1. Effective (Isotropic) Radiated Power Output Data

1.1 Test Result

1.1.1 B42a_5MHz_EIRP

Band: 42a / Bandwidth: 5MHz / NTNV								
Modulation	Frequency (MHz)	RB Allocation		Conducted Power (dBm)	Gain (dBi)	EIRP (dBm)		Verdict
		Size	Offset			Result	Limit	
QPSK	3452.5	1	0	23.09	-2.69	20.40	<=30	Pass
			13	23.04	-2.69	20.35	<=30	Pass
			24	23.03	-2.69	20.34	<=30	Pass
		12	0	22.11	-2.69	19.42	<=30	Pass
			6	22.08	-2.69	19.39	<=30	Pass
			13	22.08	-2.69	19.39	<=30	Pass
		25	0	22.10	-2.69	19.41	<=30	Pass
	3500	1	0	23.28	-2.69	20.59	<=30	Pass
			13	23.29	-2.69	20.60	<=30	Pass
			24	23.34	-2.69	20.65	<=30	Pass
		12	0	22.29	-2.69	19.60	<=30	Pass
			6	22.31	-2.69	19.62	<=30	Pass
			13	22.33	-2.69	19.64	<=30	Pass
		25	0	22.33	-2.69	19.64	<=30	Pass
	3547.5	1	0	23.32	-2.69	20.63	<=30	Pass
			13	23.26	-2.69	20.57	<=30	Pass
			24	23.26	-2.69	20.57	<=30	Pass
		12	0	22.31	-2.69	19.62	<=30	Pass
			6	22.30	-2.69	19.61	<=30	Pass
			13	22.30	-2.69	19.61	<=30	Pass
		25	0	22.32	-2.69	19.63	<=30	Pass
16QAM	3452.5	1	0	22.20	-2.69	19.51	<=30	Pass
			13	22.15	-2.69	19.46	<=30	Pass
			24	22.14	-2.69	19.45	<=30	Pass
		12	0	21.09	-2.69	18.40	<=30	Pass
			6	21.05	-2.69	18.36	<=30	Pass
			13	21.04	-2.69	18.35	<=30	Pass
		25	0	21.13	-2.69	18.44	<=30	Pass
	3500	1	0	22.25	-2.69	19.56	<=30	Pass
			13	22.39	-2.69	19.70	<=30	Pass
			24	22.38	-2.69	19.69	<=30	Pass
		12	0	21.27	-2.69	18.58	<=30	Pass
			6	21.27	-2.69	18.58	<=30	Pass
			13	21.29	-2.69	18.60	<=30	Pass
		25	0	21.34	-2.69	18.65	<=30	Pass
	3547.5	1	0	22.43	-2.69	19.74	<=30	Pass
			13	22.38	-2.69	19.69	<=30	Pass
			24	22.38	-2.69	19.69	<=30	Pass
		12	0	21.30	-2.69	18.61	<=30	Pass
			6	21.27	-2.69	18.58	<=30	Pass
			13	21.27	-2.69	18.58	<=30	Pass
		25	0	21.34	-2.69	18.65	<=30	Pass
64QAM	3452.5	1	0	20.83	-2.69	18.14	<=30	Pass
			13	20.78	-2.69	18.09	<=30	Pass
			24	20.74	-2.69	18.05	<=30	Pass
		12	0	20.27	-2.69	17.58	<=30	Pass
			6	20.21	-2.69	17.52	<=30	Pass
			13	20.23	-2.69	17.54	<=30	Pass
		25	0	20.25	-2.69	17.56	<=30	Pass

	3500	1	0	20.98	-2.69	18.29	<=30	Pass
			13	20.99	-2.69	18.30	<=30	Pass
			24	21.01	-2.69	18.32	<=30	Pass
		12	0	20.47	-2.69	17.78	<=30	Pass
			6	20.46	-2.69	17.77	<=30	Pass
			13	20.46	-2.69	17.77	<=30	Pass
		25	0	20.46	-2.69	17.77	<=30	Pass
	3547.5	1	0	21.02	-2.69	18.33	<=30	Pass
			13	20.97	-2.69	18.28	<=30	Pass
			24	20.96	-2.69	18.27	<=30	Pass
		12	0	20.44	-2.69	17.75	<=30	Pass
			6	20.42	-2.69	17.73	<=30	Pass
			13	20.42	-2.69	17.73	<=30	Pass
		25	0	20.44	-2.69	17.75	<=30	Pass
256QAM	3452.5	1	0	18.10	-2.69	15.41	<=30	Pass
			13	18.04	-2.69	15.35	<=30	Pass
			24	18.00	-2.69	15.31	<=30	Pass
		12	0	18.31	-2.69	15.62	<=30	Pass
			6	18.26	-2.69	15.57	<=30	Pass
			13	18.28	-2.69	15.59	<=30	Pass
		25	0	18.23	-2.69	15.54	<=30	Pass
	3500	1	0	18.27	-2.69	15.58	<=30	Pass
			13	18.30	-2.69	15.61	<=30	Pass
			24	18.15	-2.69	15.46	<=30	Pass
		12	0	18.50	-2.69	15.81	<=30	Pass
			6	18.50	-2.69	15.81	<=30	Pass
			13	18.50	-2.69	15.81	<=30	Pass
		25	0	18.44	-2.69	15.75	<=30	Pass
	3547.5	1	0	18.24	-2.69	15.55	<=30	Pass
			13	18.20	-2.69	15.51	<=30	Pass
			24	18.16	-2.69	15.47	<=30	Pass
		12	0	18.47	-2.69	15.78	<=30	Pass
			6	18.45	-2.69	15.76	<=30	Pass
			13	18.45	-2.69	15.76	<=30	Pass
		25	0	18.42	-2.69	15.73	<=30	Pass
Note1: EIRP=Conducted Power+Antenna Gain								

1.1.2 B42a_10MHz_EIRP

Band: 42a / Bandwidth: 10MHz / NTNV								
Modulation	Frequency (MHz)	RB Allocation		Conducted Power (dBm)	Gain (dBi)	EIRP (dBm)		Verdict
		Size	Offset			Result	Limit	
QPSK	3455	1	0	23.09	-2.69	20.40	<=30	Pass
			25	22.96	-2.69	20.27	<=30	Pass
			49	22.97	-2.69	20.28	<=30	Pass
		25	0	22.05	-2.69	19.36	<=30	Pass
			13	22.01	-2.69	19.32	<=30	Pass
			25	22.03	-2.69	19.34	<=30	Pass
		50	0	22.05	-2.69	19.36	<=30	Pass
	3500	1	0	23.23	-2.69	20.54	<=30	Pass
			25	23.22	-2.69	20.53	<=30	Pass
			49	23.29	-2.69	20.60	<=30	Pass
		25	0	22.24	-2.69	19.55	<=30	Pass
			13	22.26	-2.69	19.57	<=30	Pass
			25	22.25	-2.69	19.56	<=30	Pass
		50	0	22.24	-2.69	19.55	<=30	Pass
	3545	1	0	23.25	-2.69	20.56	<=30	Pass

			25	23.15	-2.69	20.46	<=30	Pass
			49	23.16	-2.69	20.47	<=30	Pass
		25	0	22.23	-2.69	19.54	<=30	Pass
			13	22.17	-2.69	19.48	<=30	Pass
			25	22.18	-2.69	19.49	<=30	Pass
		50	0	22.18	-2.69	19.49	<=30	Pass
16QAM	3455	1	0	22.22	-2.69	19.53	<=30	Pass
			25	22.06	-2.69	19.37	<=30	Pass
			49	22.10	-2.69	19.41	<=30	Pass
		25	0	21.07	-2.69	18.38	<=30	Pass
			13	21.01	-2.69	18.32	<=30	Pass
			25	21.04	-2.69	18.35	<=30	Pass
		50	0	21.07	-2.69	18.38	<=30	Pass
	3500	1	0	22.35	-2.69	19.66	<=30	Pass
			25	22.36	-2.69	19.67	<=30	Pass
			49	22.42	-2.69	19.73	<=30	Pass
		25	0	21.25	-2.69	18.56	<=30	Pass
			13	21.27	-2.69	18.58	<=30	Pass
			25	21.27	-2.69	18.58	<=30	Pass
		50	0	21.27	-2.69	18.58	<=30	Pass
	3545	1	0	22.37	-2.69	19.68	<=30	Pass
			25	22.26	-2.69	19.57	<=30	Pass
			49	22.29	-2.69	19.60	<=30	Pass
		25	0	21.26	-2.69	18.57	<=30	Pass
			13	21.19	-2.69	18.50	<=30	Pass
			25	21.18	-2.69	18.49	<=30	Pass
		50	0	21.22	-2.69	18.53	<=30	Pass
64QAM	3455	1	0	20.79	-2.69	18.10	<=30	Pass
			25	20.66	-2.69	17.97	<=30	Pass
			49	20.66	-2.69	17.97	<=30	Pass
		25	0	20.19	-2.69	17.50	<=30	Pass
			13	20.17	-2.69	17.48	<=30	Pass
			25	20.18	-2.69	17.49	<=30	Pass
		50	0	20.15	-2.69	17.46	<=30	Pass
	3500	1	0	20.93	-2.69	18.24	<=30	Pass
			25	20.90	-2.69	18.21	<=30	Pass
			49	20.98	-2.69	18.29	<=30	Pass
		25	0	20.36	-2.69	17.67	<=30	Pass
			13	20.41	-2.69	17.72	<=30	Pass
			25	20.41	-2.69	17.72	<=30	Pass
		50	0	20.35	-2.69	17.66	<=30	Pass
	3545	1	0	20.94	-2.69	18.25	<=30	Pass
			25	20.82	-2.69	18.13	<=30	Pass
			49	20.84	-2.69	18.15	<=30	Pass
		25	0	20.34	-2.69	17.65	<=30	Pass
			13	20.31	-2.69	17.62	<=30	Pass
			25	20.28	-2.69	17.59	<=30	Pass
		50	0	20.25	-2.69	17.56	<=30	Pass
256QAM	3455	1	0	18.11	-2.69	15.42	<=30	Pass
			25	17.93	-2.69	15.24	<=30	Pass
			49	17.98	-2.69	15.29	<=30	Pass
		25	0	18.18	-2.69	15.49	<=30	Pass
			13	18.13	-2.69	15.44	<=30	Pass
			25	18.15	-2.69	15.46	<=30	Pass
		50	0	18.20	-2.69	15.51	<=30	Pass
	3500	1	0	18.19	-2.69	15.50	<=30	Pass
			25	18.21	-2.69	15.52	<=30	Pass
			49	18.29	-2.69	15.60	<=30	Pass
		25	0	18.33	-2.69	15.64	<=30	Pass

			13	18.36	-2.69	15.67	<=30	Pass
			25	18.41	-2.69	15.72	<=30	Pass
		50	0	18.38	-2.69	15.69	<=30	Pass
	3545	1	0	18.14	-2.69	15.45	<=30	Pass
			25	18.09	-2.69	15.40	<=30	Pass
			49	18.14	-2.69	15.45	<=30	Pass
		25	0	18.30	-2.69	15.61	<=30	Pass
			13	18.26	-2.69	15.57	<=30	Pass
			25	18.26	-2.69	15.57	<=30	Pass
		50	0	18.29	-2.69	15.60	<=30	Pass
Note1: EIRP=Conducted Power+Antenna Gain								

1.1.3 B42a_15MHz_EIRP

Band: 42a / Bandwidth: 15MHz / NTNV								
Modulation	Frequency (MHz)	RB Allocation		Conducted Power (dBm)	Gain (dBi)	EIRP (dBm)		Verdict
		Size	Offset			Result	Limit	
QPSK	3457.5	1	0	23.18	-2.69	20.49	<=30	Pass
			38	23.12	-2.69	20.43	<=30	Pass
			74	23.04	-2.69	20.35	<=30	Pass
		36	0	22.19	-2.69	19.50	<=30	Pass
			18	22.15	-2.69	19.46	<=30	Pass
			39	22.09	-2.69	19.40	<=30	Pass
		75	0	22.17	-2.69	19.48	<=30	Pass
	3500	1	0	23.19	-2.69	20.50	<=30	Pass
			38	23.33	-2.69	20.64	<=30	Pass
			74	23.33	-2.69	20.64	<=30	Pass
		36	0	22.23	-2.69	19.54	<=30	Pass
			18	22.33	-2.69	19.64	<=30	Pass
			39	22.32	-2.69	19.63	<=30	Pass
		75	0	22.29	-2.69	19.60	<=30	Pass
	3542.5	1	0	23.31	-2.69	20.62	<=30	Pass
			38	23.27	-2.69	20.58	<=30	Pass
			74	23.19	-2.69	20.50	<=30	Pass
		36	0	22.30	-2.69	19.61	<=30	Pass
			18	22.29	-2.69	19.60	<=30	Pass
			39	22.23	-2.69	19.54	<=30	Pass
		75	0	22.29	-2.69	19.60	<=30	Pass
16QAM	3457.5	1	0	22.31	-2.69	19.62	<=30	Pass
			38	22.23	-2.69	19.54	<=30	Pass
			74	22.15	-2.69	19.46	<=30	Pass
		36	0	21.19	-2.69	18.50	<=30	Pass
			18	21.15	-2.69	18.46	<=30	Pass
			39	21.07	-2.69	18.38	<=30	Pass
		75	0	21.18	-2.69	18.49	<=30	Pass
	3500	1	0	22.30	-2.69	19.61	<=30	Pass
			38	22.44	-2.69	19.75	<=30	Pass
			74	22.43	-2.69	19.74	<=30	Pass
		36	0	21.23	-2.69	18.54	<=30	Pass
			18	21.31	-2.69	18.62	<=30	Pass
			39	21.31	-2.69	18.62	<=30	Pass
		75	0	21.31	-2.69	18.62	<=30	Pass
	3542.5	1	0	22.41	-2.69	19.72	<=30	Pass
			38	22.38	-2.69	19.69	<=30	Pass
			74	22.32	-2.69	19.63	<=30	Pass
		36	0	21.28	-2.69	18.59	<=30	Pass
			18	21.27	-2.69	18.58	<=30	Pass

			39	21.22	-2.69	18.53	<=30	Pass
		75	0	21.30	-2.69	18.61	<=30	Pass
64QAM	3457.5	1	0	20.92	-2.69	18.23	<=30	Pass
			38	20.81	-2.69	18.12	<=30	Pass
			74	20.73	-2.69	18.04	<=30	Pass
		36	0	20.29	-2.69	17.60	<=30	Pass
			18	20.25	-2.69	17.56	<=30	Pass
			39	20.17	-2.69	17.48	<=30	Pass
		75	0	20.26	-2.69	17.57	<=30	Pass
	3500	1	0	20.88	-2.69	18.19	<=30	Pass
			38	21.01	-2.69	18.32	<=30	Pass
			74	21.01	-2.69	18.32	<=30	Pass
		36	0	20.32	-2.69	17.63	<=30	Pass
			18	20.37	-2.69	17.68	<=30	Pass
			39	20.44	-2.69	17.75	<=30	Pass
		75	0	20.41	-2.69	17.72	<=30	Pass
	3542.5	1	0	20.98	-2.69	18.29	<=30	Pass
			38	20.94	-2.69	18.25	<=30	Pass
			74	20.87	-2.69	18.18	<=30	Pass
		36	0	20.35	-2.69	17.66	<=30	Pass
			18	20.33	-2.69	17.64	<=30	Pass
			39	20.29	-2.69	17.60	<=30	Pass
		75	0	20.34	-2.69	17.65	<=30	Pass
256QAM	3457.5	1	0	18.19	-2.69	15.50	<=30	Pass
			38	18.09	-2.69	15.40	<=30	Pass
			74	17.99	-2.69	15.30	<=30	Pass
		36	0	18.28	-2.69	15.59	<=30	Pass
			18	18.25	-2.69	15.56	<=30	Pass
			39	18.20	-2.69	15.51	<=30	Pass
		75	0	18.27	-2.69	15.58	<=30	Pass
	3500	1	0	18.14	-2.69	15.45	<=30	Pass
			38	18.31	-2.69	15.62	<=30	Pass
			74	18.27	-2.69	15.58	<=30	Pass
		36	0	18.33	-2.69	15.64	<=30	Pass
			18	18.42	-2.69	15.73	<=30	Pass
			39	18.43	-2.69	15.74	<=30	Pass
		75	0	18.38	-2.69	15.69	<=30	Pass
	3542.5	1	0	18.24	-2.69	15.55	<=30	Pass
			38	18.12	-2.69	15.43	<=30	Pass
			74	18.14	-2.69	15.45	<=30	Pass
		36	0	18.34	-2.69	15.65	<=30	Pass
			18	18.36	-2.69	15.67	<=30	Pass
			39	18.30	-2.69	15.61	<=30	Pass
		75	0	18.34	-2.69	15.65	<=30	Pass
Note1: EIRP=Conducted Power+Antenna Gain								

1.1.4 B42a_20MHz_EIRP

Band: 42a / Bandwidth: 20MHz / NTNV								
Modulation	Frequency (MHz)	RB Allocation		Conducted Power (dBm)	Gain (dBi)	EIRP (dBm)		Verdict
		Size	Offset			Result	Limit	
QPSK	3460	1	0	23.19	-2.69	20.50	<=30	Pass
			50	23.02	-2.69	20.33	<=30	Pass
			99	22.96	-2.69	20.27	<=30	Pass
		50	0	22.20	-2.69	19.51	<=30	Pass
			25	22.15	-2.69	19.46	<=30	Pass
			50	22.08	-2.69	19.39	<=30	Pass

		100	0	22.14	-2.69	19.45	<=30	Pass
	3500	1	0	23.15	-2.69	20.46	<=30	Pass
			50	23.28	-2.69	20.59	<=30	Pass
			99	23.30	-2.69	20.61	<=30	Pass
		50	0	22.24	-2.69	19.55	<=30	Pass
			25	22.30	-2.69	19.61	<=30	Pass
			50	22.32	-2.69	19.63	<=30	Pass
		100	0	22.27	-2.69	19.58	<=30	Pass
	3540	1	0	23.31	-2.69	20.62	<=30	Pass
			50	23.25	-2.69	20.56	<=30	Pass
			99	23.18	-2.69	20.49	<=30	Pass
		50	0	22.35	-2.69	19.66	<=30	Pass
			25	22.32	-2.69	19.63	<=30	Pass
			50	22.27	-2.69	19.58	<=30	Pass
		100	0	22.31	-2.69	19.62	<=30	Pass
16QAM	3460	1	0	22.35	-2.69	19.66	<=30	Pass
			50	22.20	-2.69	19.51	<=30	Pass
			99	22.12	-2.69	19.43	<=30	Pass
		50	0	21.24	-2.69	18.55	<=30	Pass
			25	21.19	-2.69	18.50	<=30	Pass
			50	21.14	-2.69	18.45	<=30	Pass
		100	0	21.18	-2.69	18.49	<=30	Pass
	3500	1	0	22.12	-2.69	19.43	<=30	Pass
			50	22.48	-2.69	19.79	<=30	Pass
			99	22.30	-2.69	19.61	<=30	Pass
		50	0	21.29	-2.69	18.60	<=30	Pass
			25	21.33	-2.69	18.64	<=30	Pass
			50	21.38	-2.69	18.69	<=30	Pass
		100	0	21.32	-2.69	18.63	<=30	Pass
	3540	1	0	22.47	-2.69	19.78	<=30	Pass
			50	22.39	-2.69	19.70	<=30	Pass
			99	22.23	-2.69	19.54	<=30	Pass
		50	0	21.40	-2.69	18.71	<=30	Pass
			25	21.35	-2.69	18.66	<=30	Pass
			50	21.31	-2.69	18.62	<=30	Pass
		100	0	21.36	-2.69	18.67	<=30	Pass
64QAM	3460	1	0	20.89	-2.69	18.20	<=30	Pass
			50	20.77	-2.69	18.08	<=30	Pass
			99	20.69	-2.69	18.00	<=30	Pass
		50	0	20.32	-2.69	17.63	<=30	Pass
			25	20.26	-2.69	17.57	<=30	Pass
			50	20.21	-2.69	17.52	<=30	Pass
		100	0	20.26	-2.69	17.57	<=30	Pass
	3500	1	0	20.83	-2.69	18.14	<=30	Pass
			50	21.00	-2.69	18.31	<=30	Pass
			99	21.02	-2.69	18.33	<=30	Pass
		50	0	20.34	-2.69	17.65	<=30	Pass
			25	20.43	-2.69	17.74	<=30	Pass
			50	20.42	-2.69	17.73	<=30	Pass
		100	0	20.39	-2.69	17.70	<=30	Pass
	3540	1	0	21.03	-2.69	18.34	<=30	Pass
			50	20.98	-2.69	18.29	<=30	Pass
			99	20.88	-2.69	18.19	<=30	Pass
		50	0	20.44	-2.69	17.75	<=30	Pass
			25	20.39	-2.69	17.70	<=30	Pass
			50	20.34	-2.69	17.65	<=30	Pass
		100	0	20.37	-2.69	17.68	<=30	Pass
256QAM	3460	1	0	18.03	-2.69	15.34	<=30	Pass
			50	18.05	-2.69	15.36	<=30	Pass

			99	17.99	-2.69	15.30	<=30	Pass
		50	0	18.32	-2.69	15.63	<=30	Pass
			25	18.29	-2.69	15.60	<=30	Pass
			50	18.23	-2.69	15.54	<=30	Pass
		100	0	18.25	-2.69	15.56	<=30	Pass
	3500	1	0	18.09	-2.69	15.40	<=30	Pass
			50	18.30	-2.69	15.61	<=30	Pass
			99	18.12	-2.69	15.43	<=30	Pass
		50	0	18.38	-2.69	15.69	<=30	Pass
			25	18.46	-2.69	15.77	<=30	Pass
			50	18.47	-2.69	15.78	<=30	Pass
		100	0	18.39	-2.69	15.70	<=30	Pass
	3540	1	0	18.30	-2.69	15.61	<=30	Pass
			50	18.18	-2.69	15.49	<=30	Pass
			99	18.16	-2.69	15.47	<=30	Pass
		50	0	18.46	-2.69	15.77	<=30	Pass
			25	18.43	-2.69	15.74	<=30	Pass
			50	18.38	-2.69	15.69	<=30	Pass
		100	0	18.37	-2.69	15.68	<=30	Pass
Note1: EIRP=Conducted Power+Antenna Gain								

2. Frequency Stability

2.1 Test Result

2.1.1 B42a_10MHz

Band: 42a / Bandwidth: 10MHz									
Modulation	Frequency (MHz)	RB Allocation		Temp. (°C)	Voltage (VDC)	Freq. Error (Hz)	Freq. vs. Rated (ppm)		Verdict
		Size	Offset				Result	Limit	
QPSK	3500	50	0	20	3.8	-7.500	-0.0021	-2.5 to 2.5	Pass
					4	-3.800	-0.0011	-2.5 to 2.5	Pass
					4.2	-6.400	-0.0018	-2.5 to 2.5	Pass
				-30	4	-0.500	-0.0001	-2.5 to 2.5	Pass
				-20	4	-10.000	-0.0029	-2.5 to 2.5	Pass
				-10	4	2.000	0.0006	-2.5 to 2.5	Pass
				0	4	-2.400	-0.0007	-2.5 to 2.5	Pass
				10	4	-3.700	-0.0011	-2.5 to 2.5	Pass
				30	4	-4.100	-0.0012	-2.5 to 2.5	Pass
				40	4	-10.100	-0.0029	-2.5 to 2.5	Pass
				50	4	-5.800	-0.0017	-2.5 to 2.5	Pass

3. 99% & 26dB Bandwidth

3.1 Test Result

3.1.1 Band42a_OBW

Band: 42a / NTNV							
Bandwidth (MHz)	Modulation	Frequency (MHz)	RB Allocation		99% Occupied Bandwidth (MHz)		Verdict
			Size	Offset	Result	Limit	
5	QPSK	3500	25	0	4.535	/	Pass
	16QAM	3500	25	0	4.549	/	Pass
10	QPSK	3500	50	0	9.062	/	Pass
	16QAM	3500	50	0	9.045	/	Pass
15	QPSK	3500	75	0	13.643	/	Pass
	16QAM	3500	75	0	13.601	/	Pass
20	QPSK	3500	100	0	18.100	/	Pass
	16QAM	3500	100	0	18.073	/	Pass

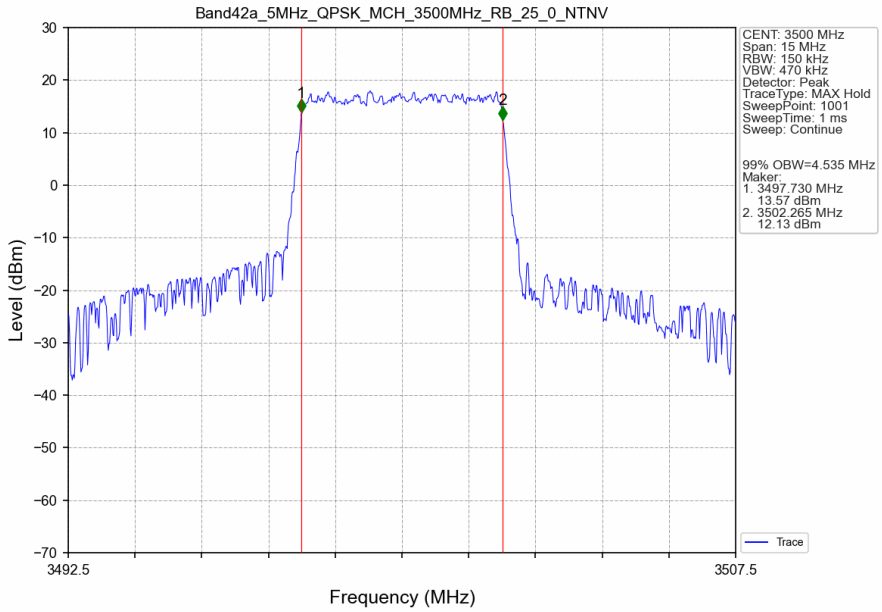
3.1.2 Band42a_XDB

Band: 42a / NTNV							
Bandwidth (MHz)	Modulation	Frequency (MHz)	RB Allocation		26dB Bandwidth (MHz)		Verdict
			Size	Offset	Result	Limit	
5	QPSK	3500	25	0	5.089	/	Pass
	16QAM	3500	25	0	5.036	/	Pass
10	QPSK	3500	50	0	10.235	/	Pass
	16QAM	3500	50	0	10.074	/	Pass
15	QPSK	3500	75	0	16.318	/	Pass
	16QAM	3500	75	0	14.859	/	Pass
20	QPSK	3500	100	0	20.546	/	Pass
	16QAM	3500	100	0	19.553	/	Pass

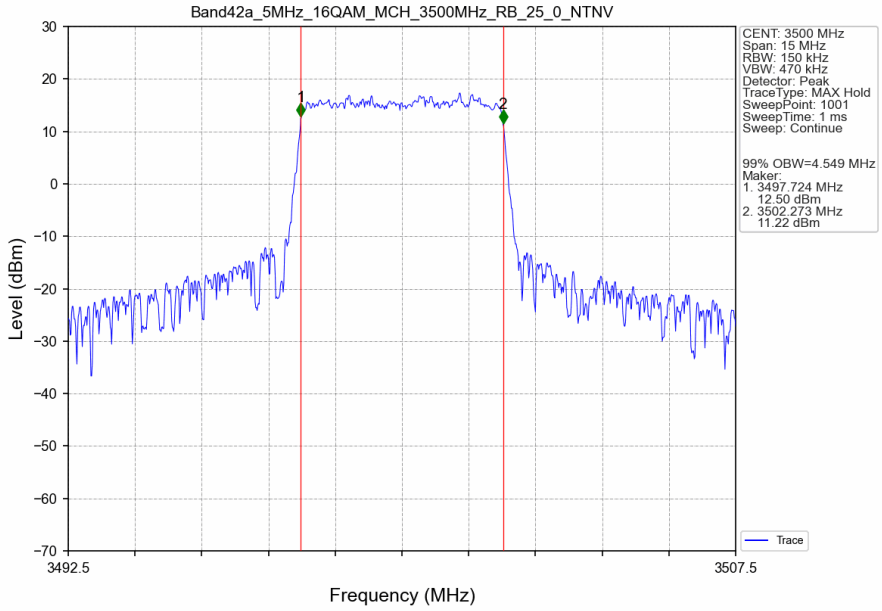
3.2 Test Graph

3.2.1 Band42a_OBW

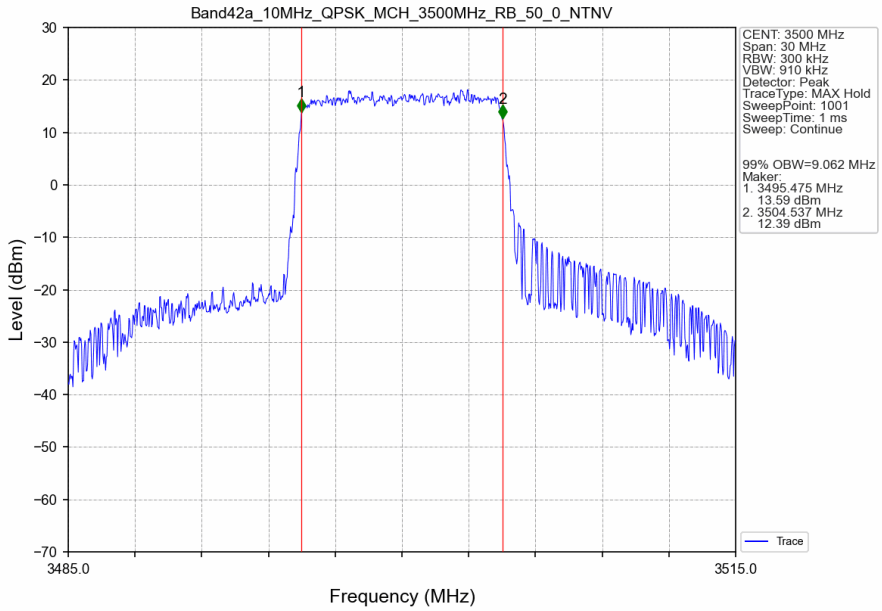
Band42a_5MHz_QPSK_MCH_3500MHz_RB_25_0_NTNV



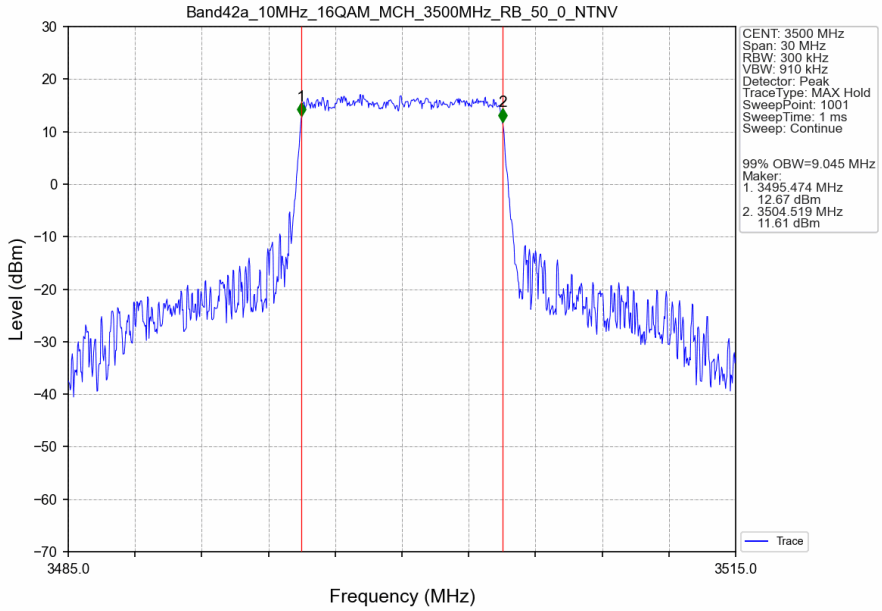
Band42a_5MHz_16QAM_MCH_3500MHz_RB_25_0_NTNV



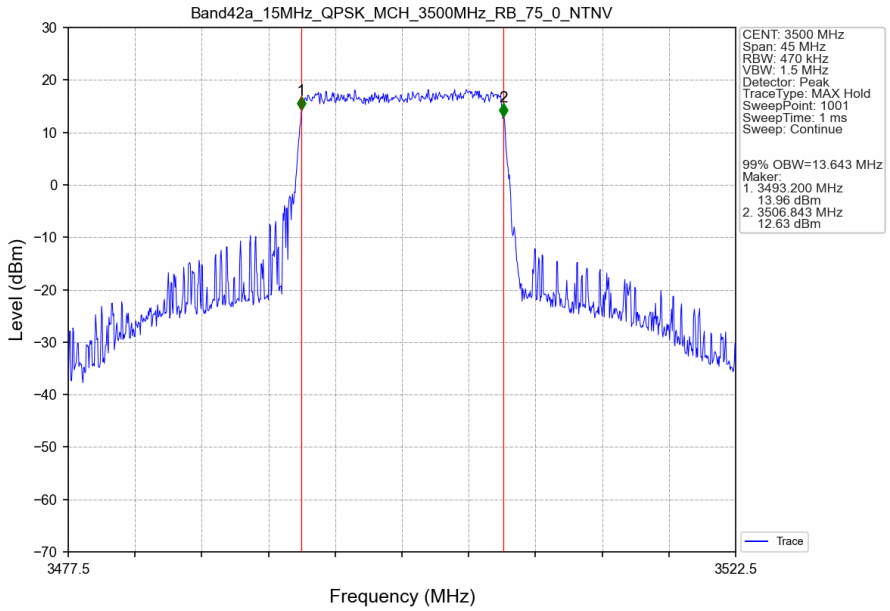
Band42a_10MHz_QPSK_MCH_3500MHz_RB_50_0_NTNV



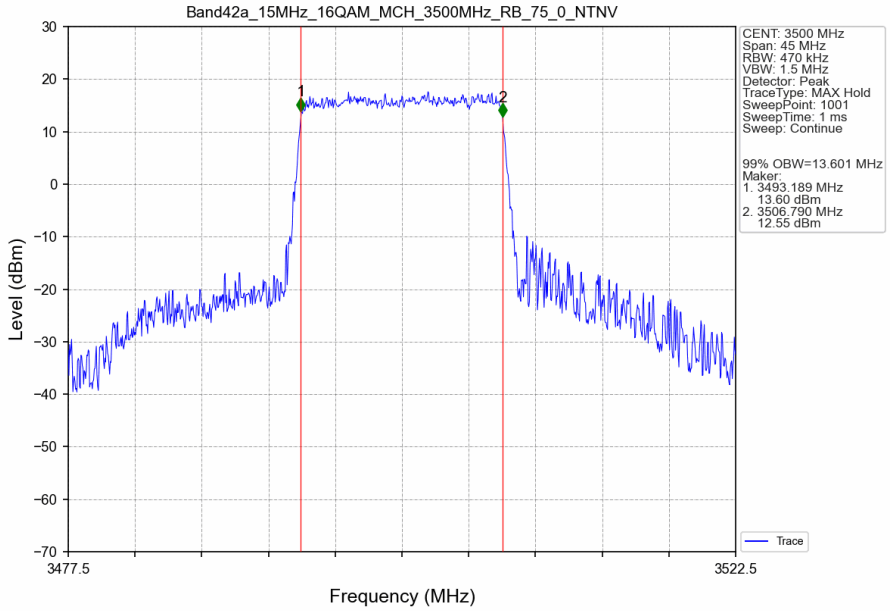
Band42a_10MHz_16QAM_MCH_3500MHz_RB_50_0_NTNV



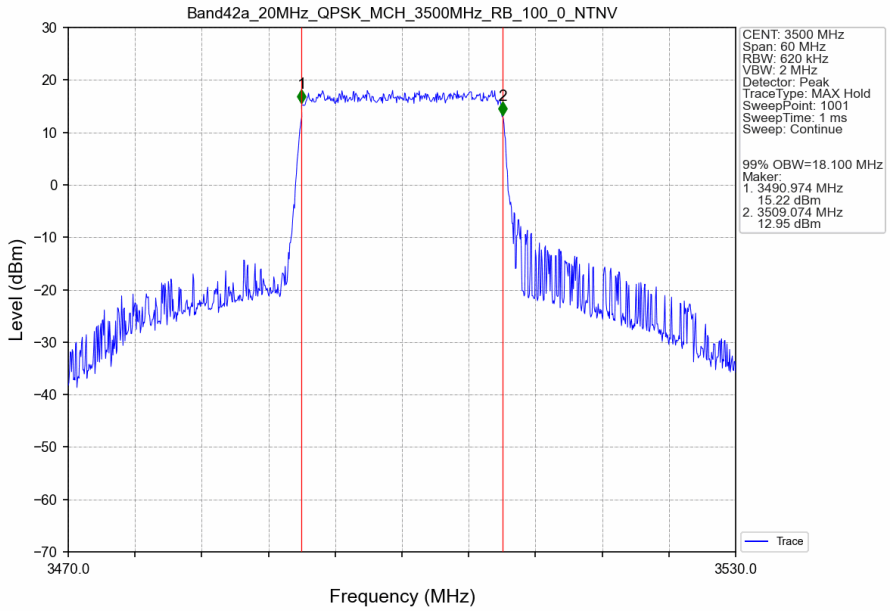
Band42a_15MHz_QPSK_MCH_3500MHz_RB_75_0_NTNV



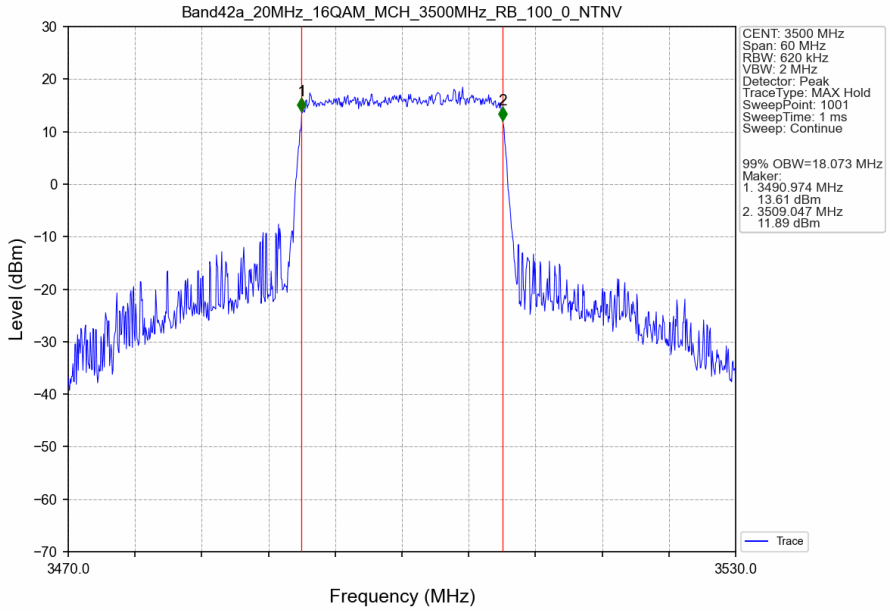
Band42a_15MHz_16QAM_MCH_3500MHz_RB_75_0_NTNV



Band42a_20MHz_QPSK_MCH_3500MHz_RB_100_0_NTNV

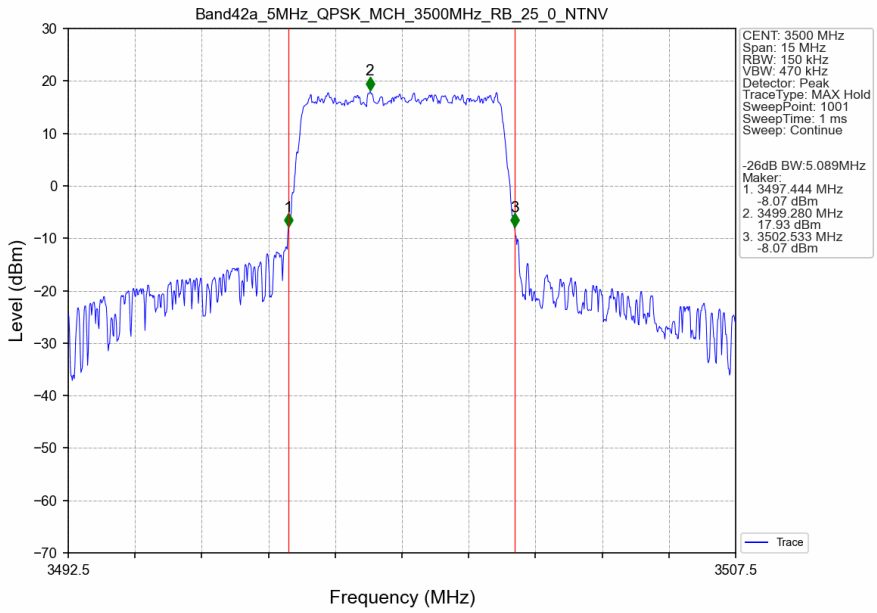


Band42a_20MHz_16QAM_MCH_3500MHz_RB_100_0_NTNV

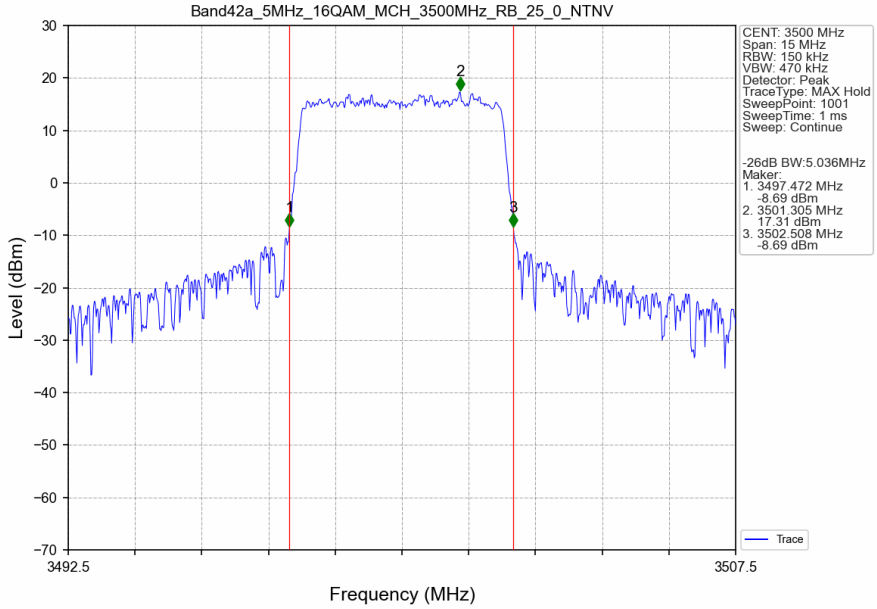


3.2.2 Band42a_XDB

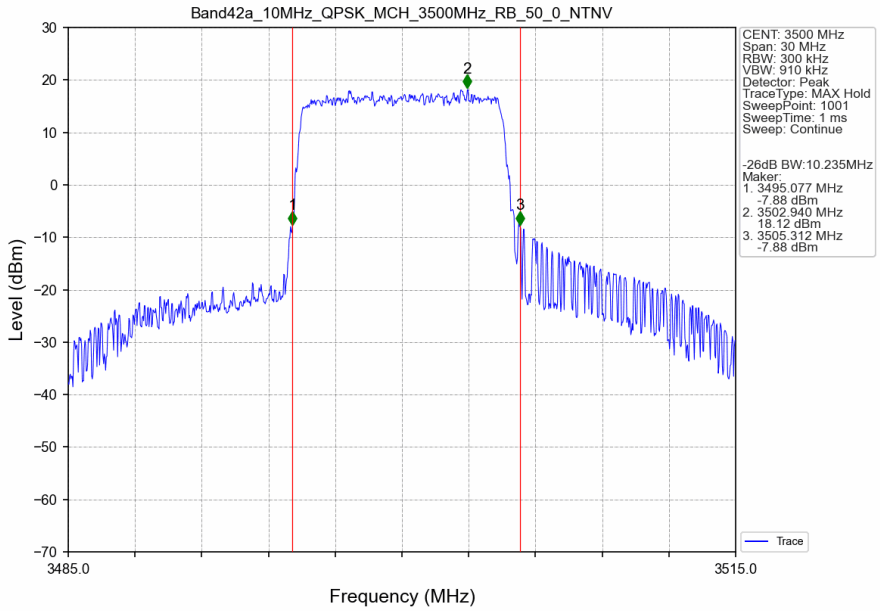
Band42a_5MHz_QPSK_MCH_3500MHz_RB_25_0_NTNV



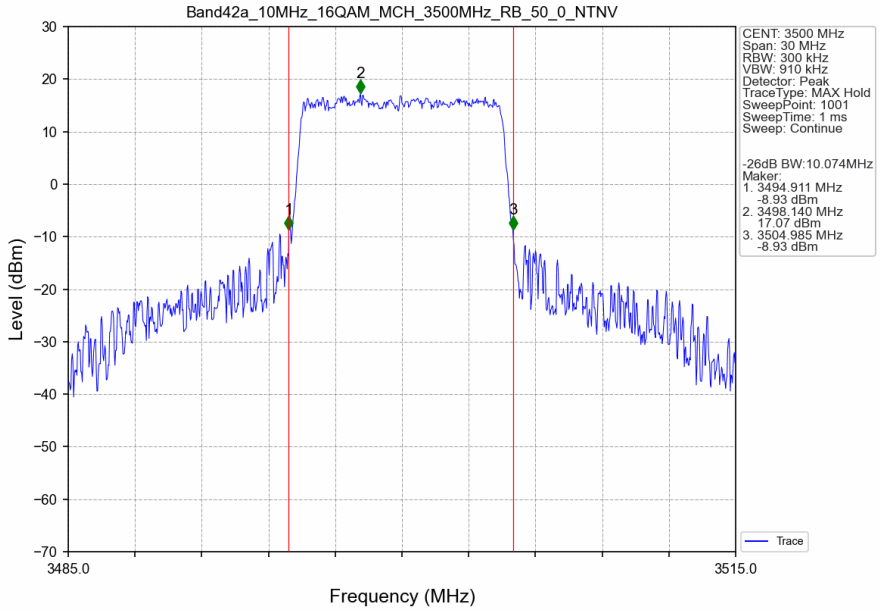
Band42a_5MHz_16QAM_MCH_3500MHz_RB_25_0_NTNV



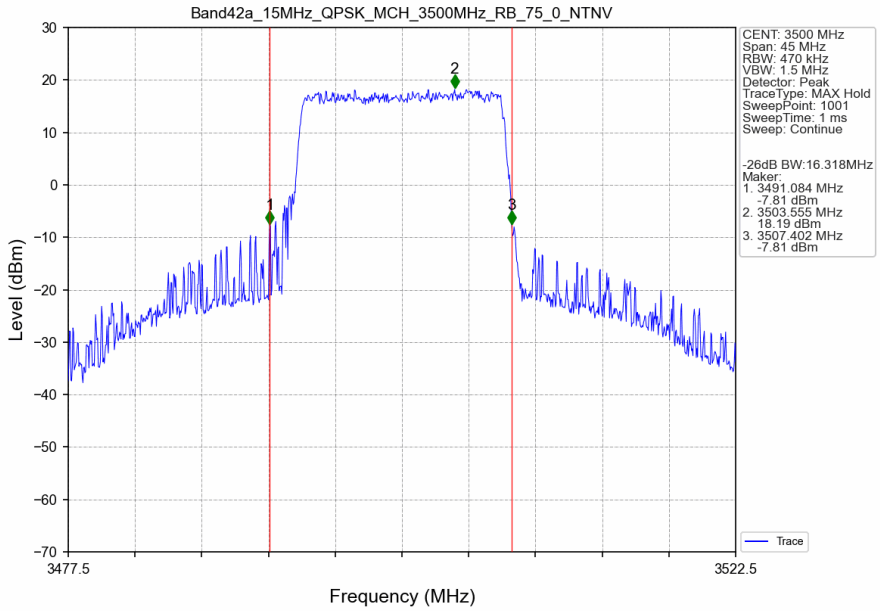
Band42a_10MHz_QPSK_MCH_3500MHz_RB_50_0_NTNV



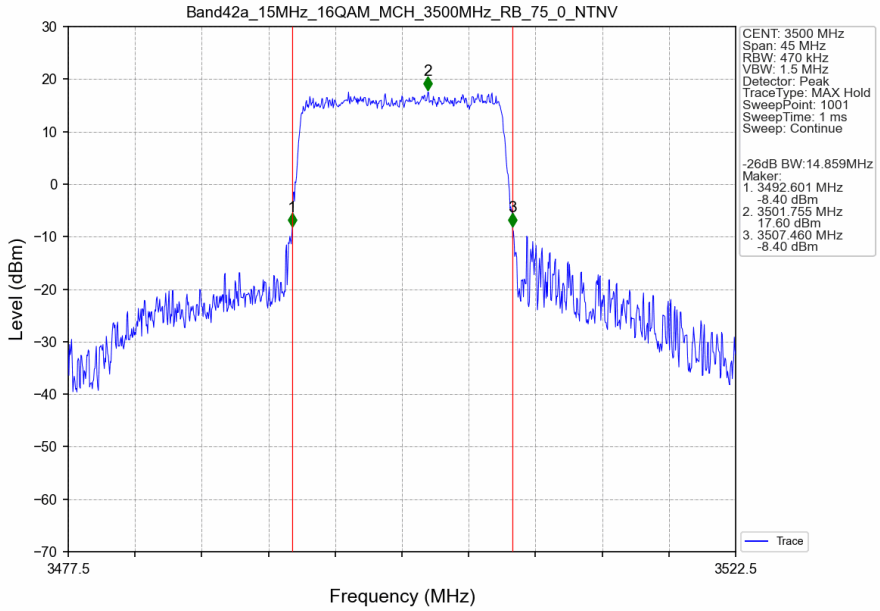
Band42a_10MHz_16QAM_MCH_3500MHz_RB_50_0_NTNV



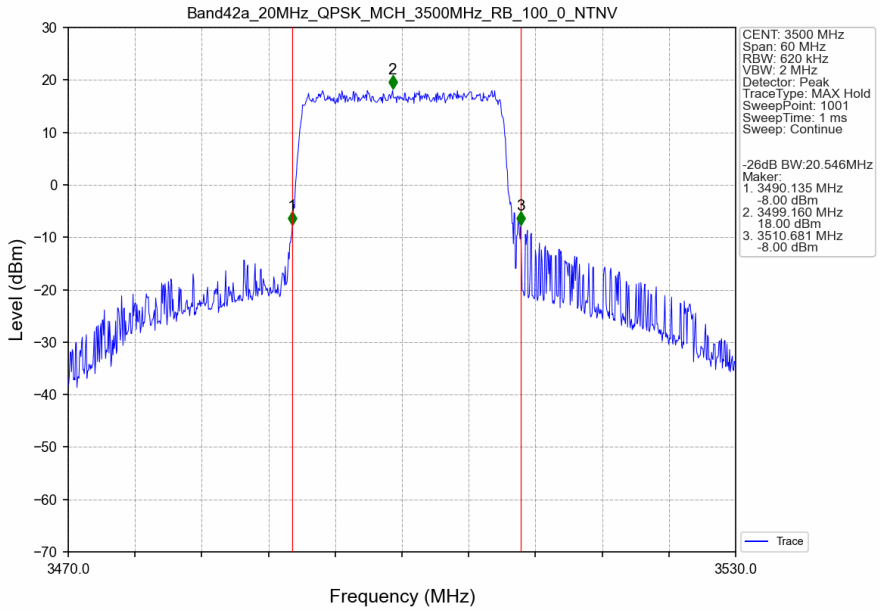
Band42a_15MHz_QPSK_MCH_3500MHz_RB_75_0_NTNV



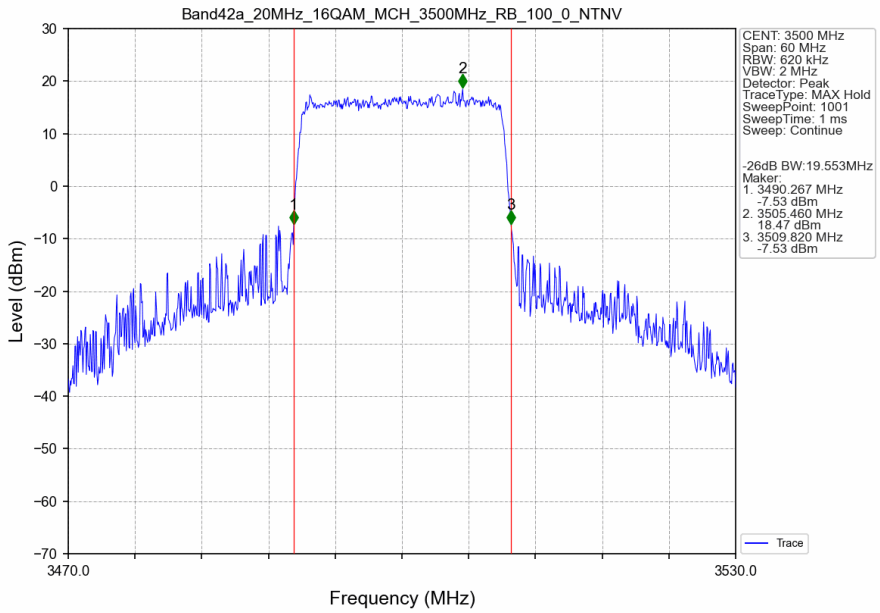
Band42a_15MHz_16QAM_MCH_3500MHz_RB_75_0_NTNV



Band42a_20MHz_QPSK_MCH_3500MHz_RB_100_0_NTNV



Band42a_20MHz_16QAM_MCH_3500MHz_RB_100_0_NTNV



4. Peak-Average Ratio

4.1 Test Result

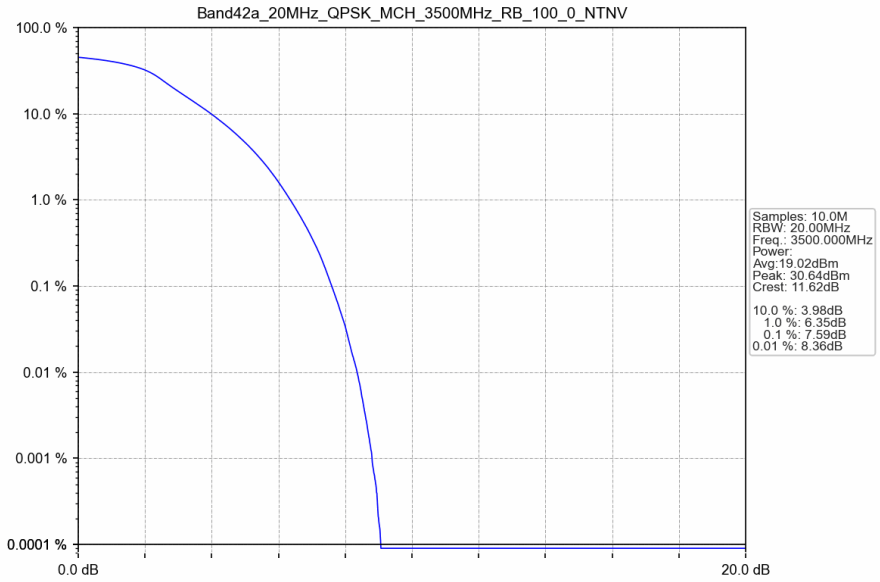
4.1.1 B42a_20MHz

Band: 42a / Bandwidth: 20MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Peak-Average Ratio (dB)		Verdict
		Size	Offset	Result	Limit	
QPSK	3500	100	0	7.59	<=13	Pass
16QAM	3500	100	0	8.12	<=13	Pass
64QAM	3500	100	0	8.30	<=13	Pass
256QAM	3500	100	0	8.52	<=13	Pass

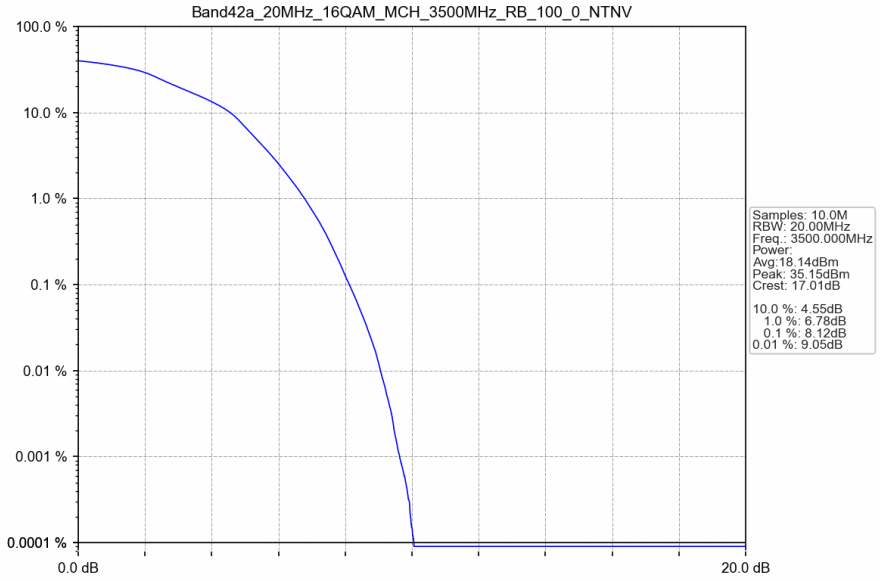
4.2 Test Graph

4.2.1 B42a_20MHz

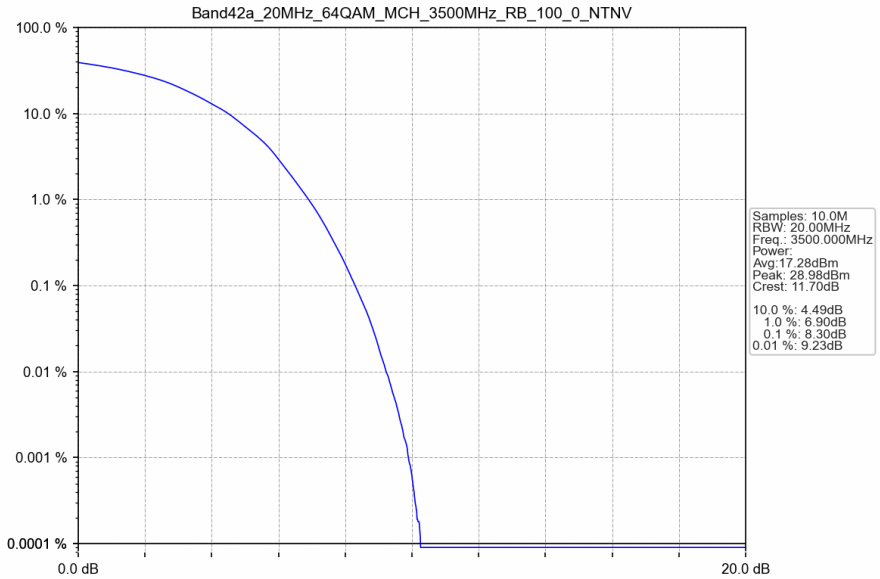
Band42a_20MHz_QPSK_MCH_3500MHz_RB_100_0_NTNV



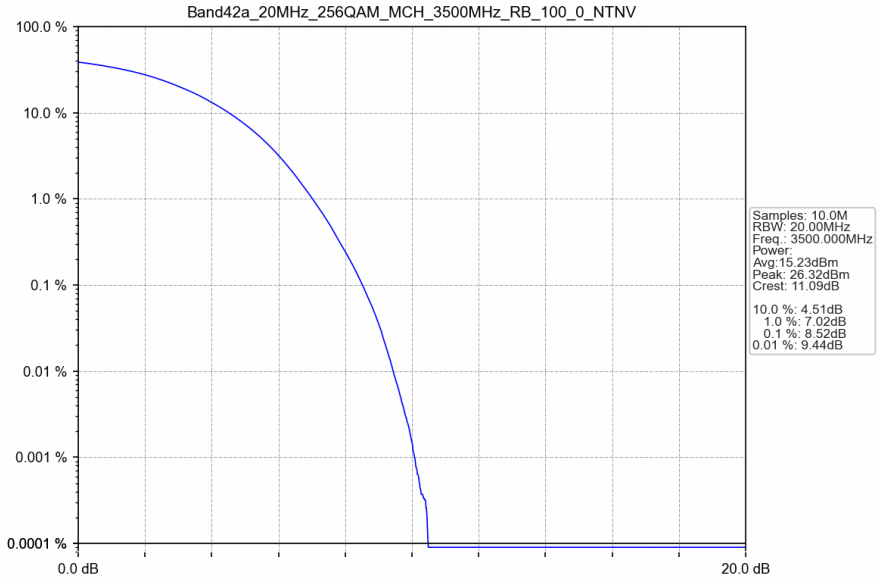
Band42a_20MHz_16QAM_MCH_3500MHz_RB_100_0_NTNV



Band42a_20MHz_64QAM_MCH_3500MHz_RB_100_0_NTNV



Band42a_20MHz_256QAM_MCH_3500MHz_RB_100_0_NTNV



5. Spurious Emission

5.1 Test Result

5.1.1 B42a_5MHz

Band: 42a / Bandwidth: 5MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission		Verdict
		Size	Offset	Result	Limit	
QPSK	3452.5	1	0	Refer To Test Graph		Pass
		25	0	Refer To Test Graph		Pass
	3500	1	0	Refer To Test Graph		Pass
	3547.5	1	0	Refer To Test Graph		Pass
			24	Refer To Test Graph		Pass
		25	0	Refer To Test Graph		Pass

5.1.2 B42a_10MHz

Band: 42a / Bandwidth: 10MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission		Verdict
		Size	Offset	Result	Limit	
QPSK	3455	1	0	Refer To Test Graph		Pass
		50	0	Refer To Test Graph		Pass
	3500	1	0	Refer To Test Graph		Pass
	3545	1	0	Refer To Test Graph		Pass
			49	Refer To Test Graph		Pass
		50	0	Refer To Test Graph		Pass

5.1.3 B42a_15MHz

Band: 42a / Bandwidth: 15MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission		Verdict
		Size	Offset	Result	Limit	
QPSK	3457.5	1	0	Refer To Test Graph		Pass
		75	0	Refer To Test Graph		Pass
	3500	1	0	Refer To Test Graph		Pass
	3542.5	1	0	Refer To Test Graph		Pass
			74	Refer To Test Graph		Pass
		75	0	Refer To Test Graph		Pass

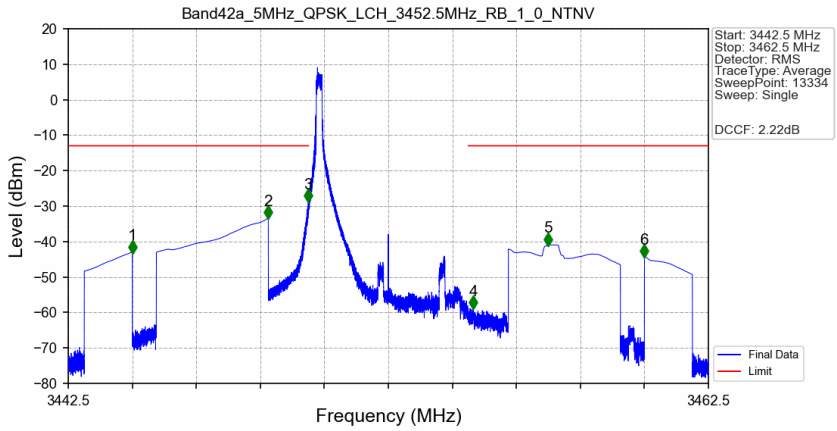
5.1.4 B42a_20MHz

Band: 42a / Bandwidth: 20MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission		Verdict
		Size	Offset	Result	Limit	
QPSK	3460	1	0	Refer To Test Graph		Pass
		100	0	Refer To Test Graph		Pass
	3500	1	0	Refer To Test Graph		Pass
	3540	1	0	Refer To Test Graph		Pass
			99	Refer To Test Graph		Pass
		100	0	Refer To Test Graph		Pass

5.2 Test Graph

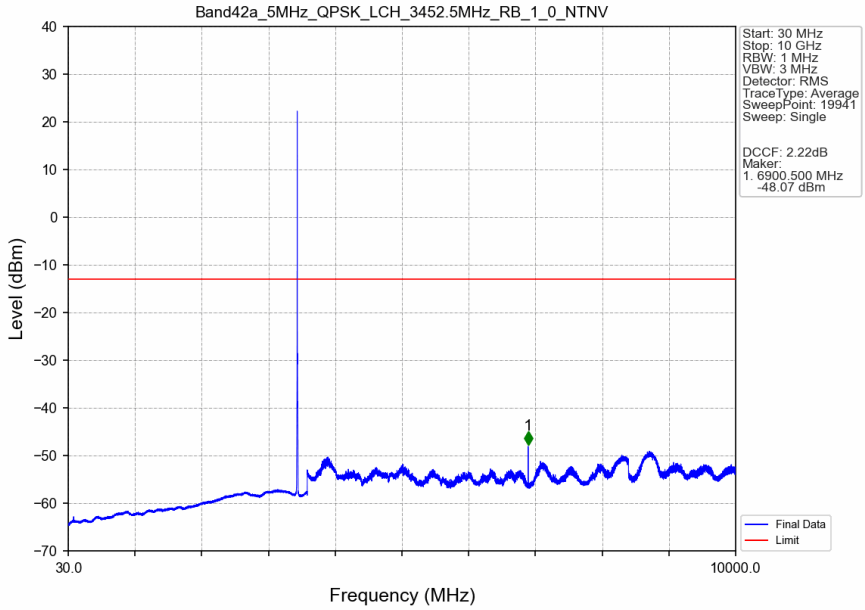
5.2.1 B42a_5MHz

Band42a_5MHz_QPSK_LCH_3452.5MHz_RB_1_0_NTNV

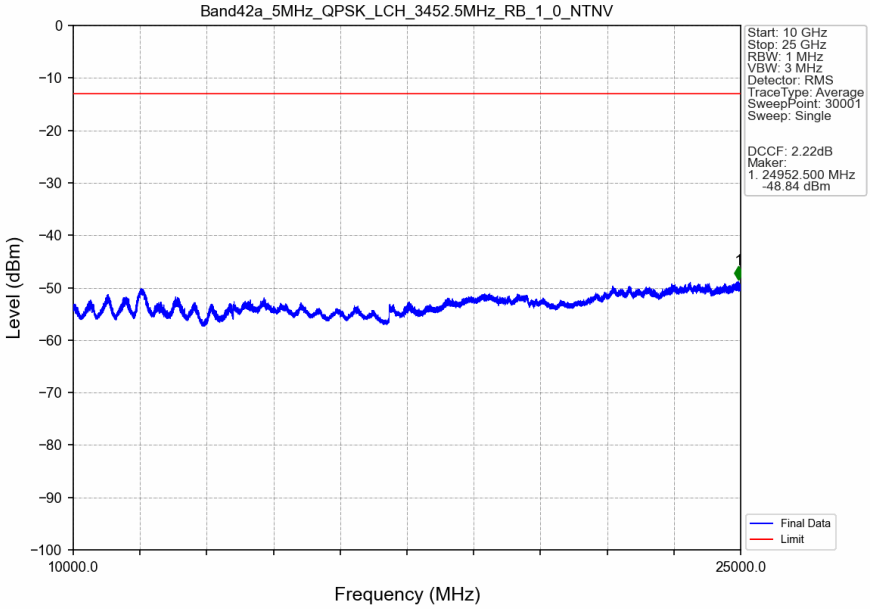


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
3442.5	3445	1	CHP	1	3444.498	-43.03	-13	Pass
3445	3449	0.5	CHP	2	3448.748	-33.33	-13	Pass
3449	3450	0.003	/	3	3449.999	-28.56	-13	Pass
3450	3455	0.003	/	/	/	/	/	/
3455	3456	0.003	/	4	3455.150	-58.70	-13	Pass
3456	3460	0.5	CHP	5	3457.493	-40.93	-13	Pass
3460	3462.5	1	CHP	6	3460.500	-44.20	-13	Pass

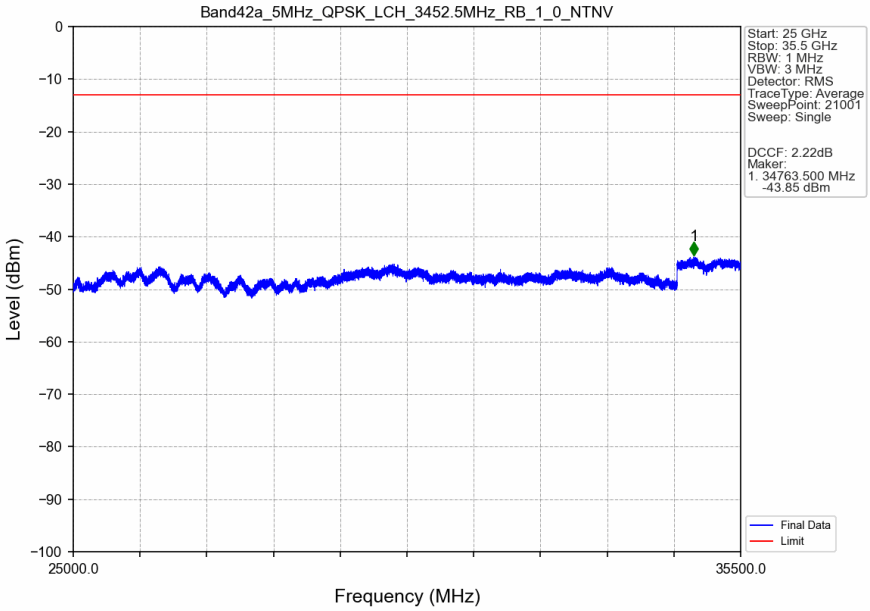
Band42a_5MHz_QPSK_LCH_3452.5MHz_RB_1_0_NTNV



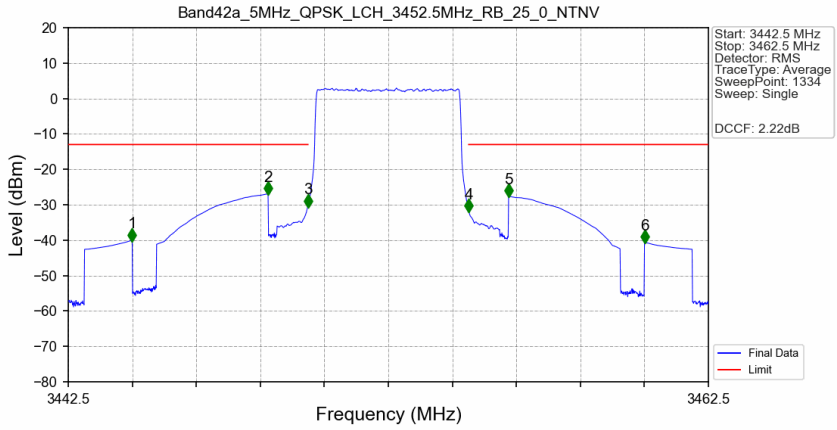
Band42a_5MHz_QPSK_LCH_3452.5MHz_RB_1_0_NTNV



Band42a_5MHz_QPSK_LCH_3452.5MHz_RB_1_0_NTNV

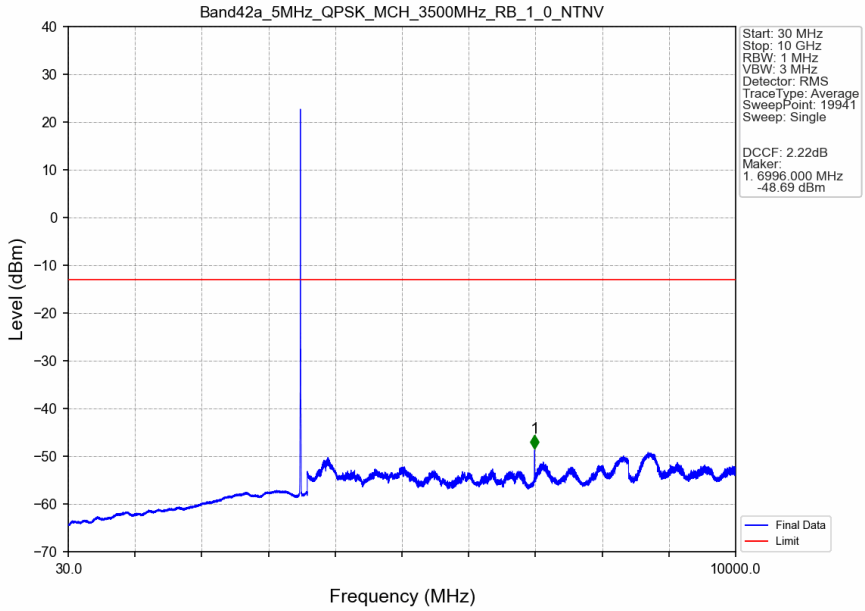


Band42a_5MHz_QPSK_LCH_3452.5MHz_RB_25_0_NTNV

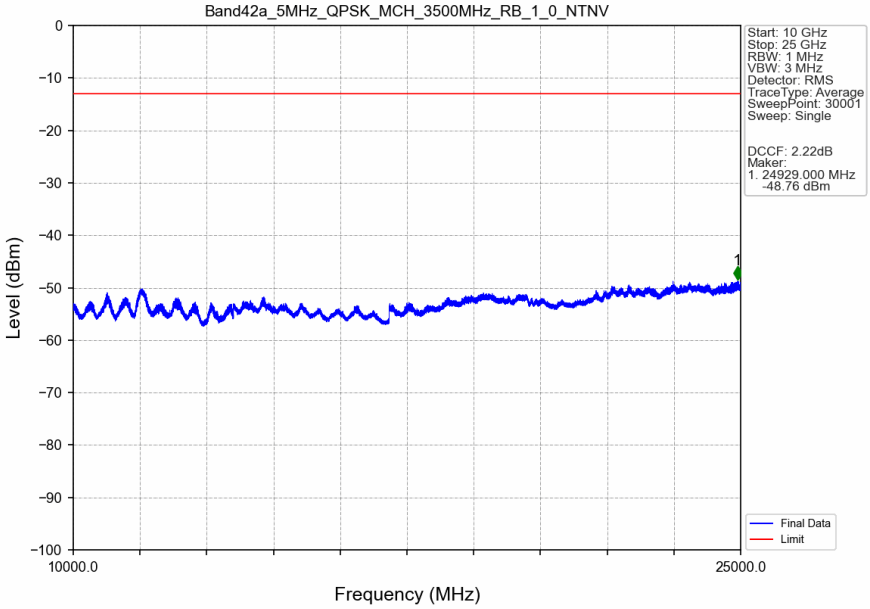


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
3442.5	3445	1	CHP	1	3444.495	-40.06	-13	Pass
3445	3449	0.5	CHP	2	3448.742	-26.98	-13	Pass
3449	3450	0.051	CHP	3	3449.987	-30.42	-13	Pass
3450	3455	0.051	CHP	/	/	/	/	/
3455	3456	0.051	CHP	4	3455.013	-31.82	-13	Pass
3456	3460	0.5	CHP	5	3456.258	-27.52	-13	Pass
3460	3462.5	1	CHP	6	3460.505	-40.62	-13	Pass

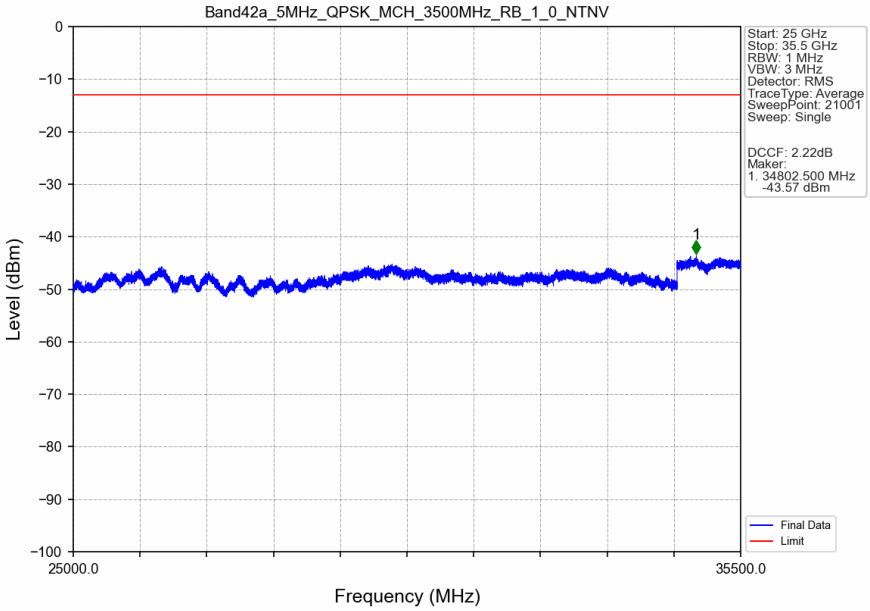
Band42a_5MHz_QPSK_MCH_3500MHz_RB_1_0_NTNV



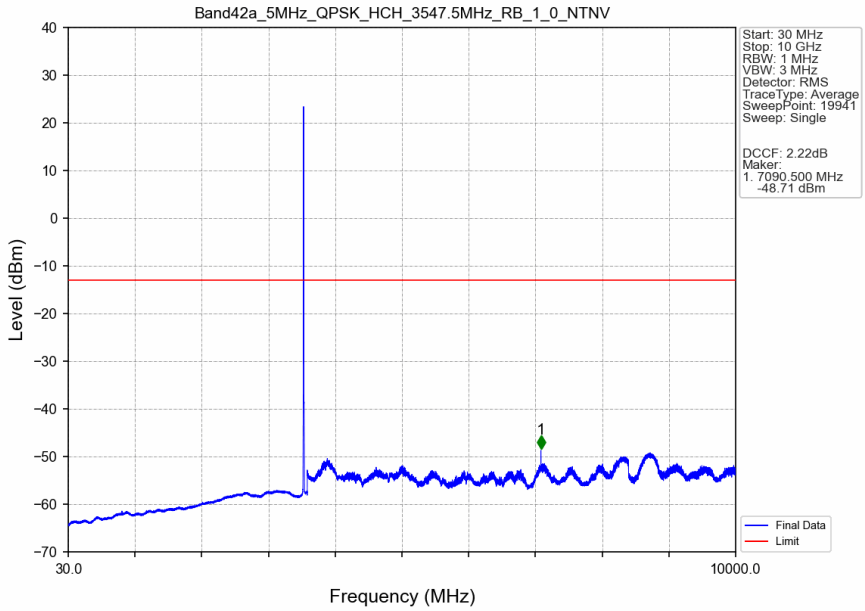
Band42a_5MHz_QPSK_MCH_3500MHz_RB_1_0_NTNV



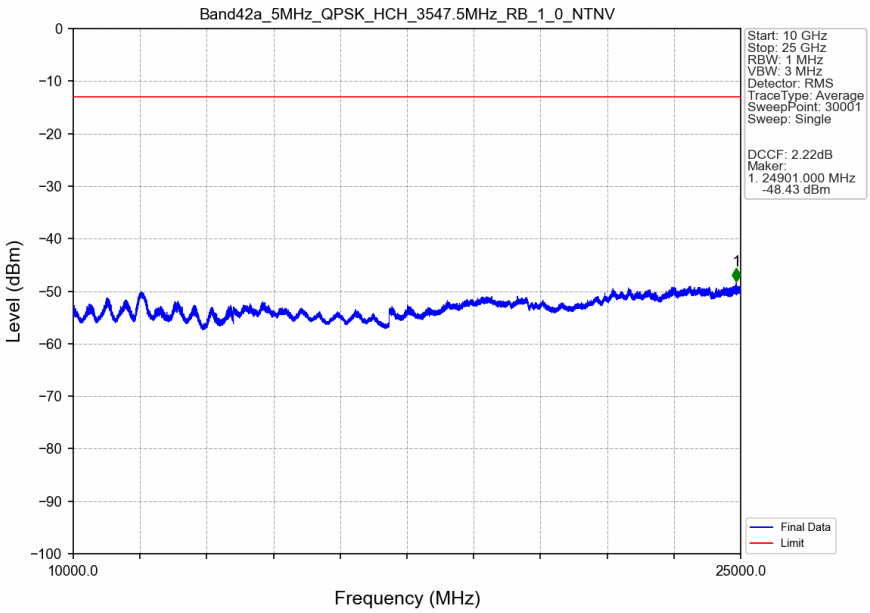
Band42a_5MHz_QPSK_MCH_3500MHz_RB_1_0_NTNV



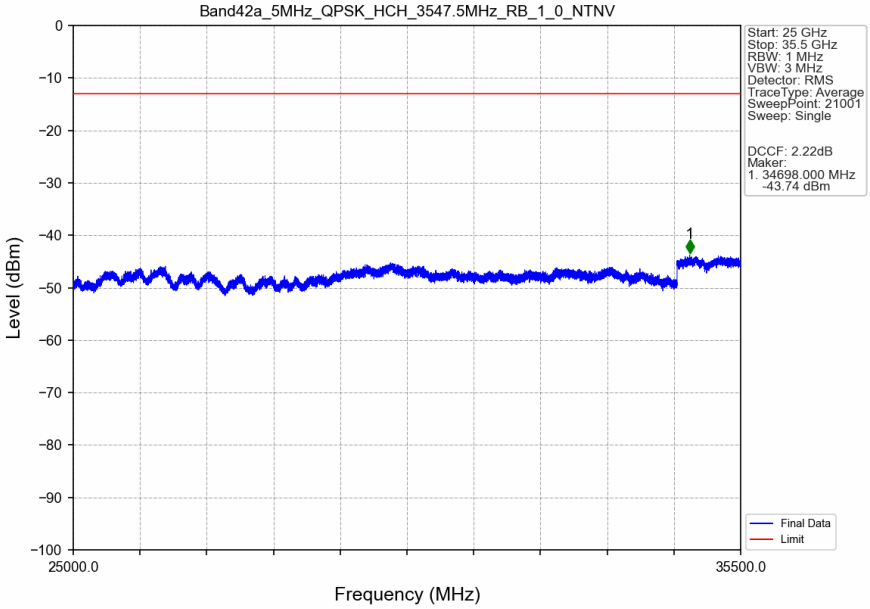
Band42a_5MHz_QPSK_HCH_3547.5MHz_RB_1_0_NTNV



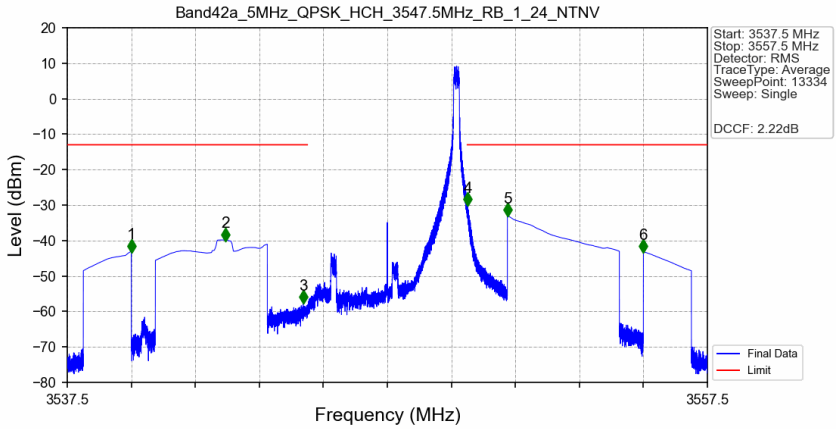
Band42a_5MHz_QPSK_HCH_3547.5MHz_RB_1_0_NTNV



Band42a_5MHz_QPSK_HCH_3547.5MHz_RB_1_0_NTNV

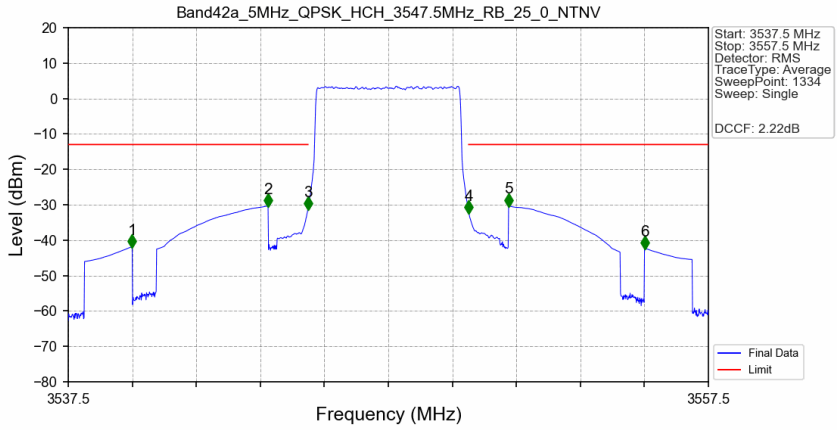


Band42a_5MHz_QPSK_HCH_3547.5MHz_RB_1_24_NTNV



Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
3537.5	3540	1	CHP	1	3539.498	-43.06	-13	Pass
3540	3544	0.5	CHP	2	3542.435	-39.82	-13	Pass
3544	3545	0.003	/	3	3544.868	-57.49	-13	Pass
3545	3550	0.003	/	/	/	/	/	/
3550	3551	0.003	/	4	3550.010	-29.95	-13	Pass
3551	3555	0.5	CHP	5	3551.251	-32.88	-13	Pass
3555	3557.5	1	CHP	6	3555.500	-43.13	-13	Pass

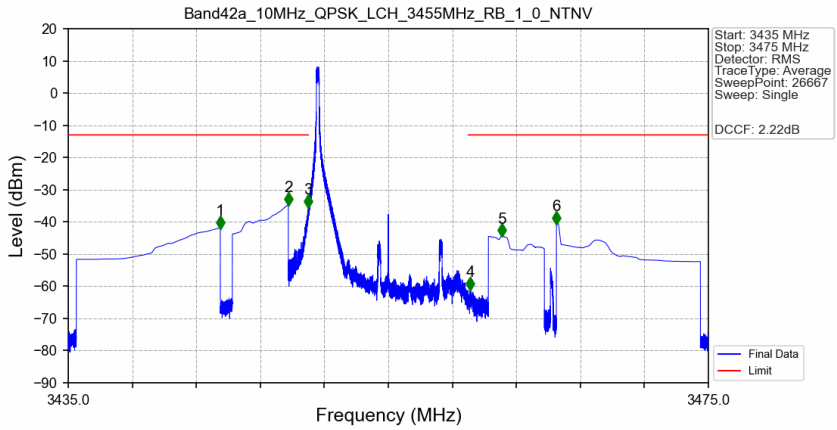
Band42a_5MHz_QPSK_HCH_3547.5MHz_RB_25_0_NTNV



Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
3537.5	3540	1	CHP	1	3539.495	-41.87	-13	Pass
3540	3544	0.5	CHP	2	3543.742	-30.36	-13	Pass
3544	3545	0.051	CHP	3	3544.987	-31.19	-13	Pass
3545	3550	0.051	CHP	/	/	/	/	/
3550	3551	0.051	CHP	4	3550.013	-32.23	-13	Pass
3551	3555	0.5	CHP	5	3551.258	-30.22	-13	Pass
3555	3557.5	1	CHP	6	3555.505	-42.26	-13	Pass

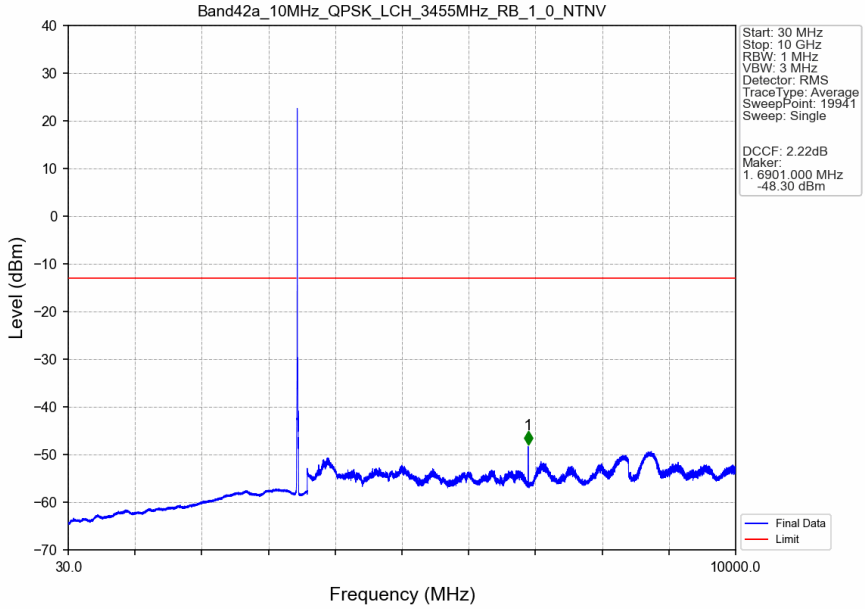
5.2.2 B42a_10MHz

Band42a_10MHz_QPSK_LCH_3455MHz_RB_1_0_NTNV

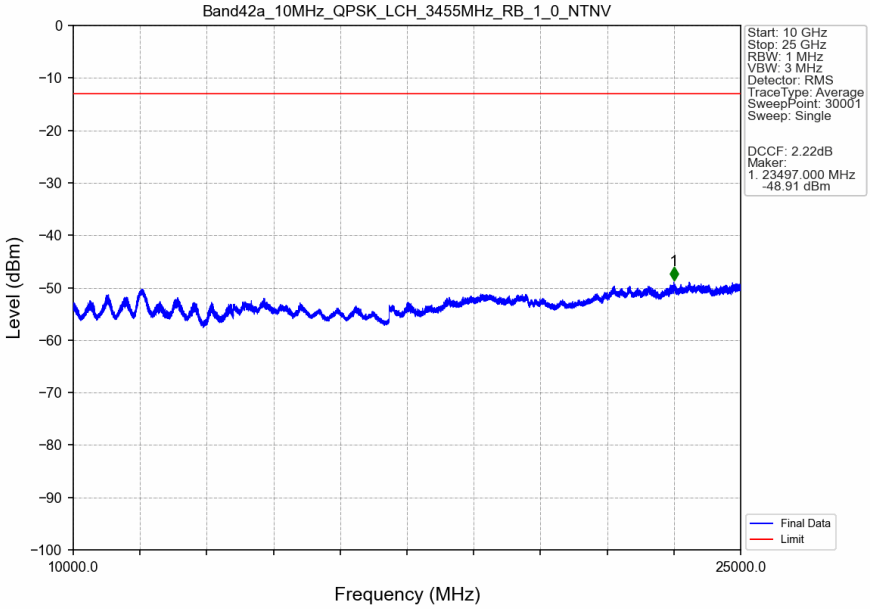


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
3435	3445	1	CHP	1	3444.497	-41.85	-13	Pass
3445	3449	0.5	CHP	2	3448.749	-34.52	-13	Pass
3449	3450	0.003	/	3	3449.999	-35.26	-13	Pass
3450	3460	0.003	/	/	/	/	/	/
3460	3461	0.003	/	4	3460.112	-60.84	-13	Pass
3461	3465	0.5	CHP	5	3462.104	-44.26	-13	Pass
3465	3475	1	CHP	6	3465.500	-40.40	-13	Pass

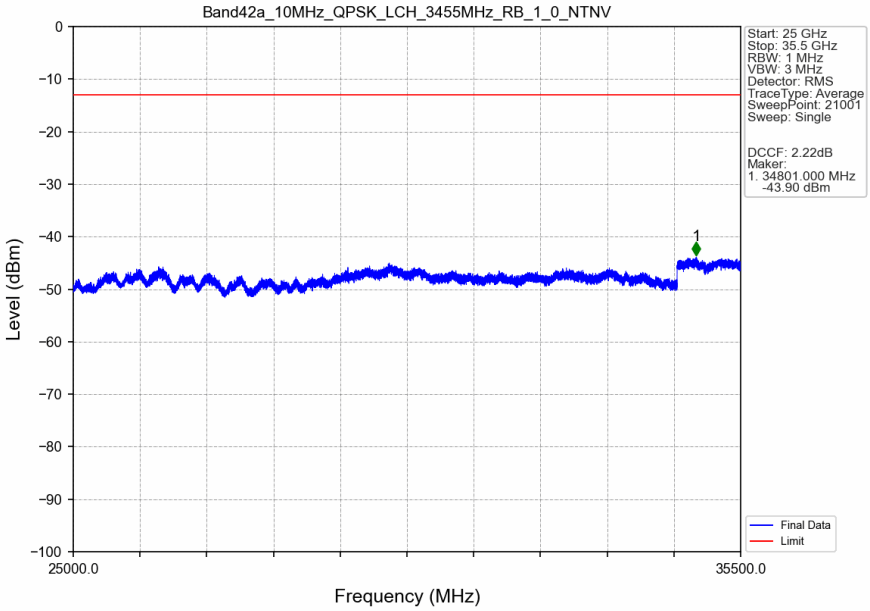
Band42a_10MHz_QPSK_LCH_3455MHz_RB_1_0_NTNV



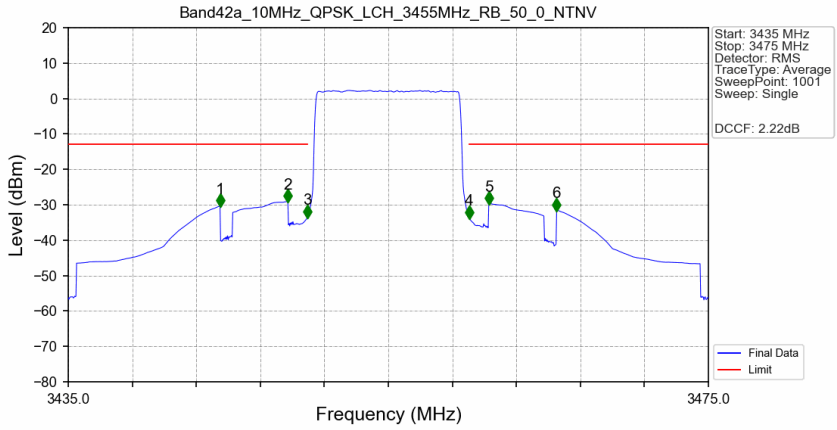
Band42a_10MHz_QPSK_LCH_3455MHz_RB_1_0_NTNV



Band42a_10MHz_QPSK_LCH_3455MHz_RB_1_0_NTNV

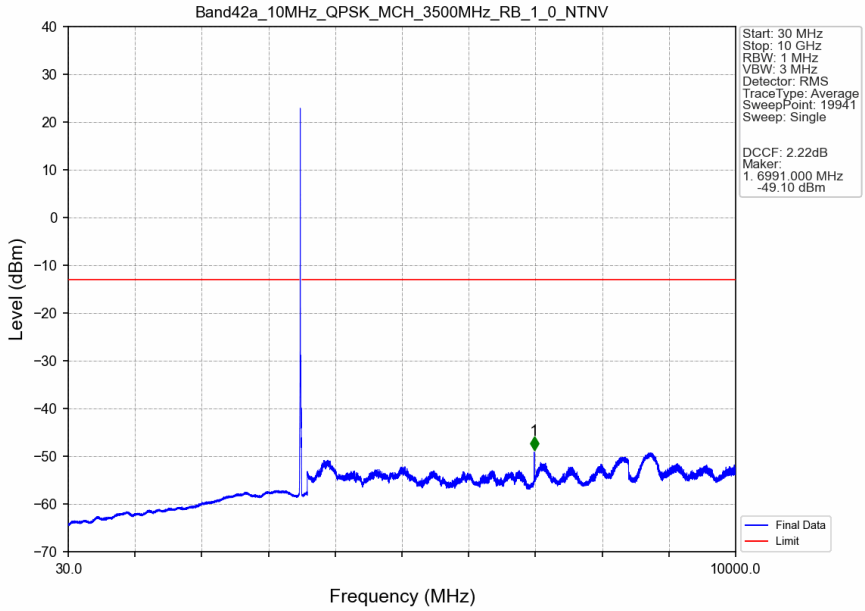


Band42a_10MHz_QPSK_LCH_3455MHz_RB_50_0_NTNV

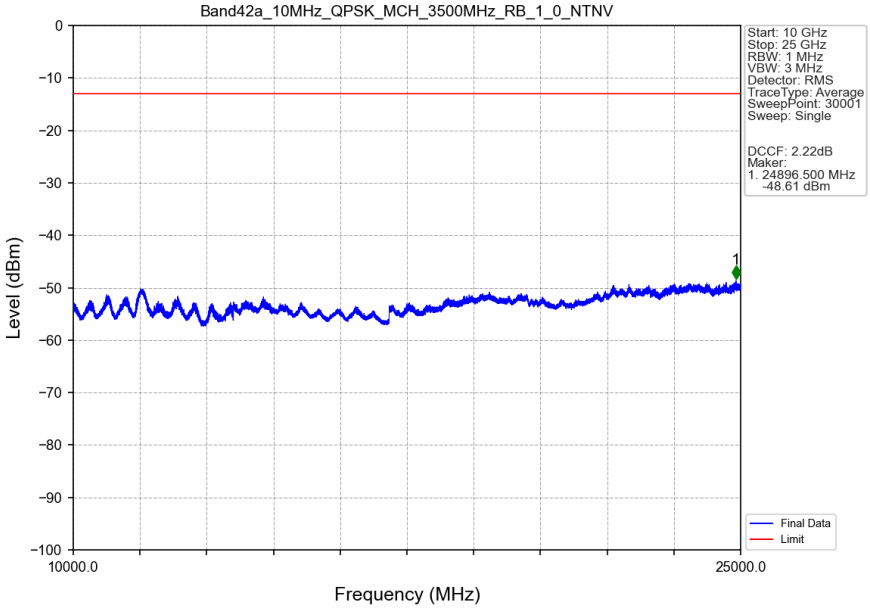


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
3435	3445	1	CHP	1	3444.480	-30.37	-13	Pass
3445	3449	0.5	CHP	2	3448.720	-29.01	-13	Pass
3449	3450	0.102	CHP	3	3449.960	-33.41	-13	Pass
3450	3460	0.102	CHP	/	/	/	/	/
3460	3461	0.102	CHP	4	3460.040	-33.61	-13	Pass
3461	3465	0.5	CHP	5	3461.280	-29.65	-13	Pass
3465	3475	1	CHP	6	3465.520	-31.49	-13	Pass

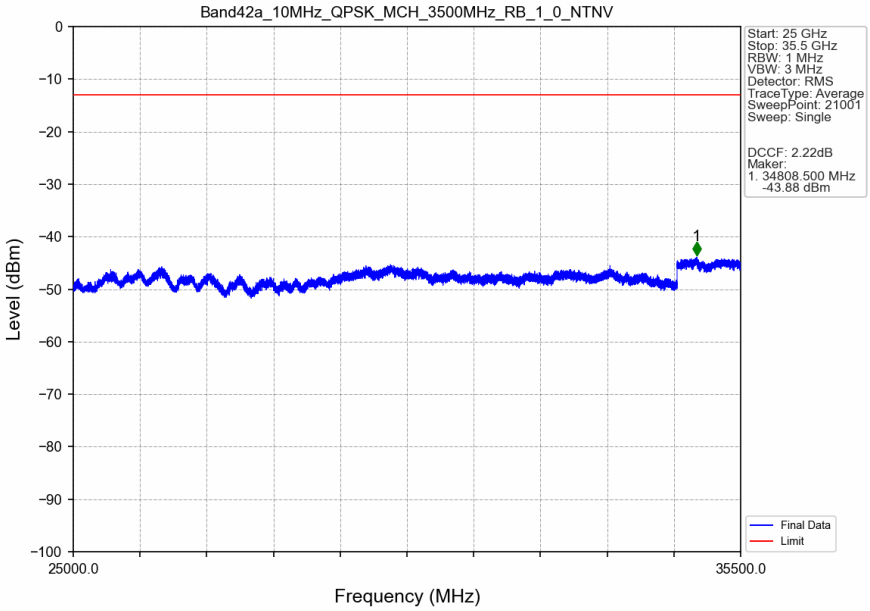
Band42a_10MHz_QPSK_MCH_3500MHz_RB_1_0_NTNV



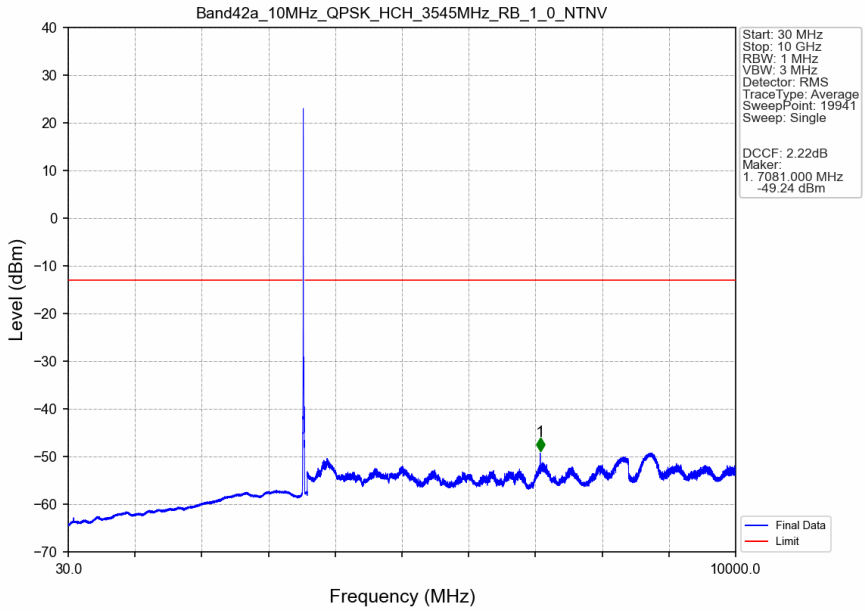
Band42a_10MHz_QPSK_MCH_3500MHz_RB_1_0_NTNV



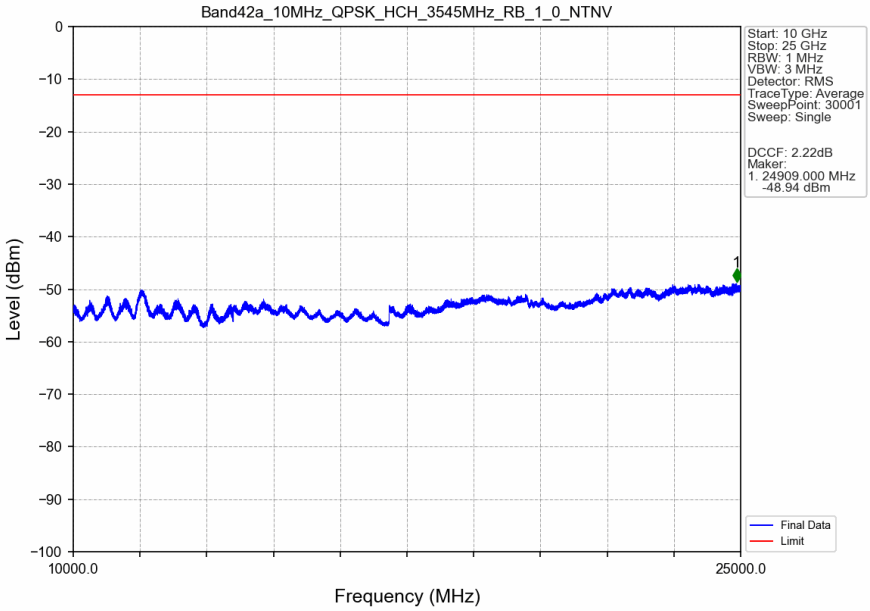
Band42a_10MHz_QPSK_MCH_3500MHz_RB_1_0_NTNV



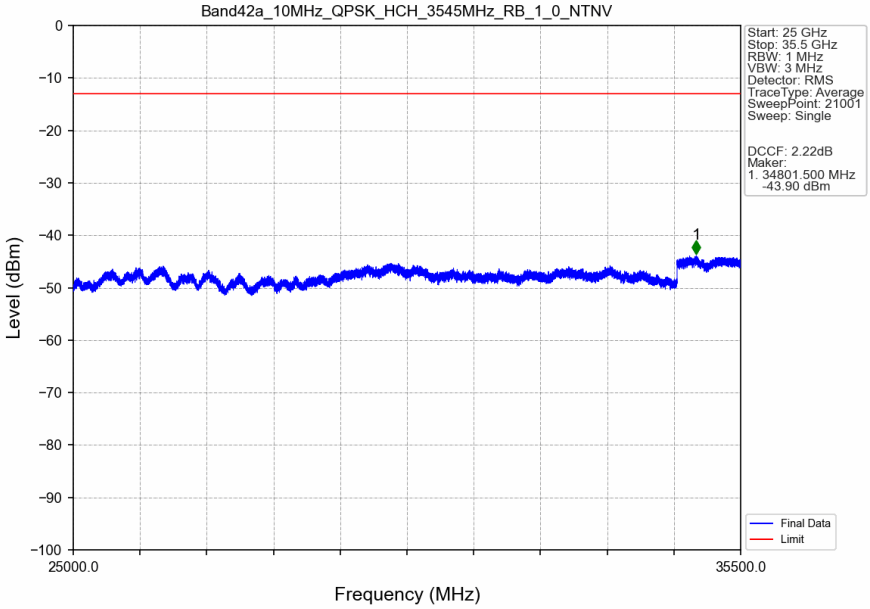
Band42a_10MHz_QPSK_HCH_3545MHz_RB_1_0_NTNV



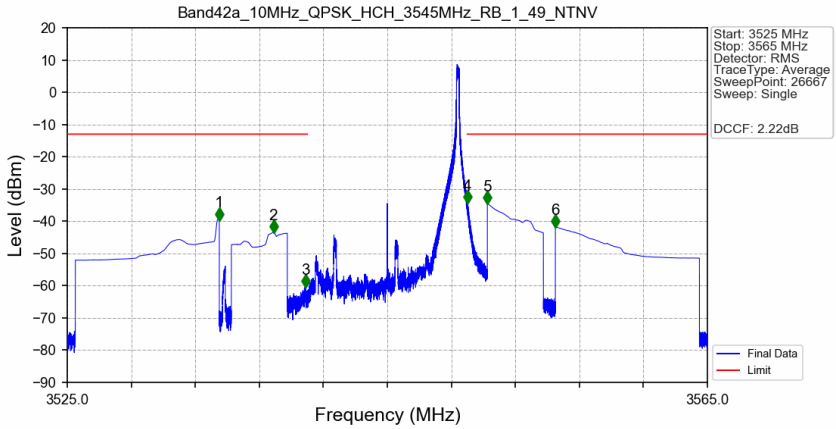
Band42a_10MHz_QPSK_HCH_3545MHz_RB_1_0_NTNV



Band42a_10MHz_QPSK_HCH_3545MHz_RB_1_0_NTNV

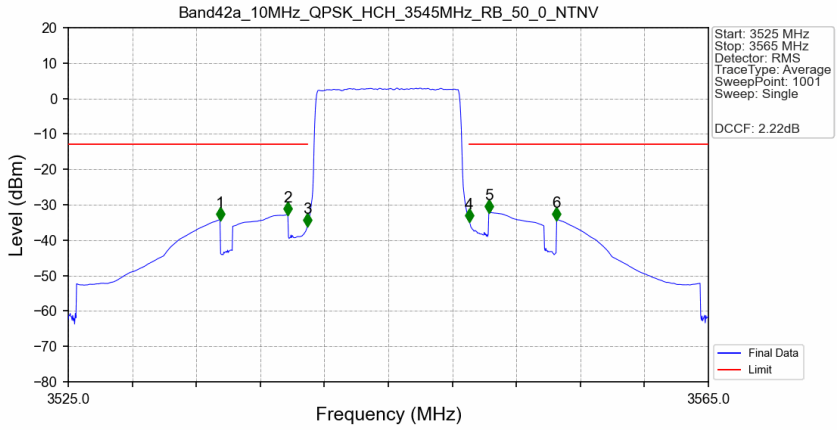


Band42a_10MHz_QPSK_HCH_3545MHz_RB_1_49_NTNV



Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
3525	3535	1	CHP	1	3534.497	-39.47	-13	Pass
3535	3539	0.5	CHP	2	3537.888	-43.42	-13	Pass
3539	3540	0.003	/	3	3539.871	-60.35	-13	Pass
3540	3550	0.003	/	/	/	/	/	/
3550	3551	0.003	/	4	3550.010	-34.15	-13	Pass
3551	3555	0.5	CHP	5	3551.251	-34.38	-13	Pass
3555	3565	1	CHP	6	3555.500	-41.72	-13	Pass

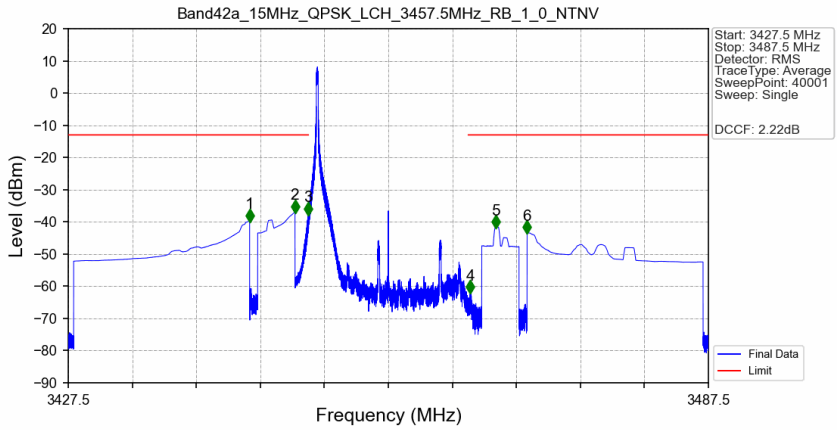
Band42a_10MHz_QPSK_HCH_3545MHz_RB_50_0_NTNV



Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
3525	3535	1	CHP	1	3534.480	-34.20	-13	Pass
3535	3539	0.5	CHP	2	3538.720	-32.73	-13	Pass
3539	3540	0.102	CHP	3	3539.960	-35.85	-13	Pass
3540	3550	0.102	CHP	/	/	/	/	/
3550	3551	0.102	CHP	4	3550.040	-34.57	-13	Pass
3551	3555	0.5	CHP	5	3551.280	-32.07	-13	Pass
3555	3565	1	CHP	6	3555.520	-34.11	-13	Pass

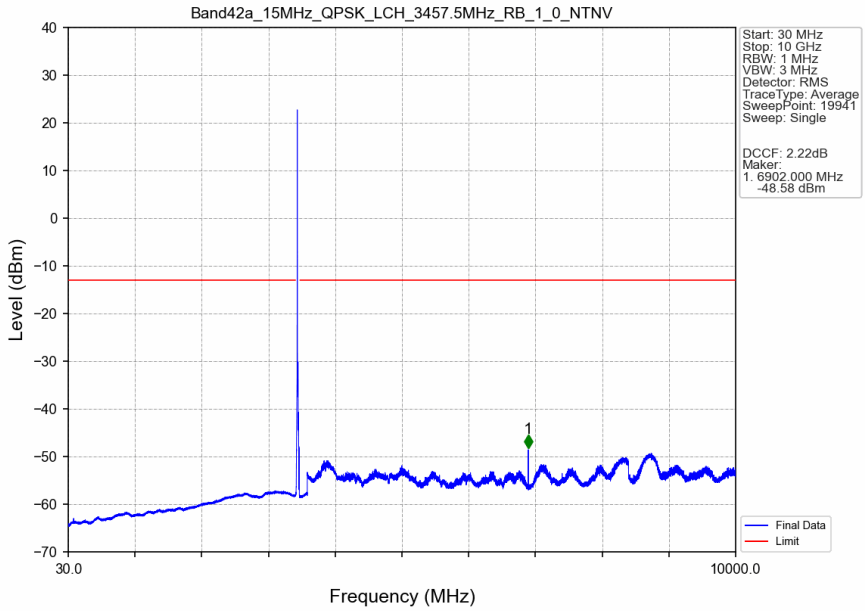
5.2.3 B42a_15MHz

Band42a_15MHz_QPSK_LCH_3457.5MHz_RB_1_0_NTNV

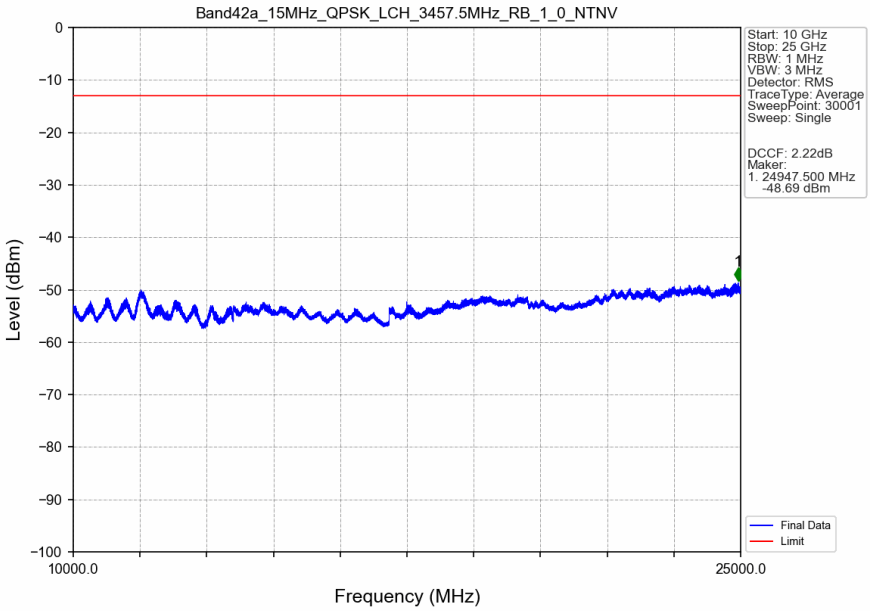


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
3427.5	3445	1	CHP	1	3444.490	-39.72	-13	Pass
3445	3449	0.5	CHP	2	3448.744	-36.86	-13	Pass
3449	3450	0.003	/	3	3449.995	-37.58	-13	Pass
3450	3465	0.003	/	/	/	/	/	/
3465	3466	0.003	/	4	3465.173	-62.00	-13	Pass
3466	3470	0.5	CHP	5	3467.586	-41.64	-13	Pass
3470	3487.5	1	CHP	6	3470.503	-43.40	-13	Pass

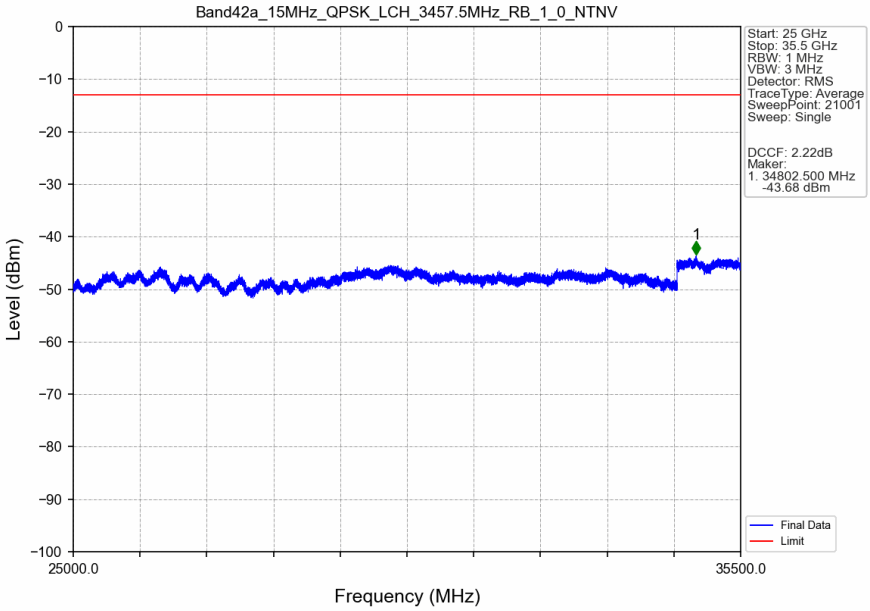
Band42a_15MHz_QPSK_LCH_3457.5MHz_RB_1_0_NTNV



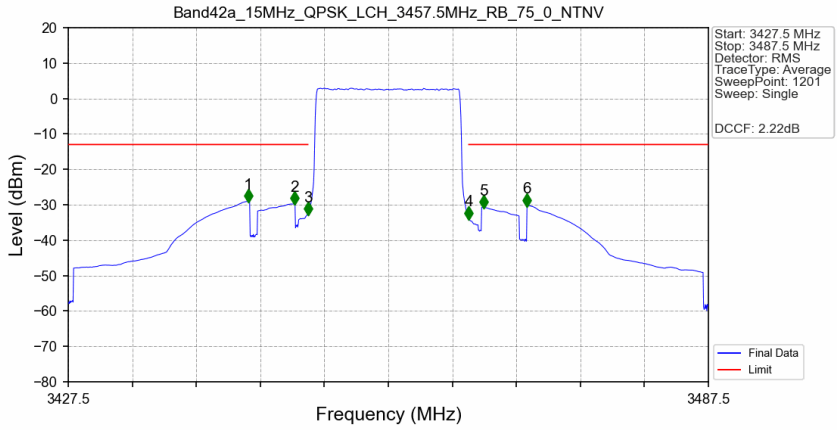
Band42a_15MHz_QPSK_LCH_3457.5MHz_RB_1_0_NTNV



Band42a_15MHz_QPSK_LCH_3457.5MHz_RB_1_0_NTNV

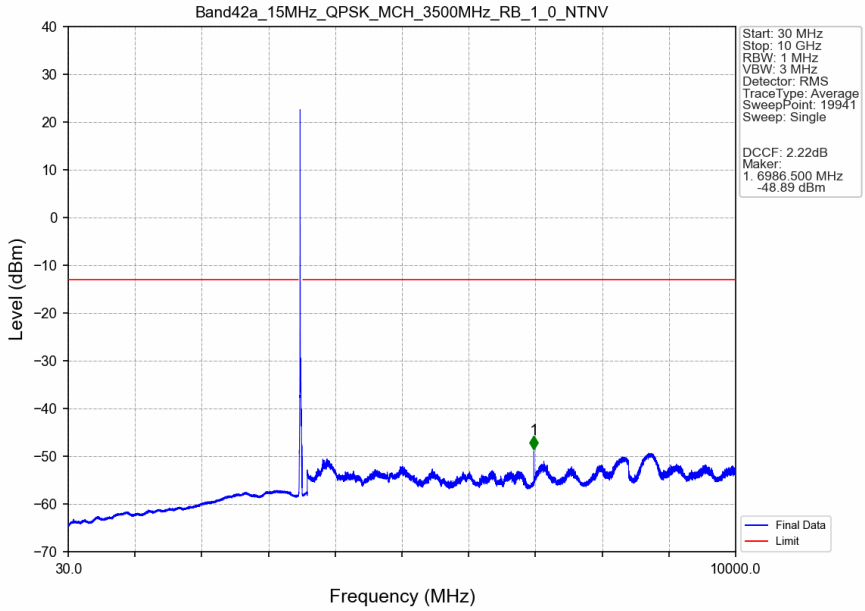


Band42a_15MHz_QPSK_LCH_3457.5MHz_RB_75_0_NTNV

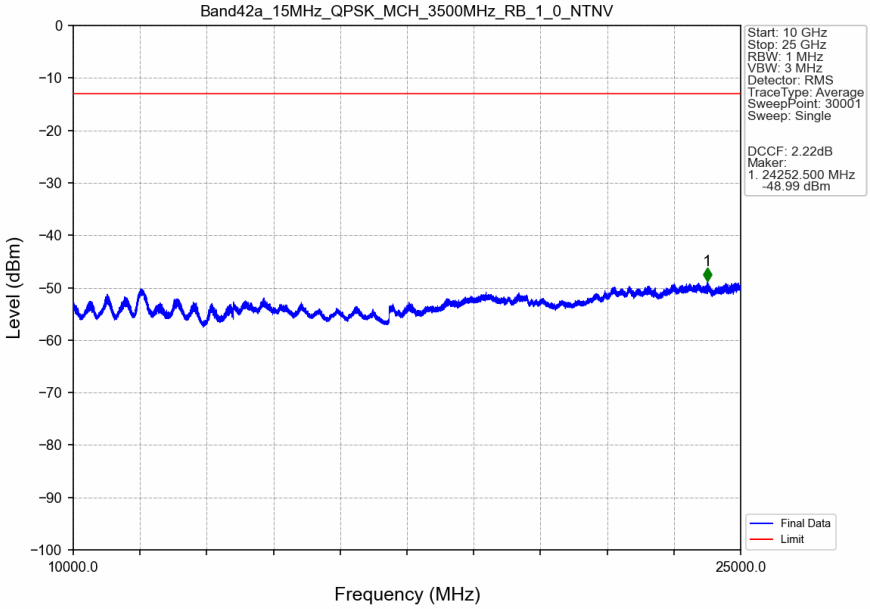


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
3427.5	3445	1	CHP	1	3444.350	-29.07	-13	Pass
3445	3449	0.5	CHP	2	3448.700	-29.66	-13	Pass
3449	3450	0.163	CHP	3	3449.950	-32.68	-13	Pass
3450	3465	0.163	CHP	/	/	/	/	/
3465	3466	0.163	CHP	4	3465.050	-33.85	-13	Pass
3466	3470	0.5	CHP	5	3466.450	-30.73	-13	Pass
3470	3487.5	1	CHP	6	3470.500	-30.24	-13	Pass

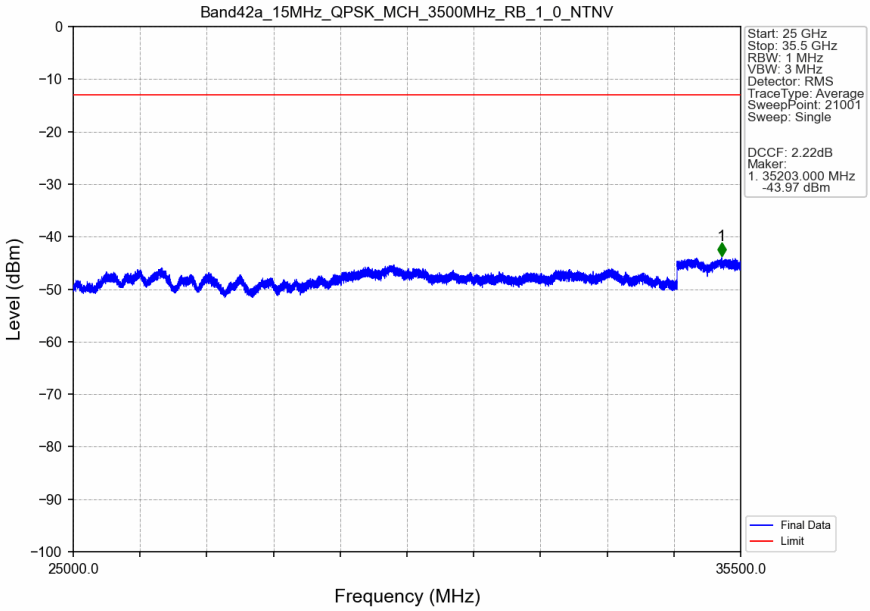
Band42a_15MHz_QPSK_MCH_3500MHz_RB_1_0_NTNV



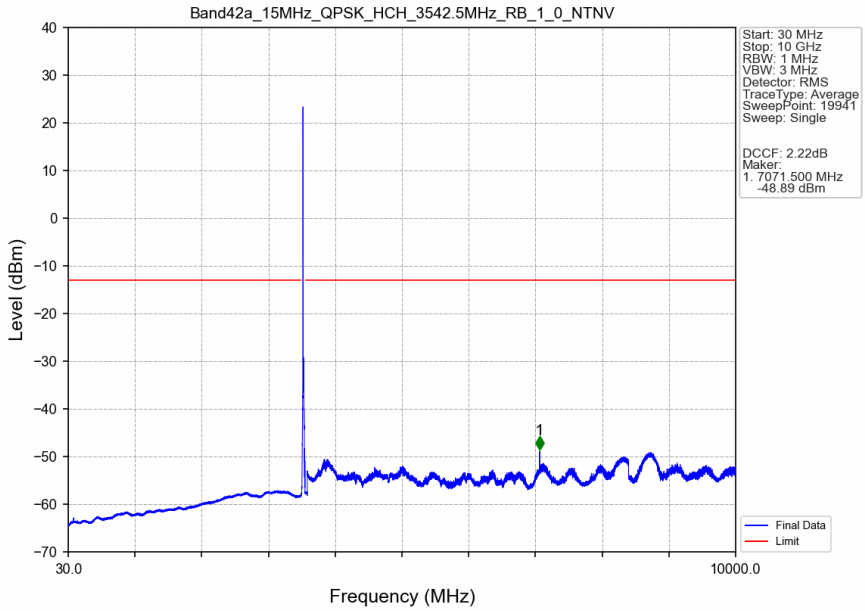
Band42a_15MHz_QPSK_MCH_3500MHz_RB_1_0_NTNV



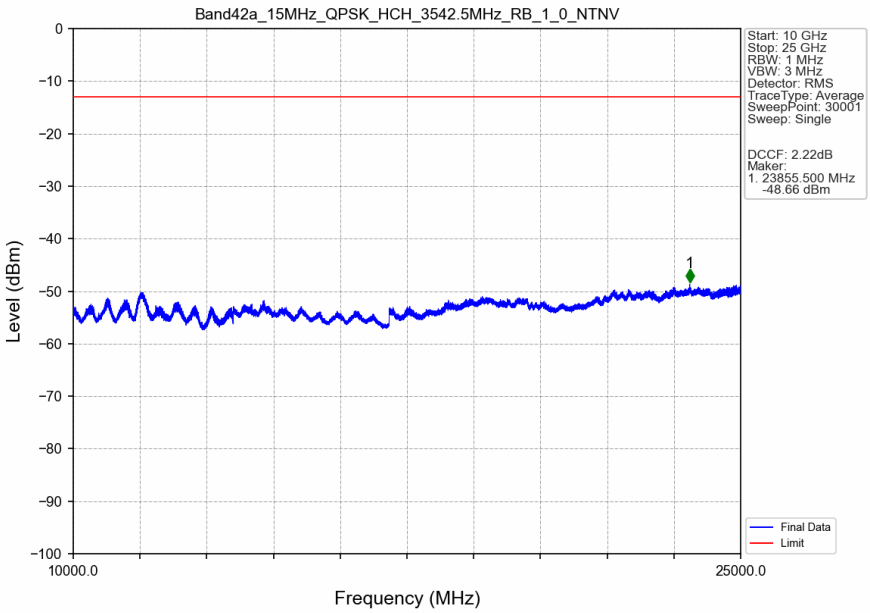
Band42a_15MHz_QPSK_MCH_3500MHz_RB_1_0_NTNV



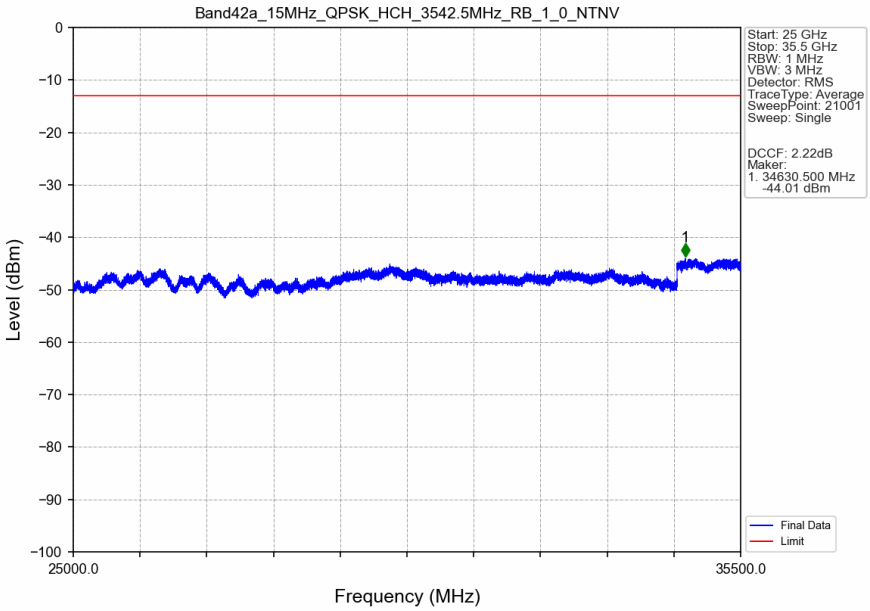
Band42a_15MHz_QPSK_HCH_3542.5MHz_RB_1_0_NTNV



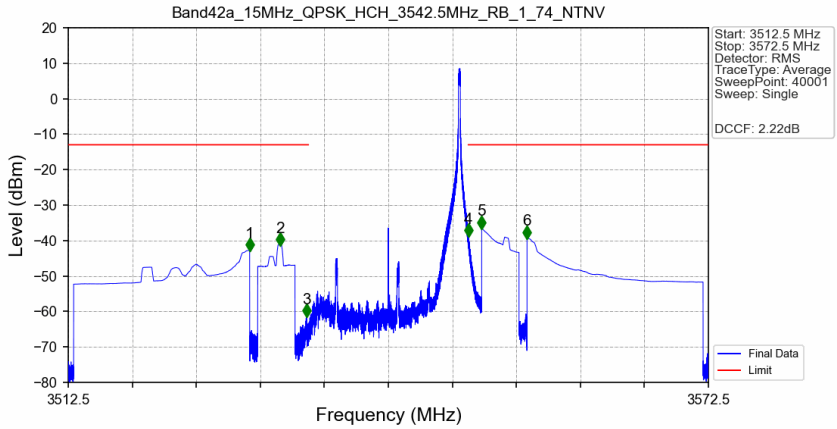
Band42a_15MHz_QPSK_HCH_3542.5MHz_RB_1_0_NTNV



Band42a_15MHz_QPSK_HCH_3542.5MHz_RB_1_0_NTNV

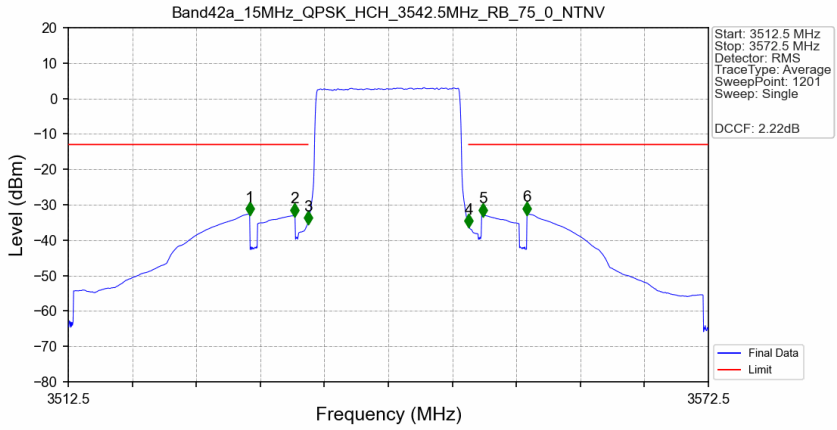


Band42a_15MHz_QPSK_HCH_3542.5MHz_RB_1_74_NTNV



Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
3512.5	3530	1	CHP	1	3529.499	-42.75	-13	Pass
3530	3534	0.5	CHP	2	3532.356	-41.20	-13	Pass
3534	3535	0.003	/	3	3534.844	-61.38	-13	Pass
3535	3550	0.003	/	/	/	/	/	/
3550	3551	0.003	/	4	3550.006	-38.69	-13	Pass
3551	3555	0.5	CHP	5	3551.251	-36.41	-13	Pass
3555	3572.5	1	CHP	6	3555.501	-39.20	-13	Pass

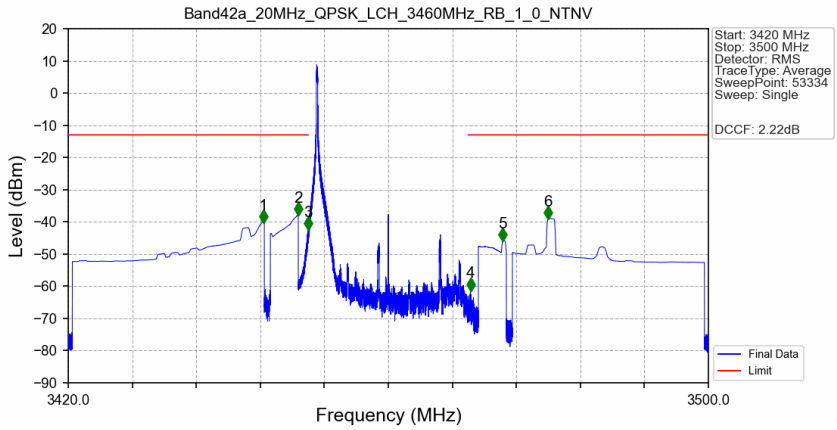
Band42a_15MHz_QPSK_HCH_3542.5MHz_RB_75_0_NTNV



Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
3512.5	3530	1	CHP	1	3529.500	-32.68	-13	Pass
3530	3534	0.5	CHP	2	3533.700	-33.02	-13	Pass
3534	3535	0.149	CHP	3	3534.950	-35.23	-13	Pass
3535	3550	0.149	CHP	/	/	/	/	/
3550	3551	0.149	CHP	4	3550.050	-36.03	-13	Pass
3551	3555	0.5	CHP	5	3551.350	-32.97	-13	Pass
3555	3572.5	1	CHP	6	3555.500	-32.59	-13	Pass

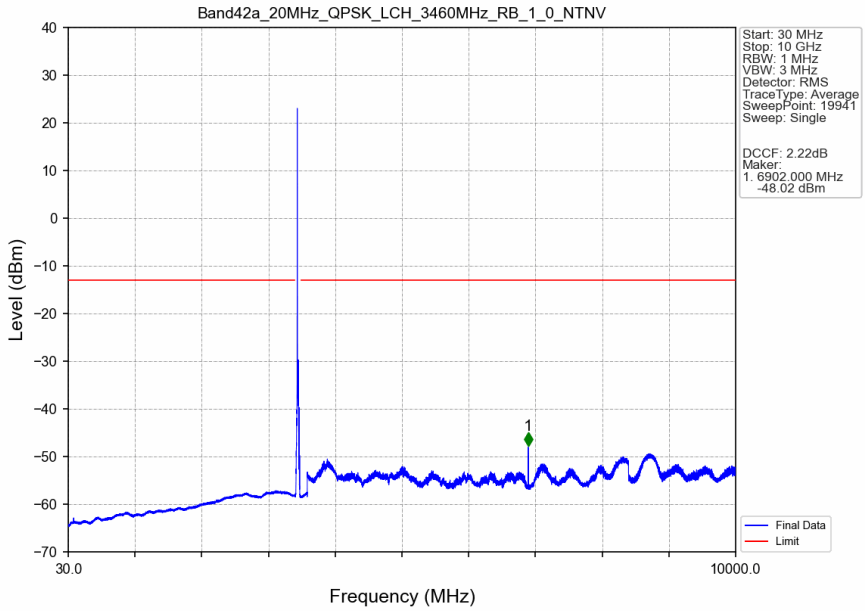
5.2.4 B42a_20MHz

Band42a_20MHz_QPSK_LCH_3460MHz_RB_1_0_NTNV

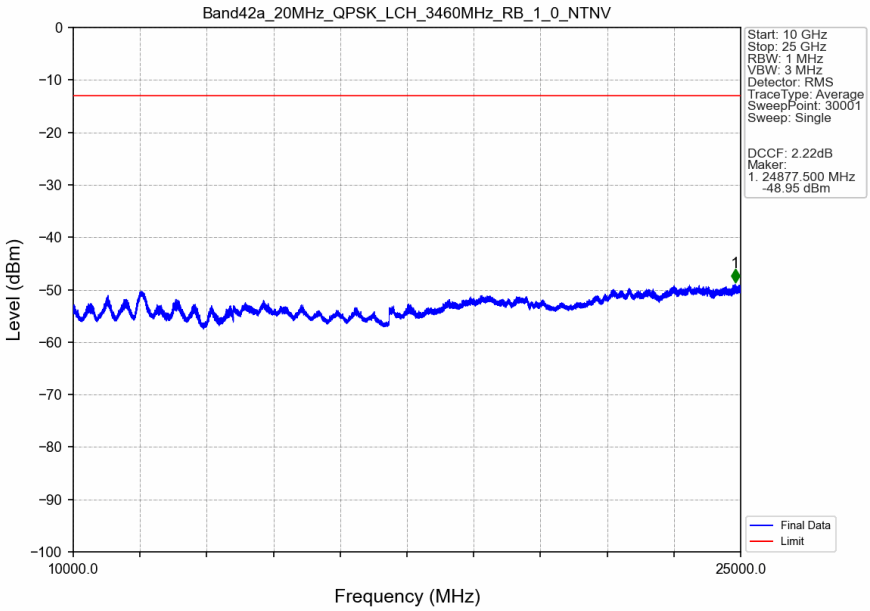


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
3420	3445	1	CHP	1	3444.372	-40.00	-13	Pass
3445	3449	0.5	CHP	2	3448.748	-37.66	-13	Pass
3449	3450	0.003	/	3	3449.984	-42.18	-13	Pass
3450	3470	0.003	/	/	/	/	/	/
3470	3471	0.003	/	4	3470.264	-61.07	-13	Pass
3471	3475	0.5	CHP	5	3474.300	-45.75	-13	Pass
3475	3500	1	CHP	6	3479.945	-38.94	-13	Pass

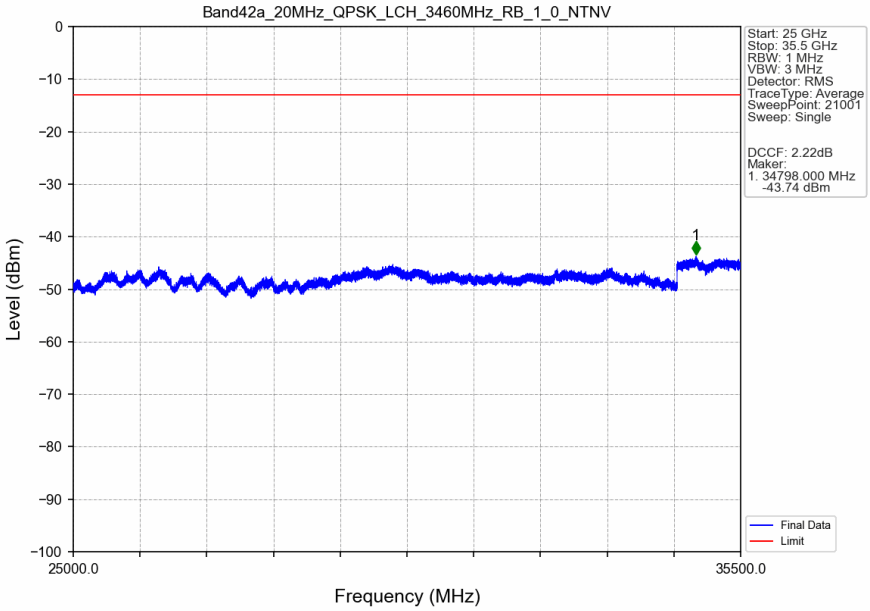
Band42a_20MHz_QPSK_LCH_3460MHz_RB_1_0_NTNV



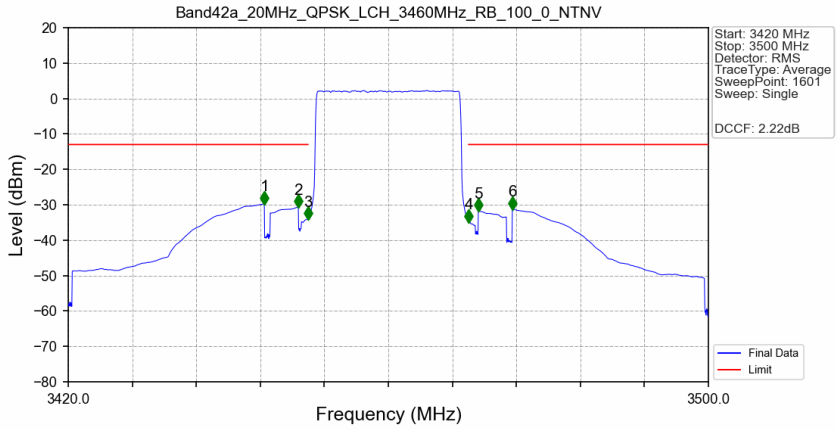
Band42a_20MHz_QPSK_LCH_3460MHz_RB_1_0_NTNV



Band42a_20MHz_QPSK_LCH_3460MHz_RB_1_0_NTNV

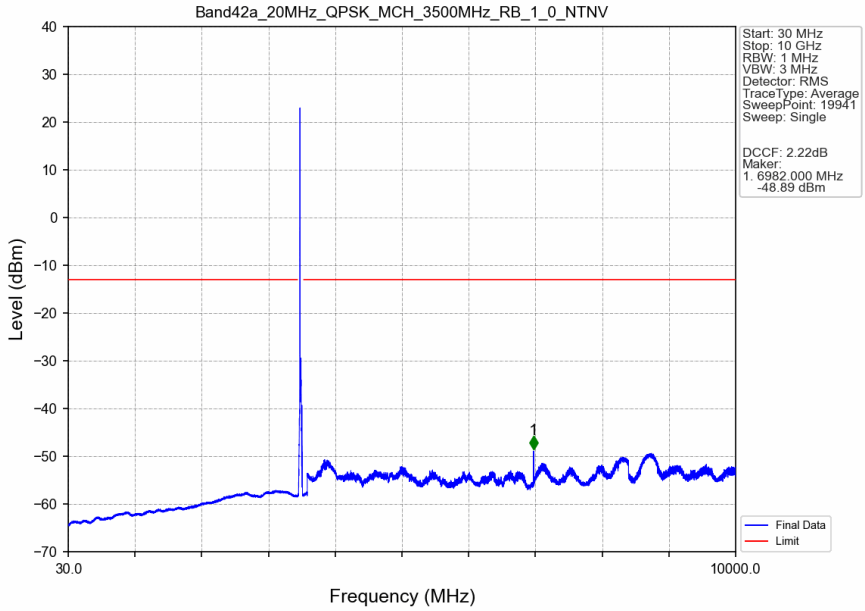


Band42a_20MHz_QPSK_LCH_3460MHz_RB_100_0_NTNV

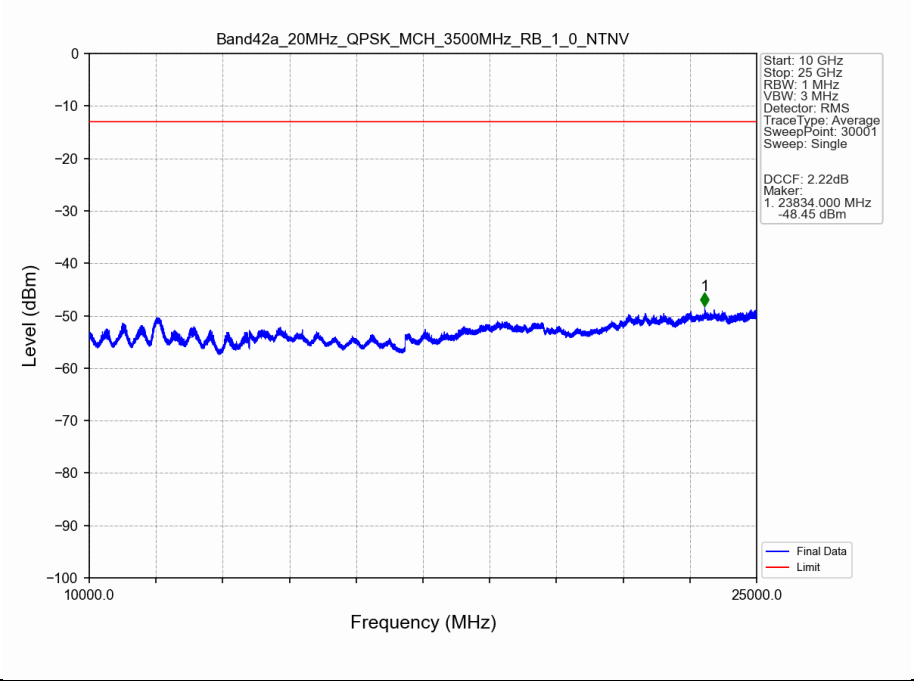


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
3420	3445	1	CHP	1	3444.500	-29.61	-13	Pass
3445	3449	0.5	CHP	2	3448.750	-30.57	-13	Pass
3449	3450	0.2	CHP	3	3449.950	-33.95	-13	Pass
3450	3470	0.2	CHP	/	/	/	/	/
3470	3471	0.2	CHP	4	3470.050	-34.69	-13	Pass
3471	3475	0.5	CHP	5	3471.250	-31.67	-13	Pass
3475	3500	1	CHP	6	3475.500	-31.08	-13	Pass

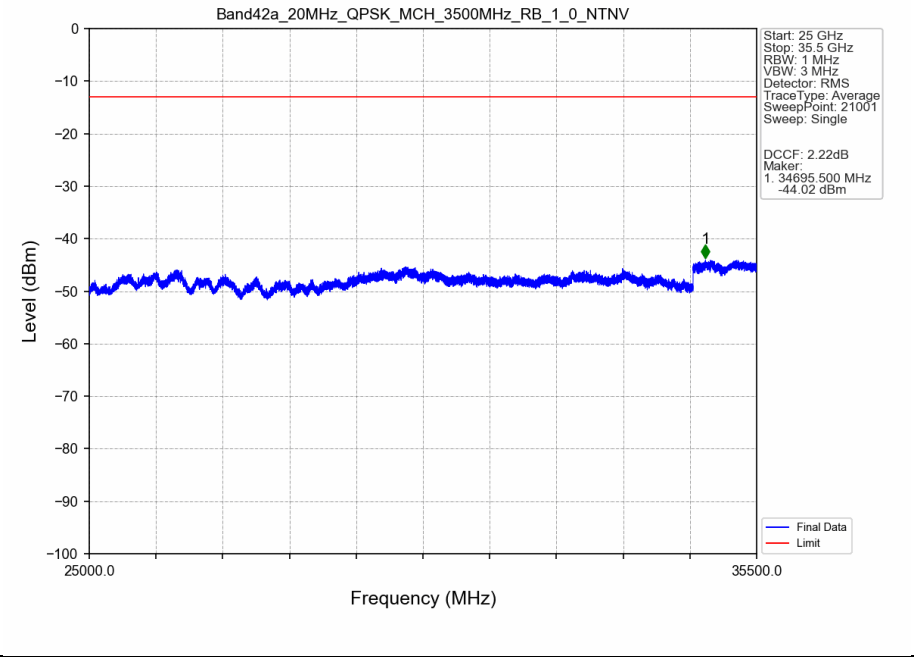
Band42a_20MHz_QPSK_MCH_3500MHz_RB_1_0_NTNV



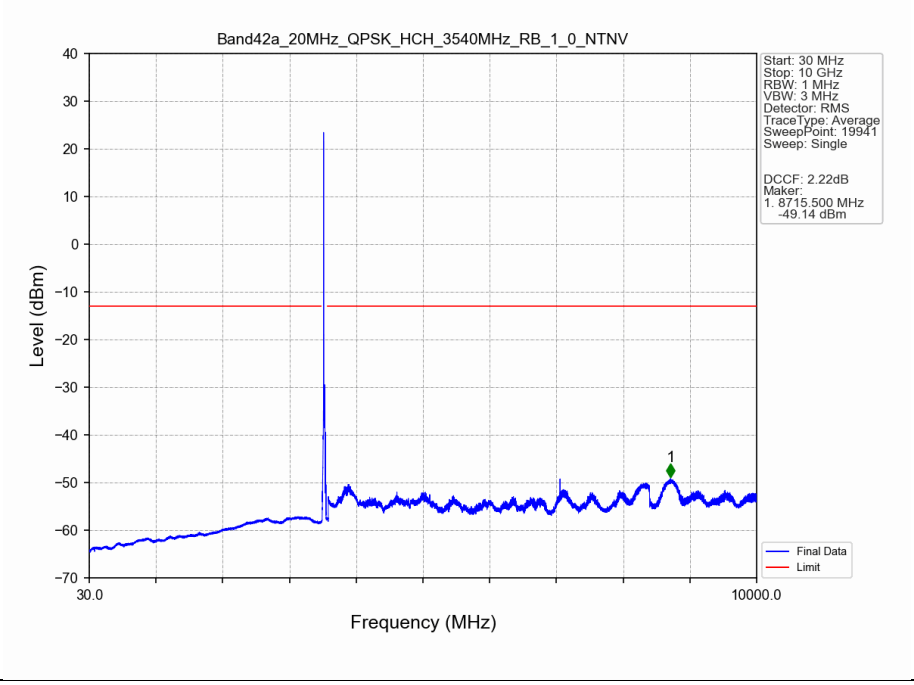
Band42a_20MHz_QPSK_MCH_3500MHz_RB_1_0_NTNV



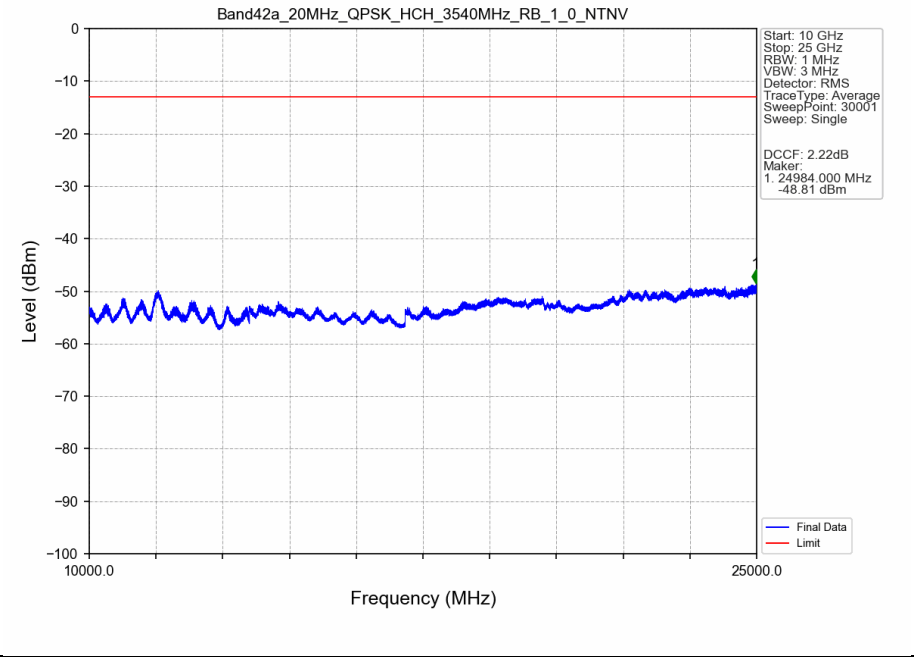
Band42a_20MHz_QPSK_MCH_3500MHz_RB_1_0_NTNV



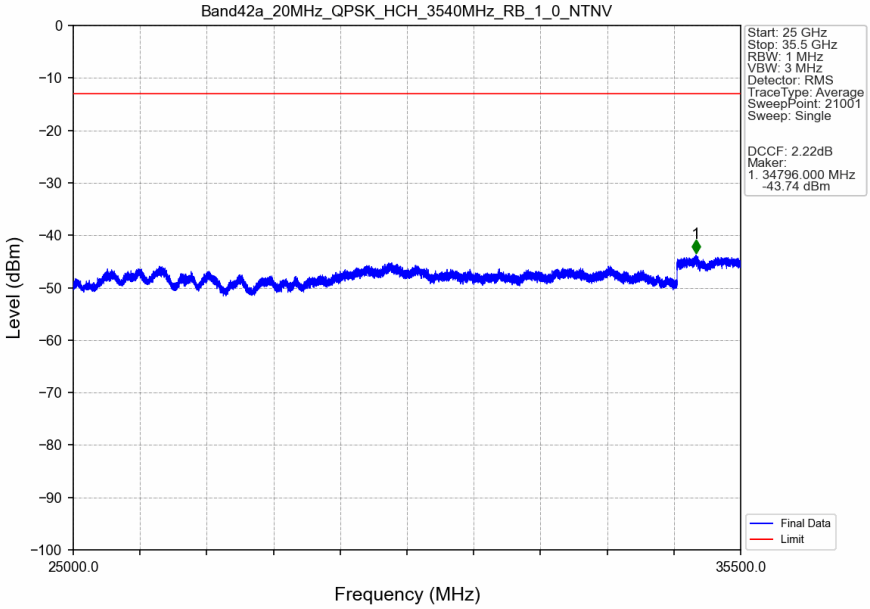
Band42a_20MHz_QPSK_HCH_3540MHz_RB_1_0_NTNV



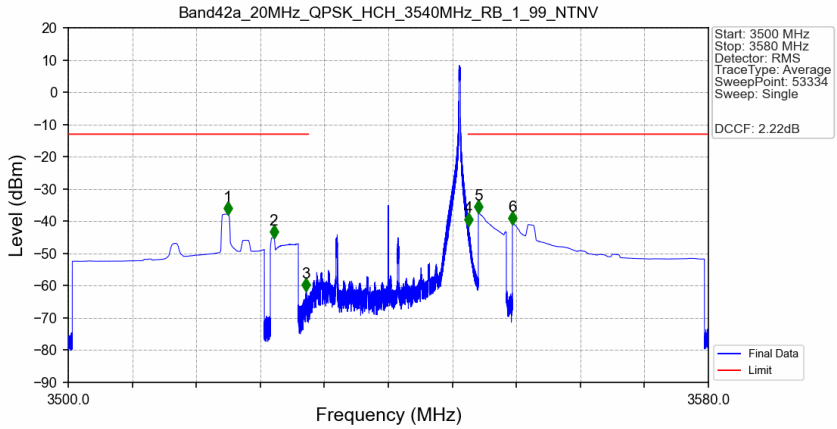
Band42a_20MHz_QPSK_HCH_3540MHz_RB_1_0_NTNV



Band42a_20MHz_QPSK_HCH_3540MHz_RB_1_0_NTNV

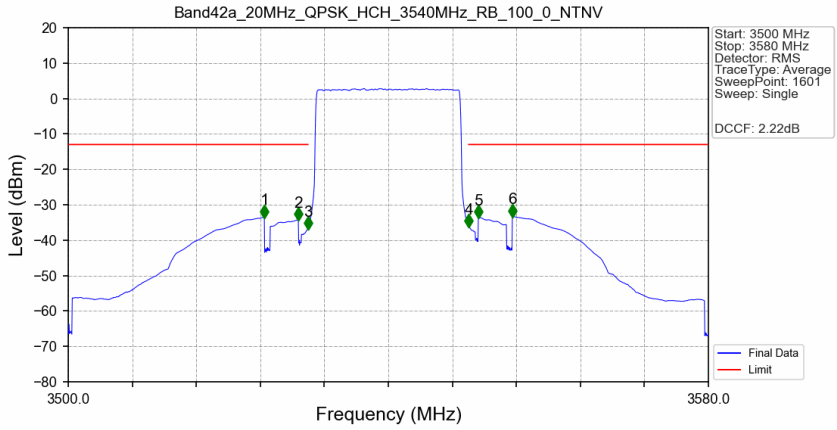


Band42a_20MHz_QPSK_HCH_3540MHz_RB_1_99_NTNV



Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
3500	3525	1	CHP	1	3519.923	-37.78	-13	Pass
3525	3529	0.5	CHP	2	3525.683	-44.97	-13	Pass
3529	3530	0.003	/	3	3529.733	-61.52	-13	Pass
3530	3550	0.003	/	/	/	/	/	/
3550	3551	0.003	/	4	3550.006	-41.14	-13	Pass
3551	3555	0.5	CHP	5	3551.251	-37.22	-13	Pass
3555	3580	1	CHP	6	3555.553	-40.77	-13	Pass

Band42a_20MHz_QPSK_HCH_3540MHz_RB_100_0_NTNV



Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
3500	3525	1	CHP	1	3524.500	-33.40	-13	Pass
3525	3529	0.5	CHP	2	3528.750	-34.14	-13	Pass
3529	3530	0.2	CHP	3	3529.950	-36.77	-13	Pass
3530	3550	0.2	CHP	/	/	/	/	/
3550	3551	0.2	CHP	4	3550.050	-36.14	-13	Pass
3551	3555	0.5	CHP	5	3551.250	-33.49	-13	Pass
3555	3580	1	CHP	6	3555.500	-33.21	-13	Pass

6. Field Strength of Spurious Radiation

LTE Band 42a(3450-3550MHz)-FCC-Low channel, Modulation: QPSK, Bandwidth:20MHz, 1RB#0								
Frequency (MHz)	**EIRP (dBm)**	**Limit (dBm)**	**Over Limit (dB)**	**S.G. Power (dBm)**	**Cable Loss (dB)**	**Antenna Gain (dBi)**	**Polarization (H/V)**	**Result**
6902.0	-46.59	-13	-33.59	-52.69	4.9	11.0	Horizontal	Pass
10353.0	-55.71	-13	-42.71	-63.28	5.52	13.09	Horizontal	Pass
13804.0	-54.04	-13	-41.04	-62.21	6.2	14.37	Horizontal	Pass
6902.0	-46.52	-13	-33.52	-52.62	4.9	11.0	Vertical	Pass
10353.0	-56.1	-13	-43.1	-63.67	5.52	13.09	Vertical	Pass
13804.0	-54.1	-13	-41.1	-62.27	6.2	14.37	Vertical	Pass

LTE Band 42a(3450-3550MHz)-FCC-Middle channel, Modulation: QPSK, Bandwidth:20MHz, 1RB#0								
Frequency (MHz)	**EIRP (dBm)**	**Limit (dBm)**	**Over Limit (dB)**	**S.G. Power (dBm)**	**Cable Loss (dB)**	**Antenna Gain (dBi)**	**Polarization (H/V)**	**Result**
6982.0	-50.24	-13	-37.24	-56.43	4.92	11.11	Horizontal	Pass
10473.0	-55.68	-13	-42.68	-63.26	5.54	13.12	Horizontal	Pass
13964.0	-53.35	-13	-40.35	-61.5	6.31	14.46	Horizontal	Pass
6982.0	-44.09	-13	-31.09	-50.28	4.92	11.11	Vertical	Pass
10473.0	-55.86	-13	-42.86	-63.44	5.54	13.12	Vertical	Pass
13964.0	-53.57	-13	-40.57	-61.72	6.31	14.46	Vertical	Pass

LTE Band 42a(3450-3550MHz)-FCC-High channel, Modulation: QPSK, Bandwidth:20MHz, 1RB#0								
Frequency (MHz)	**EIRP (dBm)**	**Limit (dBm)**	**Over Limit (dB)**	**S.G. Power (dBm)**	**Cable Loss (dB)**	**Antenna Gain (dBi)**	**Polarization (H/V)**	**Result**
7062.0	-47.35	-13	-34.35	-53.64	4.92	11.21	Horizontal	Pass
10593.0	-55.15	-13	-42.15	-62.72	5.58	13.15	Horizontal	Pass
14124.0	-53.46	-13	-40.46	-61.52	6.41	14.47	Horizontal	Pass
7062.0	-48.79	-13	-35.79	-55.08	4.92	11.21	Vertical	Pass
10593.0	-55.12	-13	-42.12	-62.69	5.58	13.15	Vertical	Pass
14124.0	-53.37	-13	-40.37	-61.43	6.41	14.47	Vertical	Pass