

Annex for FCC 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	23.05	0.00	23.05	<=33.01	Pass
			13	23.13	0.00	23.13	<=33.01	Pass
			24	22.93	0.00	22.93	<=33.01	Pass
		12	0	22.07	0.00	22.07	<=33.01	Pass
			6	22.08	0.00	22.08	<=33.01	Pass
			13	21.94	0.00	21.94	<=33.01	Pass
		25	0	21.98	0.00	21.98	<=33.01	Pass
	2595	1	0	23.01	0.00	23.01	<=33.01	Pass
			13	22.87	0.00	22.87	<=33.01	Pass
			24	22.92	0.00	22.92	<=33.01	Pass
		12	0	22.03	0.00	22.03	<=33.01	Pass
			6	22.05	0.00	22.05	<=33.01	Pass
			13	22.04	0.00	22.04	<=33.01	Pass
		25	0	22.03	0.00	22.03	<=33.01	Pass
	2617.5	1	0	23.11	0.00	23.11	<=33.01	Pass
			13	23.13	0.00	23.13	<=33.01	Pass
			24	23.09	0.00	23.09	<=33.01	Pass
		12	0	22.18	0.00	22.18	<=33.01	Pass
			6	22.10	0.00	22.10	<=33.01	Pass
			13	22.06	0.00	22.06	<=33.01	Pass
		25	0	22.12	0.00	22.12	<=33.01	Pass
16QAM	2572.5	1	0	21.44	0.00	21.44	<=33.01	Pass
			13	21.78	0.00	21.78	<=33.01	Pass
			24	21.78	0.00	21.78	<=33.01	Pass
		12	0	21.06	0.00	21.06	<=33.01	Pass
			6	21.16	0.00	21.16	<=33.01	Pass
			13	20.93	0.00	20.93	<=33.01	Pass
		25	0	21.06	0.00	21.06	<=33.01	Pass
	2595	1	0	22.85	0.00	22.85	<=33.01	Pass
			13	23.04	0.00	23.04	<=33.01	Pass
			24	23.02	0.00	23.02	<=33.01	Pass
		12	0	21.09	0.00	21.09	<=33.01	Pass
			6	20.97	0.00	20.97	<=33.01	Pass
			13	20.94	0.00	20.94	<=33.01	Pass
		25	0	21.31	0.00	21.31	<=33.01	Pass
	2617.5	1	0	21.91	0.00	21.91	<=33.01	Pass
			13	21.97	0.00	21.97	<=33.01	Pass
			24	21.96	0.00	21.96	<=33.01	Pass
		12	0	21.23	0.00	21.23	<=33.01	Pass
			6	21.17	0.00	21.17	<=33.01	Pass
			13	21.16	0.00	21.16	<=33.01	Pass
		25	0	21.13	0.00	21.13	<=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	23.12	0.00	23.12	<=33.01	Pass
			25	23.03	0.00	23.03	<=33.01	Pass
			49	23.05	0.00	23.05	<=33.01	Pass
		25	0	21.96	0.00	21.96	<=33.01	Pass
			13	22.11	0.00	22.11	<=33.01	Pass
			25	21.97	0.00	21.97	<=33.01	Pass
		50	0	22.05	0.00	22.05	<=33.01	Pass
			0	23.15	0.00	23.15	<=33.01	Pass
			25	22.87	0.00	22.87	<=33.01	Pass
	2595	1	49	22.86	0.00	22.86	<=33.01	Pass
			0	22.08	0.00	22.08	<=33.01	Pass
			13	22.11	0.00	22.11	<=33.01	Pass
		25	25	22.04	0.00	22.04	<=33.01	Pass
			0	22.02	0.00	22.02	<=33.01	Pass
			0	22.95	0.00	22.95	<=33.01	Pass
		50	0	22.95	0.00	22.95	<=33.01	Pass
			25	23.05	0.00	23.05	<=33.01	Pass
			49	22.94	0.00	22.94	<=33.01	Pass
16QAM	2575	1	0	22.07	0.00	22.07	<=33.01	Pass
			25	22.40	0.00	22.40	<=33.01	Pass
			49	22.38	0.00	22.38	<=33.01	Pass
		25	0	21.09	0.00	21.09	<=33.01	Pass
			13	21.24	0.00	21.24	<=33.01	Pass
			25	21.23	0.00	21.23	<=33.01	Pass
		50	0	21.07	0.00	21.07	<=33.01	Pass
			0	21.98	0.00	21.98	<=33.01	Pass
			25	22.01	0.00	22.01	<=33.01	Pass
	2595	1	49	21.97	0.00	21.97	<=33.01	Pass
			0	21.46	0.00	21.46	<=33.01	Pass
			13	21.41	0.00	21.41	<=33.01	Pass
		25	25	21.43	0.00	21.43	<=33.01	Pass
			0	21.05	0.00	21.05	<=33.01	Pass
			0	23.15	0.00	23.15	<=33.01	Pass
		50	0	23.15	0.00	23.15	<=33.01	Pass
			25	23.12	0.00	23.12	<=33.01	Pass
			49	23.17	0.00	23.17	<=33.01	Pass
	2615	1	0	21.30	0.00	21.30	<=33.01	Pass
			13	21.12	0.00	21.12	<=33.01	Pass
			25	21.14	0.00	21.14	<=33.01	Pass
		25	0	21.38	0.00	21.38	<=33.01	Pass
			0	21.38	0.00	21.38	<=33.01	Pass
			0	21.38	0.00	21.38	<=33.01	Pass
		50	0	21.38	0.00	21.38	<=33.01	Pass
			0	21.38	0.00	21.38	<=33.01	Pass
			0	21.38	0.00	21.38	<=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	23.21	0.00	23.21	<=33.01	Pass	
			38	23.00	0.00	23.00	<=33.01	Pass	
			74	23.05	0.00	23.05	<=33.01	Pass	
		36	0	21.99	0.00	21.99	<=33.01	Pass	
			18	21.98	0.00	21.98	<=33.01	Pass	
			39	22.05	0.00	22.05	<=33.01	Pass	
		75	0	21.97	0.00	21.97	<=33.01	Pass	
		2595	1	0	22.98	0.00	22.98	<=33.01	Pass
				38	22.89	0.00	22.89	<=33.01	Pass
	74			22.92	0.00	22.92	<=33.01	Pass	
	36		0	22.03	0.00	22.03	<=33.01	Pass	
			18	21.94	0.00	21.94	<=33.01	Pass	
			39	22.05	0.00	22.05	<=33.01	Pass	
	75		0	22.10	0.00	22.10	<=33.01	Pass	
	2612.5		1	0	23.19	0.00	23.19	<=33.01	Pass
				38	23.00	0.00	23.00	<=33.01	Pass
		74		23.10	0.00	23.10	<=33.01	Pass	
		36	0	21.93	0.00	21.93	<=33.01	Pass	
			18	21.96	0.00	21.96	<=33.01	Pass	
			39	21.94	0.00	21.94	<=33.01	Pass	
		75	0	21.94	0.00	21.94	<=33.01	Pass	

16QAM	2577.5	1	0	22.24	0.00	22.24	<=33.01	Pass	
			38	22.02	0.00	22.02	<=33.01	Pass	
			74	22.14	0.00	22.14	<=33.01	Pass	
		36	0	21.04	0.00	21.04	<=33.01	Pass	
			18	21.05	0.00	21.05	<=33.01	Pass	
			39	21.13	0.00	21.13	<=33.01	Pass	
		75	0	21.11	0.00	21.11	<=33.01	Pass	
		2595	1	0	22.54	0.00	22.54	<=33.01	Pass
				38	22.05	0.00	22.05	<=33.01	Pass
	74			21.81	0.00	21.81	<=33.01	Pass	
	36		0	21.23	0.00	21.23	<=33.01	Pass	
			18	21.30	0.00	21.30	<=33.01	Pass	
			39	21.25	0.00	21.25	<=33.01	Pass	
	75		0	21.11	0.00	21.11	<=33.01	Pass	
	2612.5		1	0	22.99	0.00	22.99	<=33.01	Pass
				38	23.10	0.00	23.10	<=33.01	Pass
		74		22.93	0.00	22.93	<=33.01	Pass	
		36	0	21.23	0.00	21.23	<=33.01	Pass	
			18	21.16	0.00	21.16	<=33.01	Pass	
			39	21.18	0.00	21.18	<=33.01	Pass	
		75	0	21.19	0.00	21.19	<=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	23.03	0.00	23.03	<=33.01	Pass
			50	22.88	0.00	22.88	<=33.01	Pass
			99	22.92	0.00	22.92	<=33.01	Pass
		50	0	22.05	0.00	22.05	<=33.01	Pass
			25	22.03	0.00	22.03	<=33.01	Pass
			50	22.02	0.00	22.02	<=33.01	Pass
		100	0	22.09	0.00	22.09	<=33.01	Pass
	2595	1	0	23.03	0.00	23.03	<=33.01	Pass
			50	23.07	0.00	23.07	<=33.01	Pass

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		50	99	23.05	0.00	23.05	<=33.01	Pass	
			0	21.93	0.00	21.93	<=33.01	Pass	
			25	22.07	0.00	22.07	<=33.01	Pass	
			50	21.91	0.00	21.91	<=33.01	Pass	
		100	0	21.87	0.00	21.87	<=33.01	Pass	
	2610	1	0	22.92	0.00	22.92	<=33.01	Pass	
			50	22.86	0.00	22.86	<=33.01	Pass	
			99	22.86	0.00	22.86	<=33.01	Pass	
		50	0	21.95	0.00	21.95	<=33.01	Pass	
			25	21.90	0.00	21.90	<=33.01	Pass	
			50	22.04	0.00	22.04	<=33.01	Pass	
		100	0	22.08	0.00	22.08	<=33.01	Pass	
		16QAM	2580	1	0	22.78	0.00	22.78	<=33.01
	50				22.50	0.00	22.50	<=33.01	Pass
	99				22.54	0.00	22.54	<=33.01	Pass
	50			0	21.46	0.00	21.46	<=33.01	Pass
25				21.39	0.00	21.39	<=33.01	Pass	
50				21.46	0.00	21.46	<=33.01	Pass	
100	0			21.19	0.00	21.19	<=33.01	Pass	
2595	1			0	22.94	0.00	22.94	<=33.01	Pass
				50	22.82	0.00	22.82	<=33.01	Pass
			99	22.92	0.00	22.92	<=33.01	Pass	
	50		0	21.32	0.00	21.32	<=33.01	Pass	
			25	21.20	0.00	21.20	<=33.01	Pass	
			50	21.27	0.00	21.27	<=33.01	Pass	
	100		0	21.27	0.00	21.27	<=33.01	Pass	
2610	1		0	22.12	0.00	22.12	<=33.01	Pass	
			50	22.53	0.00	22.53	<=33.01	Pass	
			99	22.09	0.00	22.09	<=33.01	Pass	
	50		0	21.15	0.00	21.15	<=33.01	Pass	
			25	21.30	0.00	21.30	<=33.01	Pass	
			50	21.21	0.00	21.21	<=33.01	Pass	
	100		0	21.11	0.00	21.11	<=33.01	Pass	
	Note1: EIRP=Conducted Power+Antenna Gain								

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	17.309	0.0067	-2.5 to 2.5	Pass
					3.7	-18.539	-0.0072	-2.5 to 2.5	Pass
					4.26	-10.543	-0.0041	-2.5 to 2.5	Pass
				-30	3.7	-5.965	-0.0023	-2.5 to 2.5	Pass
				-20	3.7	22.359	0.0087	-2.5 to 2.5	Pass
				-10	3.7	23.932	0.0093	-2.5 to 2.5	Pass
				0	3.7	38.710	0.0150	-2.5 to 2.5	Pass
				10	3.7	20.800	0.0081	-2.5 to 2.5	Pass
				30	3.7	25.678	0.0100	-2.5 to 2.5	Pass
				40	3.7	34.075	0.0132	-2.5 to 2.5	Pass
				50	3.7	40.326	0.0157	-2.5 to 2.5	Pass
	2595	25	0	20	3.15	12.074	0.0047	-2.5 to 2.5	Pass
					3.7	9.656	0.0037	-2.5 to 2.5	Pass
					4.26	1.788	0.0007	-2.5 to 2.5	Pass
				-30	3.7	-20.027	-0.0077	-2.5 to 2.5	Pass
				-20	3.7	-11.458	-0.0044	-2.5 to 2.5	Pass
				-10	3.7	-24.319	-0.0094	-2.5 to 2.5	Pass
				0	3.7	-24.276	-0.0094	-2.5 to 2.5	Pass
				10	3.7	-15.664	-0.0060	-2.5 to 2.5	Pass
				30	3.7	-8.898	-0.0034	-2.5 to 2.5	Pass
				40	3.7	-5.007	-0.0019	-2.5 to 2.5	Pass
				50	3.7	-10.028	-0.0039	-2.5 to 2.5	Pass
	2617.5	25	0	20	3.15	11.330	0.0043	-2.5 to 2.5	Pass
					3.7	-10.128	-0.0039	-2.5 to 2.5	Pass
					4.26	-37.107	-0.0142	-2.5 to 2.5	Pass
				-30	3.7	-21.100	-0.0081	-2.5 to 2.5	Pass
				-20	3.7	-23.174	-0.0089	-2.5 to 2.5	Pass
				-10	3.7	-49.038	-0.0187	-2.5 to 2.5	Pass
				0	3.7	1.516	0.0006	-2.5 to 2.5	Pass
				10	3.7	14.248	0.0054	-2.5 to 2.5	Pass
				30	3.7	-0.200	-0.0001	-2.5 to 2.5	Pass
				40	3.7	-0.300	-0.0001	-2.5 to 2.5	Pass
				50	3.7	5.035	0.0019	-2.5 to 2.5	Pass
16QAM	2572.5	25	0	20	3.15	8.898	0.0035	-2.5 to 2.5	Pass
					3.7	34.003	0.0132	-2.5 to 2.5	Pass
					4.26	-4.821	-0.0019	-2.5 to 2.5	Pass
				-30	3.7	8.326	0.0032	-2.5 to 2.5	Pass
				-20	3.7	34.518	0.0134	-2.5 to 2.5	Pass
				-10	3.7	43.974	0.0171	-2.5 to 2.5	Pass
				0	3.7	42.086	0.0164	-2.5 to 2.5	Pass
				10	3.7	25.535	0.0099	-2.5 to 2.5	Pass
				30	3.7	37.994	0.0148	-2.5 to 2.5	Pass
				40	3.7	-14.706	-0.0057	-2.5 to 2.5	Pass
				50	3.7	0.587	0.0002	-2.5 to 2.5	Pass
	2595	25	0	20	3.15	-2.346	-0.0009	-2.5 to 2.5	Pass
					3.7	17.166	0.0066	-2.5 to 2.5	Pass

					4.26	38.309	0.0148	-2.5 to 2.5	Pass
				-30	3.7	10.285	0.0040	-2.5 to 2.5	Pass
				-20	3.7	23.861	0.0092	-2.5 to 2.5	Pass
				-10	3.7	35.377	0.0136	-2.5 to 2.5	Pass
				0	3.7	-18.296	-0.0071	-2.5 to 2.5	Pass
				10	3.7	-8.669	-0.0033	-2.5 to 2.5	Pass
				30	3.7	-5.207	-0.0020	-2.5 to 2.5	Pass
				40	3.7	-11.015	-0.0042	-2.5 to 2.5	Pass
				50	3.7	-6.580	-0.0025	-2.5 to 2.5	Pass
	2617.5	25	0	20	3.15	27.494	0.0105	-2.5 to 2.5	Pass
					3.7	10.314	0.0039	-2.5 to 2.5	Pass
					4.26	13.375	0.0051	-2.5 to 2.5	Pass
				-30	3.7	-8.197	-0.0031	-2.5 to 2.5	Pass
				-20	3.7	28.853	0.0110	-2.5 to 2.5	Pass
				-10	3.7	-17.066	-0.0065	-2.5 to 2.5	Pass
				0	3.7	23.789	0.0091	-2.5 to 2.5	Pass
				10	3.7	38.939	0.0149	-2.5 to 2.5	Pass
				30	3.7	22.430	0.0086	-2.5 to 2.5	Pass
				40	3.7	35.334	0.0135	-2.5 to 2.5	Pass
				50	3.7	-13.475	-0.0051	-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	17.910	0.0070	-2.5 to 2.5	Pass
					3.7	2.933	0.0011	-2.5 to 2.5	Pass
					4.26	-34.175	-0.0133	-2.5 to 2.5	Pass
				-30	3.7	-49.810	-0.0193	-2.5 to 2.5	Pass
				-20	3.7	-12.674	-0.0049	-2.5 to 2.5	Pass
				-10	3.7	-6.022	-0.0023	-2.5 to 2.5	Pass
				0	3.7	-1.330	-0.0005	-2.5 to 2.5	Pass
				10	3.7	26.393	0.0102	-2.5 to 2.5	Pass
				30	3.7	-4.306	-0.0017	-2.5 to 2.5	Pass
				40	3.7	8.855	0.0034	-2.5 to 2.5	Pass
				50	3.7	21.157	0.0082	-2.5 to 2.5	Pass
	2595	50	0	20	3.15	20.471	0.0079	-2.5 to 2.5	Pass
					3.7	12.217	0.0047	-2.5 to 2.5	Pass
					4.26	-3.576	-0.0014	-2.5 to 2.5	Pass
				-30	3.7	-5.808	-0.0022	-2.5 to 2.5	Pass
				-20	3.7	-6.495	-0.0025	-2.5 to 2.5	Pass
				-10	3.7	-9.227	-0.0036	-2.5 to 2.5	Pass
				0	3.7	-3.648	-0.0014	-2.5 to 2.5	Pass
				10	3.7	4.191	0.0016	-2.5 to 2.5	Pass
				30	3.7	22.430	0.0086	-2.5 to 2.5	Pass
				40	3.7	24.090	0.0093	-2.5 to 2.5	Pass
				50	3.7	37.165	0.0143	-2.5 to 2.5	Pass
	2615	50	0	20	3.15	26.279	0.0100	-2.5 to 2.5	Pass
					3.7	-6.580	-0.0025	-2.5 to 2.5	Pass
					4.26	-39.010	-0.0149	-2.5 to 2.5	Pass
				-30	3.7	-55.175	-0.0211	-2.5 to 2.5	Pass
				-20	3.7	-12.932	-0.0049	-2.5 to 2.5	Pass
				-10	3.7	-17.924	-0.0069	-2.5 to 2.5	Pass
				0	3.7	-18.511	-0.0071	-2.5 to 2.5	Pass
				10	3.7	-28.024	-0.0107	-2.5 to 2.5	Pass
				30	3.7	-22.902	-0.0088	-2.5 to 2.5	Pass
				40	3.7	-19.212	-0.0073	-2.5 to 2.5	Pass

Model: M2+

16QAM	2575	50	0	50	3.7	-19.197	-0.0073	-2.5 to 2.5	Pass
				20	3.15	36.364	0.0141	-2.5 to 2.5	Pass
					3.7	14.763	0.0057	-2.5 to 2.5	Pass
					4.26	42.286	0.0164	-2.5 to 2.5	Pass
				-30	3.7	32.344	0.0126	-2.5 to 2.5	Pass
				-20	3.7	-2.418	-0.0009	-2.5 to 2.5	Pass
				-10	3.7	12.703	0.0049	-2.5 to 2.5	Pass
				0	3.7	27.752	0.0108	-2.5 to 2.5	Pass
				10	3.7	41.456	0.0161	-2.5 to 2.5	Pass
				30	3.7	12.245	0.0048	-2.5 to 2.5	Pass
	2595	50	0	40	3.7	31.857	0.0124	-2.5 to 2.5	Pass
				50	3.7	14.176	0.0055	-2.5 to 2.5	Pass
				20	3.15	-14.963	-0.0058	-2.5 to 2.5	Pass
					3.7	30.541	0.0118	-2.5 to 2.5	Pass
					4.26	2.418	0.0009	-2.5 to 2.5	Pass
				-30	3.7	16.723	0.0064	-2.5 to 2.5	Pass
				-20	3.7	26.822	0.0103	-2.5 to 2.5	Pass
				-10	3.7	17.881	0.0069	-2.5 to 2.5	Pass
				0	3.7	35.491	0.0137	-2.5 to 2.5	Pass
				10	3.7	7.610	0.0029	-2.5 to 2.5	Pass
	2615	50	0	30	3.7	20.242	0.0078	-2.5 to 2.5	Pass
				40	3.7	34.933	0.0135	-2.5 to 2.5	Pass
				50	3.7	11.916	0.0046	-2.5 to 2.5	Pass
				20	3.15	-11.129	-0.0043	-2.5 to 2.5	Pass
					3.7	8.082	0.0031	-2.5 to 2.5	Pass
					4.26	37.036	0.0142	-2.5 to 2.5	Pass
				-30	3.7	-0.257	-0.0001	-2.5 to 2.5	Pass
				-20	3.7	7.896	0.0030	-2.5 to 2.5	Pass
				-10	3.7	13.747	0.0053	-2.5 to 2.5	Pass
				0	3.7	21.601	0.0083	-2.5 to 2.5	Pass
				10	3.7	37.522	0.0143	-2.5 to 2.5	Pass
				30	3.7	-7.610	-0.0029	-2.5 to 2.5	Pass
				40	3.7	5.336	0.0020	-2.5 to 2.5	Pass
				50	3.7	2.332	0.0009	-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	6.809	0.0026	-2.5 to 2.5	Pass
					3.7	-43.130	-0.0167	-2.5 to 2.5	Pass
					4.26	-33.832	-0.0131	-2.5 to 2.5	Pass
				-30	3.7	-48.394	-0.0188	-2.5 to 2.5	Pass
				-20	3.7	-22.631	-0.0088	-2.5 to 2.5	Pass
				-10	3.7	-26.507	-0.0103	-2.5 to 2.5	Pass
				0	3.7	-18.239	-0.0071	-2.5 to 2.5	Pass
				10	3.7	-12.317	-0.0048	-2.5 to 2.5	Pass
				30	3.7	-18.725	-0.0073	-2.5 to 2.5	Pass
				40	3.7	-13.847	-0.0054	-2.5 to 2.5	Pass
				50	3.7	-3.862	-0.0015	-2.5 to 2.5	Pass
	2595	75	0	20	3.15	11.101	0.0043	-2.5 to 2.5	Pass
					3.7	-7.424	-0.0029	-2.5 to 2.5	Pass
					4.26	-33.002	-0.0127	-2.5 to 2.5	Pass
				-30	3.7	-54.617	-0.0210	-2.5 to 2.5	Pass
				-20	3.7	0.429	0.0002	-2.5 to 2.5	Pass
				-10	3.7	0.257	0.0001	-2.5 to 2.5	Pass
				0	3.7	-10.786	-0.0042	-2.5 to 2.5	Pass

Model: M2+

				10	3.7	-8.326	-0.0032	-2.5 to 2.5	Pass
				30	3.7	-16.322	-0.0063	-2.5 to 2.5	Pass
				40	3.7	-26.922	-0.0104	-2.5 to 2.5	Pass
				50	3.7	-31.972	-0.0123	-2.5 to 2.5	Pass
	2612.5	75	0	20	3.15	10.343	0.0040	-2.5 to 2.5	Pass
					3.7	-11.945	-0.0046	-2.5 to 2.5	Pass
					4.26	-41.070	-0.0157	-2.5 to 2.5	Pass
				-30	3.7	1.373	0.0005	-2.5 to 2.5	Pass
				-20	3.7	-0.787	-0.0003	-2.5 to 2.5	Pass
				-10	3.7	-20.585	-0.0079	-2.5 to 2.5	Pass
				0	3.7	-40.956	-0.0157	-2.5 to 2.5	Pass
				10	3.7	-47.765	-0.0183	-2.5 to 2.5	Pass
				30	3.7	-10.228	-0.0039	-2.5 to 2.5	Pass
				40	3.7	-17.996	-0.0069	-2.5 to 2.5	Pass
				50	3.7	-23.346	-0.0089	-2.5 to 2.5	Pass
16QAM	2577.5	75	0	20	3.15	3.762	0.0015	-2.5 to 2.5	Pass
					3.7	34.890	0.0135	-2.5 to 2.5	Pass
					4.26	23.360	0.0091	-2.5 to 2.5	Pass
				-30	3.7	41.714	0.0162	-2.5 to 2.5	Pass
				-20	3.7	-20.256	-0.0079	-2.5 to 2.5	Pass
				-10	3.7	-6.166	-0.0024	-2.5 to 2.5	Pass
				0	3.7	5.951	0.0023	-2.5 to 2.5	Pass
				10	3.7	17.095	0.0066	-2.5 to 2.5	Pass
				30	3.7	25.191	0.0098	-2.5 to 2.5	Pass
				40	3.7	32.372	0.0126	-2.5 to 2.5	Pass
				50	3.7	40.197	0.0156	-2.5 to 2.5	Pass
	2595	75	0	20	3.15	-31.857	-0.0123	-2.5 to 2.5	Pass
					3.7	0.758	0.0003	-2.5 to 2.5	Pass
					4.26	22.058	0.0085	-2.5 to 2.5	Pass
				-30	3.7	-10.901	-0.0042	-2.5 to 2.5	Pass
				-20	3.7	12.016	0.0046	-2.5 to 2.5	Pass
				-10	3.7	34.990	0.0135	-2.5 to 2.5	Pass
				0	3.7	10.529	0.0041	-2.5 to 2.5	Pass
				10	3.7	34.146	0.0132	-2.5 to 2.5	Pass
				30	3.7	-10.815	-0.0042	-2.5 to 2.5	Pass
				40	3.7	7.467	0.0029	-2.5 to 2.5	Pass
				50	3.7	17.166	0.0066	-2.5 to 2.5	Pass
	2612.5	75	0	20	3.15	-23.832	-0.0091	-2.5 to 2.5	Pass
					3.7	2.532	0.0010	-2.5 to 2.5	Pass
					4.26	13.433	0.0051	-2.5 to 2.5	Pass
				-30	3.7	15.349	0.0059	-2.5 to 2.5	Pass
				-20	3.7	25.277	0.0097	-2.5 to 2.5	Pass
				-10	3.7	24.834	0.0095	-2.5 to 2.5	Pass
				0	3.7	26.279	0.0101	-2.5 to 2.5	Pass
				10	3.7	22.459	0.0086	-2.5 to 2.5	Pass
				30	3.7	25.649	0.0098	-2.5 to 2.5	Pass
				40	3.7	35.276	0.0135	-2.5 to 2.5	Pass
				50	3.7	-0.787	-0.0003	-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	-2.146	-0.0008	-2.5 to 2.5	Pass
					3.7	-39.210	-0.0152	-2.5 to 2.5	Pass
					4.26	-18.411	-0.0071	-2.5 to 2.5	Pass
				-30	3.7	-37.179	-0.0144	-2.5 to 2.5	Pass

Model: M2+

				-20	3.7	-47.851	-0.0185	-2.5 to 2.5	Pass
				-10	3.7	-18.497	-0.0072	-2.5 to 2.5	Pass
				0	3.7	-20.127	-0.0078	-2.5 to 2.5	Pass
				10	3.7	-23.146	-0.0090	-2.5 to 2.5	Pass
				30	3.7	-28.067	-0.0109	-2.5 to 2.5	Pass
				40	3.7	-22.860	-0.0089	-2.5 to 2.5	Pass
				50	3.7	-28.367	-0.0110	-2.5 to 2.5	Pass
	2595	100	0	20	3.15	18.396	0.0071	-2.5 to 2.5	Pass
					3.7	-0.544	-0.0002	-2.5 to 2.5	Pass
					4.26	-26.464	-0.0102	-2.5 to 2.5	Pass
				-30	3.7	-49.753	-0.0192	-2.5 to 2.5	Pass
				-20	3.7	1.259	0.0005	-2.5 to 2.5	Pass
				-10	3.7	-5.536	-0.0021	-2.5 to 2.5	Pass
				0	3.7	-19.169	-0.0074	-2.5 to 2.5	Pass
				10	3.7	-16.479	-0.0064	-2.5 to 2.5	Pass
				30	3.7	-13.690	-0.0053	-2.5 to 2.5	Pass
				40	3.7	-15.378	-0.0059	-2.5 to 2.5	Pass
				50	3.7	-15.635	-0.0060	-2.5 to 2.5	Pass
	2610	100	0	20	3.15	14.648	0.0056	-2.5 to 2.5	Pass
					3.7	-26.908	-0.0103	-2.5 to 2.5	Pass
					4.26	-3.304	-0.0013	-2.5 to 2.5	Pass
				-30	3.7	-33.302	-0.0128	-2.5 to 2.5	Pass
				-20	3.7	-0.472	-0.0002	-2.5 to 2.5	Pass
				-10	3.7	-13.719	-0.0053	-2.5 to 2.5	Pass
				0	3.7	-31.543	-0.0121	-2.5 to 2.5	Pass
				10	3.7	-45.676	-0.0175	-2.5 to 2.5	Pass
				30	3.7	-44.217	-0.0169	-2.5 to 2.5	Pass
				40	3.7	-1.359	-0.0005	-2.5 to 2.5	Pass
				50	3.7	-12.903	-0.0049	-2.5 to 2.5	Pass
16QAM	2580	100	0	20	3.15	-18.182	-0.0070	-2.5 to 2.5	Pass
					3.7	15.006	0.0058	-2.5 to 2.5	Pass
					4.26	32.086	0.0124	-2.5 to 2.5	Pass
				-30	3.7	28.410	0.0110	-2.5 to 2.5	Pass
				-20	3.7	-23.904	-0.0093	-2.5 to 2.5	Pass
				-10	3.7	-16.308	-0.0063	-2.5 to 2.5	Pass
				0	3.7	-7.811	-0.0030	-2.5 to 2.5	Pass
				10	3.7	-5.708	-0.0022	-2.5 to 2.5	Pass
				30	3.7	-1.030	-0.0004	-2.5 to 2.5	Pass
				40	3.7	3.662	0.0014	-2.5 to 2.5	Pass
				50	3.7	7.467	0.0029	-2.5 to 2.5	Pass
	2595	100	0	20	3.15	-9.327	-0.0036	-2.5 to 2.5	Pass
					3.7	22.144	0.0085	-2.5 to 2.5	Pass
					4.26	-17.681	-0.0068	-2.5 to 2.5	Pass
				-30	3.7	1.273	0.0005	-2.5 to 2.5	Pass
				-20	3.7	22.559	0.0087	-2.5 to 2.5	Pass
				-10	3.7	34.175	0.0132	-2.5 to 2.5	Pass
				0	3.7	-15.206	-0.0059	-2.5 to 2.5	Pass
				10	3.7	-15.450	-0.0060	-2.5 to 2.5	Pass
				30	3.7	-25.992	-0.0100	-2.5 to 2.5	Pass
				40	3.7	-23.160	-0.0089	-2.5 to 2.5	Pass
				50	3.7	-8.283	-0.0032	-2.5 to 2.5	Pass
	2610	100	0	20	3.15	-18.125	-0.0069	-2.5 to 2.5	Pass
					3.7	4.864	0.0019	-2.5 to 2.5	Pass
					4.26	20.628	0.0079	-2.5 to 2.5	Pass
				-30	3.7	18.139	0.0069	-2.5 to 2.5	Pass
				-20	3.7	25.878	0.0099	-2.5 to 2.5	Pass
				-10	3.7	23.518	0.0090	-2.5 to 2.5	Pass
				0	3.7	29.268	0.0112	-2.5 to 2.5	Pass
				10	3.7	33.760	0.0129	-2.5 to 2.5	Pass

Model: M2+

				30	3.7	19.069	0.0073	-2.5 to 2.5	Pass
				40	3.7	26.522	0.0102	-2.5 to 2.5	Pass
				50	3.7	24.419	0.0094	-2.5 to 2.5	Pass

3. 99% & 26dB Bandwidth

3.1 Test Result

3.1.1 Band38_99% Occupied Bandwidth

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	4.545	/	Pass
		2595	25	0	4.548	/	Pass
		2617.5	25	0	4.554	/	Pass
	16QAM	2572.5	25	0	4.547	/	Pass
		2595	25	0	4.594	/	Pass
		2617.5	25	0	4.579	/	Pass
10	QPSK	2575	50	0	9.070	/	Pass
		2595	50	0	9.058	/	Pass
		2615	50	0	9.069	/	Pass
	16QAM	2575	50	0	9.137	/	Pass
		2595	50	0	9.069	/	Pass
		2615	50	0	9.074	/	Pass
15	QPSK	2577.5	75	0	13.604	/	Pass
		2595	75	0	13.596	/	Pass
		2612.5	75	0	13.597	/	Pass
	16QAM	2577.5	75	0	13.558	/	Pass
		2595	75	0	13.610	/	Pass
		2612.5	75	0	13.608	/	Pass
20	QPSK	2580	100	0	18.118	/	Pass
		2595	100	0	18.165	/	Pass
		2610	100	0	18.102	/	Pass
	16QAM	2580	100	0	18.108	/	Pass
		2595	100	0	18.152	/	Pass
		2610	100	0	18.133	/	Pass

3.1.2 Band38_26dB Occupied Bandwidth

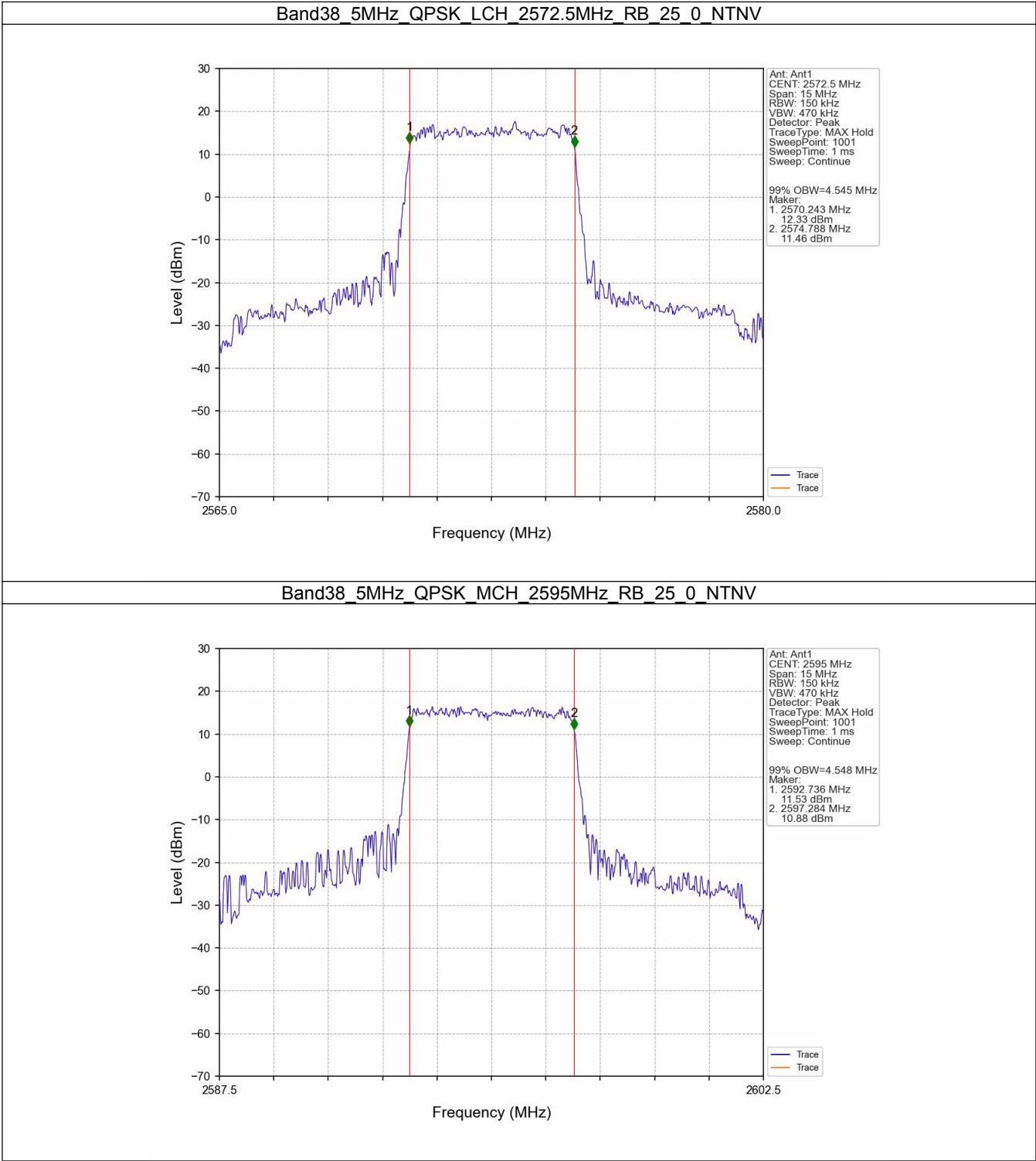
Band: 38 / NTNV							
Bandwidth (MHz)	Modulation	Frequency (MHz)	RB Allocation		26dB Bandwidth (MHz)		Verdict
			Size	Offset	Result	Limit	
5	QPSK	2572.5	25	0	5.074	/	Pass
		2595	25	0	5.124	/	Pass
		2617.5	25	0	5.333	/	Pass
	16QAM	2572.5	25	0	5.065	/	Pass
		2595	25	0	5.111	/	Pass
		2617.5	25	0	5.361	/	Pass
10	QPSK	2575	50	0	10.047	/	Pass
		2595	50	0	9.720	/	Pass
		2615	50	0	10.323	/	Pass
	16QAM	2575	50	0	9.660	/	Pass
		2595	50	0	10.034	/	Pass
		2615	50	0	10.234	/	Pass
15	QPSK	2577.5	75	0	15.431	/	Pass
		2595	75	0	15.174	/	Pass
		2612.5	75	0	15.115	/	Pass

Model: M2+

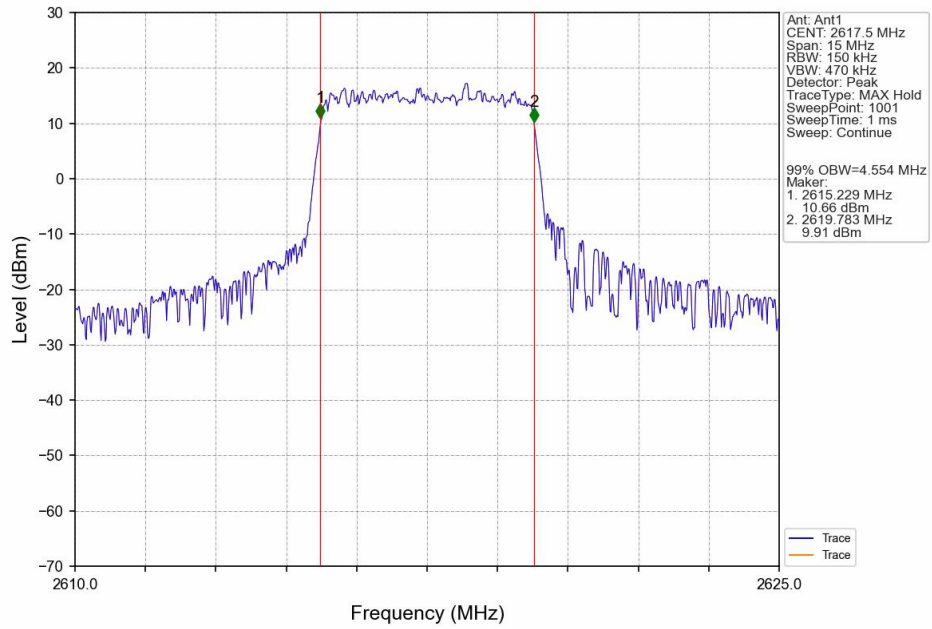
20	16QAM	2577.5	75	0	15.184	/	Pass
		2595	75	0	15.110	/	Pass
		2612.5	75	0	15.452	/	Pass
	QPSK	2580	100	0	20.033	/	Pass
		2595	100	0	20.205	/	Pass
		2610	100	0	20.450	/	Pass
	16QAM	2580	100	0	20.093	/	Pass
		2595	100	0	19.943	/	Pass
		2610	100	0	20.809	/	Pass

3.2 Test Graph

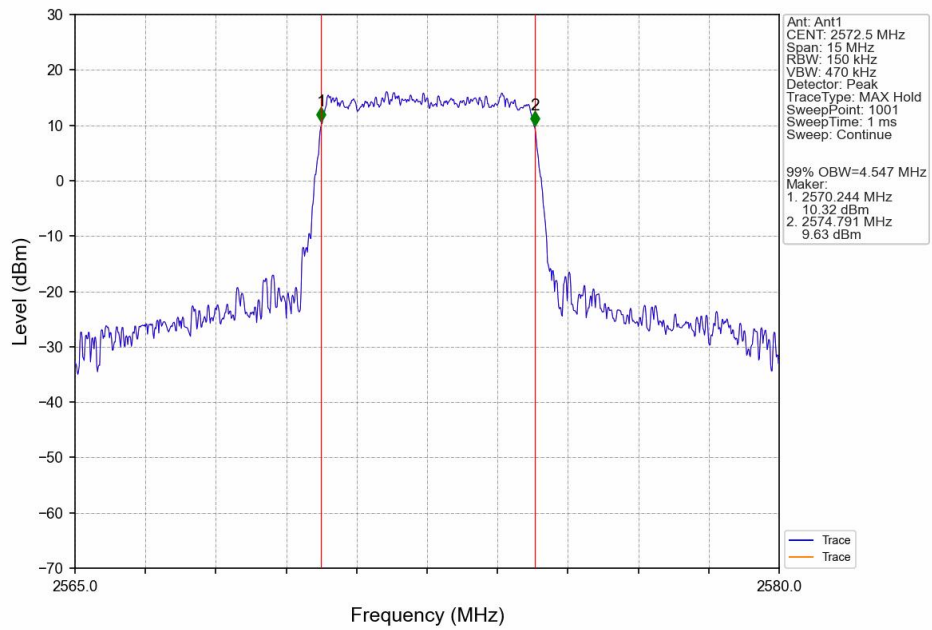
3.2.1 Band38_99% Occupied Bandwidth



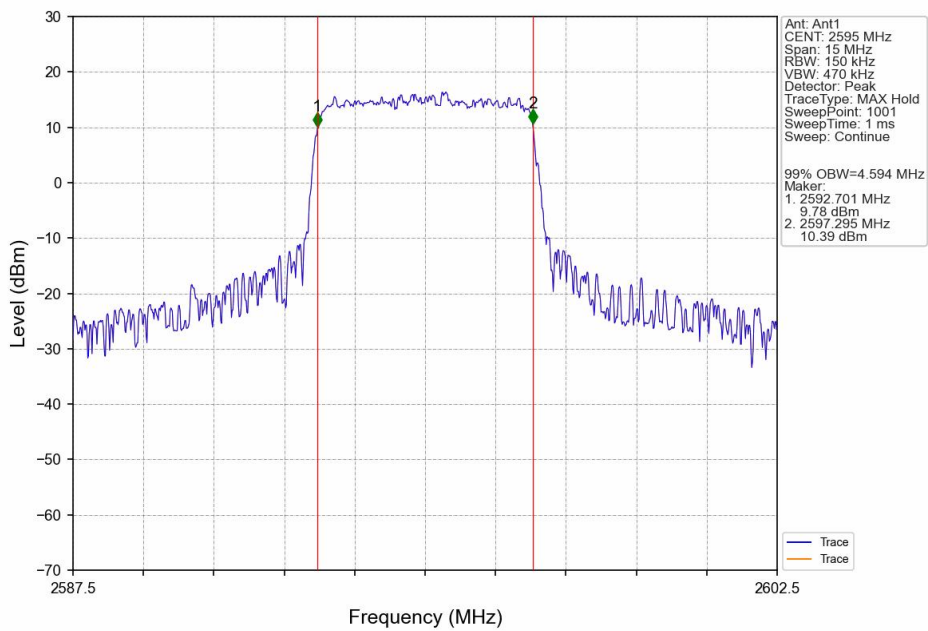
Band38_5MHz_QPSK_HCH_2617.5MHz_RB_25_0_NTNV



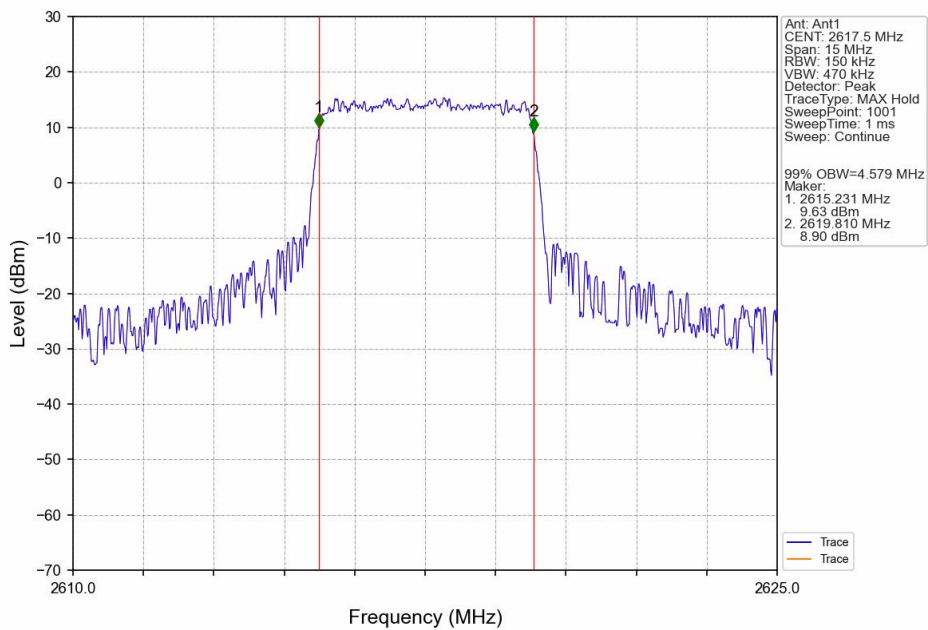
Band38_5MHz_16QAM_LCH_2572.5MHz_RB_25_0_NTNV



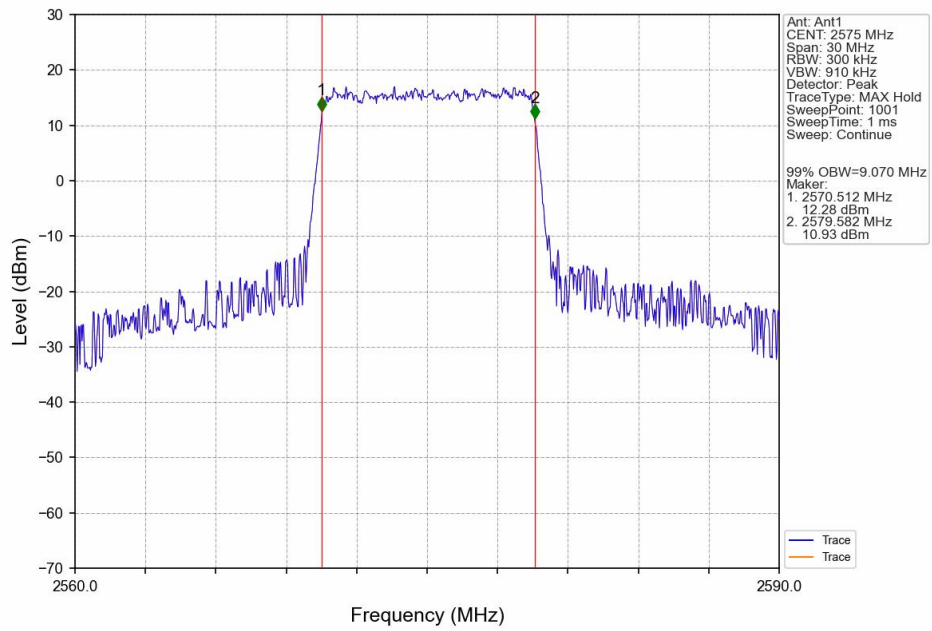
Band38_5MHz_16QAM_MCH_2595MHz_RB_25_0_NTNV



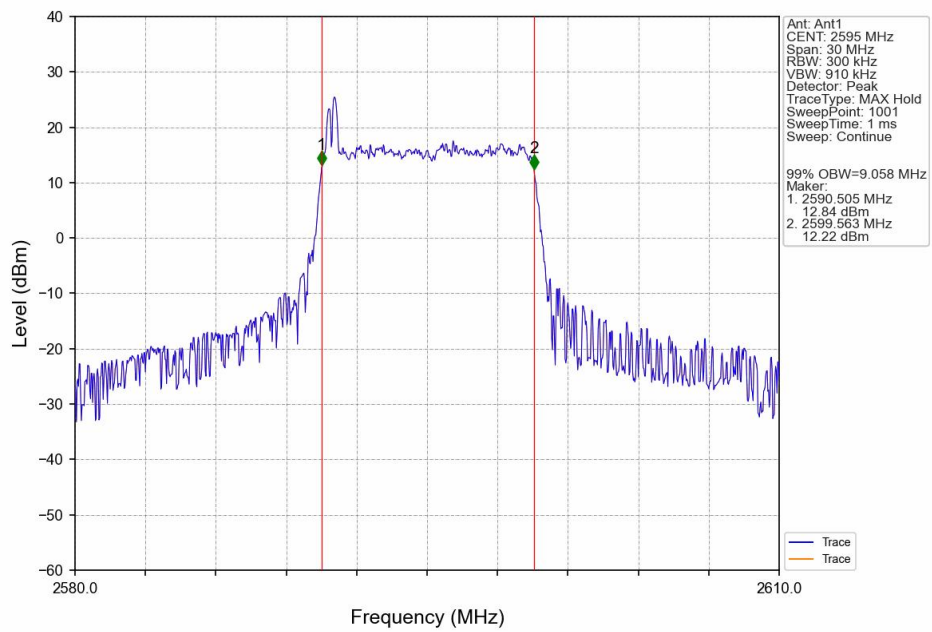
Band38_5MHz_16QAM_HCH_2617.5MHz_RB_25_0_NTNV



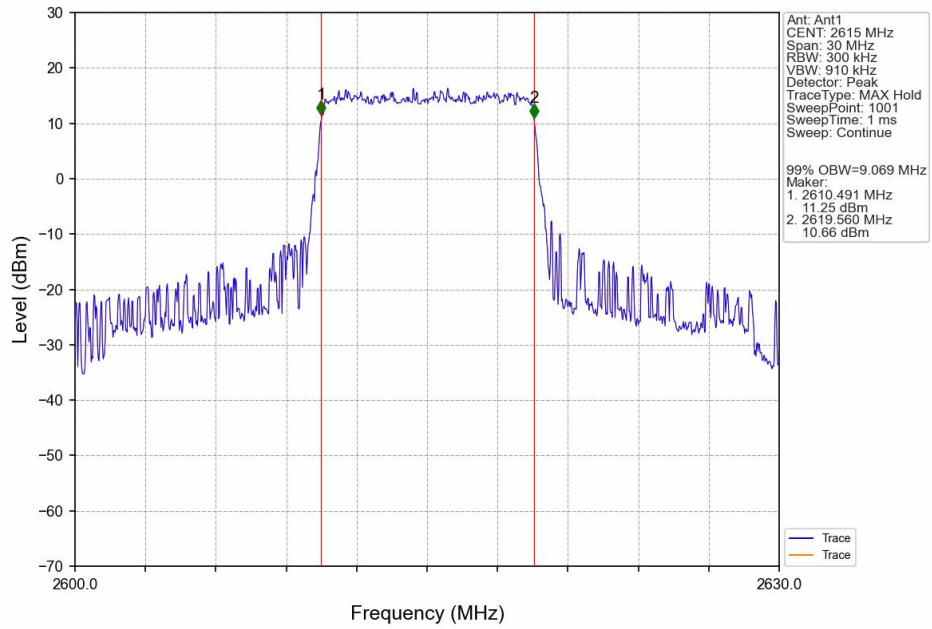
Band38_10MHz_QPSK_LCH_2575MHz_RB_50_0_NTNV



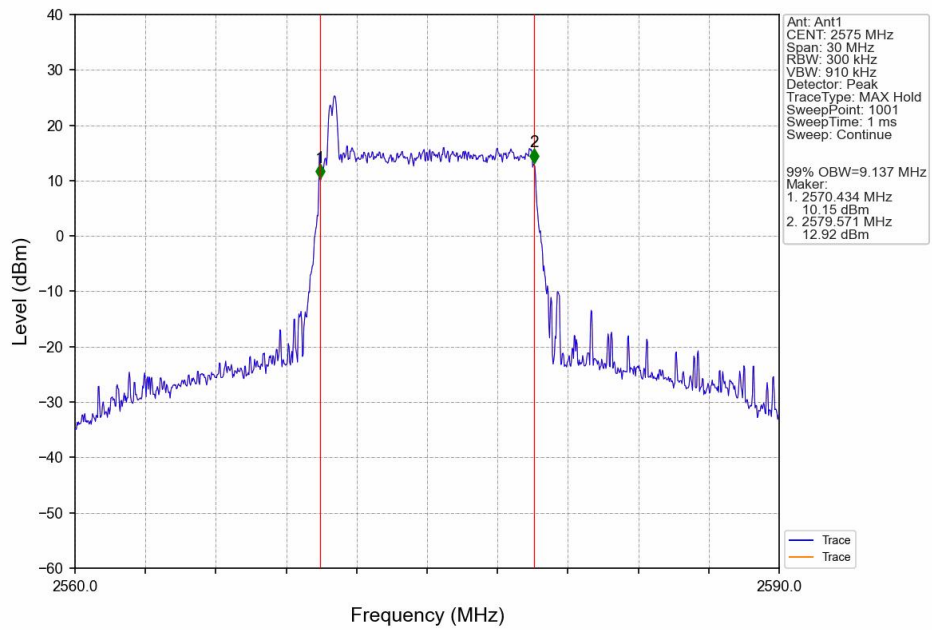
Band38_10MHz_QPSK_MCH_2595MHz_RB_50_0_NTNV

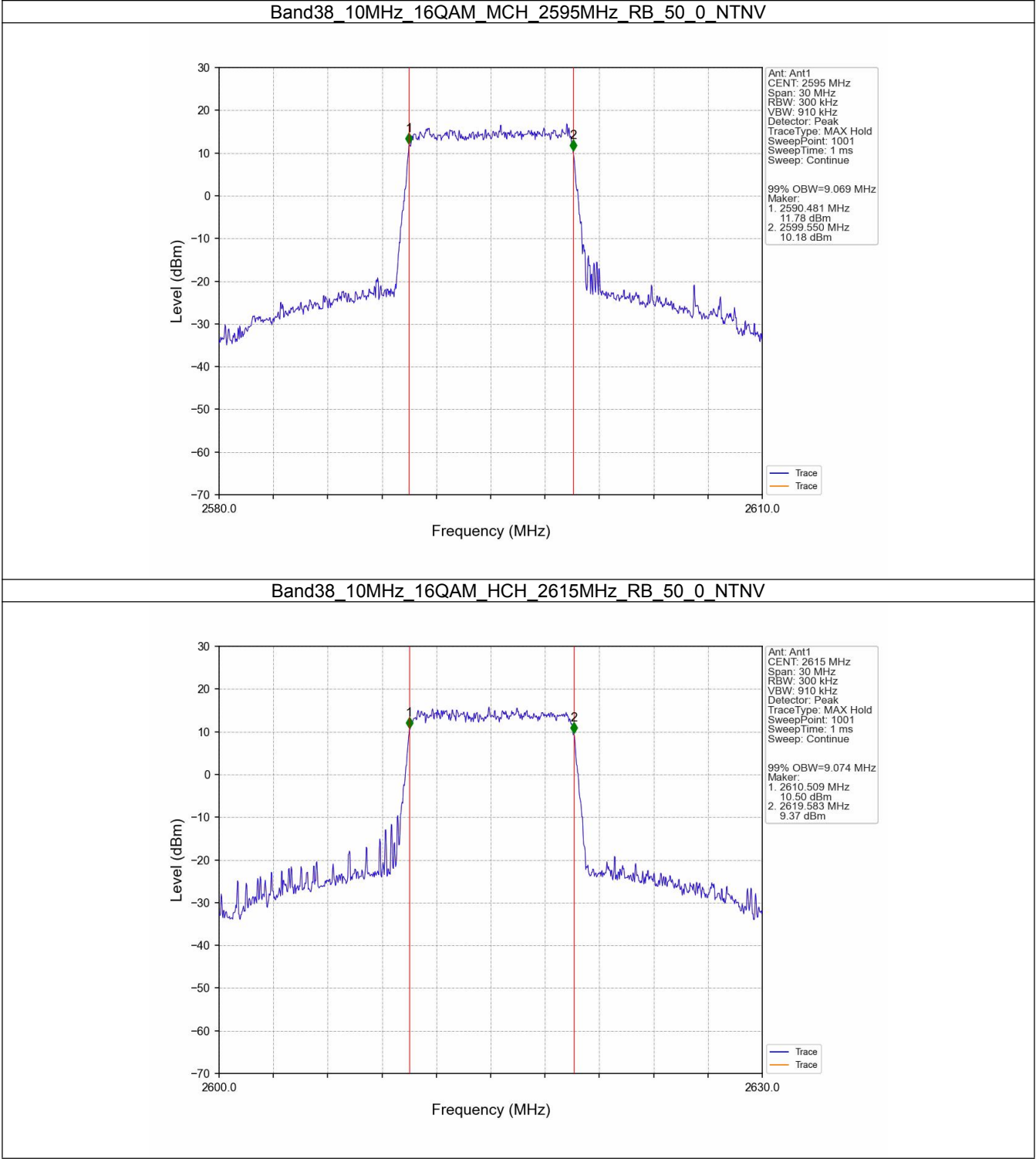


Band38_10MHz_QPSK_HCH_2615MHz_RB_50_0_NTNV

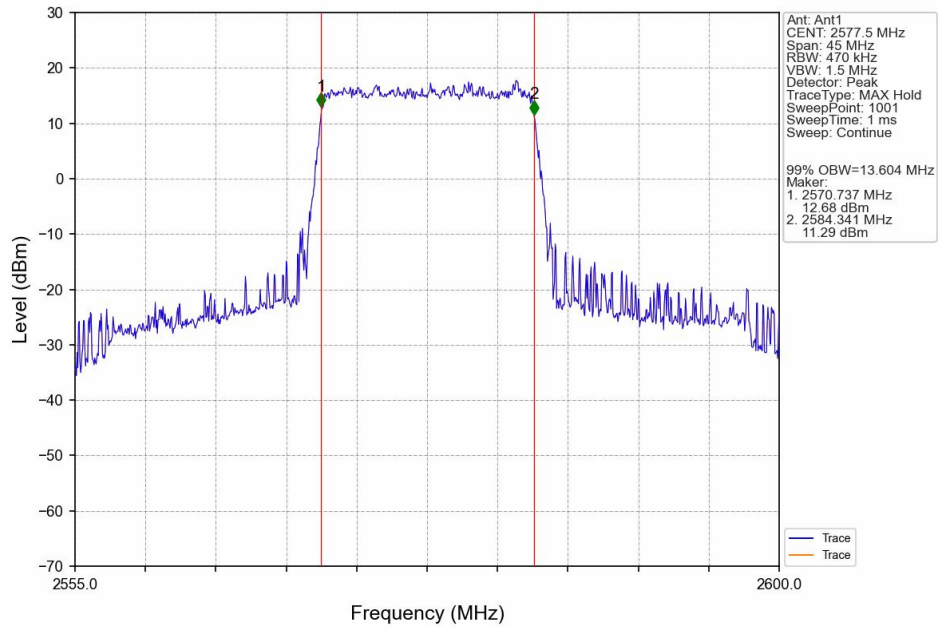


Band38_10MHz_16QAM_LCH_2575MHz_RB_50_0_NTNV

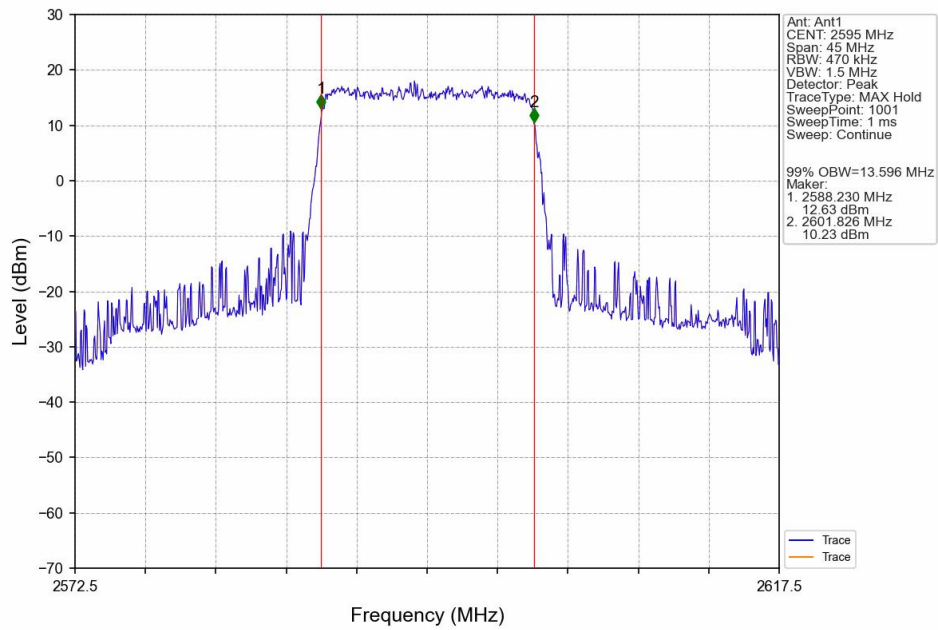




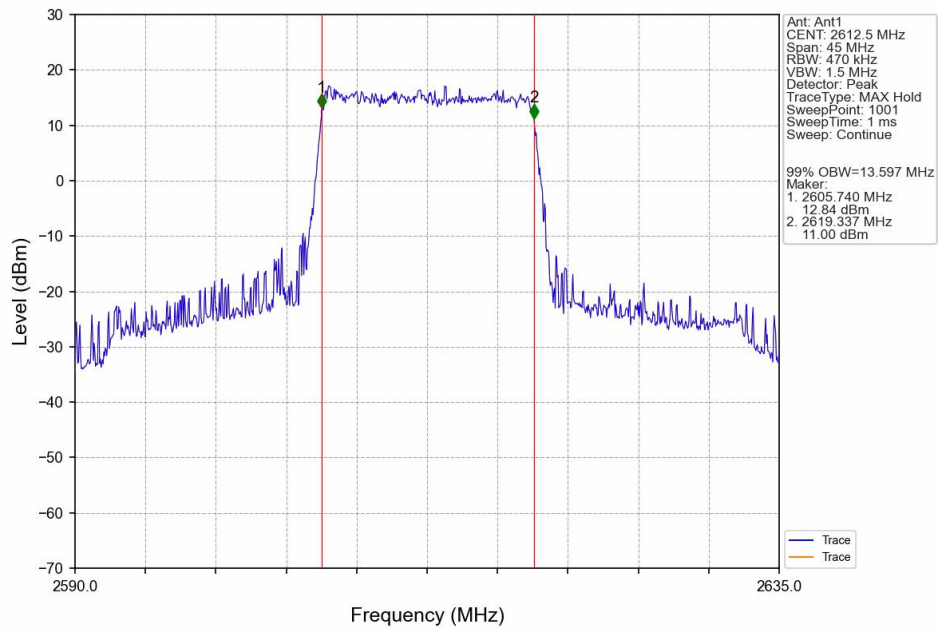
Band38_15MHz_QPSK_LCH_2577.5MHz_RB_75_0_NTNV



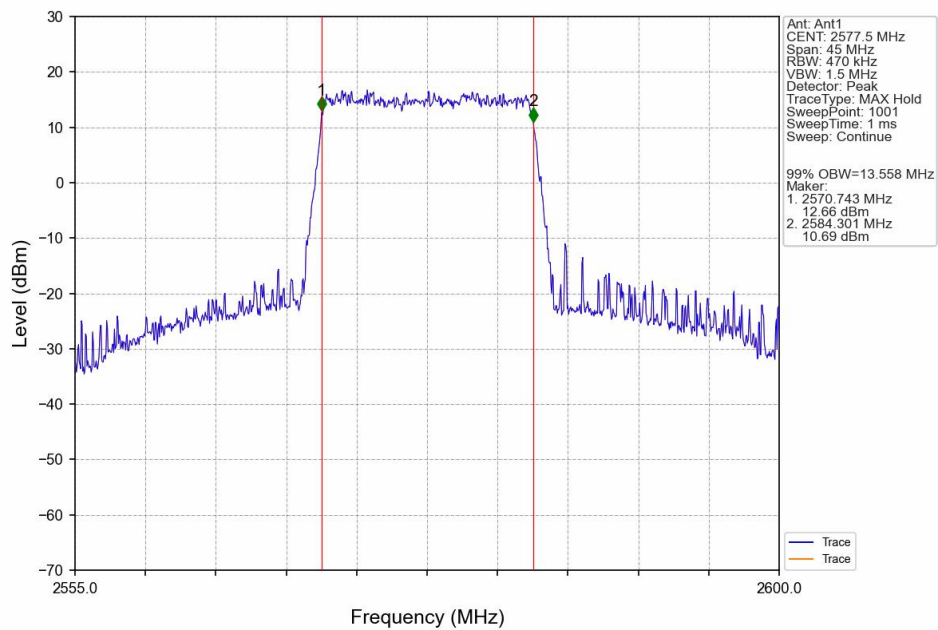
Band38_15MHz_QPSK_MCH_2595MHz_RB_75_0_NTNV



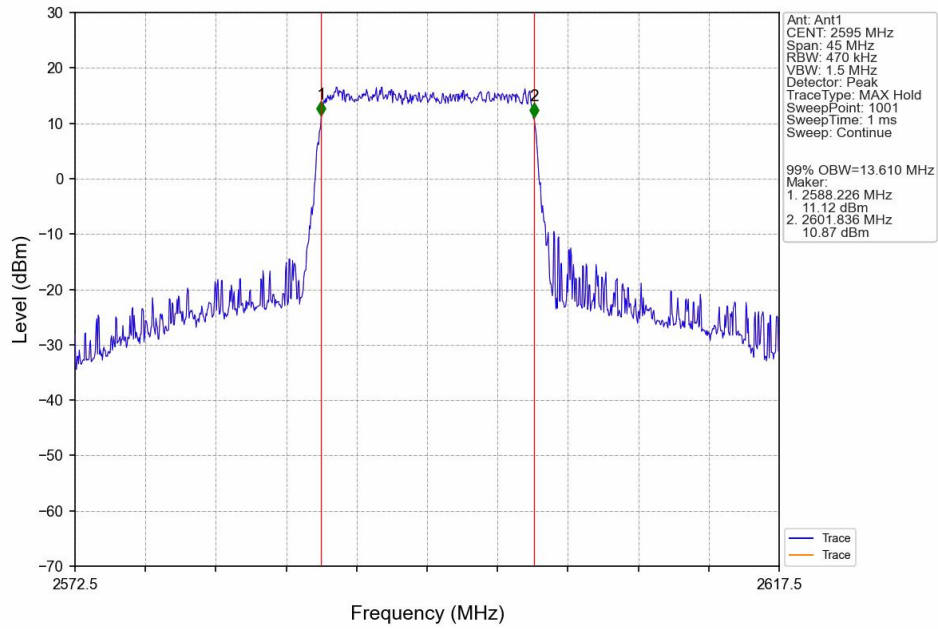
Band38_15MHz_QPSK_HCH_2612.5MHz_RB_75_0_NTNV



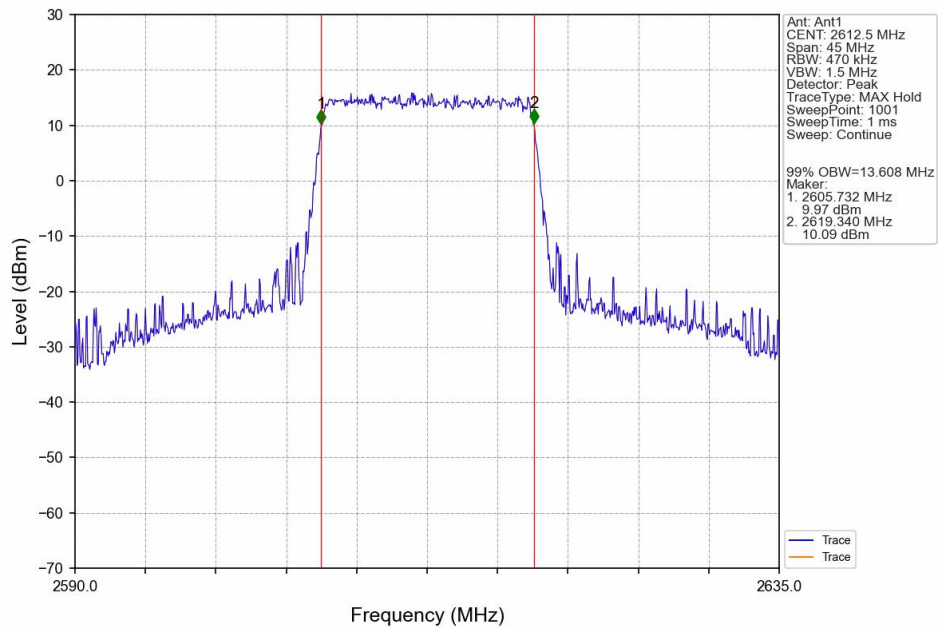
Band38_15MHz_16QAM_LCH_2577.5MHz_RB_75_0_NTNV



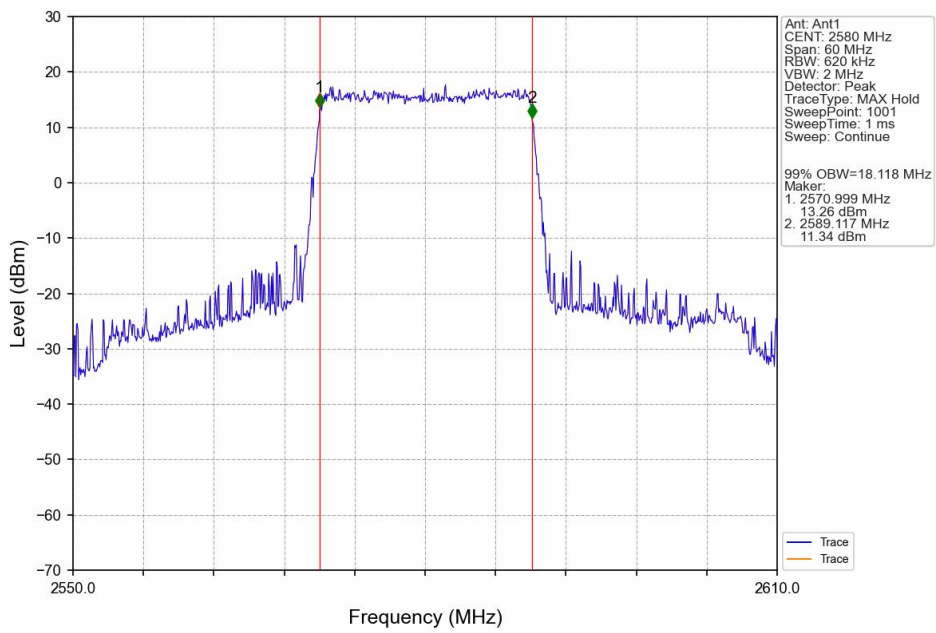
Band38_15MHz_16QAM_MCH_2595MHz_RB_75_0_NTNV



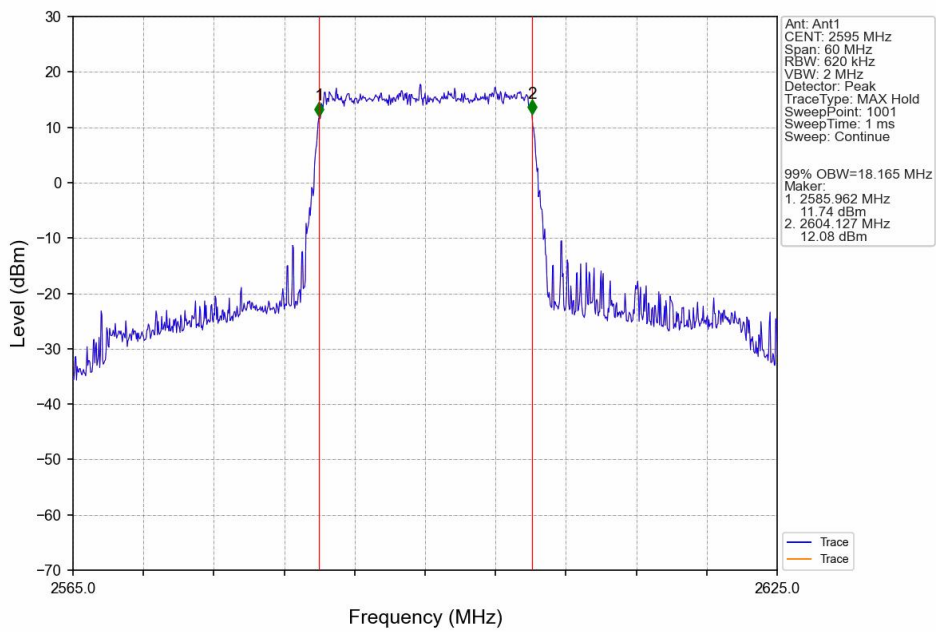
Band38_15MHz_16QAM_HCH_2612.5MHz_RB_75_0_NTNV



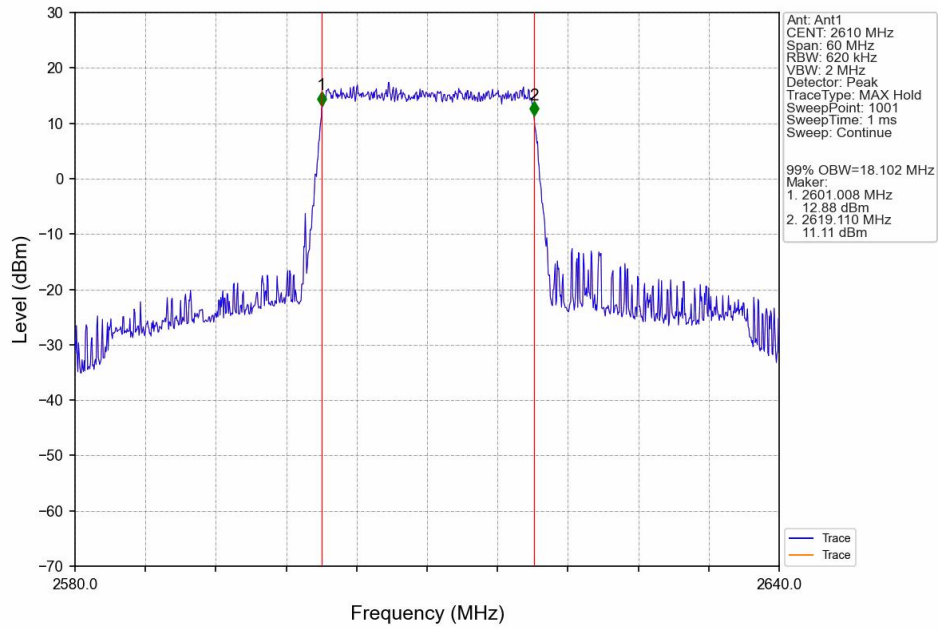
Band38_20MHz_QPSK_LCH_2580MHz_RB_100_0_NTNV



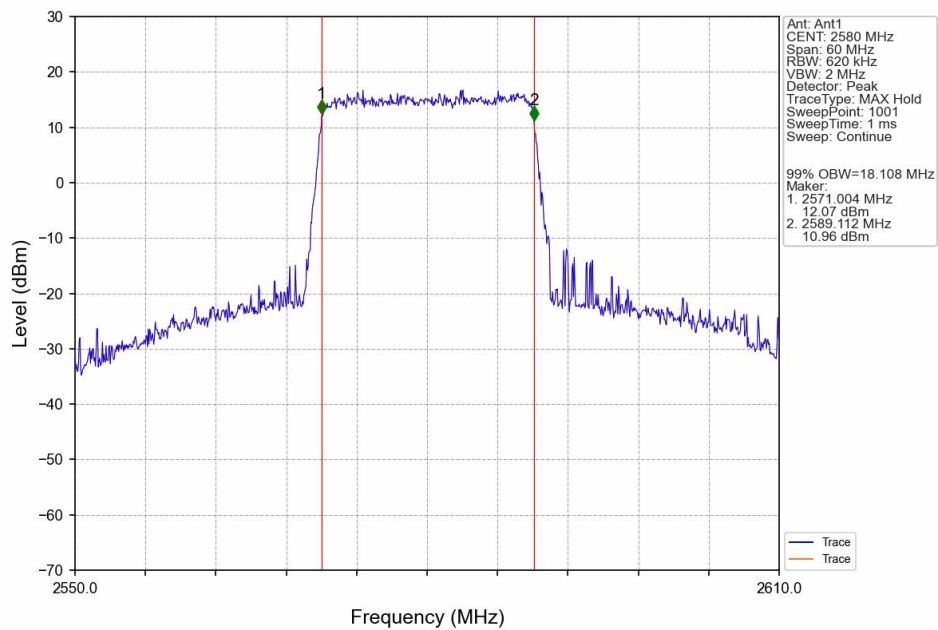
Band38_20MHz_QPSK_MCH_2595MHz_RB_100_0_NTNV



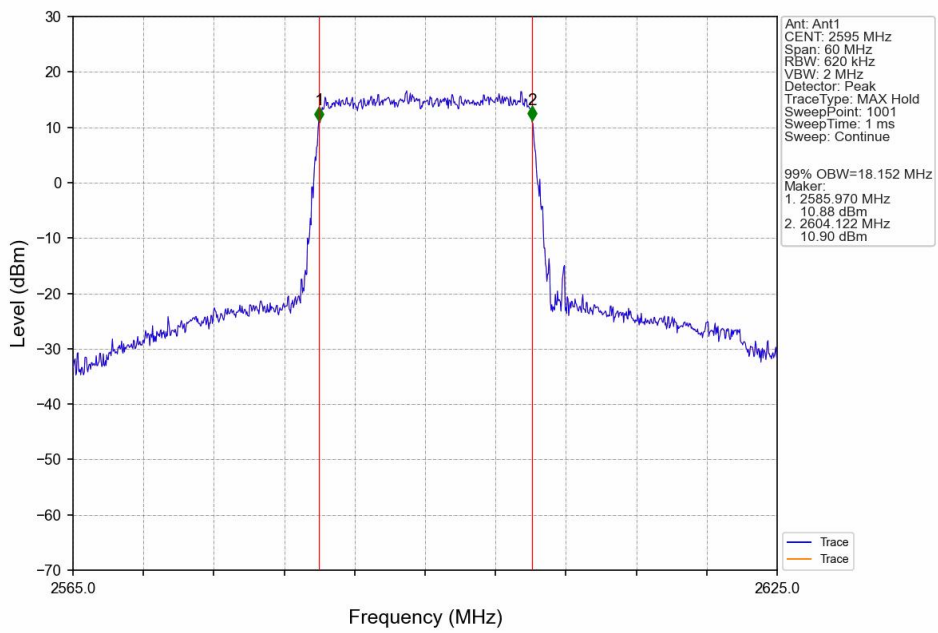
Band38_20MHz_QPSK_HCH_2610MHz_RB_100_0_NTNV



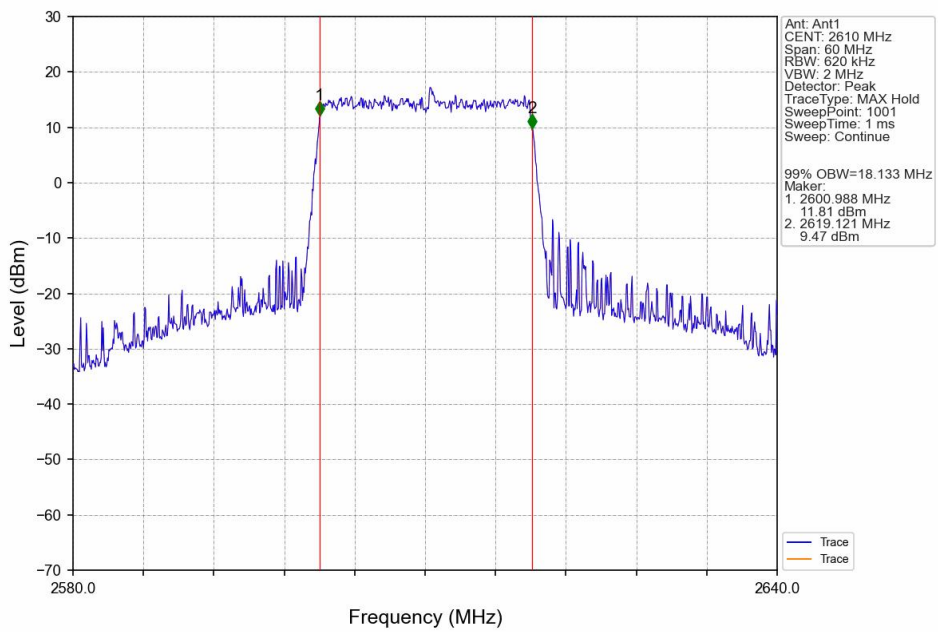
Band38_20MHz_16QAM_LCH_2580MHz_RB_100_0_NTNV



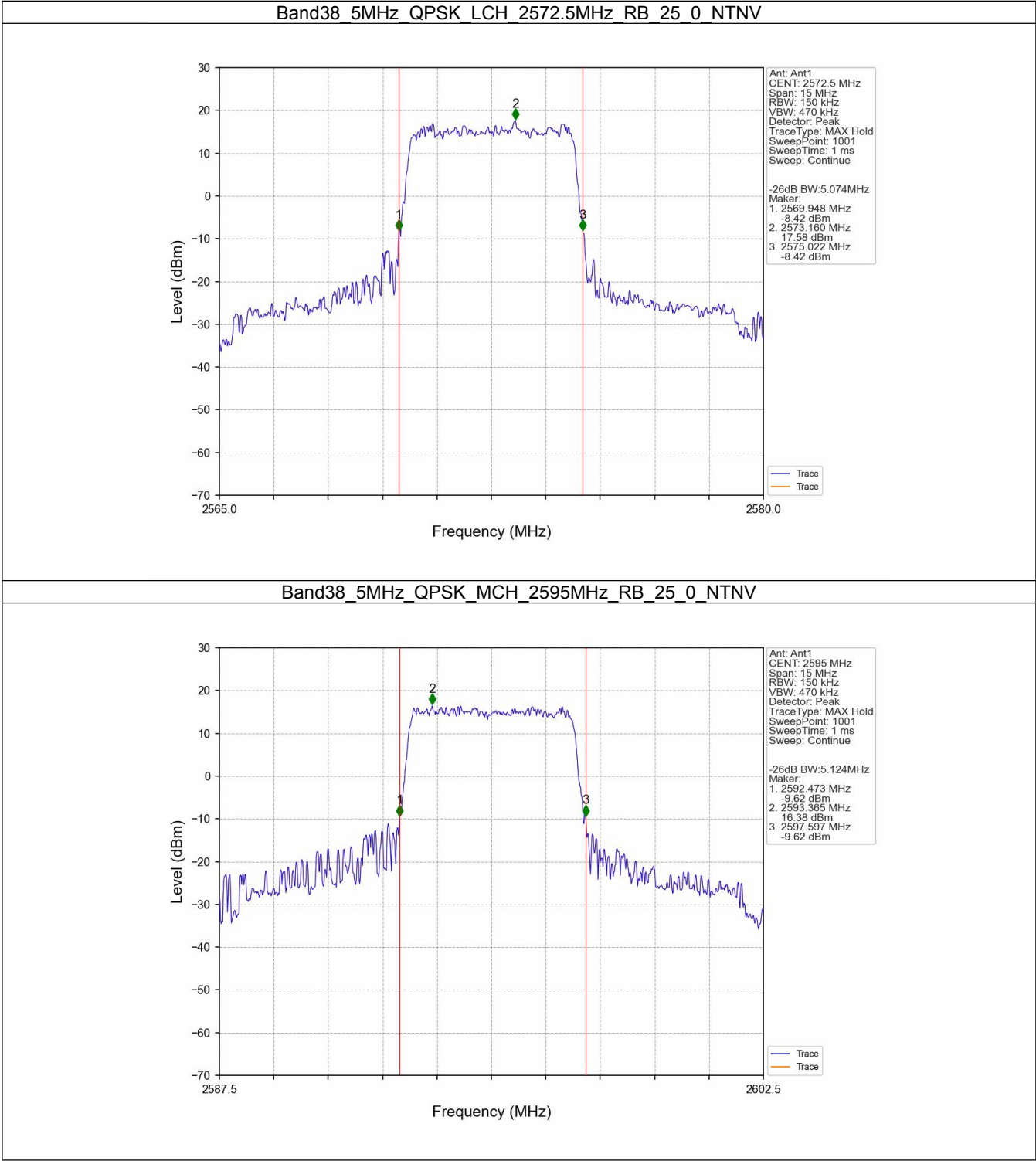
Band38_20MHz_16QAM_MCH_2595MHz_RB_100_0_NTNV



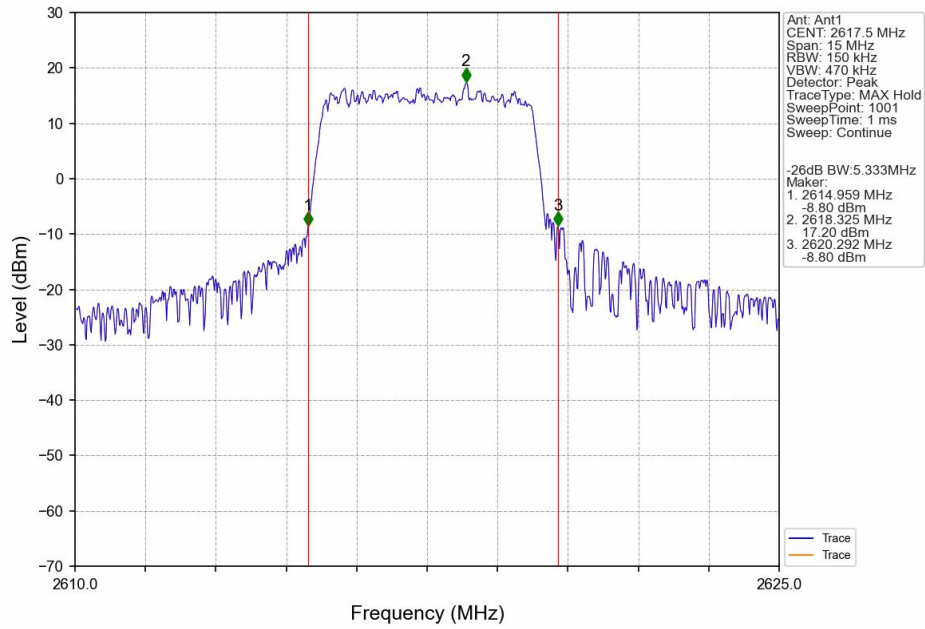
Band38_20MHz_16QAM_HCH_2610MHz_RB_100_0_NTNV



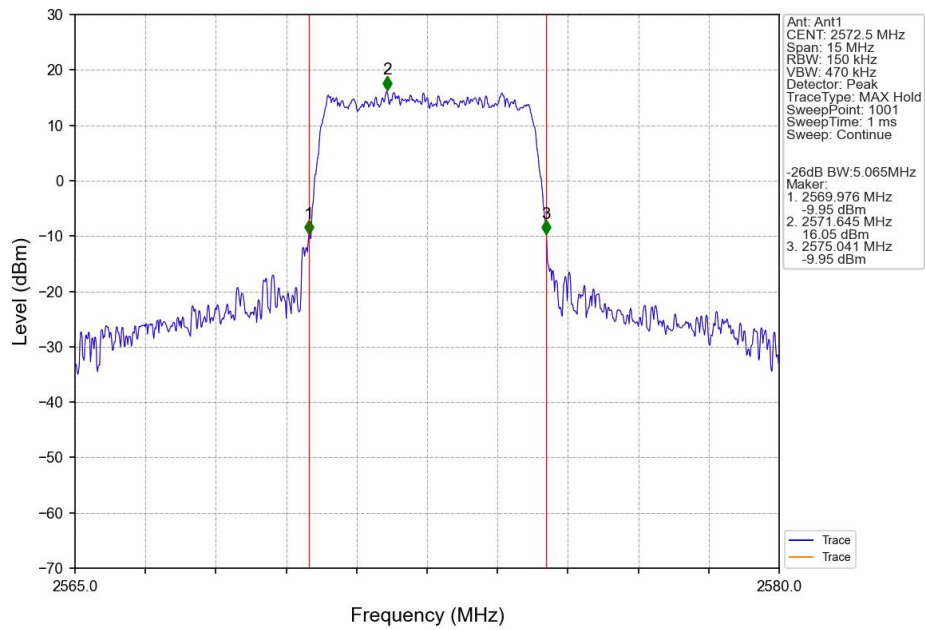
3.2.2 Band38_26dB Occupied Bandwidth



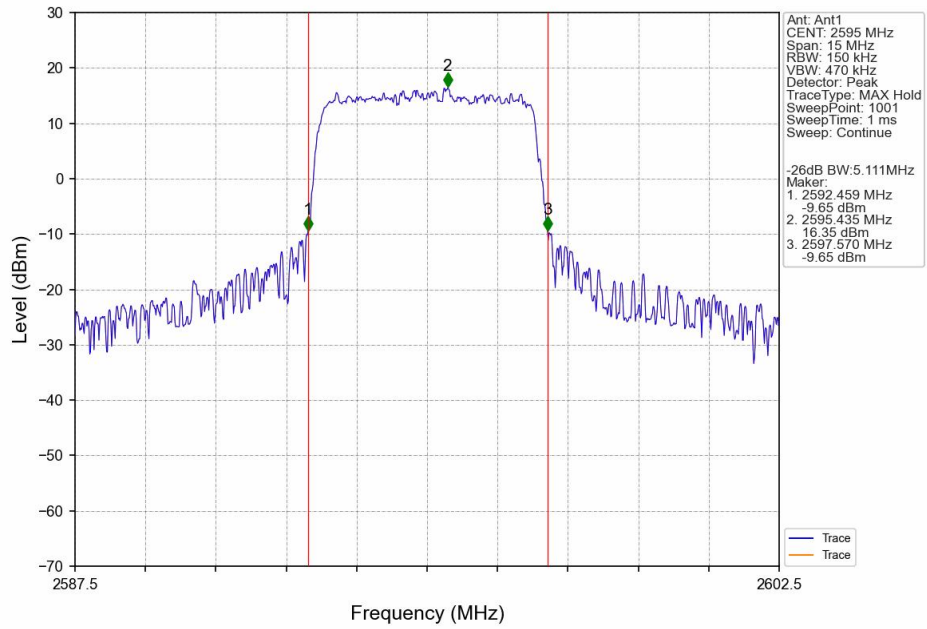
Band38_5MHz_QPSK_HCH_2617.5MHz_RB_25_0_NTNV



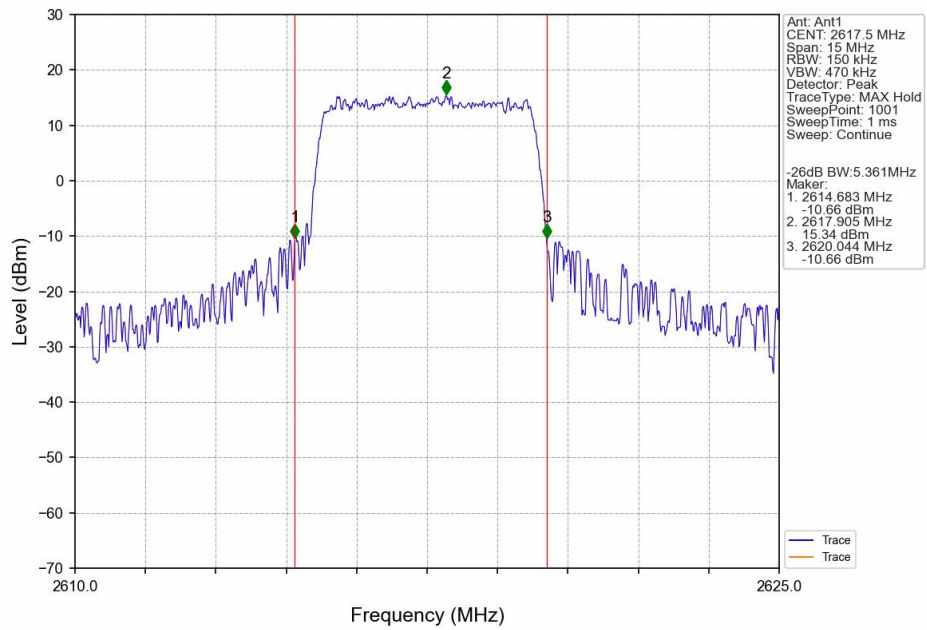
Band38_5MHz_16QAM_LCH_2572.5MHz_RB_25_0_NTNV



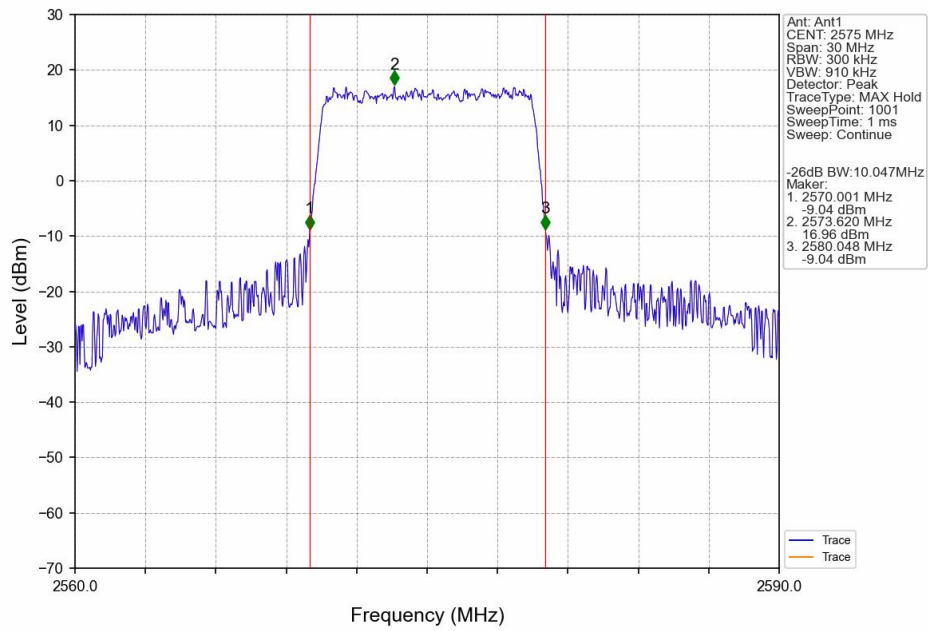
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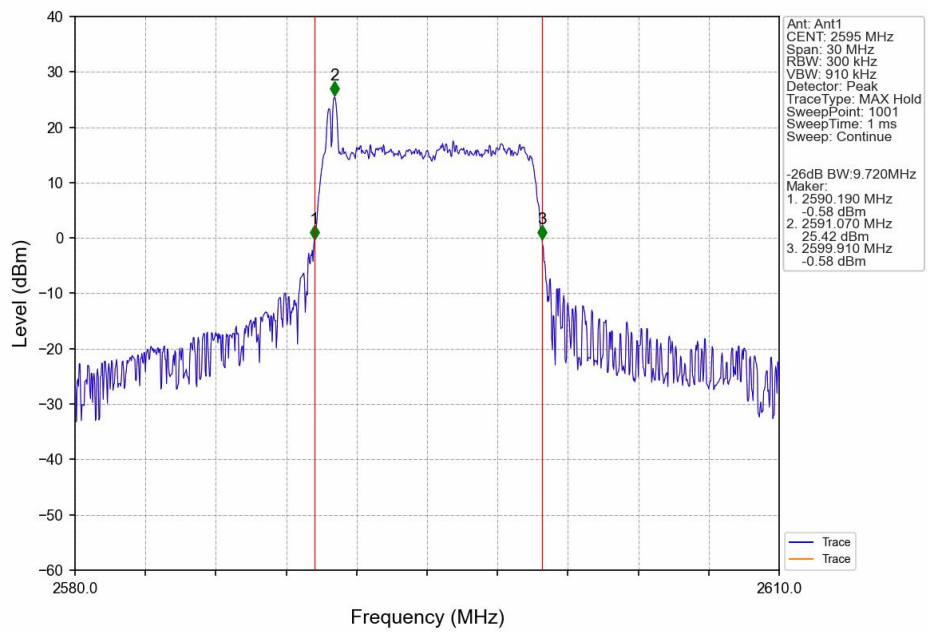
Band38_5MHz_16QAM_HCH_2617.5MHz_RB_25_0_NTNV



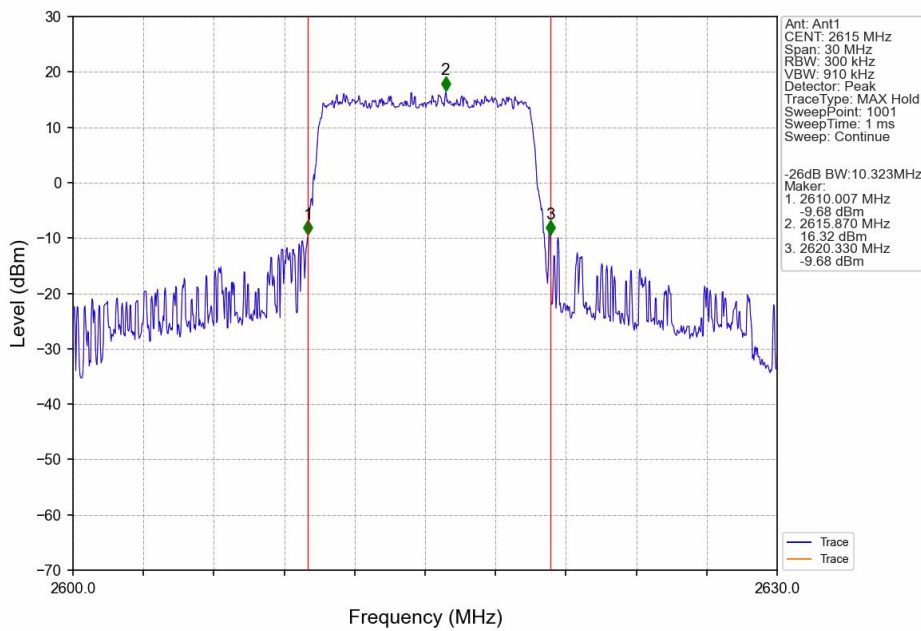
Band38_10MHz_QPSK_LCH_2575MHz_RB_50_0_NTNV



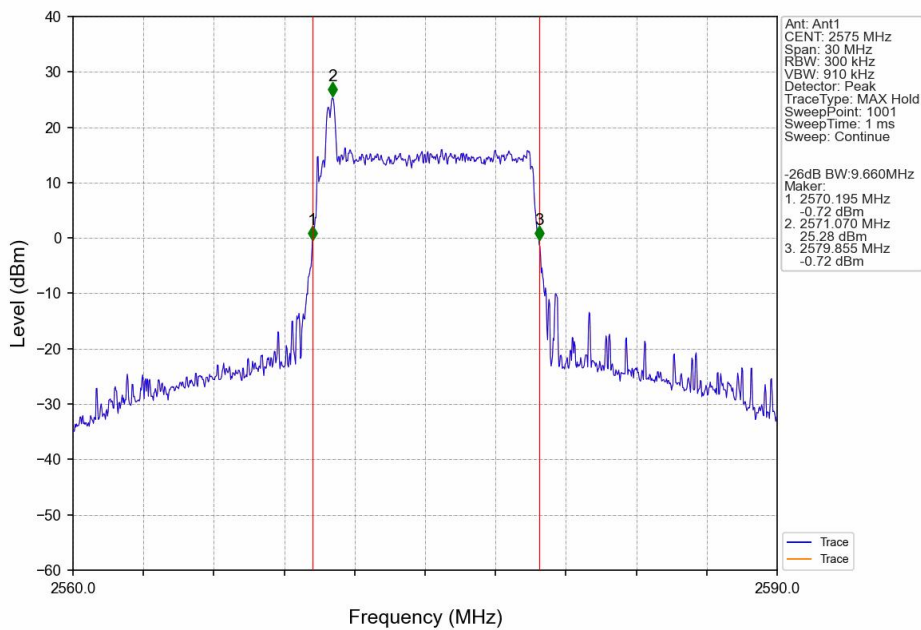
Band38_10MHz_QPSK_MCH_2595MHz_RB_50_0_NTNV



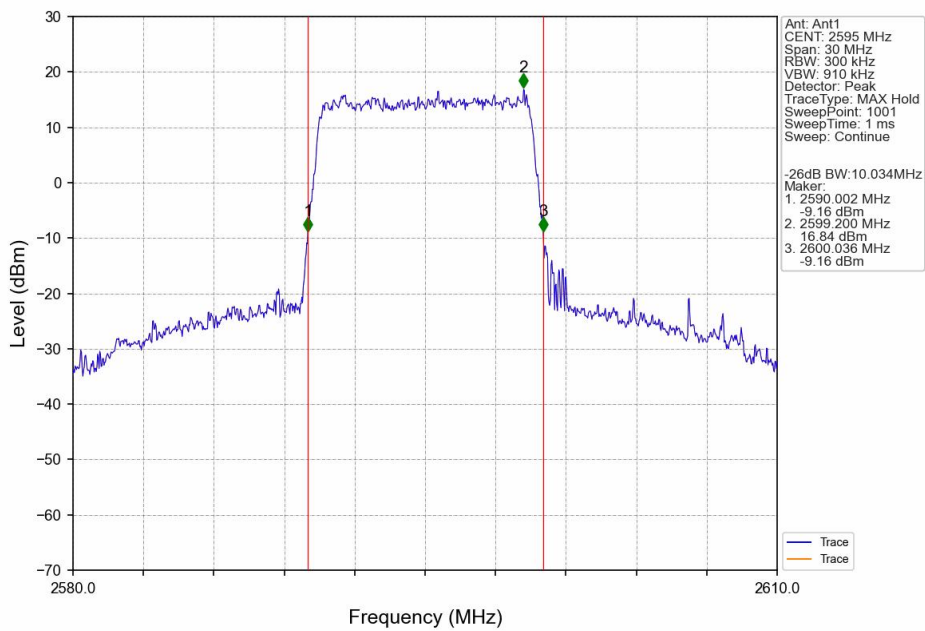
Band38_10MHz_QPSK_HCH_2615MHz_RB_50_0_NTNV



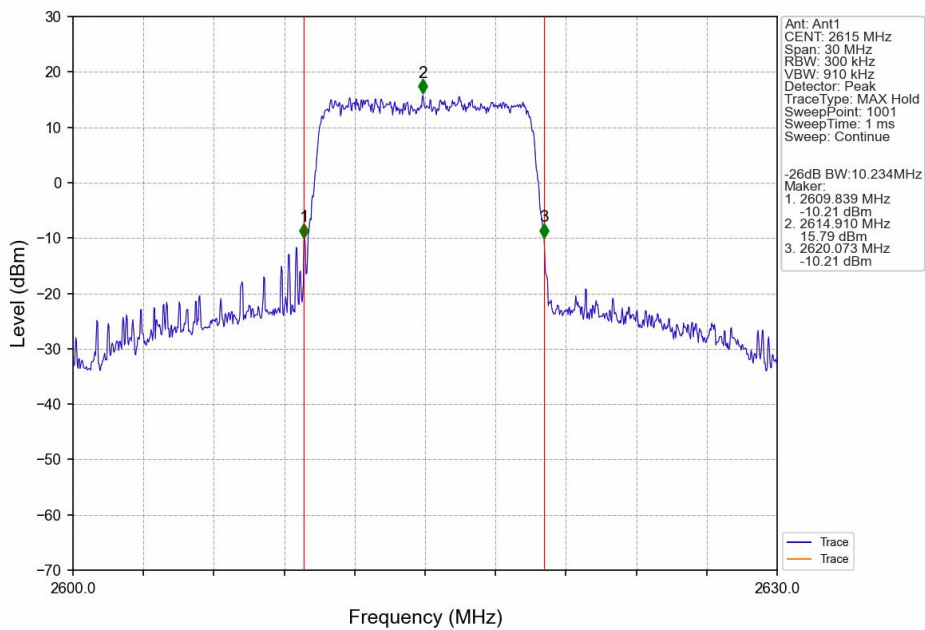
Band38_10MHz_16QAM_LCH_2575MHz_RB_50_0_NTNV



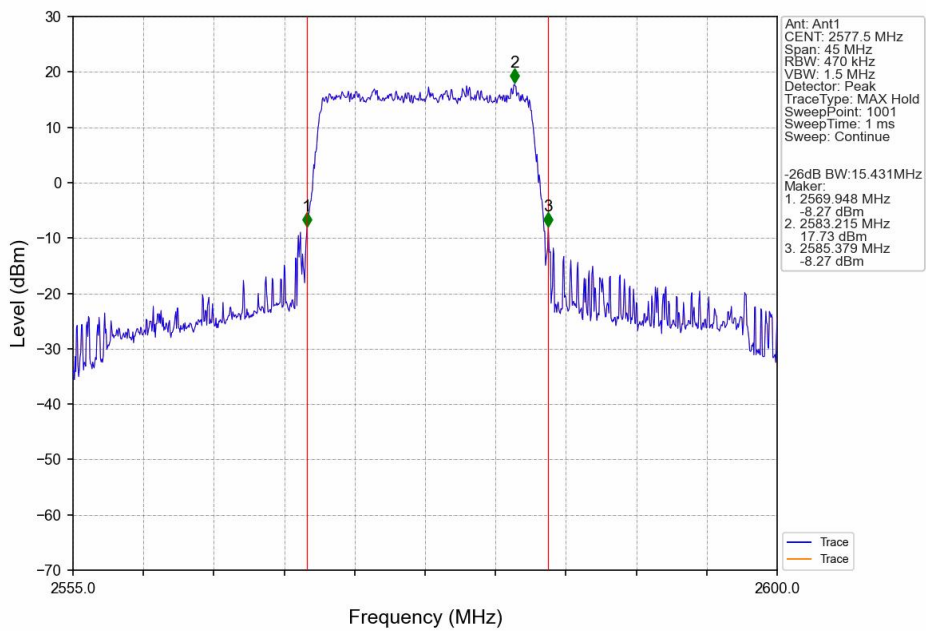
Band38_10MHz_16QAM_MCH_2595MHz_RB_50_0_NTNV



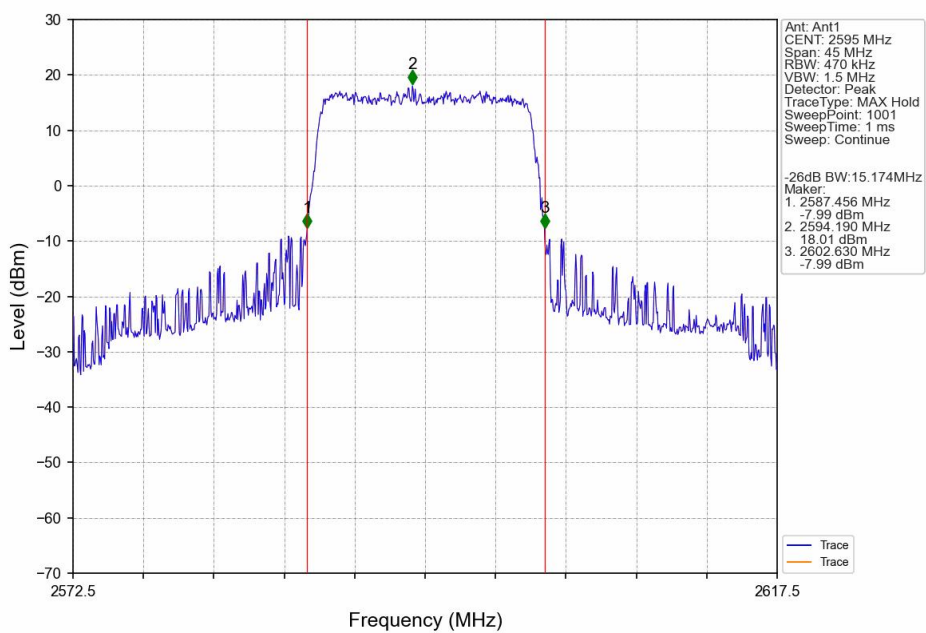
Band38_10MHz_16QAM_HCH_2615MHz_RB_50_0_NTNV



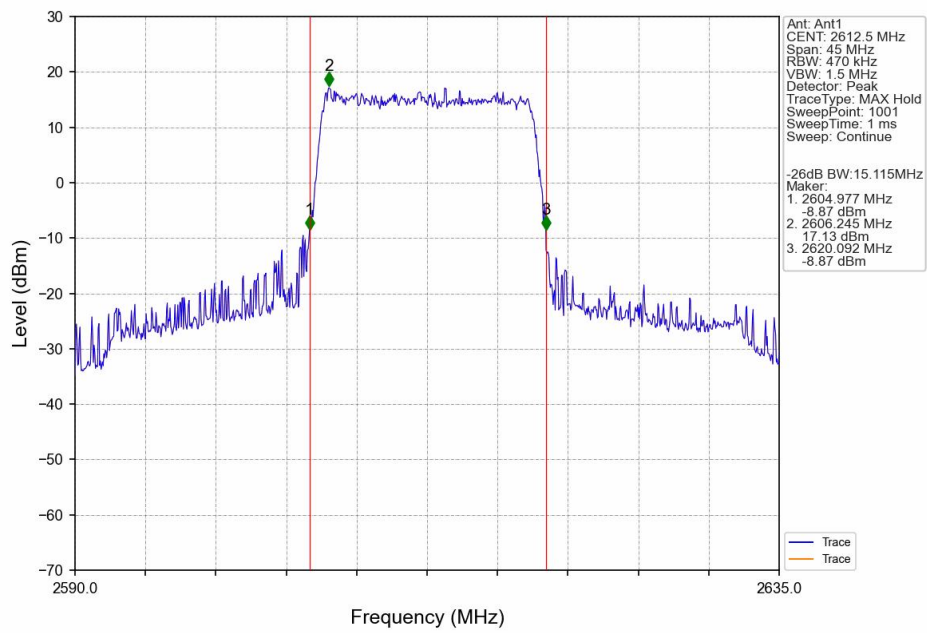
Band38_15MHz_QPSK_LCH_2577.5MHz_RB_75_0_NTNV



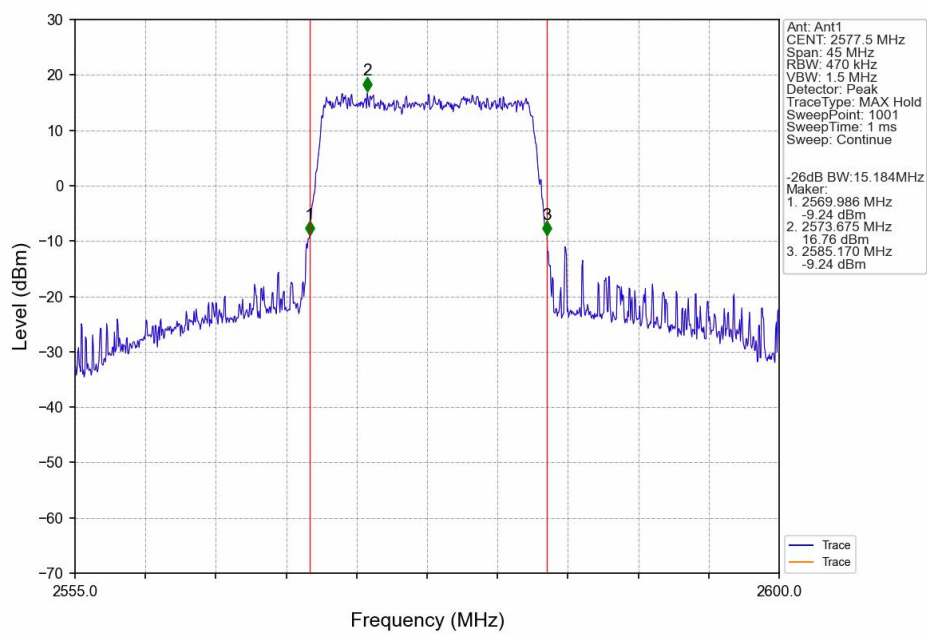
Band38_15MHz_QPSK_MCH_2595MHz_RB_75_0_NTNV



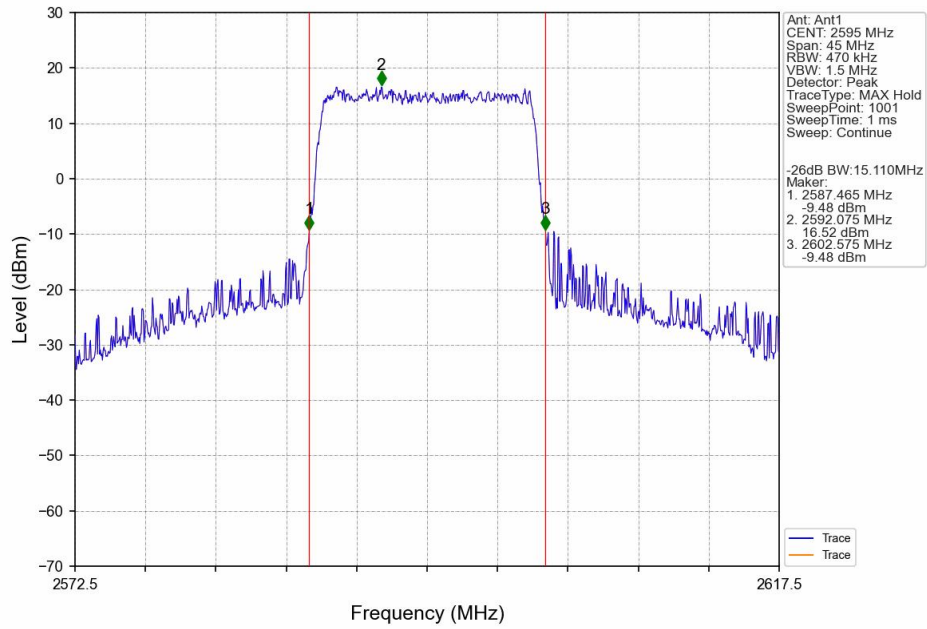
Band38_15MHz_QPSK_HCH_2612.5MHz_RB_75_0_NTNV



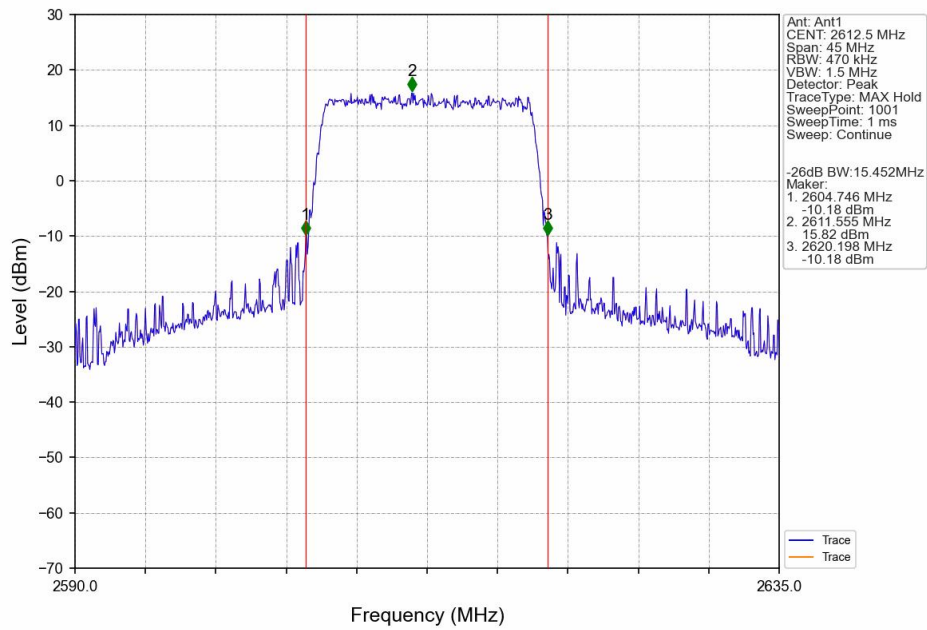
Band38_15MHz_16QAM_LCH_2577.5MHz_RB_75_0_NTNV



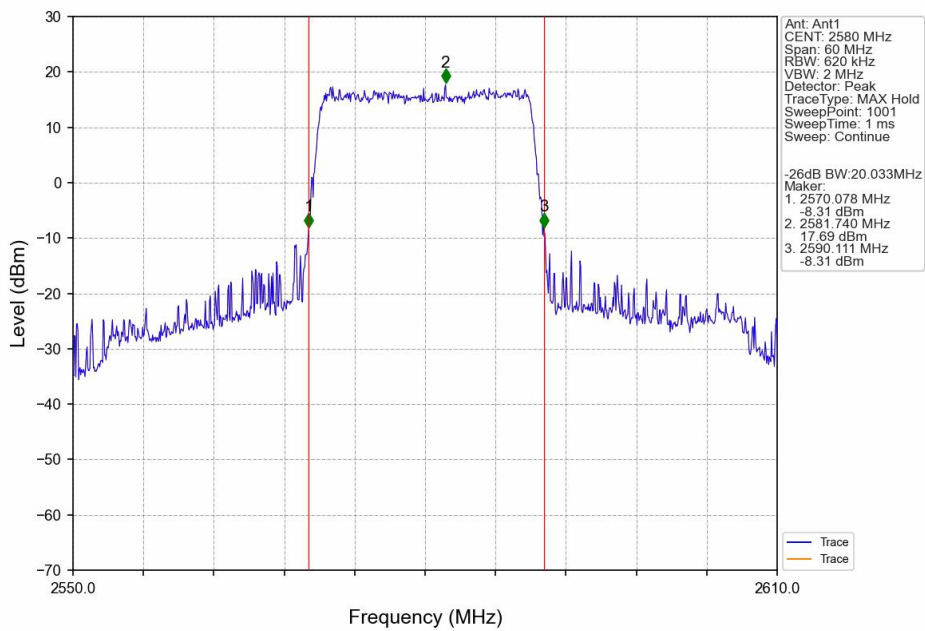
Band38_15MHz_16QAM_MCH_2595MHz_RB_75_0_NTNV



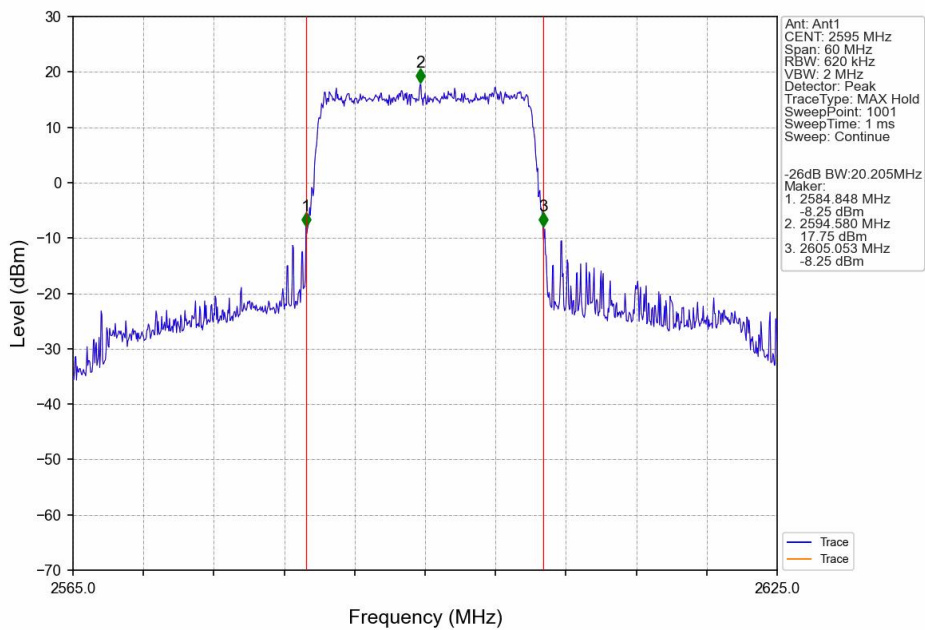
Band38_15MHz_16QAM_HCH_2612.5MHz_RB_75_0_NTNV



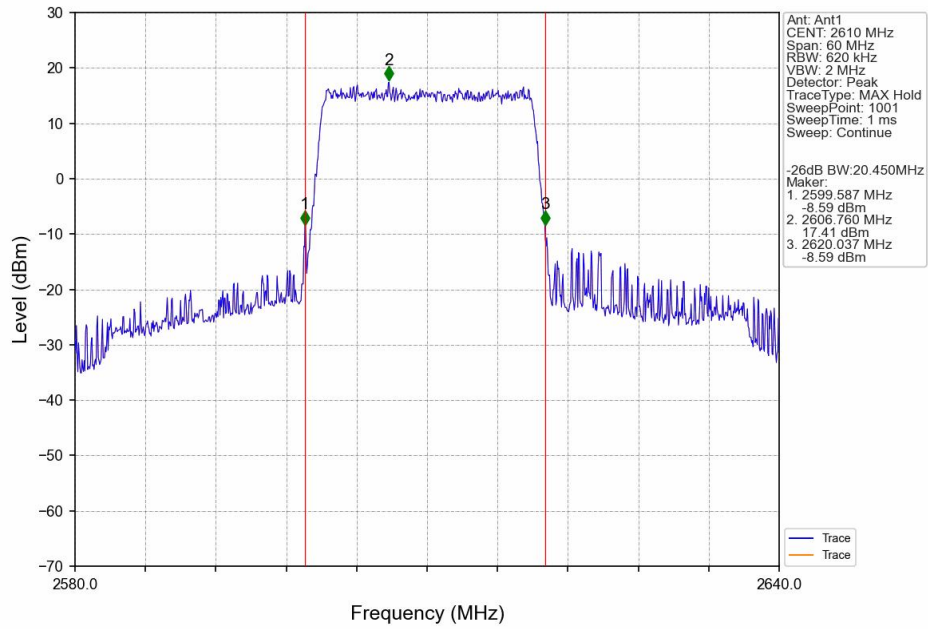
Band38_20MHz_QPSK_LCH_2580MHz_RB_100_0_NTNV



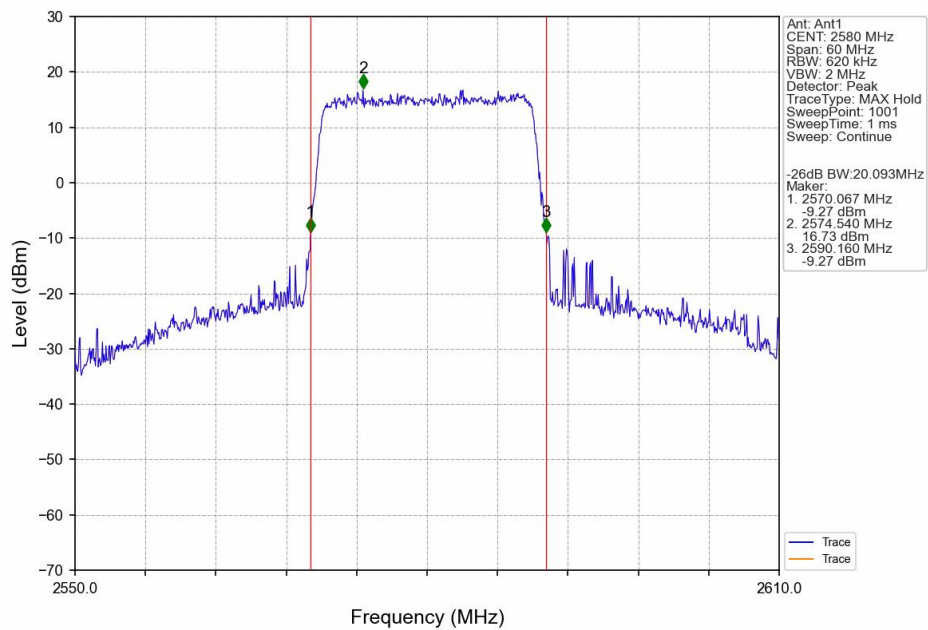
Band38_20MHz_QPSK_MCH_2595MHz_RB_100_0_NTNV



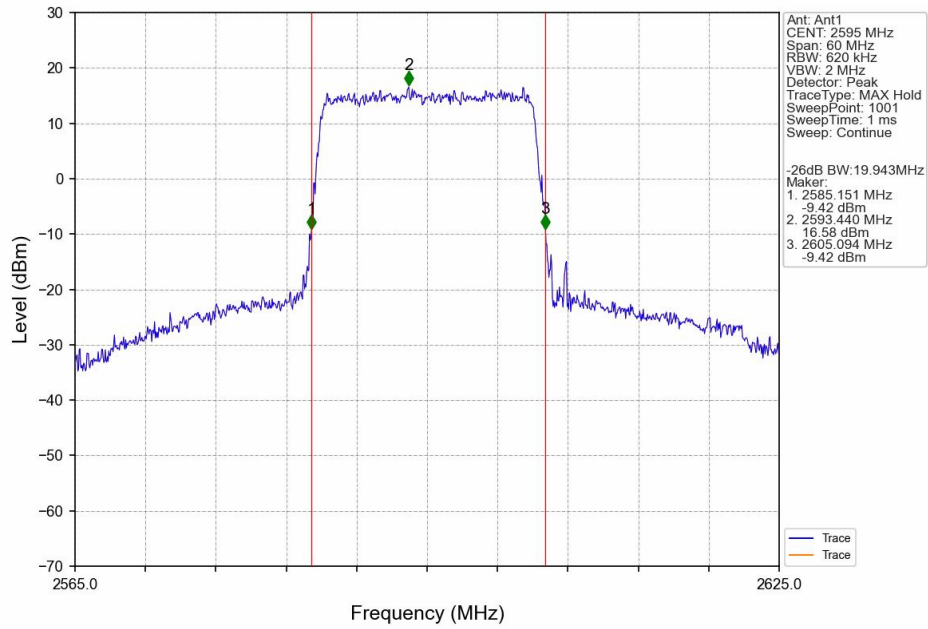
Band38_20MHz_QPSK_HCH_2610MHz_RB_100_0_NTNV



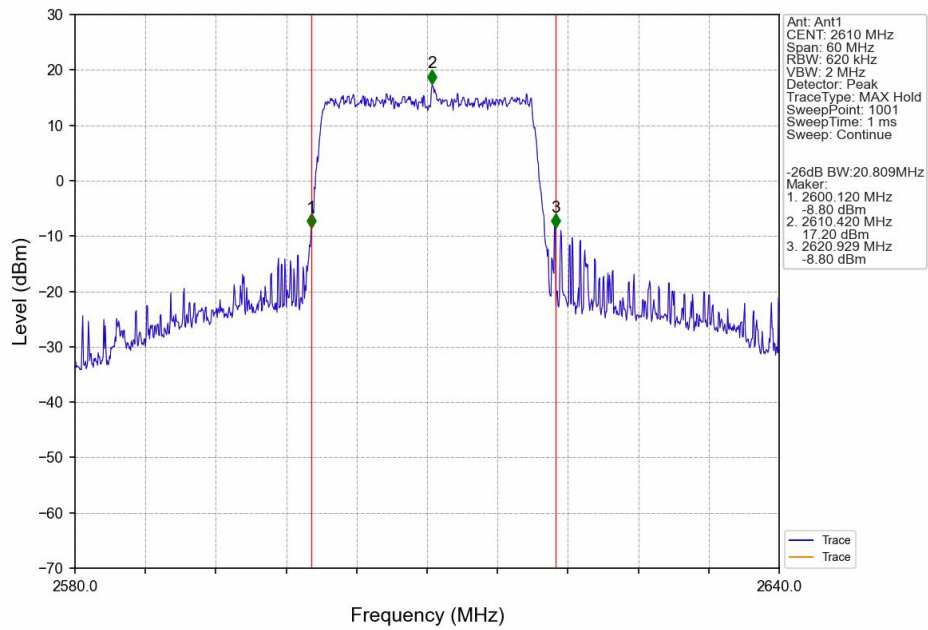
Band38_20MHz_16QAM_LCH_2580MHz_RB_100_0_NTNV



Band38_20MHz_16QAM_MCH_2595MHz_RB_100_0_NTNV



Band38_20MHz_16QAM_HCH_2610MHz_RB_100_0_NTNV



4. Peak-Average Ratio

4.1 Test Result

4.1.1 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	7.55	<=13	Pass
	2595	25	0	7.45	<=13	Pass
	2617.5	25	0	7.49	<=13	Pass
16QAM	2572.5	25	0	8.20	<=13	Pass
	2595	25	0	8.12	<=13	Pass
	2617.5	25	0	8.23	<=13	Pass

4.1.2 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	7.70	<=13	Pass
	2595	50	0	7.55	<=13	Pass
	2615	50	0	7.57	<=13	Pass
16QAM	2575	50	0	8.15	<=13	Pass
	2595	50	0	8.21	<=13	Pass
	2615	50	0	8.18	<=13	Pass

4.1.3 B38_15MHz

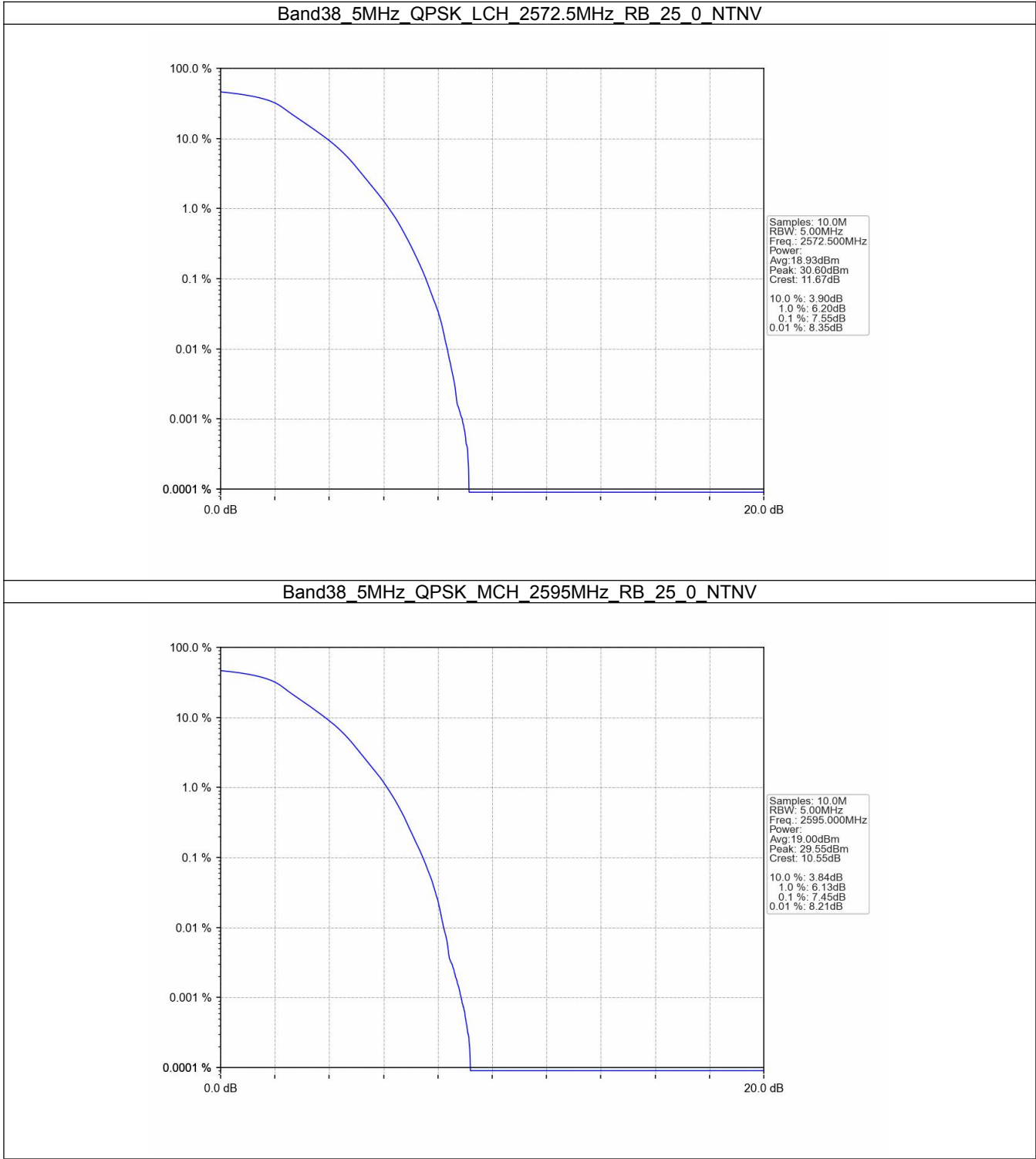
Band: 38 / Bandwidth: 15MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Peak-Average Ratio (dB)		Verdict
		Size	Offset	Result	Limit	
QPSK	2577.5	75	0	7.87	<=13	Pass
	2595	75	0	7.89	<=13	Pass
	2612.5	75	0	7.92	<=13	Pass
16QAM	2577.5	75	0	8.37	<=13	Pass
	2595	75	0	8.14	<=13	Pass
	2612.5	75	0	8.37	<=13	Pass

4.1.4 B38_20MHz

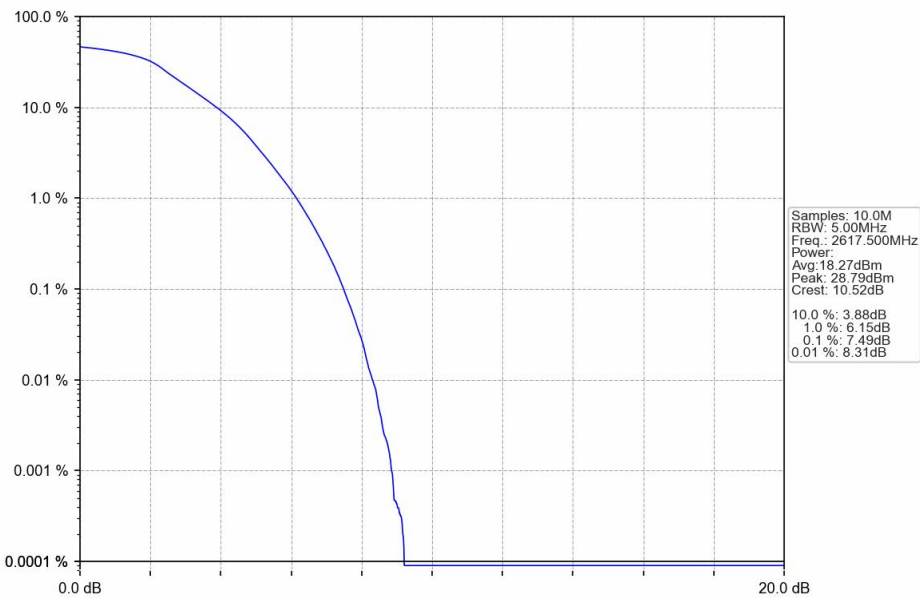
Band: 38 / Bandwidth: 20MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Peak-Average Ratio (dB)		Verdict
		Size	Offset	Result	Limit	
QPSK	2580	100	0	7.28	<=13	Pass
	2595	100	0	7.48	<=13	Pass
	2610	100	0	7.33	<=13	Pass
16QAM	2580	100	0	8.29	<=13	Pass
	2595	100	0	8.06	<=13	Pass
	2610	100	0	8.17	<=13	Pass

4.2 Test Graph

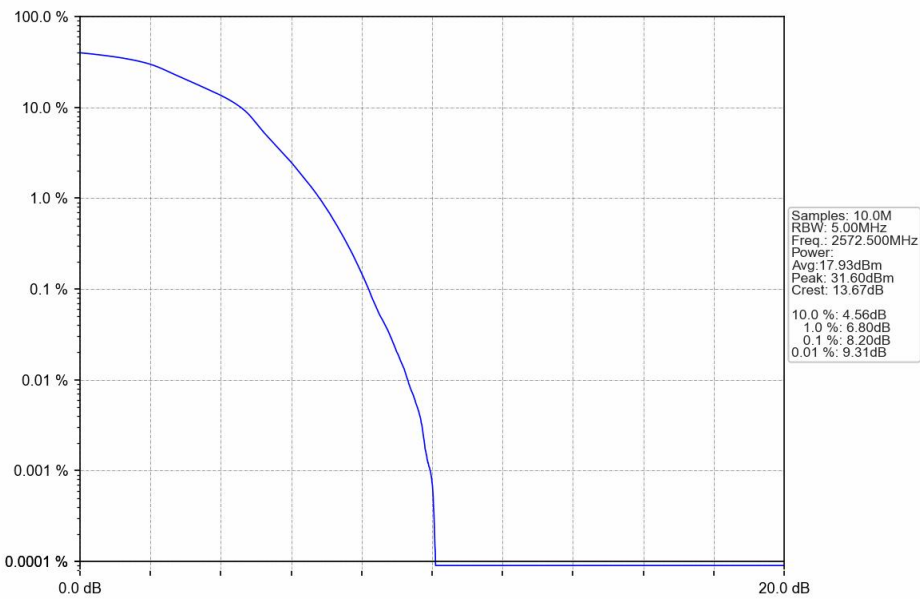
4.2.1 B38_5MHz



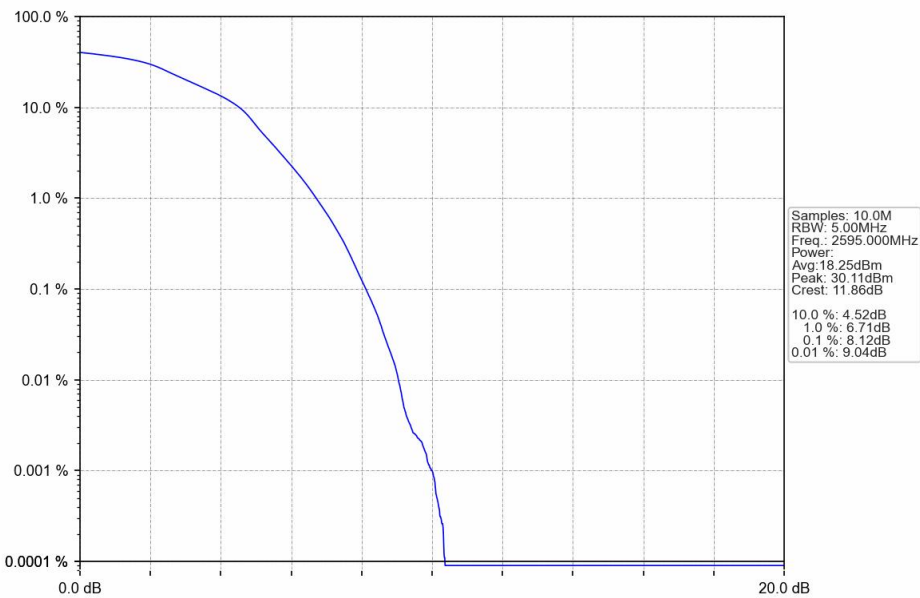
Band38_5MHz_QPSK_HCH_2617.5MHz_RB_25_0_NTNV



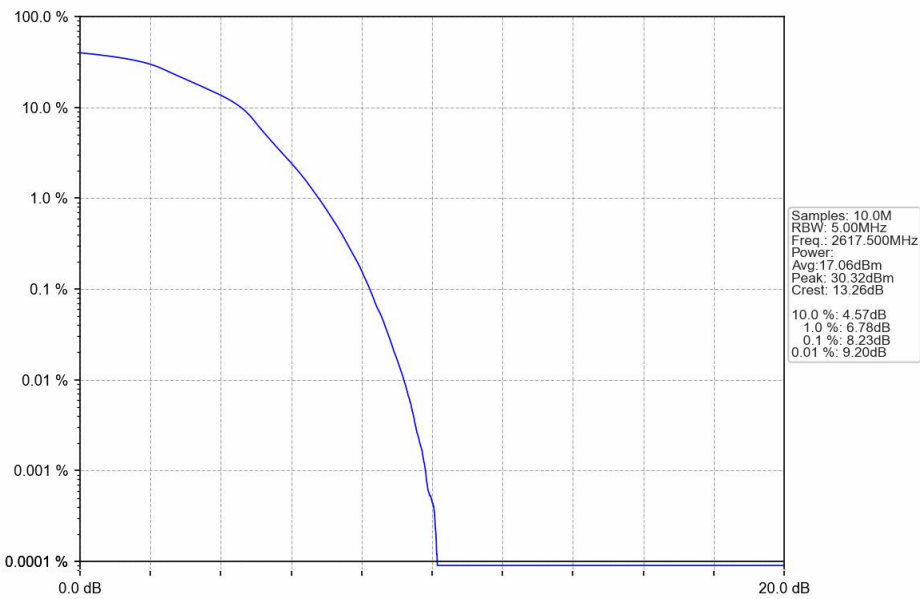
Band38_5MHz_16QAM_LCH_2572.5MHz_RB_25_0_NTNV



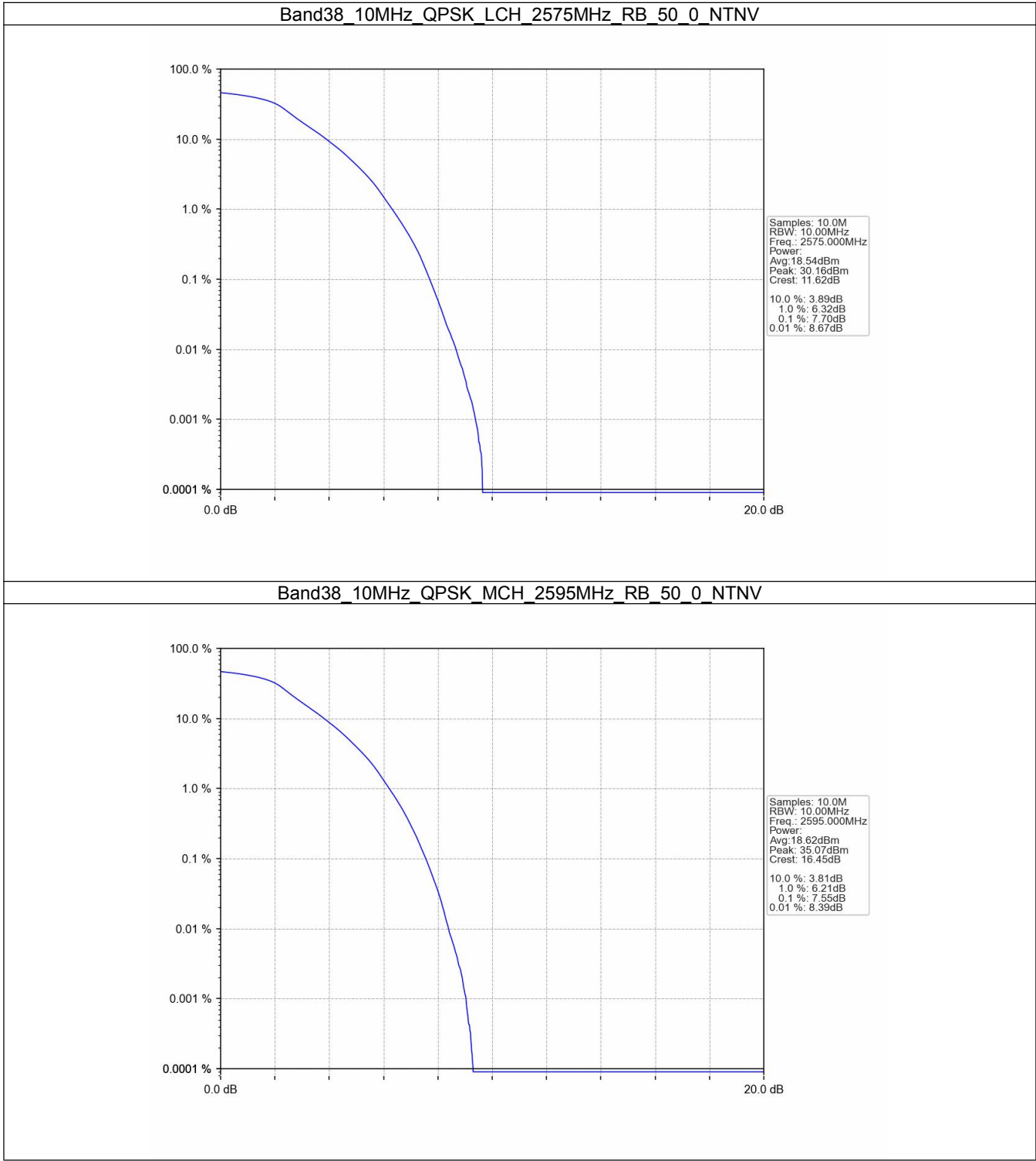
Band38_5MHz_16QAM_MCH_2595MHz_RB_25_0_NTNV



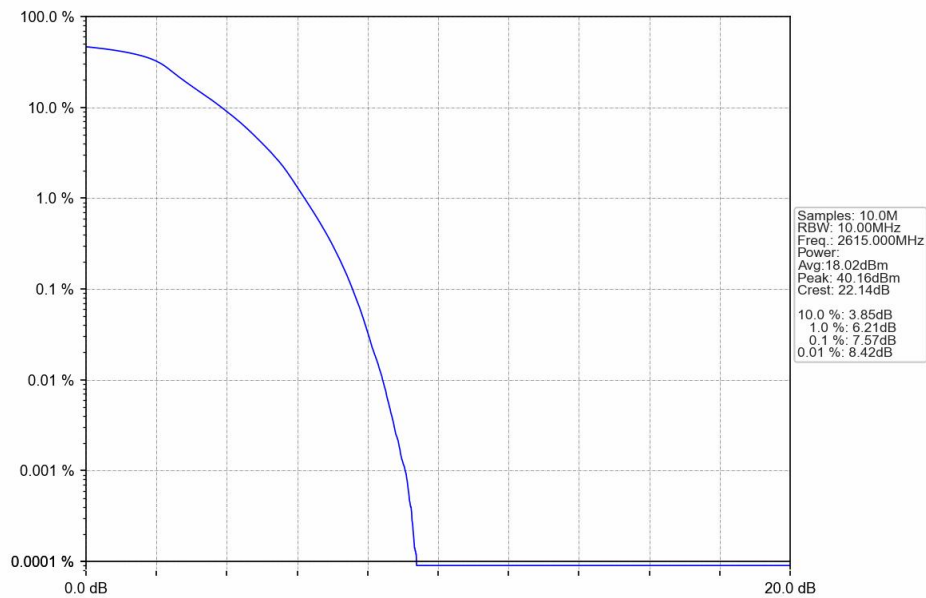
Band38_5MHz_16QAM_HCH_2617.5MHz_RB_25_0_NTNV



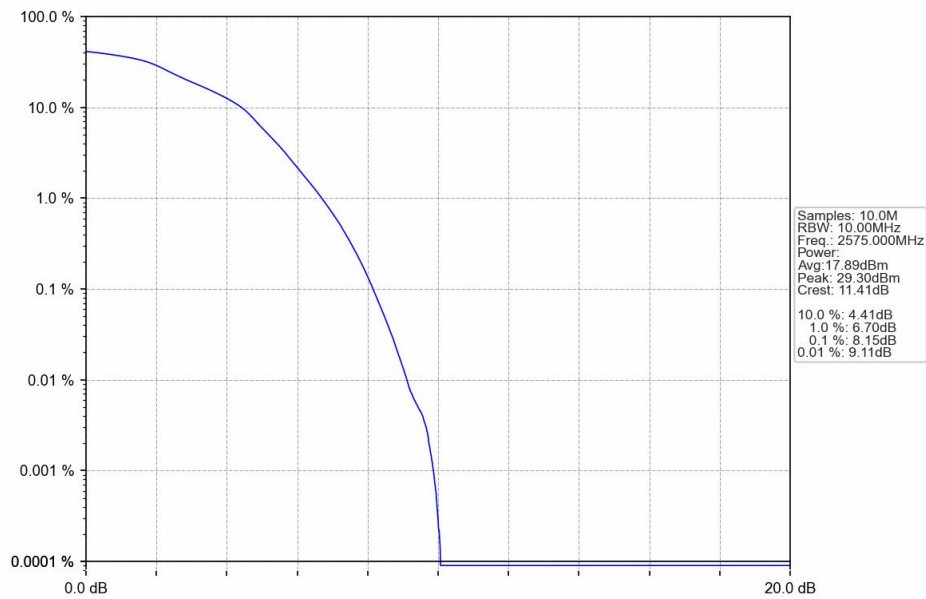
4.2.2 B38_10MHz



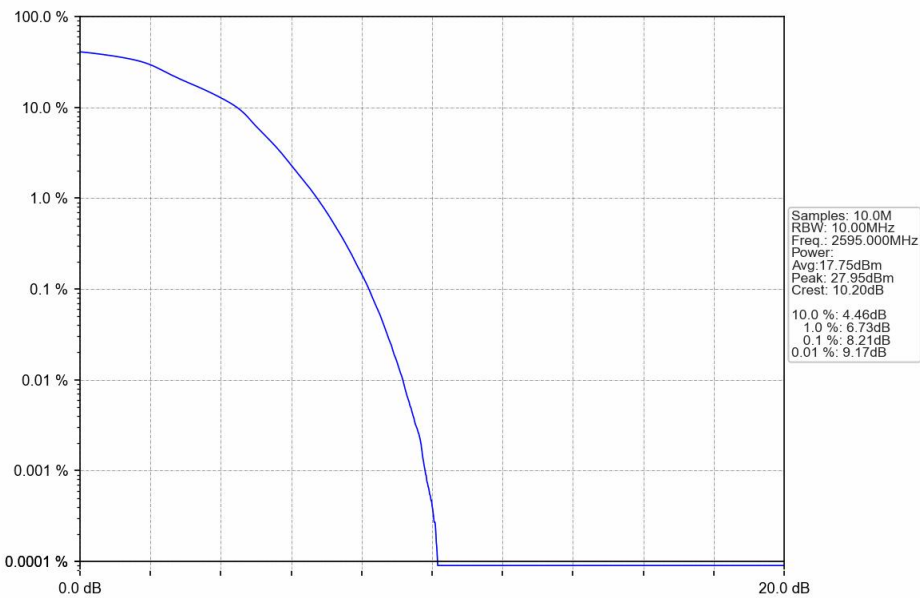
Band38_10MHz_QPSK_HCH_2615MHz_RB_50_0_NTNV



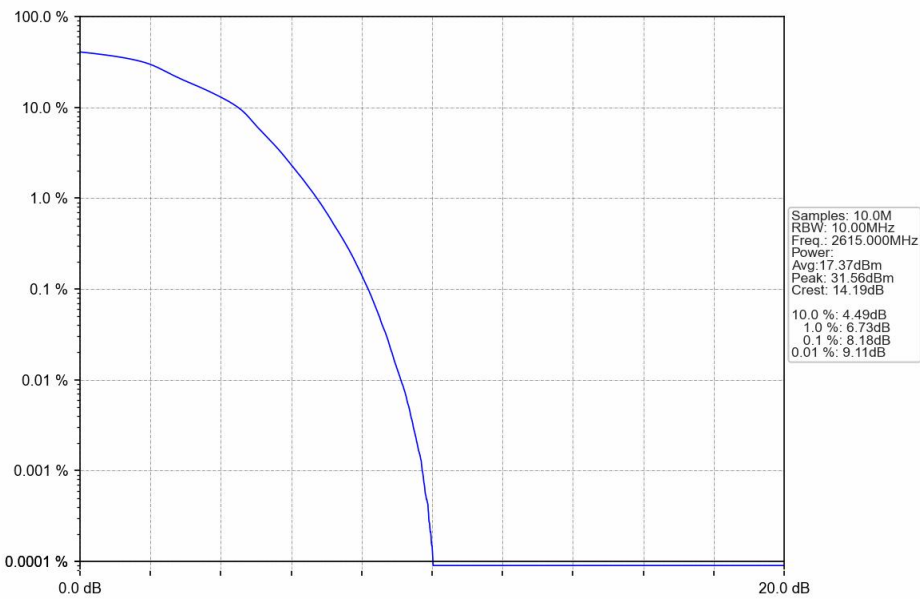
Band38_10MHz_16QAM_LCH_2575MHz_RB_50_0_NTNV



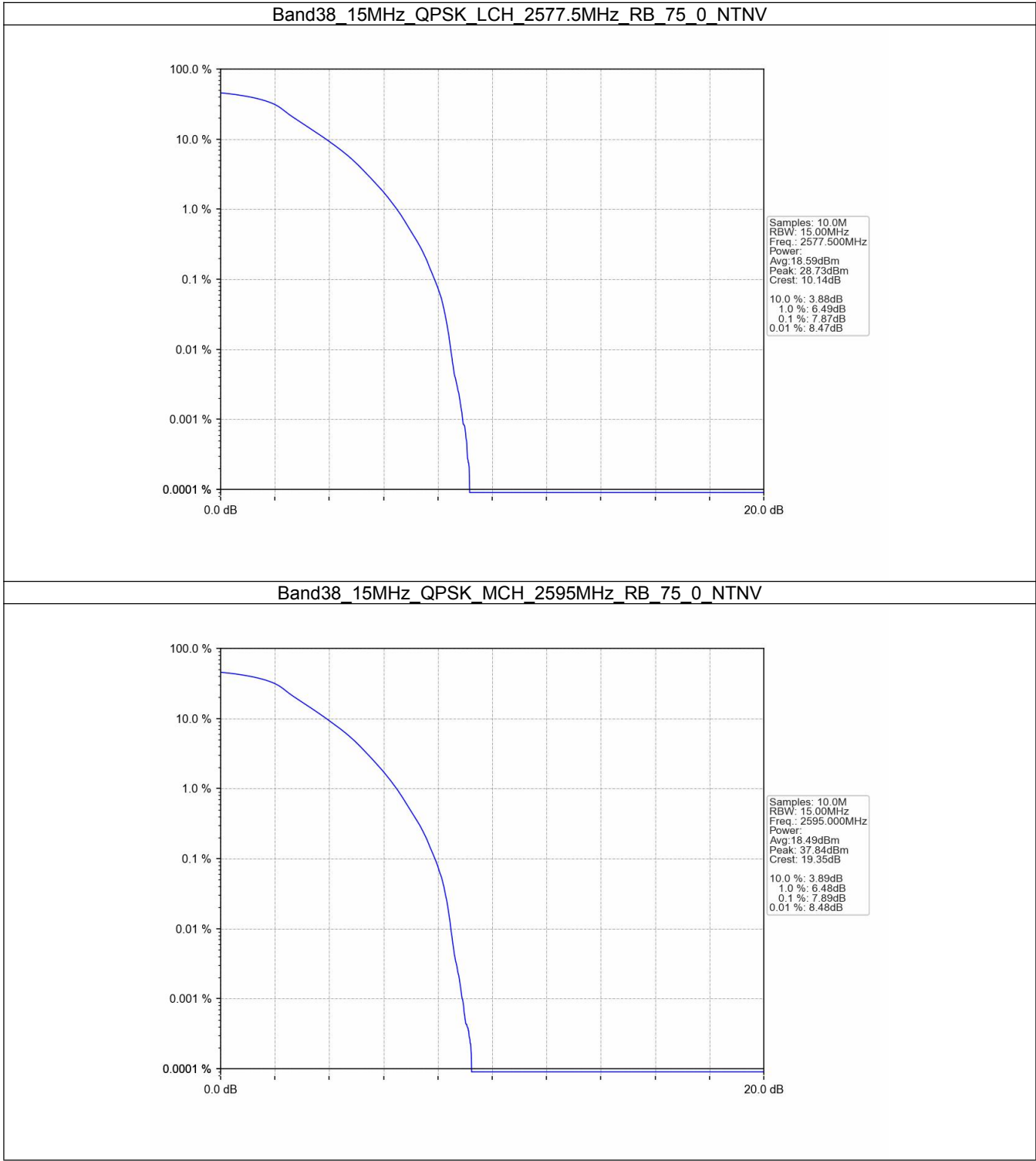
Band38_10MHz_16QAM_MCH_2595MHz_RB_50_0_NTNV



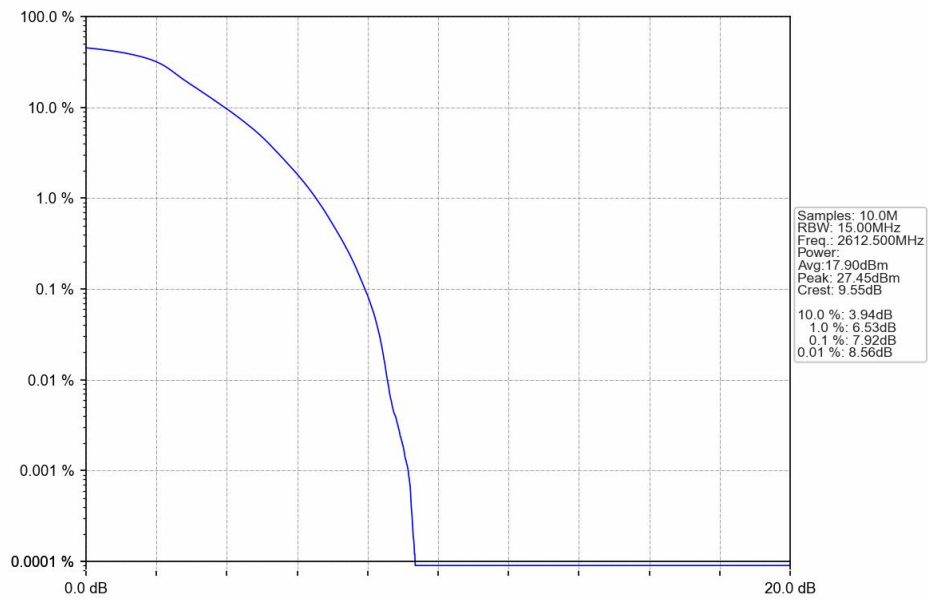
Band38_10MHz_16QAM_HCH_2615MHz_RB_50_0_NTNV



4.2.3 B38_15MHz



Band38_15MHz_QPSK_HCH_2612.5MHz_RB_75_0_NTNV



Band38_15MHz_16QAM_LCH_2577.5MHz_RB_75_0_NTNV

