

## Appendix A

### RF Test Data for BT V4.2 (BDR/EDR) (Conducted Measurement)

**Product Name:** EcoEdge Plus

**Trade Mark:** ECOXGEAR

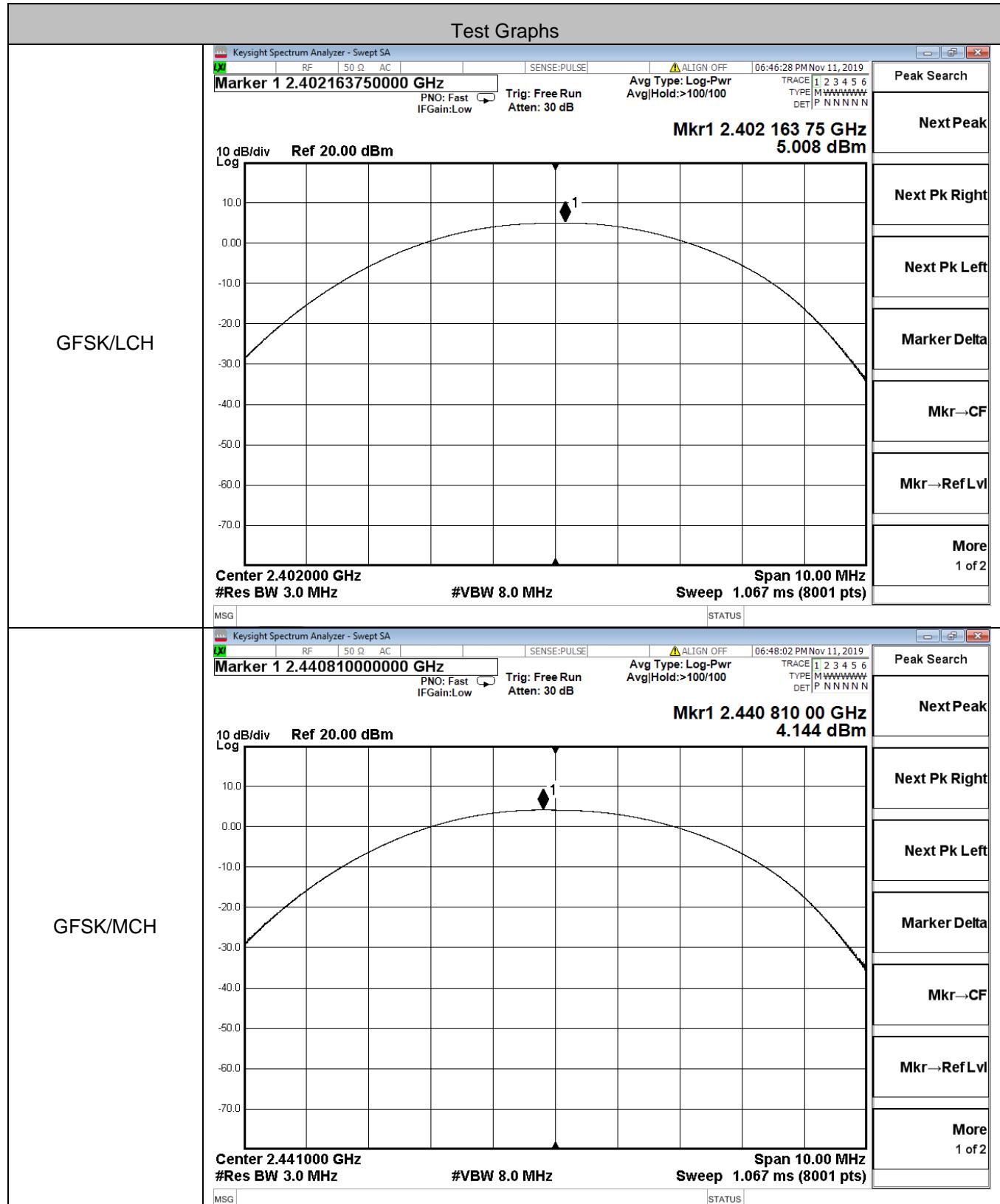
**Test Model:** GDI-EXEGPL410

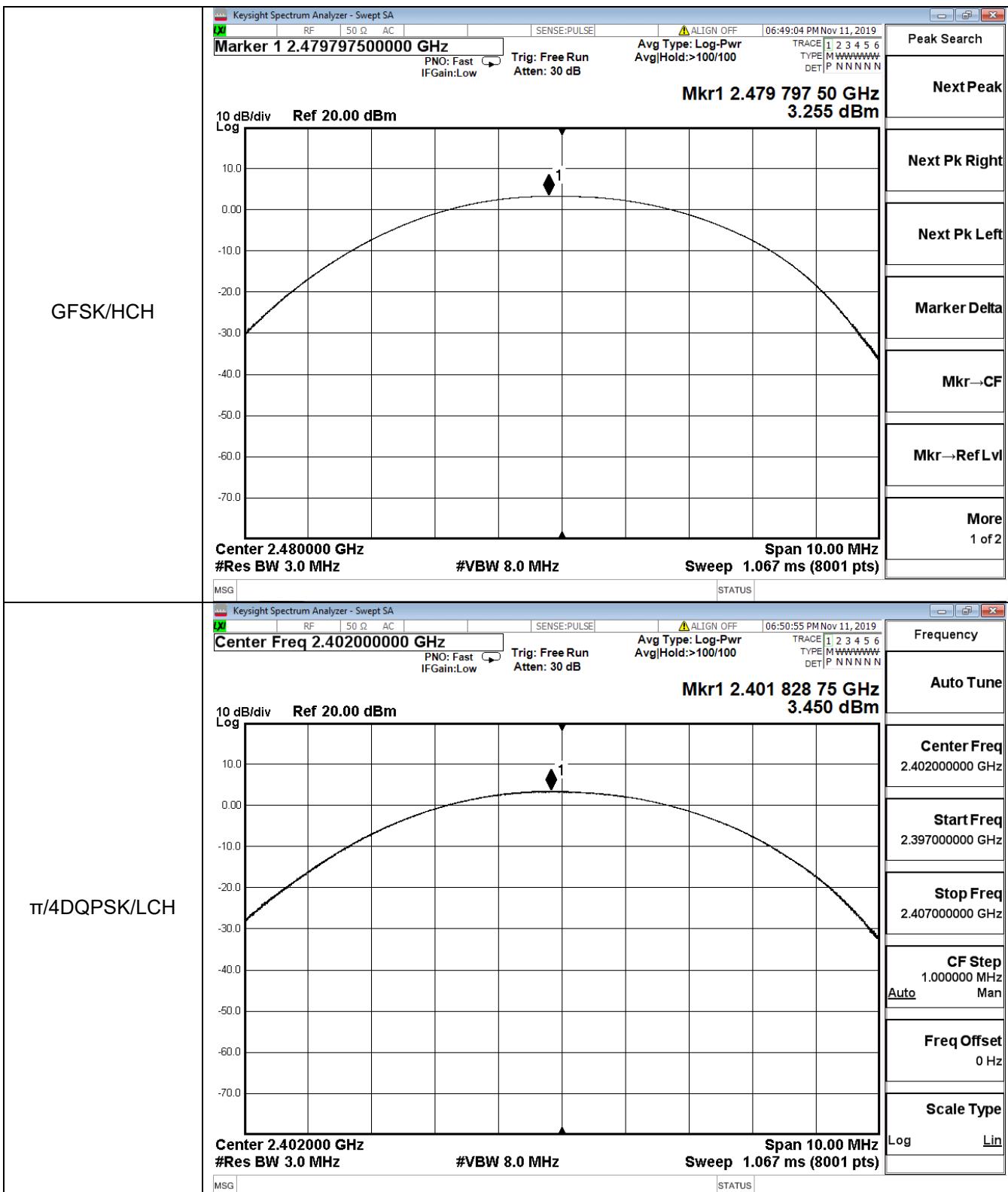
#### Environmental Conditions

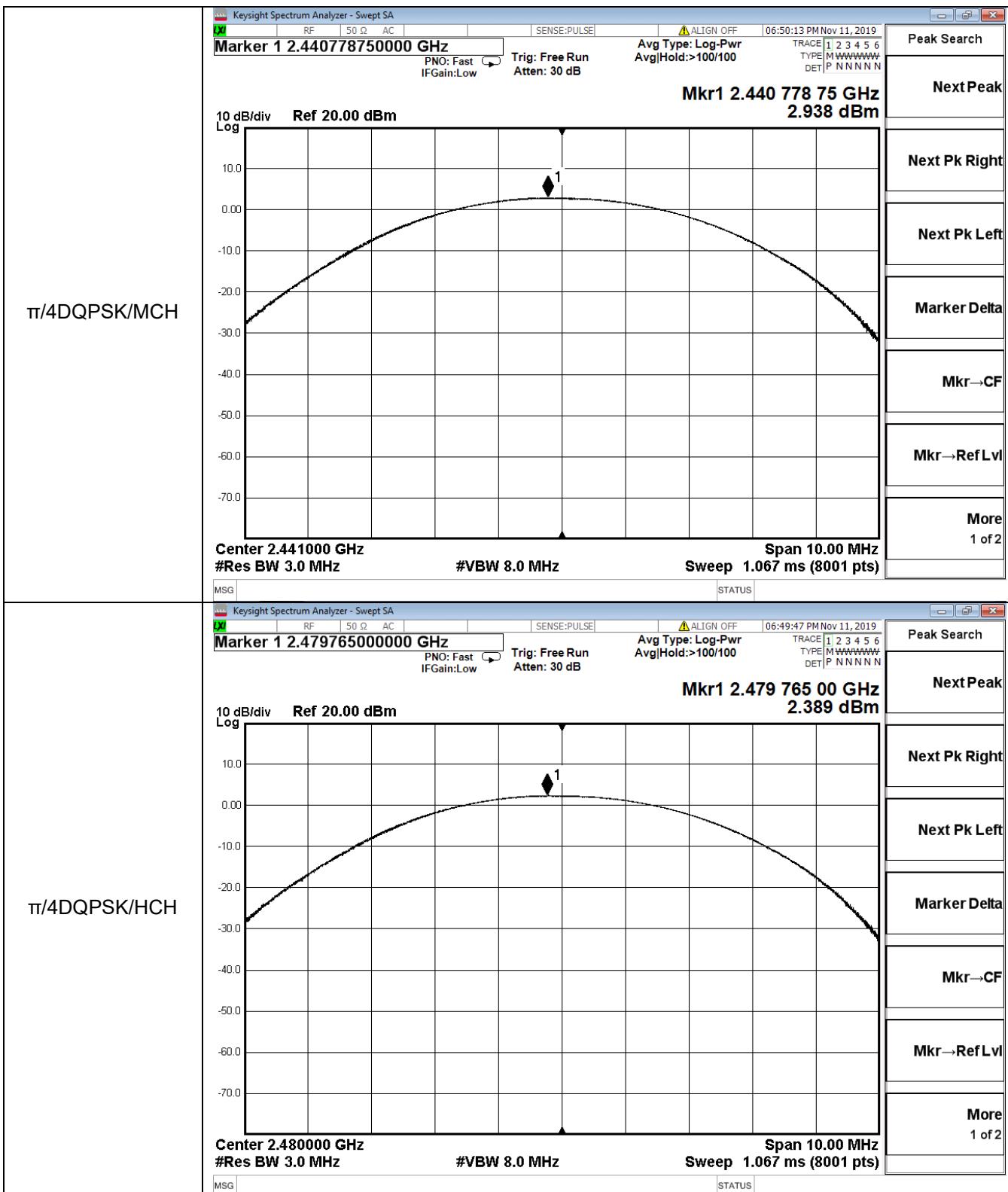
Temperature:	23.2° C
Relative Humidity:	54.1%
ATM Pressure:	100.0 kPa
Test Engineer:	Chuang Wang
Supervised by:	Jayden Zhuo

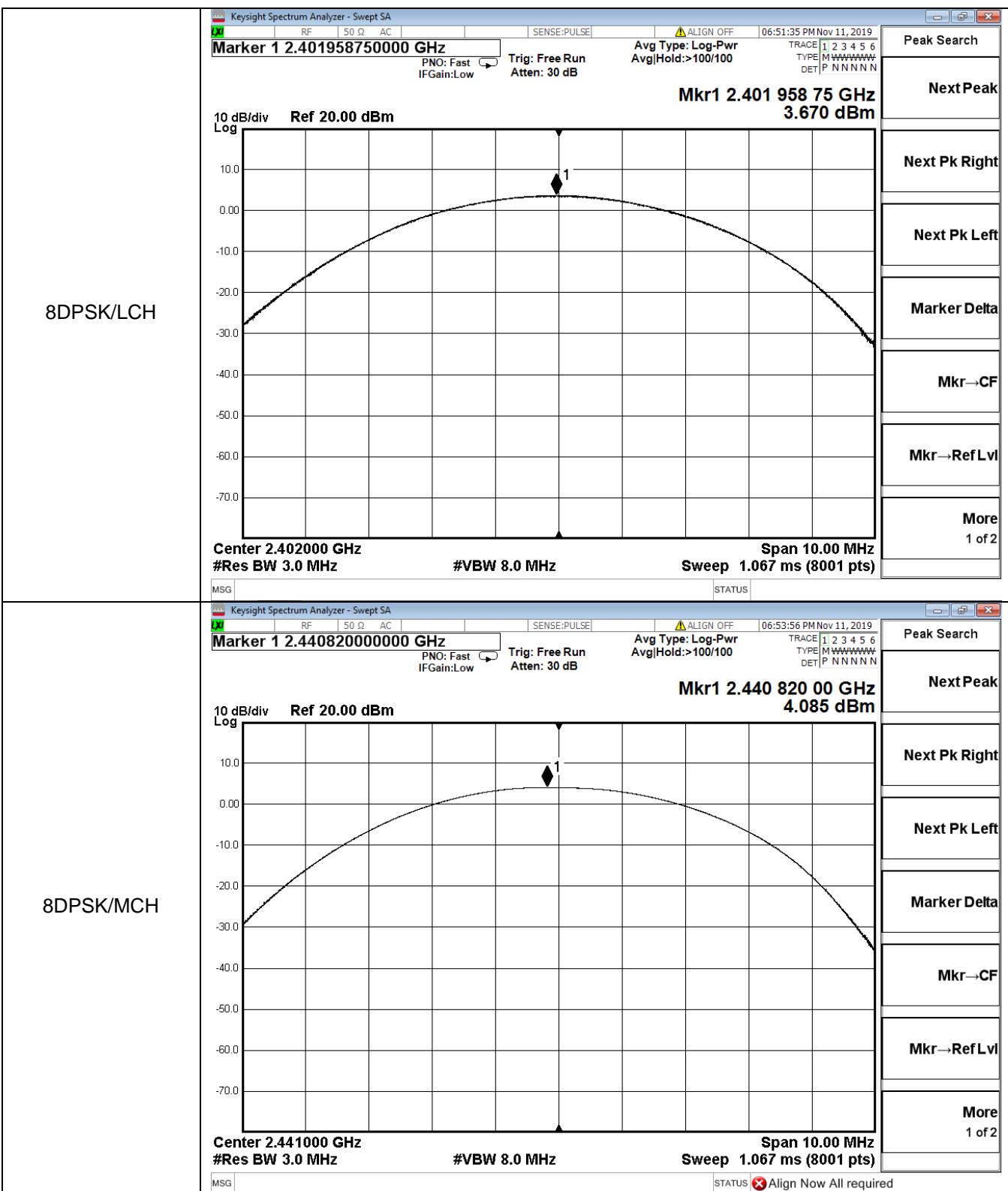
#### A.1 Maximum Conducted Peak Output Power

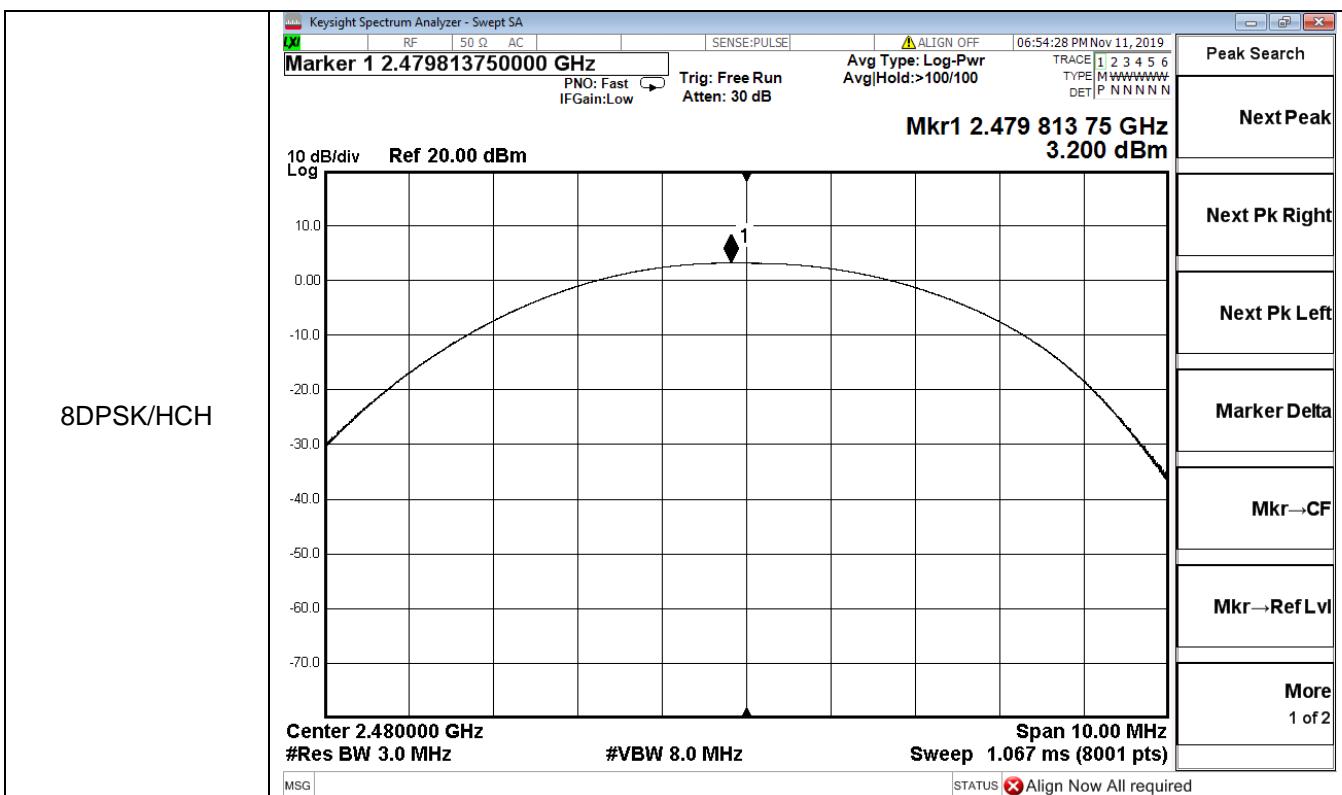
Mode	Channel.	Maximum Peak Output Power [dBm]	Limit [dBm]	Verdict
GFSK	LCH	5.008	21	PASS
	MCH	4.144	21	PASS
	HCH	3.255	21	PASS
$\pi/4$ DQPSK	LCH	3.450	21	PASS
	MCH	2.938	21	PASS
	HCH	2.389	21	PASS
8DPSK	LCH	3.670	21	PASS
	MCH	4.085	21	PASS
	HCH	3.200	21	PASS





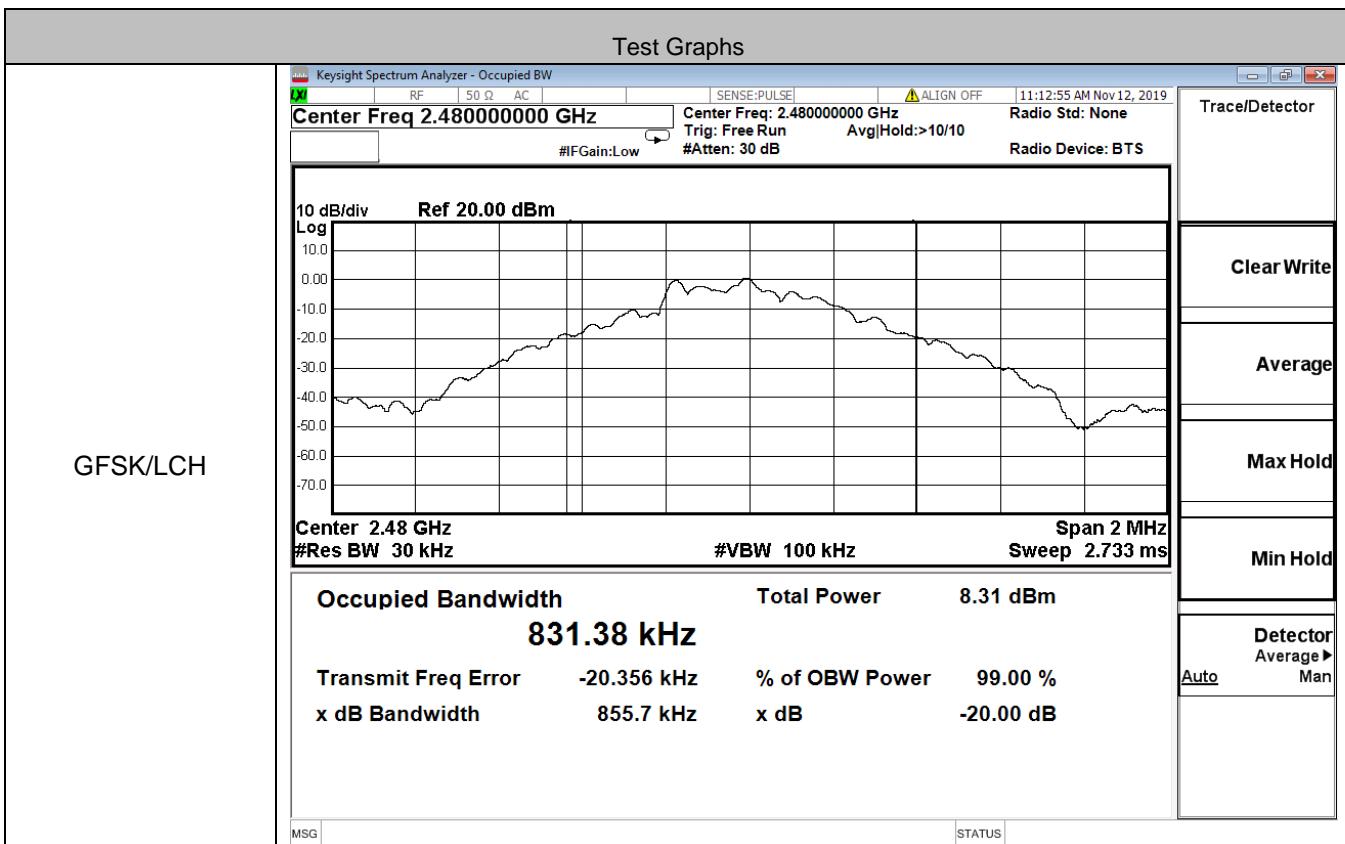


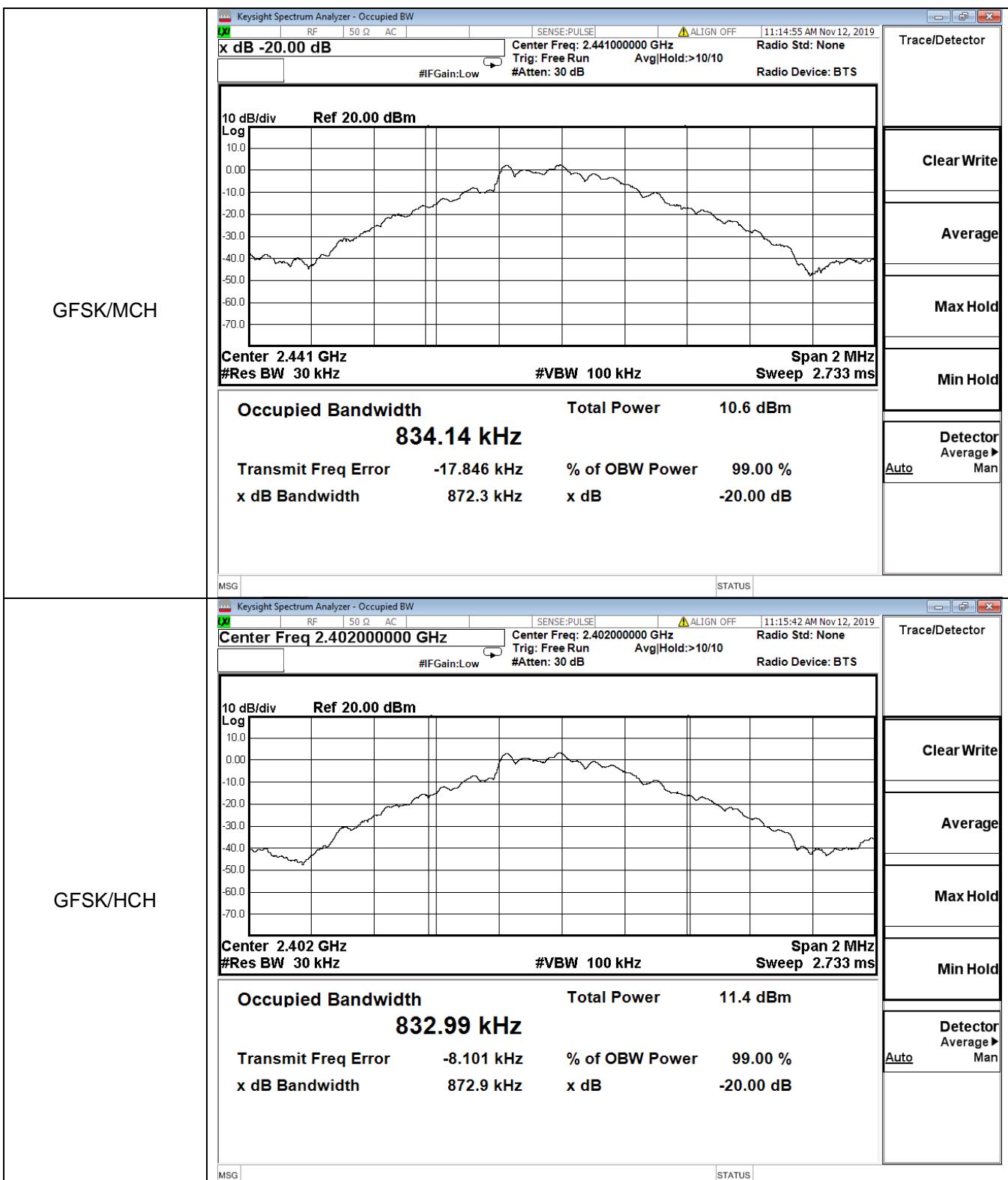


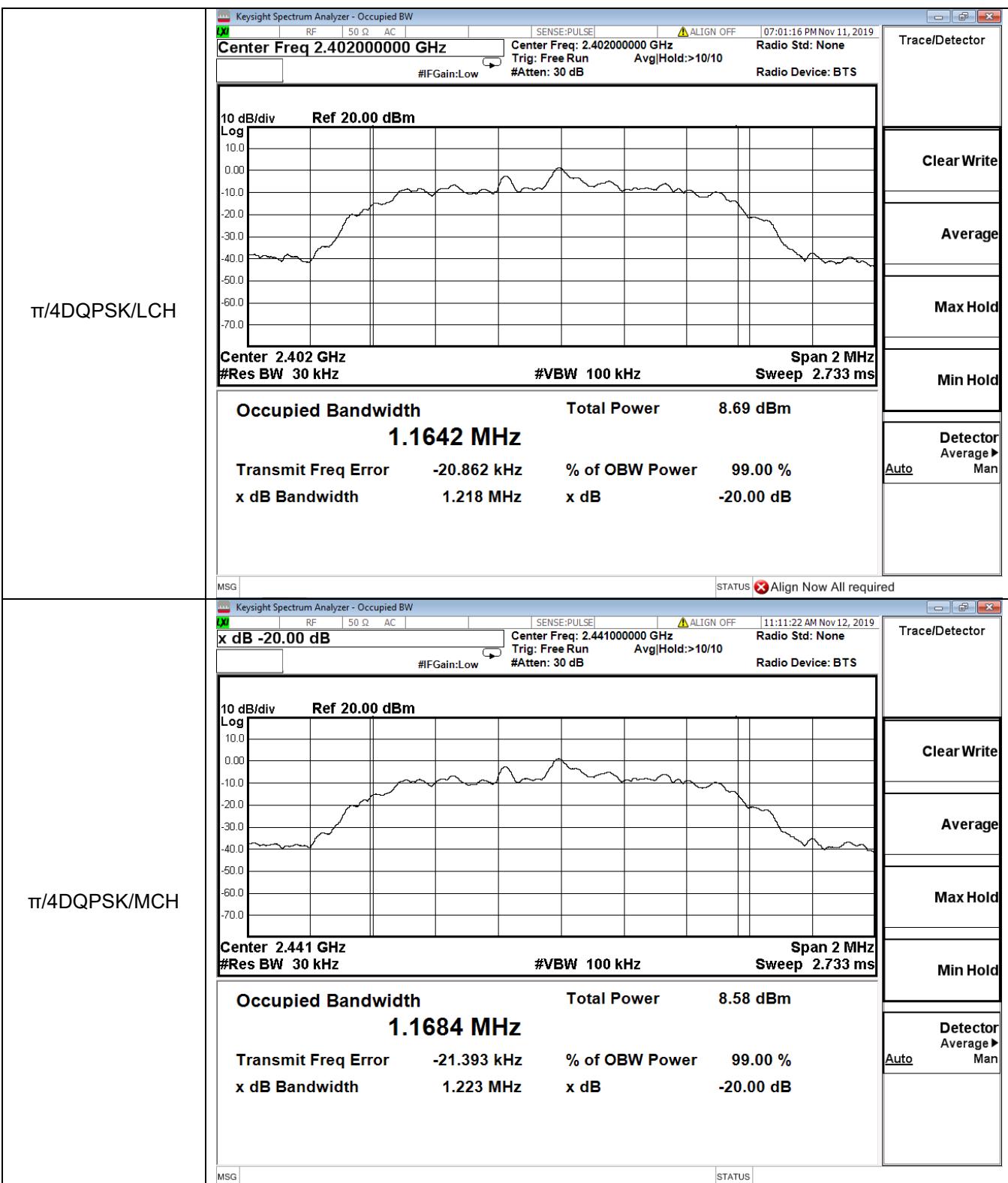


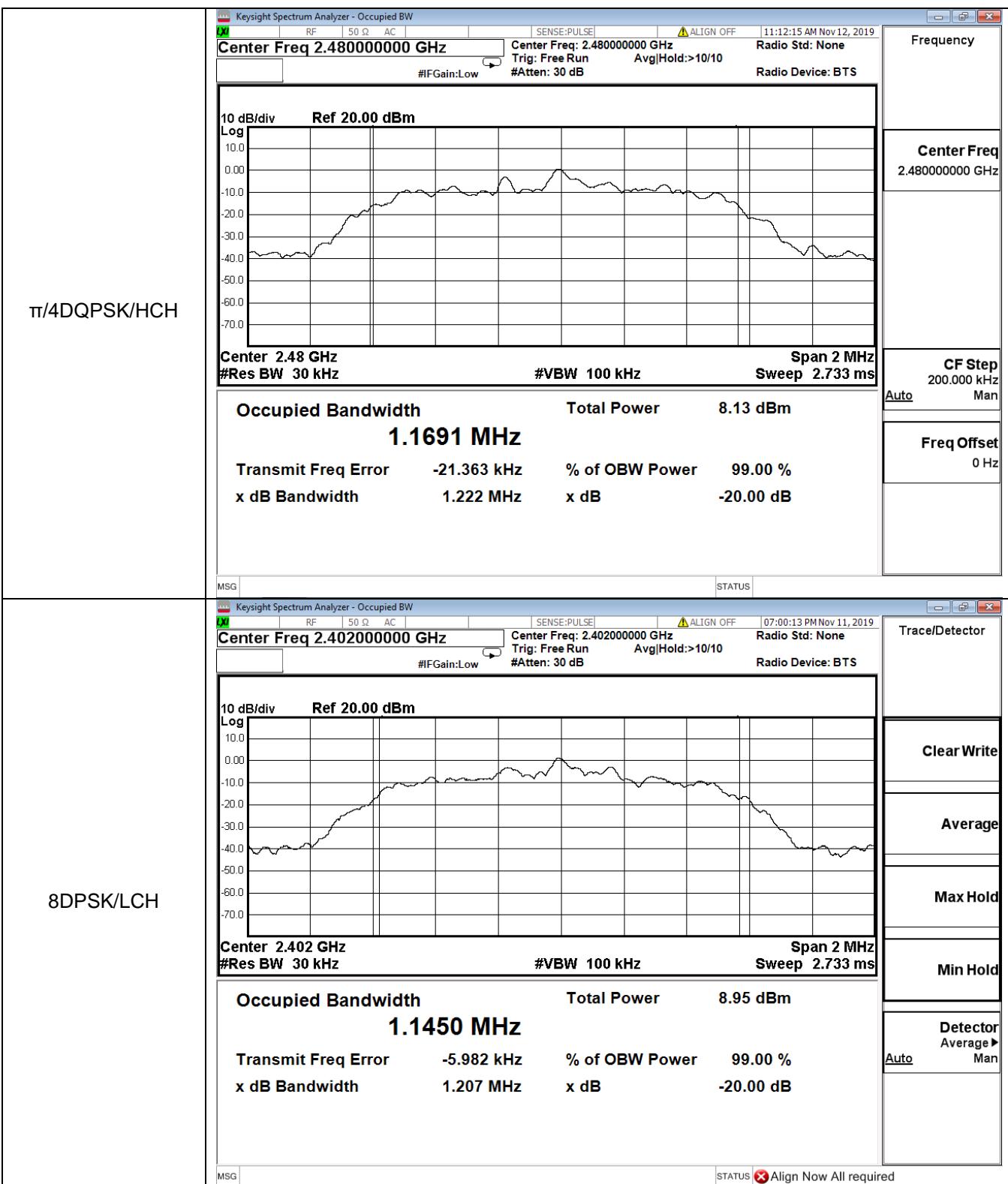
## A.2 99% and 20dB Bandwidth

Mode	Channel.	99% Bandwidth [MHz]	20dB Bandwidth [MHz]	Limit [MHz]	Verdict
GFSK	LCH	0.83138	0.8557	Not Specified	PASS
	MCH	0.83414	0.8723	Not Specified	PASS
	HCH	0.83299	0.8729	Not Specified	PASS
π/4DQPSK	LCH	1.1642	1.218	Not Specified	PASS
	MCH	1.1684	1.223	Not Specified	PASS
	HCH	1.1691	1.222	Not Specified	PASS
8DPSK	LCH	1.1450	1.207	Not Specified	PASS
	MCH	1.1508	1.210	Not Specified	PASS
	HCH	1.1504	1.209	Not Specified	PASS

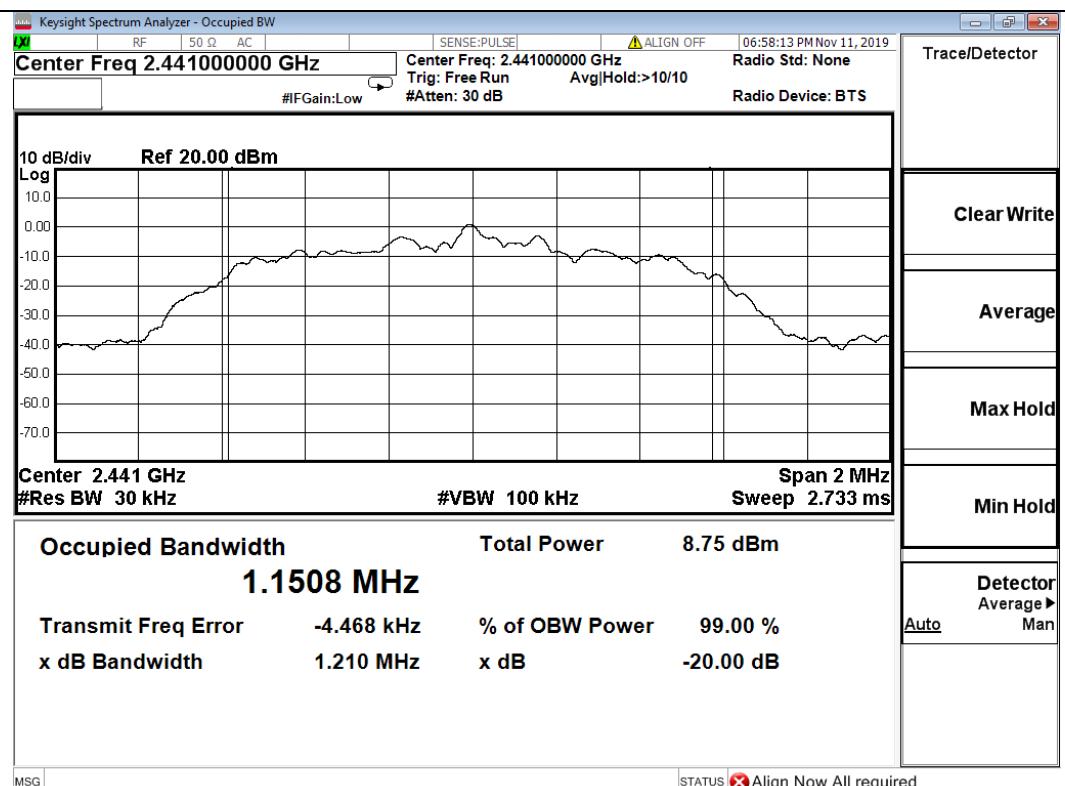




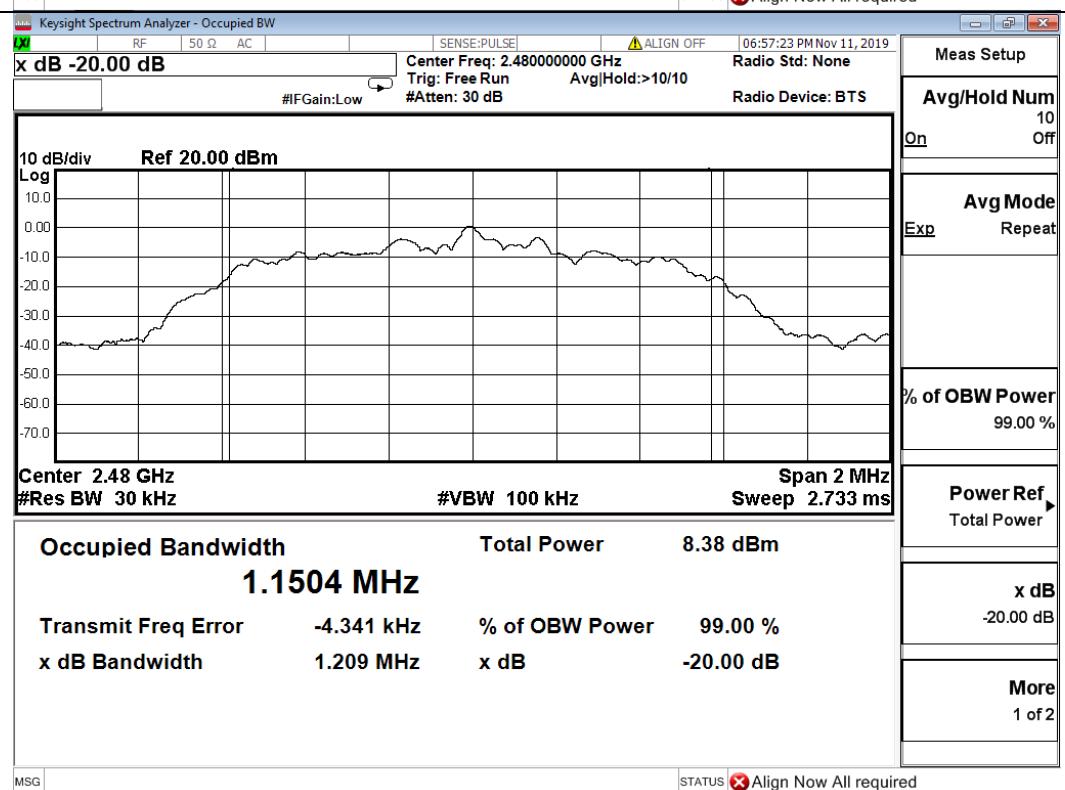




8DPSK/MCH

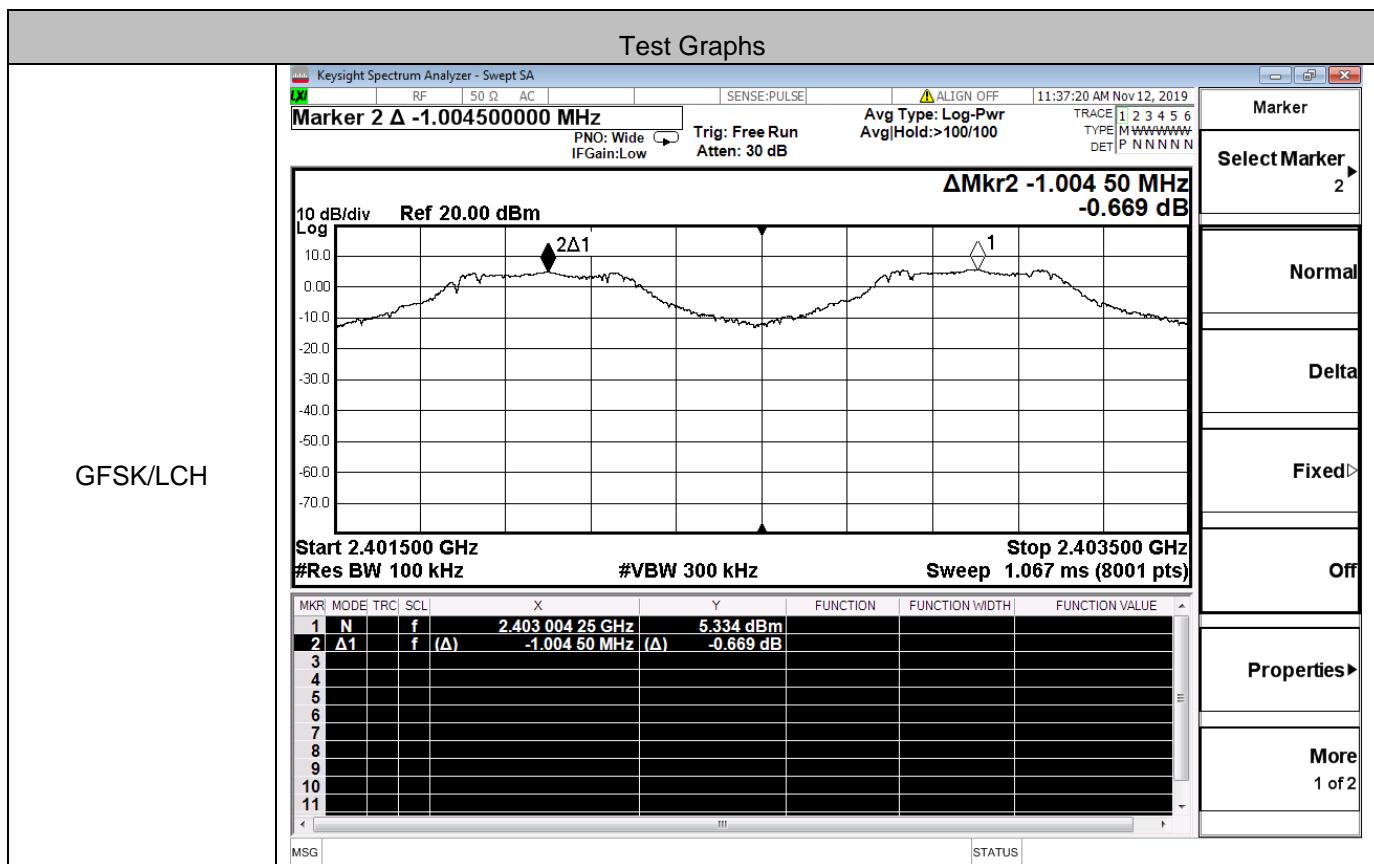


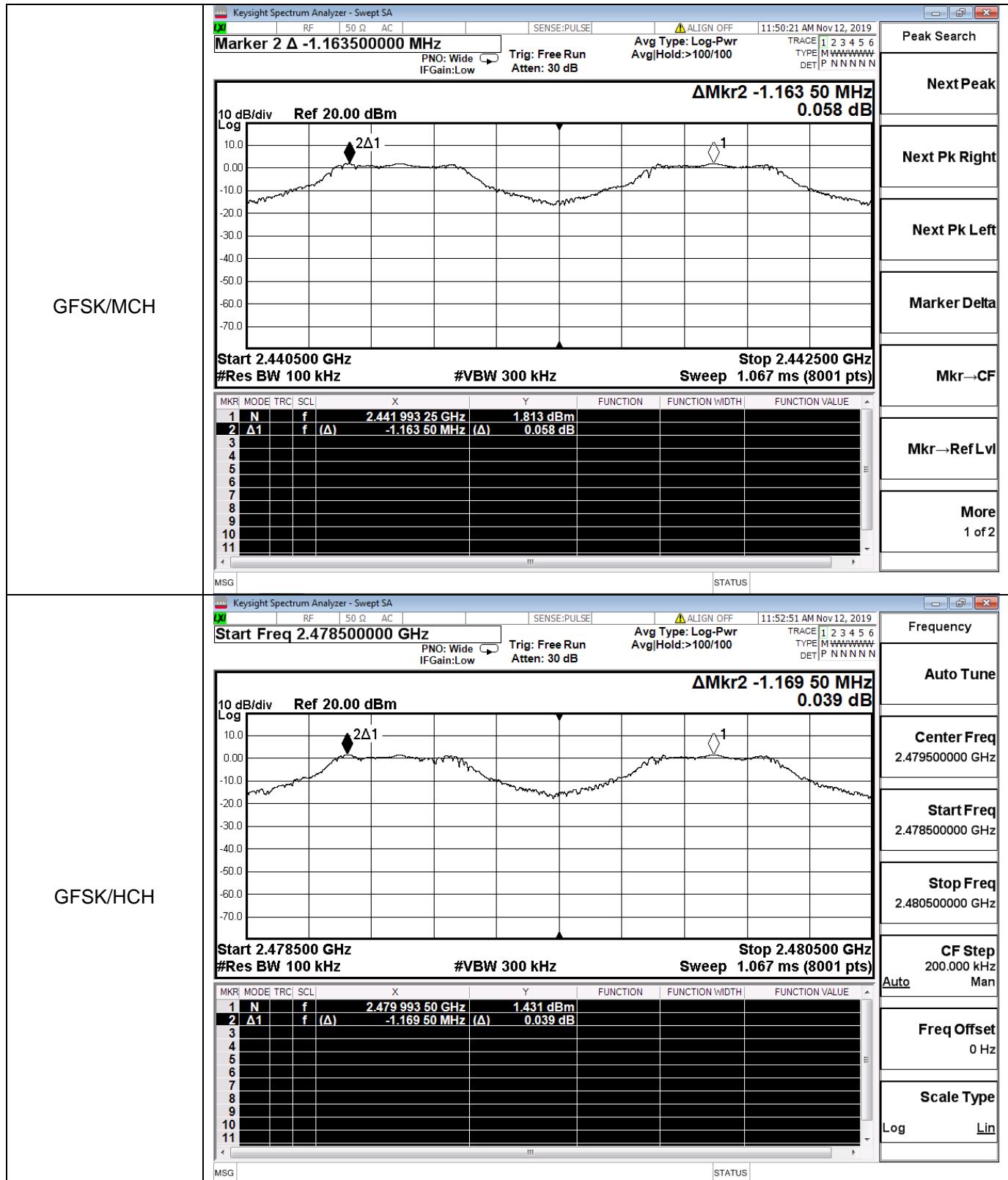
8DPSK/HCH

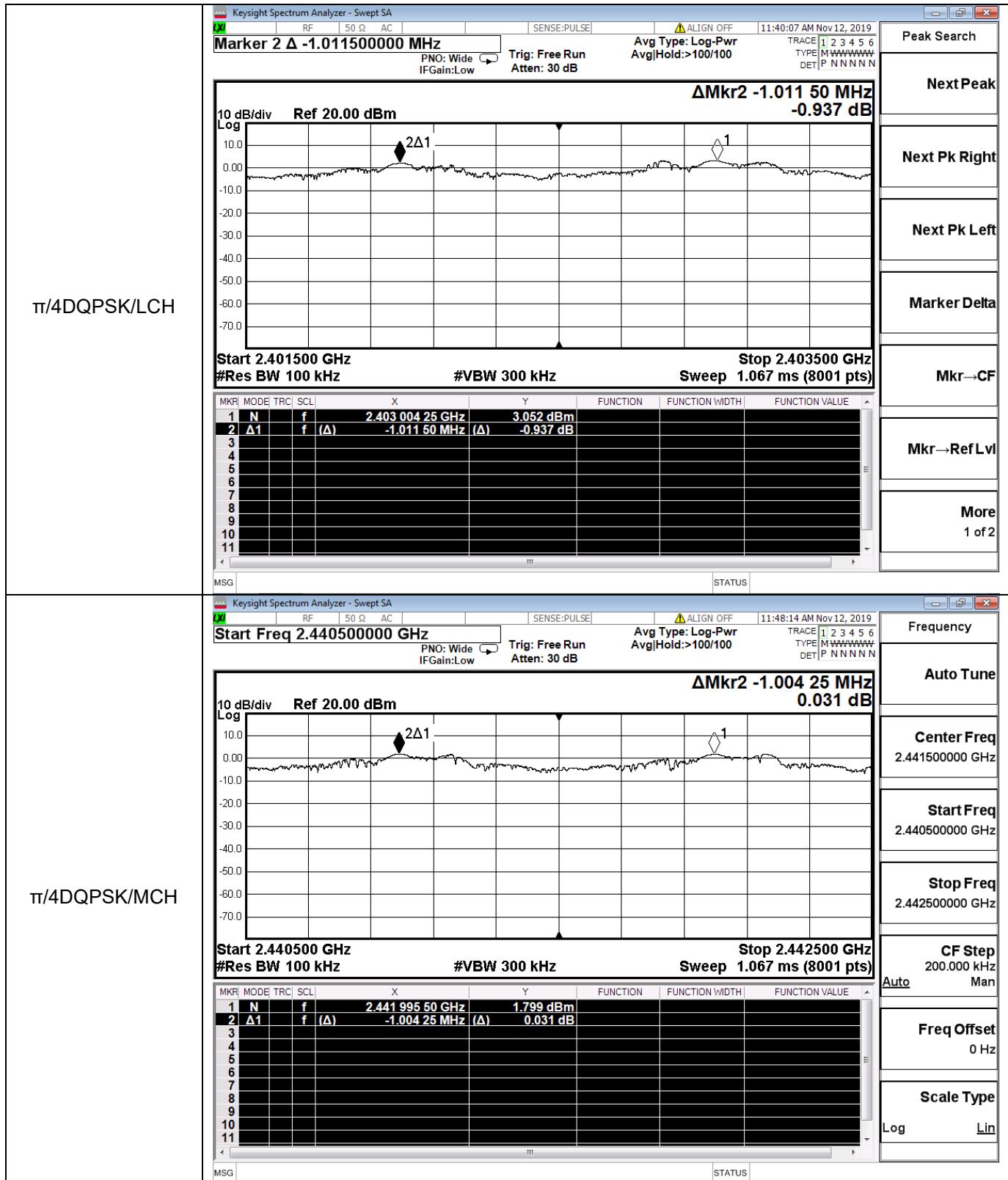


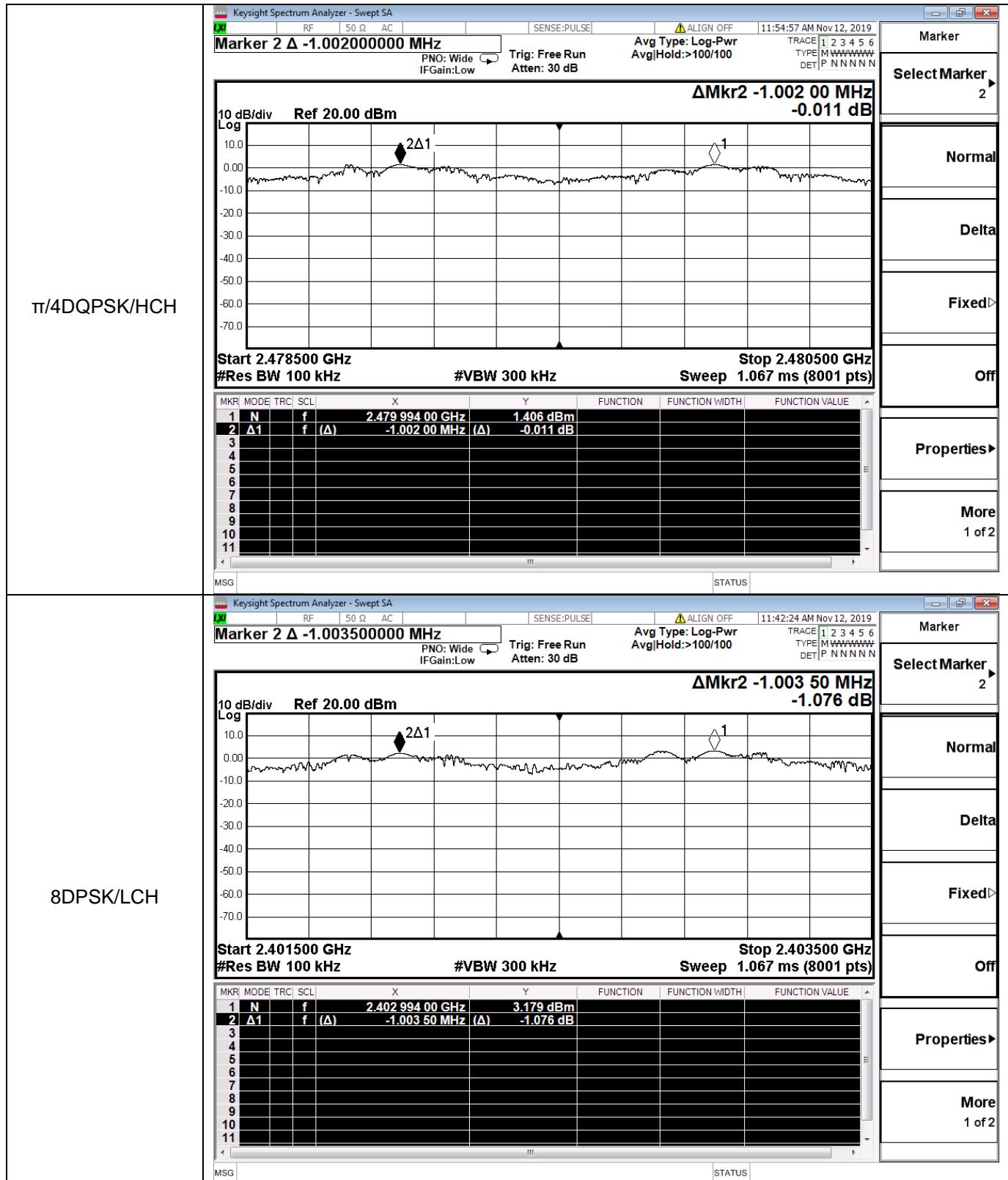
### A.3 Carrier Frequency Separation

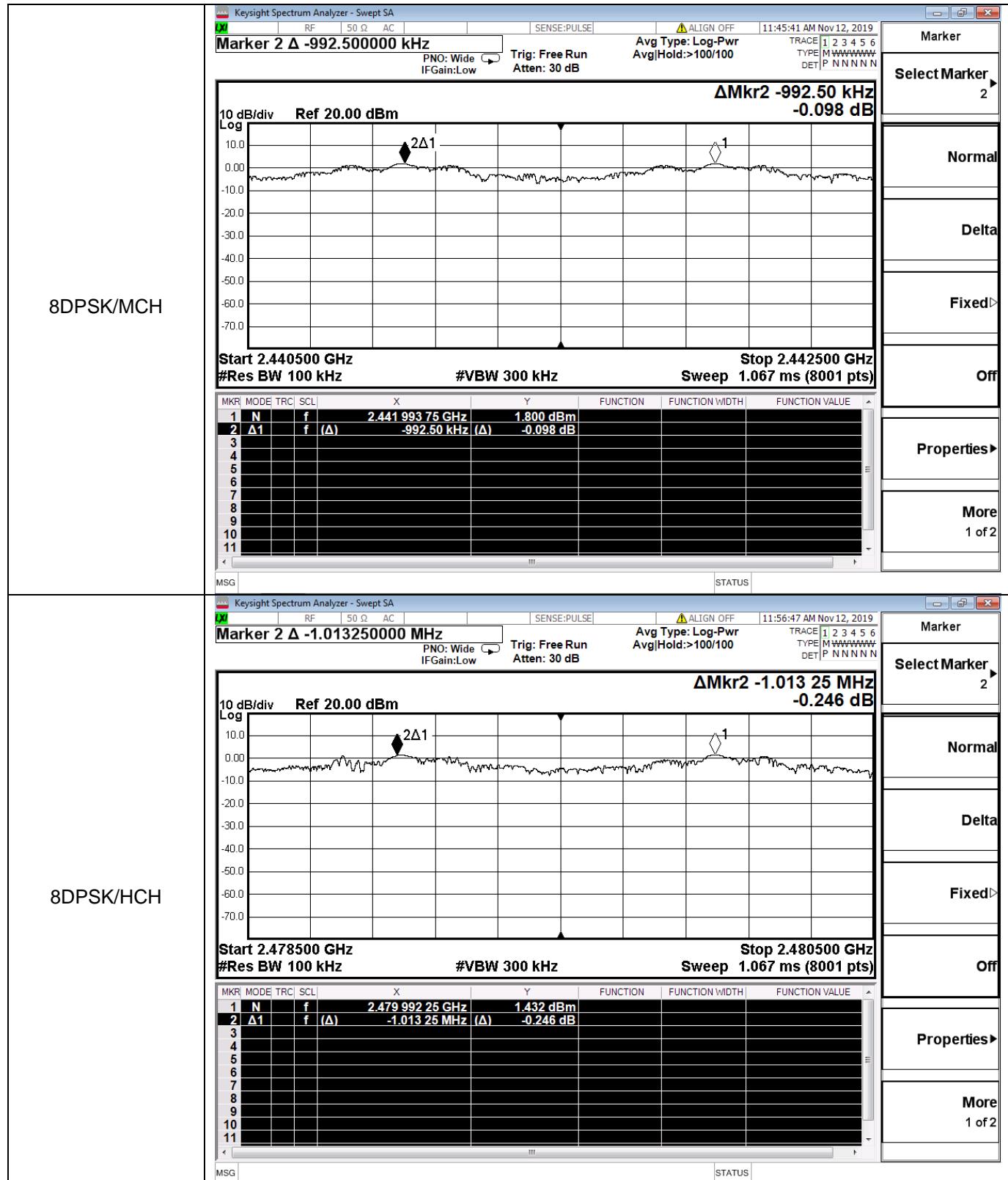
Mode	Channel.	Carrier Frequency Separation [MHz]	Limit [MHz]	Verdict
GFSK	LCH	1.0045	0.570	PASS
	MCH	1.1635	0.582	PASS
	HCH	1.1695	0.582	PASS
$\pi/4$ DQPSK	LCH	1.0115	0.812	PASS
	MCH	1.0043	0.815	PASS
	HCH	1.0020	0.815	PASS
8DPSK	LCH	1.0035	0.805	PASS
	MCH	0.9925	0.807	PASS
	HCH	1.0133	0.806	PASS





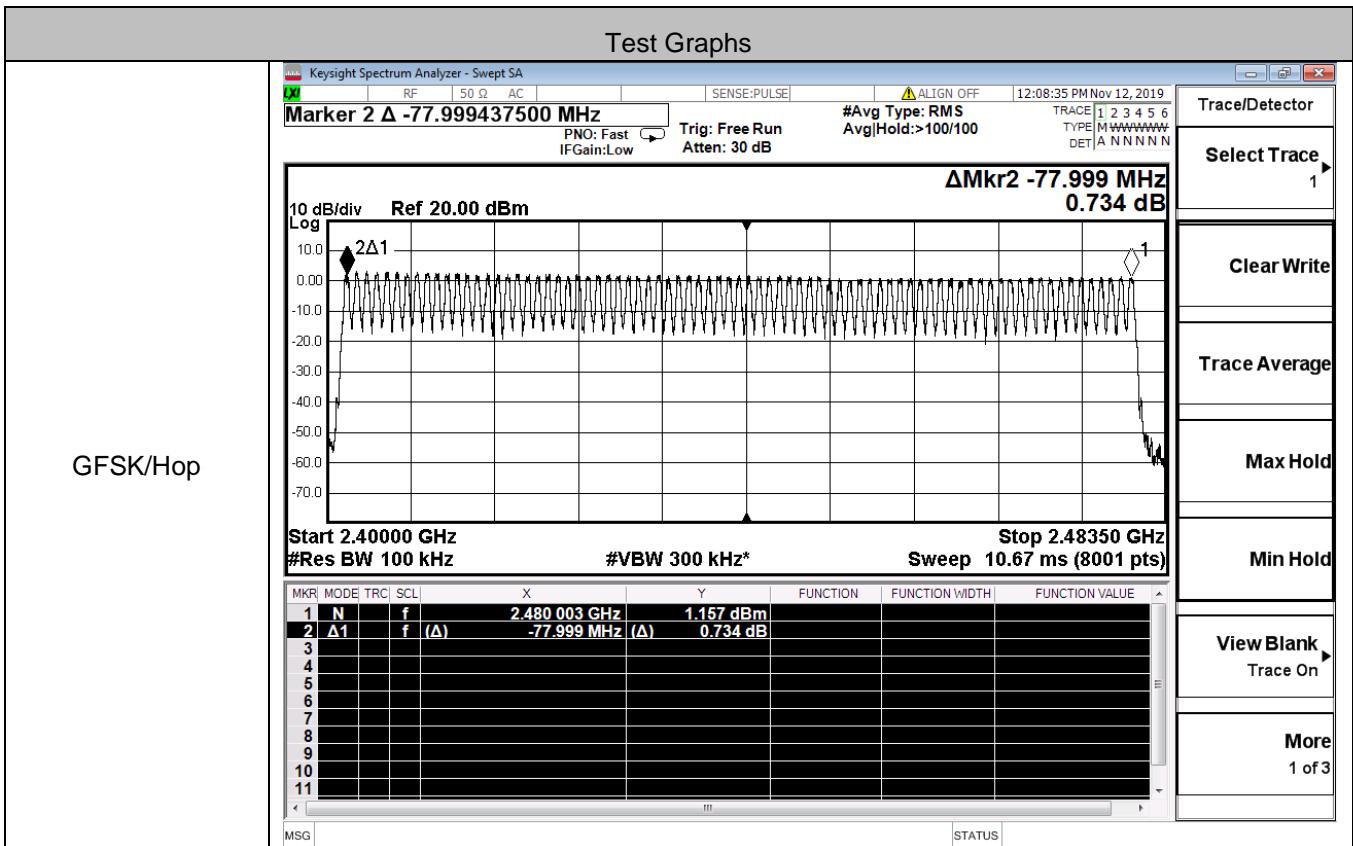


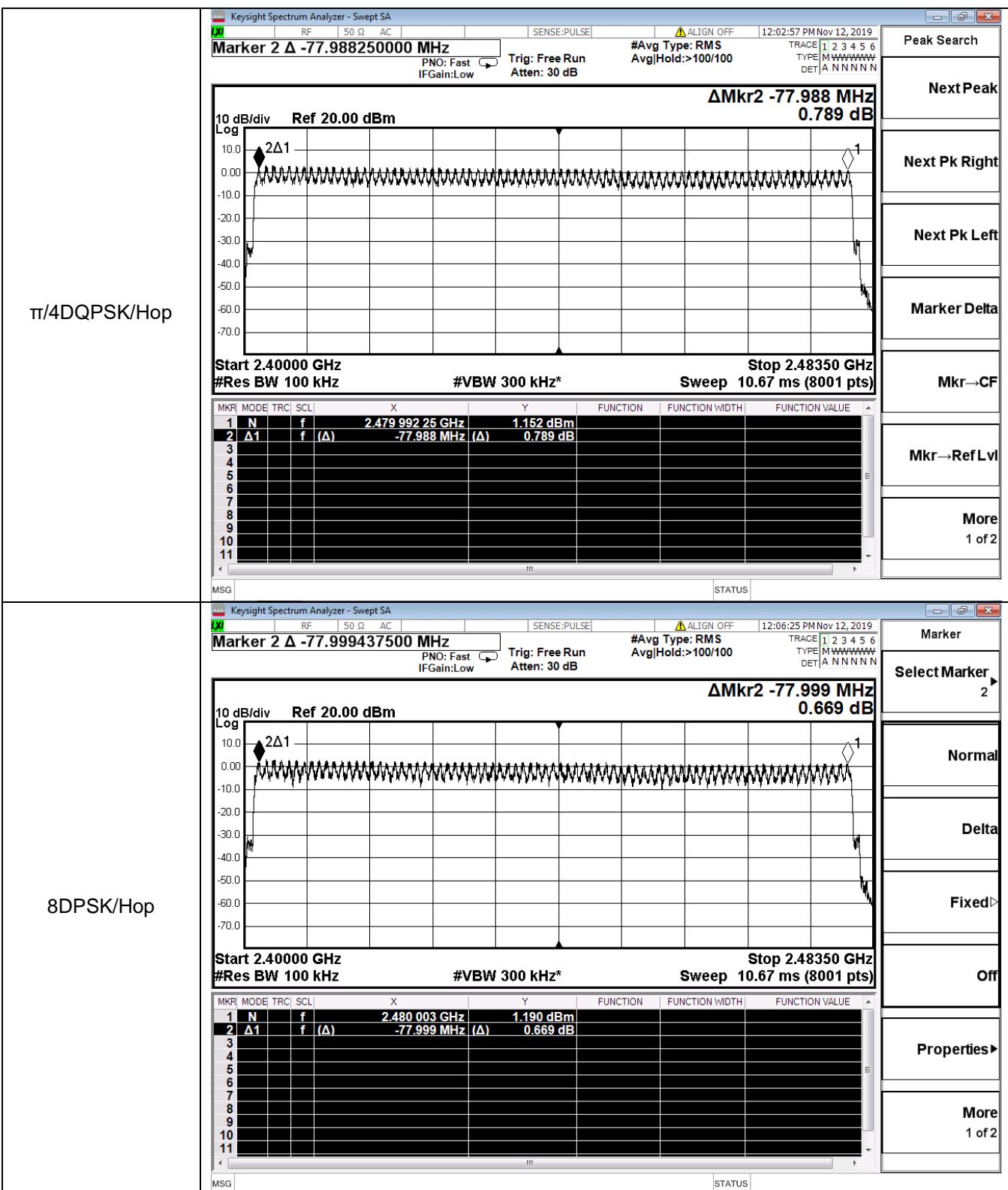




#### A.4 Hopping Channel Number

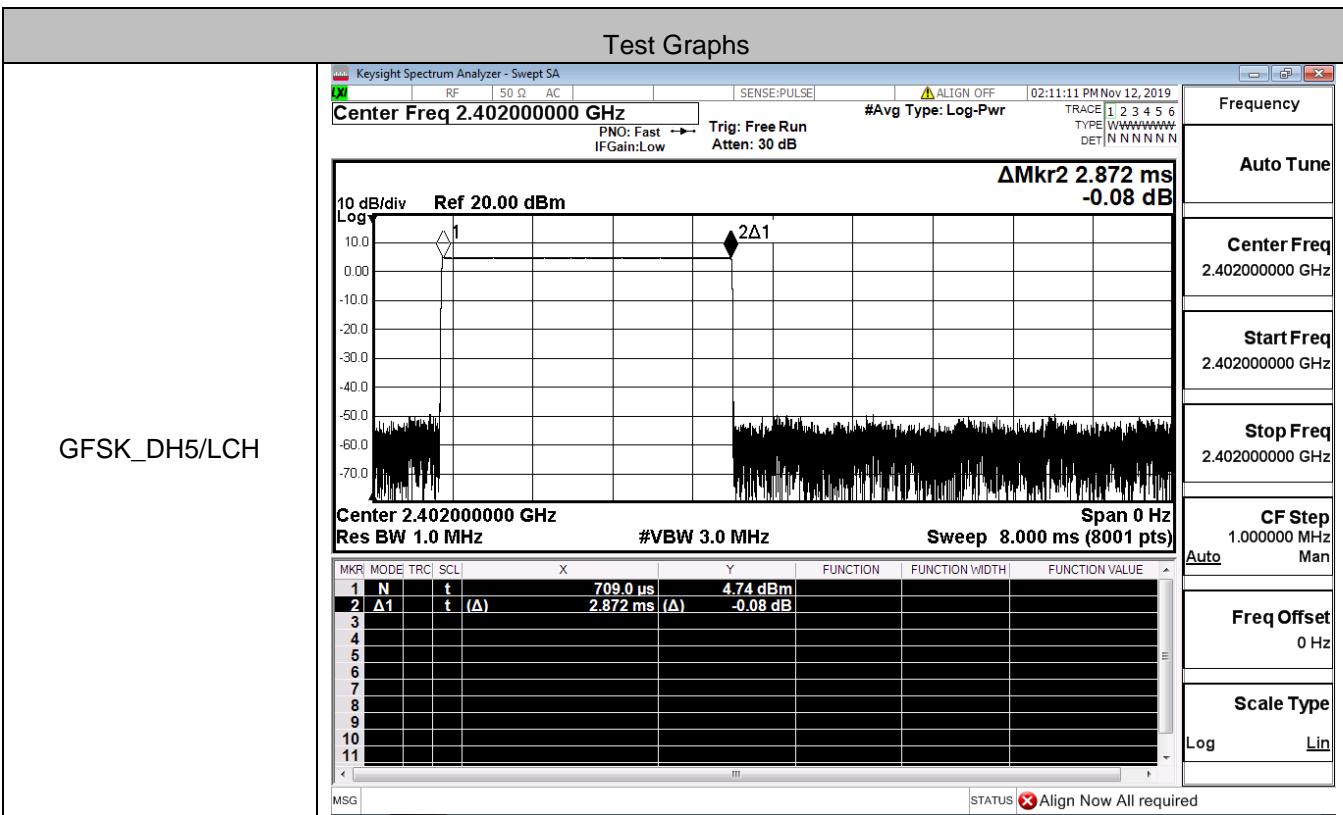
Mode	Channel.	Number of Hopping Channel [N]	Limit [N]	Verdict
GFSK	Hop	79	>=15	PASS
$\pi/4$ DQPSK	Hop	79	>=15	PASS
8DPSK	Hop	79	>=15	PASS

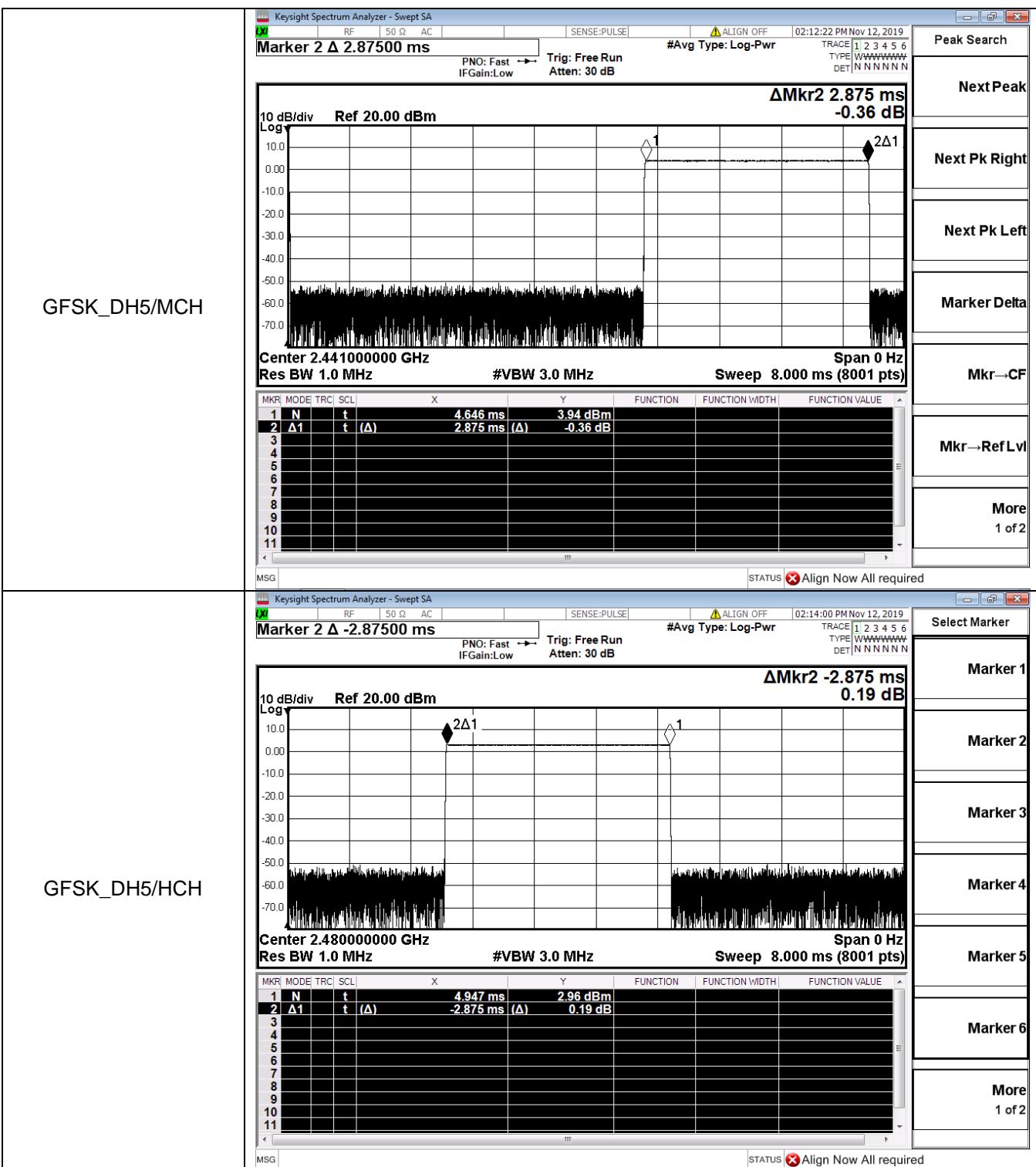




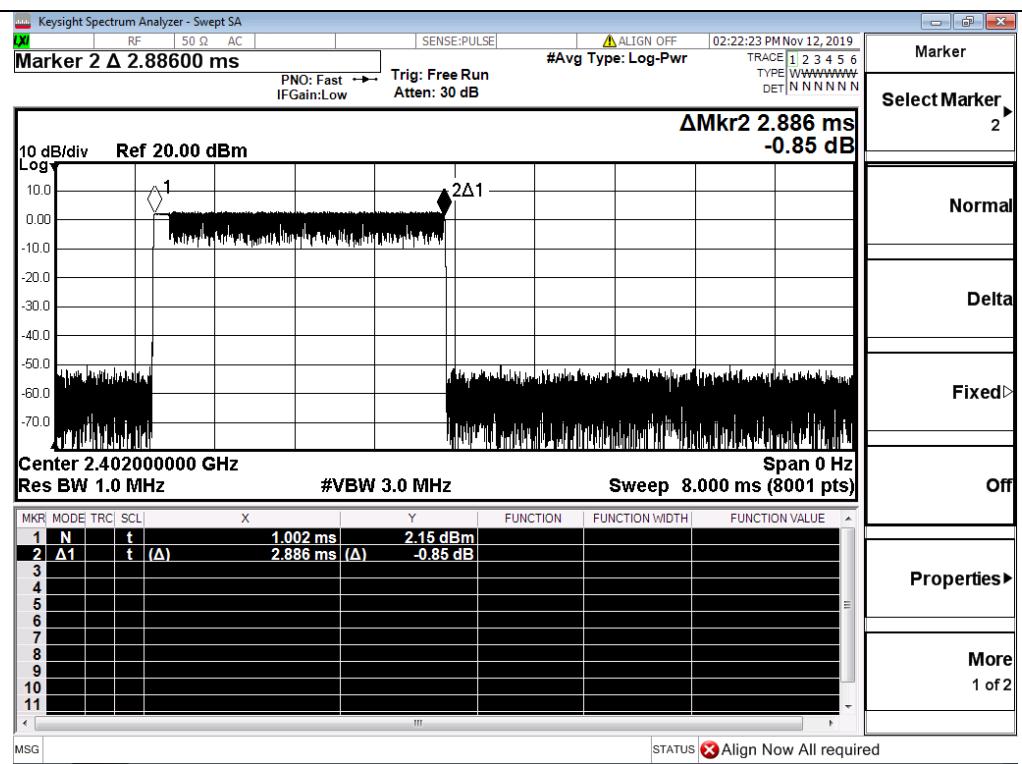
### A.5 Dwell Time

Mode	Packet	Channel	Burst Width [ms/hop/ch]	Total Hops[hop*ch]	Dwell Time[s]	Limit [s]	Verdict
GFSK	DH5	LCH	2.872	106.7	0.306	0.4	PASS
	DH5	MCH	2.875	106.7	0.307	0.4	PASS
	DH5	HCH	2.875	106.7	0.307	0.4	PASS
$\pi/4$ DQPSK	2DH5	LCH	2.885	106.7	0.308	0.4	PASS
	2DH5	MCH	2.883	106.7	0.308	0.4	PASS
	2DH5	HCH	2.895	106.7	0.309	0.4	PASS
8DPSK	3DH5	LCH	2.882	106.7	0.308	0.4	PASS
	3DH5	MCH	2.882	106.7	0.308	0.4	PASS
	3DH5	HCH	2.884	106.7	0.308	0.4	PASS

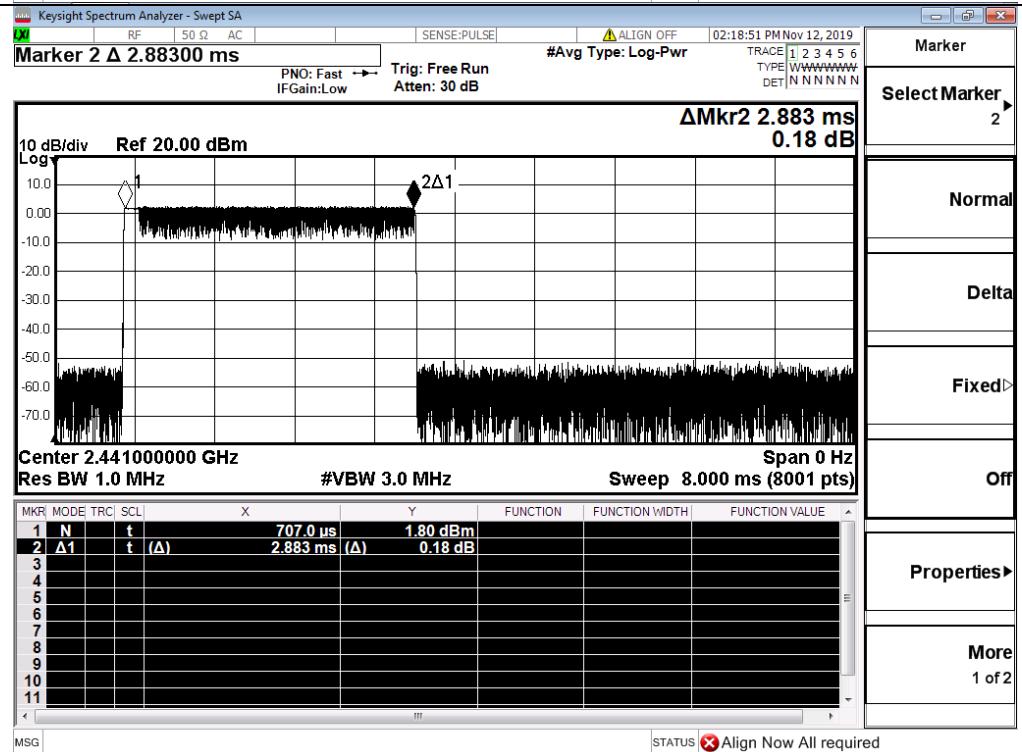




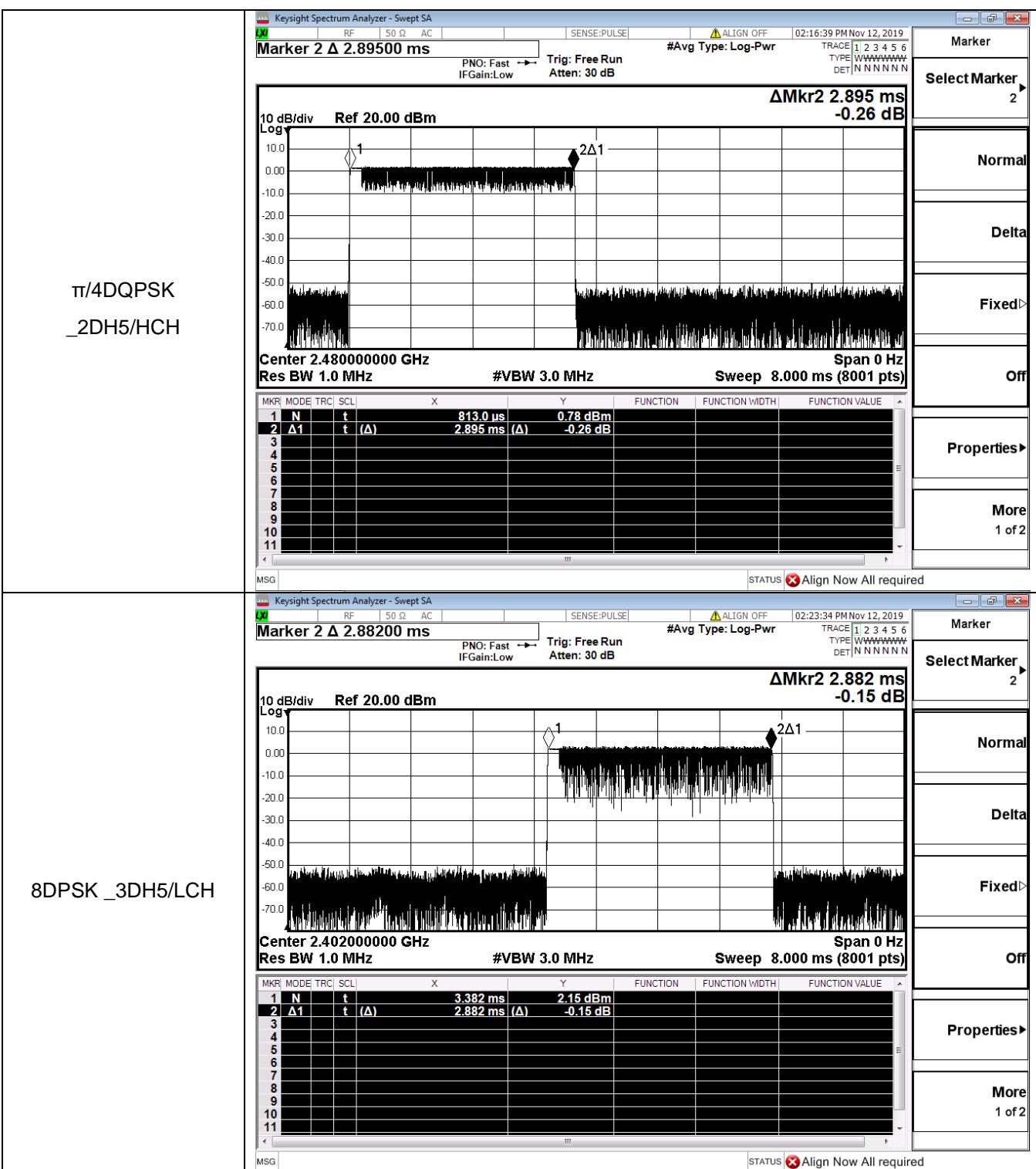
$\pi/4$ DQPSK  
\_2DH5/LCH



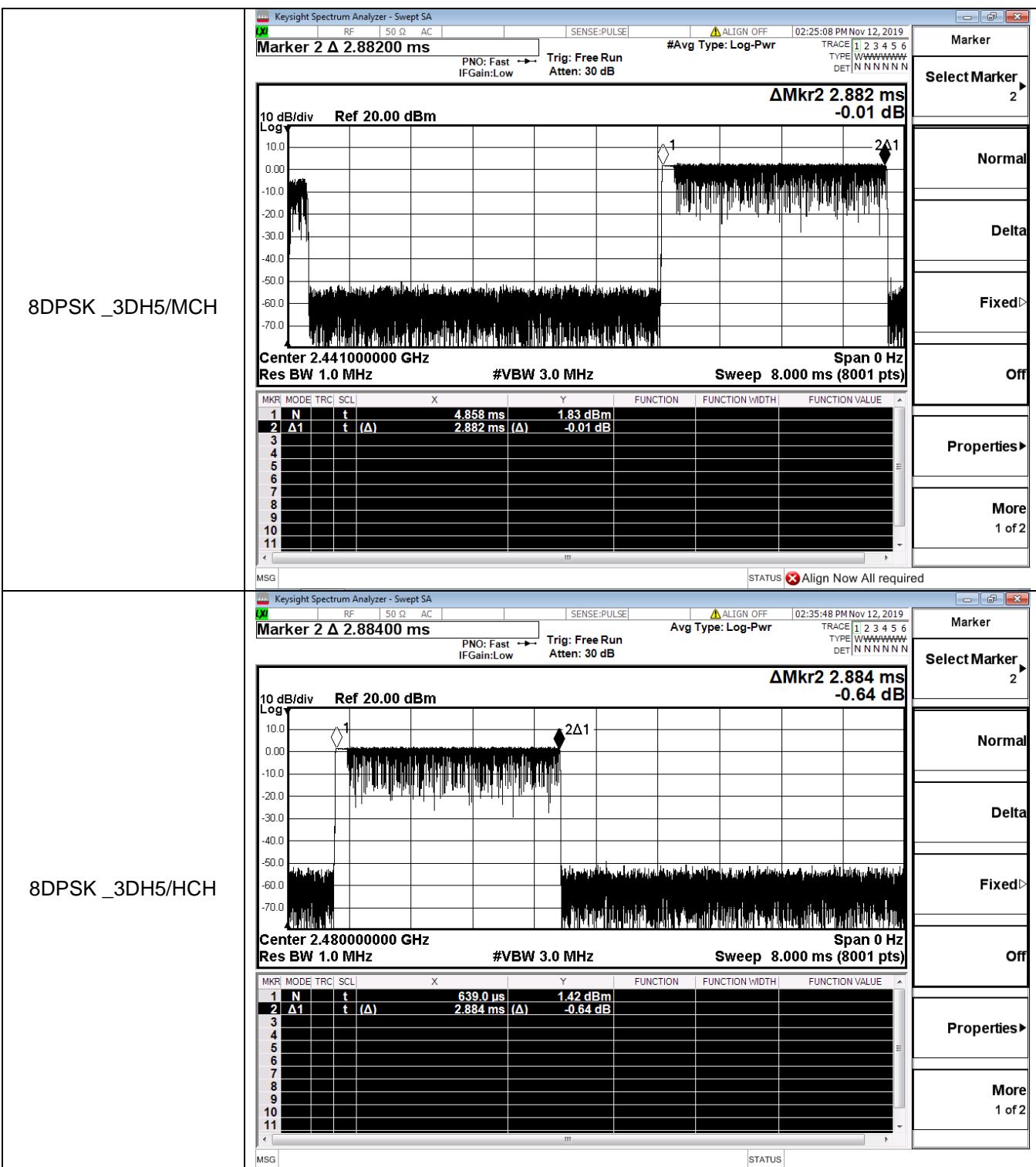
$\pi/4$ DQPSK  
\_2DH5/MCH



$\pi/4$ DQPSK  
\_2DH5/HCH

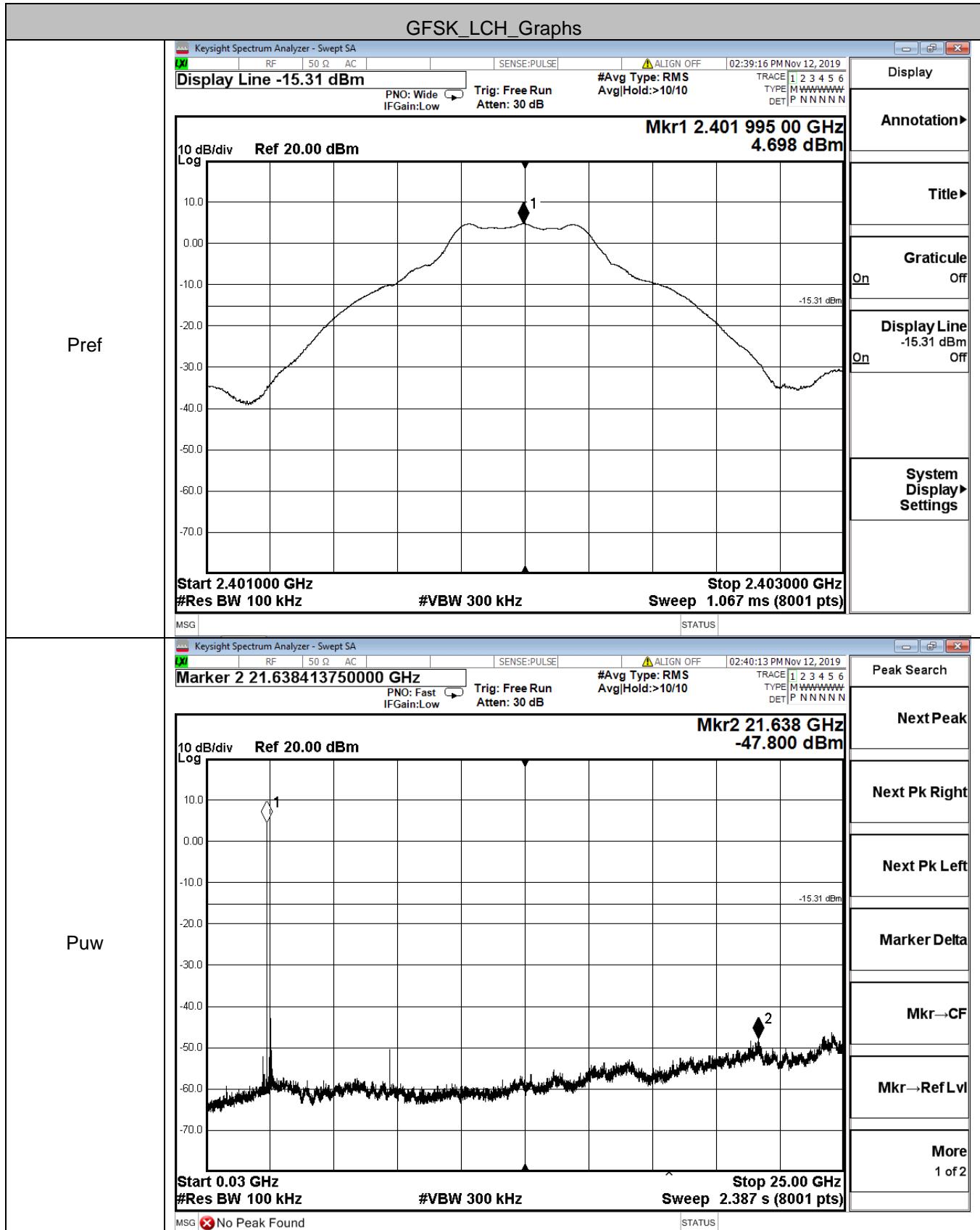


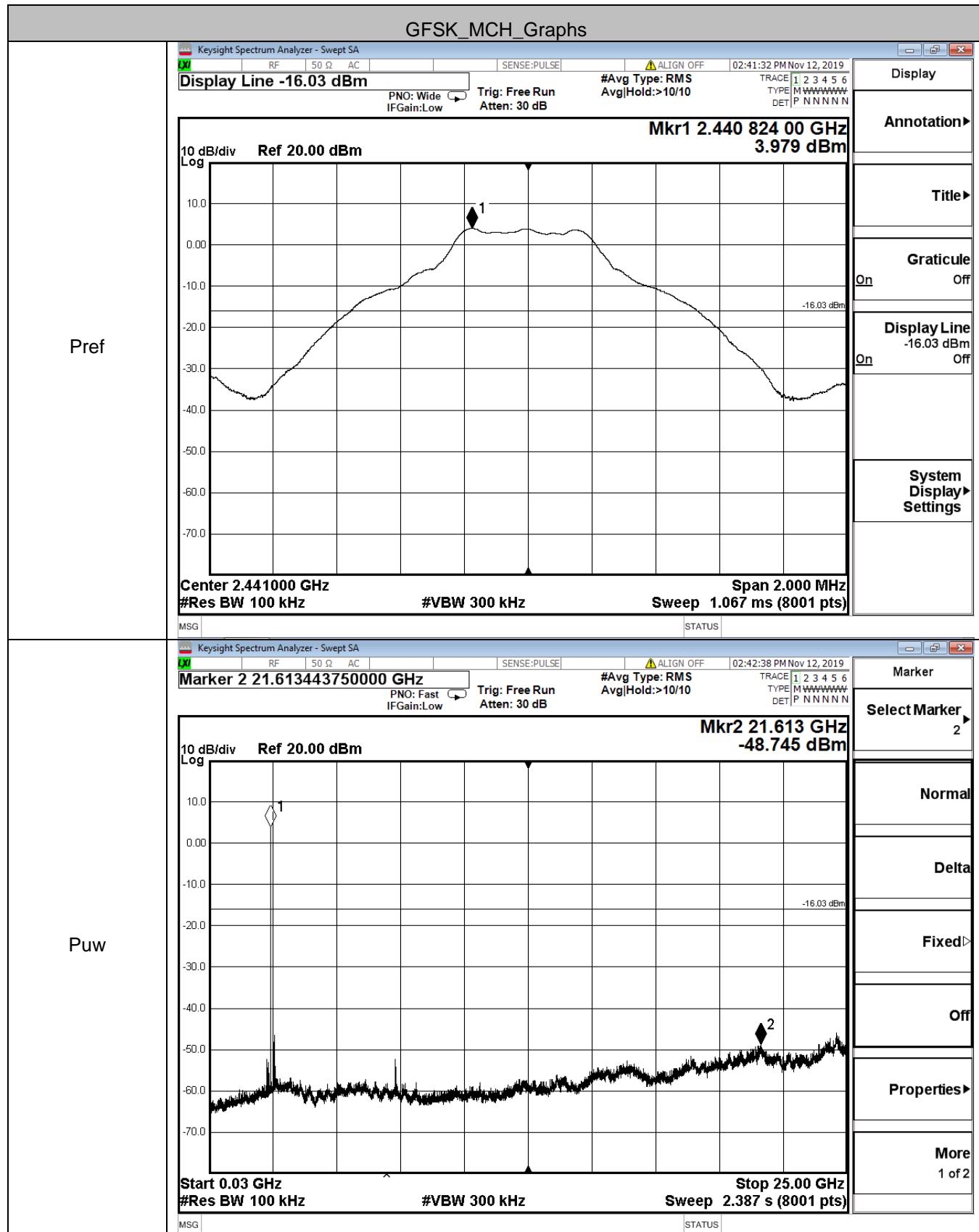
8DPSK \_3DH5/LCH

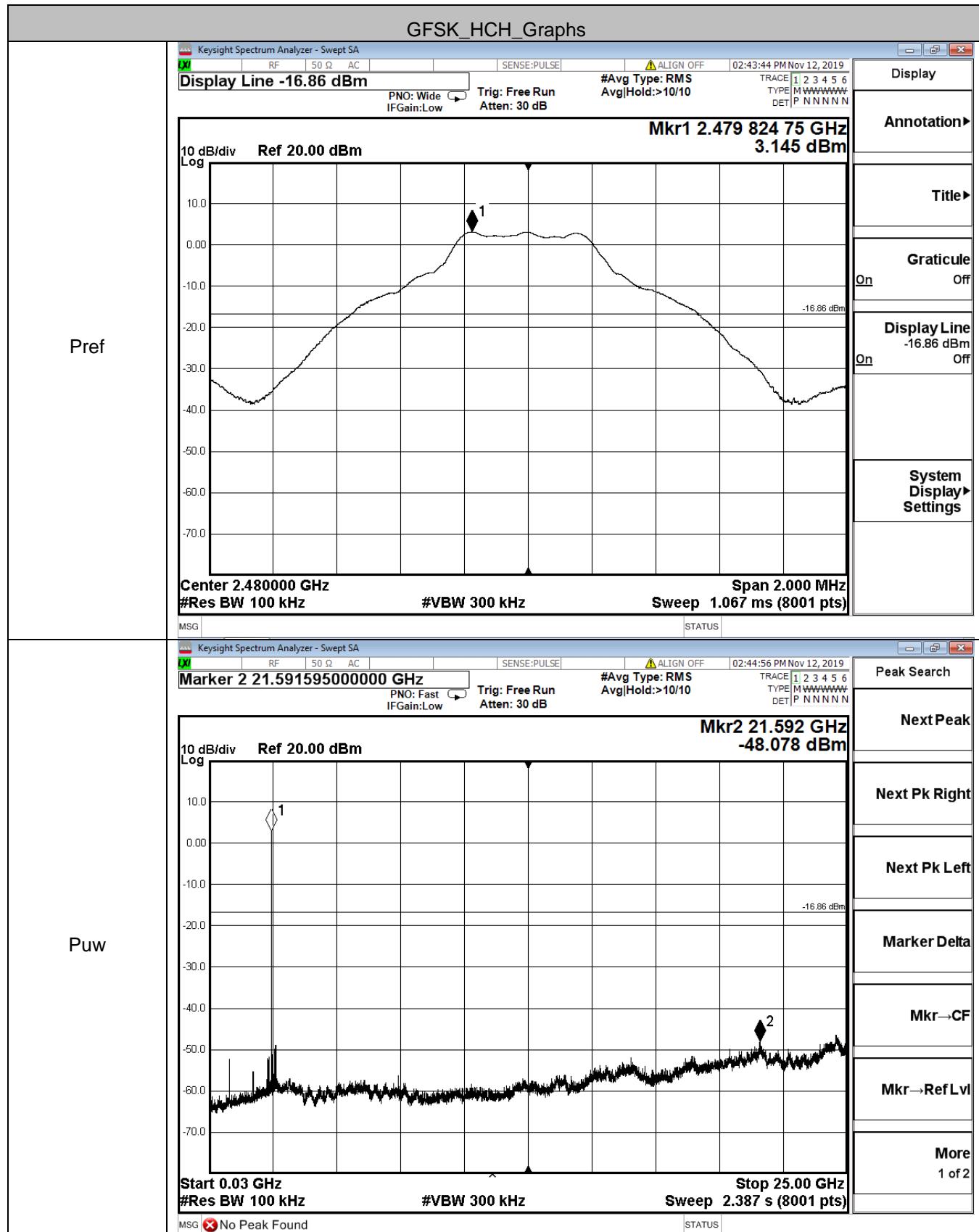


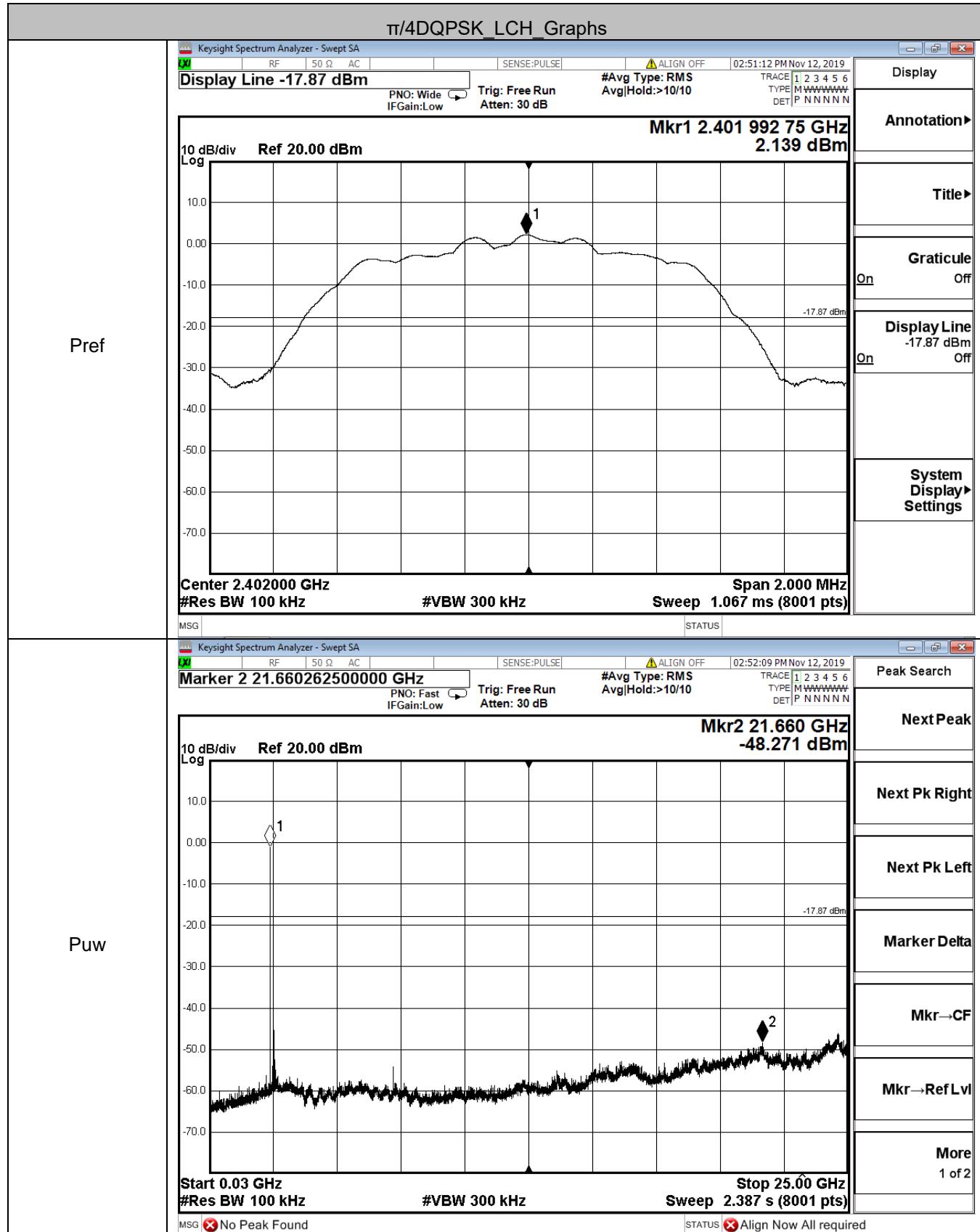
## A.6 RF Conducted Spurious Emissions

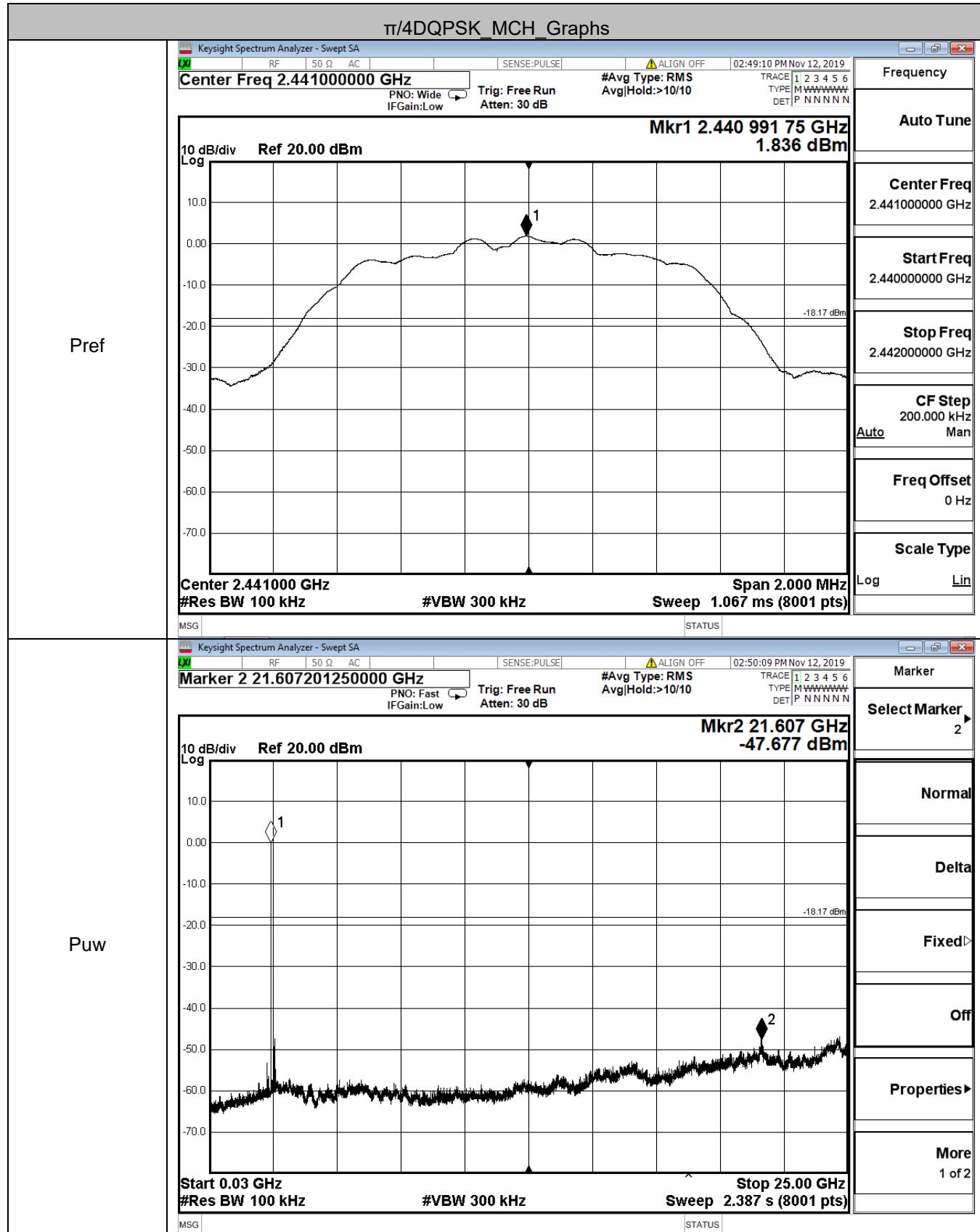
Mode	Channel	Pref [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
GFSK	LCH	4.698	-47.800	-15.30	PASS
	MCH	3.979	-48.745	-16.02	PASS
	HCH	3.145	-48.078	-16.86	PASS
$\pi/4$ DQPSK	LCH	2.139	-48.271	-17.86	PASS
	MCH	1.836	-47.677	-18.16	PASS
	HCH	1.415	-48.968	-18.59	PASS
8DPSK	LCH	2.144	-48.904	-17.86	PASS
	MCH	1.840	-54.235	-18.16	PASS
	HCH	1.431	-48.722	-18.57	PASS

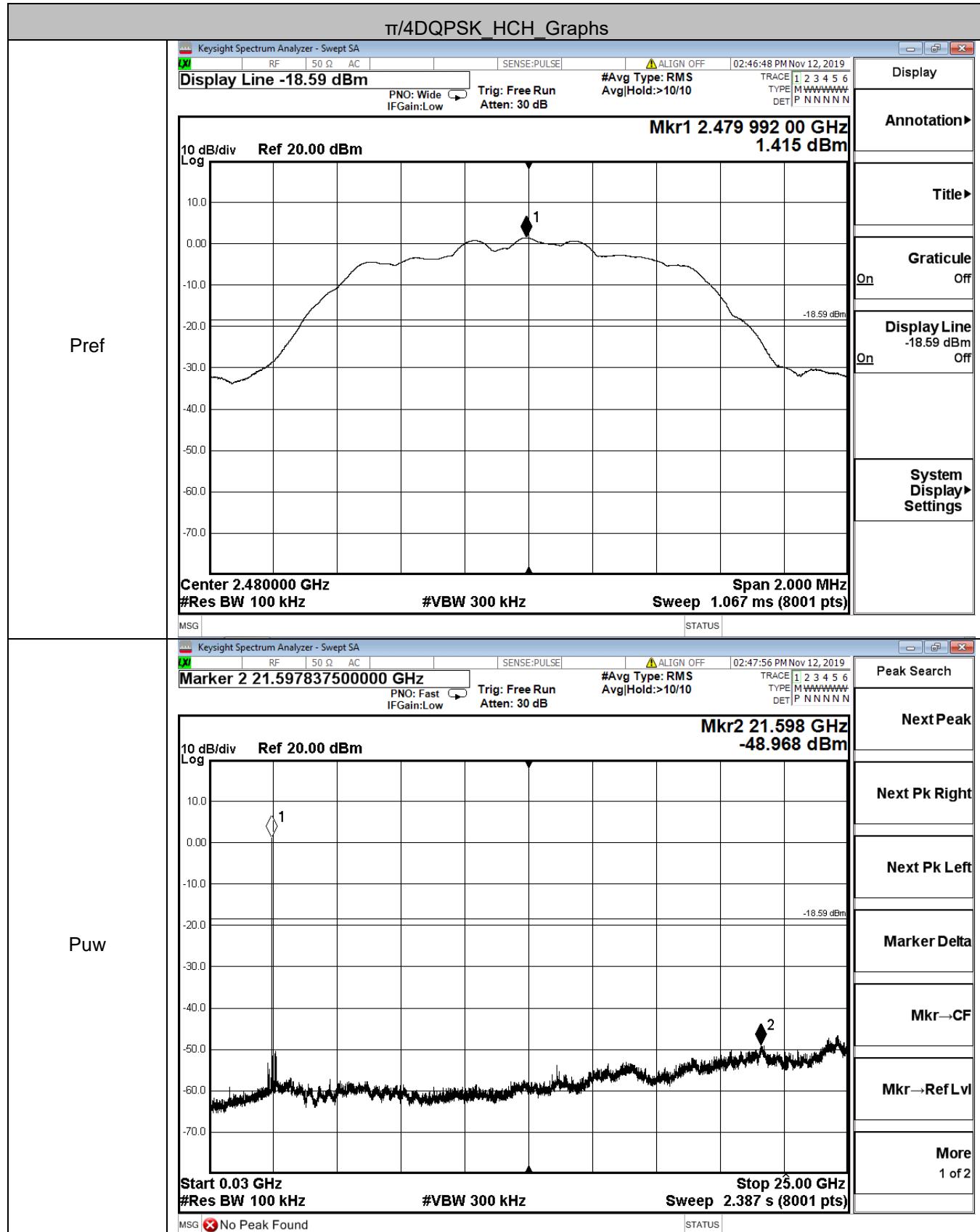


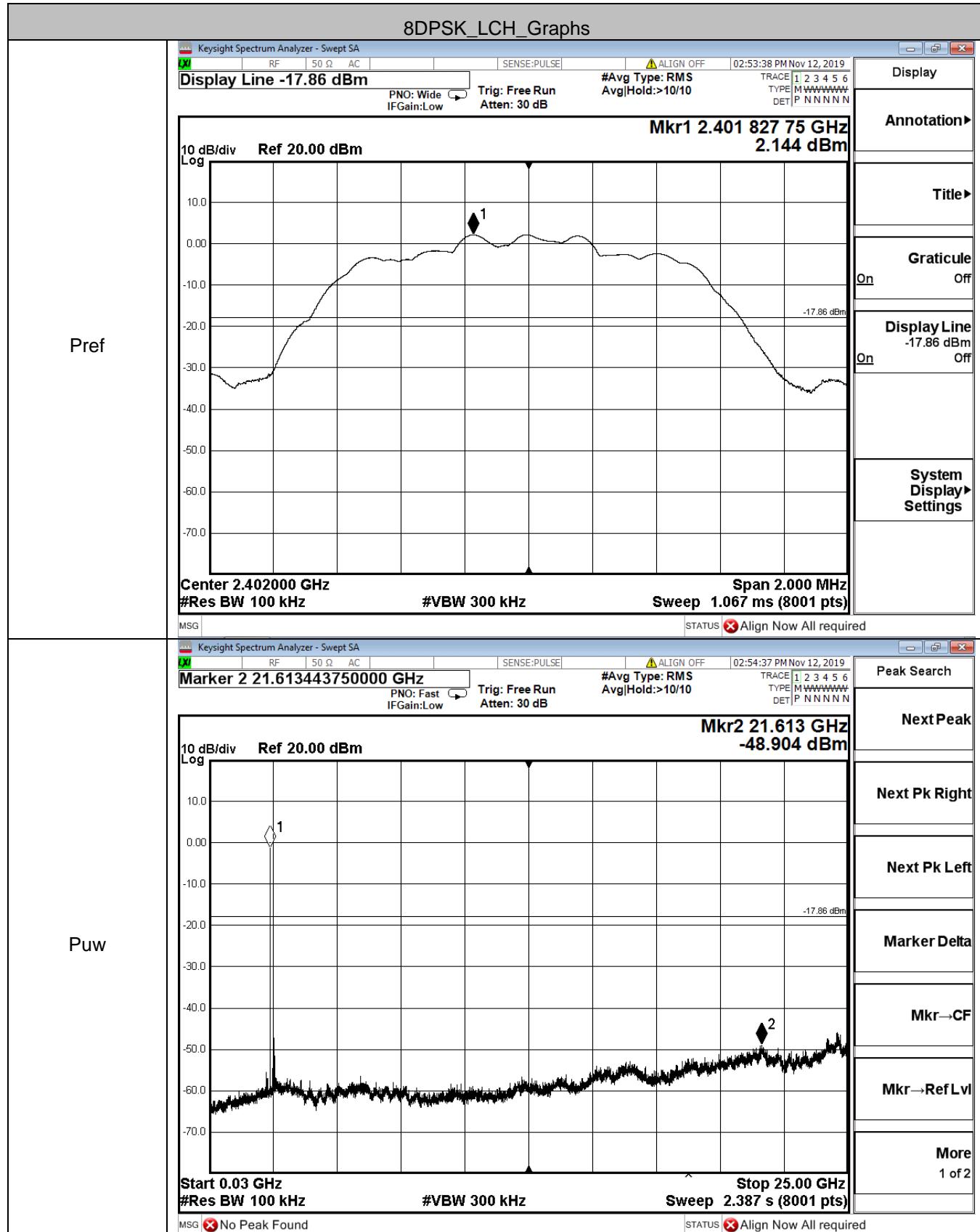


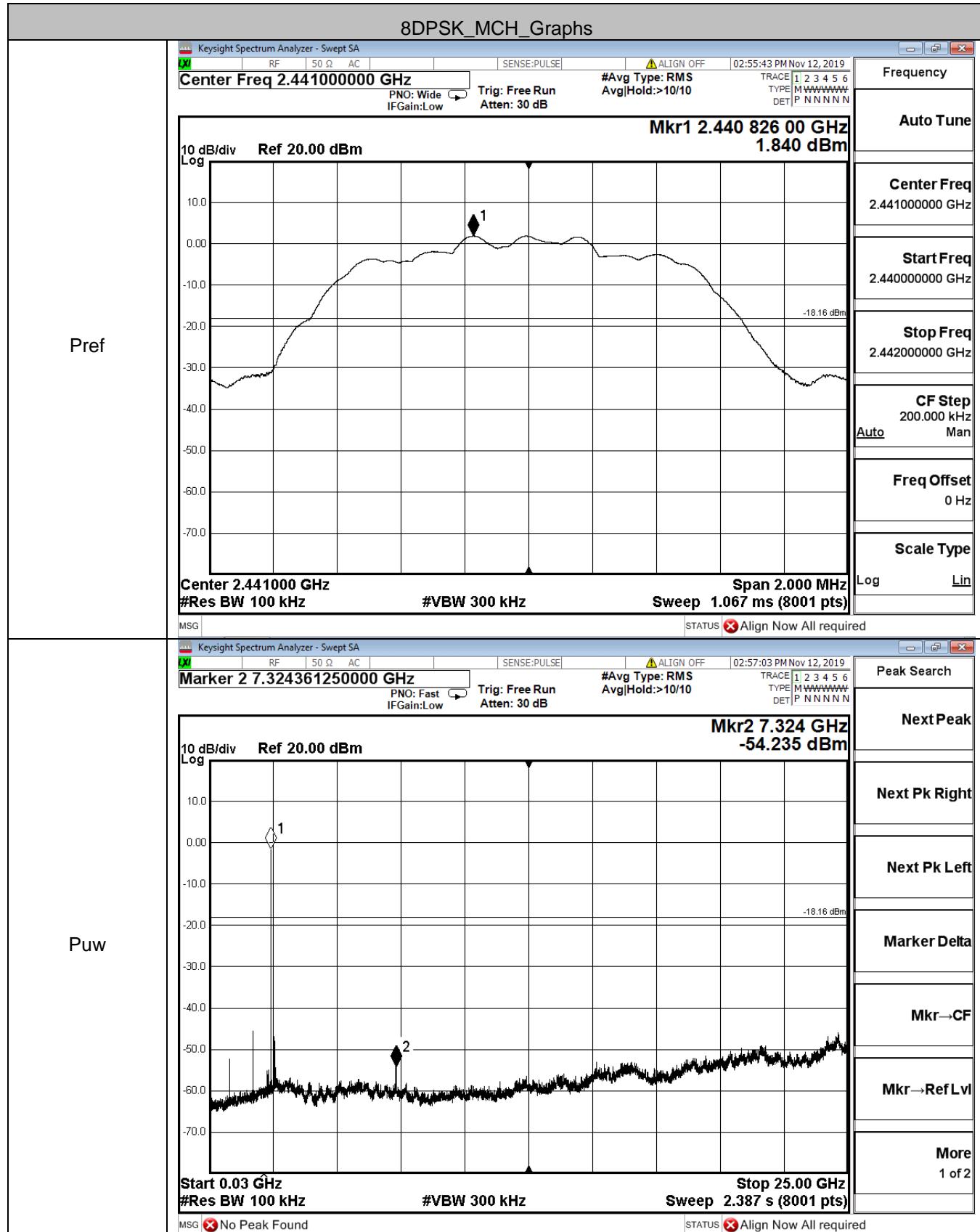


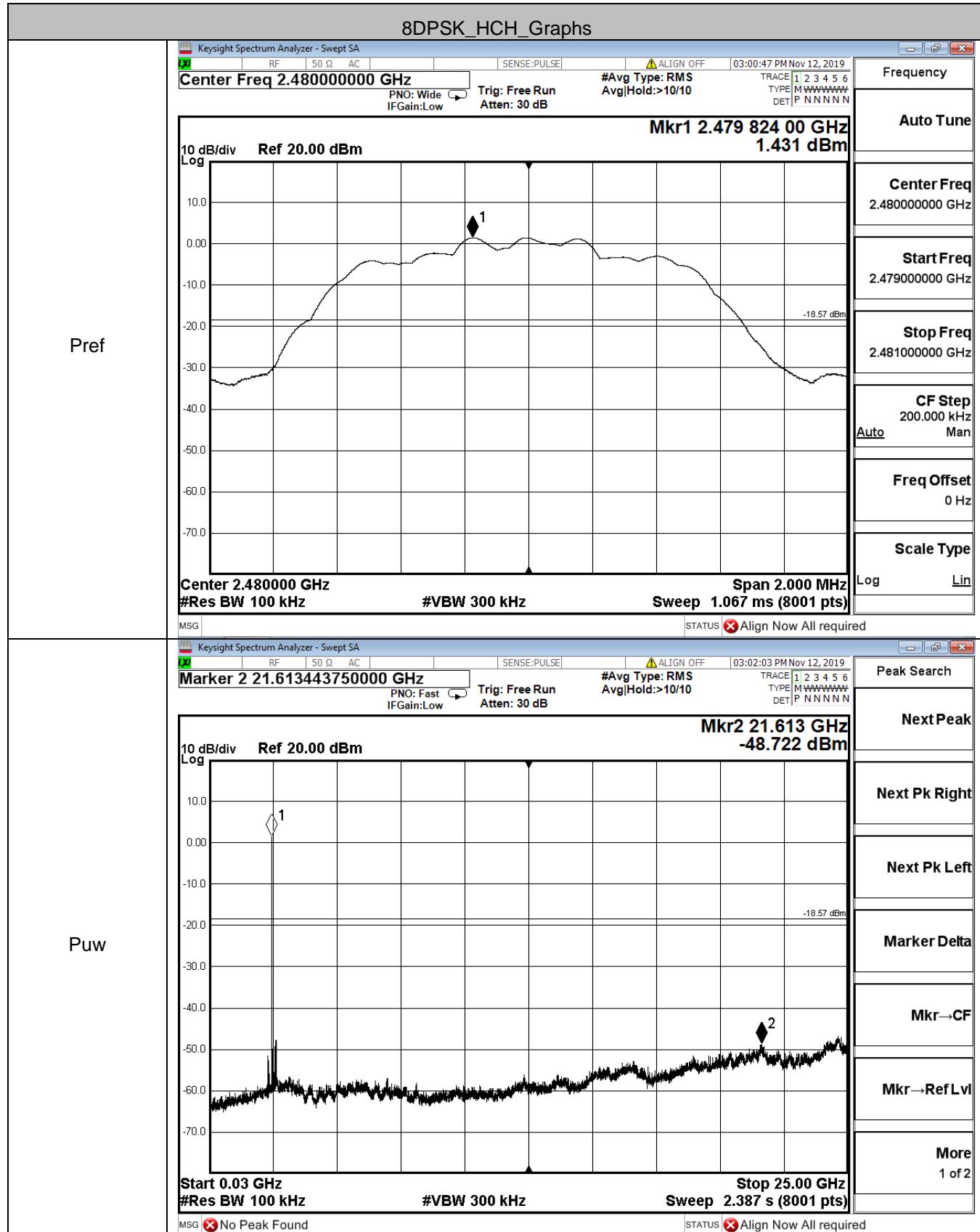






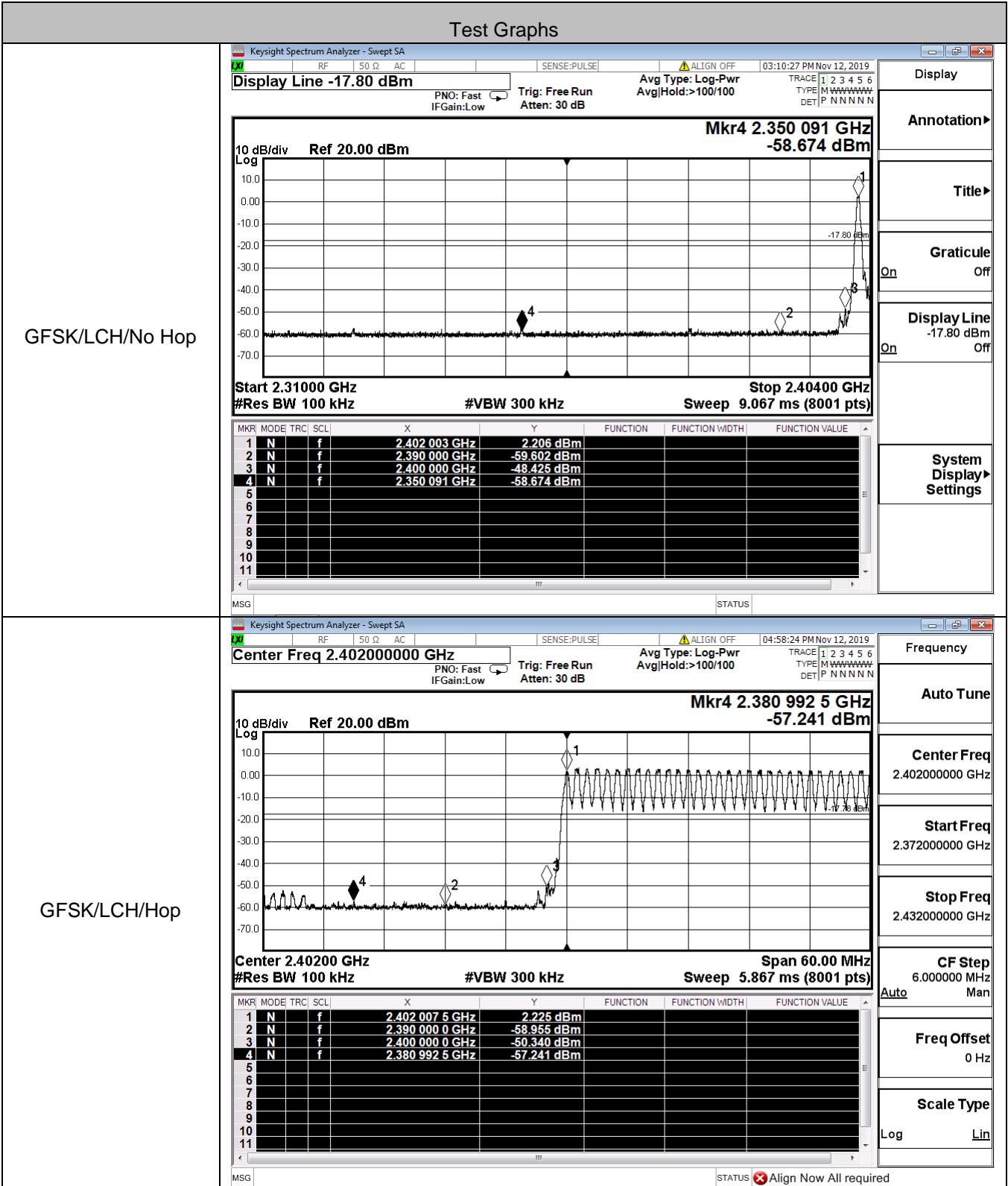


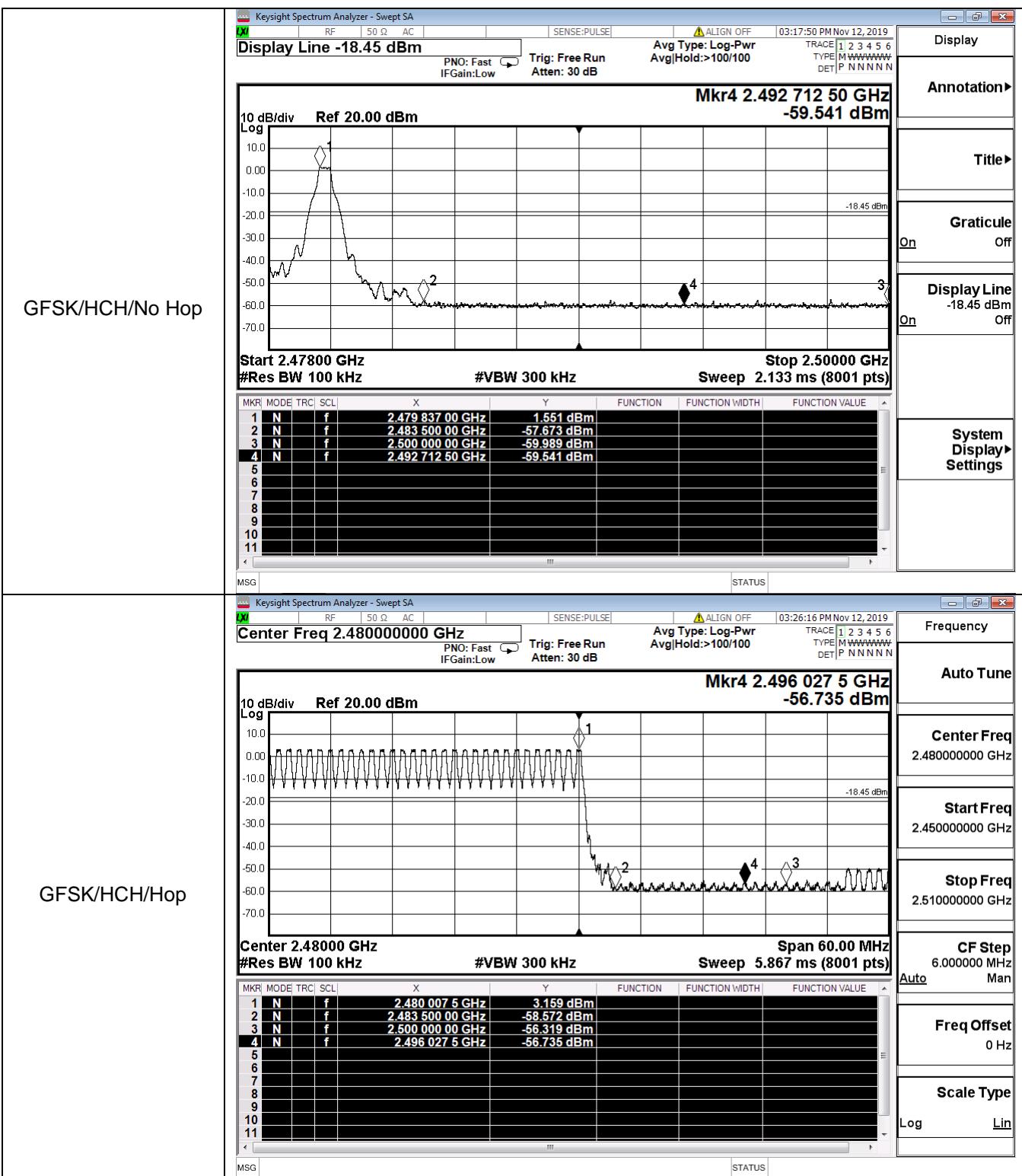


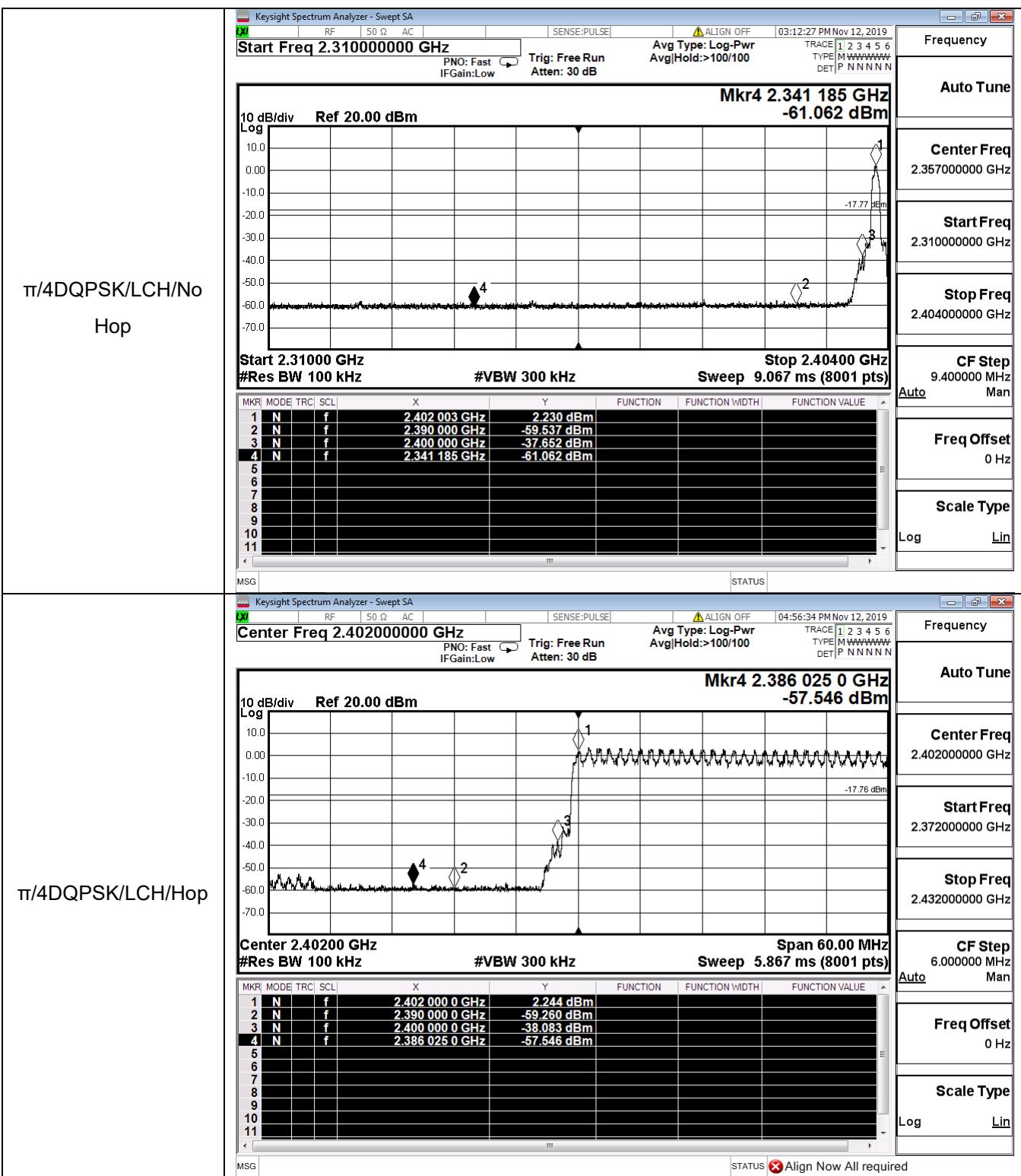


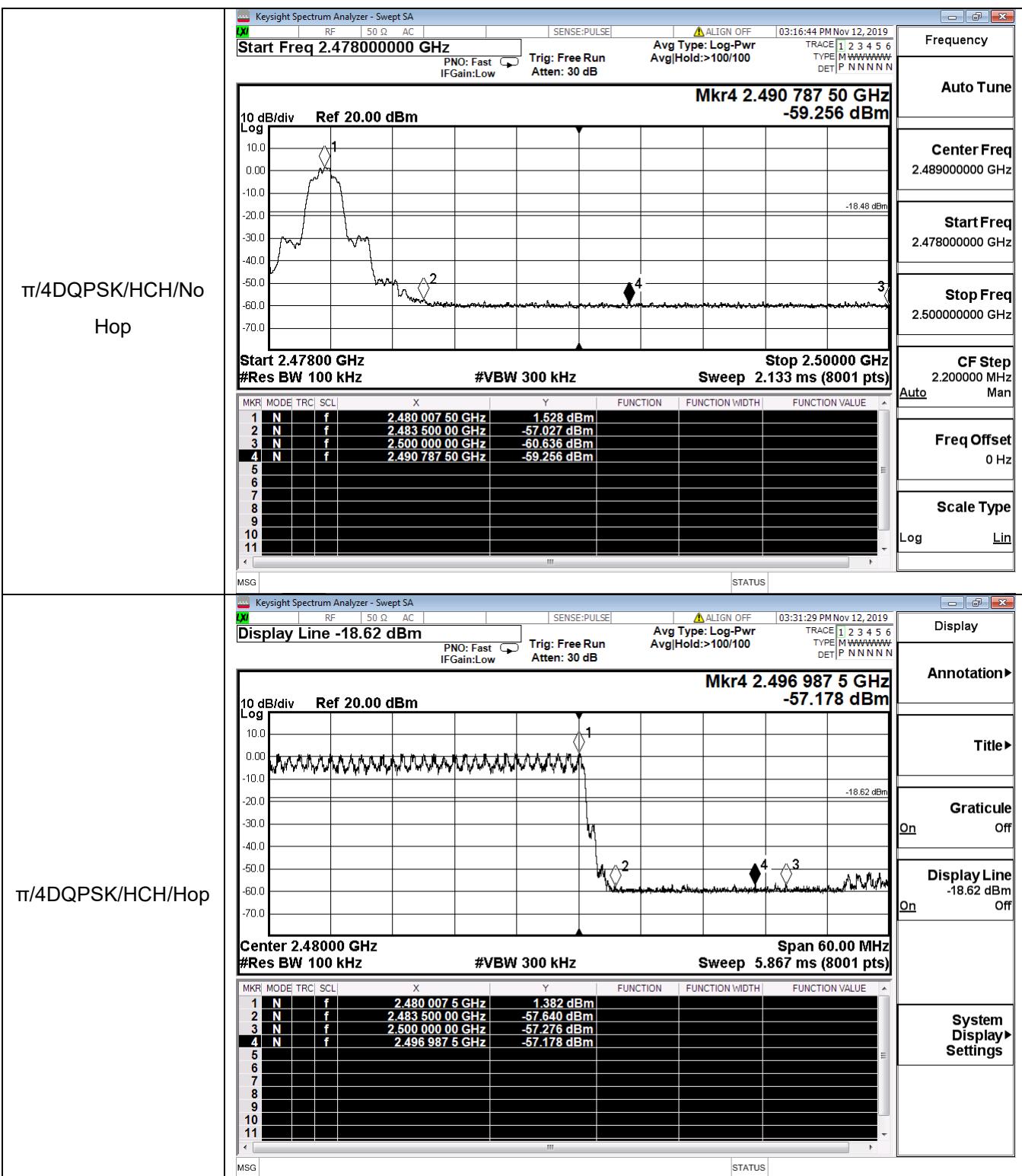
**A.7 Band-edge for RF Conducted Emissions**

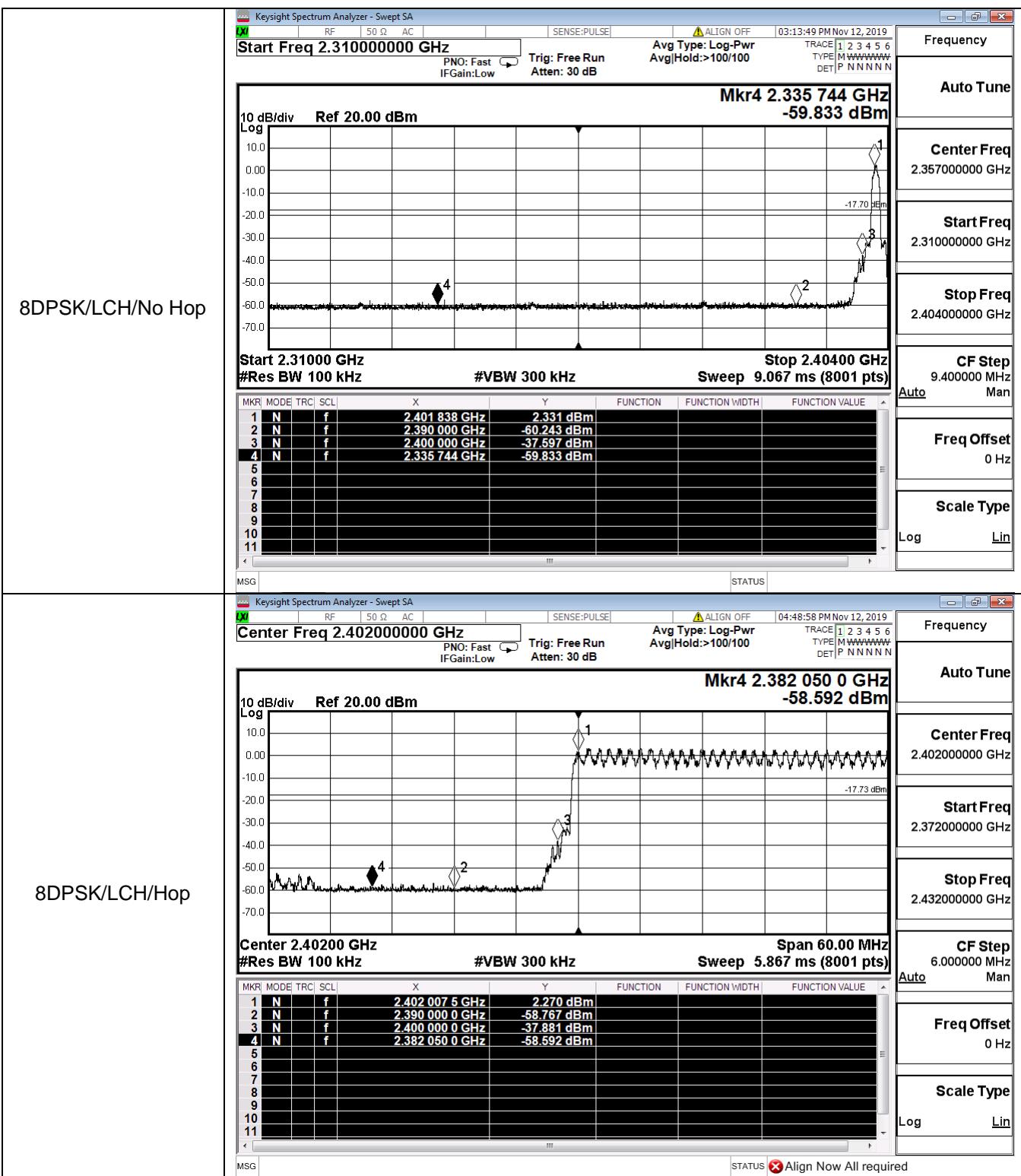
Mode	Channel	Carrier Frequency [MHz]	Carrier Power [dBm]	Frequency Hopping	Max Spurious Level [dBm]	Limit [dBm]	Verdict
GFSK	LCH	2402	2.206	Off	-48.425	-17.79	PASS
			2.225	On	-50.340	-17.78	PASS
	HCH	2480	1.551	Off	-57.673	-18.45	PASS
			3.159	On	-56.319	-16.84	PASS
$\pi/4$ DQPSK	LCH	2402	2.230	Off	-37.652	-17.77	PASS
			2.244	On	-38.083	-17.76	PASS
	HCH	2480	1.528	Off	-57.027	-18.47	PASS
			1.382	On	-57.178	-18.62	PASS
8DPSK	LCH	2402	2.331	Off	-37.597	-17.67	PASS
			2.270	On	-37.881	-17.73	PASS
	HCH	2480	1.538	Off	-54.772	-18.46	PASS
			1.554	On	-57.752	-18.45	PASS

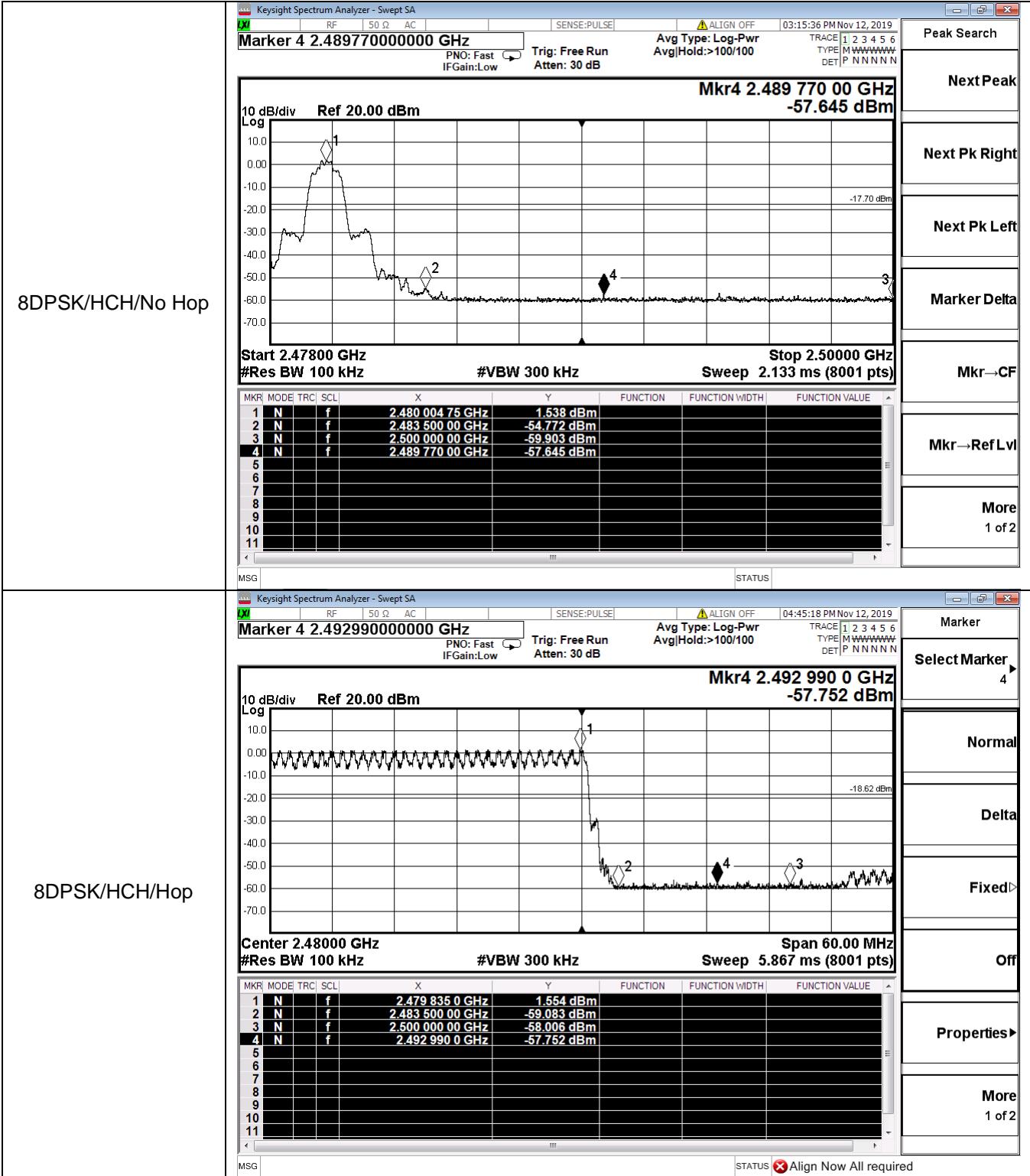








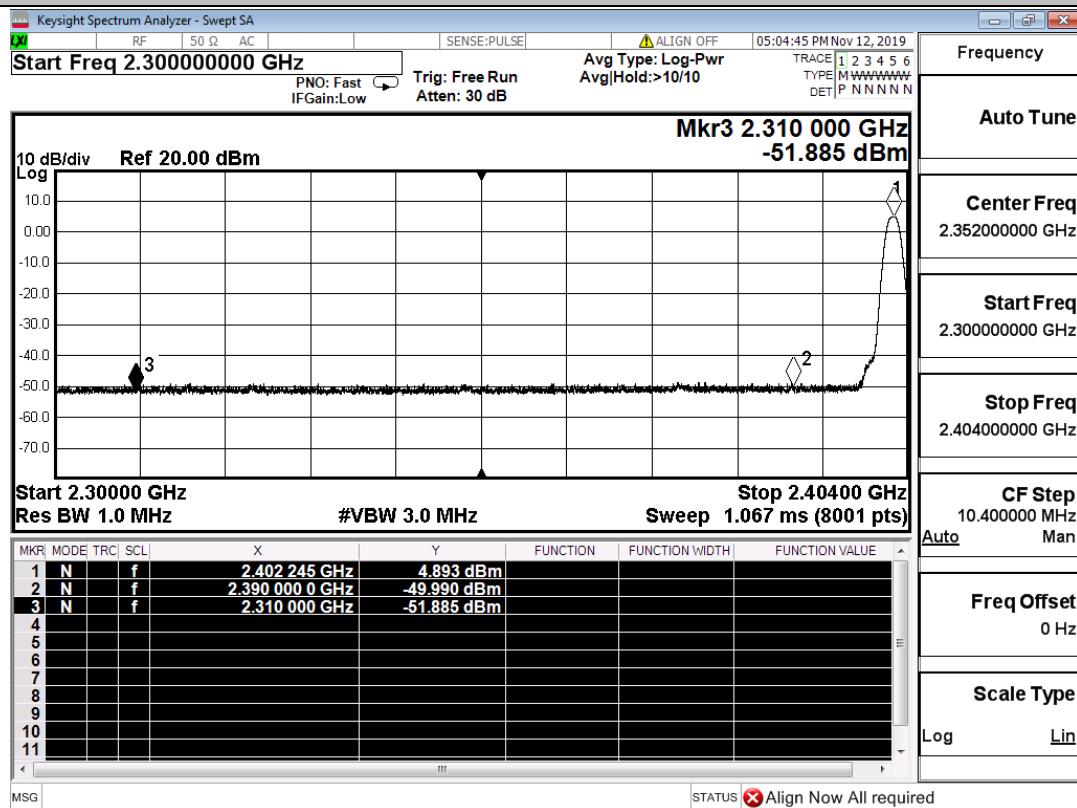




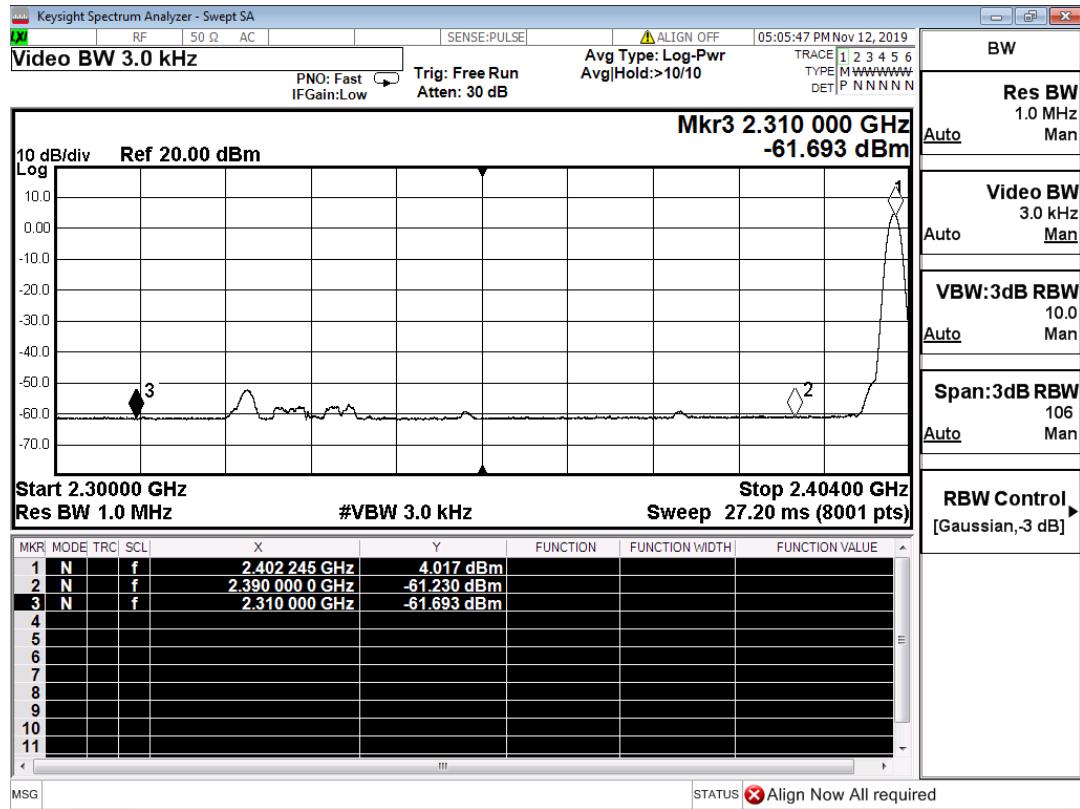
## A.8 Restrict-band band-edge measurements

Test Mode	Hopping	Freq.	Power [dBm]	Gain	Ground Factor	E [dBuV/m]	Detector	Limit [dBuV/m]	Verdict
GFSK	Off	2310.0	-51.885	2.0	0	45.35	PEAK	74	PASS
	Off	2310.0	-61.693	2.0	0	35.54	AV	54	PASS
	Off	2390.0	-49.990	2.0	0	47.24	PEAK	74	PASS
	Off	2390.0	-61.230	2.0	0	36.00	AV	54	PASS
	Off	2483.5	-47.145	2.0	0	50.09	PEAK	74	PASS
	Off	2483.5	-58.792	2.0	0	38.44	AV	54	PASS
	Off	2500.0	-50.346	2.0	0	46.88	PEAK	74	PASS
	Off	2500.0	-60.899	2.0	0	36.33	AV	54	PASS
$\pi/4$ DQPSK	Off	2310.0	-50.176	2.0	0	47.05	PEAK	74	PASS
	Off	2310.0	-61.619	2.0	0	35.61	AV	54	PASS
	Off	2390.0	-50.684	2.0	0	46.55	PEAK	74	PASS
	Off	2390.0	-61.477	2.0	0	35.75	AV	54	PASS
	Off	2483.5	-47.030	2.0	0	50.20	PEAK	74	PASS
	Off	2483.5	-57.930	2.0	0	39.30	AV	54	PASS
	Off	2500.0	-50.200	2.0	0	47.03	PEAK	74	PASS
	Off	2500.0	-60.650	2.0	0	36.58	AV	54	PASS
8DPSK	Off	2310.0	-50.937	2.0	0	46.29	PEAK	74	PASS
	Off	2310.0	-61.372	2.0	0	35.86	AV	54	PASS
	Off	2390.0	-50.855	2.0	0	46.38	PEAK	74	PASS
	Off	2390.0	-61.056	2.0	0	36.17	AV	54	PASS
	Off	2483.5	-46.747	2.0	0	50.48	PEAK	74	PASS
	Off	2483.5	-57.515	2.0	0	39.72	AV	54	PASS
	Off	2500.0	-50.864	2.0	0	46.37	PEAK	74	PASS
	Off	2500.0	-60.865	2.0	0	36.37	AV	54	PASS

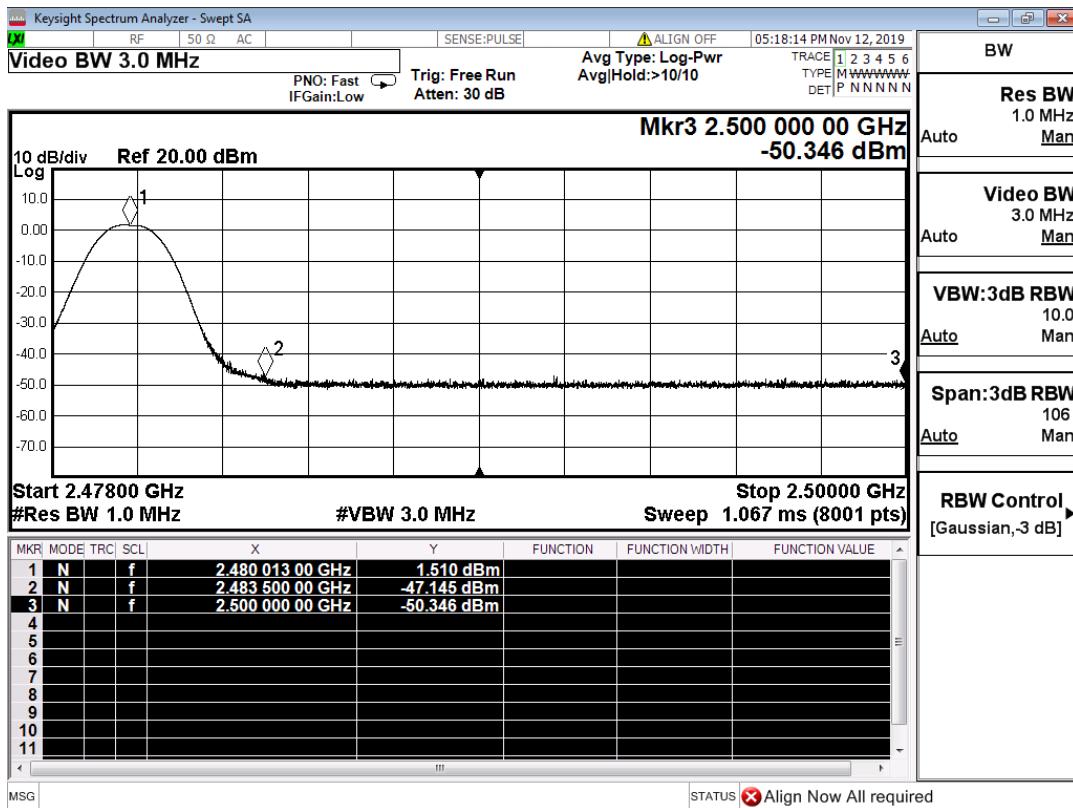
## Restrict-band band-edge measurements\_Hopping Off\_GFSK\_PEAK (Low Channel)



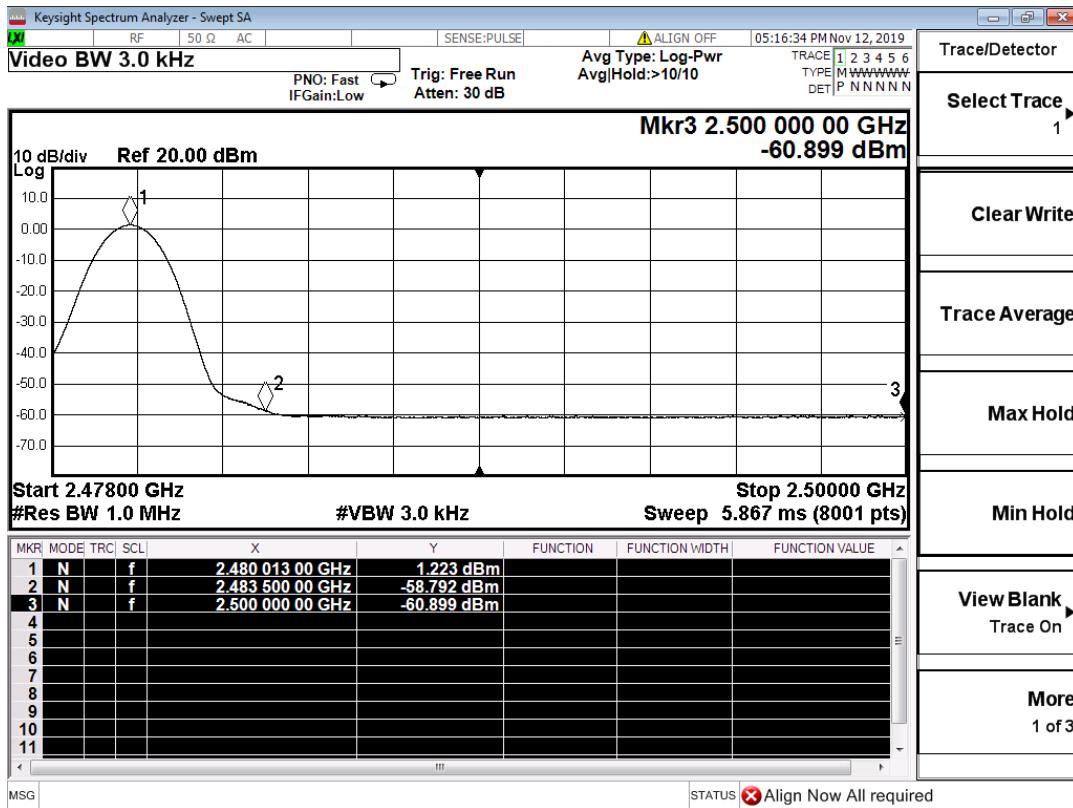
## Restrict-band band-edge measurements\_Hopping Off\_GFSK\_Average (Low Channel)



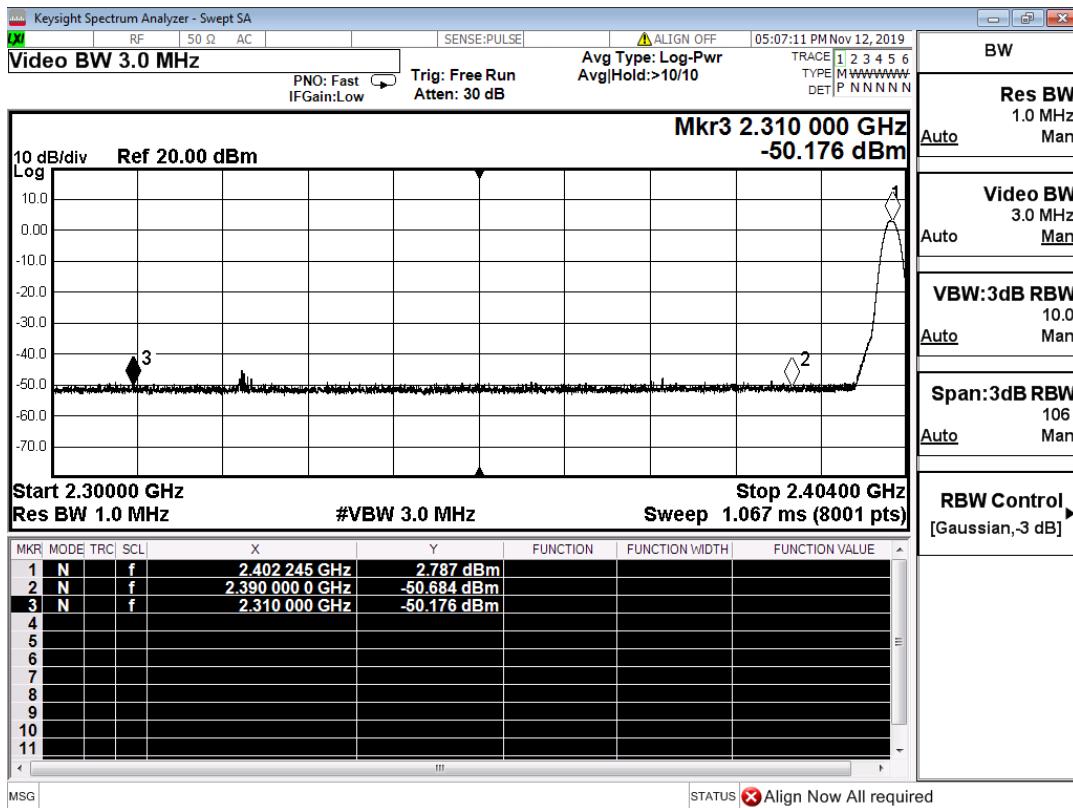
## Restrict-band band-edge measurements\_Hopping Off\_ GFSK\_PEAK (High Channel)



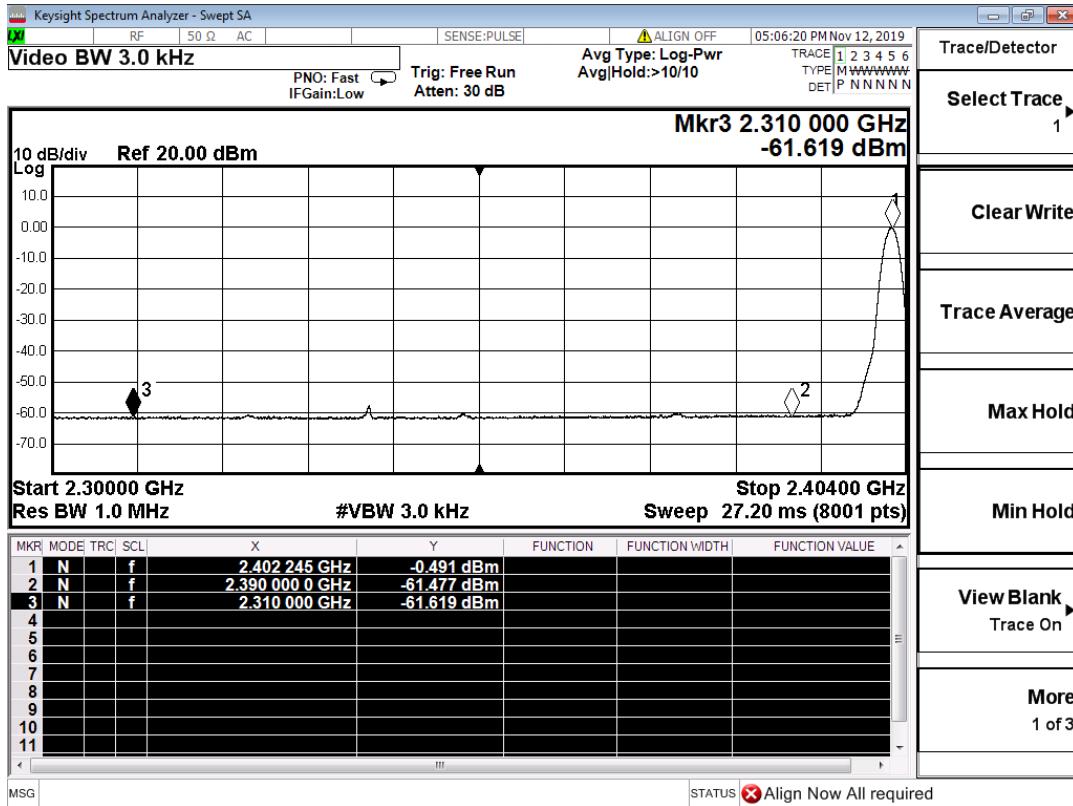
## Restrict-band band-edge measurements\_Hopping Off\_ GFSK\_Average (High Channel)



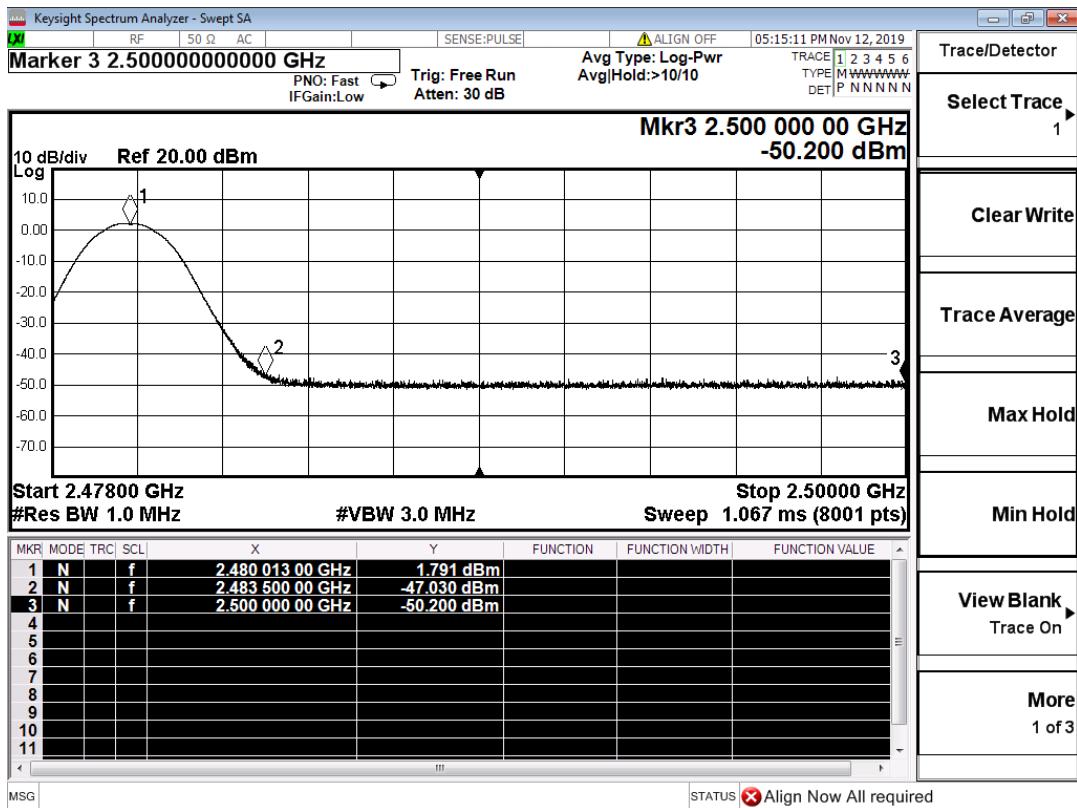
## Restrict-band band-edge measurements\_Hopping Off\_π/4-DQPSK\_PEAK (Low Channel)



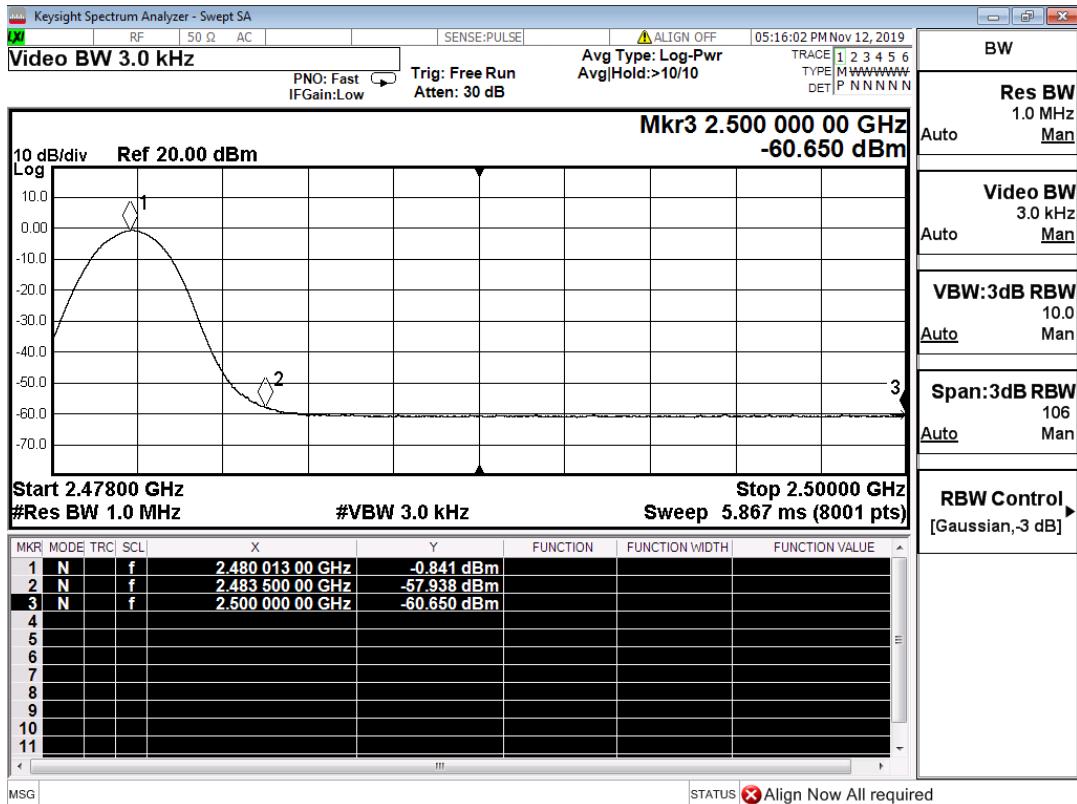
## Restrict-band band-edge measurements\_Hopping Off\_π/4-DQPSK\_Average (Low Channel)



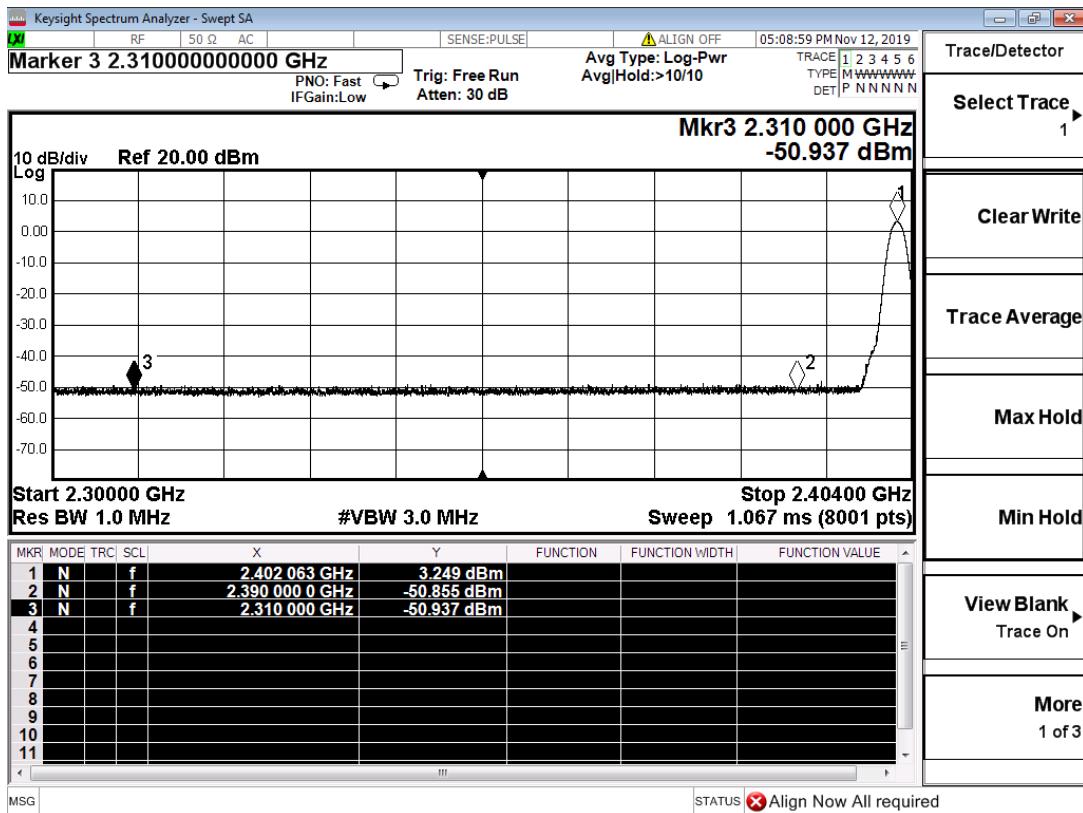
## Restrict-band band-edge measurements\_Hopping Off\_π/4-DQPSK\_PEAK (High Channel)



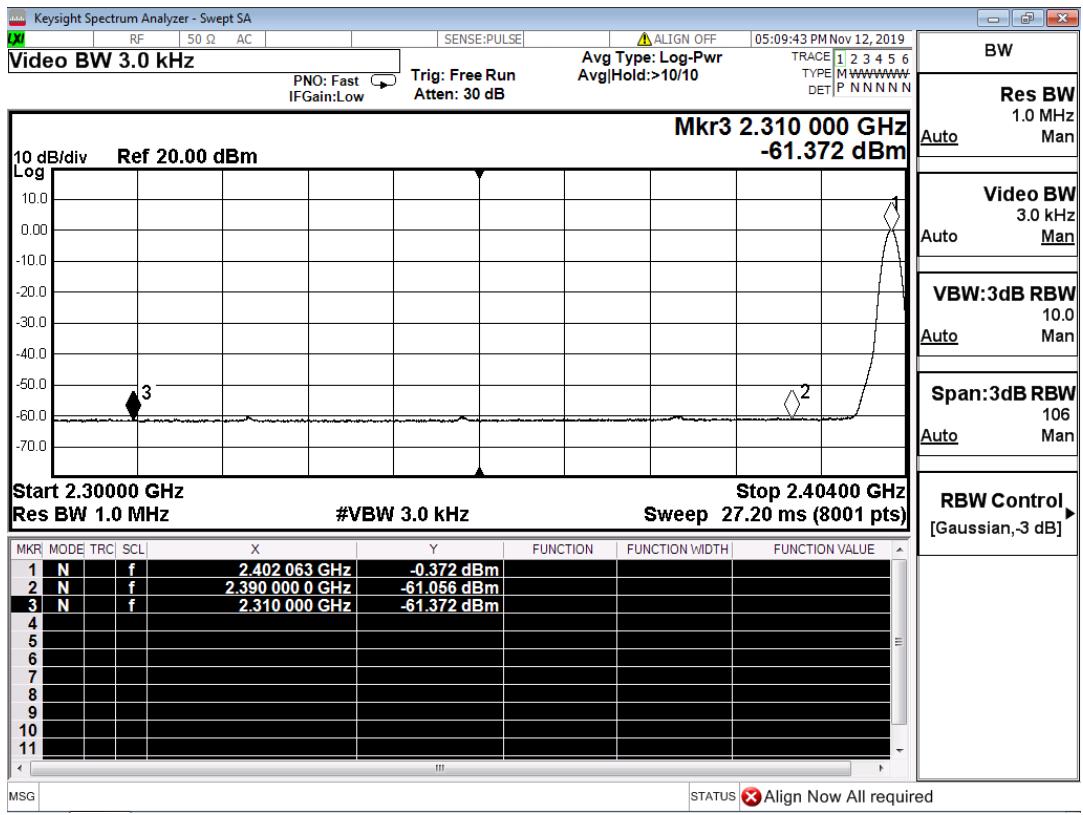
## Restrict-band band-edge measurements\_Hopping Off\_π/4-DQPSK\_Average (High Channel)



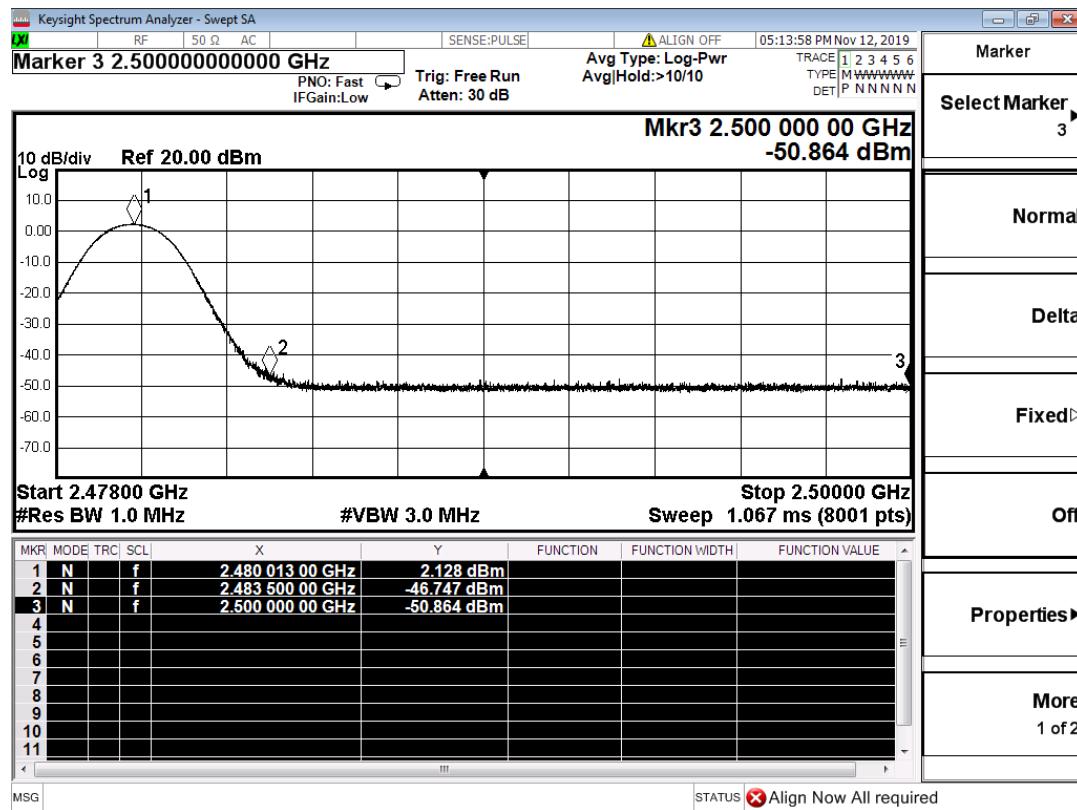
## Restrict-band band-edge measurements\_Hopping Off\_8DPSK\_PEAK (Low Channel)



## Restrict-band band-edge measurements\_Hopping Off\_8DPSK\_Average (Low Channel)



## Restrict-band band-edge measurements\_Hopping Off\_8DPSK\_PEAK (High Channel)



## Restrict-band band-edge measurements\_Hopping Off\_8DPSK\_Average (High Channel)

