

Appendix A

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

Product Name: MONSTER PARTYBOX 600

Trade Mark: MONSTER

Test Model: MNPA-PB600

Environmental Conditions

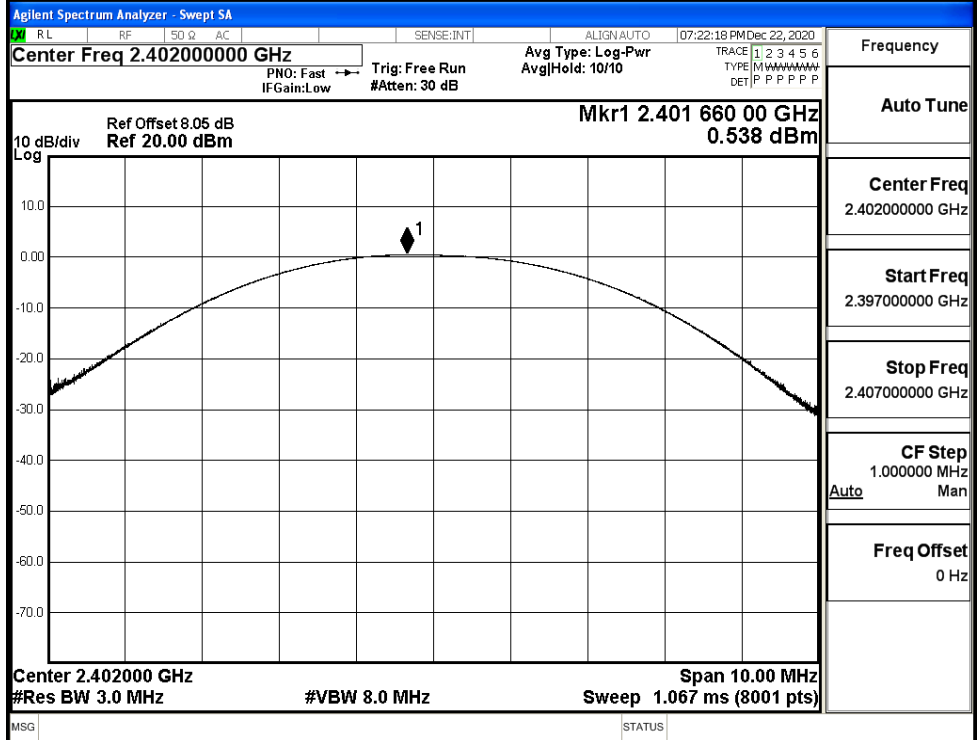
Temperature:	23.3° C
Relative Humidity:	53.7%
ATM Pressure:	100.0 kPa
Test Engineer:	Kay Hu
Supervised by:	Li Huan

A.1 Maximum Conducted Peak Output Power

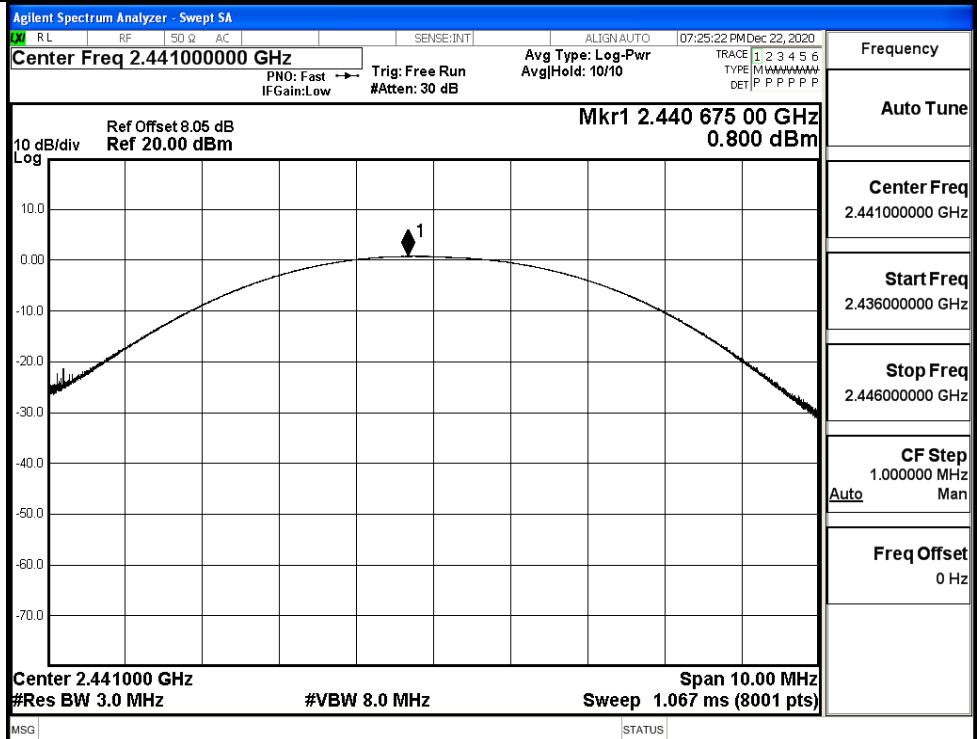
Mode	Channel.	Maximum Peak Output Power [dBm]	Limit [dBm]	Verdict
GFSK	LCH	0.538	30	PASS
	MCH	0.800	30	PASS
	HCH	0.712	30	PASS
π/4DQPSK	LCH	1.265	21	PASS
	MCH	1.546	21	PASS
	HCH	1.474	21	PASS

Test Graphs

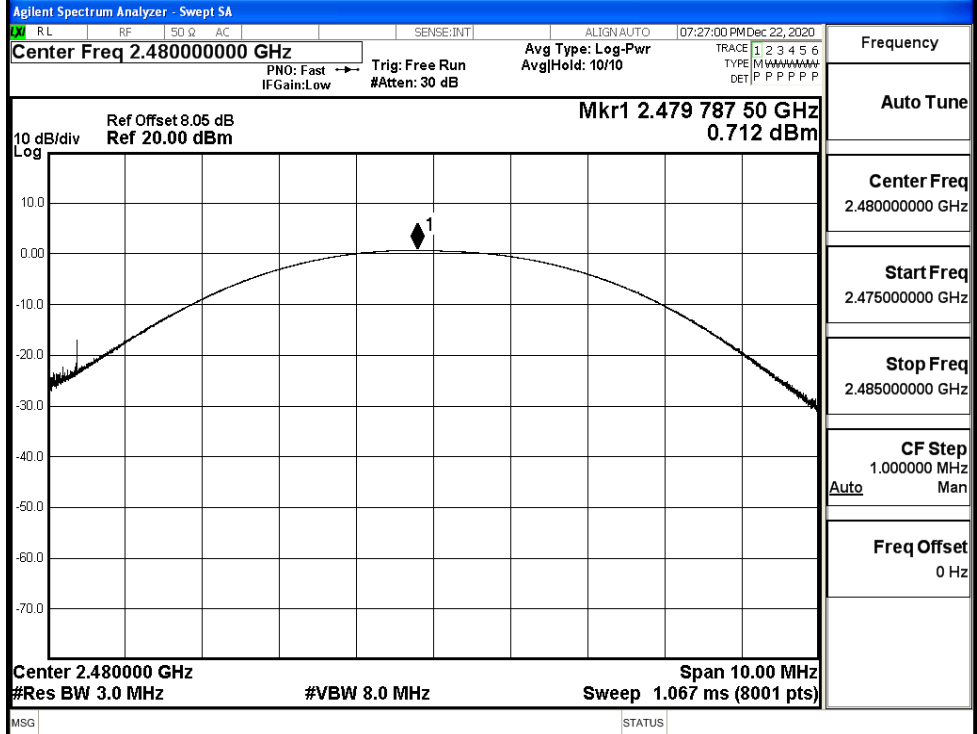
GFSK/LCH



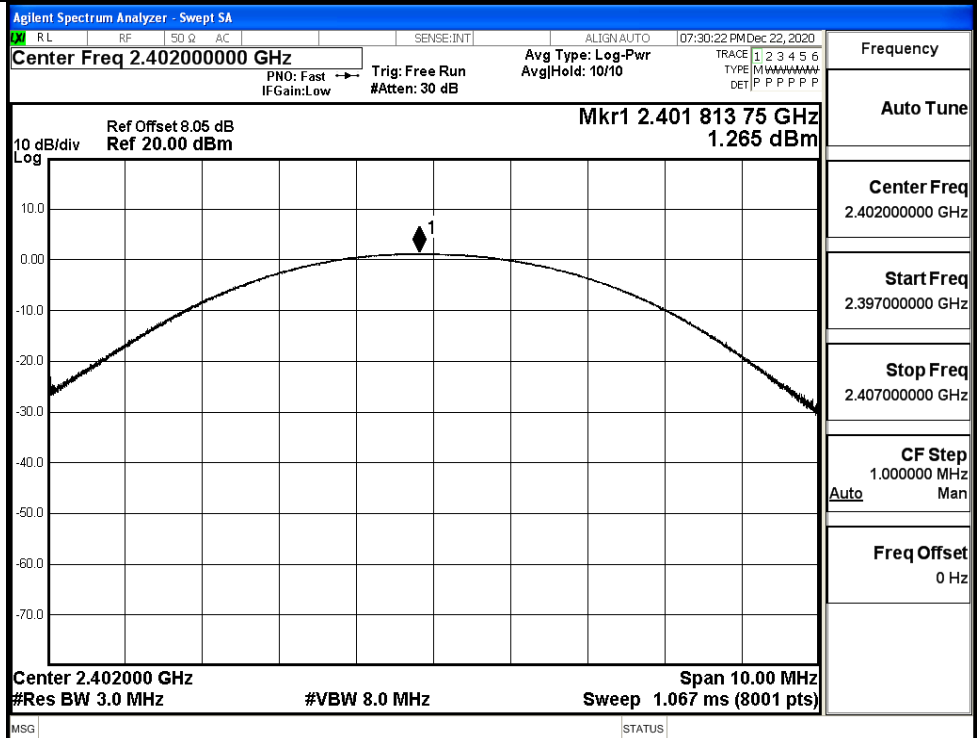
GFSK/MCH



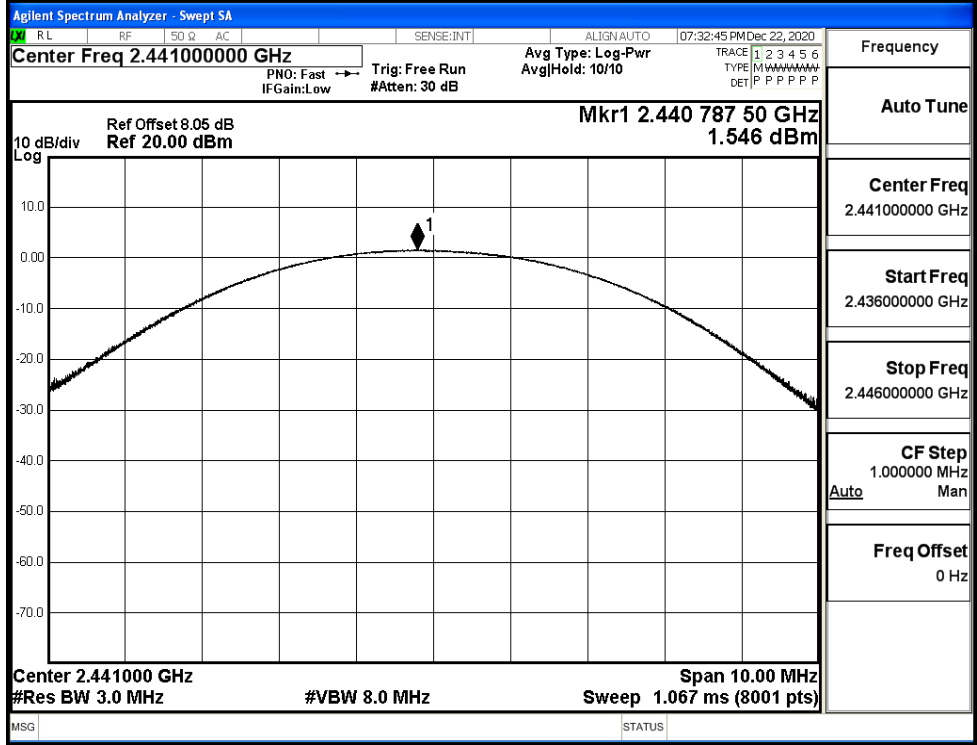
GFSK/HCH



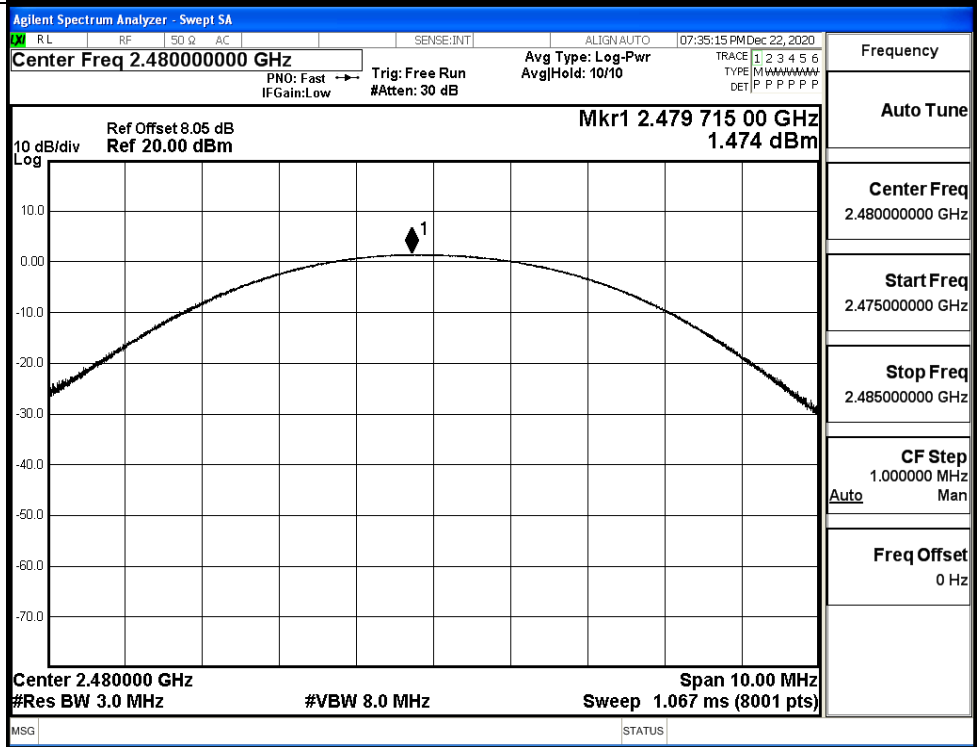
$\pi/4$ DQPSK/LCH



π /4DQPSK/MCH

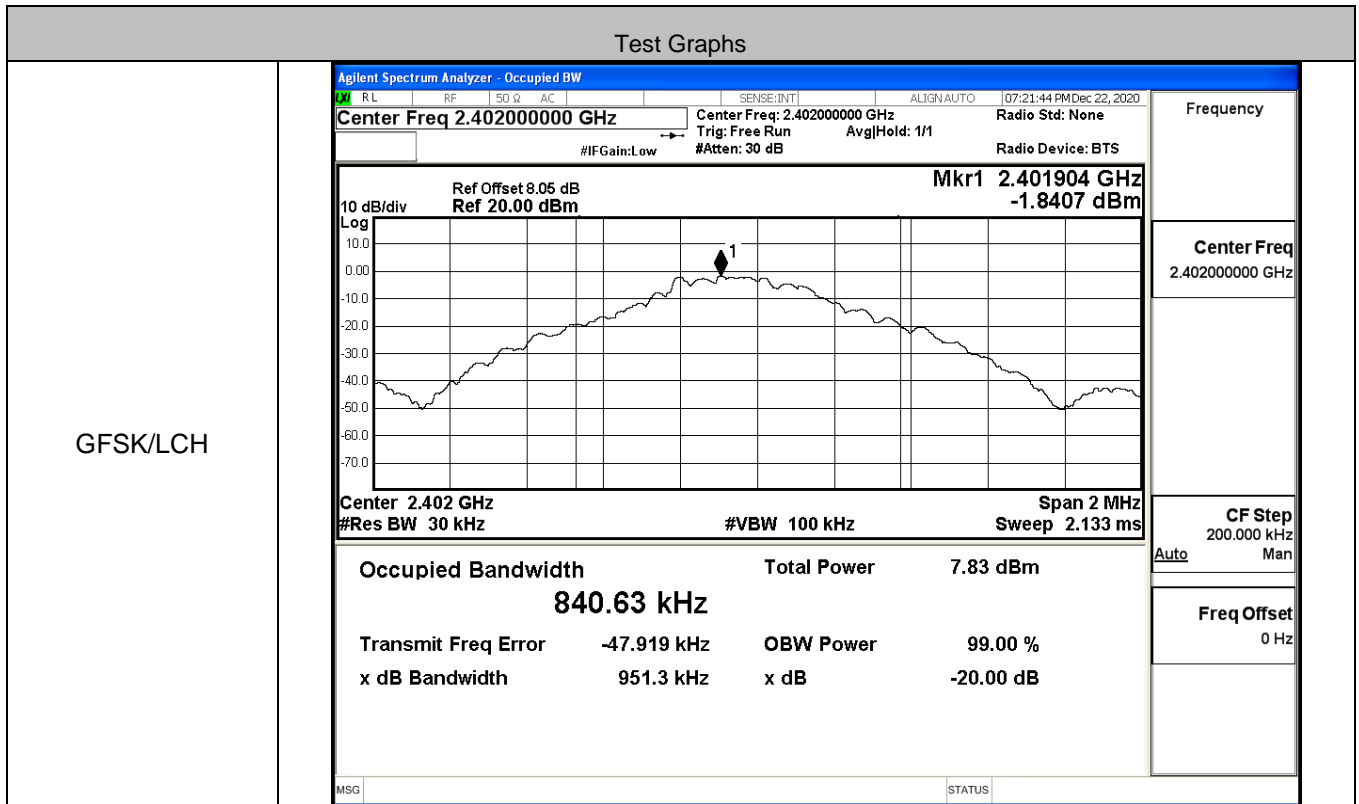


π /4DQPSK/HCH

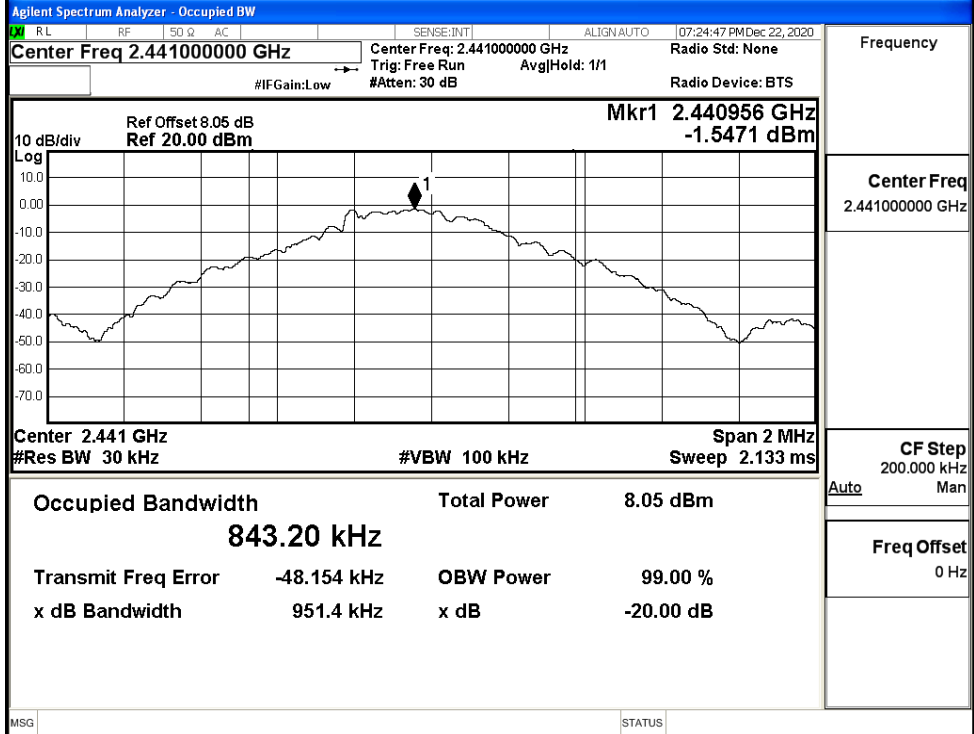


A.2 20dB Bandwidth

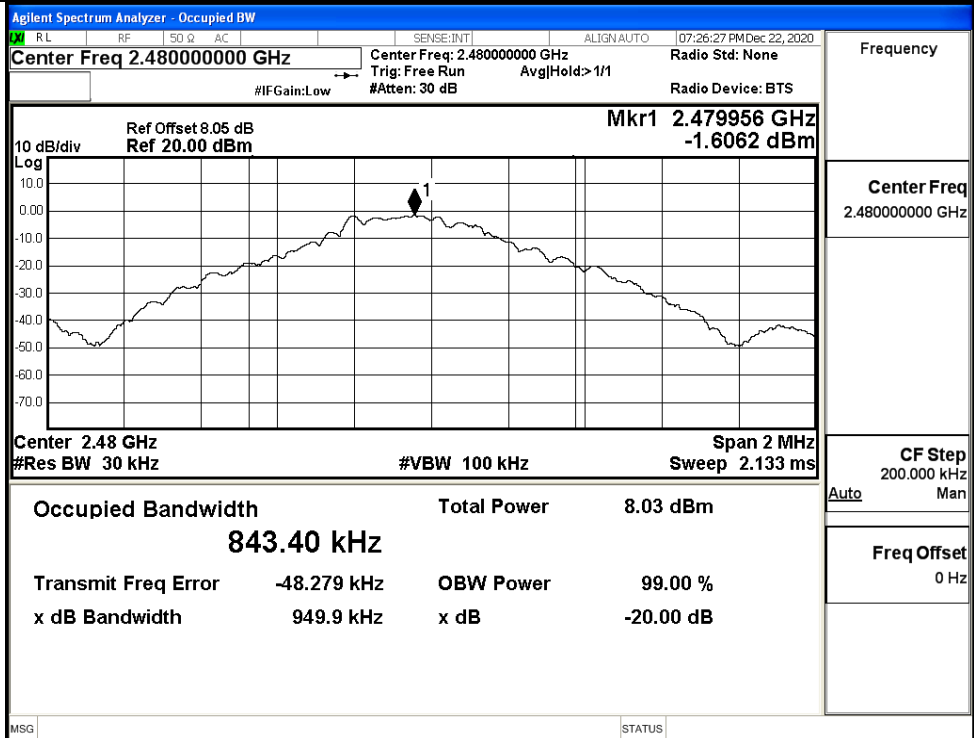
Mode	Channel.	20dB Bandwidth [MHz]	Limit [MHz]	Verdict
GFSK	LCH	0.9513	Not Specified	PASS
	MCH	0.9514	Not Specified	PASS
	HCH	0.9499	Not Specified	PASS
π/4DQPSK	LCH	1.313	Not Specified	PASS
	MCH	1.313	Not Specified	PASS
	HCH	1.315	Not Specified	PASS



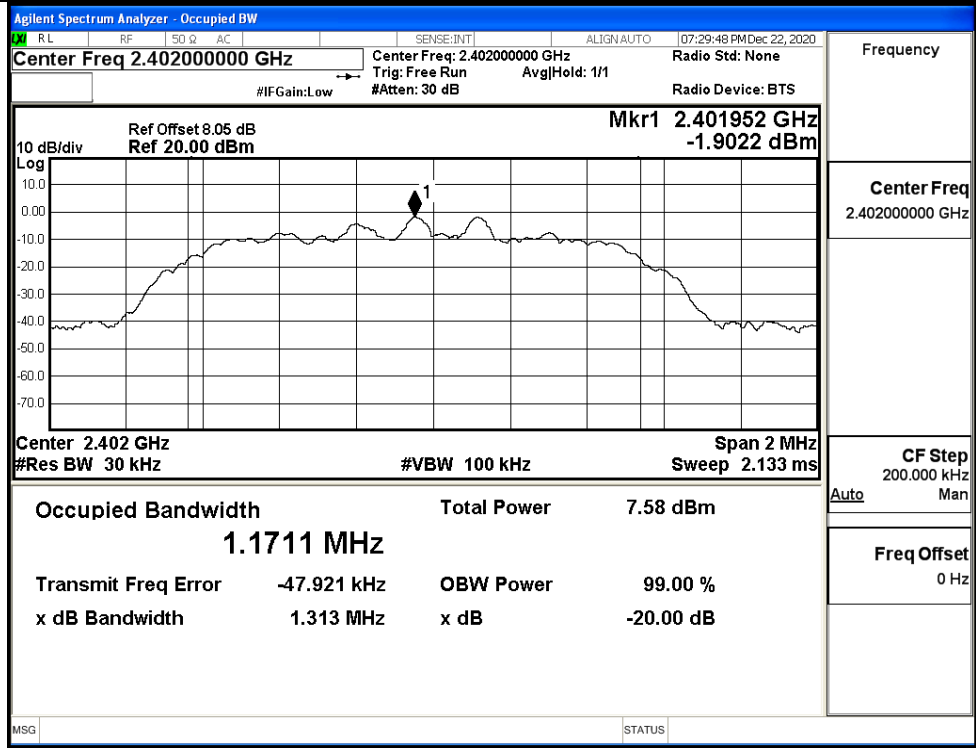
GFSK/MCH



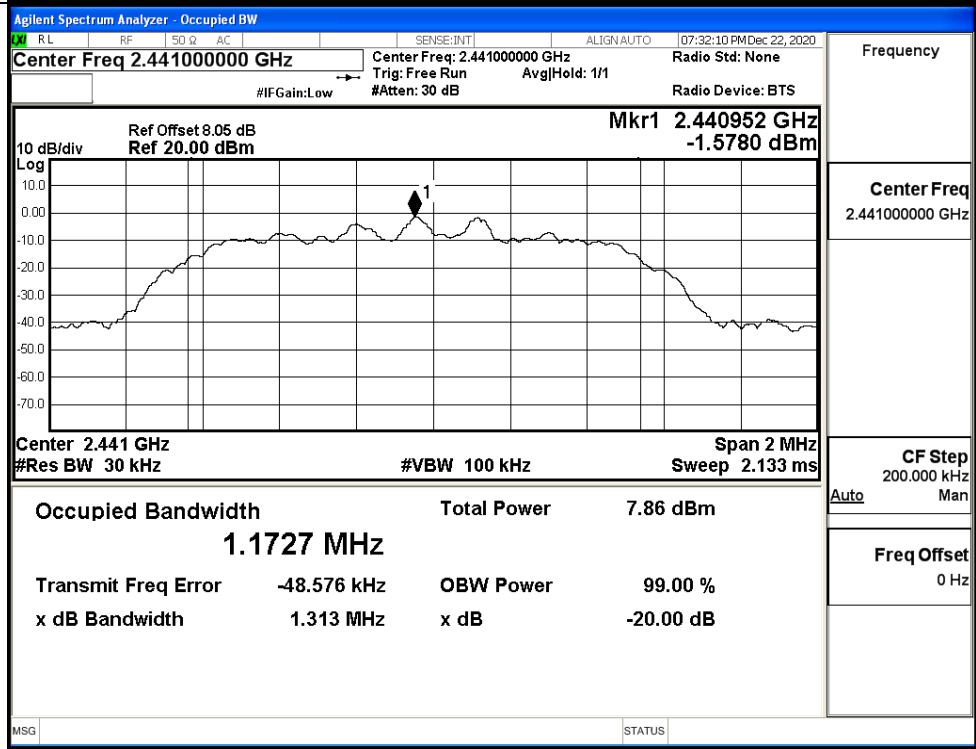
GFSK/HCH



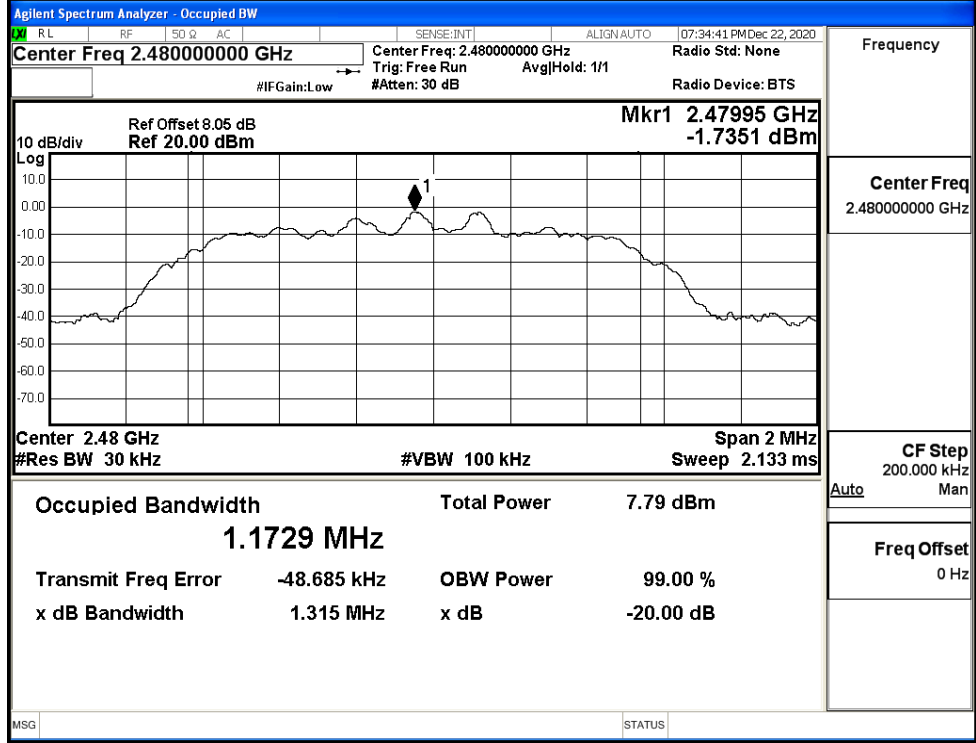
$\pi/4$ DQPSK/LCH



$\pi/4$ DQPSK/MCH

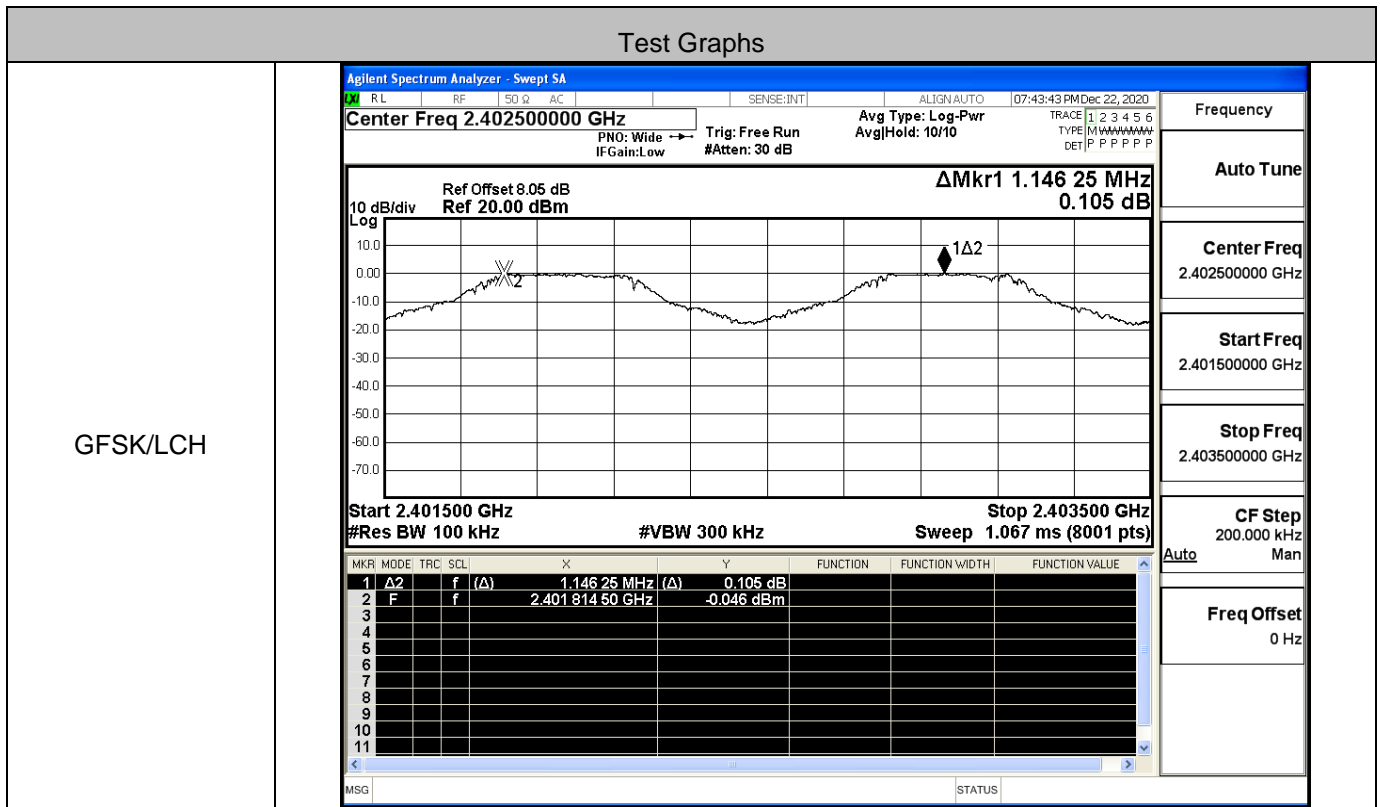


$\pi/4$ DQPSK/HCH

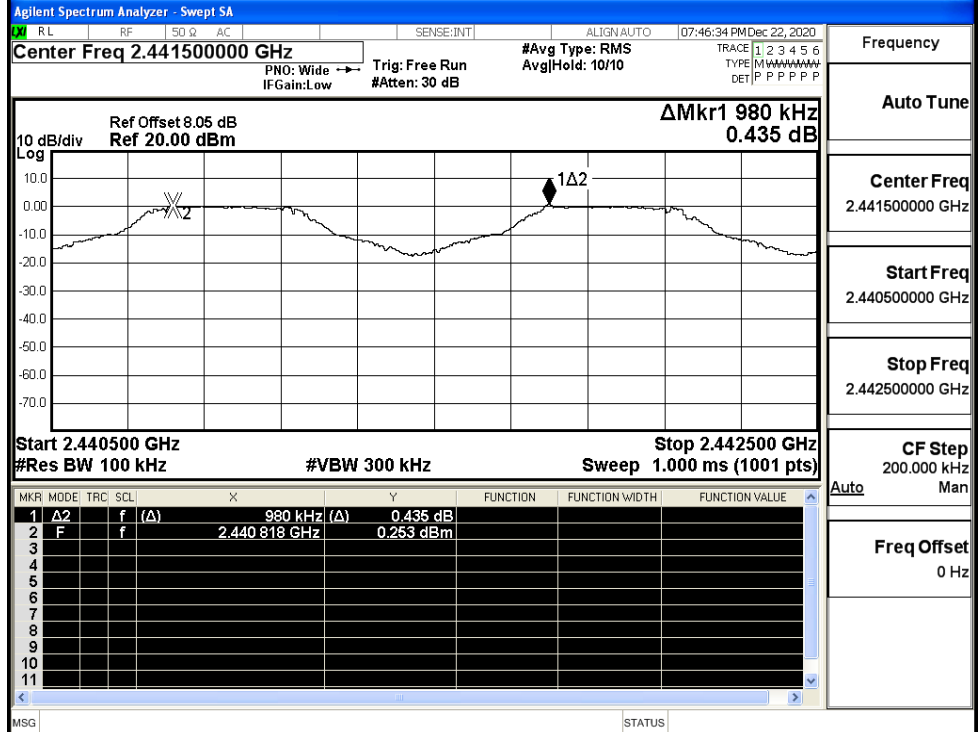


A.3 Carrier Frequency Separation

Mode	Channel.	Carrier Frequency Separation [MHz]	Limit [MHz]	Verdict
GFSK	LCH	1.146	0.537	PASS
	MCH	0.980	0.537	PASS
	HCH	1.112	0.537	PASS
$\pi/4$ DQPSK	LCH	0.998	0.831	PASS
	MCH	1.006	0.831	PASS
	HCH	1.006	0.831	PASS

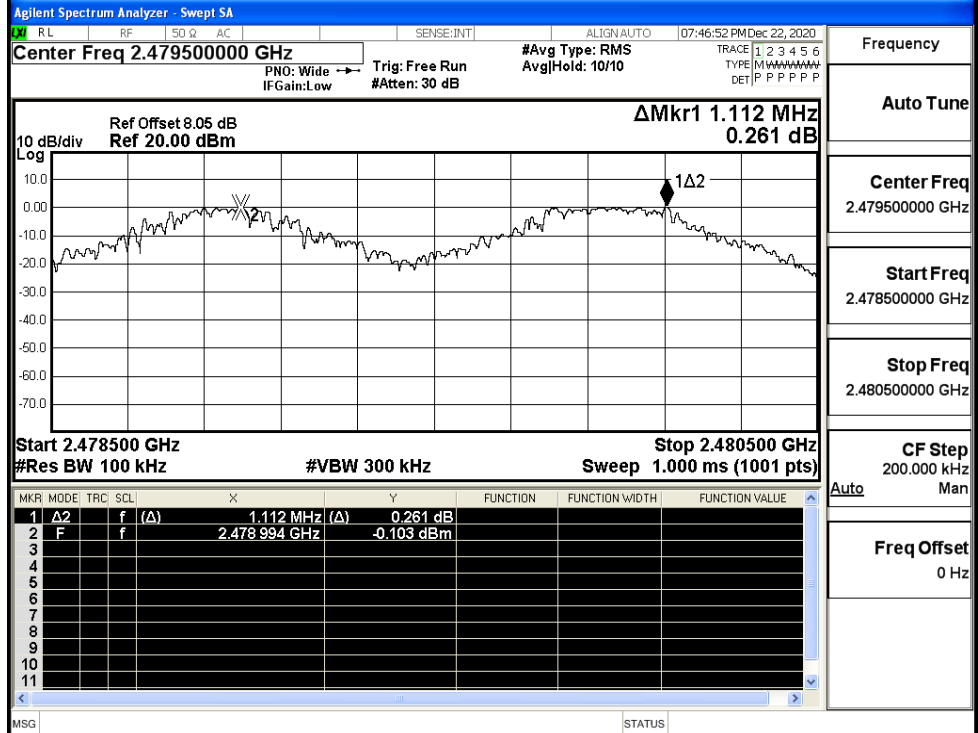


GFSK/MCH



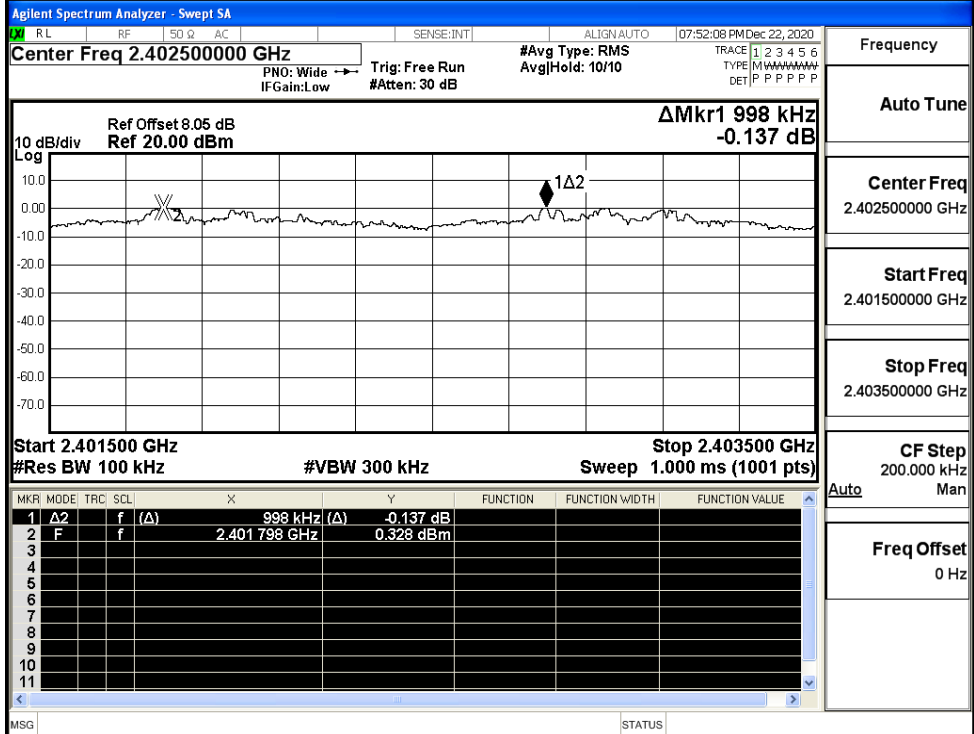
Frequency
Auto Tune
Center Freq 2.441500000 GHz
Start Freq 2.440500000 GHz
Stop Freq 2.442500000 GHz
CF Step 200.000 kHz
Auto Man
Freq Offset 0 Hz

GFSK/HCH



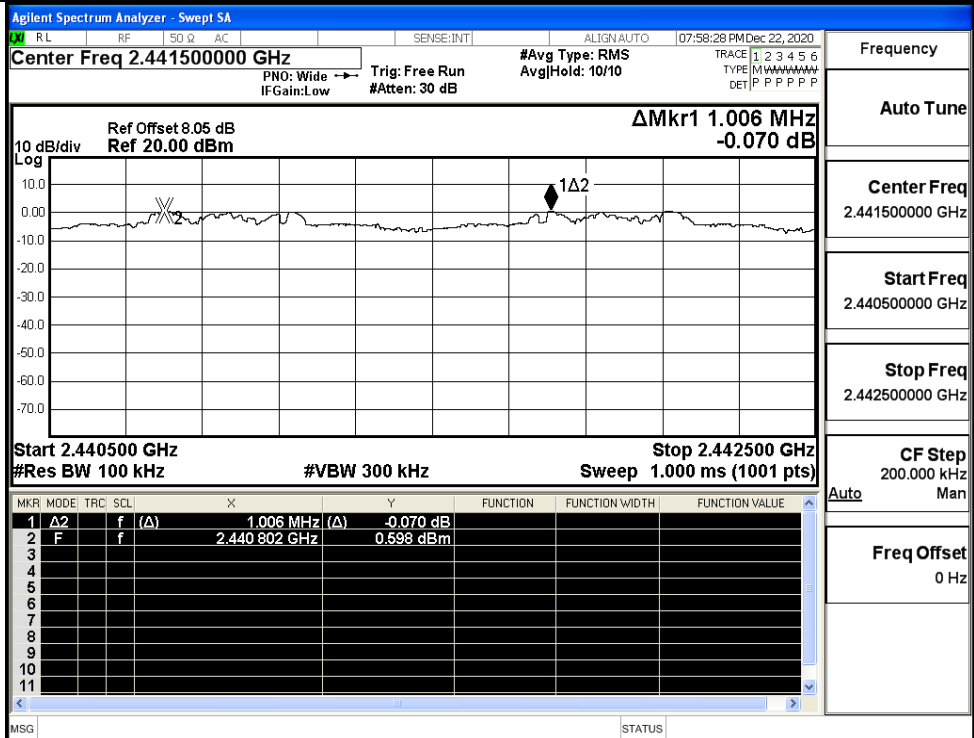
Frequency
Auto Tune
Center Freq 2.479500000 GHz
Start Freq 2.478500000 GHz
Stop Freq 2.480500000 GHz
CF Step 200.000 kHz
Auto Man
Freq Offset 0 Hz

$\pi/4$ DQPSK/LCH



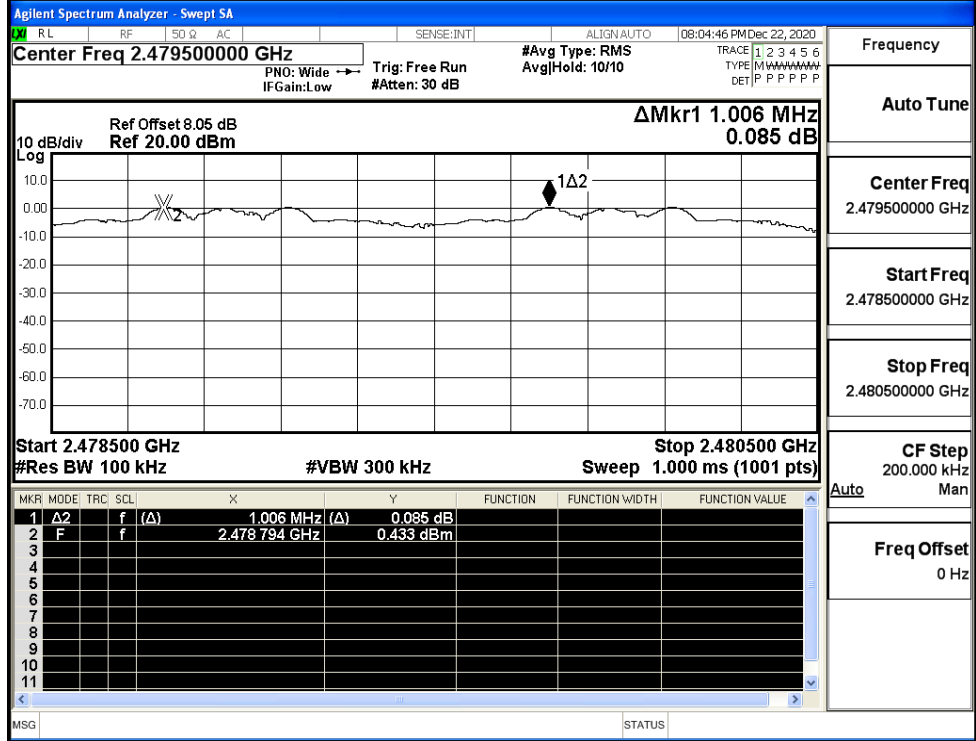
Frequency	2.402500000 GHz
Auto Tune	
Center Freq	2.402500000 GHz
Start Freq	2.401500000 GHz
Stop Freq	2.403500000 GHz
CF Step	200.000 kHz
Auto	Man
Freq Offset	0 Hz

$\pi/4$ DQPSK/MCH



Frequency	2.441500000 GHz
Auto Tune	
Center Freq	2.441500000 GHz
Start Freq	2.440500000 GHz
Stop Freq	2.442500000 GHz
CF Step	200.000 kHz
Auto	Man
Freq Offset	0 Hz

π/4DQPSK/HCH



Frequency

Auto Tune

Center Freq
2.479500000 GHz

Start Freq
2.478500000 GHz

Stop Freq
2.480500000 GHz

CF Step
200.000 kHz

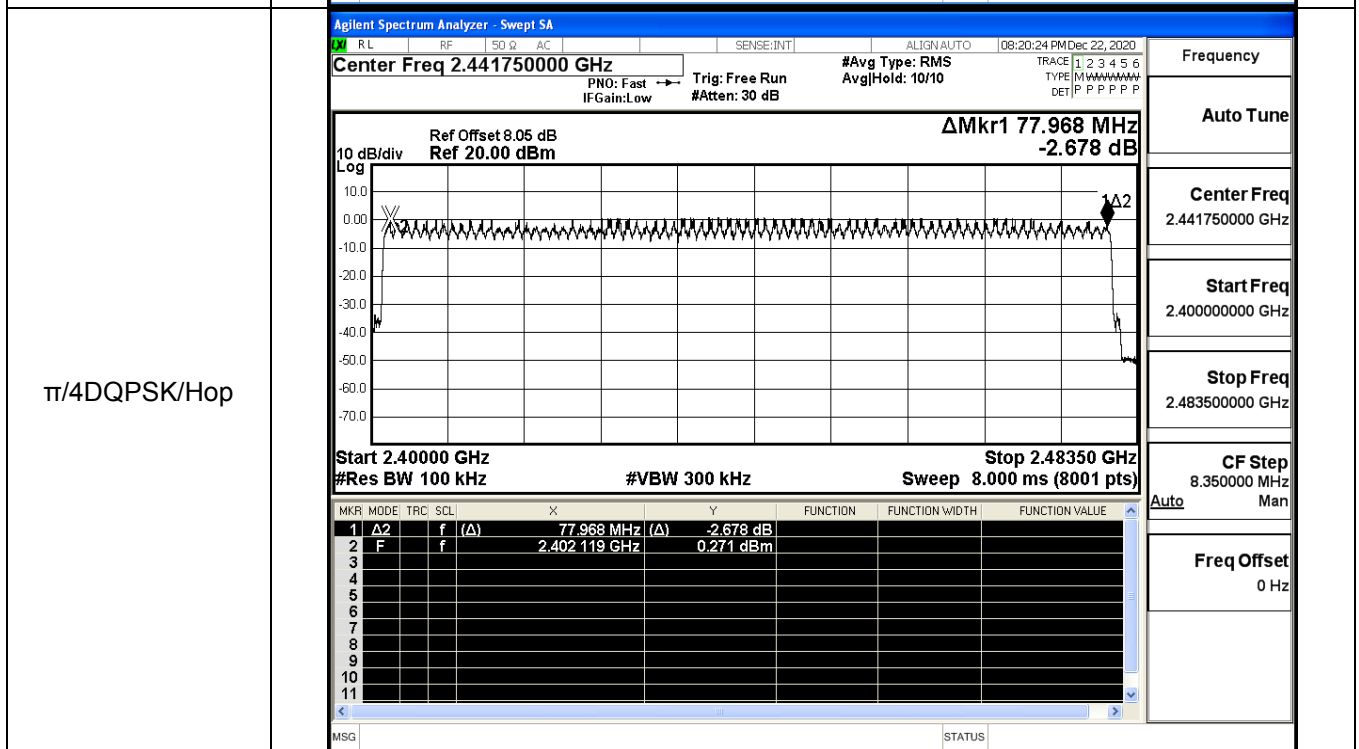
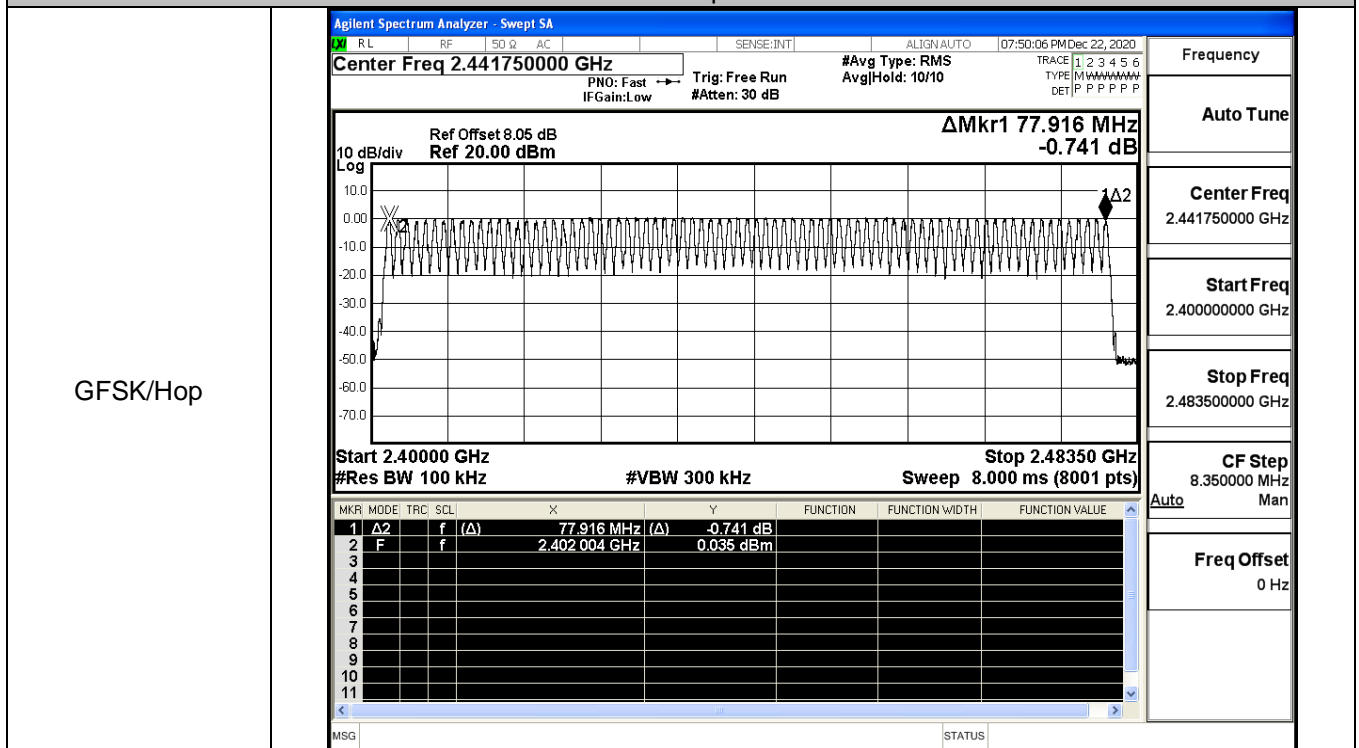
Auto Man

Freq Offset
0 Hz

A.4 Hopping Channel Number

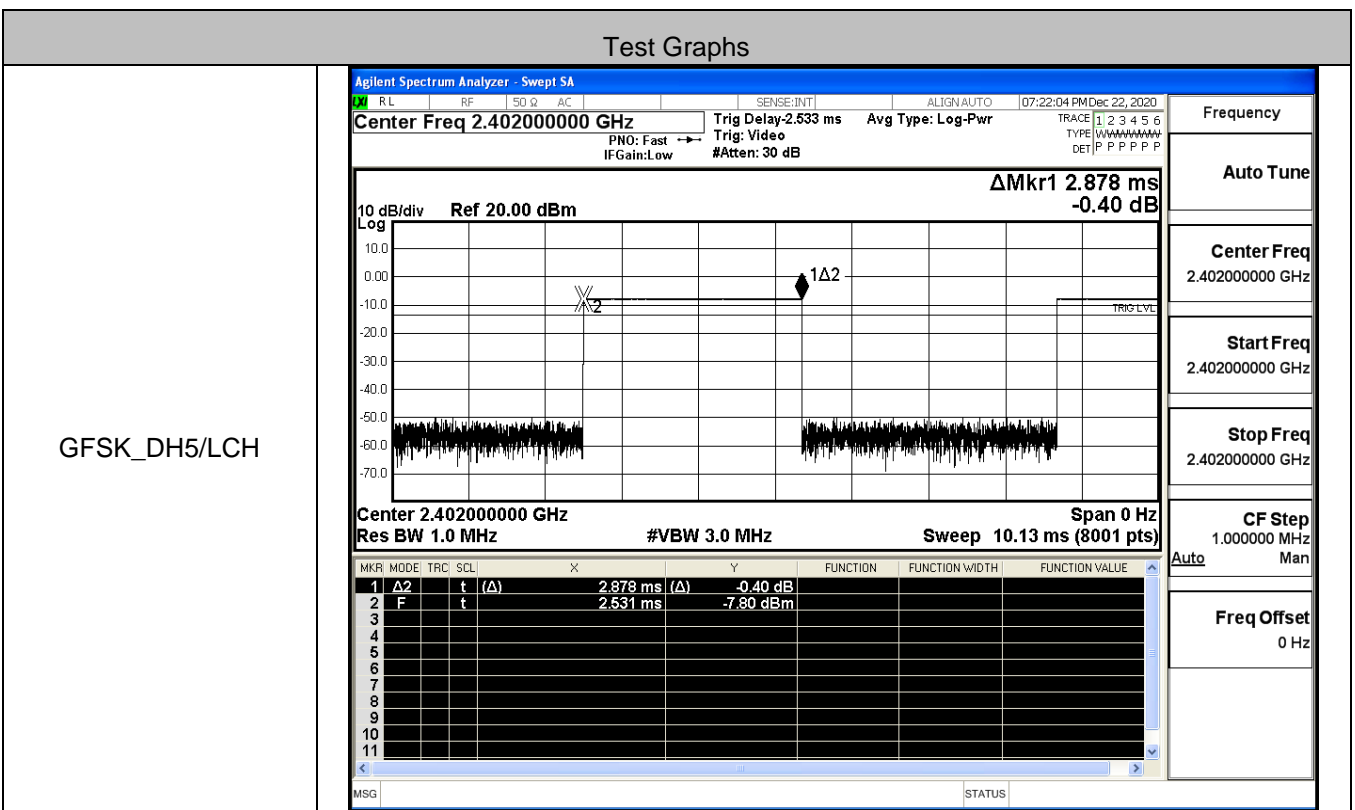
Mode	Channel.	Number of Hopping Channel [N]	Limit [N]	Verdict
GFSK	Hop	79	>=15	PASS
$\pi/4$ DQPSK	Hop	79	>=15	PASS

Test Graphs

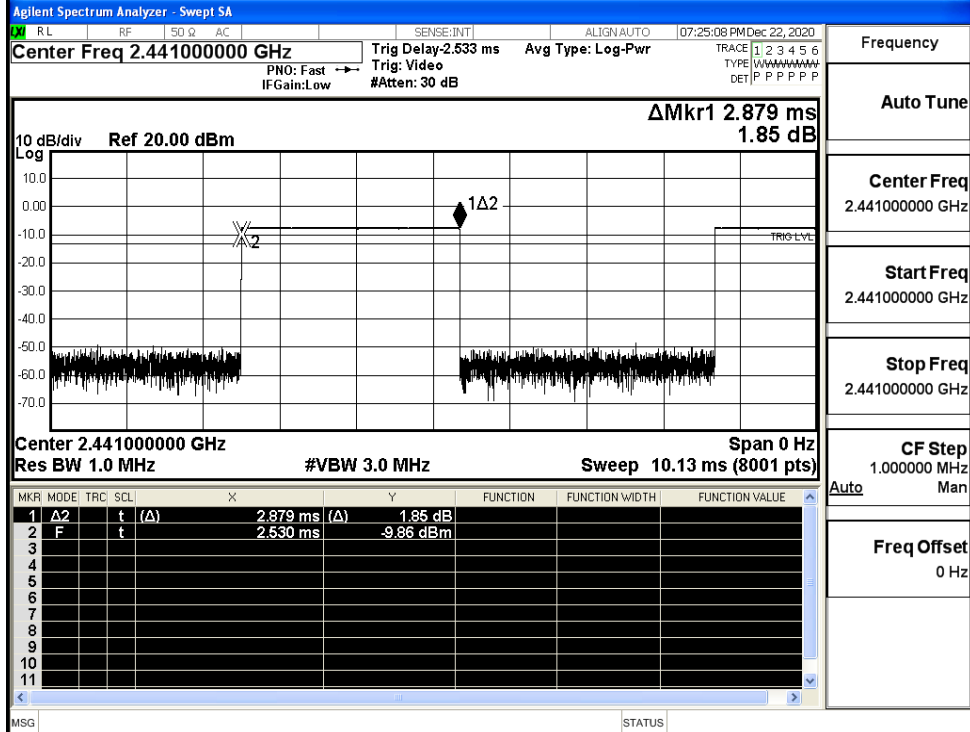


A.5 Dwell Time

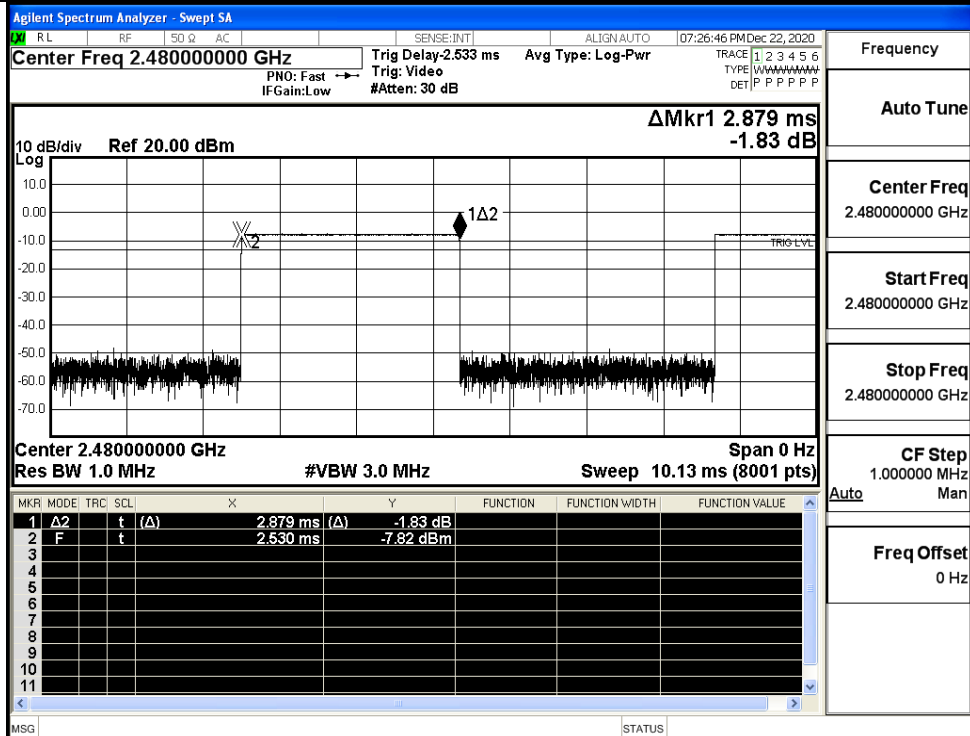
Mode	Packet	Channel	Burst Width [ms/hop/ch]	Total Hops[hop*ch]	Dwell Time[s]	Limit [s]	Verdict
GFSK	DH5	LCH	2.88	106.7	0.307	0.4	PASS
	DH5	MCH	2.88	106.7	0.307	0.4	PASS
	DH5	HCH	2.88	106.7	0.307	0.4	PASS
π/4DQPSK	2DH5	LCH	2.88	106.7	0.308	0.4	PASS
	2DH5	MCH	2.88	106.7	0.307	0.4	PASS
	2DH5	HCH	2.88	106.7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



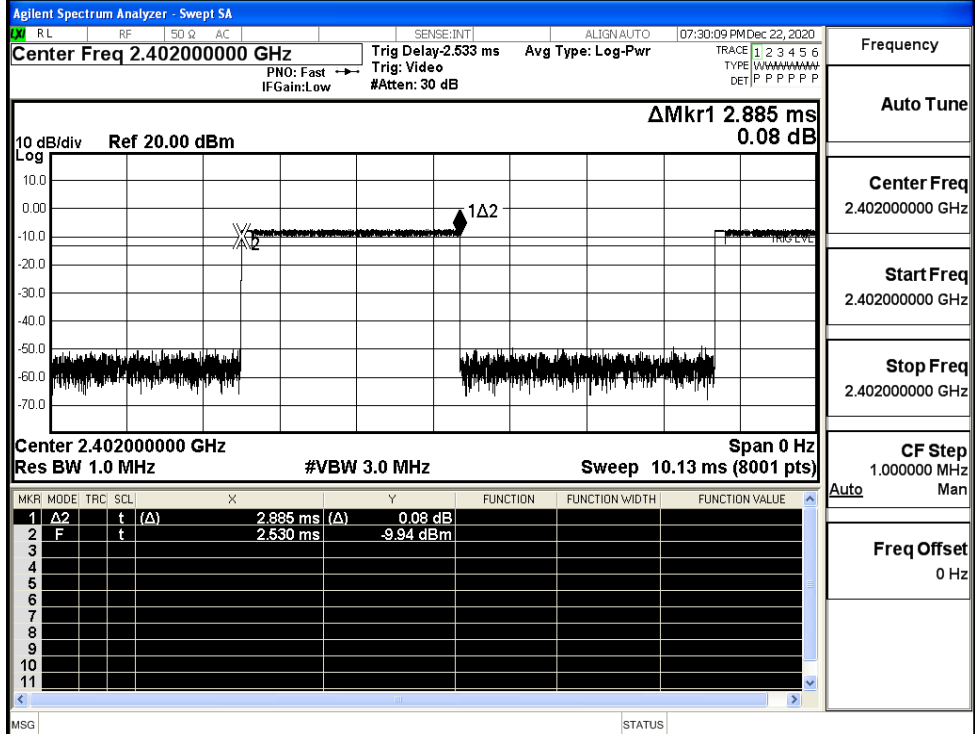
GFSK_DH5/MCH



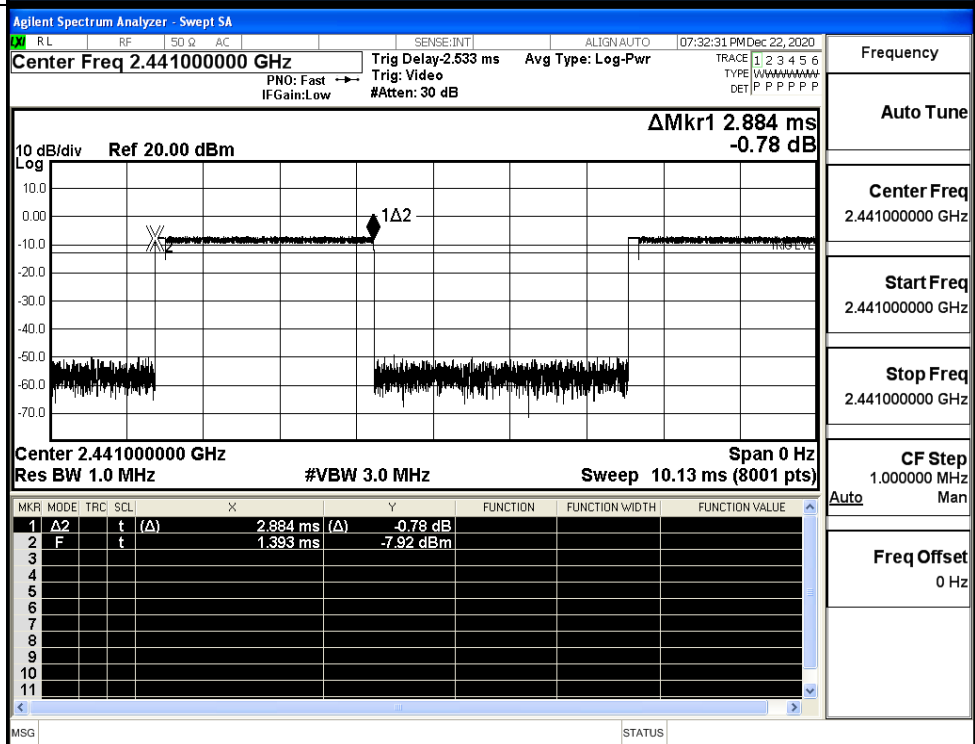
GFSK_DH5/HCH



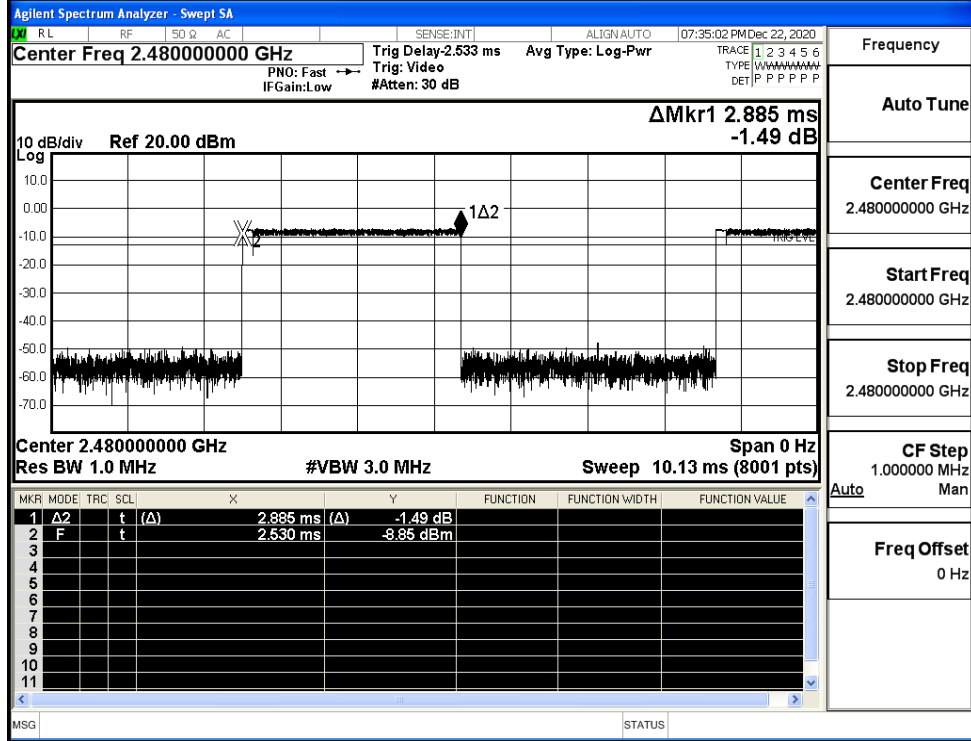
$\pi/4$ DQPSK
_2DH5/LCH



$\pi/4$ DQPSK
_2DH5/MCH

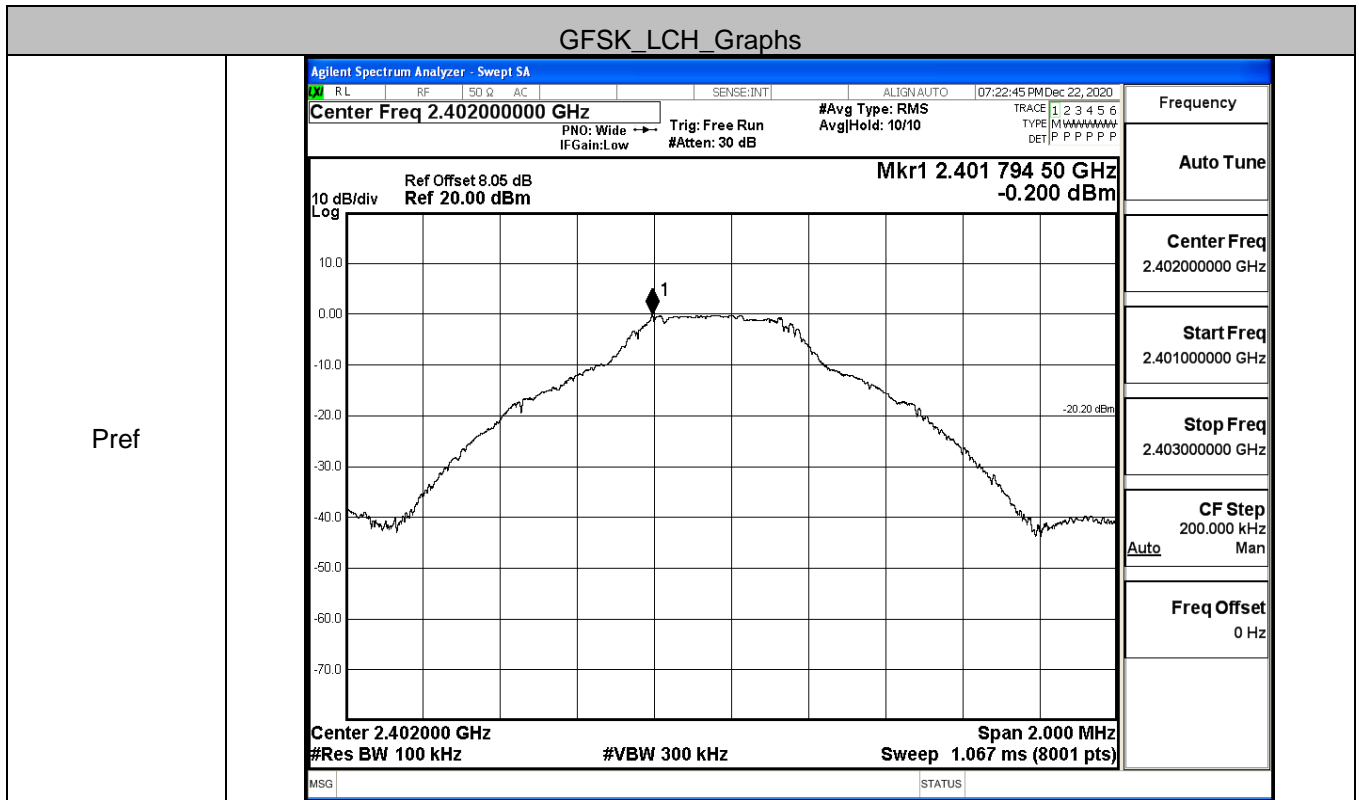


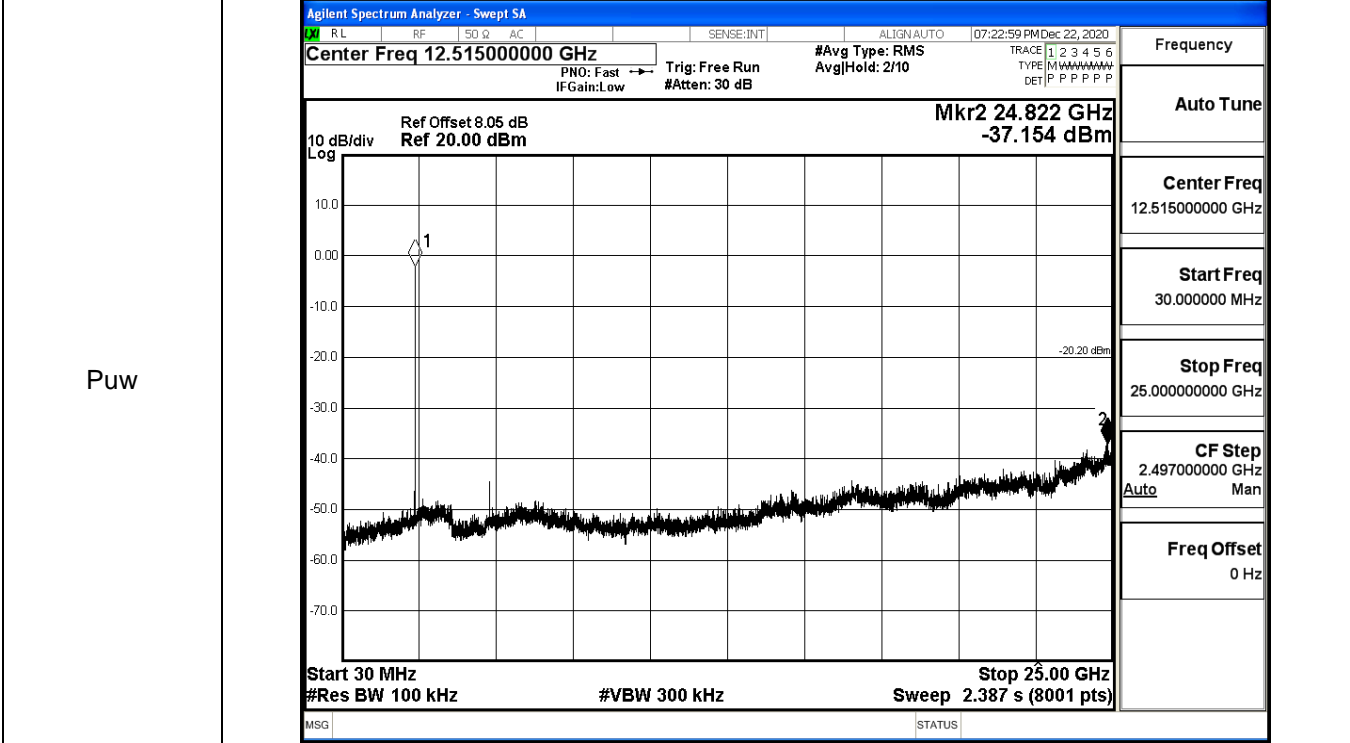
$\pi/4$ DQPSK
_2DH5/HCH



A.6 RF Conducted Spurious Emissions

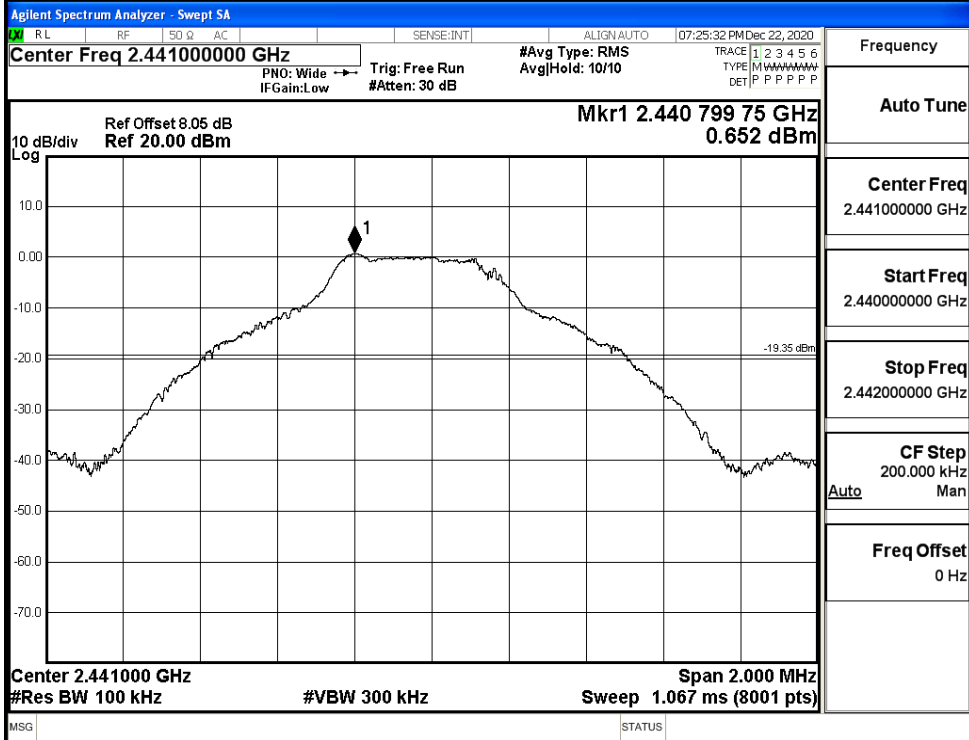
Mode	Channel	Pref [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
GFSK	LCH	-0.2	-37.154	-20.200	PASS
	MCH	0.652	-37.667	-19.348	PASS
	HCH	-0.082	-37.760	-20.082	PASS
π/4DQPSK	LCH	0.182	-36.552	-19.818	PASS
	MCH	0.545	-38.047	-19.455	PASS
	HCH	0.531	-36.873	-19.469	PASS



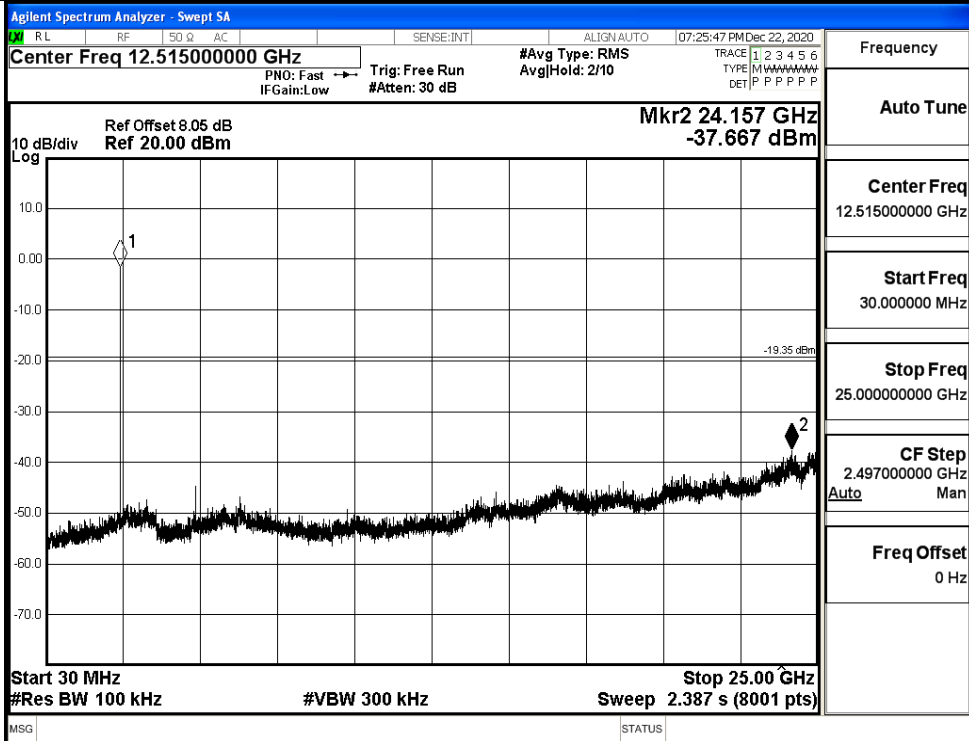


GFSK_MCH_Graphs

Pref

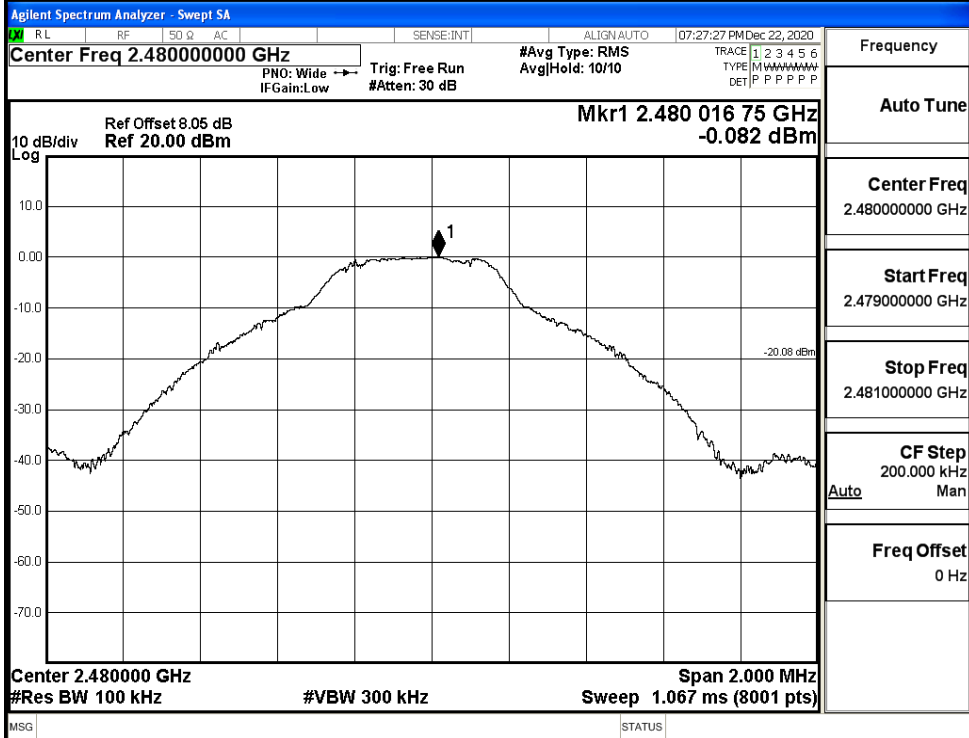


Puw

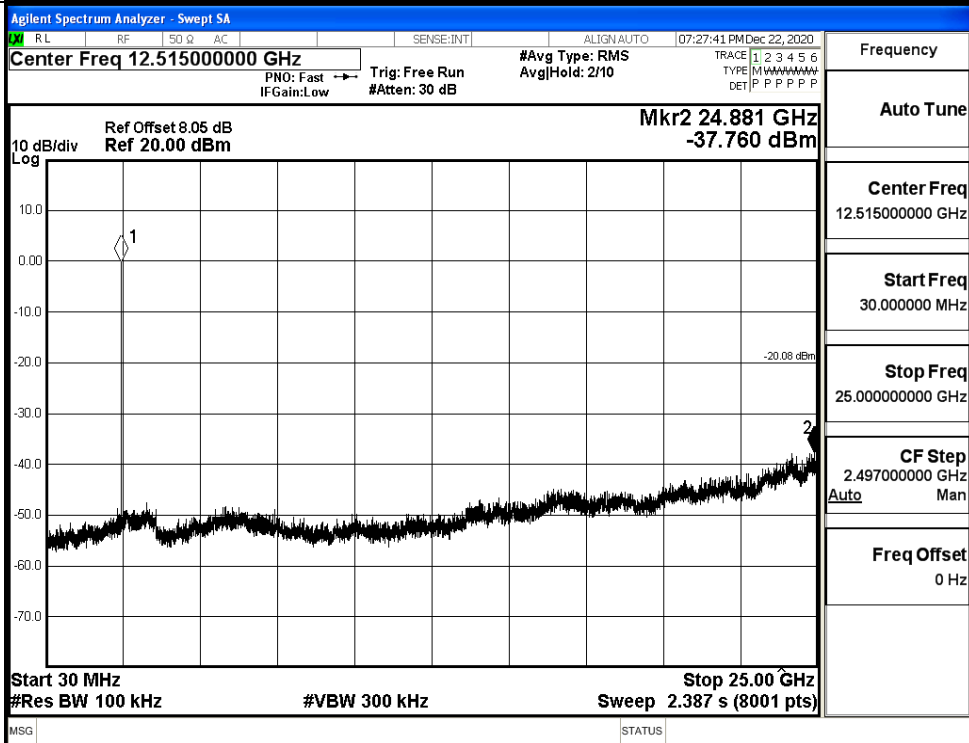


GFSK_HCH_Graphs

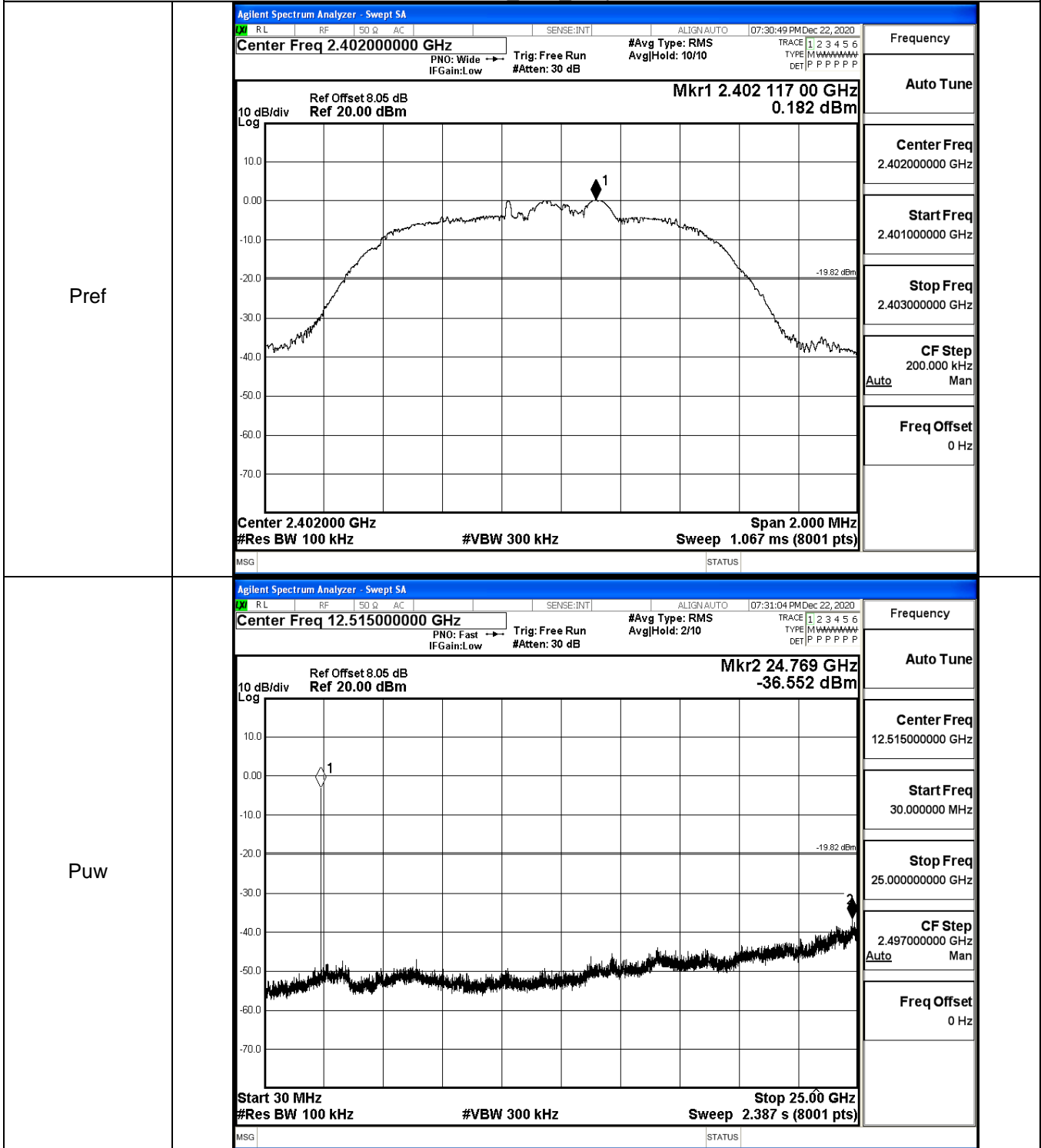
Pref



Puw

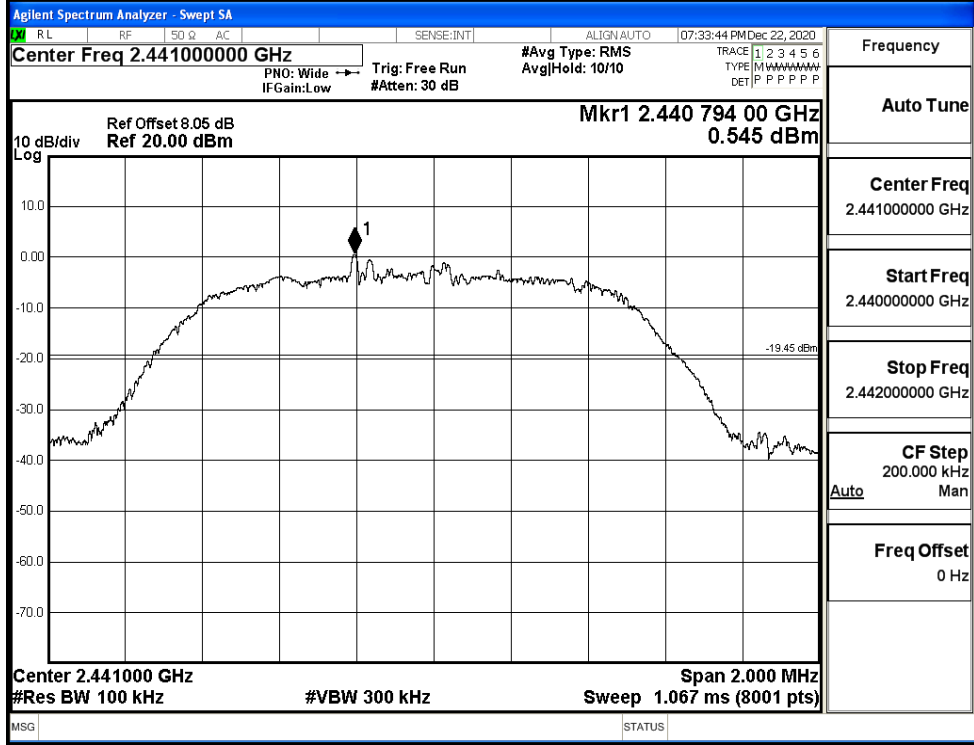


π /4DQPSK_LCH_Graphs

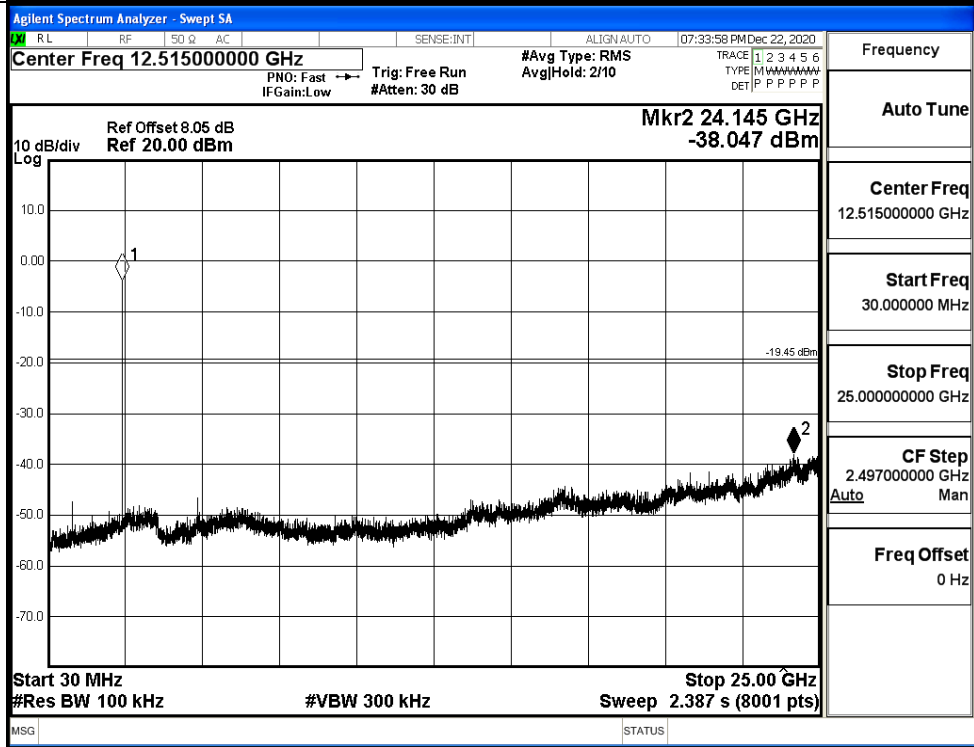


π /4DQPSK_MCH_Graphs

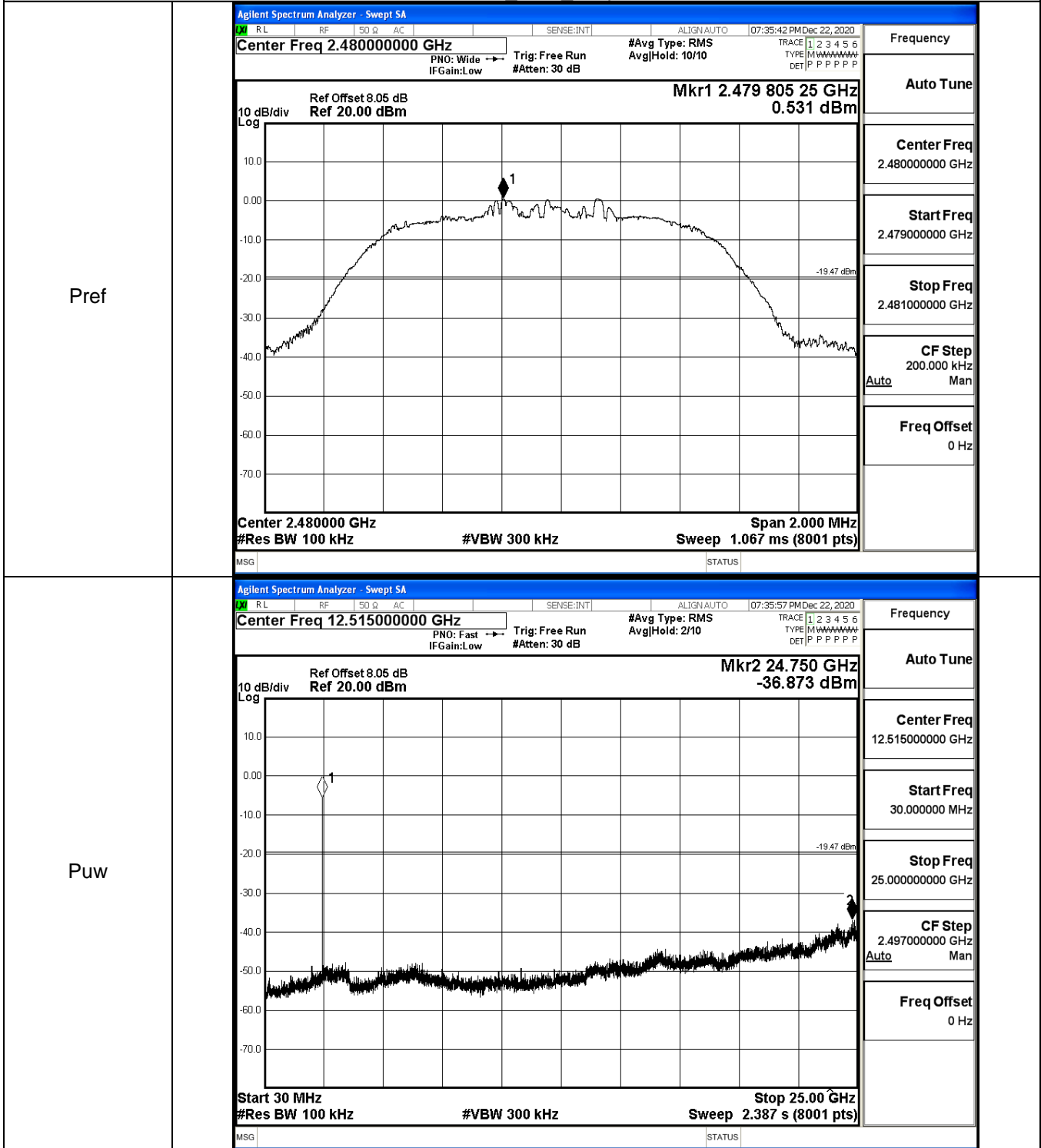
Pref



Puw



π /4DQPSK_HCH_Graphs

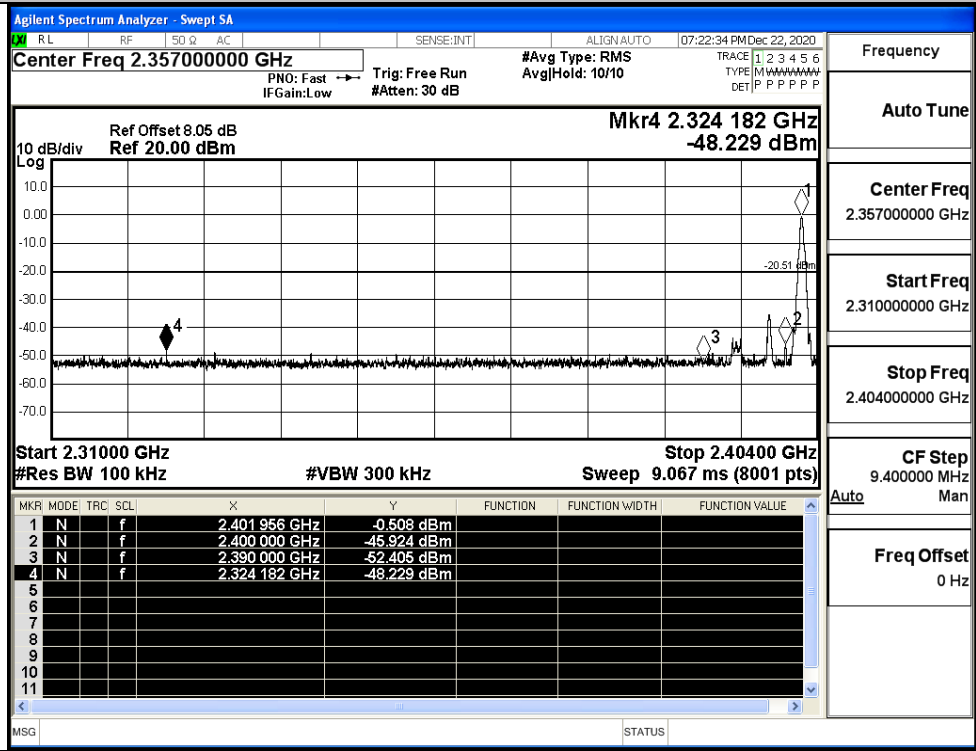


A.7 Band-edge for RF Conducted Emissions

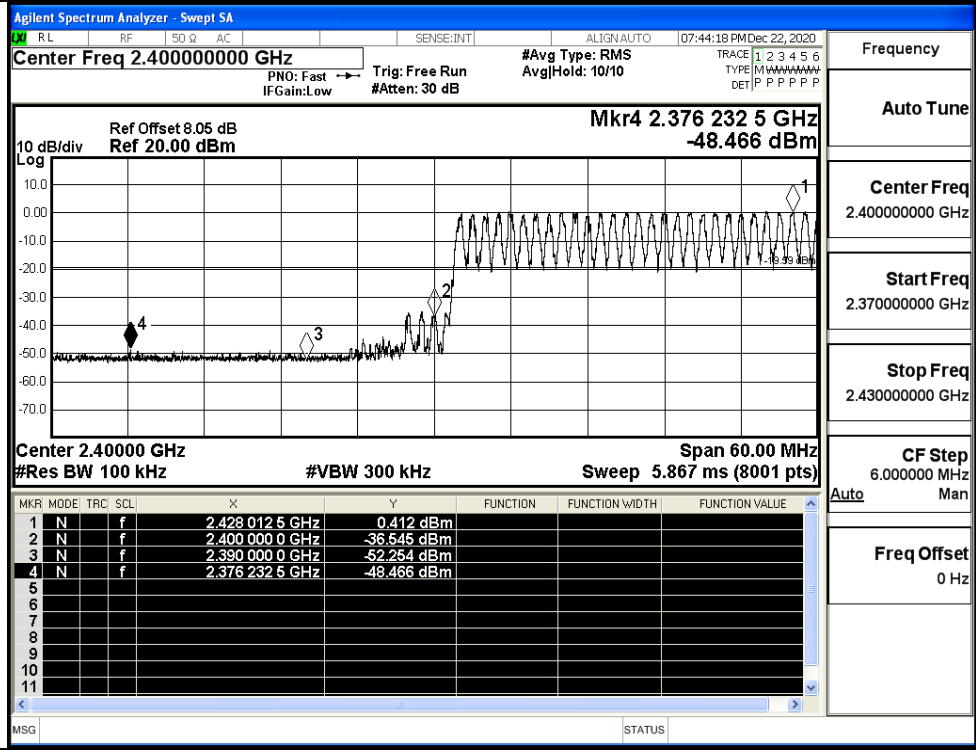
Mode	Channel	Carrier Frequency [MHz]	Carrier Power [dBm]	Frequency Hopping	Max Spurious Level [dBm]	Limit [dBm]	Verdict
GFSK	LCH	2402	-0.508	Off	-48.229	-20.51	PASS
			0.412	On	-48.466	-19.59	PASS
	HCH	2480	0.368	Off	-46.953	-19.63	PASS
			0.707	On	-47.338	-19.29	PASS
π/4DQPSK	LCH	2402	-2.825	Off	-49.301	-22.83	PASS
			0.312	On	-49.039	-19.69	PASS
	HCH	2480	0.702	Off	-46.565	-19.3	PASS
			0.583	On	-48.077	-19.42	PASS

Test Graphs

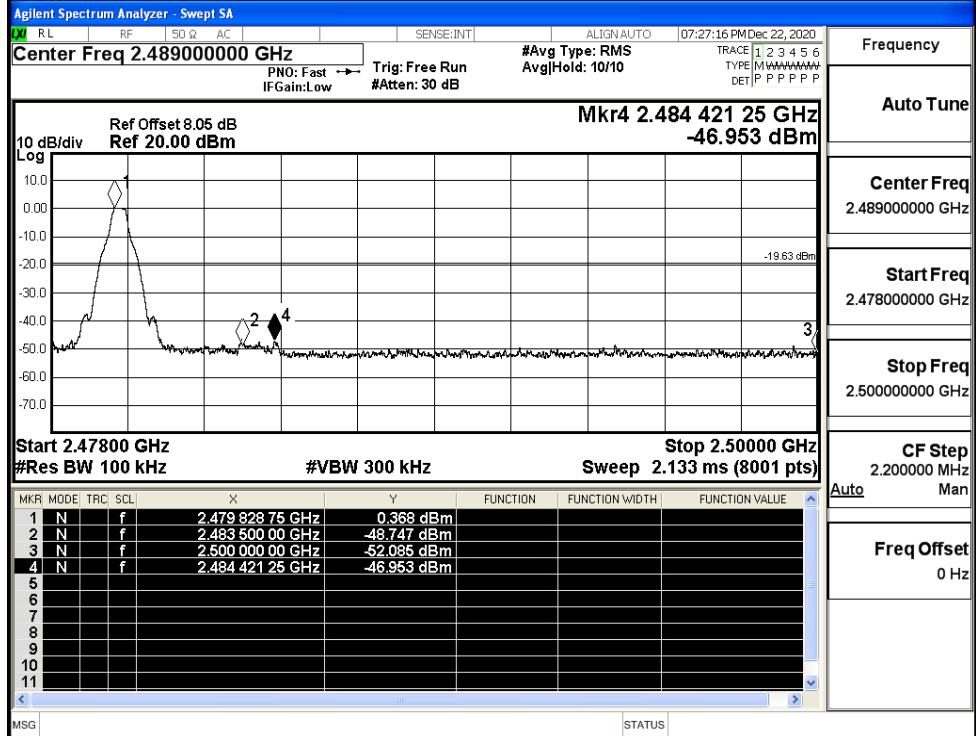
GFSK/LCH/No Hop



GFSK/LCH/Hop



GFSK/HCH/No Hop



Frequency

Auto Tune

Center Freq
2.489000000 GHz

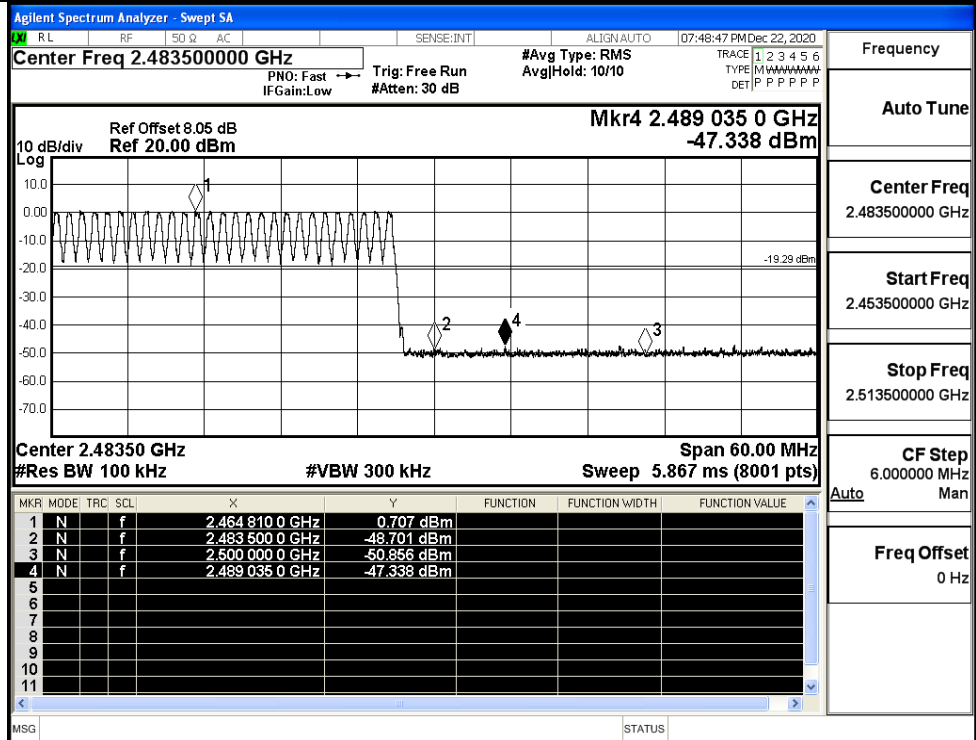
Start Freq
2.478000000 GHz

Stop Freq
2.500000000 GHz

CF Step
2.200000 MHz

Freq Offset
0 Hz

GFSK/HCH/Hop



Frequency

Auto Tune

Center Freq
2.483500000 GHz

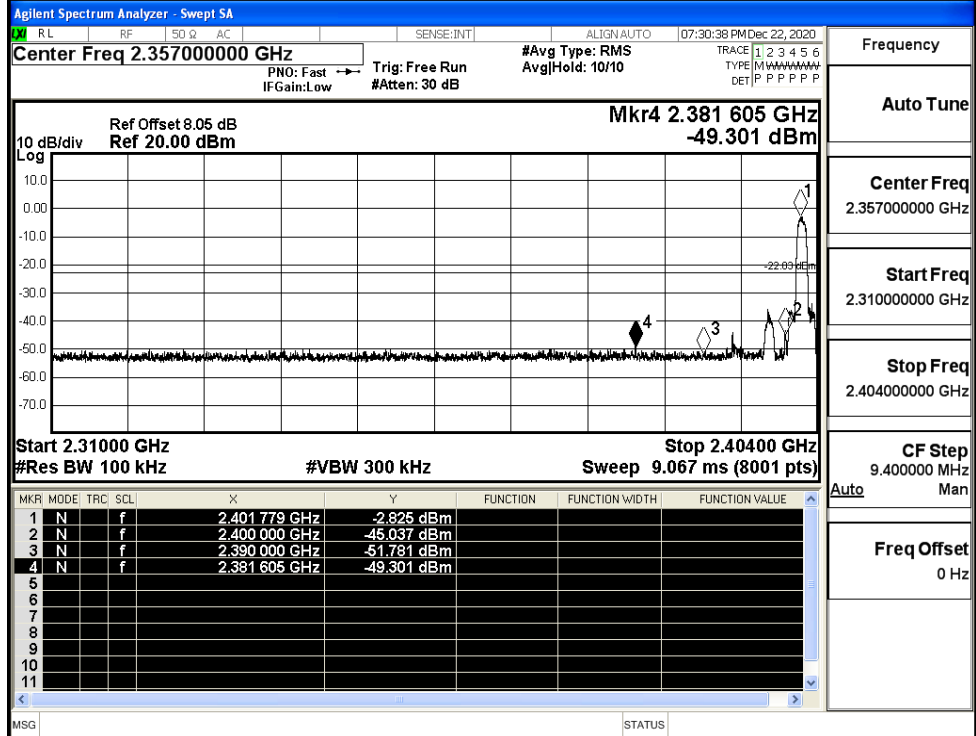
Start Freq
2.453500000 GHz

Stop Freq
2.513500000 GHz

CF Step
6.000000 MHz

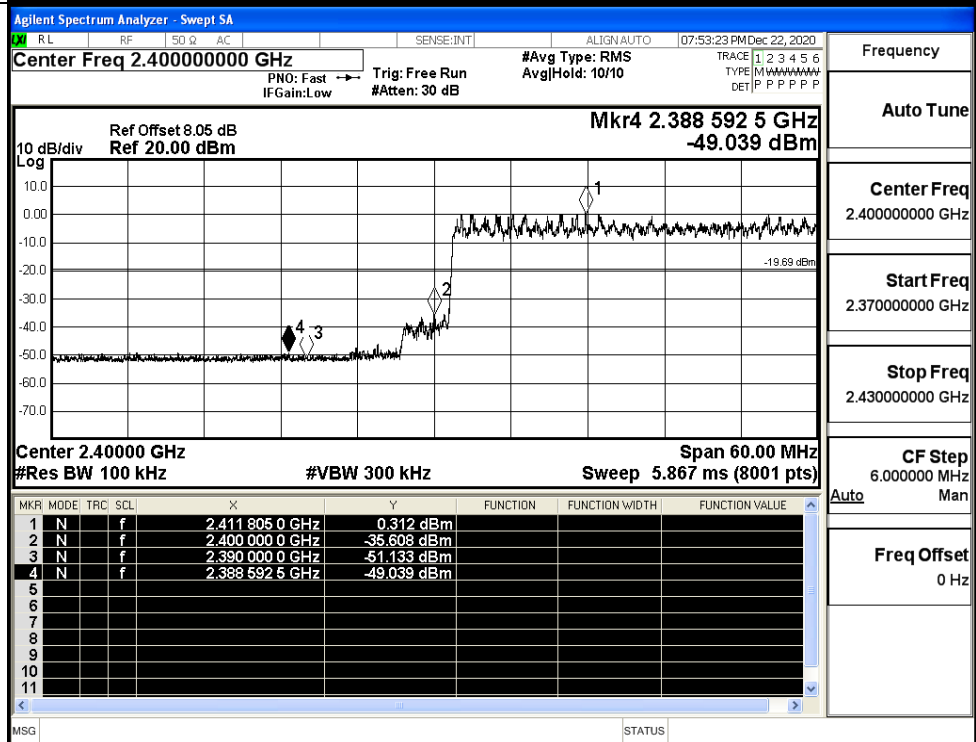
Freq Offset
0 Hz

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



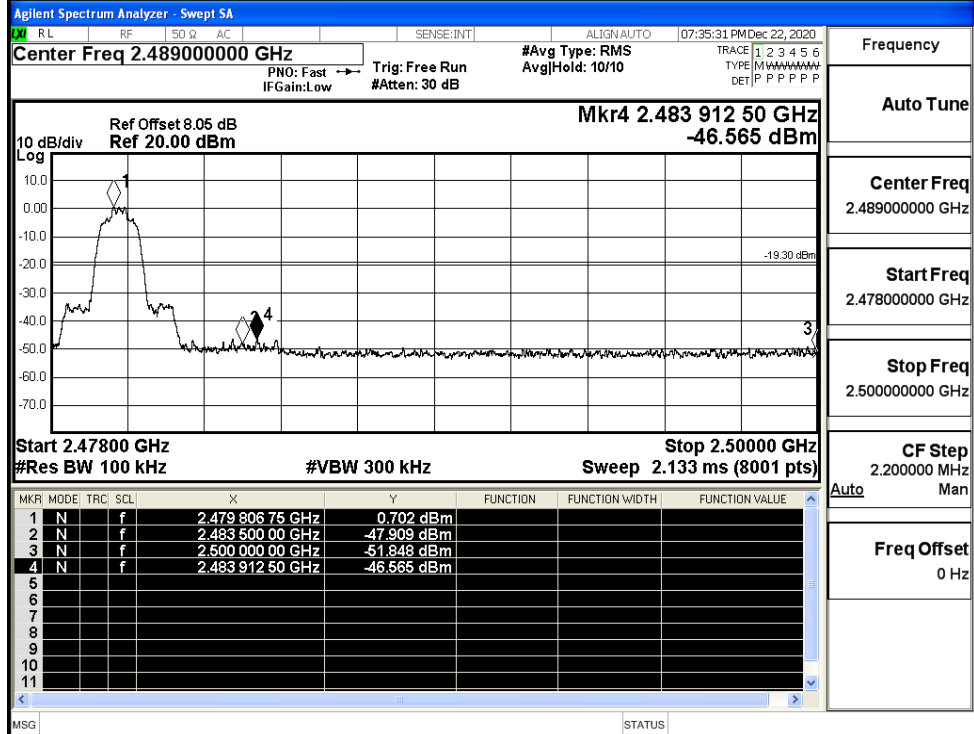
Frequency	2.35700000 GHz
Auto Tune	
Center Freq	2.35700000 GHz
Start Freq	2.310000000 GHz
Stop Freq	2.404000000 GHz
CF Step	9.400000 MHz
Auto	Man
Freq Offset	0 Hz

$\pi/4$ DQPSK/LCH/Hop



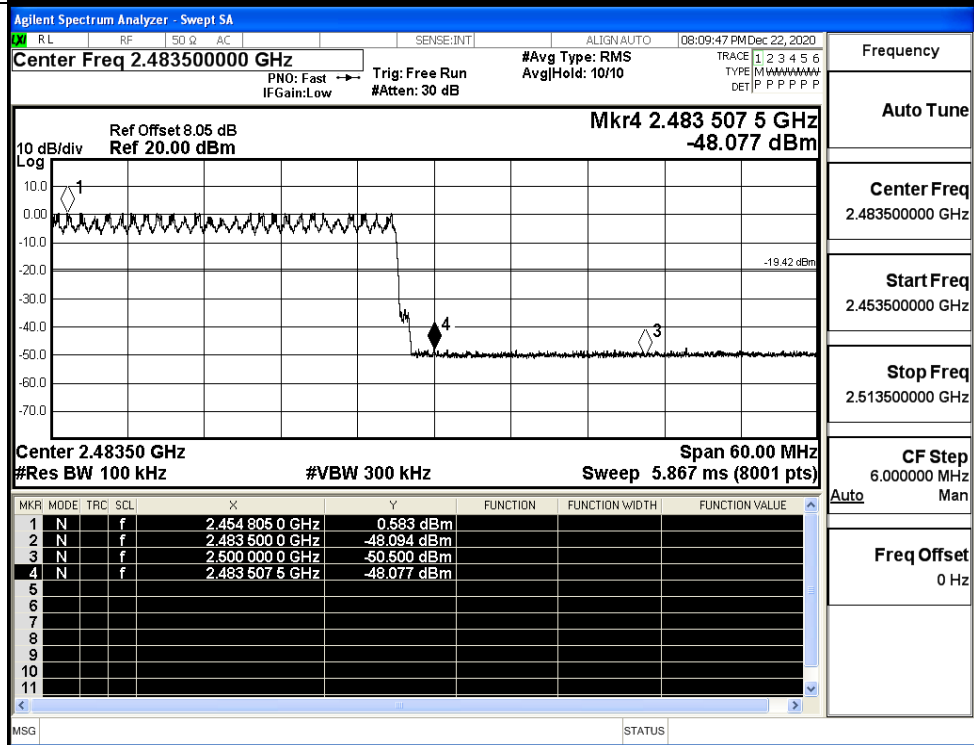
Frequency	2.40000000 GHz
Auto Tune	
Center Freq	2.400000000 GHz
Start Freq	2.370000000 GHz
Stop Freq	2.430000000 GHz
CF Step	6.000000 MHz
Auto	Man
Freq Offset	0 Hz

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



Frequency	
Auto Tune	
Center Freq	2.489000000 GHz
Start Freq	2.478000000 GHz
Stop Freq	2.500000000 GHz
CF Step	2.200000 MHz
Freq Offset	0 Hz

$\pi/4$ DQPSK/HCH/Hop

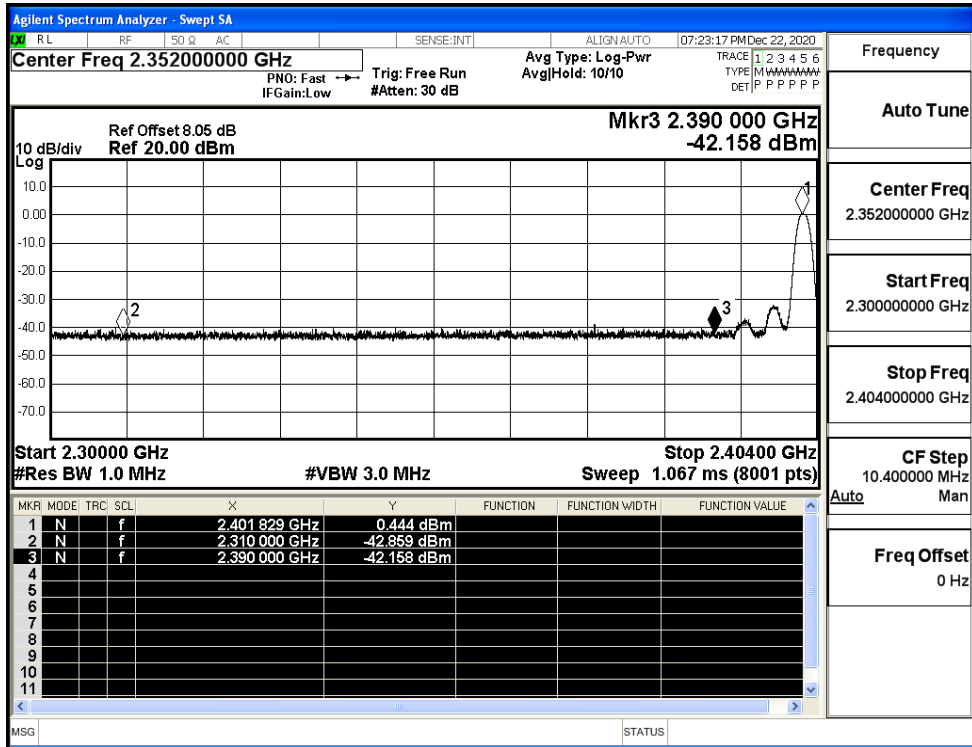


Frequency	
Auto Tune	
Center Freq	2.483500000 GHz
Start Freq	2.453500000 GHz
Stop Freq	2.513500000 GHz
CF Step	6.000000 MHz
Freq Offset	0 Hz

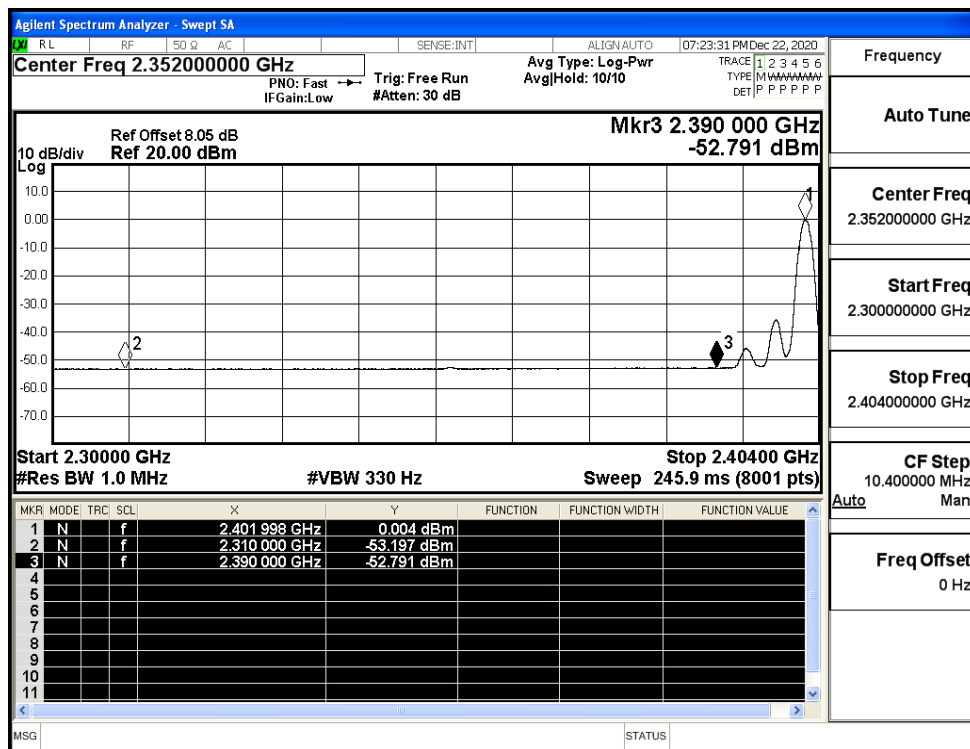
A.8 Restrict-band band-edge measurements

Test Mode	Hopping	Freq.	Power [dBm]	Gain	Ground Factor	E [dBuV/m]	Detector	Limit [dBuV/m]	Verdict
GFSK	Off	2310.0	-42.86	5.0	0	57.37	PEAK	74	PASS
	Off	2310.0	-53.20	5.0	0	47.03	AV	54	PASS
	Off	2390.0	-42.16	5.0	0	58.07	PEAK	74	PASS
	Off	2390.0	-52.79	5.0	0	47.44	AV	54	PASS
	Off	2483.5	-41.07	5.0	0	59.16	PEAK	74	PASS
	Off	2483.5	-49.43	5.0	0	50.80	AV	54	PASS
	Off	2500.0	-41.70	5.0	0	58.53	PEAK	74	PASS
	Off	2500.0	-52.23	5.0	0	48.00	AV	54	PASS
π/4DQPSK	Off	2310.0	-42.78	5.0	0	57.45	PEAK	74	PASS
	Off	2310.0	-53.25	5.0	0	46.98	AV	54	PASS
	Off	2390.0	-43.05	5.0	0	57.18	PEAK	74	PASS
	Off	2390.0	-52.72	5.0	0	47.51	AV	54	PASS
	Off	2483.5	-40.45	5.0	0	59.78	PEAK	74	PASS
	Off	2483.5	-50.48	5.0	0	49.75	AV	54	PASS
	Off	2500.0	-41.16	5.0	0	59.07	PEAK	74	PASS
	Off	2500.0	-52.23	5.0	0	48.00	AV	54	PASS

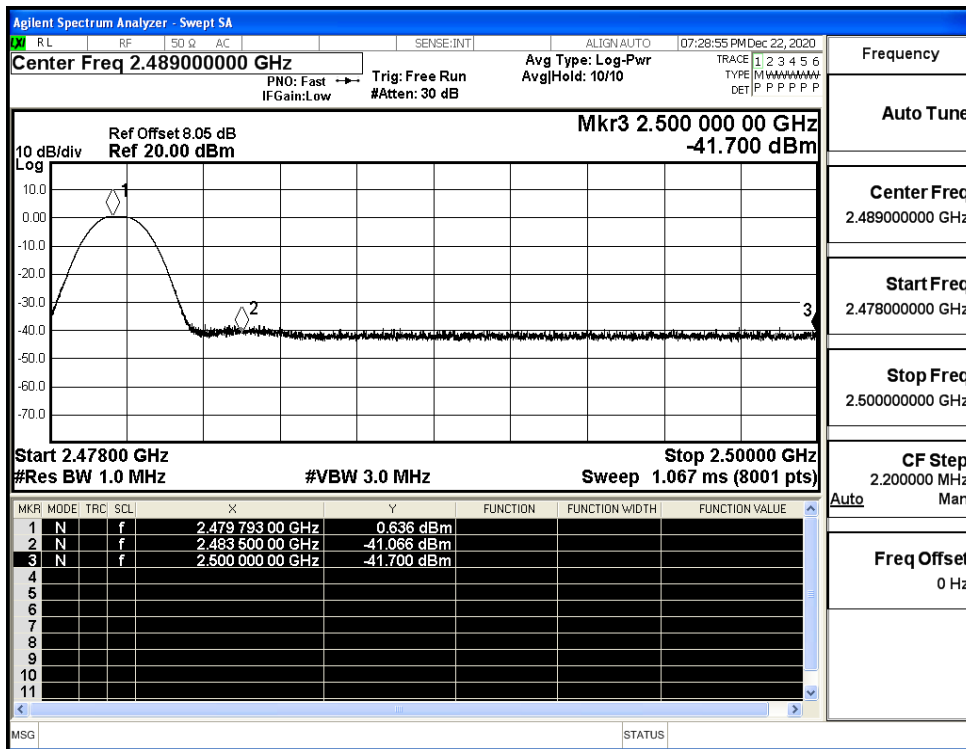
Restrict-band band-edge measurements_Hopping Off_GFSK_PEAK (Low Channel)



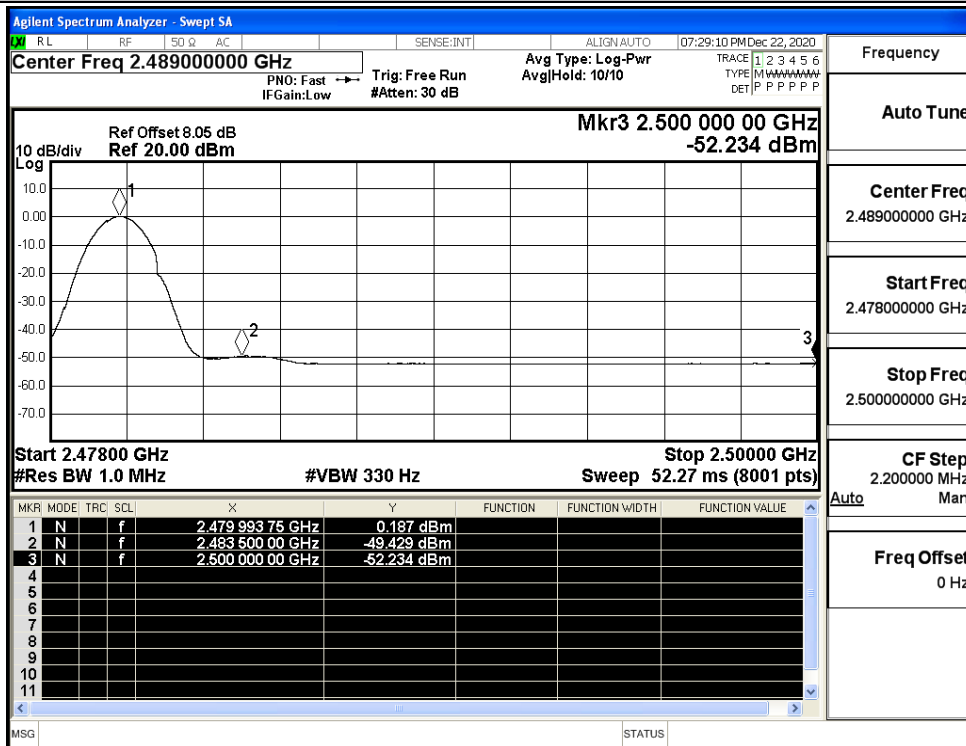
Restrict-band band-edge measurements_Hopping Off_GFSK_Average (Low Channel)



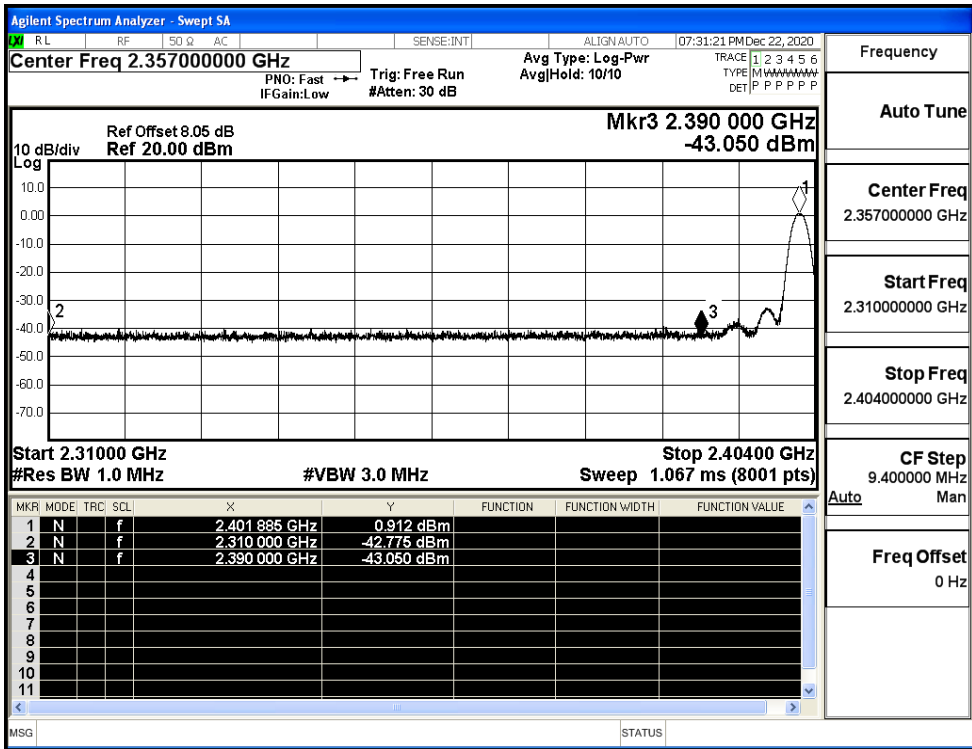
Restrict-band band-edge measurements_Hopping Off_GFSK_PEAK (High Channel)



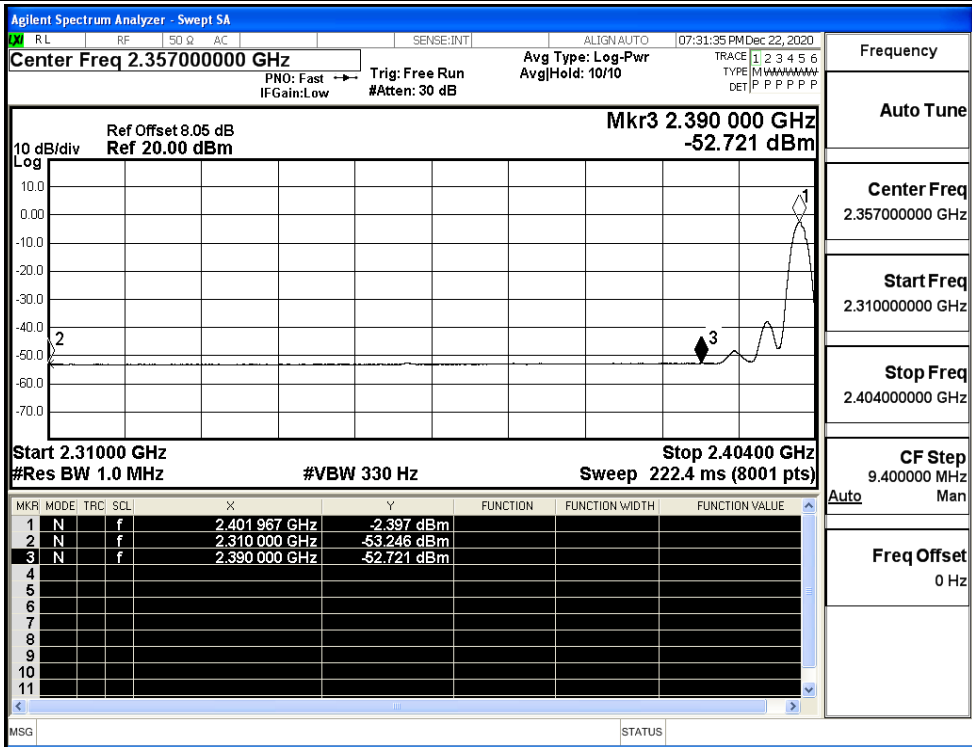
Restrict-band band-edge measurements_Hopping Off_GFSK_Average (High Channel)



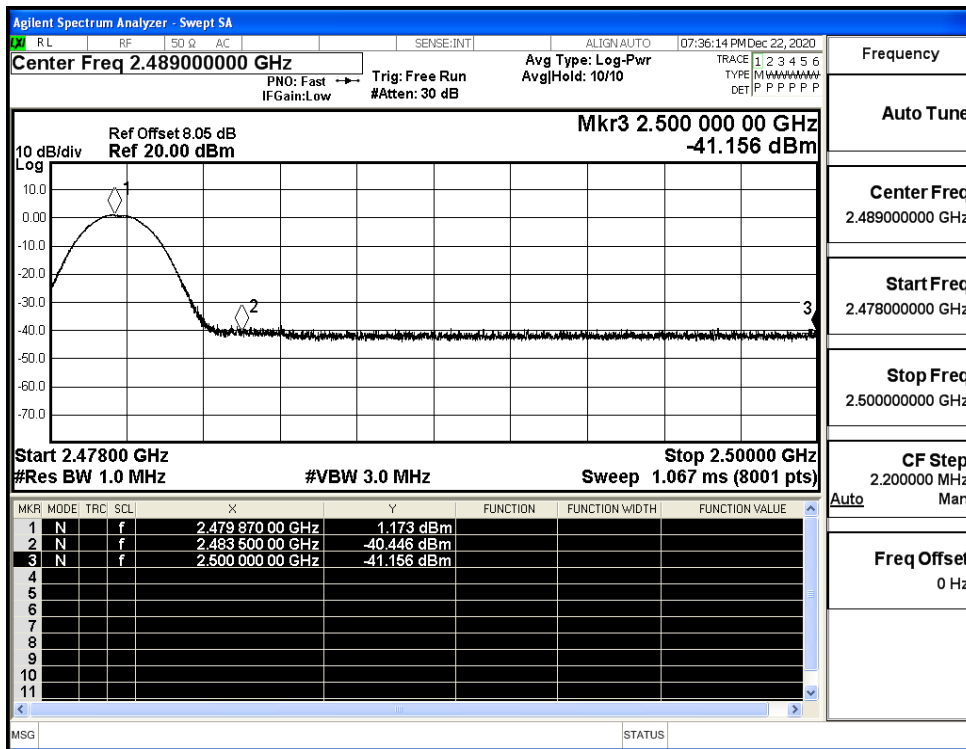
Restrict-band band-edge measurements_Hopping Off_π/4-DQPSK_PEAK (Low Channel)



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)

