

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	23.42	1.60	25.02	<=30	Pass
			5	23.41	1.60	25.01	<=30	Pass
		6	0	22.29	1.60	23.89	<=30	Pass
	1732.5	1	0	23.37	1.60	24.97	<=30	Pass
			5	23.37	1.60	24.97	<=30	Pass
		6	0	22.31	1.60	23.91	<=30	Pass
	1754.3	1	0	23.58	1.60	25.18	<=30	Pass
			5	23.57	1.60	25.17	<=30	Pass
		6	0	22.49	1.60	24.09	<=30	Pass
16QAM	1710.7	1	0	22.34	1.60	23.94	<=30	Pass
			5	22.43	1.60	24.03	<=30	Pass
		6	0	21.32	1.60	22.92	<=30	Pass
	1732.5	1	0	22.23	1.60	23.83	<=30	Pass
			5	22.22	1.60	23.82	<=30	Pass
		6	0	21.36	1.60	22.96	<=30	Pass
	1754.3	1	0	22.59	1.60	24.19	<=30	Pass
			5	22.56	1.60	24.16	<=30	Pass
		6	0	21.60	1.60	23.20	<=30	Pass
64QAM	1710.7	1	0	20.99	1.60	22.59	<=30	Pass
			5	21.41	1.60	23.01	<=30	Pass
		6	0	20.07	1.60	21.67	<=30	Pass
	1732.5	1	0	21.45	1.60	23.05	<=30	Pass
			5	21.35	1.60	22.95	<=30	Pass
		6	0	20.34	1.60	21.94	<=30	Pass
	1754.3	1	0	21.58	1.60	23.18	<=30	Pass
			5	21.59	1.60	23.19	<=30	Pass
		6	0	20.48	1.60	22.08	<=30	Pass
256QAM	1710.7	1	0	18.57	1.60	20.17	<=30	Pass
			5	18.65	1.60	20.25	<=30	Pass
		6	0	18.58	1.60	20.18	<=30	Pass
	1732.5	1	0	18.46	1.60	20.06	<=30	Pass
			5	18.53	1.60	20.13	<=30	Pass
		6	0	18.25	1.60	19.85	<=30	Pass
	1754.3	1	0	18.81	1.60	20.41	<=30	Pass
			5	18.76	1.60	20.36	<=30	Pass
		6	0	18.74	1.60	20.34	<=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	23.40	1.60	25.00	<=30	Pass
			14	23.26	1.60	24.86	<=30	Pass
		15	0	22.36	1.60	23.96	<=30	Pass
	1732.5	1	0	23.49	1.60	25.09	<=30	Pass

	1753.5		14	23.31	1.60	24.91	<=30	Pass
		15	0	22.42	1.60	24.02	<=30	Pass
		1	0	23.50	1.60	25.10	<=30	Pass
			14	23.39	1.60	24.99	<=30	Pass
		15	0	22.57	1.60	24.17	<=30	Pass
16QAM	1711.5	1	0	22.43	1.60	24.03	<=30	Pass
			14	22.52	1.60	24.12	<=30	Pass
		15	0	21.33	1.60	22.93	<=30	Pass
	1732.5	1	0	22.41	1.60	24.01	<=30	Pass
			14	22.43	1.60	24.03	<=30	Pass
		15	0	21.32	1.60	22.92	<=30	Pass
	1753.5	1	0	22.75	1.60	24.35	<=30	Pass
			14	22.66	1.60	24.26	<=30	Pass
		15	0	21.62	1.60	23.22	<=30	Pass
64QAM	1711.5	1	0	21.12	1.60	22.72	<=30	Pass
			14	21.50	1.60	23.10	<=30	Pass
		15	0	20.32	1.60	21.92	<=30	Pass
	1732.5	1	0	21.35	1.60	22.95	<=30	Pass
			14	21.43	1.60	23.03	<=30	Pass
		15	0	20.32	1.60	21.92	<=30	Pass
	1753.5	1	0	21.60	1.60	23.20	<=30	Pass
			14	21.73	1.60	23.33	<=30	Pass
		15	0	20.56	1.60	22.16	<=30	Pass
256QAM	1711.5	1	0	18.62	1.60	20.22	<=30	Pass
			14	18.64	1.60	20.24	<=30	Pass
		15	0	18.54	1.60	20.14	<=30	Pass
	1732.5	1	0	18.59	1.60	20.19	<=30	Pass
			14	18.46	1.60	20.06	<=30	Pass
		15	0	18.54	1.60	20.14	<=30	Pass
	1753.5	1	0	18.69	1.60	20.29	<=30	Pass
			14	18.72	1.60	20.32	<=30	Pass
		15	0	18.74	1.60	20.34	<=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	23.47	1.60	25.07	<=30	Pass
			24	23.46	1.60	25.06	<=30	Pass
		25	0	22.46	1.60	24.06	<=30	Pass
	1732.5	1	0	23.30	1.60	24.90	<=30	Pass
			24	23.21	1.60	24.81	<=30	Pass
		25	0	22.49	1.60	24.09	<=30	Pass
	1752.5	1	0	23.14	1.60	24.74	<=30	Pass
			24	23.18	1.60	24.78	<=30	Pass
		25	0	22.69	1.60	24.29	<=30	Pass
16QAM	1712.5	1	0	22.50	1.60	24.10	<=30	Pass
			24	22.56	1.60	24.16	<=30	Pass
		25	0	21.36	1.60	22.96	<=30	Pass
	1732.5	1	0	21.79	1.60	23.39	<=30	Pass
			24	22.55	1.60	24.15	<=30	Pass
		25	0	21.31	1.60	22.91	<=30	Pass
	1752.5	1	0	22.49	1.60	24.09	<=30	Pass
			24	22.81	1.60	24.41	<=30	Pass
		25	0	21.59	1.60	23.19	<=30	Pass

64QAM	1712.5	1	0	21.04	1.60	22.64	<=30	Pass
			24	21.46	1.60	23.06	<=30	Pass
		25	0	20.35	1.60	21.95	<=30	Pass
	1732.5	1	0	21.42	1.60	23.02	<=30	Pass
			24	21.54	1.60	23.14	<=30	Pass
		25	0	20.46	1.60	22.06	<=30	Pass
	1752.5	1	0	21.39	1.60	22.99	<=30	Pass
			24	21.35	1.60	22.95	<=30	Pass
		25	0	20.63	1.60	22.23	<=30	Pass
256QAM	1712.5	1	0	18.49	1.60	20.09	<=30	Pass
			24	18.53	1.60	20.13	<=30	Pass
		25	0	18.38	1.60	19.98	<=30	Pass
	1732.5	1	0	18.65	1.60	20.25	<=30	Pass
			24	18.65	1.60	20.25	<=30	Pass
		25	0	18.60	1.60	20.20	<=30	Pass
	1752.5	1	0	18.35	1.60	19.95	<=30	Pass
			24	18.85	1.60	20.45	<=30	Pass
		25	0	18.82	1.60	20.42	<=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	23.24	1.60	24.84	<=30	Pass
			49	23.51	1.60	25.11	<=30	Pass
		50	0	22.45	1.60	24.05	<=30	Pass
	1732.5	1	0	23.24	1.60	24.84	<=30	Pass
			49	23.52	1.60	25.12	<=30	Pass
		50	0	22.34	1.60	23.94	<=30	Pass
	1750	1	0	23.55	1.60	25.15	<=30	Pass
			49	23.55	1.60	25.15	<=30	Pass
		50	0	22.66	1.60	24.26	<=30	Pass
16QAM	1715	1	0	22.64	1.60	24.24	<=30	Pass
			49	22.52	1.60	24.12	<=30	Pass
		50	0	21.37	1.60	22.97	<=30	Pass
	1732.5	1	0	22.79	1.60	24.39	<=30	Pass
			49	22.75	1.60	24.35	<=30	Pass
		50	0	21.44	1.60	23.04	<=30	Pass
	1750	1	0	22.76	1.60	24.36	<=30	Pass
			49	22.95	1.60	24.55	<=30	Pass
		50	0	21.61	1.60	23.21	<=30	Pass
64QAM	1715	1	0	21.44	1.60	23.04	<=30	Pass
			49	21.19	1.60	22.79	<=30	Pass
		50	0	20.30	1.60	21.90	<=30	Pass
	1732.5	1	0	21.59	1.60	23.19	<=30	Pass
			49	21.68	1.60	23.28	<=30	Pass
		50	0	20.50	1.60	22.10	<=30	Pass
	1750	1	0	21.44	1.60	23.04	<=30	Pass
			49	21.63	1.60	23.23	<=30	Pass
		50	0	20.54	1.60	22.14	<=30	Pass
256QAM	1715	1	0	18.73	1.60	20.33	<=30	Pass
			49	18.56	1.60	20.16	<=30	Pass
		50	0	18.51	1.60	20.11	<=30	Pass
	1732.5	1	0	18.70	1.60	20.30	<=30	Pass
			49	18.75	1.60	20.35	<=30	Pass

	1750	50	0	18.61	1.60	20.21	<=30	Pass
		1	0	18.84	1.60	20.44	<=30	Pass
			49	18.87	1.60	20.47	<=30	Pass
		50	0	18.77	1.60	20.37	<=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	23.48	1.60	25.08	<=30	Pass
			74	23.45	1.60	25.05	<=30	Pass
		75	0	22.22	1.60	23.82	<=30	Pass
	1732.5	1	0	23.33	1.60	24.93	<=30	Pass
			74	23.59	1.60	25.19	<=30	Pass
		75	0	22.45	1.60	24.05	<=30	Pass
	1747.5	1	0	23.57	1.60	25.17	<=30	Pass
			74	23.63	1.60	25.23	<=30	Pass
		75	0	22.64	1.60	24.24	<=30	Pass
16QAM	1717.5	1	0	22.07	1.60	23.67	<=30	Pass
			74	22.70	1.60	24.30	<=30	Pass
		75	0	21.43	1.60	23.03	<=30	Pass
	1732.5	1	0	22.62	1.60	24.22	<=30	Pass
			74	22.81	1.60	24.41	<=30	Pass
		75	0	21.44	1.60	23.04	<=30	Pass
	1747.5	1	0	22.75	1.60	24.35	<=30	Pass
			74	22.63	1.60	24.23	<=30	Pass
		75	0	21.46	1.60	23.06	<=30	Pass
64QAM	1717.5	1	0	21.31	1.60	22.91	<=30	Pass
			74	21.54	1.60	23.14	<=30	Pass
		75	0	20.39	1.60	21.99	<=30	Pass
	1732.5	1	0	21.44	1.60	23.04	<=30	Pass
			74	21.69	1.60	23.29	<=30	Pass
		75	0	20.49	1.60	22.09	<=30	Pass
	1747.5	1	0	21.69	1.60	23.29	<=30	Pass
			74	21.42	1.60	23.02	<=30	Pass
		75	0	20.66	1.60	22.26	<=30	Pass
256QAM	1717.5	1	0	18.68	1.60	20.28	<=30	Pass
			74	18.63	1.60	20.23	<=30	Pass
		75	0	18.60	1.60	20.20	<=30	Pass
	1732.5	1	0	18.59	1.60	20.19	<=30	Pass
			74	18.81	1.60	20.41	<=30	Pass
		75	0	18.66	1.60	20.26	<=30	Pass
	1747.5	1	0	18.72	1.60	20.32	<=30	Pass
			74	18.95	1.60	20.55	<=30	Pass
		75	0	18.81	1.60	20.41	<=30	Pass

Note1: EIRP=Conducted Power+Antenna Gain

1.1.6 B4_20MHz_EIRP

Band: 4 / Bandwidth: 20MHz / NTNV								
Modulation	Frequency (MHz)	RB Allocation		Conducted Power (dBm)	Gain (dBi)	EIRP (dBm)		Verdict
		Size	Offset			Result	Limit	
QPSK	1720	1	0	23.38	1.60	24.98	<=30	Pass
			99	23.43	1.60	25.03	<=30	Pass

		100	0	22.39	1.60	23.99	<=30	Pass
	1732.5	1	0	23.32	1.60	24.92	<=30	Pass
			99	23.61	1.60	25.21	<=30	Pass
		100	0	22.53	1.60	24.13	<=30	Pass
	1745	1	0	23.34	1.60	24.94	<=30	Pass
			99	23.68	1.60	25.28	<=30	Pass
100		0	22.63	1.60	24.23	<=30	Pass	
16QAM	1720	1	0	22.64	1.60	24.24	<=30	Pass
			99	22.89	1.60	24.49	<=30	Pass
		100	0	21.40	1.60	23.00	<=30	Pass
	1732.5	1	0	22.57	1.60	24.17	<=30	Pass
			99	22.97	1.60	24.57	<=30	Pass
		100	0	21.49	1.60	23.09	<=30	Pass
	1745	1	0	22.83	1.60	24.43	<=30	Pass
			99	22.98	1.60	24.58	<=30	Pass
		100	0	21.60	1.60	23.20	<=30	Pass
64QAM	1720	1	0	21.39	1.60	22.99	<=30	Pass
			99	21.29	1.60	22.89	<=30	Pass
		100	0	20.42	1.60	22.02	<=30	Pass
	1732.5	1	0	21.56	1.60	23.16	<=30	Pass
			99	21.79	1.60	23.39	<=30	Pass
		100	0	20.50	1.60	22.10	<=30	Pass
	1745	1	0	21.73	1.60	23.33	<=30	Pass
			99	21.91	1.60	23.51	<=30	Pass
		100	0	20.57	1.60	22.17	<=30	Pass
256QAM	1720	1	0	18.65	1.60	20.25	<=30	Pass
			99	18.81	1.60	20.41	<=30	Pass
		100	0	18.55	1.60	20.15	<=30	Pass
	1732.5	1	0	18.63	1.60	20.23	<=30	Pass
			99	18.92	1.60	20.52	<=30	Pass
		100	0	18.65	1.60	20.25	<=30	Pass
	1745	1	0	18.78	1.60	20.38	<=30	Pass
			99	18.87	1.60	20.47	<=30	Pass
		100	0	18.72	1.60	20.32	<=30	Pass
Note1: EIRP=Conducted Power+Antenna Gain								

Note1: EIRP=Conducted Power+Antenna Gain

2. Frequency Stability

2.1 Test Result

2.1.1 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	1732.5	50	0	20	LV	-1.400	-0.0008	-2.5 to 2.5	Pass
					NV	-2.800	-0.0016	-2.5 to 2.5	Pass
					HV	-3.700	-0.0021	-2.5 to 2.5	Pass
				-30	NV	0.200	0.0001	-2.5 to 2.5	Pass
				-20	NV	1.400	0.0008	-2.5 to 2.5	Pass
				-10	NV	-4.400	-0.0025	-2.5 to 2.5	Pass
				0	NV	-3.500	-0.0020	-2.5 to 2.5	Pass
				10	NV	-4.500	-0.0026	-2.5 to 2.5	Pass
				30	NV	-2.300	-0.0013	-2.5 to 2.5	Pass
				40	NV	-2.900	-0.0017	-2.5 to 2.5	Pass
				50	NV	-3.100	-0.0018	-2.5 to 2.5	Pass

3. 99% & 26dB Bandwidth

3.1 Test Result

3.1.1 Band4_OBW

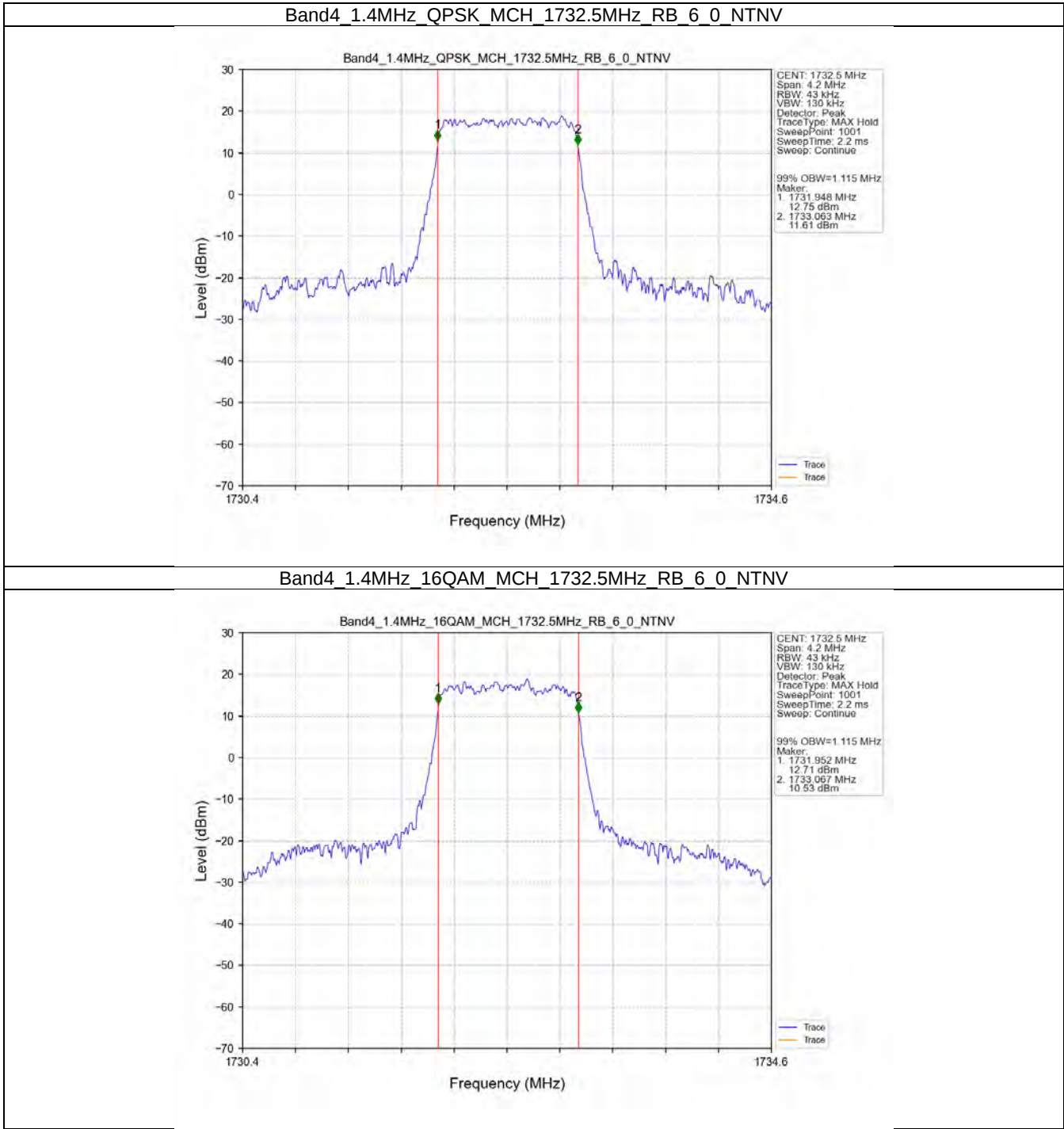
Band: 4 / NTNV							
Bandwidth (MHz)	Modulation	Frequency (MHz)	RB Allocation		99% Occupied Bandwidth (MHz)		Verdict
			Size	Offset	Result	Limit	
1.4	QPSK	1732.5	6	0	1.115	/	Pass
	16QAM	1732.5	6	0	1.115	/	Pass
3	QPSK	1732.5	15	0	2.725	/	Pass
	16QAM	1732.5	15	0	2.728	/	Pass
5	QPSK	1732.5	25	0	4.558	/	Pass
	16QAM	1732.5	25	0	4.534	/	Pass
10	QPSK	1732.5	50	0	9.067	/	Pass
	16QAM	1732.5	50	0	9.027	/	Pass
15	QPSK	1732.5	75	0	13.589	/	Pass
	16QAM	1732.5	75	0	13.572	/	Pass
20	QPSK	1732.5	100	0	18.121	/	Pass
	16QAM	1732.5	100	0	18.069	/	Pass

3.1.2 Band4_XDB

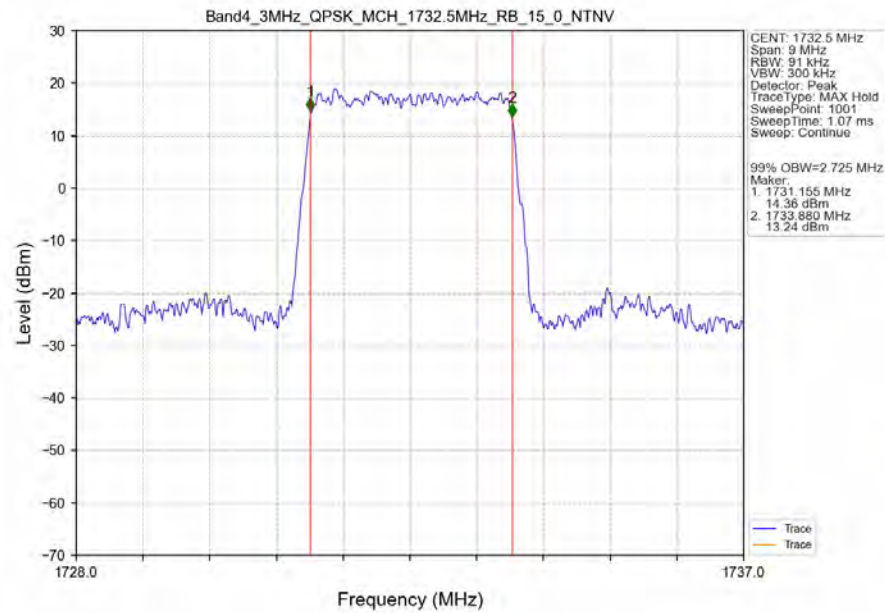
Band: 4 / NTNV							
Bandwidth (MHz)	Modulation	Frequency (MHz)	RB Allocation		26dB Bandwidth (MHz)		Verdict
			Size	Offset	Result	Limit	
1.4	QPSK	1732.5	6	0	1.317	/	Pass
	16QAM	1732.5	6	0	1.304	/	Pass
3	QPSK	1732.5	15	0	3.035	/	Pass
	16QAM	1732.5	15	0	3.037	/	Pass
5	QPSK	1732.5	25	0	4.993	/	Pass
	16QAM	1732.5	25	0	5.062	/	Pass
10	QPSK	1732.5	50	0	9.942	/	Pass
	16QAM	1732.5	50	0	9.906	/	Pass
15	QPSK	1732.5	75	0	14.885	/	Pass
	16QAM	1732.5	75	0	14.926	/	Pass
20	QPSK	1732.5	100	0	19.755	/	Pass
	16QAM	1732.5	100	0	19.745	/	Pass

3.2 Test Graph

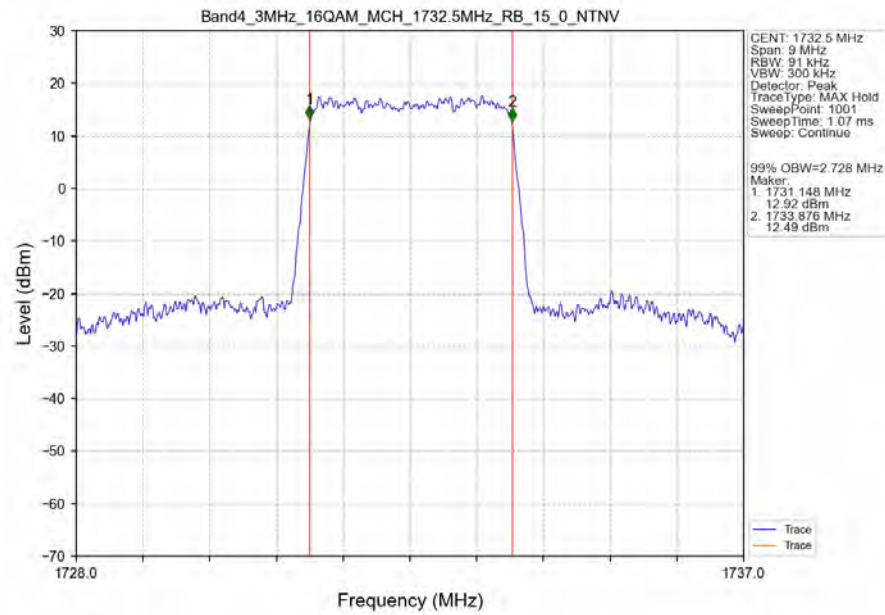
3.2.1 Band4_OBW



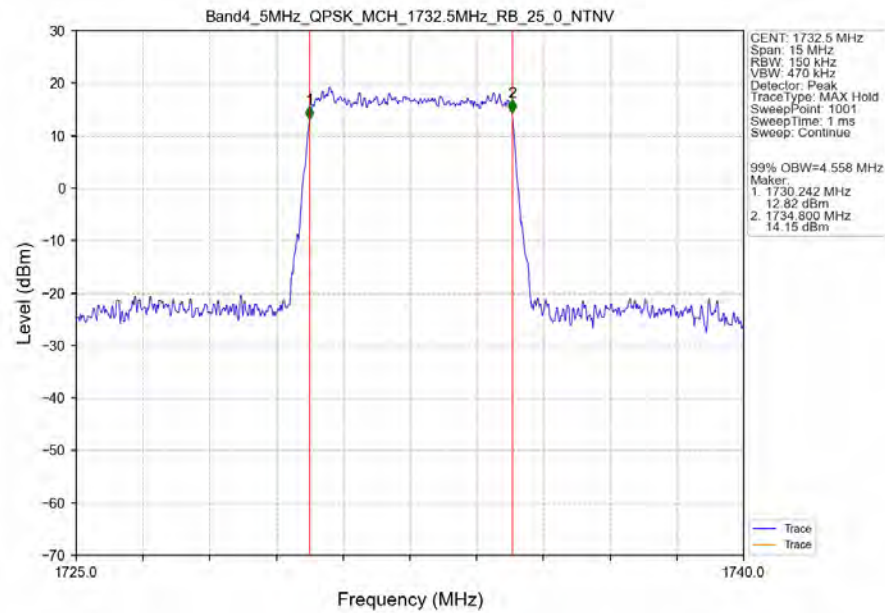
Band4_3MHz_QPSK_MCH_1732.5MHz_RB_15_0_NTNV



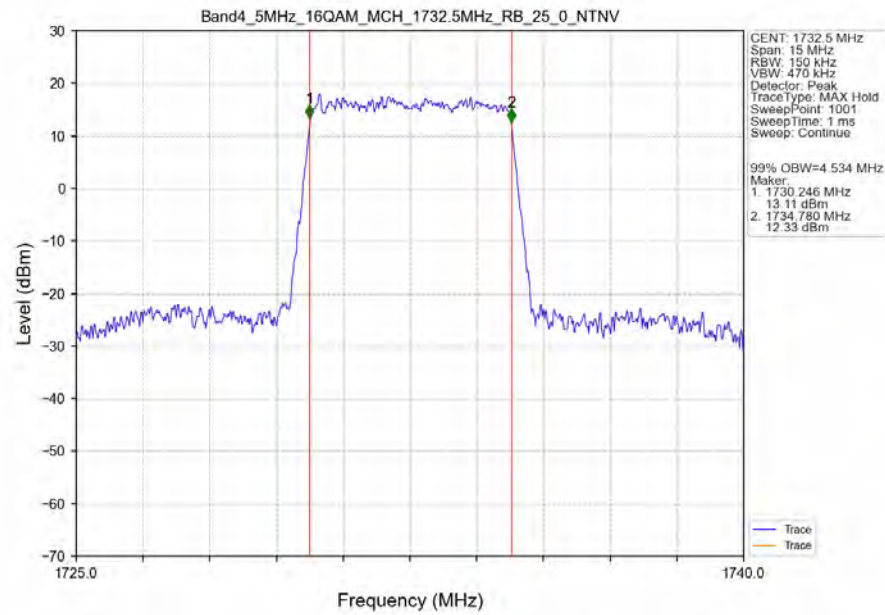
Band4_3MHz_16QAM_MCH_1732.5MHz_RB_15_0_NTNV



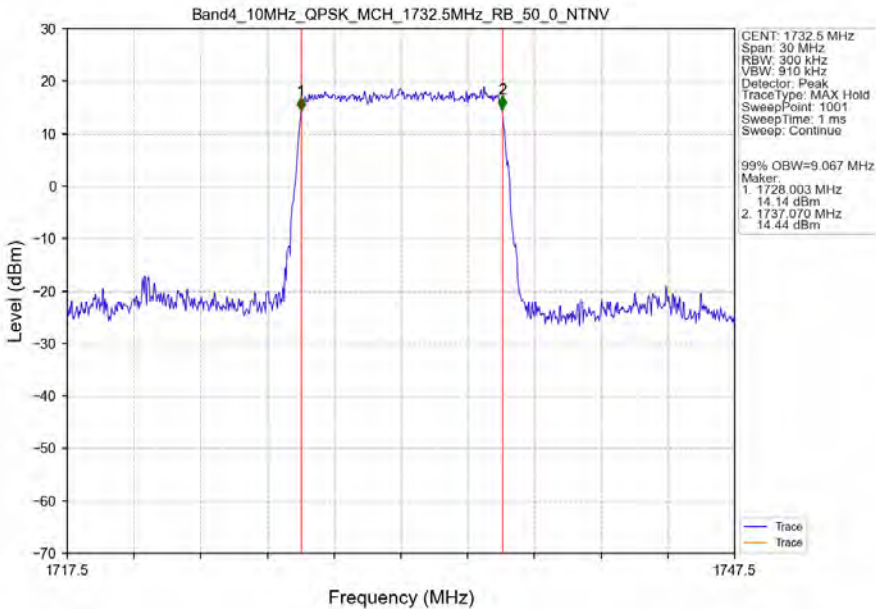
Band4 5MHz QPSK MCH 1732.5MHz RB 25 0 NTV



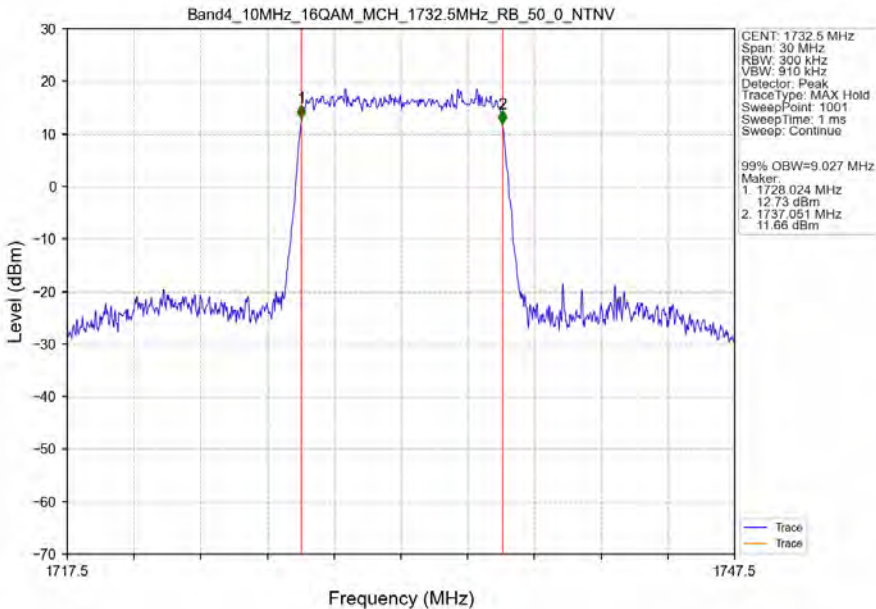
Band4 5MHz 16QAM MCH 1732.5MHz RB 25 0 NTV



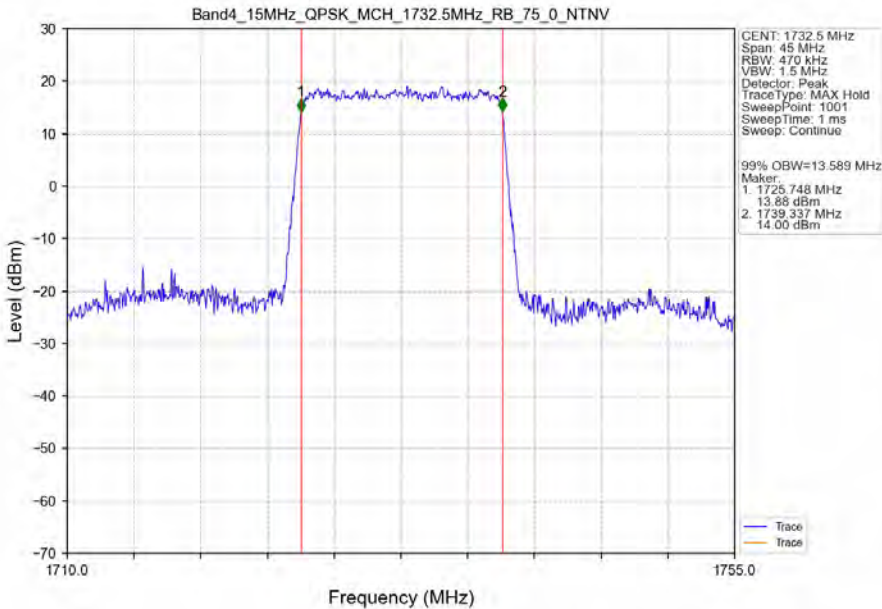
Band4 10MHz QPSK MCH 1732.5MHz RB 50 0 NTV



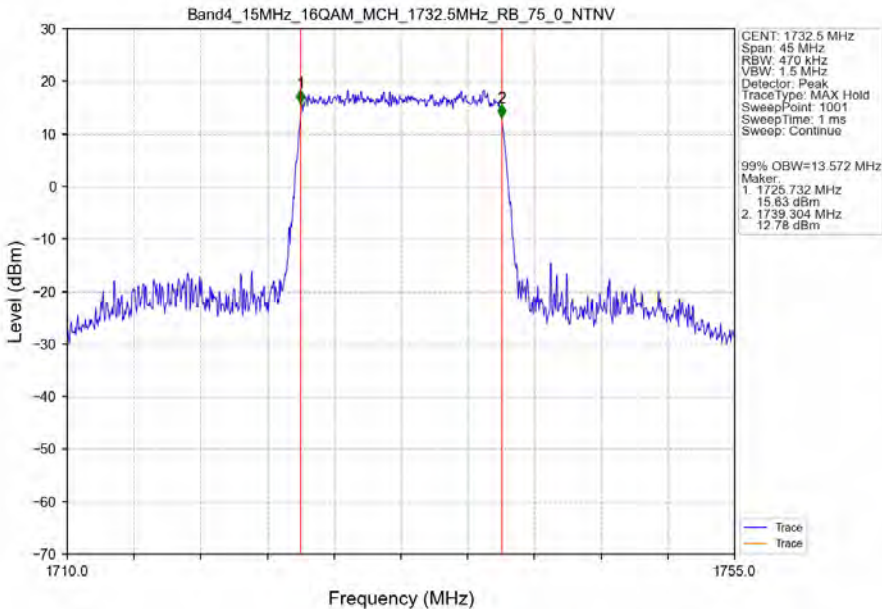
Band4 10MHz 16QAM MCH 1732.5MHz RB 50 0 NTV



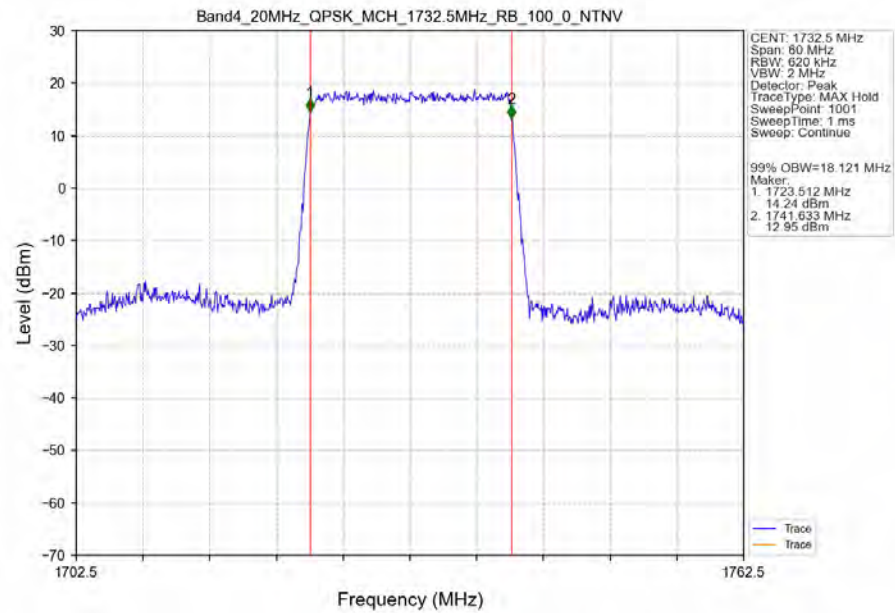
Band4 15MHz QPSK MCH 1732.5MHz RB 75 0 NTV



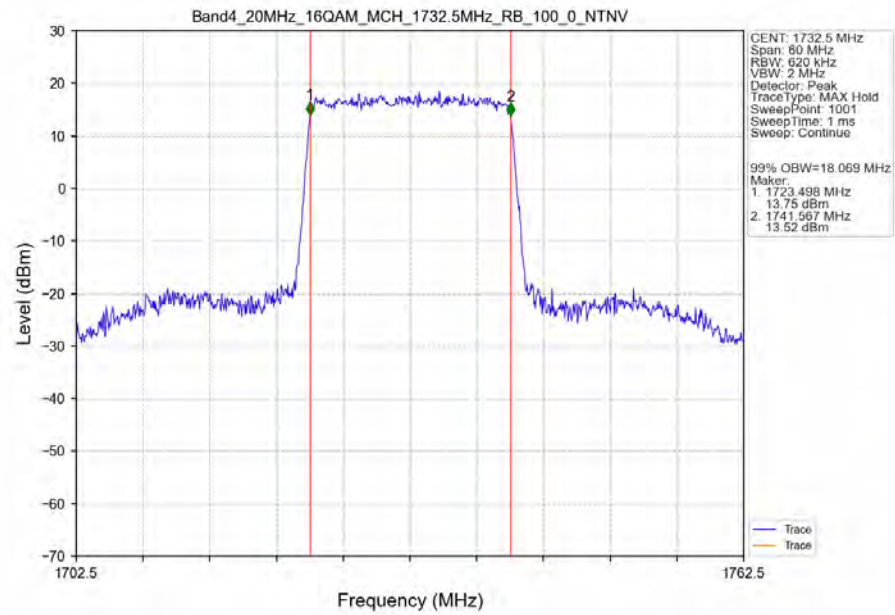
Band4 15MHz 16QAM MCH 1732.5MHz RB 75 0 NTV



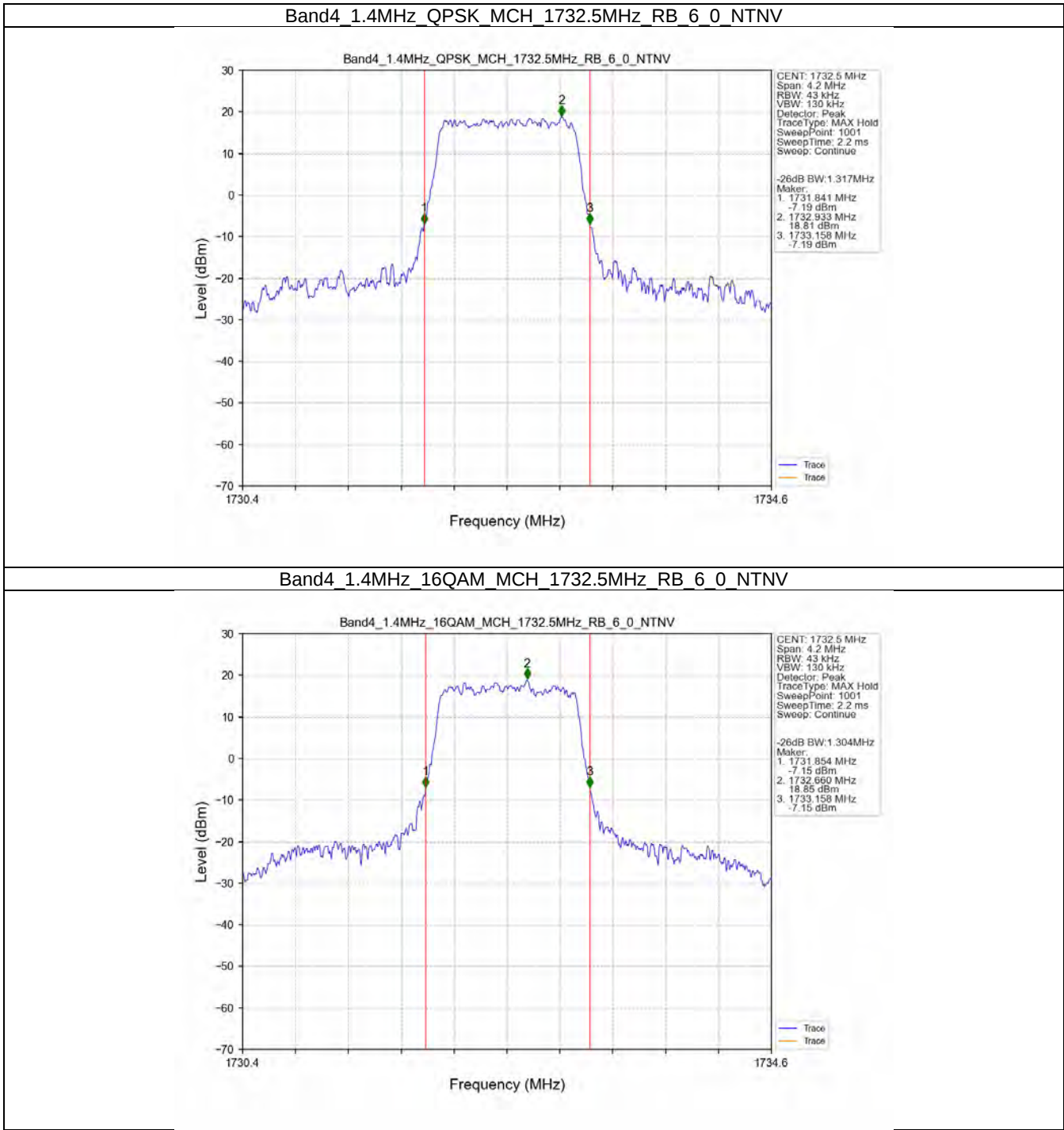
Band4 20MHz QPSK MCH 1732.5MHz RB 100 0 NTN



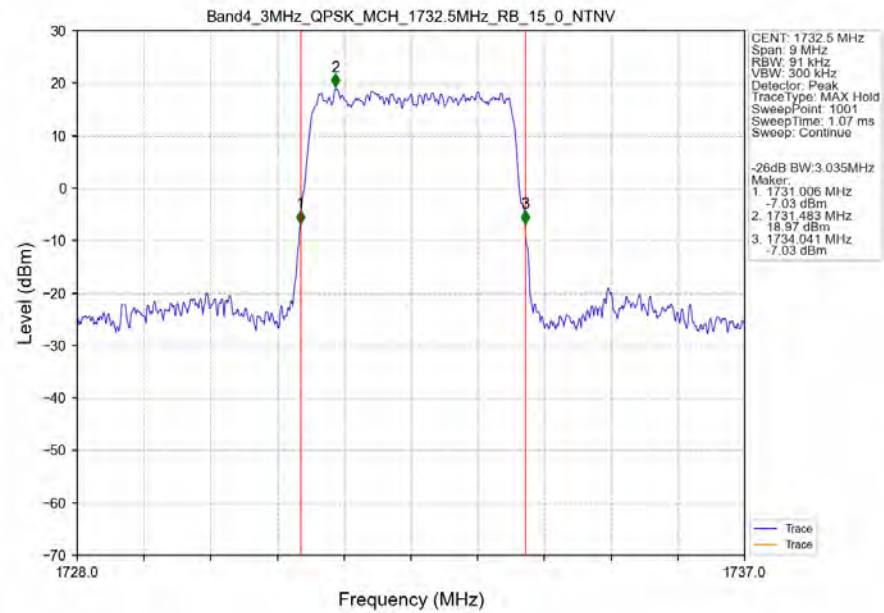
Band4 20MHz 16QAM MCH 1732.5MHz RB 100 0 NTN



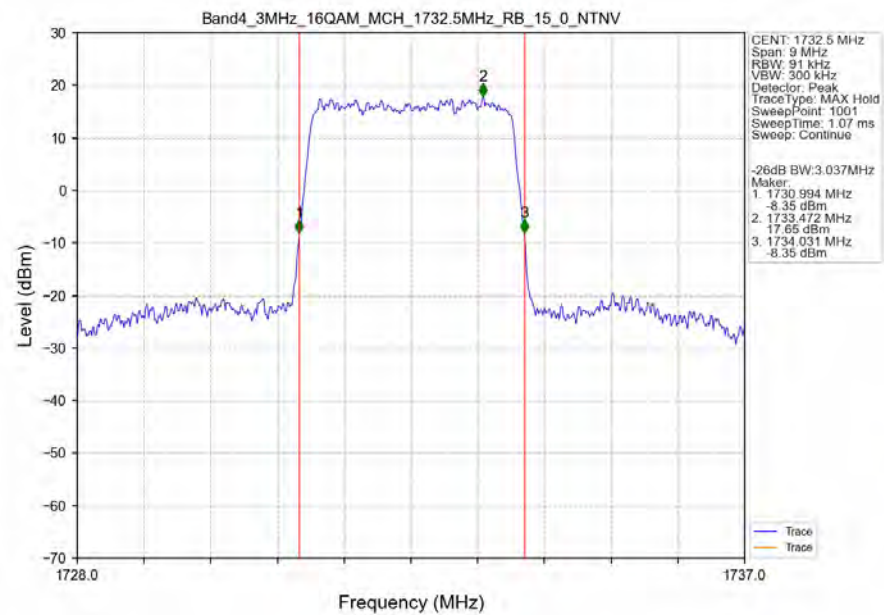
3.2.2 Band4_XDB



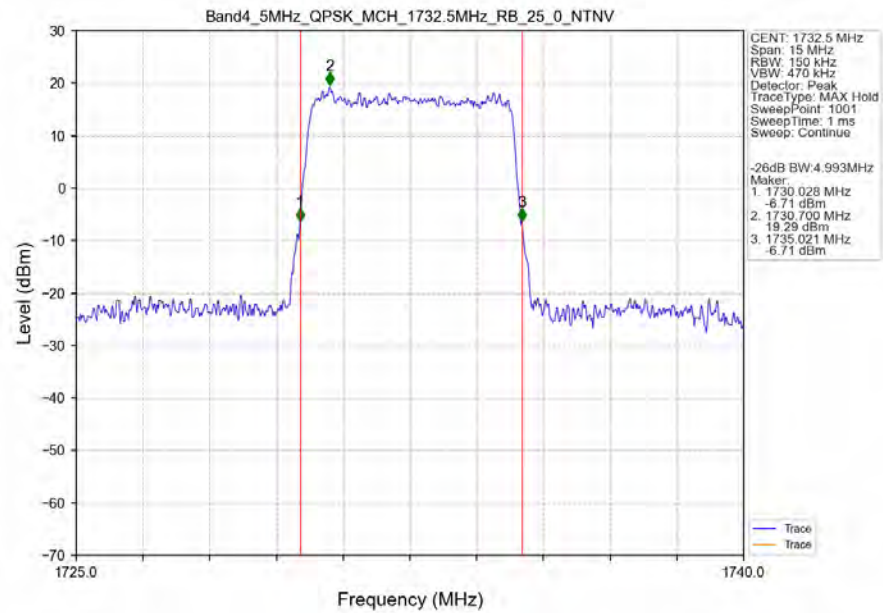
Band4_3MHz_QPSK_MCH_1732.5MHz_RB_15_0_NTNV



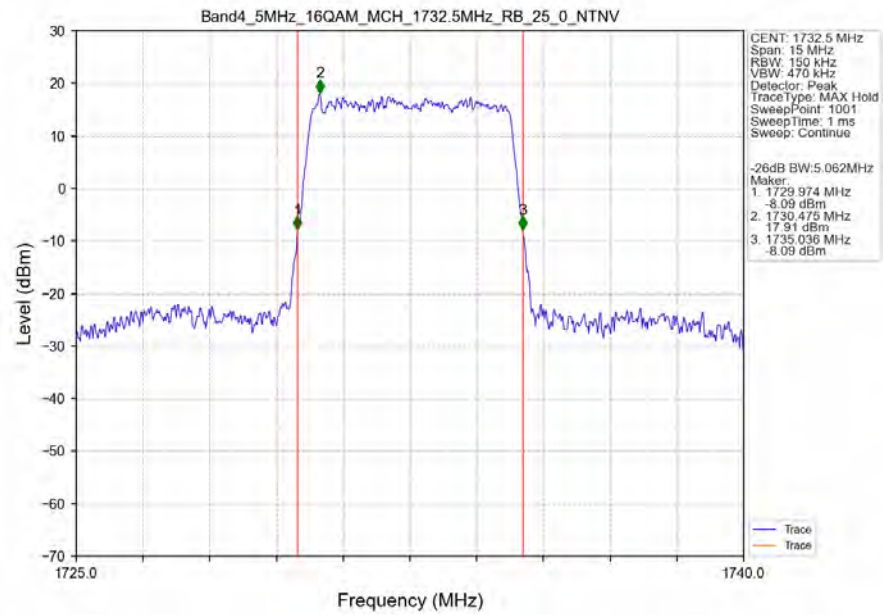
Band4_3MHz_16QAM_MCH_1732.5MHz_RB_15_0_NTNV



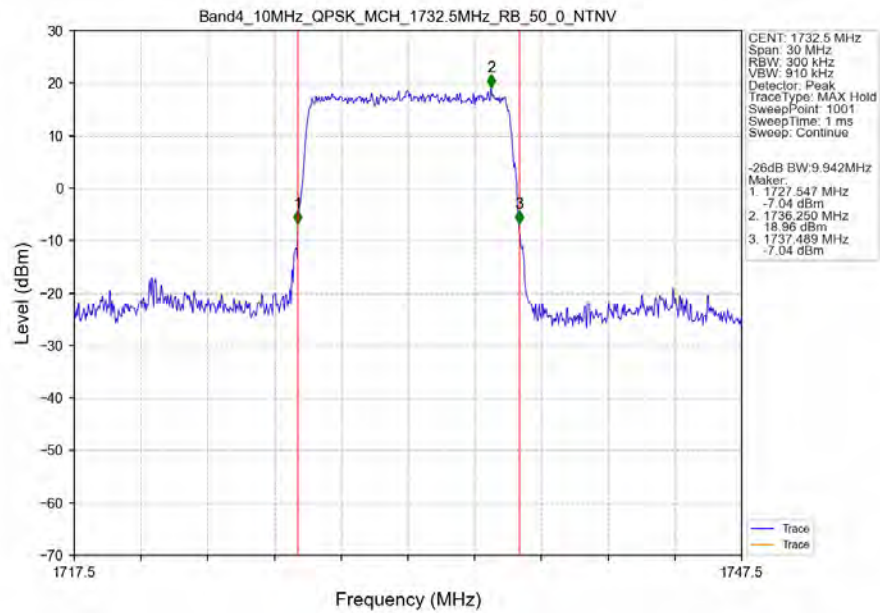
Band4_5MHz_QPSK_MCH_1732.5MHz_RB_25_0_NTNV



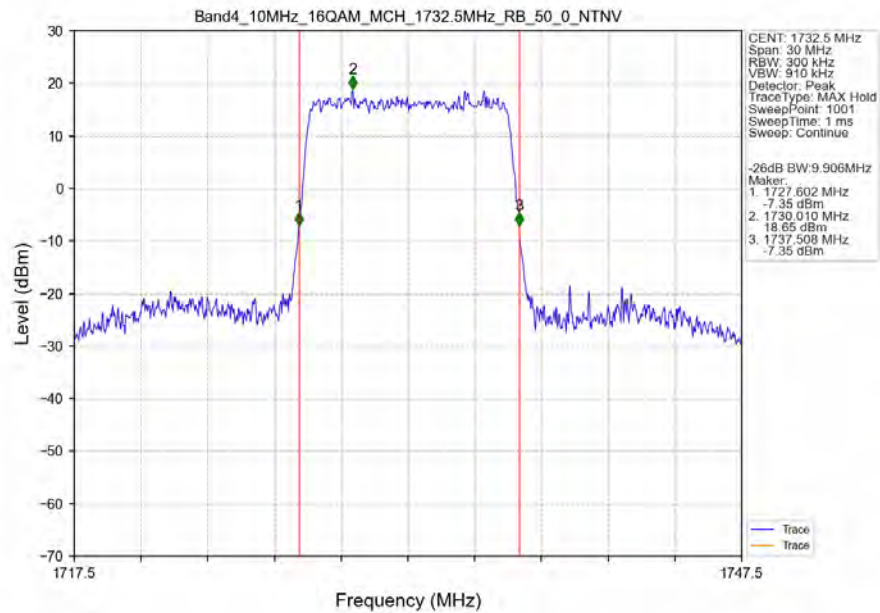
Band4_5MHz_16QAM_MCH_1732.5MHz_RB_25_0_NTNV



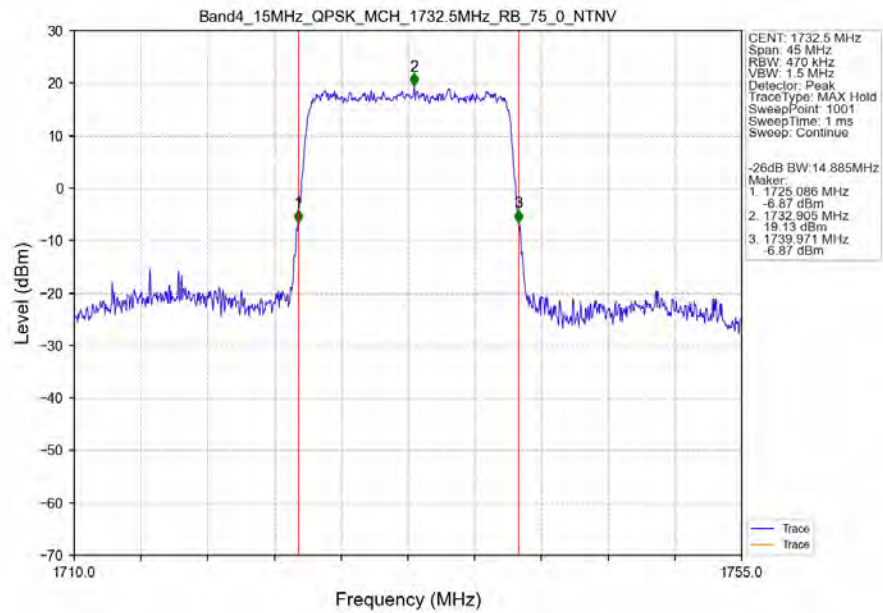
Band4 10MHz QPSK MCH 1732.5MHz RB 50 0 NTV



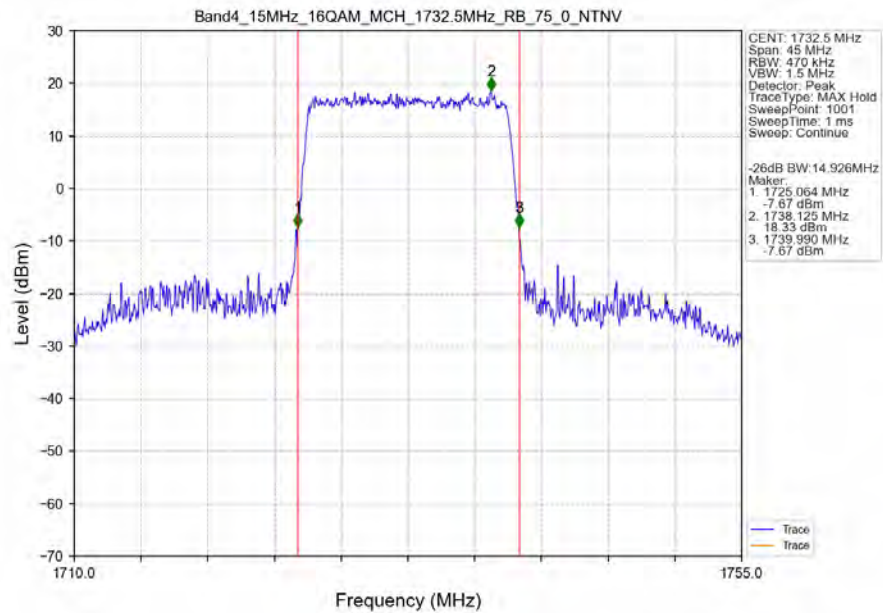
Band4 10MHz 16QAM MCH 1732.5MHz RB 50 0 NTV



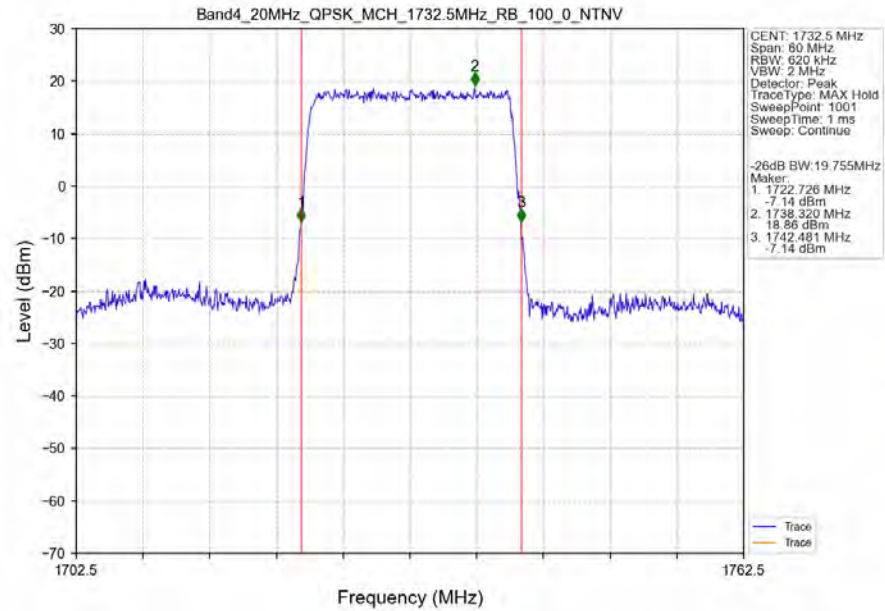
Band4 15MHz QPSK MCH 1732.5MHz RB 75 0 NTV



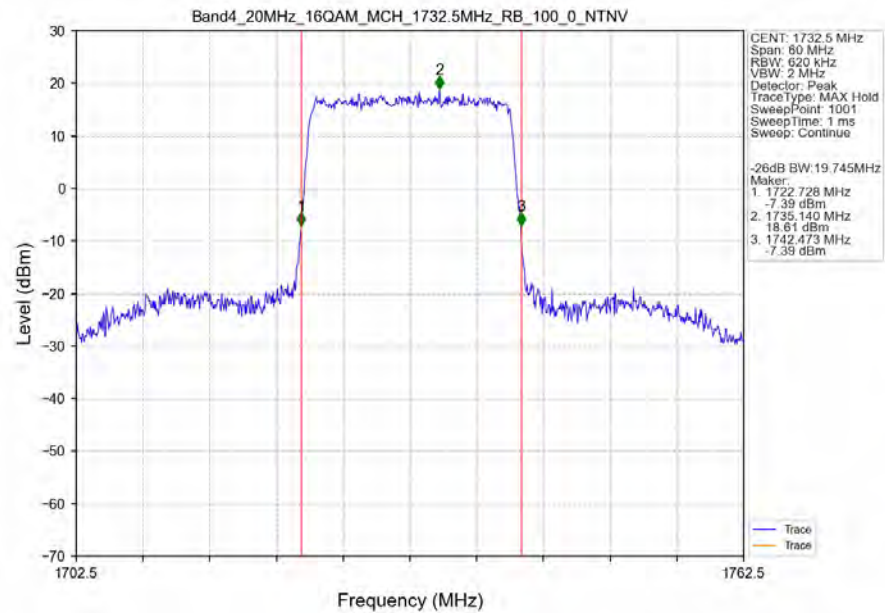
Band4 15MHz 16QAM MCH 1732.5MHz RB 75 0 NTV



Band4 20MHz QPSK MCH 1732.5MHz RB 100 0 NTN



Band4 20MHz 16QAM MCH 1732.5MHz RB 100 0 NTN



4. Peak-Average Ratio

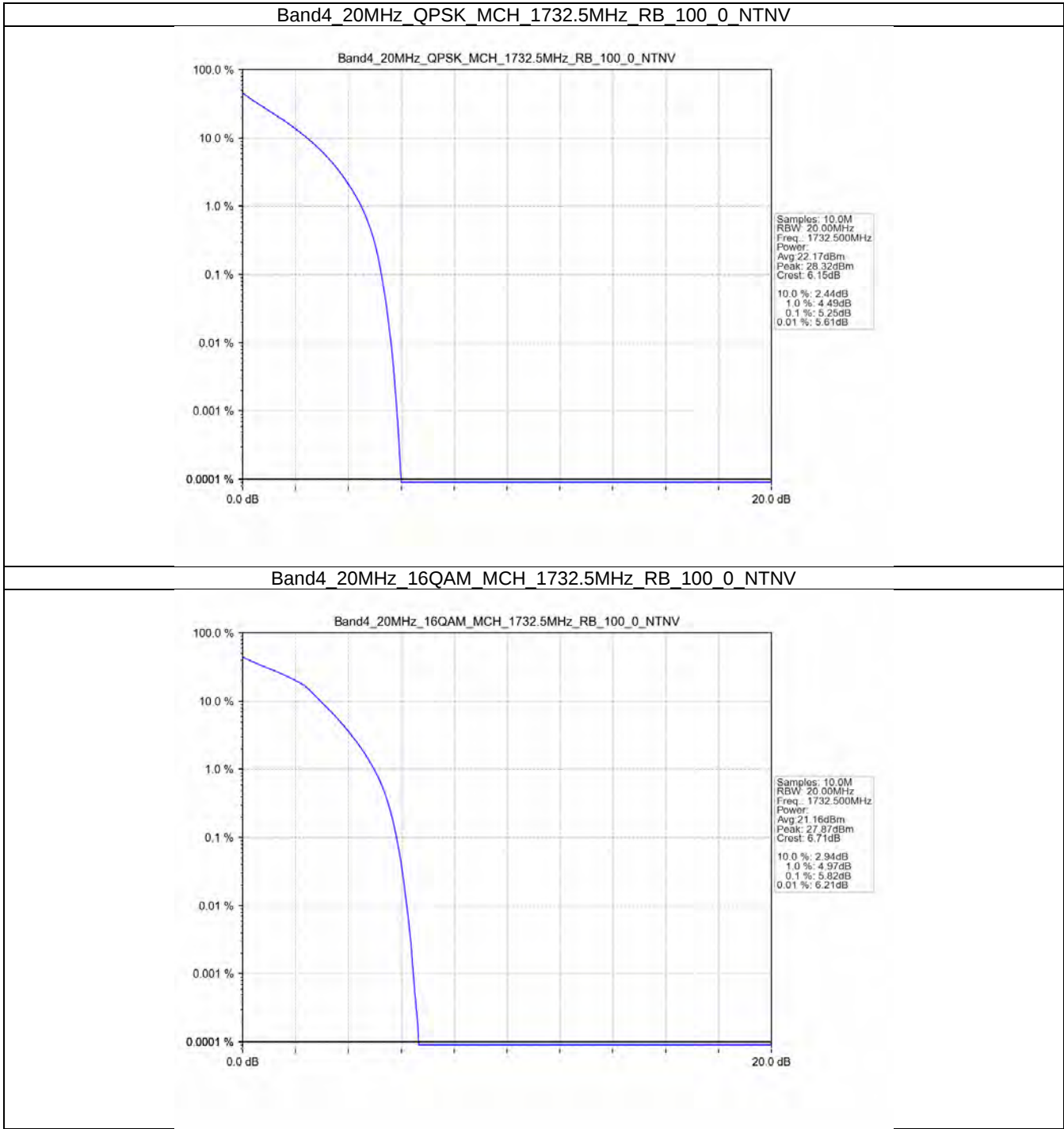
4.1 Test Result

4.1.1 B4_20MHz

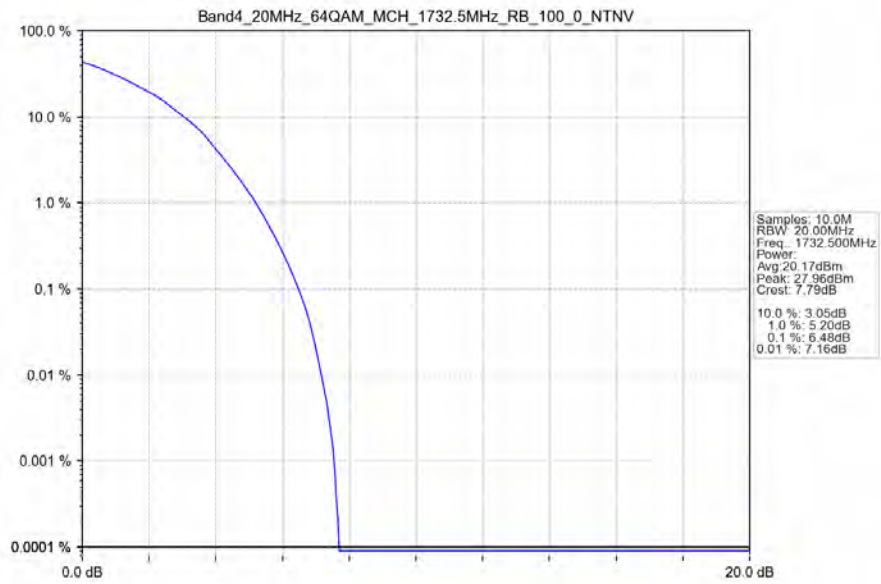
Band: 4 / Bandwidth: 20MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Peak-Average Ratio (dB)		Verdict
		Size	Offset	Result	Limit	
QPSK	1732.5	100	0	5.25	<=13	Pass
16QAM	1732.5	100	0	5.82	<=13	Pass
64QAM	1732.5	100	0	6.48	<=13	Pass
256QAM	1732.5	100	0	6.47	<=13	Pass

4.2 Test Graph

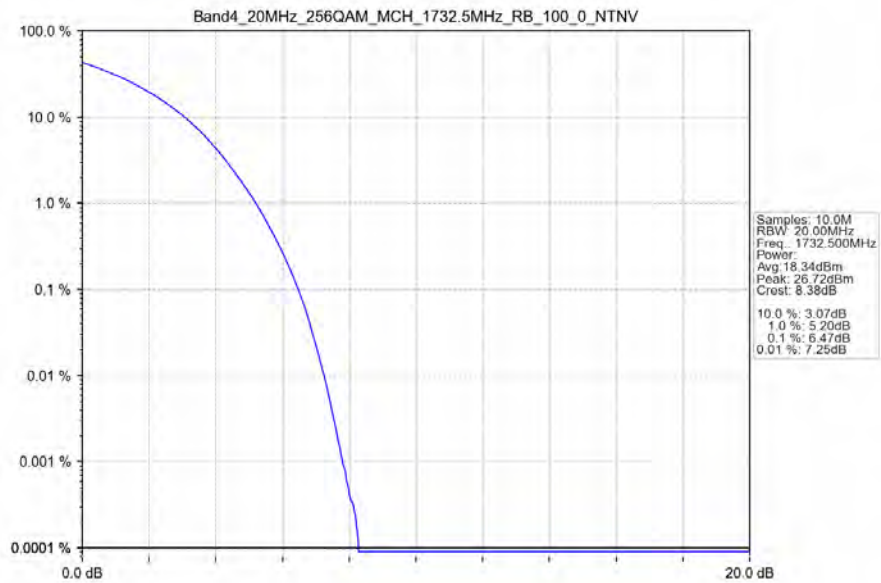
4.2.1 B4_20MHz



Band4 20MHz 64QAM MCH 1732.5MHz RB 100 0 NTNV



Band4 20MHz 256QAM MCH 1732.5MHz RB 100 0 NTNV



5. Spurious Emission

5.1 Test Result

5.1.1 B4_1.4MHz

Band: 4 / Bandwidth: 1.4MHz / NTV						
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission		Verdict
		Size	Offset	Result	Limit	
QPSK	1710.7	1	0	Refer To Test Graph		Pass
		6	0	Refer To Test Graph		Pass
	1732.5	1	0	Refer To Test Graph		Pass
	1754.3	1	0	Refer To Test Graph		Pass
			5	Refer To Test Graph		Pass
		6	0	Refer To Test Graph		Pass

5.1.2 B4_3MHz

Band: 4 / Bandwidth: 3MHz / NTV						
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission		Verdict
		Size	Offset	Result	Limit	
QPSK	1711.5	1	0	Refer To Test Graph		Pass
		15	0	Refer To Test Graph		Pass
	1732.5	1	0	Refer To Test Graph		Pass
	1753.5	1	0	Refer To Test Graph		Pass
			14	Refer To Test Graph		Pass
		15	0	Refer To Test Graph		Pass

5.1.3 B4_5MHz

Band: 4 / Bandwidth: 5MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission		Verdict
		Size	Offset	Result	Limit	
QPSK	1712.5	1	0	Refer To Test Graph		Pass
		25	0	Refer To Test Graph		Pass
	1732.5	1	0	Refer To Test Graph		Pass
	1752.5	1	0	Refer To Test Graph		Pass
			24	Refer To Test Graph		Pass
		25	0	Refer To Test Graph		Pass

5.1.4 B4_10MHz

Band: 4 / Bandwidth: 10MHz / NTV						
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission		Verdict
		Size	Offset	Result	Limit	
QPSK	1715	1	0	Refer To Test Graph		Pass
		50	0	Refer To Test Graph		Pass
	1732.5	1	0	Refer To Test Graph		Pass
	1750	1	0	Refer To Test Graph		Pass
			49	Refer To Test Graph		Pass
		50	0	Refer To Test Graph		Pass

5.1.5 B4_15MHz

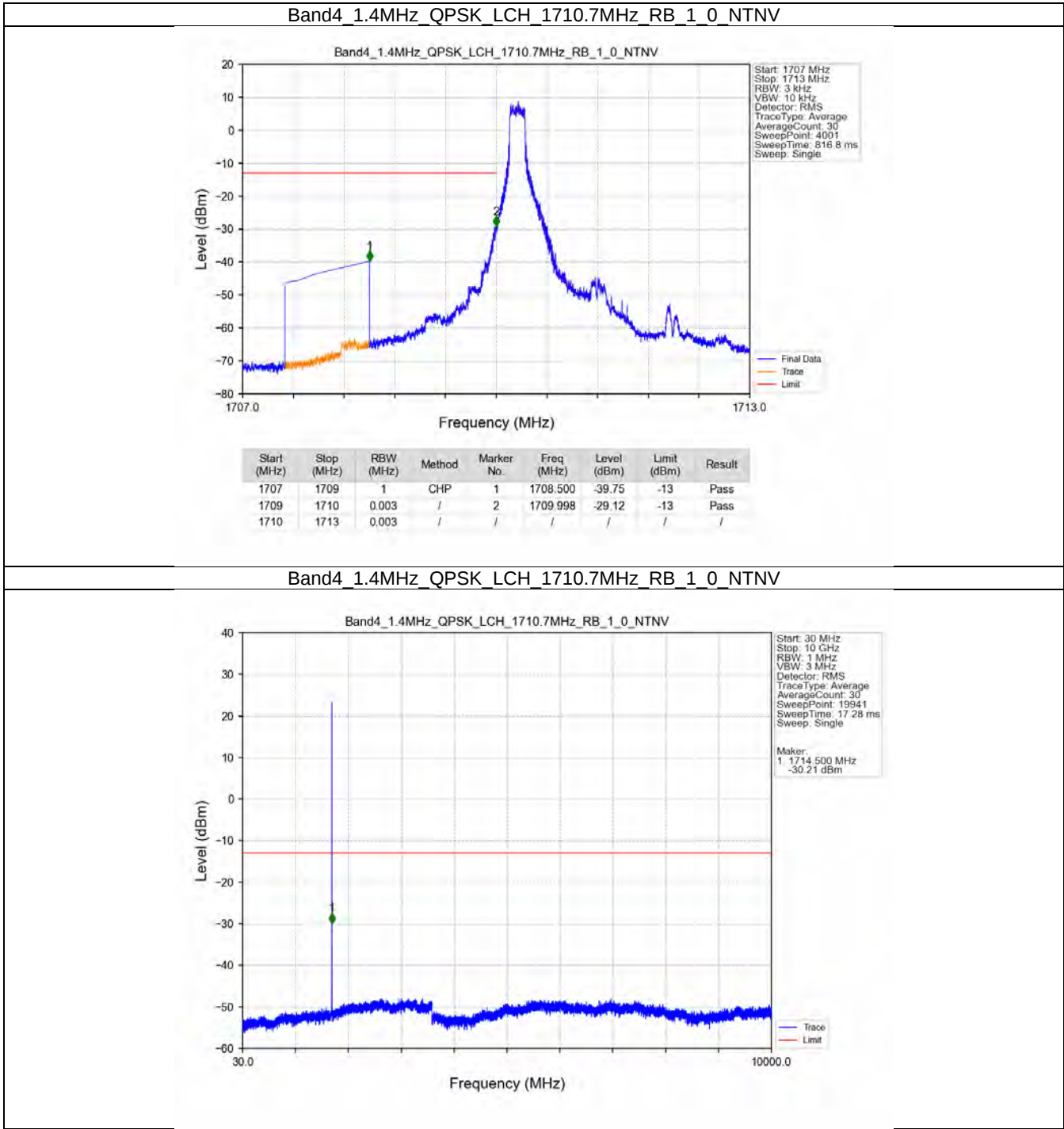
Band: 4 / Bandwidth: 15MHz / NTVN						
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission		Verdict
		Size	Offset	Result	Limit	
QPSK	1717.5	1	0	Refer To Test Graph		Pass
		75	0	Refer To Test Graph		Pass
	1732.5	1	0	Refer To Test Graph		Pass
	1747.5	1	0	Refer To Test Graph		Pass
			74	Refer To Test Graph		Pass
		75	0	Refer To Test Graph		Pass

5.1.6 B4_20MHz

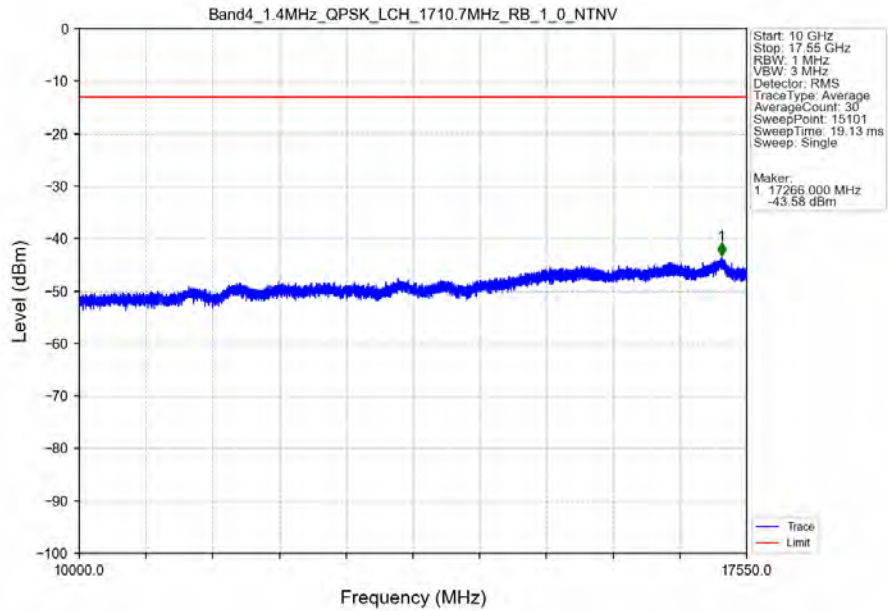
Band: 4 / Bandwidth: 20MHz / NTV						
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission		Verdict
		Size	Offset	Result	Limit	
QPSK	1720	1	0	Refer To Test Graph		Pass
		100	0	Refer To Test Graph		Pass
	1732.5	1	0	Refer To Test Graph		Pass
	1745	1	0	Refer To Test Graph		Pass
			99	Refer To Test Graph		Pass
		100	0	Refer To Test Graph		Pass

5.2 Test Graph

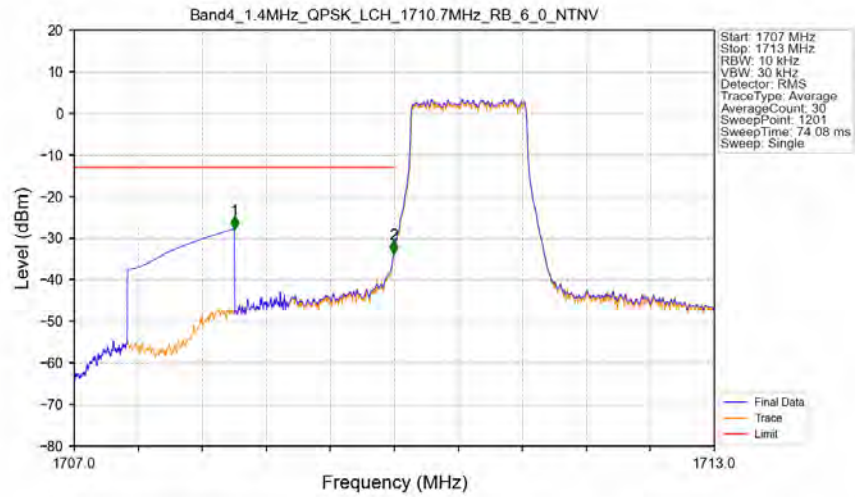
5.2.1 B4_1.4MHz



Band4 1.4MHz QPSK LCH 1710.7MHz RB 1 0 NTV

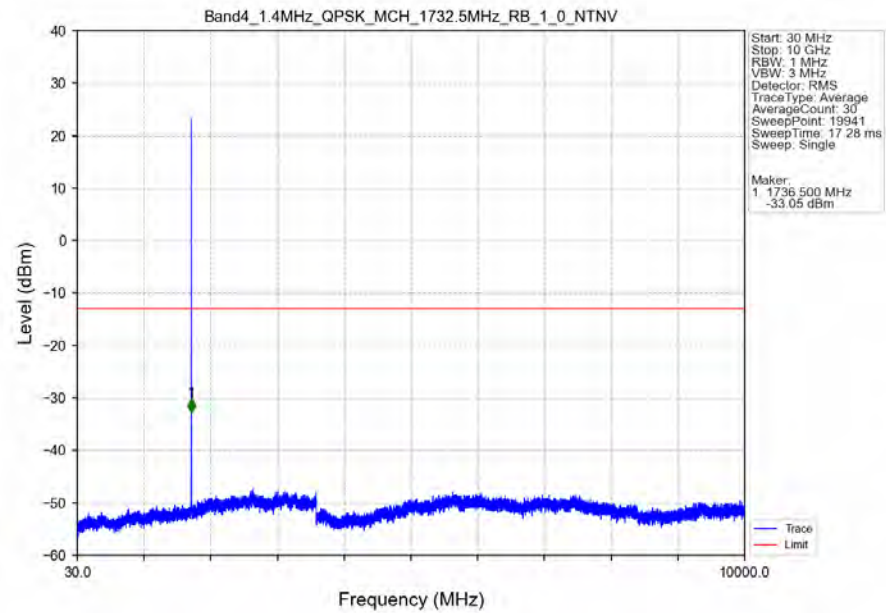


Band4 1.4MHz QPSK LCH 1710.7MHz RB 6 0 NTV

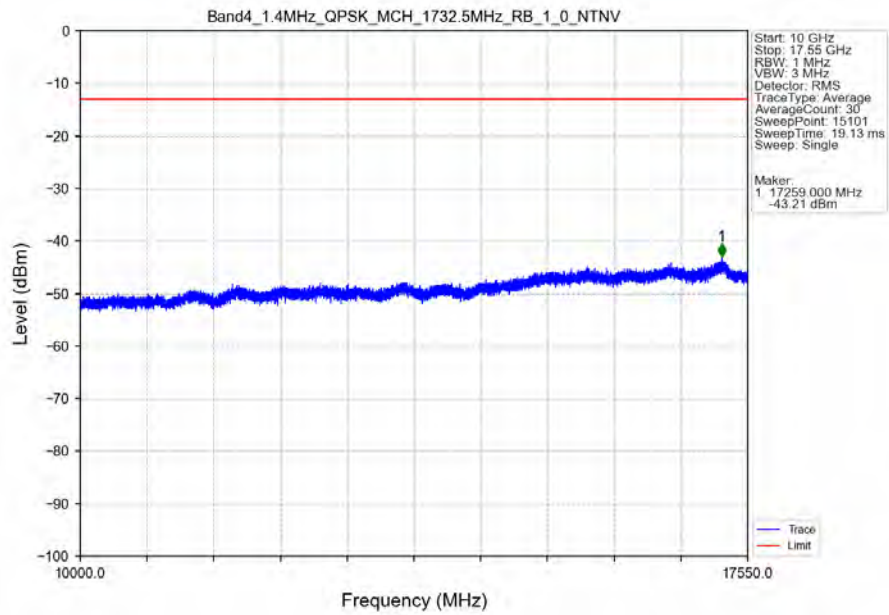


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
1707	1709	1	CHP	1	1708.500	-27.82	-13	Pass
1709	1710	0.013	CHP	2	1709.995	-33.65	-13	Pass
1710	1713	0.013	CHP	/	/	/	/	/

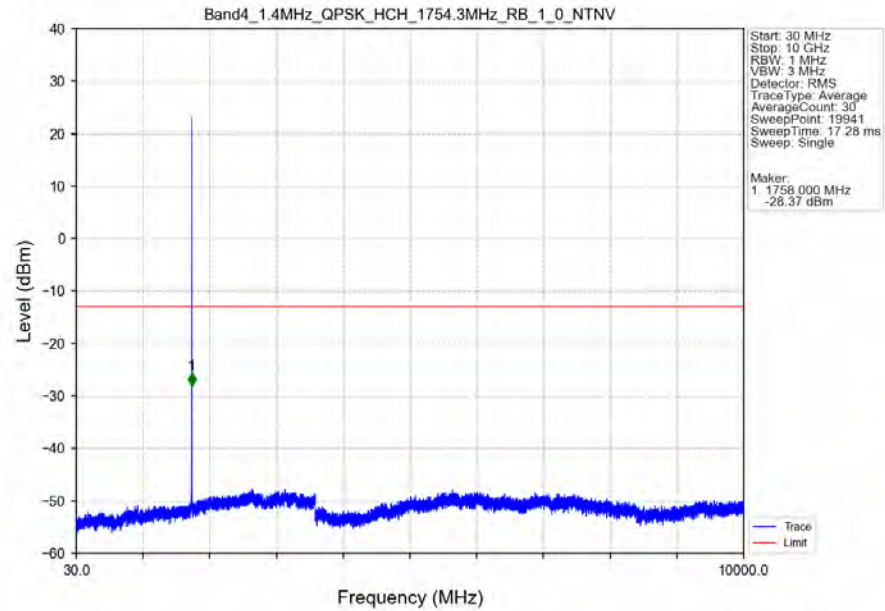
Band4 1.4MHz QPSK MCH 1732.5MHz RB 1 0 NTV



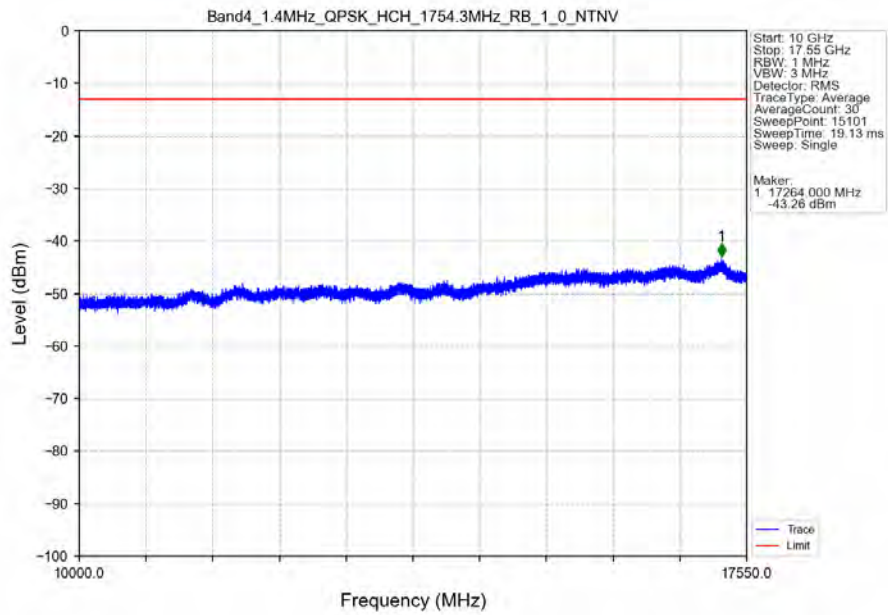
Band4 1.4MHz QPSK MCH 1732.5MHz RB 1 0 NTV



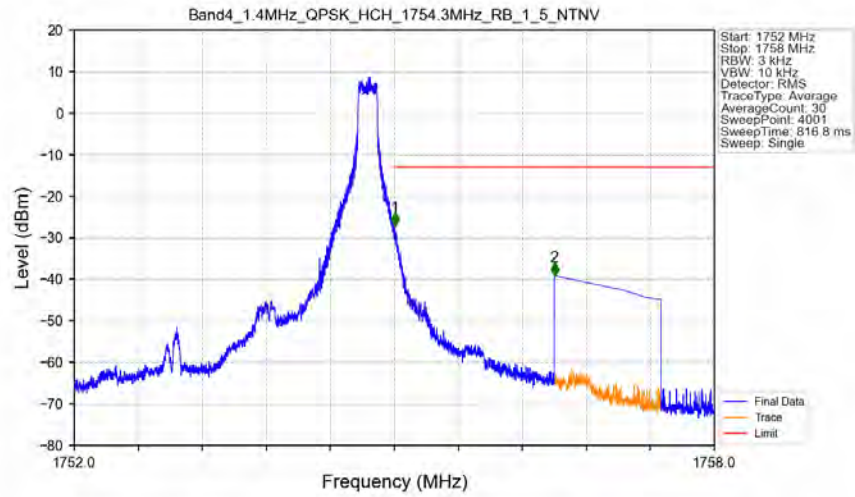
Band4 1.4MHz QPSK HCH 1754.3MHz RB 1 0 NTV



Band4 1.4MHz QPSK HCH 1754.3MHz RB 1 0 NTV

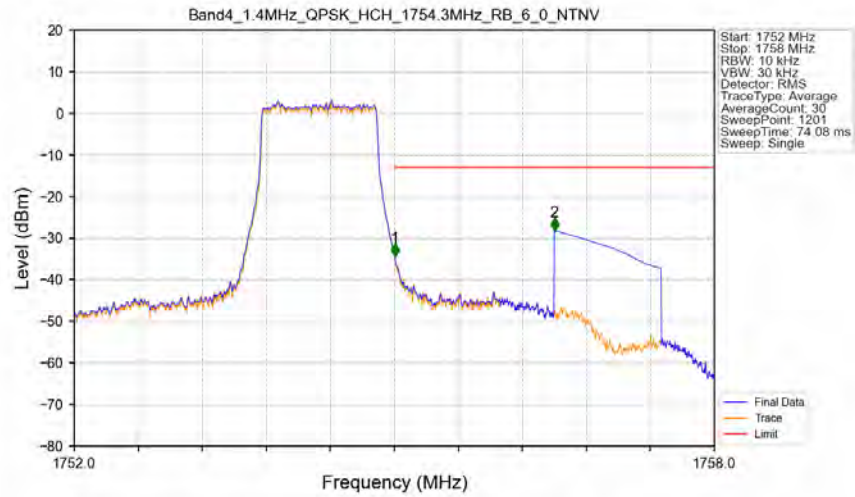


Band4 1.4MHz QPSK HCH 1754.3MHz RB 1 5 NTV



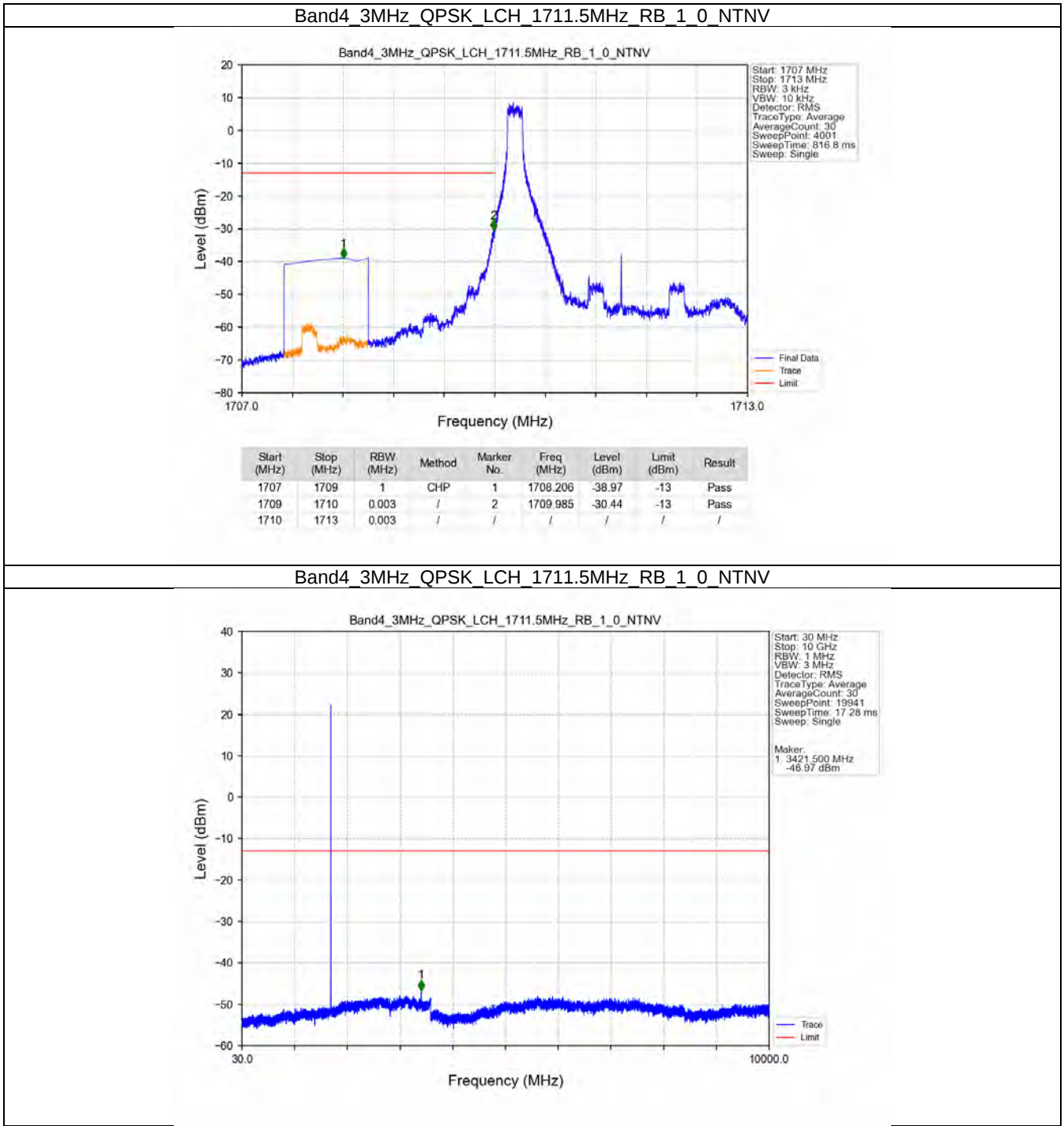
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
1752	1755	0.003	/	/	/	/	/	/
1755	1756	0.003	/	1	1755.005	-27.09	-13	Pass
1756	1758	1	CHP	2	1756.500	-39.08	-13	Pass

Band4 1.4MHz QPSK HCH 1754.3MHz RB 6 0 NTV

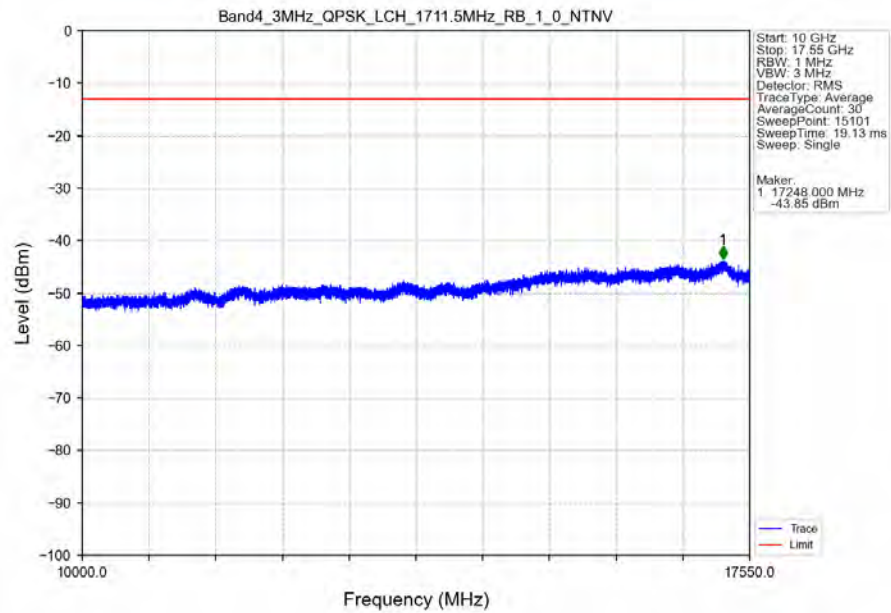


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
1752	1755	0.013	CHP	/	/	/	/	/
1755	1756	0.013	CHP	1	1755.005	-34.40	-13	Pass
1756	1758	1	CHP	2	1756.500	-28.13	-13	Pass

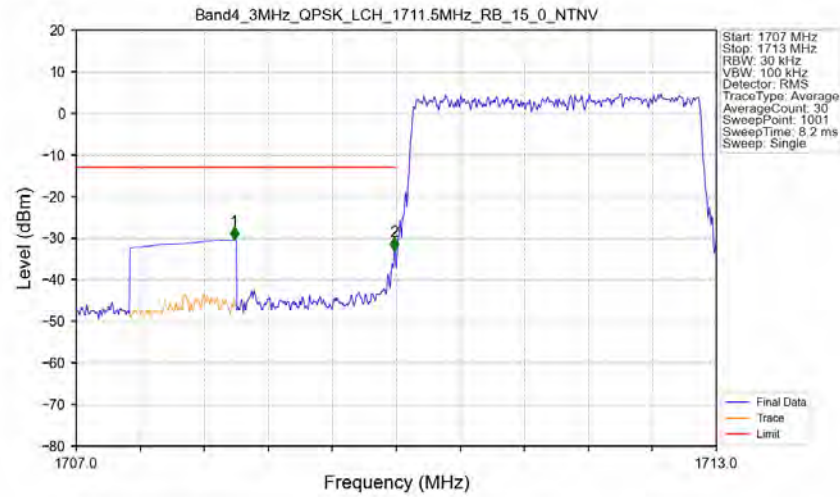
5.2.2 B4_3MHz



Band4 3MHz QPSK LCH 1711.5MHz RB 1 0 NTNV

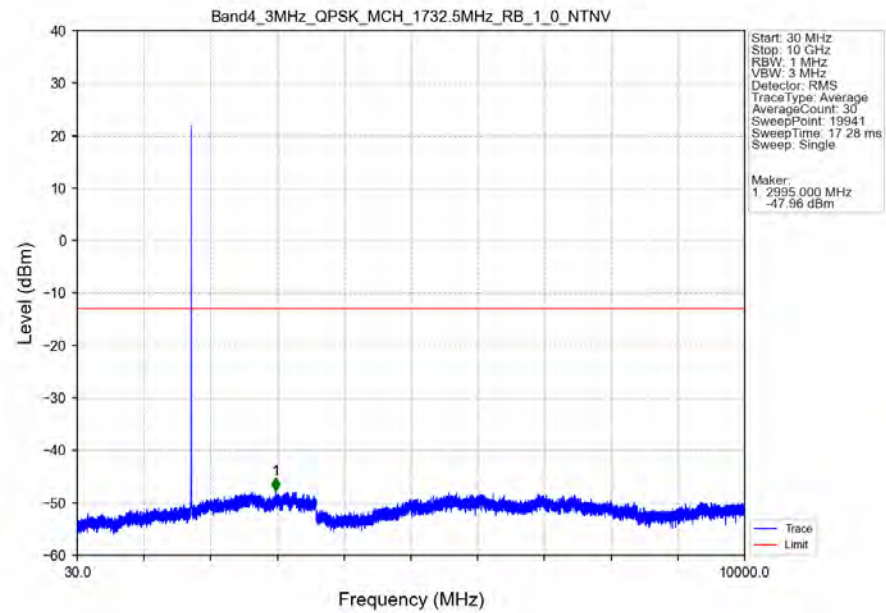


Band4 3MHz QPSK LCH 1711.5MHz RB 15 0 NTNV

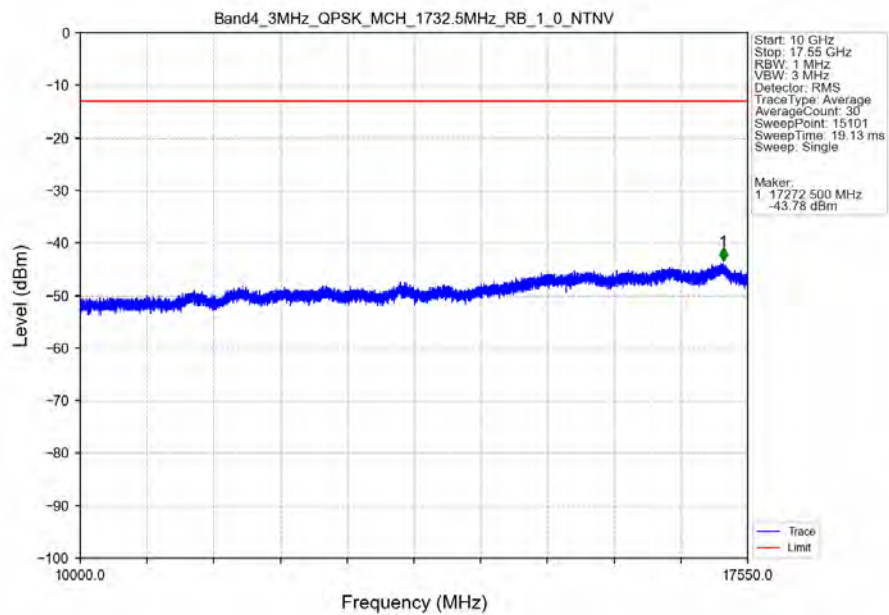


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
1707	1709	1	CHP	1	1708.482	-30.48	-13	Pass
1709	1710	0.03	/	2	1709.982	-32.89	-13	Pass
1710	1713	0.03	/	/	/	/	/	/

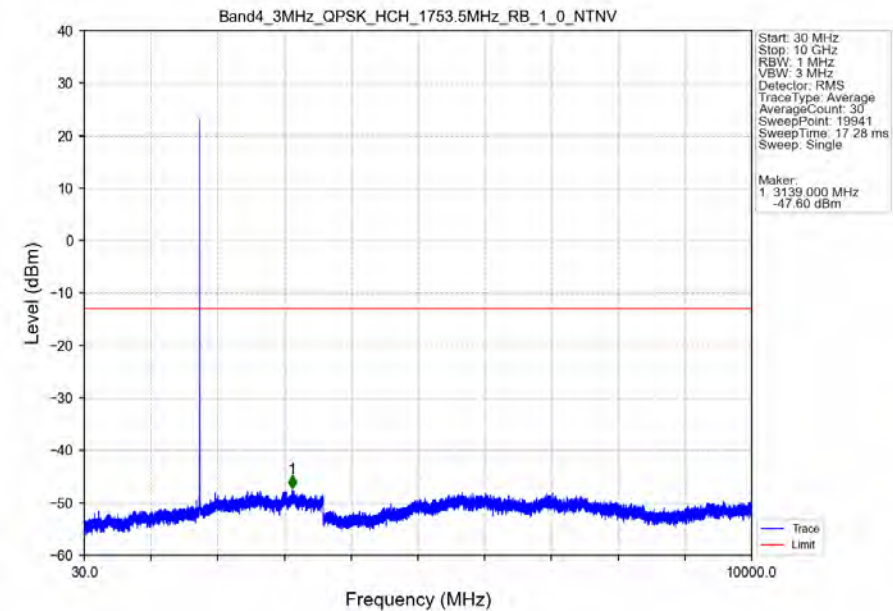
Band4 3MHz QPSK MCH 1732.5MHz RB 1 0 NTNV



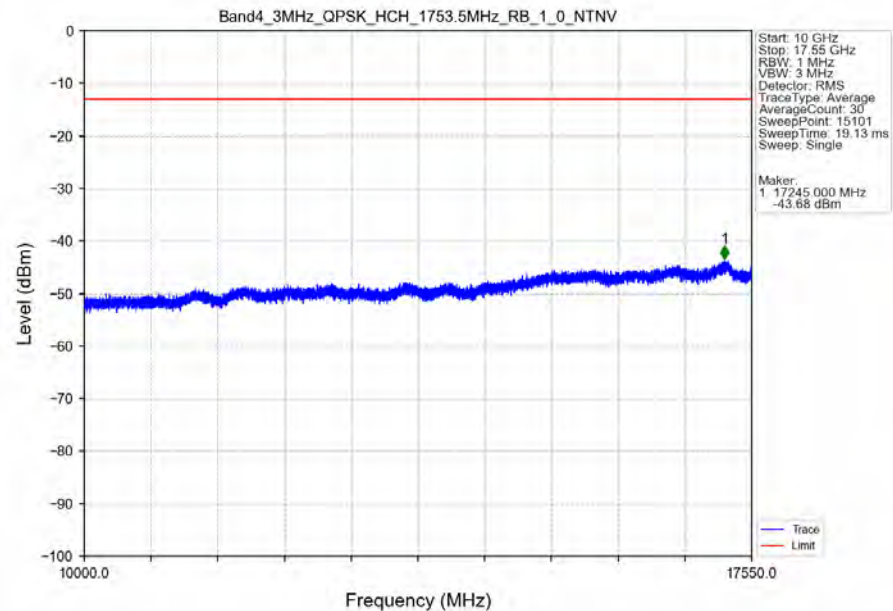
Band4 3MHz QPSK MCH 1732.5MHz RB 1 0 NTNV



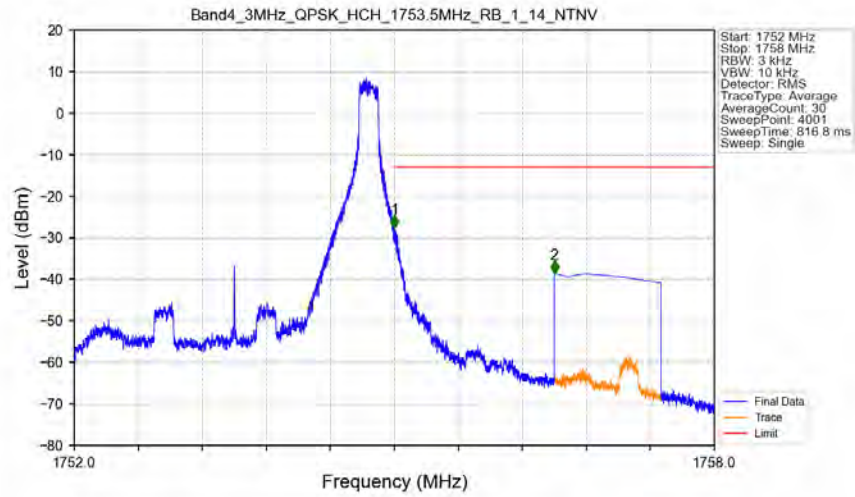
Band4 3MHz QPSK HCH 1753.5MHz RB 1 0 NTN



Band4 3MHz QPSK HCH 1753.5MHz RB 1 0 NTN

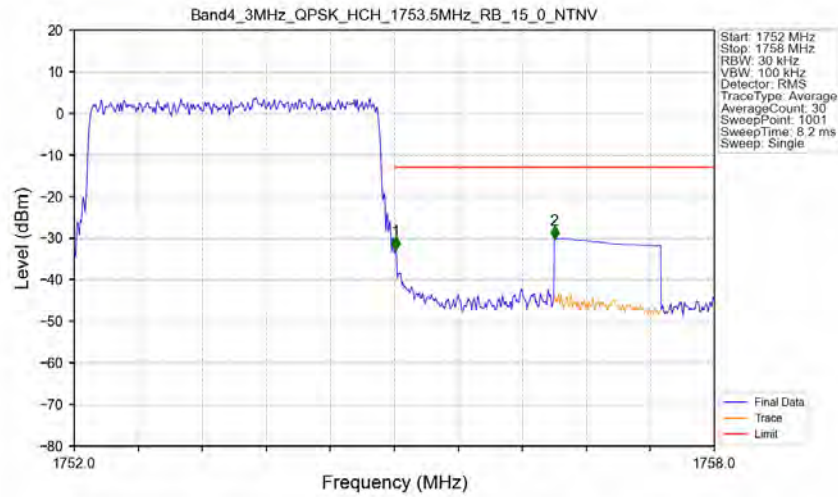


Band4 3MHz QPSK HCH 1753.5MHz RB 1 14 NTV



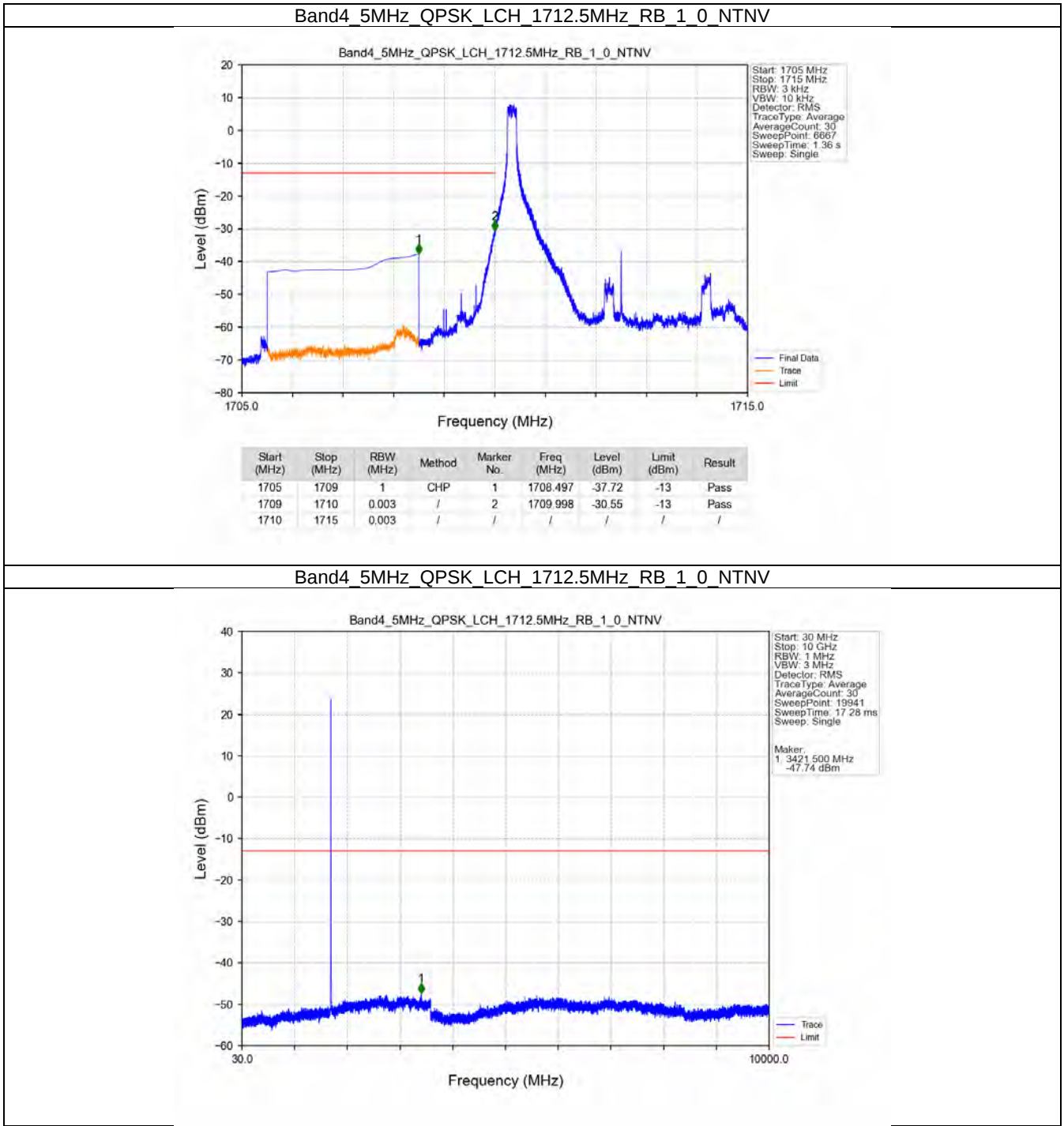
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
1752	1755	0.003	/	/	/	/	/	/
1755	1756	0.003	/	1	1755.002	-27.67	-13	Pass
1756	1758	1	CHP	2	1756.500	-38.65	-13	Pass

Band4 3MHz QPSK HCH 1753.5MHz RB 15 0 NTV

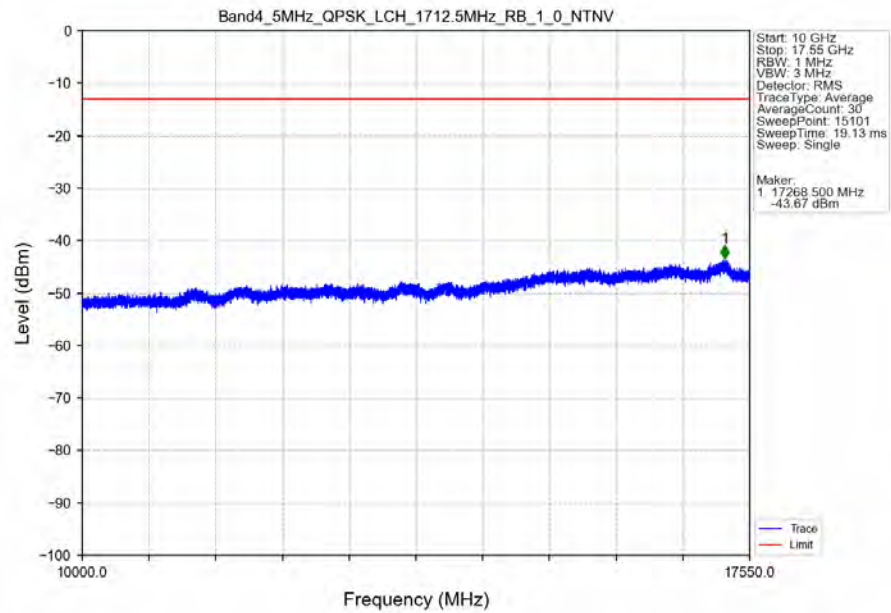


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
1752	1755	0.03	/	/	/	/	/	/
1755	1756	0.03	/	1	1755.012	-32.75	-13	Pass
1756	1758	1	CHP	2	1756.500	-30.20	-13	Pass

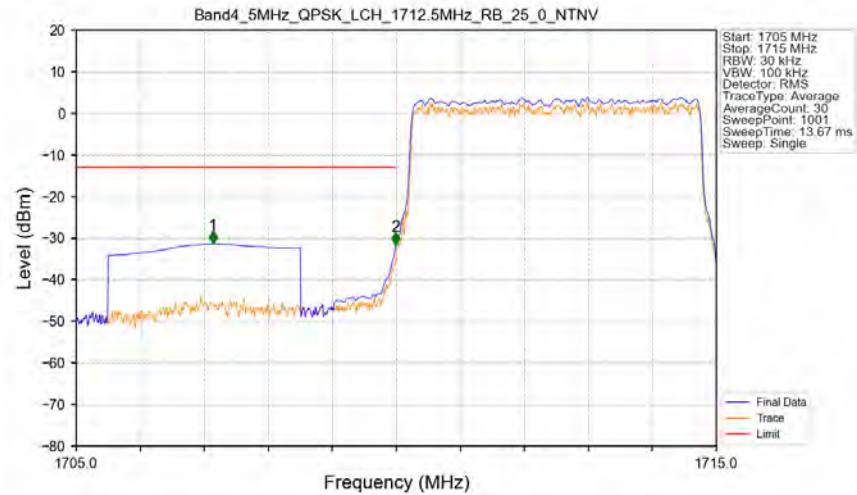
5.2.3 B4_5MHz



Band4 5MHz QPSK LCH 1712.5MHz RB 1 0 NTN

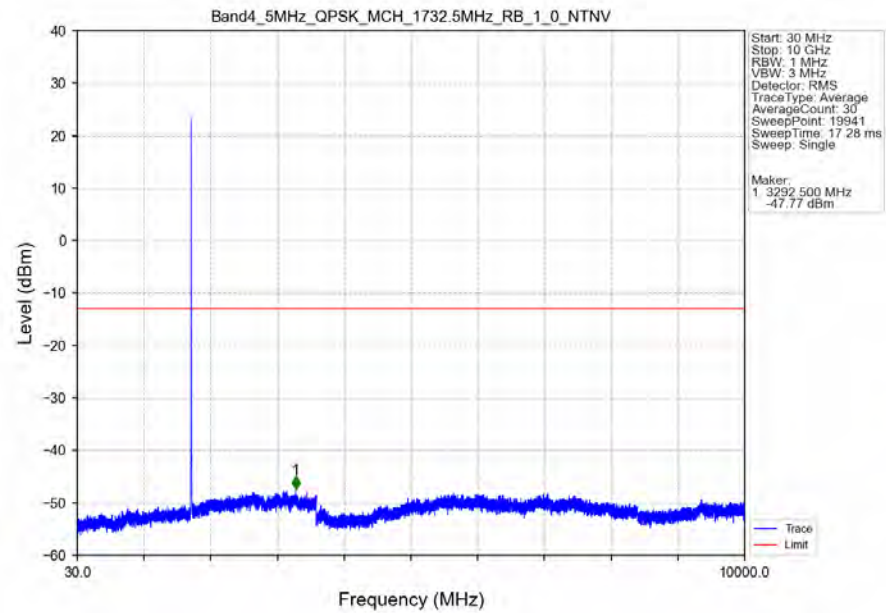


Band4 5MHz QPSK LCH 1712.5MHz RB 25 0 NTN

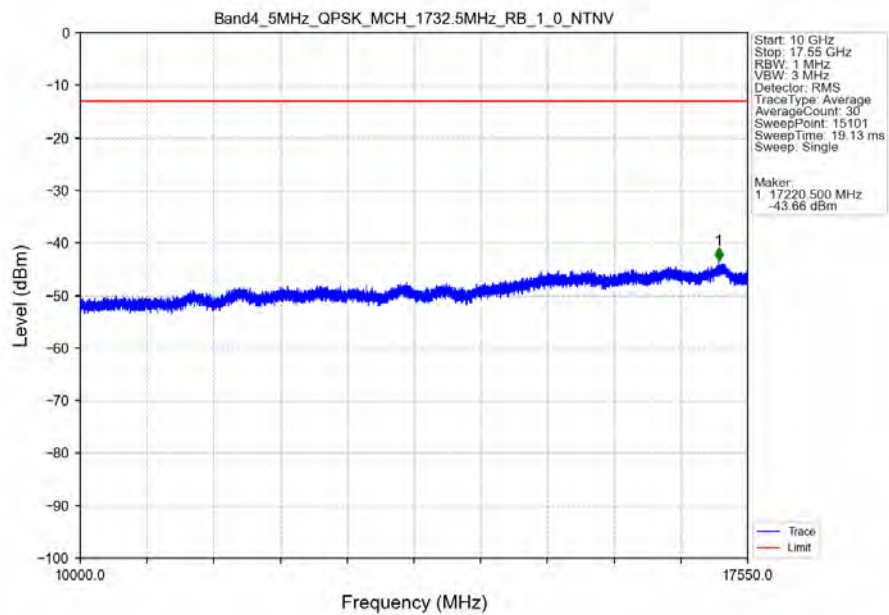


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
1705	1709	1	CHP	1	1707.140	-31.39	-13	Pass
1709	1710	0.051	CHP	2	1709.990	-31.68	-13	Pass
1710	1715	0.051	CHP	/	/	/	/	/

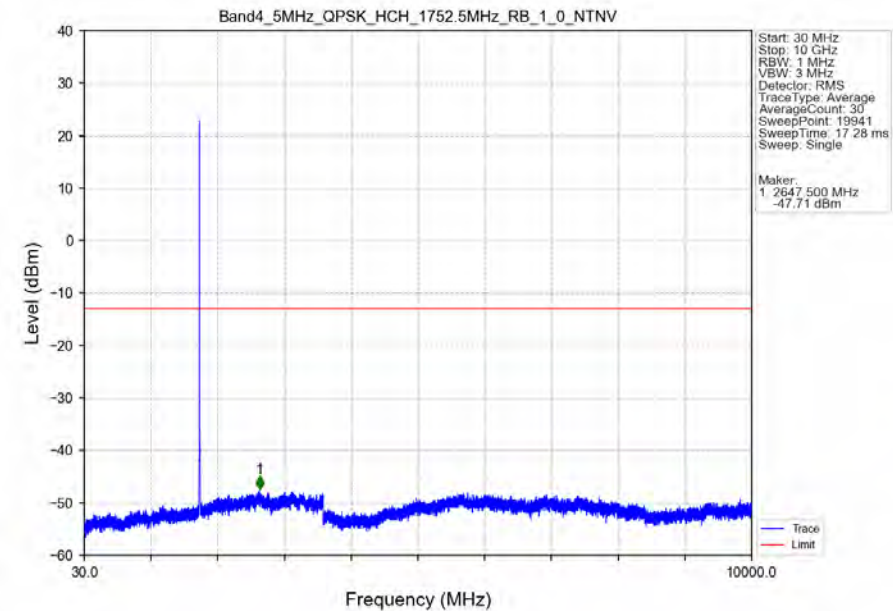
Band4 5MHz QPSK MCH 1732.5MHz RB 1 0 NTNV



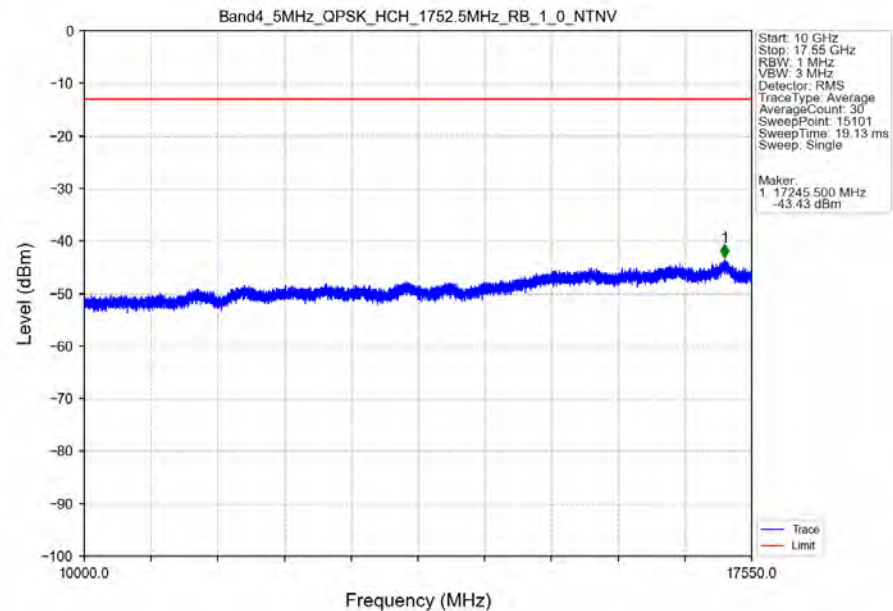
Band4 5MHz QPSK MCH 1732.5MHz RB 1 0 NTNV



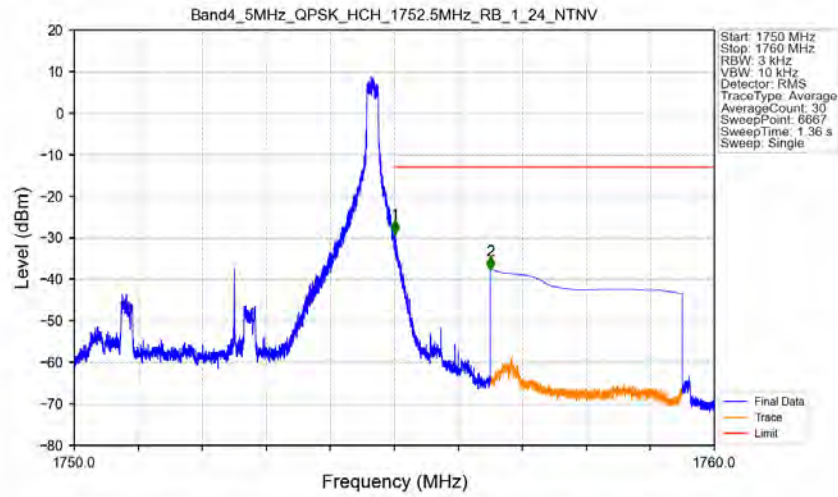
Band4 5MHz QPSK HCH 1752.5MHz RB 1 0 NTN



Band4 5MHz QPSK HCH 1752.5MHz RB 1 0 NTN

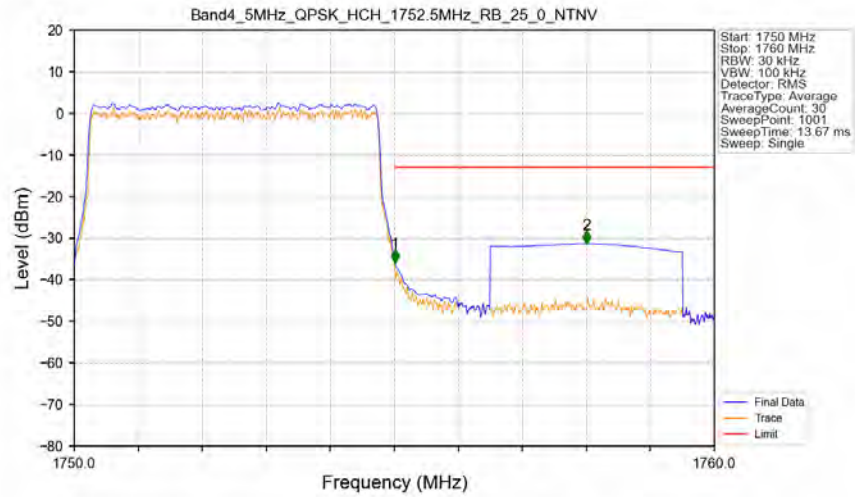


Band4 5MHz QPSK HCH 1752.5MHz RB 1 24 NTV



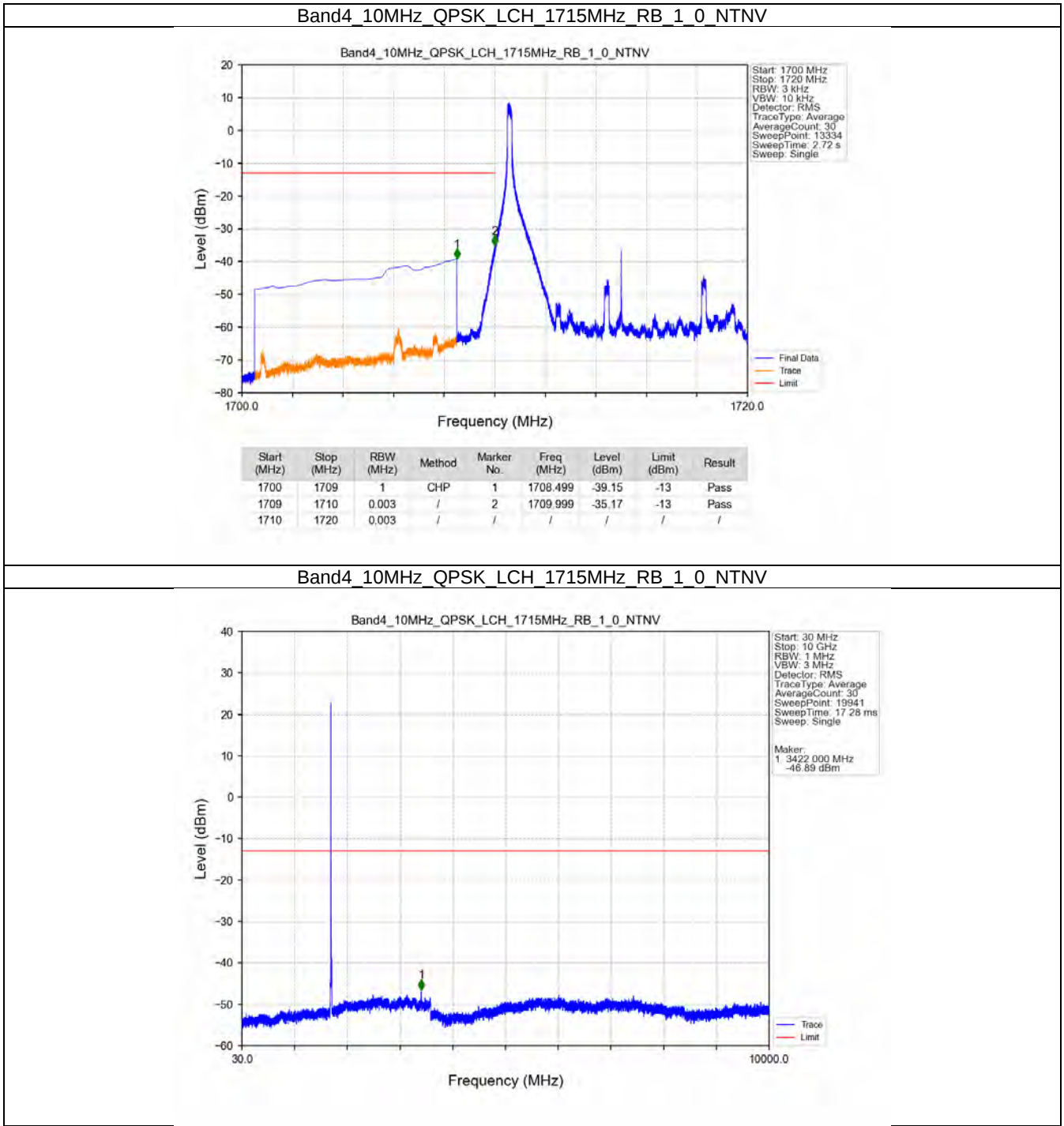
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
1750	1755	0.003	/	/	/	/	/	/
1755	1756	0.003	/	1	1755.011	-28.89	-13	Pass
1756	1760	1	CHP	2	1756.500	-37.70	-13	Pass

Band4 5MHz QPSK HCH 1752.5MHz RB 25 0 NTV

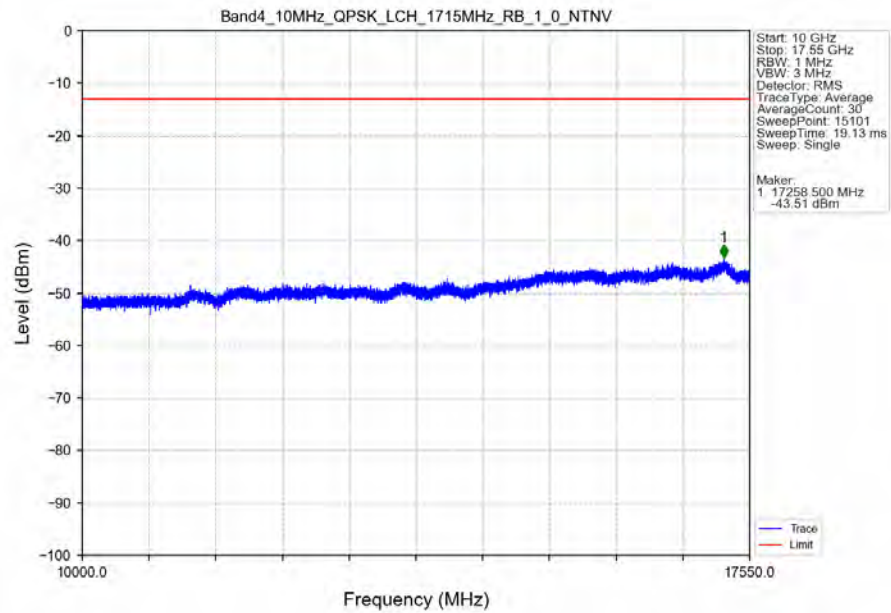


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
1750	1755	0.051	CHP	/	/	/	/	/
1755	1756	0.051	CHP	1	1755.010	-35.78	-13	Pass
1756	1760	1	CHP	2	1758.000	-31.30	-13	Pass

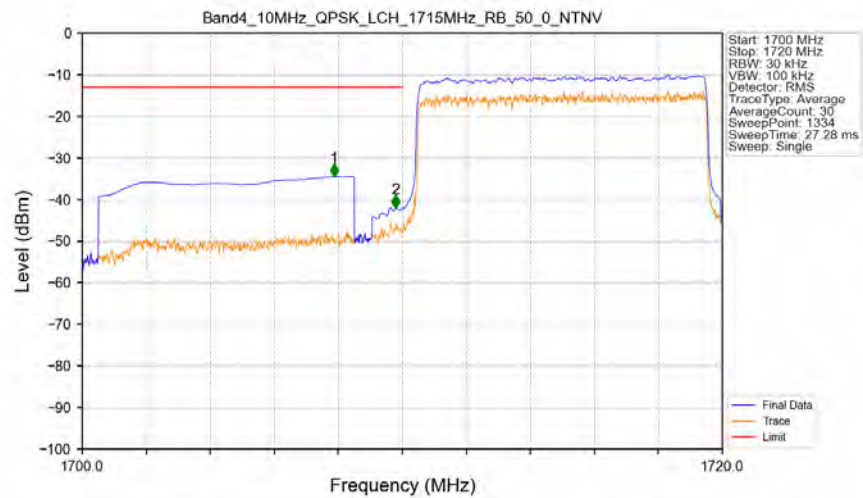
5.2.4 B4_10MHz



Band4 10MHz QPSK LCH 1715MHz RB 1 0 NTNV

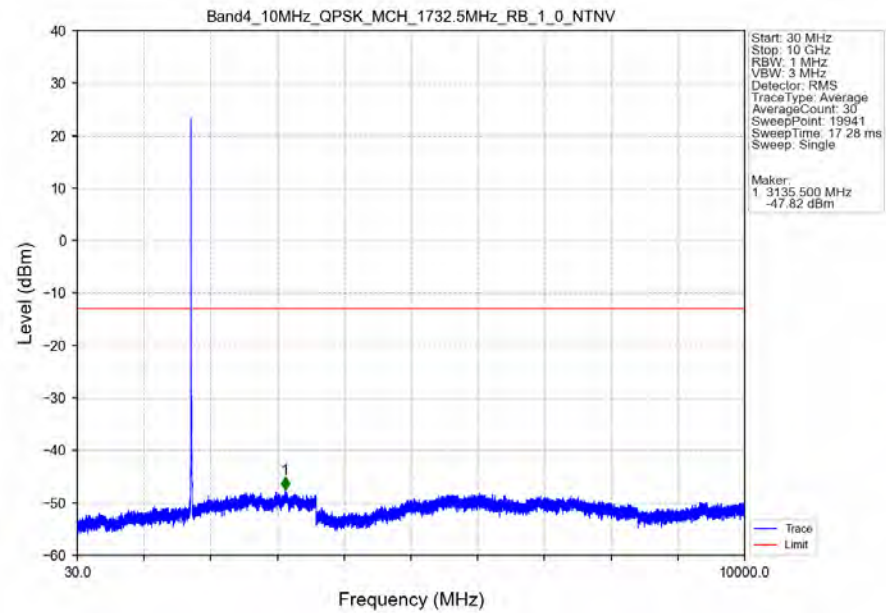


Band4 10MHz QPSK LCH 1715MHz RB 50 0 NTNV

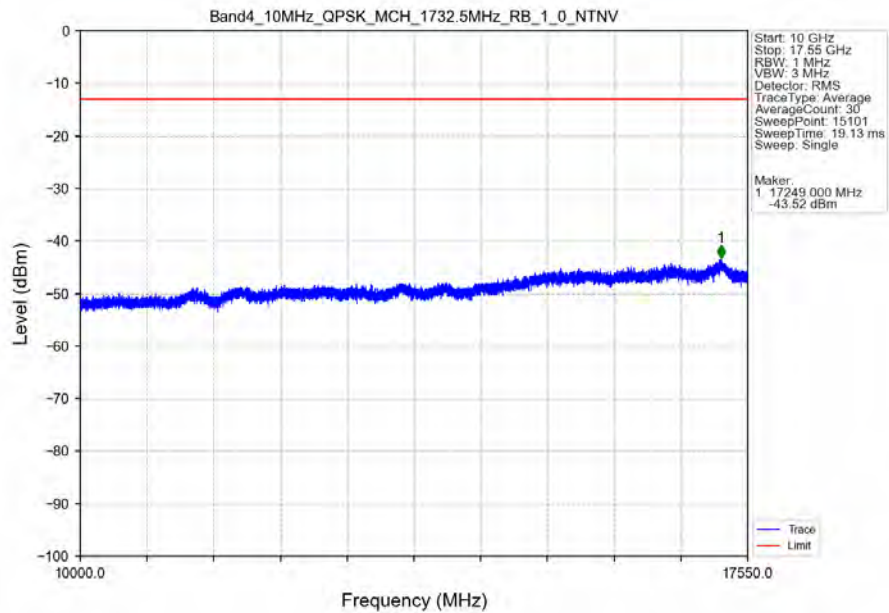


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
1700	1709	1	CHP	1	1707.862	-34.50	-13	Pass
1709	1710	0.099	CHP	2	1709.797	-42.05	-13	Pass
1710	1720	0.099	CHP	/	/	/	/	/

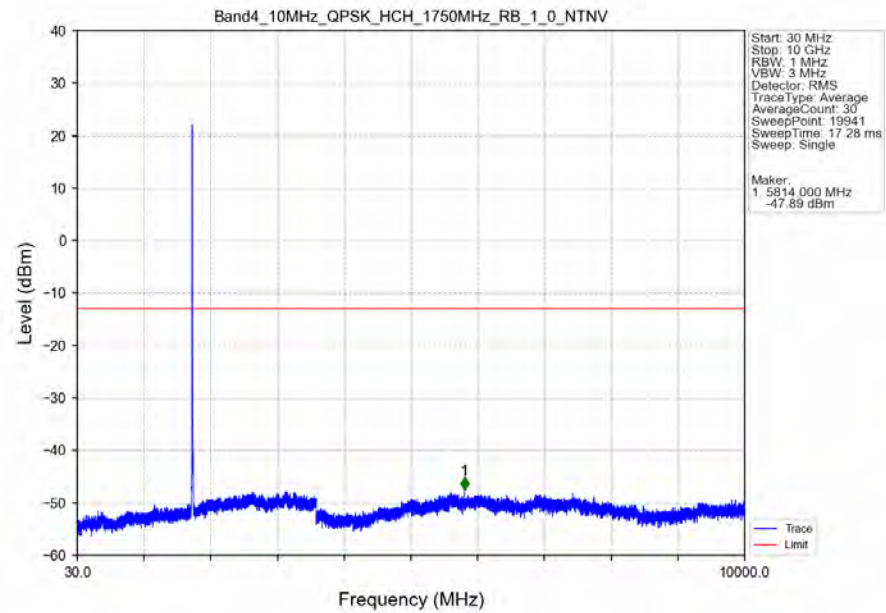
Band4_10MHz_QPSK_MCH_1732.5MHz_RB_1_0_NTNV



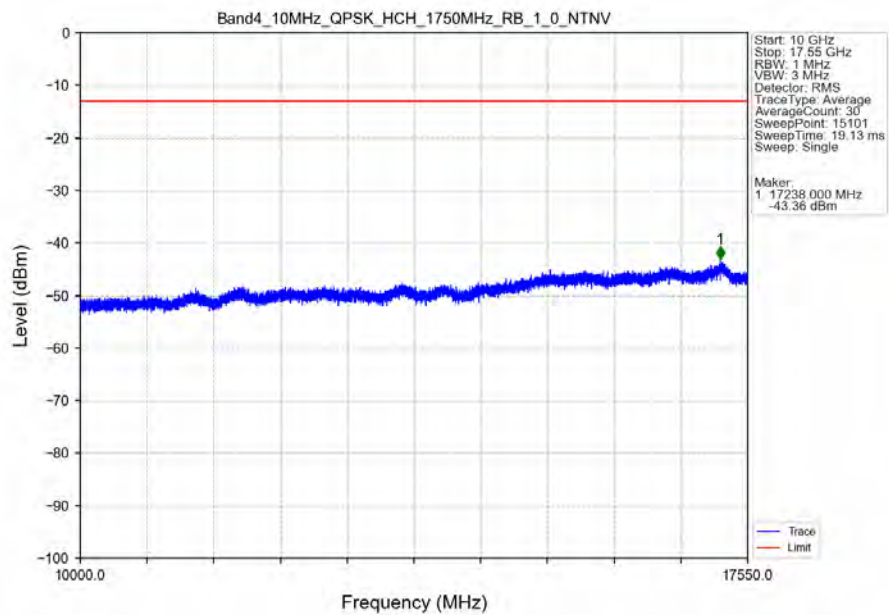
Band4_10MHz_QPSK_MCH_1732.5MHz_RB_1_0_NTNV



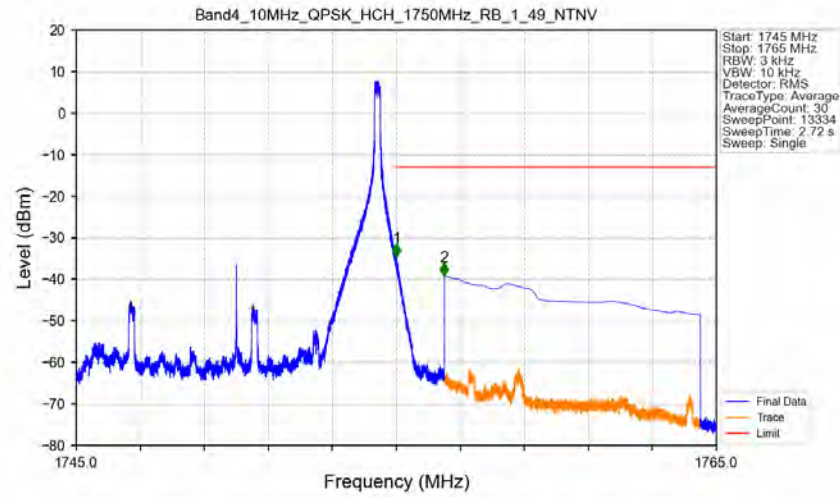
Band4_10MHz_QPSK_HCH_1750MHz_RB_1_0_NTNV



Band4_10MHz_QPSK_HCH_1750MHz_RB_1_0_NTNV

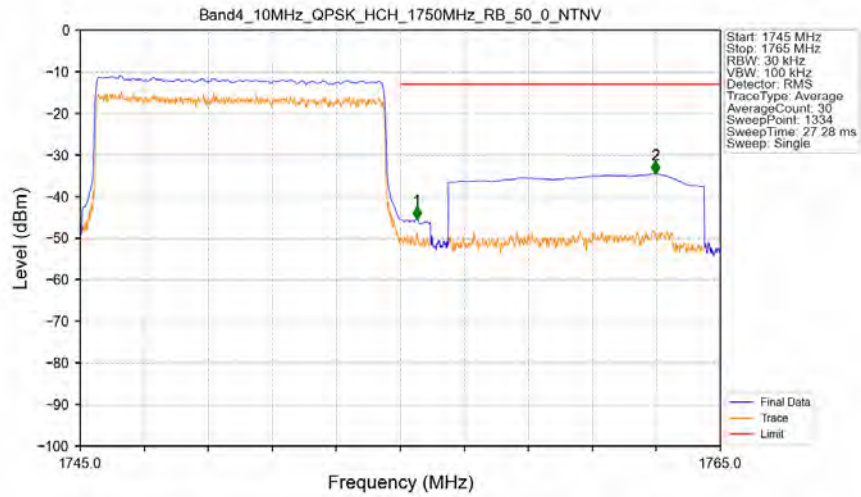


Band4 10MHz QPSK HCH 1750MHz RB 1 49 NTNV



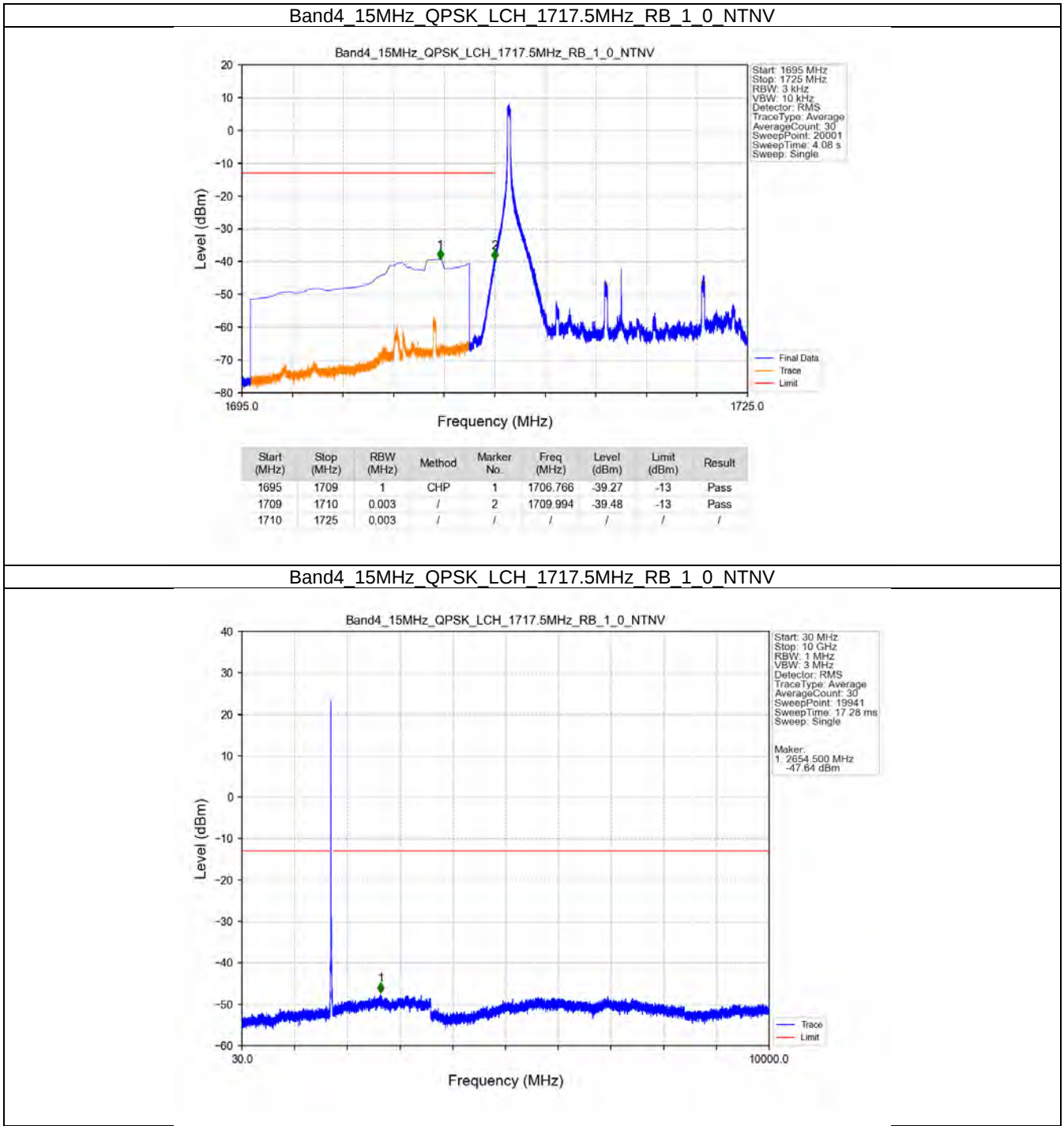
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
1745	1755	0.003	/	/	/	/	/	/
1755	1756	0.003	/	1	1755.002	-34.57	-13	Pass
1756	1765	1	CHP	2	1756.501	-39.15	-13	Pass

Band4 10MHz QPSK HCH 1750MHz RB 50 0 NTNV

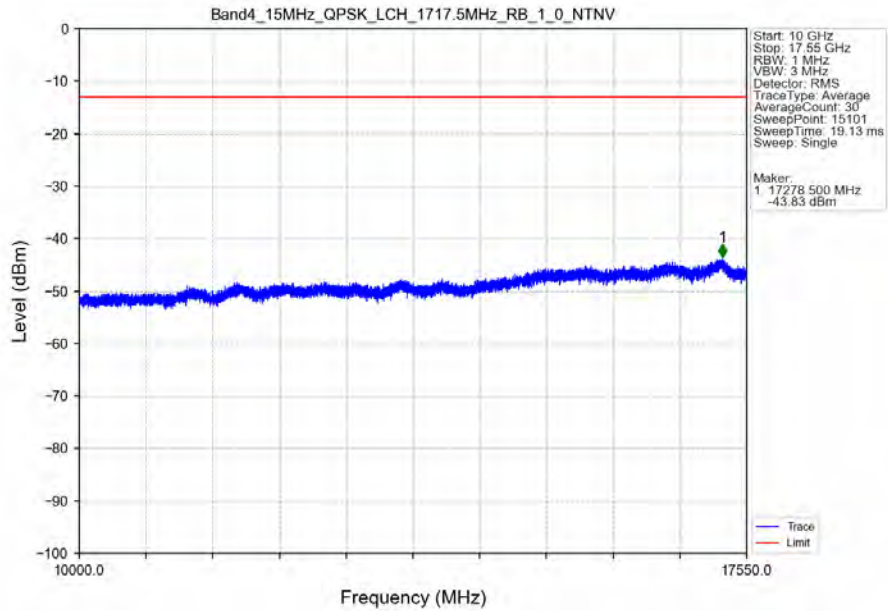


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
1745	1755	0.099	CHP	/	/	/	/	/
1755	1756	0.099	CHP	1	1755.518	-45.46	-13	Pass
1756	1765	1	CHP	2	1762.974	-34.61	-13	Pass

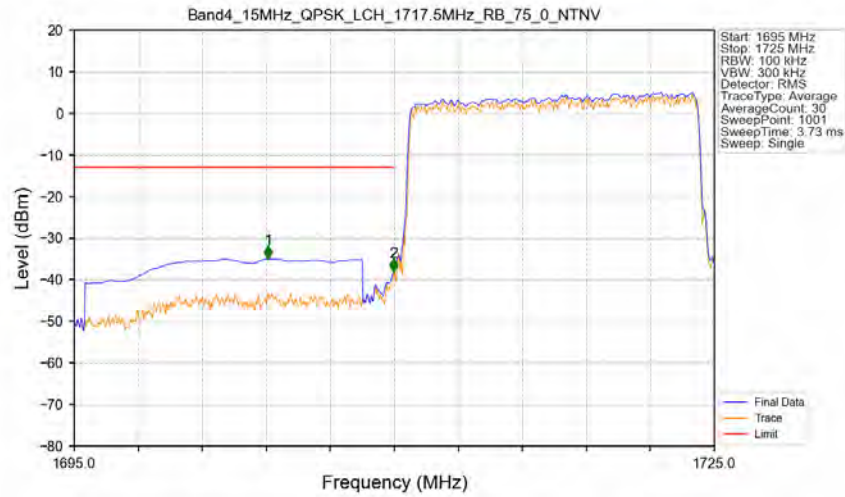
5.2.5 B4_15MHz



Band4 15MHz QPSK LCH 1717.5MHz RB 1 0 NTNV

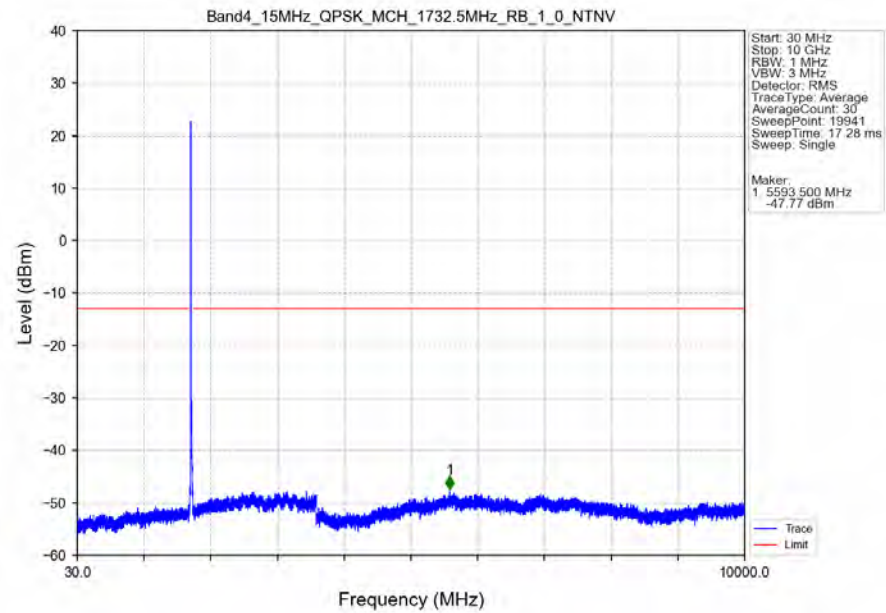


Band4 15MHz QPSK LCH 1717.5MHz RB 75 0 NTNV

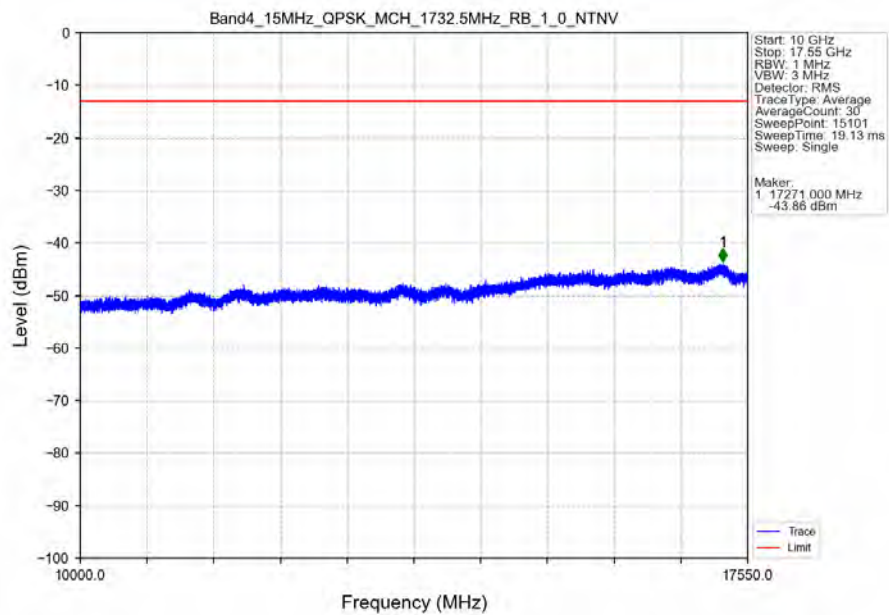


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
1695	1709	1	CHP	1	1704.090	-34.99	-13	Pass
1709	1710	0.149	CHP	2	1709.970	-38.02	-13	Pass
1710	1725	0.149	CHP	/	/	/	/	/

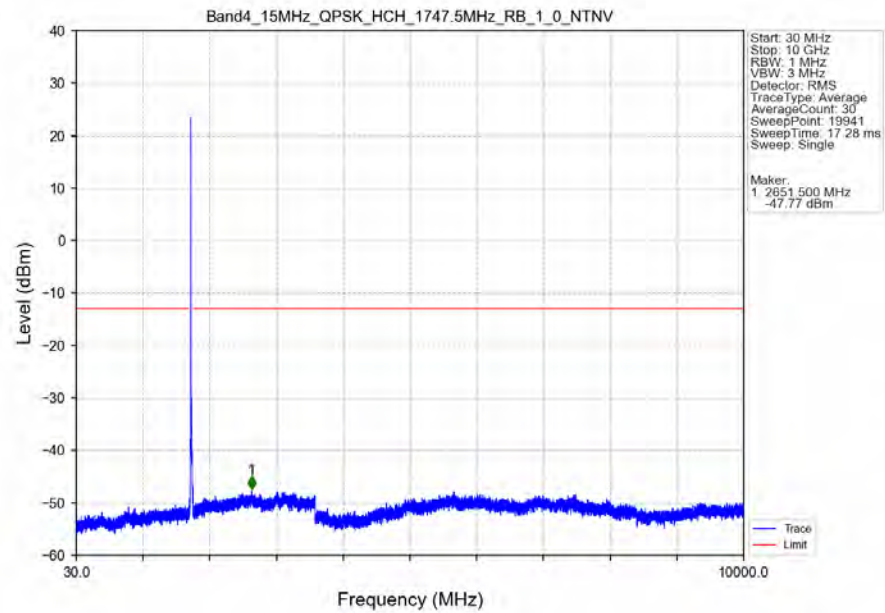
Band4 15MHz QPSK MCH 1732.5MHz RB 1 0 NTV



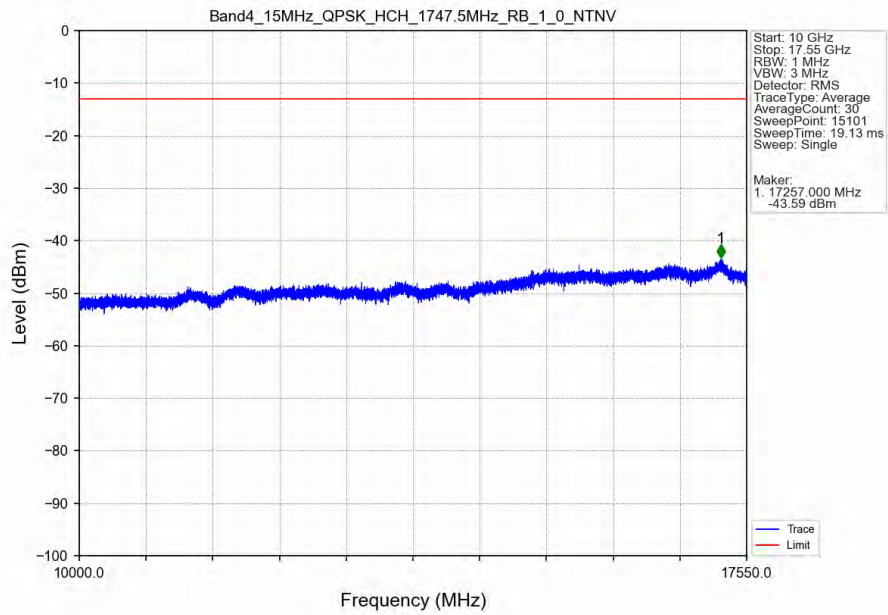
Band4 15MHz QPSK MCH 1732.5MHz RB 1 0 NTV



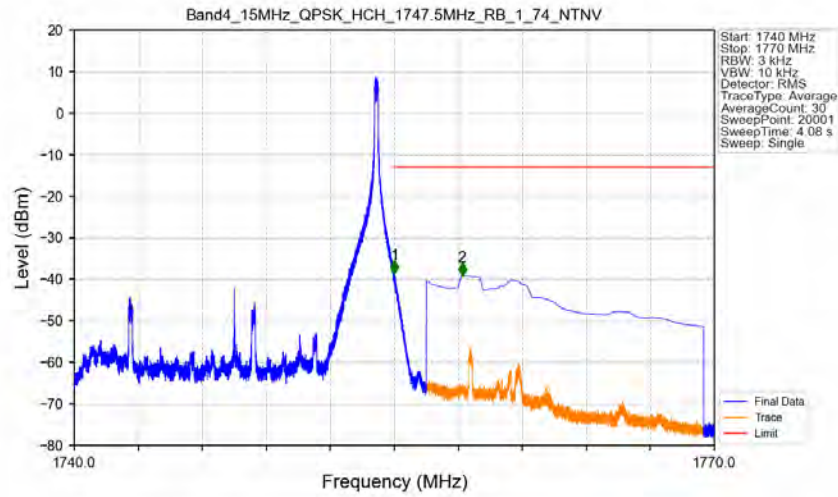
Band4 15MHz QPSK HCH 1747.5MHz RB 1 0 NTV



Band4 15MHz QPSK HCH 1747.5MHz RB 1 0 NTV

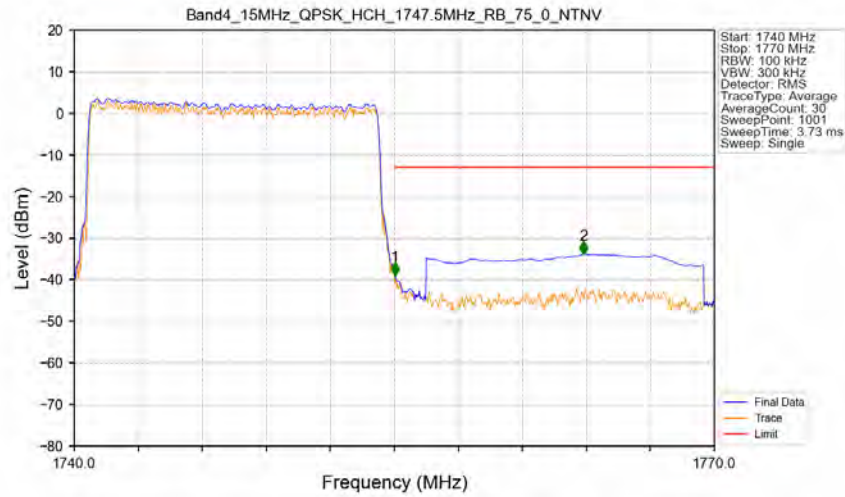


Band4 15MHz QPSK HCH 1747.5MHz RB 1 74 NTV



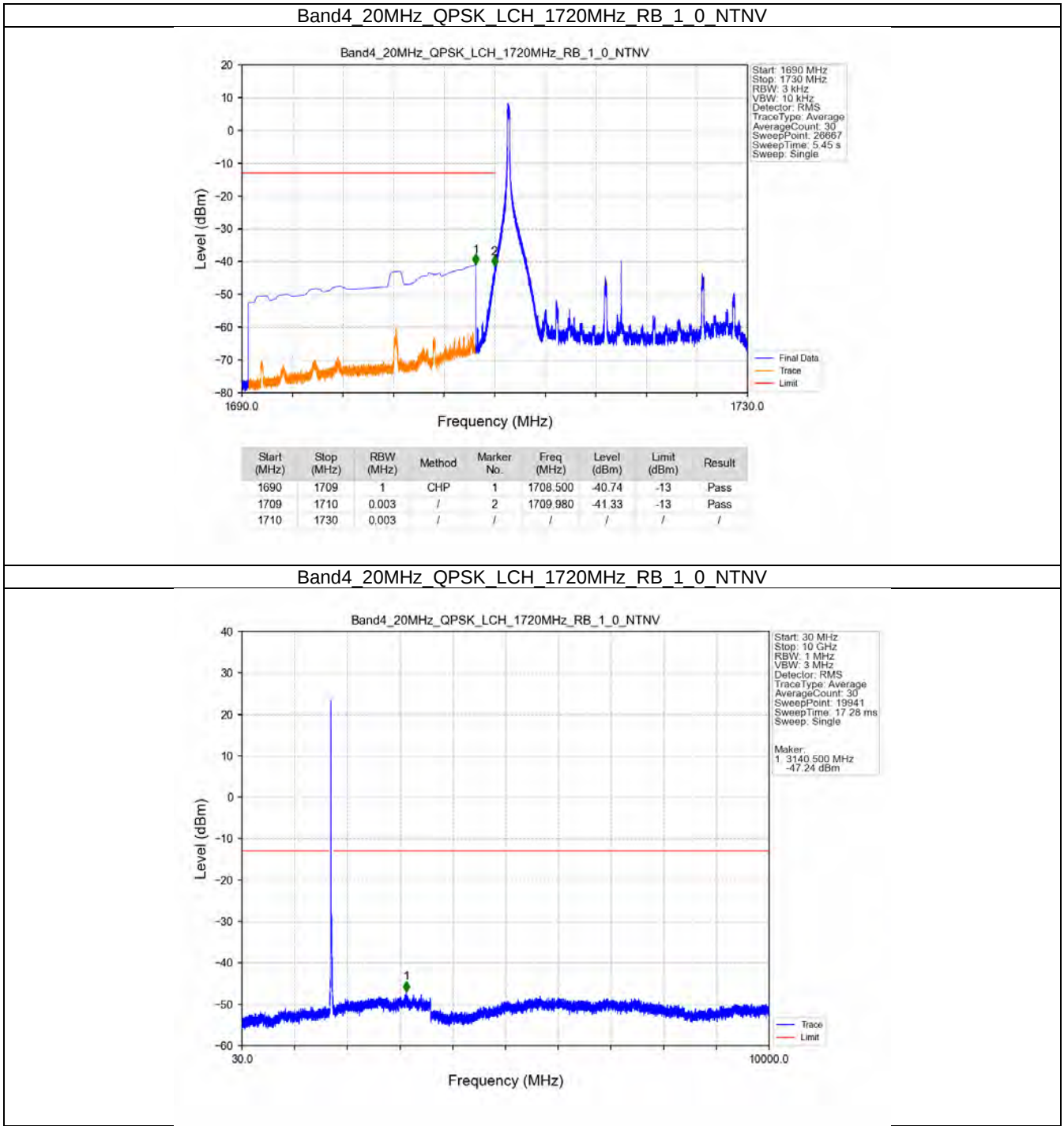
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
1740	1755	0.003	/	/	/	/	/	/
1755	1756	0.003	/	1	1755.012	-38.64	-13	Pass
1756	1770	1	CHP	2	1758.174	-39.16	-13	Pass

Band4 15MHz QPSK HCH 1747.5MHz RB 75 0 NTV

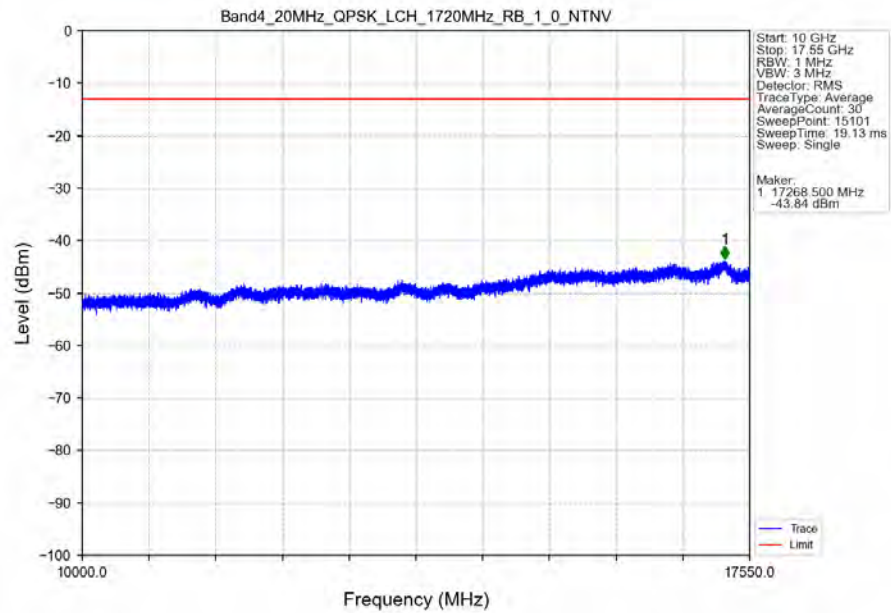


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
1740	1755	0.149	CHP	/	/	/	/	/
1755	1756	0.149	CHP	1	1755.030	-38.97	-13	Pass
1756	1770	1	CHP	2	1763.880	-33.88	-13	Pass

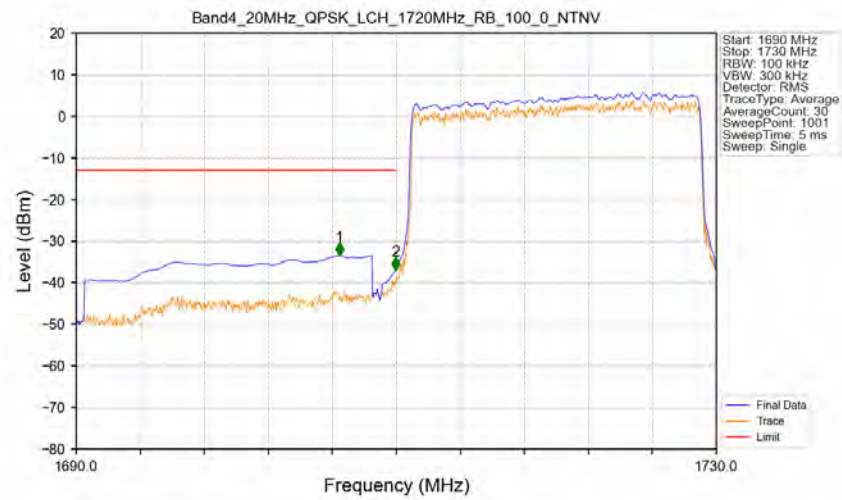
5.2.6 B4_20MHz



Band4 20MHz QPSK LCH 1720MHz RB 1 0 NTV

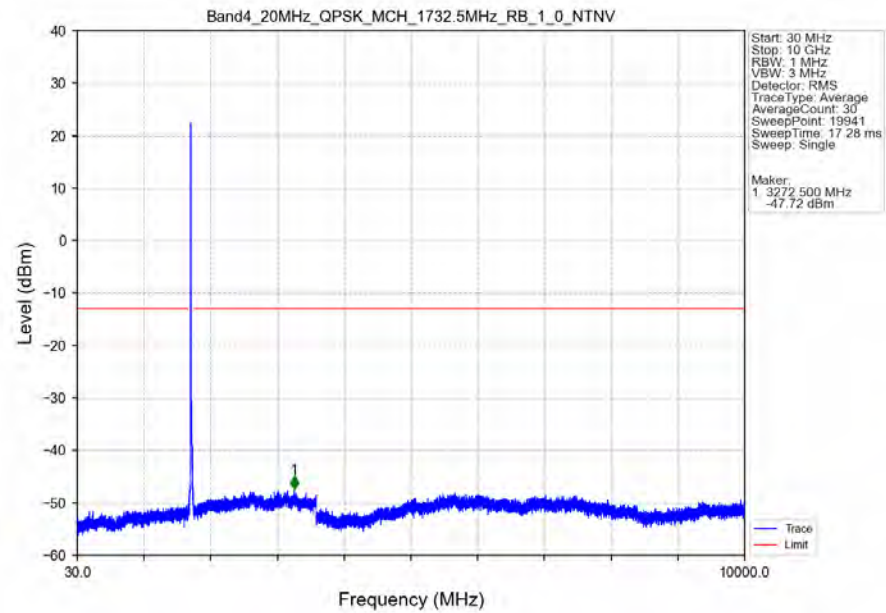


Band4 20MHz QPSK LCH 1720MHz RB 100 0 NTV

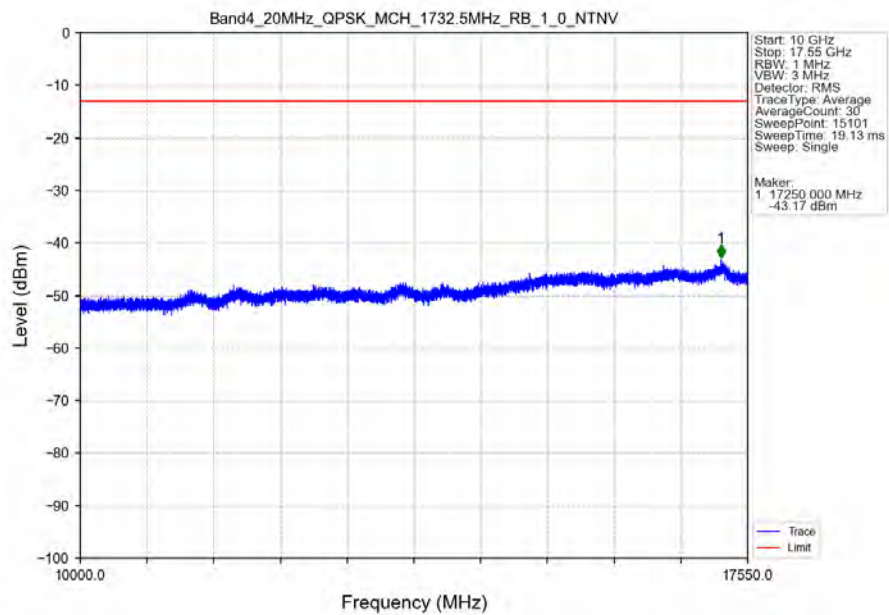


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
1690	1709	1	CHP	1	1706.440	-33.52	-13	Pass
1709	1710	0.198	CHP	2	1709.960	-37.01	-13	Pass
1710	1730	0.198	CHP	/	/	/	/	/

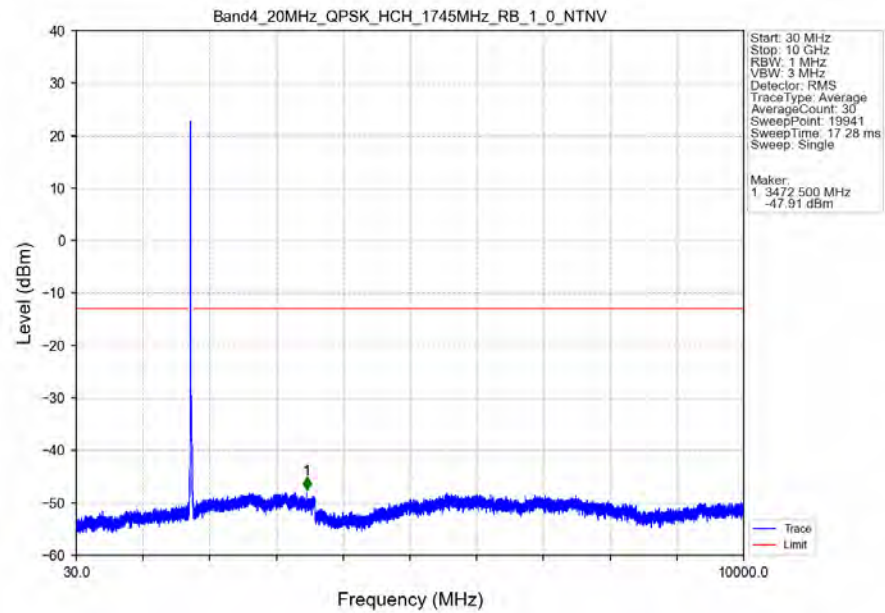
Band4 20MHz QPSK MCH 1732.5MHz RB 1 0 NTV



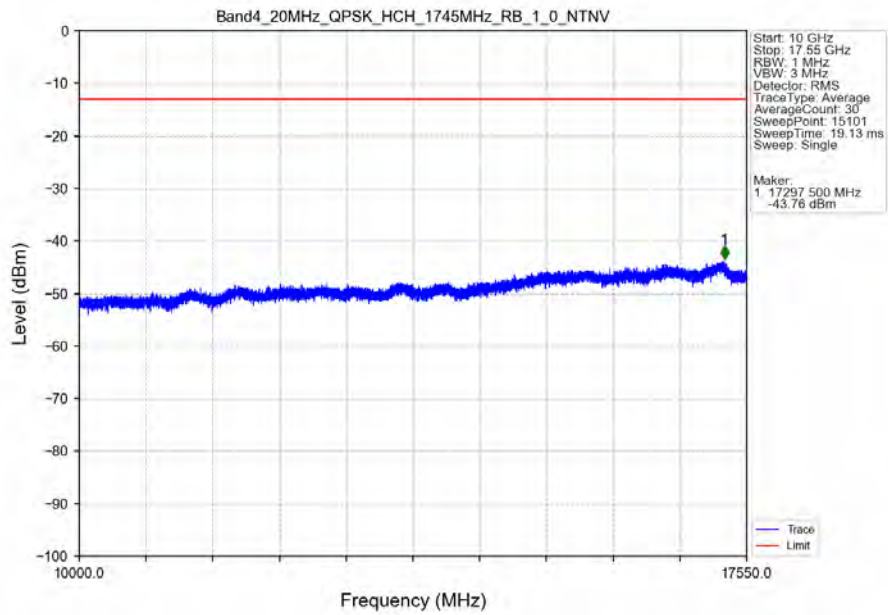
Band4 20MHz QPSK MCH 1732.5MHz RB 1 0 NTV



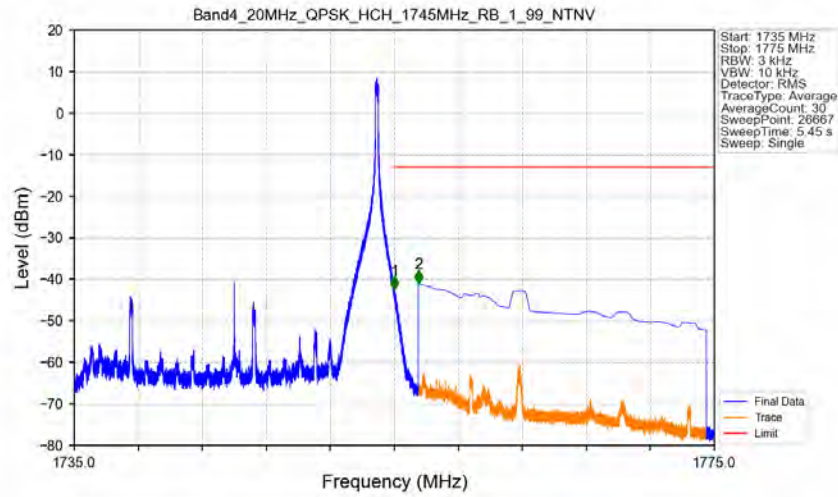
Band4 20MHz QPSK HCH 1745MHz RB 1 0 NTN



Band4 20MHz QPSK HCH 1745MHz RB 1 0 NTN

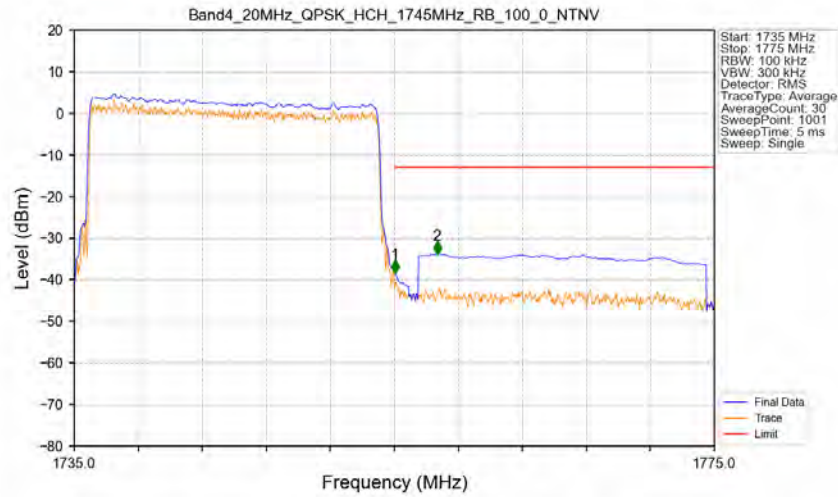


Band4 20MHz QPSK HCH 1745MHz RB 1 99 NTNV



Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
1735	1755	0.003	/	/	/	/	/	/
1755	1756	0.003	/	1	1755.006	-42.46	-13	Pass
1756	1775	1	CHP	2	1756.500	-40.87	-13	Pass

Band4 20MHz QPSK HCH 1745MHz RB 100 0 NTNV



Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
1735	1755	0.198	CHP	/	/	/	/	/
1755	1756	0.198	CHP	1	1755.040	-38.35	-13	Pass
1756	1775	1	CHP	2	1757.680	-33.85	-13	Pass

6. Field Strength of Spurious Radiation

LTE Band 4-Low channel, Modulation: QPSK, Bandwidth:20MHz, 1RB#0								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable Loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
3422.0	-59.37	-13	-46.37	-63.99	3.36	7.98	Horizontal	Pass
5133.0	-56.14	-13	-43.14	-61.75	4.61	10.22	Horizontal	Pass
6844.0	-61.4	-13	-48.4	-67.43	4.9	10.93	Horizontal	Pass
3422.0	-58.66	-13	-45.66	-63.28	3.36	7.98	Vertical	Pass
5133.0	-54.42	-13	-41.42	-60.03	4.61	10.22	Vertical	Pass
6844.0	-60.47	-13	-47.47	-66.5	4.9	10.93	Vertical	Pass

LTE Band 4-Middle channel, Modulation: QPSK, Bandwidth:20MHz, 1RB#0								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable Loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
3447.0	-59.31	-13	-46.31	-63.98	3.37	8.04	Horizontal	Pass
5170.5	-55.35	-13	-42.35	-60.98	4.62	10.25	Horizontal	Pass
6894.0	-61.2	-13	-48.2	-67.29	4.9	10.99	Horizontal	Pass
3447.0	-59.19	-13	-46.19	-63.86	3.37	8.04	Vertical	Pass
5170.5	-48.98	-13	-35.98	-54.61	4.62	10.25	Vertical	Pass
6894.0	-61.21	-13	-48.21	-67.3	4.9	10.99	Vertical	Pass

LTE Band 4-High channel, Modulation: QPSK, Bandwidth:20MHz, 1RB#0								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable Loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
3472.0	-59.17	-13	-46.17	-63.88	3.39	8.1	Horizontal	Pass
5208.0	-56.06	-13	-43.06	-61.69	4.64	10.27	Horizontal	Pass
6944.0	-61.26	-13	-48.26	-67.41	4.91	11.06	Horizontal	Pass
3472.0	-60.74	-13	-47.74	-65.45	3.39	8.1	Vertical	Pass
5208.0	-51.81	-13	-38.81	-57.44	4.64	10.27	Vertical	Pass
6944.0	-61.09	-13	-48.09	-67.24	4.91	11.06	Vertical	Pass