

Appendix A

RF Test Data for BT V5.0(DSS) (Conducted Measurement)

Product Name: CD /BLUETOOTH BOOMBOX

Trade Mark: N/A

Test Model: AAABLK100009771

Environmental Conditions

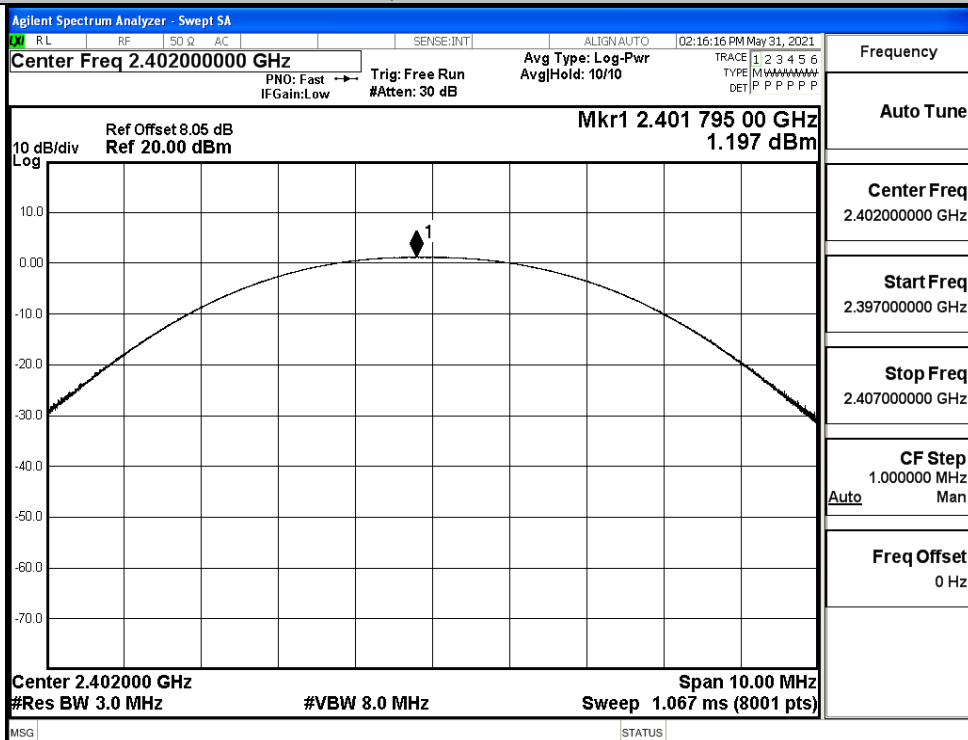
Temperature:	23.7 ° C
Relative Humidity:	51.6%
ATM Pressure:	100.0 kPa
Test Engineer:	Jay Li
Supervised by:	Li Huan

A.1 Maximum Conducted Peak Output Power

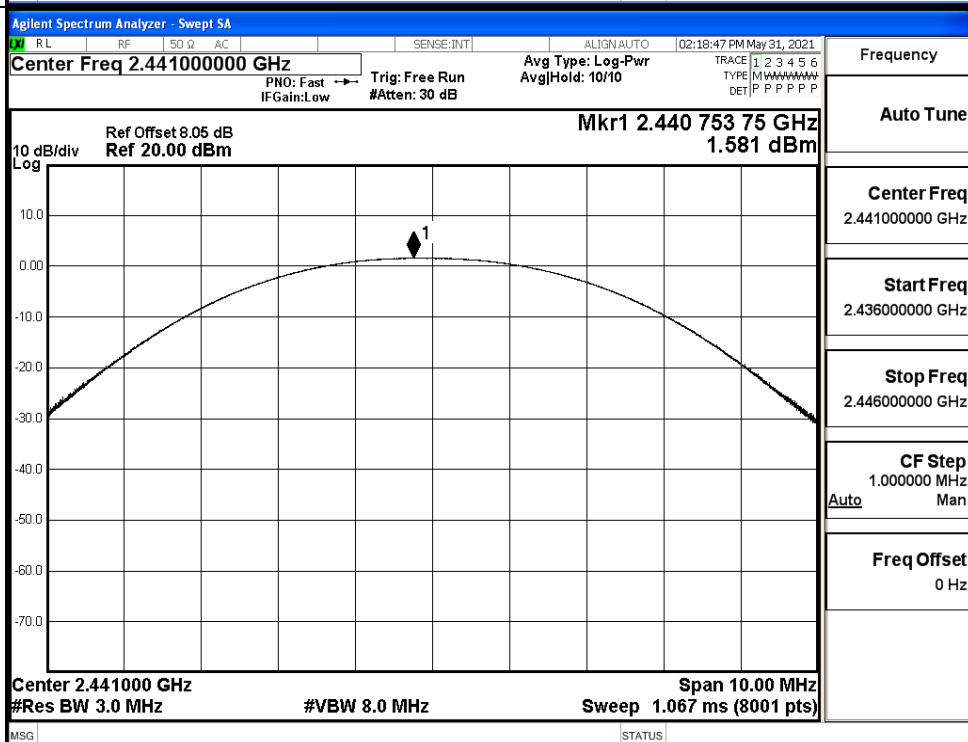
Mode	Channel.	Maximum Peak Output Power [dBm]	Limit [dBm]	Verdict
GFSK	LCH	1.197	21	PASS
	MCH	1.581	21	PASS
	HCH	1.673	21	PASS
$\pi/4$ DQPSK	LCH	1.179	21	PASS
	MCH	1.520	21	PASS
	HCH	1.528	21	PASS

Test Graphs

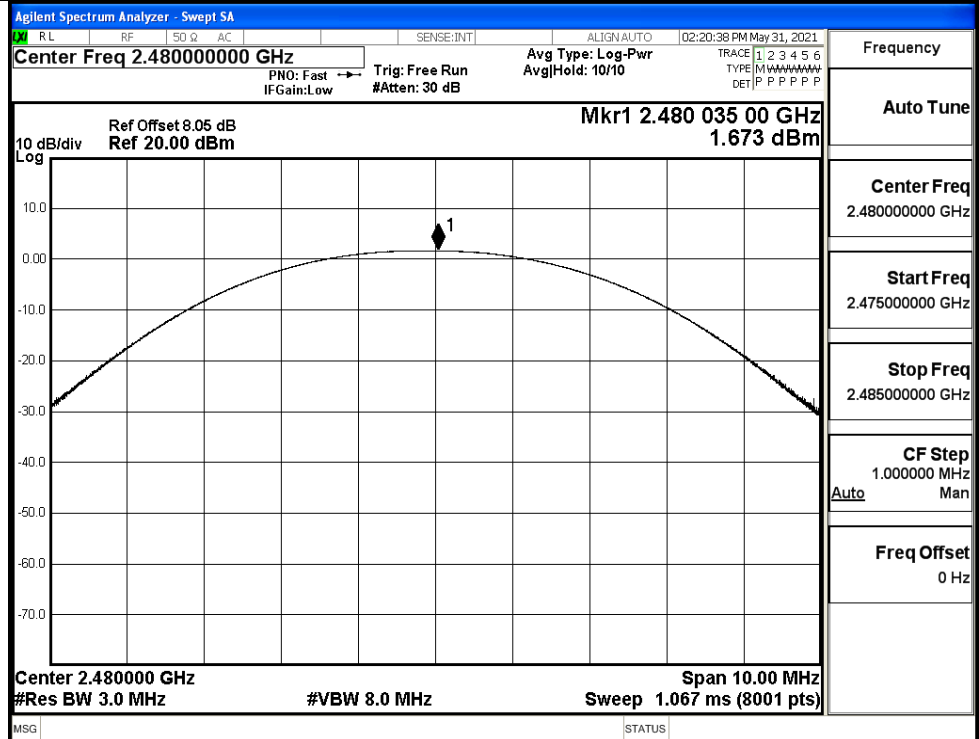
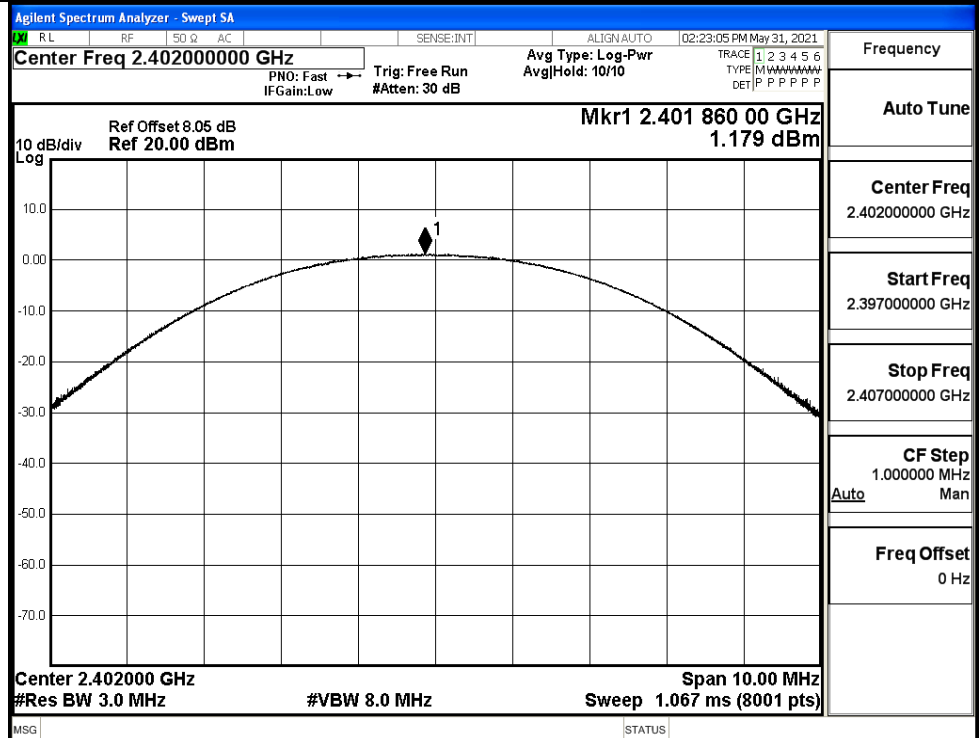
GFSK/LCH

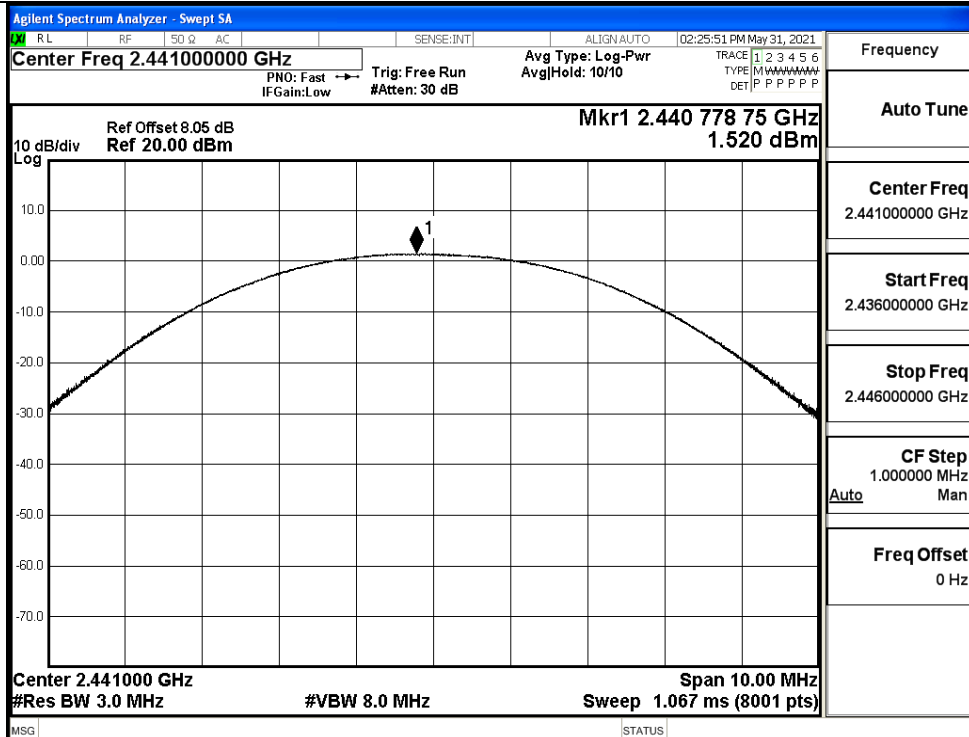
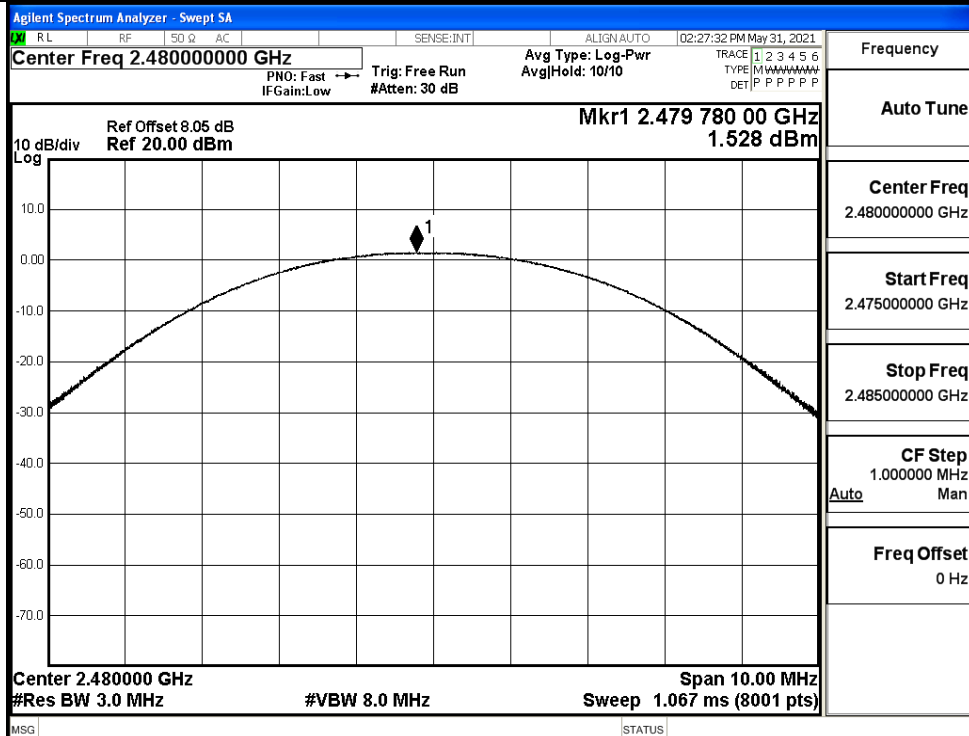


GFSK/MCH



GFSK/HCH

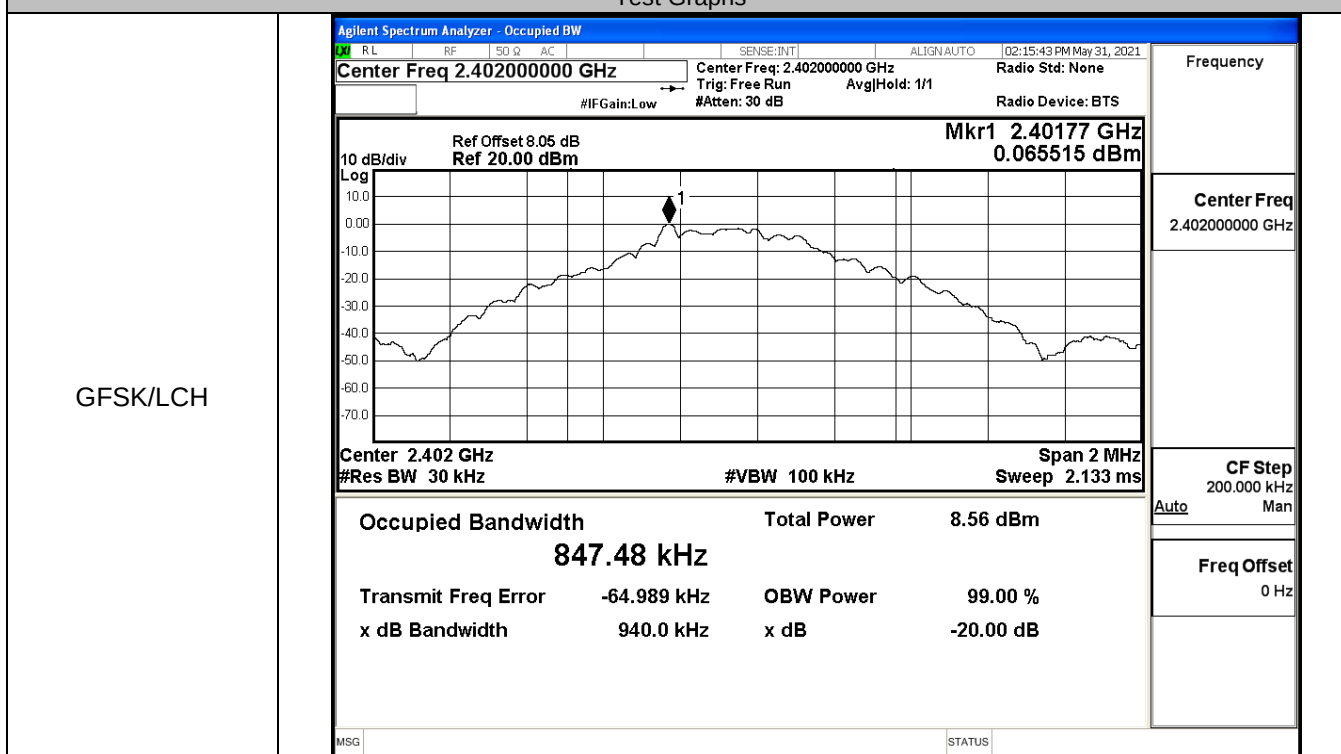
 $\pi/4$ DQPSK/LCH

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

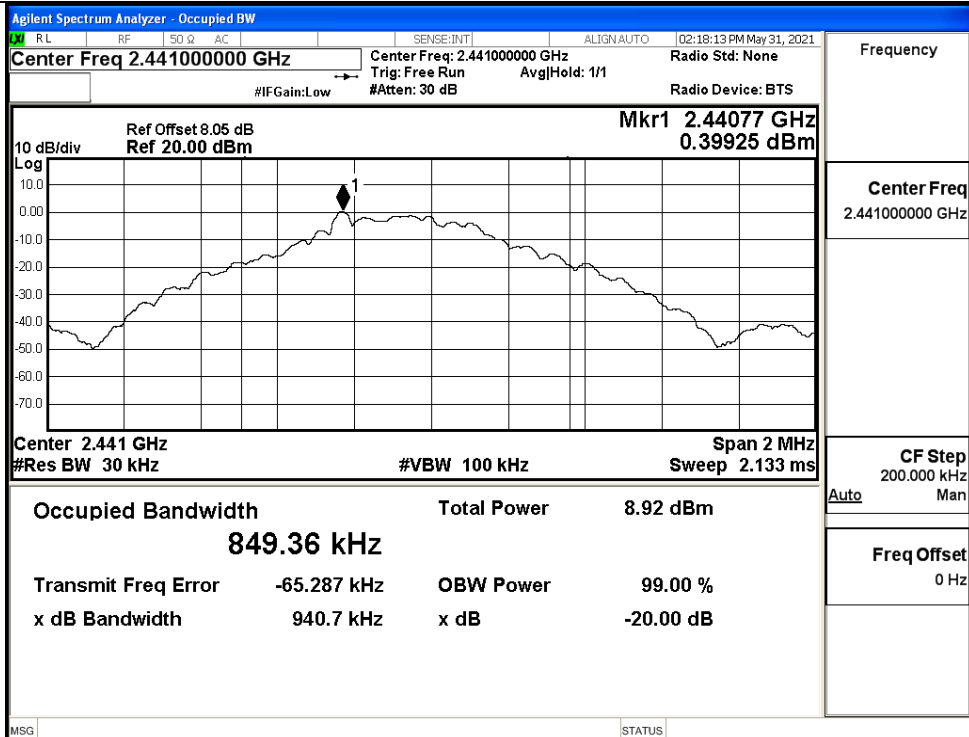
A.2 20dB Bandwidth

Mode	Channel.	20dB Bandwidth [MHz]	Limit [MHz]	Verdict
GFSK	LCH	0.9400	Not Specified	PASS
	MCH	0.9407	Not Specified	PASS
	HCH	0.9420	Not Specified	PASS
$\pi/4$ DQPSK	LCH	1.271	Not Specified	PASS
	MCH	1.271	Not Specified	PASS
	HCH	1.273	Not Specified	PASS

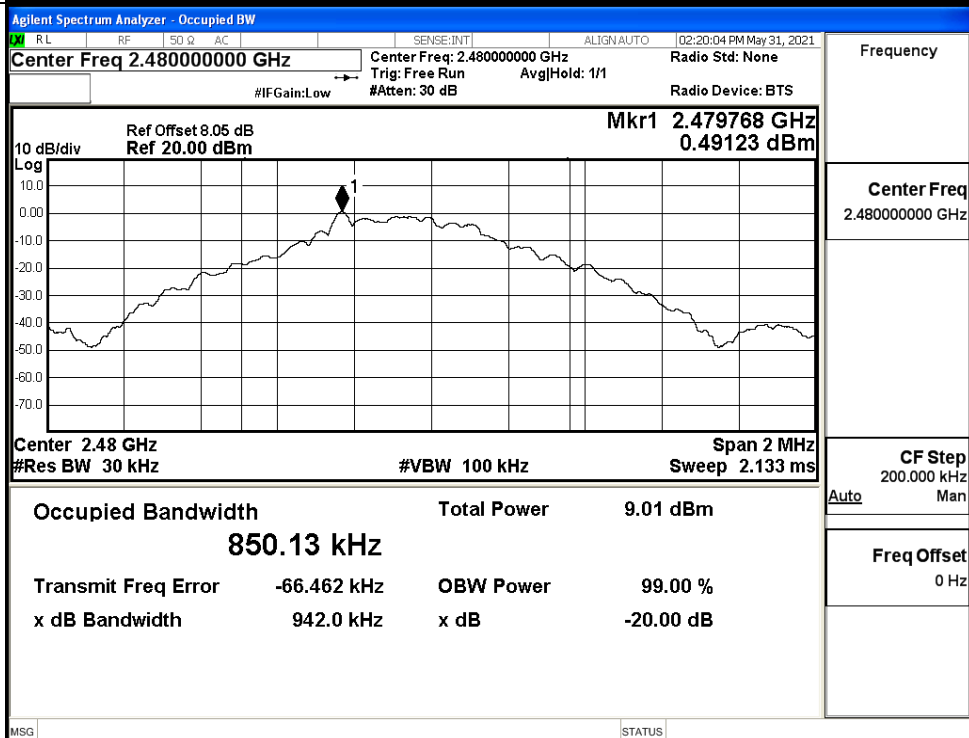
Test Graphs

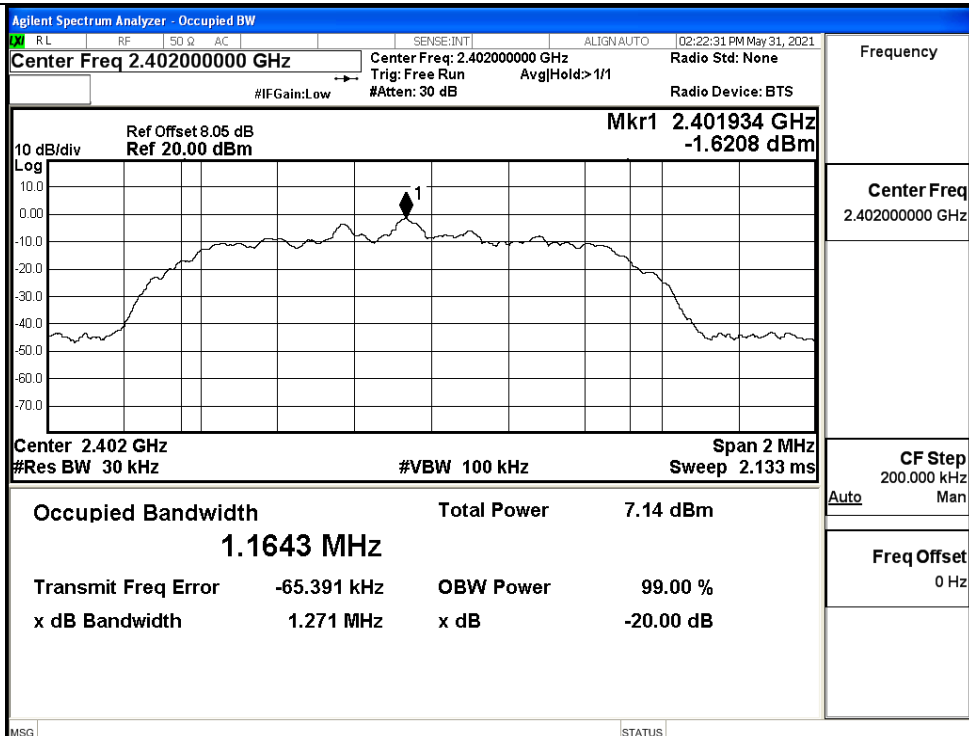


GFSK/MCH

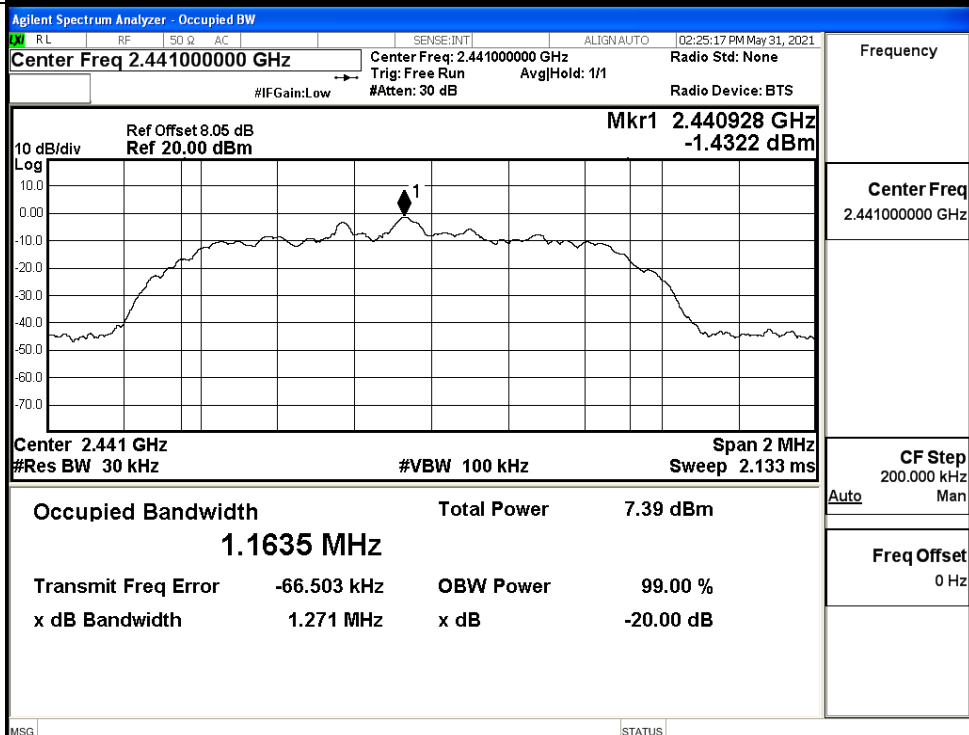


GFSK/HCH



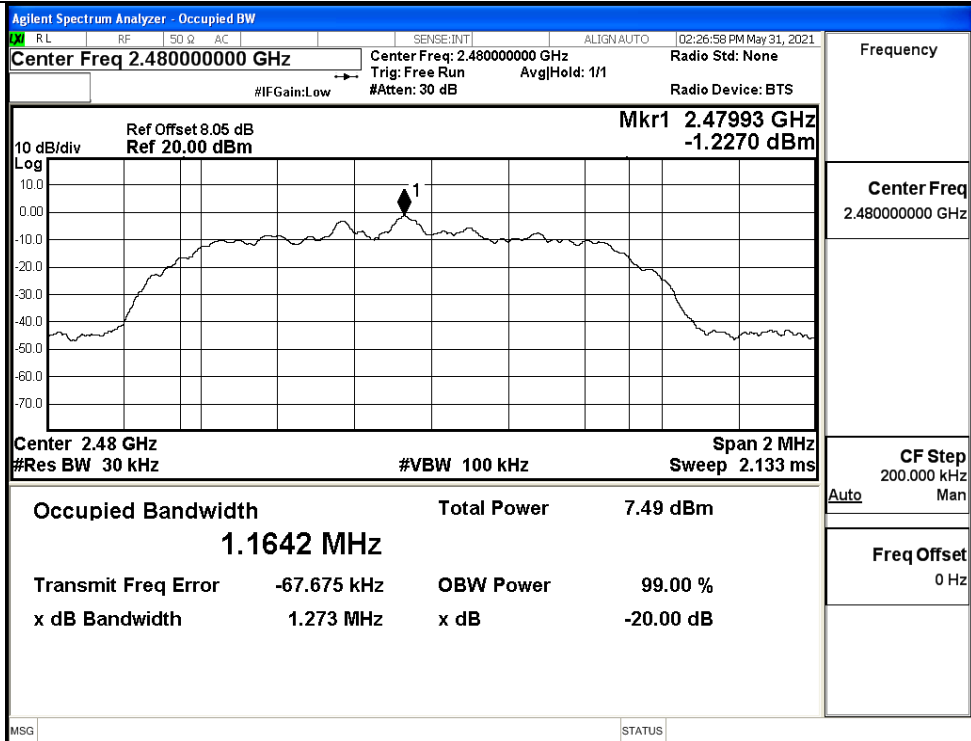
$\pi/4$ DQPSK/LCH

Frequency

Center Freq
2.40200000 GHzCF Step
200.000 kHz
Auto ManFreq Offset
0 Hz $\pi/4$ DQPSK/MCH

Frequency

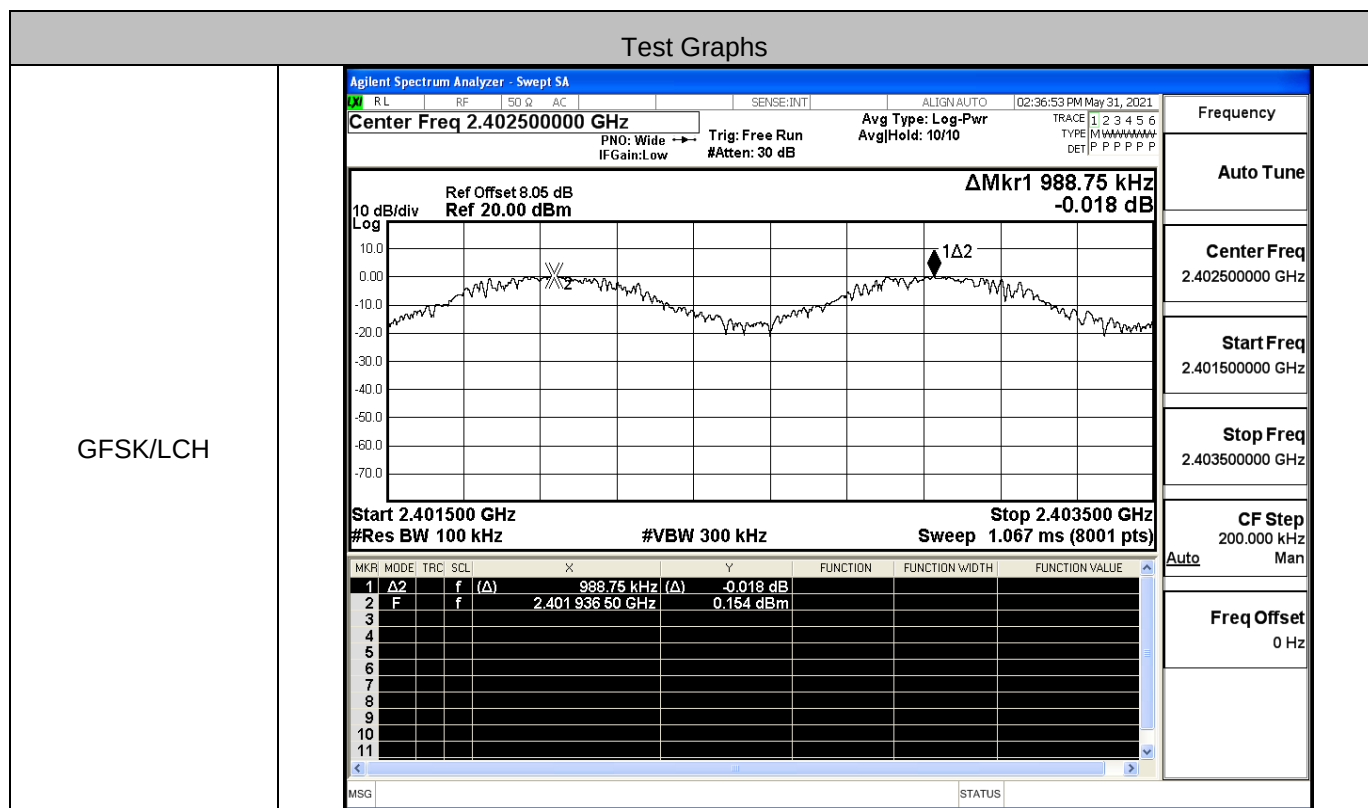
Center Freq
2.44100000 GHzCF Step
200.000 kHz
Auto ManFreq Offset
0 Hz

$\pi/4$ DQPSK/HCH

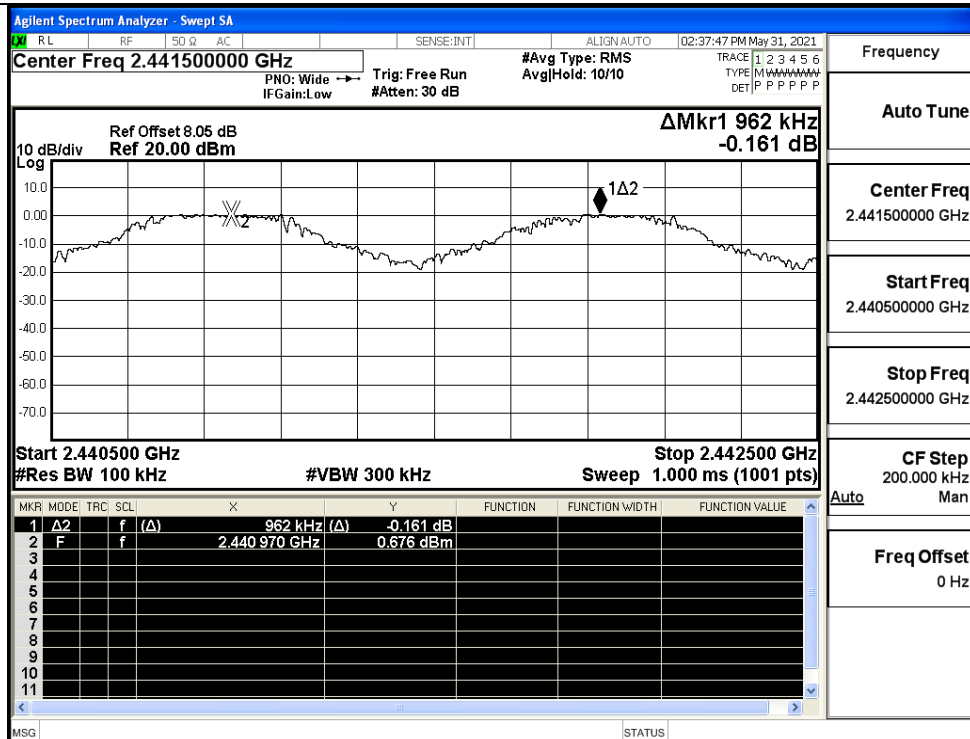
A.3 Carrier Frequency Separation

Mode	Channel.	Carrier Frequency Separation [MHz]	Limit [MHz]	Verdict
GFSK	LCH	0.989	0.628	PASS
	MCH	0.962	0.628	PASS
	HCH	0.668	0.628	PASS
$\pi/4$ DQPSK	LCH	0.954	0.849	PASS
	MCH	1.008	0.849	PASS
	HCH	1.136	0.849	PASS

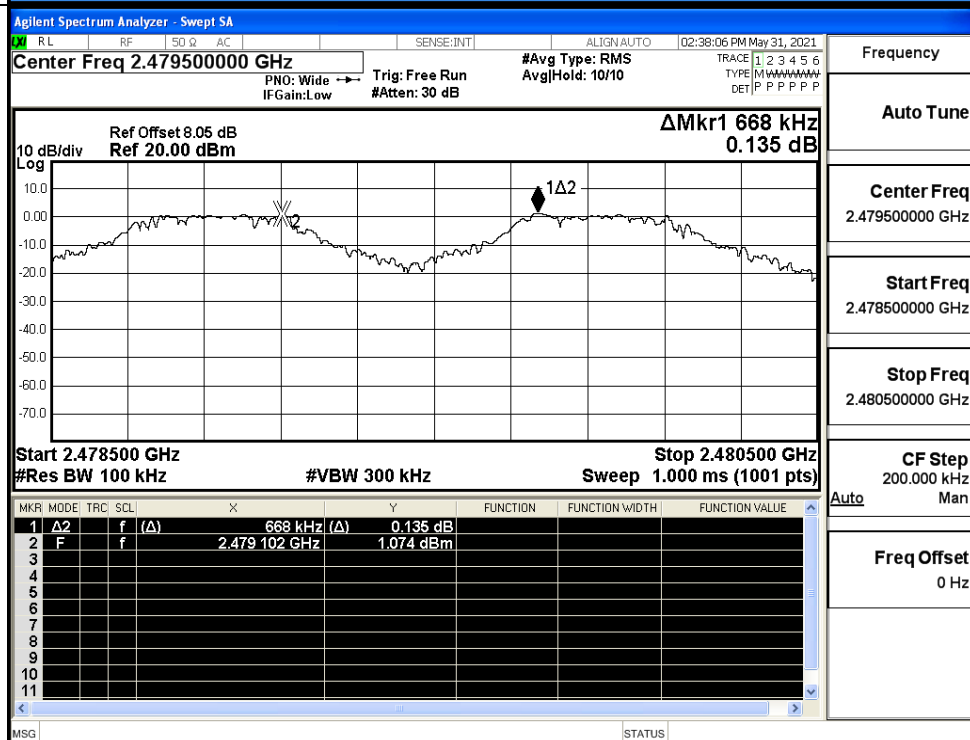
Test Graphs

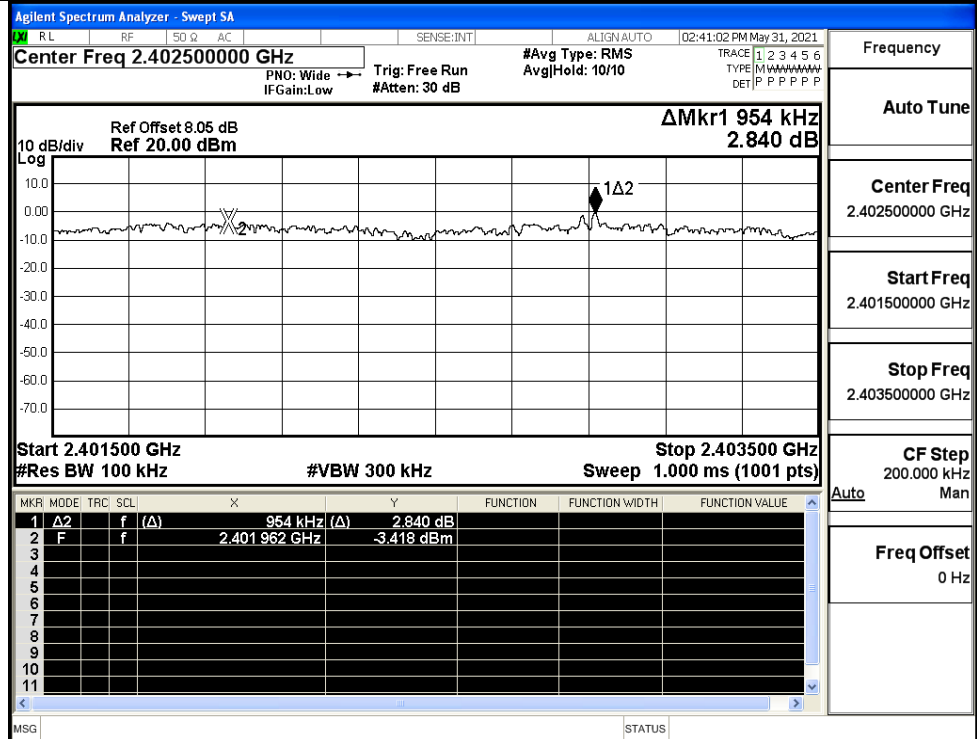


GFSK/MCH



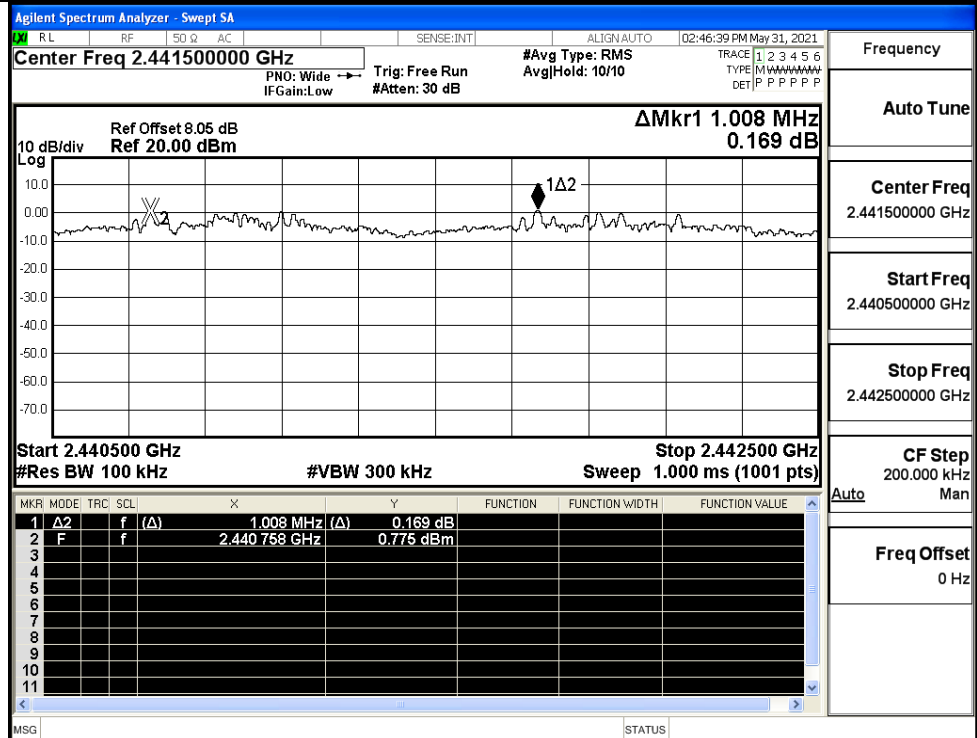
GFSK/HCH



$\pi/4$ DQPSK/LCH

Frequency

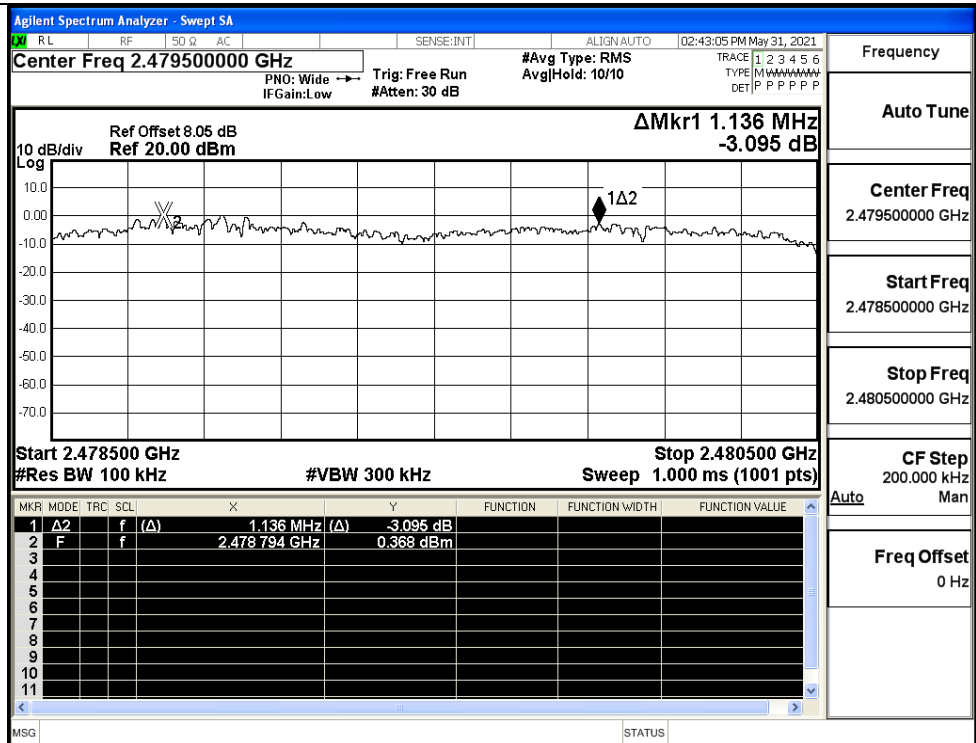
Auto Tune

Center Freq
2.402500000 GHzStart Freq
2.401500000 GHzStop Freq
2.403500000 GHzCF Step
200.000 kHz
ManFreq Offset
0 Hz $\pi/4$ DQPSK/MCH

Frequency

Auto Tune

Center Freq
2.441500000 GHzStart Freq
2.440500000 GHzStop Freq
2.442500000 GHzCF Step
200.000 kHz
ManFreq Offset
0 Hz

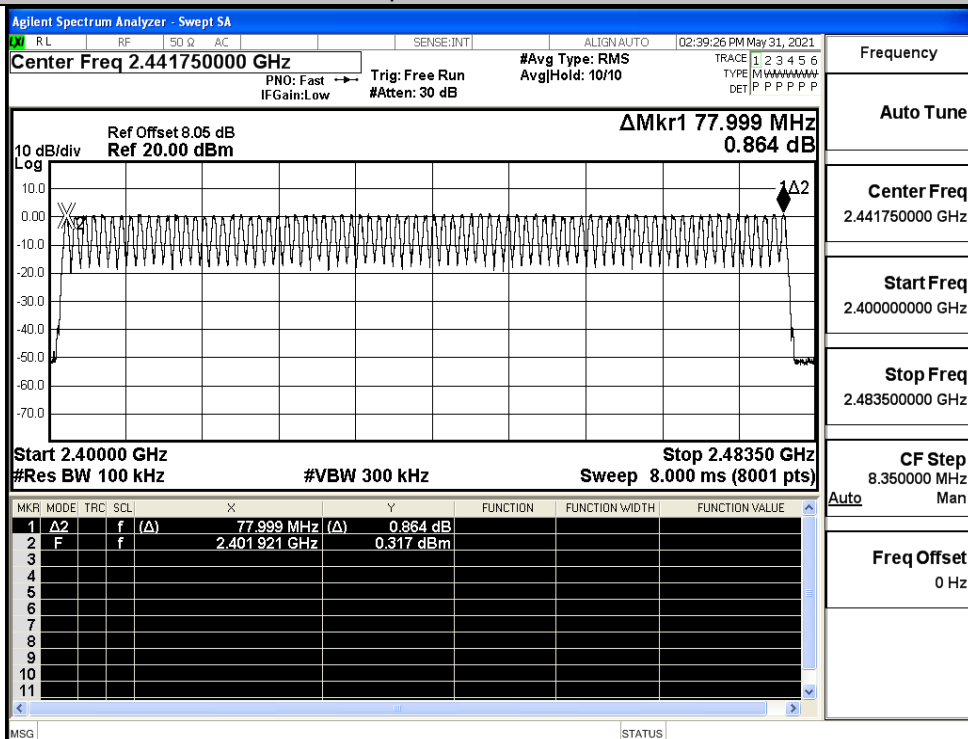
$\pi/4$ DQPSK/HCH

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

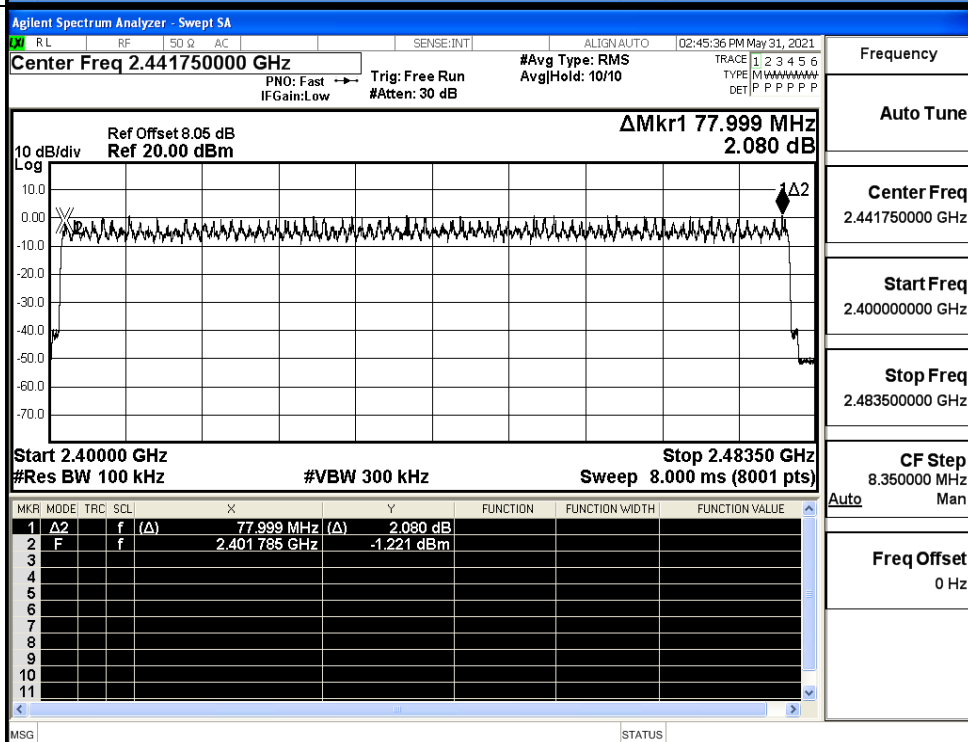
Test Graphs

GFSK/Hop



Frequency

Auto Tune

Center Freq
2.441750000 GHzStart Freq
2.400000000 GHzStop Freq
2.483500000 GHzCF Step
8.350000 MHz
ManFreq Offset
0 Hz $\pi/4$ DQPSK/Hop

Frequency

Auto Tune

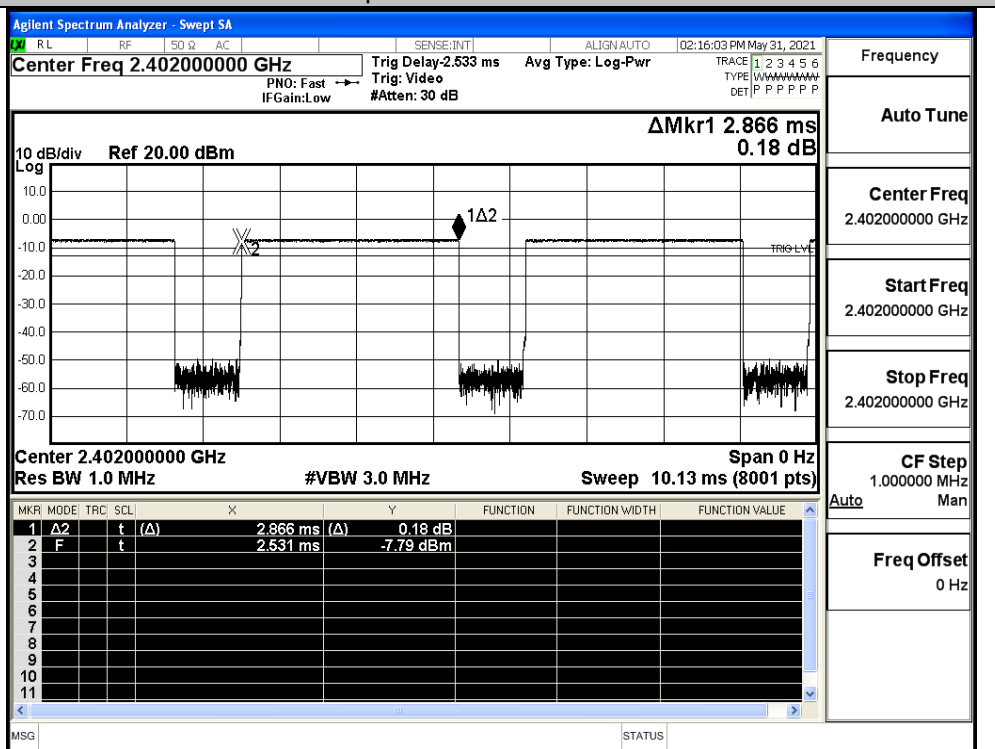
Center Freq
2.441750000 GHzStart Freq
2.400000000 GHzStop Freq
2.483500000 GHzCF Step
8.350000 MHz
ManFreq Offset
0 Hz

A.5 Dwell Time

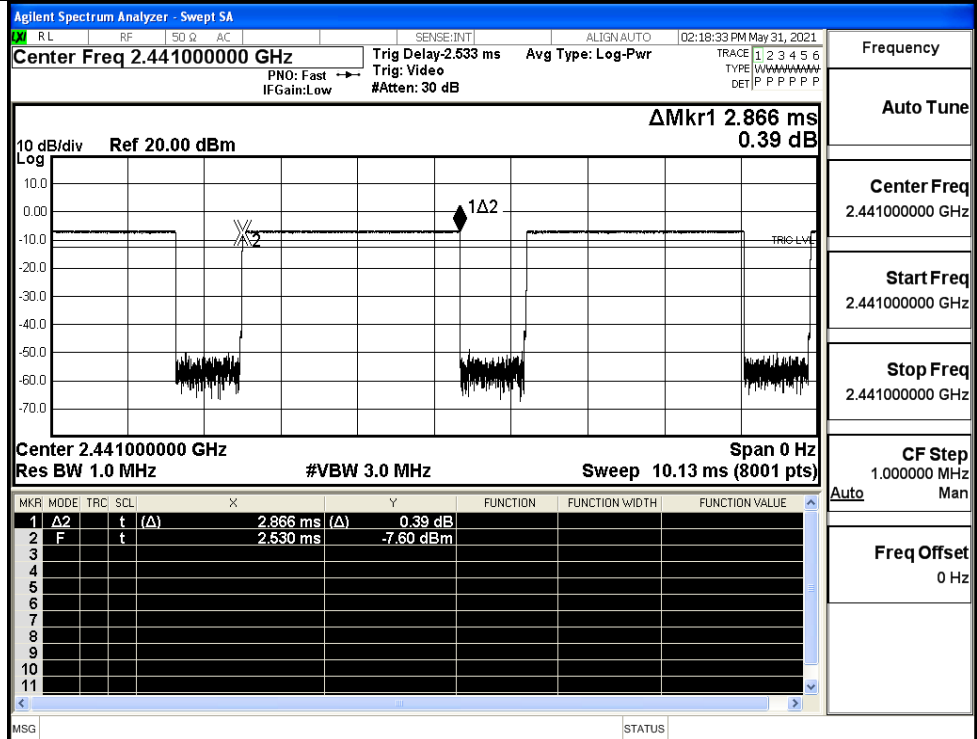
Mode	Packet	Channel	Burst Width [ms/hop/ch]	Total Hops[hop*ch]	Dwell Time[s]	Limit [s]	Verdict
GFSK	DH5	LCH	2.87	106.7	0.306	0.4	PASS
	DH5	MCH	2.87	106.7	0.306	0.4	PASS
	DH5	HCH	2.87	106.7	0.306	0.4	PASS
$\pi/4$ DQPSK	2DH5	LCH	2.88	106.7	0.307	0.4	PASS
	2DH5	MCH	2.88	106.7	0.307	0.4	PASS
	2DH5	HCH	2.88	106.7	0.307	0.4	PASS

Test Graphs

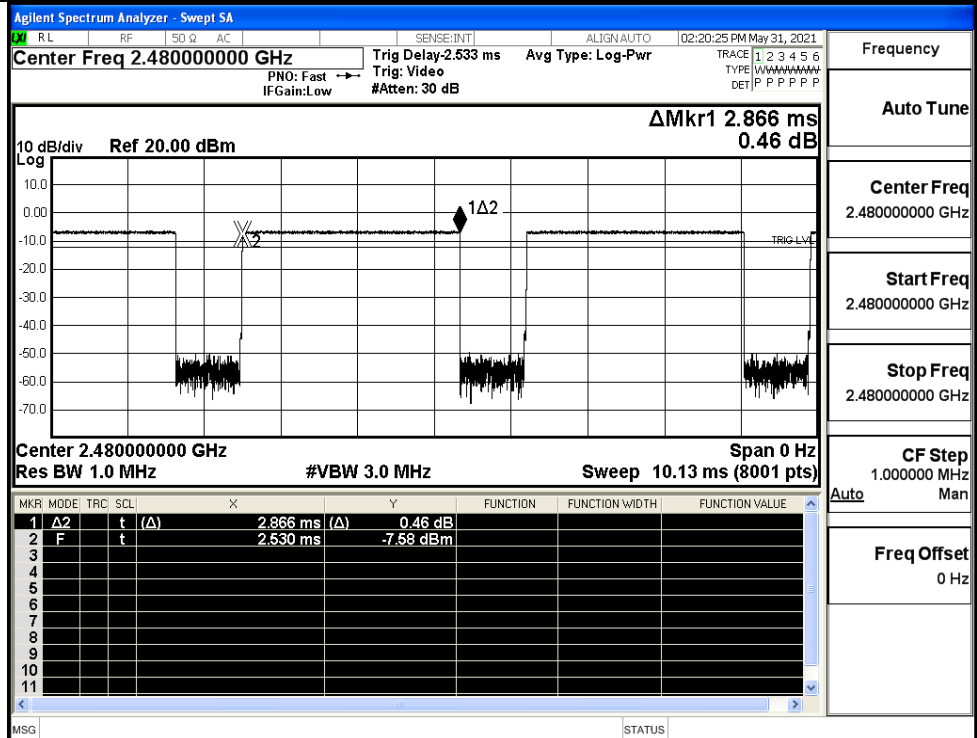
GFSK_DH5/LCH



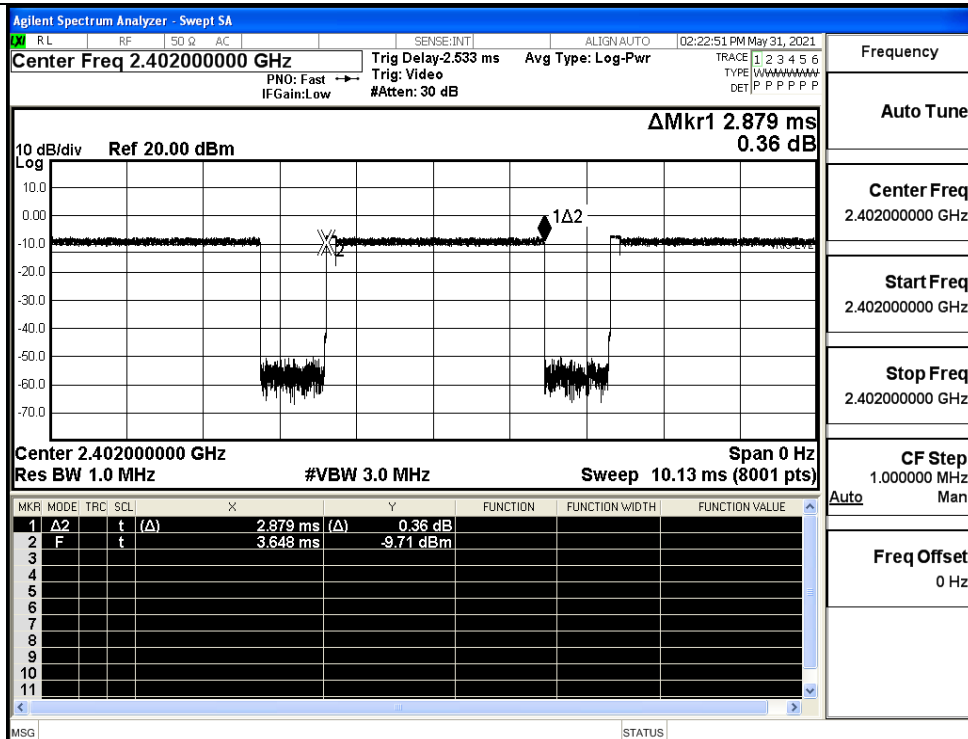
GFSK_DH5/MCH



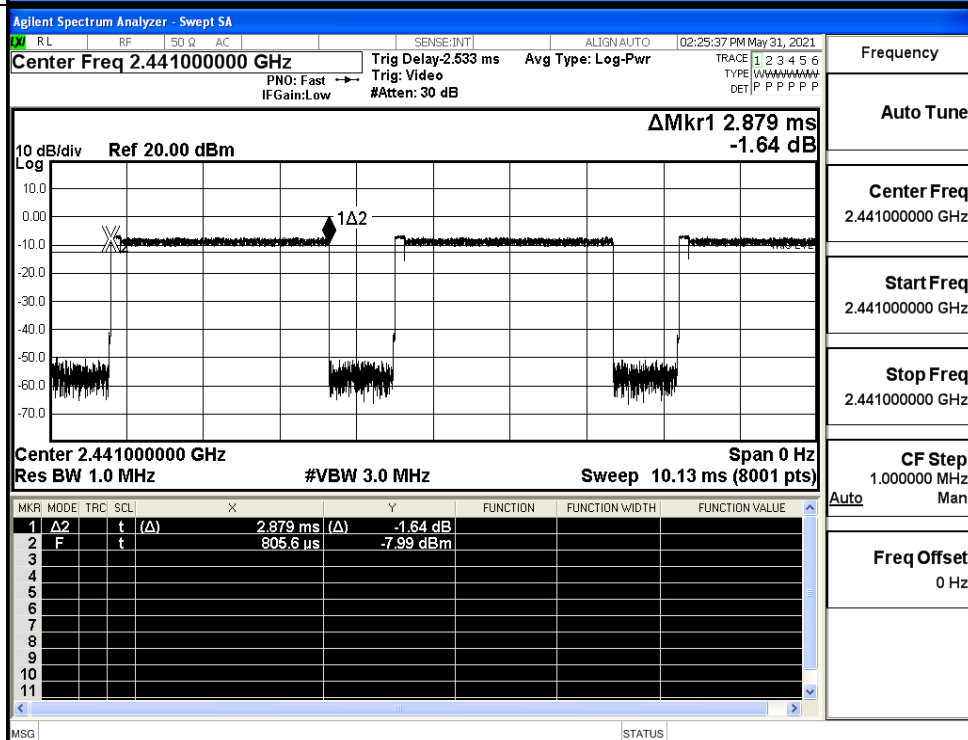
GFSK_DH5/HCH



$\pi/4$ DQPSK
_2DH5/LCH



$\pi/4$ DQPSK
_2DH5/MCH

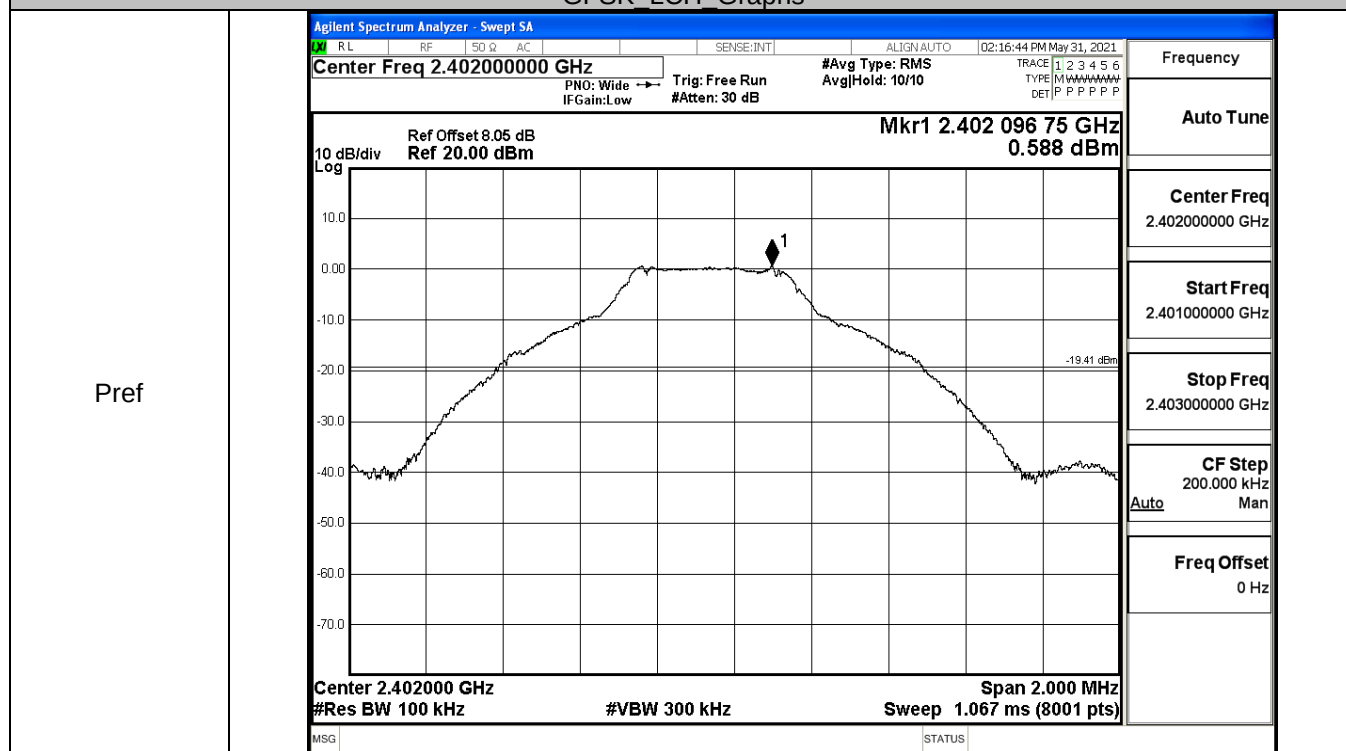


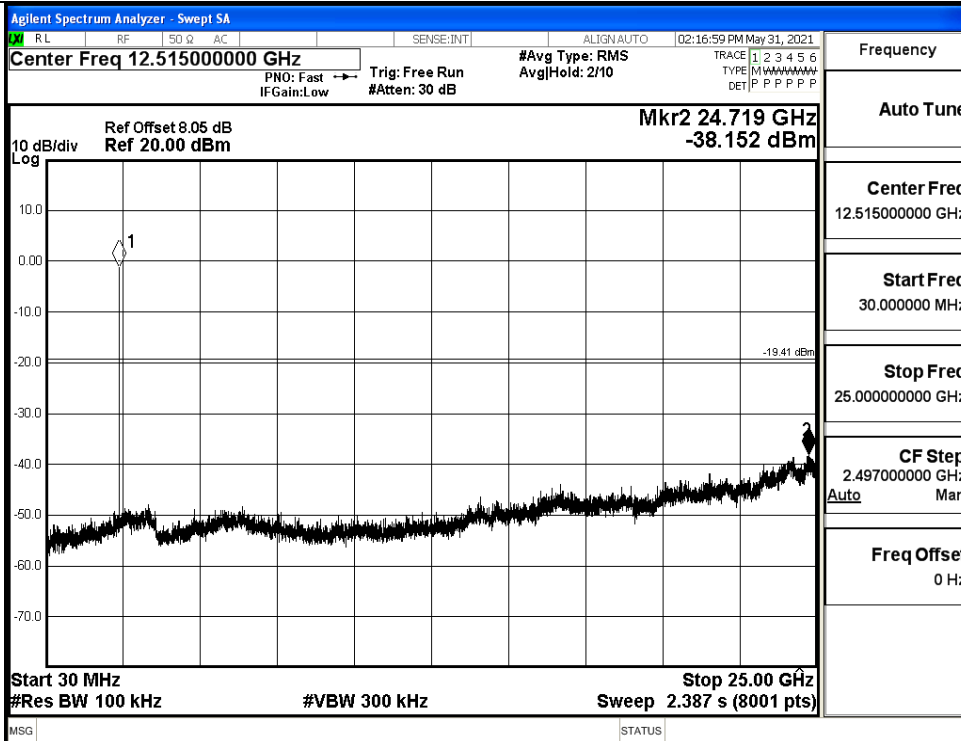
[illegible]

A.6 RF Conducted Spurious Emissions

Mode	Channel	Pref [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
GFSK	LCH	0.588	-38.152	-19.412	PASS
	MCH	1.181	-37.642	-18.819	PASS
	HCH	1.293	-36.536	-18.707	PASS
$\pi/4$ DQPSK	LCH	0.571	-37.297	-19.429	PASS
	MCH	0.934	-36.687	-19.066	PASS
	HCH	1.033	-38.002	-18.967	PASS

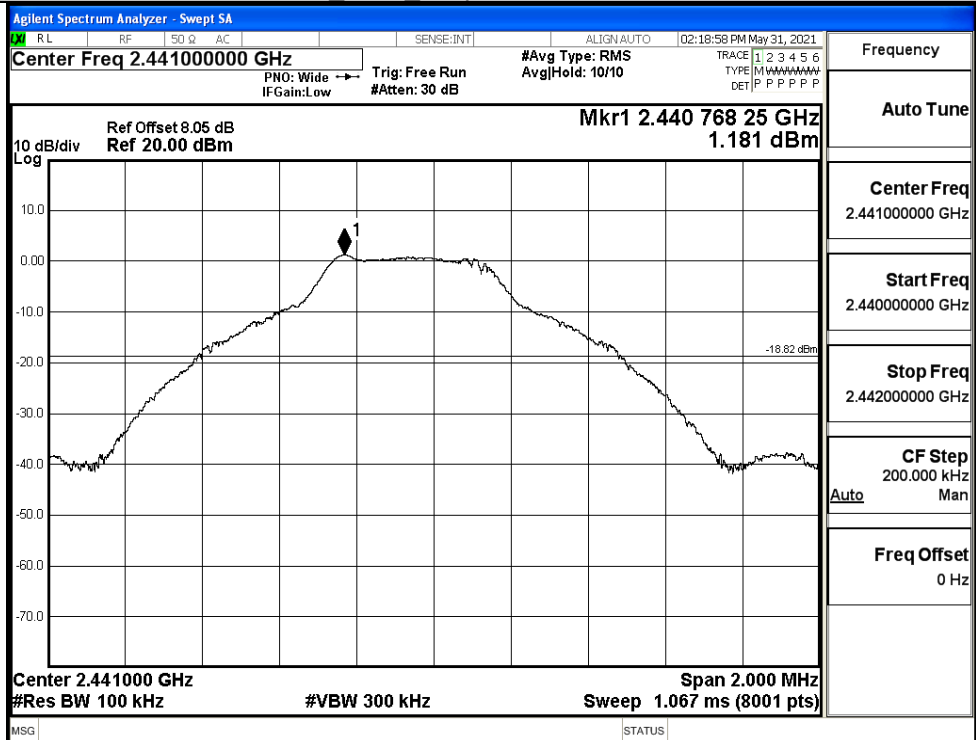
GFSK LCH Graphs



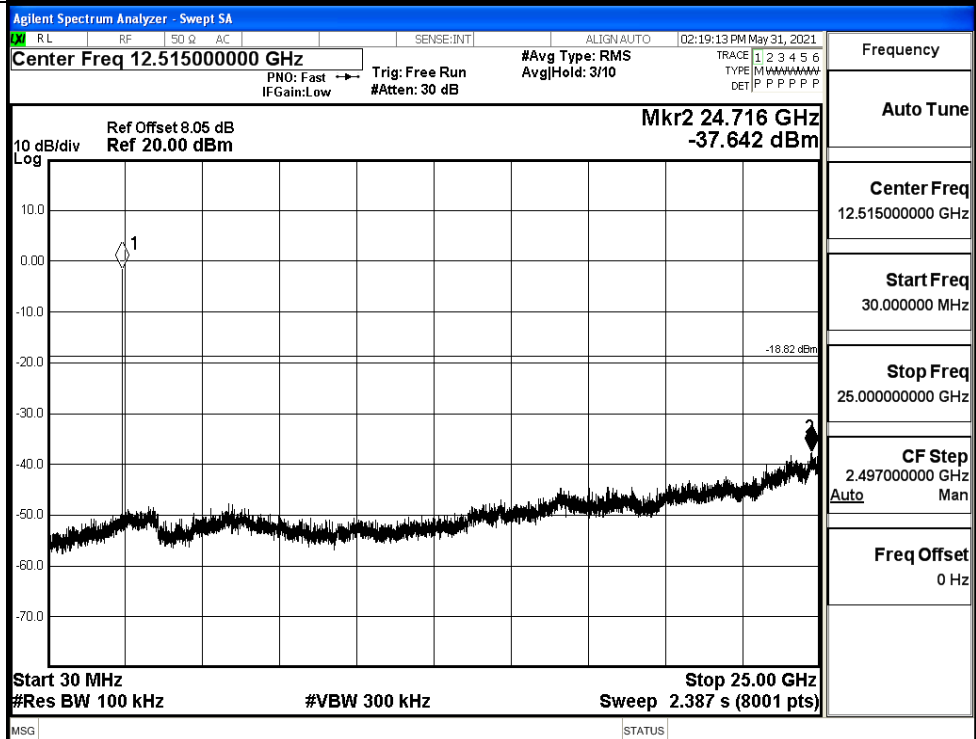
P_uw

GFSK_MCH_Graphs

Pref

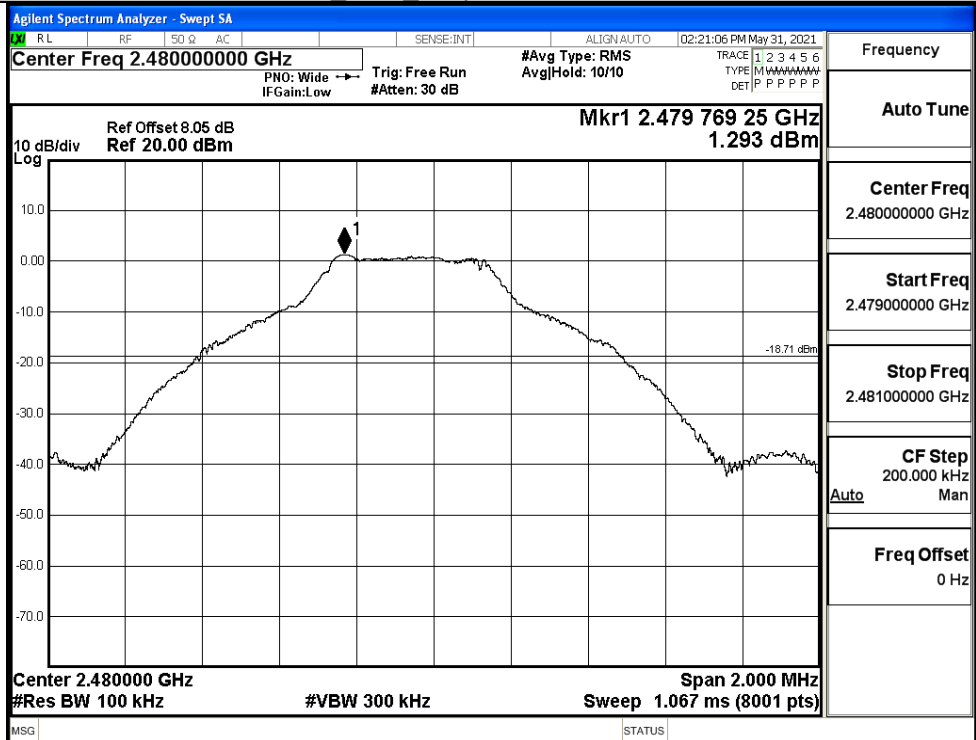


Puw

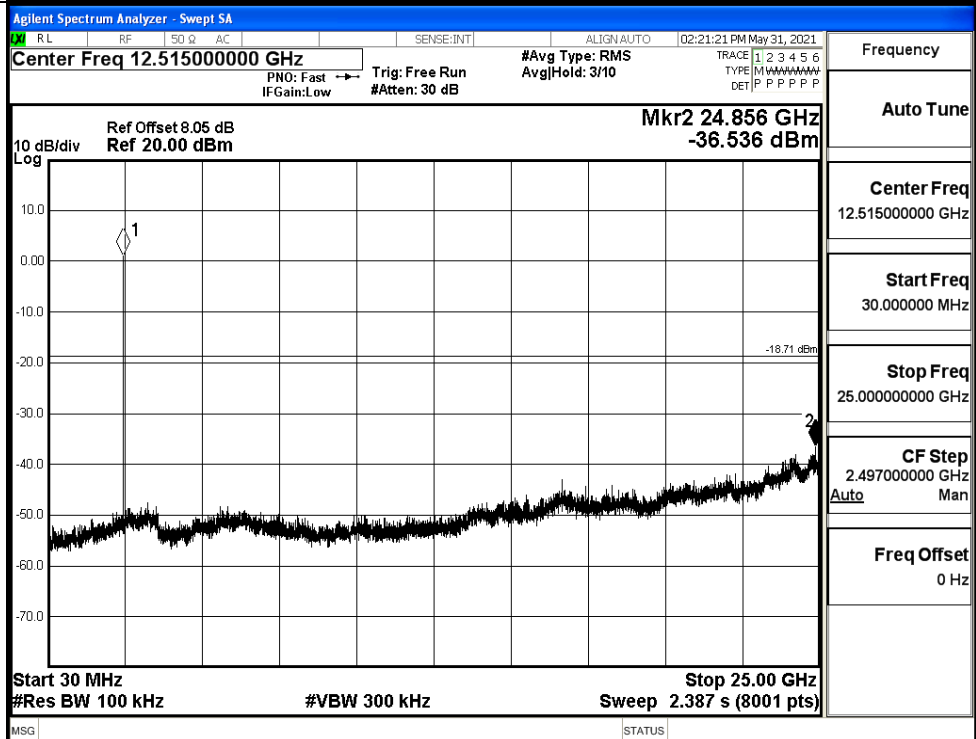


GFSK HCH Graphs

Pref

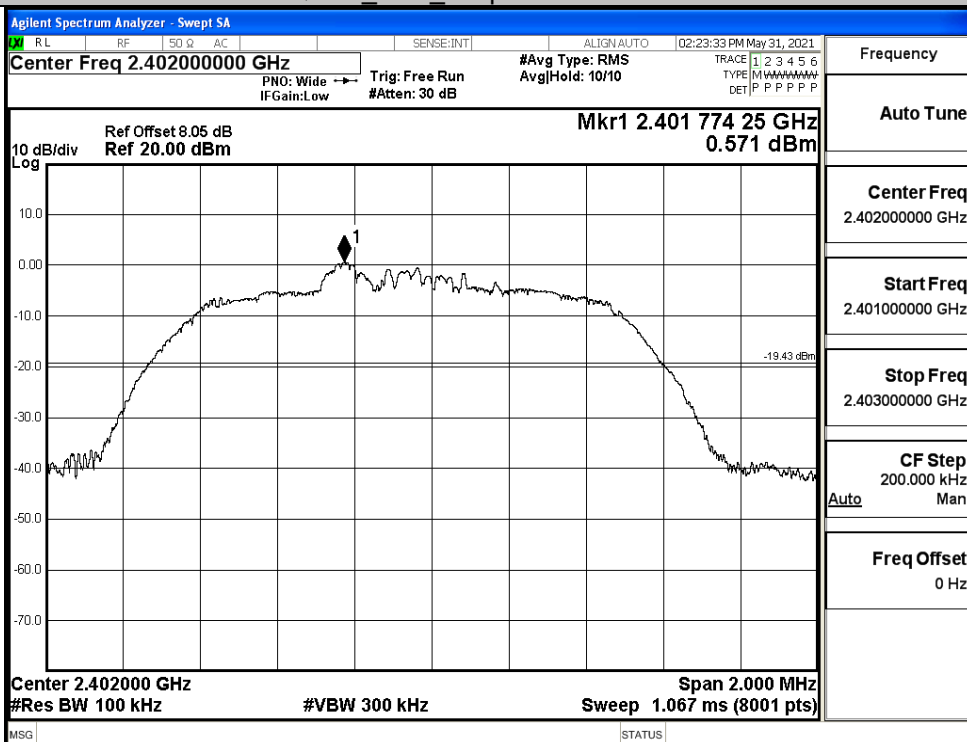


Puw

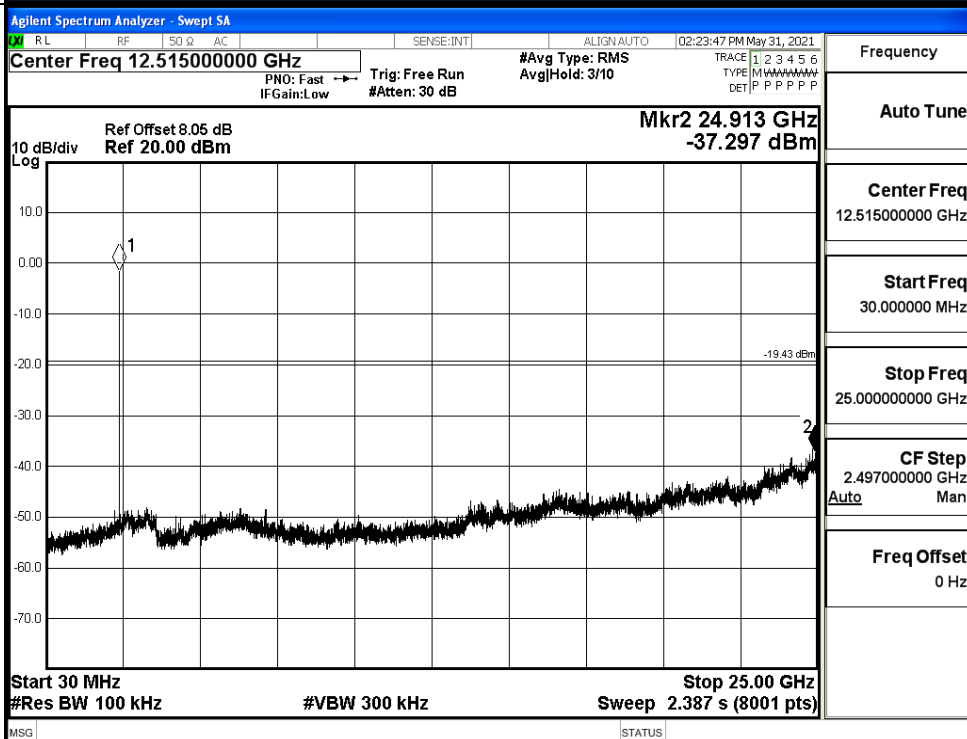


π /4DQPSK_LCH_Graphs

Pref

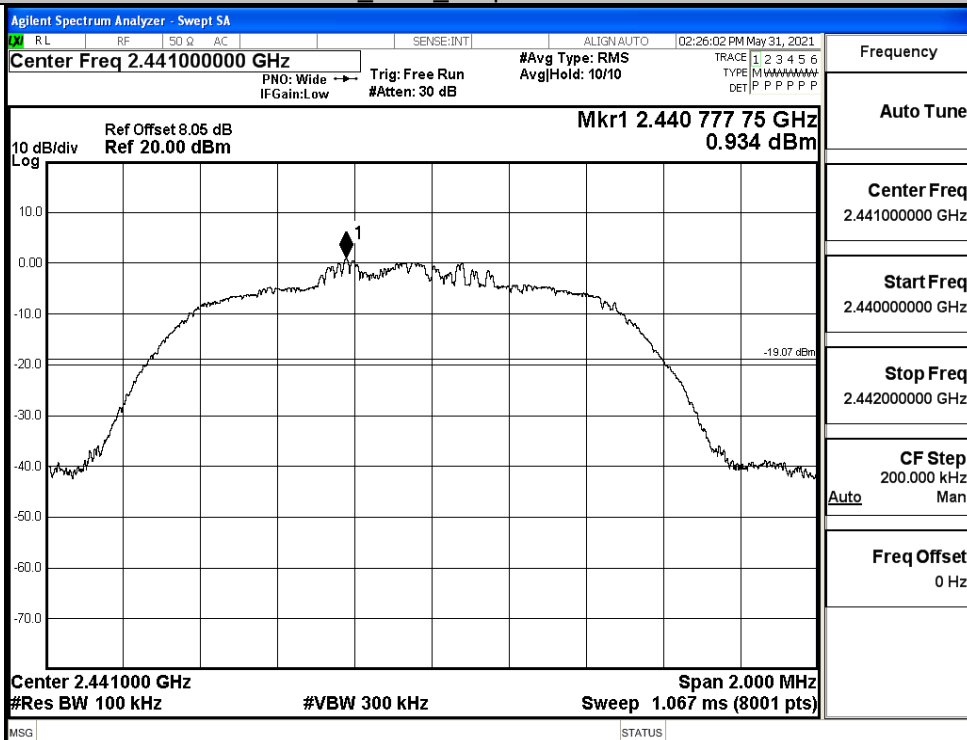


Puw

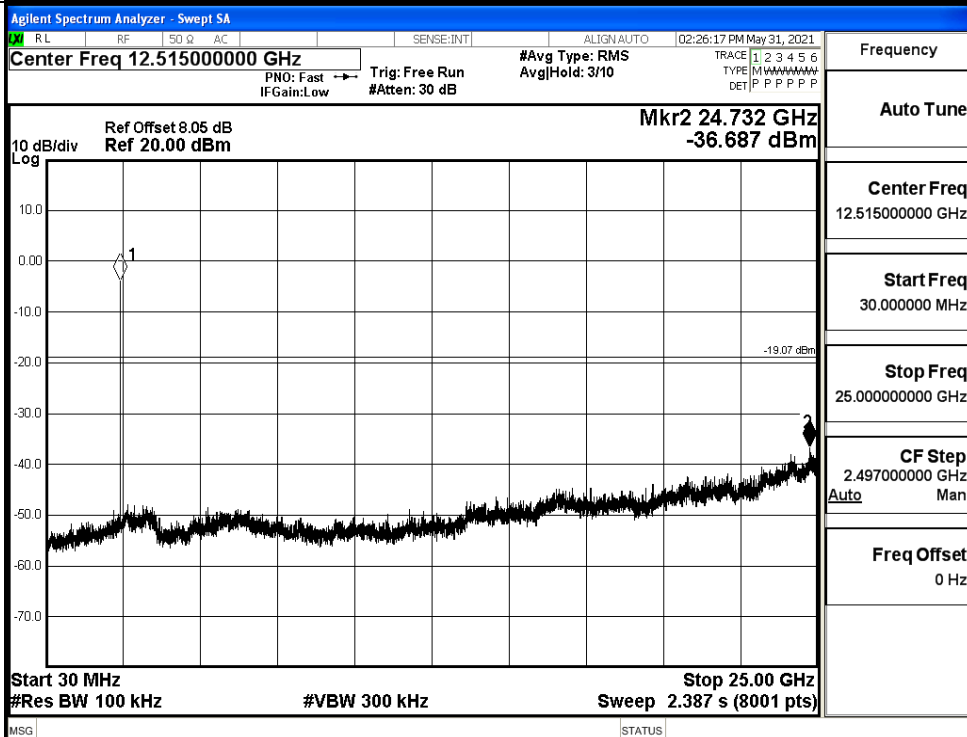


π /4DQPSK_MCH_Graphs

Pref

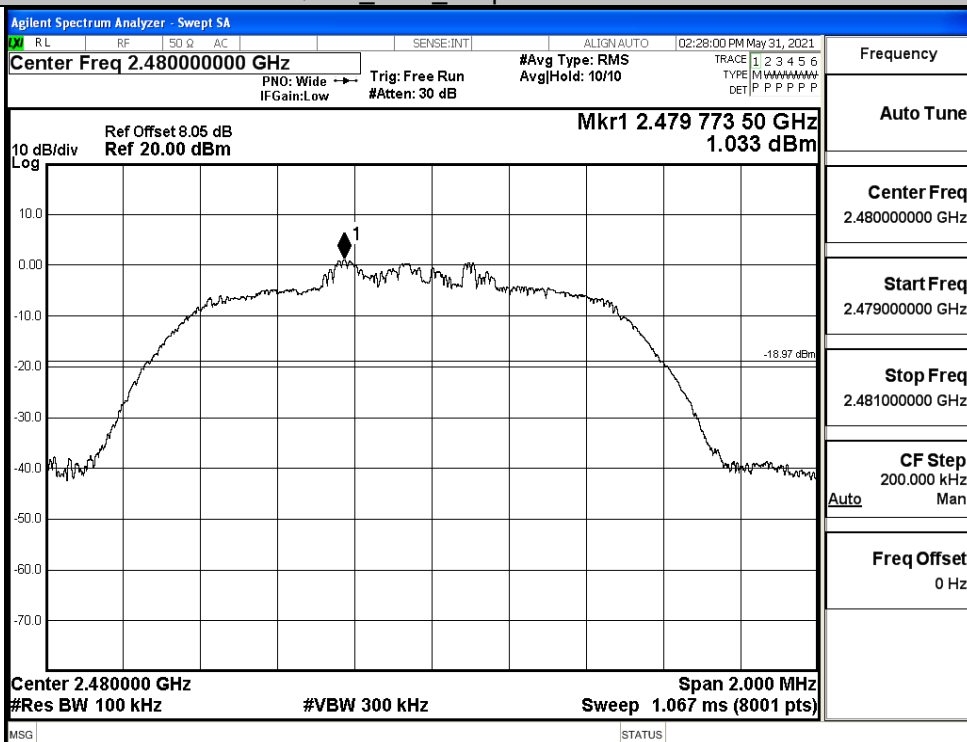


Puw

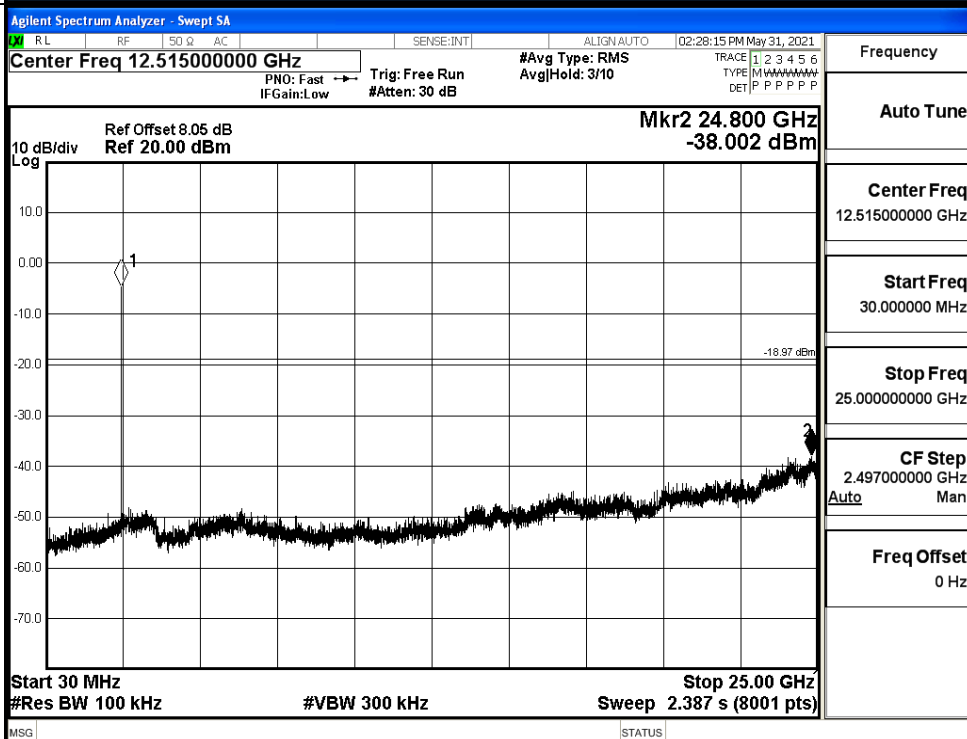


$\pi/4$ DQPSK_HCH_Graphs

Pref



Puw

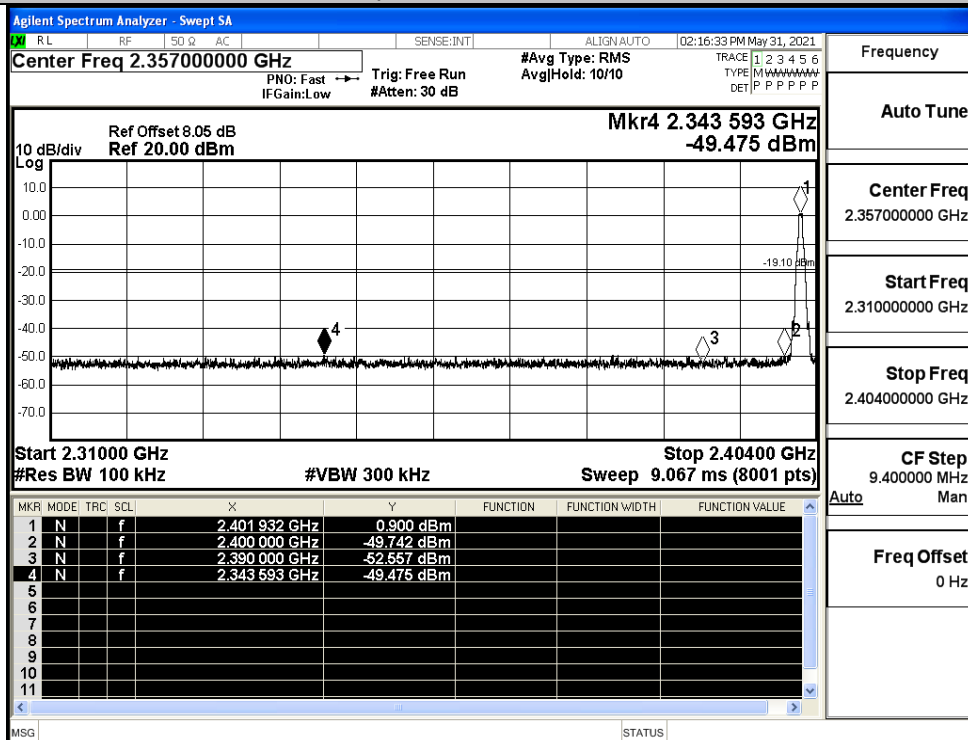


A.7 Band-edge for RF Conducted Emissions

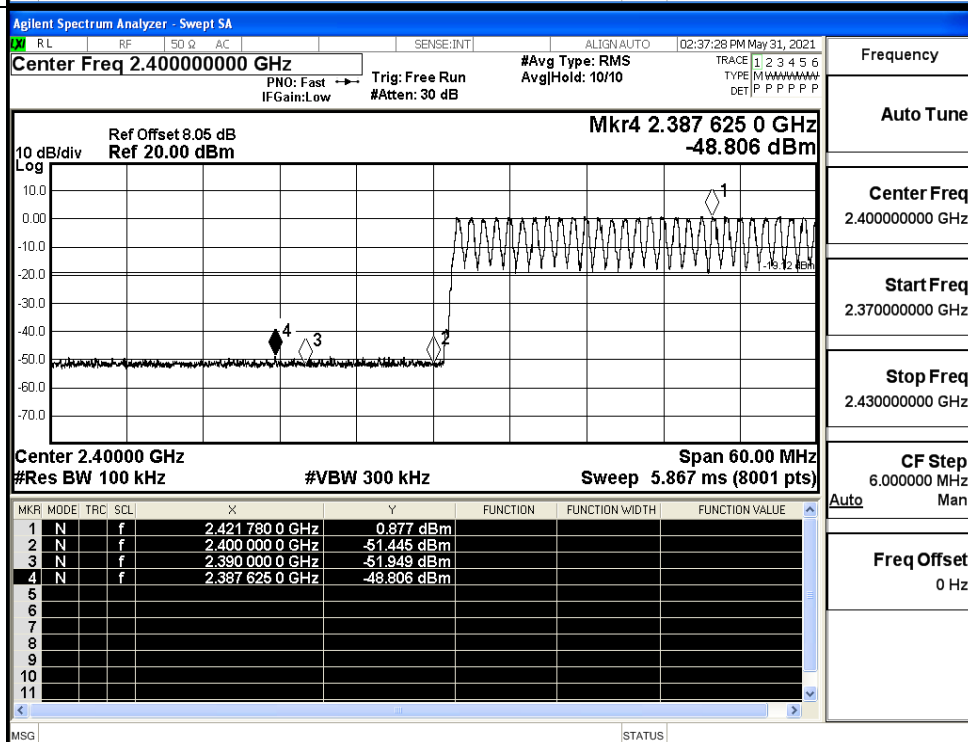
Mode	Channel	Carrier Frequency [MHz]	Carrier Power [dBm]	Frequency Hopping	Max Spurious Level [dBm]	Limit [dBm]	Verdict
GFSK	LCH	2402	0.900	Off	-49.475	-19.1	PASS
			0.877	On	-48.806	-19.12	PASS
	HCH	2480	1.357	Off	-48.853	-18.64	PASS
			1.097	On	-48.718	-18.9	PASS
$\pi/4$ DQPSK	LCH	2402	0.278	Off	-49.166	-19.72	PASS
			0.802	On	-48.925	-19.2	PASS
	HCH	2480	0.966	Off	-48.968	-19.03	PASS
			1.155	On	-49.012	-18.85	PASS

Test Graphs

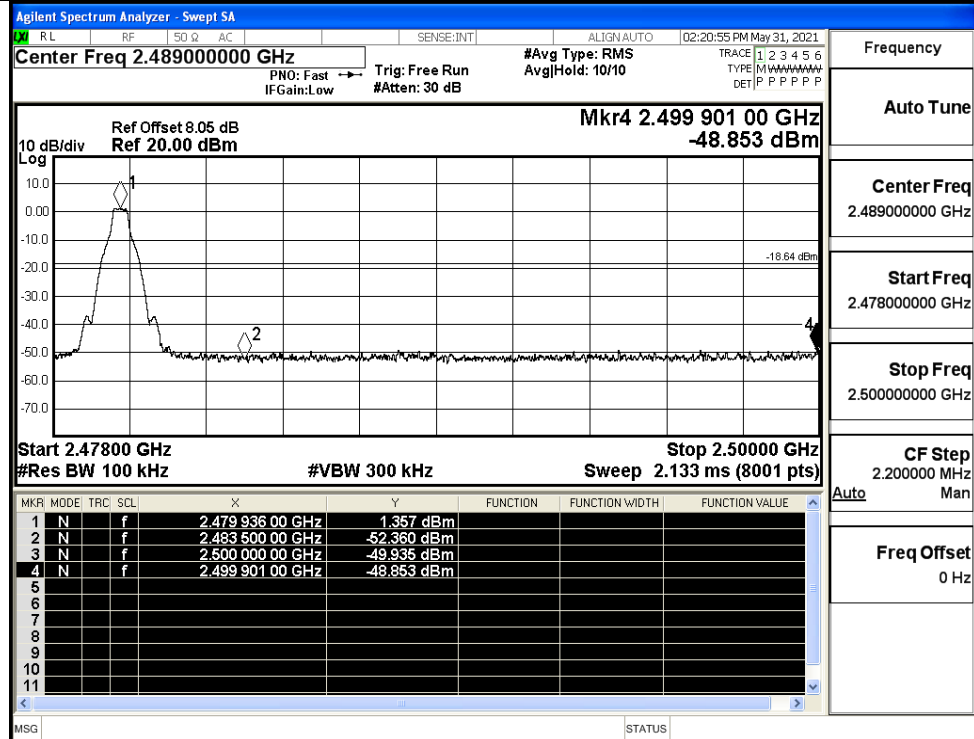
GFSK/LCH/No Hop



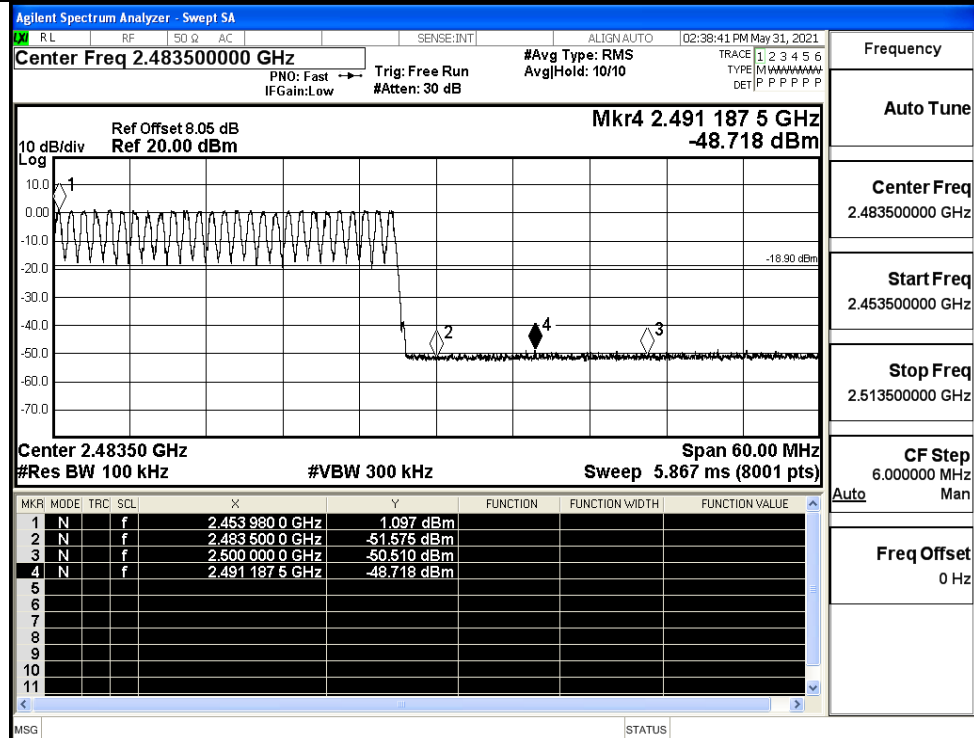
GFSK/LCH/Hop



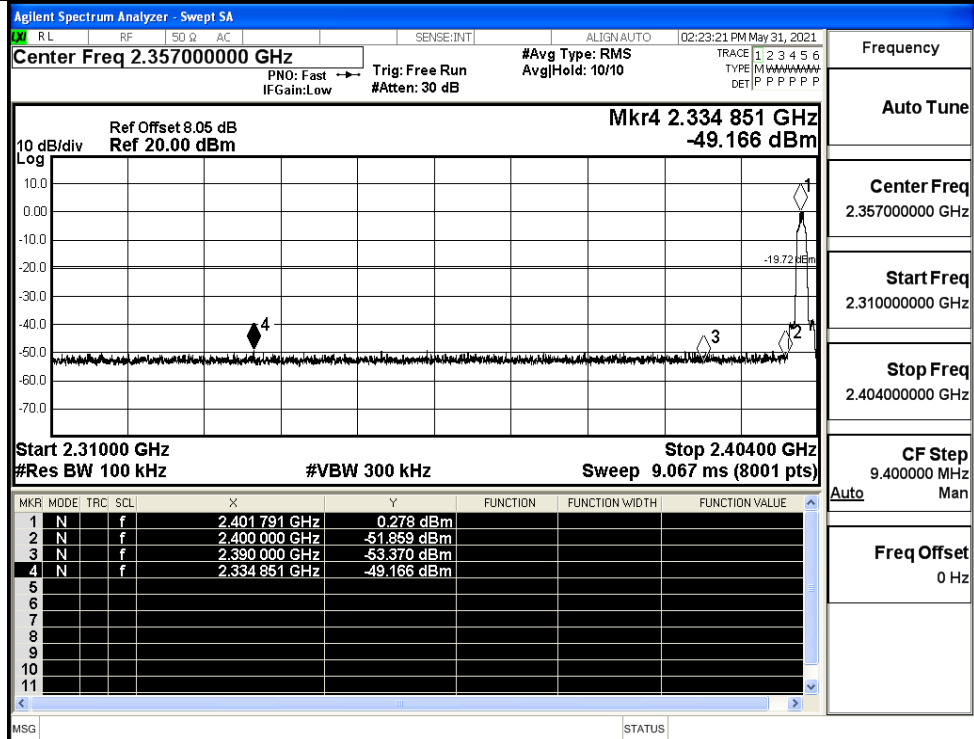
GFSK/HCH/No Hop



GFSK/HCH/Hop



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



Frequency

Auto Tune

Center Freq
2.357000000 GHz

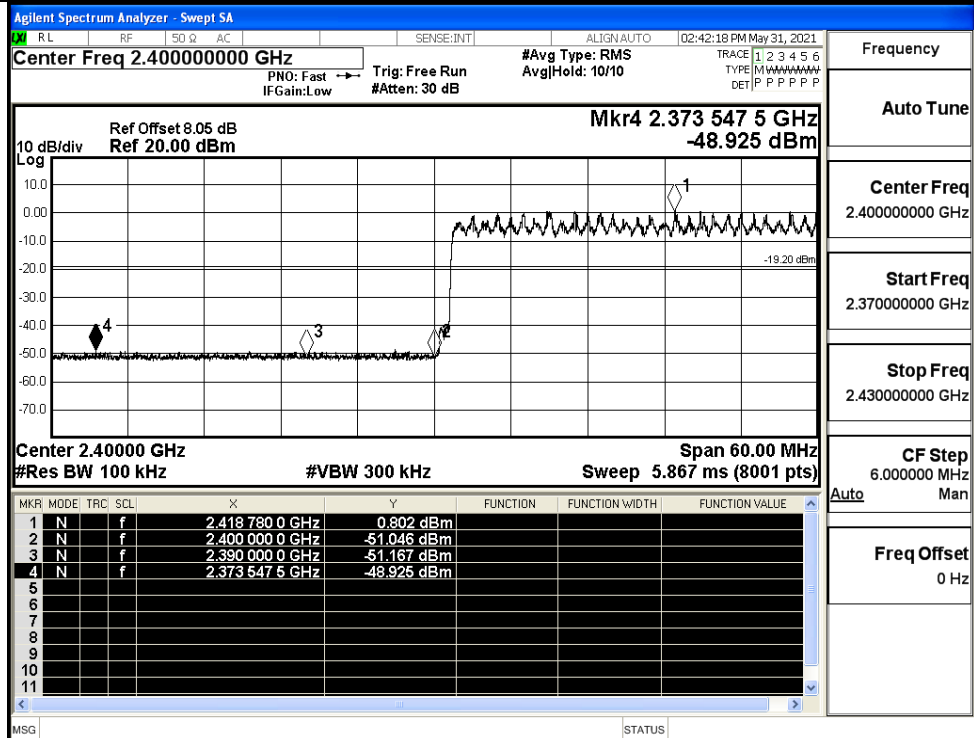
Start Freq
2.310000000 GHz

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

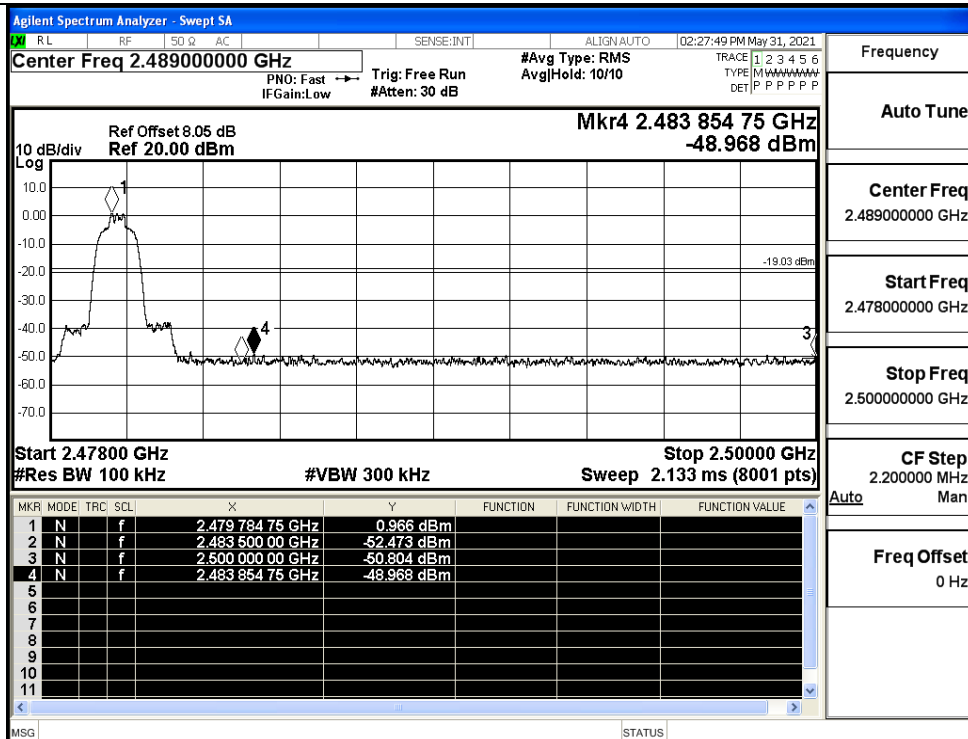
Start Freq
2.370000000 GHz

Stop Freq
2.430000000 GHz

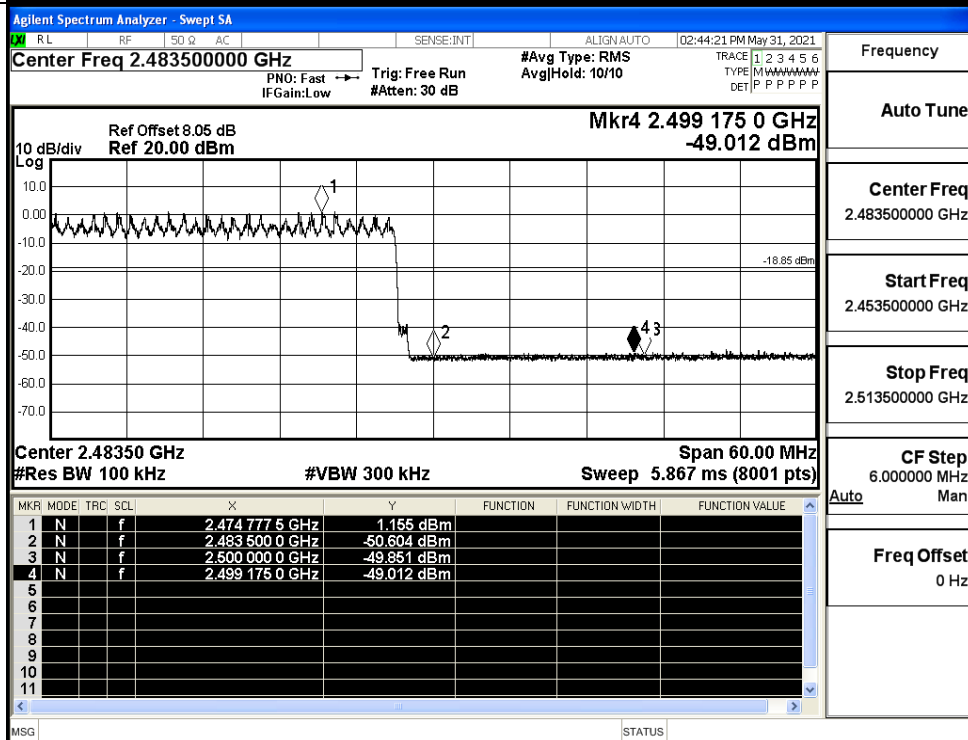
CF Step
6.000000 MHz
Auto Man

Freq Offset
0 Hz

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



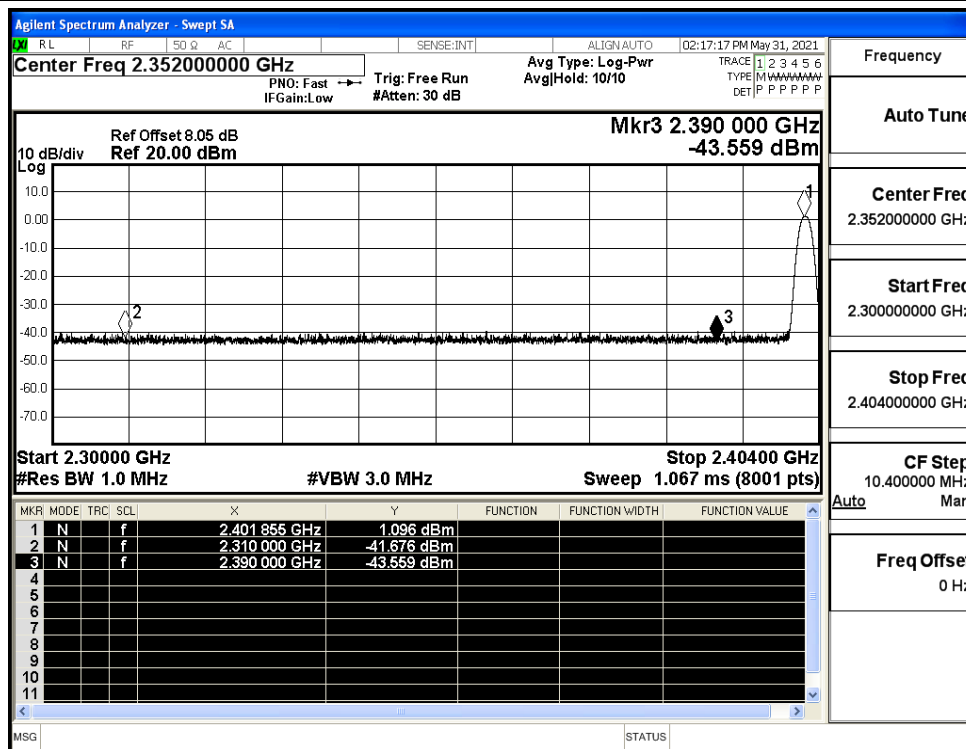
$\pi/4$ DQPSK/HCH/Hop



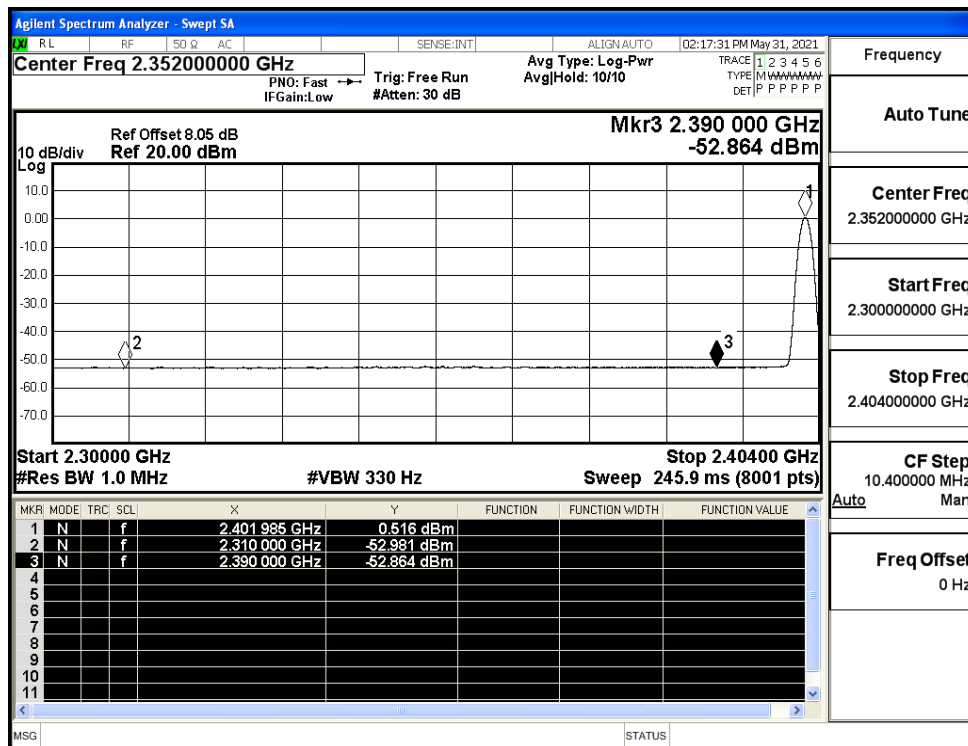
A.8 Restrict-band band-edge measurements

Test Mode	Hopping	Freq.	Power [dBm]	Gain	Ground Factor	E [dBuV/m]	Detector	Limit [dBuV/m]	Verdict
GFSK	Off	2310.0	-41.68	2.0	0	55.58	PEAK	74	PASS
	Off	2310.0	-52.98	2.0	0	44.28	AV	54	PASS
	Off	2390.0	-43.56	2.0	0	53.70	PEAK	74	PASS
	Off	2390.0	-52.86	2.0	0	44.39	AV	54	PASS
	Off	2483.5	-42.24	2.0	0	55.01	PEAK	74	PASS
	Off	2483.5	-52.25	2.0	0	45.01	AV	54	PASS
	Off	2500.0	-42.54	2.0	0	54.72	PEAK	74	PASS
	Off	2500.0	-52.21	2.0	0	45.05	AV	54	PASS
$\pi/4$ DQPSK	Off	2310.0	-44.02	2.0	0	53.24	PEAK	74	PASS
	Off	2310.0	-53.19	2.0	0	44.07	AV	54	PASS
	Off	2390.0	-42.87	2.0	0	54.39	PEAK	74	PASS
	Off	2390.0	-52.90	2.0	0	44.36	AV	54	PASS
	Off	2483.5	-41.79	2.0	0	55.47	PEAK	74	PASS
	Off	2483.5	-52.26	2.0	0	45.00	AV	54	PASS
	Off	2500.0	-42.36	2.0	0	54.90	PEAK	74	PASS
	Off	2500.0	-52.29	2.0	0	44.97	AV	54	PASS

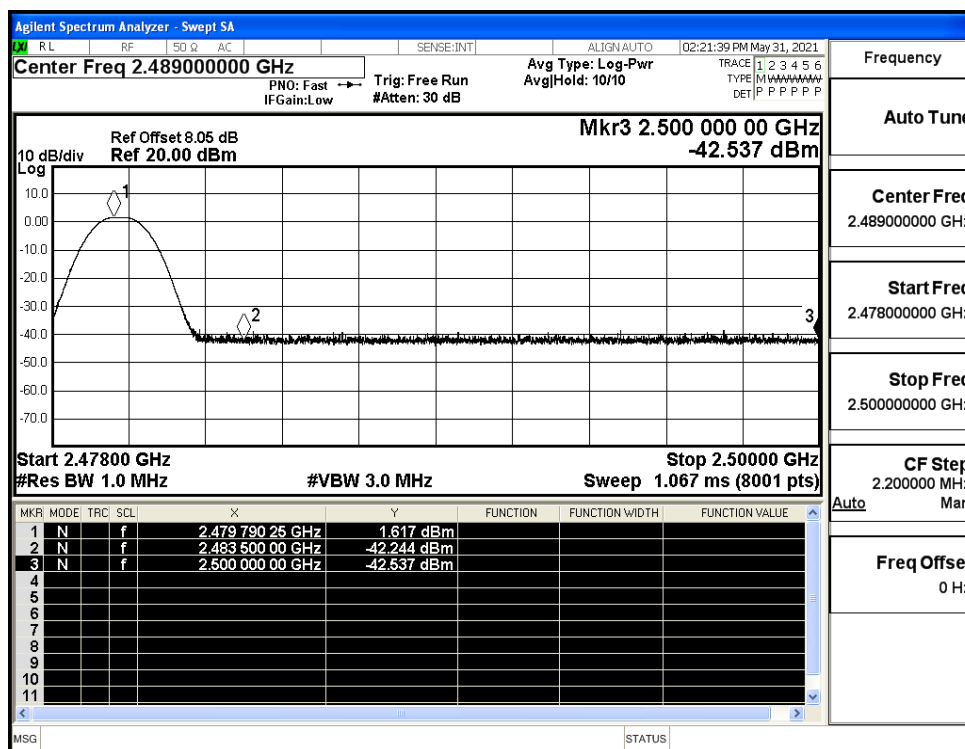
Restrict-band band-edge measurements_Hopping Off_GFSK_PEAK (Low Channel)



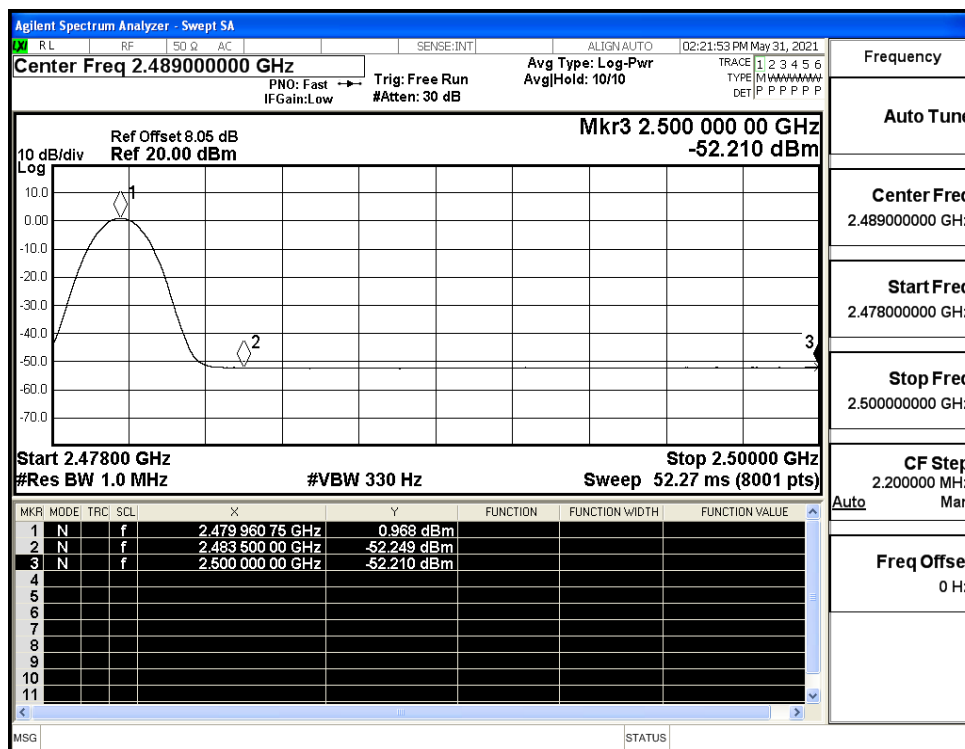
Restrict-band band-edge measurements_Hopping Off_GFSK_Average (Low Channel)

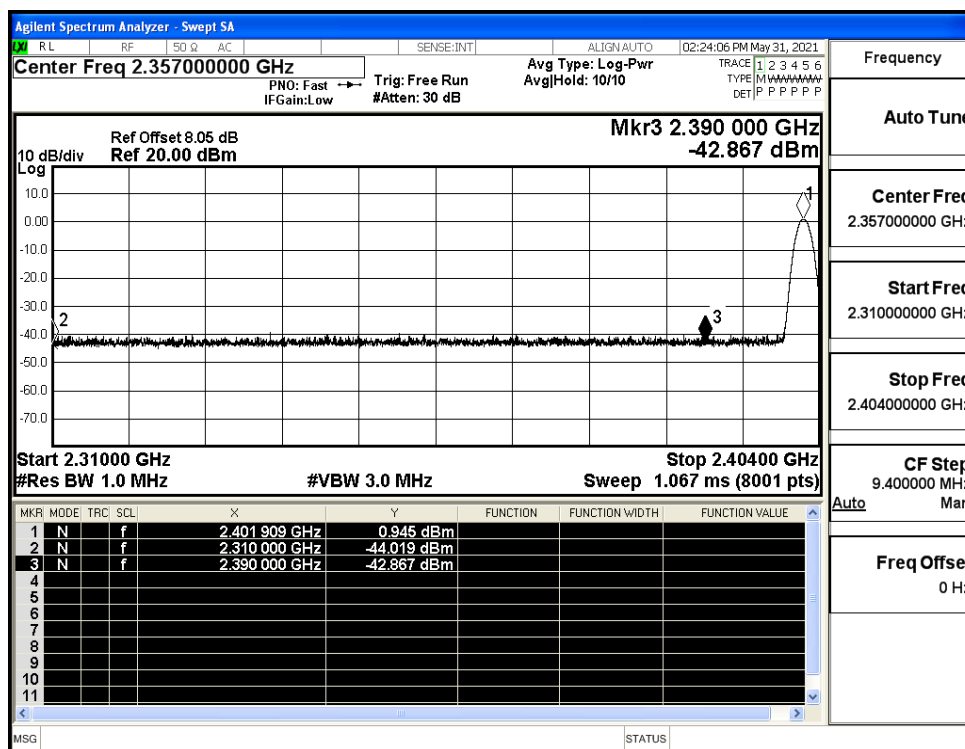
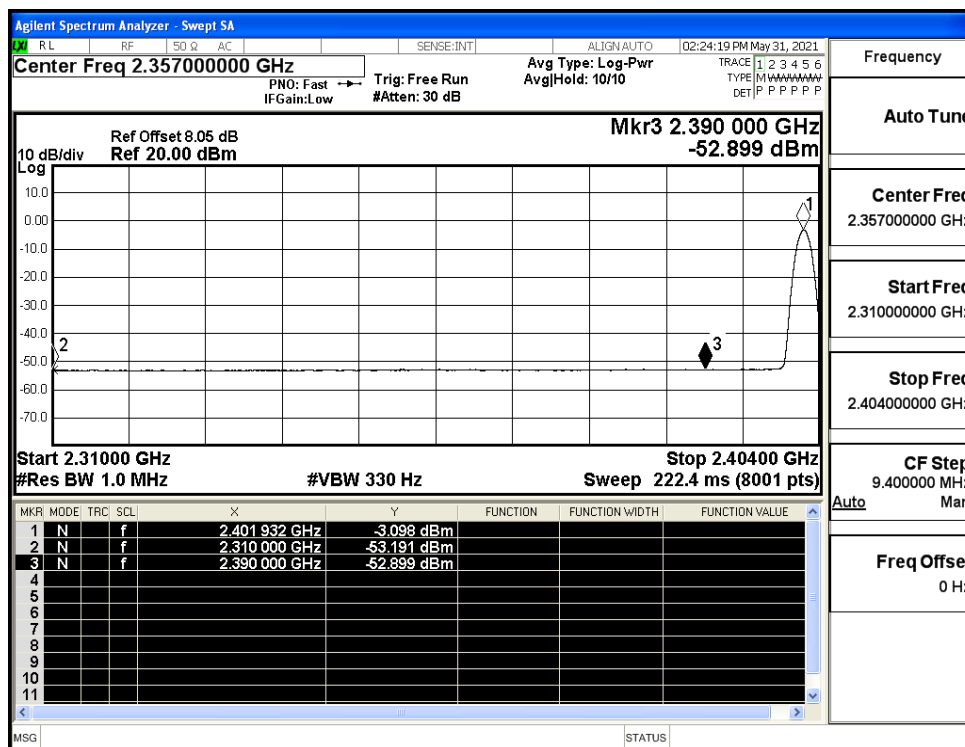


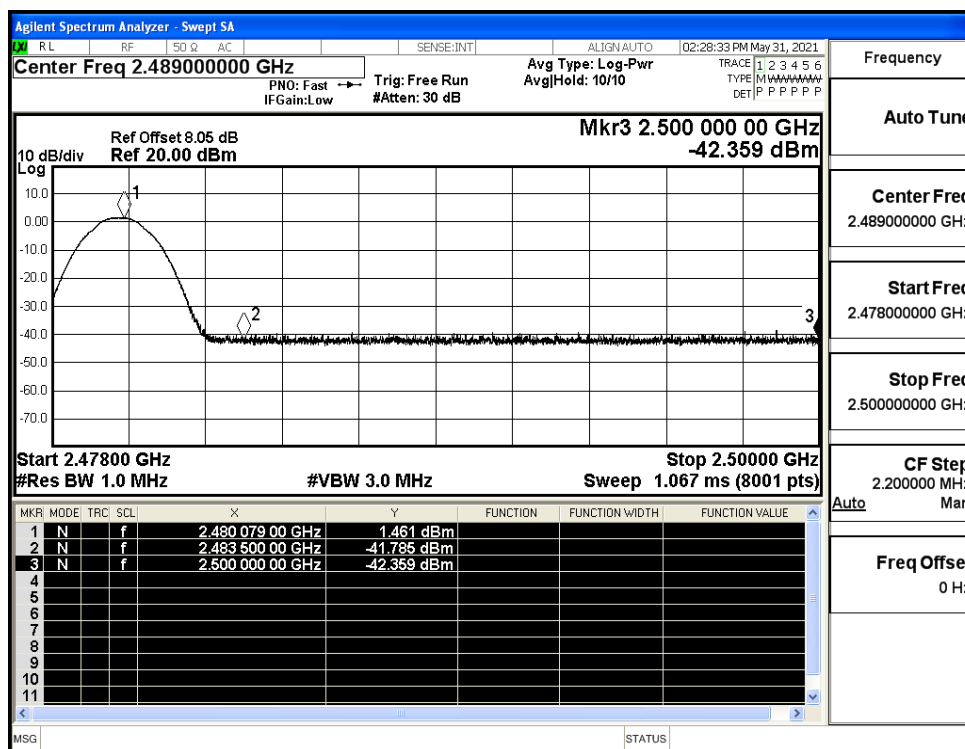
Restrict-band band-edge measurements_Hopping Off_GFSK_PEAK (High Channel)



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)