

Appendix A

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

Product Name: J.ANE MUSIC DESK LAMP

Trade Mark: N/A

Test Model: LZ-C1801

Environmental Conditions

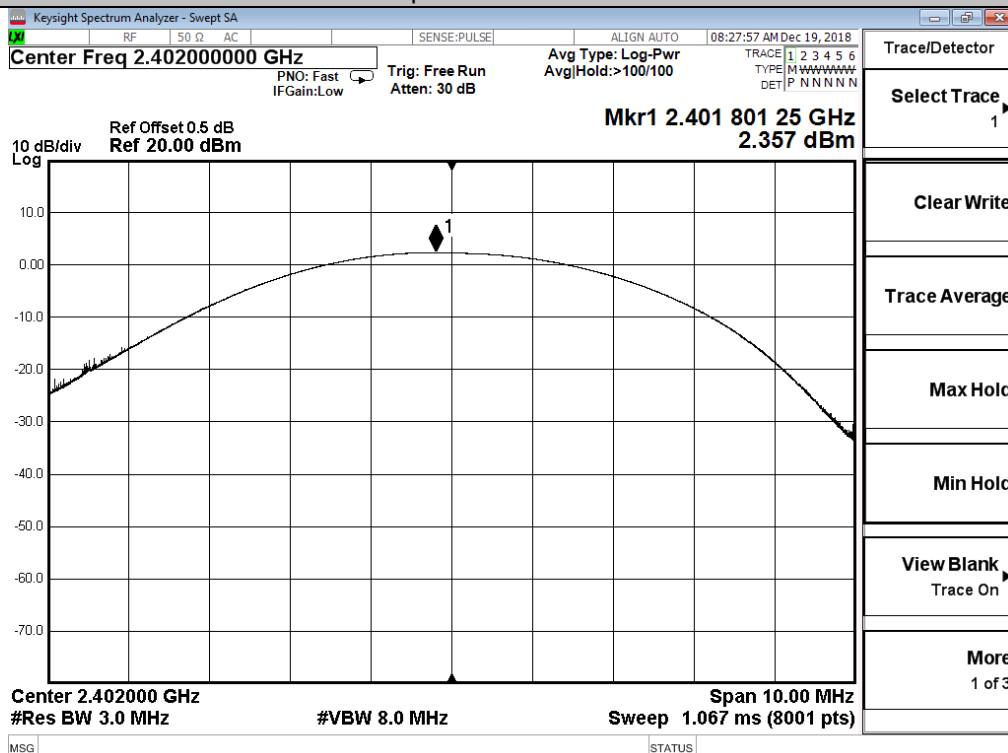
Temperature:	22.3 °C
Relative Humidity:	52.1%
ATM Pressure:	100.0 kPa
Test Engineer:	Tom Liu
Supervised by:	Jayden.Zhuo

A.1 Maximum Conducted Peak Output Power

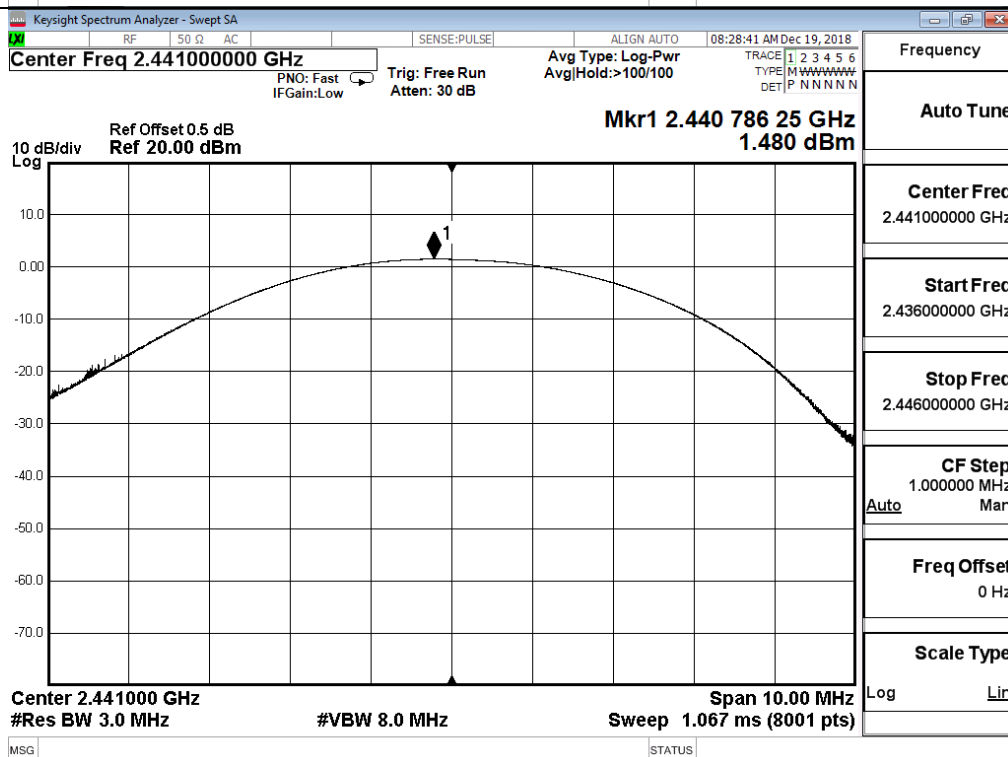
Mode	Channel.	Maximum Peak Output Power [dBm]	Limit [dBm]	Verdict
GFSK	LCH	2.357	21	PASS
	MCH	1.480	21	PASS
	HCH	0.866	21	PASS
$\pi/4$ DQPSK	LCH	2.961	21	PASS
	MCH	2.031	21	PASS
	HCH	1.490	21	PASS

Test Graphs

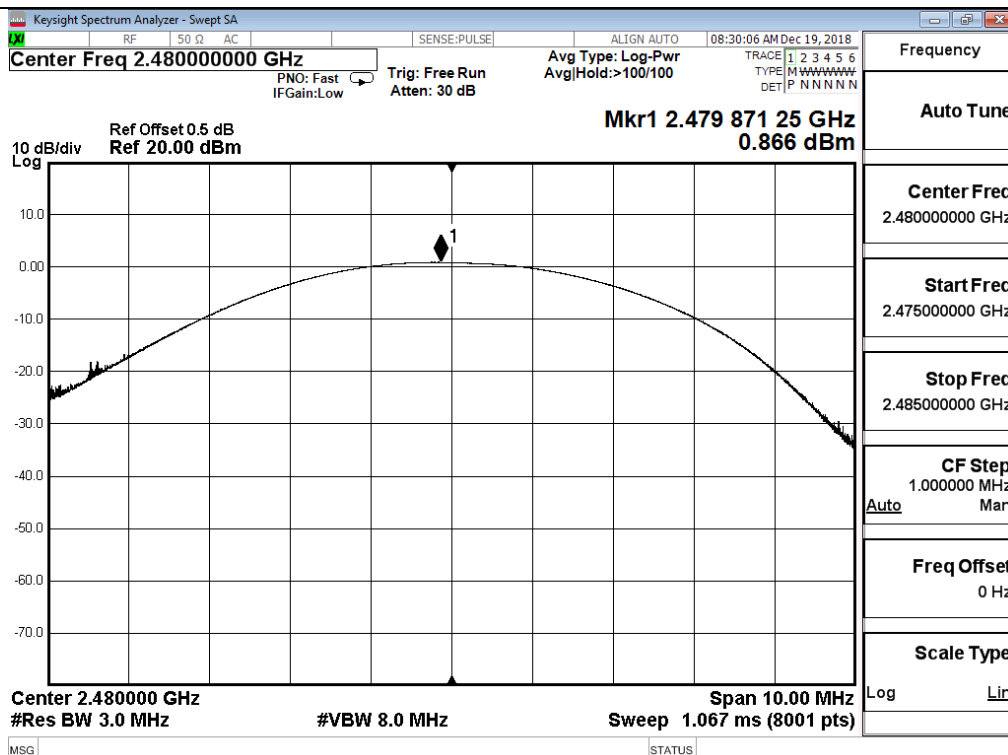
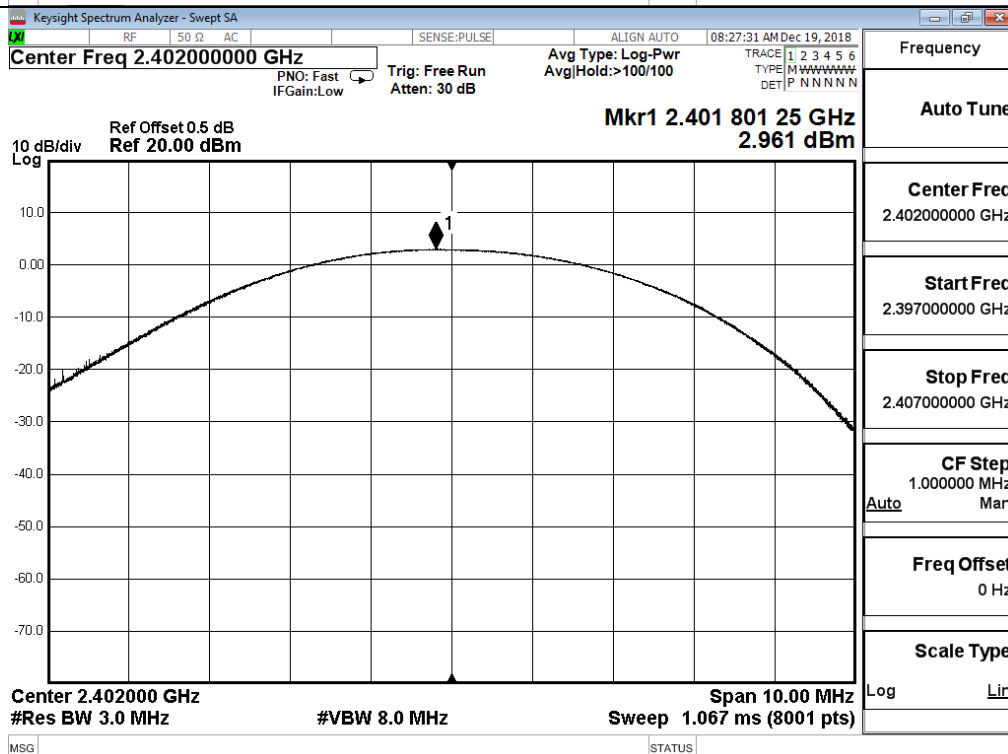
GFSK/LCH

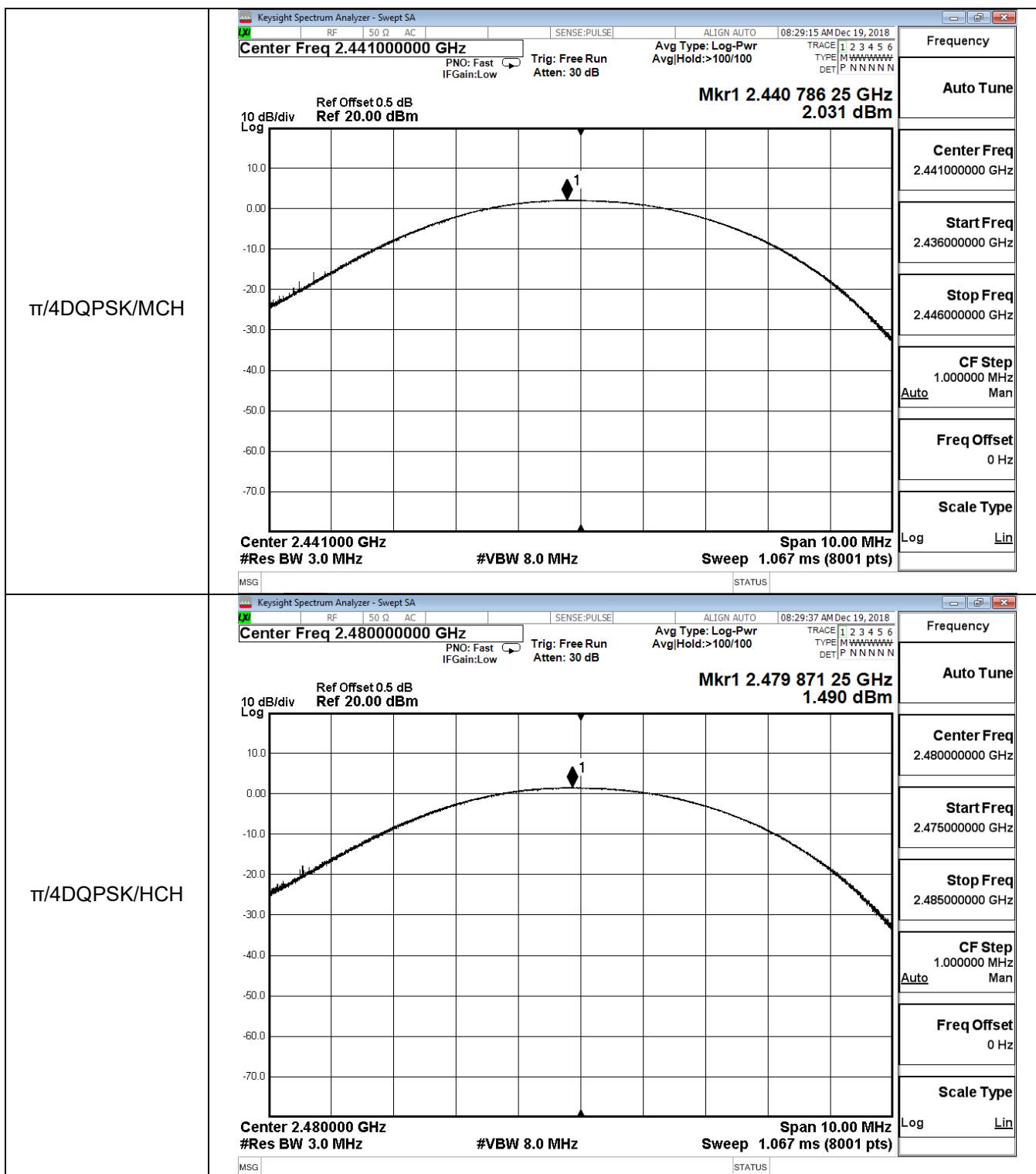


GFSK/MCH



GFSK/HCH

 π /4DQPSK/LCH

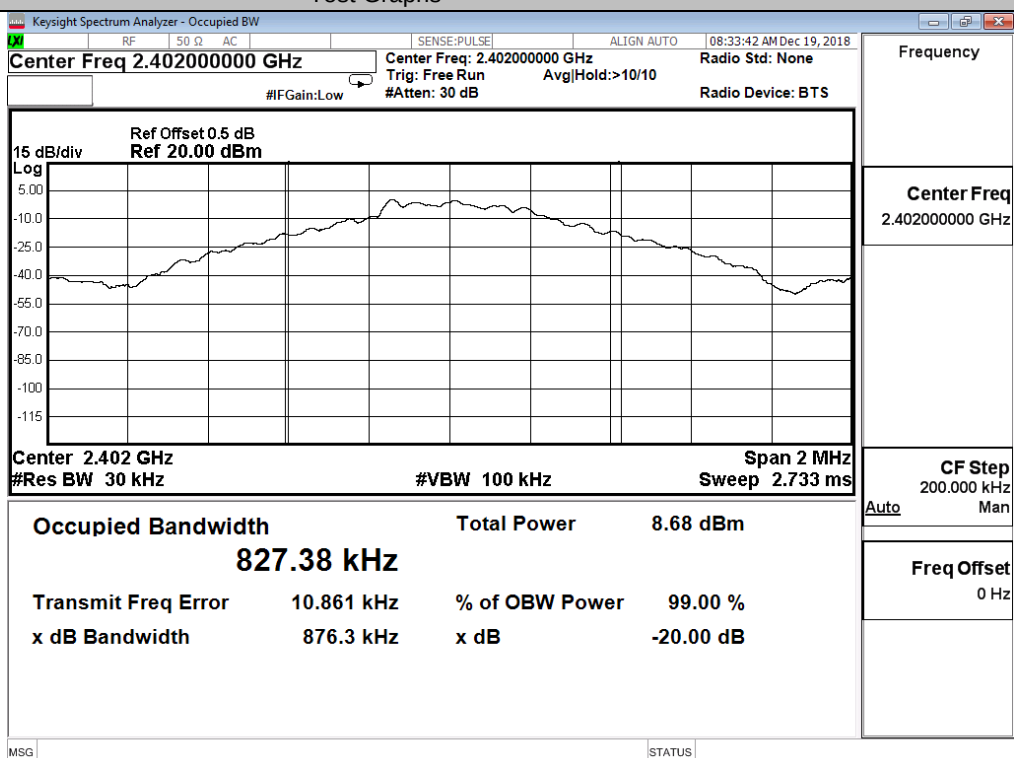


A.2 99% and 20dB Bandwidth

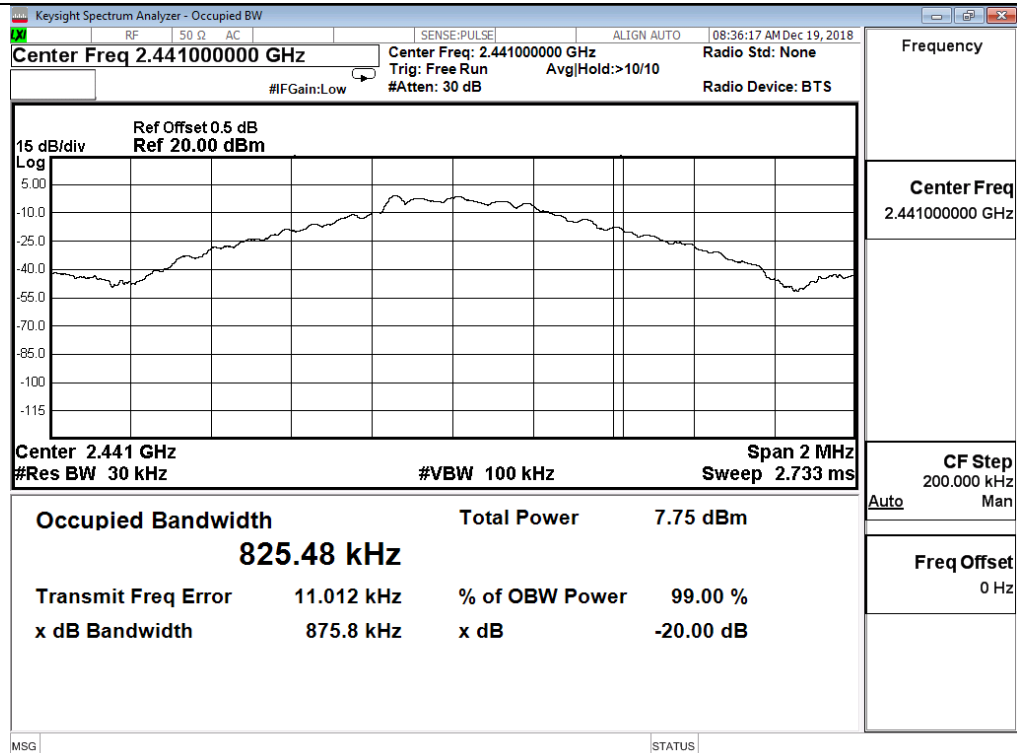
Mode	Channel.	99% Bandwidth (MHz)	20dB Bandwidth [MHz]	Limit [MHz]	Verdict
GFSK	LCH	0.82738	0.8763	Not Specified	PASS
	MCH	0.82548	0.8758	Not Specified	PASS
	HCH	0.82336	0.8732	Not Specified	PASS
$\pi/4$ DQPSK	LCH	1.1680	1.255	Not Specified	PASS
	MCH	1.1671	1.228	Not Specified	PASS
	HCH	1.1669	1.229	Not Specified	PASS

Test Graphs

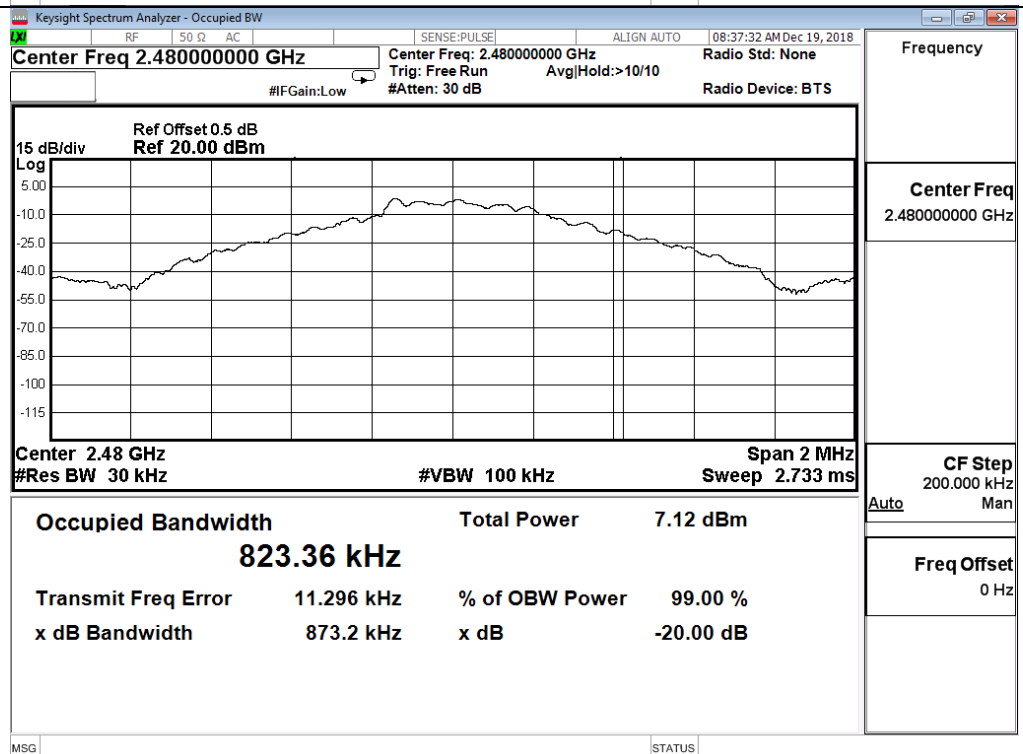
GFSK/LCH

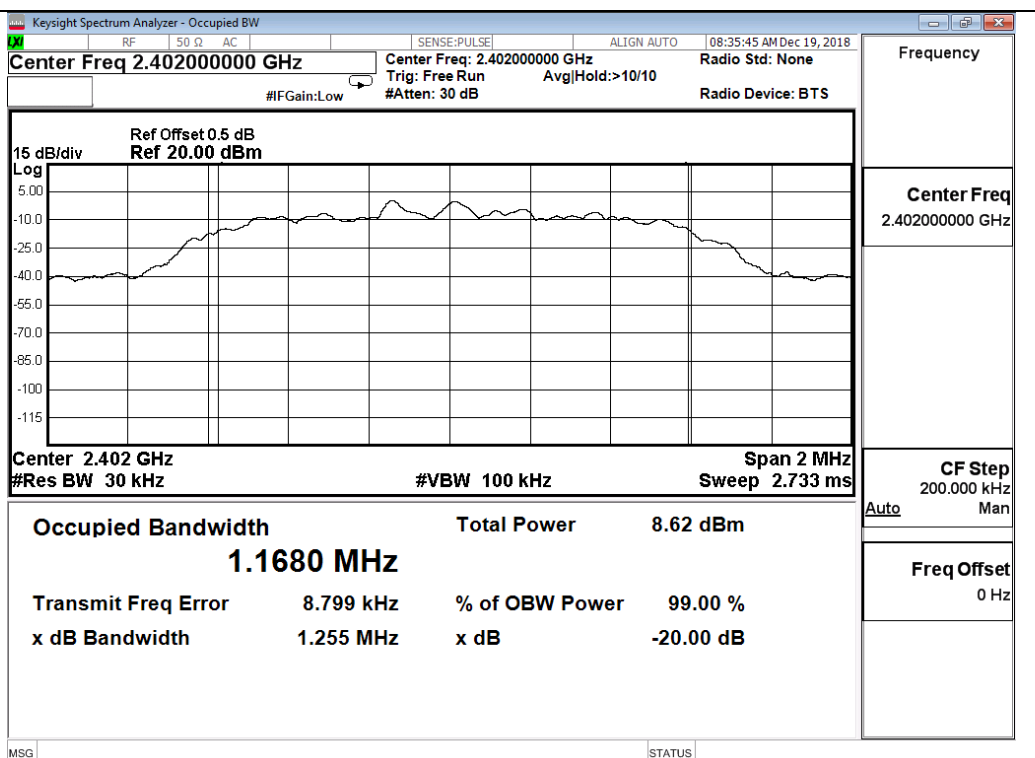
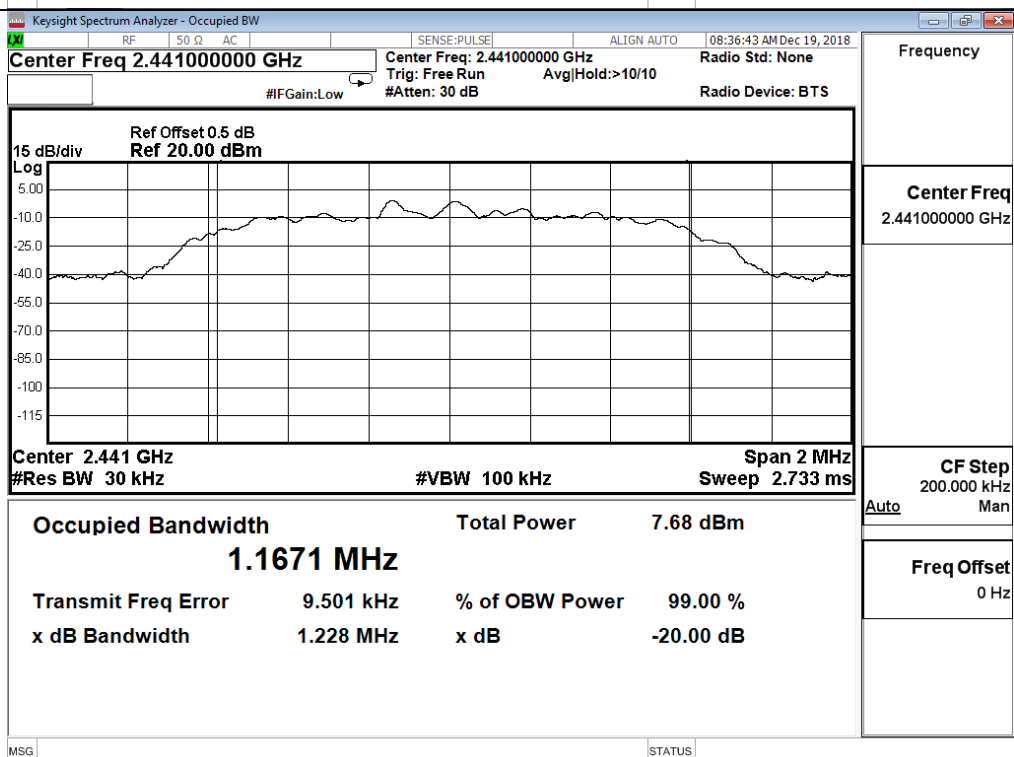


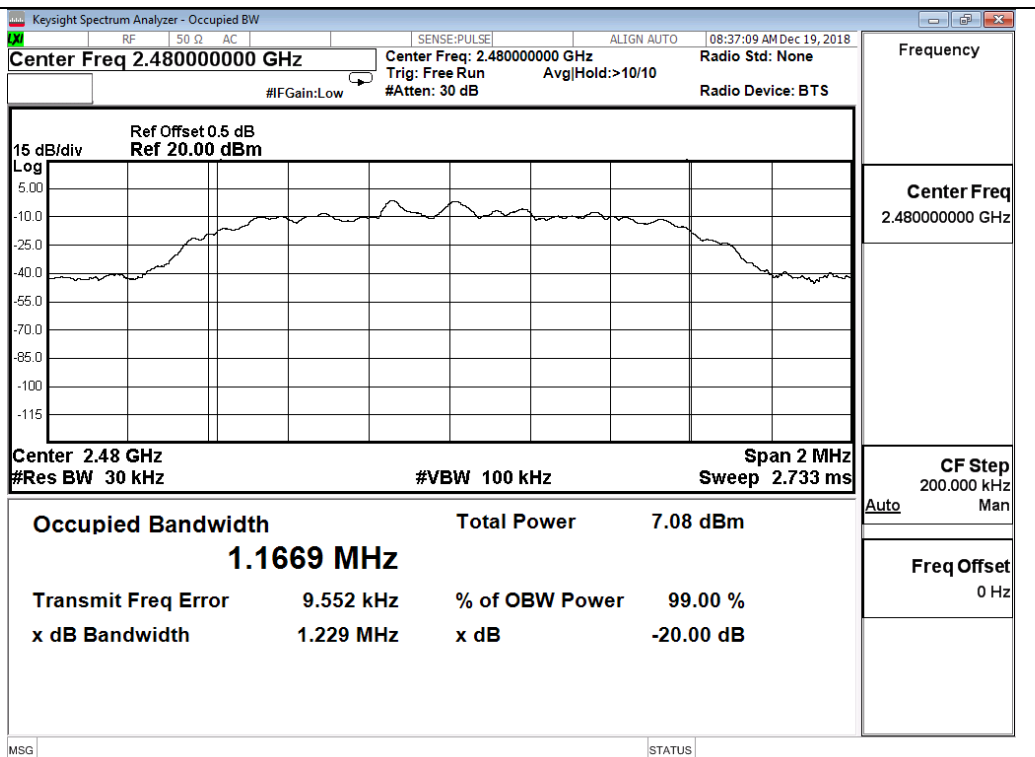
GFSK/MCH



GFSK/HCH



$\pi/4$ DQPSK/LCH $\pi/4$ DQPSK/MCH

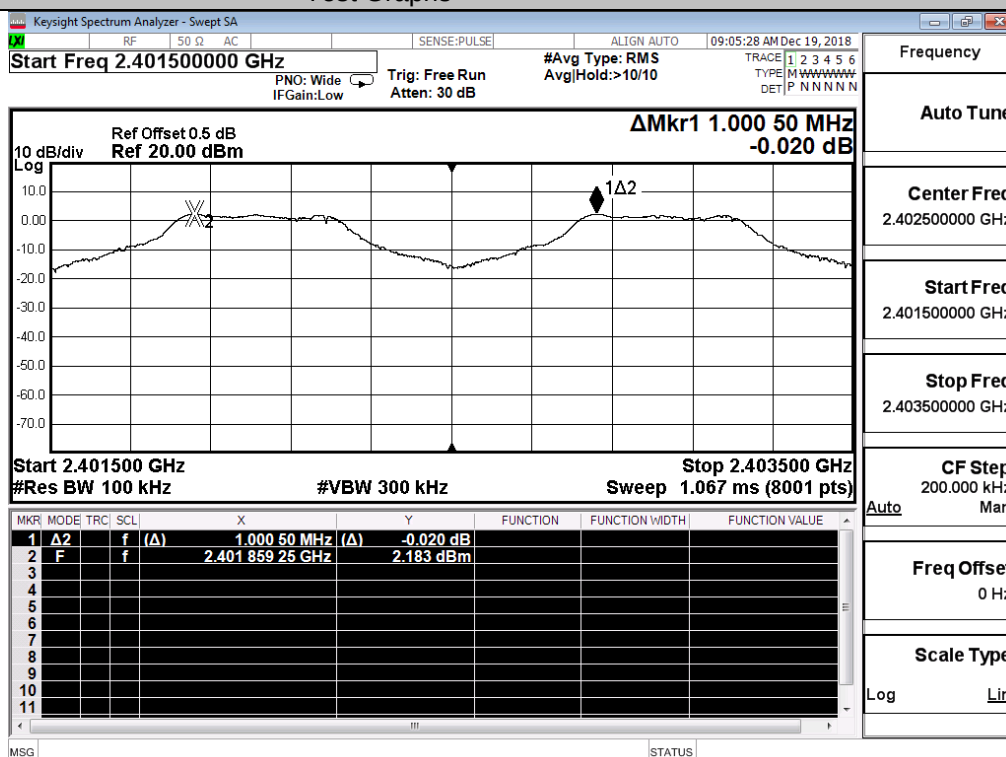
$\pi/4$ DQPSK/HCH

A.3 Carrier Frequency Separation

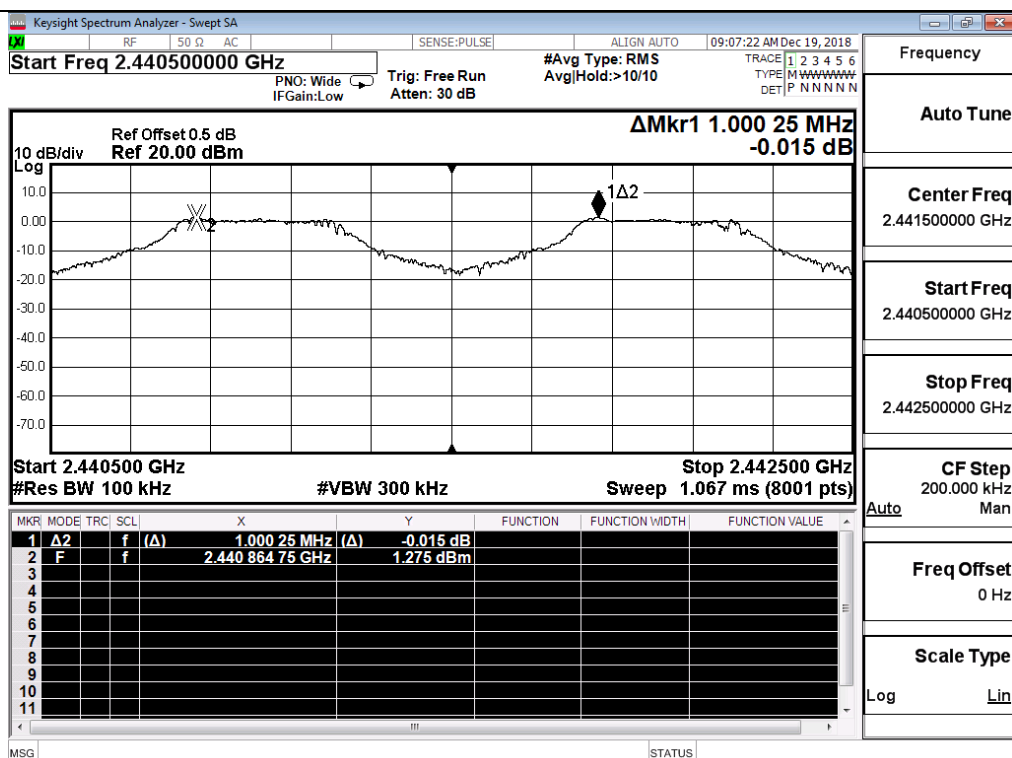
Mode	Channel.	Carrier Frequency Separation [MHz]	Limit [MHz]	Verdict
GFSK	LCH	1.001	0.5842	PASS
	MCH	1.000	0.5839	PASS
	HCH	0.998	0.5821	PASS
π /4DQPSK	LCH	1.000	0.837	PASS
	MCH	1.001	0.819	PASS
	HCH	1.000	0.819	PASS

Test Graphs

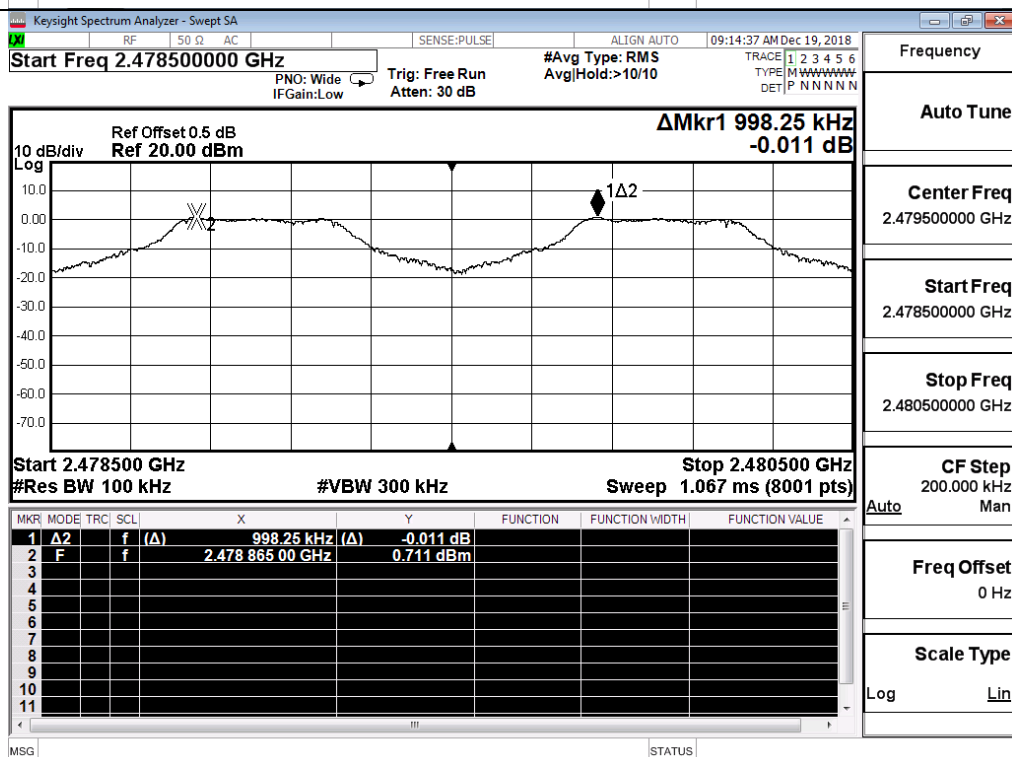
GFSK/LCH

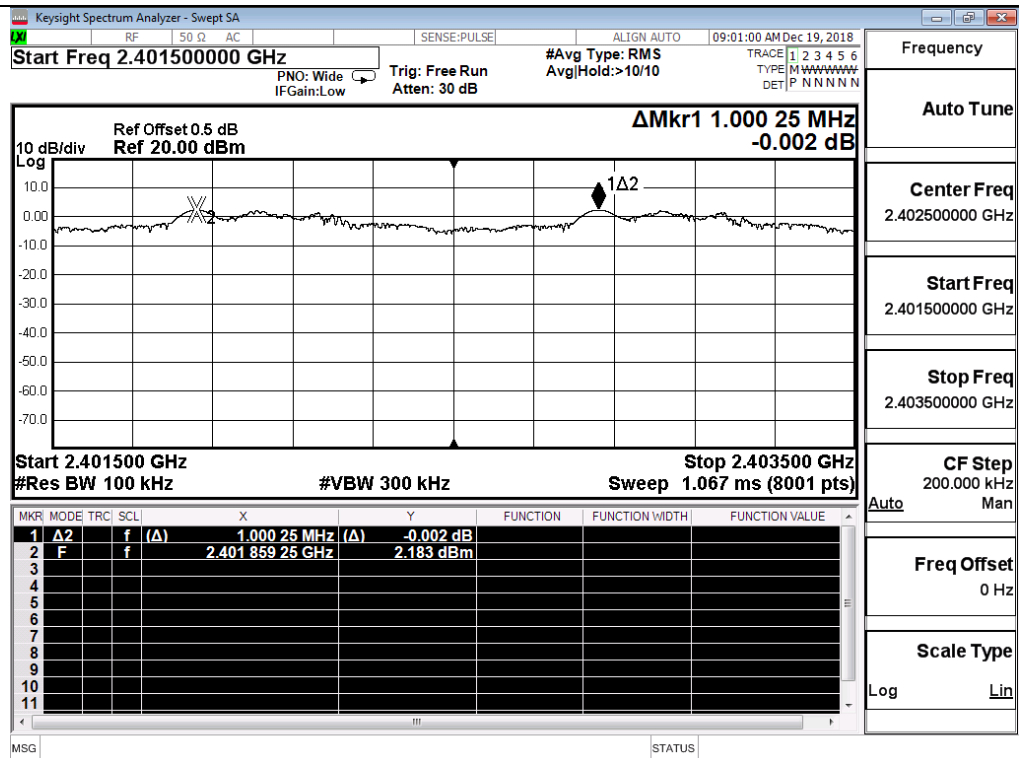
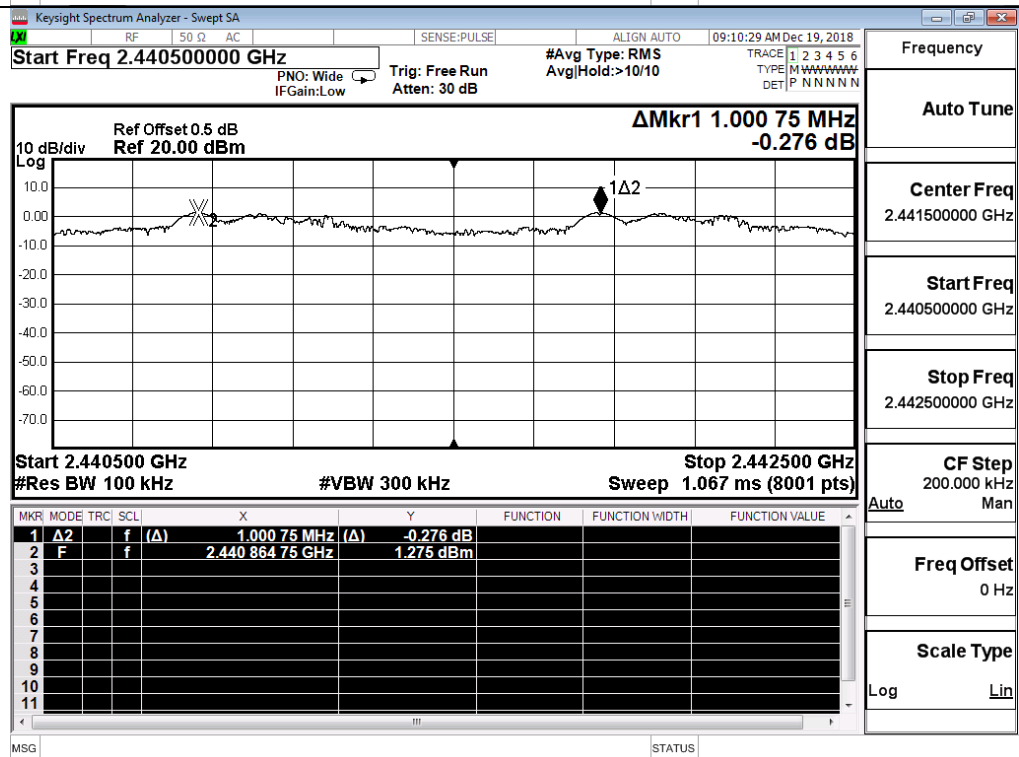


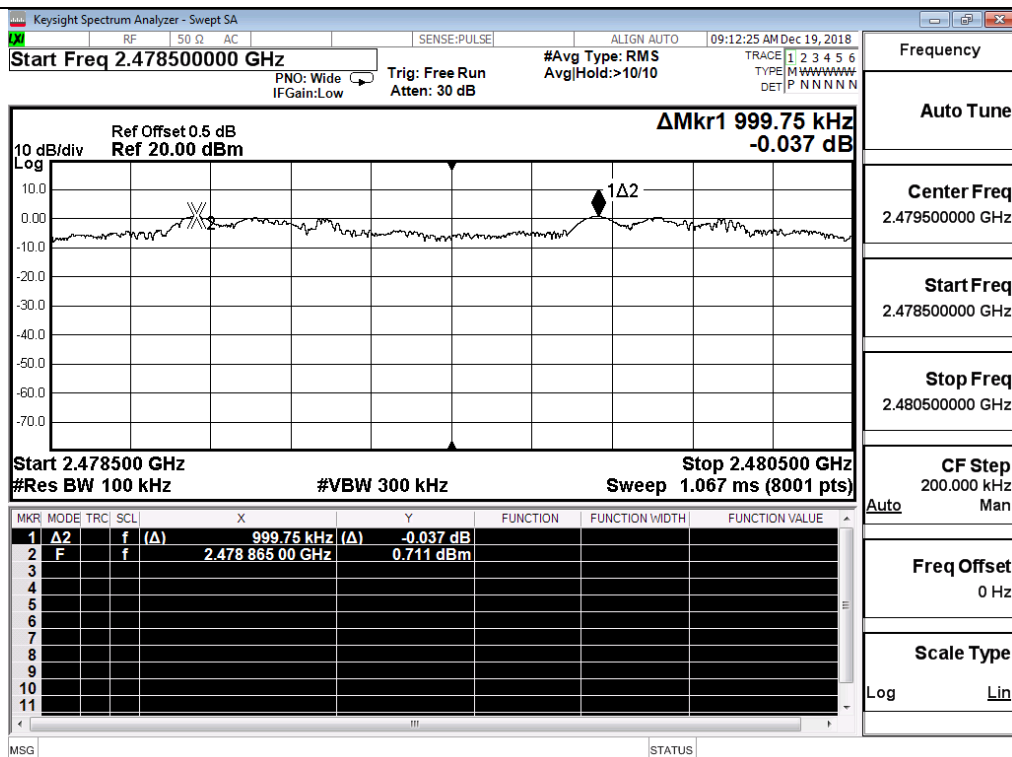
GFSK/MCH



GFSK/HCH

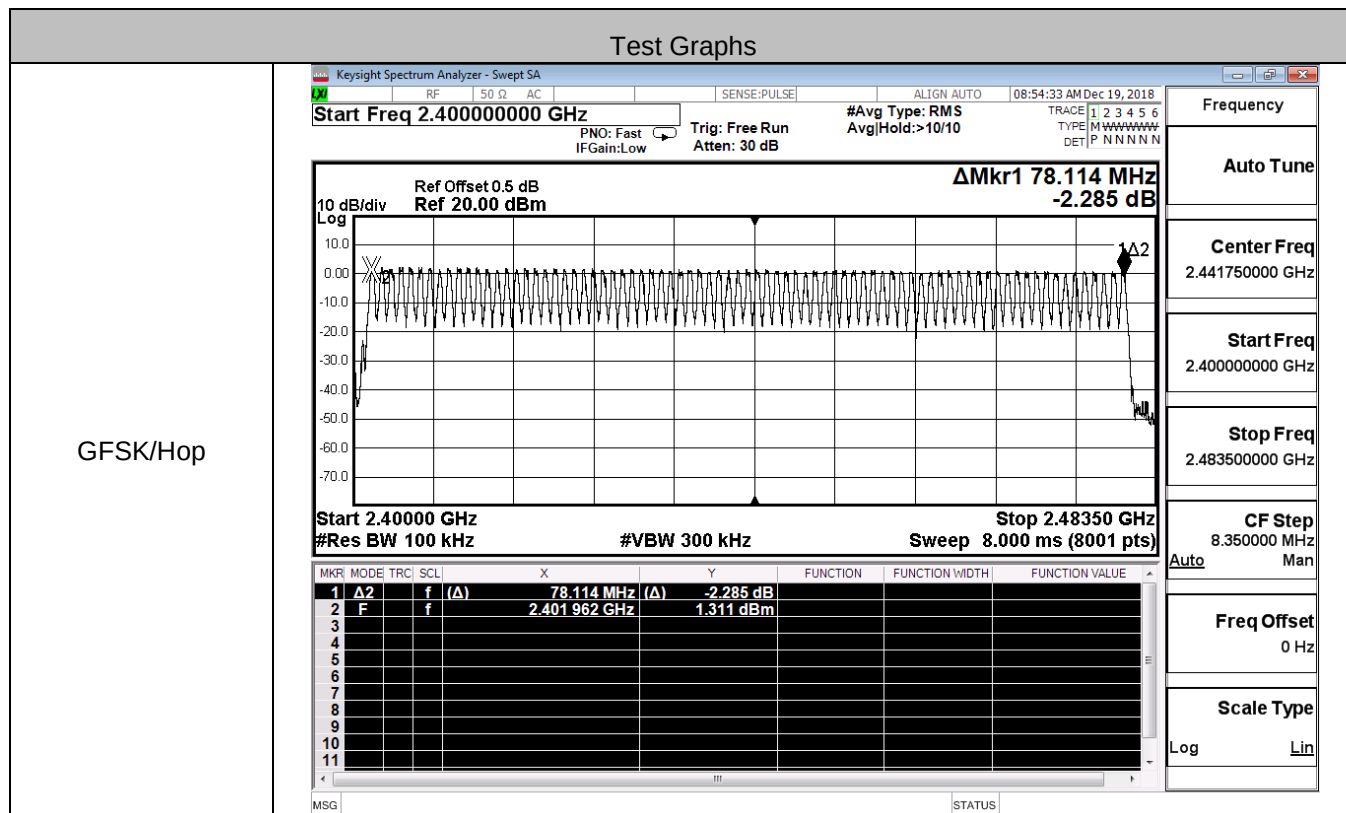


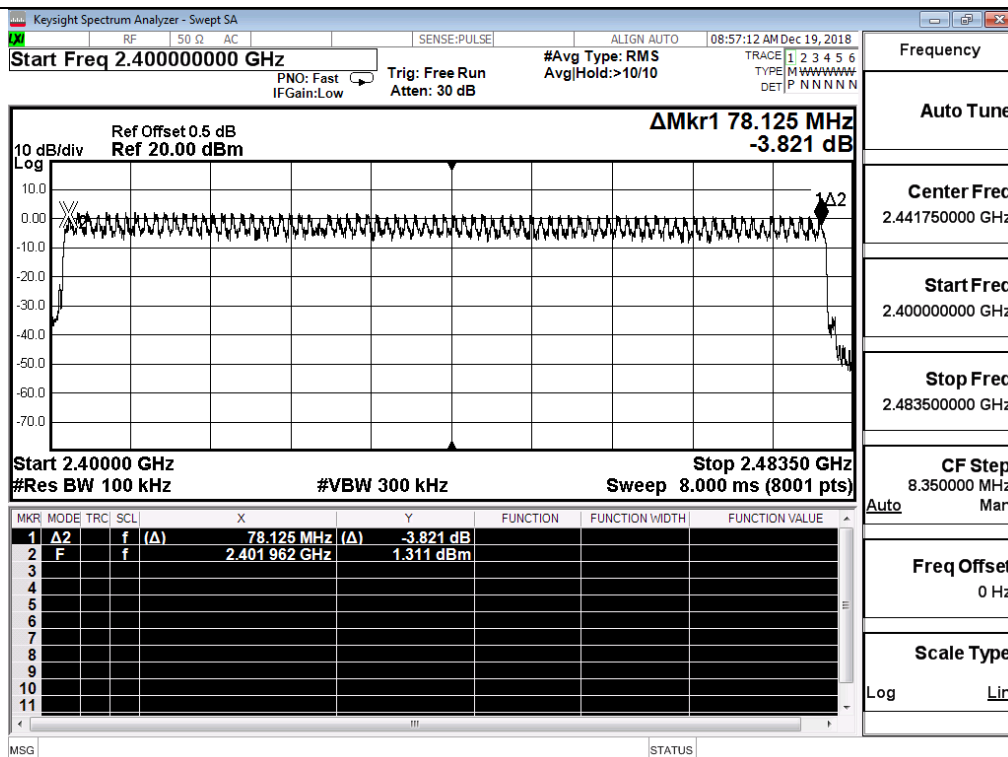
$\pi/4$ DQPSK/LCH $\pi/4$ DQPSK/MCH

$\pi/4$ DQPSK/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



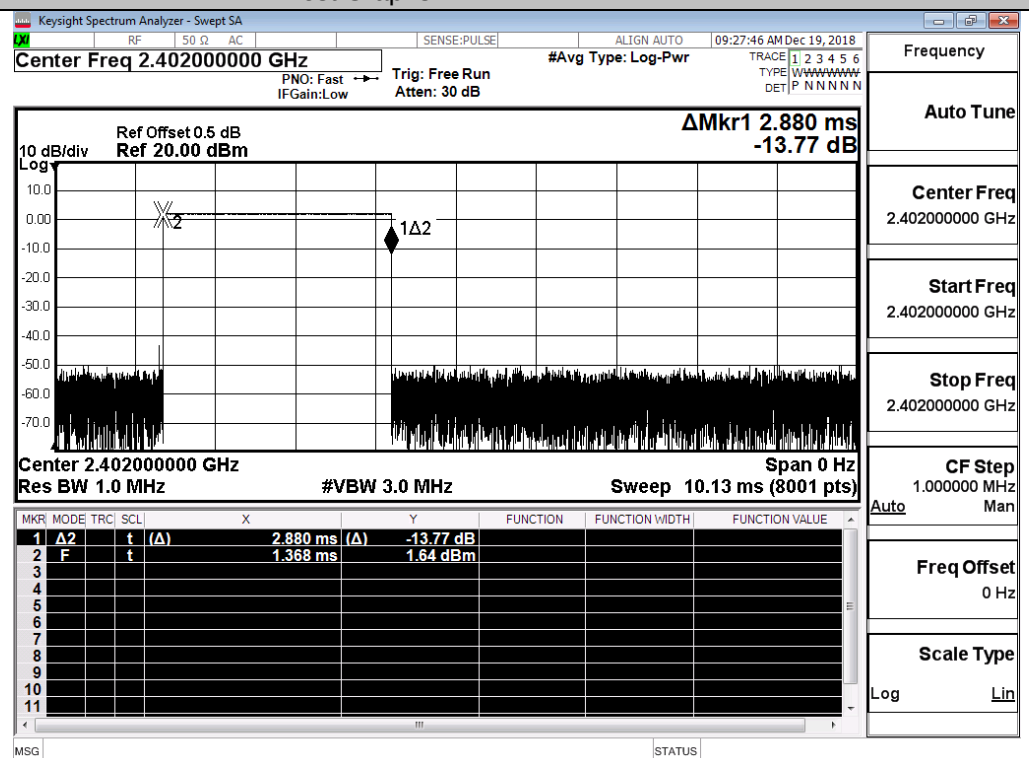
$\pi/4$ DQPSK/Hop

A.5 Dwell Time

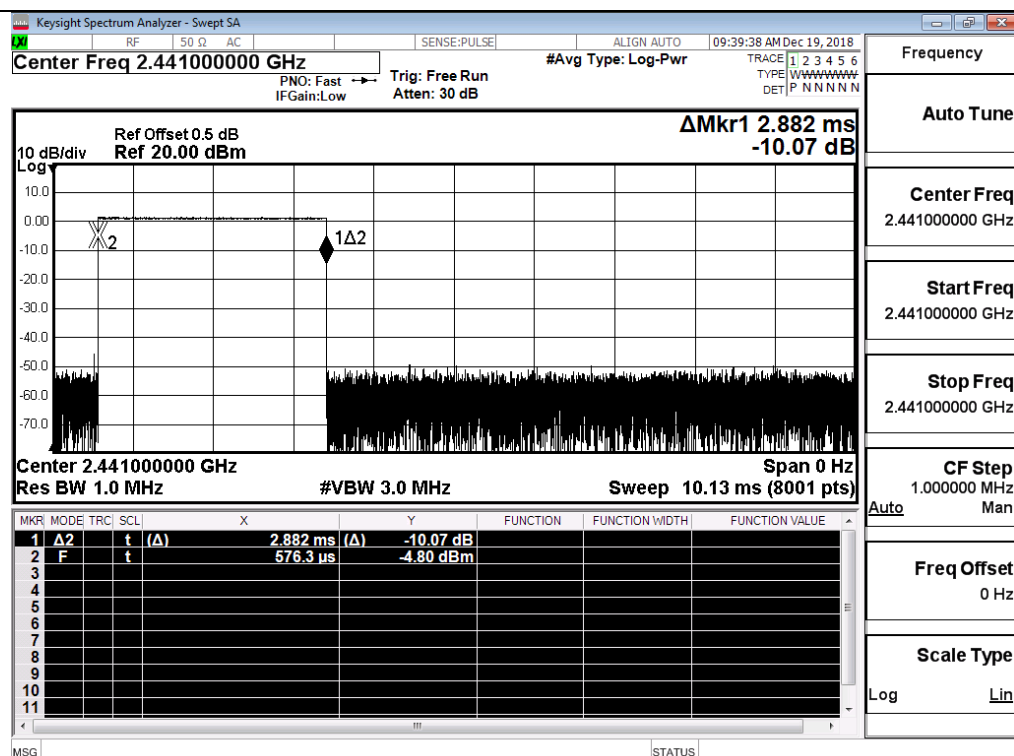
Mode	Packet	Channel	Burst Width [ms/hop/ch]	Total Hops[hop*ch]	Dwell Time[s]	Limit [s]	Verdict
GFSK	DH5	LCH	2.88	106.7	0.307	0.4	PASS
	DH5	MCH	2.88	106.7	0.307	0.4	PASS
	DH5	HCH	2.88	106.7	0.307	0.4	PASS
$\pi/4$ DQPSK	2DH5	LCH	2.89	106.7	0.308	0.4	PASS
	2DH5	MCH	2.89	106.7	0.308	0.4	PASS
	2DH5	HCH	2.88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

Test Graphs

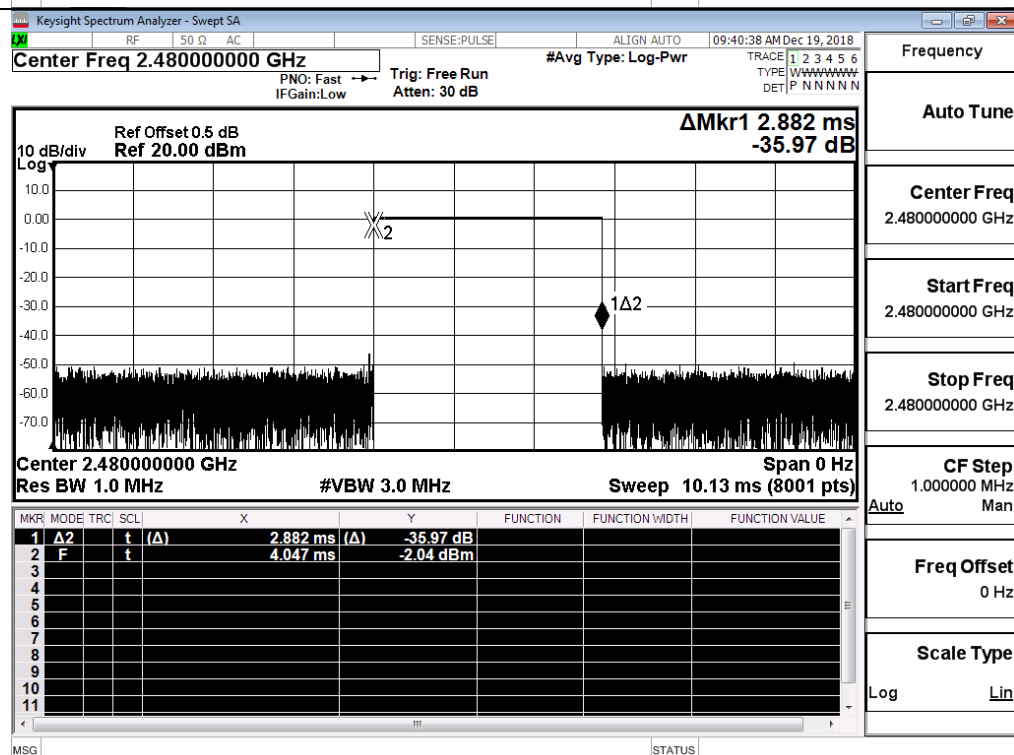
GFSK_DH5/LCH



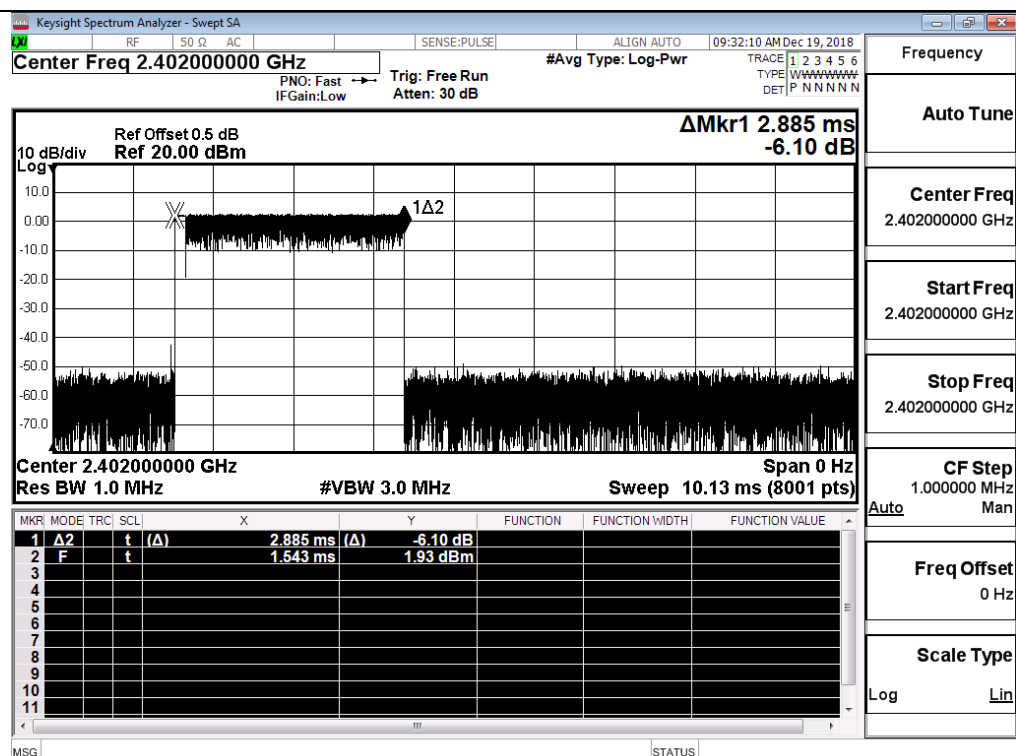
GFSK_DH5/MCH



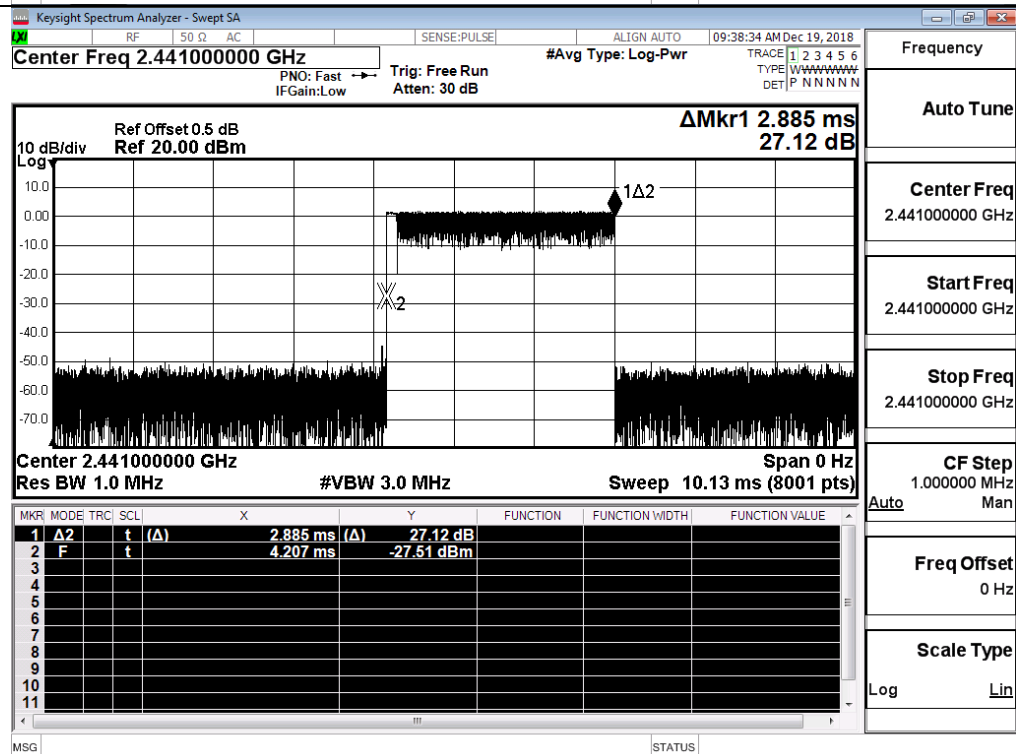
GFSK_DH5/HCH



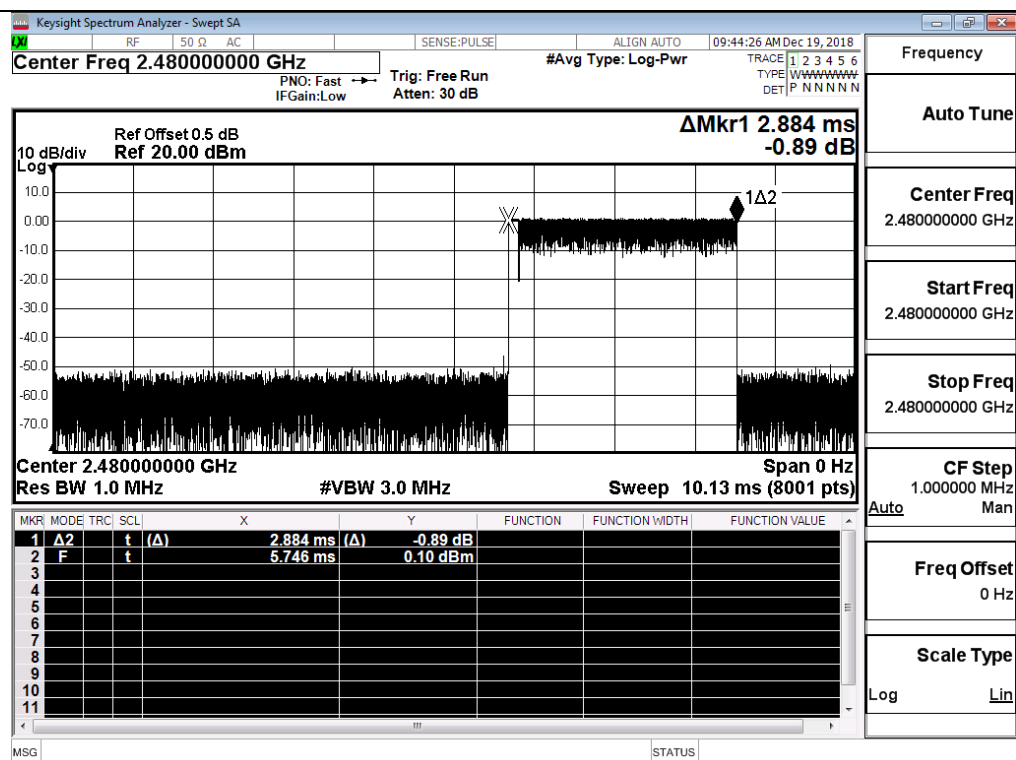
$\pi/4$ DQPSK
_2DH5/LCH



$\pi/4$ DQPSK
_2DH5/MCH



$\pi/4$ DQPSK
_2DH5/HCH

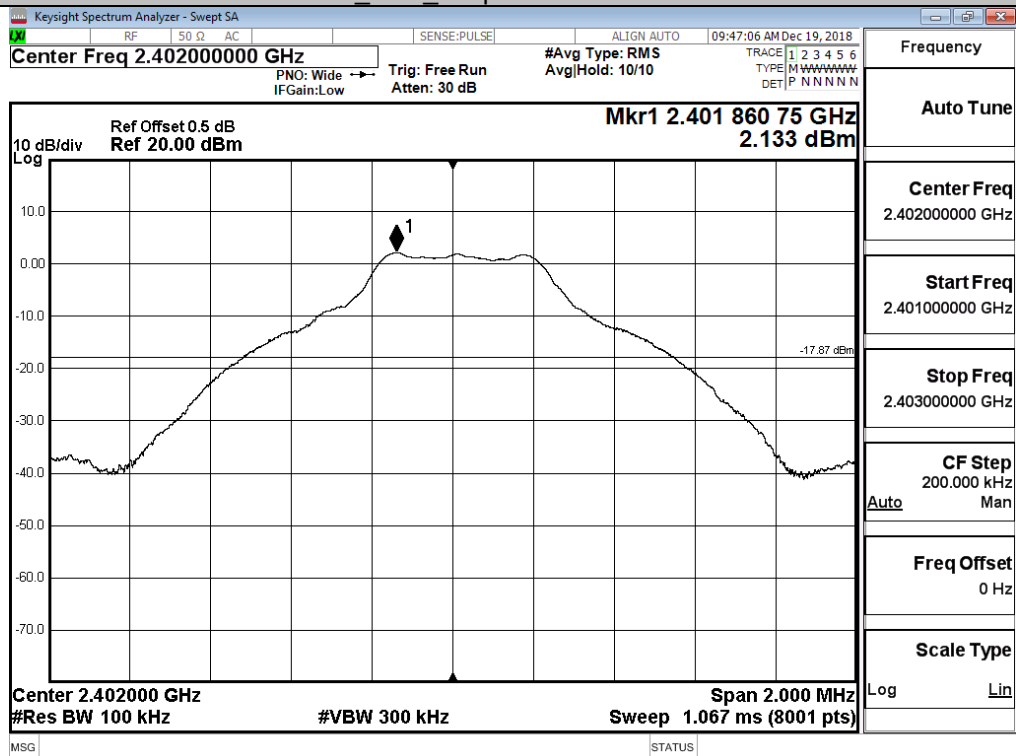


A.6 RF Conducted Spurious Emissions

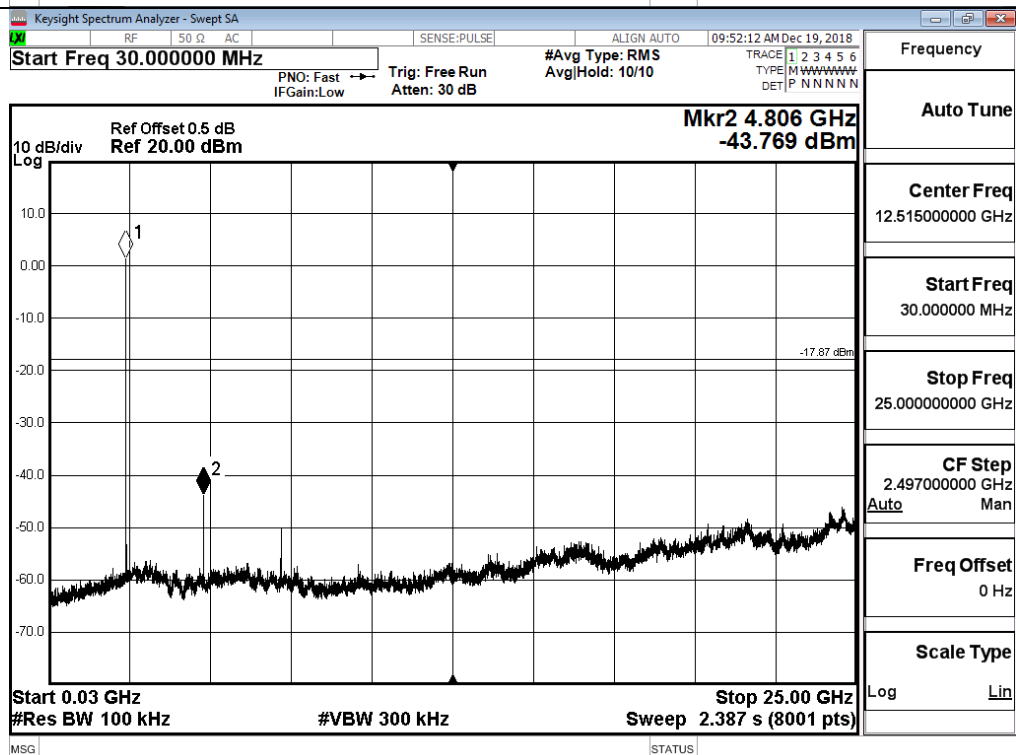
Mode	Channel	Pref [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
GFSK	LCH	2.133	-43.769	-17.87	PASS
	MCH	1.276	-45.693	-18.72	PASS
	HCH	0.641	-44.640	-19.36	PASS
$\pi/4$ DQPSK	LCH	2.143	-46.237	-17.86	PASS
	MCH	1.299	-46.617	-18.70	PASS
	HCH	0.666	-40.833	-19.33	PASS

GFSK LCH Graphs

Pref

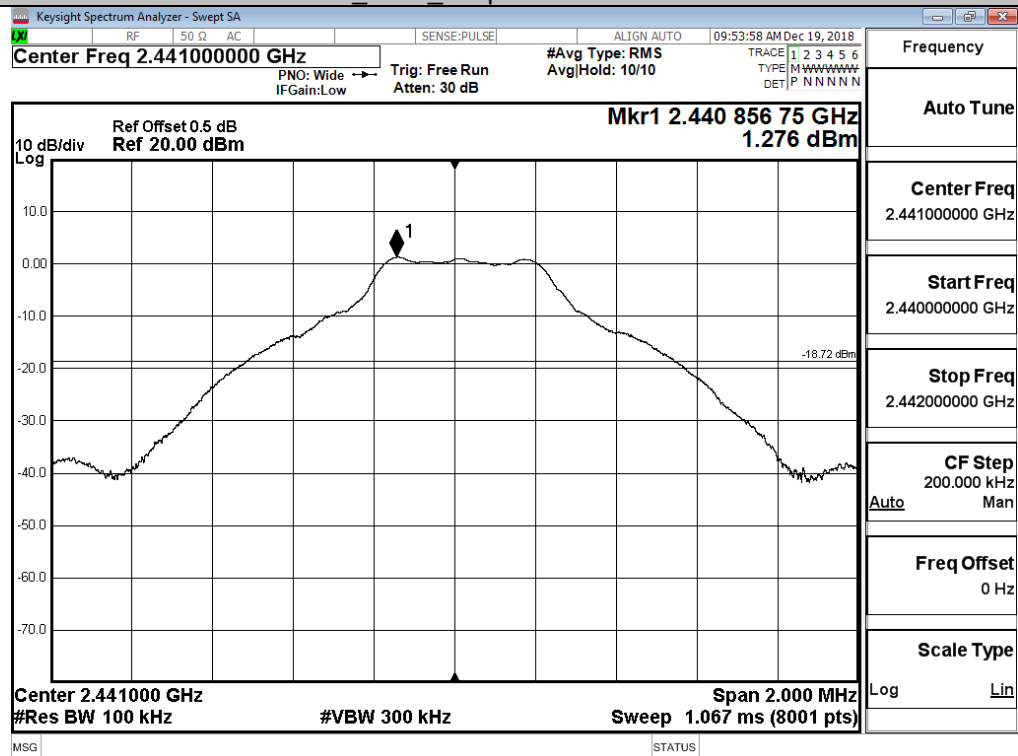


Puw

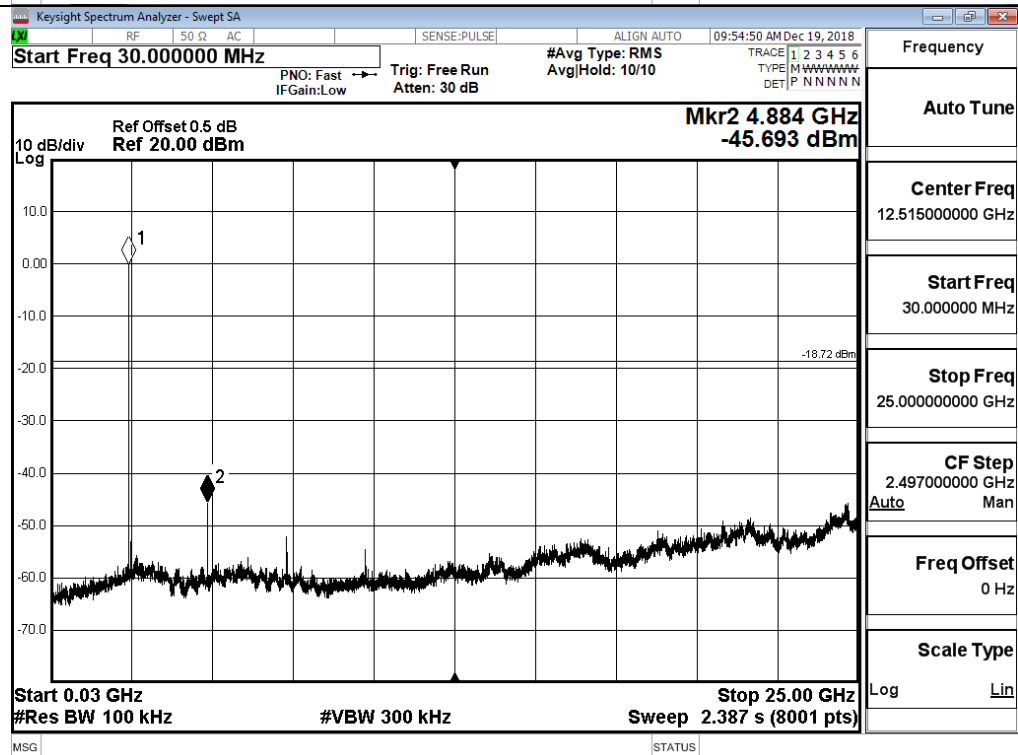


GFSK_MCH_Graphs

Pref

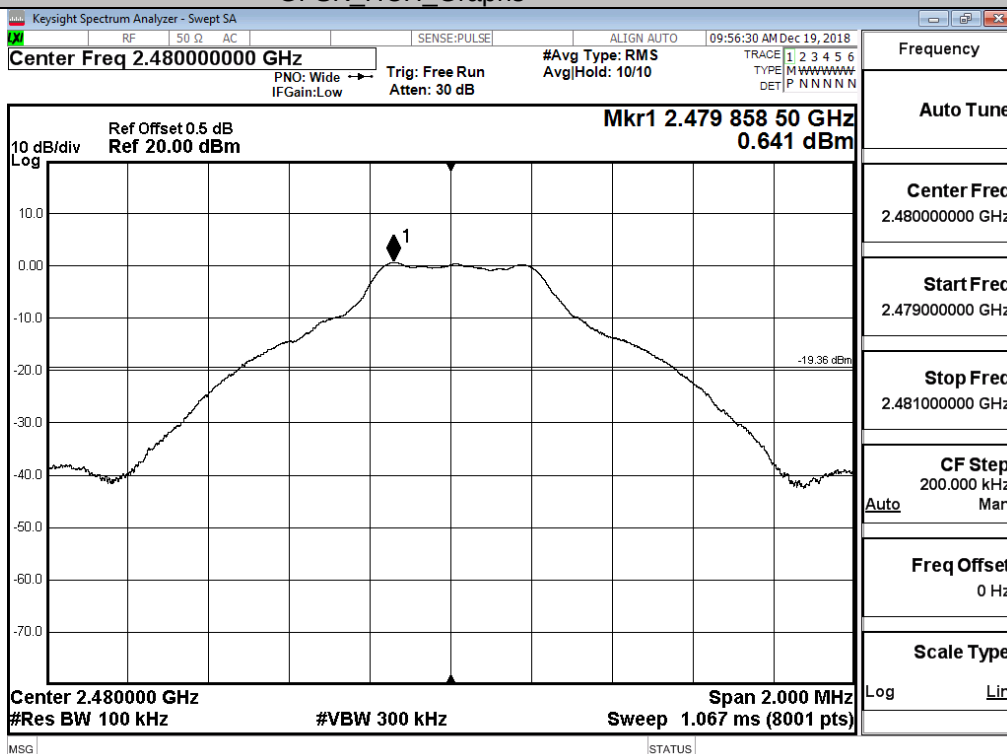


Puw

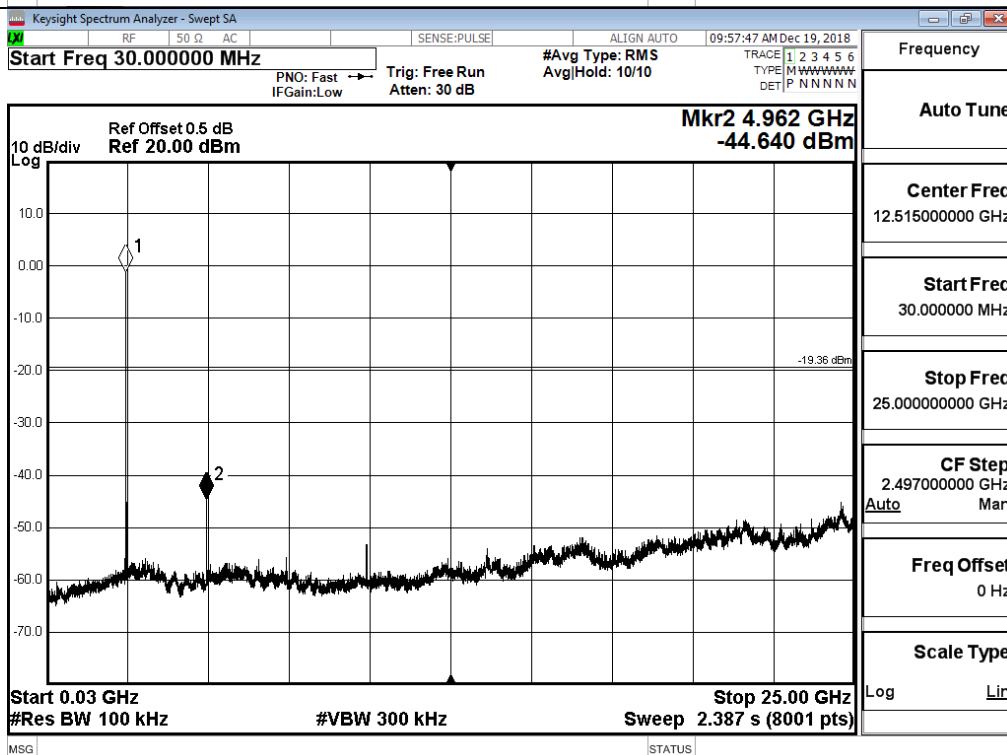


GFSK_HCH_Graphs

Pref

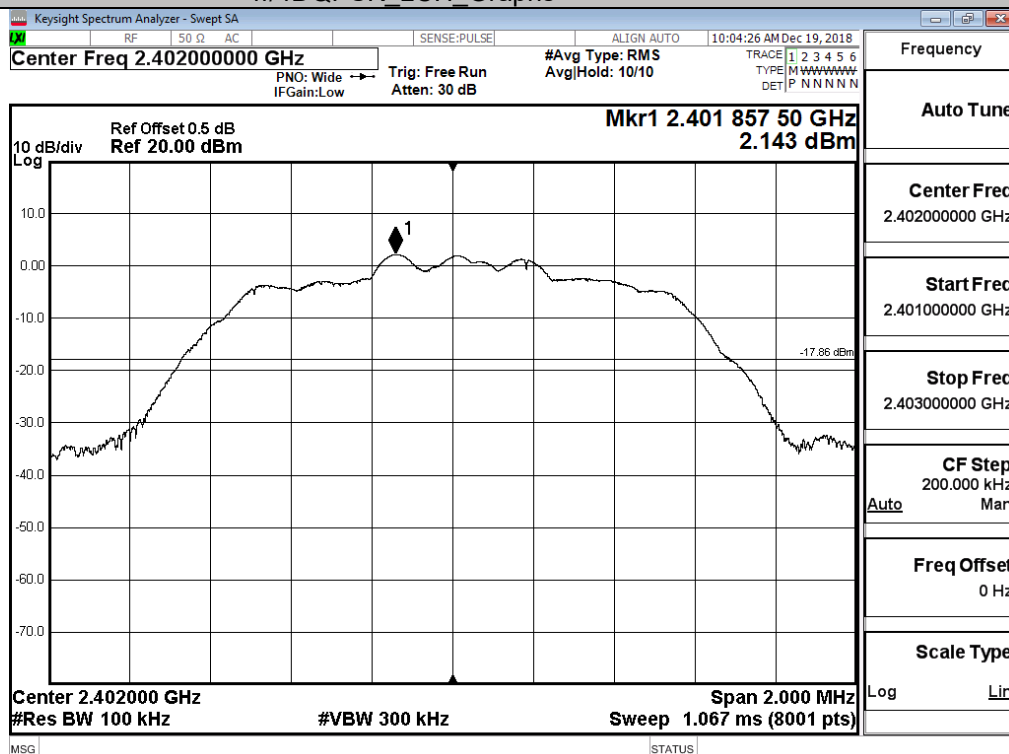


Puw

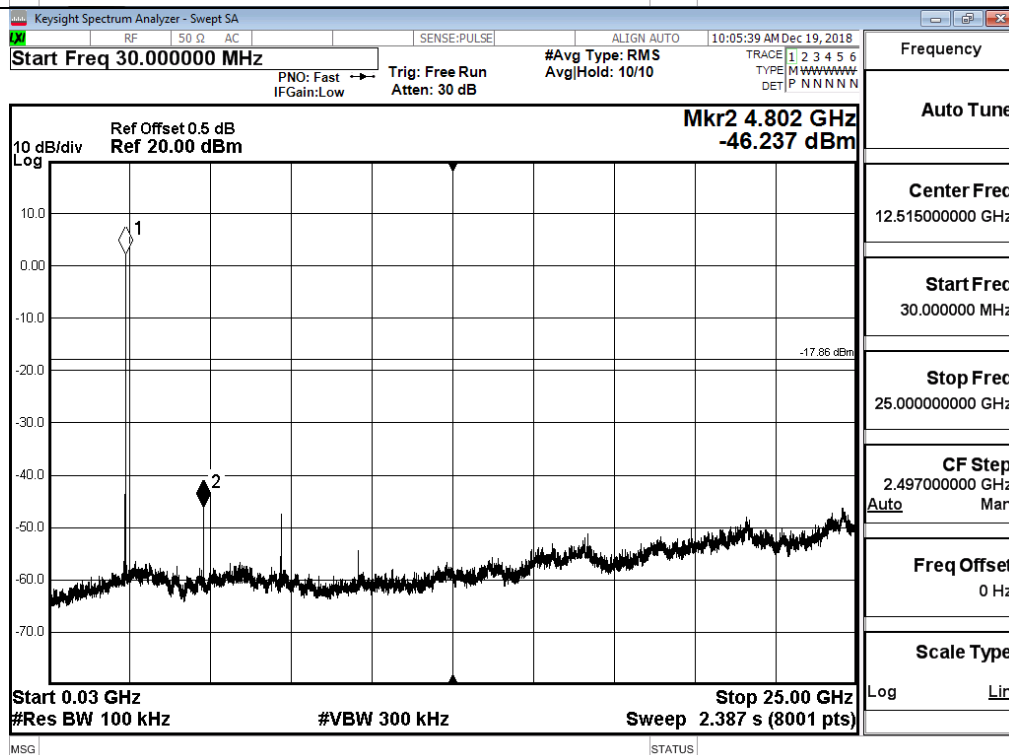


$\pi/4$ DQPSK LCH_Graphs

Pref

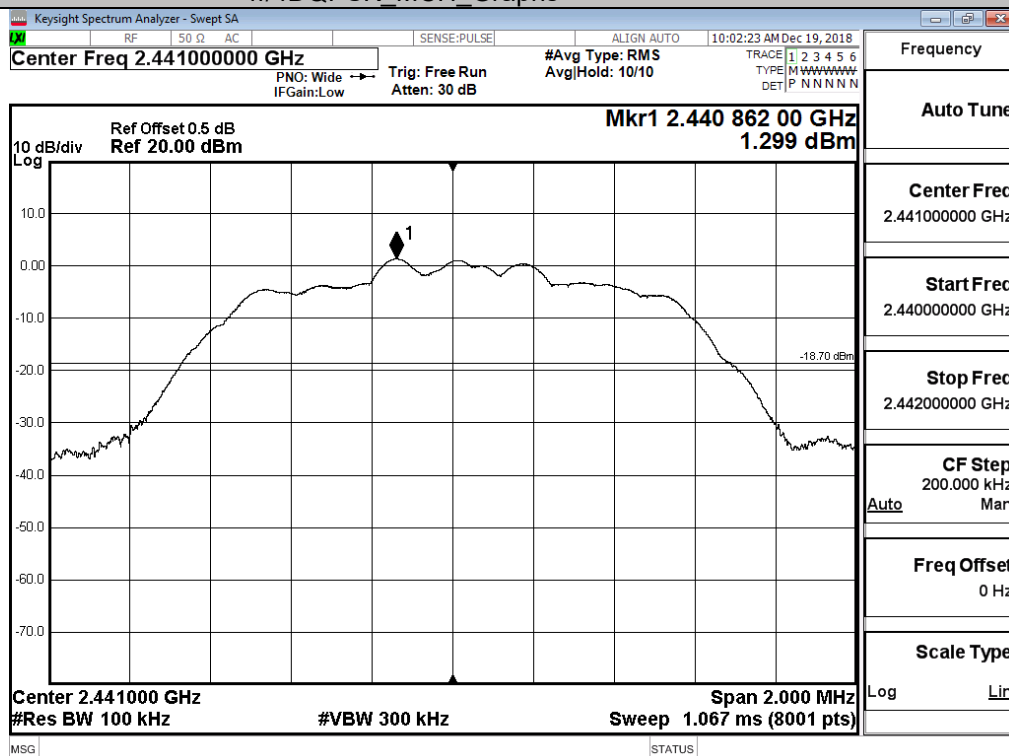


Puw

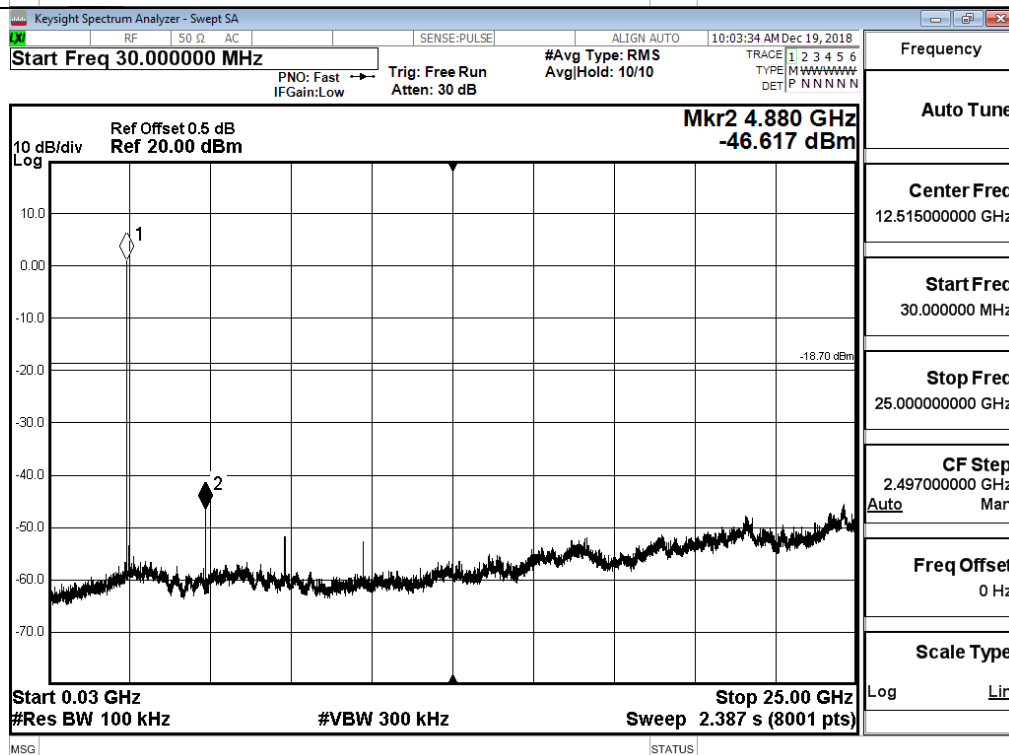


$\pi/4$ DQPSK MCH Graphs

Pref

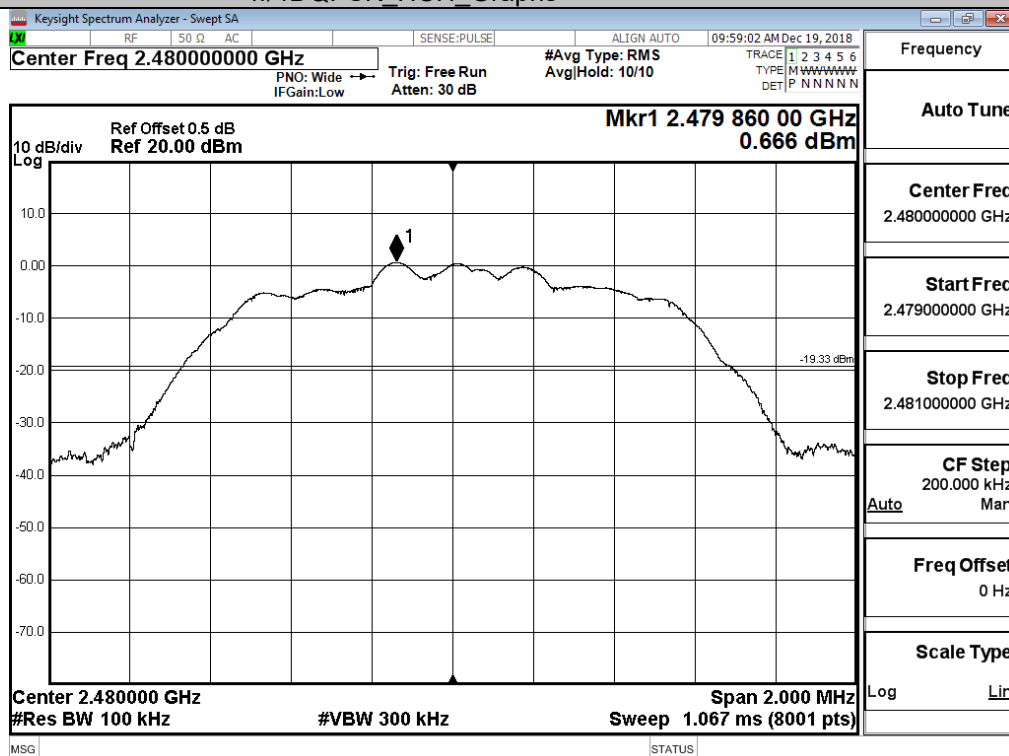


Puw

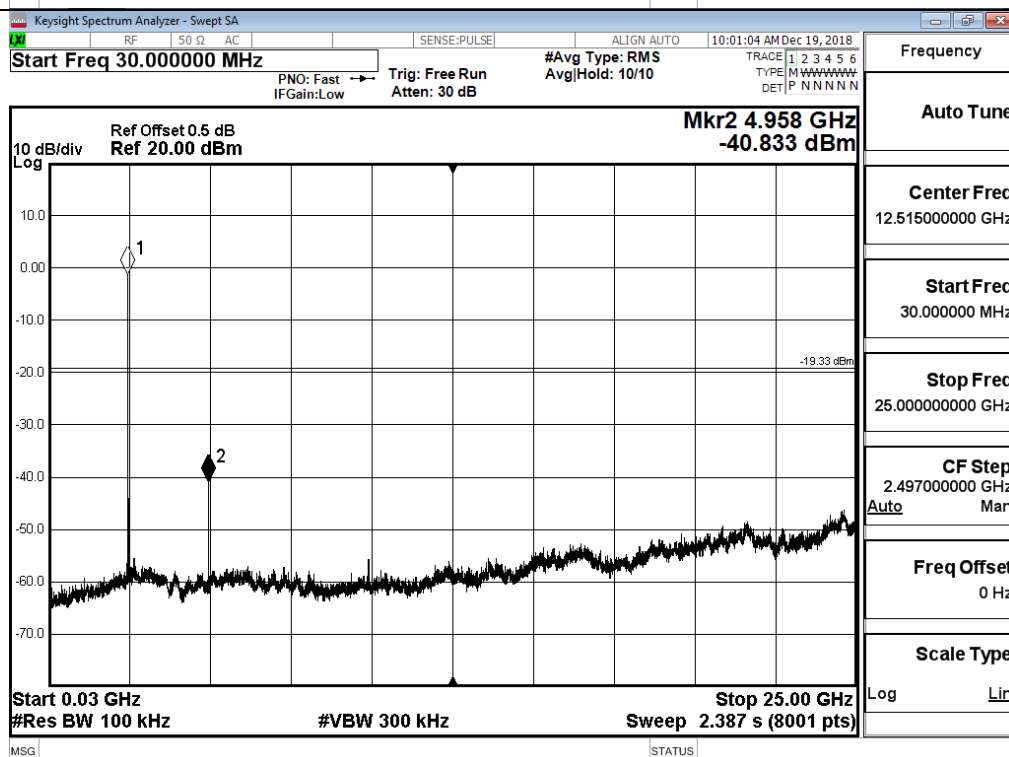


$\pi/4$ DQPSK HCH Graphs

Pref



Puw

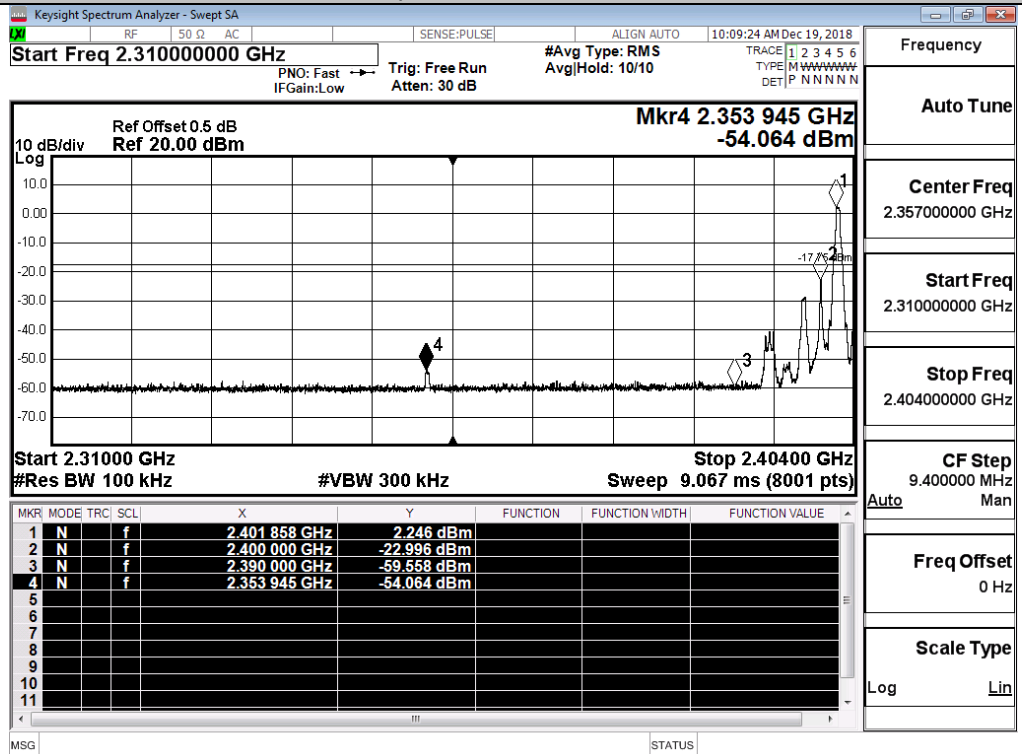


A.7 Band-edge for RF Conducted Emissions

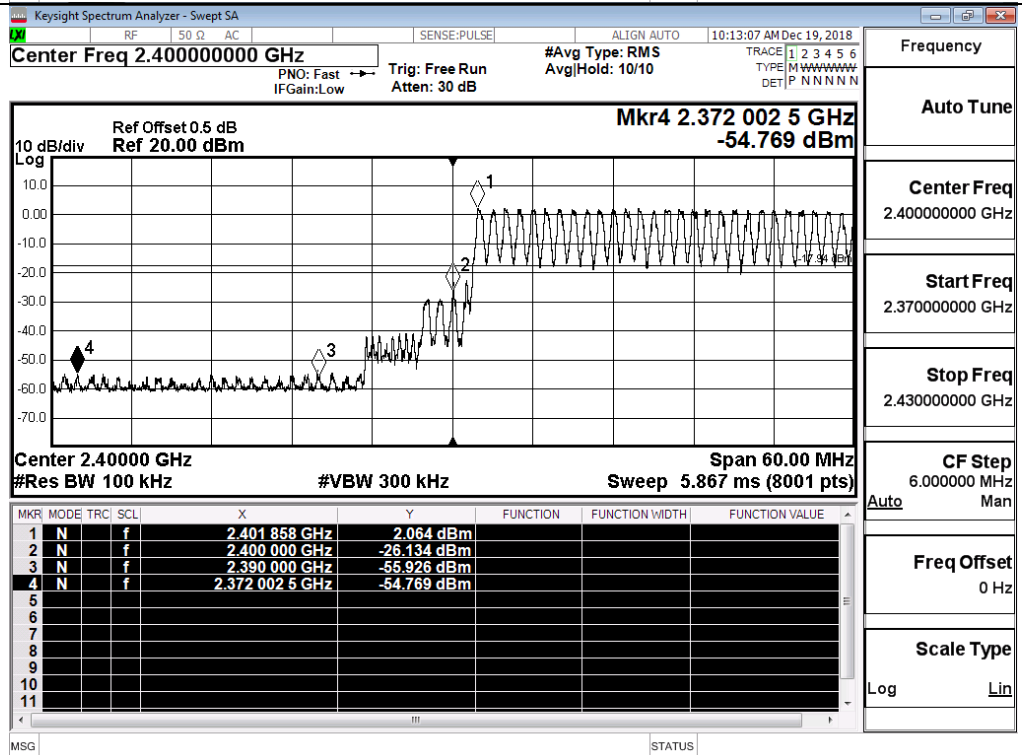
Mode	Channel	Carrier Frequency [MHz]	Carrier Power [dBm]	Frequency Hopping	Max Spurious Level [dBm]	Limit [dBm]	Verdict
GFSK	LCH	2402	2.246	Off	-54.064	-17.75	PASS
			2.064	On	-54.769	-17.94	PASS
	HCH	2480	0.752	Off	-26.924	-19.25	PASS
			0.114	On	-51.869	-19.89	PASS
$\pi/4$ DQPSK	LCH	2402	2.165	Off	-55.228	-17.84	PASS
			1.912	On	-54.912	-18.09	PASS
	HCH	2480	0.709	Off	-26.359	-19.29	PASS
			0.233	On	-51.845	-19.77	PASS

Test Graphs

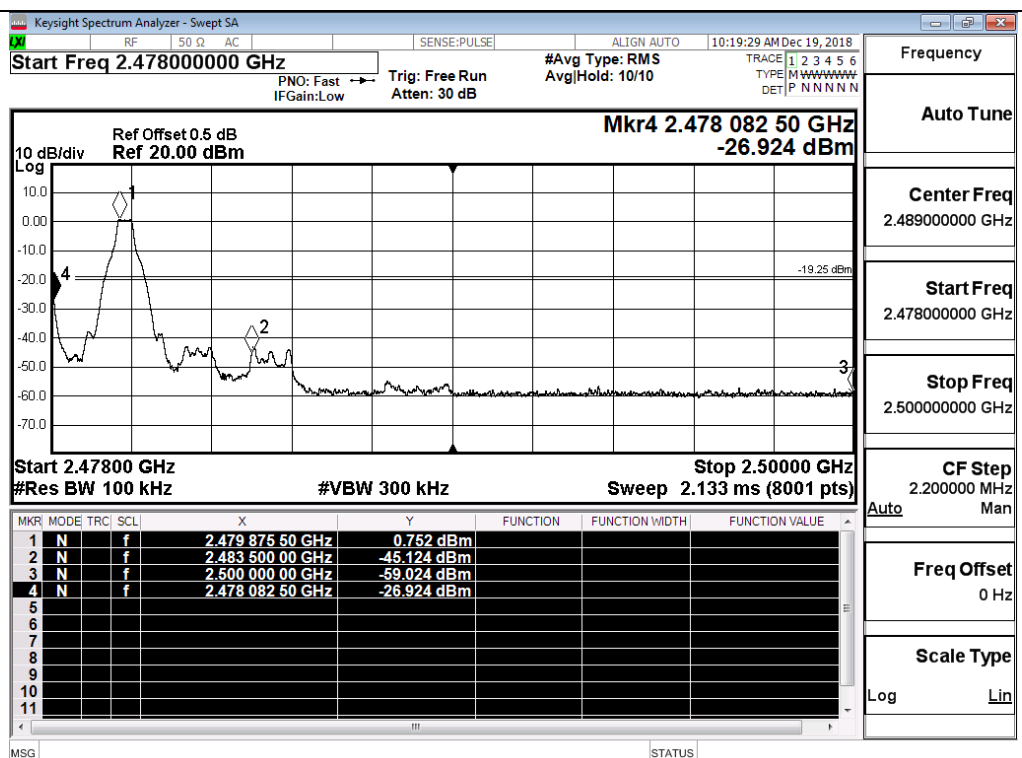
GFSK/LCH/No Hop



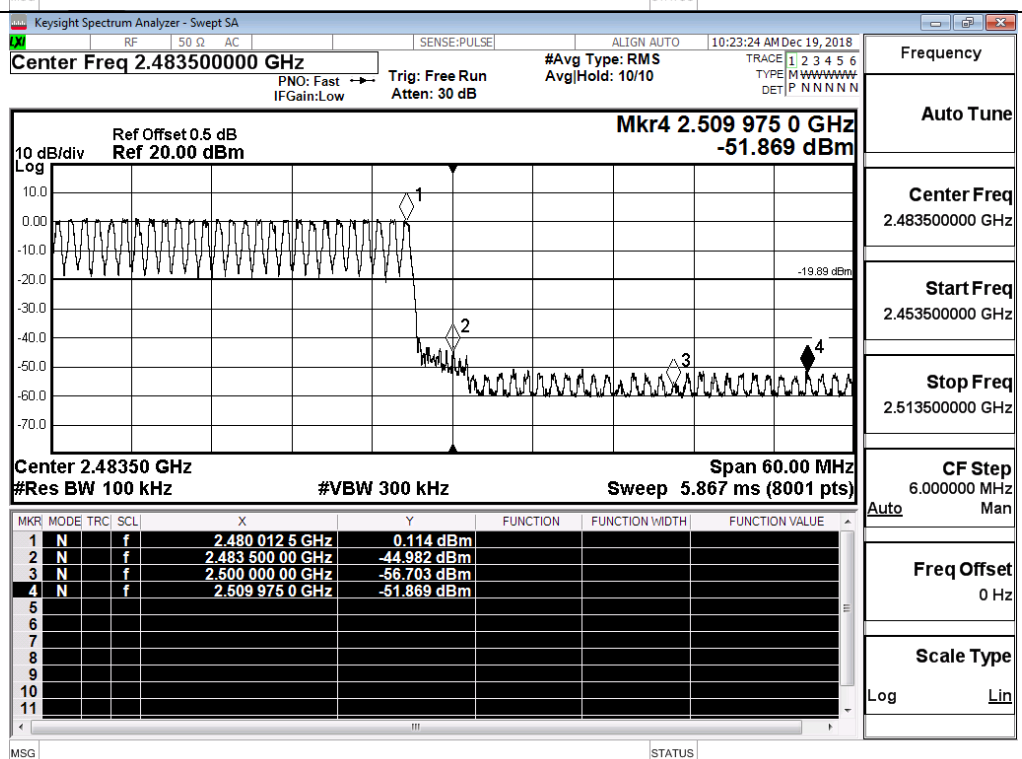
GFSK/LCH/Hop



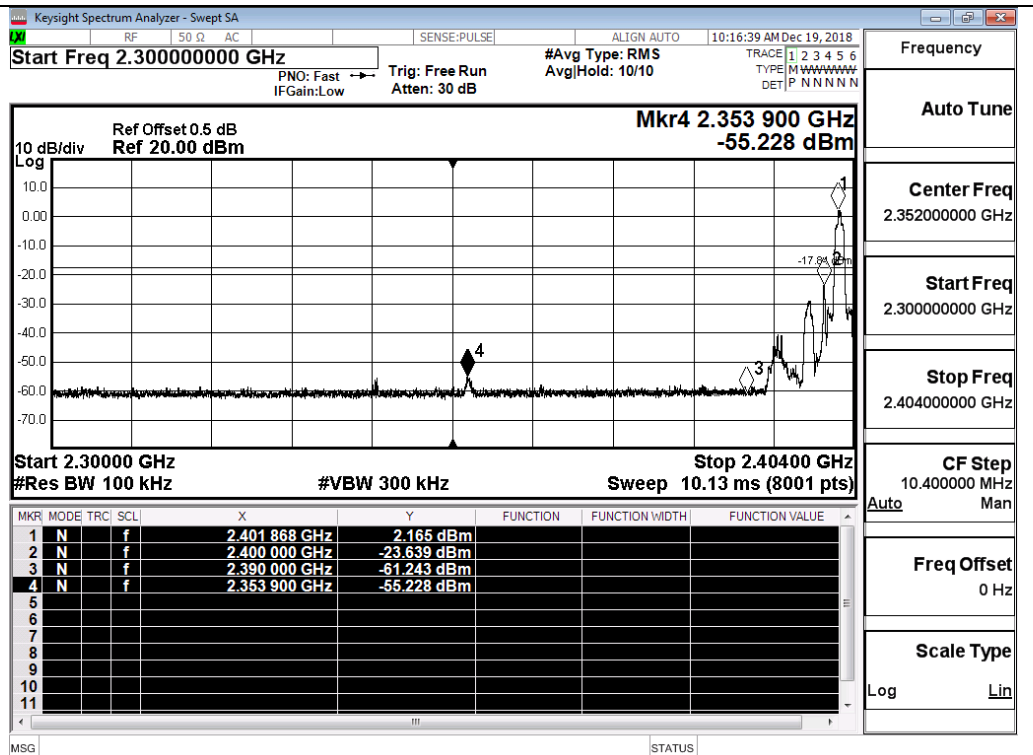
GFSK/HCH/No Hop



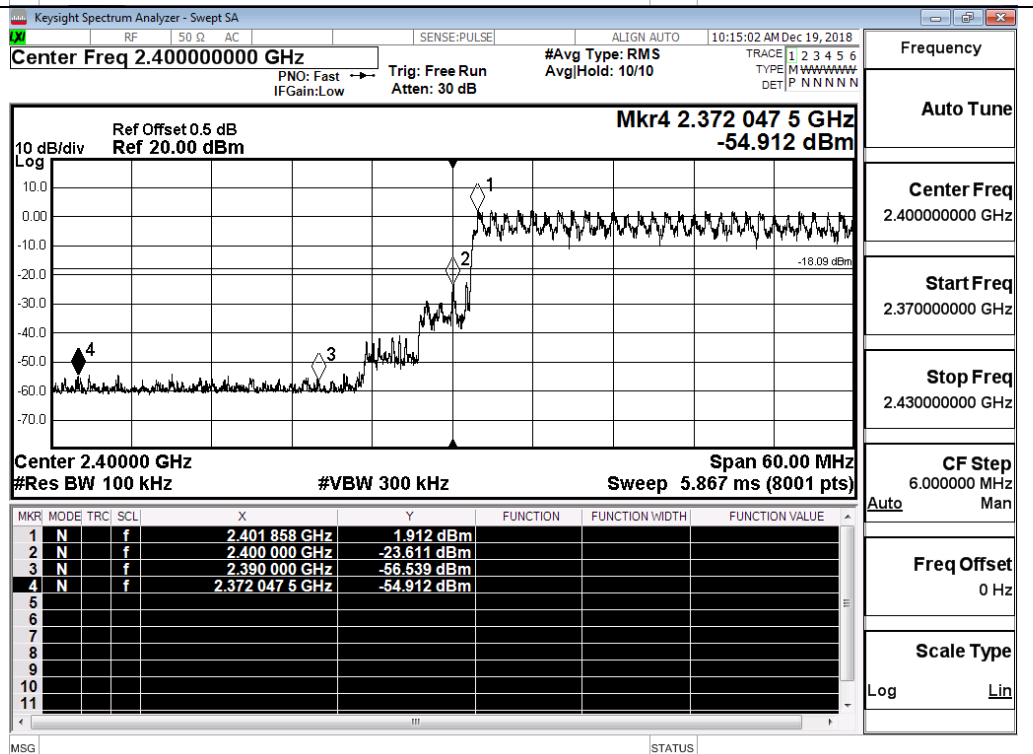
GFSK/HCH/Hop



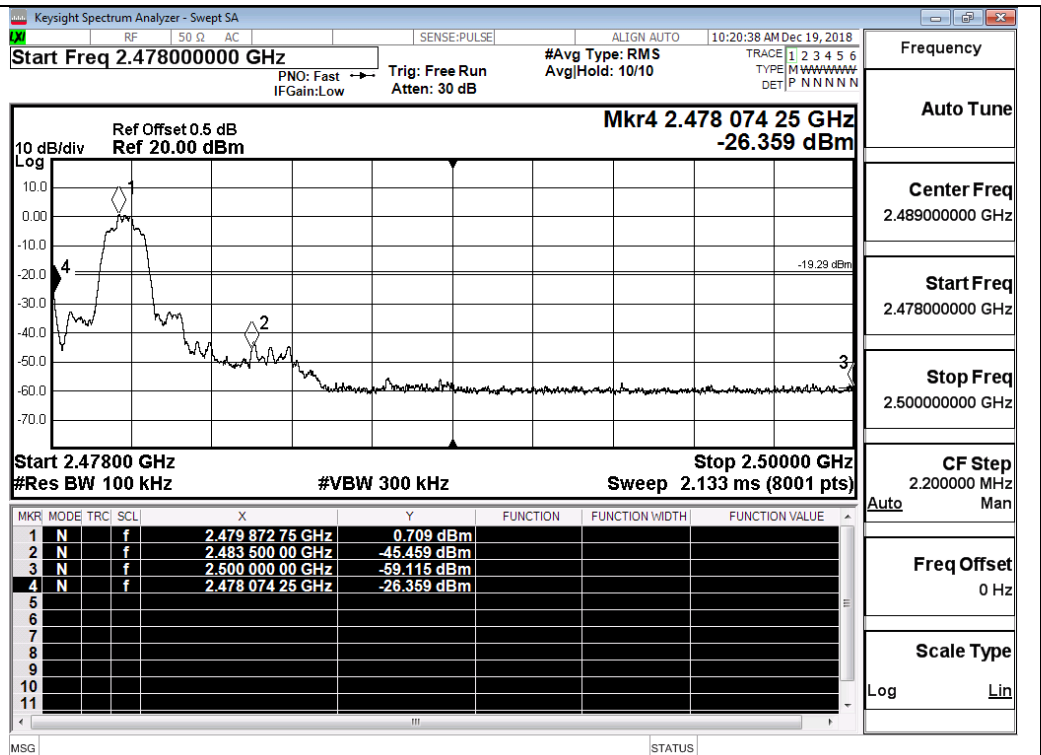
$\pi/4$ DQPSK/LCH/No
Hop



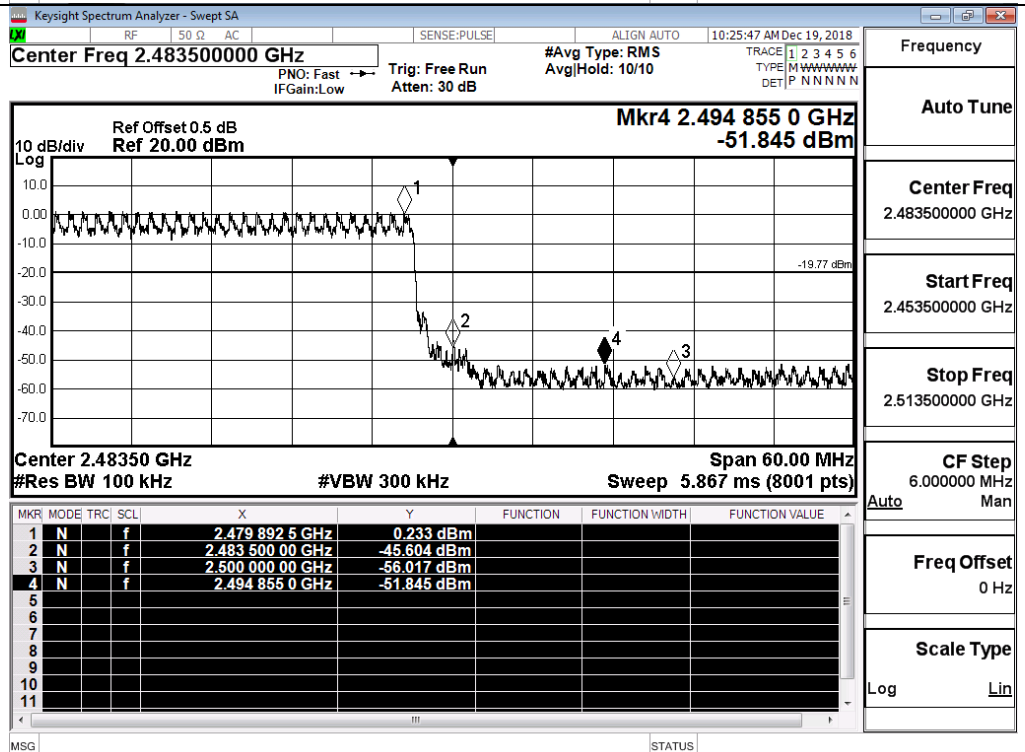
$\pi/4$ DQPSK/LCH/Hop



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



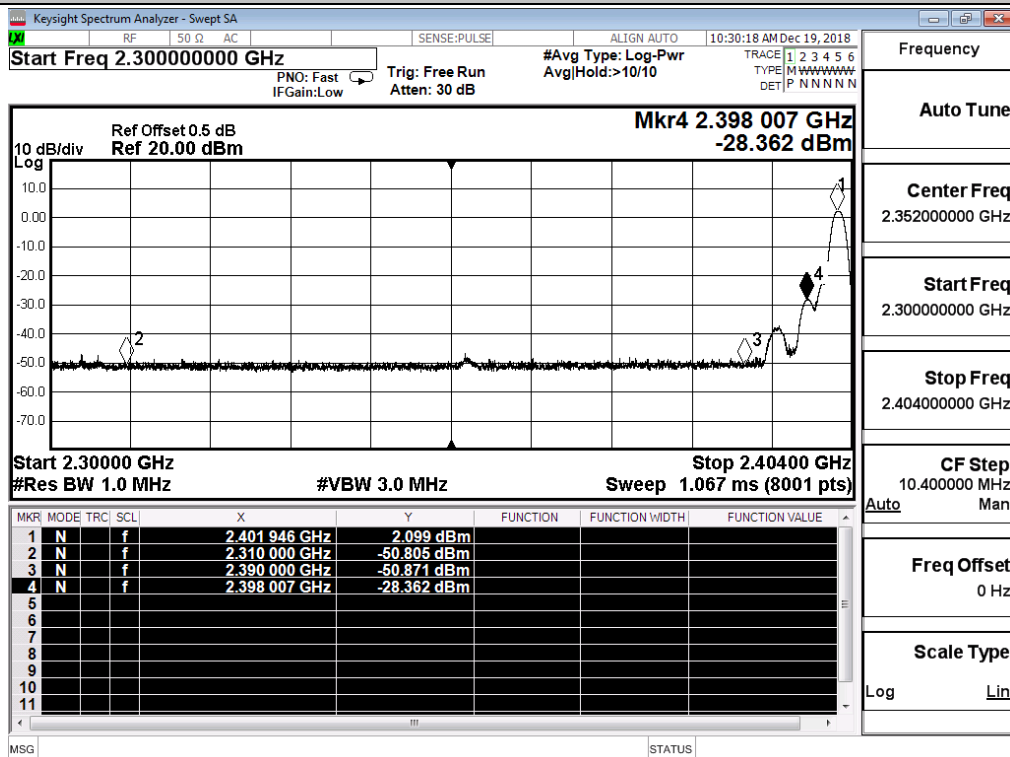
$\pi/4$ DQPSK/HCH/Hop



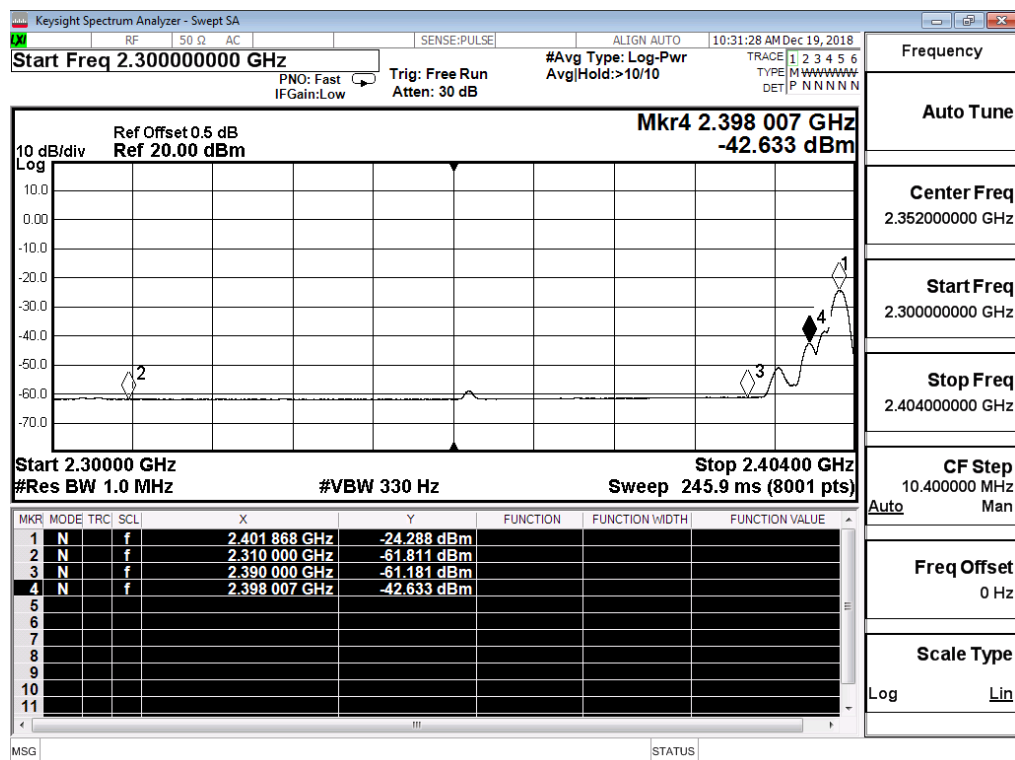
A.8 Restrict-band band-edge measurements

Test Mode	Hopping	Freq.	Power [dBm]	Gain	Ground Factor	E [dBuV/m]	Detector	Limit [dBuV/m]	Verdict
GFSK	Off	2310.0	-50.805	2.0	0	46.46	PEAK	74	PASS
	Off	2310.0	-61.811	2.0	0	35.45	AV	54	PASS
	Off	2390.0	-50.871	2.0	0	46.39	PEAK	74	PASS
	Off	2390.0	-61.181	2.0	0	36.08	AV	54	PASS
	Off	2483.5	-41.114	2.0	0	56.15	PEAK	74	PASS
	Off	2483.5	-53.242	2.0	0	44.02	AV	54	PASS
	Off	2500.0	-49.321	2.0	0	47.94	PEAK	74	PASS
	Off	2500.0	-60.994	2.0	0	36.27	AV	54	PASS
$\pi/4$ DQPSK	Off	2310.0	-50.040	2.0	0	47.22	PEAK	74	PASS
	Off	2310.0	-61.843	2.0	0	35.42	AV	54	PASS
	Off	2390.0	-49.704	2.0	0	47.56	PEAK	74	PASS
	Off	2390.0	-61.245	2.0	0	36.02	AV	54	PASS
	Off	2483.5	-40.491	2.0	0	56.77	PEAK	74	PASS
	Off	2483.5	-54.315	2.0	0	42.95	AV	54	PASS
	Off	2500.0	-50.536	2.0	0	46.72	PEAK	74	PASS
	Off	2500.0	-60.968	2.0	0	36.29	AV	54	PASS

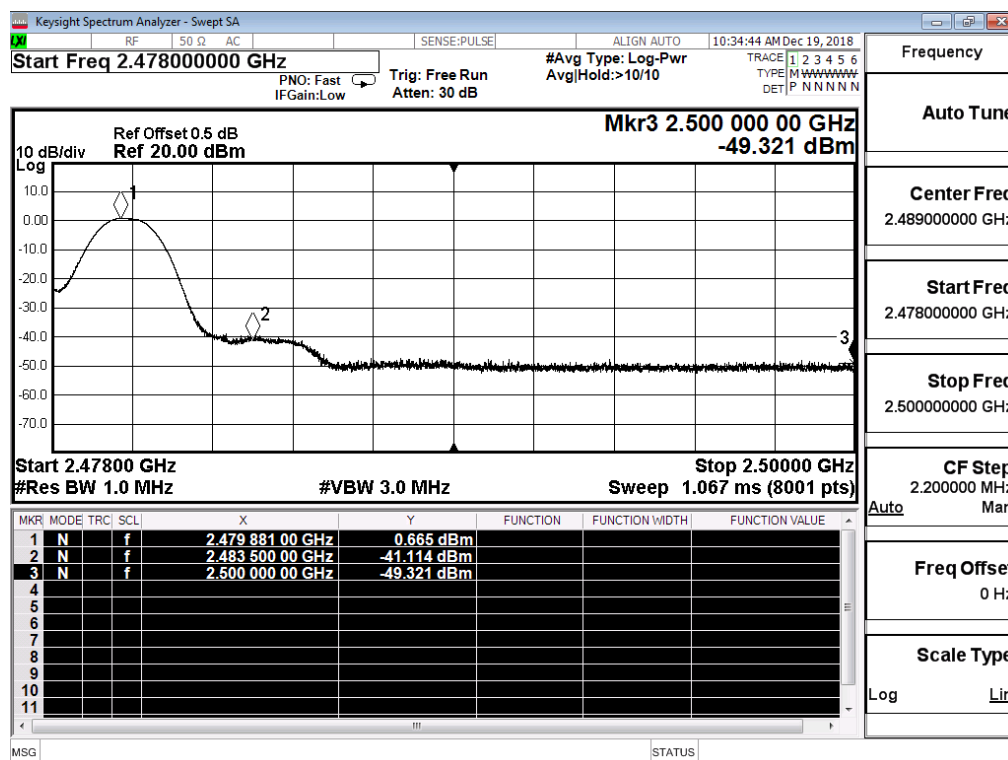
Restrict-band band-edge measurements_Hopping Off_GFSK_PEAK (Low Channel)



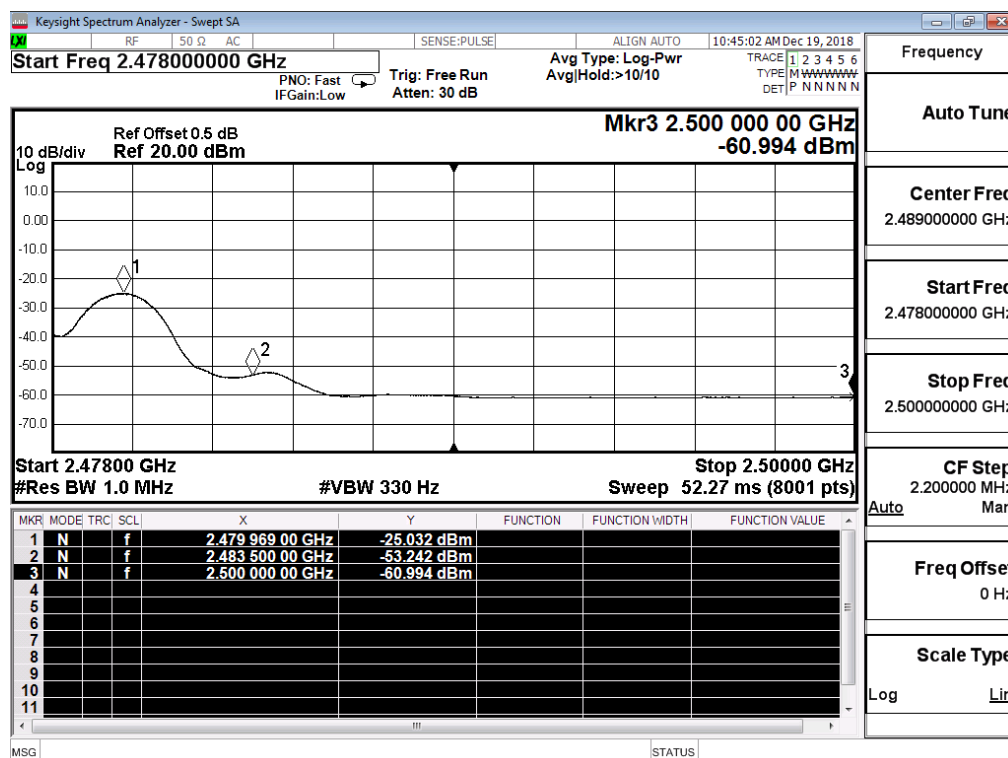
Restrict-band band-edge measurements_Hopping Off_GFSK_Average (Low Channel)

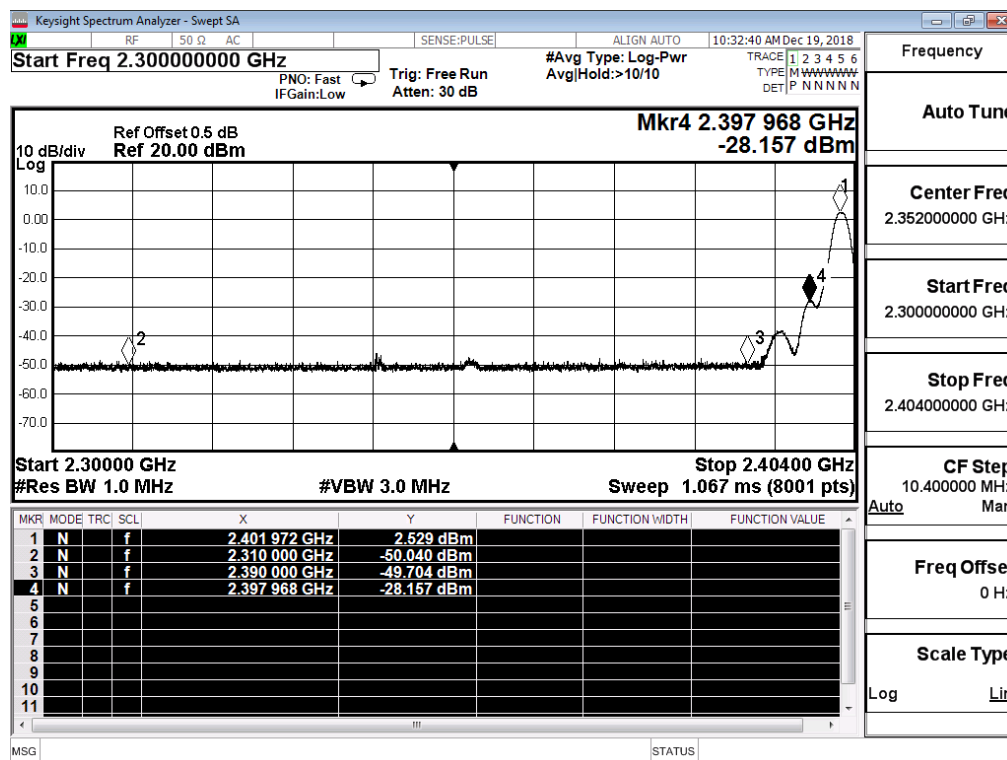
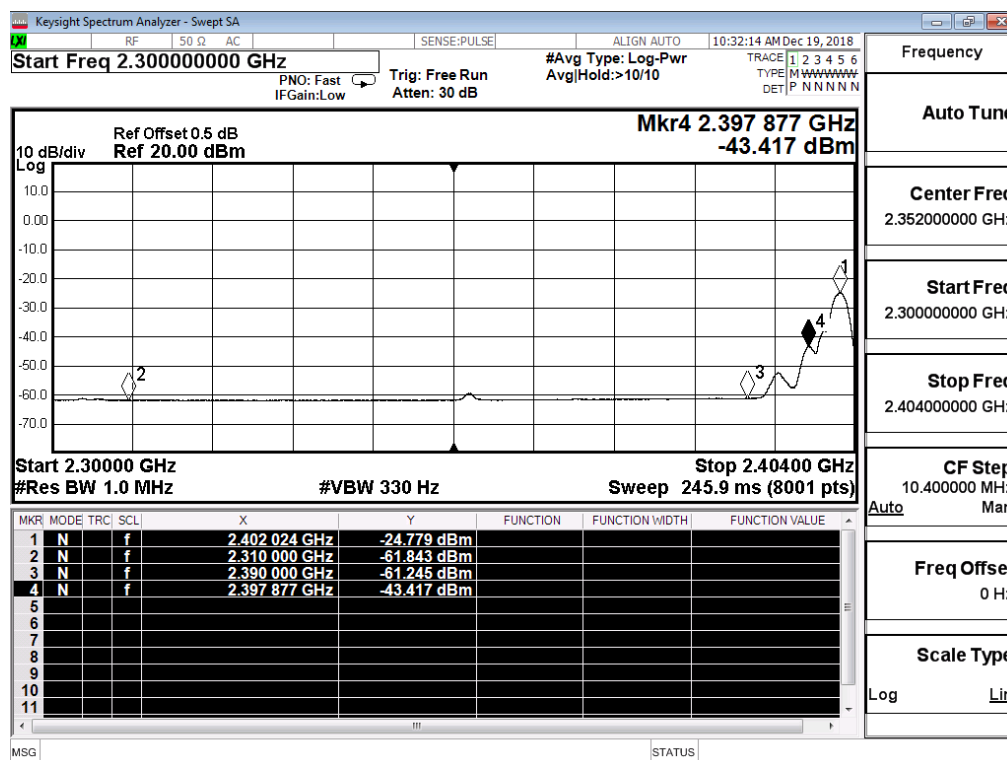


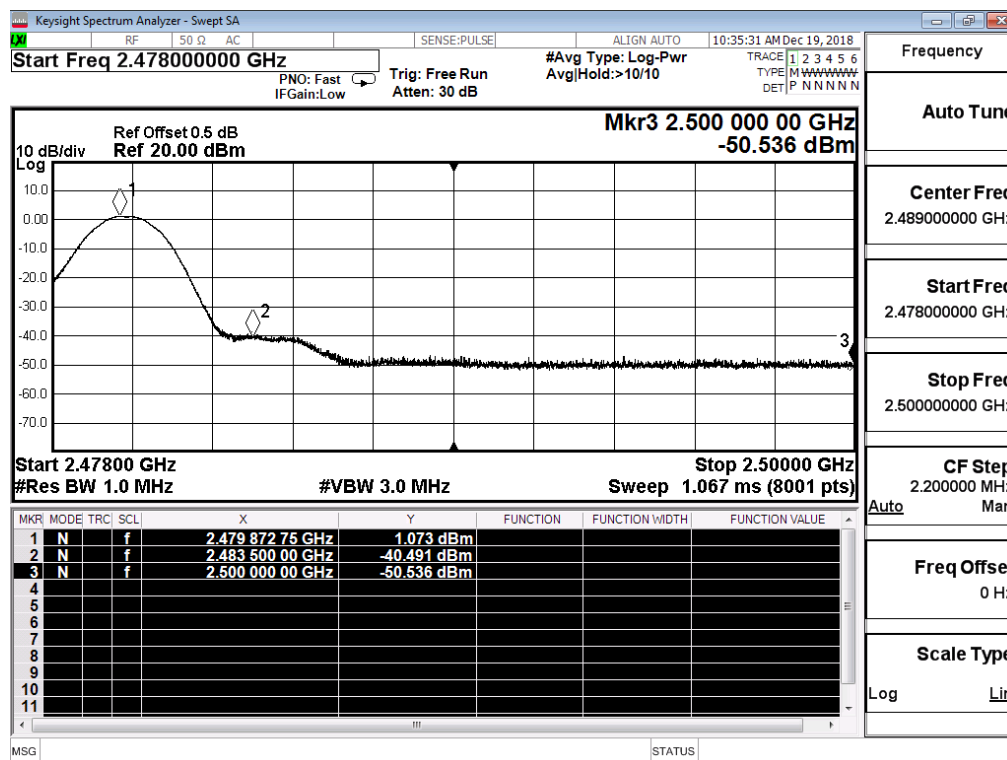
Restrict-band band-edge measurements_Hopping Off_GFSK_PEAK (High Channel)



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