

Appendix A

RF Test Data for BT V4.1(BDR/EDR) (Conducted Measurement)

Product Name: TABLET PC

Trade Mark: Haitech

Test Model: H133

Environmental Conditions

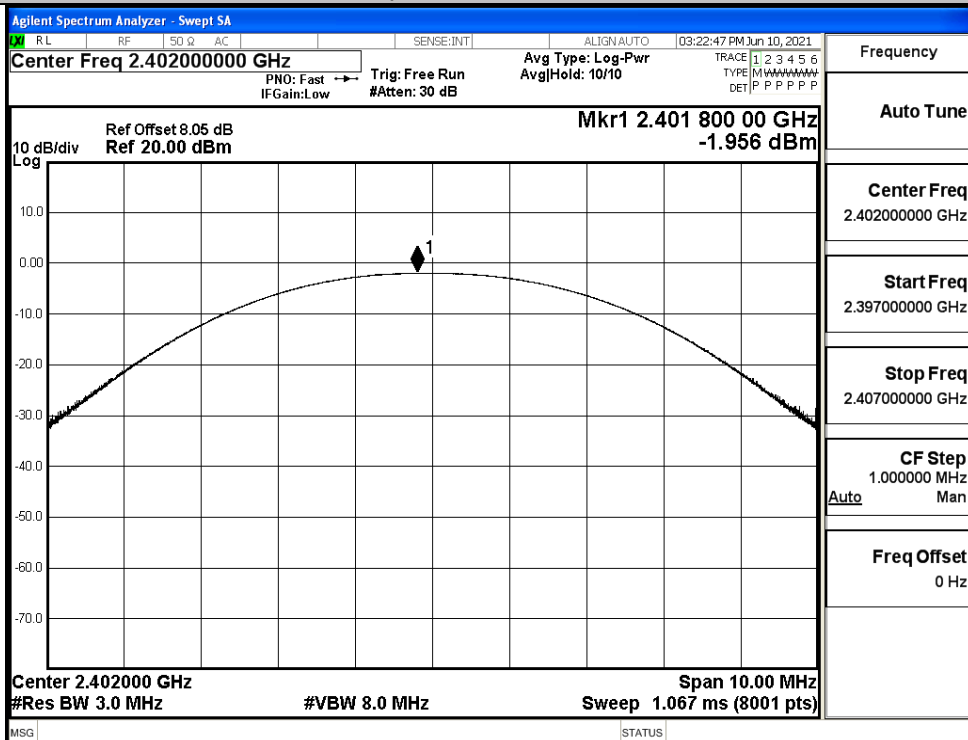
Temperature:	25.1 ° C
Relative Humidity:	50.3%
ATM Pressure:	100.0 kPa
Test Engineer:	Carl Fu
Supervised by:	Li Huan

A.1 Maximum Conducted Peak Output Power

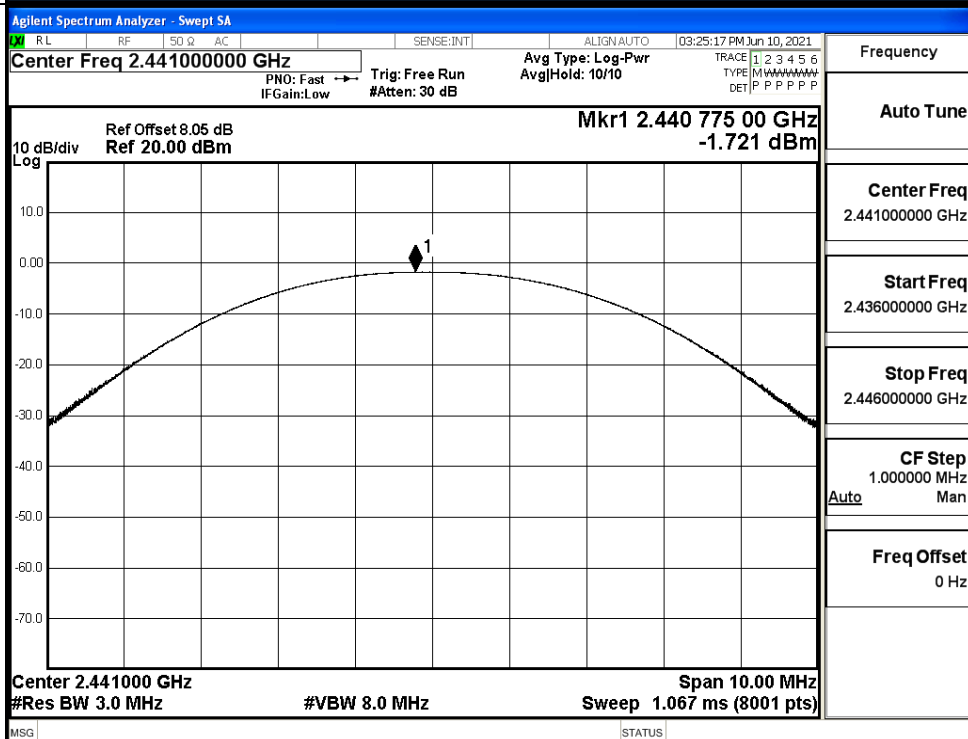
Mode	Channel.	Maximum Peak Output Power [dBm]	Limit [dBm]	Verdict
GFSK	LCH	-1.956	30	PASS
	MCH	-1.721	30	PASS
	HCH	-1.246	30	PASS
$\pi/4$ DQPSK	LCH	0.349	21	PASS
	MCH	0.619	21	PASS
	HCH	1.418	21	PASS
8DPSK	LCH	0.916	21	PASS
	MCH	1.206	21	PASS
	HCH	1.953	21	PASS

Test Graphs

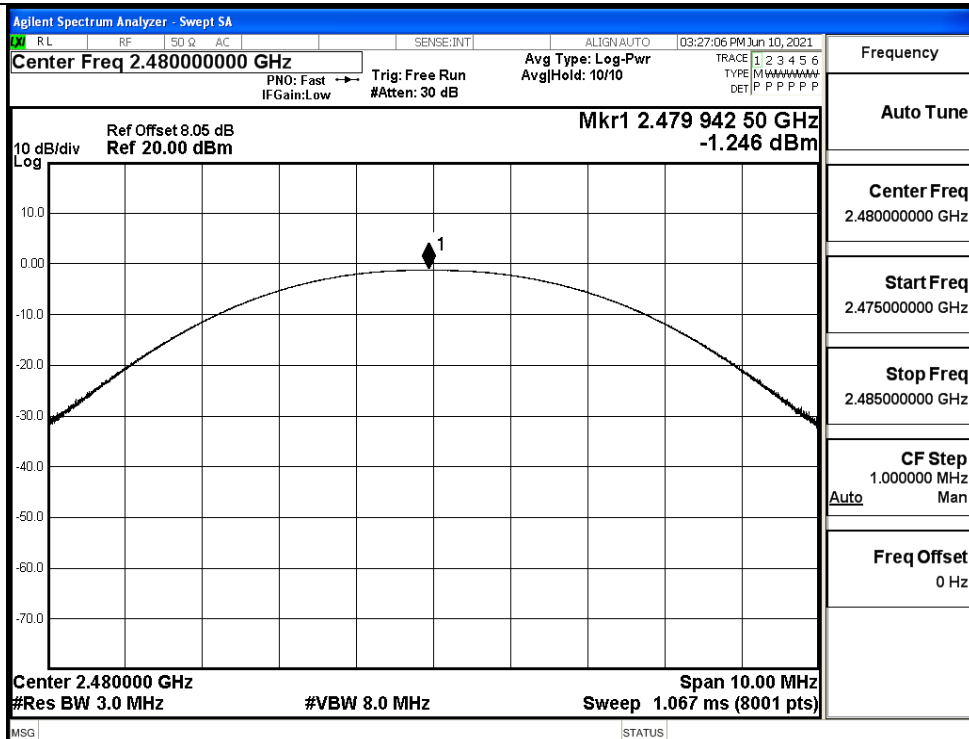
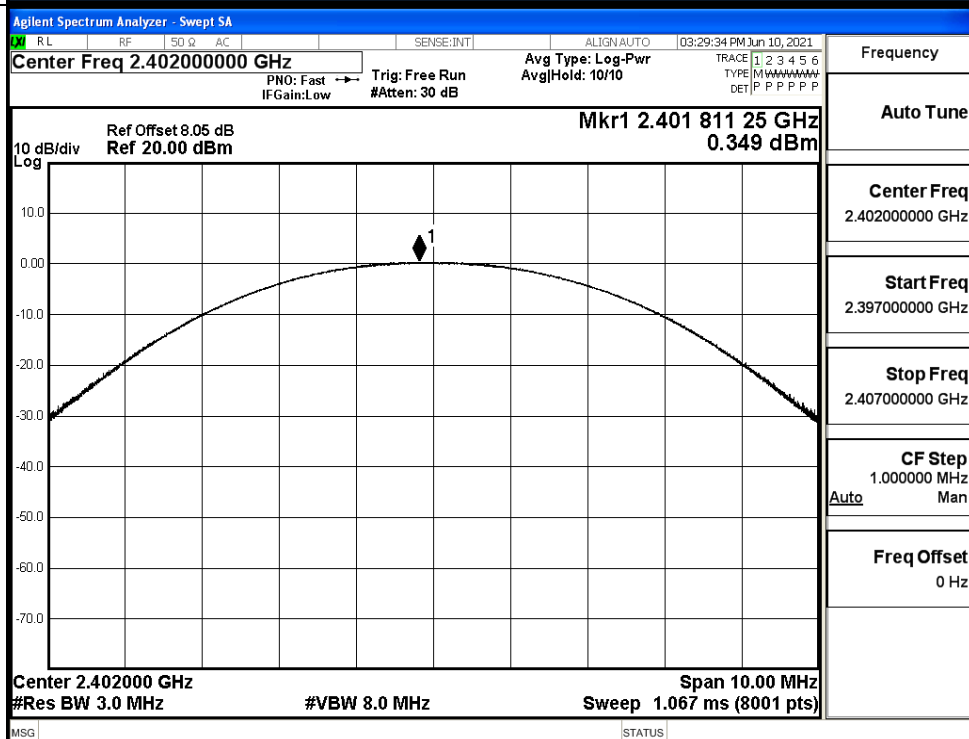
GFSK/LCH

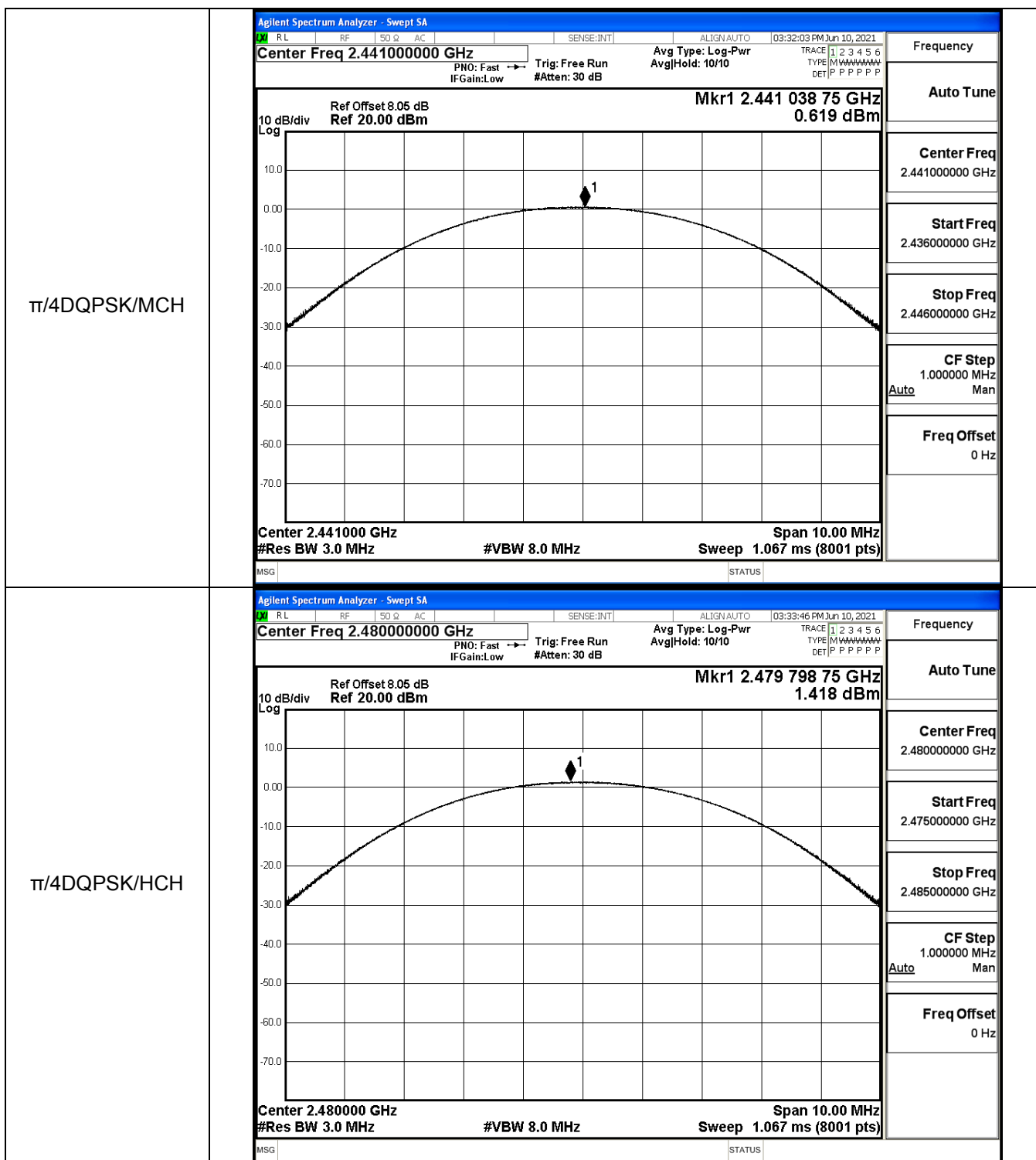


GFSK/MCH

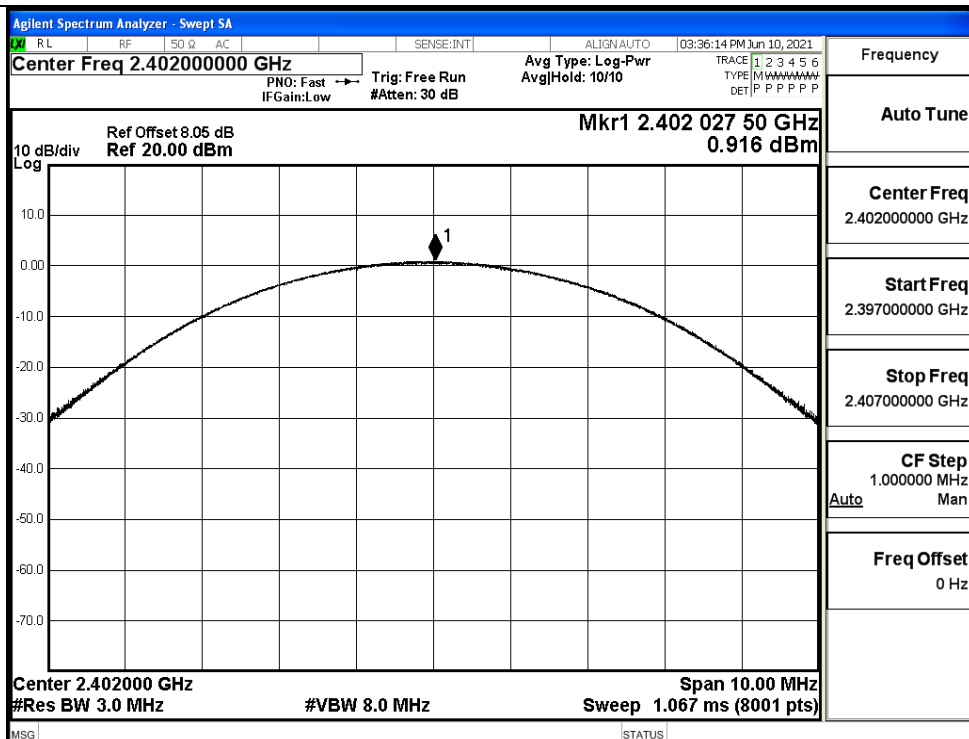


GFSK/HCH

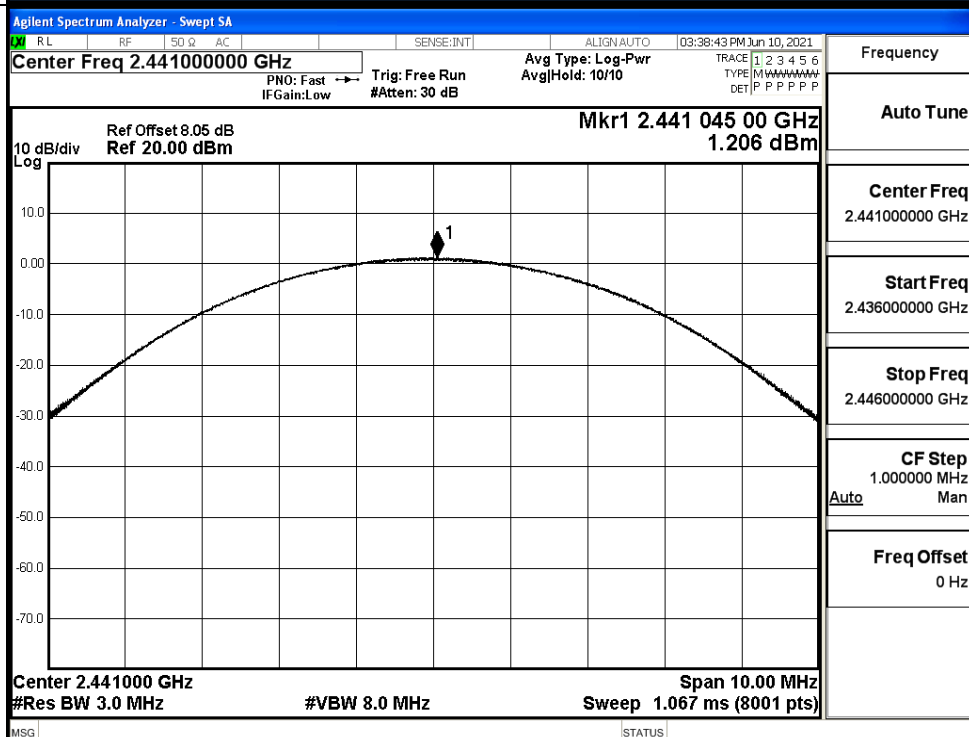
 π /4DQPSK/LCH



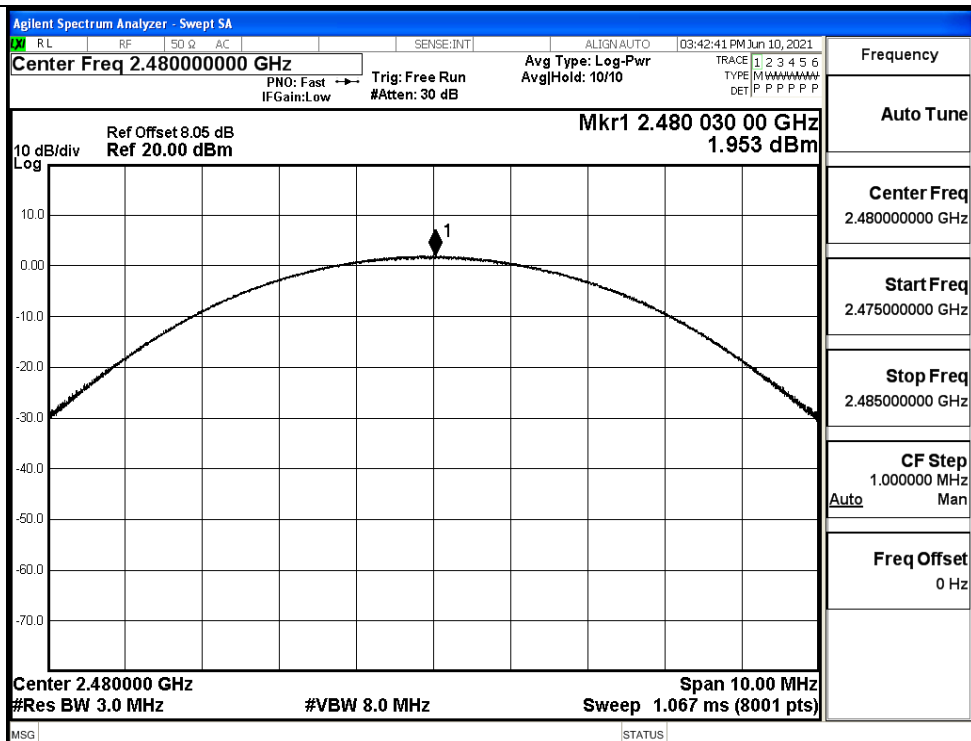
8DPSK/LCH



8DPSK/MCH



8DPSK/HCH

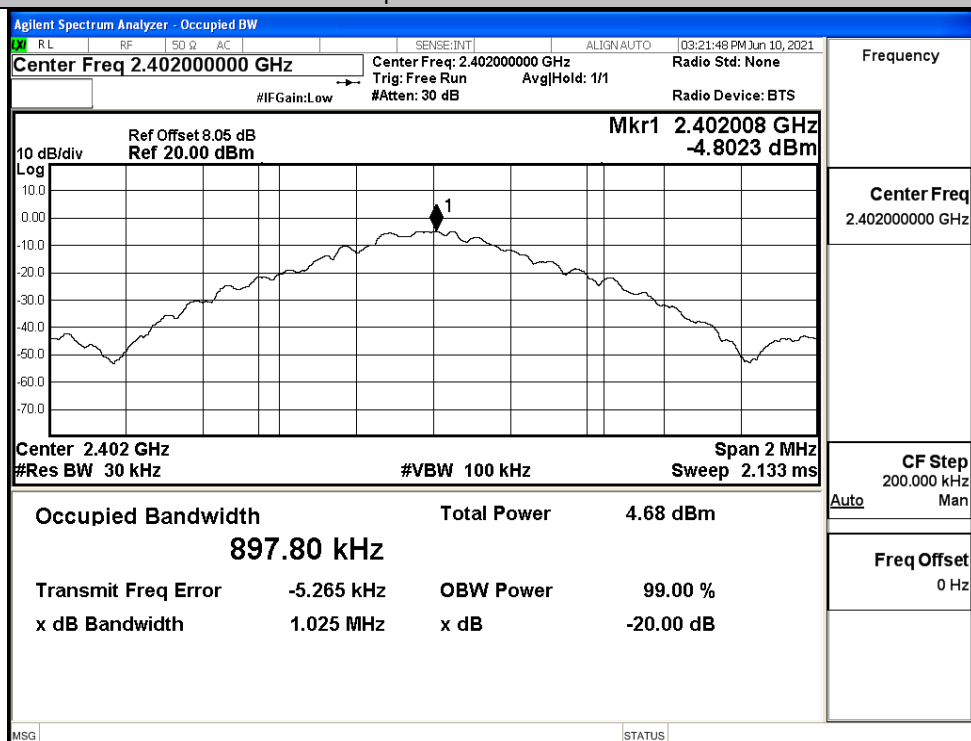


A.2 20dB Bandwidth

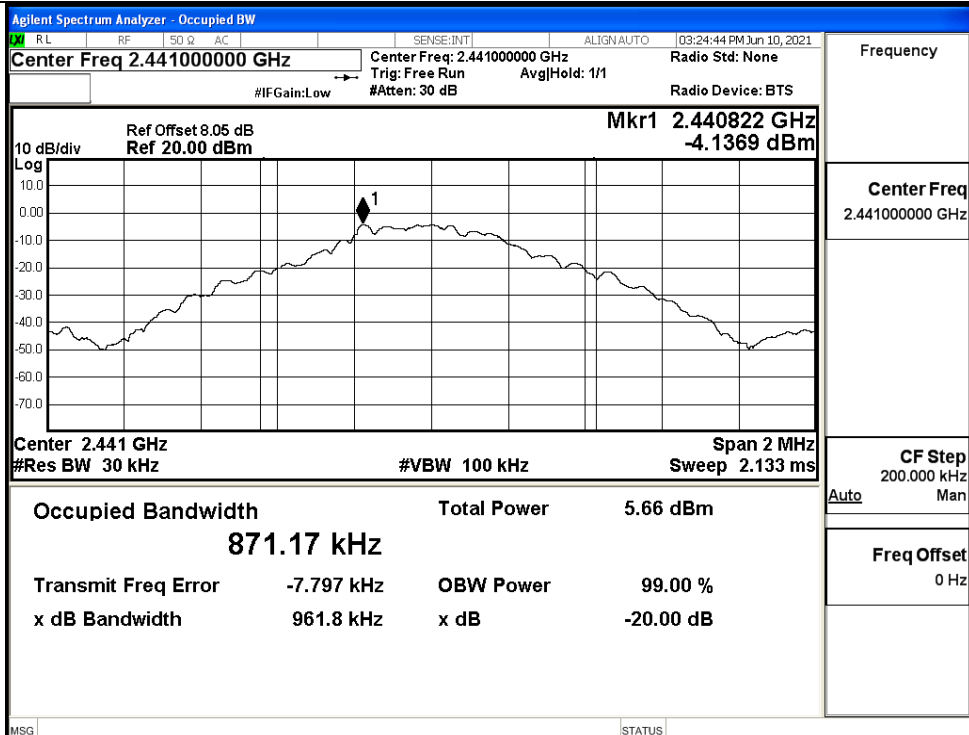
Mode	Channel.	20dB Bandwidth [MHz]	Limit [MHz]	Verdict
GFSK	LCH	1.025	Not Specified	PASS
	MCH	0.9618	Not Specified	PASS
	HCH	0.9610	Not Specified	PASS
$\pi/4$ DQPSK	LCH	1.282	Not Specified	PASS
	MCH	1.281	Not Specified	PASS
	HCH	1.281	Not Specified	PASS
8DPSK	LCH	1.302	Not Specified	PASS
	MCH	1.300	Not Specified	PASS
	HCH	1.300	Not Specified	PASS

Test Graphs

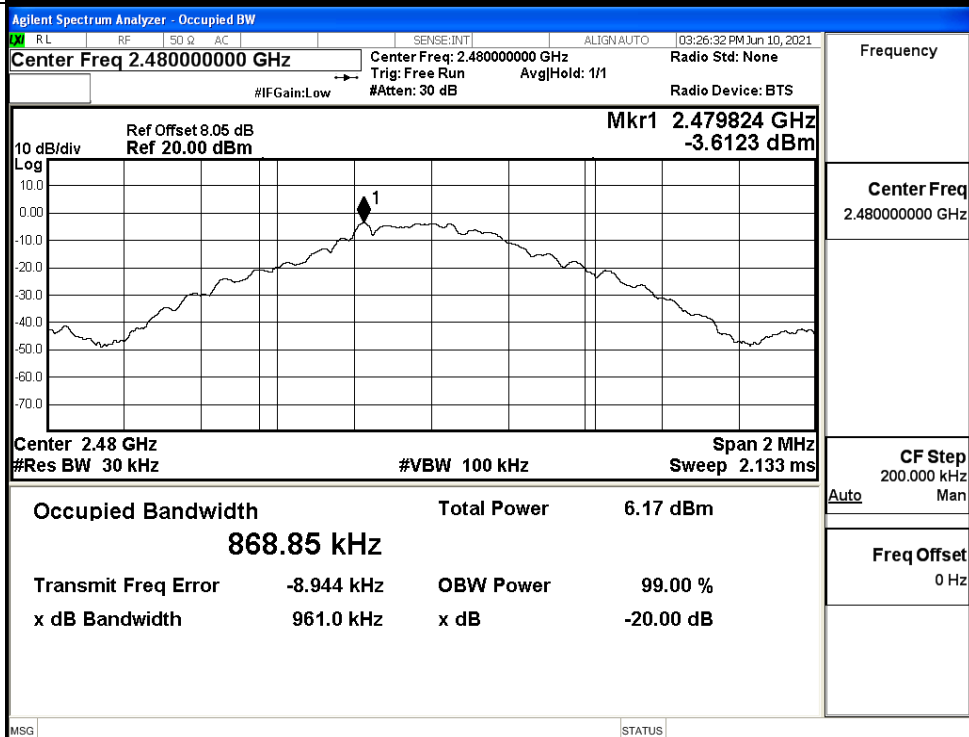
GFSK/LCH

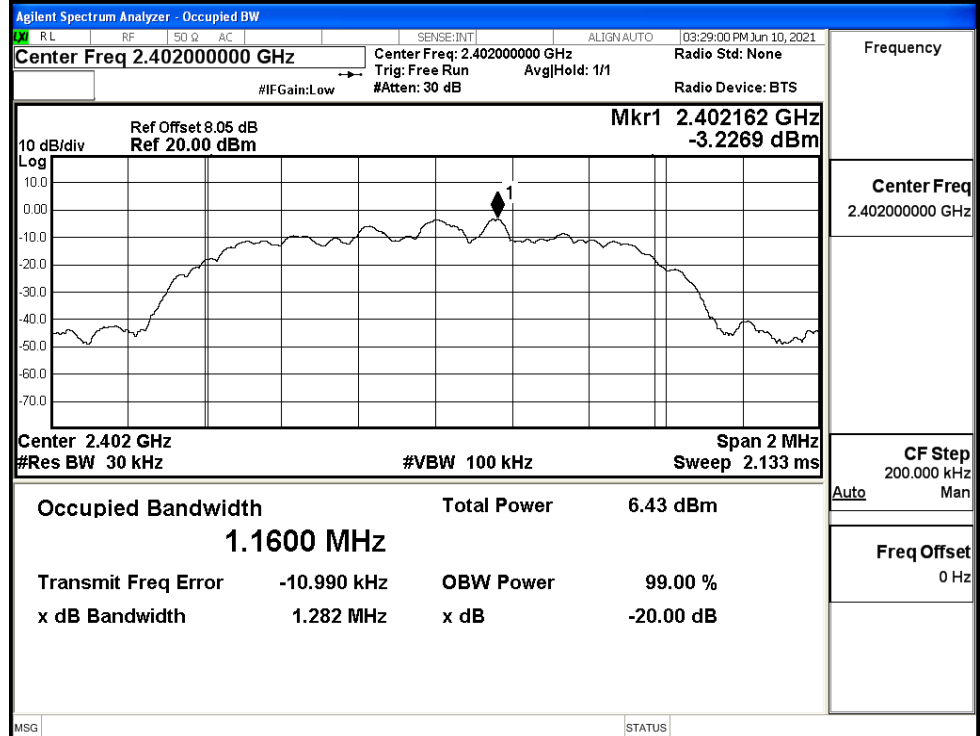


GFSK/MCH



GFSK/HCH

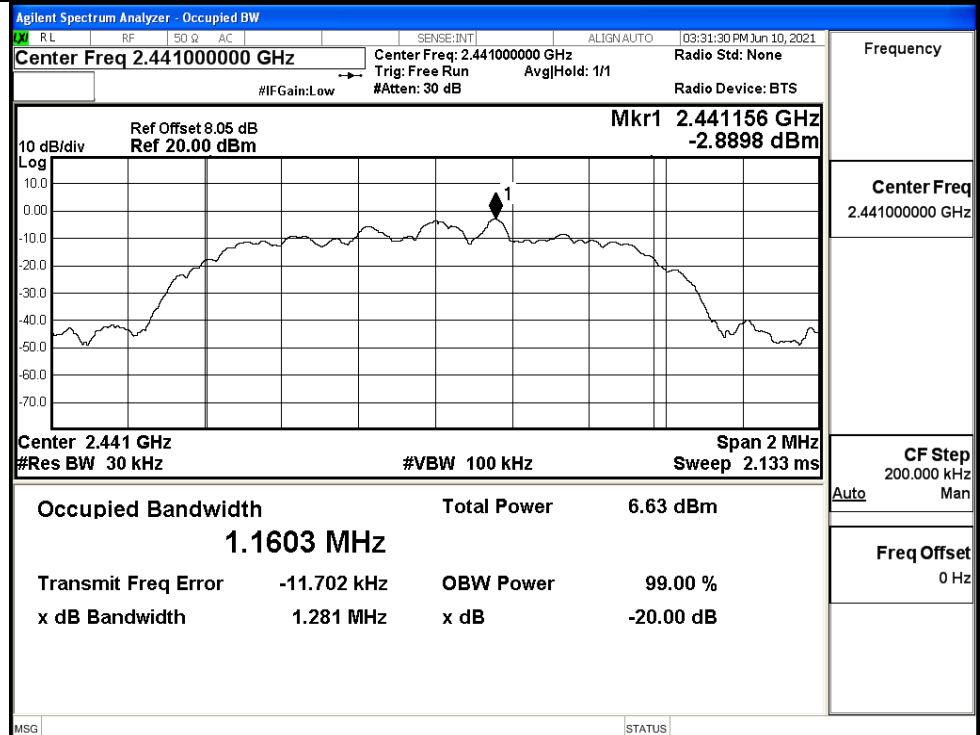


$\pi/4$ DQPSK/LCH

Frequency

Center Freq
2.402000000 GHzCF Step
200.000 kHz
Man

Auto

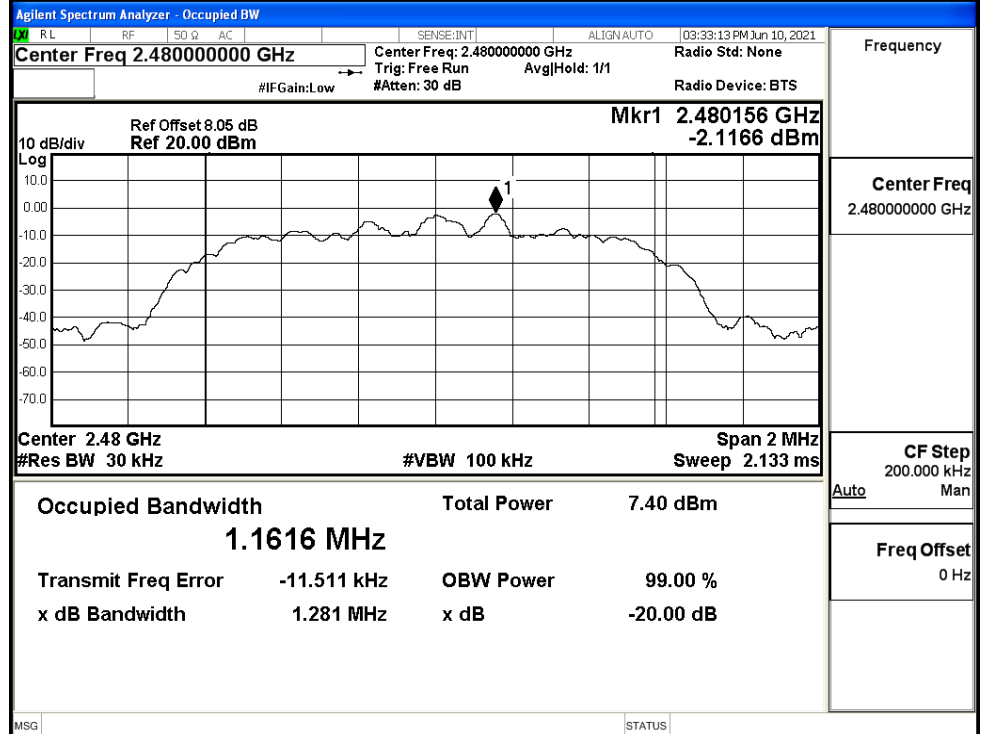
Freq Offset
0 Hz $\pi/4$ DQPSK/MCH

Frequency

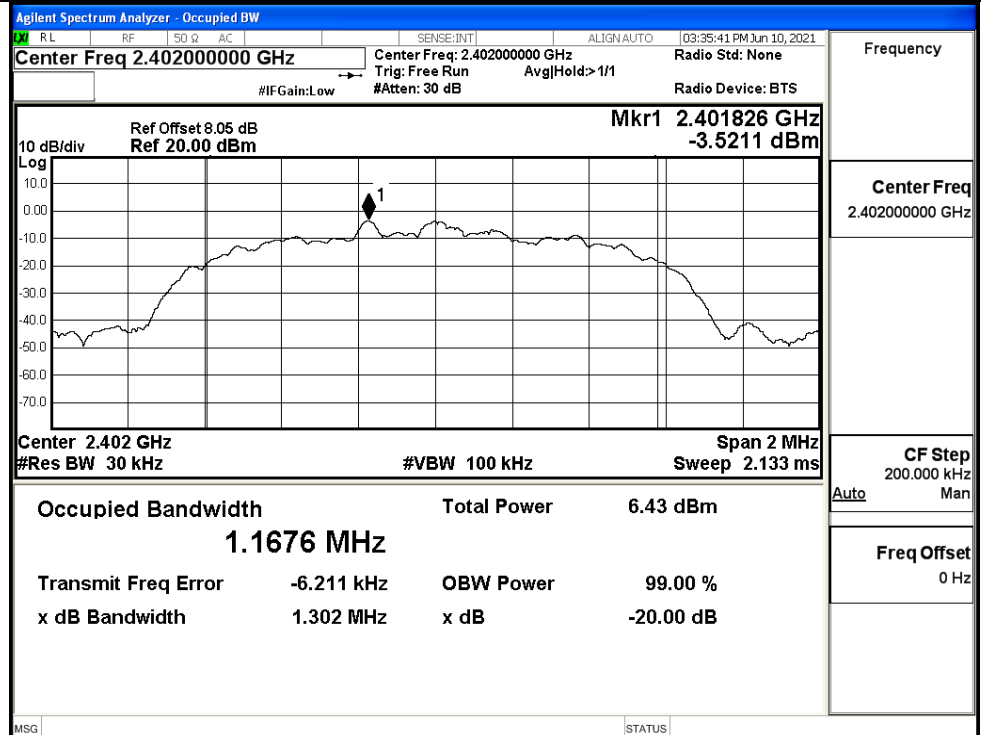
Center Freq
2.441000000 GHzCF Step
200.000 kHz
Man

Auto

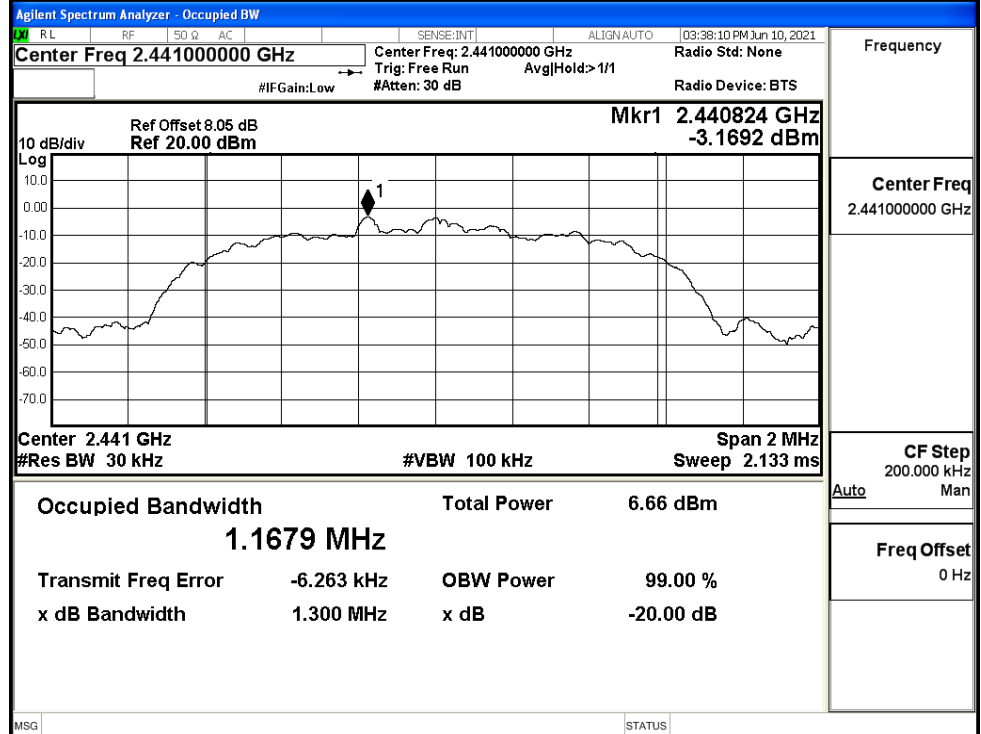
Freq Offset
0 Hz

$\pi/4$ DQPSK/HCH

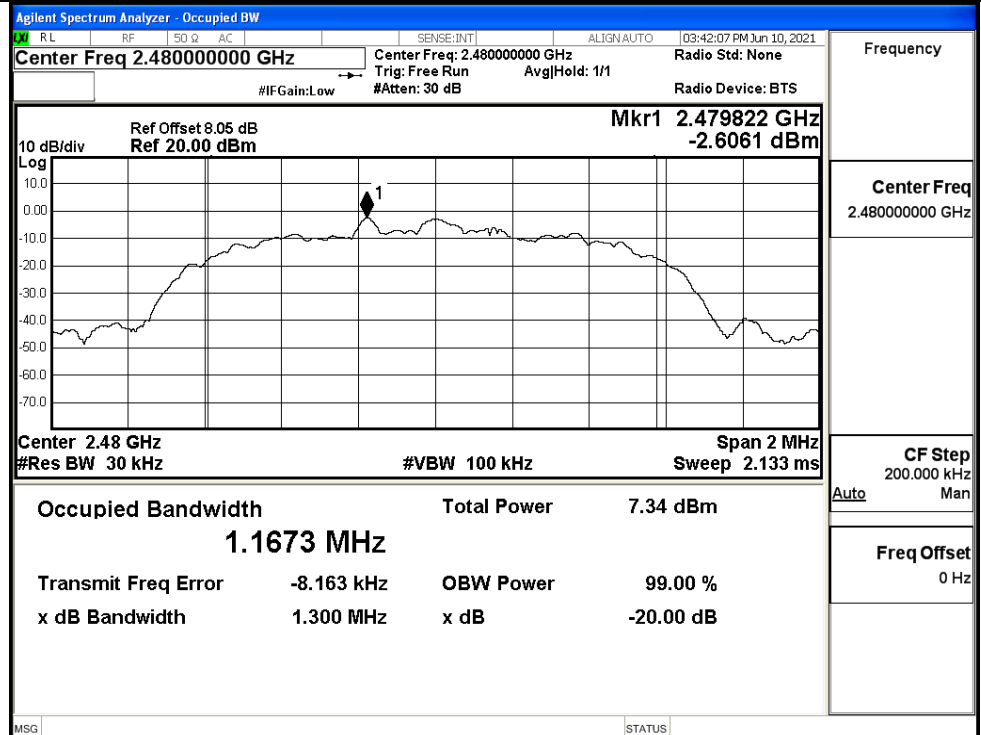
8DPSK/LCH



8DPSK/MCH



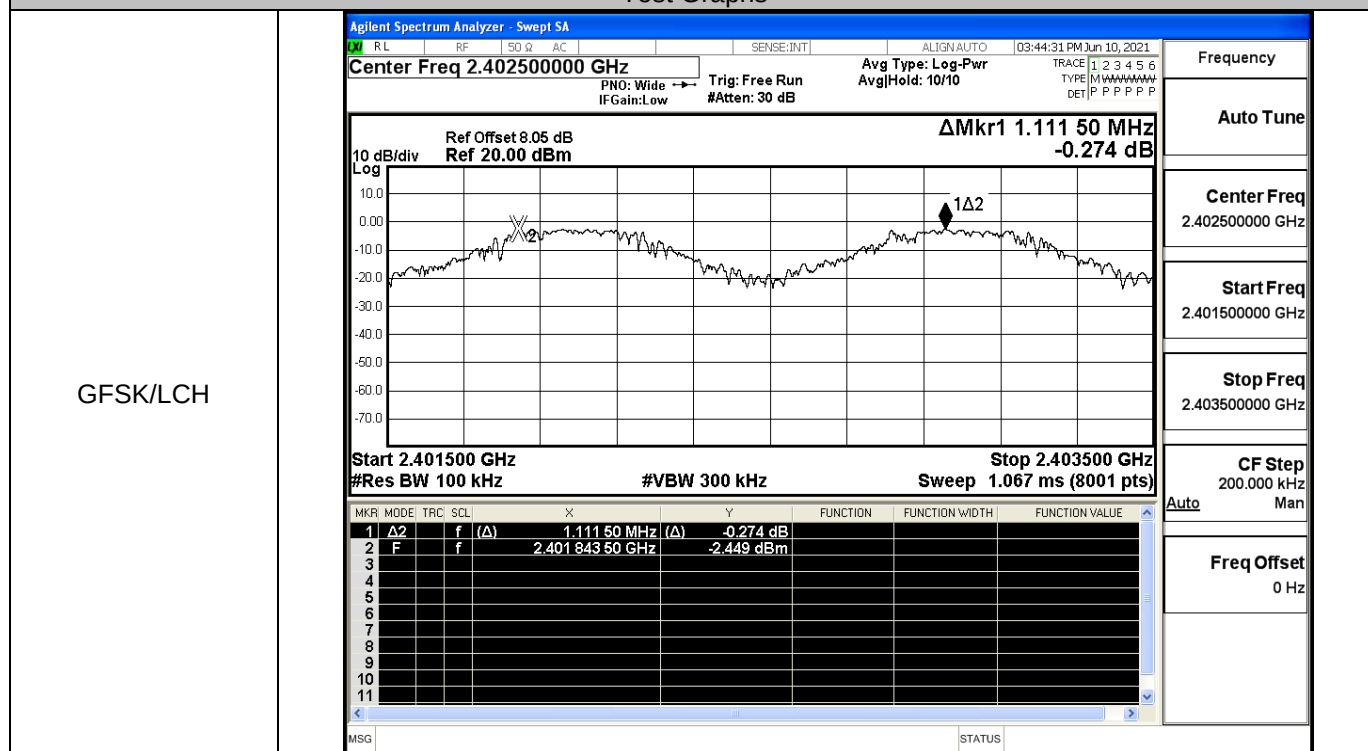
8DPSK/HCH



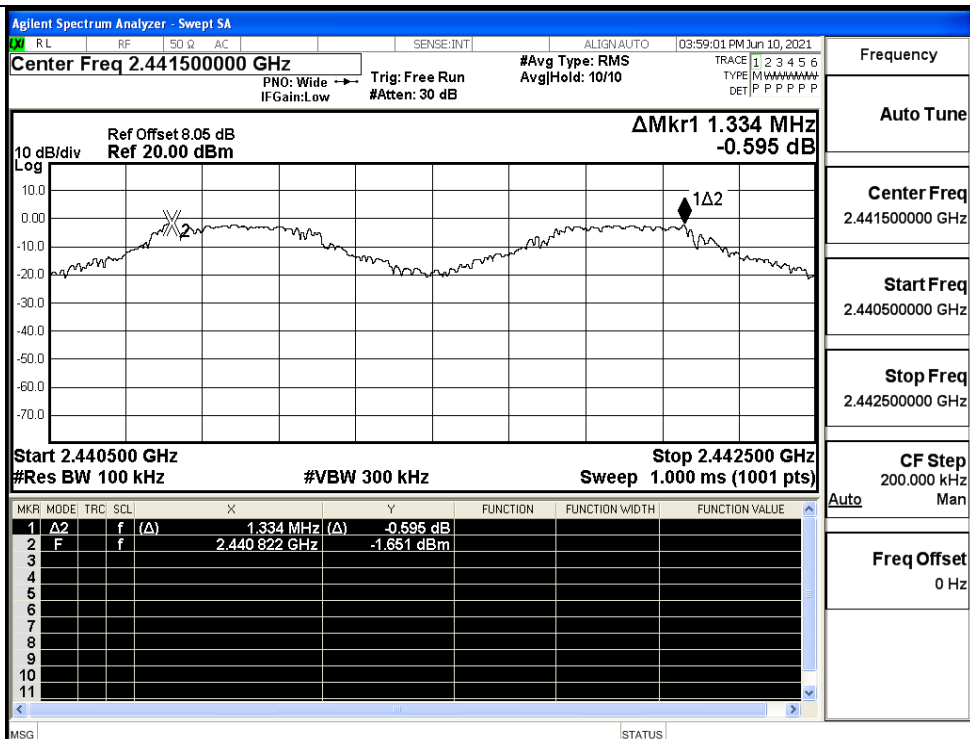
A.3 Carrier Frequency Separation

Mode	Channel.	Carrier Frequency Separation [MHz]	Limit [MHz]	Verdict
GFSK	LCH	1.111	0.683	PASS
	MCH	1.334	0.683	PASS
	HCH	1.008	0.683	PASS
$\pi/4$ DQPSK	LCH	0.996	0.855	PASS
	MCH	1.046	0.855	PASS
	HCH	1.328	0.855	PASS
8DPSK	LCH	1.006	0.868	PASS
	MCH	1.038	0.868	PASS
	HCH	1.198	0.868	PASS

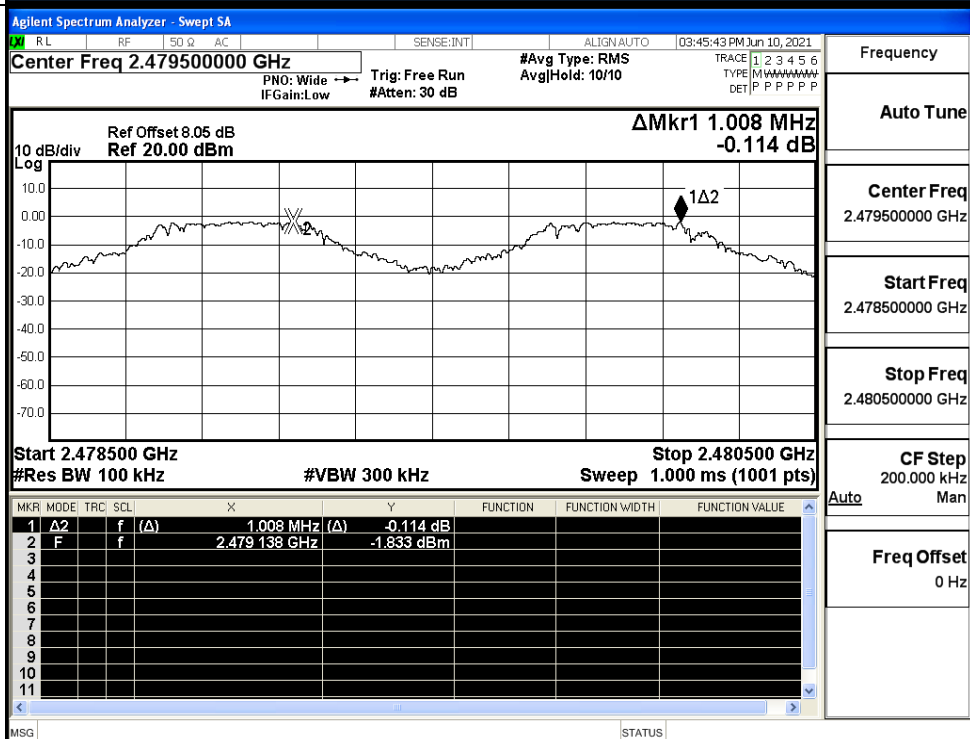
Test Graphs

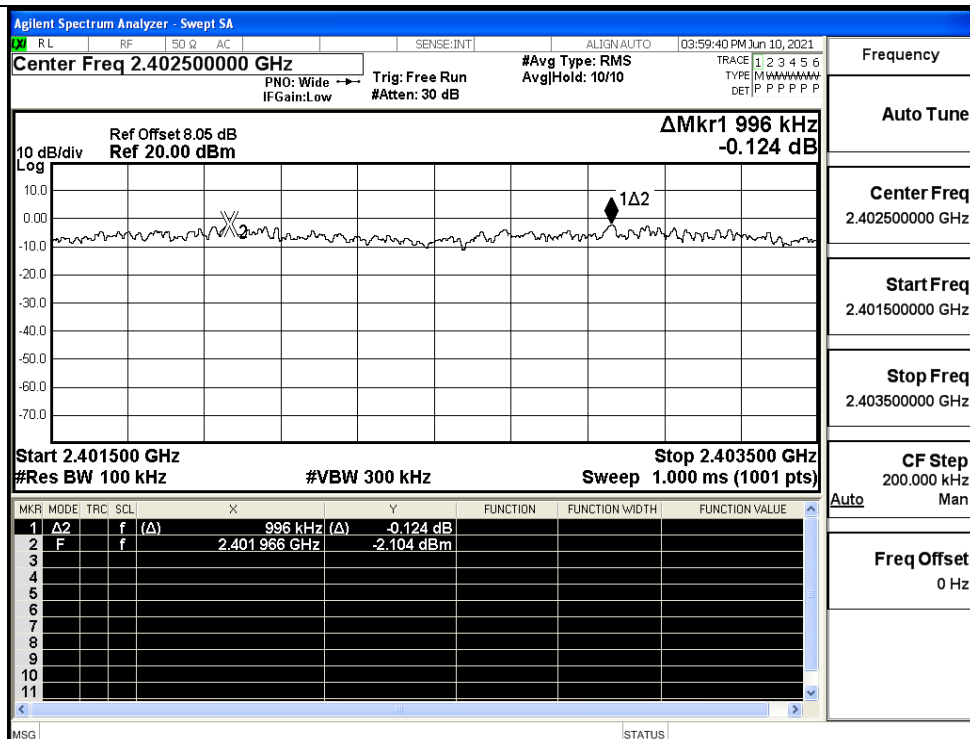
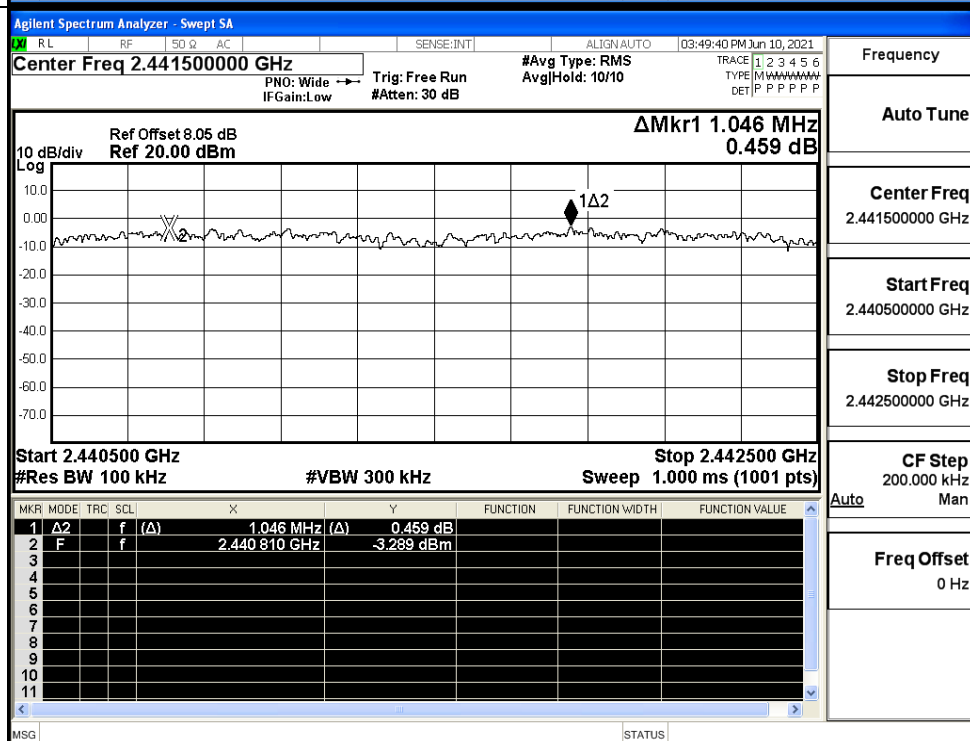


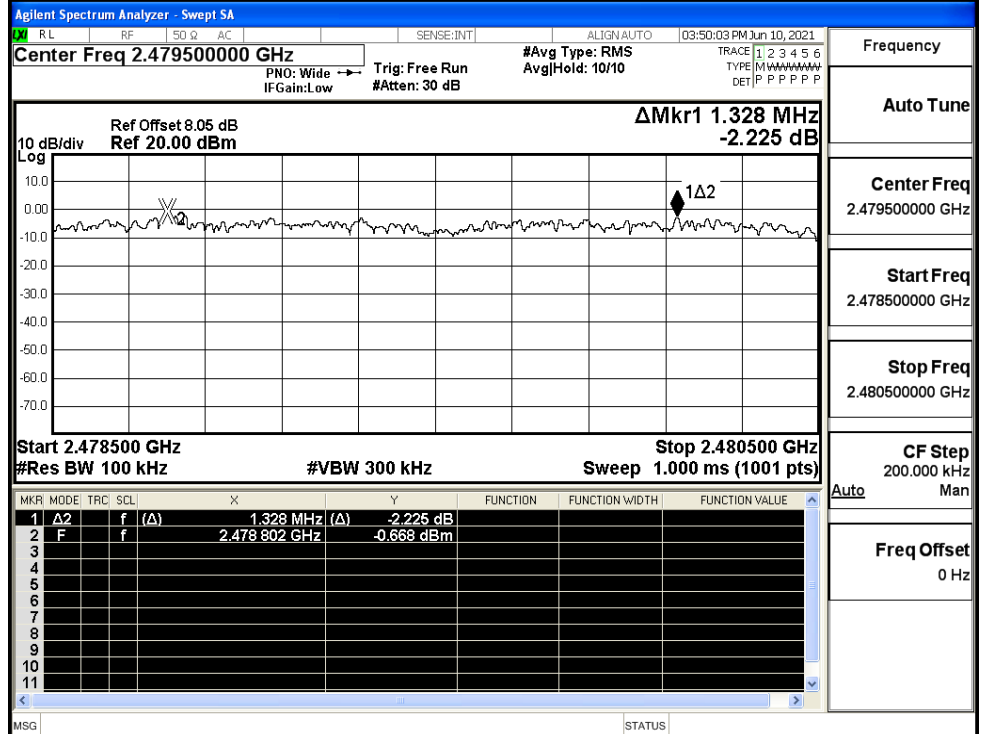
GFSK/MCH



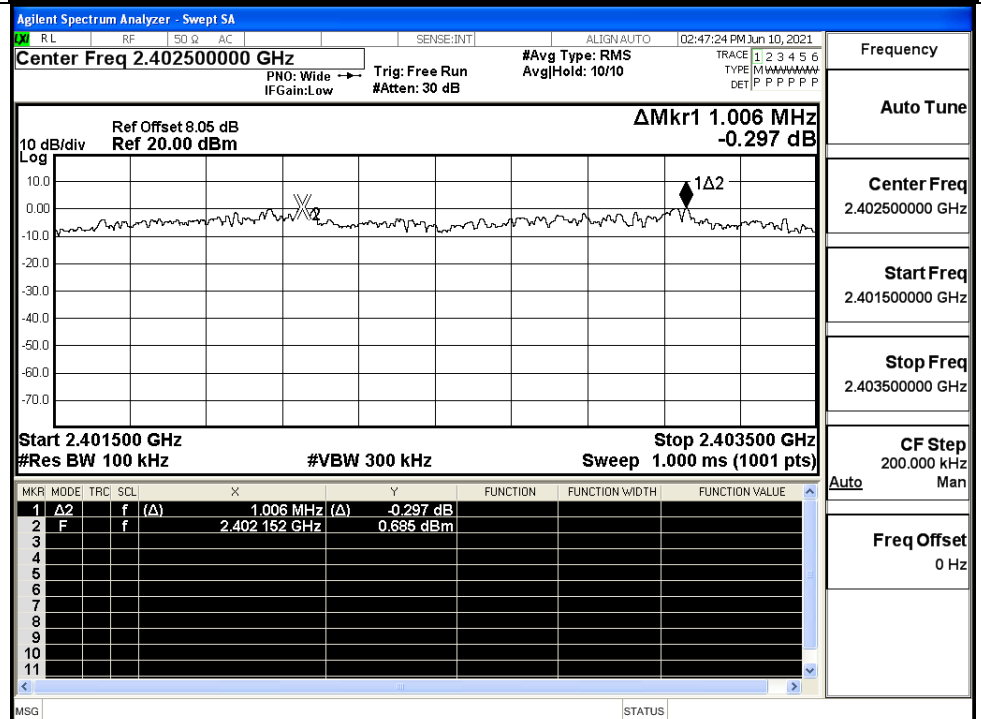
GFSK/HCH



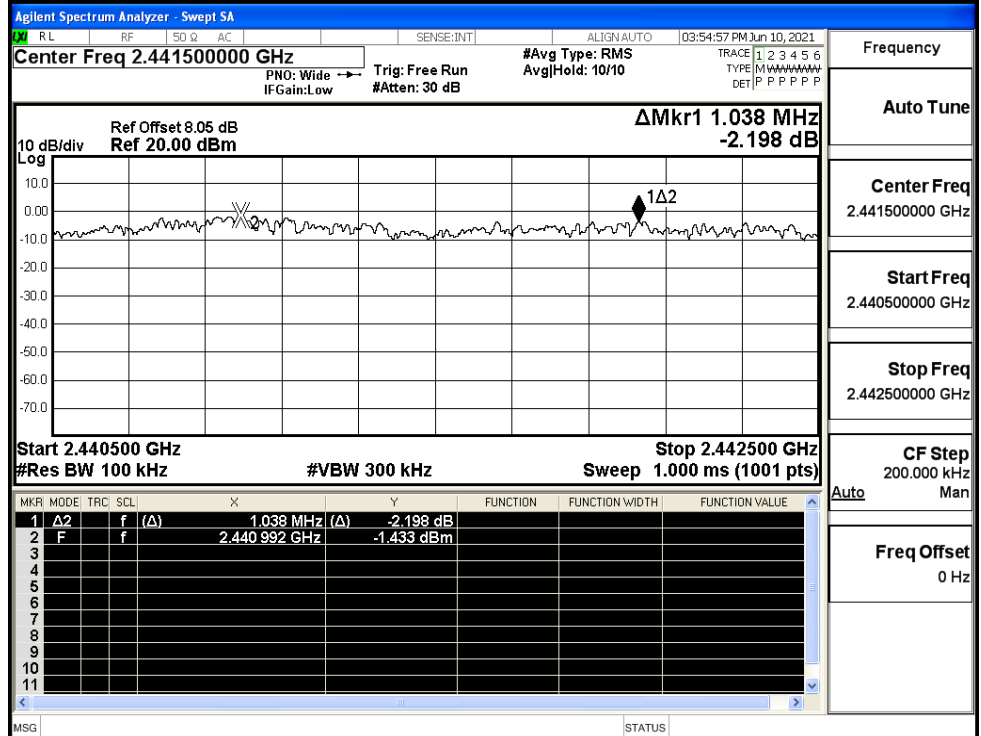
$\pi/4$ DQPSK/LCH $\pi/4$ DQPSK/MCH

$\pi/4$ DQPSK/HCH

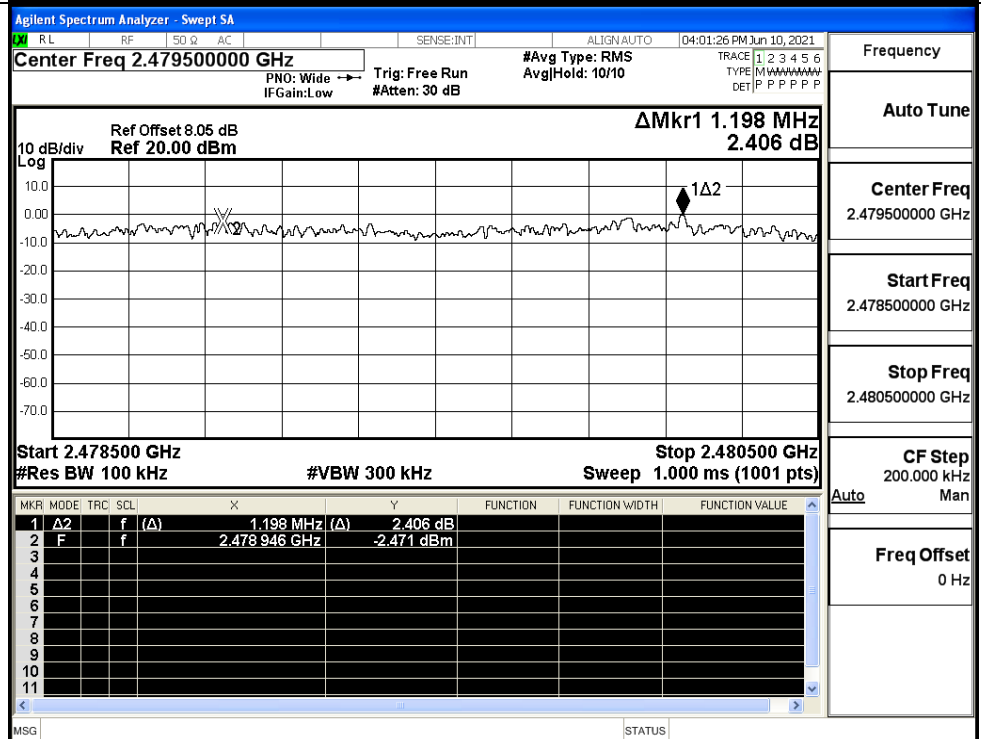
8DPSK/LCH



8DPSK/MCH



8DPSK/HCH

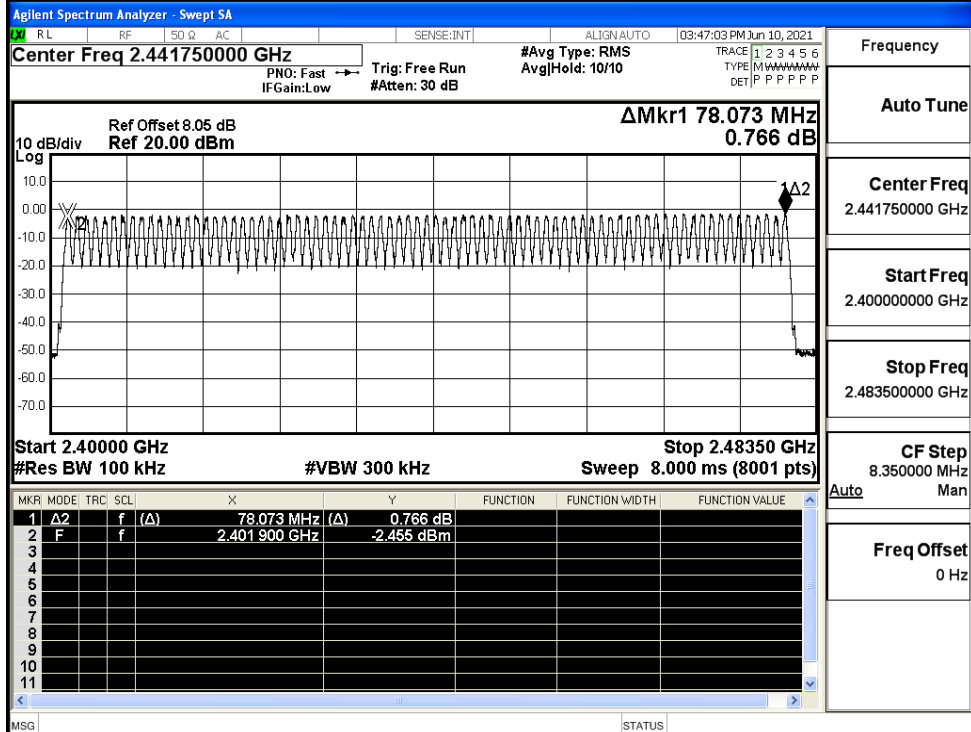


A.4 Hopping Channel Number

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

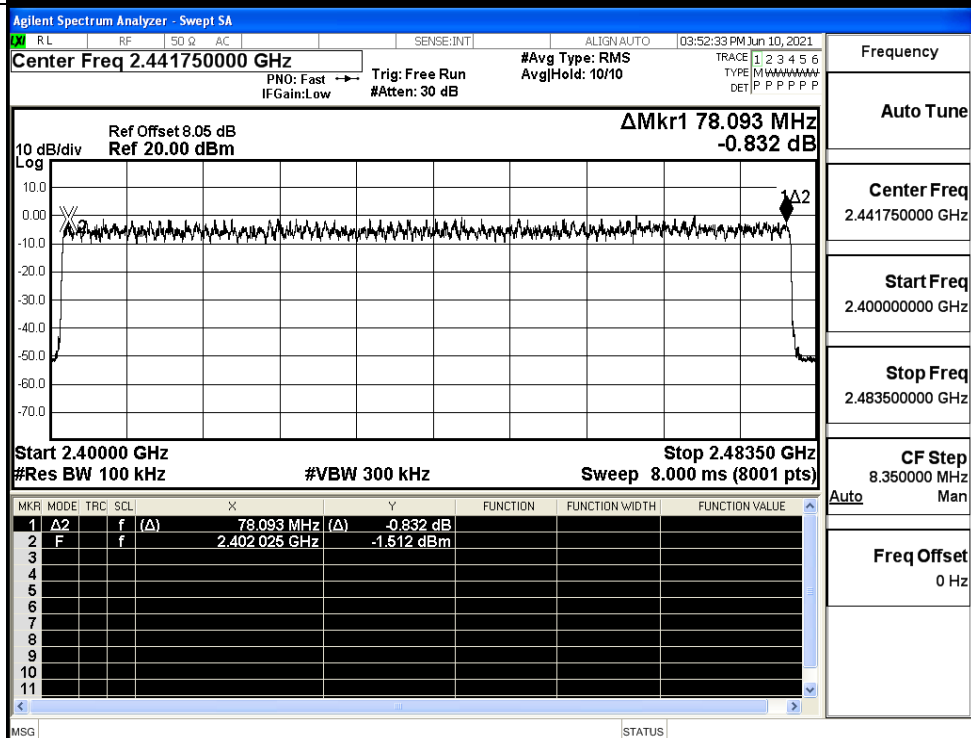
Test Graphs

GFSK/Hop



Frequency

Auto Tune

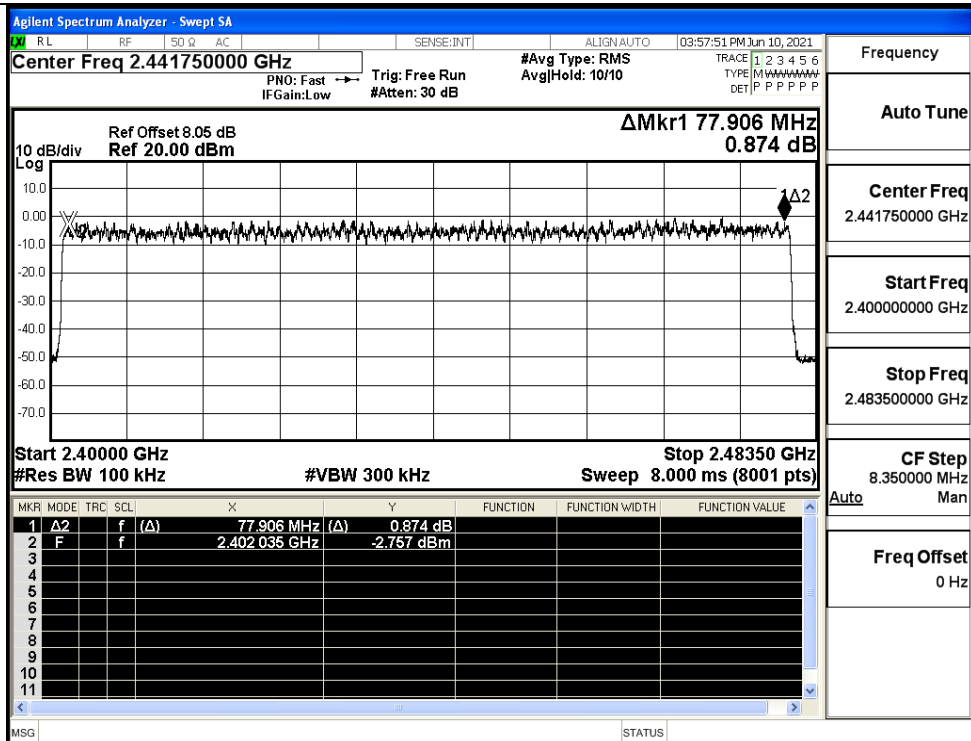
Center Freq
2.441750000 GHzStart Freq
2.400000000 GHzStop Freq
2.483500000 GHzCF Step
8.350000 MHz
Auto ManFreq Offset
0 Hz $\pi/4$ DQPSK/Hop

Frequency

Auto Tune

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

8DPSK/Hop

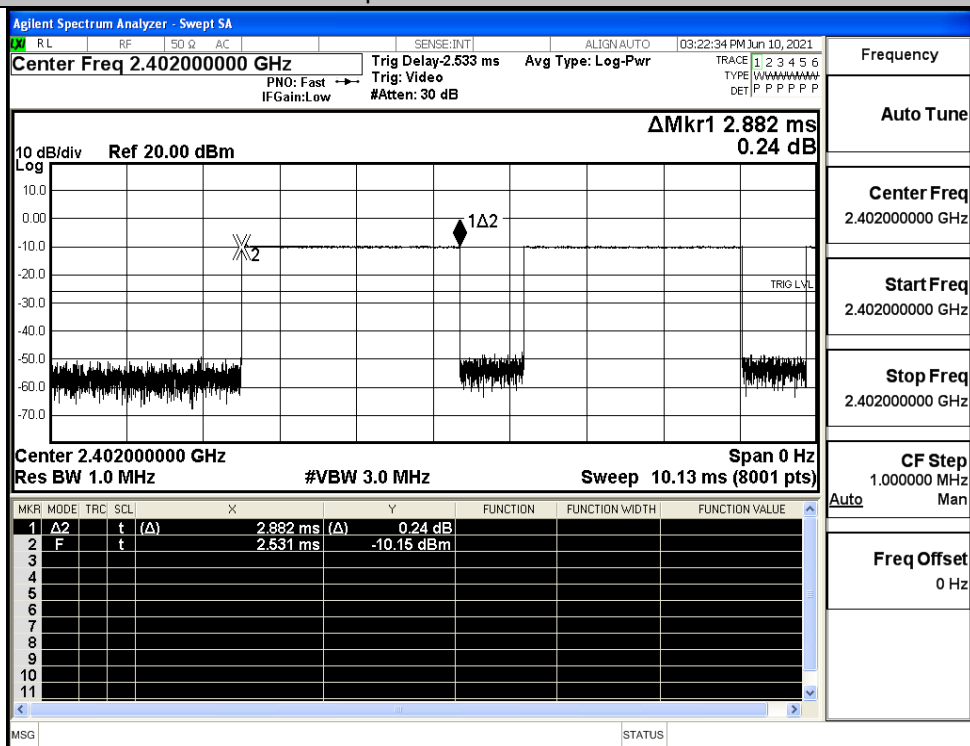


A.5 Dwell Time

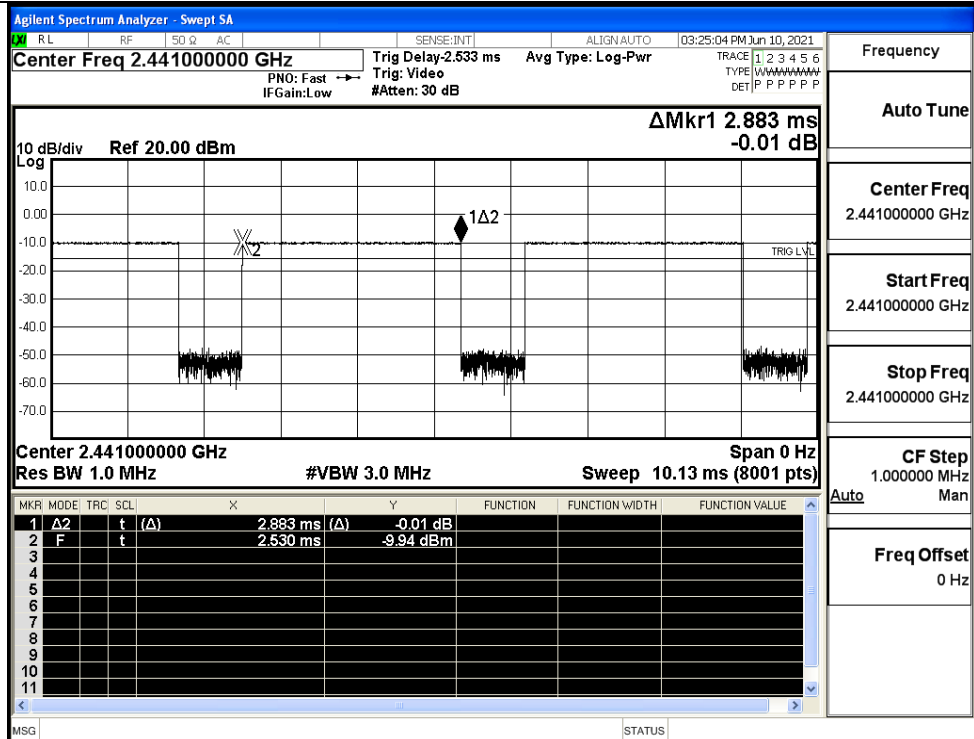
Mode	Packet	Channel	Burst Width [ms/hop/ch]	Total Hops[hop*ch]	Dwell Time[s]	Limit [s]	Verdict
GFSK	DH5	LCH	2.88	106.7	0.307	0.4	PASS
	DH5	MCH	2.88	106.7	0.307	0.4	PASS
	DH5	HCH	2.88	106.7	0.307	0.4	PASS
$\pi/4$ DQPSK	2DH5	LCH	2.88	106.7	0.015	0.4	PASS
	2DH5	MCH	2.88	106.7	0.308	0.4	PASS
	2DH5	HCH	2.88	106.7	0.015	0.4	PASS
8DPSK	3DH5	LCH	2.88	106.7	0.015	0.4	PASS
	3DH5	MCH	2.88	106.7	0.308	0.4	PASS
	3DH5	HCH	2.88	106.7	0.015	0.4	PASS

Test Graphs

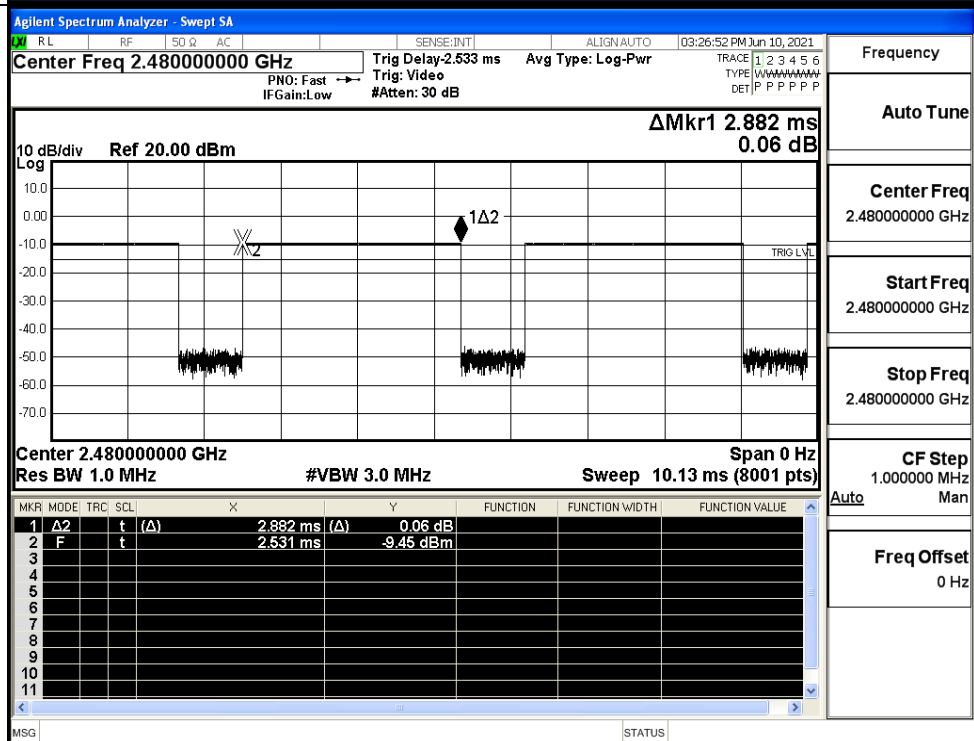
GFSK_DH5/LCH



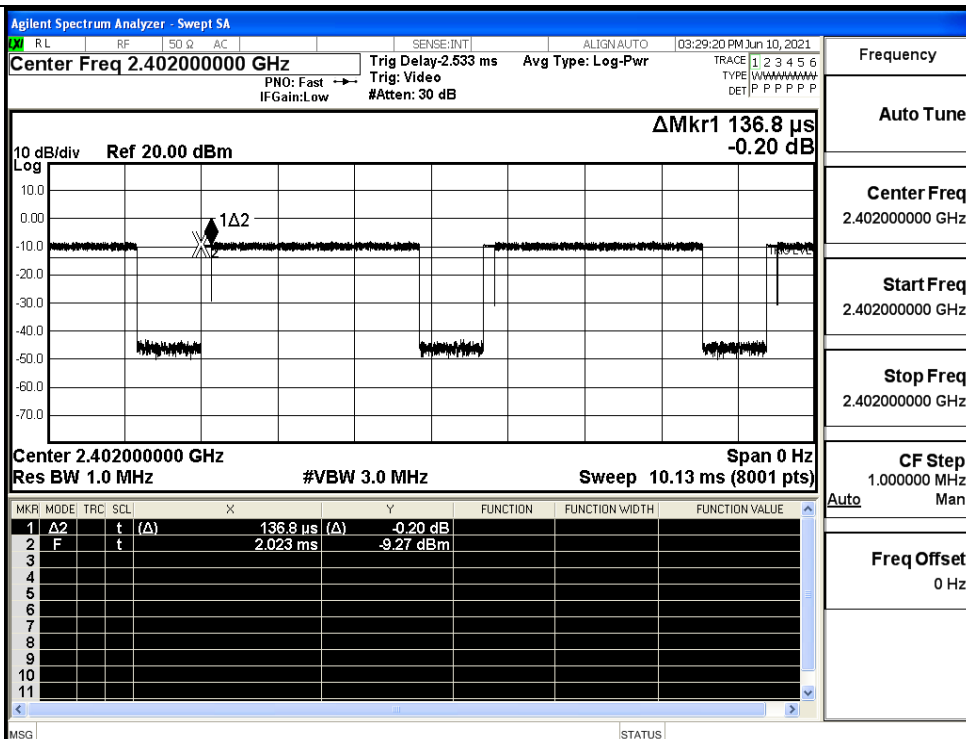
GFSK_DH5/MCH



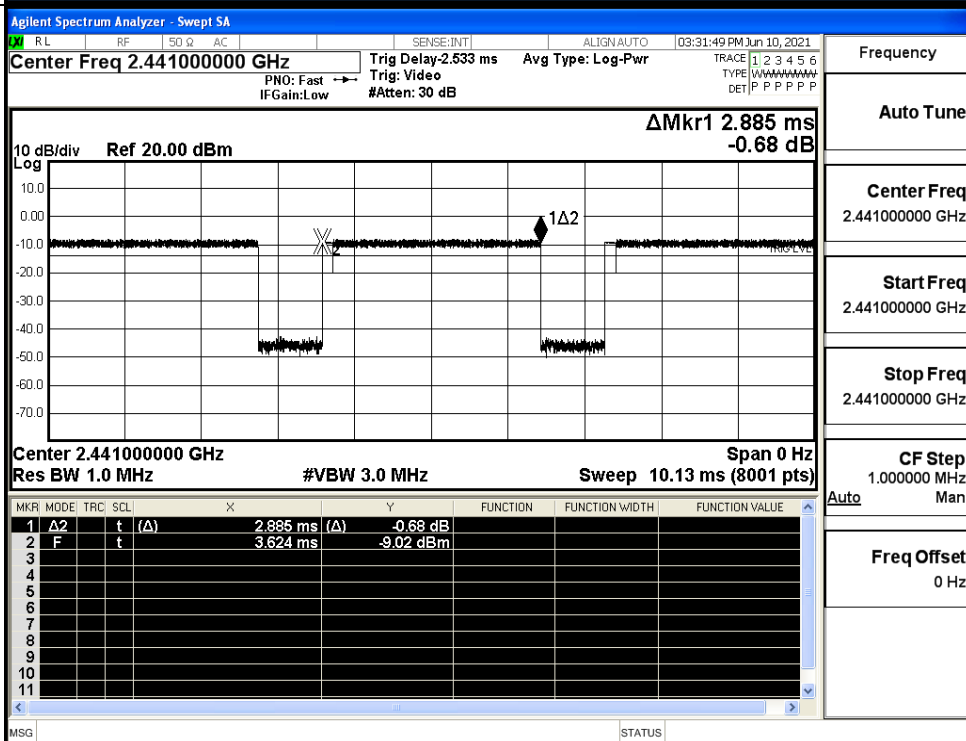
GFSK_DH5/HCH



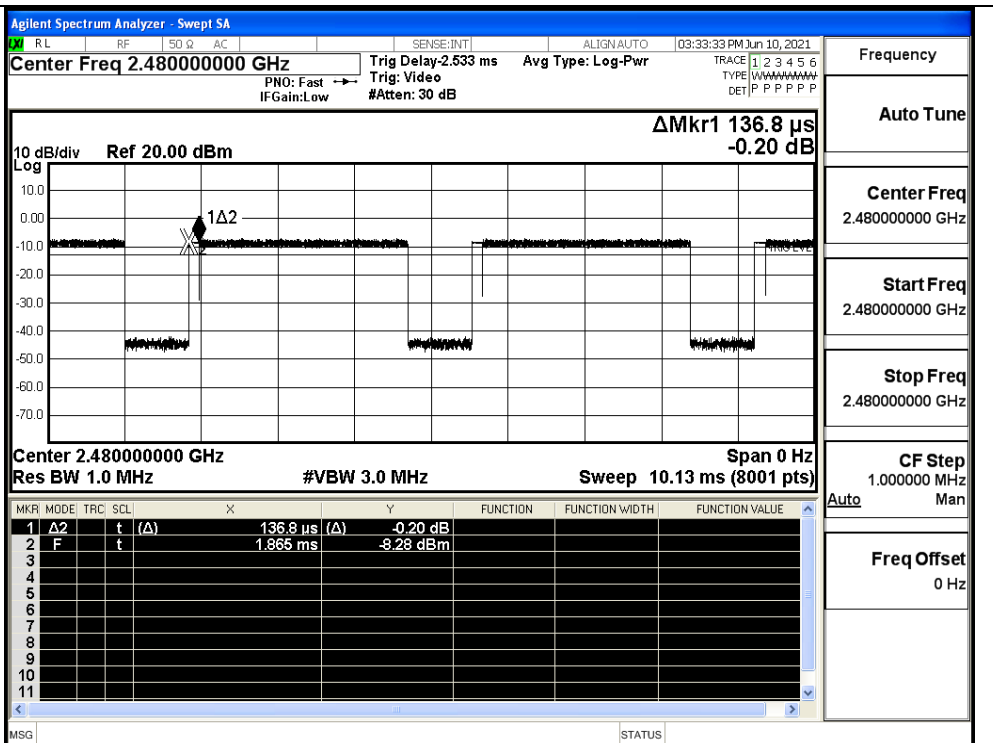
$\pi/4$ DQPSK
_2DH5/LCH



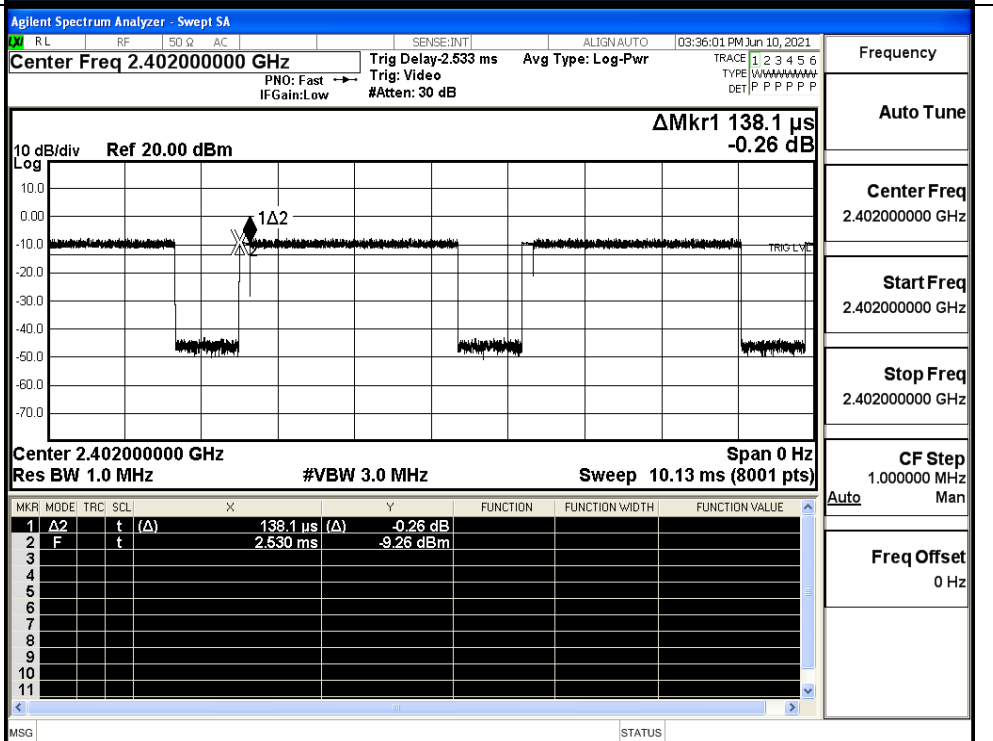
$\pi/4$ DQPSK
_2DH5/MCH



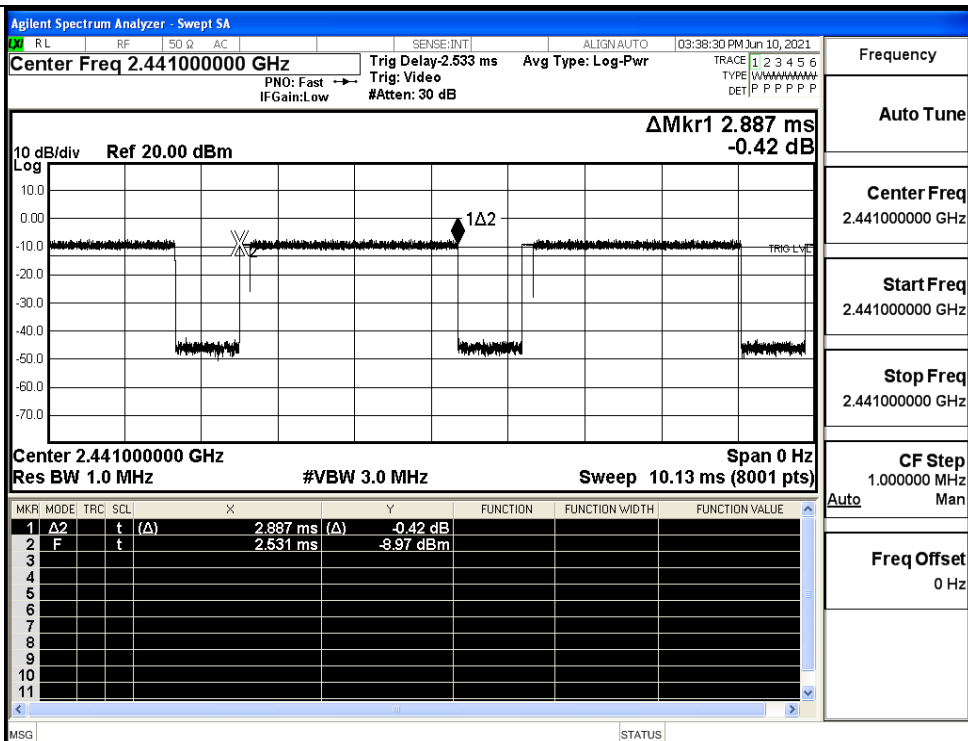
$\pi/4$ DQPSK
_2DH5/HCH



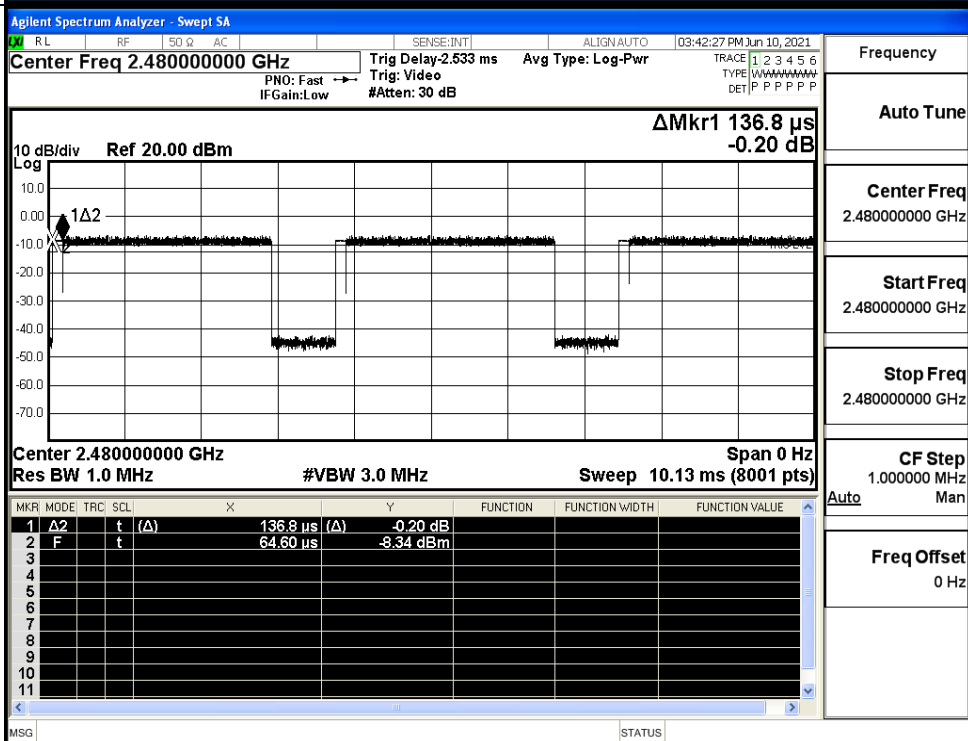
8DPSK _3DH5/LCH



8DPSK_3DH5/MCH



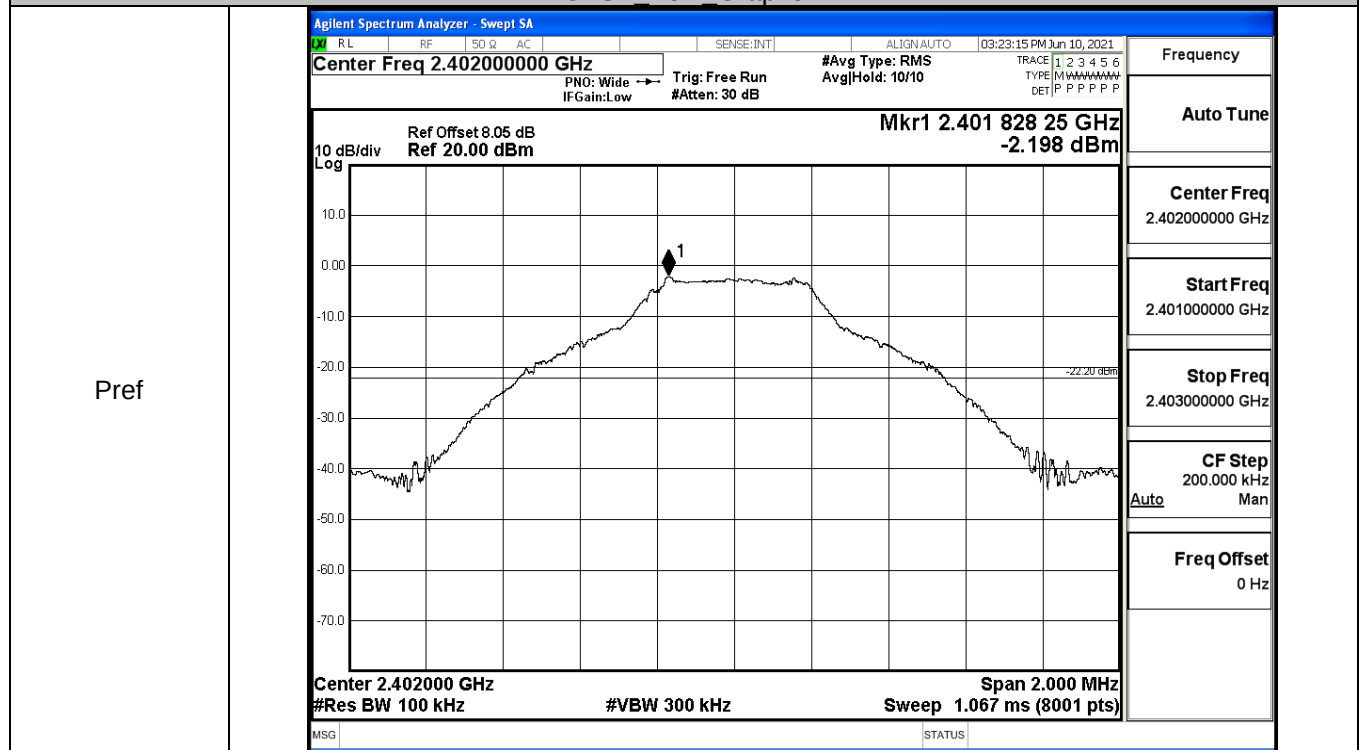
8DPSK_3DH5/HCH



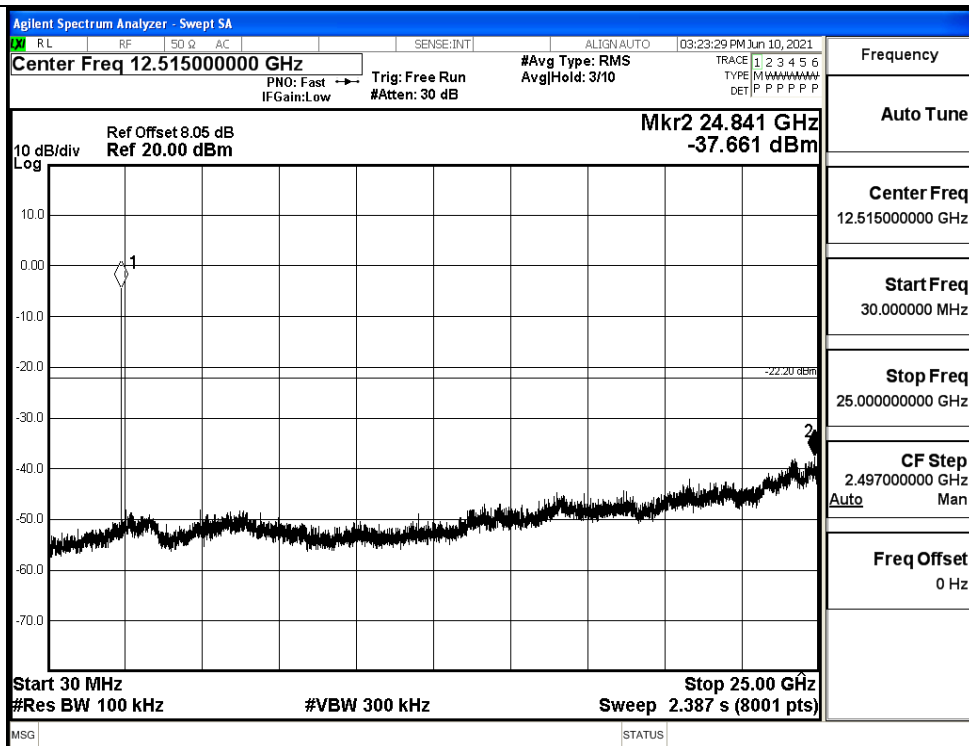
A.6 RF Conducted Spurious Emissions

Mode	Channel	Pref [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
GFSK	LCH	-2.198	-37.661	-22.198	PASS
	MCH	-2.036	-37.920	-22.036	PASS
	HCH	-1.537	-37.325	-21.537	PASS
$\pi/4$ DQPSK	LCH	-1.372	-38.024	-21.372	PASS
	MCH	-1.106	-37.555	-21.106	PASS
	HCH	-0.358	-35.532	-20.358	PASS
8DPSK	LCH	-1.324	-36.898	-21.324	PASS
	MCH	-1.086	-37.613	-21.086	PASS
	HCH	-0.414	-37.326	-20.414	PASS

GFSK LCH Graphs

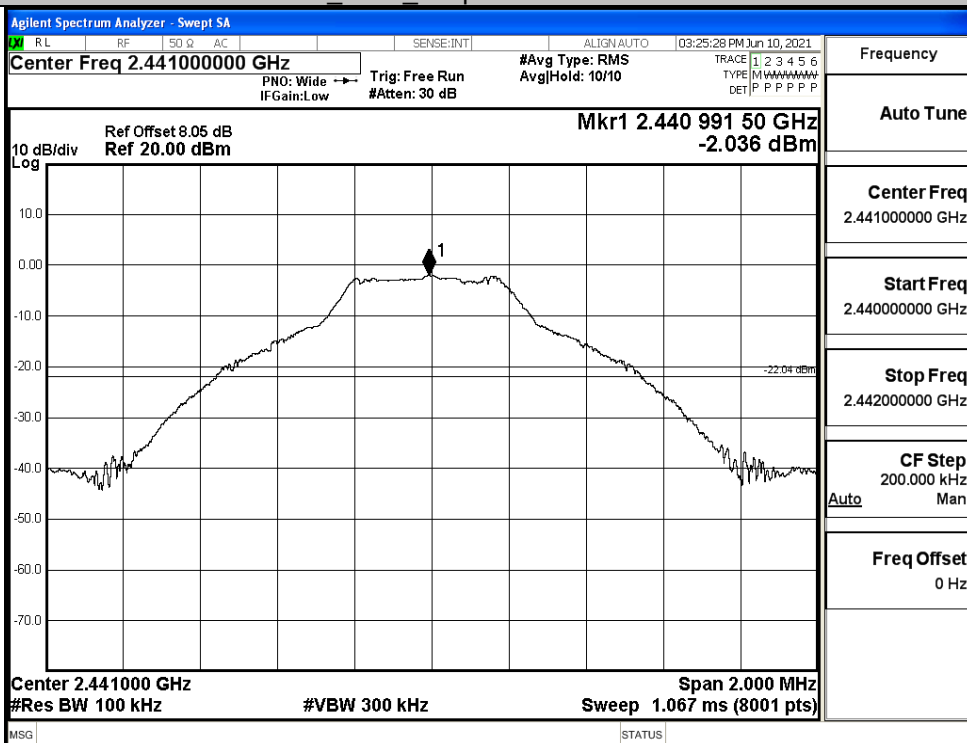


Puw

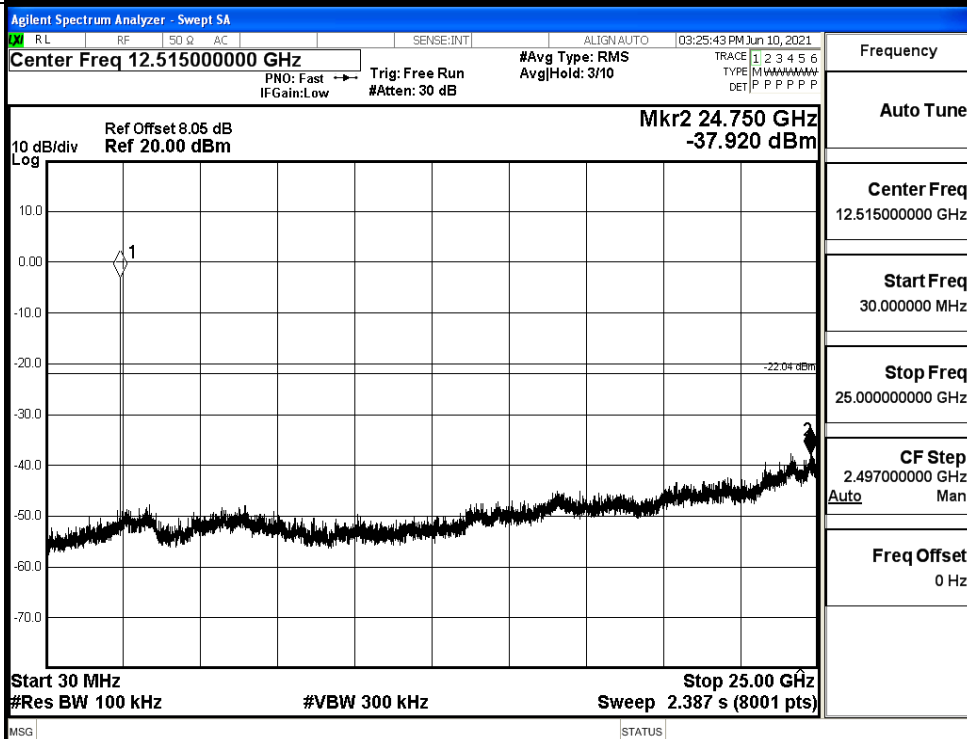


GFSK MCH_Graphs

Pref

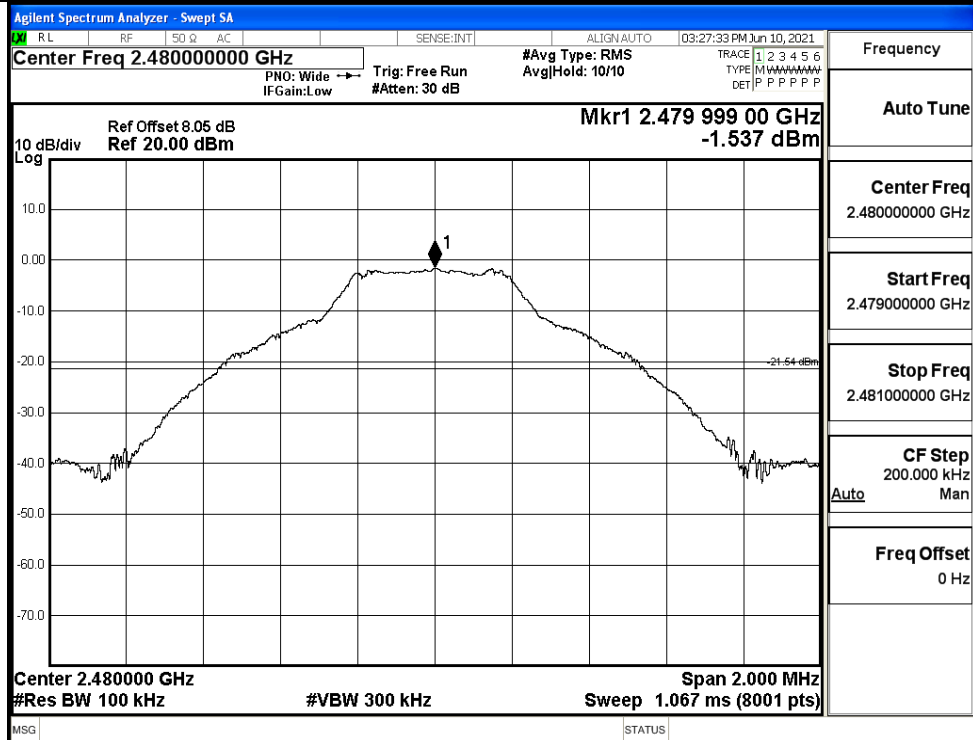


Puw

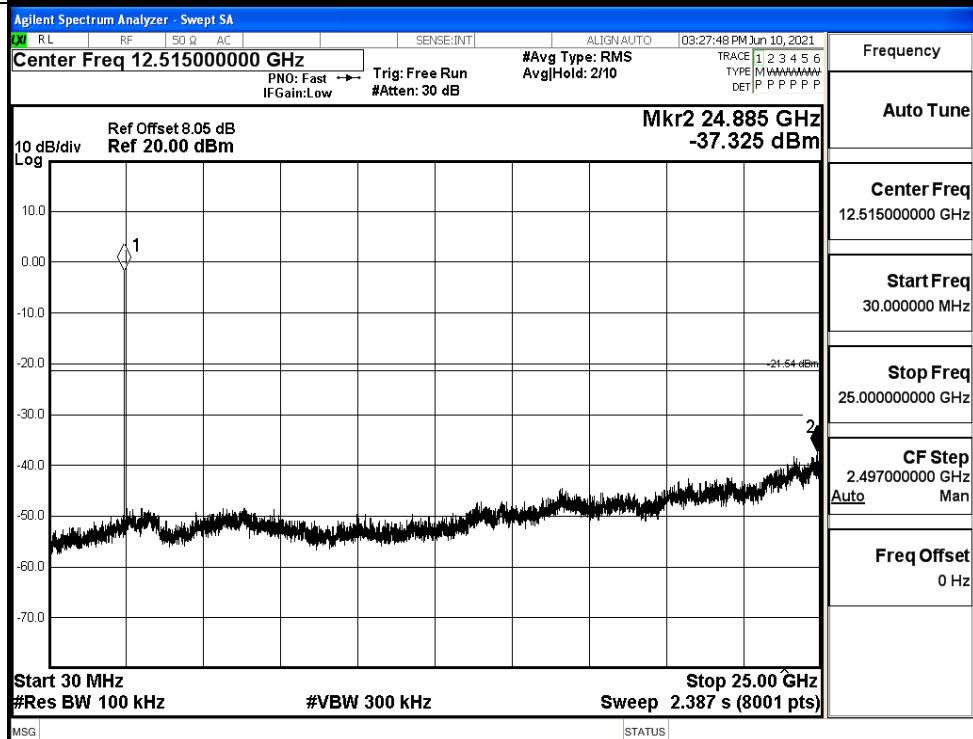


GFSK HCH Graphs

Pref

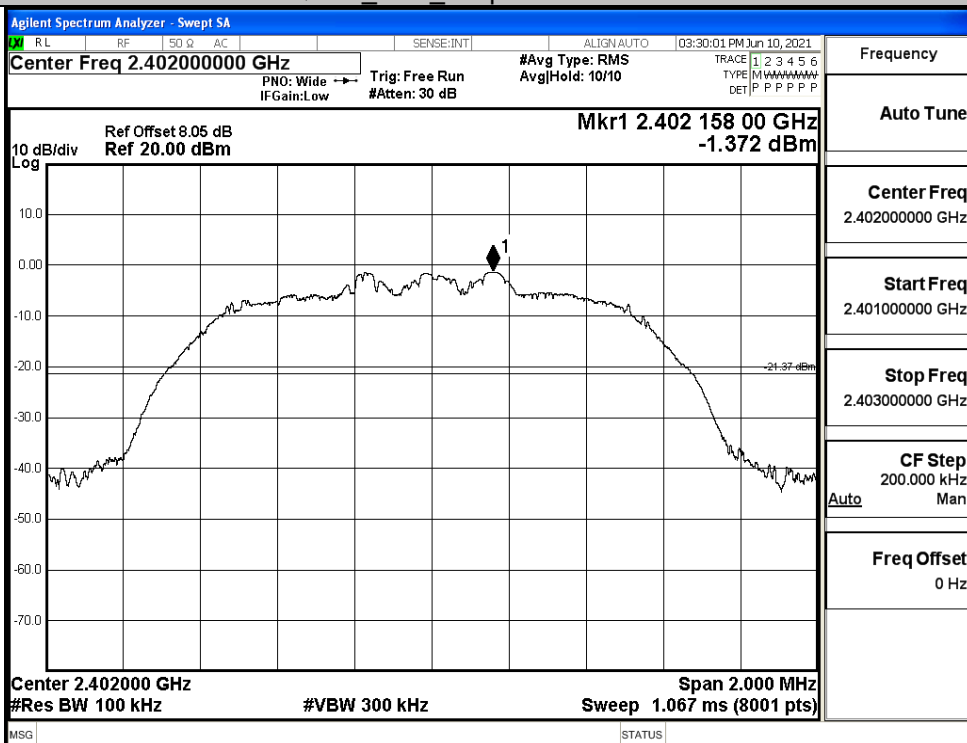


Puw

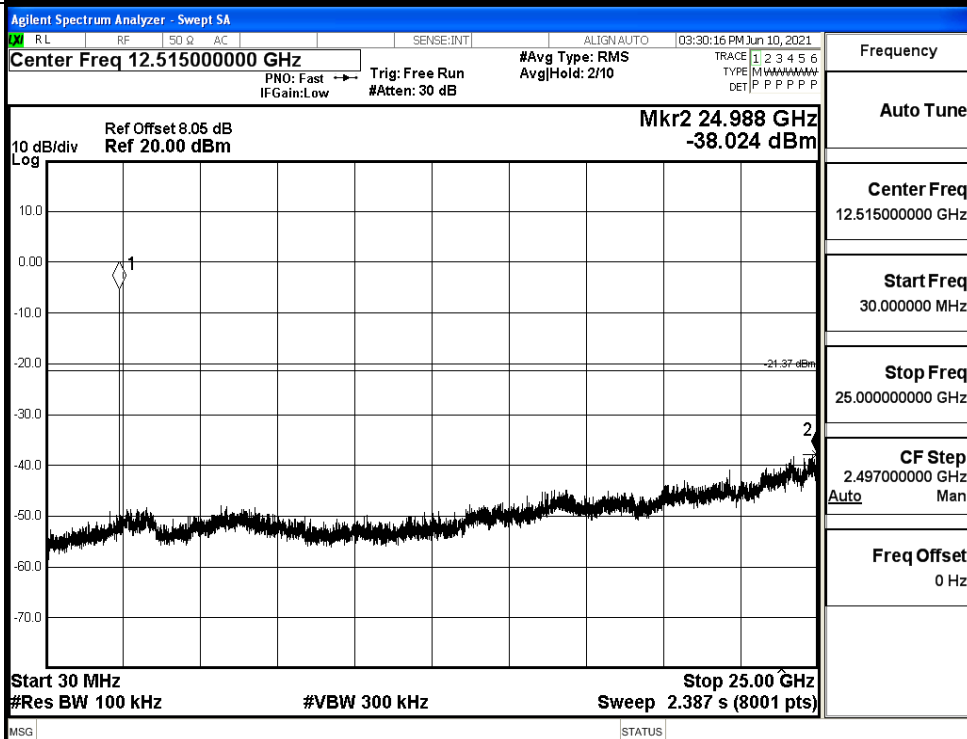


$\pi/4$ DQPSK LCH_Graphs

Pref

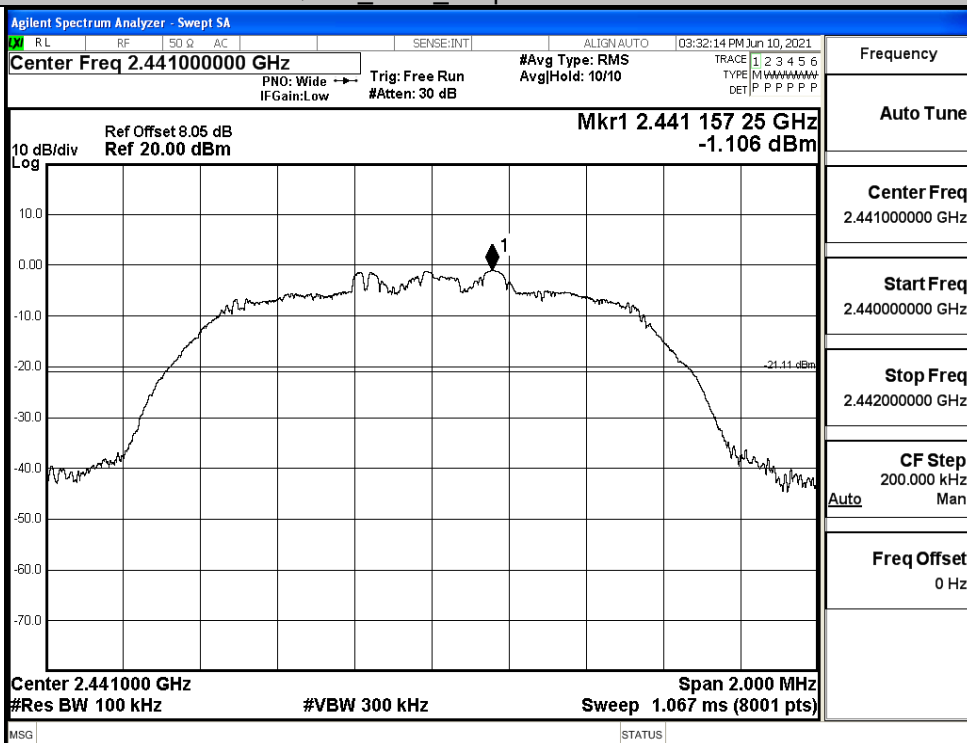


Puw

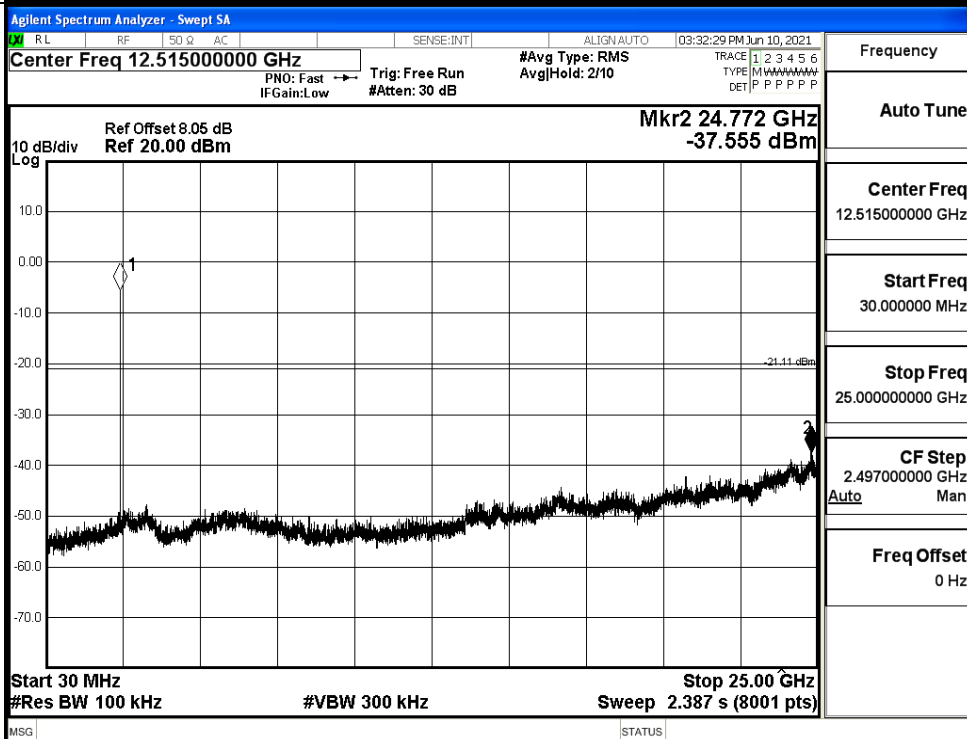


π /4DQPSK_MCH_Graphs

Pref

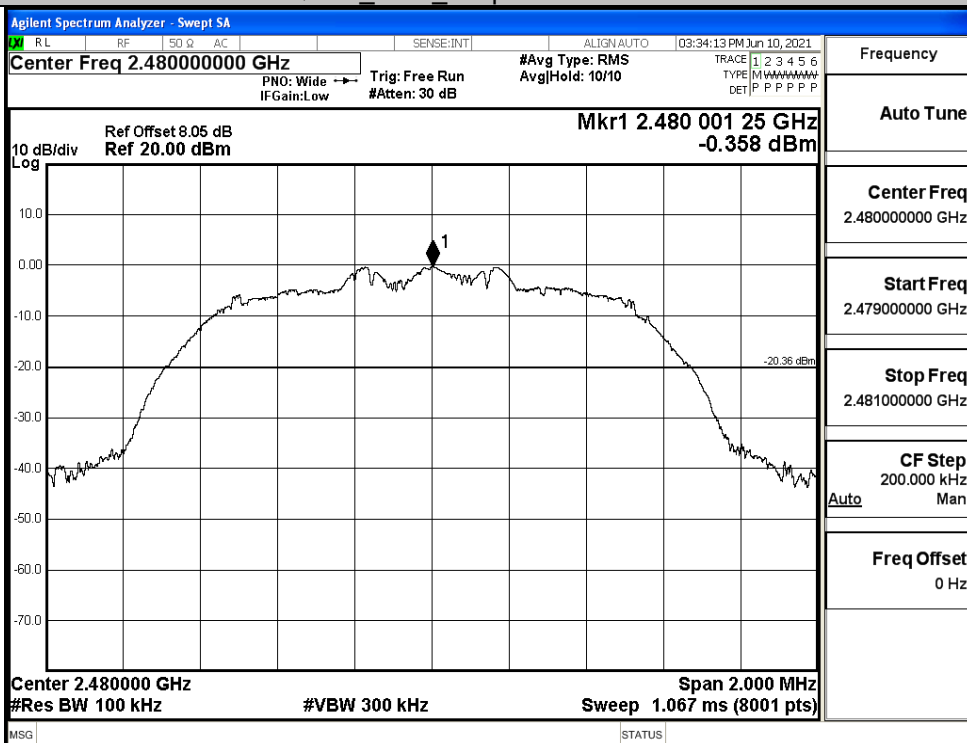


Puw

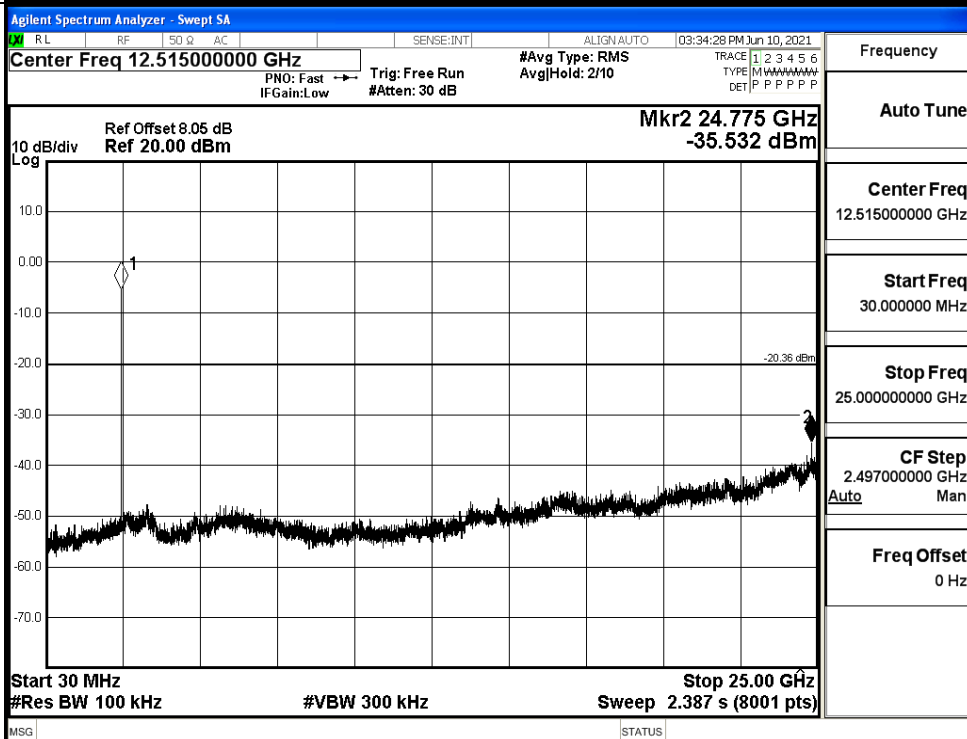


$\pi/4$ DQPSK_HCH_Graphs

Pref

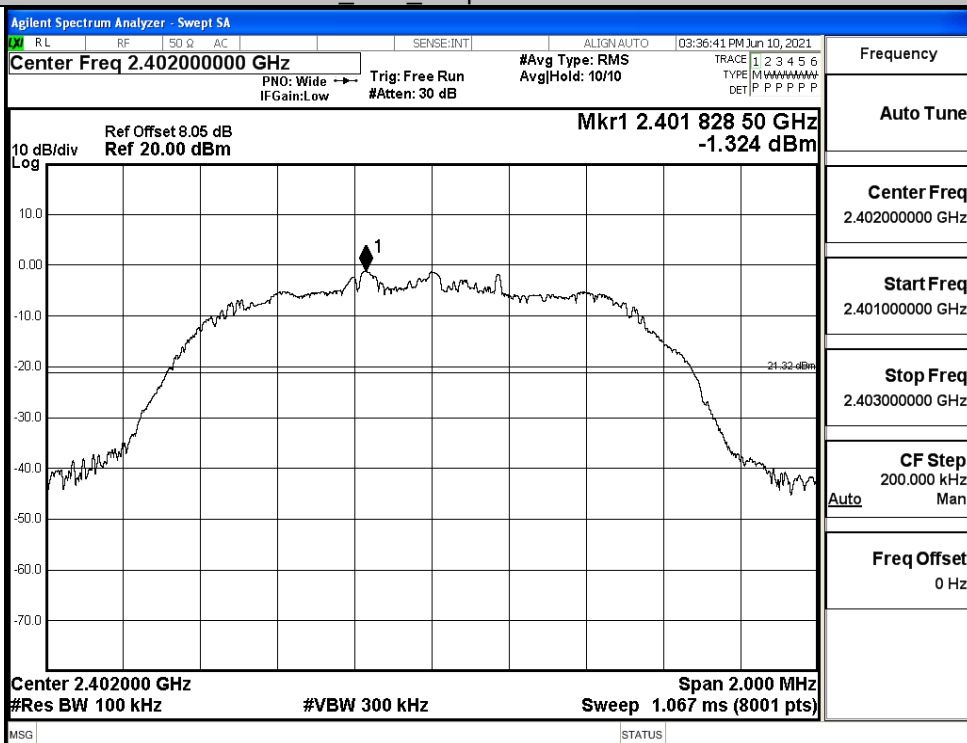


Puw

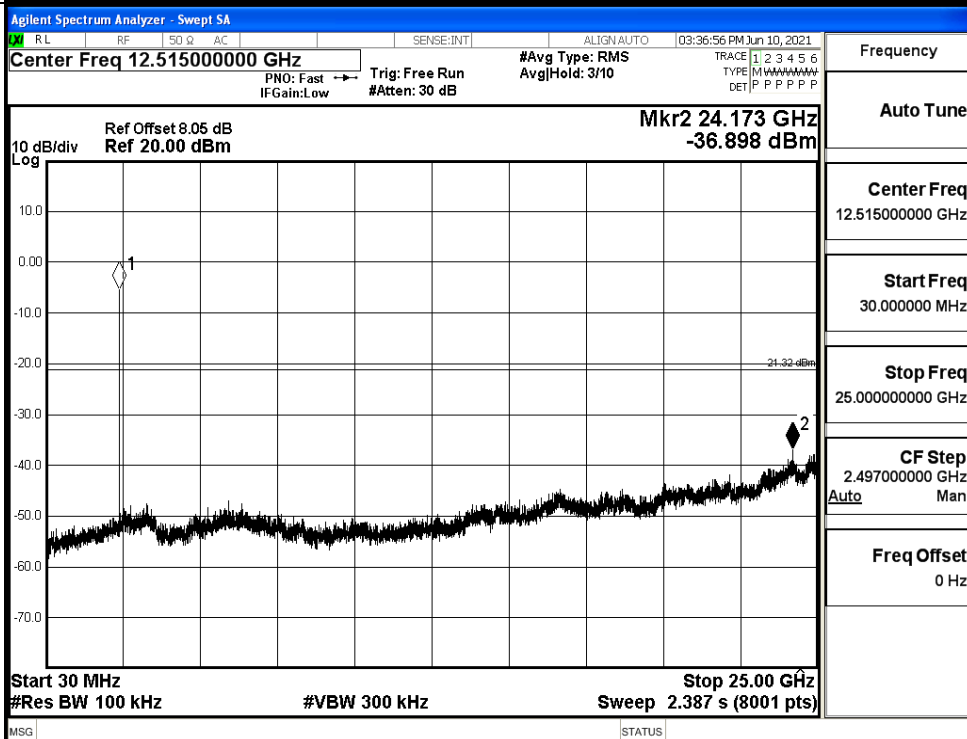


8DPSK_LCH_Graphs

Pref

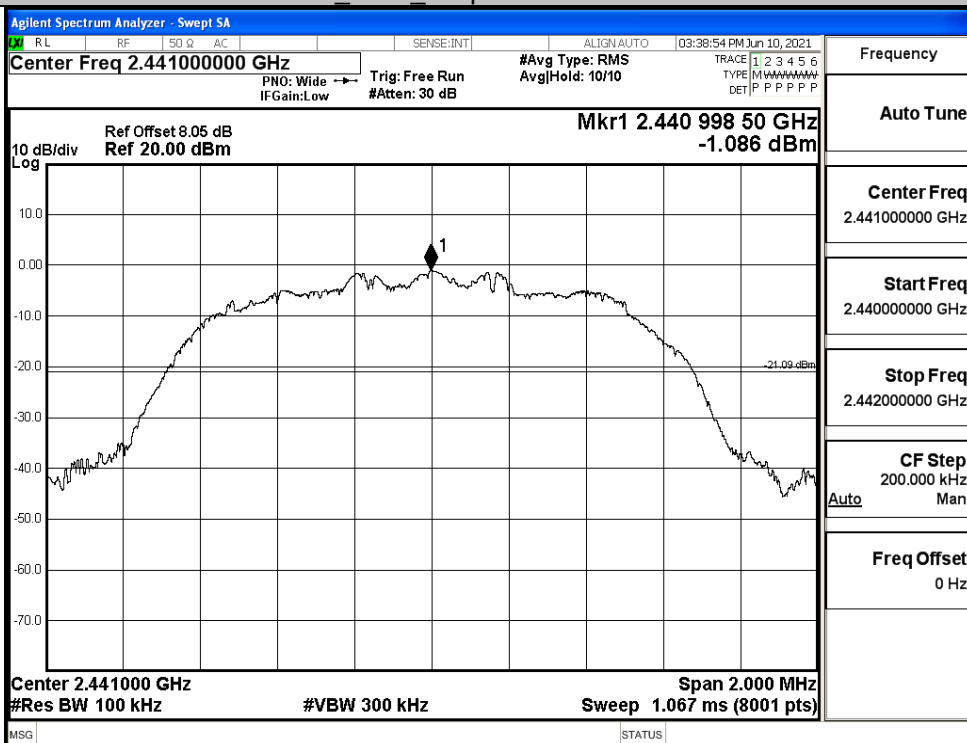


Puw

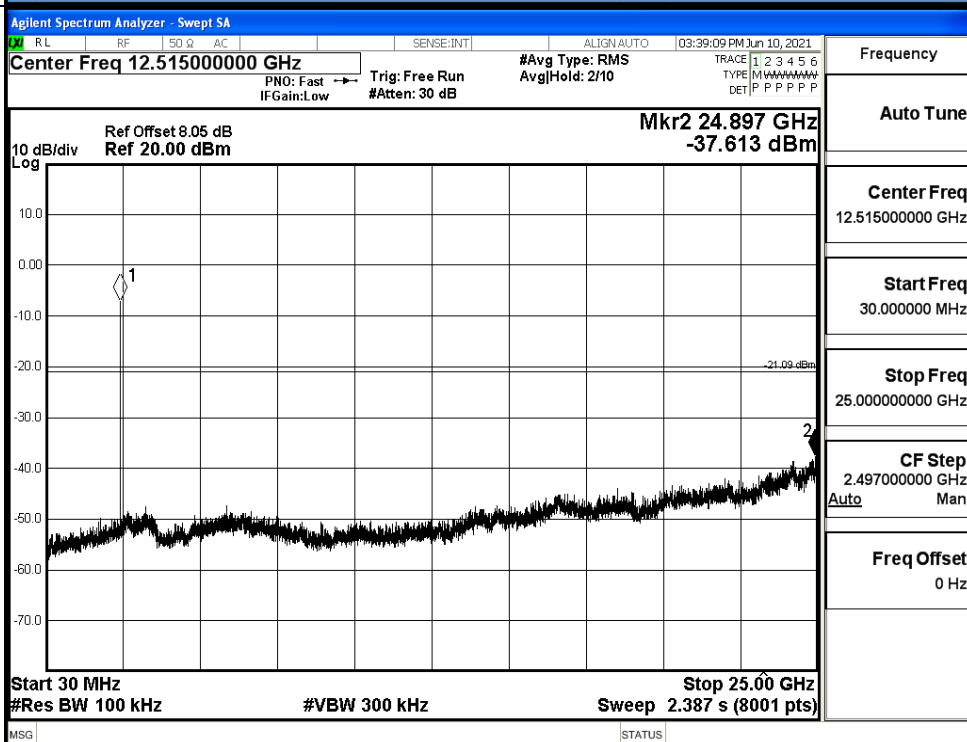


8DPSK MCH_Graphs

Pref

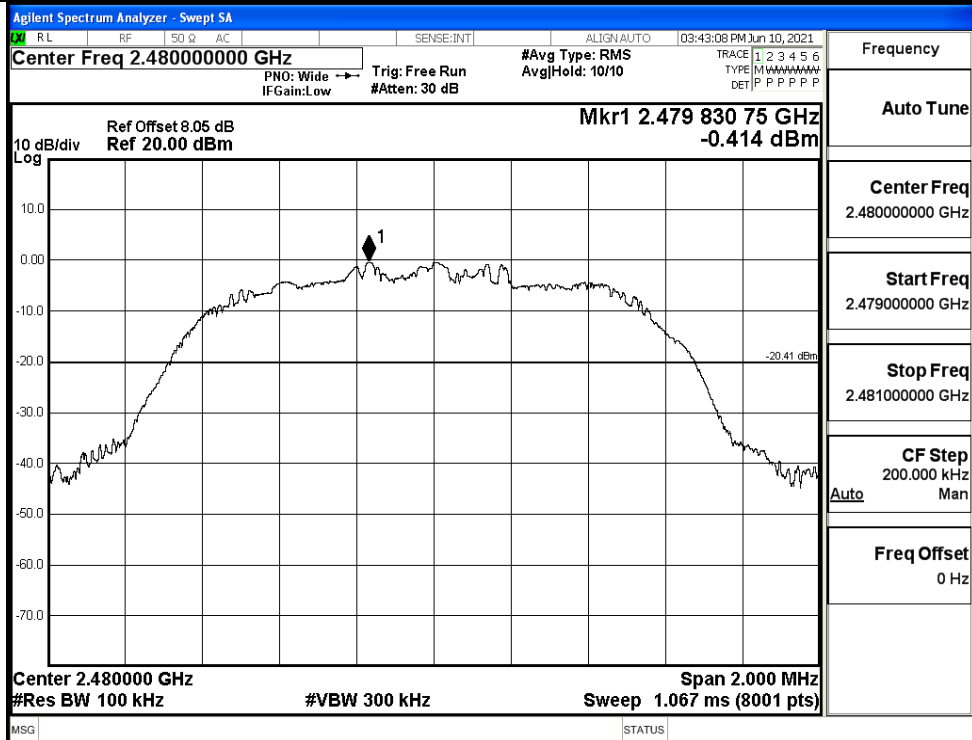


Puw

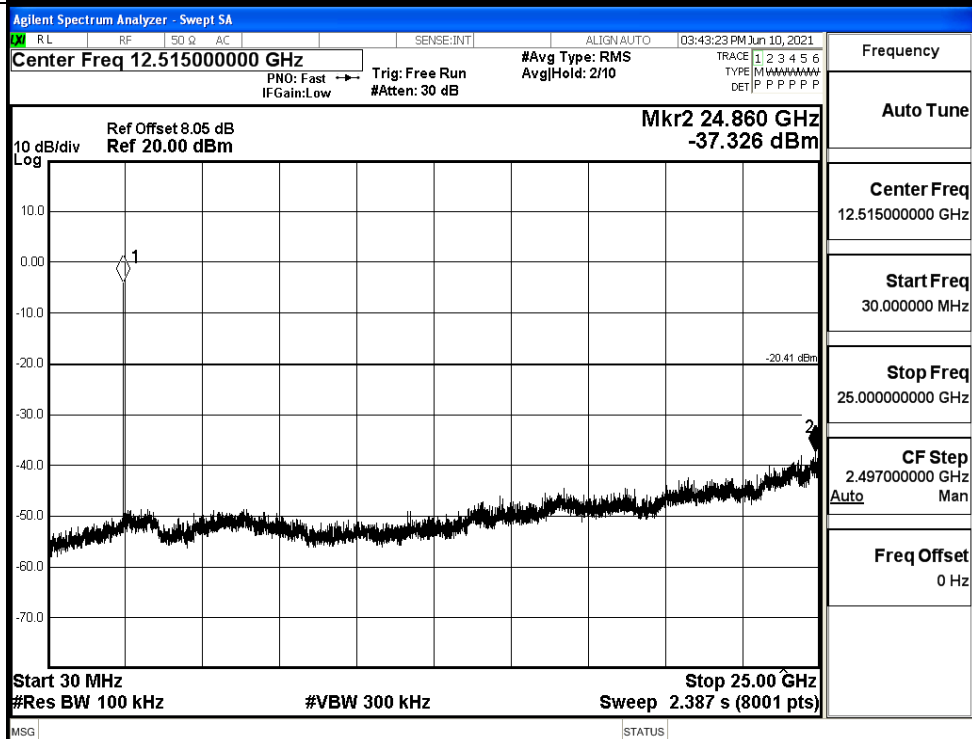


8DPSK_HCH_Graphs

Pref



Puw

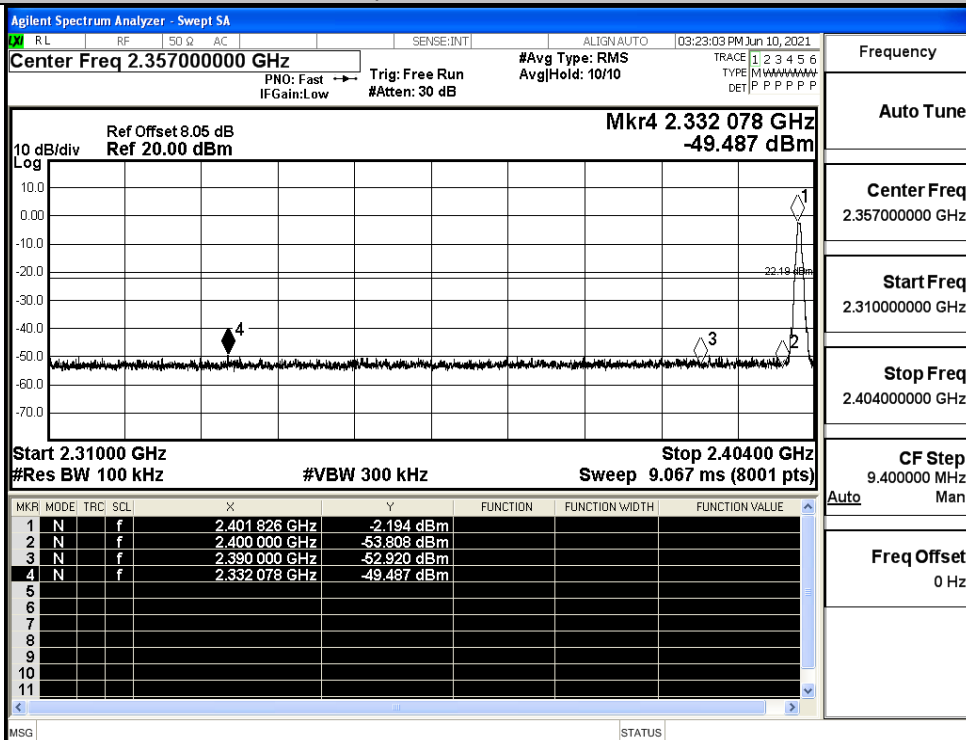


A.7 Band-edge for RF Conducted Emissions

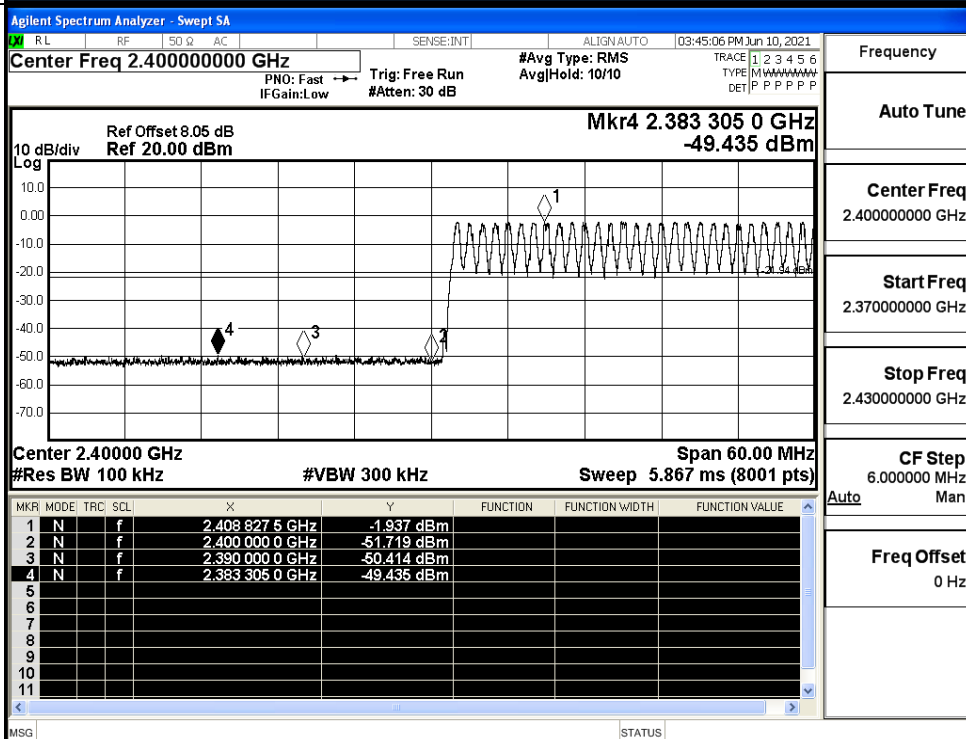
Mode	Channel	Carrier Frequency [MHz]	Carrier Power [dBm]	Frequency Hopping	Max Spurious Level [dBm]	Limit [dBm]	Verdict
GFSK	LCH	2402	-2.194	Off	-49.487	-22.19	PASS
			-1.937	On	-49.435	-21.94	PASS
	HCH	2480	-1.499	Off	-49.051	-21.5	PASS
			-1.409	On	-48.391	-21.41	PASS
$\pi/4$ DQPSK	LCH	2402	-1.405	Off	-49.869	-21.41	PASS
			-0.837	On	-48.499	-20.84	PASS
	HCH	2480	-0.194	Off	-49.128	-20.19	PASS
			-0.096	On	-48.417	-20.1	PASS
8DPSK	LCH	2402	-1.369	Off	-48.990	-21.37	PASS
			-0.861	On	-49.008	-20.86	PASS
	HCH	2480	-0.357	Off	-48.716	-20.36	PASS
			0.026	On	-48.653	-19.97	PASS

Test Graphs

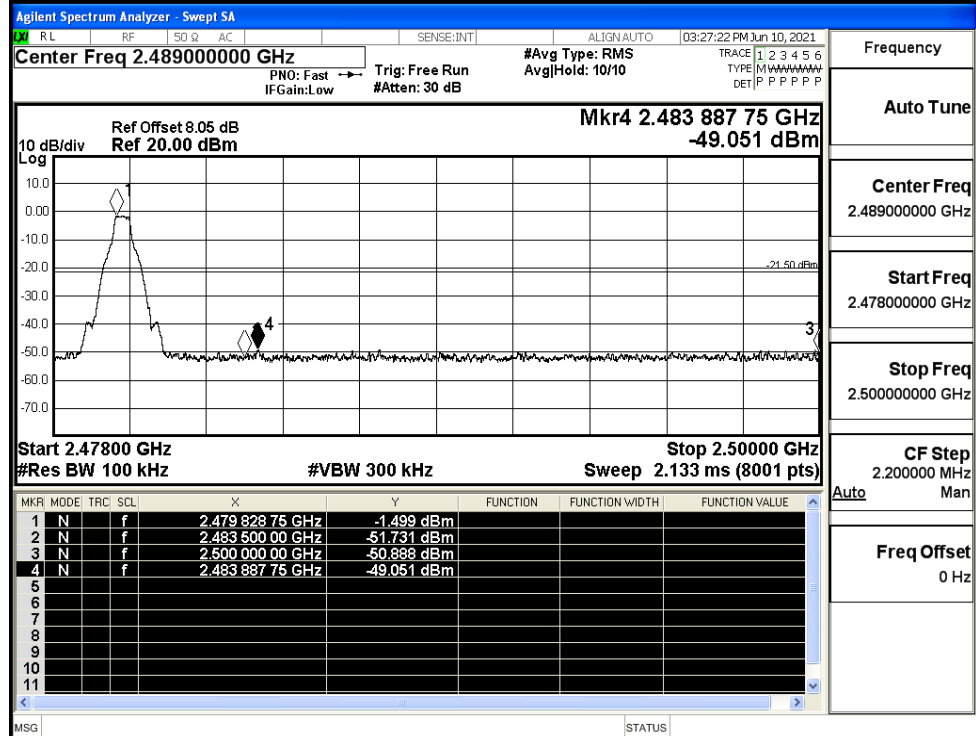
GFSK/LCH/No Hop



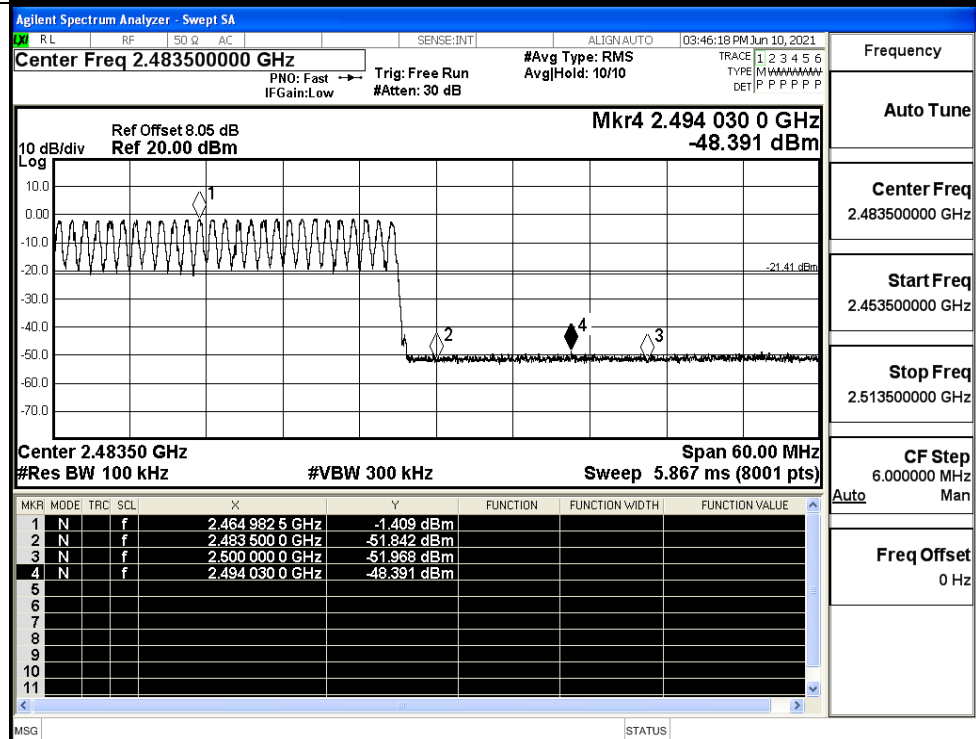
GFSK/LCH/Hop



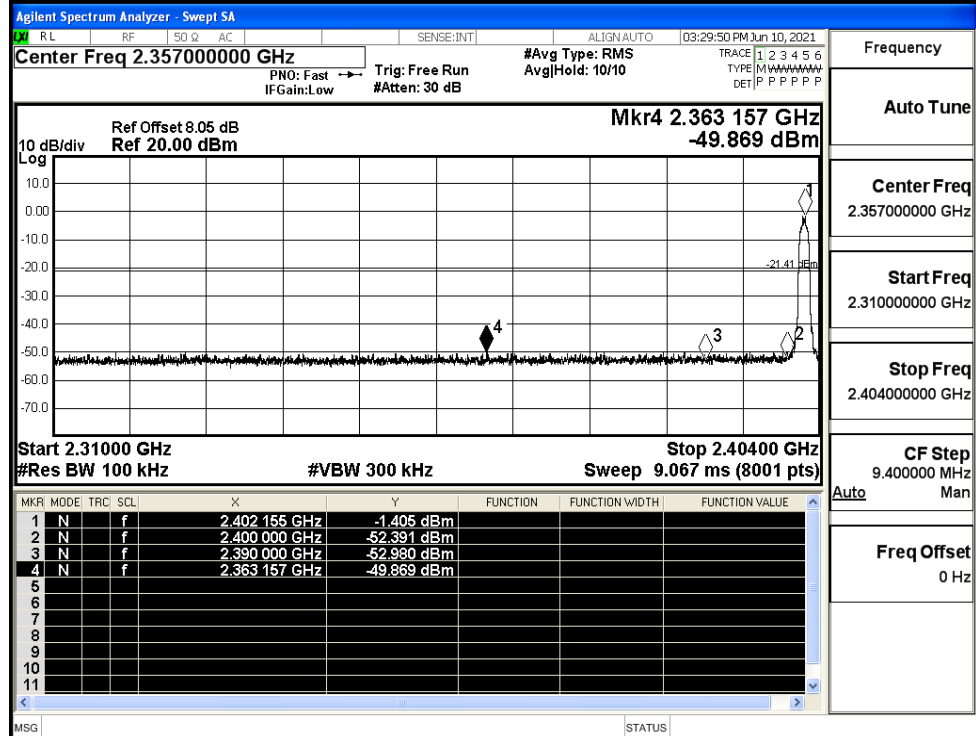
GFSK/HCH/No Hop



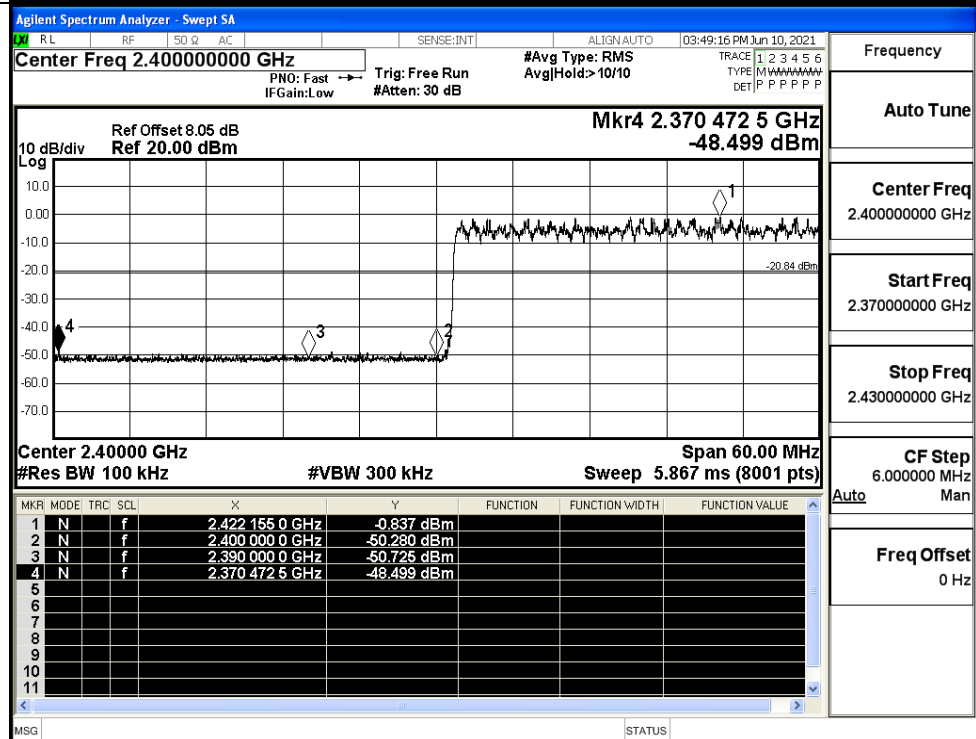
GFSK/HCH/Hop



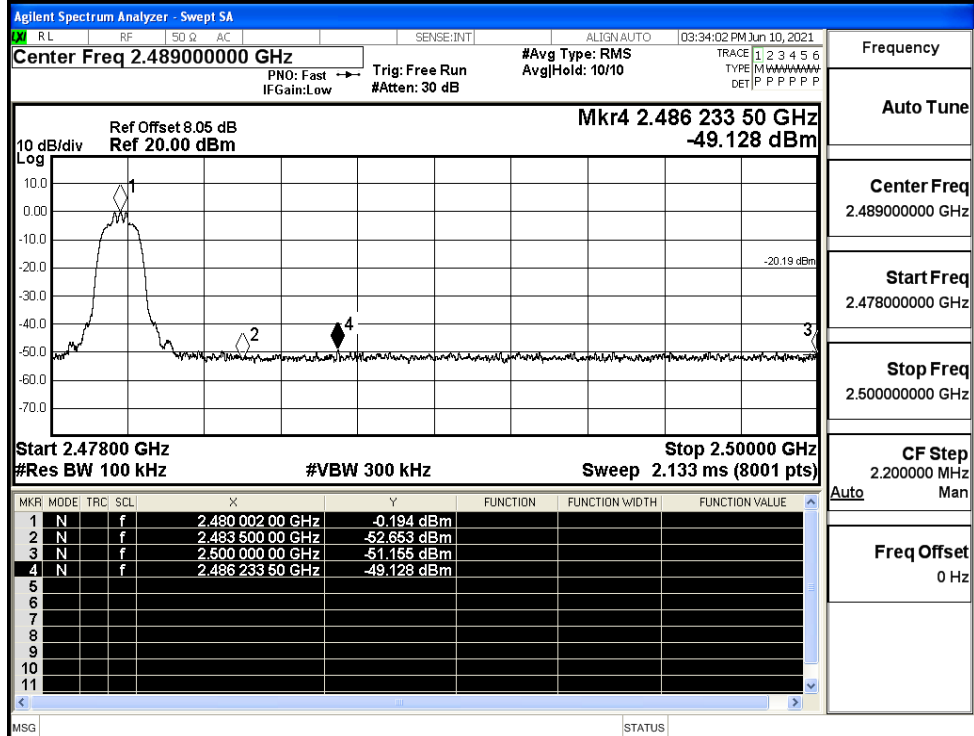
$\pi/4$ DQPSK/LCH/No
Hop



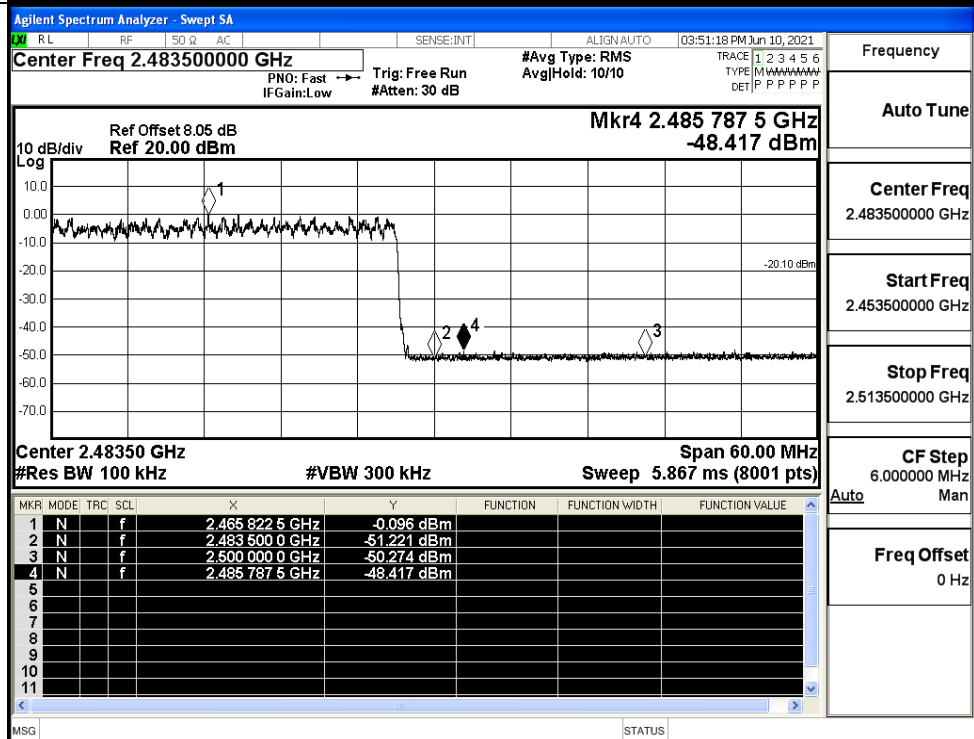
$\pi/4$ DQPSK/LCH/Hop



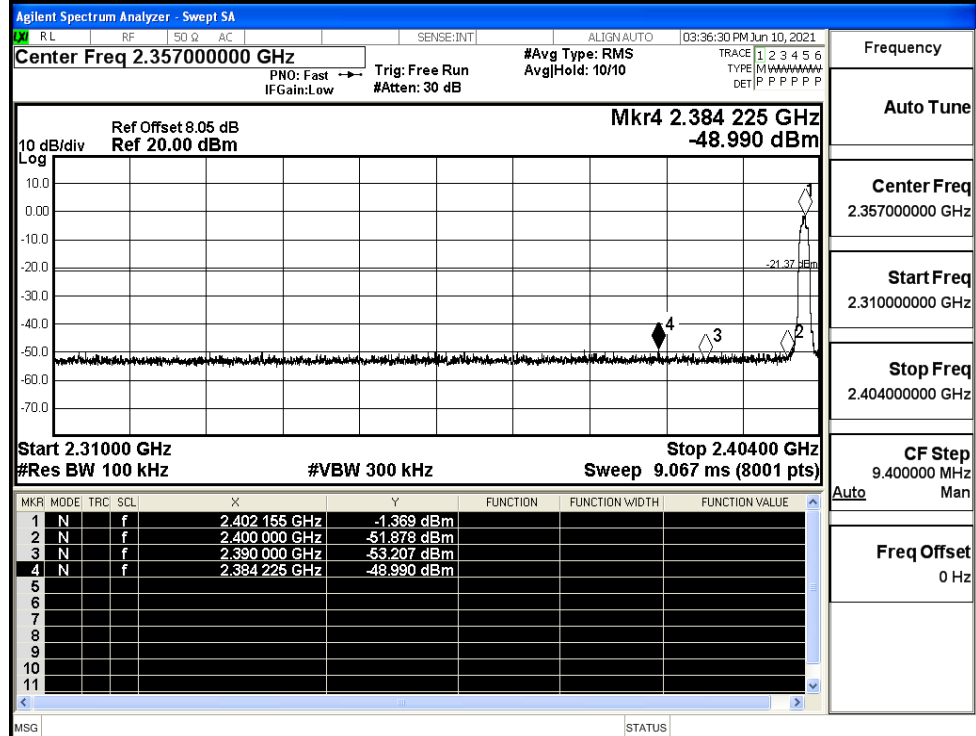
$\pi/4$ DQPSK/HCH/No
Hop



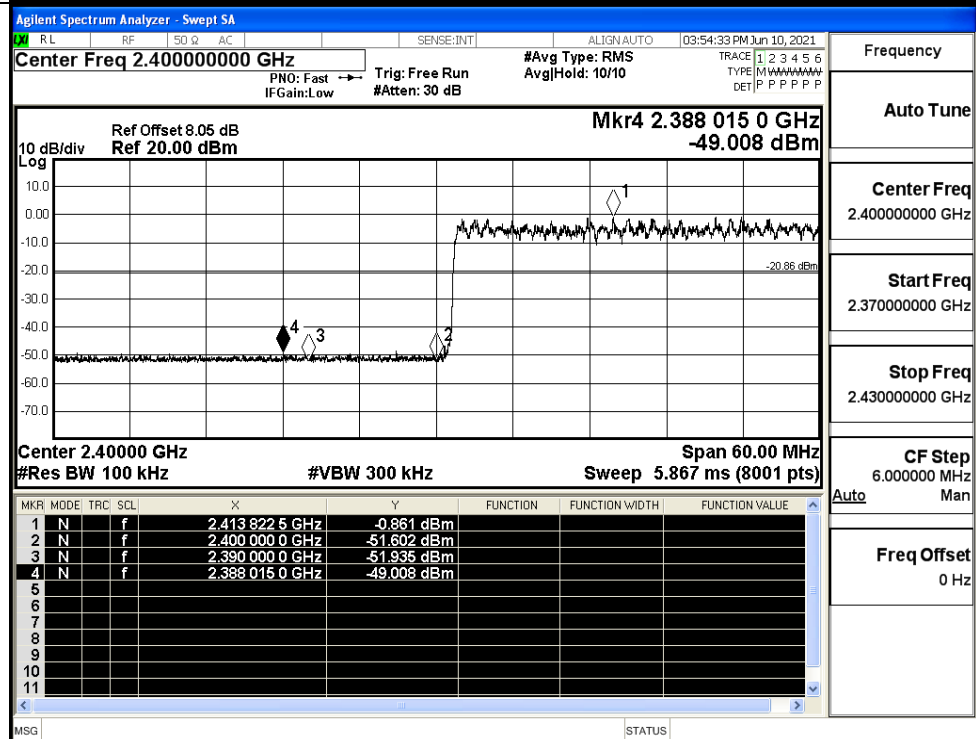
$\pi/4$ DQPSK/HCH/Hop



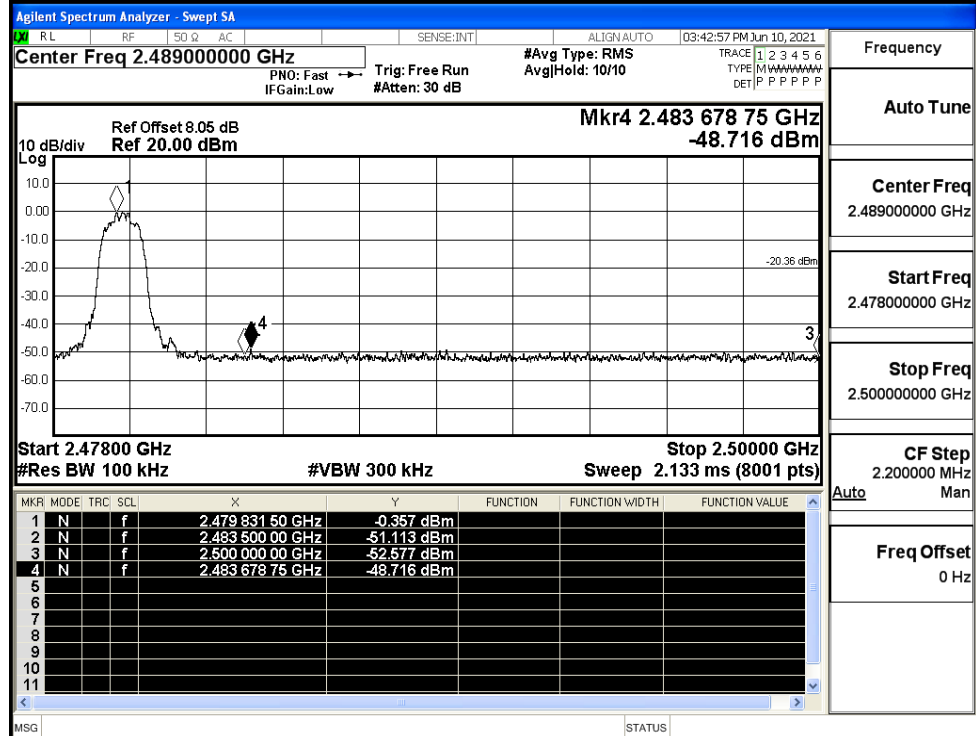
8DPSK/LCH/No Hop



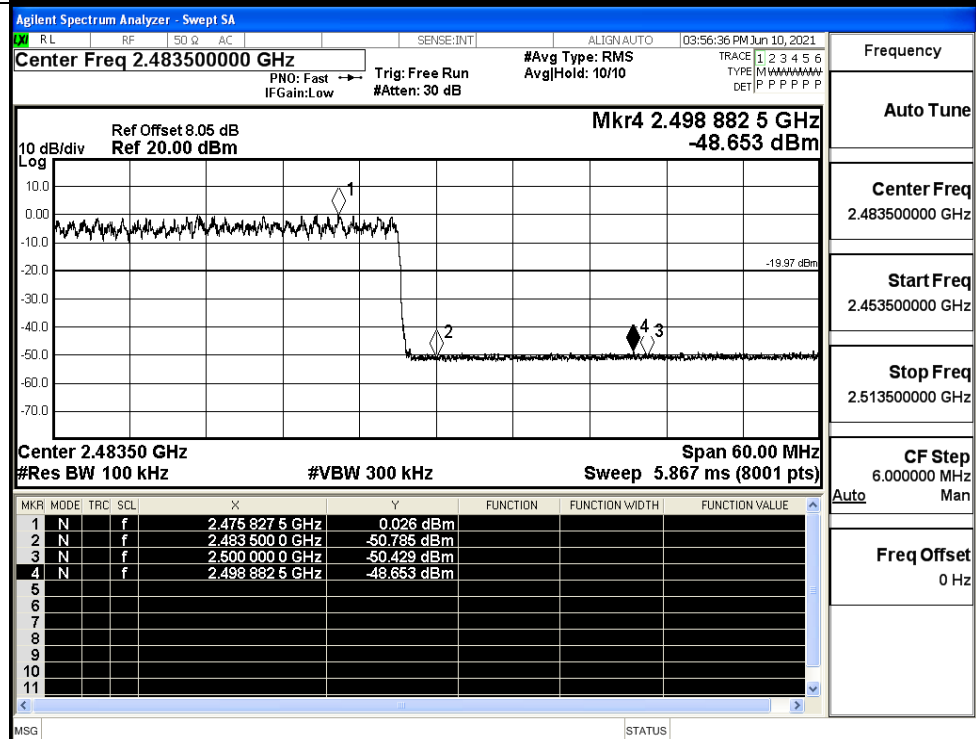
8DPSK/LCH/Hop



8DPSK/HCH/No Hop



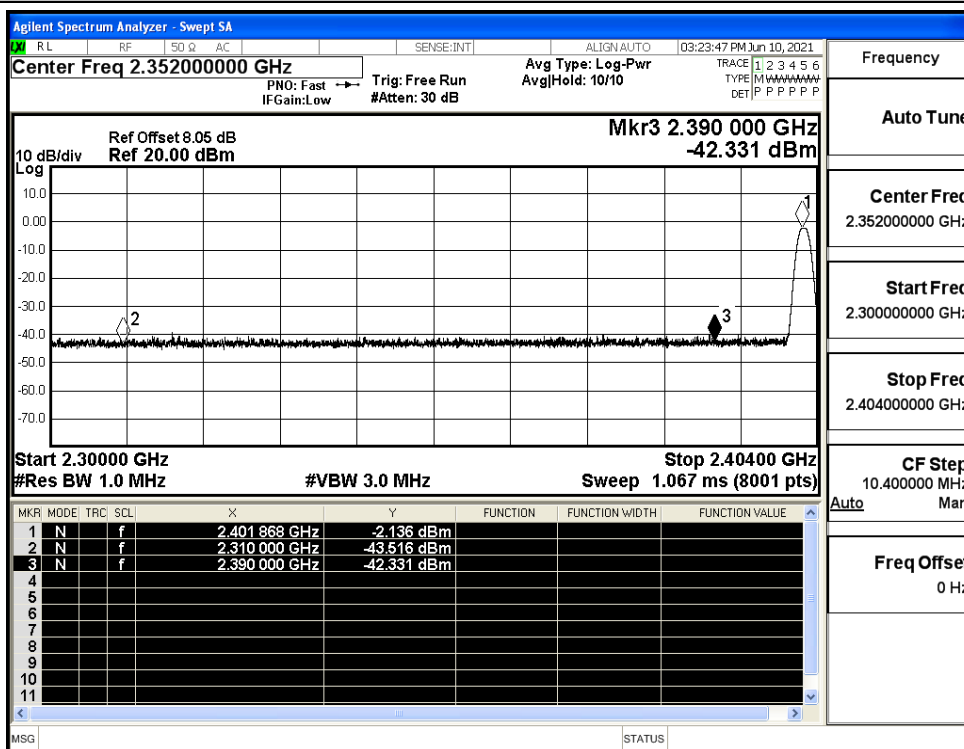
8DPSK/HCH/Hop



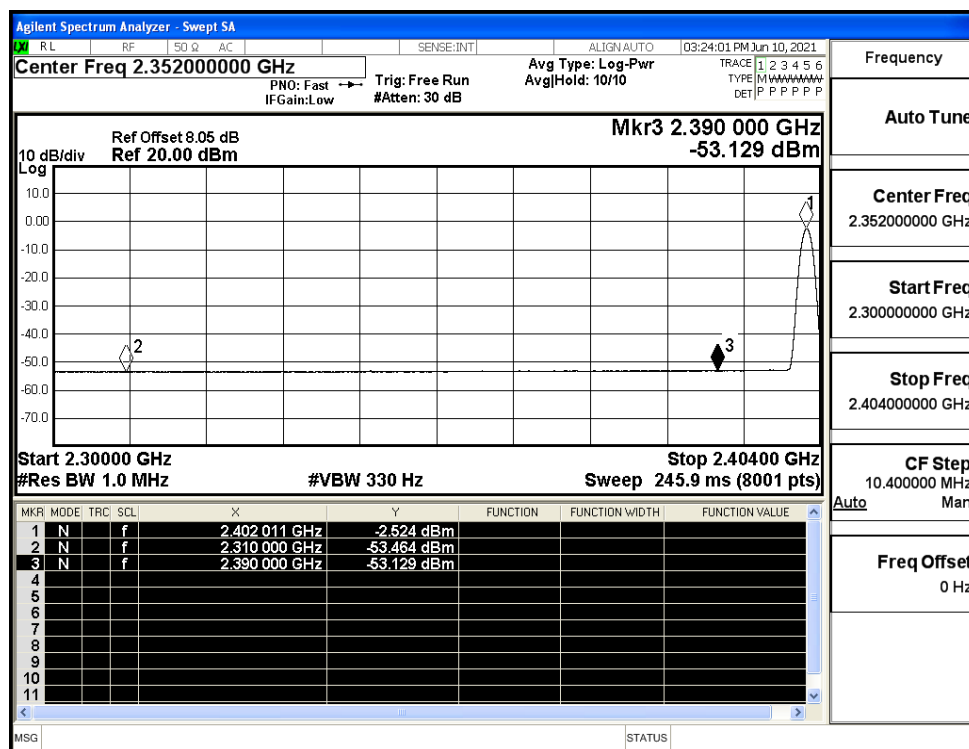
A.8 Restrict-band band-edge measurements

Test Mode	Hopping	Freq.	Power [dBm]	Gain	Ground Factor	E [dBuV/m]	Detector	Limit [dBuV/m]	Verdict
GFSK	Off	2310.0	-43.52	2.0	0	53.74	PEAK	74	PASS
	Off	2310.0	-53.46	2.0	0	43.80	AV	54	PASS
	Off	2390.0	-42.33	2.0	0	54.93	PEAK	74	PASS
	Off	2390.0	-53.13	2.0	0	44.13	AV	54	PASS
	Off	2483.5	-42.48	2.0	0	54.78	PEAK	74	PASS
	Off	2483.5	-52.54	2.0	0	44.72	AV	54	PASS
	Off	2500.0	-43.27	2.0	0	53.99	PEAK	74	PASS
	Off	2500.0	-52.46	2.0	0	44.80	AV	54	PASS
$\pi/4$ DQPSK	Off	2310.0	-44.22	2.0	0	53.04	PEAK	74	PASS
	Off	2310.0	-53.50	2.0	0	43.76	AV	54	PASS
	Off	2390.0	-43.40	2.0	0	53.86	PEAK	74	PASS
	Off	2390.0	-53.02	2.0	0	44.24	AV	54	PASS
	Off	2483.5	-42.71	2.0	0	54.55	PEAK	74	PASS
	Off	2483.5	-52.48	2.0	0	44.78	AV	54	PASS
	Off	2500.0	-41.77	2.0	0	55.49	PEAK	74	PASS
	Off	2500.0	-52.39	2.0	0	44.87	AV	54	PASS
8DPSK	Off	2310.0	-42.94	2.0	0	54.32	PEAK	74	PASS
	Off	2310.0	-53.34	2.0	0	43.92	AV	54	PASS
	Off	2390.0	-42.27	2.0	0	54.99	PEAK	74	PASS
	Off	2390.0	-53.14	2.0	0	44.12	AV	54	PASS
	Off	2483.5	-42.70	2.0	0	54.56	PEAK	74	PASS
	Off	2483.5	-52.53	2.0	0	44.73	AV	54	PASS
	Off	2500.0	-42.50	2.0	0	54.76	PEAK	74	PASS
	Off	2500.0	-52.33	2.0	0	44.93	AV	54	PASS

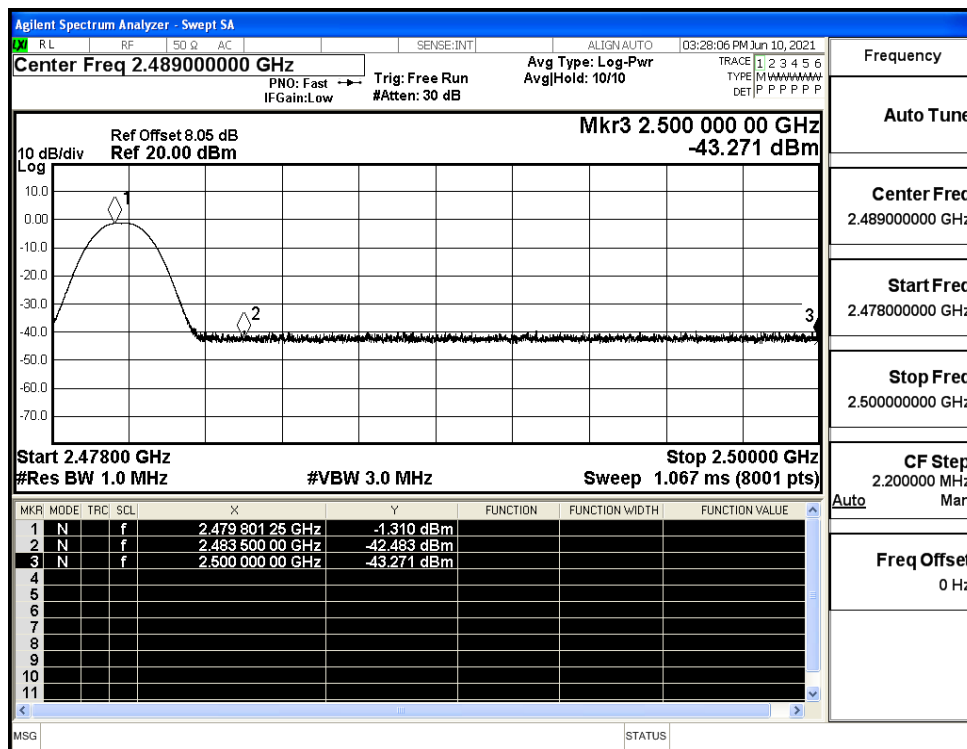
Restrict-band band-edge measurements_Hopping Off_GFSK_PEAK (Low Channel)



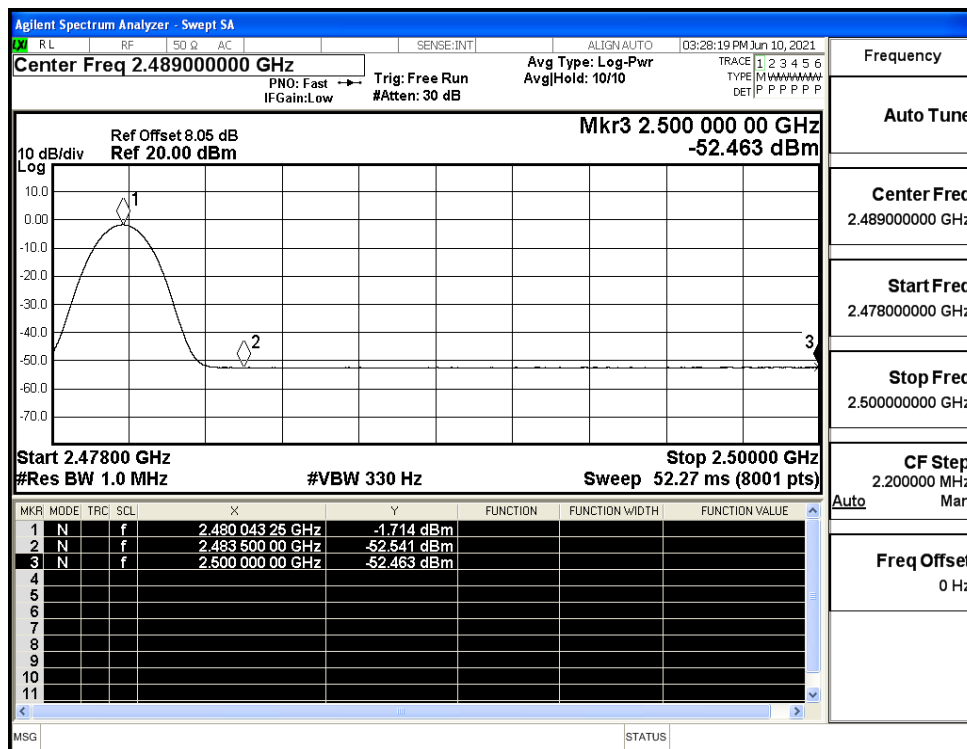
Restrict-band band-edge measurements_Hopping Off_GFSK_Average (Low Channel)

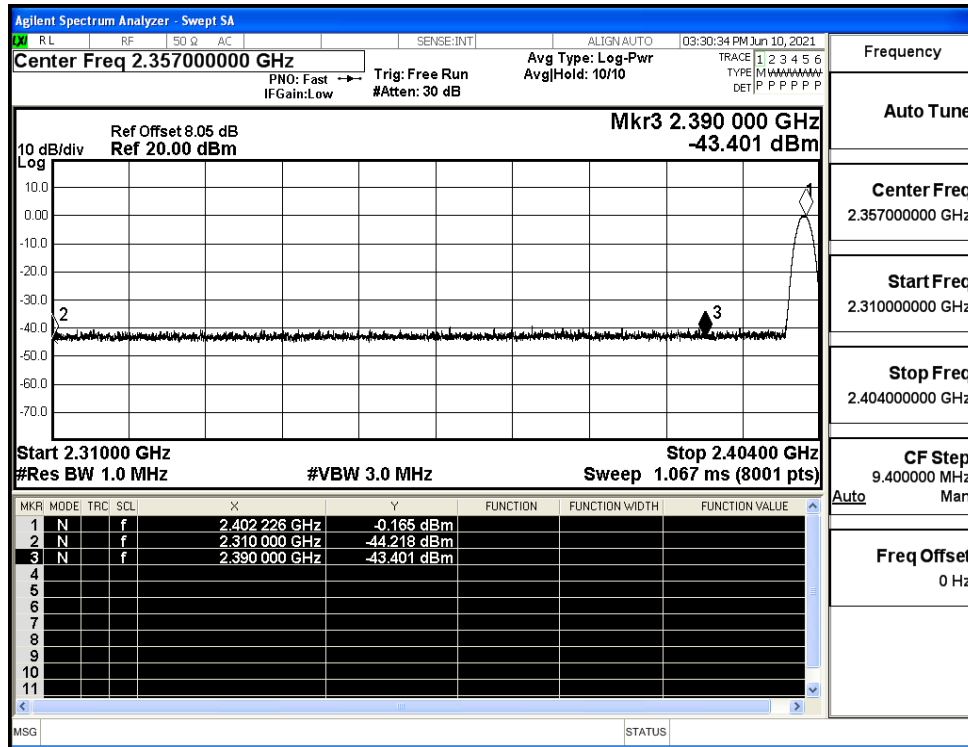
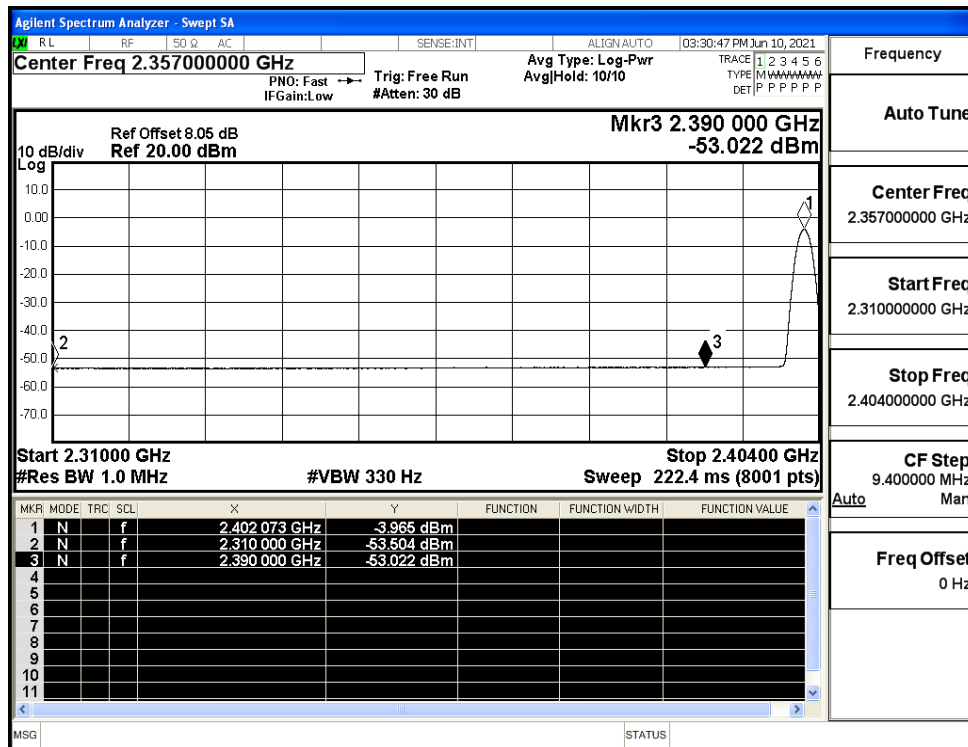


Restrict-band band-edge measurements_Hopping Off_GFSK_PEAK (High Channel)

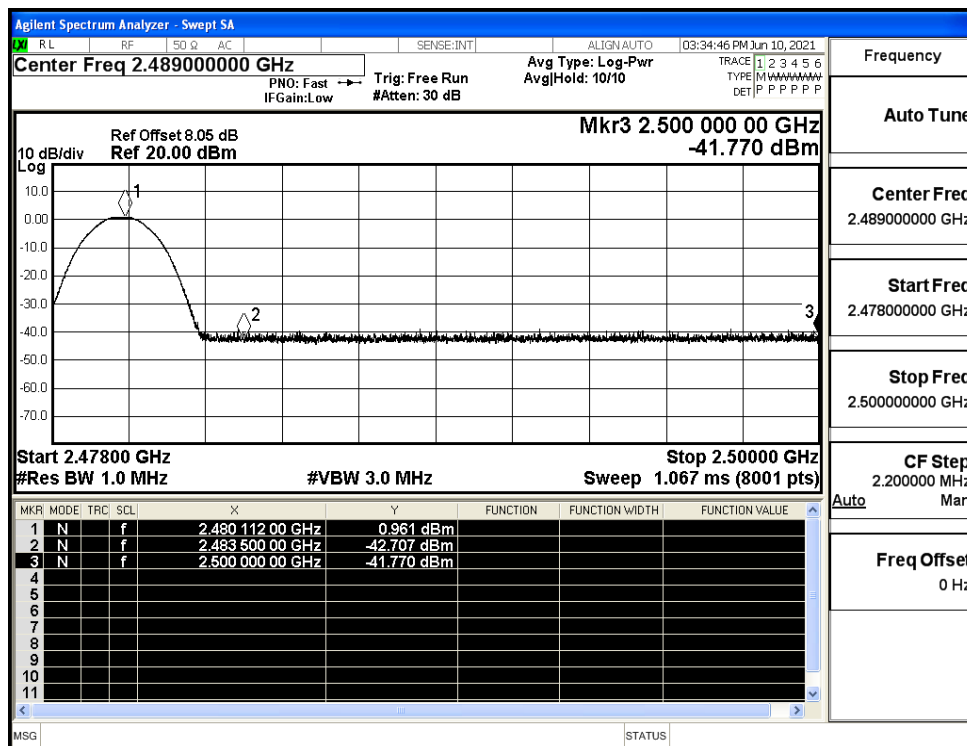


Restrict-band band-edge measurements_Hopping Off_GFSK_Average (High Channel)

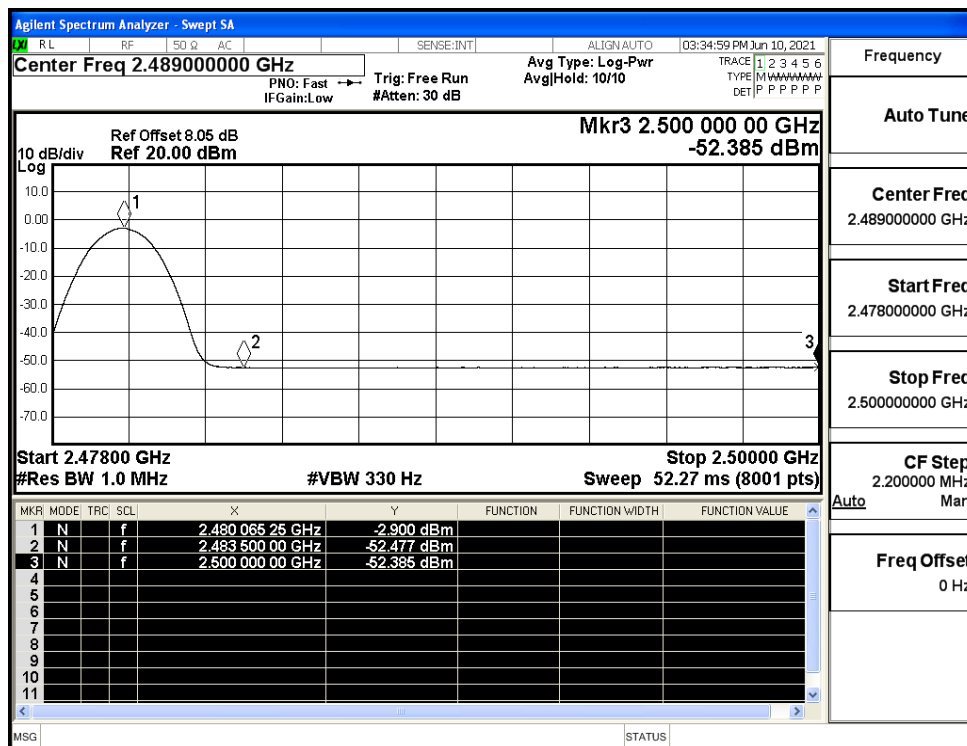


Restrict-band band-edge measurements_Hopping Off $\pi/4$ -DQPSK_PEAK (Low Channel)Restrict-band band-edge measurements_Hopping Off $\pi/4$ -DQPSK_Average (Low Channel)

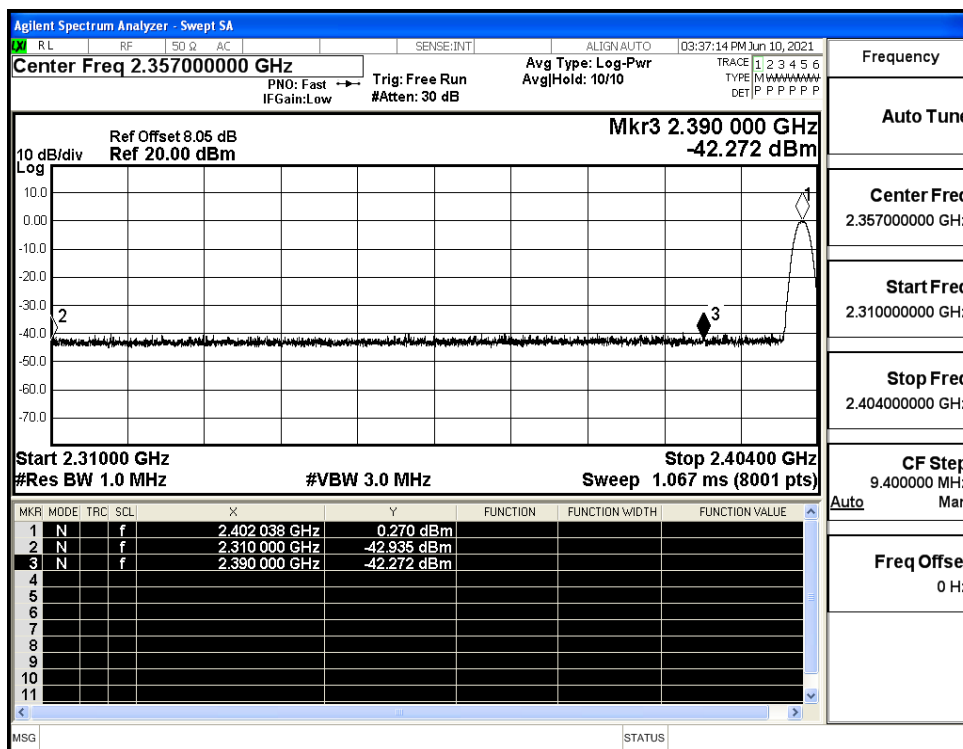
Restrict-band band-edge measurements_Hopping Off_π/4-DQPSK_PEAK (High Channel)



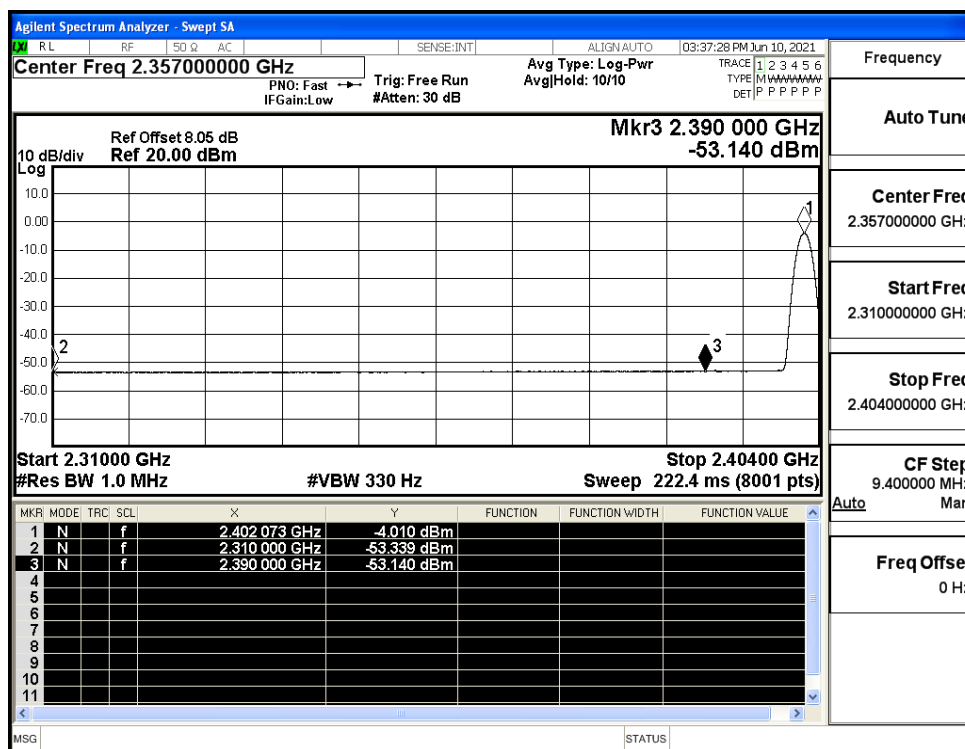
Restrict-band band-edge measurements_Hopping Off_π/4-DQPSK_Average (High Channel)



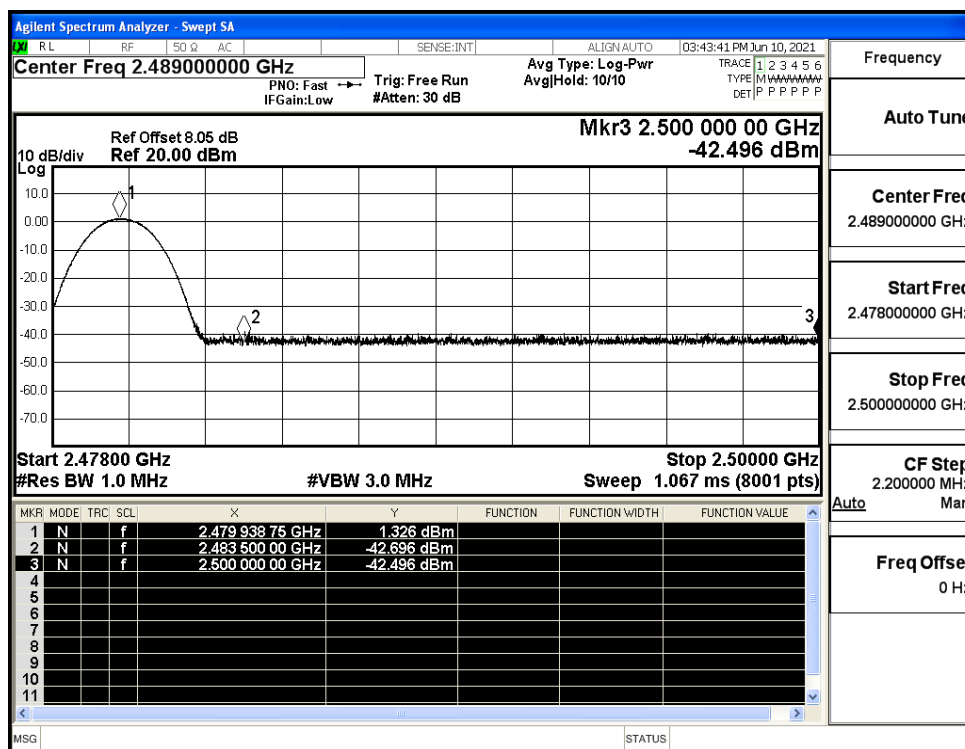
Restrict-band band-edge measurements_Hopping Off_8DPSK_PEAK (Low Channel)



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)

