

Appendix Test Data for LTE_band_38

1. Effective (Isotropic) Radiated Power Output Data

1.1 Test Result

1.1.1 B38_5MHz_EIRP

Band: 38 / Bandwidth: 5MHz / NTNV								
Modulation	Frequency (MHz)	RB Allocation		Conducted Power (dBm)	Gain (dBi)	EIRP (dBm)		Verdict
		Size	Offset			Result	Limit	
QPSK	2572.5	1	0	23.02	2.82	25.84	<=33.01	Pass
			13	23.01	2.82	25.83	<=33.01	Pass
			24	23.01	2.82	25.83	<=33.01	Pass
		12	0	21.94	2.82	24.76	<=33.01	Pass
			6	21.97	2.82	24.79	<=33.01	Pass
			13	21.94	2.82	24.76	<=33.01	Pass
		25	0	21.97	2.82	24.79	<=33.01	Pass
	2595	1	0	23.09	2.82	25.91	<=33.01	Pass
			13	23.01	2.82	25.83	<=33.01	Pass
			24	23.09	2.82	25.91	<=33.01	Pass
		12	0	22.01	2.82	24.83	<=33.01	Pass
			6	21.99	2.82	24.81	<=33.01	Pass
			13	21.95	2.82	24.77	<=33.01	Pass
		25	0	22.01	2.82	24.83	<=33.01	Pass
	2617.5	1	0	23.21	2.82	26.03	<=33.01	Pass
			13	23.10	2.82	25.92	<=33.01	Pass
			24	23.24	2.82	26.06	<=33.01	Pass
		12	0	22.14	2.82	24.96	<=33.01	Pass
			6	22.16	2.82	24.98	<=33.01	Pass
			13	22.20	2.82	25.02	<=33.01	Pass
		25	0	22.22	2.82	25.04	<=33.01	Pass
16QAM	2572.5	1	0	21.94	2.82	24.76	<=33.01	Pass
			13	21.96	2.82	24.78	<=33.01	Pass
			24	21.96	2.82	24.78	<=33.01	Pass
		12	0	20.85	2.82	23.67	<=33.01	Pass
			6	20.93	2.82	23.75	<=33.01	Pass
			13	20.95	2.82	23.77	<=33.01	Pass
		25	0	20.94	2.82	23.76	<=33.01	Pass
	2595	1	0	21.99	2.82	24.81	<=33.01	Pass
			13	22.01	2.82	24.83	<=33.01	Pass
			24	22.13	2.82	24.95	<=33.01	Pass
		12	0	21.02	2.82	23.84	<=33.01	Pass
			6	20.93	2.82	23.75	<=33.01	Pass
			13	20.97	2.82	23.79	<=33.01	Pass
		25	0	20.94	2.82	23.76	<=33.01	Pass
	2617.5	1	0	21.88	2.82	24.70	<=33.01	Pass
			13	22.26	2.82	25.08	<=33.01	Pass
			24	22.20	2.82	25.02	<=33.01	Pass
		12	0	21.09	2.82	23.91	<=33.01	Pass
			6	21.22	2.82	24.04	<=33.01	Pass
			13	21.12	2.82	23.94	<=33.01	Pass
		25	0	21.22	2.82	24.04	<=33.01	Pass

Note1: EIRP=Conducted Power+Antenna Gain

1.1.2 B38_10MHz_EIRP

Band: 38 / Bandwidth: 10MHz / NTNV								
Modulation	Frequency (MHz)	RB Allocation		Conducted Power (dBm)	Gain (dBi)	EIRP (dBm)		Verdict
		Size	Offset			Result	Limit	
QPSK	2575	1	0	22.93	2.82	25.75	<=33.01	Pass
			25	22.96	2.82	25.78	<=33.01	Pass
			49	23.02	2.82	25.84	<=33.01	Pass
		25	0	21.88	2.82	24.70	<=33.01	Pass
			13	21.89	2.82	24.71	<=33.01	Pass
			25	21.95	2.82	24.77	<=33.01	Pass
		50	0	21.89	2.82	24.71	<=33.01	Pass
	2595	1	0	23.00	2.82	25.82	<=33.01	Pass
			25	22.96	2.82	25.78	<=33.01	Pass
			49	22.94	2.82	25.76	<=33.01	Pass
		25	0	21.95	2.82	24.77	<=33.01	Pass
			13	22.00	2.82	24.82	<=33.01	Pass
			25	21.90	2.82	24.72	<=33.01	Pass
		50	0	21.94	2.82	24.76	<=33.01	Pass
	2615	1	0	23.08	2.82	25.90	<=33.01	Pass
			25	23.08	2.82	25.90	<=33.01	Pass
			49	23.12	2.82	25.94	<=33.01	Pass
		25	0	22.01	2.82	24.83	<=33.01	Pass
			13	22.04	2.82	24.86	<=33.01	Pass
			25	22.12	2.82	24.94	<=33.01	Pass
		50	0	22.15	2.82	24.97	<=33.01	Pass
16QAM	2575	1	0	21.91	2.82	24.73	<=33.01	Pass
			25	22.03	2.82	24.85	<=33.01	Pass
			49	22.04	2.82	24.86	<=33.01	Pass
		12	0	21.83	2.82	24.65	<=33.01	Pass
			19	21.93	2.82	24.75	<=33.01	Pass
			38	21.88	2.82	24.70	<=33.01	Pass
		27	0	20.90	2.82	23.72	<=33.01	Pass
	2595	1	0	22.18	2.82	25.00	<=33.01	Pass
			25	21.67	2.82	24.49	<=33.01	Pass
			49	22.19	2.82	25.01	<=33.01	Pass
		12	0	21.97	2.82	24.79	<=33.01	Pass
			19	22.02	2.82	24.84	<=33.01	Pass
			38	21.97	2.82	24.79	<=33.01	Pass
		27	0	20.86	2.82	23.68	<=33.01	Pass
	2615	1	0	21.89	2.82	24.71	<=33.01	Pass
			25	22.01	2.82	24.83	<=33.01	Pass
			49	22.05	2.82	24.87	<=33.01	Pass
		12	0	22.06	2.82	24.88	<=33.01	Pass
			19	22.12	2.82	24.94	<=33.01	Pass
			38	22.18	2.82	25.00	<=33.01	Pass
		27	23	21.09	2.82	23.91	<=33.01	Pass

Note1: EIRP=Conducted Power+Antenna Gain

1.1.3 B38_15MHz_EIRP

Band: 38 / Bandwidth: 15MHz / NTNV								
Modulation	Frequency (MHz)	RB Allocation		Conducted Power (dBm)	Gain (dBi)	EIRP (dBm)		Verdict
		Size	Offset			Result	Limit	
QPSK	2577.5	1	0	22.73	2.82	25.55	<=33.01	Pass
			38	22.84	2.82	25.66	<=33.01	Pass
			74	23.02	2.82	25.84	<=33.01	Pass
		36	0	21.87	2.82	24.69	<=33.01	Pass
			18	21.91	2.82	24.73	<=33.01	Pass
			39	21.91	2.82	24.73	<=33.01	Pass
		75	0	21.94	2.82	24.76	<=33.01	Pass
			0	22.86	2.82	25.68	<=33.01	Pass
			38	22.90	2.82	25.72	<=33.01	Pass
	2595	1	74	22.96	2.82	25.78	<=33.01	Pass
			0	21.92	2.82	24.74	<=33.01	Pass
			18	21.88	2.82	24.70	<=33.01	Pass
		36	39	21.93	2.82	24.75	<=33.01	Pass
			0	21.89	2.82	24.71	<=33.01	Pass
			0	22.98	2.82	25.80	<=33.01	Pass
		75	38	23.16	2.82	25.98	<=33.01	Pass
			74	23.17	2.82	25.99	<=33.01	Pass
			0	21.97	2.82	24.79	<=33.01	Pass
	2612.5	36	18	22.02	2.82	24.84	<=33.01	Pass
			39	22.07	2.82	24.89	<=33.01	Pass
		75	0	22.04	2.82	24.86	<=33.01	Pass
16QAM	2577.5	1	0	21.70	2.82	24.52	<=33.01	Pass
			38	22.27	2.82	25.09	<=33.01	Pass
			74	22.02	2.82	24.84	<=33.01	Pass
		12	0	21.83	2.82	24.65	<=33.01	Pass
			31	21.92	2.82	24.74	<=33.01	Pass
			63	21.90	2.82	24.72	<=33.01	Pass
		27	0	20.84	2.82	23.66	<=33.01	Pass
			0	21.67	2.82	24.49	<=33.01	Pass
			38	21.75	2.82	24.57	<=33.01	Pass
	2595	1	74	21.81	2.82	24.63	<=33.01	Pass
			0	21.87	2.82	24.69	<=33.01	Pass
			31	21.97	2.82	24.79	<=33.01	Pass
		12	63	21.94	2.82	24.76	<=33.01	Pass
			0	20.88	2.82	23.70	<=33.01	Pass
			0	21.78	2.82	24.60	<=33.01	Pass
		27	38	21.93	2.82	24.75	<=33.01	Pass
			74	22.18	2.82	25.00	<=33.01	Pass
			0	22.03	2.82	24.85	<=33.01	Pass
	2612.5	12	31	22.12	2.82	24.94	<=33.01	Pass
			63	22.15	2.82	24.97	<=33.01	Pass
		27	48	21.12	2.82	23.94	<=33.01	Pass

Note1: EIRP=Conducted Power+Antenna Gain

1.1.4 B38_20MHz_EIRP

Band: 38 / Bandwidth: 20MHz / NTNV								
Modulation	Frequency (MHz)	RB Allocation		Conducted Power (dBm)	Gain (dBi)	EIRP (dBm)		Verdict
		Size	Offset			Result	Limit	
QPSK	2580	1	0	22.84	2.82	25.66	<=33.01	Pass
			50	23.01	2.82	25.83	<=33.01	Pass
			99	23.00	2.82	25.82	<=33.01	Pass
		50	0	21.92	2.82	24.74	<=33.01	Pass
			25	21.92	2.82	24.74	<=33.01	Pass
			50	22.00	2.82	24.82	<=33.01	Pass
		100	0	21.89	2.82	24.71	<=33.01	Pass
			0	22.74	2.82	25.56	<=33.01	Pass
			50	22.85	2.82	25.67	<=33.01	Pass
	2595	1	99	22.94	2.82	25.76	<=33.01	Pass
			0	21.93	2.82	24.75	<=33.01	Pass
			25	22.00	2.82	24.82	<=33.01	Pass
		50	50	21.97	2.82	24.79	<=33.01	Pass
			0	21.91	2.82	24.73	<=33.01	Pass
			0	22.82	2.82	25.64	<=33.01	Pass
		100	50	22.92	2.82	25.74	<=33.01	Pass
			99	23.10	2.82	25.92	<=33.01	Pass
			0	21.99	2.82	24.81	<=33.01	Pass
16QAM	2580	1	25	22.05	2.82	24.87	<=33.01	Pass
			50	22.08	2.82	24.90	<=33.01	Pass
			0	21.99	2.82	24.81	<=33.01	Pass
		12	0	22.06	2.82	24.88	<=33.01	Pass
			50	21.94	2.82	24.76	<=33.01	Pass
			99	21.96	2.82	24.78	<=33.01	Pass
		27	0	21.80	2.82	24.62	<=33.01	Pass
			44	21.86	2.82	24.68	<=33.01	Pass
			88	21.95	2.82	24.77	<=33.01	Pass
	2595	1	0	20.81	2.82	23.63	<=33.01	Pass
			0	21.98	2.82	24.80	<=33.01	Pass
			50	22.16	2.82	24.98	<=33.01	Pass
		12	99	22.13	2.82	24.95	<=33.01	Pass
			0	21.86	2.82	24.68	<=33.01	Pass
			44	21.86	2.82	24.68	<=33.01	Pass
		27	88	21.84	2.82	24.66	<=33.01	Pass
			0	20.83	2.82	23.65	<=33.01	Pass
			0	21.92	2.82	24.74	<=33.01	Pass
	2610	1	50	21.75	2.82	24.57	<=33.01	Pass
			99	21.80	2.82	24.62	<=33.01	Pass
			0	21.80	2.82	24.62	<=33.01	Pass
		12	44	22.02	2.82	24.84	<=33.01	Pass
			88	22.12	2.82	24.94	<=33.01	Pass
			0	21.01	2.82	23.83	<=33.01	Pass
		27	73	21.01	2.82	23.83	<=33.01	Pass
			0	21.92	2.82	24.74	<=33.01	Pass
			50	21.75	2.82	24.57	<=33.01	Pass
			99	21.80	2.82	24.62	<=33.01	Pass

Note1: EIRP=Conducted Power+Antenna Gain

2. Frequency Stability

2.1 Test Result

2.1.1 B38_5MHz

Band: 38 / Bandwidth: 5MHz									
Modulation	Frequency (MHz)	RB Allocation		Temp. (°C)	Voltage (VAC)	Freq. Error (Hz)	Freq. vs. Rated (ppm)		Verdict
		Size	Offset				Result	Limit	
QPSK	2572.5	25	0	20	102	-7.267	-0.0028	-2.5 to 2.5	Pass
					120	-17.853	-0.0069	-2.5 to 2.5	Pass
					138	-44.303	-0.0172	-2.5 to 2.5	Pass
				-30	120	635.505	0.2470	-2.5 to 2.5	Pass
				-20	120	620.327	0.2411	-2.5 to 2.5	Pass
				-10	120	611.572	0.2377	-2.5 to 2.5	Pass
				0	120	601.873	0.2340	-2.5 to 2.5	Pass
				10	120	1.817	0.0007	-2.5 to 2.5	Pass
				30	120	-23.003	-0.0089	-2.5 to 2.5	Pass
				40	120	-27.351	-0.0106	-2.5 to 2.5	Pass
				50	120	302.625	0.1176	-2.5 to 2.5	Pass
	2595	25	0	20	102	0.386	0.0001	-2.5 to 2.5	Pass
					120	1.230	0.0005	-2.5 to 2.5	Pass
					138	0.629	0.0002	-2.5 to 2.5	Pass
				-30	120	5.407	0.0021	-2.5 to 2.5	Pass
				-20	120	1.631	0.0006	-2.5 to 2.5	Pass
				-10	120	5.121	0.0020	-2.5 to 2.5	Pass
				0	120	-2.160	-0.0008	-2.5 to 2.5	Pass
				10	120	-6.866	-0.0026	-2.5 to 2.5	Pass
				30	120	-4.191	-0.0016	-2.5 to 2.5	Pass
				40	120	6.952	0.0027	-2.5 to 2.5	Pass
				50	120	-0.443	-0.0002	-2.5 to 2.5	Pass
	2617.5	25	0	20	102	-7.625	-0.0029	-2.5 to 2.5	Pass
					120	-7.410	-0.0028	-2.5 to 2.5	Pass
					138	-8.154	-0.0031	-2.5 to 2.5	Pass
				-30	120	-2.031	-0.0008	-2.5 to 2.5	Pass
				-20	120	-9.170	-0.0035	-2.5 to 2.5	Pass
				-10	120	-5.379	-0.0021	-2.5 to 2.5	Pass
				0	120	-16.880	-0.0064	-2.5 to 2.5	Pass
				10	120	-16.222	-0.0062	-2.5 to 2.5	Pass
				30	120	-14.820	-0.0057	-2.5 to 2.5	Pass
				40	120	-16.294	-0.0062	-2.5 to 2.5	Pass
				50	120	-6.866	-0.0026	-2.5 to 2.5	Pass
16QAM	2572.5	25	0	20	102	-1.473	-0.0006	-2.5 to 2.5	Pass
					120	11.888	0.0046	-2.5 to 2.5	Pass
					138	4.449	0.0017	-2.5 to 2.5	Pass
				-30	120	-4.234	-0.0016	-2.5 to 2.5	Pass
				-20	120	0.873	0.0003	-2.5 to 2.5	Pass
				-10	120	-4.435	-0.0017	-2.5 to 2.5	Pass
				0	120	5.250	0.0020	-2.5 to 2.5	Pass
				10	120	9.227	0.0036	-2.5 to 2.5	Pass
				30	120	2.961	0.0012	-2.5 to 2.5	Pass
				40	120	-0.343	-0.0001	-2.5 to 2.5	Pass
				50	120	4.292	0.0017	-2.5 to 2.5	Pass
	2595	25	0	20	102	5.980	0.0023	-2.5 to 2.5	Pass
					120	1.059	0.0004	-2.5 to 2.5	Pass
					138	6.309	0.0024	-2.5 to 2.5	Pass
				-30	120	-6.537	-0.0025	-2.5 to 2.5	Pass
				-20	120	-6.080	-0.0023	-2.5 to 2.5	Pass
				-10	120	0.143	0.0001	-2.5 to 2.5	Pass

				0	120	11.330	0.0044	-2.5 to 2.5	Pass
				10	120	7.482	0.0029	-2.5 to 2.5	Pass
				30	120	-6.366	-0.0025	-2.5 to 2.5	Pass
				40	120	5.765	0.0022	-2.5 to 2.5	Pass
				50	120	6.380	0.0025	-2.5 to 2.5	Pass
	2617.5	25	0	20	102	-2.246	-0.0009	-2.5 to 2.5	Pass
					120	-0.100	0.0000	-2.5 to 2.5	Pass
					138	-6.537	-0.0025	-2.5 to 2.5	Pass
				-30	120	-24.891	-0.0095	-2.5 to 2.5	Pass
				-20	120	-20.485	-0.0078	-2.5 to 2.5	Pass
				-10	120	-23.146	-0.0088	-2.5 to 2.5	Pass
				0	120	-15.306	-0.0058	-2.5 to 2.5	Pass
				10	120	-18.325	-0.0070	-2.5 to 2.5	Pass
				30	120	-16.923	-0.0065	-2.5 to 2.5	Pass
				40	120	-21.958	-0.0084	-2.5 to 2.5	Pass
				50	120	-28.710	-0.0110	-2.5 to 2.5	Pass

2.1.2 B38_10MHz

Band: 38 / Bandwidth: 10MHz									
Modulation	Frequency (MHz)	RB Allocation		Temp. (°C)	Voltage (VDC)	Freq. Error (Hz)	Freq. vs. Rated (ppm)		Verdict
		Size	Offset				Result	Limit	
QPSK	2575	50	0	20	102	3.905	0.0015	-2.5 to 2.5	Pass
					120	-0.429	-0.0002	-2.5 to 2.5	Pass
					138	2.961	0.0011	-2.5 to 2.5	Pass
				-30	120	3.104	0.0012	-2.5 to 2.5	Pass
				-20	120	3.591	0.0014	-2.5 to 2.5	Pass
				-10	120	4.249	0.0017	-2.5 to 2.5	Pass
				0	120	1.931	0.0007	-2.5 to 2.5	Pass
				10	120	0.172	0.0001	-2.5 to 2.5	Pass
				30	120	9.542	0.0037	-2.5 to 2.5	Pass
				40	120	5.007	0.0019	-2.5 to 2.5	Pass
				50	120	6.766	0.0026	-2.5 to 2.5	Pass
	2595	50	0	20	102	1.345	0.0005	-2.5 to 2.5	Pass
					120	1.001	0.0004	-2.5 to 2.5	Pass
					138	5.250	0.0020	-2.5 to 2.5	Pass
				-30	120	4.492	0.0017	-2.5 to 2.5	Pass
				-20	120	5.350	0.0021	-2.5 to 2.5	Pass
				-10	120	1.602	0.0006	-2.5 to 2.5	Pass
				0	120	-5.937	-0.0023	-2.5 to 2.5	Pass
				10	120	1.287	0.0005	-2.5 to 2.5	Pass
				30	120	2.990	0.0012	-2.5 to 2.5	Pass
				40	120	1.631	0.0006	-2.5 to 2.5	Pass
				50	120	9.170	0.0035	-2.5 to 2.5	Pass
	2615	50	0	20	102	2.017	0.0008	-2.5 to 2.5	Pass
					120	-2.346	-0.0009	-2.5 to 2.5	Pass
					138	1.903	0.0007	-2.5 to 2.5	Pass
				-30	120	4.578	0.0018	-2.5 to 2.5	Pass
				-20	120	-1.574	-0.0006	-2.5 to 2.5	Pass
				-10	120	0.558	0.0002	-2.5 to 2.5	Pass
				0	120	1.101	0.0004	-2.5 to 2.5	Pass
				10	120	4.306	0.0016	-2.5 to 2.5	Pass
				30	120	0.515	0.0002	-2.5 to 2.5	Pass
				40	120	1.888	0.0007	-2.5 to 2.5	Pass
16QAM	2575	27	0	20	102	7.224	0.0028	-2.5 to 2.5	Pass
					120	-5.679	-0.0022	-2.5 to 2.5	Pass
					138	0.043	0.0000	-2.5 to 2.5	Pass
				-30	120	1.316	0.0005	-2.5 to 2.5	Pass
				-20	120	1.388	0.0005	-2.5 to 2.5	Pass
				-10	120	-4.892	-0.0019	-2.5 to 2.5	Pass
				0	120	12.631	0.0049	-2.5 to 2.5	Pass
				10	120	0.000	0.0000	-2.5 to 2.5	Pass
				30	120	-5.350	-0.0021	-2.5 to 2.5	Pass
				40	120	2.160	0.0008	-2.5 to 2.5	Pass
				50	120	7.110	0.0028	-2.5 to 2.5	Pass
	2595	27	0	20	102	5.450	0.0021	-2.5 to 2.5	Pass
					120	-0.029	0.0000	-2.5 to 2.5	Pass
					138	5.922	0.0023	-2.5 to 2.5	Pass
				-30	120	7.253	0.0028	-2.5 to 2.5	Pass
				-20	120	2.589	0.0010	-2.5 to 2.5	Pass
				-10	120	4.807	0.0019	-2.5 to 2.5	Pass
				0	120	14.262	0.0055	-2.5 to 2.5	Pass
				10	120	3.376	0.0013	-2.5 to 2.5	Pass
				30	120	0.129	0.0000	-2.5 to 2.5	Pass
				40	120	2.031	0.0008	-2.5 to 2.5	Pass
				50	120	5.107	0.0020	-2.5 to 2.5	Pass

	2615	27	23	20	102	-3.333	-0.0013	-2.5 to 2.5	Pass
					120	-0.844	-0.0003	-2.5 to 2.5	Pass
					138	-2.046	-0.0008	-2.5 to 2.5	Pass
				-30	120	6.151	0.0024	-2.5 to 2.5	Pass
				-20	120	8.140	0.0031	-2.5 to 2.5	Pass
				-10	120	-3.777	-0.0014	-2.5 to 2.5	Pass
				0	120	-0.443	-0.0002	-2.5 to 2.5	Pass
				10	120	-2.789	-0.0011	-2.5 to 2.5	Pass
				30	120	-0.257	-0.0001	-2.5 to 2.5	Pass
				40	120	7.067	0.0027	-2.5 to 2.5	Pass
				50	120	-3.762	-0.0014	-2.5 to 2.5	Pass

2.1.3 B38_15MHz

Band: 38 / Bandwidth: 15MHz									
Modulation	Frequency (MHz)	RB Allocation		Temp. (°C)	Voltage (VDC)	Freq. Error (Hz)	Freq. vs. Rated (ppm)		Verdict
		Size	Offset				Result	Limit	
QPSK	2577.5	75	0	20	102	0.157	0.0001	-2.5 to 2.5	Pass
					120	3.490	0.0014	-2.5 to 2.5	Pass
					138	-2.046	-0.0008	-2.5 to 2.5	Pass
				-30	120	4.034	0.0016	-2.5 to 2.5	Pass
				-20	120	3.247	0.0013	-2.5 to 2.5	Pass
				-10	120	2.117	0.0008	-2.5 to 2.5	Pass
				0	120	2.060	0.0008	-2.5 to 2.5	Pass
				10	120	8.011	0.0031	-2.5 to 2.5	Pass
				30	120	5.779	0.0022	-2.5 to 2.5	Pass
				40	120	-0.014	0.0000	-2.5 to 2.5	Pass
				50	120	2.389	0.0009	-2.5 to 2.5	Pass
	2595	75	0	20	102	-1.874	-0.0007	-2.5 to 2.5	Pass
					120	0.987	0.0004	-2.5 to 2.5	Pass
					138	1.016	0.0004	-2.5 to 2.5	Pass
				-30	120	0.257	0.0001	-2.5 to 2.5	Pass
				-20	120	-1.559	-0.0006	-2.5 to 2.5	Pass
				-10	120	2.832	0.0011	-2.5 to 2.5	Pass
				0	120	6.166	0.0024	-2.5 to 2.5	Pass
				10	120	0.844	0.0003	-2.5 to 2.5	Pass
				30	120	-1.702	-0.0007	-2.5 to 2.5	Pass
				40	120	-2.089	-0.0008	-2.5 to 2.5	Pass
				50	120	-0.072	0.0000	-2.5 to 2.5	Pass
	2612.5	75	0	20	102	2.131	0.0008	-2.5 to 2.5	Pass
					120	-0.229	-0.0001	-2.5 to 2.5	Pass
					138	5.007	0.0019	-2.5 to 2.5	Pass
				-30	120	2.046	0.0008	-2.5 to 2.5	Pass
				-20	120	1.144	0.0004	-2.5 to 2.5	Pass
				-10	120	0.114	0.0000	-2.5 to 2.5	Pass
				0	120	2.332	0.0009	-2.5 to 2.5	Pass
				10	120	0.615	0.0002	-2.5 to 2.5	Pass
				30	120	3.176	0.0012	-2.5 to 2.5	Pass
				40	120	-4.506	-0.0017	-2.5 to 2.5	Pass
16QAM	2577.5	27	0	20	102	11.716	0.0045	-2.5 to 2.5	Pass
					120	6.051	0.0023	-2.5 to 2.5	Pass
					138	1.988	0.0008	-2.5 to 2.5	Pass
				-30	120	13.633	0.0053	-2.5 to 2.5	Pass
				-20	120	5.836	0.0023	-2.5 to 2.5	Pass
				-10	120	8.283	0.0032	-2.5 to 2.5	Pass
				0	120	6.094	0.0024	-2.5 to 2.5	Pass
				10	120	-6.108	-0.0024	-2.5 to 2.5	Pass
				30	120	0.114	0.0000	-2.5 to 2.5	Pass
				40	120	6.738	0.0026	-2.5 to 2.5	Pass
				50	120	8.769	0.0034	-2.5 to 2.5	Pass
	2595	27	0	20	102	-0.715	-0.0003	-2.5 to 2.5	Pass
					120	1.731	0.0007	-2.5 to 2.5	Pass
					138	7.038	0.0027	-2.5 to 2.5	Pass
				-30	120	4.349	0.0017	-2.5 to 2.5	Pass
				-20	120	-4.463	-0.0017	-2.5 to 2.5	Pass
				-10	120	-5.035	-0.0019	-2.5 to 2.5	Pass
				0	120	0.014	0.0000	-2.5 to 2.5	Pass
				10	120	4.220	0.0016	-2.5 to 2.5	Pass
				30	120	6.137	0.0024	-2.5 to 2.5	Pass
				40	120	1.073	0.0004	-2.5 to 2.5	Pass
				50	120	-0.987	-0.0004	-2.5 to 2.5	Pass

	2612.5	27	48	20	102	-3.304	-0.0013	-2.5 to 2.5	Pass
					120	-0.644	-0.0002	-2.5 to 2.5	Pass
					138	4.792	0.0018	-2.5 to 2.5	Pass
				-30	120	-0.615	-0.0002	-2.5 to 2.5	Pass
				-20	120	2.389	0.0009	-2.5 to 2.5	Pass
				-10	120	-5.293	-0.0020	-2.5 to 2.5	Pass
				0	120	5.307	0.0020	-2.5 to 2.5	Pass
				10	120	5.565	0.0021	-2.5 to 2.5	Pass
				30	120	6.967	0.0027	-2.5 to 2.5	Pass
				40	120	0.086	0.0000	-2.5 to 2.5	Pass
				50	120	6.137	0.0023	-2.5 to 2.5	Pass

2.1.4 B38_20MHz

Band: 38 / Bandwidth: 20MHz									
Modulation	Frequency (MHz)	RB Allocation		Temp. (°C)	Voltage (VDC)	Freq. Error (Hz)	Freq. vs. Rated (ppm)		Verdict
		Size	Offset				Result	Limit	
QPSK	2580	100	0	20	102	1.230	0.0005	-2.5 to 2.5	Pass
					120	1.531	0.0006	-2.5 to 2.5	Pass
					138	1.287	0.0005	-2.5 to 2.5	Pass
				-30	120	2.246	0.0009	-2.5 to 2.5	Pass
				-20	120	0.701	0.0003	-2.5 to 2.5	Pass
				-10	120	1.073	0.0004	-2.5 to 2.5	Pass
				0	120	5.107	0.0020	-2.5 to 2.5	Pass
				10	120	0.944	0.0004	-2.5 to 2.5	Pass
				30	120	-0.744	-0.0003	-2.5 to 2.5	Pass
				40	120	3.705	0.0014	-2.5 to 2.5	Pass
				50	120	3.133	0.0012	-2.5 to 2.5	Pass
	2595	100	0	20	102	2.947	0.0011	-2.5 to 2.5	Pass
					120	6.080	0.0023	-2.5 to 2.5	Pass
					138	1.960	0.0008	-2.5 to 2.5	Pass
				-30	120	-2.618	-0.0010	-2.5 to 2.5	Pass
				-20	120	-1.459	-0.0006	-2.5 to 2.5	Pass
				-10	120	6.466	0.0025	-2.5 to 2.5	Pass
				0	120	2.747	0.0011	-2.5 to 2.5	Pass
				10	120	-0.501	-0.0002	-2.5 to 2.5	Pass
				30	120	2.661	0.0010	-2.5 to 2.5	Pass
				40	120	1.774	0.0007	-2.5 to 2.5	Pass
				50	120	7.396	0.0029	-2.5 to 2.5	Pass
	2610	100	0	20	102	3.104	0.0012	-2.5 to 2.5	Pass
					120	0.229	0.0001	-2.5 to 2.5	Pass
					138	1.974	0.0008	-2.5 to 2.5	Pass
				-30	120	7.782	0.0030	-2.5 to 2.5	Pass
				-20	120	0.858	0.0003	-2.5 to 2.5	Pass
				-10	120	2.704	0.0010	-2.5 to 2.5	Pass
				0	120	1.674	0.0006	-2.5 to 2.5	Pass
				10	120	-1.602	-0.0006	-2.5 to 2.5	Pass
				30	120	0.958	0.0004	-2.5 to 2.5	Pass
				40	120	3.133	0.0012	-2.5 to 2.5	Pass
16QAM	2580	27	0	20	102	4.177	0.0016	-2.5 to 2.5	Pass
					120	0.114	0.0000	-2.5 to 2.5	Pass
					138	-7.367	-0.0029	-2.5 to 2.5	Pass
				-30	120	0.486	0.0002	-2.5 to 2.5	Pass
				-20	120	-3.033	-0.0012	-2.5 to 2.5	Pass
				-10	120	-8.698	-0.0034	-2.5 to 2.5	Pass
				0	120	12.002	0.0047	-2.5 to 2.5	Pass
				10	120	7.954	0.0031	-2.5 to 2.5	Pass
				30	120	-7.110	-0.0028	-2.5 to 2.5	Pass
				40	120	-1.473	-0.0006	-2.5 to 2.5	Pass
				50	120	-1.402	-0.0005	-2.5 to 2.5	Pass
	2595	27	0	20	102	2.704	0.0010	-2.5 to 2.5	Pass
					120	-4.420	-0.0017	-2.5 to 2.5	Pass
					138	0.443	0.0002	-2.5 to 2.5	Pass
				-30	120	-0.043	0.0000	-2.5 to 2.5	Pass
				-20	120	2.804	0.0011	-2.5 to 2.5	Pass
				-10	120	1.044	0.0004	-2.5 to 2.5	Pass
				0	120	1.659	0.0006	-2.5 to 2.5	Pass
				10	120	3.090	0.0012	-2.5 to 2.5	Pass
				30	120	4.721	0.0018	-2.5 to 2.5	Pass
				40	120	-3.819	-0.0015	-2.5 to 2.5	Pass
				50	120	0.229	0.0001	-2.5 to 2.5	Pass

	2610	27	73	20	102	-1.101	-0.0004	-2.5 to 2.5	Pass
					120	8.898	0.0034	-2.5 to 2.5	Pass
					138	10.328	0.0040	-2.5 to 2.5	Pass
				-30	120	4.435	0.0017	-2.5 to 2.5	Pass
				-20	120	1.345	0.0005	-2.5 to 2.5	Pass
				-10	120	3.405	0.0013	-2.5 to 2.5	Pass
				0	120	4.621	0.0018	-2.5 to 2.5	Pass
				10	120	-9.341	-0.0036	-2.5 to 2.5	Pass
				30	120	8.798	0.0034	-2.5 to 2.5	Pass
				40	120	3.991	0.0015	-2.5 to 2.5	Pass
				50	120	7.010	0.0027	-2.5 to 2.5	Pass

3. Modulation Characteristics

3.1 Test Result

3.1.1 B38_5MHz

Band: 38 / Bandwidth: 5MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Modulation Characteristics		Verdict
		Size	Offset	Result	Limit	
QPSK	2595	25	0	Refer To Test Graph		Pass
16QAM	2595	25	0	Refer To Test Graph		Pass

3.1.2 B38_10MHz

Band: 38 / Bandwidth: 10MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Modulation Characteristics		Verdict
		Size	Offset	Result	Limit	
QPSK	2595	50	0	Refer To Test Graph		Pass
16QAM	2595	27	0	Refer To Test Graph		Pass

3.1.3 B38_15MHz

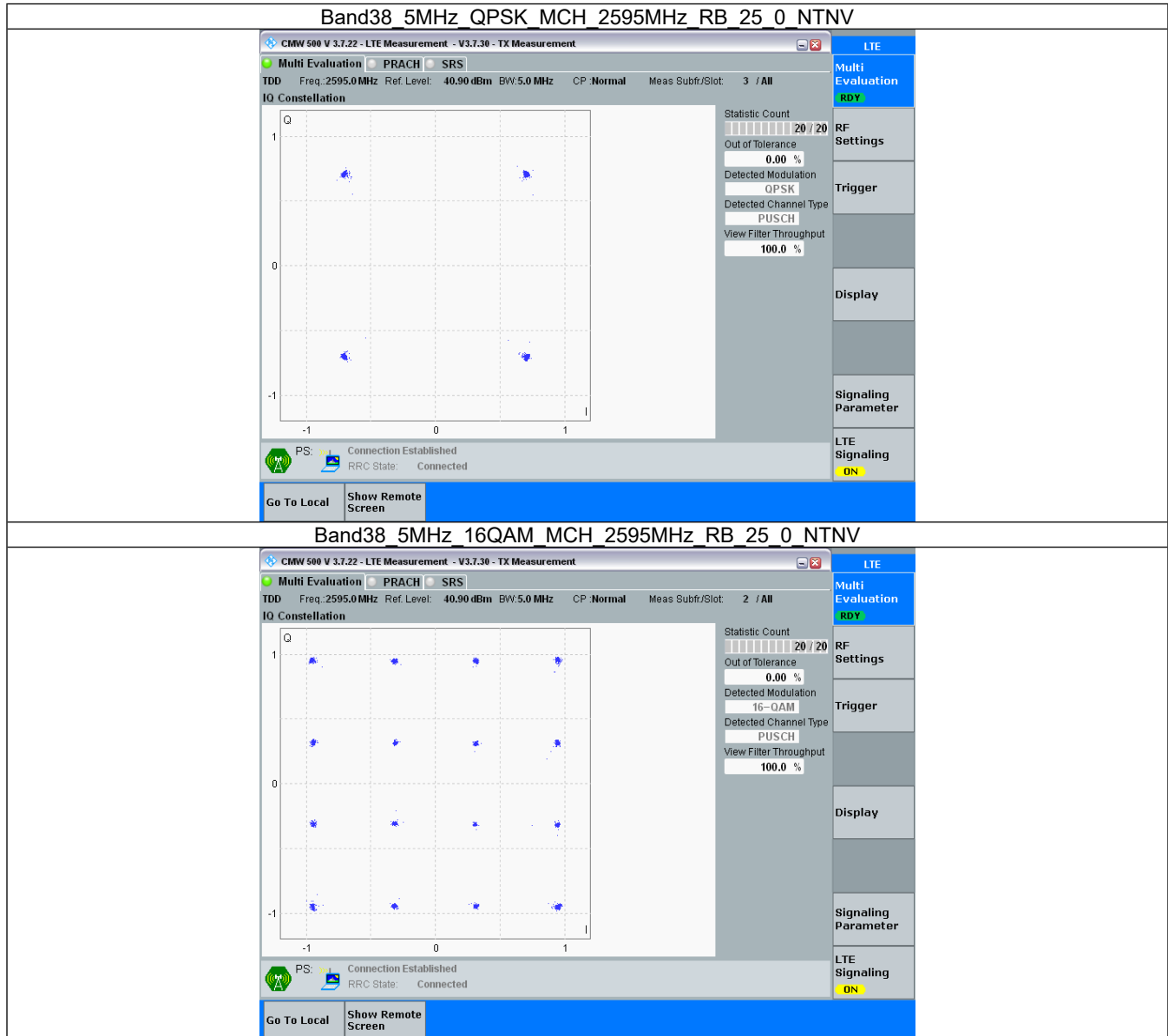
Band: 38 / Bandwidth: 15MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Modulation Characteristics		Verdict
		Size	Offset	Result	Limit	
QPSK	2595	75	0	Refer To Test Graph		Pass
16QAM	2595	27	0	Refer To Test Graph		Pass

3.1.4 B38_20MHz

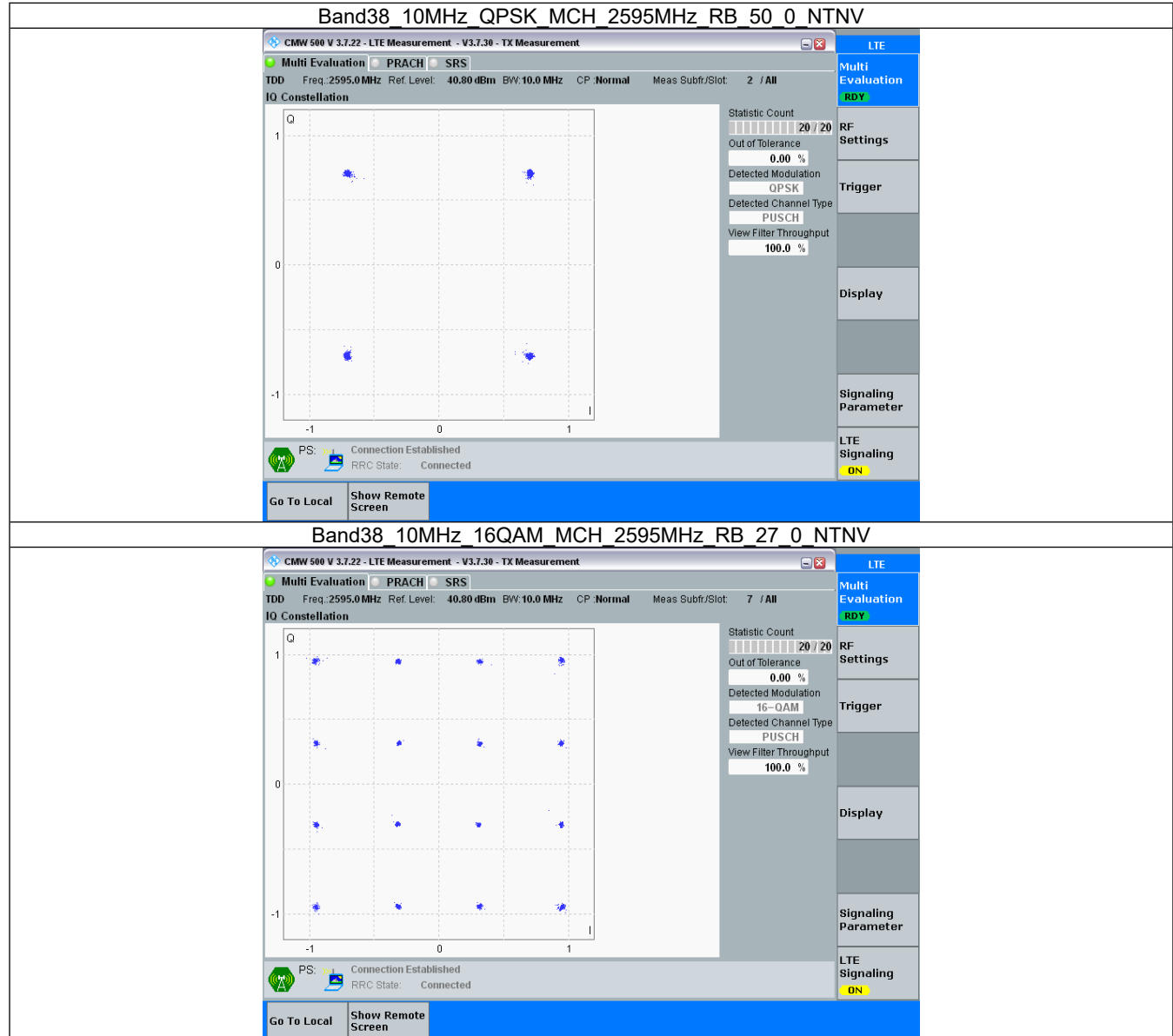
Band: 38 / Bandwidth: 20MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Modulation Characteristics		Verdict
		Size	Offset	Result	Limit	
QPSK	2595	100	0	Refer To Test Graph		Pass
16QAM	2595	27	0	Refer To Test Graph		Pass

3.2 Test Graph

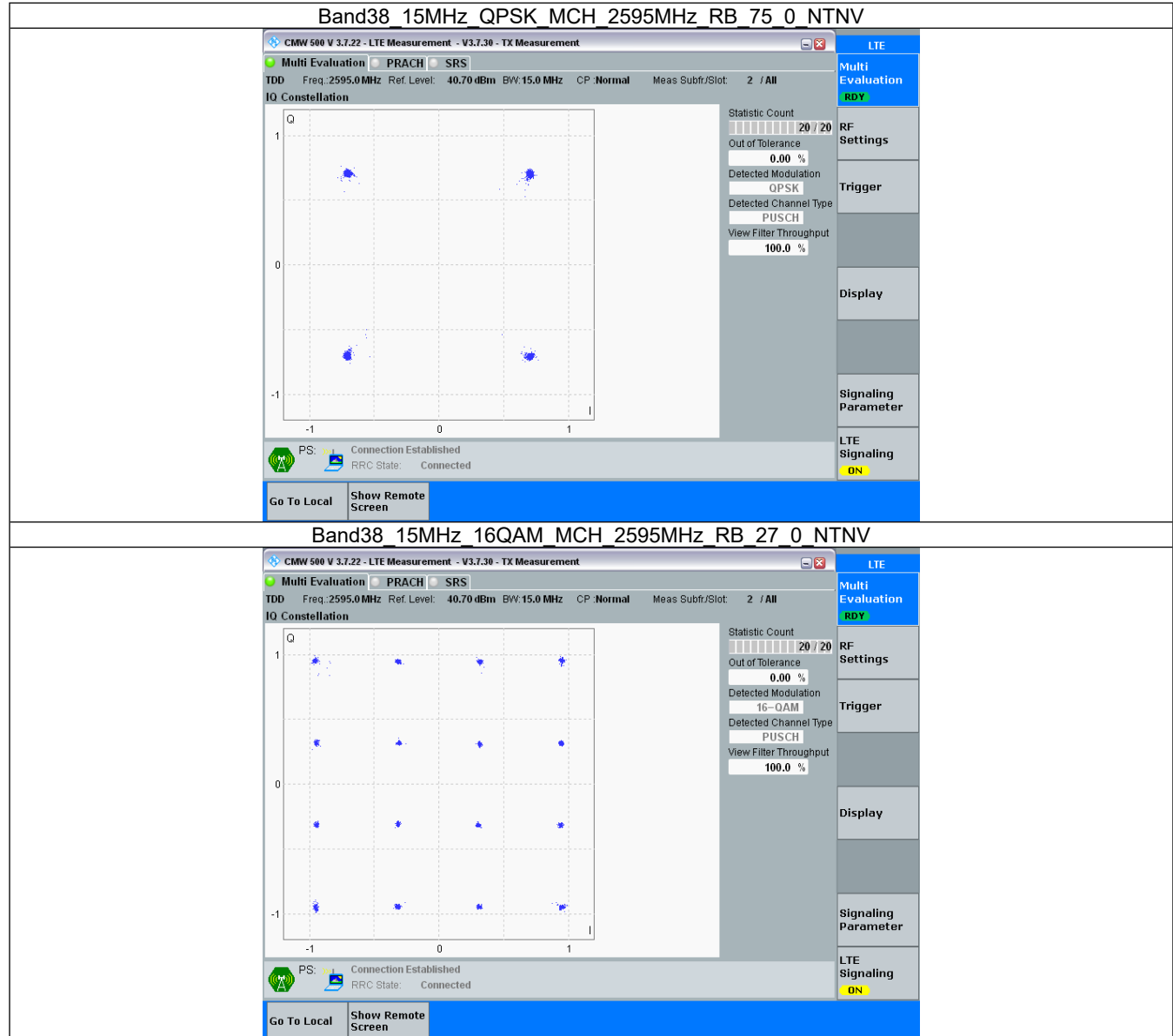
3.2.1 B38_5MHz



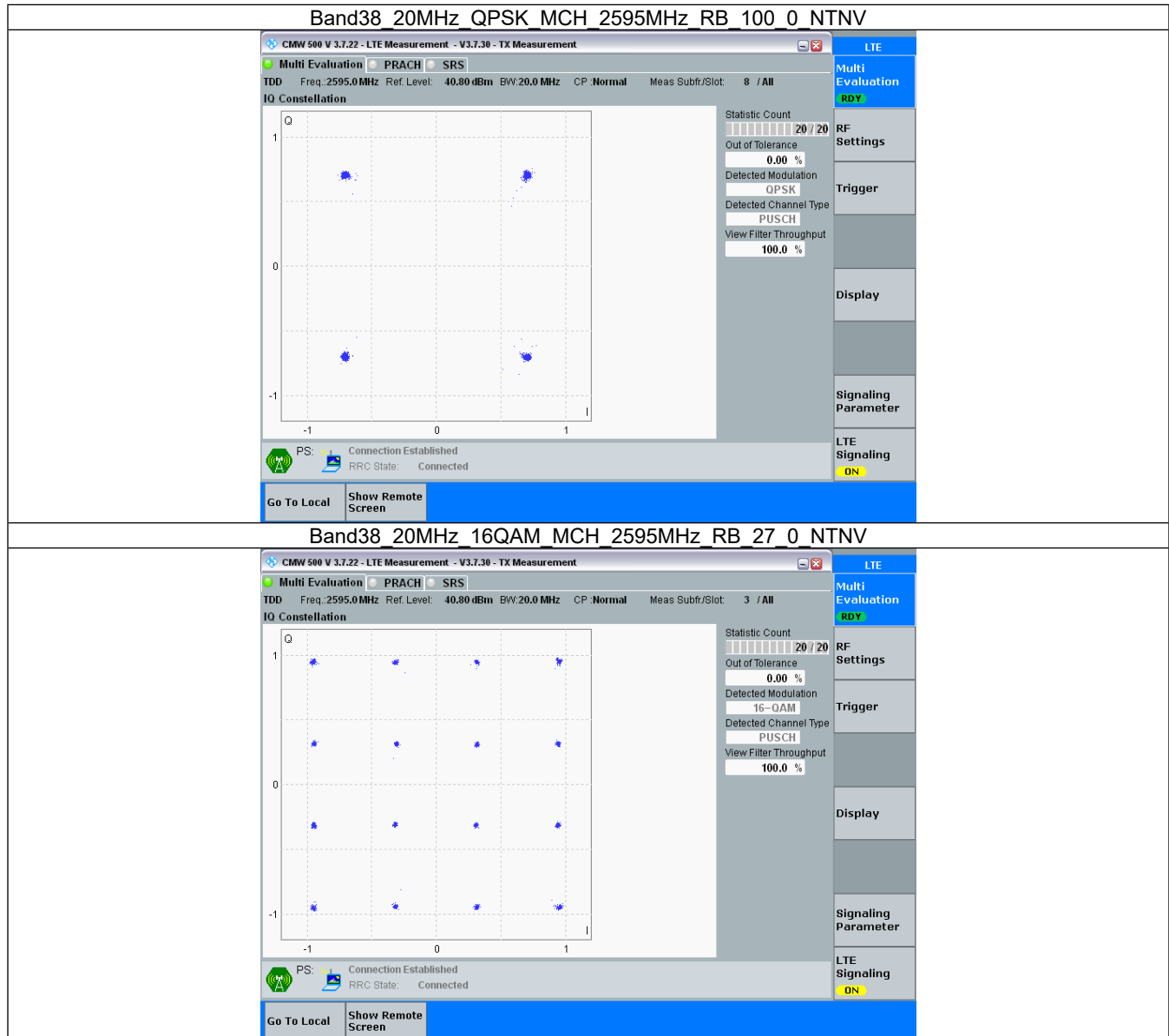
3.2.2 B38_10MHz



3.2.3 B38_15MHz



3.2.4 B38_20MHz



4. 99% & 26dB Bandwidth

4.1 Test Result

4.1.1 Band38_OBW

Band: 38 / NTNV							
Bandwidth (MHz)	Modulation	Frequency (MHz)	RB Allocation		99% Occupied Bandwidth (MHz)		Verdict
			Size	Offset	Result	Limit	
5	QPSK	2572.5	25	0	4.555	/	Pass
		2595	25	0	4.561	/	Pass
		2617.5	25	0	4.552	/	Pass
	16QAM	2572.5	25	0	4.550	/	Pass
		2595	25	0	4.542	/	Pass
		2617.5	25	0	4.555	/	Pass
10	QPSK	2575	50	0	9.085	/	Pass
		2595	50	0	9.085	/	Pass
		2615	50	0	9.065	/	Pass
	16QAM	2575	27	0	5.127	/	Pass
		2595	27	0	5.121	/	Pass
		2615	27	23	5.091	/	Pass
15	QPSK	2577.5	75	0	13.533	/	Pass
		2595	75	0	13.584	/	Pass
		2612.5	75	0	13.627	/	Pass
	16QAM	2577.5	27	0	5.340	/	Pass
		2595	27	0	5.395	/	Pass
		2612.5	27	48	5.357	/	Pass
20	QPSK	2580	100	0	18.148	/	Pass
		2595	100	0	18.076	/	Pass
		2610	100	0	18.144	/	Pass
	16QAM	2580	27	0	5.814	/	Pass
		2595	27	0	5.656	/	Pass
		2610	27	73	5.588	/	Pass

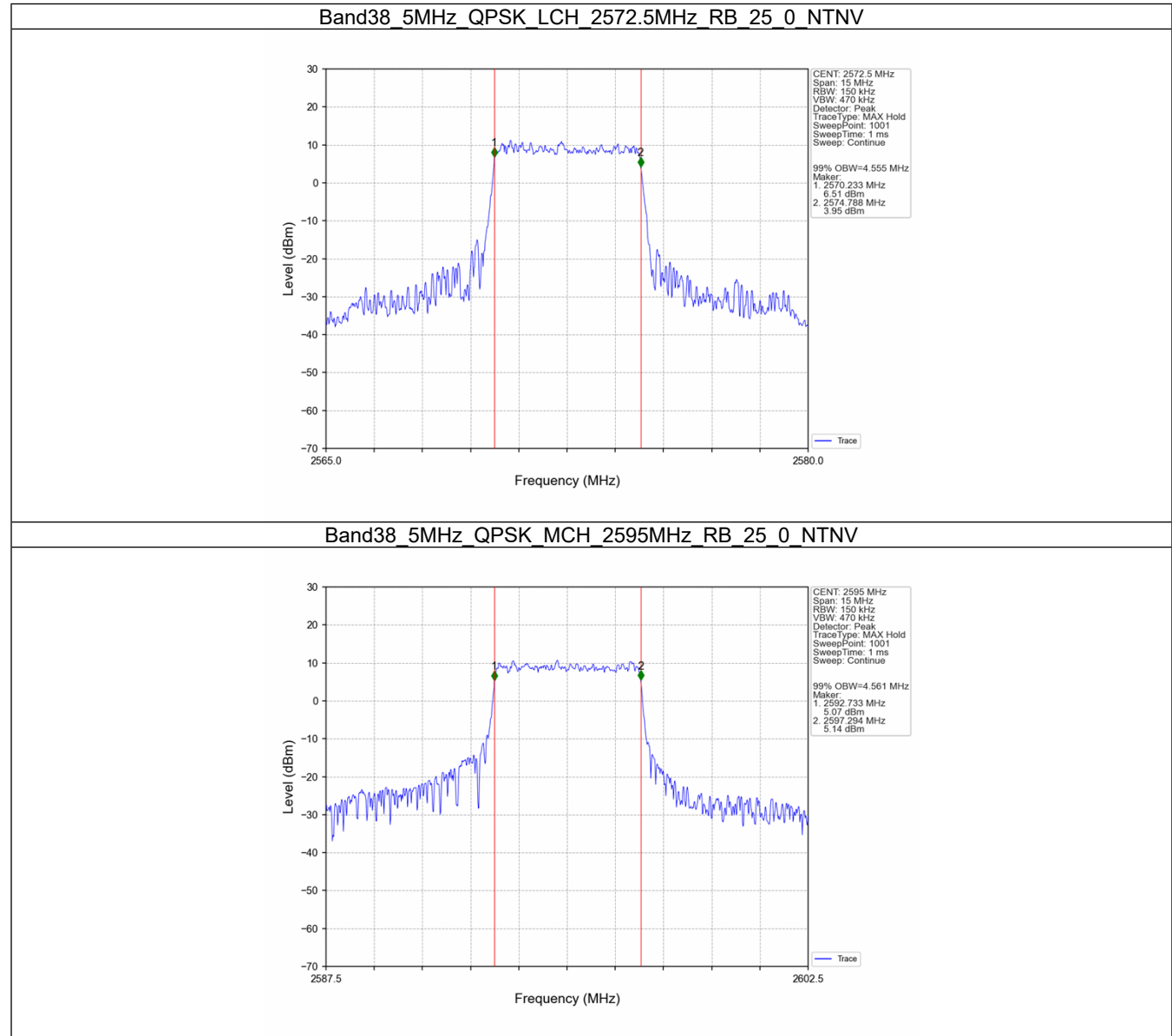
4.1.2 Band38_XDB

Band: 38 / NTNV							
Bandwidth (MHz)	Modulation	Frequency (MHz)	RB Allocation		26dB Bandwidth (MHz)		Verdict
			Size	Offset	Result	Limit	
5	QPSK	2572.5	25	0	5.051	/	Pass
		2595	25	0	5.824	/	Pass
		2617.5	25	0	5.817	/	Pass
	16QAM	2572.5	25	0	5.068	/	Pass
		2595	25	0	5.128	/	Pass
		2617.5	25	0	5.069	/	Pass
10	QPSK	2575	50	0	10.738	/	Pass
		2595	50	0	10.300	/	Pass
		2615	50	0	11.953	/	Pass
	16QAM	2575	27	0	6.851	/	Pass
		2595	27	0	6.555	/	Pass
		2615	27	23	6.216	/	Pass
15	QPSK	2577.5	75	0	15.727	/	Pass
		2595	75	0	15.103	/	Pass
		2612.5	75	0	15.673	/	Pass
	16QAM	2577.5	27	0	7.076	/	Pass
		2595	27	0	7.036	/	Pass
		2612.5	27	48	7.151	/	Pass
20	QPSK	2580	100	0	24.838	/	Pass

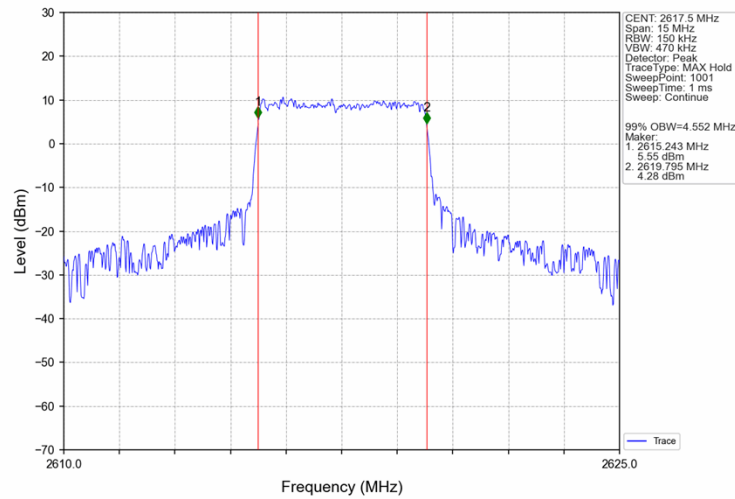
		2595	100	0	21.412	/	Pass
		2610	100	0	20.425	/	Pass
	16QAM	2580	27	0	12.994	/	Pass
		2595	27	0	8.077	/	Pass
		2610	27	73	7.853	/	Pass

4.2 Test Graph

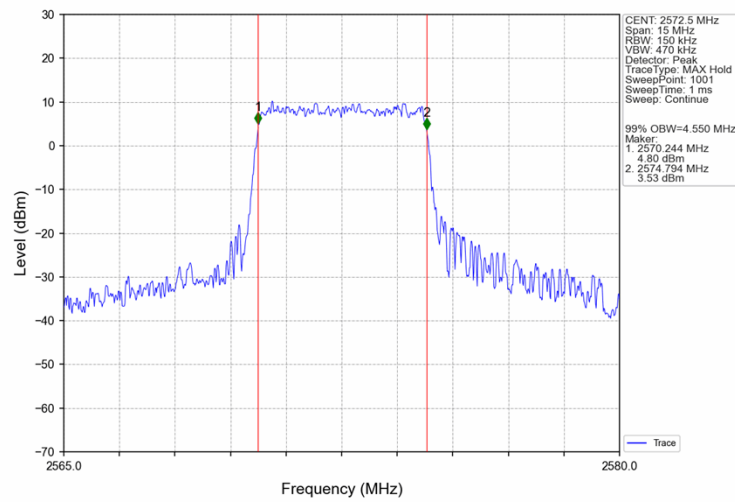
4.2.1 Band38_OBW



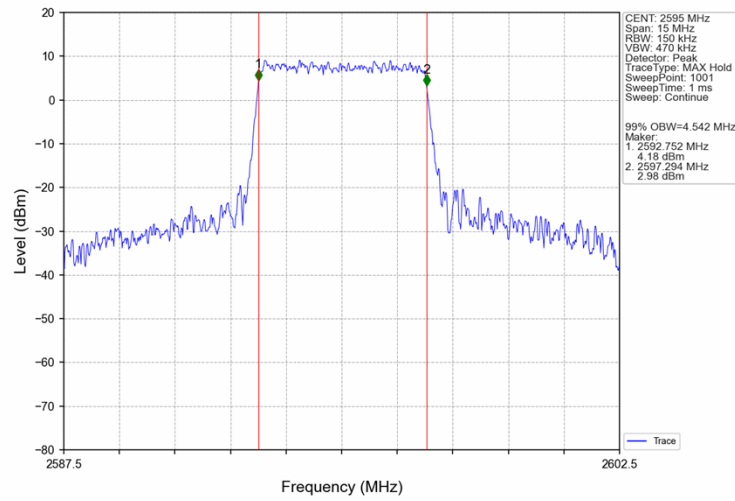
Band38_5MHz_QPSK_HCH_2617.5MHz_RB_25_0_NTNV



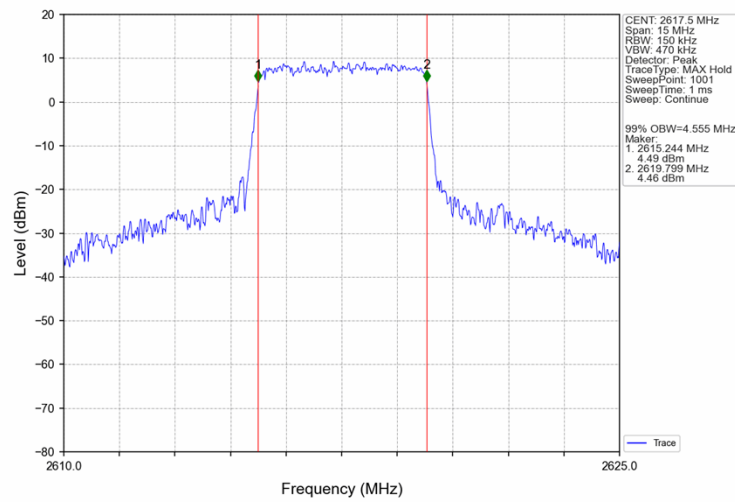
Band38_5MHz_16QAM_LCH_2572.5MHz_RB_25_0_NTNV



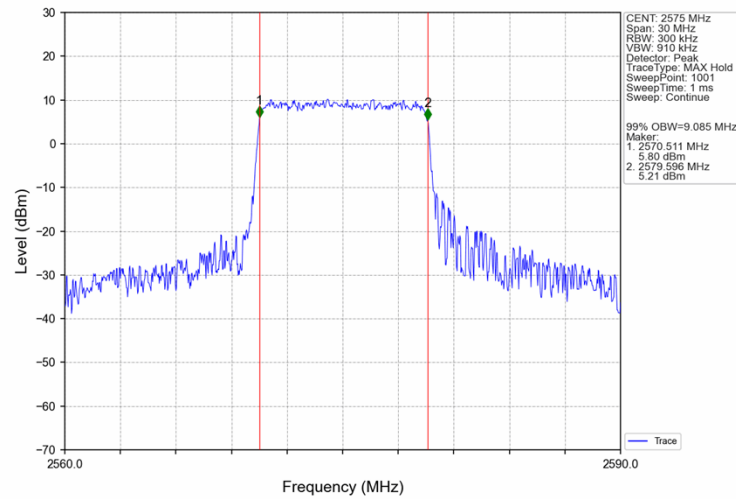
Band38_5MHz_16QAM_MCH_2595MHz_RB_25_0_NTNV



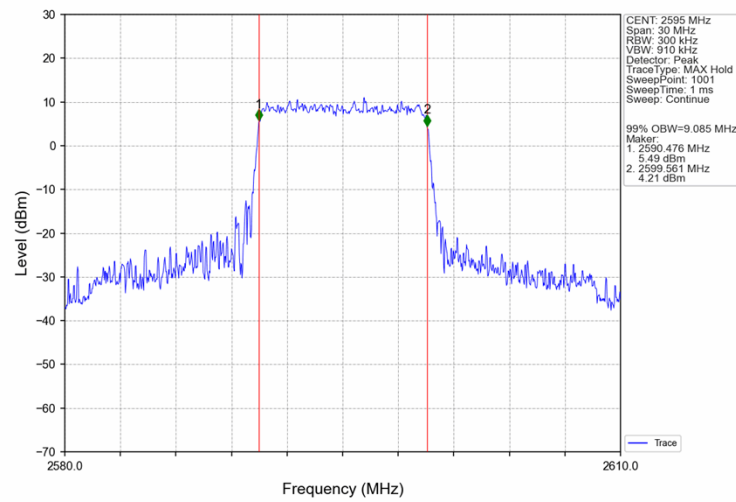
Band38_5MHz_16QAM_HCH_2617.5MHz_RB_25_0_NTNV



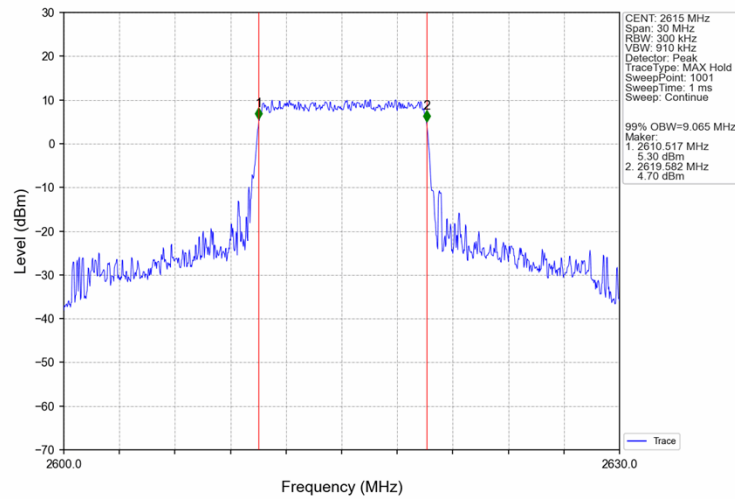
Band38_10MHz_QPSK_LCH_2575MHz_RB_50_0_NTNV



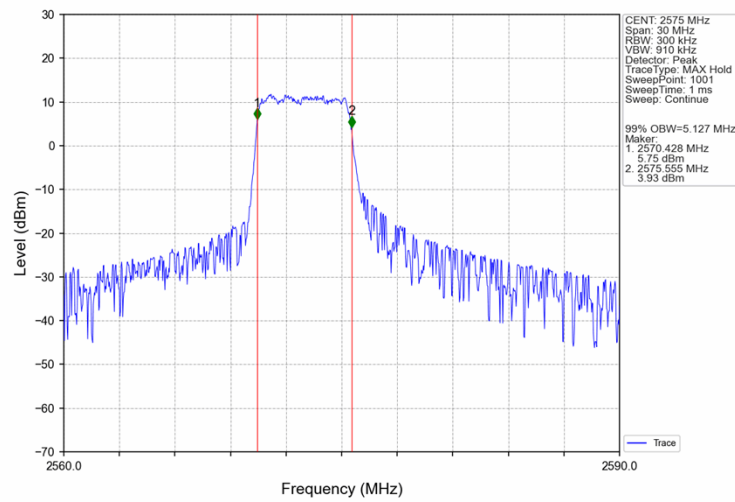
Band38_10MHz_QPSK_MCH_2595MHz_RB_50_0_NTNV



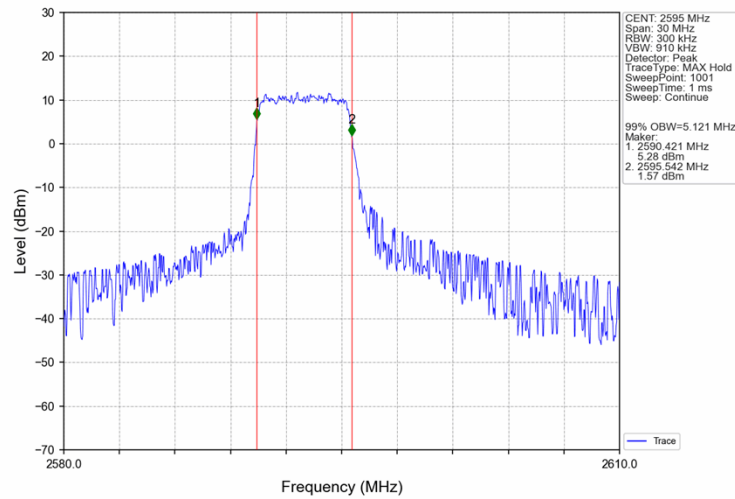
Band38_10MHz_QPSK_HCH_2615MHz_RB_50_0_NTNV



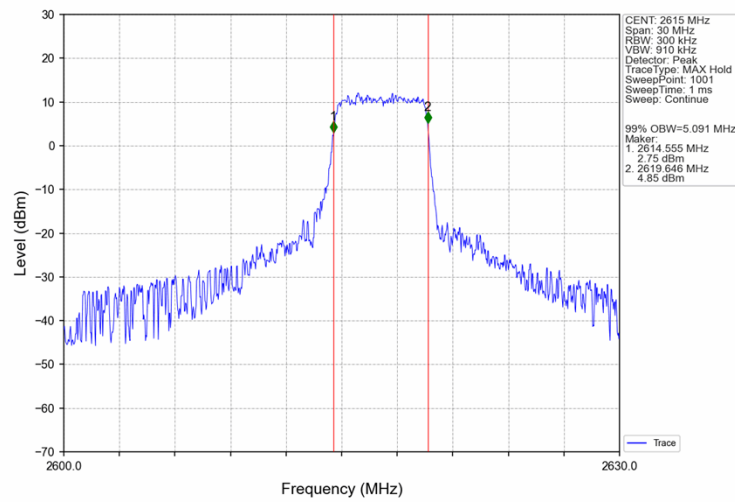
Band38_10MHz_16QAM_LCH_2575MHz_RB_27_0_NTNV



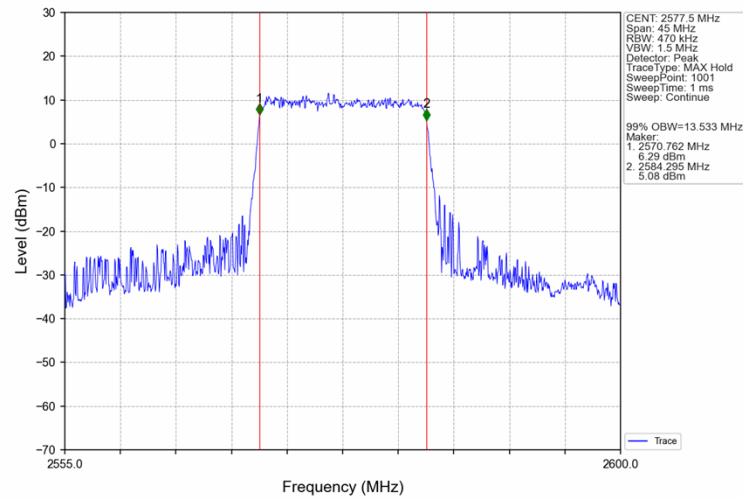
Band38_10MHz_16QAM_MCH_2595MHz_RB_27_0_NTNV



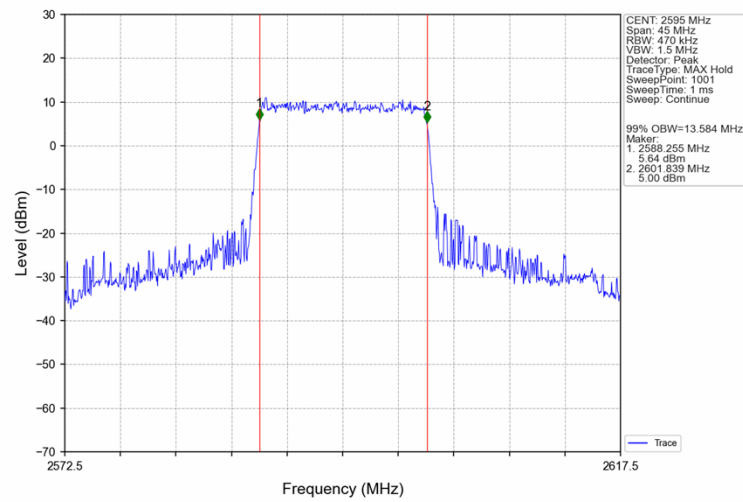
Band38_10MHz_16QAM_HCH_2615MHz_RB_27_23_NTNV



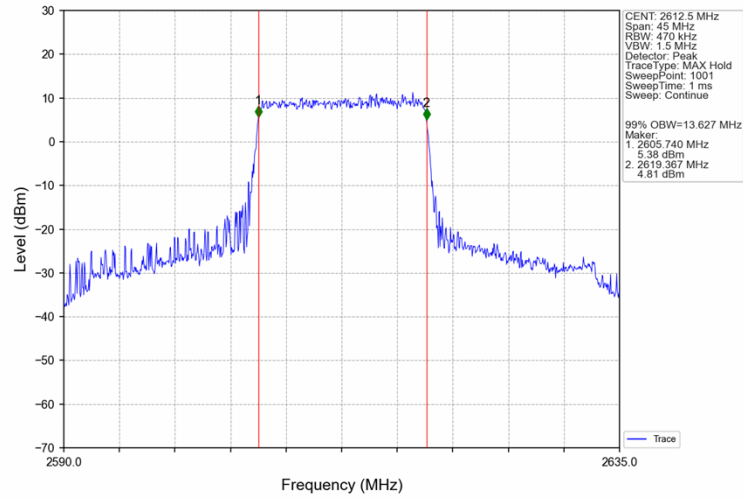
Band38_15MHz_QPSK_LCH_2577.5MHz_RB_75_0_NTNV



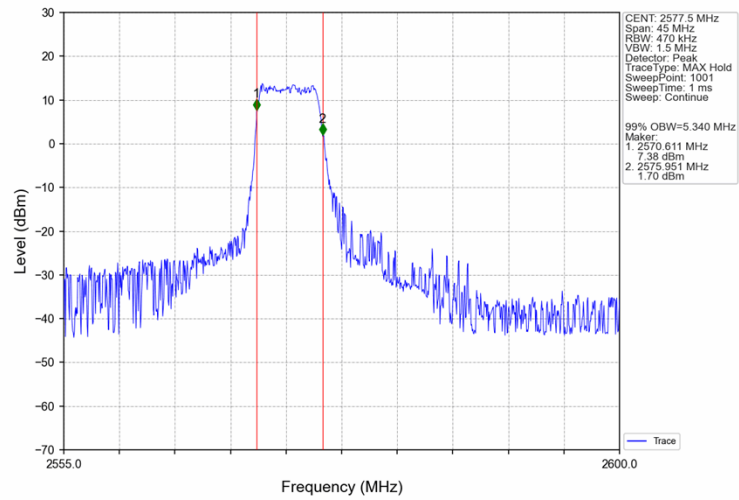
Band38_15MHz_QPSK_MCH_2595MHz_RB_75_0_NTNV



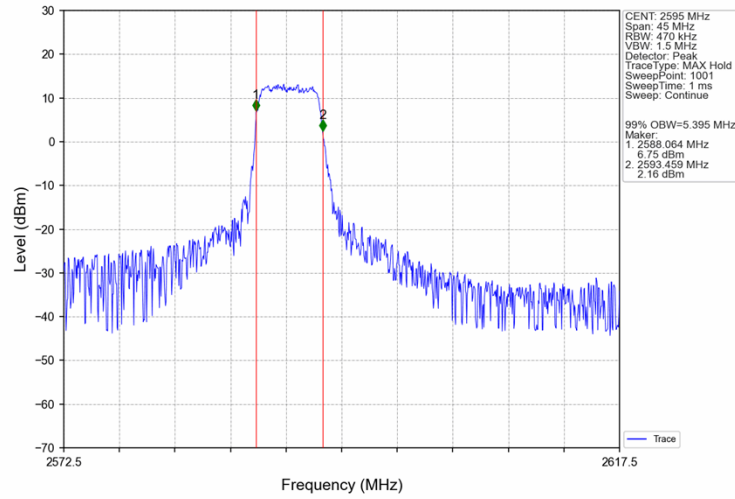
Band38_15MHz_QPSK_HCH_2612.5MHz_RB_75_0_NTNV



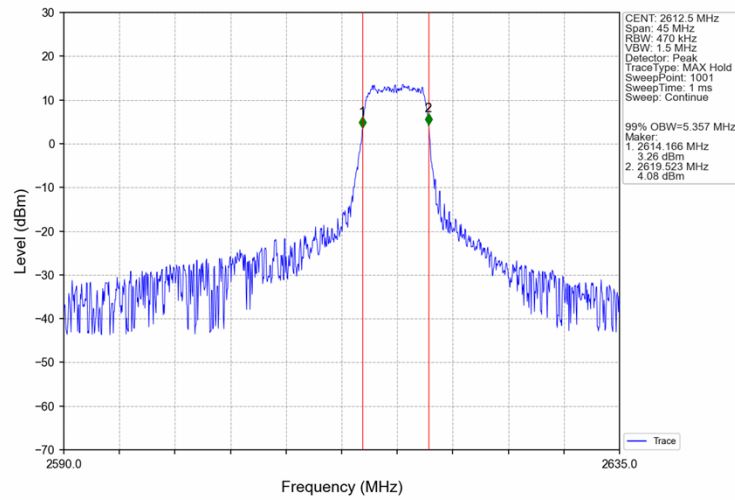
Band38_15MHz_16QAM_LCH_2577.5MHz_RB_27_0_NTNV



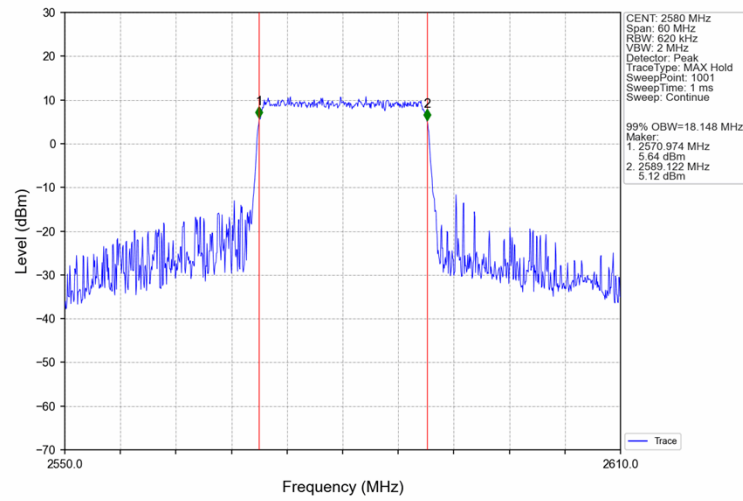
Band38_15MHz_16QAM_MCH_2595MHz_RB_27_0_NTNV



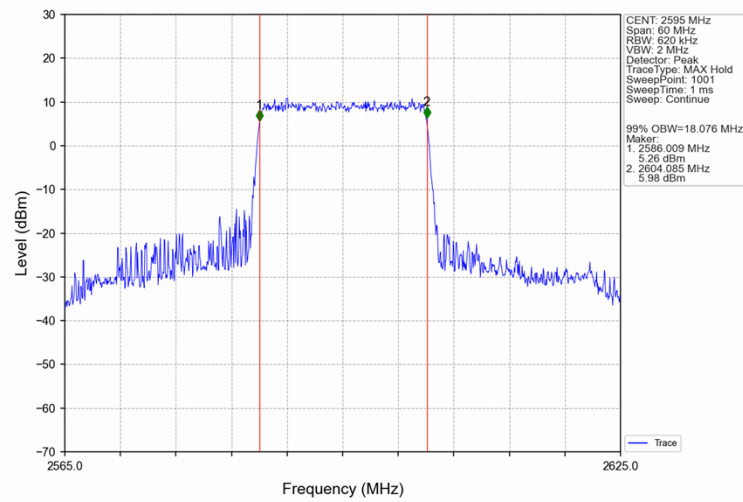
Band38_15MHz_16QAM_HCH_2612.5MHz_RB_27_48_NTNV



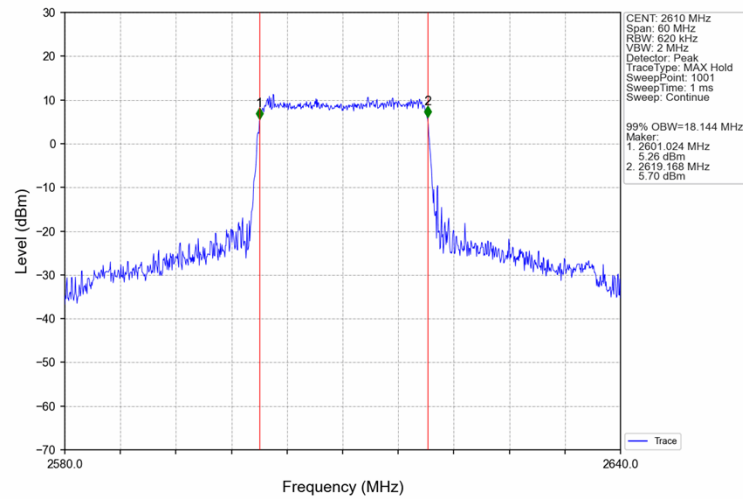
Band38_20MHz_QPSK_LCH_2580MHz_RB_100_0_NTNV



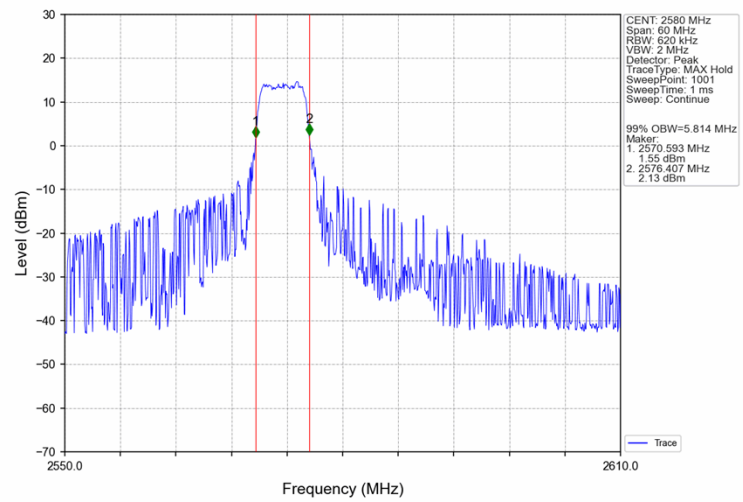
Band38_20MHz_QPSK_MCH_2595MHz_RB_100_0_NTNV



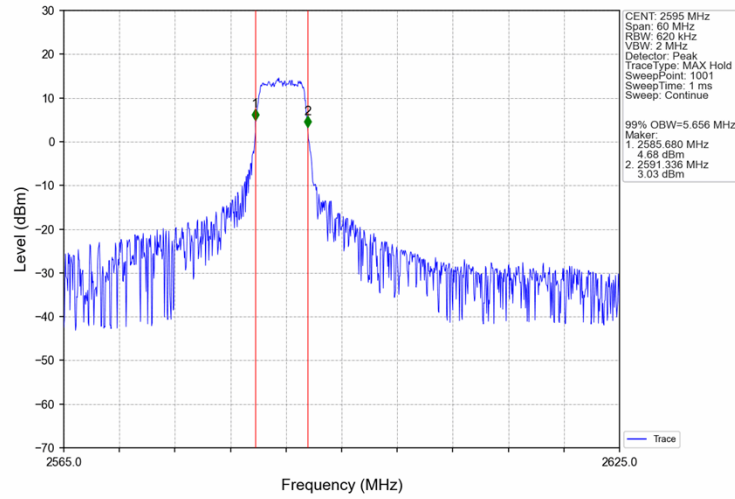
Band38 20MHz QPSK HCH 2610MHz RB 100 0 NTN



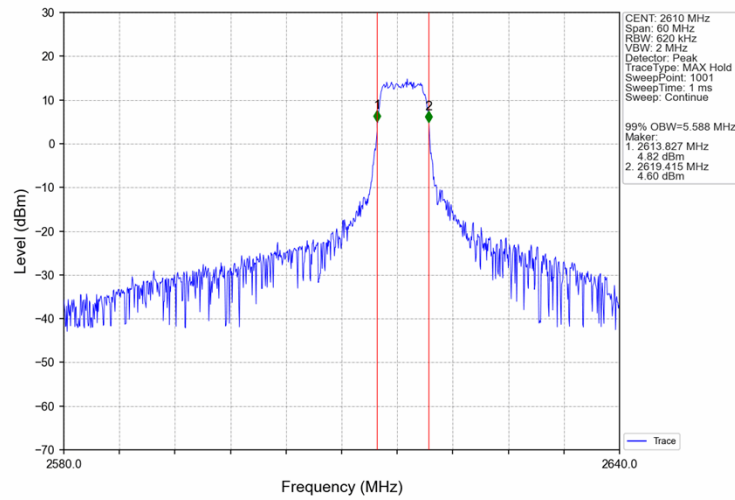
Band38 20MHz 16QAM LCH 2580MHz RB 127 0 NTN



Band38_20MHz_16QAM_MCH_2595MHz_RB_27_0_NTNV

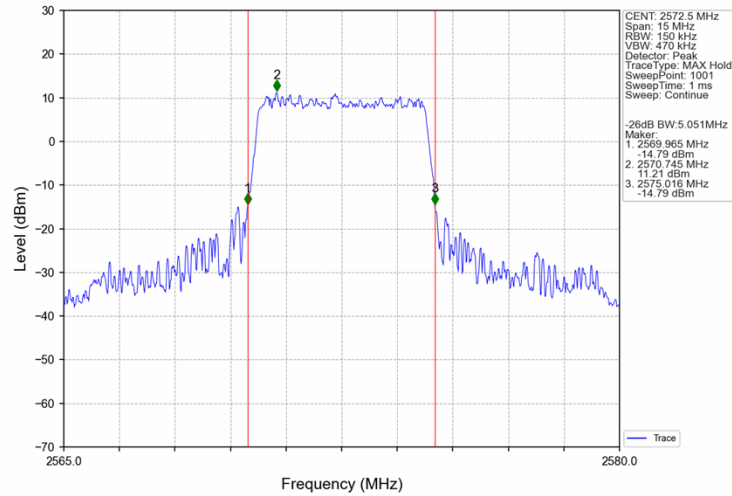


Band38_20MHz_16QAM_HCH_2610MHz_RB_27_73_NTNV

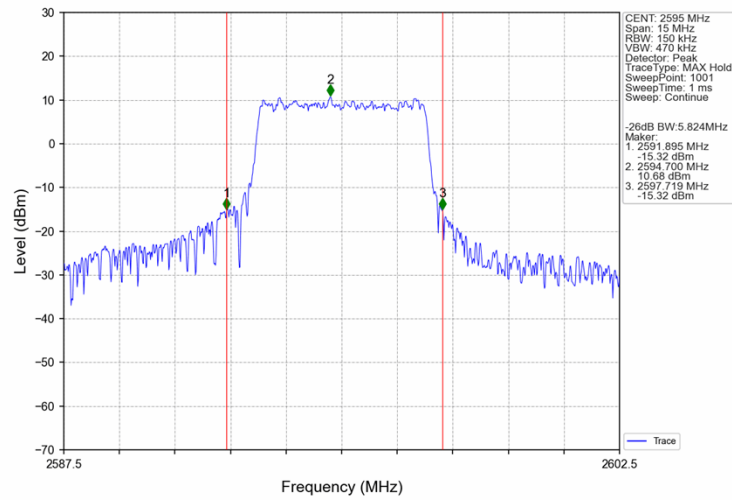


4.2.2 Band38_XDB

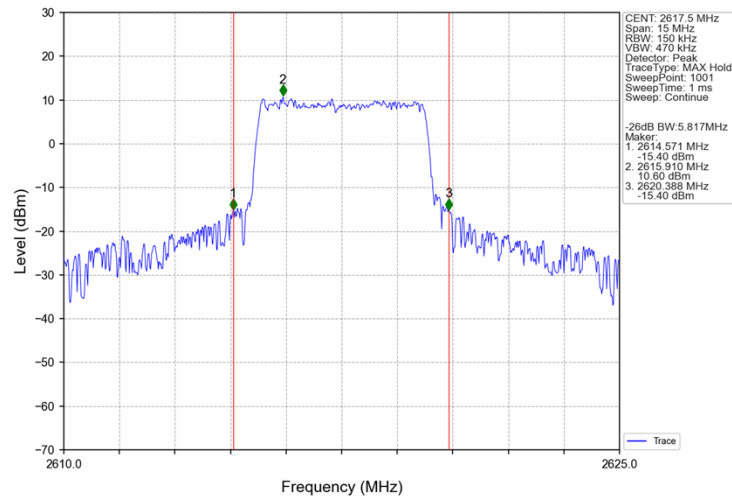
Band38_5MHz_QPSK_LCH_2572.5MHz_RB_25_0_NTNV



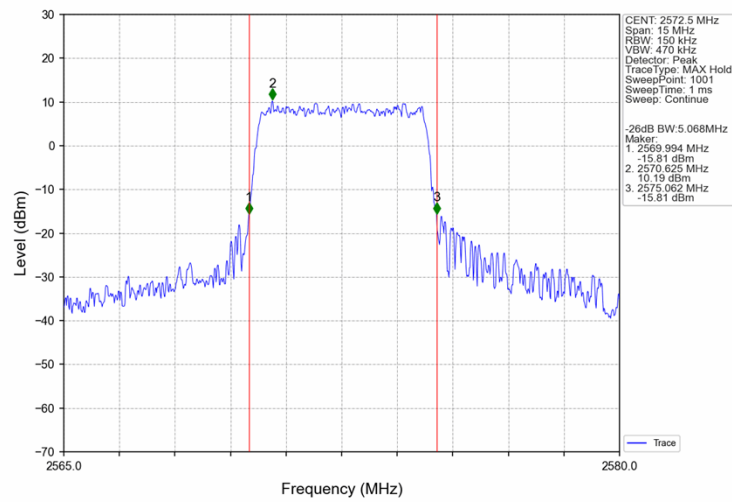
Band38_5MHz_QPSK_MCH_2595MHz_RB_25_0_NTNV



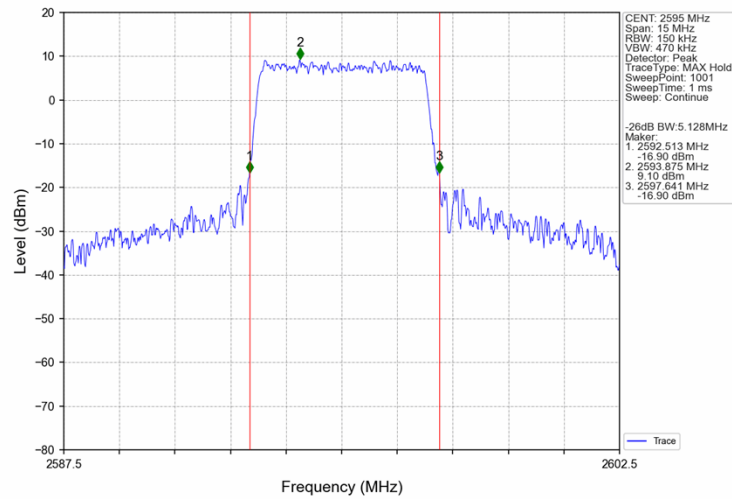
Band38_5MHz_QPSK_HCH_2617.5MHz_RB_25_0_NTNV



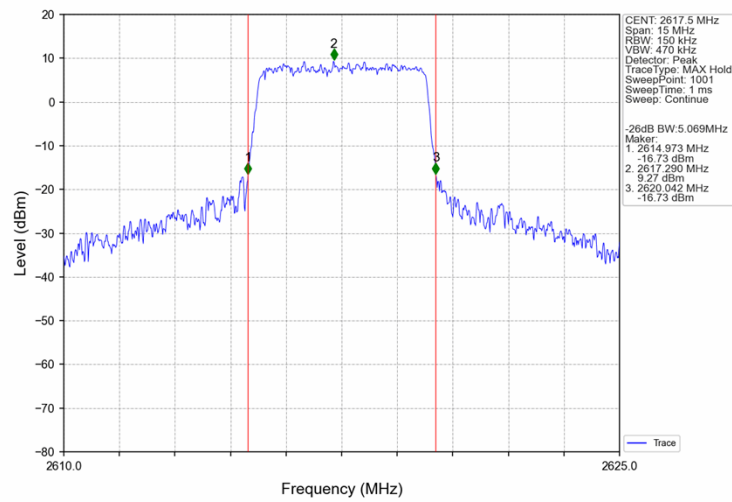
Band38_5MHz_16QAM_LCH_2572.5MHz_RB_25_0_NTNV



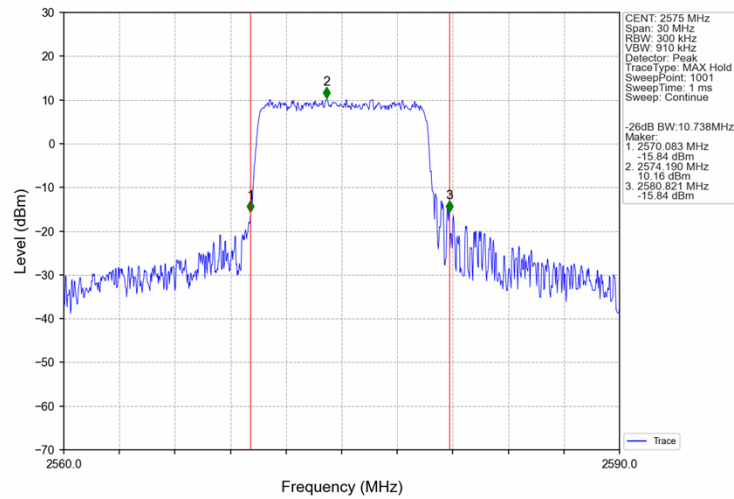
Band38_5MHz_16QAM_MCH_2595MHz_RB_25_0_NTNV



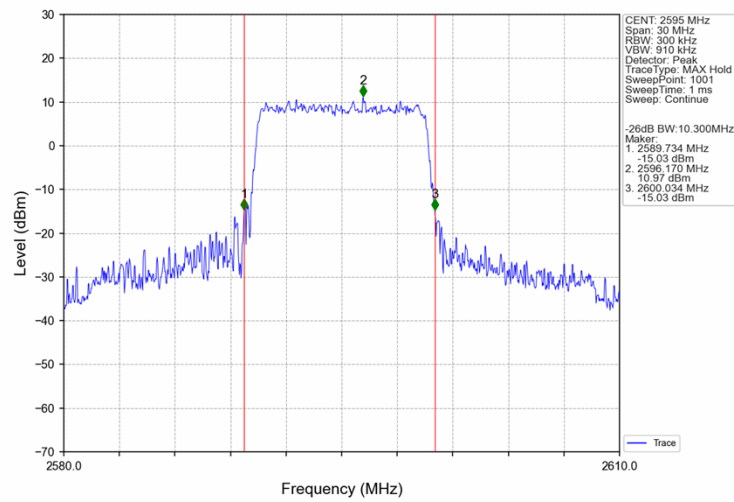
Band38_5MHz_16QAM_HCH_2617.5MHz_RB_25_0_NTNV



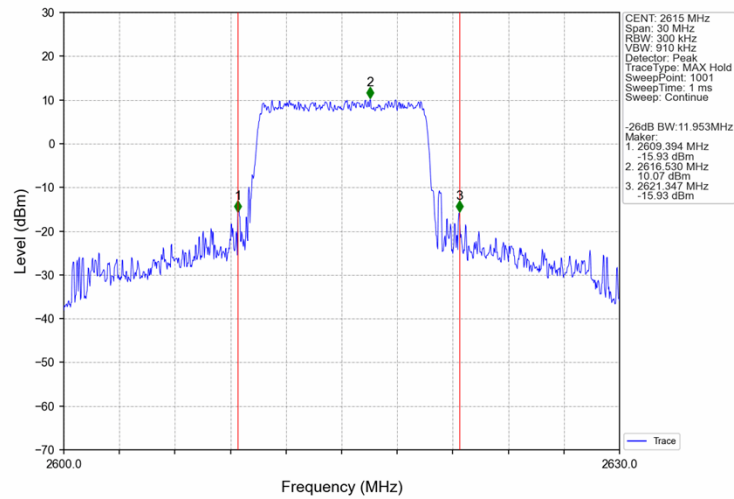
Band38_10MHz_QPSK_LCH_2575MHz_RB_50_0_NTNV



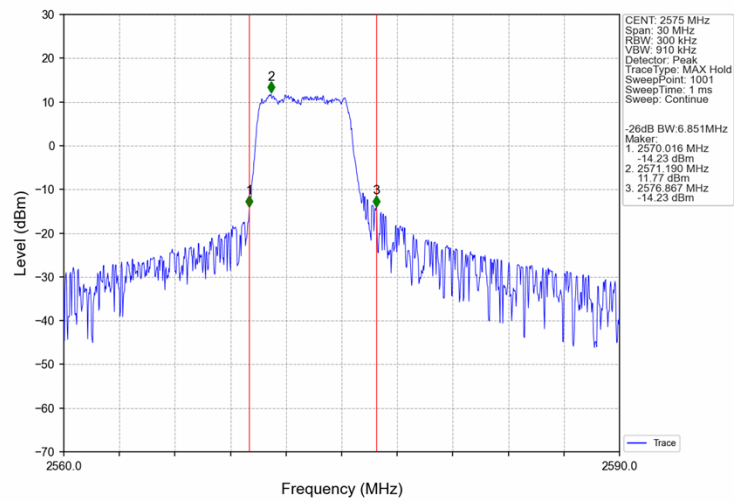
Band38_10MHz_QPSK_MCH_2595MHz_RB_50_0_NTNV



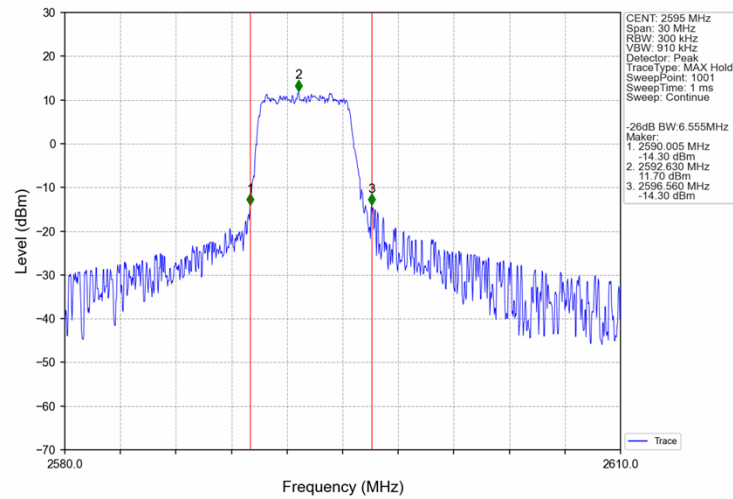
Band38_10MHz_QPSK_HCH_2615MHz_RB_50_0_NTNV



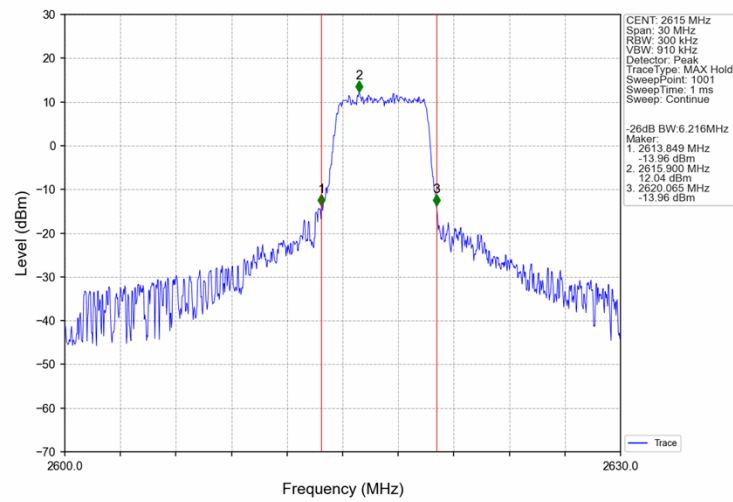
Band38_10MHz_16QAM_LCH_2575MHz_RB_27_0_NTNV



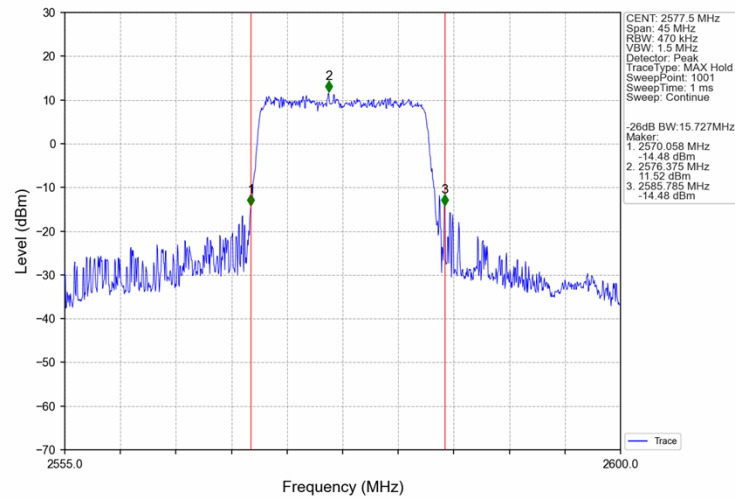
Band38_10MHz_16QAM_MCH_2595MHz_RB_27_0_NTNV



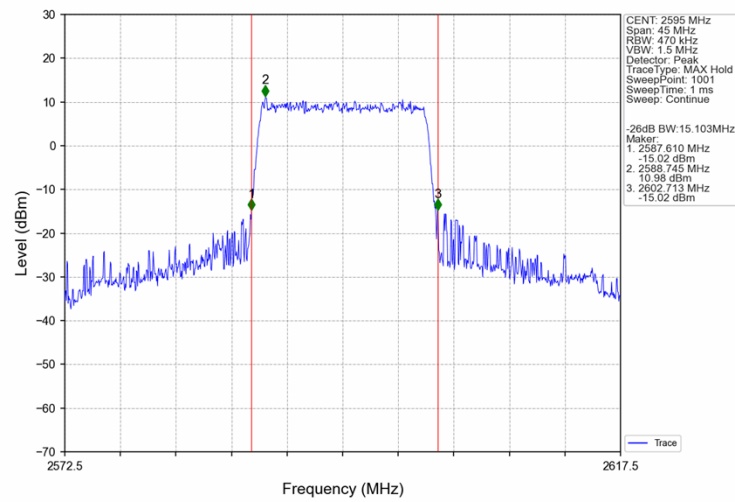
Band38_10MHz_16QAM_HCH_2615MHz_RB_27_23_NTNV



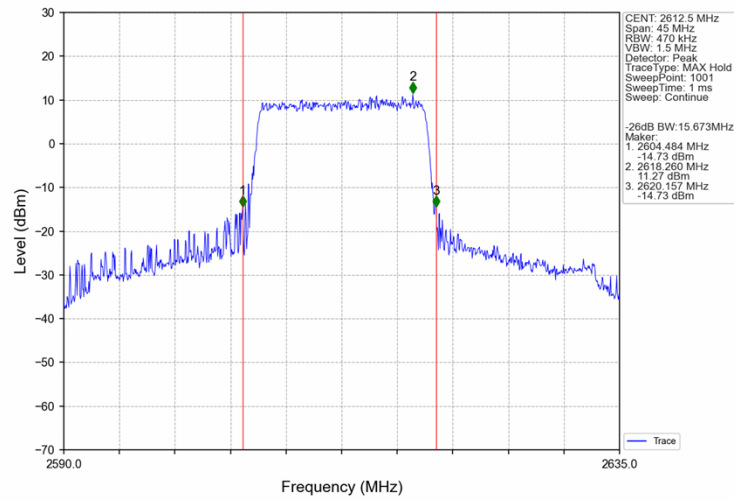
Band38_15MHz_QPSK_LCH_2577.5MHz_RB_75_0_NTNV



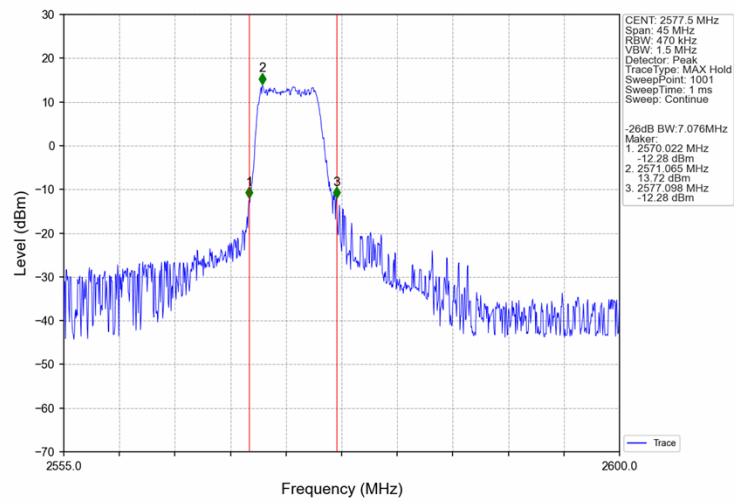
Band38_15MHz_QPSK_MCH_2595MHz_RB_75_0_NTNV



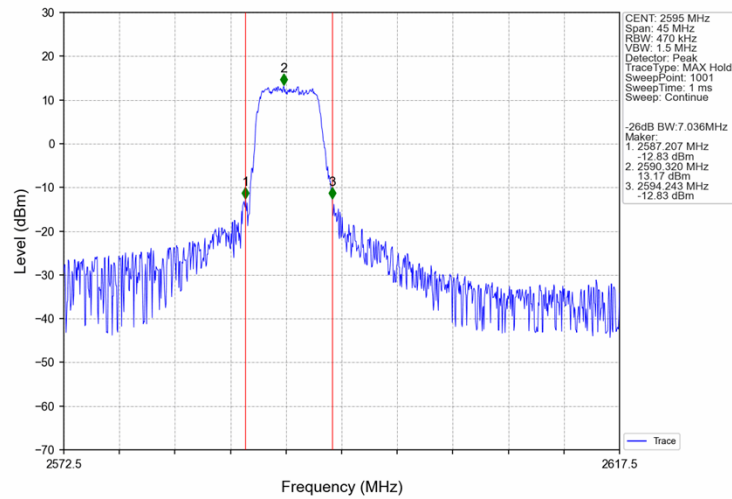
Band38_15MHz_QPSK_HCH_2612.5MHz_RB_75_0_NTNV



Band38_15MHz_16QAM_LCH_2577.5MHz_RB_27_0_NTNV



Band38_15MHz_16QAM_MCH_2595MHz_RB_27_0_NTNV



Band38_15MHz_16QAM_HCH_2612.5MHz_RB_27_48_NTNV

