Appendix RF test data for LTE_band_41

1. Effective (Isotropic) Radiated Power Output Data

1.1 Test Result

1.1.1 B41_5MHz_EIRP

Band: 41 / Bandwidth: 5MHz / NTNV								
Modulation	Frequency (MHz)	RB Allocation		Conducted Power (dBm)	Gain (dBi)	EIRP (dBm)		Verdict
		Size	Offset			Result	Limit	
QPSK	2557.5	1	0	23.37	-1.80	21.57	<=33.01	Pass
			13	23.37	-1.80	21.57	<=33.01	Pass
			24	23.53	-1.80	21.73	<=33.01	Pass
		12	0	22.49	-1.80	20.69	<=33.01	Pass
			6	22.42	-1.80	20.62	<=33.01	Pass
			13	22.83	-1.80	21.03	<=33.01	Pass
		25	0	22.81	-1.80	21.01	<=33.01	Pass
	2605	1	0	23.50	-1.80	21.70	<=33.01	Pass
			13	23.41	-1.80	21.61	<=33.01	Pass
			24	23.50	-1.80	21.70	<=33.01	Pass
		12	0	22.42	-1.80	20.62	<=33.01	Pass
			6	22.56	-1.80	20.76	<=33.01	Pass
			13	22.46	-1.80	20.66	<=33.01	Pass
		25	0	22.47	-1.80	20.67	<=33.01	Pass
	2652.5	1	0	23.50	-1.80	21.70	<=33.01	Pass
			13	23.66	-1.80	21.86	<=33.01	Pass
			24	23.43	-1.80	21.63	<=33.01	Pass
		12	0	22.56	-1.80	20.76	<=33.01	Pass
			6	22.67	-1.80	20.87	<=33.01	Pass
			13	22.65	-1.80	20.85	<=33.01	Pass
		25	0	22.60	-1.80	20.80	<=33.01	Pass
16QAM	2557.5	1	0	22.80	-1.80	21.00	<=33.01	Pass
			13	23.05	-1.80	21.25	<=33.01	Pass
			24	22.97	-1.80	21.17	<=33.01	Pass
		12	0	21.78	-1.80	19.98	<=33.01	Pass
			6	21.77	-1.80	19.97	<=33.01	Pass
			13	21.73	-1.80	19.93	<=33.01	Pass
		25	0	21.73	-1.80	19.93	<=33.01	Pass
	2605	1	0	22.30	-1.80	20.50	<=33.01	Pass
			13	22.56	-1.80	20.76	<=33.01	Pass
			24	22.12	-1.80	20.32	<=33.01	Pass
		12	0	21.33	-1.80	19.53	<=33.01	Pass
			6	21.47	-1.80	19.67	<=33.01	Pass
			13	21.48	-1.80	19.68	<=33.01	Pass
		25	0	21.40	-1.80	19.60	<=33.01	Pass
	2652.5	1	0	22.89	-1.80	21.09	<=33.01	Pass
			13	22.98	-1.80	21.18	<=33.01	Pass
			24	22.45	-1.80	20.65	<=33.01	Pass
		12	0	21.64	-1.80	19.84	<=33.01	Pass
			6	21.74	-1.80	19.94	<=33.01	Pass
			13	21.50	-1.80	19.70	<=33.01	Pass
		25	0	21.57	-1.80	19.77	<=33.01	Pass
Note1: EIRP=Conducted Power+Antenna Gain								

1.1.2 B41_10MHz_EIRP

Band: 41 / Bandwidth: 10MHz / NTNV								
Modulation	Frequency (MHz)	RB Allocation		Conducted Power (dBm)	Gain (dBi)	EIRP (dBm)		Verdict
		Size	Offset			Result	Limit	

QPSK	2560	1	0	23.92	-1.80	22.12	<=33.01	Pass
			25	24.04	-1.80	22.24	<=33.01	Pass
			49	23.92	-1.80	22.12	<=33.01	Pass
		25	0	22.82	-1.80	21.02	<=33.01	Pass
			13	22.83	-1.80	21.03	<=33.01	Pass
			25	22.82	-1.80	21.02	<=33.01	Pass
		50	0	22.79	-1.80	20.99	<=33.01	Pass
	2605	1	0	23.62	-1.80	21.82	<=33.01	Pass
			25	23.66	-1.80	21.86	<=33.01	Pass
			49	23.62	-1.80	21.82	<=33.01	Pass
		25	0	22.48	-1.80	20.68	<=33.01	Pass
			13	22.45	-1.80	20.65	<=33.01	Pass
			25	22.46	-1.80	20.66	<=33.01	Pass
		50	0	22.44	-1.80	20.64	<=33.01	Pass
	2650	1	0	23.60	-1.80	21.80	<=33.01	Pass
			25	23.70	-1.80	21.90	<=33.01	Pass
			49	23.52	-1.80	21.72	<=33.01	Pass
		25	0	22.59	-1.80	20.79	<=33.01	Pass
			13	22.58	-1.80	20.78	<=33.01	Pass
			25	22.67	-1.80	20.87	<=33.01	Pass
		50	0	22.61	-1.80	20.81	<=33.01	Pass
16QAM	2560	1	0	22.72	-1.80	20.92	<=33.01	Pass
			25	22.92	-1.80	21.12	<=33.01	Pass
			49	22.77	-1.80	20.97	<=33.01	Pass
		25	0	21.86	-1.80	20.06	<=33.01	Pass
			13	21.75	-1.80	19.95	<=33.01	Pass
			25	21.83	-1.80	20.03	<=33.01	Pass
		50	0	21.84	-1.80	20.04	<=33.01	Pass
	2605	1	0	22.31	-1.80	20.51	<=33.01	Pass
			25	22.44	-1.80	20.64	<=33.01	Pass
			49	22.21	-1.80	20.41	<=33.01	Pass
		25	0	21.37	-1.80	19.57	<=33.01	Pass
			13	21.49	-1.80	19.69	<=33.01	Pass
			25	21.53	-1.80	19.73	<=33.01	Pass
		50	0	21.39	-1.80	19.59	<=33.01	Pass
	2650	1	0	22.60	-1.80	20.80	<=33.01	Pass
			25	22.60	-1.80	20.80	<=33.01	Pass
			49	22.63	-1.80	20.83	<=33.01	Pass
		25	0	21.66	-1.80	19.86	<=33.01	Pass
			13	21.69	-1.80	19.89	<=33.01	Pass
			25	21.65	-1.80	19.85	<=33.01	Pass
		50	0	21.63	-1.80	19.83	<=33.01	Pass
Note1: EIRP=Conducted Power+Antenna Gain								

1.1.3 B41_15MHz_EIRP

Band: 41 / Bandwidth: 15MHz / NTNV								
Modulation	Frequency (MHz)	RB Allocation		Conducted Power (dBm)	Gain (dBi)	EIRP (dBm)		Verdict
		Size	Offset			Result	Limit	
QPSK	2562.5	1	0	23.72	-1.80	21.92	<=33.01	Pass
			38	23.80	-1.80	22.00	<=33.01	Pass
			74	23.73	-1.80	21.93	<=33.01	Pass
		36	0	22.87	-1.80	21.07	<=33.01	Pass
			18	22.88	-1.80	21.08	<=33.01	Pass
			39	22.82	-1.80	21.02	<=33.01	Pass
		75	0	22.79	-1.80	20.99	<=33.01	Pass
	2605	1	0	23.52	-1.80	21.72	<=33.01	Pass
			38	23.56	-1.80	21.76	<=33.01	Pass

			74	23.30	-1.80	21.50	<=33.01	Pass
		36	0	22.47	-1.80	20.67	<=33.01	Pass
			18	22.48	-1.80	20.68	<=33.01	Pass
			39	22.41	-1.80	20.61	<=33.01	Pass
		75	0	22.41	-1.80	20.61	<=33.01	Pass
	2647.5	1	0	23.47	-1.80	21.67	<=33.01	Pass
			38	23.72	-1.80	21.92	<=33.01	Pass
			74	23.53	-1.80	21.73	<=33.01	Pass
		36	0	22.65	-1.80	20.85	<=33.01	Pass
			18	22.68	-1.80	20.88	<=33.01	Pass
			39	22.59	-1.80	20.79	<=33.01	Pass
		75	0	22.60	-1.80	20.80	<=33.01	Pass
16QAM	2562.5	1	0	22.77	-1.80	20.97	<=33.01	Pass
			38	22.86	-1.80	21.06	<=33.01	Pass
			74	22.71	-1.80	20.91	<=33.01	Pass
		36	0	21.79	-1.80	19.99	<=33.01	Pass
			18	21.84	-1.80	20.04	<=33.01	Pass
			39	21.73	-1.80	19.93	<=33.01	Pass
		75	0	21.80	-1.80	20.00	<=33.01	Pass
	2605	1	0	22.11	-1.80	20.31	<=33.01	Pass
			38	22.60	-1.80	20.80	<=33.01	Pass
			74	21.99	-1.80	20.19	<=33.01	Pass
		36	0	21.15	-1.80	19.35	<=33.01	Pass
			18	21.46	-1.80	19.66	<=33.01	Pass
			39	21.29	-1.80	19.49	<=33.01	Pass
		75	0	21.52	-1.80	19.72	<=33.01	Pass
	2647.5	1	0	22.41	-1.80	20.61	<=33.01	Pass
			38	22.50	-1.80	20.70	<=33.01	Pass
			74	22.31	-1.80	20.51	<=33.01	Pass
		36	0	21.52	-1.80	19.72	<=33.01	Pass
			18	21.54	-1.80	19.74	<=33.01	Pass
			39	21.55	-1.80	19.75	<=33.01	Pass
		75	0	21.64	-1.80	19.84	<=33.01	Pass
Note1: EIRP=Conducted Power+Antenna Gain								

1.1.4 B41_20MHz_EIRP

Band: 41 / Bandwidth: 20MHz / NTNV								
Modulation	Frequency (MHz)	RB Allocation		Conducted Power (dBm)	Gain (dBi)	EIRP (dBm)		Verdict
		Size	Offset			Result	Limit	
QPSK	2565	1	0	23.53	-1.80	21.73	<=33.01	Pass
			50	23.90	-1.80	22.10	<=33.01	Pass
			99	23.62	-1.80	21.82	<=33.01	Pass
		50	0	22.78	-1.80	20.98	<=33.01	Pass
			25	22.81	-1.80	21.01	<=33.01	Pass
			50	22.78	-1.80	20.98	<=33.01	Pass
		100	0	22.67	-1.80	20.87	<=33.01	Pass
	2605	1	0	23.20	-1.80	21.40	<=33.01	Pass
			50	23.79	-1.80	21.99	<=33.01	Pass
			99	23.26	-1.80	21.46	<=33.01	Pass
		50	0	22.42	-1.80	20.62	<=33.01	Pass
			25	22.26	-1.80	20.46	<=33.01	Pass
			50	22.30	-1.80	20.50	<=33.01	Pass
		100	0	22.10	-1.80	20.30	<=33.01	Pass
	2645	1	0	23.20	-1.80	21.40	<=33.01	Pass
			50	23.76	-1.80	21.96	<=33.01	Pass
			99	23.08	-1.80	21.28	<=33.01	Pass
		50	0	22.26	-1.80	20.46	<=33.01	Pass

			25	22.46	-1.80	20.66	<=33.01	Pass
			50	22.36	-1.80	20.56	<=33.01	Pass
		100	0	22.33	-1.80	20.53	<=33.01	Pass
16QAM	2565	1	0	22.82	-1.80	21.02	<=33.01	Pass
			50	23.30	-1.80	21.50	<=33.01	Pass
			99	22.46	-1.80	20.66	<=33.01	Pass
		50	0	21.72	-1.80	19.92	<=33.01	Pass
			25	21.74	-1.80	19.94	<=33.01	Pass
			50	21.74	-1.80	19.94	<=33.01	Pass
		100	0	21.65	-1.80	19.85	<=33.01	Pass
	2605	1	0	21.88	-1.80	20.08	<=33.01	Pass
			50	21.76	-1.80	19.96	<=33.01	Pass
			99	21.83	-1.80	20.03	<=33.01	Pass
		50	0	21.06	-1.80	19.26	<=33.01	Pass
			25	21.26	-1.80	19.46	<=33.01	Pass
			50	21.26	-1.80	19.46	<=33.01	Pass
		100	0	21.17	-1.80	19.37	<=33.01	Pass
	2645	1	0	21.83	-1.80	20.03	<=33.01	Pass
			50	22.28	-1.80	20.48	<=33.01	Pass
			99	21.80	-1.80	20.00	<=33.01	Pass
		50	0	21.27	-1.80	19.47	<=33.01	Pass
			25	21.65	-1.80	19.85	<=33.01	Pass
			50	21.44	-1.80	19.64	<=33.01	Pass
		100	0	21.61	-1.80	19.81	<=33.01	Pass
Note1: EIRP=Conducted Power+Antenna Gain								

2. Frequency Stability

2.1 Test Result

2.1.1 B41_5MHz

Band: 41 / Bandwidth: 5MHz									
Modulation	Frequency (MHz)	RB Allocation		Temp. (°C)	Voltage (VDC)	Freq. Error (Hz)	Freq. vs. Rated (ppm)		Verdict
		Size	Offset				Result	Limit	
QPSK	2557.5	25	0	20	3.27	-2.861	-0.0011	-2.5 to 2.5	Pass
					3.85	0.343	0.0001	-2.5 to 2.5	Pass
					4.43	-1.860	-0.0007	-2.5 to 2.5	Pass
				-30	3.85	-10.772	-0.0042	-2.5 to 2.5	Pass
				-20	3.85	-8.798	-0.0034	-2.5 to 2.5	Pass
				-10	3.85	-11.401	-0.0045	-2.5 to 2.5	Pass
				0	3.85	-3.619	-0.0014	-2.5 to 2.5	Pass
				10	3.85	-12.531	-0.0049	-2.5 to 2.5	Pass
				30	3.85	-7.539	-0.0029	-2.5 to 2.5	Pass
				40	3.85	-4.649	-0.0018	-2.5 to 2.5	Pass
				50	3.85	-16.623	-0.0065	-2.5 to 2.5	Pass
	2605	25	0	20	3.27	-17.624	-0.0068	-2.5 to 2.5	Pass
					3.85	-20.342	-0.0078	-2.5 to 2.5	Pass
					4.43	-24.147	-0.0093	-2.5 to 2.5	Pass
				-30	3.85	-15.707	-0.0060	-2.5 to 2.5	Pass
				-20	3.85	-28.653	-0.0110	-2.5 to 2.5	Pass
				-10	3.85	-13.433	-0.0052	-2.5 to 2.5	Pass
				0	3.85	-11.058	-0.0042	-2.5 to 2.5	Pass
				10	3.85	-20.599	-0.0079	-2.5 to 2.5	Pass
				30	3.85	-29.140	-0.0112	-2.5 to 2.5	Pass
				40	3.85	-29.497	-0.0113	-2.5 to 2.5	Pass

				50	3.85	-32.930	-0.0126	-2.5 to 2.5	Pass
	2652.5	25	0	20	3.27	7.796	0.0029	-2.5 to 2.5	Pass
					3.85	-4.363	-0.0016	-2.5 to 2.5	Pass
					4.43	-11.201	-0.0042	-2.5 to 2.5	Pass
				-30	3.85	0.744	0.0003	-2.5 to 2.5	Pass
				-20	3.85	-3.247	-0.0012	-2.5 to 2.5	Pass
				-10	3.85	-4.635	-0.0017	-2.5 to 2.5	Pass
				0	3.85	-11.358	-0.0043	-2.5 to 2.5	Pass
				10	3.85	-2.589	-0.0010	-2.5 to 2.5	Pass
				30	3.85	-5.150	-0.0019	-2.5 to 2.5	Pass
				40	3.85	-9.470	-0.0036	-2.5 to 2.5	Pass
				50	3.85	-11.373	-0.0043	-2.5 to 2.5	Pass
16QAM	2557.5	25	0	20	3.27	-11.830	-0.0046	-2.5 to 2.5	Pass
					3.85	-8.812	-0.0034	-2.5 to 2.5	Pass
					4.43	-4.392	-0.0017	-2.5 to 2.5	Pass
				-30	3.85	-3.505	-0.0014	-2.5 to 2.5	Pass
				-20	3.85	-13.547	-0.0053	-2.5 to 2.5	Pass
				-10	3.85	-13.132	-0.0051	-2.5 to 2.5	Pass
				0	3.85	-8.583	-0.0034	-2.5 to 2.5	Pass
				10	3.85	-11.888	-0.0046	-2.5 to 2.5	Pass
				30	3.85	-3.748	-0.0015	-2.5 to 2.5	Pass
				40	3.85	-11.086	-0.0043	-2.5 to 2.5	Pass
				50	3.85	-10.600	-0.0041	-2.5 to 2.5	Pass
	2605	25	0	20	3.27	-18.926	-0.0073	-2.5 to 2.5	Pass
					3.85	-14.076	-0.0054	-2.5 to 2.5	Pass
					4.43	-29.826	-0.0114	-2.5 to 2.5	Pass
				-30	3.85	-14.305	-0.0055	-2.5 to 2.5	Pass
				-20	3.85	-25.735	-0.0099	-2.5 to 2.5	Pass
				-10	3.85	-13.576	-0.0052	-2.5 to 2.5	Pass
				0	3.85	-13.762	-0.0053	-2.5 to 2.5	Pass
				10	3.85	-9.141	-0.0035	-2.5 to 2.5	Pass
				30	3.85	-8.140	-0.0031	-2.5 to 2.5	Pass
				40	3.85	-14.749	-0.0057	-2.5 to 2.5	Pass
				50	3.85	-12.531	-0.0048	-2.5 to 2.5	Pass
	2652.5	25	0	20	3.27	-16.379	-0.0062	-2.5 to 2.5	Pass
					3.85	0.315	0.0001	-2.5 to 2.5	Pass
					4.43	3.133	0.0012	-2.5 to 2.5	Pass
				-30	3.85	-5.908	-0.0022	-2.5 to 2.5	Pass
				-20	3.85	-13.232	-0.0050	-2.5 to 2.5	Pass
				-10	3.85	-3.719	-0.0014	-2.5 to 2.5	Pass
				0	3.85	-6.695	-0.0025	-2.5 to 2.5	Pass
				10	3.85	2.632	0.0010	-2.5 to 2.5	Pass
				30	3.85	-9.327	-0.0035	-2.5 to 2.5	Pass
				40	3.85	0.343	0.0001	-2.5 to 2.5	Pass
				50	3.85	-0.787	-0.0003	-2.5 to 2.5	Pass

2.1.2 B41_10MHz

Band: 41 / Bandwidth: 10MHz									
Modulation	Frequency (MHz)	RB Allocation		Temp. (°C)	Voltage (VDC)	Freq. Error (Hz)	Freq. vs. Rated (ppm)		Verdict
		Size	Offset				Result	Limit	
QPSK	2560	50	0	20	3.27	-16.465	-0.0064	-2.5 to 2.5	Pass
					3.85	-10.872	-0.0042	-2.5 to 2.5	Pass
					4.43	-9.484	-0.0037	-2.5 to 2.5	Pass
				-30	3.85	1.903	0.0007	-2.5 to 2.5	Pass
				-20	3.85	-7.439	-0.0029	-2.5 to 2.5	Pass
				-10	3.85	-13.762	-0.0054	-2.5 to 2.5	Pass
				0	3.85	-17.881	-0.0070	-2.5 to 2.5	Pass

				10	3.85	-4.191	-0.0016	-2.5 to 2.5	Pass
				30	3.85	-3.848	-0.0015	-2.5 to 2.5	Pass
				40	3.85	-5.879	-0.0023	-2.5 to 2.5	Pass
				50	3.85	-6.609	-0.0026	-2.5 to 2.5	Pass
	2605	50	0	20	3.27	-16.894	-0.0065	-2.5 to 2.5	Pass
					3.85	-8.597	-0.0033	-2.5 to 2.5	Pass
					4.43	-13.747	-0.0053	-2.5 to 2.5	Pass
				-30	3.85	-3.605	-0.0014	-2.5 to 2.5	Pass
				-20	3.85	-11.215	-0.0043	-2.5 to 2.5	Pass
				-10	3.85	-6.866	-0.0026	-2.5 to 2.5	Pass
				0	3.85	-13.161	-0.0051	-2.5 to 2.5	Pass
				10	3.85	-4.935	-0.0019	-2.5 to 2.5	Pass
				30	3.85	0.744	0.0003	-2.5 to 2.5	Pass
				40	3.85	-9.871	-0.0038	-2.5 to 2.5	Pass
				50	3.85	-0.515	-0.0002	-2.5 to 2.5	Pass
	2650	50	0	20	3.27	-8.726	-0.0033	-2.5 to 2.5	Pass
					3.85	-12.560	-0.0047	-2.5 to 2.5	Pass
					4.43	-11.187	-0.0042	-2.5 to 2.5	Pass
				-30	3.85	-12.016	-0.0045	-2.5 to 2.5	Pass
				-20	3.85	1.974	0.0007	-2.5 to 2.5	Pass
				-10	3.85	-3.862	-0.0015	-2.5 to 2.5	Pass
				0	3.85	-3.376	-0.0013	-2.5 to 2.5	Pass
				10	3.85	-13.561	-0.0051	-2.5 to 2.5	Pass
				30	3.85	-7.095	-0.0027	-2.5 to 2.5	Pass
				40	3.85	-9.899	-0.0037	-2.5 to 2.5	Pass
				50	3.85	-11.158	-0.0042	-2.5 to 2.5	Pass
16QAM	2560	50	0	20	3.27	-7.553	-0.0030	-2.5 to 2.5	Pass
					3.85	-13.103	-0.0051	-2.5 to 2.5	Pass
					4.43	-3.519	-0.0014	-2.5 to 2.5	Pass
				-30	3.85	-7.253	-0.0028	-2.5 to 2.5	Pass
				-20	3.85	-9.227	-0.0036	-2.5 to 2.5	Pass
				-10	3.85	-1.216	-0.0005	-2.5 to 2.5	Pass
				0	3.85	-9.456	-0.0037	-2.5 to 2.5	Pass
				10	3.85	-1.903	-0.0007	-2.5 to 2.5	Pass
				30	3.85	-9.785	-0.0038	-2.5 to 2.5	Pass
				40	3.85	-4.735	-0.0018	-2.5 to 2.5	Pass
				50	3.85	-2.718	-0.0011	-2.5 to 2.5	Pass
	2605	50	0	20	3.27	-9.527	-0.0037	-2.5 to 2.5	Pass
					3.85	-7.839	-0.0030	-2.5 to 2.5	Pass
					4.43	-0.572	-0.0002	-2.5 to 2.5	Pass
				-30	3.85	-12.016	-0.0046	-2.5 to 2.5	Pass
				-20	3.85	0.443	0.0002	-2.5 to 2.5	Pass
				-10	3.85	-4.563	-0.0018	-2.5 to 2.5	Pass
				0	3.85	-2.403	-0.0009	-2.5 to 2.5	Pass
				10	3.85	-4.277	-0.0016	-2.5 to 2.5	Pass
				30	3.85	-6.366	-0.0024	-2.5 to 2.5	Pass
				40	3.85	-2.246	-0.0009	-2.5 to 2.5	Pass
				50	3.85	-5.364	-0.0021	-2.5 to 2.5	Pass
	2650	50	0	20	3.27	-5.894	-0.0022	-2.5 to 2.5	Pass
					3.85	-13.261	-0.0050	-2.5 to 2.5	Pass
					4.43	-6.723	-0.0025	-2.5 to 2.5	Pass
				-30	3.85	-4.935	-0.0019	-2.5 to 2.5	Pass
				-20	3.85	-11.516	-0.0043	-2.5 to 2.5	Pass
				-10	3.85	-10.586	-0.0040	-2.5 to 2.5	Pass
				0	3.85	-13.218	-0.0050	-2.5 to 2.5	Pass
				10	3.85	-0.315	-0.0001	-2.5 to 2.5	Pass
				30	3.85	-9.942	-0.0038	-2.5 to 2.5	Pass
				40	3.85	-10.185	-0.0038	-2.5 to 2.5	Pass
				50	3.85	-8.440	-0.0032	-2.5 to 2.5	Pass

2.1.3 B41_15MHz

Band: 41 / Bandwidth: 15MHz									
Modulation	Frequency (MHz)	RB Allocation		Temp. (°C)	Voltage (VDC)	Freq. Error (Hz)	Freq. vs. Rated (ppm)		Verdict
		Size	Offset				Result	Limit	
QPSK	2562.5	75	0	20	3.27	-9.642	-0.0038	-2.5 to 2.5	Pass
					3.85	-12.202	-0.0048	-2.5 to 2.5	Pass
					4.43	-13.933	-0.0054	-2.5 to 2.5	Pass
				-30	3.85	-5.150	-0.0020	-2.5 to 2.5	Pass
				-20	3.85	-7.610	-0.0030	-2.5 to 2.5	Pass
				-10	3.85	-8.111	-0.0032	-2.5 to 2.5	Pass
				0	3.85	-11.845	-0.0046	-2.5 to 2.5	Pass
				10	3.85	-1.702	-0.0007	-2.5 to 2.5	Pass
				30	3.85	-4.563	-0.0018	-2.5 to 2.5	Pass
				40	3.85	-4.506	-0.0018	-2.5 to 2.5	Pass
				50	3.85	-15.163	-0.0059	-2.5 to 2.5	Pass
	2605	75	0	20	3.27	-10.614	-0.0041	-2.5 to 2.5	Pass
					3.85	-12.317	-0.0047	-2.5 to 2.5	Pass
					4.43	-5.965	-0.0023	-2.5 to 2.5	Pass
				-30	3.85	-13.118	-0.0050	-2.5 to 2.5	Pass
				-20	3.85	-5.808	-0.0022	-2.5 to 2.5	Pass
				-10	3.85	-5.865	-0.0023	-2.5 to 2.5	Pass
				0	3.85	-11.888	-0.0046	-2.5 to 2.5	Pass
				10	3.85	-12.102	-0.0046	-2.5 to 2.5	Pass
				30	3.85	-11.287	-0.0043	-2.5 to 2.5	Pass
				40	3.85	-12.932	-0.0050	-2.5 to 2.5	Pass
				50	3.85	-6.866	-0.0026	-2.5 to 2.5	Pass
	2647.5	75	0	20	3.27	-16.694	-0.0063	-2.5 to 2.5	Pass
					3.85	-6.552	-0.0025	-2.5 to 2.5	Pass
					4.43	-7.725	-0.0029	-2.5 to 2.5	Pass
				-30	3.85	-4.563	-0.0017	-2.5 to 2.5	Pass
				-20	3.85	-1.173	-0.0004	-2.5 to 2.5	Pass
				-10	3.85	-13.890	-0.0052	-2.5 to 2.5	Pass
				0	3.85	-8.869	-0.0033	-2.5 to 2.5	Pass
				10	3.85	-14.076	-0.0053	-2.5 to 2.5	Pass
				30	3.85	-16.165	-0.0061	-2.5 to 2.5	Pass
				40	3.85	-1.760	-0.0007	-2.5 to 2.5	Pass
				50	3.85	-11.230	-0.0042	-2.5 to 2.5	Pass
16QAM	2562.5	75	0	20	3.27	-9.742	-0.0038	-2.5 to 2.5	Pass
					3.85	-1.574	-0.0006	-2.5 to 2.5	Pass
					4.43	-6.466	-0.0025	-2.5 to 2.5	Pass
				-30	3.85	2.003	0.0008	-2.5 to 2.5	Pass
				-20	3.85	-10.514	-0.0041	-2.5 to 2.5	Pass
				-10	3.85	-19.112	-0.0075	-2.5 to 2.5	Pass
				0	3.85	-12.760	-0.0050	-2.5 to 2.5	Pass
				10	3.85	-8.740	-0.0034	-2.5 to 2.5	Pass
				30	3.85	-15.407	-0.0060	-2.5 to 2.5	Pass
				40	3.85	-1.531	-0.0006	-2.5 to 2.5	Pass
				50	3.85	-8.426	-0.0033	-2.5 to 2.5	Pass
	2605	75	0	20	3.27	-11.916	-0.0046	-2.5 to 2.5	Pass
					3.85	-18.611	-0.0071	-2.5 to 2.5	Pass
					4.43	-6.251	-0.0024	-2.5 to 2.5	Pass
				-30	3.85	-6.709	-0.0026	-2.5 to 2.5	Pass
				-20	3.85	-0.973	-0.0004	-2.5 to 2.5	Pass
				-10	3.85	-12.460	-0.0048	-2.5 to 2.5	Pass
				0	3.85	-6.137	-0.0024	-2.5 to 2.5	Pass
				10	3.85	-7.825	-0.0030	-2.5 to 2.5	Pass

				30	3.85	-8.612	-0.0033	-2.5 to 2.5	Pass
				40	3.85	-9.556	-0.0037	-2.5 to 2.5	Pass
				50	3.85	-6.781	-0.0026	-2.5 to 2.5	Pass
	2647.5	75	0	20	3.27	-9.055	-0.0034	-2.5 to 2.5	Pass
					3.85	-5.851	-0.0022	-2.5 to 2.5	Pass
					4.43	-13.061	-0.0049	-2.5 to 2.5	Pass
				-30	3.85	-0.672	-0.0003	-2.5 to 2.5	Pass
				-20	3.85	-10.314	-0.0039	-2.5 to 2.5	Pass
				-10	3.85	-4.921	-0.0019	-2.5 to 2.5	Pass
				0	3.85	-7.668	-0.0029	-2.5 to 2.5	Pass
				10	3.85	-11.187	-0.0042	-2.5 to 2.5	Pass
				30	3.85	-11.959	-0.0045	-2.5 to 2.5	Pass
				40	3.85	-7.024	-0.0027	-2.5 to 2.5	Pass
				50	3.85	-11.158	-0.0042	-2.5 to 2.5	Pass

2.1.4 B41_20MHz

Band: 41 / Bandwidth: 20MHz									
Modulation	Frequency (MHz)	RB Allocation		Temp. (°C)	Voltage (VDC)	Freq. Error (Hz)	Freq. vs. Rated (ppm)		Verdict
		Size	Offset				Result	Limit	
QPSK	2565	100	0	20	3.27	-0.372	-0.0001	-2.5 to 2.5	Pass
					3.85	-7.911	-0.0031	-2.5 to 2.5	Pass
					4.43	-13.275	-0.0052	-2.5 to 2.5	Pass
				-30	3.85	1.945	0.0008	-2.5 to 2.5	Pass
				-20	3.85	-7.238	-0.0028	-2.5 to 2.5	Pass
				-10	3.85	-5.593	-0.0022	-2.5 to 2.5	Pass
				0	3.85	-1.302	-0.0005	-2.5 to 2.5	Pass
				10	3.85	-13.118	-0.0051	-2.5 to 2.5	Pass
				30	3.85	-11.687	-0.0046	-2.5 to 2.5	Pass
				40	3.85	-8.984	-0.0035	-2.5 to 2.5	Pass
				50	3.85	-13.375	-0.0052	-2.5 to 2.5	Pass
	2605	100	0	20	3.27	-9.255	-0.0036	-2.5 to 2.5	Pass
					3.85	-12.074	-0.0046	-2.5 to 2.5	Pass
					4.43	-10.886	-0.0042	-2.5 to 2.5	Pass
				-30	3.85	-1.845	-0.0007	-2.5 to 2.5	Pass
				-20	3.85	-11.802	-0.0045	-2.5 to 2.5	Pass
				-10	3.85	-8.769	-0.0034	-2.5 to 2.5	Pass
				0	3.85	2.503	0.0010	-2.5 to 2.5	Pass
				10	3.85	2.761	0.0011	-2.5 to 2.5	Pass
				30	3.85	-8.311	-0.0032	-2.5 to 2.5	Pass
				40	3.85	-5.794	-0.0022	-2.5 to 2.5	Pass
				50	3.85	-12.259	-0.0047	-2.5 to 2.5	Pass
	2645	100	0	20	3.27	-13.146	-0.0050	-2.5 to 2.5	Pass
					3.85	-6.738	-0.0025	-2.5 to 2.5	Pass
					4.43	-11.988	-0.0045	-2.5 to 2.5	Pass
				-30	3.85	-17.710	-0.0067	-2.5 to 2.5	Pass
				-20	3.85	-17.180	-0.0065	-2.5 to 2.5	Pass
				-10	3.85	-11.830	-0.0045	-2.5 to 2.5	Pass
				0	3.85	-11.873	-0.0045	-2.5 to 2.5	Pass
				10	3.85	-4.935	-0.0019	-2.5 to 2.5	Pass
				30	3.85	-8.011	-0.0030	-2.5 to 2.5	Pass
				40	3.85	-6.824	-0.0026	-2.5 to 2.5	Pass
				50	3.85	-3.748	-0.0014	-2.5 to 2.5	Pass
16QAM	2565	100	0	20	3.27	-2.818	-0.0011	-2.5 to 2.5	Pass
					3.85	-6.580	-0.0026	-2.5 to 2.5	Pass
					4.43	-15.464	-0.0060	-2.5 to 2.5	Pass
				-30	3.85	-8.354	-0.0033	-2.5 to 2.5	Pass
				-20	3.85	-11.230	-0.0044	-2.5 to 2.5	Pass

				-10	3.85	-8.841	-0.0034	-2.5 to 2.5	Pass
				0	3.85	-4.377	-0.0017	-2.5 to 2.5	Pass
				10	3.85	-11.559	-0.0045	-2.5 to 2.5	Pass
				30	3.85	-10.200	-0.0040	-2.5 to 2.5	Pass
				40	3.85	-2.904	-0.0011	-2.5 to 2.5	Pass
				50	3.85	-12.345	-0.0048	-2.5 to 2.5	Pass
	2605	100	0	20	3.27	-14.277	-0.0055	-2.5 to 2.5	Pass
					3.85	-2.775	-0.0011	-2.5 to 2.5	Pass
					4.43	0.558	0.0002	-2.5 to 2.5	Pass
				-30	3.85	-5.121	-0.0020	-2.5 to 2.5	Pass
				-20	3.85	-12.159	-0.0047	-2.5 to 2.5	Pass
				-10	3.85	-12.560	-0.0048	-2.5 to 2.5	Pass
				0	3.85	-9.398	-0.0036	-2.5 to 2.5	Pass
				10	3.85	-11.444	-0.0044	-2.5 to 2.5	Pass
				30	3.85	-0.615	-0.0002	-2.5 to 2.5	Pass
				40	3.85	-2.789	-0.0011	-2.5 to 2.5	Pass
				50	3.85	-2.718	-0.0010	-2.5 to 2.5	Pass
	2645	100	0	20	3.27	-3.490	-0.0013	-2.5 to 2.5	Pass
					3.85	-17.467	-0.0066	-2.5 to 2.5	Pass
					4.43	-9.456	-0.0036	-2.5 to 2.5	Pass
				-30	3.85	-15.593	-0.0059	-2.5 to 2.5	Pass
				-20	3.85	-12.817	-0.0048	-2.5 to 2.5	Pass
				-10	3.85	-15.235	-0.0058	-2.5 to 2.5	Pass
				0	3.85	-10.414	-0.0039	-2.5 to 2.5	Pass
				10	3.85	-20.227	-0.0076	-2.5 to 2.5	Pass
				30	3.85	-17.409	-0.0066	-2.5 to 2.5	Pass
				40	3.85	0.057	0.0000	-2.5 to 2.5	Pass
				50	3.85	-12.803	-0.0048	-2.5 to 2.5	Pass

3. Modulation Characteristics

3.1 Test Result

3.1.1 B41_5MHz

Band: 41 / Bandwidth: 5MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Modulation Characteristics		Verdict
		Size	Offset	Result	Limit	
QPSK	2605	25	0	Refer To Test Graph		Pass
16QAM	2605	25	0	Refer To Test Graph		Pass

3.1.2 B41_10MHz

Band: 41 / Bandwidth: 10MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Modulation Characteristics		Verdict
		Size	Offset	Result	Limit	
QPSK	2605	50	0	Refer To Test Graph		Pass
16QAM	2605	50	0	Refer To Test Graph		Pass

3.1.3 B41_15MHz

Band: 41 / Bandwidth: 15MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Modulation Characteristics		Verdict
		Size	Offset	Result	Limit	

QPSK	2605	75	0	Refer To Test Graph	Pass
16QAM	2605	75	0	Refer To Test Graph	Pass

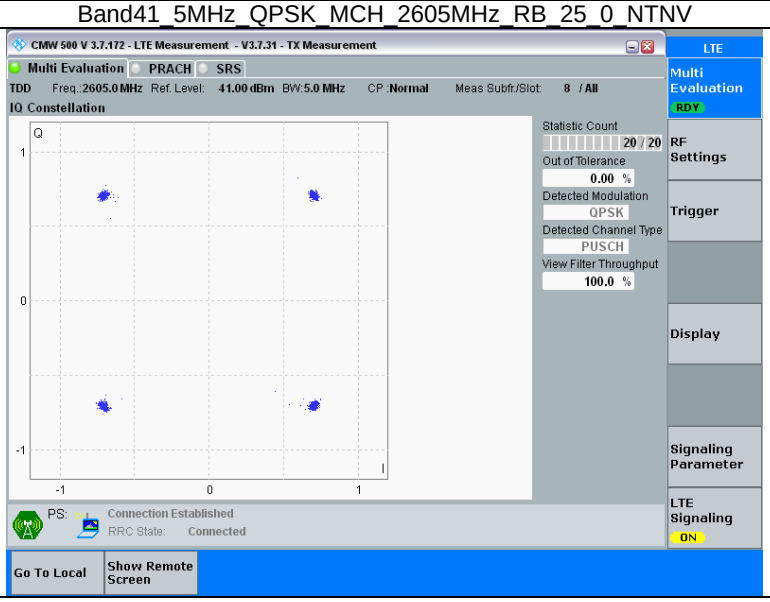
3.1.4 B41_20MHz

Band: 41 / Bandwidth: 20MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Modulation Characteristics		Verdict
		Size	Offset	Result	Limit	
QPSK	2605	100	0	Refer To Test Graph		Pass
16QAM	2605	100	0	Refer To Test Graph		Pass

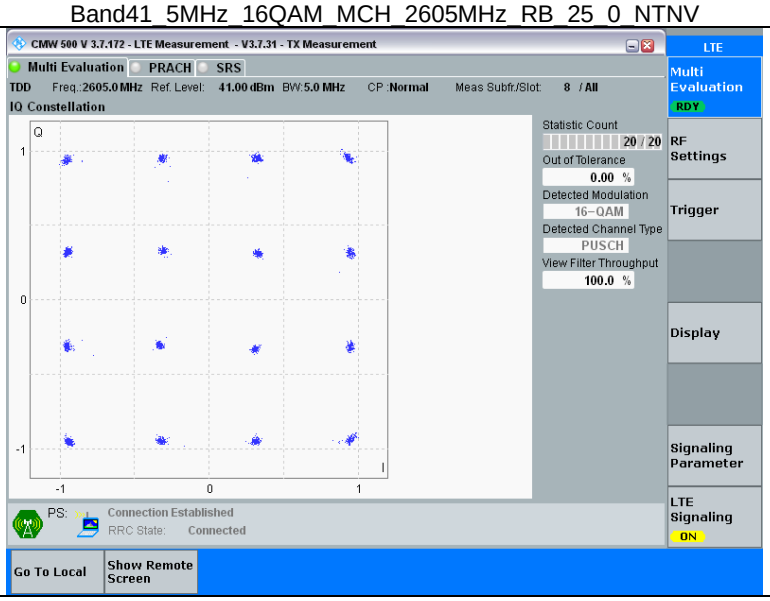
3.2 Test Graph

3.2.1 B41_5MHz

Band41_5MHz_QPSK_MCH_2605MHz_RB_25_0_NTNV

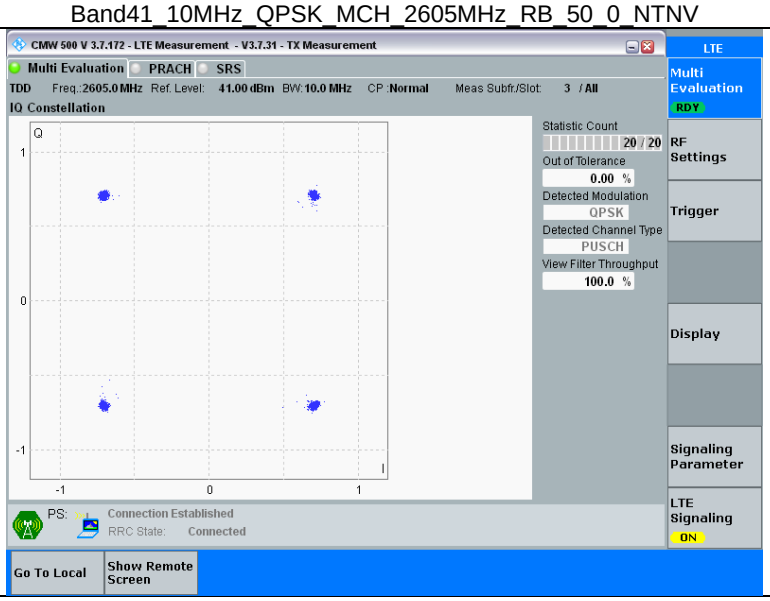


Band41_5MHz_16QAM_MCH_2605MHz_RB_25_0_NTNV

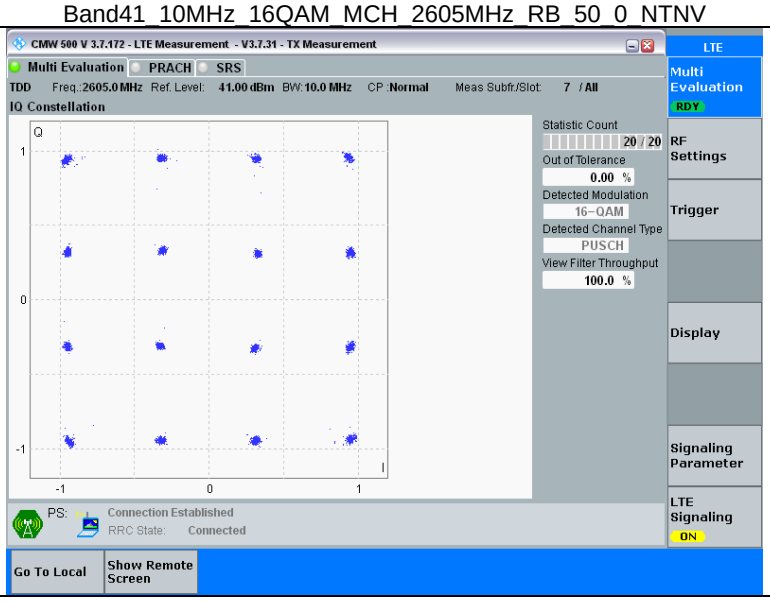


3.2.2 B41_10MHz

Band41_10MHz_QPSK_MCH_2605MHz_RB_50_0_NTNV

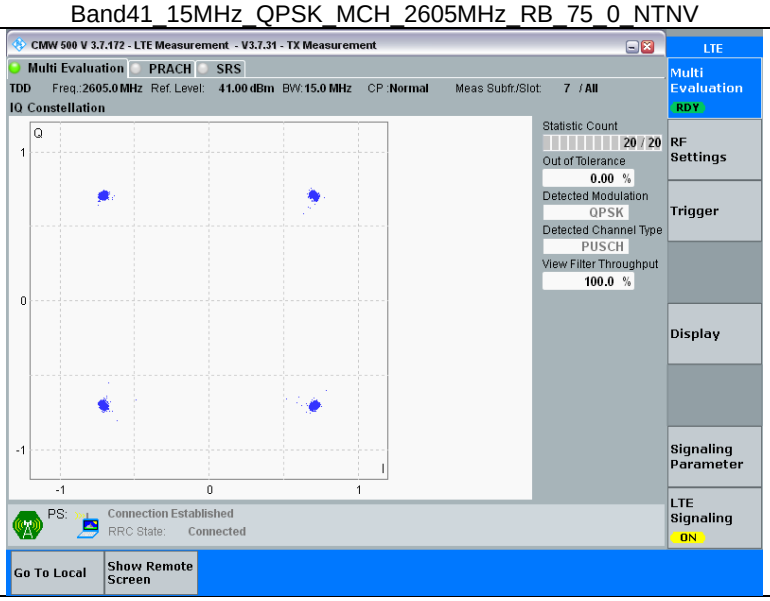


Band41_10MHz_16QAM_MCH_2605MHz_RB_50_0_NTNV

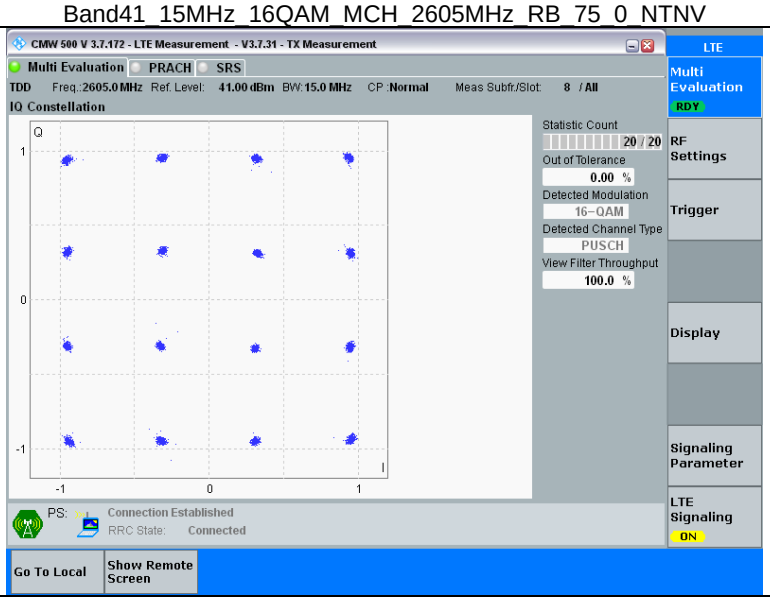


3.2.3 B41_15MHz

Band41_15MHz_QPSK_MCH_2605MHz_RB_75_0_NTNV

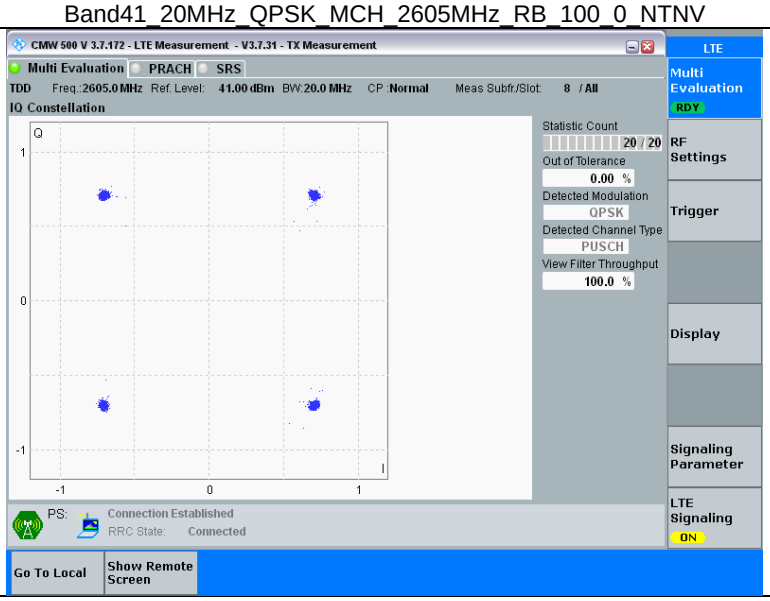


Band41_15MHz_16QAM_MCH_2605MHz_RB_75_0_NTNV

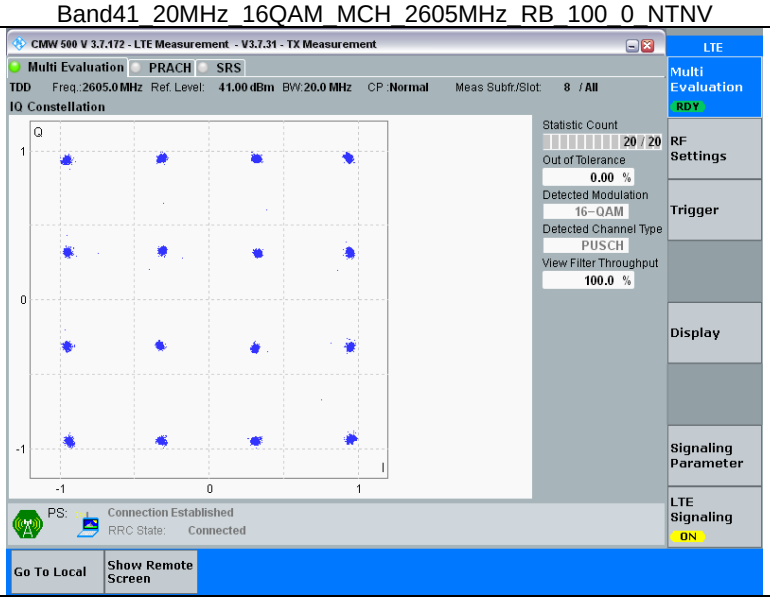


3.2.4 B41_20MHz

Band41_20MHz_QPSK_MCH_2605MHz_RB_100_0_NTNV



Band41_20MHz_16QAM_MCH_2605MHz_RB_100_0_NTNV



4. 99% & 26dB Bandwidth

4.1 Test Result

4.1.1 Band41_OBW

Band: 41 / NTNV							
Bandwidth (MHz)	Modulation	Frequency (MHz)	RB Allocation		99% Occupied Bandwidth (MHz)		Verdict
			Size	Offset	Result	Limit	
5	QPSK	2557.5	25	0	4.548	/	Pass
		2605	25	0	4.543	/	Pass
		2652.5	25	0	4.554	/	Pass
	16QAM	2557.5	25	0	4.541	/	Pass
		2605	25	0	4.530	/	Pass
		2652.5	25	0	4.555	/	Pass
10	QPSK	2560	50	0	9.050	/	Pass
		2605	50	0	9.084	/	Pass
		2650	50	0	9.057	/	Pass
	16QAM	2560	50	0	9.057	/	Pass
		2605	50	0	9.069	/	Pass
		2650	50	0	9.062	/	Pass
15	QPSK	2562.5	75	0	13.616	/	Pass
		2605	75	0	13.561	/	Pass
		2647.5	75	0	13.595	/	Pass
	16QAM	2562.5	75	0	13.608	/	Pass
		2605	75	0	13.671	/	Pass
		2647.5	75	0	13.637	/	Pass
20	QPSK	2565	100	0	18.110	/	Pass
		2605	100	0	18.164	/	Pass
		2645	100	0	18.103	/	Pass
	16QAM	2565	100	0	18.047	/	Pass
		2605	100	0	18.124	/	Pass
		2645	100	0	18.137	/	Pass

4.1.2 Band41_XDB

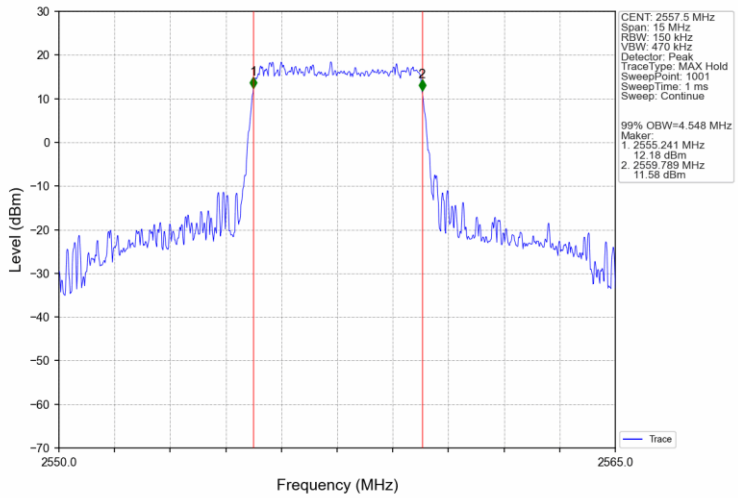
Band: 41 / NTNV							
Bandwidth (MHz)	Modulation	Frequency (MHz)	RB Allocation		26dB Bandwidth (MHz)		Verdict
			Size	Offset	Result	Limit	
5	QPSK	2557.5	25	0	5.132	/	Pass
		2605	25	0	5.354	/	Pass
		2652.5	25	0	5.211	/	Pass
	16QAM	2557.5	25	0	5.265	/	Pass
		2605	25	0	5.196	/	Pass
		2652.5	25	0	5.283	/	Pass
10	QPSK	2560	50	0	10.479	/	Pass
		2605	50	0	9.896	/	Pass
		2650	50	0	11.833	/	Pass
	16QAM	2560	50	0	10.235	/	Pass
		2605	50	0	11.483	/	Pass
		2650	50	0	10.157	/	Pass
15	QPSK	2562.5	75	0	15.945	/	Pass
		2605	75	0	15.770	/	Pass
		2647.5	75	0	16.400	/	Pass

	16QAM	2562.5	75	0	16.019	/	Pass
		2605	75	0	18.418	/	Pass
		2647.5	75	0	15.664	/	Pass
20	QPSK	2565	100	0	19.681	/	Pass
		2605	100	0	20.526	/	Pass
		2645	100	0	19.755	/	Pass
	16QAM	2565	100	0	20.543	/	Pass
		2605	100	0	19.651	/	Pass
		2645	100	0	21.768	/	Pass

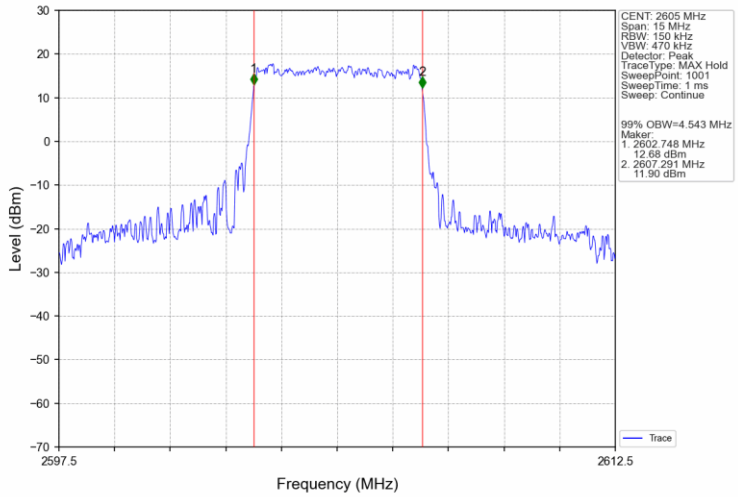
4.2 Test Graph

4.2.1 Band41_OBW

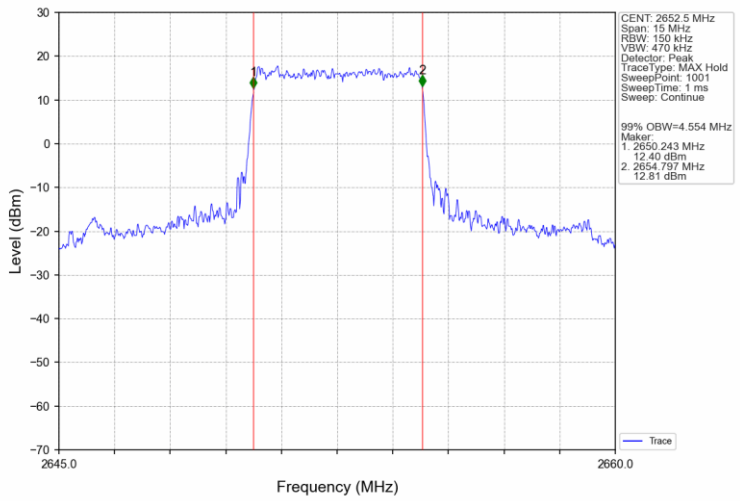
Band41_5MHz_QPSK_LCH_2557.5MHz_RB_25_0_NTNV



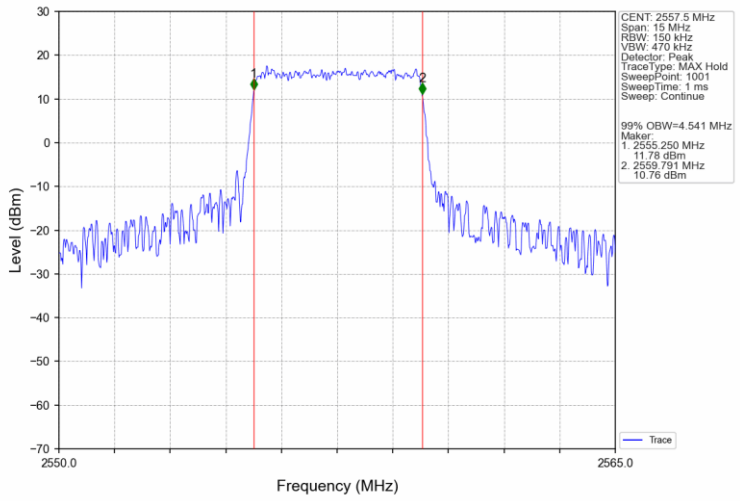
Band41_5MHz_QPSK_MCH_2605MHz_RB_25_0_NTNV



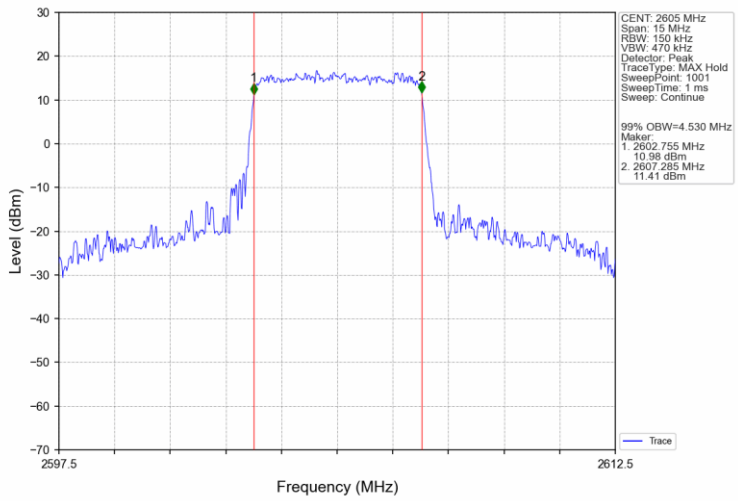
Band41_5MHz_QPSK_HCH_2652.5MHz_RB_25_0_NTNV



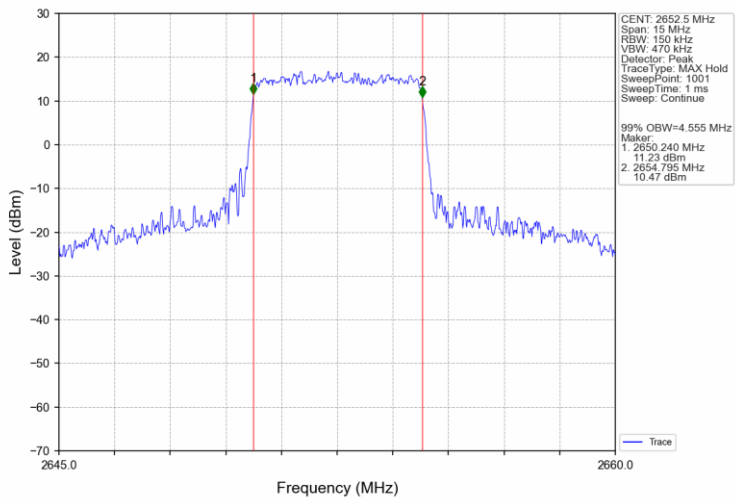
Band41_5MHz_16QAM_LCH_2557.5MHz_RB_25_0_NTNV



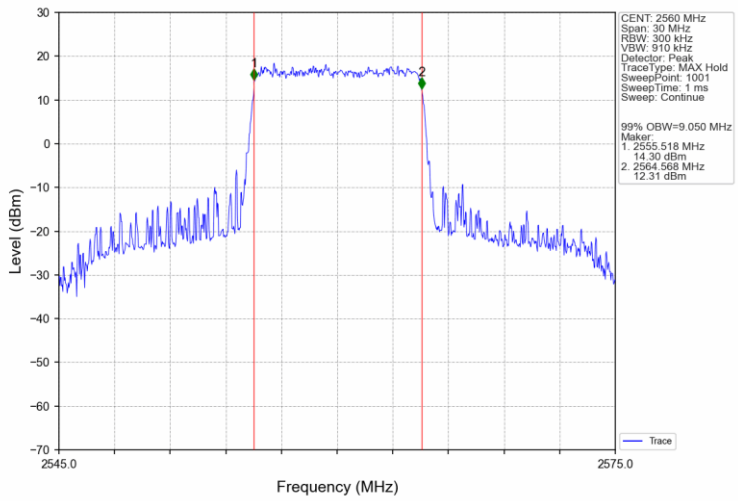
Band41_5MHz_16QAM_MCH_2605MHz_RB_25_0_NTNV



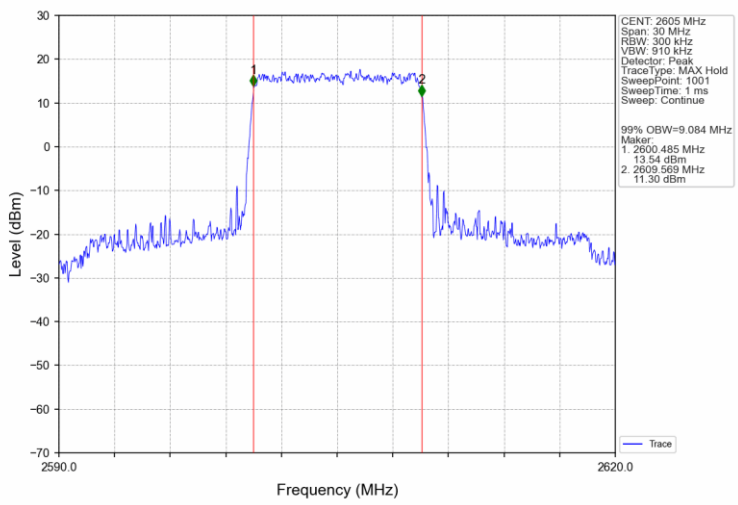
Band41_5MHz_16QAM_HCH_2652.5MHz_RB_25_0_NTNV



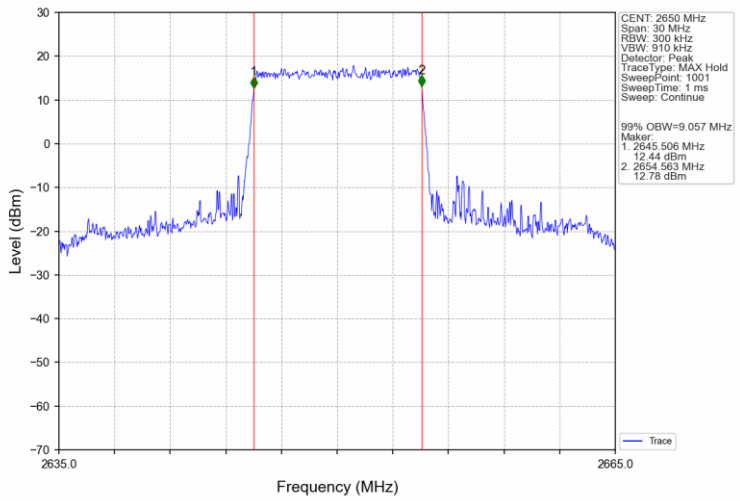
Band41_10MHz_QPSK_LCH_2560MHz_RB_50_0_NTNV



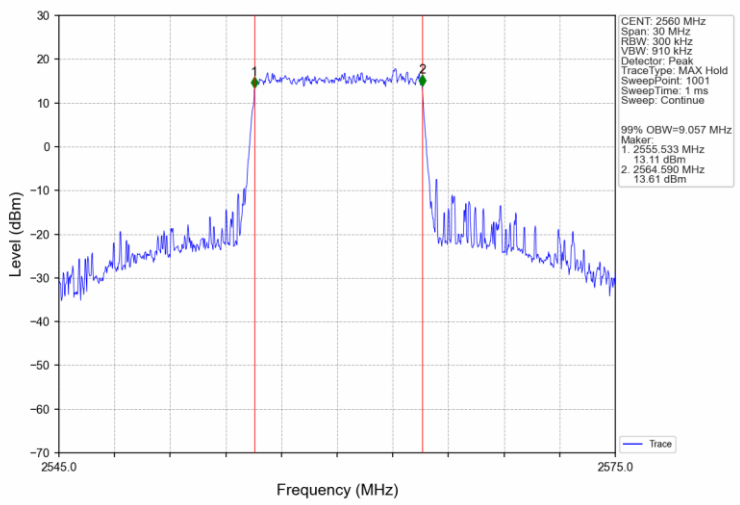
Band41_10MHz_QPSK_MCH_2605MHz_RB_50_0_NTNV



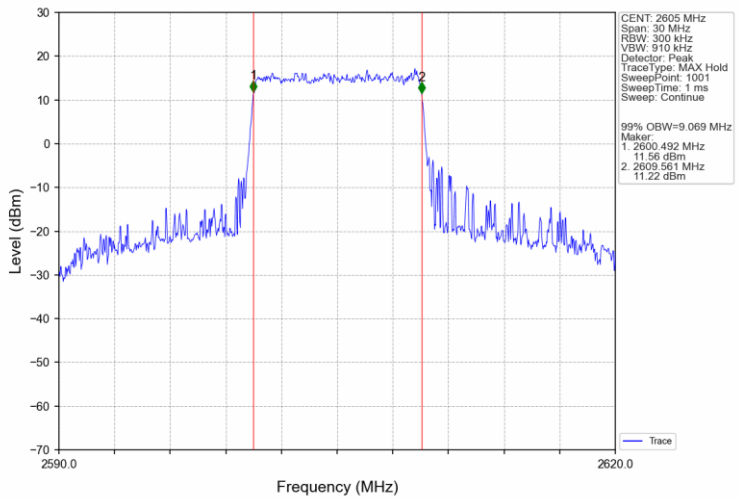
Band41_10MHz_QPSK_HCH_2650MHz_RB_50_0_NTNV



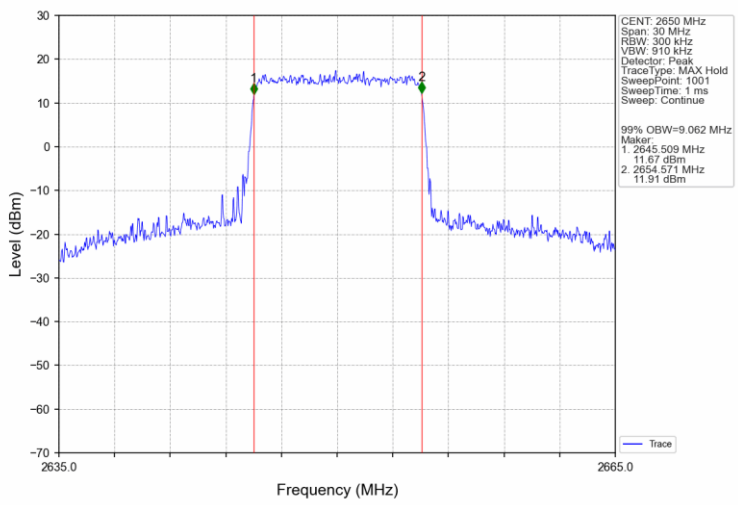
Band41_10MHz_16QAM_LCH_2560MHz_RB_50_0_NTNV



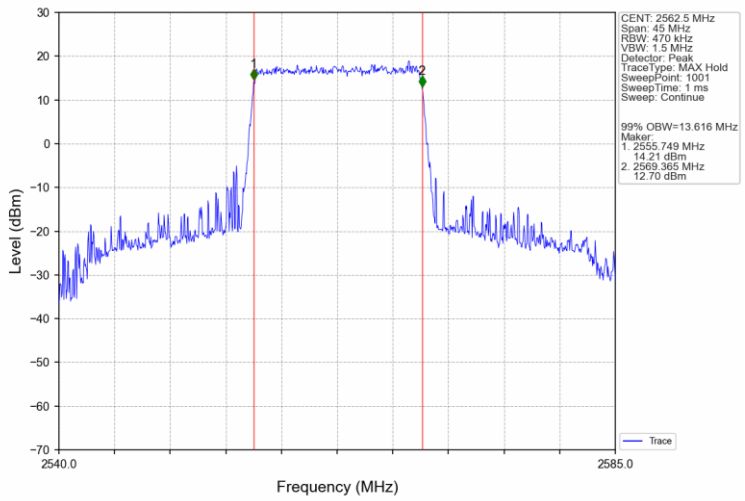
Band41_10MHz_16QAM_MCH_2605MHz_RB_50_0_NTNV



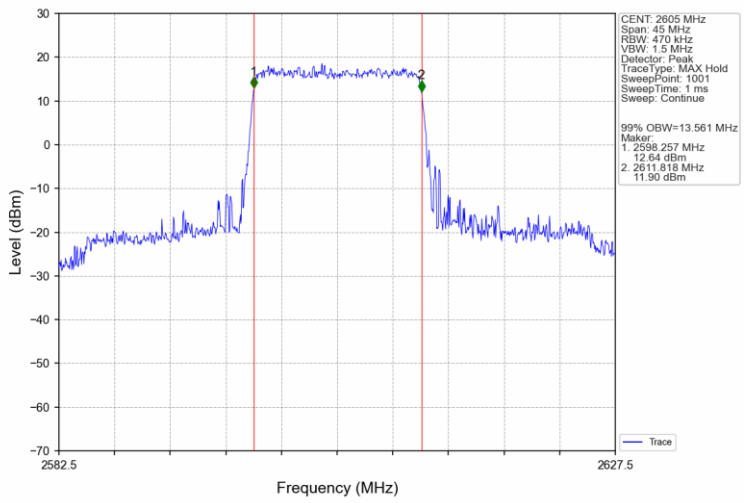
Band41_10MHz_16QAM_HCH_2650MHz_RB_50_0_NTNV



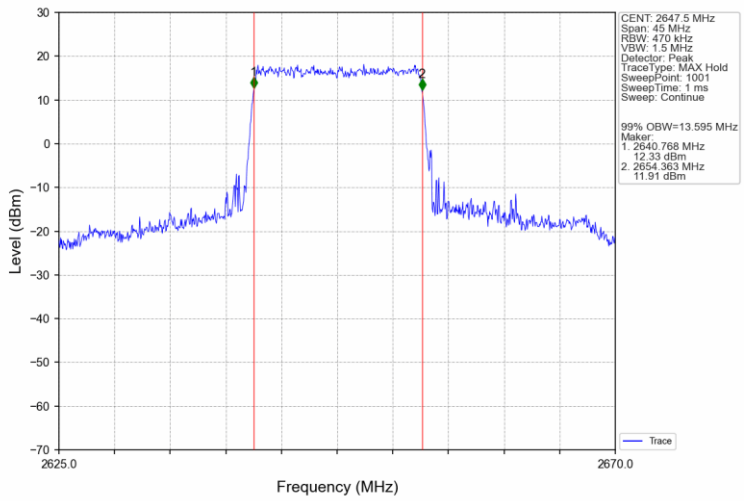
Band41_15MHz_QPSK_LCH_2562.5MHz_RB_75_0_NTNV



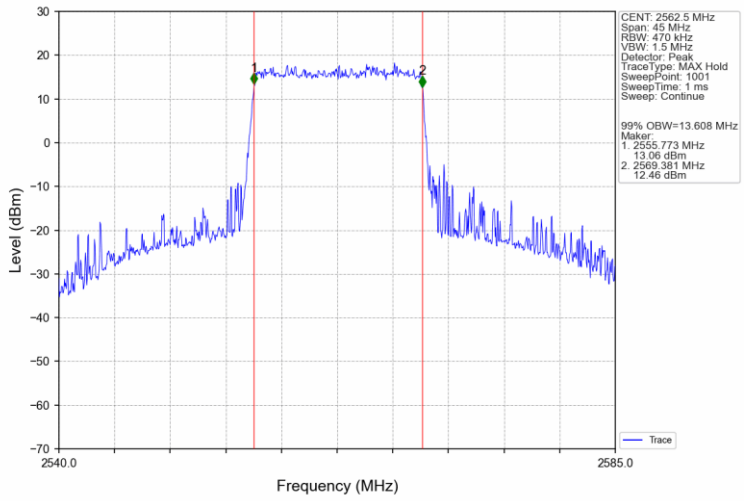
Band41_15MHz_QPSK_MCH_2605MHz_RB_75_0_NTNV



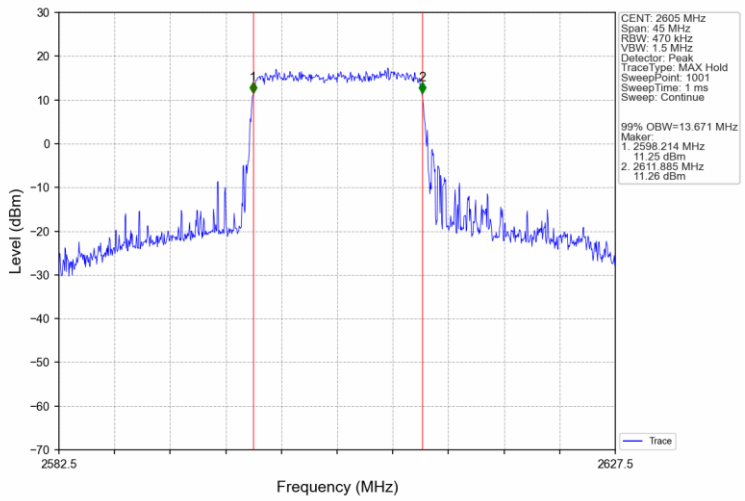
Band41_15MHz_QPSK_HCH_2647.5MHz_RB_75_0_NTNV



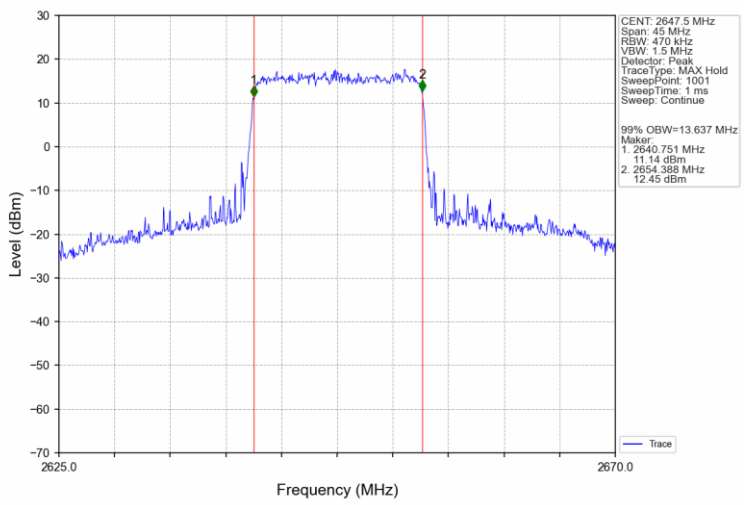
Band41_15MHz_16QAM_LCH_2562.5MHz_RB_75_0_NTNV



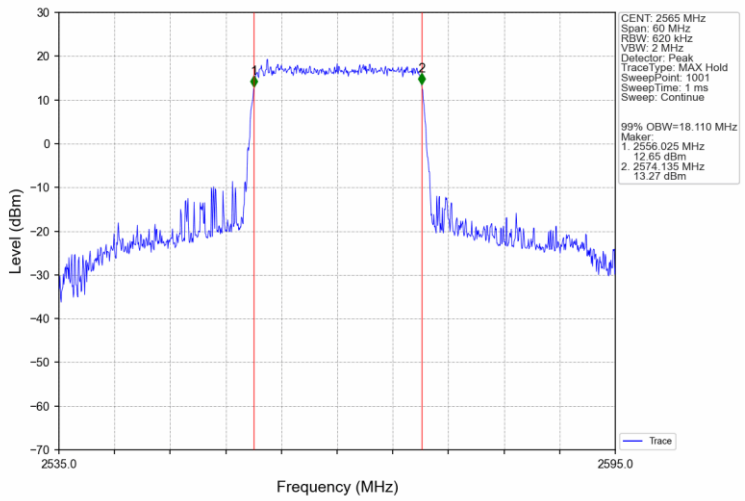
Band41_15MHz_16QAM_MCH_2605MHz_RB_75_0_NTNV



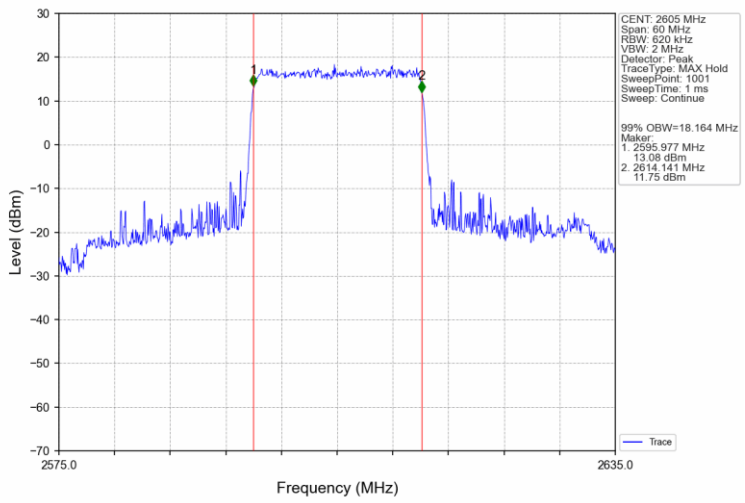
Band41_15MHz_16QAM_HCH_2647.5MHz_RB_75_0_NTNV



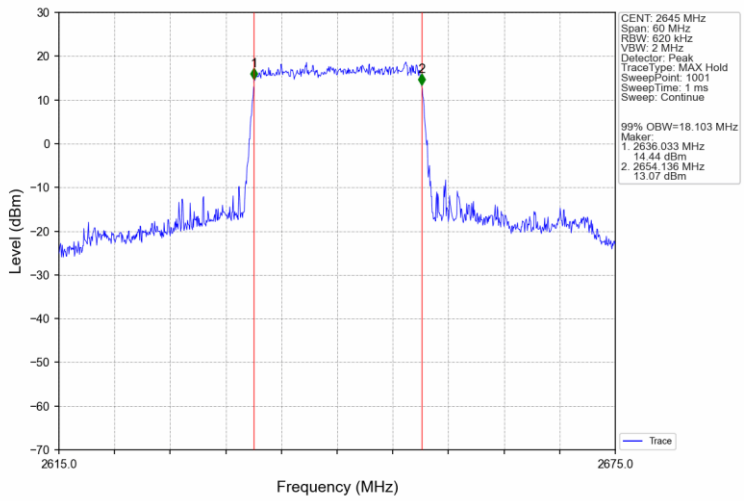
Band41_20MHz_QPSK_LCH_2565MHz_RB_100_0_NTNV



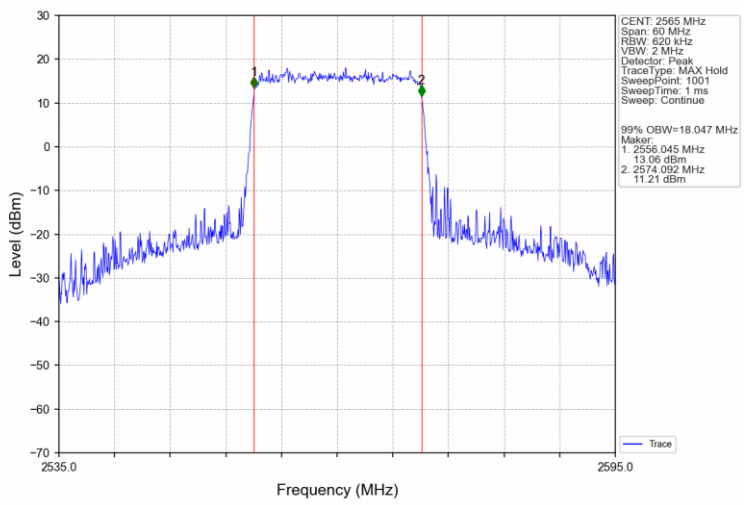
Band41_20MHz_QPSK_MCH_2605MHz_RB_100_0_NTNV



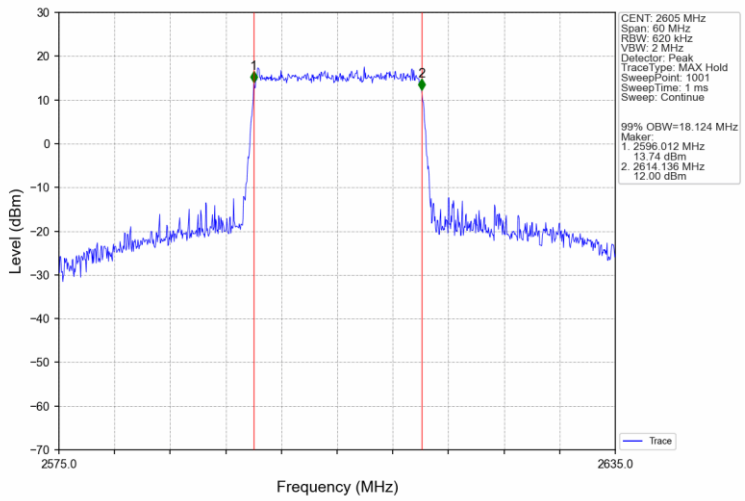
Band41_20MHz_QPSK_HCH_2645MHz_RB_100_0_NTNV



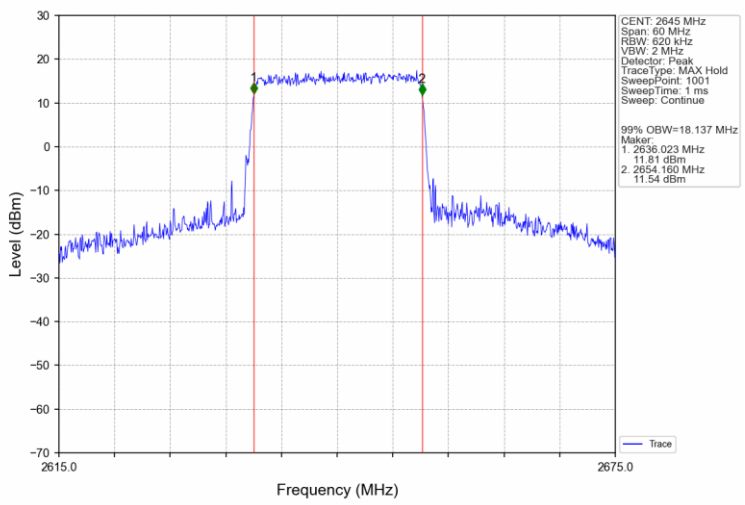
Band41_20MHz_16QAM_LCH_2565MHz_RB_100_0_NTNV



Band41_20MHz_16QAM_MCH_2605MHz_RB_100_0_NTNV

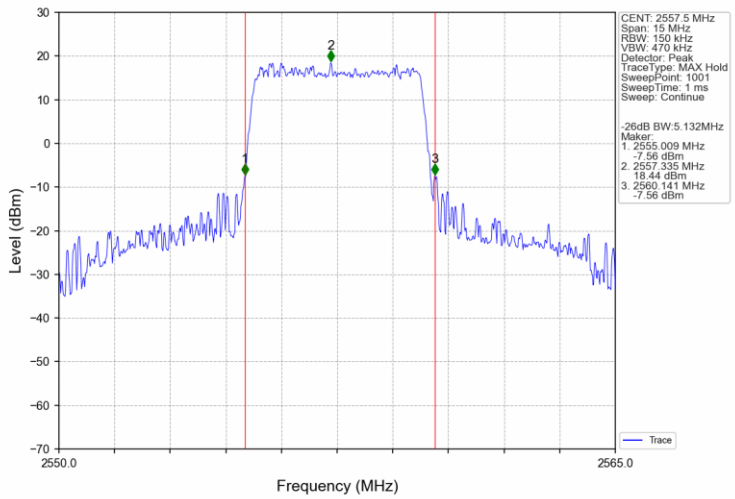


Band41_20MHz_16QAM_HCH_2645MHz_RB_100_0_NTNV

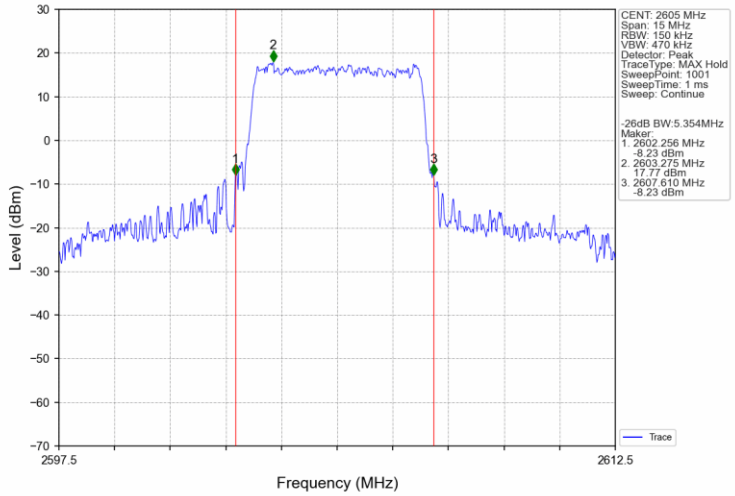


4.2.2 Band41_XDB

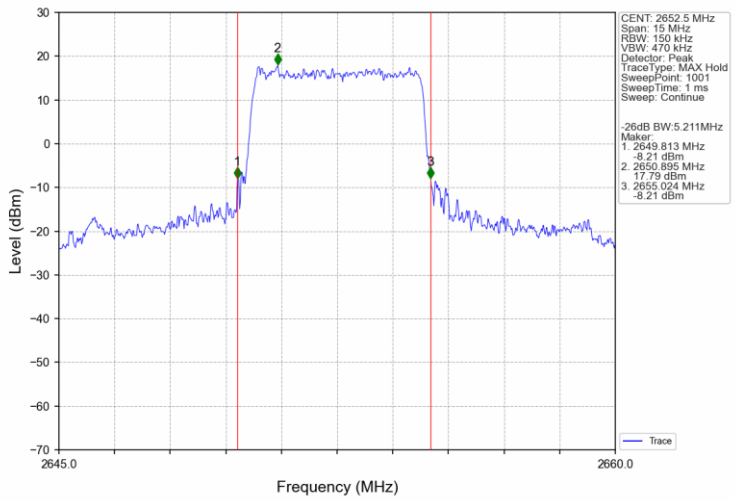
Band41_5MHz_QPSK_LCH_2557.5MHz_RB_25_0_NTNV



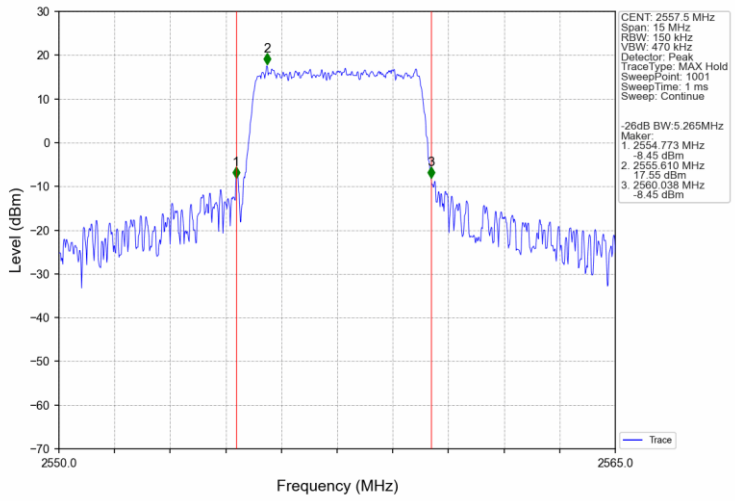
Band41_5MHz_QPSK_MCH_2605MHz_RB_25_0_NTNV



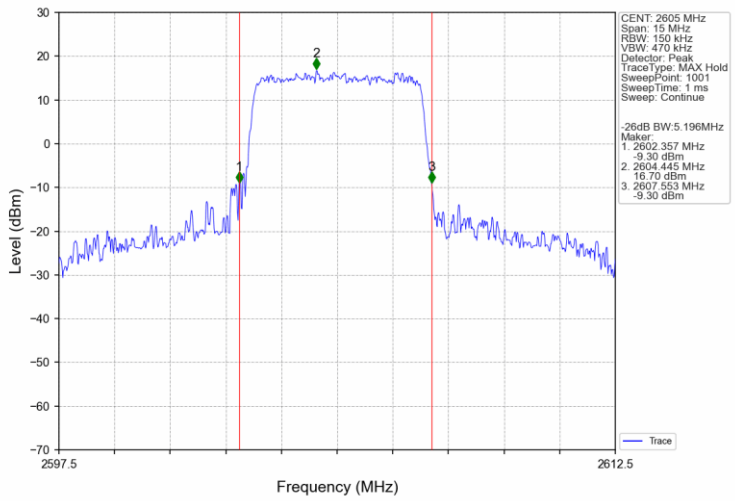
Band41_5MHz_QPSK_HCH_2652.5MHz_RB_25_0_NTNV



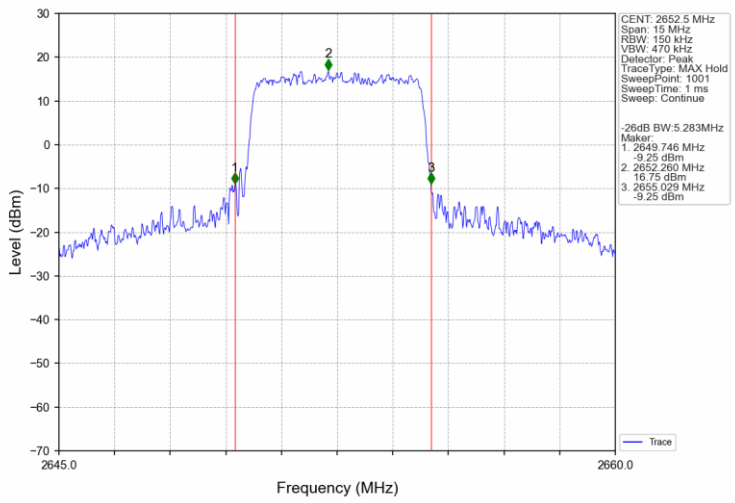
Band41_5MHz_16QAM_LCH_2557.5MHz_RB_25_0_NTNV



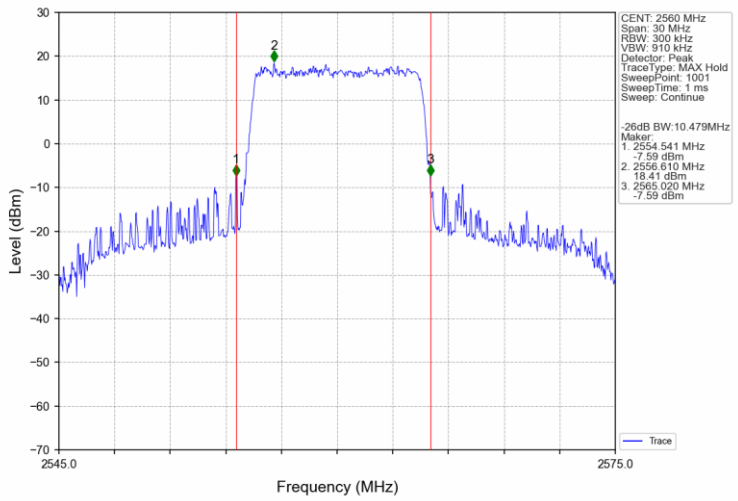
Band41_5MHz_16QAM_MCH_2605MHz_RB_25_0_NTNV



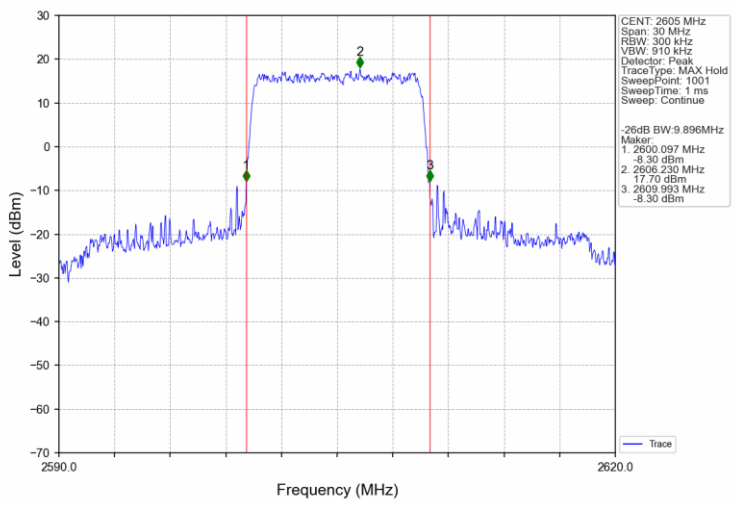
Band41_5MHz_16QAM_HCH_2652.5MHz_RB_25_0_NTNV



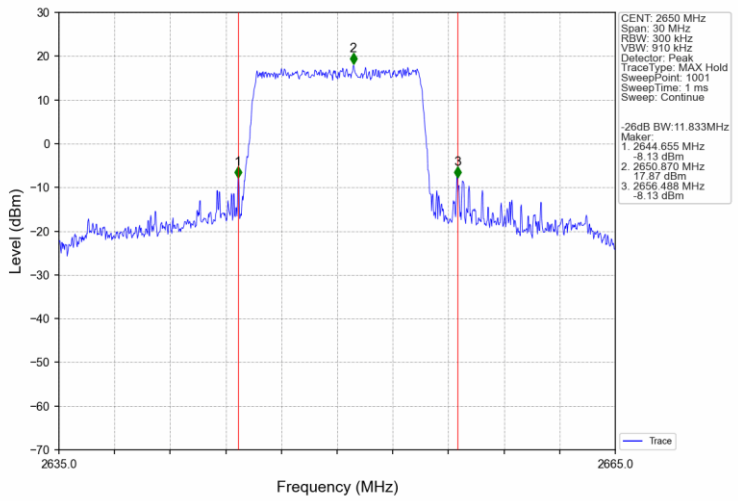
Band41_10MHz_QPSK_LCH_2560MHz_RB_50_0_NTNV



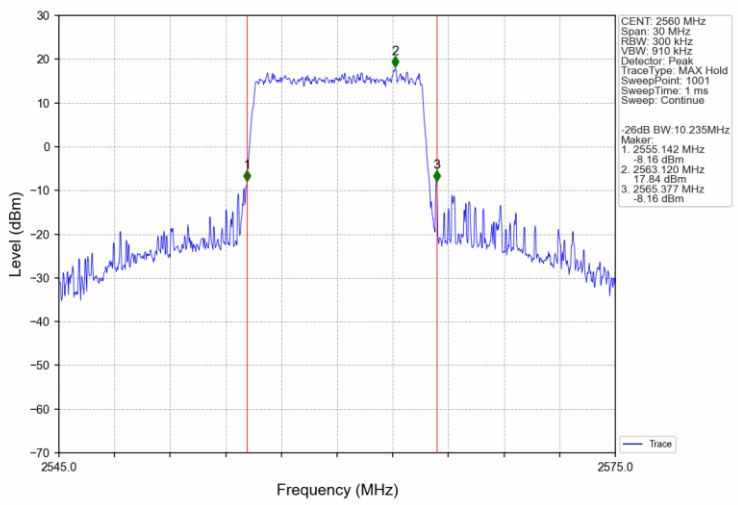
Band41_10MHz_QPSK_MCH_2605MHz_RB_50_0_NTNV



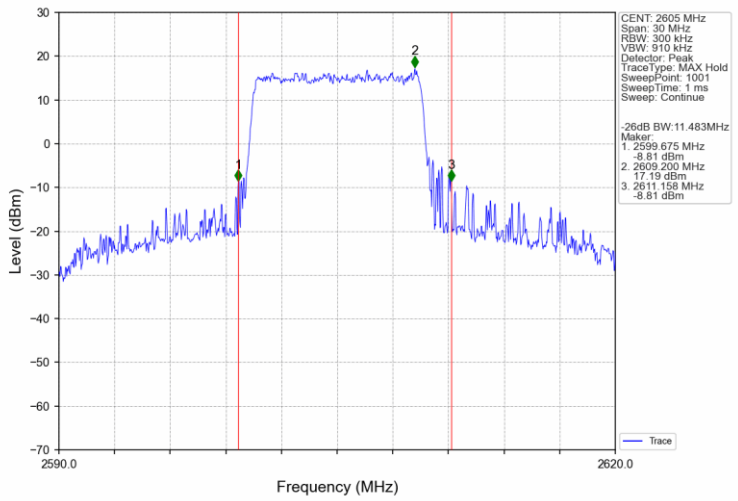
Band41_10MHz_QPSK_HCH_2650MHz_RB_50_0_NTNV



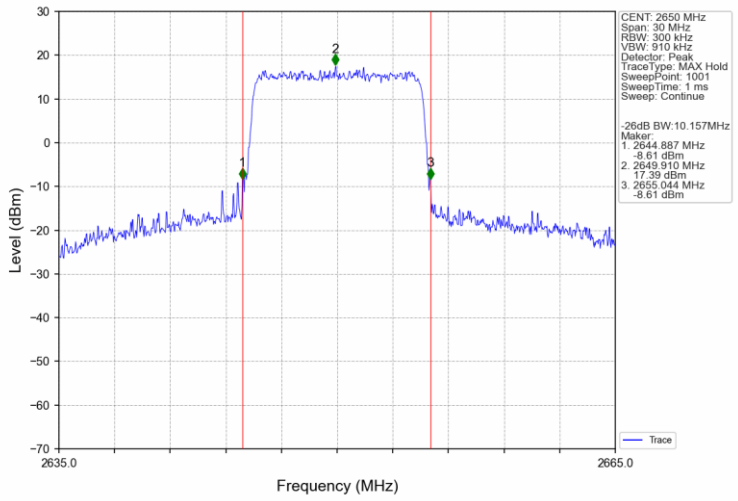
Band41_10MHz_16QAM_LCH_2560MHz_RB_50_0_NTNV



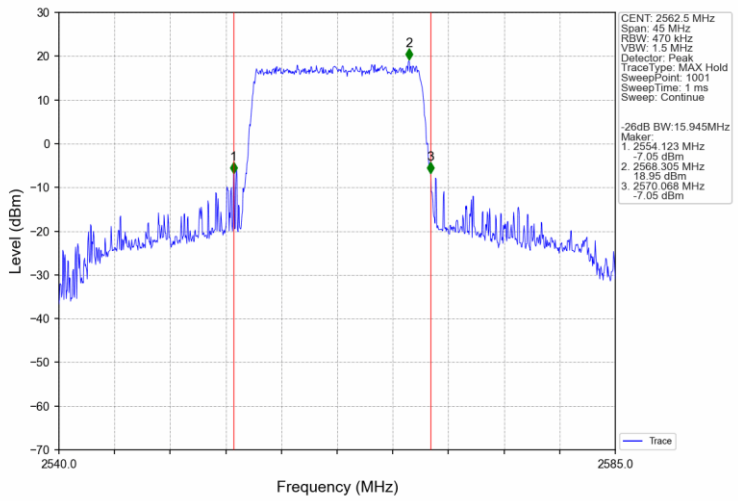
Band41_10MHz_16QAM_MCH_2605MHz_RB_50_0_NTNV



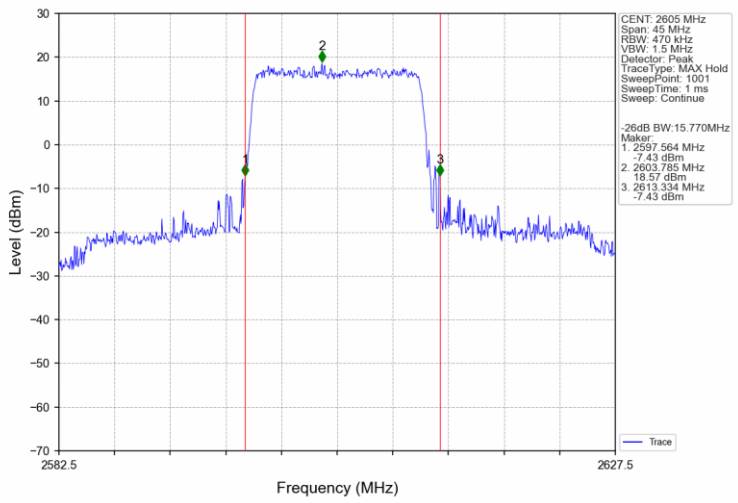
Band41_10MHz_16QAM_HCH_2650MHz_RB_50_0_NTNV



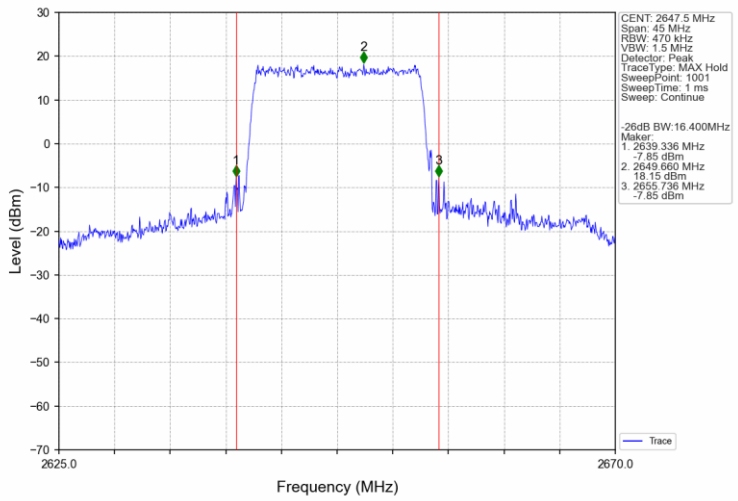
Band41_15MHz_QPSK_LCH_2562.5MHz_RB_75_0_NTNV



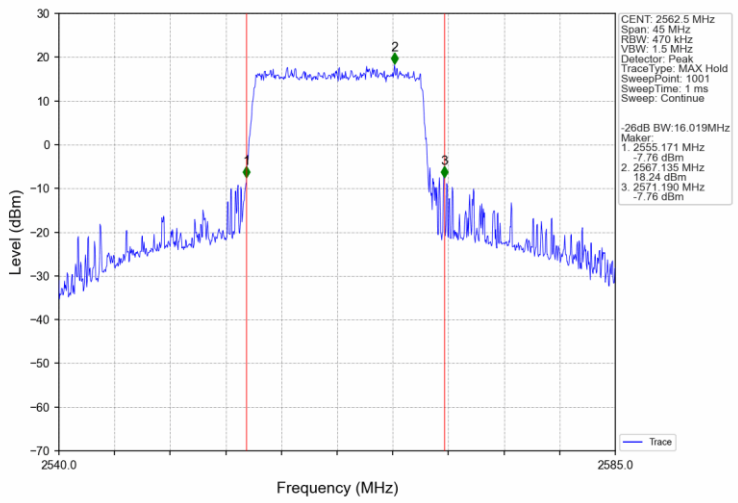
Band41_15MHz_QPSK_MCH_2605MHz_RB_75_0_NTNV



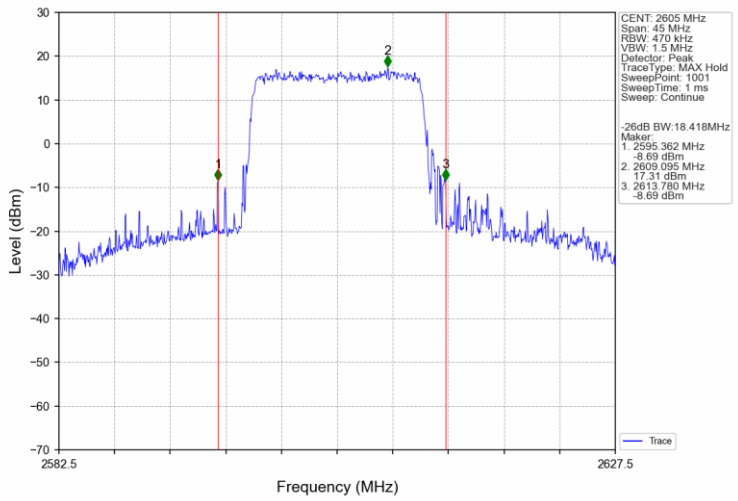
Band41_15MHz_QPSK_HCH_2647.5MHz_RB_75_0_NTNV



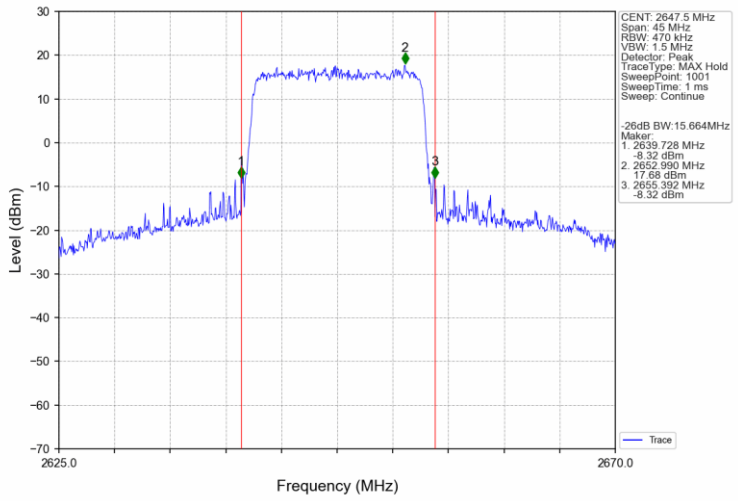
Band41_15MHz_16QAM_LCH_2562.5MHz_RB_75_0_NTNV



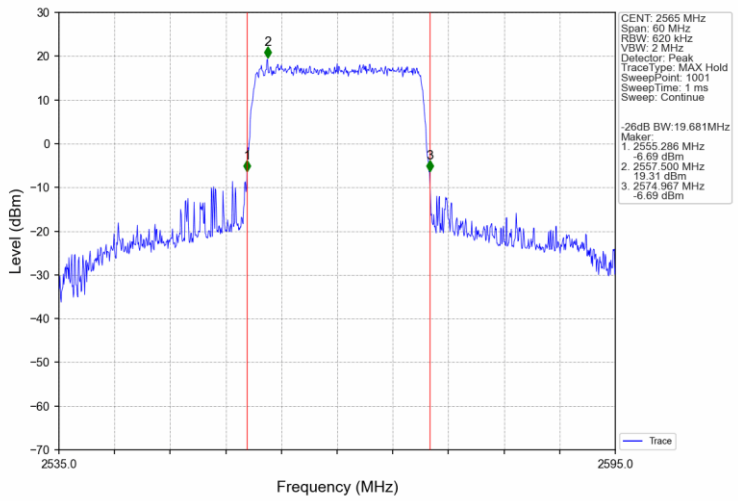
Band41_15MHz_16QAM_MCH_2605MHz_RB_75_0_NTNV



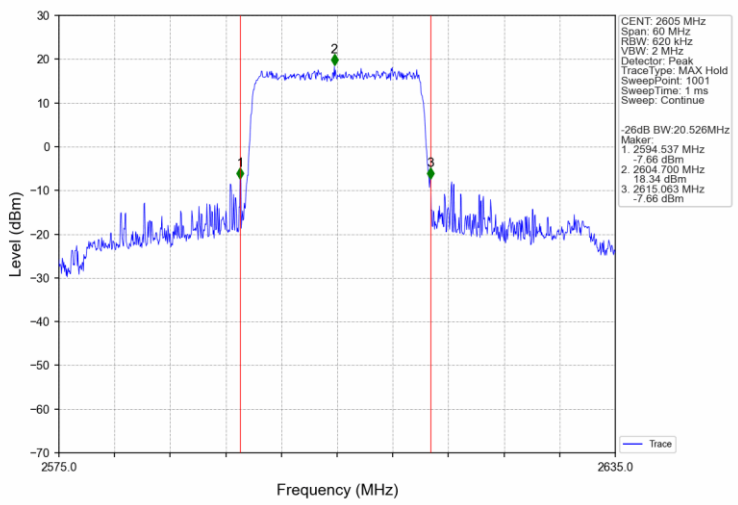
Band41_15MHz_16QAM_HCH_2647.5MHz_RB_75_0_NTNV



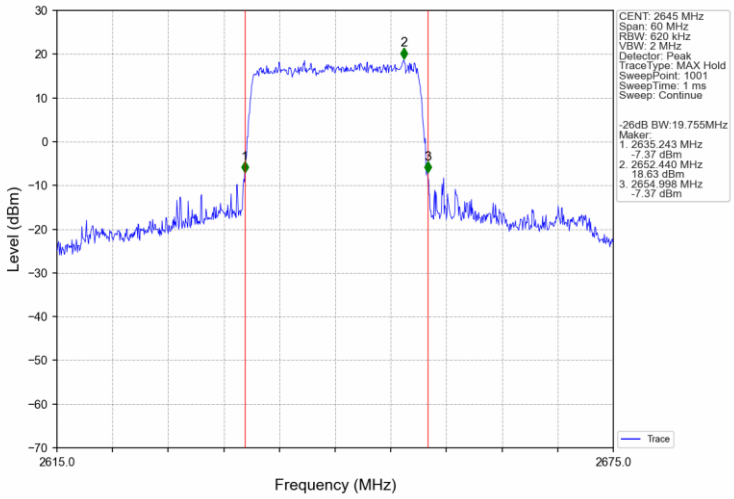
Band41_20MHz_QPSK_LCH_2565MHz_RB_100_0_NTNV



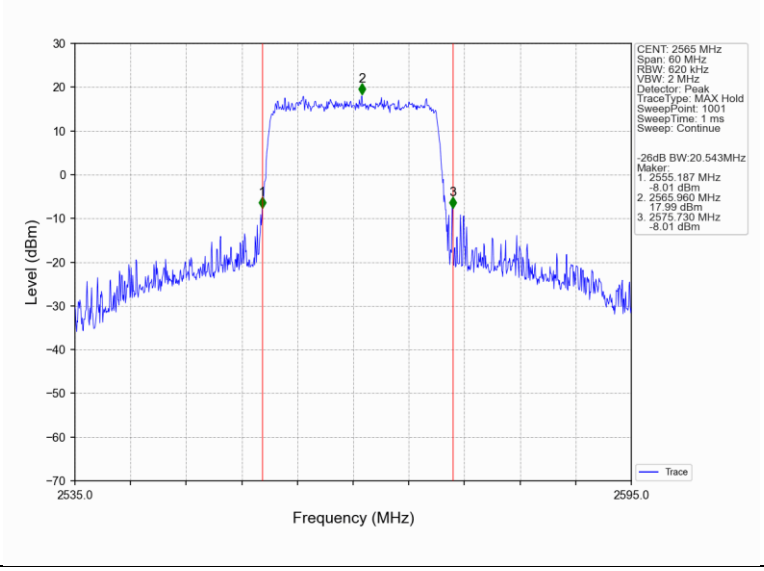
Band41_20MHz_QPSK_MCH_2605MHz_RB_100_0_NTNV



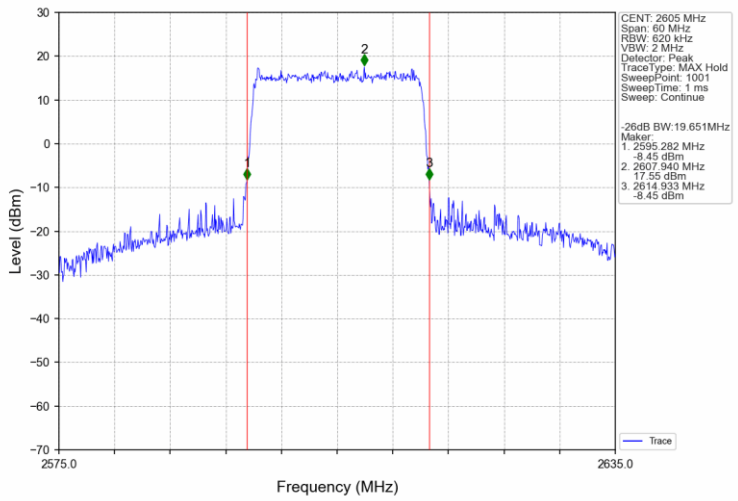
Band41_20MHz_QPSK_HCH_2645MHz_RB_100_0_NTNV



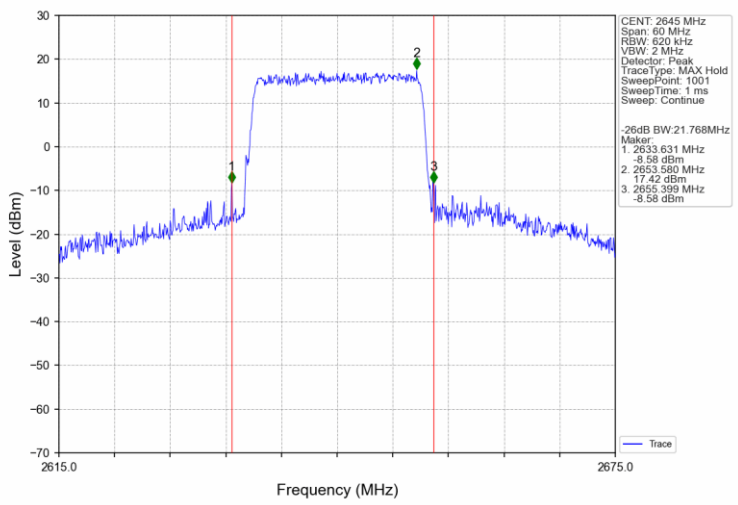
Band41_20MHz_16QAM_LCH_2565MHz_RB_100_0_NTNV



Band41_20MHz_16QAM_MCH_2605MHz_RB_100_0_NTNV



Band41_20MHz_16QAM_HCH_2645MHz_RB_100_0_NTNV



5. Peak-Average Ratio

5.1 Test Result

5.1.1 B41_5MHz

Band: 41 / Bandwidth: 5MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Peak-Average Ratio (dB)		Verdict
		Size	Offset	Result	Limit	
QPSK	2557.5	25	0	7.57	<=13	Pass
	2605	25	0	7.44	<=13	Pass
	2652.5	25	0	7.75	<=13	Pass
16QAM	2557.5	25	0	8.11	<=13	Pass
	2605	25	0	8.21	<=13	Pass
	2652.5	25	0	8.49	<=13	Pass

5.1.2 B41_10MHz

Band: 41 / Bandwidth: 10MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Peak-Average Ratio (dB)		Verdict
		Size	Offset	Result	Limit	
QPSK	2560	50	0	7.53	<=13	Pass
	2605	50	0	7.52	<=13	Pass
	2650	50	0	7.71	<=13	Pass
16QAM	2560	50	0	8.15	<=13	Pass
	2605	50	0	8.29	<=13	Pass
	2650	50	0	8.57	<=13	Pass

5.1.3 B41_15MHz

Band: 41 / Bandwidth: 15MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Peak-Average Ratio (dB)		Verdict
		Size	Offset	Result	Limit	
QPSK	2562.5	75	0	6.99	<=13	Pass
	2605	75	0	7.22	<=13	Pass
	2647.5	75	0	7.27	<=13	Pass
16QAM	2562.5	75	0	8.03	<=13	Pass
	2605	75	0	8.22	<=13	Pass
	2647.5	75	0	8.22	<=13	Pass

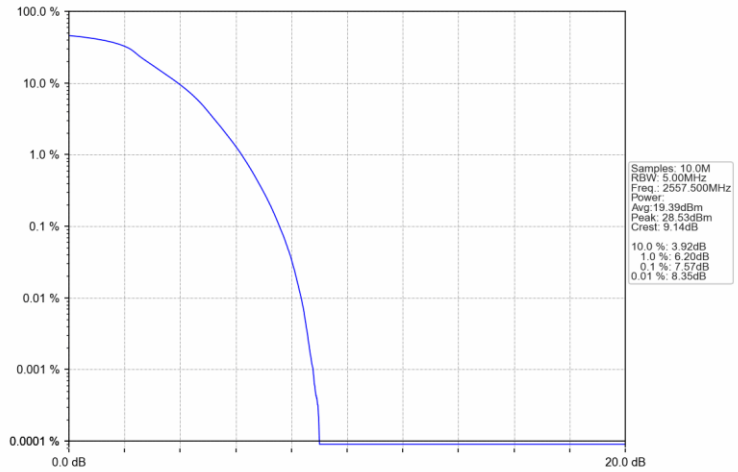
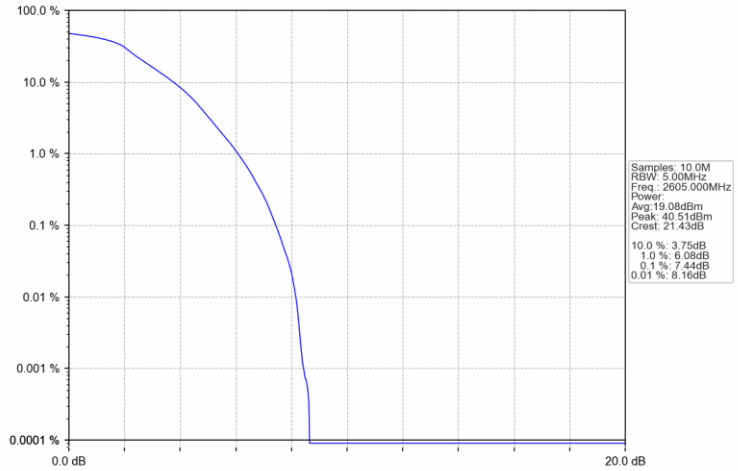
5.1.4 B41_20MHz

Band: 41 / Bandwidth: 20MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Peak-Average Ratio (dB)		Verdict
		Size	Offset	Result	Limit	
QPSK	2565	100	0	7.71	<=13	Pass
	2605	100	0	7.70	<=13	Pass
	2645	100	0	7.75	<=13	Pass
16QAM	2565	100	0	8.49	<=13	Pass
	2605	100	0	8.53	<=13	Pass
	2645	100	0	8.62	<=13	Pass

5.2 Test Graph

5.2.1 B41_5MHz

Band41_5MHz_QPSK_LCH_2557.5MHz_RB_25_0_NTNV



Band41_5MHz_QPSK_MCH_2605MHz_RB_25_0_NTNV