

Appendix A

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

Product Name: TABLET PC

Trade Mark: Simbans

Test Model: TangoTab_XL

Environmental Conditions

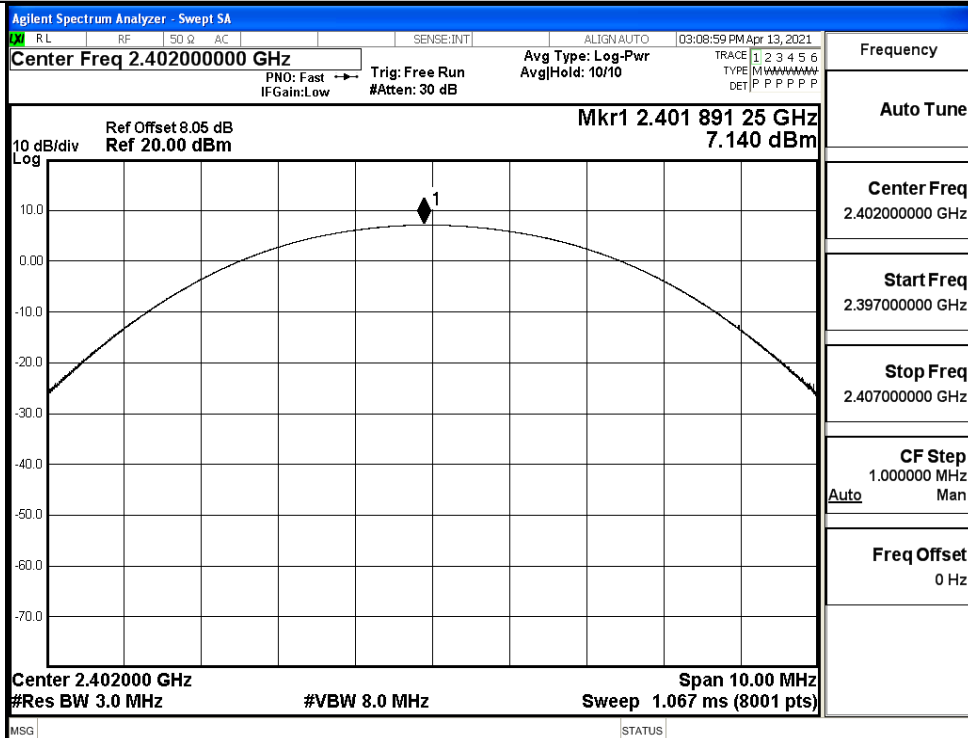
Temperature:	25 ° C
Relative Humidity:	50%
ATM Pressure:	100.0 kPa
Test Engineer:	Jay Li
Supervised by:	Li Huan

A.1 Maximum Conducted Peak Output Power

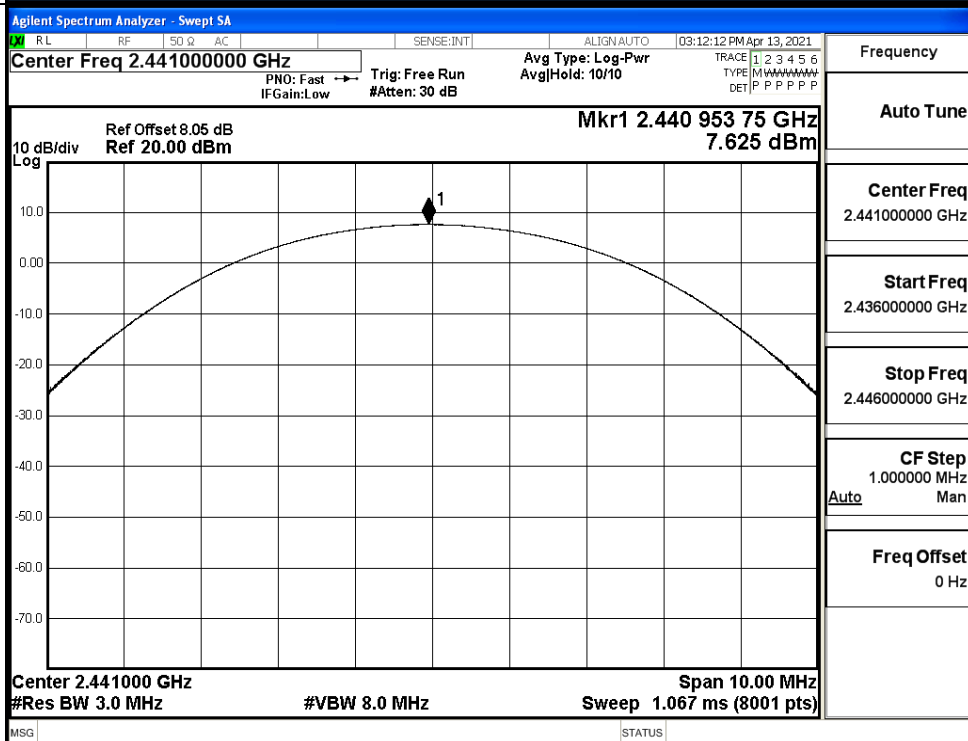
Mode	Channel.	Maximum Peak Output Power [dBm]	Limit [dBm]	Verdict
GFSK	LCH	7.140	21	PASS
	MCH	7.625	21	PASS
	HCH	7.462	21	PASS
$\pi/4$ DQPSK	LCH	6.404	21	PASS
	MCH	6.970	21	PASS
	HCH	6.823	21	PASS
8DPSK	LCH	6.406	21	PASS
	MCH	6.923	21	PASS
	HCH	6.773	21	PASS

Test Graphs

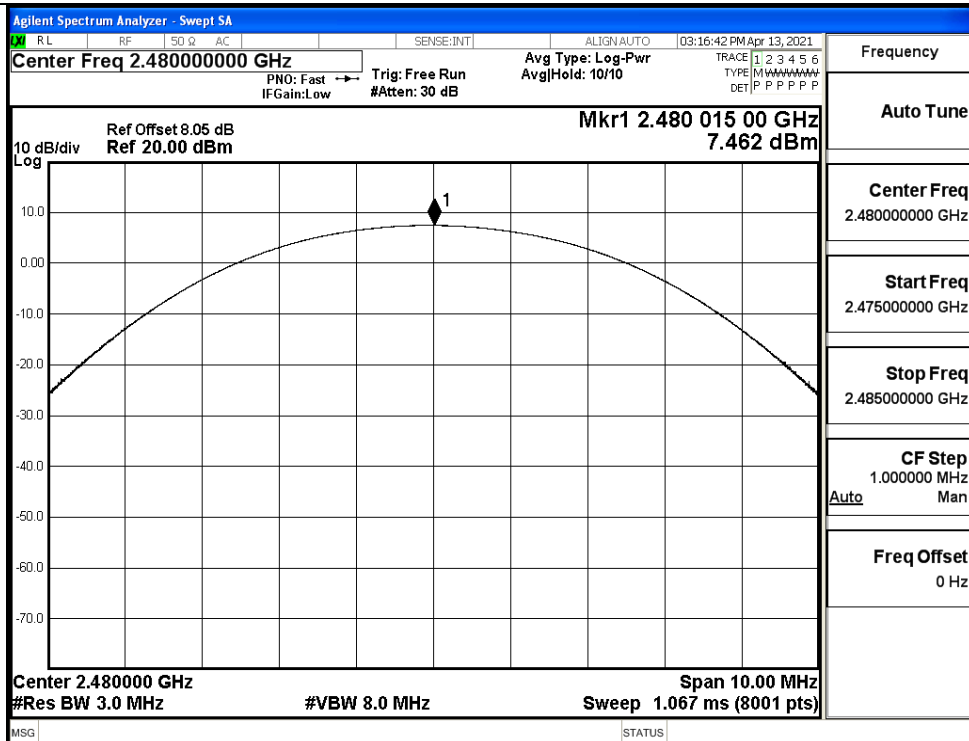
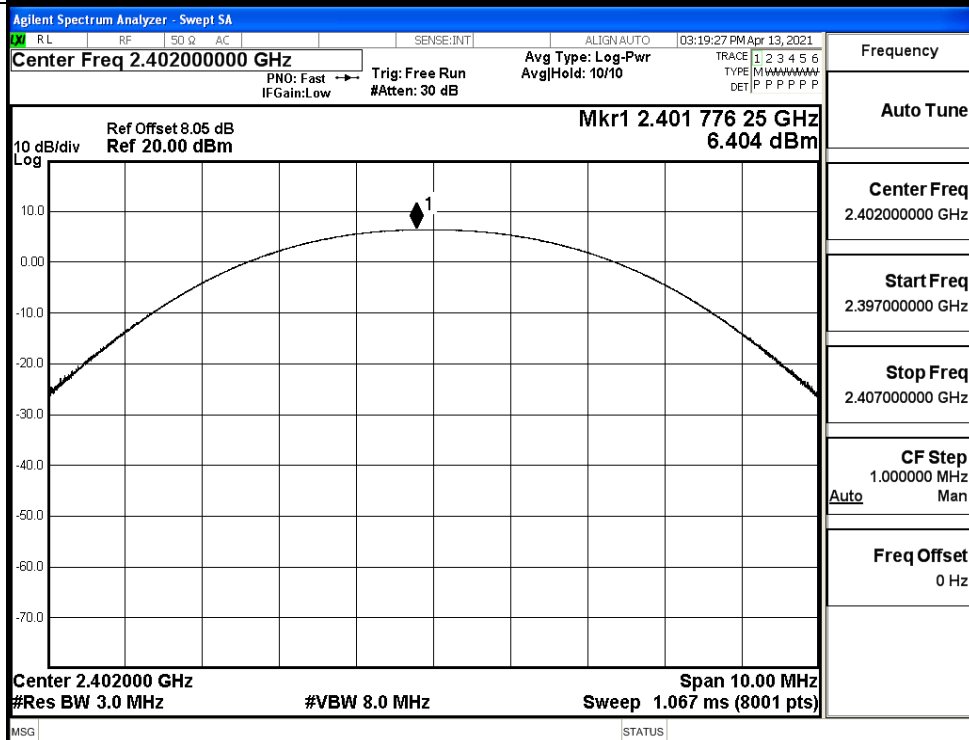
GFSK/LCH

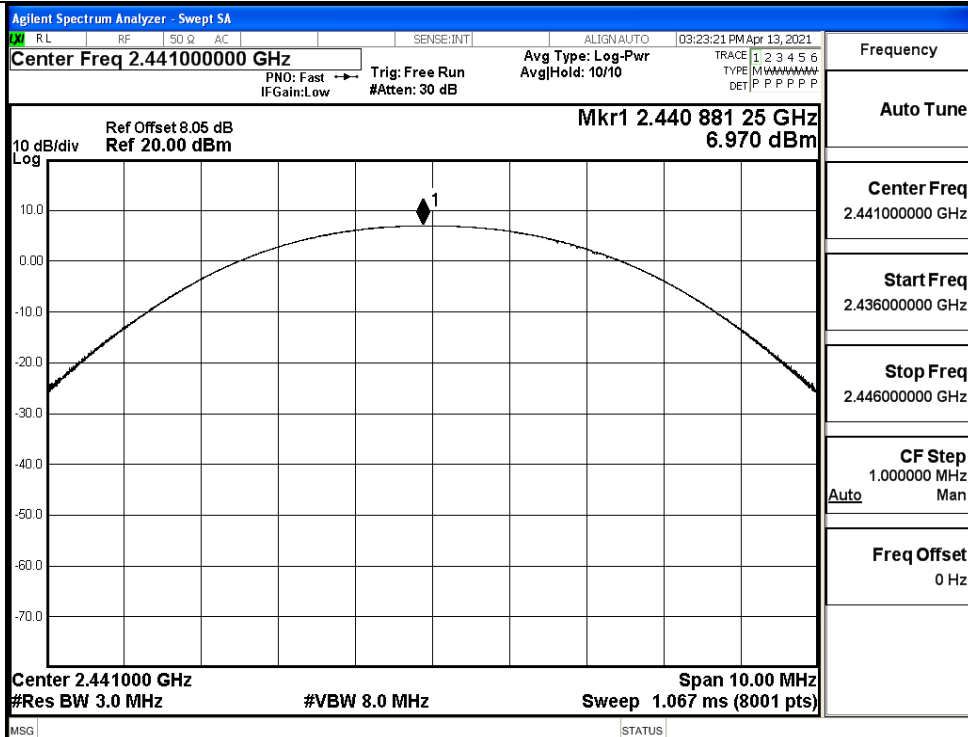
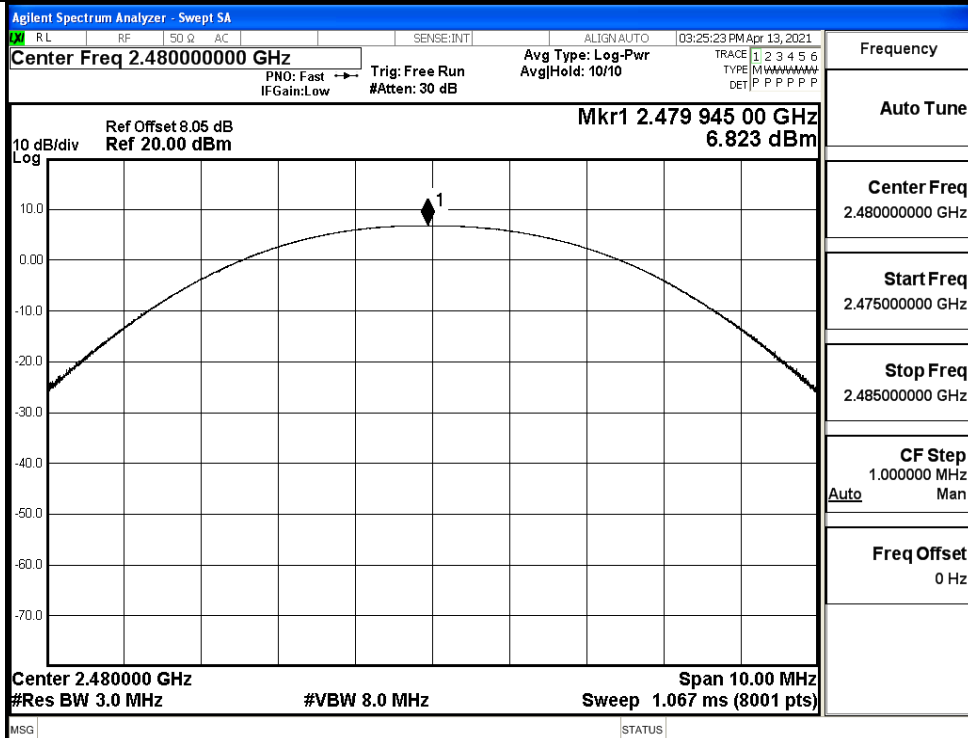


GFSK/MCH

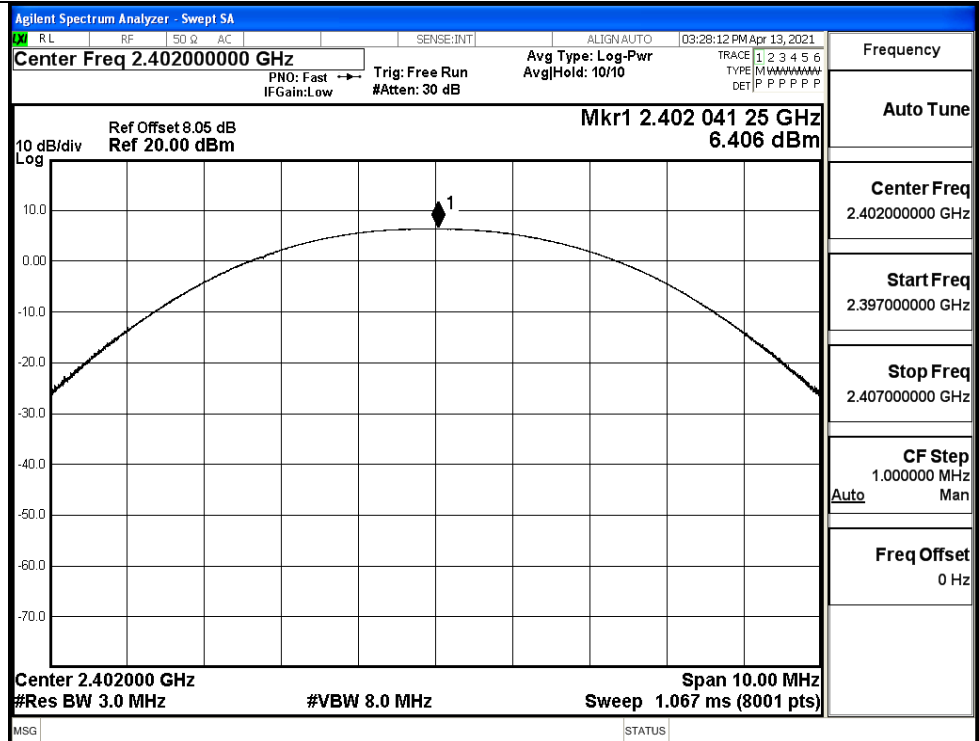


GFSK/HCH

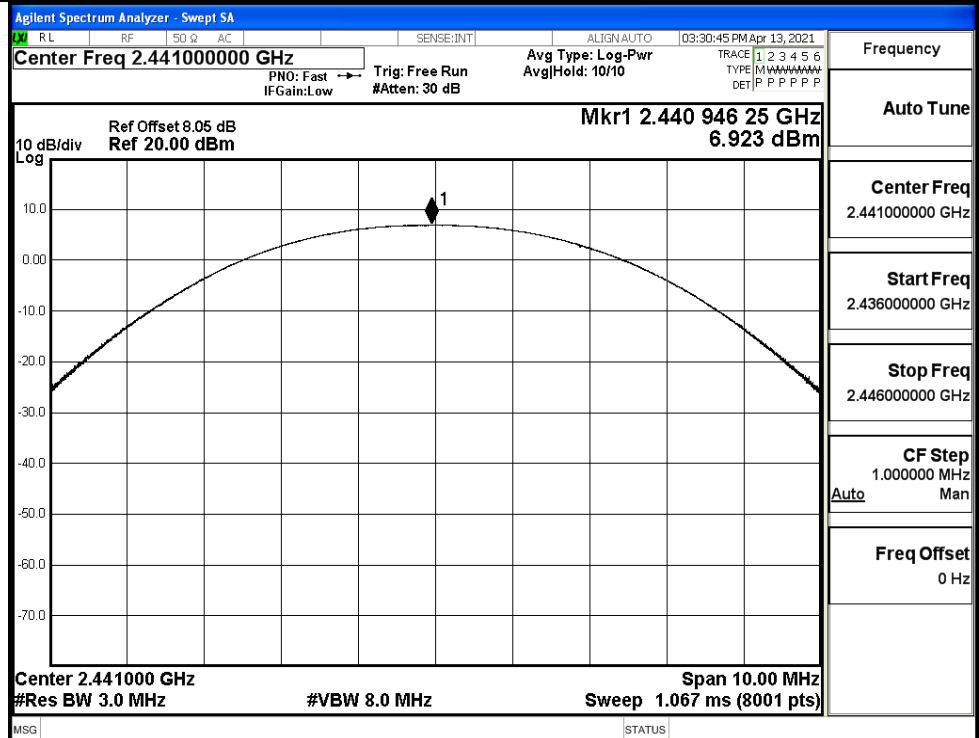
 $\pi/4$ DQPSK/LCH

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

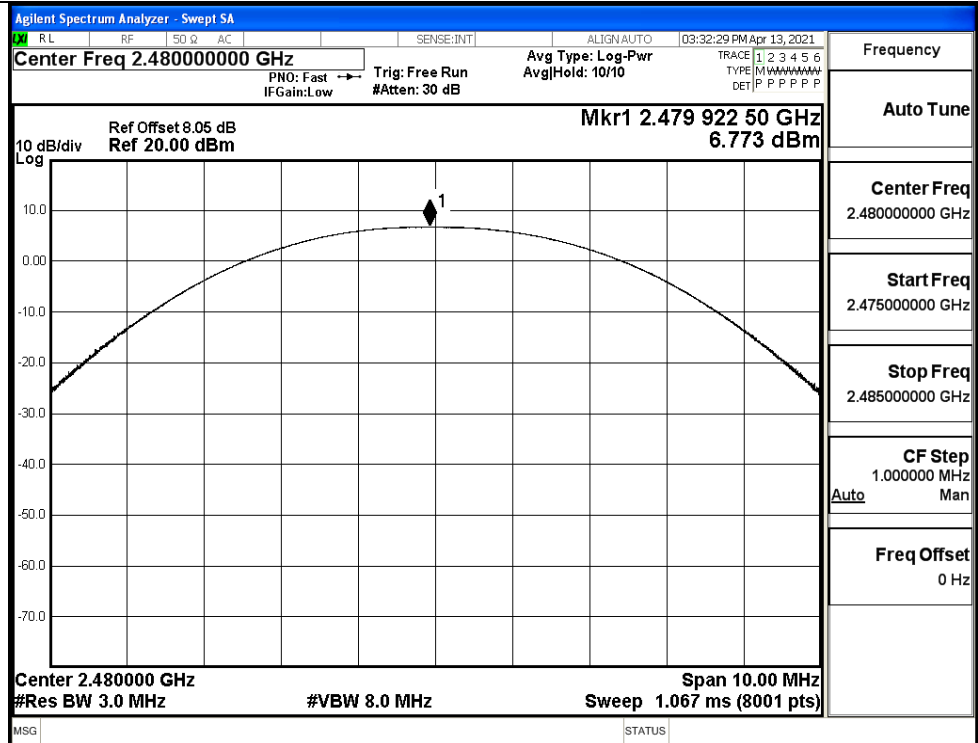
8DPSK/LCH



8DPSK/MCH



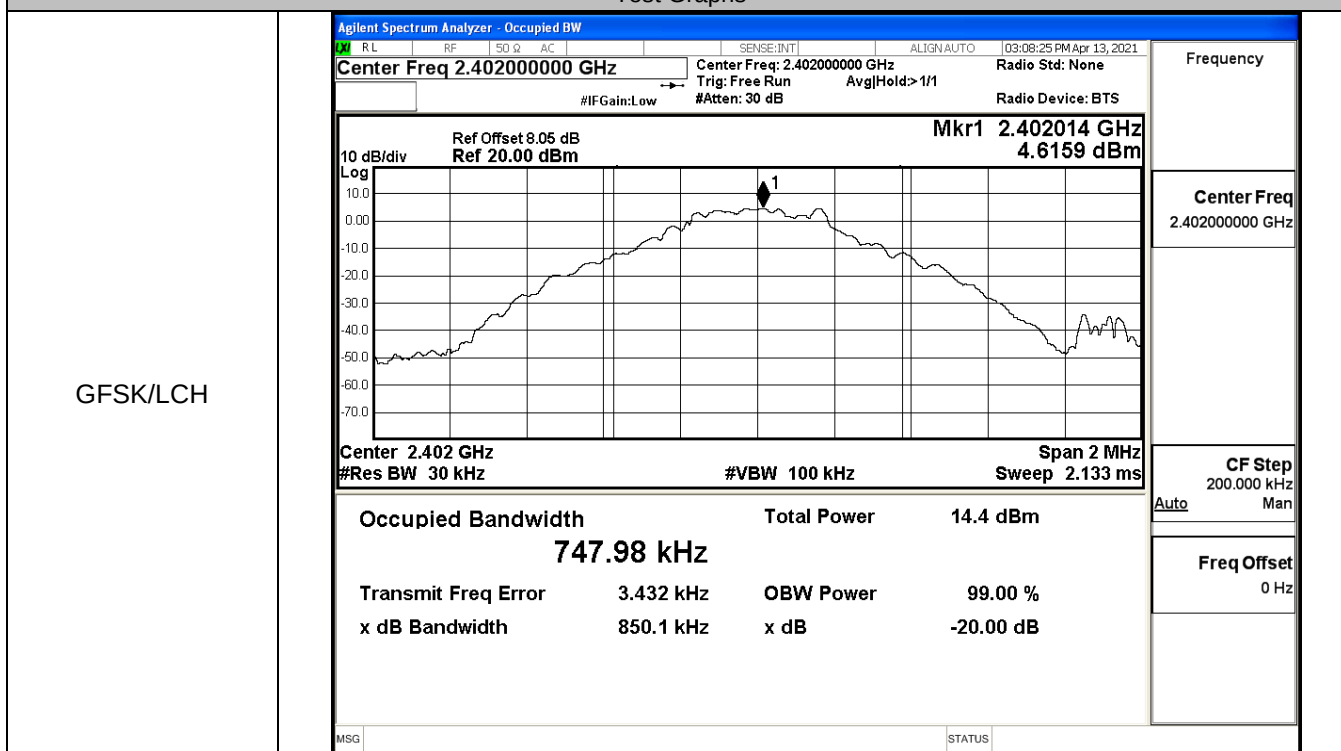
8DPSK/HCH



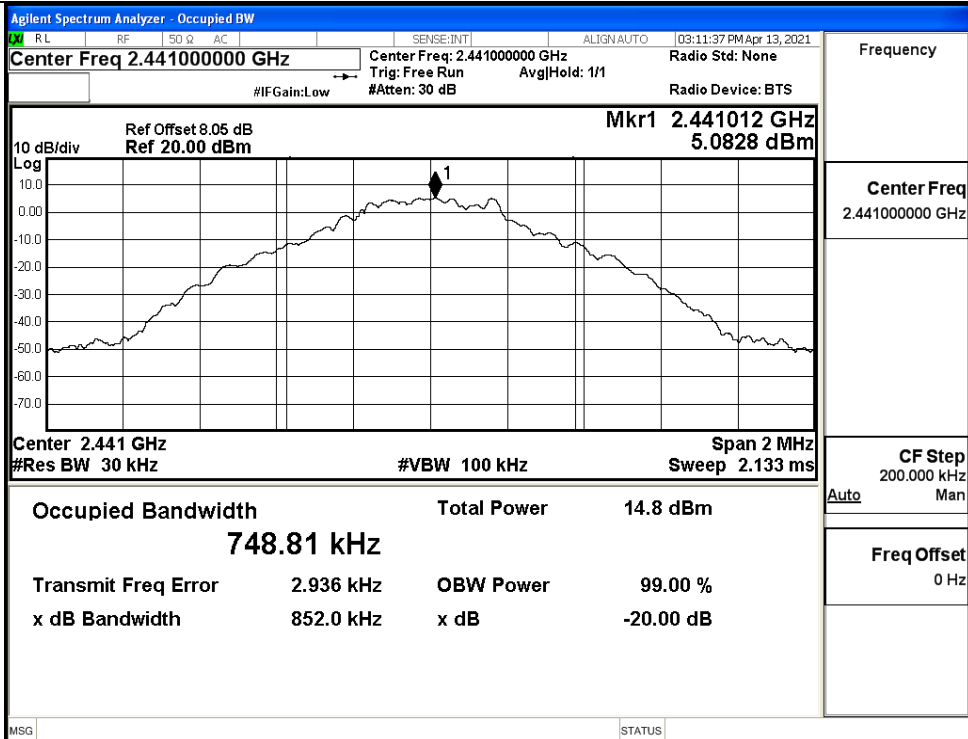
A.2 20dB Bandwidth

Mode	Channel.	20dB Bandwidth [MHz]	Limit [MHz]	Verdict
GFSK	LCH	0.8501	Not Specified	PASS
	MCH	0.8520	Not Specified	PASS
	HCH	0.8501	Not Specified	PASS
$\pi/4$ DQPSK	LCH	1.268	Not Specified	PASS
	MCH	1.268	Not Specified	PASS
	HCH	1.274	Not Specified	PASS
8DPSK	LCH	1.267	Not Specified	PASS
	MCH	1.267	Not Specified	PASS
	HCH	1.294	Not Specified	PASS

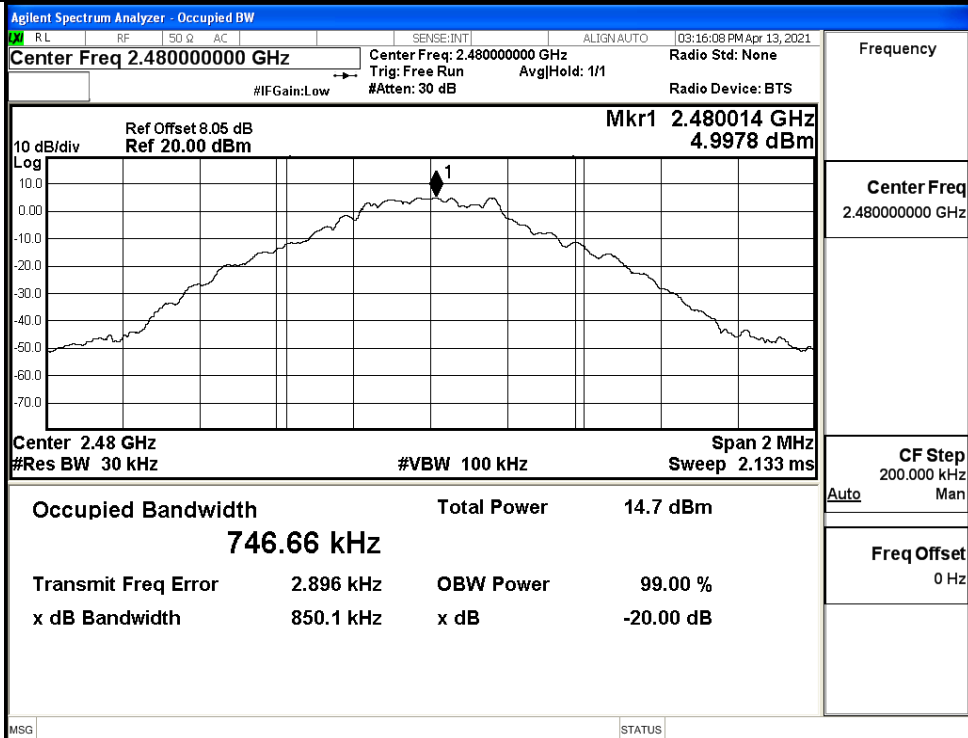
Test Graphs

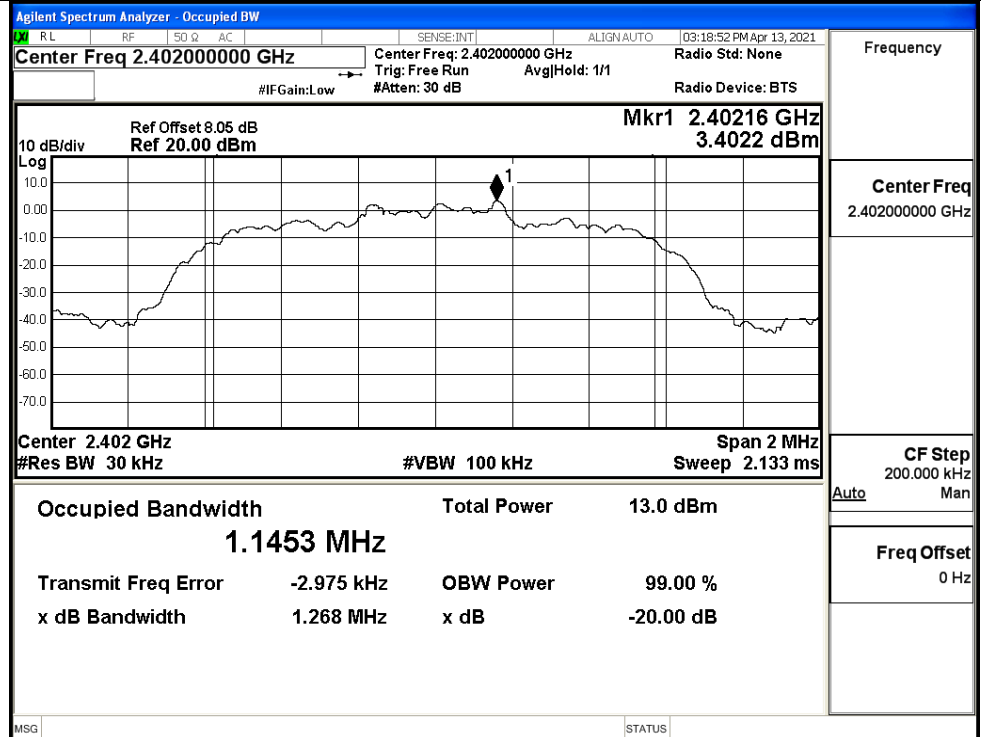
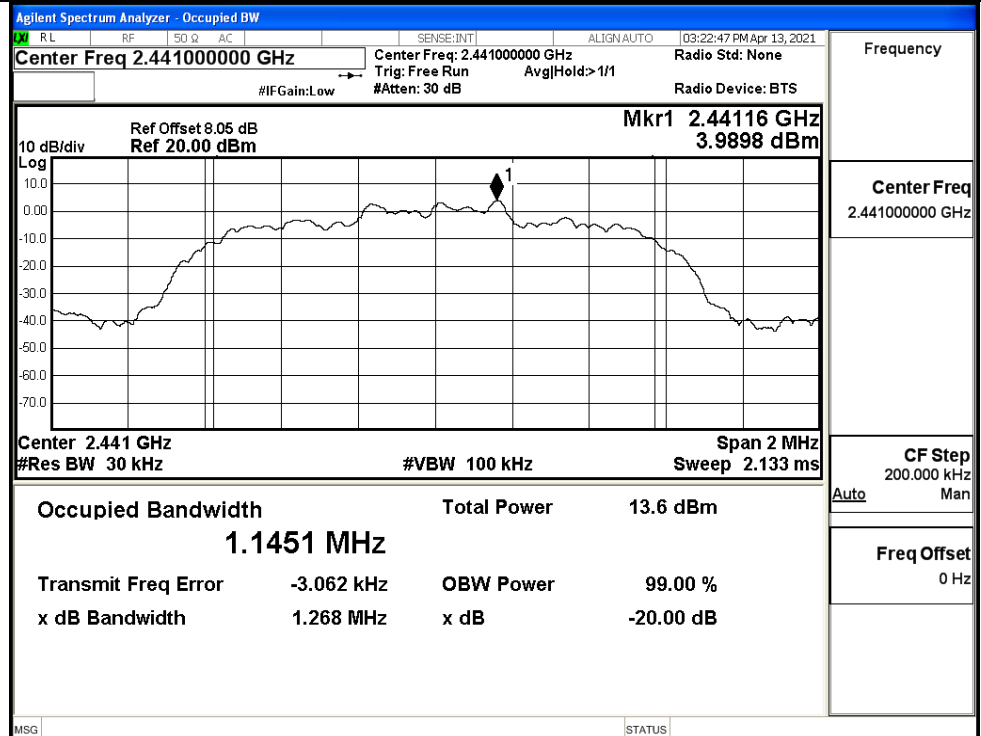


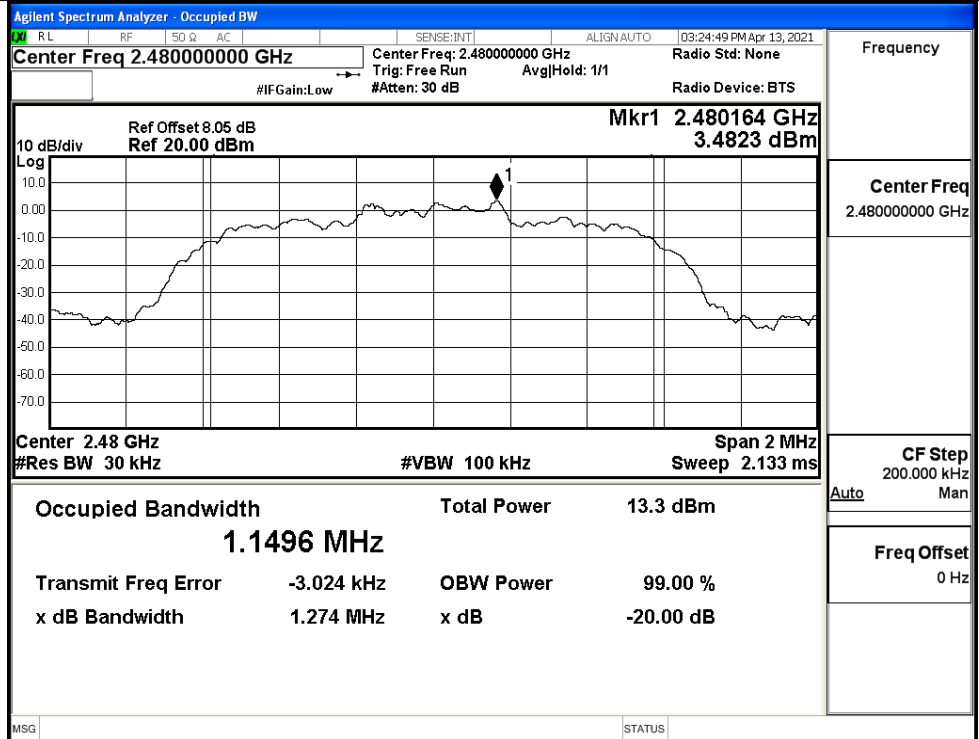
GFSK/MCH



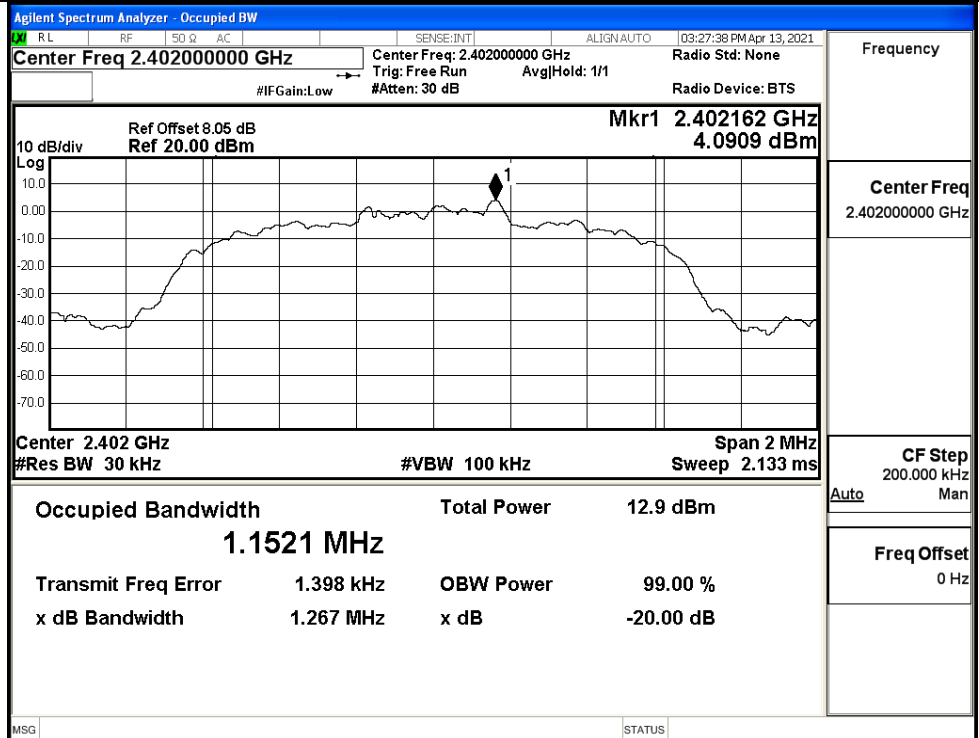
GFSK/HCH



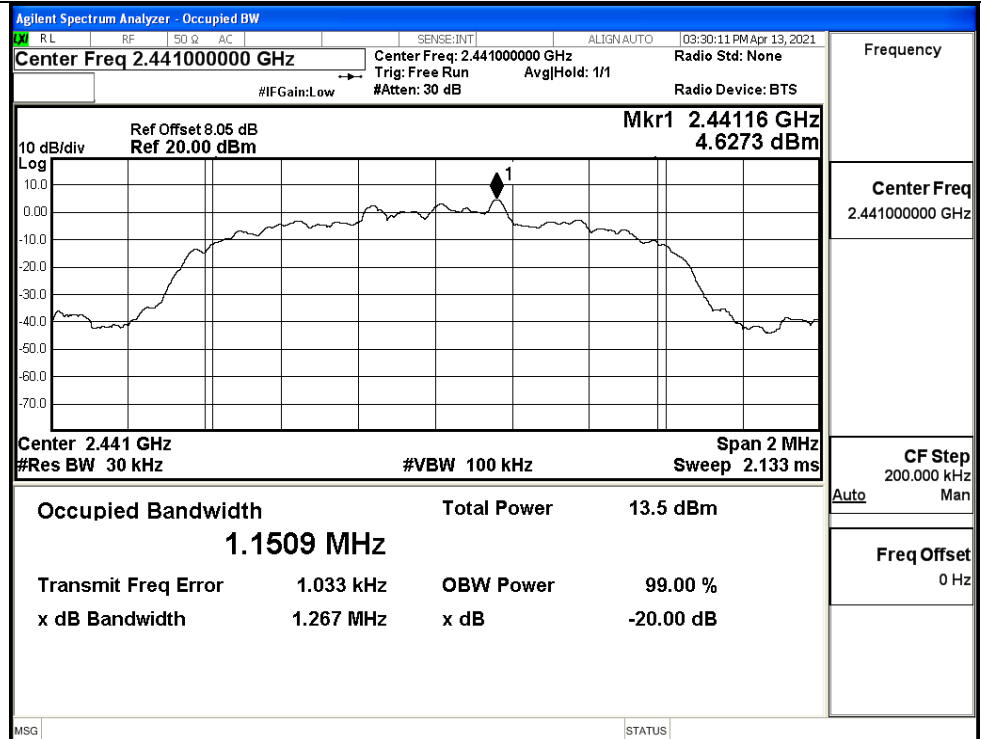
$\pi/4$ DQPSK/LCH $\pi/4$ DQPSK/MCH

$\pi/4$ DQPSK/HCH

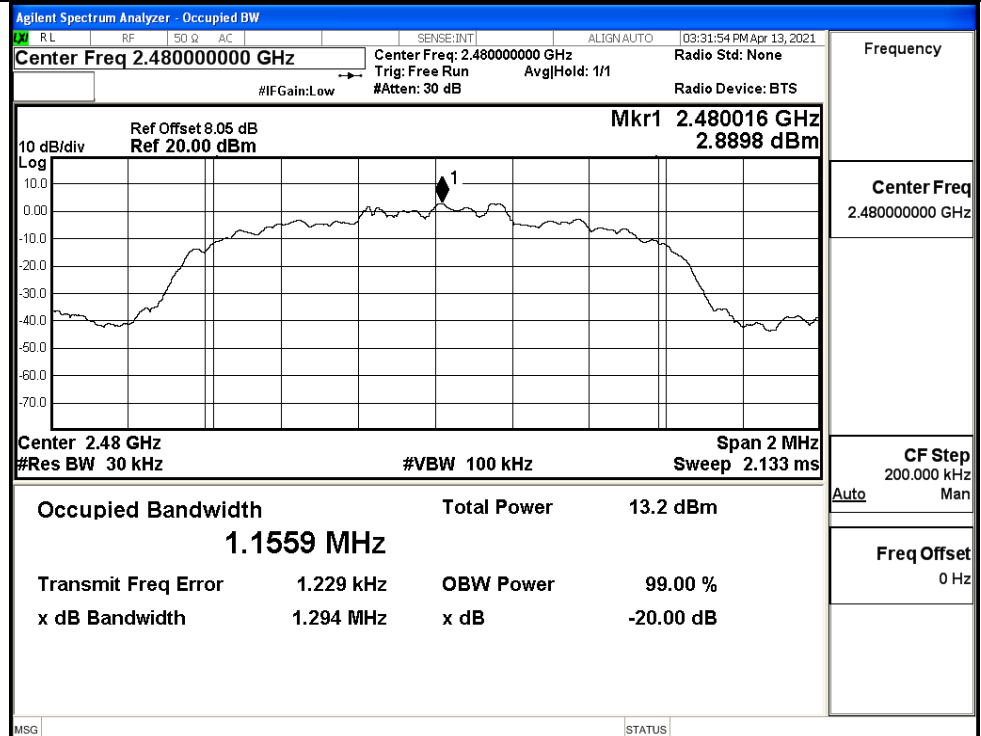
8DPSK/LCH



8DPSK/MCH



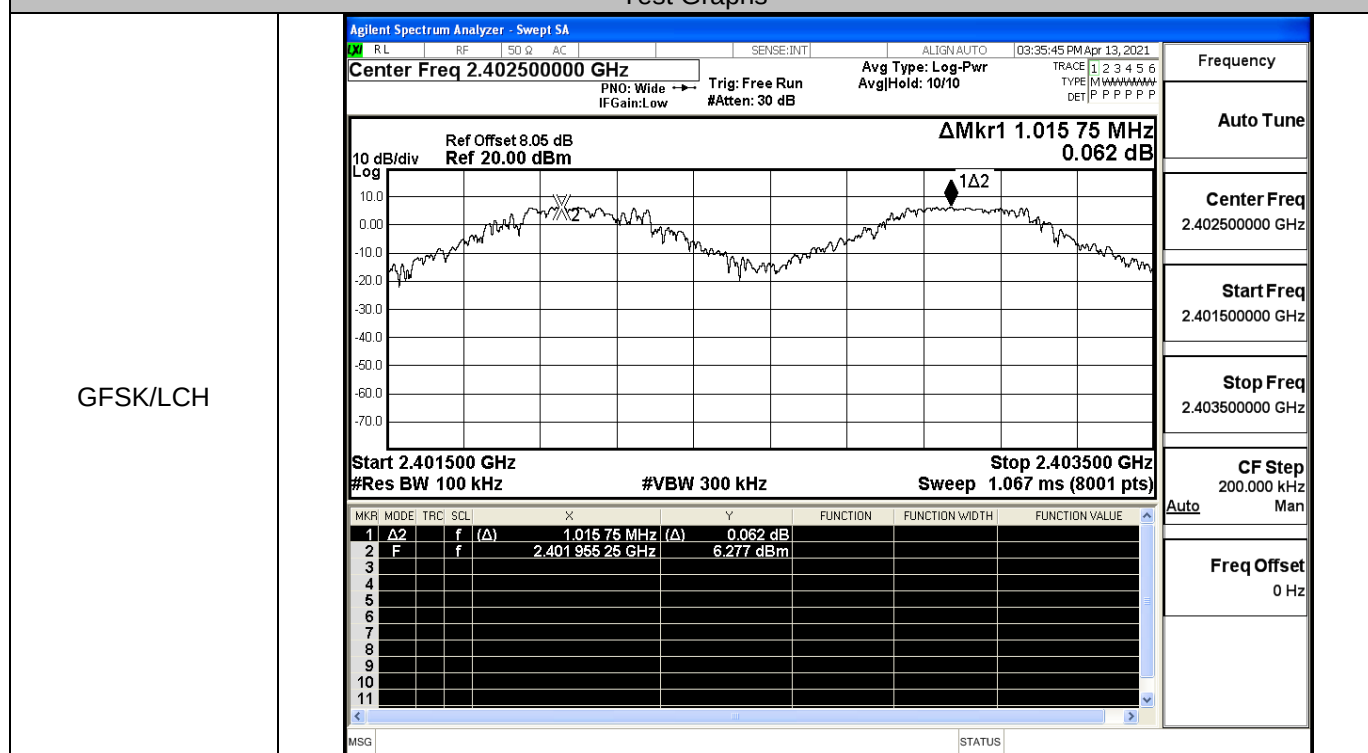
8DPSK/HCH



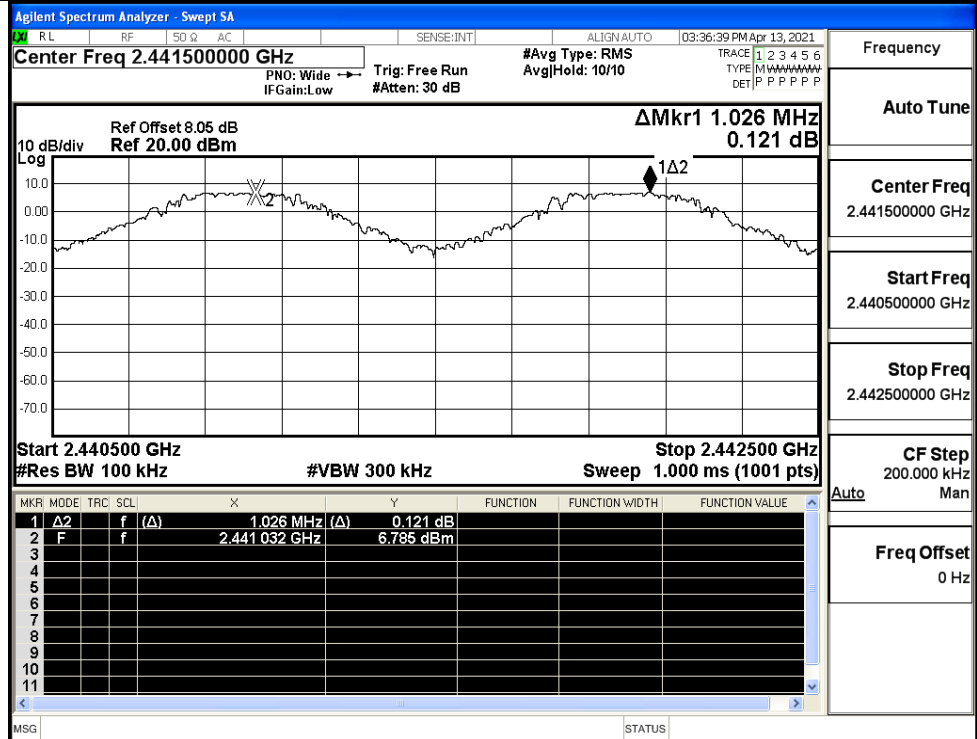
A.3 Carrier Frequency Separation

Mode	Channel	Carrier Frequency Separation [MHz]	Limit [MHz]	Verdict
GFSK	LCH	1.016	0.568	PASS
	MCH	1.026	0.568	PASS
	HCH	1.212	0.568	PASS
$\pi/4$ DQPSK	LCH	1.324	0.849	PASS
	MCH	1.172	0.849	PASS
	HCH	0.992	0.849	PASS
8DPSK	LCH	1.024	0.863	PASS
	MCH	1.140	0.863	PASS
	HCH	1.050	0.863	PASS

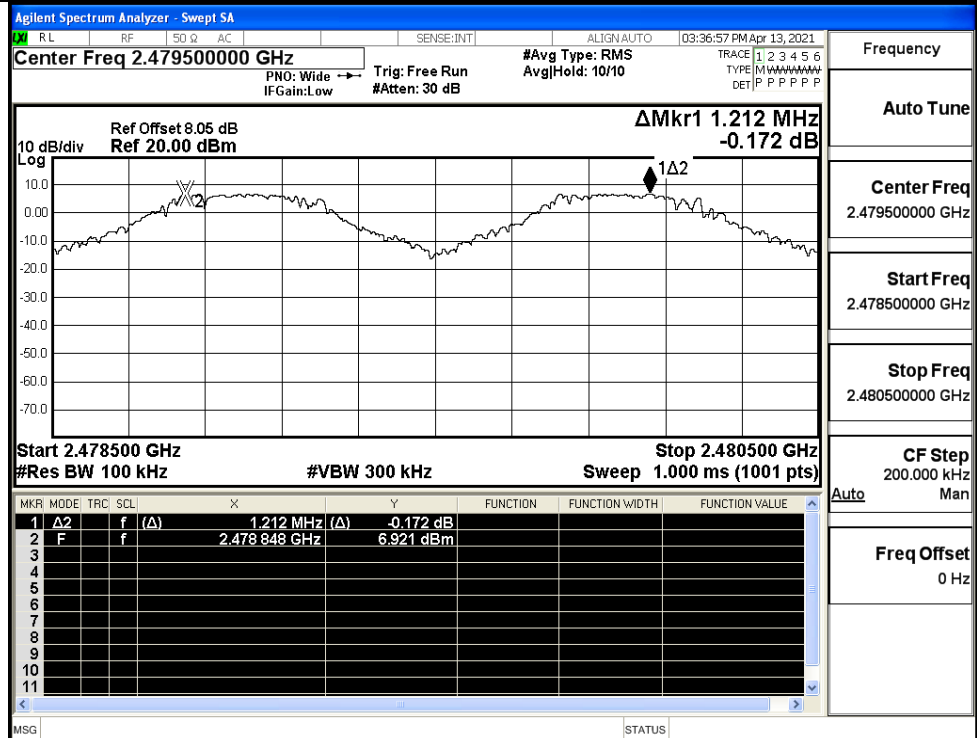
Test Graphs

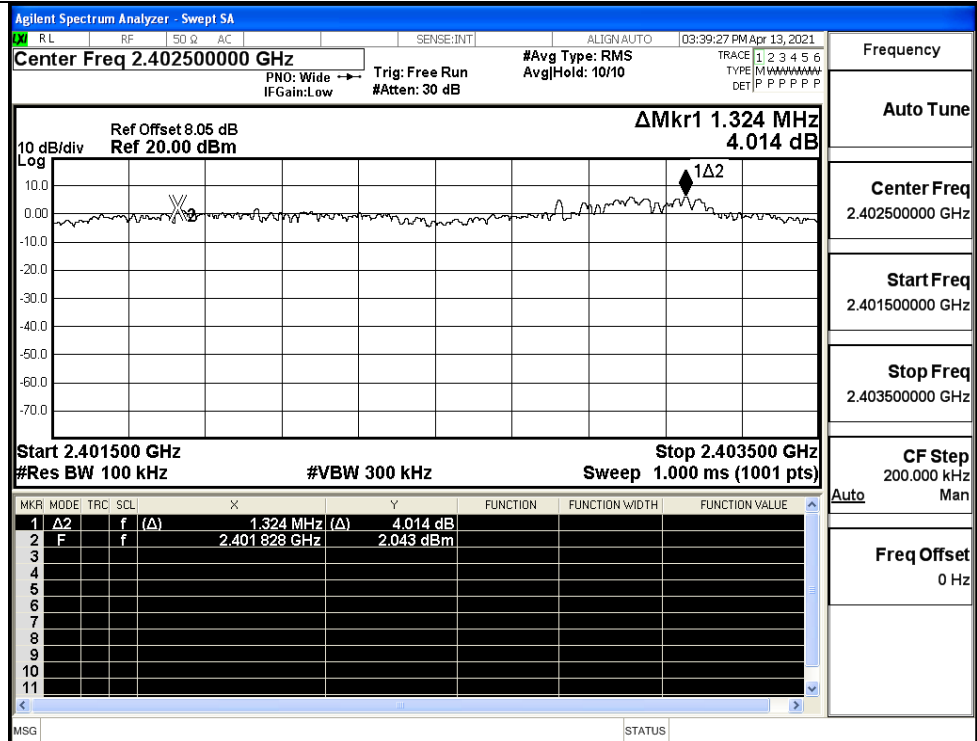
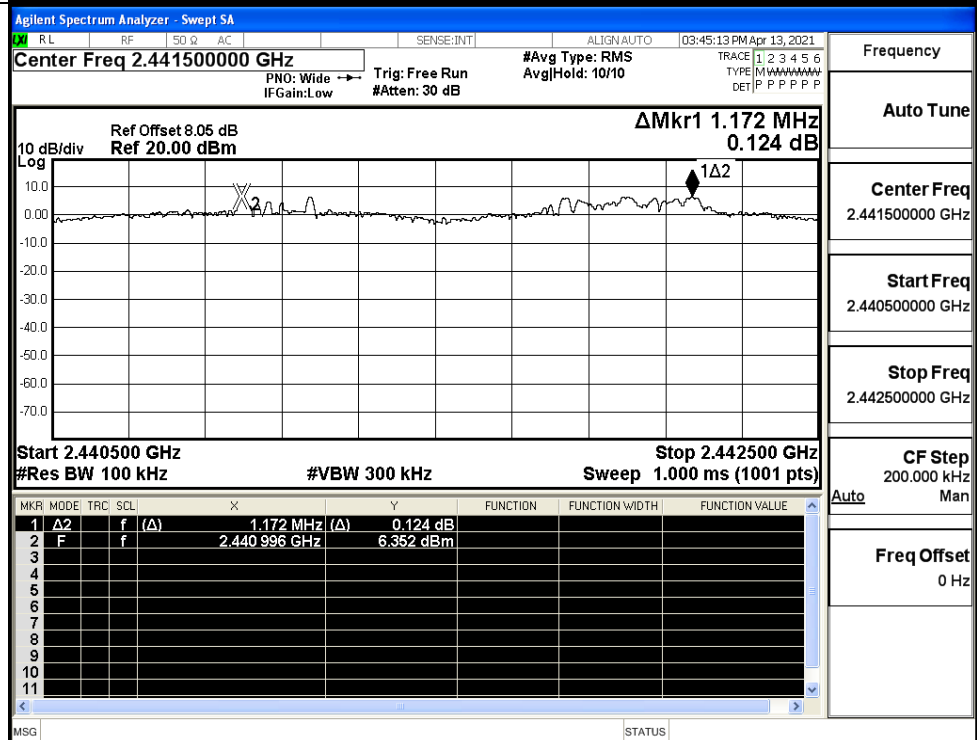


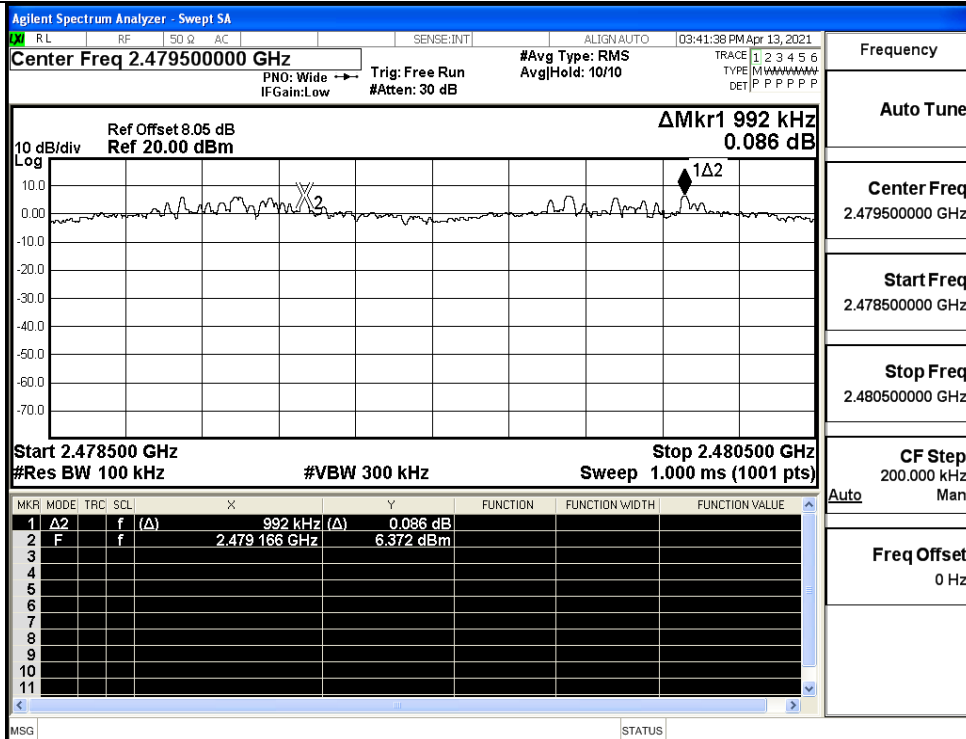
GFSK/MCH



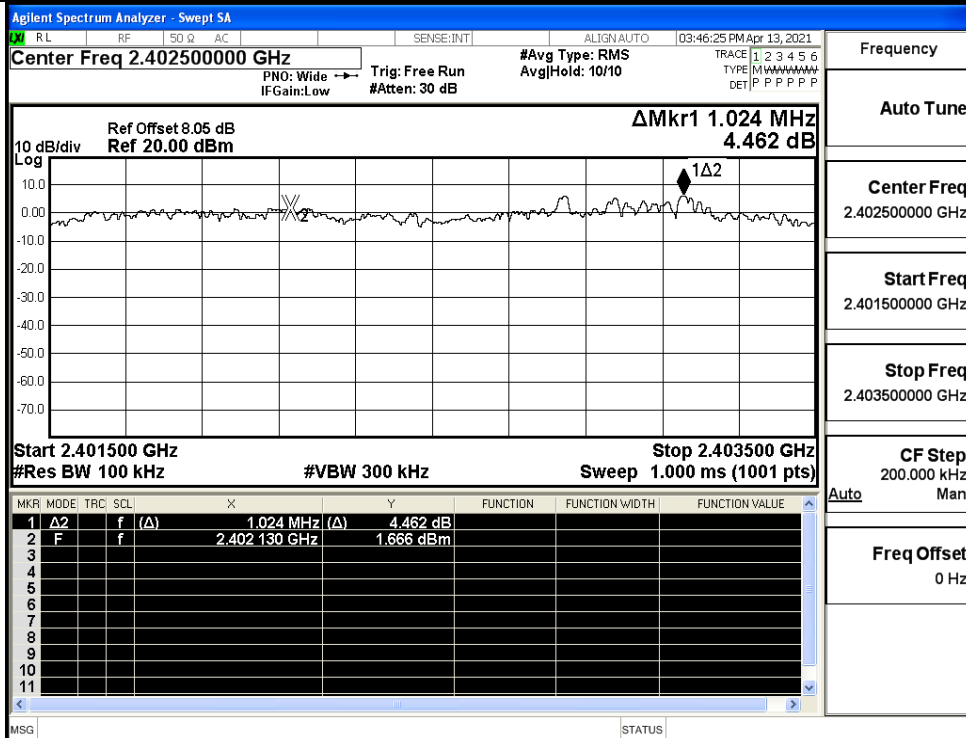
GFSK/HCH



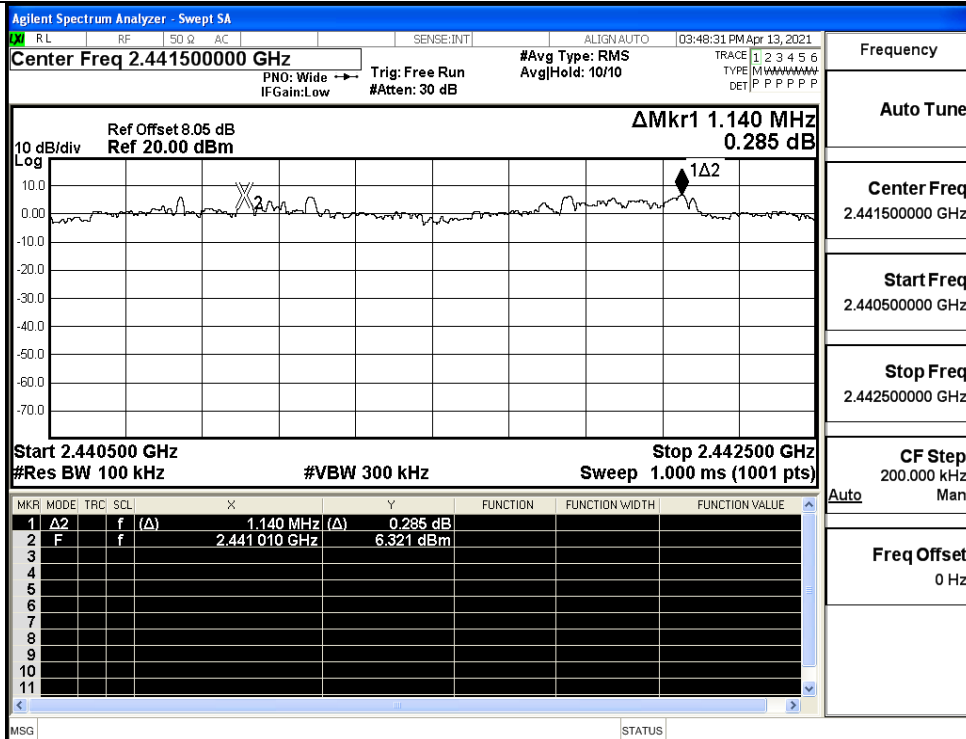
$\pi/4$ DQPSK/LCH $\pi/4$ DQPSK/MCH

$\pi/4$ DQPSK/HCH

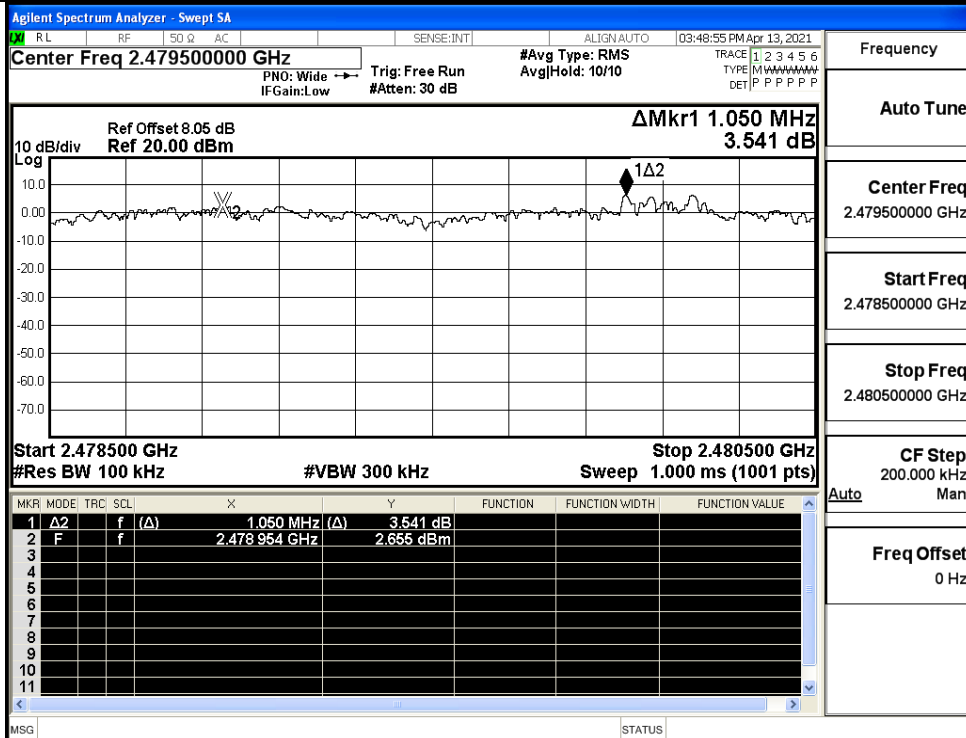
8DPSK/LCH



8DPSK/MCH



8DPSK/HCH

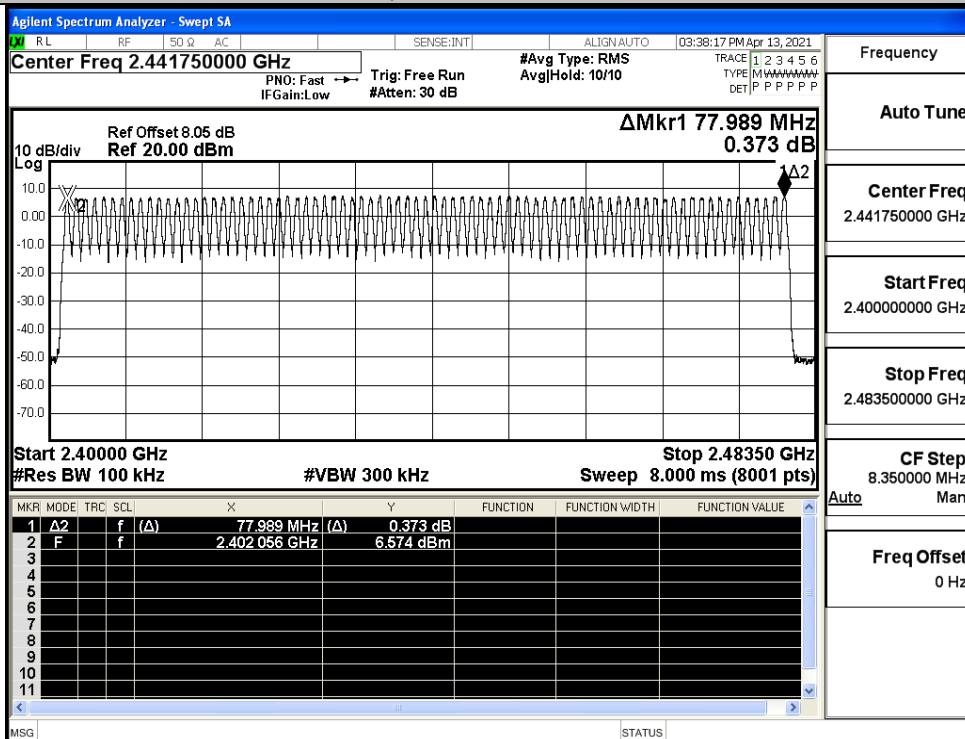
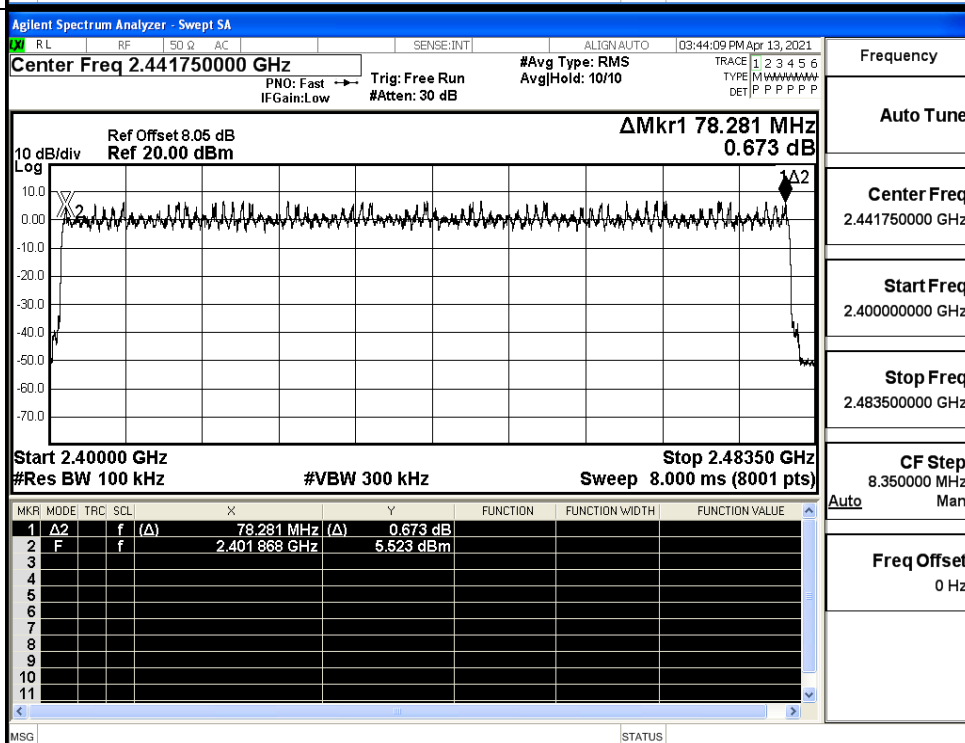


A.4 Hopping Channel Number

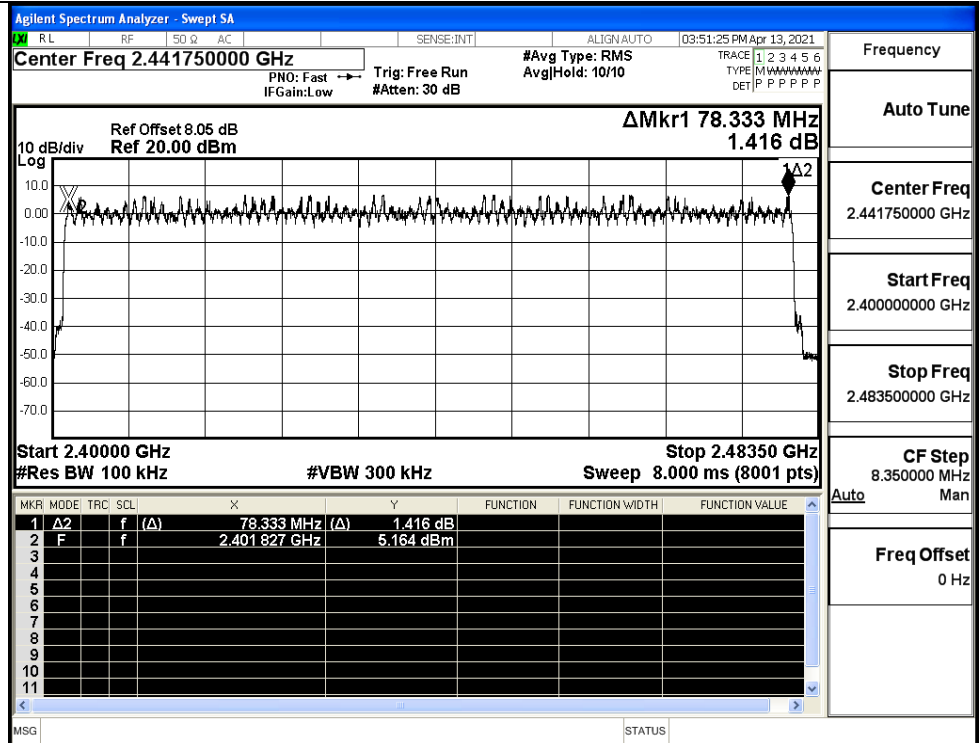
Mode	Channel.	Number of Hopping Channel [N]	Limit [N]	Verdict
GFSK	Hop	79	>=15	PASS
$\pi/4$ DQPSK	Hop	79	>=15	PASS
8DPSK	Hop	79	>=15	PASS

Test Graphs

GFSK/Hop

 $\pi/4$ DQPSK/Hop

8DPSK/Hop

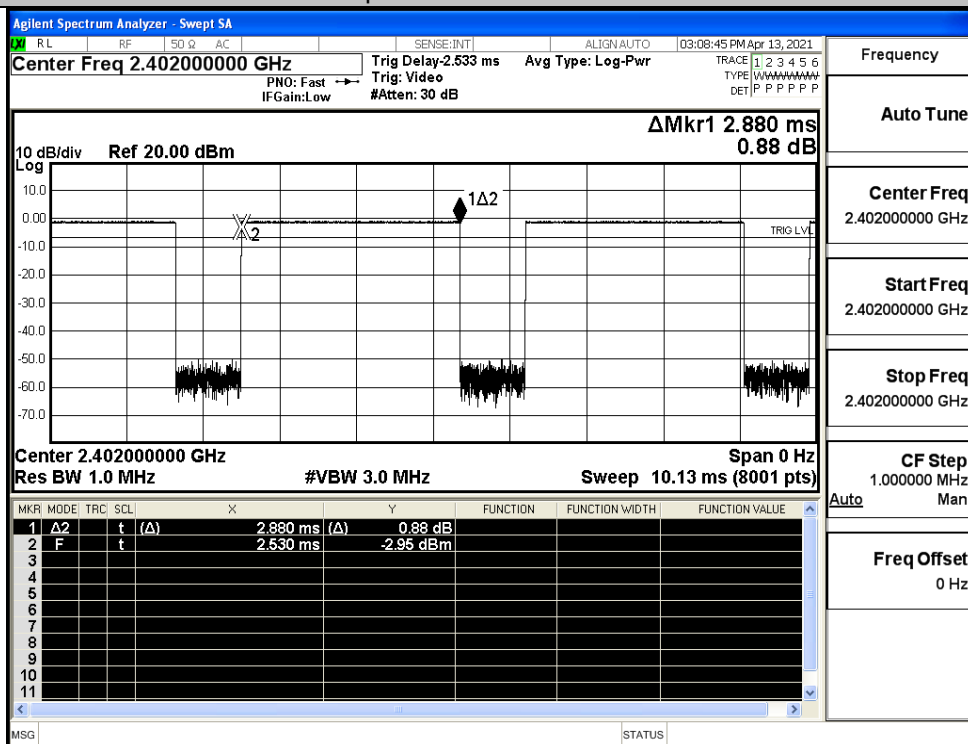


A.5 Dwell Time

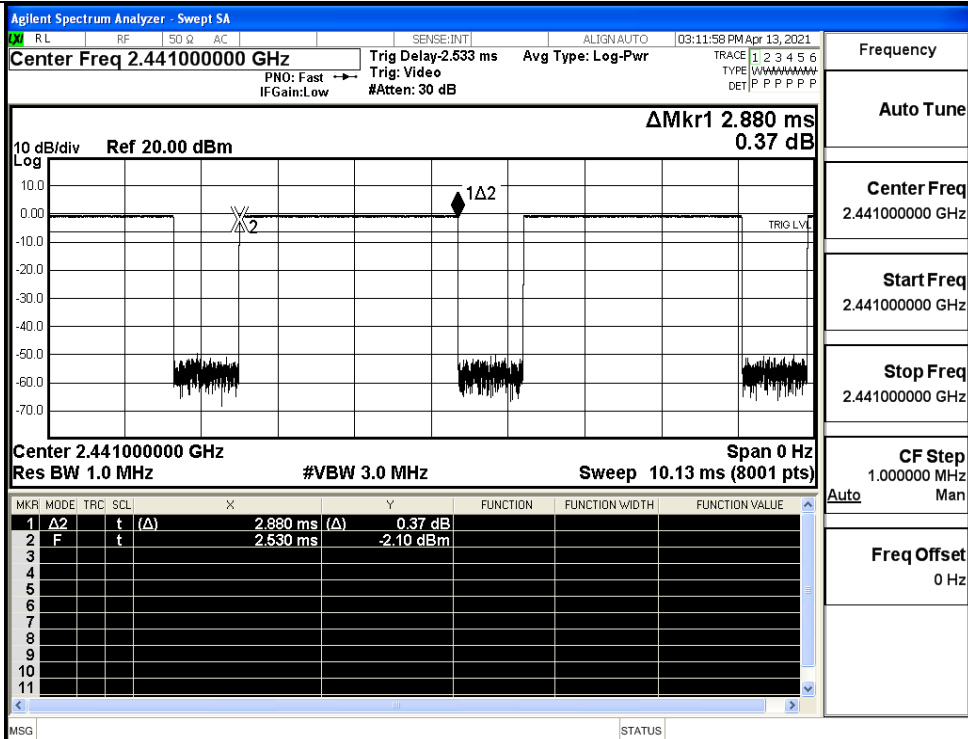
Mode	Packet	Channel	Burst Width [ms/hop/ch]	Total Hops[hop*ch]	Dwell Time[s]	Limit [s]	Verdict
GFSK	DH5	LCH	2.88	106.7	0.307	0.4	PASS
	DH5	MCH	2.88	106.7	0.307	0.4	PASS
	DH5	HCH	2.88	106.7	0.307	0.4	PASS
$\pi/4$ DQPSK	2DH5	LCH	2.88	106.7	0.307	0.4	PASS
	2DH5	MCH	2.88	106.7	0.307	0.4	PASS
	2DH5	HCH	2.88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

Test Graphs

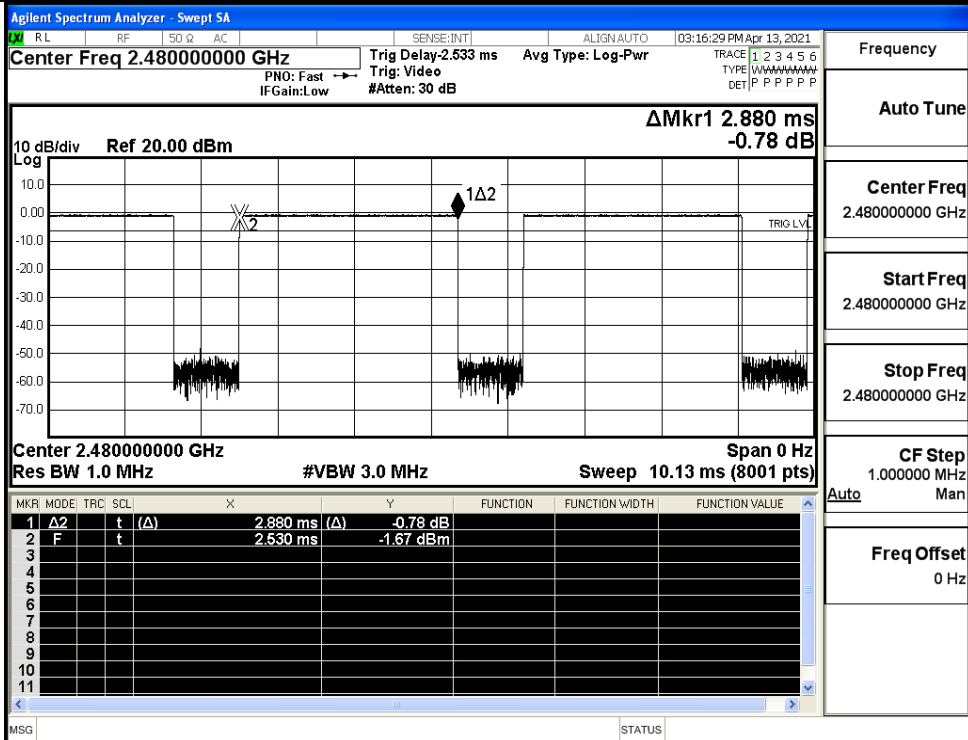
GFSK_DH5/LCH



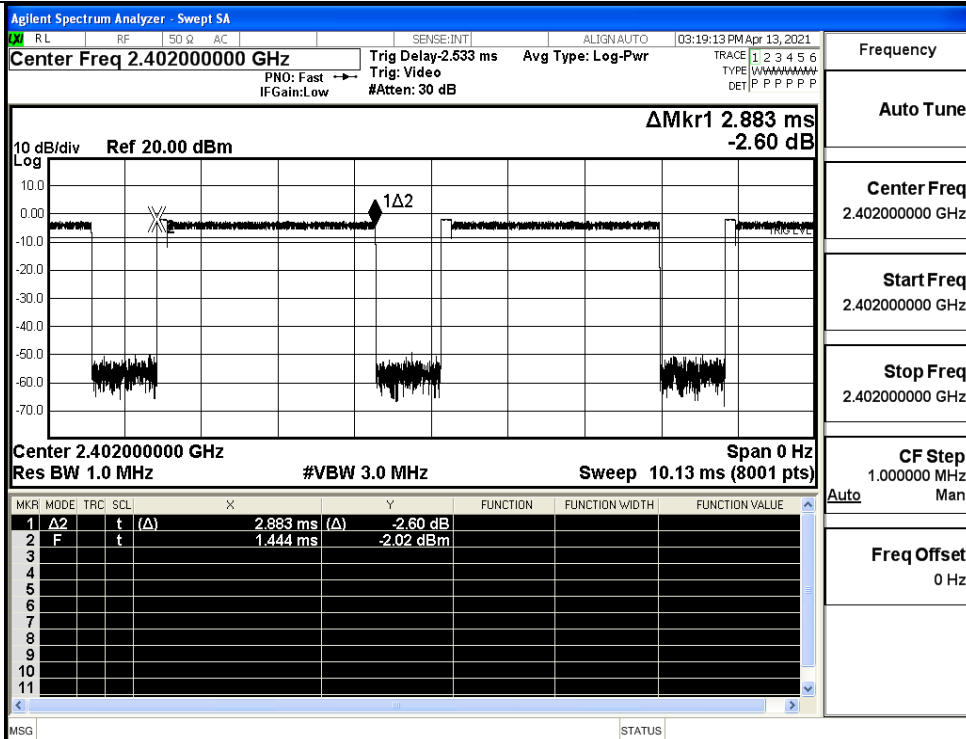
GFSK_DH5/MCH



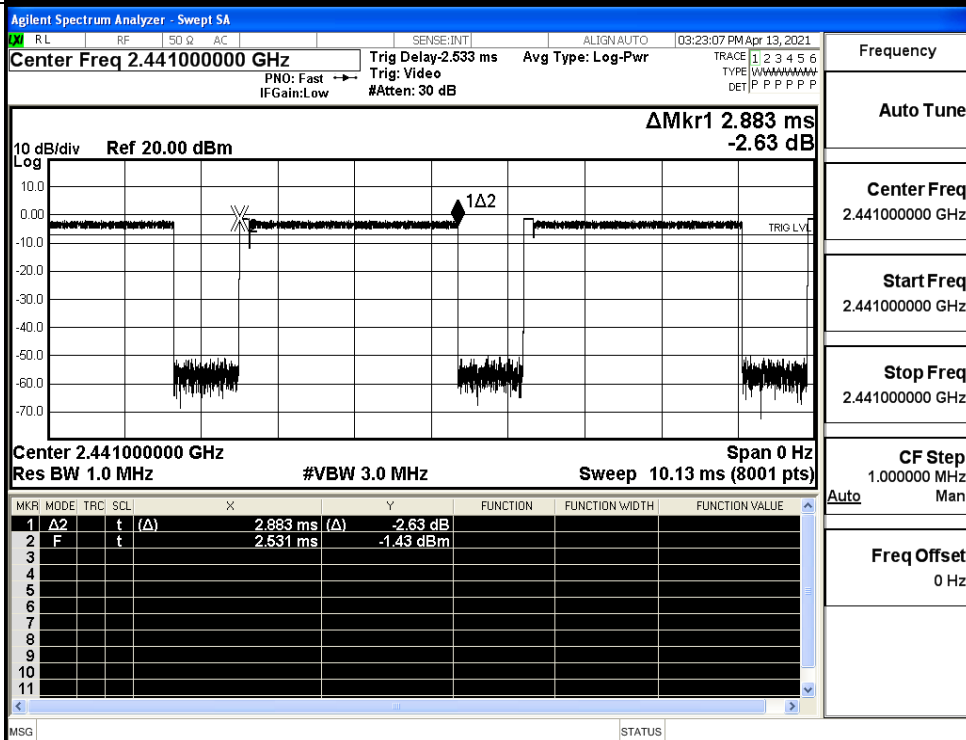
GFSK_DH5/HCH



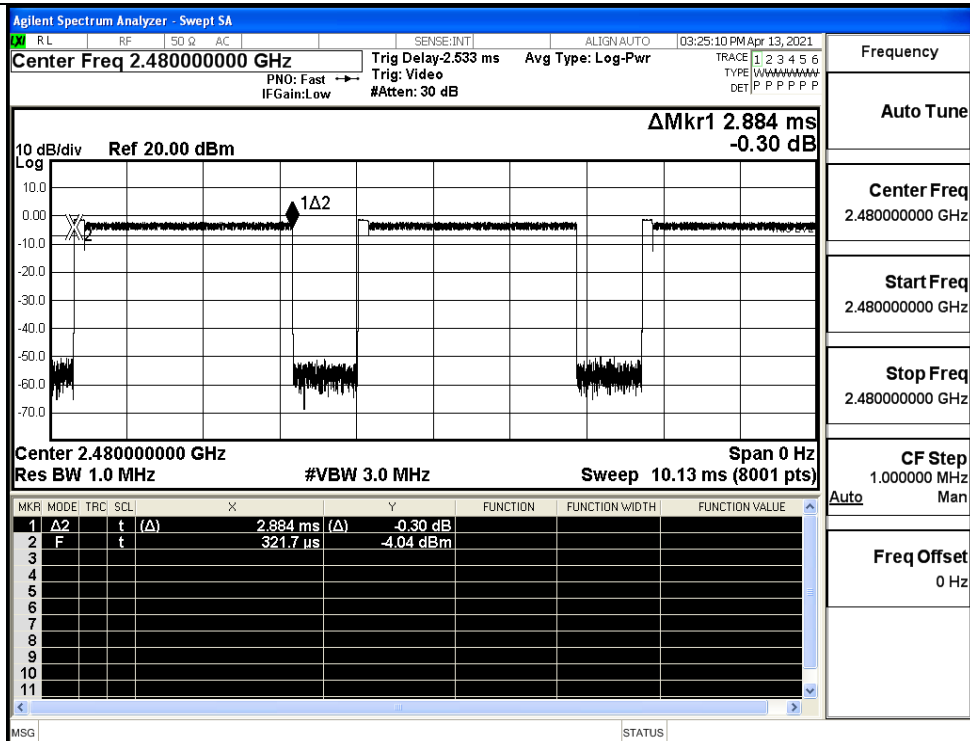
$\pi/4$ DQPSK
_2DH5/LCH



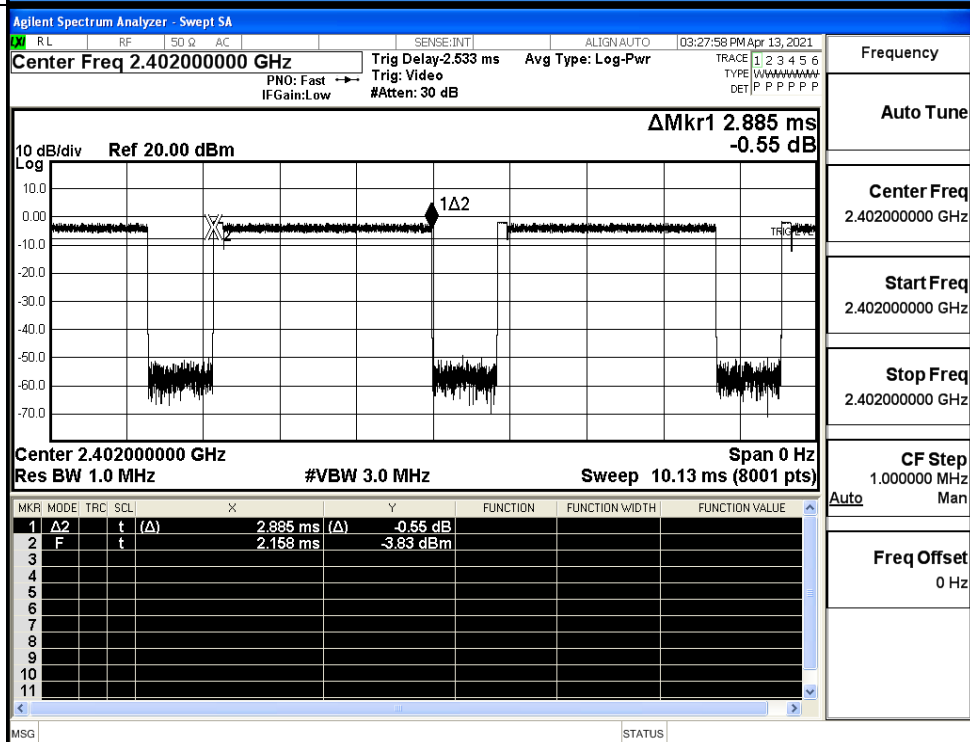
$\pi/4$ DQPSK
_2DH5/MCH



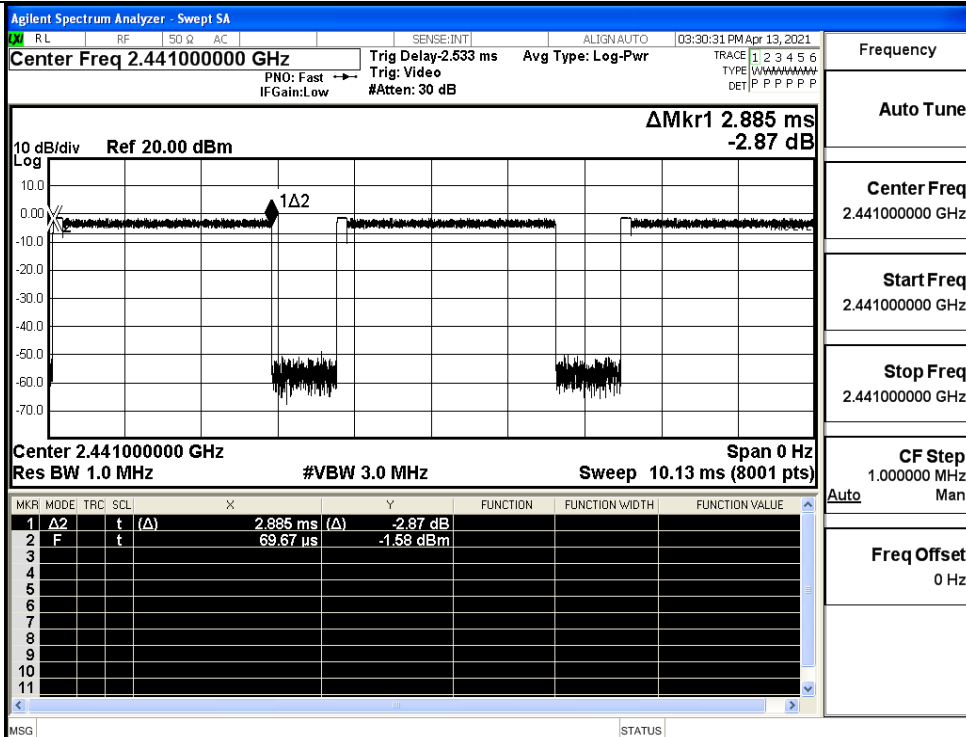
π/4DQPSK
2DH5/HCH



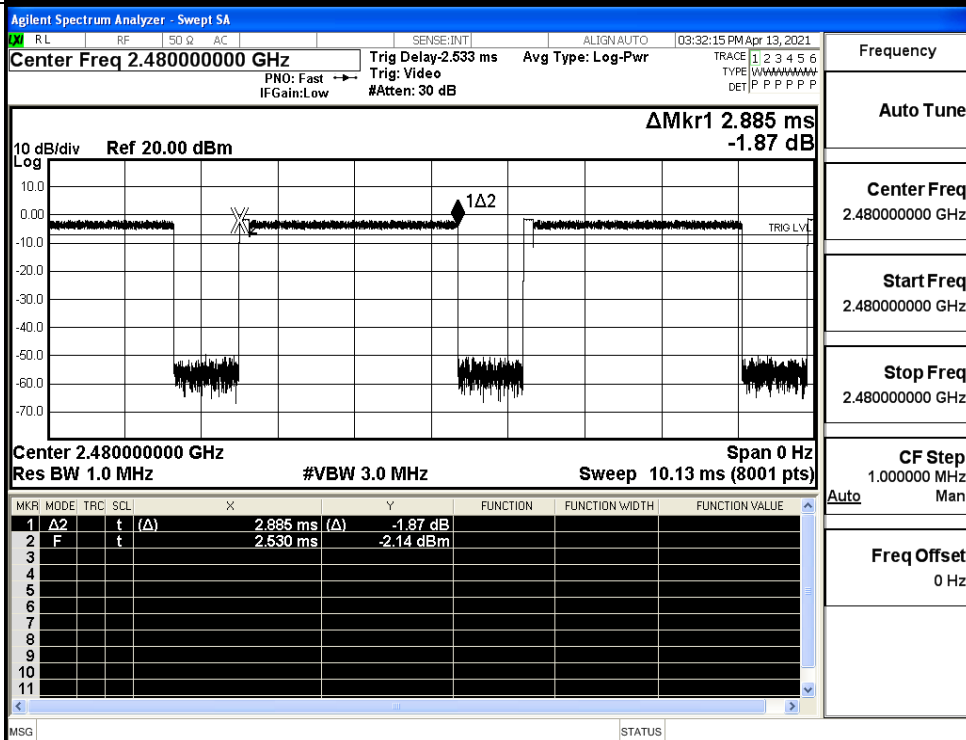
8DPSK_3DH5/LCH



8DPSK_3DH5/MCH



8DPSK_3DH5/HCH

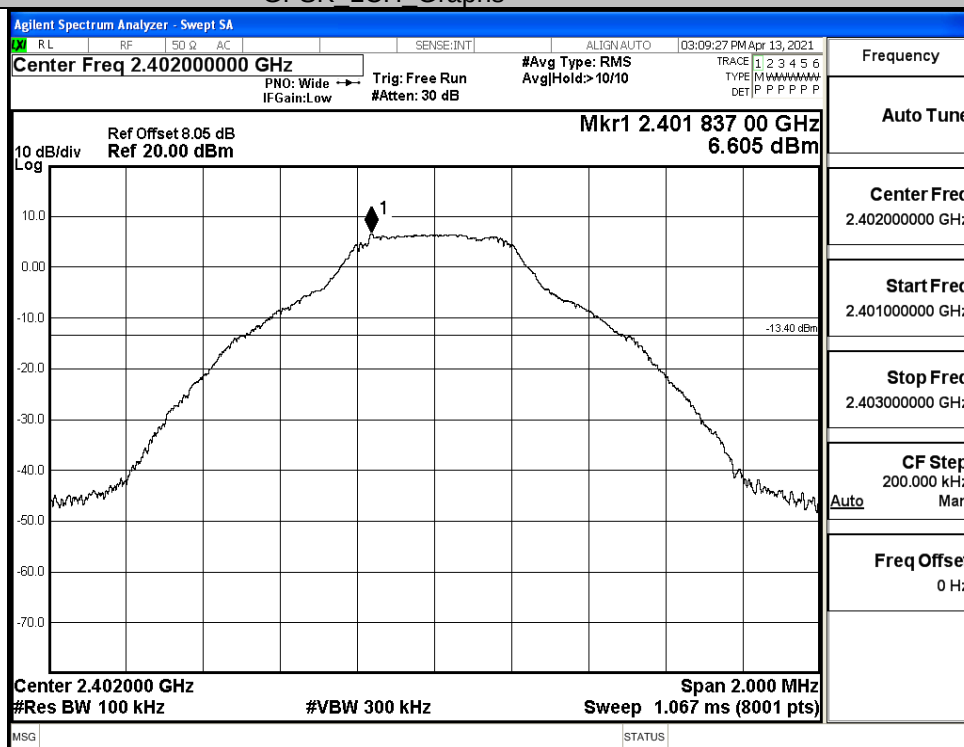


A.6 RF Conducted Spurious Emissions

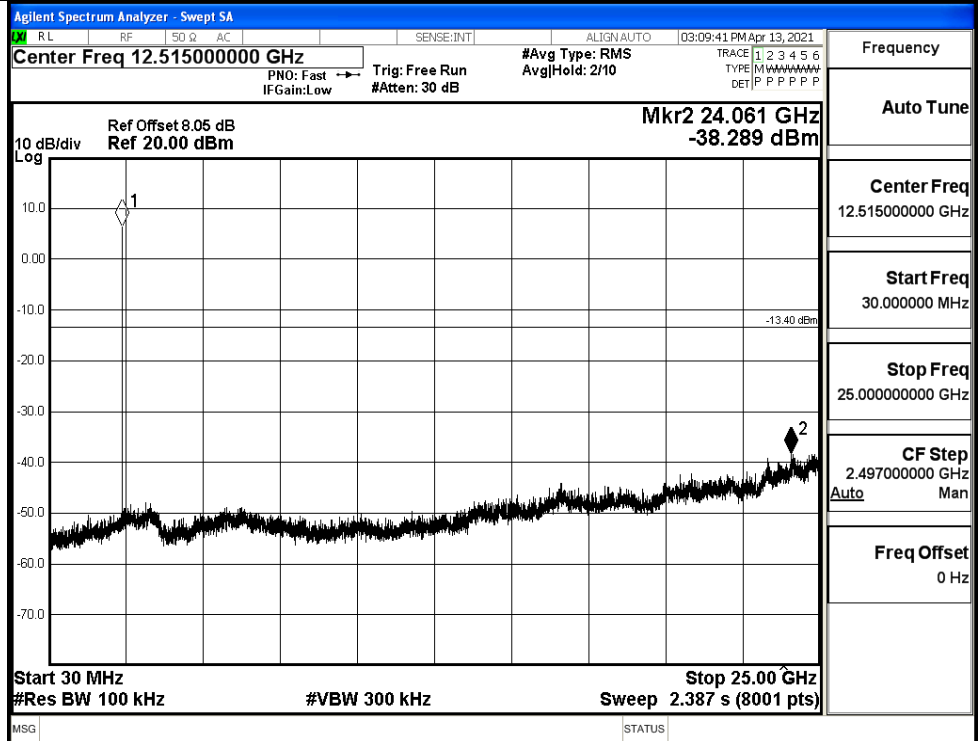
Mode	Channel	Pref [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
GFSK	LCH	6.605	-38.289	-13.395	PASS
	MCH	7.023	-38.130	-12.977	PASS
	HCH	6.967	-37.472	-13.033	PASS
$\pi/4$ DQPSK	LCH	6.192	-37.220	-13.808	PASS
	MCH	6.593	-38.253	-13.407	PASS
	HCH	6.461	-37.622	-13.539	PASS
8DPSK	LCH	6.164	-37.390	-13.836	PASS
	MCH	6.59	-36.587	-13.410	PASS
	HCH	6.429	-37.067	-13.571	PASS

GFSK LCH Graphs

Pref

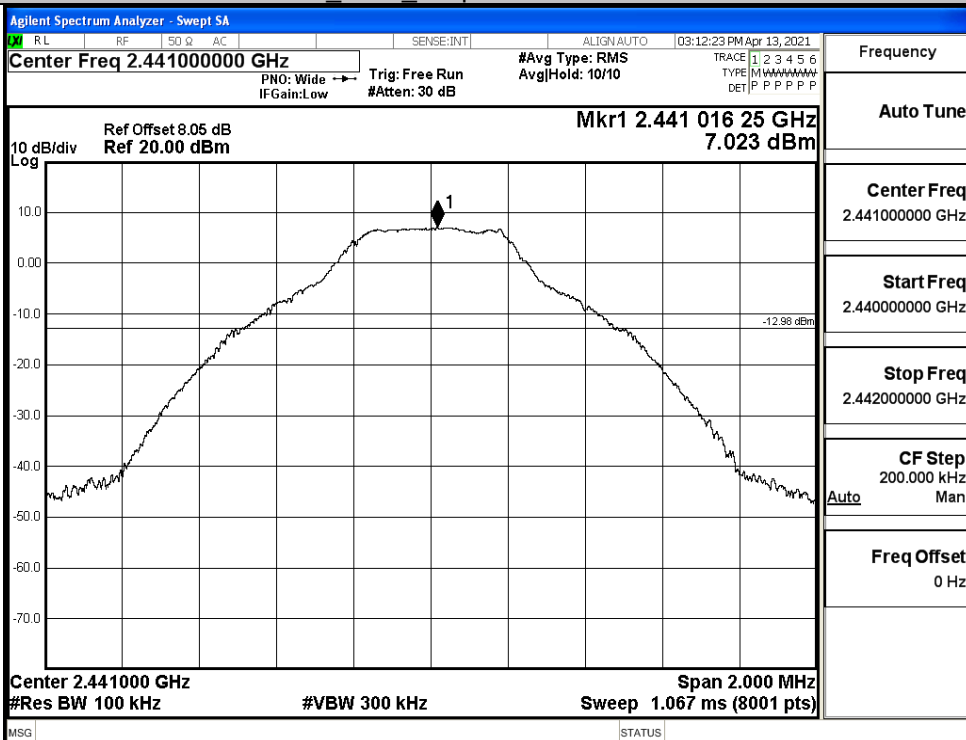


Puw

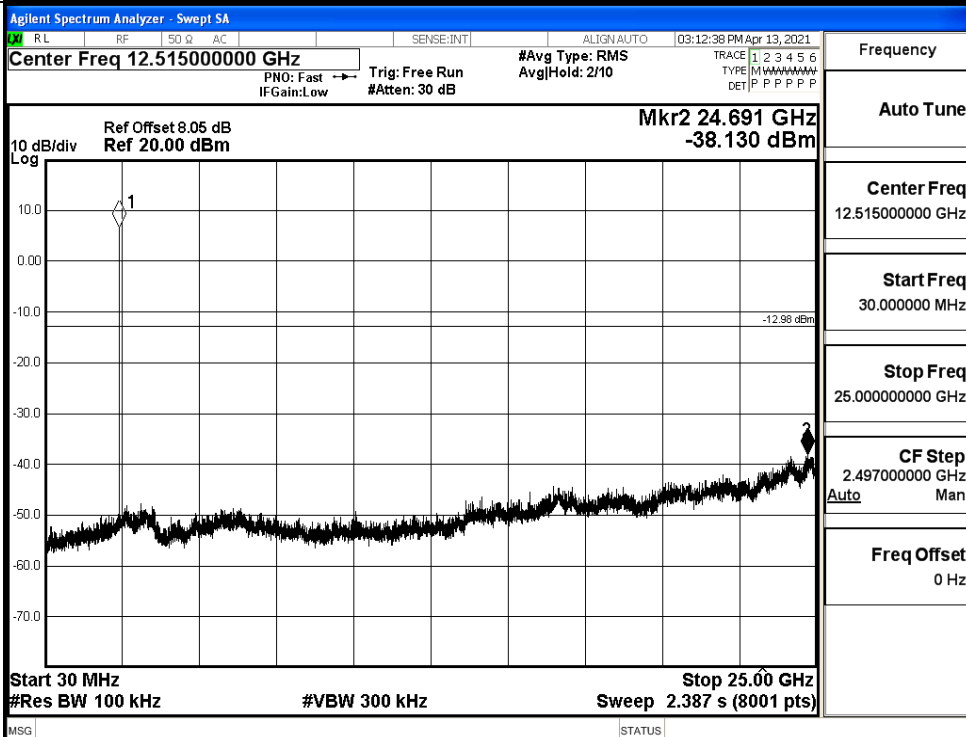


GFSK_MCH_Graphs

Pref

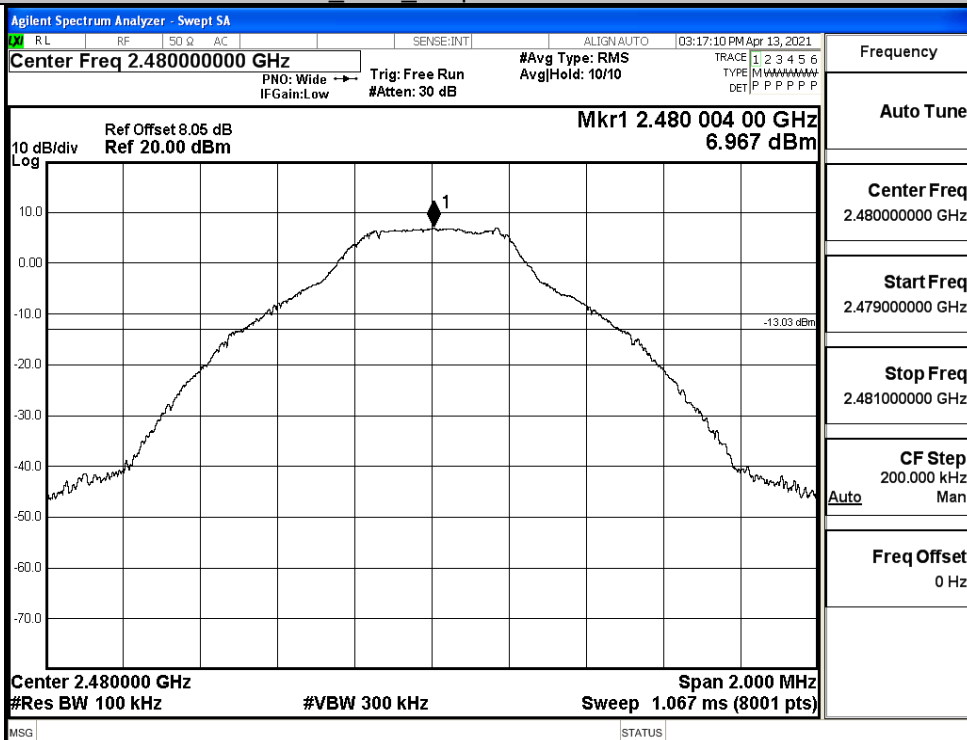


Puw

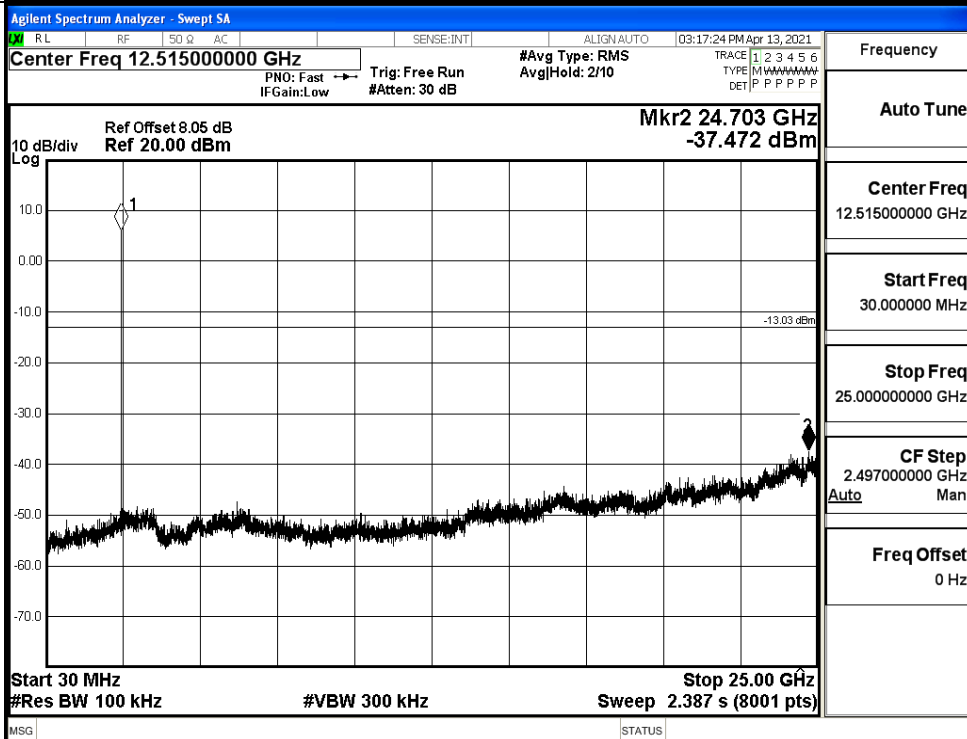


GFSK HCH_Graphs

Pref

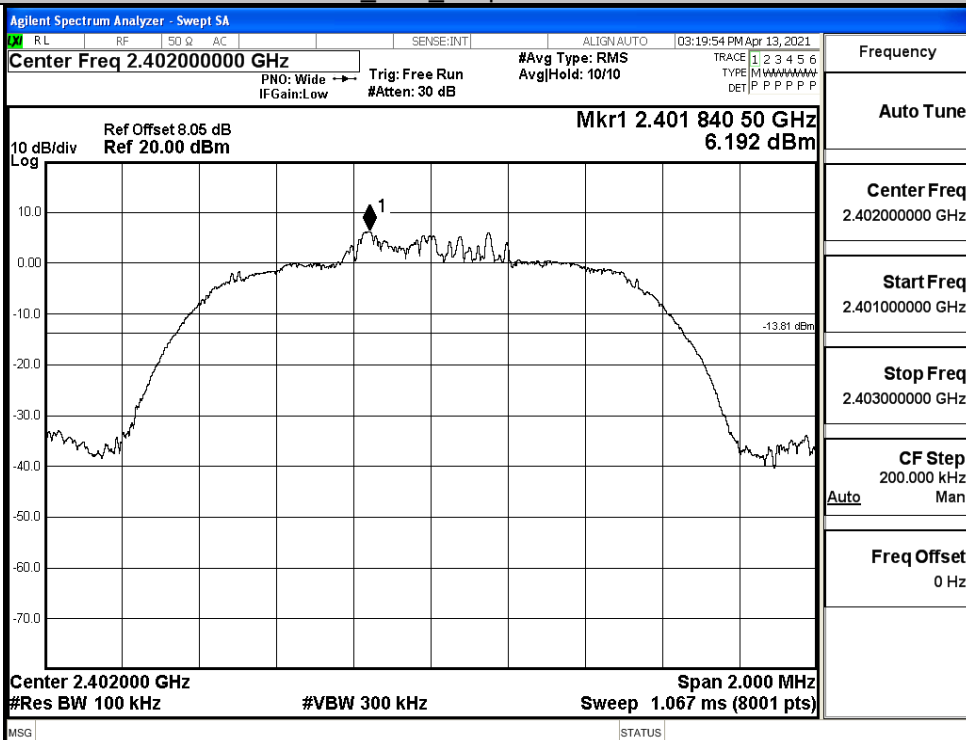


Puw

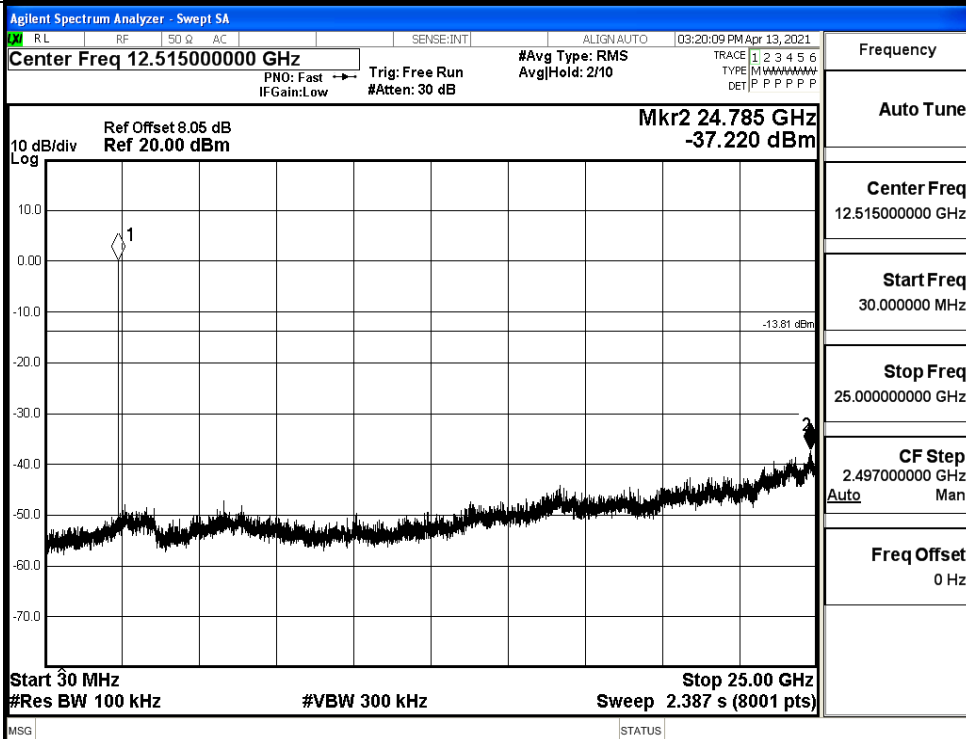


$\pi/4$ DQPSK_LCH_Graphs

Pref

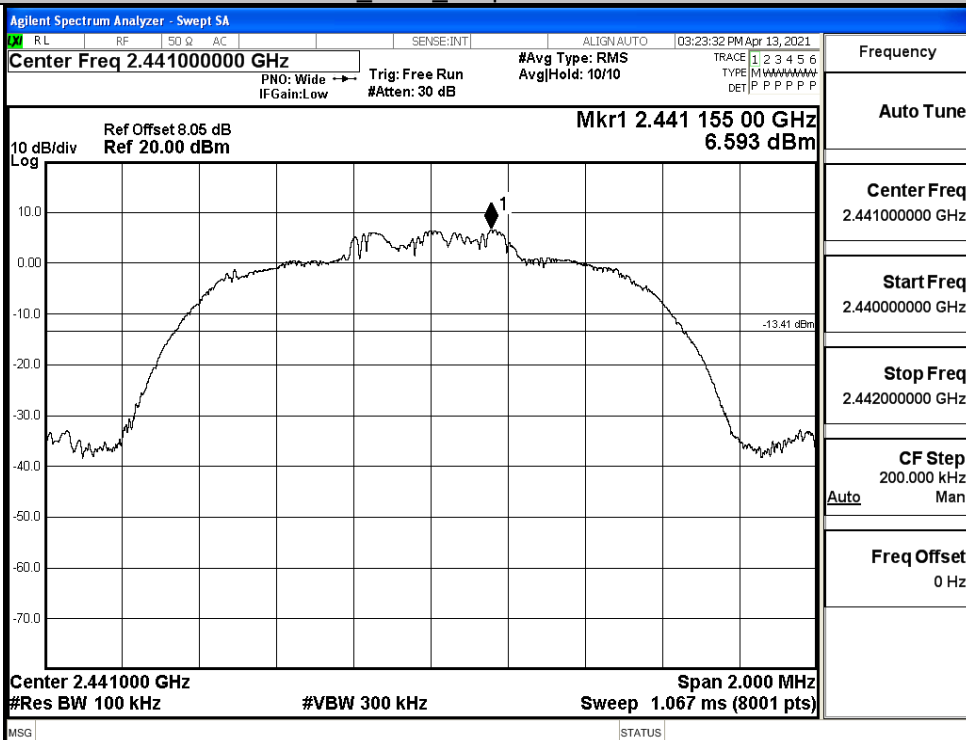


Puw

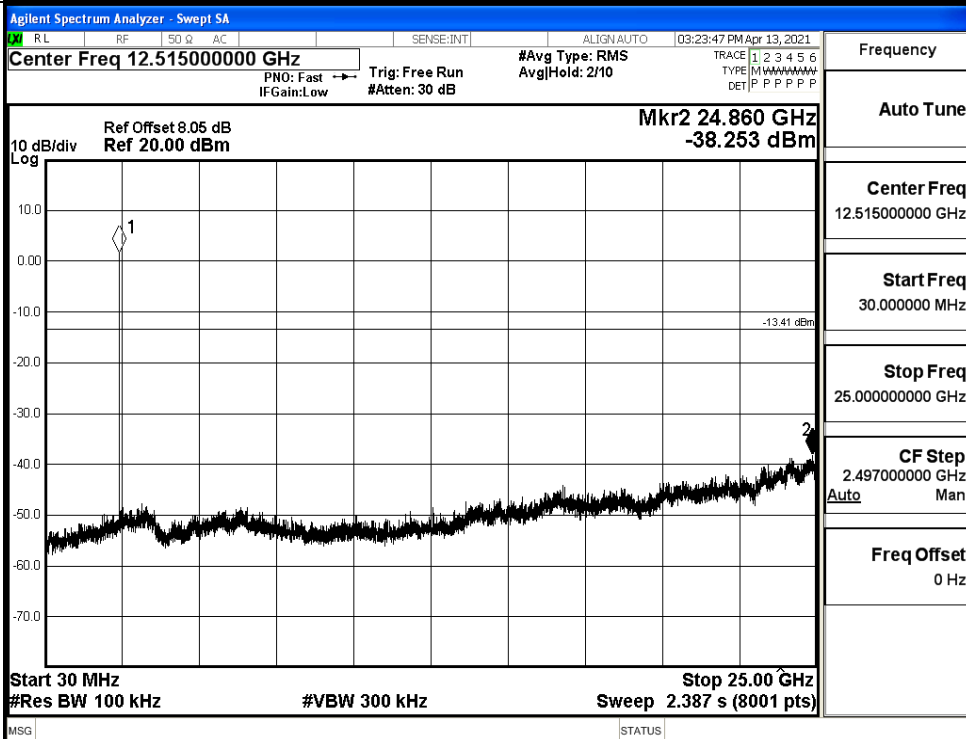


π /4DQPSK_MCH_Graphs

Pref

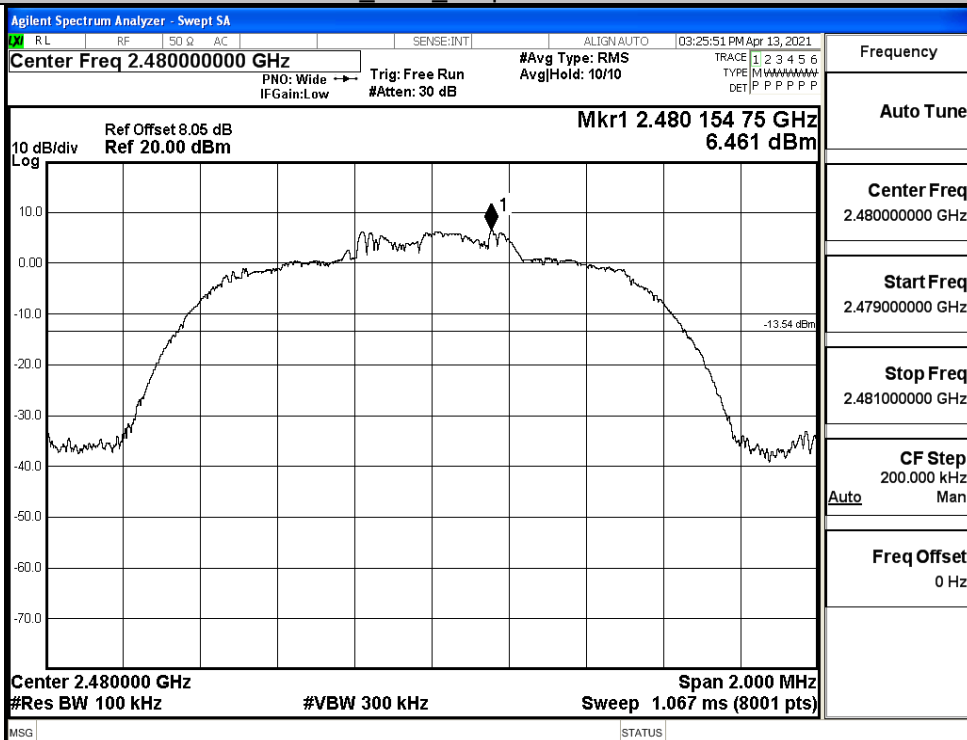


Puw

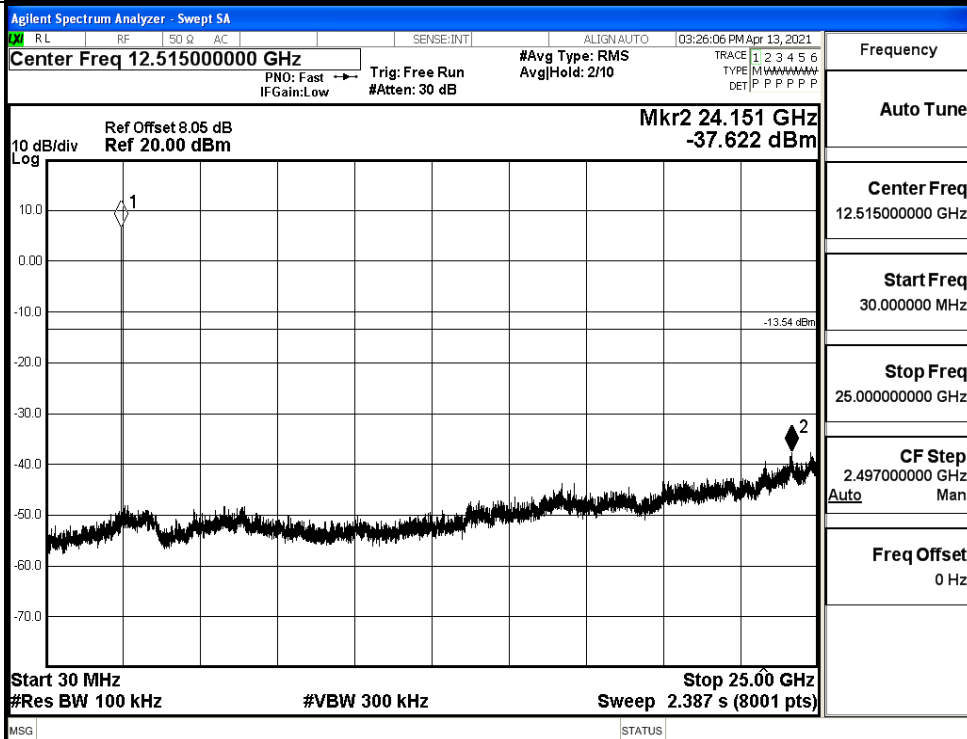


π /4DQPSK_HCH_Graphs

Pref

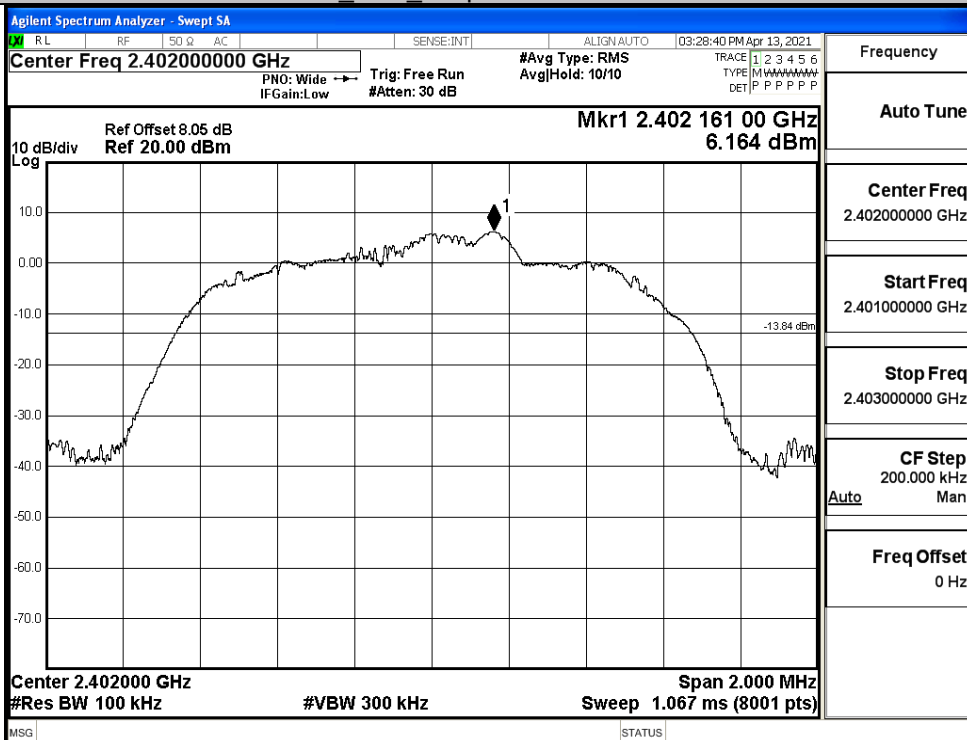


Puw

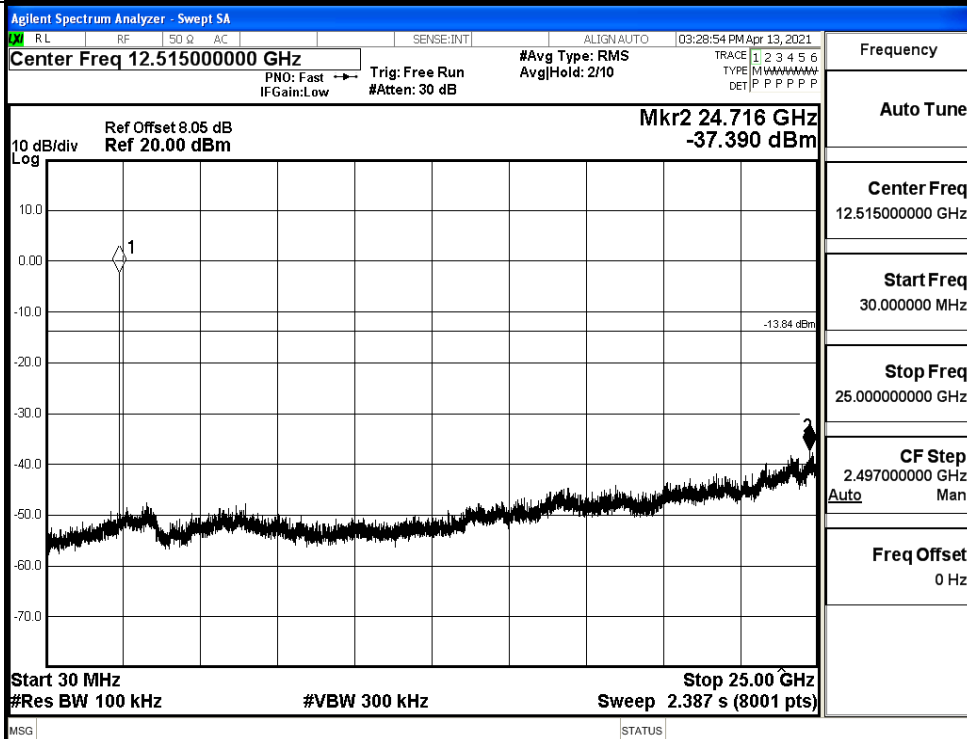


8DPSK_LCH_Graphs

Pref

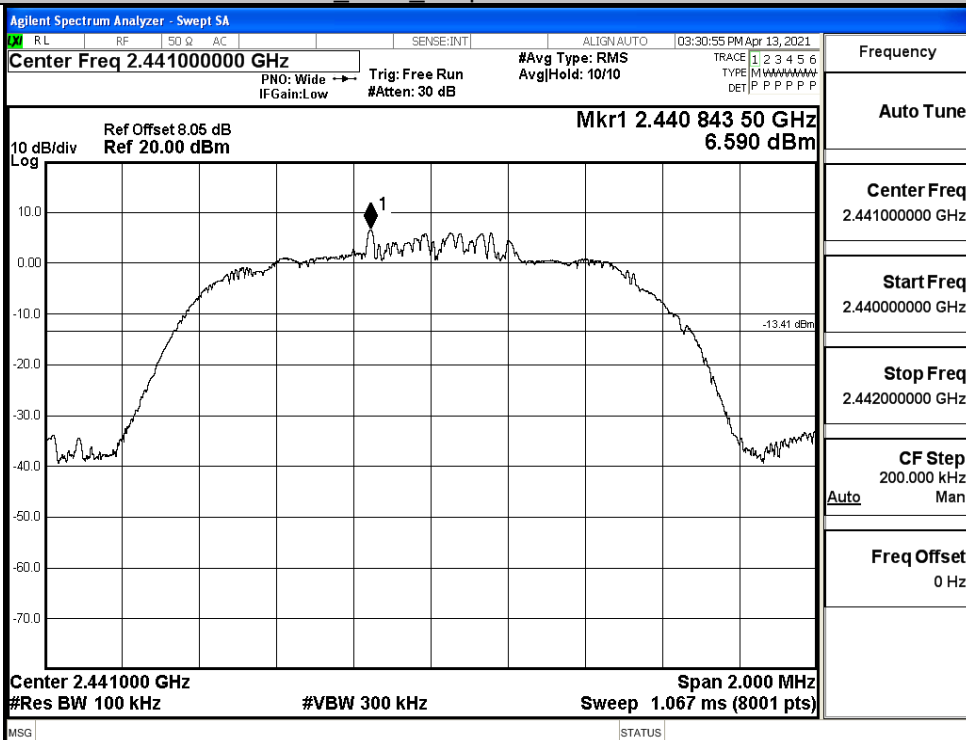


Puw

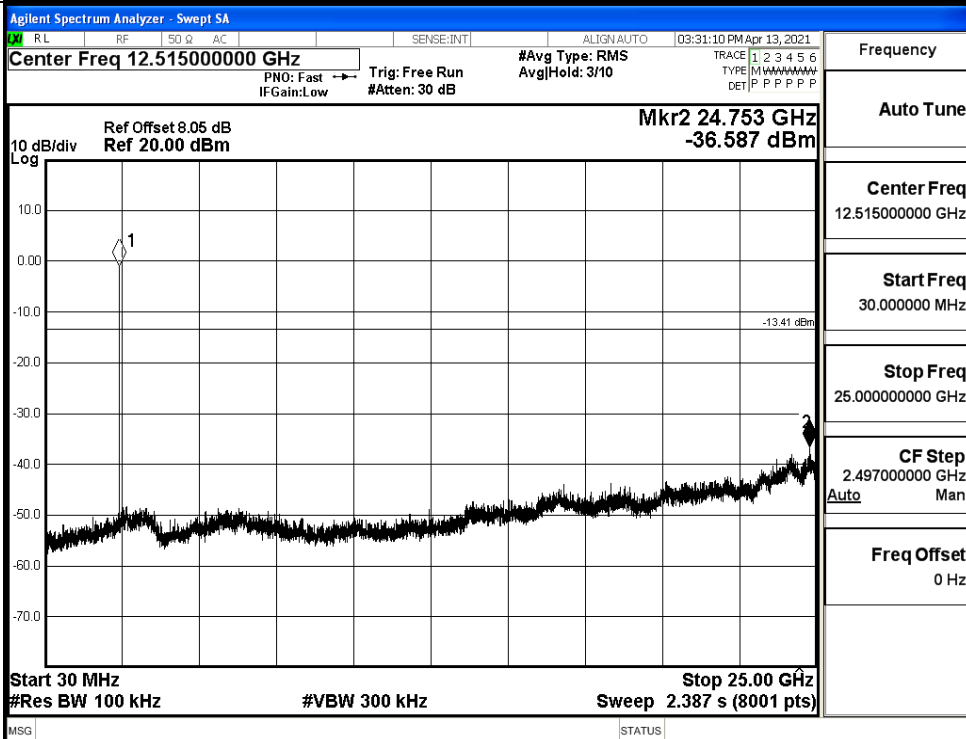


8DPSK_MCH_Graphs

Pref

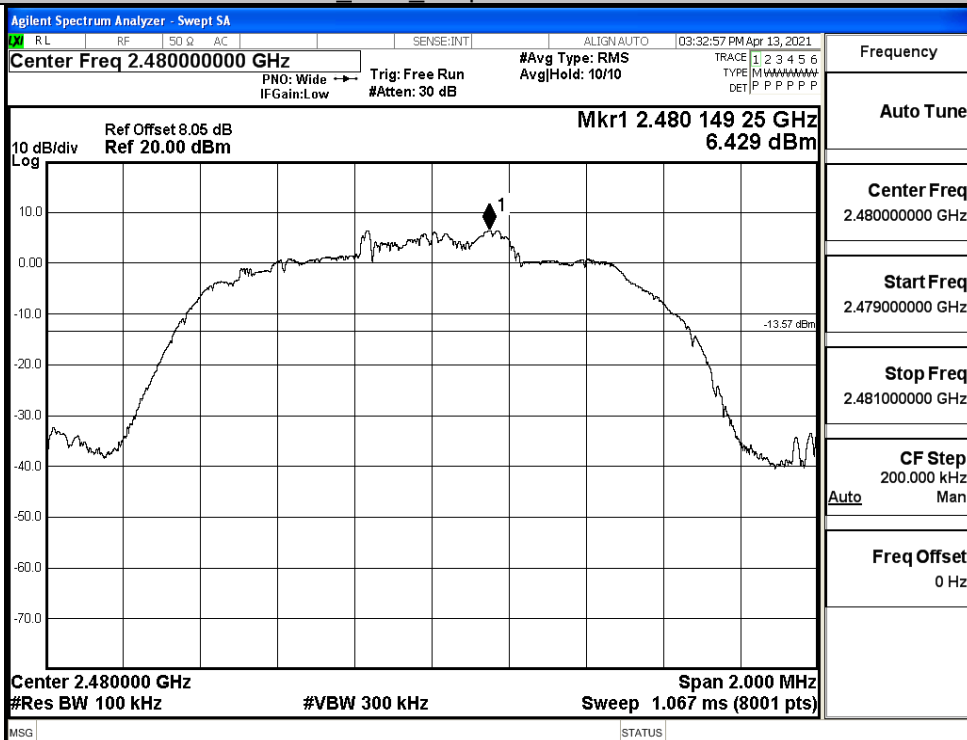


Puw

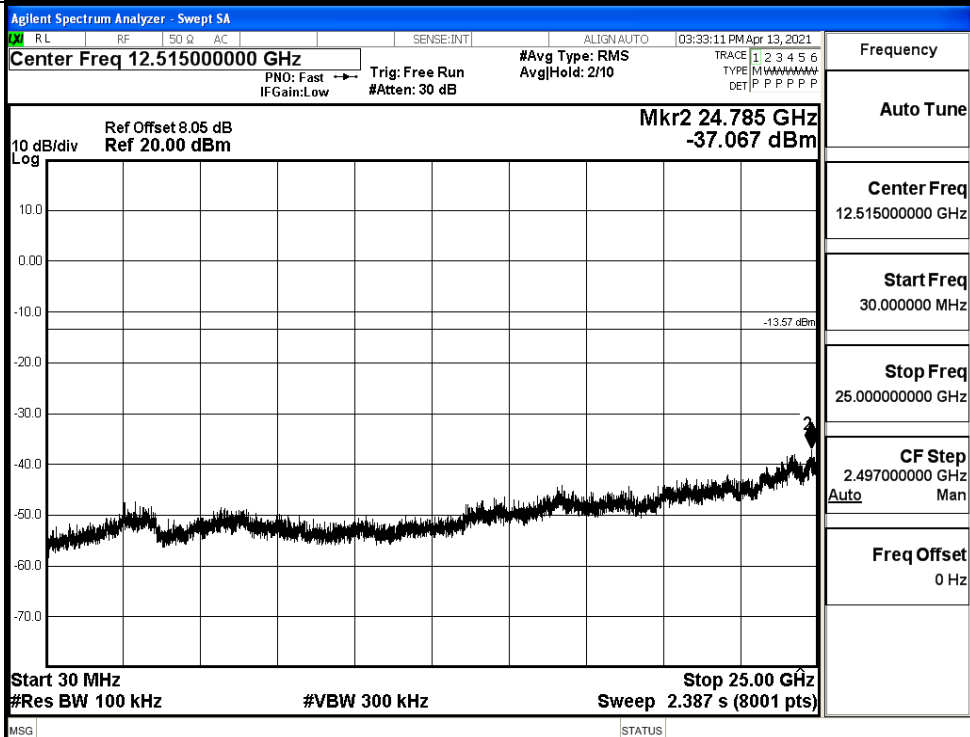


8DPSK_HCH_Graphs

Pref



Puw

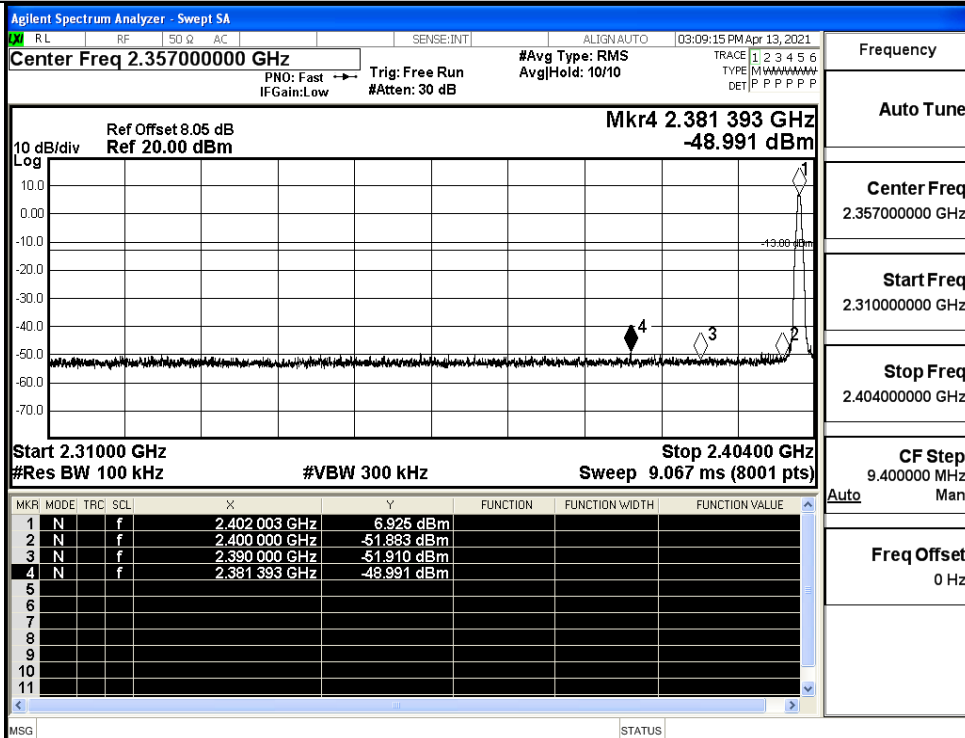


A.7 Band-edge for RF Conducted Emissions

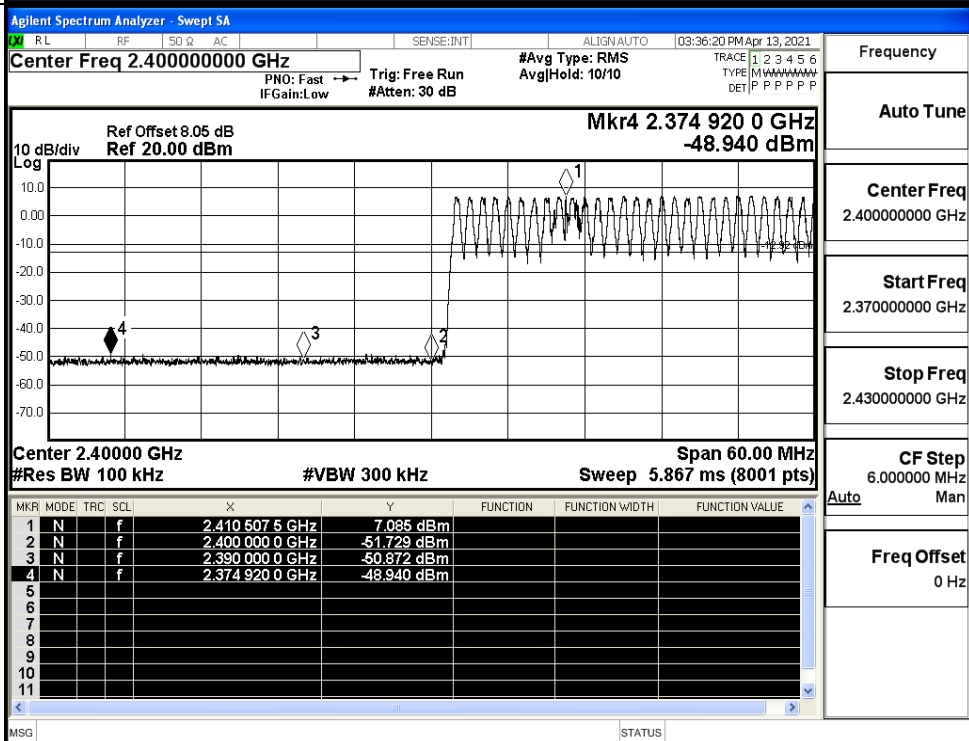
Mode	Channel	Carrier Frequency [MHz]	Carrier Power [dBm]	Frequency Hopping	Max Spurious Level [dBm]	Limit [dBm]	Verdict
GFSK	LCH	2402	6.925	Off	-48.991	-13.08	PASS
			7.085	On	-48.940	-12.92	PASS
	HCH	2480	7.153	Off	-49.262	-12.85	PASS
			7.180	On	-48.746	-12.82	PASS
$\pi/4$ DQPSK	LCH	2402	4.098	Off	-49.211	-15.9	PASS
			6.264	On	-48.727	-13.74	PASS
	HCH	2480	5.544	Off	-49.036	-14.46	PASS
			6.628	On	-48.394	-13.37	PASS
8DPSK	LCH	2402	5.782	Off	-49.283	-14.22	PASS
			6.606	On	-49.135	-13.39	PASS
	HCH	2480	5.754	Off	-48.122	-14.25	PASS
			6.626	On	-48.764	-13.37	PASS

Test Graphs

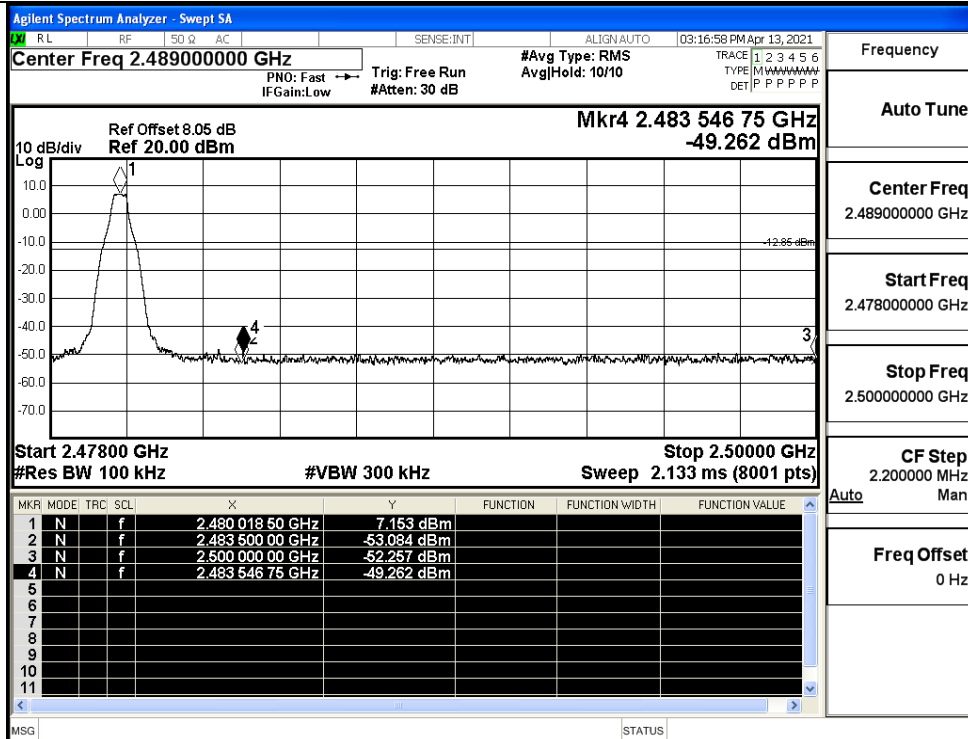
GFSK/LCH/No Hop



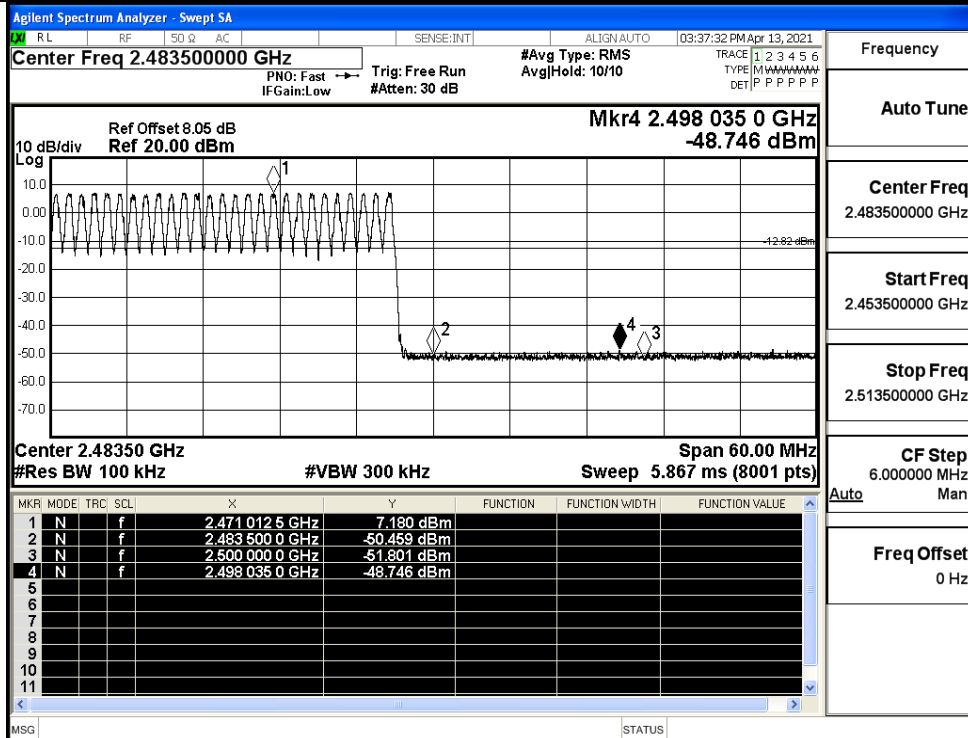
GFSK/LCH/Hop



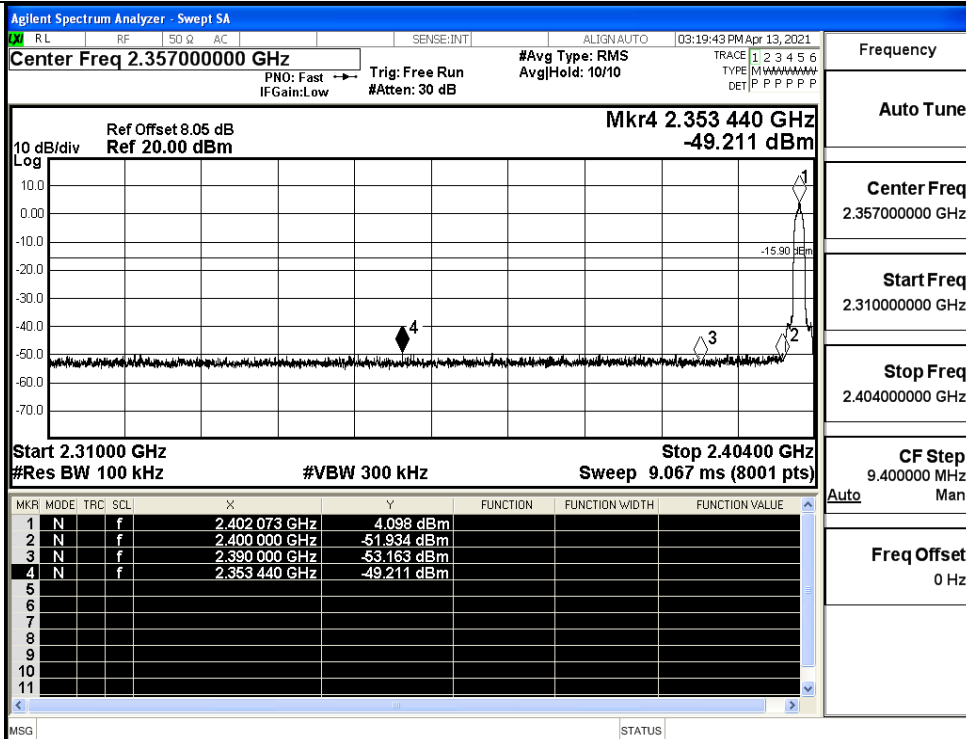
GFSK/HCH/No Hop



GFSK/HCH/Hop



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



Frequency

Auto Tune

Center Freq
2.357000000 GHz

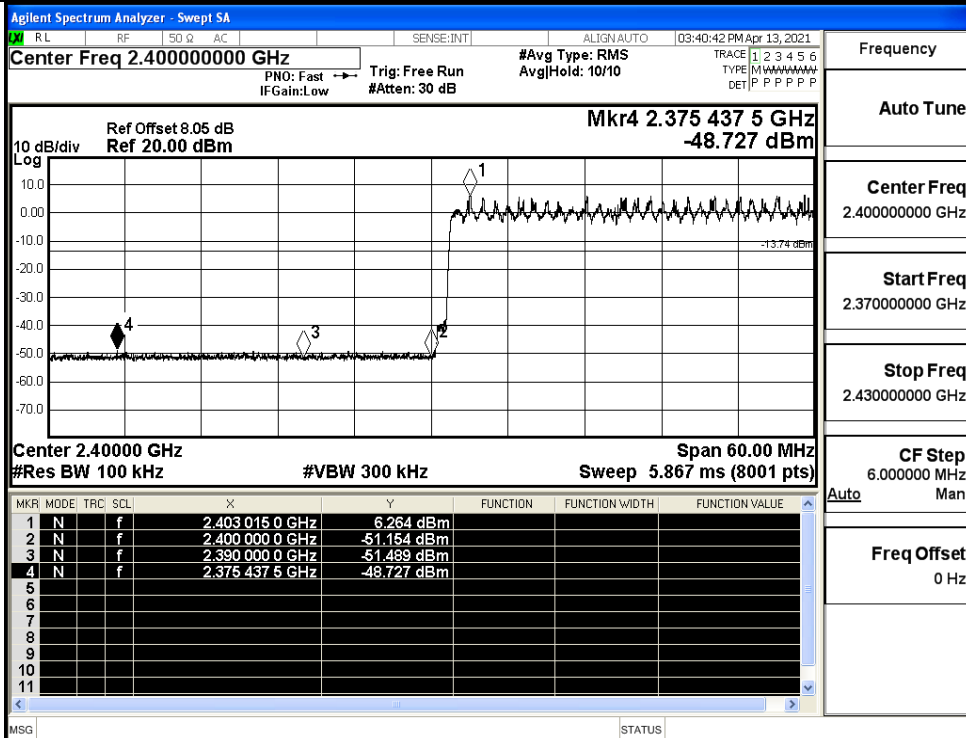
Start Freq
2.310000000 GHz

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

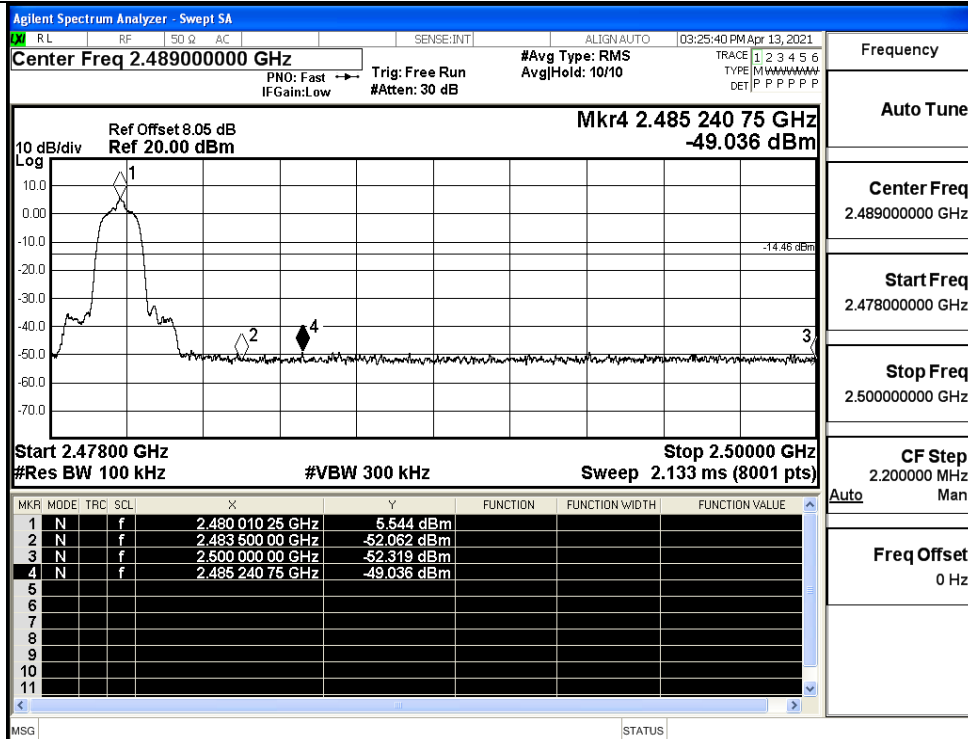
Start Freq
2.370000000 GHz

Stop Freq
2.430000000 GHz

CF Step
6.000000 MHz
Auto Man

Freq Offset
0 Hz

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

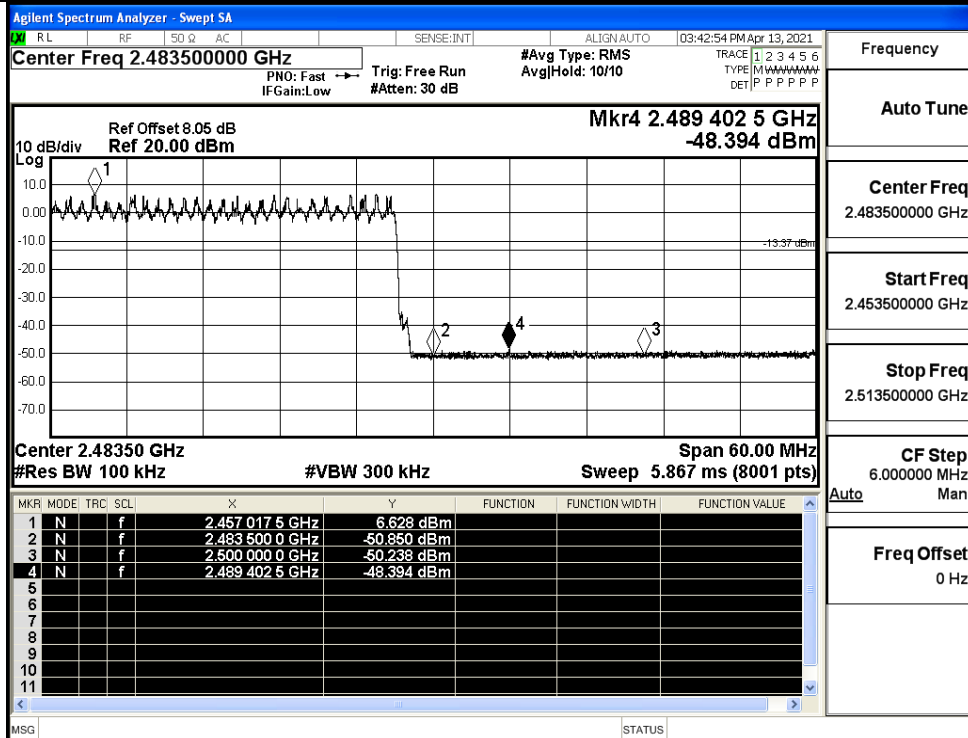


Frequency

Auto Tune

Center Freq
2.489000000 GHzStart Freq
2.478000000 GHzStop Freq
2.500000000 GHzCF Step
2.200000 MHz
Auto ManFreq Offset
0 Hz

$\pi/4$ DQPSK/HCH/Hop

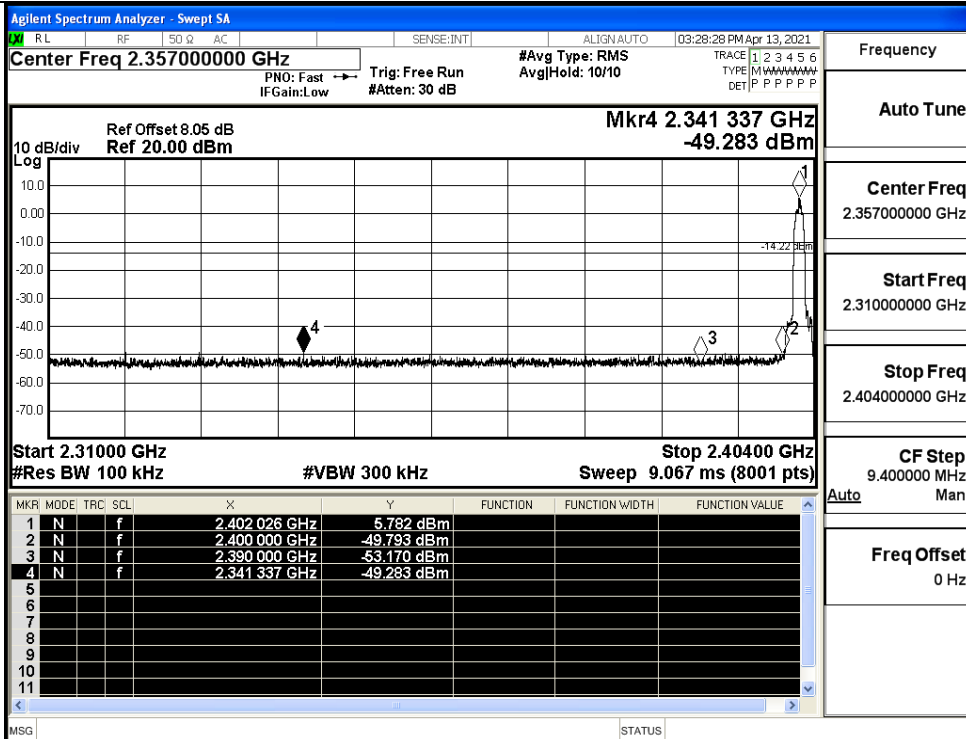


Frequency

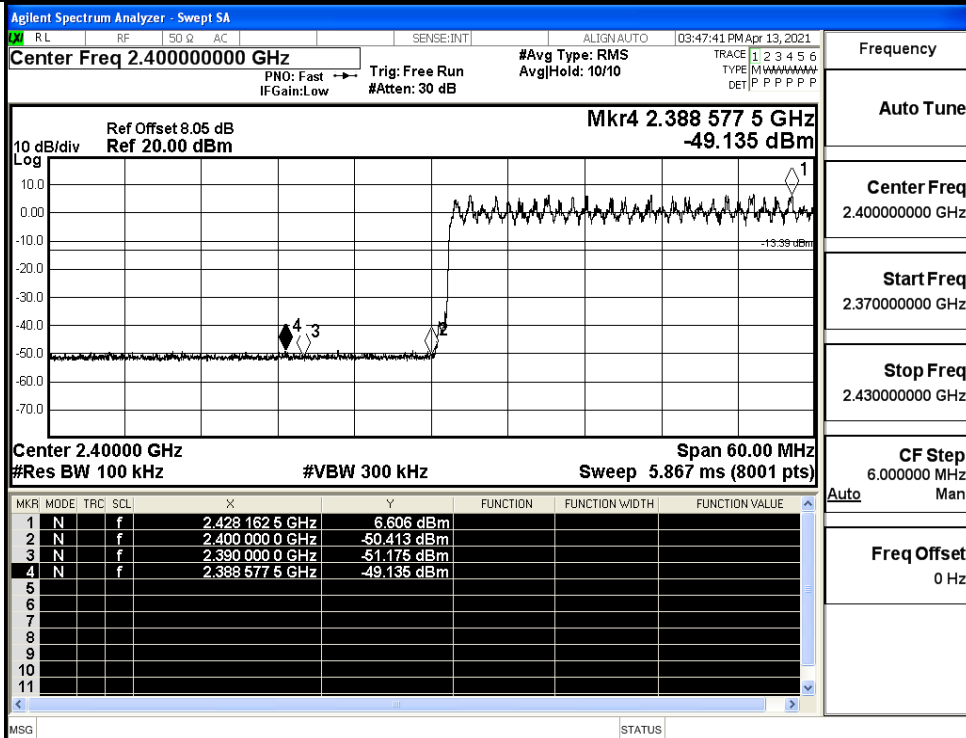
Auto Tune

Center Freq
2.483500000 GHzStart Freq
2.453500000 GHzStop Freq
2.513500000 GHzCF Step
6.000000 MHz
Auto ManFreq Offset
0 Hz

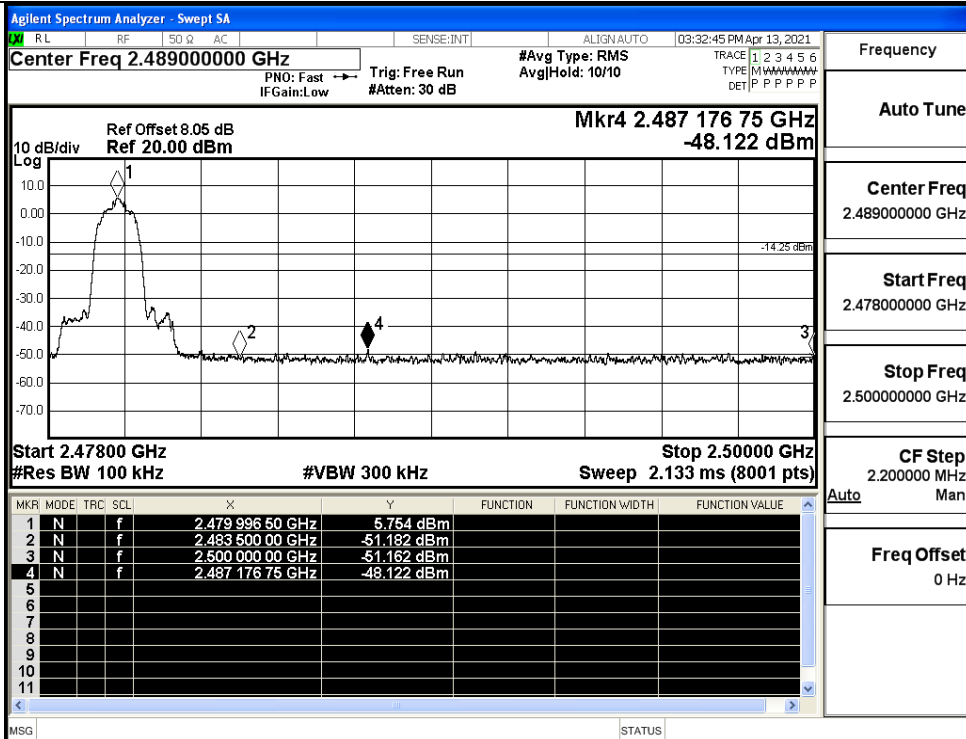
8DPSK/LCH/No Hop



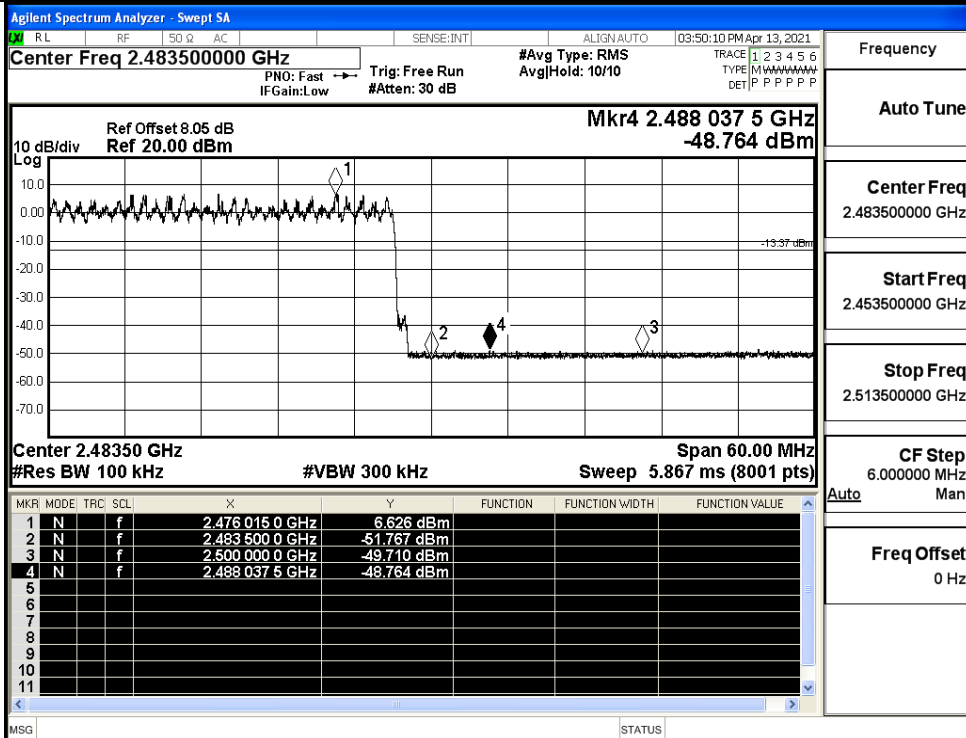
8DPSK/LCH/Hop



8DPSK/HCH/No Hop



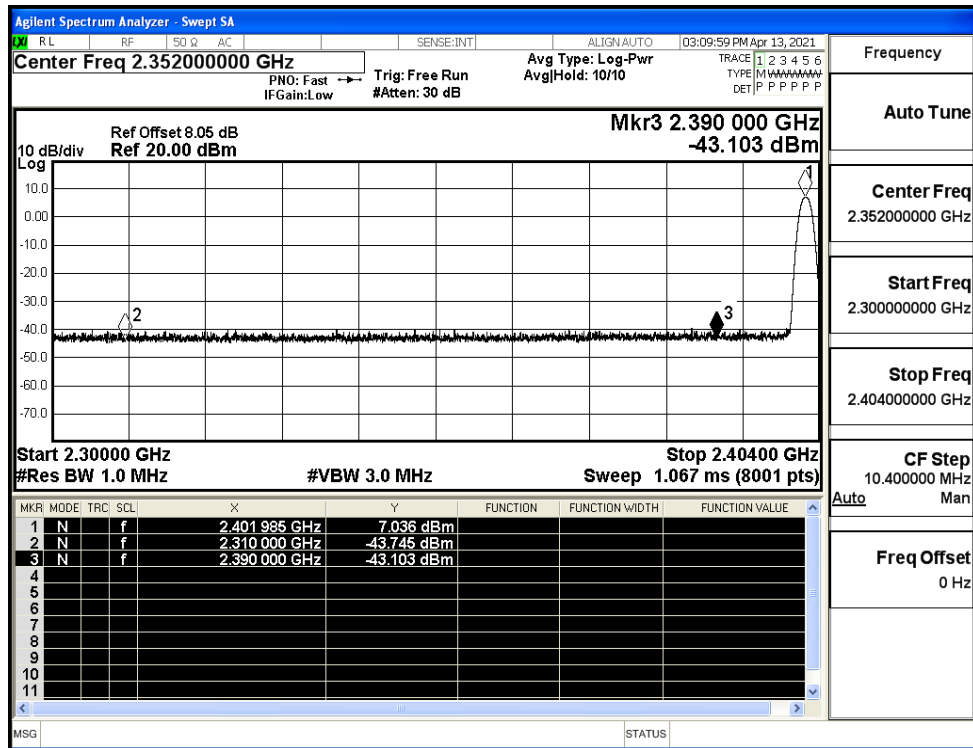
8DPSK/HCH/Hop



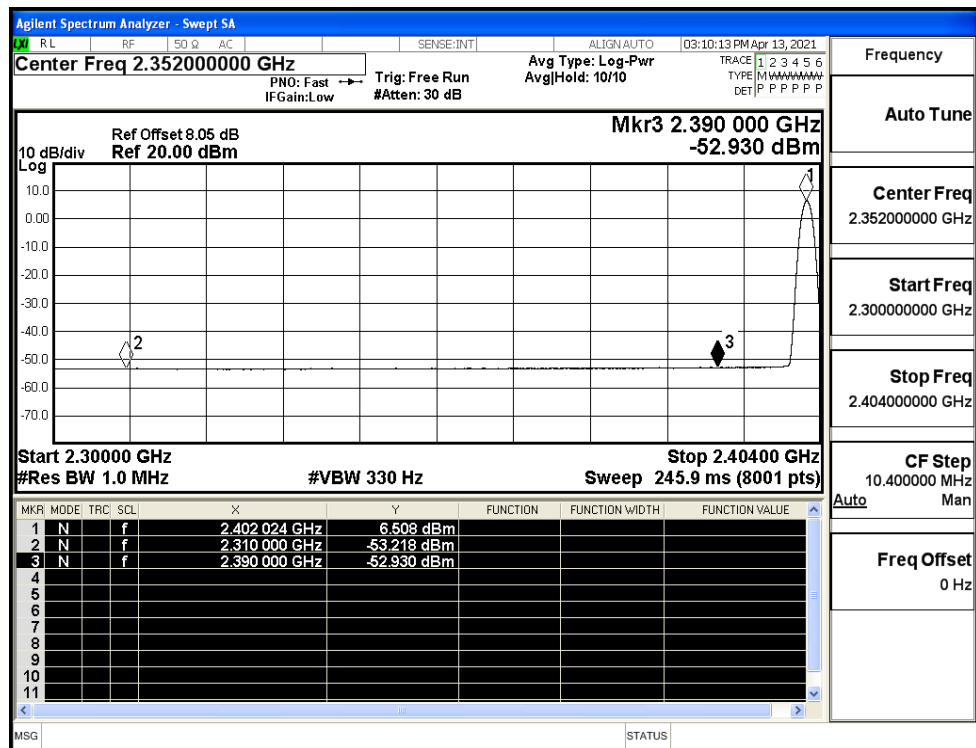
A.8 Restrict-band band-edge measurements

Test Mode	Hopping	Freq.	Power [dBm]	Gain	Ground Factor	E [dBuV/m]	Detector	Limit [dBuV/m]	Verdict
GFSK	Off	2310.0	-43.75	2.0	0	53.48	PEAK	74	PASS
	Off	2310.0	-53.22	2.0	0	44.01	AV	54	PASS
	Off	2390.0	-43.10	2.0	0	54.13	PEAK	74	PASS
	Off	2390.0	-52.93	2.0	0	44.30	AV	54	PASS
	Off	2483.5	-43.13	2.0	0	54.10	PEAK	74	PASS
	Off	2483.5	-52.20	2.0	0	45.03	AV	54	PASS
	Off	2500.0	-40.95	2.0	0	56.28	PEAK	74	PASS
	Off	2500.0	-52.22	2.0	0	45.01	AV	54	PASS
$\pi/4$ DQPSK	Off	2310.0	-42.19	2.0	0	55.04	PEAK	74	PASS
	Off	2310.0	-53.25	2.0	0	43.98	AV	54	PASS
	Off	2390.0	-43.36	2.0	0	53.87	PEAK	74	PASS
	Off	2390.0	-52.78	2.0	0	44.45	AV	54	PASS
	Off	2483.5	-42.61	2.0	0	54.62	PEAK	74	PASS
	Off	2483.5	-52.02	2.0	0	45.21	AV	54	PASS
	Off	2500.0	-41.64	2.0	0	55.59	PEAK	74	PASS
	Off	2500.0	-52.36	2.0	0	44.87	AV	54	PASS
8DPSK	Off	2310.0	-43.66	2.0	0	53.57	PEAK	74	PASS
	Off	2310.0	-53.31	2.0	0	43.92	AV	54	PASS
	Off	2390.0	-42.71	2.0	0	54.52	PEAK	74	PASS
	Off	2390.0	-52.98	2.0	0	44.25	AV	54	PASS
	Off	2483.5	-42.72	2.0	0	54.51	PEAK	74	PASS
	Off	2483.5	-51.86	2.0	0	45.37	AV	54	PASS
	Off	2500.0	-41.85	2.0	0	55.38	PEAK	74	PASS
	Off	2500.0	-52.32	2.0	0	44.91	AV	54	PASS

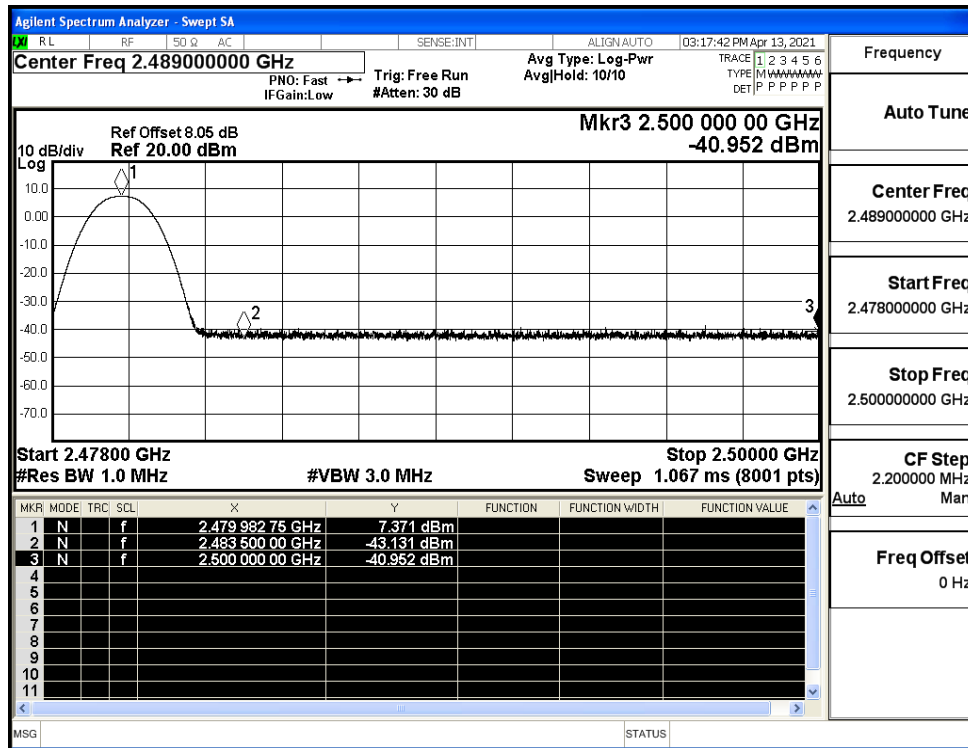
Restrict-band band-edge measurements_Hopping Off_GFSK_PEAK (Low Channel)



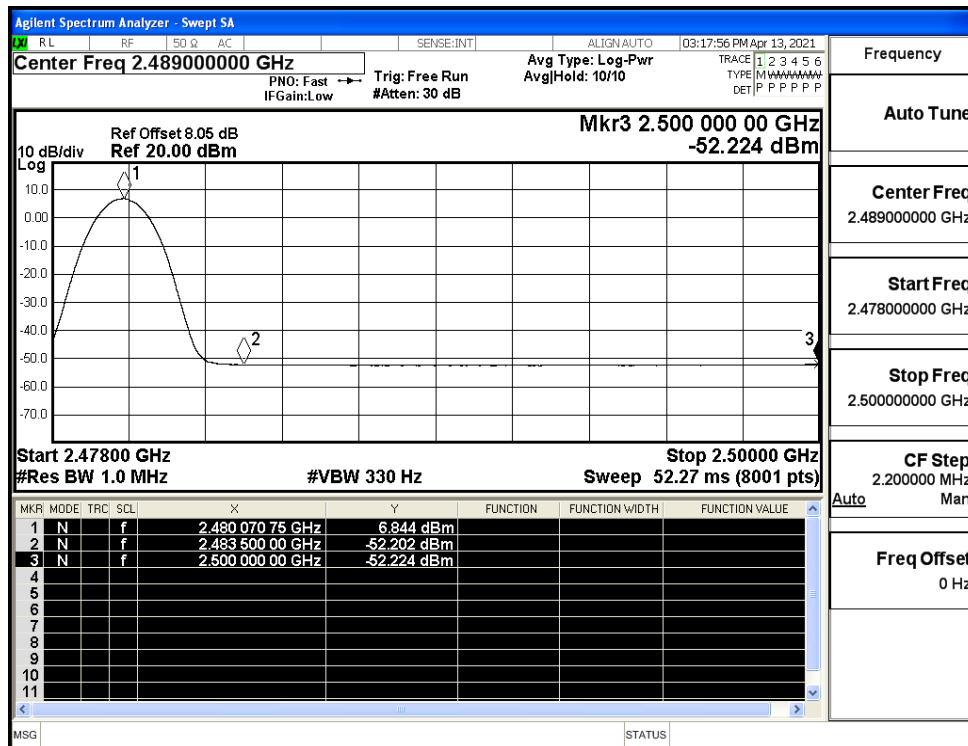
Restrict-band band-edge measurements_Hopping Off_GFSK_Average (Low Channel)

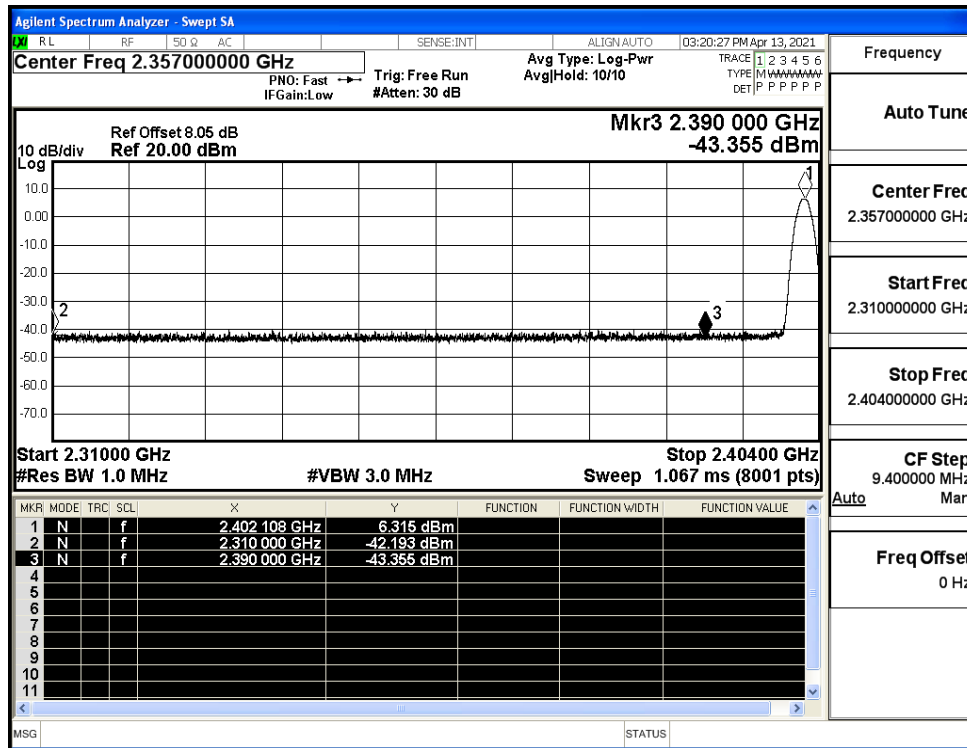
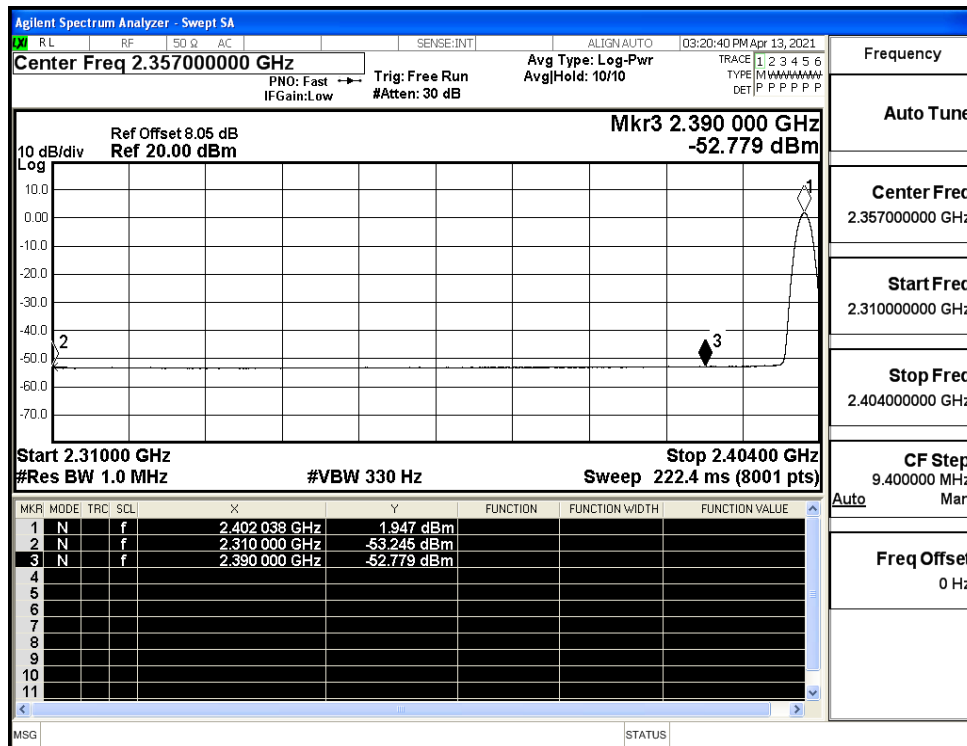


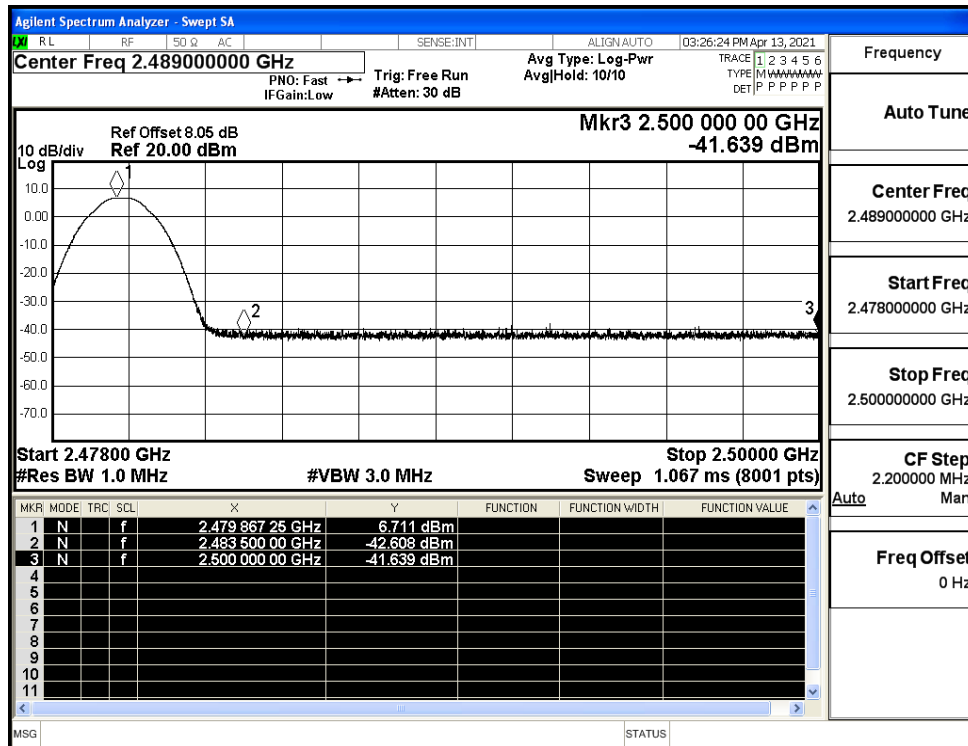
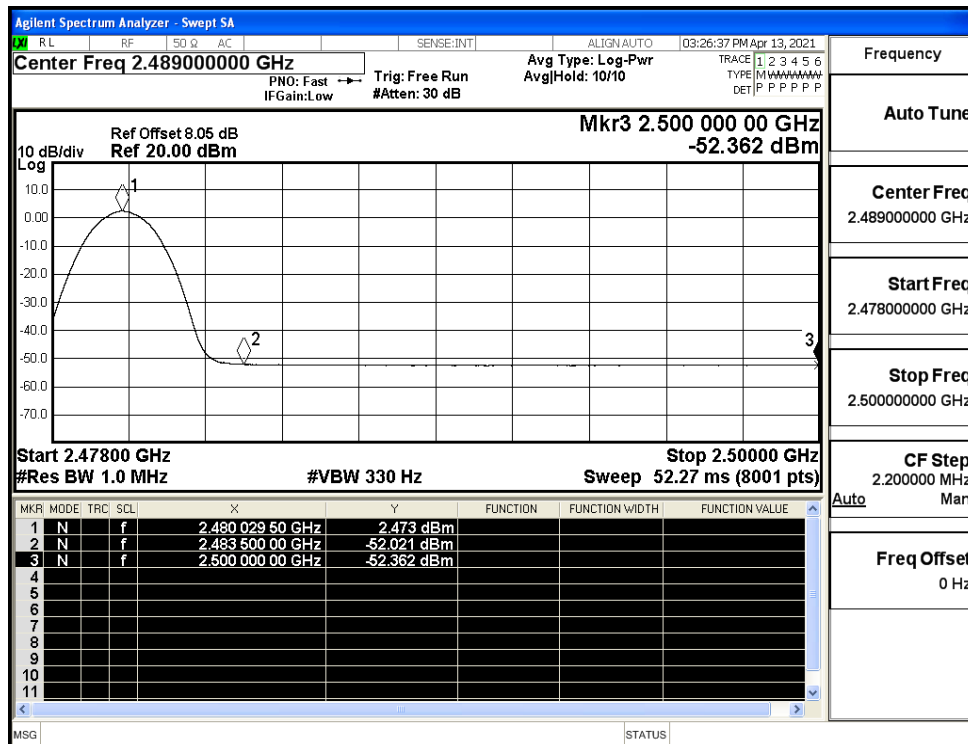
Restrict-band band-edge measurements_Hopping Off_GFSK_PEAK (High Channel)



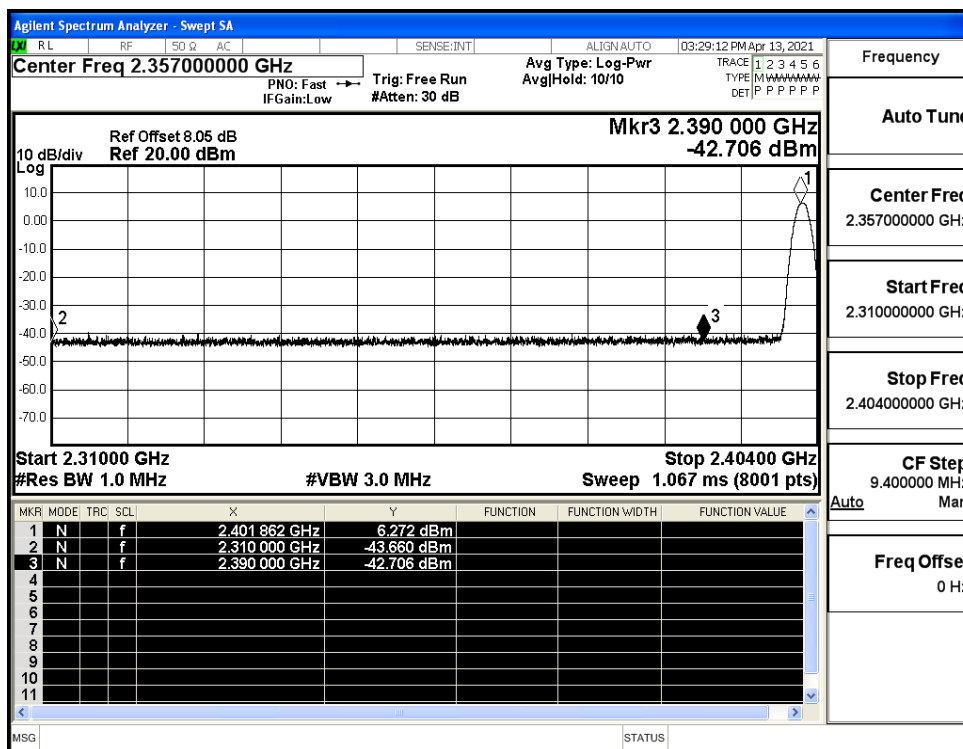
Restrict-band band-edge measurements_Hopping Off_GFSK_Average (High Channel)



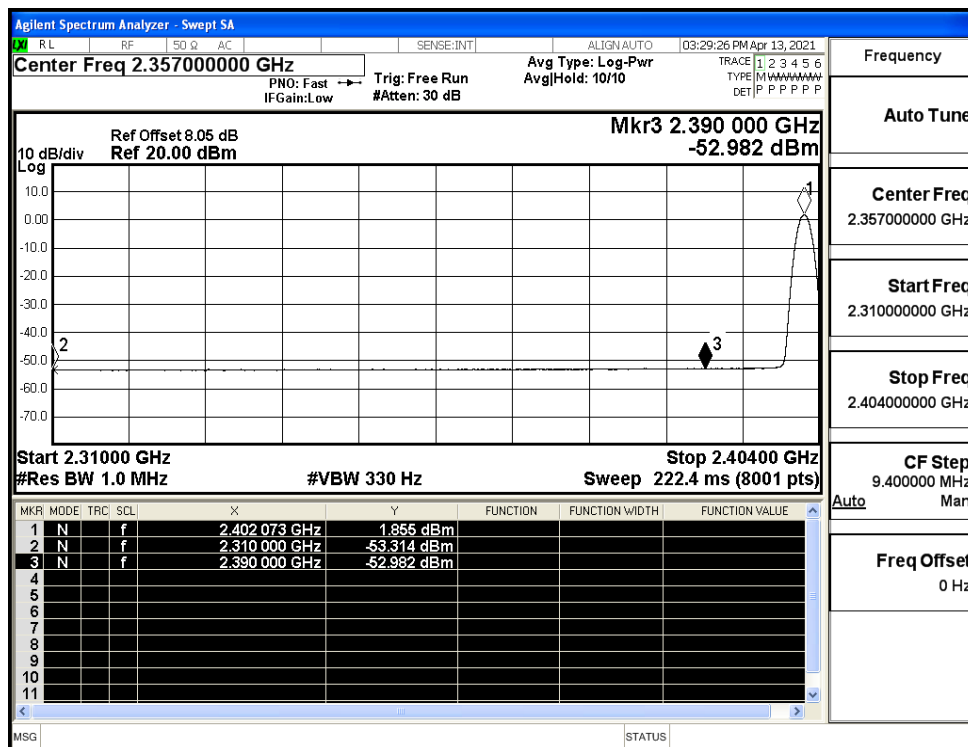
Restrict-band band-edge measurements_Hopping Off $\pi/4$ -DQPSK_PEAK (Low Channel)Restrict-band band-edge measurements_Hopping Off $\pi/4$ -DQPSK_Average (Low Channel)

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)

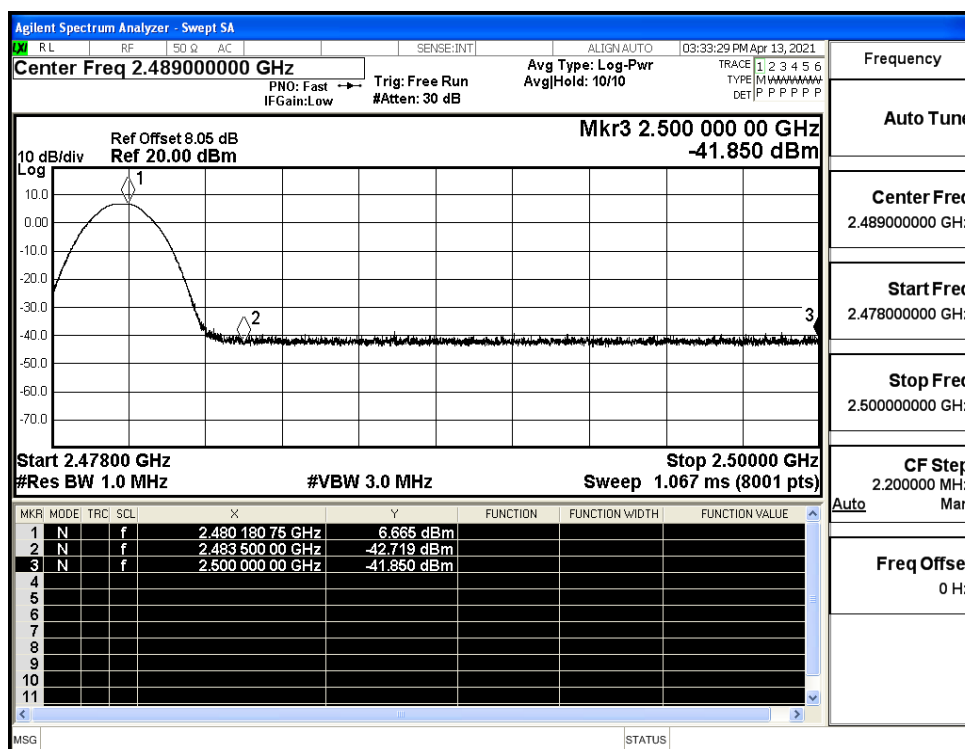
Restrict-band band-edge measurements_Hopping Off_8DPSK_PEAK (Low Channel)



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)

