



1. Effective (Isotropic) Radiated Power Output Data

1.1 Test Result

1.1.1 B4_1.4MHz_EIRP

Band: 4 / Bandwidth: 1.4MHz / NTNV										
Modulation	Frequency (MHz)	RB Allocation		Conducted Power (dBm)	Gain (dBi)	EIRP (dBm)		Verdict		
		Size	Offset			Result	Limit			
QPSK	1710.7	1	0	22.37	0.67	23.04	<=30	Pass		
			2	22.46	0.67	23.13	<=30	Pass		
			5	22.46	0.67	23.13	<=30	Pass		
		3	0	22.41	0.67	23.08	<=30	Pass		
			2	22.44	0.67	23.11	<=30	Pass		
			3	22.38	0.67	23.05	<=30	Pass		
		6	0	21.36	0.67	22.03	<=30	Pass		
		1732.5	1	0	22.28	0.67	22.95	<=30	Pass	
				2	22.50	0.67	23.17	<=30	Pass	
	5			22.52	0.67	23.19	<=30	Pass		
	3		0	22.48	0.67	23.15	<=30	Pass		
			2	22.39	0.67	23.06	<=30	Pass		
			3	22.49	0.67	23.16	<=30	Pass		
	6		0	21.42	0.67	22.09	<=30	Pass		
	1754.3		1	0	22.22	0.67	22.89	<=30	Pass	
				2	22.12	0.67	22.79	<=30	Pass	
		5		22.17	0.67	22.84	<=30	Pass		
		3	0	22.12	0.67	22.79	<=30	Pass		
			2	22.12	0.67	22.79	<=30	Pass		
			3	22.11	0.67	22.78	<=30	Pass		
		6	0	21.11	0.67	21.78	<=30	Pass		
		16QAM	1710.7	1	0	21.41	0.67	22.08	<=30	Pass
					2	21.43	0.67	22.10	<=30	Pass
	5				21.43	0.67	22.10	<=30	Pass	
3	0			21.33	0.67	22.00	<=30	Pass		
	2			21.33	0.67	22.00	<=30	Pass		
	3			21.32	0.67	21.99	<=30	Pass		
6	0			20.50	0.67	21.17	<=30	Pass		
1732.5	1			0	22.12	0.67	22.79	<=30	Pass	
				2	22.09	0.67	22.76	<=30	Pass	
			5	22.16	0.67	22.83	<=30	Pass		
	3		0	21.62	0.67	22.29	<=30	Pass		
			2	21.68	0.67	22.35	<=30	Pass		
			3	21.67	0.67	22.34	<=30	Pass		
	6		0	20.62	0.67	21.29	<=30	Pass		
	1754.3		1	0	21.88	0.67	22.55	<=30	Pass	
				2	21.91	0.67	22.58	<=30	Pass	
5				21.94	0.67	22.61	<=30	Pass		
3			0	20.81	0.67	21.48	<=30	Pass		
			2	20.80	0.67	21.47	<=30	Pass		
			3	20.78	0.67	21.45	<=30	Pass		
6			0	20.19	0.67	20.86	<=30	Pass		

Note1: EIRP=Conducted Power+Antenna Gain

1.1.2 B4_3MHz_EIRP

Band: 4 / Bandwidth: 3MHz / NTNV										
Modulation	Frequency (MHz)	RB Allocation		Conducted Power (dBm)	Gain (dBi)	EIRP (dBm)		Verdict		
		Size	Offset			Result	Limit			
QPSK	1711.5	1	0	22.37	0.67	23.04	<=30	Pass		
			7	22.44	0.67	23.11	<=30	Pass		
			14	22.35	0.67	23.02	<=30	Pass		
		8	0	21.52	0.67	22.19	<=30	Pass		
			4	21.53	0.67	22.20	<=30	Pass		
			7	21.31	0.67	21.98	<=30	Pass		
		15	0	21.50	0.67	22.17	<=30	Pass		
		1732.5	1	0	22.40	0.67	23.07	<=30	Pass	
				7	22.32	0.67	22.99	<=30	Pass	
	14			22.31	0.67	22.98	<=30	Pass		
	8		0	21.29	0.67	21.96	<=30	Pass		
			4	21.37	0.67	22.04	<=30	Pass		
			7	21.36	0.67	22.03	<=30	Pass		
	15		0	21.32	0.67	21.99	<=30	Pass		
	1753.5		1	0	22.01	0.67	22.68	<=30	Pass	
				7	22.00	0.67	22.67	<=30	Pass	
		14		21.96	0.67	22.63	<=30	Pass		
		8	0	21.12	0.67	21.79	<=30	Pass		
			4	21.09	0.67	21.76	<=30	Pass		
			7	21.06	0.67	21.73	<=30	Pass		
		15	0	21.15	0.67	21.82	<=30	Pass		
		16QAM	1711.5	1	0	22.40	0.67	23.07	<=30	Pass
					7	22.38	0.67	23.05	<=30	Pass
	14				22.29	0.67	22.96	<=30	Pass	
8	0			20.86	0.67	21.53	<=30	Pass		
	4			20.81	0.67	21.48	<=30	Pass		
	7			20.75	0.67	21.42	<=30	Pass		
15	0			20.62	0.67	21.29	<=30	Pass		
1732.5	1			0	21.35	0.67	22.02	<=30	Pass	
				7	21.39	0.67	22.06	<=30	Pass	
			14	21.41	0.67	22.08	<=30	Pass		
	8		0	20.63	0.67	21.30	<=30	Pass		
			4	20.64	0.67	21.31	<=30	Pass		
			7	20.64	0.67	21.31	<=30	Pass		
	15		0	20.49	0.67	21.16	<=30	Pass		
	1753.5		1	0	22.31	0.67	22.98	<=30	Pass	
				7	22.31	0.67	22.98	<=30	Pass	
14				22.34	0.67	23.01	<=30	Pass		
8			0	20.34	0.67	21.01	<=30	Pass		
			4	20.32	0.67	20.99	<=30	Pass		
			7	20.24	0.67	20.91	<=30	Pass		
15			0	20.30	0.67	20.97	<=30	Pass		

Note1: EIRP=Conducted Power+Antenna Gain

1.1.3 B4_5MHz_EIRP

Band: 4 / Bandwidth: 5MHz / NTNV								
Modulation	Frequency (MHz)	RB Allocation		Conducted Power (dBm)	Gain (dBi)	EIRP (dBm)		Verdict
		Size	Offset			Result	Limit	
QPSK	1712.5	1	0	22.38	0.67	23.05	<=30	Pass
			13	22.37	0.67	23.04	<=30	Pass
			24	22.33	0.67	23.00	<=30	Pass
		12	0	21.54	0.67	22.21	<=30	Pass



16QAM	1732.5	25	6	21.33	0.67	22.00	<=30	Pass	
			13	21.38	0.67	22.05	<=30	Pass	
			0	21.30	0.67	21.97	<=30	Pass	
		12	1	0	22.25	0.67	22.92	<=30	Pass
				13	22.23	0.67	22.90	<=30	Pass
				24	22.26	0.67	22.93	<=30	Pass
			25	0	21.38	0.67	22.05	<=30	Pass
				6	21.37	0.67	22.04	<=30	Pass
				13	21.31	0.67	21.98	<=30	Pass
	1752.5	1	0	22.07	0.67	22.74	<=30	Pass	
			13	22.07	0.67	22.74	<=30	Pass	
			24	22.03	0.67	22.70	<=30	Pass	
		12	0	21.20	0.67	21.87	<=30	Pass	
			6	21.24	0.67	21.91	<=30	Pass	
			13	21.23	0.67	21.90	<=30	Pass	
		25	0	21.11	0.67	21.78	<=30	Pass	
		1712.5	1	0	21.16	0.67	21.83	<=30	Pass
				13	20.98	0.67	21.65	<=30	Pass
	24			21.06	0.67	21.73	<=30	Pass	
	12			0	20.54	0.67	21.21	<=30	Pass
				6	20.44	0.67	21.11	<=30	Pass
				13	20.48	0.67	21.15	<=30	Pass
	25		0	20.53	0.67	21.20	<=30	Pass	
	1732.5		1	0	21.97	0.67	22.64	<=30	Pass
13				21.95	0.67	22.62	<=30	Pass	
24				21.91	0.67	22.58	<=30	Pass	
12			0	20.46	0.67	21.13	<=30	Pass	
			6	20.45	0.67	21.12	<=30	Pass	
			13	20.44	0.67	21.11	<=30	Pass	
25	0		20.50	0.67	21.17	<=30	Pass		
1752.5	1		0	21.65	0.67	22.32	<=30	Pass	
			13	21.57	0.67	22.24	<=30	Pass	
			24	21.63	0.67	22.30	<=30	Pass	
	12		0	20.22	0.67	20.89	<=30	Pass	
		6	20.32	0.67	20.99	<=30	Pass		
		13	20.28	0.67	20.95	<=30	Pass		
25	0	20.24	0.67	20.91	<=30	Pass			

Note1: EIRP=Conducted Power+Antenna Gain

1.1.4 B4_10MHz_EIRP

Band: 4 / Bandwidth: 10MHz / NTNV								
Modulation	Frequency (MHz)	RB Allocation		Conducted Power (dBm)	Gain (dBi)	EIRP (dBm)		Verdict
		Size	Offset			Result	Limit	
QPSK	1715	1	0	22.35	0.67	23.02	<=30	Pass
			25	22.29	0.67	22.96	<=30	Pass
			49	22.31	0.67	22.98	<=30	Pass
		25	0	21.33	0.67	22.00	<=30	Pass
			13	21.39	0.67	22.06	<=30	Pass
			25	21.27	0.67	21.94	<=30	Pass
	50	0	21.39	0.67	22.06	<=30	Pass	
	1732.5	1	0	22.42	0.67	23.09	<=30	Pass
			25	22.36	0.67	23.03	<=30	Pass
			49	22.30	0.67	22.97	<=30	Pass
		25	0	21.38	0.67	22.05	<=30	Pass



16QAM	1750	50	13	21.41	0.67	22.08	<=30	Pass	
			25	21.35	0.67	22.02	<=30	Pass	
			0	21.45	0.67	22.12	<=30	Pass	
		1	0	22.22	0.67	22.89	<=30	Pass	
			25	22.16	0.67	22.83	<=30	Pass	
			49	22.14	0.67	22.81	<=30	Pass	
	25	0	21.22	0.67	21.89	<=30	Pass		
		13	21.10	0.67	21.77	<=30	Pass		
		25	21.16	0.67	21.83	<=30	Pass		
	50	0	21.14	0.67	21.81	<=30	Pass		
	16QAM	1715	1	0	22.13	0.67	22.80	<=30	Pass
				25	22.11	0.67	22.78	<=30	Pass
				49	22.11	0.67	22.78	<=30	Pass
			25	0	20.50	0.67	21.17	<=30	Pass
				13	20.46	0.67	21.13	<=30	Pass
25				20.47	0.67	21.14	<=30	Pass	
50		0	20.47	0.67	21.14	<=30	Pass		
1732.5		1	0	21.38	0.67	22.05	<=30	Pass	
			25	21.44	0.67	22.11	<=30	Pass	
			49	21.38	0.67	22.05	<=30	Pass	
		25	0	20.59	0.67	21.26	<=30	Pass	
			13	20.61	0.67	21.28	<=30	Pass	
			25	20.59	0.67	21.26	<=30	Pass	
50		0	20.46	0.67	21.13	<=30	Pass		
1750		1	0	22.28	0.67	22.95	<=30	Pass	
			25	22.21	0.67	22.88	<=30	Pass	
			49	22.19	0.67	22.86	<=30	Pass	
		25	0	20.36	0.67	21.03	<=30	Pass	
	13		20.30	0.67	20.97	<=30	Pass		
	25		20.25	0.67	20.92	<=30	Pass		
	50	0	20.33	0.67	21.00	<=30	Pass		

Note1: EIRP=Conducted Power+Antenna Gain

1.1.5 B4_15MHz_EIRP

Band: 4 / Bandwidth: 15MHz / NTNv								
Modulation	Frequency (MHz)	RB Allocation		Conducted Power (dBm)	Gain (dBi)	EIRP (dBm)		Verdict
		Size	Offset			Result	Limit	
QPSK	1717.5	1	0	22.36	0.67	23.03	<=30	Pass
			38	22.30	0.67	22.97	<=30	Pass
			74	22.29	0.67	22.96	<=30	Pass
		36	0	21.42	0.67	22.09	<=30	Pass
			18	21.39	0.67	22.06	<=30	Pass
			39	21.41	0.67	22.08	<=30	Pass
	75	0	21.49	0.67	22.16	<=30	Pass	
	1732.5	1	0	22.29	0.67	22.96	<=30	Pass
			38	22.30	0.67	22.97	<=30	Pass
			74	22.27	0.67	22.94	<=30	Pass
		36	0	21.37	0.67	22.04	<=30	Pass
			18	21.39	0.67	22.06	<=30	Pass
			39	21.37	0.67	22.04	<=30	Pass
	75	0	21.41	0.67	22.08	<=30	Pass	
	1747.5	1	0	22.26	0.67	22.93	<=30	Pass
			38	22.22	0.67	22.89	<=30	Pass
			74	22.15	0.67	22.82	<=30	Pass
		36	0	21.28	0.67	21.95	<=30	Pass



16QAM	1717.5	75	18	21.28	0.67	21.95	<=30	Pass	
			39	21.09	0.67	21.76	<=30	Pass	
			0	21.21	0.67	21.88	<=30	Pass	
		1	0	22.15	0.67	22.82	<=30	Pass	
			38	22.06	0.67	22.73	<=30	Pass	
			74	22.10	0.67	22.77	<=30	Pass	
		36	0	20.60	0.67	21.27	<=30	Pass	
			18	20.54	0.67	21.21	<=30	Pass	
			39	20.59	0.67	21.26	<=30	Pass	
	75	0	20.49	0.67	21.16	<=30	Pass		
	1732.5	1	0	22.22	0.67	22.89	<=30	Pass	
			38	22.20	0.67	22.87	<=30	Pass	
			74	22.21	0.67	22.88	<=30	Pass	
		36	0	20.45	0.67	21.12	<=30	Pass	
			18	20.46	0.67	21.13	<=30	Pass	
			39	20.40	0.67	21.07	<=30	Pass	
		75	0	20.53	0.67	21.20	<=30	Pass	
		1747.5	1	0	22.32	0.67	22.99	<=30	Pass
				38	22.27	0.67	22.94	<=30	Pass
	74			22.23	0.67	22.90	<=30	Pass	
	36		0	20.50	0.67	21.17	<=30	Pass	
			18	20.35	0.67	21.02	<=30	Pass	
			39	20.26	0.67	20.93	<=30	Pass	
	75		0	20.37	0.67	21.04	<=30	Pass	

Note1: EIRP=Conducted Power+Antenna Gain

1.1.6 B4_20MHz_EIRP

Band: 4 / Bandwidth: 20MHz / NTV										
Modulation	Frequency (MHz)	RB Allocation		Conducted Power (dBm)	Gain (dBi)	EIRP (dBm)		Verdict		
		Size	Offset			Result	Limit			
QPSK	1720	1	0	22.51	0.67	23.18	<=30	Pass		
			50	22.38	0.67	23.05	<=30	Pass		
			99	22.43	0.67	23.10	<=30	Pass		
		50	0	21.43	0.67	22.10	<=30	Pass		
			25	21.33	0.67	22.00	<=30	Pass		
			50	21.42	0.67	22.09	<=30	Pass		
		100	0	21.37	0.67	22.04	<=30	Pass		
		1732.5	1	0	22.48	0.67	23.15	<=30	Pass	
				50	22.46	0.67	23.13	<=30	Pass	
	99			22.41	0.67	23.08	<=30	Pass		
	50		0	21.44	0.67	22.11	<=30	Pass		
			25	21.35	0.67	22.02	<=30	Pass		
			50	21.45	0.67	22.12	<=30	Pass		
	100		0	21.42	0.67	22.09	<=30	Pass		
	1745		1	0	22.33	0.67	23.00	<=30	Pass	
				50	22.18	0.67	22.85	<=30	Pass	
		99		22.18	0.67	22.85	<=30	Pass		
		50	0	21.21	0.67	21.88	<=30	Pass		
			25	21.24	0.67	21.91	<=30	Pass		
			50	21.26	0.67	21.93	<=30	Pass		
		100	0	21.32	0.67	21.99	<=30	Pass		
		16QAM	1720	1	0	21.92	0.67	22.59	<=30	Pass
					50	21.84	0.67	22.51	<=30	Pass
	99				21.80	0.67	22.47	<=30	Pass	
50	0			20.50	0.67	21.17	<=30	Pass		



	1732.5	25	20.61	0.67	21.28	<=30	Pass		
			50	20.60	0.67	21.27	<=30	Pass	
		100	0	20.50	0.67	21.17	<=30	Pass	
			1	0	22.66	0.67	23.33	<=30	Pass
				50	22.64	0.67	23.31	<=30	Pass
		99	22.53	0.67	23.20	<=30	Pass		
	50	0	20.46	0.67	21.13	<=30	Pass		
		25	20.44	0.67	21.11	<=30	Pass		
		50	20.36	0.67	21.03	<=30	Pass		
	100	0	20.47	0.67	21.14	<=30	Pass		
		1745	1	0	22.31	0.67	22.98	<=30	Pass
	50			22.20	0.67	22.87	<=30	Pass	
	99			22.09	0.67	22.76	<=30	Pass	
	50	1	0	20.51	0.67	21.18	<=30	Pass	
			25	20.44	0.67	21.11	<=30	Pass	
			50	20.41	0.67	21.08	<=30	Pass	
			100	0	20.24	0.67	20.91	<=30	Pass

Note1: EIRP=Conducted Power+Antenna Gain

2. Frequency Stability

2.1 Test Result

2.1.1 B4_1.4MHz

Band: 4 / Bandwidth: 1.4MHz									
Modulation	Frequency (MHz)	RB Allocation		Temp. (°C)	Voltage (VDC)	Freq. Error (Hz)	Freq. vs. Rated (ppm)		Verdict
		Size	Offset				Result	Limit	
QPSK	1710.7	6	0	20	3.27	-3.963	-0.0023	-2.5 to 2.5	Pass
					3.85	-40.855	-0.0239	-2.5 to 2.5	Pass
					4.43	-9.685	-0.0057	-2.5 to 2.5	Pass
				-30	3.85	-10.386	-0.0061	-2.5 to 2.5	Pass
				-20	3.85	-15.922	-0.0093	-2.5 to 2.5	Pass
				-10	3.85	-19.169	-0.0112	-2.5 to 2.5	Pass
				0	3.85	-15.821	-0.0092	-2.5 to 2.5	Pass
				10	3.85	-23.060	-0.0135	-2.5 to 2.5	Pass
				30	3.85	-13.475	-0.0079	-2.5 to 2.5	Pass
				40	3.85	-6.280	-0.0037	-2.5 to 2.5	Pass
	50	3.85	-30.270	-0.0177	-2.5 to 2.5	Pass			
	1732.5	6	0	20	3.27	20.742	0.0120	-2.5 to 2.5	Pass
					3.85	9.341	0.0054	-2.5 to 2.5	Pass
					4.43	-9.270	-0.0054	-2.5 to 2.5	Pass
				-30	3.85	-17.180	-0.0099	-2.5 to 2.5	Pass
				-20	3.85	-16.551	-0.0096	-2.5 to 2.5	Pass
				-10	3.85	-17.252	-0.0100	-2.5 to 2.5	Pass
				0	3.85	-9.241	-0.0053	-2.5 to 2.5	Pass
				10	3.85	-5.264	-0.0030	-2.5 to 2.5	Pass
				30	3.85	7.725	0.0045	-2.5 to 2.5	Pass
				40	3.85	8.054	0.0046	-2.5 to 2.5	Pass
	50	3.85	2.561	0.0015	-2.5 to 2.5	Pass			
	1754.3	6	0	20	3.27	35.820	0.0204	-2.5 to 2.5	Pass
					3.85	24.920	0.0142	-2.5 to 2.5	Pass
					4.43	9.370	0.0053	-2.5 to 2.5	Pass
				-30	3.85	16.522	0.0094	-2.5 to 2.5	Pass
				-20	3.85	13.990	0.0080	-2.5 to 2.5	Pass



				-10	3.85	11.787	0.0067	-2.5 to 2.5	Pass			
				0	3.85	17.381	0.0099	-2.5 to 2.5	Pass			
				10	3.85	11.187	0.0064	-2.5 to 2.5	Pass			
				30	3.85	7.682	0.0044	-2.5 to 2.5	Pass			
				40	3.85	7.010	0.0040	-2.5 to 2.5	Pass			
				50	3.85	6.452	0.0037	-2.5 to 2.5	Pass			
16QAM	1710.7	6	0	20	3.27	-3.247	-0.0019	-2.5 to 2.5	Pass			
					3.85	-14.005	-0.0082	-2.5 to 2.5	Pass			
					4.43	-22.945	-0.0134	-2.5 to 2.5	Pass			
				-30	3.85	-34.647	-0.0203	-2.5 to 2.5	Pass			
					-20	3.85	-43.645	-0.0255	-2.5 to 2.5	Pass		
						3.85	-3.633	-0.0021	-2.5 to 2.5	Pass		
				0	3.85	-11.601	-0.0068	-2.5 to 2.5	Pass			
					3.85	-13.247	-0.0077	-2.5 to 2.5	Pass			
				30	3.85	-24.061	-0.0141	-2.5 to 2.5	Pass			
					3.85	-26.121	-0.0153	-2.5 to 2.5	Pass			
				40	3.85	-33.846	-0.0198	-2.5 to 2.5	Pass			
					3.85	-5.765	-0.0033	-2.5 to 2.5	Pass			
	1732.5	6	0	20	3.85	-8.225	-0.0047	-2.5 to 2.5	Pass			
					4.43	-3.934	-0.0023	-2.5 to 2.5	Pass			
					3.85	-9.141	-0.0053	-2.5 to 2.5	Pass			
				-30	3.85	-6.952	-0.0040	-2.5 to 2.5	Pass			
					-20	3.85	-10.314	-0.0060	-2.5 to 2.5	Pass		
				0		3.85	-15.392	-0.0089	-2.5 to 2.5	Pass		
					10	3.85	-12.875	-0.0074	-2.5 to 2.5	Pass		
				30		3.85	-13.189	-0.0076	-2.5 to 2.5	Pass		
					40	3.85	-12.617	-0.0073	-2.5 to 2.5	Pass		
				50		3.85	-15.821	-0.0091	-2.5 to 2.5	Pass		
					1754.3	6	0	20	3.27	3.920	0.0022	-2.5 to 2.5
				3.85					11.687	0.0067	-2.5 to 2.5	Pass
4.43	17.252	0.0098	-2.5 to 2.5	Pass								
-30	3.85	20.213	0.0115	-2.5 to 2.5				Pass				
	-20	3.85	23.246	0.0133				-2.5 to 2.5	Pass			
		3.85	24.261	0.0138				-2.5 to 2.5	Pass			
0	3.85	24.018	0.0137	-2.5 to 2.5				Pass				
	10	3.85	24.376	0.0139				-2.5 to 2.5	Pass			
30		3.85	19.097	0.0109				-2.5 to 2.5	Pass			
	40	3.85	24.691	0.0141				-2.5 to 2.5	Pass			
50		3.85	20.099	0.0115				-2.5 to 2.5	Pass			

2.1.2 B4_3MHz

Band: 4 / Bandwidth: 3MHz										
Modulation	Frequency (MHz)	RB Allocation		Temp. (°C)	Voltage (VDC)	Freq. Error (Hz)	Freq. vs. Rated (ppm)		Verdict	
		Size	Offset				Result	Limit		
QPSK	1711.5	15	0	20	3.27	9.942	0.0058	-2.5 to 2.5	Pass	
					3.85	-11.816	-0.0069	-2.5 to 2.5	Pass	
					4.43	-4.692	-0.0027	-2.5 to 2.5	Pass	
				-30	3.85	6.380	0.0037	-2.5 to 2.5	Pass	
					-20	3.85	9.456	0.0055	-2.5 to 2.5	Pass
						3.85	5.279	0.0031	-2.5 to 2.5	Pass
				0	3.85	-2.332	-0.0014	-2.5 to 2.5	Pass	
					10	3.85	-8.826	-0.0052	-2.5 to 2.5	Pass
				30		3.85	-16.966	-0.0099	-2.5 to 2.5	Pass
					40	3.85	-16.694	-0.0098	-2.5 to 2.5	Pass
				50		3.85	-16.780	-0.0098	-2.5 to 2.5	Pass



	1732.5	15	0	20	3.27	18.697	0.0108	-2.5 to 2.5	Pass	
					3.85	4.792	0.0028	-2.5 to 2.5	Pass	
					4.43	-7.124	-0.0041	-2.5 to 2.5	Pass	
				-30	3.85	-9.656	-0.0056	-2.5 to 2.5	Pass	
					-20	3.85	-10.543	-0.0061	-2.5 to 2.5	Pass
						-10	3.85	-10.843	-0.0063	-2.5 to 2.5
				0	3.85	-8.426	-0.0049	-2.5 to 2.5	Pass	
				10	3.85	-4.706	-0.0027	-2.5 to 2.5	Pass	
				30	3.85	-5.608	-0.0032	-2.5 to 2.5	Pass	
	40	3.85	-6.909	-0.0040	-2.5 to 2.5	Pass				
	50	3.85	-1.917	-0.0011	-2.5 to 2.5	Pass				
	1753.5	15	0	20	3.27	20.871	0.0119	-2.5 to 2.5	Pass	
					3.85	7.882	0.0045	-2.5 to 2.5	Pass	
					4.43	6.909	0.0039	-2.5 to 2.5	Pass	
				-30	3.85	7.153	0.0041	-2.5 to 2.5	Pass	
					-20	3.85	9.742	0.0056	-2.5 to 2.5	Pass
						-10	3.85	7.796	0.0044	-2.5 to 2.5
				0	3.85	5.364	0.0031	-2.5 to 2.5	Pass	
10				3.85	1.917	0.0011	-2.5 to 2.5	Pass		
30				3.85	12.274	0.0070	-2.5 to 2.5	Pass		
40	3.85	11.458	0.0065	-2.5 to 2.5	Pass					
50	3.85	12.760	0.0073	-2.5 to 2.5	Pass					
16QAM	1711.5	15	0	20	3.27	-25.749	-0.0150	-2.5 to 2.5	Pass	
					3.85	-19.698	-0.0115	-2.5 to 2.5	Pass	
					4.43	-18.454	-0.0108	-2.5 to 2.5	Pass	
				-30	3.85	-18.697	-0.0109	-2.5 to 2.5	Pass	
					-20	3.85	-20.413	-0.0119	-2.5 to 2.5	Pass
						-10	3.85	-19.598	-0.0115	-2.5 to 2.5
				0	3.85	-17.953	-0.0105	-2.5 to 2.5	Pass	
				10	3.85	-15.421	-0.0090	-2.5 to 2.5	Pass	
				30	3.85	-17.223	-0.0101	-2.5 to 2.5	Pass	
	40	3.85	-20.943	-0.0122	-2.5 to 2.5	Pass				
	50	3.85	-18.597	-0.0109	-2.5 to 2.5	Pass				
	1732.5	15	0	20	3.27	-3.734	-0.0022	-2.5 to 2.5	Pass	
					3.85	2.532	0.0015	-2.5 to 2.5	Pass	
					4.43	-4.520	-0.0026	-2.5 to 2.5	Pass	
				-30	3.85	-6.223	-0.0036	-2.5 to 2.5	Pass	
					-20	3.85	-1.144	-0.0007	-2.5 to 2.5	Pass
						-10	3.85	-5.908	-0.0034	-2.5 to 2.5
				0	3.85	-8.712	-0.0050	-2.5 to 2.5	Pass	
10				3.85	-5.794	-0.0033	-2.5 to 2.5	Pass		
30				3.85	-7.768	-0.0045	-2.5 to 2.5	Pass		
40	3.85	-9.527	-0.0055	-2.5 to 2.5	Pass					
50	3.85	-8.426	-0.0049	-2.5 to 2.5	Pass					
1753.5	15	0	20	3.27	13.375	0.0076	-2.5 to 2.5	Pass		
				3.85	16.251	0.0093	-2.5 to 2.5	Pass		
				4.43	10.328	0.0059	-2.5 to 2.5	Pass		
			-30	3.85	10.557	0.0060	-2.5 to 2.5	Pass		
				-20	3.85	10.943	0.0062	-2.5 to 2.5	Pass	
					-10	3.85	6.981	0.0040	-2.5 to 2.5	Pass
			0	3.85	8.869	0.0051	-2.5 to 2.5	Pass		
			10	3.85	12.116	0.0069	-2.5 to 2.5	Pass		
			30	3.85	11.015	0.0063	-2.5 to 2.5	Pass		
40	3.85	11.086	0.0063	-2.5 to 2.5	Pass					
50	3.85	14.634	0.0083	-2.5 to 2.5	Pass					



2.1.3 B4_5MHz

Band: 4 / Bandwidth: 5MHz									
Modulation	Frequency (MHz)	RB Allocation		Temp. (°C)	Voltage (VDC)	Freq. Error (Hz)	Freq. vs. Rated (ppm)		Verdict
		Size	Offset				Result	Limit	
QPSK	1712.5	25	0	20	3.27	4.706	0.0027	-2.5 to 2.5	Pass
					3.85	-13.361	-0.0078	-2.5 to 2.5	Pass
					4.43	-23.217	-0.0136	-2.5 to 2.5	Pass
				-30	3.85	-34.547	-0.0202	-2.5 to 2.5	Pass
				-20	3.85	-16.680	-0.0097	-2.5 to 2.5	Pass
				-10	3.85	-18.568	-0.0108	-2.5 to 2.5	Pass
				0	3.85	-17.495	-0.0102	-2.5 to 2.5	Pass
				10	3.85	-19.698	-0.0115	-2.5 to 2.5	Pass
				30	3.85	-16.422	-0.0096	-2.5 to 2.5	Pass
				40	3.85	-15.650	-0.0091	-2.5 to 2.5	Pass
	50	3.85	-17.109	-0.0100	-2.5 to 2.5	Pass			
	1732.5	25	0	20	3.27	10.042	0.0058	-2.5 to 2.5	Pass
					3.85	0.272	0.0002	-2.5 to 2.5	Pass
					4.43	-6.080	-0.0035	-2.5 to 2.5	Pass
				-30	3.85	-5.193	-0.0030	-2.5 to 2.5	Pass
				-20	3.85	2.761	0.0016	-2.5 to 2.5	Pass
				-10	3.85	7.281	0.0042	-2.5 to 2.5	Pass
				0	3.85	12.932	0.0075	-2.5 to 2.5	Pass
				10	3.85	10.757	0.0062	-2.5 to 2.5	Pass
				30	3.85	17.281	0.0100	-2.5 to 2.5	Pass
				40	3.85	21.987	0.0127	-2.5 to 2.5	Pass
	50	3.85	24.405	0.0141	-2.5 to 2.5	Pass			
	1752.5	25	0	20	3.27	19.984	0.0114	-2.5 to 2.5	Pass
					3.85	3.777	0.0022	-2.5 to 2.5	Pass
					4.43	-0.844	-0.0005	-2.5 to 2.5	Pass
				-30	3.85	-1.416	-0.0008	-2.5 to 2.5	Pass
				-20	3.85	1.445	0.0008	-2.5 to 2.5	Pass
				-10	3.85	0.100	0.0001	-2.5 to 2.5	Pass
				0	3.85	3.490	0.0020	-2.5 to 2.5	Pass
				10	3.85	2.217	0.0013	-2.5 to 2.5	Pass
30				3.85	2.861	0.0016	-2.5 to 2.5	Pass	
40				3.85	4.792	0.0027	-2.5 to 2.5	Pass	
50	3.85	8.025	0.0046	-2.5 to 2.5	Pass				
16QAM	1712.5	25	0	20	3.27	-14.219	-0.0083	-2.5 to 2.5	Pass
					3.85	-11.945	-0.0070	-2.5 to 2.5	Pass
					4.43	-11.072	-0.0065	-2.5 to 2.5	Pass
				-30	3.85	-14.849	-0.0087	-2.5 to 2.5	Pass
				-20	3.85	-20.614	-0.0120	-2.5 to 2.5	Pass
				-10	3.85	-20.599	-0.0120	-2.5 to 2.5	Pass
				0	3.85	-16.651	-0.0097	-2.5 to 2.5	Pass
				10	3.85	-11.859	-0.0069	-2.5 to 2.5	Pass
				30	3.85	-14.563	-0.0085	-2.5 to 2.5	Pass
				40	3.85	-15.492	-0.0090	-2.5 to 2.5	Pass
	50	3.85	-20.657	-0.0121	-2.5 to 2.5	Pass			
	1732.5	25	0	20	3.27	29.211	0.0169	-2.5 to 2.5	Pass
					3.85	29.154	0.0168	-2.5 to 2.5	Pass
					4.43	27.423	0.0158	-2.5 to 2.5	Pass
				-30	3.85	23.661	0.0137	-2.5 to 2.5	Pass
				-20	3.85	21.744	0.0126	-2.5 to 2.5	Pass
				-10	3.85	15.306	0.0088	-2.5 to 2.5	Pass
				0	3.85	15.392	0.0089	-2.5 to 2.5	Pass
				10	3.85	12.589	0.0073	-2.5 to 2.5	Pass
				30	3.85	16.437	0.0095	-2.5 to 2.5	Pass



	1752.5	25	0	40	3.85	17.853	0.0103	-2.5 to 2.5	Pass
				50	3.85	22.273	0.0129	-2.5 to 2.5	Pass
				20	3.27	6.180	0.0035	-2.5 to 2.5	Pass
					3.85	8.011	0.0046	-2.5 to 2.5	Pass
					4.43	-2.031	-0.0012	-2.5 to 2.5	Pass
				-30	3.85	0.973	0.0006	-2.5 to 2.5	Pass
				-20	3.85	1.545	0.0009	-2.5 to 2.5	Pass
				-10	3.85	0.844	0.0005	-2.5 to 2.5	Pass
				0	3.85	-2.618	-0.0015	-2.5 to 2.5	Pass
				10	3.85	-0.629	-0.0004	-2.5 to 2.5	Pass
				30	3.85	-1.616	-0.0009	-2.5 to 2.5	Pass
				40	3.85	-3.948	-0.0023	-2.5 to 2.5	Pass
				50	3.85	-8.597	-0.0049	-2.5 to 2.5	Pass

2.1.4 B4_10MHz

Band: 4 / Bandwidth: 10MHz									
Modulation	Frequency (MHz)	RB Allocation		Temp. (°C)	Voltage (VDC)	Freq. Error (Hz)	Freq. vs. Rated (ppm)		Verdict
		Size	Offset				Result	Limit	
QPSK	1715	50	0	20	3.27	3.719	0.0022	-2.5 to 2.5	Pass
					3.85	-23.003	-0.0134	-2.5 to 2.5	Pass
					4.43	-36.836	-0.0215	-2.5 to 2.5	Pass
				-30	3.85	-39.783	-0.0232	-2.5 to 2.5	Pass
				-20	3.85	-3.619	-0.0021	-2.5 to 2.5	Pass
				-10	3.85	2.189	0.0013	-2.5 to 2.5	Pass
				0	3.85	5.064	0.0030	-2.5 to 2.5	Pass
				10	3.85	13.633	0.0079	-2.5 to 2.5	Pass
				30	3.85	16.351	0.0095	-2.5 to 2.5	Pass
				40	3.85	21.071	0.0123	-2.5 to 2.5	Pass
	50	3.85	22.573	0.0132	-2.5 to 2.5	Pass			
	1732.5	50	0	20	3.27	9.656	0.0056	-2.5 to 2.5	Pass
					3.85	-5.951	-0.0034	-2.5 to 2.5	Pass
					4.43	-11.530	-0.0067	-2.5 to 2.5	Pass
				-30	3.85	-1.073	-0.0006	-2.5 to 2.5	Pass
				-20	3.85	7.253	0.0042	-2.5 to 2.5	Pass
				-10	3.85	14.162	0.0082	-2.5 to 2.5	Pass
				0	3.85	18.711	0.0108	-2.5 to 2.5	Pass
				10	3.85	23.961	0.0138	-2.5 to 2.5	Pass
				30	3.85	27.952	0.0161	-2.5 to 2.5	Pass
				40	3.85	31.500	0.0182	-2.5 to 2.5	Pass
	50	3.85	39.210	0.0226	-2.5 to 2.5	Pass			
	1750	50	0	20	3.27	15.521	0.0089	-2.5 to 2.5	Pass
					3.85	-2.332	-0.0013	-2.5 to 2.5	Pass
					4.43	-5.593	-0.0032	-2.5 to 2.5	Pass
				-30	3.85	-1.602	-0.0009	-2.5 to 2.5	Pass
				-20	3.85	-1.216	-0.0007	-2.5 to 2.5	Pass
				-10	3.85	-3.648	-0.0021	-2.5 to 2.5	Pass
				0	3.85	3.490	0.0020	-2.5 to 2.5	Pass
				10	3.85	5.822	0.0033	-2.5 to 2.5	Pass
30				3.85	8.826	0.0050	-2.5 to 2.5	Pass	
40				3.85	8.998	0.0051	-2.5 to 2.5	Pass	
50	3.85	9.756	0.0056	-2.5 to 2.5	Pass				
16QAM	1715	50	0	20	3.27	24.633	0.0144	-2.5 to 2.5	Pass
					3.85	27.866	0.0162	-2.5 to 2.5	Pass
					4.43	25.063	0.0146	-2.5 to 2.5	Pass
				-30	3.85	20.571	0.0120	-2.5 to 2.5	Pass



				-20	3.85	17.366	0.0101	-2.5 to 2.5	Pass
				-10	3.85	19.484	0.0114	-2.5 to 2.5	Pass
				0	3.85	17.538	0.0102	-2.5 to 2.5	Pass
				10	3.85	20.542	0.0120	-2.5 to 2.5	Pass
				30	3.85	21.501	0.0125	-2.5 to 2.5	Pass
				40	3.85	22.902	0.0134	-2.5 to 2.5	Pass
				50	3.85	17.638	0.0103	-2.5 to 2.5	Pass
	1732.5	50	0	20	3.27	37.737	0.0218	-2.5 to 2.5	Pass
					3.85	-2.847	-0.0016	-2.5 to 2.5	Pass
					4.43	-3.119	-0.0018	-2.5 to 2.5	Pass
				-30	3.85	-11.430	-0.0066	-2.5 to 2.5	Pass
				-20	3.85	-17.023	-0.0098	-2.5 to 2.5	Pass
				-10	3.85	-16.136	-0.0093	-2.5 to 2.5	Pass
				0	3.85	-16.680	-0.0096	-2.5 to 2.5	Pass
				10	3.85	-15.850	-0.0091	-2.5 to 2.5	Pass
				30	3.85	-17.695	-0.0102	-2.5 to 2.5	Pass
				40	3.85	-20.356	-0.0117	-2.5 to 2.5	Pass
	50	3.85	-20.556	-0.0119	-2.5 to 2.5	Pass			
	1750	50	0	20	3.27	12.231	0.0070	-2.5 to 2.5	Pass
					3.85	2.432	0.0014	-2.5 to 2.5	Pass
					4.43	2.360	0.0013	-2.5 to 2.5	Pass
				-30	3.85	4.048	0.0023	-2.5 to 2.5	Pass
				-20	3.85	1.330	0.0008	-2.5 to 2.5	Pass
				-10	3.85	-3.576	-0.0020	-2.5 to 2.5	Pass
0				3.85	-5.293	-0.0030	-2.5 to 2.5	Pass	
10				3.85	-4.663	-0.0027	-2.5 to 2.5	Pass	
30				3.85	-8.082	-0.0046	-2.5 to 2.5	Pass	
40				3.85	-5.479	-0.0031	-2.5 to 2.5	Pass	
50	3.85	-4.621	-0.0026	-2.5 to 2.5	Pass				

2.1.5 B4_15MHz

Band: 4 / Bandwidth: 15MHz									
Modulation	Frequency (MHz)	RB Allocation		Temp. (°C)	Voltage (VDC)	Freq. Error (Hz)	Freq. vs. Rated (ppm)		Verdict
		Size	Offset				Result	Limit	
QPSK	1717.5	75	0	20	3.27	-4.492	-0.0026	-2.5 to 2.5	Pass
					3.85	-30.813	-0.0179	-2.5 to 2.5	Pass
					4.43	-28.682	-0.0167	-2.5 to 2.5	Pass
				-30	3.85	-14.663	-0.0085	-2.5 to 2.5	Pass
				-20	3.85	-12.832	-0.0075	-2.5 to 2.5	Pass
				-10	3.85	-9.527	-0.0055	-2.5 to 2.5	Pass
				0	3.85	-1.087	-0.0006	-2.5 to 2.5	Pass
				10	3.85	5.679	0.0033	-2.5 to 2.5	Pass
				30	3.85	13.332	0.0078	-2.5 to 2.5	Pass
				40	3.85	15.507	0.0090	-2.5 to 2.5	Pass
	50	3.85	30.069	0.0175	-2.5 to 2.5	Pass			
	1732.5	75	0	20	3.27	7.124	0.0041	-2.5 to 2.5	Pass
					3.85	-6.695	-0.0039	-2.5 to 2.5	Pass
					4.43	-0.401	-0.0002	-2.5 to 2.5	Pass
				-30	3.85	4.277	0.0025	-2.5 to 2.5	Pass
				-20	3.85	11.101	0.0064	-2.5 to 2.5	Pass
				-10	3.85	19.283	0.0111	-2.5 to 2.5	Pass
				0	3.85	22.545	0.0130	-2.5 to 2.5	Pass
				10	3.85	35.377	0.0204	-2.5 to 2.5	Pass
				30	3.85	4.692	0.0027	-2.5 to 2.5	Pass
40				3.85	5.665	0.0033	-2.5 to 2.5	Pass	



	1747.5	75	0	50	3.85	7.195	0.0042	-2.5 to 2.5	Pass
				20	3.27	15.149	0.0087	-2.5 to 2.5	Pass
					3.85	-2.990	-0.0017	-2.5 to 2.5	Pass
					4.43	-1.731	-0.0010	-2.5 to 2.5	Pass
					-30	3.85	-7.954	-0.0046	-2.5 to 2.5
				-20	3.85	-6.509	-0.0037	-2.5 to 2.5	Pass
				-10	3.85	1.903	0.0011	-2.5 to 2.5	Pass
				0	3.85	4.892	0.0028	-2.5 to 2.5	Pass
				10	3.85	7.396	0.0042	-2.5 to 2.5	Pass
				30	3.85	3.848	0.0022	-2.5 to 2.5	Pass
40	3.85	6.595	0.0038	-2.5 to 2.5	Pass				
50	3.85	3.819	0.0022	-2.5 to 2.5	Pass				
16QAM	1717.5	75	0	20	3.27	31.843	0.0185	-2.5 to 2.5	Pass
					3.85	33.674	0.0196	-2.5 to 2.5	Pass
					4.43	26.035	0.0152	-2.5 to 2.5	Pass
					-30	3.85	25.048	0.0146	-2.5 to 2.5
				-20	3.85	20.370	0.0119	-2.5 to 2.5	Pass
				-10	3.85	20.356	0.0119	-2.5 to 2.5	Pass
				0	3.85	15.821	0.0092	-2.5 to 2.5	Pass
				10	3.85	19.627	0.0114	-2.5 to 2.5	Pass
				30	3.85	17.939	0.0104	-2.5 to 2.5	Pass
				40	3.85	15.035	0.0088	-2.5 to 2.5	Pass
	50	3.85	16.708	0.0097	-2.5 to 2.5	Pass			
	1732.5	75	0	20	3.27	9.084	0.0052	-2.5 to 2.5	Pass
					3.85	11.716	0.0068	-2.5 to 2.5	Pass
					4.43	1.974	0.0011	-2.5 to 2.5	Pass
					-30	3.85	-7.582	-0.0044	-2.5 to 2.5
				-20	3.85	-11.001	-0.0063	-2.5 to 2.5	Pass
				-10	3.85	-8.497	-0.0049	-2.5 to 2.5	Pass
				0	3.85	-11.001	-0.0063	-2.5 to 2.5	Pass
				10	3.85	-15.121	-0.0087	-2.5 to 2.5	Pass
				30	3.85	-15.321	-0.0088	-2.5 to 2.5	Pass
40				3.85	-19.841	-0.0115	-2.5 to 2.5	Pass	
50	3.85	-10.300	-0.0059	-2.5 to 2.5	Pass				
1747.5	75	0	20	3.27	4.935	0.0028	-2.5 to 2.5	Pass	
				3.85	2.418	0.0014	-2.5 to 2.5	Pass	
				4.43	-1.230	-0.0007	-2.5 to 2.5	Pass	
				-30	3.85	-6.080	-0.0035	-2.5 to 2.5	Pass
			-20	3.85	-12.317	-0.0070	-2.5 to 2.5	Pass	
			-10	3.85	-16.952	-0.0097	-2.5 to 2.5	Pass	
			0	3.85	-17.881	-0.0102	-2.5 to 2.5	Pass	
			10	3.85	-18.783	-0.0107	-2.5 to 2.5	Pass	
			30	3.85	-20.857	-0.0119	-2.5 to 2.5	Pass	
			40	3.85	-19.126	-0.0109	-2.5 to 2.5	Pass	
50	3.85	-21.658	-0.0124	-2.5 to 2.5	Pass				

2.1.6 B4_20MHz

Band: 4 / Bandwidth: 20MHz															
Modulation	Frequency (MHz)	RB Allocation		Temp. (°C)	Voltage (VDC)	Freq. Error (Hz)	Freq. vs. Rated (ppm)		Verdict						
		Size	Offset				Result	Limit							
QPSK	1720	100	0	20	3.27	-26.679	-0.0155	-2.5 to 2.5	Pass						
											3.85	-12.016	-0.0070	-2.5 to 2.5	Pass
											4.43	-5.436	-0.0032	-2.5 to 2.5	Pass
											-30	3.85	6.537	0.0038	-2.5 to 2.5
										-20	3.85	17.481	0.0102	-2.5 to 2.5	Pass



				-10	3.85	27.609	0.0161	-2.5 to 2.5	Pass	
				0	3.85	33.660	0.0196	-2.5 to 2.5	Pass	
				10	3.85	-2.704	-0.0016	-2.5 to 2.5	Pass	
				30	3.85	5.751	0.0033	-2.5 to 2.5	Pass	
				40	3.85	9.899	0.0058	-2.5 to 2.5	Pass	
				50	3.85	17.753	0.0103	-2.5 to 2.5	Pass	
	1732.5	100	0	20	3.27	6.394	0.0037	-2.5 to 2.5	Pass	
					3.85	-9.527	-0.0055	-2.5 to 2.5	Pass	
					4.43	-1.774	-0.0010	-2.5 to 2.5	Pass	
				-30	3.85	9.527	0.0055	-2.5 to 2.5	Pass	
				-20	3.85	16.937	0.0098	-2.5 to 2.5	Pass	
				-10	3.85	22.159	0.0128	-2.5 to 2.5	Pass	
				0	3.85	33.560	0.0194	-2.5 to 2.5	Pass	
				10	3.85	33.703	0.0195	-2.5 to 2.5	Pass	
				30	3.85	38.667	0.0223	-2.5 to 2.5	Pass	
				40	3.85	4.578	0.0026	-2.5 to 2.5	Pass	
				50	3.85	7.696	0.0044	-2.5 to 2.5	Pass	
				1745	100	0	20	3.27	-1.445	-0.0008
	3.85	-6.208	-0.0036					-2.5 to 2.5	Pass	
	4.43	-2.103	-0.0012					-2.5 to 2.5	Pass	
	-30	3.85	-2.718				-0.0016	-2.5 to 2.5	Pass	
	-20	3.85	-6.208				-0.0036	-2.5 to 2.5	Pass	
	-10	3.85	-1.831				-0.0010	-2.5 to 2.5	Pass	
	0	3.85	-0.772				-0.0004	-2.5 to 2.5	Pass	
	10	3.85	-1.674				-0.0010	-2.5 to 2.5	Pass	
	30	3.85	1.259				0.0007	-2.5 to 2.5	Pass	
	40	3.85	2.933				0.0017	-2.5 to 2.5	Pass	
	50	3.85	3.691				0.0021	-2.5 to 2.5	Pass	
	16QAM	1720	100				0	20	3.27	24.433
				3.85	16.866	0.0098			-2.5 to 2.5	Pass
				4.43	7.067	0.0041			-2.5 to 2.5	Pass
				-30	3.85	3.891		0.0023	-2.5 to 2.5	Pass
				-20	3.85	-0.715		-0.0004	-2.5 to 2.5	Pass
-10				3.85	3.448	0.0020		-2.5 to 2.5	Pass	
0				3.85	-2.403	-0.0014		-2.5 to 2.5	Pass	
10				3.85	9.613	0.0056		-2.5 to 2.5	Pass	
30				3.85	4.735	0.0028		-2.5 to 2.5	Pass	
40				3.85	7.482	0.0044		-2.5 to 2.5	Pass	
50				3.85	6.709	0.0039		-2.5 to 2.5	Pass	
1732.5				100	0	20		3.27	11.601	0.0067
		3.85	16.050				0.0093	-2.5 to 2.5	Pass	
		4.43	9.055				0.0052	-2.5 to 2.5	Pass	
		-30	3.85			6.466	0.0037	-2.5 to 2.5	Pass	
		-20	3.85			-7.024	-0.0041	-2.5 to 2.5	Pass	
		-10	3.85			-13.490	-0.0078	-2.5 to 2.5	Pass	
		0	3.85			-15.593	-0.0090	-2.5 to 2.5	Pass	
		10	3.85			-17.052	-0.0098	-2.5 to 2.5	Pass	
		30	3.85			-18.697	-0.0108	-2.5 to 2.5	Pass	
		40	3.85			-26.522	-0.0153	-2.5 to 2.5	Pass	
		50	3.85			-25.134	-0.0145	-2.5 to 2.5	Pass	
		1745	100			0	20	3.27	-0.916	-0.0005
3.85				2.189	0.0013			-2.5 to 2.5	Pass	
4.43				-4.606	-0.0026			-2.5 to 2.5	Pass	
-30				3.85	-12.517		-0.0072	-2.5 to 2.5	Pass	
-20				3.85	-16.236		-0.0093	-2.5 to 2.5	Pass	
-10				3.85	-19.827		-0.0114	-2.5 to 2.5	Pass	
0				3.85	-24.004		-0.0138	-2.5 to 2.5	Pass	
10				3.85	-27.924		-0.0160	-2.5 to 2.5	Pass	

				30	3.85	-27.022	-0.0155	-2.5 to 2.5	Pass
				40	3.85	-31.056	-0.0178	-2.5 to 2.5	Pass
				50	3.85	-29.640	-0.0170	-2.5 to 2.5	Pass

3. Modulation Characteristics

3.1 Test Result

3.1.1 B4_1.4MHz

Band: 4 / Bandwidth: 1.4MHz / NTN									
Modulation	Frequency (MHz)	RB Allocation		Modulation Characteristics		Verdict			
		Size	Offset	Result	Limit				
QPSK	1732.5	6	0	Refer To Test Graph		Pass			
16QAM	1732.5	6	0	Refer To Test Graph		Pass			

3.1.2 B4_3MHz

Band: 4 / Bandwidth: 3MHz / NTN									
Modulation	Frequency (MHz)	RB Allocation		Modulation Characteristics		Verdict			
		Size	Offset	Result	Limit				
QPSK	1732.5	15	0	Refer To Test Graph		Pass			
16QAM	1732.5	15	0	Refer To Test Graph		Pass			

3.1.3 B4_5MHz

Band: 4 / Bandwidth: 5MHz / NTN									
Modulation	Frequency (MHz)	RB Allocation		Modulation Characteristics		Verdict			
		Size	Offset	Result	Limit				
QPSK	1732.5	25	0	Refer To Test Graph		Pass			
16QAM	1732.5	25	0	Refer To Test Graph		Pass			

3.1.4 B4_10MHz

Band: 4 / Bandwidth: 10MHz / NTN									
Modulation	Frequency (MHz)	RB Allocation		Modulation Characteristics		Verdict			
		Size	Offset	Result	Limit				
QPSK	1732.5	50	0	Refer To Test Graph		Pass			
16QAM	1732.5	50	0	Refer To Test Graph		Pass			

3.1.5 B4_15MHz

Band: 4 / Bandwidth: 15MHz / NTN									
Modulation	Frequency (MHz)	RB Allocation		Modulation Characteristics		Verdict			
		Size	Offset	Result	Limit				
QPSK	1732.5	75	0	Refer To Test Graph		Pass			
16QAM	1732.5	75	0	Refer To Test Graph		Pass			

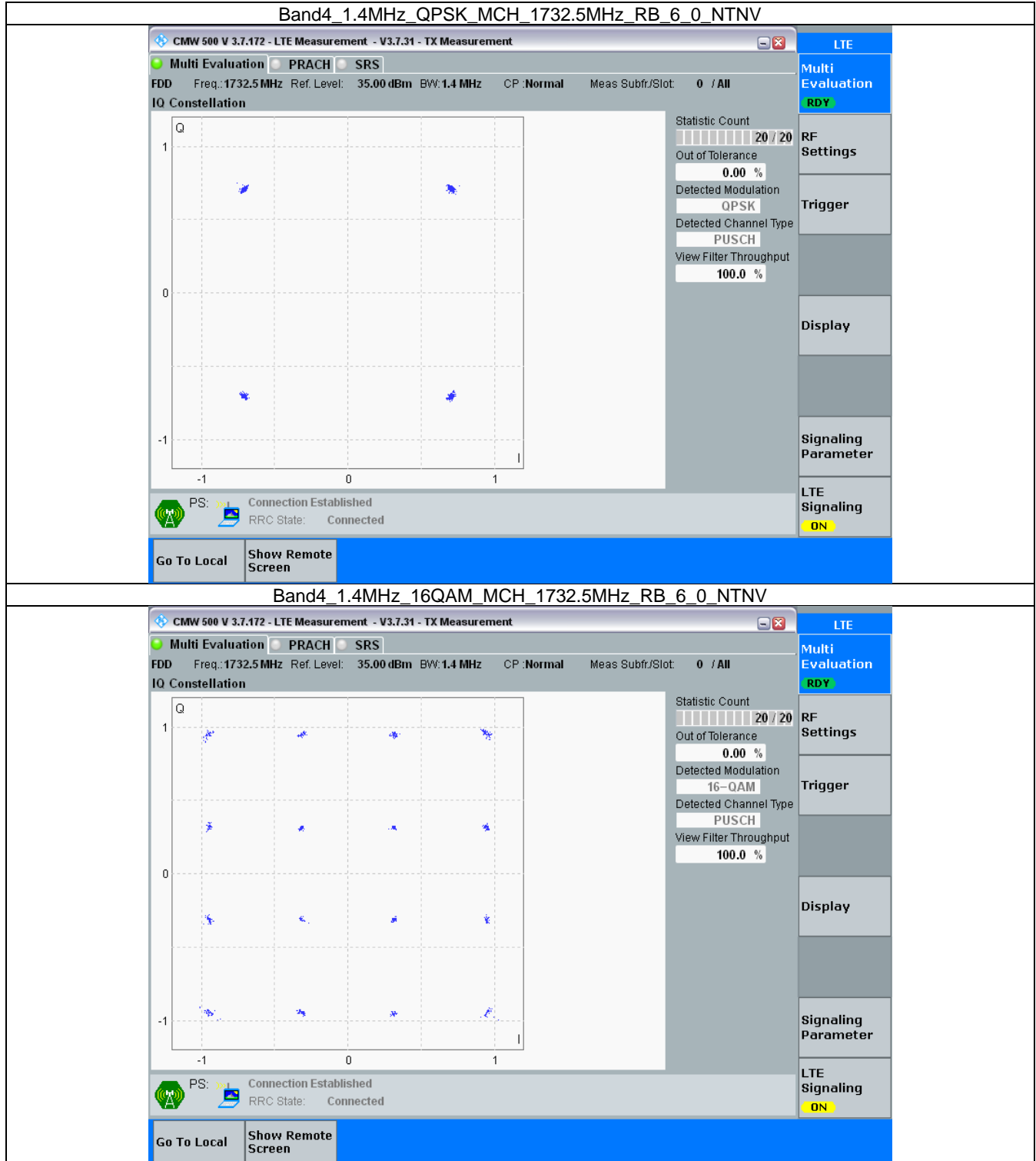


3.1.6 B4_20MHz

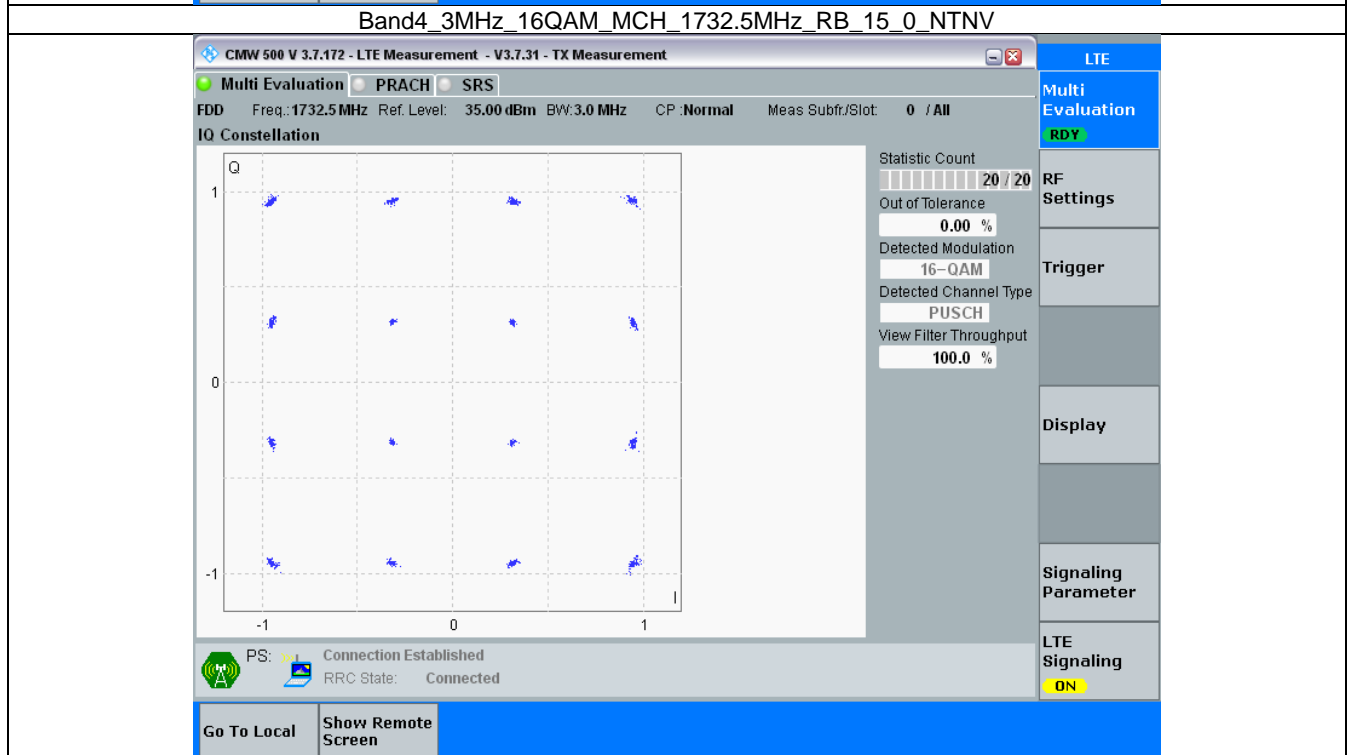
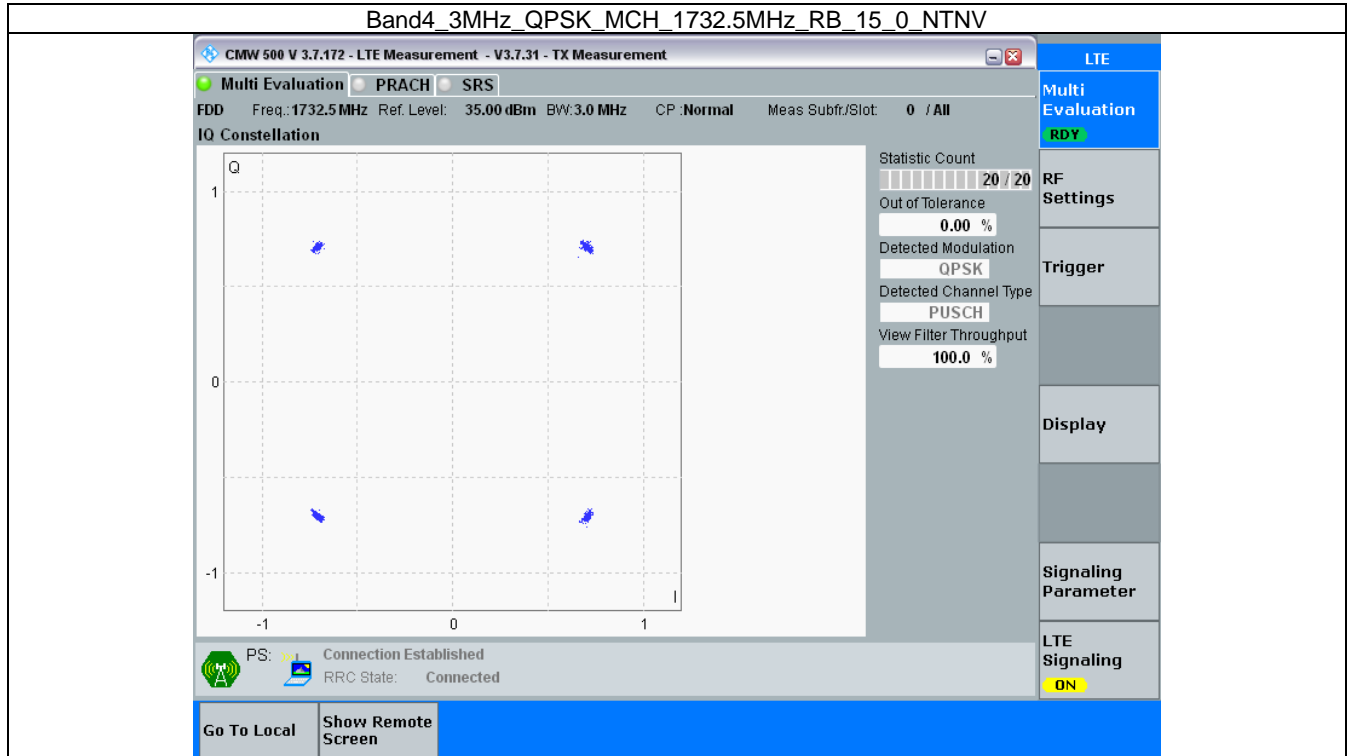
Band: 4 / Bandwidth: 20MHz / NTN						
Modulation	Frequency (MHz)	RB Allocation		Modulation Characteristics		Verdict
		Size	Offset	Result	Limit	
QPSK	1732.5	100	0	Refer To Test Graph		Pass
16QAM	1732.5	100	0	Refer To Test Graph		Pass

3.2 Test Graph

3.2.1 B4_1.4MHz



3.2.2 B4_3MHz



3.2.3 B4_5MHz

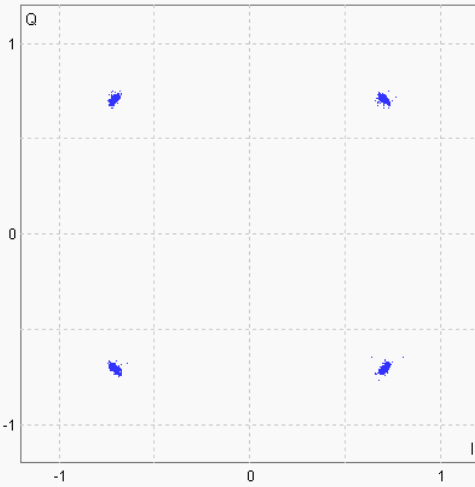
Band4_5MHz_QPSK_MCH_1732.5MHz_RB_25_0_NTNV

CMW 500 V 3.7.172 - LTE Measurement - V3.7.31 - TX Measurement

Multi Evaluation PRACH SRS

FDD Freq.: 1732.5 MHz Ref. Level: 35.00 dBm BW: 5.0 MHz CP: Normal Meas Subfr./Slot: 0 / All

IQ Constellation



Statistic Count
 [Progress Bar] 20 / 20
 Out of Tolerance
0.00 %
 Detected Modulation
QPSK
 Detected Channel Type
PUSCH
 View Filter Throughput
100.0 %

LTE

Multi Evaluation

RDY

RF Settings

Trigger

Display

Signaling Parameter

LTE Signaling

ON

PS: Connection Established

RRC State: Connected

Go To Local
Show Remote Screen

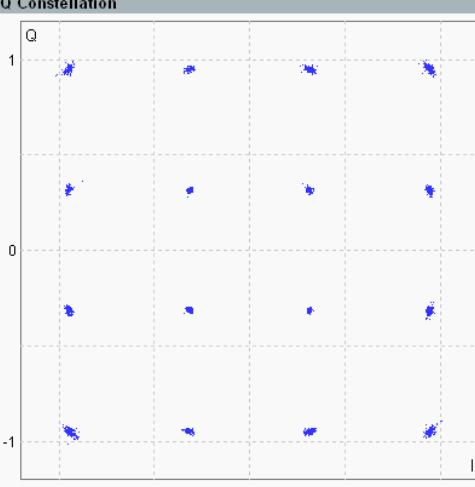
Band4_5MHz_16QAM_MCH_1732.5MHz_RB_25_0_NTNV

CMW 500 V 3.7.172 - LTE Measurement - V3.7.31 - TX Measurement

Multi Evaluation PRACH SRS

FDD Freq.: 1732.5 MHz Ref. Level: 35.00 dBm BW: 5.0 MHz CP: Normal Meas Subfr./Slot: 0 / All

IQ Constellation



Statistic Count
 [Progress Bar] 20 / 20
 Out of Tolerance
0.00 %
 Detected Modulation
16-QAM
 Detected Channel Type
PUSCH
 View Filter Throughput
100.0 %

LTE

Multi Evaluation

RDY

RF Settings

Trigger

Display

Signaling Parameter

LTE Signaling

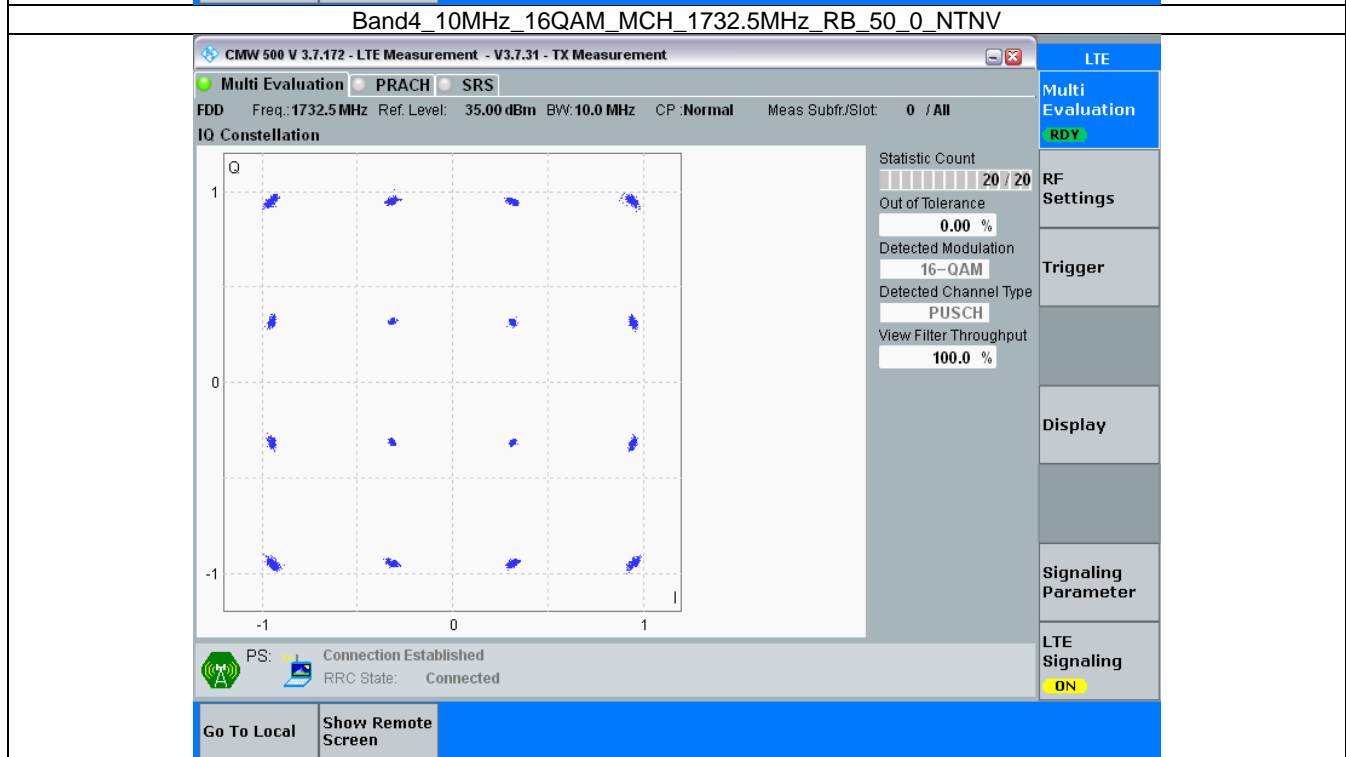
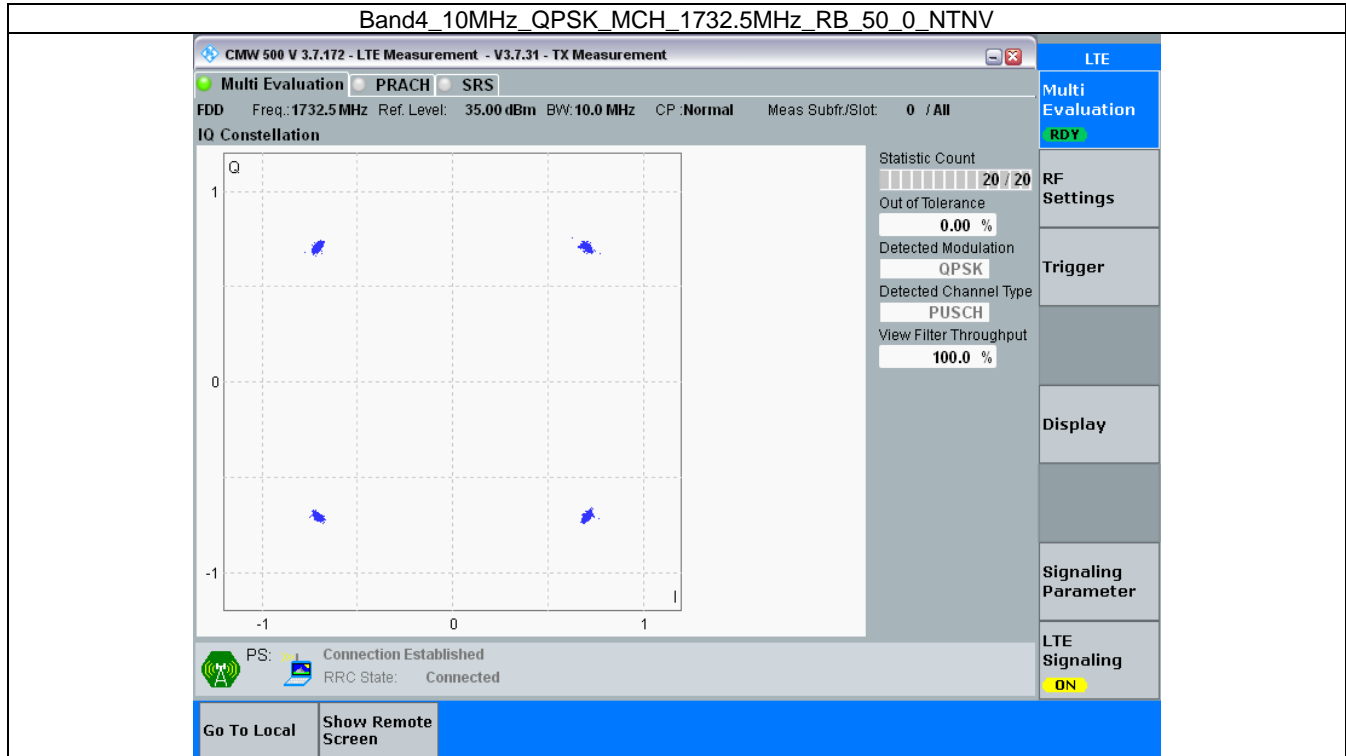
ON

PS: Connection Established

RRC State: Connected

Go To Local
Show Remote Screen

3.2.4 B4_10MHz



3.2.5 B4_15MHz

Band4_15MHz_QPSK_MCH_1732.5MHz_RB_75_0_NTNV

CMW 500 V 3.7.172 - LTE Measurement - V3.7.31 - TX Measurement

Multi Evaluation PRACH SRS

FDD Freq.: 1732.5 MHz Ref. Level: 35.00 dBm BW: 15.0 MHz CP: Normal Meas Subfr./Slot: 0 / All

IQ Constellation

Statistic Count: 20 / 20

Out of Tolerance: 0.00 %

Detected Modulation: QPSK

Detected Channel Type: PUSCH

View Filter Throughput: 100.0 %

LTE

Multi Evaluation RDY

RF Settings

Trigger

Display

Signaling Parameter

LTE Signaling ON

PS: Connection Established

RRC State: Connected

Go To Local
Show Remote Screen

Band4_15MHz_16QAM_MCH_1732.5MHz_RB_75_0_NTNV

CMW 500 V 3.7.172 - LTE Measurement - V3.7.31 - TX Measurement

Multi Evaluation PRACH SRS

FDD Freq.: 1732.5 MHz Ref. Level: 35.00 dBm BW: 15.0 MHz CP: Normal Meas Subfr./Slot: 0 / All

IQ Constellation

Statistic Count: 20 / 20

Out of Tolerance: 0.00 %

Detected Modulation: 16-QAM

Detected Channel Type: PUSCH

View Filter Throughput: 100.0 %

LTE

Multi Evaluation RDY

RF Settings

Trigger

Display

Signaling Parameter

LTE Signaling ON

PS: Connection Established

RRC State: Connected

Go To Local
Show Remote Screen

3.2.6 B4_20MHz

Band4_20MHz_QPSK_MCH_1732.5MHz_RB_100_0_NTNV

CMW 500 V 3.7.172 - LTE Measurement - V3.7.31 - TX Measurement

Multi Evaluation PRACH SRS

FDD Freq.: 1732.5 MHz Ref. Level: 35.00 dBm BW: 20.0 MHz CP: Normal Meas Subfr./Slot: 0 / All

IO Constellation

Statistic Count: 20 / 20

Out of Tolerance: 0.00 %

Detected Modulation: QPSK

Detected Channel Type: PUSCH

View Filter Throughput: 100.0 %

LTE

Multi Evaluation: RDY

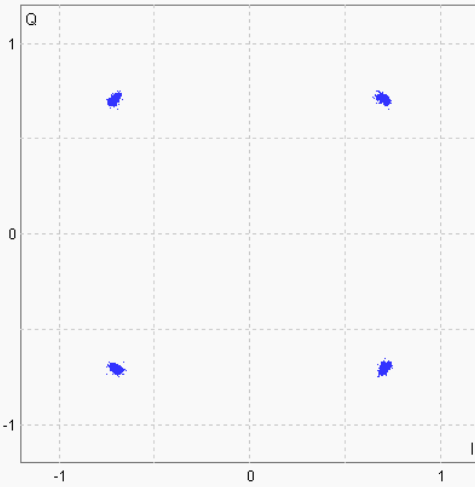
RF Settings

Trigger

Display

Signaling Parameter

LTE Signaling: ON



QPSK constellation diagram showing four points in a square grid on a Q-I plane from -1 to 1.

PS: Connection Established

RRC State: Connected

Go To Local

Show Remote Screen

Band4_20MHz_16QAM_MCH_1732.5MHz_RB_100_0_NTNV

CMW 500 V 3.7.172 - LTE Measurement - V3.7.31 - TX Measurement

Multi Evaluation PRACH SRS

FDD Freq.: 1732.5 MHz Ref. Level: 35.00 dBm BW: 20.0 MHz CP: Normal Meas Subfr./Slot: 0 / All

IO Constellation

Statistic Count: 20 / 20

Out of Tolerance: 0.00 %

Detected Modulation: 16-QAM

Detected Channel Type: PUSCH

View Filter Throughput: 100.0 %

LTE

Multi Evaluation: RDY

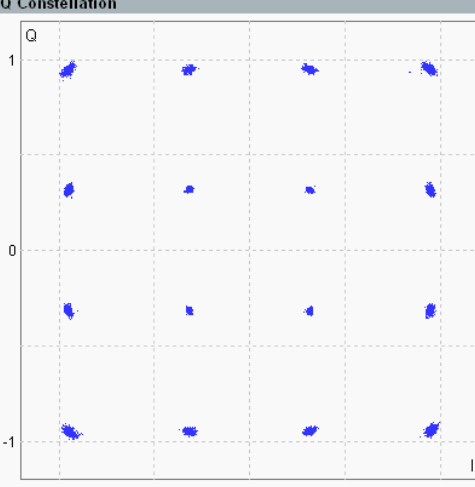
RF Settings

Trigger

Display

Signaling Parameter

LTE Signaling: ON



16QAM constellation diagram showing 16 points in a 4x4 grid on a Q-I plane from -1 to 1.

PS: Connection Established

RRC State: Connected

Go To Local

Show Remote Screen

4. 99% & 26dB Bandwidth

4.1 Test Result

4.1.1 Band4_OBW

Band: 4 / NTNV							
Bandwidth (MHz)	Modulation	Frequency (MHz)	RB Allocation		99% Occupied Bandwidth (MHz)		Verdict
			Size	Offset	Result	Limit	
1.4	QPSK	1710.7	6	0	1.117	/	Pass
		1732.5	6	0	1.110	/	Pass
		1754.3	6	0	1.114	/	Pass
	16QAM	1710.7	6	0	1.118	/	Pass
		1732.5	6	0	1.112	/	Pass
		1754.3	6	0	1.124	/	Pass
3	QPSK	1711.5	15	0	2.767	/	Pass
		1732.5	15	0	2.760	/	Pass
		1753.5	15	0	2.749	/	Pass
	16QAM	1711.5	15	0	2.752	/	Pass
		1732.5	15	0	2.763	/	Pass
		1753.5	15	0	2.751	/	Pass
5	QPSK	1712.5	25	0	4.557	/	Pass
		1732.5	25	0	4.540	/	Pass
		1752.5	25	0	4.555	/	Pass
	16QAM	1712.5	25	0	4.550	/	Pass
		1732.5	25	0	4.554	/	Pass
		1752.5	25	0	4.573	/	Pass
10	QPSK	1715	50	0	9.065	/	Pass
		1732.5	50	0	9.098	/	Pass
		1750	50	0	9.050	/	Pass
	16QAM	1715	50	0	9.073	/	Pass
		1732.5	50	0	9.061	/	Pass
		1750	50	0	9.084	/	Pass
15	QPSK	1717.5	75	0	13.622	/	Pass
		1732.5	75	0	13.642	/	Pass
		1747.5	75	0	13.568	/	Pass
	16QAM	1717.5	75	0	13.632	/	Pass
		1732.5	75	0	13.599	/	Pass
		1747.5	75	0	13.601	/	Pass
20	QPSK	1720	100	0	18.204	/	Pass
		1732.5	100	0	18.174	/	Pass
		1745	100	0	18.080	/	Pass
	16QAM	1720	100	0	18.265	/	Pass
		1732.5	100	0	18.172	/	Pass
		1745	100	0	18.106	/	Pass

4.1.2 Band4_XDB

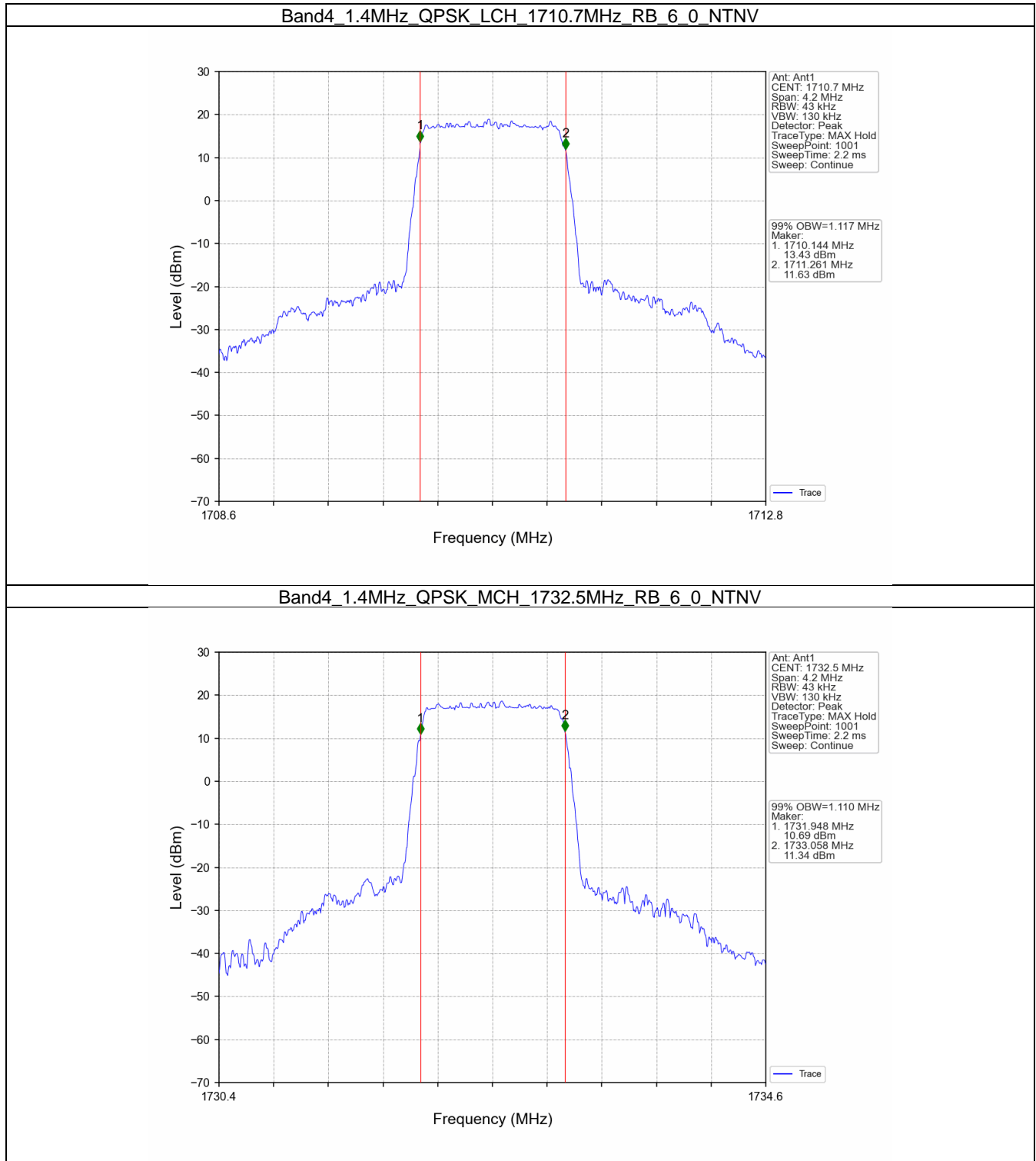
Band: 4 / NTNV							
Bandwidth (MHz)	Modulation	Frequency (MHz)	RB Allocation		26dB Bandwidth (MHz)		Verdict
			Size	Offset	Result	Limit	
1.4	QPSK	1710.7	6	0	1.272	/	Pass



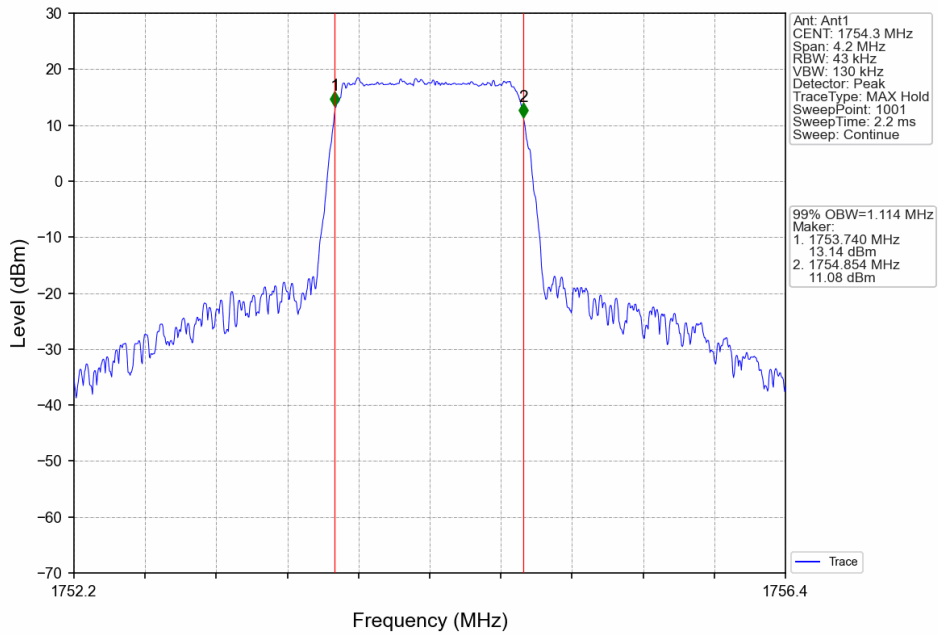
	16QAM	1732.5	6	0	1.271	/	Pass
		1754.3	6	0	1.273	/	Pass
		1710.7	6	0	1.281	/	Pass
		1732.5	6	0	1.272	/	Pass
		1754.3	6	0	1.279	/	Pass
3	QPSK	1711.5	15	0	3.106	/	Pass
		1732.5	15	0	3.097	/	Pass
		1753.5	15	0	3.075	/	Pass
	16QAM	1711.5	15	0	3.098	/	Pass
		1732.5	15	0	3.087	/	Pass
		1753.5	15	0	3.091	/	Pass
5	QPSK	1712.5	25	0	5.048	/	Pass
		1732.5	25	0	5.090	/	Pass
		1752.5	25	0	5.059	/	Pass
	16QAM	1712.5	25	0	5.067	/	Pass
		1732.5	25	0	5.077	/	Pass
		1752.5	25	0	5.077	/	Pass
10	QPSK	1715	50	0	10.031	/	Pass
		1732.5	50	0	10.067	/	Pass
		1750	50	0	10.041	/	Pass
	16QAM	1715	50	0	10.038	/	Pass
		1732.5	50	0	10.059	/	Pass
		1750	50	0	9.985	/	Pass
15	QPSK	1717.5	75	0	15.237	/	Pass
		1732.5	75	0	15.179	/	Pass
		1747.5	75	0	15.072	/	Pass
	16QAM	1717.5	75	0	15.181	/	Pass
		1732.5	75	0	15.133	/	Pass
		1747.5	75	0	15.150	/	Pass
20	QPSK	1720	100	0	19.927	/	Pass
		1732.5	100	0	20.125	/	Pass
		1745	100	0	19.855	/	Pass
	16QAM	1720	100	0	19.969	/	Pass
		1732.5	100	0	20.180	/	Pass
		1745	100	0	20.080	/	Pass

4.2 Test Graph

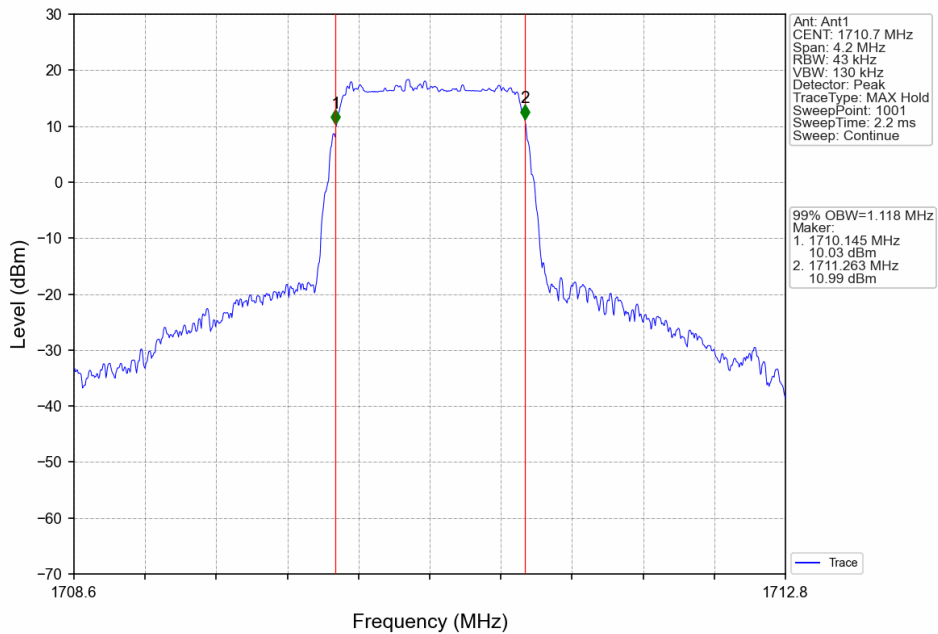
4.2.1 Band4_OBW



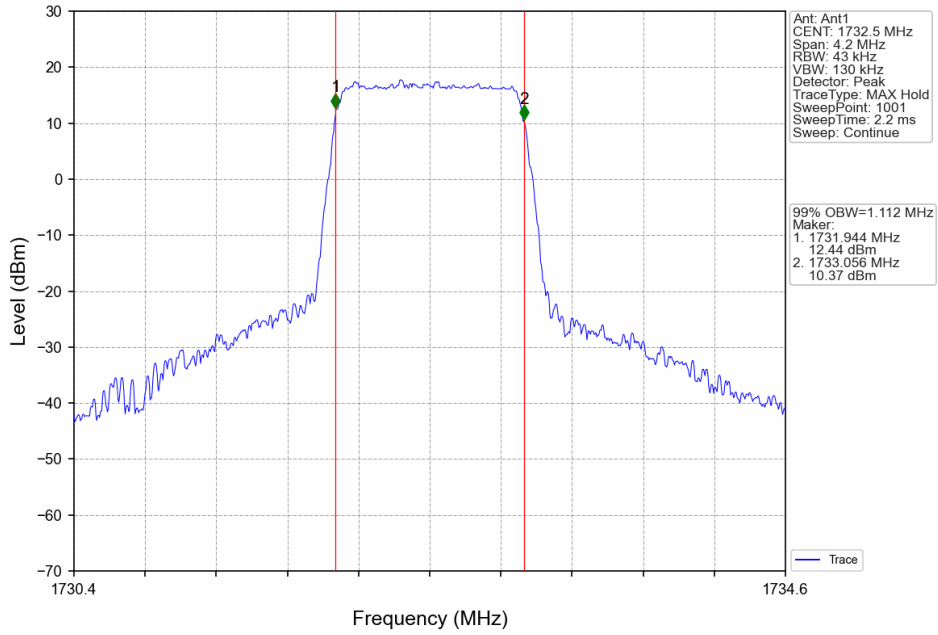
Band4_1.4MHz_QPSK_HCH_1754.3MHz_RB_6_0_NTNV



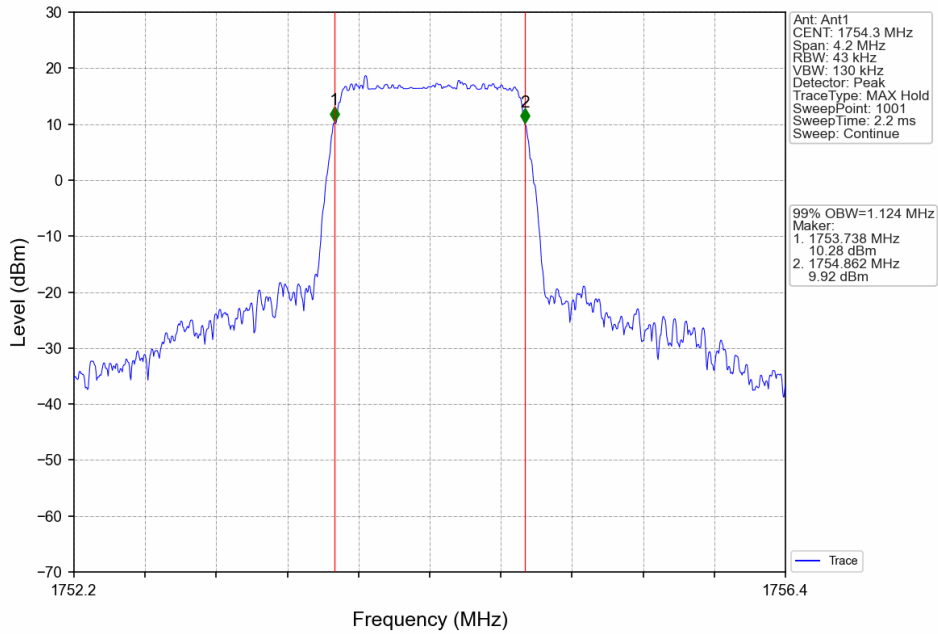
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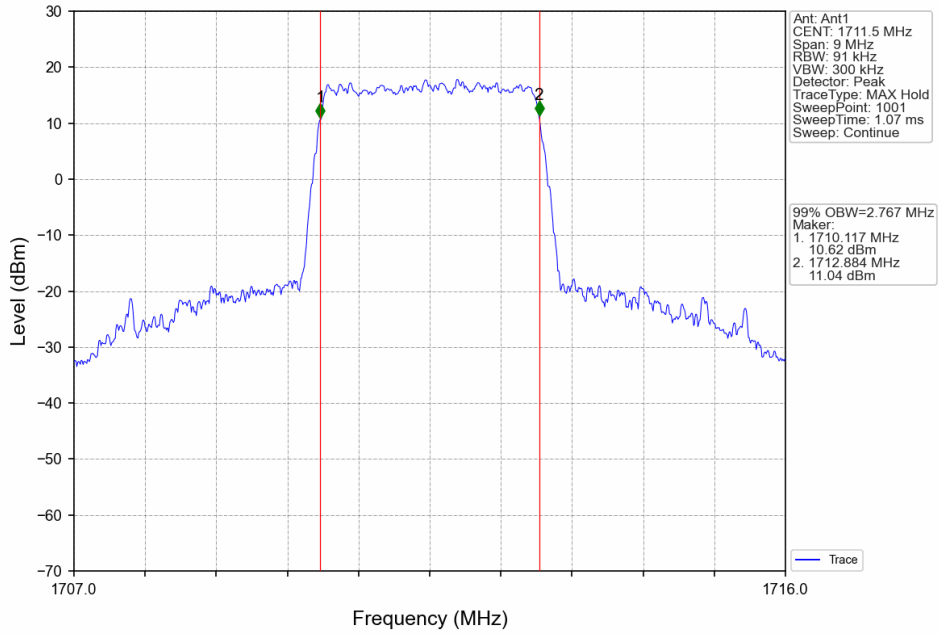
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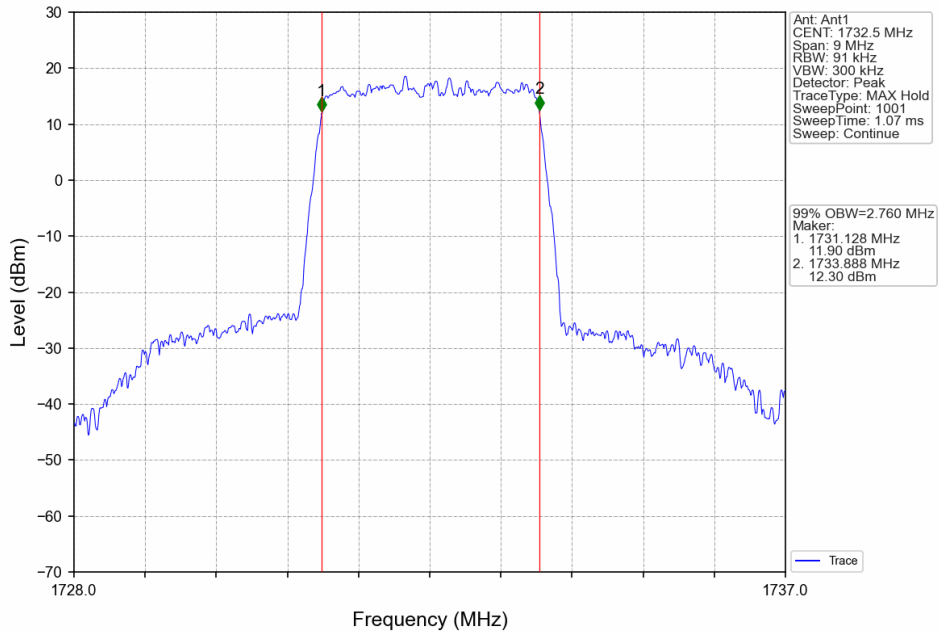
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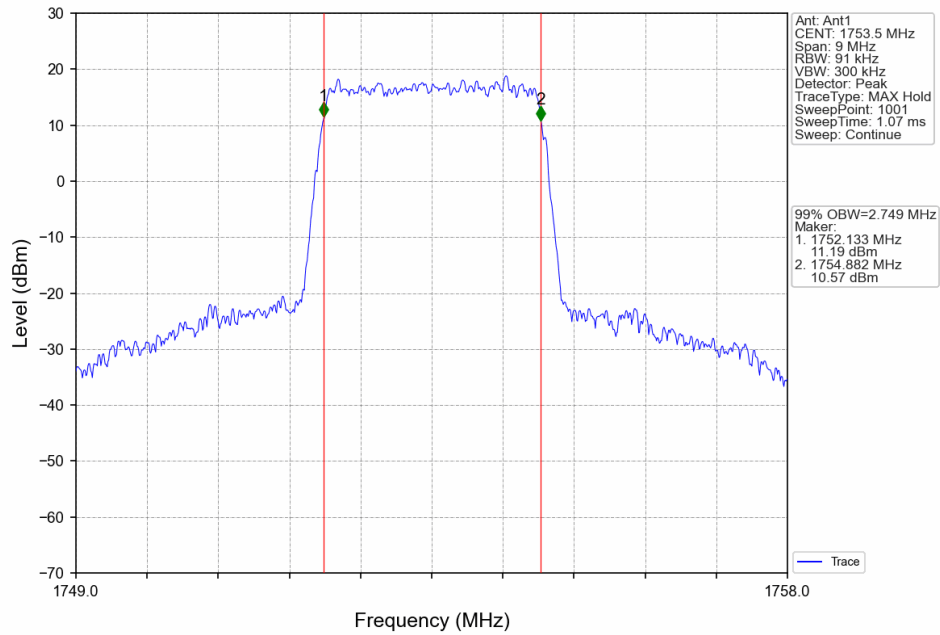
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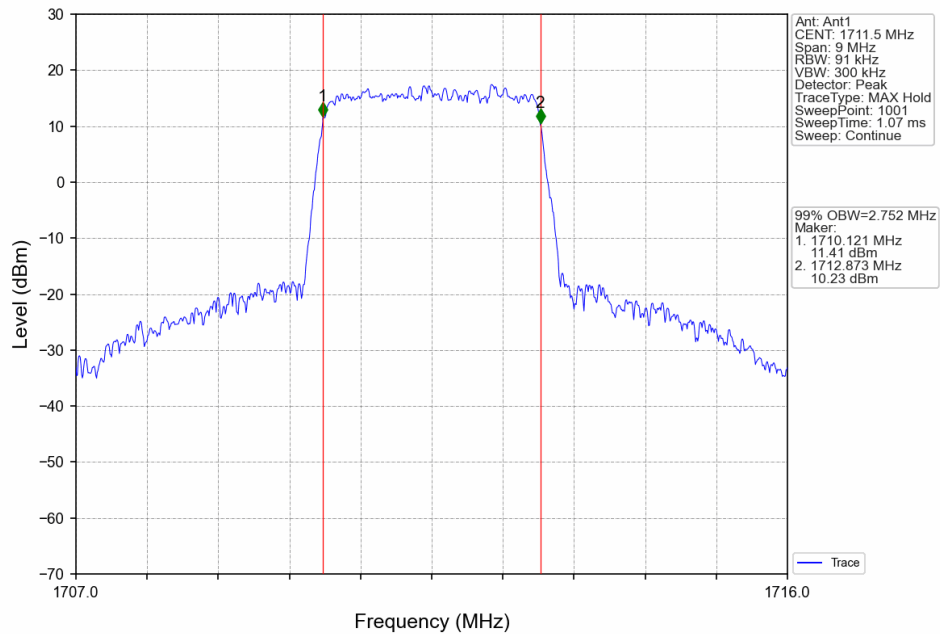
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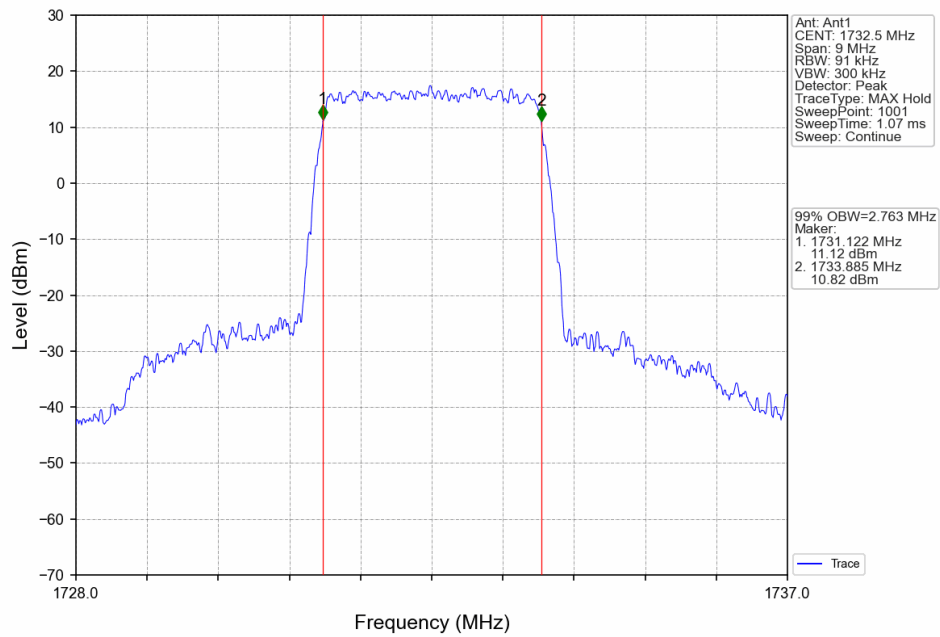
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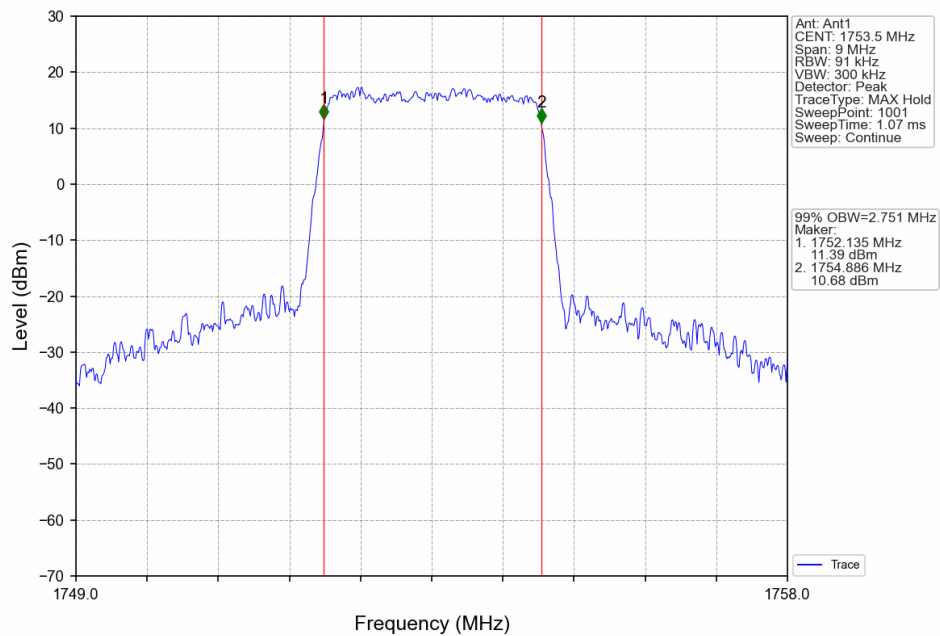
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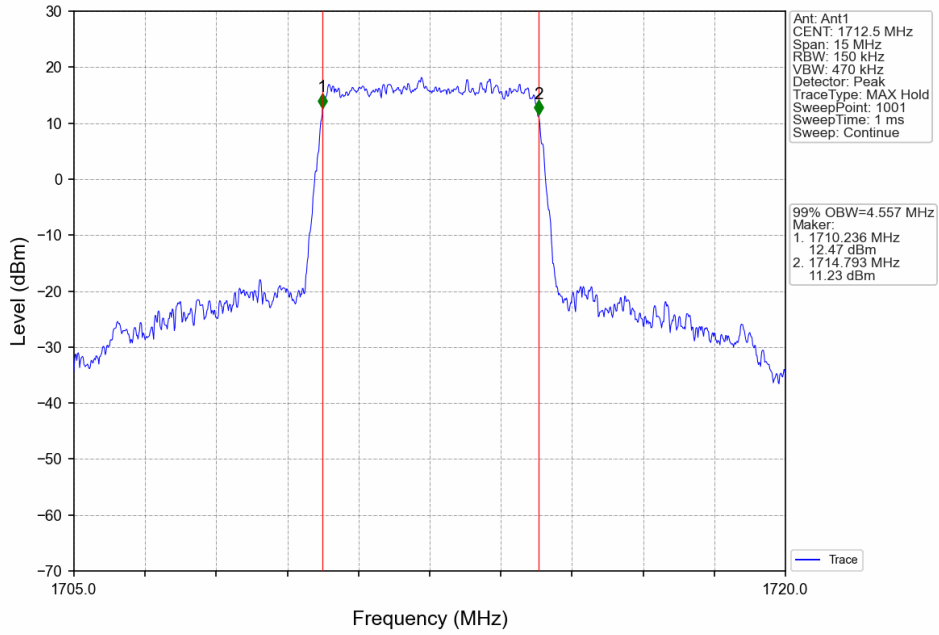
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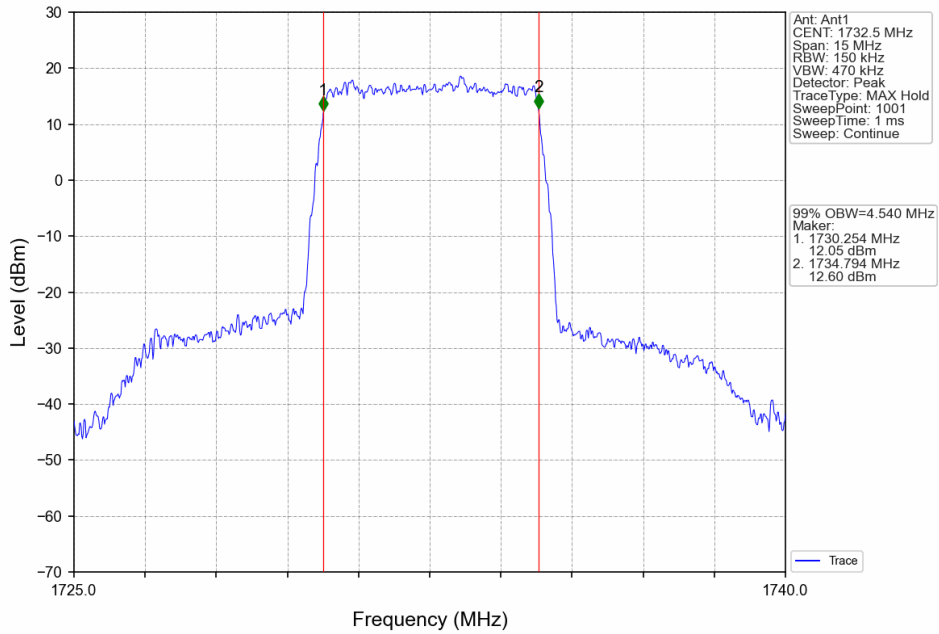
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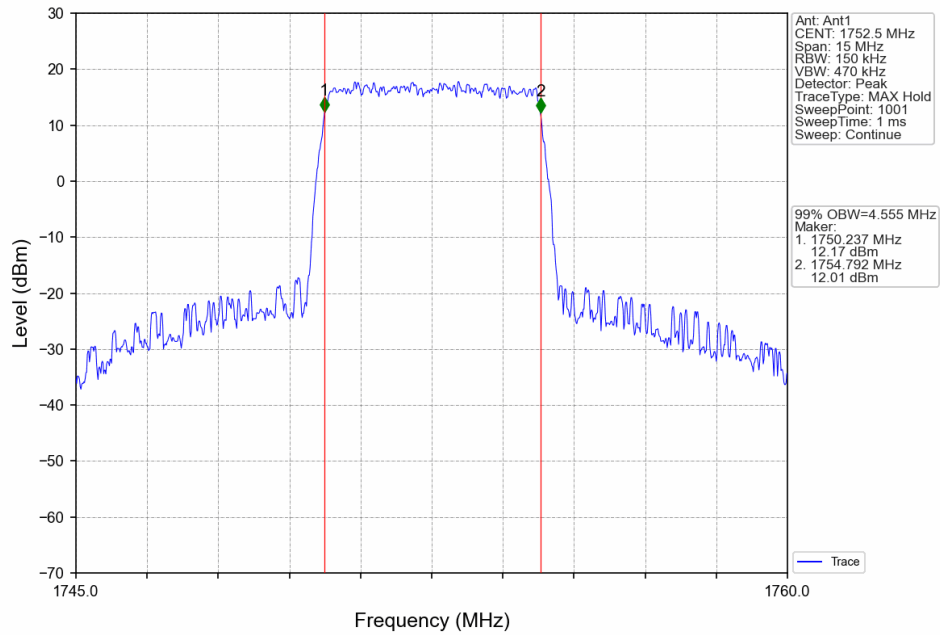
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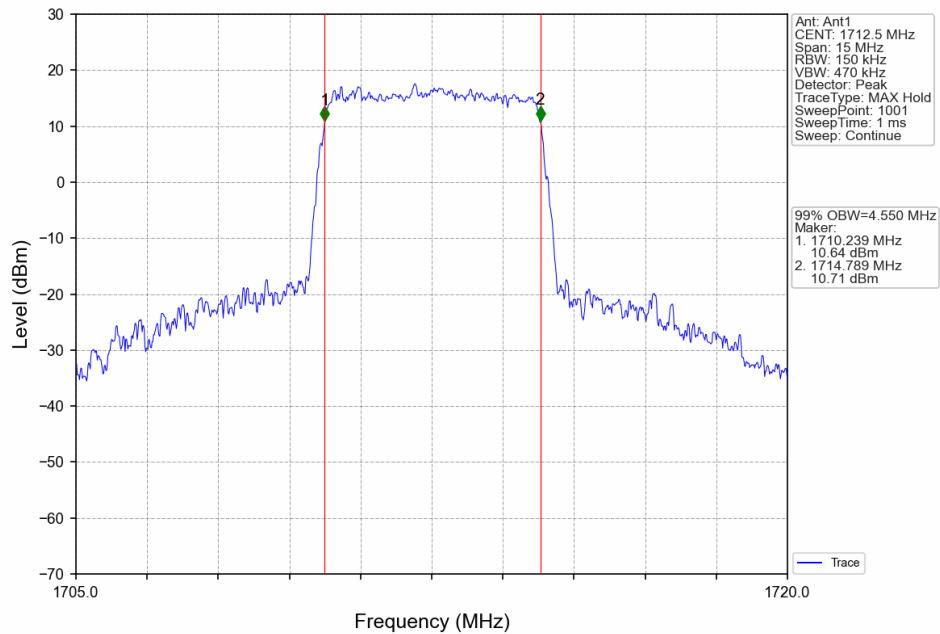
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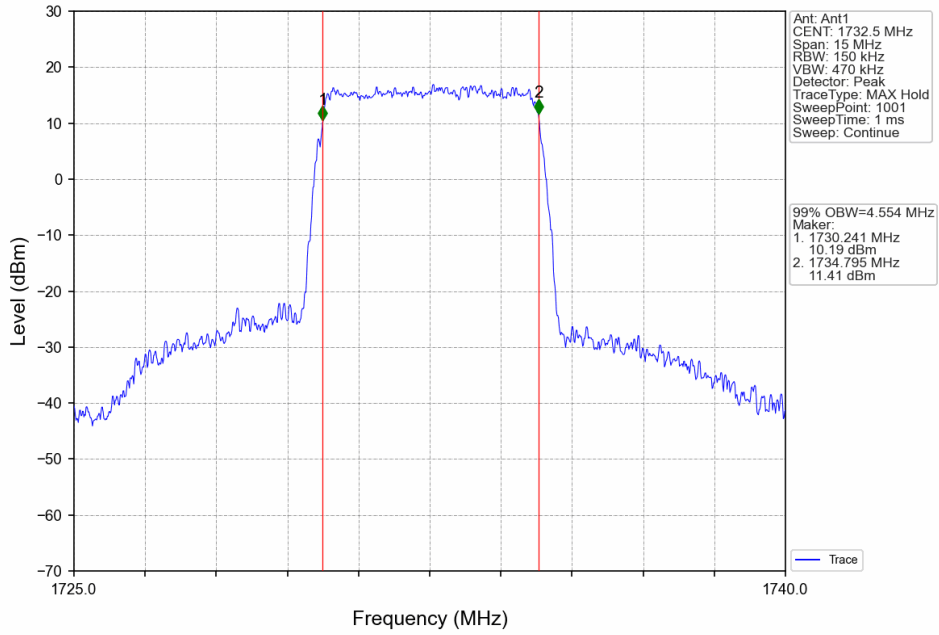
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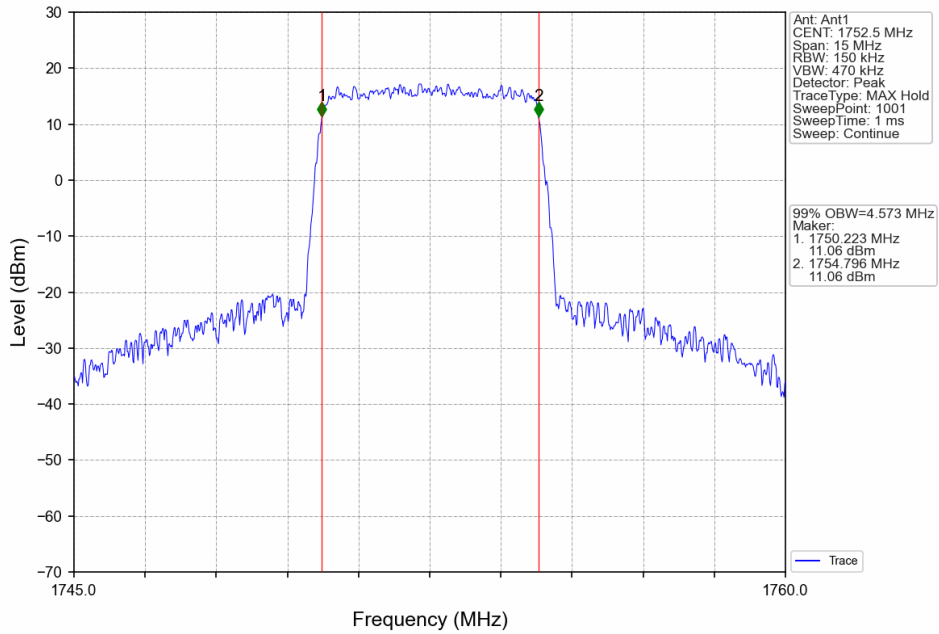
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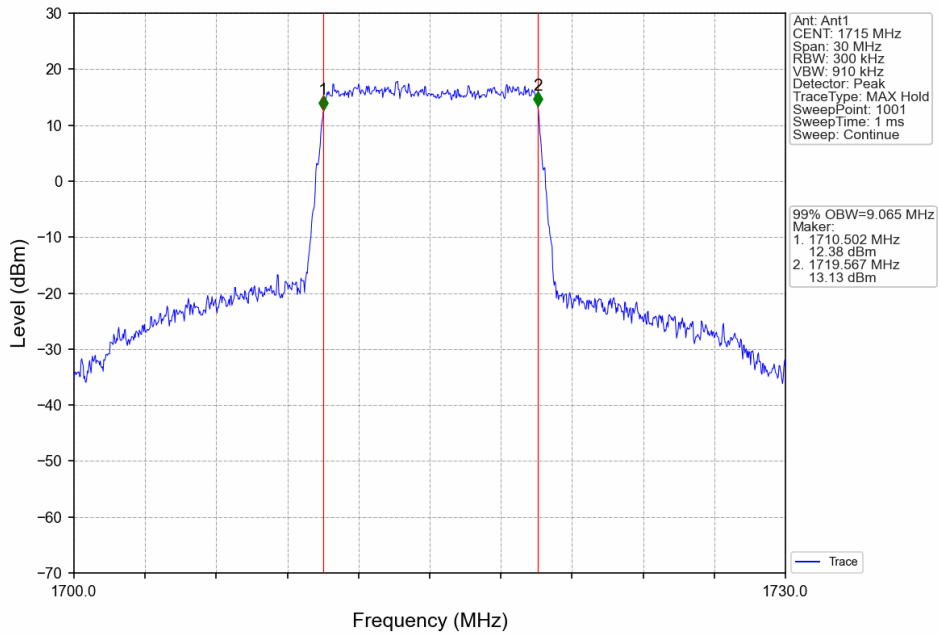
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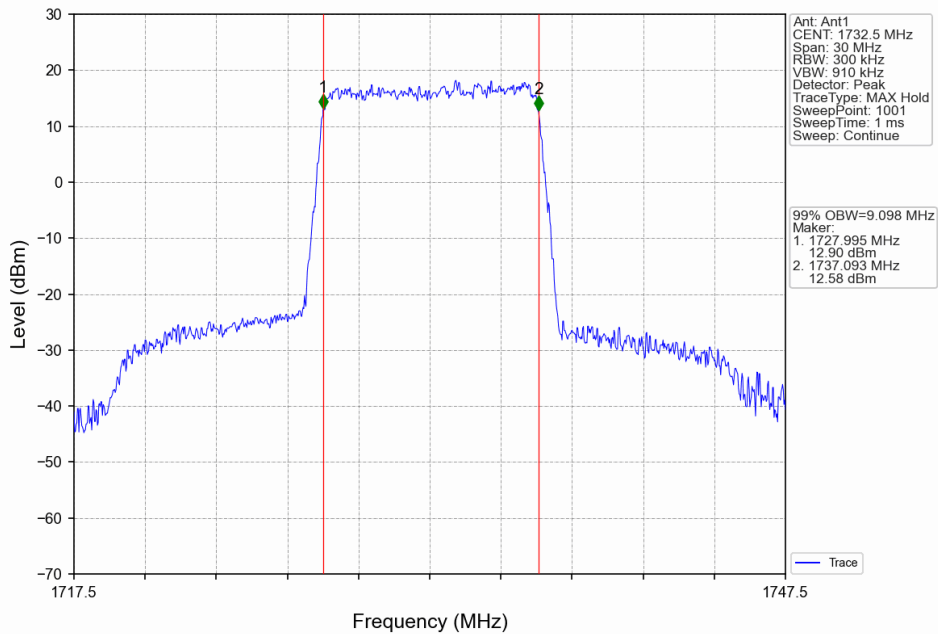
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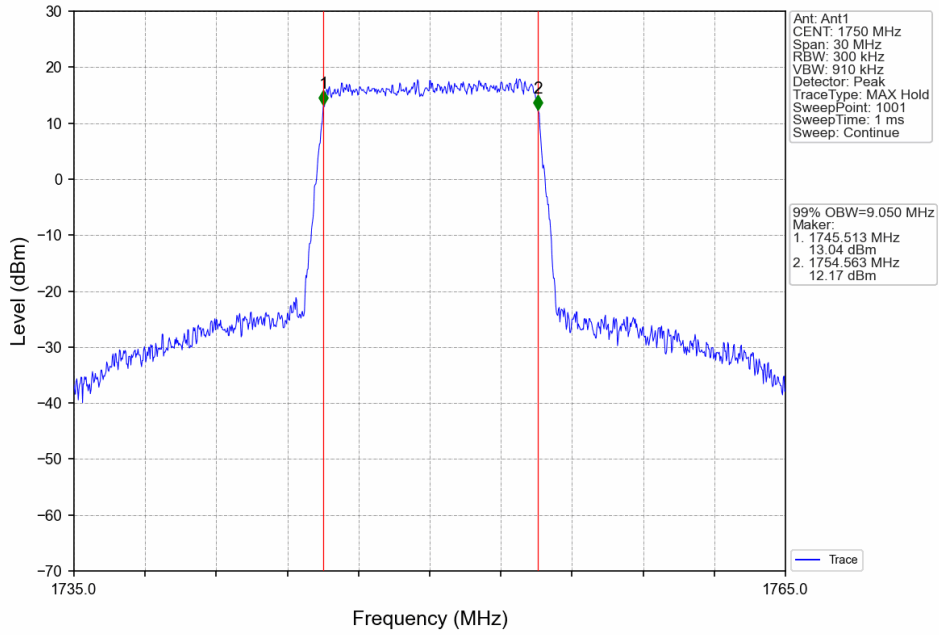
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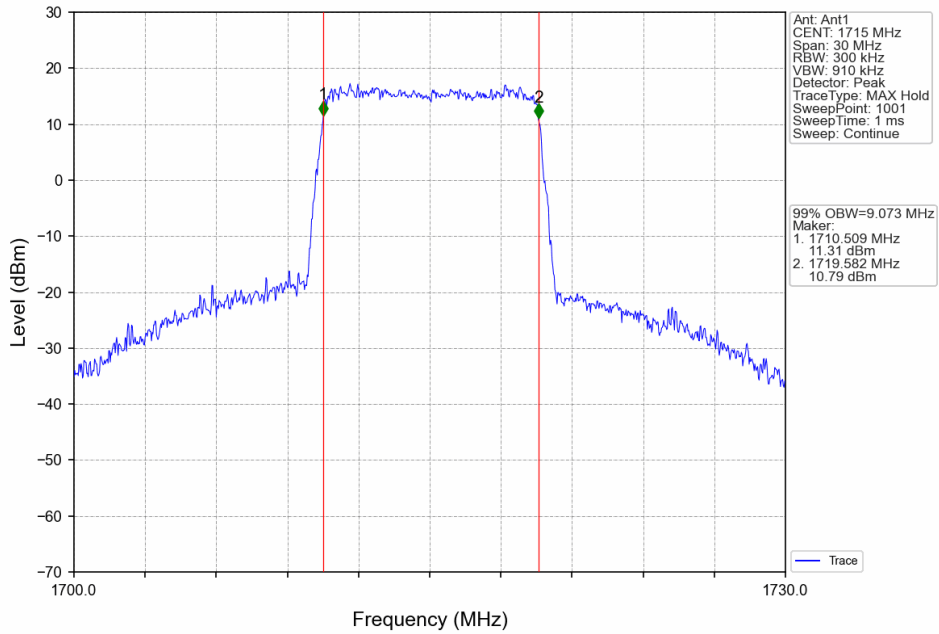
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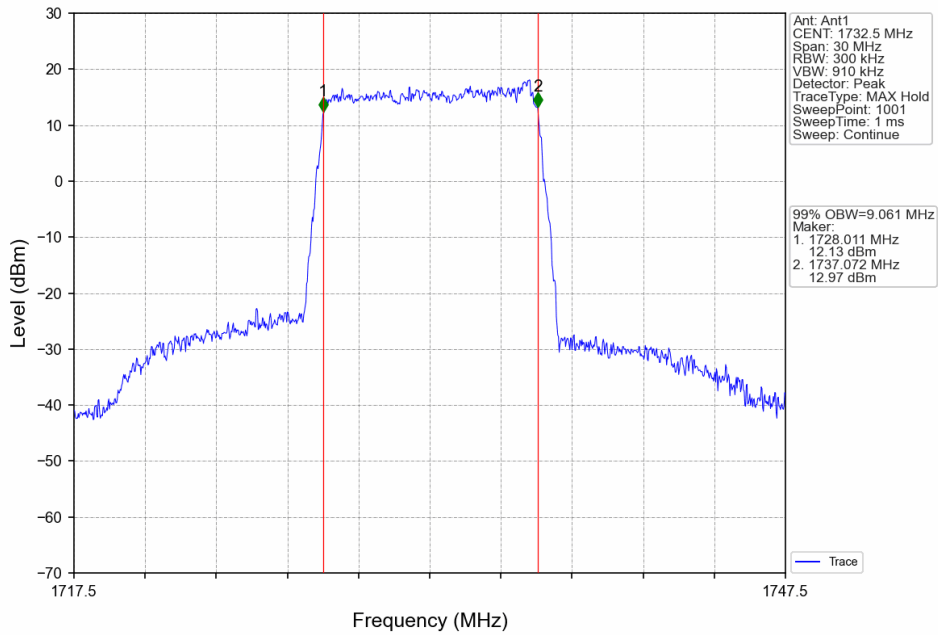
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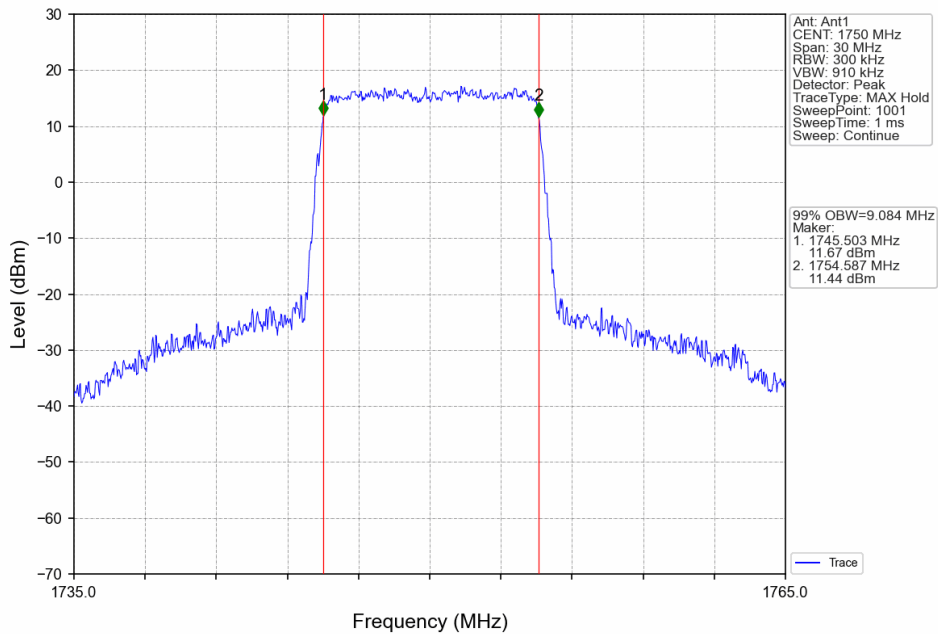
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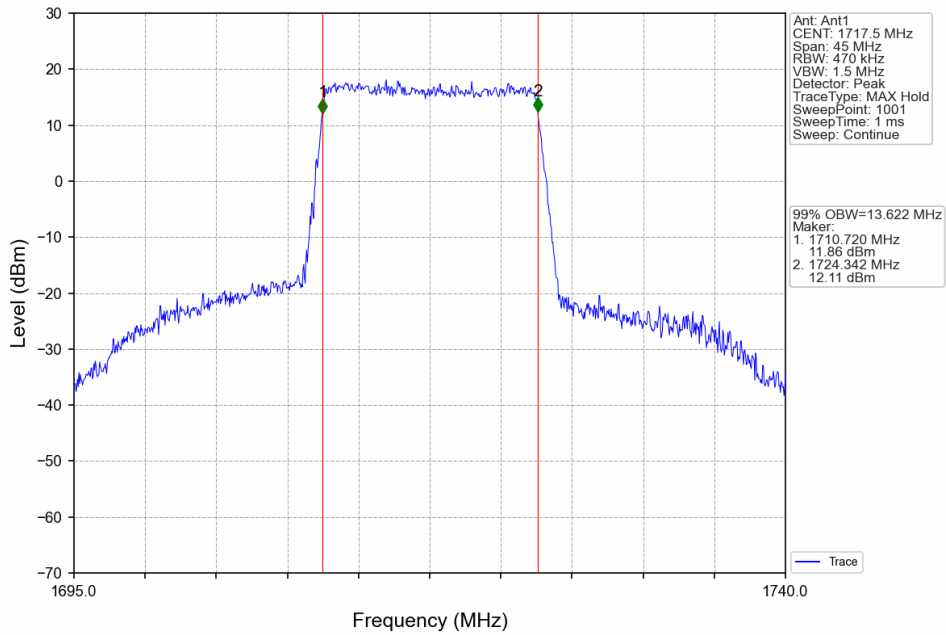
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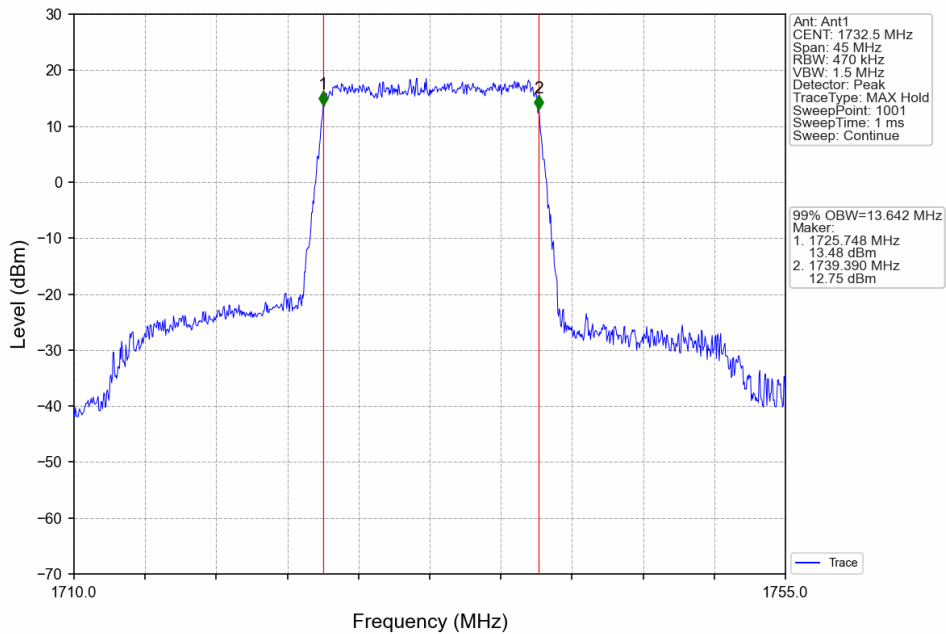
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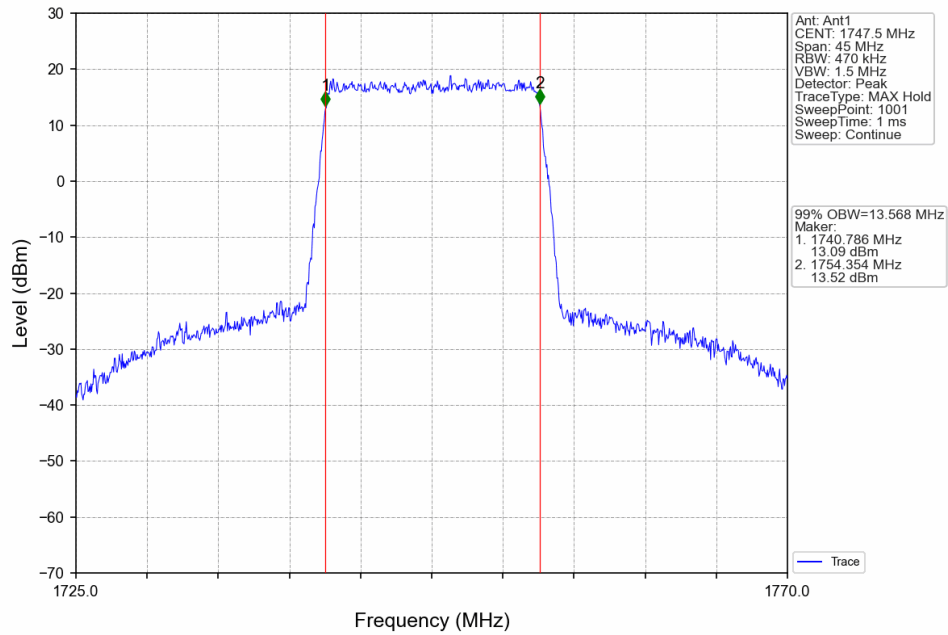
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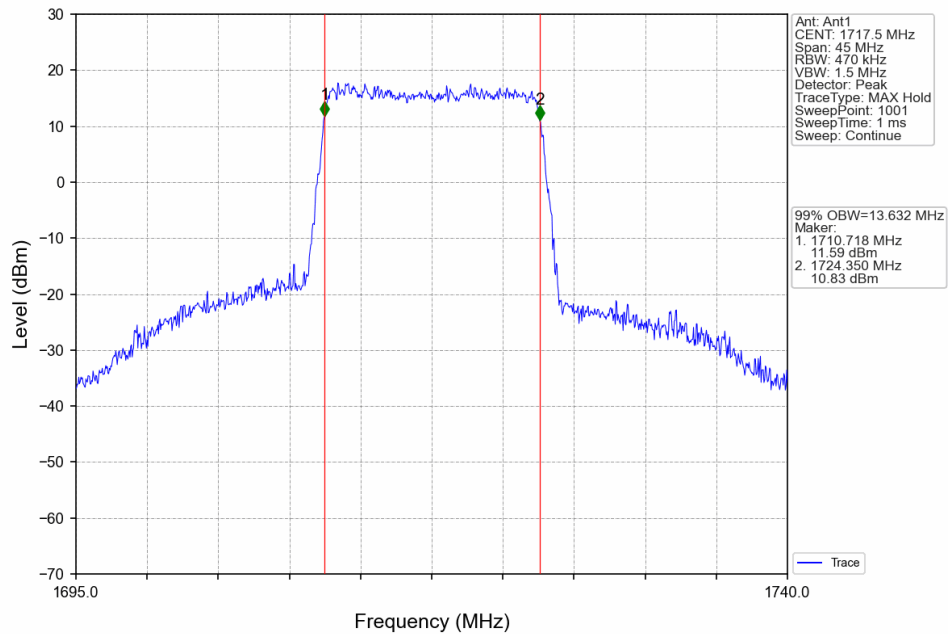
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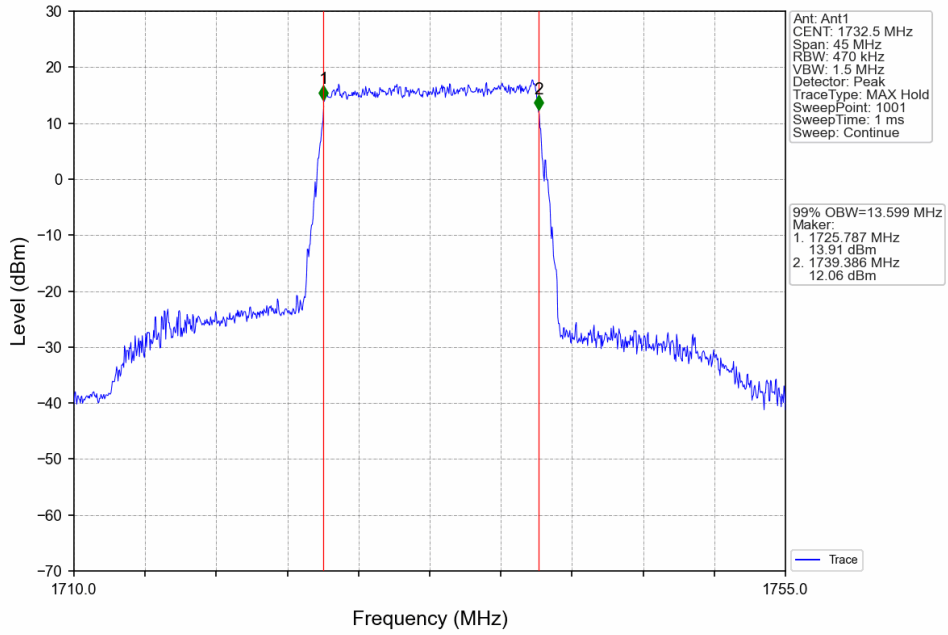
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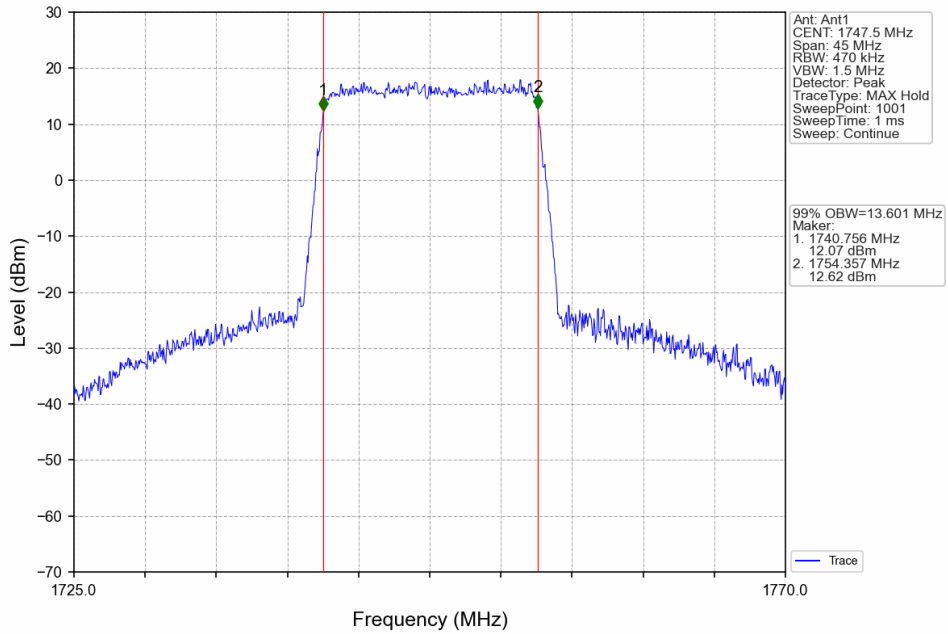
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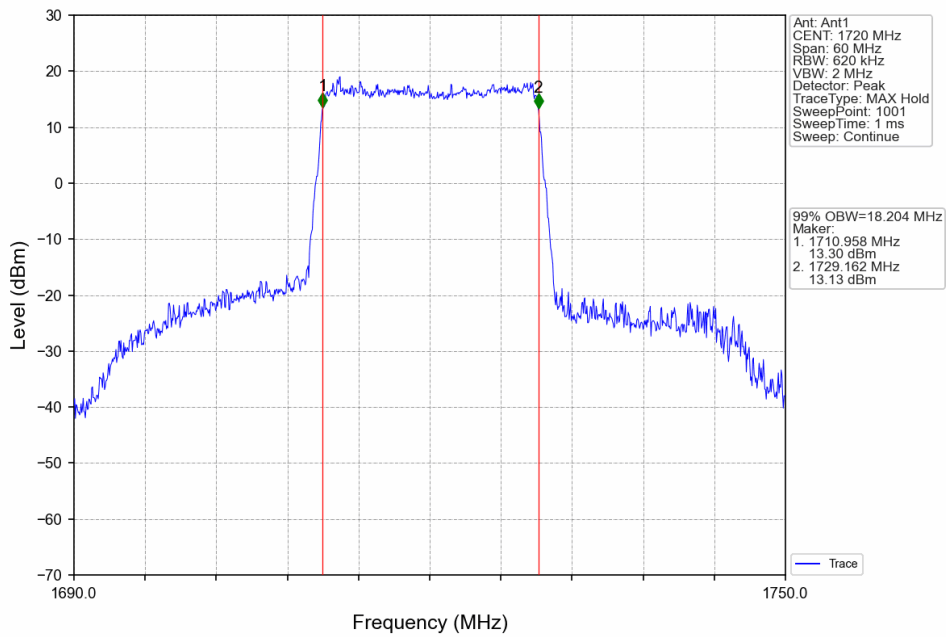
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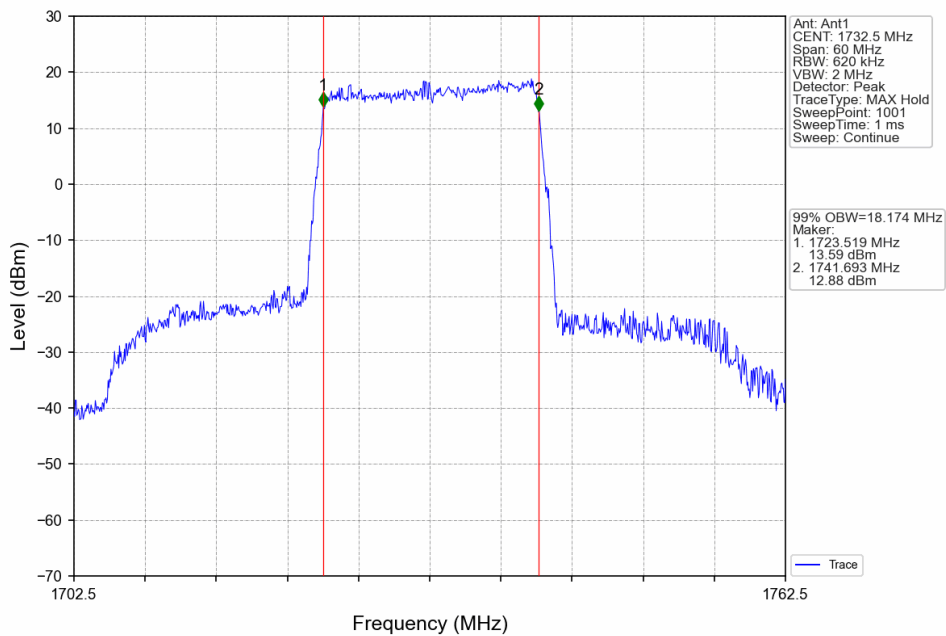
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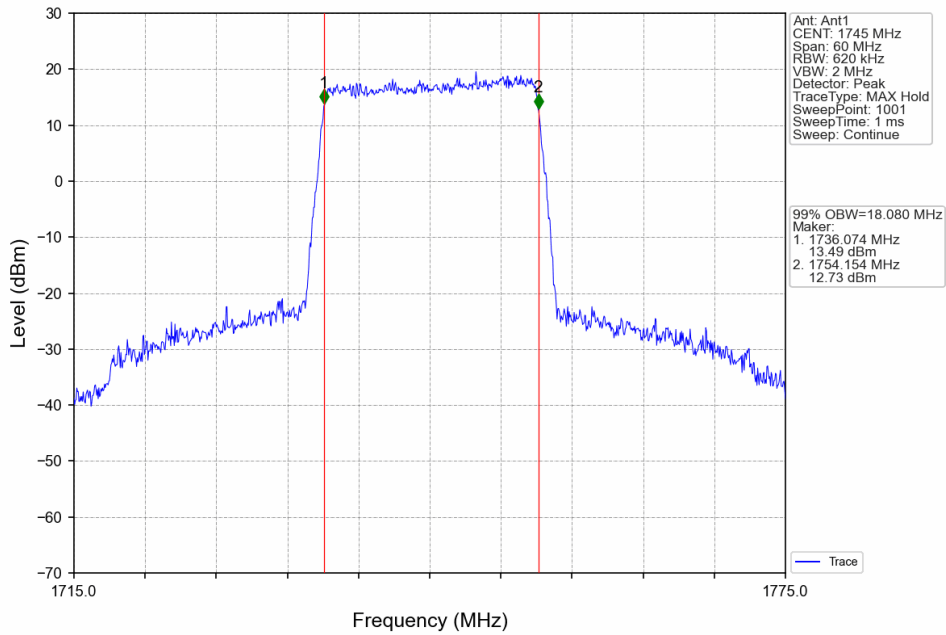
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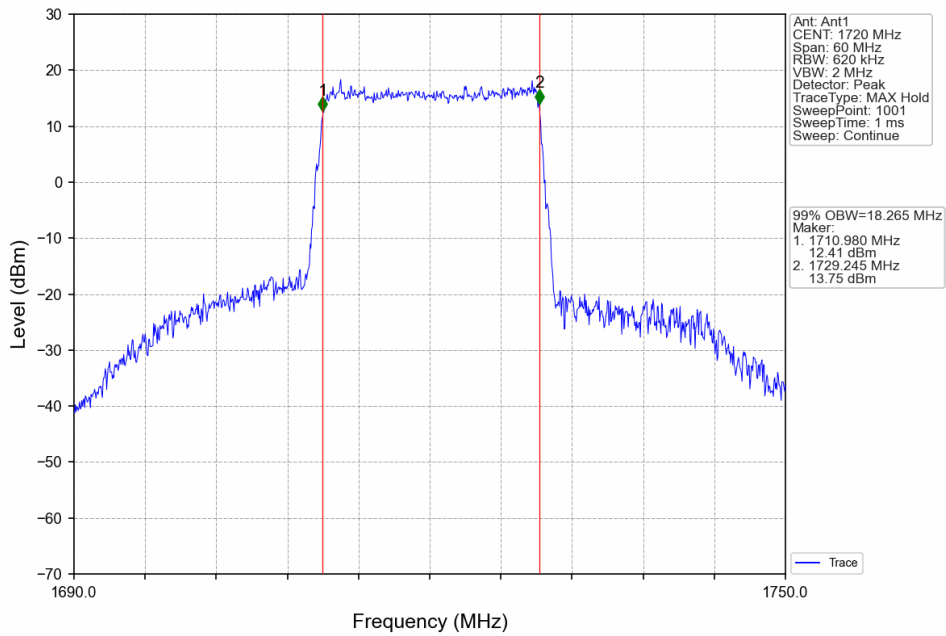
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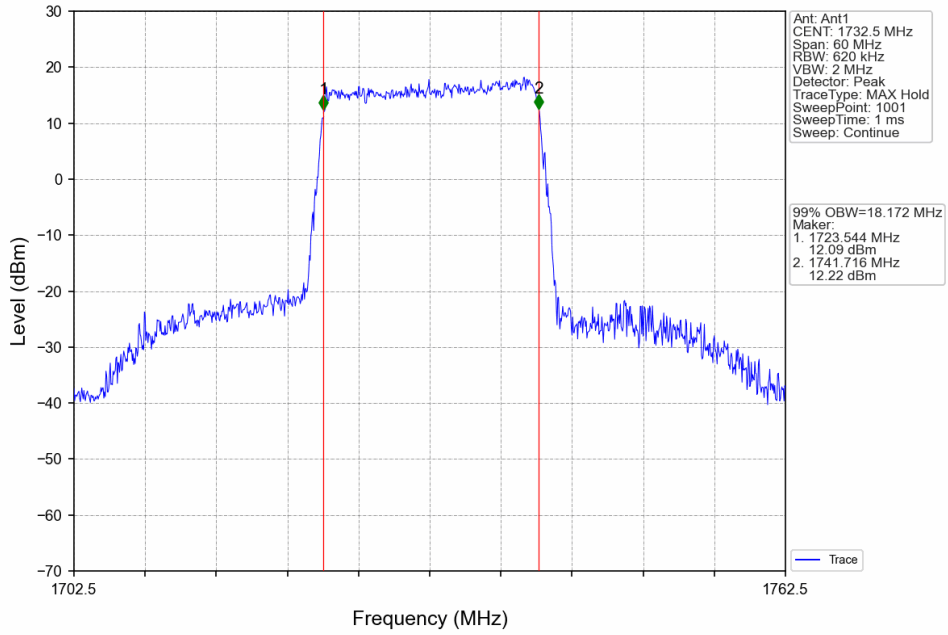


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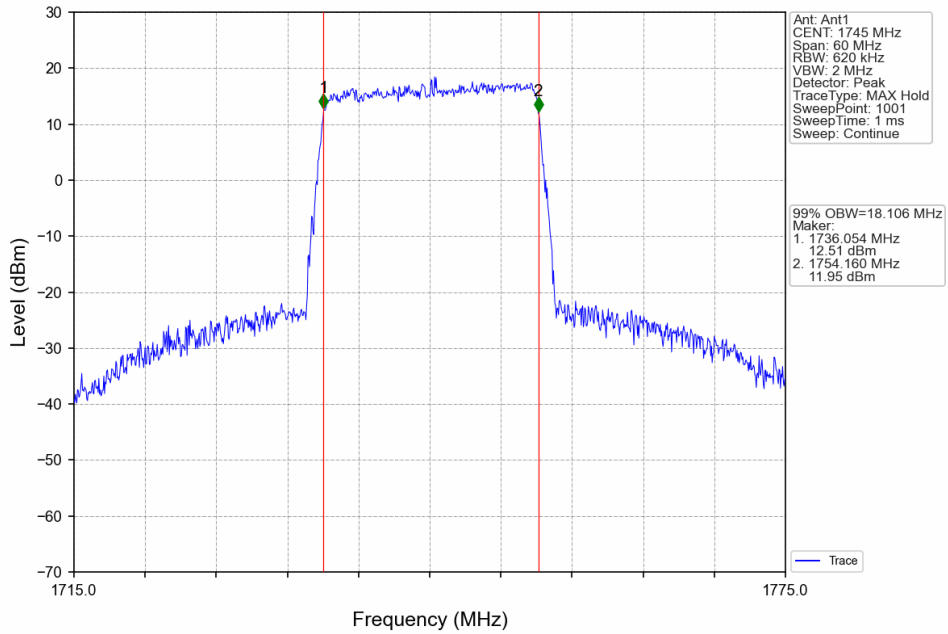




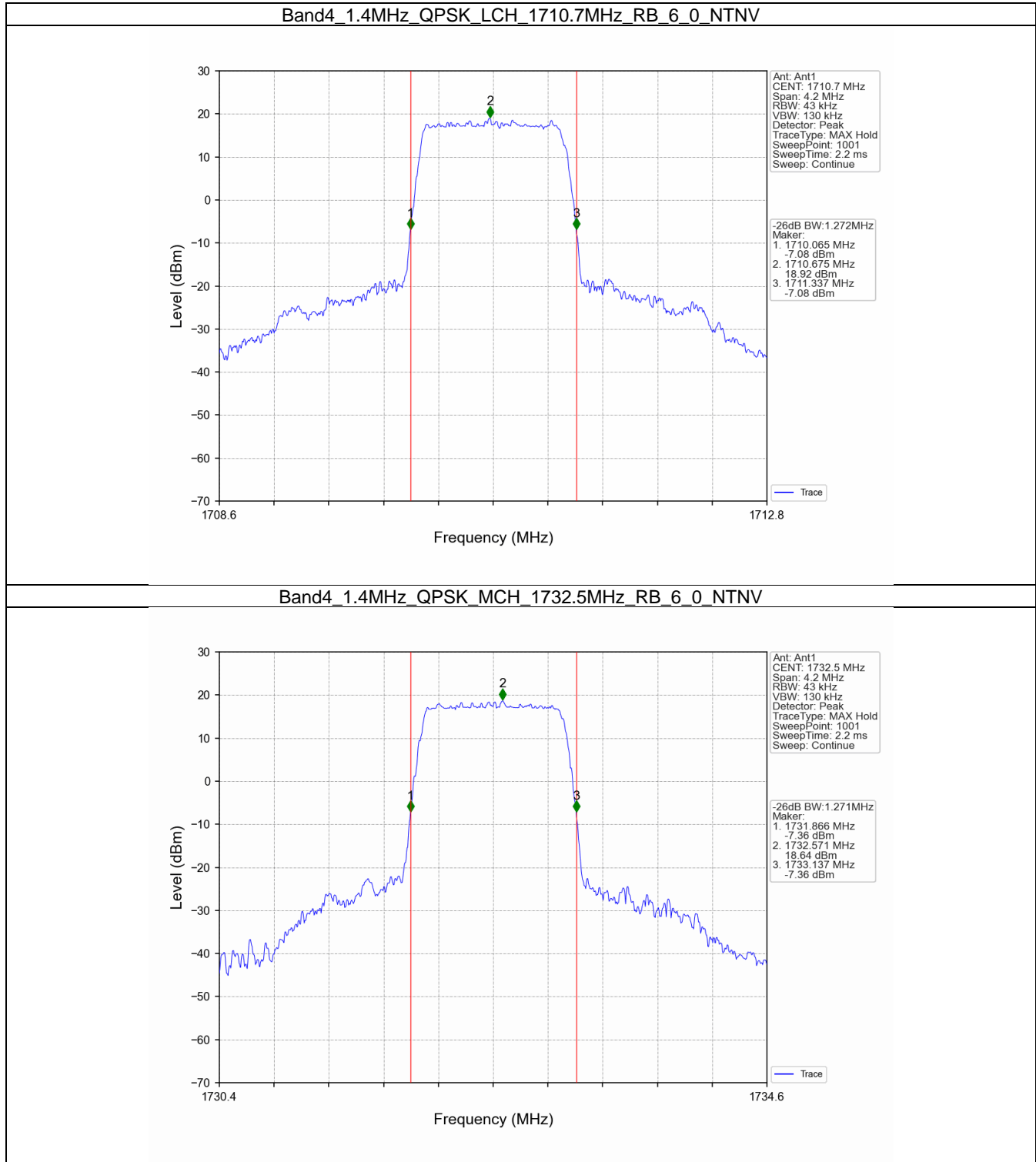
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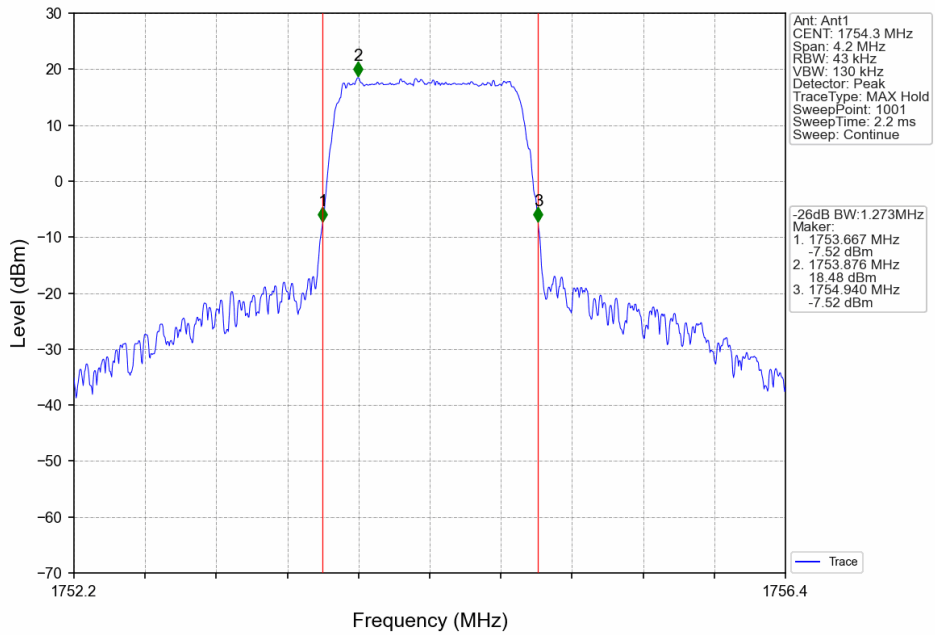
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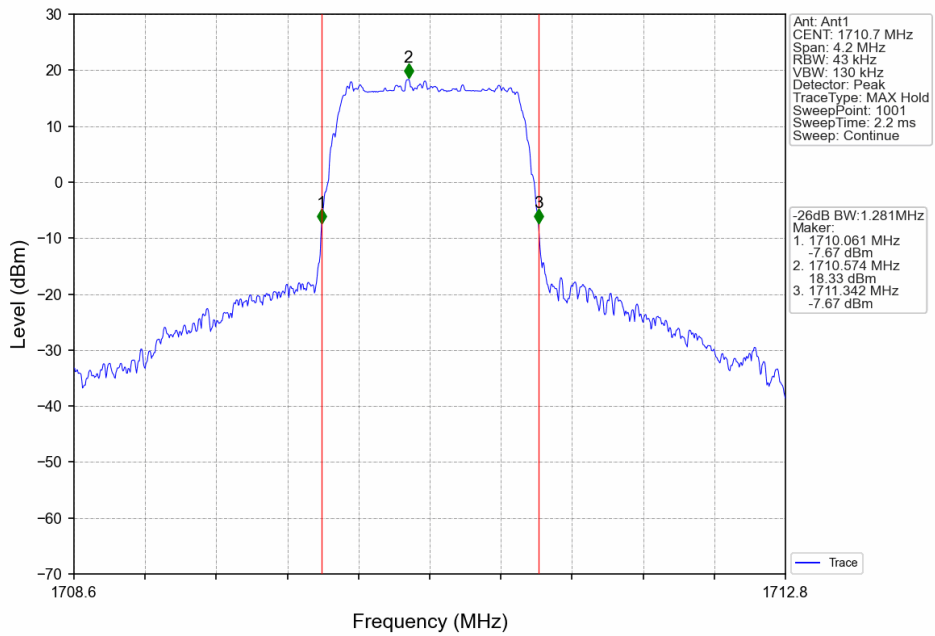
4.2.2 Band4_XDB



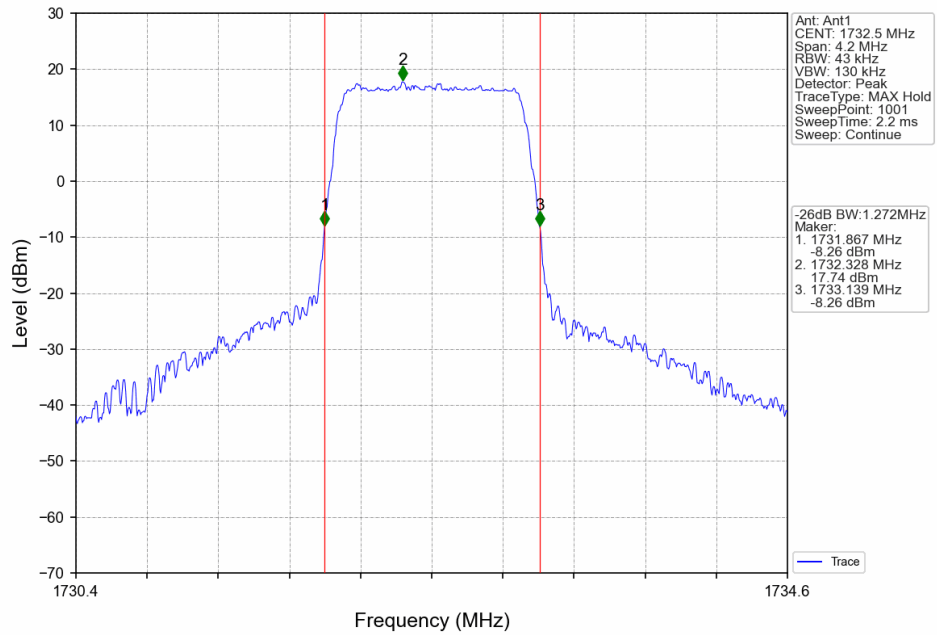
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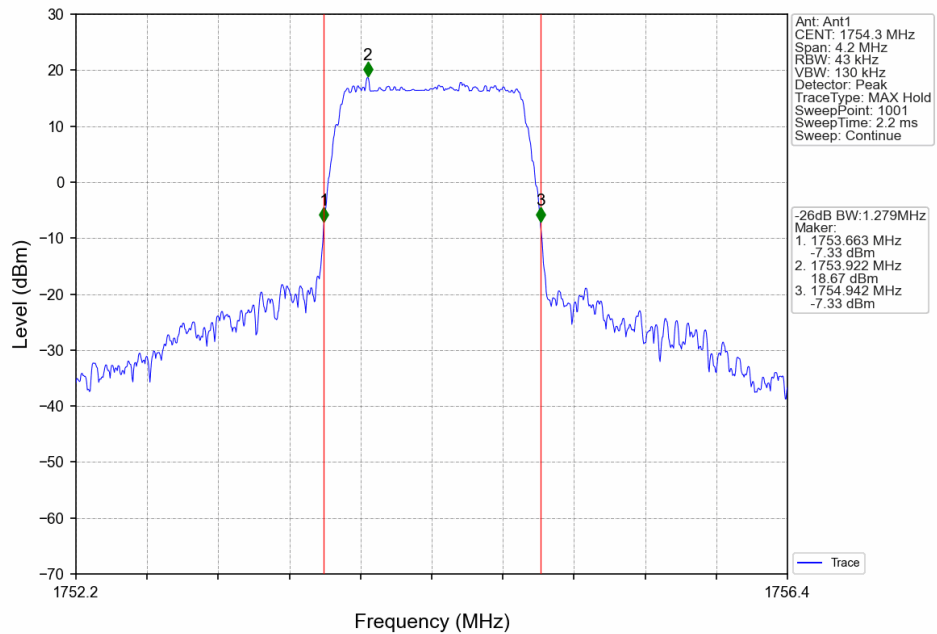
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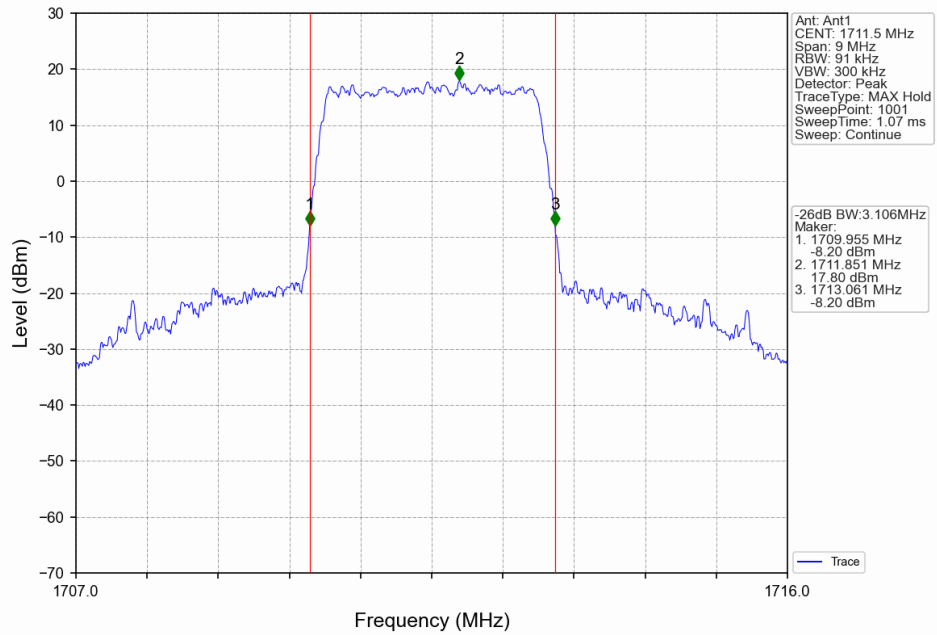
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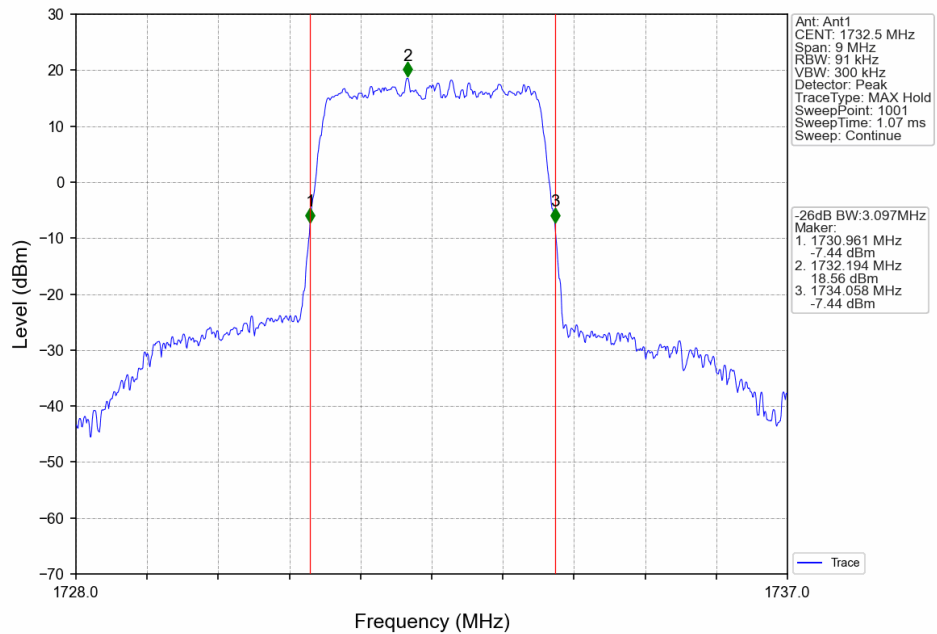
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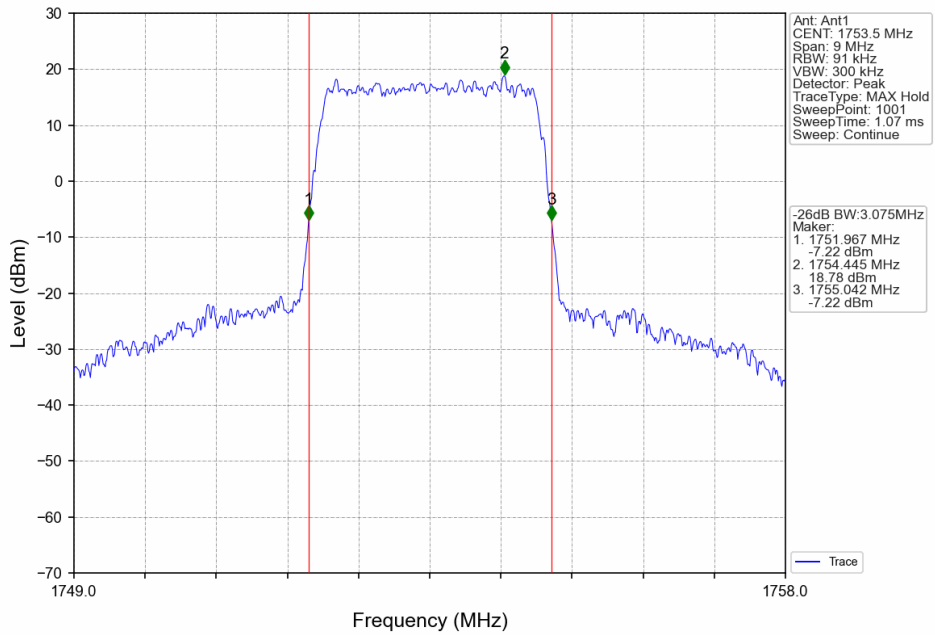
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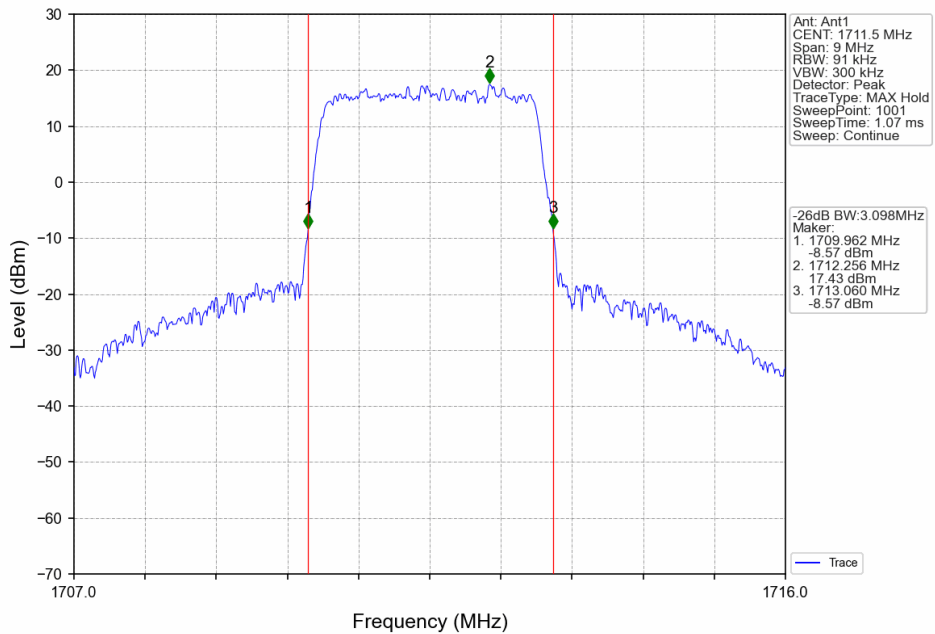
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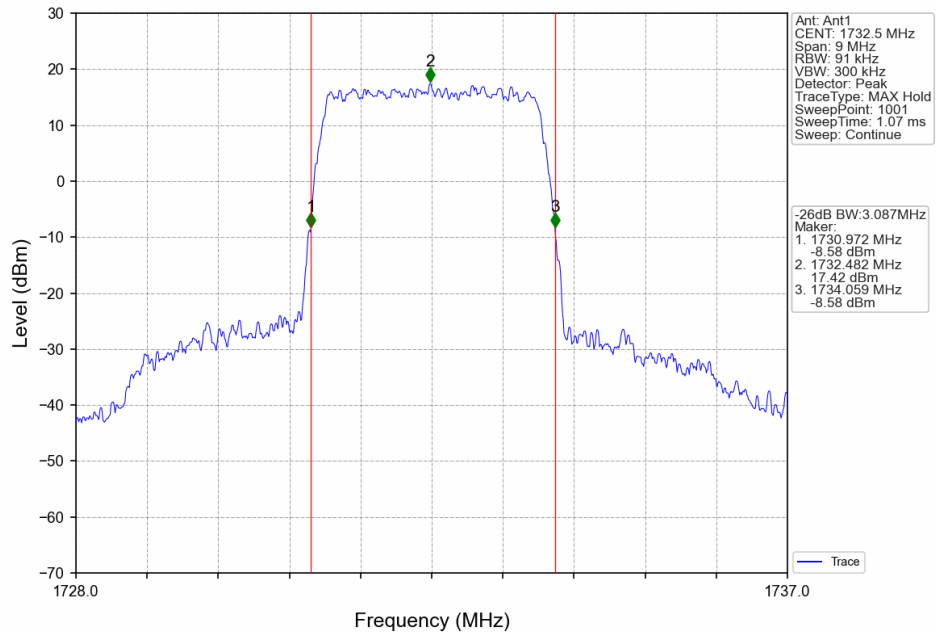
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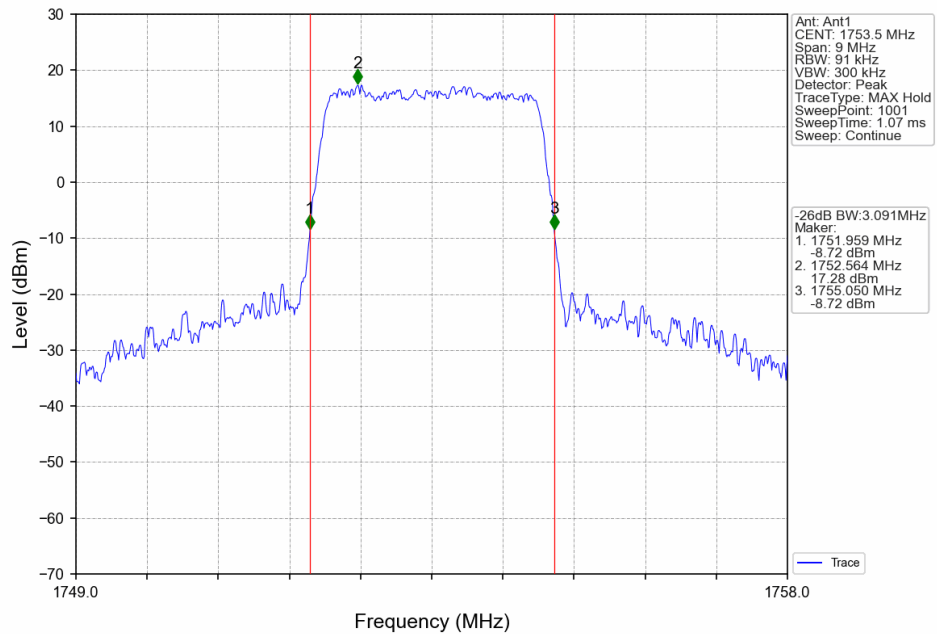
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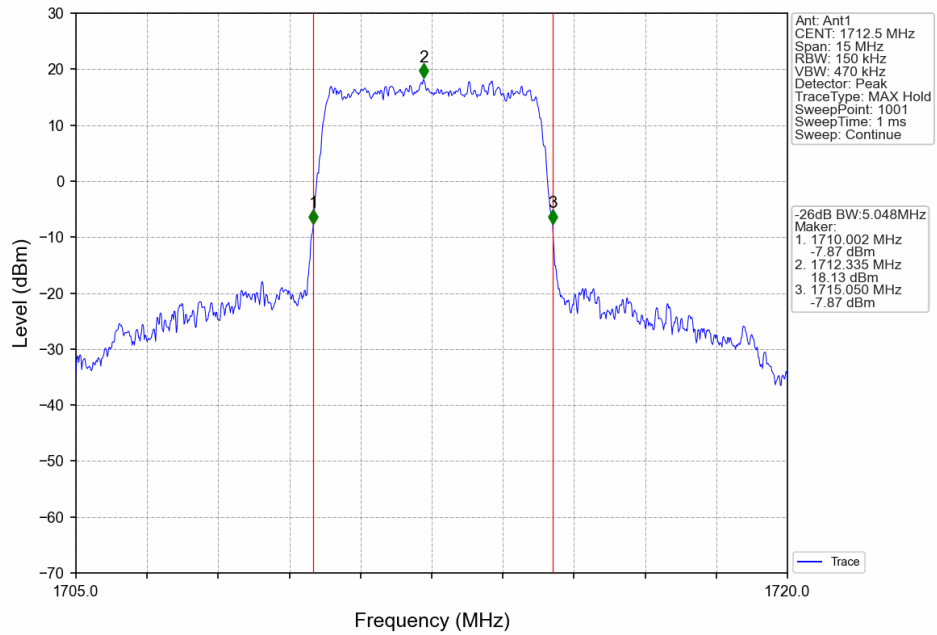
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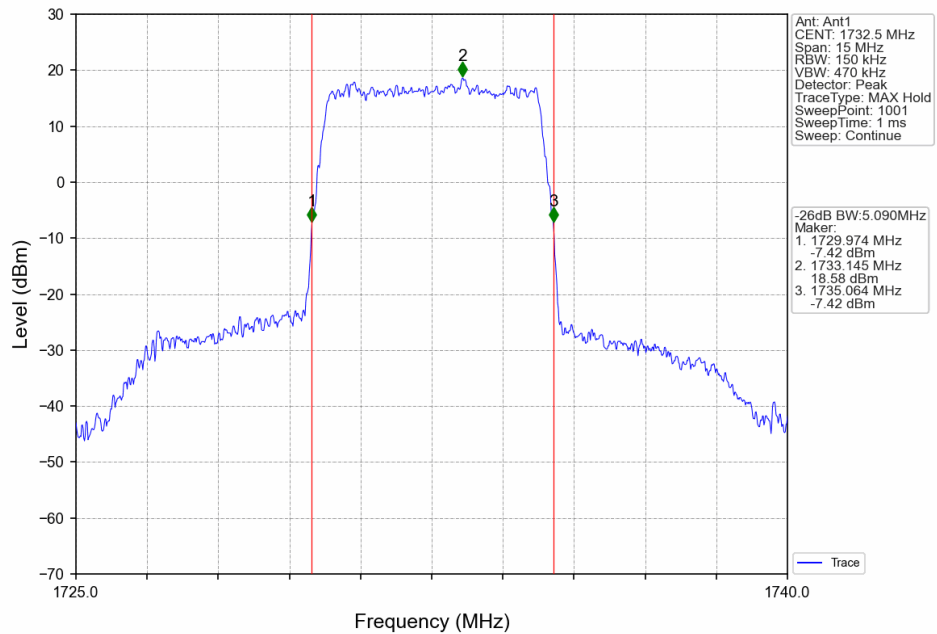
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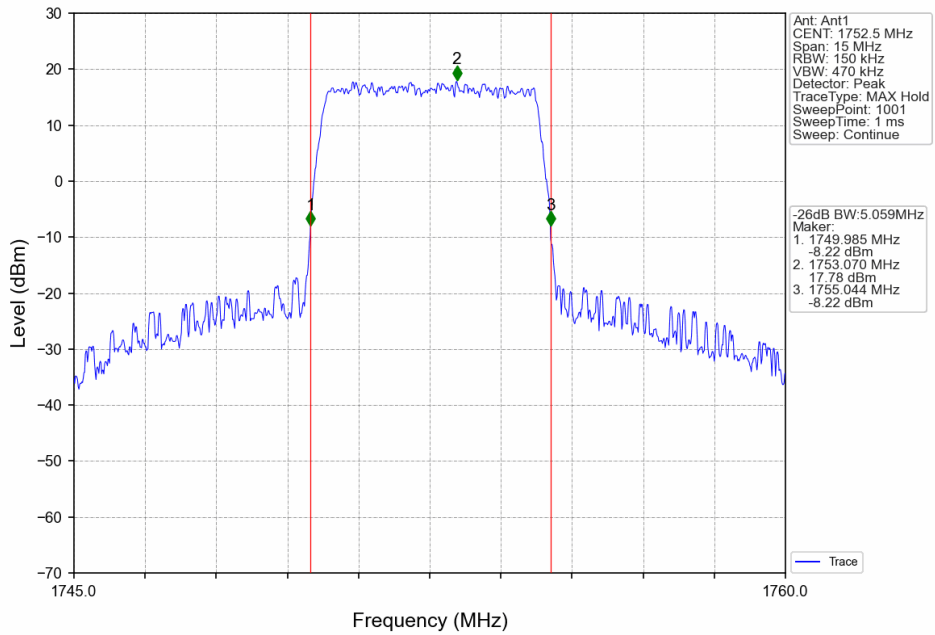
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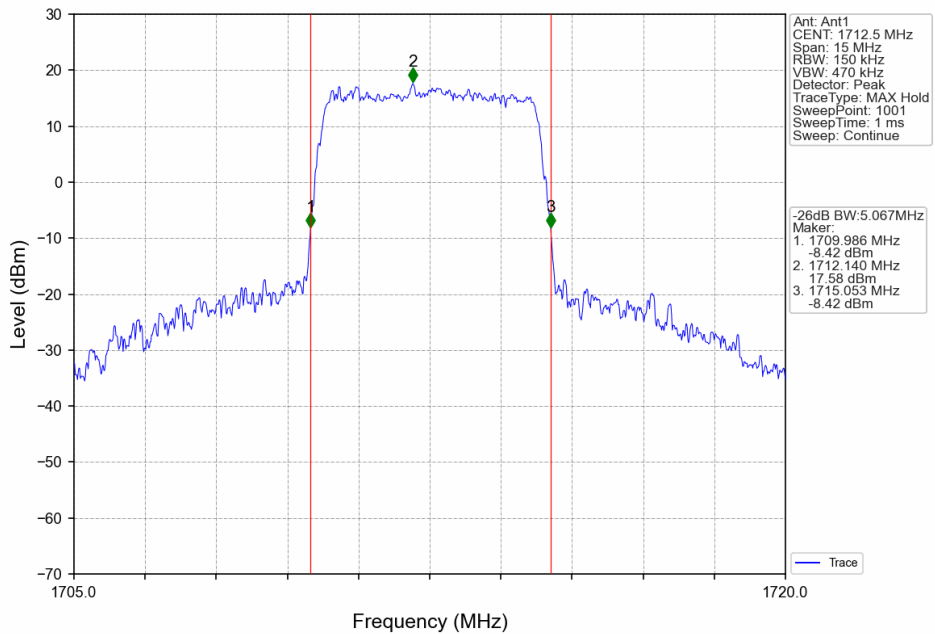
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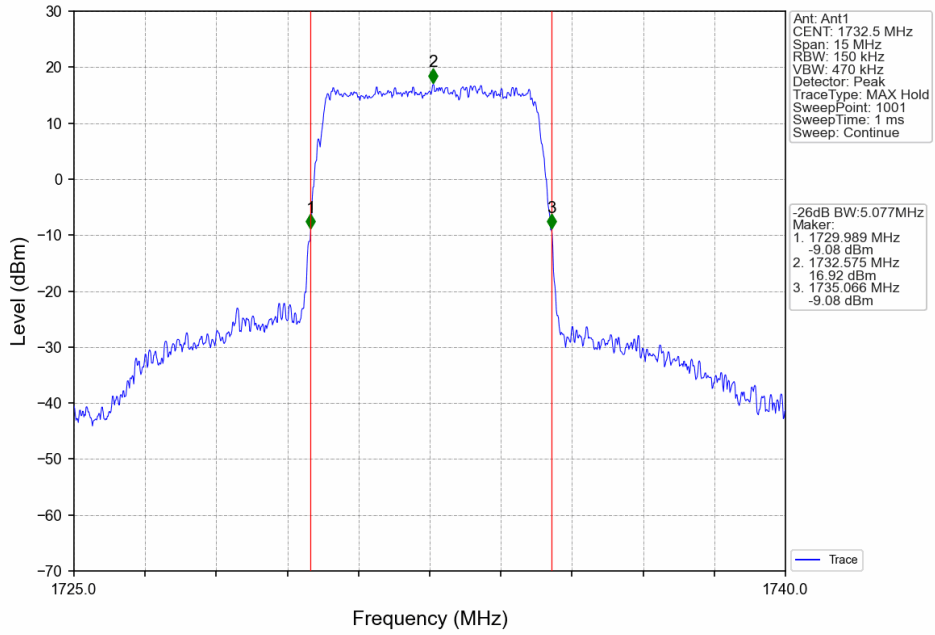
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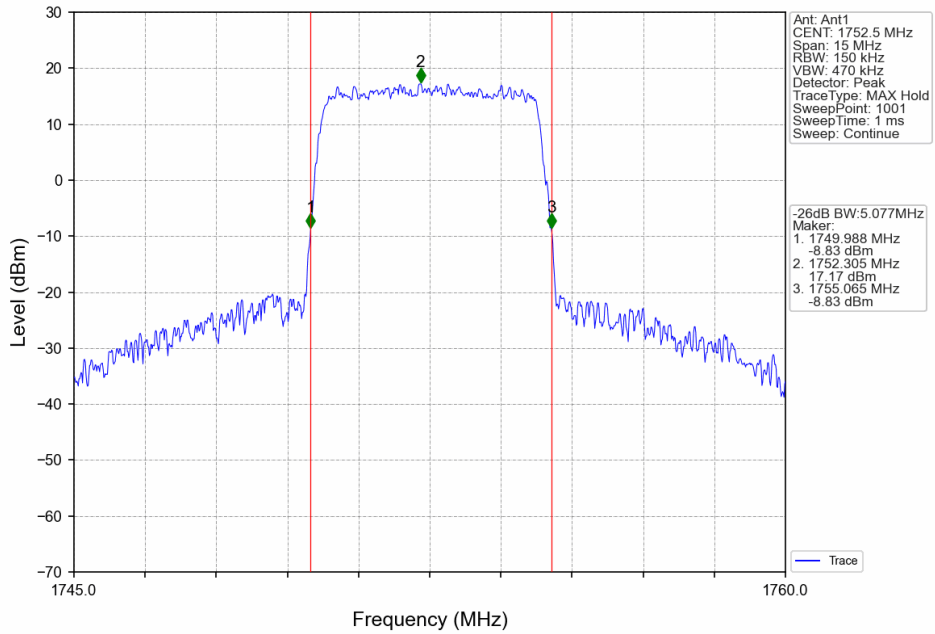
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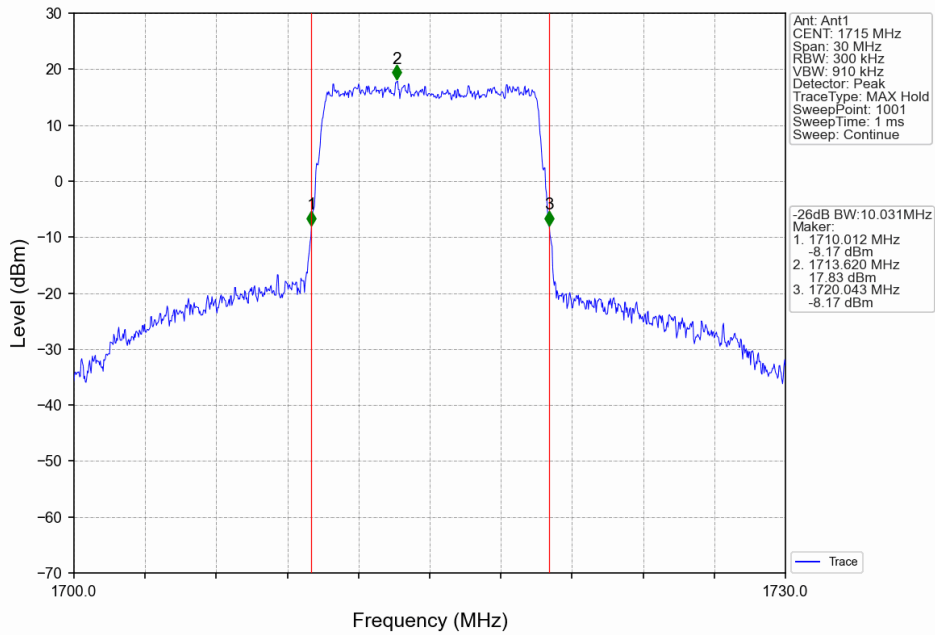
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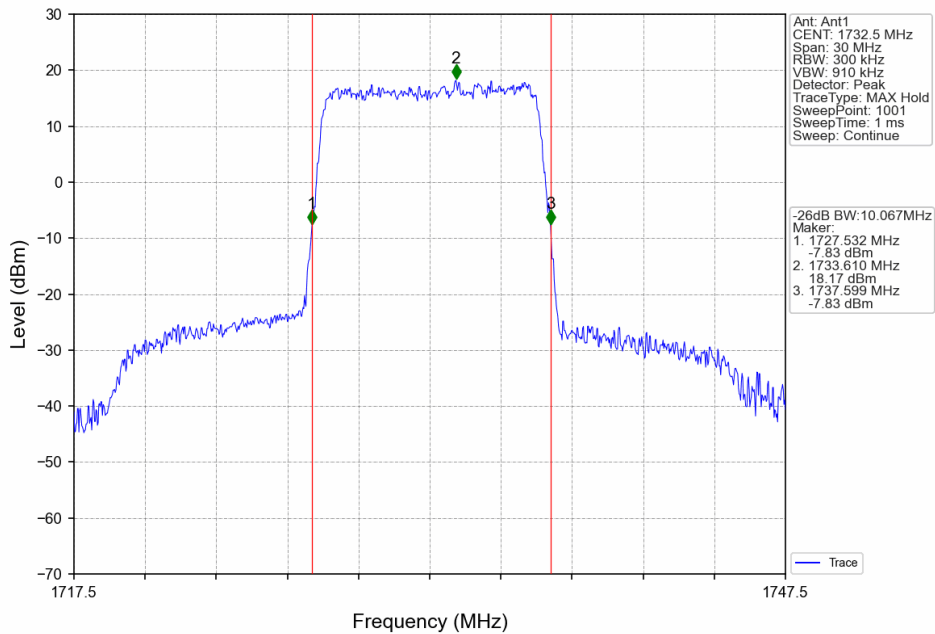
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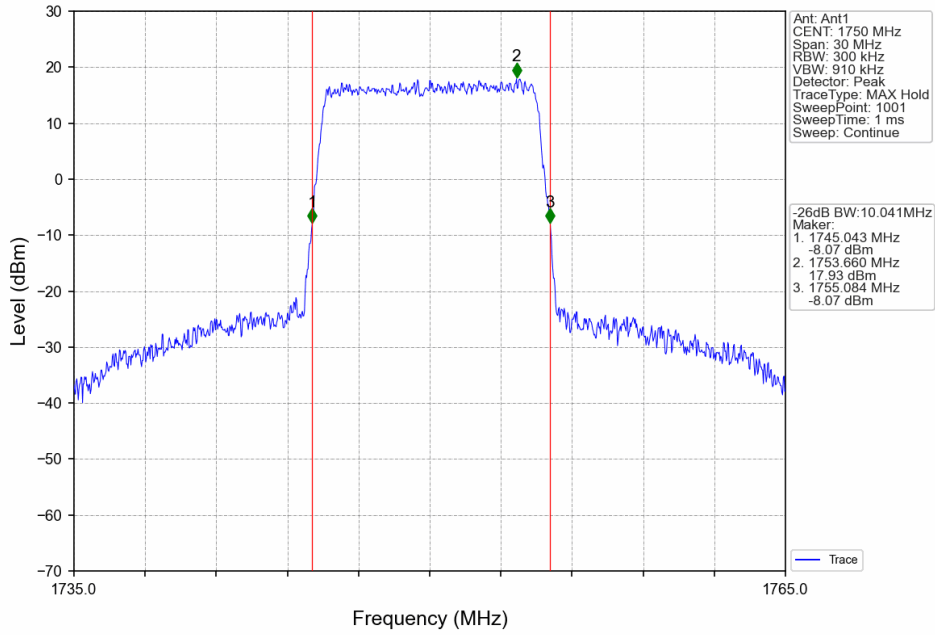
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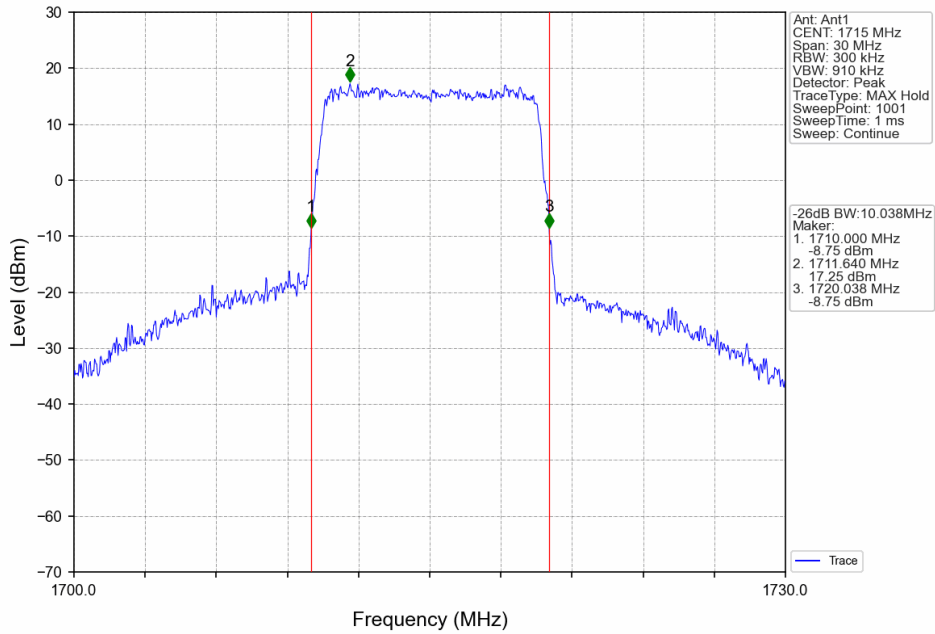
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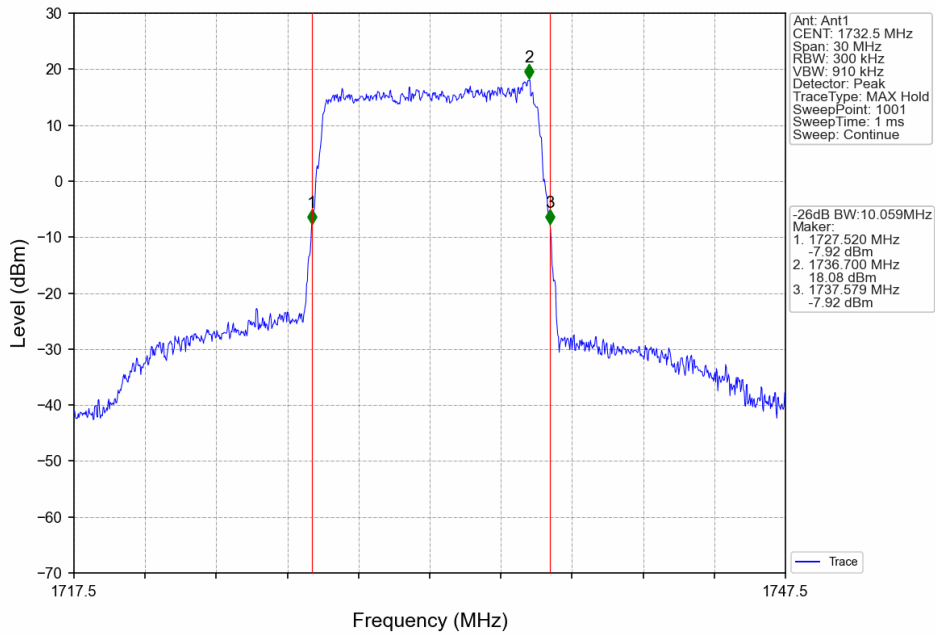


Band4_10MHz_16QAM_LCH_1715MHz_RB_50_0_NTNV





Band4_10MHz_16QAM_MCH_1732.5MHz_RB_50_0_NTNV



Band4_10MHz_16QAM_HCH_1750MHz_RB_50_0_NTNV

