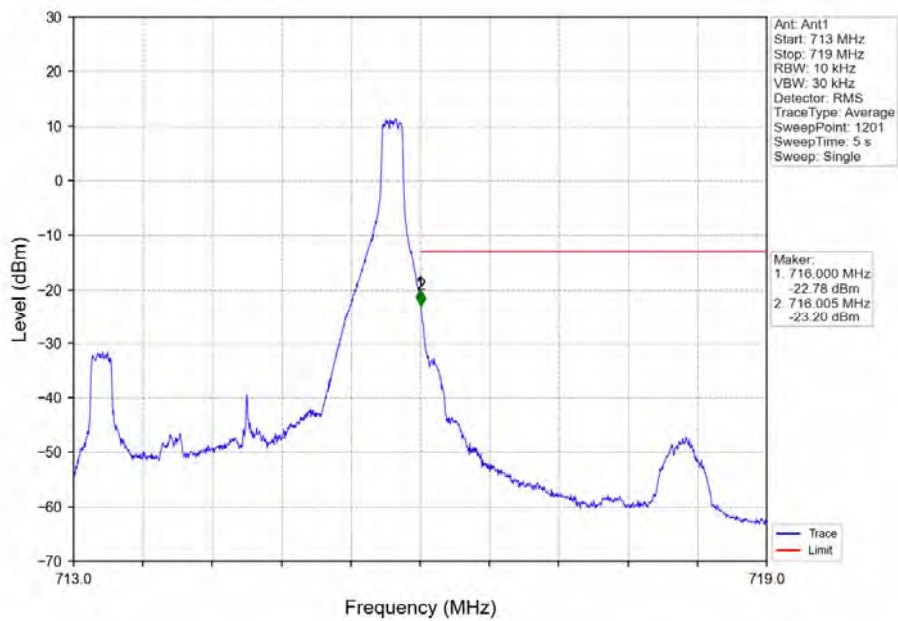




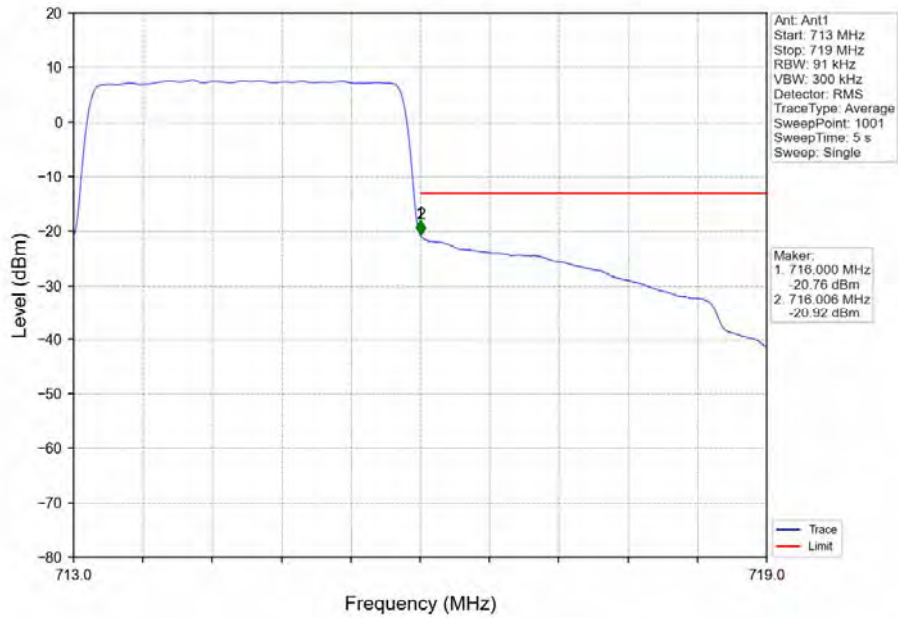
Band12_3MHz_QPSK_HCH_714.5MHz_RB_1_0_NTNV



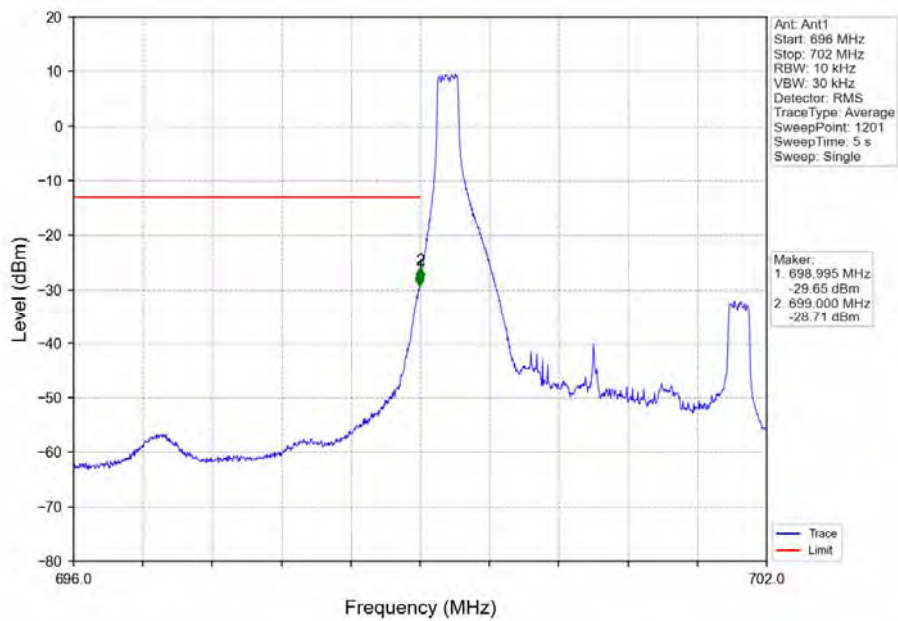
Band12_3MHz_QPSK_HCH_714.5MHz_RB_1_14_NTNV



Band12_3MHz_QPSK_HCH_714.5MHz_RB_15_0_NTNV

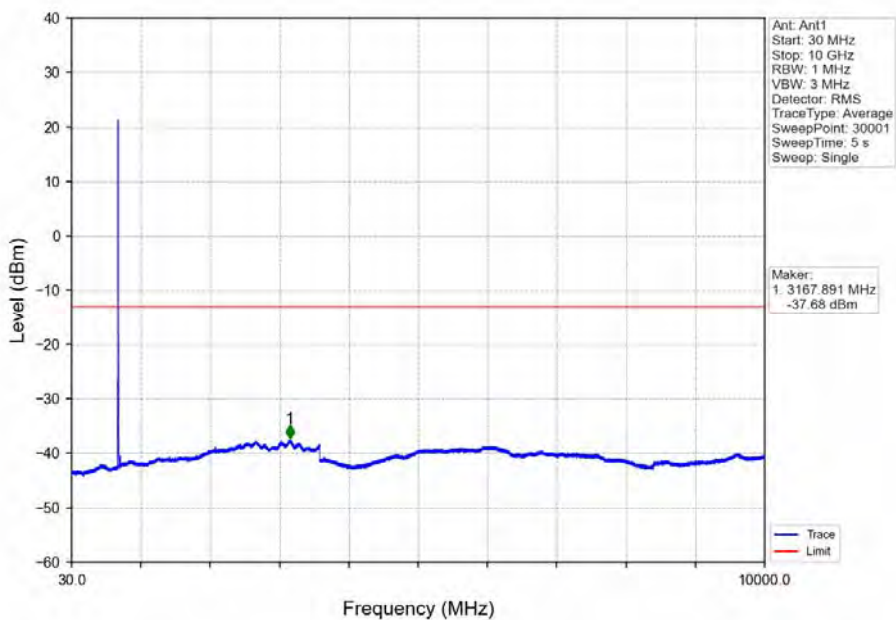


Band12_3MHz_16QAM_LCH_700.5MHz_RB_1_0_NTNV

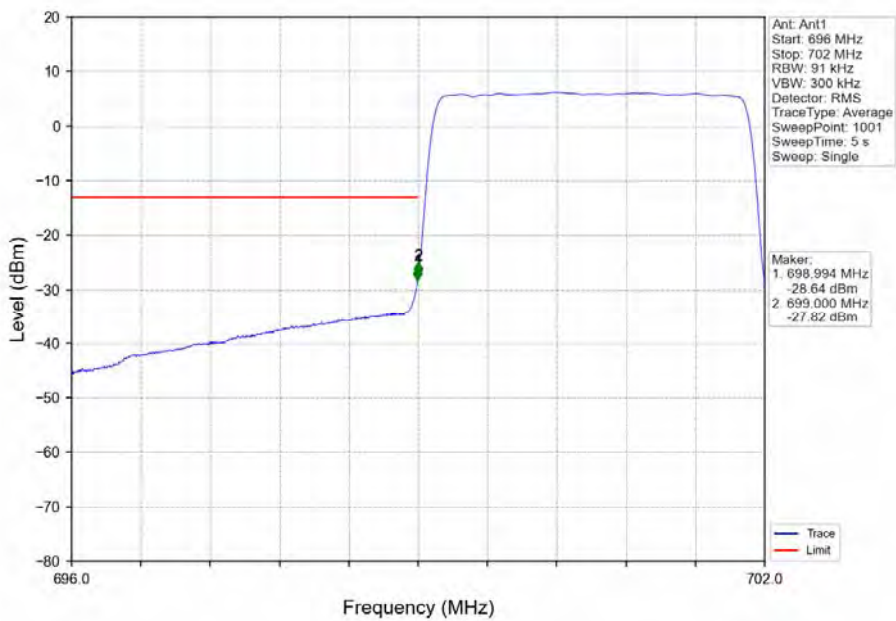




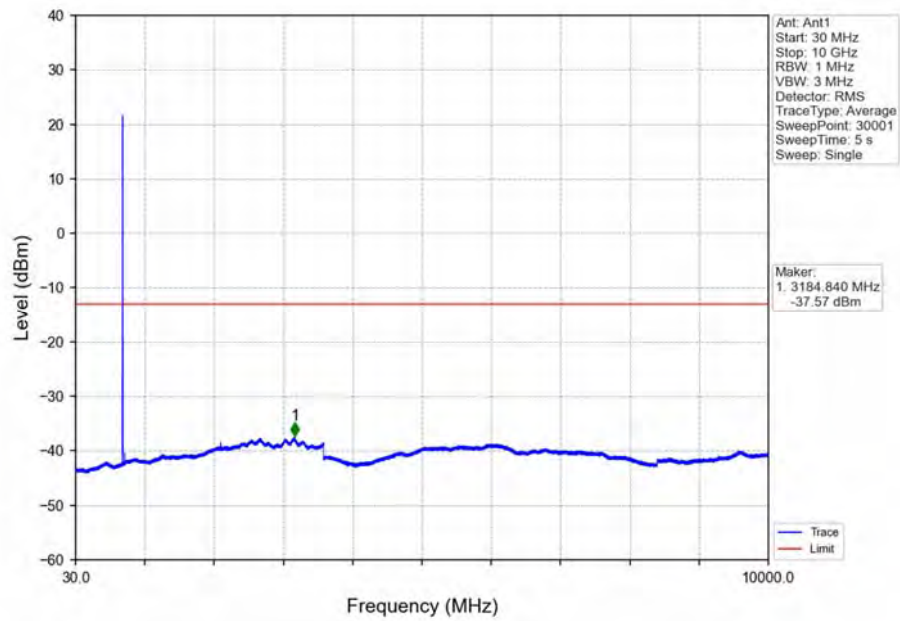
Band12_3MHz_16QAM_LCH_700.5MHz_RB_1_0_NTNV



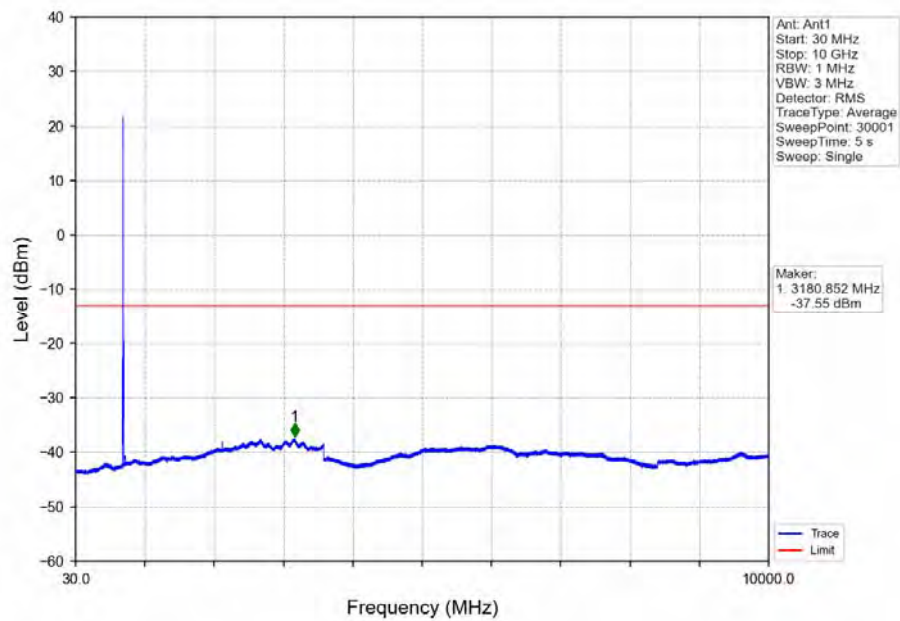
Band12_3MHz_16QAM_LCH_700.5MHz_RB_15_0_NTNV



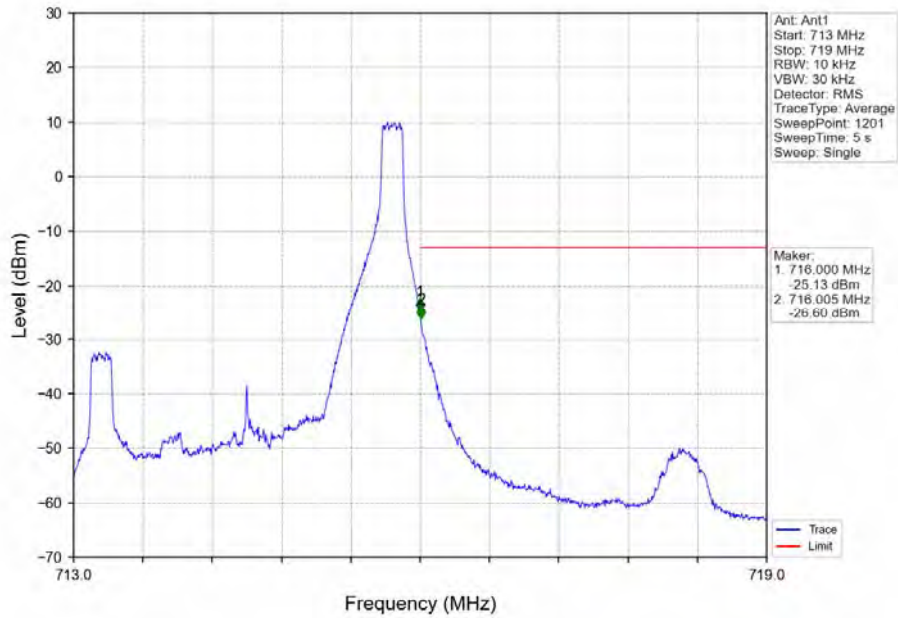
Band12_3MHz_16QAM_MCH_707.5MHz_RB_1_0_NTNV



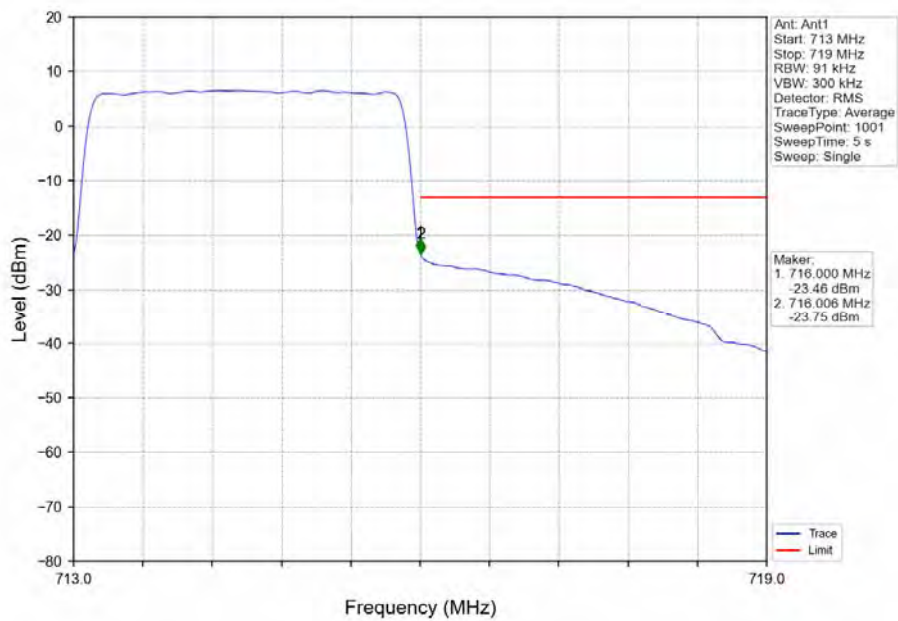
Band12_3MHz_16QAM_HCH_714.5MHz_RB_1_0_NTNV



Band12_3MHz_16QAM_HCH_714.5MHz_RB_1_14_NTNV

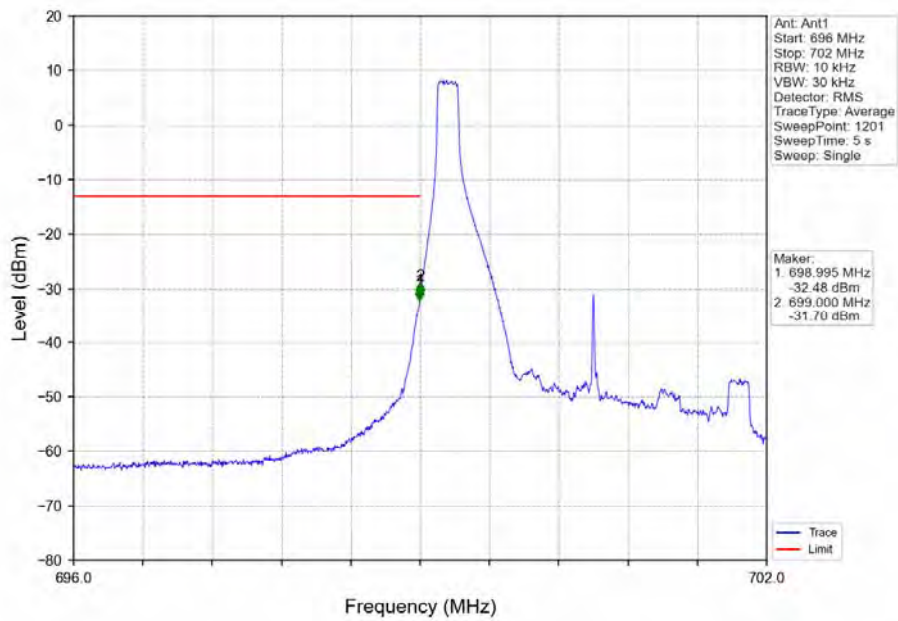


Band12_3MHz_16QAM_HCH_714.5MHz_RB_15_0_NTNV

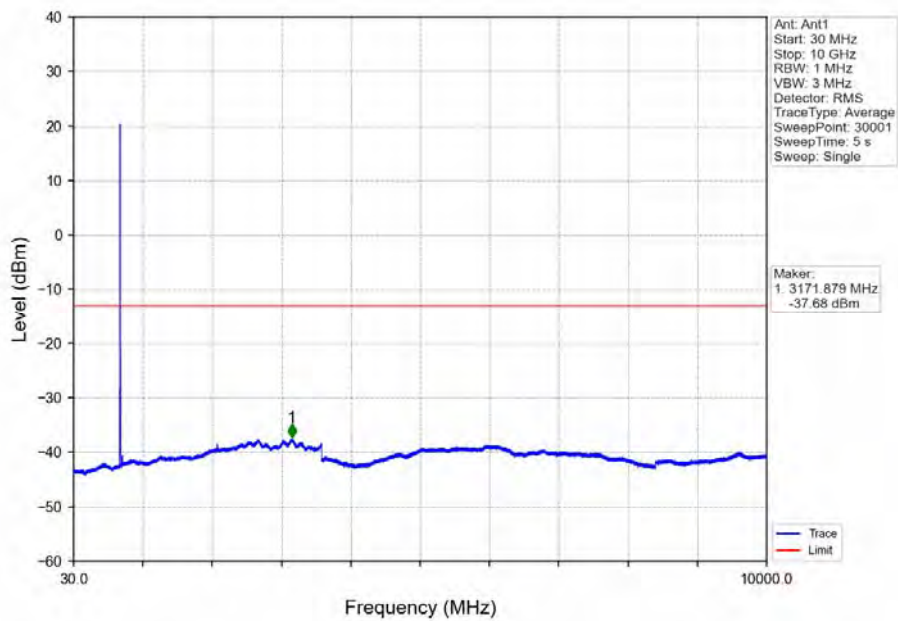




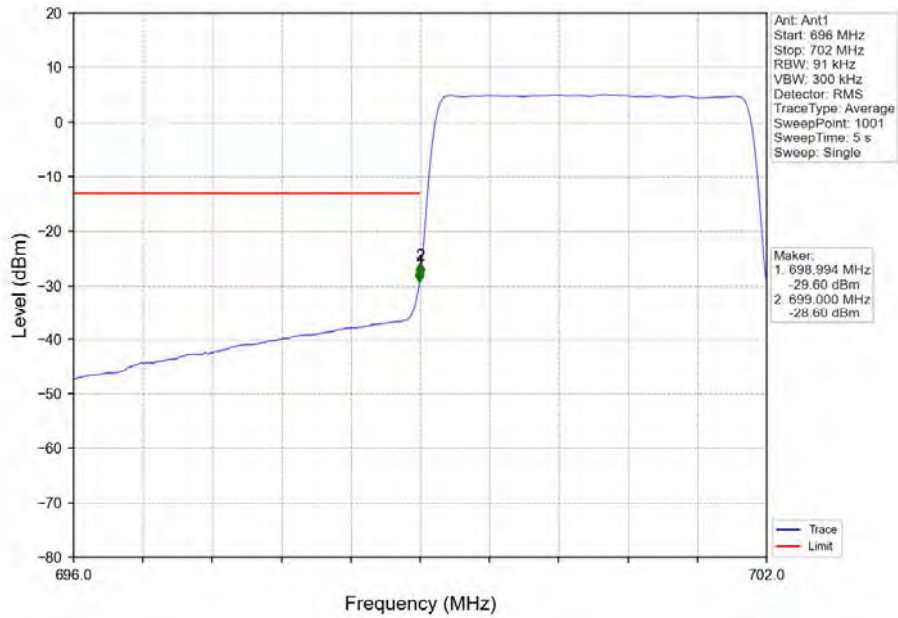
Band12_3MHz_64QAM_LCH_700.5MHz_RB_1_0_NTNV



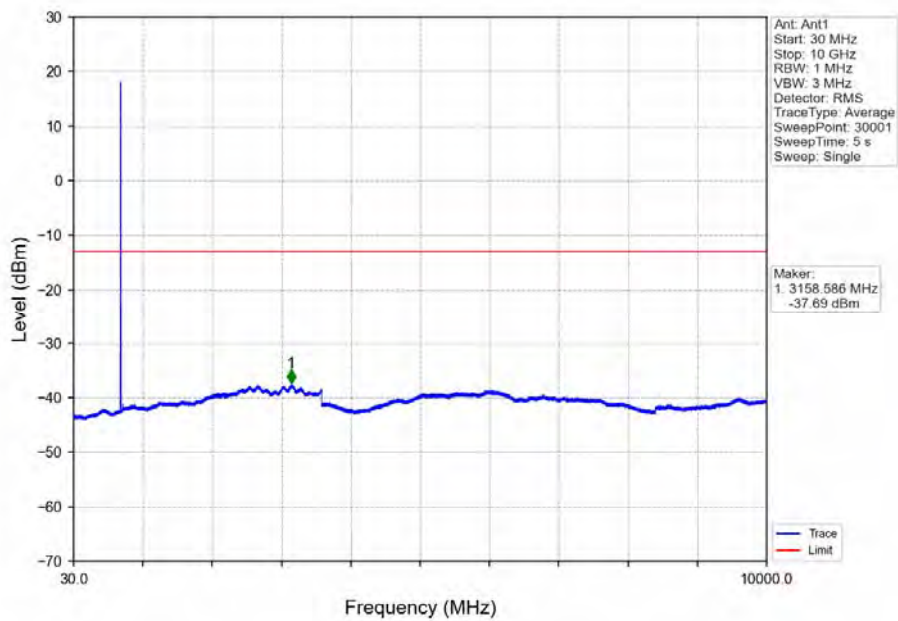
Band12_3MHz_64QAM_LCH_700.5MHz_RB_1_0_NTNV



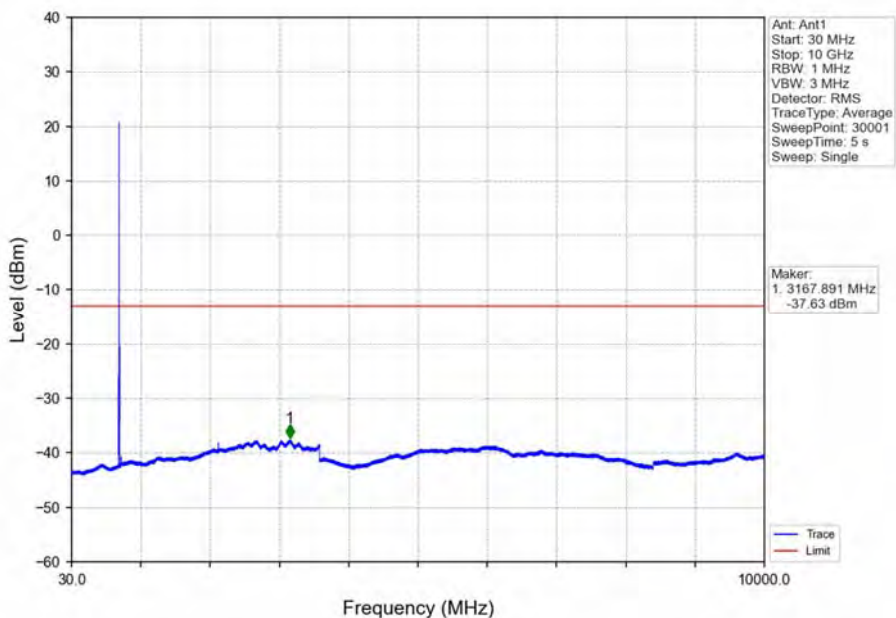
Band12_3MHz_64QAM_LCH_700.5MHz_RB_15_0_NTNV



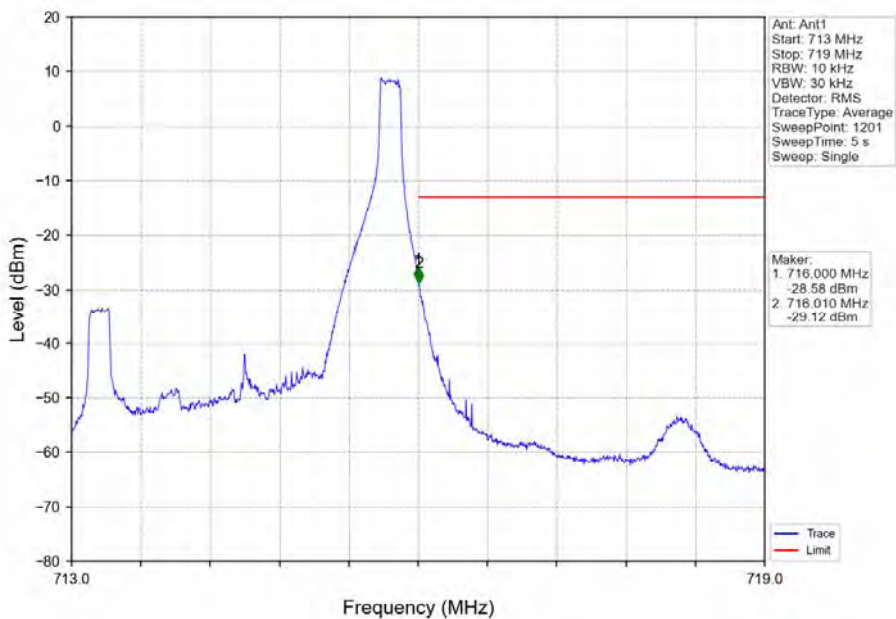
Band12_3MHz_64QAM_MCH_707.5MHz_RB_1_0_NTNV



Band12_3MHz_64QAM_HCH_714.5MHz_RB_1_0_NTNV

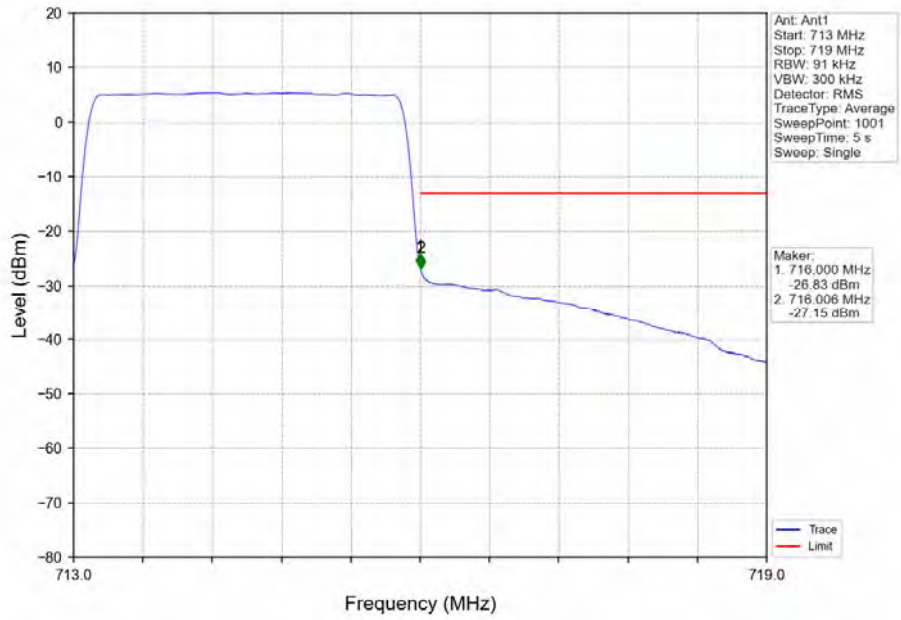


Band12_3MHz_64QAM_HCH_714.5MHz_RB_1_14_NTNV





Band12_3MHz_64QAM_HCH_714.5MHz_RB_15_0_NTNV





B12_5MHz

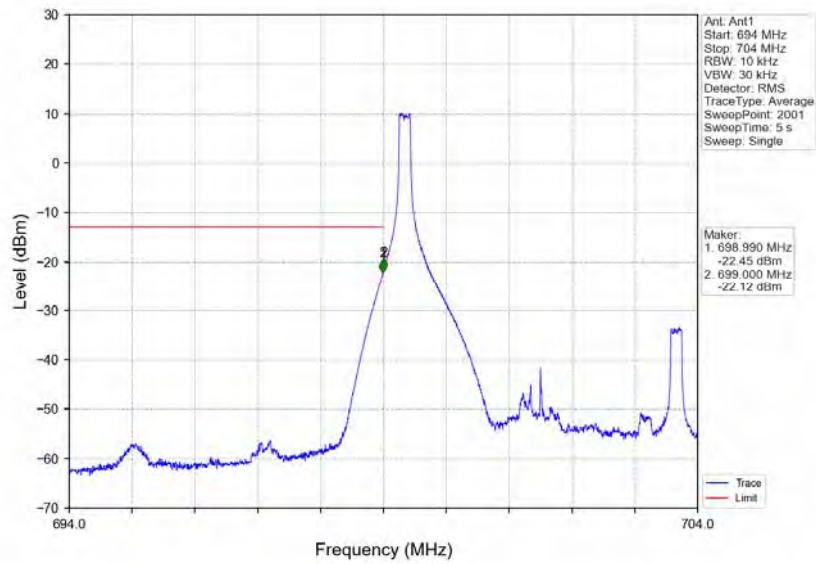
Test Result

Band: 12 / Bandwidth: 5MHz / NTN						
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission		Verdict
		Size	Offset	Result	Limit	
QPSK	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
16QAM	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
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

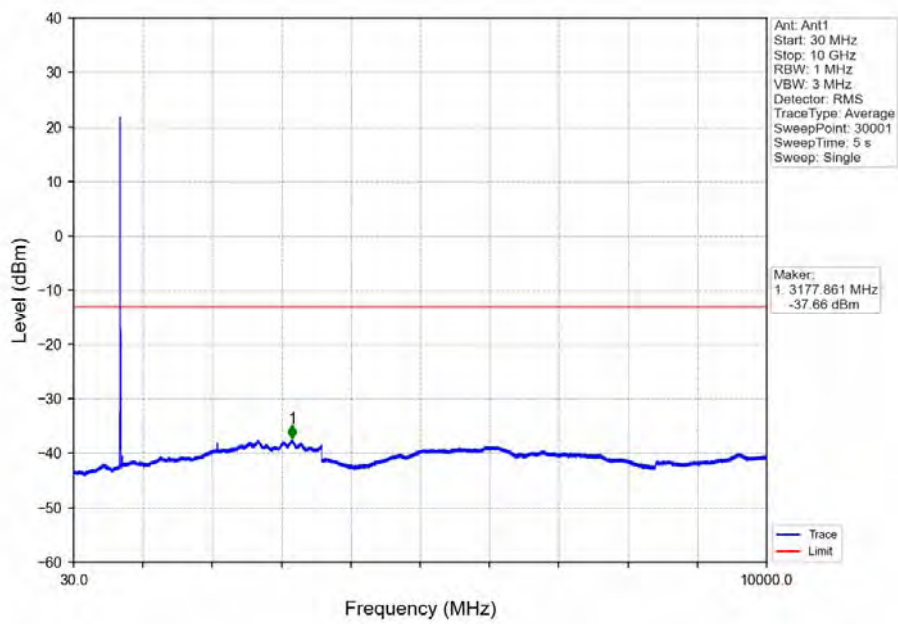


Test Graph

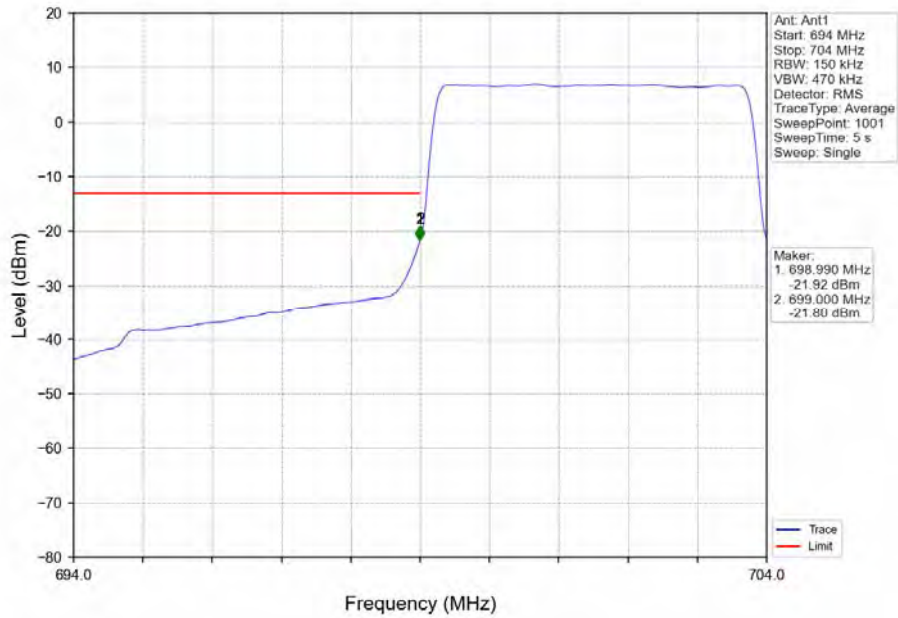
Band12_5MHz_QPSK_LCH_701.5MHz_RB_1_0_NTNV



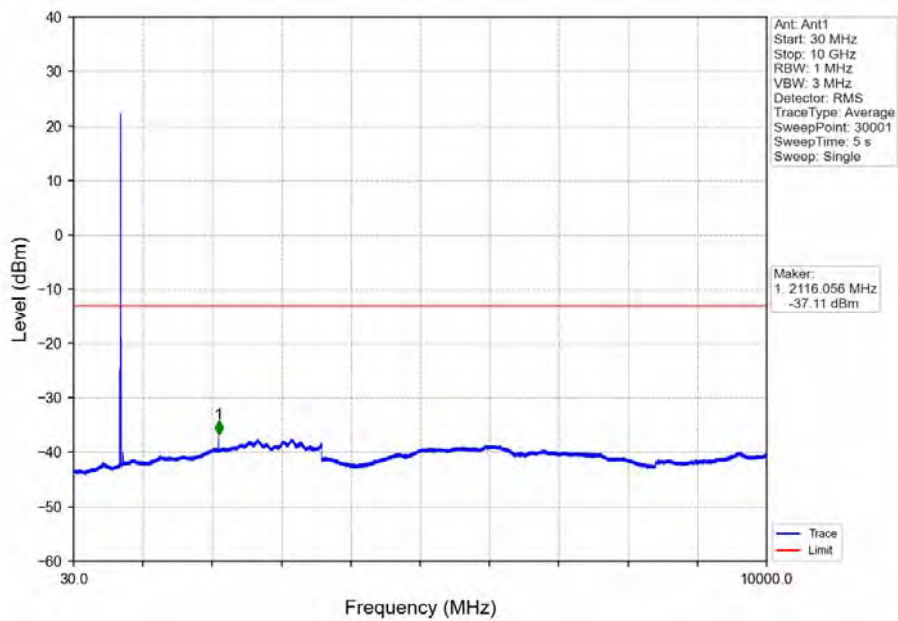
Band12_5MHz_QPSK_LCH_701.5MHz_RB_1_0_NTNV



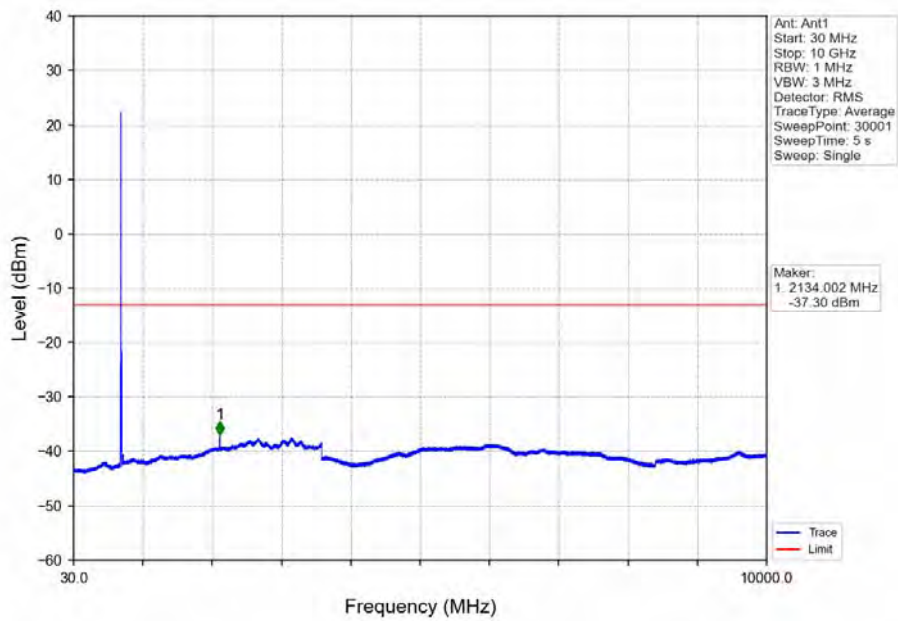
Band12_5MHz_QPSK_LCH_701.5MHz_RB_25_0_NTNV



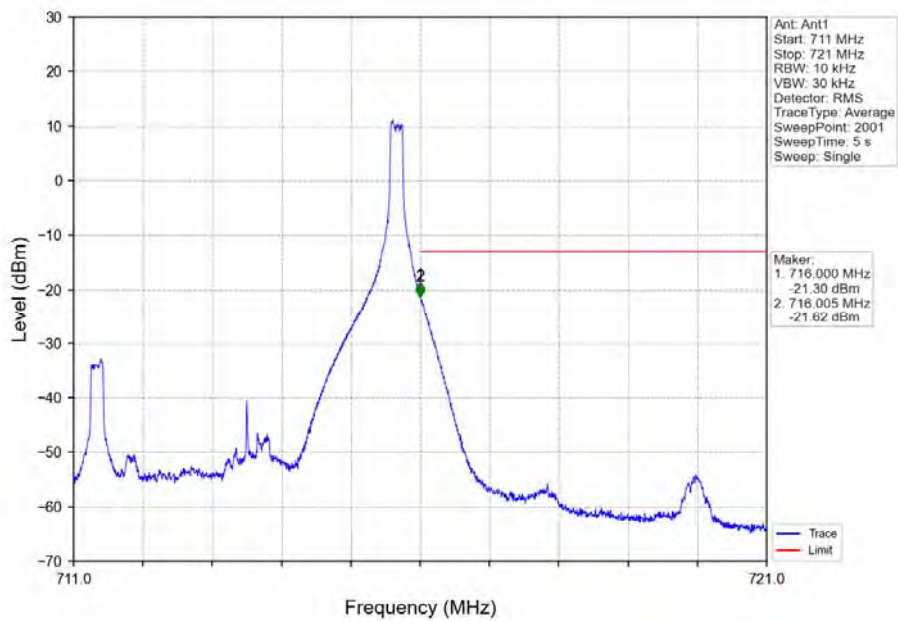
Band12_5MHz_QPSK_MCH_707.5MHz_RB_1_0_NTNV



Band12_5MHz_QPSK_HCH_713.5MHz_RB_1_0_NTNV

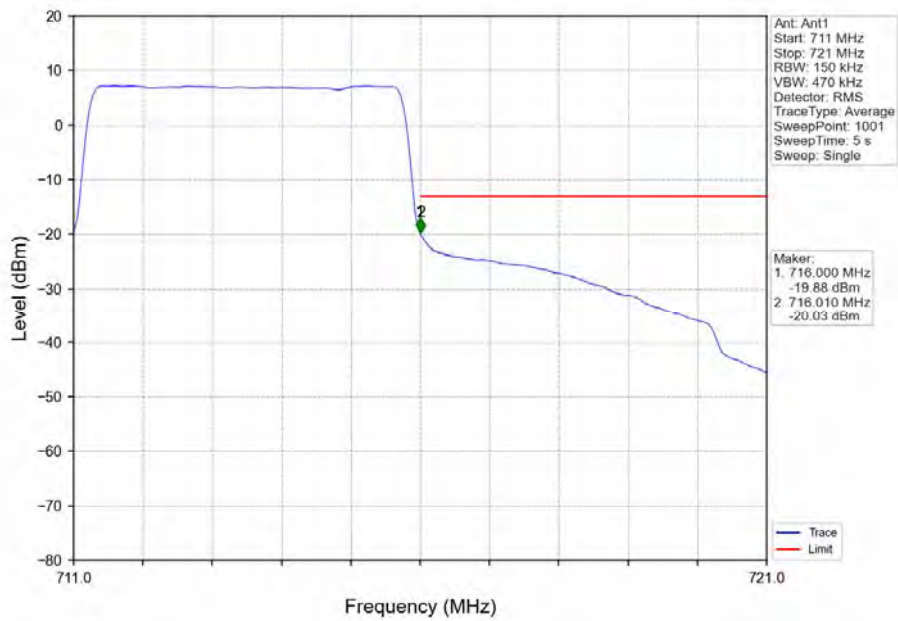


Band12_5MHz_QPSK_HCH_713.5MHz_RB_1_24_NTNV

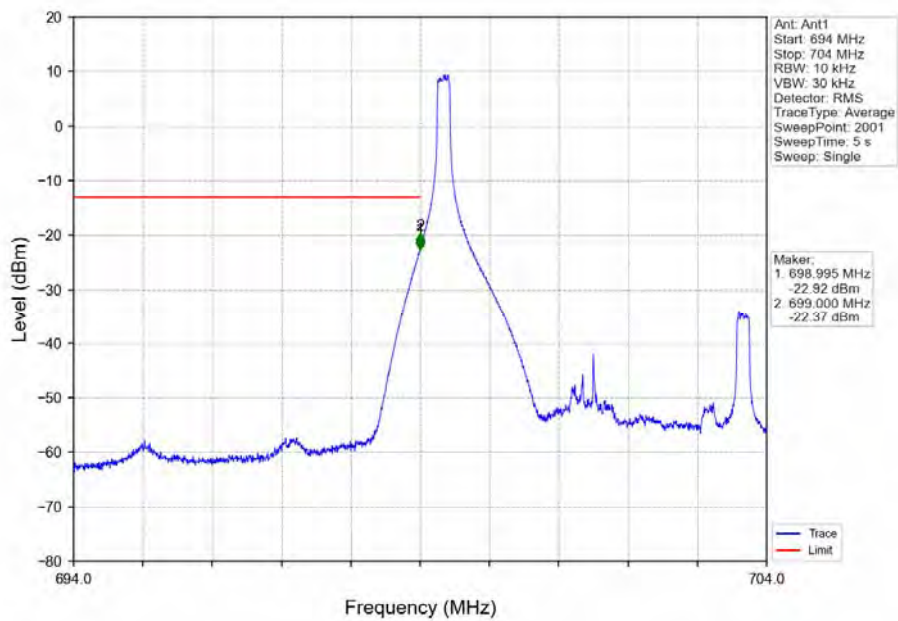




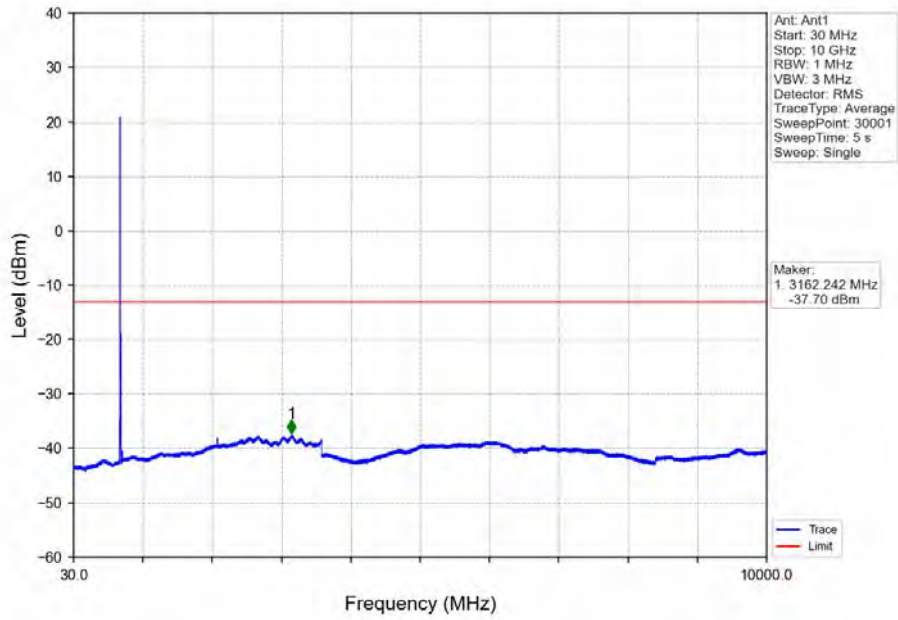
Band12_5MHz_QPSK_HCH_713.5MHz_RB_25_0_NTNV



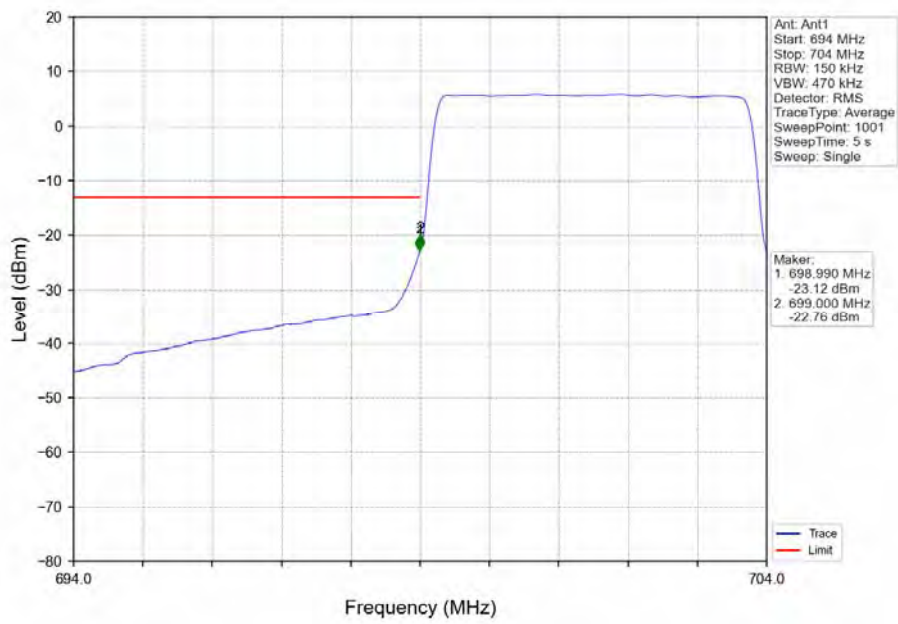
Band12_5MHz_16QAM_LCH_701.5MHz_RB_1_0_NTNV



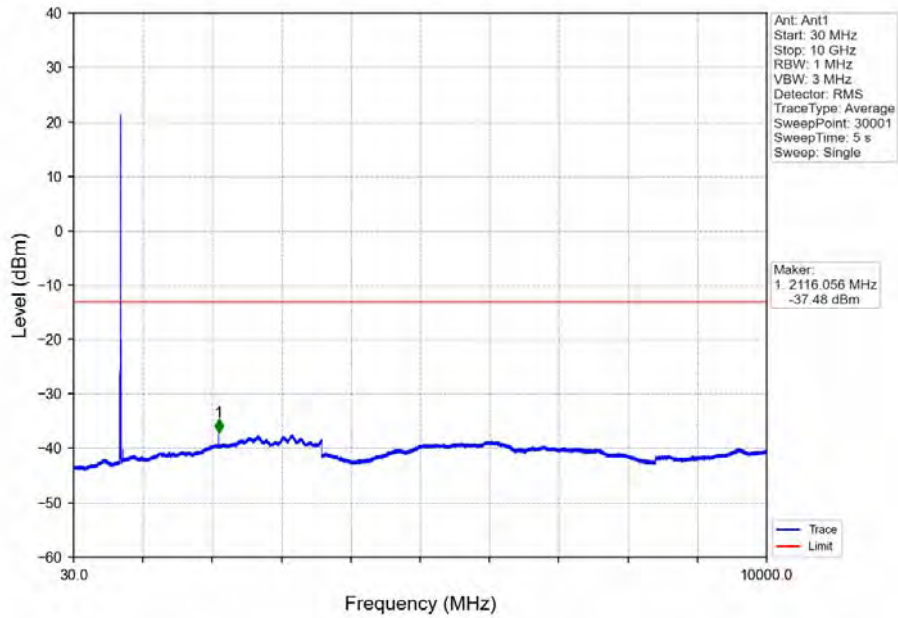
Band12_5MHz_16QAM_LCH_701.5MHz_RB_1_0_NTNV



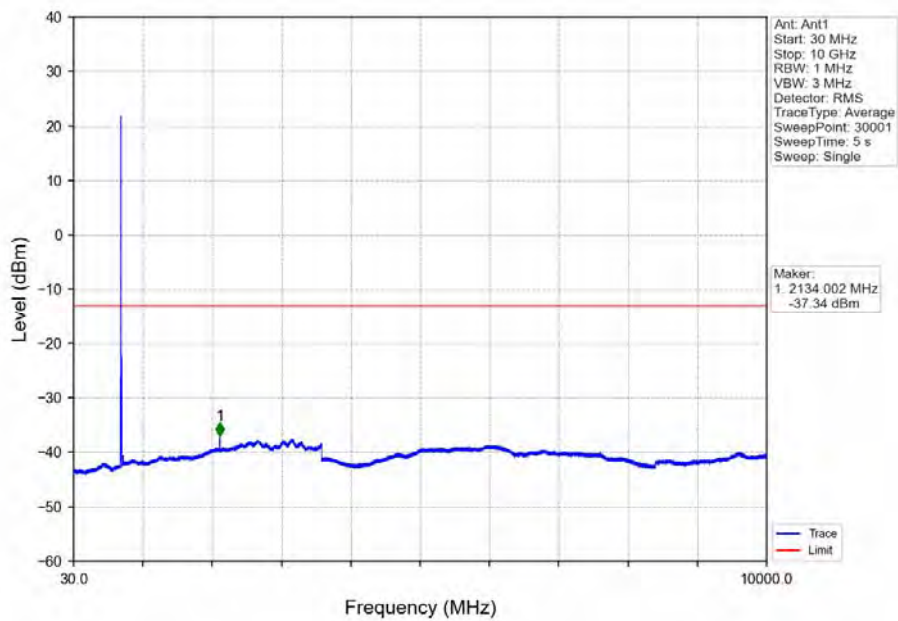
Band12_5MHz_16QAM_LCH_701.5MHz_RB_25_0_NTNV



Band12_5MHz_16QAM_MCH_707.5MHz_RB_1_0_NTNV

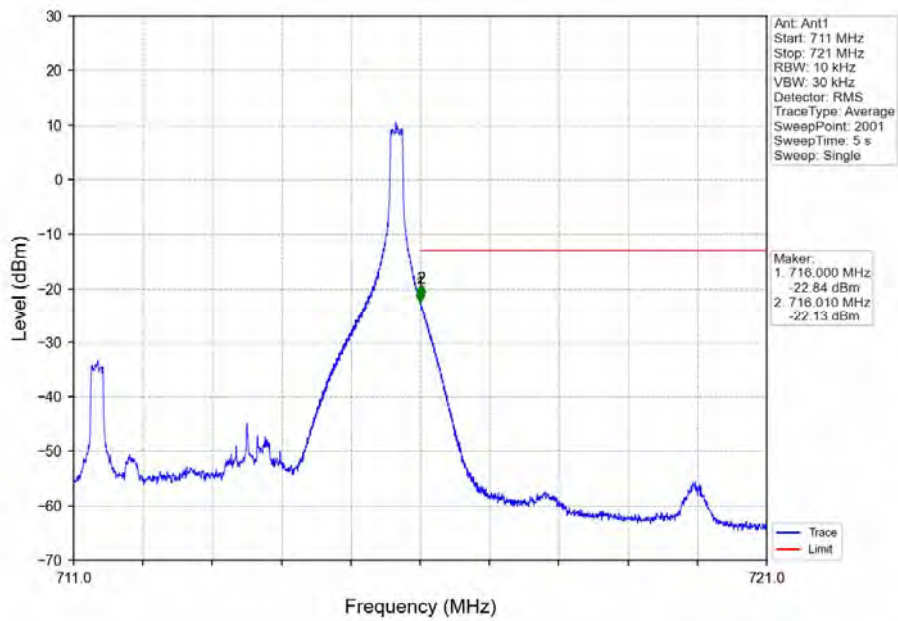


Band12_5MHz_16QAM_HCH_713.5MHz_RB_1_0_NTNV

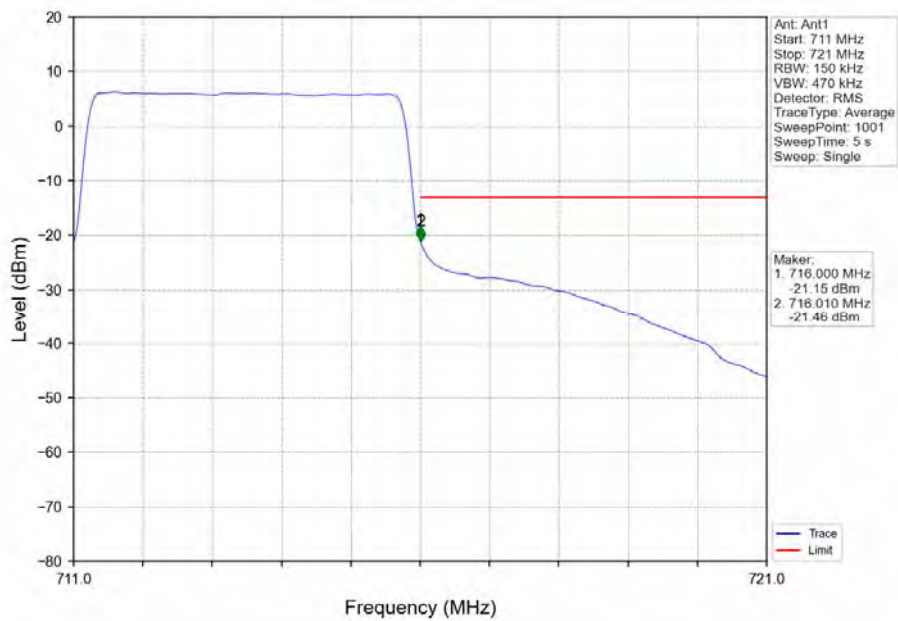




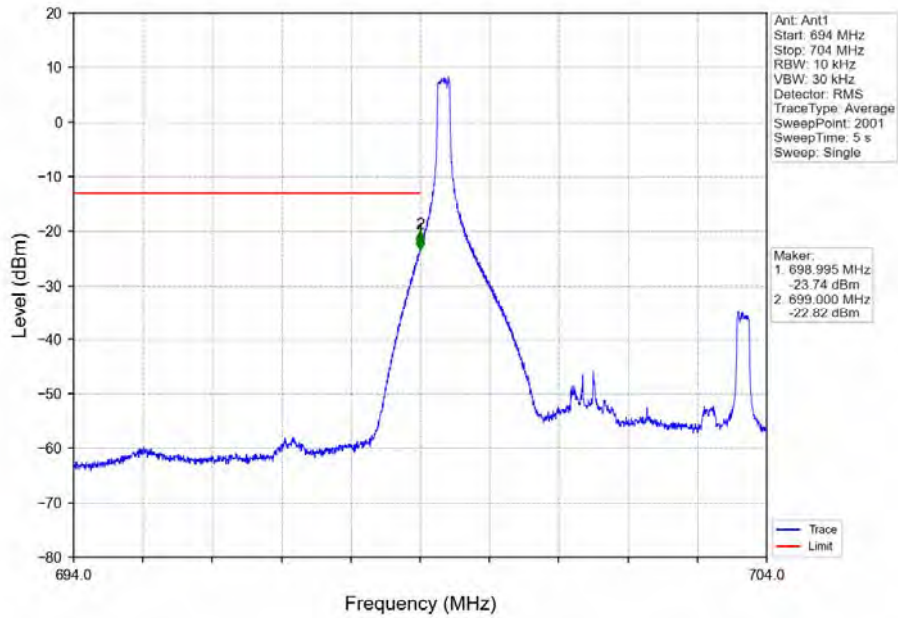
Band12_5MHz_16QAM_HCH_713.5MHz_RB_1_24_NTNV



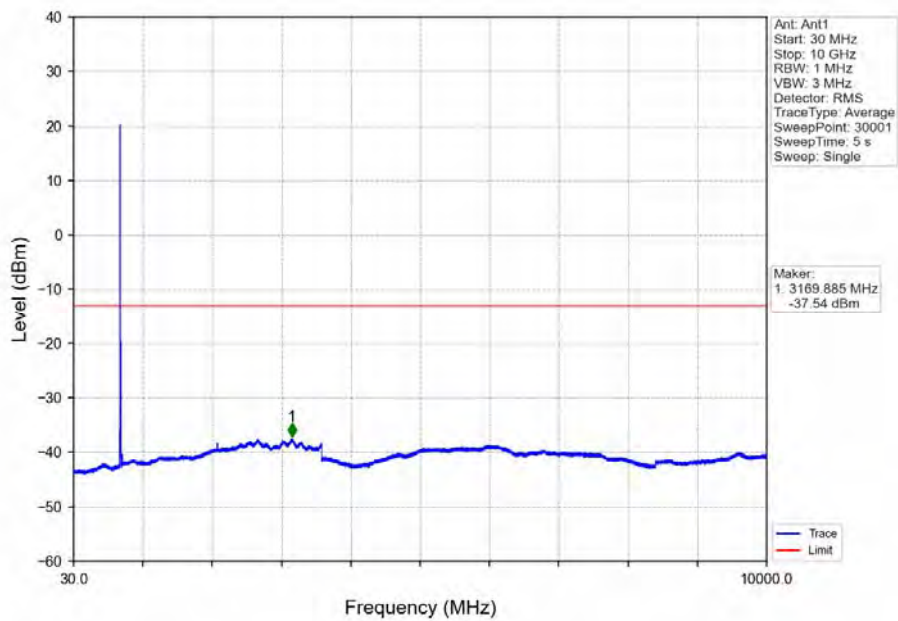
Band12_5MHz_16QAM_HCH_713.5MHz_RB_25_0_NTNV



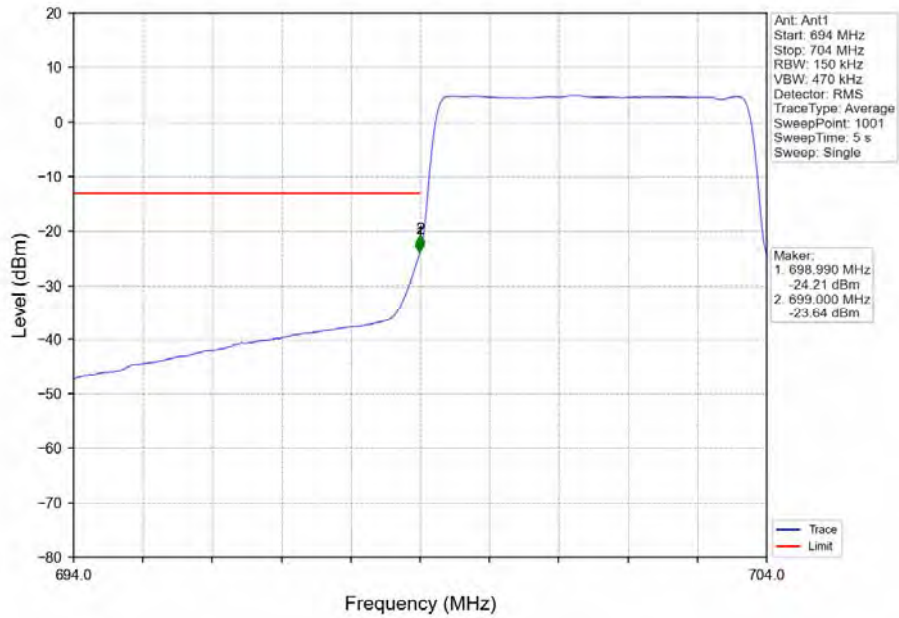
Band12_5MHz_64QAM_LCH_701.5MHz_RB_1_0_NTNV



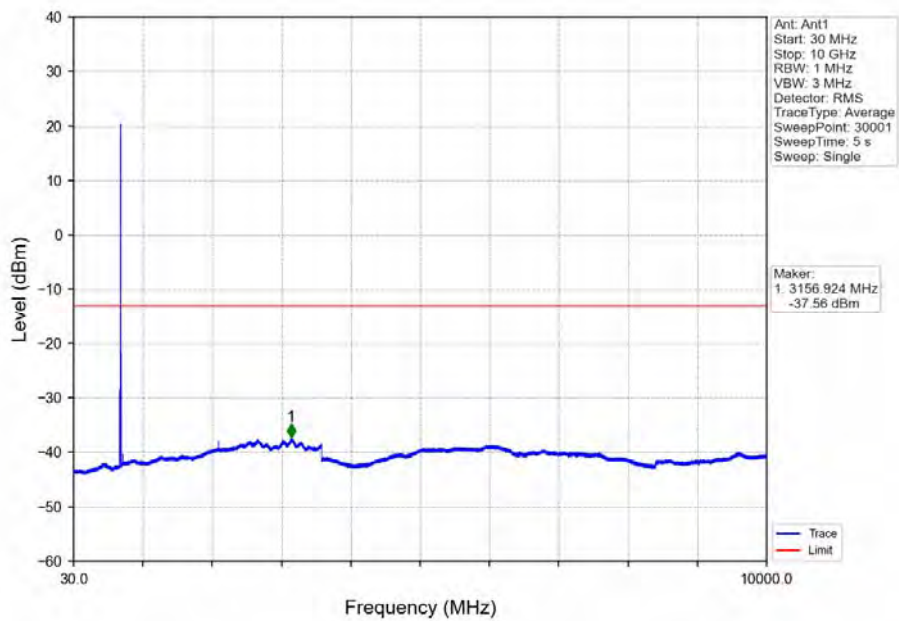
Band12_5MHz_64QAM_LCH_701.5MHz_RB_1_0_NTNV



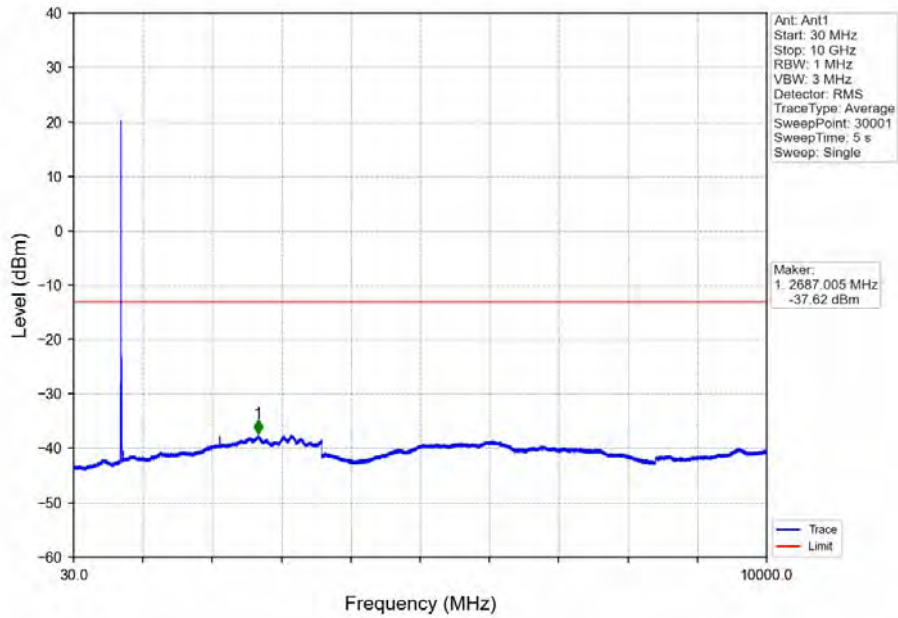
Band12_5MHz_64QAM_LCH_701.5MHz_RB_25_0_NTNV



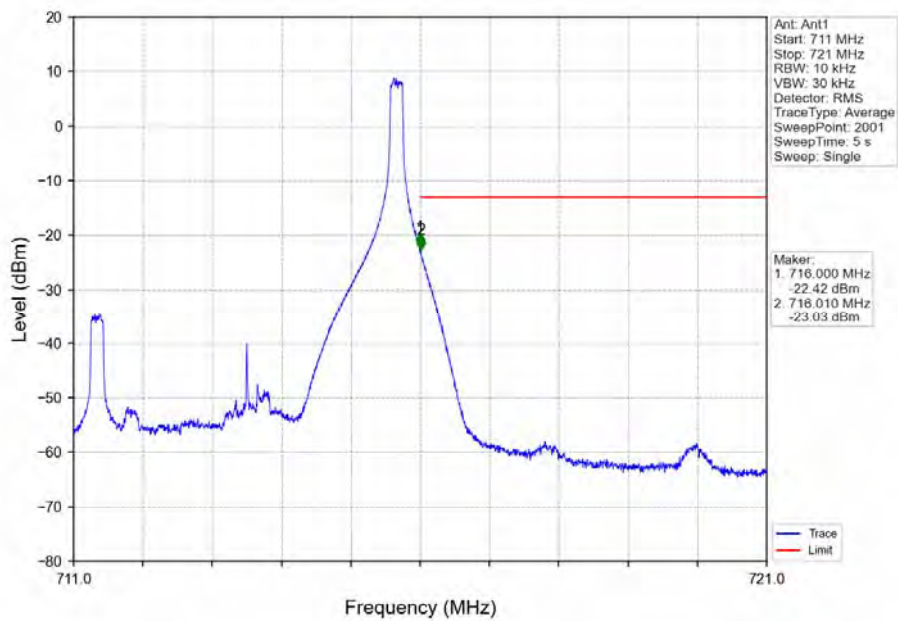
Band12_5MHz_64QAM_MCH_707.5MHz_RB_1_0_NTNV



Band12_5MHz_64QAM_HCH_713.5MHz_RB_1_0_NTNV

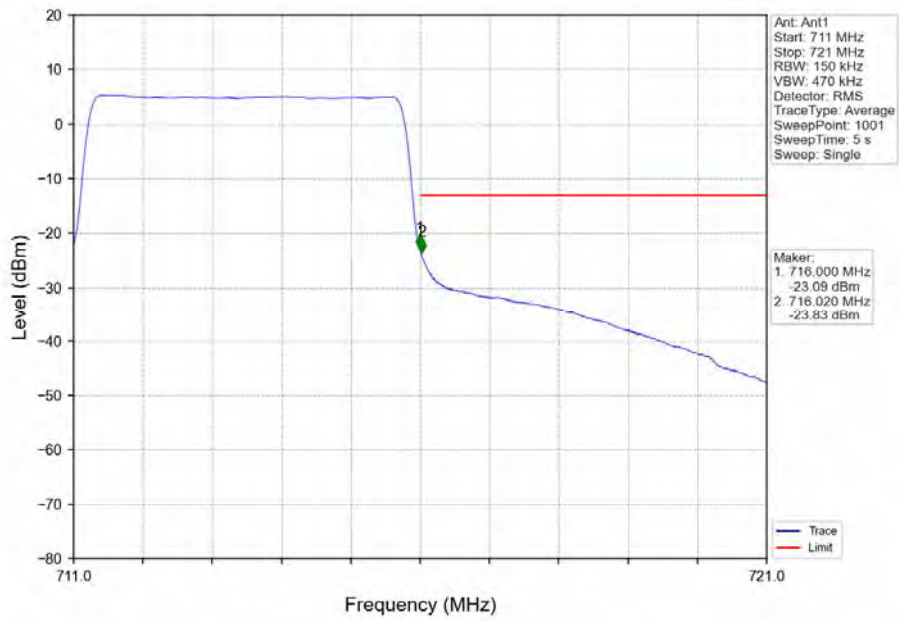


Band12_5MHz_64QAM_HCH_713.5MHz_RB_1_24_NTNV





Band12_5MHz_64QAM_HCH_713.5MHz_RB_25_0_NTNV





B12_10MHz

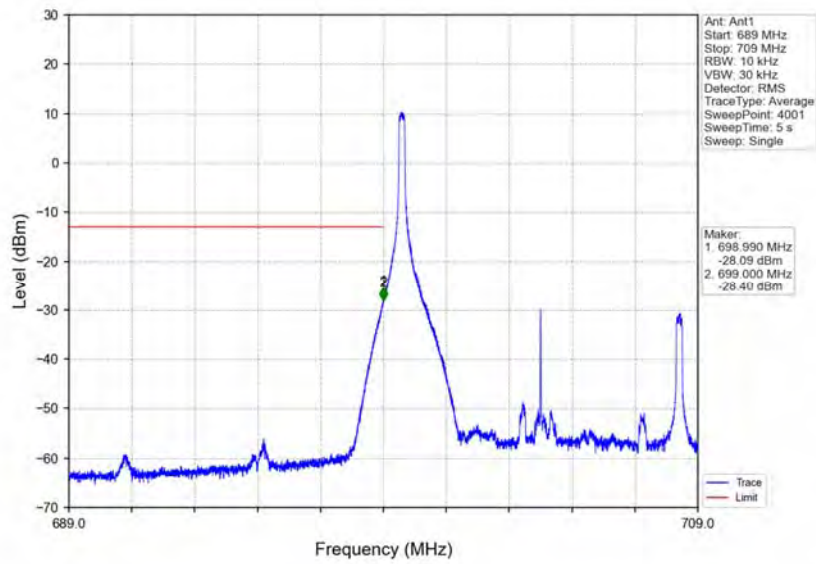
Test Result

Band: 12 / Bandwidth: 10MHz / NTVN						
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission		Verdict
		Size	Offset	Result	Limit	
QPSK	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
16QAM	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
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

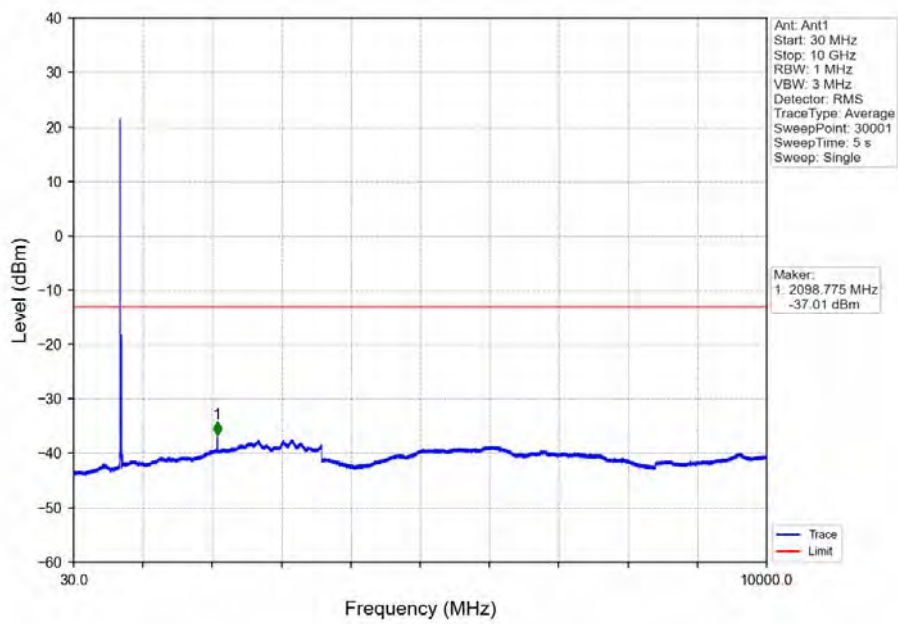


Test Graph

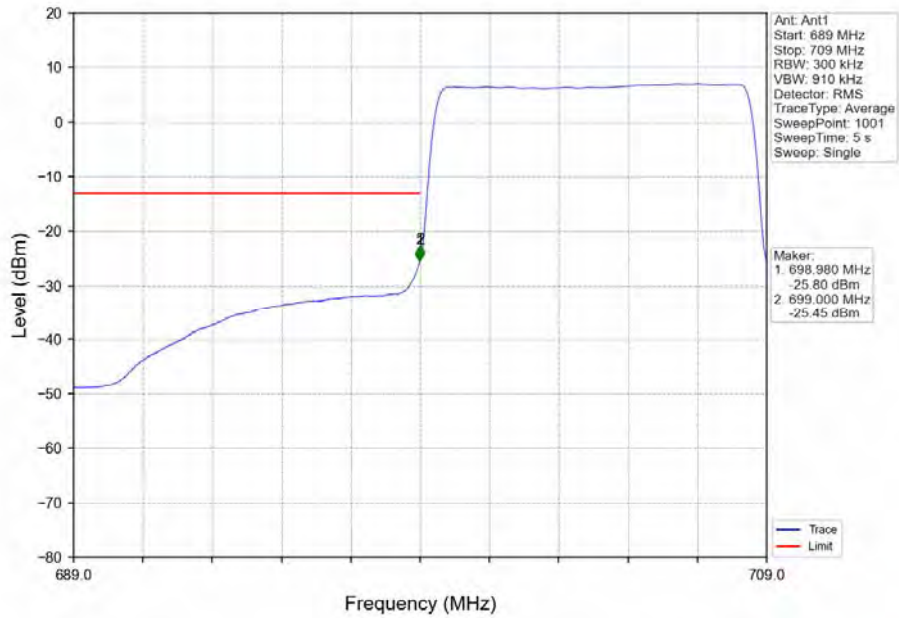
Band12_10MHz_QPSK_LCH_704MHz_RB_1_0_NTNV



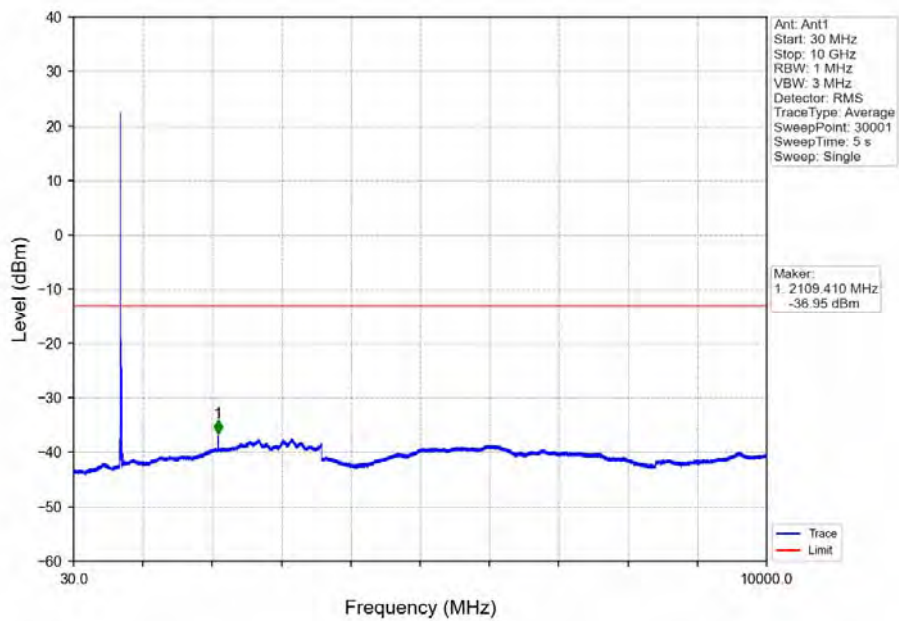
Band12_10MHz_QPSK_LCH_704MHz_RB_1_0_NTNV



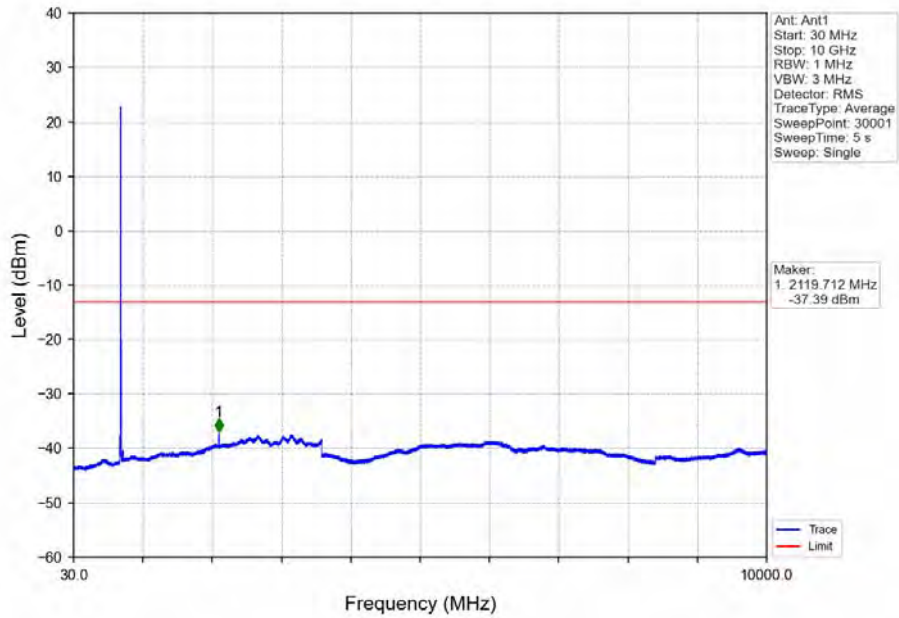
Band12_10MHz_QPSK_LCH_704MHz_RB_50_0_NTNV



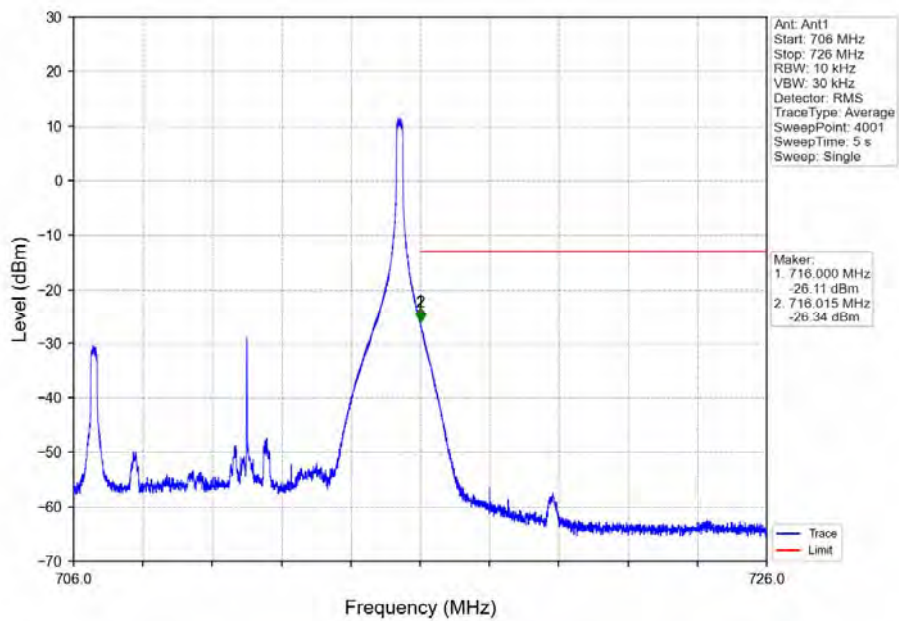
Band12_10MHz_QPSK_MCH_707.5MHz_RB_1_0_NTNV



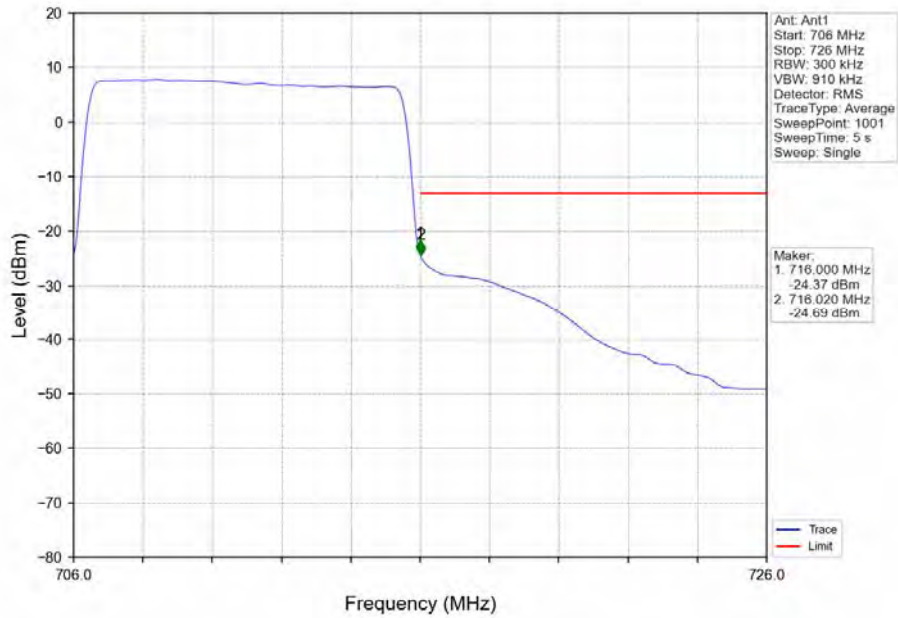
Band12_10MHz_QPSK_HCH_711MHz_RB_1_0_NTNV



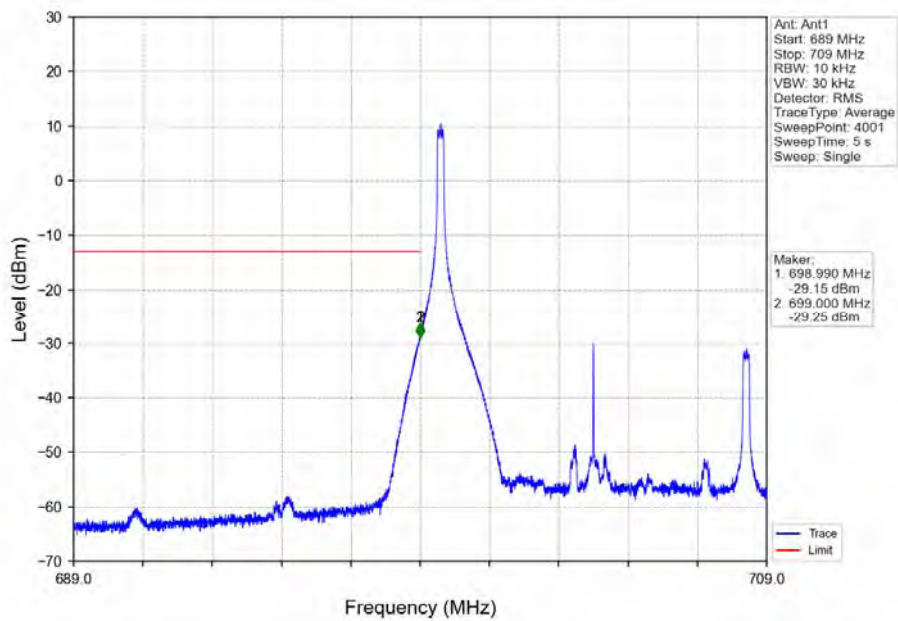
Band12_10MHz_QPSK_HCH_711MHz_RB_1_49_NTNV



Band12_10MHz_QPSK_HCH_711MHz_RB_50_0_NTNV

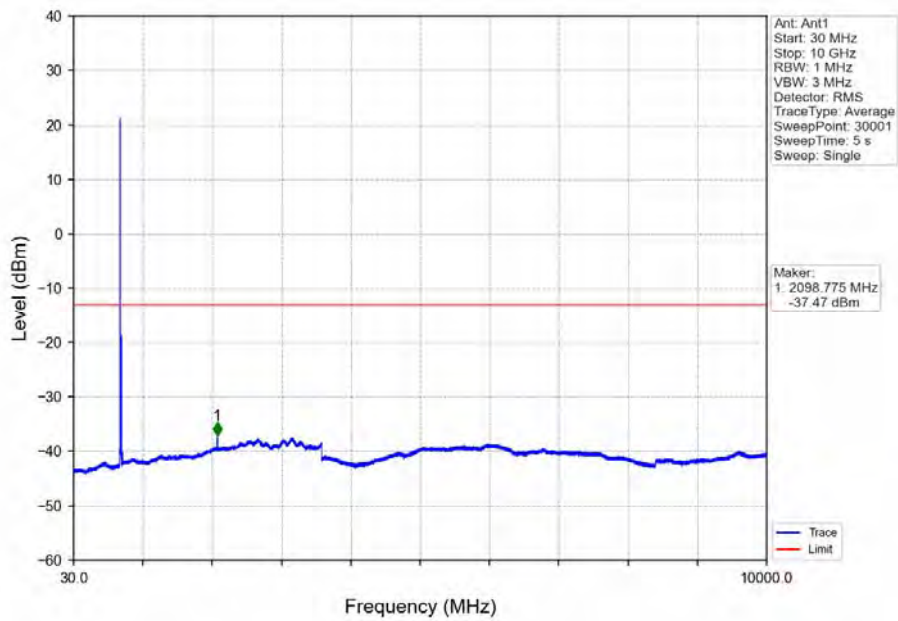


Band12_10MHz_16QAM_LCH_704MHz_RB_1_0_NTNV

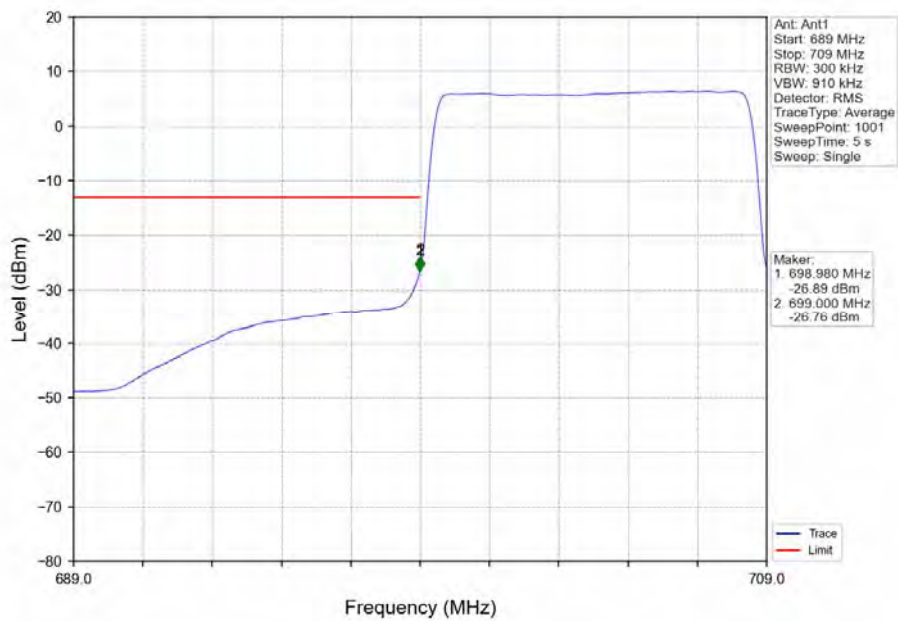




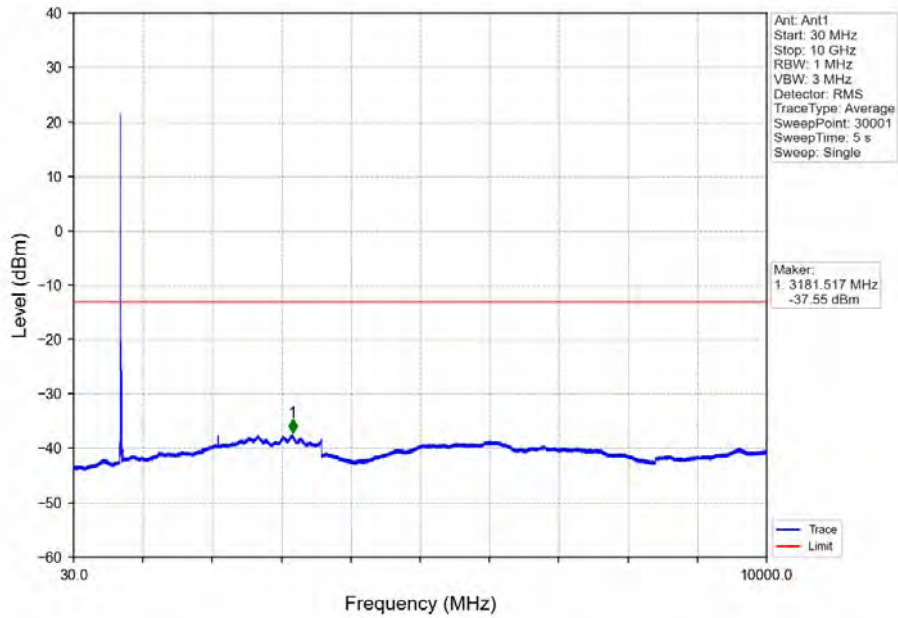
Band12_10MHz_16QAM_LCH_704MHz_RB_1_0_NTNV



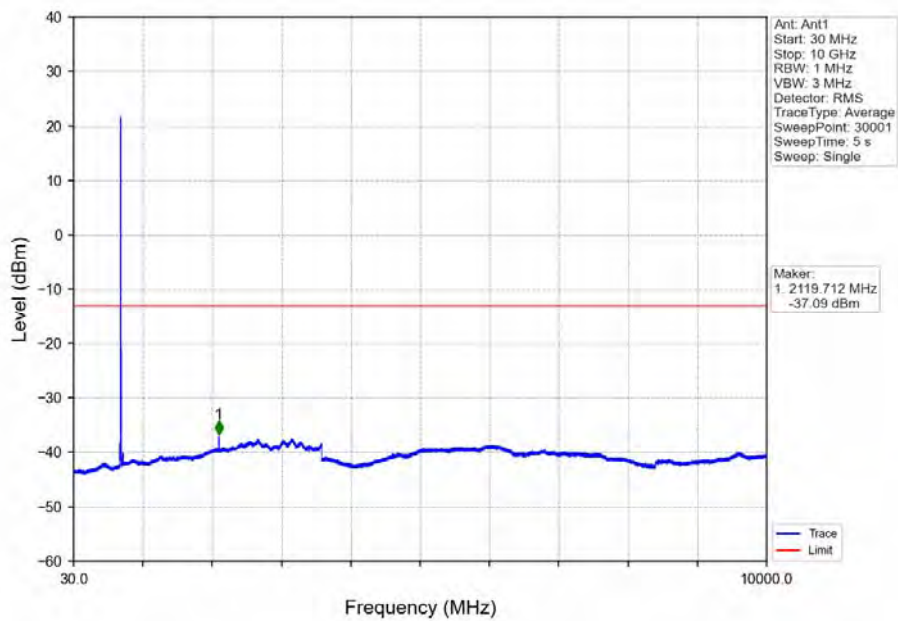
Band12_10MHz_16QAM_LCH_704MHz_RB_50_0_NTNV



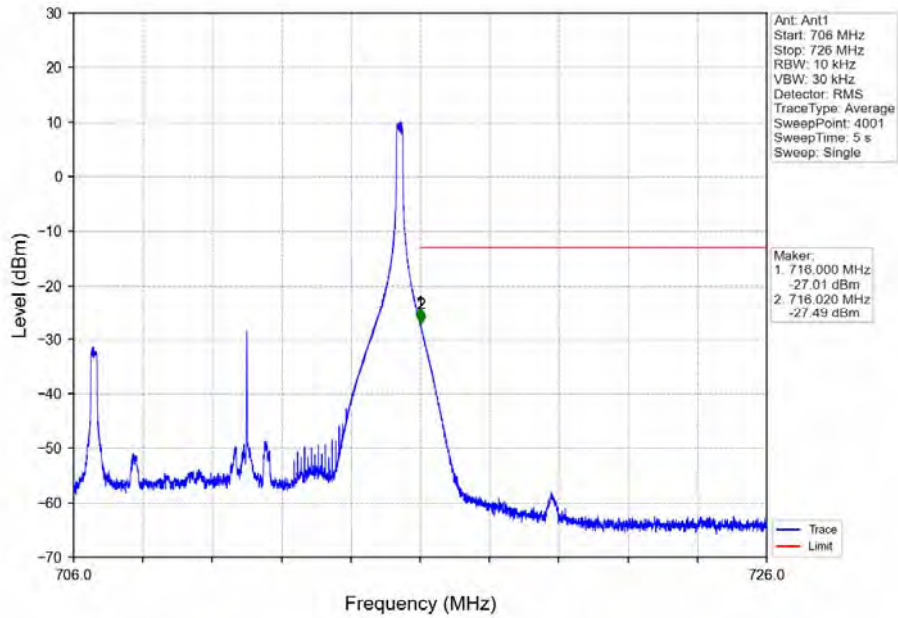
Band12_10MHz_16QAM_MCH_707.5MHz_RB_1_0_NTNV



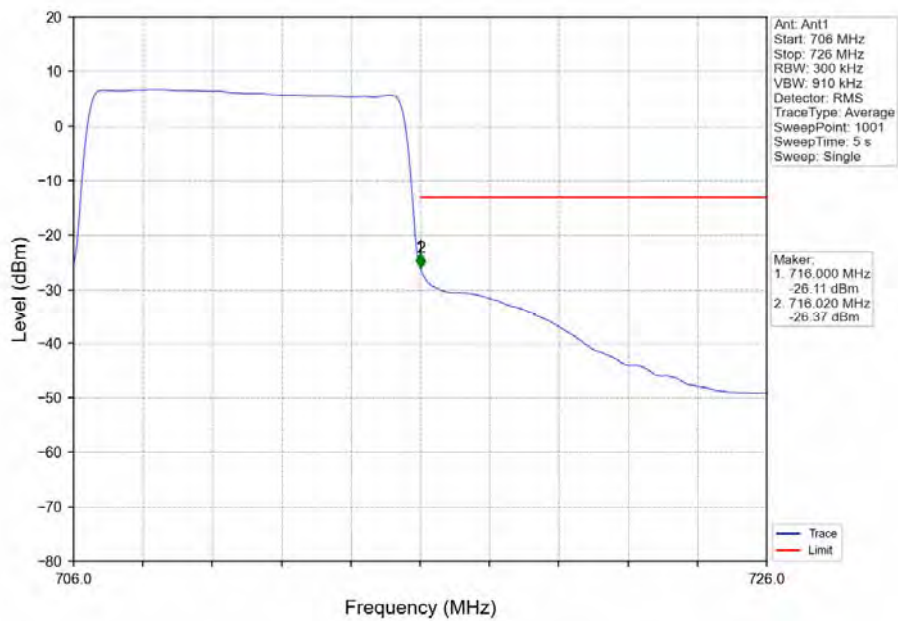
Band12_10MHz_16QAM_HCH_711MHz_RB_1_0_NTNV



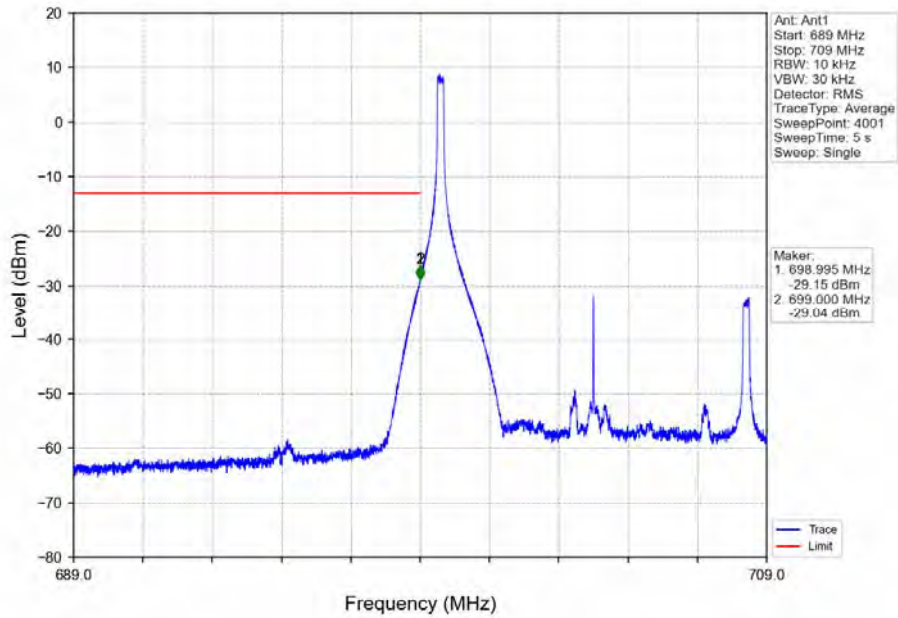
Band12_10MHz_16QAM_HCH_711MHz_RB_1_49_NTNV



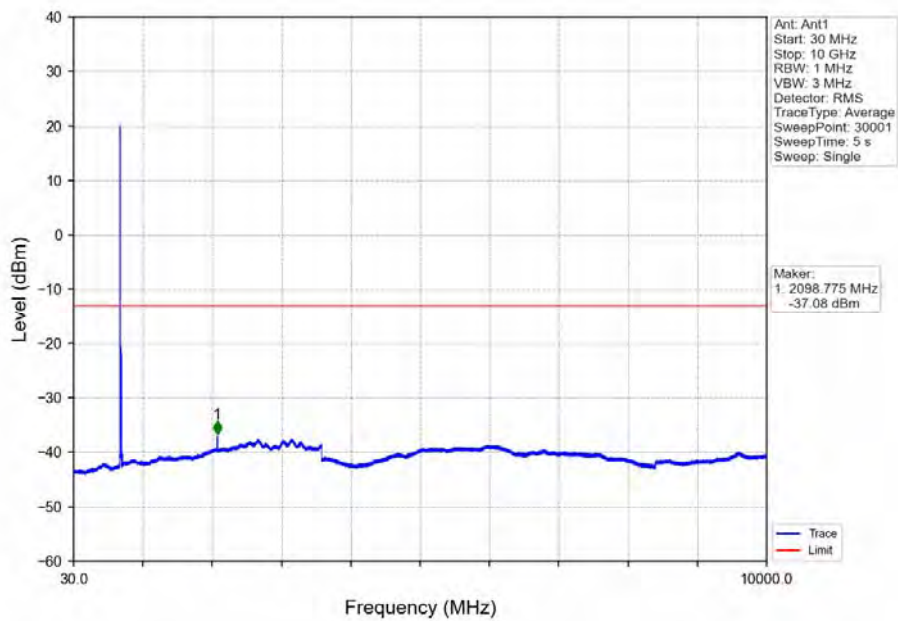
Band12_10MHz_16QAM_HCH_711MHz_RB_50_0_NTNV



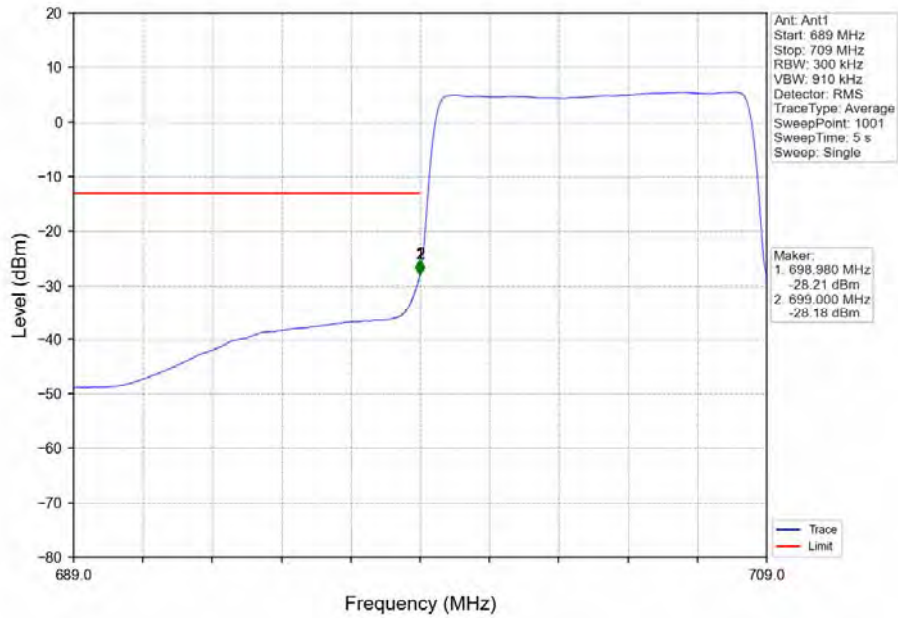
Band12_10MHz_64QAM_LCH_704MHz_RB_1_0_NTNV



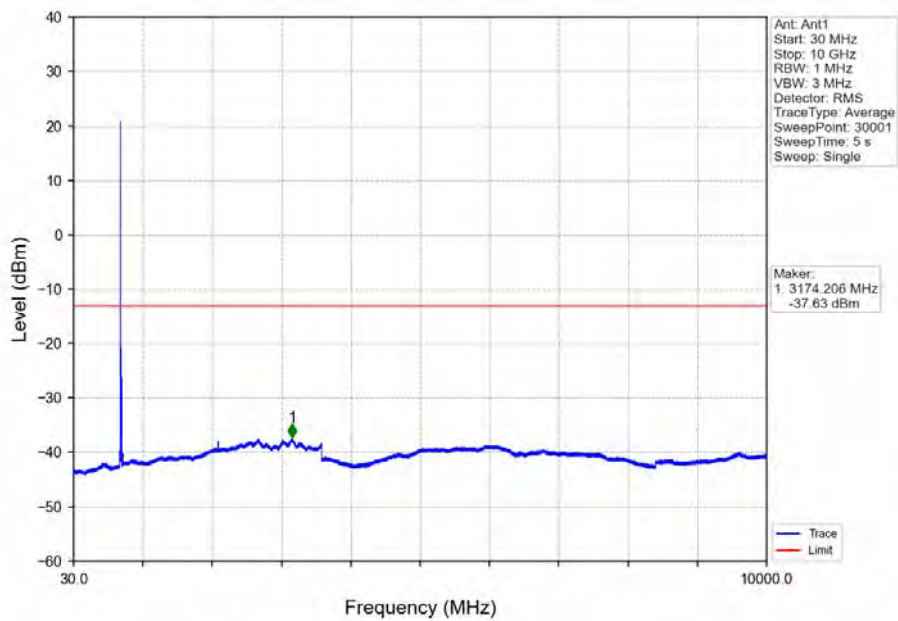
Band12_10MHz_64QAM_LCH_704MHz_RB_1_0_NTNV



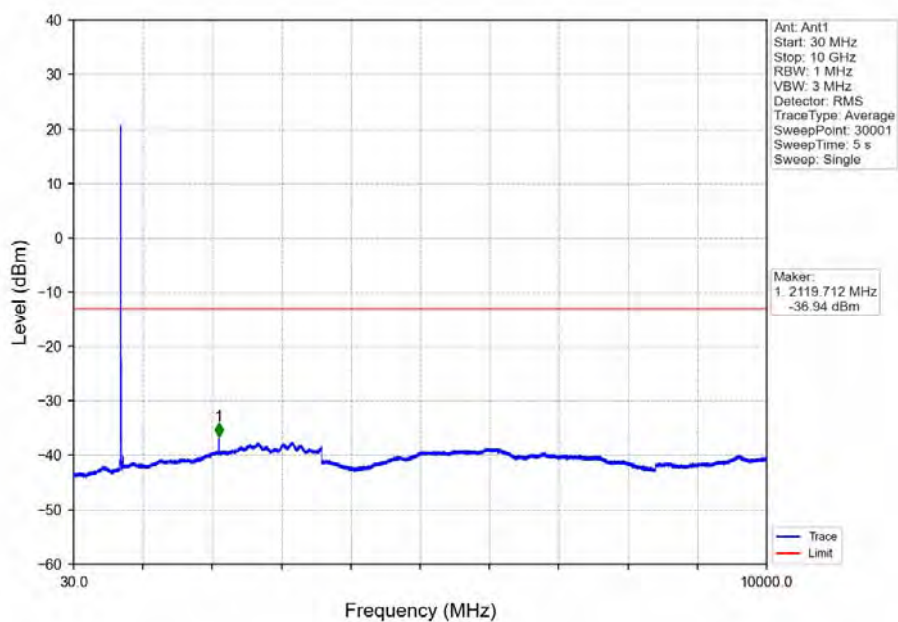
Band12_10MHz_64QAM_LCH_704MHz_RB_50_0_NTNV



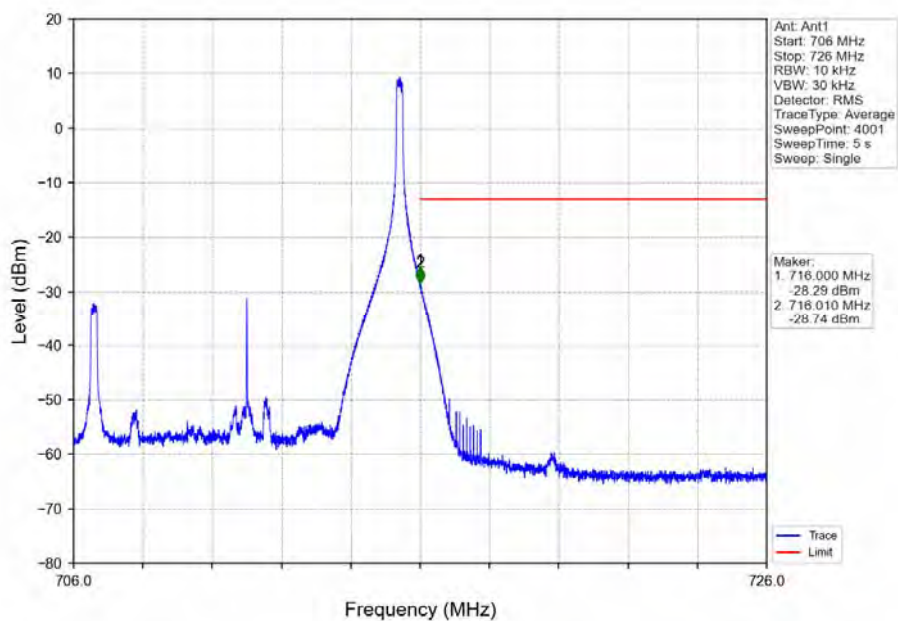
Band12_10MHz_64QAM_MCH_707.5MHz_RB_1_0_NTNV



Band12_10MHz_64QAM_HCH_711MHz_RB_1_0_NTNV

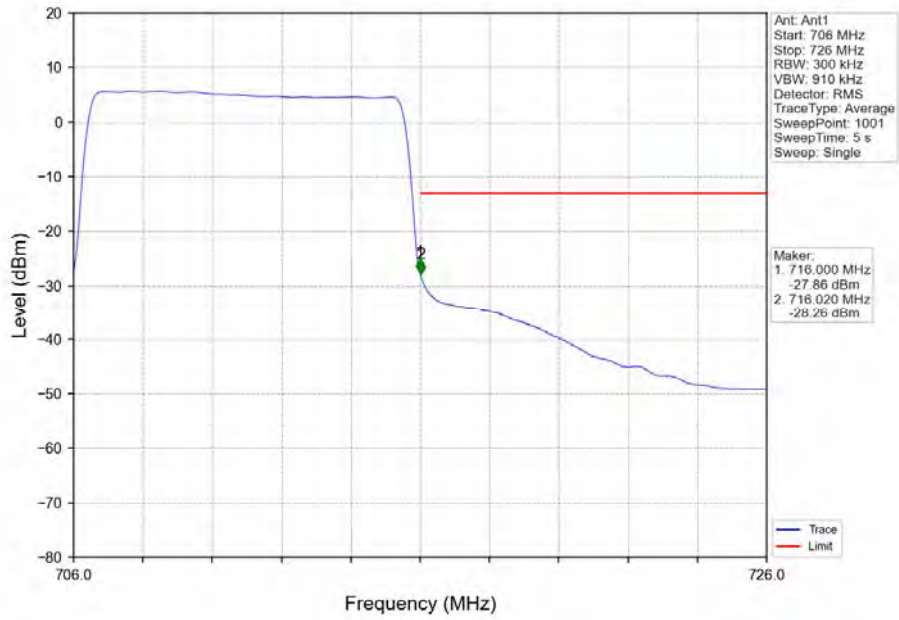


Band12_10MHz_64QAM_HCH_711MHz_RB_1_49_NTNV





Band12_10MHz_64QAM_HCH_711MHz_RB_50_0_NTNV





APPENDIX C : LTE Band30

Frequency Stability

B30_5MHz

Test Result

Band: 30 / Bandwidth: 5MHz									
Modulation	Frequency (MHz)	RB Allocation		Temp. (°C)	Voltage (VDC)	Freq. Error (Hz)	Freq. vs. Rated (ppm)		Verdict
		Size	Offset				Result	Limit	
QPSK	2307.5	25	0	20	3.27	-7.71	-0.00	-2.5 to 2.5	Pass
					3.85	-16.77	-0.01	-2.5 to 2.5	Pass
					4.43	-2.38	-0.00	-2.5 to 2.5	Pass
				-10	3.85	4.59	0.00	-2.5 to 2.5	Pass
				0	3.85	5.36	0.00	-2.5 to 2.5	Pass
				10	3.85	0.47	0.00	-2.5 to 2.5	Pass
				30	3.85	-4.12	-0.00	-2.5 to 2.5	Pass
				40	3.85	-4.81	-0.00	-2.5 to 2.5	Pass
	50	3.85	-11.10	-0.00	-2.5 to 2.5	Pass			
	2310	25	0	20	3.27	-6.11	-0.00	-2.5 to 2.5	Pass
					3.85	-28.14	-0.01	-2.5 to 2.5	Pass
					4.43	-13.96	-0.01	-2.5 to 2.5	Pass
				-10	3.85	-5.55	-0.00	-2.5 to 2.5	Pass
				0	3.85	-3.25	-0.00	-2.5 to 2.5	Pass
10				3.85	-5.09	-0.00	-2.5 to 2.5	Pass	
30	3.85	-5.26	-0.00	-2.5 to 2.5	Pass				



				40	3.85	-7.20	-0.00	-2.5 to 2.5	Pass	
				50	3.85	-8.80	-0.00	-2.5 to 2.5	Pass	
	2312.5	25	0	20	3.27	-4.05	-0.00	-2.5 to 2.5	Pass	
					3.85	-23.12	-0.01	-2.5 to 2.5	Pass	
					4.43	-8.55	-0.00	-2.5 to 2.5	Pass	
				-10	3.85	-4.41	-0.00	-2.5 to 2.5	Pass	
				0	3.85	-4.59	-0.00	-2.5 to 2.5	Pass	
				10	3.85	-2.82	-0.00	-2.5 to 2.5	Pass	
				30	3.85	-5.85	-0.00	-2.5 to 2.5	Pass	
				40	3.85	9.23	0.00	-2.5 to 2.5	Pass	
				50	3.85	2.33	0.00	-2.5 to 2.5	Pass	
				16QAM	2307.5	25	0	20	3.27	-6.79
	3.85	-4.43	-0.00						-2.5 to 2.5	Pass
	4.43	-6.07	-0.00						-2.5 to 2.5	Pass
-10	3.85	-11.46	-0.01					-2.5 to 2.5	Pass	
0	3.85	-18.15	-0.01					-2.5 to 2.5	Pass	
10	3.85	-7.17	-0.00					-2.5 to 2.5	Pass	
30	3.85	-12.52	-0.01					-2.5 to 2.5	Pass	
40	3.85	-12.02	-0.01					-2.5 to 2.5	Pass	
50	3.85	-6.45	-0.00					-2.5 to 2.5	Pass	
2310	25	0	20					3.27	-2.88	-0.00
					3.85	2.82	0.00	-2.5 to 2.5	Pass	
					4.43	-1.19	-0.00	-2.5 to 2.5	Pass	
			-10		3.85	-9.05	-0.00	-2.5 to 2.5	Pass	



				0	3.85	-9.01	-0.00	-2.5 to 2.5	Pass
				10	3.85	-14.68	-0.01	-2.5 to 2.5	Pass
				30	3.85	-4.33	-0.00	-2.5 to 2.5	Pass
				40	3.85	-12.49	-0.01	-2.5 to 2.5	Pass
				50	3.85	-3.82	-0.00	-2.5 to 2.5	Pass
	2312.5	25	0	20	3.27	-1.57	-0.00	-2.5 to 2.5	Pass
					3.85	1.75	0.00	-2.5 to 2.5	Pass
					4.43	-0.63	-0.00	-2.5 to 2.5	Pass
				-10	3.85	-7.25	-0.00	-2.5 to 2.5	Pass
				0	3.85	-5.18	-0.00	-2.5 to 2.5	Pass
				10	3.85	-1.12	-0.00	-2.5 to 2.5	Pass
				30	3.85	-8.77	-0.00	-2.5 to 2.5	Pass
				40	3.85	-13.12	-0.01	-2.5 to 2.5	Pass
				50	3.85	-12.40	-0.01	-2.5 to 2.5	Pass
	64QAM	2307.5	25	20	3.27	-1.89	-0.00	-2.5 to 2.5	Pass
3.85					-5.38	-0.00	-2.5 to 2.5	Pass	
4.43					0.84	0.00	-2.5 to 2.5	Pass	
-10				3.85	4.89	0.00	-2.5 to 2.5	Pass	
0				3.85	-5.79	-0.00	-2.5 to 2.5	Pass	
10				3.85	-12.39	-0.01	-2.5 to 2.5	Pass	
30				3.85	-8.91	-0.00	-2.5 to 2.5	Pass	
40				3.85	-3.82	-0.00	-2.5 to 2.5	Pass	
50				3.85	-4.42	-0.00	-2.5 to 2.5	Pass	
2310		25	0	20	3.27	-2.79	-0.00	-2.5 to 2.5	Pass



					3.85	1.26	0.00	-2.5 to 2.5	Pass	
					4.43	-1.72	-0.00	-2.5 to 2.5	Pass	
				-10	3.85	-2.30	-0.00	-2.5 to 2.5	Pass	
				0	3.85	-4.09	-0.00	-2.5 to 2.5	Pass	
				10	3.85	0.21	0.00	-2.5 to 2.5	Pass	
				30	3.85	-0.71	-0.00	-2.5 to 2.5	Pass	
				40	3.85	-7.28	-0.00	-2.5 to 2.5	Pass	
				50	3.85	-3.90	-0.00	-2.5 to 2.5	Pass	
	2312.5	25	0	20		3.27	-5.58	-0.00	-2.5 to 2.5	Pass
						3.85	6.15	0.00	-2.5 to 2.5	Pass
						4.43	-1.62	-0.00	-2.5 to 2.5	Pass
					-10	3.85	-6.37	-0.00	-2.5 to 2.5	Pass
					0	3.85	-5.41	-0.00	-2.5 to 2.5	Pass
					10	3.85	-6.11	-0.00	-2.5 to 2.5	Pass
					30	3.85	-2.00	-0.00	-2.5 to 2.5	Pass
					40	3.85	-5.26	-0.00	-2.5 to 2.5	Pass
	50	3.85	-3.76	-0.00	-2.5 to 2.5	Pass				

B30_10MHz

Test Result

Band: 30 / Bandwidth: 10MHz									
Modulation	Frequency (MHz)	RB Allocation		Temp. (°C)	Voltage (VDC)	Freq. Error (Hz)	Freq. vs. Rated (ppm)		Verdict
		Size	Offset				Result	Limit	
QPSK	2310	50	0	20	3.27	-15.16	-0.01	-2.5 to 2.5	Pass



					3.85	-11.00	-0.00	-2.5 to 2.5	Pass				
					4.43	-2.63	-0.00	-2.5 to 2.5	Pass				
				-10	3.85	-9.86	-0.00	-2.5 to 2.5	Pass				
				0	3.85	-12.00	-0.01	-2.5 to 2.5	Pass				
				10	3.85	-11.20	-0.00	-2.5 to 2.5	Pass				
				30	3.85	-8.01	-0.00	-2.5 to 2.5	Pass				
				40	3.85	-10.40	-0.00	-2.5 to 2.5	Pass				
				50	3.85	-1.22	-0.00	-2.5 to 2.5	Pass				
16QAM	2310	50	0	20	3.27	-4.05	-0.00	-2.5 to 2.5	Pass				
					3.85	-4.19	-0.00	-2.5 to 2.5	Pass				
					4.43	-5.11	-0.00	-2.5 to 2.5	Pass				
								-10	3.85	-12.46	-0.01	-2.5 to 2.5	Pass
								0	3.85	4.71	0.00	-2.5 to 2.5	Pass
								10	3.85	-5.65	-0.00	-2.5 to 2.5	Pass
								30	3.85	-3.69	-0.00	-2.5 to 2.5	Pass
								40	3.85	-1.52	-0.00	-2.5 to 2.5	Pass
								50	3.85	-2.25	-0.00	-2.5 to 2.5	Pass
64QAM	2310	50	0	20	3.27	6.27	0.00	-2.5 to 2.5	Pass				
					3.85	-9.61	-0.00	-2.5 to 2.5	Pass				
					4.43	-2.82	-0.00	-2.5 to 2.5	Pass				
								-10	3.85	-6.78	-0.00	-2.5 to 2.5	Pass
								0	3.85	-9.71	-0.00	-2.5 to 2.5	Pass
								10	3.85	-14.23	-0.01	-2.5 to 2.5	Pass
								30	3.85	-6.81	-0.00	-2.5 to 2.5	Pass



Report No.: W7L-P21100025RF06

				40	3.85	-8.57	-0.00	-2.5 to 2.5	Pass
				50	3.85	-14.35	-0.01	-2.5 to 2.5	Pass



99% & 26dB Bandwidth

99%_OBW

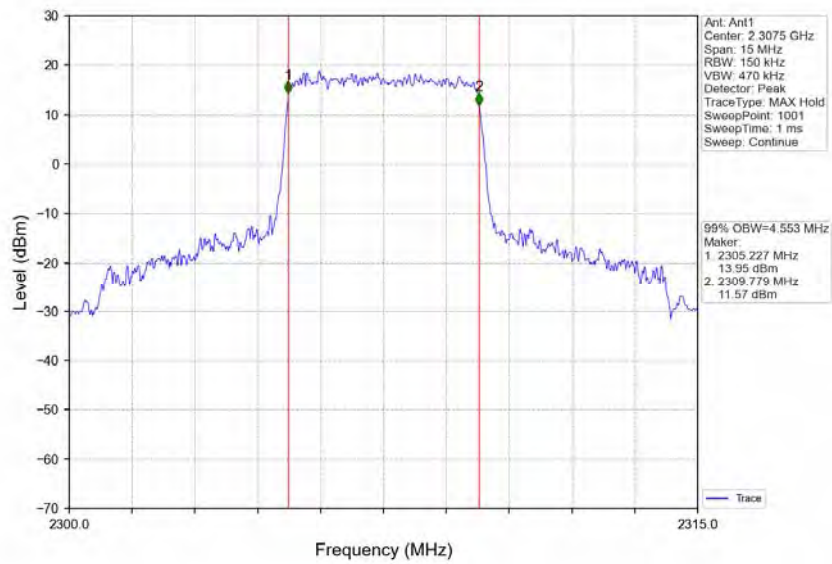
Test Result

Band: 30 / NTV						
Bandwidth (MHz)	Modulation	Frequency (MHz)	RB Allocation		99% Occupied Bandwidth (MHz)	Verdict
			Size	Offset	Result	
5	QPSK	2307.5	25	0	4.553	Pass
		2310	25	0	4.546	Pass
		2312.5	25	0	4.546	Pass
	16QAM	2307.5	25	0	4.527	Pass
		2310	25	0	4.564	Pass
		2312.5	25	0	4.563	Pass
	64QAM	2307.5	25	0	4.539	Pass
		2310	25	0	4.550	Pass
		2312.5	25	0	4.543	Pass
10	QPSK	/	/	/	/	Pass
		2310	50	0	9.075	Pass
		/	/	/	/	Pass
	16QAM	/	/	/	/	Pass
		2310	50	0	9.062	Pass
		/	/	/	/	Pass
	64QAM	/	/	/	/	Pass
		2310	50	0	9.050	Pass
		/	/	/	/	Pass

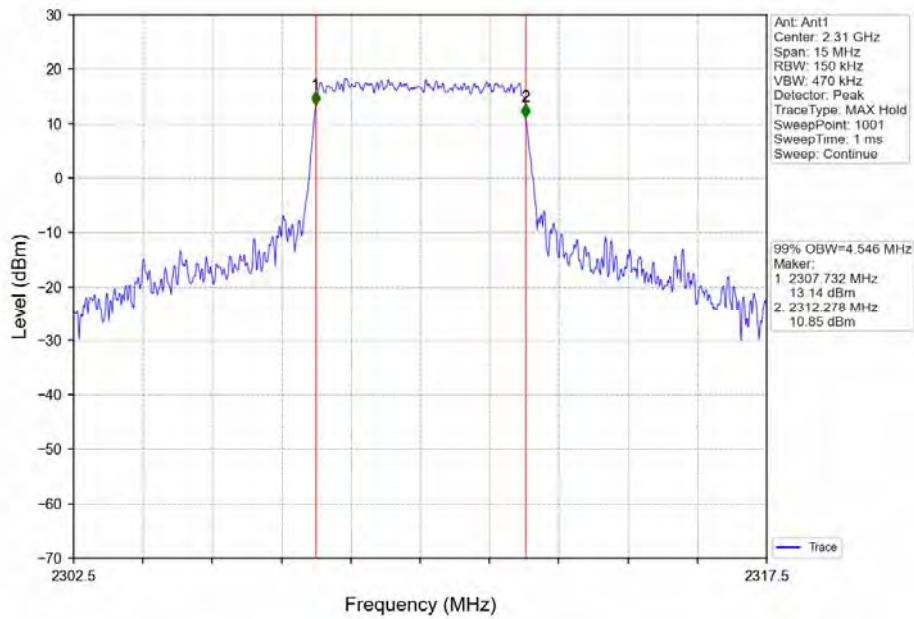


Test Graph

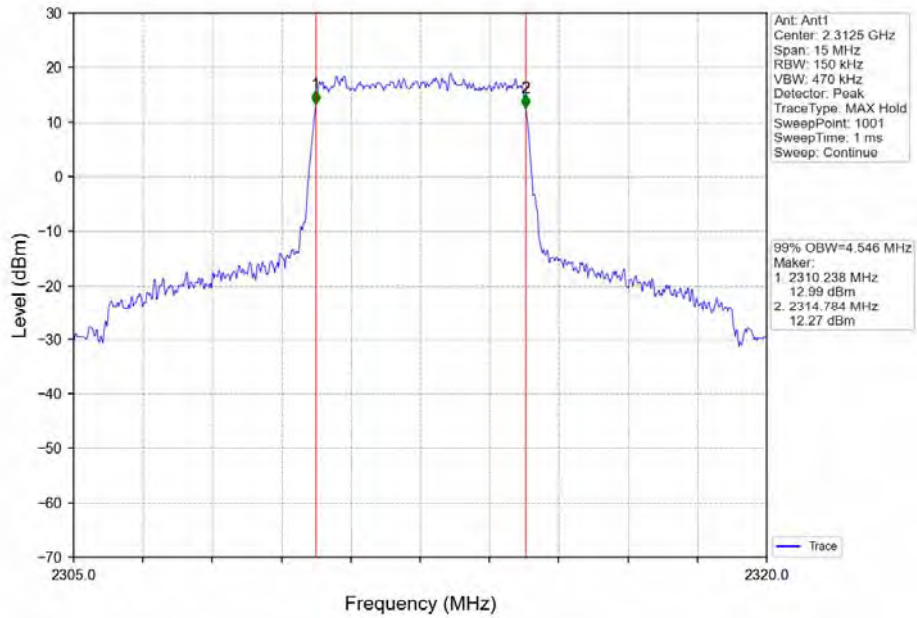
Band30_5MHz_QPSK_LCH_2307.5MHz_RB_25_0_NTNV



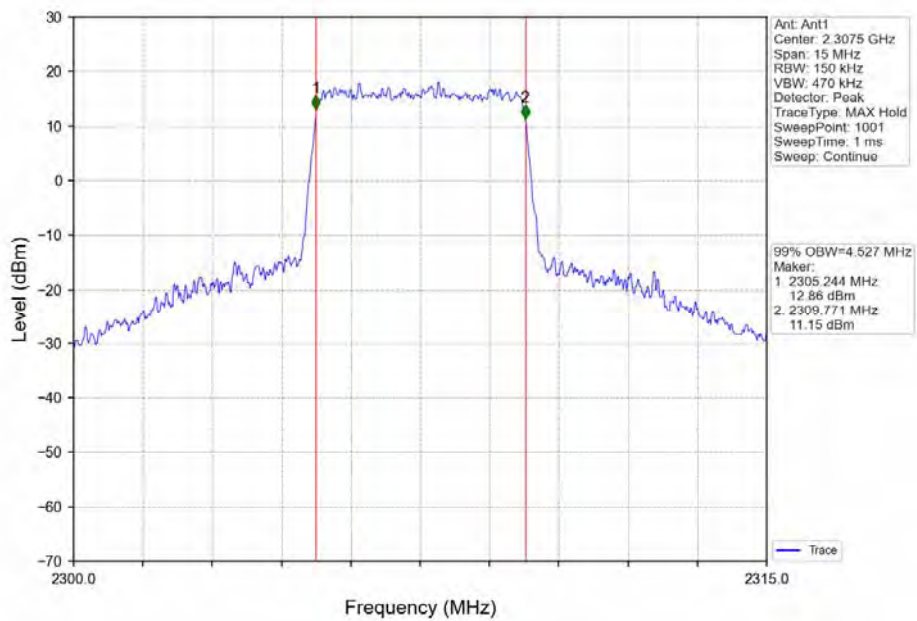
Band30_5MHz_QPSK_MCH_2310MHz_RB_25_0_NTNV



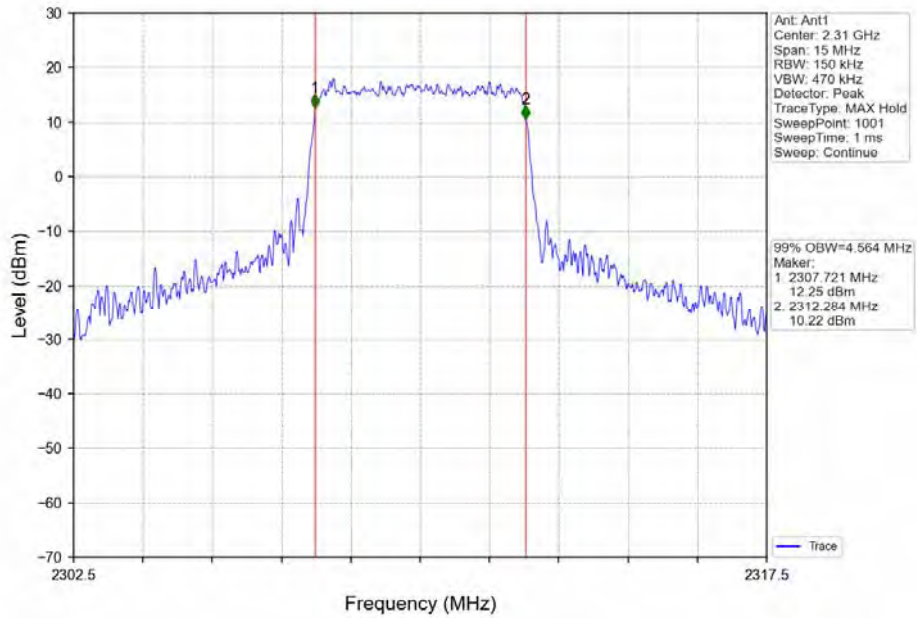
Band30_5MHz_QPSK_HCH_2312.5MHz_RB_25_0_NTNV



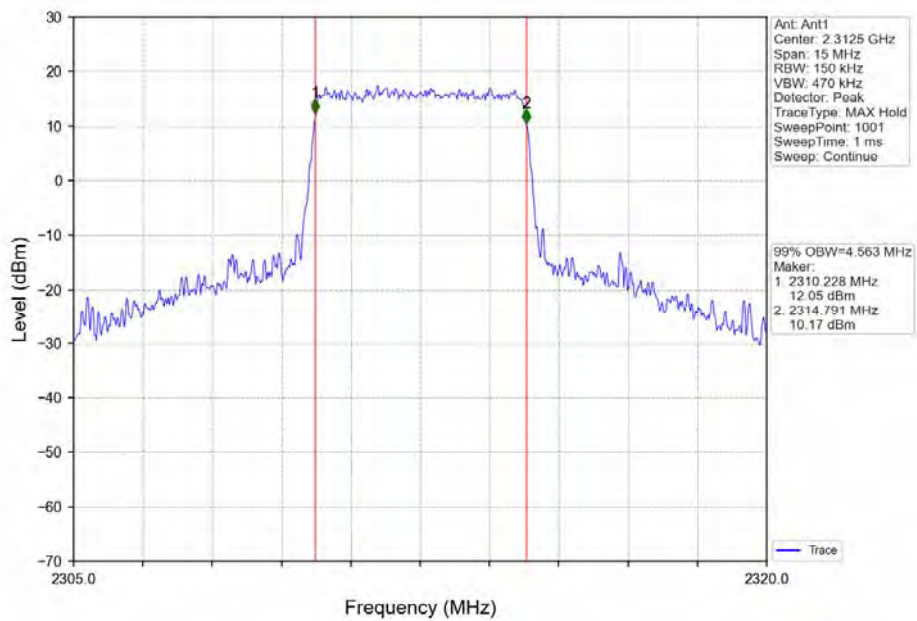
Band30_5MHz_16QAM_LCH_2307.5MHz_RB_25_0_NTNV



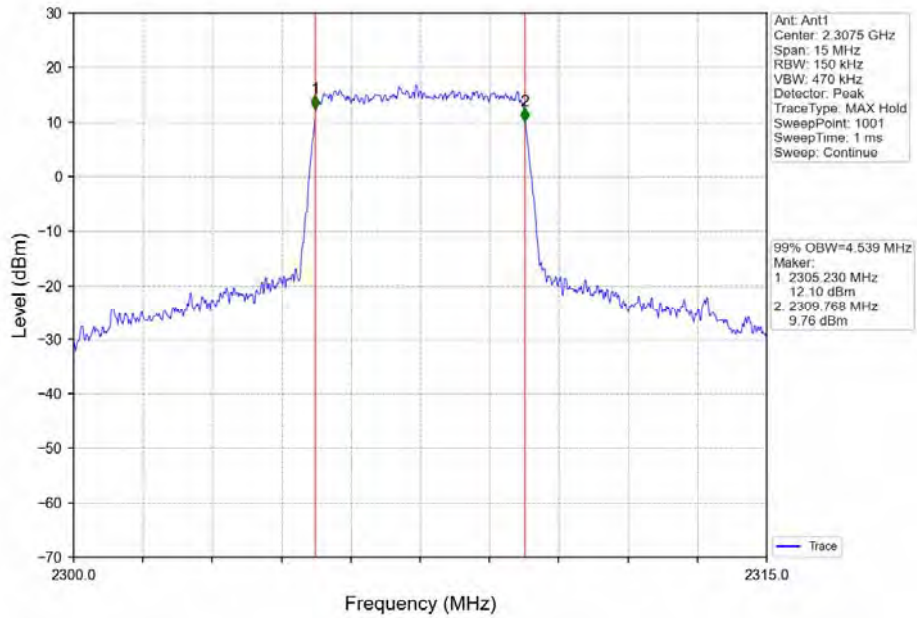
Band30_5MHz_16QAM_MCH_2310MHz_RB_25_0_NTNV



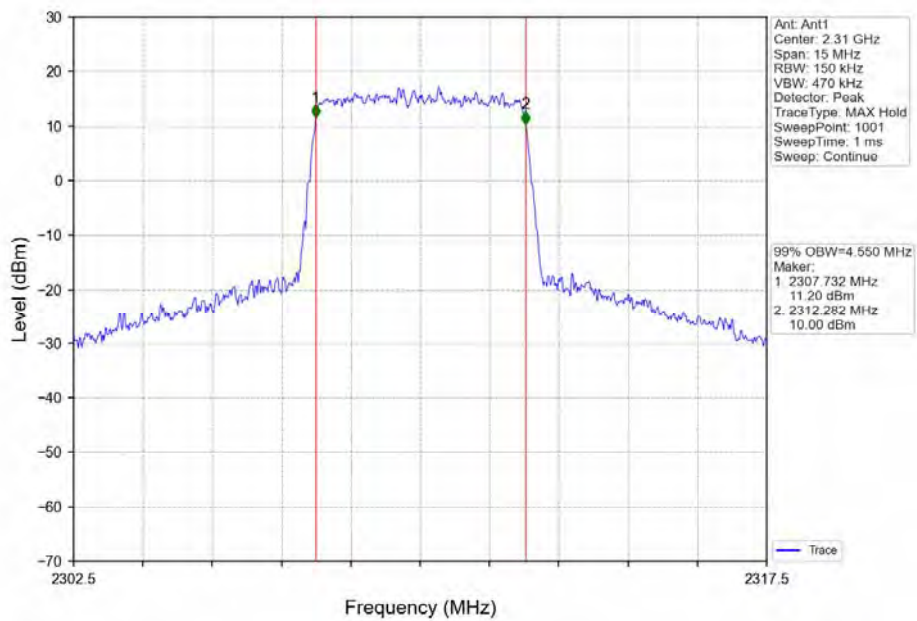
Band30_5MHz_16QAM_HCH_2312.5MHz_RB_25_0_NTNV



Band30_5MHz_64QAM_LCH_2307.5MHz_RB_25_0_NTNV

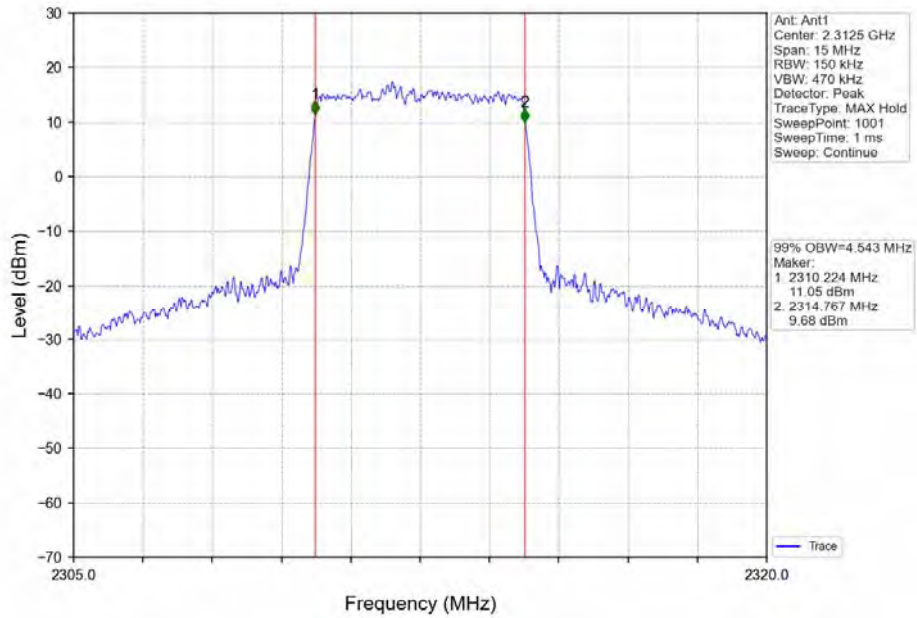


Band30_5MHz_64QAM_MCH_2310MHz_RB_25_0_NTNV

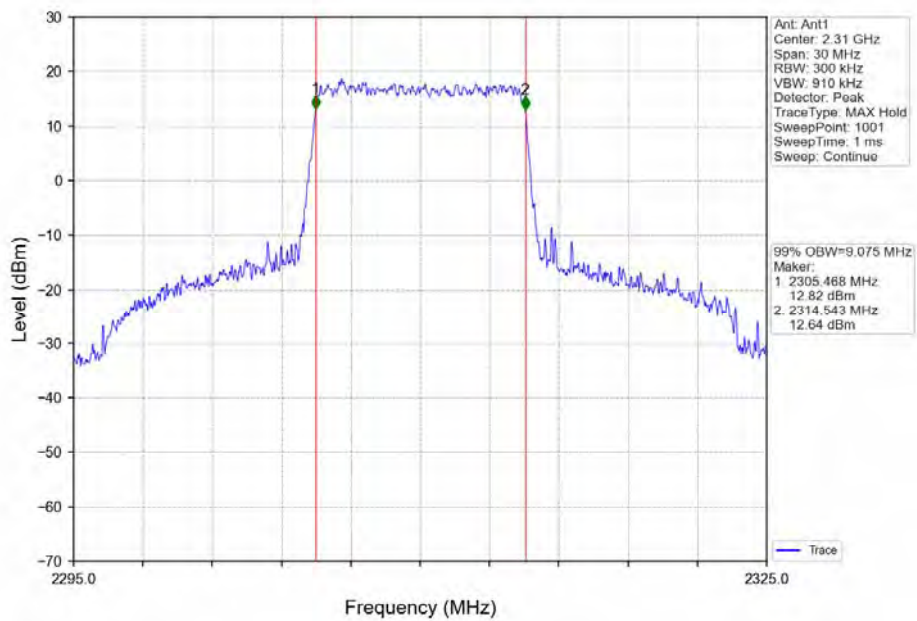




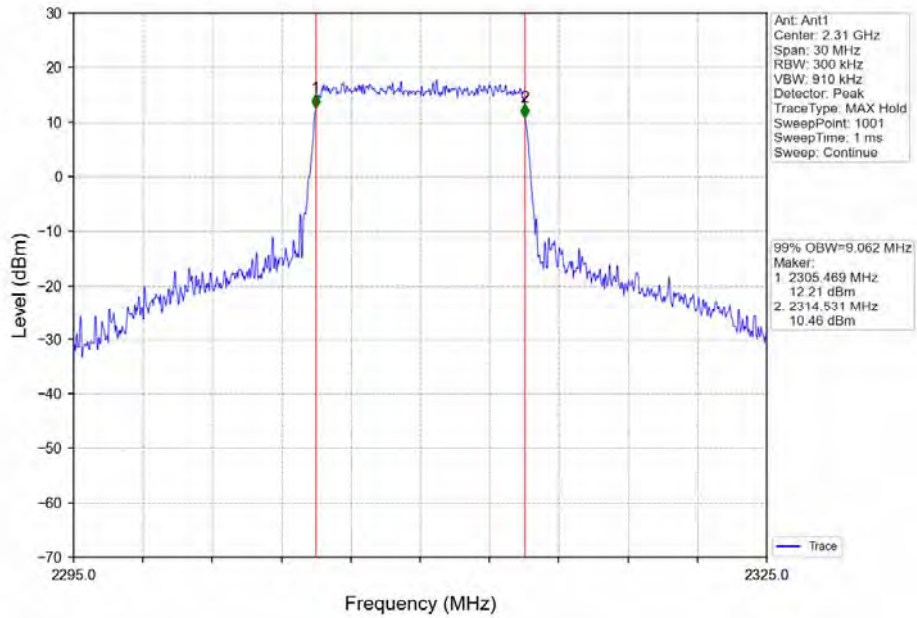
Band30_5MHz_64QAM_HCH_2312.5MHz_RB_25_0_NTNV



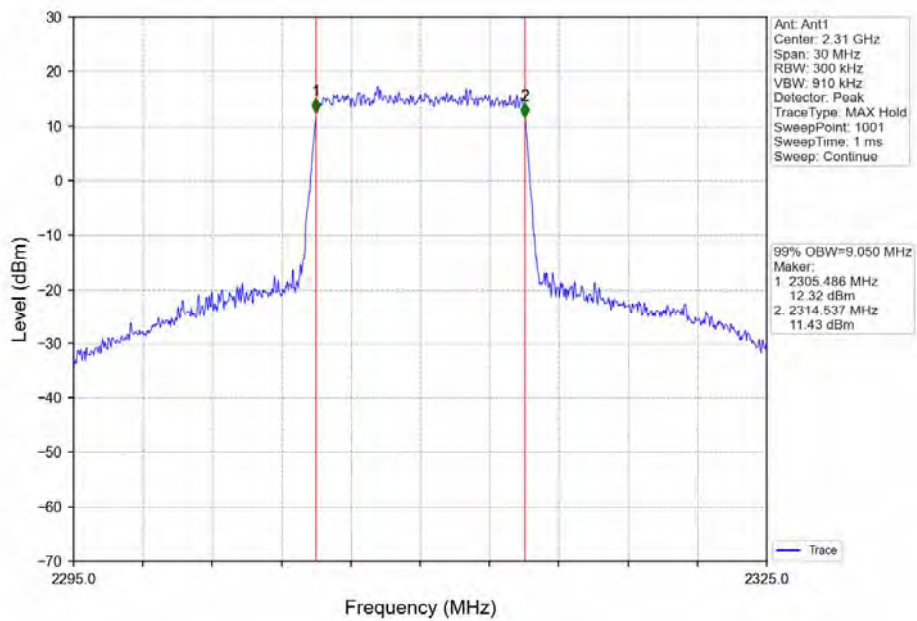
Band30_10MHz_QPSK_MCH_2310MHz_RB_50_0_NTNV



Band30_10MHz_16QAM_MCH_2310MHz_RB_50_0_NTNV



Band30_10MHz_64QAM_MCH_2310MHz_RB_50_0_NTNV





26DB_BW

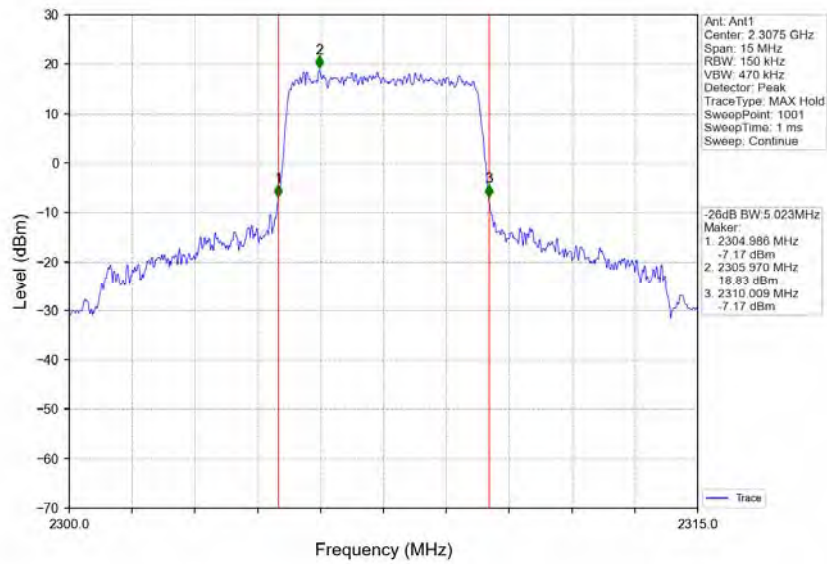
Test Result

Band: 30 / NTNV						
Bandwidth (MHz)	Modulation	Frequency (MHz)	RB Allocation		26dB Bandwidth (MHz)	Verdict
			Size	Offset	Result	
5	QPSK	2307.5	25	0	5.023	Pass
		2310	25	0	5.690	Pass
		2312.5	25	0	5.018	Pass
	16QAM	2307.5	25	0	5.008	Pass
		2310	25	0	5.211	Pass
		2312.5	25	0	5.067	Pass
	64QAM	2307.5	25	0	5.013	Pass
		2310	25	0	5.042	Pass
		2312.5	25	0	4.991	Pass
10	QPSK	/	/	/	/	Pass
		2310	50	0	10.023	Pass
		/	/	/	/	Pass
	16QAM	/	/	/	/	Pass
		2310	50	0	10.251	Pass
		/	/	/	/	Pass
	64QAM	/	/	/	/	Pass
		2310	50	0	9.851	Pass
		/	/	/	/	Pass



Test Graph

Band30_5MHz_QPSK_LCH_2307.5MHz_RB_25_0_NTNV



Band30_5MHz_QPSK_MCH_2310MHz_RB_25_0_NTNV

