

Appendix A

RF Test Data for BT V4.0(BDR/EDR) (Conducted Measurement)

Product Name: Tablet

Trade Mark: N/A

Test Model: 8LAB1

Environmental Conditions

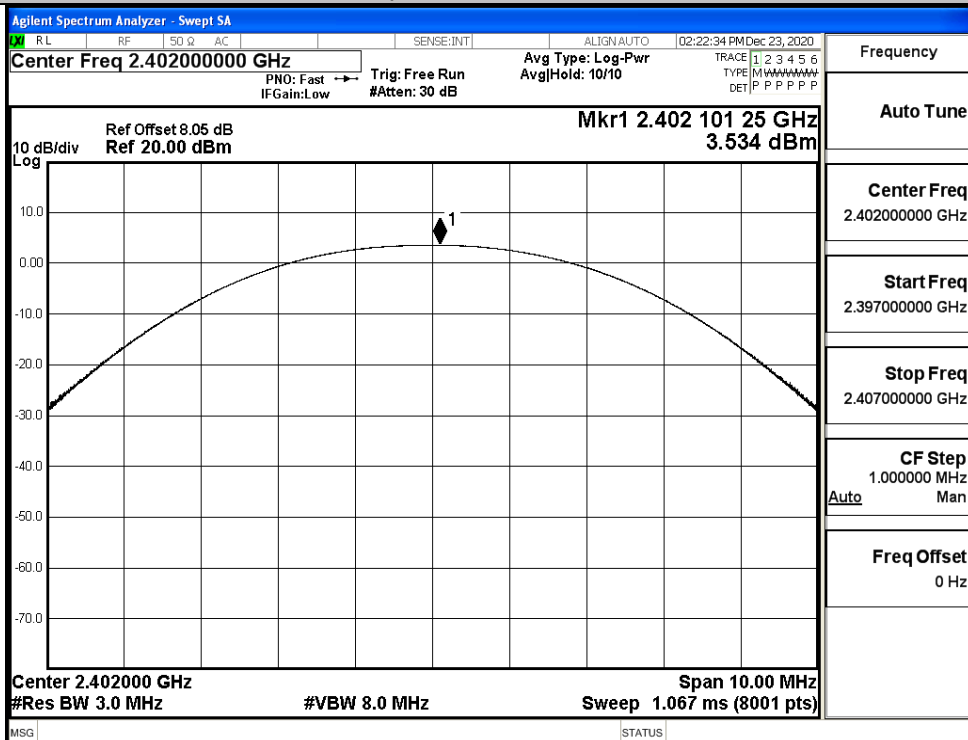
Temperature:	22.3° C
Relative Humidity:	53.5%
ATM Pressure:	100.0 kPa
Test Engineer:	Diamond Lu
Supervised by:	Li Huan

A.1 Maximum Conducted Peak Output Power

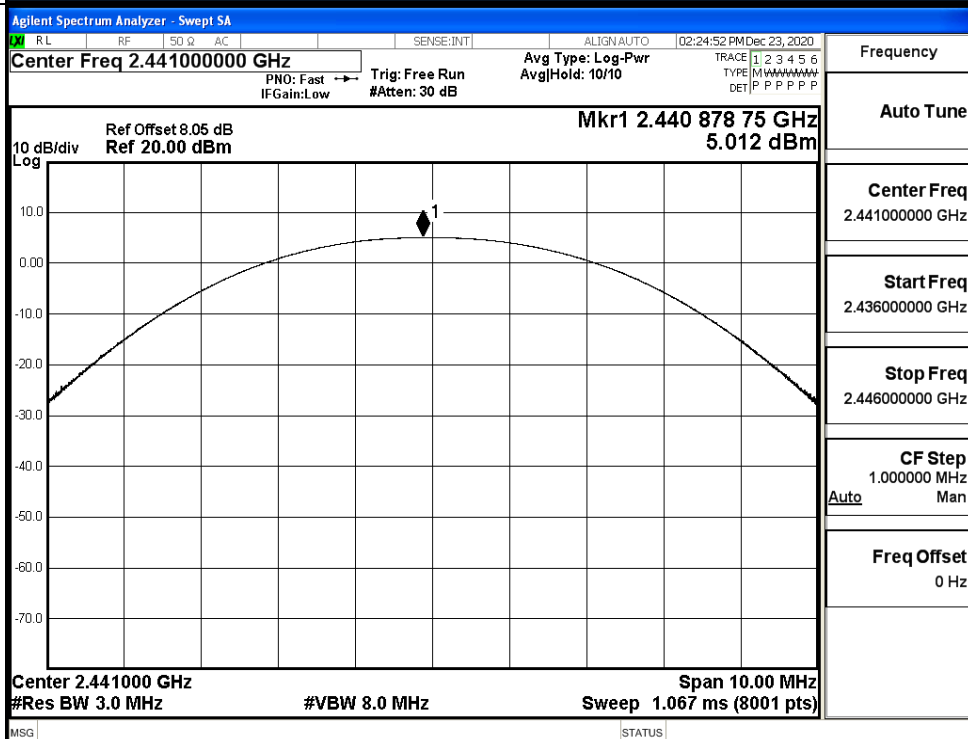
Mode	Channel.	Maximum Peak Output Power [dBm]	Limit [dBm]	Verdict
GFSK	LCH	3.534	21	PASS
	MCH	5.012	21	PASS
	HCH	3.385	21	PASS
$\pi/4$ DQPSK	LCH	2.765	21	PASS
	MCH	4.238	21	PASS
	HCH	2.686	21	PASS
8DPSK	LCH	2.857	21	PASS
	MCH	4.426	21	PASS
	HCH	2.821	21	PASS

Test Graphs

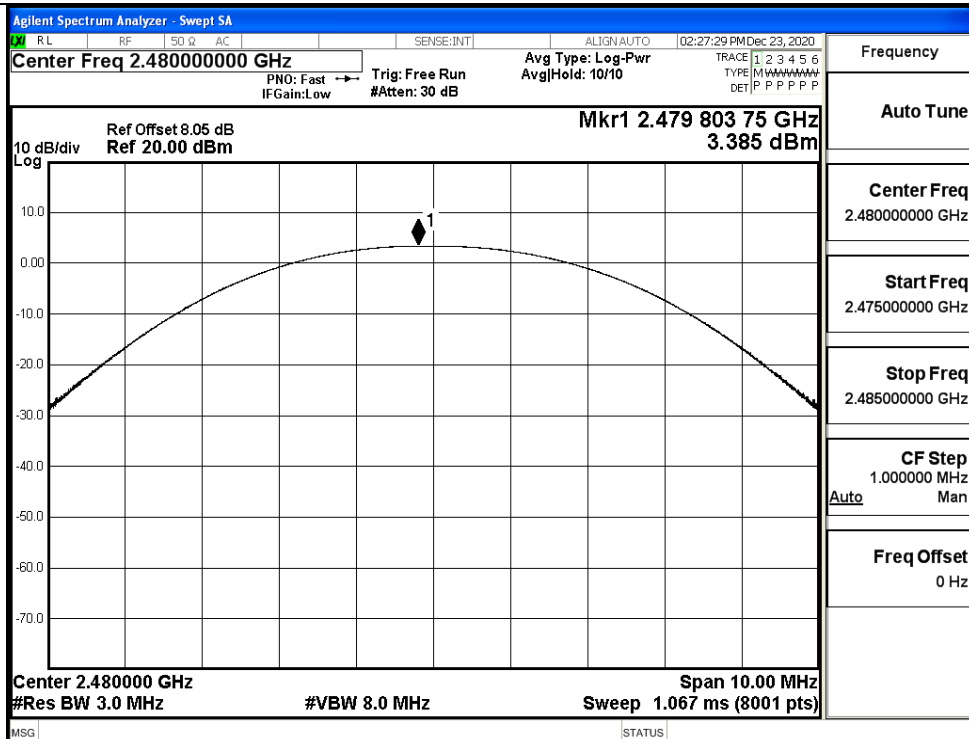
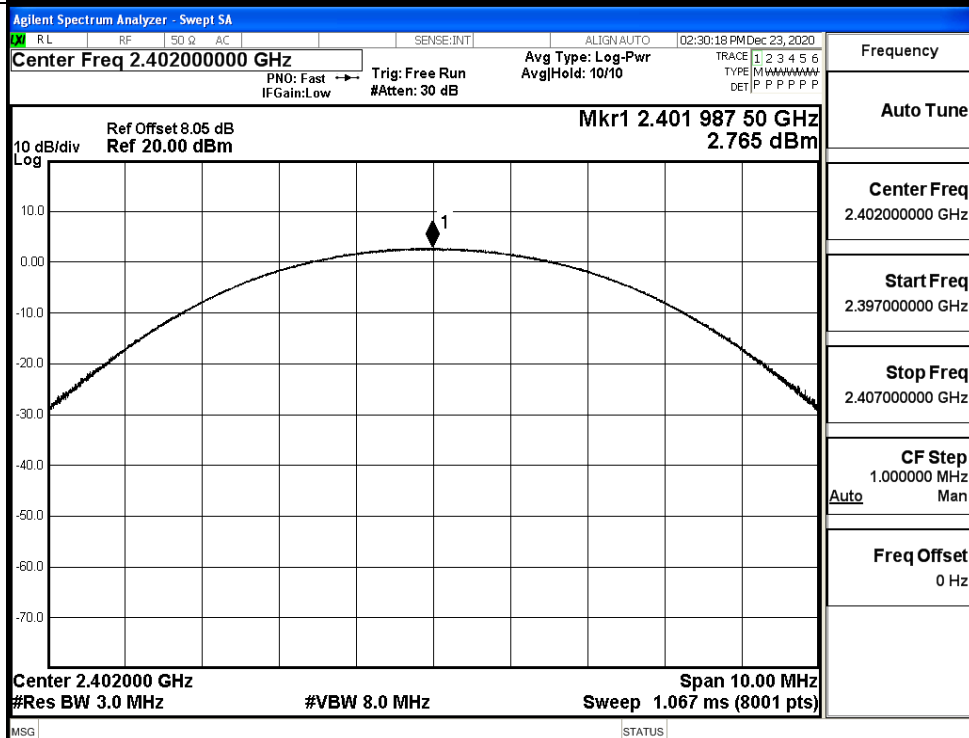
GFSK/LCH

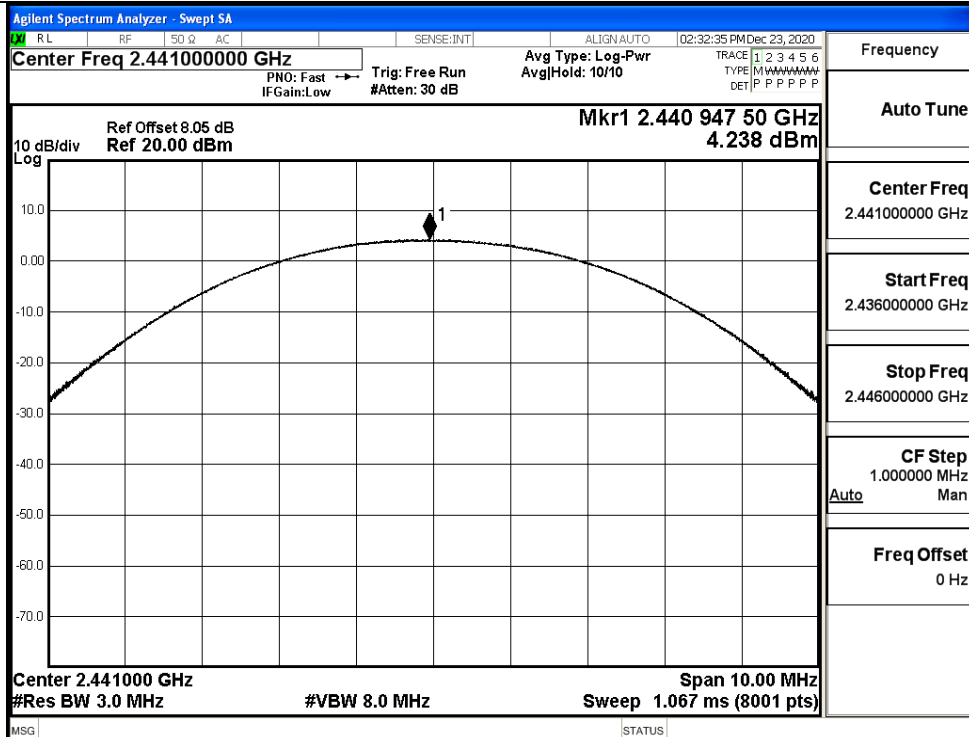
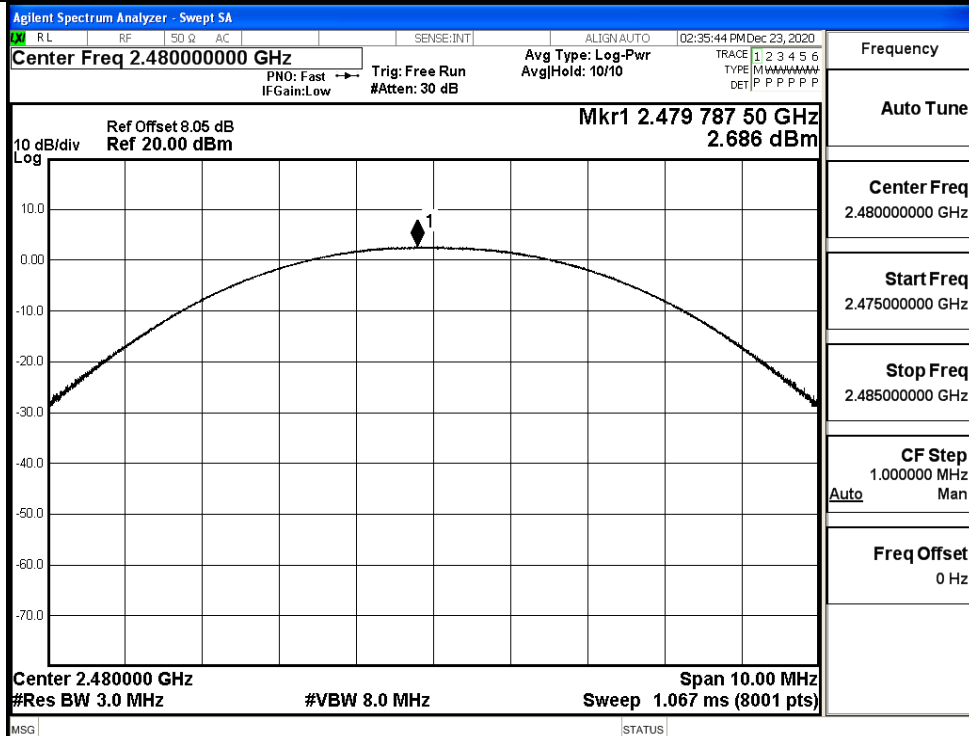


GFSK/MCH

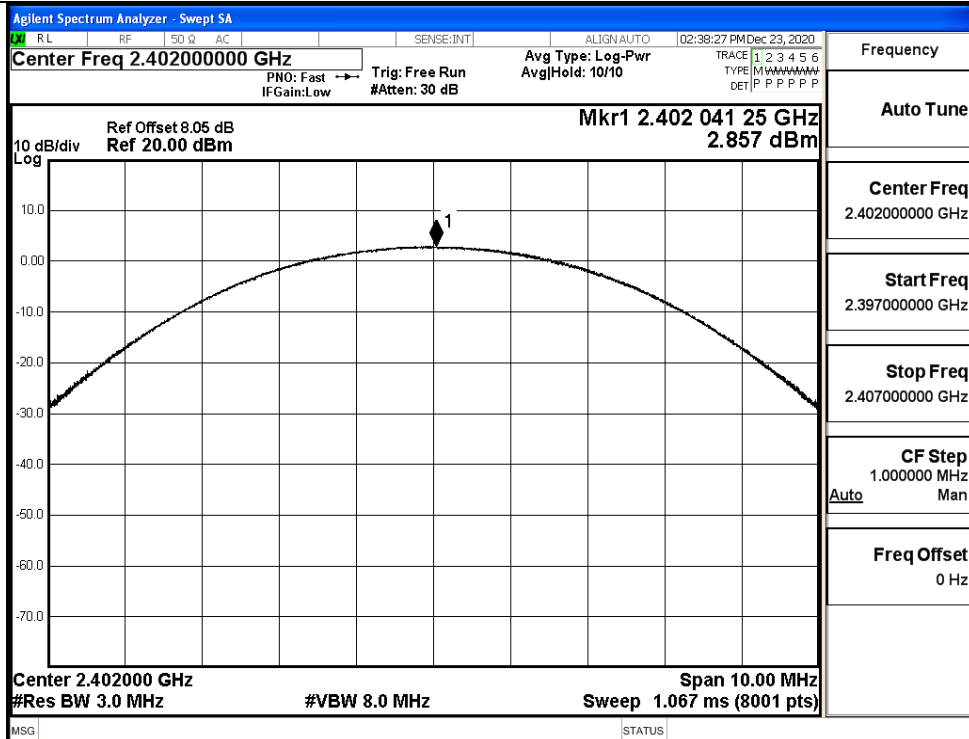


GFSK/HCH

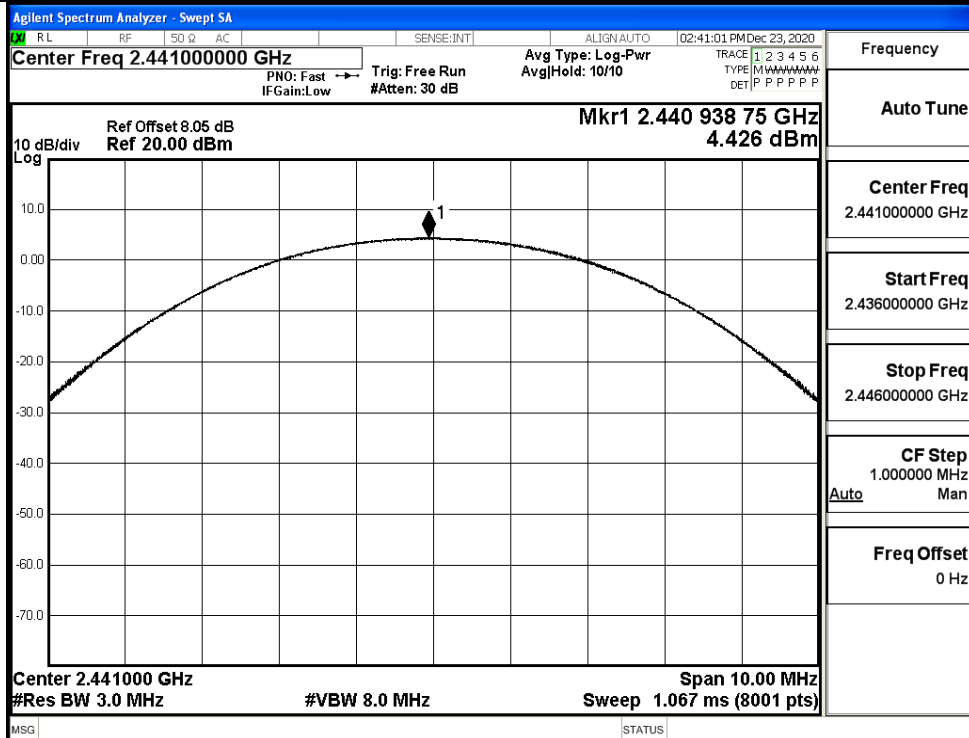
 $\pi/4$ DQPSK/LCH

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

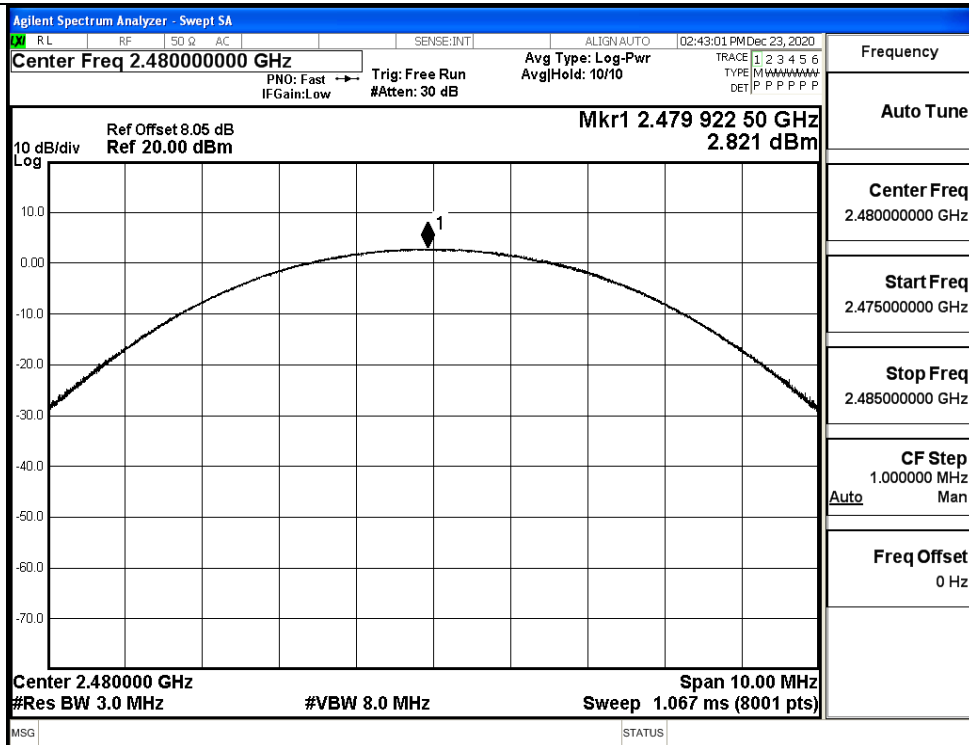
8DPSK/LCH



8DPSK/MCH



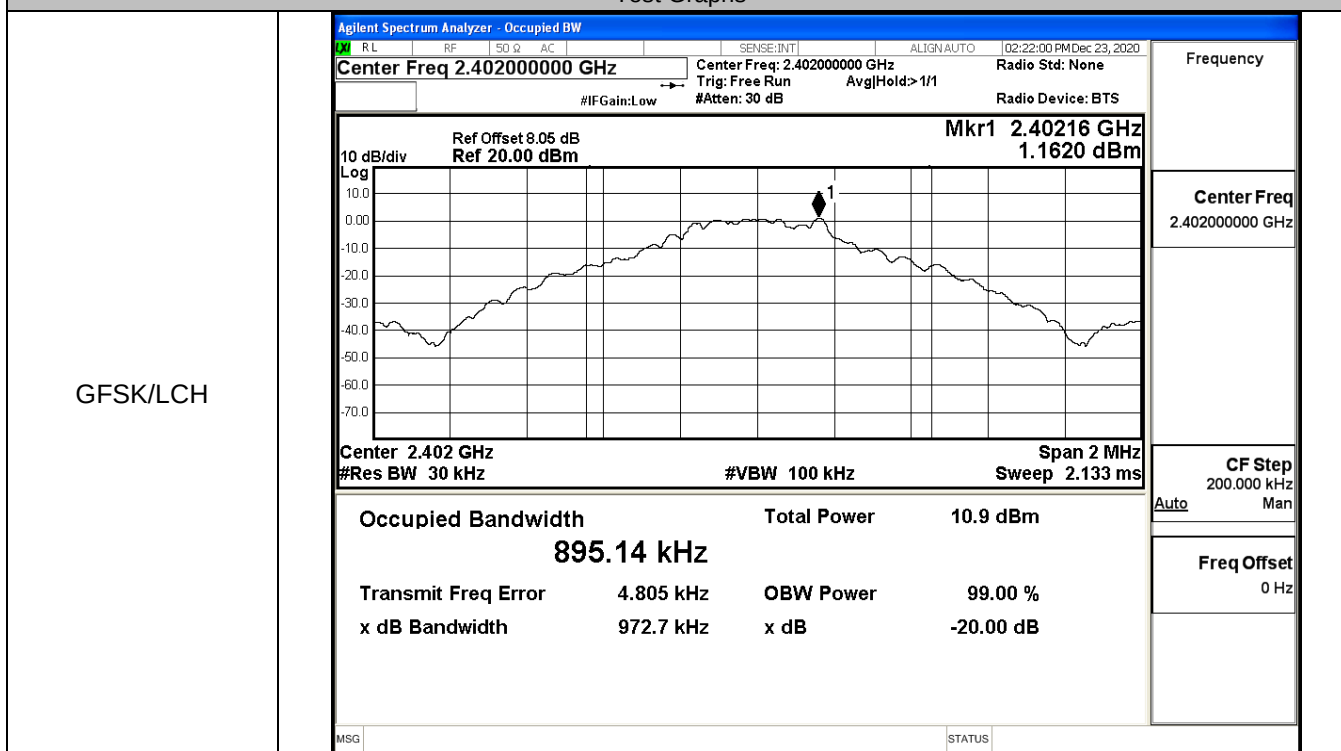
8DPSK/HCH



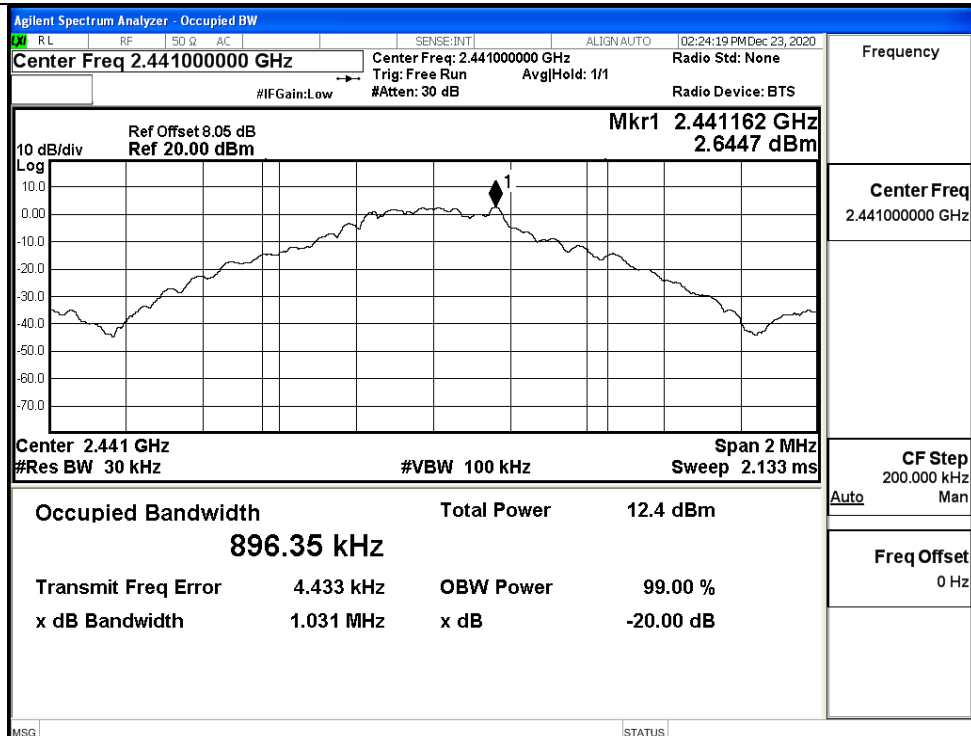
A.2 20dB Bandwidth

Mode	Channel.	20dB Bandwidth [MHz]	Limit [MHz]	Verdict
GFSK	LCH	0.9727	Not Specified	PASS
	MCH	1.031	Not Specified	PASS
	HCH	1.035	Not Specified	PASS
$\pi/4$ DQPSK	LCH	1.287	Not Specified	PASS
	MCH	1.288	Not Specified	PASS
	HCH	1.291	Not Specified	PASS
8DPSK	LCH	1.292	Not Specified	PASS
	MCH	1.302	Not Specified	PASS
	HCH	1.300	Not Specified	PASS

Test Graphs



GFSK/MCH



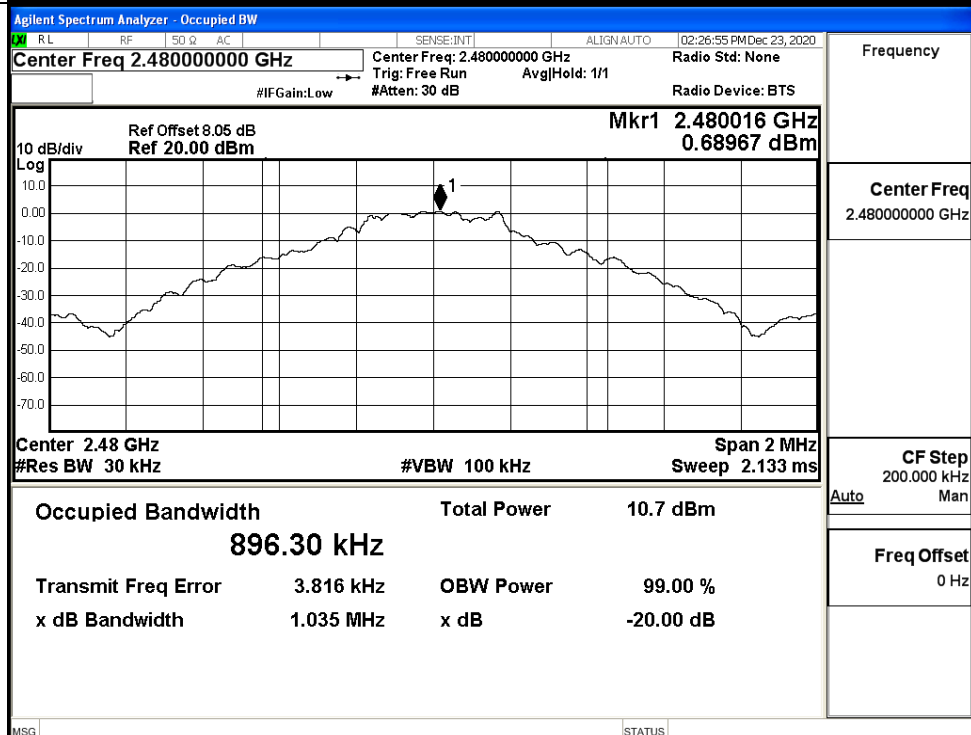
Frequency

Center Freq
2.441000000 GHzCF Step
200.000 kHz
Man

Auto

Freq Offset
0 Hz

GFSK/HCH

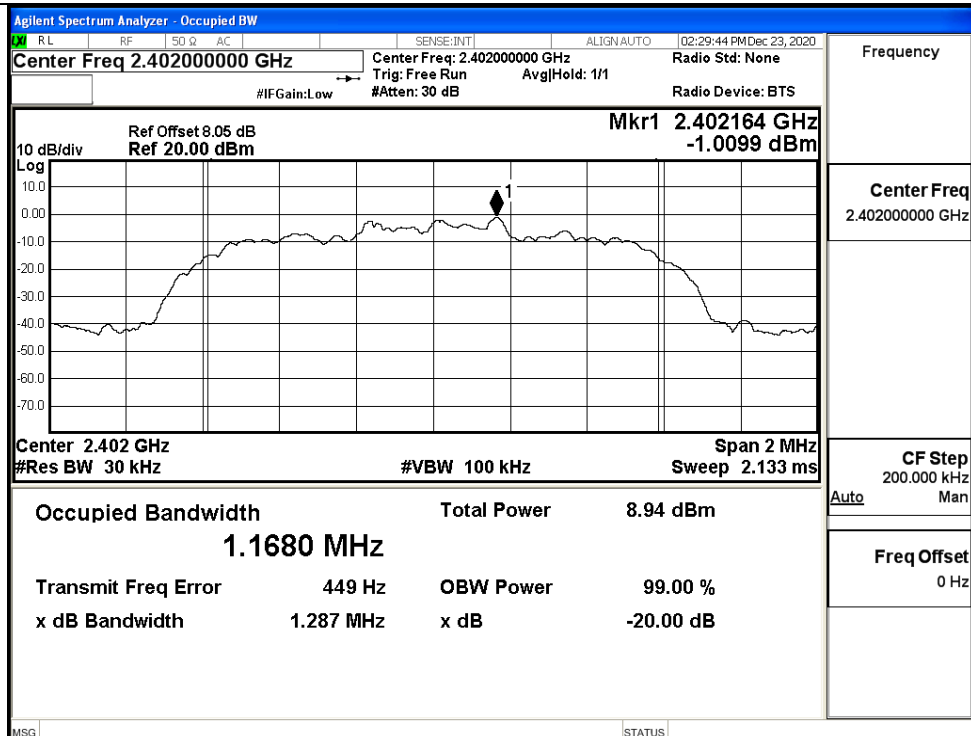


Frequency

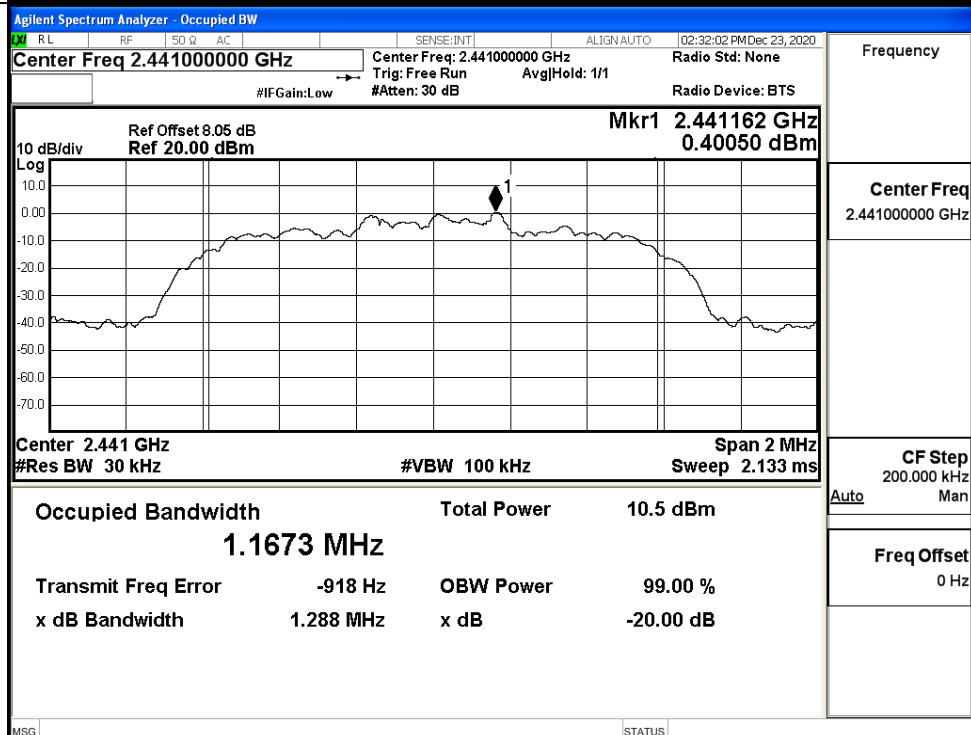
Center Freq
2.480000000 GHzCF Step
200.000 kHz
Man

Auto

Freq Offset
0 Hz

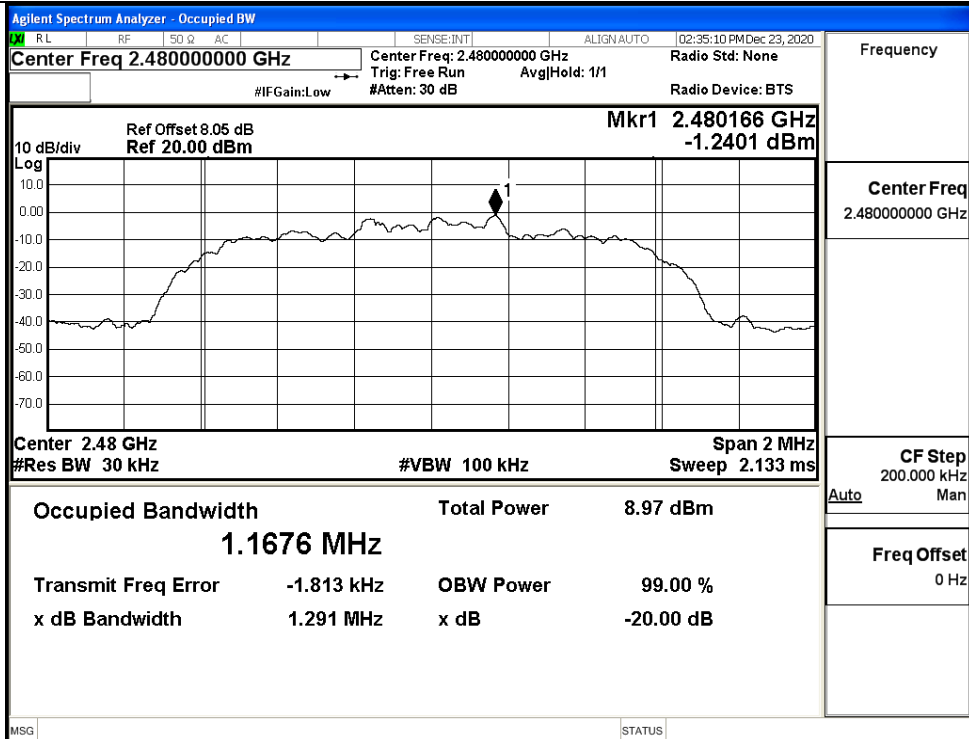
$\pi/4$ DQPSK/LCH

Frequency

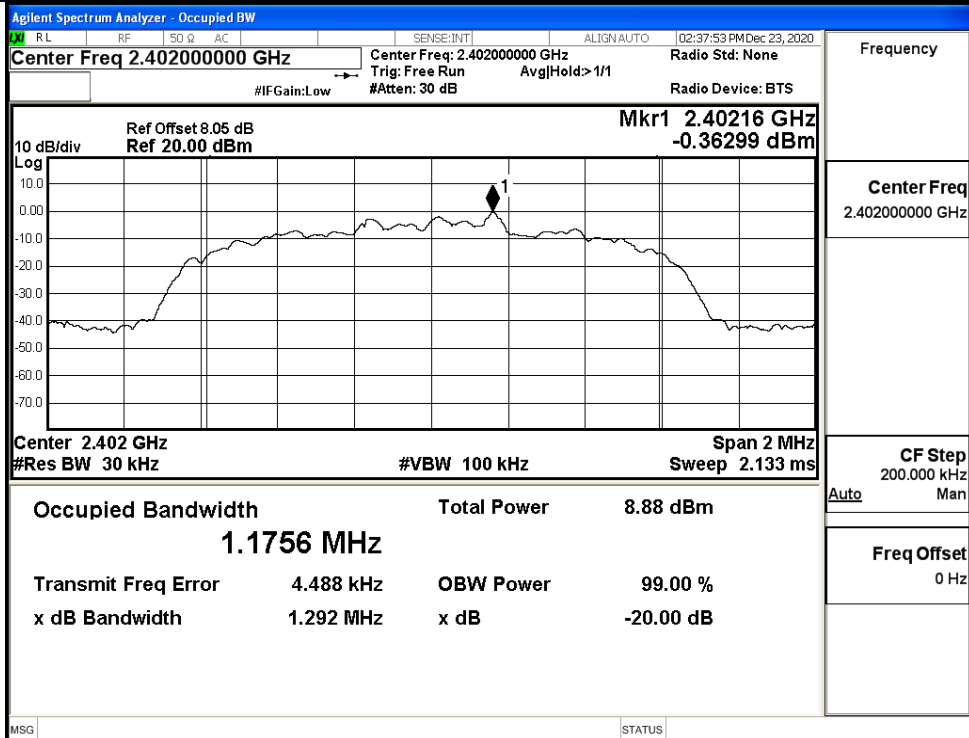
Center Freq
2.40200000 GHzCF Step
200.000 kHz
Auto ManFreq Offset
0 Hz $\pi/4$ DQPSK/MCH

Frequency

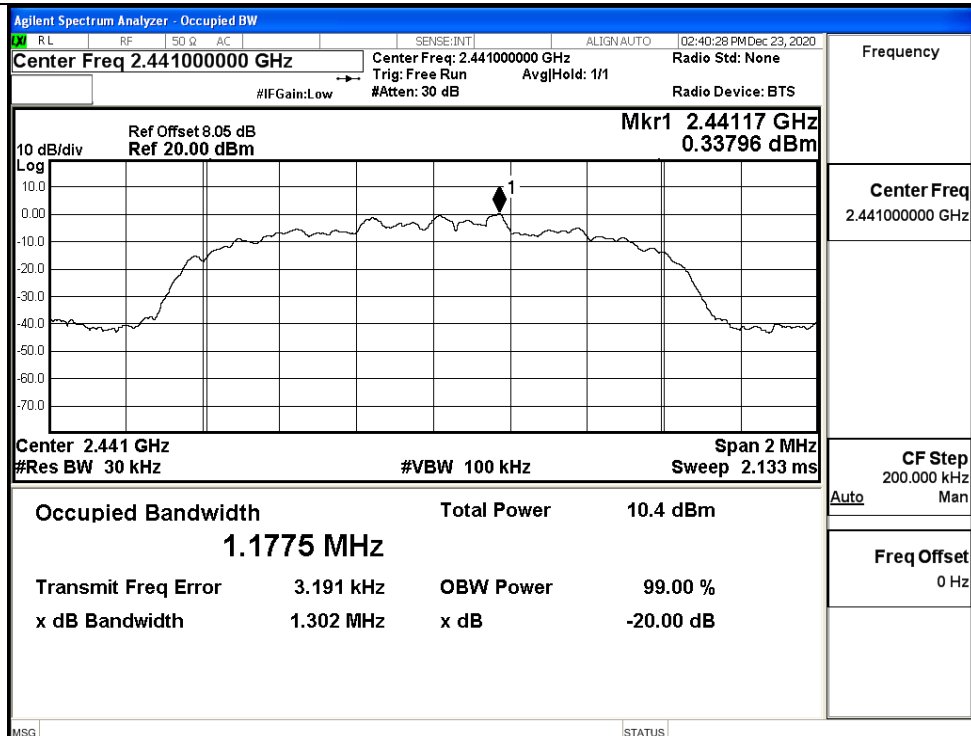
Center Freq
2.44100000 GHzCF Step
200.000 kHz
Auto ManFreq Offset
0 Hz

$\pi/4$ DQPSK/HCH

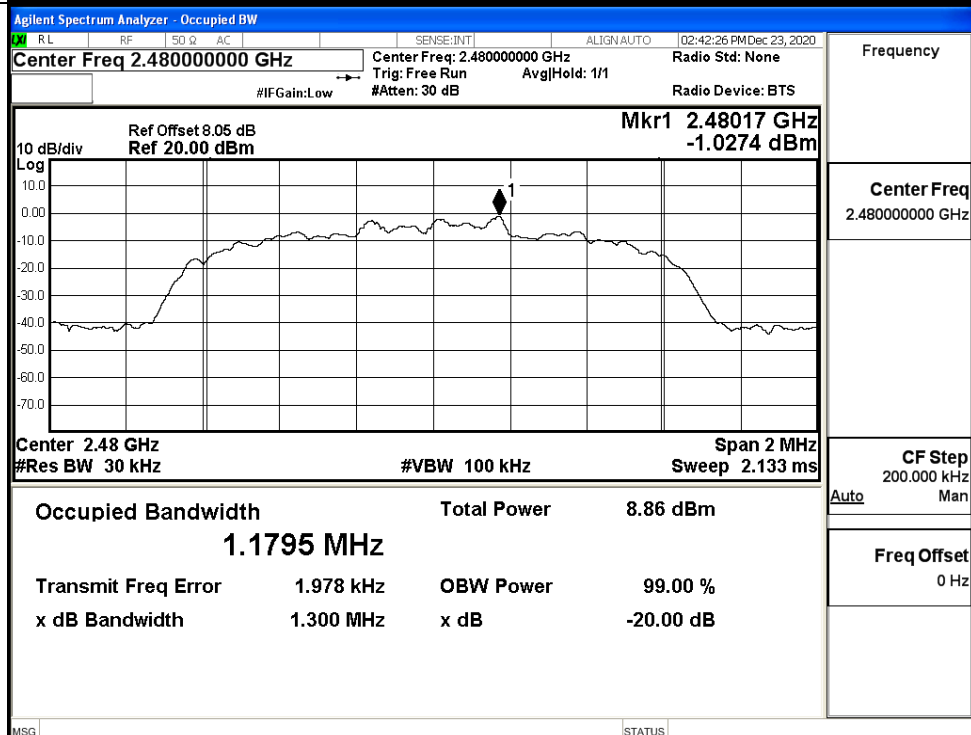
8DPSK/LCH



8DPSK/MCH



8DPSK/HCH

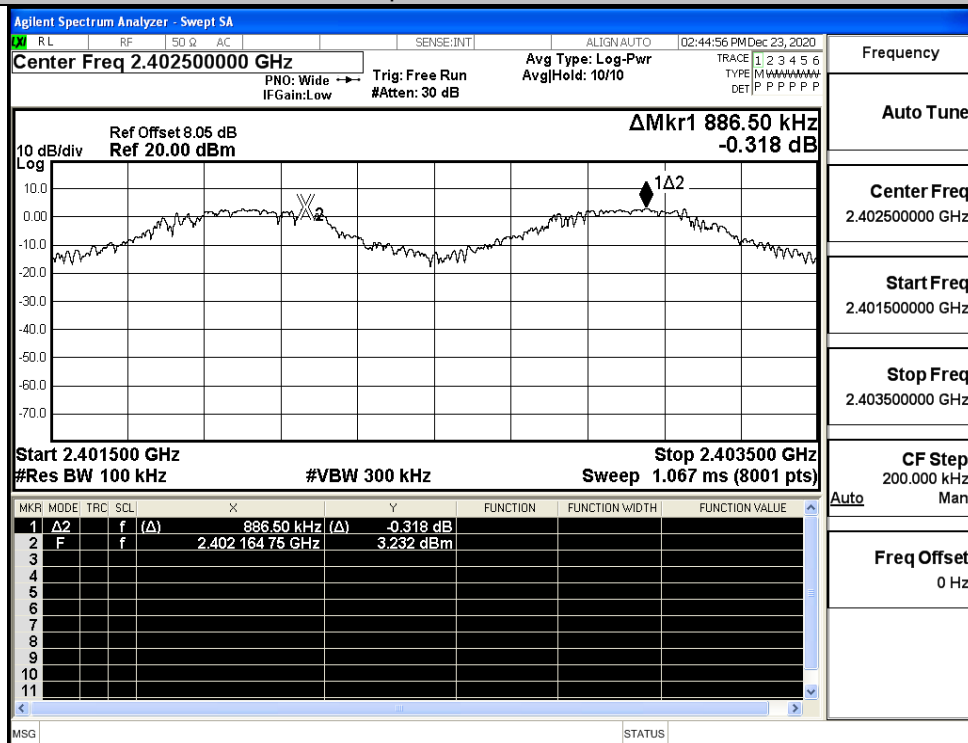


A.3 Carrier Frequency Separation

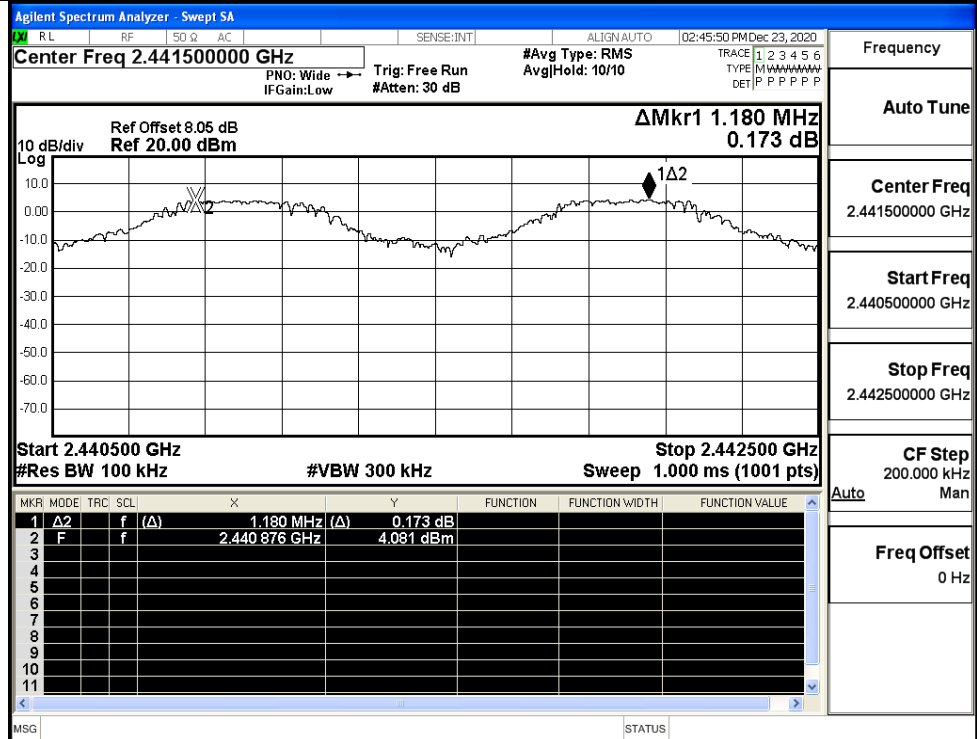
Mode	Channel.	Carrier Frequency Separation [MHz]	Limit [MHz]	Verdict
GFSK	LCH	0.887	0.690	PASS
	MCH	1.180	0.690	PASS
	HCH	1.020	0.690	PASS
$\pi/4$ DQPSK	LCH	1.282	0.861	PASS
	MCH	1.184	0.861	PASS
	HCH	1.234	0.861	PASS
8DPSK	LCH	1.154	0.868	PASS
	MCH	1.298	0.868	PASS
	HCH	1.234	0.868	PASS

Test Graphs

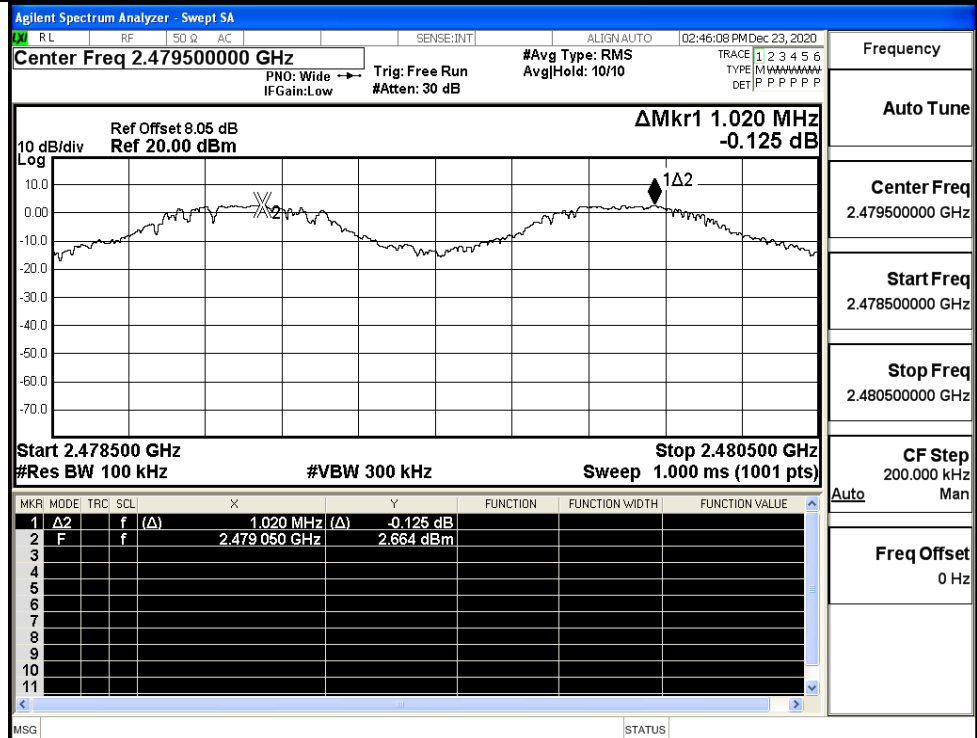
GFSK/LCH

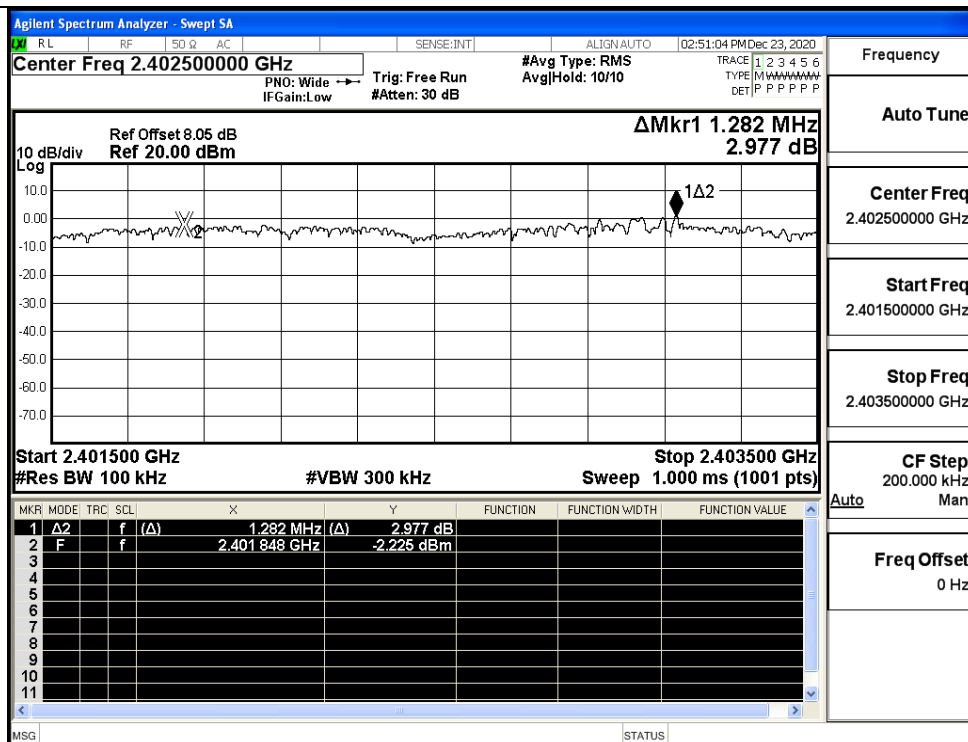
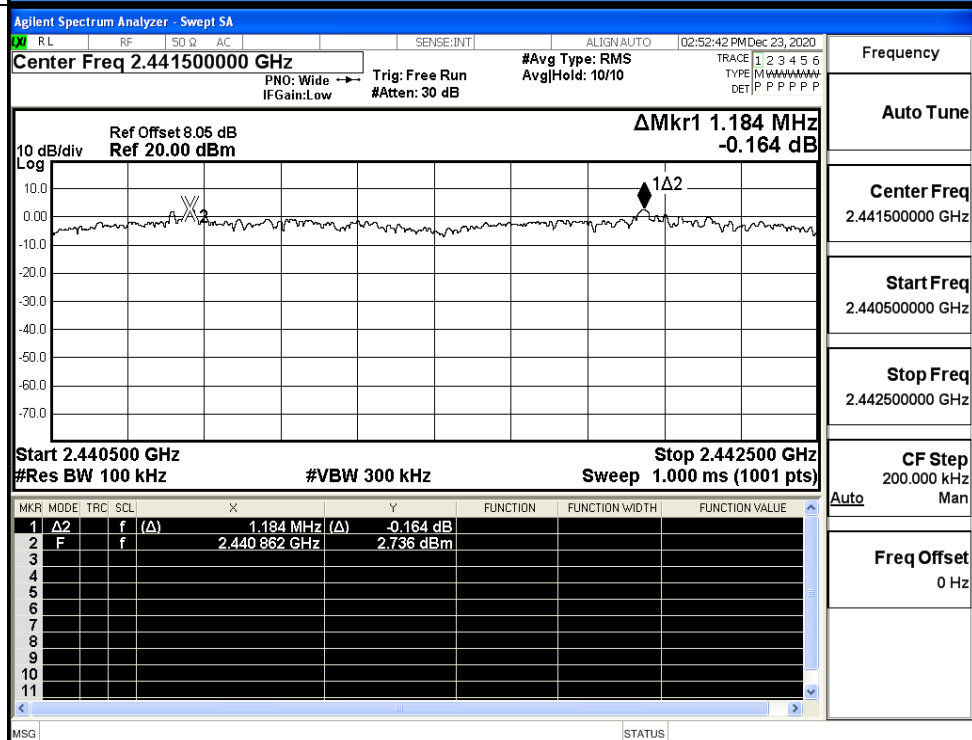


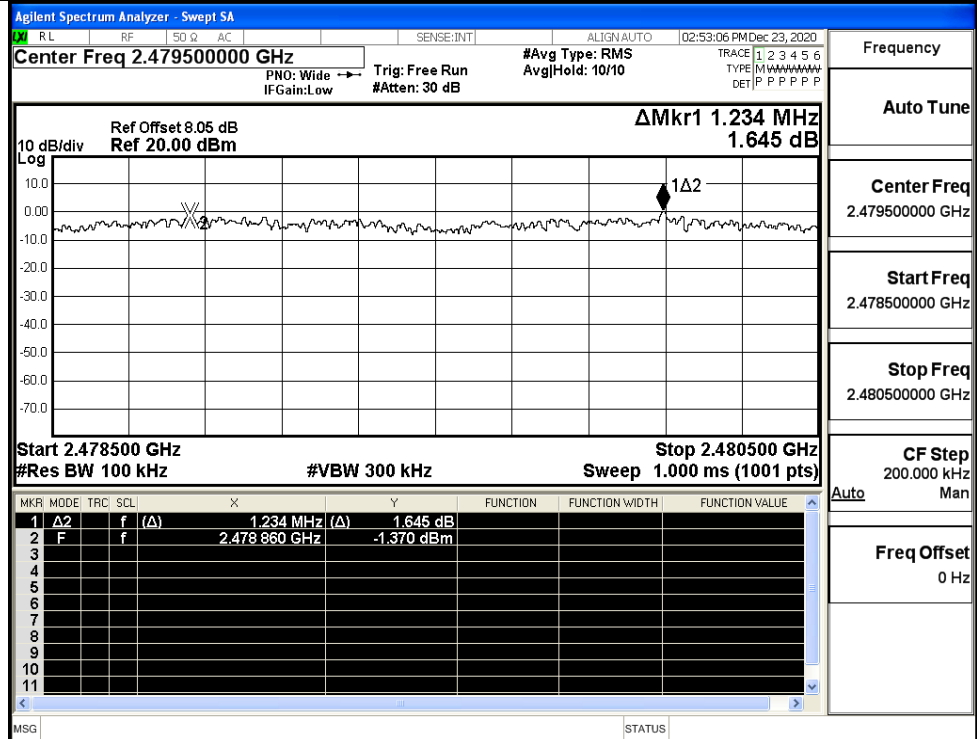
GFSK/MCH



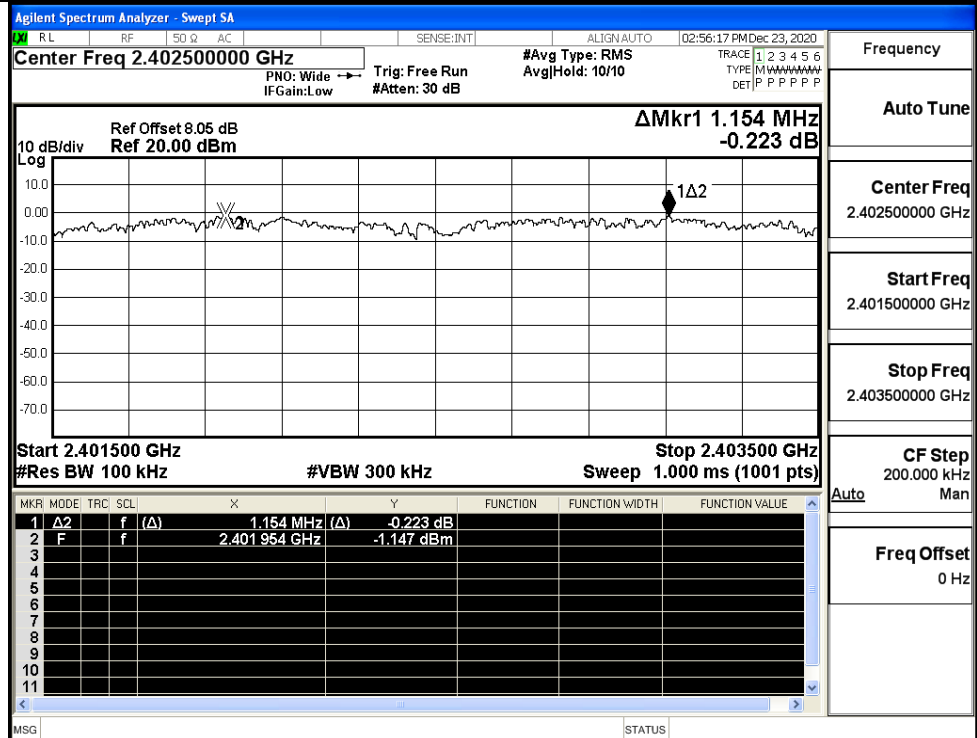
GFSK/HCH



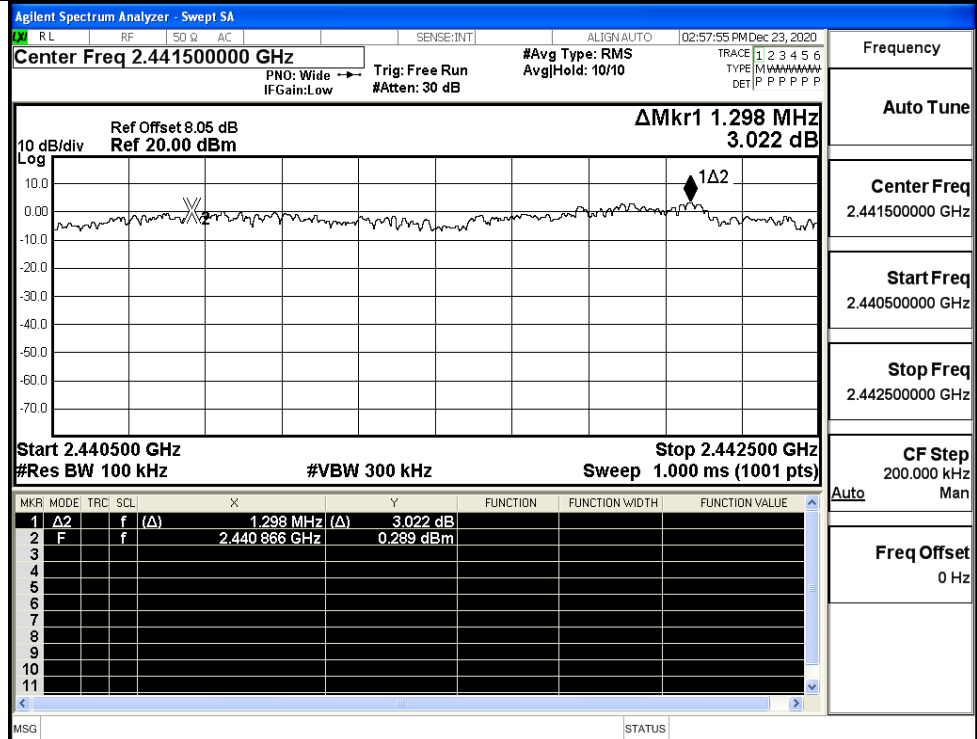
$\pi/4$ DQPSK/LCH $\pi/4$ DQPSK/MCH

$\pi/4$ DQPSK/HCH

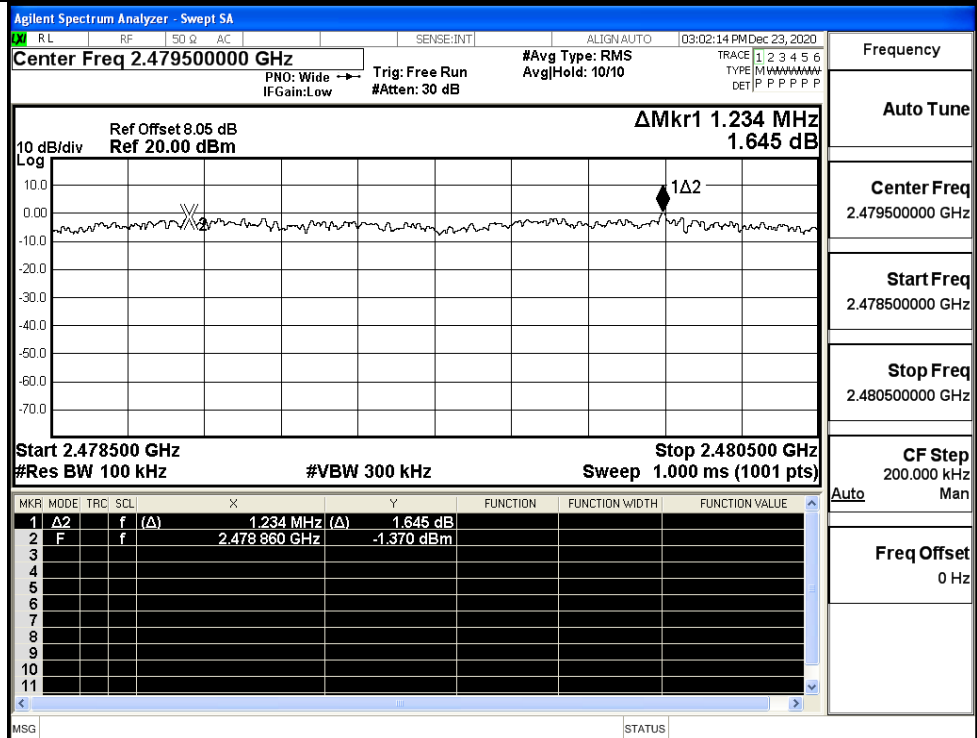
8DPSK/LCH



8DPSK/MCH



8DPSK/HCH

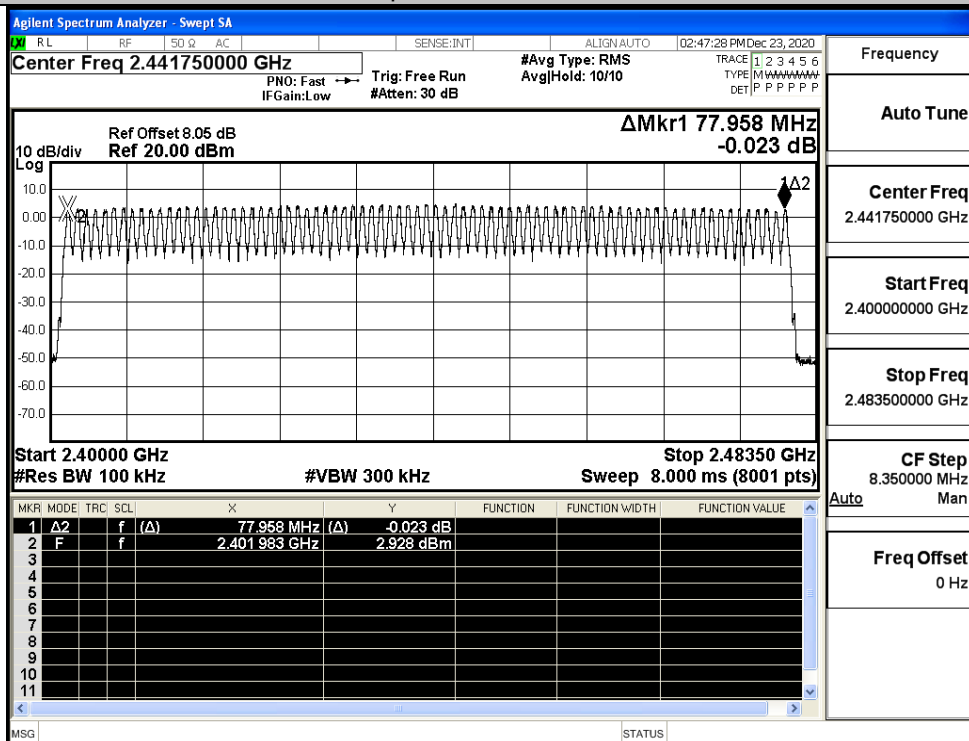


A.4 Hopping Channel Number

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

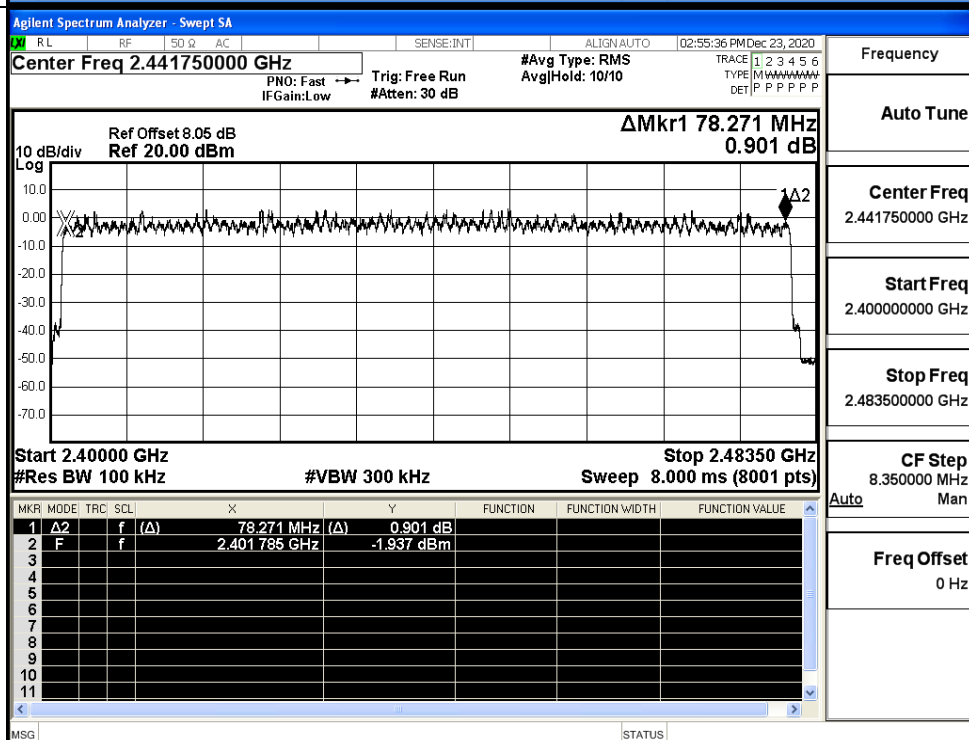
Test Graphs

GFSK/Hop



Frequency

Auto Tune

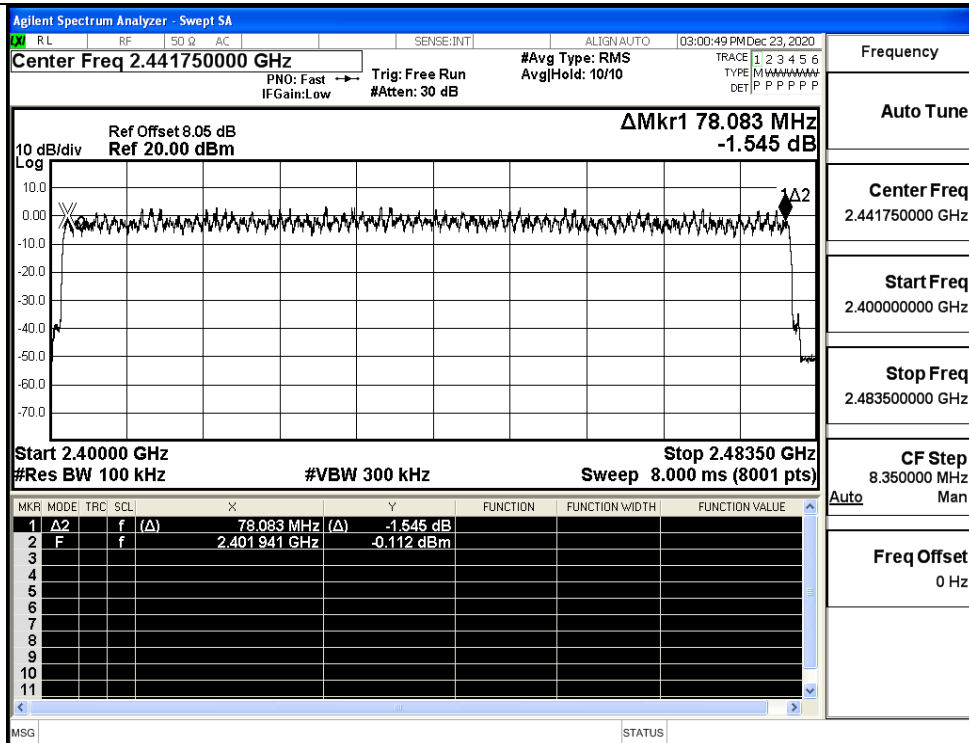
Center Freq
2.441750000 GHzStart Freq
2.400000000 GHzStop Freq
2.483500000 GHzCF Step
8.350000 MHz
Auto ManFreq Offset
0 Hz $\pi/4$ DQPSK/Hop

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

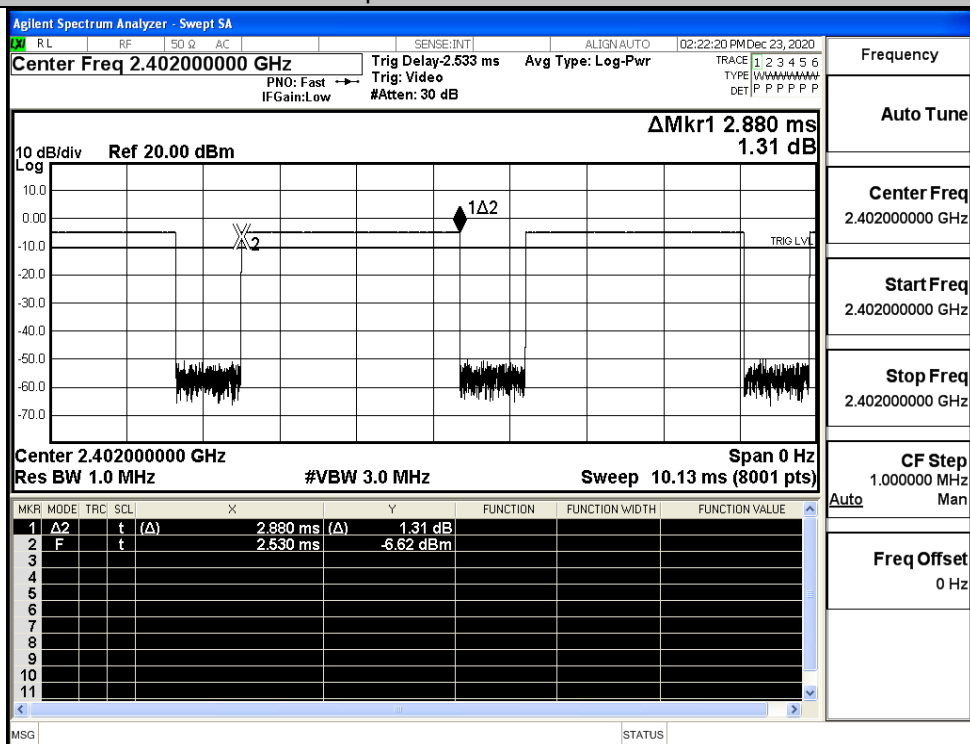


A.5 Dwell Time

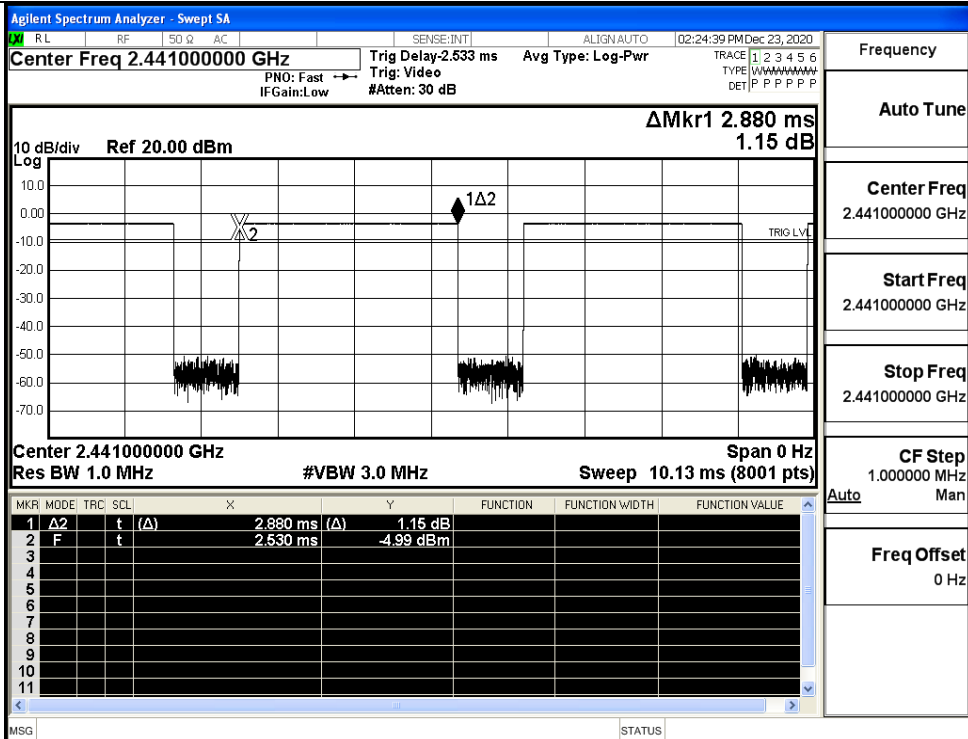
Mode	Packet	Channel	Burst Width [ms/hop/ch]	Total Hops[hop*ch]	Dwell Time[s]	Limit [s]	Verdict
GFSK	DH5	LCH	2.880	106.7	0.307	0.4	PASS
	DH5	MCH	2.880	106.7	0.307	0.4	PASS
	DH5	HCH	2.880	106.7	0.307	0.4	PASS
$\pi/4$ DQPSK	2DH5	LCH	2.883	106.7	0.307	0.4	PASS
	2DH5	MCH	2.883	106.7	0.307	0.4	PASS
	2DH5	HCH	2.883	106.7	0.307	0.4	PASS
8DPSK	3DH5	LCH	2.885	106.7	0.308	0.4	PASS
	3DH5	MCH	2.885	106.7	0.308	0.4	PASS
	3DH5	HCH	2.887	106.7	0.308	0.4	PASS

Test Graphs

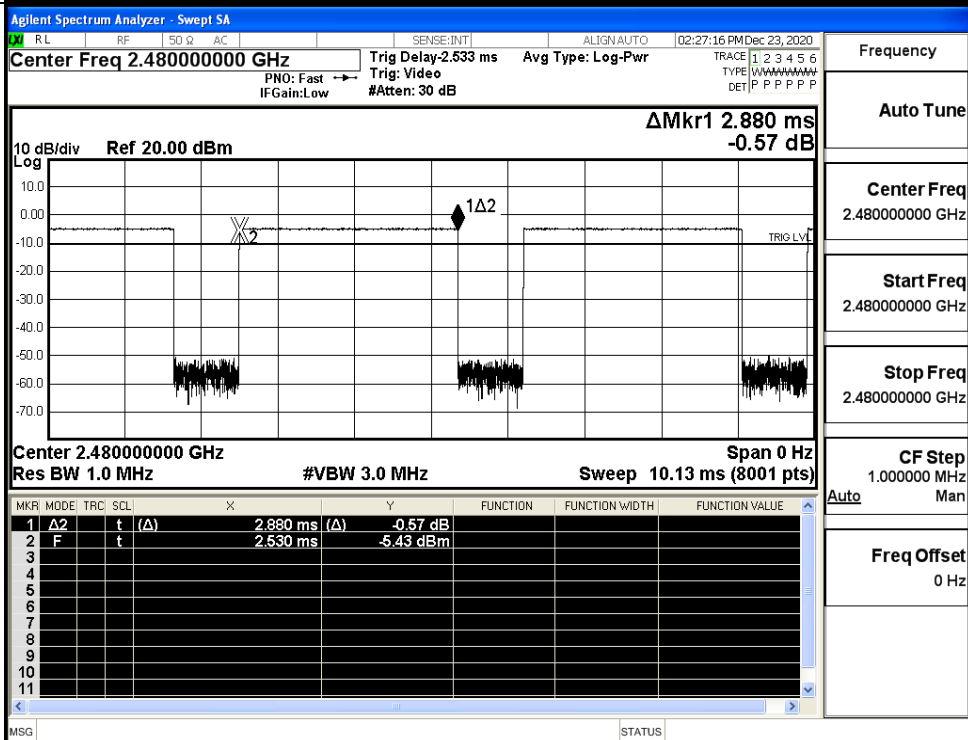
GFSK_DH5/LCH



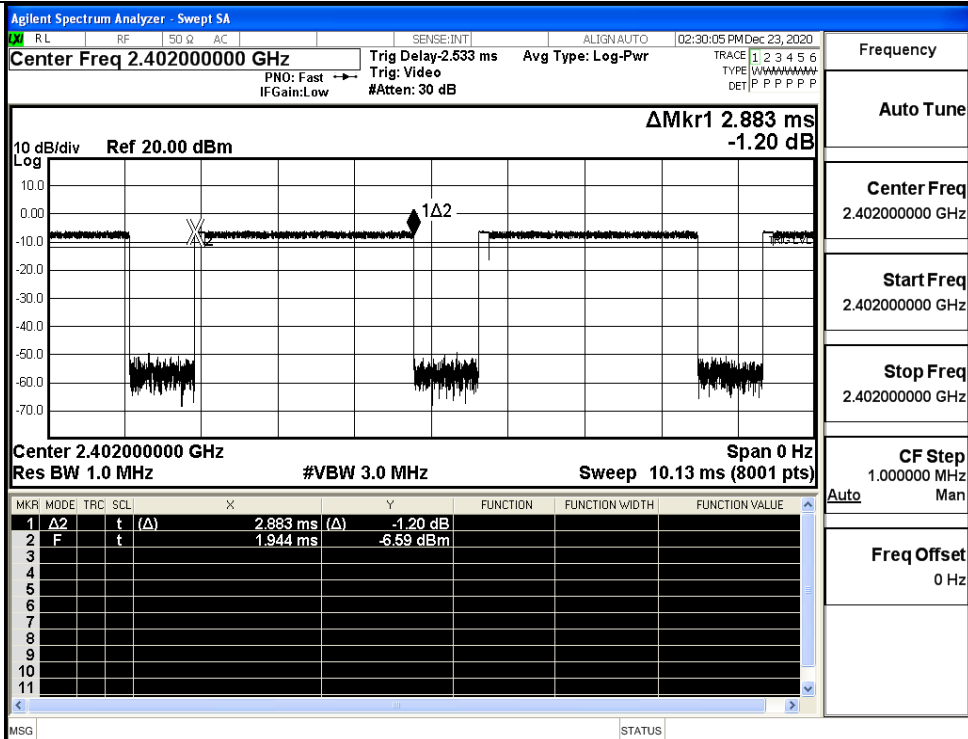
GFSK_DH5/MCH



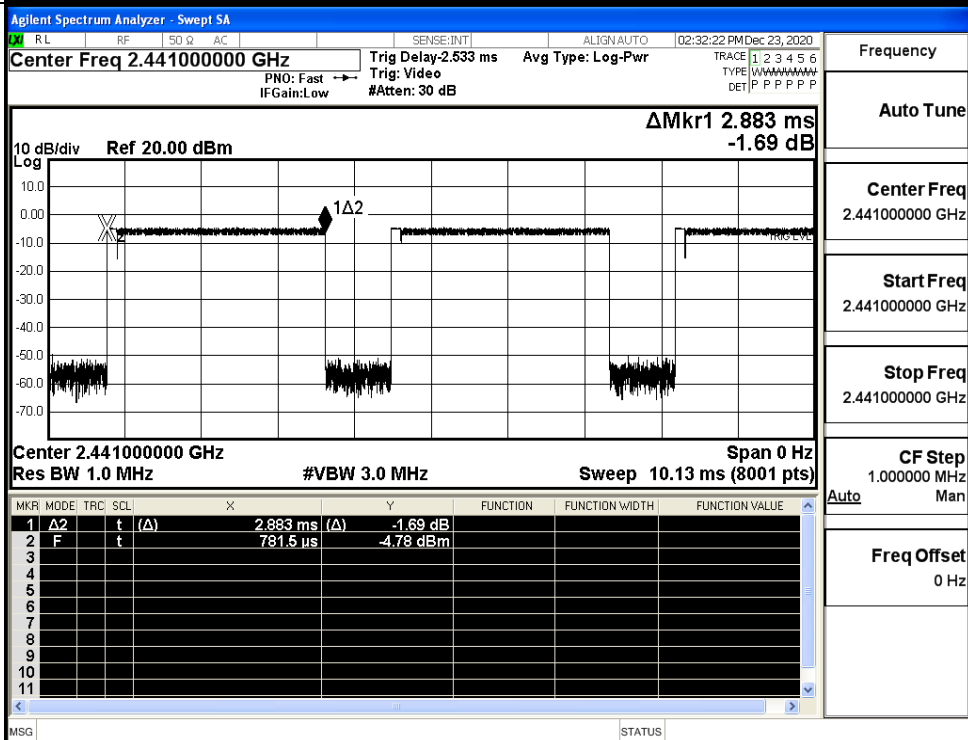
GFSK_DH5/HCH



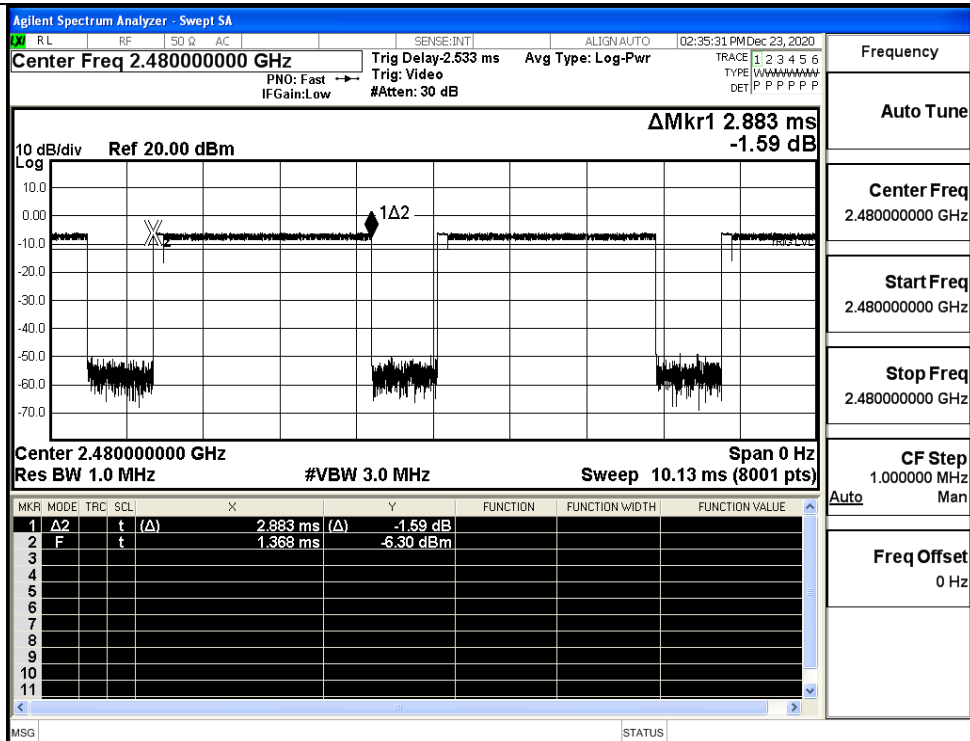
$\pi/4$ DQPSK
_2DH5/LCH



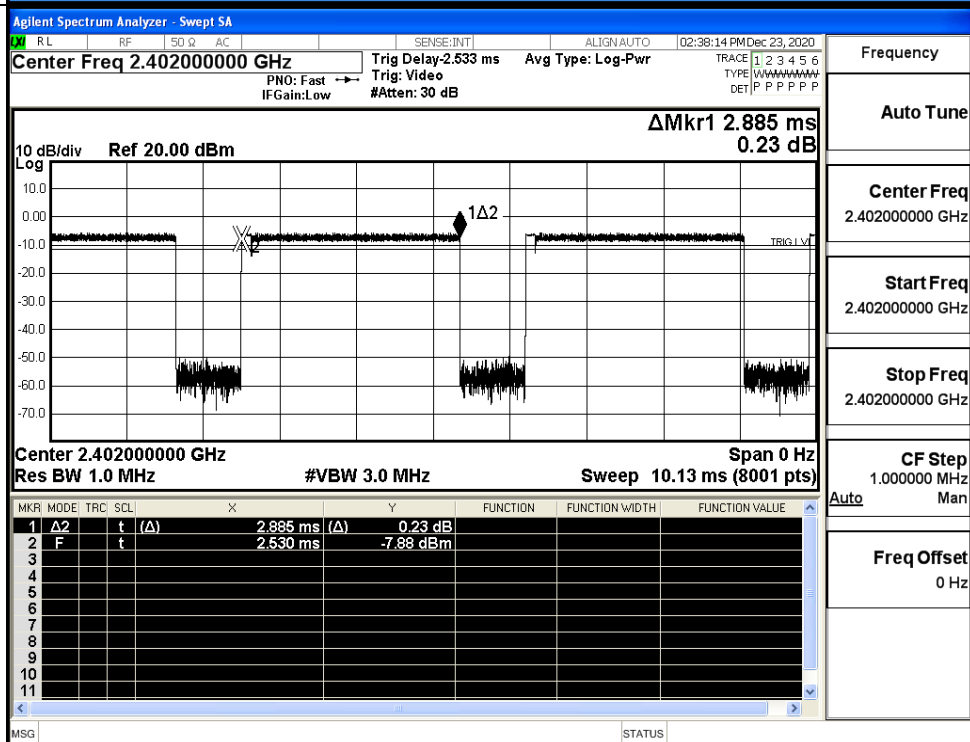
$\pi/4$ DQPSK
_2DH5/MCH



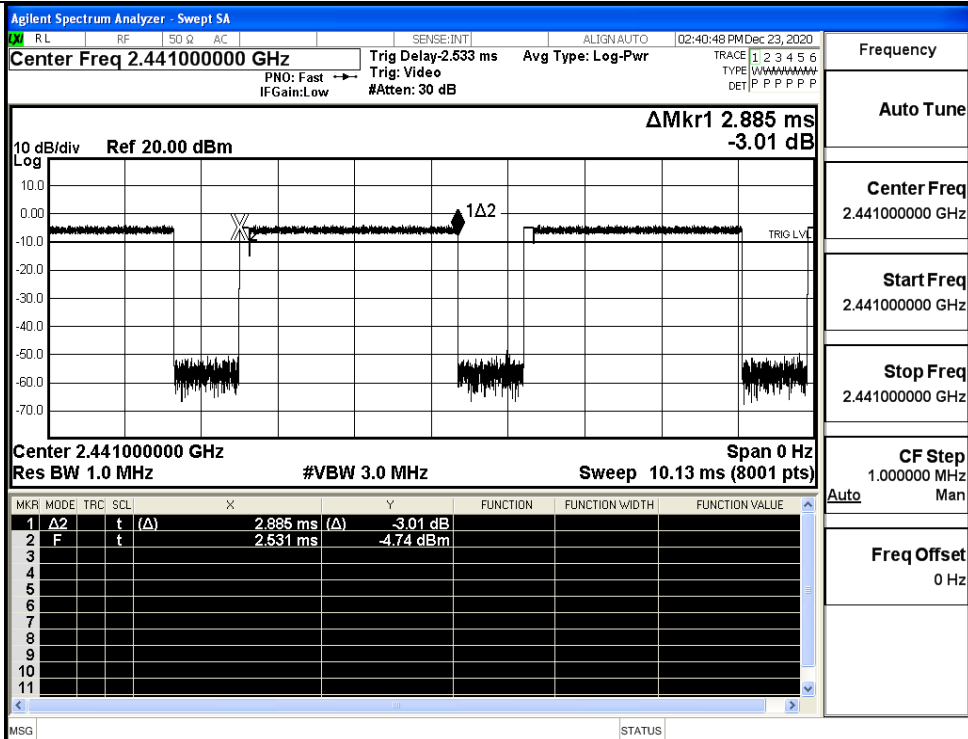
$\pi/4$ DQPSK
_2DH5/HCH



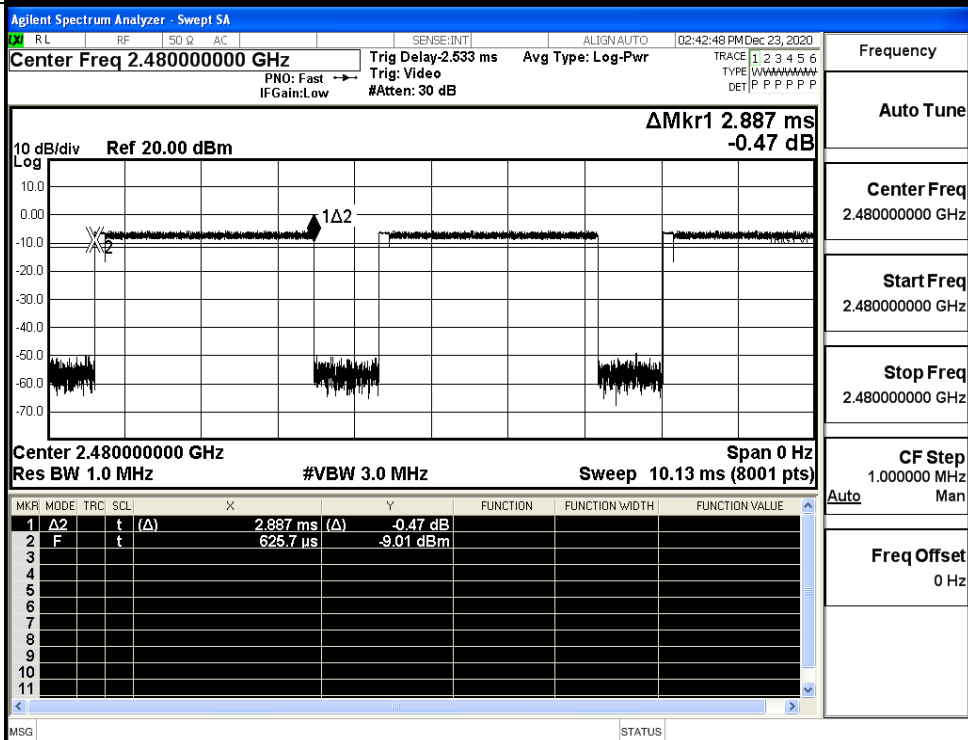
8DPSK _3DH5/LCH



8DPSK_3DH5/MCH



8DPSK_3DH5/HCH

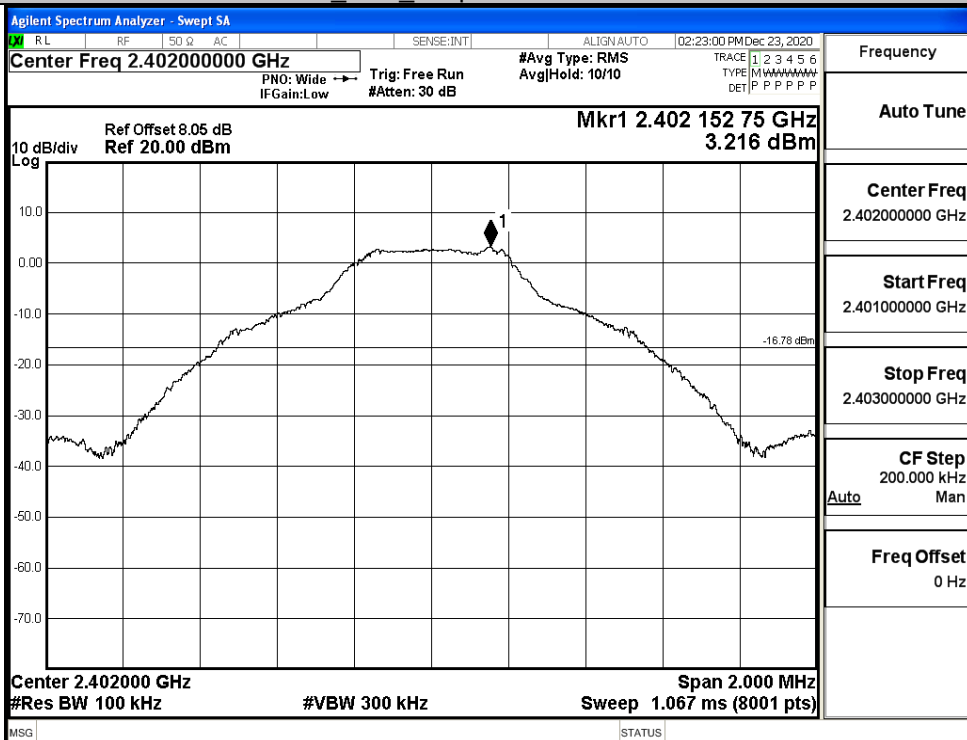


A.6 RF Conducted Spurious Emissions

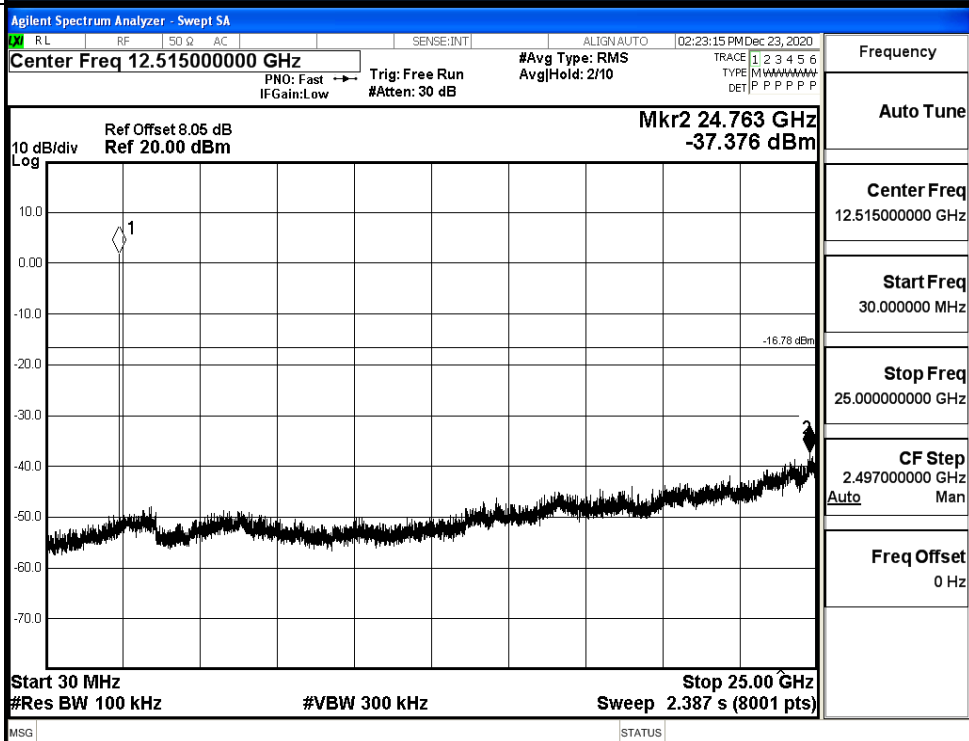
Mode	Channel	Pref [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
GFSK	LCH	3.216	-37.376	-16.784	PASS
	MCH	4.592	-37.914	-15.408	PASS
	HCH	3.084	-38.260	-16.916	PASS
$\pi/4$ DQPSK	LCH	1.479	-36.287	-18.521	PASS
	MCH	3.243	-37.670	-16.757	PASS
	HCH	1.783	-37.754	-18.217	PASS
8DPSK	LCH	1.784	-37.100	-18.216	PASS
	MCH	3.281	-36.874	-16.719	PASS
	HCH	1.642	-38.116	-18.358	PASS

GFSK LCH Graphs

Pref

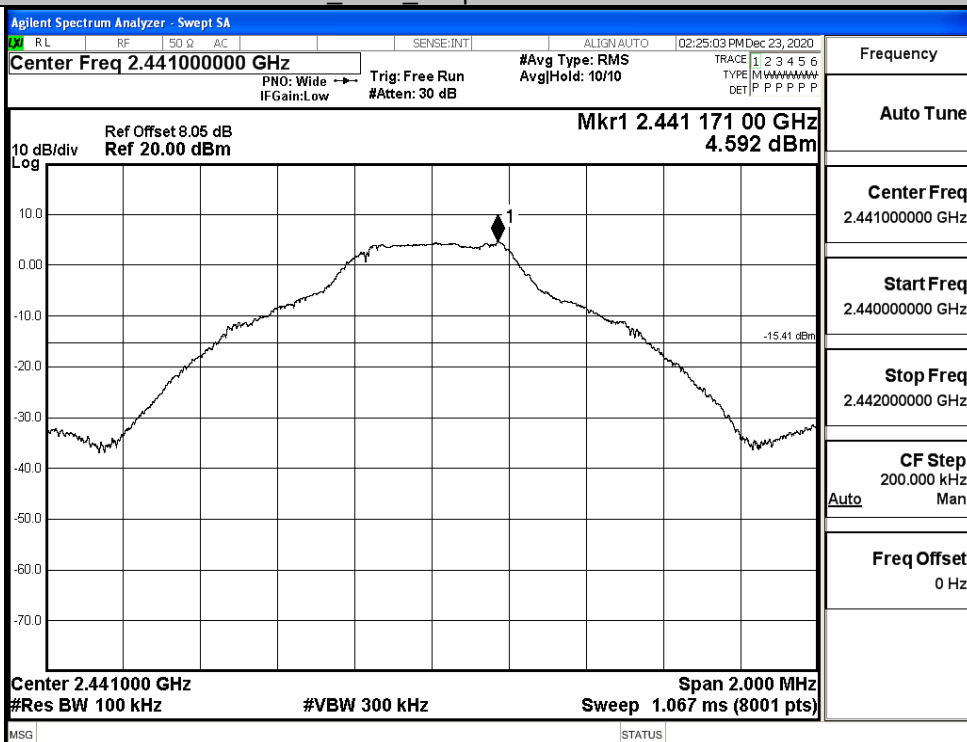


Puw

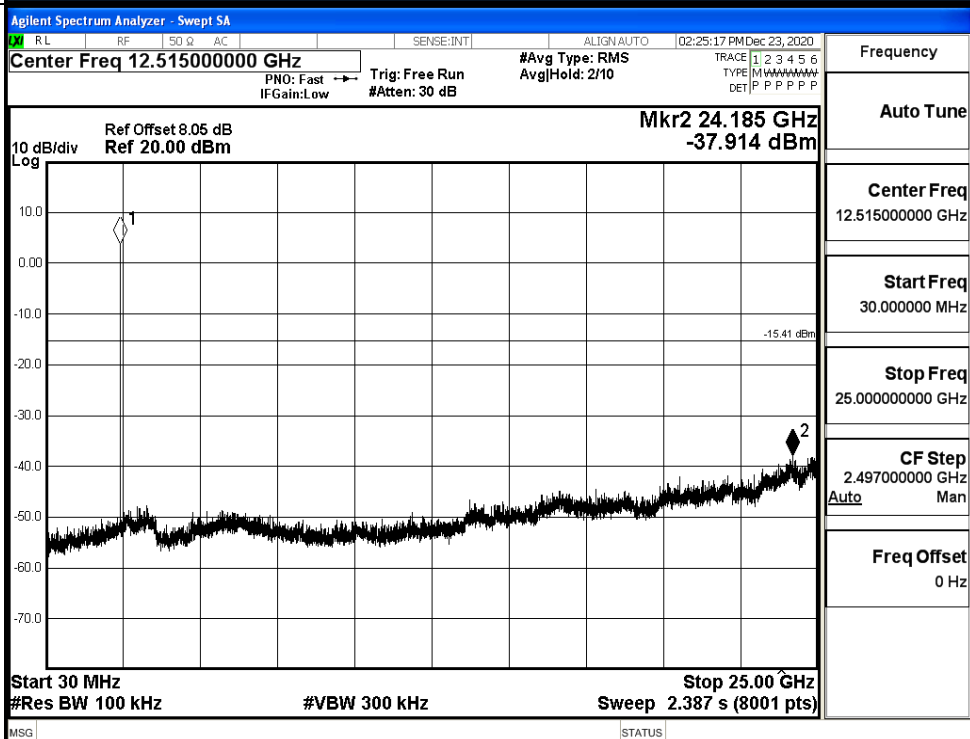


GFSK_MCH_Graphs

Pref

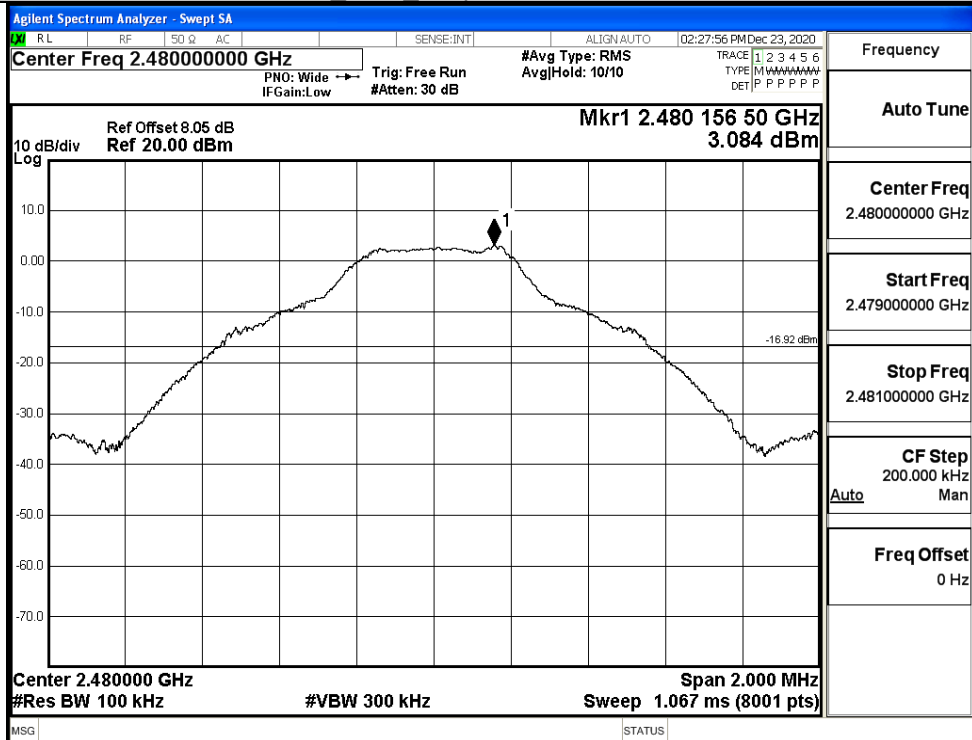


Puw

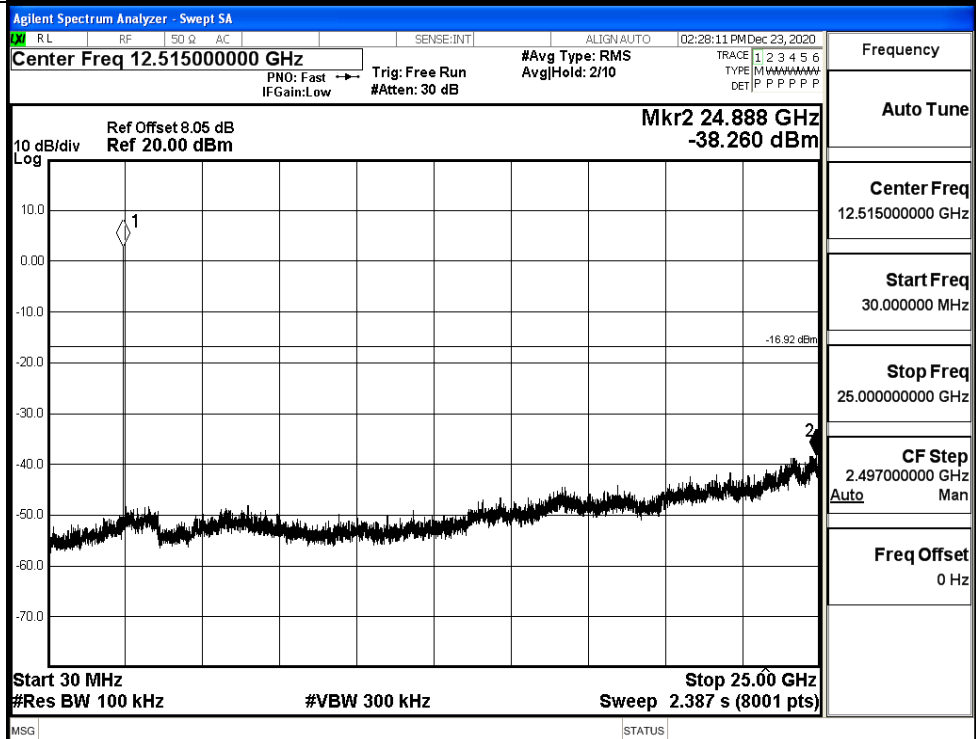


GFSK HCH_Graphs

Pref

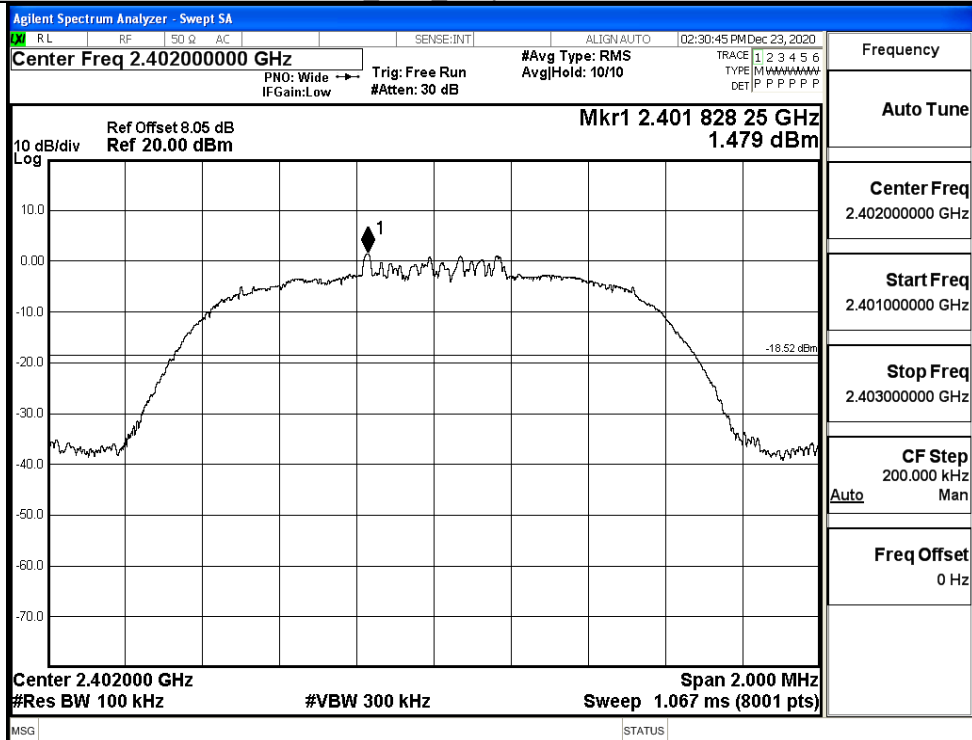


Puw

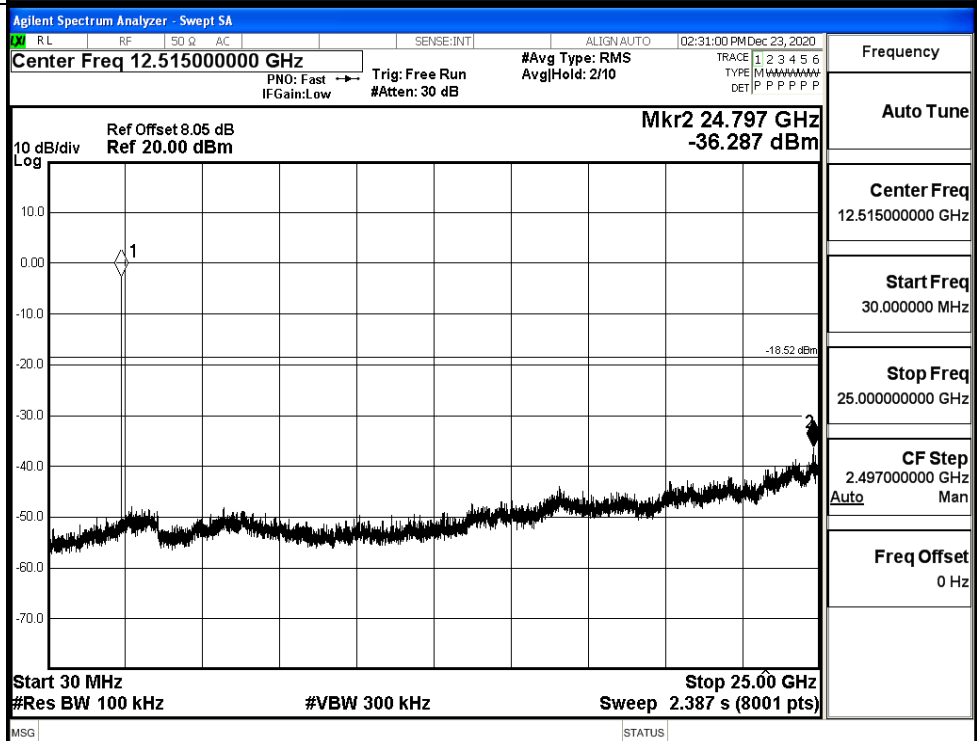


$\pi/4$ DQPSK_LCH_Graphs

Pref

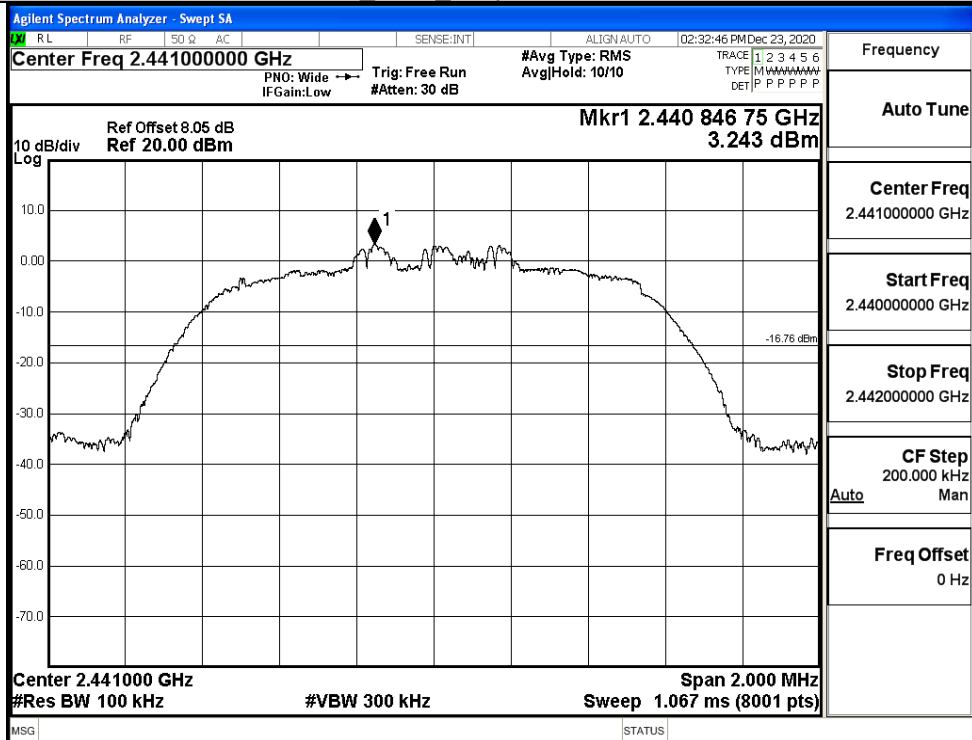


Puw

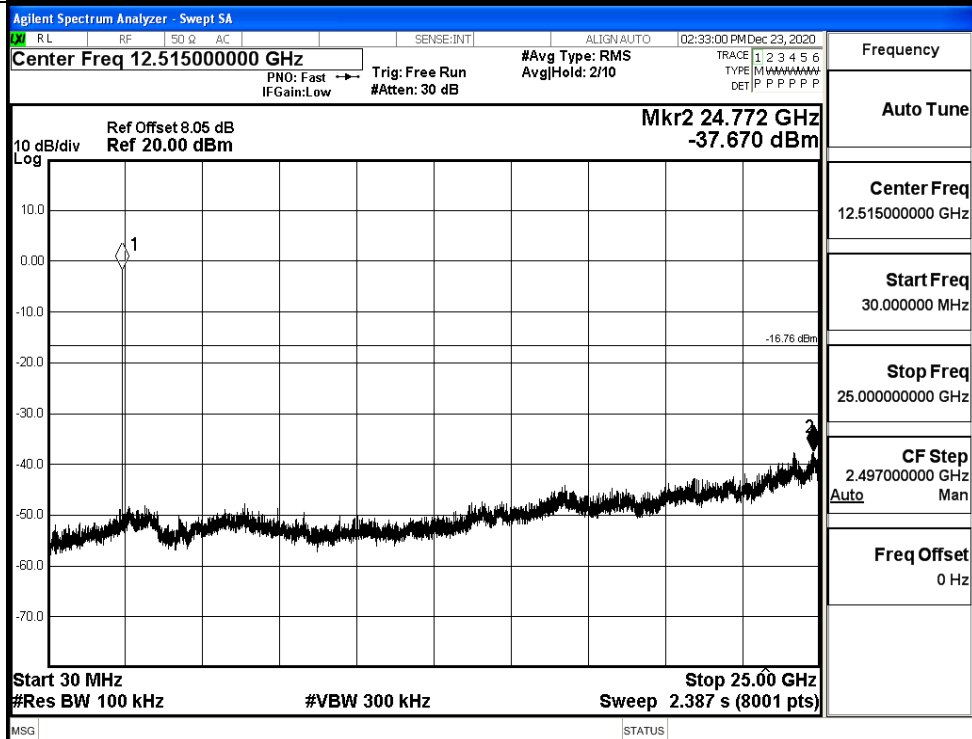


π /4DQPSK_MCH_Graphs

Pref

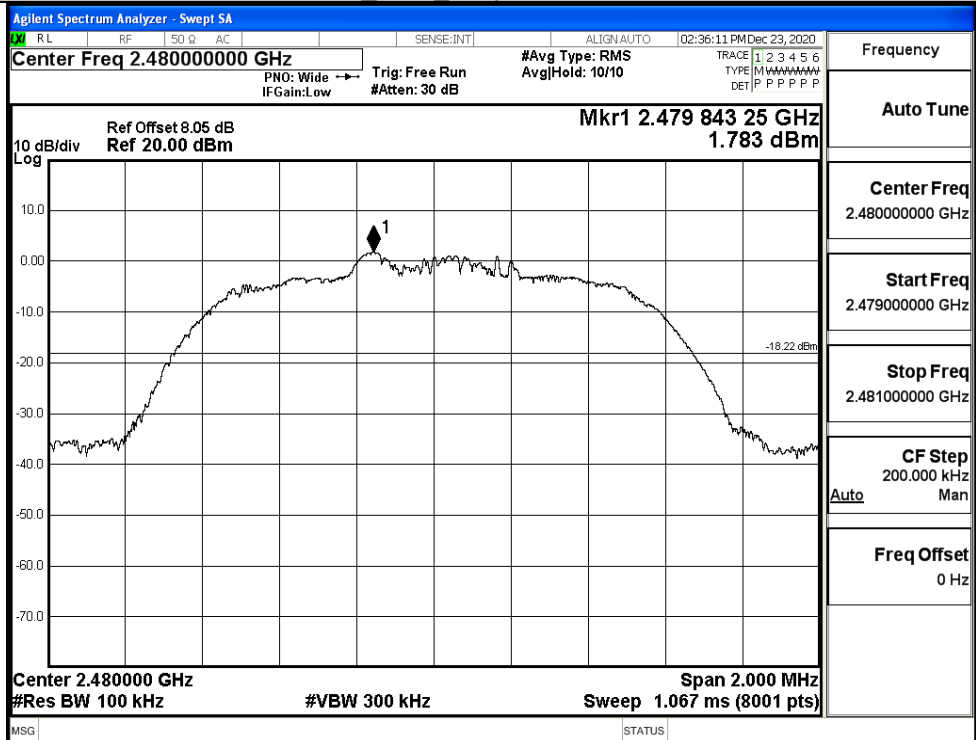


Puw

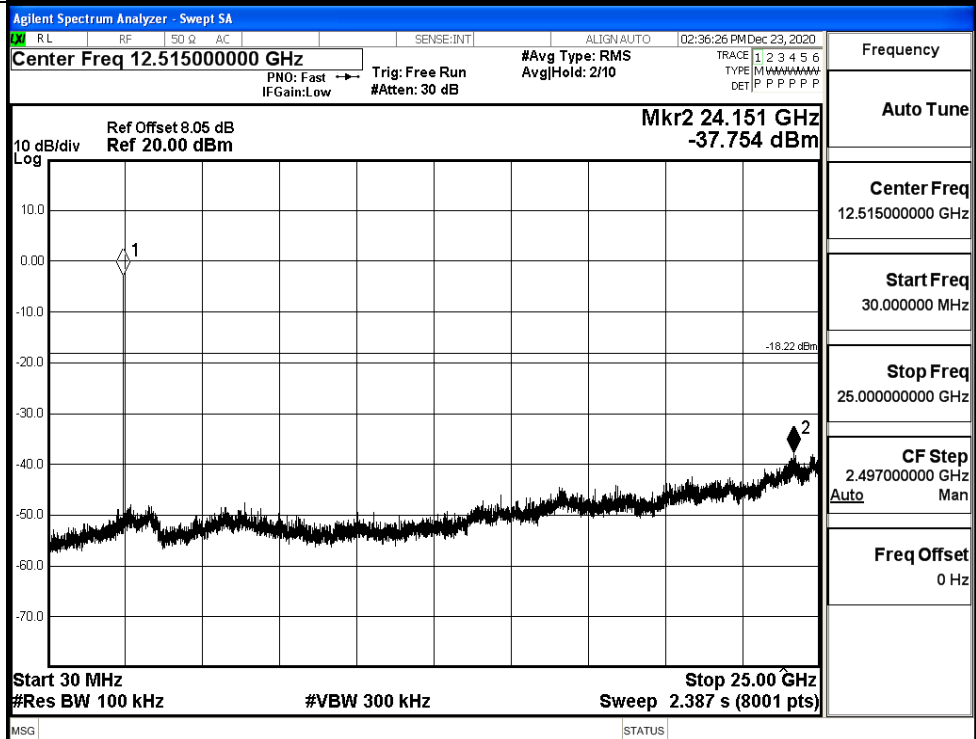


π /4DQPSK_HCH_Graphs

Pref

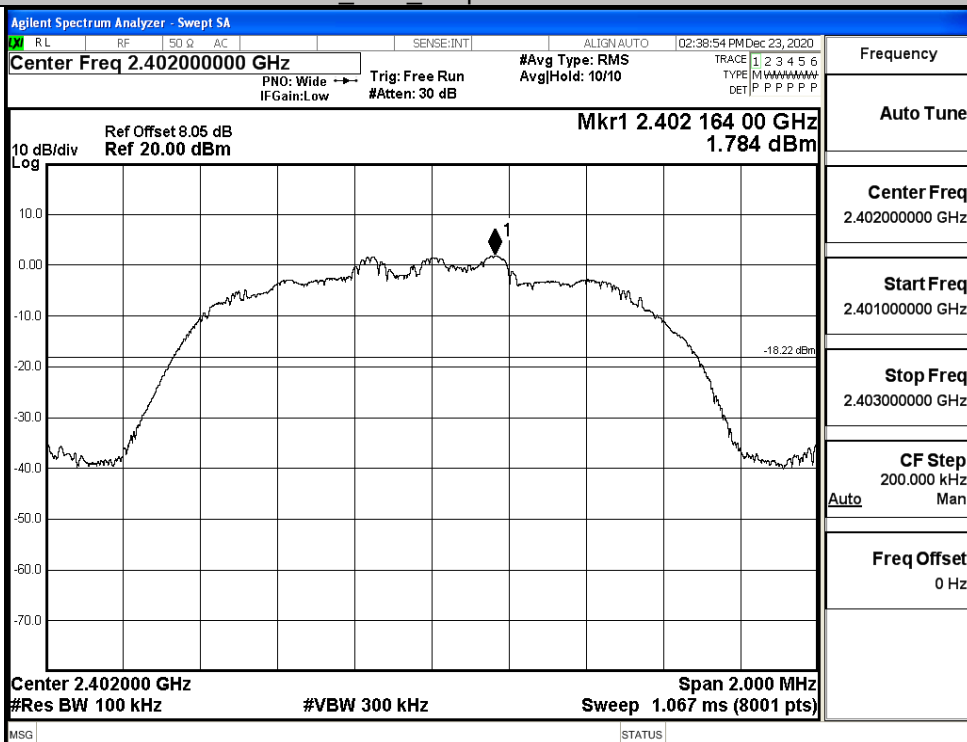


Puw

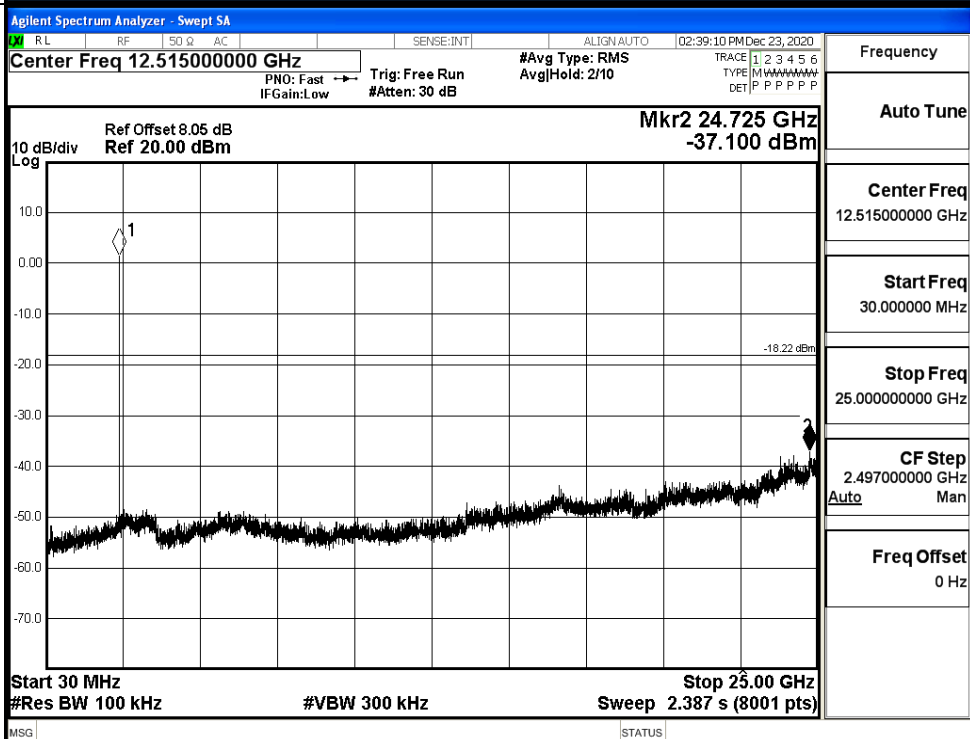


8DPSK_LCH_Graphs

Pref

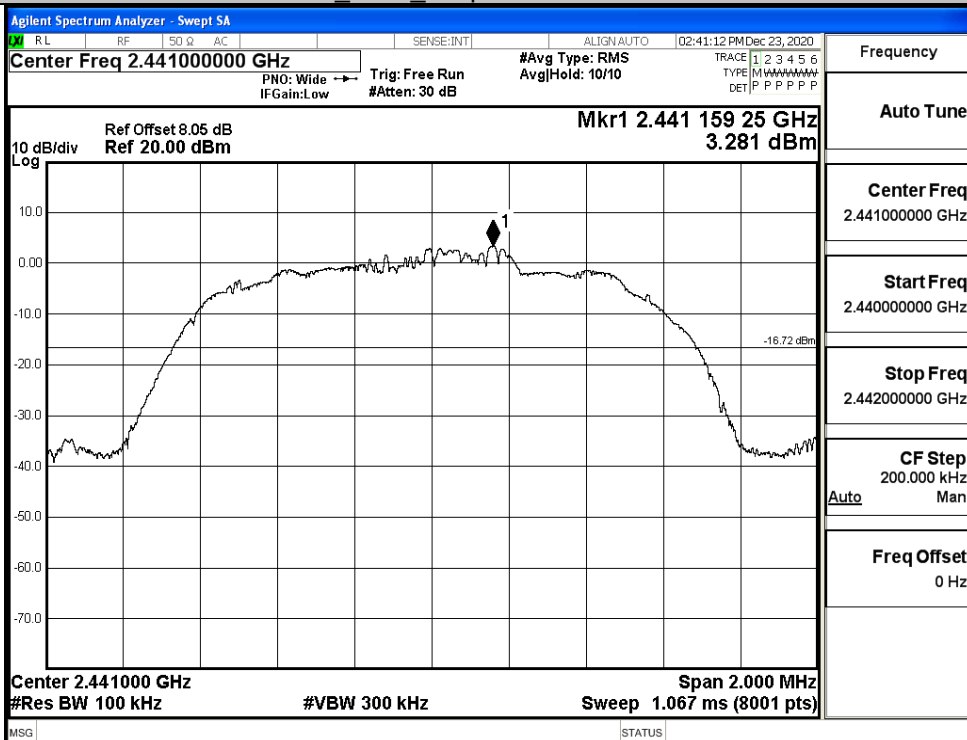


Puw

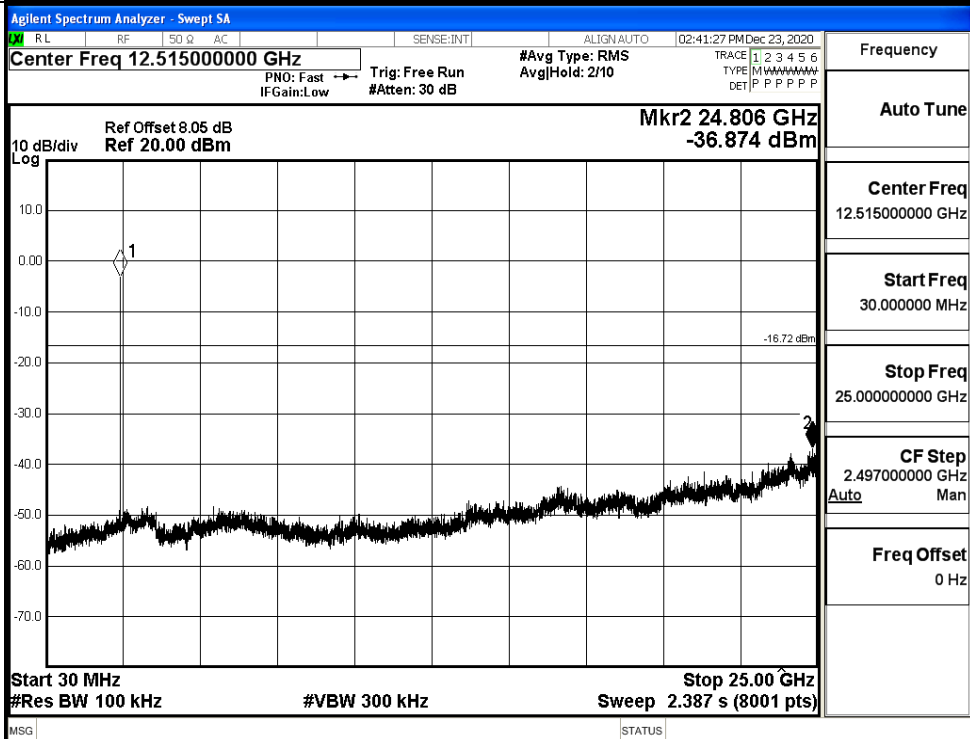


8DPSK_MCH_Graphs

Pref

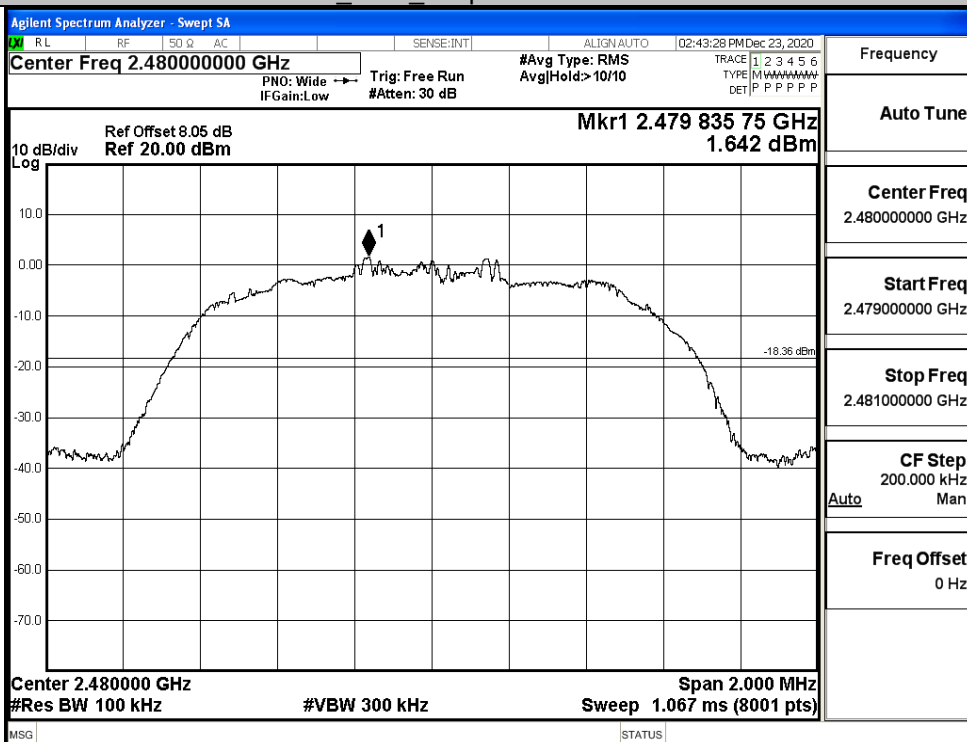


Puw

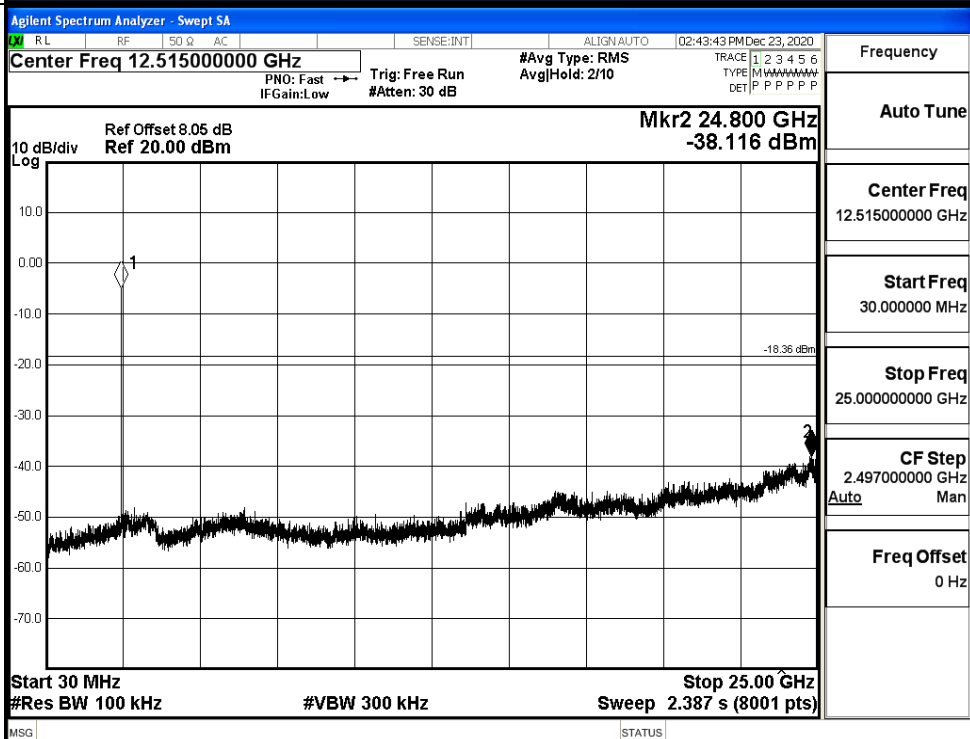


8DPSK_HCH_Graphs

Pref



Puw

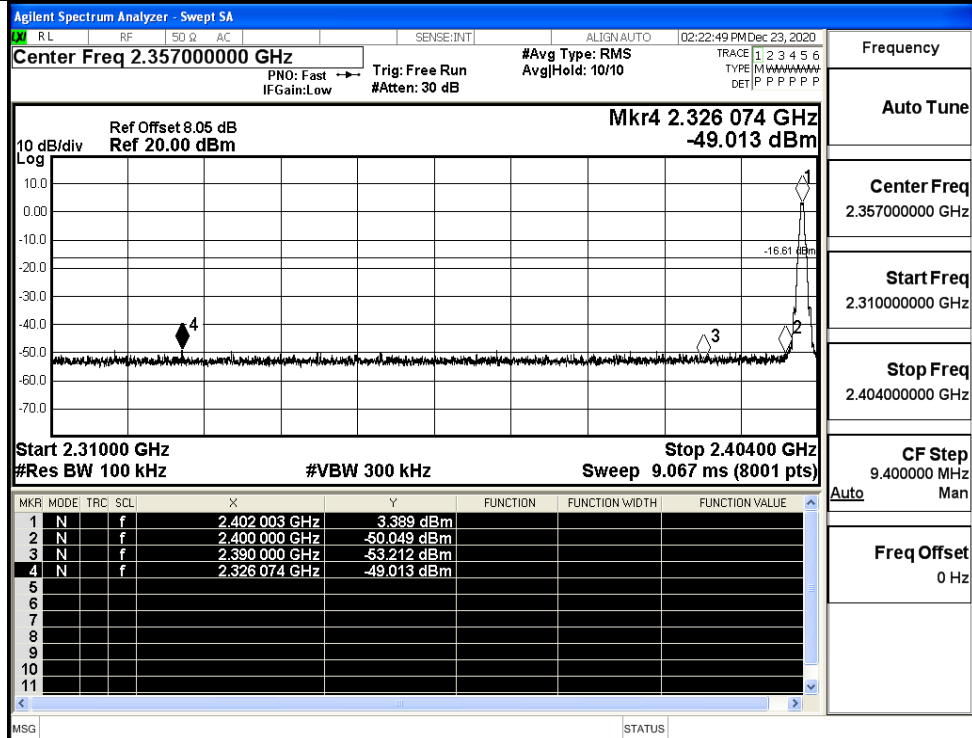


A.7 Band-edge for RF Conducted Emissions

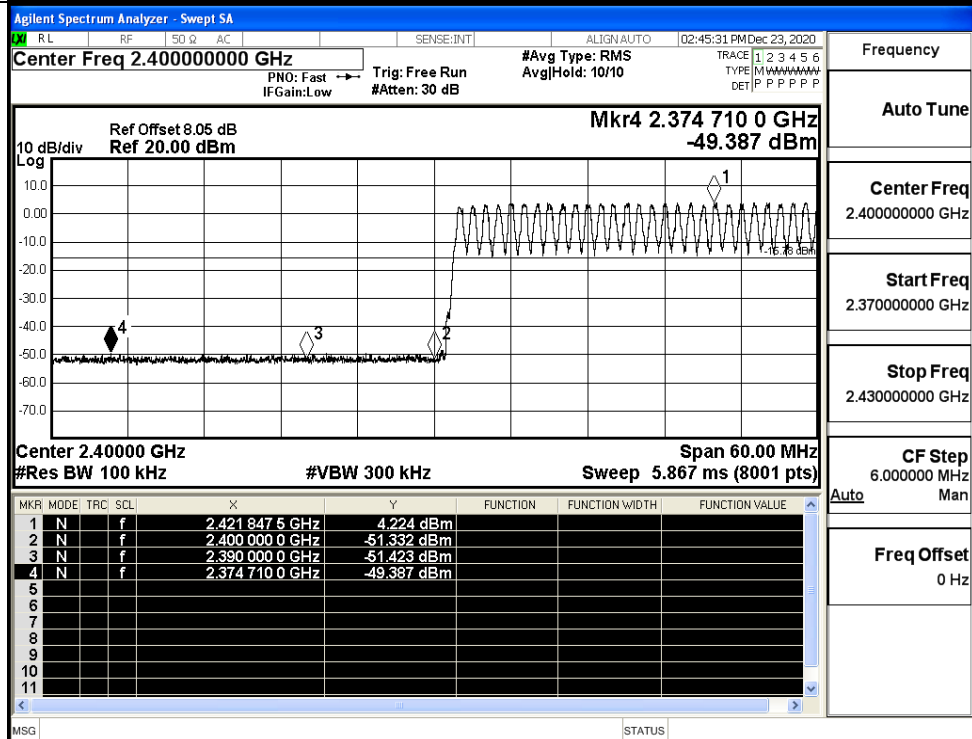
Mode	Channel	Carrier Frequency [MHz]	Carrier Power [dBm]	Frequency Hopping	Max Spurious Level [dBm]	Limit [dBm]	Verdict
GFSK	LCH	2402	3.389	Off	-49.013	-16.61	PASS
			4.224	On	-49.387	-15.78	PASS
	HCH	2480	3.200	Off	-49.443	-16.8	PASS
			4.189	On	-48.798	-15.81	PASS
$\pi/4$ DQPSK	LCH	2402	1.742	Off	-48.895	-18.26	PASS
			2.543	On	-48.876	-17.46	PASS
	HCH	2480	1.792	Off	-48.618	-18.21	PASS
			2.788	On	-48.446	-17.21	PASS
8DPSK	LCH	2402	1.813	Off	-49.175	-18.19	PASS
			2.844	On	-49.379	-17.16	PASS
	HCH	2480	1.848	Off	-48.679	-18.15	PASS
			2.847	On	-48.122	-17.15	PASS

Test Graphs

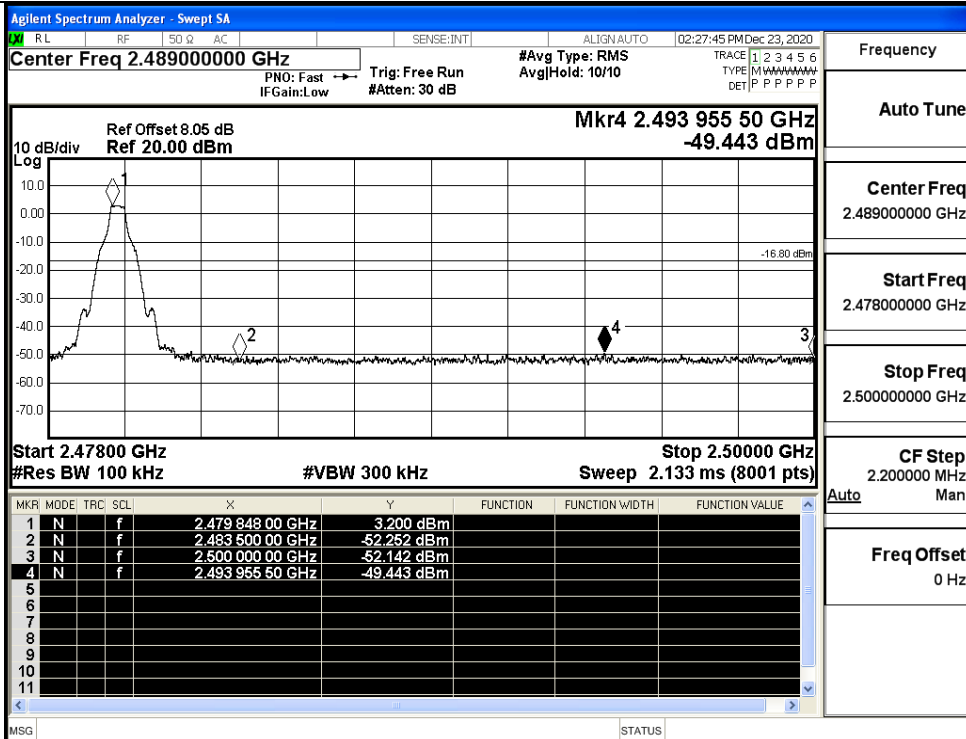
GFSK/LCH/No Hop



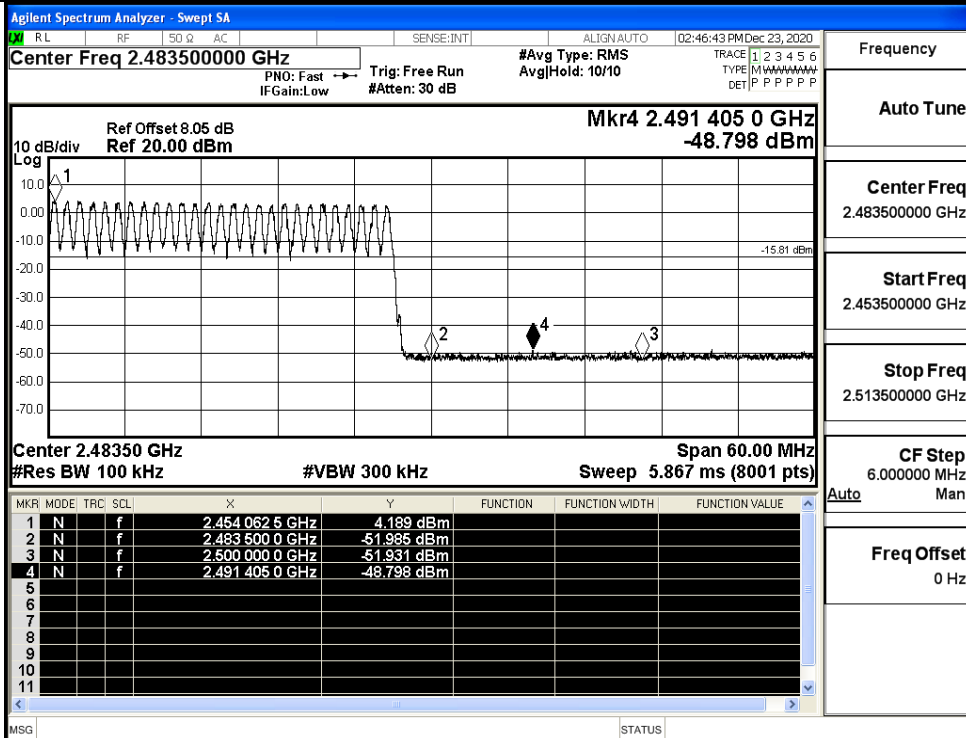
GFSK/LCH/Hop



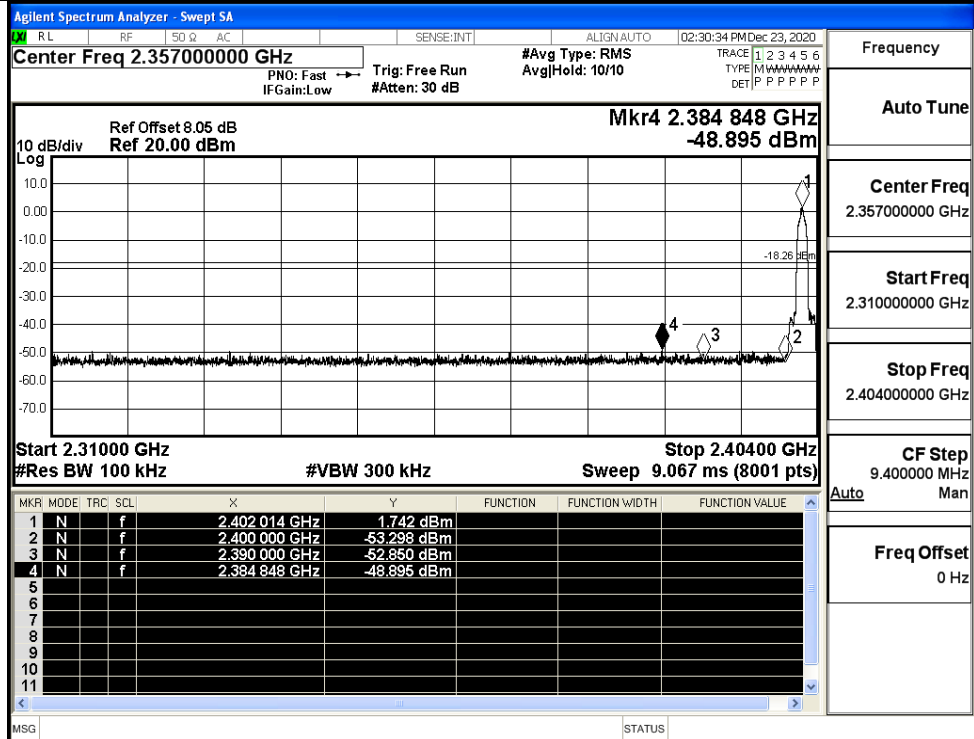
GFSK/HCH/No Hop



GFSK/HCH/Hop



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



Frequency

Auto Tune

Center Freq
2.357000000 GHz

Start Freq
2.310000000 GHz

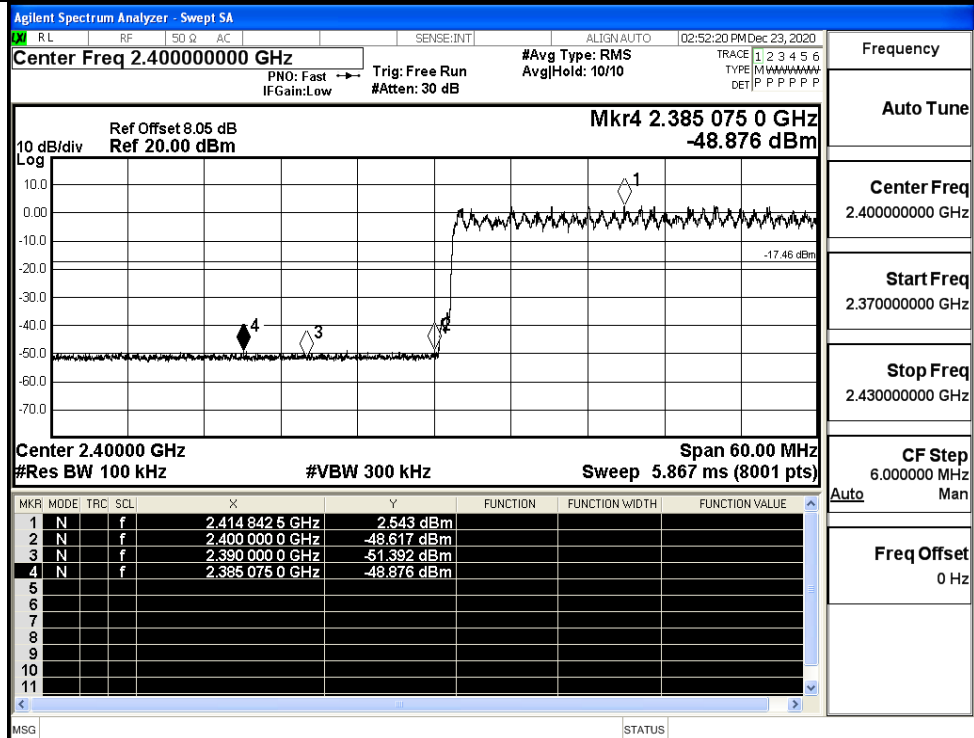
Stop Freq
2.404000000 GHz

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

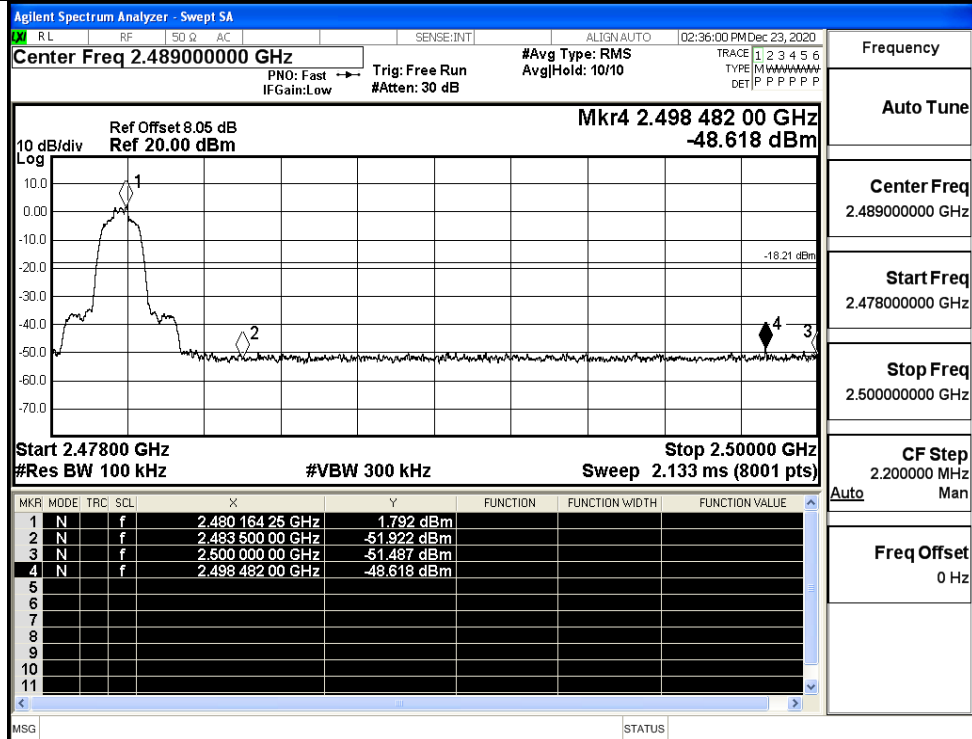
Stop Freq
2.430000000 GHz

CF Step
6.000000 MHz

Auto Man

Freq Offset
0 Hz

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



Frequency

Auto Tune

Center Freq
2.489000000 GHz

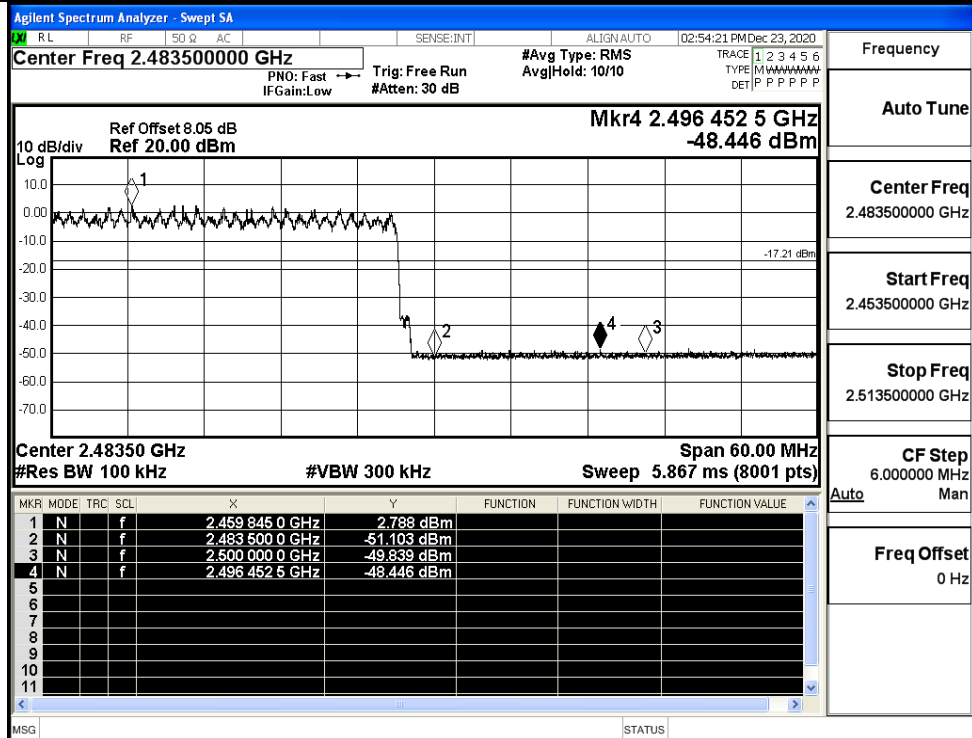
Start Freq
2.478000000 GHz

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

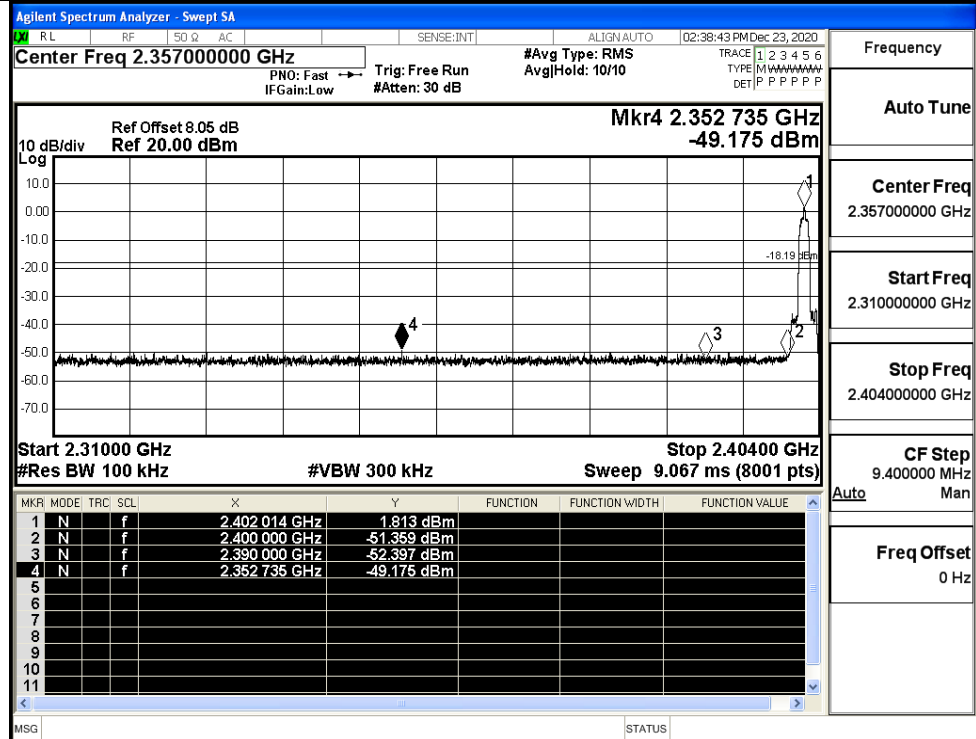
Start Freq
2.453500000 GHz

Stop Freq
2.513500000 GHz

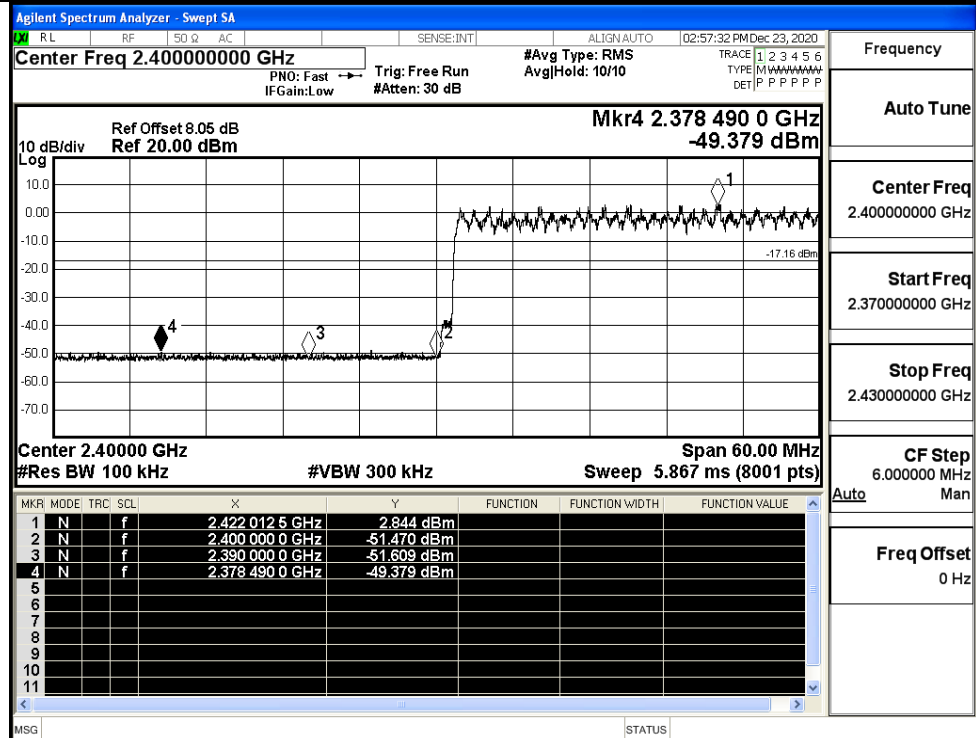
CF Step
6.000000 MHz

Freq Offset
0 Hz

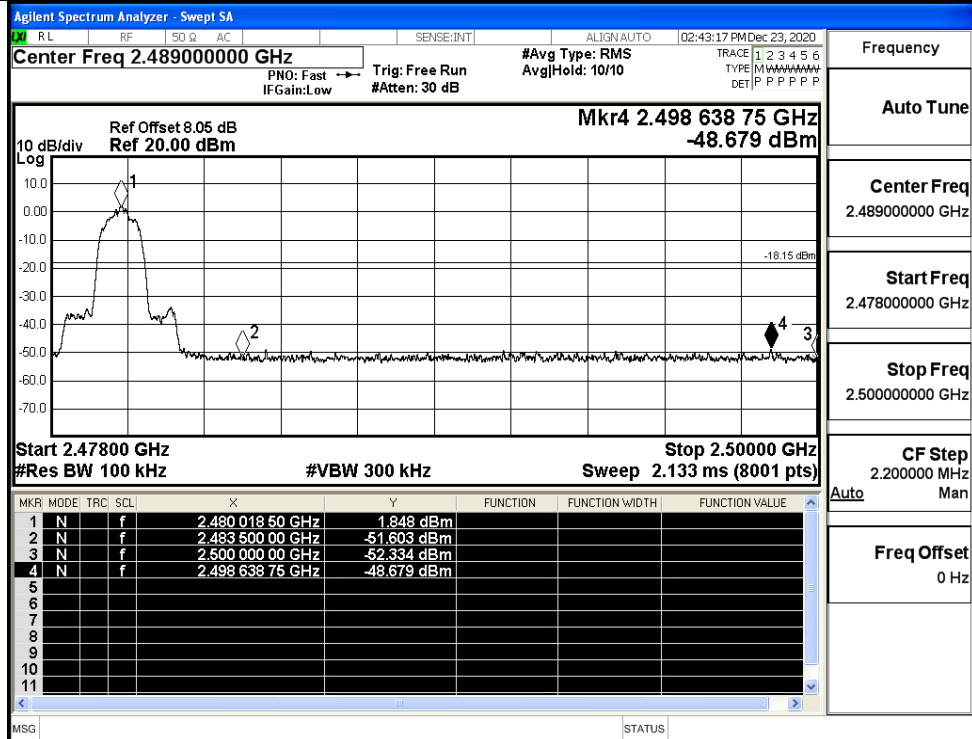
8DPSK/LCH/No Hop



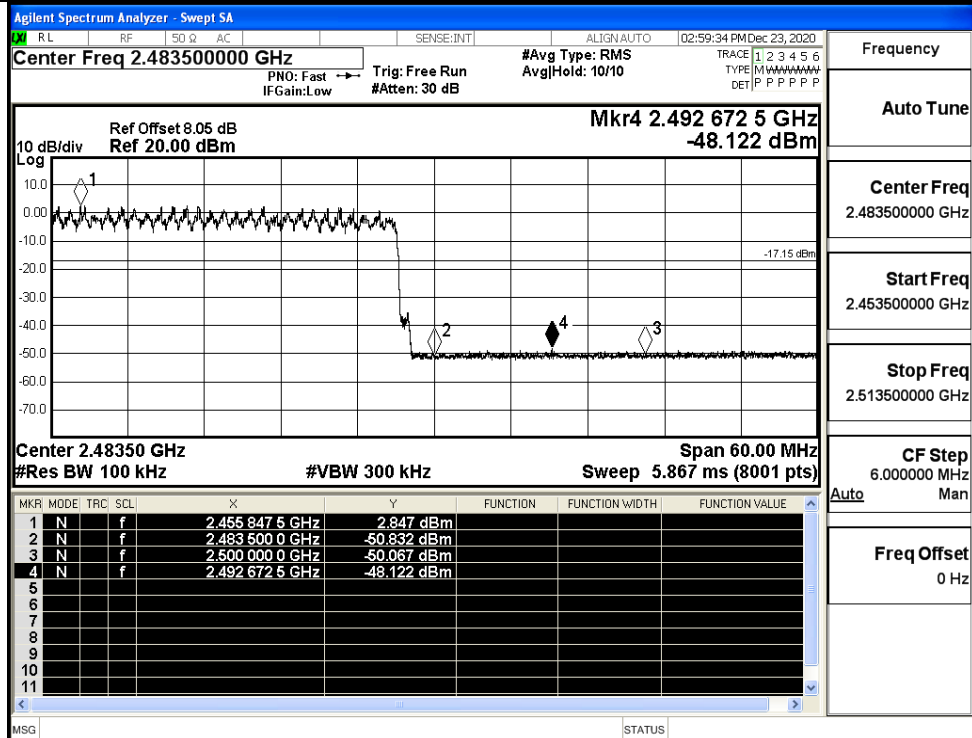
8DPSK/LCH/Hop



8DPSK/HCH/No Hop



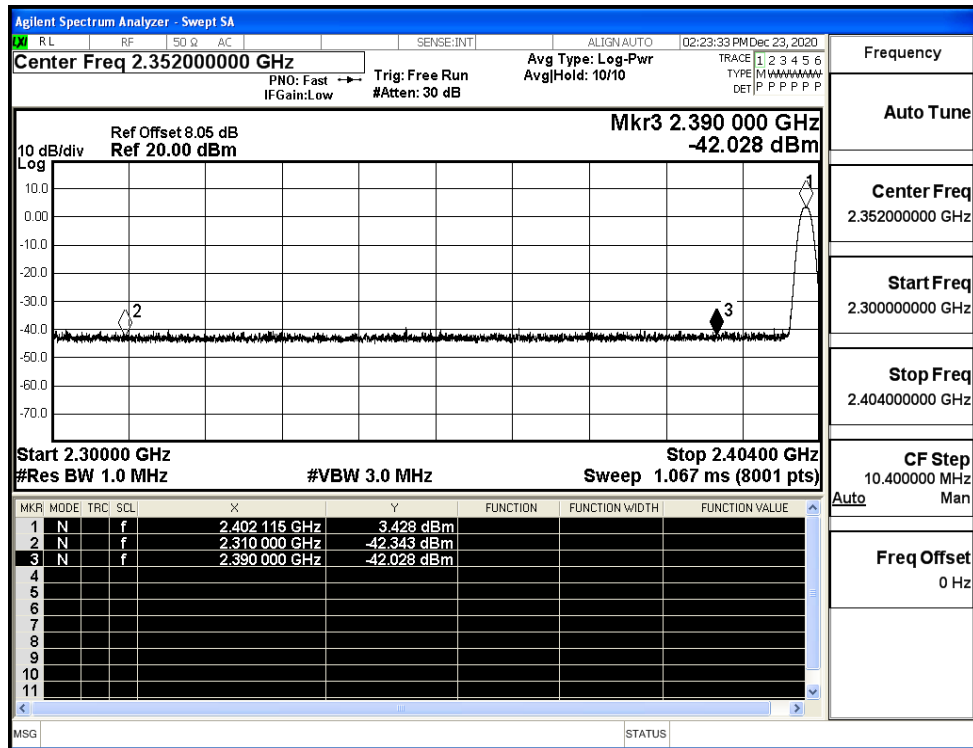
8DPSK/HCH/Hop



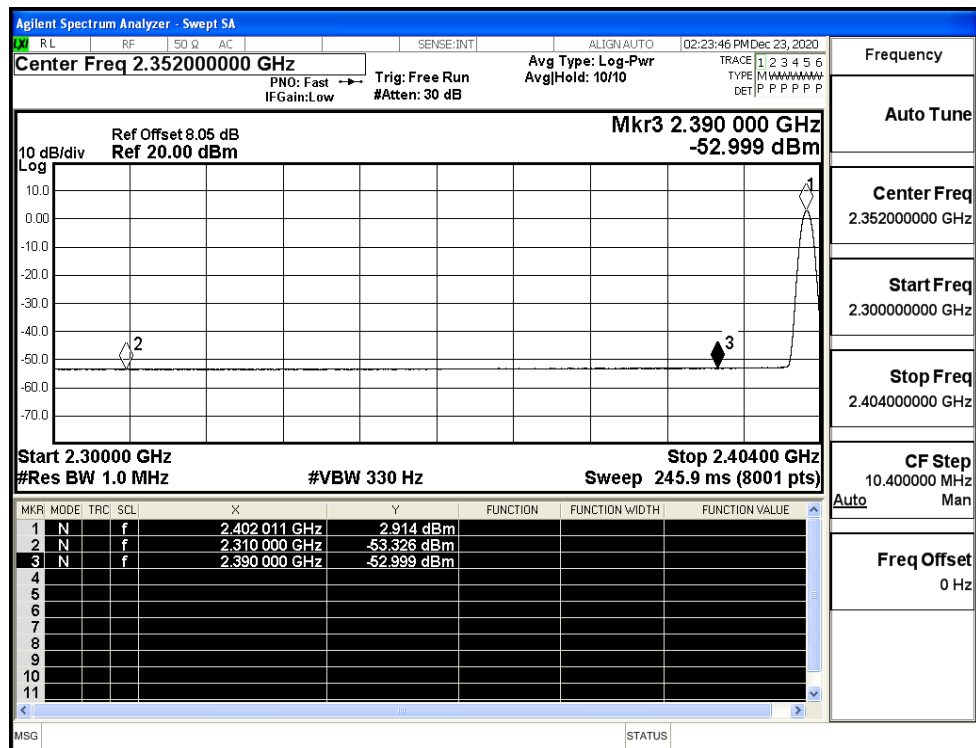
A.8 Restrict-band band-edge measurements

Test Mode	Hopping	Freq.	Power [dBm]	Gain	Ground Factor	E [dBuV/m]	Detector	Limit [dBuV/m]	Verdict
GFSK	Off	2310.0	-42.34	2.0	0	54.89	PEAK	74	PASS
	Off	2310.0	-53.33	2.0	0	43.90	AV	54	PASS
	Off	2390.0	-42.03	2.0	0	55.20	PEAK	74	PASS
	Off	2390.0	-53.00	2.0	0	44.23	AV	54	PASS
	Off	2483.5	-40.56	2.0	0	56.67	PEAK	74	PASS
	Off	2483.5	-52.51	2.0	0	44.72	AV	54	PASS
	Off	2500.0	-42.27	2.0	0	54.96	PEAK	74	PASS
	Off	2500.0	-52.39	2.0	0	44.84	AV	54	PASS
$\pi/4$ DQPSK	Off	2310.0	-42.34	2.0	0	54.89	PEAK	74	PASS
	Off	2310.0	-53.43	2.0	0	43.80	AV	54	PASS
	Off	2390.0	-41.68	2.0	0	55.55	PEAK	74	PASS
	Off	2390.0	-53.06	2.0	0	44.17	AV	54	PASS
	Off	2483.5	-41.85	2.0	0	55.38	PEAK	74	PASS
	Off	2483.5	-52.42	2.0	0	44.81	AV	54	PASS
	Off	2500.0	-41.71	2.0	0	55.52	PEAK	74	PASS
	Off	2500.0	-52.39	2.0	0	44.84	AV	54	PASS
8DPSK	Off	2310.0	-42.92	2.0	0	54.31	PEAK	74	PASS
	Off	2310.0	-53.37	2.0	0	43.86	AV	54	PASS
	Off	2390.0	-41.77	2.0	0	55.46	PEAK	74	PASS
	Off	2390.0	-53.08	2.0	0	44.15	AV	54	PASS
	Off	2483.5	-42.27	2.0	0	54.96	PEAK	74	PASS
	Off	2483.5	-52.43	2.0	0	44.80	AV	54	PASS
	Off	2500.0	-42.43	2.0	0	54.80	PEAK	74	PASS
	Off	2500.0	-52.44	2.0	0	44.79	AV	54	PASS

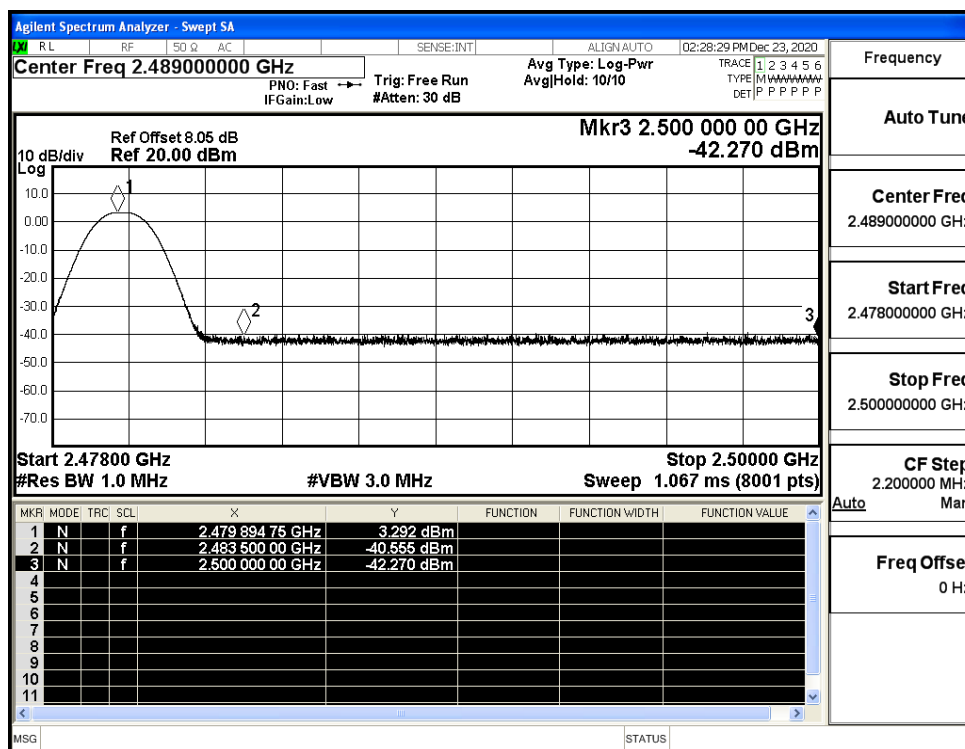
Restrict-band band-edge measurements_Hopping Off_GFSK_PEAK (Low Channel)



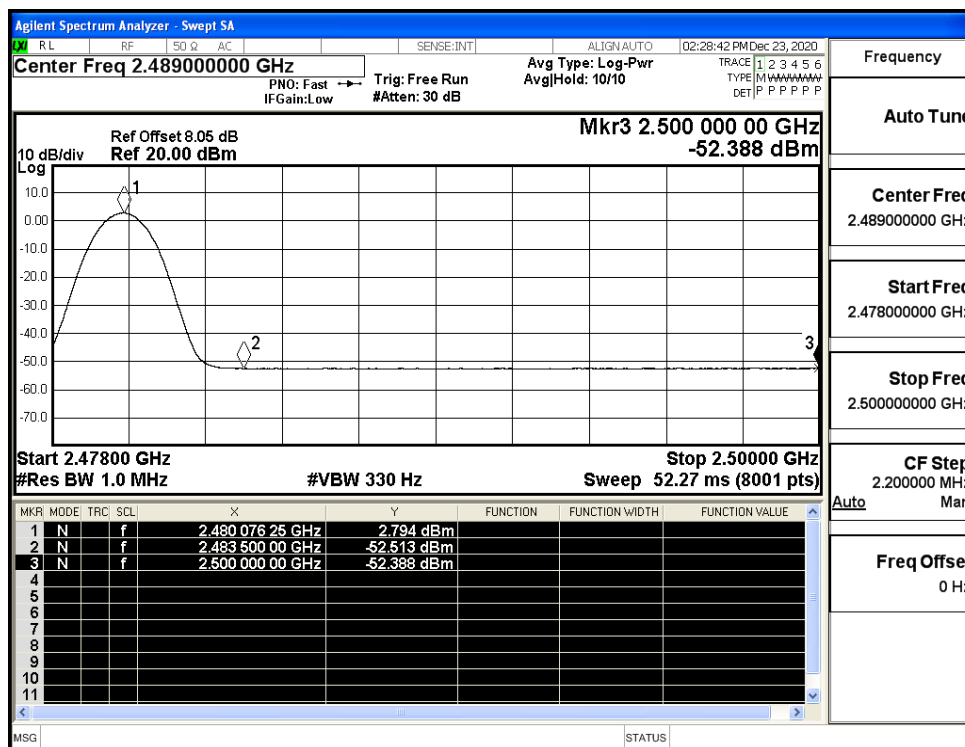
Restrict-band band-edge measurements_Hopping Off_GFSK_Average (Low Channel)

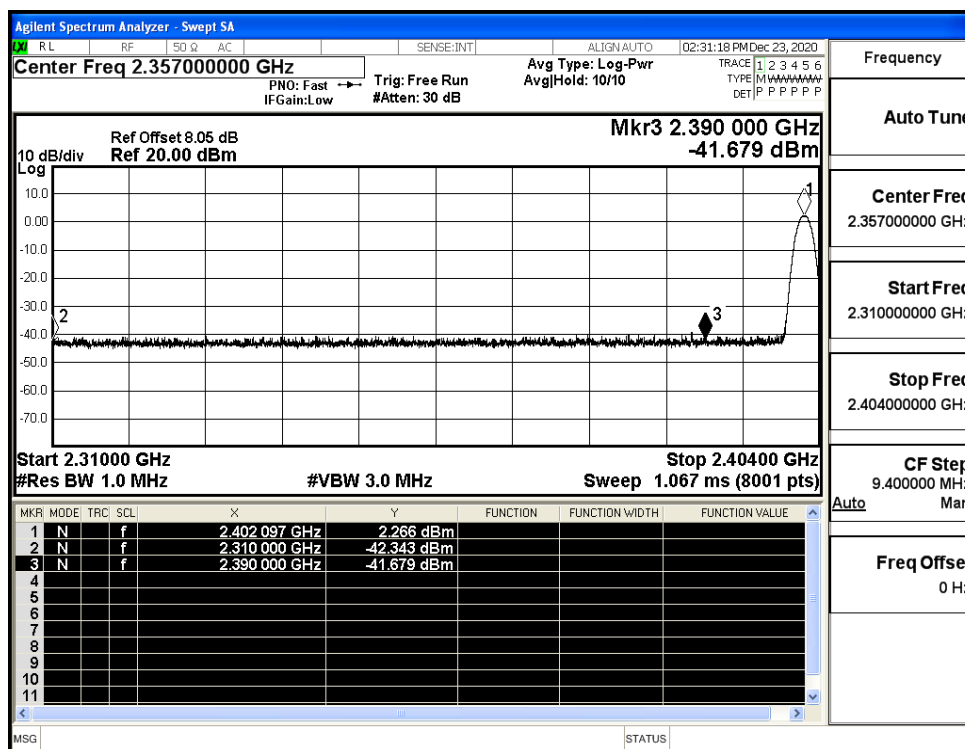
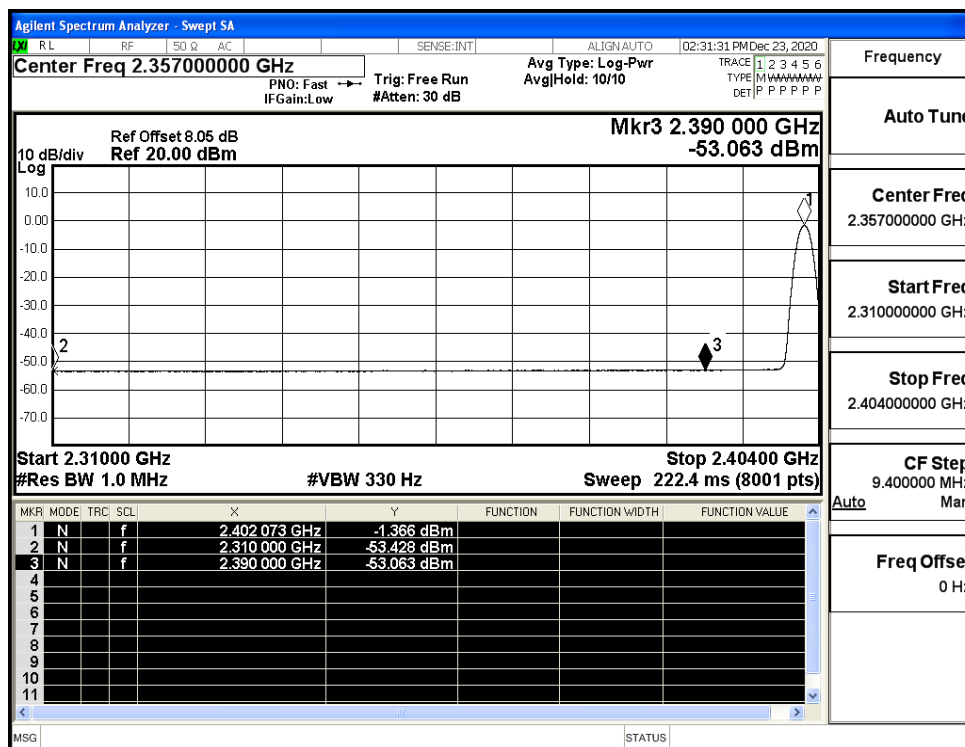


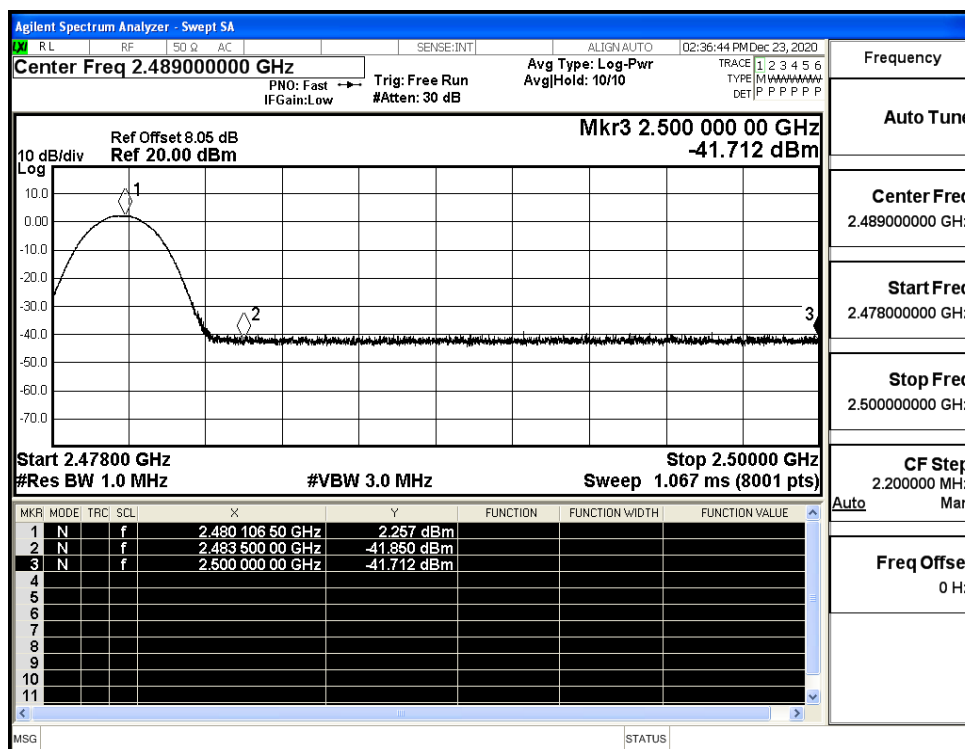
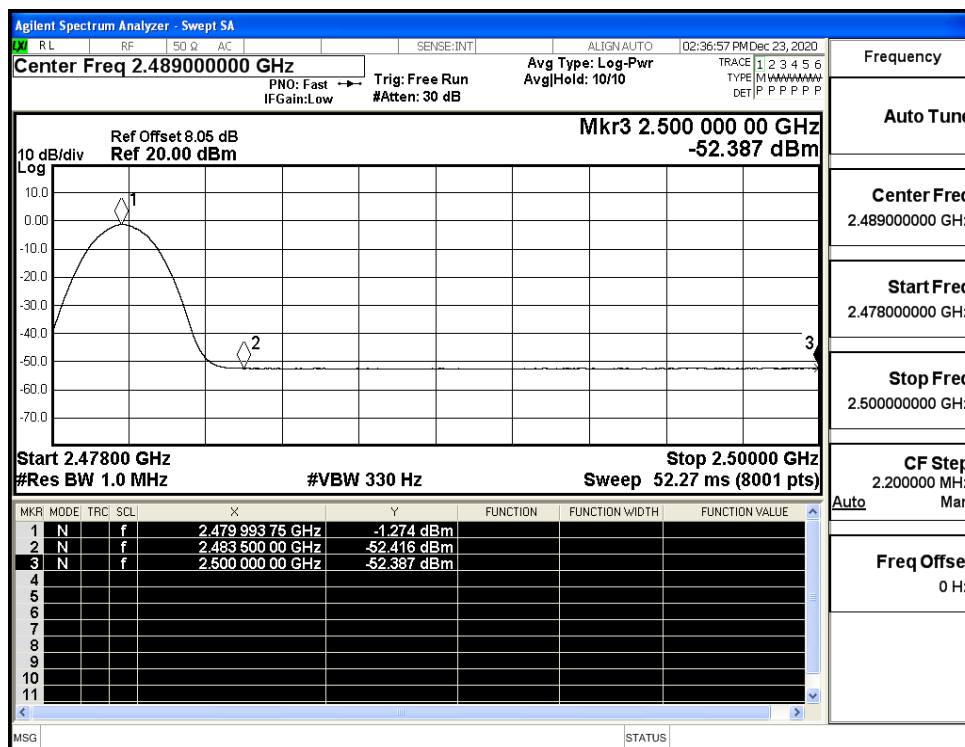
Restrict-band band-edge measurements_Hopping Off_GFSK_PEAK (High Channel)



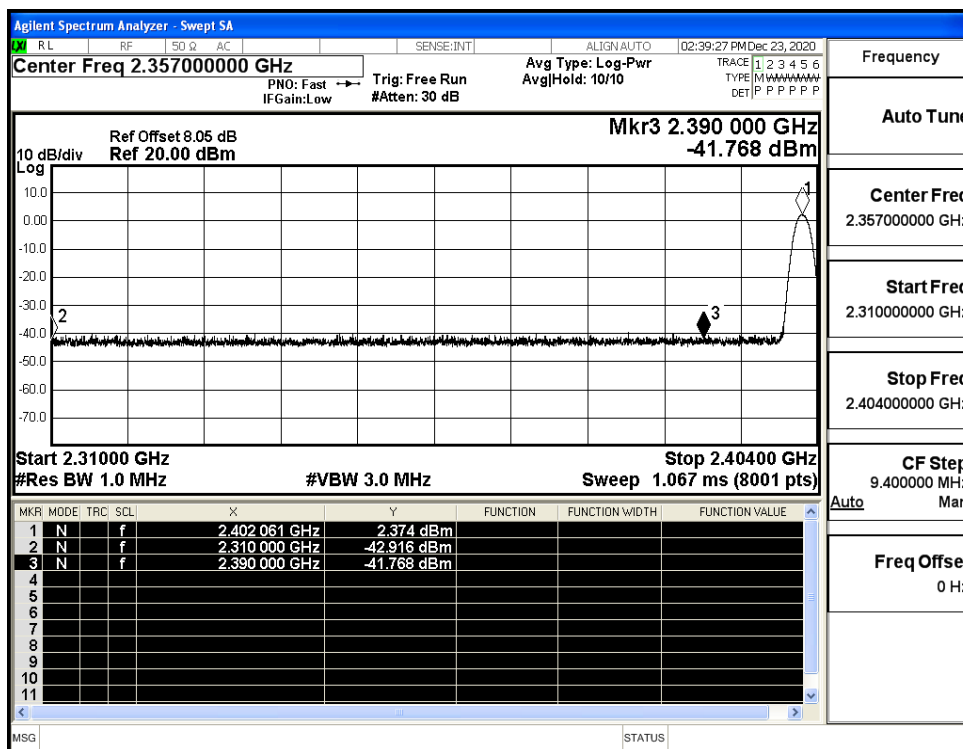
Restrict-band band-edge measurements_Hopping Off_GFSK_Average (High Channel)



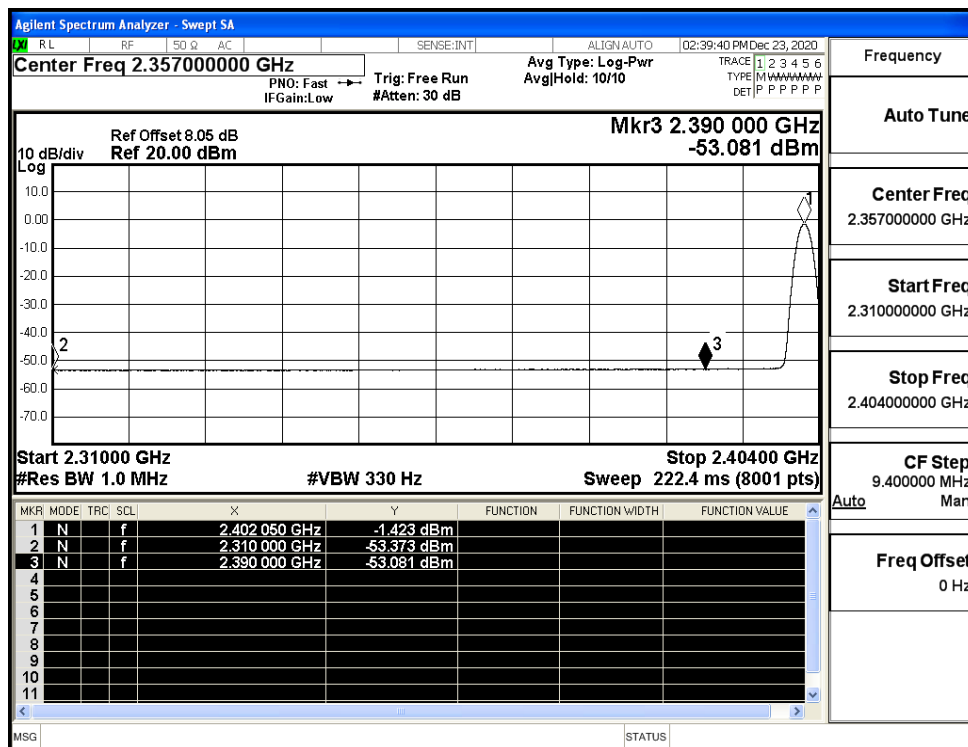
Restrict-band band-edge measurements_Hopping Off $\pi/4$ -DQPSK_PEAK (Low Channel)Restrict-band band-edge measurements_Hopping Off $\pi/4$ -DQPSK_Average (Low Channel)

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)

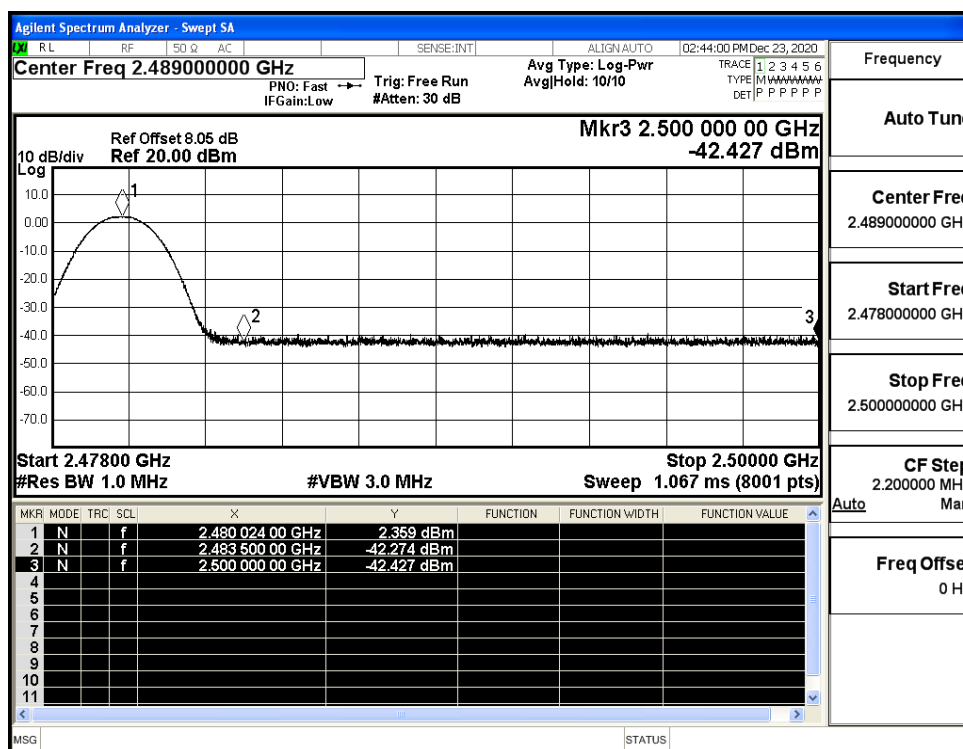
Restrict-band band-edge measurements_Hopping Off_8DPSK_PEAK (Low Channel)



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)

