

## Appendix A

### RF Test Data for BT V4.0 (BDR/EDR) (Conducted Measurement)

Product Name: Notebook

Trade Mark: EMATIC

Test Model: EWT148

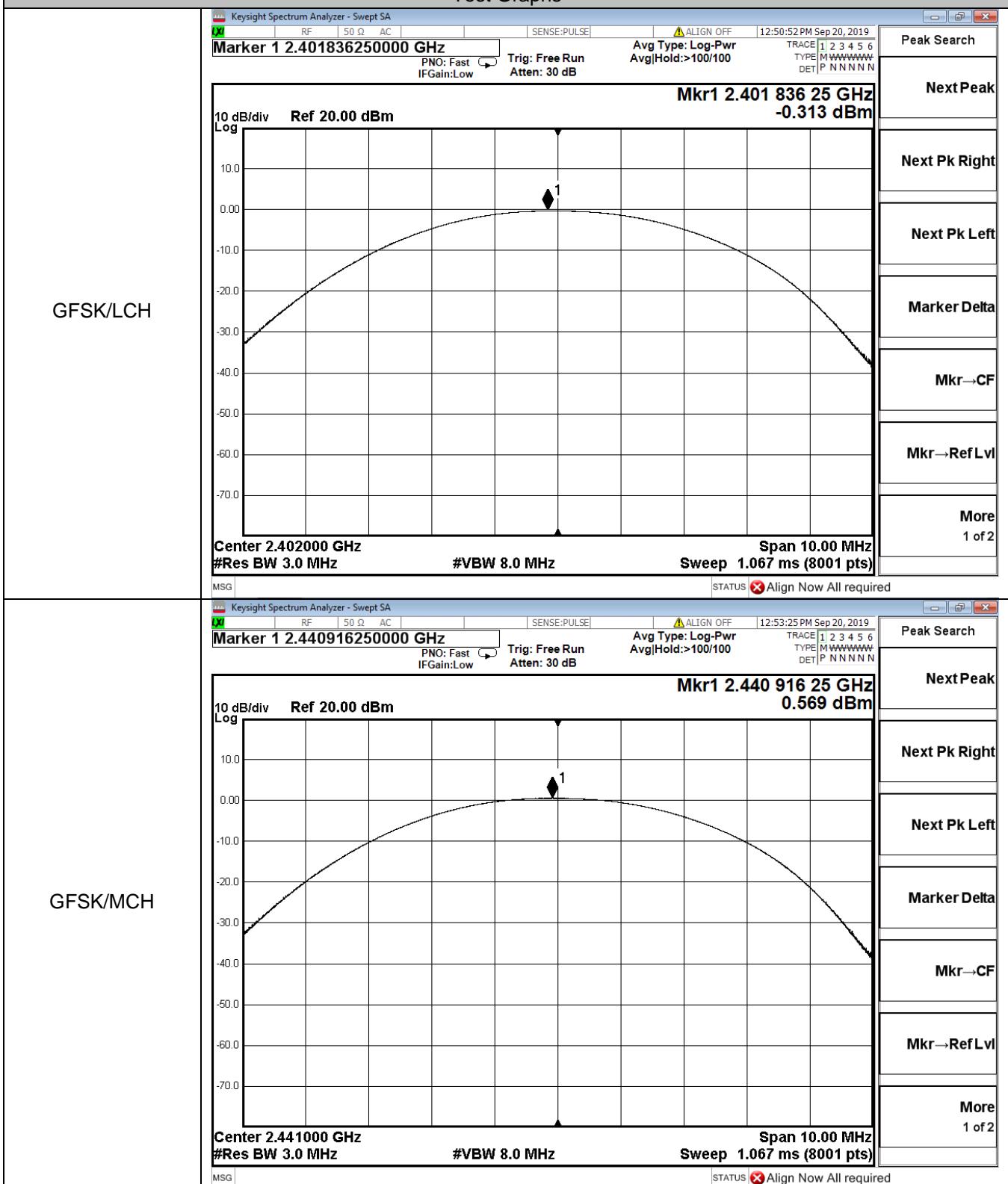
#### Environmental Conditions

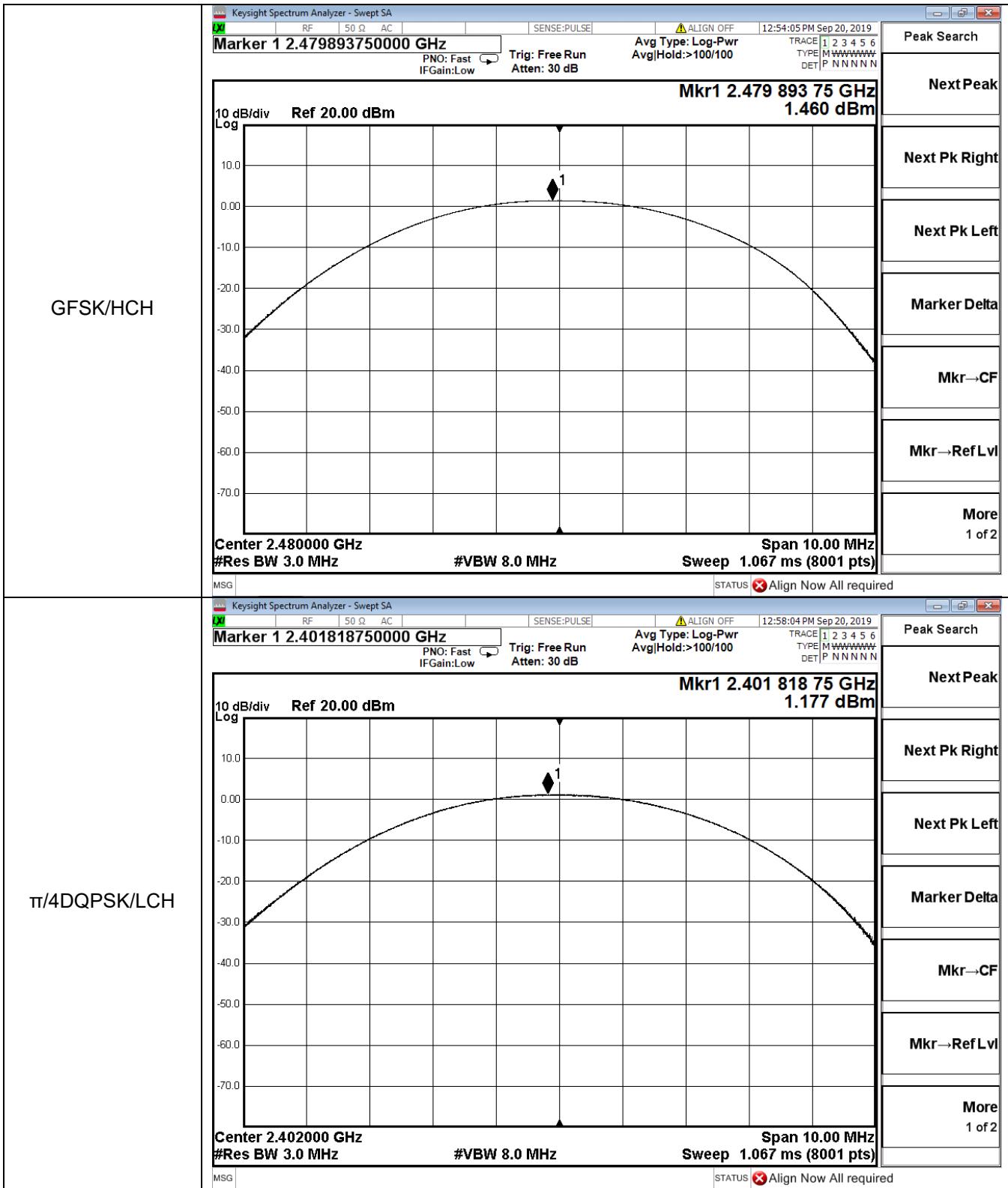
Temperature:	23.6 ° C
Relative Humidity:	57%
ATM Pressure:	100.0 kPa
Test Engineer:	CHUANG WANG
Supervised by:	JAYDEN ZHUO

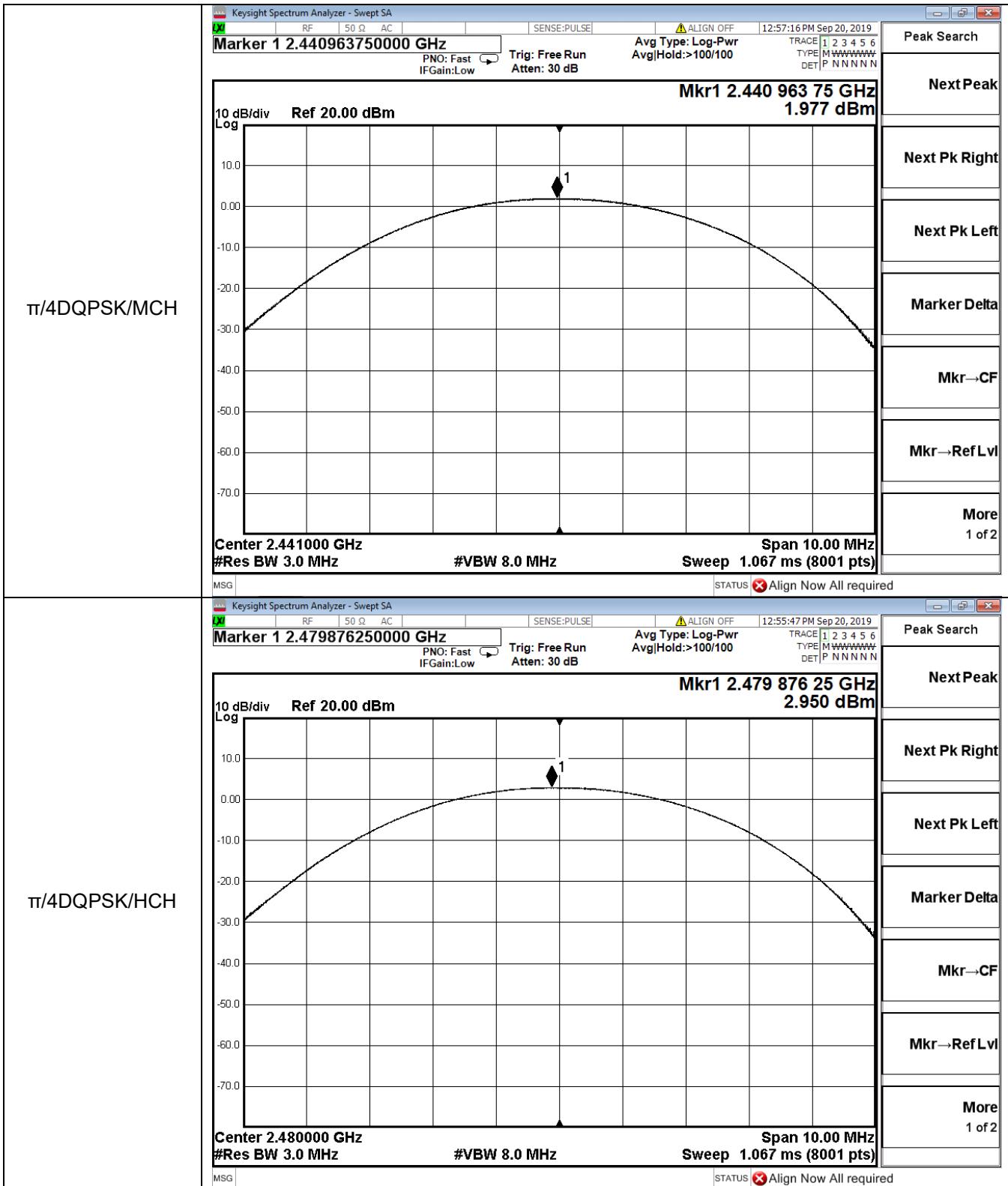
#### A.1 Maximum Conducted Peak Output Power

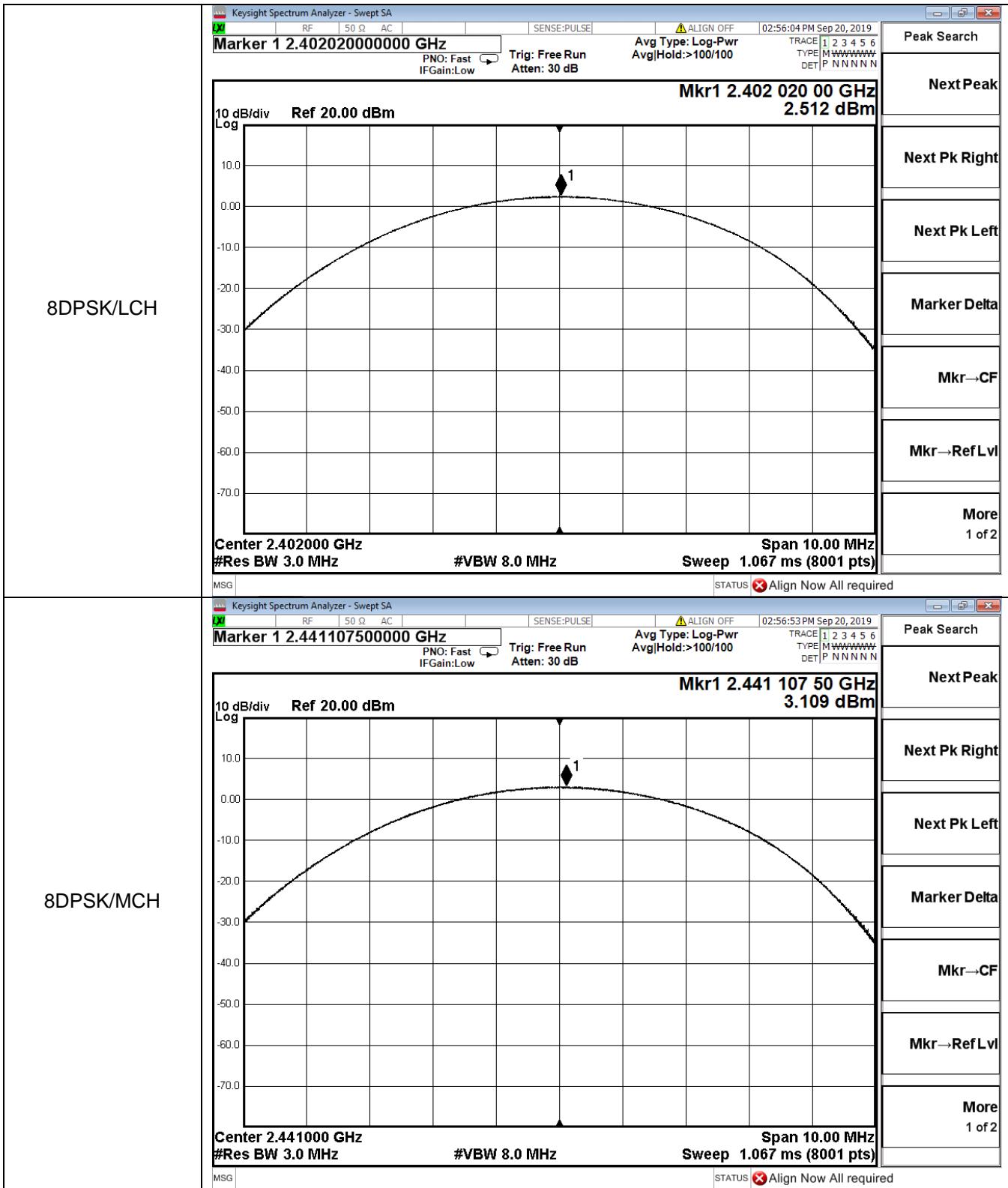
Mode	Channel.	Maximum Peak Output Power [dBm]	Limit [dBm]	Verdict
GFSK	LCH	-0.313	21	PASS
	MCH	0.569	21	PASS
	HCH	1.460	21	PASS
$\pi/4$ DQPSK	LCH	1.177	21	PASS
	MCH	1.977	21	PASS
	HCH	2.950	21	PASS
8DPSK	LCH	2.512	21	PASS
	MCH	3.109	21	PASS
	HCH	3.981	21	PASS

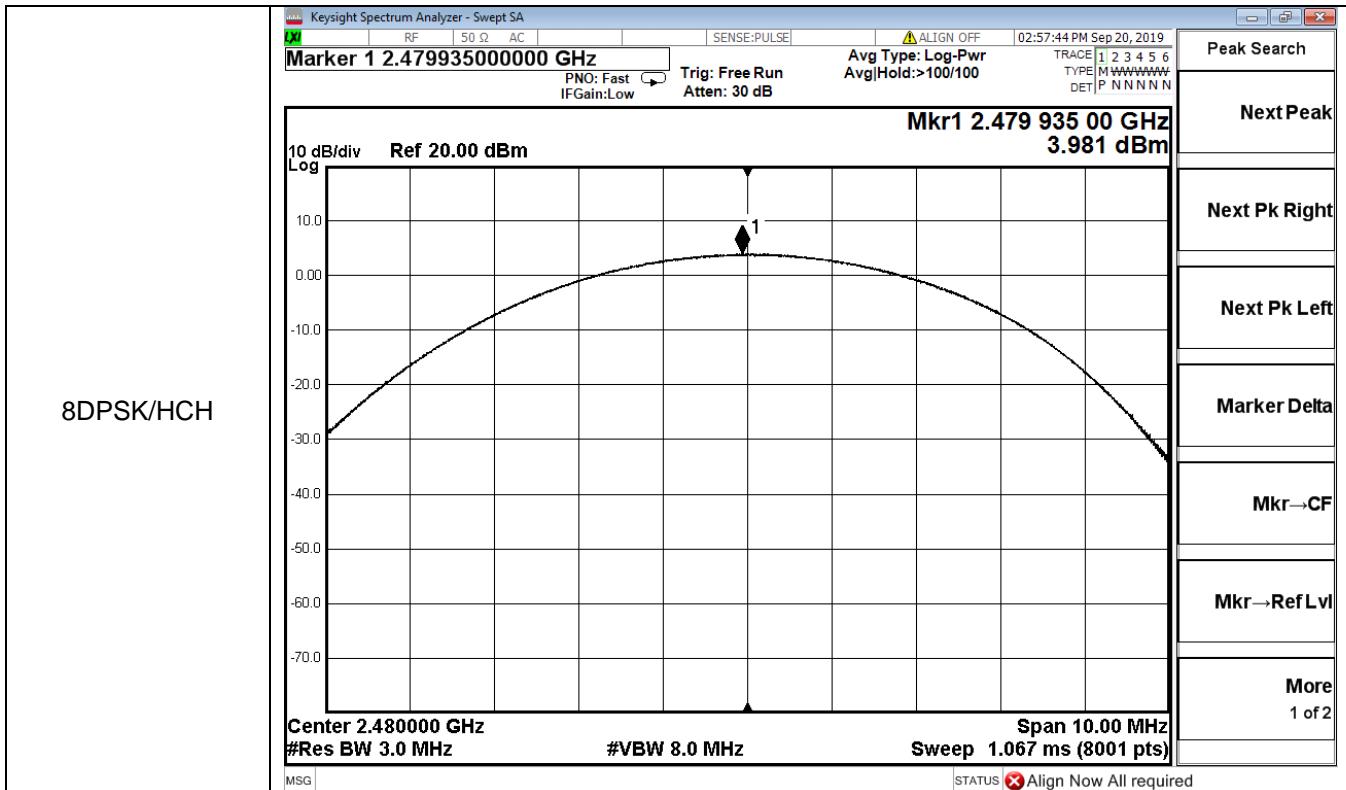
## Test Graphs





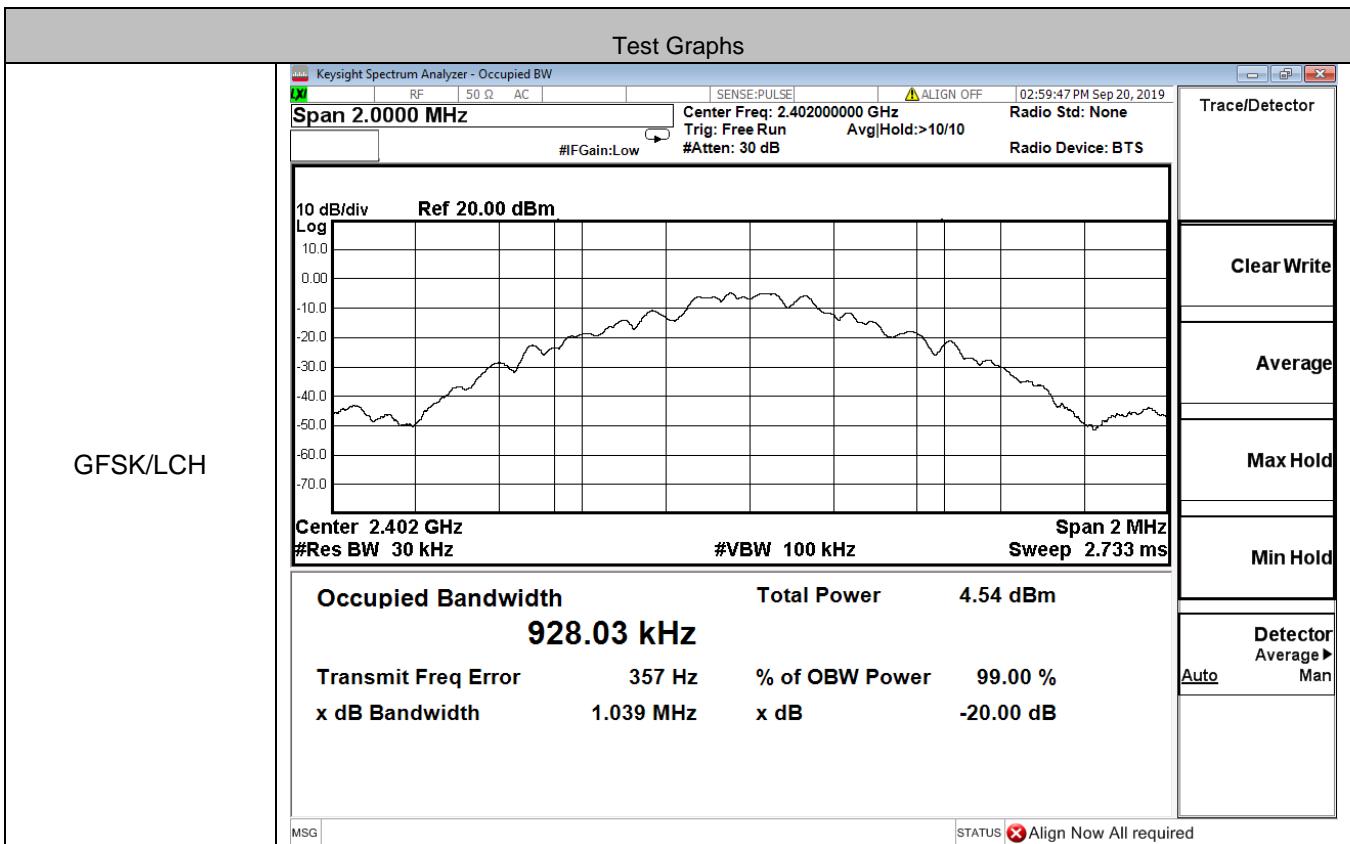


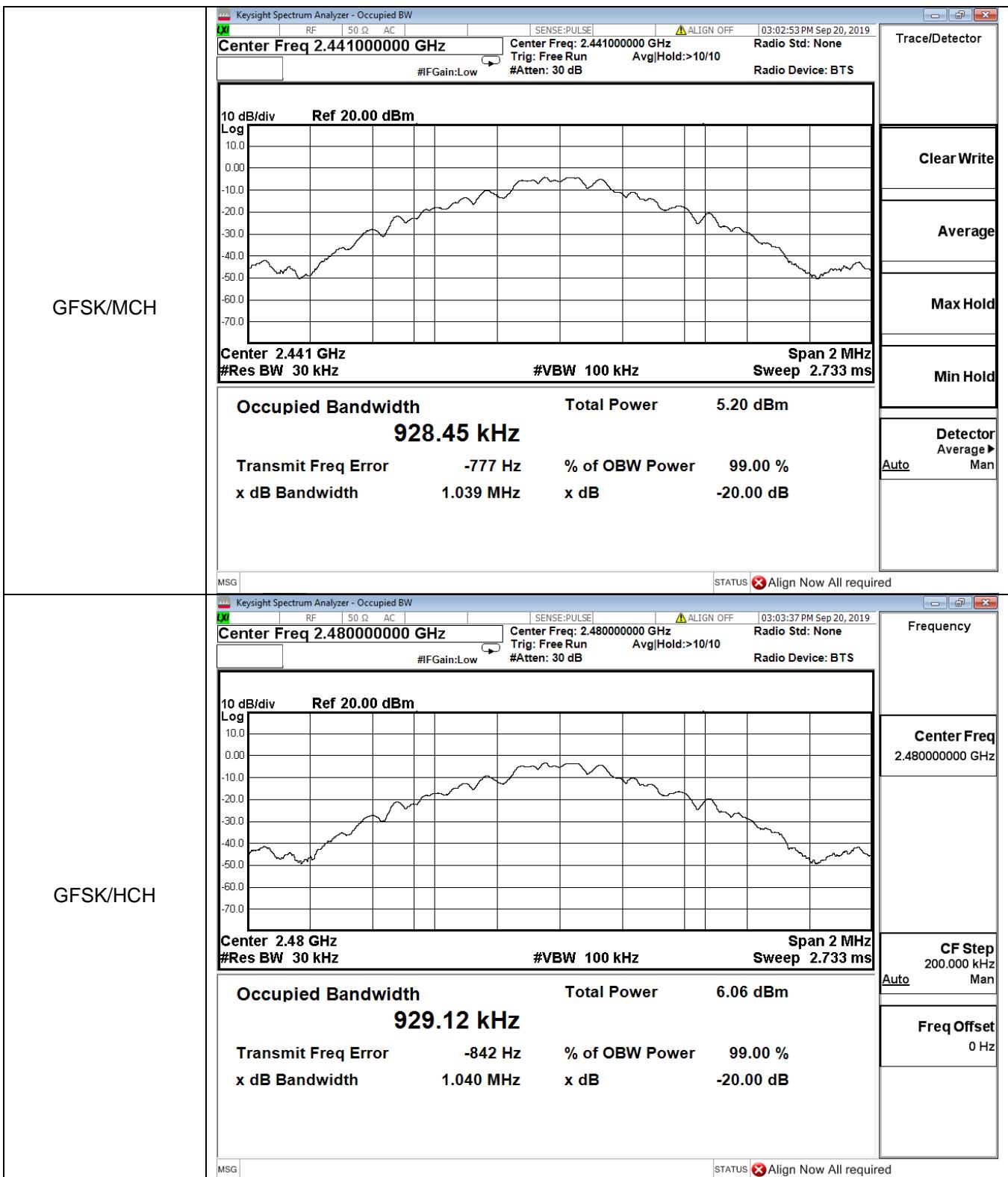


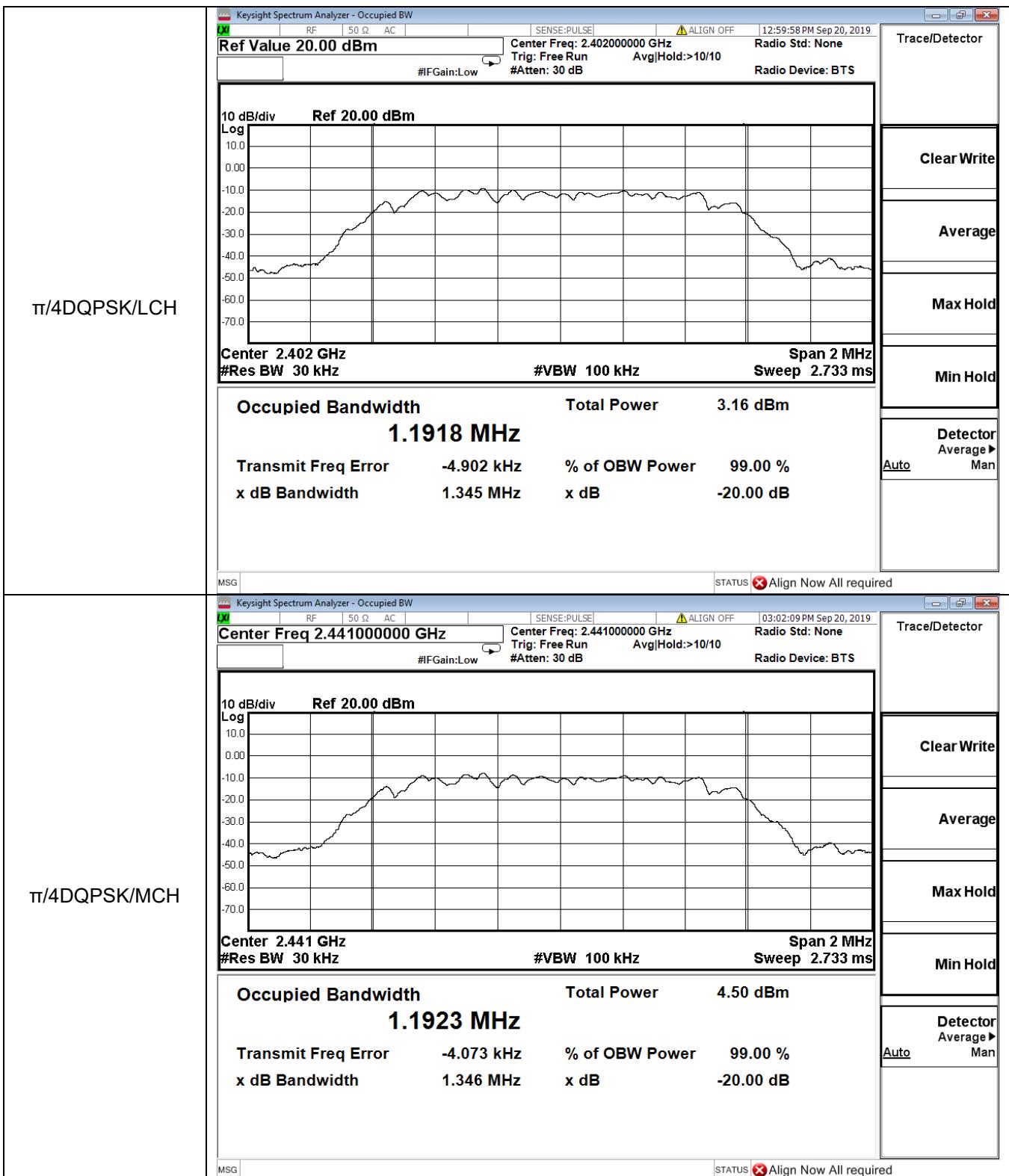


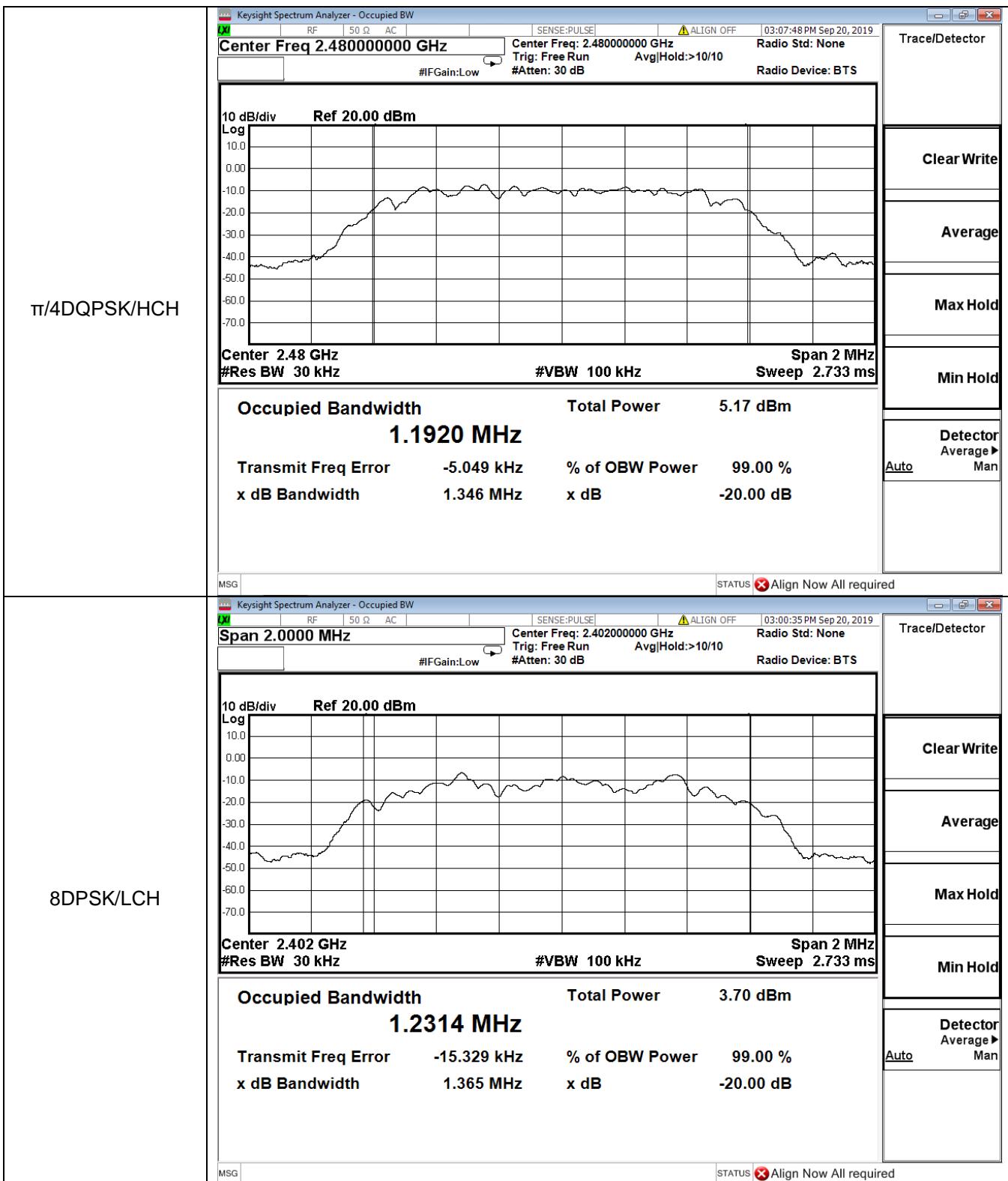
## A.2 99% and 20dB Bandwidth

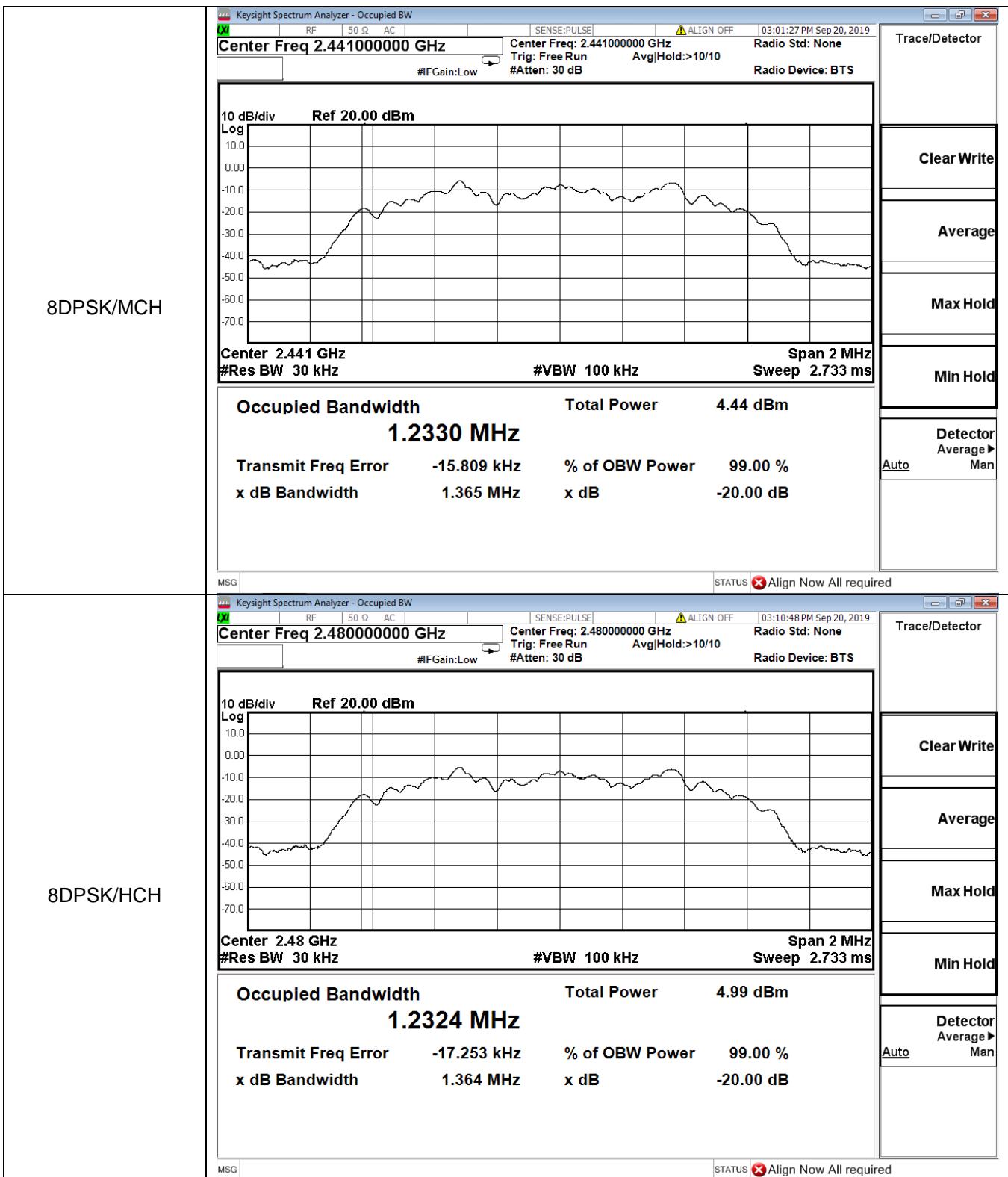
Mode	Channel.	99% Bandwidth [MHz]	20dB Bandwidth [MHz]	Limit [MHz]	Verdict
GFSK	LCH	0.92803	1.039	Not Specified	PASS
	MCH	0.92845	1.039	Not Specified	PASS
	HCH	0.92912	1.040	Not Specified	PASS
$\pi/4$ DQPSK	LCH	1.1918	1.345	Not Specified	PASS
	MCH	1.1923	1.346	Not Specified	PASS
	HCH	1.1920	1.346	Not Specified	PASS
8DPSK	LCH	1.2314	1.365	Not Specified	PASS
	MCH	1.2330	1.365	Not Specified	PASS
	HCH	1.2324	1.364	Not Specified	PASS





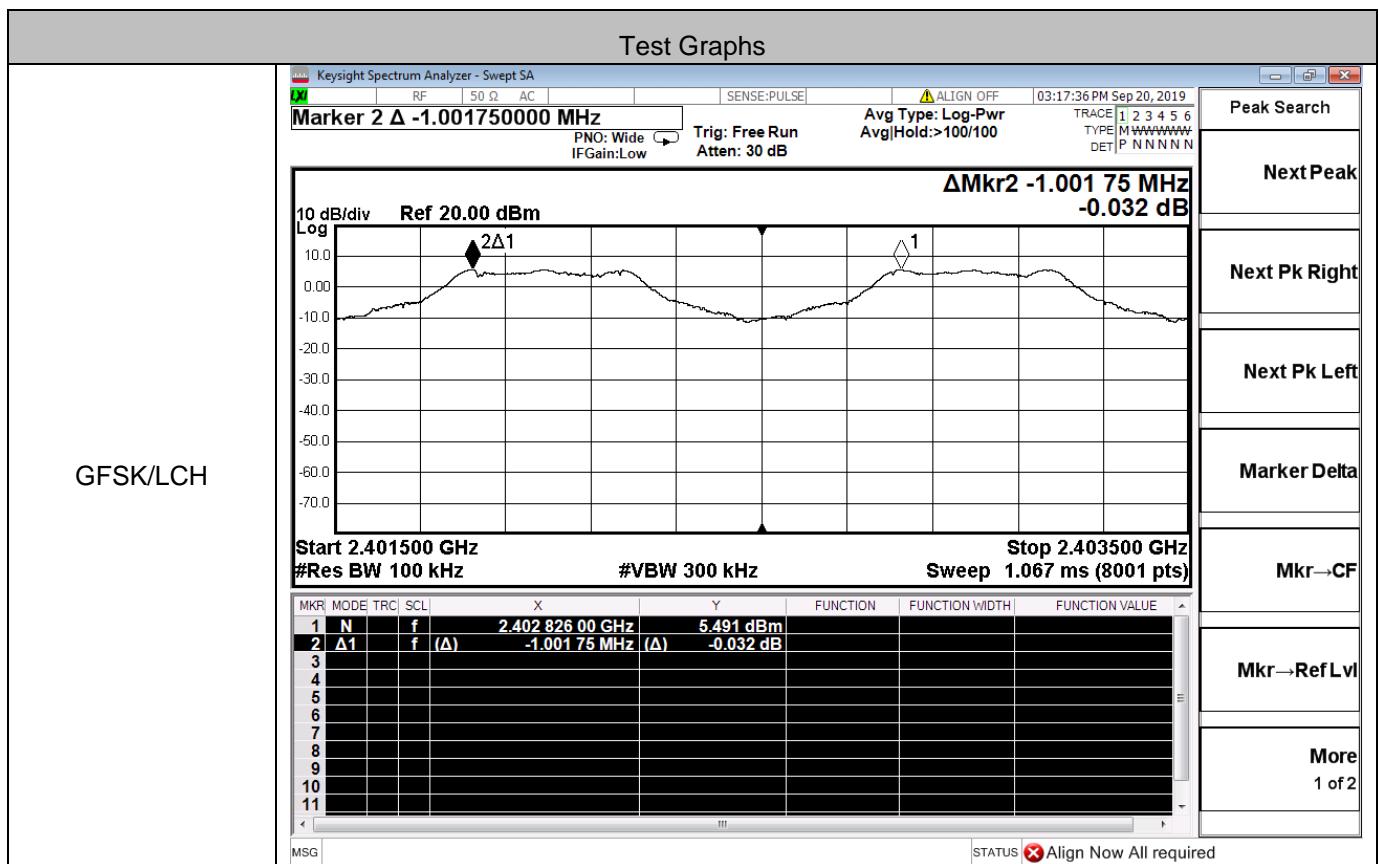


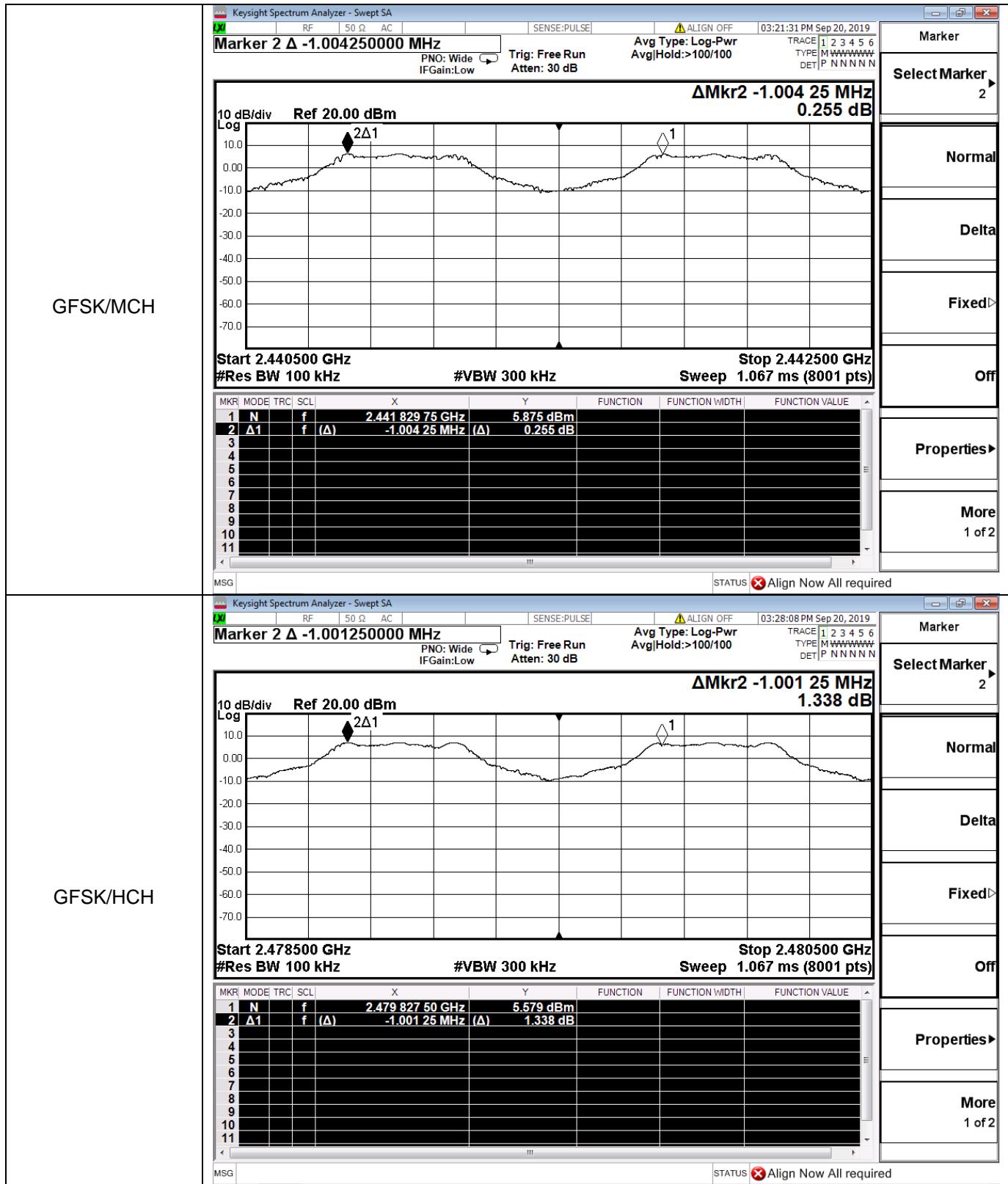


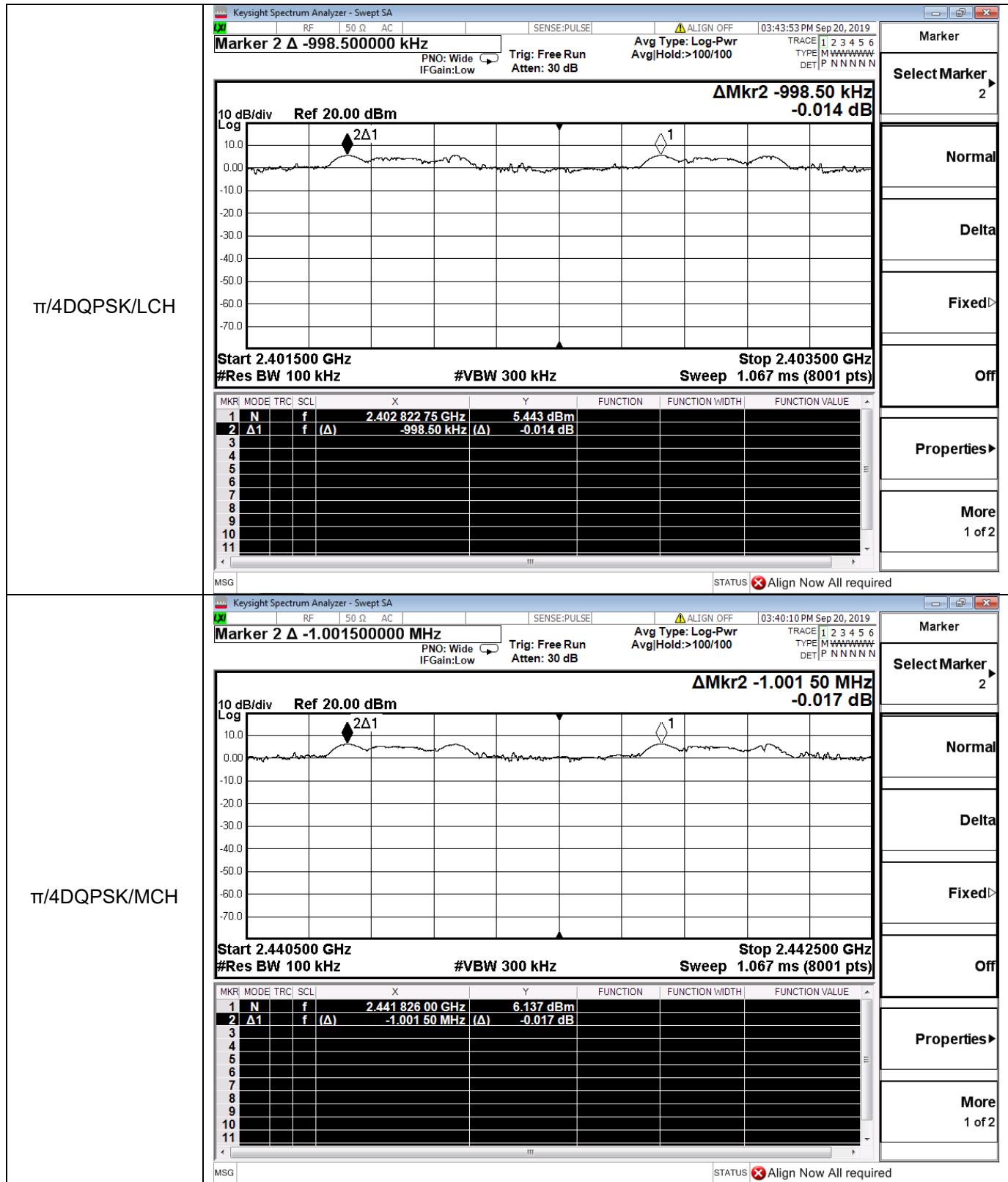


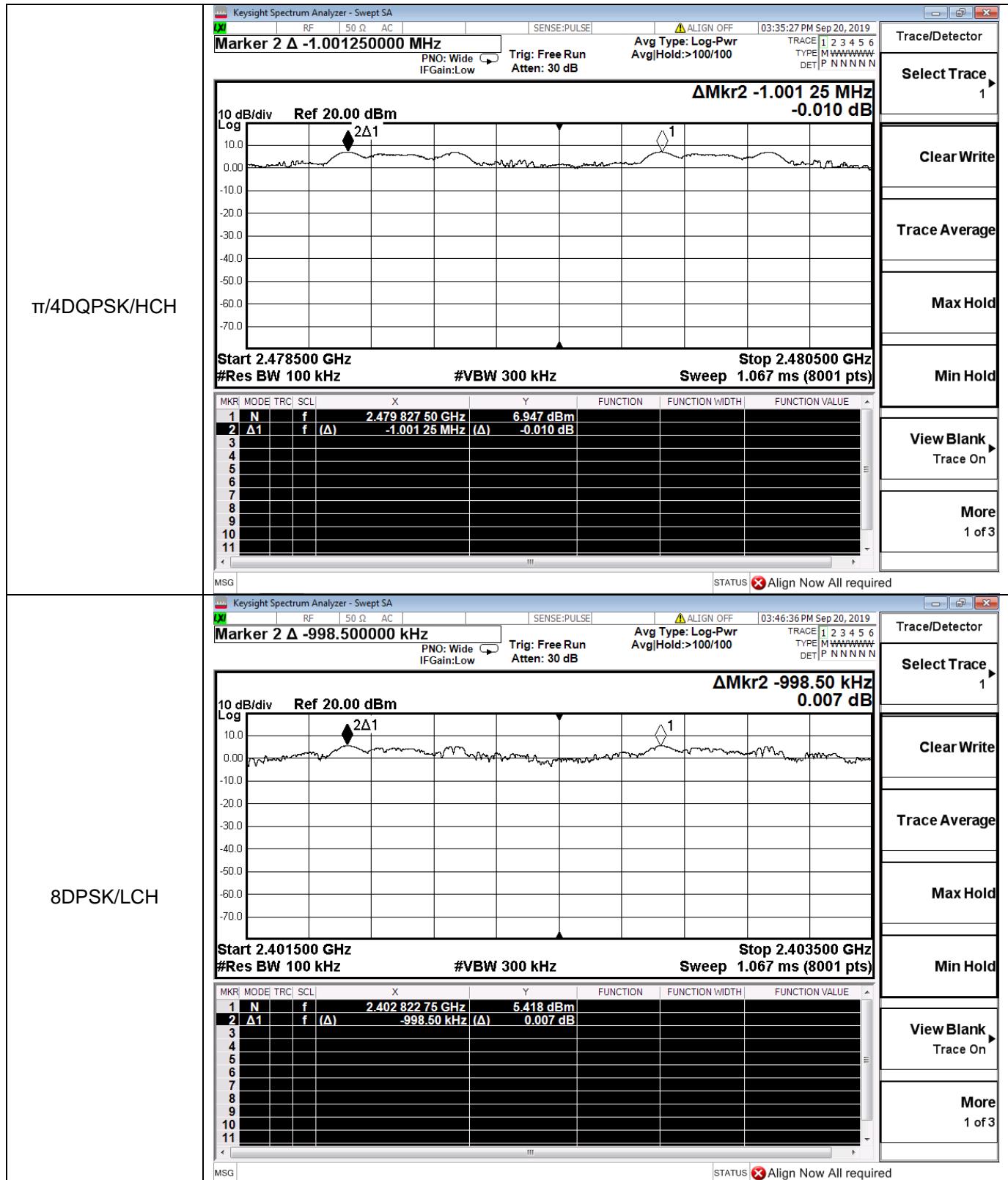
### A.3 Carrier Frequency Separation

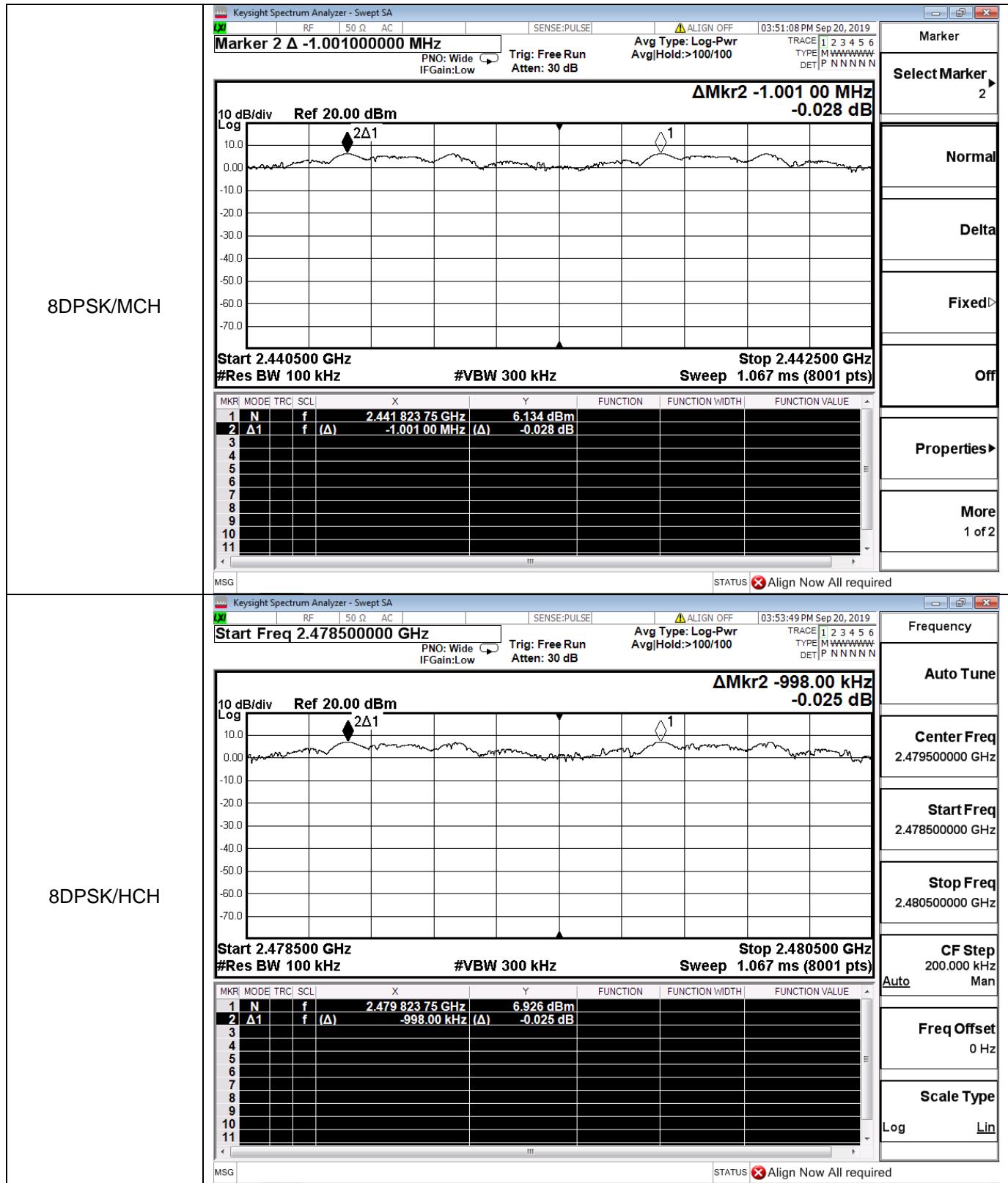
Mode	Channel.	Carrier Frequency Separation [MHz]	Limit [MHz]	Verdict
			2/3*20dB Bandwidth	
GFSK	LCH	1.002	0.693	PASS
	MCH	1.004	0.693	PASS
	HCH	1.001	0.693	PASS
$\pi/4$ DQPSK	LCH	0.999	0.897	PASS
	MCH	1.002	0.897	PASS
	HCH	1.001	0.897	PASS
8DPSK	LCH	0.999	0.910	PASS
	MCH	1.001	0.910	PASS
	HCH	0.998	0.909	PASS





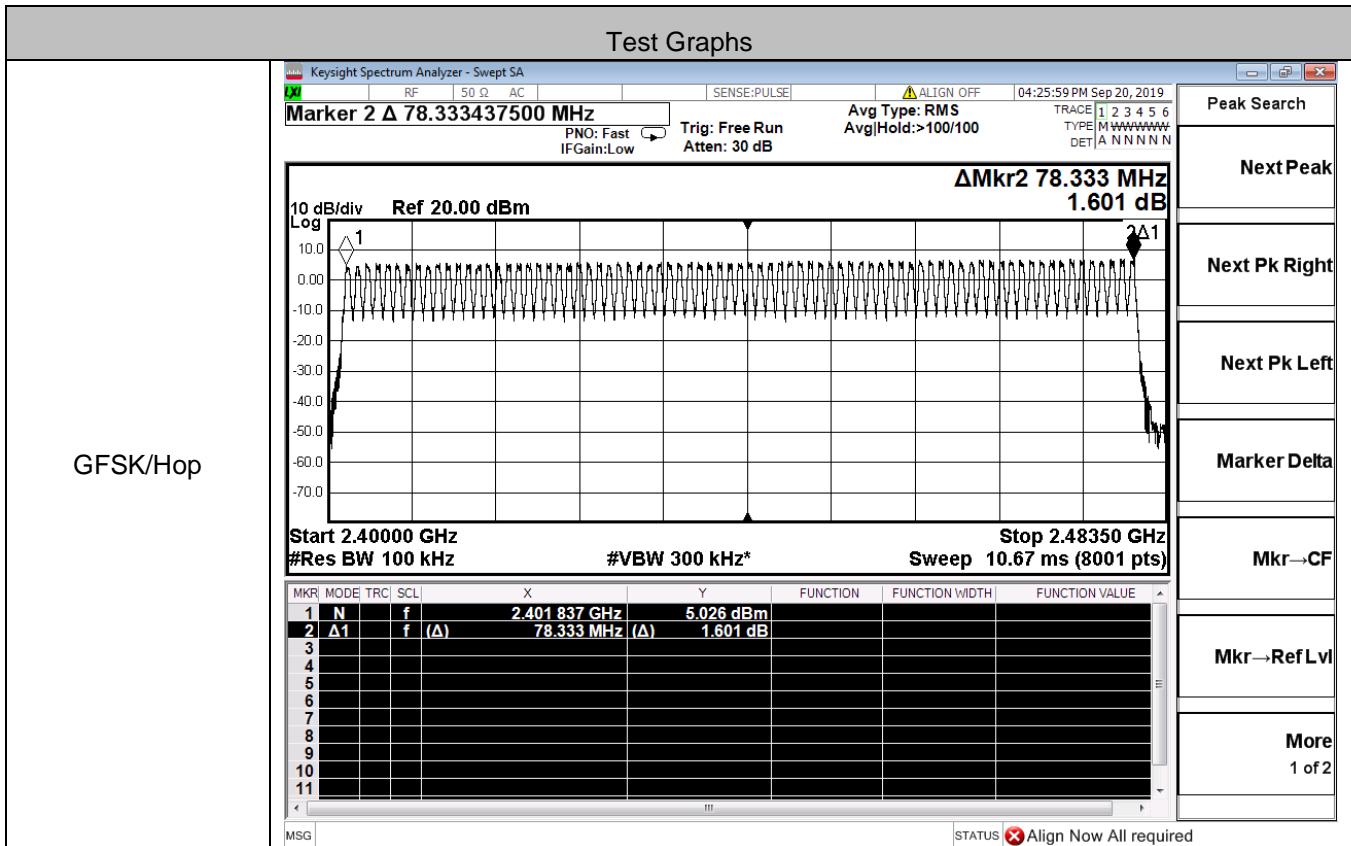


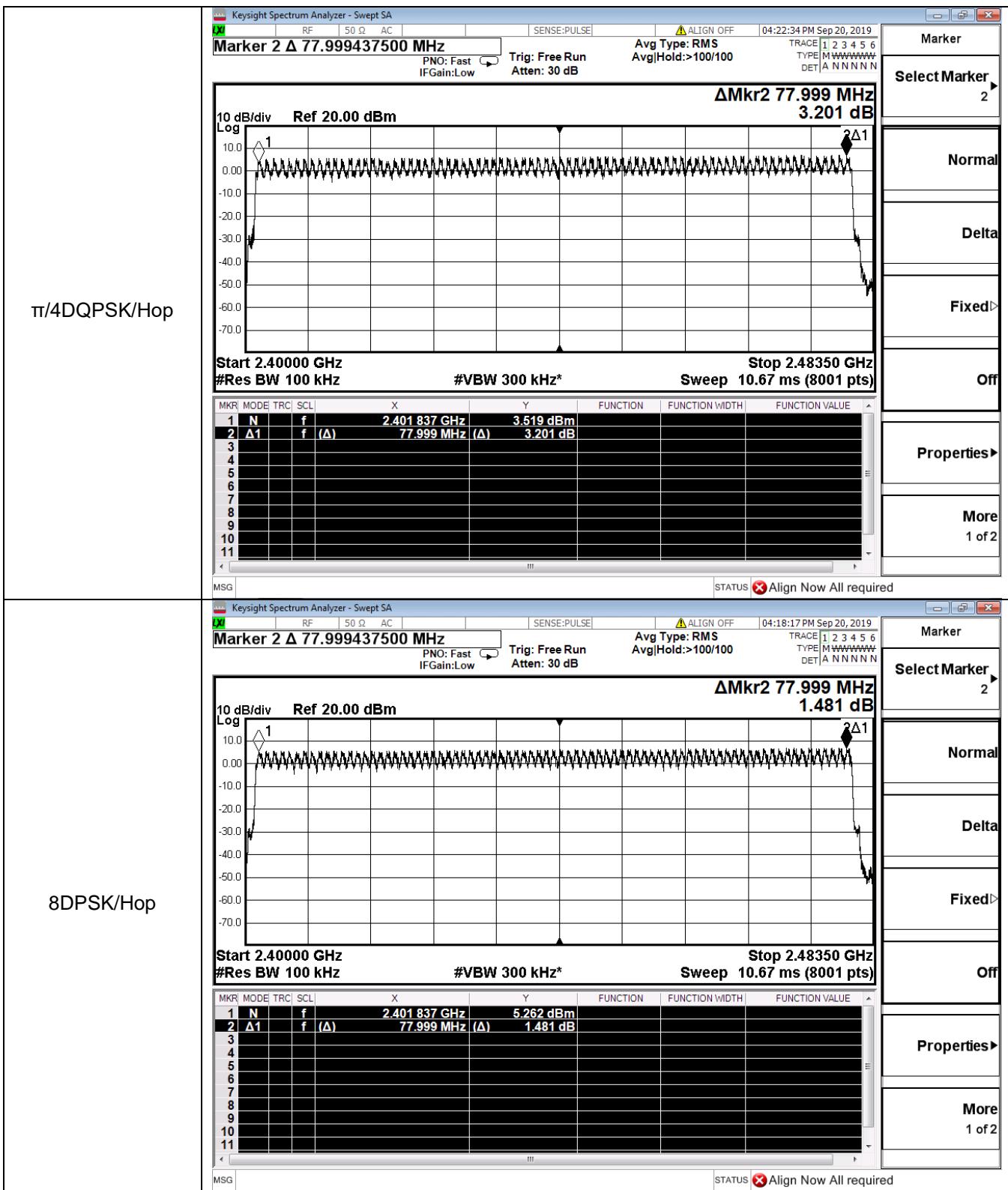




#### A.4 Hopping Channel Number

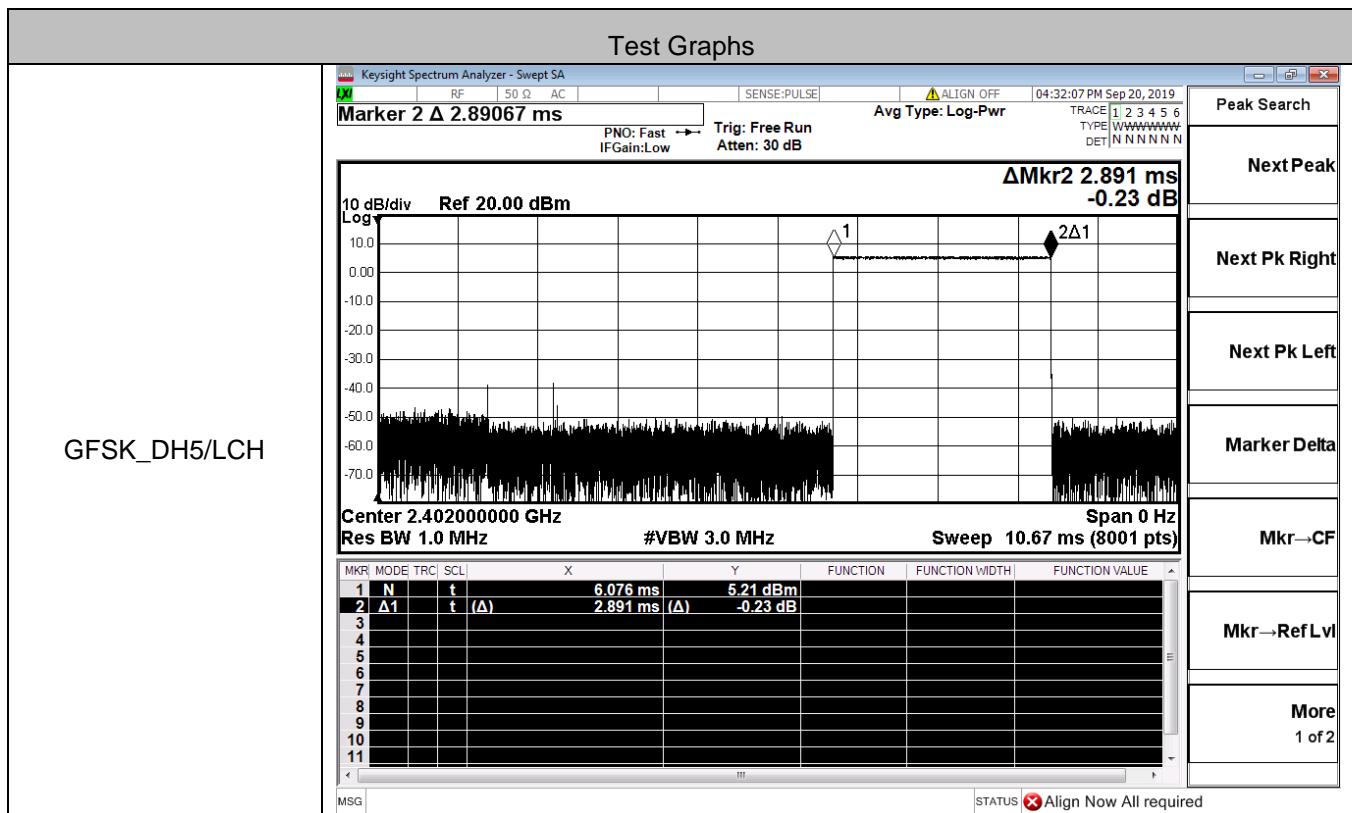
Mode	Channel.	Number of Hopping Channel [N]	Limit [N]	Verdict
GFSK	Hop	79	>=15	PASS
$\pi/4$ DQPSK	Hop	79	>=15	PASS
8DPSK	Hop	79	>=15	PASS

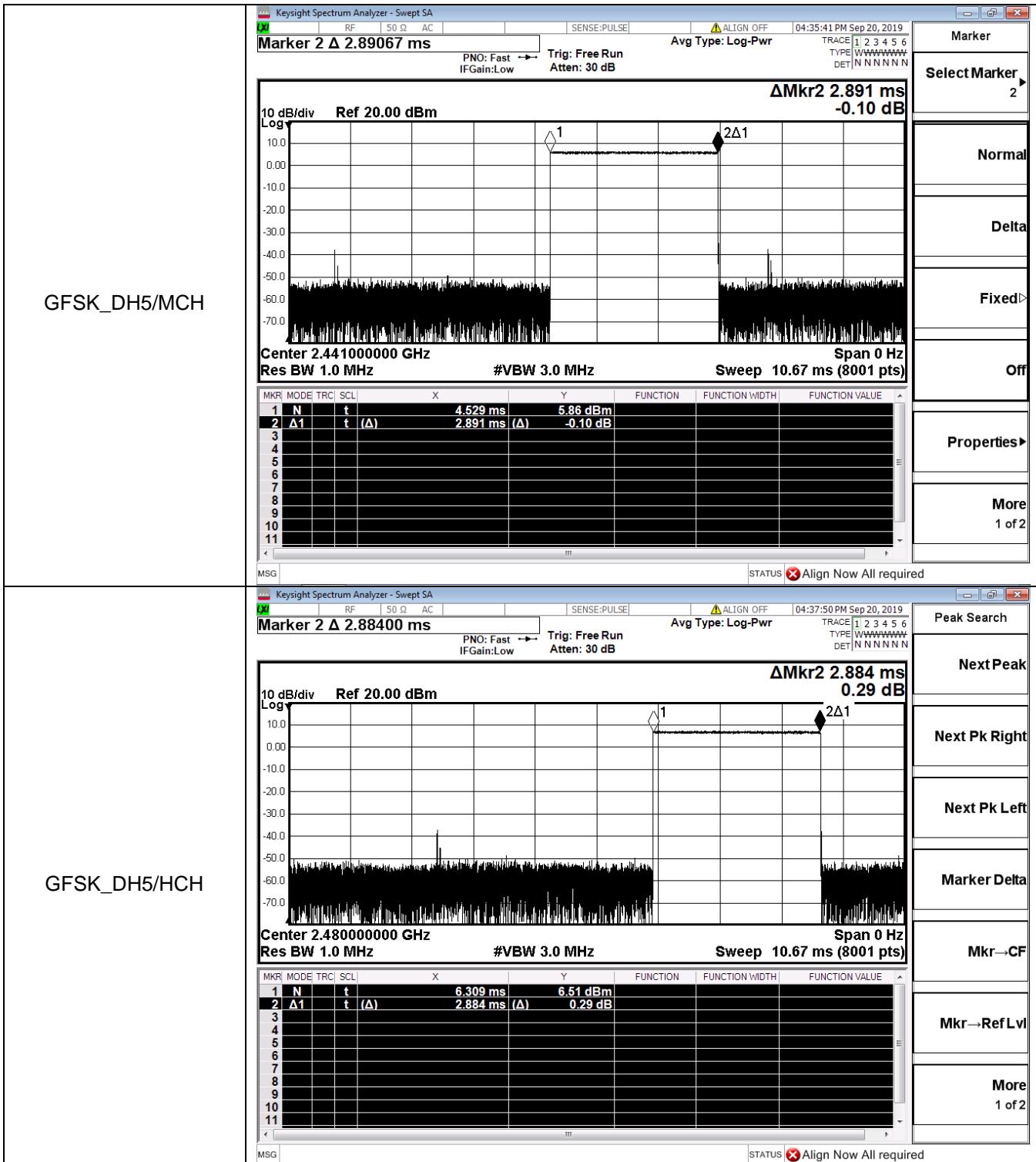


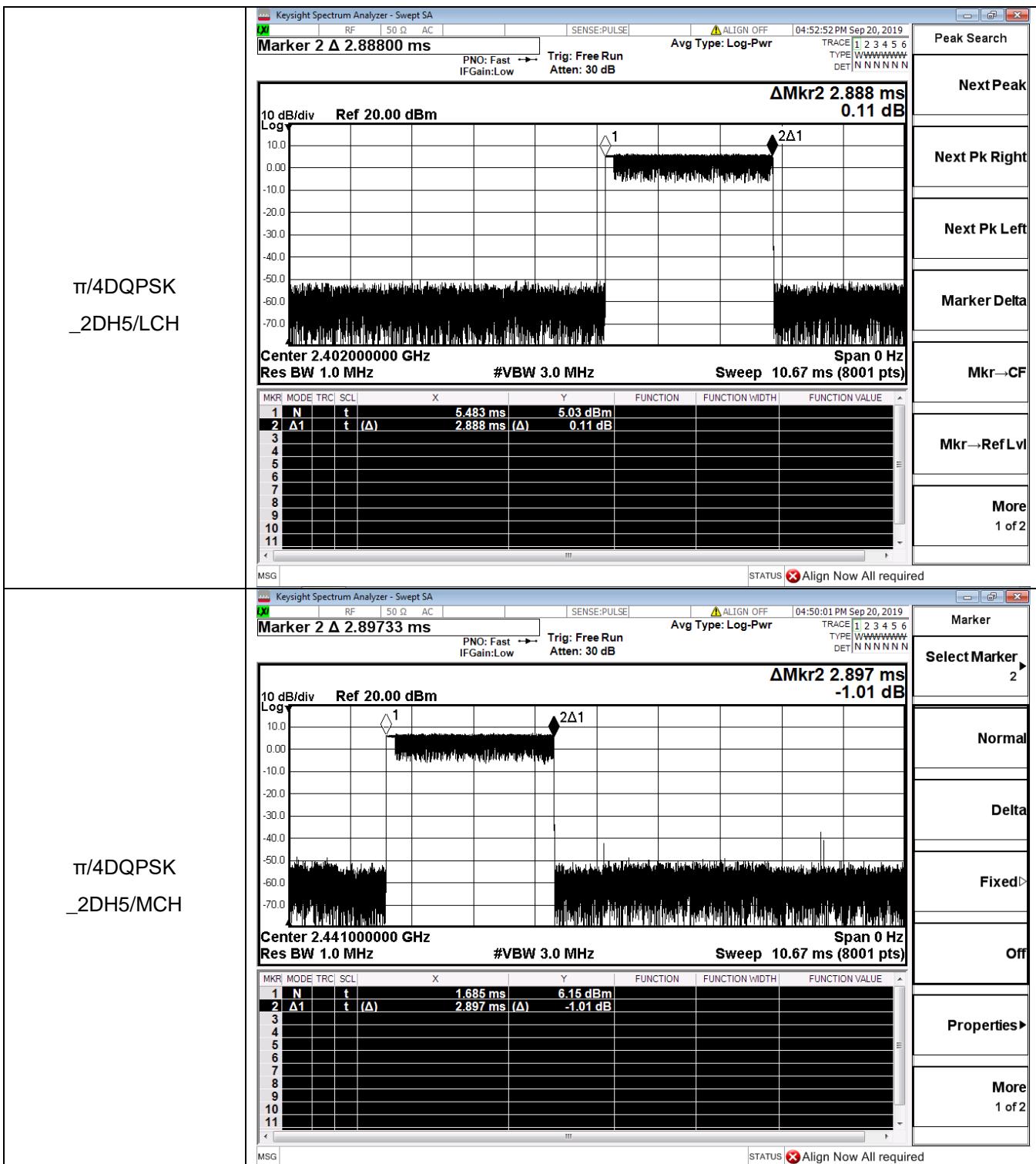


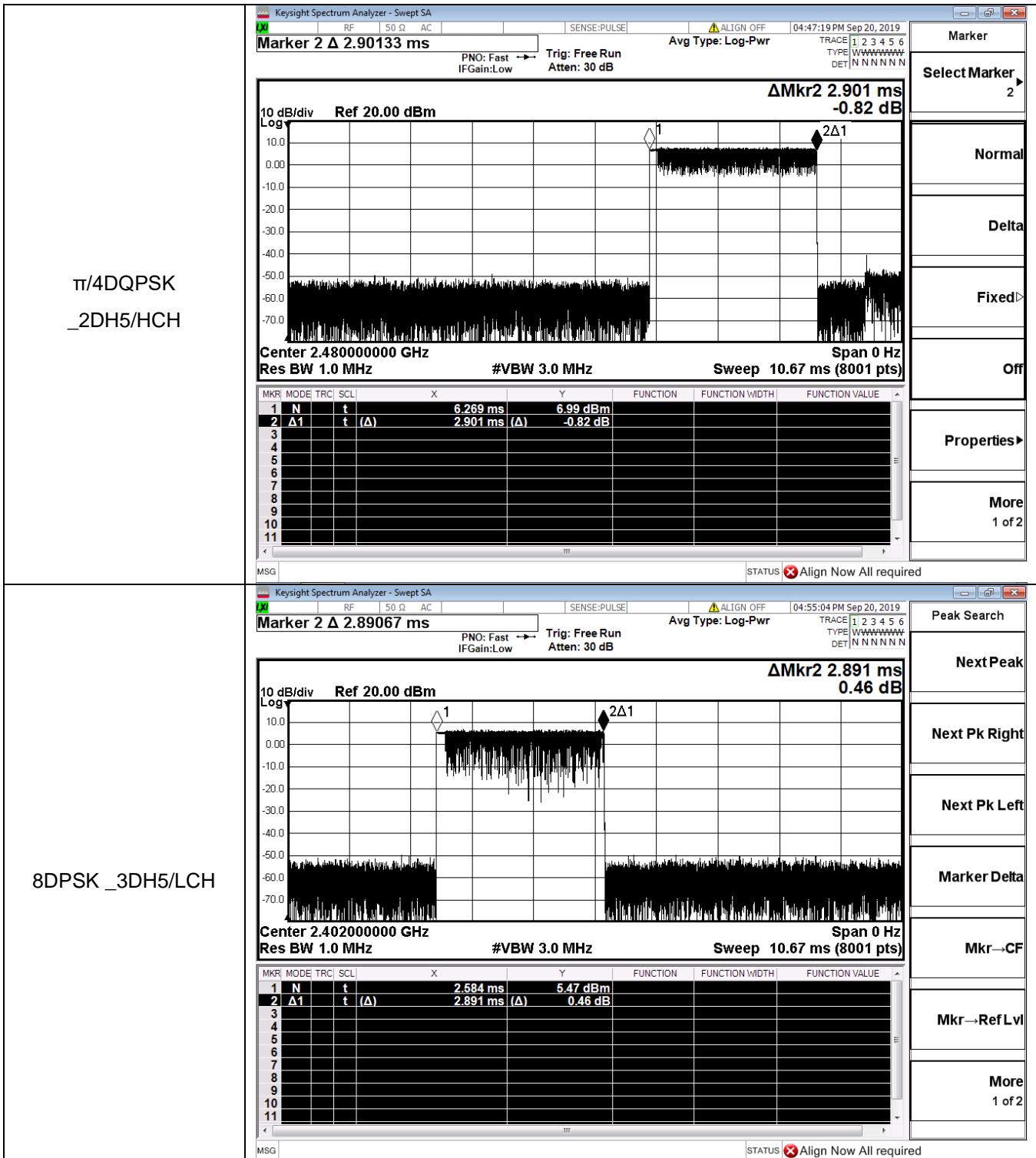
## A.5 Dwell Time

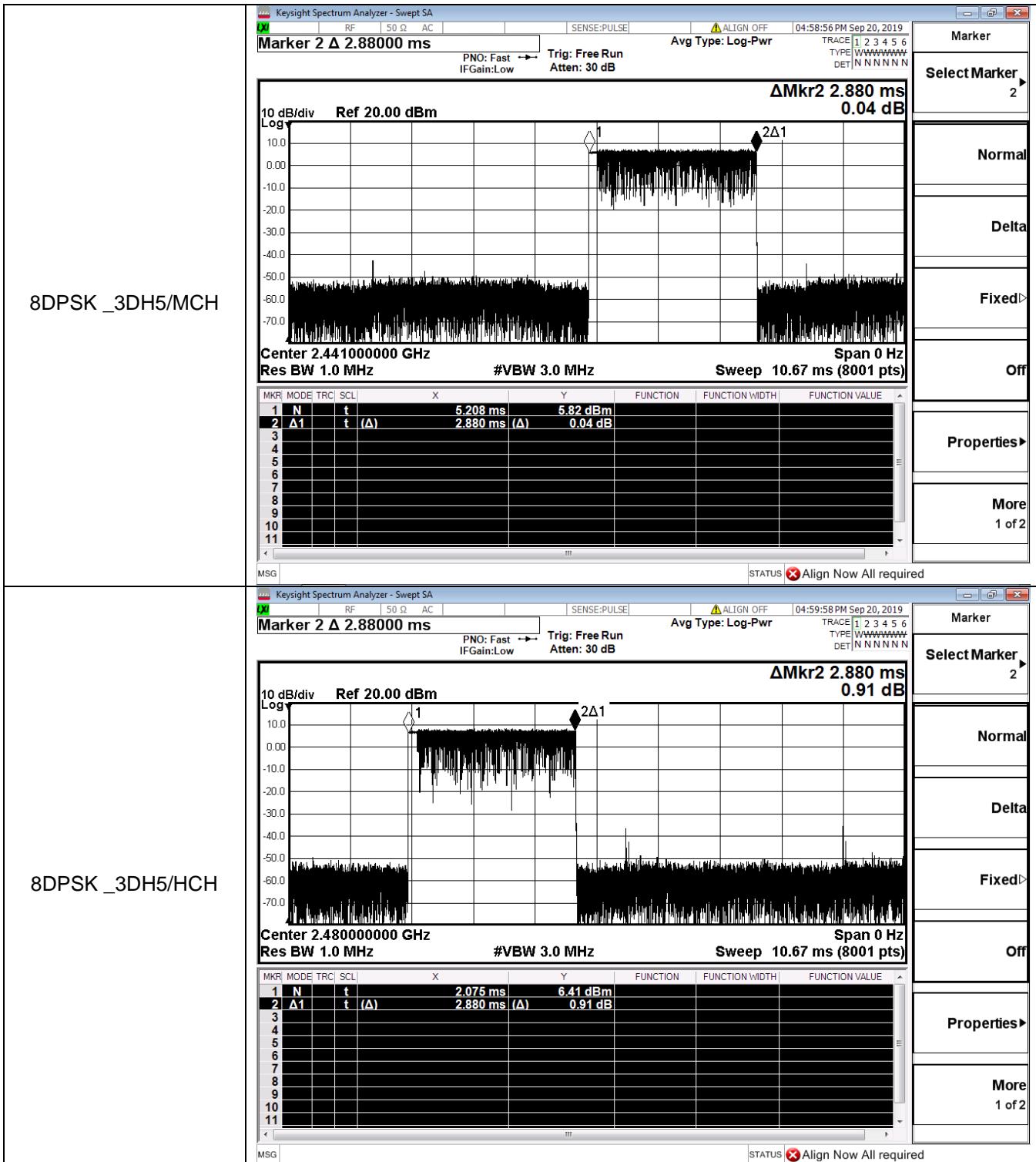
Mode	Packet	Channel	Burst Width [ms/hop/ch]	Total Hops[hop*ch]	Dwell Time[s]	Limit [s]	Verdict
GFSK	DH5	LCH	2.89	106.7	0.308	0.4	PASS
	DH5	MCH	2.89	106.7	0.308	0.4	PASS
	DH5	HCH	2.88	106.7	0.307	0.4	PASS
$\pi/4$ DQPSK	2DH5	LCH	2.89	106.7	0.308	0.4	PASS
	2DH5	MCH	2.90	106.7	0.309	0.4	PASS
	2DH5	HCH	2.90	106.7	0.309	0.4	PASS
8DPSK	3DH5	LCH	2.89	106.7	0.308	0.4	PASS
	3DH5	MCH	2.88	106.7	0.307	0.4	PASS
	3DH5	HCH	2.88	106.7	0.307	0.4	PASS





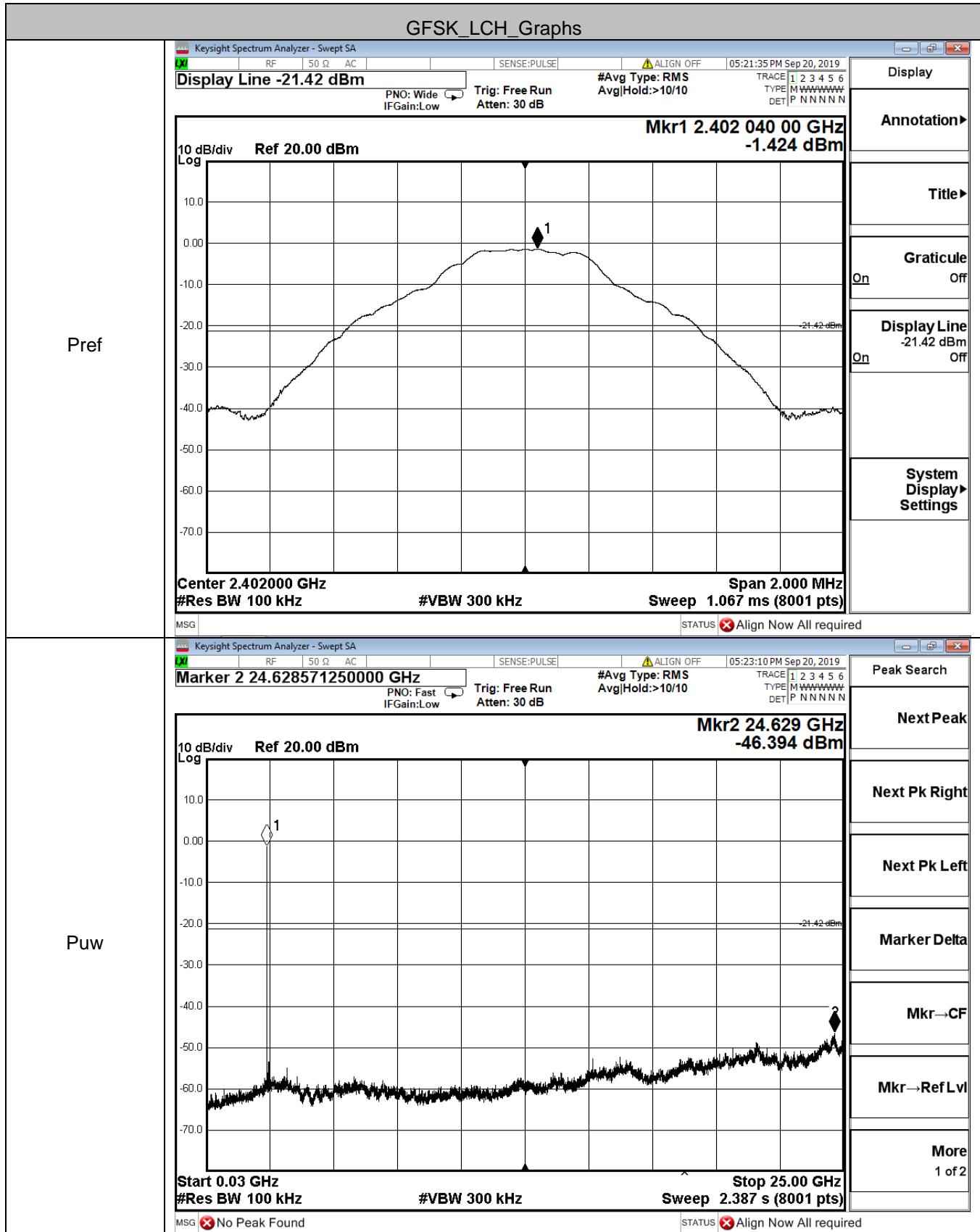


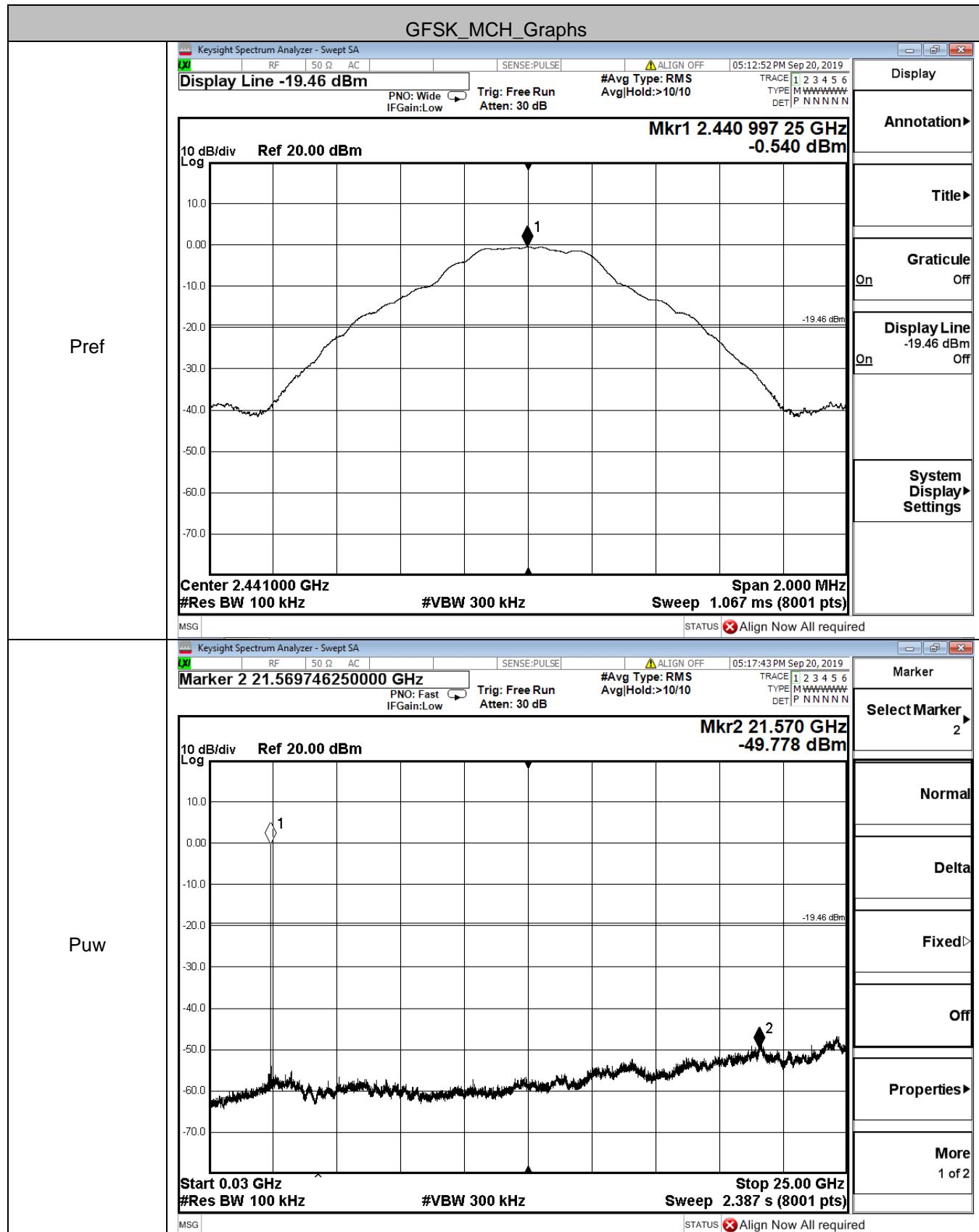


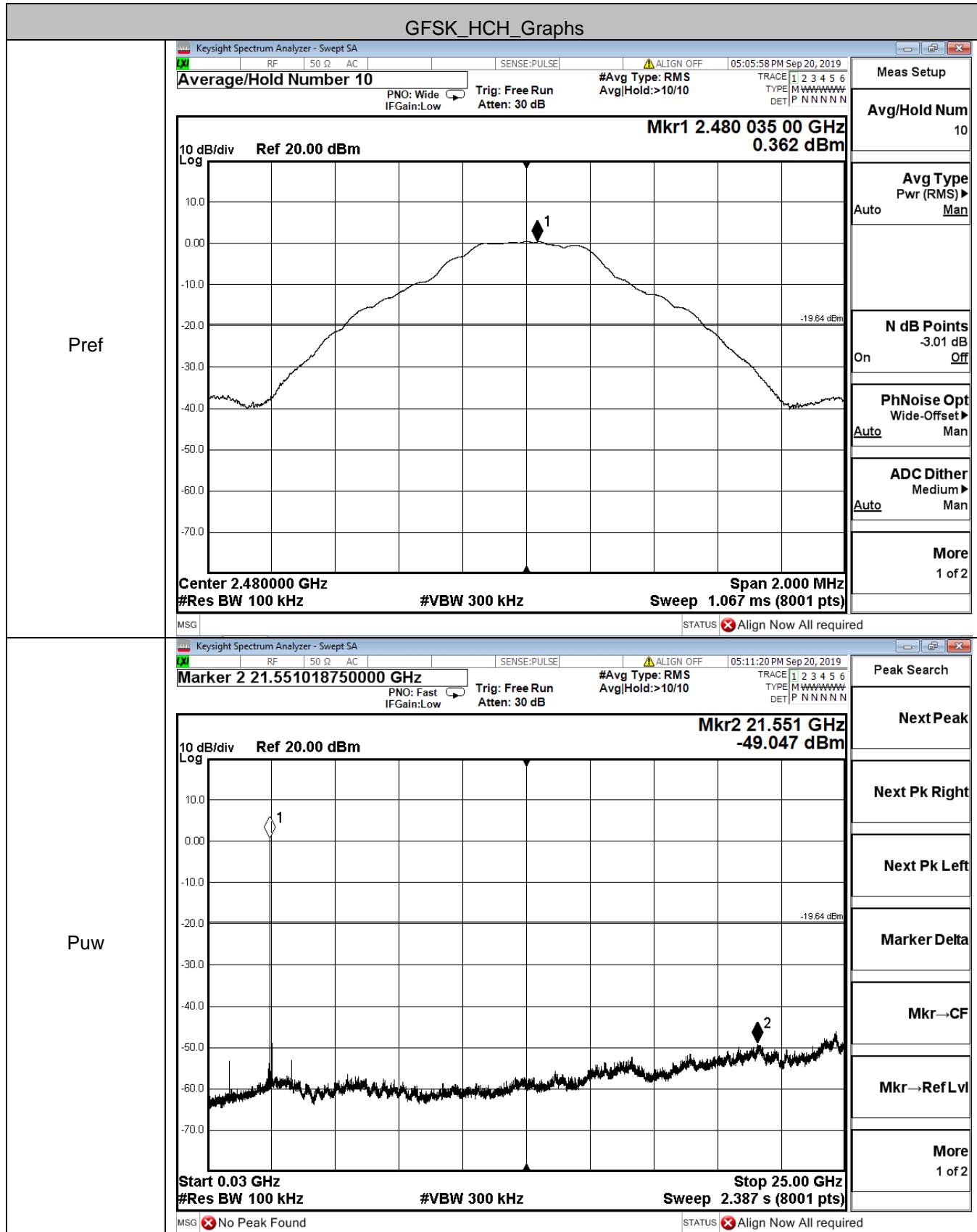


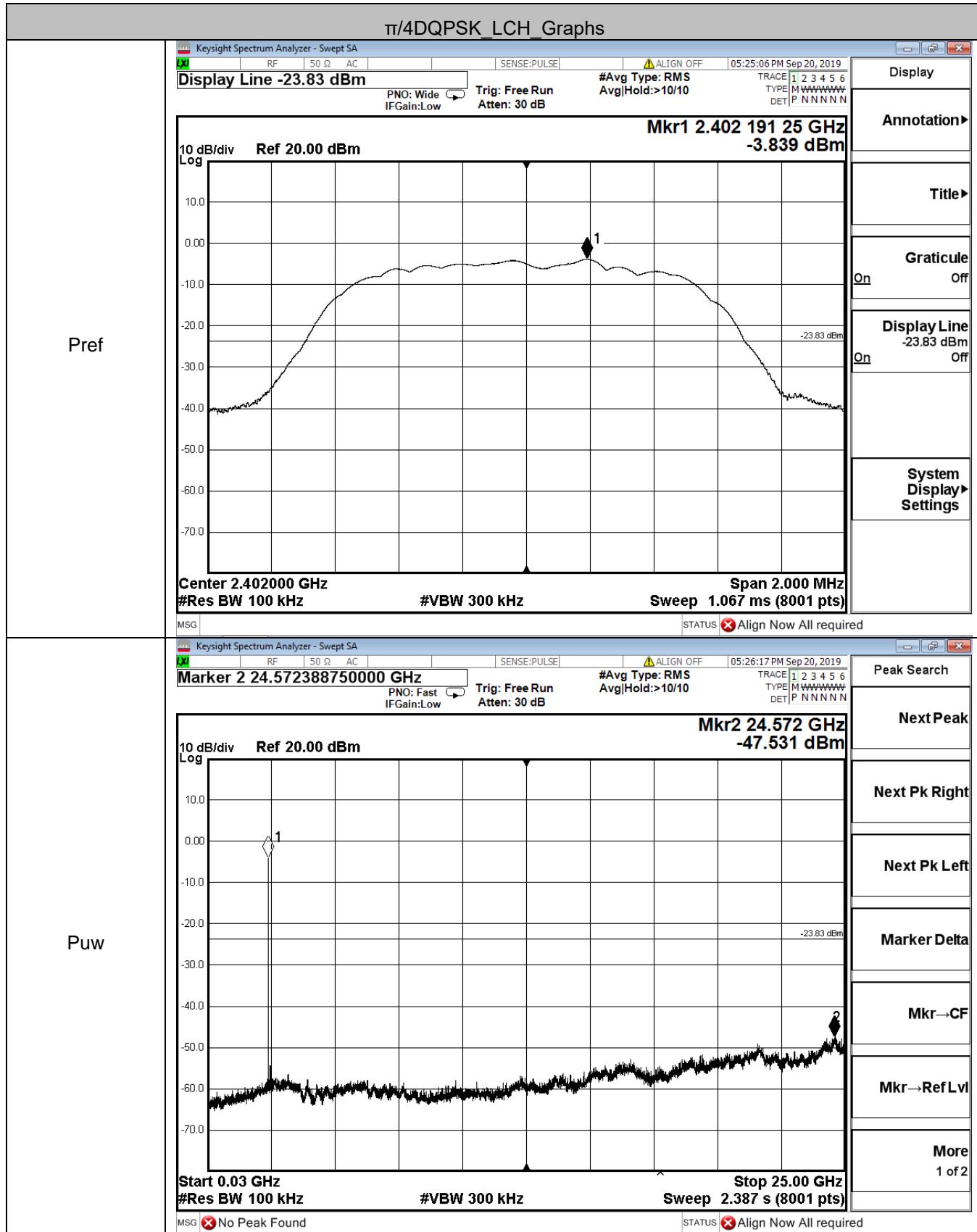
## A.6 RF Conducted Spurious Emissions

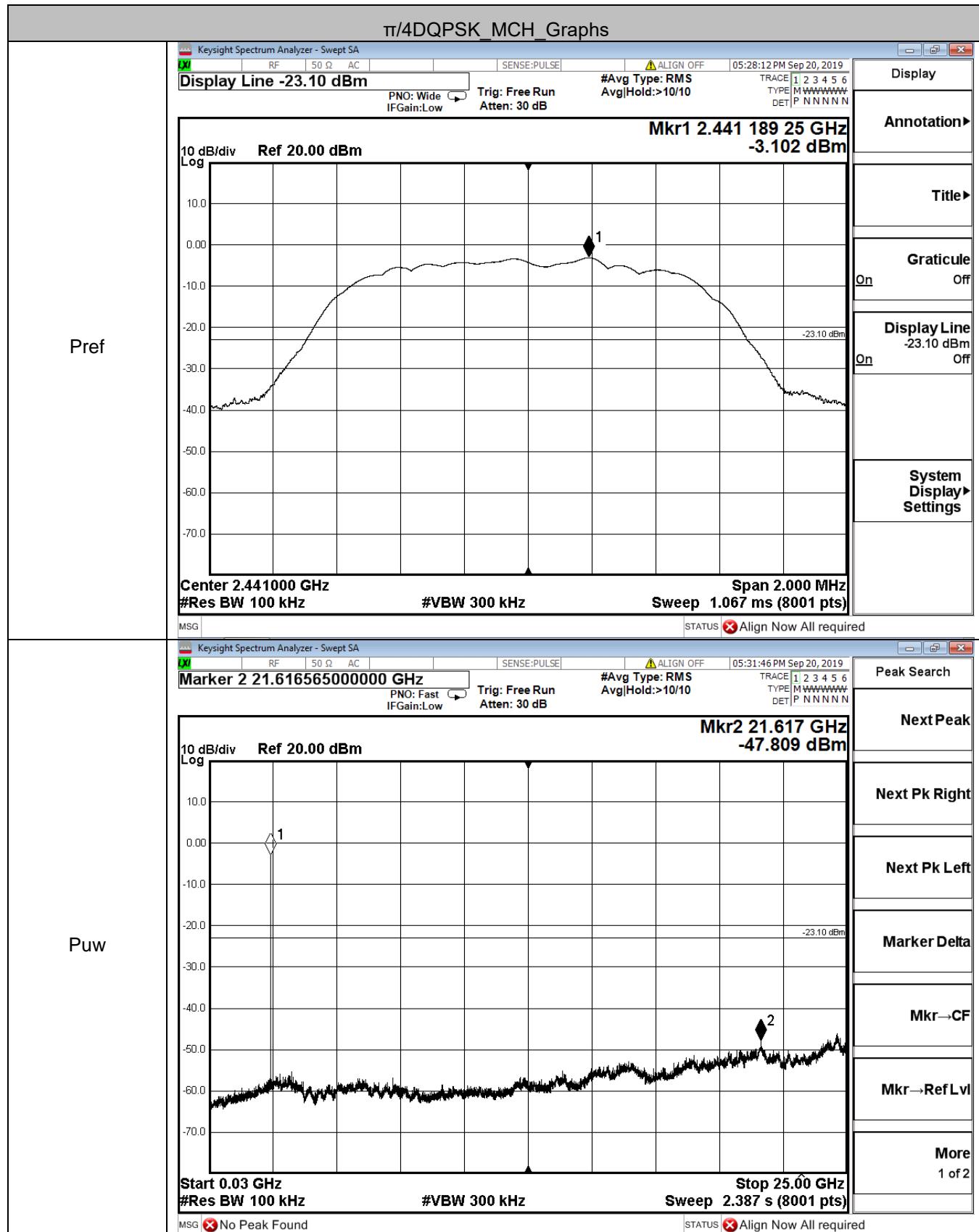
Mode	Channel	Pref [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
GFSK	LCH	-1.424	-46.394	-21.42	PASS
	MCH	-0.540	-49.778	-20.54	PASS
	HCH	0.362	-49.047	-19.64	PASS
$\pi/4$ DQPSK	LCH	-3.839	-47.531	-23.84	PASS
	MCH	-3.102	-47.809	-23.10	PASS
	HCH	-2.246	-48.879	-22.25	PASS
8DPSK	LCH	-3.346	-49.696	-23.35	PASS
	MCH	-2.495	-49.196	-22.50	PASS
	HCH	-1.636	-45.682	-21.64	PASS

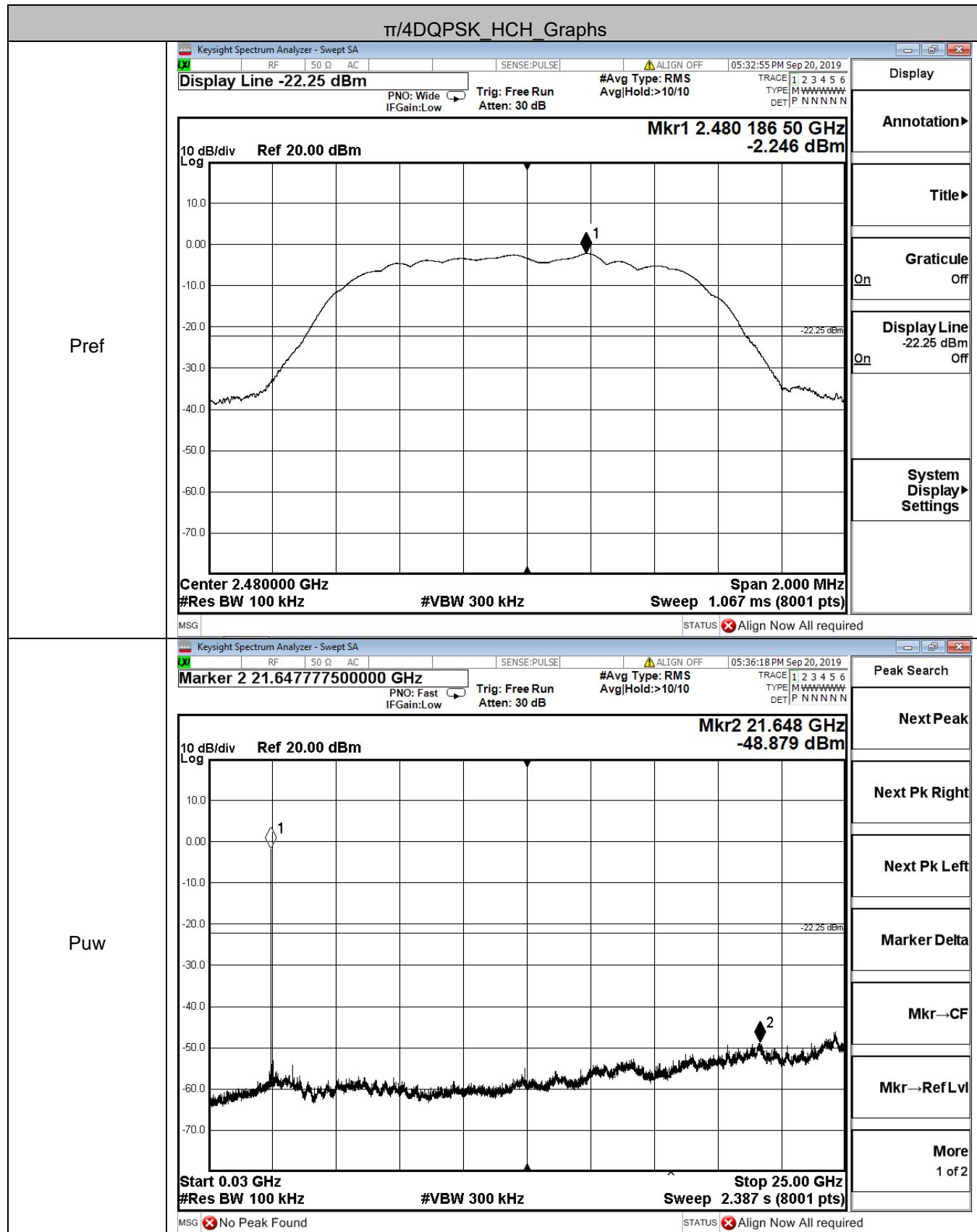


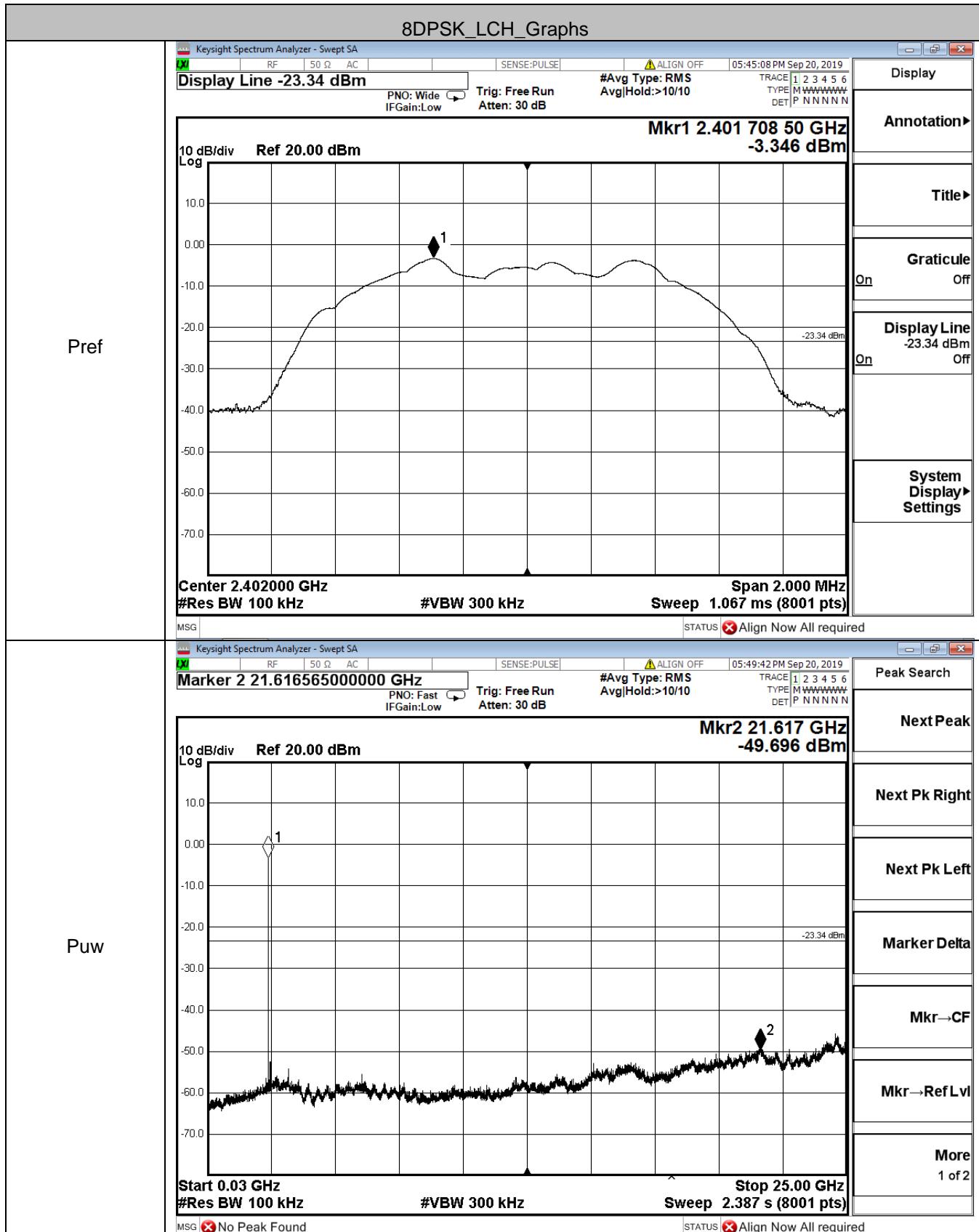


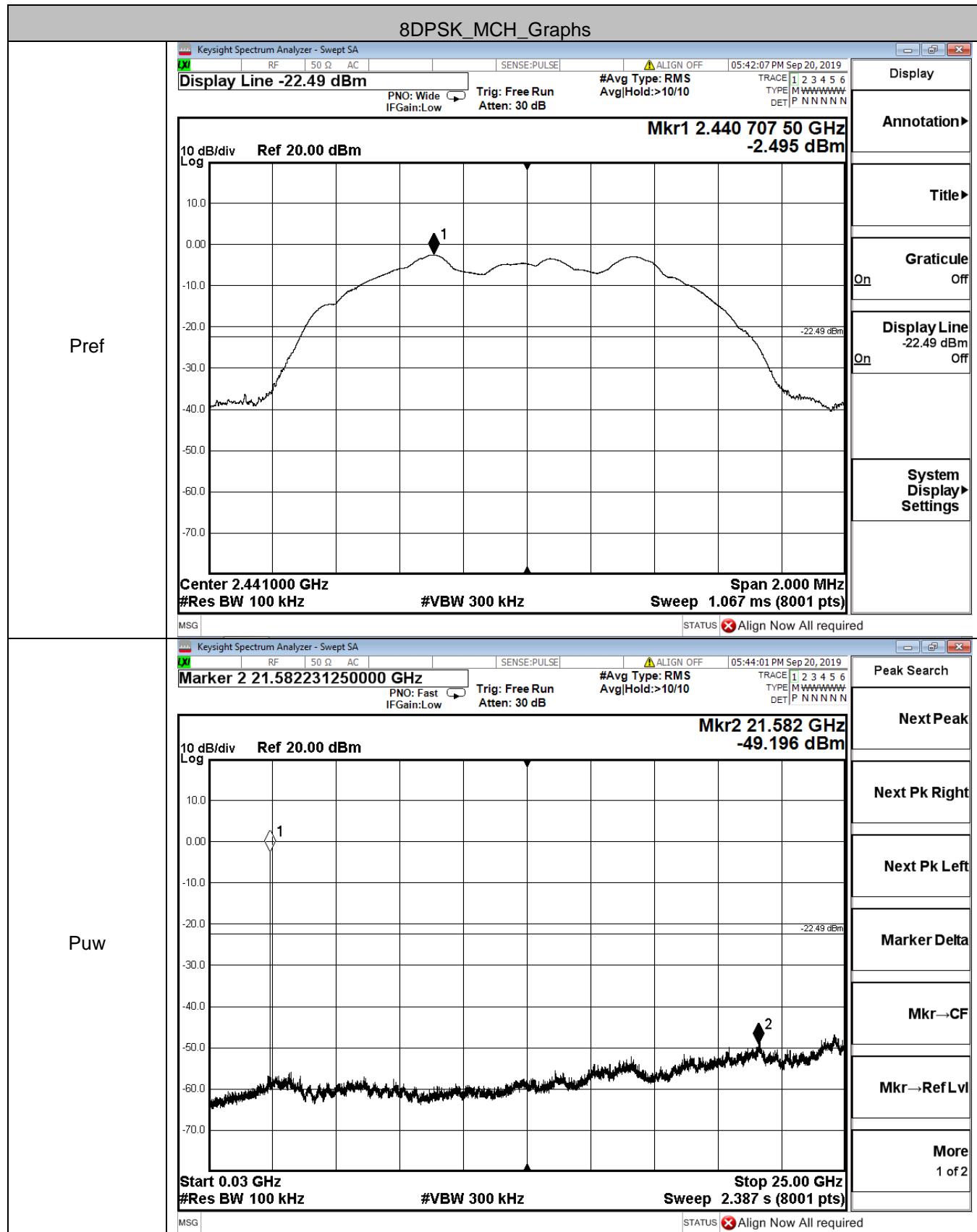


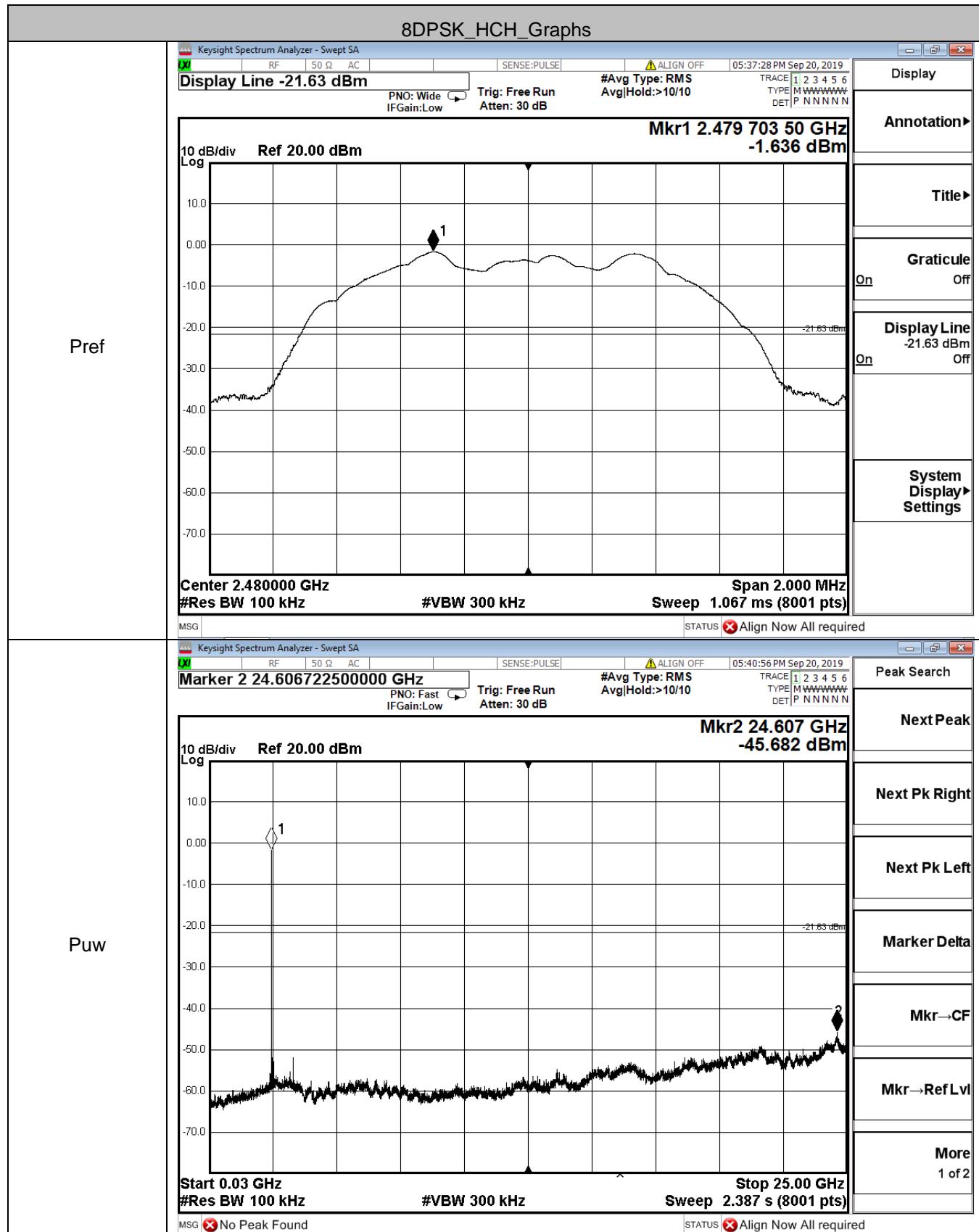






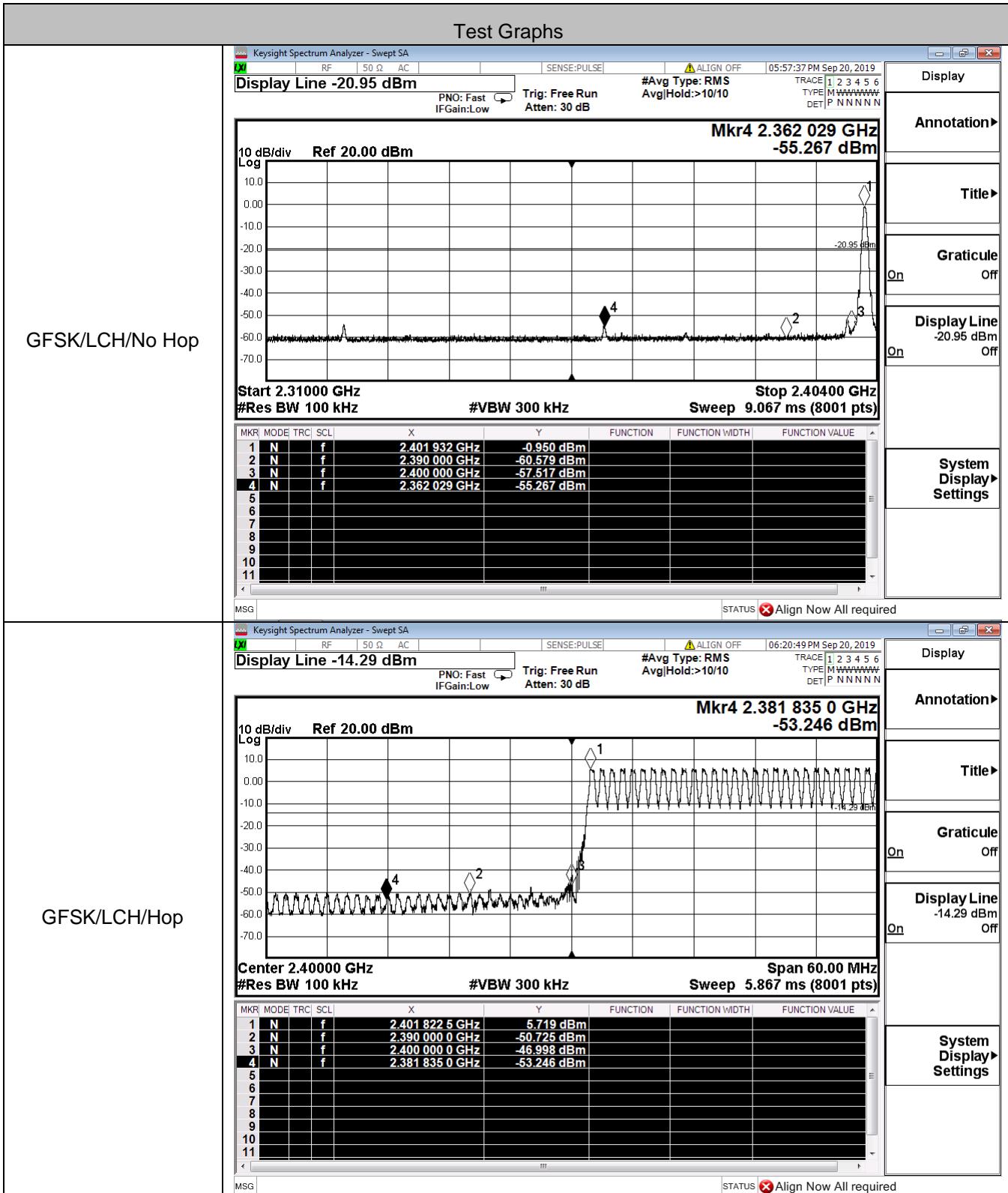


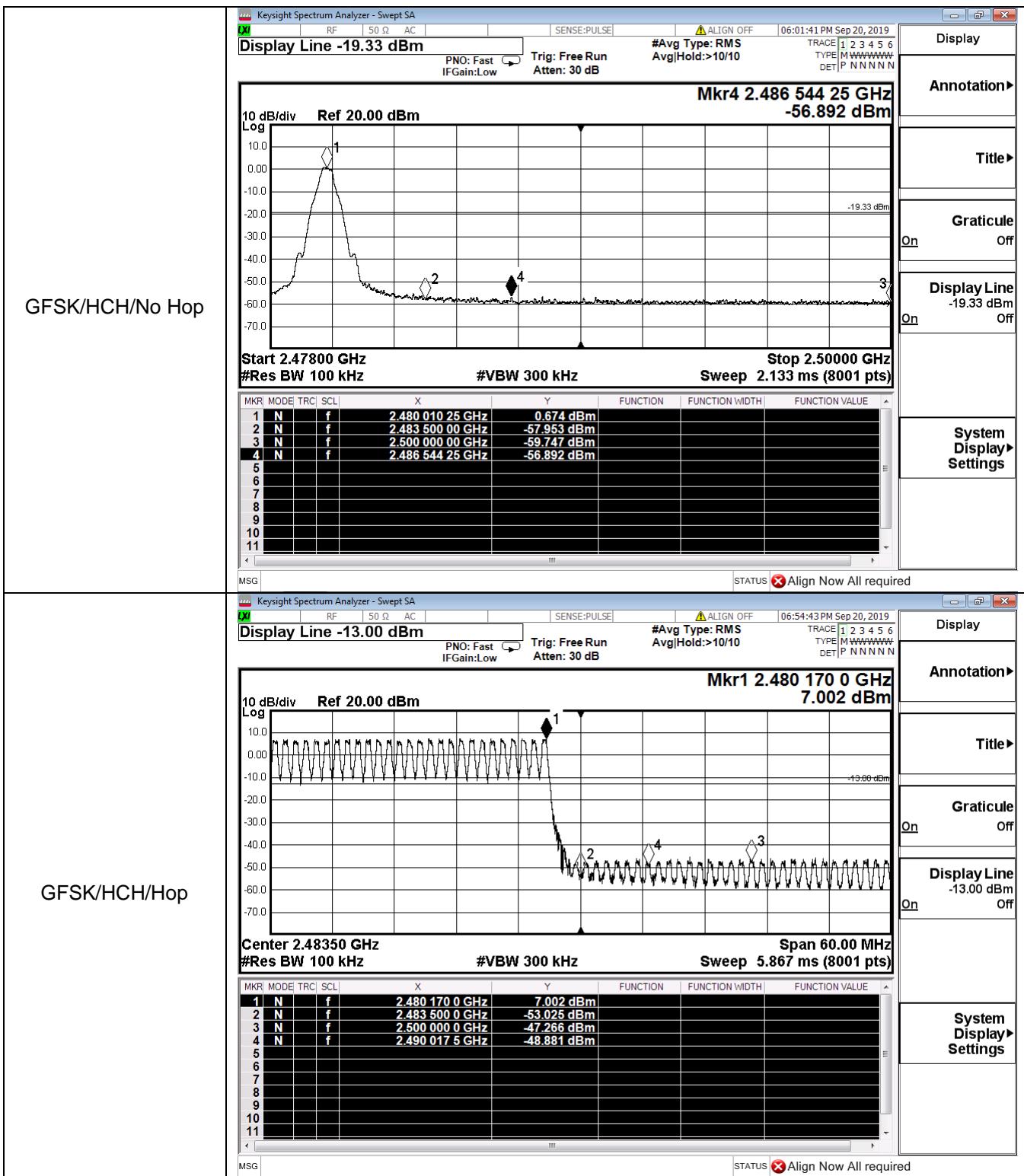


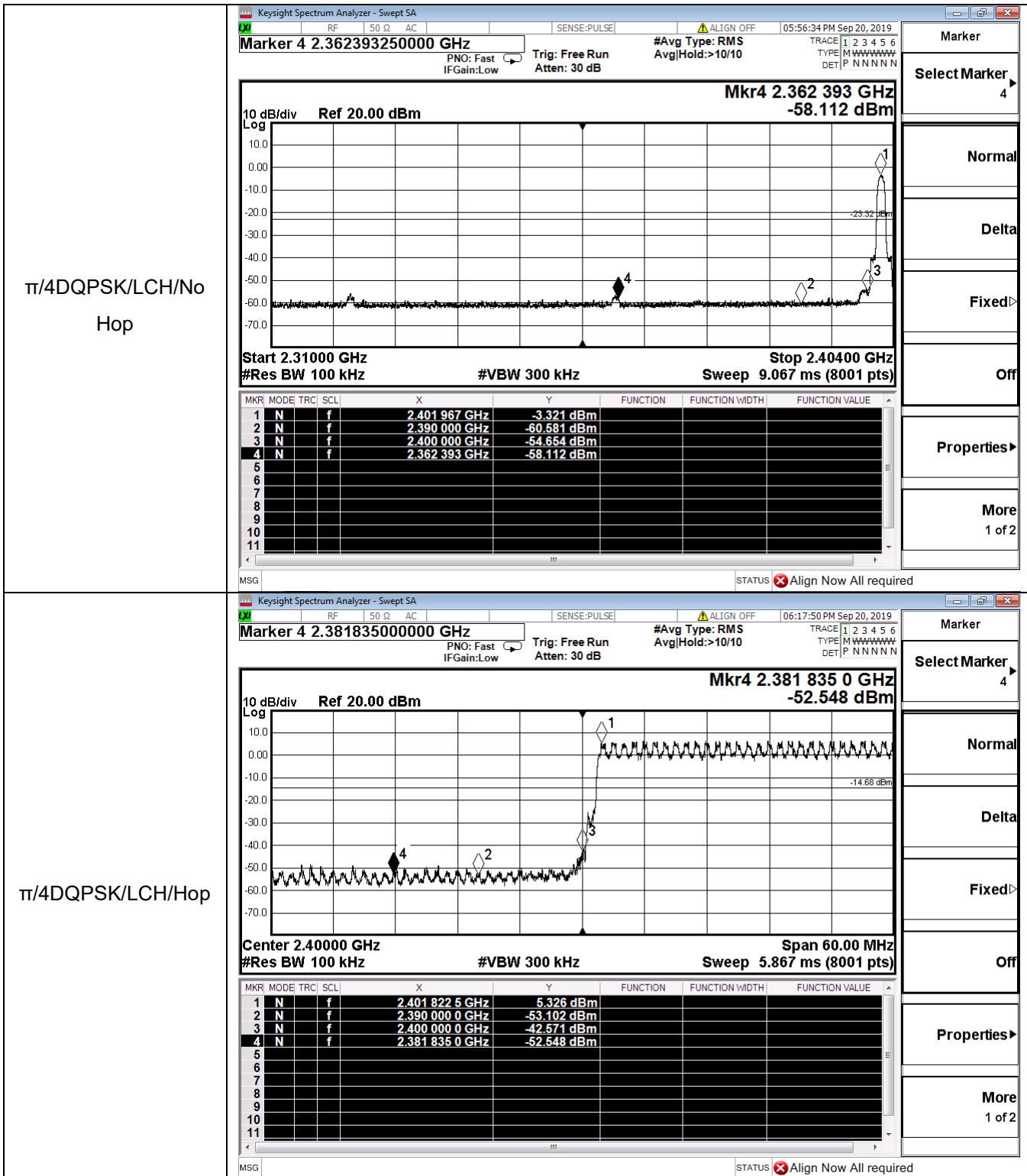


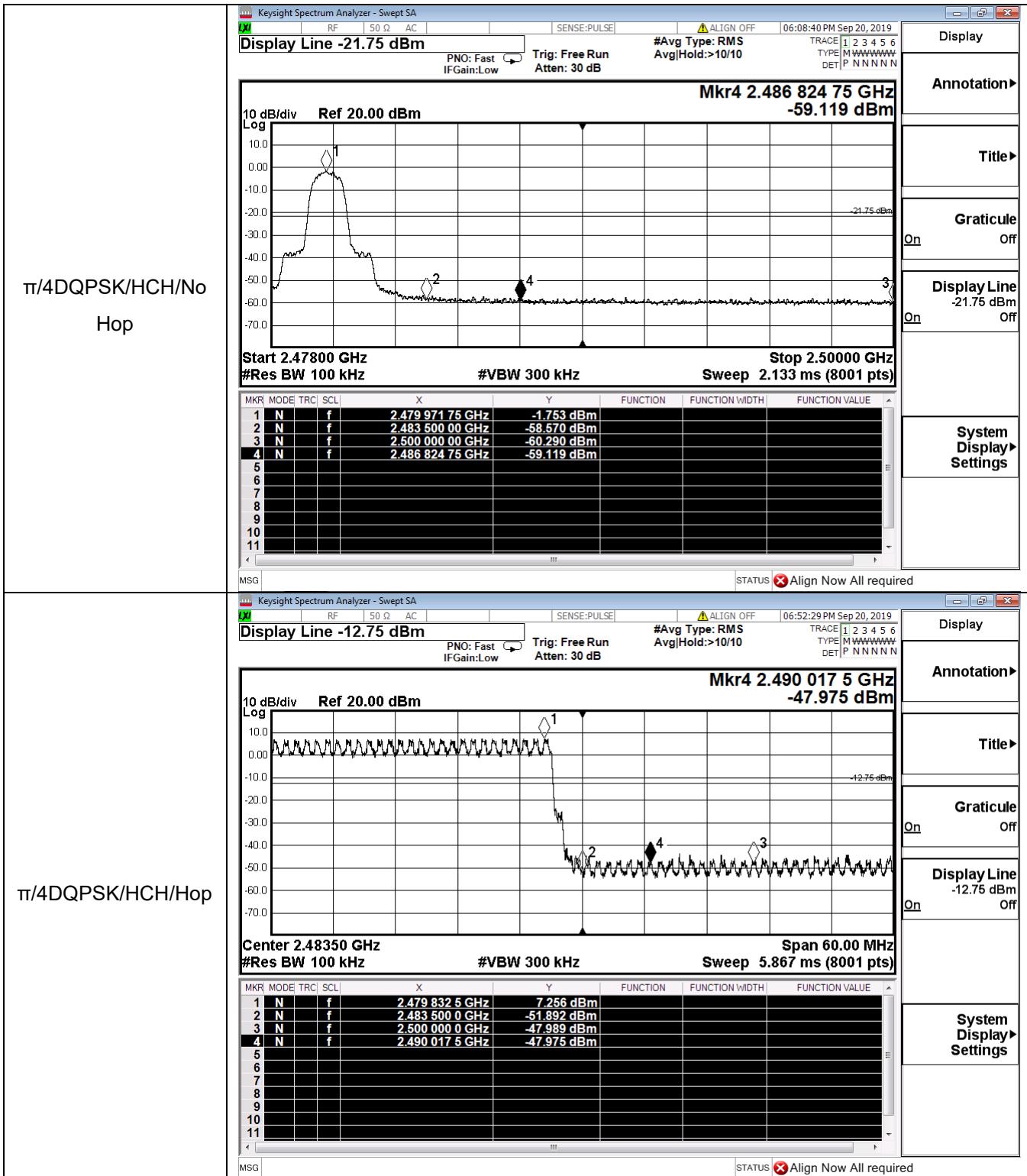
**A.7 Band-edge for RF Conducted Emissions**

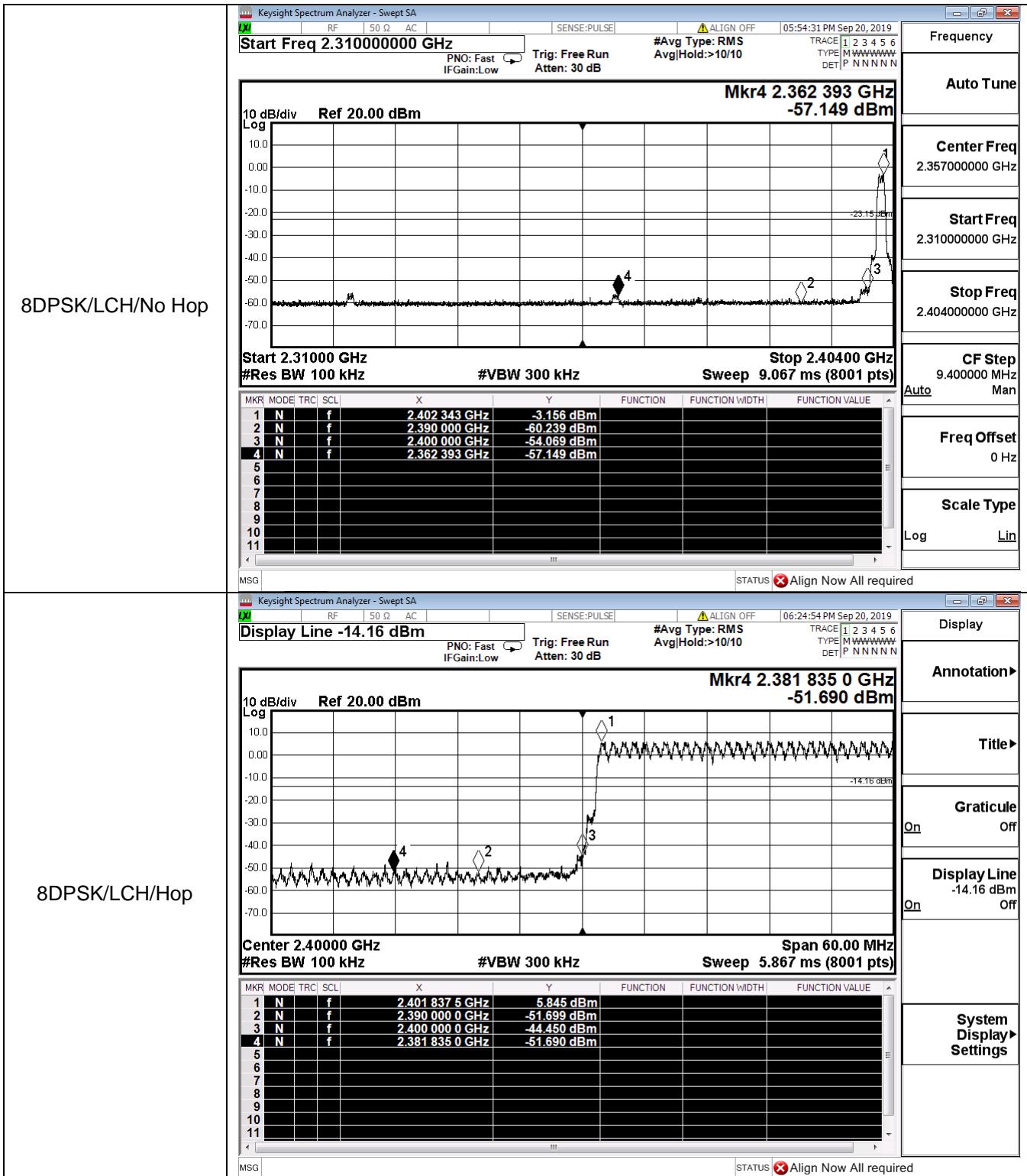
Mode	Channel	Carrier Frequency [MHz]	Carrier Power [dBm]	Frequency Hopping	Max Spurious Level [dBm]	Limit [dBm]	Verdict
GFSK	LCH	2402	-0.950	Off	-55.267	-20.95	PASS
			5.719	On	-46.998	-14.28	PASS
	HCH	2480	0.674	Off	-56.892	-19.33	PASS
			7.002	On	-47.266	-13.00	PASS
$\pi/4$ DQPSK	LCH	2402	-3.321	Off	-54.654	-23.32	PASS
			5.326	On	-42.571	-14.67	PASS
	HCH	2480	-1.753	Off	-58.570	-21.75	PASS
			7.256	On	-47.975	-12.74	PASS
8DPSK	LCH	2402	-3.156	Off	-54.069	-23.16	PASS
			5.845	On	-44.450	-14.16	PASS
	HCH	2480	-1.736	Off	-58.580	-21.74	PASS
			7.251	On	-45.203	-12.75	PASS

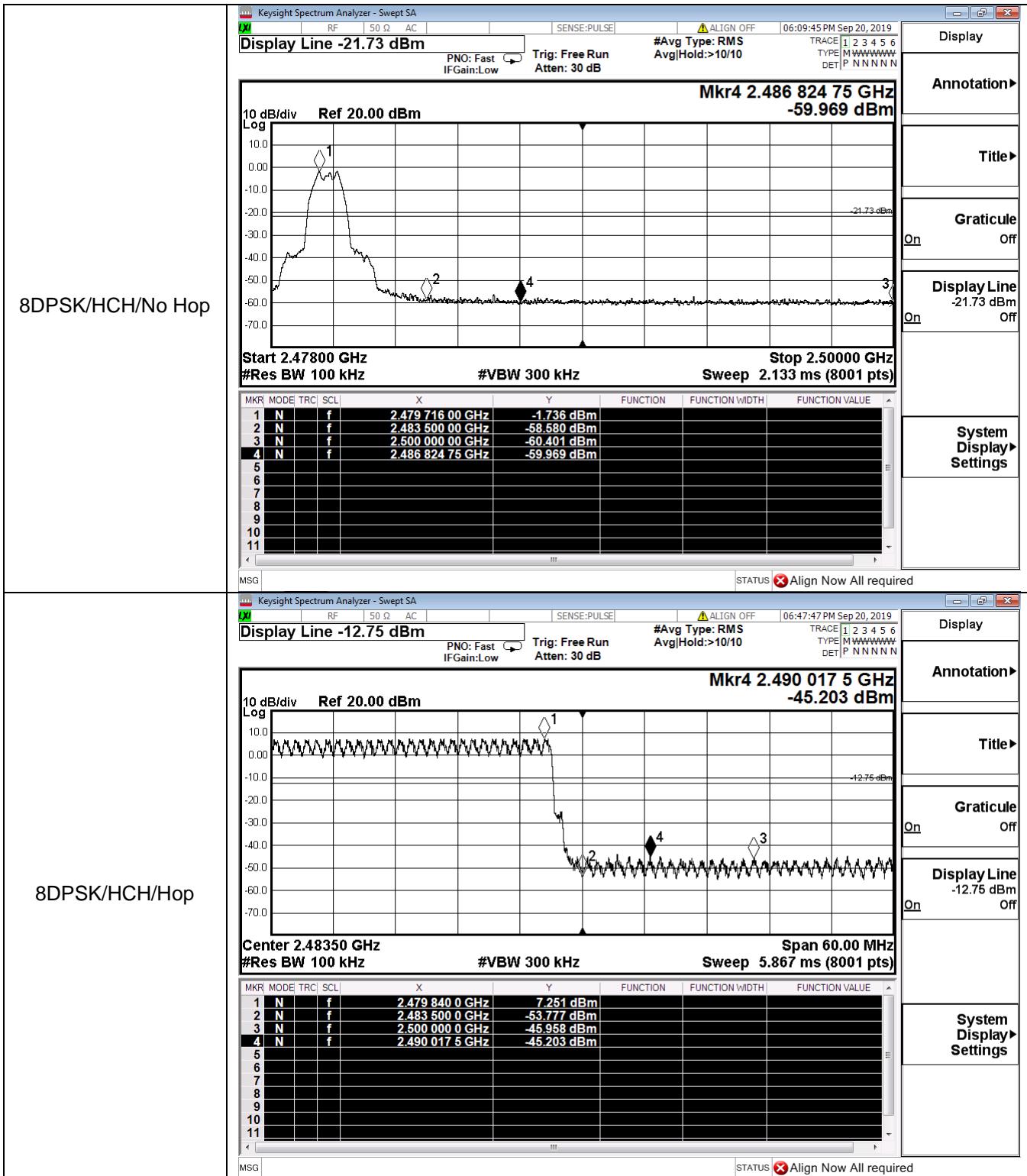








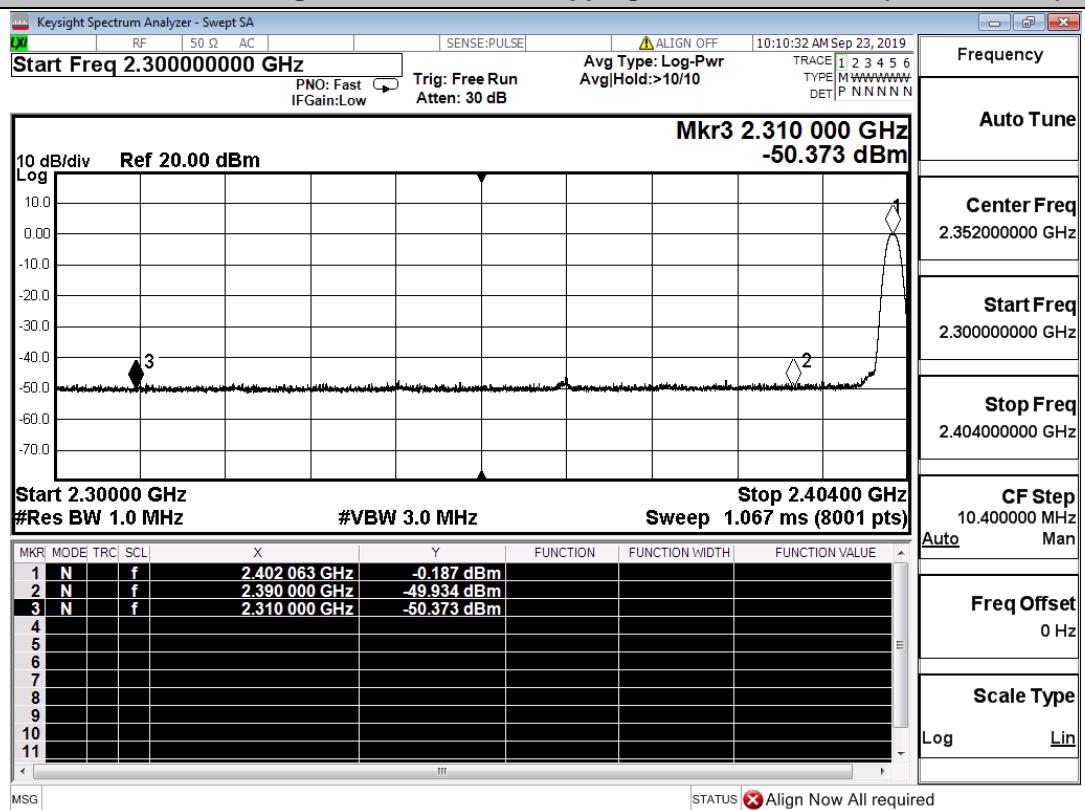




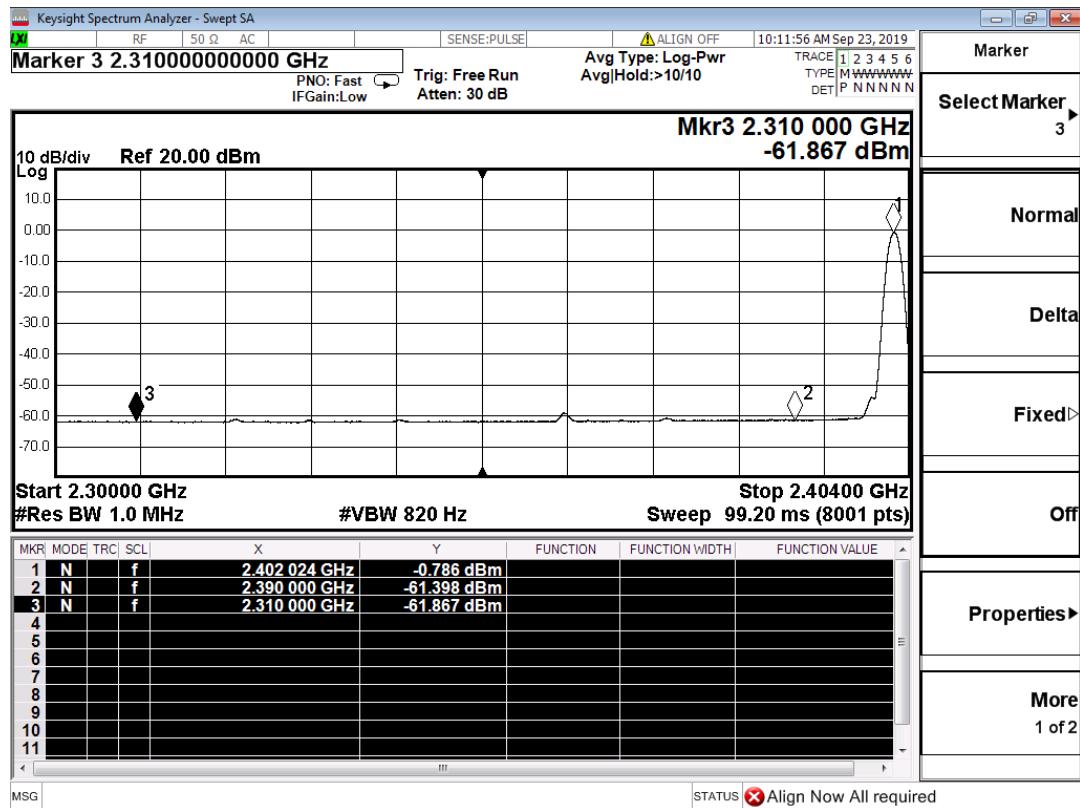
## A.8 Restrict-band band-edge measurements

Test Mode	Hopping	Freq.	Power [dBm]	Gain	Ground Factor	E [dBuV/m]	Detector	Limit [dBuV/m]	Verdict
GFSK	Off	2310.0	-50.373	2.000	0	46.86	PEAK	74	PASS
	Off	2310.0	-61.867	2.000	0	35.36	AV	54	PASS
	Off	2390.0	-49.934	2.000	0	47.30	PEAK	74	PASS
	Off	2390.0	-61.398	2.000	0	35.83	AV	54	PASS
	Off	2483.5	-49.072	2.000	0	48.16	PEAK	74	PASS
	Off	2483.5	-59.622	2.000	0	37.61	AV	54	PASS
	Off	2500.0	-49.850	2.000	0	47.38	PEAK	74	PASS
	Off	2500.0	-60.995	2.000	0	36.24	AV	54	PASS
$\pi/4$ DQPSK	Off	2310.0	-50.939	2.000	0	46.29	PEAK	74	PASS
	Off	2310.0	-61.930	2.000	0	35.30	AV	54	PASS
	Off	2390.0	-49.116	2.000	0	48.11	PEAK	74	PASS
	Off	2390.0	-61.381	2.000	0	35.85	AV	54	PASS
	Off	2483.5	-48.558	2.000	0	48.67	PEAK	74	PASS
	Off	2483.5	-59.575	2.000	0	37.66	AV	54	PASS
	Off	2500.0	-49.204	2.000	0	48.03	PEAK	74	PASS
	Off	2500.0	-61.015	2.000	0	36.22	AV	54	PASS
8DPSK	Off	2310.0	-51.082	2.000	0	46.15	PEAK	74	PASS
	Off	2310.0	-62.104	2.000	0	35.13	AV	54	PASS
	Off	2390.0	-49.556	2.000	0	47.67	PEAK	74	PASS
	Off	2390.0	-61.484	2.000	0	35.75	AV	54	PASS
	Off	2483.5	-48.530	2.000	0	48.70	PEAK	74	PASS
	Off	2483.5	-59.638	2.000	0	37.59	AV	54	PASS
	Off	2500.0	-50.296	2.000	0	46.93	PEAK	74	PASS
	Off	2500.0	-60.935	2.000	0	36.30	AV	54	PASS

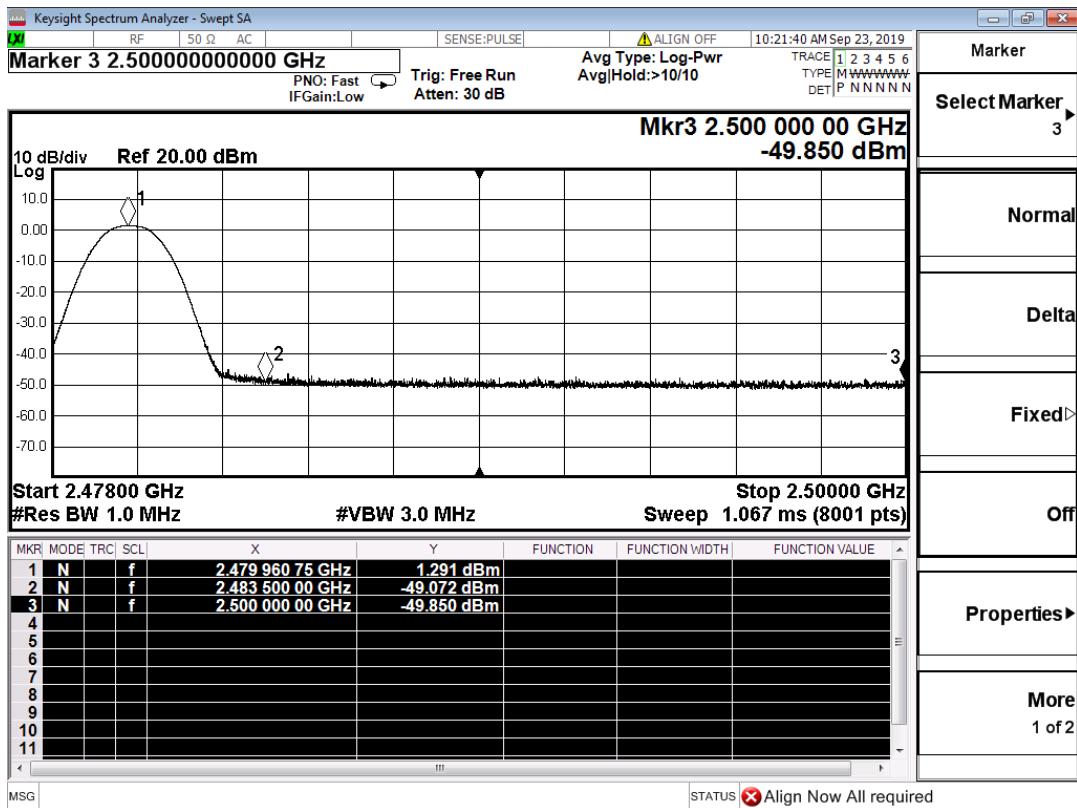
### Restrict-band band-edge measurements\_Hopping Off\_GFSK\_PEAK (Low Channel)



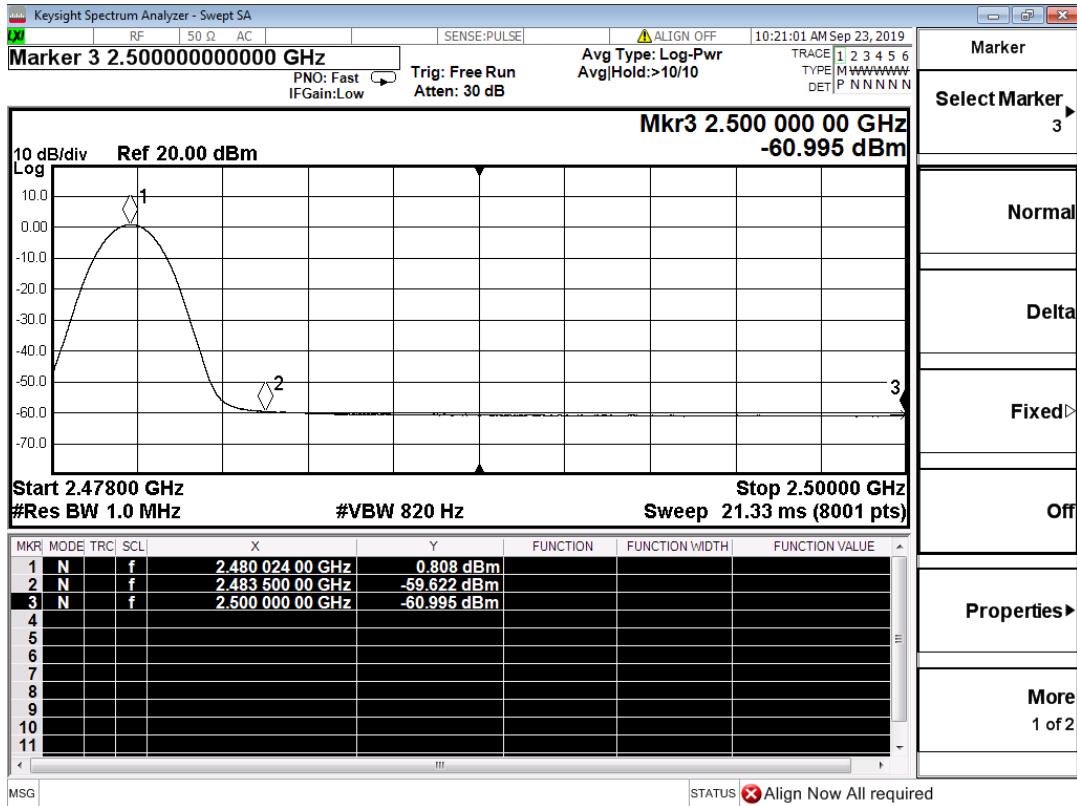
### Restrict-band band-edge measurements\_Hopping Off\_GFSK\_Average (Low Channel)



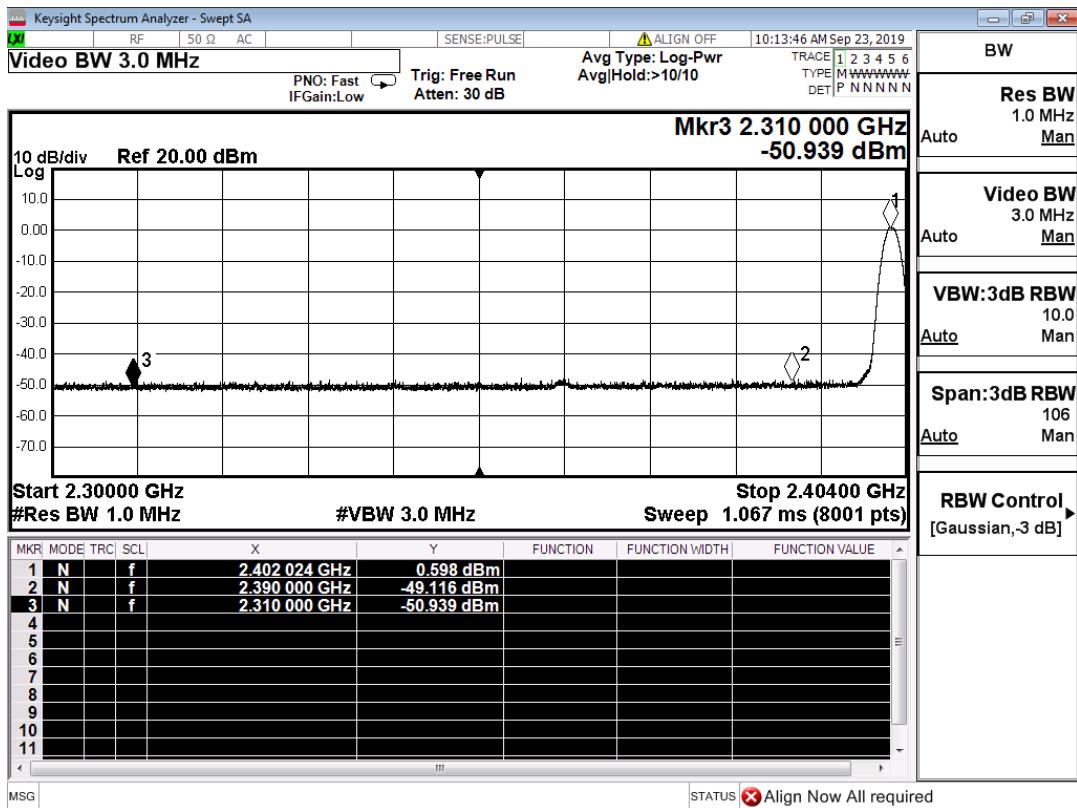
## Restrict-band band-edge measurements\_Hopping Off\_ GFSK\_PEAK (High Channel)



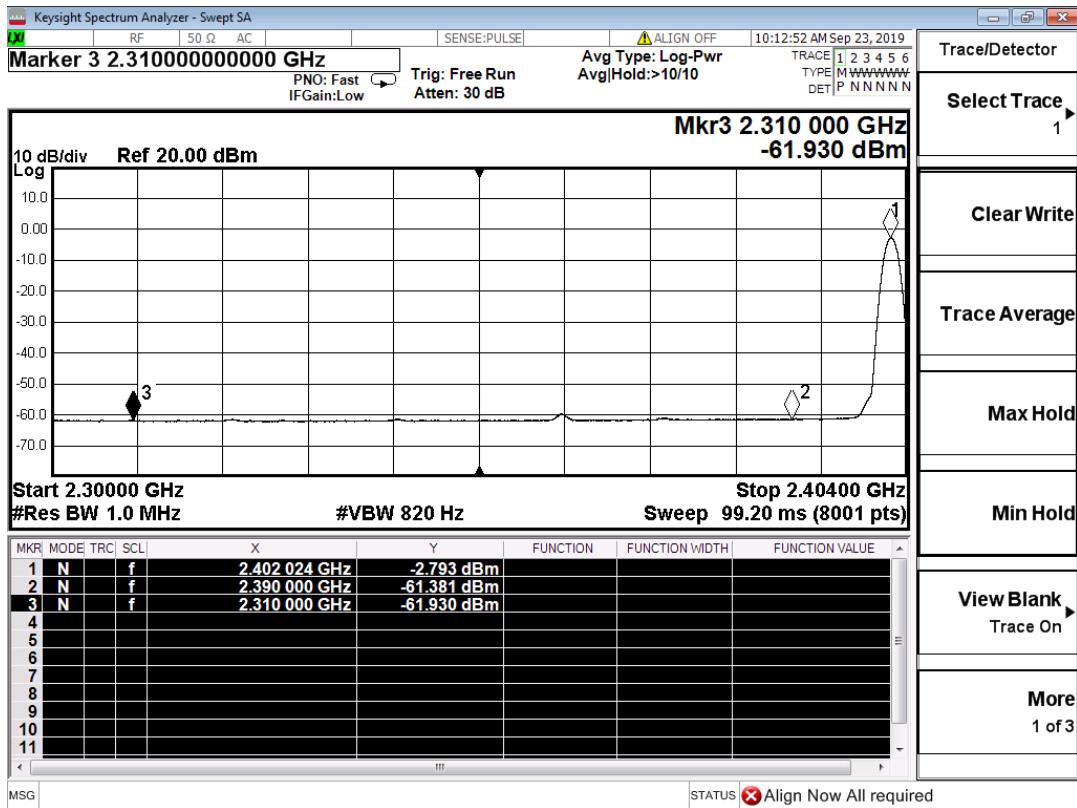
## Restrict-band band-edge measurements\_Hopping Off\_ GFSK\_Average (High Channel)



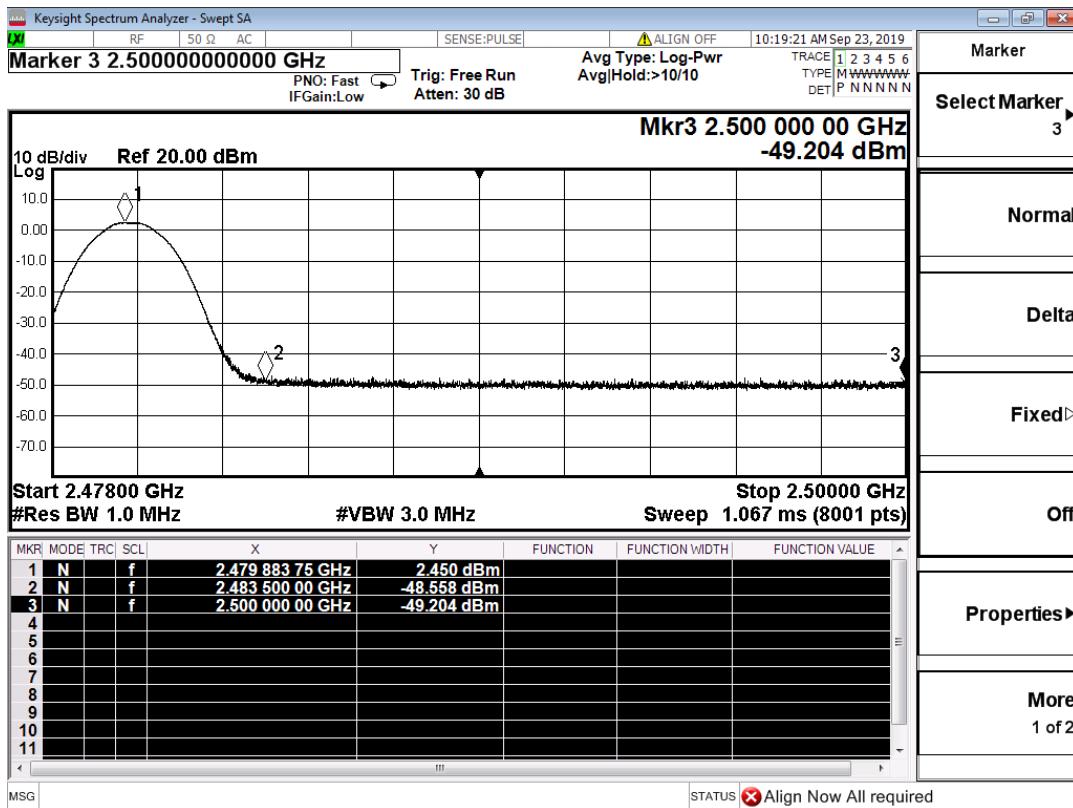
### Restrict-band band-edge measurements\_Hopping Off\_π/4-DQPSK\_PEAK (Low Channel)



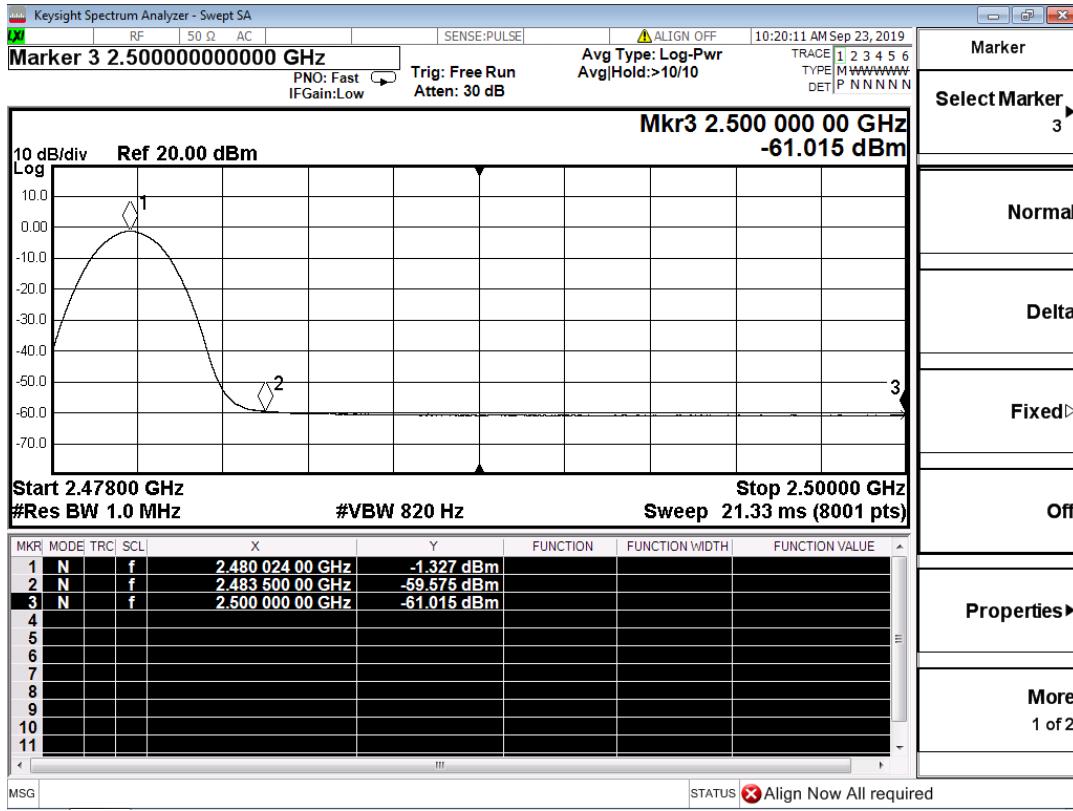
### Restrict-band band-edge measurements\_Hopping Off\_π/4-DQPSK\_Average (Low Channel)



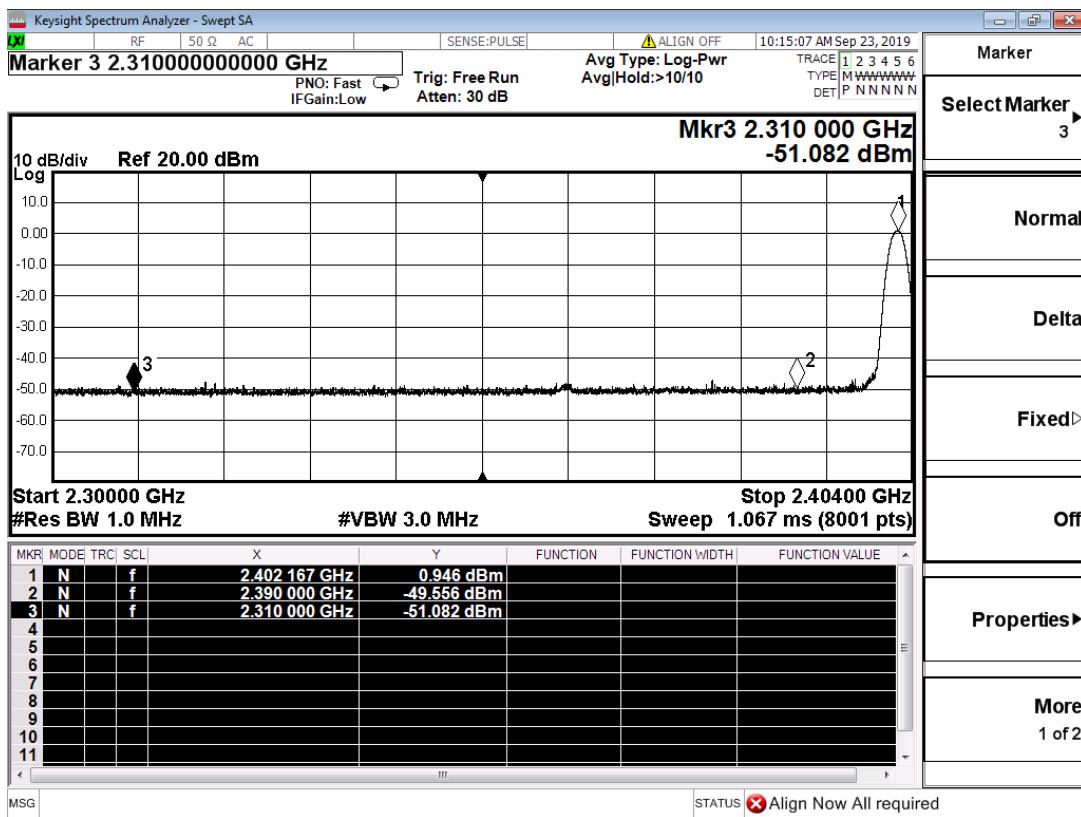
## Restrict-band band-edge measurements\_Hopping Off\_π/4-DQPSK\_PEAK (High Channel)



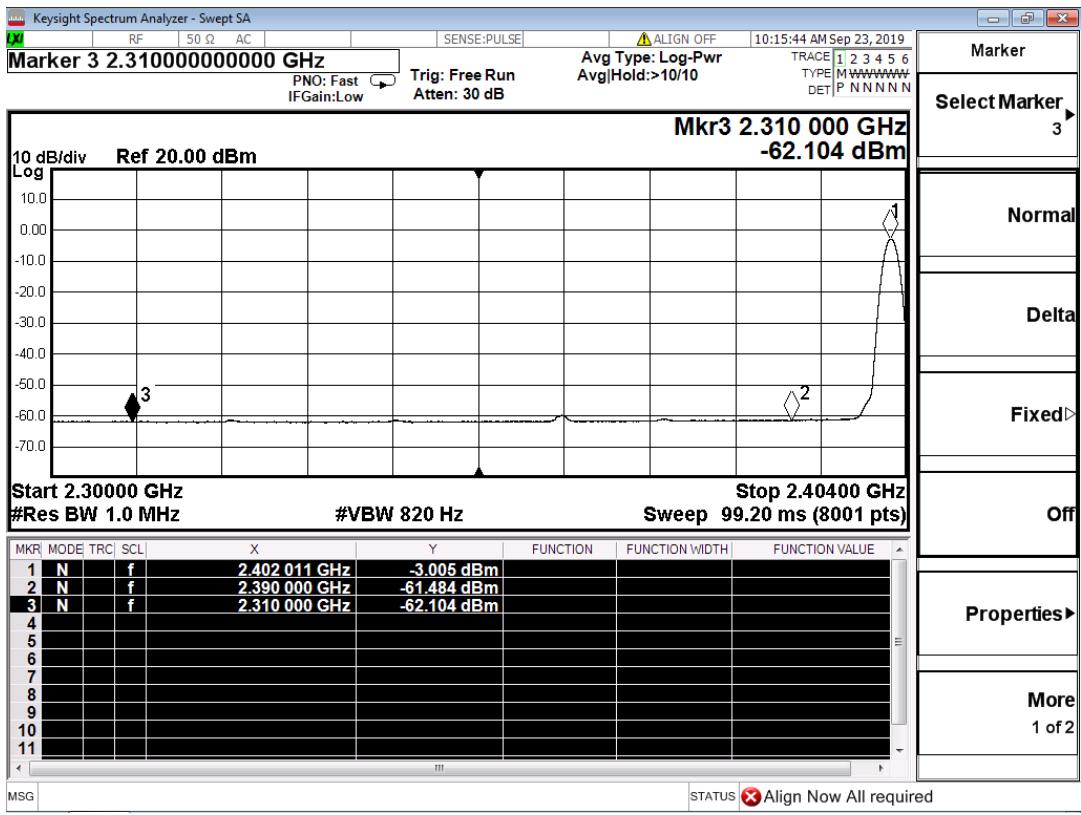
## Restrict-band band-edge measurements\_Hopping Off\_π/4-DQPSK\_Average (High Channel)



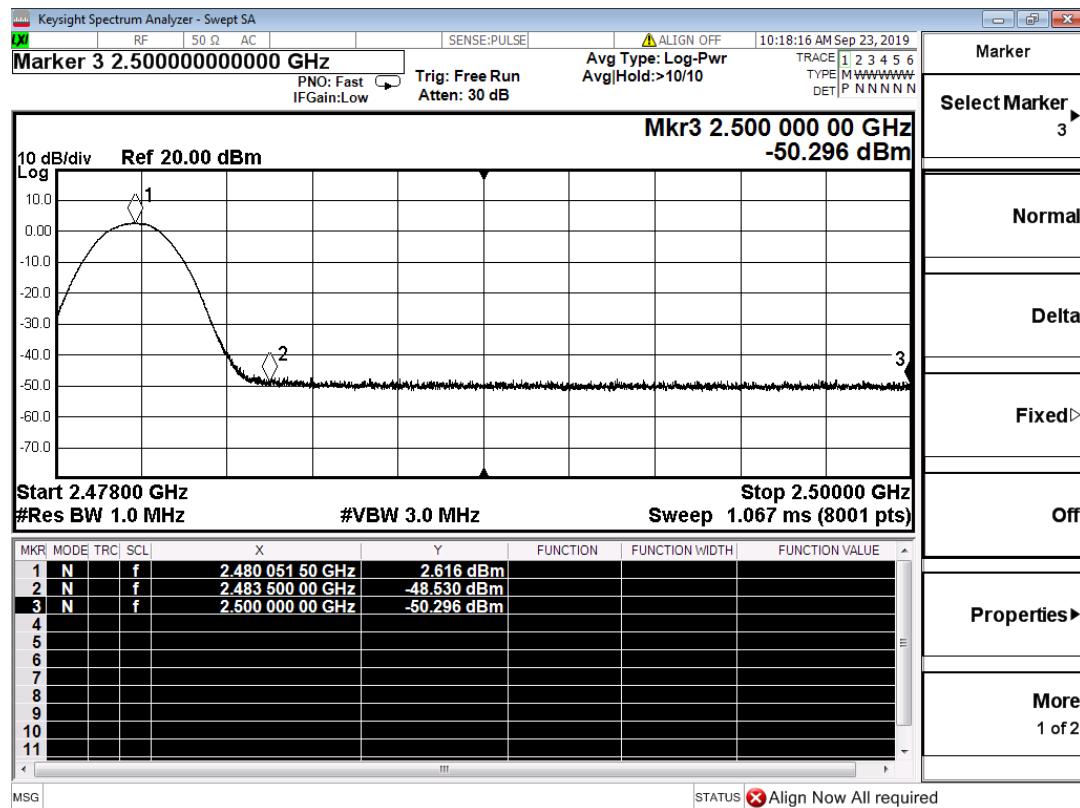
## Restrict-band band-edge measurements\_Hopping Off\_8DPSK\_PEAK (Low Channel)



## 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)

