

Appendix A

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

Product Name: ACOUSTIC GUITAR AMP

Trade Mark: AROMA, Tom'sline

Test Model: AG-26A

Environmental Conditions

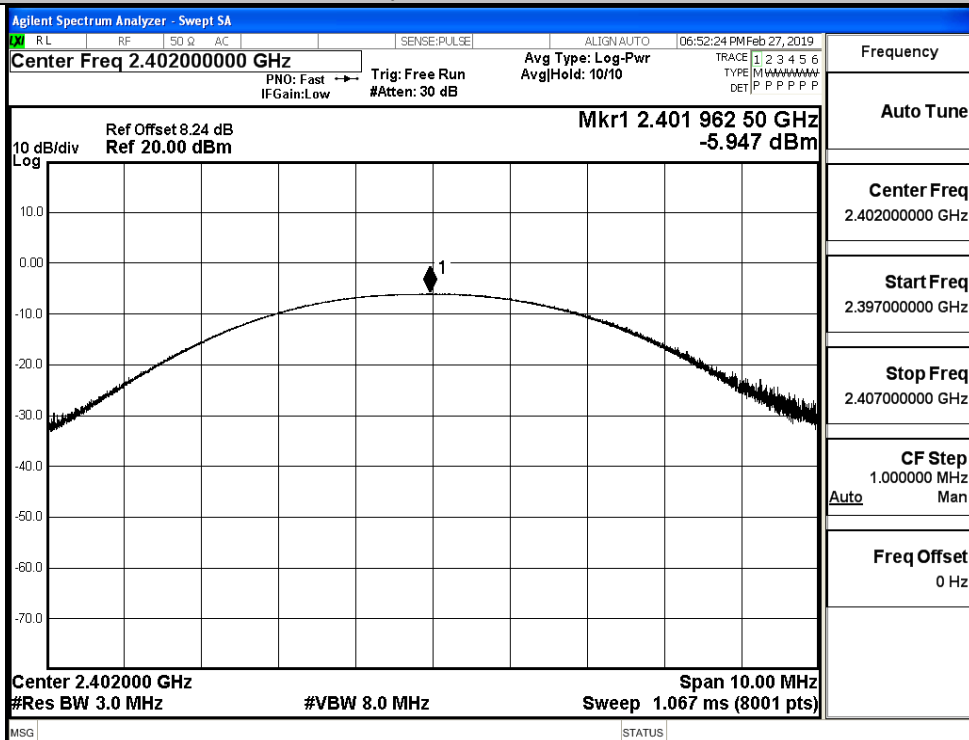
Temperature:	22.8 ° C
Relative Humidity:	53.3%
ATM Pressure:	100.0 kPa
Test Engineer:	David.Luo
Supervised by:	Jayden.Zhuo

A.1 Maximum Conducted Peak Output Power

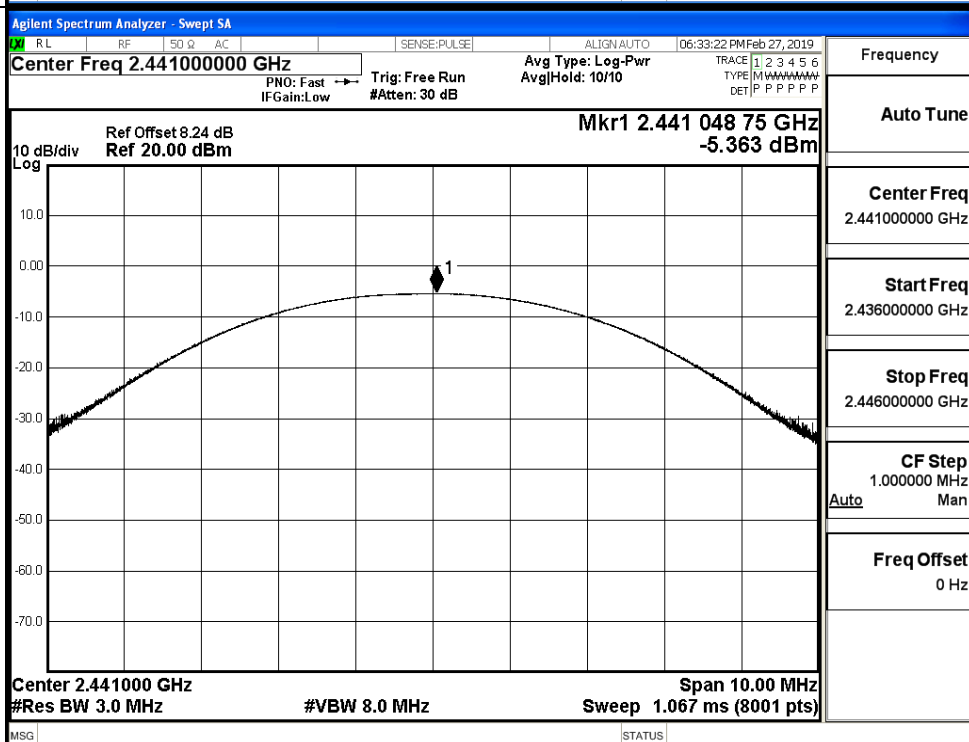
Mode	Channel.	Maximum Peak Output Power [dBm]	Limit [dBm]	Verdict
GFSK	LCH	-5.947	21	PASS
	MCH	-5.363	21	PASS
	HCH	-5.450	21	PASS
$\pi/4$ DQPSK	LCH	-4.852	21	PASS
	MCH	-4.170	21	PASS
	HCH	-4.331	21	PASS

Test Graphs

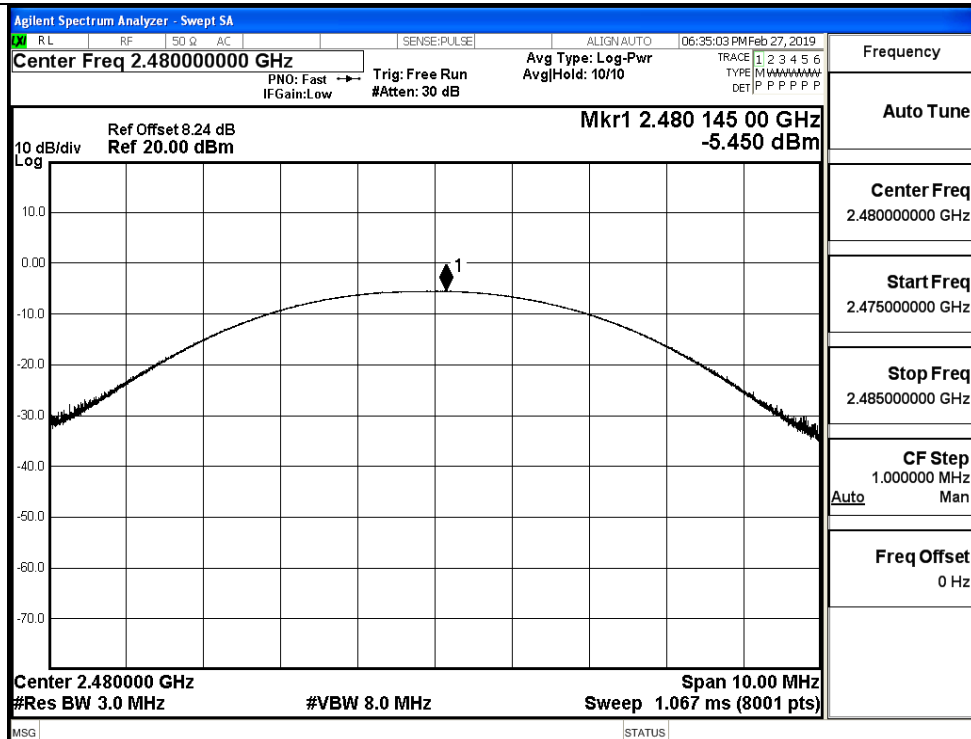
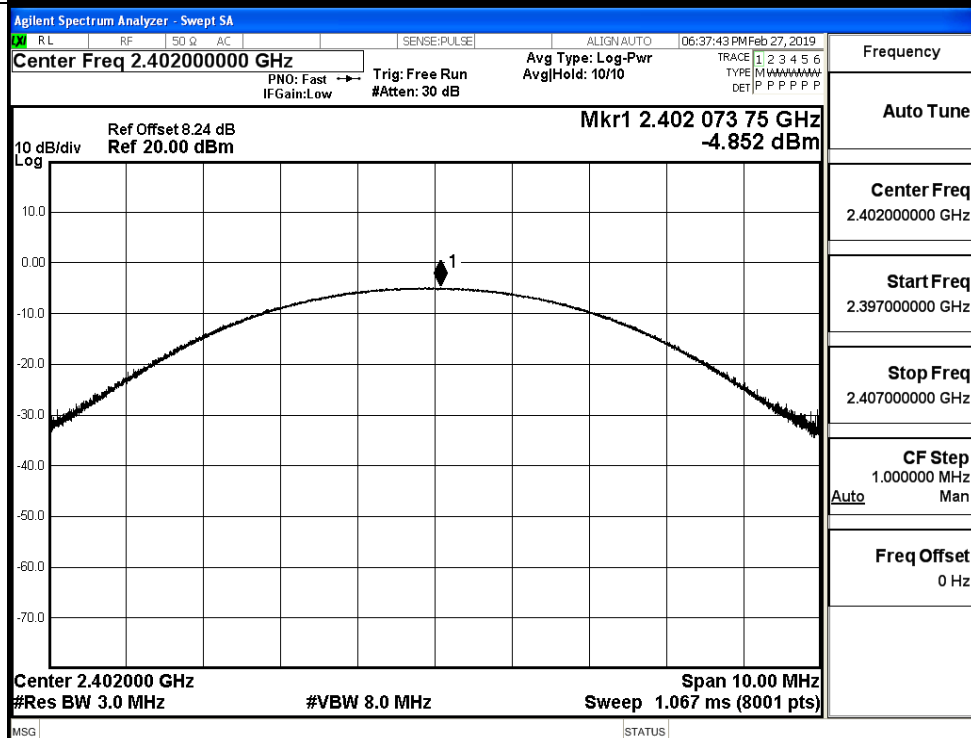
GFSK/LCH

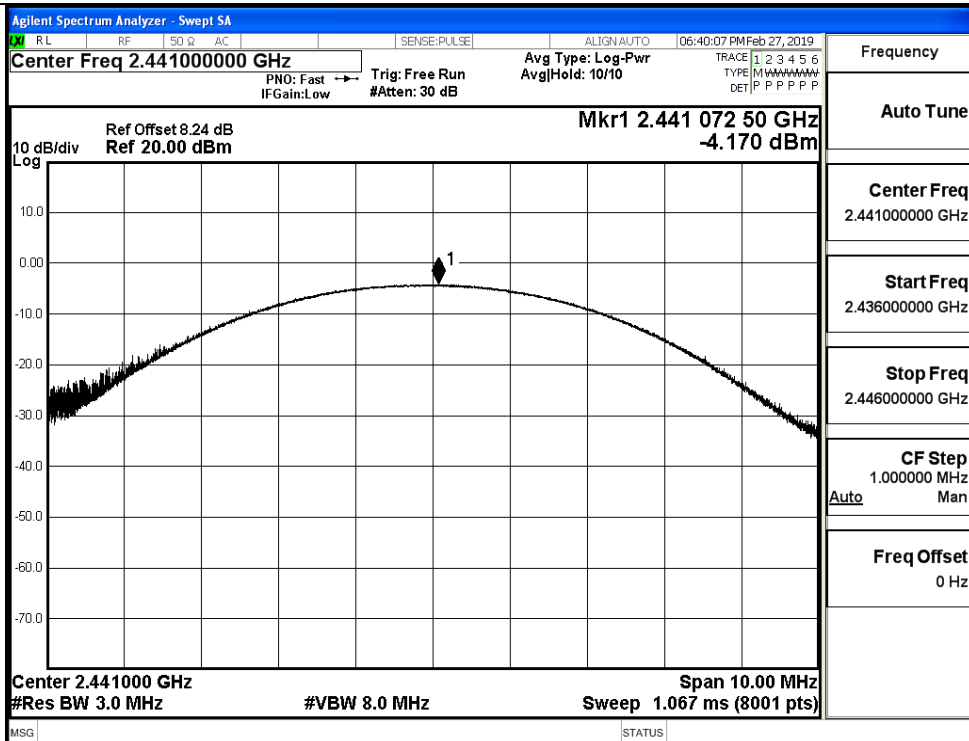
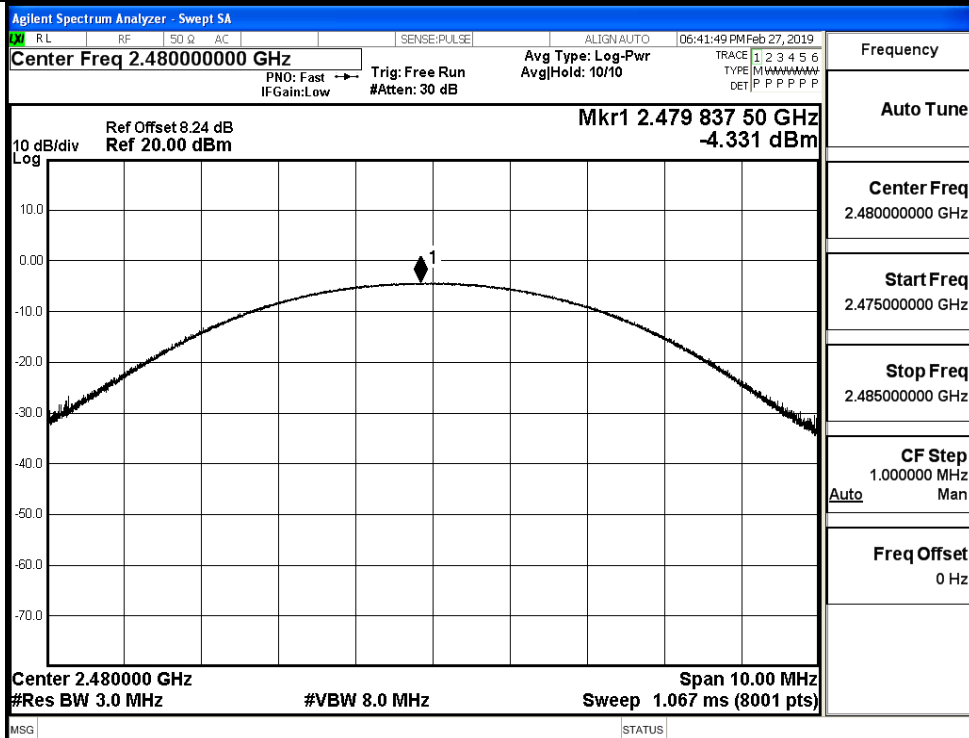


GFSK/MCH



GFSK/HCH

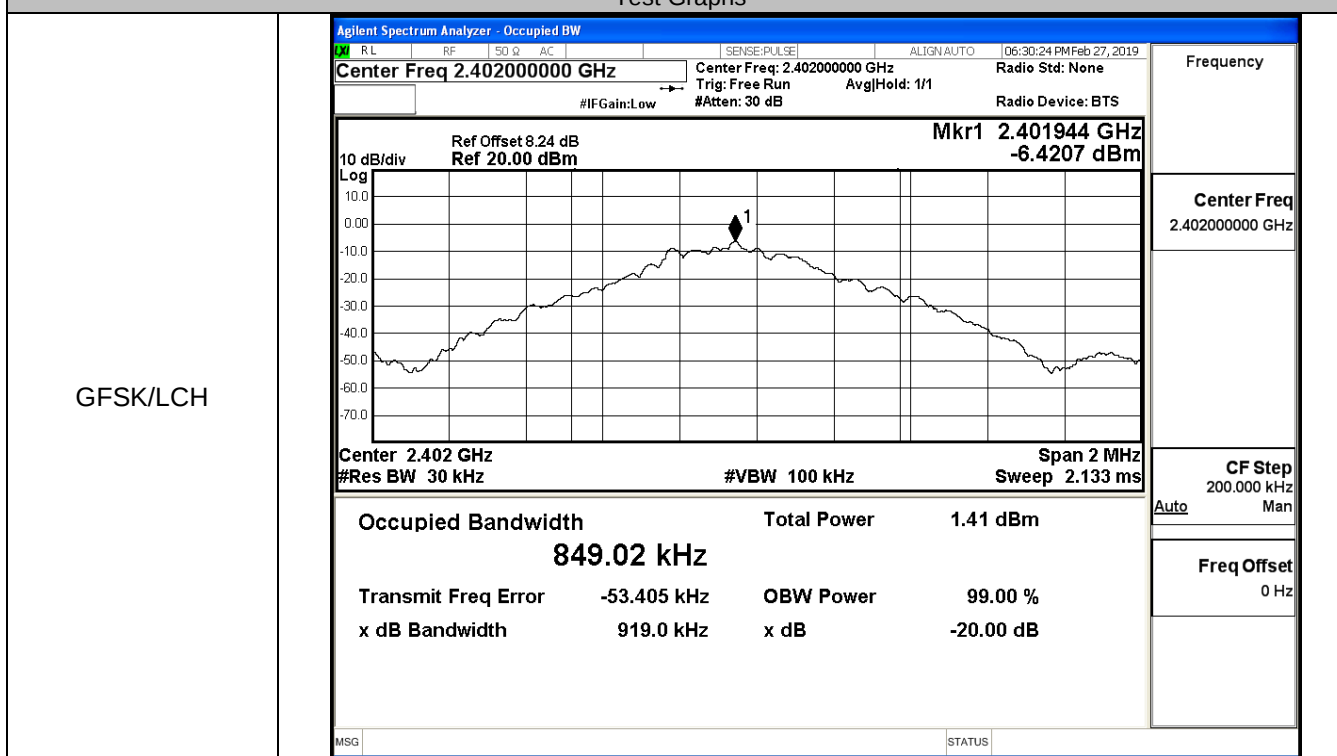
 π /4DQPSK/LCH

$\pi/4$ DQPSK/MCH $\pi/4$ DQPSK/HCH

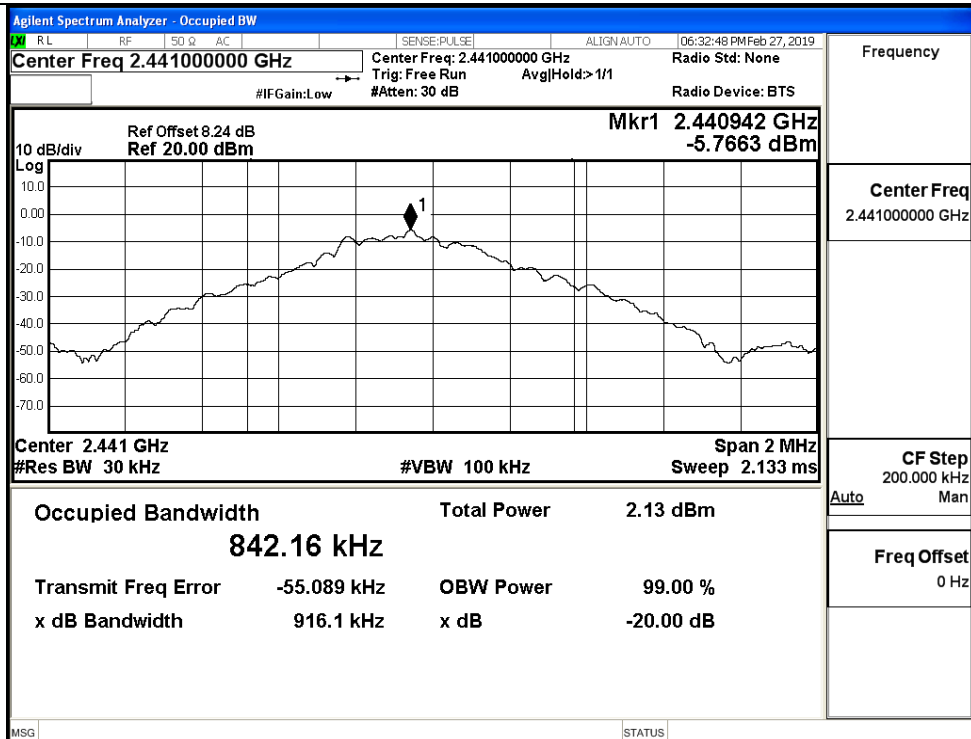
A.2 99% and 20dB Bandwidth

Mode	Channel.	99% Bandwidth [MHz]	20dB Bandwidth [MHz]	Limit [MHz]	Verdict
GFSK	LCH	0.84902	0.9190	Not Specified	PASS
	MCH	0.84216	0.9161	Not Specified	PASS
	HCH	0.84661	0.9224	Not Specified	PASS
π /4DQPSK	LCH	1.1642	1.228	Not Specified	PASS
	MCH	1.1643	1.227	Not Specified	PASS
	HCH	1.1640	1.229	Not Specified	PASS

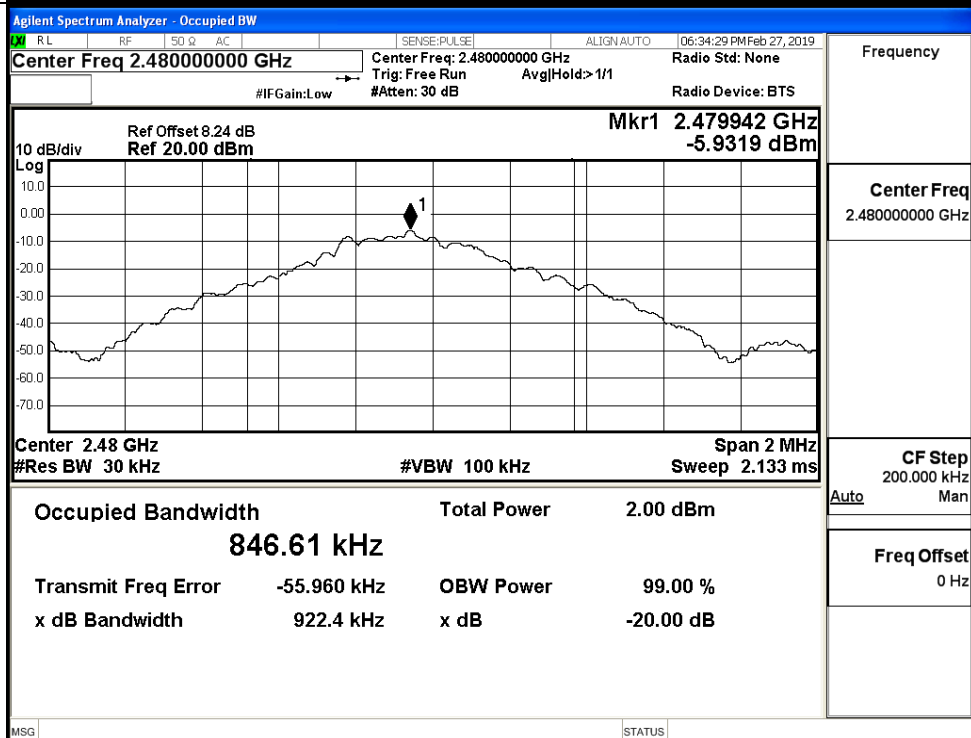
Test Graphs

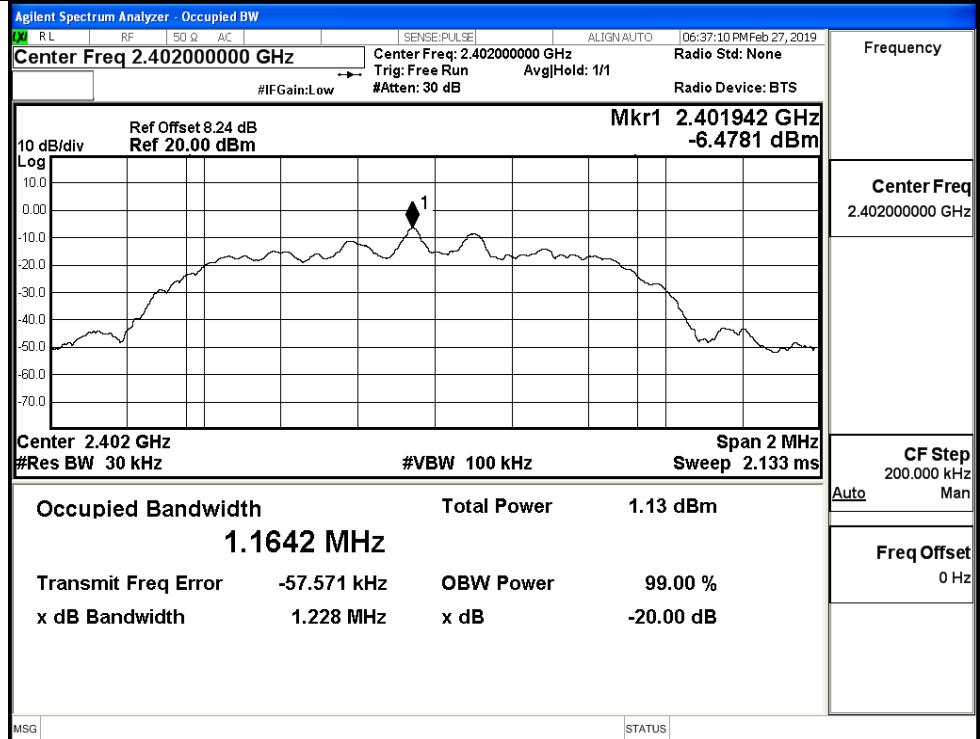
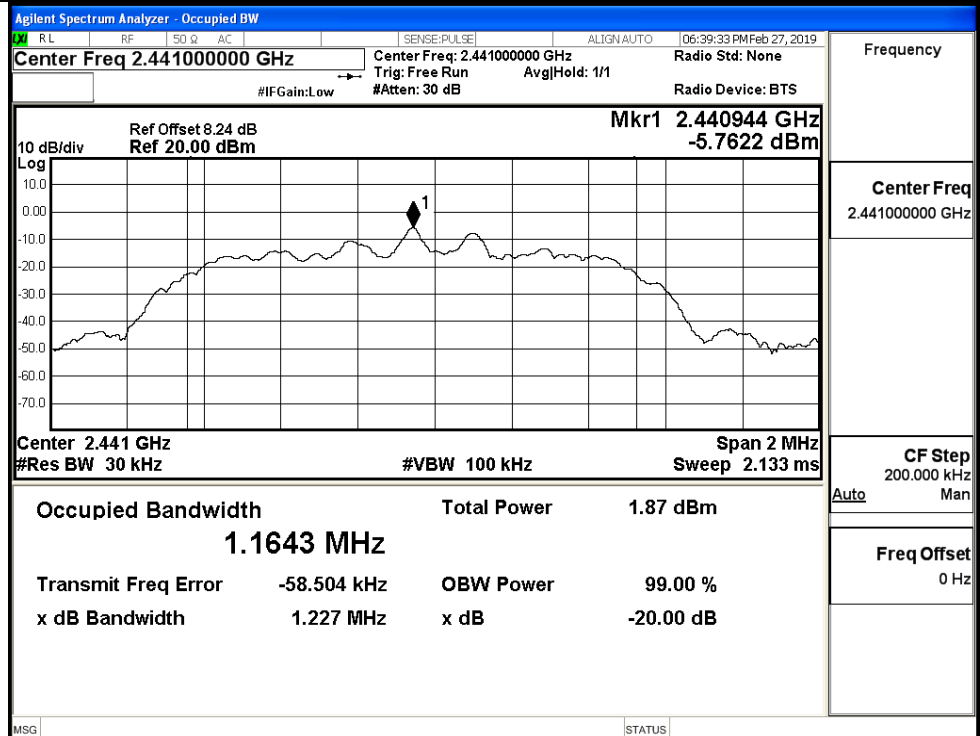


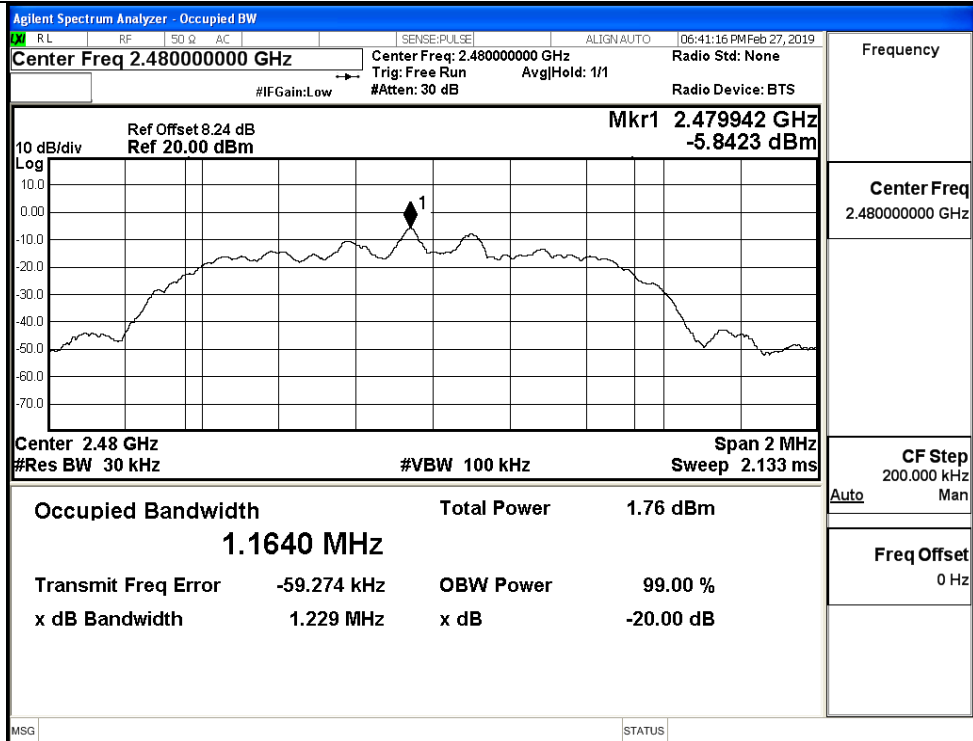
GFSK/MCH



GFSK/HCH



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

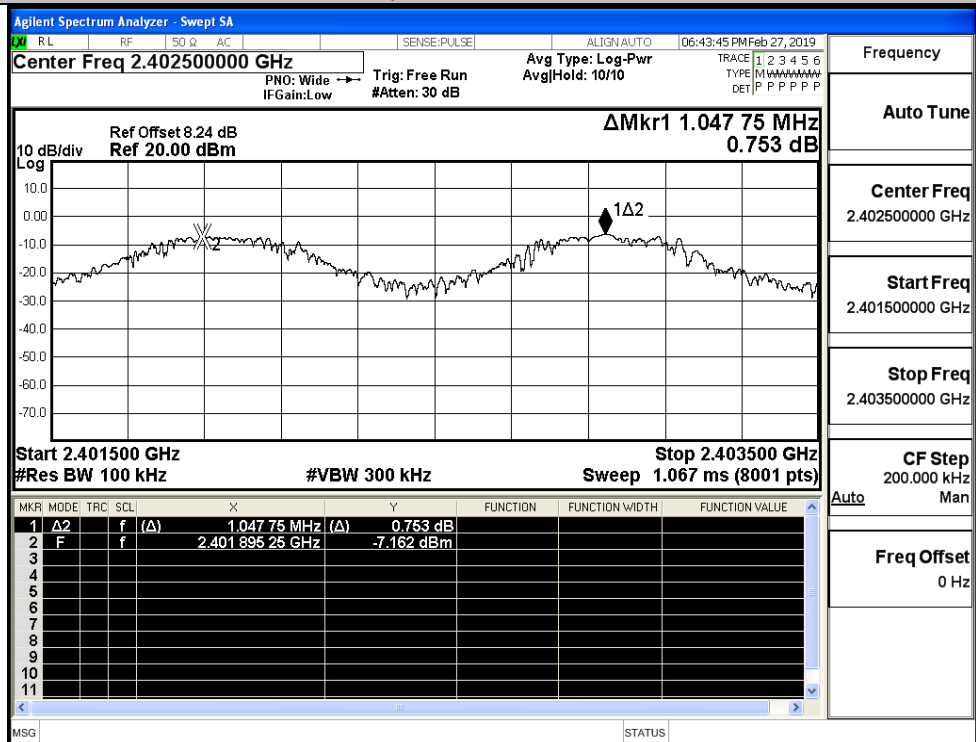
$\pi/4$ DQPSK/HCH

A.3 Carrier Frequency Separation

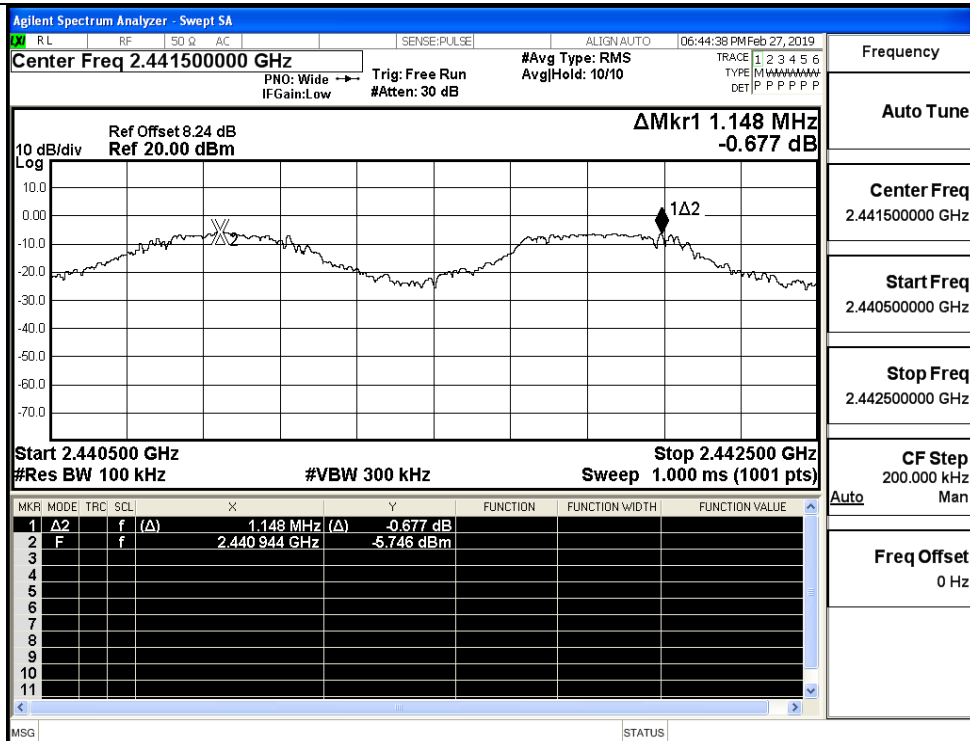
Mode	Channel.	Carrier Frequency Separation [MHz]	Limit [MHz]	Verdict
GFSK	LCH	1.048	0.615	PASS
	MCH	1.148	0.615	PASS
	HCH	0.790	0.615	PASS
π /4DQPSK	LCH	1.146	0.819	PASS
	MCH	0.976	0.819	PASS
	HCH	1.326	0.819	PASS

Test Graphs

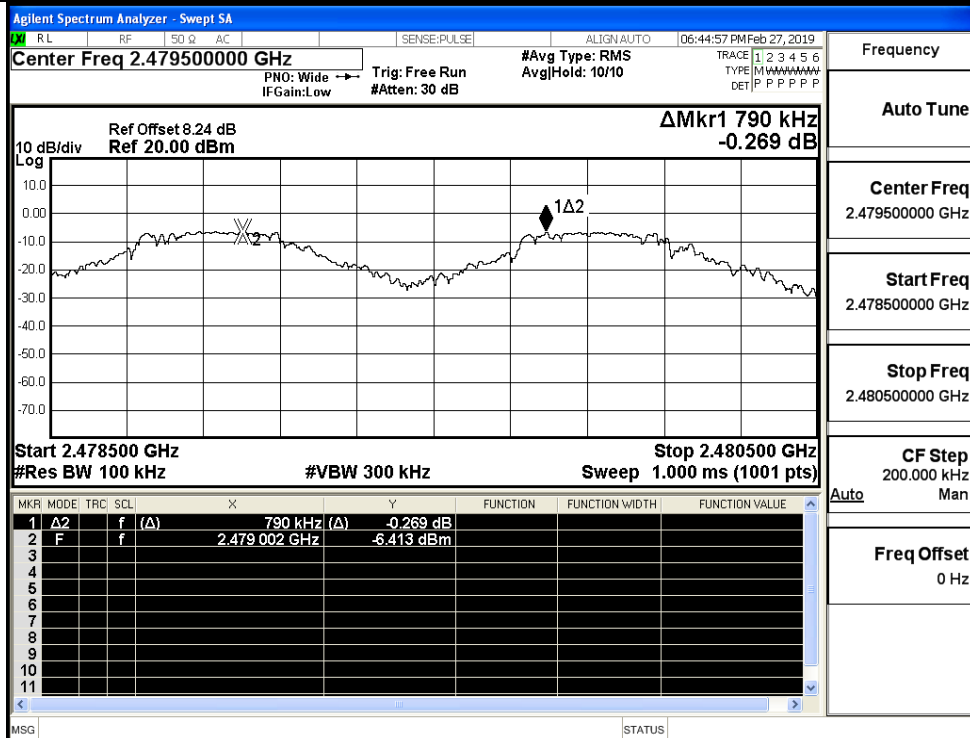
GFSK/LCH

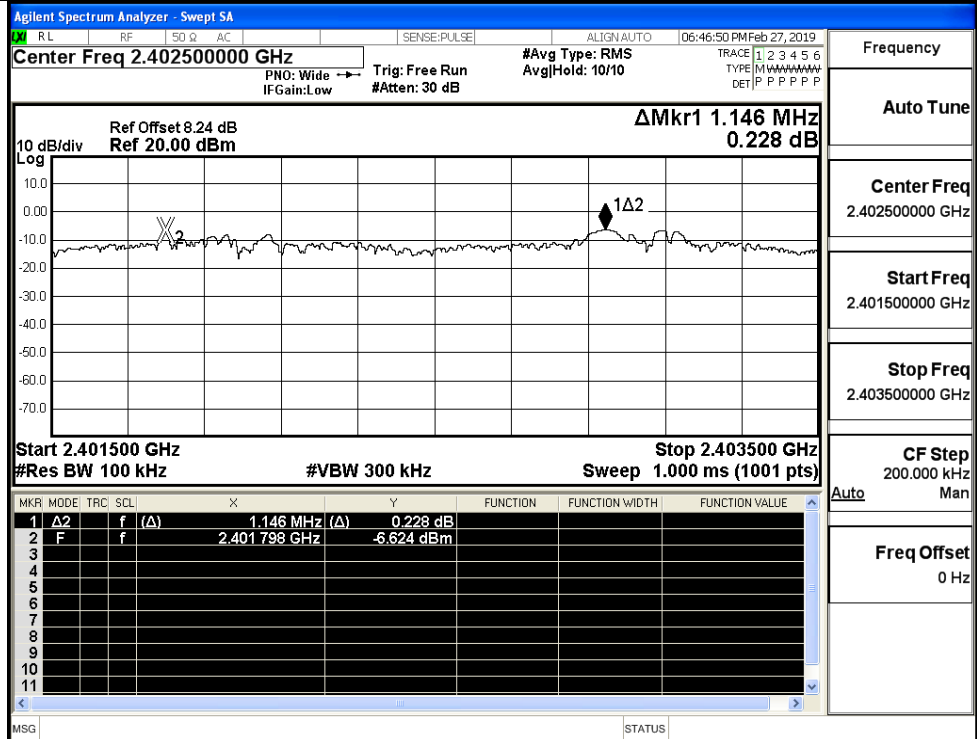
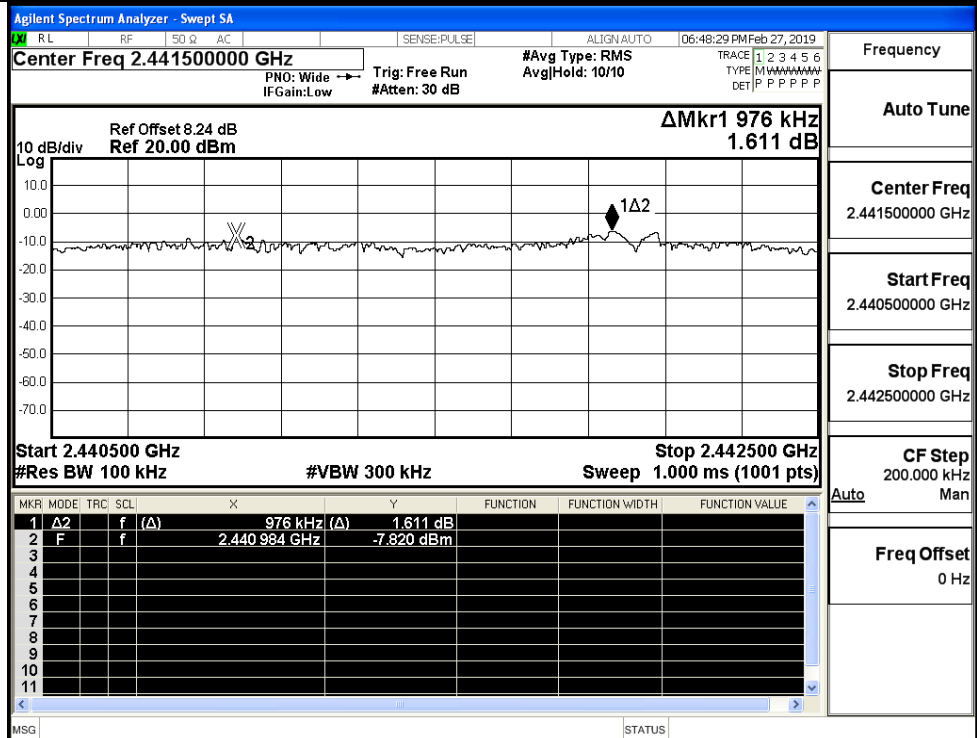


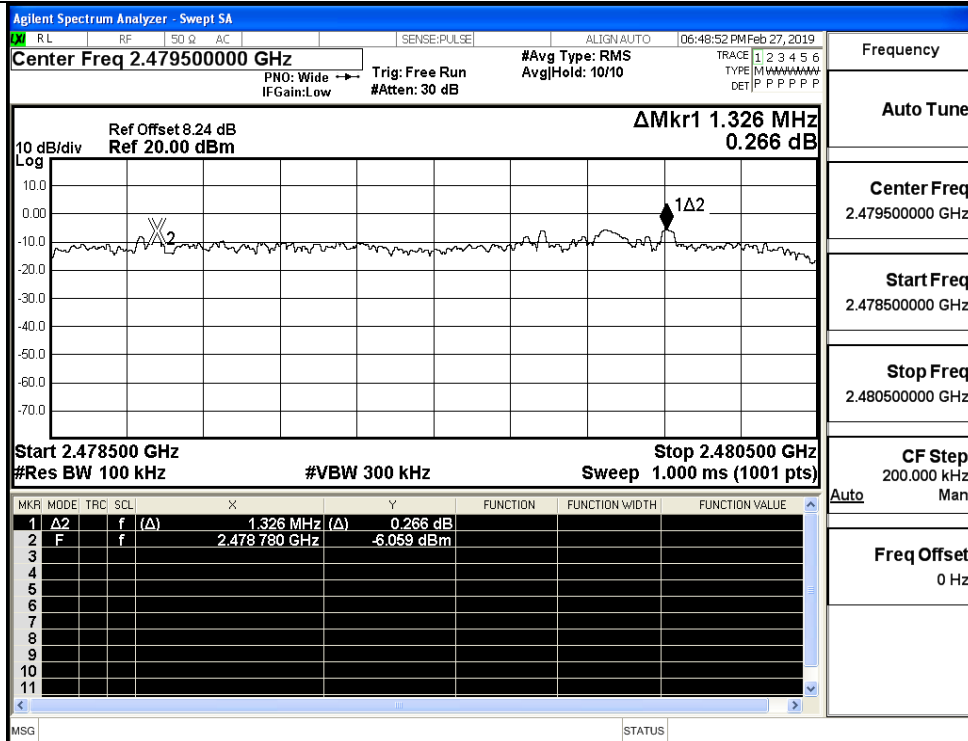
GFSK/MCH



GFSK/HCH



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

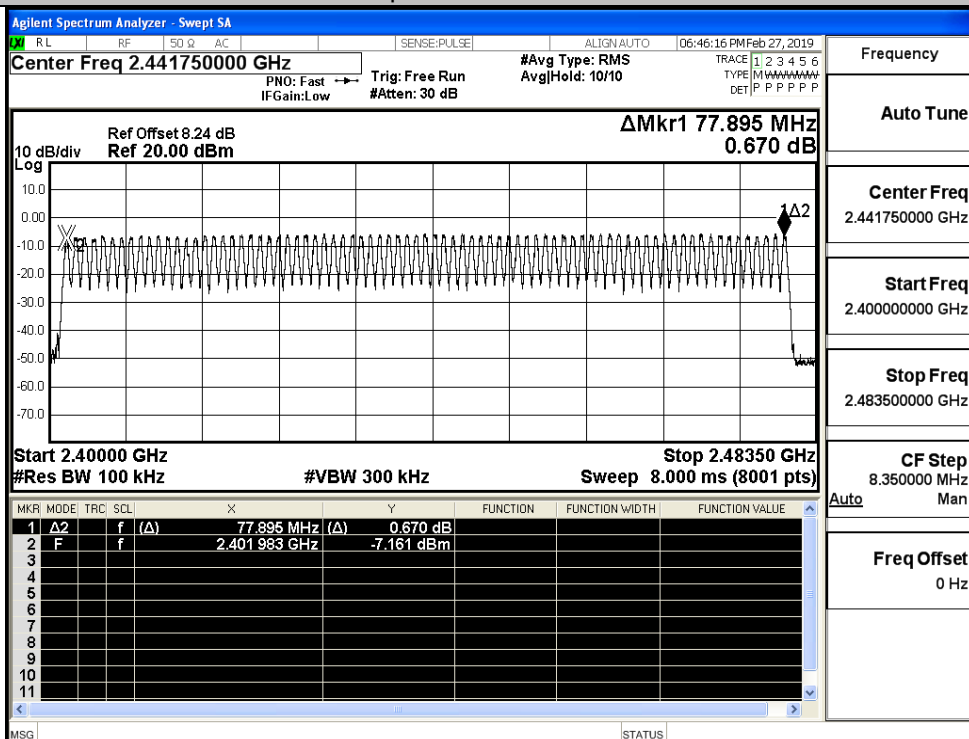
$\pi/4$ DQPSK/HCH

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

Test Graphs

GFSK/Hop



Frequency

Auto Tune

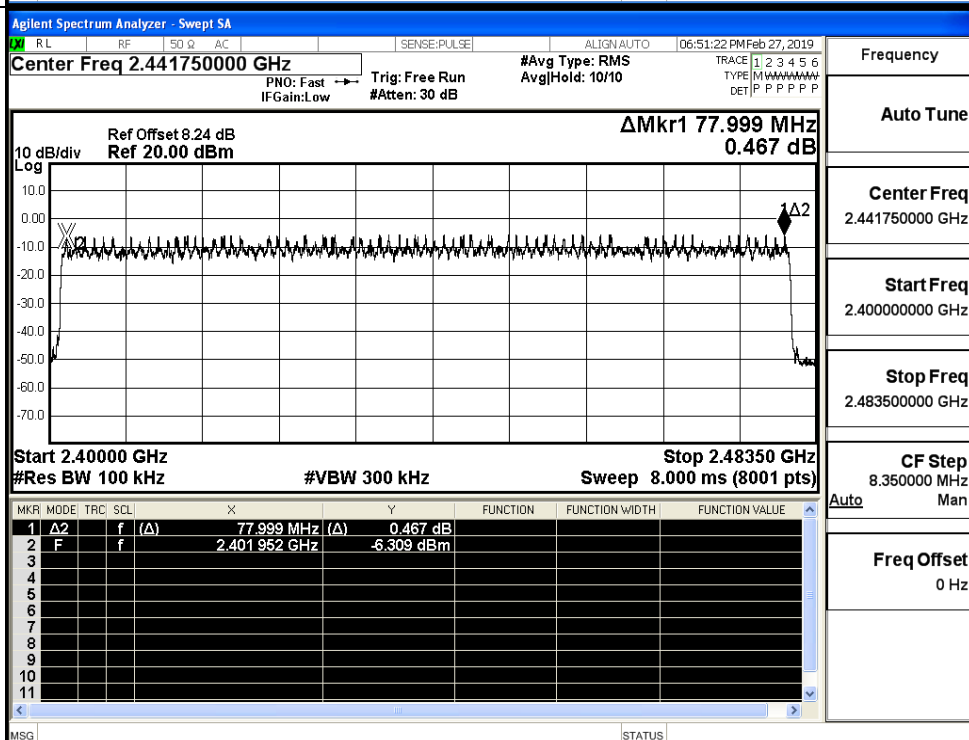
Center Freq
2.441750000 GHz

Start Freq
2.400000000 GHz

Stop Freq
2.483500000 GHz

CF Step
8.350000 MHz
Man

Freq Offset
0 Hz

 $\pi/4$ DQPSK/Hop

Frequency

Auto Tune

Center Freq
2.441750000 GHz

Start Freq
2.400000000 GHz

Stop Freq
2.483500000 GHz

CF Step
8.350000 MHz
Man

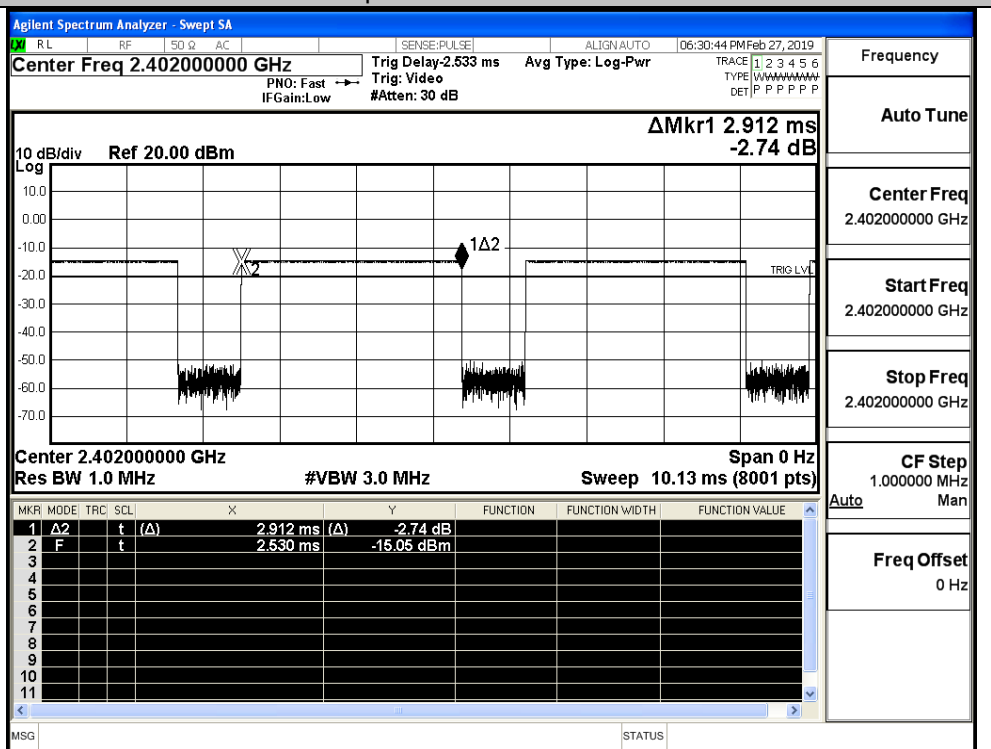
Freq Offset
0 Hz

A.5 Dwell Time

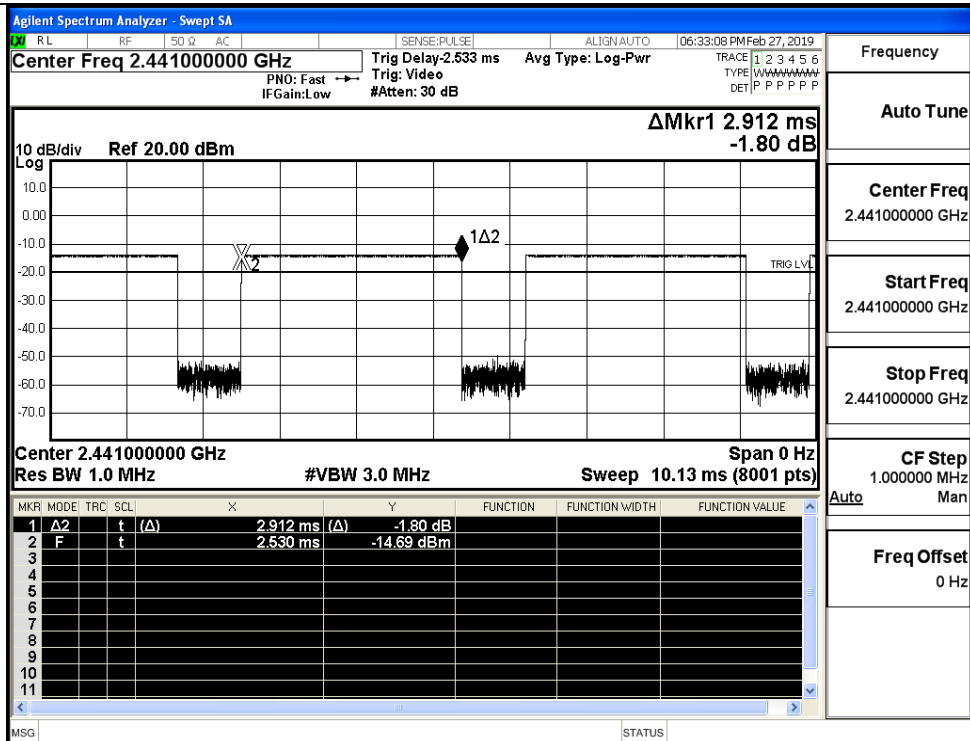
Mode	Packet	Channel	Burst Width [ms/hop/ch]	Total Hops[hop*ch]	Dwell Time[s]	Limit [s]	Verdict
GFSK	DH5	LCH	2.912	106.7	0.31	0.4	PASS
	DH5	MCH	2.912	106.7	0.31	0.4	PASS
	DH5	HCH	2.912	106.7	0.31	0.4	PASS
$\pi/4$ DQPSK	2DH5	LCH	2.917	106.7	0.312	0.4	PASS
	2DH5	MCH	2.918	106.7	0.312	0.4	PASS
	2DH5	HCH	2.917	106.7	0.312	0.4	PASS

Test Graphs

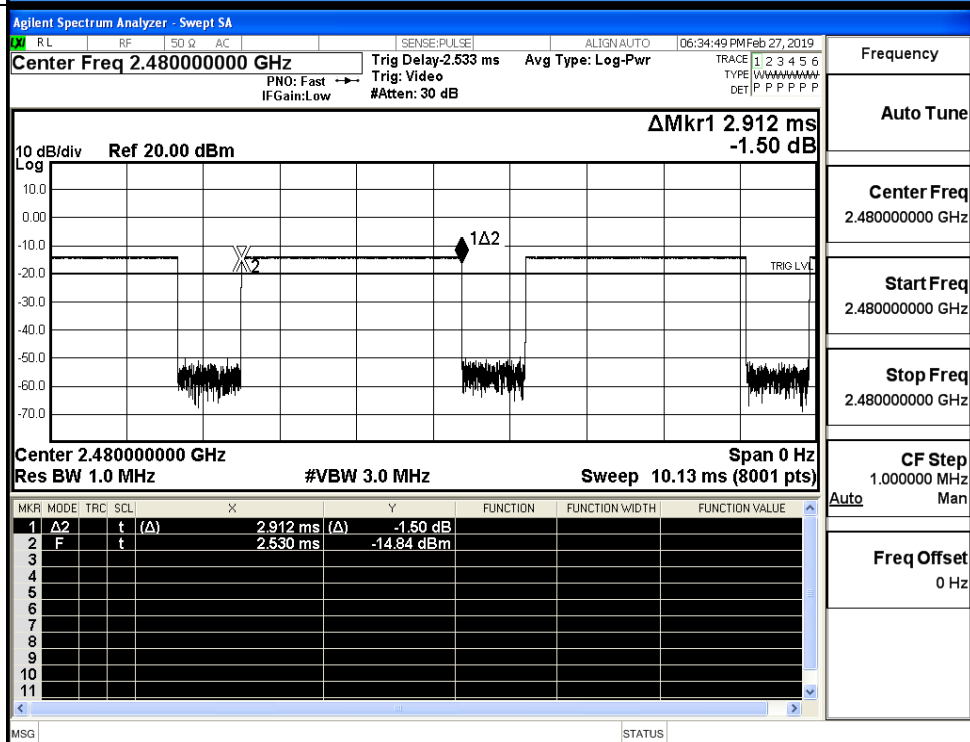
GFSK_DH5/LCH



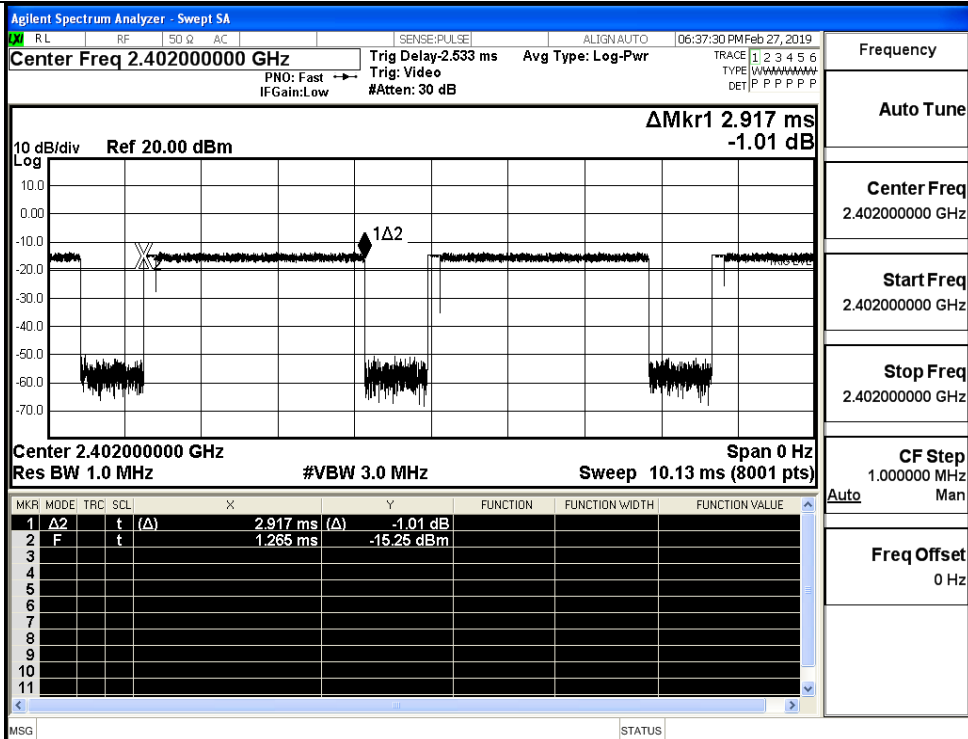
GFSK_DH5/MCH



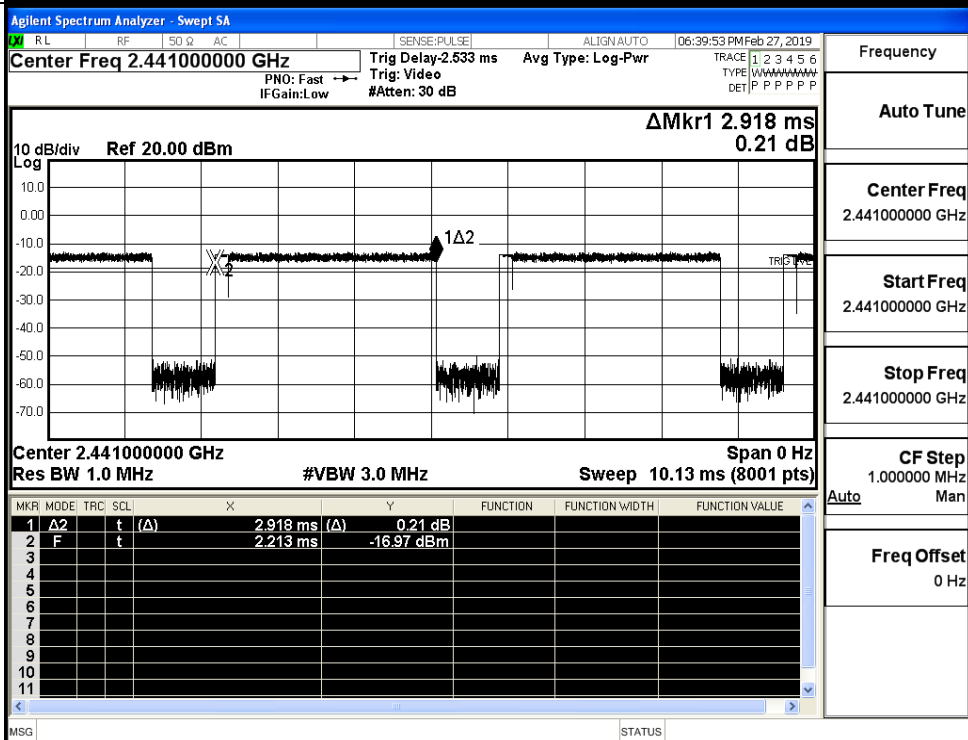
GFSK_DH5/HCH



$\pi/4$ DQPSK
_2DH5/LCH



$\pi/4$ DQPSK
_2DH5/MCH

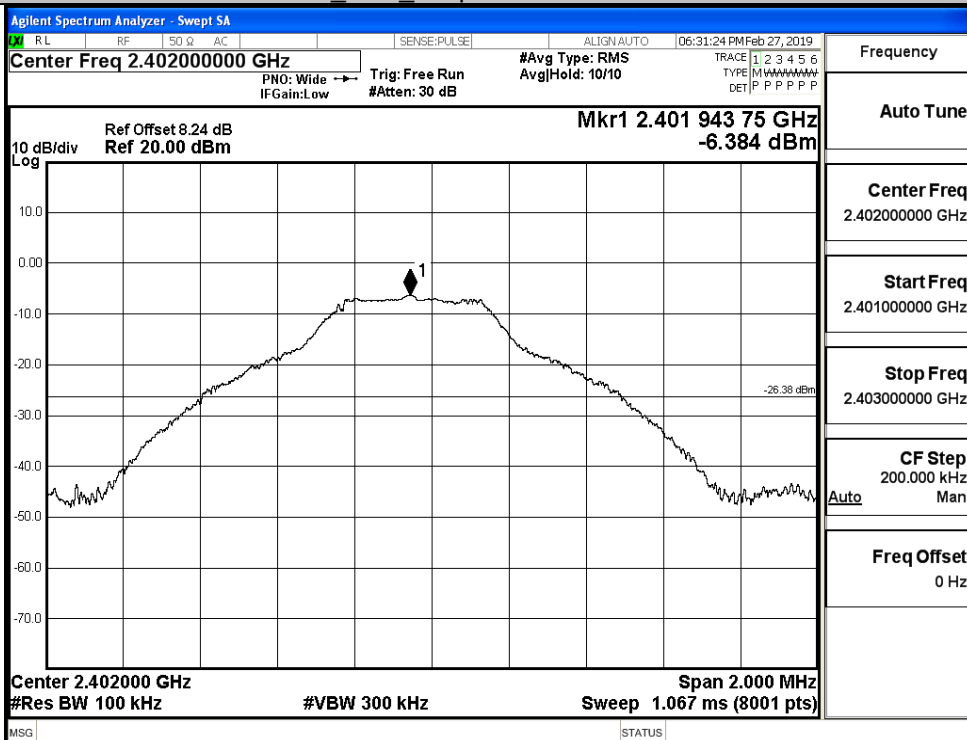


A.6 RF Conducted Spurious Emissions

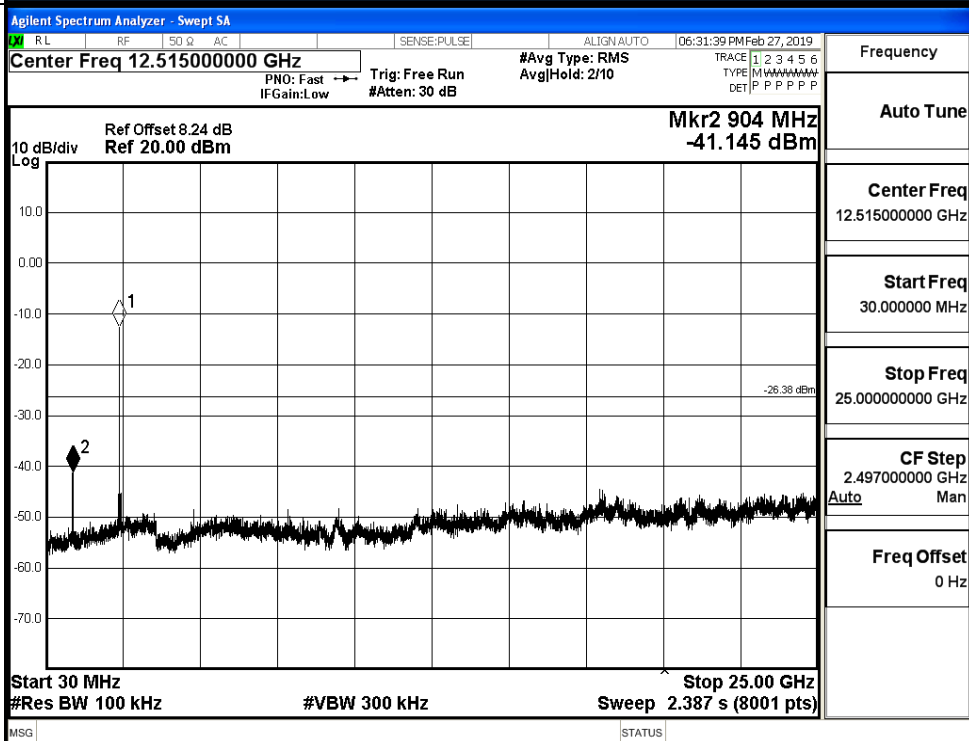
Mode	Channel	Pref [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
GFSK	LCH	-6.384	-41.145	-26.384	PASS
	MCH	-5.701	-39.439	-25.701	PASS
	HCH	-5.802	-45.017	-25.802	PASS
$\pi/4$ DQPSK	LCH	-6.357	-44.589	-26.357	PASS
	MCH	-5.714	-43.787	-25.714	PASS
	HCH	-5.762	-44.242	-25.762	PASS

GFSK LCH Graphs

Pref

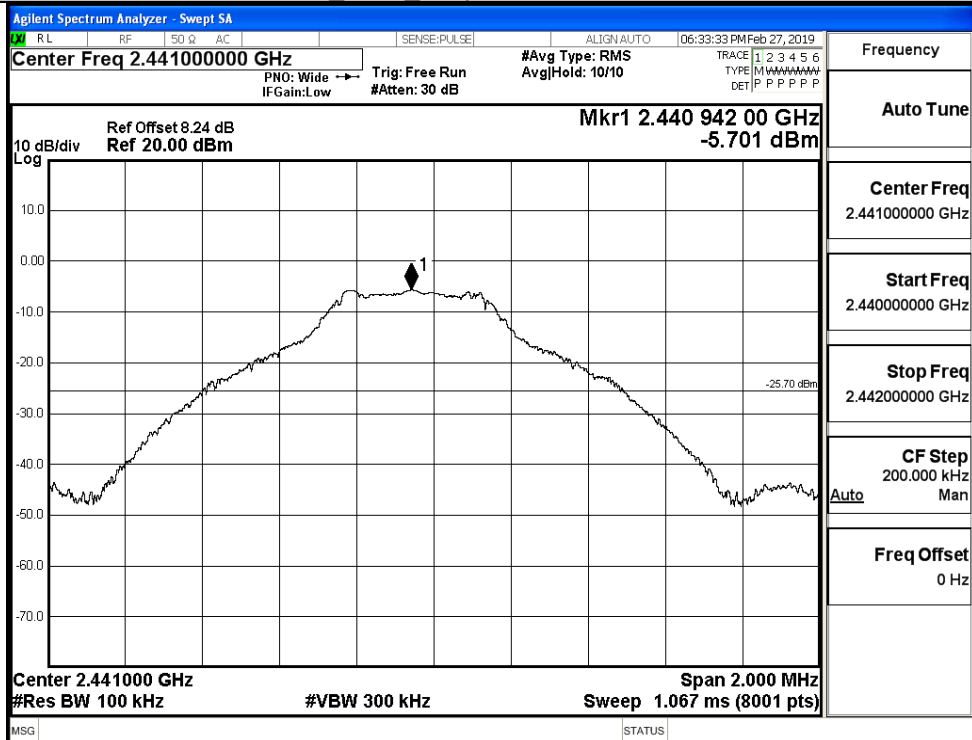


Puw

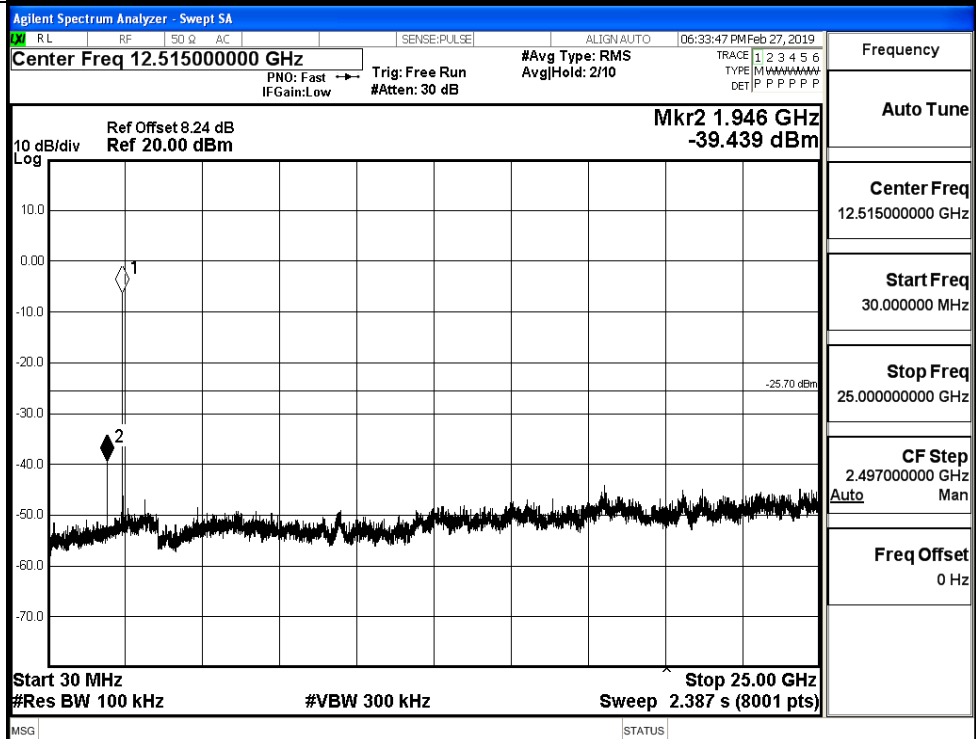


GFSK_MCH_Graphs

Pref

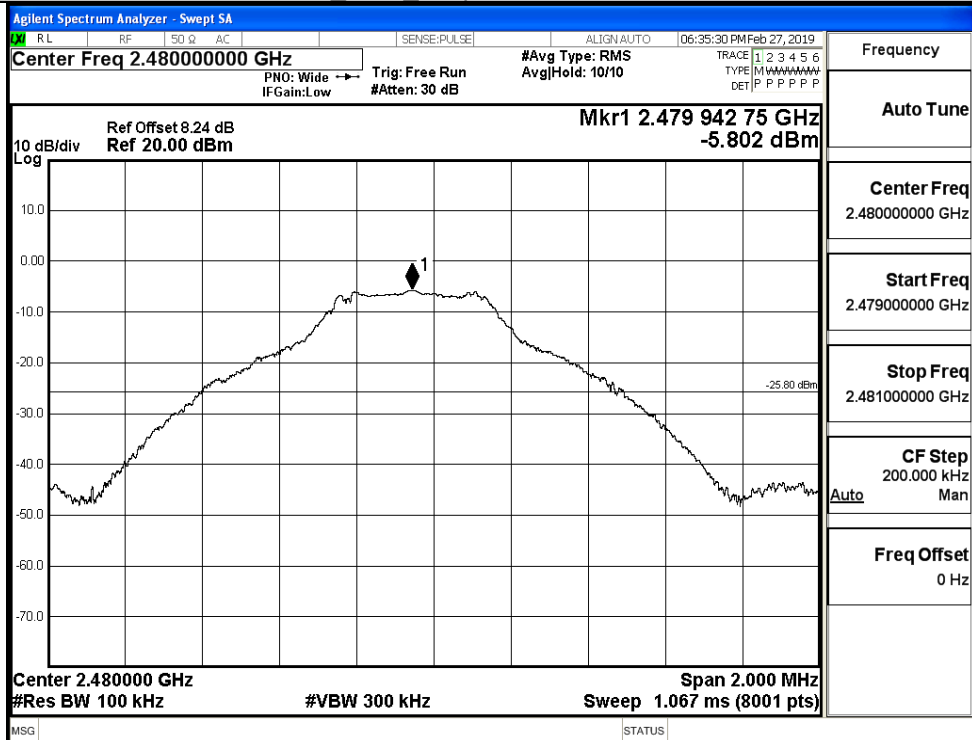


Puw

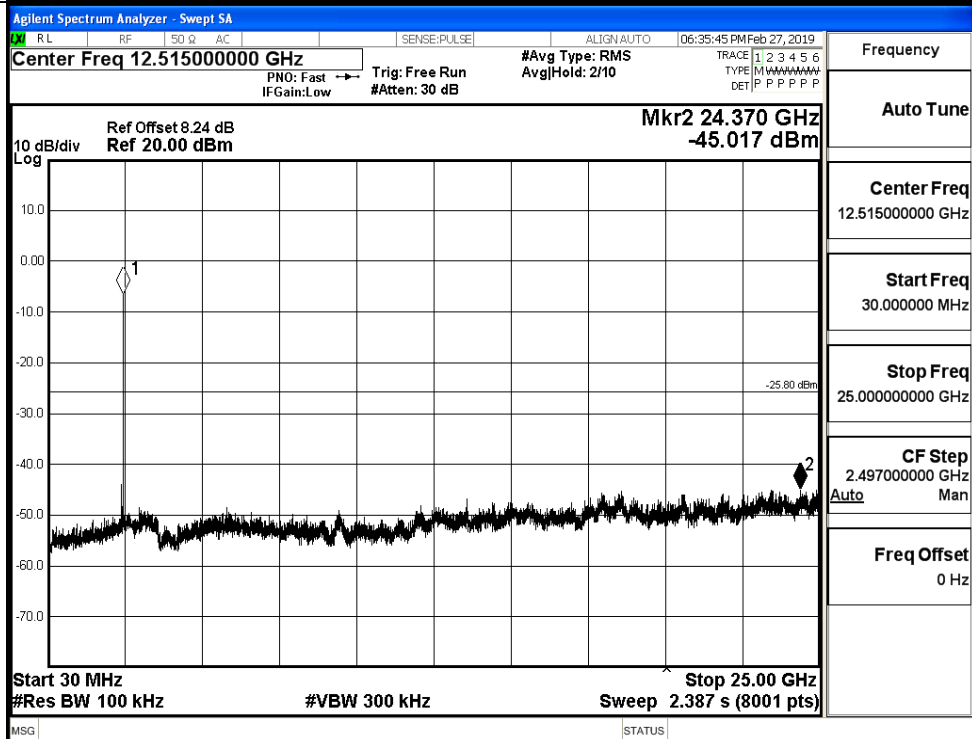


GFSK_HCH_Graphs

Pref

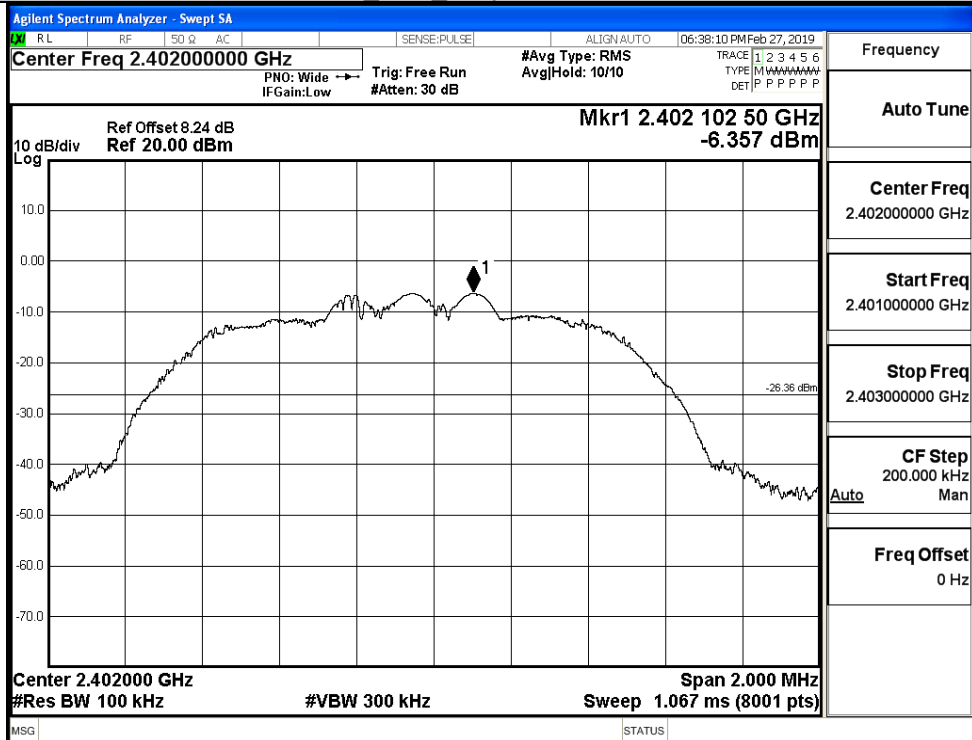


Puw

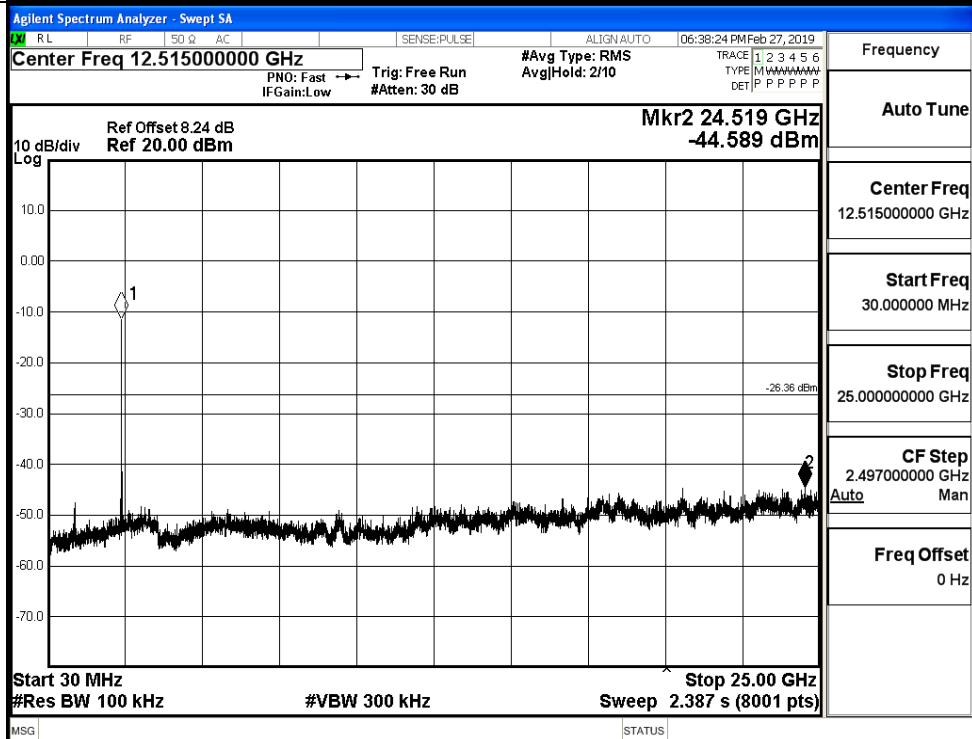


π /4DQPSK_LCH_Graphs

Pref

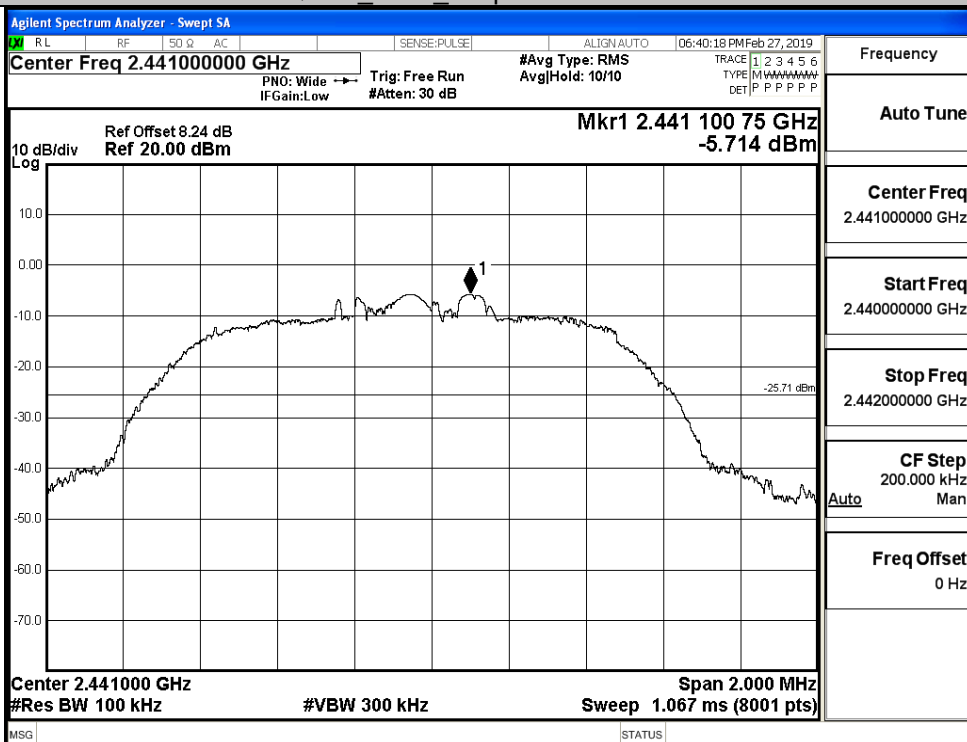


Puw

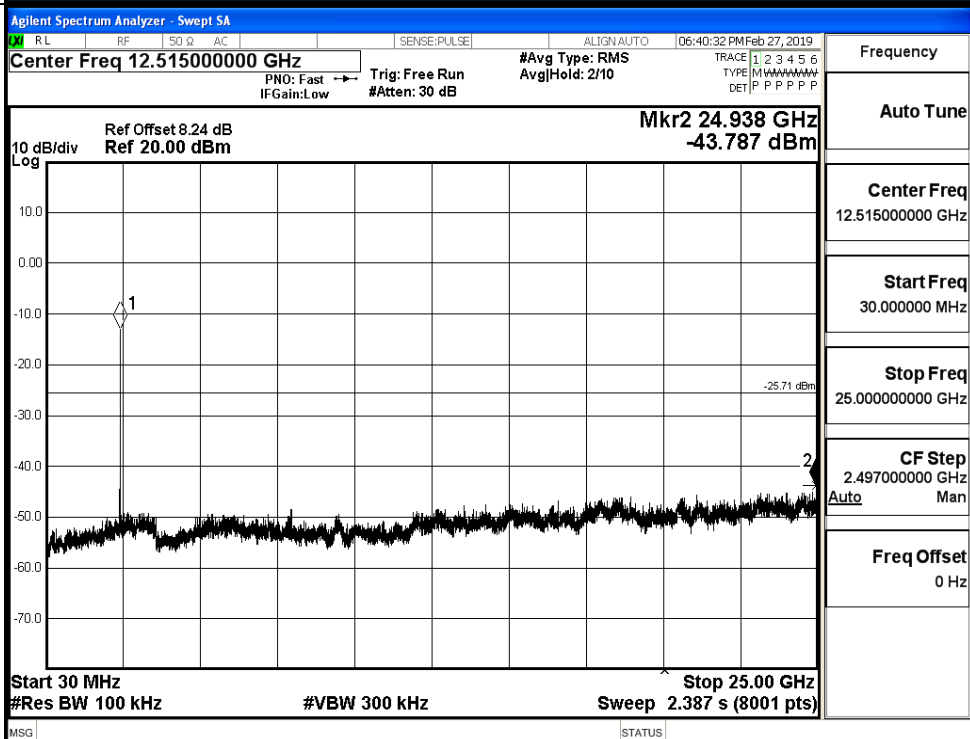


$\pi/4$ DQPSK_MCH_Graphs

Pref

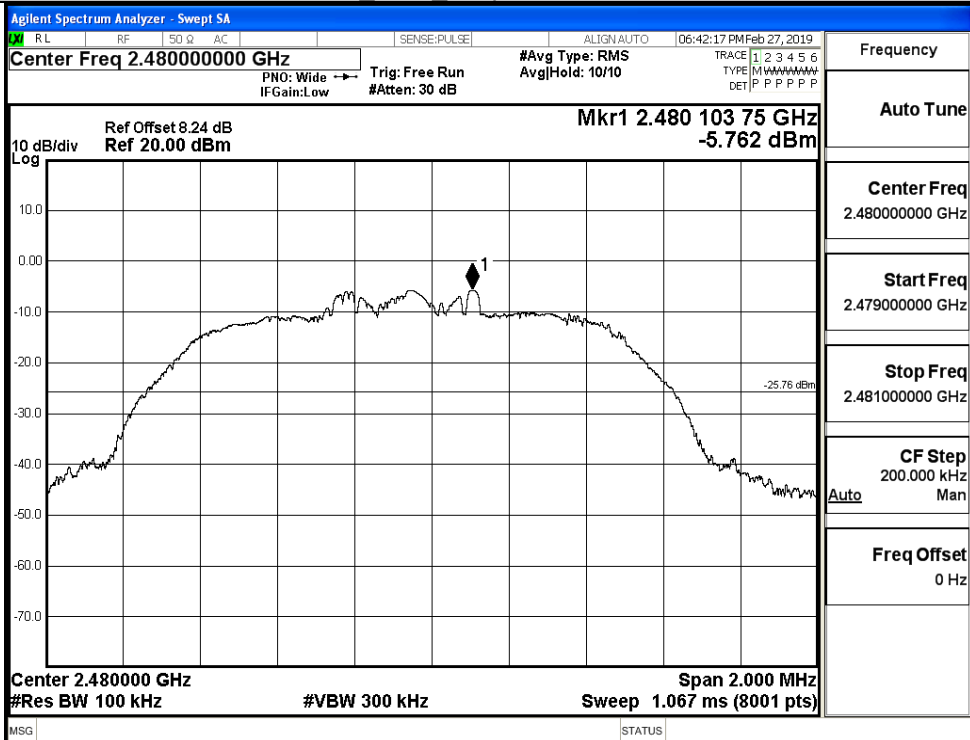


Puw

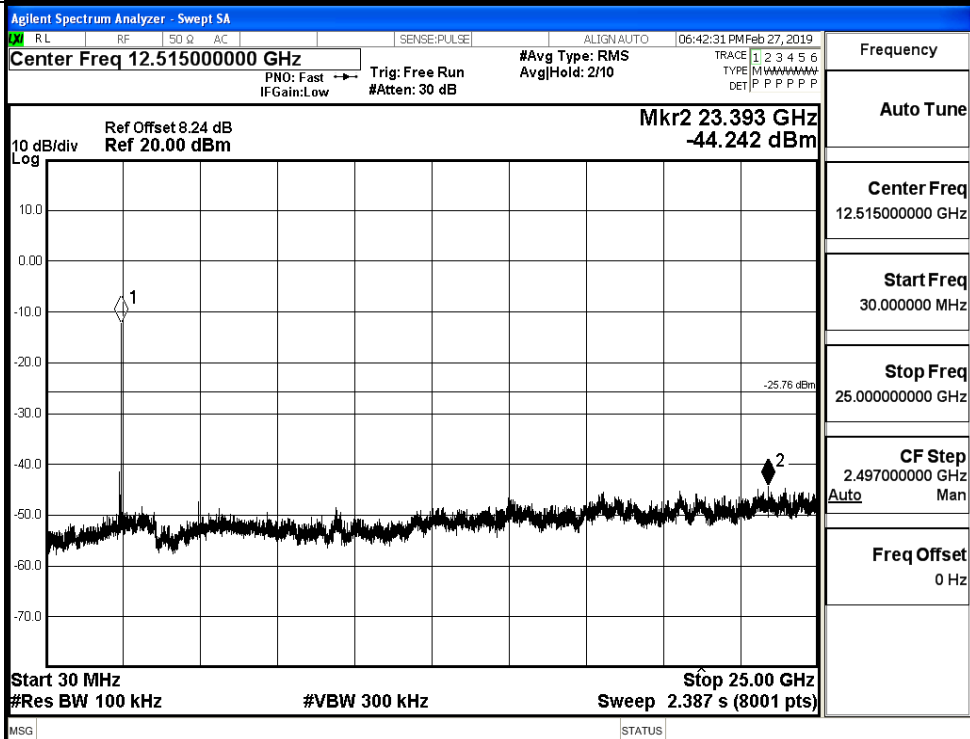


$\pi/4$ DQPSK_HCH_Graphs

Pref



Puw

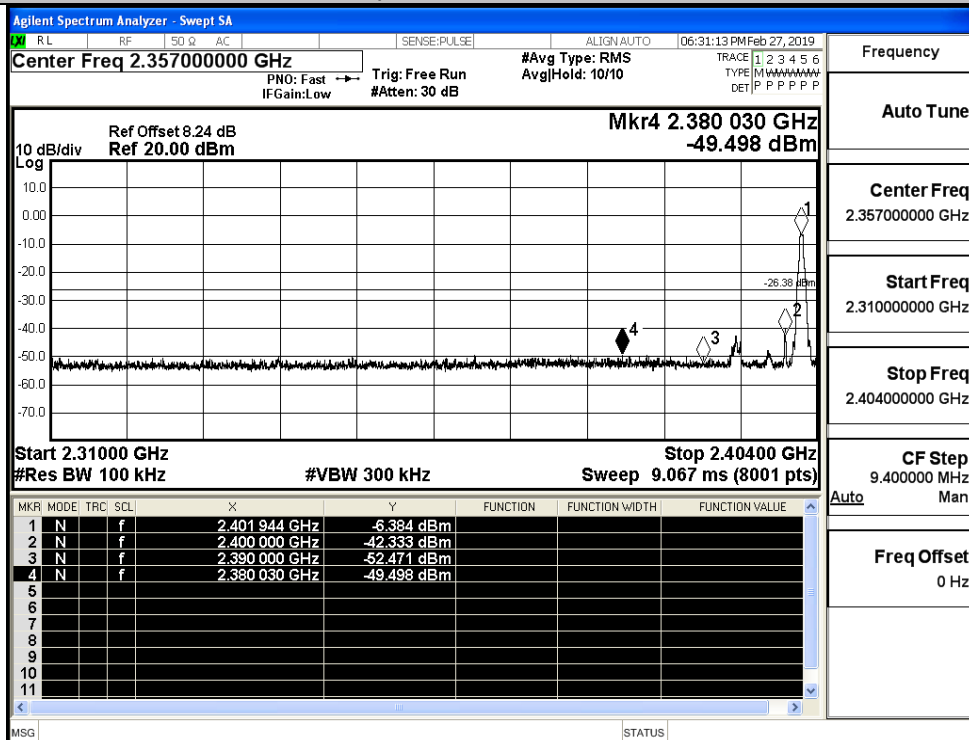


A.7 Band-edge for RF Conducted Emissions

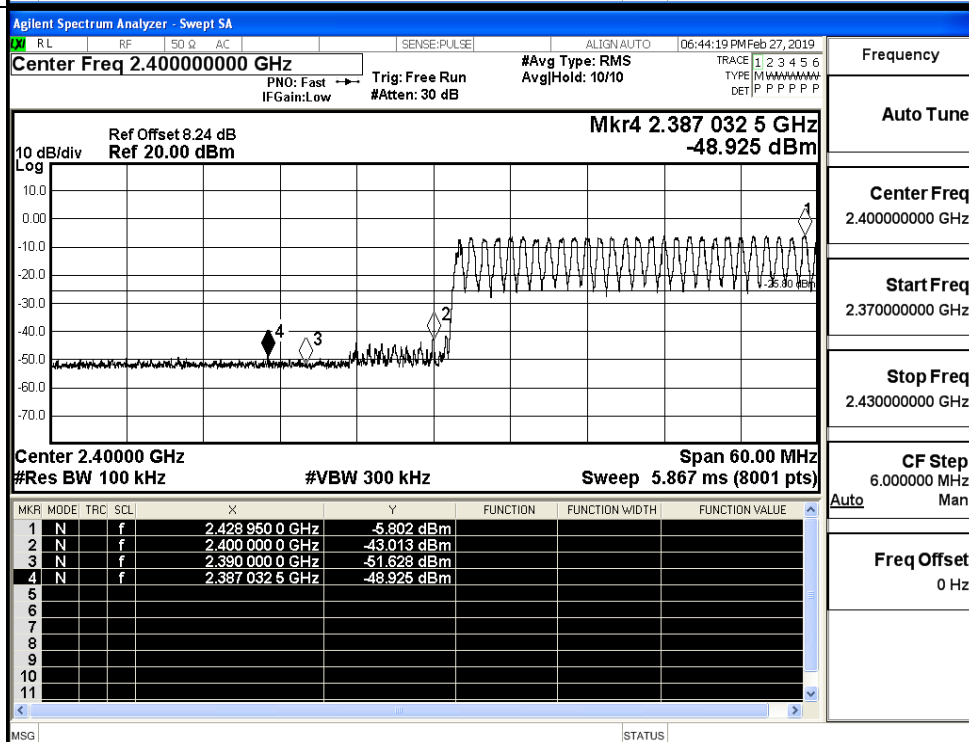
Mode	Channel	Carrier Frequency [MHz]	Carrier Power [dBm]	Frequency Hopping	Max Spurious Level [dBm]	Limit [dBm]	Verdict
GFSK	LCH	2402	-6.384	Off	-49.498	-26.38	PASS
			-5.802	On	-48.925	-25.8	PASS
	HCH	2480	-5.793	Off	-48.517	-25.79	PASS
			-5.700	On	-47.910	-25.7	PASS
$\pi/4$ DQPSK	LCH	2402	-6.534	Off	-49.569	-26.53	PASS
			-5.715	On	-48.802	-25.72	PASS
	HCH	2480	-5.733	Off	-48.232	-25.73	PASS
			-5.708	On	-49.072	-25.71	PASS

Test Graphs

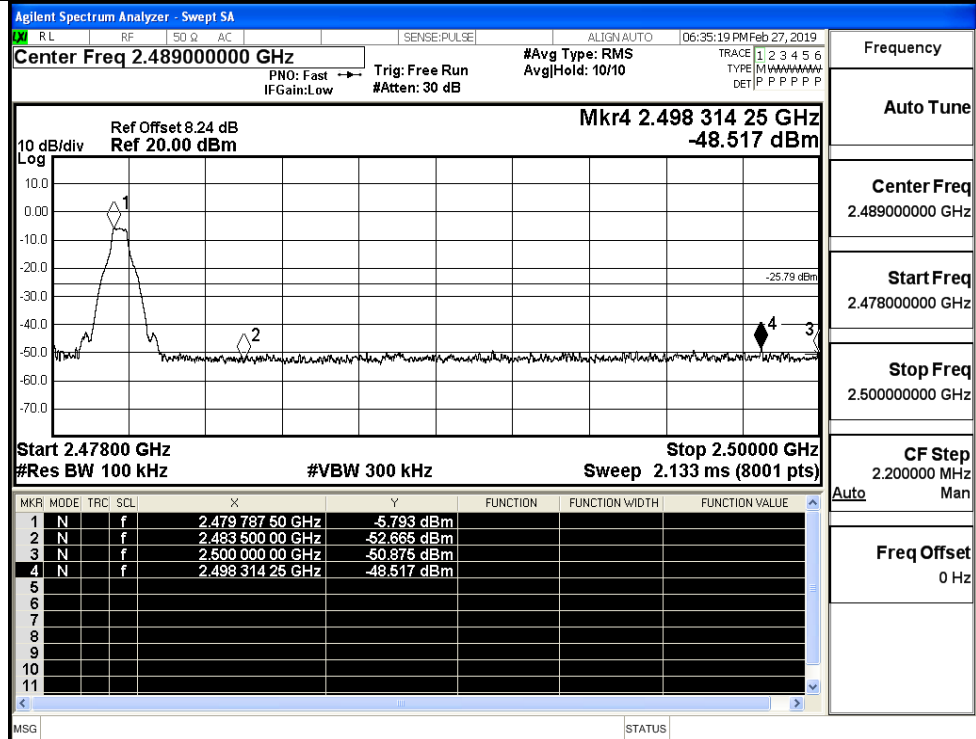
GFSK/LCH/No Hop



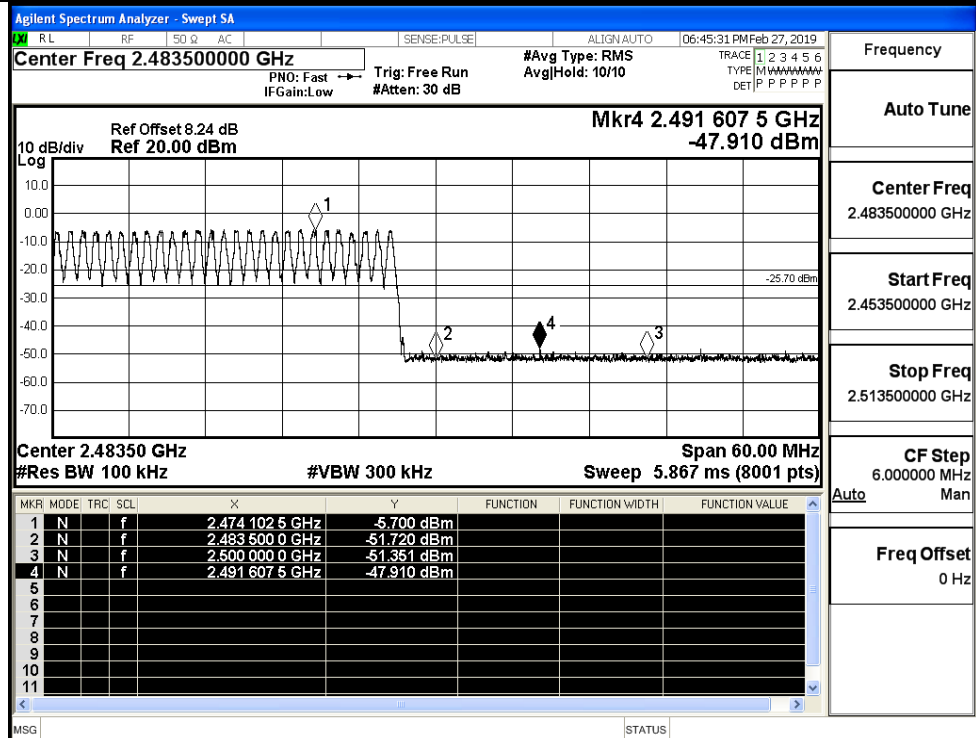
GFSK/LCH/Hop



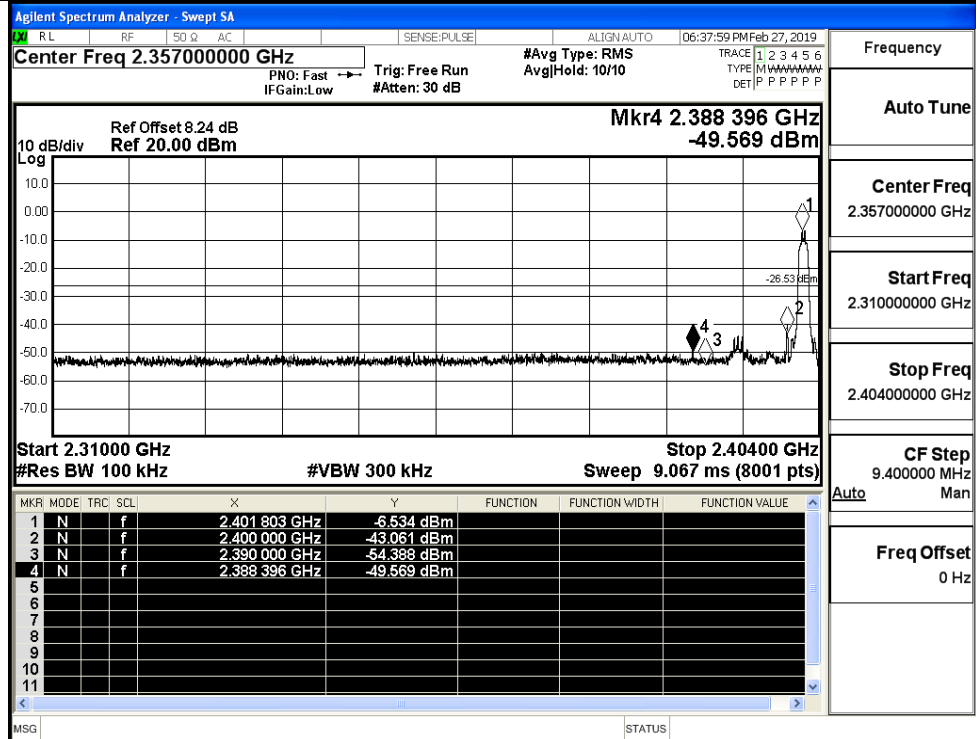
GFSK/HCH/No Hop



GFSK/HCH/Hop



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



Frequency

Auto Tune

Center Freq
2.357000000 GHz

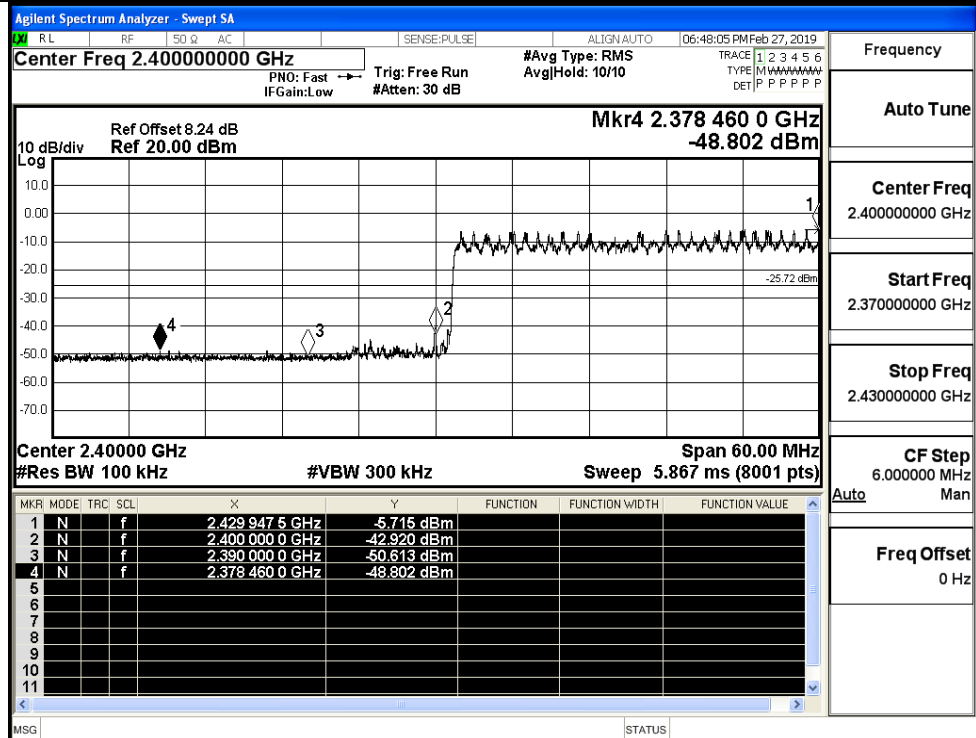
Start Freq
2.310000000 GHz

Stop Freq
2.404000000 GHz

CF Step
9.400000 MHz
Auto Man

Freq Offset
0 Hz

$\pi/4$ DQPSK/LCH/Hop



Frequency

Auto Tune

Center Freq
2.400000000 GHz

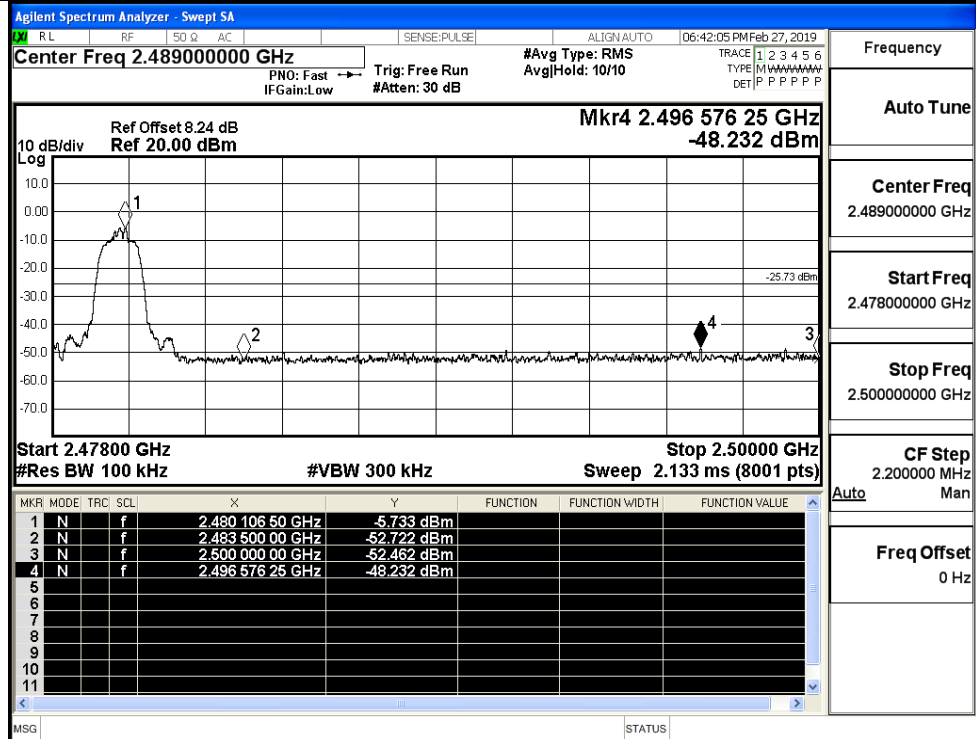
Start Freq
2.370000000 GHz

Stop Freq
2.430000000 GHz

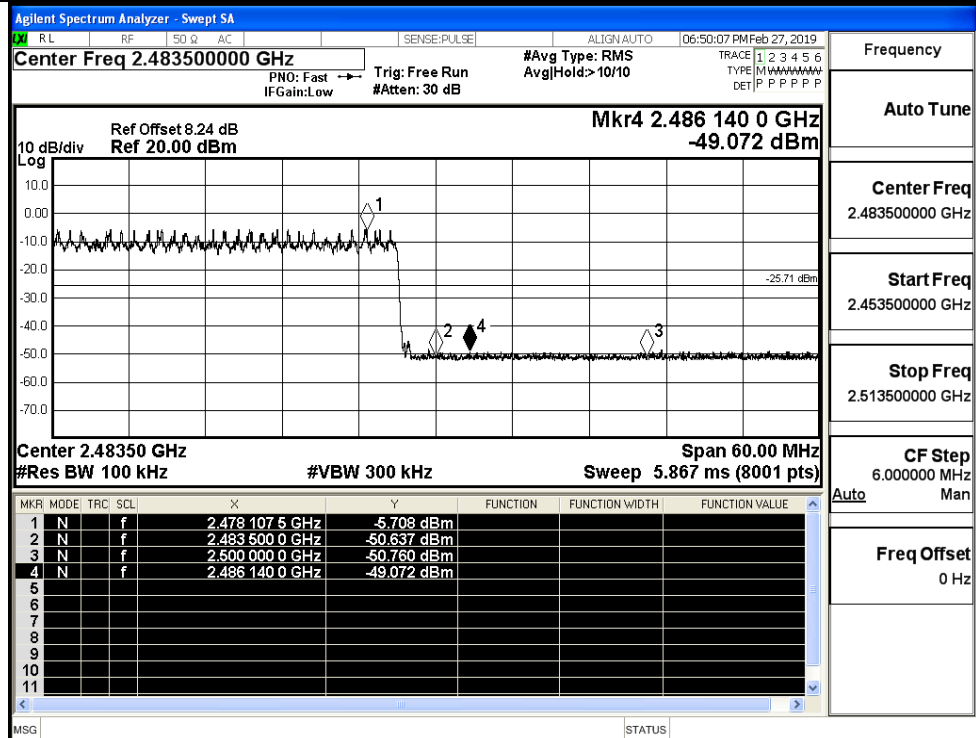
CF Step
6.000000 MHz
Auto Man

Freq Offset
0 Hz

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



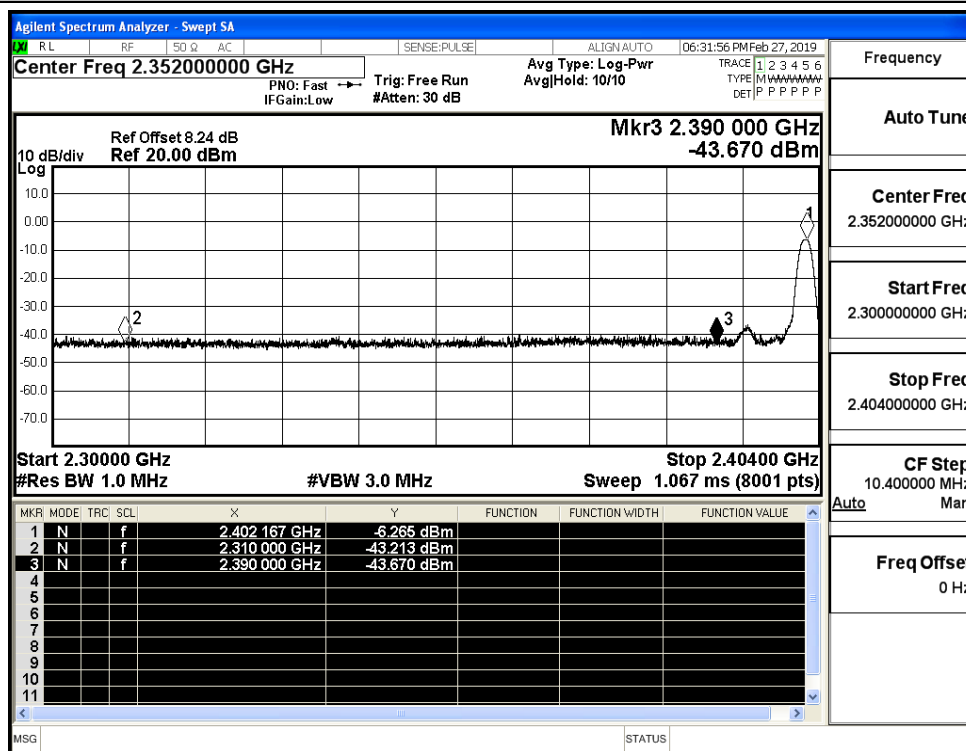
$\pi/4$ DQPSK/HCH/Hop



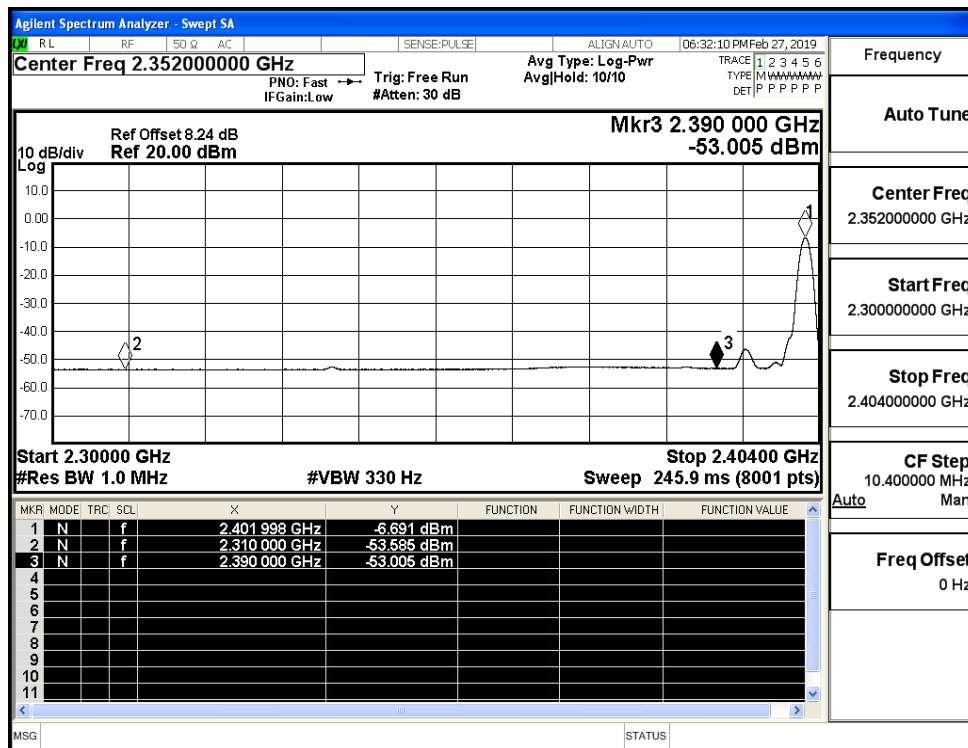
A.8 Restrict-band band-edge measurements

Test Mode	Hopping	Freq.	Power [dBm]	Gain	Ground Factor	E [dBuV/m]	Detector	Limit [dBuV/m]	Verdict
GFSK	Off	2310.0	-43.21	2.0	0	54.04	PEAK	74	PASS
	Off	2310.0	-53.59	2.0	0	43.67	AV	54	PASS
	Off	2390.0	-43.67	2.0	0	53.59	PEAK	74	PASS
	Off	2390.0	-53.01	2.0	0	44.25	AV	54	PASS
	Off	2483.5	-41.75	2.0	0	55.51	PEAK	74	PASS
	Off	2483.5	-52.78	2.0	0	44.48	AV	54	PASS
	Off	2500.0	-42.24	2.0	0	55.02	PEAK	74	PASS
	Off	2500.0	-52.10	2.0	0	45.15	AV	54	PASS
$\pi/4$ DQPSK	Off	2310.0	-42.02	2.0	0	55.24	PEAK	74	PASS
	Off	2310.0	-53.54	2.0	0	43.72	AV	54	PASS
	Off	2390.0	-43.36	2.0	0	53.89	PEAK	74	PASS
	Off	2390.0	-53.01	2.0	0	44.25	AV	54	PASS
	Off	2483.5	-42.82	2.0	0	54.44	PEAK	74	PASS
	Off	2483.5	-52.93	2.0	0	44.32	AV	54	PASS
	Off	2500.0	-40.34	2.0	0	56.92	PEAK	74	PASS
	Off	2500.0	-52.18	2.0	0	45.07	AV	54	PASS

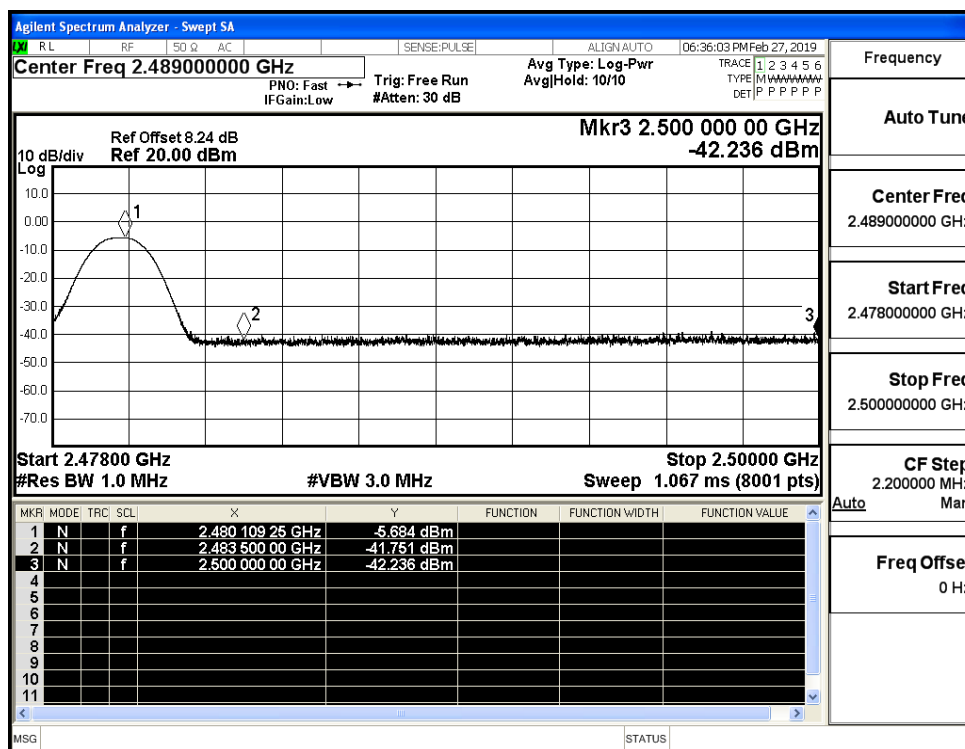
Restrict-band band-edge measurements_Hopping Off_GFSK_PEAK (Low Channel)



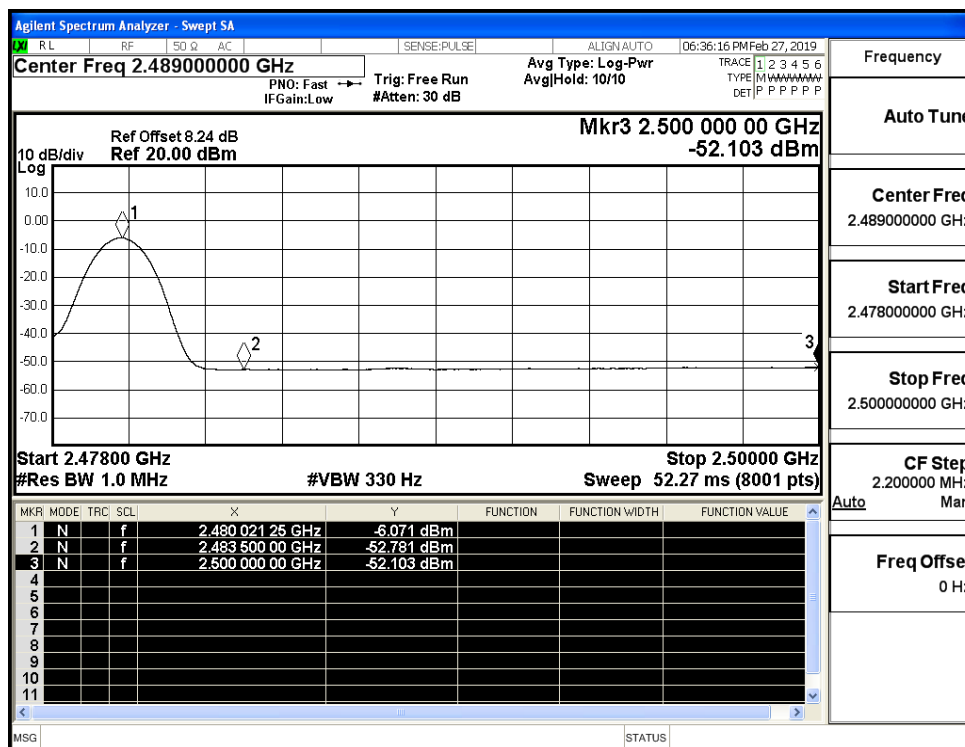
Restrict-band band-edge measurements_Hopping Off_GFSK_Average (Low Channel)

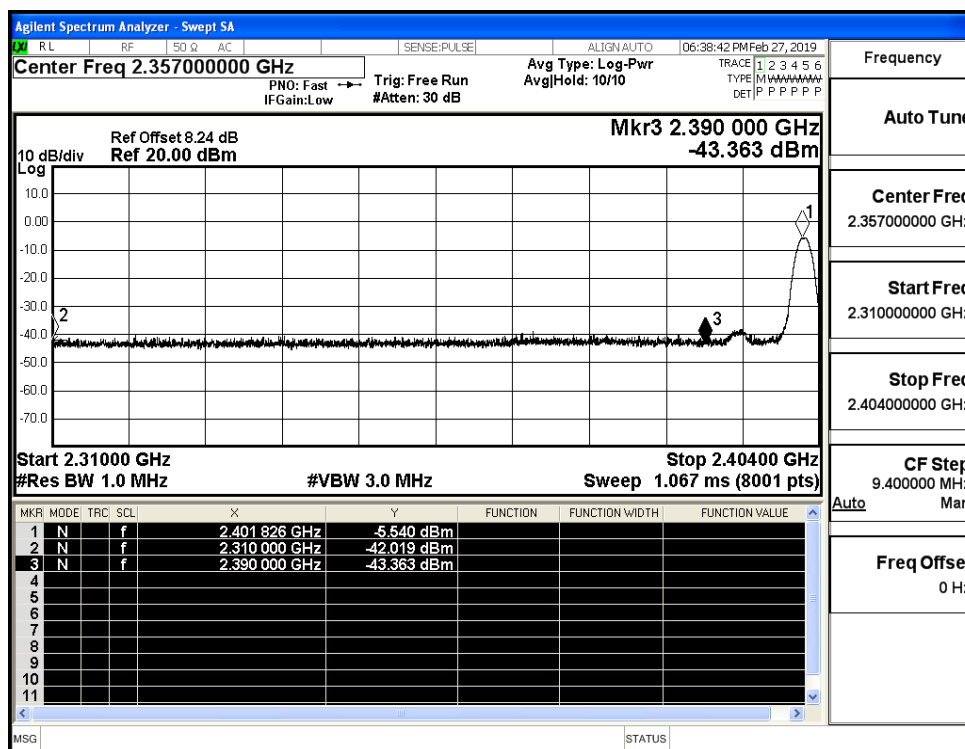
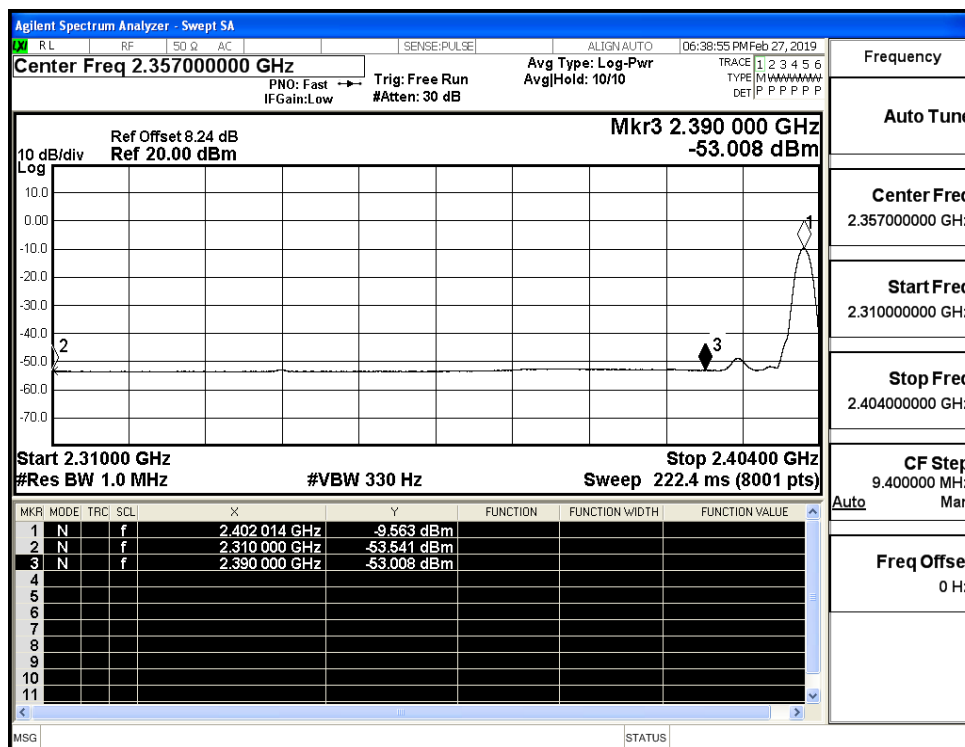


Restrict-band band-edge measurements_Hopping Off_GFSK_PEAK (High Channel)

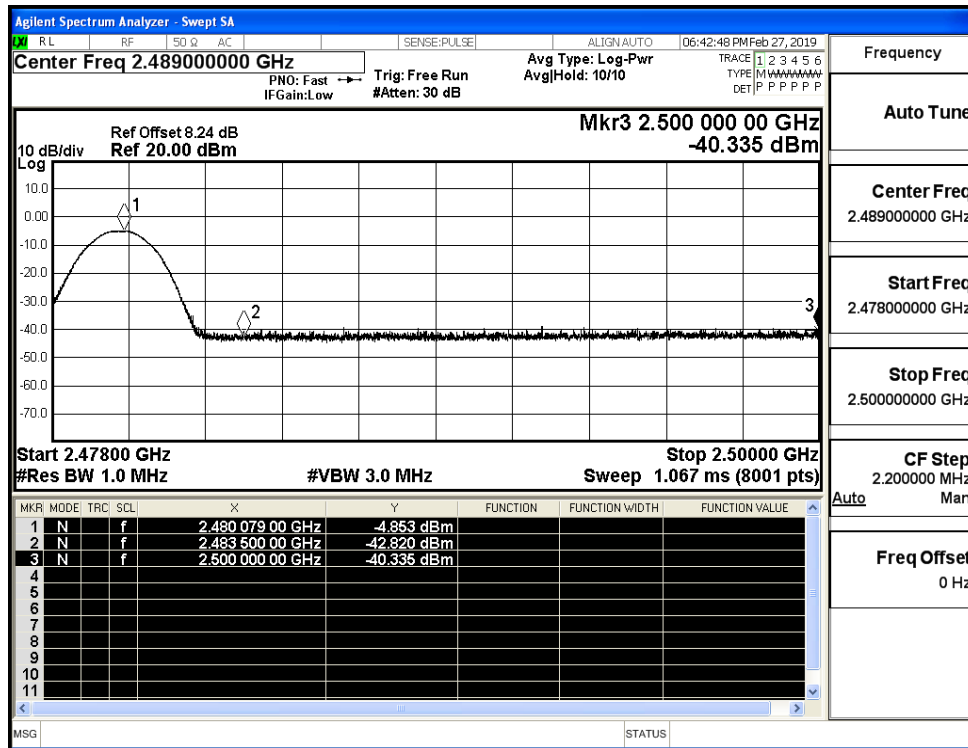


Restrict-band band-edge measurements_Hopping Off_GFSK_Average (High Channel)



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)

