

1. Effective (Isotropic) Radiated Power Output Data

1.1 Test Result

1.1.1 B40a_5MHz_EIRP

Band: 40a / Bandwidth: 5MHz / NTNV								
Modulation	Frequency (MHz)	RB Allocation		Conducted Power (dBm)	Gain (dBi)	EIRP (dBm)		Verdict
		Size	Offset			Result	Limit	
QPSK	2307.5	1	0	18.54	3.37	21.91	<=23.98	Pass
			13	18.36	3.37	21.73	<=23.98	Pass
			24	18.57	3.37	21.94	<=23.98	Pass
		12	0	18.21	3.37	21.58	<=23.98	Pass
			6	18.22	3.37	21.59	<=23.98	Pass
			13	18.23	3.37	21.60	<=23.98	Pass
		25	0	18.22	3.37	21.59	<=23.98	Pass
	2310	1	0	18.47	3.37	21.84	<=23.98	Pass
			13	18.30	3.37	21.67	<=23.98	Pass
			24	18.51	3.37	21.88	<=23.98	Pass
		12	0	18.24	3.37	21.61	<=23.98	Pass
			6	18.27	3.37	21.64	<=23.98	Pass
			13	18.28	3.37	21.65	<=23.98	Pass
		25	0	18.27	3.37	21.64	<=23.98	Pass
	2312.5	1	0	18.60	3.37	21.97	<=23.98	Pass
			13	18.44	3.37	21.81	<=23.98	Pass
			24	18.70	3.37	22.07	<=23.98	Pass
		12	0	18.43	3.37	21.80	<=23.98	Pass
			6	18.46	3.37	21.83	<=23.98	Pass
			13	18.57	3.37	21.94	<=23.98	Pass
		25	0	18.46	3.37	21.83	<=23.98	Pass
16QAM	2307.5	1	0	18.71	3.37	22.08	<=23.98	Pass
			13	18.54	3.37	21.91	<=23.98	Pass
			24	18.73	3.37	22.10	<=23.98	Pass
		12	0	18.26	3.37	21.63	<=23.98	Pass
			6	18.27	3.37	21.64	<=23.98	Pass
			13	18.28	3.37	21.65	<=23.98	Pass
		25	0	18.27	3.37	21.64	<=23.98	Pass
	2310	1	0	18.74	3.37	22.11	<=23.98	Pass
			13	18.60	3.37	21.97	<=23.98	Pass
			24	18.79	3.37	22.16	<=23.98	Pass
		12	0	18.35	3.37	21.72	<=23.98	Pass
			6	18.37	3.37	21.74	<=23.98	Pass
			13	18.39	3.37	21.76	<=23.98	Pass
		25	0	18.36	3.37	21.73	<=23.98	Pass
	2312.5	1	0	18.92	3.37	22.29	<=23.98	Pass
			13	18.79	3.37	22.16	<=23.98	Pass
			24	19.08	3.37	22.45	<=23.98	Pass
		12	0	18.48	3.37	21.85	<=23.98	Pass
			6	18.51	3.37	21.88	<=23.98	Pass
			13	18.63	3.37	22.00	<=23.98	Pass
		25	0	18.50	3.37	21.87	<=23.98	Pass
Note1: EIRP=Conducted Power+Antenna Gain								

1.1.2 B40a_10MHz_EIRP

Band: 40a / Bandwidth: 10MHz / NTNV

Modulation	Frequency (MHz)	RB Allocation		Conducted Power (dBm)	Gain (dBi)	EIRP (dBm)		Verdict
		Size	Offset			Result	Limit	
QPSK	2310	1	0	18.77	3.37	22.14	<=23.98	Pass
			25	18.35	3.37	21.72	<=23.98	Pass
			49	18.88	3.37	22.25	<=23.98	Pass
		25	0	18.26	3.37	21.63	<=23.98	Pass
			13	18.32	3.37	21.69	<=23.98	Pass
			25	18.33	3.37	21.70	<=23.98	Pass
		50	0	18.28	3.37	21.65	<=23.98	Pass
16QAM	2310	1	0	19.07	3.37	22.44	<=23.98	Pass
			25	18.67	3.37	22.04	<=23.98	Pass
			49	19.20	3.37	22.57	<=23.98	Pass
		12	0	18.49	3.37	21.86	<=23.98	Pass
			19	18.39	3.37	21.76	<=23.98	Pass
			38	18.69	3.37	22.06	<=23.98	Pass
		27	0	18.33	3.37	21.70	<=23.98	Pass

Note1: EIRP=Conducted Power+Antenna Gain

2. Frequency Stability

2.1 Test Result

2.1.1 B40a_10MHz

Band: 40a / Bandwidth: 10MHz									
Modulation	Frequency (MHz)	RB Allocation		Temp. (°C)	Voltage (VDC)	Freq. Error (Hz)	Freq. vs. Rated (ppm)		Verdict
		Size	Offset				Result	Limit	
QPSK	2310	50	0	20	3.27	-4.100	-0.0018	-2.5 to 2.5	Pass
					3.85	-22.100	-0.0096	-2.5 to 2.5	Pass
					4.43	-21.700	-0.0094	-2.5 to 2.5	Pass
				-30	3.85	-23.700	-0.0103	-2.5 to 2.5	Pass
				-20	3.85	-22.100	-0.0096	-2.5 to 2.5	Pass
				-10	3.85	-24.700	-0.0107	-2.5 to 2.5	Pass
				0	3.85	-23.300	-0.0101	-2.5 to 2.5	Pass
				10	3.85	-22.000	-0.0095	-2.5 to 2.5	Pass
				30	3.85	-23.100	-0.0100	-2.5 to 2.5	Pass
				40	3.85	-26.600	-0.0115	-2.5 to 2.5	Pass
				50	3.85	-24.400	-0.0106	-2.5 to 2.5	Pass

3. 99% & 26dB Bandwidth

3.1 Test Result

3.1.1 Band40a_OBW

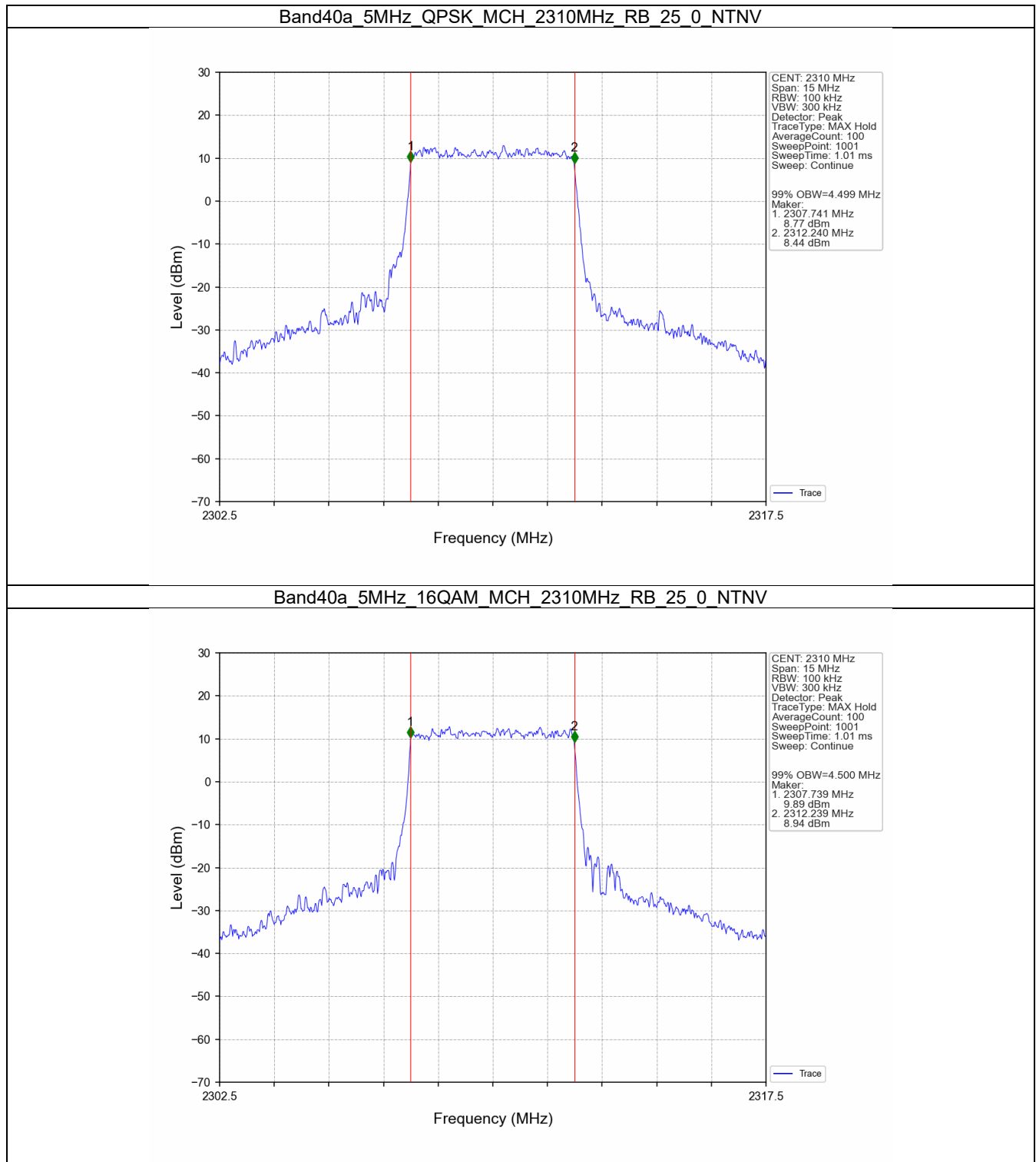
Band: 40a / NTNV							
Bandwidth (MHz)	Modulation	Frequency (MHz)	RB Allocation		99% Occupied Bandwidth (MHz)		Verdict
			Size	Offset	Result	Limit	
5	QPSK	2310	25	0	4.499	/	Pass
	16QAM	2310	25	0	4.500	/	Pass
10	QPSK	2310	50	0	8.979	/	Pass
	16QAM	2310	27	0	4.949	/	Pass

3.1.2 Band40a_XDB

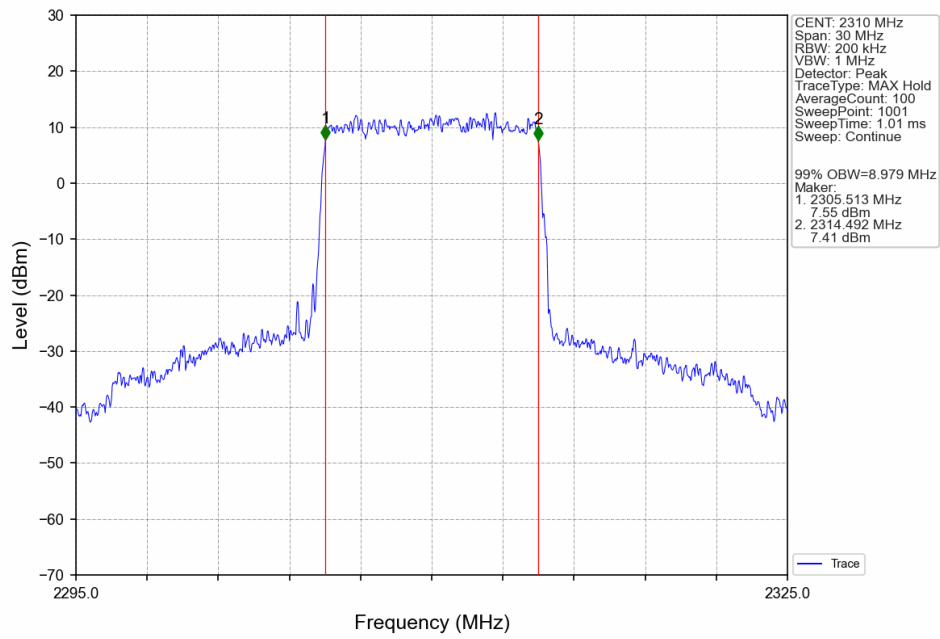
Band: 40a / NTNV							
Bandwidth (MHz)	Modulation	Frequency (MHz)	RB Allocation		26dB Bandwidth (MHz)		Verdict
			Size	Offset	Result	Limit	
5	QPSK	2310	25	0	5.084	/	Pass
	16QAM	2310	25	0	5.037	/	Pass
10	QPSK	2310	50	0	9.671	/	Pass
	16QAM	2310	27	0	5.581	/	Pass

3.2 Test Graph

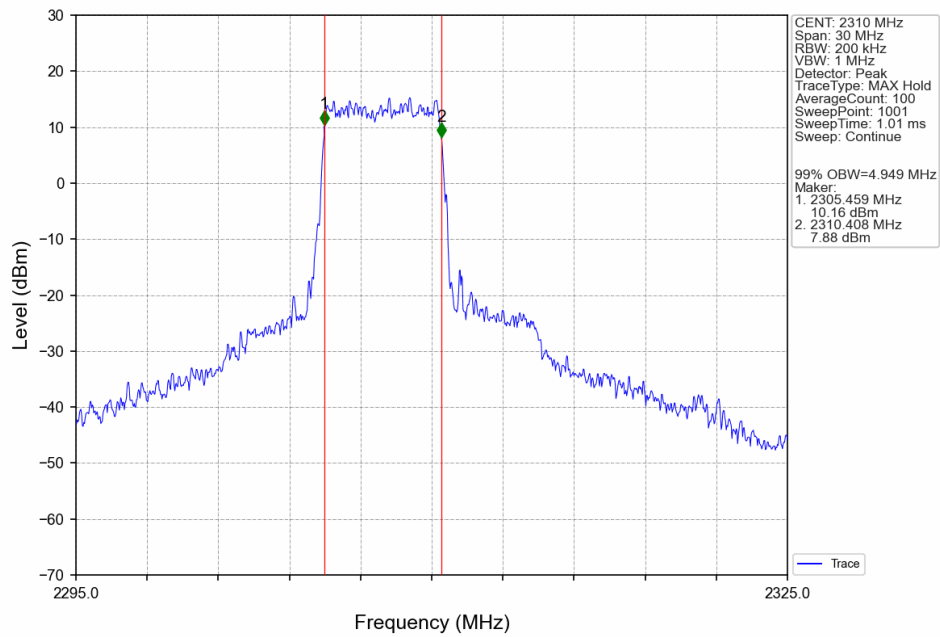
3.2.1 Band40a_OBW



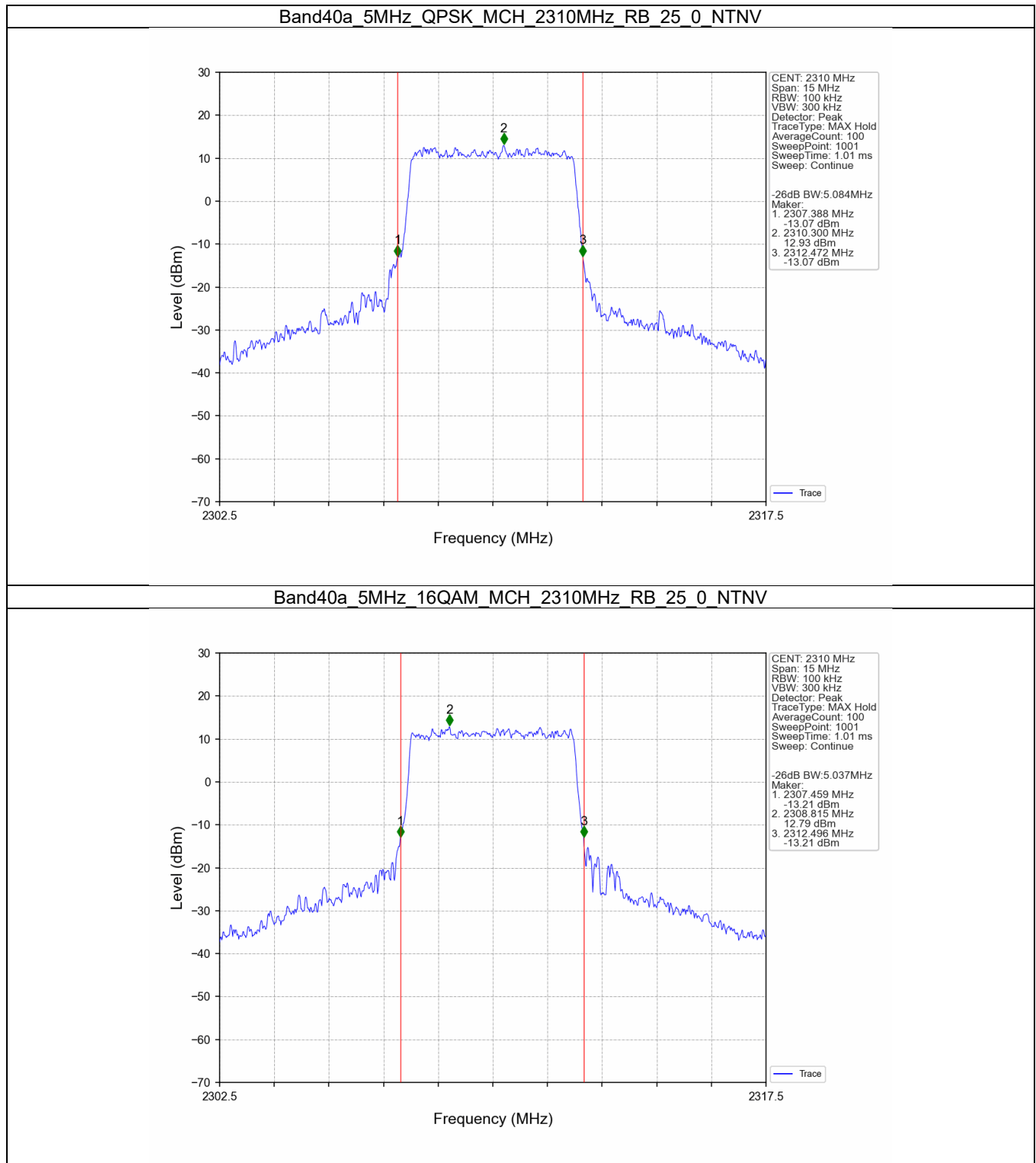
Band40a_10MHz_QPSK_MCH_2310MHz_RB_50_0_NTNV



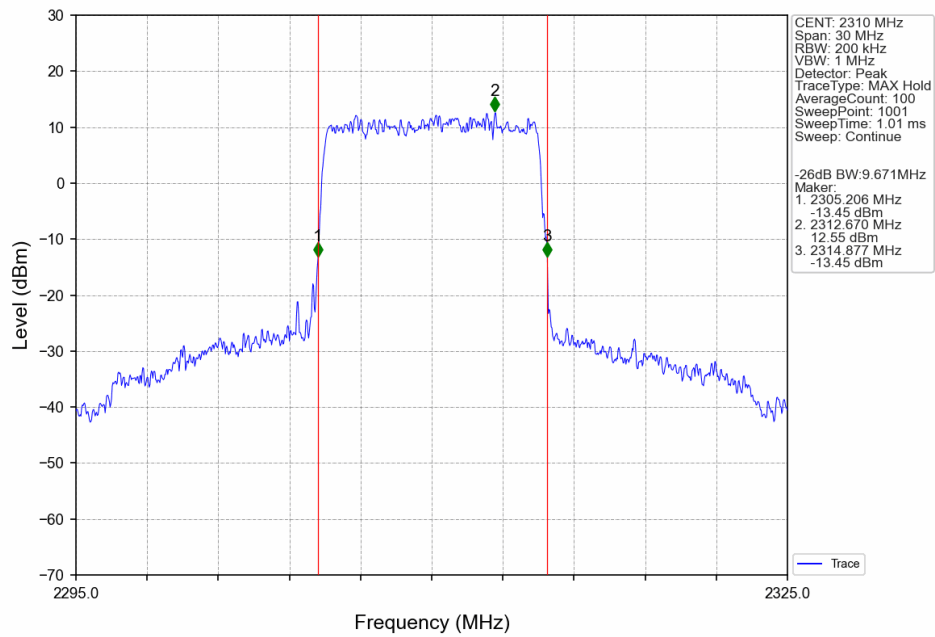
Band40a_10MHz_16QAM_MCH_2310MHz_RB_27_0_NTNV



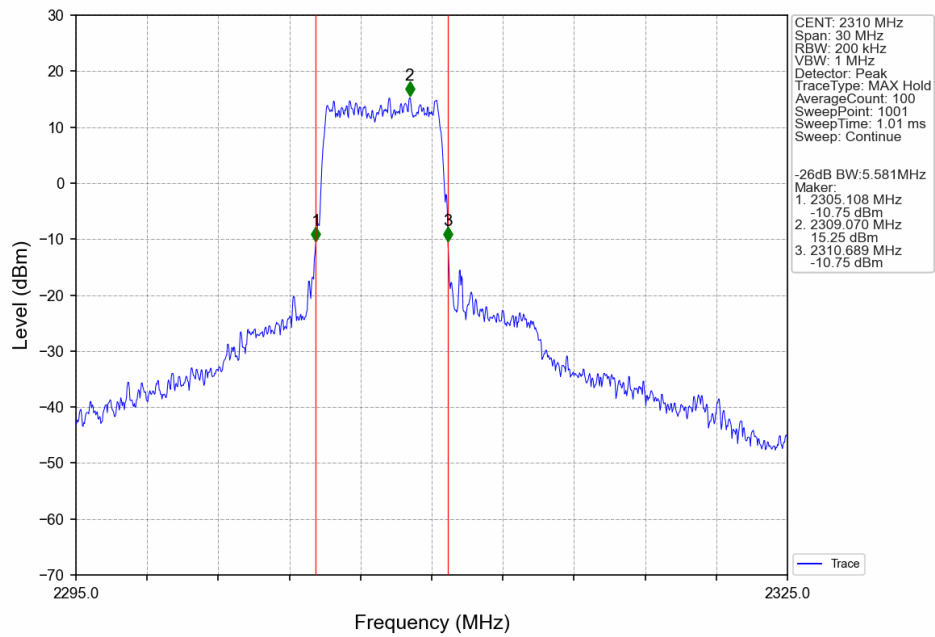
3.2.2 Band40a_XDB



Band40a_10MHz_QPSK_MCH_2310MHz_RB_50_0_NTNV



Band40a_10MHz_16QAM_MCH_2310MHz_RB_27_0_NTNV



4. Peak-Average Ratio

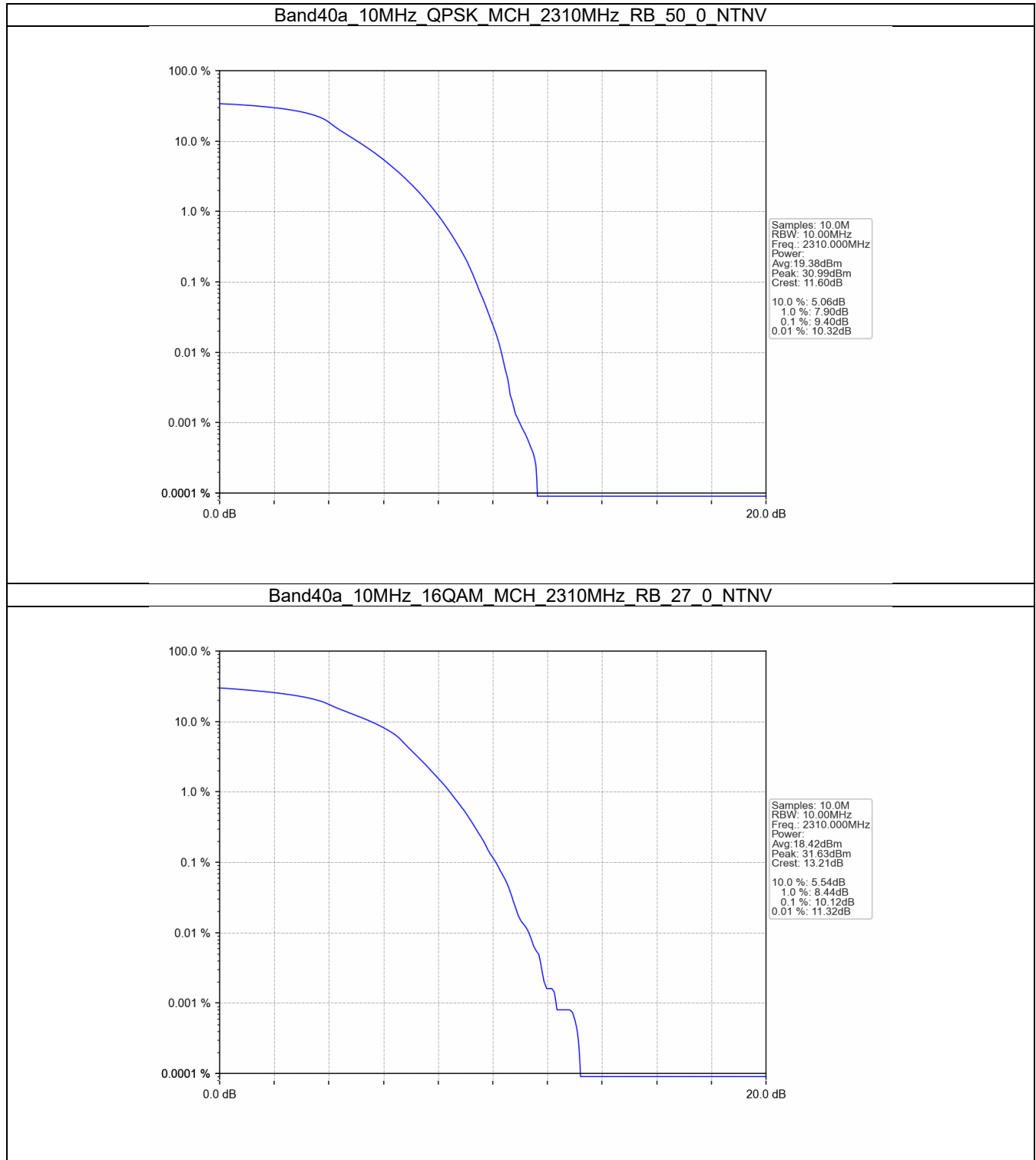
4.1 Test Result

4.1.1 B40a_10MHz

Band: 40a / Bandwidth: 10MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Peak-Average Ratio (dB)		Verdict
		Size	Offset	Result	Limit	
QPSK	2310	50	0	9.40	<=13	Pass
16QAM	2310	27	0	10.12	<=13	Pass

4.2 Test Graph

4.2.1 B40a_10MHz



5. Spurious Emission

5.1 Test Result

5.1.1 B40a_5MHz

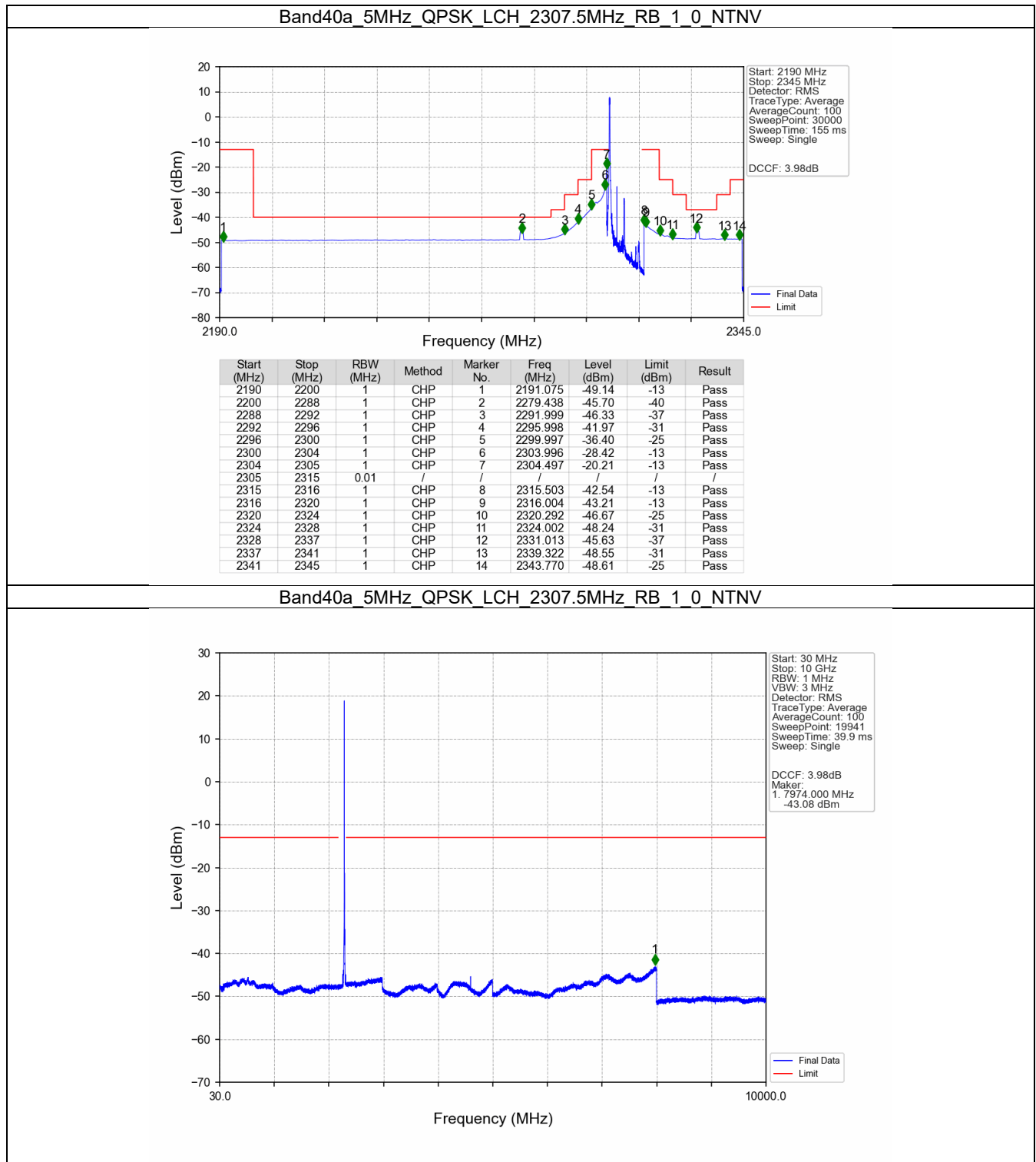
Band: 40a / Bandwidth: 5MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission		Verdict
		Size	Offset	Result	Limit	
QPSK	2307.5	1	0	Refer To Test Graph		Pass
		25	0	Refer To Test Graph		Pass
	2310	1	0	Refer To Test Graph		Pass
	2312.5	1	0	Refer To Test Graph		Pass
			24	Refer To Test Graph		Pass
		25	0	Refer To Test Graph		Pass

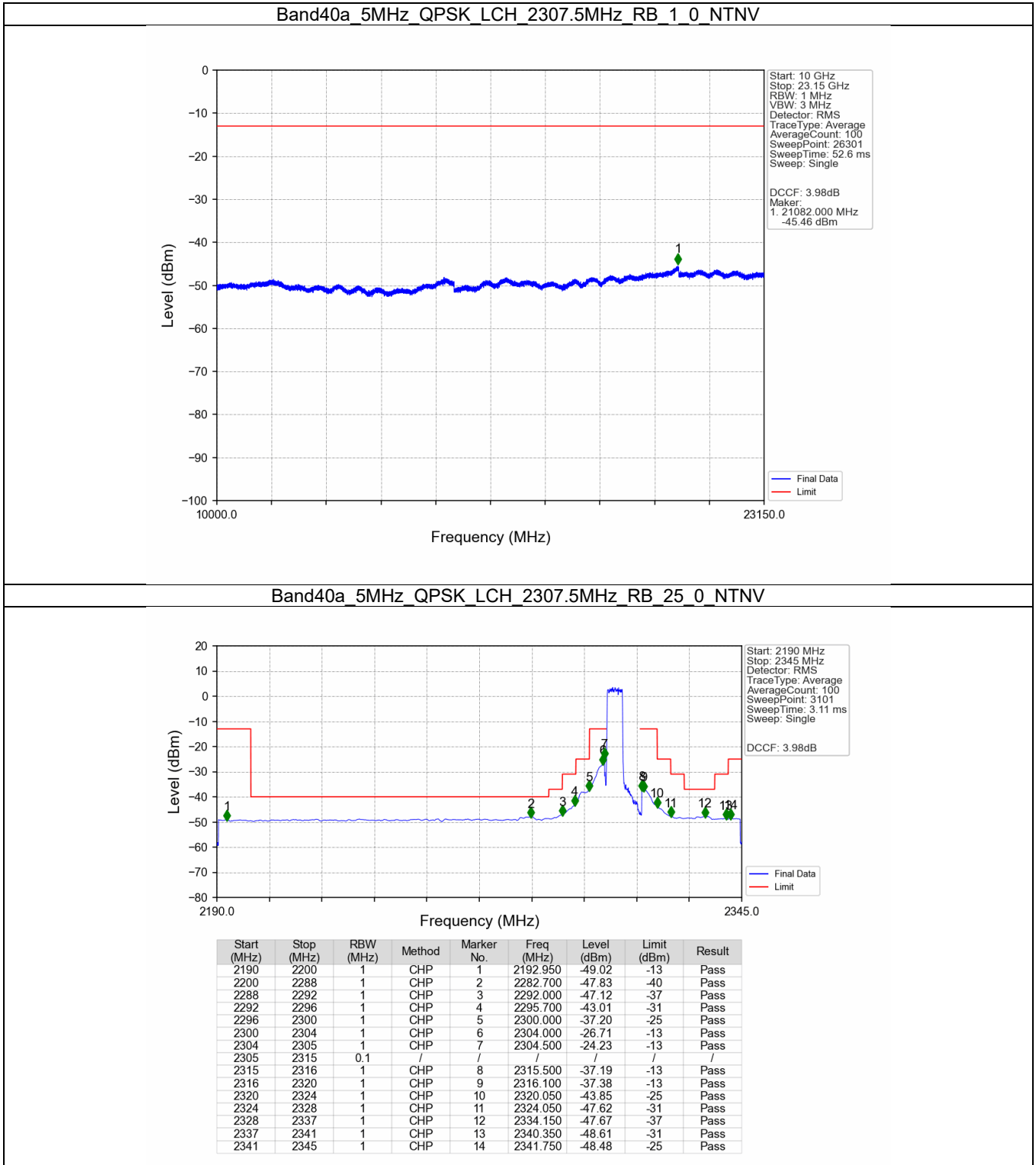
5.1.2 B40a_10MHz

Band: 40a / Bandwidth: 10MHz / NTN/V						
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission		Verdict
		Size	Offset	Result	Limit	
QPSK	2310	1	0	Refer To Test Graph		Pass
		50	0	Refer To Test Graph		Pass
	2310	1	49	Refer To Test Graph		Pass
		50	0	Refer To Test Graph		Pass

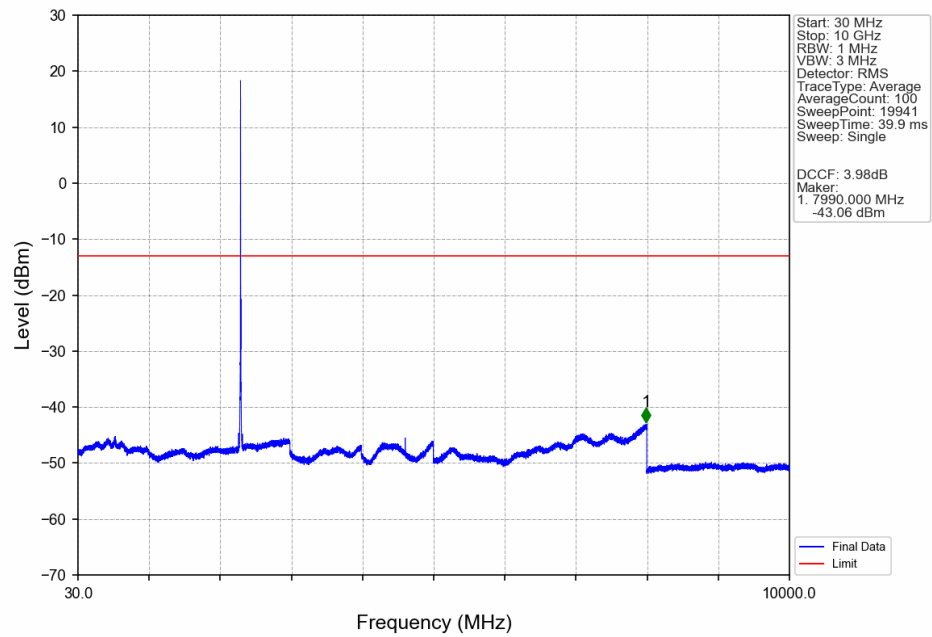
5.2 Test Graph

5.2.1 B40a_5MHz

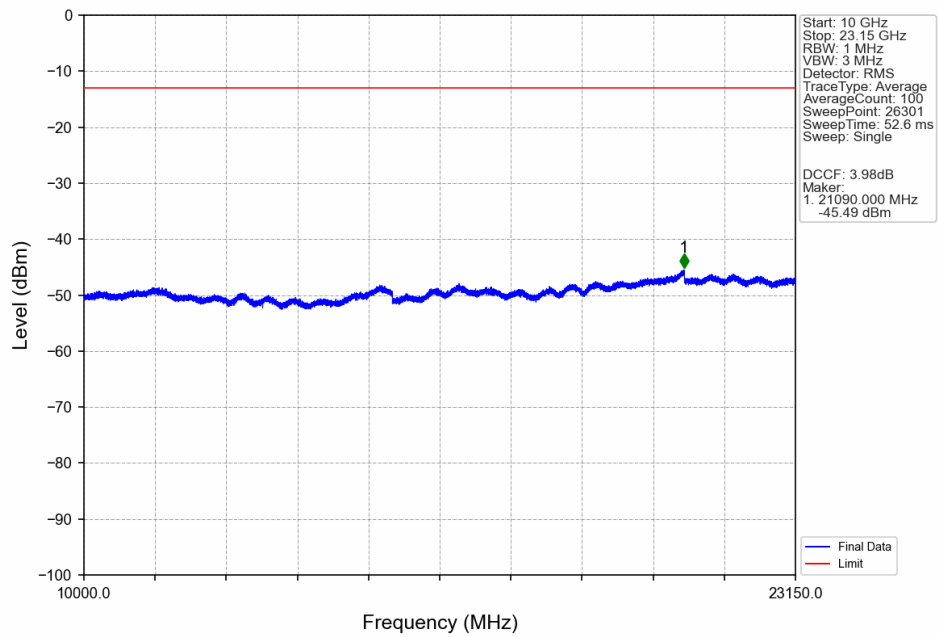




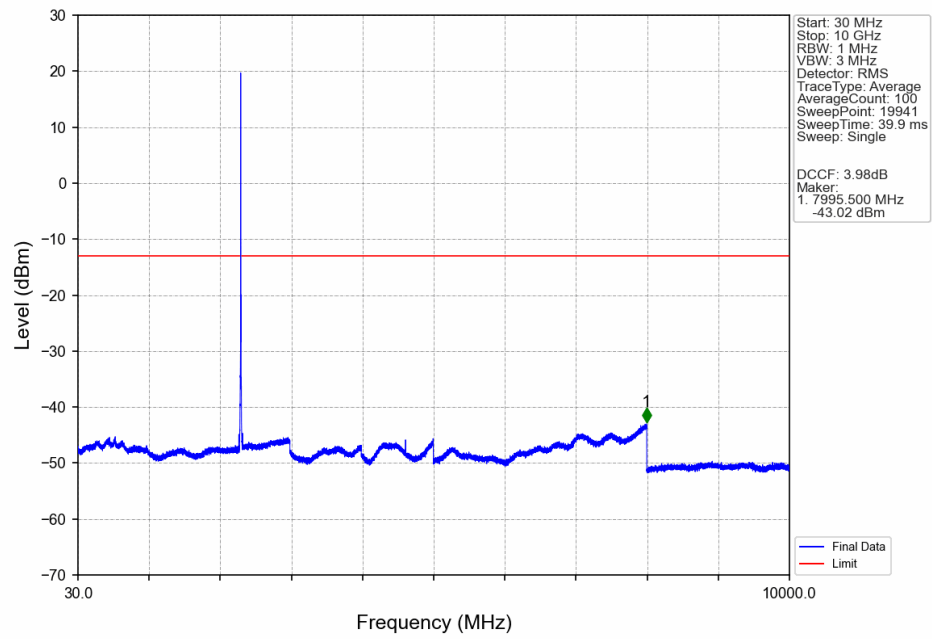
Band40a_5MHz_QPSK_MCH_2310MHz_RB_1_0_NTNV



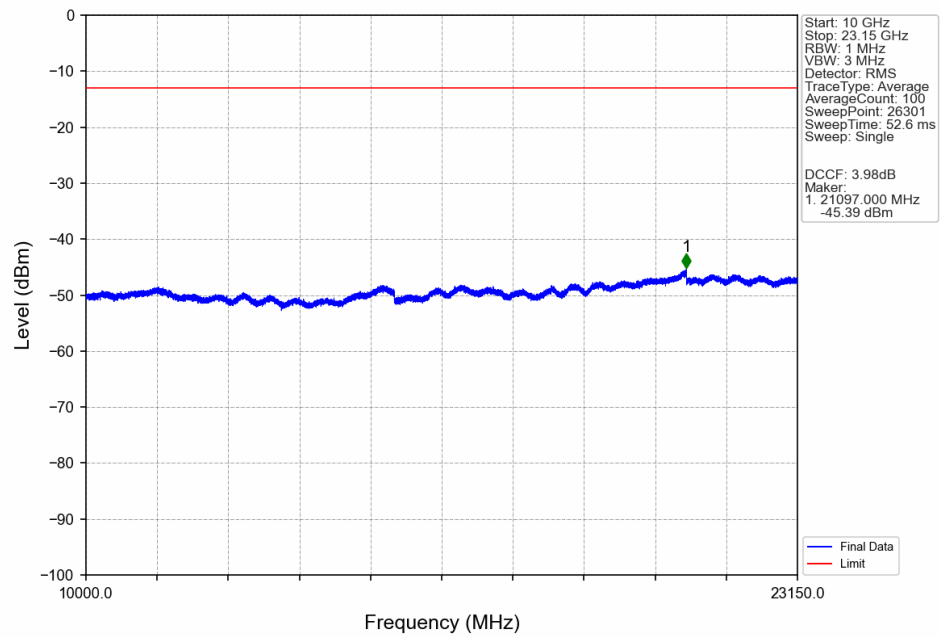
Band40a_5MHz_QPSK_MCH_2310MHz_RB_1_0_NTNV



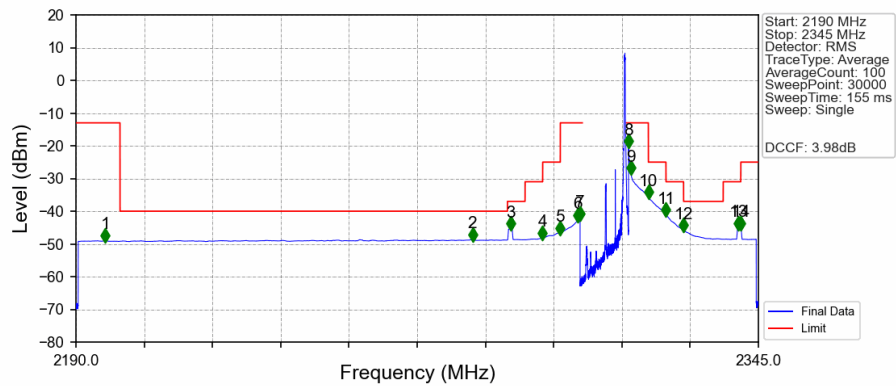
Band40a_5MHz_QPSK_HCH_2312.5MHz_RB_1_0_NTNV



Band40a_5MHz_QPSK_HCH_2312.5MHz_RB_1_0_NTNV

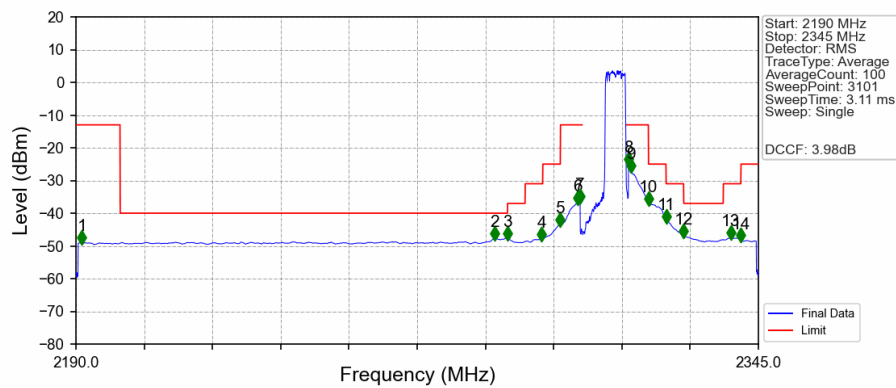


Band40a_5MHz_QPSK_HCH_2312.5MHz_RB_1_24_NTNV



Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
2190	2200	1	CHP	1	2196.650	-49.02	-13	Pass
2200	2288	1	CHP	2	2280.079	-48.69	-40	Pass
2288	2292	1	CHP	3	2288.733	-45.38	-37	Pass
2292	2296	1	CHP	4	2295.977	-48.16	-31	Pass
2296	2300	1	CHP	5	2299.986	-46.65	-25	Pass
2300	2304	1	CHP	6	2303.991	-42.77	-13	Pass
2304	2305	1	CHP	7	2304.497	-42.20	-13	Pass
2305	2315	0.01	/	/	/	/	/	/
2315	2316	1	CHP	8	2315.503	-20.20	-13	Pass
2316	2320	1	CHP	9	2316.004	-28.34	-13	Pass
2320	2324	1	CHP	10	2320.003	-35.75	-25	Pass
2324	2328	1	CHP	11	2324.002	-41.16	-31	Pass
2328	2337	1	CHP	12	2328.001	-45.85	-37	Pass
2337	2341	1	CHP	13	2340.464	-45.28	-31	Pass
2341	2345	1	CHP	14	2341.001	-45.30	-25	Pass

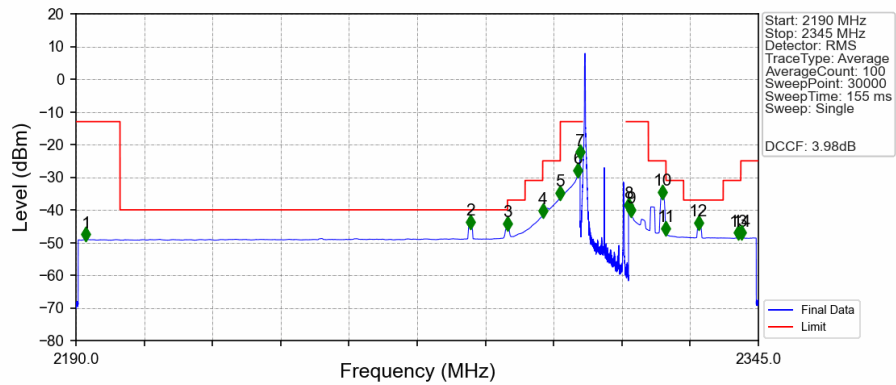
Band40a_5MHz_QPSK_HCH_2312.5MHz_RB_25_0_NTNV



Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
2190	2200	1	CHP	1	2191.300	-48.97	-13	Pass
2200	2288	1	CHP	2	2285.100	-47.65	-40	Pass
2288	2292	1	CHP	3	2288.050	-47.74	-37	Pass
2292	2296	1	CHP	4	2295.750	-47.97	-31	Pass
2296	2300	1	CHP	5	2300.000	-43.50	-25	Pass
2300	2304	1	CHP	6	2304.000	-36.80	-13	Pass
2304	2305	1	CHP	7	2304.500	-36.36	-13	Pass
2305	2315	0.1	/	/	/	/	/	/
2315	2316	1	CHP	8	2315.500	-25.01	-13	Pass
2316	2320	1	CHP	9	2316.050	-26.95	-13	Pass
2320	2324	1	CHP	10	2320.050	-37.05	-25	Pass
2324	2328	1	CHP	11	2324.050	-42.52	-31	Pass
2328	2337	1	CHP	12	2328.050	-47.04	-37	Pass
2337	2341	1	CHP	13	2338.700	-47.53	-31	Pass
2341	2345	1	CHP	14	2341.050	-48.32	-25	Pass

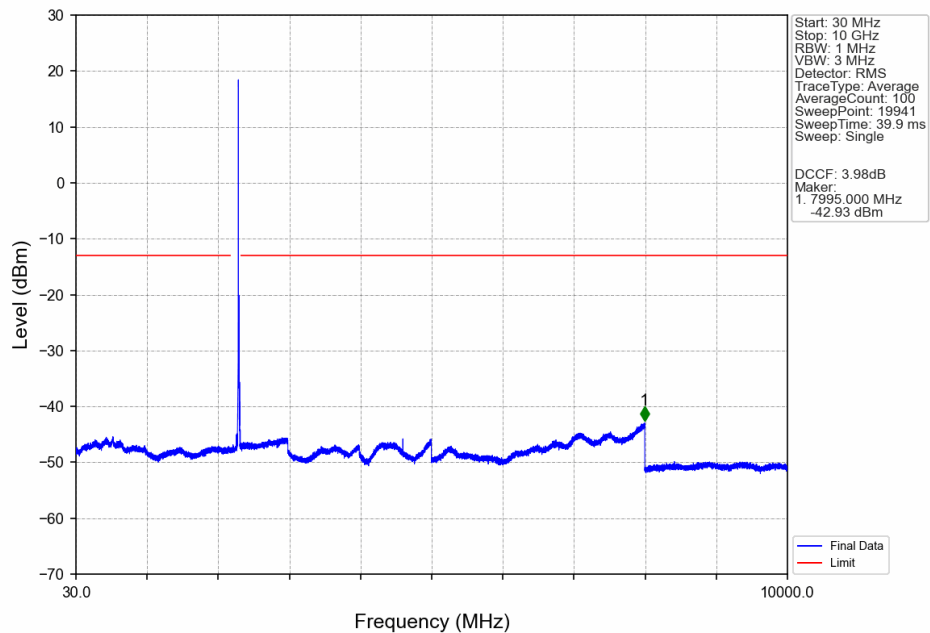
5.2.2 B40a_10MHz

Band40a_10MHz_QPSK_LCH_2310MHz_RB_1_0_NTNV

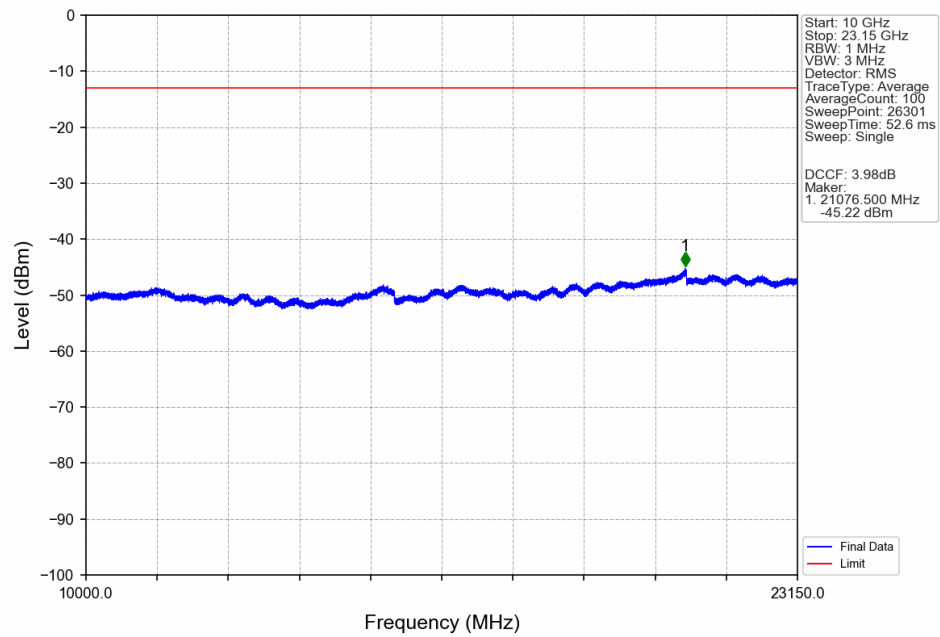


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
2190	2200	1	CHP	1	2192.211	-49.05	-13	Pass
2200	2288	1	CHP	2	2279.665	-45.33	-40	Pass
2288	2292	1	CHP	3	2288.005	-45.67	-37	Pass
2292	2296	1	CHP	4	2295.998	-41.77	-31	Pass
2296	2300	1	CHP	5	2299.986	-36.31	-25	Pass
2300	2304	1	CHP	6	2303.996	-29.52	-13	Pass
2304	2305	1	CHP	7	2304.497	-23.91	-13	Pass
2305	2315	0.01	/	/	/	/	/	/
2315	2316	1	CHP	8	2315.503	-40.12	-13	Pass
2316	2320	1	CHP	9	2316.004	-41.58	-13	Pass
2320	2324	1	CHP	10	2323.217	-36.16	-25	Pass
2324	2328	1	CHP	11	2324.002	-47.19	-31	Pass
2328	2337	1	CHP	12	2331.416	-45.52	-37	Pass
2337	2341	1	CHP	13	2340.479	-48.55	-31	Pass
2341	2345	1	CHP	14	2341.151	-48.55	-25	Pass

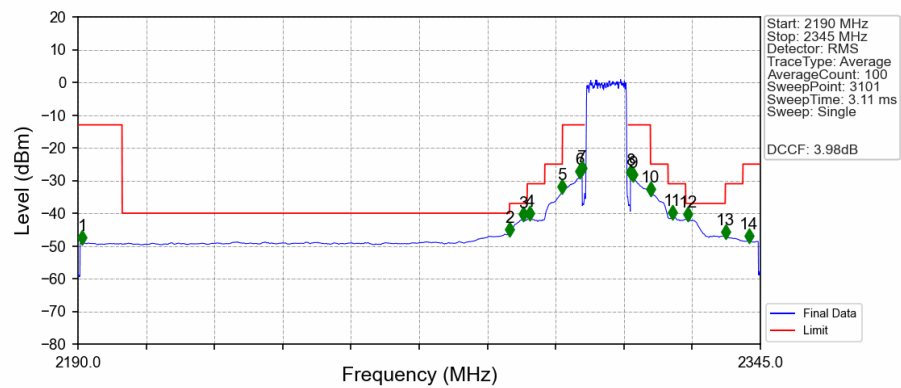
Band40a_10MHz_QPSK_LCH_2310MHz_RB_1_0_NTNV



Band40a_10MHz_QPSK_LCH_2310MHz_RB_1_0_NTNV

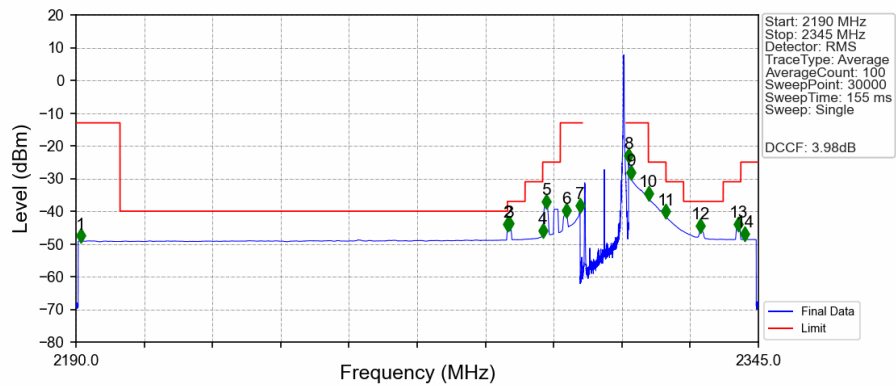


Band40a_10MHz_QPSK_LCH_2310MHz_RB_50_0_NTNV



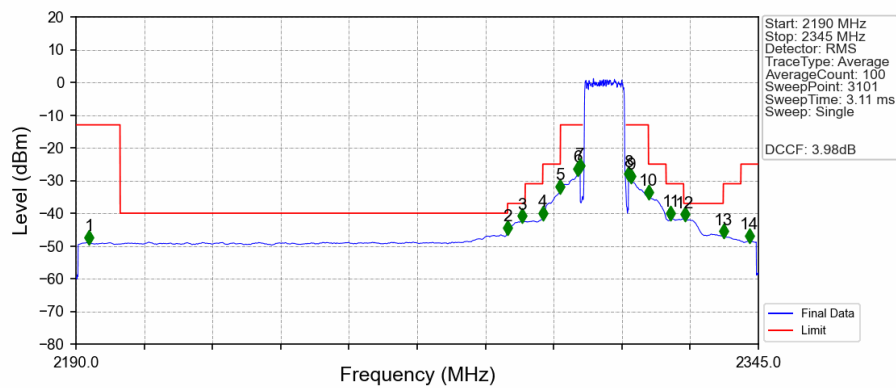
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
2190	2200	1	CHP	1	2190.950	-49.02	-13	Pass
2200	2288	1	CHP	2	2288.000	-46.41	-40	Pass
2288	2292	1	CHP	3	2291.100	-41.89	-37	Pass
2292	2296	1	CHP	4	2292.650	-41.52	-31	Pass
2296	2300	1	CHP	5	2300.000	-33.35	-25	Pass
2300	2304	1	CHP	6	2304.000	-28.72	-13	Pass
2304	2305	1	CHP	7	2304.500	-27.85	-13	Pass
2305	2315	0.1	/	/	/	/	/	/
2315	2316	1	CHP	8	2315.500	-28.89	-13	Pass
2316	2320	1	CHP	9	2316.050	-29.61	-13	Pass
2320	2324	1	CHP	10	2320.050	-34.11	-25	Pass
2324	2328	1	CHP	11	2324.950	-41.23	-31	Pass
2328	2337	1	CHP	12	2328.500	-41.74	-37	Pass
2337	2341	1	CHP	13	2337.050	-47.26	-31	Pass
2341	2345	1	CHP	14	2342.350	-48.40	-25	Pass

Band40a_10MHz_QPSK_HCH_2310MHz_RB_1_49_NTNV



Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
2190	2200	1	CHP	1	2191.070	-49.06	-13	Pass
2200	2288	1	CHP	2	2287.999	-45.43	-40	Pass
2288	2292	1	CHP	3	2288.299	-45.39	-37	Pass
2292	2296	1	CHP	4	2295.998	-47.49	-31	Pass
2296	2300	1	CHP	5	2296.752	-38.50	-25	Pass
2300	2304	1	CHP	6	2301.485	-41.23	-13	Pass
2304	2305	1	CHP	7	2304.497	-39.73	-13	Pass
2305	2315	0.01	/	/	/	/	/	/
2315	2316	1	CHP	8	2315.503	-24.53	-13	Pass
2316	2320	1	CHP	9	2316.004	-29.62	-13	Pass
2320	2324	1	CHP	10	2320.003	-36.08	-25	Pass
2324	2328	1	CHP	11	2324.002	-41.65	-31	Pass
2328	2337	1	CHP	12	2331.881	-46.05	-37	Pass
2337	2341	1	CHP	13	2340.427	-45.48	-31	Pass
2341	2345	1	CHP	14	2341.931	-48.53	-25	Pass

Band40a_10MHz_QPSK_HCH_2310MHz_RB_50_0_NTNV



Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
2190	2200	1	CHP	1	2192.950	-48.99	-13	Pass
2200	2288	1	CHP	2	2288.000	-46.03	-40	Pass
2288	2292	1	CHP	3	2291.400	-42.40	-37	Pass
2292	2296	1	CHP	4	2296.000	-41.53	-31	Pass
2296	2300	1	CHP	5	2300.000	-33.33	-25	Pass
2300	2304	1	CHP	6	2304.000	-27.94	-13	Pass
2304	2305	1	CHP	7	2304.500	-27.07	-13	Pass
2305	2315	0.1	/	/	/	/	/	/
2315	2316	1	CHP	8	2315.500	-29.53	-13	Pass
2316	2320	1	CHP	9	2316.050	-30.23	-13	Pass
2320	2324	1	CHP	10	2320.050	-35.13	-25	Pass
2324	2328	1	CHP	11	2325.100	-41.63	-31	Pass
2328	2337	1	CHP	12	2328.300	-41.93	-37	Pass
2337	2341	1	CHP	13	2337.050	-47.10	-31	Pass
2341	2345	1	CHP	14	2342.950	-48.44	-25	Pass

---End of Report---