

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	22.22	1.86	24.08	<=33.01	Pass
			13	22.32	1.86	24.18	<=33.01	Pass
			24	22.26	1.86	24.12	<=33.01	Pass
		12	0	21.30	1.86	23.16	<=33.01	Pass
			6	21.36	1.86	23.22	<=33.01	Pass
			13	21.26	1.86	23.12	<=33.01	Pass
		25	0	21.34	1.86	23.20	<=33.01	Pass
	2595	1	0	21.92	1.86	23.78	<=33.01	Pass
			13	22.09	1.86	23.95	<=33.01	Pass
			24	21.89	1.86	23.75	<=33.01	Pass
		12	0	20.94	1.86	22.80	<=33.01	Pass
			6	21.01	1.86	22.87	<=33.01	Pass
			13	20.89	1.86	22.75	<=33.01	Pass
		25	0	20.96	1.86	22.82	<=33.01	Pass
	2617.5	1	0	21.90	1.86	23.76	<=33.01	Pass
			13	21.99	1.86	23.85	<=33.01	Pass
			24	21.85	1.86	23.71	<=33.01	Pass
		12	0	20.83	1.86	22.69	<=33.01	Pass
			6	20.94	1.86	22.80	<=33.01	Pass
			13	20.77	1.86	22.63	<=33.01	Pass
		25	0	20.78	1.86	22.64	<=33.01	Pass
16QAM	2572.5	1	0	21.17	1.86	23.03	<=33.01	Pass
			13	21.45	1.86	23.31	<=33.01	Pass
			24	21.26	1.86	23.12	<=33.01	Pass
		12	0	20.22	1.86	22.08	<=33.01	Pass
			6	20.32	1.86	22.18	<=33.01	Pass
			13	20.21	1.86	22.07	<=33.01	Pass
		25	0	20.28	1.86	22.14	<=33.01	Pass
	2595	1	0	21.09	1.86	22.95	<=33.01	Pass
			13	21.12	1.86	22.98	<=33.01	Pass
			24	20.90	1.86	22.76	<=33.01	Pass
		12	0	19.90	1.86	21.76	<=33.01	Pass
			6	19.91	1.86	21.77	<=33.01	Pass
			13	19.79	1.86	21.65	<=33.01	Pass
		25	0	19.84	1.86	21.70	<=33.01	Pass
	2617.5	1	0	20.68	1.86	22.54	<=33.01	Pass
			13	21.06	1.86	22.92	<=33.01	Pass
			24	20.94	1.86	22.80	<=33.01	Pass
		12	0	19.66	1.86	21.52	<=33.01	Pass
			6	19.65	1.86	21.51	<=33.01	Pass
			13	19.60	1.86	21.46	<=33.01	Pass
		25	0	19.61	1.86	21.47	<=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	22.34	1.86	24.20	<=33.01	Pass
			25	22.54	1.86	24.40	<=33.01	Pass
			49	22.22	1.86	24.08	<=33.01	Pass
		25	0	21.29	1.86	23.15	<=33.01	Pass
			13	21.32	1.86	23.18	<=33.01	Pass
			25	21.25	1.86	23.11	<=33.01	Pass
		50	0	21.34	1.86	23.20	<=33.01	Pass
			0	22.08	1.86	23.94	<=33.01	Pass
			25	22.26	1.86	24.12	<=33.01	Pass
	2595	1	49	21.98	1.86	23.84	<=33.01	Pass
			0	21.07	1.86	22.93	<=33.01	Pass
			13	21.06	1.86	22.92	<=33.01	Pass
		25	25	20.94	1.86	22.80	<=33.01	Pass
			0	21.02	1.86	22.88	<=33.01	Pass
			0	21.95	1.86	23.81	<=33.01	Pass
		25	25	22.15	1.86	24.01	<=33.01	Pass
			49	21.83	1.86	23.69	<=33.01	Pass
			0	20.88	1.86	22.74	<=33.01	Pass
16QAM	2575	1	13	20.86	1.86	22.72	<=33.01	Pass
			25	20.83	1.86	22.69	<=33.01	Pass
			0	20.84	1.86	22.70	<=33.01	Pass
		12	0	21.39	1.86	23.25	<=33.01	Pass
			25	21.32	1.86	23.18	<=33.01	Pass
			49	21.05	1.86	22.91	<=33.01	Pass
		27	0	21.25	1.86	23.11	<=33.01	Pass
			19	21.32	1.86	23.18	<=33.01	Pass
			38	21.18	1.86	23.04	<=33.01	Pass
	2595	1	0	20.34	1.86	22.20	<=33.01	Pass
			0	20.86	1.86	22.72	<=33.01	Pass
			25	21.10	1.86	22.96	<=33.01	Pass
		12	49	20.70	1.86	22.56	<=33.01	Pass
			0	20.94	1.86	22.80	<=33.01	Pass
			19	20.98	1.86	22.84	<=33.01	Pass
		27	38	20.82	1.86	22.68	<=33.01	Pass
			0	20.08	1.86	21.94	<=33.01	Pass
			0	20.72	1.86	22.58	<=33.01	Pass
	2615	1	25	21.00	1.86	22.86	<=33.01	Pass
			49	20.81	1.86	22.67	<=33.01	Pass
			0	20.71	1.86	22.57	<=33.01	Pass
		12	19	20.74	1.86	22.60	<=33.01	Pass
			38	20.63	1.86	22.49	<=33.01	Pass
			23	19.71	1.86	21.57	<=33.01	Pass
		27	0	20.72	1.86	22.58	<=33.01	Pass
			25	21.00	1.86	22.86	<=33.01	Pass
			49	20.81	1.86	22.67	<=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	22.22	1.86	24.08	<=33.01	Pass
			38	22.24	1.86	24.10	<=33.01	Pass
			74	22.18	1.86	24.04	<=33.01	Pass
		36	0	21.24	1.86	23.10	<=33.01	Pass
			18	21.28	1.86	23.14	<=33.01	Pass
			39	21.24	1.86	23.10	<=33.01	Pass
		75	0	21.24	1.86	23.10	<=33.01	Pass
			0	21.96	1.86	23.82	<=33.01	Pass
			38	22.14	1.86	24.00	<=33.01	Pass
	2595	1	74	21.81	1.86	23.67	<=33.01	Pass
			0	21.10	1.86	22.96	<=33.01	Pass
			18	21.07	1.86	22.93	<=33.01	Pass
		36	39	21.02	1.86	22.88	<=33.01	Pass
			0	21.09	1.86	22.95	<=33.01	Pass
			0	21.76	1.86	23.62	<=33.01	Pass
		75	38	21.92	1.86	23.78	<=33.01	Pass
			74	21.76	1.86	23.62	<=33.01	Pass
			0	20.98	1.86	22.84	<=33.01	Pass
	2612.5	36	18	21.00	1.86	22.86	<=33.01	Pass
			39	20.90	1.86	22.76	<=33.01	Pass
		75	0	20.86	1.86	22.72	<=33.01	Pass
16QAM	2577.5	1	0	21.14	1.86	23.00	<=33.01	Pass
			38	20.99	1.86	22.85	<=33.01	Pass
			74	21.40	1.86	23.26	<=33.01	Pass
		12	0	21.09	1.86	22.95	<=33.01	Pass
			31	21.18	1.86	23.04	<=33.01	Pass
			63	21.03	1.86	22.89	<=33.01	Pass
		27	0	20.17	1.86	22.03	<=33.01	Pass
			0	20.85	1.86	22.71	<=33.01	Pass
			38	20.97	1.86	22.83	<=33.01	Pass
	2595	1	74	20.48	1.86	22.34	<=33.01	Pass
			0	20.84	1.86	22.70	<=33.01	Pass
			31	20.90	1.86	22.76	<=33.01	Pass
		12	63	20.64	1.86	22.50	<=33.01	Pass
			0	19.92	1.86	21.78	<=33.01	Pass
			0	20.72	1.86	22.58	<=33.01	Pass
		27	38	20.85	1.86	22.71	<=33.01	Pass
			74	20.58	1.86	22.44	<=33.01	Pass
			0	20.59	1.86	22.45	<=33.01	Pass
	2612.5	12	31	20.74	1.86	22.60	<=33.01	Pass
			63	20.46	1.86	22.32	<=33.01	Pass
		27	48	19.62	1.86	21.48	<=33.01	Pass

Note1: EIRP=Conducted Power+Antenna Gain

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	21.88	1.86	23.74	<=33.01	Pass		
			50	22.42	1.86	24.28	<=33.01	Pass		
			99	21.78	1.86	23.64	<=33.01	Pass		
		50	0	21.25	1.86	23.11	<=33.01	Pass		
			25	21.24	1.86	23.10	<=33.01	Pass		
			50	21.07	1.86	22.93	<=33.01	Pass		
		100	0	21.23	1.86	23.09	<=33.01	Pass		
		2595	1	0	21.77	1.86	23.63	<=33.01	Pass	
				50	22.17	1.86	24.03	<=33.01	Pass	
	99			21.62	1.86	23.48	<=33.01	Pass		
	50		0	21.05	1.86	22.91	<=33.01	Pass		
			25	20.96	1.86	22.82	<=33.01	Pass		
			50	20.82	1.86	22.68	<=33.01	Pass		
	100		0	20.97	1.86	22.83	<=33.01	Pass		
	2610		1	0	21.62	1.86	23.48	<=33.01	Pass	
				50	22.07	1.86	23.93	<=33.01	Pass	
		99		21.62	1.86	23.48	<=33.01	Pass		
		50	0	20.87	1.86	22.73	<=33.01	Pass		
			25	20.81	1.86	22.67	<=33.01	Pass		
			50	20.71	1.86	22.57	<=33.01	Pass		
		100	0	20.79	1.86	22.65	<=33.01	Pass		
		16QAM	2580	1	0	20.94	1.86	22.80	<=33.01	Pass
					50	21.52	1.86	23.38	<=33.01	Pass
	99				20.82	1.86	22.68	<=33.01	Pass	
12	0			21.03	1.86	22.89	<=33.01	Pass		
	44			21.22	1.86	23.08	<=33.01	Pass		
	88			20.71	1.86	22.57	<=33.01	Pass		
27	0			20.11	1.86	21.97	<=33.01	Pass		
2595	1			0	20.50	1.86	22.36	<=33.01	Pass	
				50	20.77	1.86	22.63	<=33.01	Pass	
			99	20.42	1.86	22.28	<=33.01	Pass		
	12		0	20.83	1.86	22.69	<=33.01	Pass		
			44	20.98	1.86	22.84	<=33.01	Pass		
			88	20.57	1.86	22.43	<=33.01	Pass		
27	0		19.91	1.86	21.77	<=33.01	Pass			
2610	1		0	20.50	1.86	22.36	<=33.01	Pass		
			50	21.17	1.86	23.03	<=33.01	Pass		
			99	20.52	1.86	22.38	<=33.01	Pass		
	12		0	20.44	1.86	22.30	<=33.01	Pass		
			44	20.74	1.86	22.60	<=33.01	Pass		
			88	20.43	1.86	22.29	<=33.01	Pass		
	27		73	19.60	1.86	21.46	<=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 (VDC)	Freq. Error (Hz)	Freq. vs. Rated (ppm)		Verdict
		Size	Offset				Result	Limit	
QPSK	2572.5	25	0	20	3.15	-19.584	-0.0076	-2.5 to 2.5	Pass
					3.70	-45.276	-0.0176	-2.5 to 2.5	Pass
					4.26	-36.206	-0.0141	-2.5 to 2.5	Pass
				-30	3.70	-46.806	-0.0182	-2.5 to 2.5	Pass
				-20	3.70	-47.665	-0.0185	-2.5 to 2.5	Pass
				-10	3.70	-47.836	-0.0186	-2.5 to 2.5	Pass
				0	3.70	-42.043	-0.0163	-2.5 to 2.5	Pass
				10	3.70	-37.351	-0.0145	-2.5 to 2.5	Pass
				30	3.70	-37.479	-0.0146	-2.5 to 2.5	Pass
				40	3.70	-27.223	-0.0106	-2.5 to 2.5	Pass
				50	3.70	-44.289	-0.0172	-2.5 to 2.5	Pass
	2595	25	0	20	3.15	18.454	0.0071	-2.5 to 2.5	Pass
					3.70	14.935	0.0058	-2.5 to 2.5	Pass
					4.26	3.576	0.0014	-2.5 to 2.5	Pass
				-30	3.70	0.558	0.0002	-2.5 to 2.5	Pass
				-20	3.70	10.729	0.0041	-2.5 to 2.5	Pass
				-10	3.70	4.005	0.0015	-2.5 to 2.5	Pass
				0	3.70	-1.574	-0.0006	-2.5 to 2.5	Pass
				10	3.70	-1.416	-0.0005	-2.5 to 2.5	Pass
				30	3.70	0.143	0.0001	-2.5 to 2.5	Pass
				40	3.70	1.459	0.0006	-2.5 to 2.5	Pass
				50	3.70	10.571	0.0041	-2.5 to 2.5	Pass
	2617.5	25	0	20	3.15	17.138	0.0065	-2.5 to 2.5	Pass
					3.70	8.984	0.0034	-2.5 to 2.5	Pass
					4.26	12.331	0.0047	-2.5 to 2.5	Pass
				-30	3.70	2.947	0.0011	-2.5 to 2.5	Pass
				-20	3.70	16.880	0.0064	-2.5 to 2.5	Pass
				-10	3.70	13.218	0.0050	-2.5 to 2.5	Pass
				0	3.70	-1.030	-0.0004	-2.5 to 2.5	Pass
				10	3.70	6.251	0.0024	-2.5 to 2.5	Pass
				30	3.70	16.723	0.0064	-2.5 to 2.5	Pass
				40	3.70	14.477	0.0055	-2.5 to 2.5	Pass
16QAM	2572.5	25	0	20	3.15	-30.556	-0.0119	-2.5 to 2.5	Pass
					3.70	-27.151	-0.0106	-2.5 to 2.5	Pass
					4.26	-29.969	-0.0116	-2.5 to 2.5	Pass
				-30	3.70	-37.794	-0.0147	-2.5 to 2.5	Pass
				-20	3.70	-30.456	-0.0118	-2.5 to 2.5	Pass
				-10	3.70	-42.744	-0.0166	-2.5 to 2.5	Pass
				0	3.70	-36.993	-0.0144	-2.5 to 2.5	Pass
				10	3.70	-35.691	-0.0139	-2.5 to 2.5	Pass
				30	3.70	-39.711	-0.0154	-2.5 to 2.5	Pass
				40	3.70	-45.204	-0.0176	-2.5 to 2.5	Pass
				50	3.70	-44.518	-0.0173	-2.5 to 2.5	Pass
	2595	25	0	20	3.15	17.824	0.0069	-2.5 to 2.5	Pass
					3.70	14.434	0.0056	-2.5 to 2.5	Pass
					4.26	18.082	0.0070	-2.5 to 2.5	Pass
				-30	3.70	23.260	0.0090	-2.5 to 2.5	Pass
				-20	3.70	13.919	0.0054	-2.5 to 2.5	Pass
				-10	3.70	17.552	0.0068	-2.5 to 2.5	Pass

				0	3.70	13.762	0.0053	-2.5 to 2.5	Pass
				10	3.70	14.133	0.0054	-2.5 to 2.5	Pass
				30	3.70	11.587	0.0045	-2.5 to 2.5	Pass
				40	3.70	24.333	0.0094	-2.5 to 2.5	Pass
				50	3.70	16.608	0.0064	-2.5 to 2.5	Pass
	2617.5	25	0	20	3.15	17.638	0.0067	-2.5 to 2.5	Pass
					3.70	14.448	0.0055	-2.5 to 2.5	Pass
					4.26	6.995	0.0027	-2.5 to 2.5	Pass
				-30	3.70	2.575	0.0010	-2.5 to 2.5	Pass
				-20	3.70	1.044	0.0004	-2.5 to 2.5	Pass
				-10	3.70	5.579	0.0021	-2.5 to 2.5	Pass
				0	3.70	11.458	0.0044	-2.5 to 2.5	Pass
				10	3.70	8.211	0.0031	-2.5 to 2.5	Pass
				30	3.70	5.264	0.0020	-2.5 to 2.5	Pass
				40	3.70	3.076	0.0012	-2.5 to 2.5	Pass
				50	3.70	0.343	0.0001	-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	3.15	-8.240	-0.0032	-2.5 to 2.5	Pass
					3.70	1.745	0.0007	-2.5 to 2.5	Pass
					4.26	-0.787	-0.0003	-2.5 to 2.5	Pass
				-30	3.70	-2.503	-0.0010	-2.5 to 2.5	Pass
				-20	3.70	-4.263	-0.0017	-2.5 to 2.5	Pass
				-10	3.70	-2.360	-0.0009	-2.5 to 2.5	Pass
				0	3.70	-2.718	-0.0011	-2.5 to 2.5	Pass
				10	3.70	-5.250	-0.0020	-2.5 to 2.5	Pass
				30	3.70	-3.691	-0.0014	-2.5 to 2.5	Pass
				40	3.70	-5.322	-0.0021	-2.5 to 2.5	Pass
				50	3.70	-4.349	-0.0017	-2.5 to 2.5	Pass
	2595	50	0	20	3.15	-10.529	-0.0041	-2.5 to 2.5	Pass
					3.70	1.645	0.0006	-2.5 to 2.5	Pass
					4.26	-4.721	-0.0018	-2.5 to 2.5	Pass
				-30	3.70	-2.375	-0.0009	-2.5 to 2.5	Pass
				-20	3.70	-7.095	-0.0027	-2.5 to 2.5	Pass
				-10	3.70	-3.004	-0.0012	-2.5 to 2.5	Pass
				0	3.70	-6.680	-0.0026	-2.5 to 2.5	Pass
				10	3.70	-6.051	-0.0023	-2.5 to 2.5	Pass
				30	3.70	-11.888	-0.0046	-2.5 to 2.5	Pass
				40	3.70	-1.903	-0.0007	-2.5 to 2.5	Pass
				50	3.70	-3.304	-0.0013	-2.5 to 2.5	Pass
	2615	50	0	20	3.15	-8.368	-0.0032	-2.5 to 2.5	Pass
					3.70	-5.293	-0.0020	-2.5 to 2.5	Pass
					4.26	-4.034	-0.0015	-2.5 to 2.5	Pass
				-30	3.70	-2.031	-0.0008	-2.5 to 2.5	Pass
				-20	3.70	-4.907	-0.0019	-2.5 to 2.5	Pass
				-10	3.70	-7.367	-0.0028	-2.5 to 2.5	Pass
				0	3.70	-5.507	-0.0021	-2.5 to 2.5	Pass
				10	3.70	-2.532	-0.0010	-2.5 to 2.5	Pass
				30	3.70	-5.507	-0.0021	-2.5 to 2.5	Pass
				40	3.70	-3.476	-0.0013	-2.5 to 2.5	Pass
16QAM	2575	27	0	20	3.15	-8.097	-0.0031	-2.5 to 2.5	Pass
					3.70	-3.204	-0.0012	-2.5 to 2.5	Pass
					4.26	-4.134	-0.0016	-2.5 to 2.5	Pass
				-30	3.70	-5.364	-0.0021	-2.5 to 2.5	Pass
				-20	3.70	-13.161	-0.0051	-2.5 to 2.5	Pass
				-10	3.70	-10.414	-0.0040	-2.5 to 2.5	Pass
				0	3.70	-1.945	-0.0008	-2.5 to 2.5	Pass
				10	3.70	-1.230	-0.0005	-2.5 to 2.5	Pass
				30	3.70	-2.346	-0.0009	-2.5 to 2.5	Pass
				40	3.70	-11.187	-0.0043	-2.5 to 2.5	Pass
				50	3.70	-2.103	-0.0008	-2.5 to 2.5	Pass
	2595	27	0	20	3.15	-4.463	-0.0017	-2.5 to 2.5	Pass
					3.70	-4.578	-0.0018	-2.5 to 2.5	Pass
					4.26	-8.798	-0.0034	-2.5 to 2.5	Pass
				-30	3.70	-9.170	-0.0035	-2.5 to 2.5	Pass
				-20	3.70	-11.201	-0.0043	-2.5 to 2.5	Pass
				-10	3.70	1.731	0.0007	-2.5 to 2.5	Pass
				0	3.70	-6.194	-0.0024	-2.5 to 2.5	Pass
				10	3.70	-8.783	-0.0034	-2.5 to 2.5	Pass
				30	3.70	-14.291	-0.0055	-2.5 to 2.5	Pass
				40	3.70	-6.094	-0.0023	-2.5 to 2.5	Pass
				50	3.70	-9.627	-0.0037	-2.5 to 2.5	Pass

	2615	27	23	20	3.15	-7.796	-0.0030	-2.5 to 2.5	Pass
					3.70	-11.802	-0.0045	-2.5 to 2.5	Pass
					4.26	-12.860	-0.0049	-2.5 to 2.5	Pass
				-30	3.70	-12.002	-0.0046	-2.5 to 2.5	Pass
				-20	3.70	-5.407	-0.0021	-2.5 to 2.5	Pass
				-10	3.70	-16.437	-0.0063	-2.5 to 2.5	Pass
				0	3.70	3.219	0.0012	-2.5 to 2.5	Pass
				10	3.70	-5.922	-0.0023	-2.5 to 2.5	Pass
				30	3.70	-9.084	-0.0035	-2.5 to 2.5	Pass
				40	3.70	-11.415	-0.0044	-2.5 to 2.5	Pass
				50	3.70	-14.863	-0.0057	-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	3.15	-16.851	-0.0065	-2.5 to 2.5	Pass
					3.70	-5.236	-0.0020	-2.5 to 2.5	Pass
					4.26	-8.783	-0.0034	-2.5 to 2.5	Pass
				-30	3.70	-7.010	-0.0027	-2.5 to 2.5	Pass
				-20	3.70	-4.034	-0.0016	-2.5 to 2.5	Pass
				-10	3.70	-8.640	-0.0034	-2.5 to 2.5	Pass
				0	3.70	-11.930	-0.0046	-2.5 to 2.5	Pass
				10	3.70	-7.453	-0.0029	-2.5 to 2.5	Pass
				30	3.70	-4.635	-0.0018	-2.5 to 2.5	Pass
				40	3.70	-5.121	-0.0020	-2.5 to 2.5	Pass
				50	3.70	-2.789	-0.0011	-2.5 to 2.5	Pass
	2595	75	0	20	3.15	-6.781	-0.0026	-2.5 to 2.5	Pass
					3.70	-8.526	-0.0033	-2.5 to 2.5	Pass
					4.26	-8.326	-0.0032	-2.5 to 2.5	Pass
				-30	3.70	-6.380	-0.0025	-2.5 to 2.5	Pass
				-20	3.70	-1.917	-0.0007	-2.5 to 2.5	Pass
				-10	3.70	-6.809	-0.0026	-2.5 to 2.5	Pass
				0	3.70	-8.283	-0.0032	-2.5 to 2.5	Pass
				10	3.70	-4.191	-0.0016	-2.5 to 2.5	Pass
				30	3.70	-3.233	-0.0012	-2.5 to 2.5	Pass
				40	3.70	-2.604	-0.0010	-2.5 to 2.5	Pass
				50	3.70	-15.178	-0.0058	-2.5 to 2.5	Pass
	2612.5	75	0	20	3.15	-6.609	-0.0025	-2.5 to 2.5	Pass
					3.70	-9.584	-0.0037	-2.5 to 2.5	Pass
					4.26	-5.908	-0.0023	-2.5 to 2.5	Pass
				-30	3.70	-10.729	-0.0041	-2.5 to 2.5	Pass
				-20	3.70	-10.672	-0.0041	-2.5 to 2.5	Pass
				-10	3.70	-3.347	-0.0013	-2.5 to 2.5	Pass
				0	3.70	-0.343	-0.0001	-2.5 to 2.5	Pass
				10	3.70	-3.605	-0.0014	-2.5 to 2.5	Pass
				30	3.70	-7.639	-0.0029	-2.5 to 2.5	Pass
				40	3.70	-2.418	-0.0009	-2.5 to 2.5	Pass
16QAM	2577.5	27	0	20	3.15	-0.243	-0.0001	-2.5 to 2.5	Pass
					3.70	-7.982	-0.0031	-2.5 to 2.5	Pass
					4.26	-16.694	-0.0065	-2.5 to 2.5	Pass
				-30	3.70	-14.191	-0.0055	-2.5 to 2.5	Pass
				-20	3.70	-1.373	-0.0005	-2.5 to 2.5	Pass
				-10	3.70	-12.531	-0.0049	-2.5 to 2.5	Pass
				0	3.70	-13.947	-0.0054	-2.5 to 2.5	Pass
				10	3.70	-5.078	-0.0020	-2.5 to 2.5	Pass
				30	3.70	-7.439	-0.0029	-2.5 to 2.5	Pass
				40	3.70	-5.565	-0.0022	-2.5 to 2.5	Pass
				50	3.70	-8.240	-0.0032	-2.5 to 2.5	Pass
	2595	27	0	20	3.15	-4.406	-0.0017	-2.5 to 2.5	Pass
					3.70	2.546	0.0010	-2.5 to 2.5	Pass
					4.26	-14.176	-0.0055	-2.5 to 2.5	Pass
				-30	3.70	-5.136	-0.0020	-2.5 to 2.5	Pass
				-20	3.70	-9.756	-0.0038	-2.5 to 2.5	Pass
				-10	3.70	-4.020	-0.0015	-2.5 to 2.5	Pass
				0	3.70	-3.161	-0.0012	-2.5 to 2.5	Pass
				10	3.70	-3.219	-0.0012	-2.5 to 2.5	Pass
				30	3.70	-7.653	-0.0029	-2.5 to 2.5	Pass
				40	3.70	-14.033	-0.0054	-2.5 to 2.5	Pass
				50	3.70	-14.305	-0.0055	-2.5 to 2.5	Pass

	2612.5	27	48	20	3.15	-2.189	-0.0008	-2.5 to 2.5	Pass
					3.70	-8.311	-0.0032	-2.5 to 2.5	Pass
					4.26	-5.937	-0.0023	-2.5 to 2.5	Pass
				-30	3.70	-7.653	-0.0029	-2.5 to 2.5	Pass
				-20	3.70	-5.622	-0.0022	-2.5 to 2.5	Pass
				-10	3.70	-5.794	-0.0022	-2.5 to 2.5	Pass
				0	3.70	-9.513	-0.0036	-2.5 to 2.5	Pass
				10	3.70	3.147	0.0012	-2.5 to 2.5	Pass
				30	3.70	-4.478	-0.0017	-2.5 to 2.5	Pass
				40	3.70	4.349	0.0017	-2.5 to 2.5	Pass
				50	3.70	-4.764	-0.0018	-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	3.15	-18.497	-0.0072	-2.5 to 2.5	Pass
					3.70	-8.626	-0.0033	-2.5 to 2.5	Pass
					4.26	-3.233	-0.0013	-2.5 to 2.5	Pass
				-30	3.70	-1.431	-0.0006	-2.5 to 2.5	Pass
				-20	3.70	-8.225	-0.0032	-2.5 to 2.5	Pass
				-10	3.70	-3.319	-0.0013	-2.5 to 2.5	Pass
				0	3.70	-6.595	-0.0026	-2.5 to 2.5	Pass
				10	3.70	-7.968	-0.0031	-2.5 to 2.5	Pass
				30	3.70	-7.997	-0.0031	-2.5 to 2.5	Pass
				40	3.70	-8.998	-0.0035	-2.5 to 2.5	Pass
				50	3.70	-6.552	-0.0025	-2.5 to 2.5	Pass
	2595	100	0	20	3.15	-8.640	-0.0033	-2.5 to 2.5	Pass
					3.70	-3.304	-0.0013	-2.5 to 2.5	Pass
					4.26	-5.994	-0.0023	-2.5 to 2.5	Pass
				-30	3.70	-10.471	-0.0040	-2.5 to 2.5	Pass
				-20	3.70	-4.578	-0.0018	-2.5 to 2.5	Pass
				-10	3.70	-6.380	-0.0025	-2.5 to 2.5	Pass
				0	3.70	-2.217	-0.0009	-2.5 to 2.5	Pass
				10	3.70	-8.011	-0.0031	-2.5 to 2.5	Pass
				30	3.70	0.930	0.0004	-2.5 to 2.5	Pass
				40	3.70	-3.676	-0.0014	-2.5 to 2.5	Pass
				50	3.70	2.031	0.0008	-2.5 to 2.5	Pass
	2610	100	0	20	3.15	-5.879	-0.0023	-2.5 to 2.5	Pass
					3.70	-6.094	-0.0023	-2.5 to 2.5	Pass
					4.26	-10.600	-0.0041	-2.5 to 2.5	Pass
				-30	3.70	-2.246	-0.0009	-2.5 to 2.5	Pass
				-20	3.70	-6.022	-0.0023	-2.5 to 2.5	Pass
				-10	3.70	-7.825	-0.0030	-2.5 to 2.5	Pass
				0	3.70	-12.074	-0.0046	-2.5 to 2.5	Pass
				10	3.70	-11.616	-0.0045	-2.5 to 2.5	Pass
				30	3.70	-8.712	-0.0033	-2.5 to 2.5	Pass
				40	3.70	-7.582	-0.0029	-2.5 to 2.5	Pass
16QAM	2580	27	0	20	3.15	-5.064	-0.0020	-2.5 to 2.5	Pass
					3.70	-7.467	-0.0029	-2.5 to 2.5	Pass
					4.26	-1.130	-0.0004	-2.5 to 2.5	Pass
				-30	3.70	-3.633	-0.0014	-2.5 to 2.5	Pass
				-20	3.70	-14.119	-0.0055	-2.5 to 2.5	Pass
				-10	3.70	-15.407	-0.0060	-2.5 to 2.5	Pass
				0	3.70	-16.422	-0.0064	-2.5 to 2.5	Pass
				10	3.70	0.200	0.0001	-2.5 to 2.5	Pass
				30	3.70	-10.486	-0.0041	-2.5 to 2.5	Pass
				40	3.70	1.488	0.0006	-2.5 to 2.5	Pass
				50	3.70	-6.580	-0.0026	-2.5 to 2.5	Pass
	2595	27	0	20	3.15	-5.436	-0.0021	-2.5 to 2.5	Pass
					3.70	3.633	0.0014	-2.5 to 2.5	Pass
					4.26	-9.527	-0.0037	-2.5 to 2.5	Pass
				-30	3.70	-6.309	-0.0024	-2.5 to 2.5	Pass
				-20	3.70	2.661	0.0010	-2.5 to 2.5	Pass
				-10	3.70	-4.635	-0.0018	-2.5 to 2.5	Pass
				0	3.70	-14.334	-0.0055	-2.5 to 2.5	Pass
				10	3.70	-10.986	-0.0042	-2.5 to 2.5	Pass
				30	3.70	-11.029	-0.0043	-2.5 to 2.5	Pass
				40	3.70	-7.682	-0.0030	-2.5 to 2.5	Pass
				50	3.70	2.761	0.0011	-2.5 to 2.5	Pass

	2610	27	73	20	3.15	-10.285	-0.0039	-2.5 to 2.5	Pass
					3.70	-2.174	-0.0008	-2.5 to 2.5	Pass
					4.26	-5.093	-0.0020	-2.5 to 2.5	Pass
				-30	3.70	-9.627	-0.0037	-2.5 to 2.5	Pass
				-20	3.70	-7.024	-0.0027	-2.5 to 2.5	Pass
				-10	3.70	-1.631	-0.0006	-2.5 to 2.5	Pass
				0	3.70	-1.945	-0.0007	-2.5 to 2.5	Pass
				10	3.70	-8.326	-0.0032	-2.5 to 2.5	Pass
				30	3.70	-13.962	-0.0053	-2.5 to 2.5	Pass
				40	3.70	-12.660	-0.0049	-2.5 to 2.5	Pass
				50	3.70	-6.251	-0.0024	-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

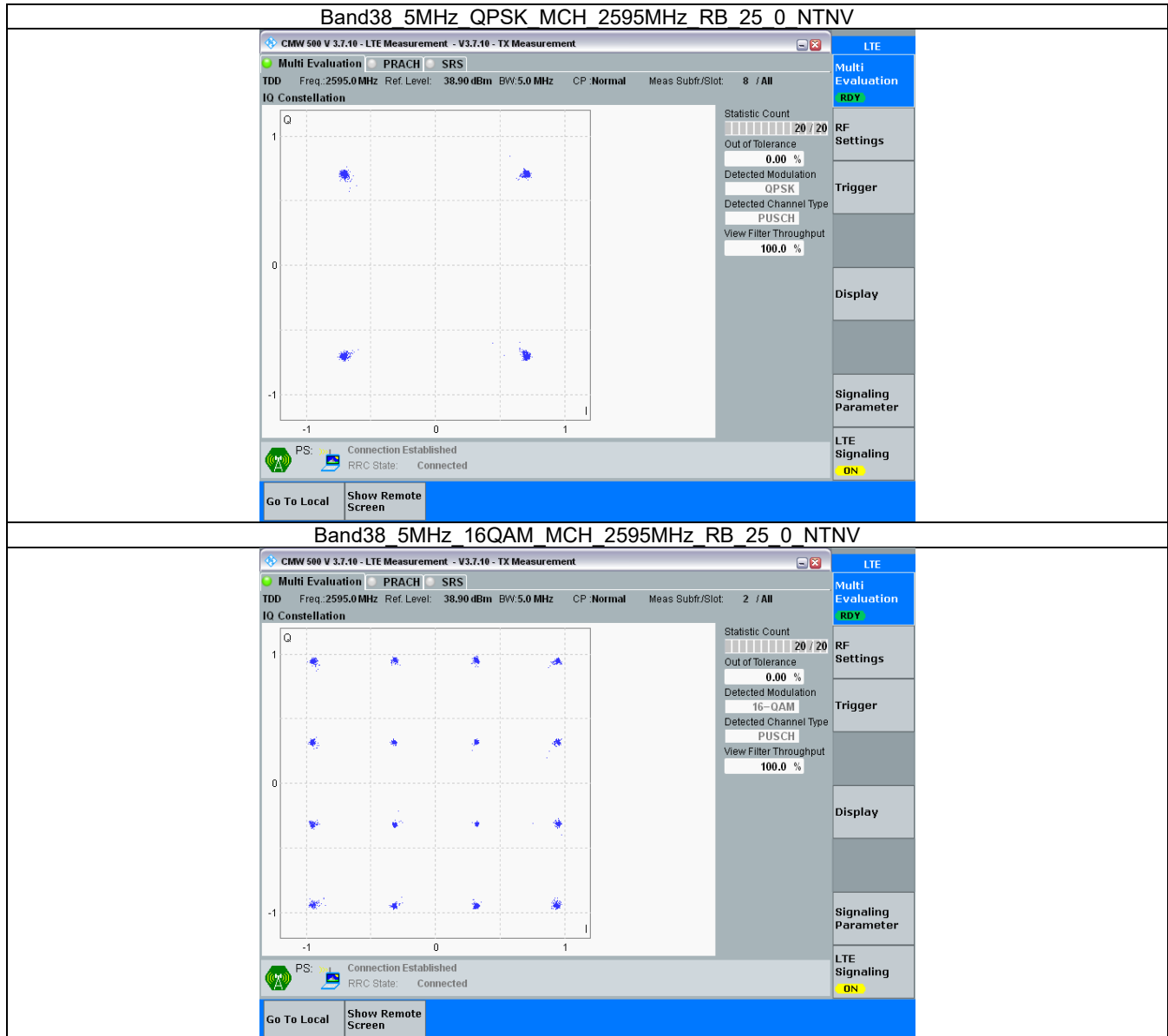
Band: 38 / Bandwidth: 15MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Modulation Characteristics		Verdict
		Size	Offset	Result	Limit	
QPSK	2595	75	0	Refer To Test Graph		Pass
16QAM	2595	27	0	Refer To Test Graph		Pass

3.1.4 B38_20MHz

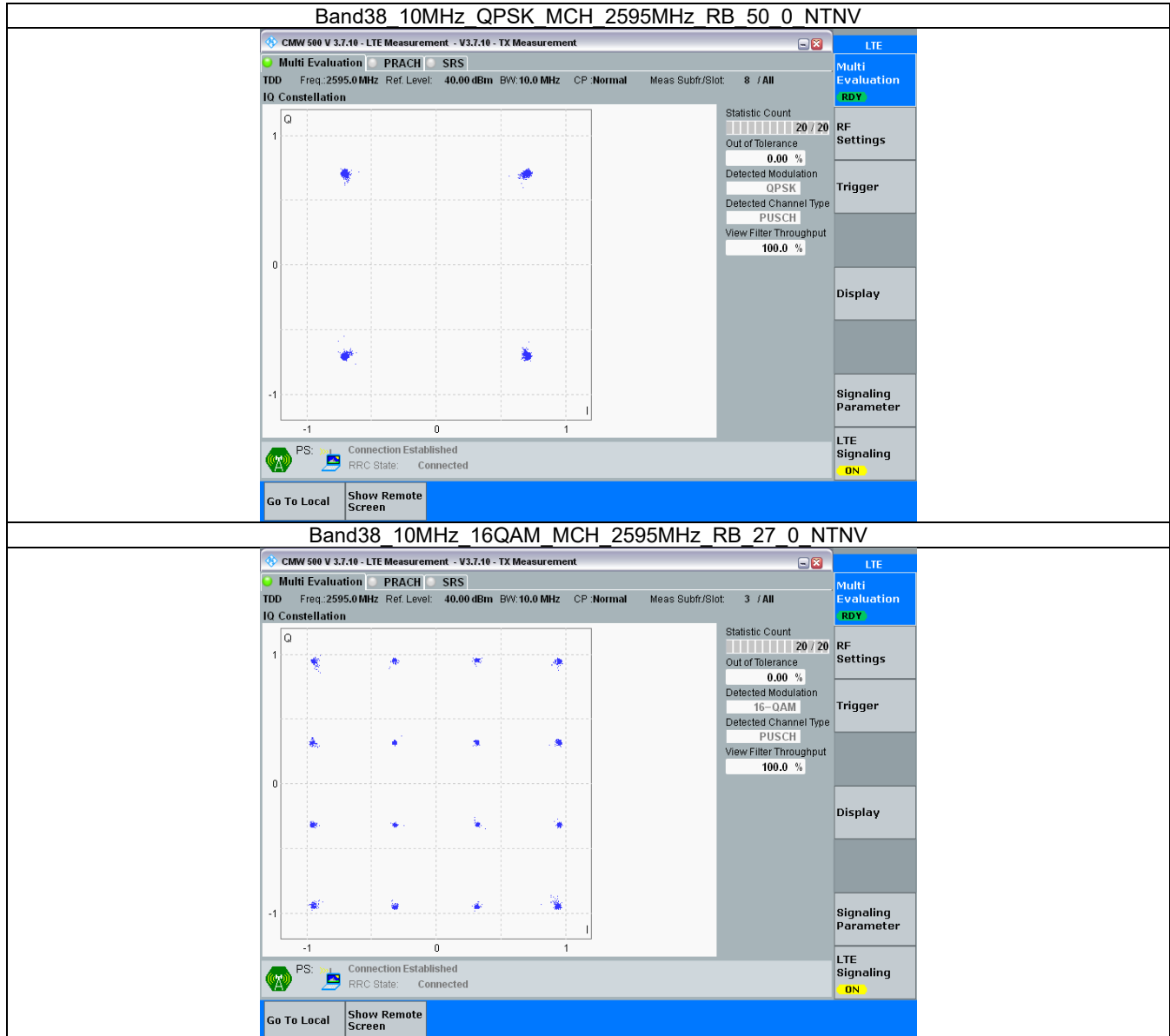
Band: 38 / Bandwidth: 20MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Modulation Characteristics		Verdict
		Size	Offset	Result	Limit	
QPSK	2595	100	0	Refer To Test Graph		Pass
16QAM	2595	27	0	Refer To Test Graph		Pass

3.2 Test Graph

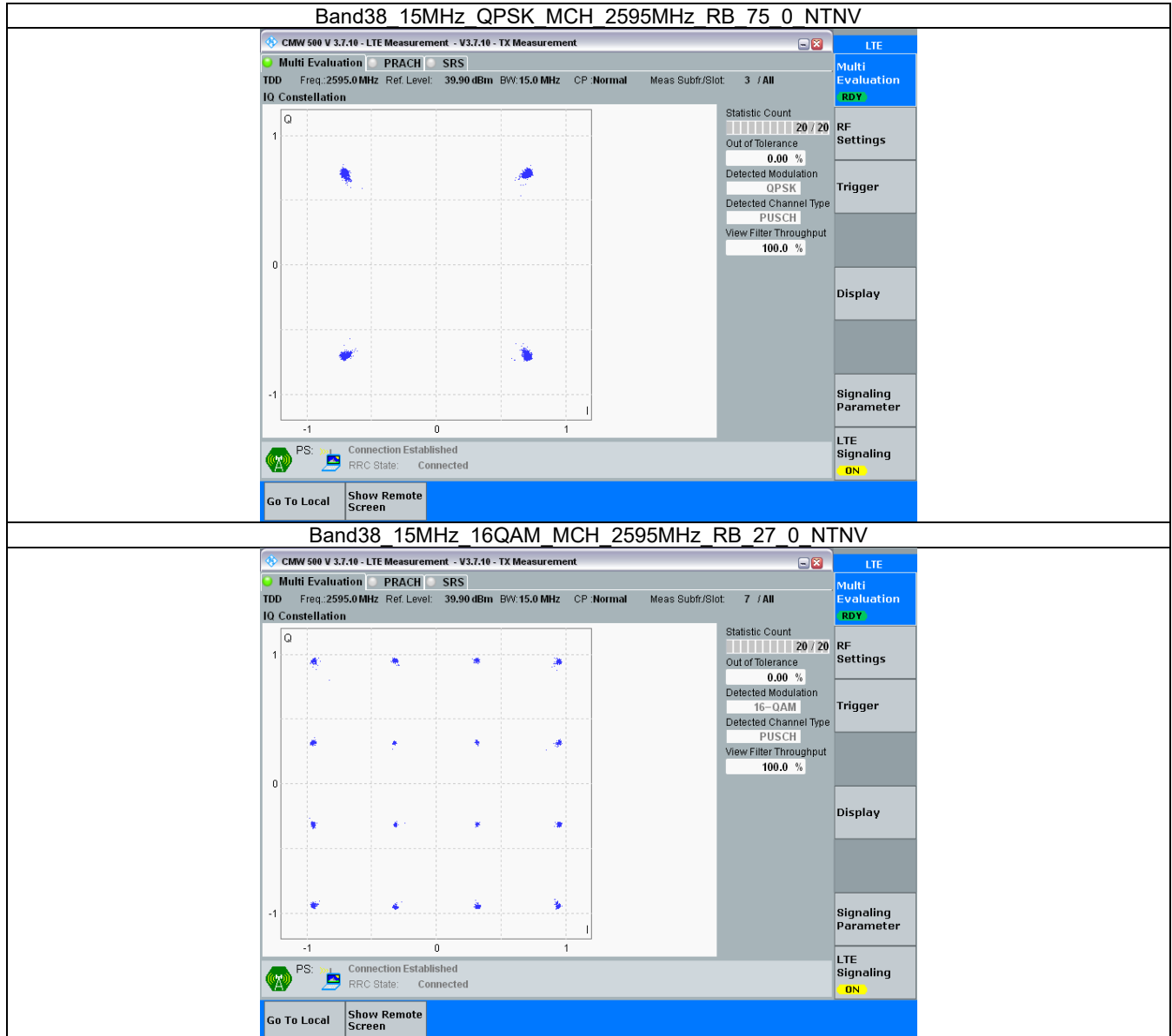
3.2.1 B38_5MHz



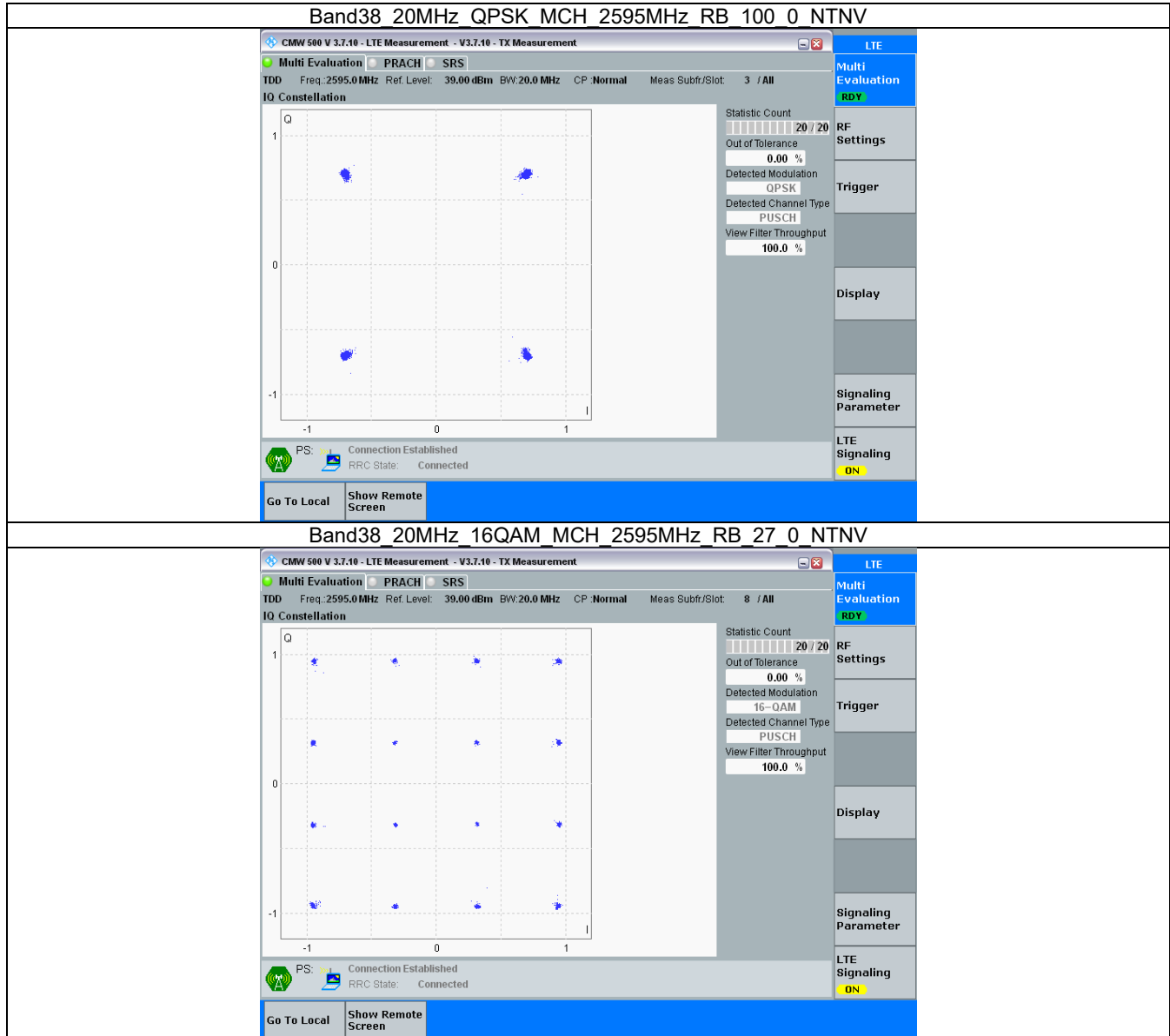
3.2.2 B38_10MHz



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	4.546	/	Pass
		2595	25	0	4.539	/	Pass
		2617.5	25	0	4.567	/	Pass
	16QAM	2572.5	25	0	4.541	/	Pass
		2595	25	0	4.527	/	Pass
		2617.5	25	0	4.556	/	Pass
10	QPSK	2575	50	0	9.085	/	Pass
		2595	50	0	9.060	/	Pass
		2615	50	0	9.102	/	Pass
	16QAM	2575	27	0	5.125	/	Pass
		2595	27	0	5.140	/	Pass
		2615	27	23	5.090	/	Pass
15	QPSK	2577.5	75	0	13.560	/	Pass
		2595	75	0	13.584	/	Pass
		2612.5	75	0	13.642	/	Pass
	16QAM	2577.5	27	0	5.345	/	Pass
		2595	27	0	5.471	/	Pass
		2612.5	27	48	5.335	/	Pass
20	QPSK	2580	100	0	18.114	/	Pass
		2595	100	0	18.132	/	Pass
		2610	100	0	18.210	/	Pass
	16QAM	2580	27	0	5.584	/	Pass
		2595	27	0	5.594	/	Pass
		2610	27	73	5.744	/	Pass

4.1.2 Band38_XDB

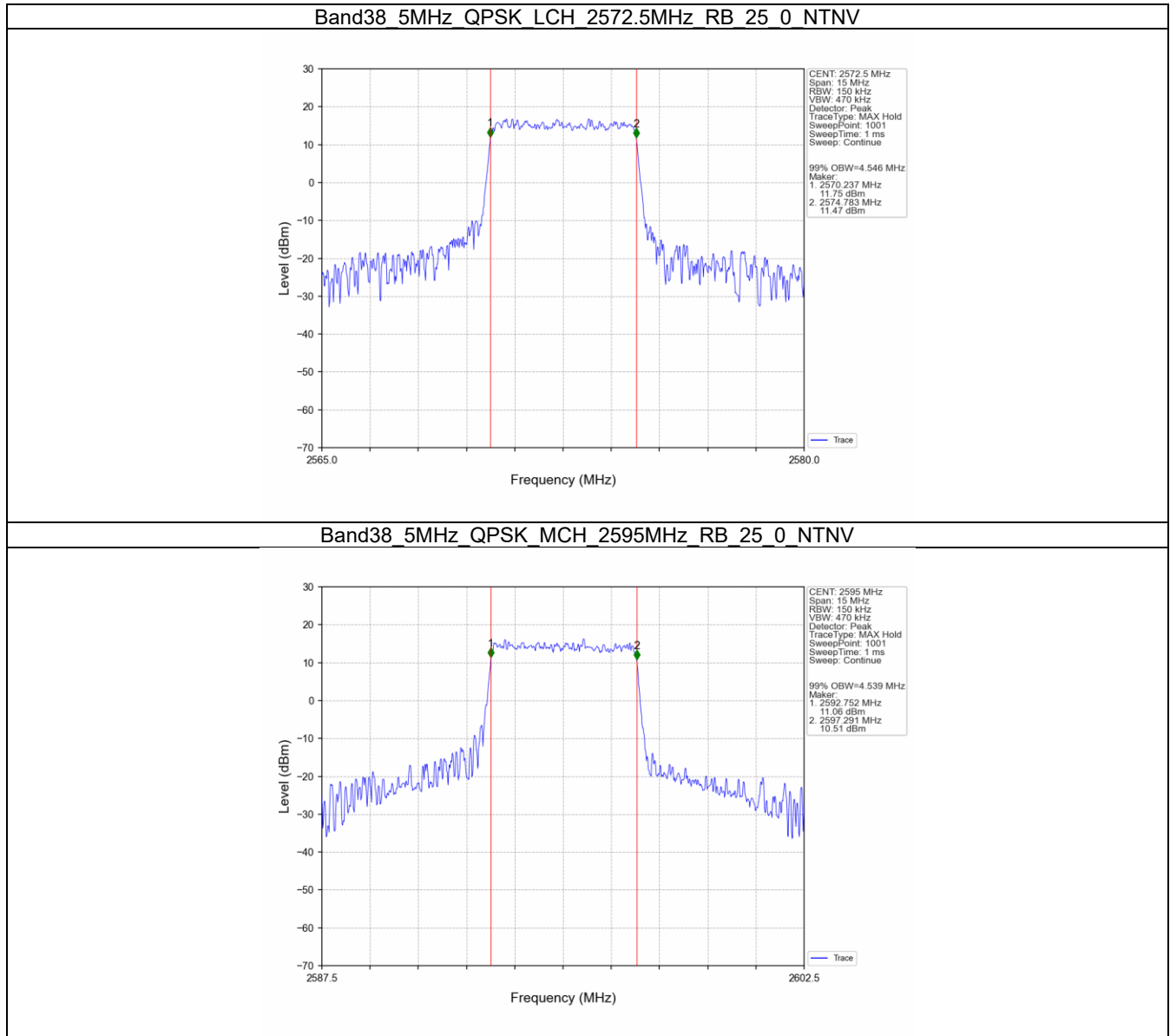
Band: 38 / NTNV							
Bandwidth (MHz)	Modulation	Frequency (MHz)	RB Allocation		26dB Bandwidth (MHz)		Verdict
			Size	Offset	Result	Limit	
5	QPSK	2572.5	25	0	5.044	/	Pass
		2595	25	0	5.296	/	Pass
		2617.5	25	0	5.022	/	Pass
	16QAM	2572.5	25	0	5.250	/	Pass
		2595	25	0	5.239	/	Pass
		2617.5	25	0	5.421	/	Pass
10	QPSK	2575	50	0	11.444	/	Pass
		2595	50	0	10.694	/	Pass
		2615	50	0	10.783	/	Pass
	16QAM	2575	27	0	6.708	/	Pass
		2595	27	0	7.016	/	Pass
		2615	27	23	6.210	/	Pass
15	QPSK	2577.5	75	0	15.472	/	Pass
		2595	75	0	15.871	/	Pass
		2612.5	75	0	15.685	/	Pass
	16QAM	2577.5	27	0	6.599	/	Pass
		2595	27	0	8.669	/	Pass
		2612.5	27	48	6.520	/	Pass
20	QPSK	2580	100	0	23.013	/	Pass



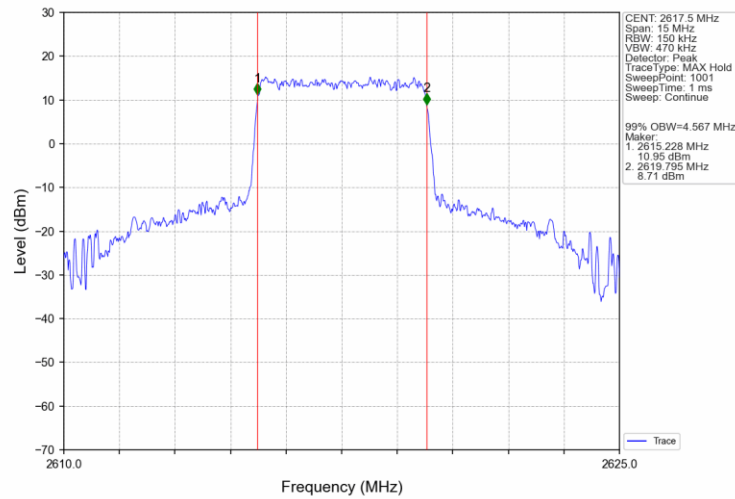
		2595	100	0	21.355	/	Pass
		2610	100	0	21.306	/	Pass
	16QAM	2580	27	0	7.467	/	Pass
		2595	27	0	7.408	/	Pass
		2610	27	73	7.778	/	Pass

4.2 Test Graph

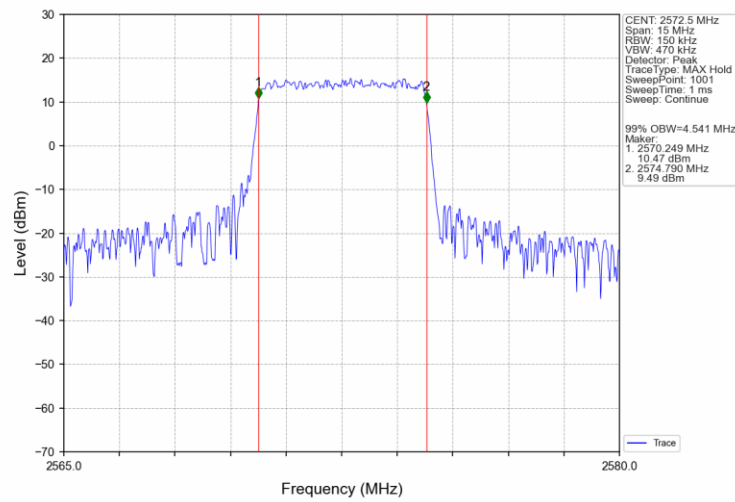
4.2.1 Band38_OBW



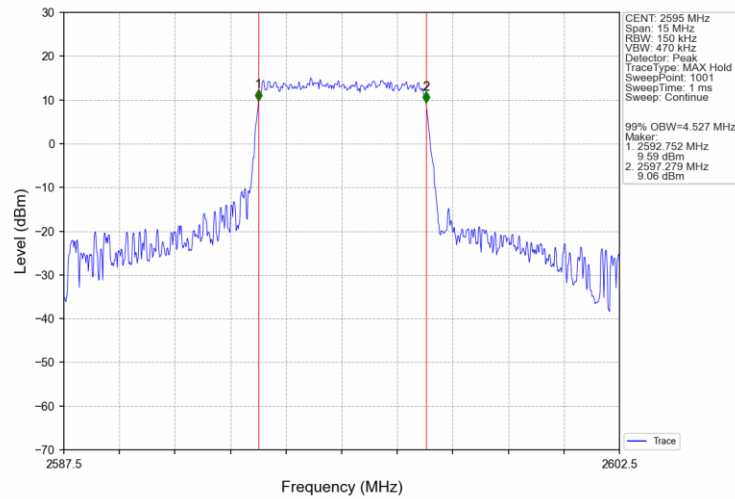
Band38 5MHz QPSK HCH 2617.5MHz RB 25 0 NTNV



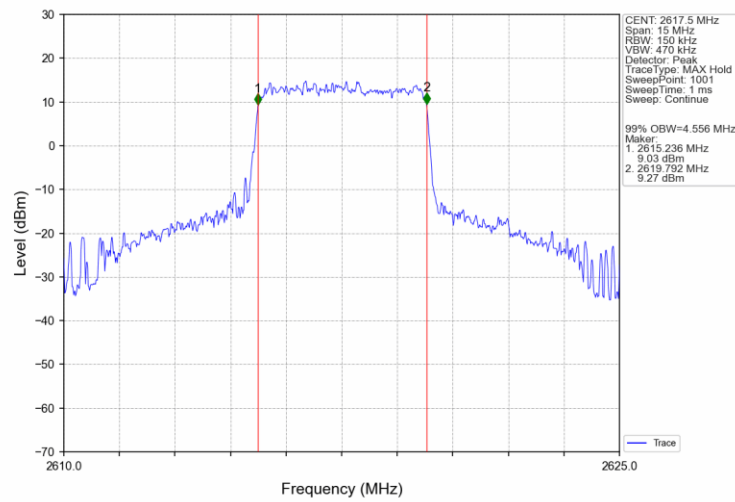
Band38 5MHz 16QAM LCH 2572.5MHz RB 25 0 NTNV



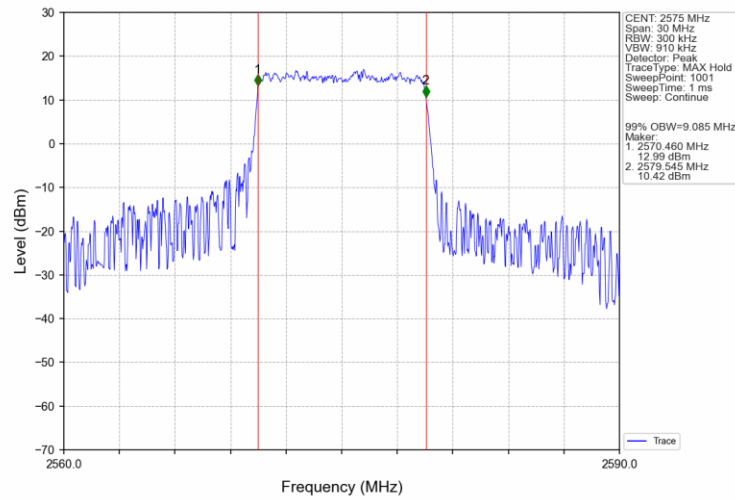
Band38_5MHz_16QAM_MCH_2595MHz_RB_25_0_NTNV



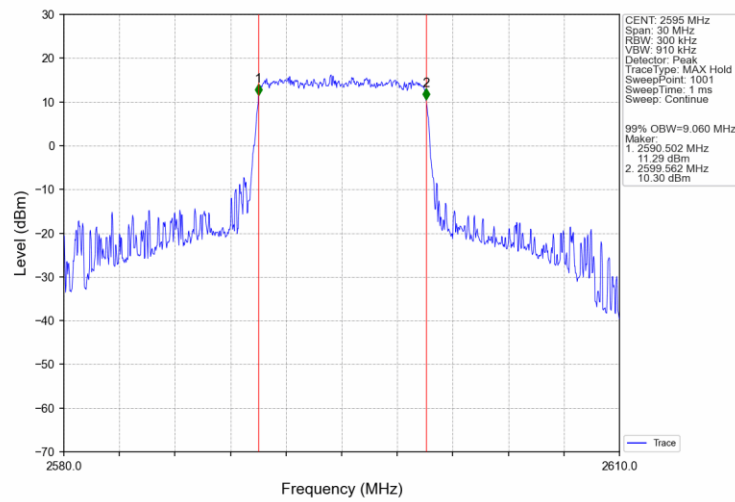
Band38_5MHz_16QAM_HCH_2617.5MHz_RB_25_0_NTNV



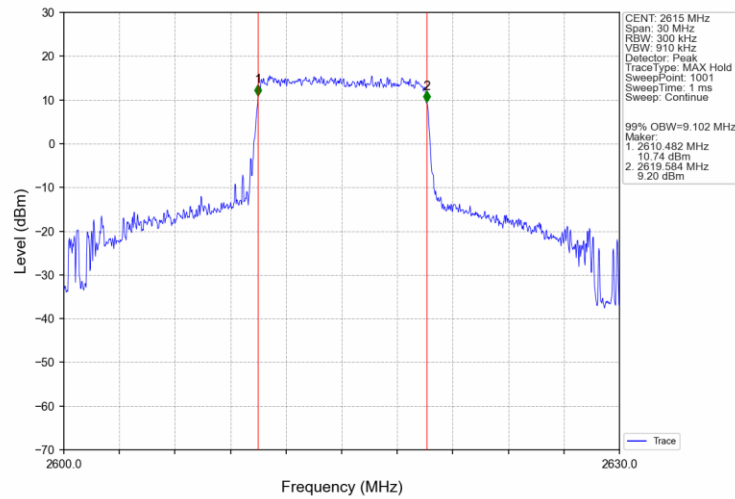
Band38 10MHz QPSK LCH 2575MHz RB 50 0 NTV



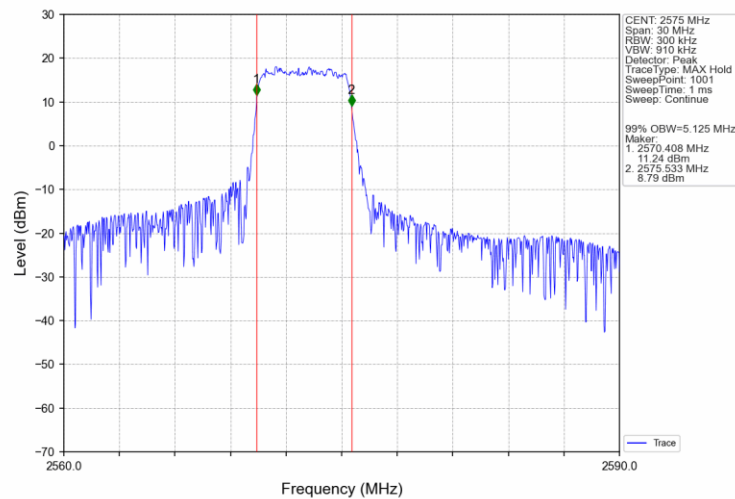
Band38 10MHz QPSK MCH 2595MHz RB 50 0 NTV



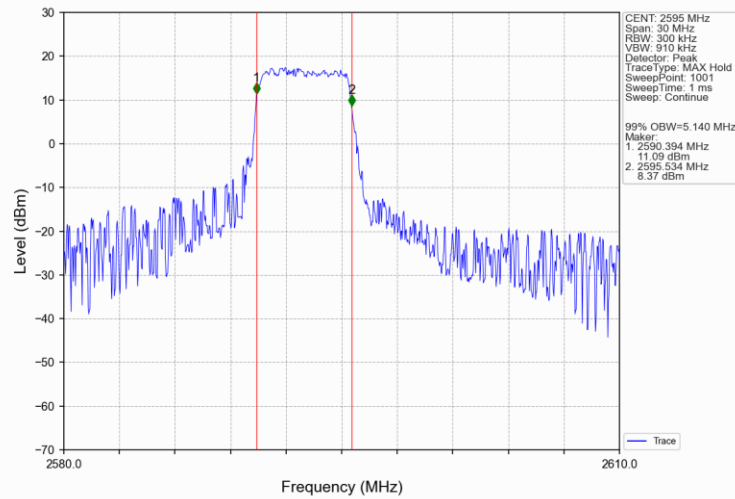
Band38 10MHz QPSK HCH 2615MHz RB 50 0 NTV



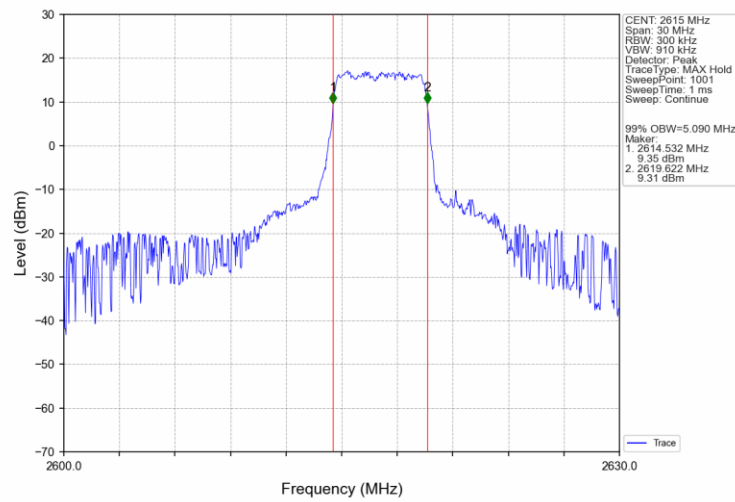
Band38 10MHz 16QAM LCH 2575MHz RB 27 0 NTV



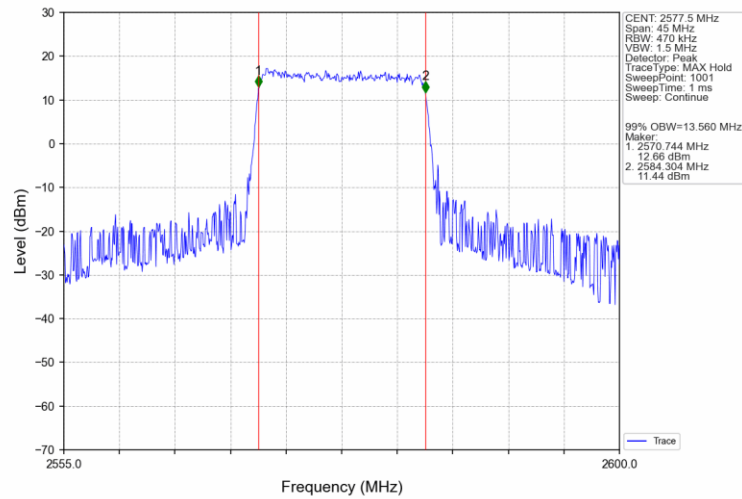
Band38 10MHz 16QAM MCH 2595MHz RB 27 0 NTN



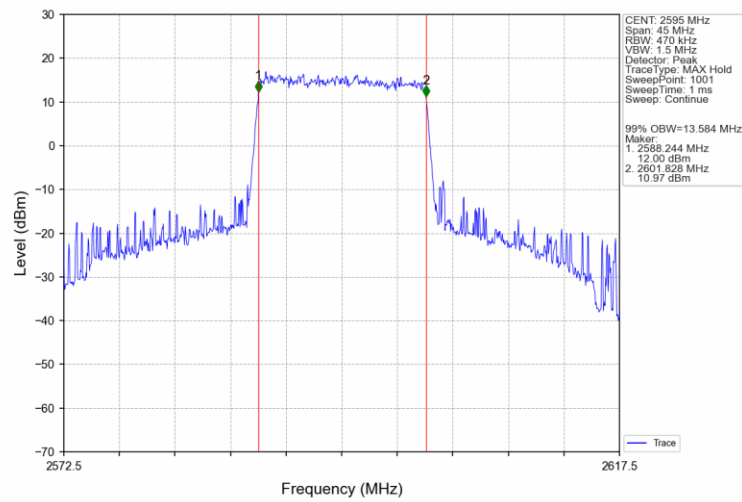
Band38 10MHz 16QAM HCH 2615MHz RB 27 23 NTN



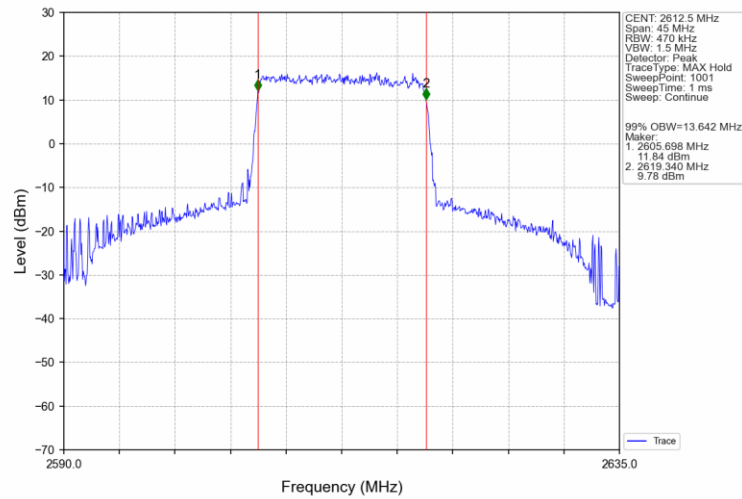
Band38 15MHz QPSK LCH 2577.5MHz RB 75 0 NTN



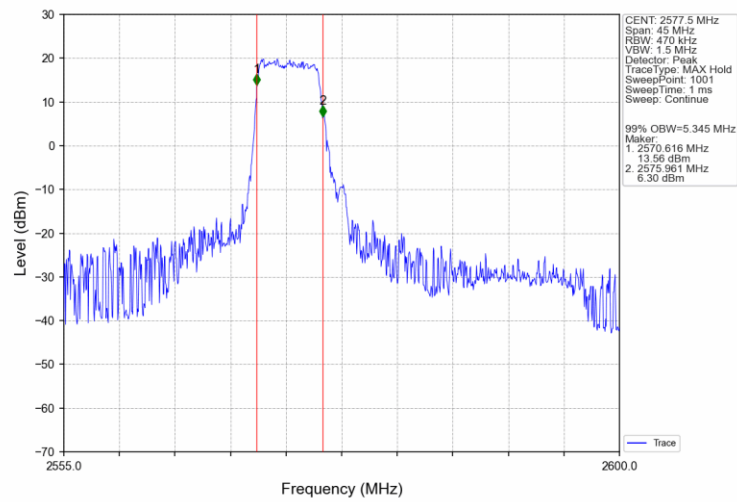
Band38 15MHz QPSK MCH 2595MHz RB 75 0 NTN



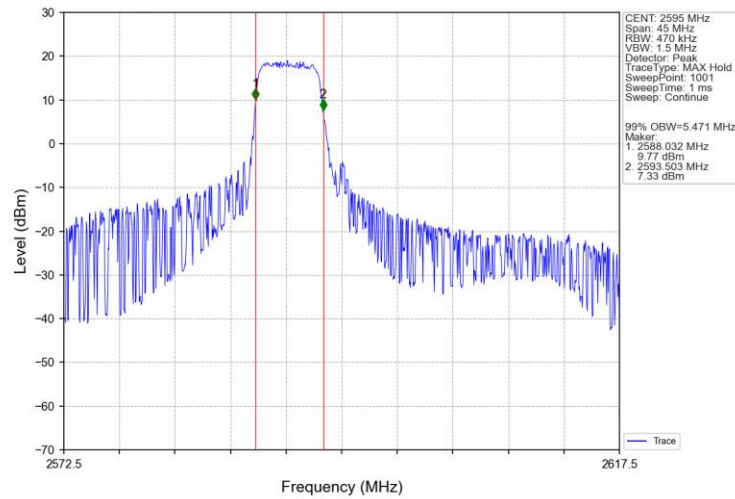
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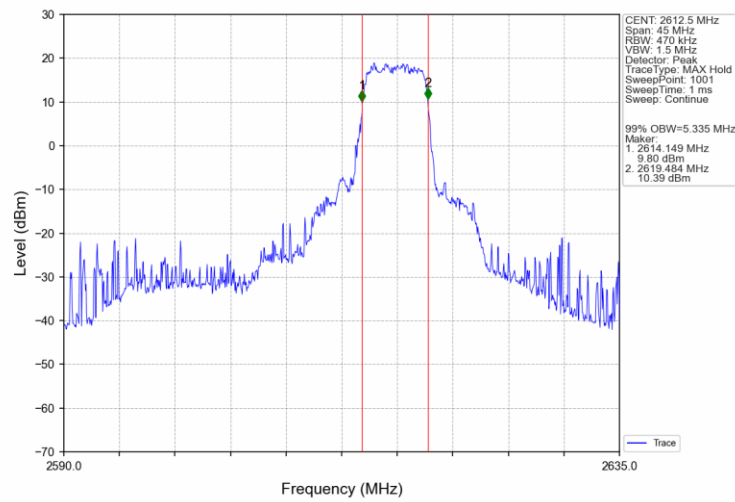
Band38 15MHz 16QAM LCH 2577.5MHz RB 27 0 NTN



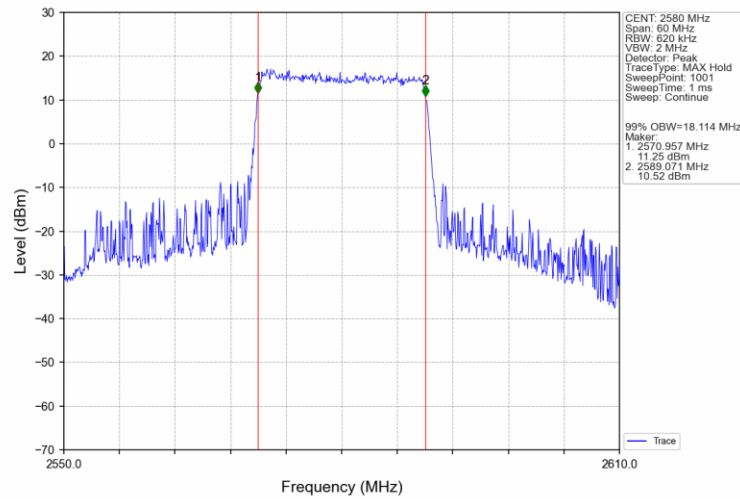
Band38 15MHz 16QAM MCH 2595MHz RB 27 0 NTN



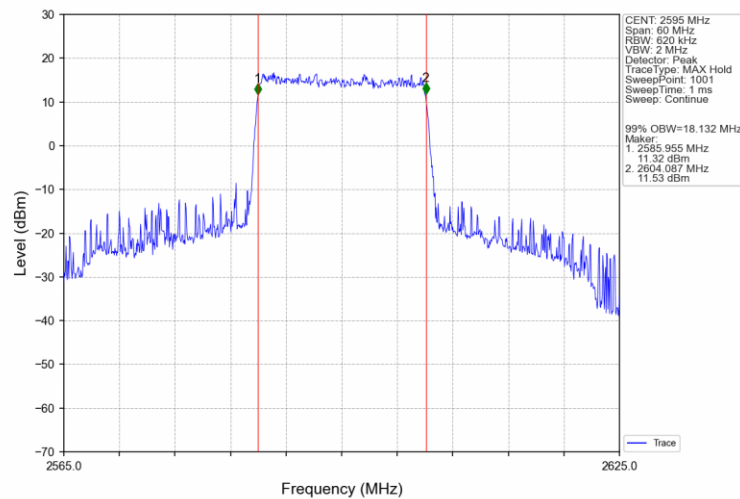
Band38 15MHz 16QAM HCH 2612.5MHz RB 27 48 NTN



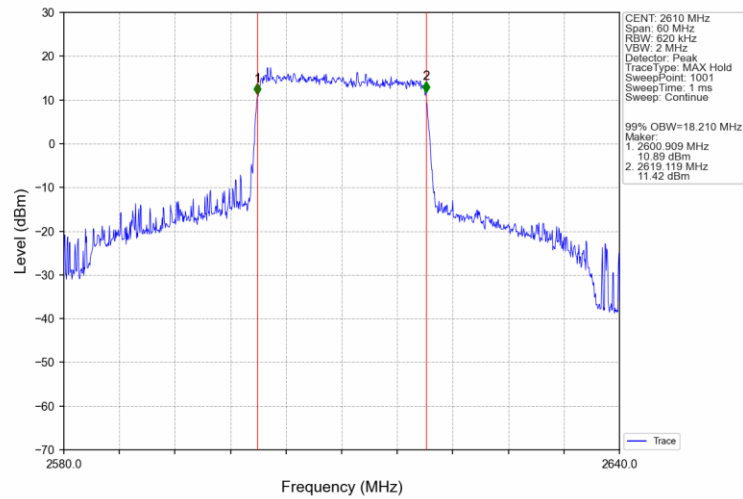
Band38 20MHz QPSK LCH 2580MHz RB 100 0 NTNV



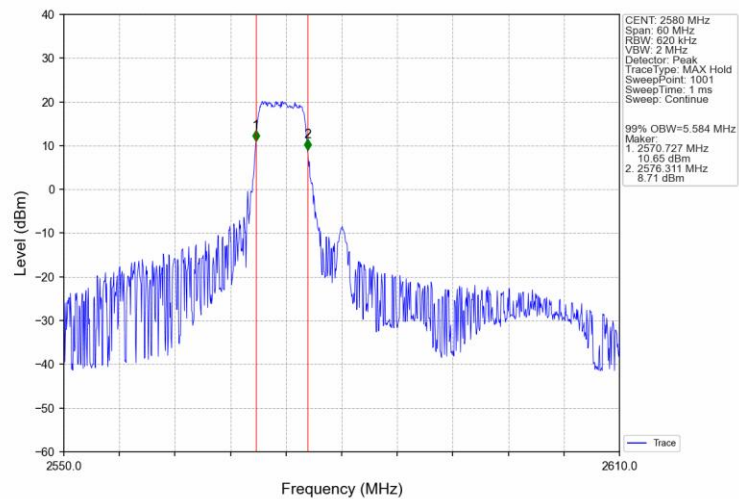
Band38 20MHz QPSK MCH 2595MHz RB 100 0 NTNV



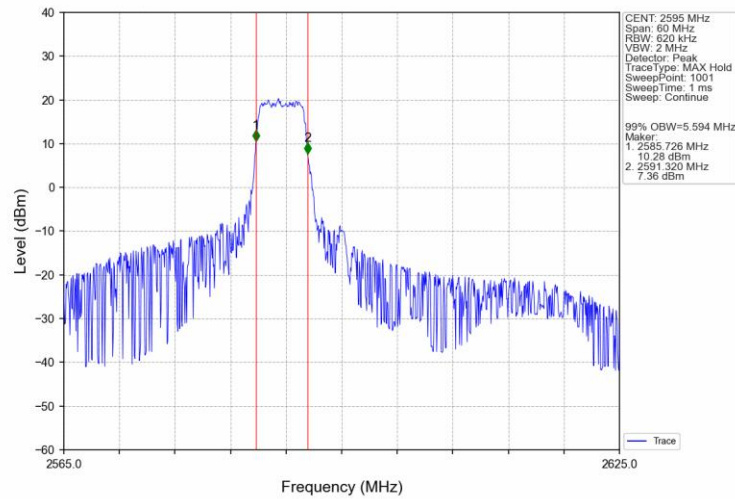
Band38 20MHz QPSK HCH 2610MHz RB 100 0 NTNV



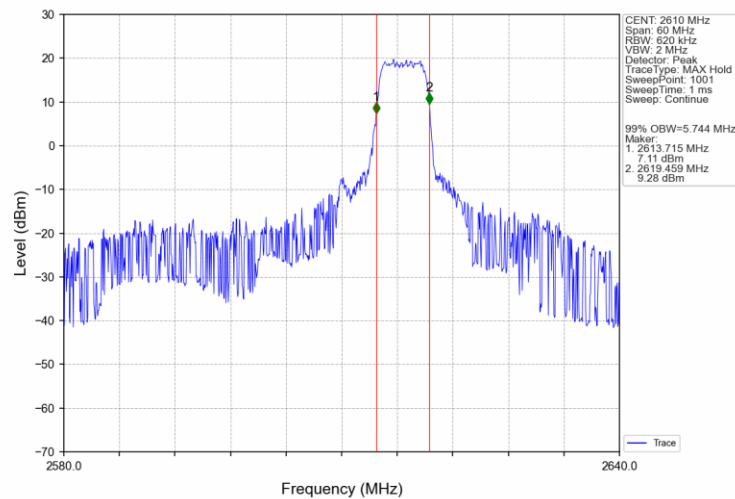
Band38 20MHz 16QAM LCH 2580MHz RB 27 0 NTNV



Band38 20MHz 16QAM MCH 2595MHz RB 27 0 NTN

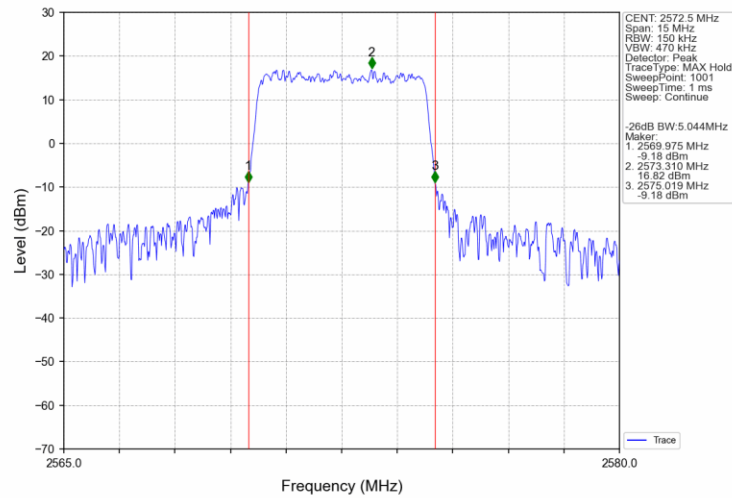


Band38 20MHz 16QAM HCH 2610MHz RB 27 73 NTN

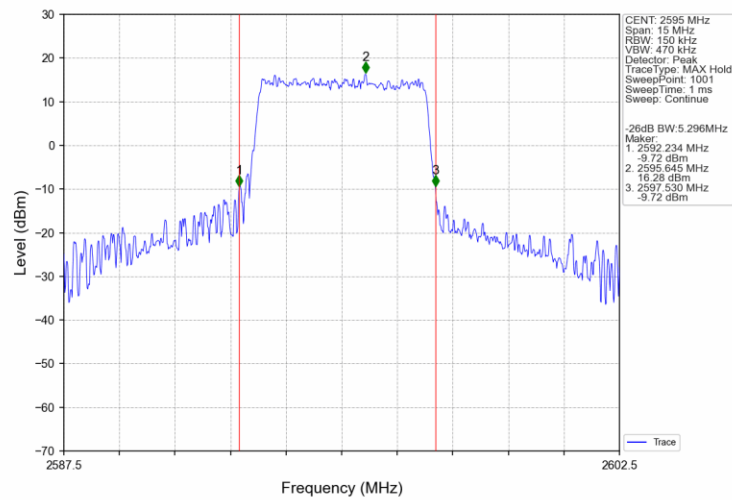


4.2.2 Band38_XDB

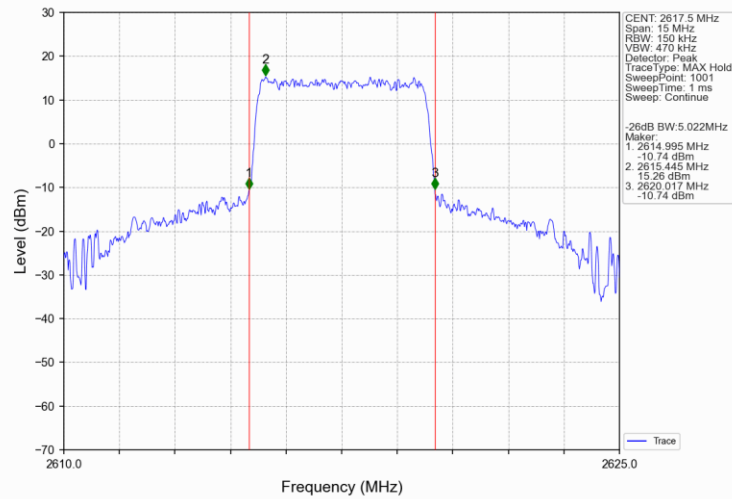
Band38 5MHz QPSK LCH 2572.5MHz RB 25 0 NTV



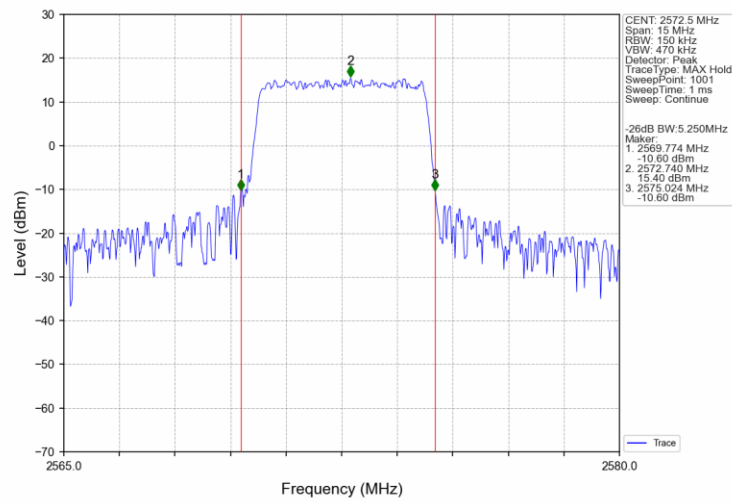
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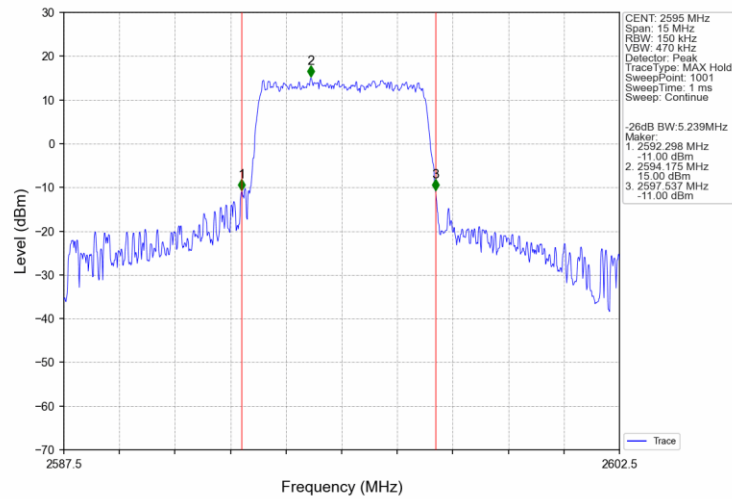
Band38 5MHz QPSK HCH 2617.5MHz RB 25 0 NTNV



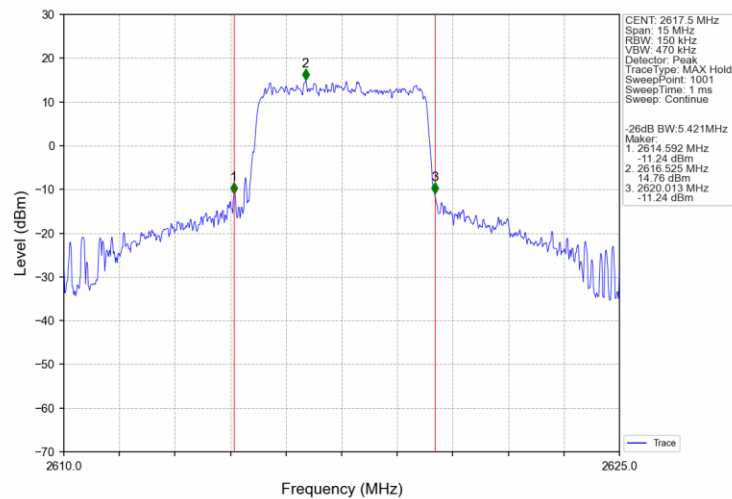
Band38 5MHz 16QAM LCH 2572.5MHz RB 25 0 NTNV



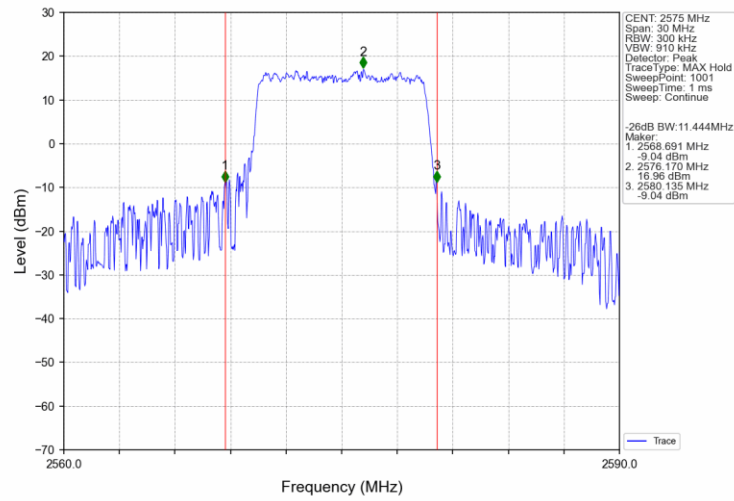
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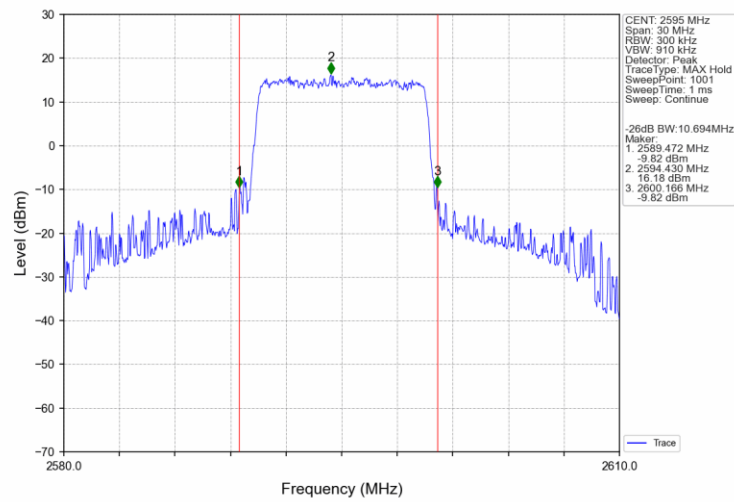
Band38 5MHz 16QAM HCH 2617.5MHz RB 25 0 NTNV



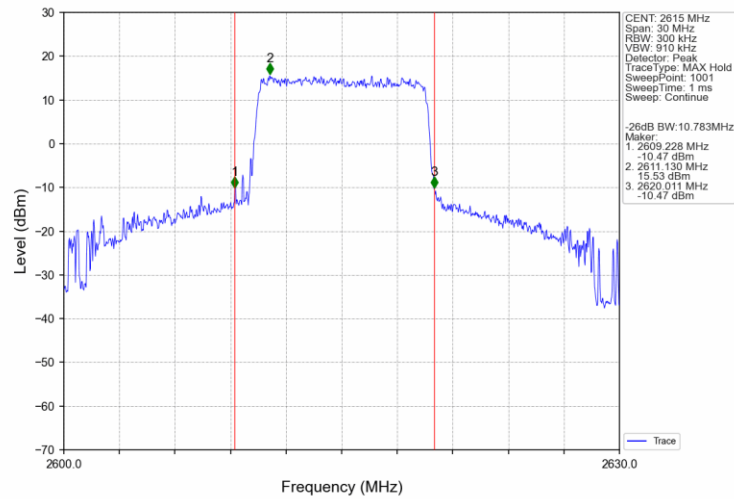
Band38 10MHz QPSK LCH 2575MHz RB 50 0 NTV



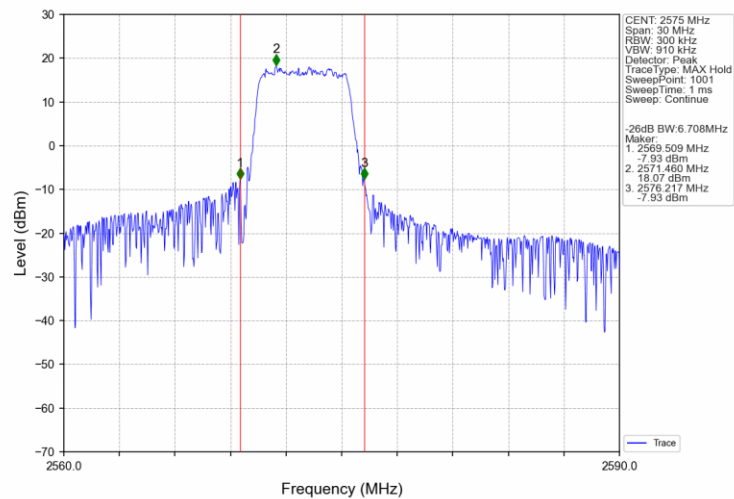
Band38 10MHz QPSK MCH 2595MHz RB 50 0 NTV



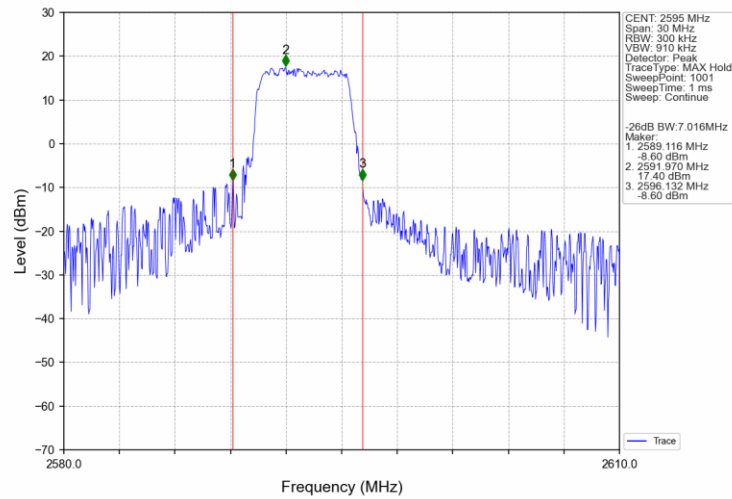
Band38_10MHz_QPSK_HCH_2615MHz_RB_50_0_NTNV



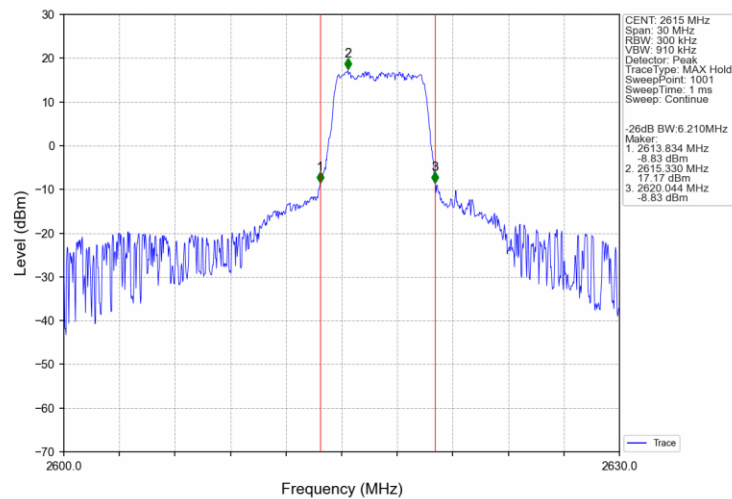
Band38_10MHz_16QAM_LCH_2575MHz_RB_27_0_NTNV



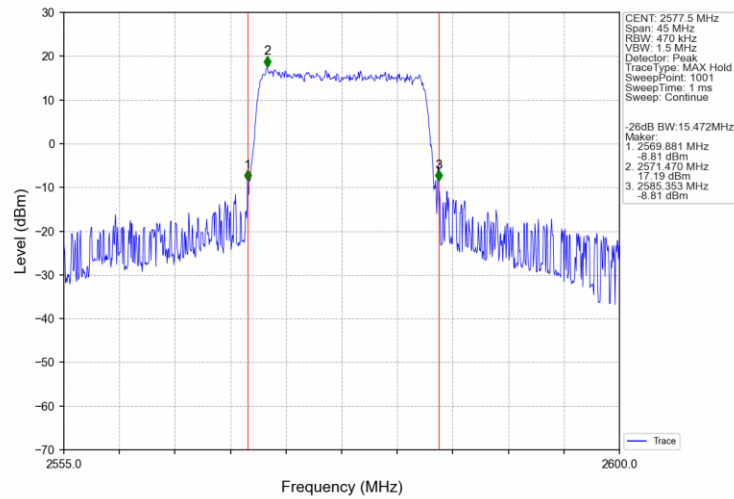
Band38 10MHz 16QAM MCH 2595MHz RB 27 0 NTN



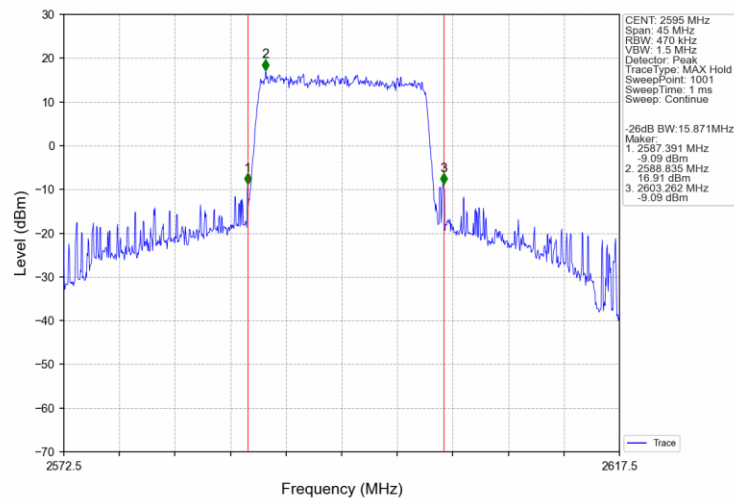
Band38 10MHz 16QAM HCH 2615MHz RB 27 23 NTN



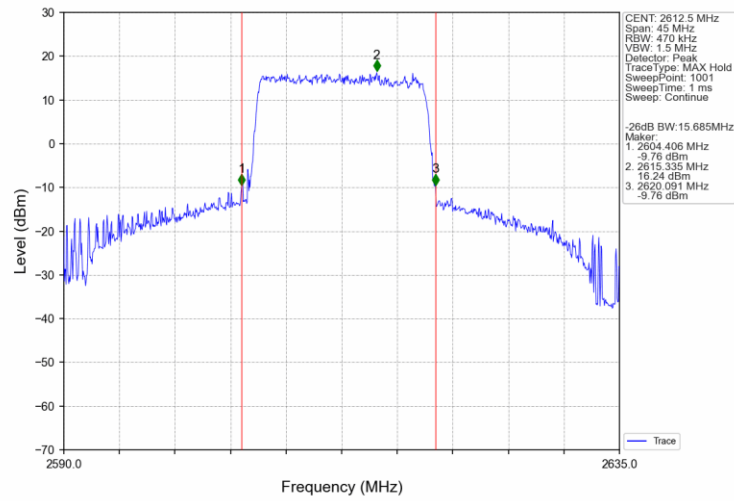
Band38 15MHz QPSK LCH 2577.5MHz RB 75 0 NTN



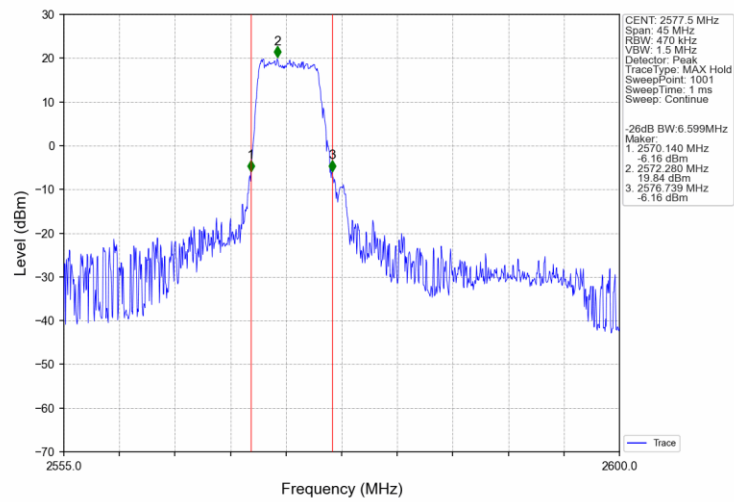
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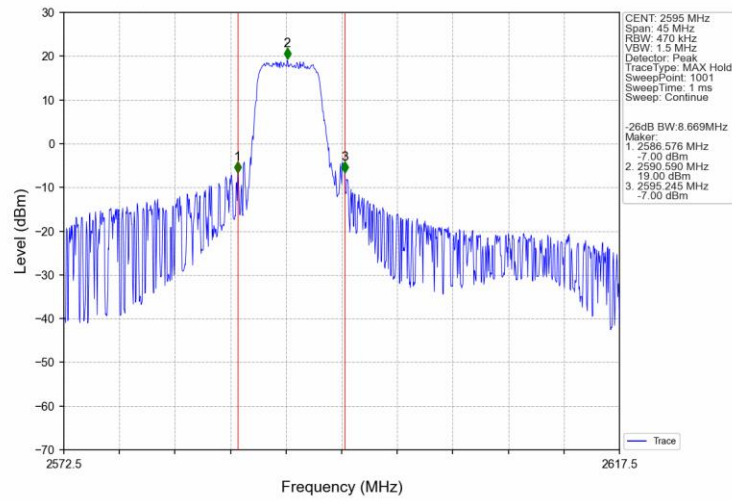
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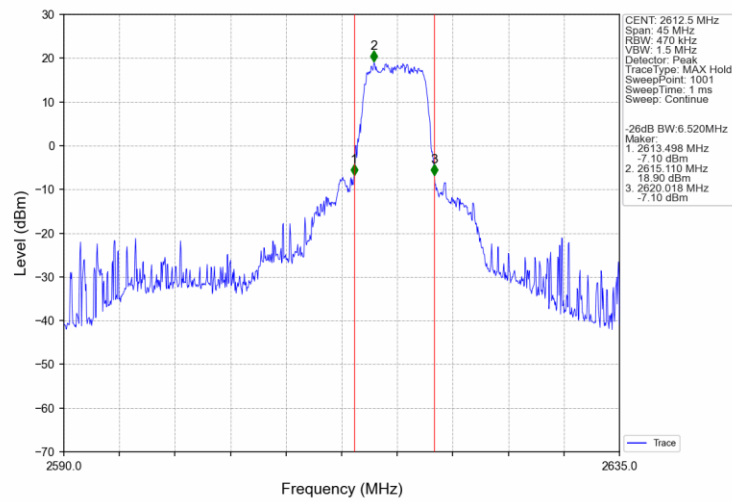
Band38 15MHz 16QAM LCH 2577.5MHz RB 27 0 NTN



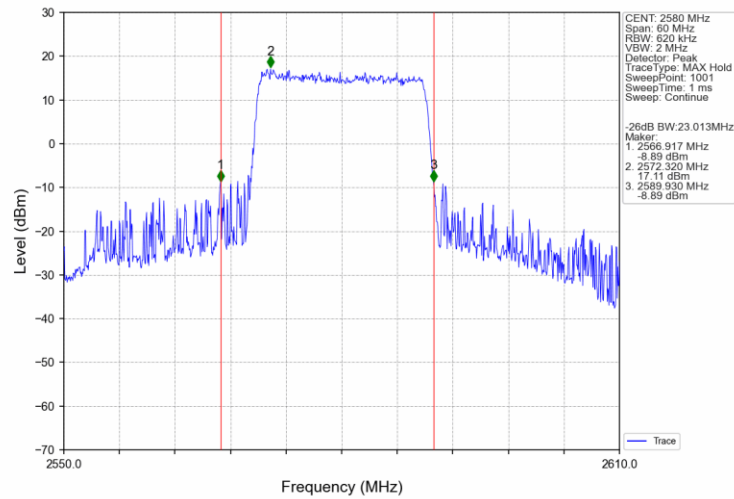
Band38 15MHz 16QAM MCH 2595MHz RB 27 0 NTN



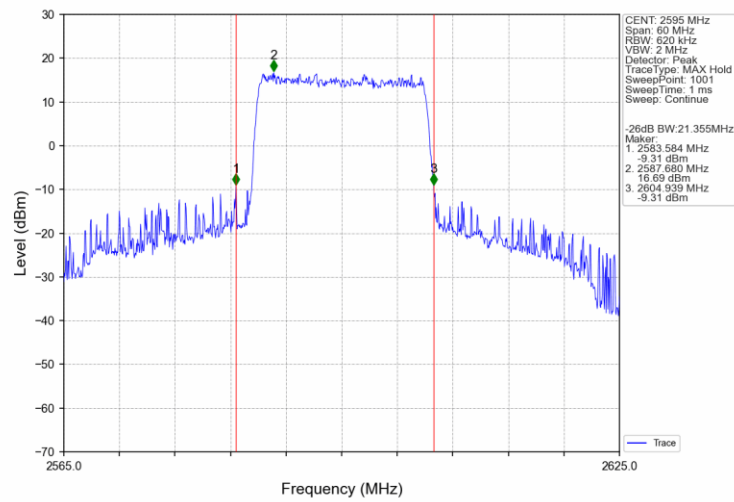
Band38 15MHz 16QAM HCH 2612.5MHz RB 27 48 NTN



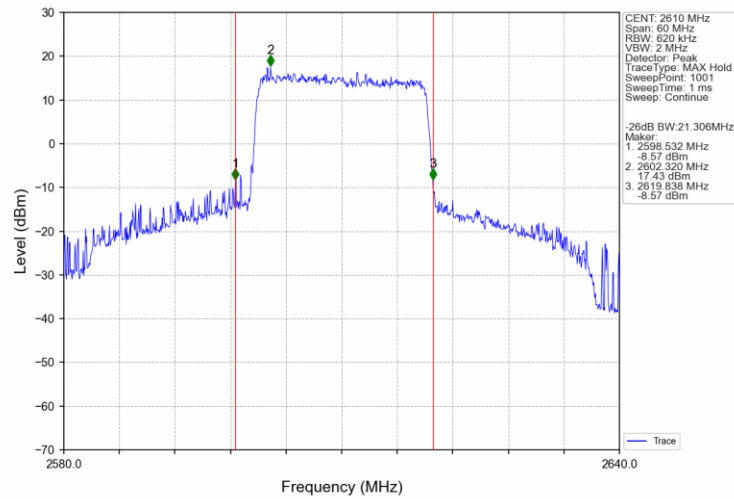
Band38 20MHz QPSK LCH 2580MHz RB 100 0 NTNV



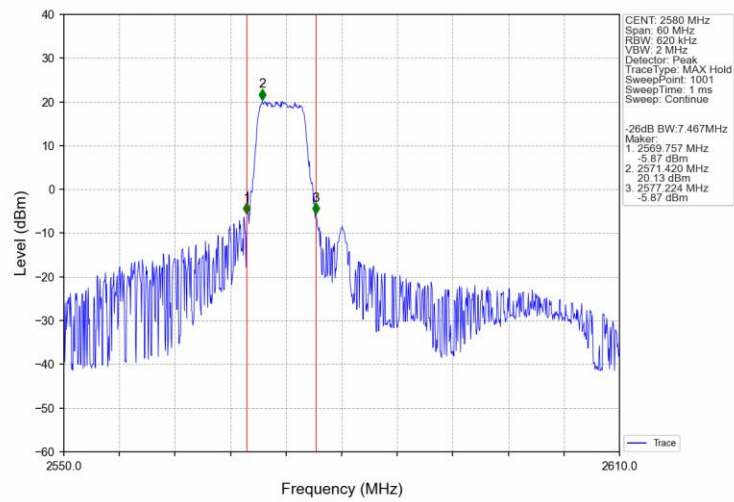
Band38 20MHz QPSK MCH 2595MHz RB 100 0 NTNV



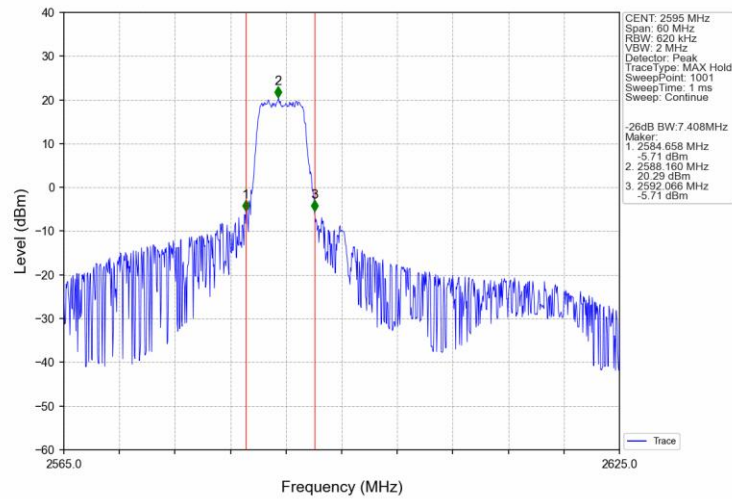
Band38 20MHz QPSK HCH 2610MHz RB 100 0 NTNV



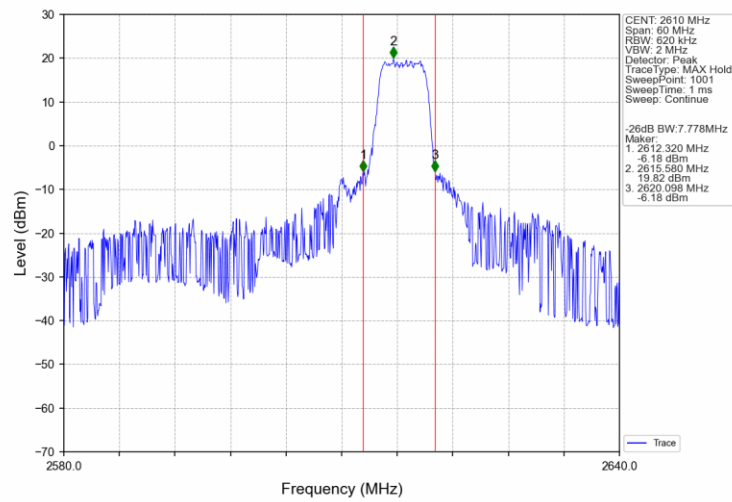
Band38 20MHz 16QAM LCH 2580MHz RB 27 0 NTNV



Band38 20MHz 16QAM MCH 2595MHz RB 27 0 NTN



Band38 20MHz 16QAM HCH 2610MHz RB 27 73 NTN



5. Peak-Average Ratio

5.1 Test Result

5.1.1 B38_5MHz

Band: 38 / Bandwidth: 5MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Peak-Average Ratio (dB)		Verdict
		Size	Offset	Result	Limit	
QPSK	2572.5	25	0	7.54	<=13	Pass
	2595	25	0	7.15	<=13	Pass
	2617.5	25	0	6.67	<=13	Pass
16QAM	2572.5	25	0	8.19	<=13	Pass
	2595	25	0	7.86	<=13	Pass
	2617.5	25	0	7.29	<=13	Pass

5.1.2 B38_10MHz

Band: 38 / Bandwidth: 10MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Peak-Average Ratio (dB)		Verdict
		Size	Offset	Result	Limit	
QPSK	2575	50	0	7.55	<=13	Pass
	2595	50	0	7.31	<=13	Pass
	2615	50	0	7.04	<=13	Pass
16QAM	2575	27	0	8.15	<=13	Pass
	2595	27	0	7.73	<=13	Pass
	2615	27	23	7.05	<=13	Pass

5.1.3 B38_15MHz

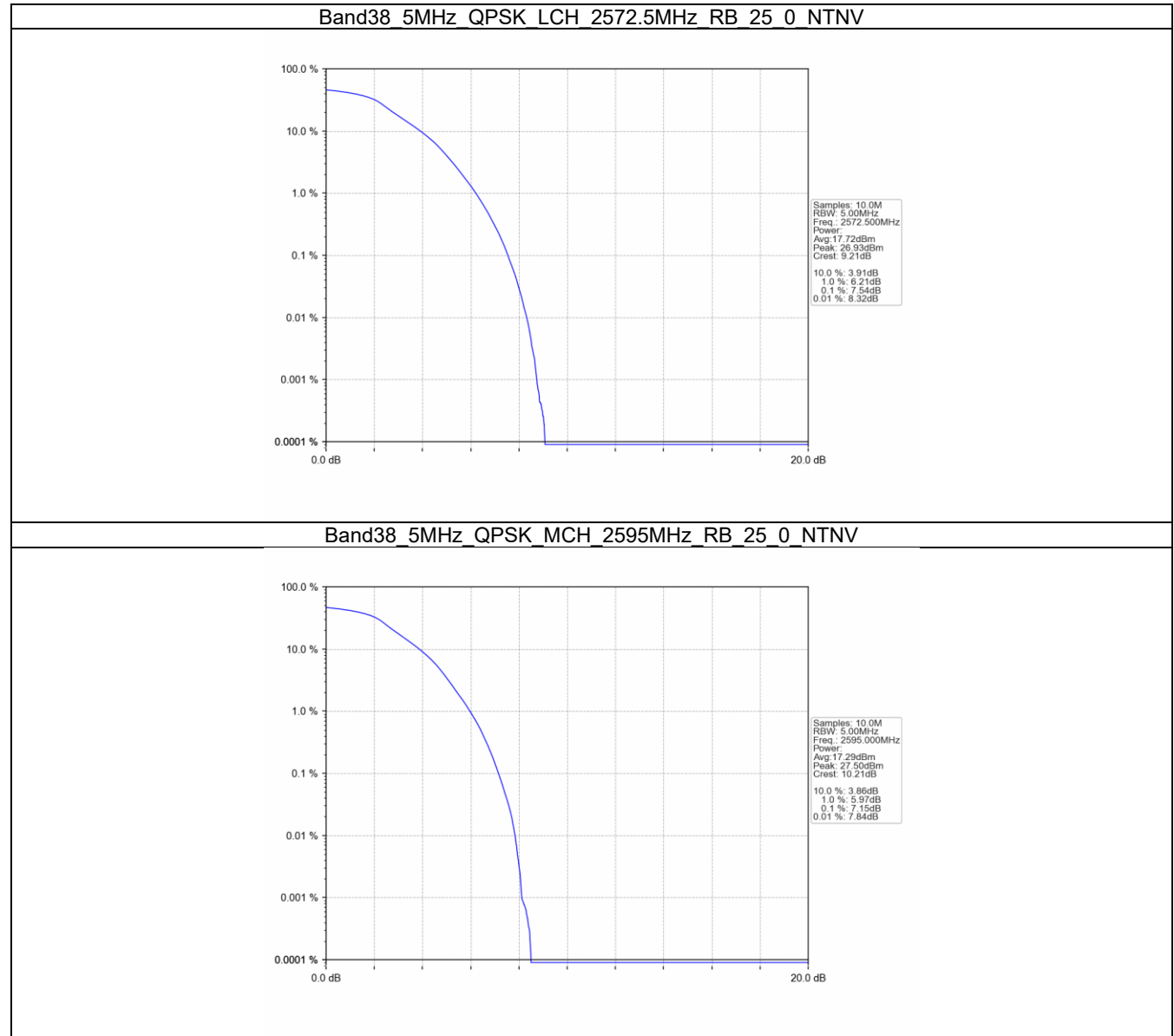
Band: 38 / Bandwidth: 15MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Peak-Average Ratio (dB)		Verdict
		Size	Offset	Result	Limit	
QPSK	2577.5	75	0	7.15	<=13	Pass
	2595	75	0	7.19	<=13	Pass
	2612.5	75	0	6.93	<=13	Pass
16QAM	2577.5	27	0	7.99	<=13	Pass
	2595	27	0	7.92	<=13	Pass
	2612.5	27	48	7.46	<=13	Pass

5.1.4 B38_20MHz

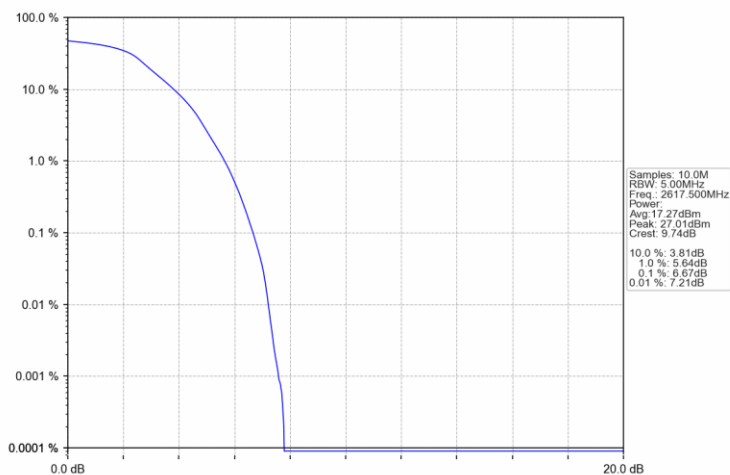
Band: 38 / Bandwidth: 20MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Peak-Average Ratio (dB)		Verdict
		Size	Offset	Result	Limit	
QPSK	2580	100	0	7.77	<=13	Pass
	2595	100	0	7.74	<=13	Pass
	2610	100	0	7.63	<=13	Pass
16QAM	2580	27	0	9.17	<=13	Pass
	2595	27	0	9.03	<=13	Pass
	2610	27	73	9.21	<=13	Pass

5.2 Test Graph

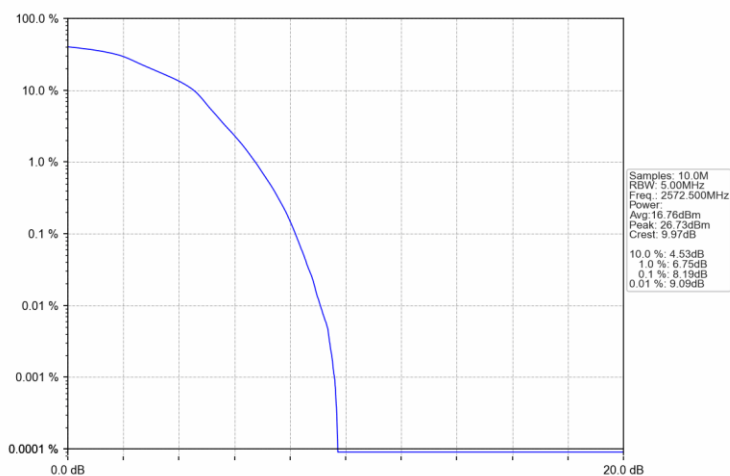
5.2.1 B38_5MHz



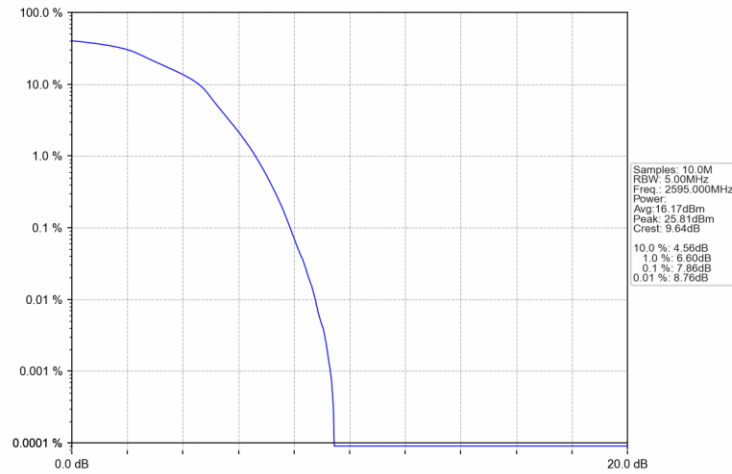
Band38 5MHz QPSK HCH 2617.5MHz RB 25 0 NTN



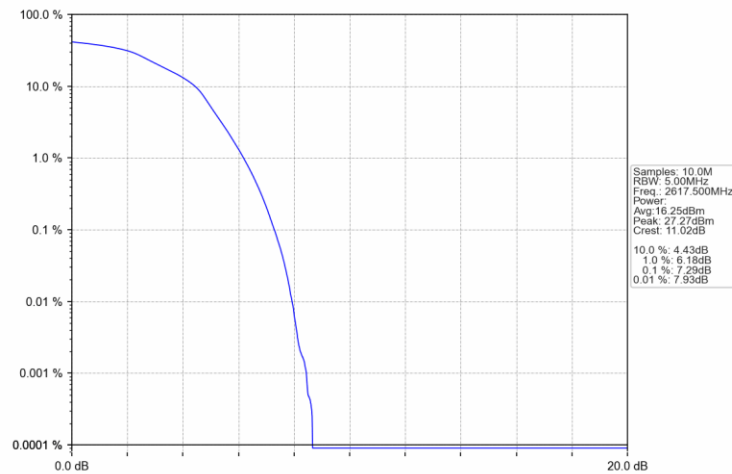
Band38 5MHz 16QAM LCH 2572.5MHz RB 25 0 NTN



Band38 5MHz 16QAM MCH 2595MHz RB 25 0 NTNV

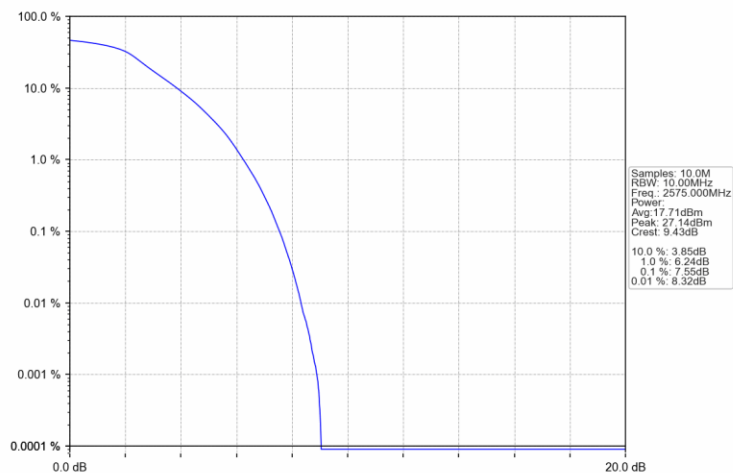


Band38 5MHz 16QAM HCH 2617.5MHz RB 25 0 NTNV

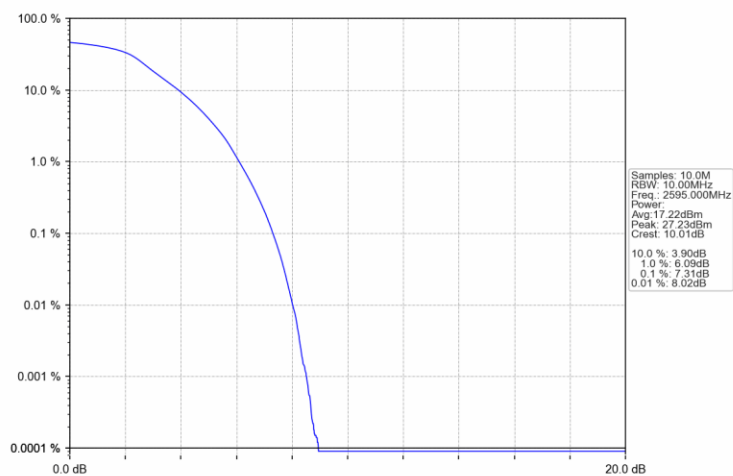


5.2.2 B38_10MHz

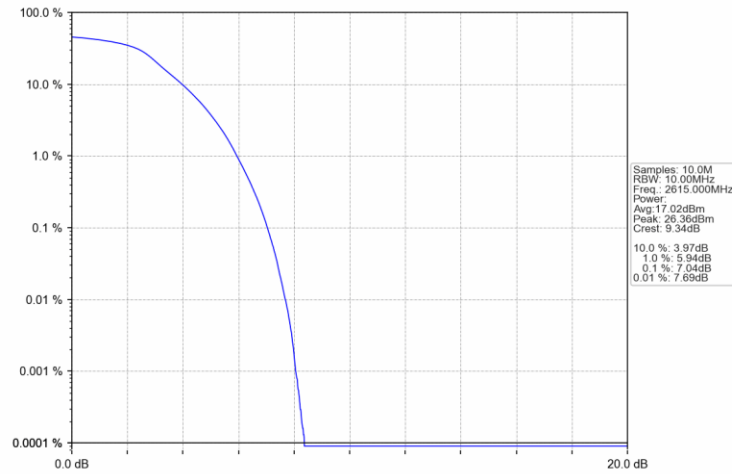
Band38_10MHz_QPSK_LCH_2575MHz_RB_50_0_NTNV



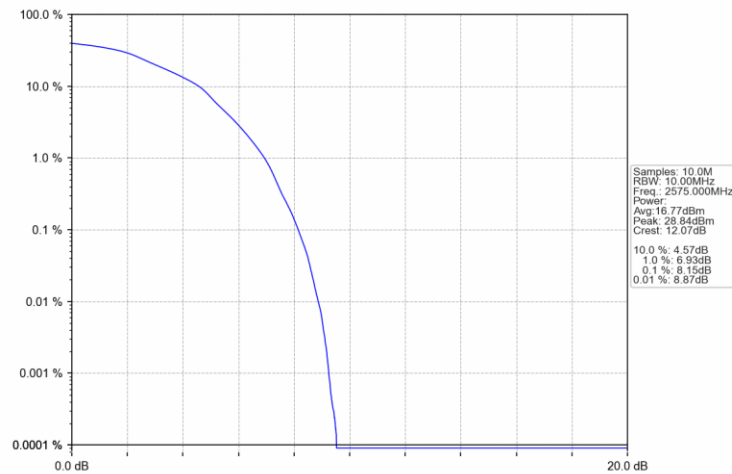
Band38_10MHz_QPSK_MCH_2595MHz_RB_50_0_NTNV



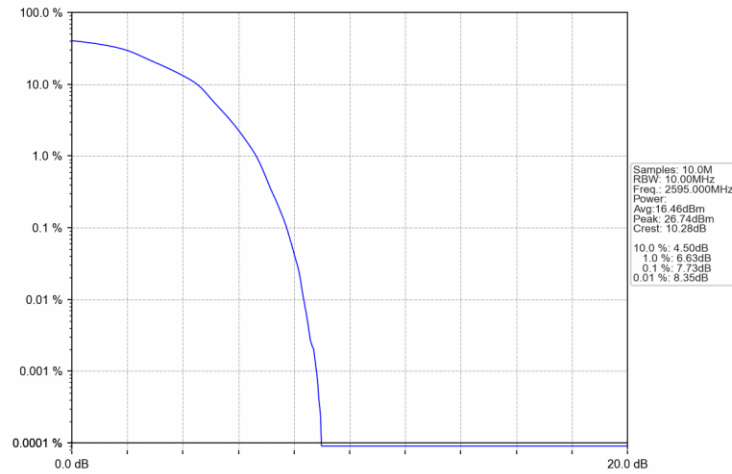
Band38 10MHz QPSK HCH 2615MHz RB 50 0 NTV



Band38 10MHz 16QAM LCH 2575MHz RB 27 0 NTV



Band38 10MHz 16QAM MCH 2595MHz RB 27 0 NTN



Band38 10MHz 16QAM HCH 2615MHz RB 27 23 NTN

