

# 1. Effective (Isotropic) Radiated Power Output Data

## 1.1 Test Result

### 1.1.1 B71\_5MHz\_ERP

Band: 71 / Bandwidth: 5MHz / NTNV										
Modulation	Frequency (MHz)	RB Allocation		Conducted Power (dBm)	Gain (dBi)	ERP (dBm)		Verdict		
		Size	Offset			Result	Limit			
QPSK	665.5	1	0	21.62	-0.13	19.34	<=34.77	Pass		
			13	21.22	-0.13	18.94	<=34.77	Pass		
			24	21.08	-0.13	18.80	<=34.77	Pass		
		12	0	20.04	-0.13	17.76	<=34.77	Pass		
			6	20.18	-0.13	17.90	<=34.77	Pass		
			13	20.21	-0.13	17.93	<=34.77	Pass		
		25	0	20.14	-0.13	17.86	<=34.77	Pass		
		680.5	1	0	21.02	-0.13	18.74	<=34.77	Pass	
				13	21.09	-0.13	18.81	<=34.77	Pass	
	24			21.07	-0.13	18.79	<=34.77	Pass		
	12		0	19.96	-0.13	17.68	<=34.77	Pass		
			6	20.11	-0.13	17.83	<=34.77	Pass		
			13	20.13	-0.13	17.85	<=34.77	Pass		
	25		0	20.07	-0.13	17.79	<=34.77	Pass		
	695.5		1	0	21.12	-0.13	18.84	<=34.77	Pass	
				13	21.31	-0.13	19.03	<=34.77	Pass	
		24		21.31	-0.13	19.03	<=34.77	Pass		
		12	0	20.17	-0.13	17.89	<=34.77	Pass		
			6	20.27	-0.13	17.99	<=34.77	Pass		
			13	20.26	-0.13	17.98	<=34.77	Pass		
		25	0	20.28	-0.13	18.00	<=34.77	Pass		
		16QAM	665.5	1	0	20.20	-0.13	17.92	<=34.77	Pass
					13	20.26	-0.13	17.98	<=34.77	Pass
	24				20.20	-0.13	17.92	<=34.77	Pass	
12	0			19.03	-0.13	16.75	<=34.77	Pass		
	6			19.20	-0.13	16.92	<=34.77	Pass		
	13			19.27	-0.13	16.99	<=34.77	Pass		
25	0			19.12	-0.13	16.84	<=34.77	Pass		
680.5	1			0	19.94	-0.13	17.66	<=34.77	Pass	
				13	20.01	-0.13	17.73	<=34.77	Pass	
			24	19.95	-0.13	17.67	<=34.77	Pass		
	12		0	19.09	-0.13	16.81	<=34.77	Pass		
			6	19.22	-0.13	16.94	<=34.77	Pass		
			13	19.20	-0.13	16.92	<=34.77	Pass		
	25		0	19.17	-0.13	16.89	<=34.77	Pass		
	695.5		1	0	20.52	-0.13	18.24	<=34.77	Pass	
				13	20.62	-0.13	18.34	<=34.77	Pass	
24				20.67	-0.13	18.39	<=34.77	Pass		
12			0	19.24	-0.13	16.96	<=34.77	Pass		
			6	19.33	-0.13	17.05	<=34.77	Pass		
			13	19.31	-0.13	17.03	<=34.77	Pass		
25			0	19.27	-0.13	16.99	<=34.77	Pass		

Note1: ERP=Conducted Power+Antenna Gain-2.15

### 1.1.2 B71\_10MHz\_ERP

Band: 71 / Bandwidth: 10MHz / NTV									
Modulation	Frequency (MHz)	RB Allocation		Conducted Power (dBm)	Gain (dBi)	ERP (dBm)		Verdict	
		Size	Offset			Result	Limit		
QPSK	668	1	0	21.21	-0.13	18.93	<=34.77	Pass	
			25	21.31	-0.13	19.03	<=34.77	Pass	
			49	21.20	-0.13	18.92	<=34.77	Pass	
		25	0	19.98	-0.13	17.70	<=34.77	Pass	
			13	20.19	-0.13	17.91	<=34.77	Pass	
			25	20.11	-0.13	17.83	<=34.77	Pass	
	50	0	20.05	-0.13	17.77	<=34.77	Pass		
	680.5	1	0	21.07	-0.13	18.79	<=34.77	Pass	
			25	21.23	-0.13	18.95	<=34.77	Pass	
			49	21.20	-0.13	18.92	<=34.77	Pass	
		25	0	20.00	-0.13	17.72	<=34.77	Pass	
			13	20.12	-0.13	17.84	<=34.77	Pass	
			25	20.26	-0.13	17.98	<=34.77	Pass	
	50	0	20.12	-0.13	17.84	<=34.77	Pass		
	693	1	0	21.05	-0.13	18.77	<=34.77	Pass	
			25	21.25	-0.13	18.97	<=34.77	Pass	
			49	21.34	-0.13	19.06	<=34.77	Pass	
		25	0	20.25	-0.13	17.97	<=34.77	Pass	
			13	20.24	-0.13	17.96	<=34.77	Pass	
			25	20.32	-0.13	18.04	<=34.77	Pass	
	50	0	20.28	-0.13	18.00	<=34.77	Pass		
	16QAM	668	1	0	20.52	-0.13	18.24	<=34.77	Pass
				25	20.59	-0.13	18.31	<=34.77	Pass
				49	20.50	-0.13	18.22	<=34.77	Pass
25			0	19.01	-0.13	16.73	<=34.77	Pass	
			13	19.21	-0.13	16.93	<=34.77	Pass	
			25	19.15	-0.13	16.87	<=34.77	Pass	
50		0	19.06	-0.13	16.78	<=34.77	Pass		
680.5		1	0	19.96	-0.13	17.68	<=34.77	Pass	
			25	20.04	-0.13	17.76	<=34.77	Pass	
			49	20.06	-0.13	17.78	<=34.77	Pass	
		25	0	19.09	-0.13	16.81	<=34.77	Pass	
			13	19.17	-0.13	16.89	<=34.77	Pass	
			25	19.29	-0.13	17.01	<=34.77	Pass	
50		0	19.13	-0.13	16.85	<=34.77	Pass		
693		1	0	20.04	-0.13	17.76	<=34.77	Pass	
			25	20.27	-0.13	17.99	<=34.77	Pass	
			49	20.34	-0.13	18.06	<=34.77	Pass	
		25	0	19.31	-0.13	17.03	<=34.77	Pass	
			13	19.30	-0.13	17.02	<=34.77	Pass	
			25	19.41	-0.13	17.13	<=34.77	Pass	
50		0	19.26	-0.13	16.98	<=34.77	Pass		

Note1: ERP=Conducted Power+Antenna Gain-2.15

### 1.1.3 B71\_15MHz\_ERP

Band: 71 / Bandwidth: 15MHz / NTV								
Modulation	Frequency (MHz)	RB Allocation		Conducted Power (dBm)	Gain (dBi)	ERP (dBm)		Verdict
		Size	Offset			Result	Limit	
QPSK	670.5	1	0	21.07	-0.13	18.79	<=34.77	Pass
			38	21.18	-0.13	18.90	<=34.77	Pass
			74	21.08	-0.13	18.80	<=34.77	Pass

	680.5	36	0	20.03	-0.13	17.75	<=34.77	Pass	
			18	20.17	-0.13	17.89	<=34.77	Pass	
			39	20.15	-0.13	17.87	<=34.77	Pass	
		75	0	20.13	-0.13	17.85	<=34.77	Pass	
			1	0	21.05	-0.13	18.77	<=34.77	Pass
				38	21.15	-0.13	18.87	<=34.77	Pass
		74		21.17	-0.13	18.89	<=34.77	Pass	
		36	0	20.03	-0.13	17.75	<=34.77	Pass	
			18	20.12	-0.13	17.84	<=34.77	Pass	
	39		20.19	-0.13	17.91	<=34.77	Pass		
	75	0	20.12	-0.13	17.84	<=34.77	Pass		
		690.5	1	0	20.99	-0.13	18.71	<=34.77	Pass
				38	21.13	-0.13	18.85	<=34.77	Pass
	74			21.32	-0.13	19.04	<=34.77	Pass	
	36	36	0	20.15	-0.13	17.87	<=34.77	Pass	
			18	20.15	-0.13	17.87	<=34.77	Pass	
			39	20.28	-0.13	18.00	<=34.77	Pass	
	75	0	20.26	-0.13	17.98	<=34.77	Pass		
		670.5	1	0	20.05	-0.13	17.77	<=34.77	Pass
				38	20.10	-0.13	17.82	<=34.77	Pass
	74			19.96	-0.13	17.68	<=34.77	Pass	
	36	36	0	19.03	-0.13	16.75	<=34.77	Pass	
			18	19.24	-0.13	16.96	<=34.77	Pass	
			39	19.20	-0.13	16.92	<=34.77	Pass	
	75	0	19.15	-0.13	16.87	<=34.77	Pass		
		680.5	1	0	19.93	-0.13	17.65	<=34.77	Pass
				38	20.00	-0.13	17.72	<=34.77	Pass
74	20.03			-0.13	17.75	<=34.77	Pass		
36	36	0	19.08	-0.13	16.80	<=34.77	Pass		
		18	19.14	-0.13	16.86	<=34.77	Pass		
		39	19.24	-0.13	16.96	<=34.77	Pass		
75	0	19.16	-0.13	16.88	<=34.77	Pass			
	690.5	1	0	19.98	-0.13	17.70	<=34.77	Pass	
			38	20.15	-0.13	17.87	<=34.77	Pass	
74			20.27	-0.13	17.99	<=34.77	Pass		
36	36	0	19.21	-0.13	16.93	<=34.77	Pass		
		18	19.21	-0.13	16.93	<=34.77	Pass		
		39	19.36	-0.13	17.08	<=34.77	Pass		
75	0	19.23	-0.13	16.95	<=34.77	Pass			

Note1: ERP=Conducted Power+Antenna Gain-2.15

#### 1.1.4 B71\_20MHz\_ERP

Band: 71 / Bandwidth: 20MHz / NTNV								
Modulation	Frequency (MHz)	RB Allocation		Conducted Power (dBm)	Gain (dBi)	ERP (dBm)		Verdict
		Size	Offset			Result	Limit	
QPSK	673	1	0	20.92	-0.13	18.64	<=34.77	Pass
			50	21.18	-0.13	18.90	<=34.77	Pass
			99	20.92	-0.13	18.64	<=34.77	Pass
		50	0	20.01	-0.13	17.73	<=34.77	Pass
			25	20.09	-0.13	17.81	<=34.77	Pass
			50	20.26	-0.13	17.98	<=34.77	Pass
	100	0	20.11	-0.13	17.83	<=34.77	Pass	
	683	1	0	20.86	-0.13	18.58	<=34.77	Pass
			50	21.11	-0.13	18.83	<=34.77	Pass

		50	99	21.02	-0.13	18.74	<=34.77	Pass		
			0	19.86	-0.13	17.58	<=34.77	Pass		
			25	20.09	-0.13	17.81	<=34.77	Pass		
			50	20.14	-0.13	17.86	<=34.77	Pass		
			100	0	19.99	-0.13	17.71	<=34.77	Pass	
	688	1	0	20.81	-0.13	18.53	<=34.77	Pass		
			50	21.24	-0.13	18.96	<=34.77	Pass		
			99	21.22	-0.13	18.94	<=34.77	Pass		
		50	0	19.94	-0.13	17.66	<=34.77	Pass		
			25	20.16	-0.13	17.88	<=34.77	Pass		
			50	20.20	-0.13	17.92	<=34.77	Pass		
		100	0	20.06	-0.13	17.78	<=34.77	Pass		
		16QAM	673	1	0	20.32	-0.13	18.04	<=34.77	Pass
					50	20.48	-0.13	18.20	<=34.77	Pass
					99	20.29	-0.13	18.01	<=34.77	Pass
50	0			19.04	-0.13	16.76	<=34.77	Pass		
	25			19.11	-0.13	16.83	<=34.77	Pass		
	50			19.27	-0.13	16.99	<=34.77	Pass		
100	0		19.19	-0.13	16.91	<=34.77	Pass			
683	1		0	19.81	-0.13	17.53	<=34.77	Pass		
			50	20.13	-0.13	17.85	<=34.77	Pass		
			99	20.04	-0.13	17.76	<=34.77	Pass		
	50		0	18.84	-0.13	16.56	<=34.77	Pass		
			25	19.08	-0.13	16.80	<=34.77	Pass		
			50	19.11	-0.13	16.83	<=34.77	Pass		
100	0		19.02	-0.13	16.74	<=34.77	Pass			
688	1		0	19.61	-0.13	17.33	<=34.77	Pass		
		50	20.05	-0.13	17.77	<=34.77	Pass			
		99	20.03	-0.13	17.75	<=34.77	Pass			
	50	0	18.97	-0.13	16.69	<=34.77	Pass			
		25	19.21	-0.13	16.93	<=34.77	Pass			
		50	19.25	-0.13	16.97	<=34.77	Pass			
100	0	19.11	-0.13	16.83	<=34.77	Pass				
Note1: ERP=Conducted Power+Antenna Gain-2.15										

## 2. Frequency Stability

### 2.1 Test Result

#### 2.1.1 B71\_5MHz

Band: 71 / Bandwidth: 5MHz										
Modulation	Frequency (MHz)	RB Allocation		Temp. (°C)	Voltage (VDC)	Freq. Error (Hz)	Freq. vs. Rated (ppm)		Verdict	
		Size	Offset				Result	Limit		
QPSK	665.5	25	0	20	3.27	-8.612	-0.0129	-2.5 to 2.5	Pass	
					3.85	-5.336	-0.0080	-2.5 to 2.5	Pass	
					4.43	-7.253	-0.0109	-2.5 to 2.5	Pass	
				-30	3.85	-8.340	-0.0125	-2.5 to 2.5	Pass	
					-20	3.85	-8.011	-0.0120	-2.5 to 2.5	Pass
					-10	3.85	-5.336	-0.0080	-2.5 to 2.5	Pass
					0	3.85	-5.794	-0.0087	-2.5 to 2.5	Pass
					10	3.85	-6.337	-0.0095	-2.5 to 2.5	Pass
					30	3.85	-8.841	-0.0133	-2.5 to 2.5	Pass
					40	3.85	-8.183	-0.0123	-2.5 to 2.5	Pass

	680.5	25	0	50	3.85	-7.396	-0.0111	-2.5 to 2.5	Pass
				20	3.27	-4.678	-0.0069	-2.5 to 2.5	Pass
					3.85	-6.566	-0.0096	-2.5 to 2.5	Pass
					4.43	-7.095	-0.0104	-2.5 to 2.5	Pass
				-30	3.85	-9.642	-0.0142	-2.5 to 2.5	Pass
				-20	3.85	-7.367	-0.0108	-2.5 to 2.5	Pass
				-10	3.85	-6.638	-0.0098	-2.5 to 2.5	Pass
				0	3.85	-4.992	-0.0073	-2.5 to 2.5	Pass
				10	3.85	-2.432	-0.0036	-2.5 to 2.5	Pass
	30	3.85	-4.120	-0.0061	-2.5 to 2.5	Pass			
	40	3.85	-5.507	-0.0081	-2.5 to 2.5	Pass			
	50	3.85	-8.426	-0.0124	-2.5 to 2.5	Pass			
	695.5	25	0	20	3.27	-8.197	-0.0118	-2.5 to 2.5	Pass
					3.85	-8.783	-0.0126	-2.5 to 2.5	Pass
					4.43	-5.708	-0.0082	-2.5 to 2.5	Pass
				-30	3.85	-8.783	-0.0126	-2.5 to 2.5	Pass
				-20	3.85	-5.980	-0.0086	-2.5 to 2.5	Pass
				-10	3.85	-3.147	-0.0045	-2.5 to 2.5	Pass
0				3.85	-6.294	-0.0090	-2.5 to 2.5	Pass	
10				3.85	-5.236	-0.0075	-2.5 to 2.5	Pass	
30				3.85	-6.995	-0.0101	-2.5 to 2.5	Pass	
40	3.85	-9.084	-0.0131	-2.5 to 2.5	Pass				
50	3.85	-6.967	-0.0100	-2.5 to 2.5	Pass				
16QAM	665.5	25	0	20	3.27	-9.542	-0.0143	-2.5 to 2.5	Pass
					3.85	-7.181	-0.0108	-2.5 to 2.5	Pass
					4.43	-7.610	-0.0114	-2.5 to 2.5	Pass
				-30	3.85	-9.069	-0.0136	-2.5 to 2.5	Pass
				-20	3.85	-7.682	-0.0115	-2.5 to 2.5	Pass
				-10	3.85	-9.456	-0.0142	-2.5 to 2.5	Pass
				0	3.85	-4.964	-0.0075	-2.5 to 2.5	Pass
				10	3.85	-7.682	-0.0115	-2.5 to 2.5	Pass
				30	3.85	-8.597	-0.0129	-2.5 to 2.5	Pass
	40	3.85	-6.466	-0.0097	-2.5 to 2.5	Pass			
	50	3.85	-5.150	-0.0077	-2.5 to 2.5	Pass			
	680.5	25	0	20	3.27	-8.712	-0.0128	-2.5 to 2.5	Pass
					3.85	-4.721	-0.0069	-2.5 to 2.5	Pass
					4.43	-6.480	-0.0095	-2.5 to 2.5	Pass
				-30	3.85	-6.180	-0.0091	-2.5 to 2.5	Pass
				-20	3.85	-5.193	-0.0076	-2.5 to 2.5	Pass
				-10	3.85	-5.021	-0.0074	-2.5 to 2.5	Pass
				0	3.85	-9.112	-0.0134	-2.5 to 2.5	Pass
10				3.85	-8.769	-0.0129	-2.5 to 2.5	Pass	
30				3.85	-2.518	-0.0037	-2.5 to 2.5	Pass	
40	3.85	-6.123	-0.0090	-2.5 to 2.5	Pass				
50	3.85	-6.680	-0.0098	-2.5 to 2.5	Pass				
695.5	25	0	20	3.27	-5.937	-0.0085	-2.5 to 2.5	Pass	
				3.85	-5.622	-0.0081	-2.5 to 2.5	Pass	
				4.43	-3.433	-0.0049	-2.5 to 2.5	Pass	
			-30	3.85	-4.978	-0.0072	-2.5 to 2.5	Pass	
			-20	3.85	-6.552	-0.0094	-2.5 to 2.5	Pass	
			-10	3.85	-5.550	-0.0080	-2.5 to 2.5	Pass	
			0	3.85	-8.454	-0.0122	-2.5 to 2.5	Pass	
			10	3.85	-8.240	-0.0118	-2.5 to 2.5	Pass	
			30	3.85	-8.011	-0.0115	-2.5 to 2.5	Pass	
40	3.85	-7.124	-0.0102	-2.5 to 2.5	Pass				
50	3.85	-8.111	-0.0117	-2.5 to 2.5	Pass				

2.1.2 B71\_10MHz

Band: 71 / Bandwidth: 10MHz									
Modulation	Frequency (MHz)	RB Allocation		Temp. (°C)	Voltage (VDC)	Freq. Error (Hz)	Freq. vs. Rated (ppm)		Verdict
		Size	Offset				Result	Limit	
QPSK	668	50	0	20	3.27	-8.197	-0.0123	-2.5 to 2.5	Pass
					3.85	-3.347	-0.0050	-2.5 to 2.5	Pass
					4.43	-7.954	-0.0119	-2.5 to 2.5	Pass
				-30	3.85	-4.392	-0.0066	-2.5 to 2.5	Pass
				-20	3.85	-5.107	-0.0076	-2.5 to 2.5	Pass
				-10	3.85	-7.253	-0.0109	-2.5 to 2.5	Pass
				0	3.85	-8.712	-0.0130	-2.5 to 2.5	Pass
				10	3.85	-7.052	-0.0106	-2.5 to 2.5	Pass
				30	3.85	-4.978	-0.0075	-2.5 to 2.5	Pass
				40	3.85	-6.723	-0.0101	-2.5 to 2.5	Pass
	50	3.85	-5.937	-0.0089	-2.5 to 2.5	Pass			
	680.5	50	0	20	3.27	-4.635	-0.0068	-2.5 to 2.5	Pass
					3.85	-6.781	-0.0100	-2.5 to 2.5	Pass
					4.43	-3.204	-0.0047	-2.5 to 2.5	Pass
				-30	3.85	-3.662	-0.0054	-2.5 to 2.5	Pass
				-20	3.85	-7.038	-0.0103	-2.5 to 2.5	Pass
				-10	3.85	-5.665	-0.0083	-2.5 to 2.5	Pass
				0	3.85	-8.411	-0.0124	-2.5 to 2.5	Pass
				10	3.85	-5.207	-0.0077	-2.5 to 2.5	Pass
				30	3.85	-5.536	-0.0081	-2.5 to 2.5	Pass
				40	3.85	-7.110	-0.0104	-2.5 to 2.5	Pass
	50	3.85	-9.799	-0.0144	-2.5 to 2.5	Pass			
	693	50	0	20	3.27	-7.839	-0.0113	-2.5 to 2.5	Pass
					3.85	-6.981	-0.0101	-2.5 to 2.5	Pass
					4.43	-6.566	-0.0095	-2.5 to 2.5	Pass
				-30	3.85	-7.854	-0.0113	-2.5 to 2.5	Pass
				-20	3.85	-10.943	-0.0158	-2.5 to 2.5	Pass
				-10	3.85	-6.552	-0.0095	-2.5 to 2.5	Pass
				0	3.85	-10.700	-0.0154	-2.5 to 2.5	Pass
				10	3.85	-8.755	-0.0126	-2.5 to 2.5	Pass
30				3.85	-7.381	-0.0107	-2.5 to 2.5	Pass	
40				3.85	-7.424	-0.0107	-2.5 to 2.5	Pass	
50	3.85	-9.913	-0.0143	-2.5 to 2.5	Pass				
16QAM	668	50	0	20	3.27	-7.439	-0.0111	-2.5 to 2.5	Pass
					3.85	-5.751	-0.0086	-2.5 to 2.5	Pass
					4.43	-4.835	-0.0072	-2.5 to 2.5	Pass
				-30	3.85	-6.895	-0.0103	-2.5 to 2.5	Pass
				-20	3.85	-4.206	-0.0063	-2.5 to 2.5	Pass
				-10	3.85	-4.678	-0.0070	-2.5 to 2.5	Pass
				0	3.85	-10.314	-0.0154	-2.5 to 2.5	Pass
				10	3.85	-9.413	-0.0141	-2.5 to 2.5	Pass
				30	3.85	-5.050	-0.0076	-2.5 to 2.5	Pass
				40	3.85	-7.238	-0.0108	-2.5 to 2.5	Pass
	50	3.85	-4.663	-0.0070	-2.5 to 2.5	Pass			
	680.5	50	0	20	3.27	-6.466	-0.0095	-2.5 to 2.5	Pass
					3.85	-8.054	-0.0118	-2.5 to 2.5	Pass
					4.43	-5.894	-0.0087	-2.5 to 2.5	Pass
				-30	3.85	-6.223	-0.0091	-2.5 to 2.5	Pass
				-20	3.85	-7.138	-0.0105	-2.5 to 2.5	Pass
				-10	3.85	-8.240	-0.0121	-2.5 to 2.5	Pass
				0	3.85	-7.968	-0.0117	-2.5 to 2.5	Pass

				10	3.85	-5.794	-0.0085	-2.5 to 2.5	Pass
				30	3.85	-7.339	-0.0108	-2.5 to 2.5	Pass
				40	3.85	-8.769	-0.0129	-2.5 to 2.5	Pass
				50	3.85	-4.878	-0.0072	-2.5 to 2.5	Pass
	693	50	0	20	3.27	-5.937	-0.0086	-2.5 to 2.5	Pass
					3.85	-5.794	-0.0084	-2.5 to 2.5	Pass
					4.43	-4.921	-0.0071	-2.5 to 2.5	Pass
				-30	3.85	-7.095	-0.0102	-2.5 to 2.5	Pass
				-20	3.85	-4.549	-0.0066	-2.5 to 2.5	Pass
				-10	3.85	-6.351	-0.0092	-2.5 to 2.5	Pass
				0	3.85	-5.107	-0.0074	-2.5 to 2.5	Pass
				10	3.85	-8.054	-0.0116	-2.5 to 2.5	Pass
				30	3.85	-5.164	-0.0075	-2.5 to 2.5	Pass
				40	3.85	-7.539	-0.0109	-2.5 to 2.5	Pass
				50	3.85	-11.029	-0.0159	-2.5 to 2.5	Pass

### 2.1.3 B71\_15MHz

Band: 71 / Bandwidth: 15MHz									
Modulation	Frequency (MHz)	RB Allocation		Temp. (°C)	Voltage (VDC)	Freq. Error (Hz)	Freq. vs. Rated (ppm)		Verdict
		Size	Offset				Result	Limit	
QPSK	670.5	75	0	20	3.27	-6.566	-0.0098	-2.5 to 2.5	Pass
					3.85	-6.051	-0.0090	-2.5 to 2.5	Pass
					4.43	-7.110	-0.0106	-2.5 to 2.5	Pass
				-30	3.85	-6.480	-0.0097	-2.5 to 2.5	Pass
				-20	3.85	-9.570	-0.0143	-2.5 to 2.5	Pass
				-10	3.85	-6.065	-0.0090	-2.5 to 2.5	Pass
				0	3.85	-6.294	-0.0094	-2.5 to 2.5	Pass
				10	3.85	-5.021	-0.0075	-2.5 to 2.5	Pass
				30	3.85	-5.608	-0.0084	-2.5 to 2.5	Pass
				40	3.85	-4.163	-0.0062	-2.5 to 2.5	Pass
	50	3.85	-8.082	-0.0121	-2.5 to 2.5	Pass			
	680.5	75	0	20	3.27	-7.510	-0.0110	-2.5 to 2.5	Pass
					3.85	-6.795	-0.0100	-2.5 to 2.5	Pass
					4.43	-8.326	-0.0122	-2.5 to 2.5	Pass
				-30	3.85	-4.020	-0.0059	-2.5 to 2.5	Pass
				-20	3.85	-5.293	-0.0078	-2.5 to 2.5	Pass
				-10	3.85	-6.223	-0.0091	-2.5 to 2.5	Pass
				0	3.85	-3.991	-0.0059	-2.5 to 2.5	Pass
				10	3.85	-8.469	-0.0124	-2.5 to 2.5	Pass
				30	3.85	-7.811	-0.0115	-2.5 to 2.5	Pass
				40	3.85	-9.184	-0.0135	-2.5 to 2.5	Pass
	50	3.85	-9.556	-0.0140	-2.5 to 2.5	Pass			
	690.5	75	0	20	3.27	-6.809	-0.0099	-2.5 to 2.5	Pass
					3.85	-6.695	-0.0097	-2.5 to 2.5	Pass
					4.43	-4.206	-0.0061	-2.5 to 2.5	Pass
				-30	3.85	-6.909	-0.0100	-2.5 to 2.5	Pass
				-20	3.85	-8.140	-0.0118	-2.5 to 2.5	Pass
				-10	3.85	-4.764	-0.0069	-2.5 to 2.5	Pass
				0	3.85	-5.836	-0.0085	-2.5 to 2.5	Pass
				10	3.85	-6.022	-0.0087	-2.5 to 2.5	Pass
30				3.85	-6.723	-0.0097	-2.5 to 2.5	Pass	
40				3.85	-10.371	-0.0150	-2.5 to 2.5	Pass	
50	3.85	-6.652	-0.0096	-2.5 to 2.5	Pass				
16QAM	670.5	75	0	20	3.27	-5.164	-0.0077	-2.5 to 2.5	Pass

					3.85	-9.041	-0.0135	-2.5 to 2.5	Pass
					4.43	-1.802	-0.0027	-2.5 to 2.5	Pass
				-30	3.85	-5.107	-0.0076	-2.5 to 2.5	Pass
				-20	3.85	-6.366	-0.0095	-2.5 to 2.5	Pass
				-10	3.85	-8.597	-0.0128	-2.5 to 2.5	Pass
				0	3.85	-7.224	-0.0108	-2.5 to 2.5	Pass
				10	3.85	-10.371	-0.0155	-2.5 to 2.5	Pass
				30	3.85	-3.963	-0.0059	-2.5 to 2.5	Pass
				40	3.85	-9.112	-0.0136	-2.5 to 2.5	Pass
				50	3.85	-3.762	-0.0056	-2.5 to 2.5	Pass
	680.5	75	0	20	3.27	-2.475	-0.0036	-2.5 to 2.5	Pass
					3.85	-5.422	-0.0080	-2.5 to 2.5	Pass
					4.43	-7.768	-0.0114	-2.5 to 2.5	Pass
				-30	3.85	-7.710	-0.0113	-2.5 to 2.5	Pass
				-20	3.85	-8.783	-0.0129	-2.5 to 2.5	Pass
				-10	3.85	-5.078	-0.0075	-2.5 to 2.5	Pass
				0	3.85	-7.195	-0.0106	-2.5 to 2.5	Pass
				10	3.85	-5.579	-0.0082	-2.5 to 2.5	Pass
				30	3.85	-6.680	-0.0098	-2.5 to 2.5	Pass
				40	3.85	-7.410	-0.0109	-2.5 to 2.5	Pass
	50	3.85	-5.436	-0.0080	-2.5 to 2.5	Pass			
	690.5	75	0	20	3.27	-6.194	-0.0090	-2.5 to 2.5	Pass
					3.85	-4.935	-0.0071	-2.5 to 2.5	Pass
					4.43	-5.093	-0.0074	-2.5 to 2.5	Pass
				-30	3.85	-5.350	-0.0077	-2.5 to 2.5	Pass
				-20	3.85	-2.990	-0.0043	-2.5 to 2.5	Pass
				-10	3.85	-4.206	-0.0061	-2.5 to 2.5	Pass
				0	3.85	-2.961	-0.0043	-2.5 to 2.5	Pass
10				3.85	-4.535	-0.0066	-2.5 to 2.5	Pass	
30				3.85	-7.324	-0.0106	-2.5 to 2.5	Pass	
40				3.85	-6.037	-0.0087	-2.5 to 2.5	Pass	
50	3.85	-7.639	-0.0111	-2.5 to 2.5	Pass				

## 2.1.4 B71\_20MHz

Band: 71 / Bandwidth: 20MHz									
Modulation	Frequency (MHz)	RB Allocation		Temp. (°C)	Voltage (VDC)	Freq. Error (Hz)	Freq. vs. Rated (ppm)		Verdict
		Size	Offset				Result	Limit	
QPSK	673	100	0	20	3.27	-9.069	-0.0135	-2.5 to 2.5	Pass
					3.85	-7.696	-0.0114	-2.5 to 2.5	Pass
					4.43	-6.509	-0.0097	-2.5 to 2.5	Pass
				-30	3.85	-7.238	-0.0108	-2.5 to 2.5	Pass
				-20	3.85	-8.211	-0.0122	-2.5 to 2.5	Pass
				-10	3.85	-6.652	-0.0099	-2.5 to 2.5	Pass
				0	3.85	-6.437	-0.0096	-2.5 to 2.5	Pass
				10	3.85	-5.207	-0.0077	-2.5 to 2.5	Pass
				30	3.85	-6.180	-0.0092	-2.5 to 2.5	Pass
				40	3.85	-5.865	-0.0087	-2.5 to 2.5	Pass
	50	3.85	-6.695	-0.0099	-2.5 to 2.5	Pass			
	683	100	0	20	3.27	-4.992	-0.0073	-2.5 to 2.5	Pass
					3.85	-5.193	-0.0076	-2.5 to 2.5	Pass
					4.43	-7.911	-0.0116	-2.5 to 2.5	Pass
-30				3.85	-10.657	-0.0156	-2.5 to 2.5	Pass	
	-20	3.85	-6.638	-0.0097	-2.5 to 2.5	Pass			
	-10	3.85	-8.526	-0.0125	-2.5 to 2.5	Pass			



				0	3.85	-4.177	-0.0061	-2.5 to 2.5	Pass				
				10	3.85	-7.153	-0.0105	-2.5 to 2.5	Pass				
				30	3.85	-4.206	-0.0062	-2.5 to 2.5	Pass				
				40	3.85	-4.435	-0.0065	-2.5 to 2.5	Pass				
				50	3.85	-2.947	-0.0043	-2.5 to 2.5	Pass				
	688	100	0	20	3.27	-7.052	-0.0102	-2.5 to 2.5	Pass				
					3.85	-3.161	-0.0046	-2.5 to 2.5	Pass				
					4.43	-8.240	-0.0120	-2.5 to 2.5	Pass				
				-30	3.85	-5.994	-0.0087	-2.5 to 2.5	Pass				
				-20	3.85	-8.583	-0.0125	-2.5 to 2.5	Pass				
				-10	3.85	-9.227	-0.0134	-2.5 to 2.5	Pass				
				0	3.85	-7.195	-0.0105	-2.5 to 2.5	Pass				
				10	3.85	-8.712	-0.0127	-2.5 to 2.5	Pass				
				30	3.85	-8.011	-0.0116	-2.5 to 2.5	Pass				
				40	3.85	-9.599	-0.0140	-2.5 to 2.5	Pass				
				50	3.85	-6.695	-0.0097	-2.5 to 2.5	Pass				
				16QAM	673	100	0	20	3.27	-6.824	-0.0101	-2.5 to 2.5	Pass
									3.85	-8.612	-0.0128	-2.5 to 2.5	Pass
									4.43	-5.865	-0.0087	-2.5 to 2.5	Pass
-30	3.85	-7.696	-0.0114					-2.5 to 2.5	Pass				
-20	3.85	-6.695	-0.0099					-2.5 to 2.5	Pass				
-10	3.85	-6.766	-0.0101					-2.5 to 2.5	Pass				
0	3.85	-4.191	-0.0062					-2.5 to 2.5	Pass				
10	3.85	-5.136	-0.0076					-2.5 to 2.5	Pass				
30	3.85	-7.796	-0.0116					-2.5 to 2.5	Pass				
40	3.85	-4.063	-0.0060					-2.5 to 2.5	Pass				
50	3.85	-3.862	-0.0057					-2.5 to 2.5	Pass				
683	100	0	20					3.27	-8.426	-0.0123	-2.5 to 2.5	Pass	
								3.85	-6.423	-0.0094	-2.5 to 2.5	Pass	
								4.43	-7.424	-0.0109	-2.5 to 2.5	Pass	
			-30		3.85	-3.719	-0.0054	-2.5 to 2.5	Pass				
			-20		3.85	-4.835	-0.0071	-2.5 to 2.5	Pass				
			-10		3.85	-7.768	-0.0114	-2.5 to 2.5	Pass				
			0		3.85	-9.584	-0.0140	-2.5 to 2.5	Pass				
			10		3.85	-4.792	-0.0070	-2.5 to 2.5	Pass				
			30		3.85	-7.424	-0.0109	-2.5 to 2.5	Pass				
			40		3.85	-8.440	-0.0124	-2.5 to 2.5	Pass				
			50		3.85	-7.725	-0.0113	-2.5 to 2.5	Pass				
			688		100	0	20	3.27	-9.184	-0.0133	-2.5 to 2.5	Pass	
								3.85	-8.283	-0.0120	-2.5 to 2.5	Pass	
								4.43	-8.469	-0.0123	-2.5 to 2.5	Pass	
							-30	3.85	-7.854	-0.0114	-2.5 to 2.5	Pass	
-20	3.85	-7.024					-0.0102	-2.5 to 2.5	Pass				
-10	3.85	-5.436					-0.0079	-2.5 to 2.5	Pass				
0	3.85	-5.794					-0.0084	-2.5 to 2.5	Pass				
10	3.85	-6.909		-0.0100			-2.5 to 2.5	Pass					
30	3.85	-8.411		-0.0122			-2.5 to 2.5	Pass					
40	3.85	-6.351		-0.0092			-2.5 to 2.5	Pass					
50	3.85	-5.693		-0.0083			-2.5 to 2.5	Pass					

### 3. Modulation Characteristics

#### 3.1 Test Result

##### 3.1.1 B71\_5MHz

Band: 71 / Bandwidth: 5MHz / NTV						
Modulation	Frequency (MHz)	RB Allocation		Modulation Characteristics		Verdict
		Size	Offset	Result	Limit	
QPSK	680.5	25	0	Refer To Test Graph		Pass
16QAM	680.5	25	0	Refer To Test Graph		Pass

##### 3.1.2 B71\_10MHz

Band: 71 / Bandwidth: 10MHz / NTV						
Modulation	Frequency (MHz)	RB Allocation		Modulation Characteristics		Verdict
		Size	Offset	Result	Limit	
QPSK	680.5	50	0	Refer To Test Graph		Pass
16QAM	680.5	50	0	Refer To Test Graph		Pass

##### 3.1.3 B71\_15MHz

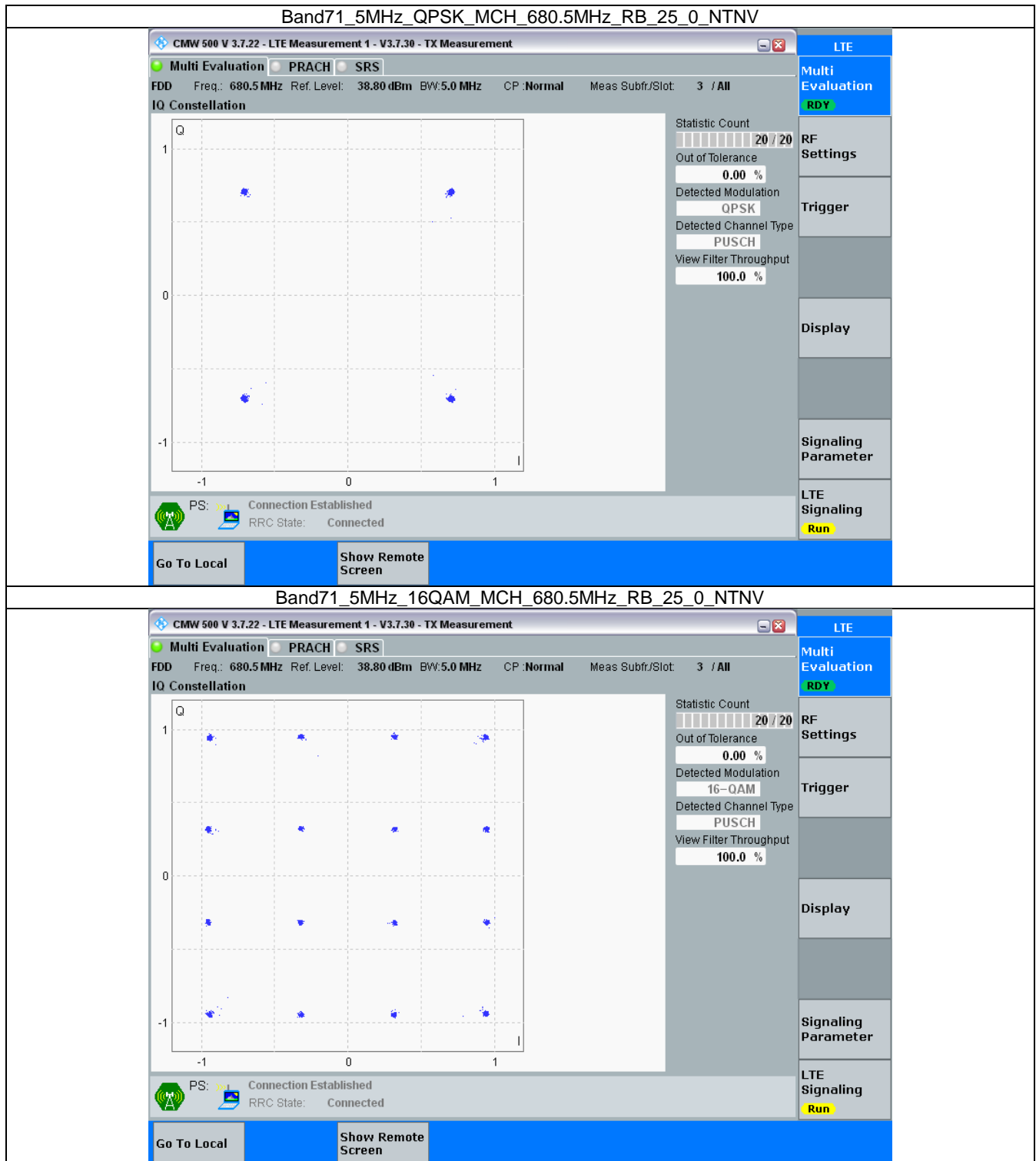
Band: 71 / Bandwidth: 15MHz / NTV						
Modulation	Frequency (MHz)	RB Allocation		Modulation Characteristics		Verdict
		Size	Offset	Result	Limit	
QPSK	680.5	75	0	Refer To Test Graph		Pass
16QAM	680.5	75	0	Refer To Test Graph		Pass

##### 3.1.4 B71\_20MHz

Band: 71 / Bandwidth: 20MHz / NTV						
Modulation	Frequency (MHz)	RB Allocation		Modulation Characteristics		Verdict
		Size	Offset	Result	Limit	
QPSK	683	100	0	Refer To Test Graph		Pass
16QAM	683	100	0	Refer To Test Graph		Pass

## 3.2 Test Graph

### 3.2.1 B71\_5MHz



### 3.2.2 B71\_10MHz

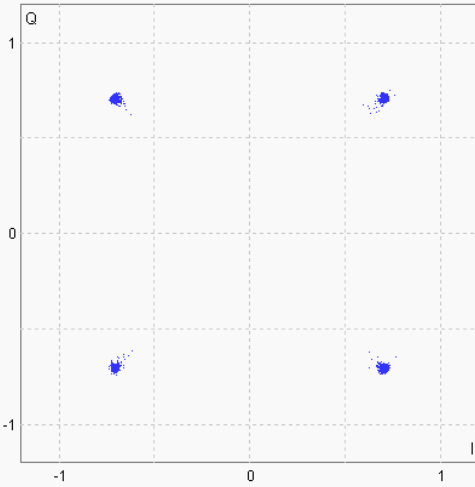
**Band71\_10MHz\_QPSK\_MCH\_680.5MHz\_RB\_50\_0\_NTNV**

CMW 500 V 3.7.22 - LTE Measurement 1 - V3.7.30 - TX Measurement

Multi Evaluation PRACH SRS

FDD Freq.: 680.5 MHz Ref. Level: 39.40 dBm BW: 10.0 MHz CP: Normal Meas Subfr./Slot: 3 / All

**IQ Constellation**



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

PS: Connection Established  
 RRC State: Connected

Go To Local Show Remote Screen

LTE

Multi Evaluation  
**RDY**

RF Settings

Trigger

Display

Signaling Parameter

LTE Signaling  
**Run**

---

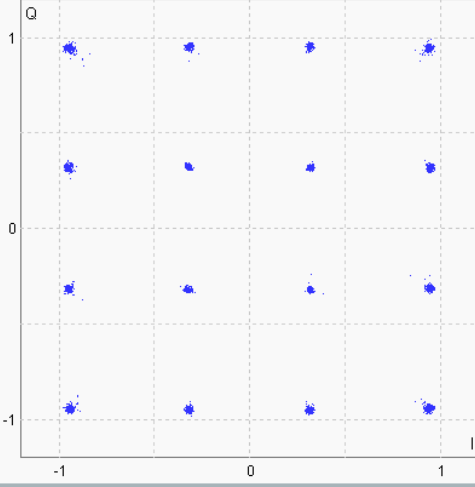
**Band71\_10MHz\_16QAM\_MCH\_680.5MHz\_RB\_50\_0\_NTNV**

CMW 500 V 3.7.22 - LTE Measurement 1 - V3.7.30 - TX Measurement

Multi Evaluation PRACH SRS

FDD Freq.: 680.5 MHz Ref. Level: 39.40 dBm BW: 10.0 MHz CP: Normal Meas Subfr./Slot: 3 / All

**IQ Constellation**



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

PS: Connection Established  
 RRC State: Connected

Go To Local Show Remote Screen

LTE

Multi Evaluation  
**RDY**

RF Settings

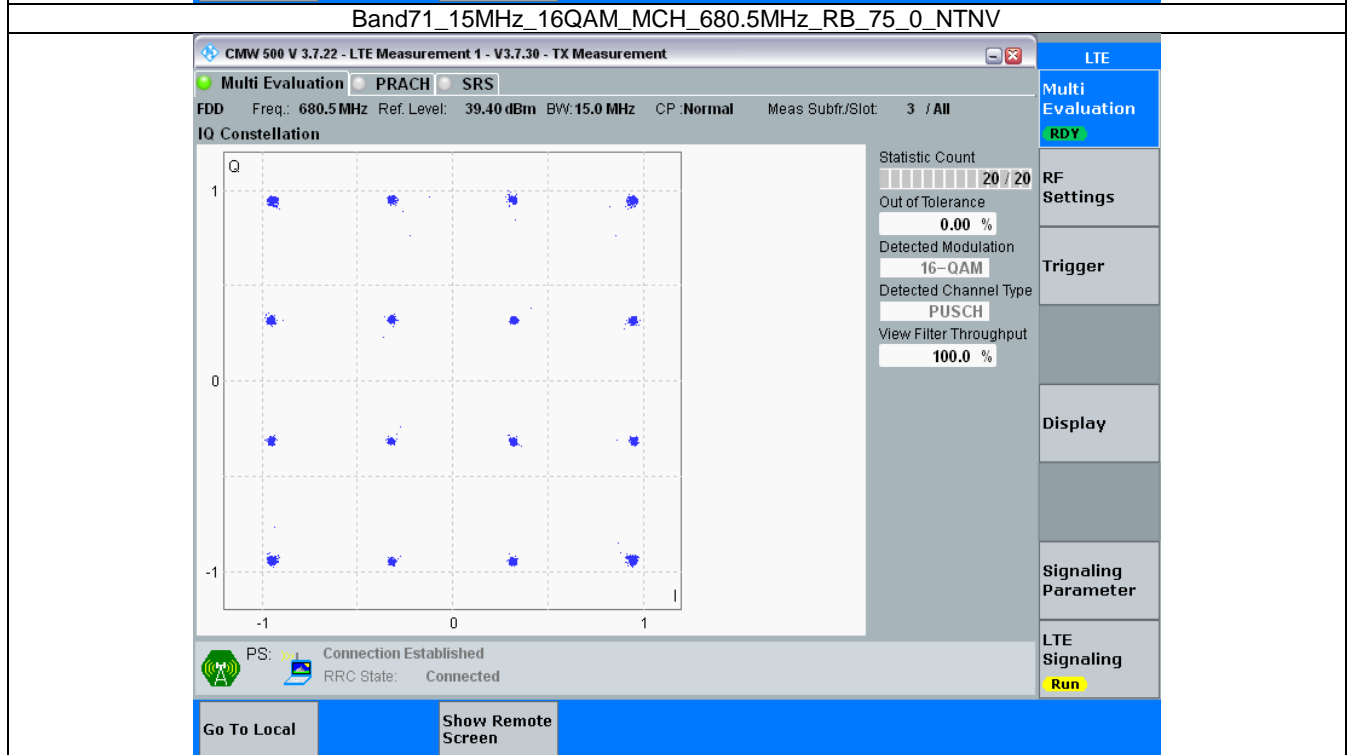
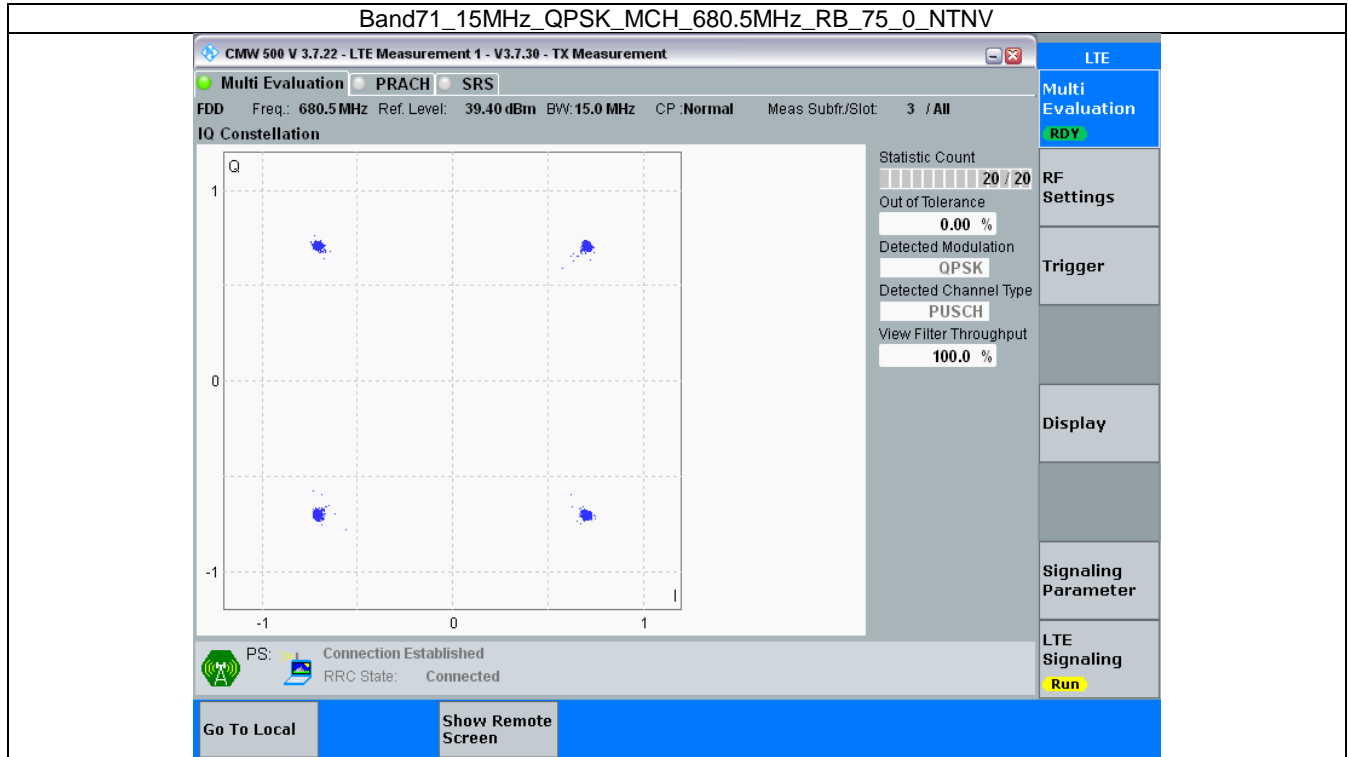
Trigger

Display

Signaling Parameter

LTE Signaling  
**Run**

### 3.2.3 B71\_15MHz



### 3.2.4 B71\_20MHz

**Band71\_20MHz\_QPSK\_MCH\_683MHz\_RB\_100\_0\_NTNV**

CMW 500 V 3.7.22 - LTE Measurement 1 - V3.7.30 - TX Measurement

Multi Evaluation PRACH SRS

FDD Freq.: 683.0 MHz Ref. Level: 39.30 dBm BW: 20.0 MHz CP: Normal Meas Subfr./Slot: 3 / All

IO Constellation

Statistic Count  
20 / 20

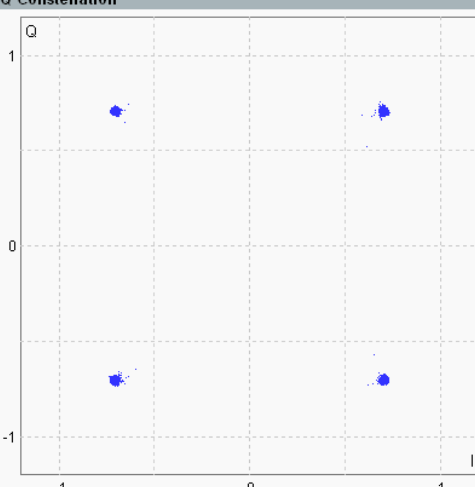
Out of Tolerance  
0.00 %

Detected Modulation  
QPSK

Detected Channel Type  
PUSCH

View Filter Throughput  
100.0 %

LTE



Multi Evaluation **RDY**

RF Settings

Trigger

Display

Signaling Parameter

LTE Signaling **Run**

PS: Connection Established  
RRC State: Connected

Go To Local
Show Remote Screen

**Band71\_20MHz\_16QAM\_MCH\_683MHz\_RB\_100\_0\_NTNV**

CMW 500 V 3.7.22 - LTE Measurement 1 - V3.7.30 - TX Measurement

Multi Evaluation PRACH SRS

FDD Freq.: 683.0 MHz Ref. Level: 39.30 dBm BW: 20.0 MHz CP: Normal Meas Subfr./Slot: 3 / All

IO Constellation

Statistic Count  
20 / 20

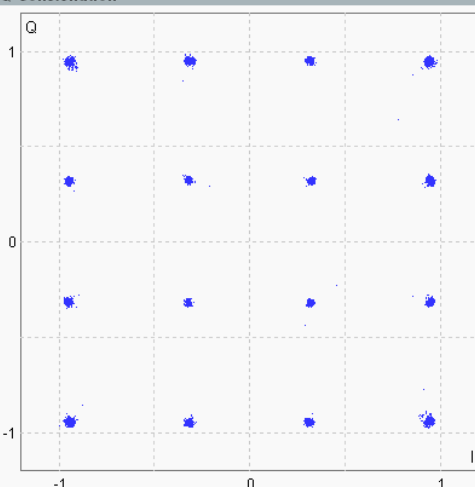
Out of Tolerance  
0.00 %

Detected Modulation  
16-QAM

Detected Channel Type  
PUSCH

View Filter Throughput  
100.0 %

LTE



Multi Evaluation **RDY**

RF Settings

Trigger

Display

Signaling Parameter

LTE Signaling **Run**

PS: Connection Established  
RRC State: Connected

Go To Local
Show Remote Screen

## 4. 99% & 26dB Bandwidth

### 4.1 Test Result

#### 4.1.1 Band71\_OBW

Band: 71 / NTNV							
Bandwidth (MHz)	Modulation	Frequency (MHz)	RB Allocation		99% Occupied Bandwidth (MHz)		Verdict
			Size	Offset	Result	Limit	
5	QPSK	665.5	25	0	4.559	/	Pass
		680.5	25	0	4.566	/	Pass
		695.5	25	0	4.574	/	Pass
	16QAM	665.5	25	0	4.574	/	Pass
		680.5	25	0	4.588	/	Pass
		695.5	25	0	4.576	/	Pass
10	QPSK	668	50	0	9.073	/	Pass
		680.5	50	0	9.052	/	Pass
		693	50	0	9.103	/	Pass
	16QAM	668	50	0	9.034	/	Pass
		680.5	50	0	9.071	/	Pass
		693	50	0	9.070	/	Pass
15	QPSK	670.5	75	0	13.583	/	Pass
		680.5	75	0	13.595	/	Pass
		690.5	75	0	13.653	/	Pass
	16QAM	670.5	75	0	13.535	/	Pass
		680.5	75	0	13.584	/	Pass
		690.5	75	0	13.667	/	Pass
20	QPSK	673	100	0	18.112	/	Pass
		683	100	0	18.034	/	Pass
		688	100	0	18.095	/	Pass
	16QAM	673	100	0	18.116	/	Pass
		683	100	0	18.102	/	Pass
		688	100	0	18.165	/	Pass

#### 4.1.2 Band71\_XDB

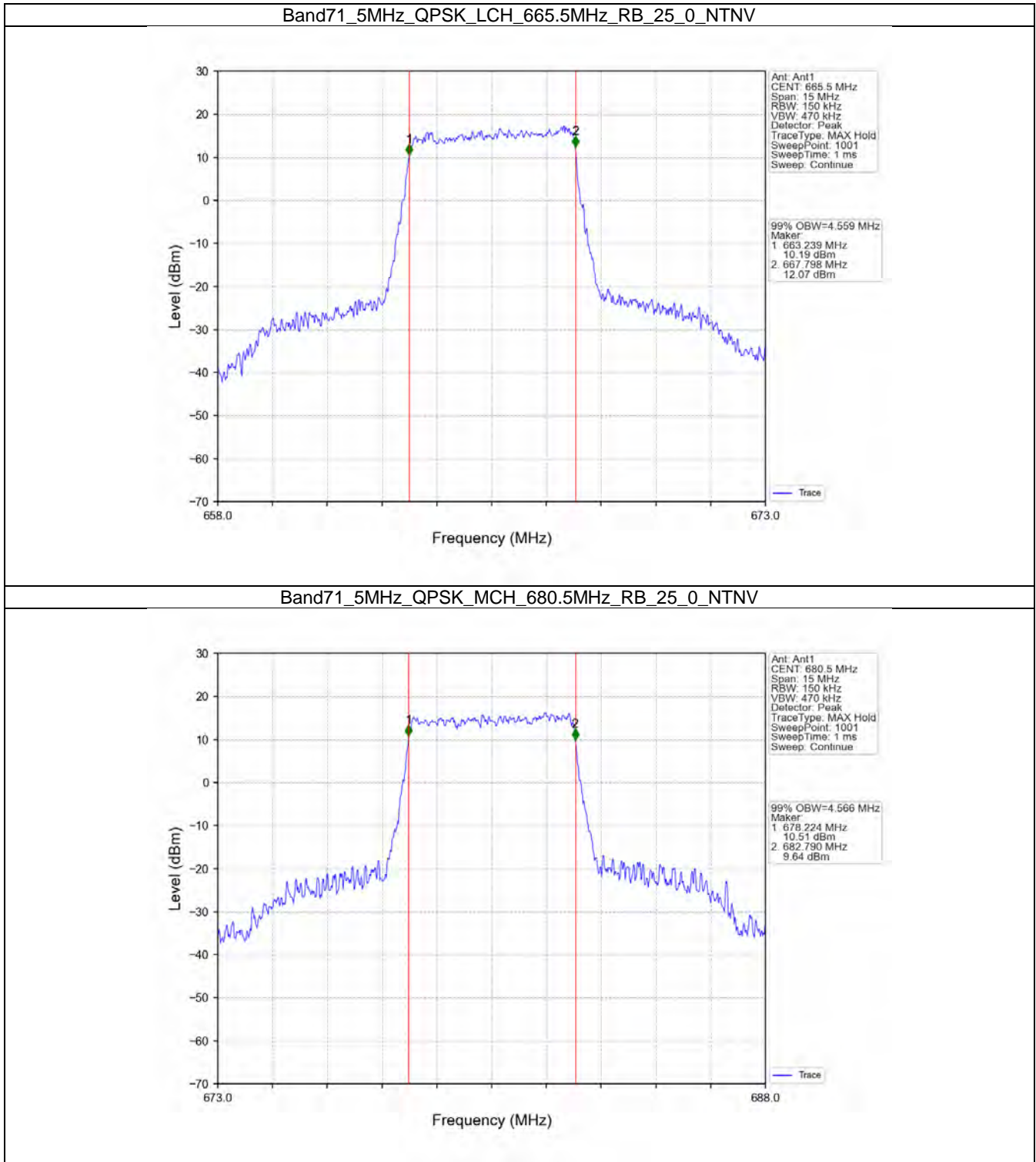
Band: 71 / NTNV							
Bandwidth (MHz)	Modulation	Frequency (MHz)	RB Allocation		26dB Bandwidth (MHz)		Verdict
			Size	Offset	Result	Limit	
5	QPSK	665.5	25	0	5.245	/	Pass
		680.5	25	0	5.229	/	Pass
		695.5	25	0	5.289	/	Pass
	16QAM	665.5	25	0	5.305	/	Pass
		680.5	25	0	5.255	/	Pass
		695.5	25	0	5.222	/	Pass
10	QPSK	668	50	0	10.132	/	Pass
		680.5	50	0	10.249	/	Pass
		693	50	0	10.315	/	Pass
	16QAM	668	50	0	10.148	/	Pass
		680.5	50	0	10.206	/	Pass
		693	50	0	10.270	/	Pass
15	QPSK	670.5	75	0	15.337	/	Pass
		680.5	75	0	15.267	/	Pass
		690.5	75	0	15.326	/	Pass

	16QAM	670.5	75	0	15.379	/	Pass
		680.5	75	0	15.234	/	Pass
		690.5	75	0	15.297	/	Pass
20	QPSK	673	100	0	19.975	/	Pass
		683	100	0	20.078	/	Pass
		688	100	0	20.163	/	Pass
	16QAM	673	100	0	20.027	/	Pass
		683	100	0	20.208	/	Pass
		688	100	0	20.069	/	Pass

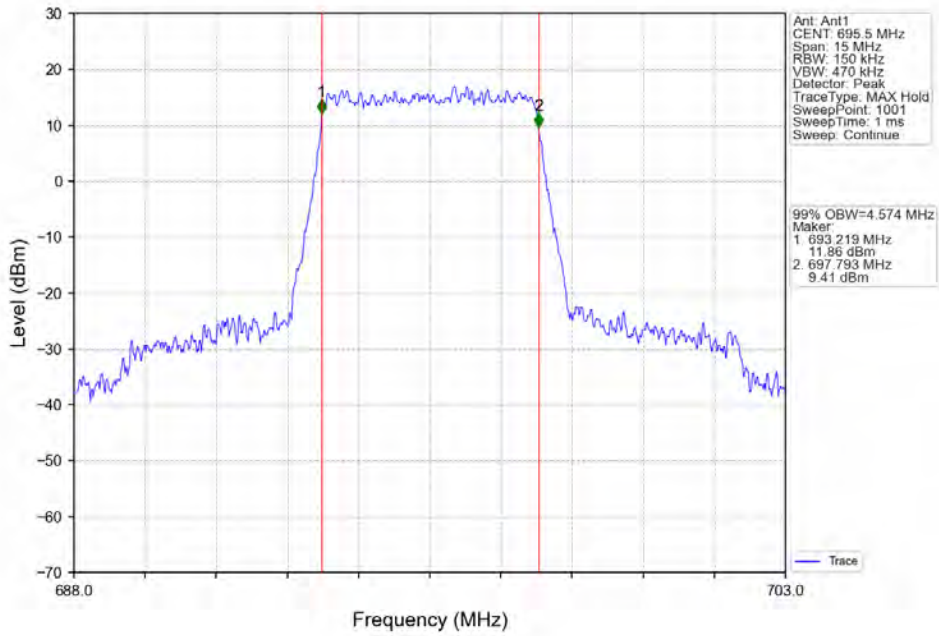


## 4.2 Test Graph

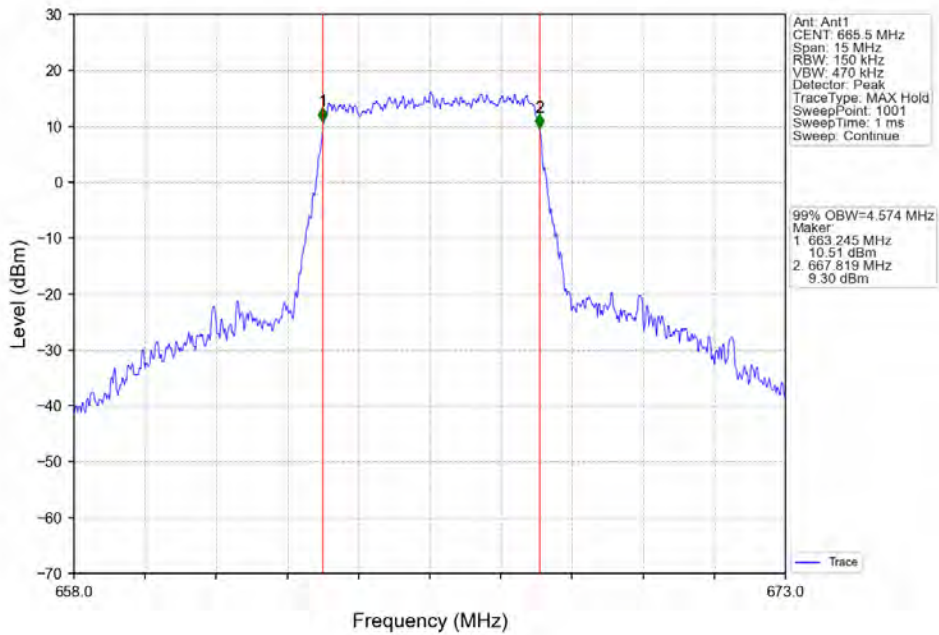
### 4.2.1 Band71\_OBW



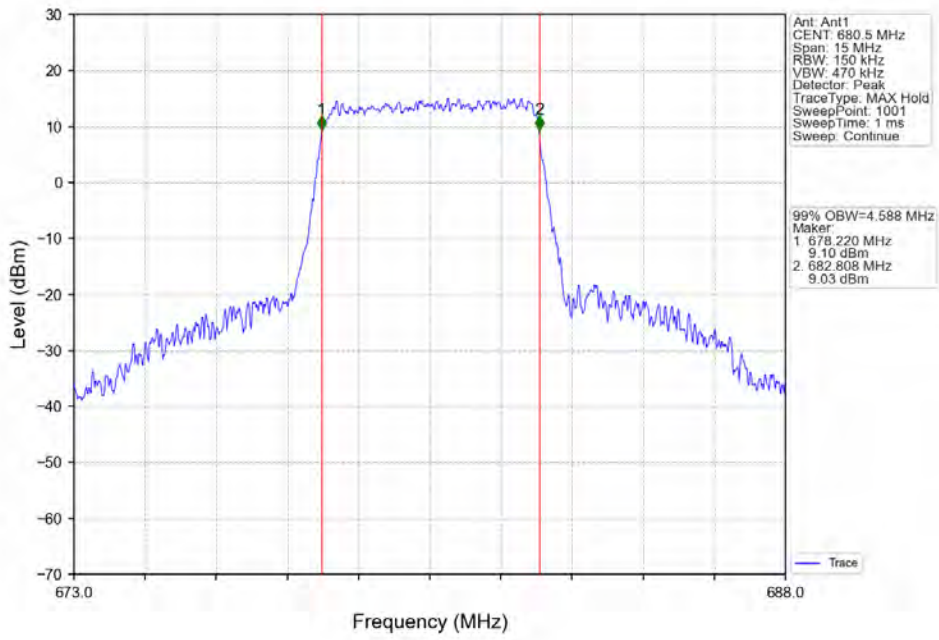
Band71\_5MHz\_QPSK\_HCH\_695.5MHz\_RB\_25\_0\_NTNV



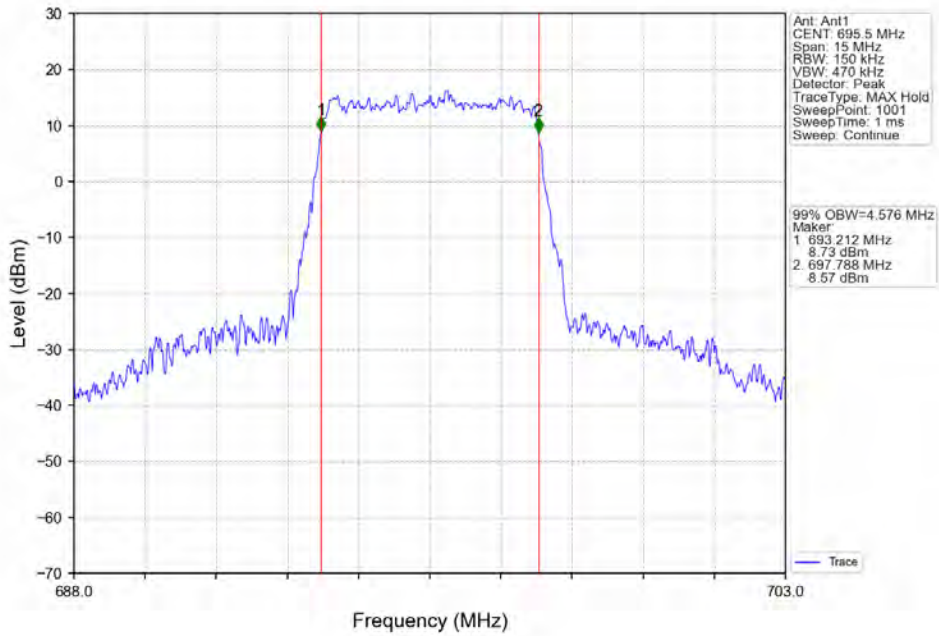
Band71\_5MHz\_16QAM\_LCH\_665.5MHz\_RB\_25\_0\_NTNV



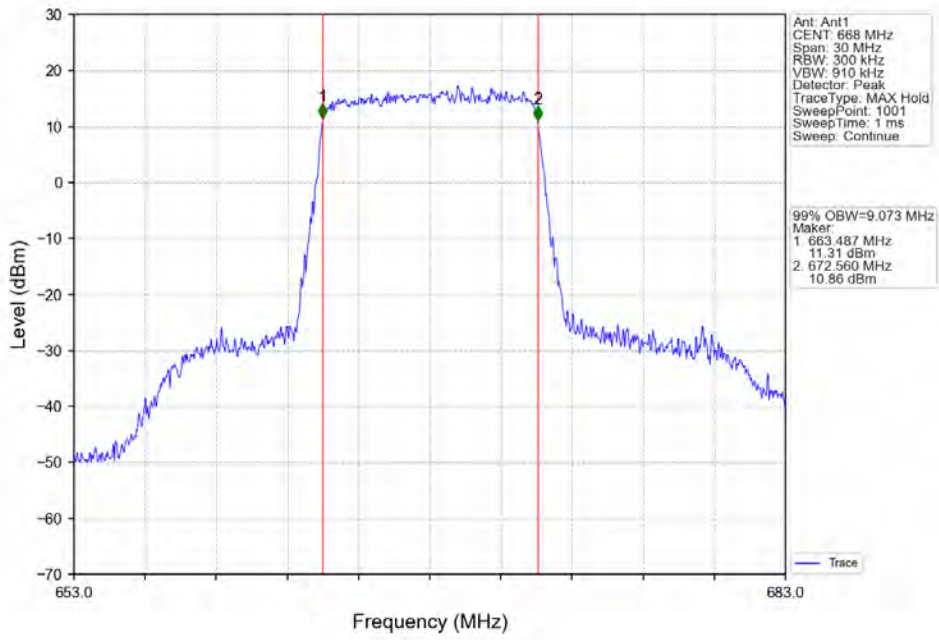
Band71\_5MHz\_16QAM\_MCH\_680.5MHz\_RB\_25\_0\_NTNV



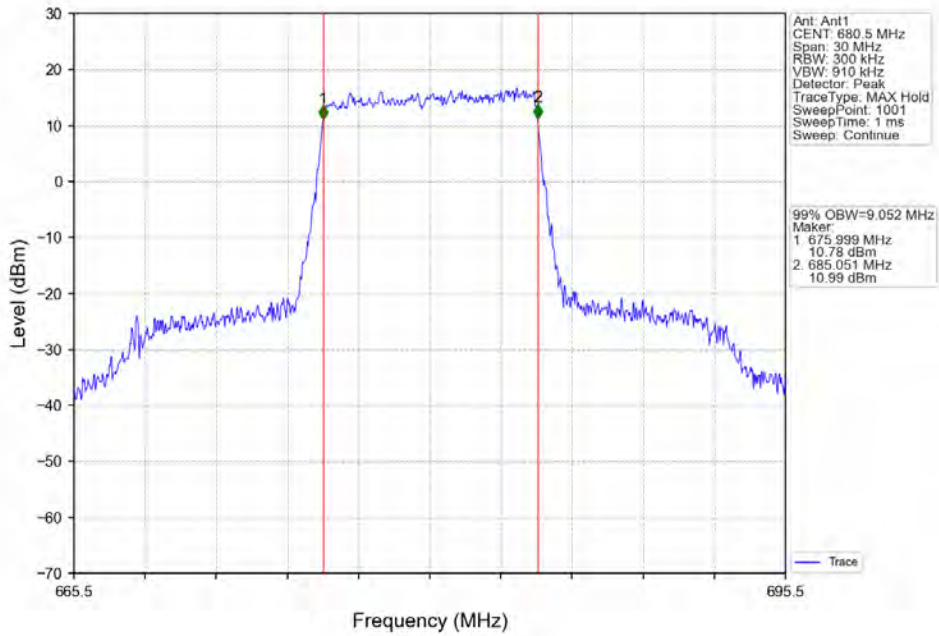
Band71\_5MHz\_16QAM\_HCH\_695.5MHz\_RB\_25\_0\_NTNV



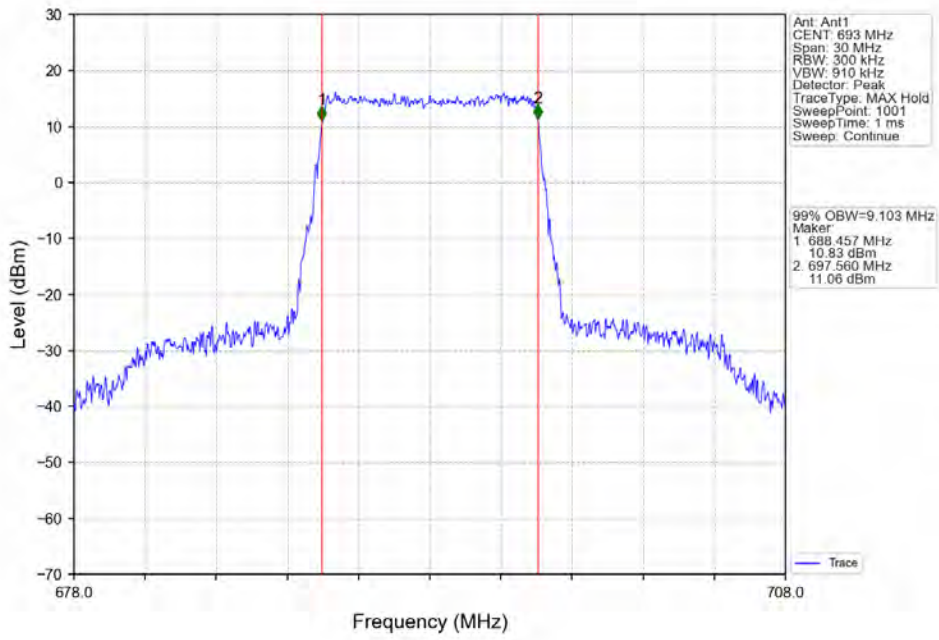
Band71\_10MHz\_QPSK\_LCH\_668MHz\_RB\_50\_0\_NTNV



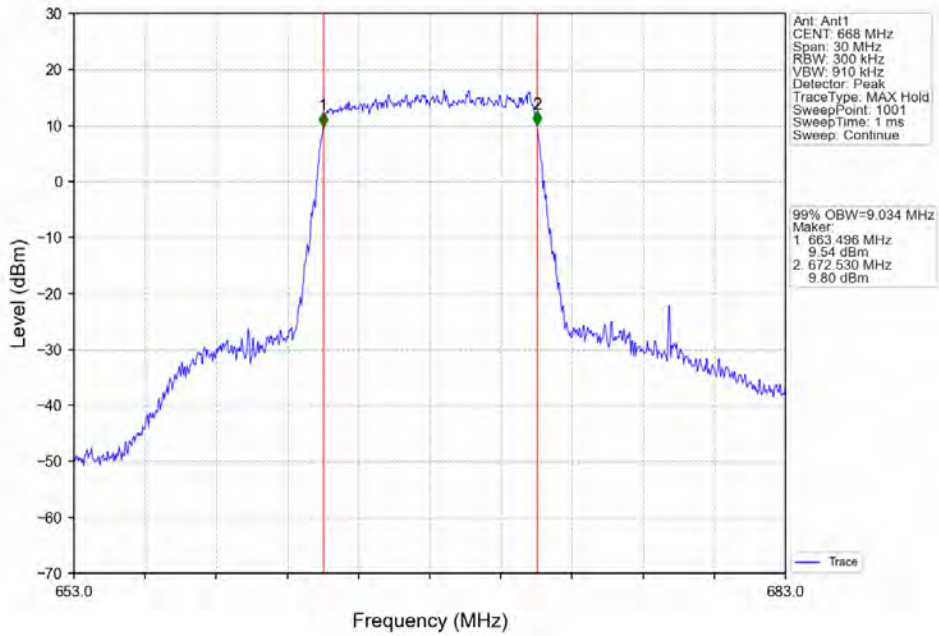
Band71\_10MHz\_QPSK\_MCH\_680.5MHz\_RB\_50\_0\_NTNV



Band71\_10MHz\_QPSK\_HCH\_693MHz\_RB\_50\_0\_NTNV

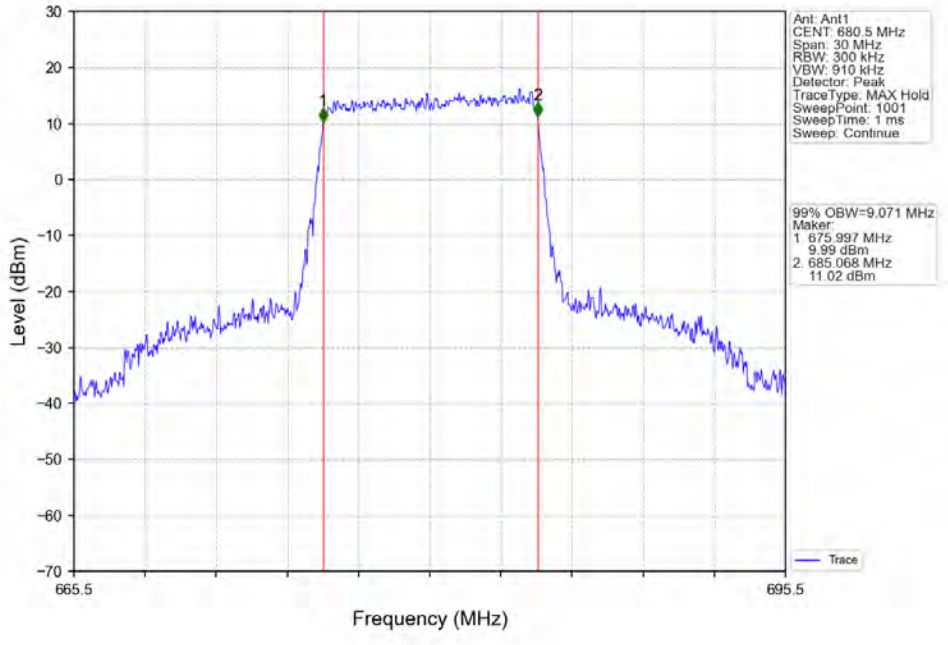


Band71\_10MHz\_16QAM\_LCH\_668MHz\_RB\_50\_0\_NTNV

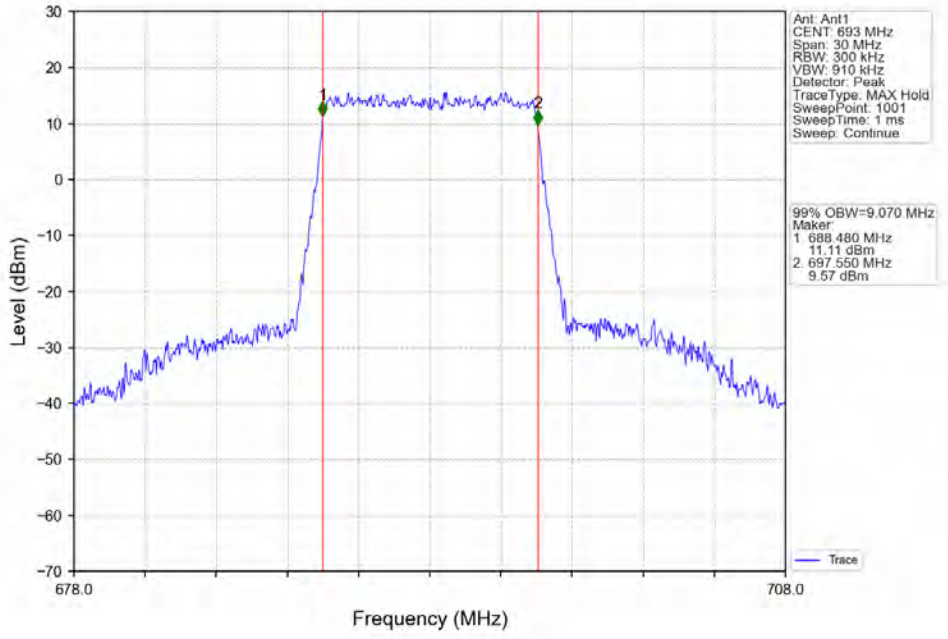




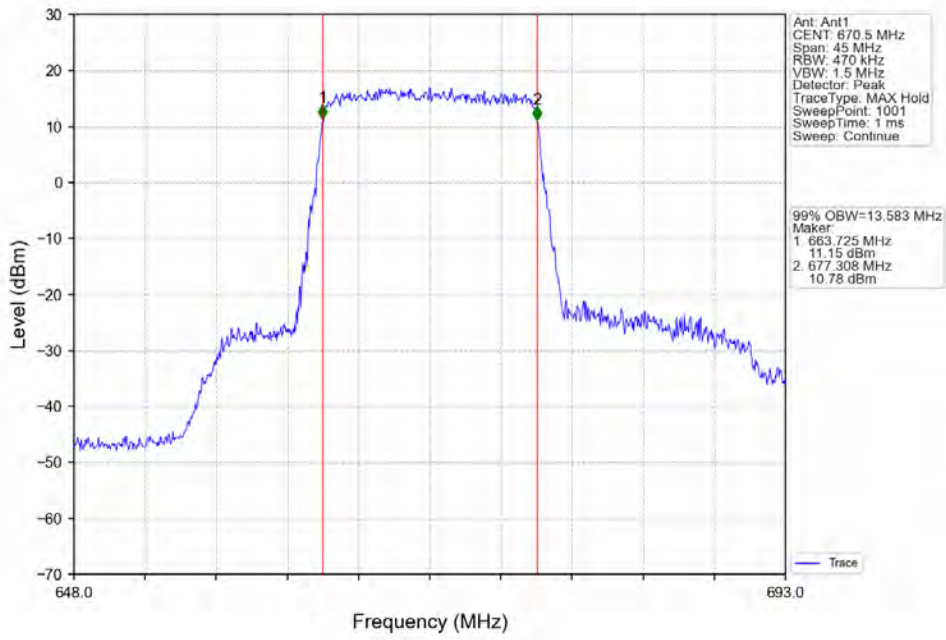
Band71\_10MHz\_16QAM\_MCH\_680.5MHz\_RB\_50\_0\_NTNV



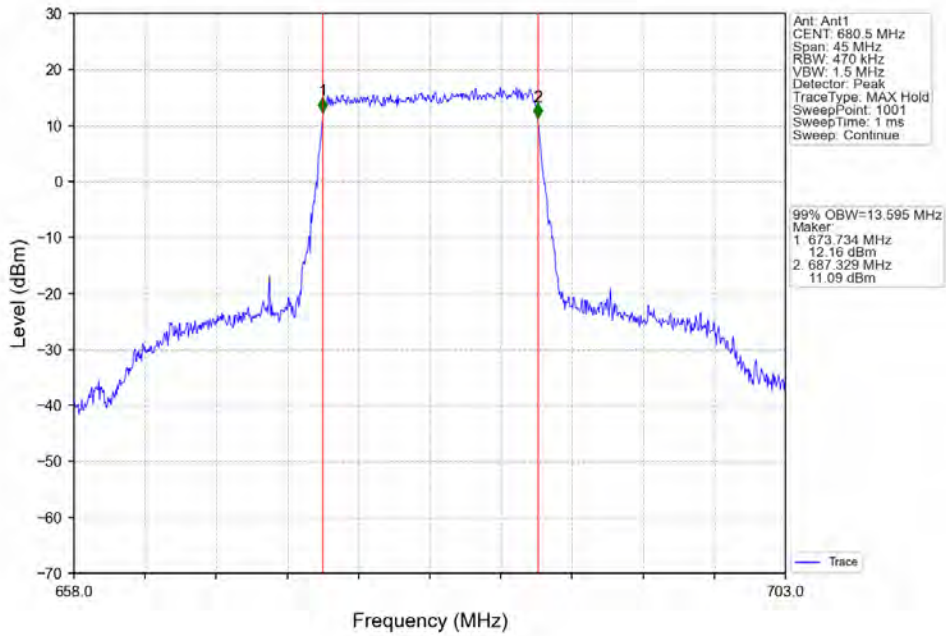
Band71\_10MHz\_16QAM\_HCH\_693MHz\_RB\_50\_0\_NTNV



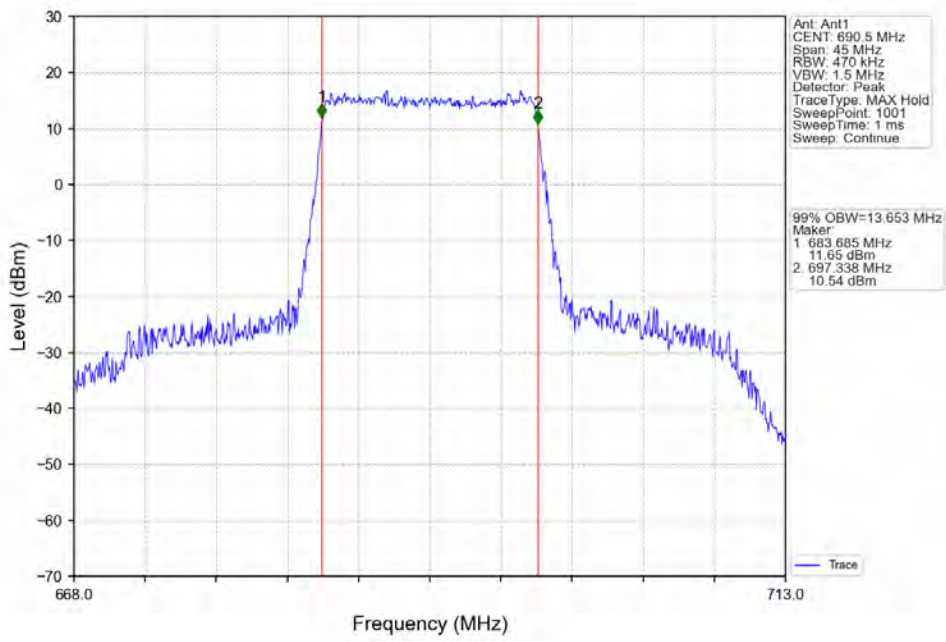
Band71\_15MHz\_QPSK\_LCH\_670.5MHz\_RB\_75\_0\_NTNV



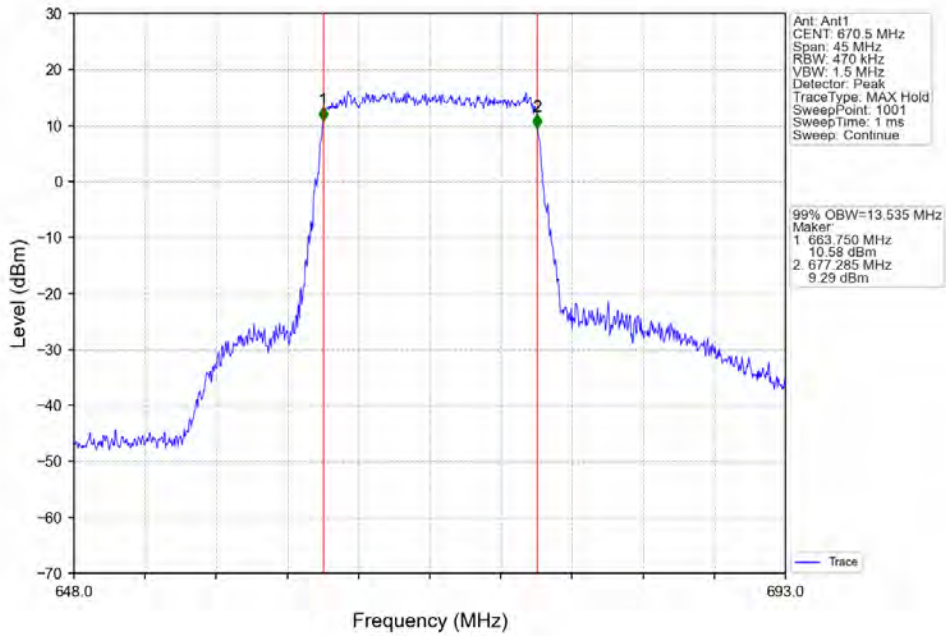
Band71\_15MHz\_QPSK\_MCH\_680.5MHz\_RB\_75\_0\_NTNV



Band71\_15MHz\_QPSK\_HCH\_690.5MHz\_RB\_75\_0\_NTNV

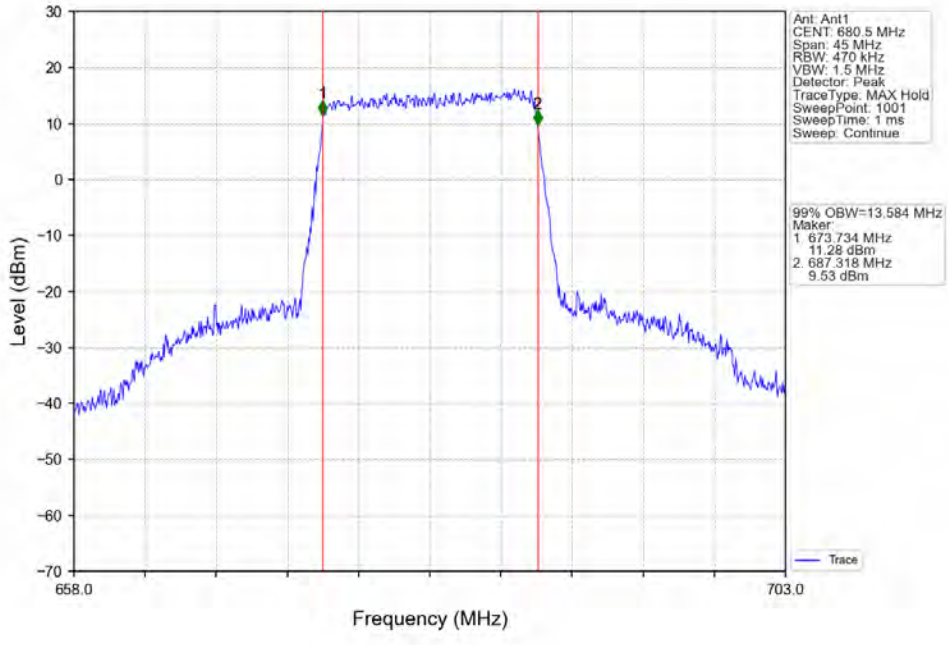


Band71\_15MHz\_16QAM\_LCH\_670.5MHz\_RB\_75\_0\_NTNV

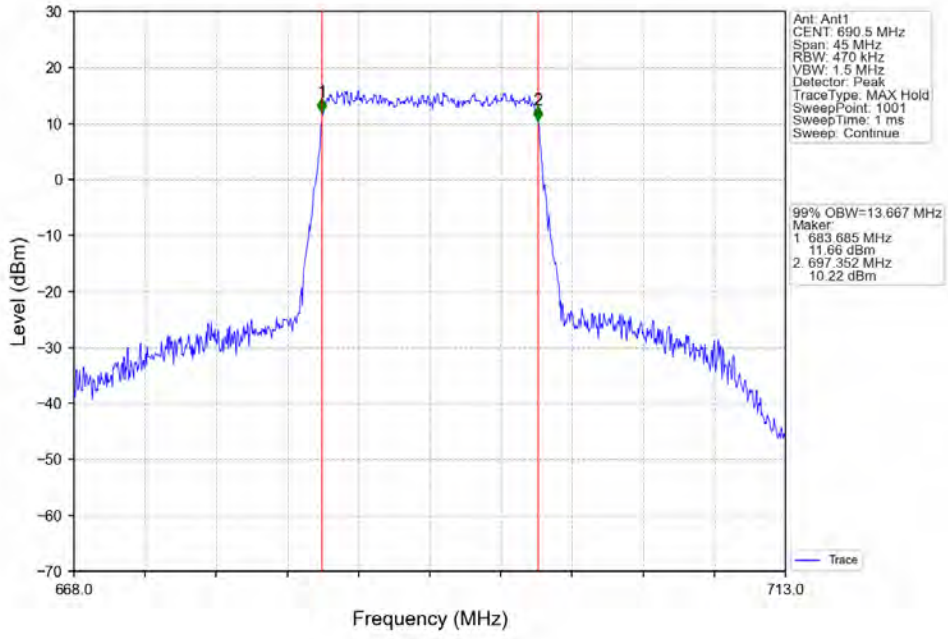




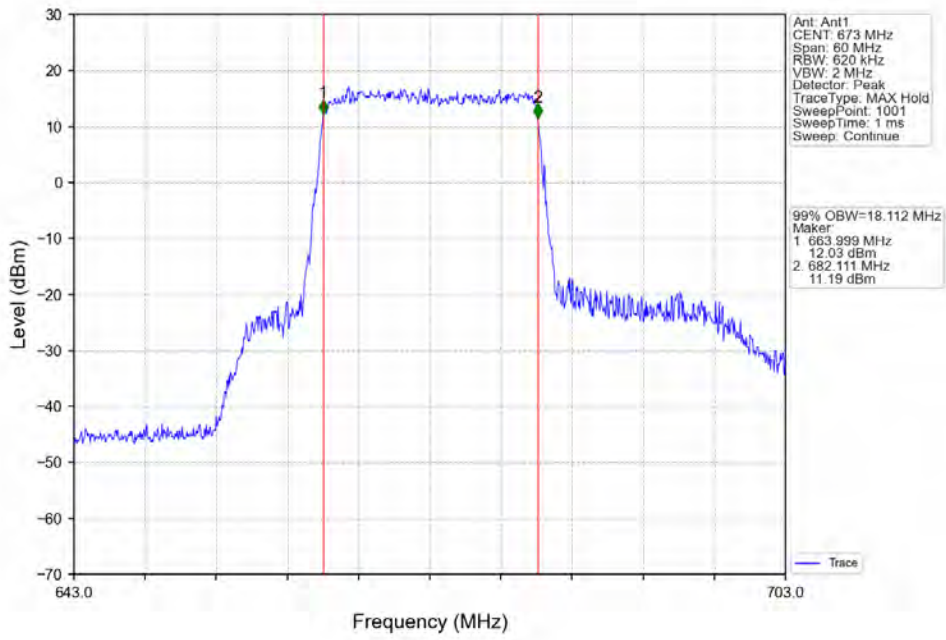
Band71\_15MHz\_16QAM\_MCH\_680.5MHz\_RB\_75\_0\_NTNV



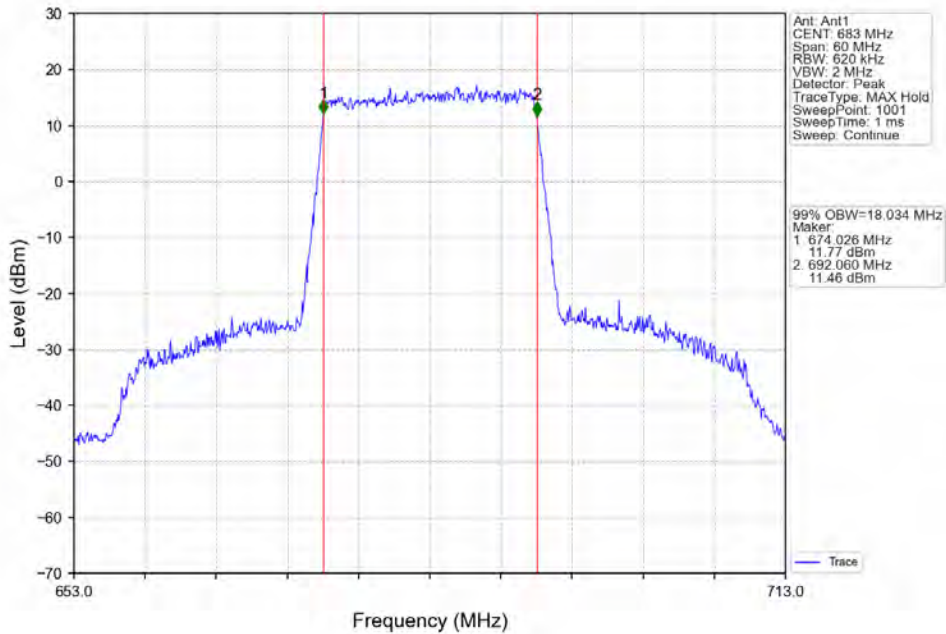
Band71\_15MHz\_16QAM\_HCH\_690.5MHz\_RB\_75\_0\_NTNV



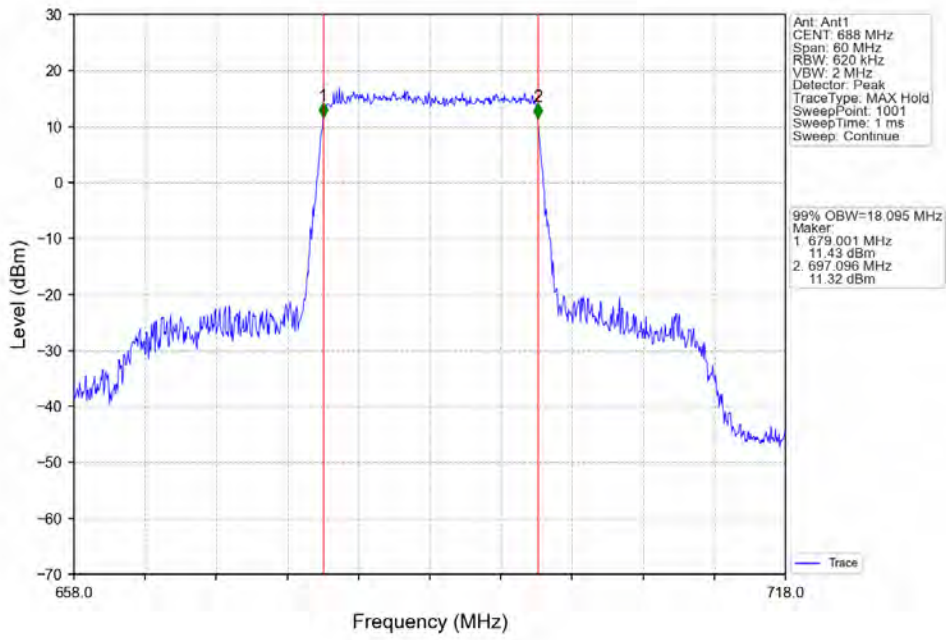
Band71\_20MHz\_QPSK\_LCH\_673MHz\_RB\_100\_0\_NTNV



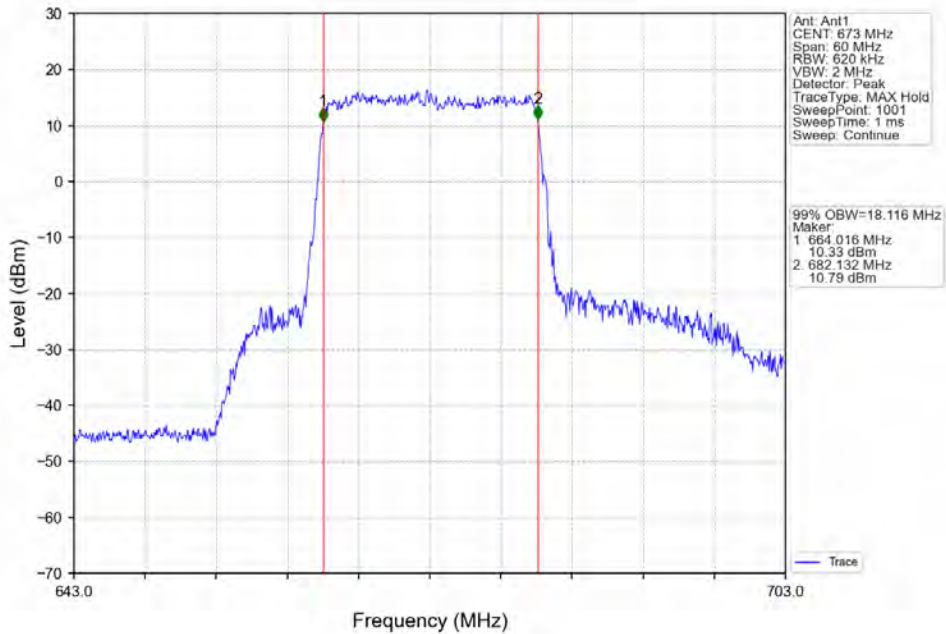
Band71\_20MHz\_QPSK\_MCH\_683MHz\_RB\_100\_0\_NTNV



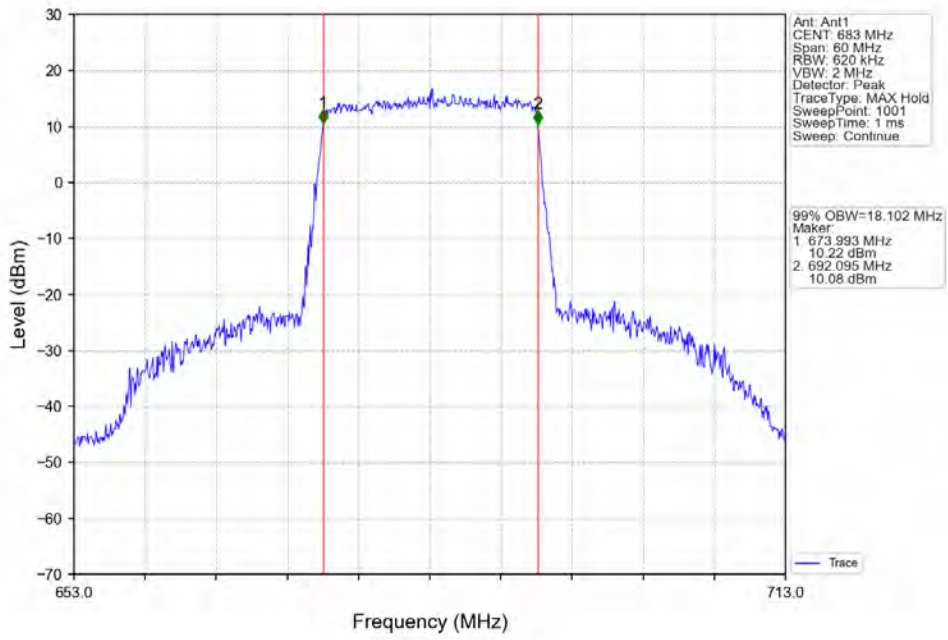
Band71\_20MHz\_QPSK\_HCH\_688MHz\_RB\_100\_0\_NTNV



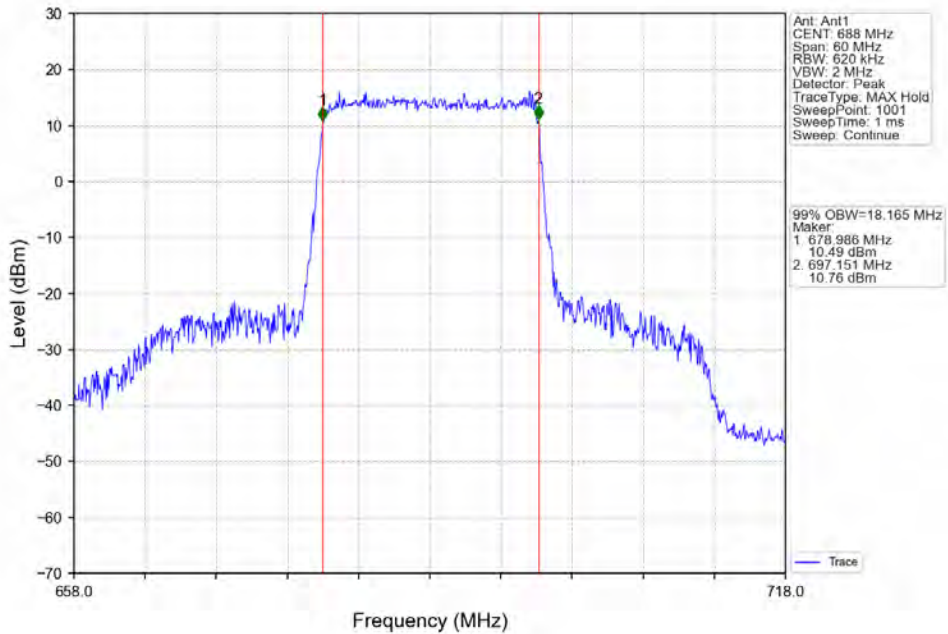
Band71\_20MHz\_16QAM\_LCH\_673MHz\_RB\_100\_0\_NTNV



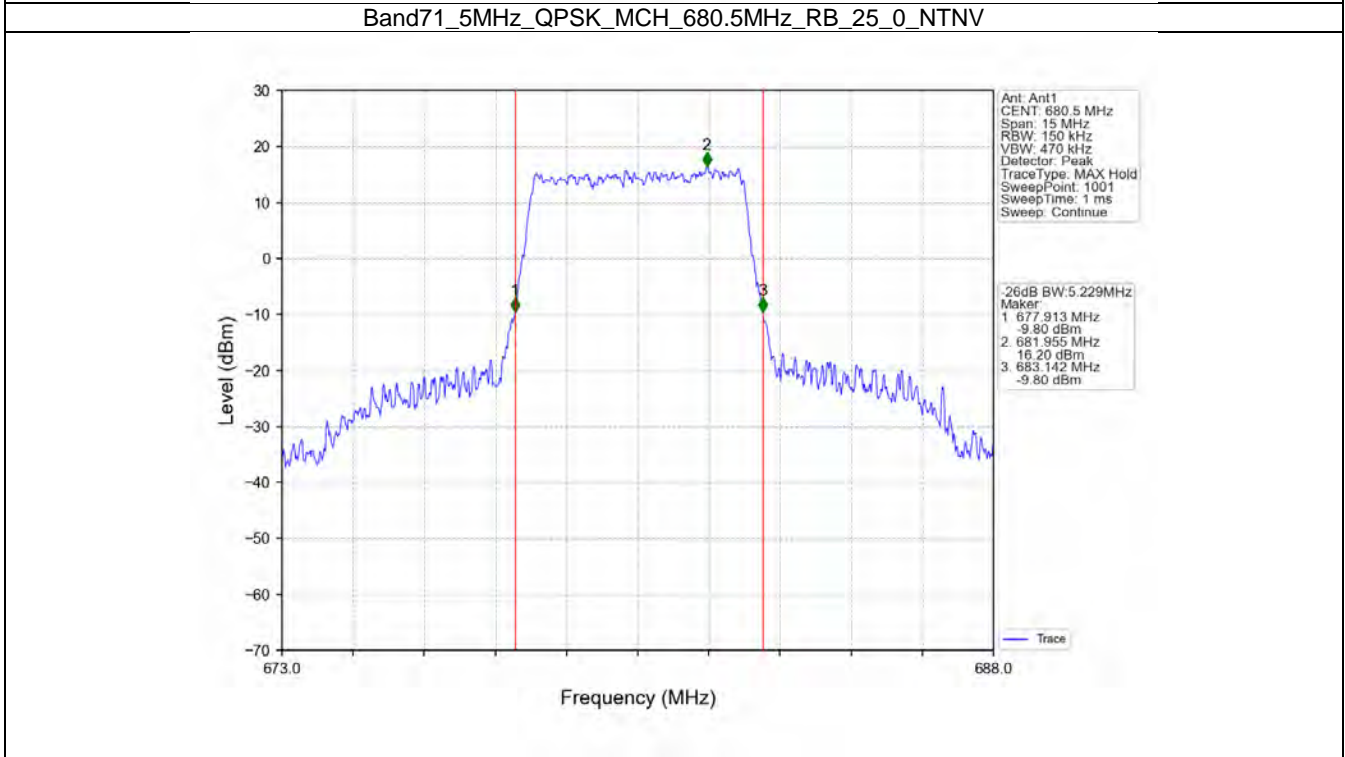
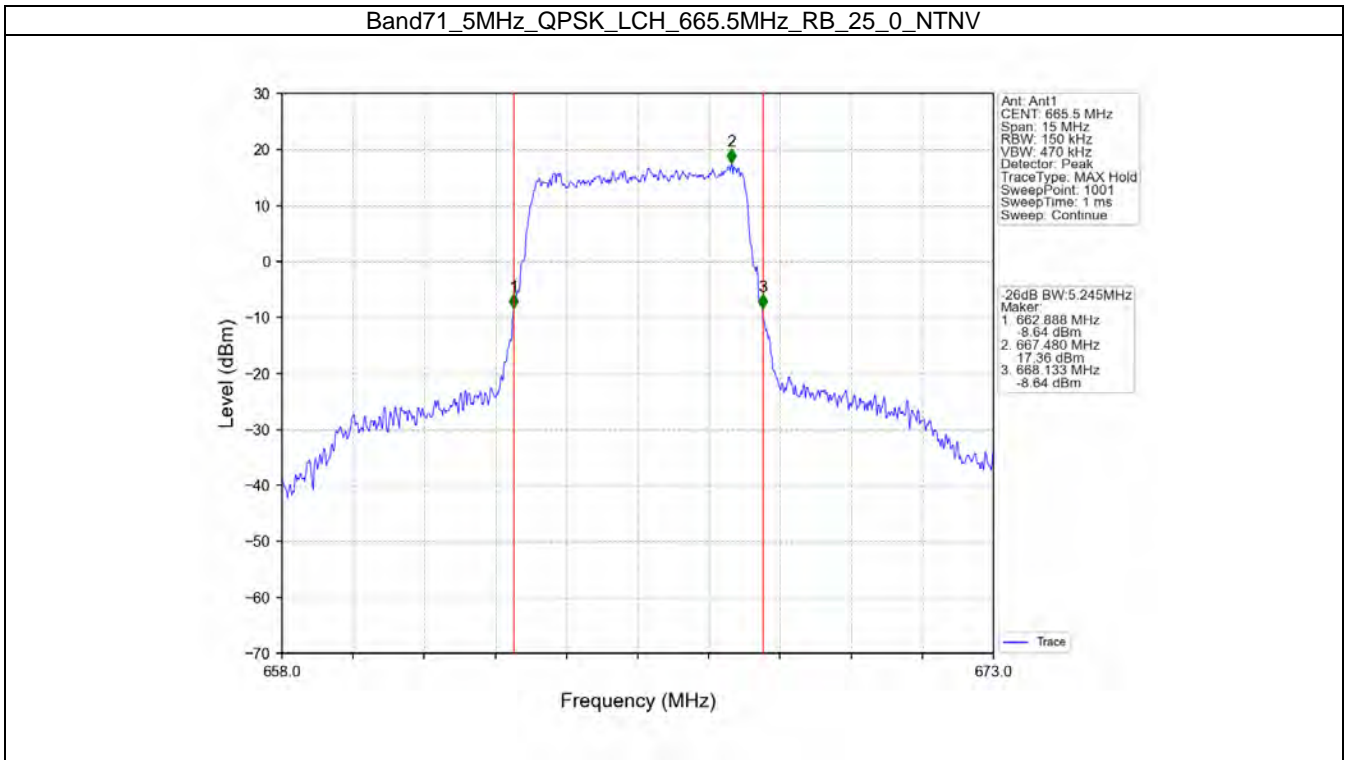
Band71\_20MHz\_16QAM\_MCH\_683MHz\_RB\_100\_0\_NTNV



Band71\_20MHz\_16QAM\_HCH\_688MHz\_RB\_100\_0\_NTNV

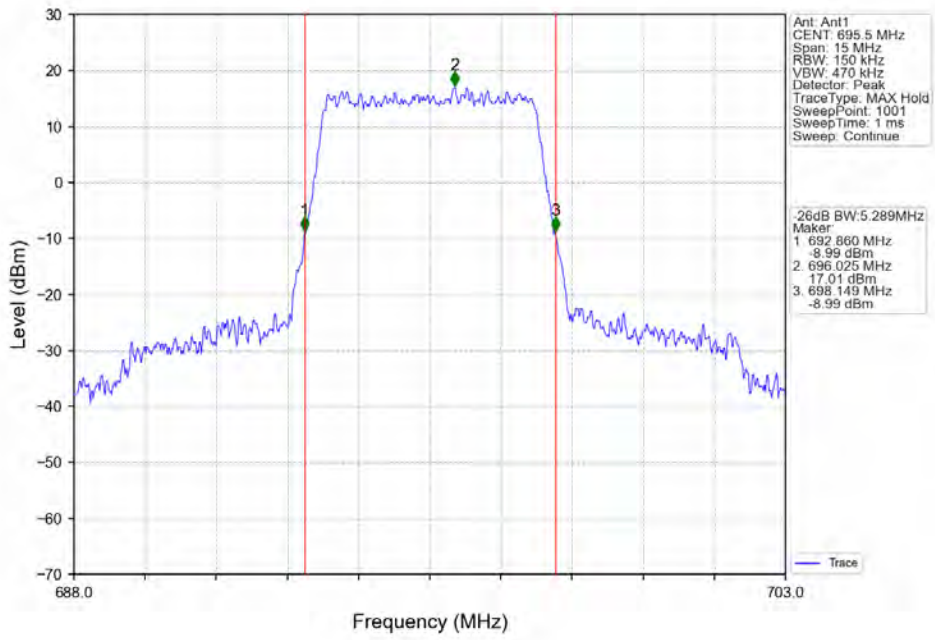


### 4.2.2 Band71\_XDB

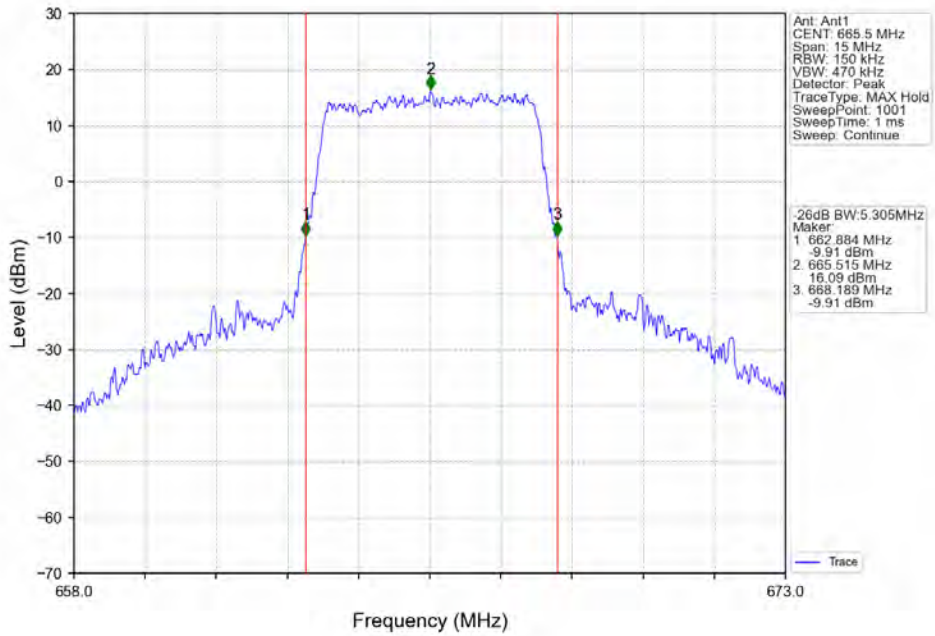




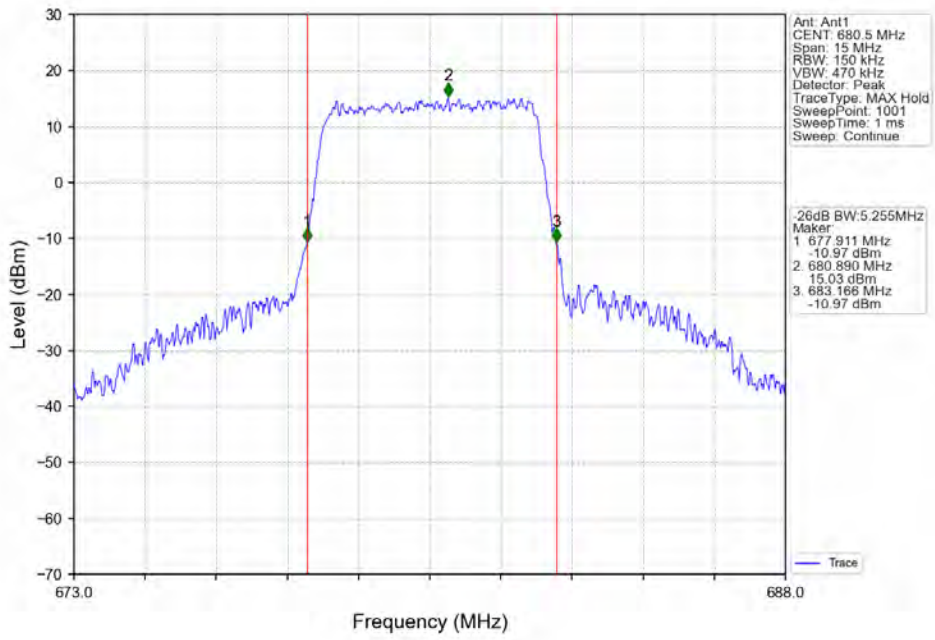
Band71\_5MHz\_QPSK\_HCH\_695.5MHz\_RB\_25\_0\_NTNV



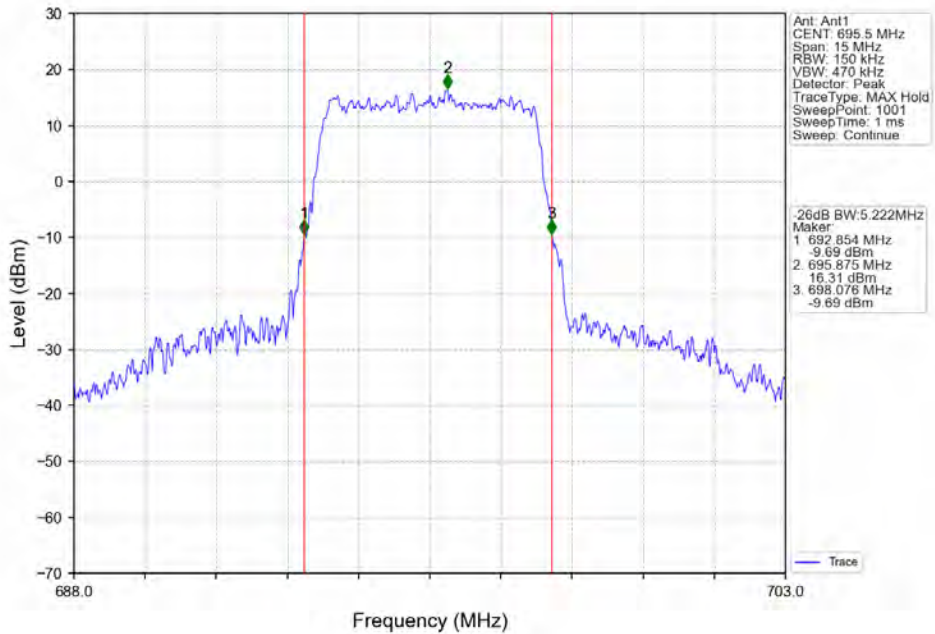
Band71\_5MHz\_16QAM\_LCH\_665.5MHz\_RB\_25\_0\_NTNV



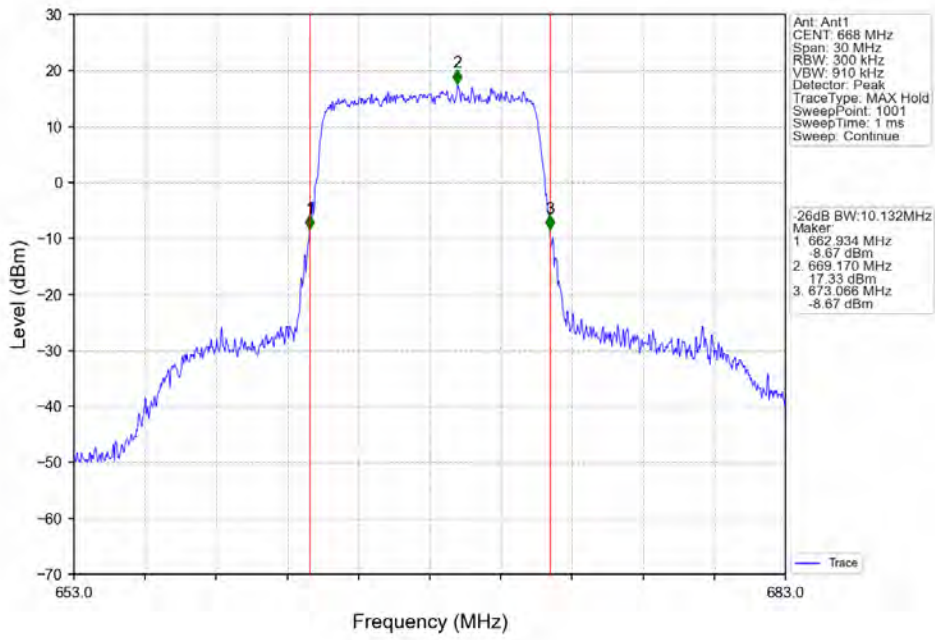
Band71\_5MHz\_16QAM\_MCH\_680.5MHz\_RB\_25\_0\_NTNV



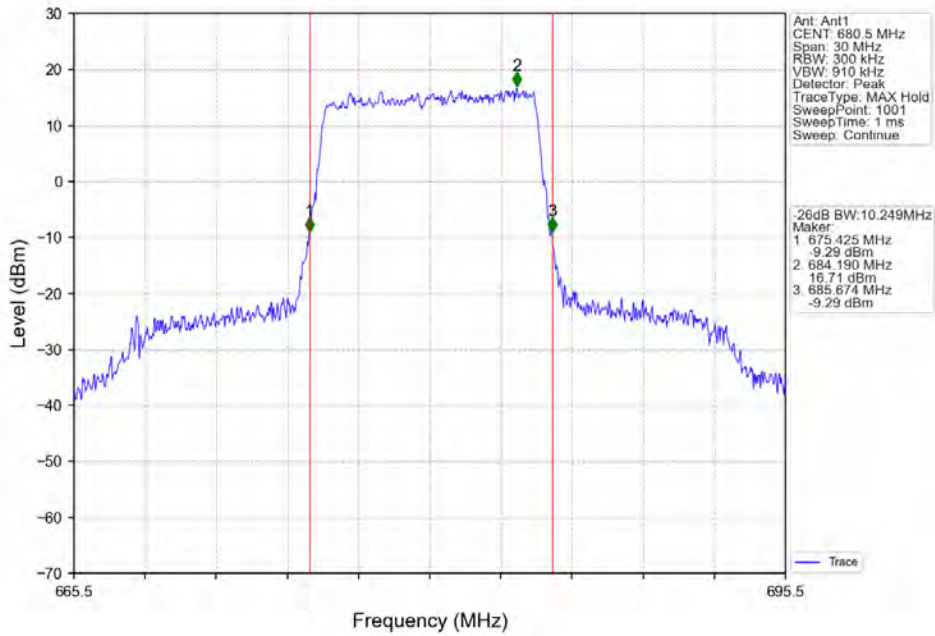
Band71\_5MHz\_16QAM\_HCH\_695.5MHz\_RB\_25\_0\_NTNV



Band71\_10MHz\_QPSK\_LCH\_668MHz\_RB\_50\_0\_NTNV

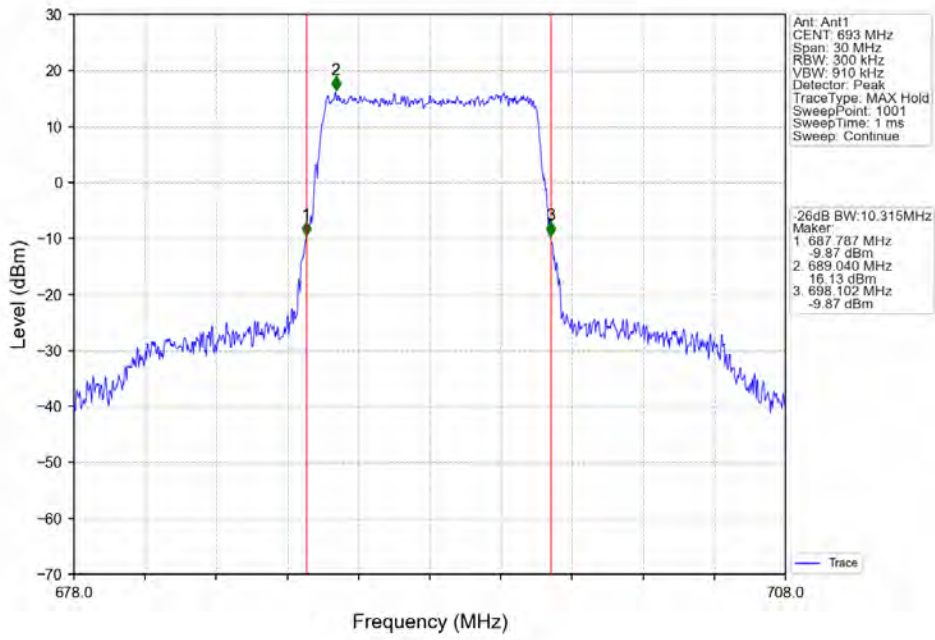


Band71\_10MHz\_QPSK\_MCH\_680.5MHz\_RB\_50\_0\_NTNV

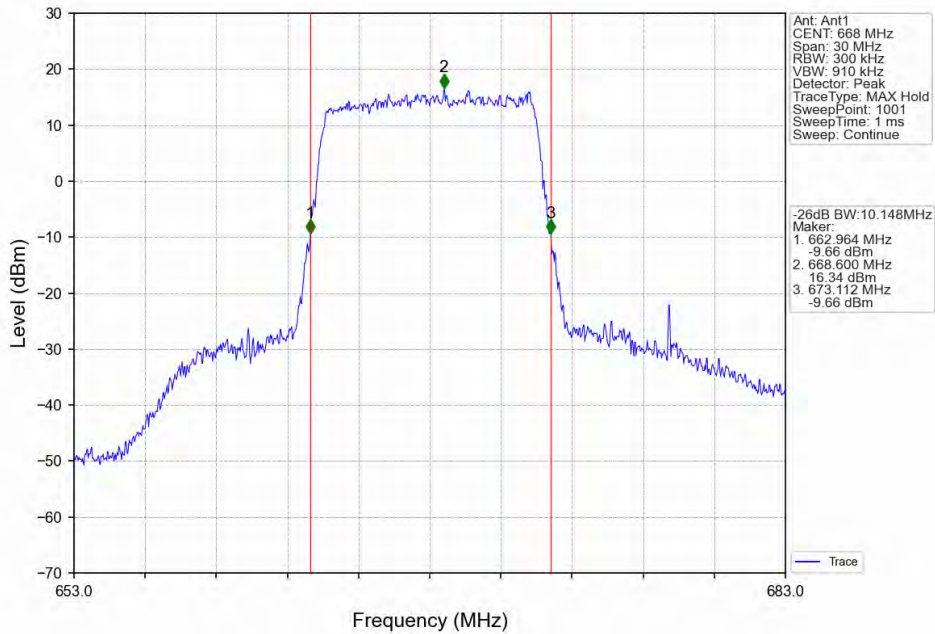




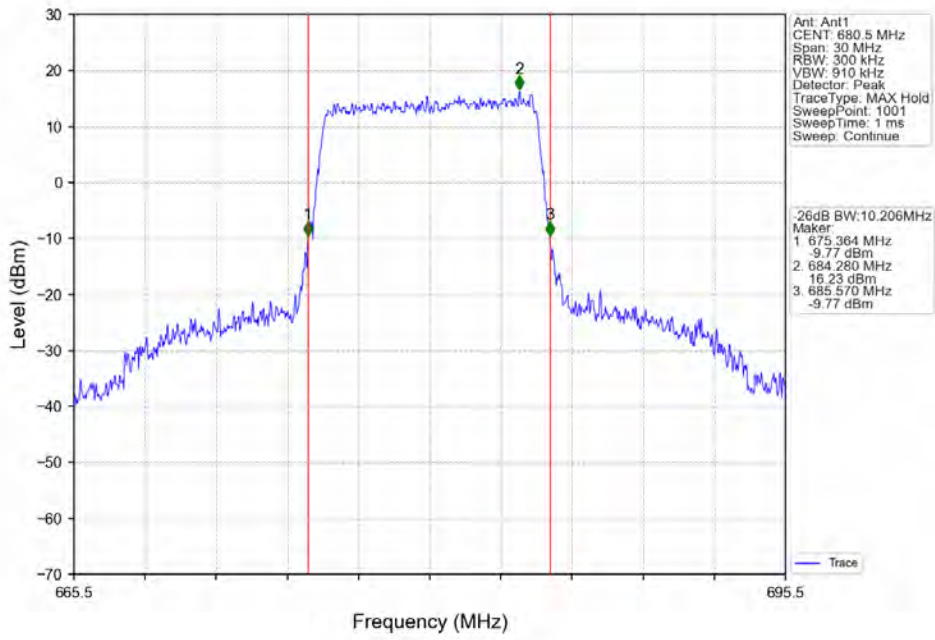
Band71\_10MHz\_QPSK\_HCH\_693MHz\_RB\_50\_0\_NTNV



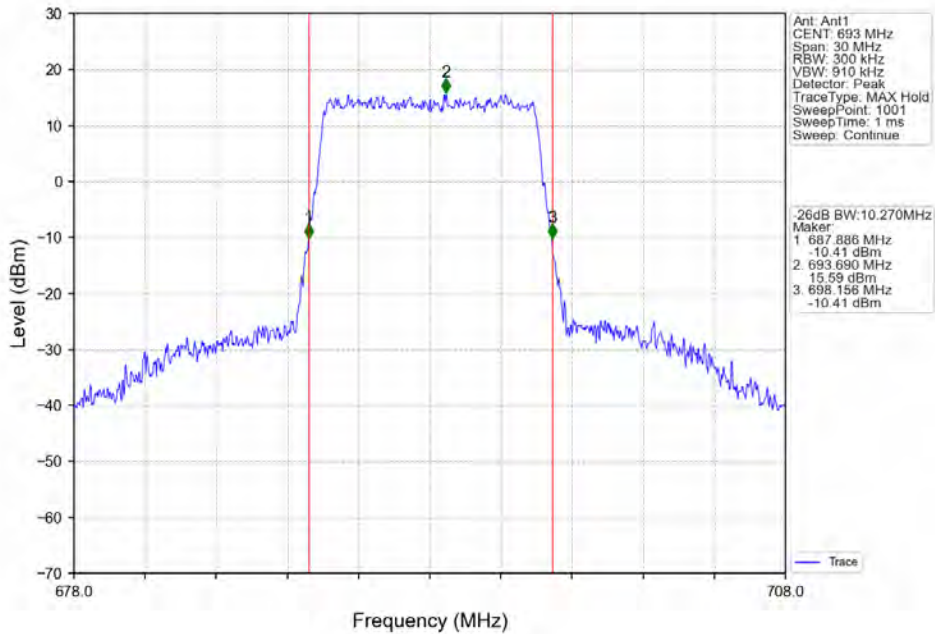
Band71\_10MHz\_16QAM\_LCH\_668MHz\_RB\_50\_0\_NTNV



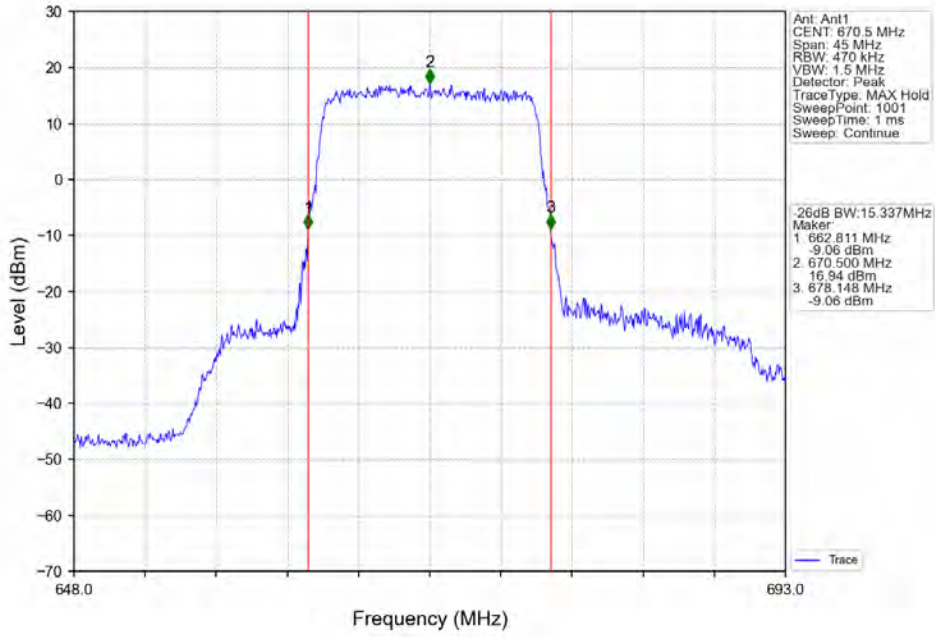
Band71\_10MHz\_16QAM\_MCH\_680.5MHz\_RB\_50\_0\_NTNV



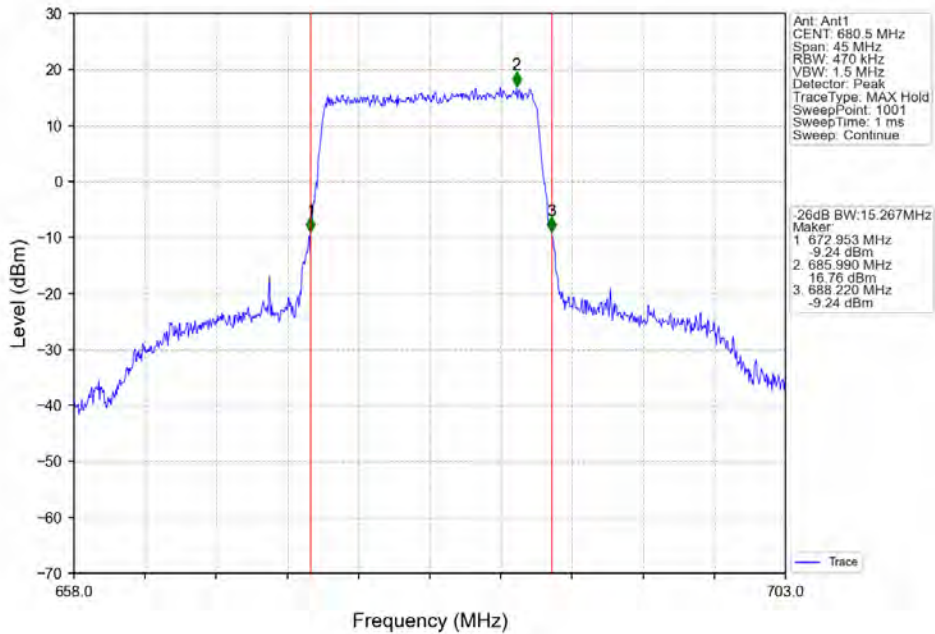
Band71\_10MHz\_16QAM\_HCH\_693MHz\_RB\_50\_0\_NTNV



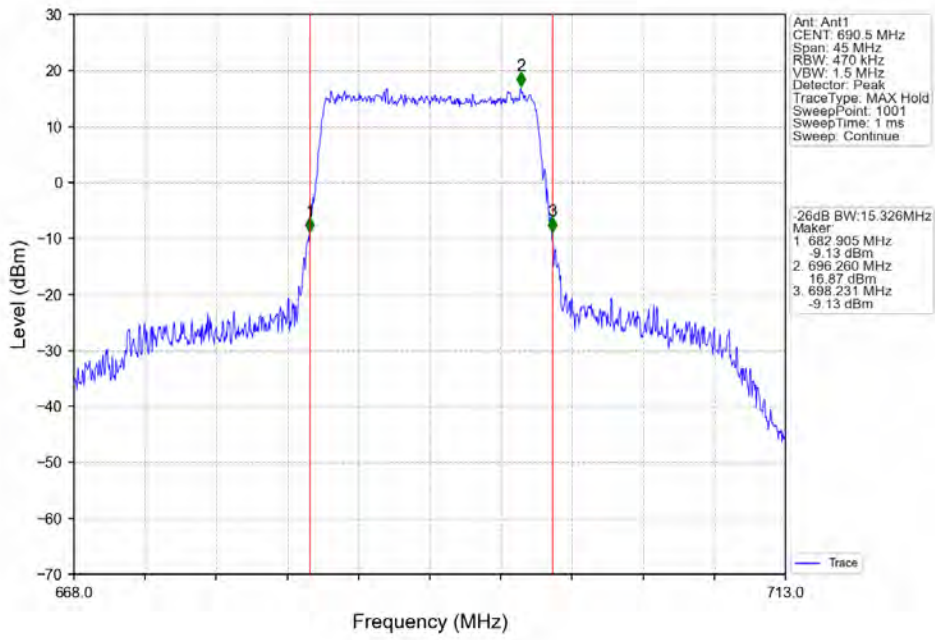
Band71\_15MHz\_QPSK\_LCH\_670.5MHz\_RB\_75\_0\_NTNV



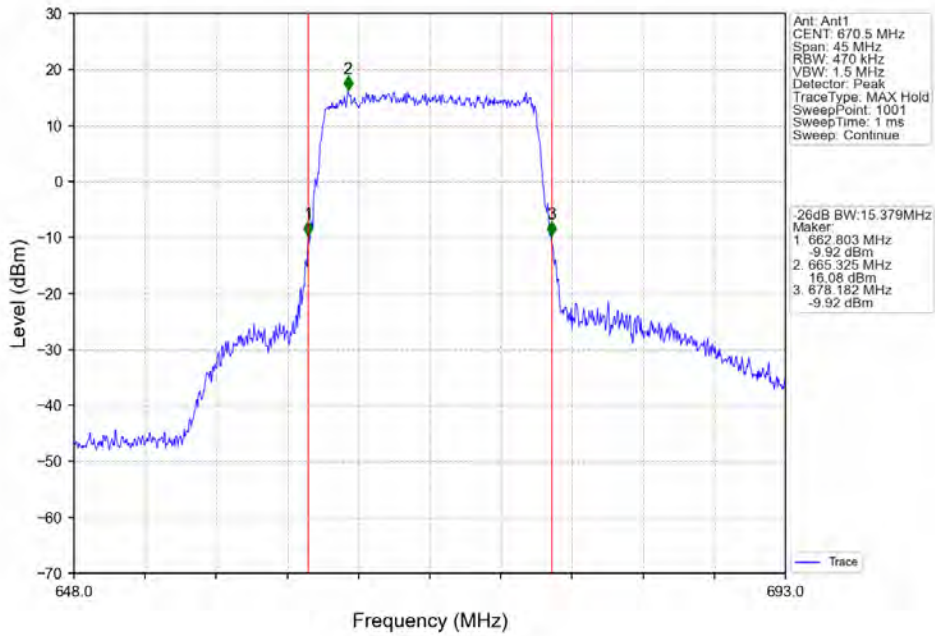
Band71\_15MHz\_QPSK\_MCH\_680.5MHz\_RB\_75\_0\_NTNV



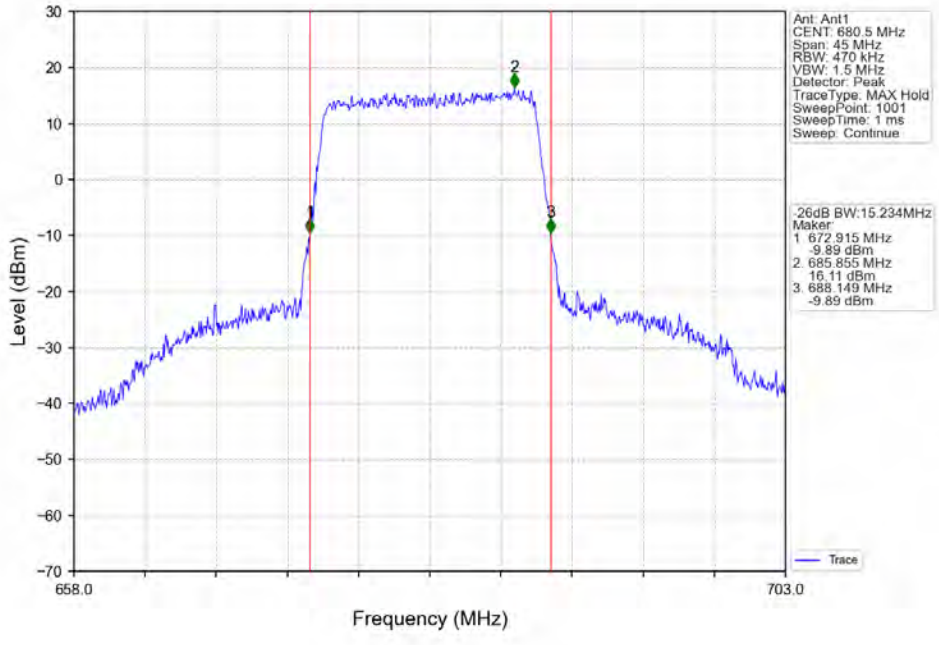
Band71\_15MHz\_QPSK\_HCH\_690.5MHz\_RB\_75\_0\_NTNV



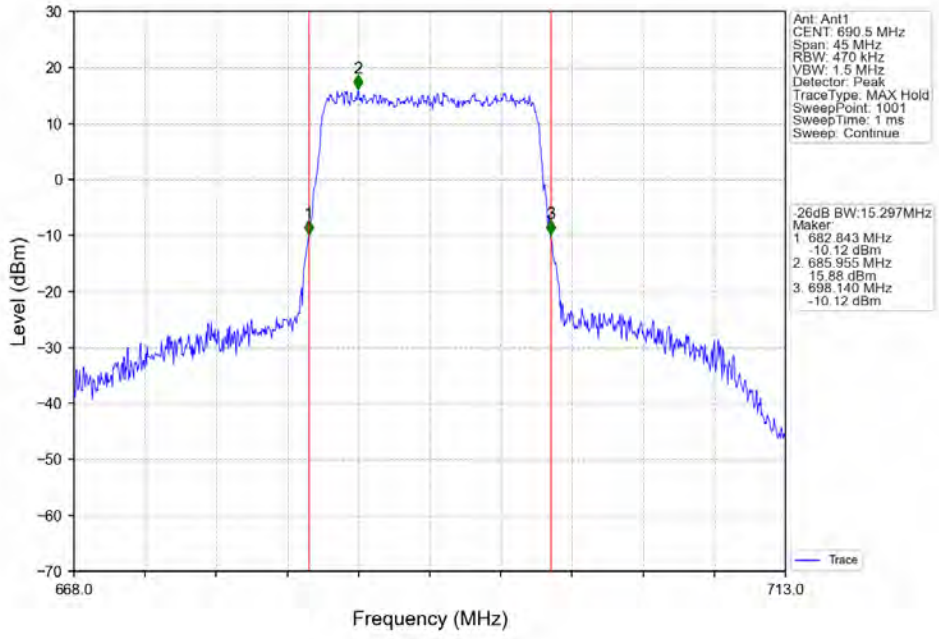
Band71\_15MHz\_16QAM\_LCH\_670.5MHz\_RB\_75\_0\_NTNV



Band71\_15MHz\_16QAM\_MCH\_680.5MHz\_RB\_75\_0\_NTNV

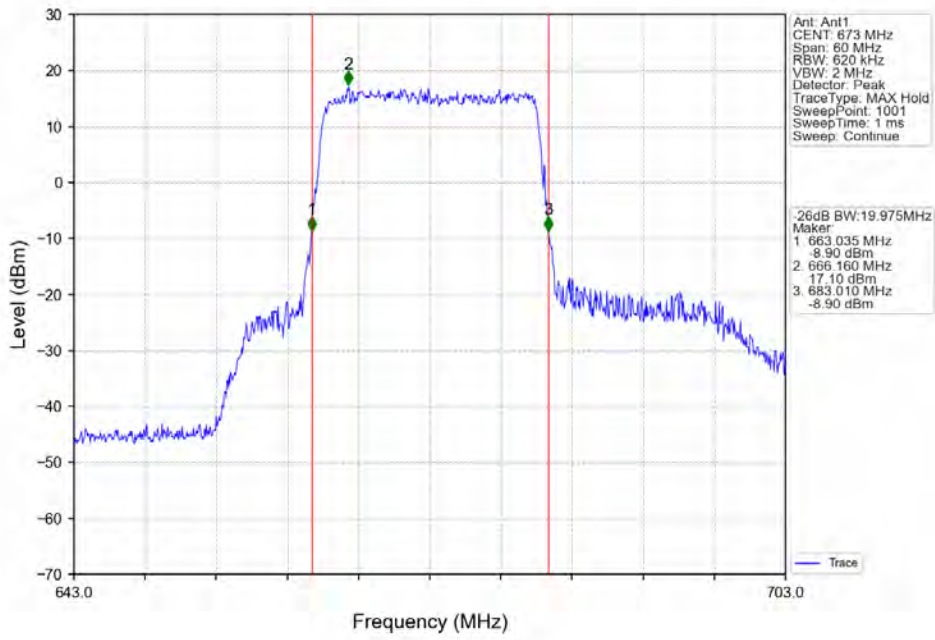


Band71\_15MHz\_16QAM\_HCH\_690.5MHz\_RB\_75\_0\_NTNV

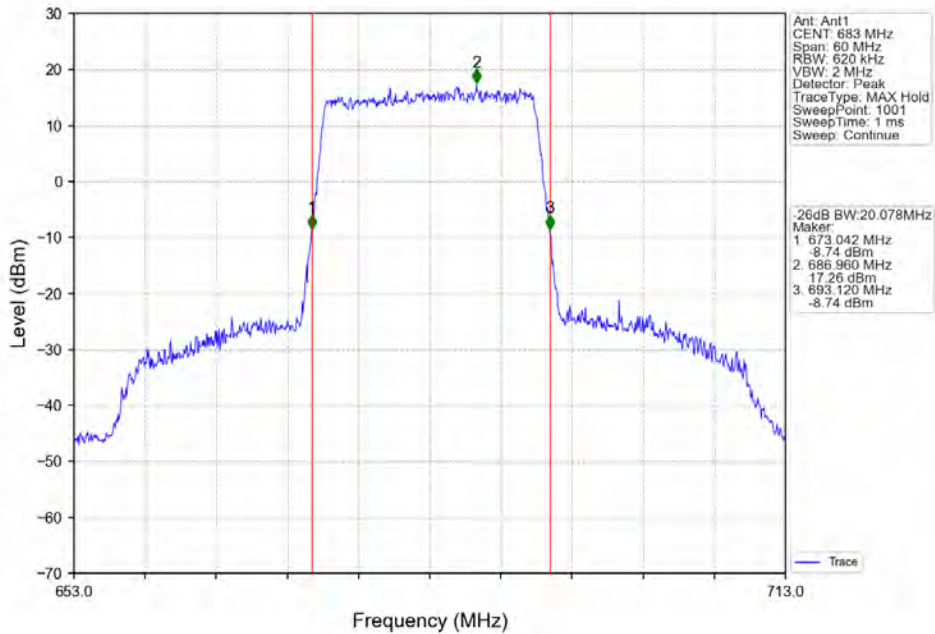




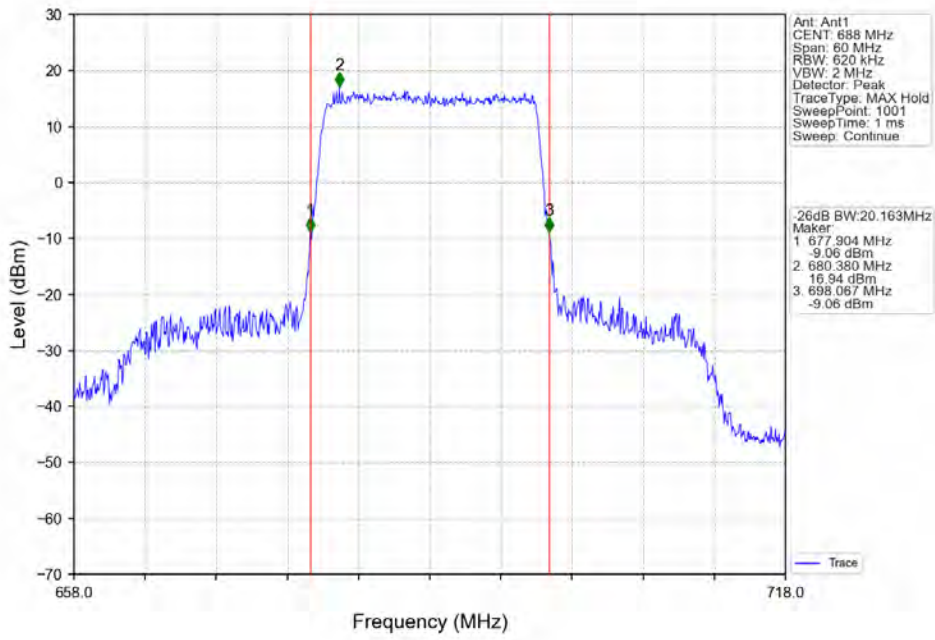
Band71\_20MHz\_QPSK\_LCH\_673MHz\_RB\_100\_0\_NTNV



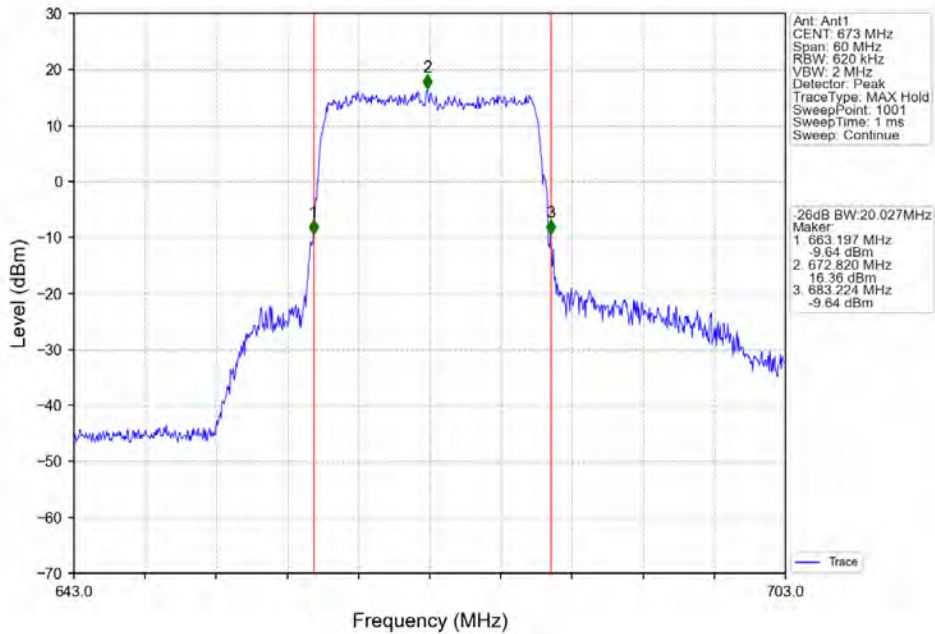
Band71\_20MHz\_QPSK\_MCH\_683MHz\_RB\_100\_0\_NTNV



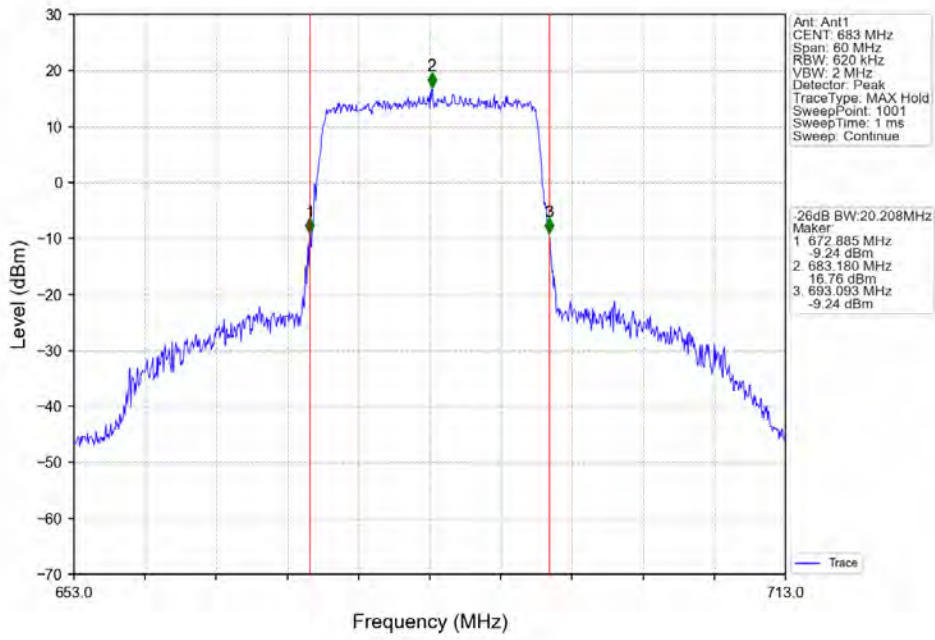
Band71\_20MHz\_QPSK\_HCH\_688MHz\_RB\_100\_0\_NTNV



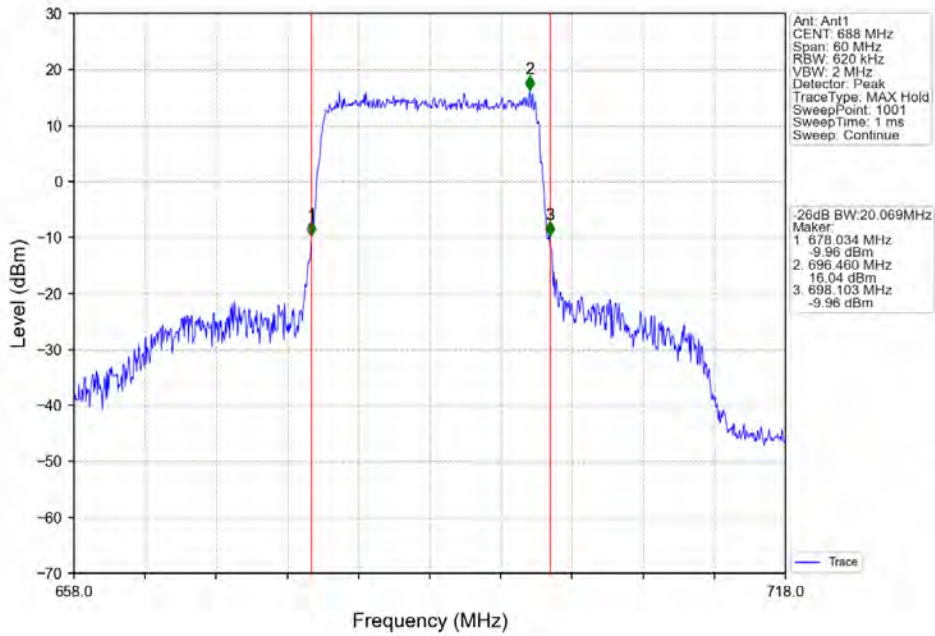
Band71\_20MHz\_16QAM\_LCH\_673MHz\_RB\_100\_0\_NTNV



Band71\_20MHz\_16QAM\_MCH\_683MHz\_RB\_100\_0\_NTNV



Band71\_20MHz\_16QAM\_HCH\_688MHz\_RB\_100\_0\_NTNV





## 5. Peak-Average Ratio

### 5.1 Test Result

#### 5.1.1 B71\_5MHz

Band: 71 / Bandwidth: 5MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Peak-Average Ratio (dB)		Verdict
		Size	Offset	Result	Limit	
QPSK	665.5	25	0	5.40	<=13	Pass
	680.5	25	0	5.23	<=13	Pass
	695.5	25	0	5.42	<=13	Pass
16QAM	665.5	25	0	6.04	<=13	Pass
	680.5	25	0	5.88	<=13	Pass
	695.5	25	0	6.18	<=13	Pass

#### 5.1.2 B71\_10MHz

Band: 71 / Bandwidth: 10MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Peak-Average Ratio (dB)		Verdict
		Size	Offset	Result	Limit	
QPSK	668	50	0	5.32	<=13	Pass
	680.5	50	0	5.47	<=13	Pass
	693	50	0	5.59	<=13	Pass
16QAM	668	50	0	6.17	<=13	Pass
	680.5	50	0	6.16	<=13	Pass
	693	50	0	6.26	<=13	Pass

#### 5.1.3 B71\_15MHz

Band: 71 / Bandwidth: 15MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Peak-Average Ratio (dB)		Verdict
		Size	Offset	Result	Limit	
QPSK	670.5	75	0	4.98	<=13	Pass
	680.5	75	0	4.84	<=13	Pass
	690.5	75	0	4.88	<=13	Pass
16QAM	670.5	75	0	6.13	<=13	Pass
	680.5	75	0	6.09	<=13	Pass
	690.5	75	0	6.19	<=13	Pass

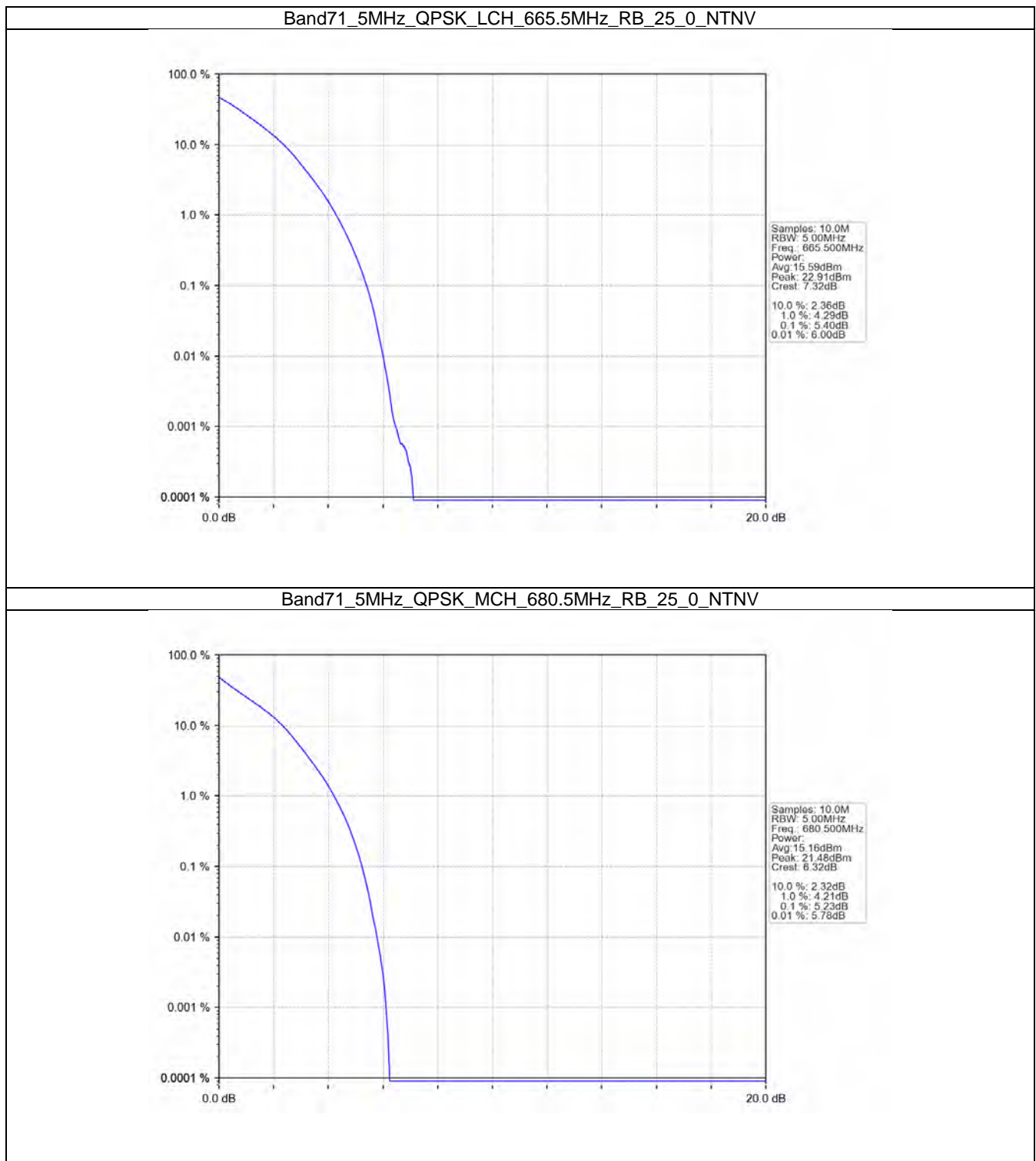
#### 5.1.4 B71\_20MHz

Band: 71 / Bandwidth: 20MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Peak-Average Ratio (dB)		Verdict
		Size	Offset	Result	Limit	
QPSK	673	100	0	5.68	<=13	Pass
	683	100	0	5.59	<=13	Pass
	688	100	0	5.65	<=13	Pass

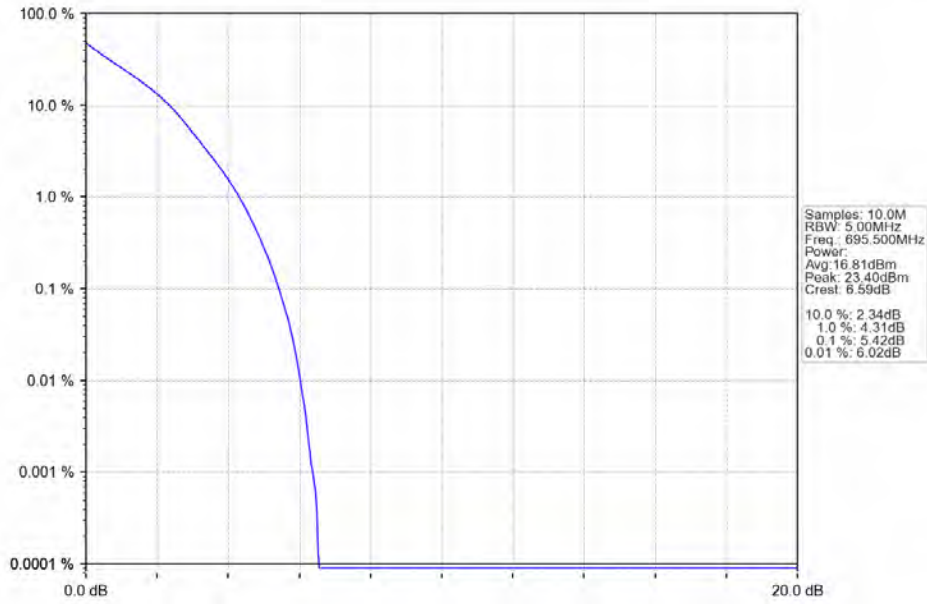
16QAM	673	100	0	6.70	<=13	Pass
	683	100	0	6.64	<=13	Pass
	688	100	0	6.70	<=13	Pass

## 5.2 Test Graph

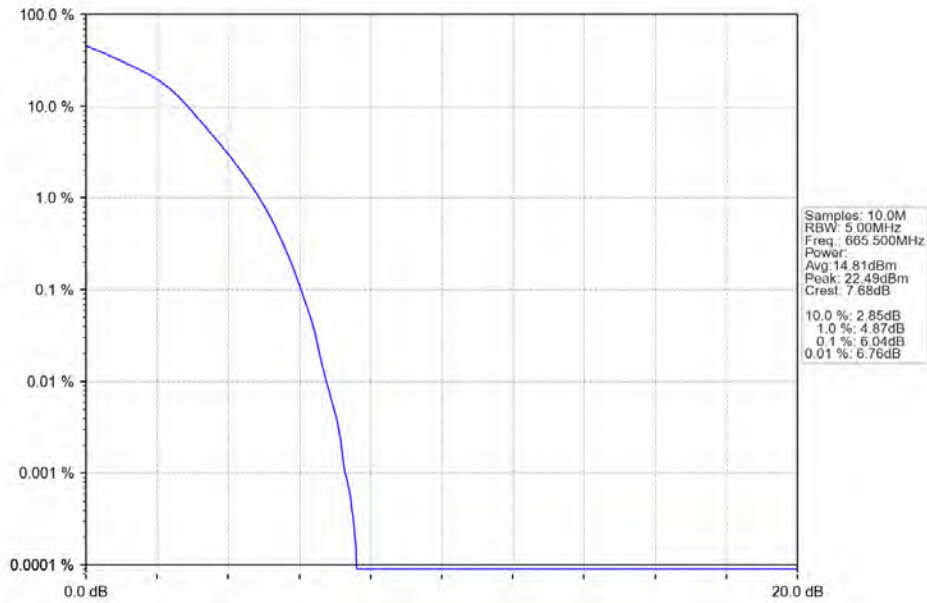
### 5.2.1 B71\_5MHz



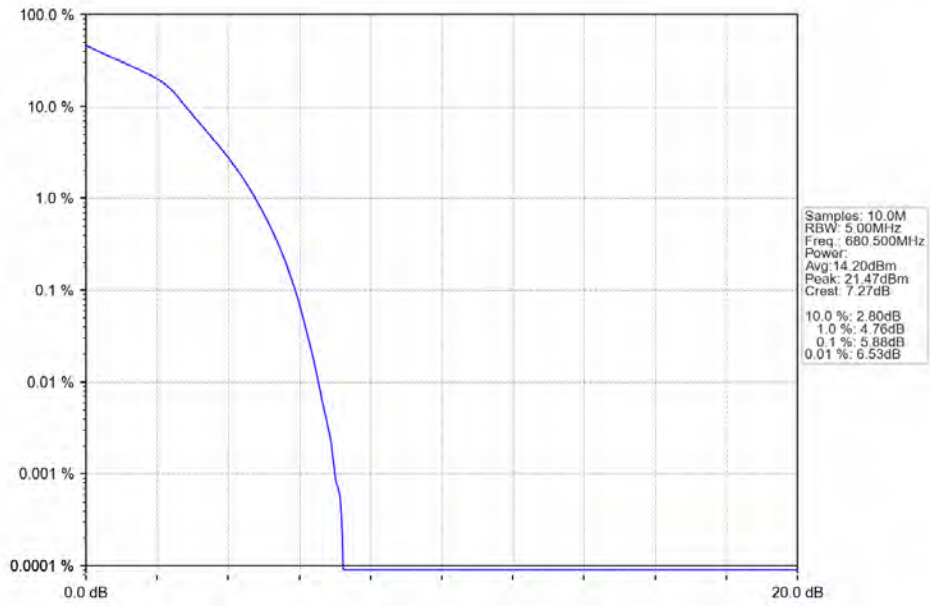
Band71\_5MHz\_QPSK\_HCH\_695.5MHz\_RB\_25\_0\_NTNV



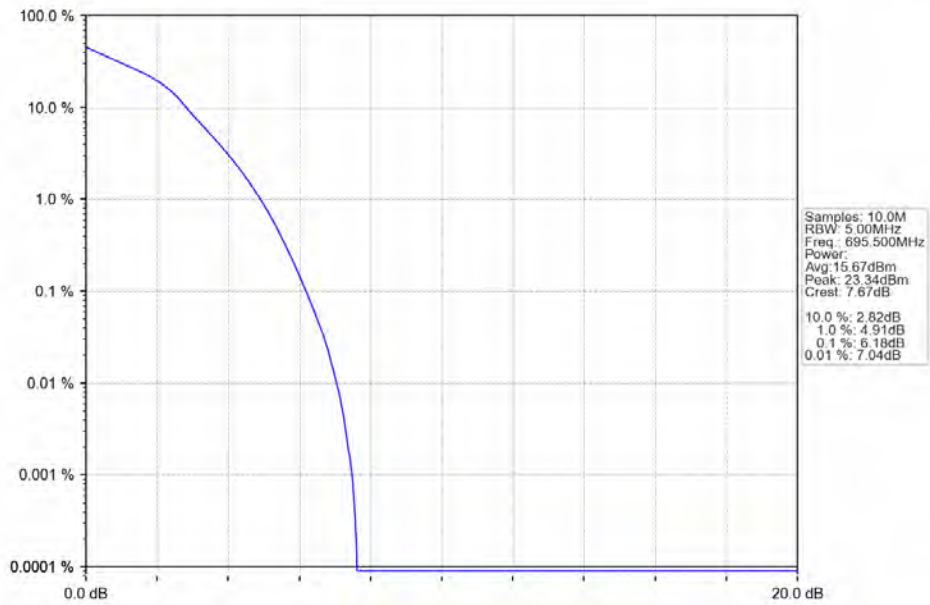
Band71\_5MHz\_16QAM\_LCH\_665.5MHz\_RB\_25\_0\_NTNV



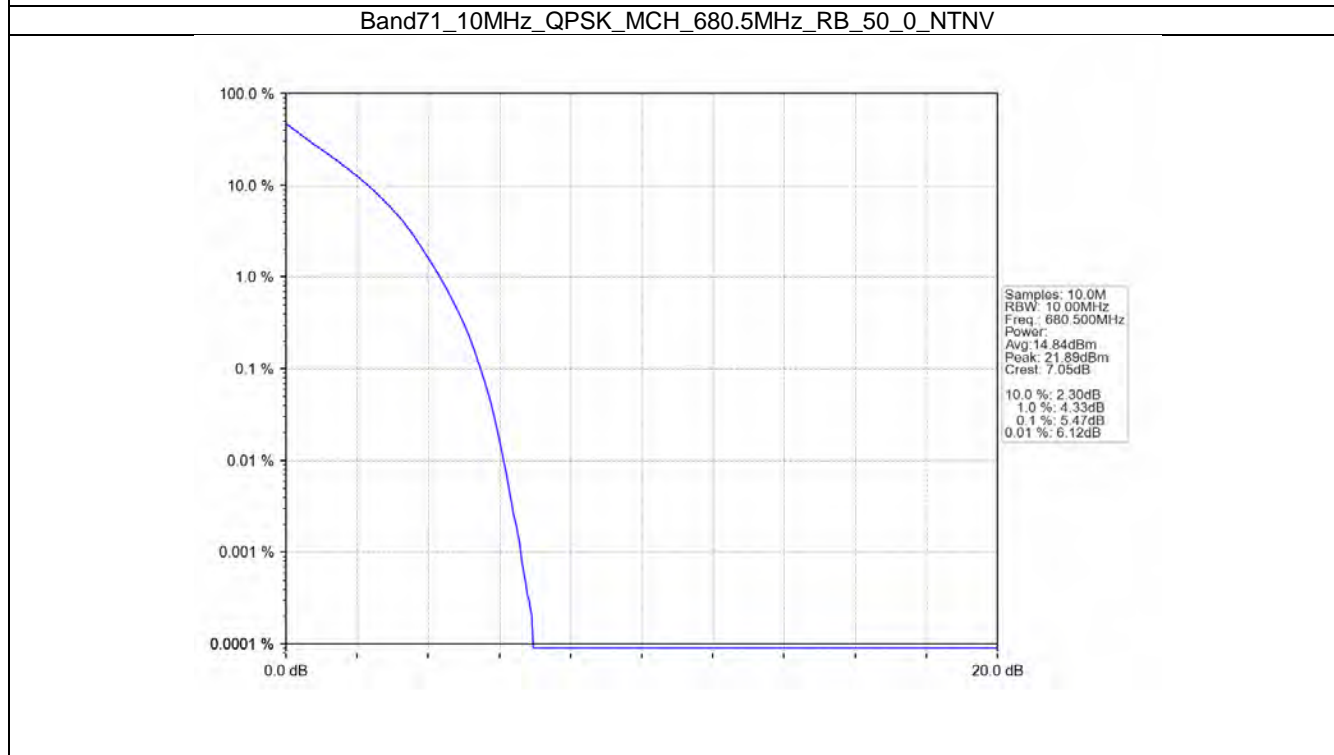
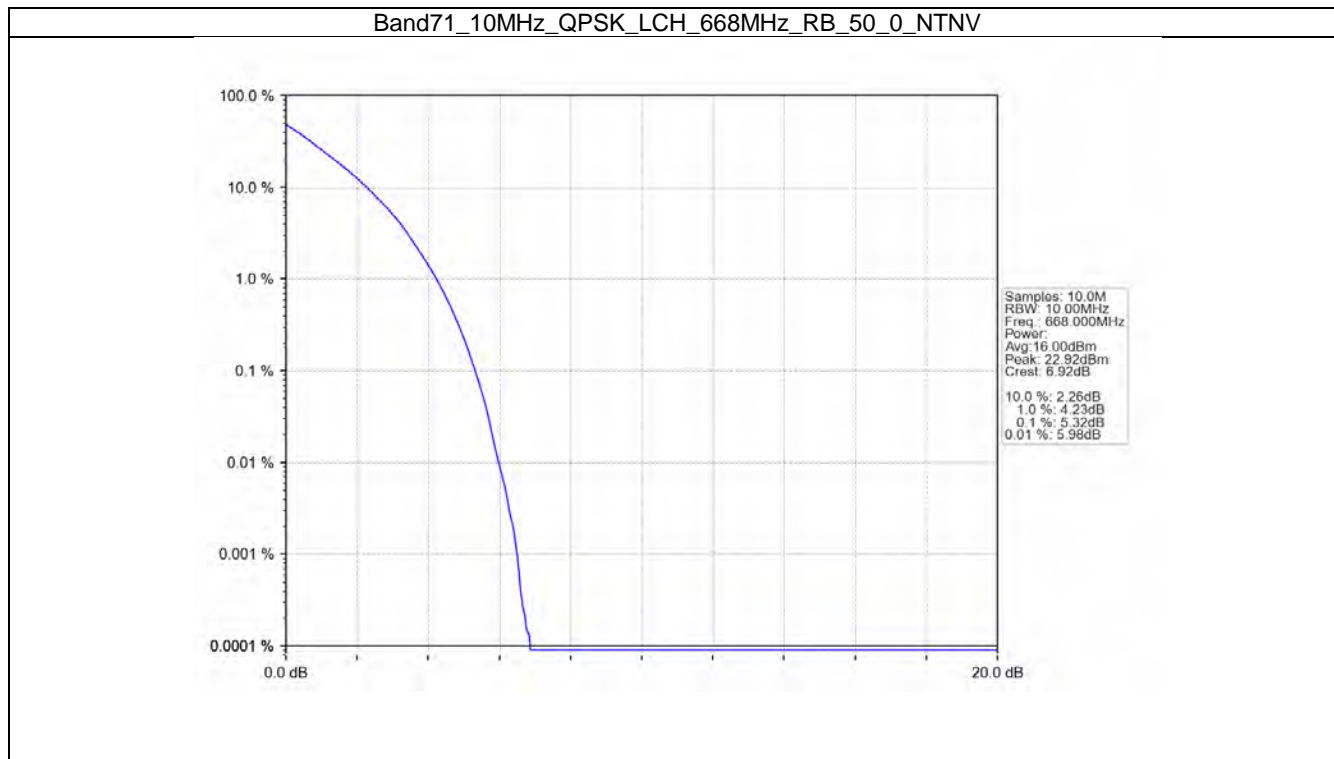
Band71\_5MHz\_16QAM\_MCH\_680.5MHz\_RB\_25\_0\_NTNV



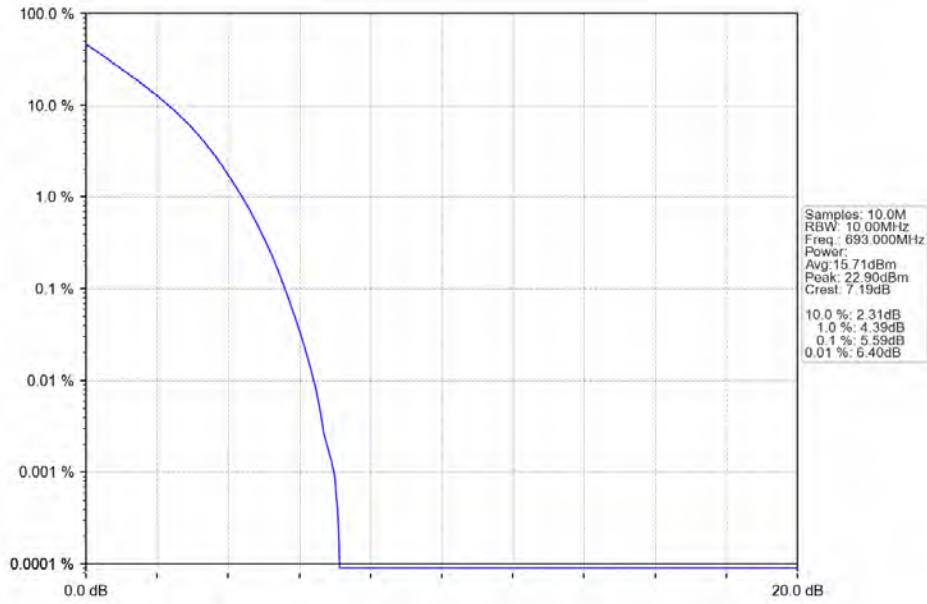
Band71\_5MHz\_16QAM\_HCH\_695.5MHz\_RB\_25\_0\_NTNV



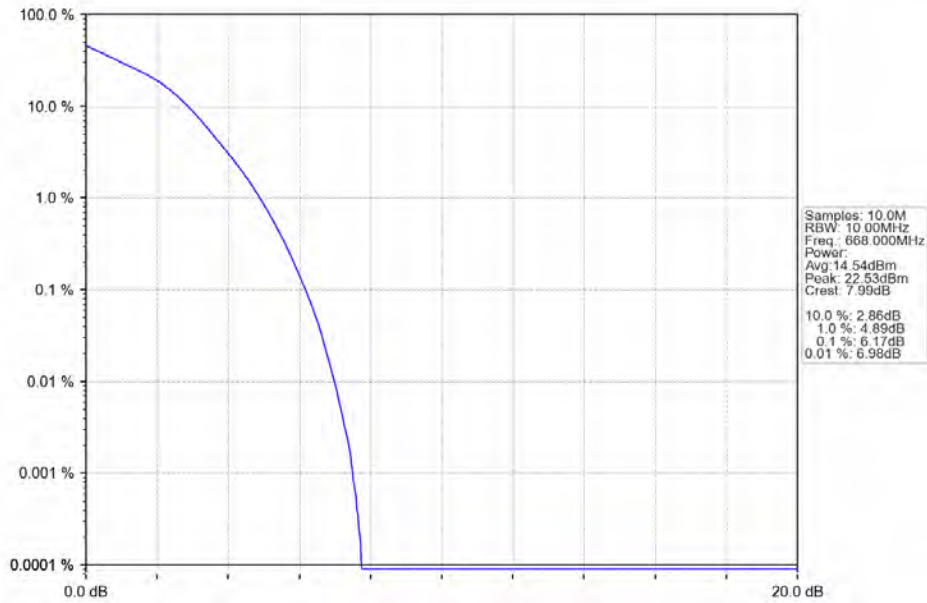
## 5.2.2 B71\_10MHz



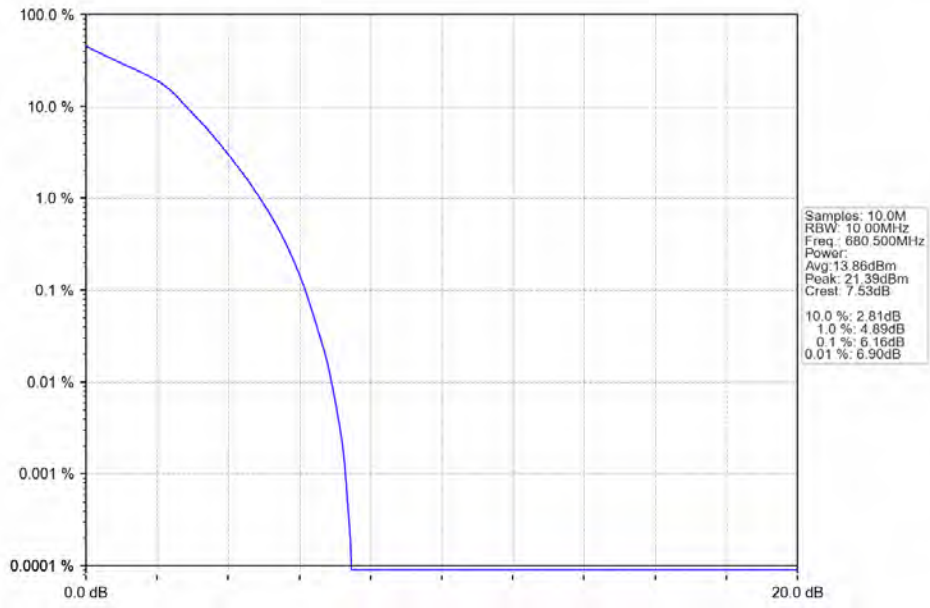
Band71\_10MHz\_QPSK\_HCH\_693MHz\_RB\_50\_0\_NTNV



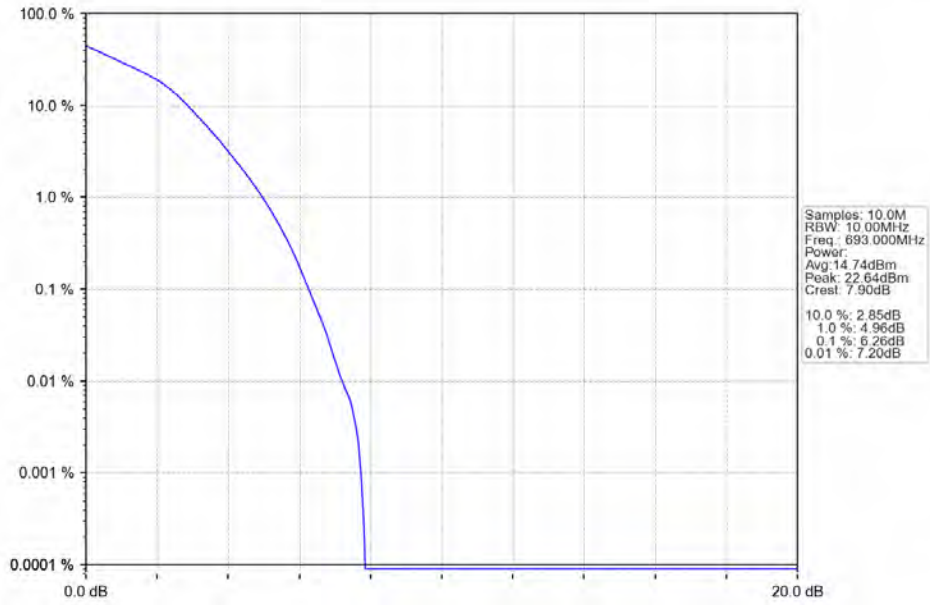
Band71\_10MHz\_16QAM\_LCH\_668MHz\_RB\_50\_0\_NTNV



Band71\_10MHz\_16QAM\_MCH\_680.5MHz\_RB\_50\_0\_NTNV

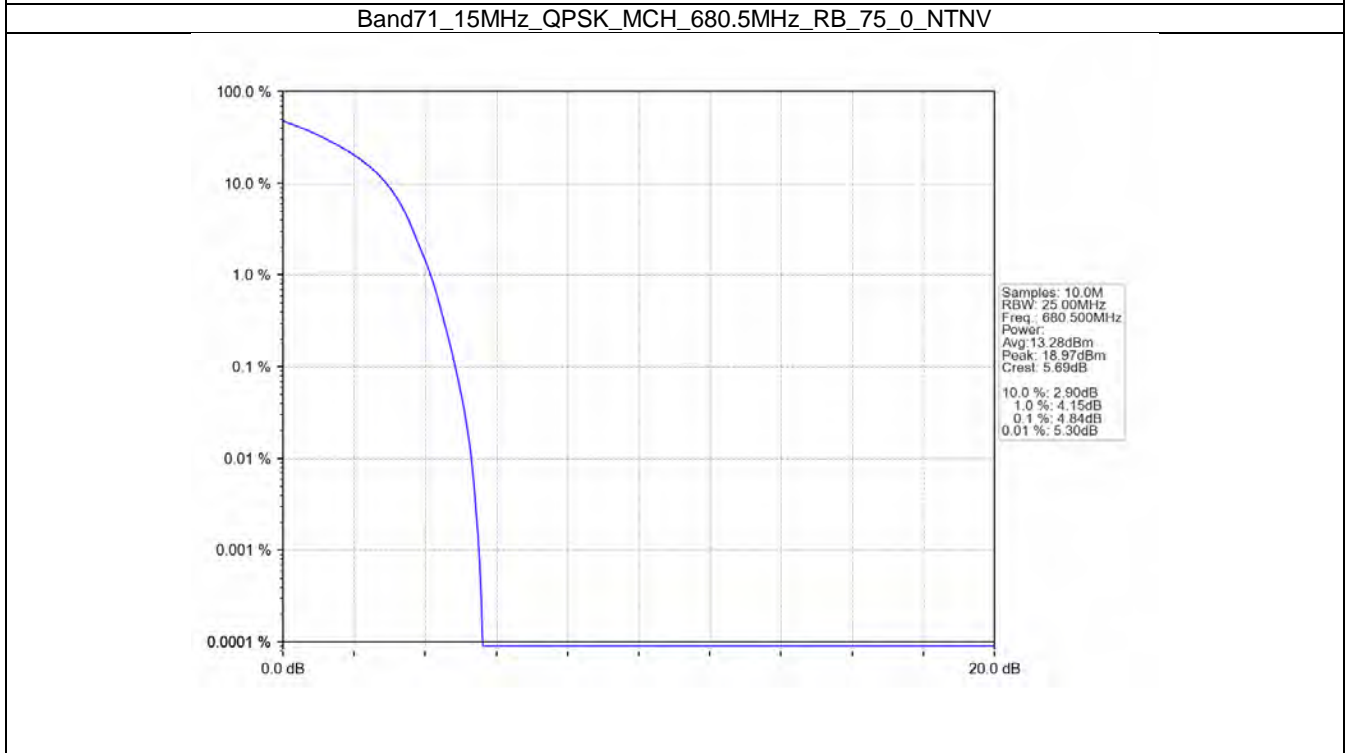
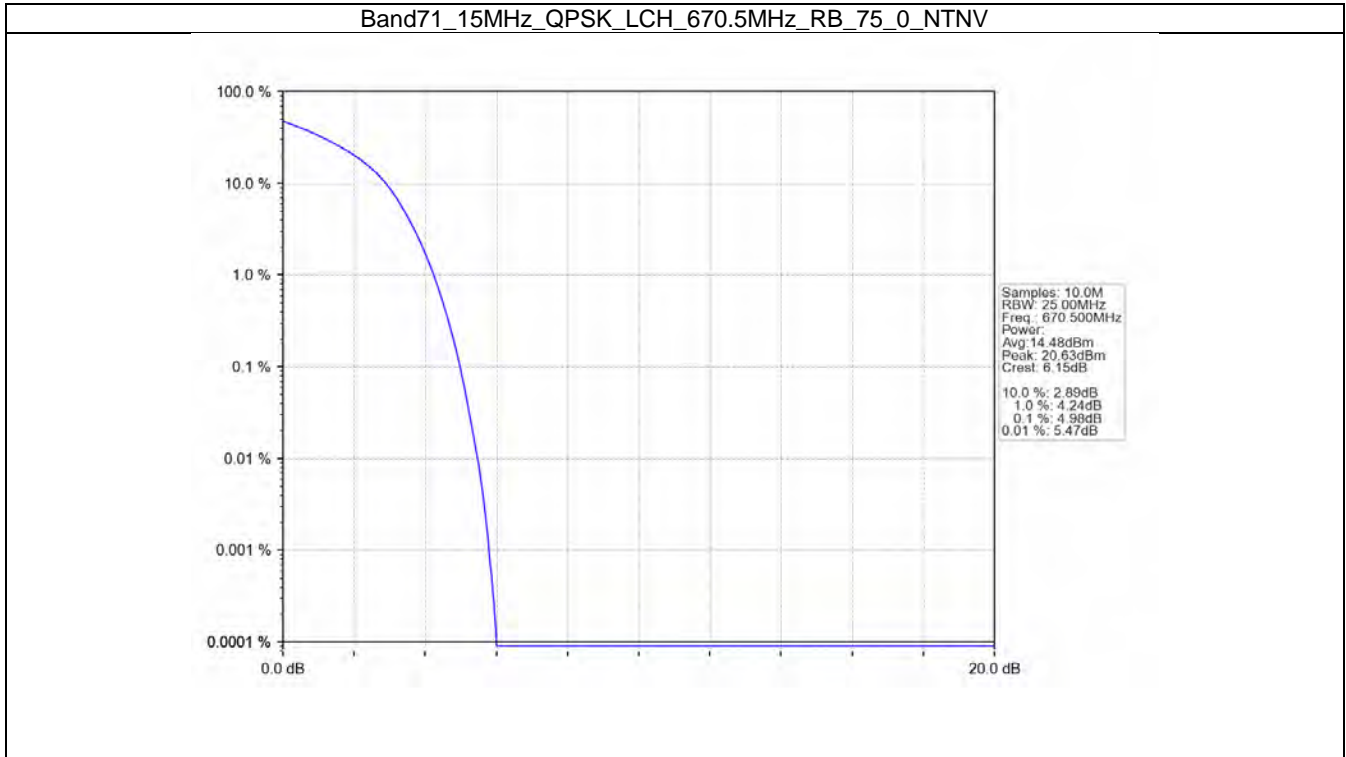


Band71\_10MHz\_16QAM\_HCH\_693MHz\_RB\_50\_0\_NTNV

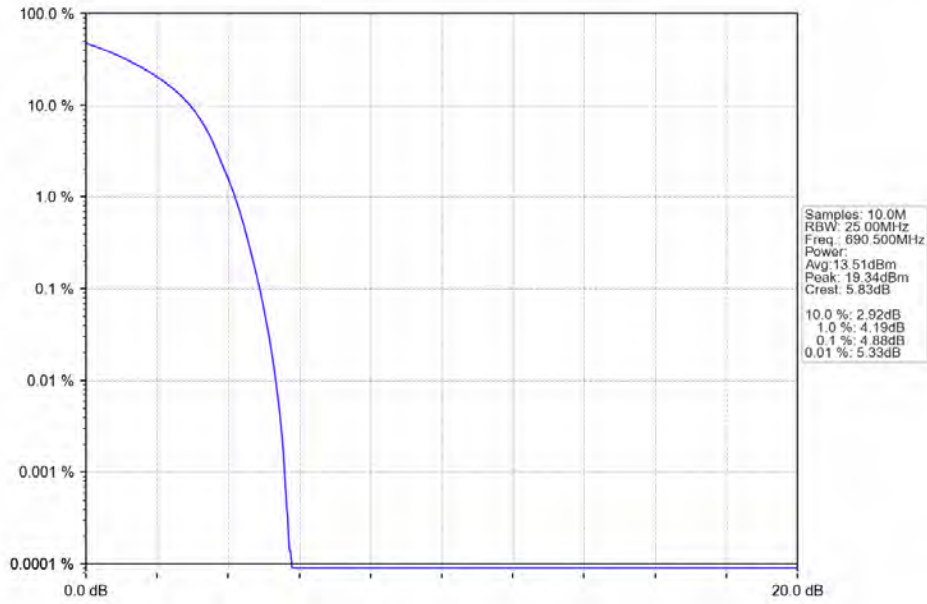




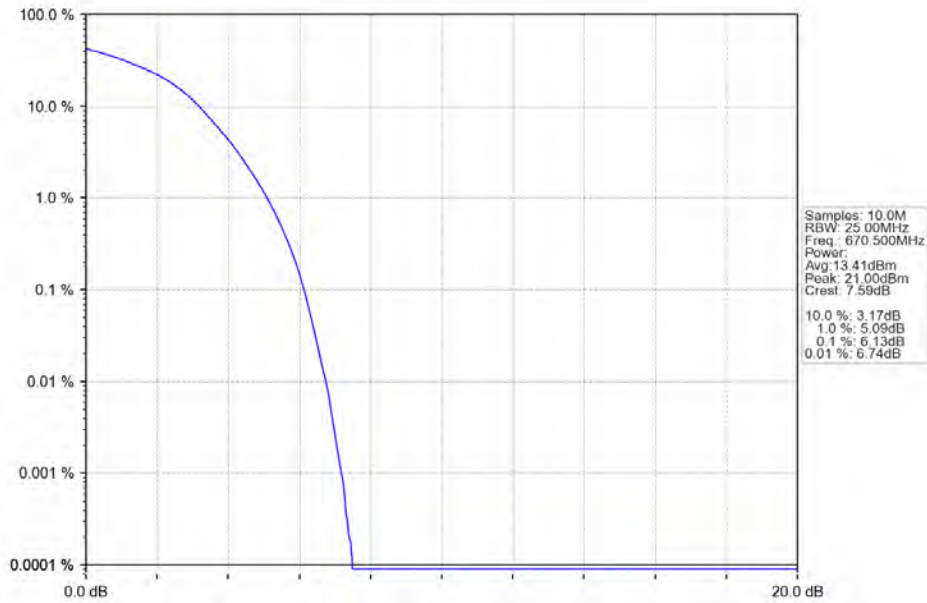
### 5.2.3 B71\_15MHz



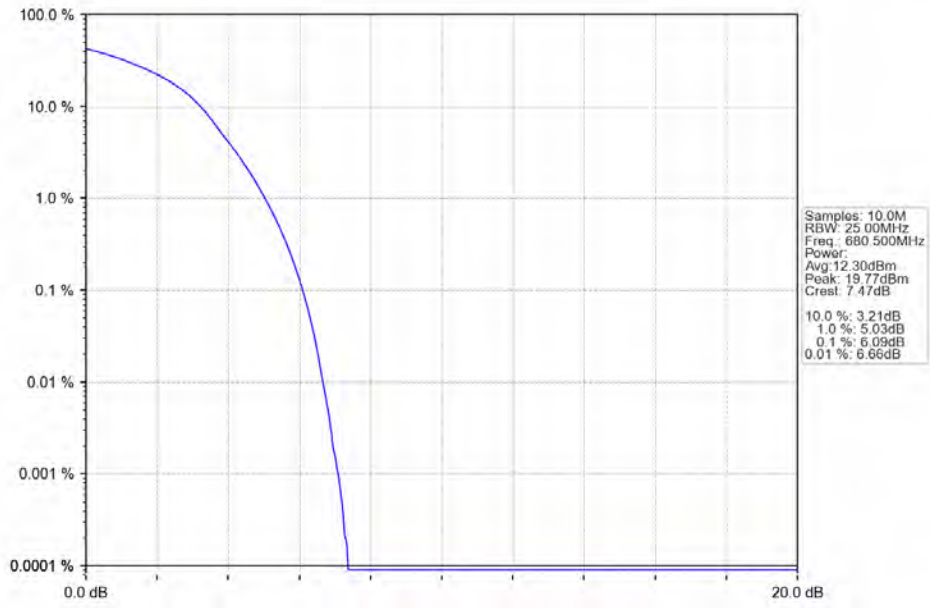
Band71\_15MHz\_QPSK\_HCH\_690.5MHz\_RB\_75\_0\_NTNV



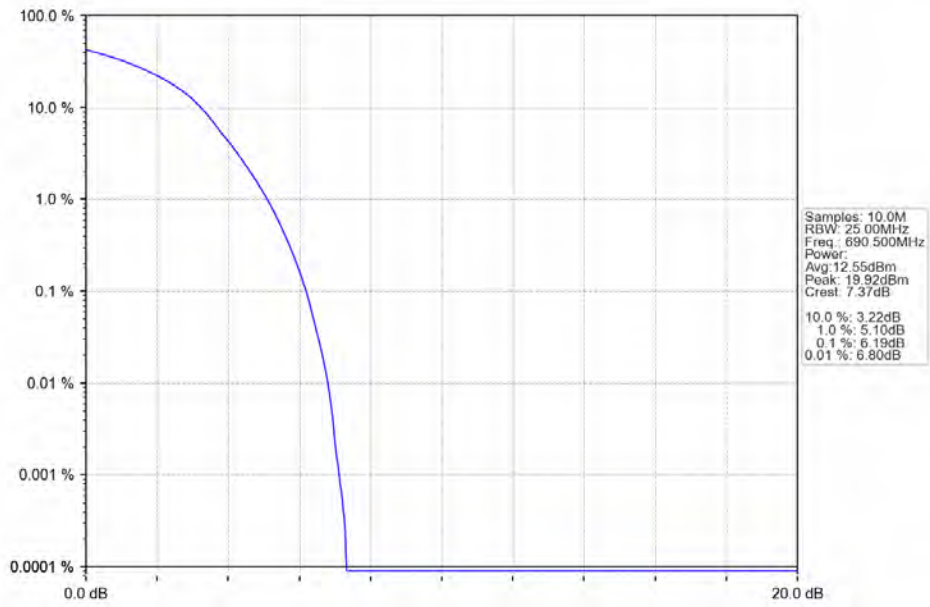
Band71\_15MHz\_16QAM\_LCH\_670.5MHz\_RB\_75\_0\_NTNV



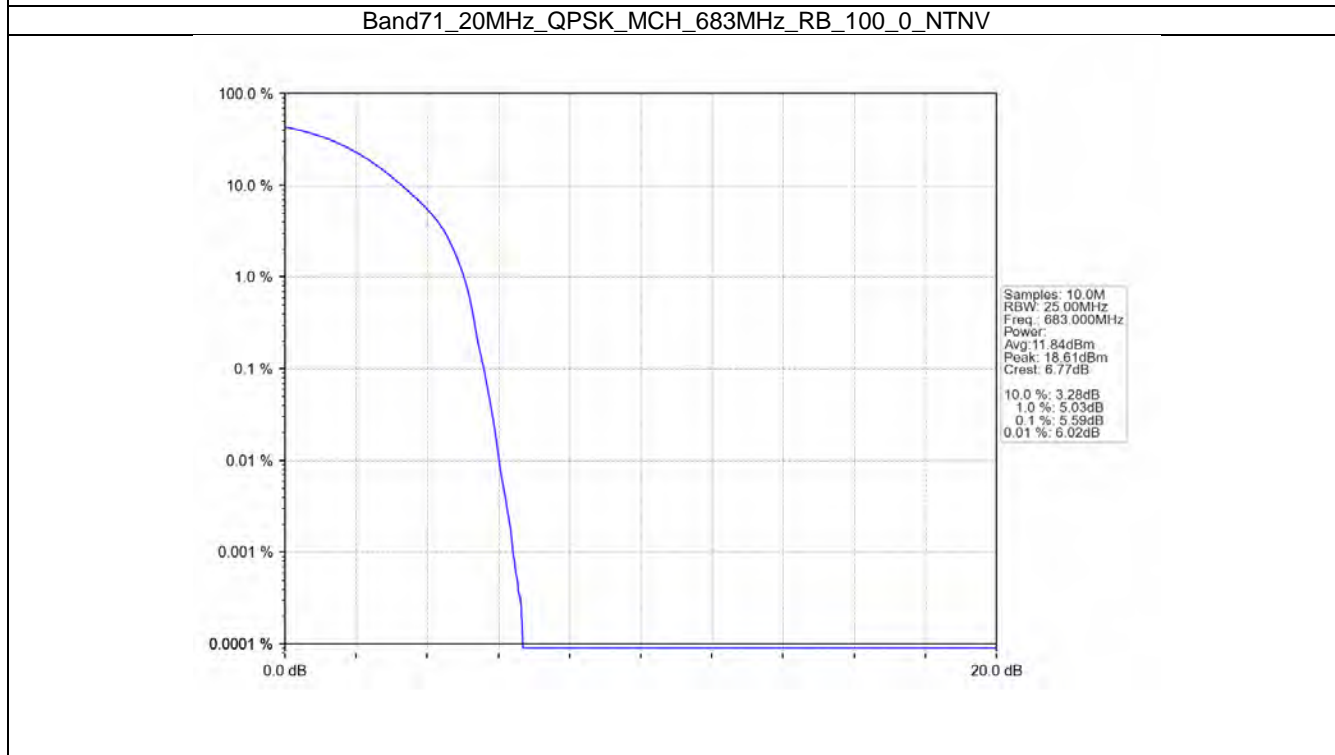
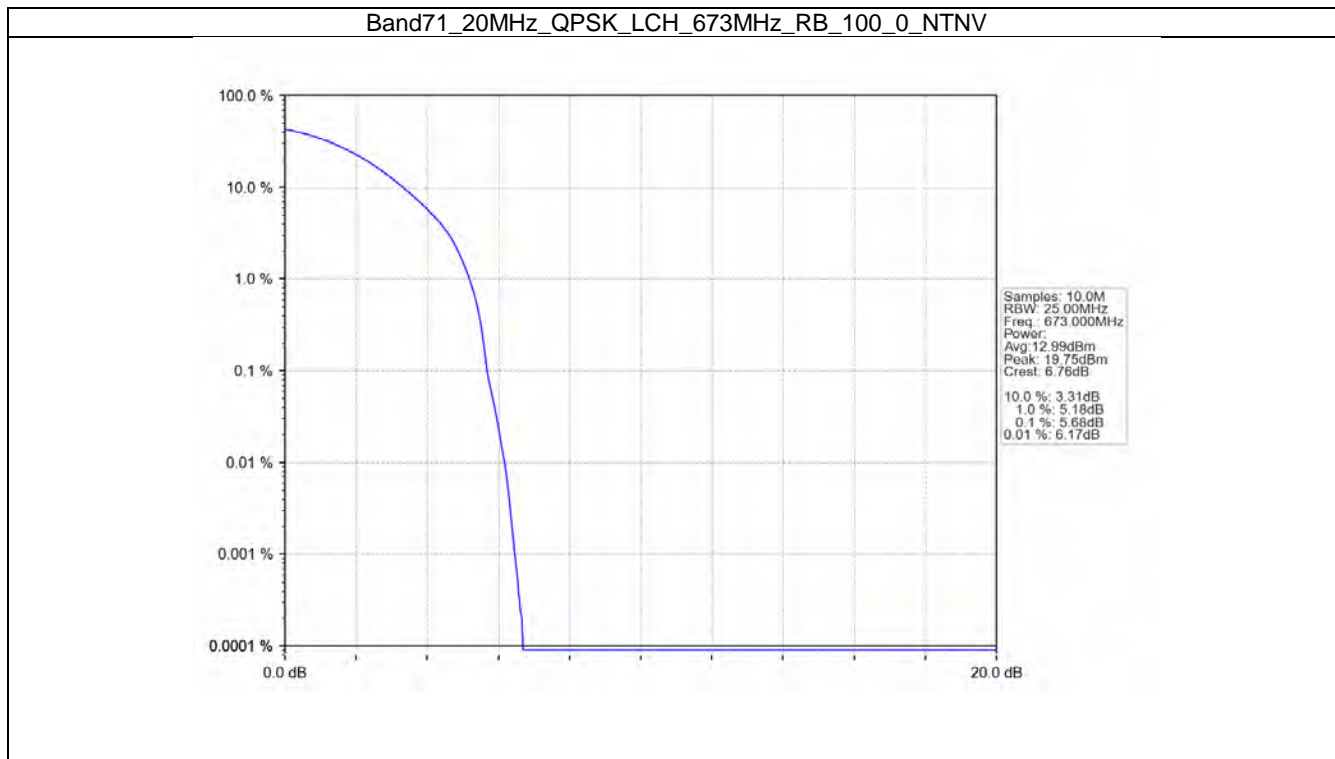
Band71\_15MHz\_16QAM\_MCH\_680.5MHz\_RB\_75\_0\_NTNV



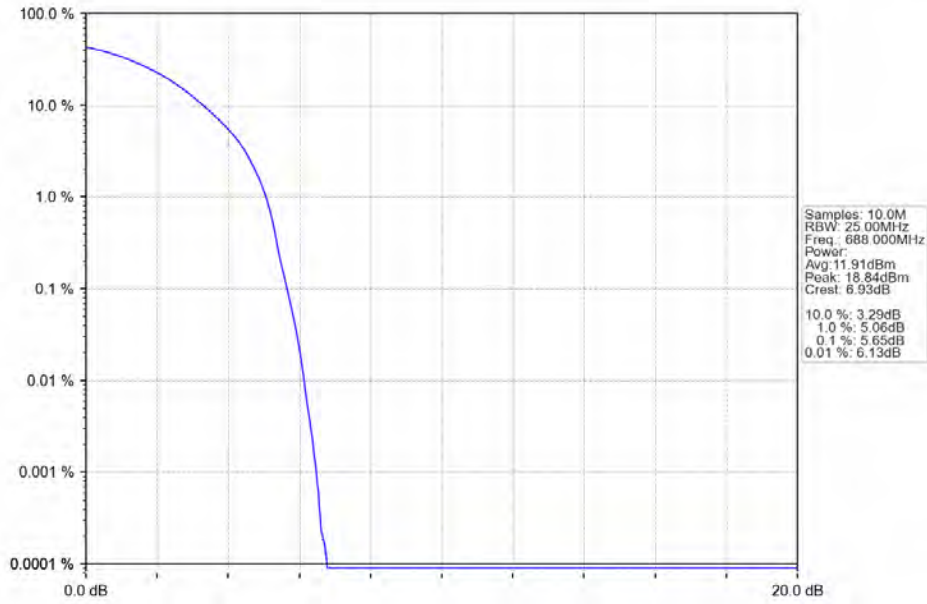
Band71\_15MHz\_16QAM\_HCH\_690.5MHz\_RB\_75\_0\_NTNV



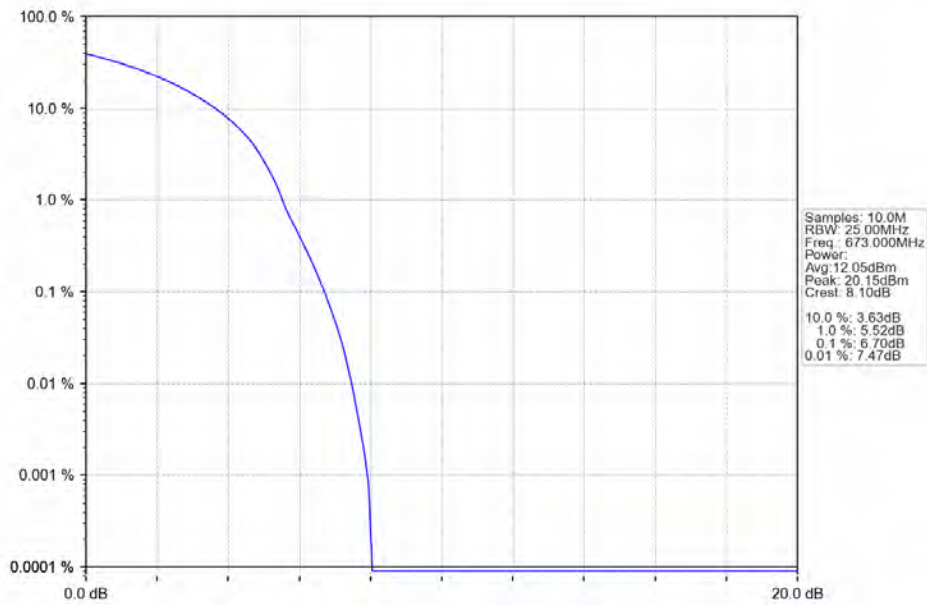
### 5.2.4 B71\_20MHz



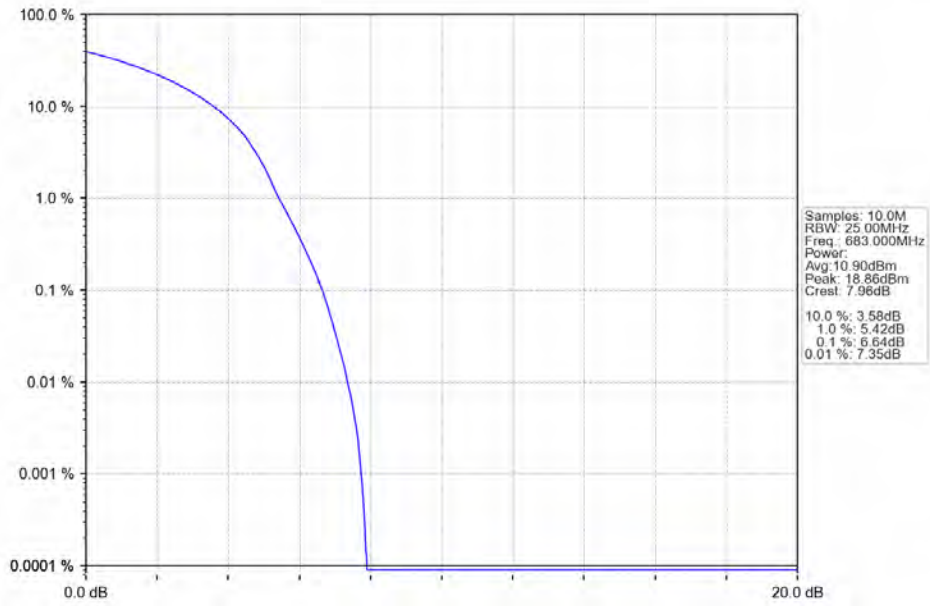
Band71\_20MHz\_QPSK\_HCH\_688MHz\_RB\_100\_0\_NTNV



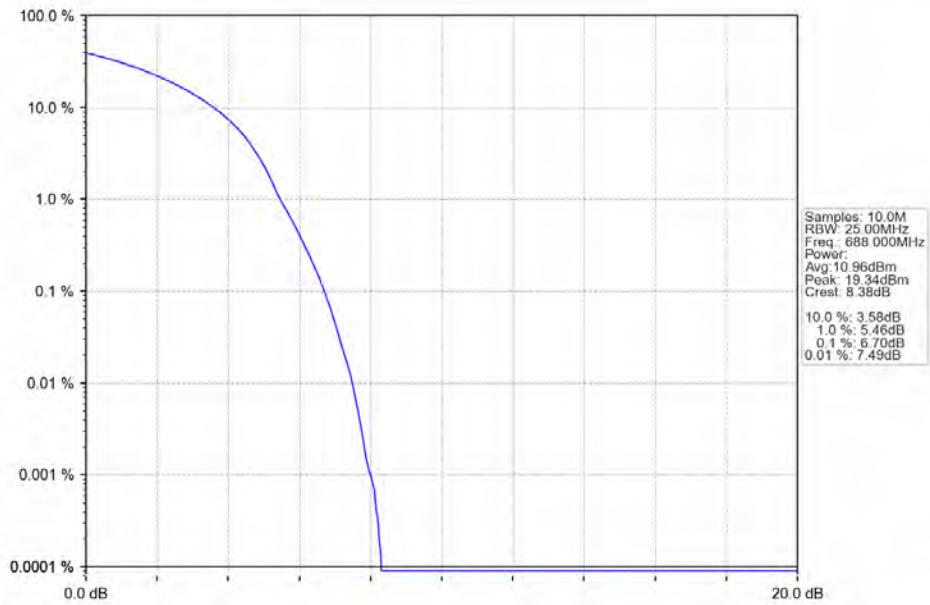
Band71\_20MHz\_16QAM\_LCH\_673MHz\_RB\_100\_0\_NTNV



Band71\_20MHz\_16QAM\_MCH\_683MHz\_RB\_100\_0\_NTNV



Band71\_20MHz\_16QAM\_HCH\_688MHz\_RB\_100\_0\_NTNV



## 6. Spurious Emission

### 6.1 Test Result

#### 6.1.1 B71\_5MHz

Band: 71 / Bandwidth: 5MHz / NTV						
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission		Verdict
		Size	Offset	Result	Limit	
QPSK	665.5	1	0	Refer To Test Graph		Pass
		25	0	Refer To Test Graph		Pass
	695.5	1	0	Refer To Test Graph		Pass
		25	0	Refer To Test Graph		Pass
			24	Refer To Test Graph		Pass
16QAM	665.5	1	0	Refer To Test Graph		Pass
		25	0	Refer To Test Graph		Pass
	695.5	1	0	Refer To Test Graph		Pass
		25	0	Refer To Test Graph		Pass
	680.5		1	0	Refer To Test Graph	
		1	24	Refer To Test Graph		Pass

#### 6.1.2 B71\_10MHz

Band: 71 / Bandwidth: 10MHz / NTV						
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission		Verdict
		Size	Offset	Result	Limit	
QPSK	668	1	0	Refer To Test Graph		Pass
		50	0	Refer To Test Graph		Pass
	693	1	0	Refer To Test Graph		Pass
		50	0	Refer To Test Graph		Pass
			49	Refer To Test Graph		Pass
16QAM	668	1	0	Refer To Test Graph		Pass
		50	0	Refer To Test Graph		Pass
	693	1	0	Refer To Test Graph		Pass
		50	0	Refer To Test Graph		Pass
	680.5		1	0	Refer To Test Graph	
		1	49	Refer To Test Graph		Pass

#### 6.1.3 B71\_15MHz

Band: 71 / Bandwidth: 15MHz / NTV						
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission		Verdict
		Size	Offset	Result	Limit	
QPSK	670.5	1	0	Refer To Test Graph		Pass
		75	0	Refer To Test Graph		Pass
	690.5	1	0	Refer To Test Graph		Pass
		75	0	Refer To Test Graph		Pass
			74	Refer To Test Graph		Pass
16QAM	670.5	1	0	Refer To Test Graph		Pass

		75	0	Refer To Test Graph	Pass
	680.5	1	0	Refer To Test Graph	Pass
	690.5	1	0	Refer To Test Graph	Pass
			74	Refer To Test Graph	Pass
		75	0	Refer To Test Graph	Pass

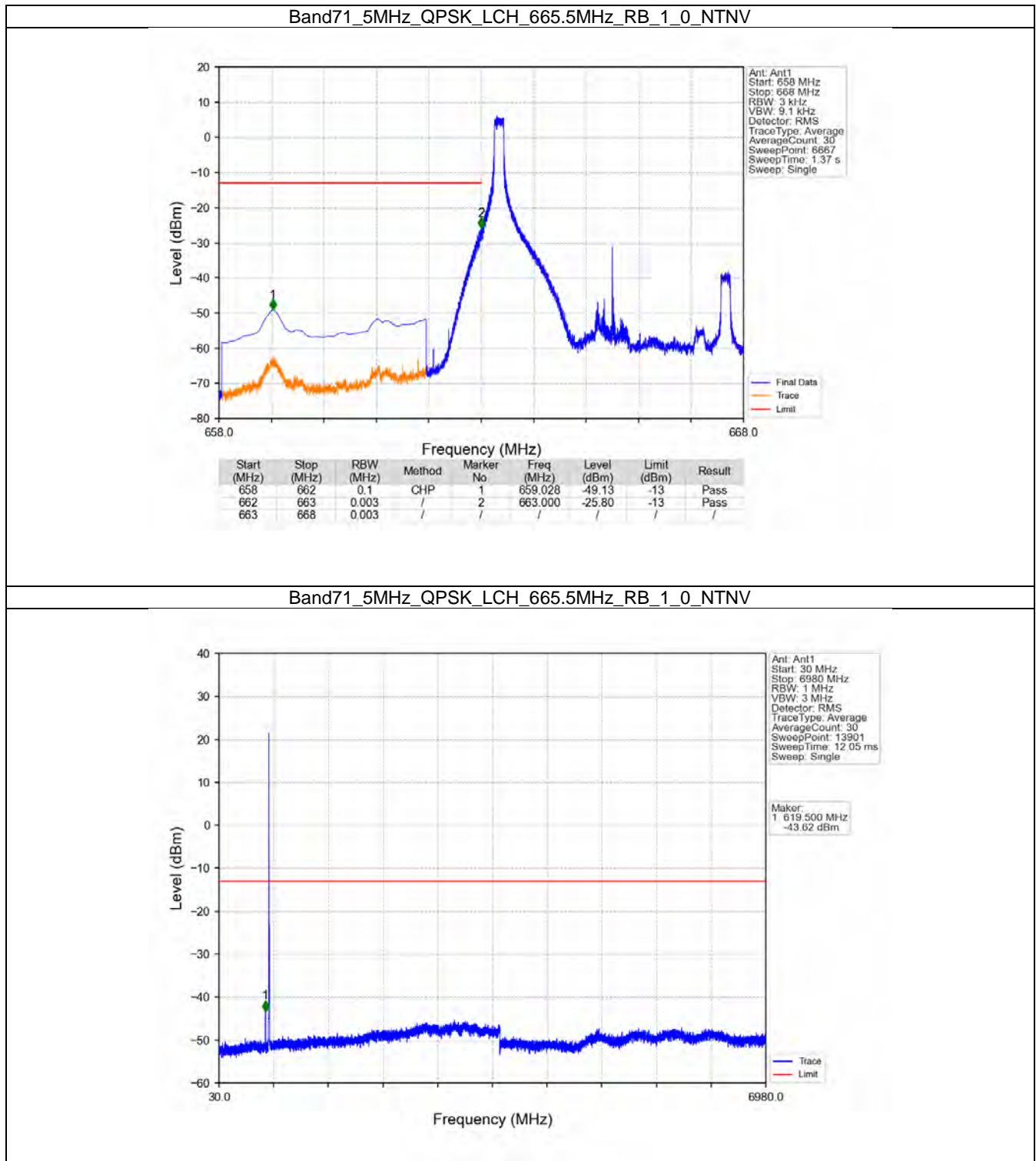
#### 6.1.4 B71\_20MHz

Band: 71 / Bandwidth: 20MHz / NTV						
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission		Verdict
		Size	Offset	Result	Limit	
QPSK	673	1	0	Refer To Test Graph	Pass	
		100	0	Refer To Test Graph	Pass	
	688	1	0	Refer To Test Graph	Pass	
		1	99	Refer To Test Graph	Pass	
			100	0	Refer To Test Graph	Pass
16QAM	673	1	0	Refer To Test Graph	Pass	
		100	0	Refer To Test Graph	Pass	
	688	1	0	Refer To Test Graph	Pass	
		1	99	Refer To Test Graph	Pass	
			100	0	Refer To Test Graph	Pass

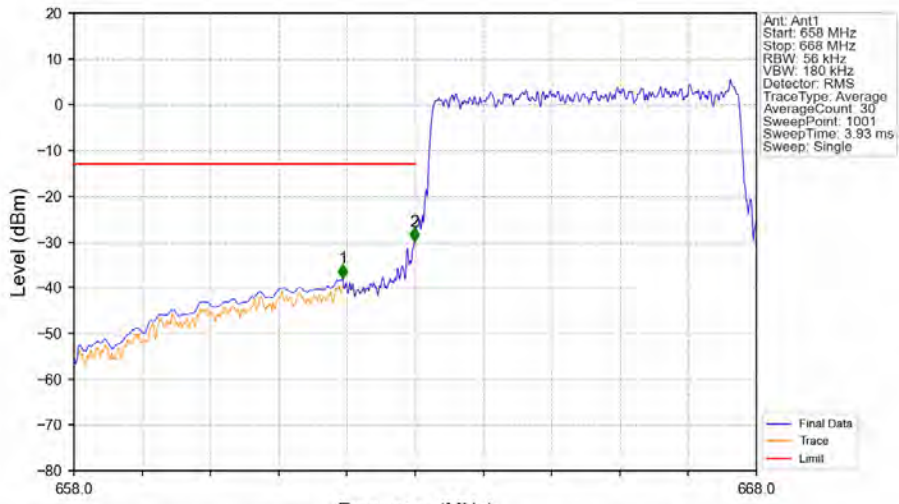


## 6.2 Test Graph

### 6.2.1 B71\_5MHz

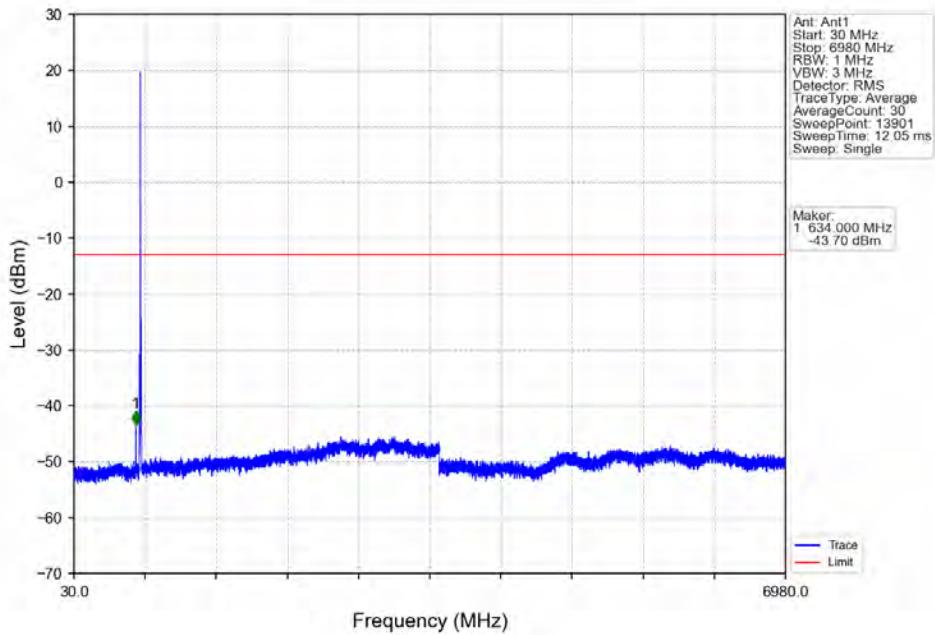


Band71\_5MHz\_QPSK\_LCH\_665.5MHz\_RB\_25\_0\_NTNV



Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
658	662	0.1	CHP	1	661.940	-37.95	-13	Pass
662	663	0.056	/	2	662.990	-29.86	-13	Pass
663	668	0.056	/	/	/	/	/	/

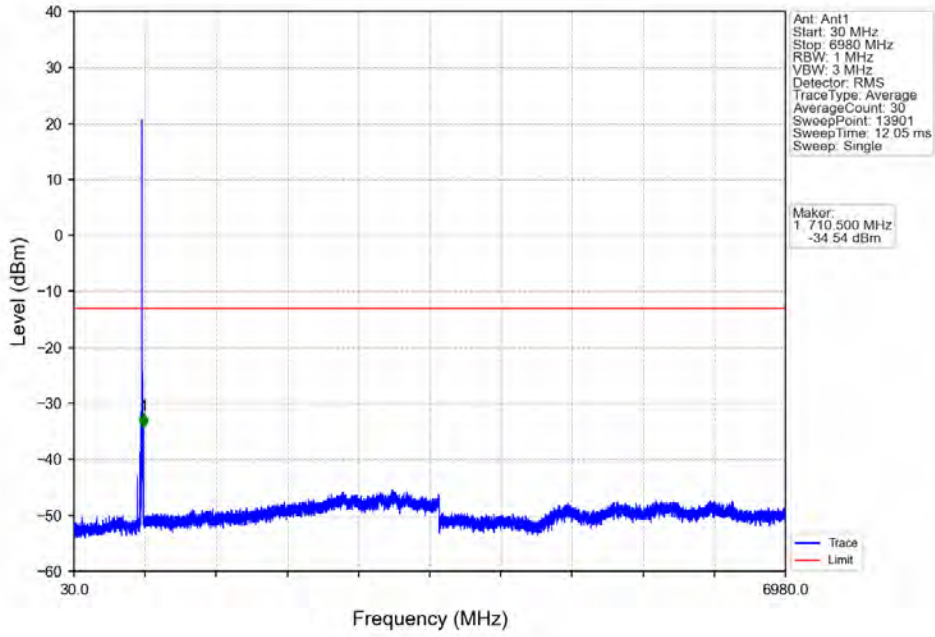
Band71\_5MHz\_QPSK\_MCH\_680.5MHz\_RB\_1\_0\_NTNV



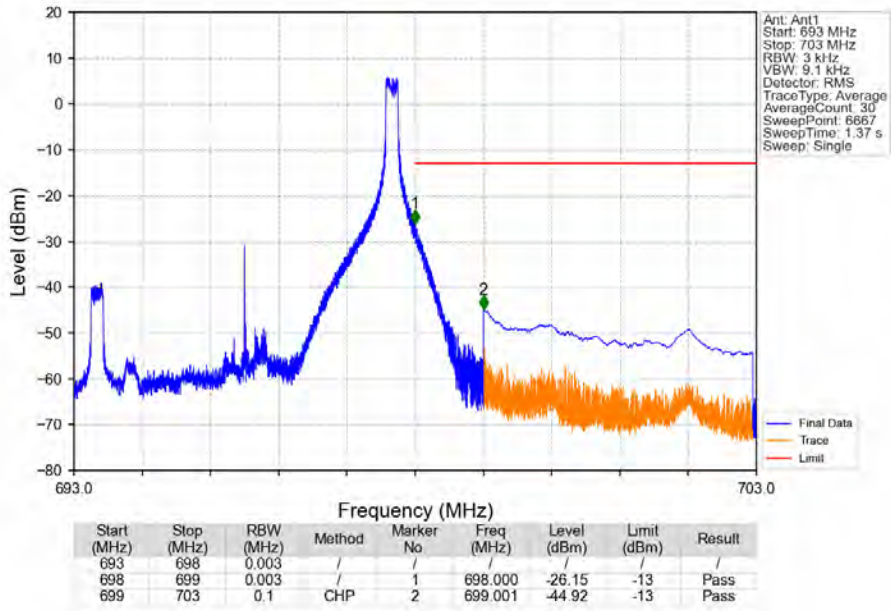
Ant: Ant1  
 Start: 30 MHz  
 Stop: 6980 MHz  
 RBW: 1 MHz  
 VBW: 3 MHz  
 Detector: RMS  
 Trace Type: Average  
 Average Count: 30  
 Sweep Point: 13901  
 Sweep Time: 12.05 ms  
 Sweep: Single

Marker  
 1 634.000 MHz  
 -43.70 dBm

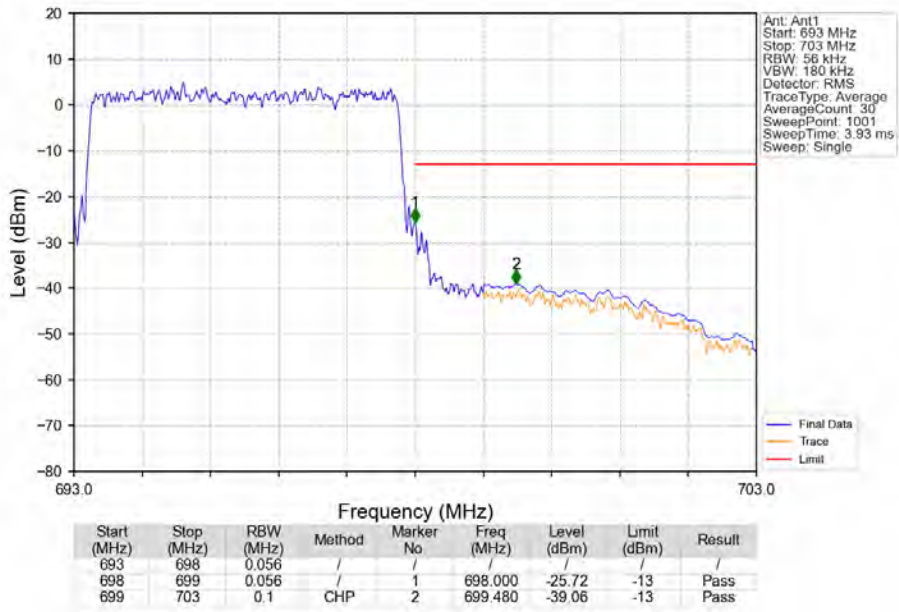
Band71\_5MHz\_QPSK\_HCH\_695.5MHz\_RB\_1\_0\_NTNV



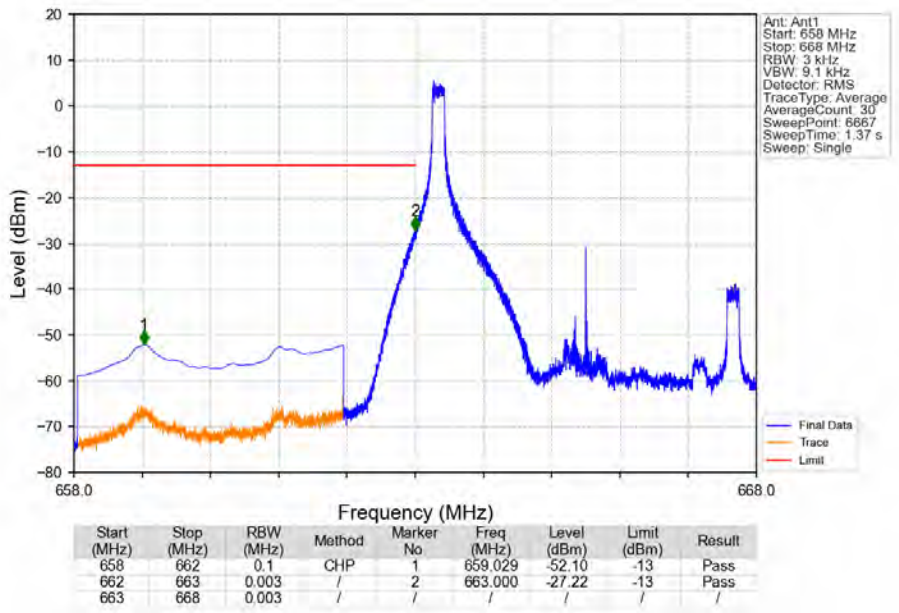
Band71\_5MHz\_QPSK\_HCH\_695.5MHz\_RB\_1\_24\_NTNV



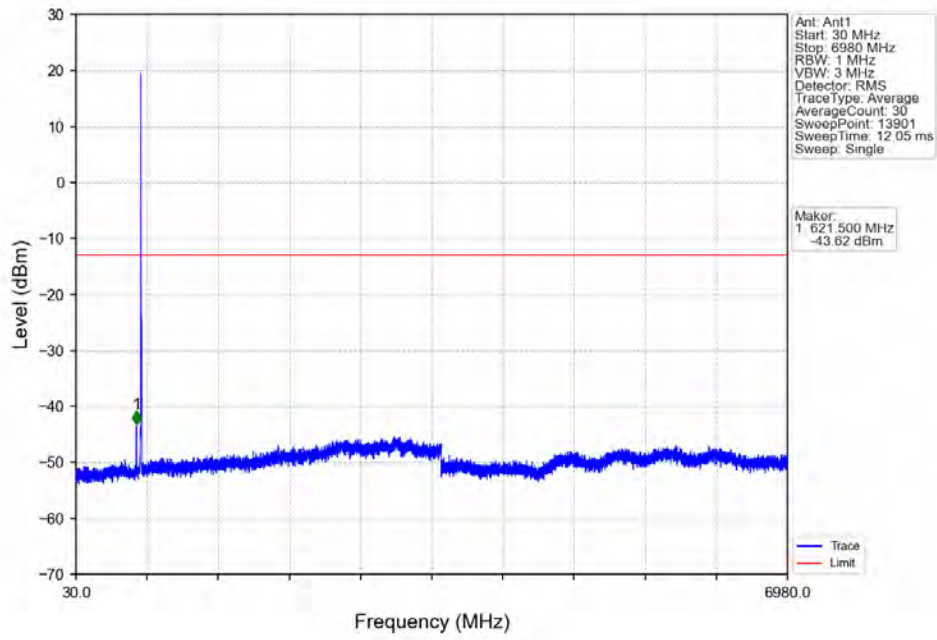
Band71\_5MHz\_QPSK\_HCH\_695.5MHz\_RB\_25\_0\_NTNV



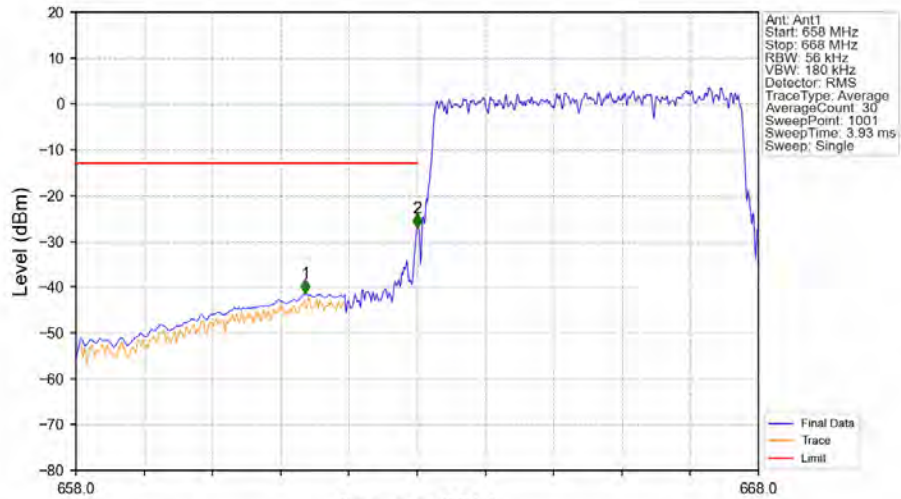
Band71\_5MHz\_16QAM\_LCH\_665.5MHz\_RB\_1\_0\_NTNV



Band71\_5MHz\_16QAM\_LCH\_665.5MHz\_RB\_1\_0\_NTNV



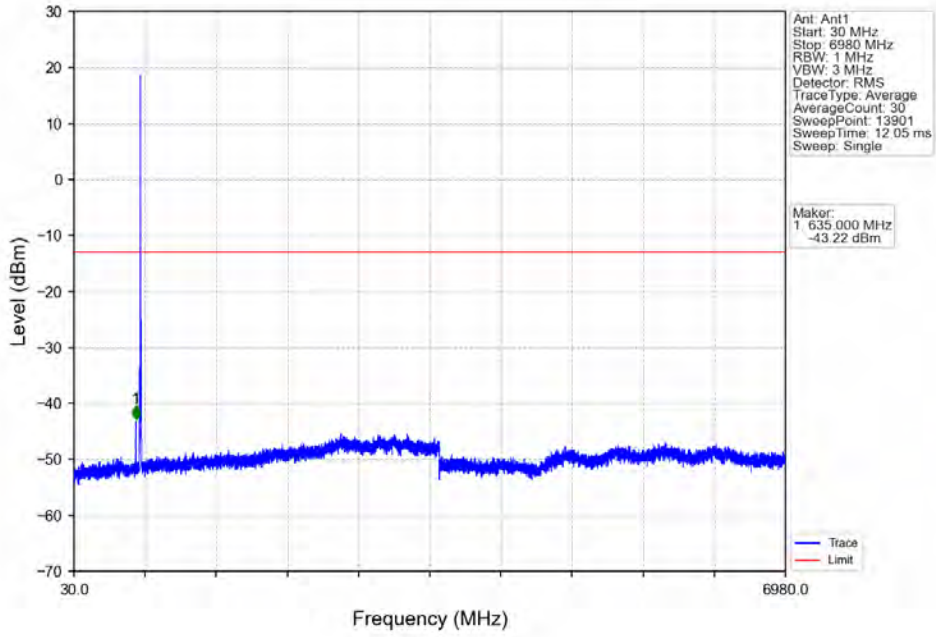
Band71\_5MHz\_16QAM\_LCH\_665.5MHz\_RB\_25\_0\_NTNV



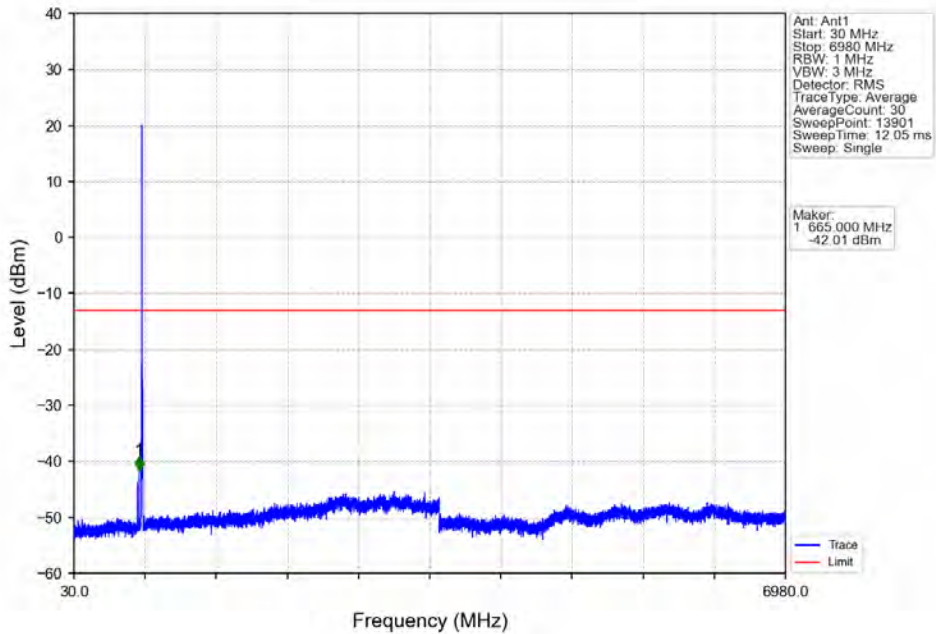
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
658	662	0.1	CHP	1	661.360	-41.45	-13	Pass
662	663	0.056	/	2	663.000	-27.05	-13	Pass
663	668	0.056	/	/	/	/	/	/



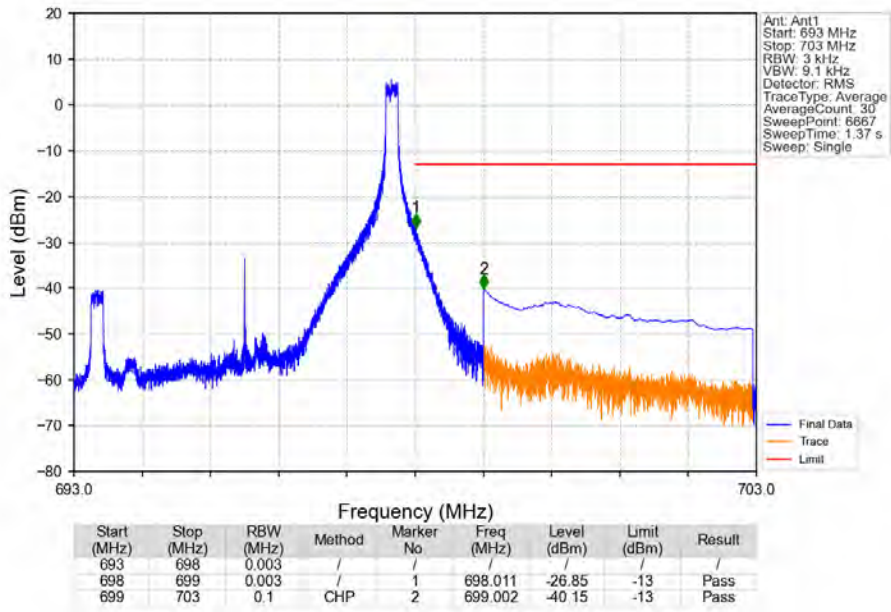
Band71\_5MHz\_16QAM\_MCH\_680.5MHz\_RB\_1\_0\_NTNV



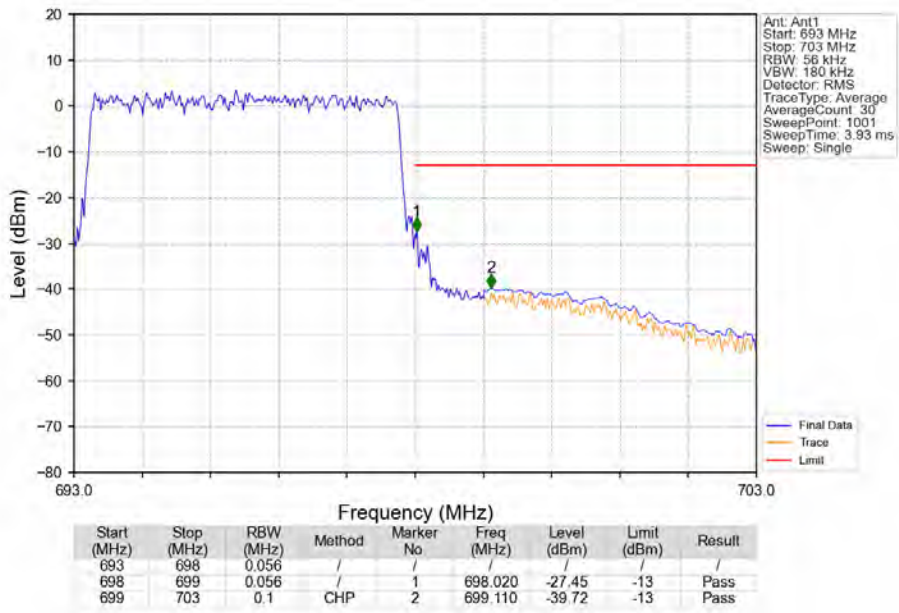
Band71\_5MHz\_16QAM\_HCH\_695.5MHz\_RB\_1\_0\_NTNV



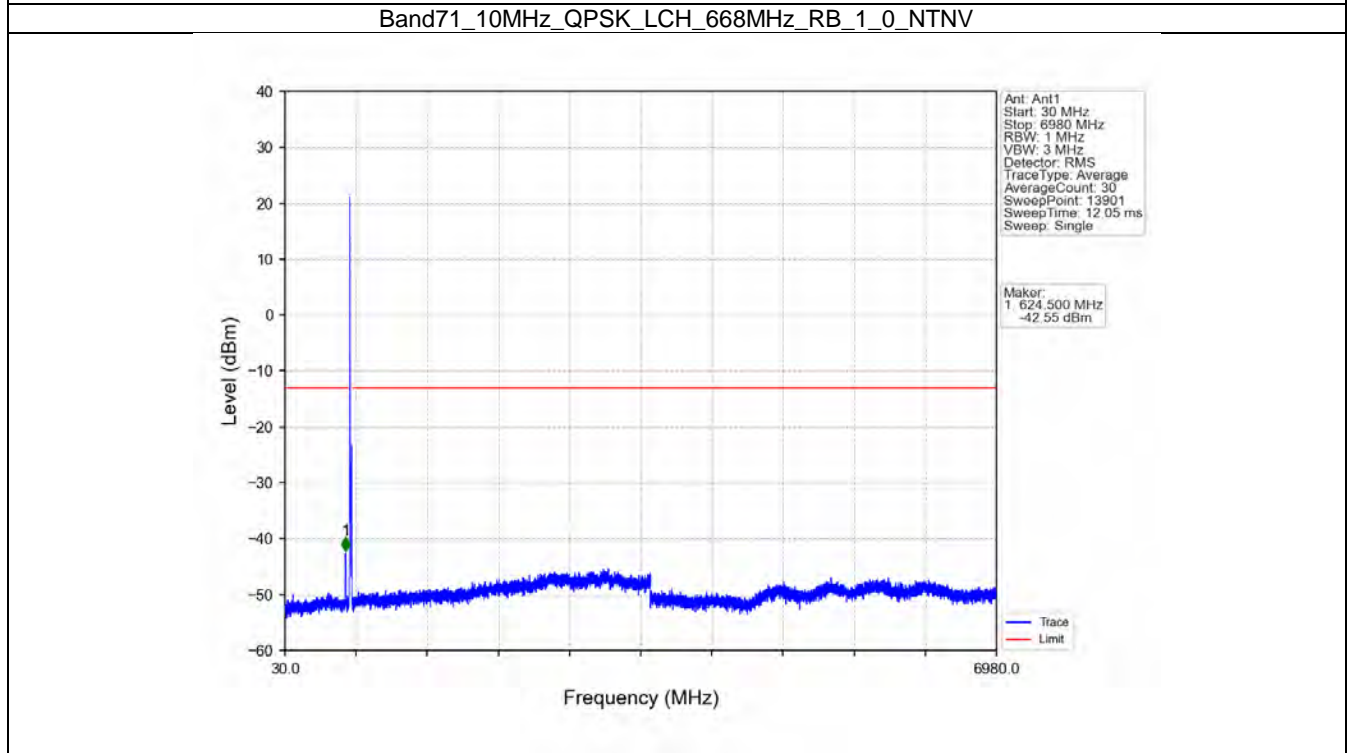
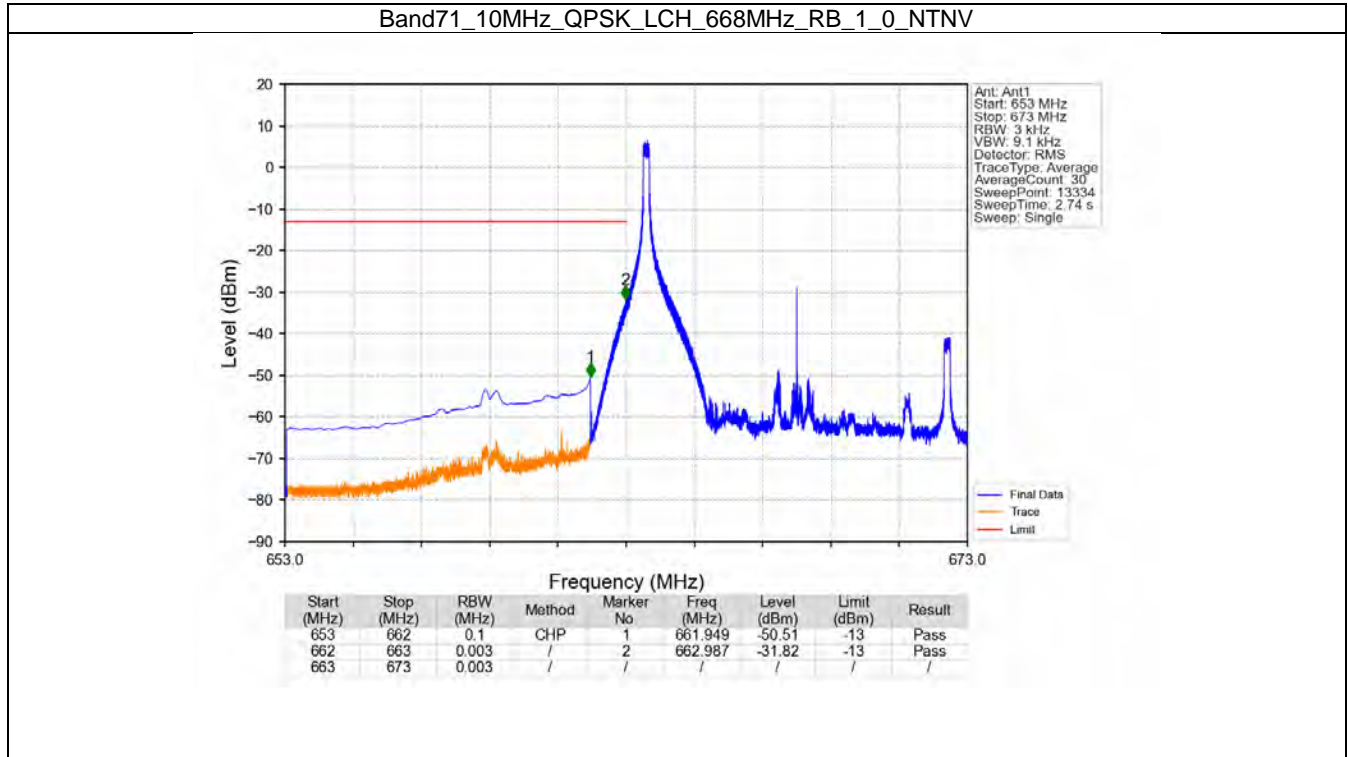
Band71\_5MHz\_16QAM\_HCH\_695.5MHz\_RB\_1\_24\_NTNV



Band71\_5MHz\_16QAM\_HCH\_695.5MHz\_RB\_25\_0\_NTNV

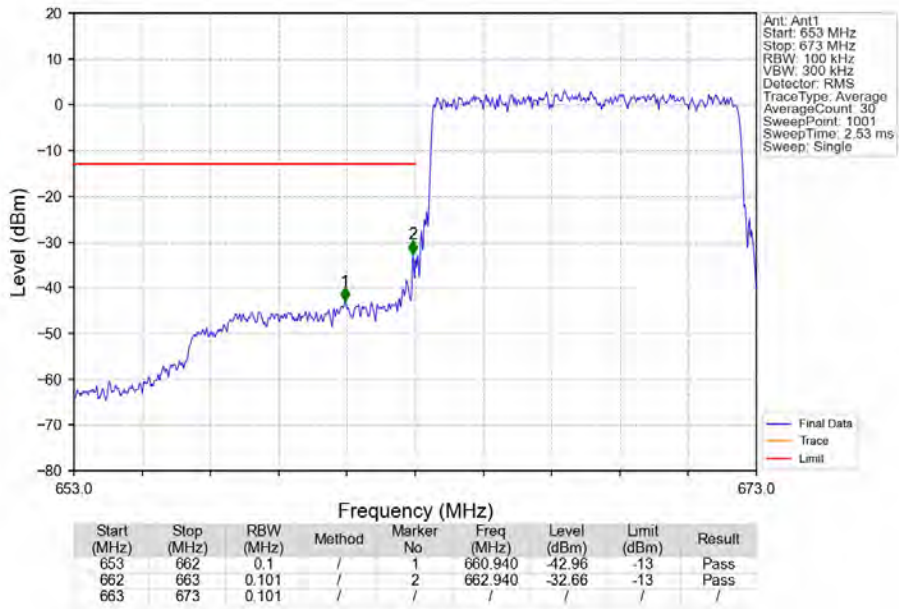


### 6.2.2 B71\_10MHz

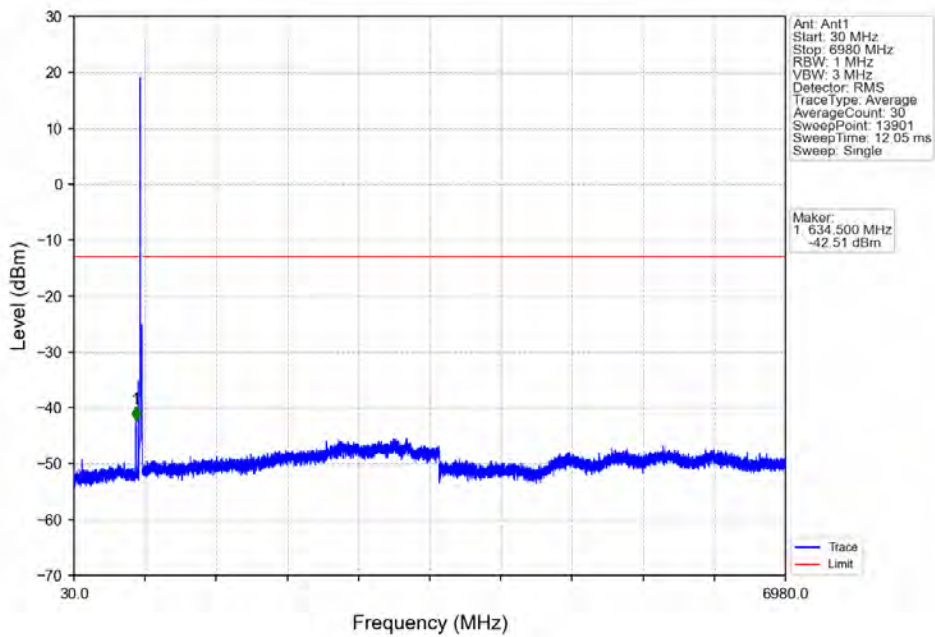




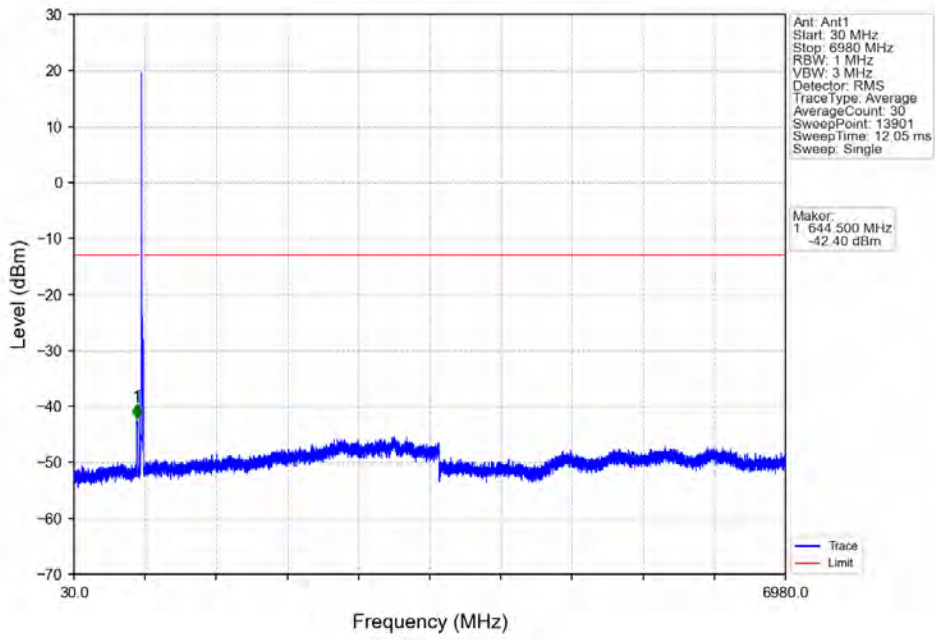
Band71\_10MHz\_QPSK\_LCH\_668MHz\_RB\_50\_0\_NTNV



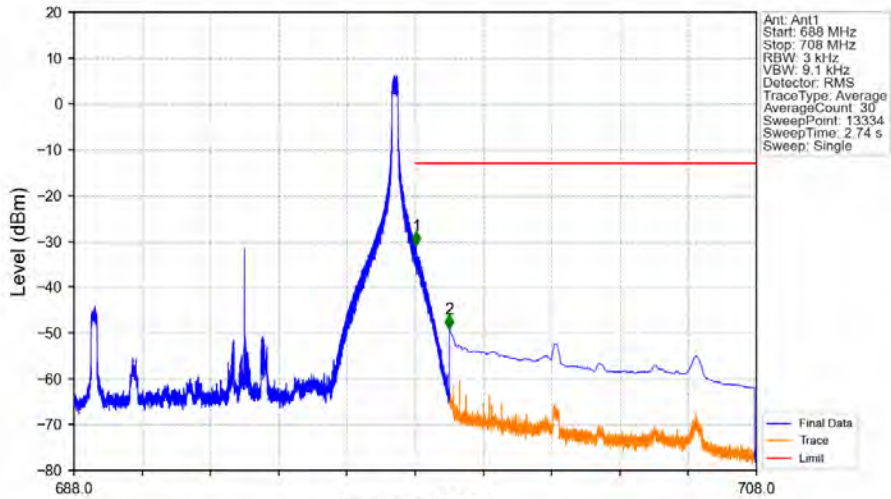
Band71\_10MHz\_QPSK\_MCH\_680.5MHz\_RB\_1\_0\_NTNV



Band71\_10MHz\_QPSK\_HCH\_693MHz\_RB\_1\_0\_NTNV

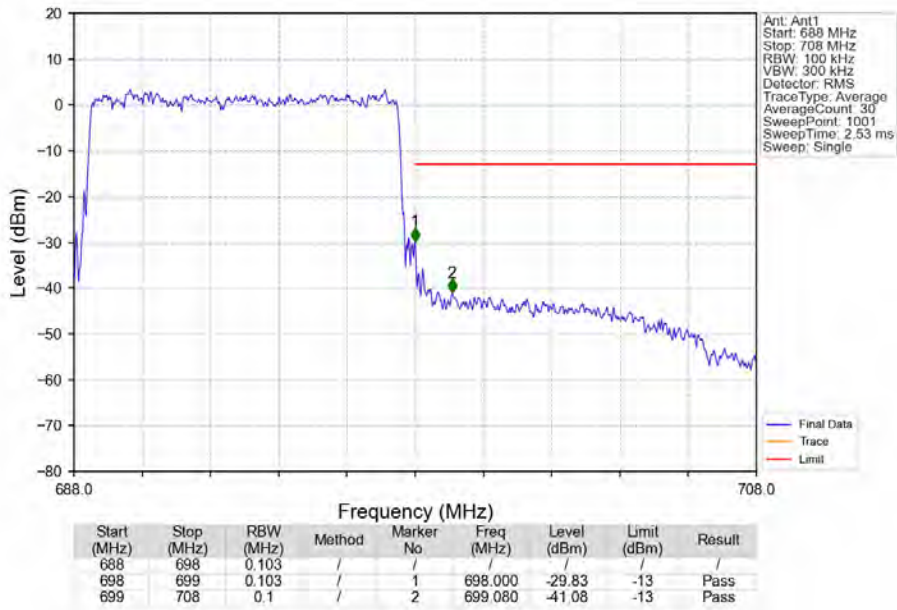


Band71\_10MHz\_QPSK\_HCH\_693MHz\_RB\_1\_49\_NTNV

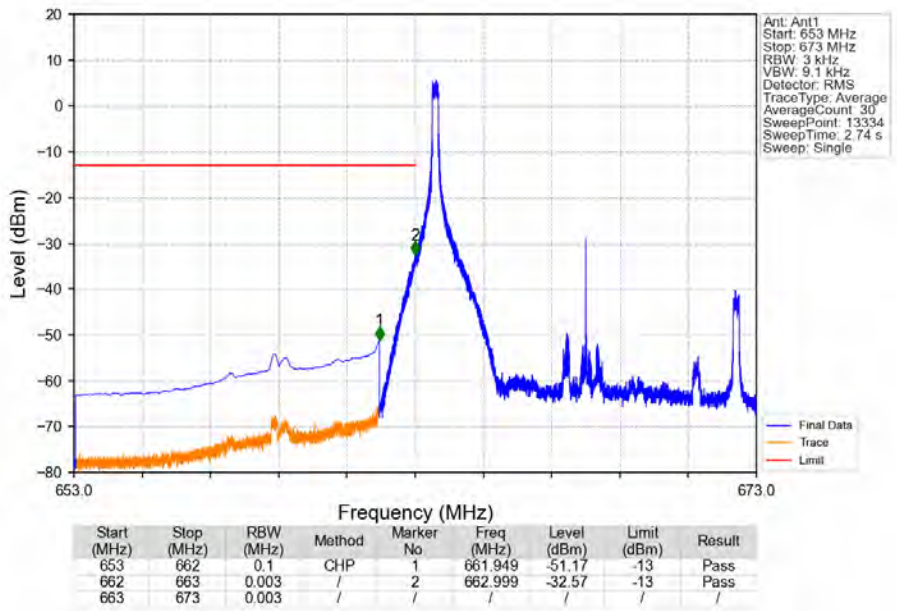


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
688	698	0.003	/	1	698.028	-31.01	-13	Pass
698	699	0.003	/	2	699.001	-49.12	-13	Pass
699	708	0.1	CHP					

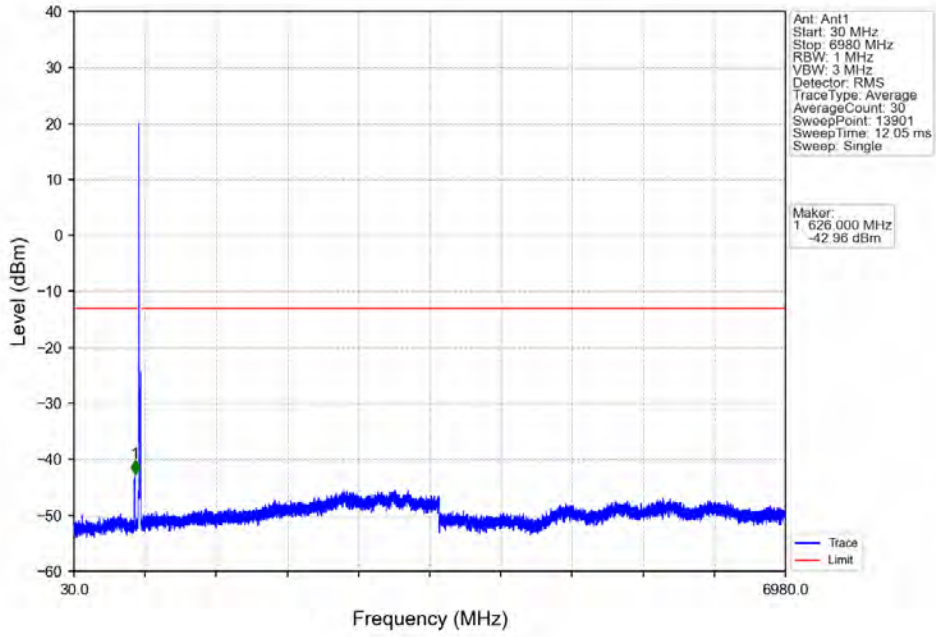
Band71\_10MHz\_QPSK\_HCH\_693MHz\_RB\_50\_0\_NTNV



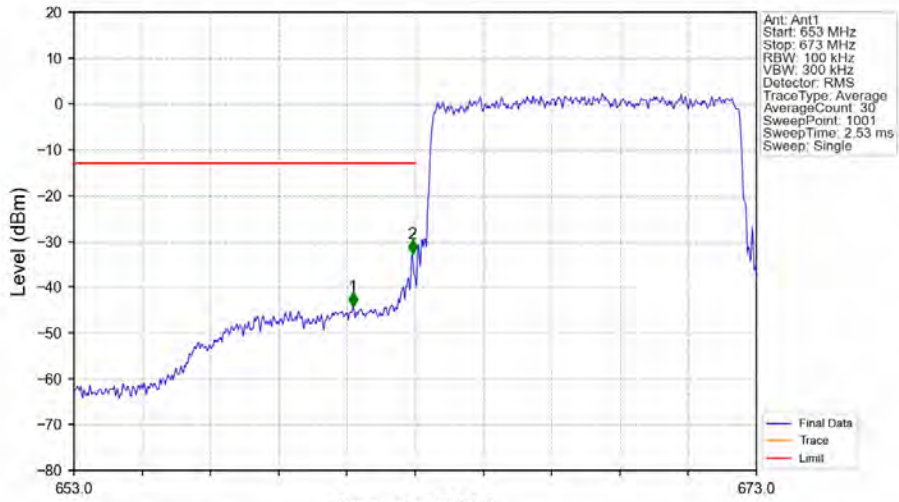
Band71\_10MHz\_16QAM\_LCH\_668MHz\_RB\_1\_0\_NTNV



Band71\_10MHz\_16QAM\_LCH\_668MHz\_RB\_1\_0\_NTNV

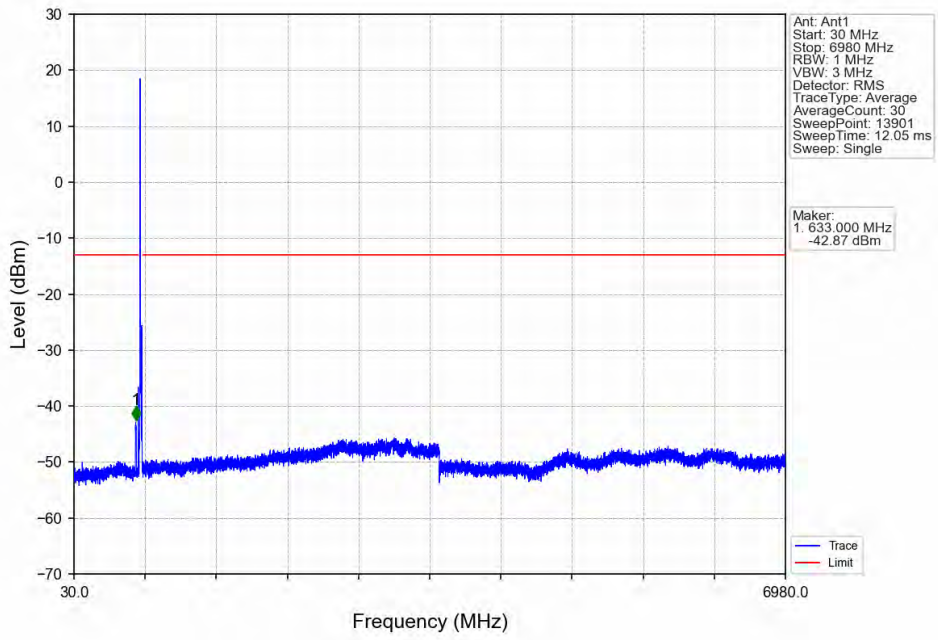


Band71\_10MHz\_16QAM\_LCH\_668MHz\_RB\_50\_0\_NTNV

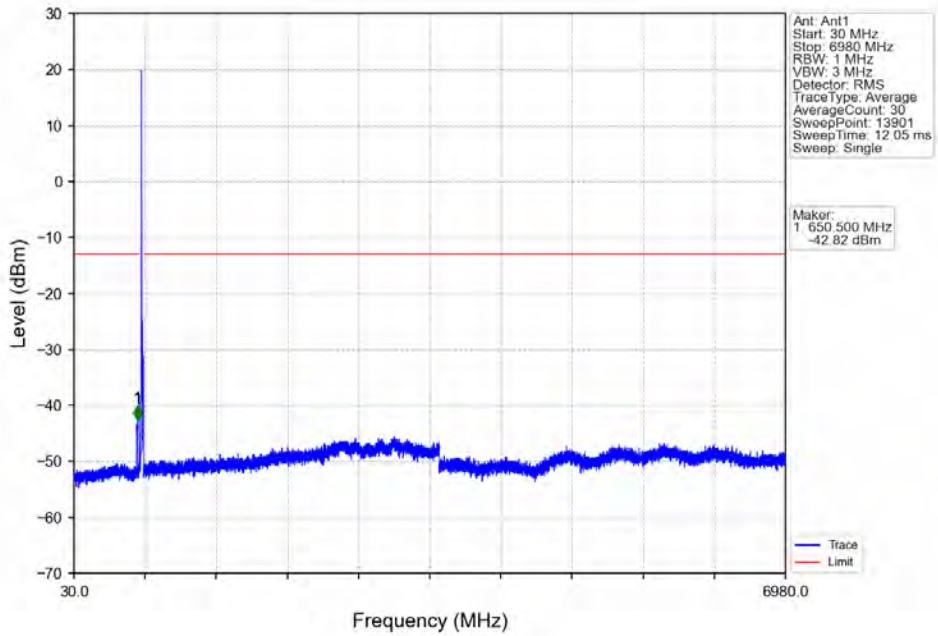


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
653	662	0.1	/	1	661.180	-44.20	-13	Pass
662	663	0.101	/	2	662.920	-32.71	-13	Pass
663	673	0.101	/	/	/	/	/	/

Band71\_10MHz\_16QAM\_MCH\_680.5MHz\_RB\_1\_0\_NTNV

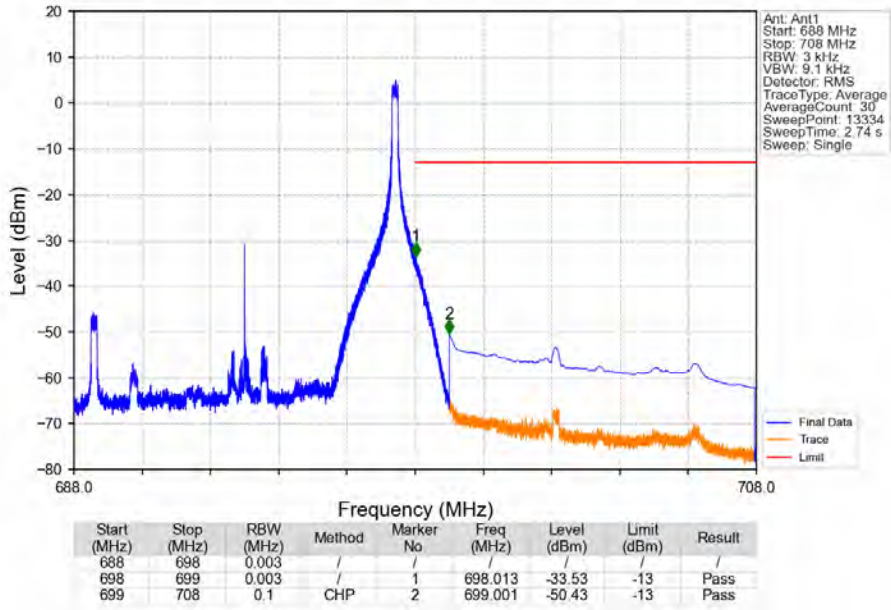


Band71\_10MHz\_16QAM\_HCH\_693MHz\_RB\_1\_0\_NTNV

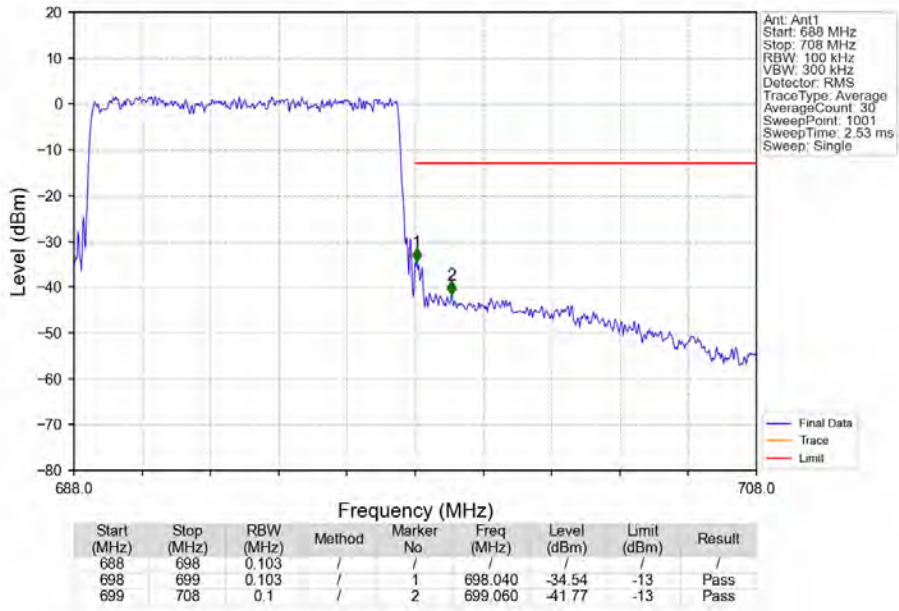




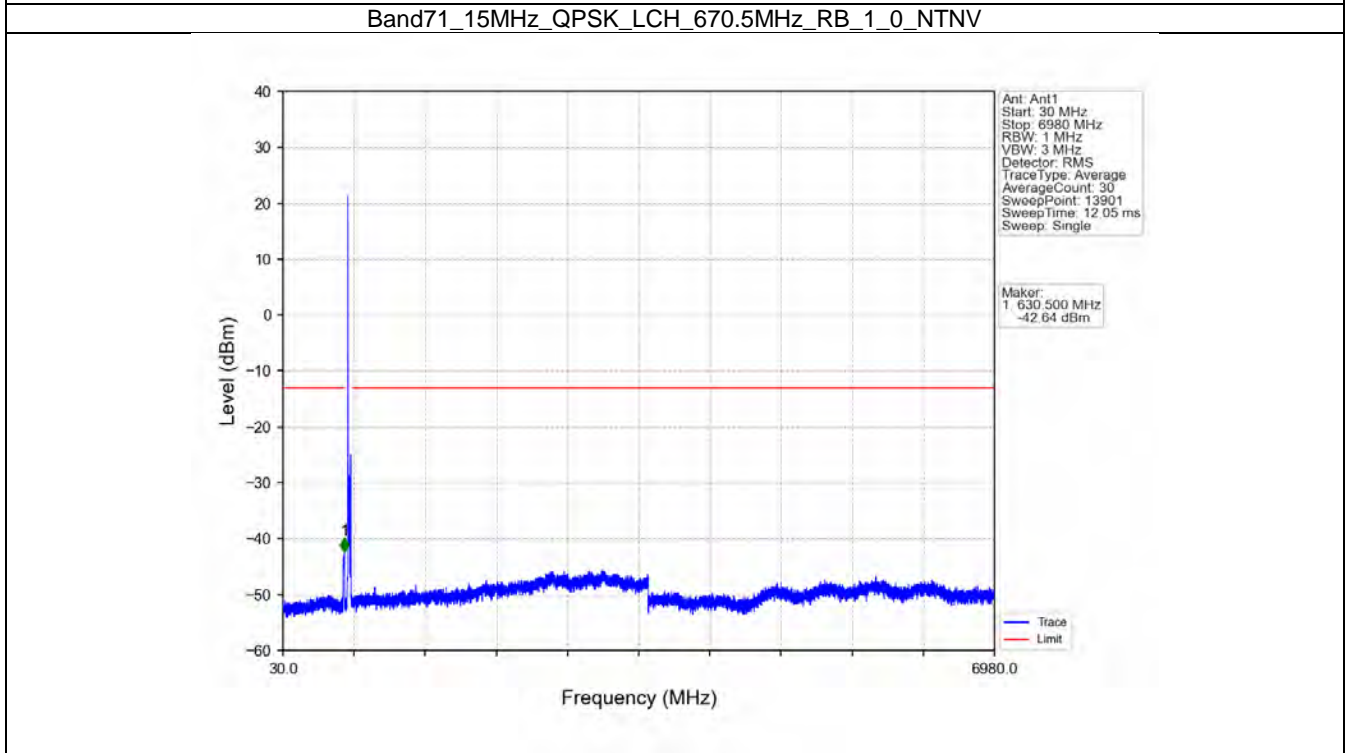
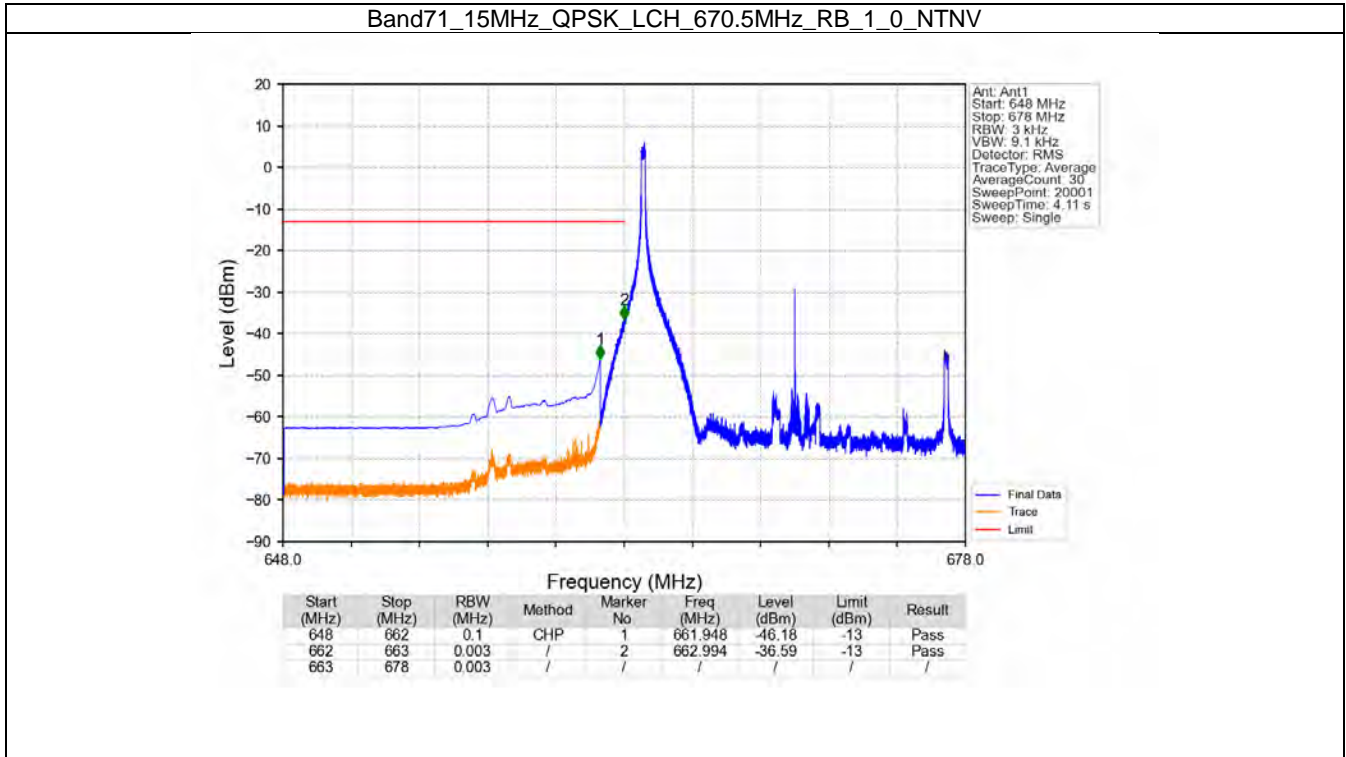
Band71\_10MHz\_16QAM\_HCH\_693MHz\_RB\_1\_49\_NTNV



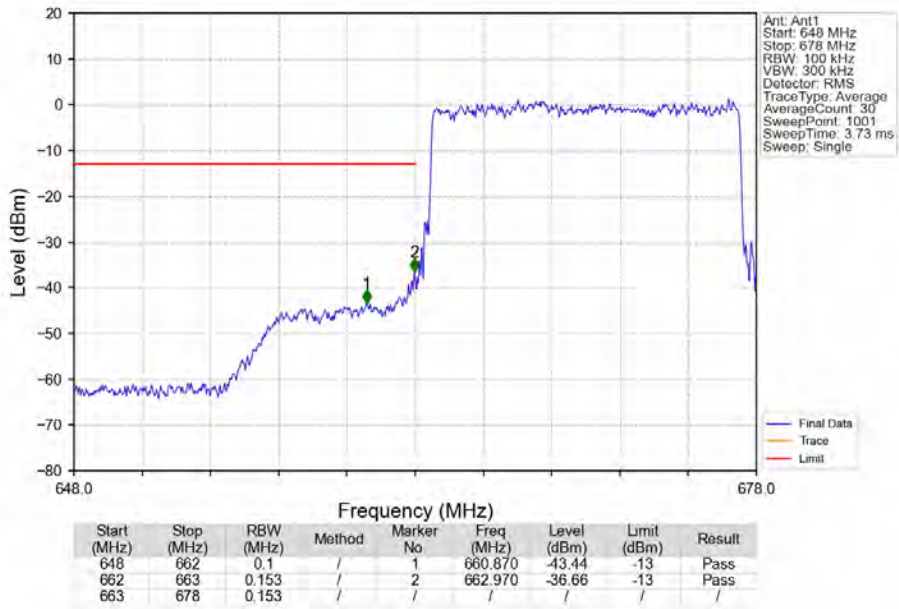
Band71\_10MHz\_16QAM\_HCH\_693MHz\_RB\_50\_0\_NTNV



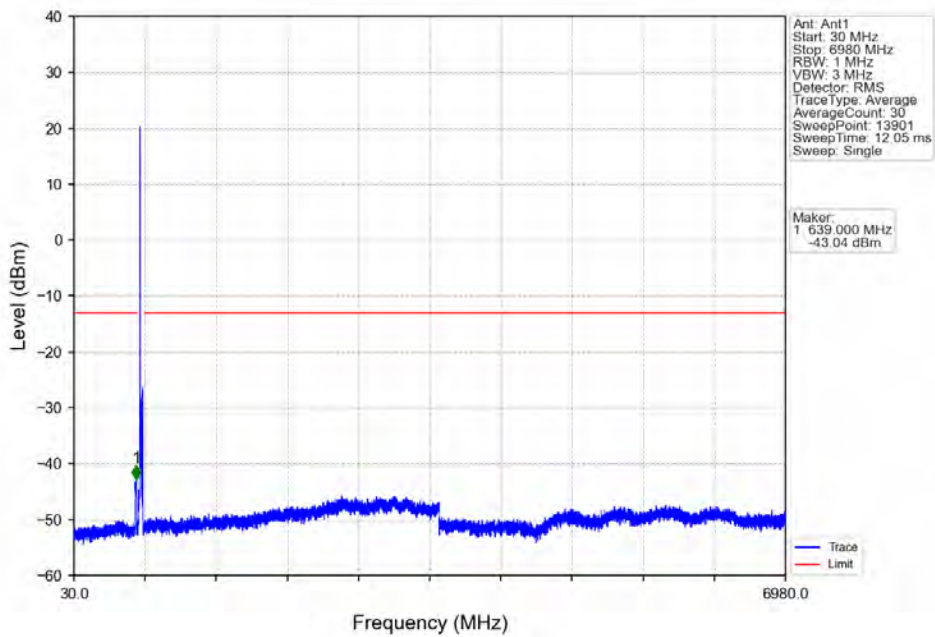
### 6.2.3 B71\_15MHz



Band71\_15MHz\_QPSK\_LCH\_670.5MHz\_RB\_75\_0\_NTNV

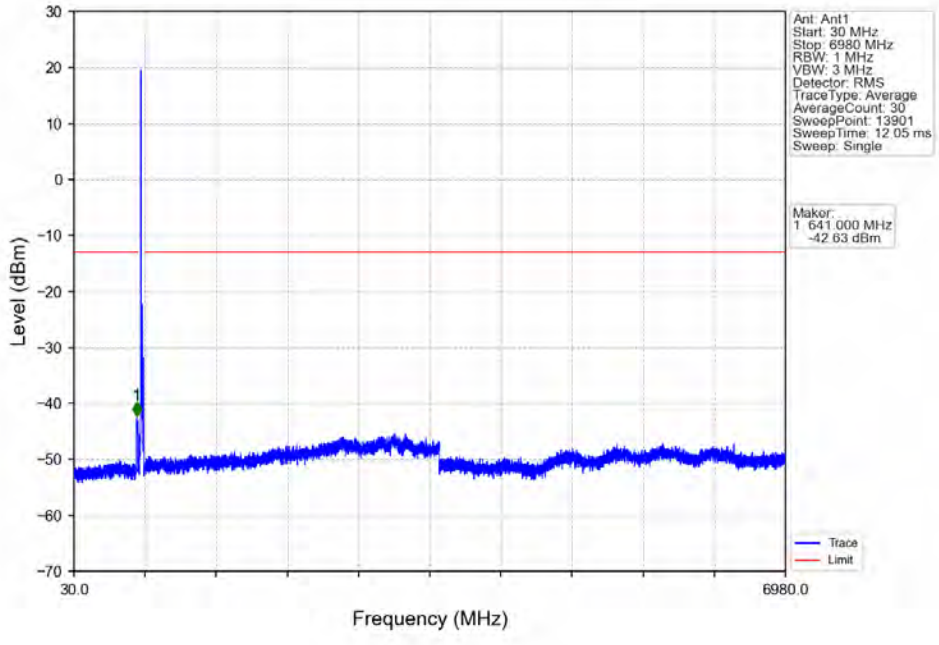


Band71\_15MHz\_QPSK\_MCH\_680.5MHz\_RB\_1\_0\_NTNV

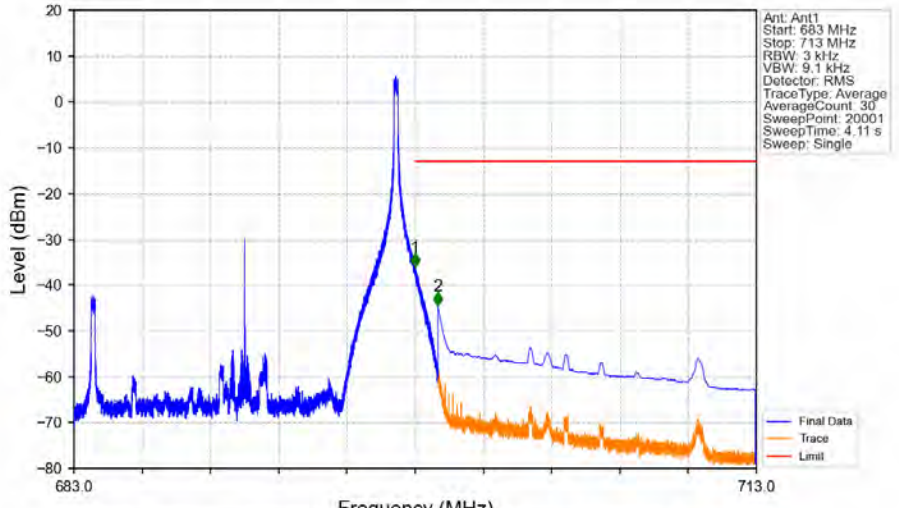




Band71\_15MHz\_QPSK\_HCH\_690.5MHz\_RB\_1\_0\_NTNV

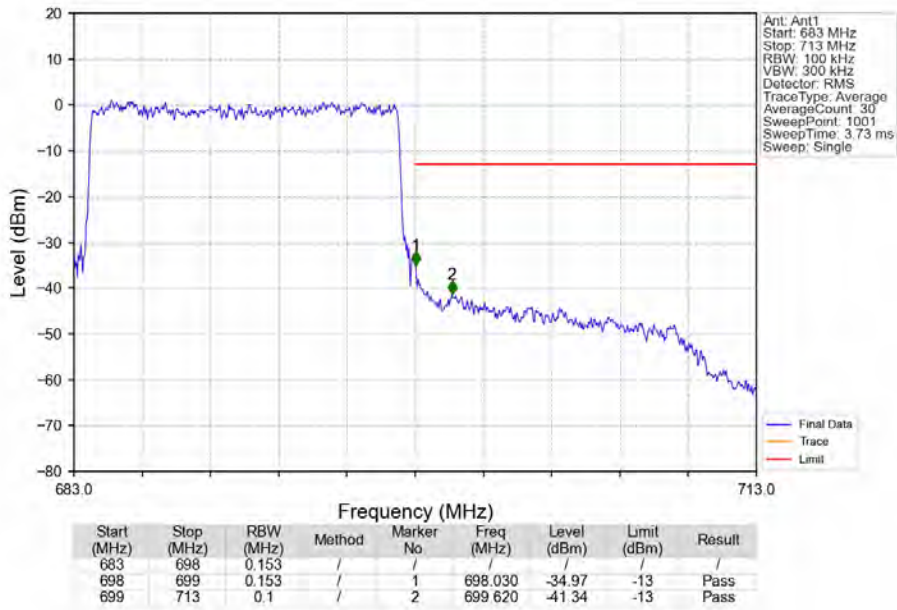


Band71\_15MHz\_QPSK\_HCH\_690.5MHz\_RB\_1\_74\_NTNV

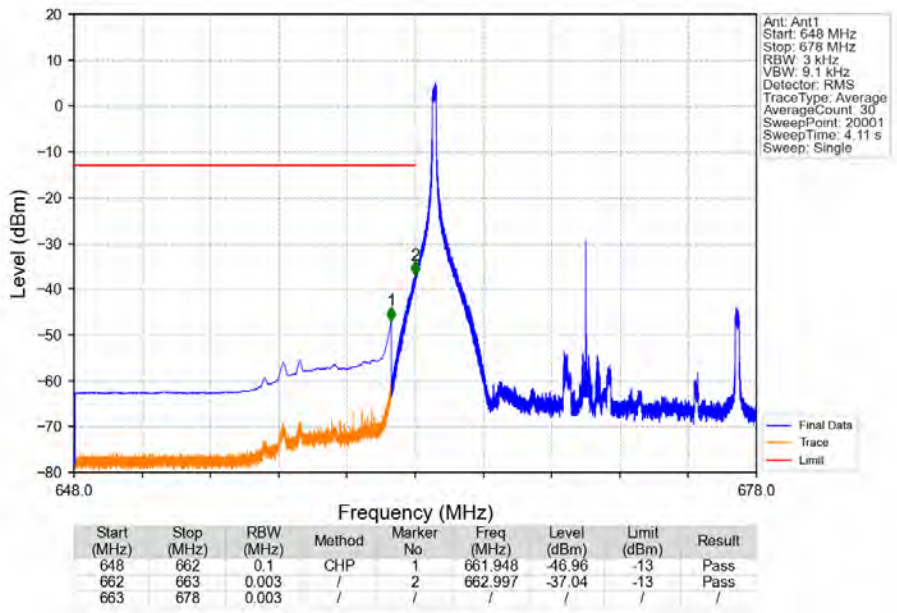


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
683	698	0.003	/	1	698.000	-36.13	-13	Pass
698	699	0.003	/	1	698.000	-36.13	-13	Pass
699	713	0.1	CHP	2	699.000	-44.52	-13	Pass

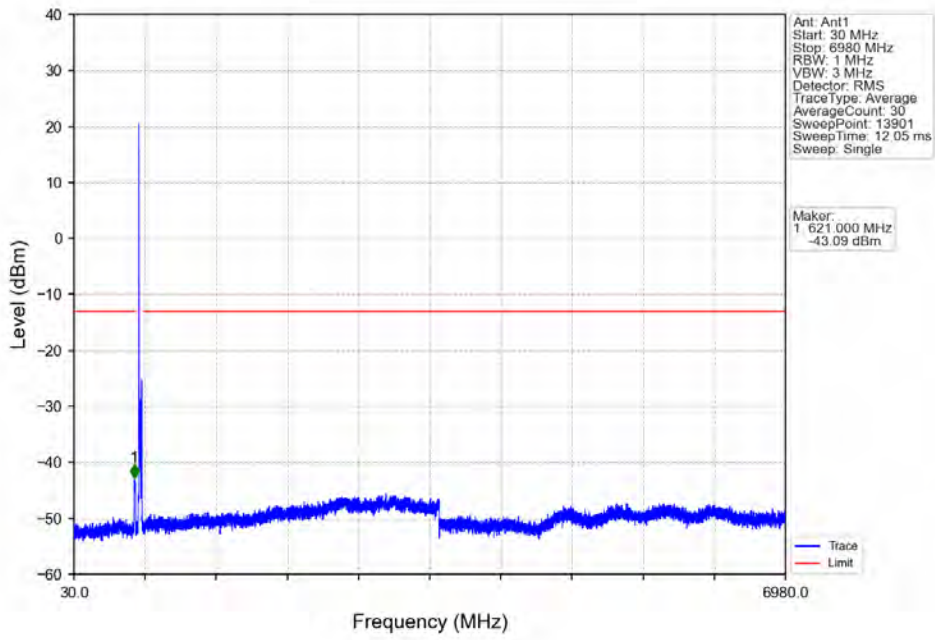
Band71\_15MHz\_QPSK\_HCH\_690.5MHz\_RB\_75\_0\_NTNV



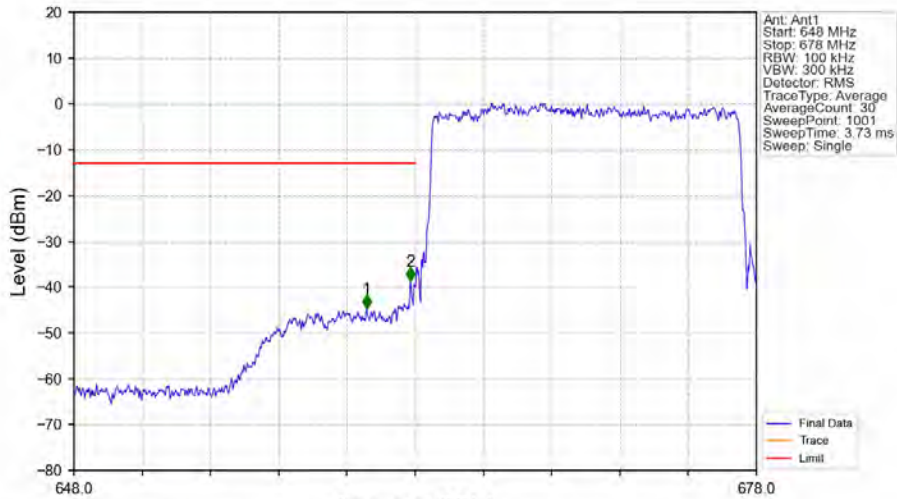
Band71\_15MHz\_16QAM\_LCH\_670.5MHz\_RB\_1\_0\_NTNV



Band71\_15MHz\_16QAM\_LCH\_670.5MHz\_RB\_1\_0\_NTNV

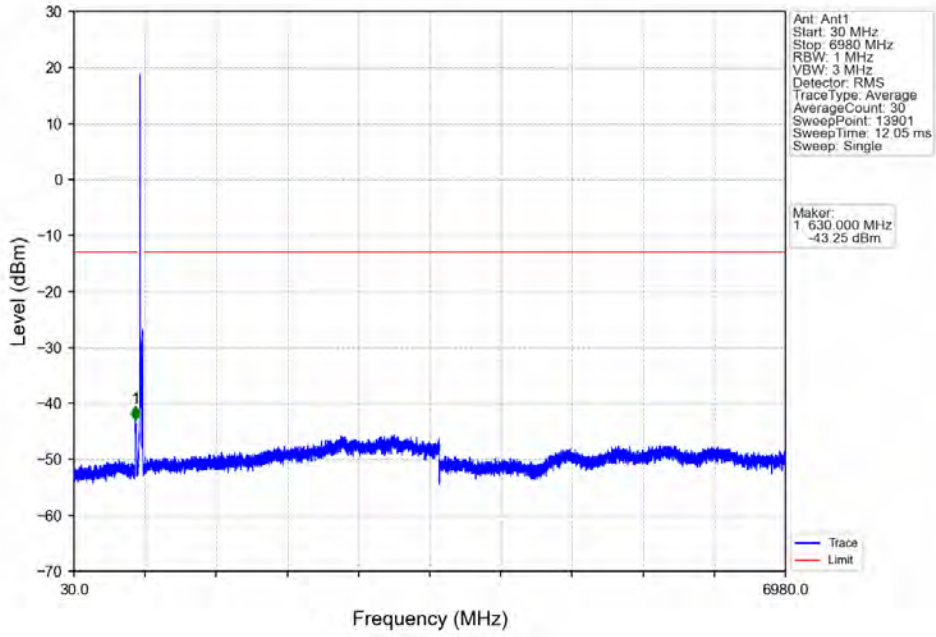


Band71\_15MHz\_16QAM\_LCH\_670.5MHz\_RB\_75\_0\_NTNV

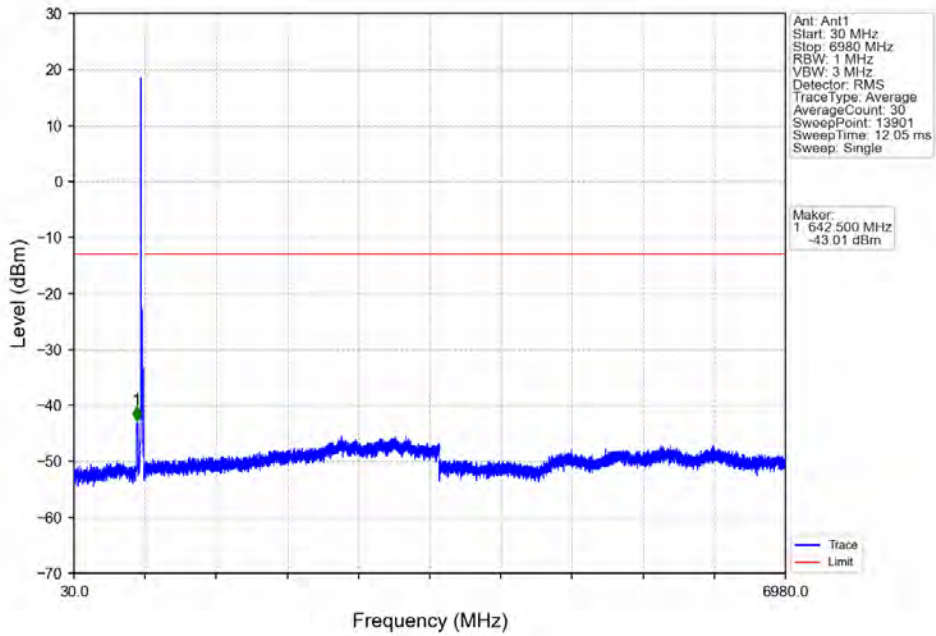


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
648	662	0.1	/	1	660.870	-44.73	-13	Pass
662	663	0.154	/	2	662.790	-38.78	-13	Pass
663	678	0.154	/	/	/	/	/	/

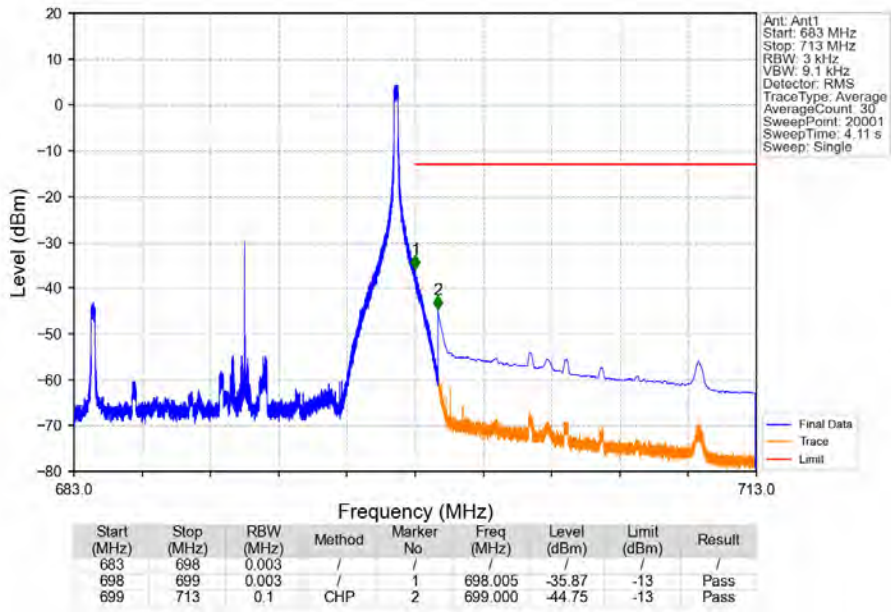
Band71\_15MHz\_16QAM\_MCH\_680.5MHz\_RB\_1\_0\_NTNV



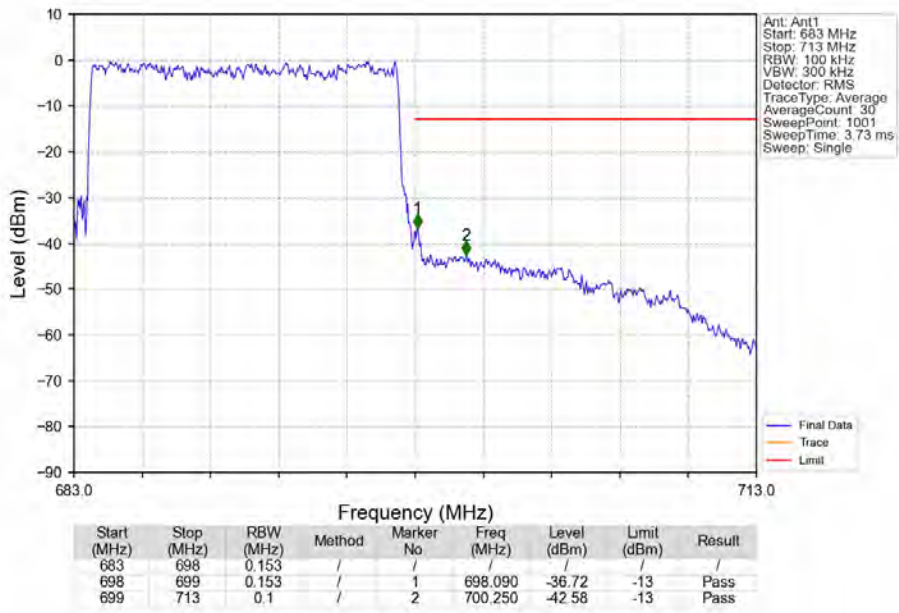
Band71\_15MHz\_16QAM\_HCH\_690.5MHz\_RB\_1\_0\_NTNV



Band71\_15MHz\_16QAM\_HCH\_690.5MHz\_RB\_1\_74\_NTNV

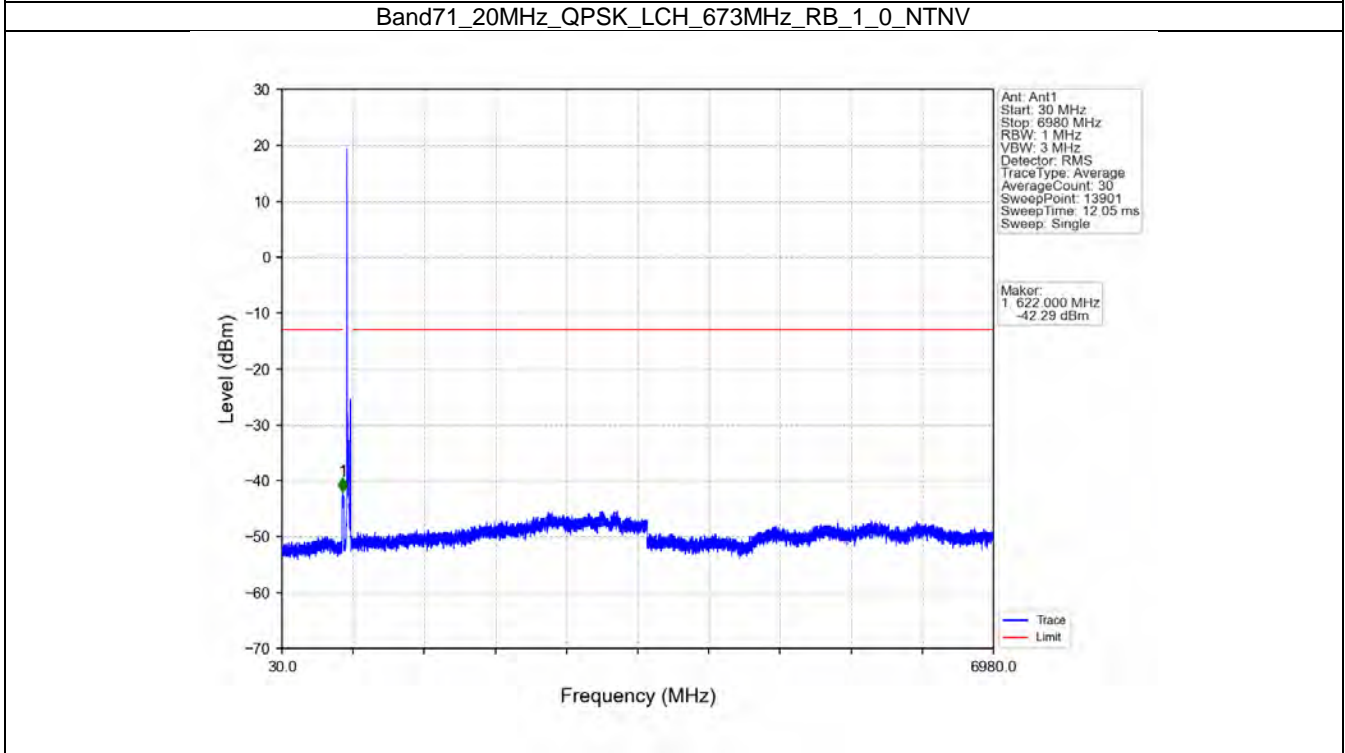
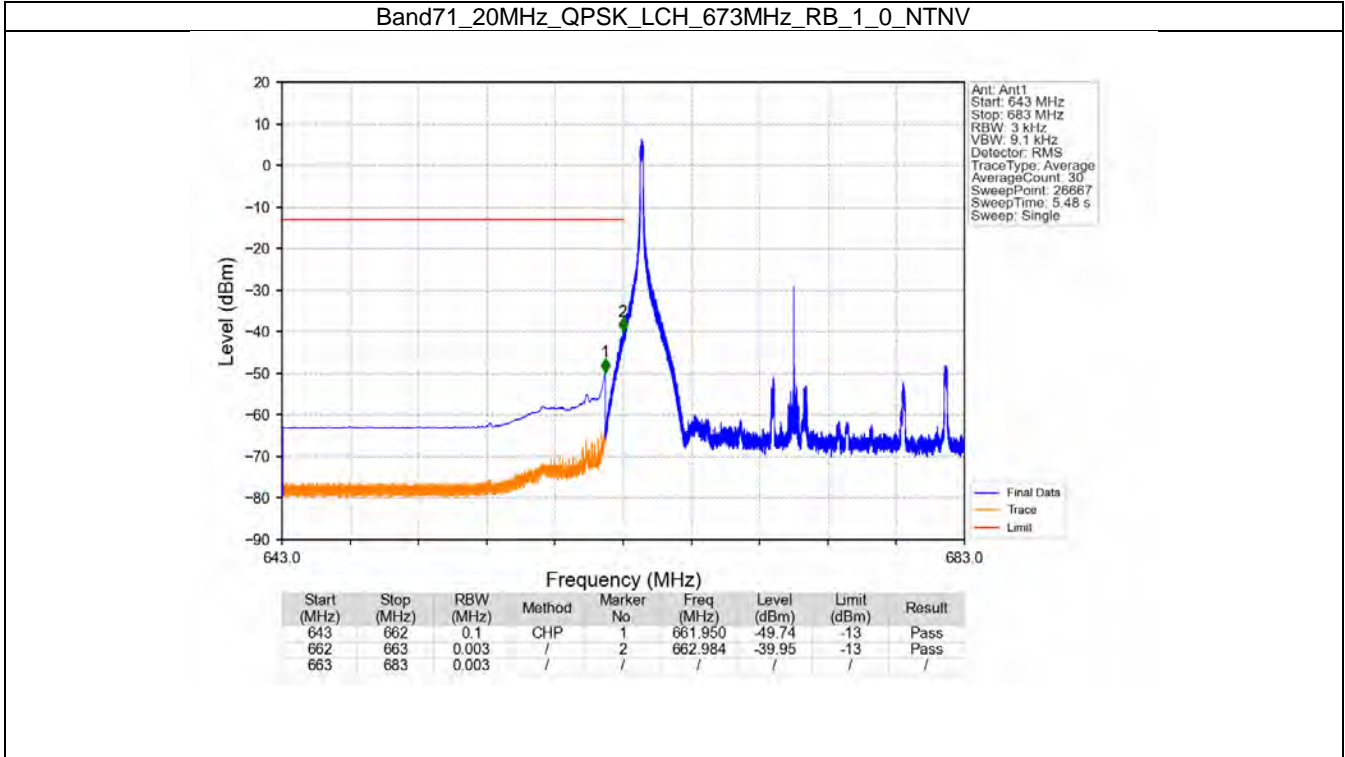


Band71\_15MHz\_16QAM\_HCH\_690.5MHz\_RB\_75\_0\_NTNV

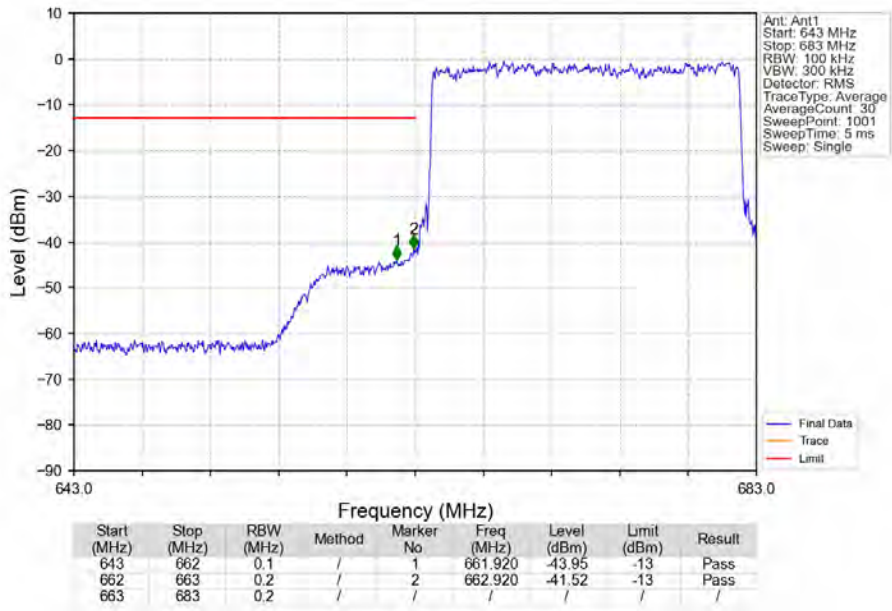




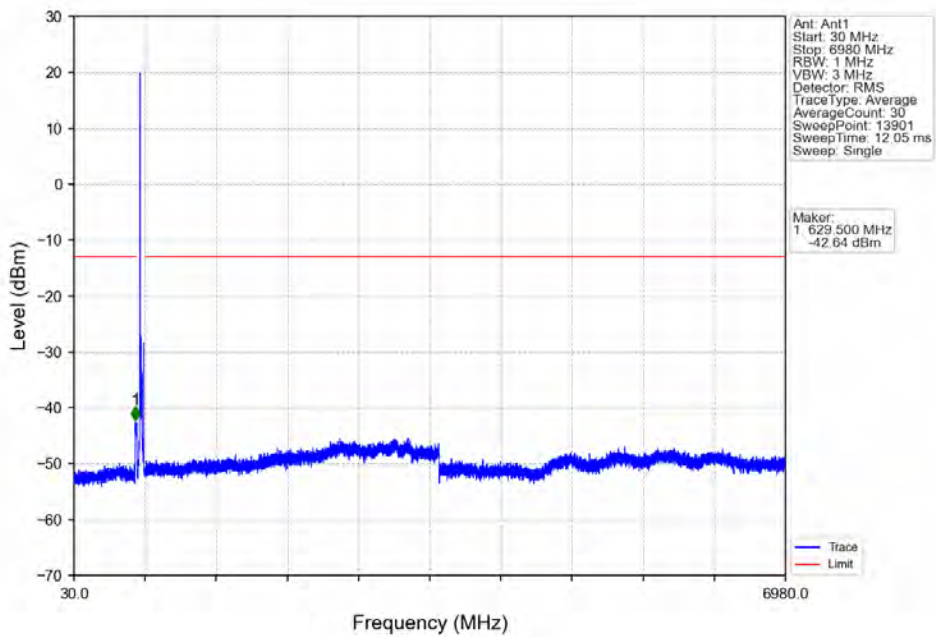
### 6.2.4 B71\_20MHz



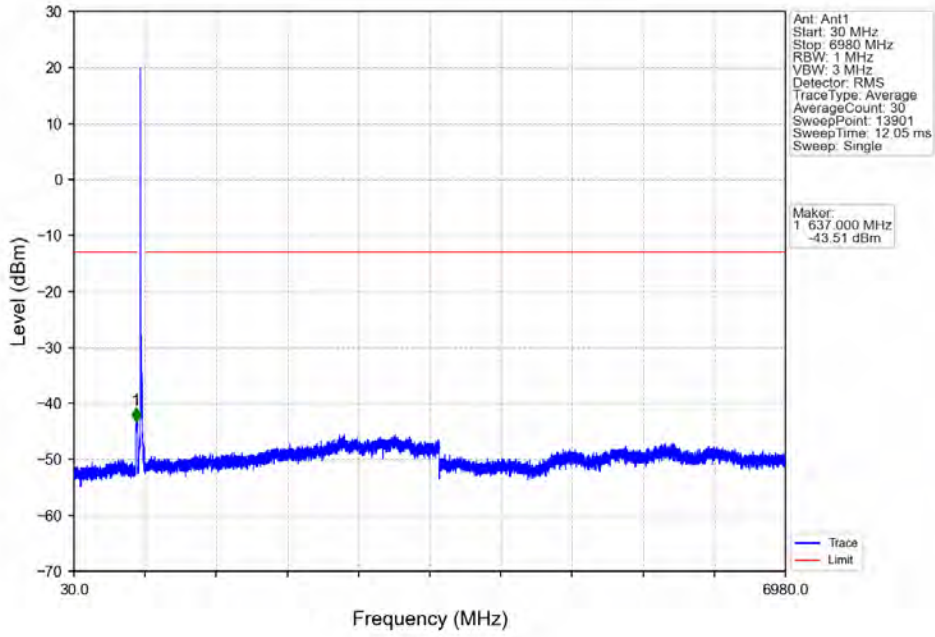
Band71\_20MHz\_QPSK\_LCH\_673MHz\_RB\_100\_0\_NTNV



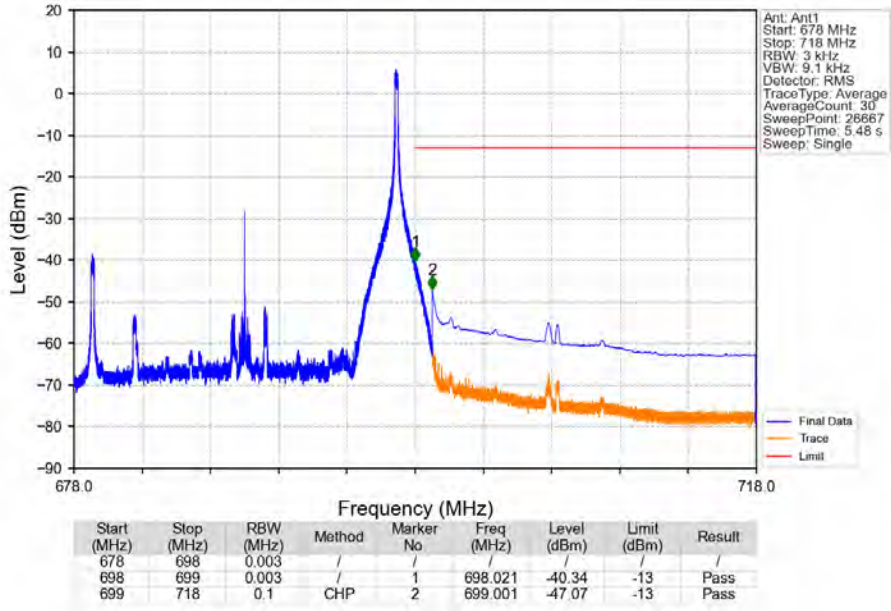
Band71\_20MHz\_QPSK\_MCH\_683MHz\_RB\_1\_0\_NTNV



Band71\_20MHz\_QPSK\_HCH\_688MHz\_RB\_1\_0\_NTNV

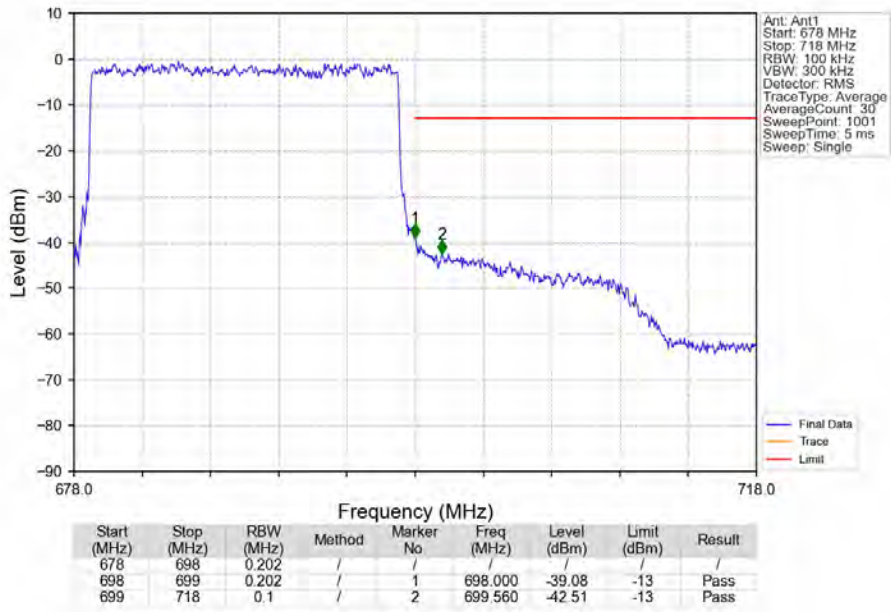


Band71\_20MHz\_QPSK\_HCH\_688MHz\_RB\_1\_99\_NTNV

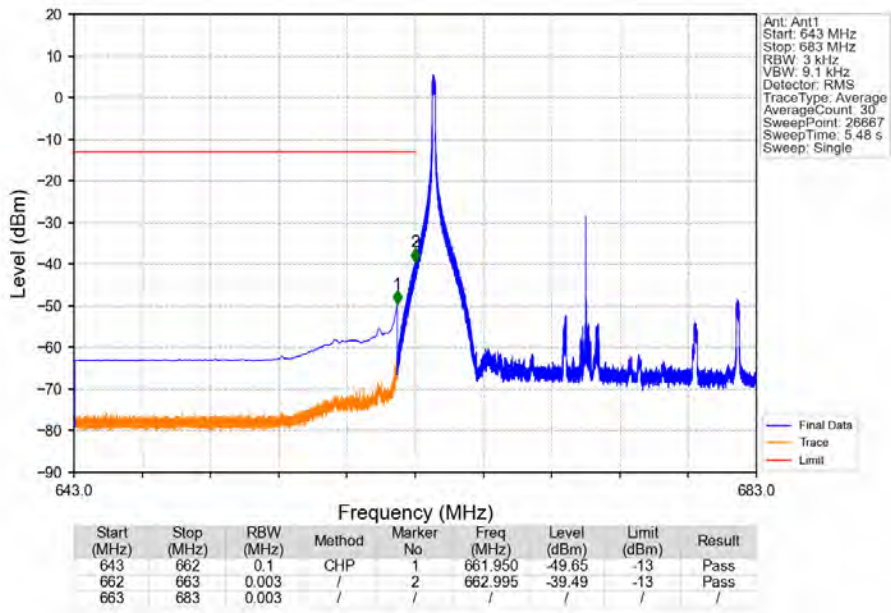




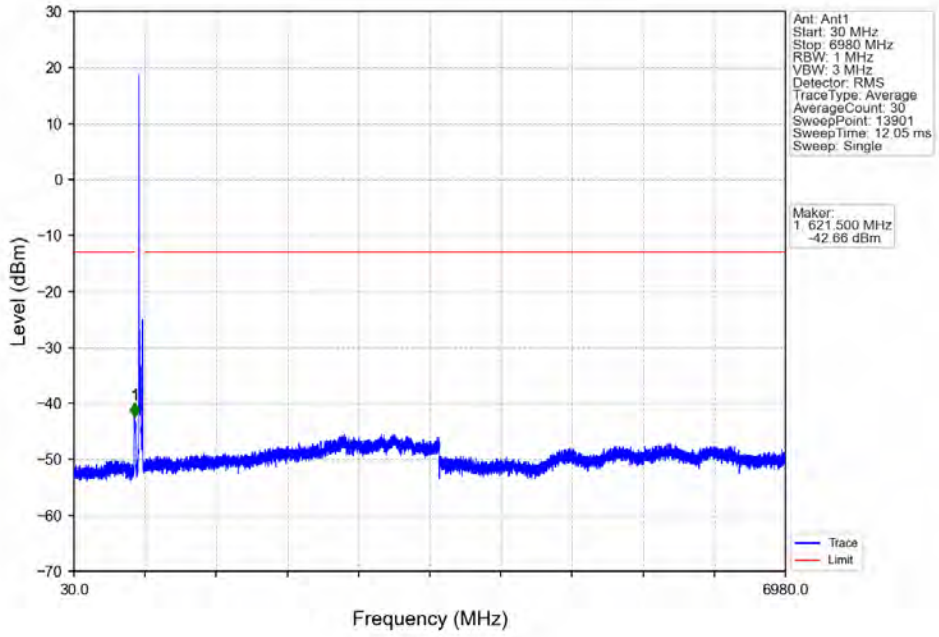
Band71\_20MHz\_QPSK\_HCH\_688MHz\_RB\_100\_0\_NTNV



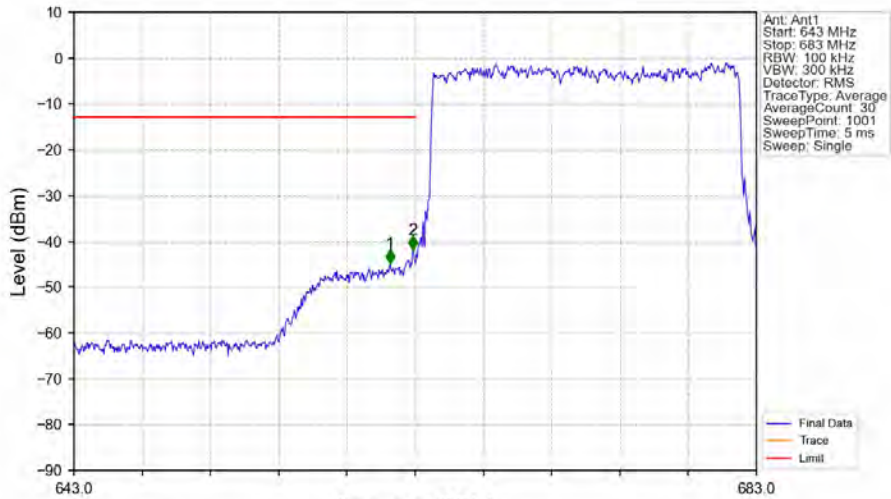
Band71\_20MHz\_16QAM\_LCH\_673MHz\_RB\_1\_0\_NTNV



Band71\_20MHz\_16QAM\_LCH\_673MHz\_RB\_1\_0\_NTNV

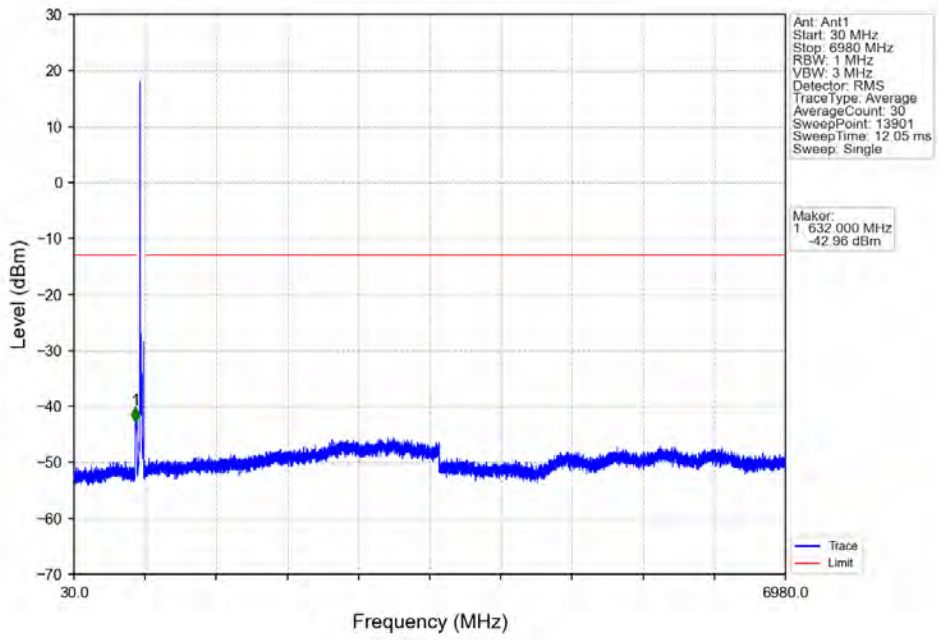


Band71\_20MHz\_16QAM\_LCH\_673MHz\_RB\_100\_0\_NTNV

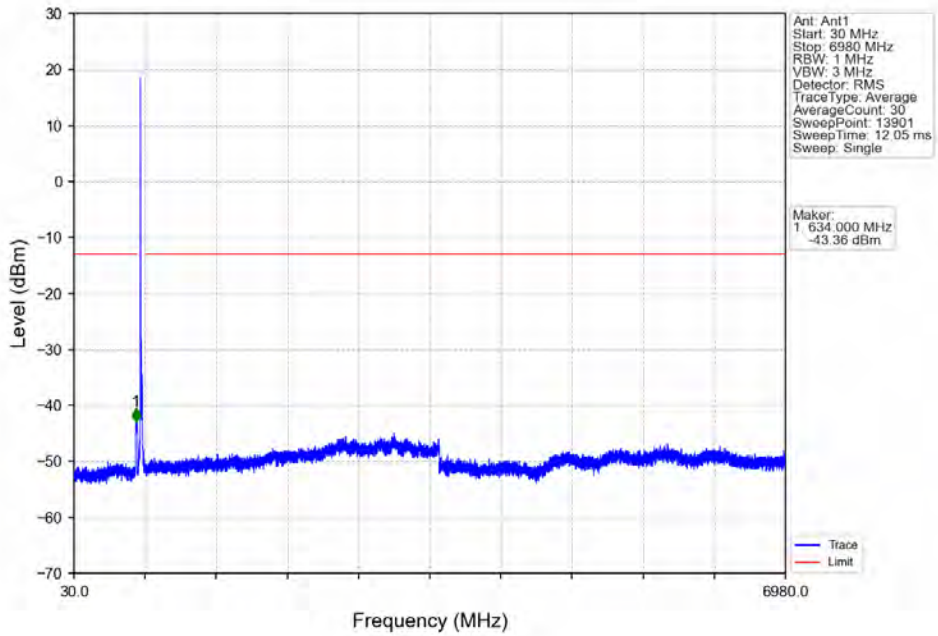


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
643	662	0.1	/	1	661.520	-44.84	-13	Pass
662	663	0.2	/	2	662.880	-41.91	-13	Pass
663	683	0.2	/	/	/	/	/	/

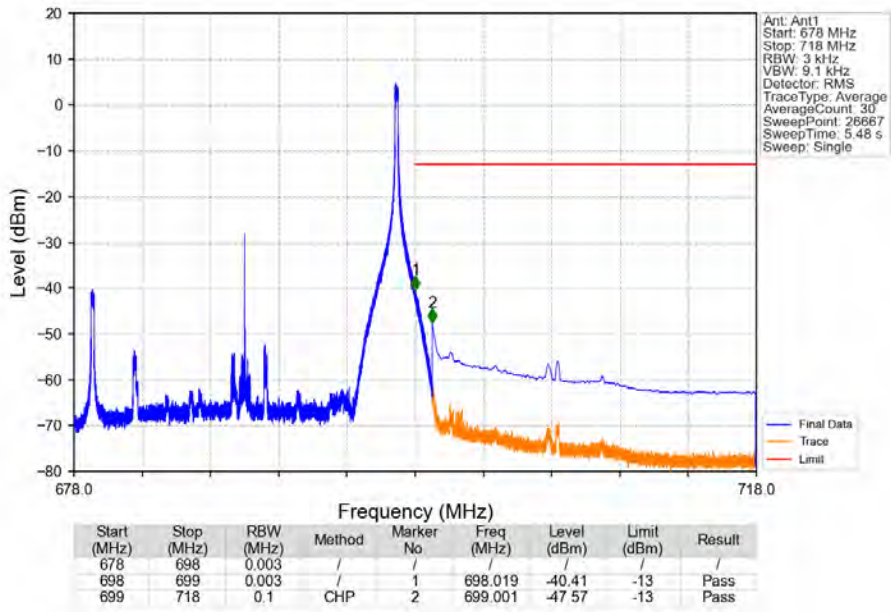
Band71\_20MHz\_16QAM\_MCH\_683MHz\_RB\_1\_0\_NTNV



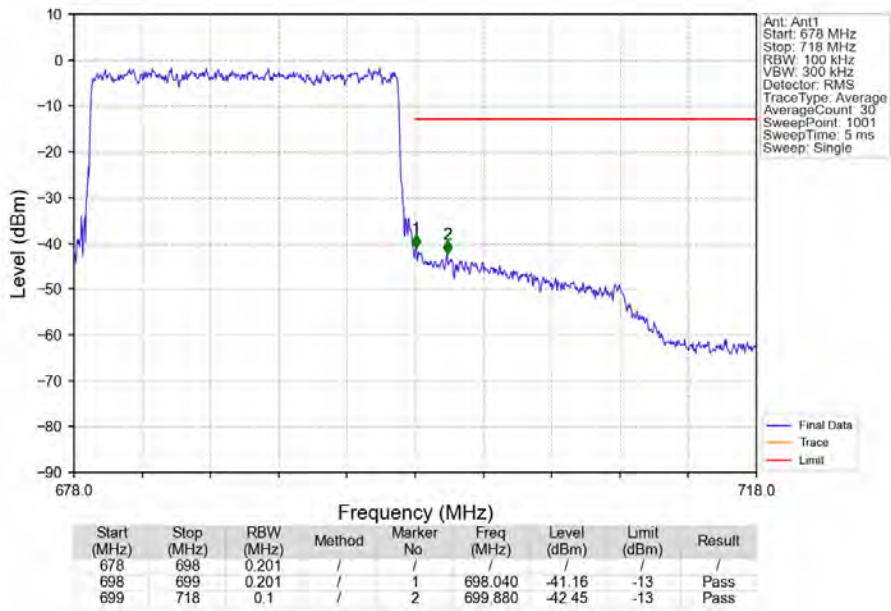
Band71\_20MHz\_16QAM\_HCH\_688MHz\_RB\_1\_0\_NTNV



Band71\_20MHz\_16QAM\_HCH\_688MHz\_RB\_1\_99\_NTNV



Band71\_20MHz\_16QAM\_HCH\_688MHz\_RB\_100\_0\_NTNV



## 7. Form731

### 7.1 Test Result

#### 7.1.1 Form731\_Power

Band	BW	Lower Freq	High Freq	MAX Power (W)	Value	Hz/ppm	Emission Designator	Rule Parts	MAX Power (dBm)
71	5	665.5	695.5	0.1452	0.0142	ppm	4M57G7D	27N	21.62
71	5	665.5	695.5	0.1167	0.0143	ppm	4M59W7D	27N	20.67
71	10	668	693	0.1361	0.0158	ppm	9M10G7D	27N	21.34
71	10	668	693	0.1146	0.0159	ppm	9M07W7D	27N	20.59
71	15	670.5	690.5	0.1355	0.0150	ppm	13M7G7D	27N	21.32
71	15	670.5	690.5	0.1064	0.0155	ppm	13M7W7D	27N	20.27
71	20	673	688	0.1330	0.0156	ppm	18M1G7D	27N	21.24
71	20	673	688	0.1117	0.0140	ppm	18M2W7D	27N	20.48

#### 7.1.2 Form731\_ERP

Band	BW	Lower Freq	High Freq	MAX Power (W)	Value	Hz/ppm	Emission Designator	Rule Parts	MAX Power (dBm)
71	5	665.5	695.5	0.0859	0.0142	ppm	4M57G7D	27N	19.34
71	5	665.5	695.5	0.0690	0.0143	ppm	4M59W7D	27N	18.39
71	10	668	693	0.0805	0.0158	ppm	9M10G7D	27N	19.06
71	10	668	693	0.0678	0.0159	ppm	9M07W7D	27N	18.31
71	15	670.5	690.5	0.0802	0.0150	ppm	13M7G7D	27N	19.04
71	15	670.5	690.5	0.0630	0.0155	ppm	13M7W7D	27N	17.99
71	20	673	688	0.0787	0.0156	ppm	18M1G7D	27N	18.96
71	20	673	688	0.0661	0.0140	ppm	18M2W7D	27N	18.20