

Appendix A

RF Test Data for BT V5.0 (BDR/EDR) (Conducted Measurement)

Product Name: Wireless Stereo Headphones

Trade Mark: **RCA**

Test Model: BT710

Environmental Conditions

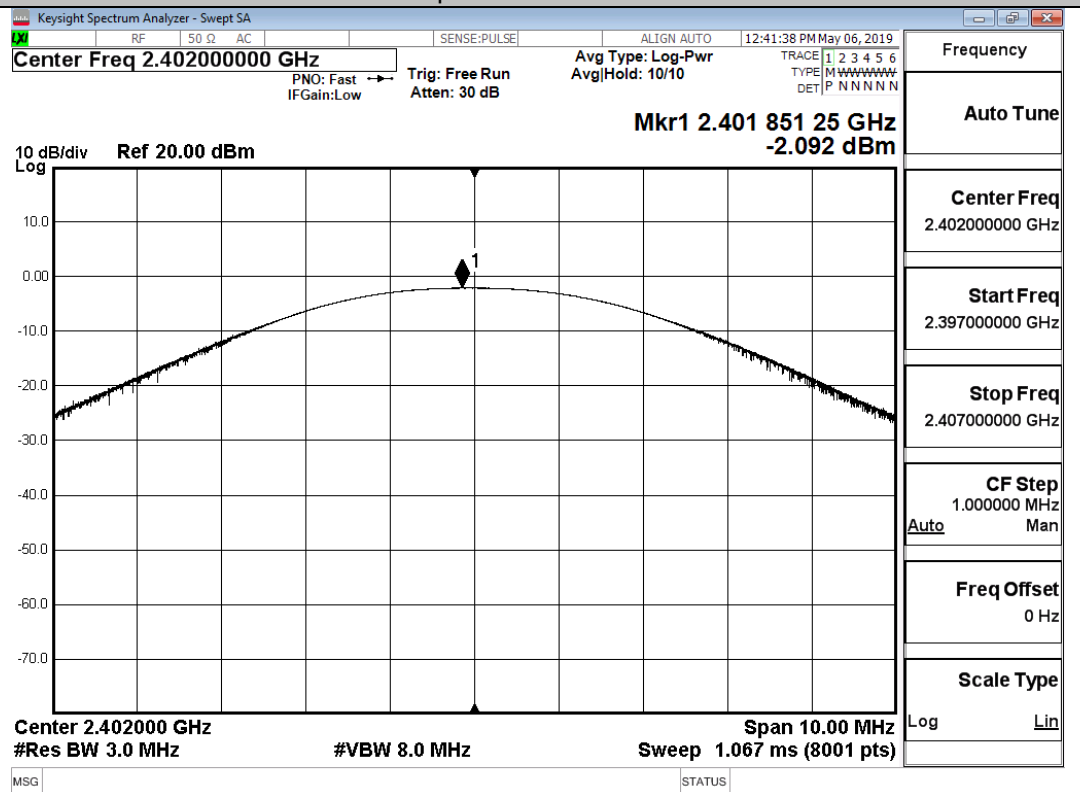
Temperature:	23.6 ° C
Relative Humidity:	60%
ATM Pressure:	100.0 kPa
Test Engineer:	CHUANG WANG
Supervised by:	JAYDEN ZHUO

A.1 Maximum Conducted Peak Output Power

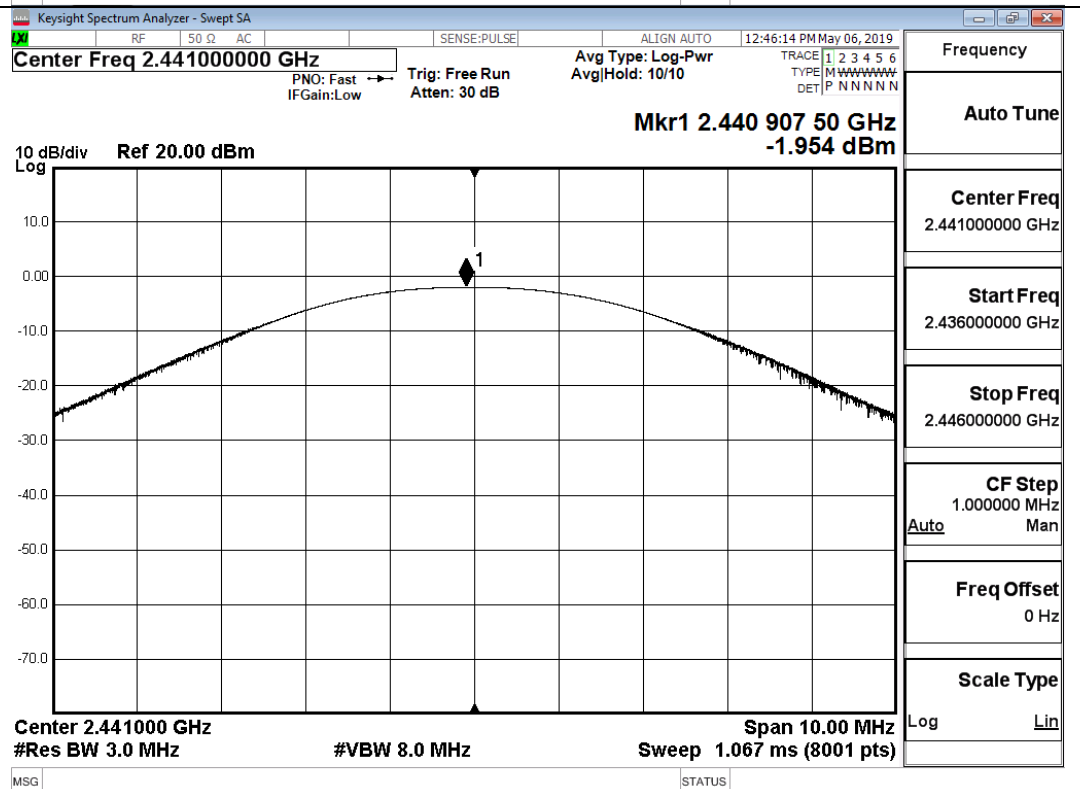
Mode	Channel.	Maximum Peak Output Power [dBm]	Limit [dBm]	Verdict
GFSK	LCH	-2.092	21	PASS
	MCH	-1.954	21	PASS
	HCH	-1.653	21	PASS
$\pi/4$ DQPSK	LCH	0.117	21	PASS
	MCH	0.209	21	PASS
	HCH	0.521	21	PASS
8DPSK	LCH	0.463	21	PASS
	MCH	0.525	21	PASS
	HCH	0.872	21	PASS

Test Graphs

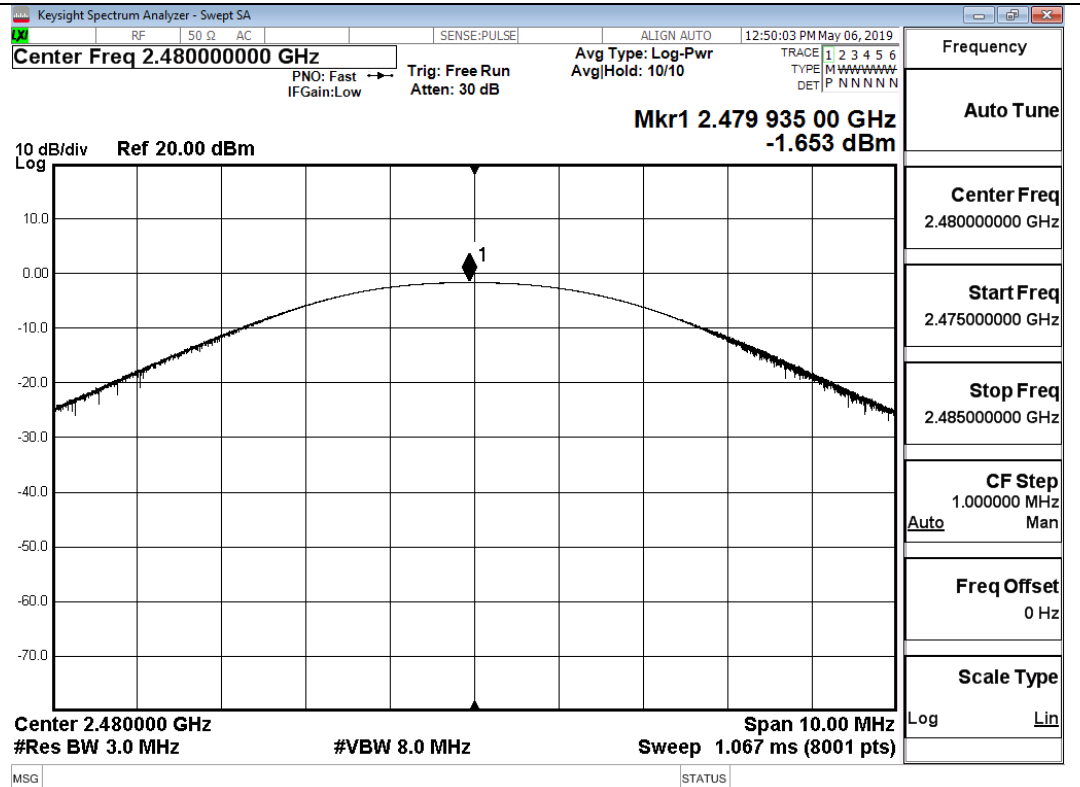
GFSK/LCH



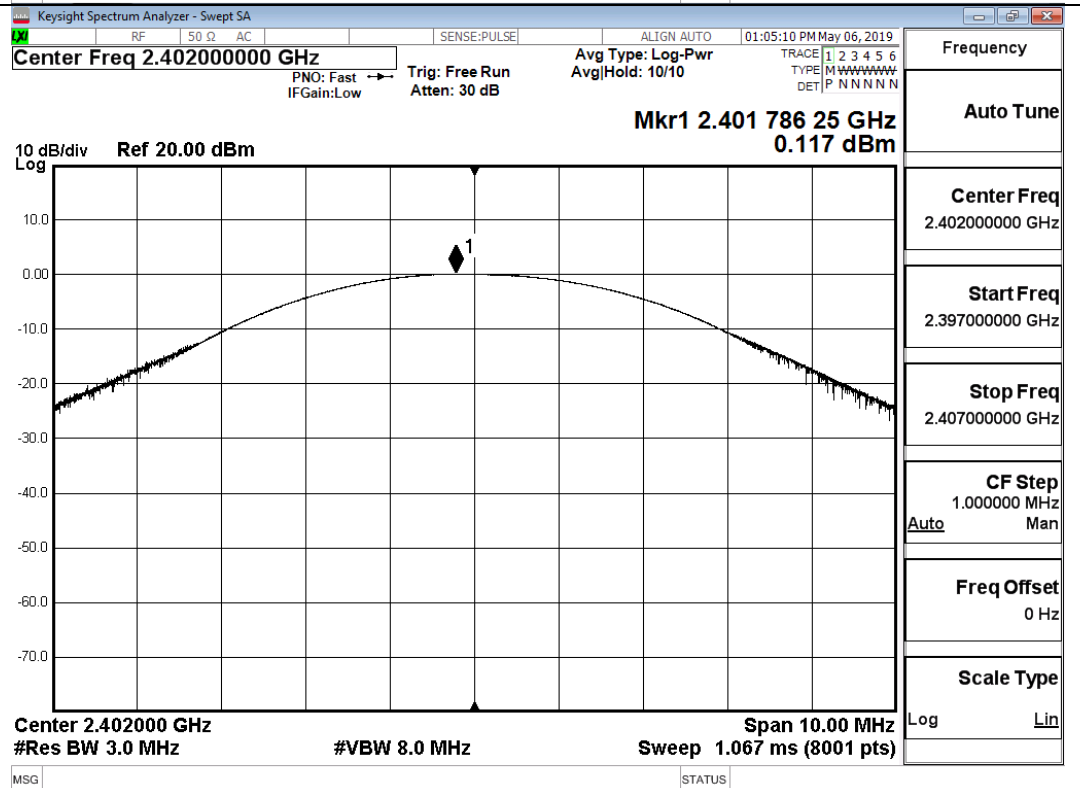
GFSK/MCH

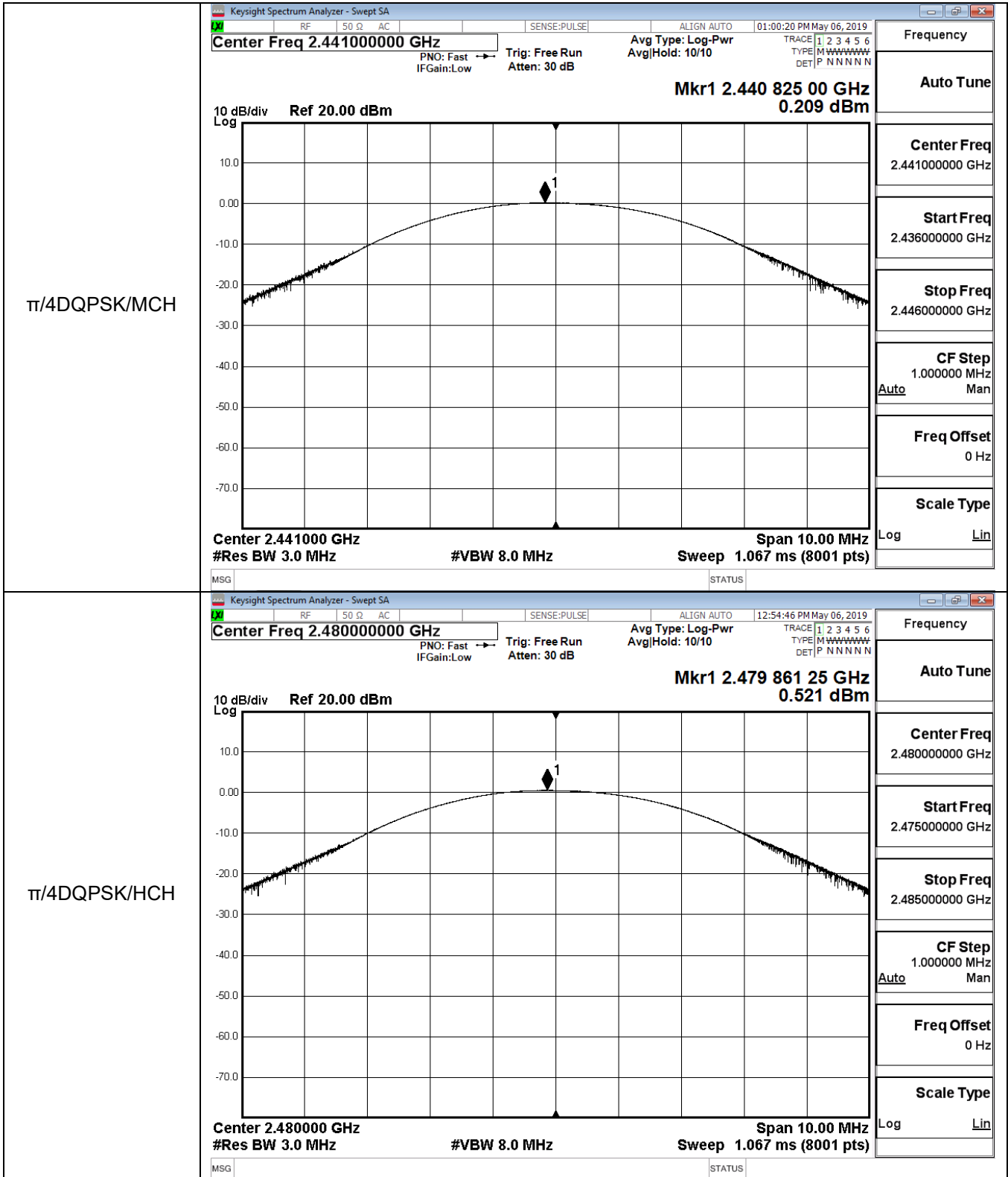


GFSK/HCH

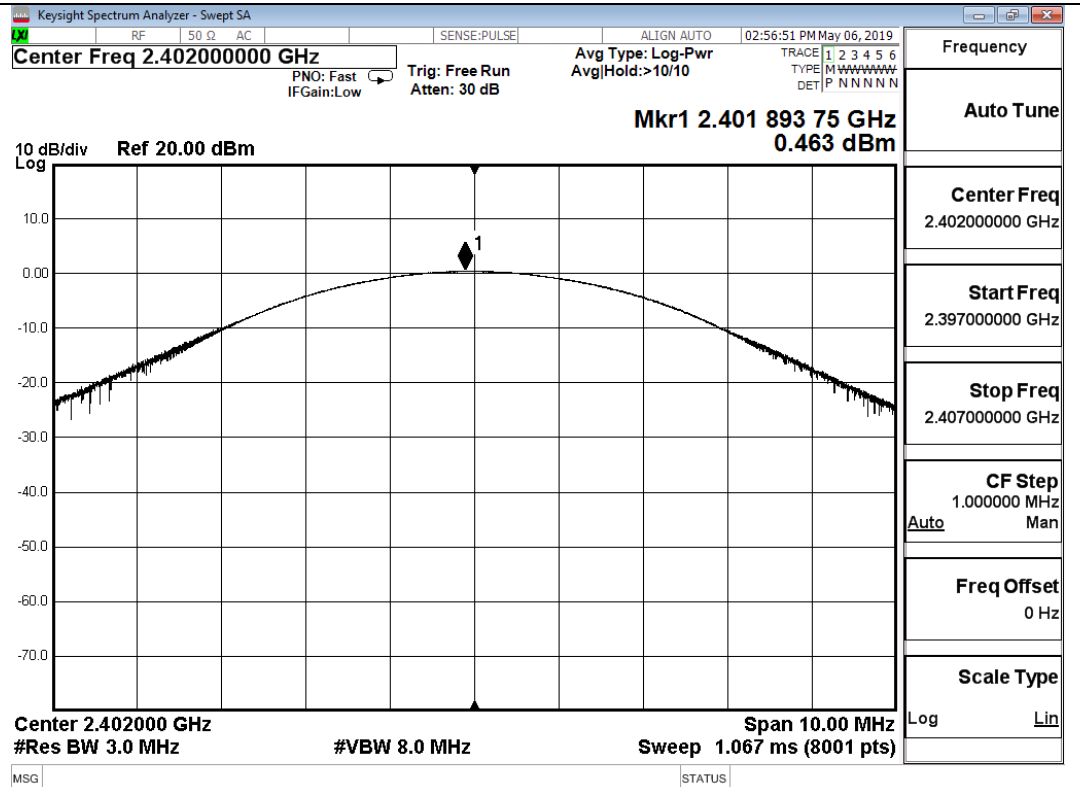


π /4DQPSK/LCH

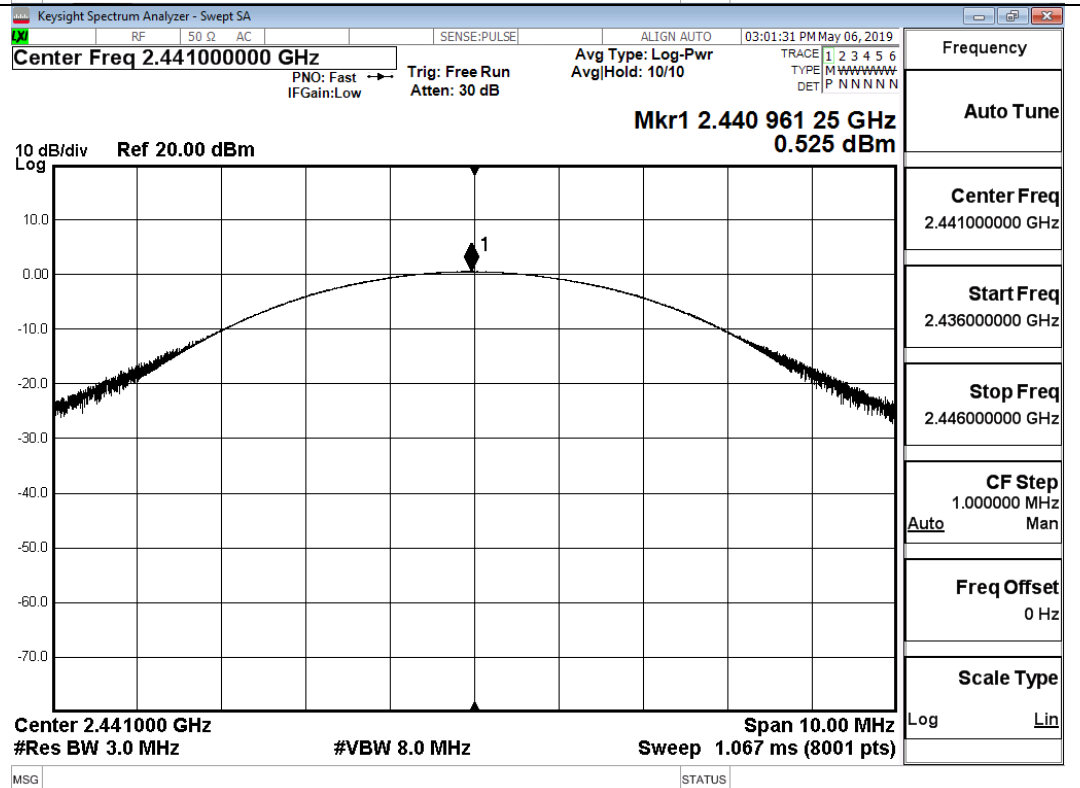




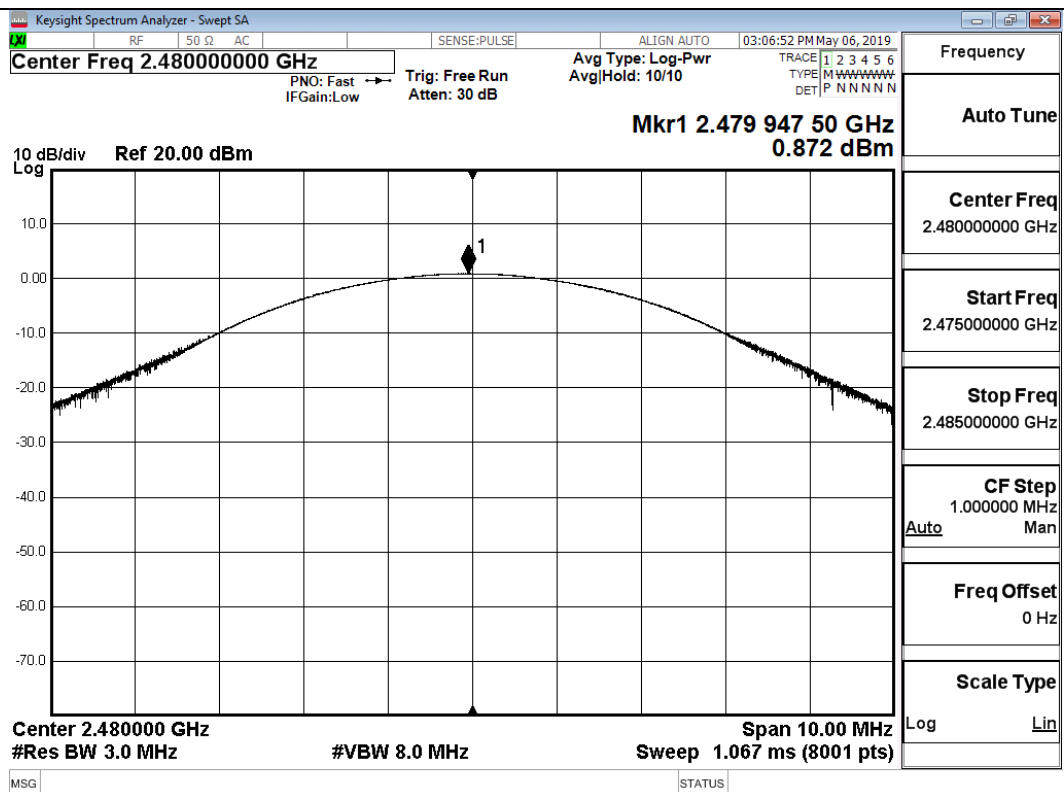
8DPSK/LCH



8DPSK/MCH

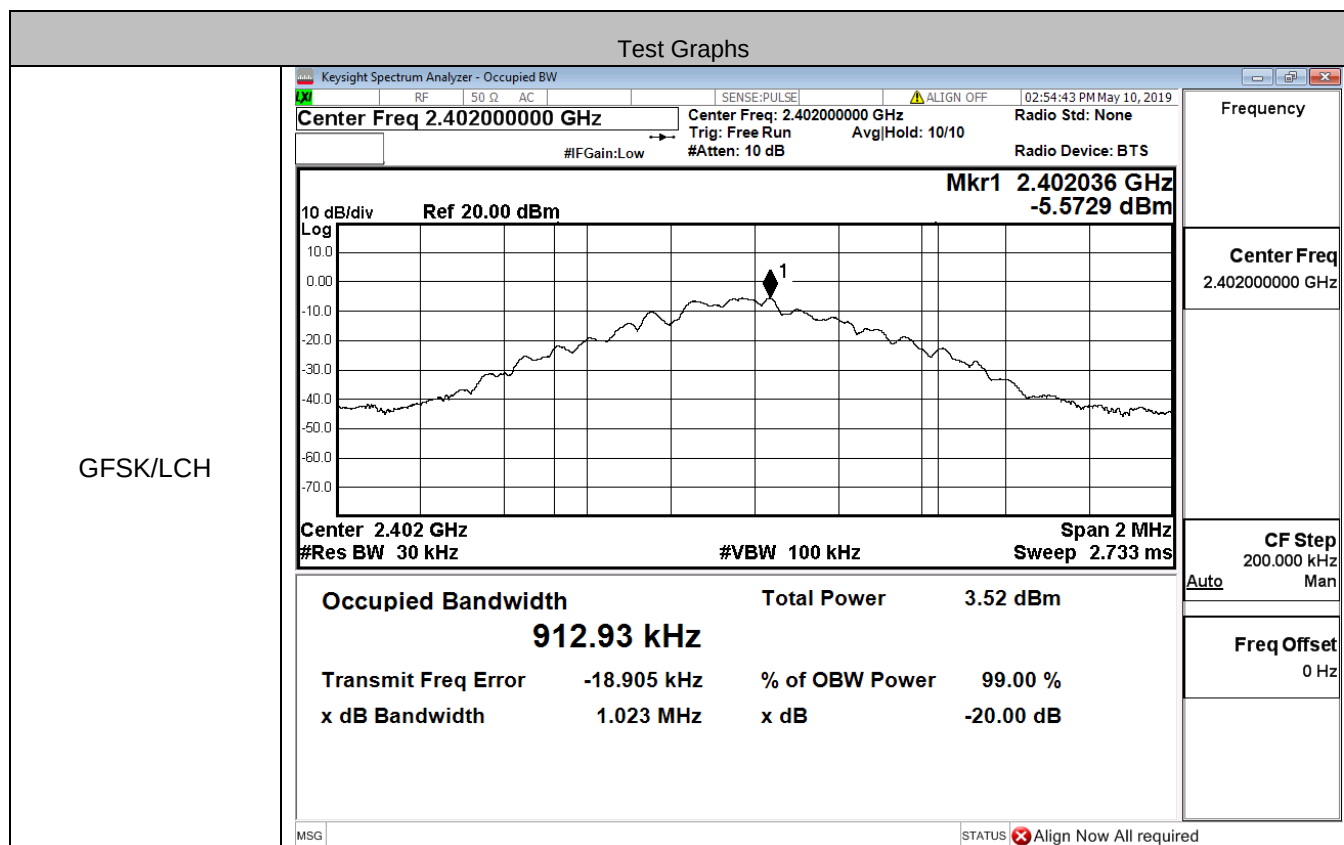


8DPSK/HCH

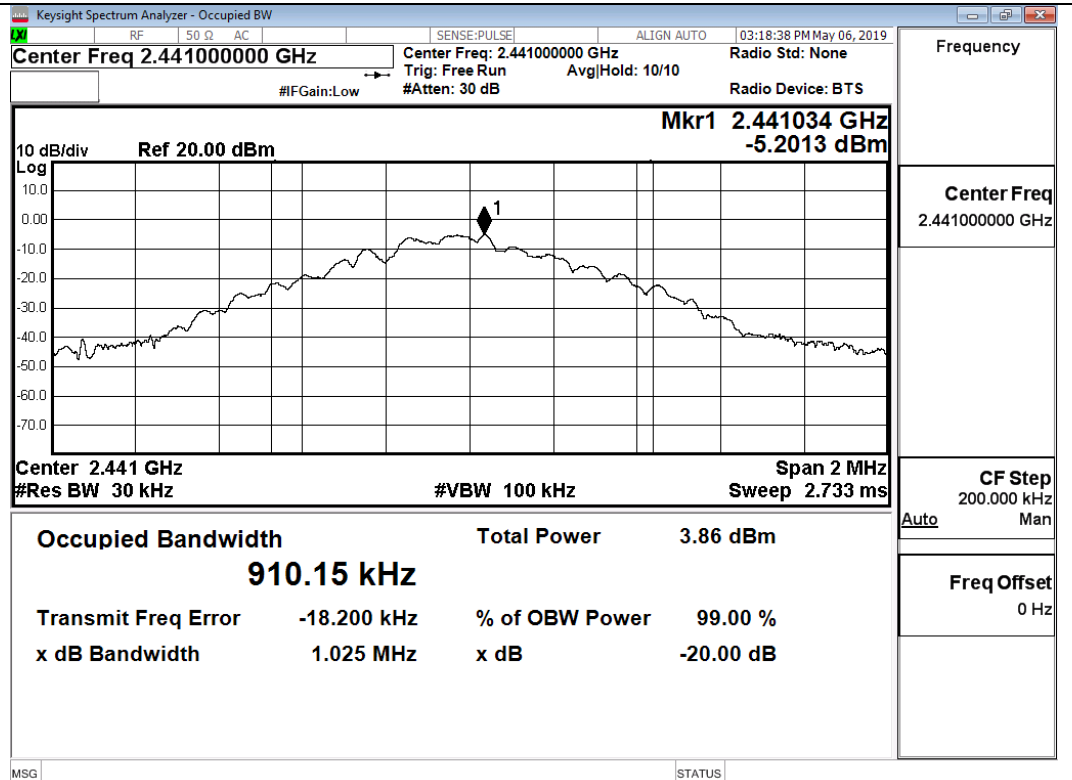


A.2 99% and 20dB Bandwidth

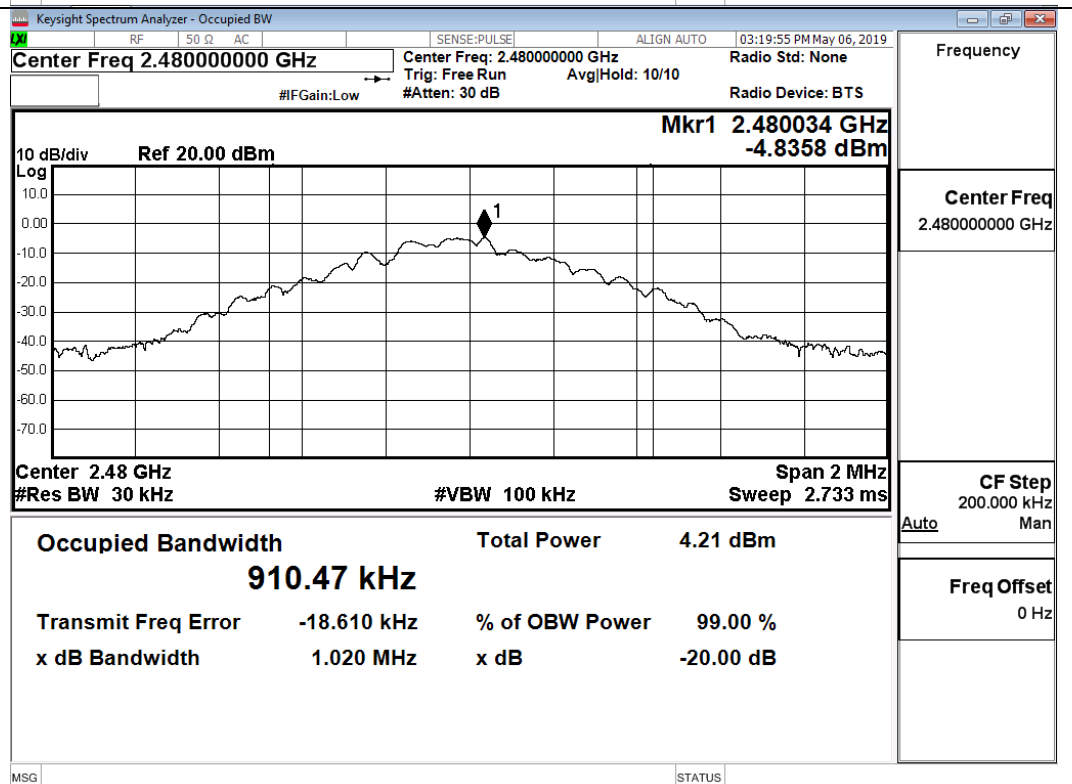
Mode	Channel.	99% Bandwidth [MHz]	20dB Bandwidth [MHz]	Limit [MHz]	Verdict
GFSK	LCH	0.91293	1.023	Not Specified	PASS
	MCH	0.91015	1.025	Not Specified	PASS
	HCH	0.91047	1.020	Not Specified	PASS
π /4DQPSK	LCH	1.1949	1.351	Not Specified	PASS
	MCH	1.1952	1.354	Not Specified	PASS
	HCH	1.1952	1.351	Not Specified	PASS
8DPSK	LCH	1.1891	1.344	Not Specified	PASS
	MCH	1.1889	1.344	Not Specified	PASS
	HCH	1.1897	1.343	Not Specified	PASS



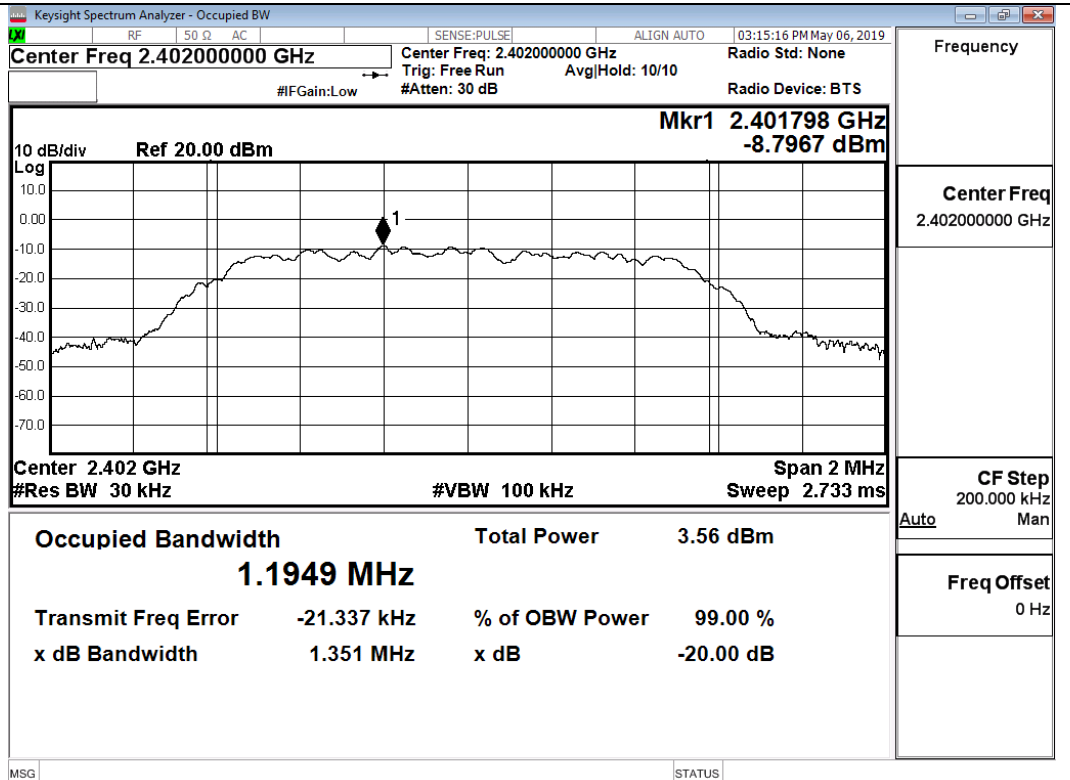
GFSK/MCH



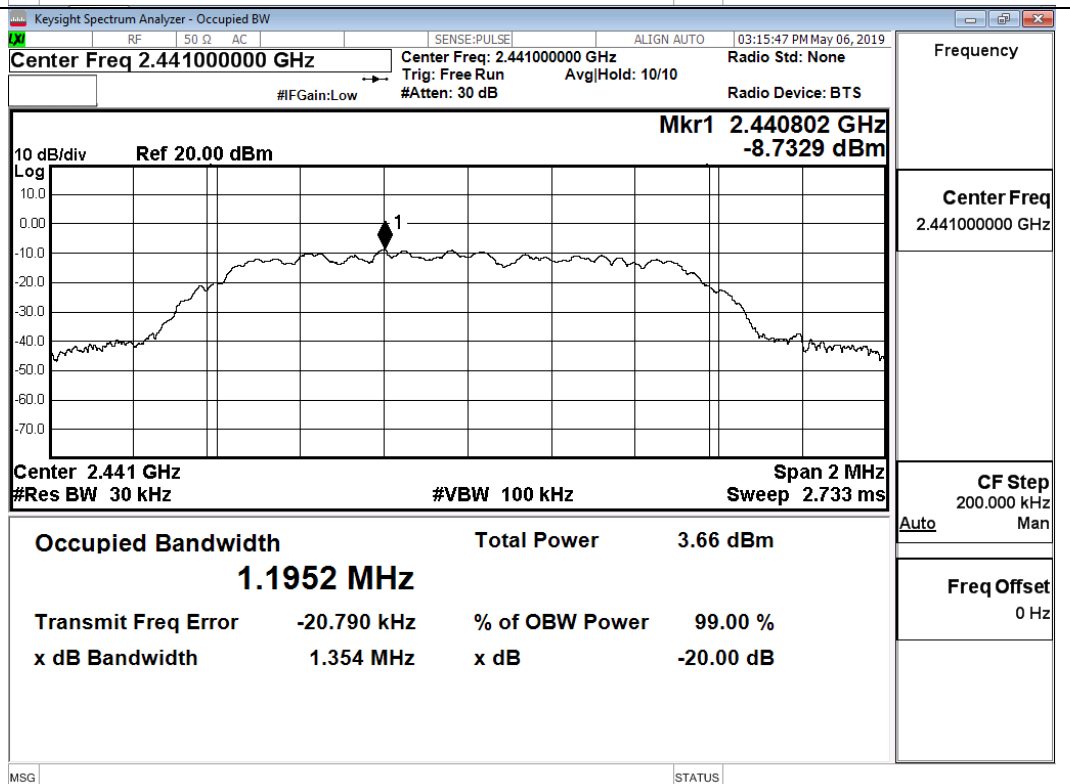
GFSK/HCH



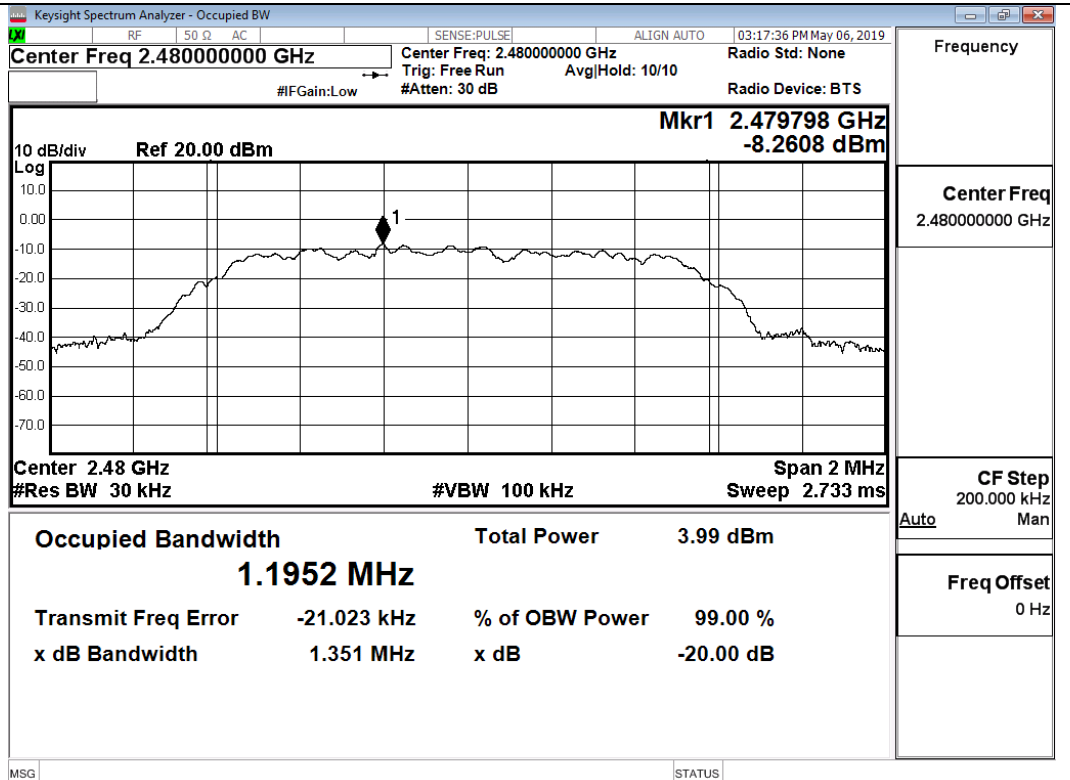
$\pi/4$ DQPSK/LCH



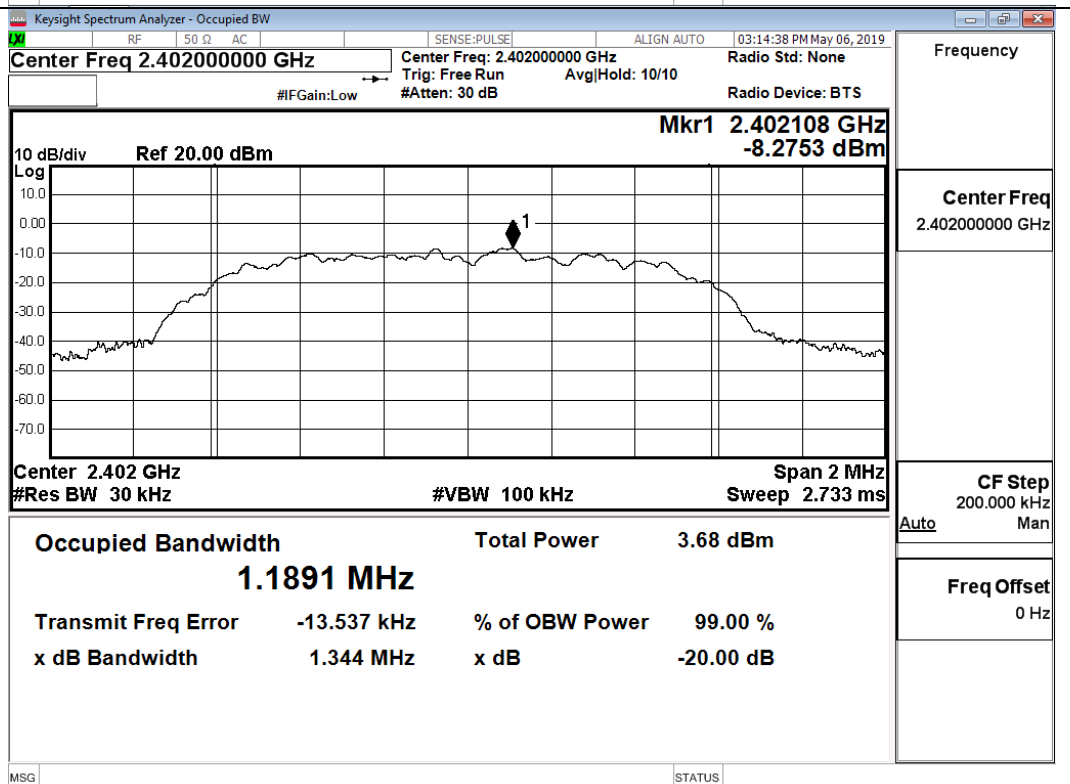
$\pi/4$ DQPSK/MCH



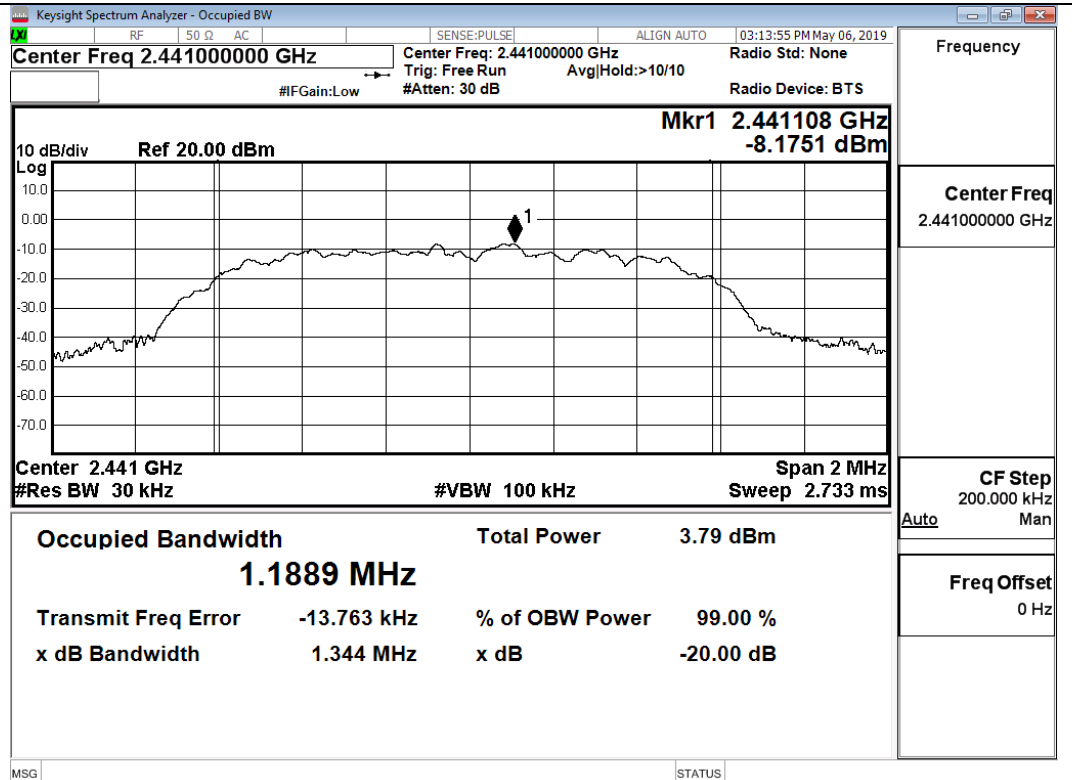
$\pi/4$ DQPSK/HCH



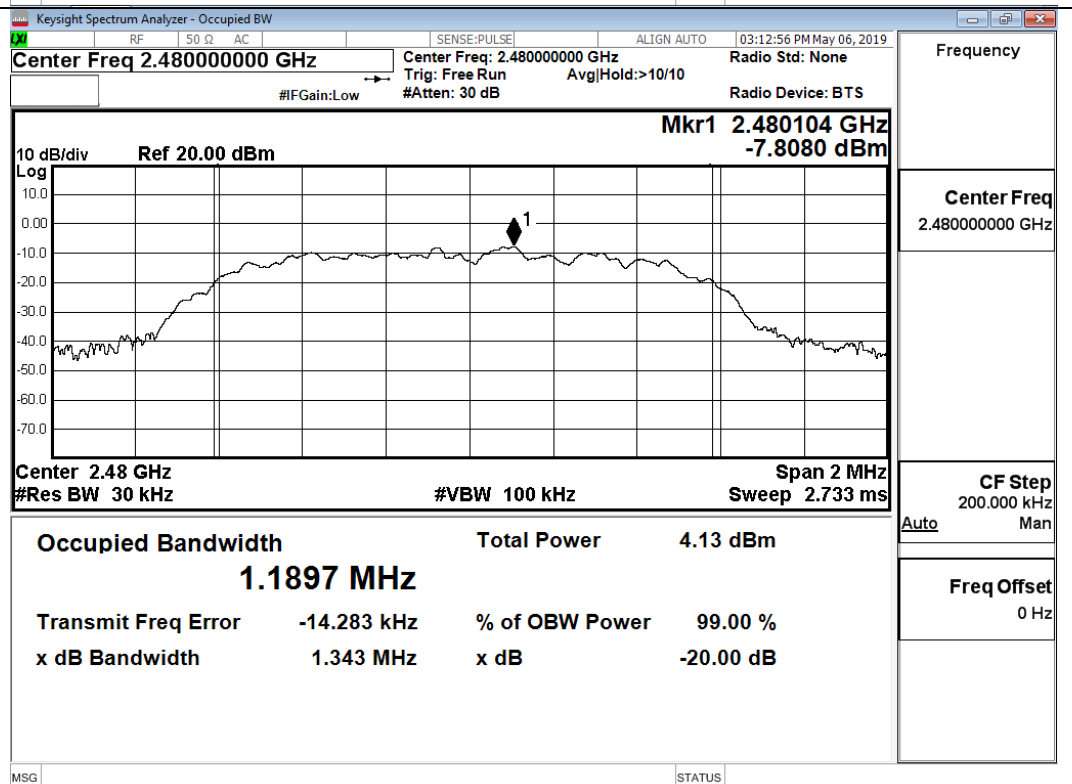
8DPSK/LCH



8DPSK/MCH

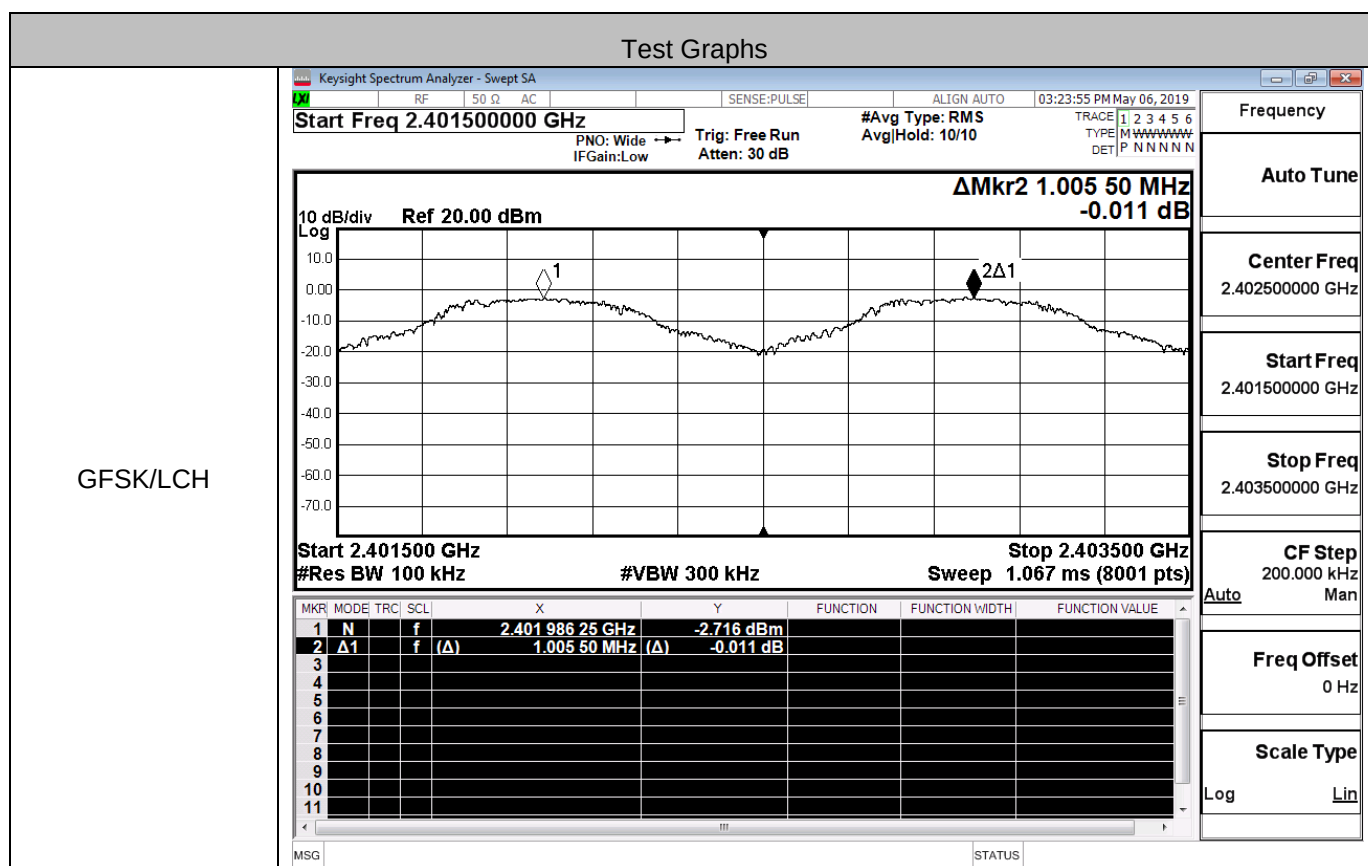


8DPSK/HCH

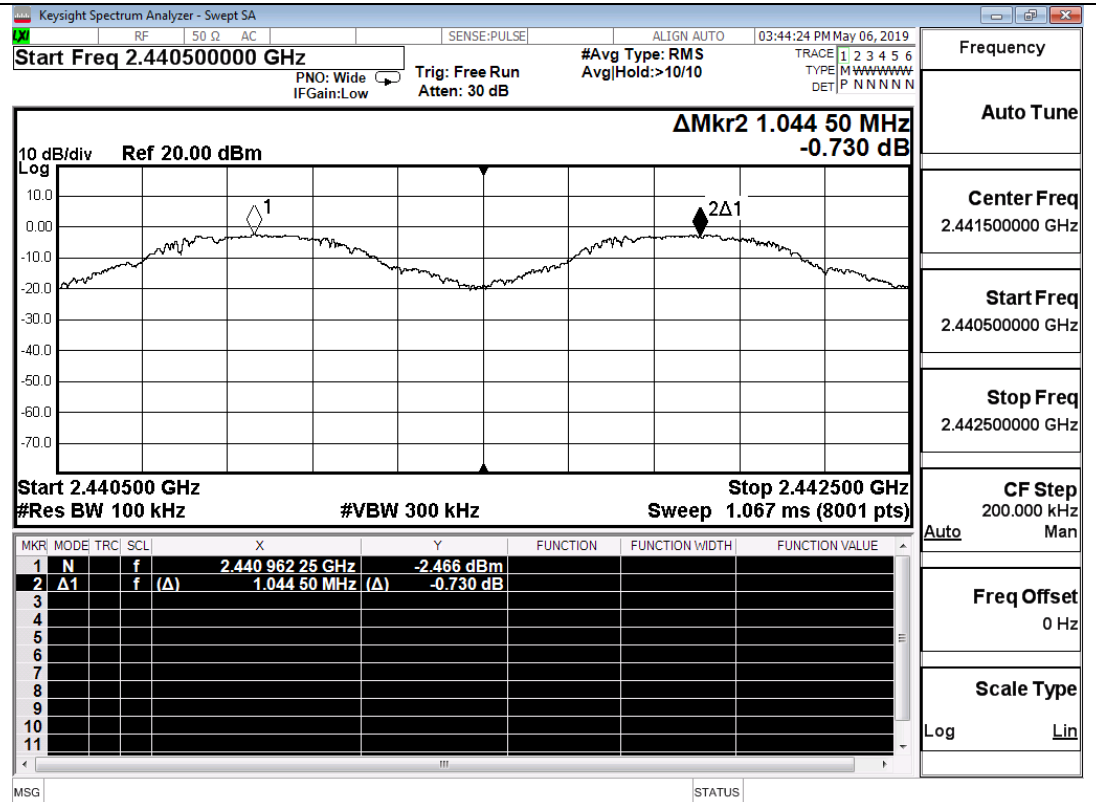


A.3 Carrier Frequency Separation

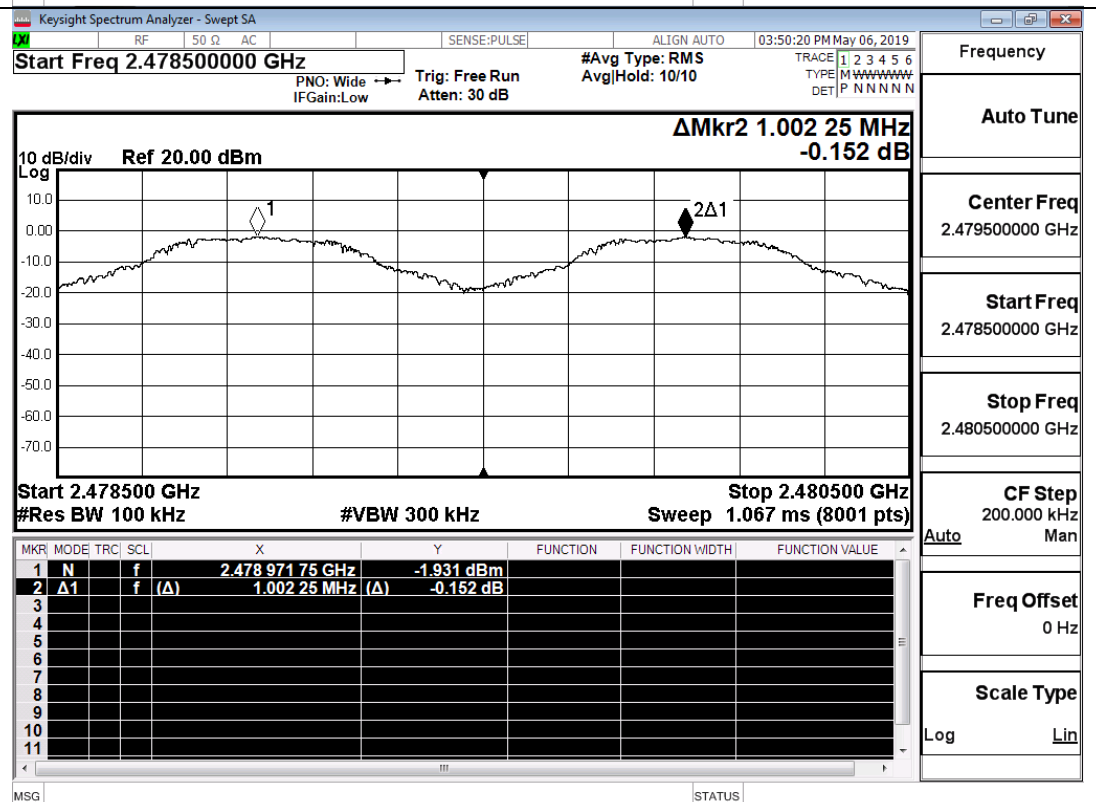
Mode	Channel.	Carrier Frequency Separation [MHz]	Limit [MHz] 2/3*20dB Bandwidth	Verdict
GFSK	LCH	1.006	0.682	PASS
	MCH	1.045	0.683	PASS
	HCH	1.002	0.680	PASS
$\pi/4$ DQPSK	LCH	1.001	0.901	PASS
	MCH	1.001	0.903	PASS
	HCH	1.012	0.901	PASS
8DPSK	LCH	1.004	0.896	PASS
	MCH	1.013	0.896	PASS
	HCH	1.006	0.895	PASS



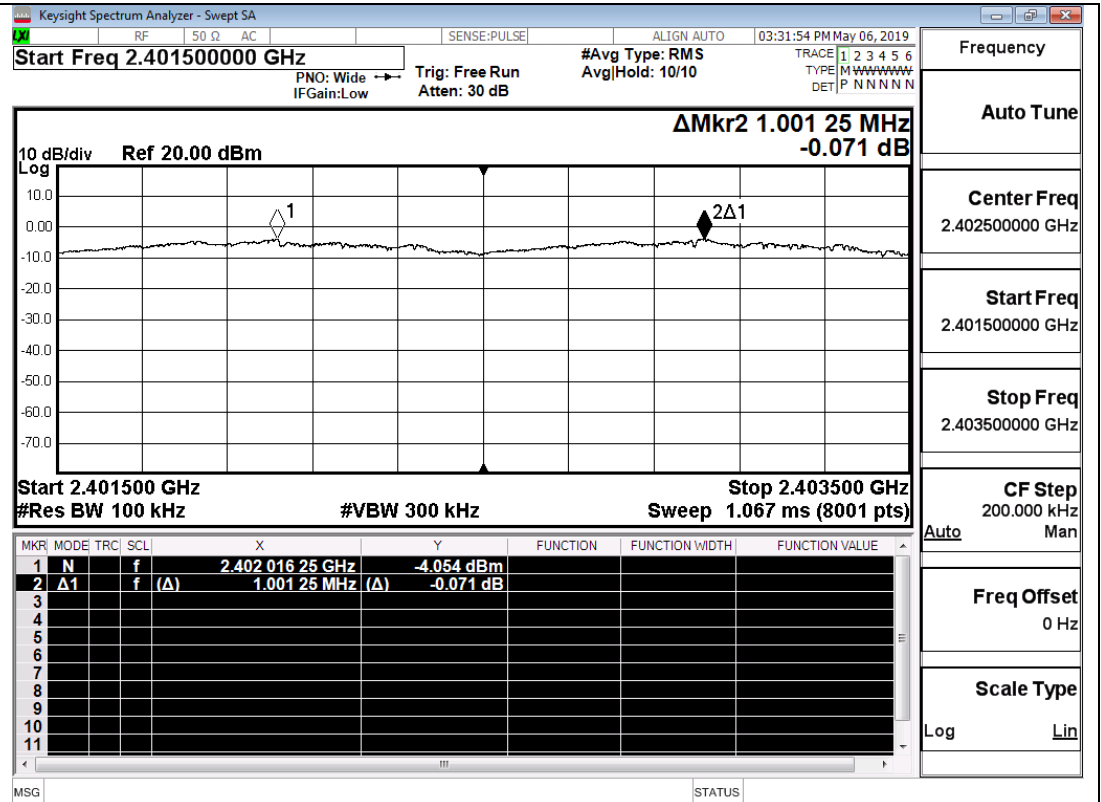
GFSK/MCH



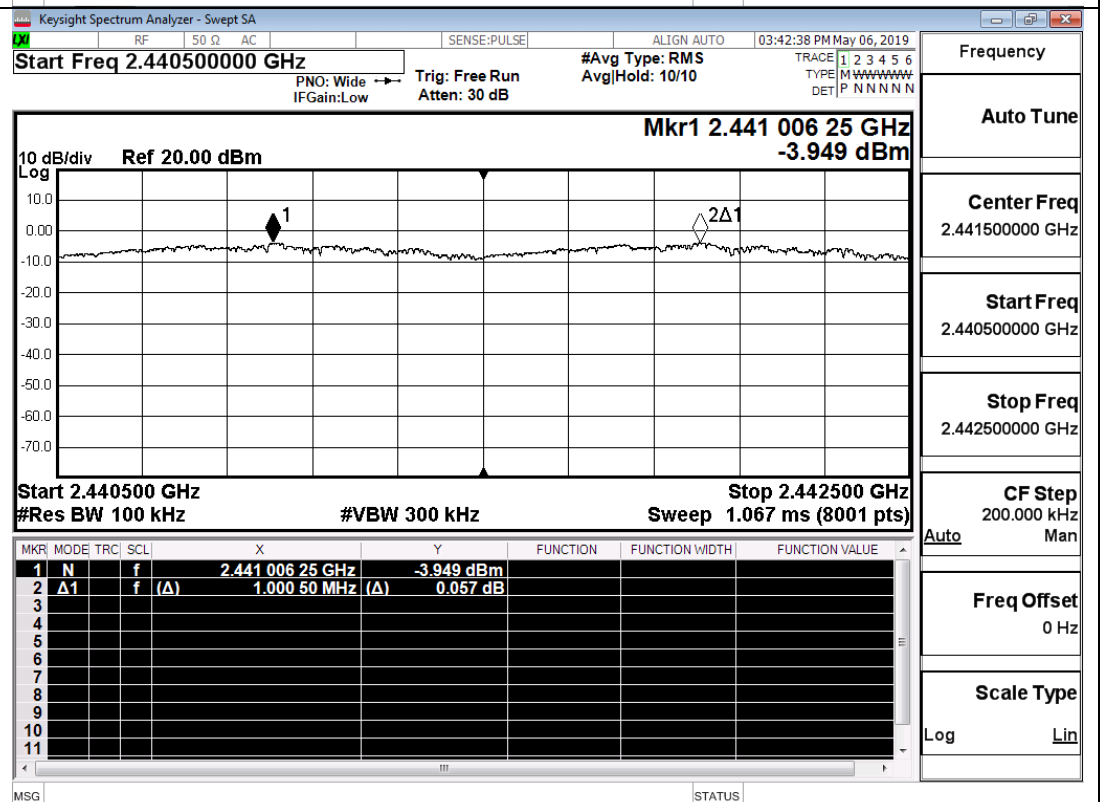
GFSK/HCH



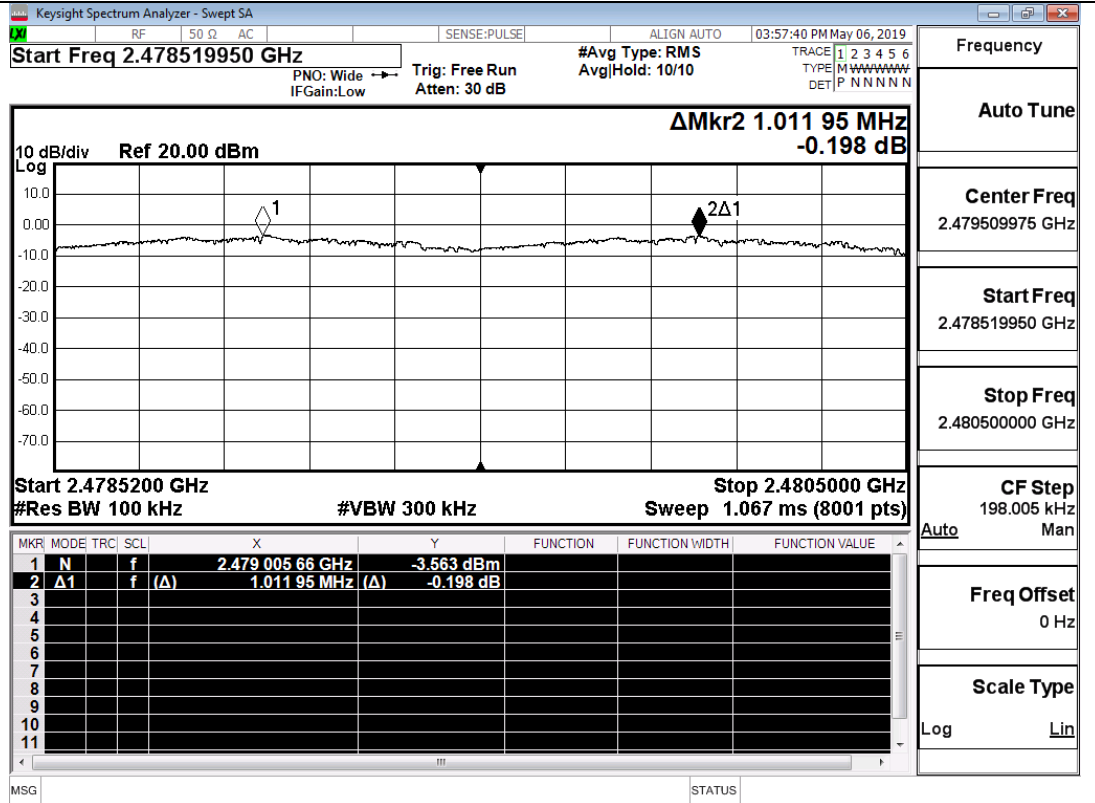
$\pi/4$ DQPSK/LCH



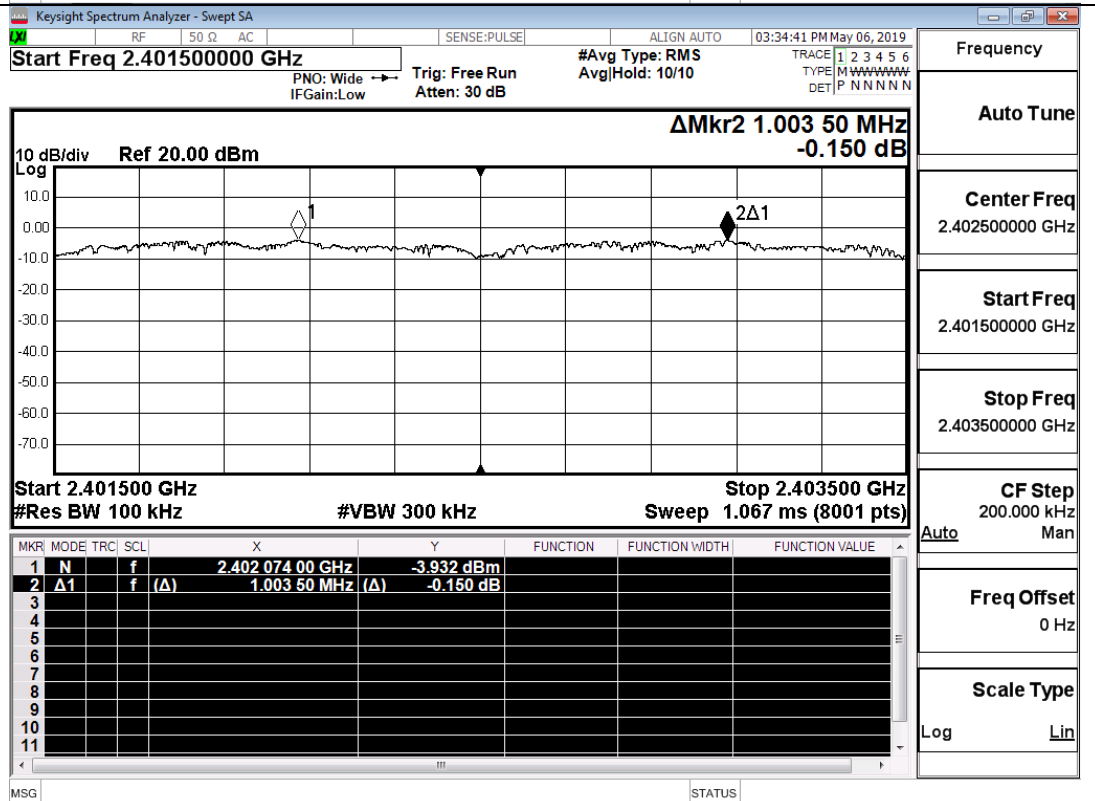
$\pi/4$ DQPSK/MCH



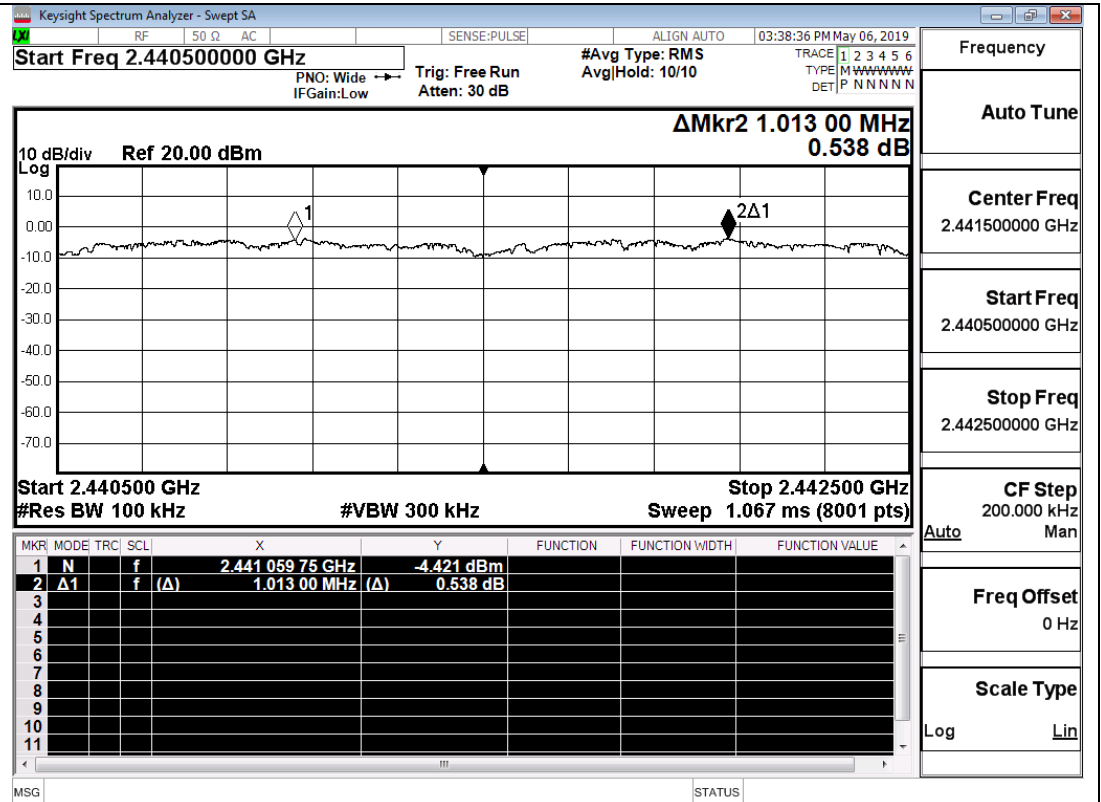
$\pi/4$ DQPSK/HCH



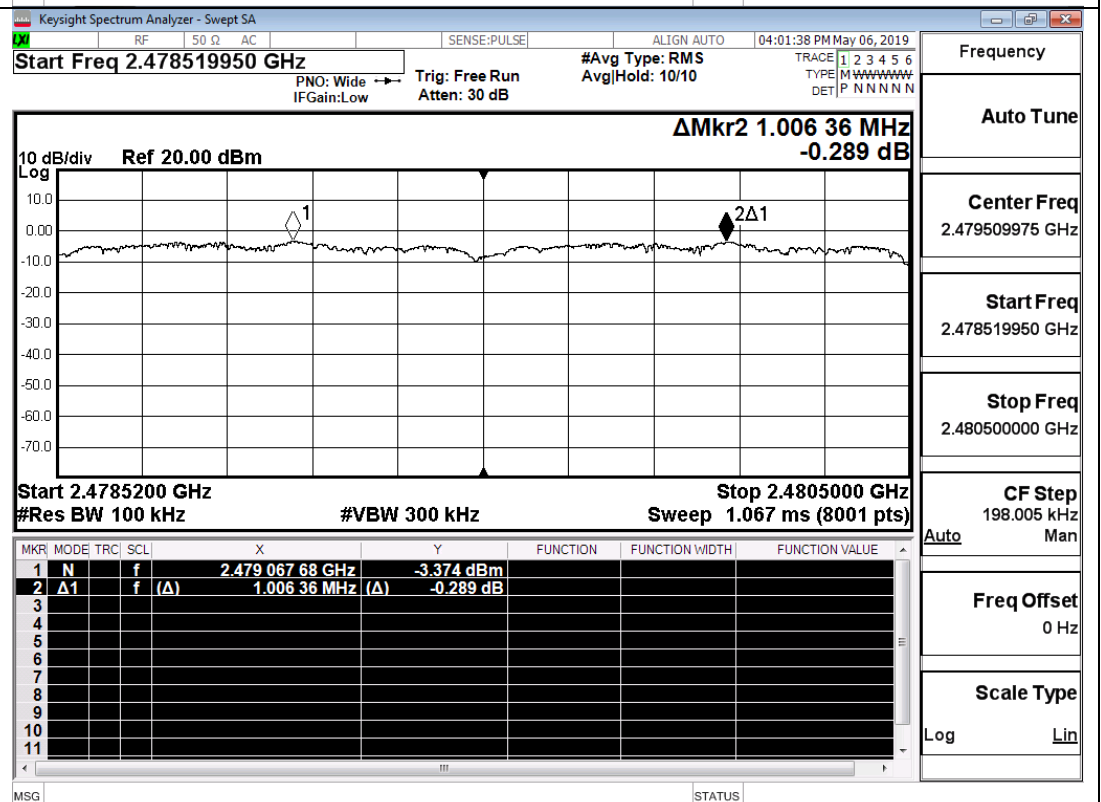
8DPSK/LCH



8DPSK/MCH

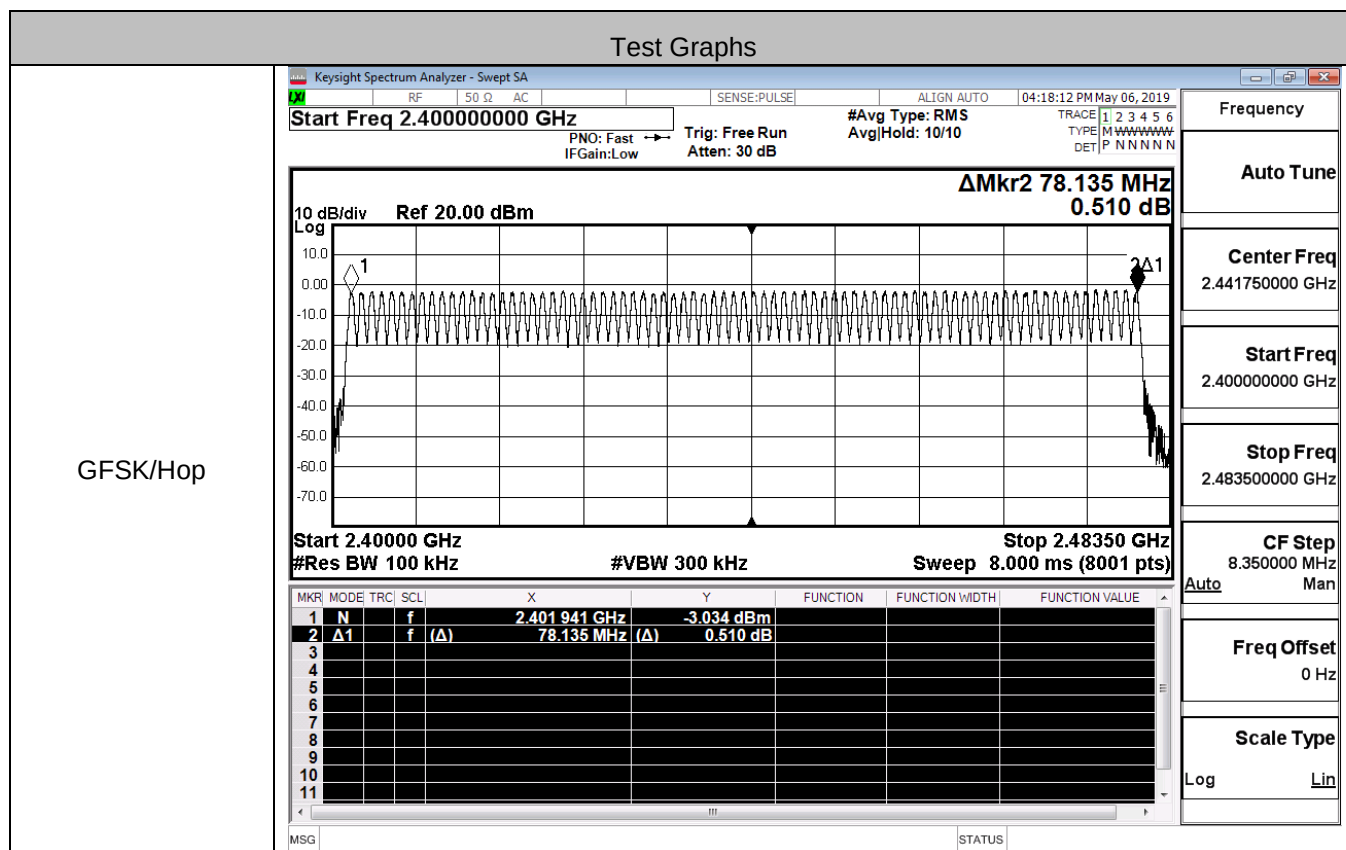


8DPSK/HCH

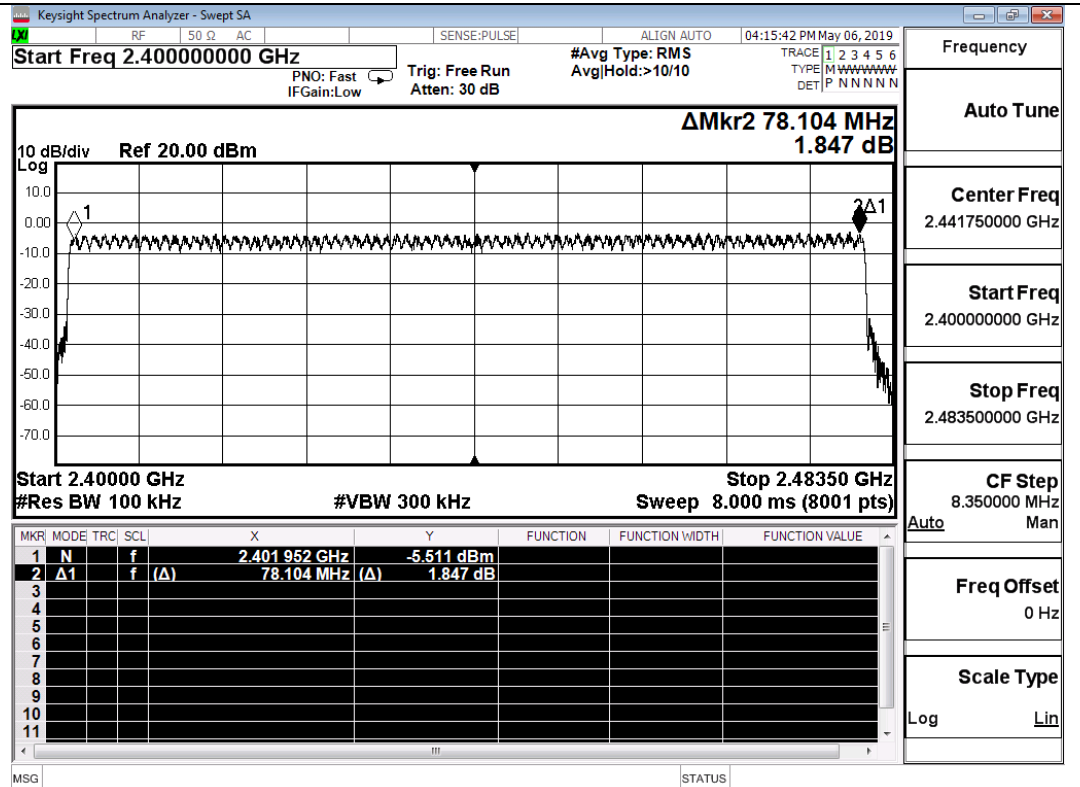


A.4 Hopping Channel Number

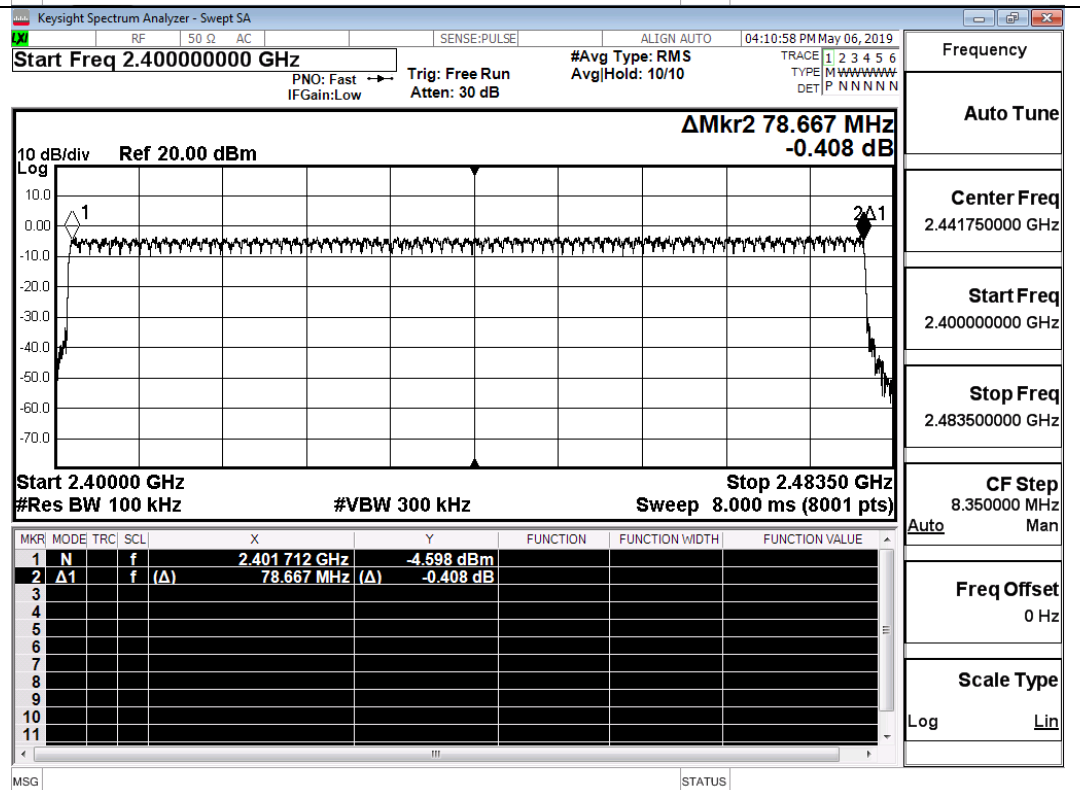
Mode	Channel.	Number of Hopping Channel [N]	Limit [N]	Verdict
GFSK	Hop	79	≥ 15	PASS
$\pi/4$ DQPSK	Hop	79	≥ 15	PASS
8DPSK	Hop	79	≥ 15	PASS



$\pi/4$ DQPSK/Hop



8DPSK/Hop

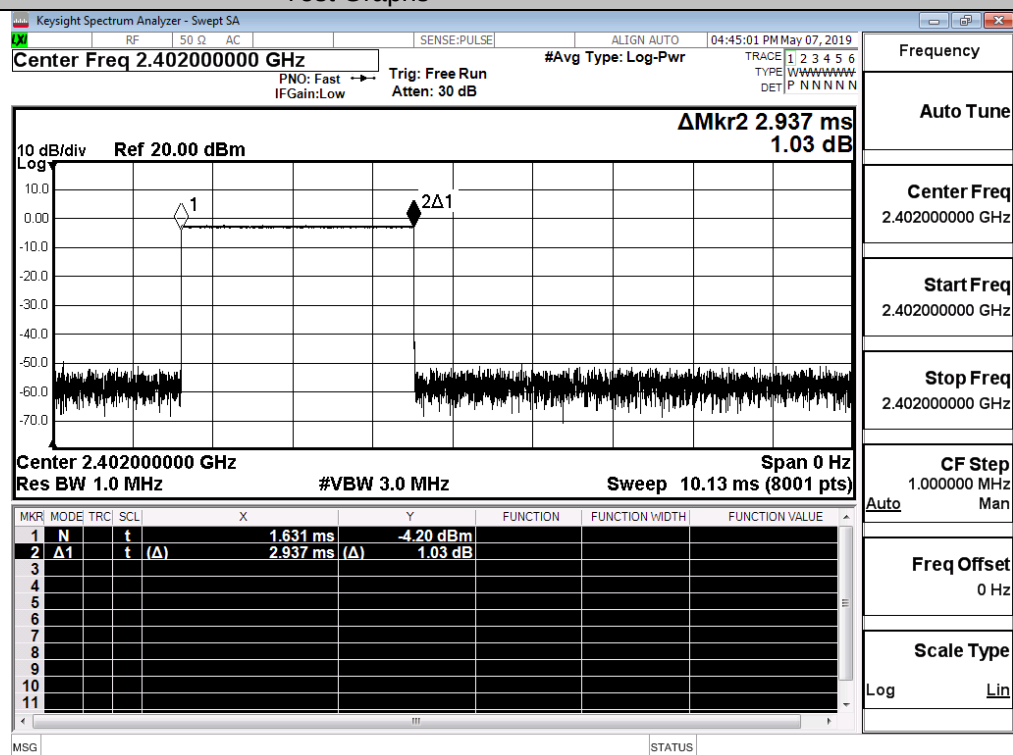


A.5 Dwell Time

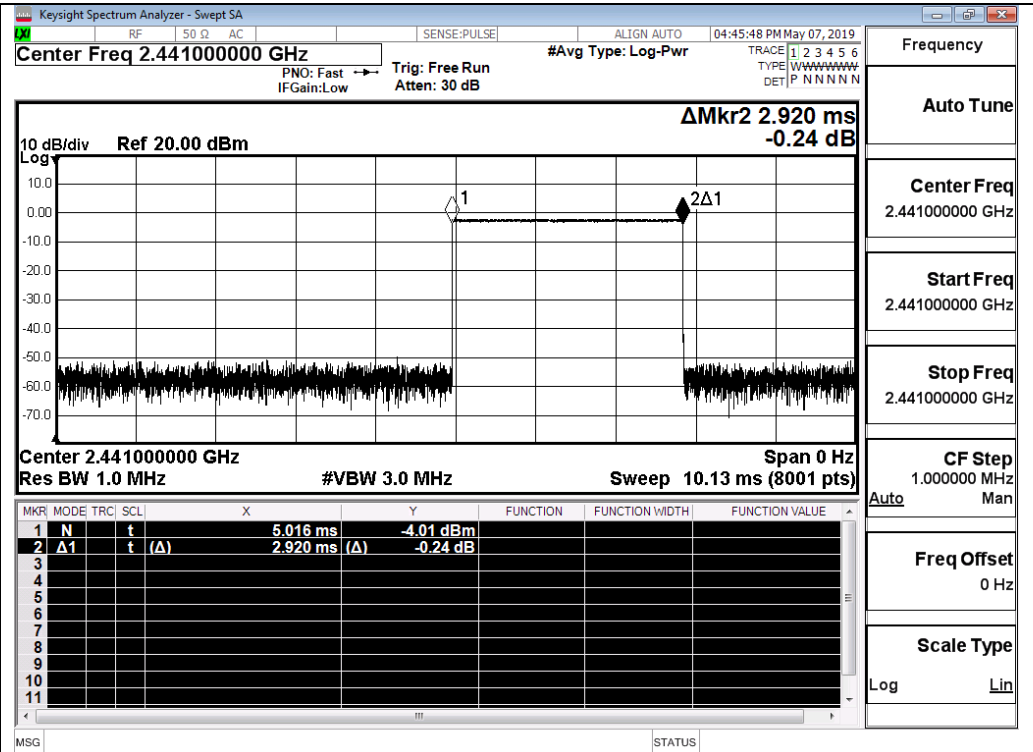
Mode	Packet	Channel	Burst Width [ms/hop/ch]	Total Hops[hop*ch]	Dwell Time[s]	Limit [s]	Verdict
GFSK	DH5	LCH	2.94	106.7	0.314	0.4	PASS
	DH5	MCH	2.92	106.7	0.312	0.4	PASS
	DH5	HCH	2.92	106.7	0.312	0.4	PASS
$\pi/4$ DQPSK	2DH5	LCH	2.93	106.7	0.313	0.4	PASS
	2DH5	MCH	2.92	106.7	0.312	0.4	PASS
	2DH5	HCH	2.92	106.7	0.312	0.4	PASS
8DPSK	3DH5	LCH	2.93	106.7	0.313	0.4	PASS
	3DH5	MCH	2.90	106.7	0.309	0.4	PASS
	3DH5	HCH	2.92	106.7	0.312	0.4	PASS

Test Graphs

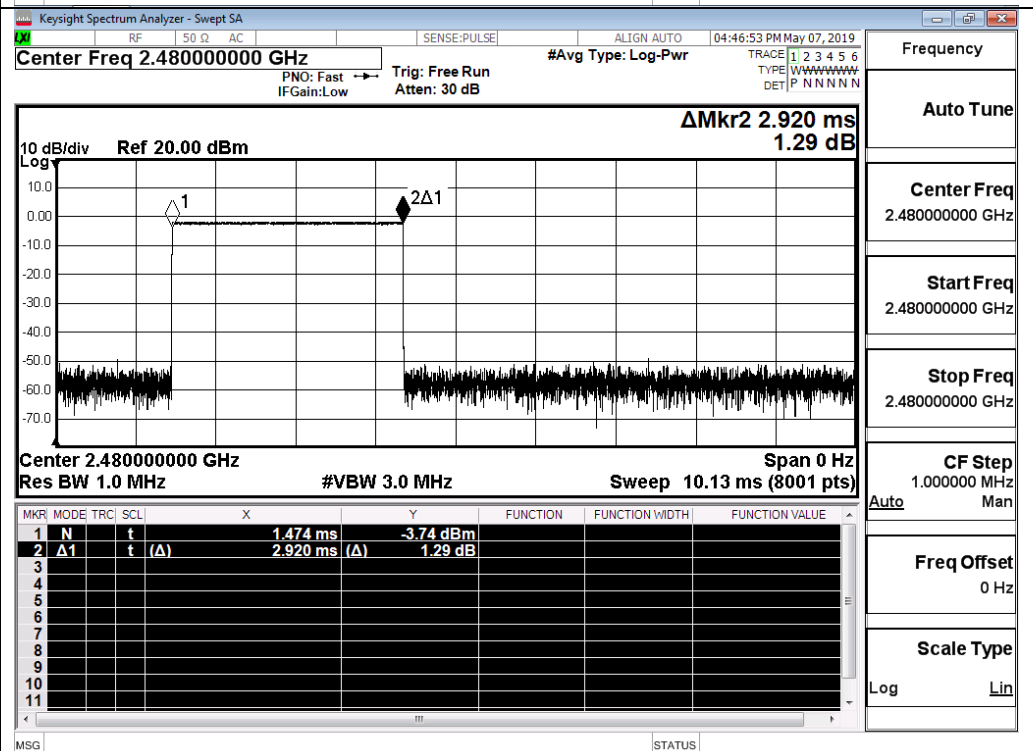
GFSK_DH5/LCH



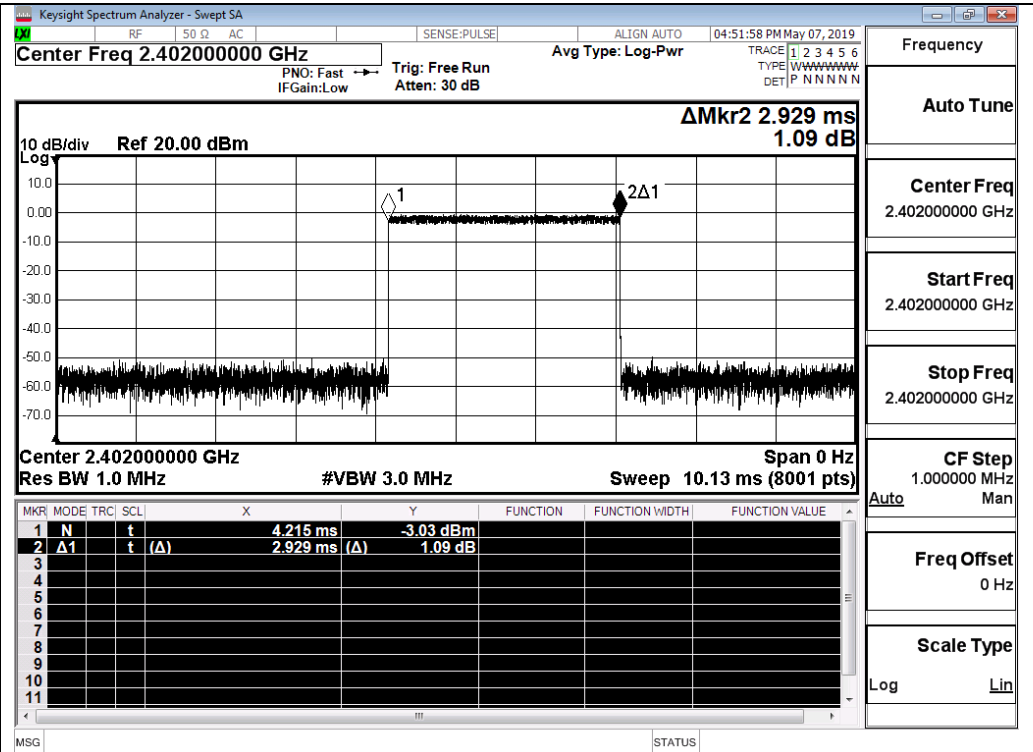
GFSK_DH5/MCH



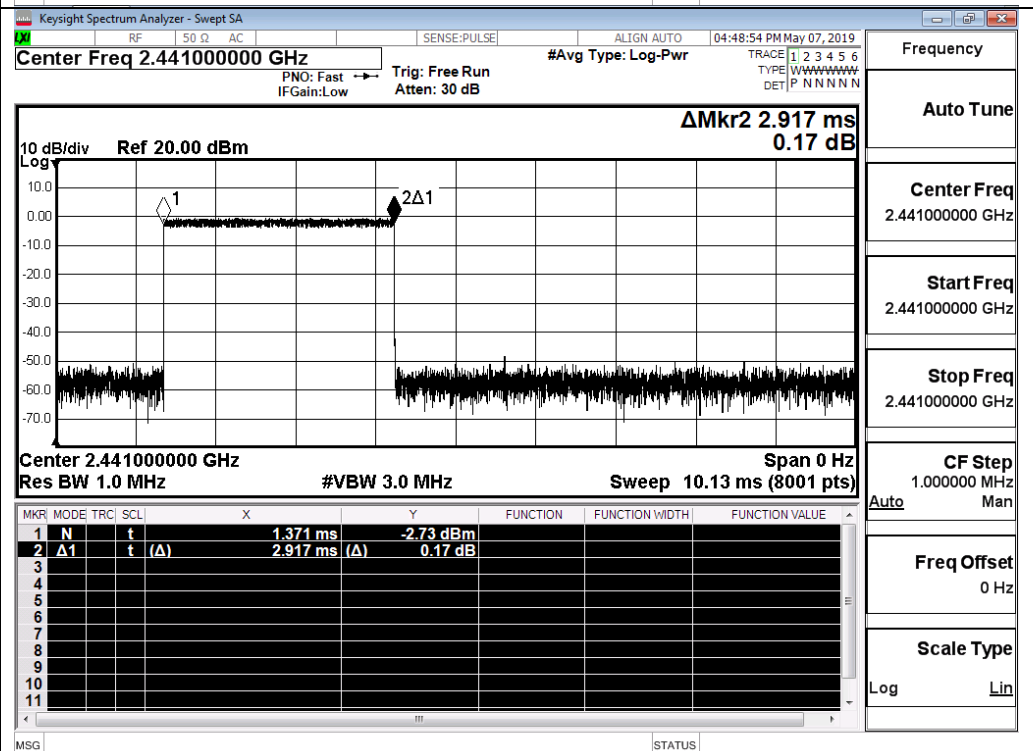
GFSK_DH5/HCH



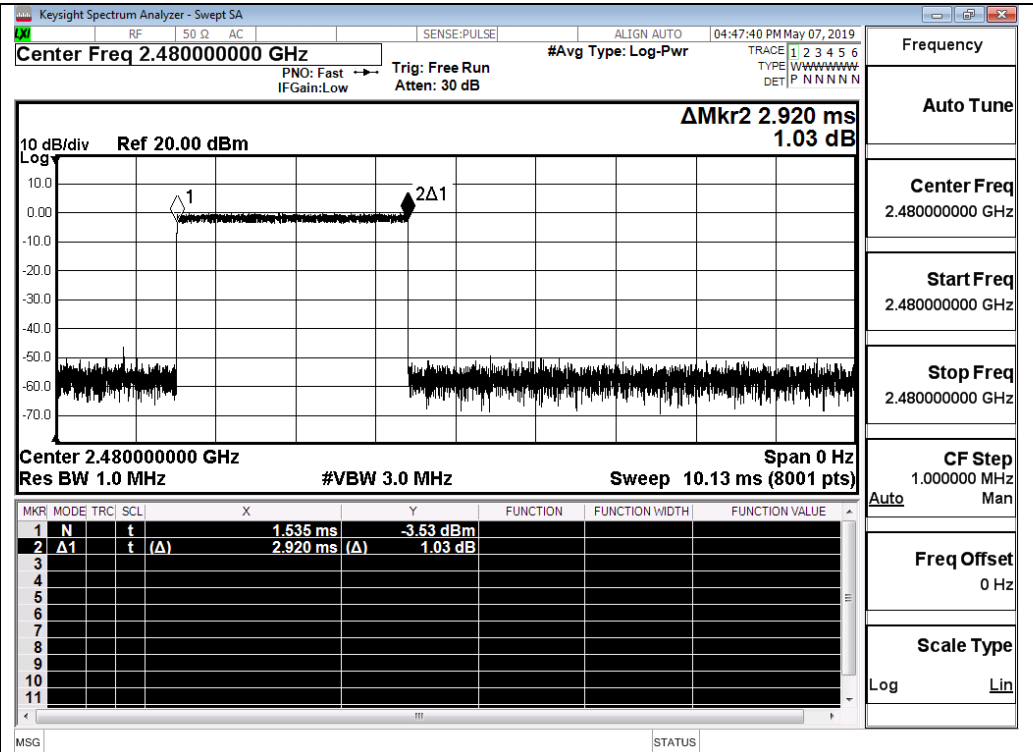
$\pi/4$ DQPSK
_2DH5/LCH



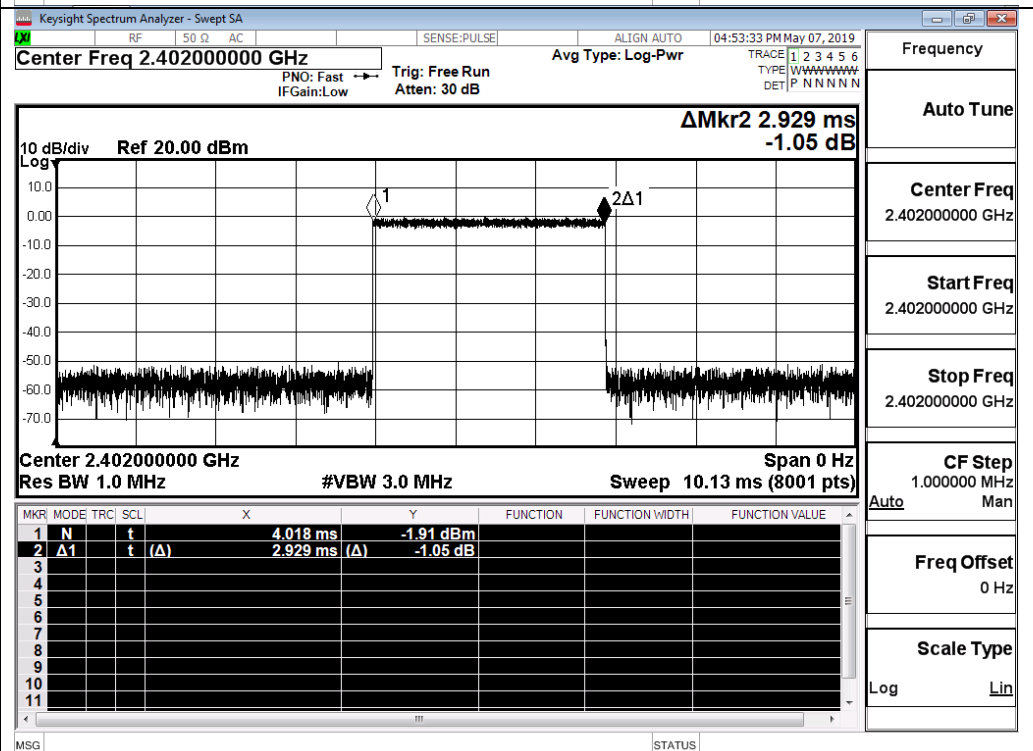
$\pi/4$ DQPSK
_2DH5/MCH



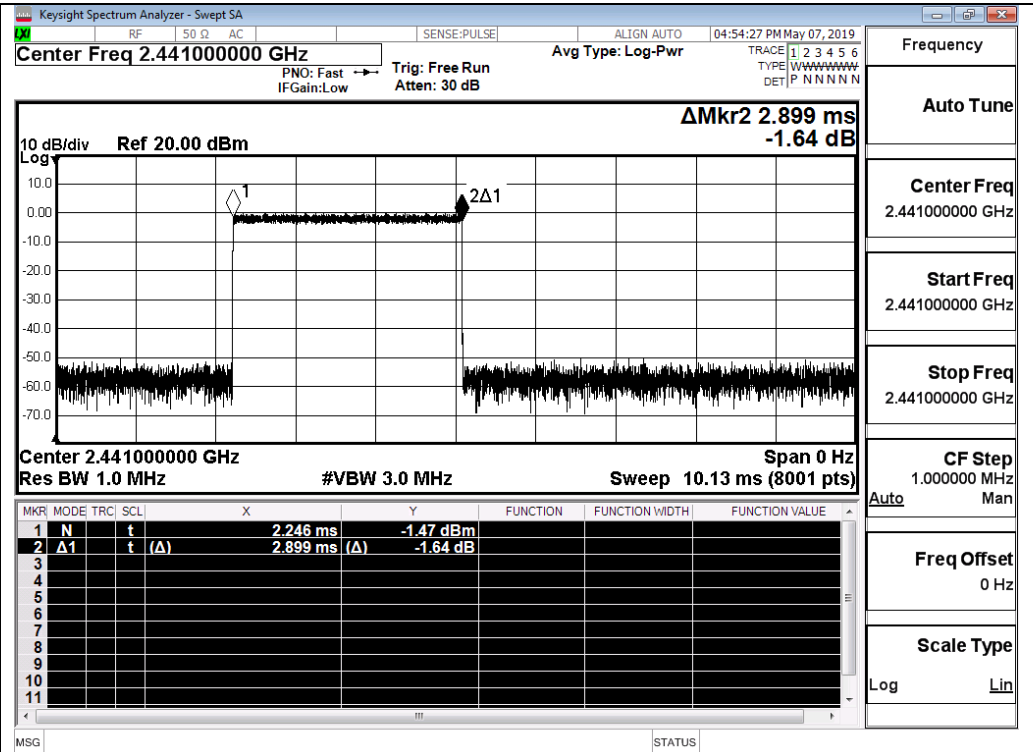
$\pi/4$ DQPSK
_2DH5/HCH



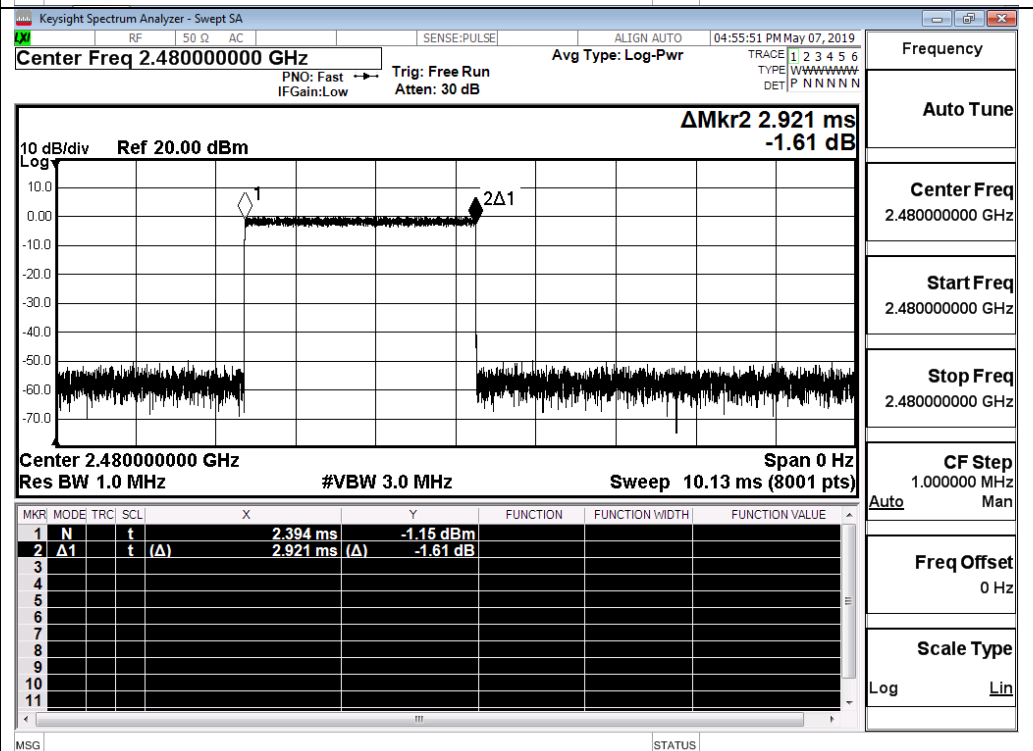
8DPSK _3DH5/LCH



8DPSK_3DH5/MCH



8DPSK_3DH5/HCH

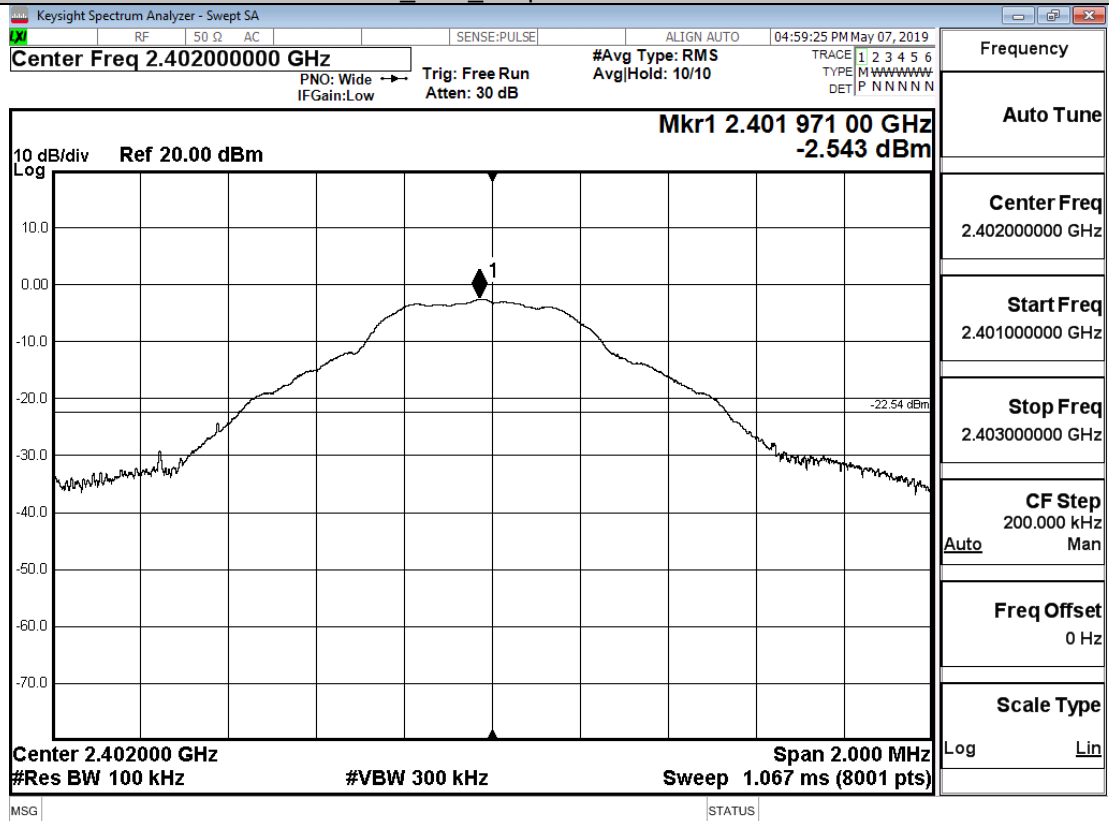


A.6 RF Conducted Spurious Emissions

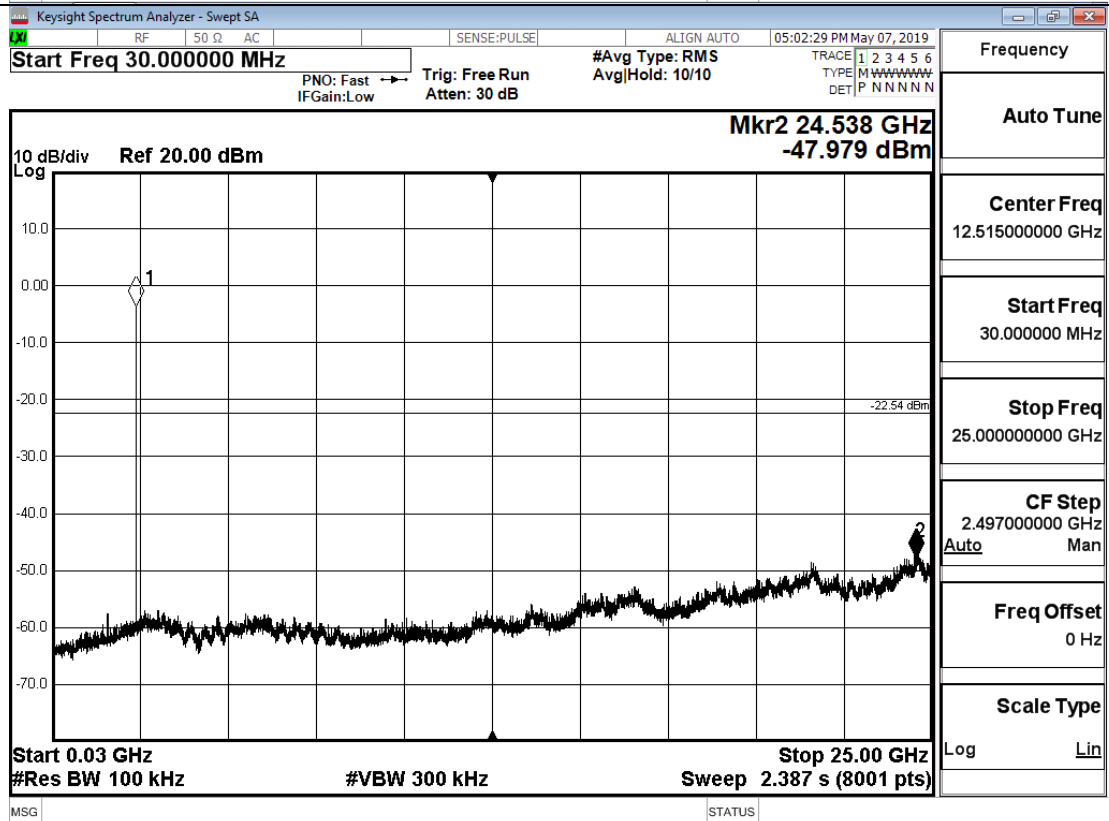
Mode	Channel	Pref [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
GFSK	LCH	-2.543	-47.979	-22.54	PASS
	MCH	-2.455	-45.639	-22.46	PASS
	HCH	-2.107	-43.821	-22.11	PASS
$\pi/4$ DQPSK	LCH	-4.203	-46.102	-24.20	PASS
	MCH	-3.977	-45.855	-23.98	PASS
	HCH	-3.583	-46.458	-23.58	PASS
8DPSK	LCH	-4.049	-48.294	-24.05	PASS
	MCH	-3.904	-46.830	-23.90	PASS
	HCH	-3.659	-46.275	-23.66	PASS

GFSK_LCH_Graphs

Pref

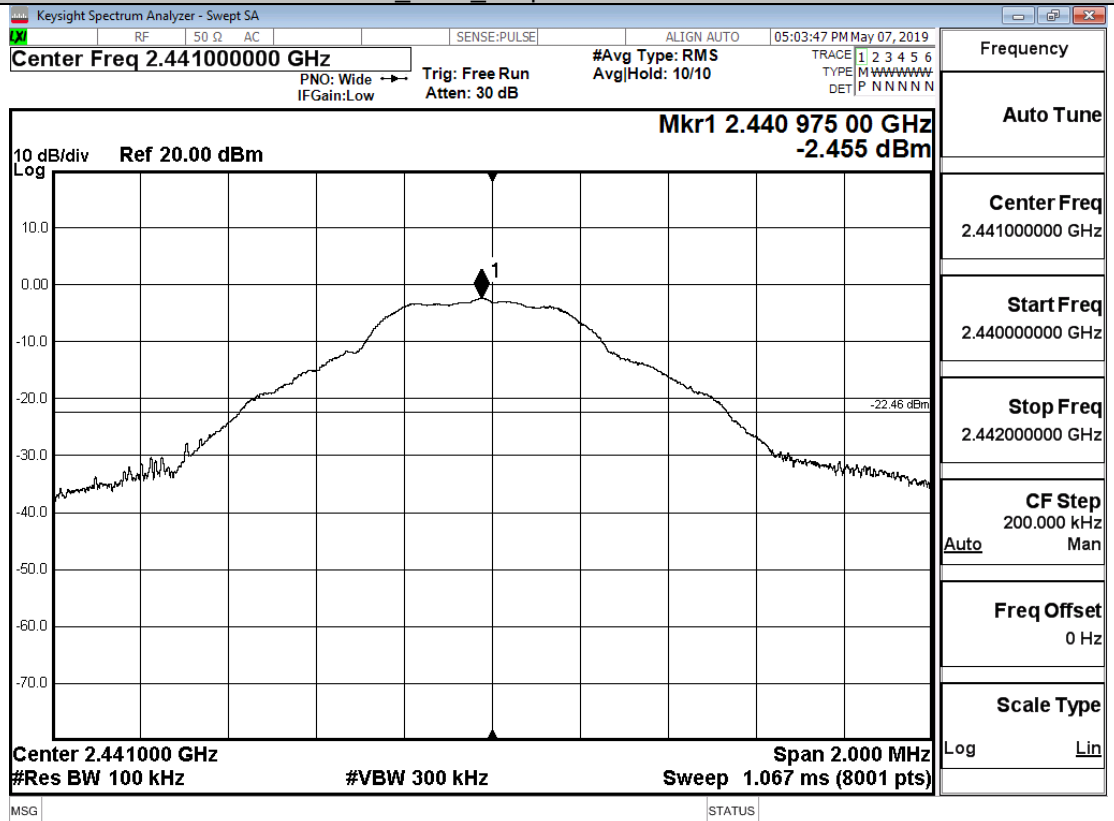


Puw

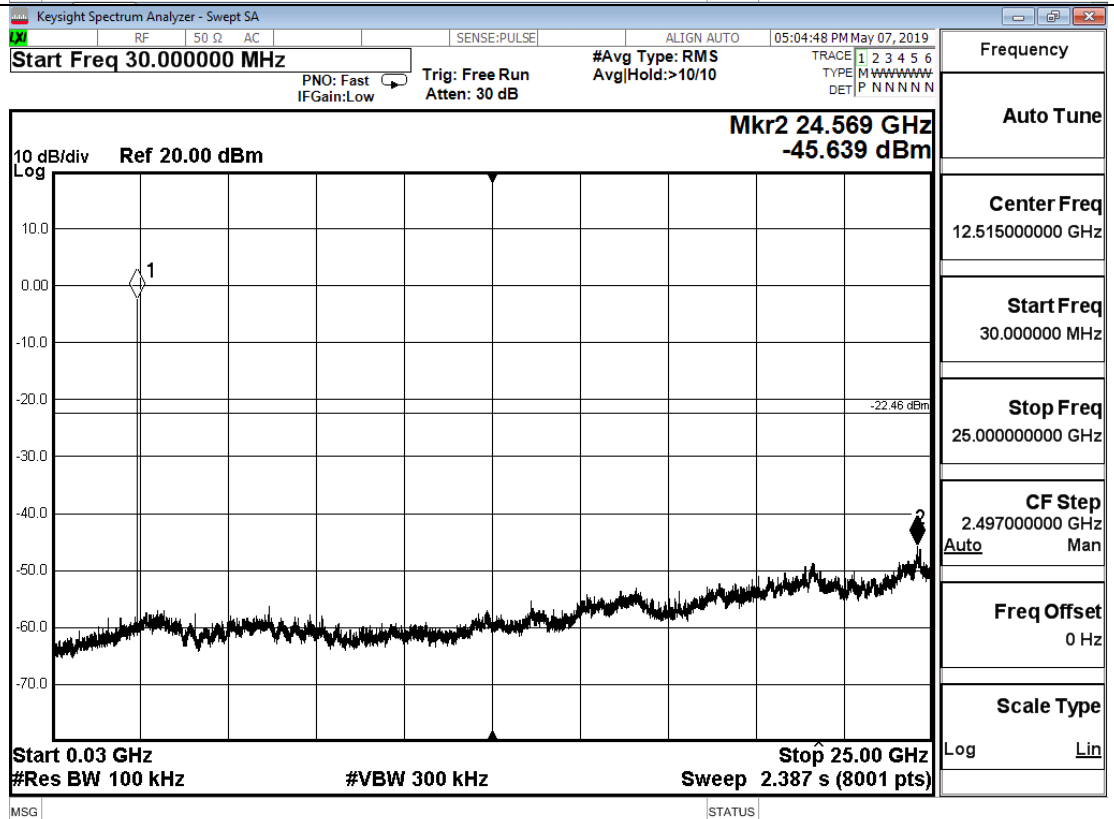


GFSK_MCH_Graphs

Pref

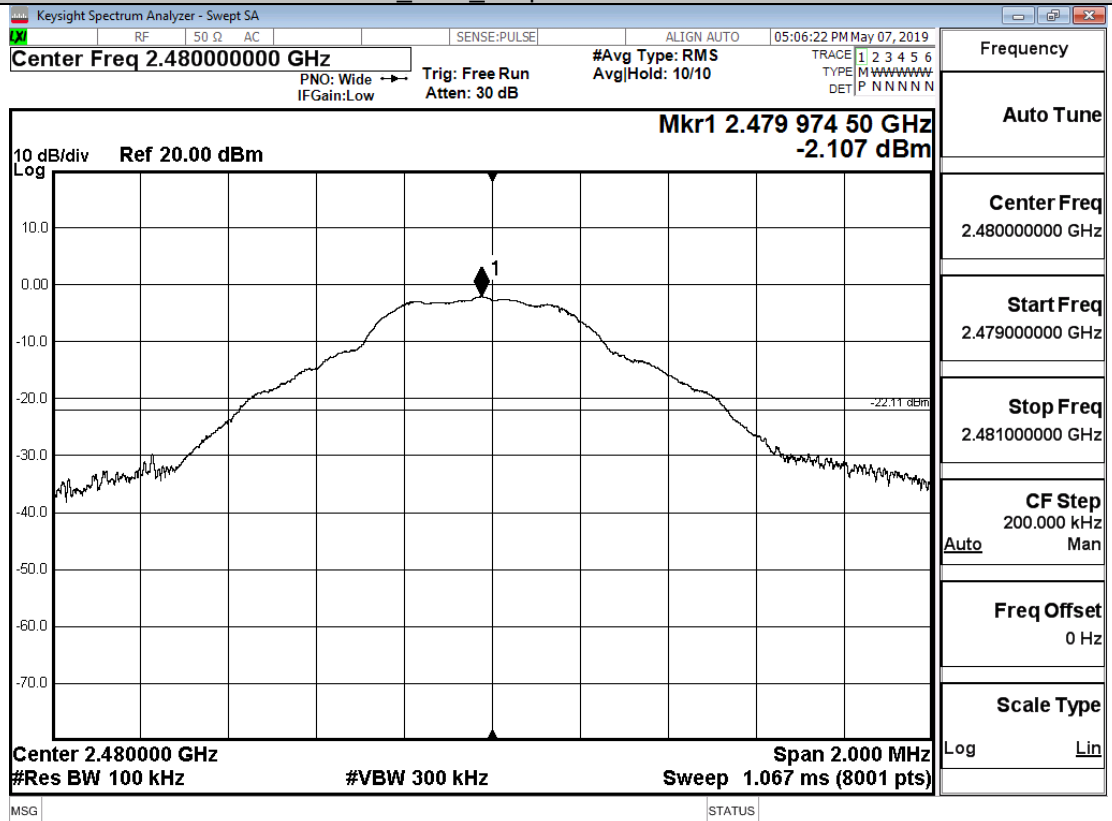


Puw

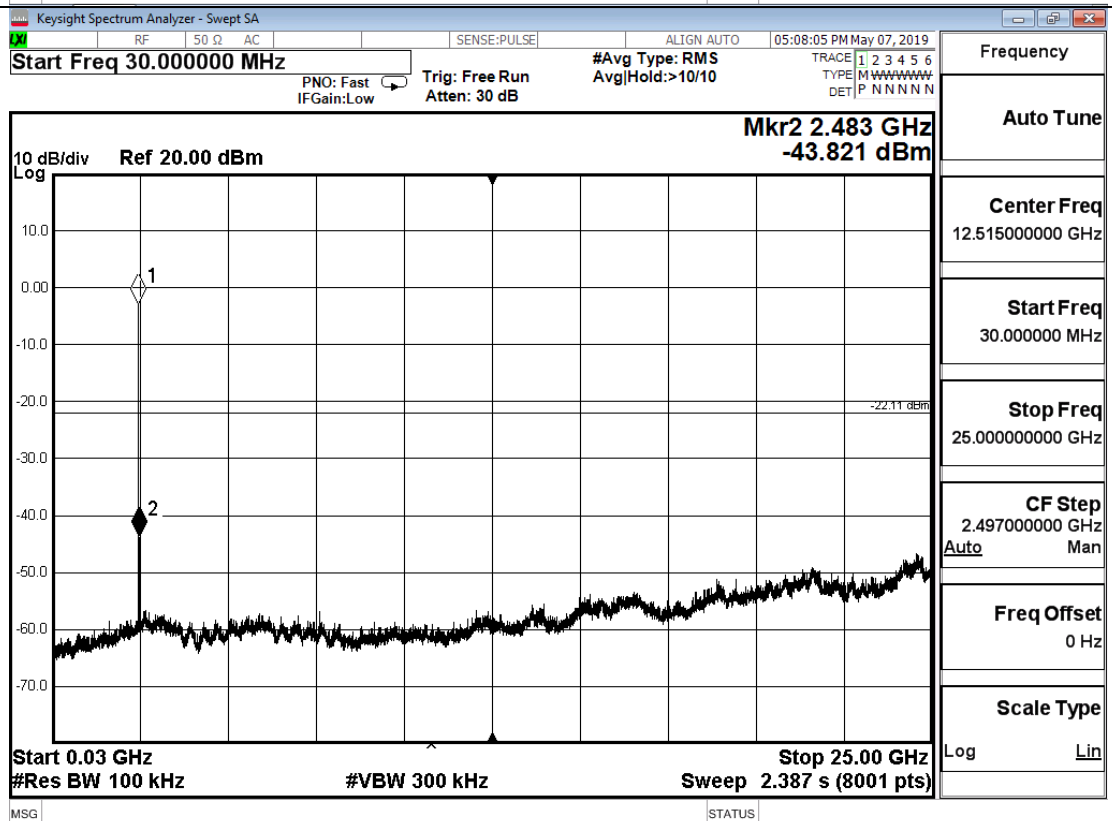


GFSK_HCH_Graphs

Pref

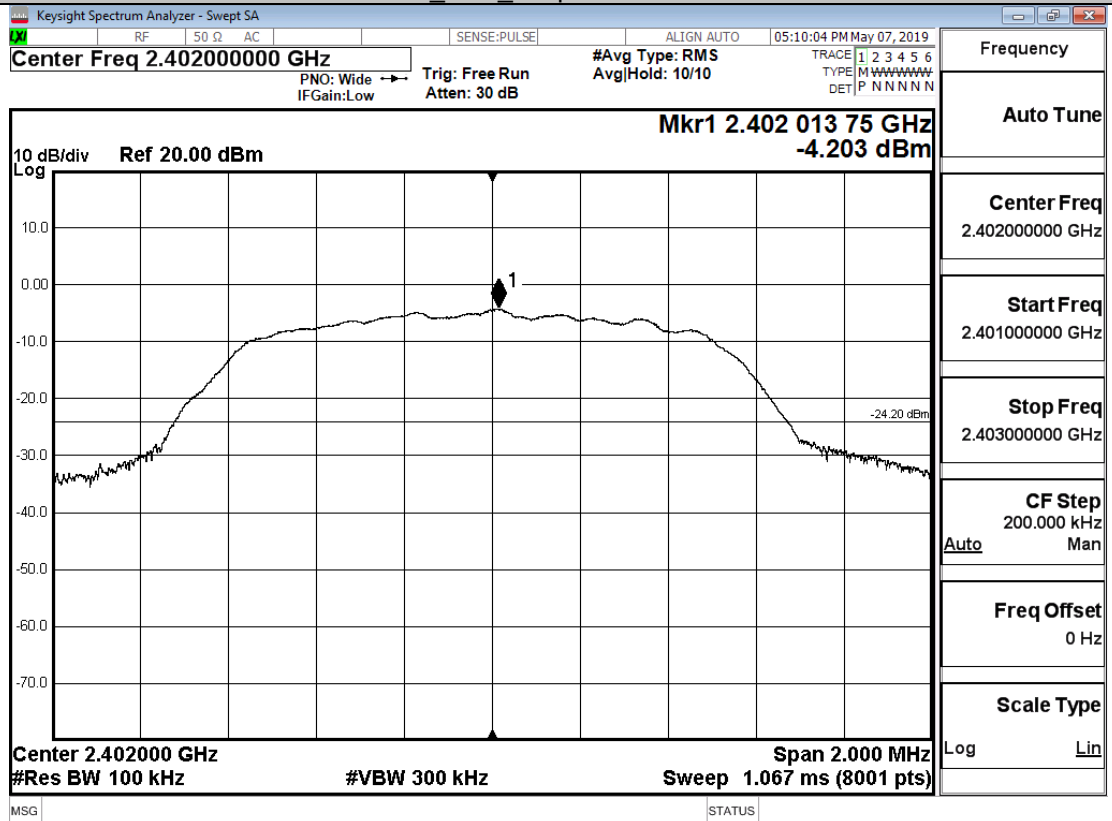


Puw

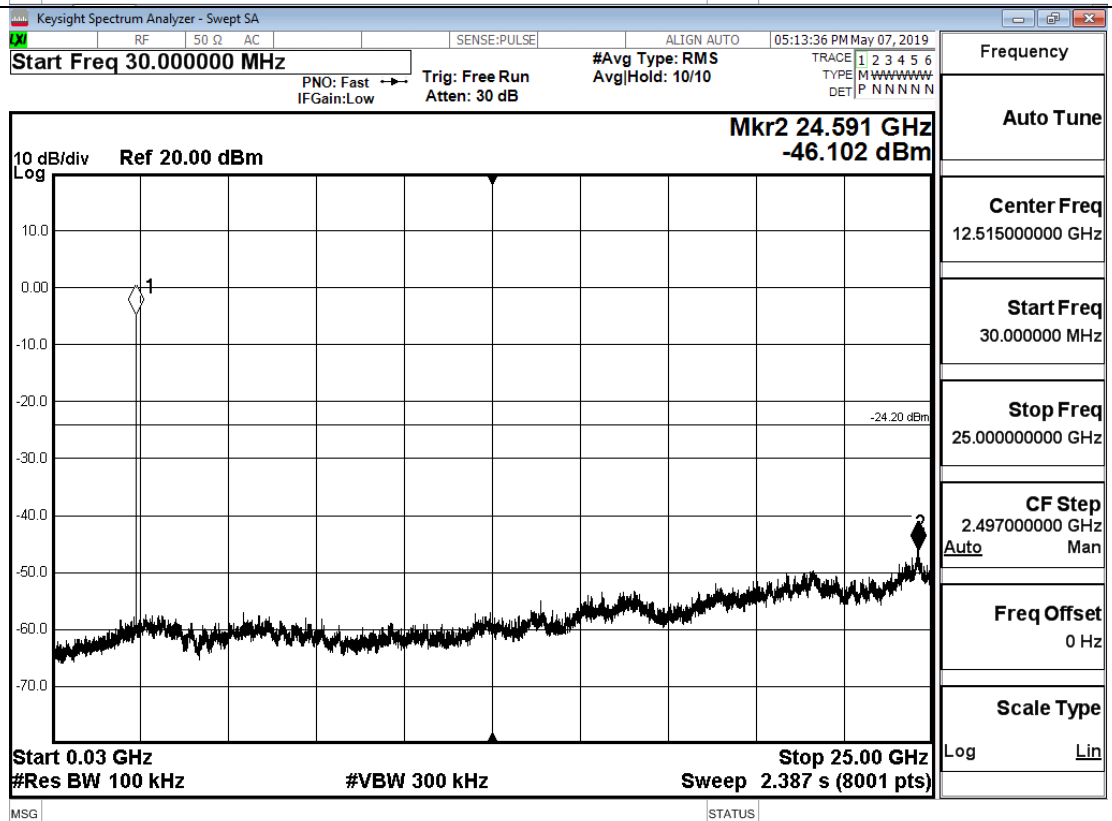


$\pi/4$ DQPSK_LCH_Graphs

Pref

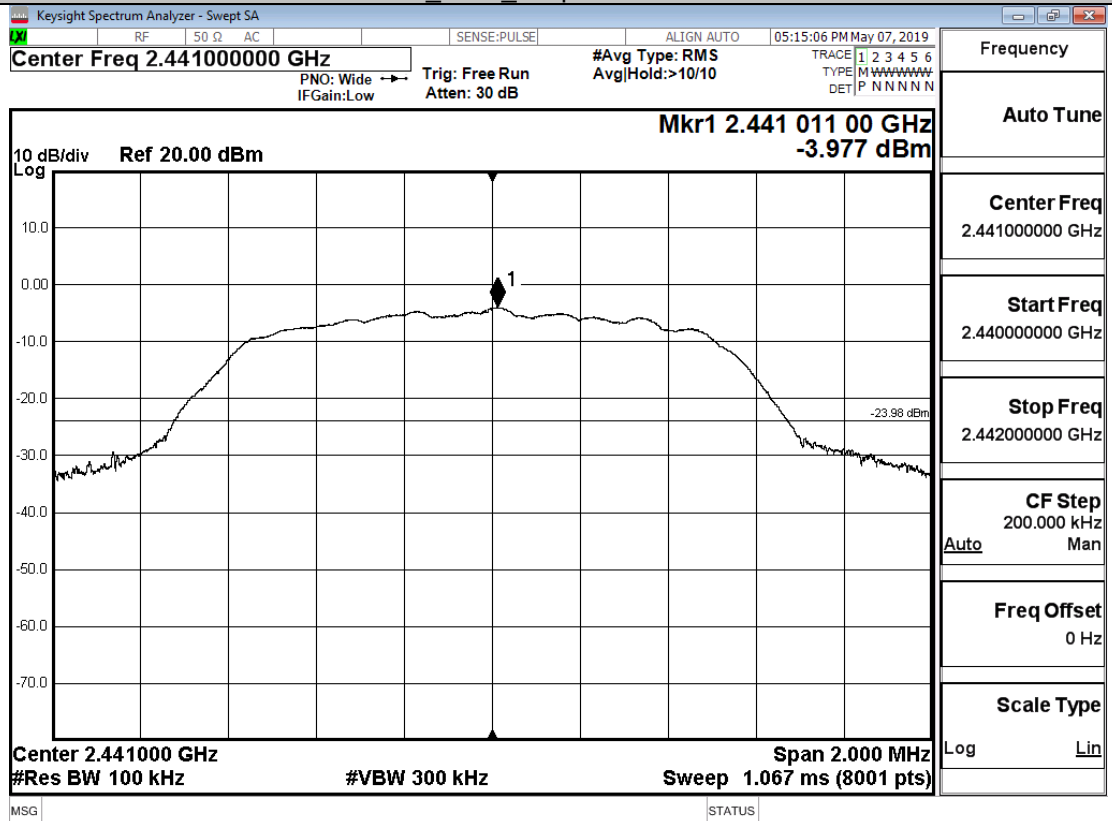


Puw

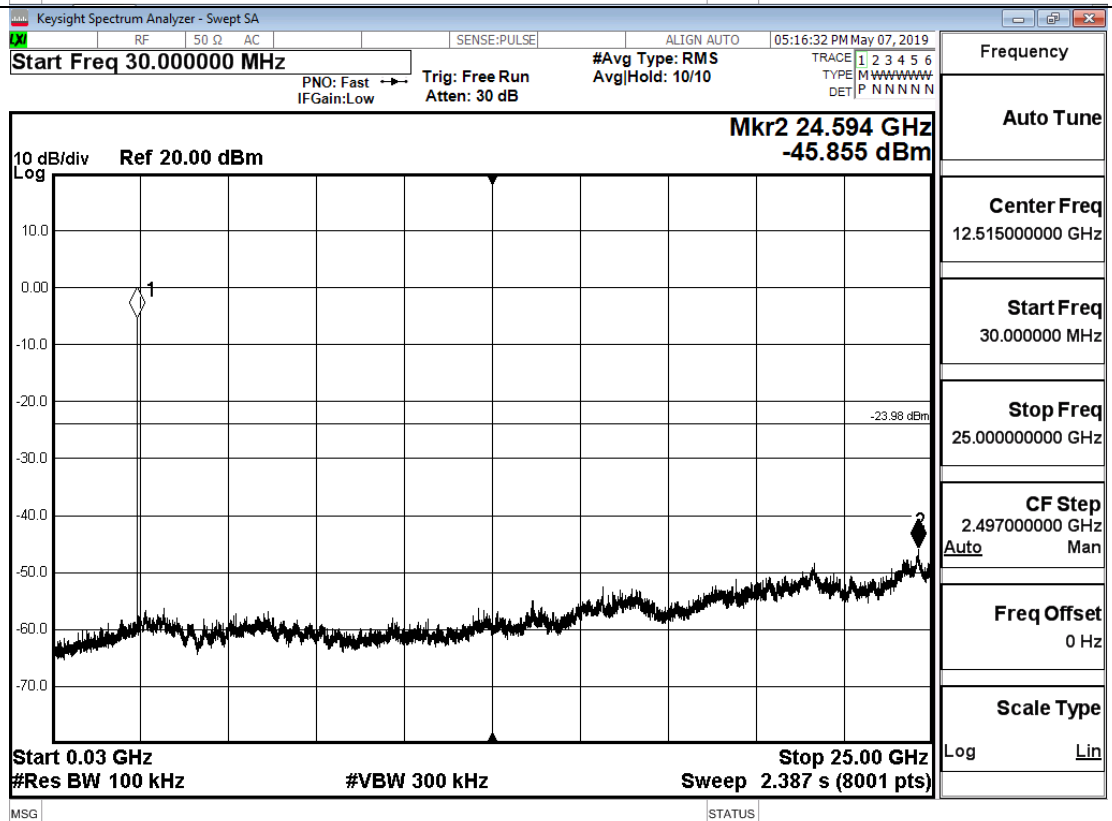


π /4DQPSK_MCH_Graphs

Pref

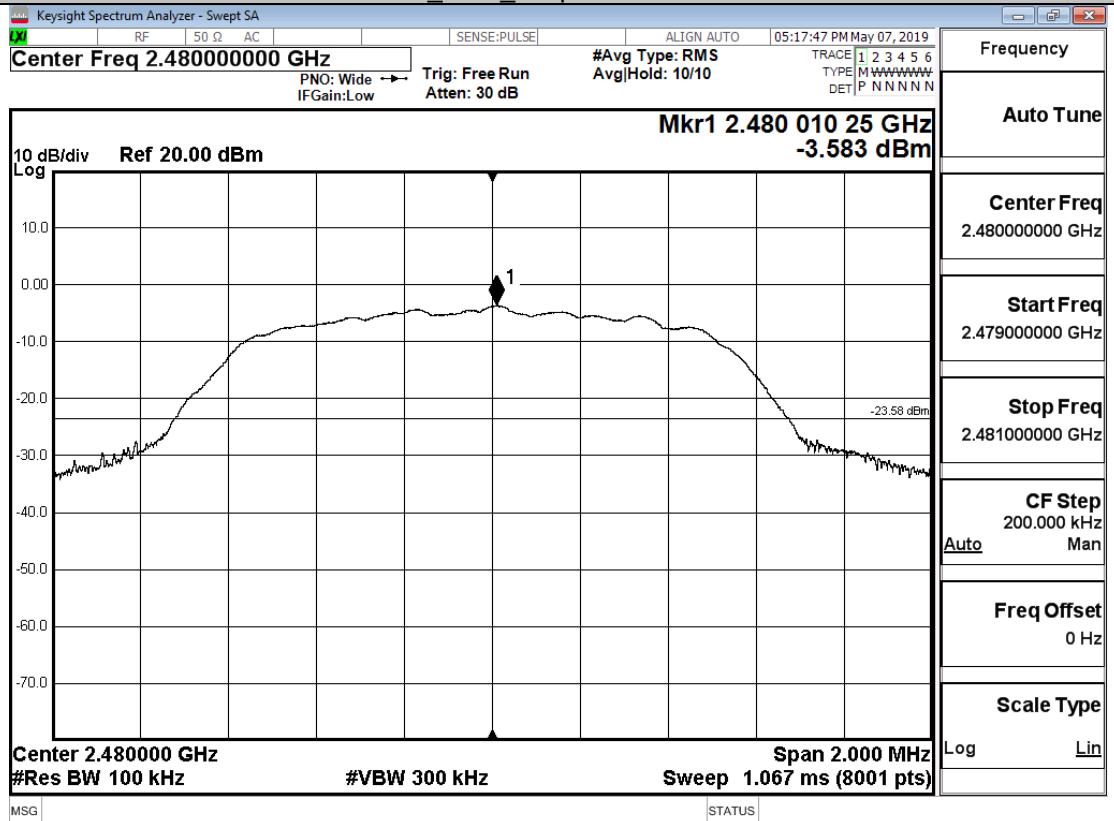


Puw

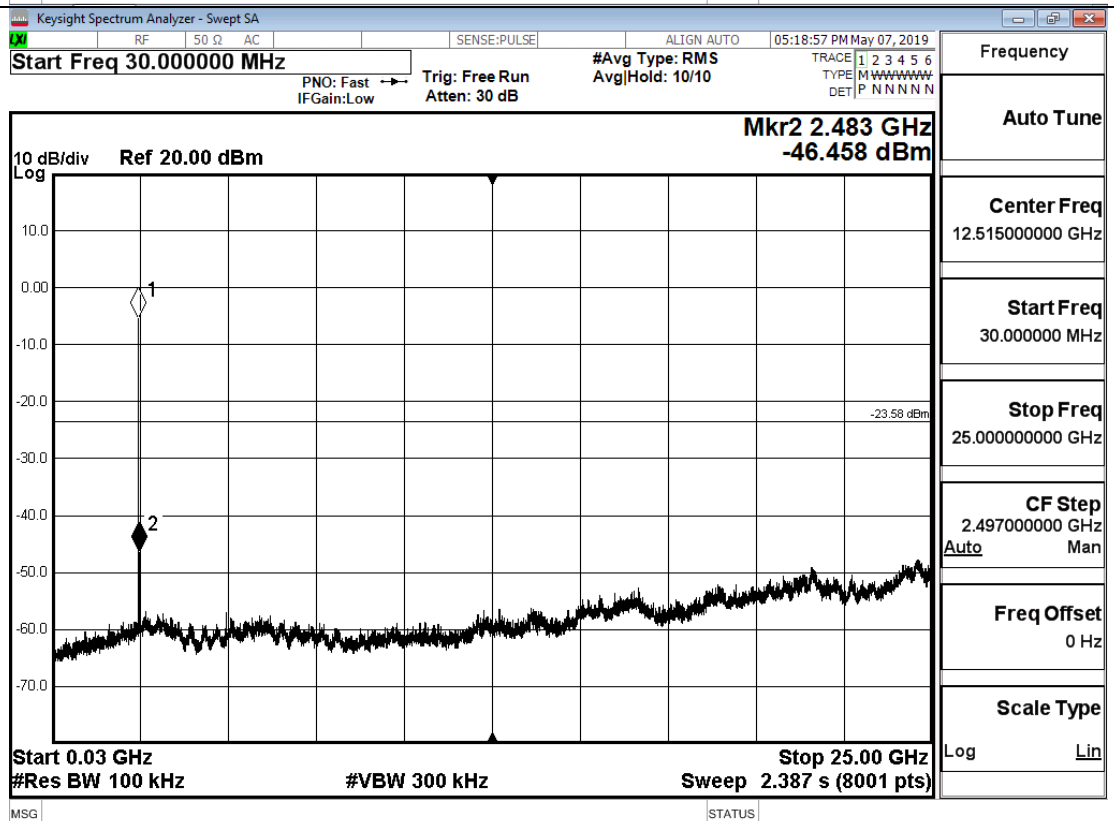


$\pi/4$ DQPSK_HCH_Graphs

Pref

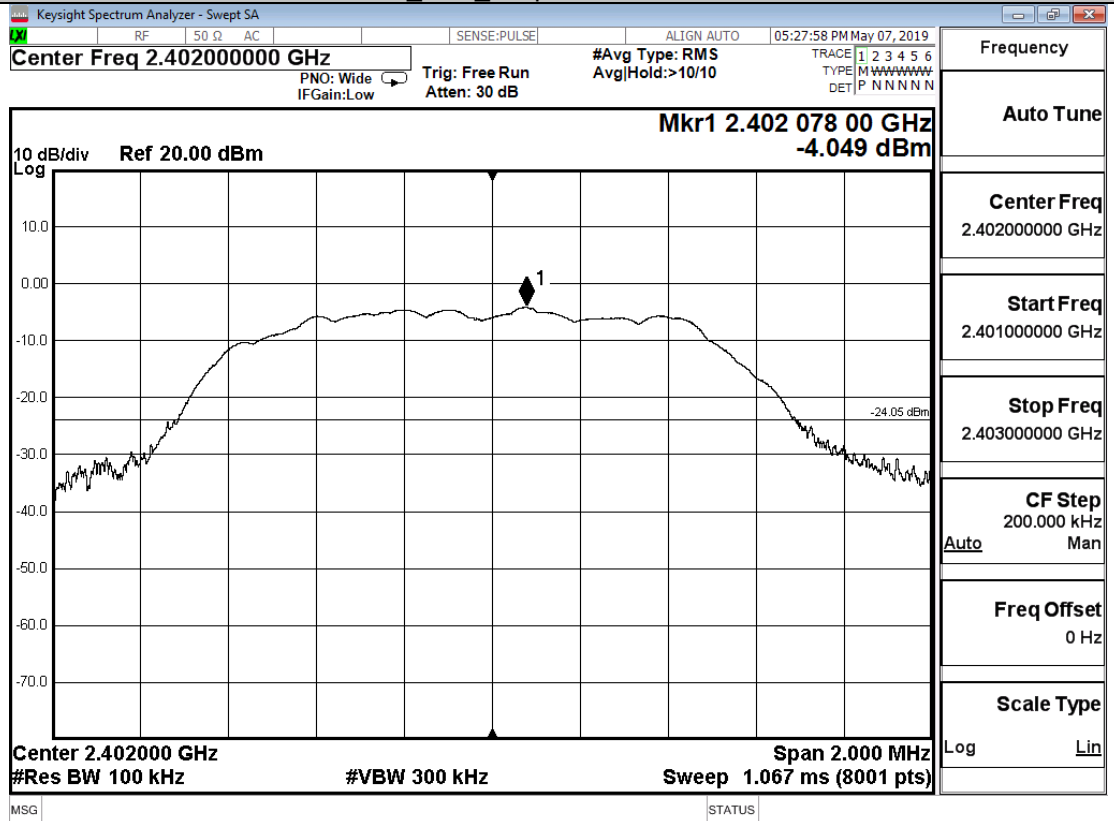


Puw

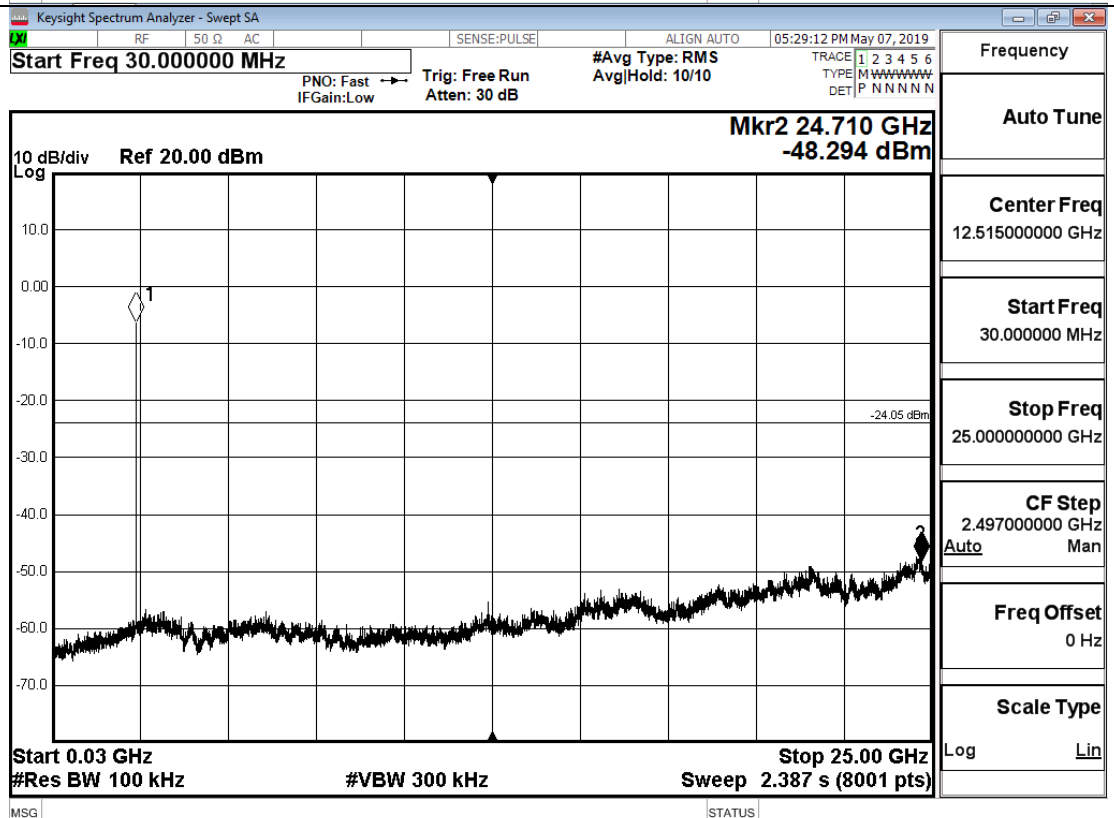


8DPSK_LCH_Graphs

Pref

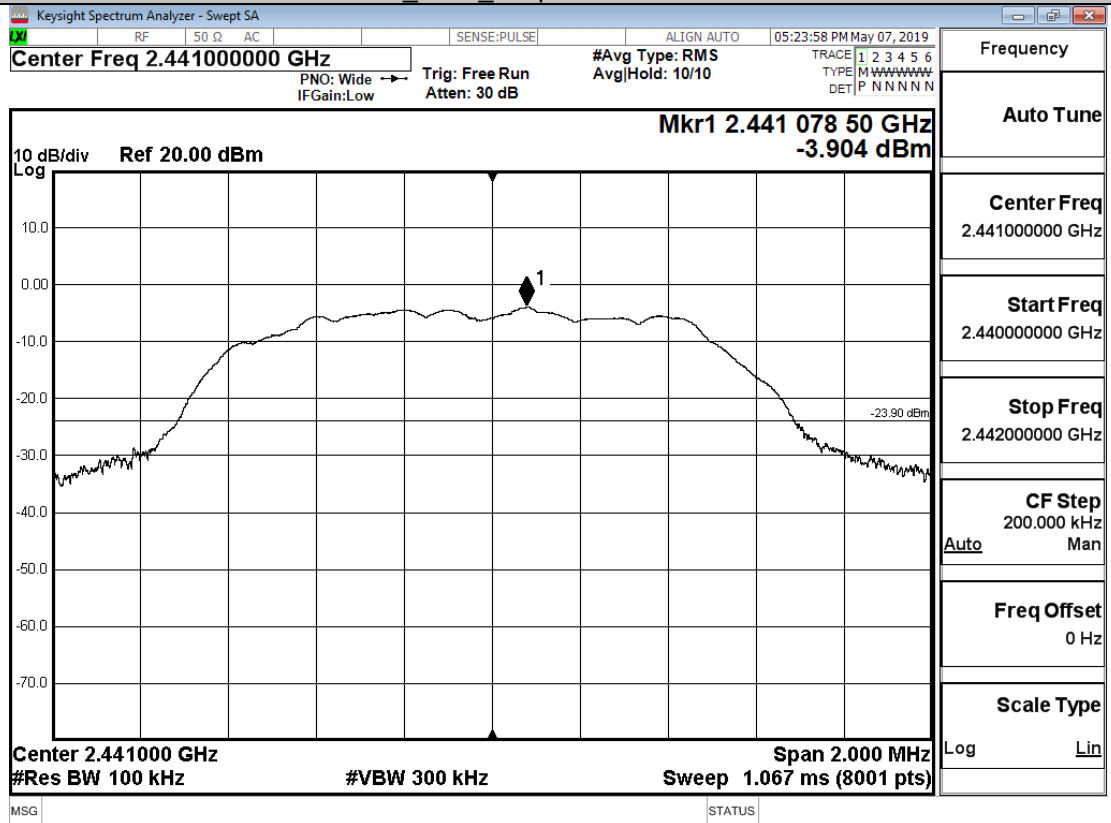


Puw

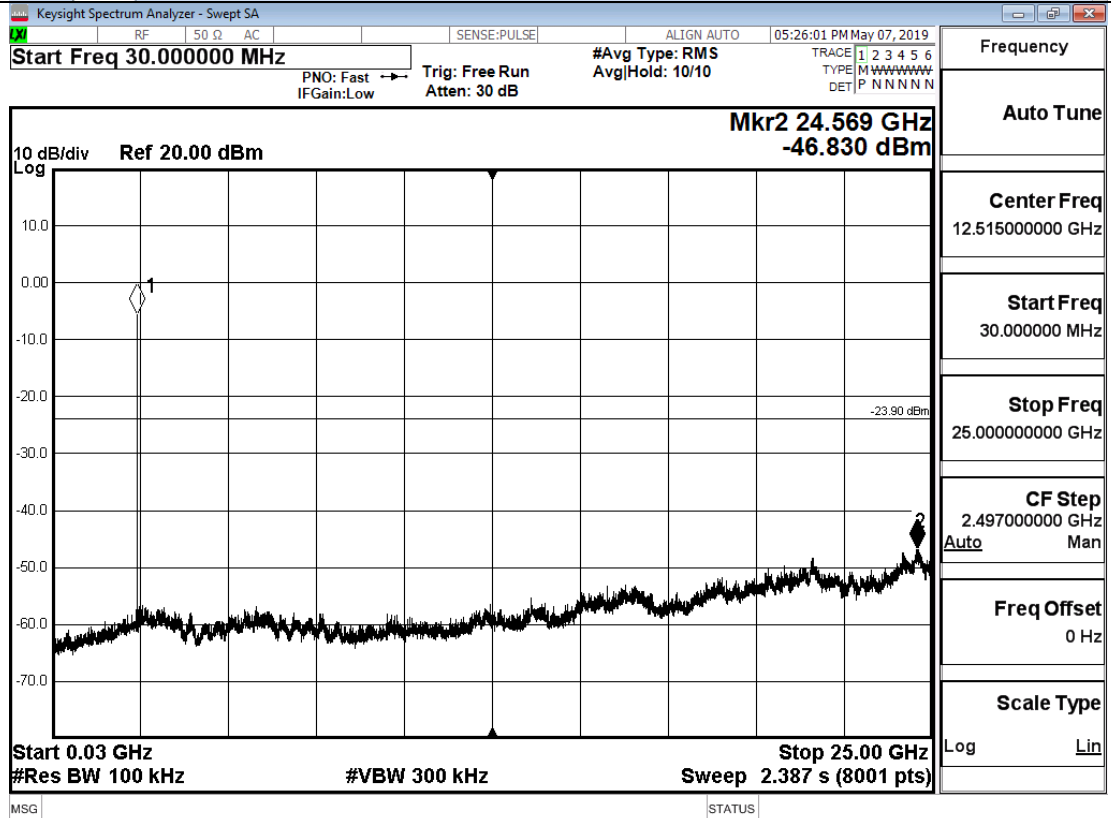


8DPSK_MCH_Graphs

Pref

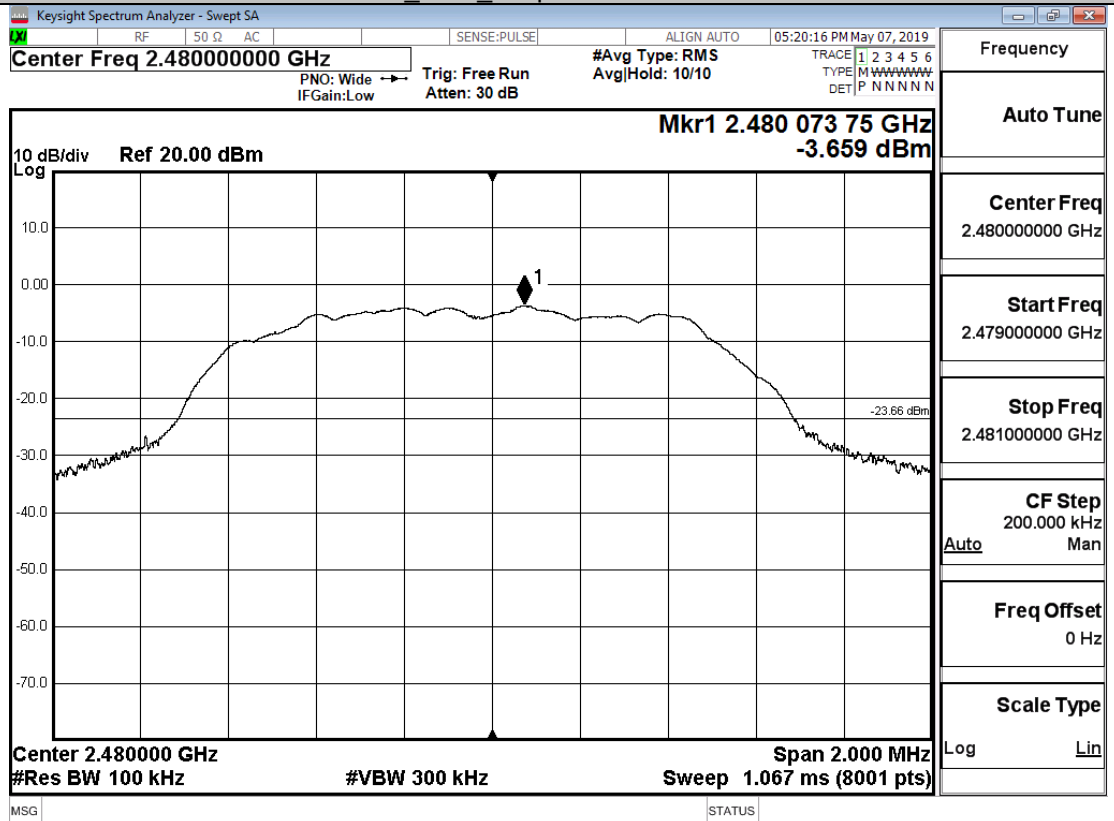


Puw

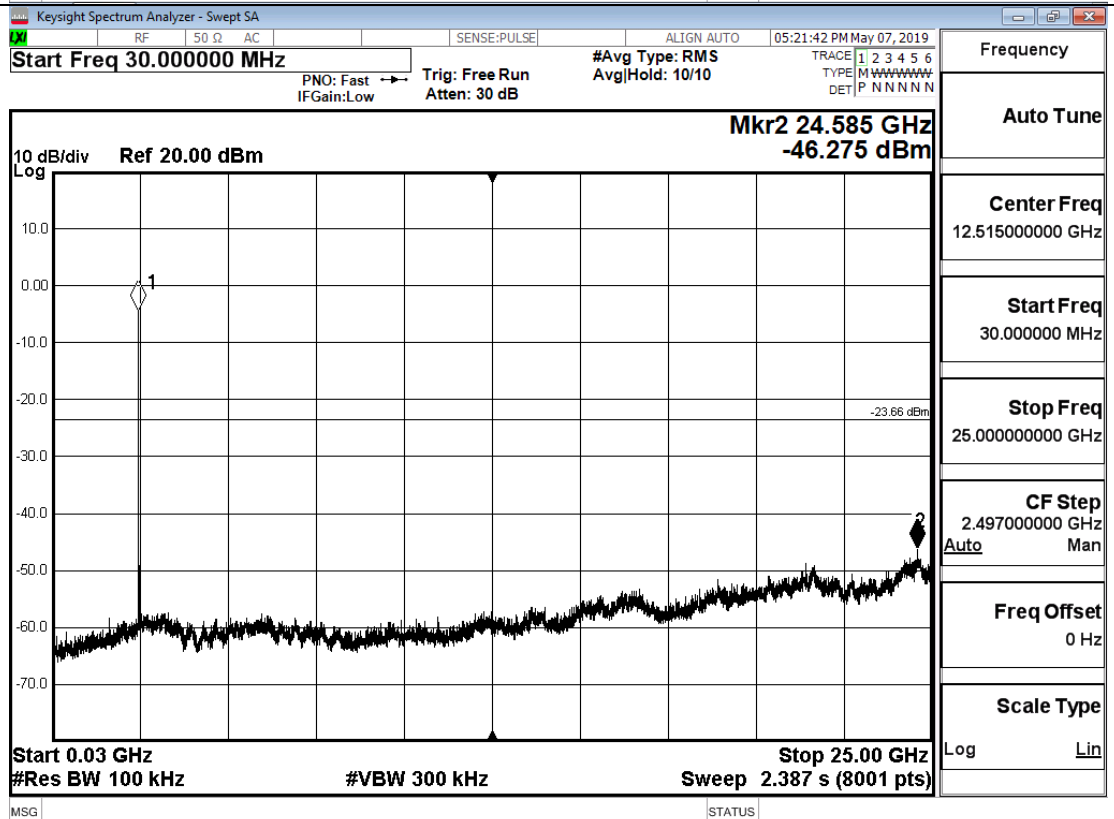


8DPSK_HCH_Graphs

Pref



Puw

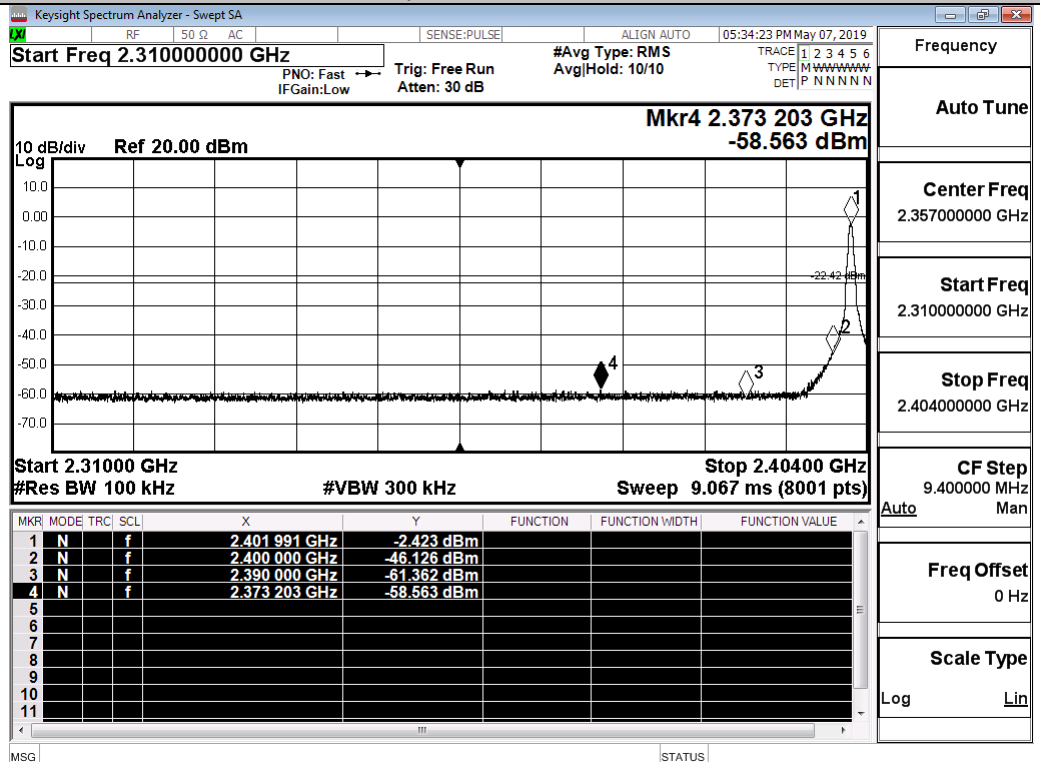


A.7 Band-edge for RF Conducted Emissions

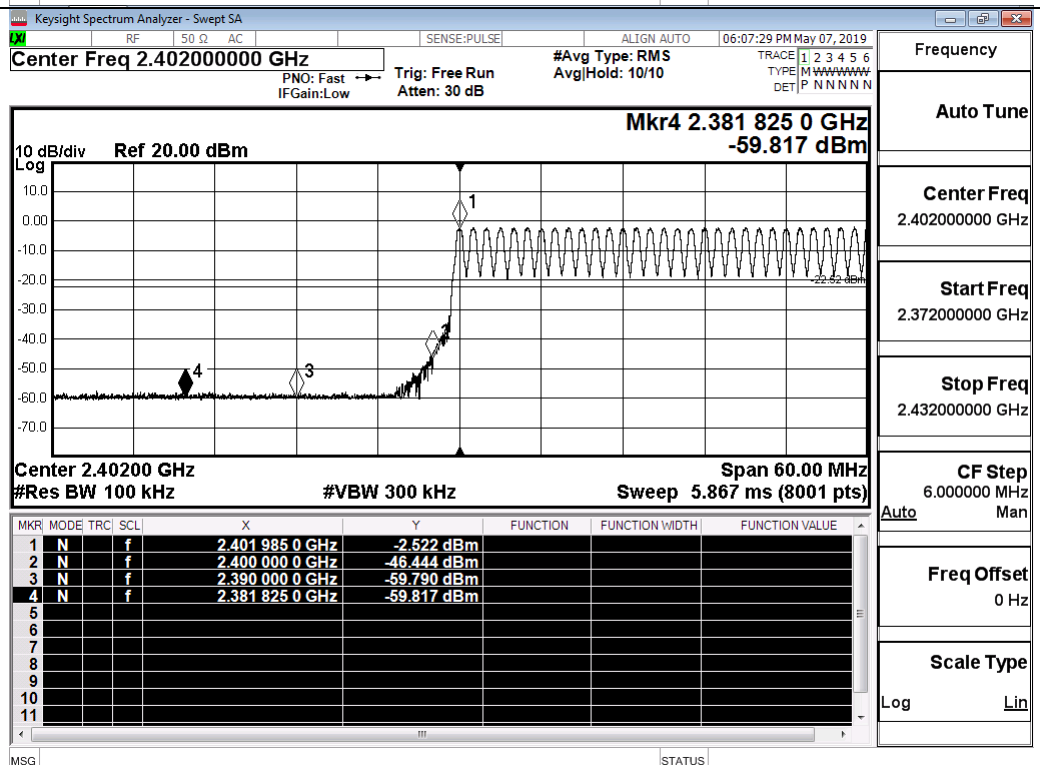
Mode	Channel	Carrier Frequency [MHz]	Carrier Power [dBm]	Frequency Hopping	Max Spurious Level [dBm]	Limit [dBm]	Verdict
GFSK	LCH	2402	-2.423	Off	-46.126	-22.42	PASS
			-2.522	On	-46.444	-22.52	PASS
	HCH	2480	-1.938	Off	-52.661	-21.94	PASS
			-2.519	On	-53.540	-22.52	PASS
$\pi/4$ DQPSK	LCH	2402	-3.859	Off	-43.725	-23.86	PASS
			-4.608	On	-45.337	-24.61	PASS
	HCH	2480	-4.179	Off	-51.406	-24.18	PASS
			-3.398	On	-56.223	-23.40	PASS
8DPSK	LCH	2402	-4.098	Off	-43.532	-24.10	PASS
			-4.698	On	-44.708	-24.70	PASS
	HCH	2480	-3.520	Off	-51.074	-23.52	PASS
			-4.001	On	-51.741	-24.00	PASS

Test Graphs

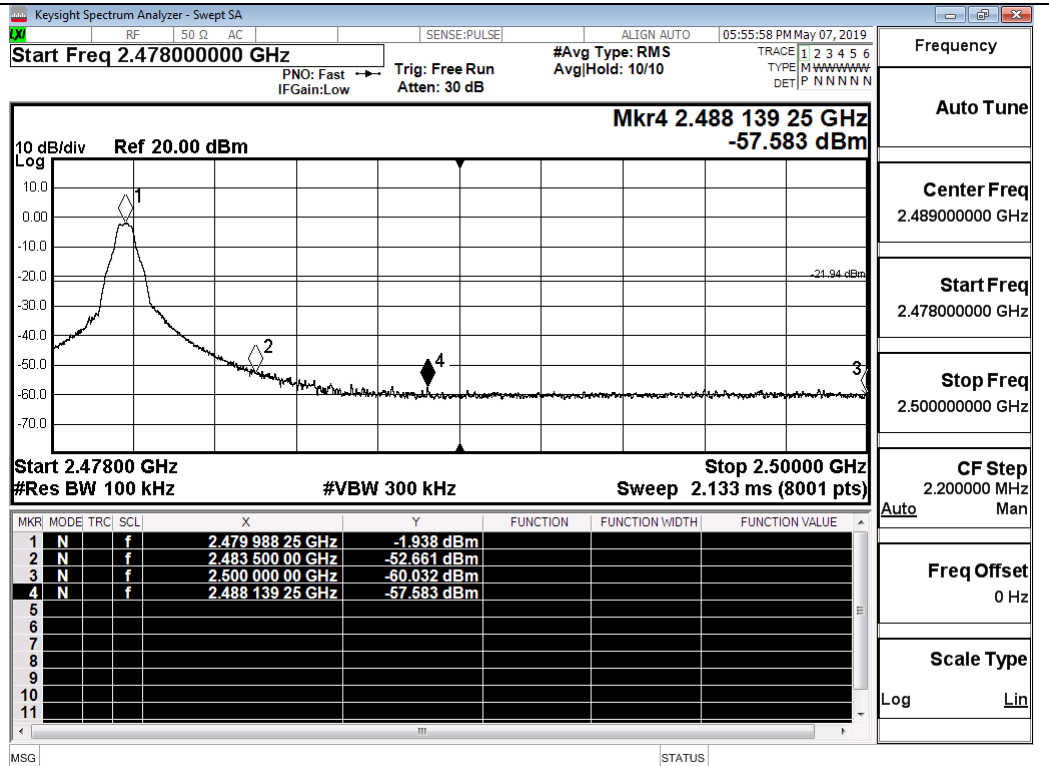
GFSK/LCH/No Hop



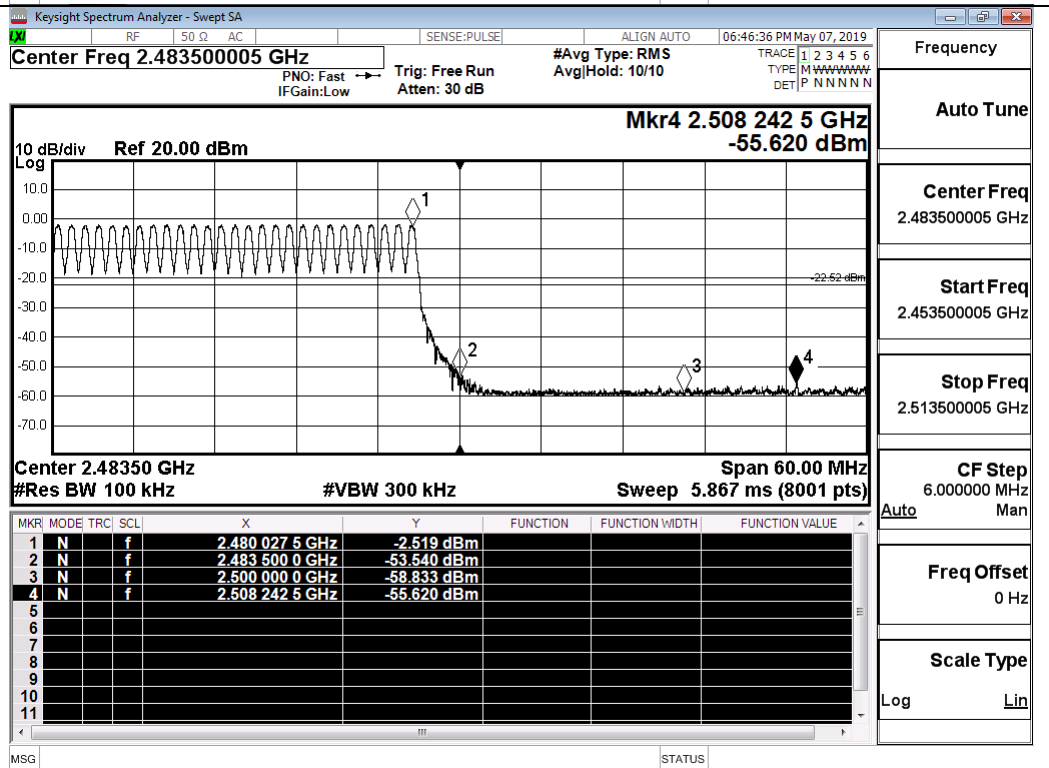
GFSK/LCH/Hop



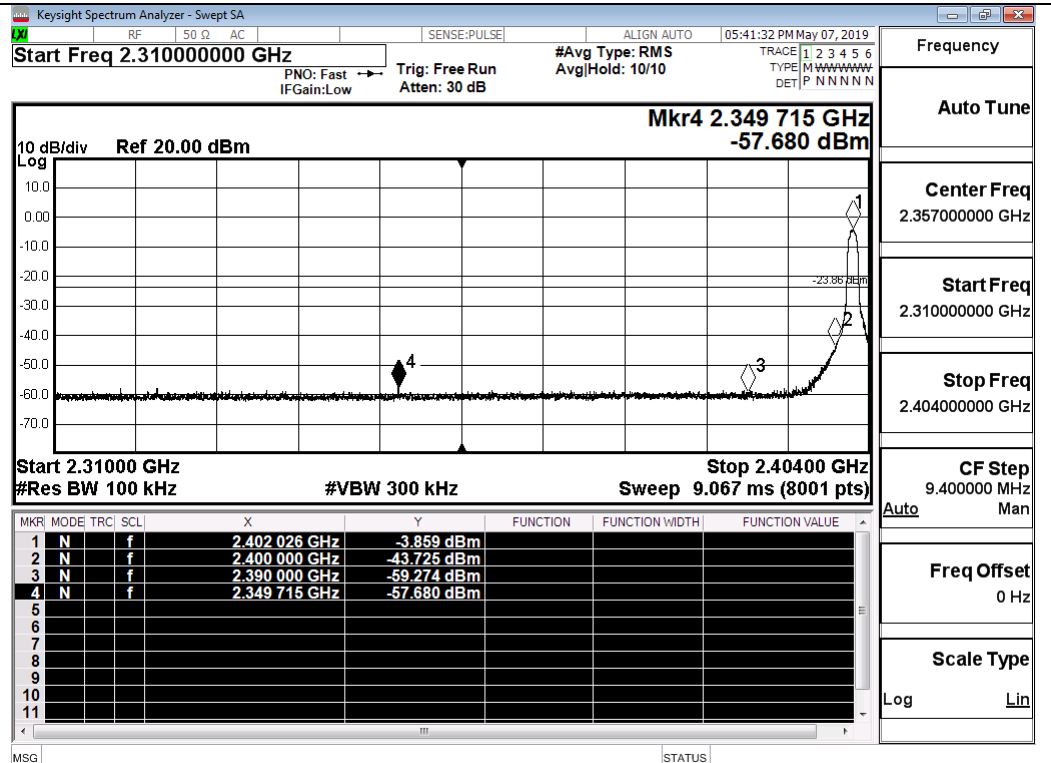
GFSK/HCH/No Hop



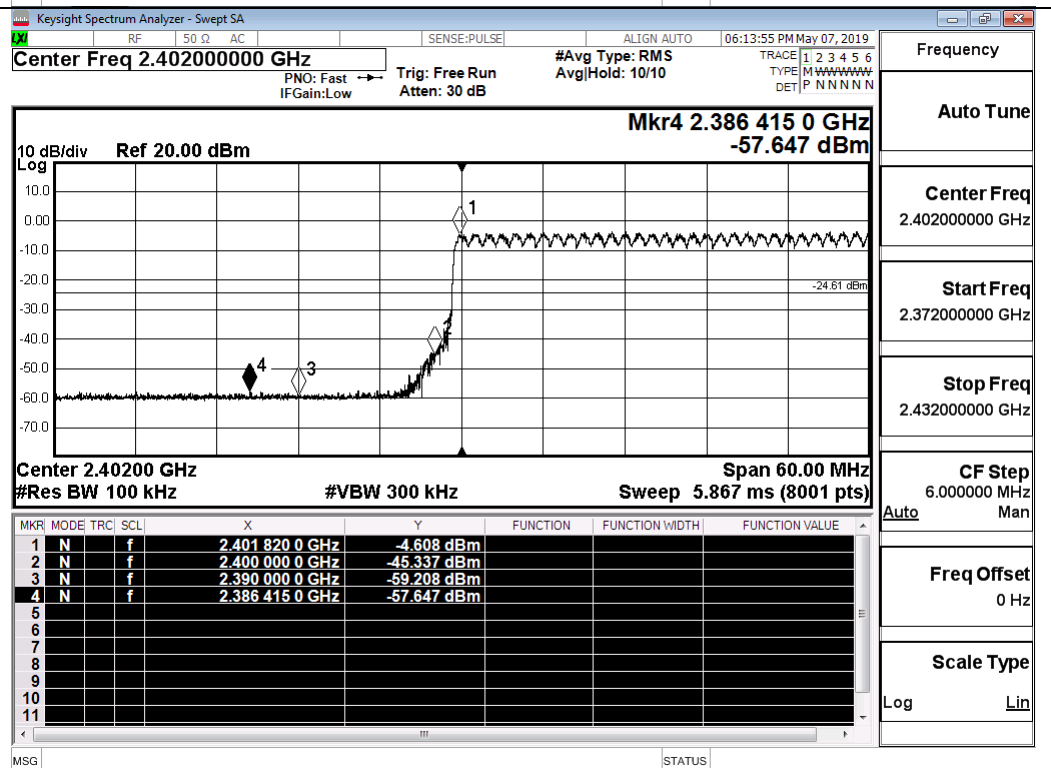
GFSK/HCH/Hop



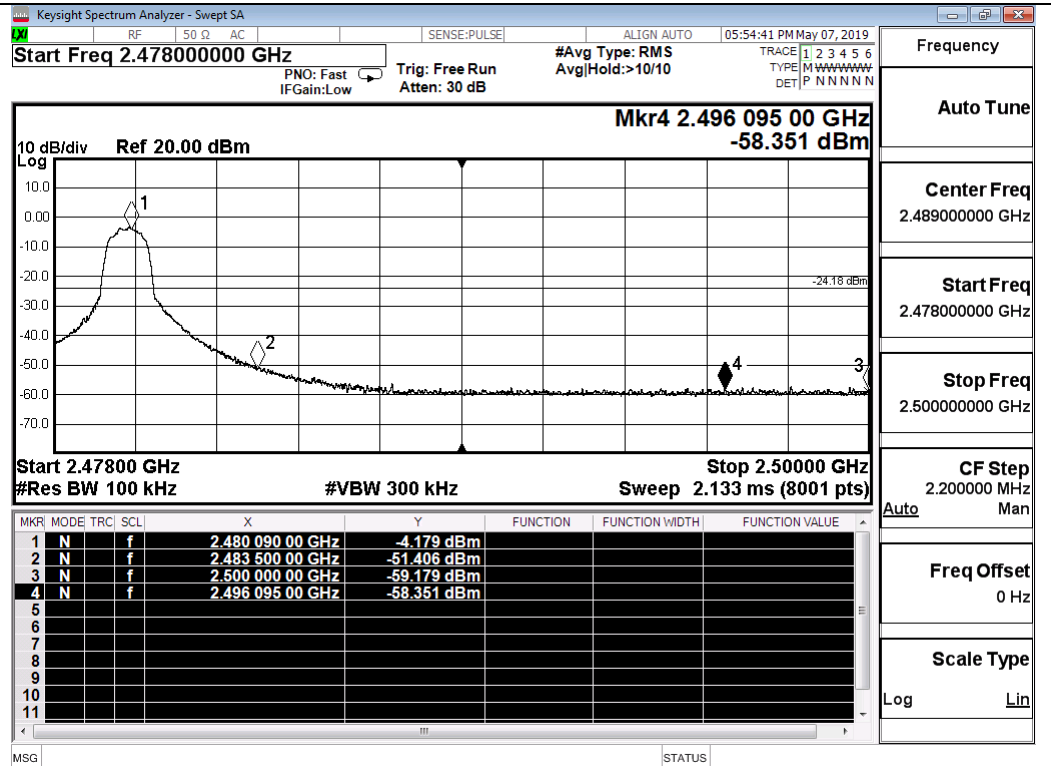
$\pi/4$ DQPSK/LCH/No
Hop



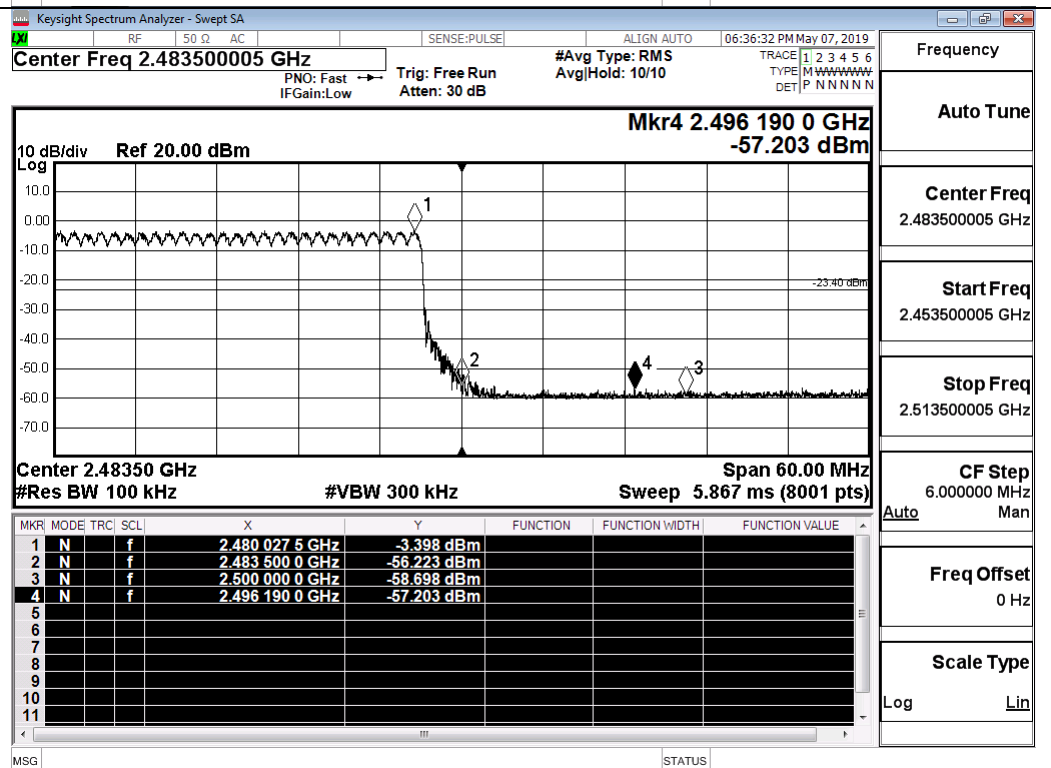
$\pi/4$ DQPSK/LCH/Hop



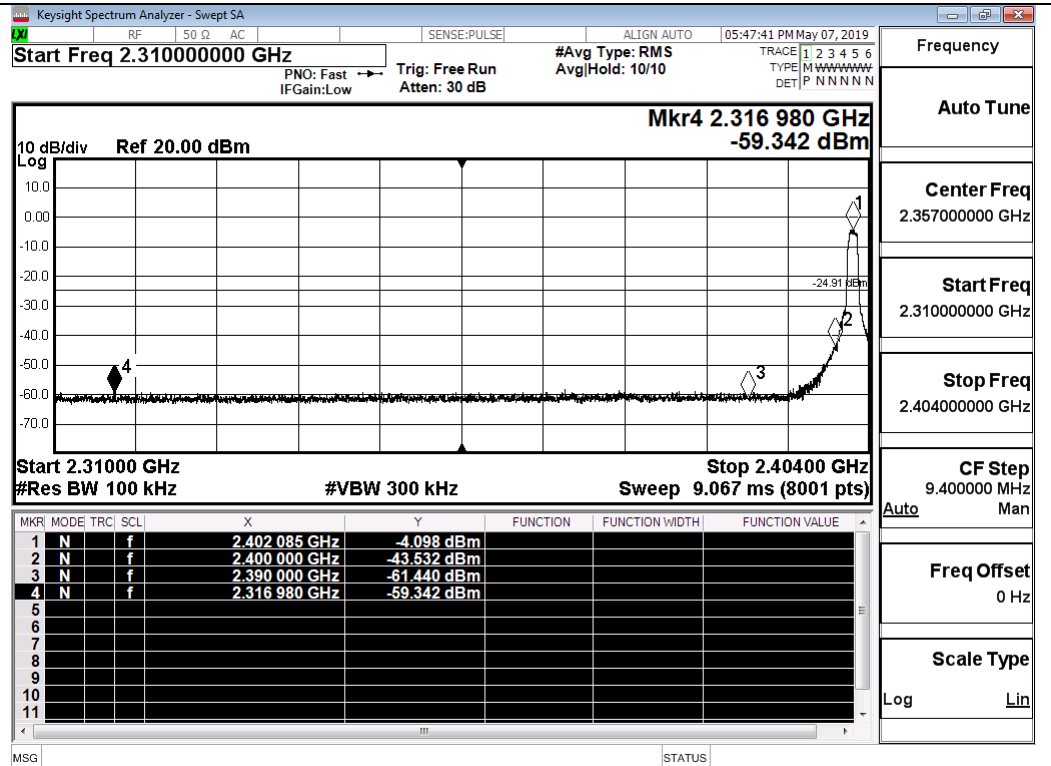
$\pi/4$ DQPSK/HCH/No
Hop



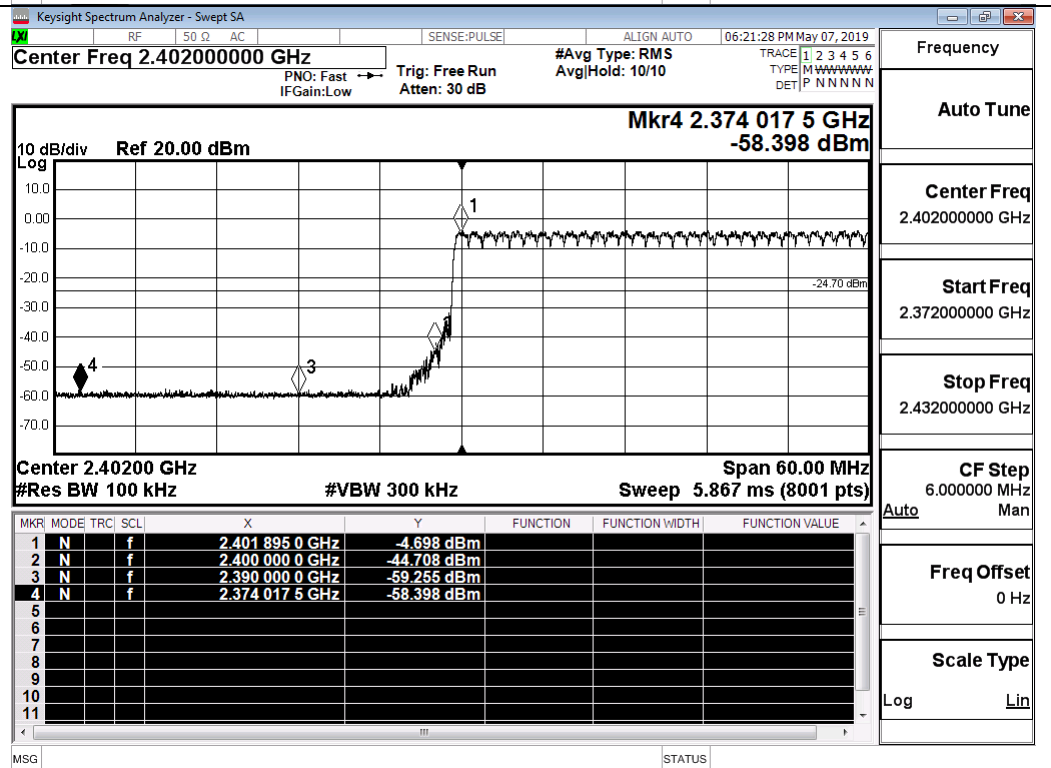
$\pi/4$ DQPSK/HCH/Hop



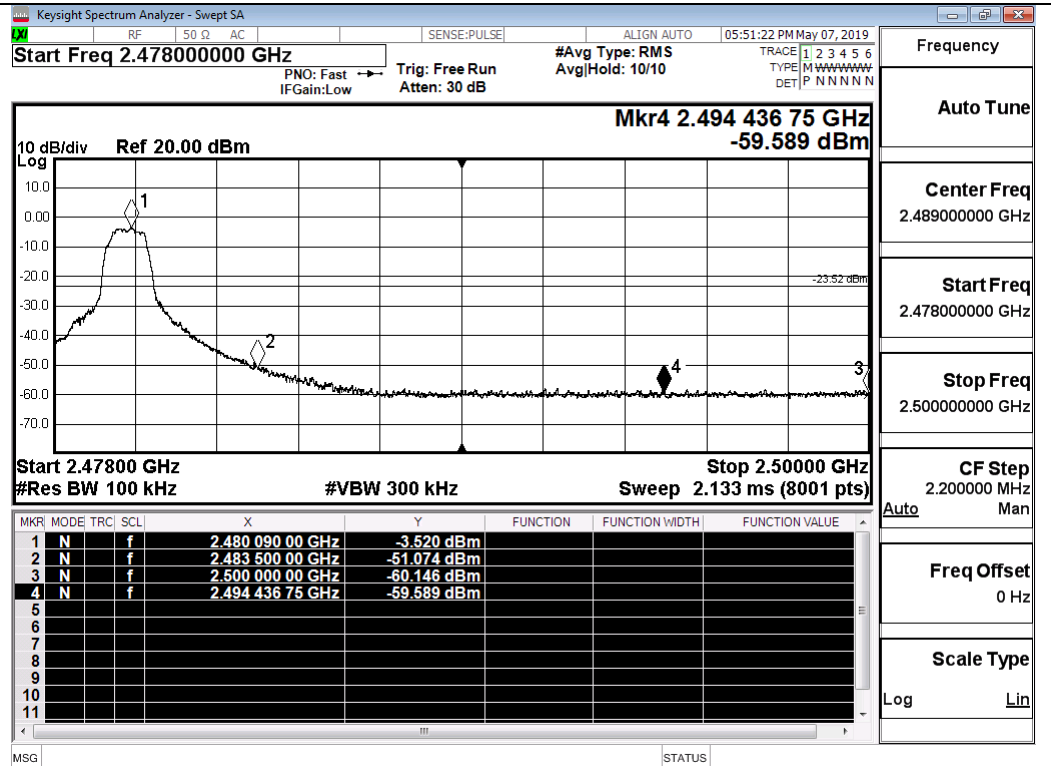
8DPSK/LCH/No Hop



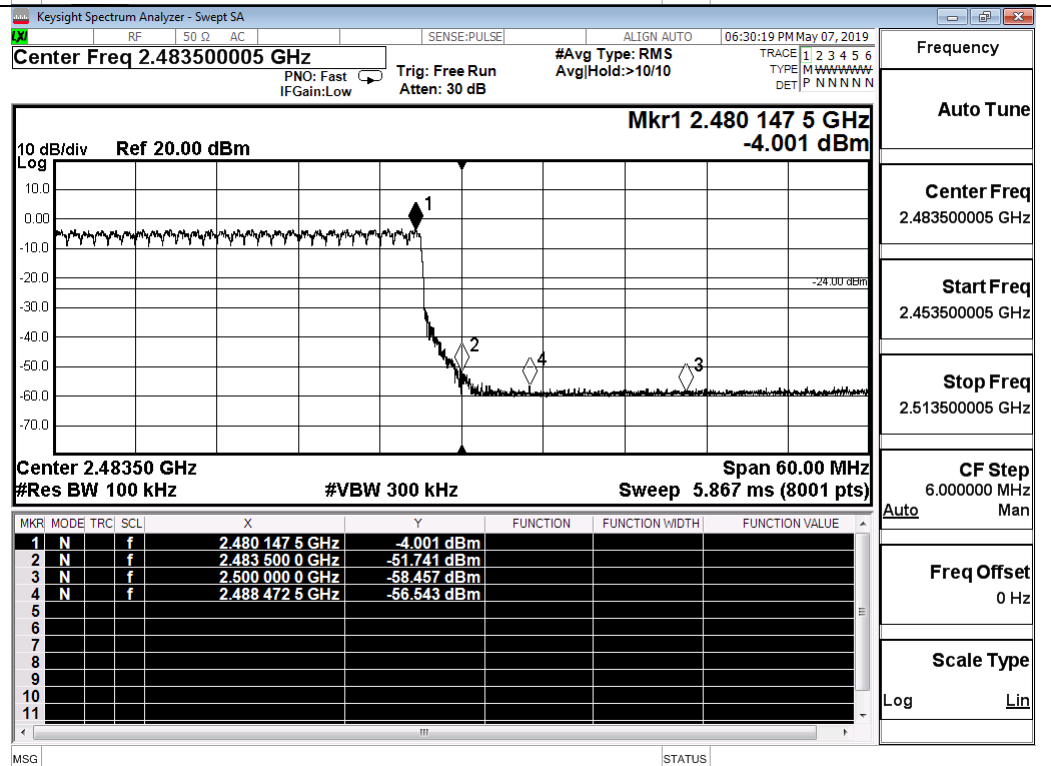
8DPSK/LCH/Hop



8DPSK/HCH/No Hop



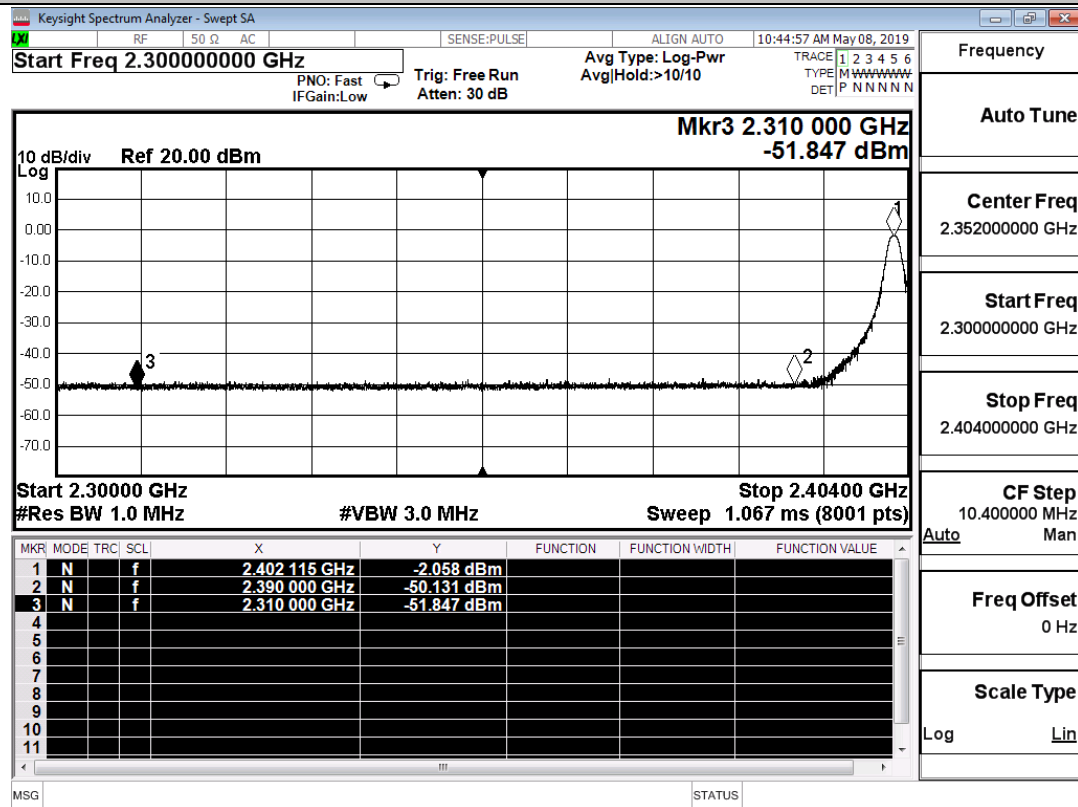
8DPSK/HCH/Hop



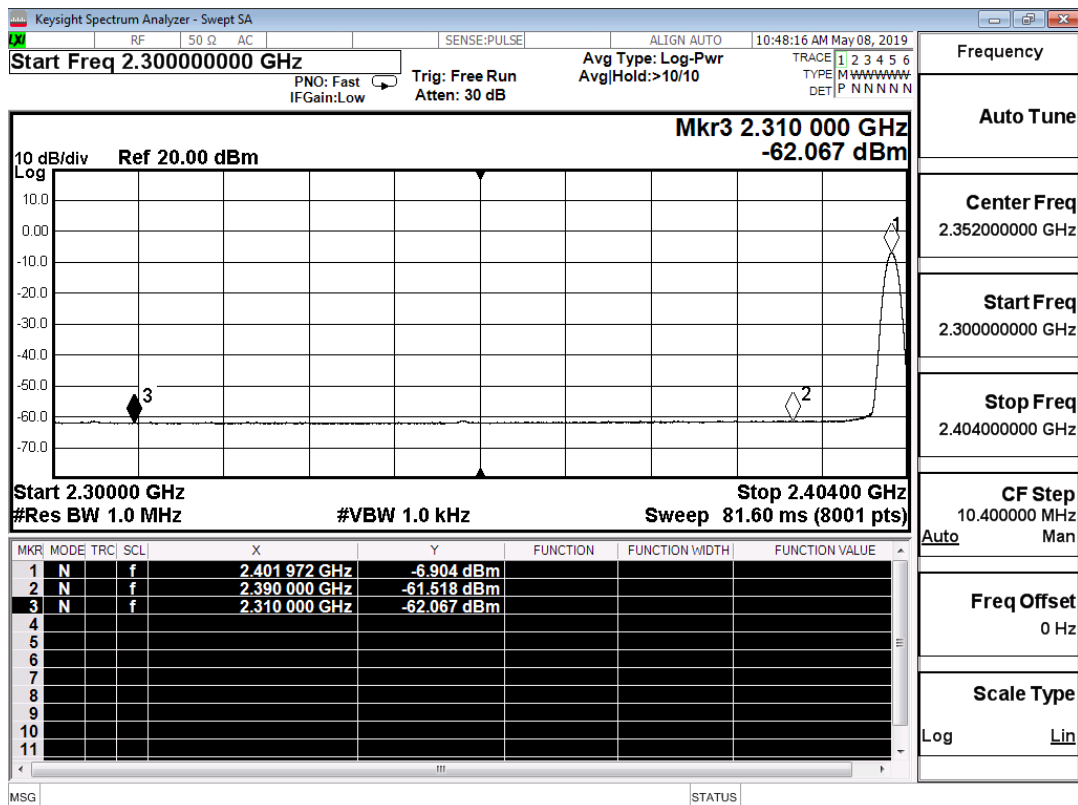
A.8 Restrict-band band-edge measurements

Test Mode	Hopping	Freq.	Power [dBm]	Gain	Ground Factor	E [dBuV/m]	Detector	Limit [dBuV/m]	Verdict
GFSK	Off	2310.0	-51.847	2.500	0	45.88	PEAK	74	PASS
	Off	2310.0	-62.067	2.500	0	35.66	AV	54	PASS
	Off	2390.0	-50.131	2.500	0	47.60	PEAK	74	PASS
	Off	2390.0	-61.518	2.500	0	36.21	AV	54	PASS
	Off	2483.5	-32.711	2.500	0	65.02	PEAK	74	PASS
	Off	2483.5	-60.039	2.500	0	37.69	AV	54	PASS
	Off	2500.0	-48.800	2.500	0	48.93	PEAK	74	PASS
	Off	2500.0	-61.329	2.500	0	36.40	AV	54	PASS
$\pi/4$ DQPSK	Off	2310.0	-50.132	2.500	0	47.60	PEAK	74	PASS
	Off	2310.0	-62.062	2.500	0	35.67	AV	54	PASS
	Off	2390.0	-49.649	2.500	0	48.08	PEAK	74	PASS
	Off	2390.0	-61.770	2.500	0	35.96	AV	54	PASS
	Off	2483.5	-32.292	2.500	0	65.44	PEAK	74	PASS
	Off	2483.5	-60.092	2.500	0	37.64	AV	54	PASS
	Off	2500.0	-49.668	2.500	0	48.06	PEAK	74	PASS
	Off	2500.0	-61.189	2.500	0	36.54	AV	54	PASS
8DPSK	Off	2310.0	-50.025	2.500	0	47.71	PEAK	74	PASS
	Off	2310.0	-62.156	2.500	0	35.57	AV	54	PASS
	Off	2390.0	-50.295	2.500	0	47.44	PEAK	74	PASS
	Off	2390.0	-61.659	2.500	0	36.07	AV	54	PASS
	Off	2483.5	-31.288	2.500	0	66.44	PEAK	74	PASS
	Off	2483.5	-59.897	2.500	0	37.83	AV	54	PASS
	Off	2500.0	-49.357	2.500	0	48.37	PEAK	74	PASS
	Off	2500.0	-61.297	2.500	0	36.43	AV	54	PASS

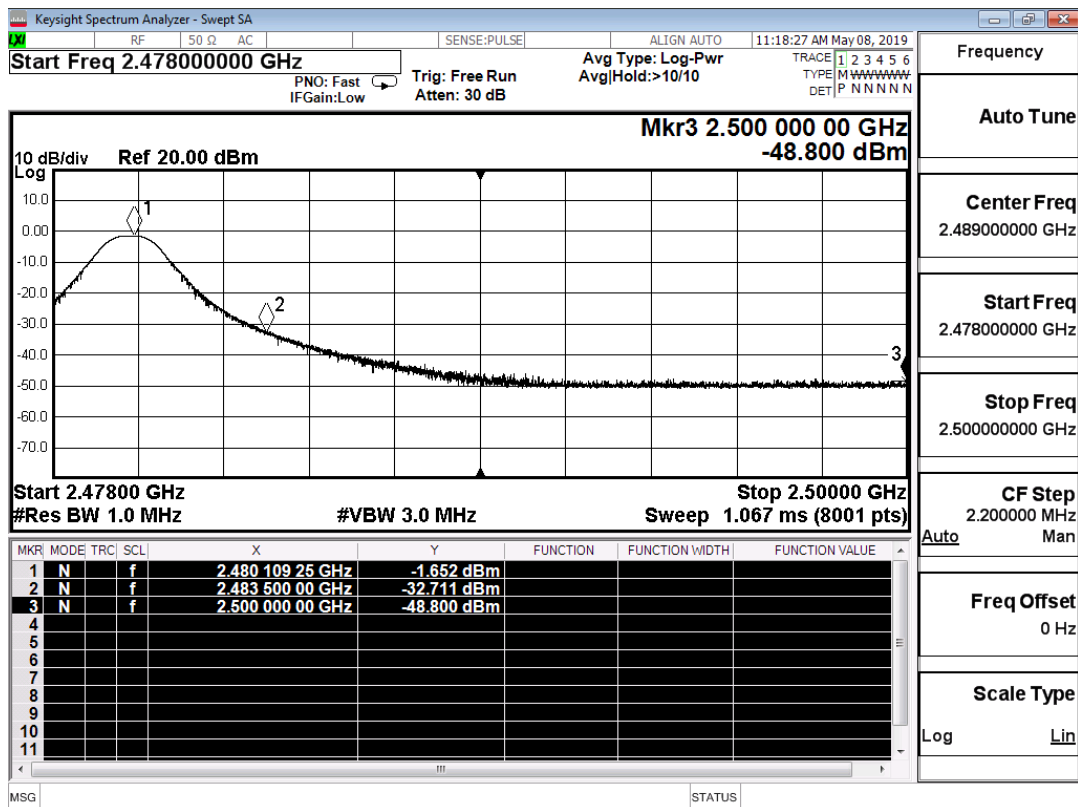
Restrict-band band-edge measurements_Hopping Off_GFSK_PEAK (Low Channel)



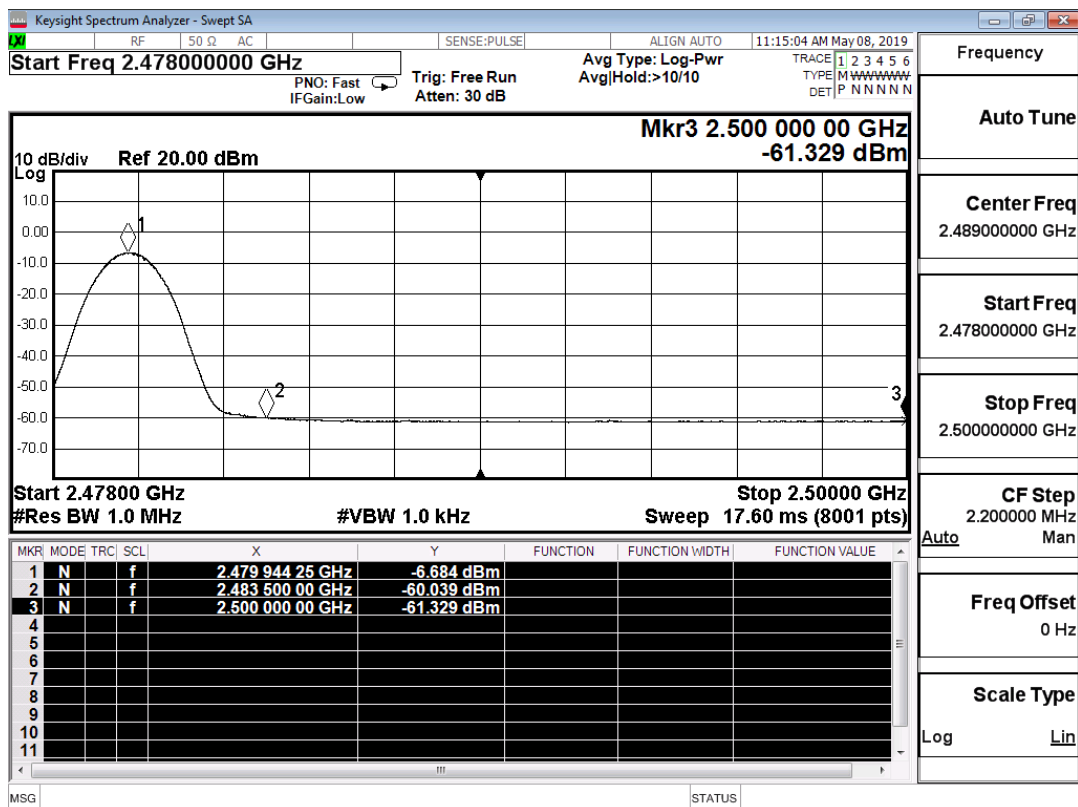
Restrict-band band-edge measurements_Hopping Off_GFSK_Average (Low Channel)

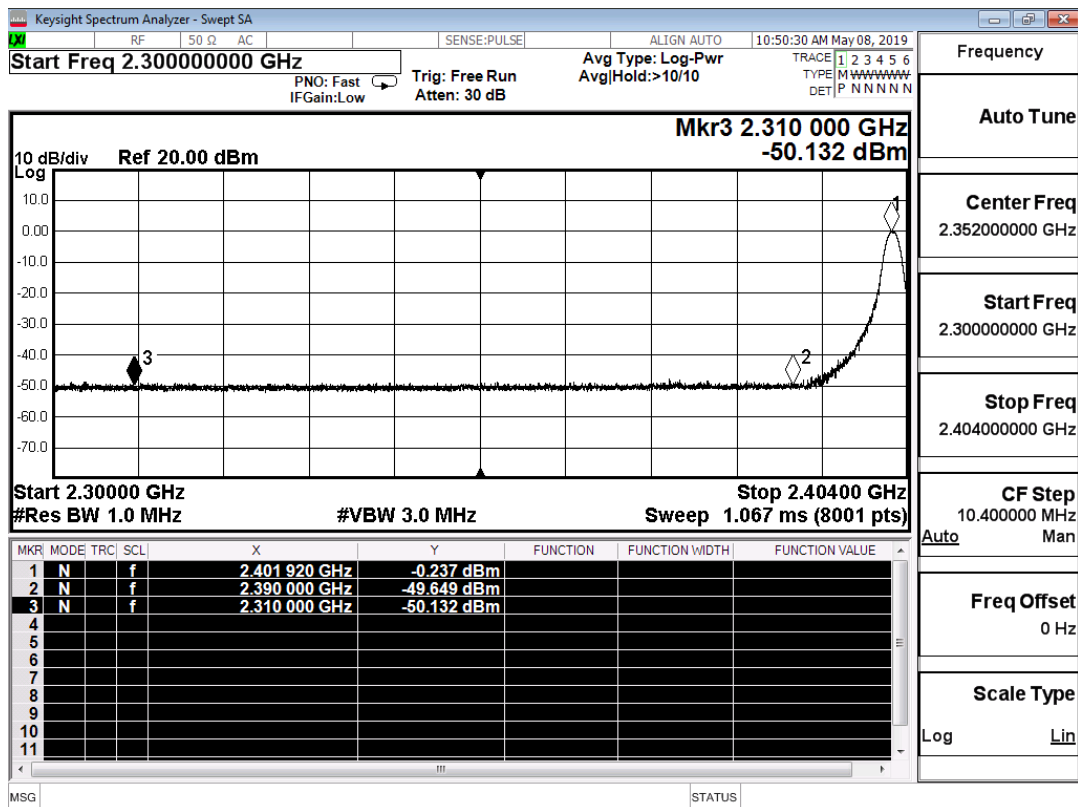
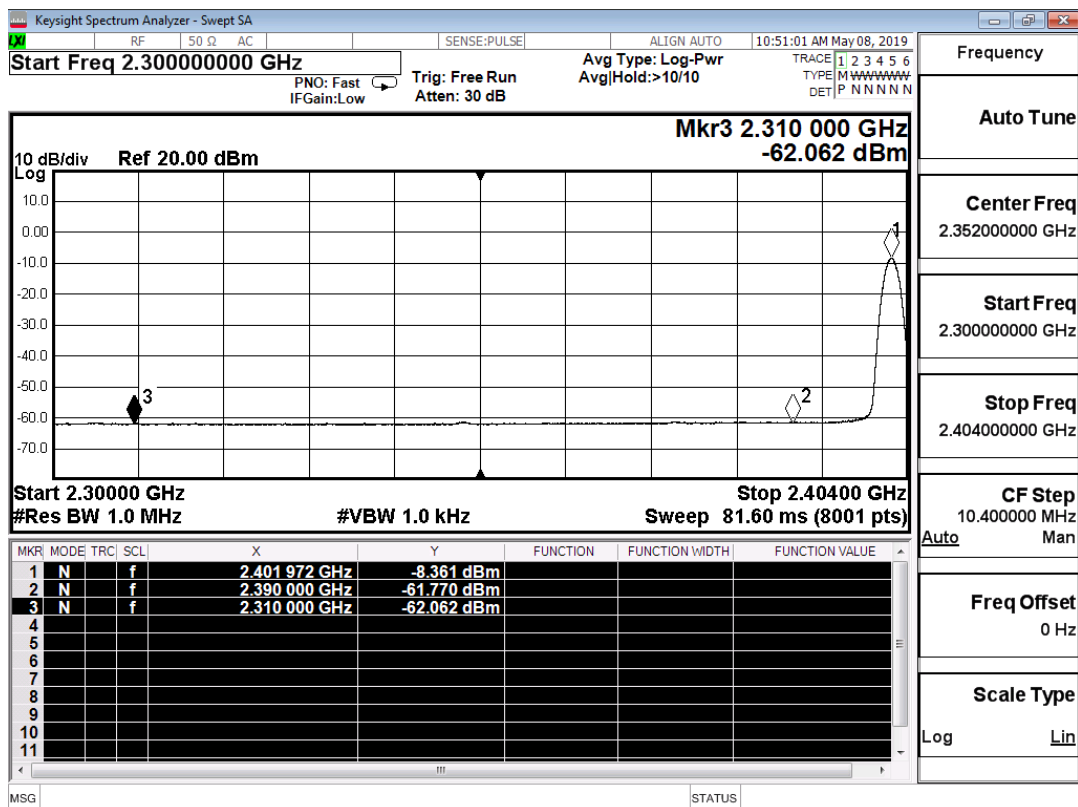


Restrict-band band-edge measurements_Hopping Off_GFSK_PEAK (High Channel)

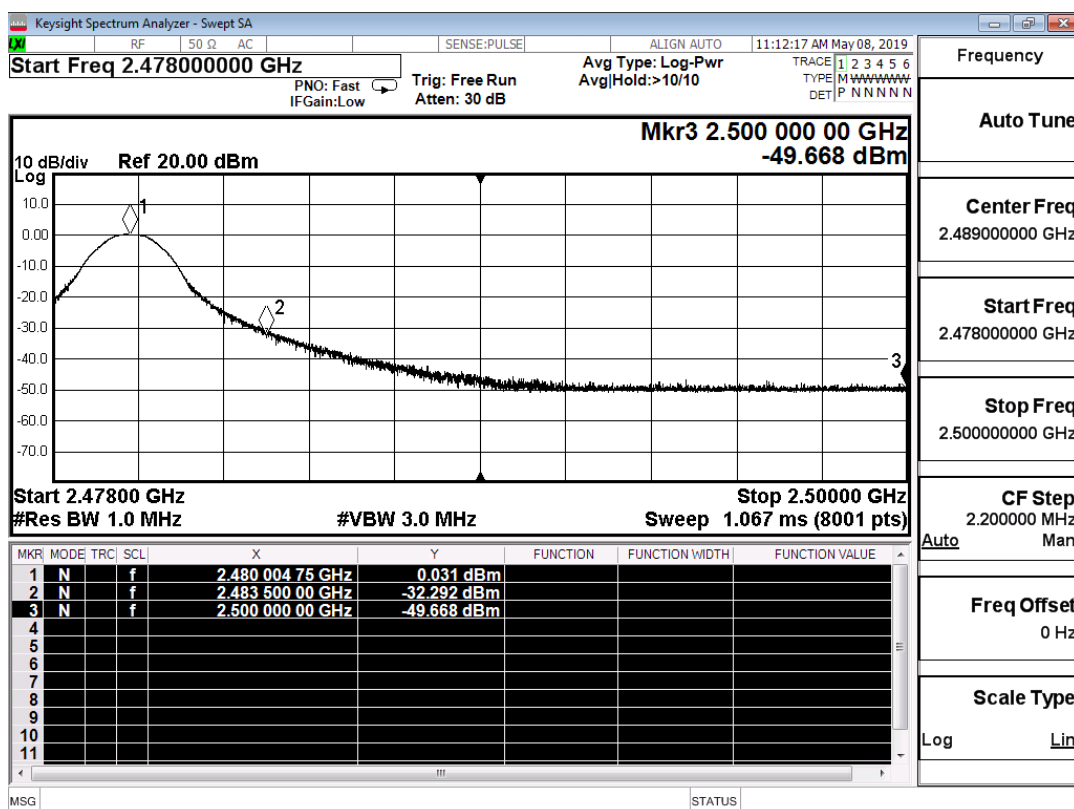


Restrict-band band-edge measurements_Hopping Off_GFSK_Average (High Channel)

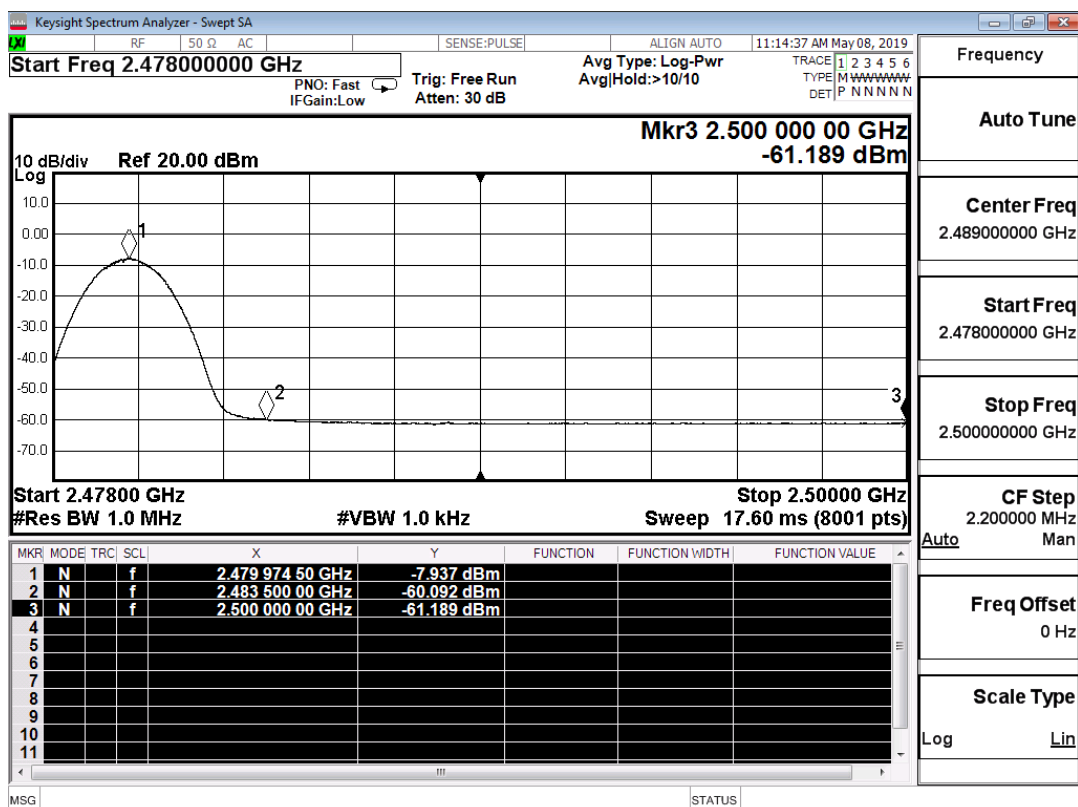


Restrict-band band-edge measurements_Hopping Off $\pi/4$ -DQPSK_PEAK (Low Channel)Restrict-band band-edge measurements_Hopping Off $\pi/4$ -DQPSK_Average (Low Channel)

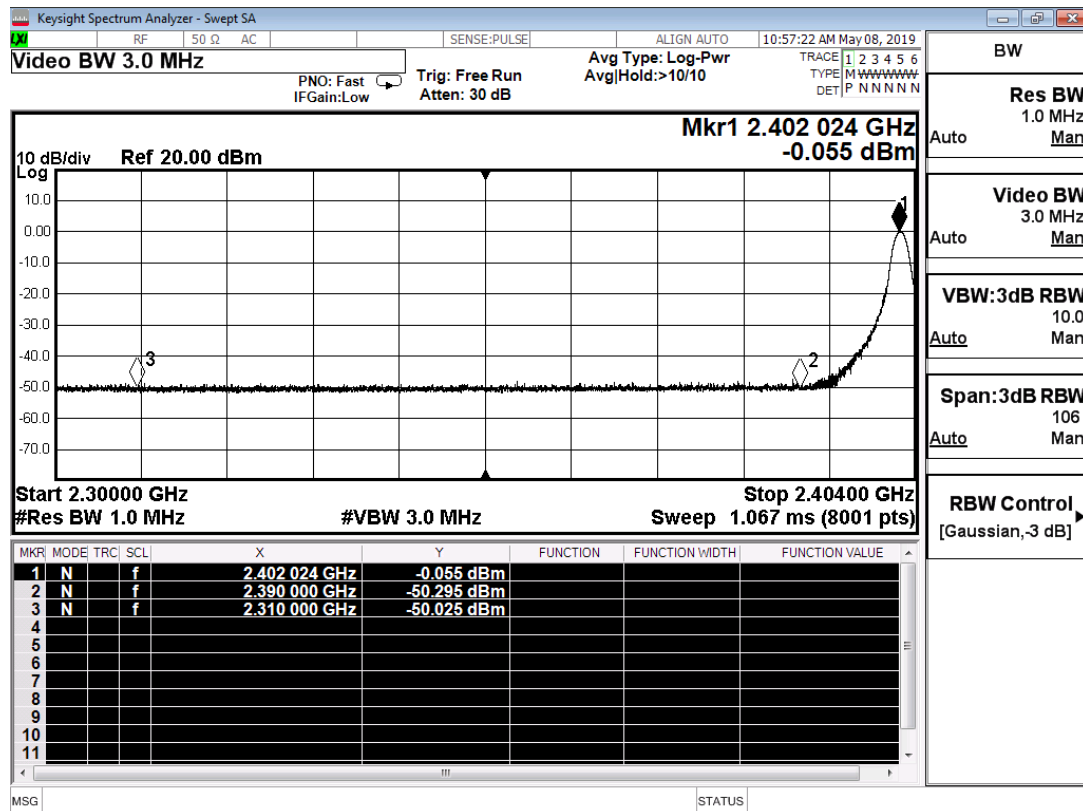
Restrict-band band-edge measurements_Hopping Off_π/4-DQPSK_PEAK (High Channel)



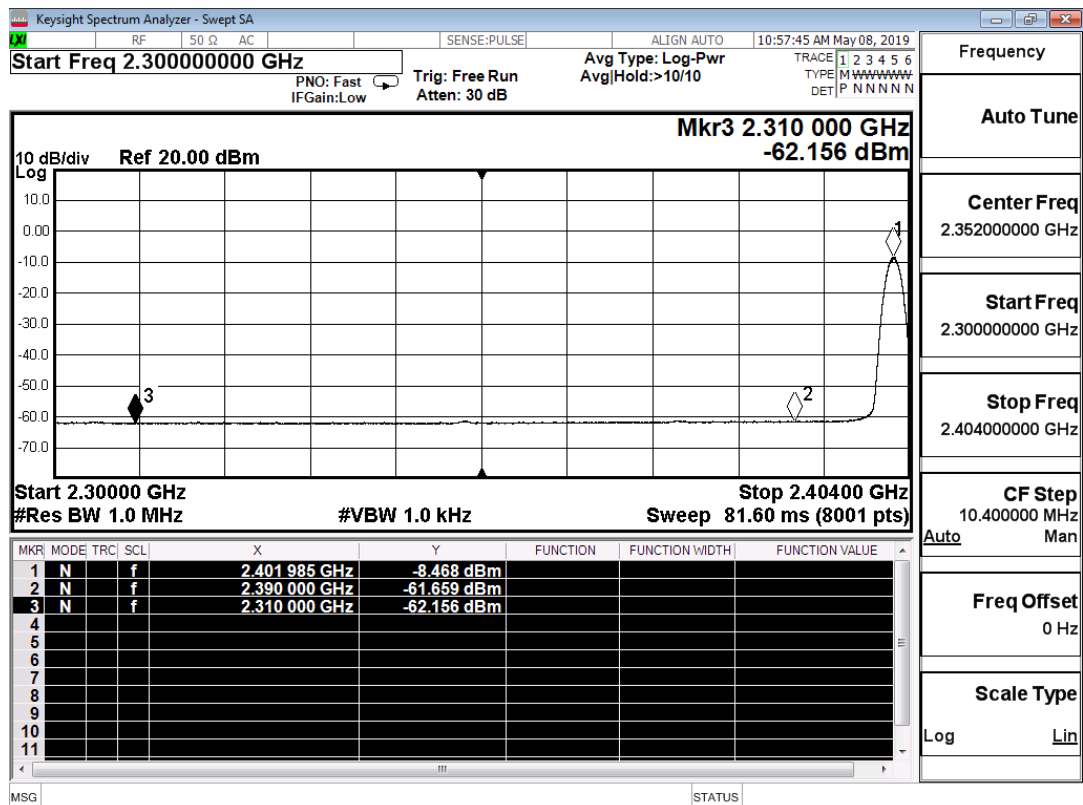
Restrict-band band-edge measurements_Hopping Off_π/4-DQPSK_Average (High Channel)



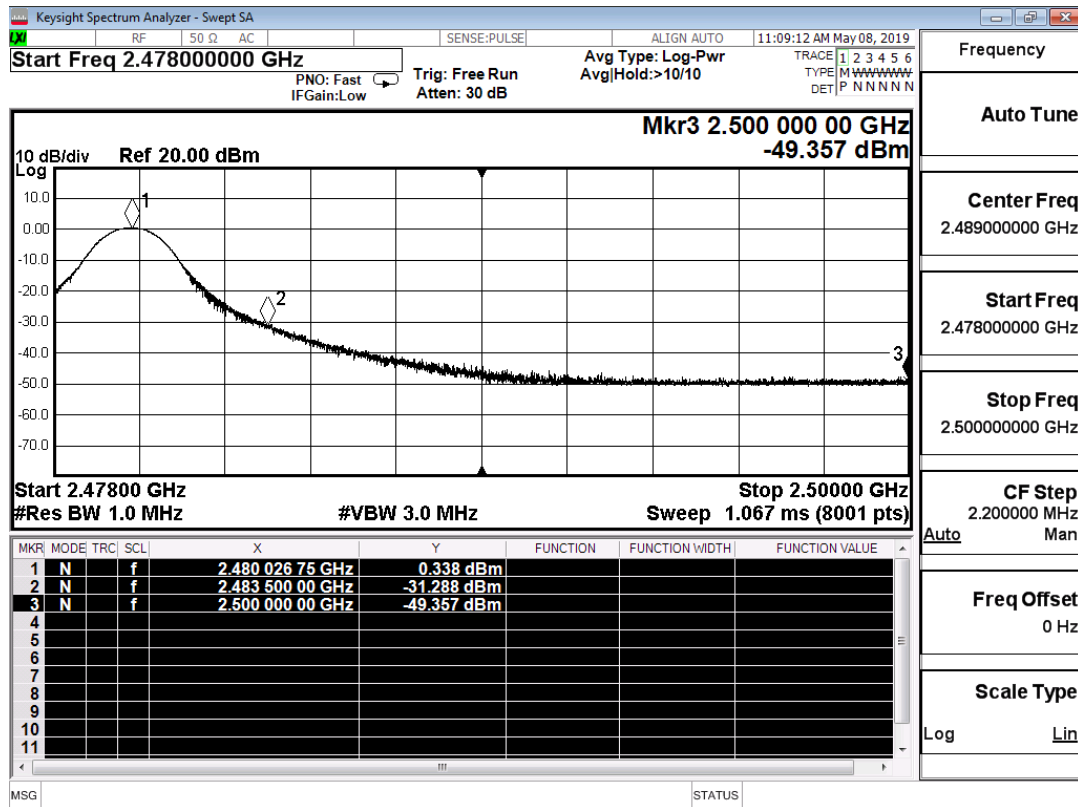
Restrict-band band-edge measurements_Hopping Off_8DPSK_PEAK (Low Channel)



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)

