

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	21.35	0.08	21.43	<=30	Pass
			13	21.34	0.08	21.42	<=30	Pass
			24	21.41	0.08	21.49	<=30	Pass
		12	0	20.35	0.08	20.43	<=30	Pass
			6	20.35	0.08	20.43	<=30	Pass
			13	20.37	0.08	20.45	<=30	Pass
		25	0	20.39	0.08	20.47	<=30	Pass
	3500	1	0	21.45	0.08	21.53	<=30	Pass
			13	21.43	0.08	21.51	<=30	Pass
			24	21.43	0.08	21.51	<=30	Pass
		12	0	20.42	0.08	20.50	<=30	Pass
			6	20.41	0.08	20.49	<=30	Pass
			13	20.41	0.08	20.49	<=30	Pass
		25	0	20.44	0.08	20.52	<=30	Pass
	3547.5	1	0	21.38	0.08	21.46	<=30	Pass
			13	21.38	0.08	21.46	<=30	Pass
			24	21.39	0.08	21.47	<=30	Pass
		12	0	20.37	0.08	20.45	<=30	Pass
			6	20.35	0.08	20.43	<=30	Pass
			13	20.37	0.08	20.45	<=30	Pass
		25	0	20.40	0.08	20.48	<=30	Pass
16QAM	3452.5	1	0	20.42	0.08	20.50	<=30	Pass
			13	20.18	0.08	20.26	<=30	Pass
			24	20.34	0.08	20.42	<=30	Pass
		12	0	19.31	0.08	19.39	<=30	Pass
			6	19.32	0.08	19.40	<=30	Pass
			13	19.33	0.08	19.41	<=30	Pass
		25	0	19.38	0.08	19.46	<=30	Pass
	3500	1	0	20.53	0.08	20.61	<=30	Pass
			13	20.48	0.08	20.56	<=30	Pass
			24	20.52	0.08	20.60	<=30	Pass
		12	0	19.38	0.08	19.46	<=30	Pass
			6	19.39	0.08	19.47	<=30	Pass
			13	19.40	0.08	19.48	<=30	Pass
		25	0	19.45	0.08	19.53	<=30	Pass
	3547.5	1	0	20.47	0.08	20.55	<=30	Pass
			13	20.46	0.08	20.54	<=30	Pass
			24	20.47	0.08	20.55	<=30	Pass
		12	0	19.33	0.08	19.41	<=30	Pass
			6	19.33	0.08	19.41	<=30	Pass
			13	19.34	0.08	19.42	<=30	Pass
		25	0	19.40	0.08	19.48	<=30	Pass
64QAM	3452.5	1	0	19.01	0.08	19.09	<=30	Pass
			13	19.01	0.08	19.09	<=30	Pass
			24	19.07	0.08	19.15	<=30	Pass
		12	0	18.40	0.08	18.48	<=30	Pass
			6	18.38	0.08	18.46	<=30	Pass
			13	18.42	0.08	18.50	<=30	Pass
		25	0	18.39	0.08	18.47	<=30	Pass

	3500	1	0	19.13	0.08	19.21	<=30	Pass	
			13	19.10	0.08	19.18	<=30	Pass	
			24	19.11	0.08	19.19	<=30	Pass	
		12	0	18.46	0.08	18.54	<=30	Pass	
			6	18.46	0.08	18.54	<=30	Pass	
			13	18.46	0.08	18.54	<=30	Pass	
		25	0	18.40	0.08	18.48	<=30	Pass	
		3547.5	1	0	19.08	0.08	19.16	<=30	Pass
				13	19.05	0.08	19.13	<=30	Pass
	24			19.07	0.08	19.15	<=30	Pass	
	12		0	18.42	0.08	18.50	<=30	Pass	
			6	18.41	0.08	18.49	<=30	Pass	
			13	18.42	0.08	18.50	<=30	Pass	
	25		0	18.42	0.08	18.50	<=30	Pass	
256QAM	3452.5		1	0	16.17	0.08	16.25	<=30	Pass
				13	13.14	0.08	13.22	<=30	Pass
		24		14.02	0.08	14.10	<=30	Pass	
		12	0	14.20	0.08	14.28	<=30	Pass	
			6	12.45	0.08	12.53	<=30	Pass	
			13	14.21	0.08	14.29	<=30	Pass	
		25	0	10.80	0.08	10.88	<=30	Pass	
	3500	1	0	16.29	0.08	16.37	<=30	Pass	
			13	13.02	0.08	13.10	<=30	Pass	
			24	12.27	0.08	12.35	<=30	Pass	
		12	0	14.94	0.08	15.02	<=30	Pass	
			6	13.51	0.08	13.59	<=30	Pass	
			13	12.57	0.08	12.65	<=30	Pass	
		25	0	14.25	0.08	14.33	<=30	Pass	
3547.5	1	0	16.24	0.08	16.32	<=30	Pass		
		13	9.67	0.08	9.75	<=30	Pass		
		24	14.61	0.08	14.69	<=30	Pass		
	12	0	14.94	0.08	15.02	<=30	Pass		
		6	14.95	0.08	15.03	<=30	Pass		
		13	16.44	0.08	16.52	<=30	Pass		
	25	0	7.52	0.08	7.60	<=30	Pass		
Note1: EIRP=Conducted Power+Antenna Gain									

1.1.2 B42a_10MHz_EIRP

Band: 42a / Bandwidth: 10MHz / NTN								
Modulation	Frequency (MHz)	RB Allocation		Conducted Power (dBm)	Gain (dBi)	EIRP (dBm)		Verdict
		Size	Offset			Result	Limit	
QPSK	3455	1	0	21.34	0.08	21.42	<=30	Pass
			25	21.38	0.08	21.46	<=30	Pass
			49	21.42	0.08	21.50	<=30	Pass
		25	0	20.37	0.08	20.45	<=30	Pass
			13	20.37	0.08	20.45	<=30	Pass
			25	20.42	0.08	20.50	<=30	Pass
		50	0	20.39	0.08	20.47	<=30	Pass
	3500	1	0	21.39	0.08	21.47	<=30	Pass
			25	21.42	0.08	21.50	<=30	Pass
			49	21.45	0.08	21.53	<=30	Pass
		25	0	20.41	0.08	20.49	<=30	Pass
			13	20.41	0.08	20.49	<=30	Pass
			25	20.43	0.08	20.51	<=30	Pass
		50	0	20.41	0.08	20.49	<=30	Pass
	3545	1	0	21.41	0.08	21.49	<=30	Pass

			25	21.37	0.08	21.45	<=30	Pass		
			49	21.40	0.08	21.48	<=30	Pass		
			0	20.38	0.08	20.46	<=30	Pass		
		25	13	20.36	0.08	20.44	<=30	Pass		
			25	20.38	0.08	20.46	<=30	Pass		
			50	0	20.37	0.08	20.45	<=30	Pass	
16QAM	3455	1	0	20.40	0.08	20.48	<=30	Pass		
			25	20.46	0.08	20.54	<=30	Pass		
			49	20.51	0.08	20.59	<=30	Pass		
		25	0	19.34	0.08	19.42	<=30	Pass		
			13	19.35	0.08	19.43	<=30	Pass		
			25	19.41	0.08	19.49	<=30	Pass		
		50	0	19.33	0.08	19.41	<=30	Pass		
		3500	1	0	20.47	0.08	20.55	<=30	Pass	
				25	20.42	0.08	20.50	<=30	Pass	
	49			20.45	0.08	20.53	<=30	Pass		
	25		0	19.40	0.08	19.48	<=30	Pass		
			13	19.40	0.08	19.48	<=30	Pass		
			25	19.41	0.08	19.49	<=30	Pass		
	50		0	19.30	0.08	19.38	<=30	Pass		
	3545		1	0	20.51	0.08	20.59	<=30	Pass	
				25	20.22	0.08	20.30	<=30	Pass	
		49		20.51	0.08	20.59	<=30	Pass		
		25	0	19.36	0.08	19.44	<=30	Pass		
			13	19.34	0.08	19.42	<=30	Pass		
			25	19.36	0.08	19.44	<=30	Pass		
		50	0	19.25	0.08	19.33	<=30	Pass		
		64QAM	3455	1	0	18.99	0.08	19.07	<=30	Pass
					25	19.04	0.08	19.12	<=30	Pass
	49				19.10	0.08	19.18	<=30	Pass	
25	0			18.36	0.08	18.44	<=30	Pass		
	13			18.37	0.08	18.45	<=30	Pass		
	25			18.42	0.08	18.50	<=30	Pass		
50	0			18.37	0.08	18.45	<=30	Pass		
3500	1			0	19.07	0.08	19.15	<=30	Pass	
				25	19.07	0.08	19.15	<=30	Pass	
			49	19.11	0.08	19.19	<=30	Pass		
	25		0	18.43	0.08	18.51	<=30	Pass		
			13	18.46	0.08	18.54	<=30	Pass		
			25	18.46	0.08	18.54	<=30	Pass		
	50		0	18.41	0.08	18.49	<=30	Pass		
	3545		1	0	19.06	0.08	19.14	<=30	Pass	
				25	19.03	0.08	19.11	<=30	Pass	
49				19.05	0.08	19.13	<=30	Pass		
25			0	18.41	0.08	18.49	<=30	Pass		
			13	18.39	0.08	18.47	<=30	Pass		
			25	18.41	0.08	18.49	<=30	Pass		
50			0	18.39	0.08	18.47	<=30	Pass		
256QAM			3455	1	0	16.19	0.08	16.27	<=30	Pass
					25	15.23	0.08	15.31	<=30	Pass
	49				14.76	0.08	14.84	<=30	Pass	
	25	0		12.40	0.08	12.48	<=30	Pass		
		13		13.37	0.08	13.45	<=30	Pass		
		25		15.47	0.08	15.55	<=30	Pass		
	50	0		12.45	0.08	12.53	<=30	Pass		
	3500	1		0	16.25	0.08	16.33	<=30	Pass	
				25	14.06	0.08	14.14	<=30	Pass	
			49	14.77	0.08	14.85	<=30	Pass		
	25	0	15.35	0.08	15.43	<=30	Pass			

			13	14.87	0.08	14.95	<=30	Pass
			25	13.43	0.08	13.51	<=30	Pass
		50	0	14.23	0.08	14.31	<=30	Pass
	3545	1	0	16.17	0.08	16.25	<=30	Pass
			25	7.09	0.08	7.17	<=30	Pass
			49	8.48	0.08	8.56	<=30	Pass
		25	0	10.59	0.08	10.67	<=30	Pass
			13	10.58	0.08	10.66	<=30	Pass
			25	10.60	0.08	10.68	<=30	Pass
		50	0	10.62	0.08	10.70	<=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	21.31	0.08	21.39	<=30	Pass
			38	21.40	0.08	21.48	<=30	Pass
			74	21.48	0.08	21.56	<=30	Pass
		36	0	20.34	0.08	20.42	<=30	Pass
			18	20.39	0.08	20.47	<=30	Pass
			39	20.43	0.08	20.51	<=30	Pass
		75	0	20.43	0.08	20.51	<=30	Pass
	3500	1	0	21.38	0.08	21.46	<=30	Pass
			38	21.45	0.08	21.53	<=30	Pass
			74	21.46	0.08	21.54	<=30	Pass
		36	0	20.38	0.08	20.46	<=30	Pass
			18	20.38	0.08	20.46	<=30	Pass
			39	20.39	0.08	20.47	<=30	Pass
		75	0	20.42	0.08	20.50	<=30	Pass
	3542.5	1	0	21.39	0.08	21.47	<=30	Pass
			38	21.38	0.08	21.46	<=30	Pass
			74	21.38	0.08	21.46	<=30	Pass
		36	0	20.33	0.08	20.41	<=30	Pass
			18	20.33	0.08	20.41	<=30	Pass
			39	20.34	0.08	20.42	<=30	Pass
		75	0	20.35	0.08	20.43	<=30	Pass
16QAM	3457.5	1	0	20.40	0.08	20.48	<=30	Pass
			38	20.48	0.08	20.56	<=30	Pass
			74	20.55	0.08	20.63	<=30	Pass
		36	0	19.32	0.08	19.40	<=30	Pass
			18	19.35	0.08	19.43	<=30	Pass
			39	19.29	0.08	19.37	<=30	Pass
		75	0	19.36	0.08	19.44	<=30	Pass
	3500	1	0	20.47	0.08	20.55	<=30	Pass
			38	20.52	0.08	20.60	<=30	Pass
			74	20.54	0.08	20.62	<=30	Pass
		36	0	19.35	0.08	19.43	<=30	Pass
			18	19.37	0.08	19.45	<=30	Pass
			39	19.37	0.08	19.45	<=30	Pass
		75	0	19.32	0.08	19.40	<=30	Pass
	3542.5	1	0	20.25	0.08	20.33	<=30	Pass
			38	20.45	0.08	20.53	<=30	Pass
			74	20.51	0.08	20.59	<=30	Pass
		36	0	19.30	0.08	19.38	<=30	Pass
			18	19.30	0.08	19.38	<=30	Pass
			18	19.30	0.08	19.38	<=30	Pass

			39	19.30	0.08	19.38	<=30	Pass	
		75	0	19.37	0.08	19.45	<=30	Pass	
64QAM	3457.5	1	0	19.02	0.08	19.10	<=30	Pass	
			38	19.07	0.08	19.15	<=30	Pass	
			74	19.14	0.08	19.22	<=30	Pass	
			0	18.33	0.08	18.41	<=30	Pass	
		36	18	18.21	0.08	18.29	<=30	Pass	
			39	18.42	0.08	18.50	<=30	Pass	
			75	0	18.45	0.08	18.53	<=30	Pass
		3500	1	0	19.07	0.08	19.15	<=30	Pass
				38	19.11	0.08	19.19	<=30	Pass
				74	19.12	0.08	19.20	<=30	Pass
	0			18.37	0.08	18.45	<=30	Pass	
	36		18	18.39	0.08	18.47	<=30	Pass	
			39	18.41	0.08	18.49	<=30	Pass	
			75	0	18.46	0.08	18.54	<=30	Pass
	3542.5		1	0	19.05	0.08	19.13	<=30	Pass
		38		19.04	0.08	19.12	<=30	Pass	
		74		19.02	0.08	19.10	<=30	Pass	
		0		18.31	0.08	18.39	<=30	Pass	
		36	18	18.29	0.08	18.37	<=30	Pass	
			39	18.29	0.08	18.37	<=30	Pass	
			75	0	18.35	0.08	18.43	<=30	Pass
		256QAM	3457.5	1	0	16.20	0.08	16.28	<=30
	38				14.05	0.08	14.13	<=30	Pass
74	13.31				0.08	13.39	<=30	Pass	
36	0			12.37	0.08	12.45	<=30	Pass	
	18			14.19	0.08	14.27	<=30	Pass	
	39			13.44	0.08	13.52	<=30	Pass	
75	0			14.92	0.08	15.00	<=30	Pass	
3500	1		0	16.27	0.08	16.35	<=30	Pass	
			38	14.07	0.08	14.15	<=30	Pass	
			74	14.10	0.08	14.18	<=30	Pass	
	36		0	14.15	0.08	14.23	<=30	Pass	
			18	14.18	0.08	14.26	<=30	Pass	
			39	11.19	0.08	11.27	<=30	Pass	
75	0		15.50	0.08	15.58	<=30	Pass		
3542.5	1		0	16.22	0.08	16.30	<=30	Pass	
			38	11.77	0.08	11.85	<=30	Pass	
			74	16.21	0.08	16.29	<=30	Pass	
	36		0	11.81	0.08	11.89	<=30	Pass	
			18	11.80	0.08	11.88	<=30	Pass	
			39	11.80	0.08	11.88	<=30	Pass	
	75		0	11.81	0.08	11.89	<=30	Pass	
	Note1: EIRP=Conducted Power+Antenna Gain								

1.1.4 B42a_20MHz_EIRP

Band: 42a / Bandwidth: 20MHz / NTV								
Modulation	Frequency (MHz)	RB Allocation		Conducted Power (dBm)	Gain (dBi)	EIRP (dBm)		Verdict
		Size	Offset			Result	Limit	
QPSK	3460	1	0	21.30	0.08	21.38	<=30	Pass
			50	21.40	0.08	21.48	<=30	Pass
			99	21.44	0.08	21.52	<=30	Pass
		50	0	20.36	0.08	20.44	<=30	Pass
			25	20.34	0.08	20.42	<=30	Pass
			50	20.43	0.08	20.51	<=30	Pass

		100	0	20.41	0.08	20.49	<=30	Pass	
	3500	1	0	21.40	0.08	21.48	<=30	Pass	
			50	21.42	0.08	21.50	<=30	Pass	
			99	21.43	0.08	21.51	<=30	Pass	
		50	0	20.40	0.08	20.48	<=30	Pass	
			25	20.33	0.08	20.41	<=30	Pass	
			50	20.43	0.08	20.51	<=30	Pass	
	100	0	20.40	0.08	20.48	<=30	Pass		
	3540	1	0	21.40	0.08	21.48	<=30	Pass	
			50	21.39	0.08	21.47	<=30	Pass	
			99	21.36	0.08	21.44	<=30	Pass	
		50	0	20.38	0.08	20.46	<=30	Pass	
			25	20.39	0.08	20.47	<=30	Pass	
			50	20.39	0.08	20.47	<=30	Pass	
	100	0	20.39	0.08	20.47	<=30	Pass		
	16QAM	3460	1	0	20.41	0.08	20.49	<=30	Pass
50				20.20	0.08	20.28	<=30	Pass	
99				20.51	0.08	20.59	<=30	Pass	
50			0	19.22	0.08	19.30	<=30	Pass	
			25	19.19	0.08	19.27	<=30	Pass	
			50	19.46	0.08	19.54	<=30	Pass	
100		0	19.42	0.08	19.50	<=30	Pass		
3500		1	0	20.45	0.08	20.53	<=30	Pass	
			50	20.52	0.08	20.60	<=30	Pass	
			99	20.52	0.08	20.60	<=30	Pass	
		50	0	19.42	0.08	19.50	<=30	Pass	
			25	19.39	0.08	19.47	<=30	Pass	
			50	19.44	0.08	19.52	<=30	Pass	
100		0	19.42	0.08	19.50	<=30	Pass		
3540		1	0	20.50	0.08	20.58	<=30	Pass	
			50	20.47	0.08	20.55	<=30	Pass	
			99	20.50	0.08	20.58	<=30	Pass	
		50	0	19.42	0.08	19.50	<=30	Pass	
			25	19.26	0.08	19.34	<=30	Pass	
			50	19.42	0.08	19.50	<=30	Pass	
100		0	19.41	0.08	19.49	<=30	Pass		
64QAM		3460	1	0	18.99	0.08	19.07	<=30	Pass
				50	19.07	0.08	19.15	<=30	Pass
	99			19.13	0.08	19.21	<=30	Pass	
	50		0	18.36	0.08	18.44	<=30	Pass	
			25	18.35	0.08	18.43	<=30	Pass	
			50	18.48	0.08	18.56	<=30	Pass	
	100	0	18.44	0.08	18.52	<=30	Pass		
	3500	1	0	19.07	0.08	19.15	<=30	Pass	
			50	19.11	0.08	19.19	<=30	Pass	
			99	19.13	0.08	19.21	<=30	Pass	
		50	0	18.41	0.08	18.49	<=30	Pass	
			25	18.40	0.08	18.48	<=30	Pass	
			50	18.45	0.08	18.53	<=30	Pass	
	100	0	18.42	0.08	18.50	<=30	Pass		
	3540	1	0	19.08	0.08	19.16	<=30	Pass	
			50	19.07	0.08	19.15	<=30	Pass	
			99	19.08	0.08	19.16	<=30	Pass	
		50	0	18.33	0.08	18.41	<=30	Pass	
			25	18.28	0.08	18.36	<=30	Pass	
			50	18.39	0.08	18.47	<=30	Pass	
	100	0	18.39	0.08	18.47	<=30	Pass		
	256QAM	3460	1	0	16.17	0.08	16.25	<=30	Pass
				50	15.30	0.08	15.38	<=30	Pass

			99	14.78	0.08	14.86	<=30	Pass
		50	0	13.40	0.08	13.48	<=30	Pass
			25	13.46	0.08	13.54	<=30	Pass
			50	13.47	0.08	13.55	<=30	Pass
		100	0	14.86	0.08	14.94	<=30	Pass
	3500	1	0	16.25	0.08	16.33	<=30	Pass
			50	15.85	0.08	15.93	<=30	Pass
			99	14.09	0.08	14.17	<=30	Pass
		50	0	14.25	0.08	14.33	<=30	Pass
			25	13.45	0.08	13.53	<=30	Pass
			50	12.52	0.08	12.60	<=30	Pass
		100	0	14.88	0.08	14.96	<=30	Pass
	3540	1	0	16.26	0.08	16.34	<=30	Pass
			50	11.73	0.08	11.81	<=30	Pass
			99	11.09	0.08	11.17	<=30	Pass
		50	0	10.64	0.08	10.72	<=30	Pass
			25	9.36	0.08	9.44	<=30	Pass
			50	11.76	0.08	11.84	<=30	Pass
		100	0	9.39	0.08	9.47	<=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	3.4	-25.500	-0.0073	-2.5 to 2.5	Pass
					3.8	-20.100	-0.0057	-2.5 to 2.5	Pass
					4.45	-24.900	-0.0071	-2.5 to 2.5	Pass
				-30	3.8	-22.600	-0.0065	-2.5 to 2.5	Pass
				-20	3.8	-3.500	-0.0010	-2.5 to 2.5	Pass
				-10	3.8	-0.800	-0.0002	-2.5 to 2.5	Pass
				0	3.8	-4.300	-0.0012	-2.5 to 2.5	Pass
				10	3.8	0.600	0.0002	-2.5 to 2.5	Pass
				30	3.8	2.000	0.0006	-2.5 to 2.5	Pass
				40	3.8	-13.000	-0.0037	-2.5 to 2.5	Pass
				50	3.8	-0.800	-0.0002	-2.5 to 2.5	Pass

3. 99% & 26dB Bandwidth

3.1 Test Result

3.1.1 Band42a_OBW

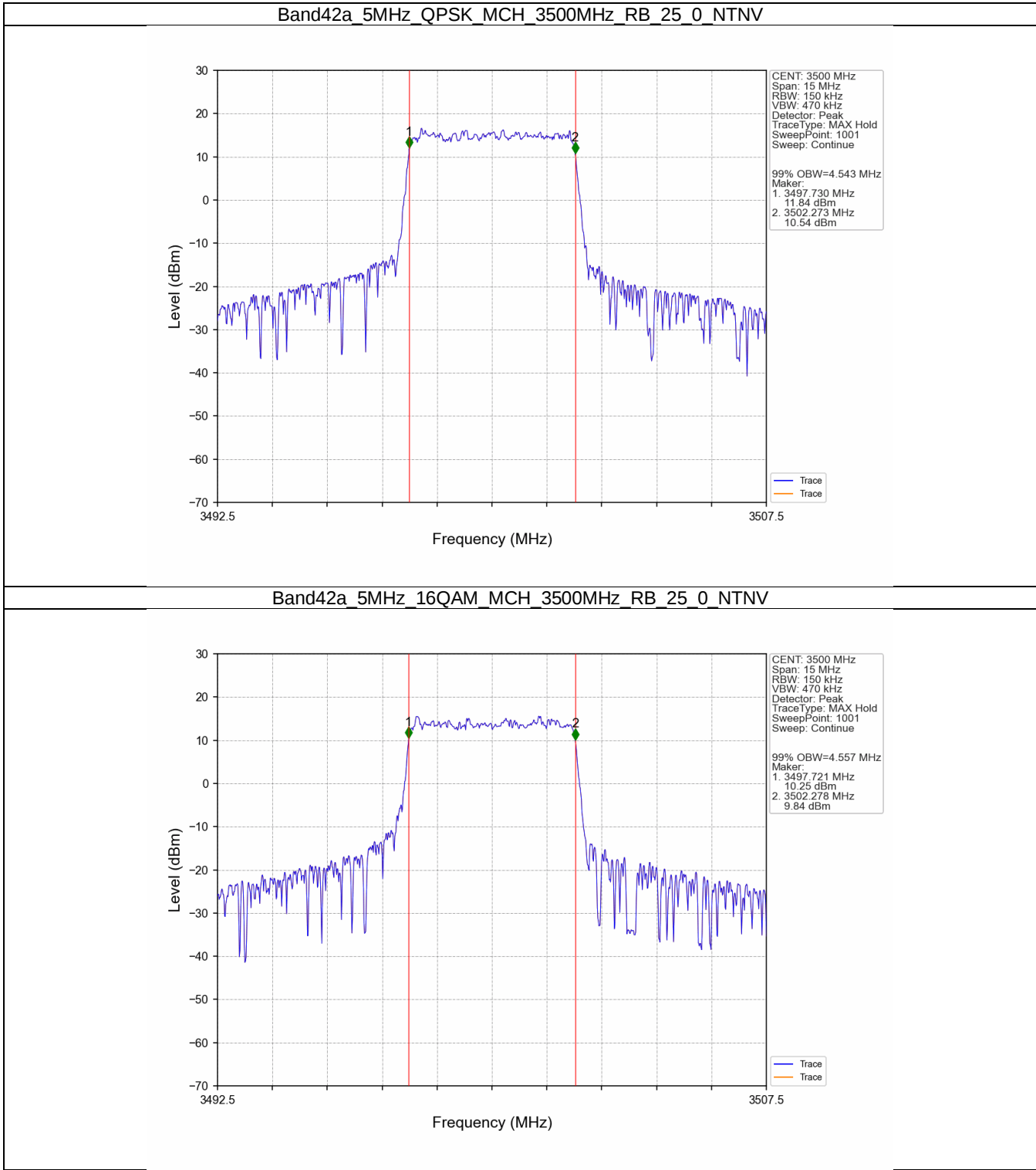
Band: 42a / NTNV							
Bandwidth (MHz)	Modulation	Frequency (MHz)	RB Allocation		99% Occupied Bandwidth (MHz)		Verdict
			Size	Offset	Result	Limit	
5	QPSK	3500	25	0	4.543	/	Pass
	16QAM	3500	25	0	4.557	/	Pass
10	QPSK	3500	50	0	9.055	/	Pass
	16QAM	3500	50	0	9.048	/	Pass
15	QPSK	3500	75	0	13.619	/	Pass
	16QAM	3500	75	0	13.578	/	Pass
20	QPSK	3500	100	0	18.092	/	Pass
	16QAM	3500	100	0	18.147	/	Pass

3.1.2 Band42a_XDB

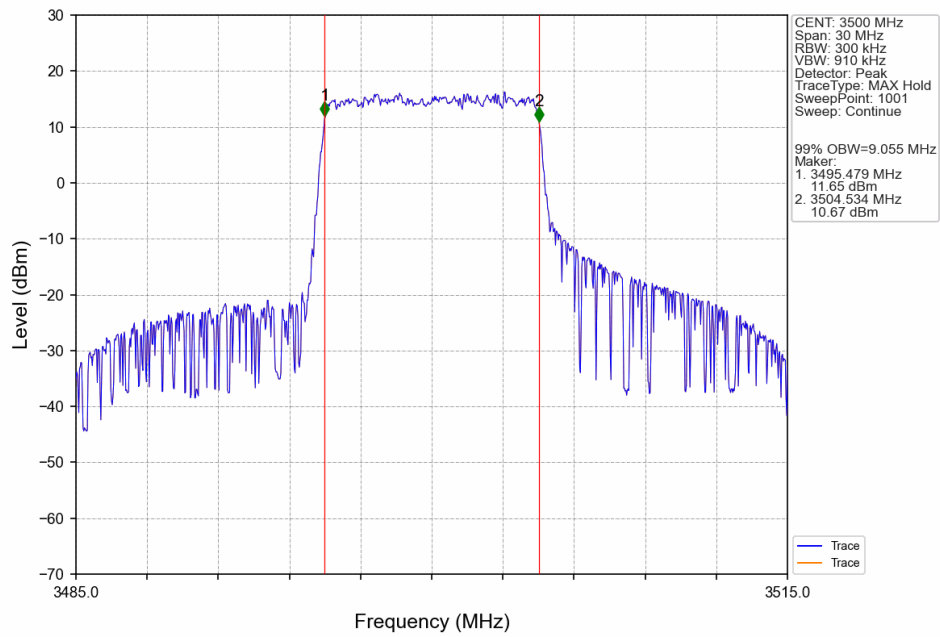
Band: 42a / NTNV							
Bandwidth (MHz)	Modulation	Frequency (MHz)	RB Allocation		26dB Bandwidth (MHz)		Verdict
			Size	Offset	Result	Limit	
5	QPSK	3500	25	0	5.061	/	Pass
	16QAM	3500	25	0	5.131	/	Pass
10	QPSK	3500	50	0	10.391	/	Pass
	16QAM	3500	50	0	10.368	/	Pass
15	QPSK	3500	75	0	17.182	/	Pass
	16QAM	3500	75	0	15.104	/	Pass
20	QPSK	3500	100	0	19.959	/	Pass
	16QAM	3500	100	0	21.784	/	Pass

3.2 Test Graph

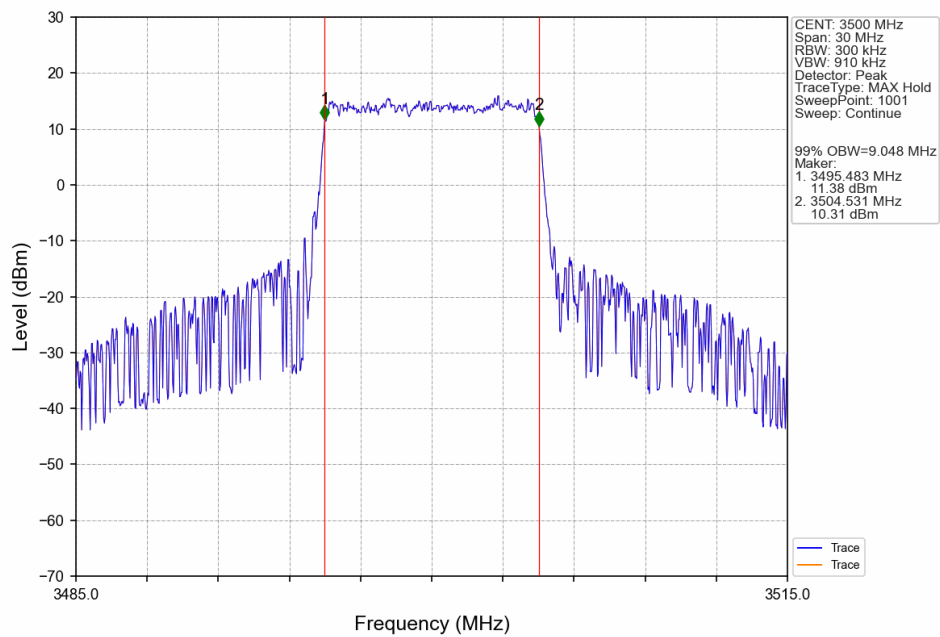
3.2.1 Band42a_OBW



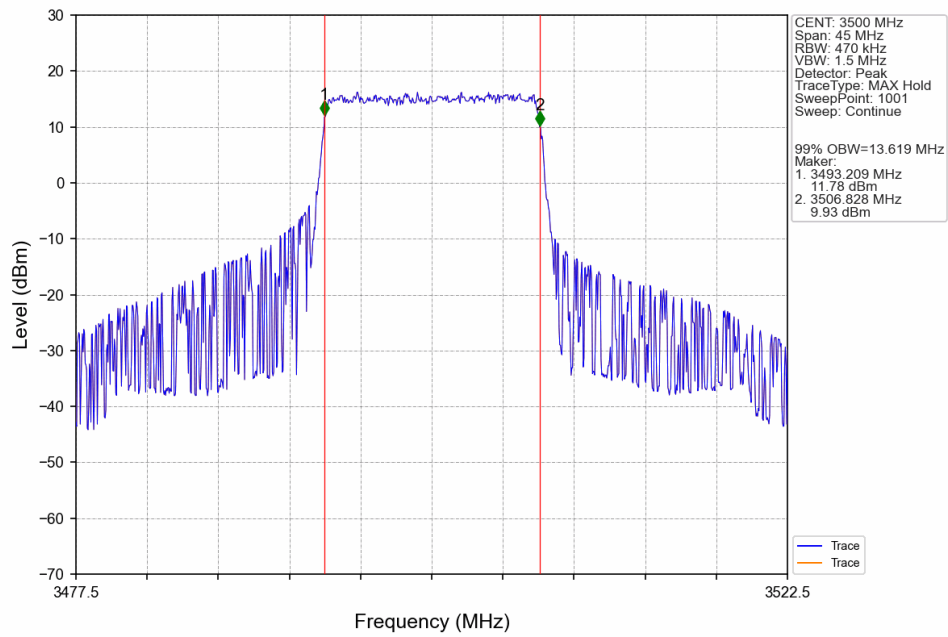
Band42a_10MHz_QPSK_MCH_3500MHz_RB_50_0_NTNV



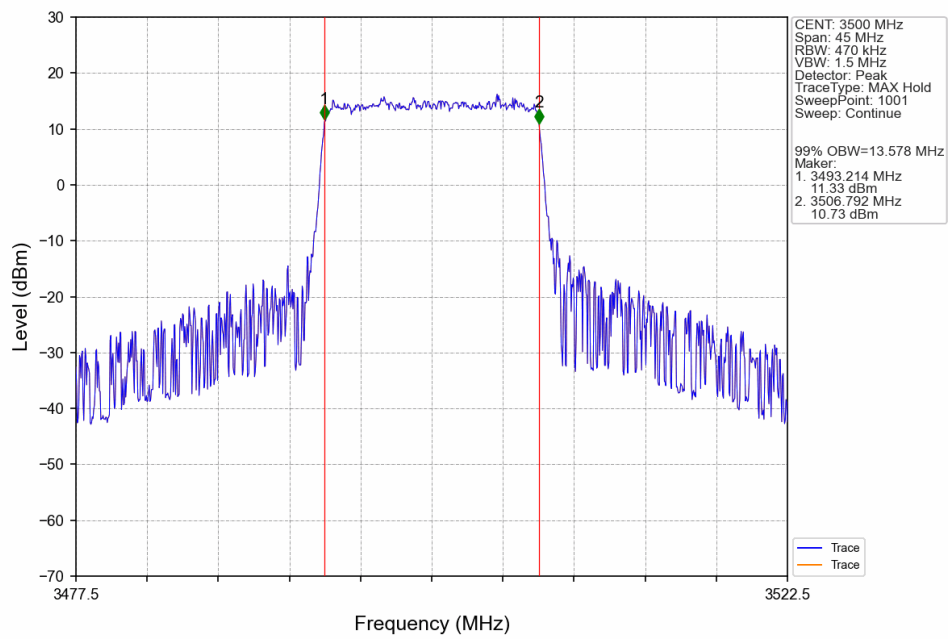
Band42a_10MHz_16QAM_MCH_3500MHz_RB_50_0_NTNV



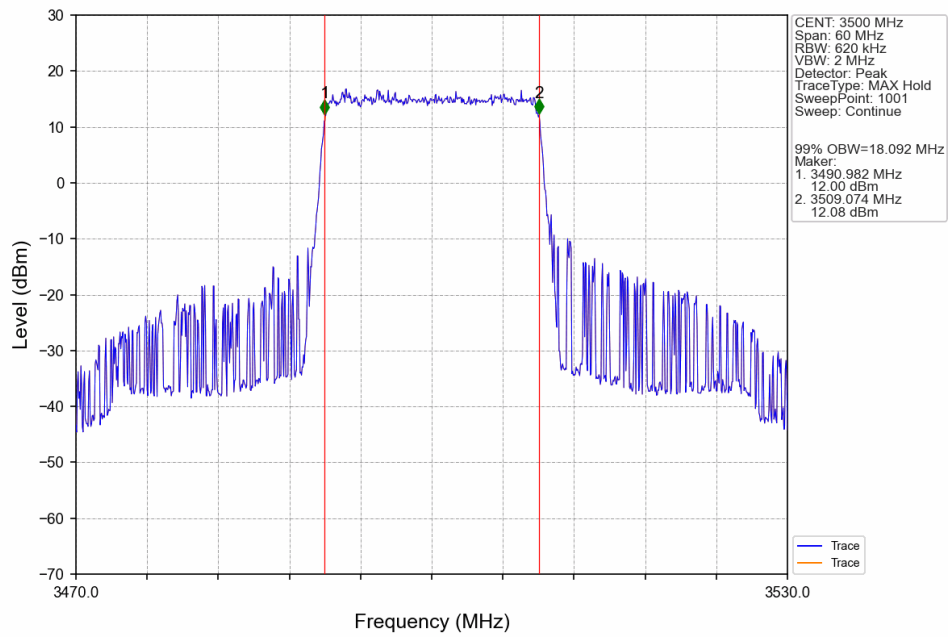
Band42a 15MHz QPSK MCH 3500MHz RB 75 0 NTNV



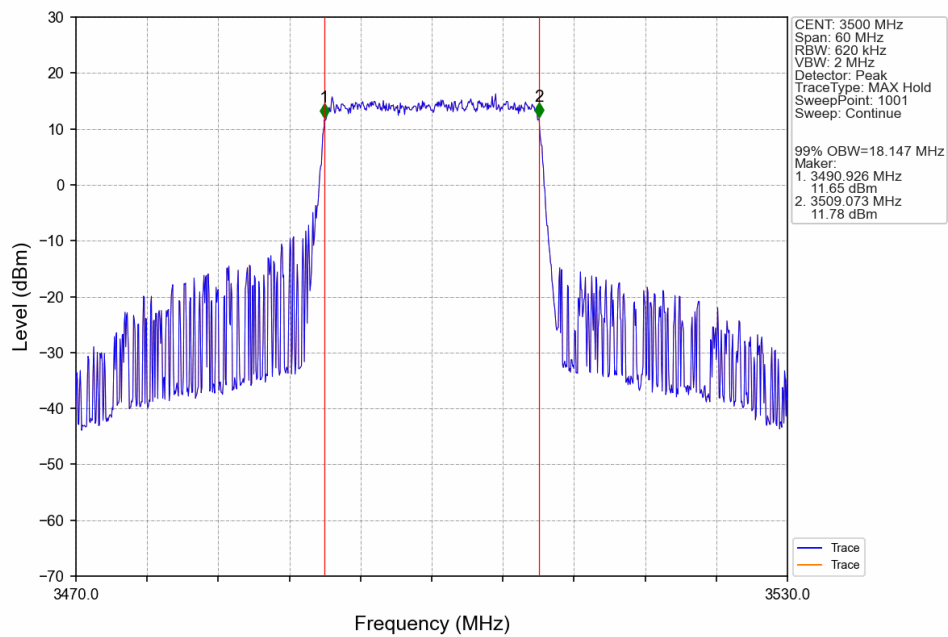
Band42a 15MHz 16QAM MCH 3500MHz RB 75 0 NTNV



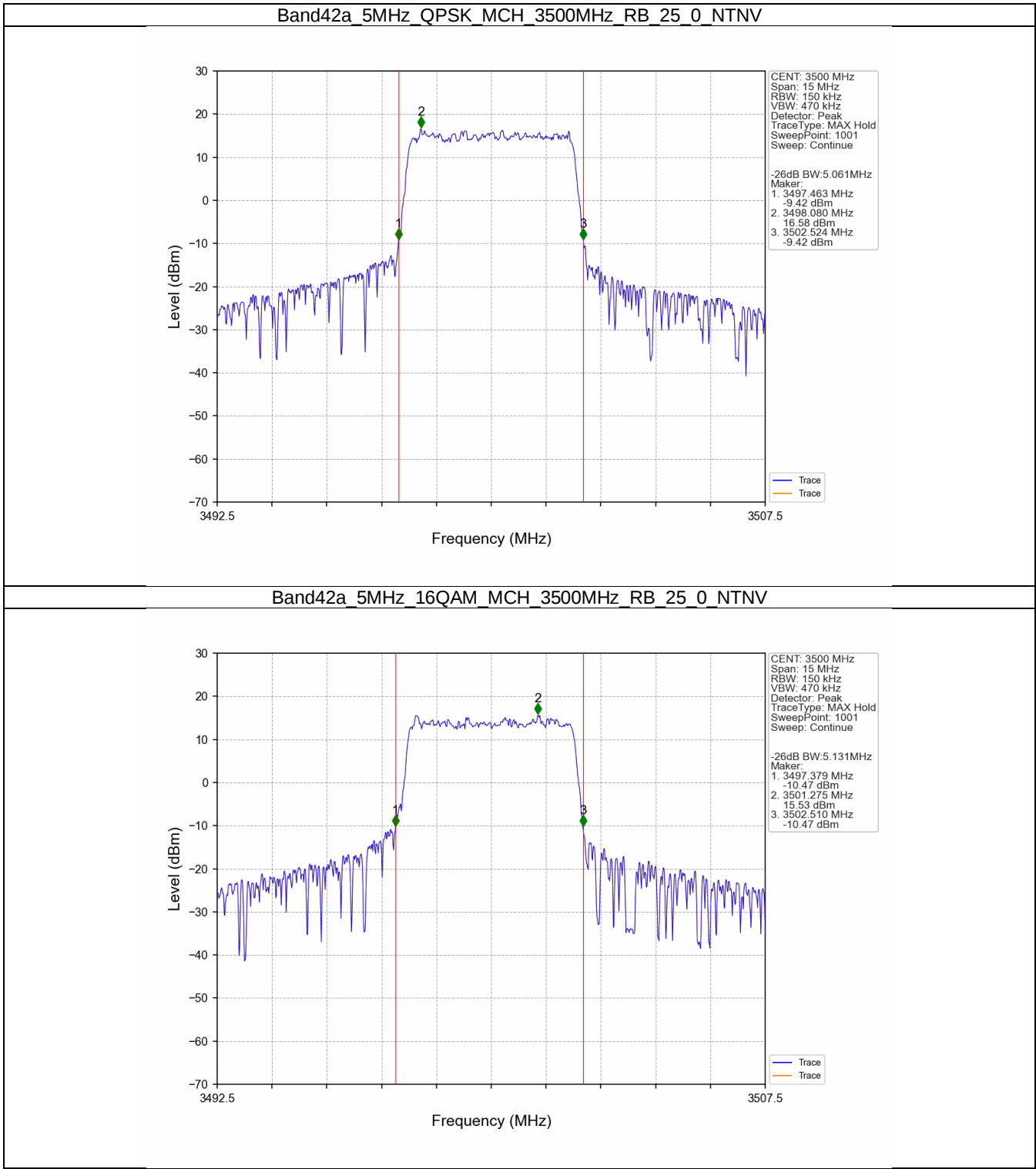
Band42a_20MHz_QPSK_MCH_3500MHz_RB_100_0_NTNV



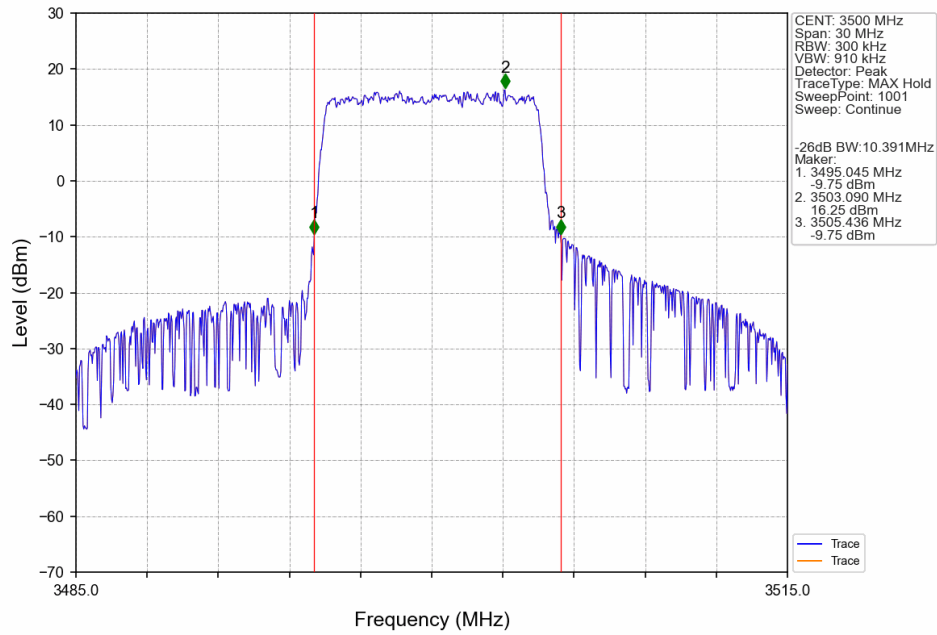
Band42a_20MHz_16QAM_MCH_3500MHz_RB_100_0_NTNV



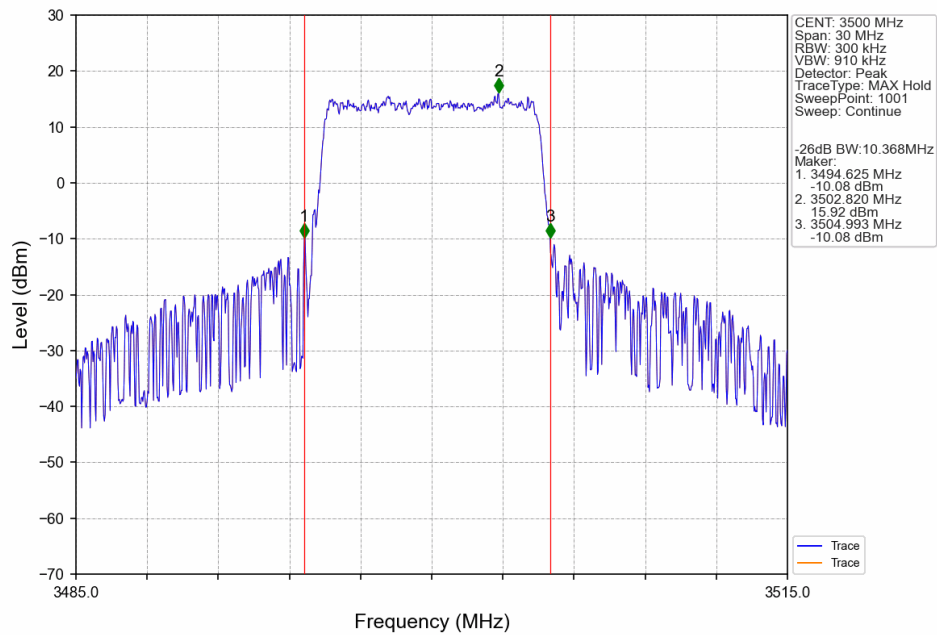
3.2.2 Band42a_XDB



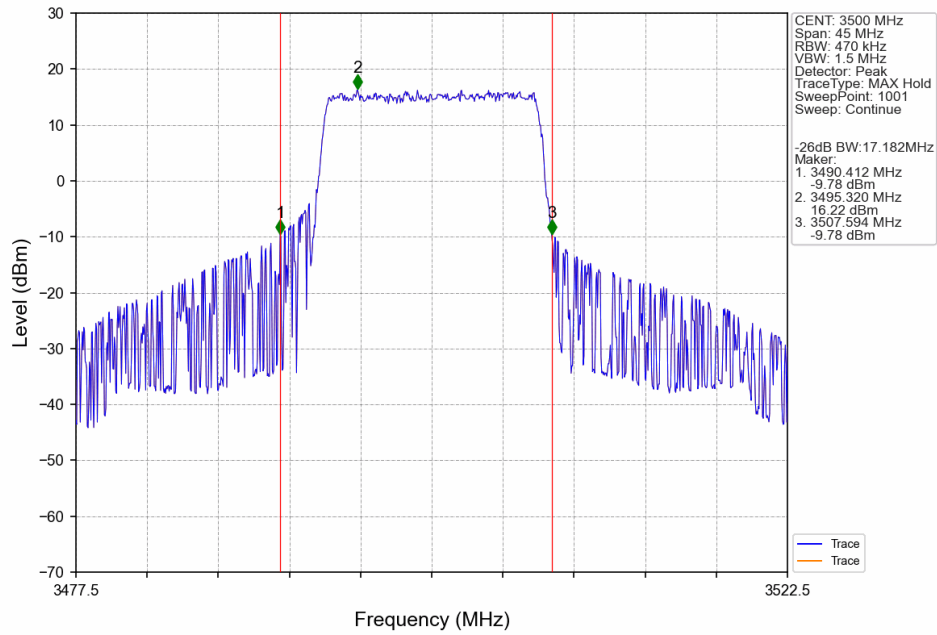
Band42a 10MHz QPSK MCH 3500MHz RB 50 0 NTN



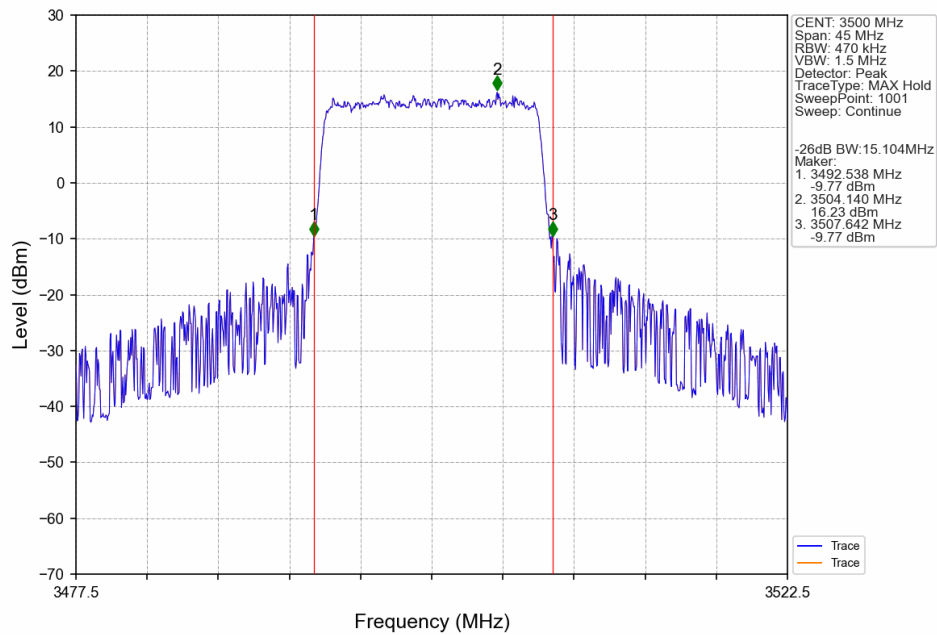
Band42a 10MHz 16QAM MCH 3500MHz RB 50 0 NTN



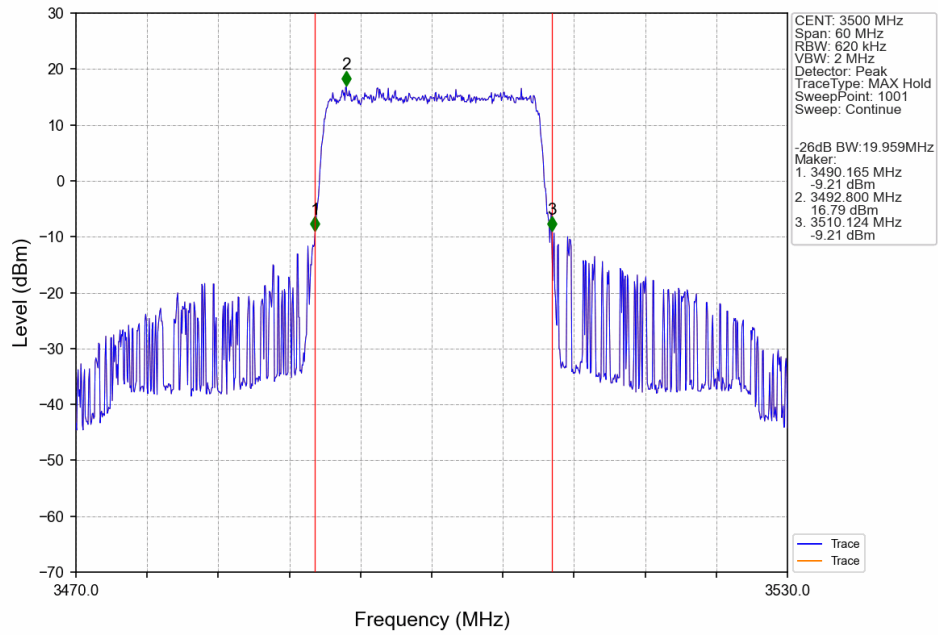
Band42a 15MHz QPSK MCH 3500MHz RB 75 0 NTN



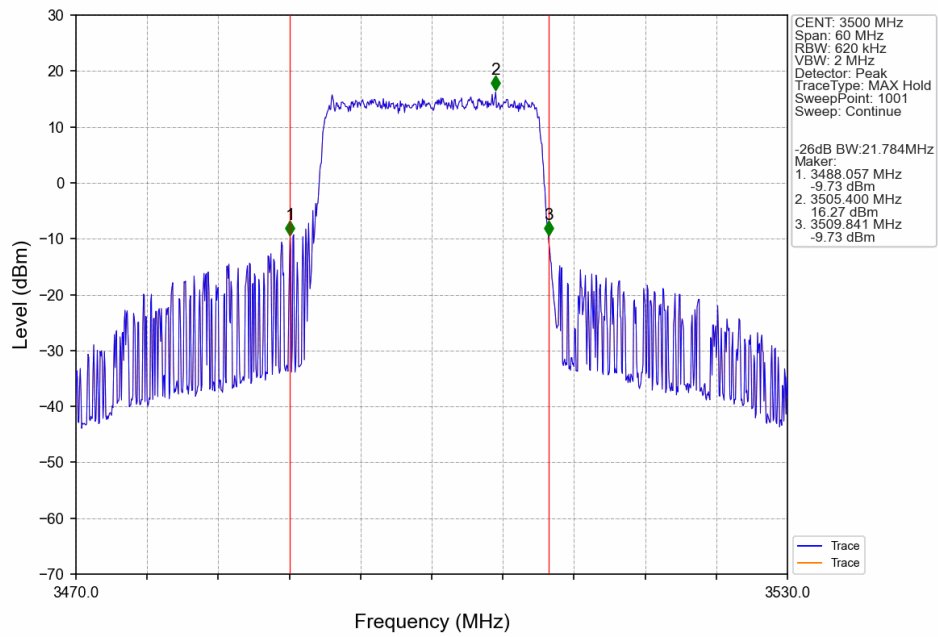
Band42a 15MHz 16QAM MCH 3500MHz RB 75 0 NTN



Band42a 20MHz QPSK MCH 3500MHz RB 100 0 NTNV



Band42a 20MHz 16QAM MCH 3500MHz RB 100 0 NTNV



4. Peak-Average Ratio

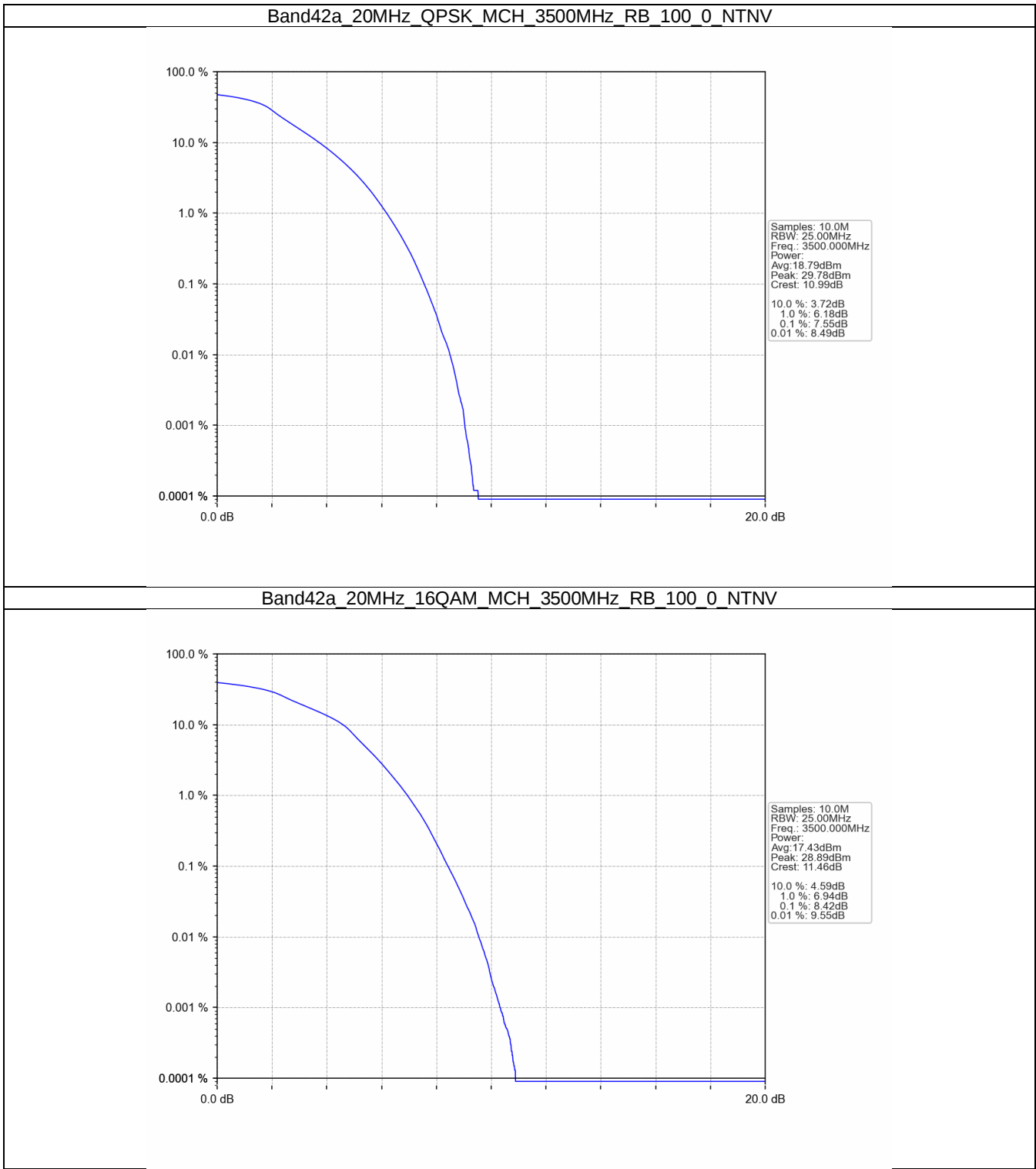
4.1 Test Result

4.1.1 B42a_20MHz

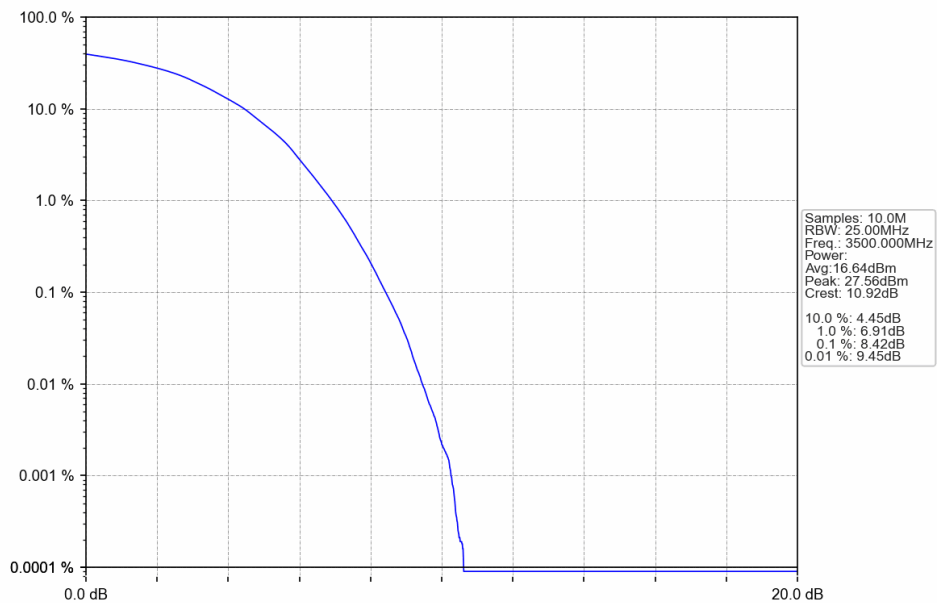
Band: 42a / Bandwidth: 20MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Peak-Average Ratio (dB)		Verdict
		Size	Offset	Result	Limit	
QPSK	3500	100	0	7.55	<=13	Pass
16QAM	3500	100	0	8.42	<=13	Pass
64QAM	3500	100	0	8.42	<=13	Pass
256QAM	3500	100	0	8.59	<=13	Pass

4.2 Test Graph

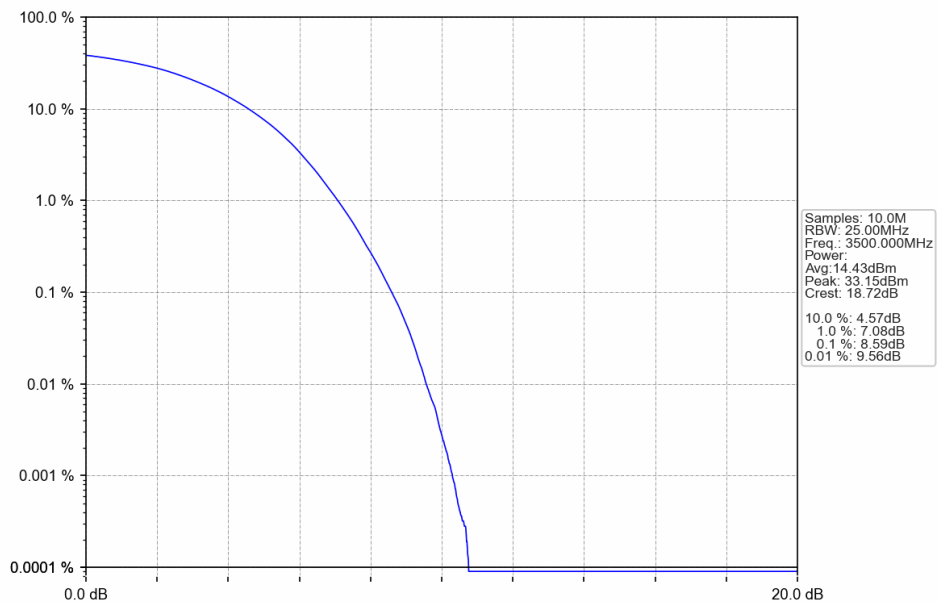
4.2.1 B42a_20MHz



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

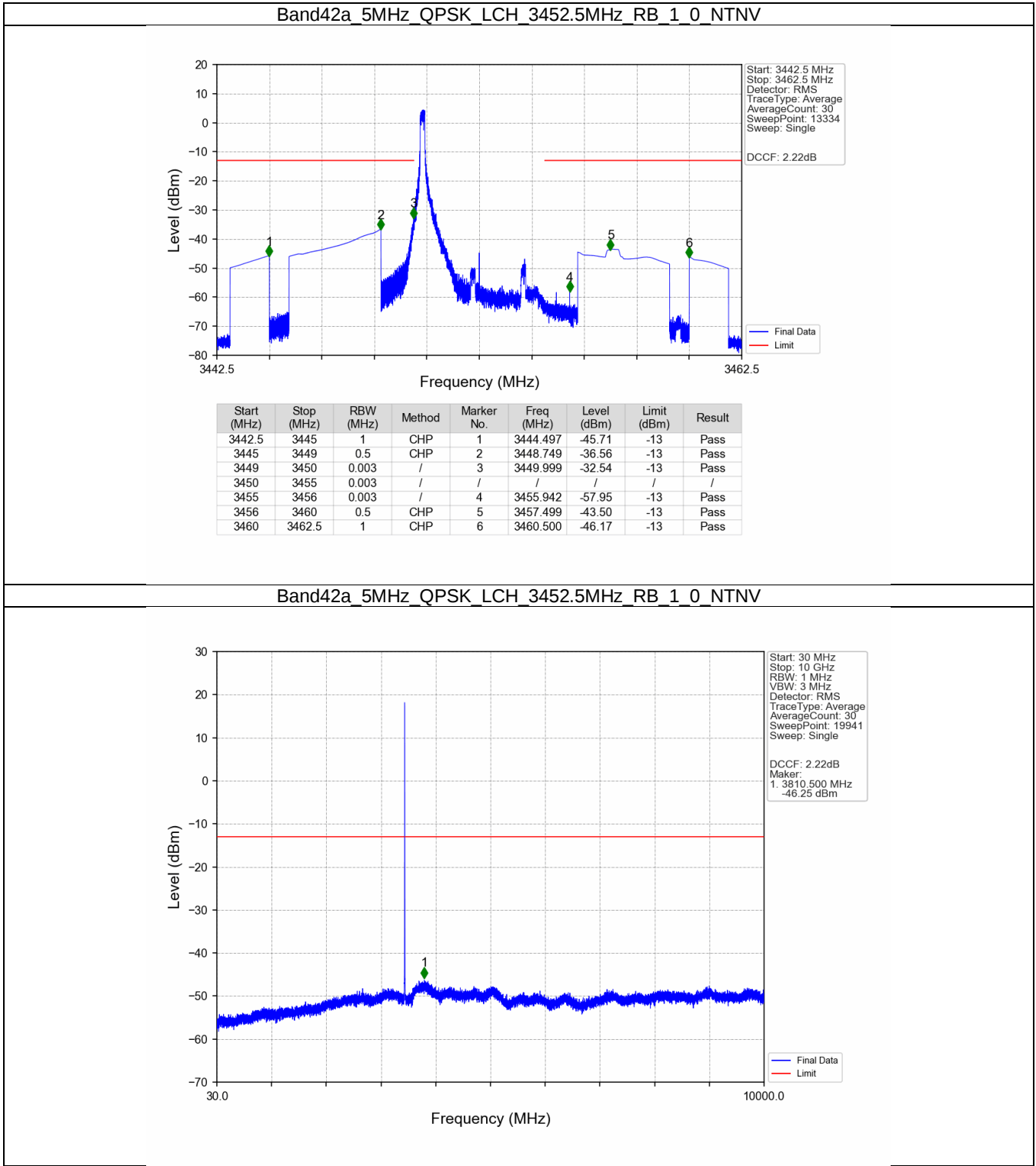
Band: 42a / Bandwidth: 15MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission		Verdict
		Size	Offset	Result	Limit	
QPSK	3457.5	1	0	Refer To Test Graph		Pass
		75	0	Refer To Test Graph		Pass
	3500	1	0	Refer To Test Graph		Pass
	3542.5	1	0	Refer To Test Graph		Pass
			74	Refer To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

5.1.4 B42a_20MHz

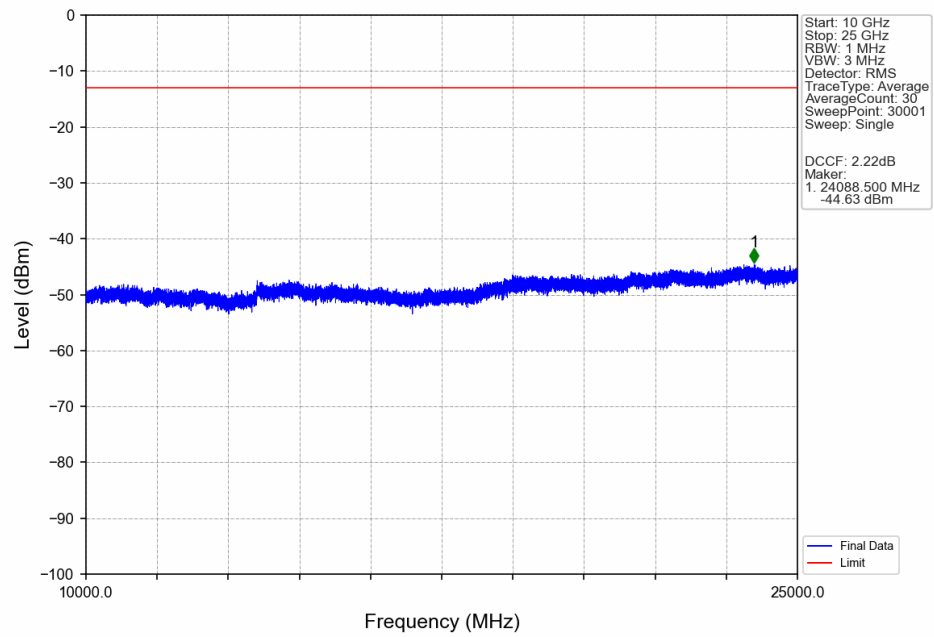
Band: 42a / Bandwidth: 20MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission		Verdict
		Size	Offset	Result	Limit	
QPSK	3460	1	0	Refer To Test Graph		Pass
		100	0	Refer To Test Graph		Pass
	3500	1	0	Refer To Test Graph		Pass
	3540	1	0	Refer To Test Graph		Pass
			99	Refer To Test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

5.2 Test Graph

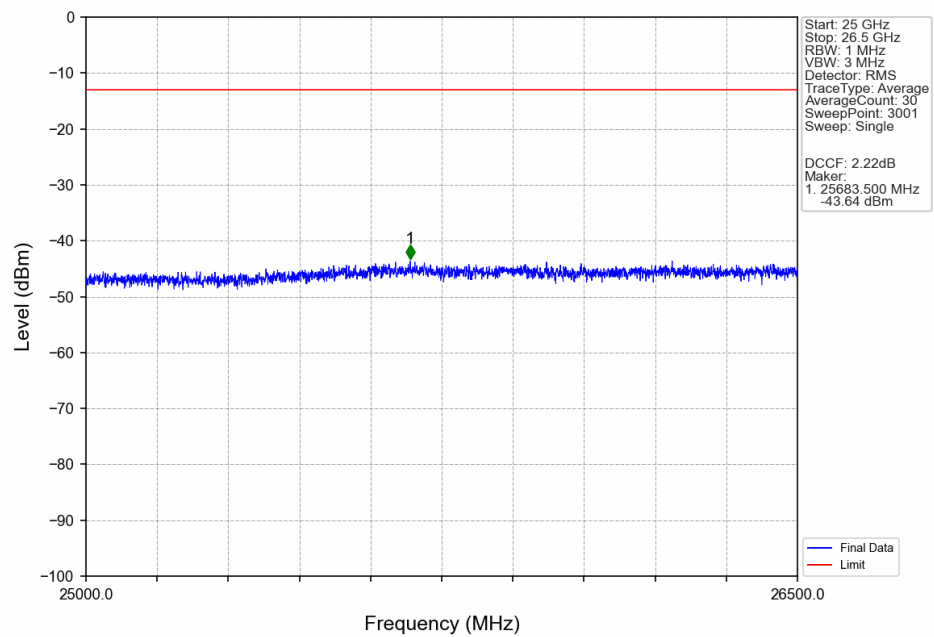
5.2.1 B42a_5MHz



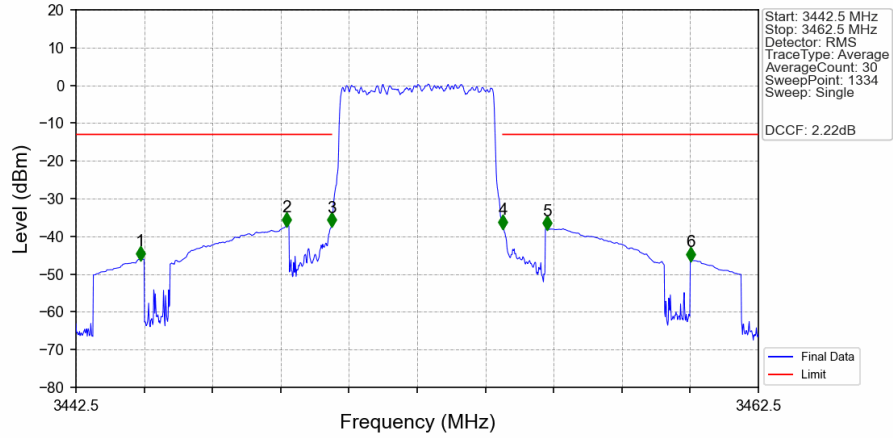
Band42a_5MHz_QPSK_LCH_3452.5MHz_RB_1_0_NTNV



Band42a_5MHz_QPSK_LCH_3452.5MHz_RB_1_0_NTNV

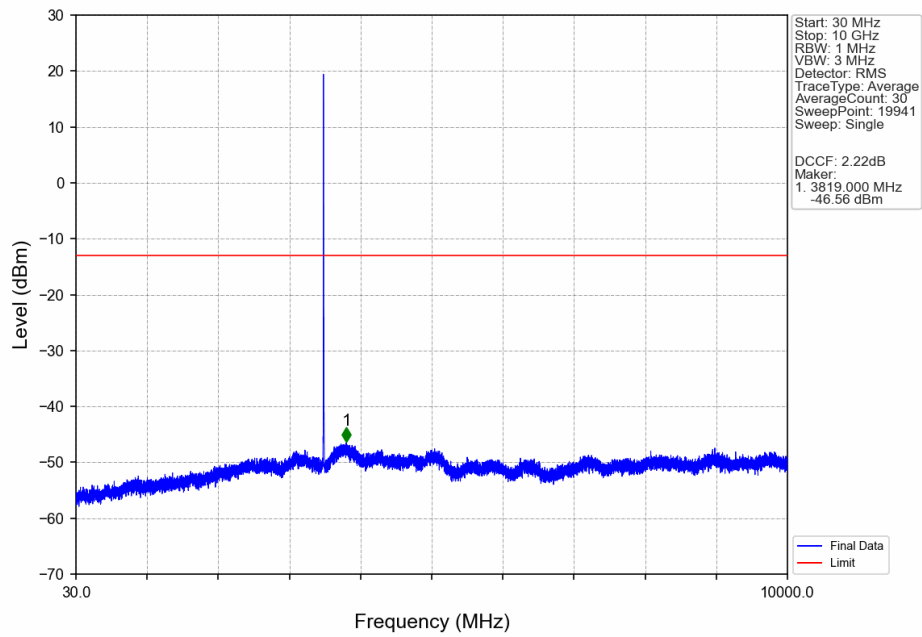


Band42a 5MHz QPSK LCH 3452.5MHz RB 25 0 NTN

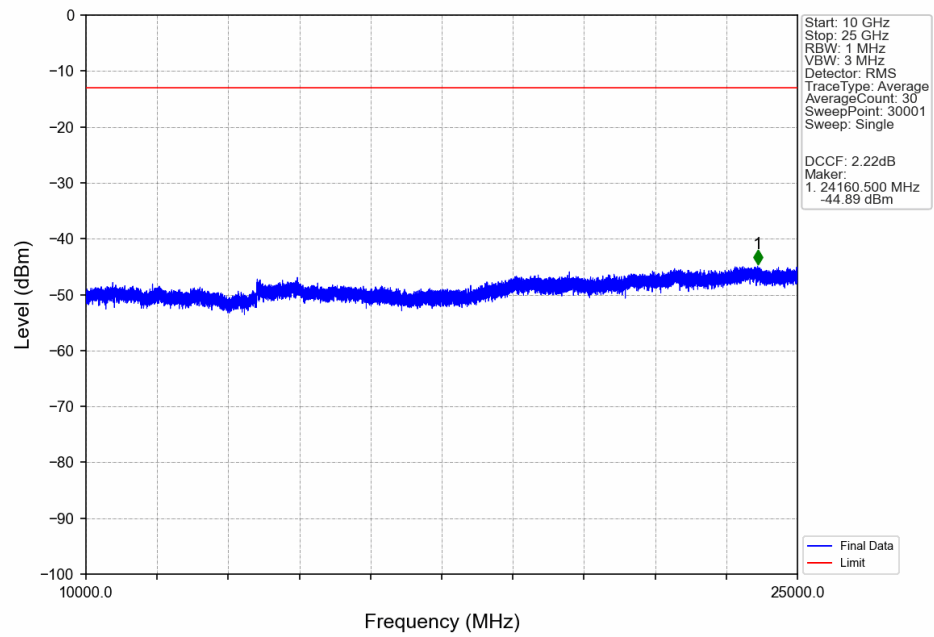


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
3442.5	3445	1	CHP	1	3444.390	-46.03	-13	Pass
3445	3449	0.5	CHP	2	3448.682	-37.07	-13	Pass
3449	3450	0.051	CHP	3	3449.987	-37.10	-13	Pass
3450	3455	0.051	CHP	/	/	/	/	/
3455	3456	0.051	CHP	4	3455.013	-37.69	-13	Pass
3456	3460	0.5	CHP	5	3456.303	-37.96	-13	Pass
3460	3462.5	1	CHP	6	3460.505	-46.25	-13	Pass

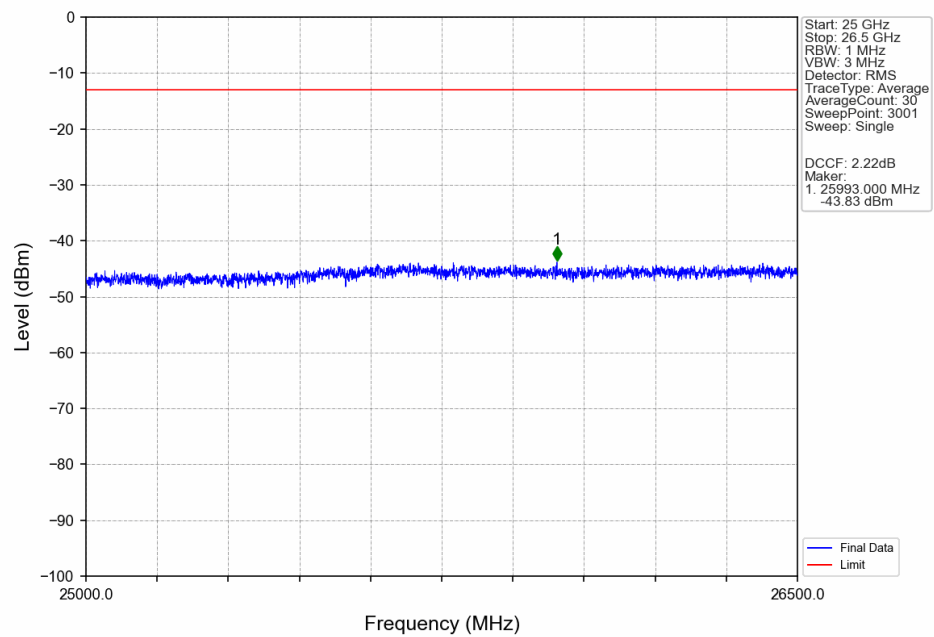
Band42a_5MHz_QPSK_MCH_3500MHz_RB_1_0_NTN



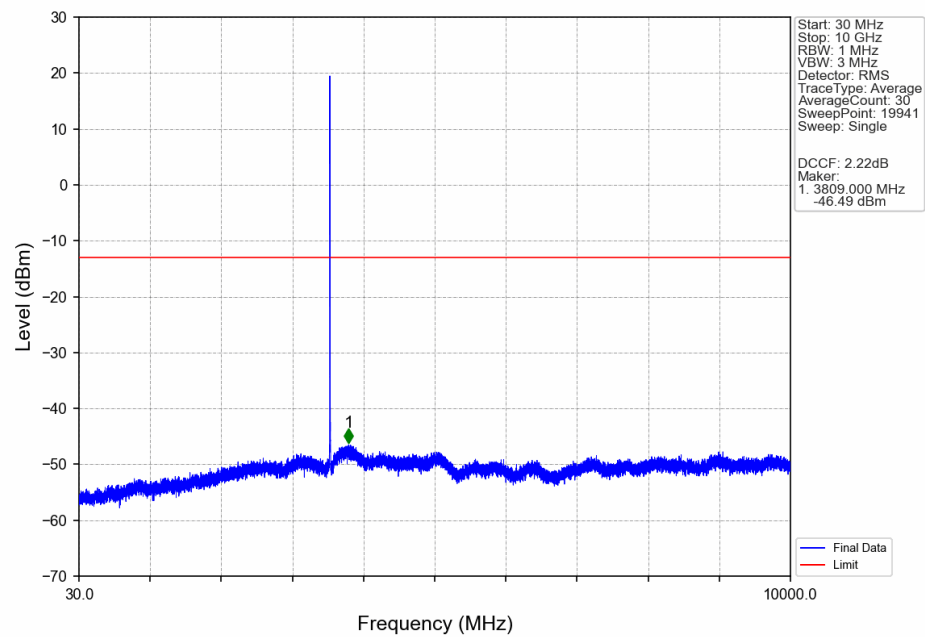
Band42a 5MHz QPSK MCH 3500MHz RB 1 0 NTV



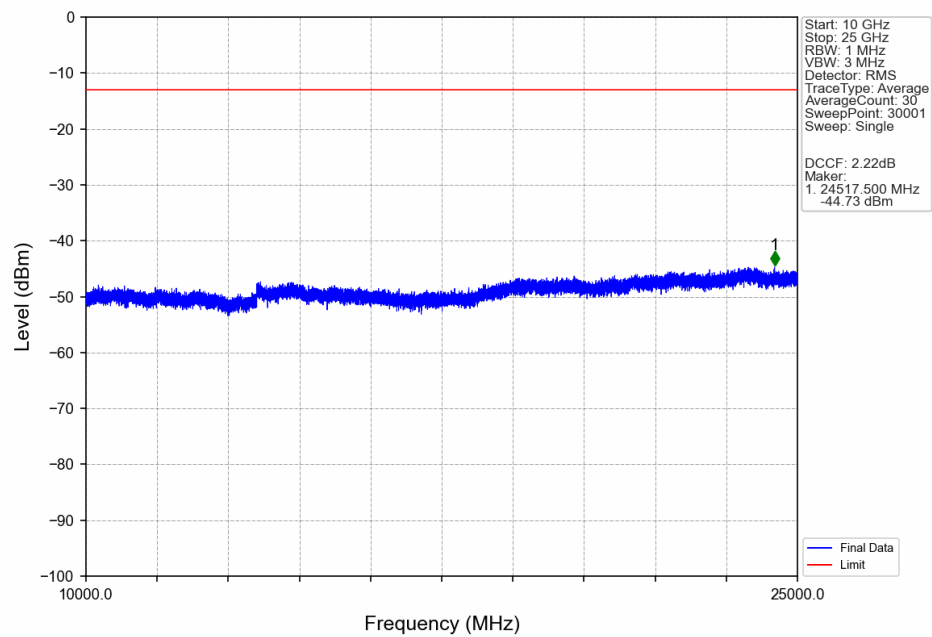
Band42a 5MHz QPSK MCH 3500MHz RB 1 0 NTV



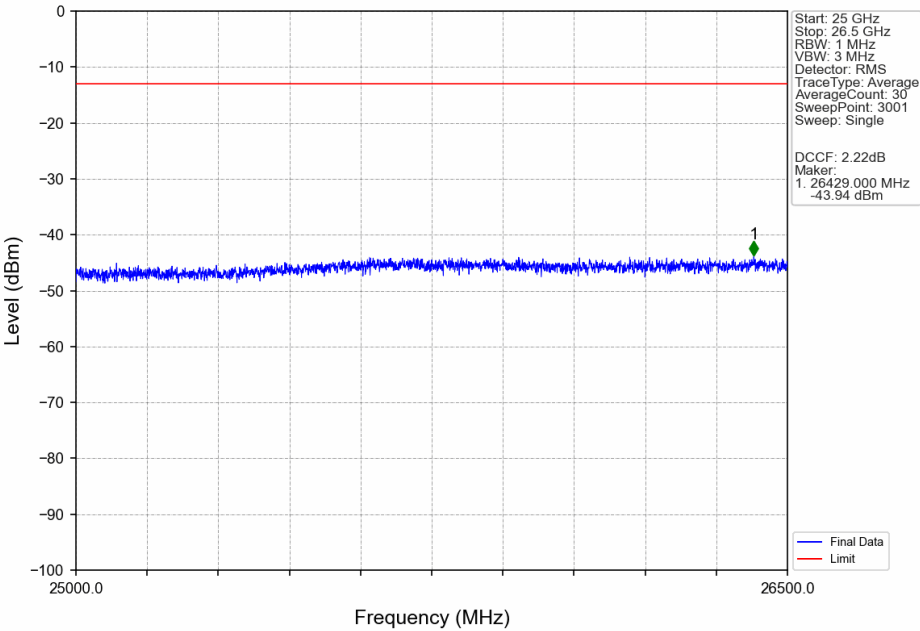
Band42a 5MHz QPSK HCH 3547.5MHz RB 1 0 NTV



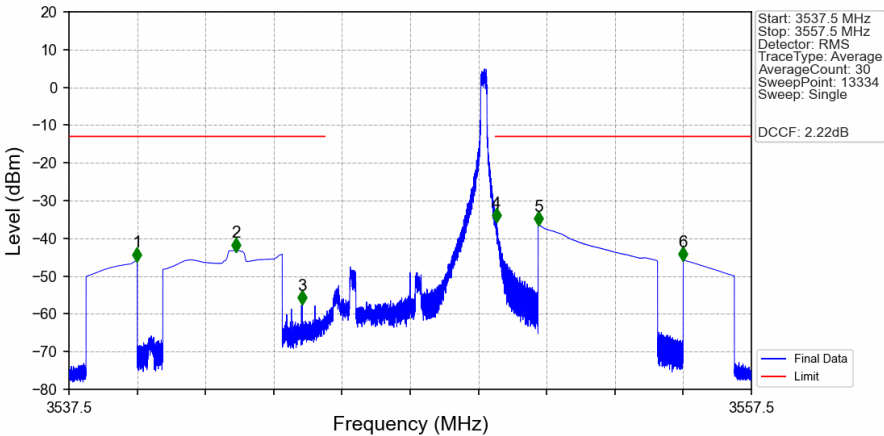
Band42a 5MHz QPSK HCH 3547.5MHz RB 1 0 NTV



Band42a 5MHz QPSK HCH 3547.5MHz RB 1 0 NTNV

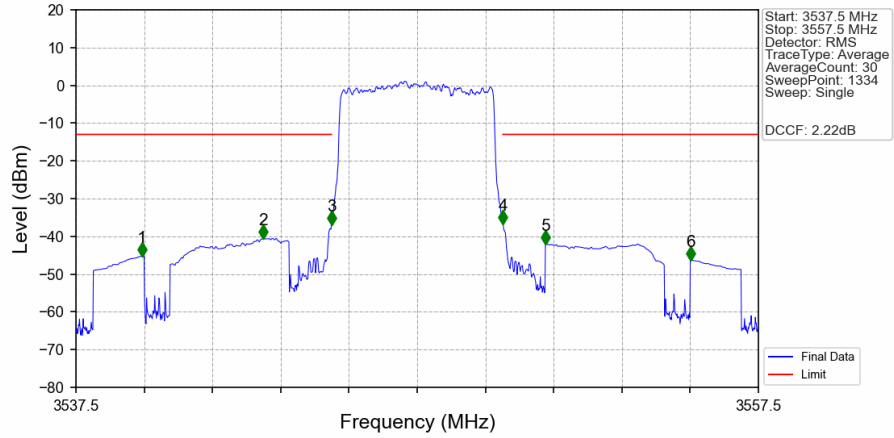


Band42a_5MHz_QPSK_HCH_3547.5MHz_RB_1_24_NTNV



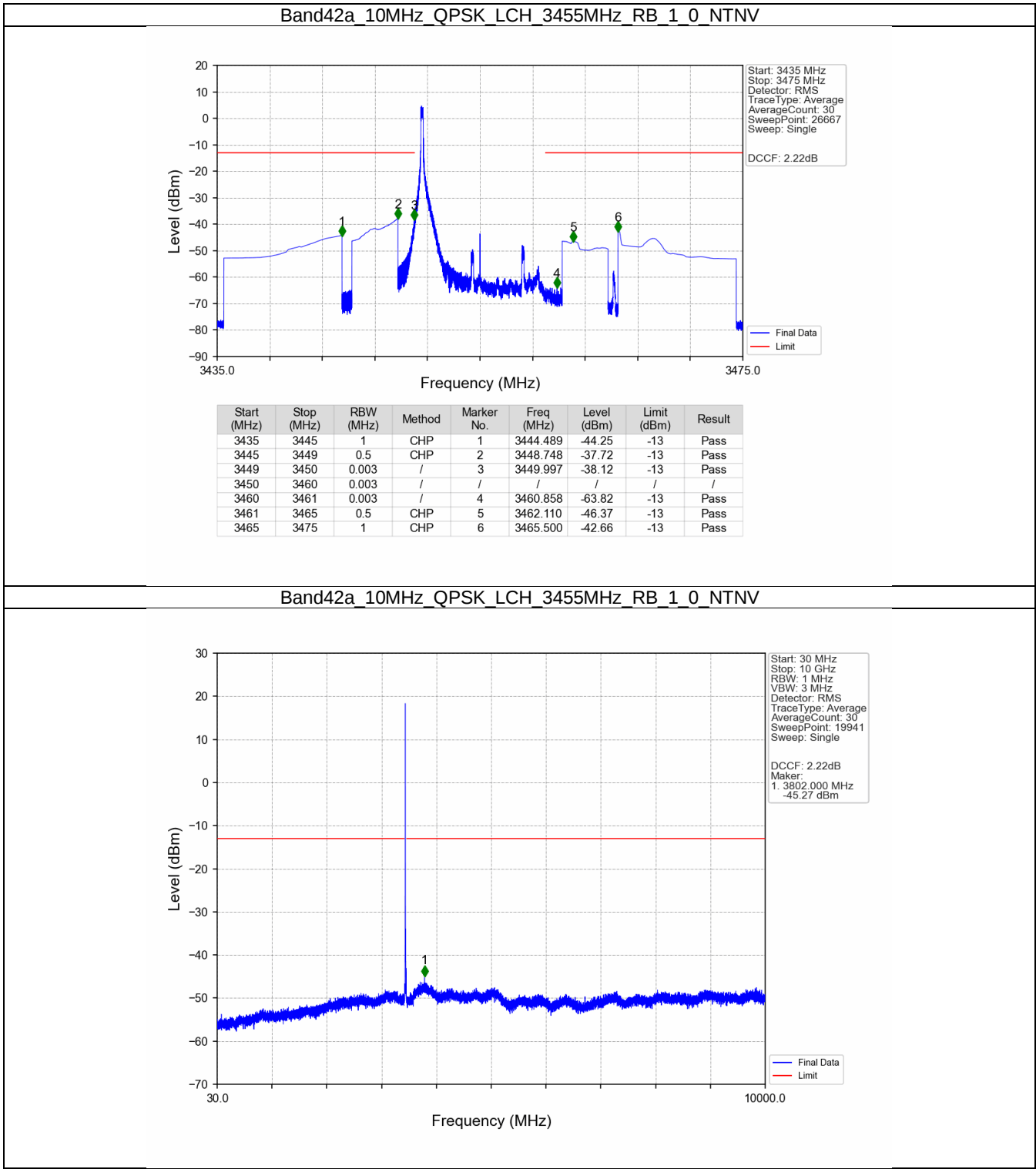
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
3537.5	3540	1	CHP	1	3539.497	-45.83	-13	Pass
3540	3544	0.5	CHP	2	3542.398	-43.23	-13	Pass
3544	3545	0.003	/	3	3544.333	-57.29	-13	Pass
3545	3550	0.003	/	/	/	/	/	/
3550	3551	0.003	/	4	3550.025	-35.51	-13	Pass
3551	3555	0.5	CHP	5	3551.251	-36.27	-13	Pass
3555	3557.5	1	CHP	6	3555.500	-45.73	-13	Pass

Band42a 5MHz QPSK HCH 3547.5MHz RB 25 0 NTN

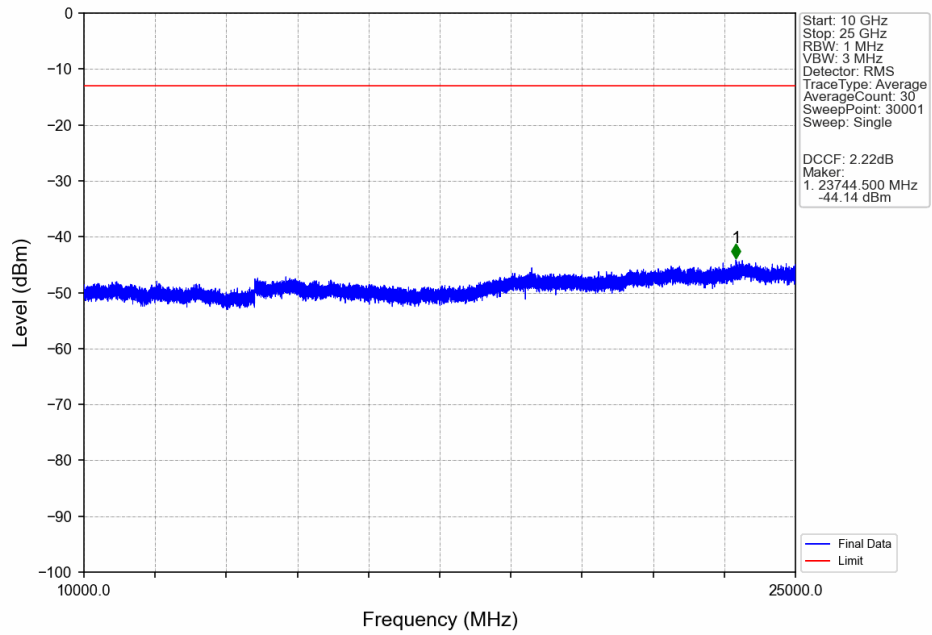


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
3537.5	3540	1	CHP	1	3539.435	-45.12	-13	Pass
3540	3544	0.5	CHP	2	3542.991	-40.40	-13	Pass
3544	3545	0.051	CHP	3	3544.987	-36.79	-13	Pass
3545	3550	0.051	CHP	/	/	/	/	/
3550	3551	0.051	CHP	4	3550.013	-36.46	-13	Pass
3551	3555	0.5	CHP	5	3551.258	-41.92	-13	Pass
3555	3557.5	1	CHP	6	3555.505	-46.09	-13	Pass

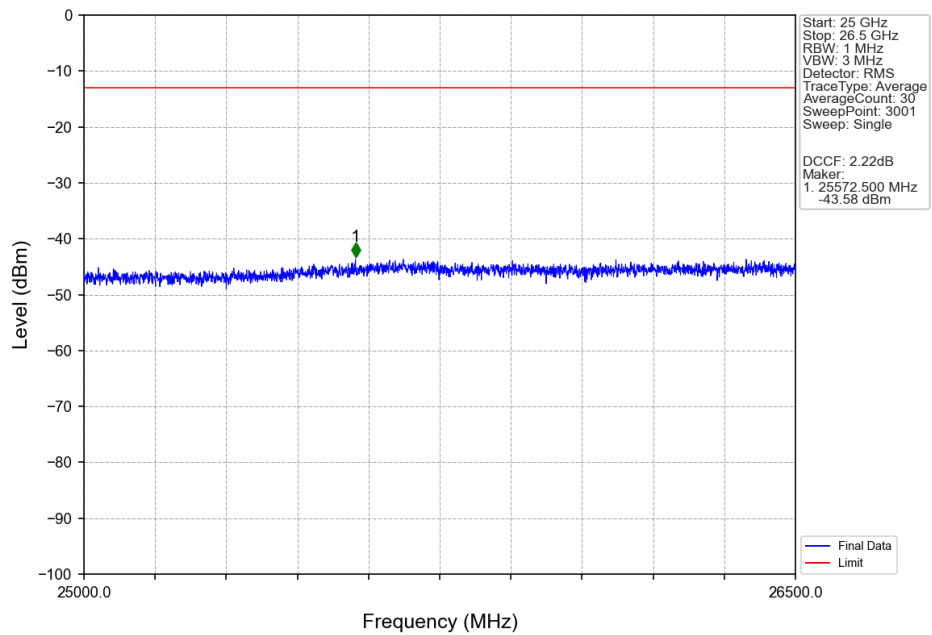
5.2.2 B42a_10MHz



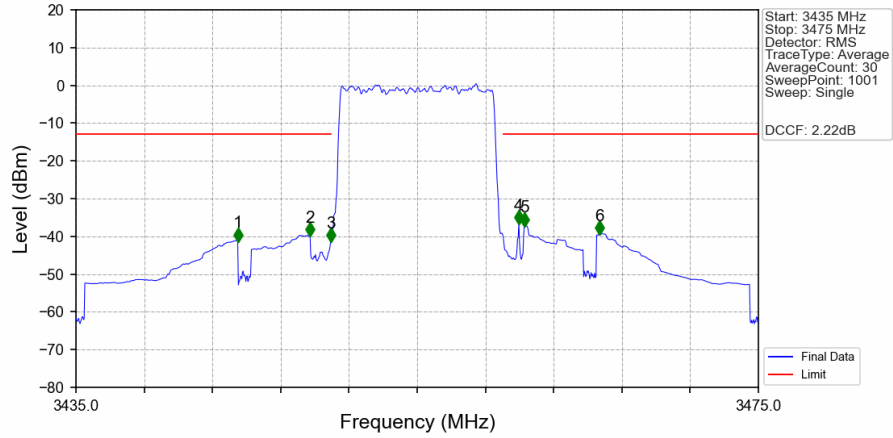
Band42a_10MHz_QPSK_LCH_3455MHz_RB_1_0_NTNV



Band42a_10MHz_QPSK_LCH_3455MHz_RB_1_0_NTNV

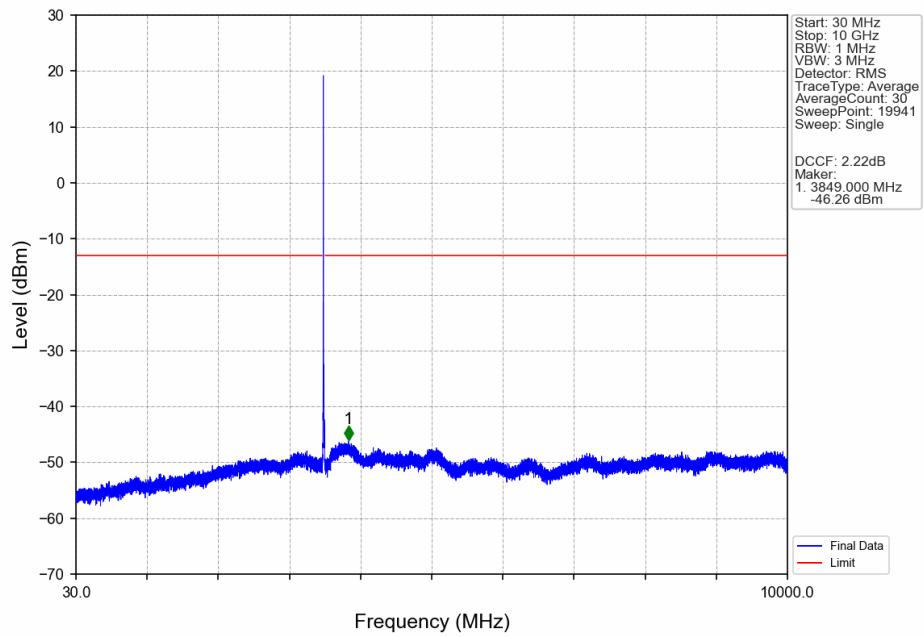


Band42a 10MHz QPSK LCH 3455MHz RB 50 0 NTNV

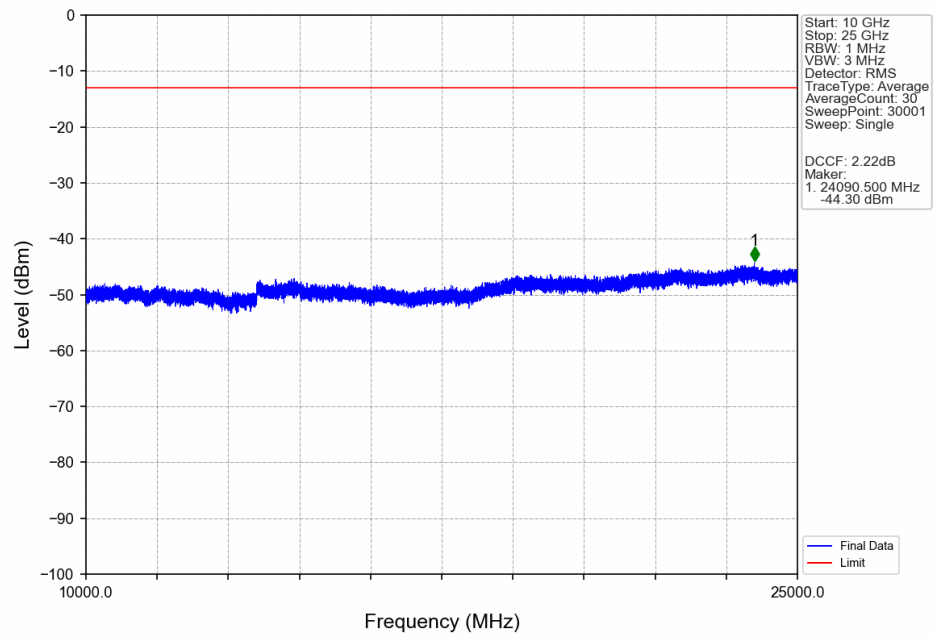


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
3435	3445	1	CHP	1	3444.480	-41.12	-13	Pass
3445	3449	0.5	CHP	2	3448.720	-39.69	-13	Pass
3449	3450	0.104	CHP	3	3449.960	-41.27	-13	Pass
3450	3460	0.104	CHP	/	/	/	/	/
3460	3461	0.104	CHP	4	3460.960	-36.52	-13	Pass
3461	3465	0.5	CHP	5	3461.280	-37.07	-13	Pass
3465	3475	1	CHP	6	3465.680	-39.31	-13	Pass

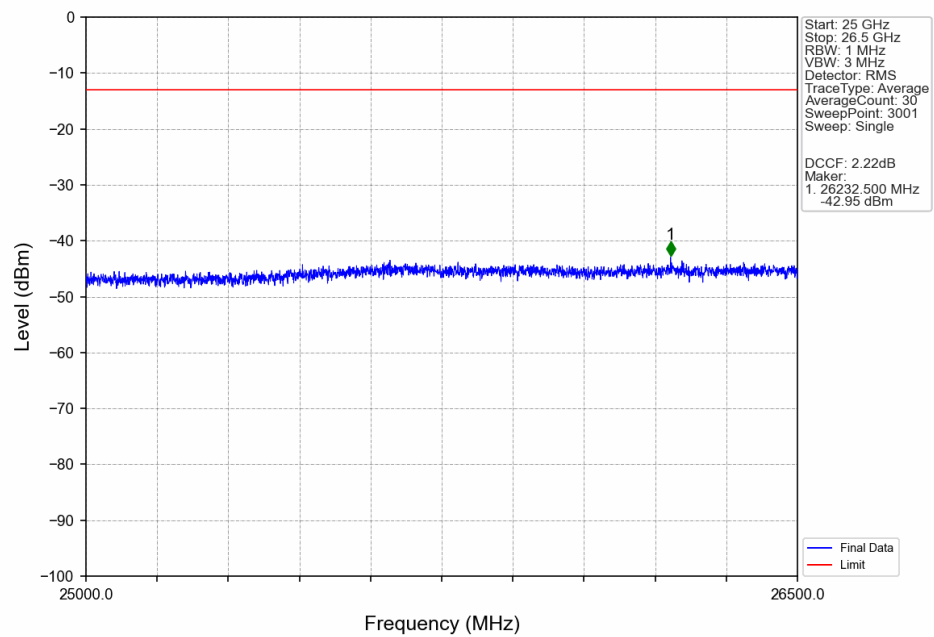
Band42a 10MHz QPSK MCH 3500MHz RB 1 0 NTNV



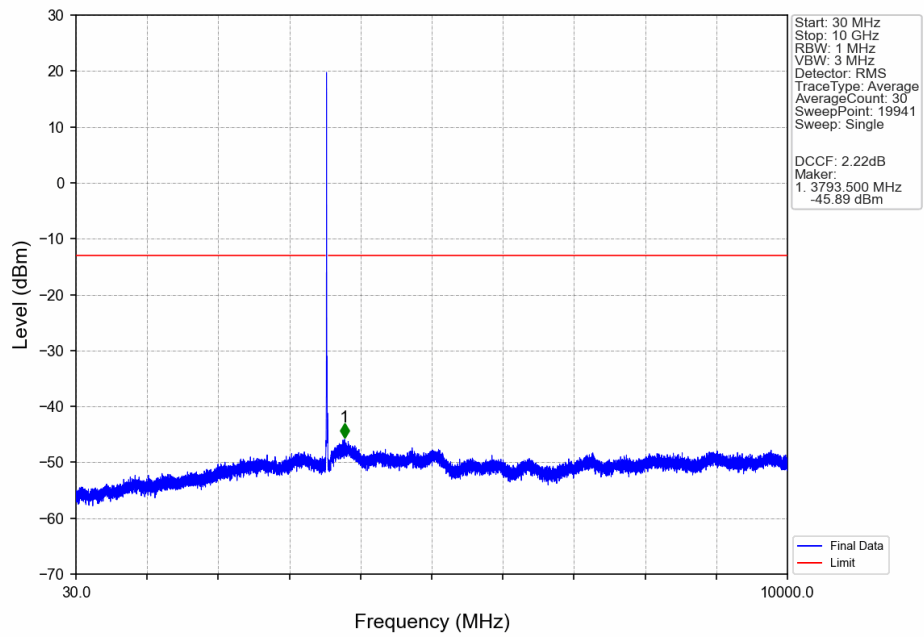
Band42a_10MHz_QPSK_MCH_3500MHz_RB_1_0_NTNV



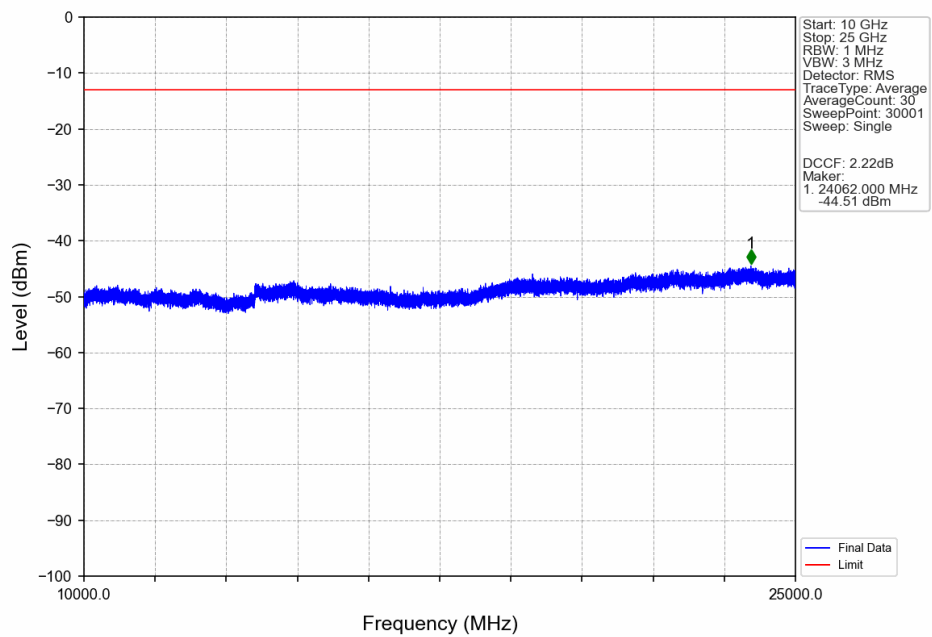
Band42a_10MHz_QPSK_MCH_3500MHz_RB_1_0_NTNV



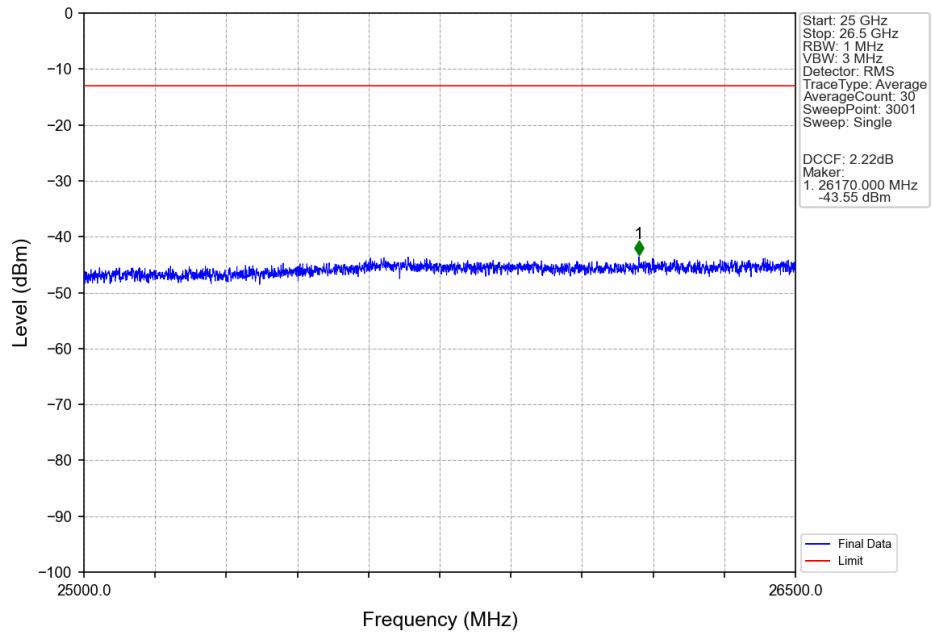
Band42a_10MHz_QPSK_HCH_3545MHz_RB_1_0_NTNV



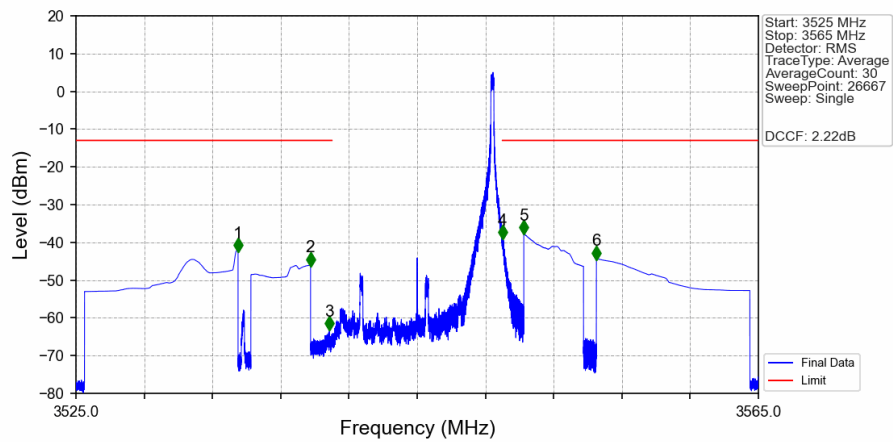
Band42a_10MHz_QPSK_HCH_3545MHz_RB_1_0_NTNV



Band42a_10MHz_QPSK_HCH_3545MHz_RB_1_0_NTNV

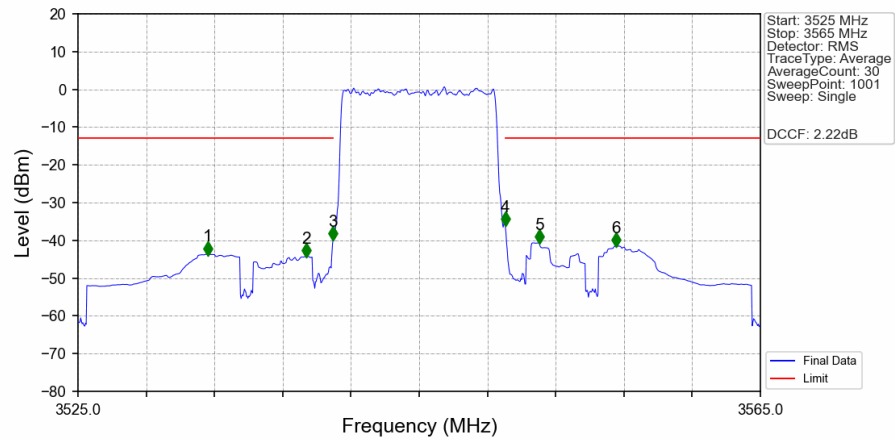


Band42a_10MHz_QPSK_HCH_3545MHz_RB_1_49_NTNV



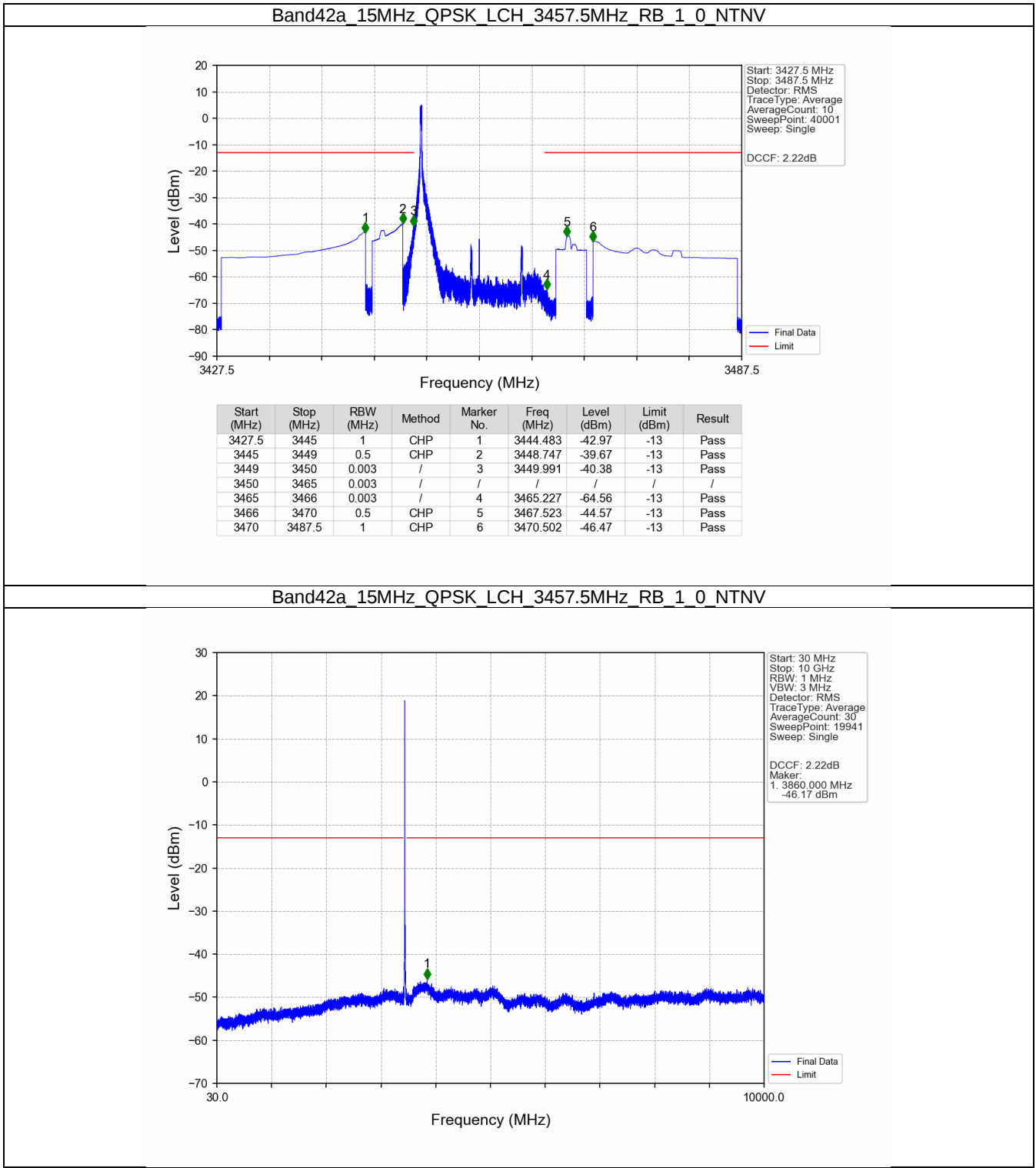
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
3525	3535	1	CHP	1	3534.500	-42.26	-13	Pass
3535	3539	0.5	CHP	2	3538.737	-46.04	-13	Pass
3539	3540	0.003	/	3	3539.853	-62.99	-13	Pass
3540	3550	0.003	/	/	/	/	/	/
3550	3551	0.003	/	4	3550.007	-38.81	-13	Pass
3551	3555	0.5	CHP	5	3551.251	-37.61	-13	Pass
3555	3565	1	CHP	6	3555.506	-44.31	-13	Pass

Band42a 10MHz QPSK HCH 3545MHz RB 50 0 NTNV

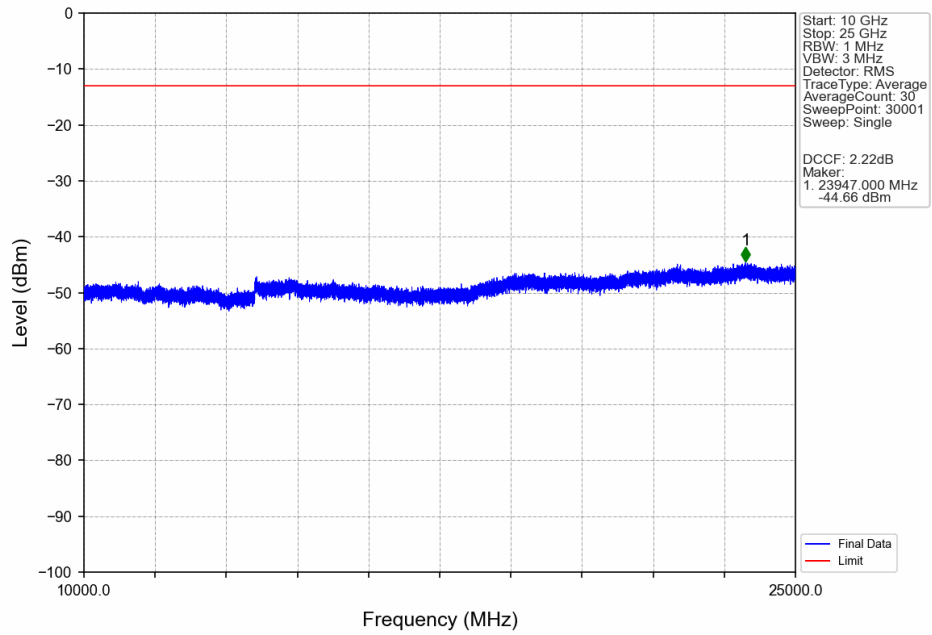


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
3525	3535	1	CHP	1	3532.600	-43.67	-13	Pass
3535	3539	0.5	CHP	2	3538.400	-44.21	-13	Pass
3539	3540	0.104	CHP	3	3539.960	-39.68	-13	Pass
3540	3550	0.104	CHP	/	/	/	/	/
3550	3551	0.104	CHP	4	3550.040	-35.95	-13	Pass
3551	3555	0.5	CHP	5	3552.040	-40.64	-13	Pass
3555	3565	1	CHP	6	3556.520	-41.51	-13	Pass

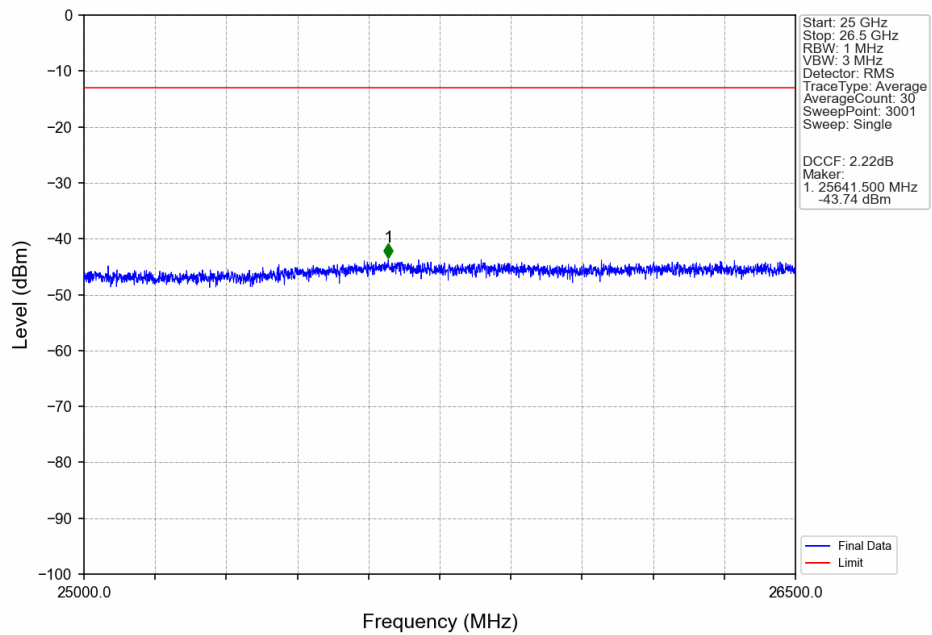
5.2.3 B42a_15MHz



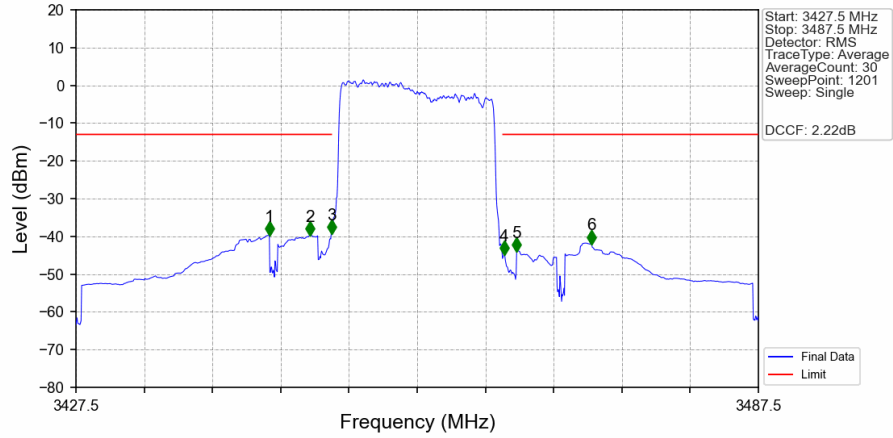
Band42a_15MHz_QPSK_LCH_3457.5MHz_RB_1_0_NTNV



Band42a_15MHz_QPSK_LCH_3457.5MHz_RB_1_0_NTNV

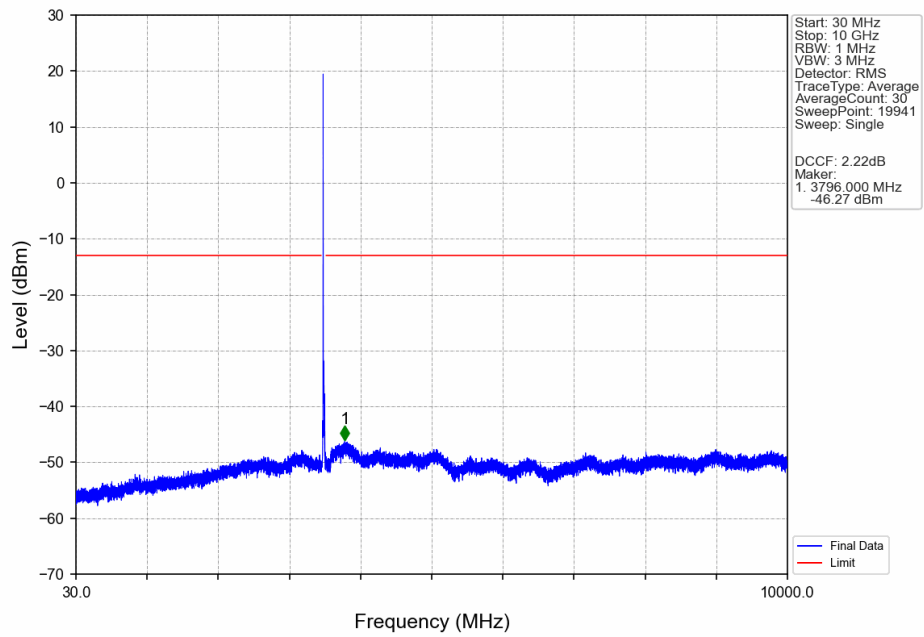


Band42a 15MHz QPSK LCH 3457.5MHz RB 75 0 NTN

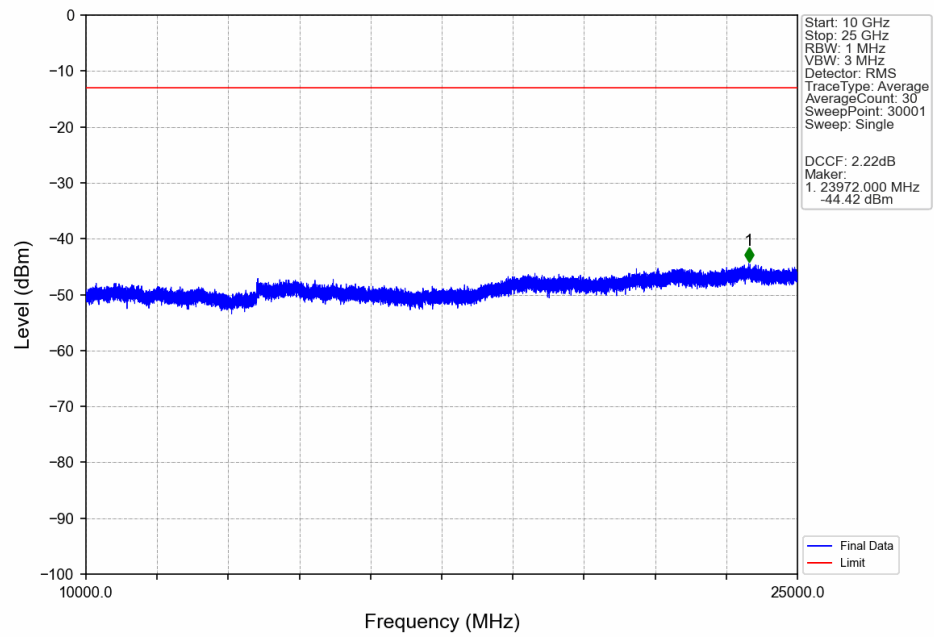


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
3427.5	3445	1	CHP	1	3444.500	-39.59	-13	Pass
3445	3449	0.5	CHP	2	3448.100	-39.57	-13	Pass
3449	3450	0.151	CHP	3	3449.950	-39.07	-13	Pass
3450	3465	0.151	CHP	/	/	/	/	/
3465	3466	0.151	CHP	4	3465.150	-44.65	-13	Pass
3466	3470	0.5	CHP	5	3466.250	-43.79	-13	Pass
3470	3487.5	1	CHP	6	3472.800	-41.74	-13	Pass

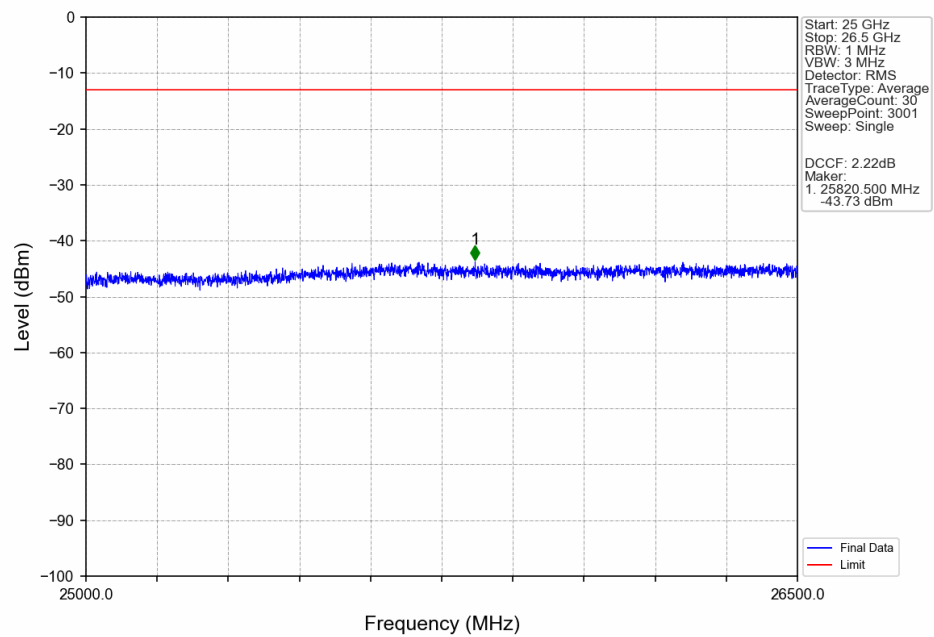
Band42a 15MHz QPSK MCH 3500MHz RB 1 0 NTN



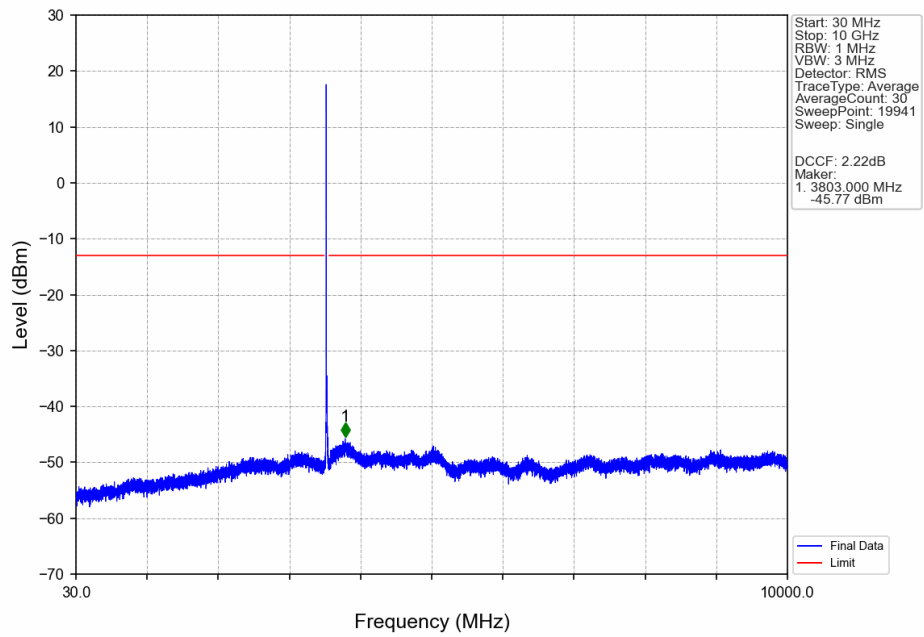
Band42a_15MHz_QPSK_MCH_3500MHz_RB_1_0_NTNV



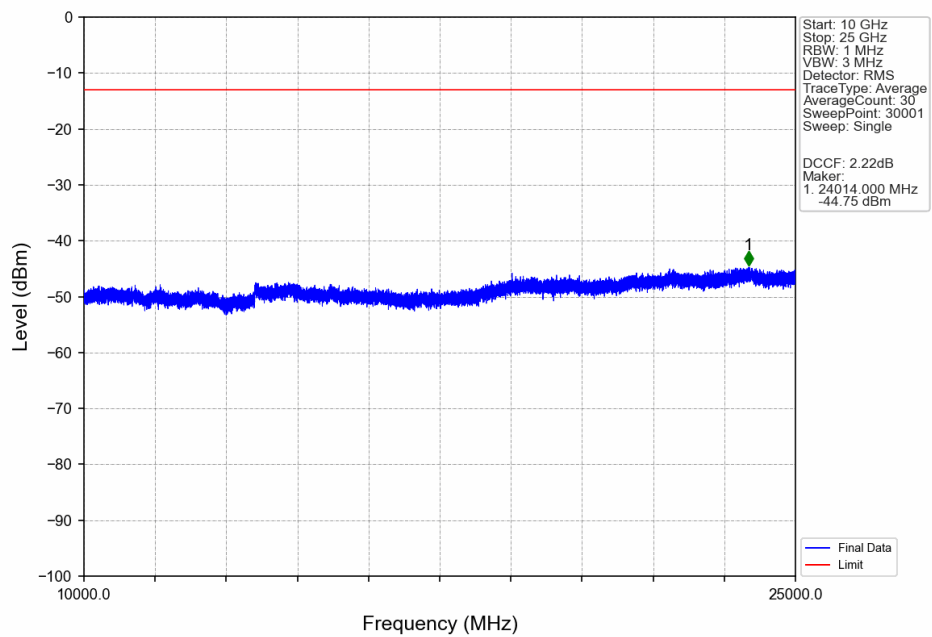
Band42a_15MHz_QPSK_MCH_3500MHz_RB_1_0_NTNV



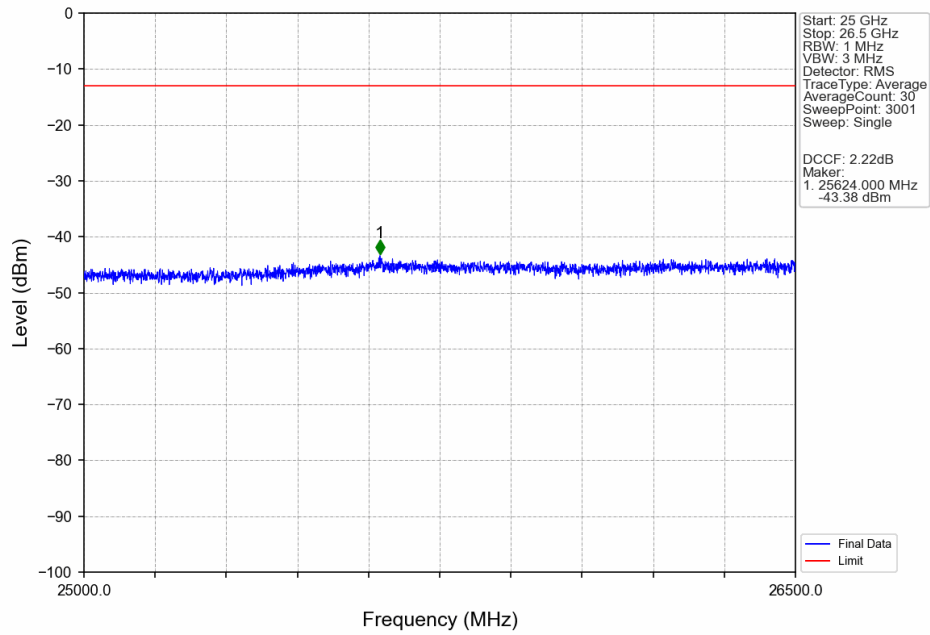
Band42a_15MHz_QPSK_HCH_3542.5MHz_RB_1_0_NTNV



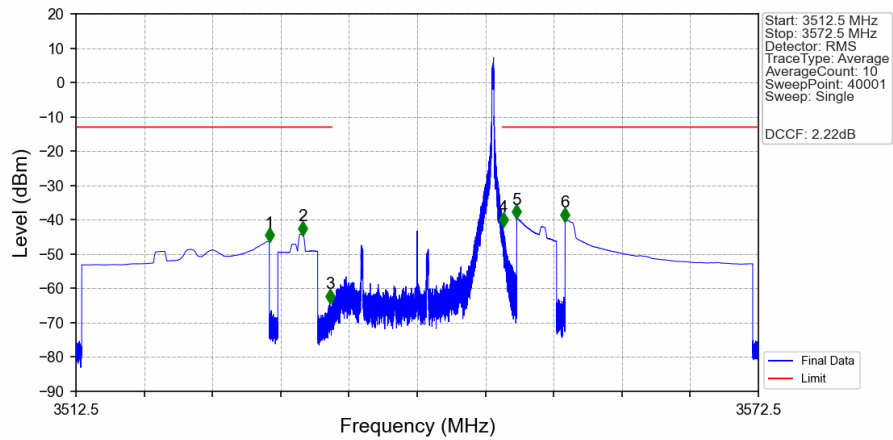
Band42a_15MHz_QPSK_HCH_3542.5MHz_RB_1_0_NTNV



Band42a 15MHz QPSK HCH 3542.5MHz RB 1 0 NTN

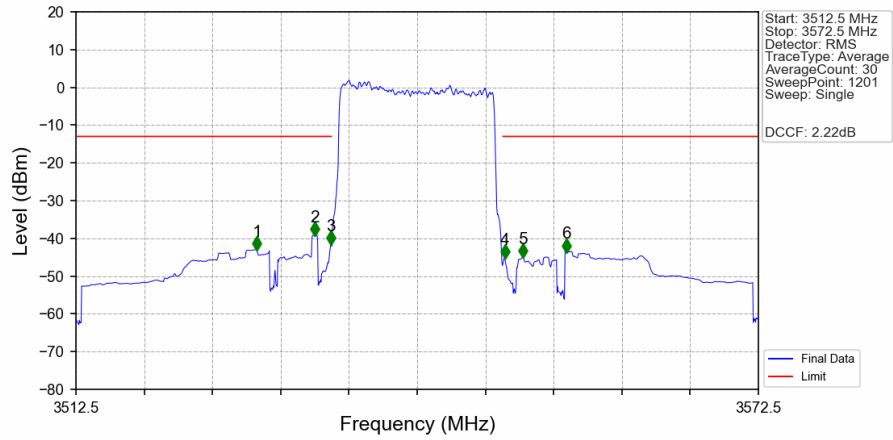


Band42a 15MHz QPSK HCH 3542.5MHz RB 1 74 NTN



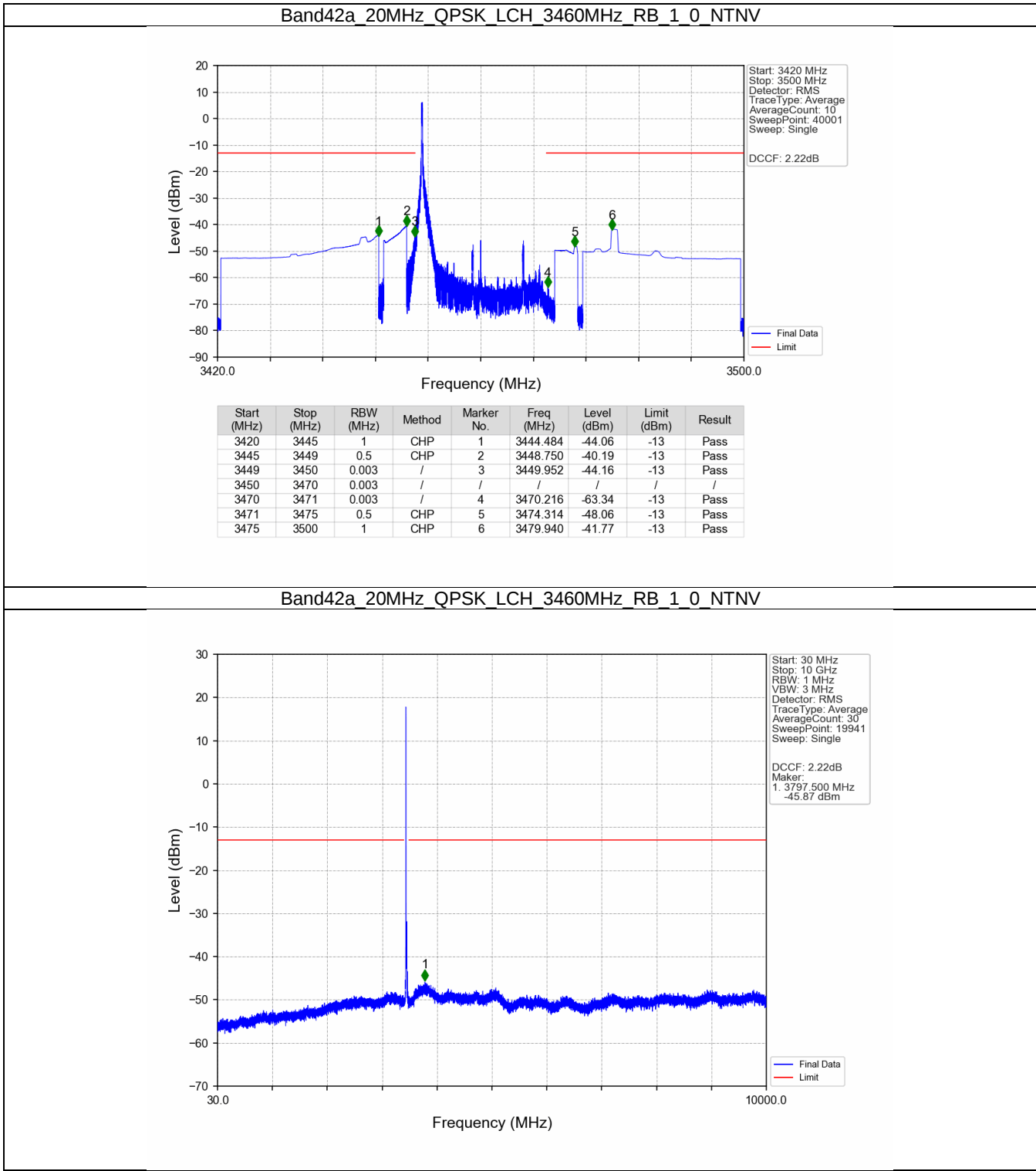
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
3512.5	3530	1	CHP	1	3529.499	-46.23	-13	Pass
3530	3534	0.5	CHP	2	3532.441	-44.21	-13	Pass
3534	3535	0.003	/	3	3534.811	-63.94	-13	Pass
3535	3550	0.003	/	/	/	/	/	/
3550	3551	0.003	/	4	3550.054	-41.57	-13	Pass
3551	3555	0.5	CHP	5	3551.251	-39.29	-13	Pass
3555	3572.5	1	CHP	6	3555.501	-40.16	-13	Pass

Band42a 15MHz QPSK HCH 3542.5MHz RB 75 0 NTNV

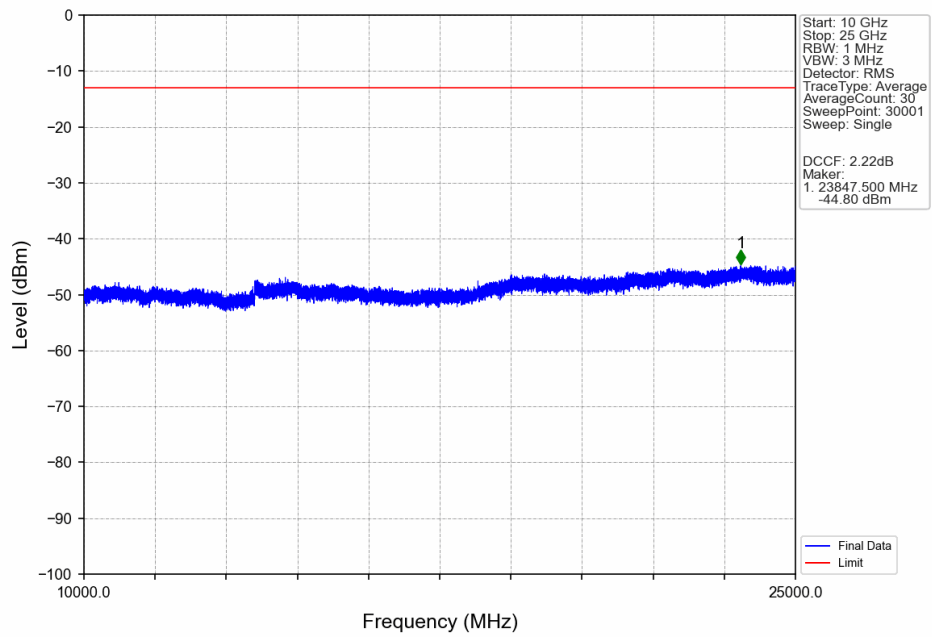


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
3512.5	3530	1	CHP	1	3528.400	-42.93	-13	Pass
3530	3534	0.5	CHP	2	3533.500	-39.15	-13	Pass
3534	3535	0.172	CHP	3	3534.900	-41.39	-13	Pass
3535	3550	0.172	CHP	/	/	/	/	/
3550	3551	0.172	CHP	4	3550.200	-45.14	-13	Pass
3551	3555	0.5	CHP	5	3551.800	-44.91	-13	Pass
3555	3572.5	1	CHP	6	3555.650	-43.50	-13	Pass

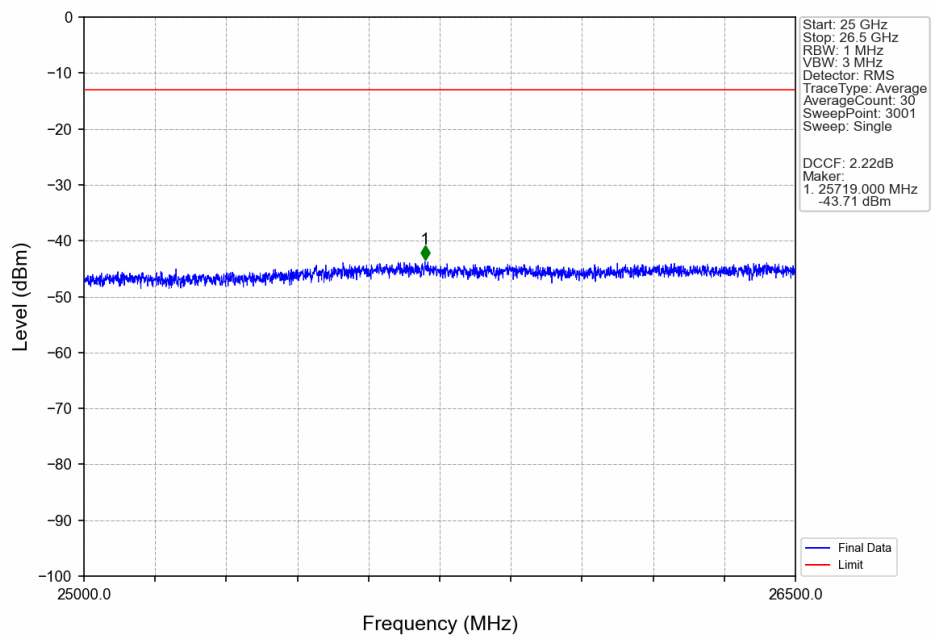
5.2.4 B42a_20MHz



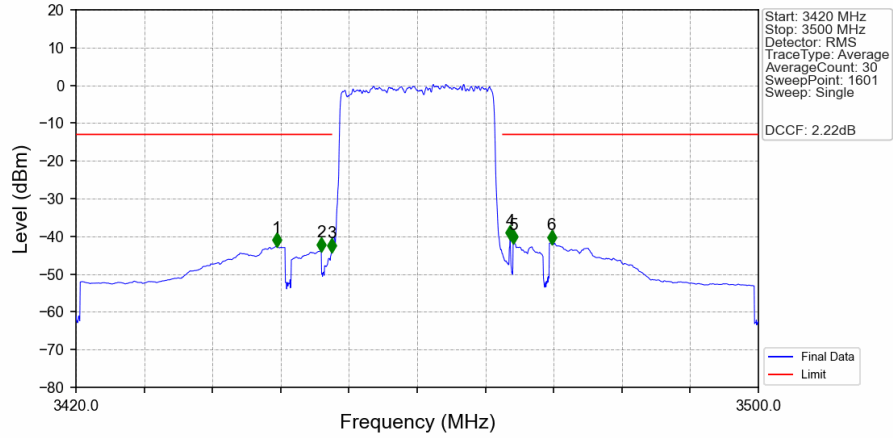
Band42a 20MHz QPSK LCH 3460MHz RB 1 0 NTNV



Band42a_20MHz_QPSK_LCH_3460MHz_RB_1_0_NTNV

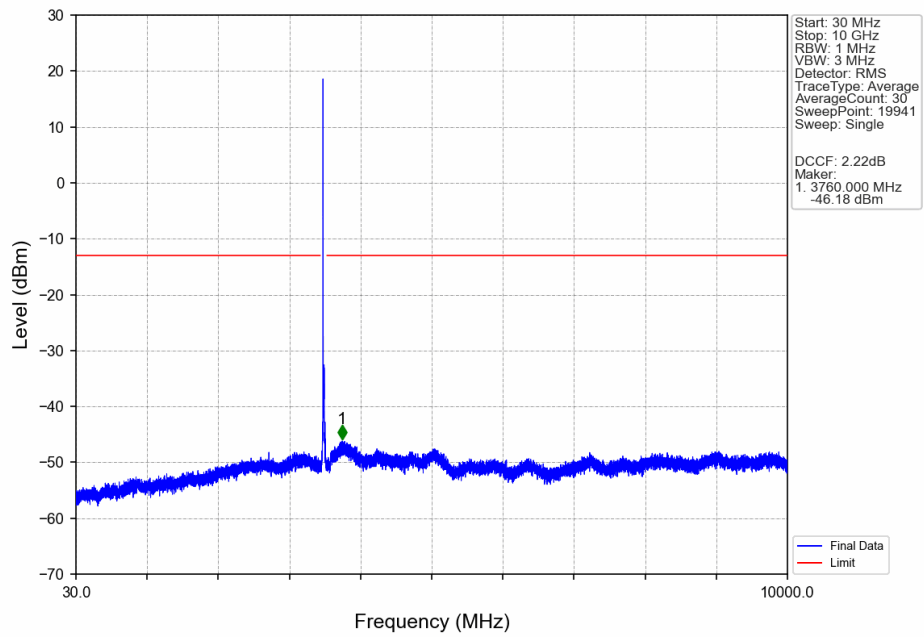


Band42a 20MHz QPSK LCH 3460MHz RB 100 0 NTNV

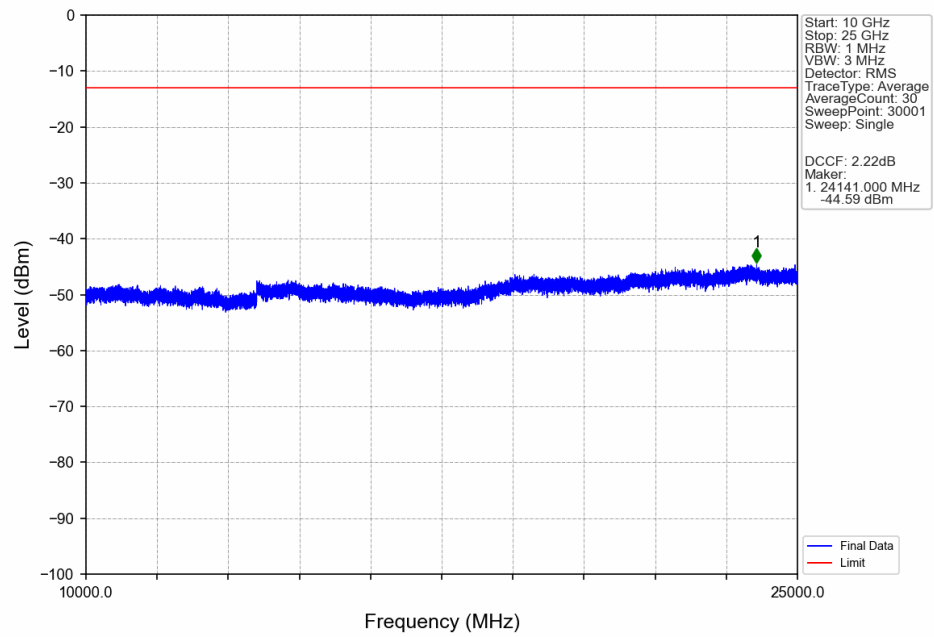


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
3420	3445	1	CHP	1	3443.500	-42.58	-13	Pass
3445	3449	0.5	CHP	2	3448.750	-43.69	-13	Pass
3449	3450	0.2	CHP	3	3449.950	-43.93	-13	Pass
3450	3470	0.2	CHP	/	/	/	/	/
3470	3471	0.2	CHP	4	3470.900	-40.56	-13	Pass
3471	3475	0.5	CHP	5	3471.250	-41.67	-13	Pass
3475	3500	1	CHP	6	3475.750	-41.79	-13	Pass

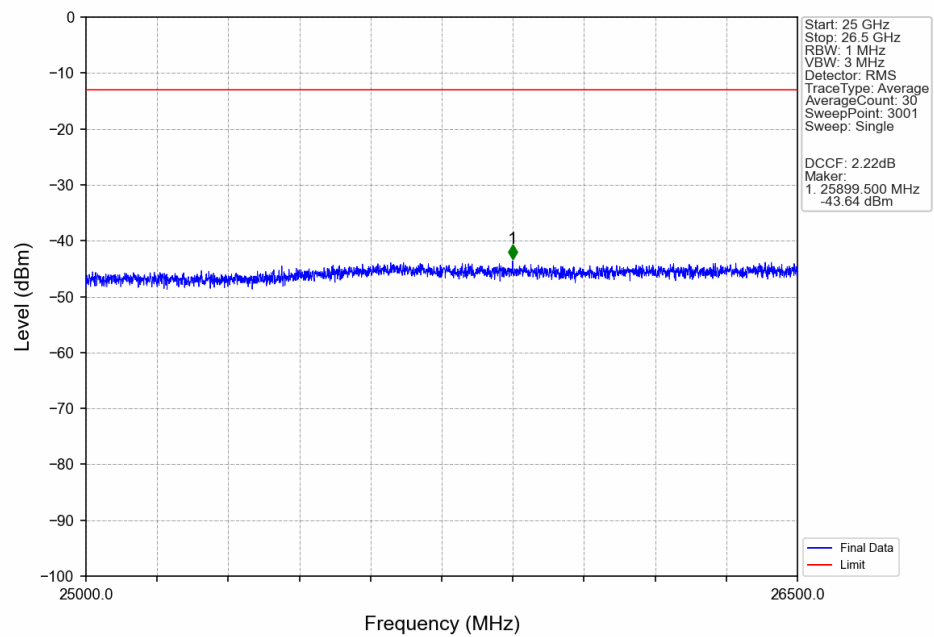
Band42a 20MHz QPSK MCH 3500MHz RB 1 0 NTNV



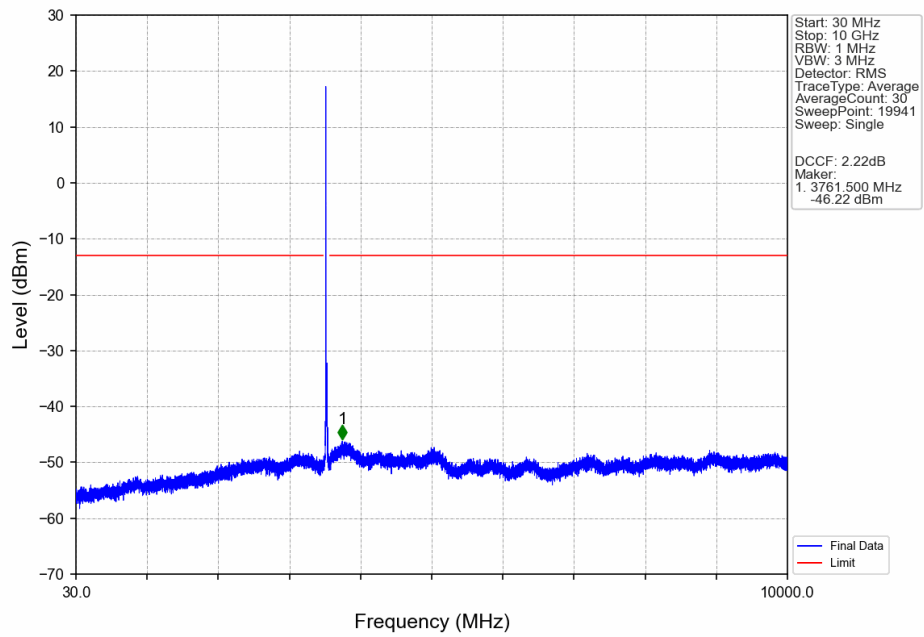
Band42a_20MHz_QPSK_MCH_3500MHz_RB_1_0_NTNV



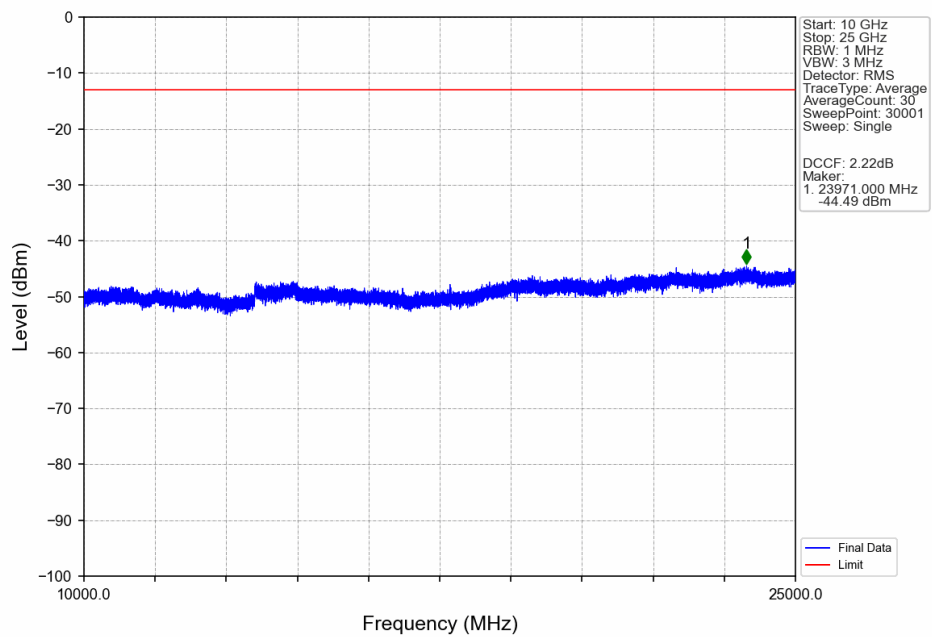
Band42a_20MHz_QPSK_MCH_3500MHz_RB_1_0_NTNV



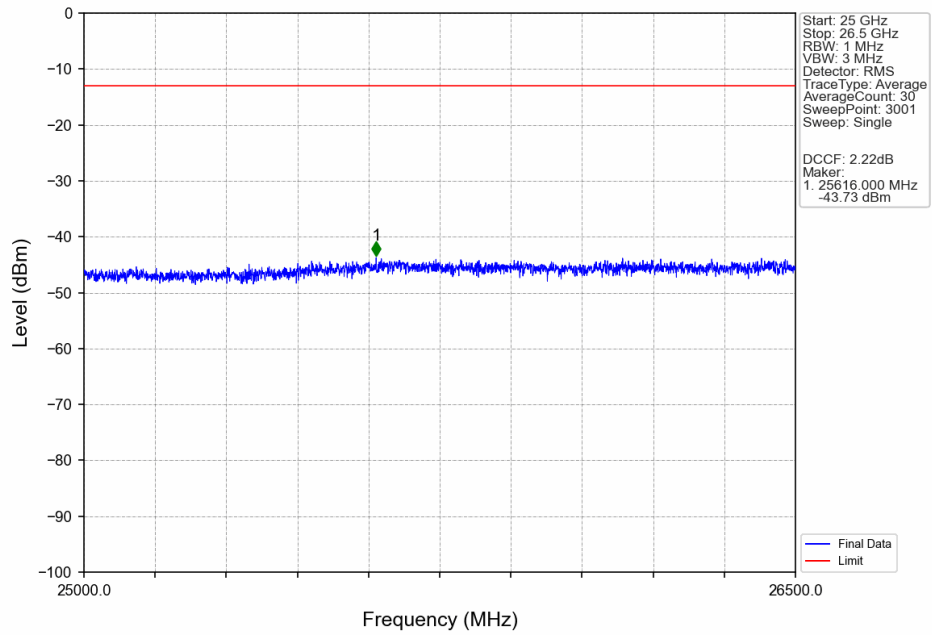
Band42a_20MHz_QPSK_HCH_3540MHz_RB_1_0_NTNV



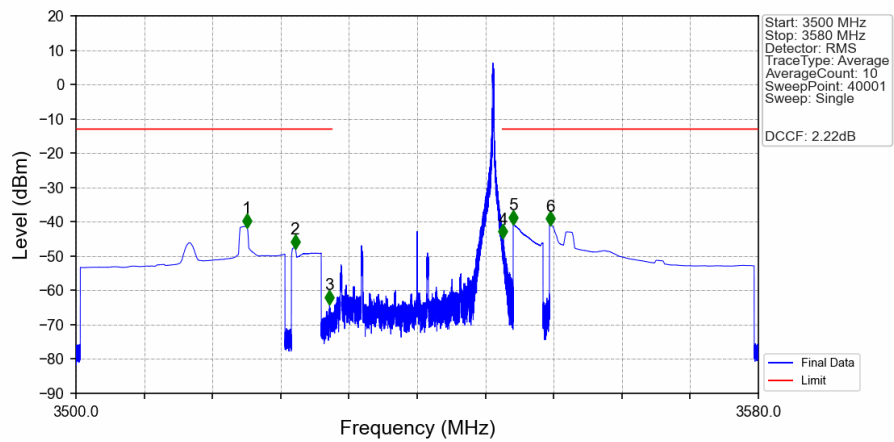
Band42a_20MHz_QPSK_HCH_3540MHz_RB_1_0_NTNV



Band42a_20MHz_QPSK_HCH_3540MHz_RB_1_0_NTNV

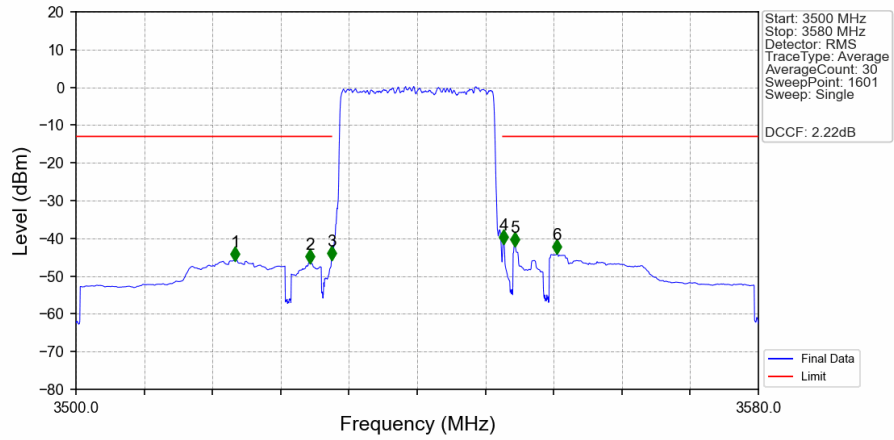


Band42a_20MHz_QPSK_HCH_3540MHz_RB_1_99_NTNV



Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
3500	3525	1	CHP	1	3520.006	-41.37	-13	Pass
3525	3529	0.5	CHP	2	3525.688	-47.50	-13	Pass
3529	3530	0.003	/	3	3529.730	-63.72	-13	Pass
3530	3550	0.003	/	/	/	/	/	/
3550	3551	0.003	/	4	3550.052	-44.54	-13	Pass
3551	3555	0.5	CHP	5	3551.252	-40.41	-13	Pass
3555	3580	1	CHP	6	3555.588	-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	3518.650	-45.75	-13	Pass
3525	3529	0.5	CHP	2	3527.400	-46.33	-13	Pass
3529	3530	0.2	CHP	3	3529.950	-45.56	-13	Pass
3530	3550	0.2	CHP	/	/	/	/	/
3550	3551	0.2	CHP	4	3550.150	-41.16	-13	Pass
3551	3555	0.5	CHP	5	3551.450	-41.87	-13	Pass
3555	3580	1	CHP	6	3556.400	-43.76	-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	-56.88	-13	-43.88	-62.98	4.9	11.0	Horizontal	Pass
10353.0	-49.72	-13	-36.72	-57.29	5.52	13.09	Horizontal	Pass
13804.0	-52.78	-13	-39.78	-60.95	6.2	14.37	Horizontal	Pass
6902.0	-56.53	-13	-43.53	-62.63	4.9	11.0	Vertical	Pass
10353.0	-47.87	-13	-34.87	-55.44	5.52	13.09	Vertical	Pass
13804.0	-52.05	-13	-39.05	-60.22	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	-56.27	-13	-43.27	-62.46	4.92	11.11	Horizontal	Pass
10473.0	-46.31	-13	-33.31	-53.89	5.54	13.12	Horizontal	Pass
13964.0	-51.18	-13	-38.18	-59.33	6.31	14.46	Horizontal	Pass
6982.0	-55.56	-13	-42.56	-61.75	4.92	11.11	Vertical	Pass
10473.0	-48.27	-13	-35.27	-55.85	5.54	13.12	Vertical	Pass
13964.0	-48.82	-13	-35.82	-56.97	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	-54.77	-13	-41.77	-61.06	4.92	11.21	Horizontal	Pass
10593.0	-46.87	-13	-33.87	-54.44	5.58	13.15	Horizontal	Pass
14124.0	-51.83	-13	-38.83	-59.89	6.41	14.47	Horizontal	Pass
7062.0	-55.13	-13	-42.13	-61.42	4.92	11.21	Vertical	Pass
10593.0	-48.93	-13	-35.93	-56.5	5.58	13.15	Vertical	Pass
14124.0	-50.83	-13	-37.83	-58.89	6.41	14.47	Vertical	Pass