

Appendix A

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

Product Name: TABLET PC

Trade Mark: PC SMART

Test Model:PCSGOB10LTE-V2

Environmental Conditions

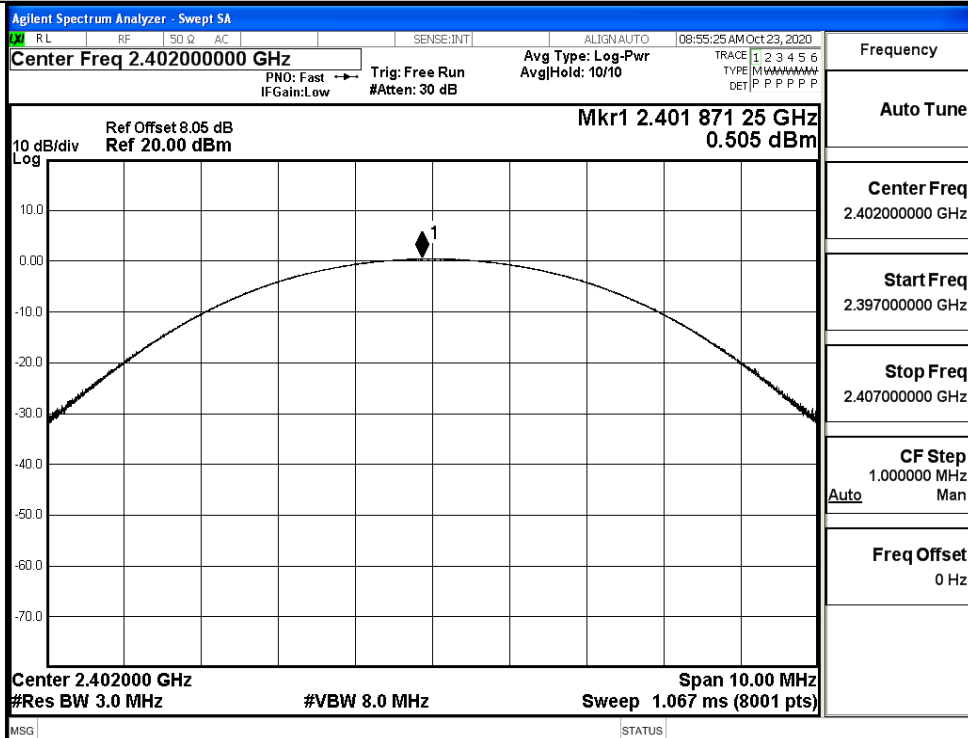
Temperature:	25.3 ° C
Relative Humidity:	54.5%
ATM Pressure:	100.0 kPa
Test Engineer:	Diamond Lu
Supervised by:	LI HUAN

A.1 Maxmum Conducted Peak Output Power

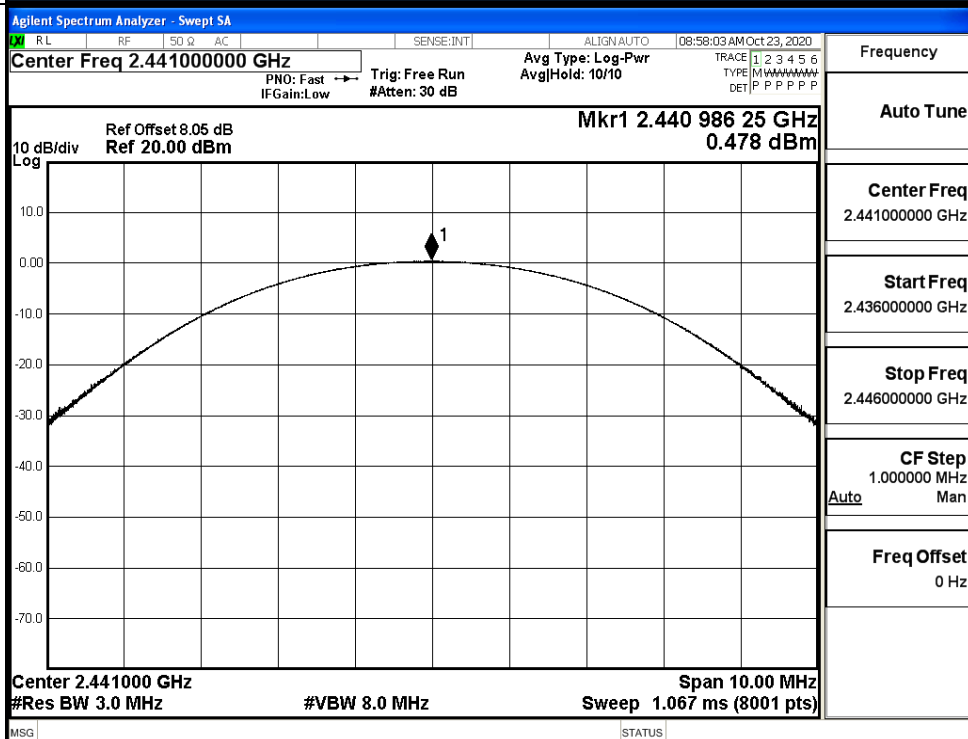
Mode	Channel.	Maximum Peak Output Power [dBm]	Limit [dBm]	Verdict
GFSK	LCH	0.505	21	PASS
	MCH	0.478	21	PASS
	HCH	-0.104	21	PASS
$\pi/4$ DQPSK	LCH	0.633	21	PASS
	MCH	0.497	21	PASS
	HCH	-0.113	21	PASS
8DPSK	LCH	0.728	21	PASS
	MCH	0.558	21	PASS
	HCH	-0.016	21	PASS

Test Graphs

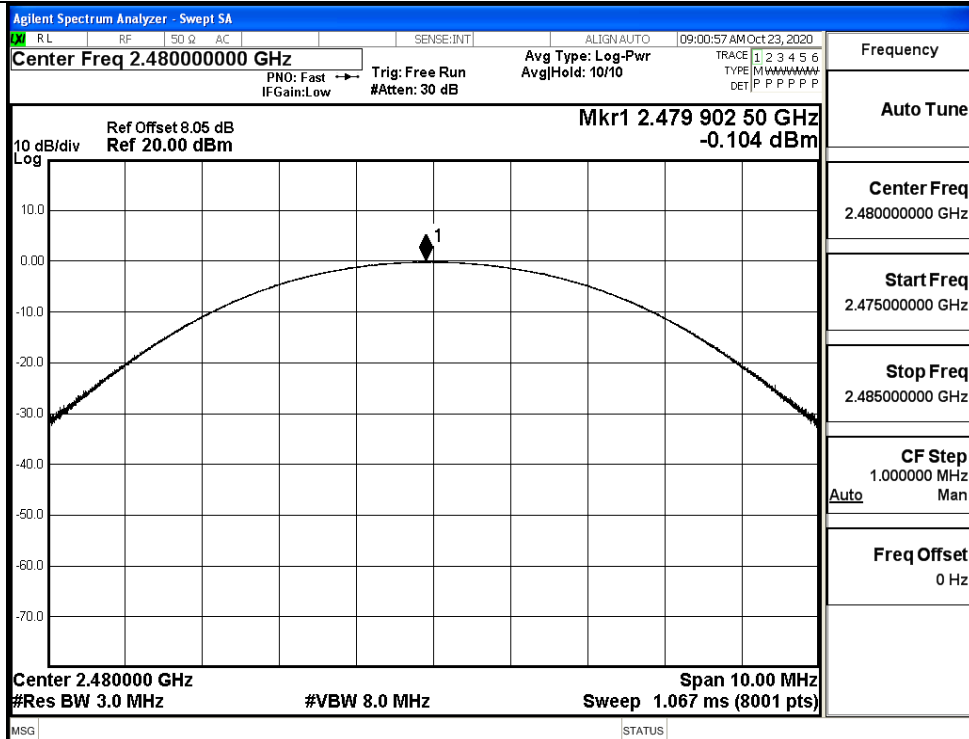
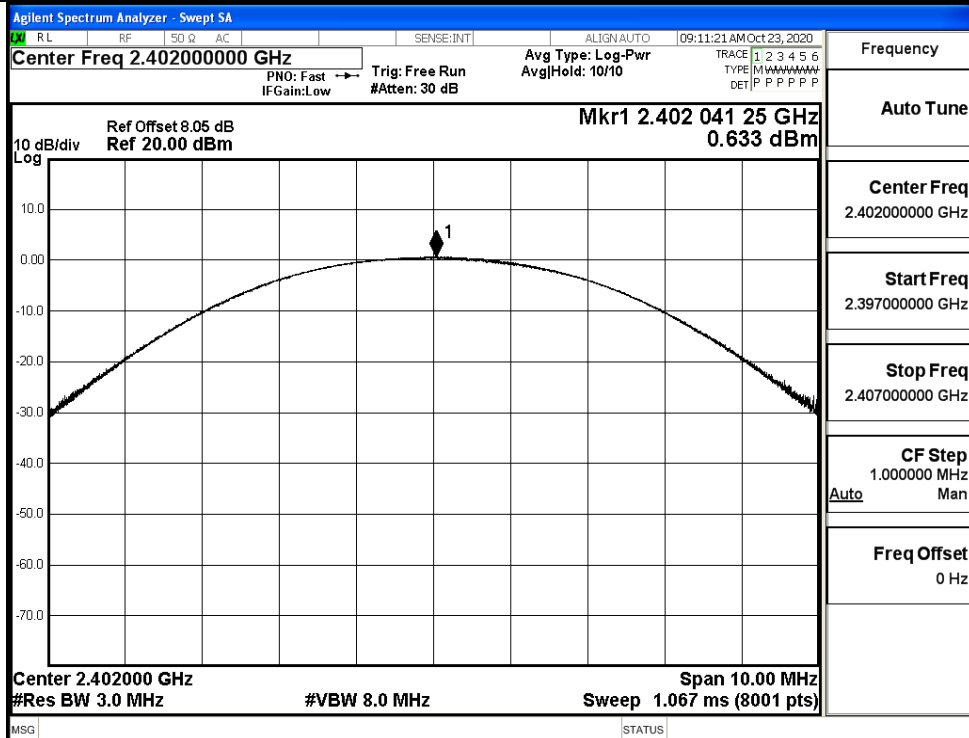
GFSK/LCH

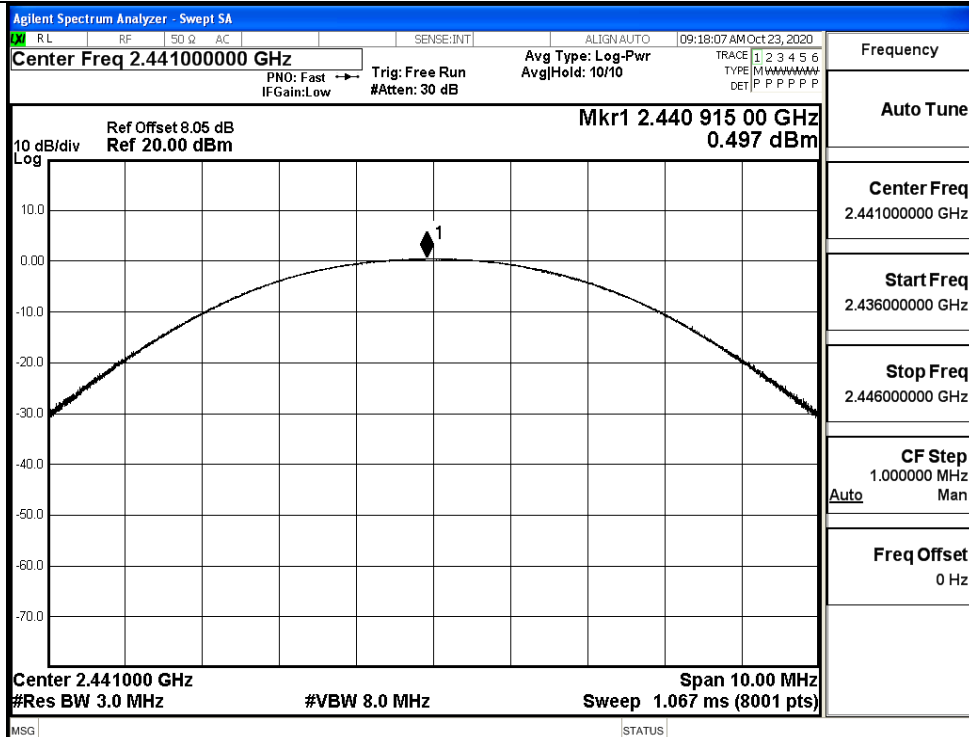
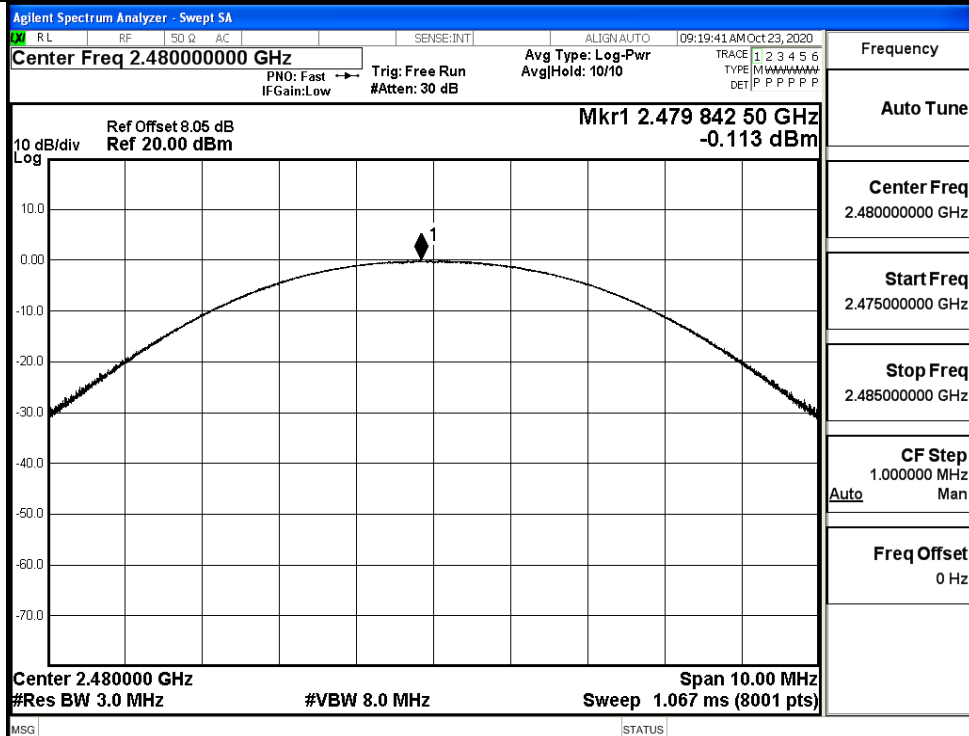


GFSK/MCH

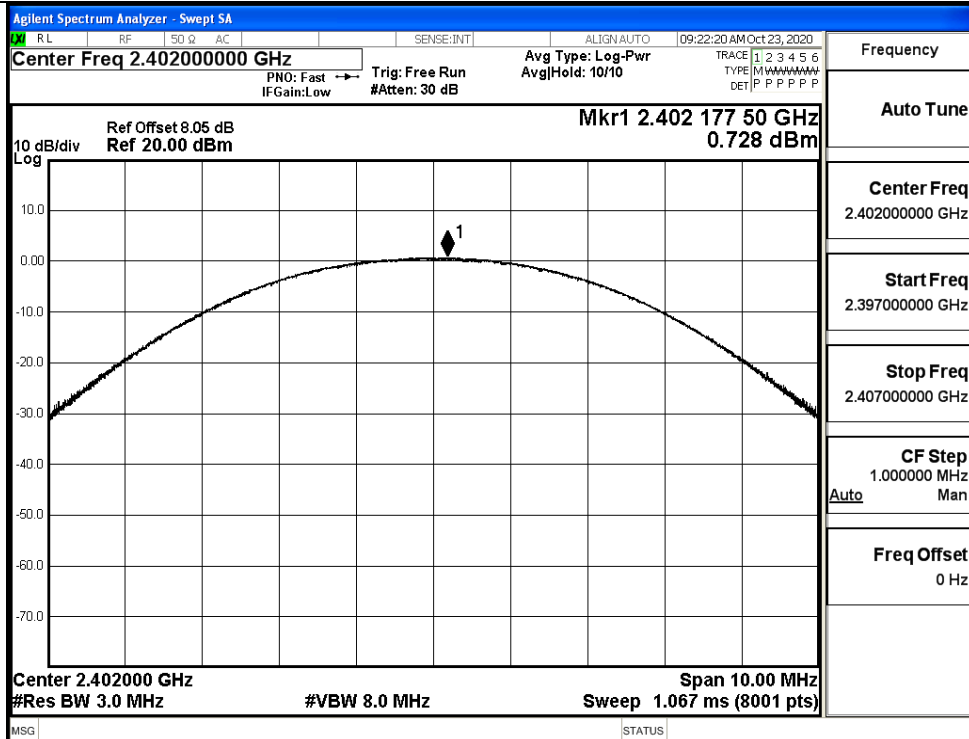


GFSK/HCH

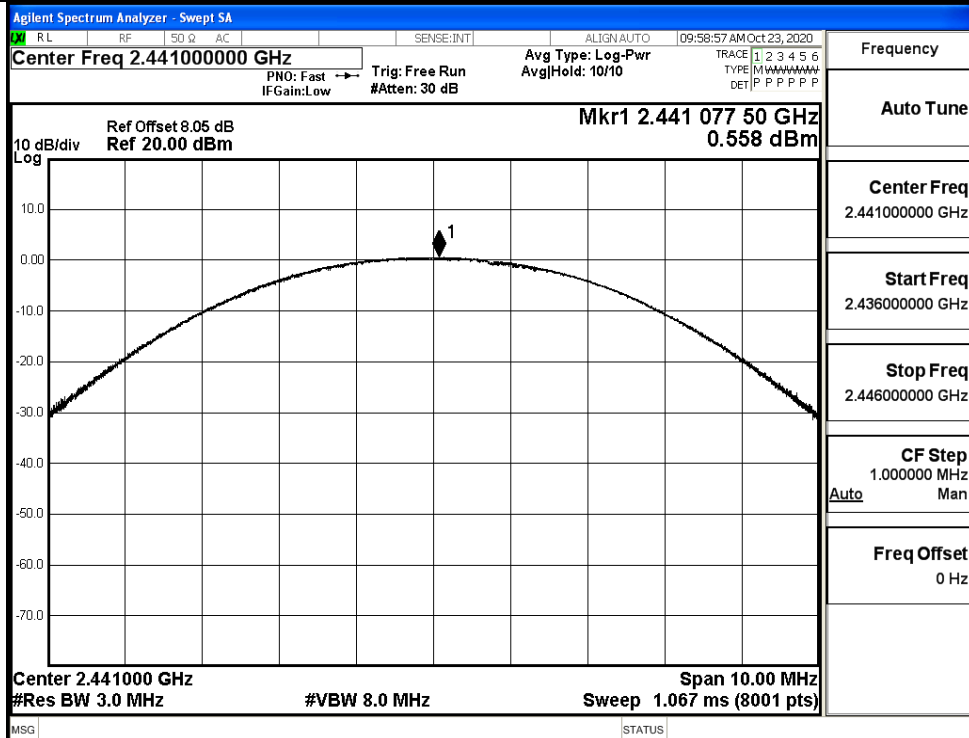
 $\pi/4$ DQPSK/LCH

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

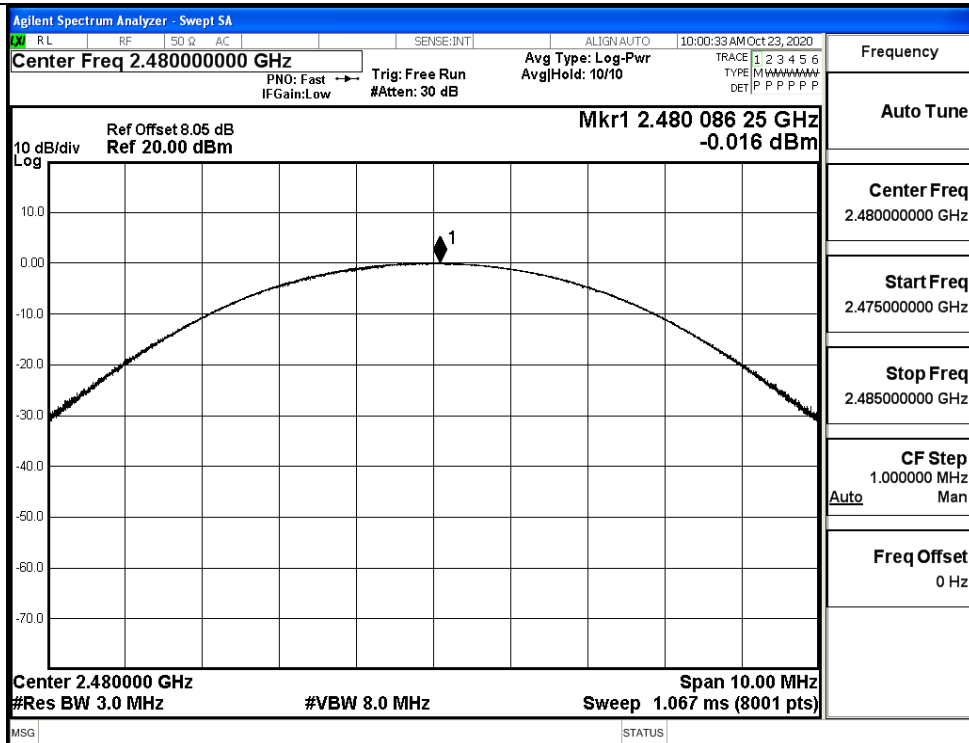
8DPSK/LCH



8DPSK/MCH



8DPSK/HCH

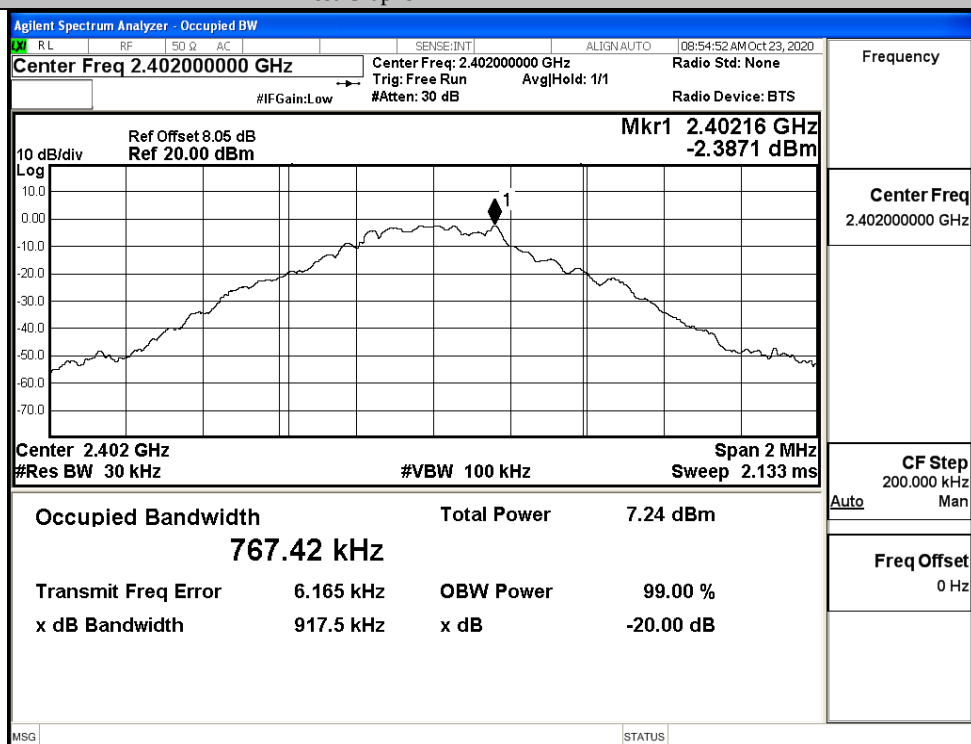


A.2 20dB Bandwidth

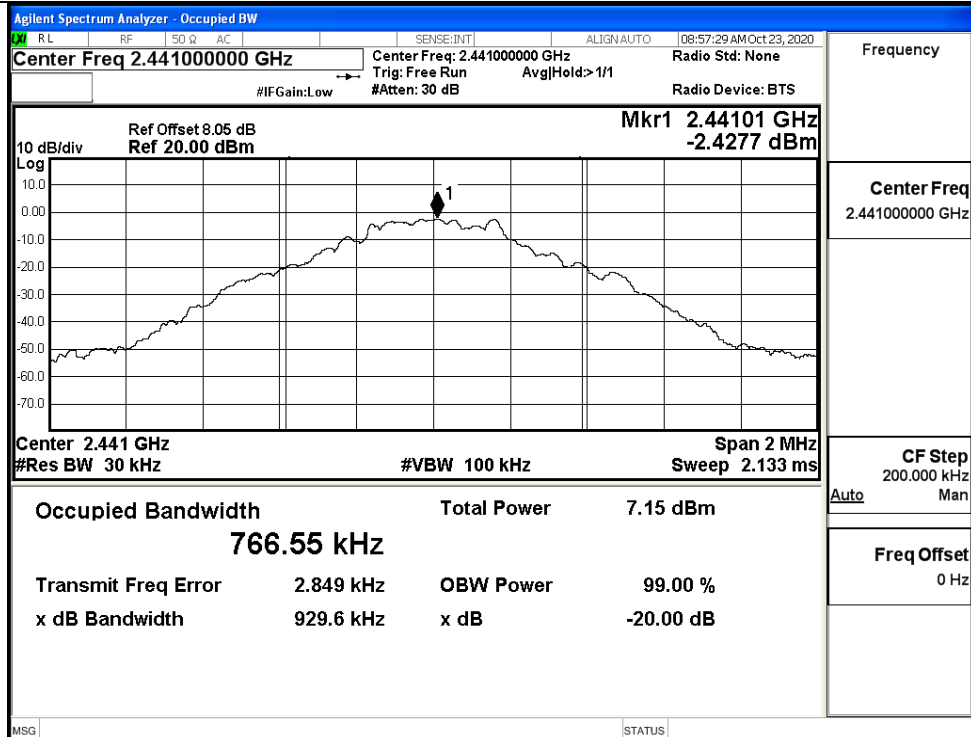
Mode	Channel.	20dB Bandwidth [MHz]	Limit [MHz]	Verdict
GFSK	LCH	0.9175	Not Specified	PASS
	MCH	0.9296	Not Specified	PASS
	HCH	0.9369	Not Specified	PASS
$\pi/4$ DQPSK	LCH	1.281	Not Specified	PASS
	MCH	1.282	Not Specified	PASS
	HCH	1.284	Not Specified	PASS
8DPSK	LCH	1.284	Not Specified	PASS
	MCH	1.297	Not Specified	PASS
	HCH	1.289	Not Specified	PASS

Test Graphs

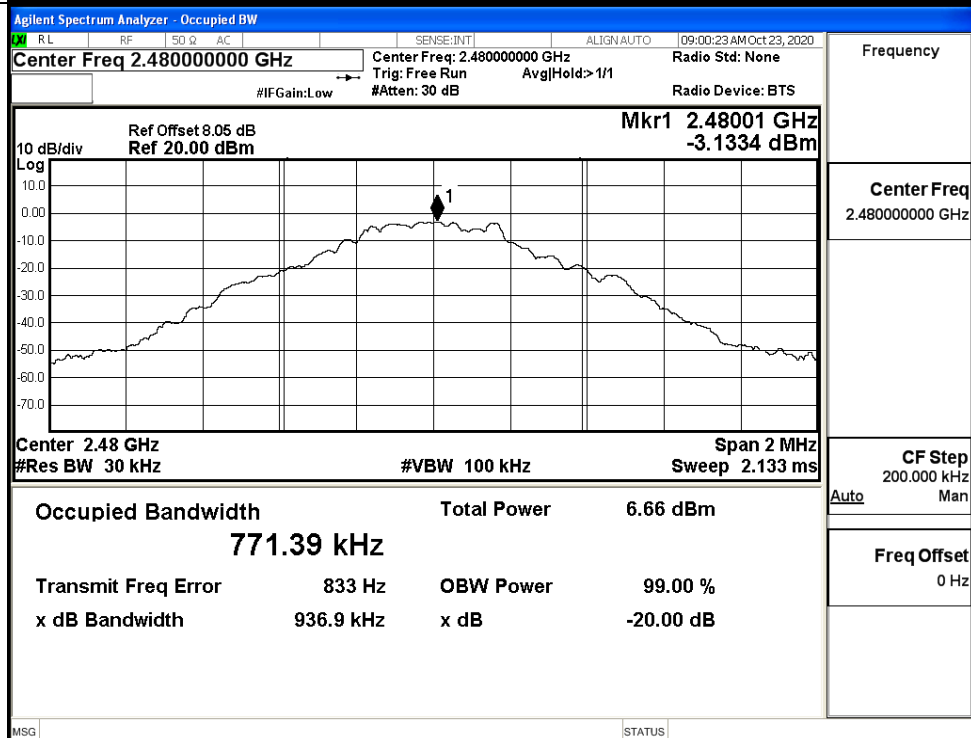
GFSK/LCH

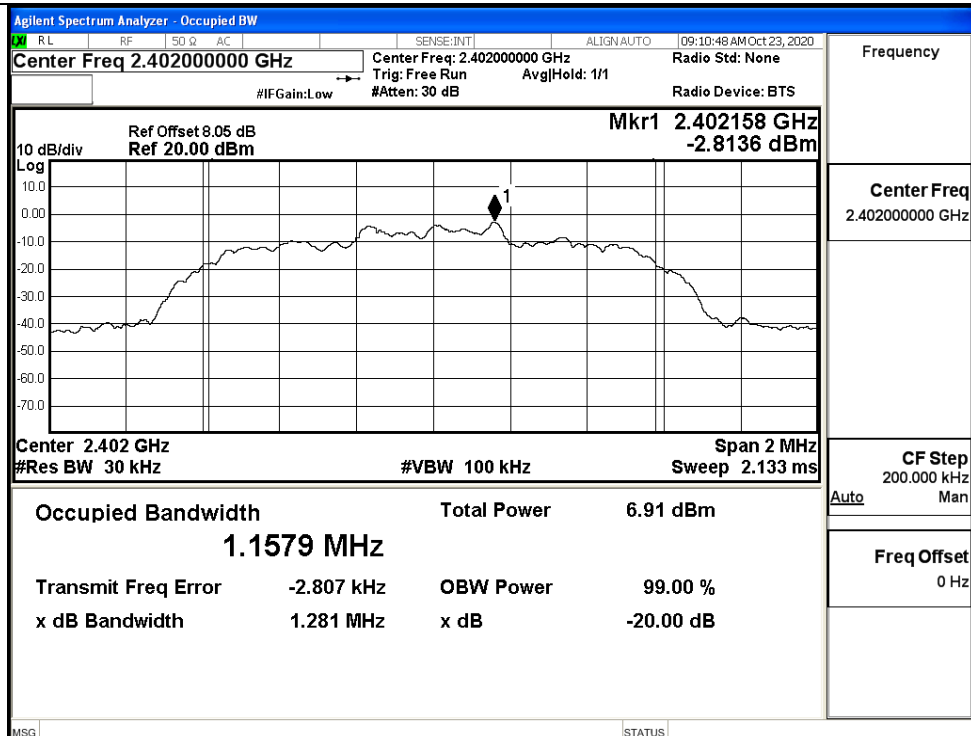
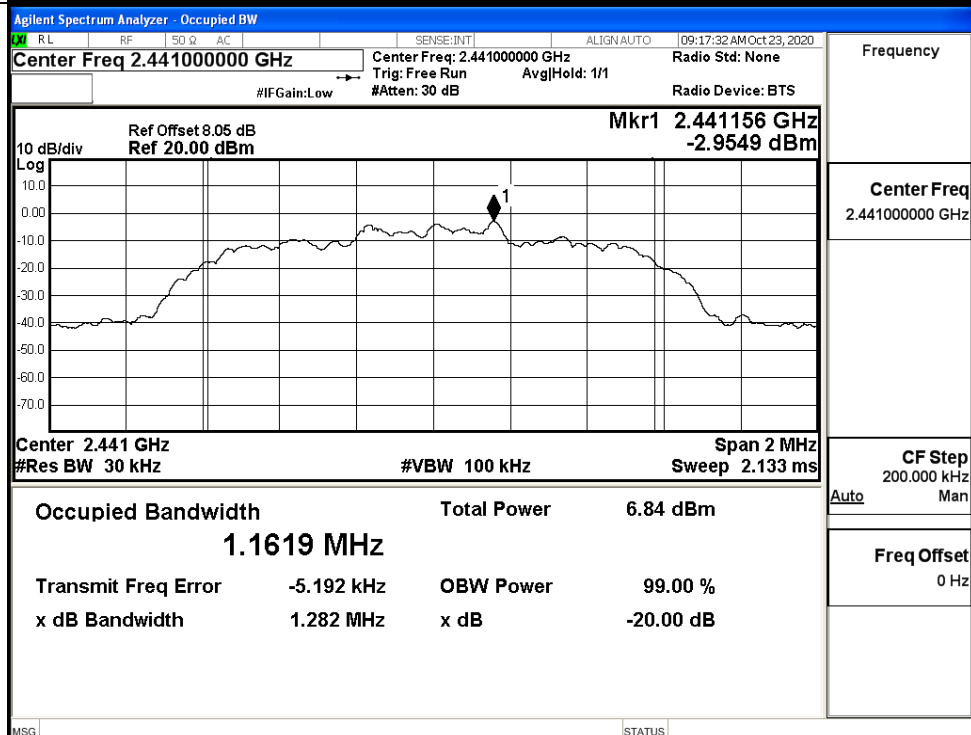


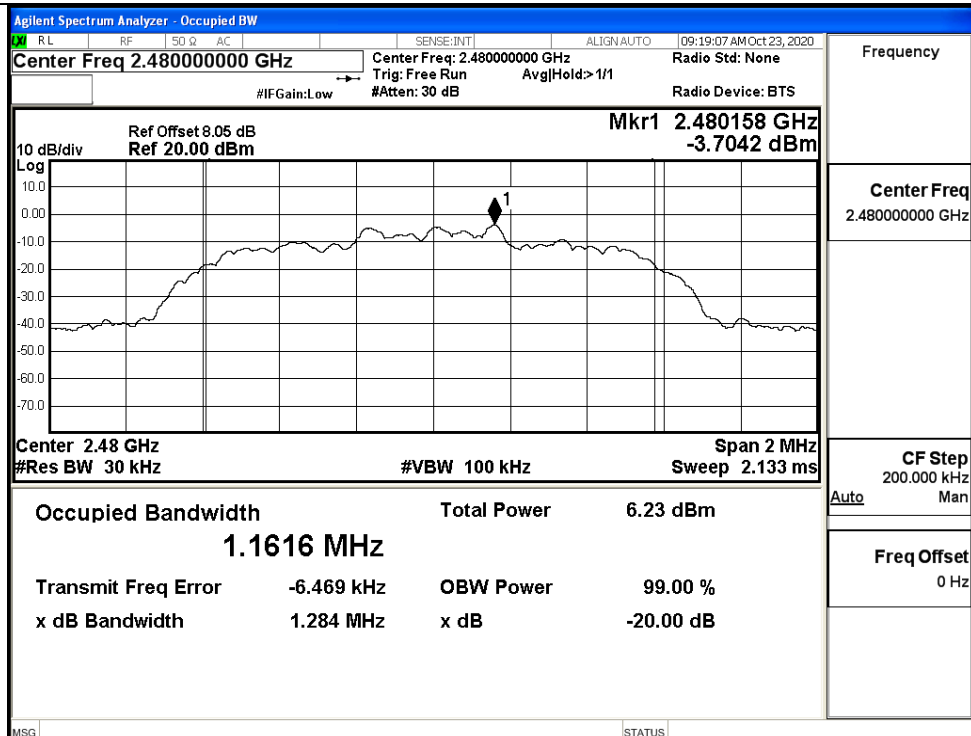
GFSK/MCH



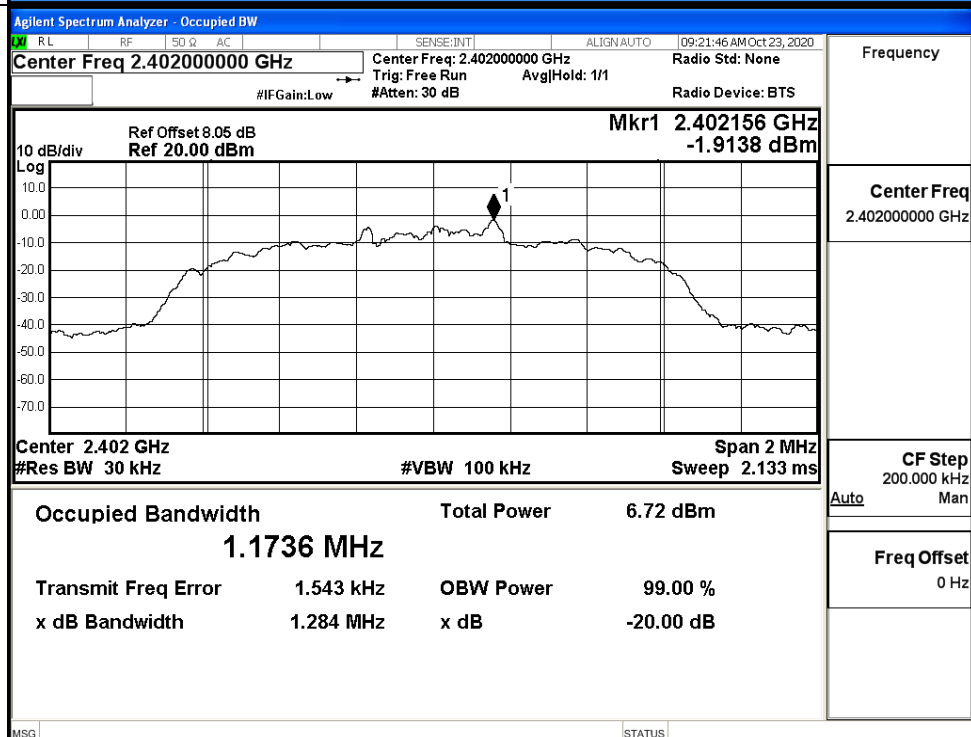
GFSK/HCH



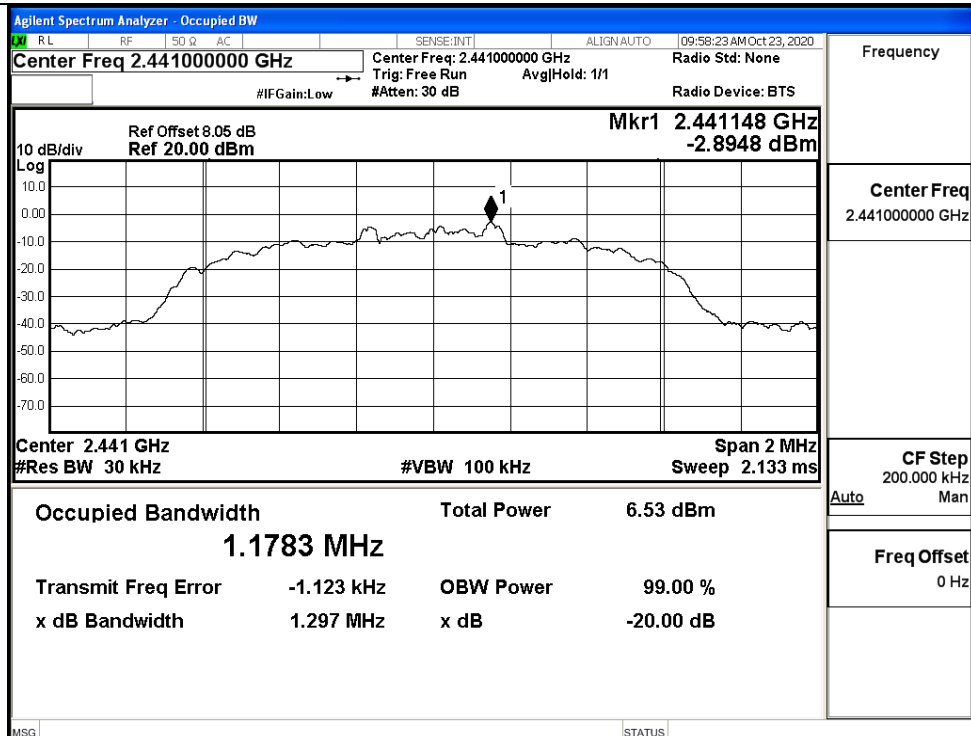
$\pi/4$ DQPSK/LCH $\pi/4$ DQPSK/MCH

$\pi/4$ DQPSK/HCH

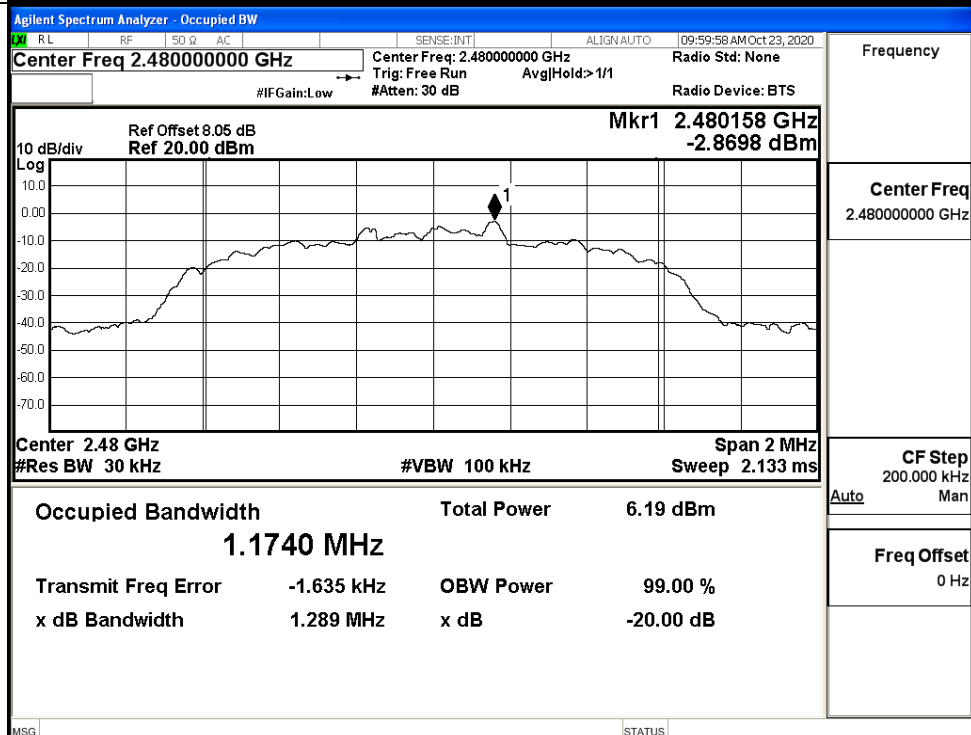
8DPSK/LCH



8DPSK/MCH



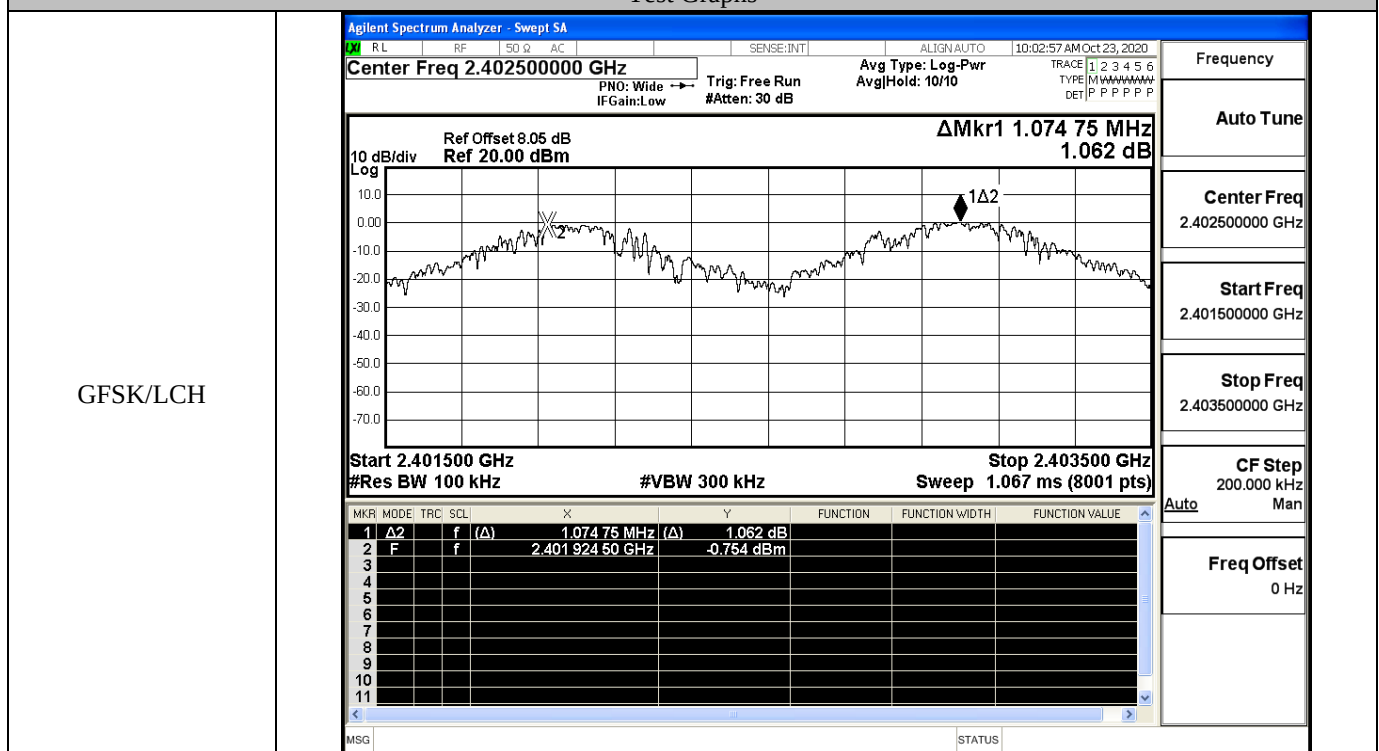
8DPSK/HCH



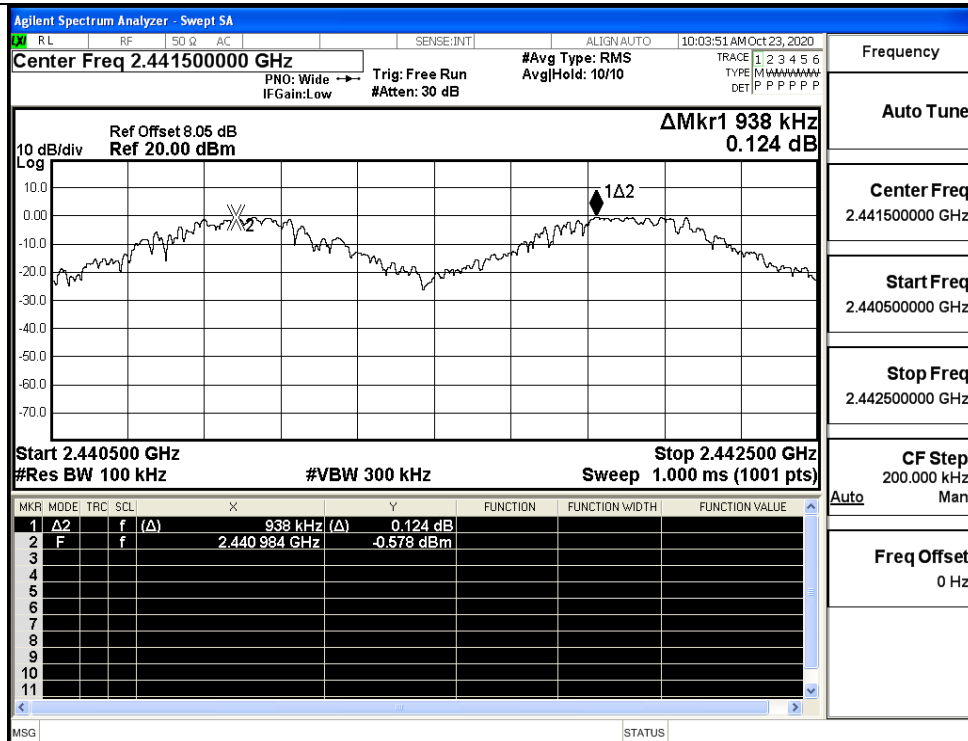
A.3 Carrier Frequency Separation

Mode	Channel.	Carrier Frequency Separation [MHz]	Limit [MHz]	Verdict
GFSK	LCH	1.075	0.612	PASS
	MCH	0.938	0.620	PASS
	HCH	1.214	0.625	PASS
$\pi/4$ DQPSK	LCH	1.144	0.854	PASS
	MCH	1.150	0.855	PASS
	HCH	1.142	0.856	PASS
8DPSK	LCH	1.000	0.856	PASS
	MCH	0.902	0.865	PASS
	HCH	1.018	0.859	PASS

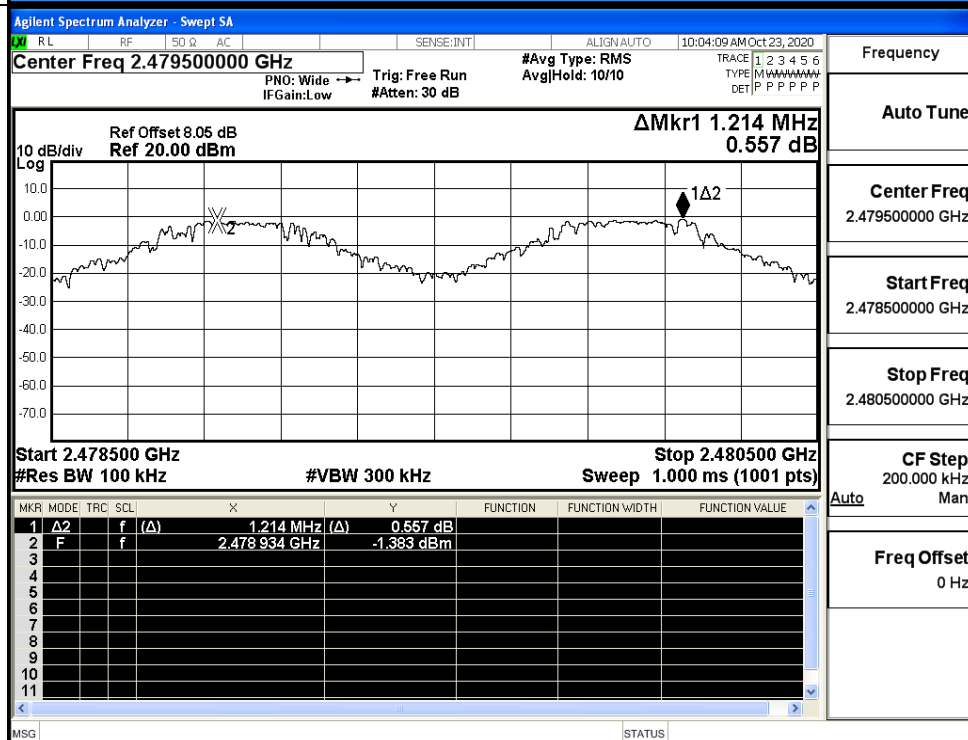
Test Graphs

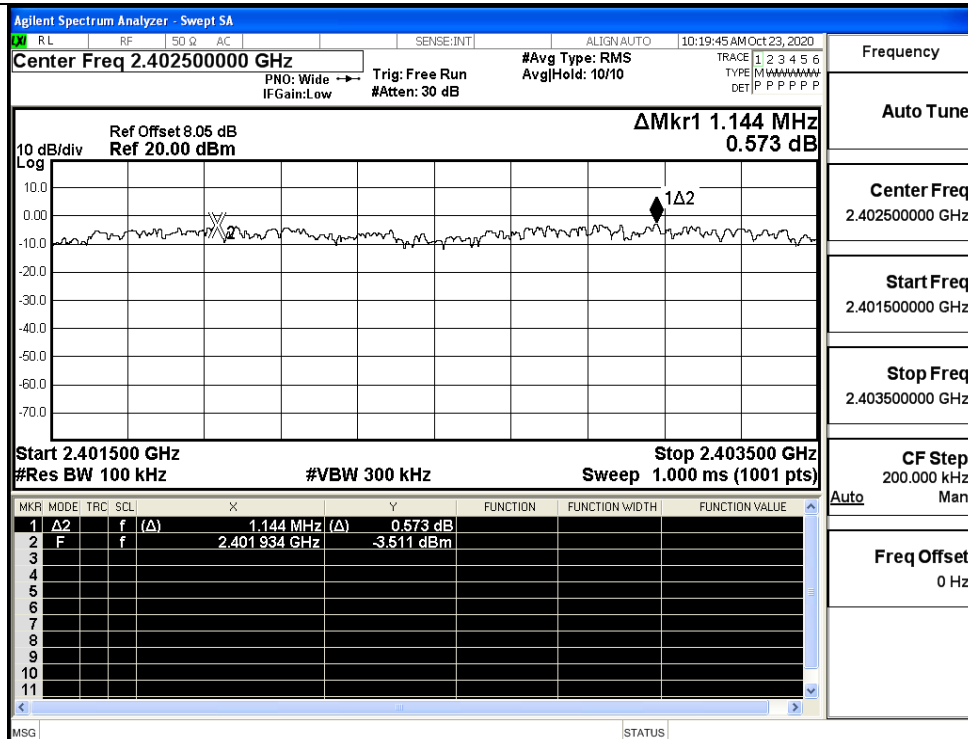
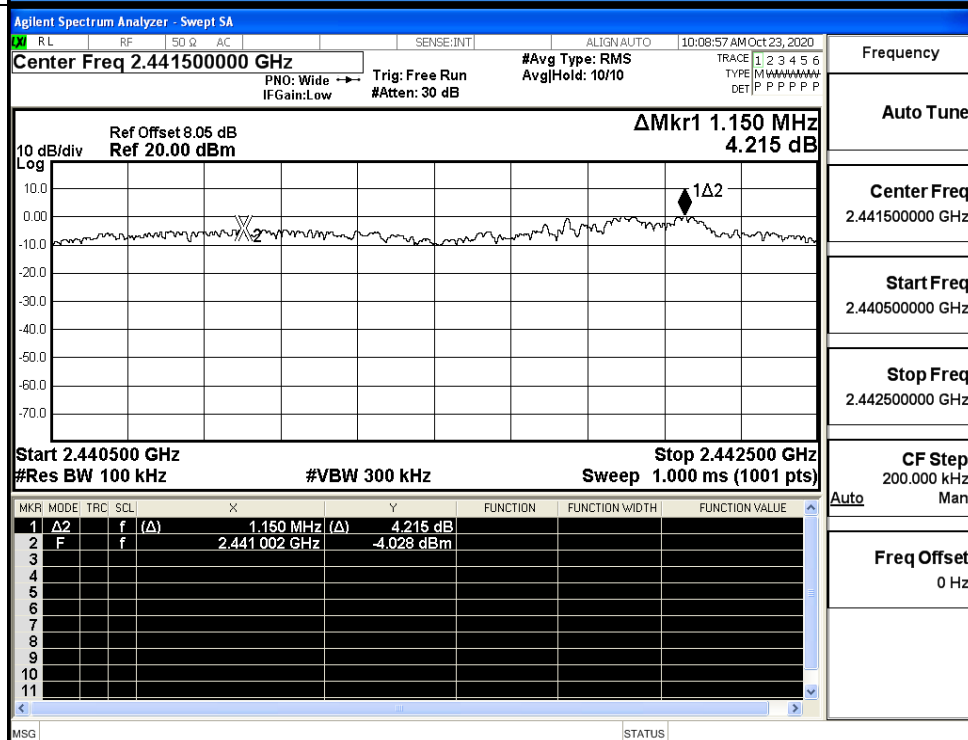


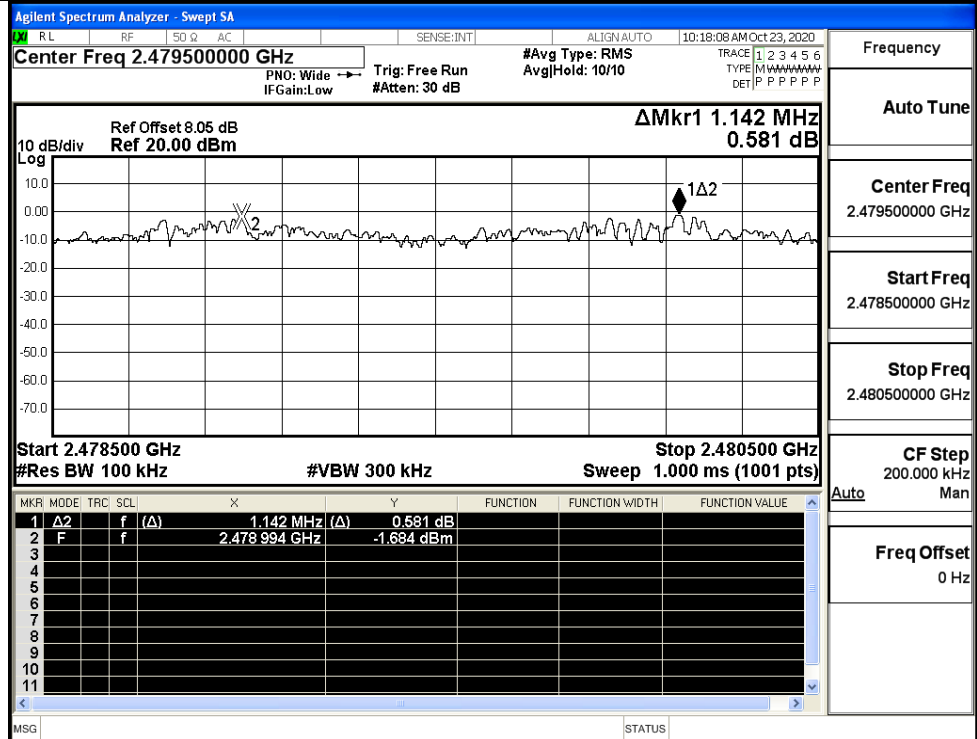
GFSK/MCH



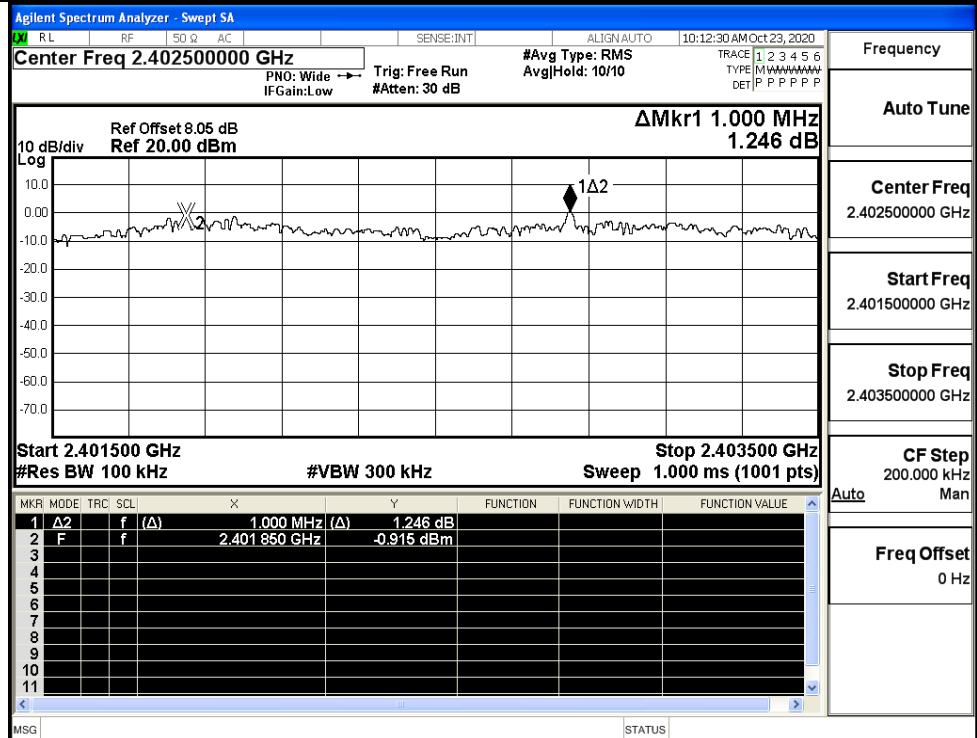
GFSK/HCH



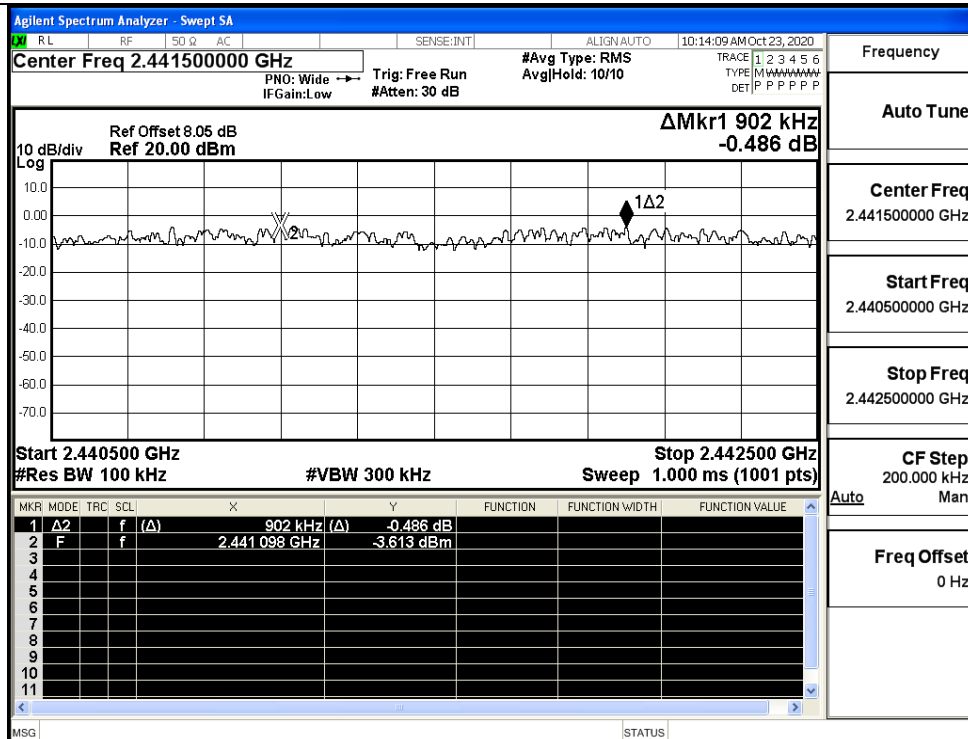
$\pi/4$ DQPSK/LCH $\pi/4$ DQPSK/MCH

$\pi/4$ DQPSK/HCH

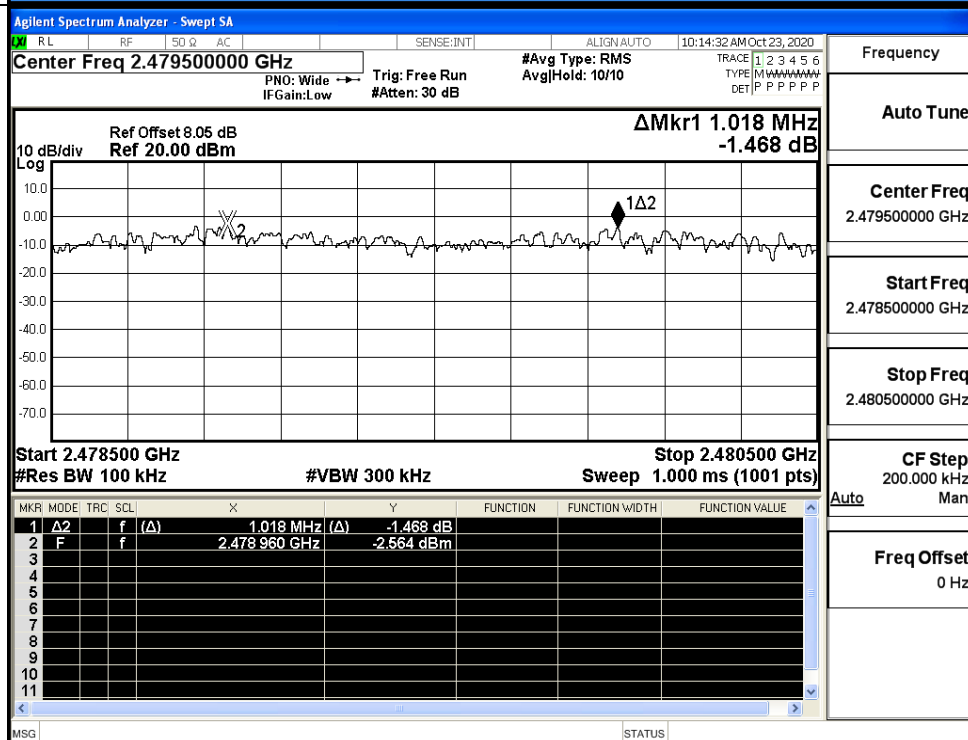
8DPSK/LCH



8DPSK/MCH



8DPSK/HCH

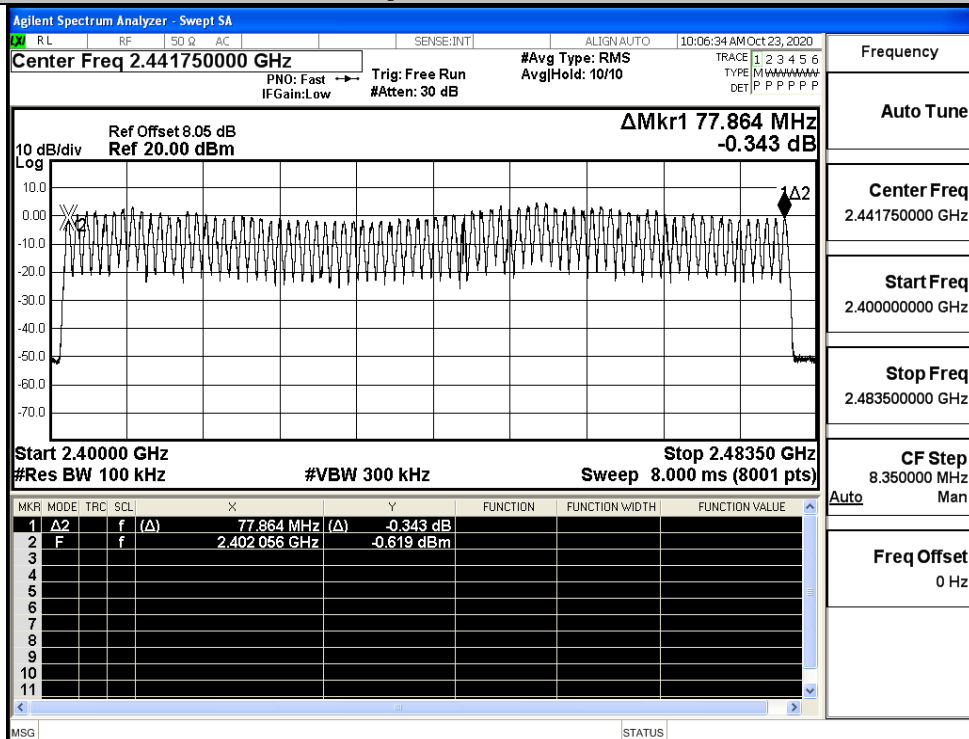
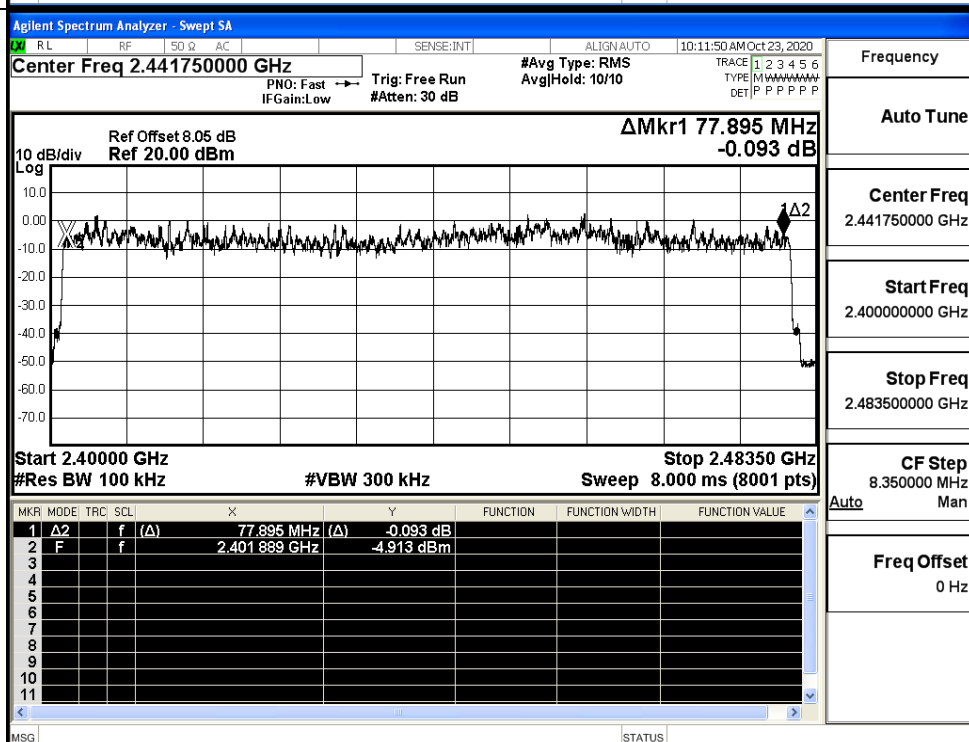


A.4 Hopping Channel Number

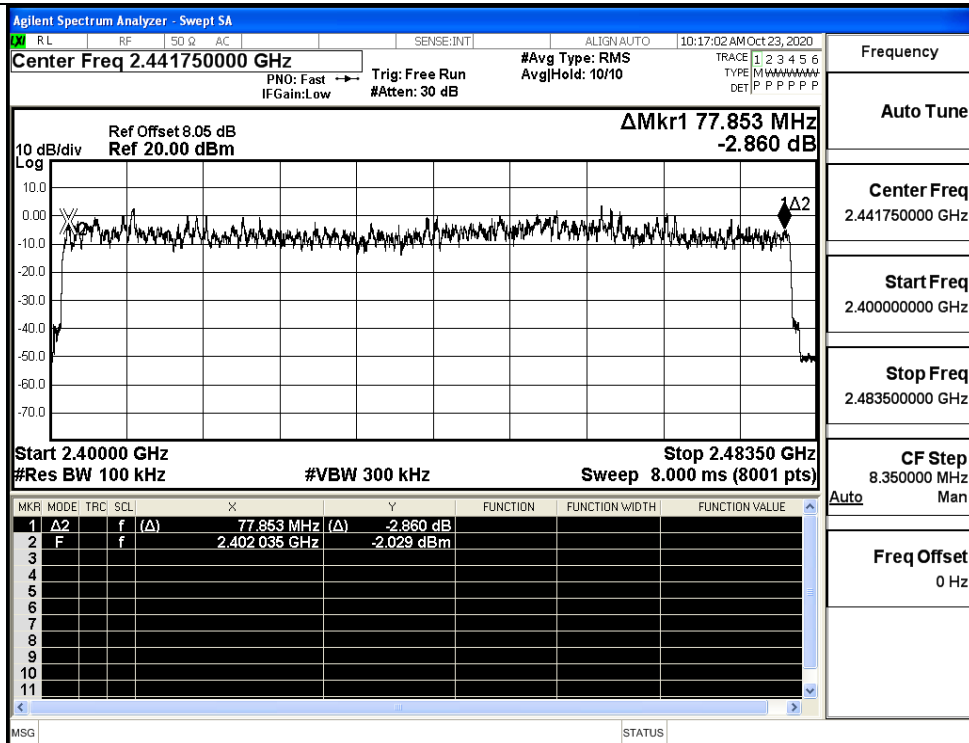
Mode	Channel.	Number of Hopping Channel [N]	Limit [N]	Verdict
GFSK	Hop	79	>=15	PASS
$\pi/4$ DQPSK	Hop	79	>=15	PASS
8DPSK	Hop	79	>=15	PASS

Test Graphs

GFSK/Hop

 $\pi/4$ DQPSK/Hop

8DPSK/Hop

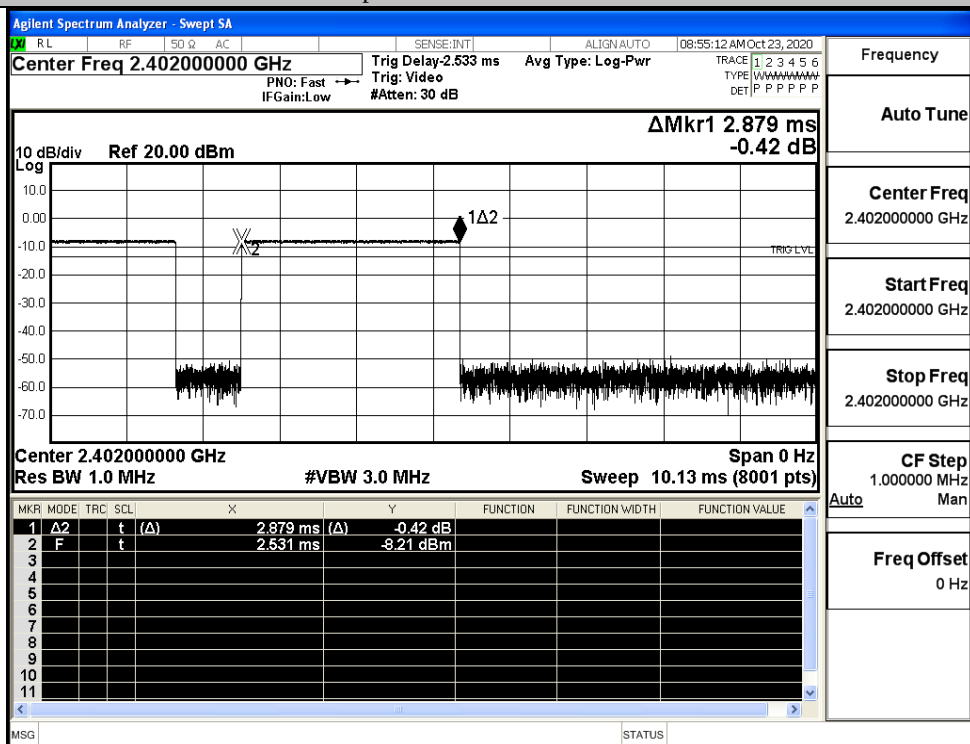


A.5 Dwell Time

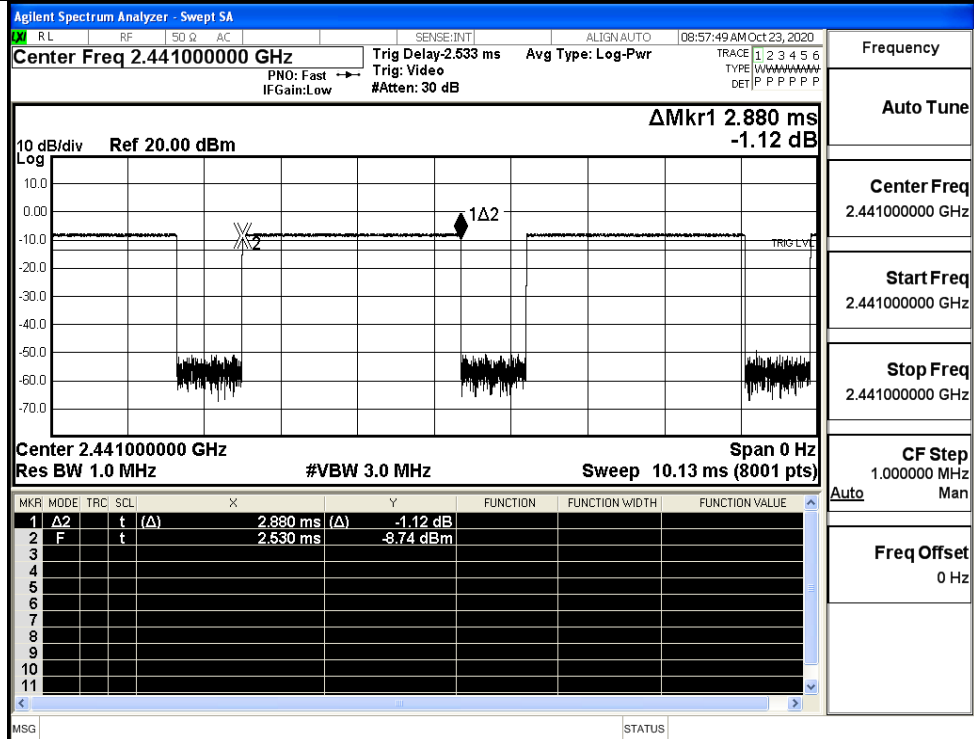
Mode	Packet	Channel	Burst Width [ms/hop/ch]	Total Hops[hop*ch]	Dwell Time[s]	Limit [s]	Verdict
GFSK	DH5	LCH	2.88	106.7	0.307	0.4	PASS
	DH5	MCH	2.88	106.7	0.307	0.4	PASS
	DH5	HCH	2.88	106.7	0.307	0.4	PASS
$\pi/4$ DQPSK	2DH5	LCH	2.88	106.7	0.307	0.4	PASS
	2DH5	MCH	2.88	106.7	0.307	0.4	PASS
	2DH5	HCH	2.88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

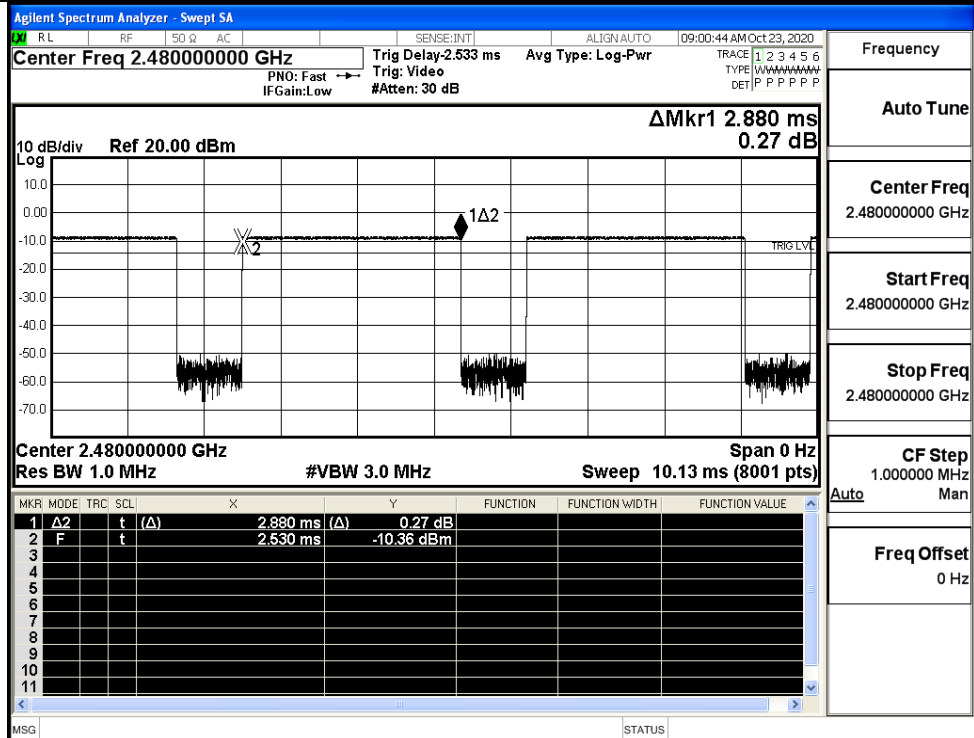
GFSK_DH5/LCH

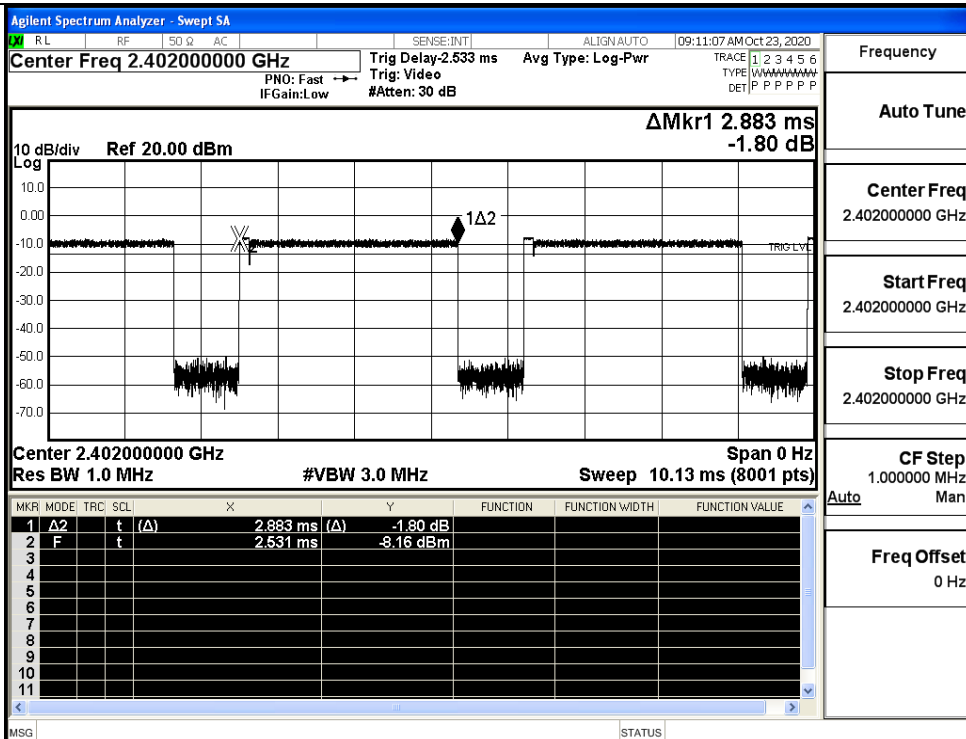
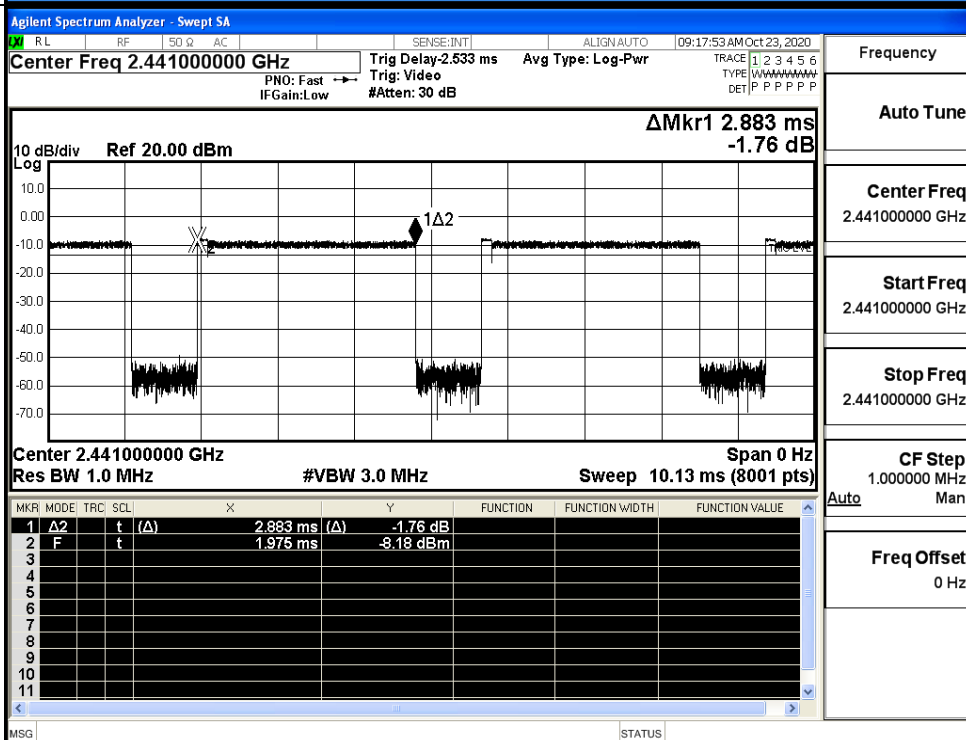


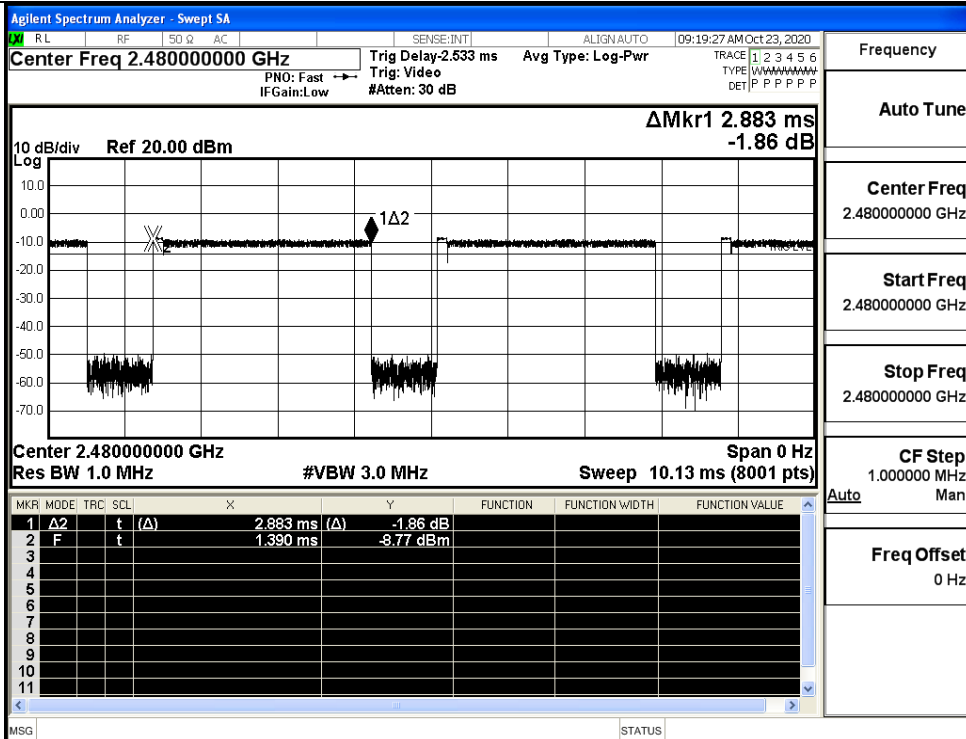
GFSK_DH5/MCH



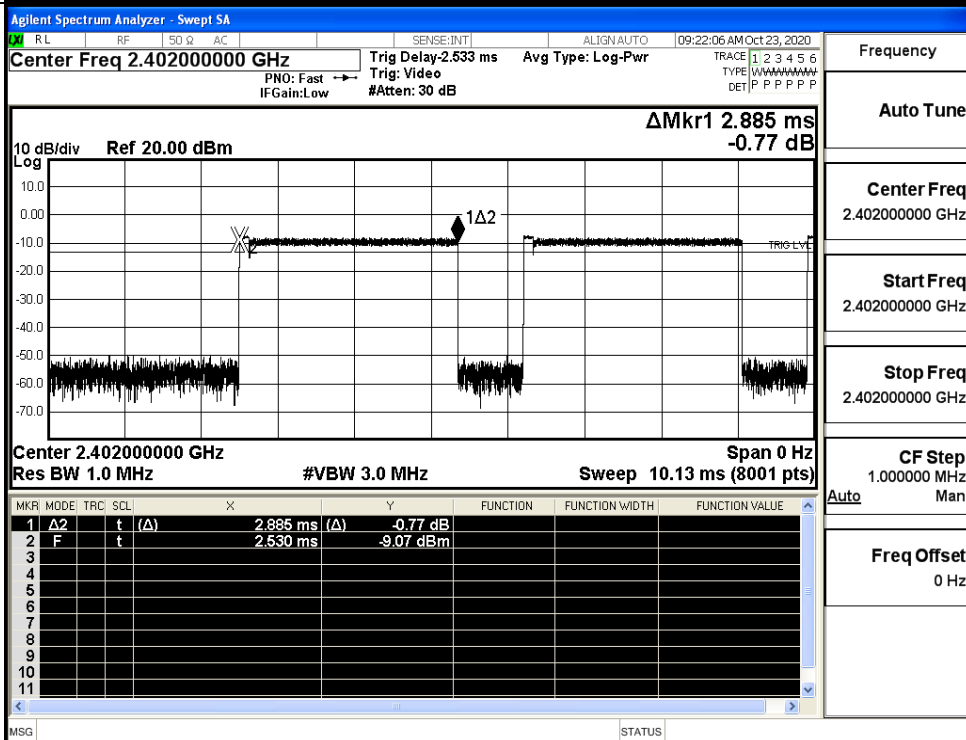
GFSK_DH5/HCH



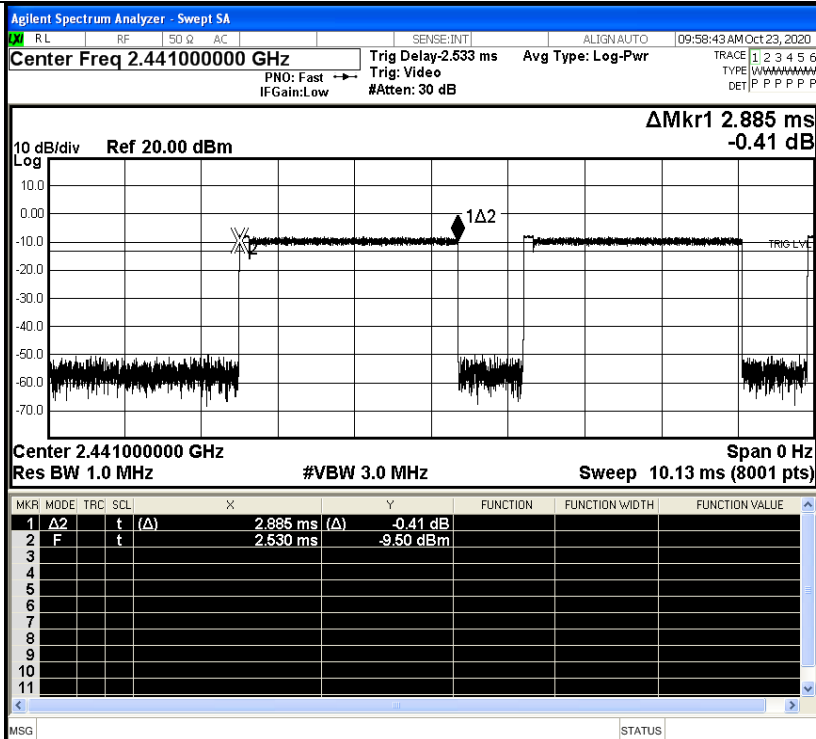
$\pi/4$ DQPSK_2DH5/LCH $\pi/4$ DQPSK_2DH5/MCH

$\pi/4$ DQPSK_2DH5/HCH

8DPSK_3DH5/LCH



8DPSK_3DH5/MCH

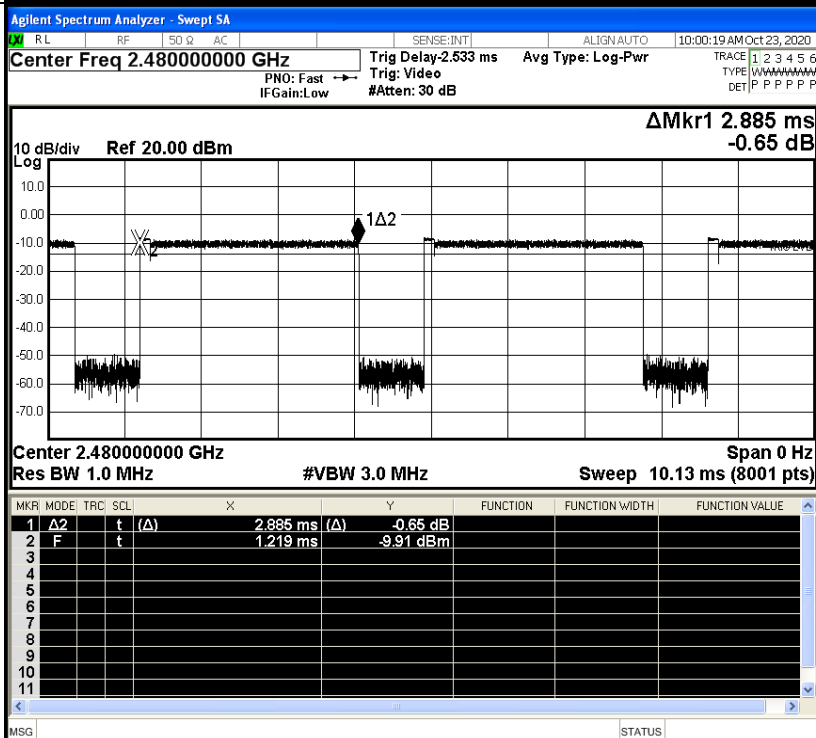


Frequency

Auto Tune

Center Freq
2.441000000 GHzStart Freq
2.441000000 GHzStop Freq
2.441000000 GHzCF Step
1.000000 MHz
Auto ManFreq Offset
0 Hz

8DPSK_3DH5/HCH



Frequency

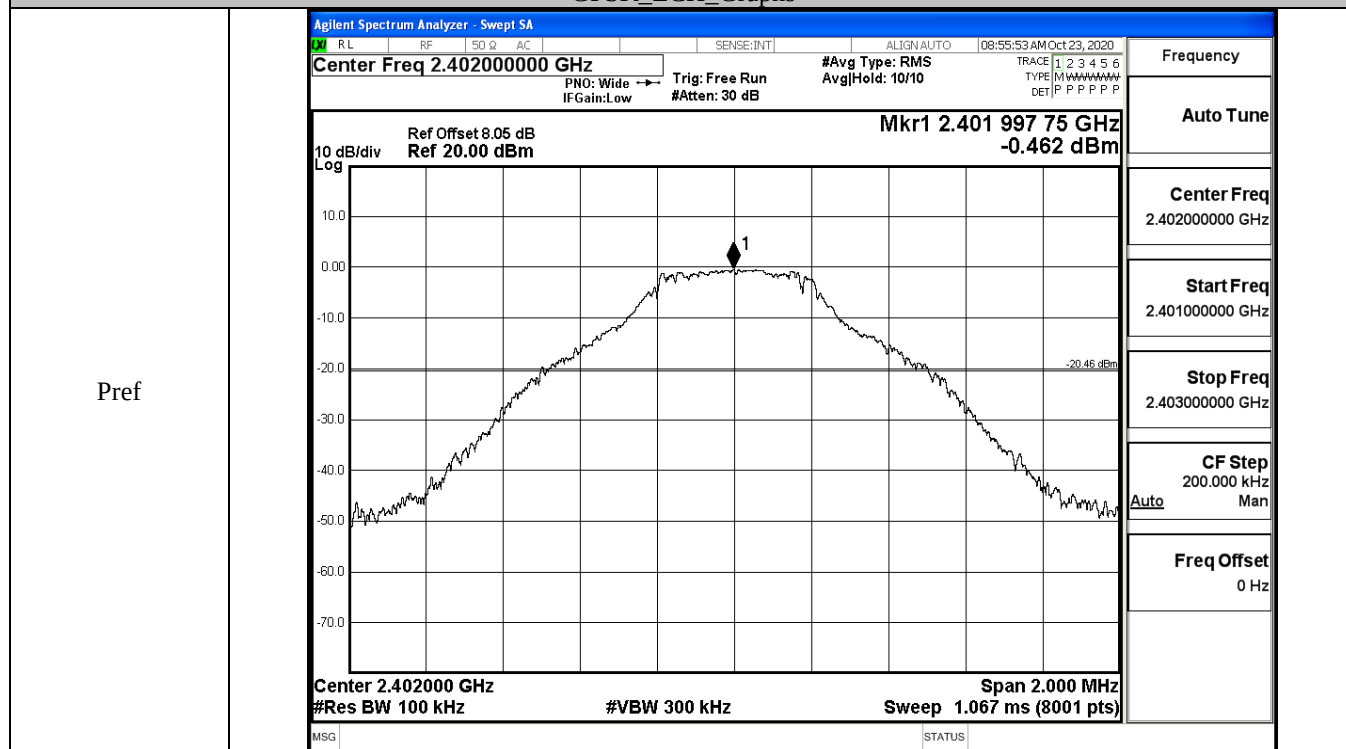
Auto Tune

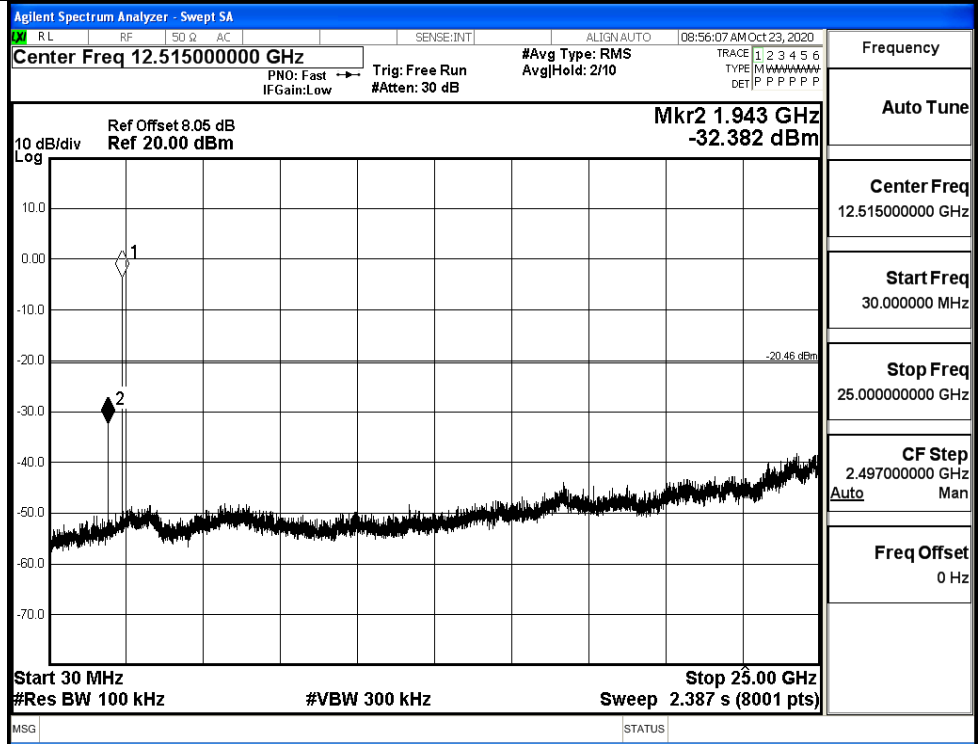
Center Freq
2.480000000 GHzStart Freq
2.480000000 GHzStop Freq
2.480000000 GHzCF Step
1.000000 MHz
Auto ManFreq Offset
0 Hz

A.6 RF Conducted Spurious Emissions

Mode	Channel	Pref [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
GFSK	LCH	-0.462	-32.382	-20.462	PASS
	MCH	-0.323	-37.774	-20.323	PASS
	HCH	-0.761	-37.991	-20.761	PASS
$\pi/4$ DQPSK	LCH	-0.153	-38.131	-20.153	PASS
	MCH	-0.291	-37.992	-20.291	PASS
	HCH	-0.905	-37.104	-20.905	PASS
8DPSK	LCH	0.044	-36.660	-19.956	PASS
	MCH	-0.92	-37.568	-20.920	PASS
	HCH	-0.568	-37.161	-20.568	PASS

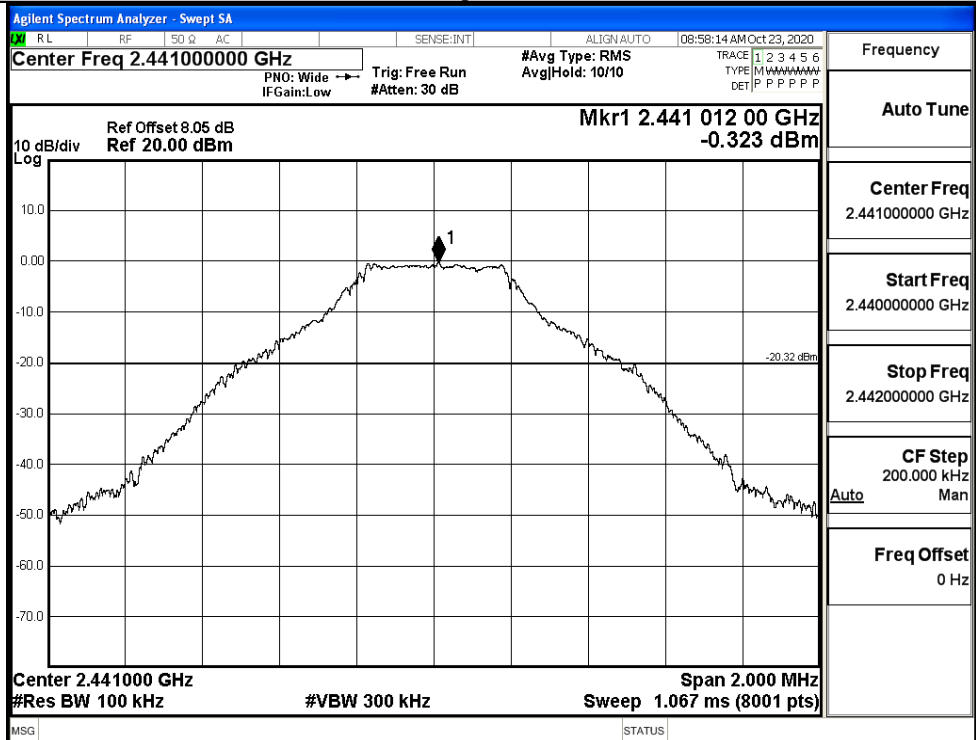
GFSK_LCH_Graphs



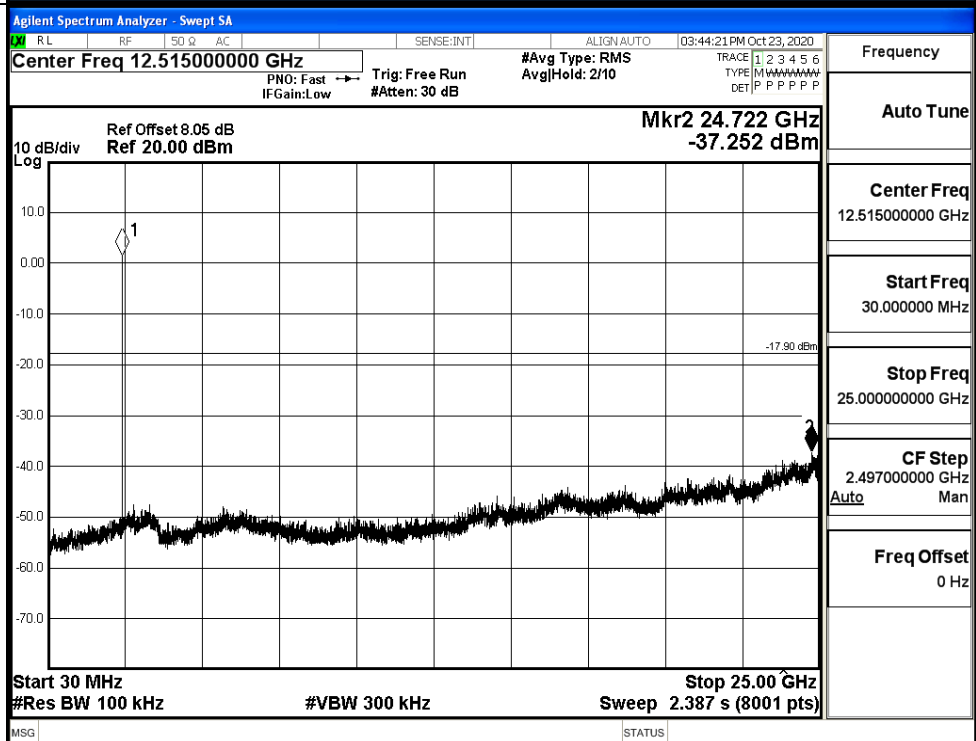
P_uw

GFSK_MCH_Graphs

Pref

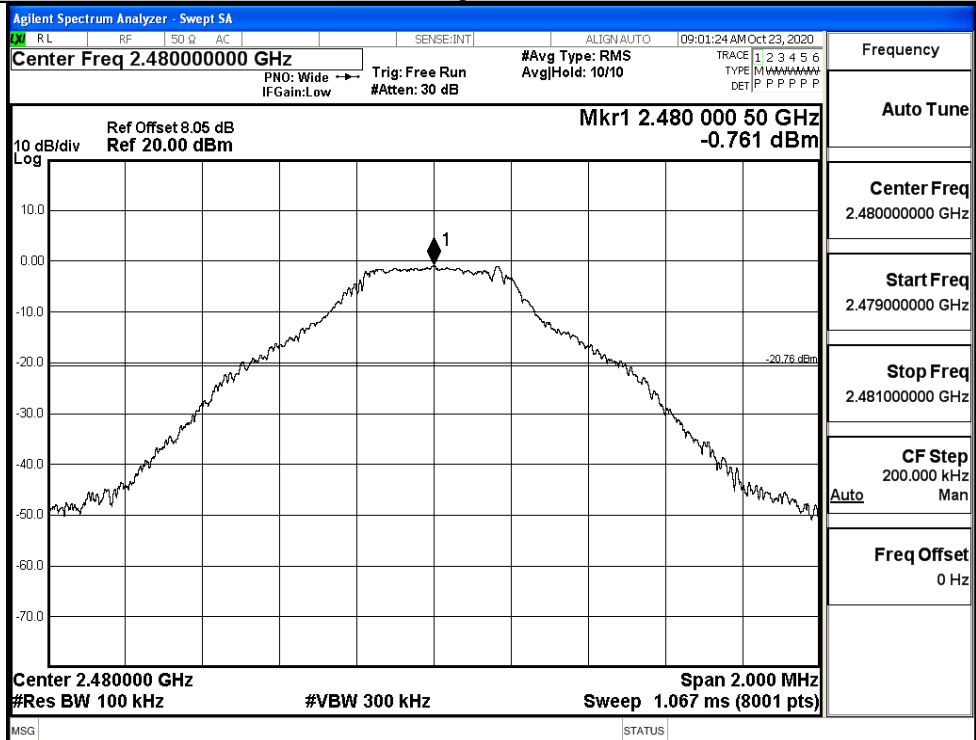


Puw

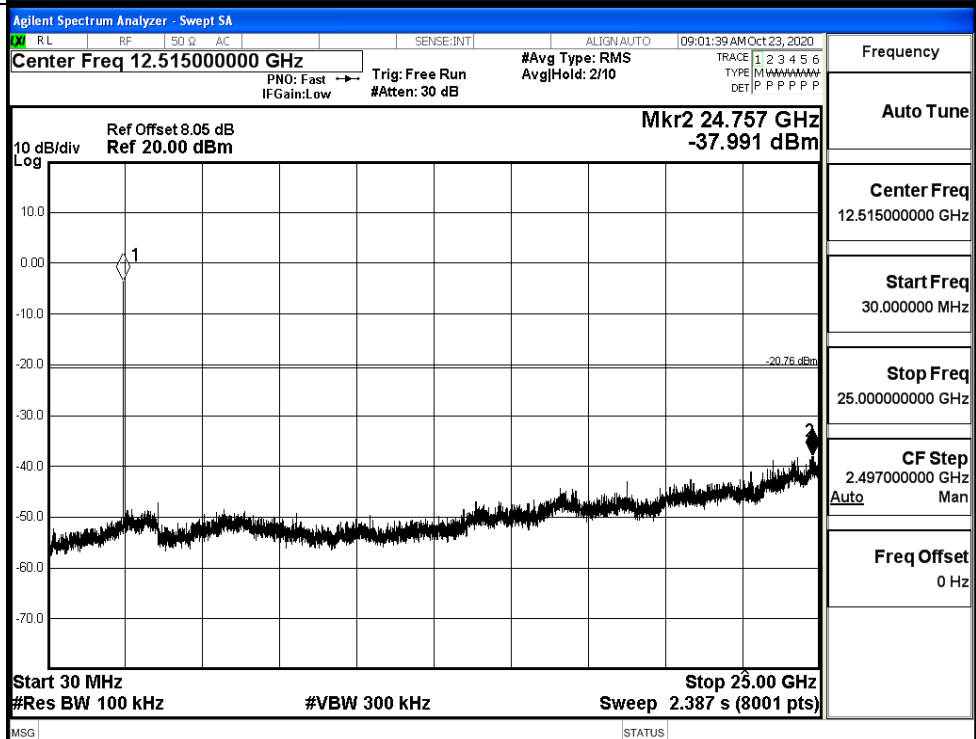


GFSK_HCH_Graphs

Pref

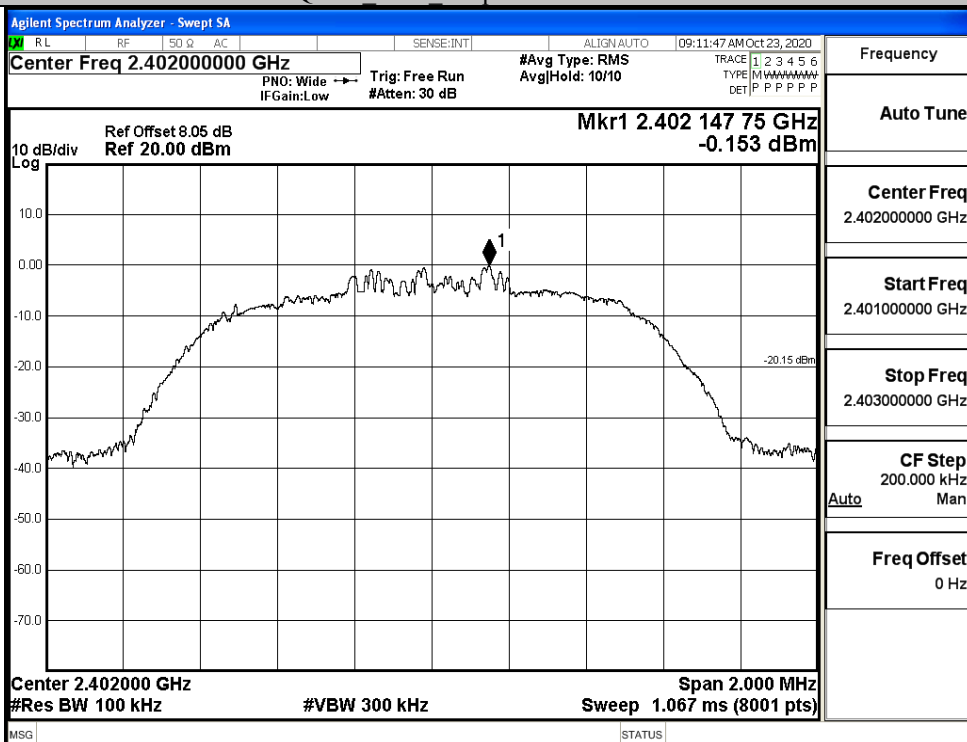


Puw

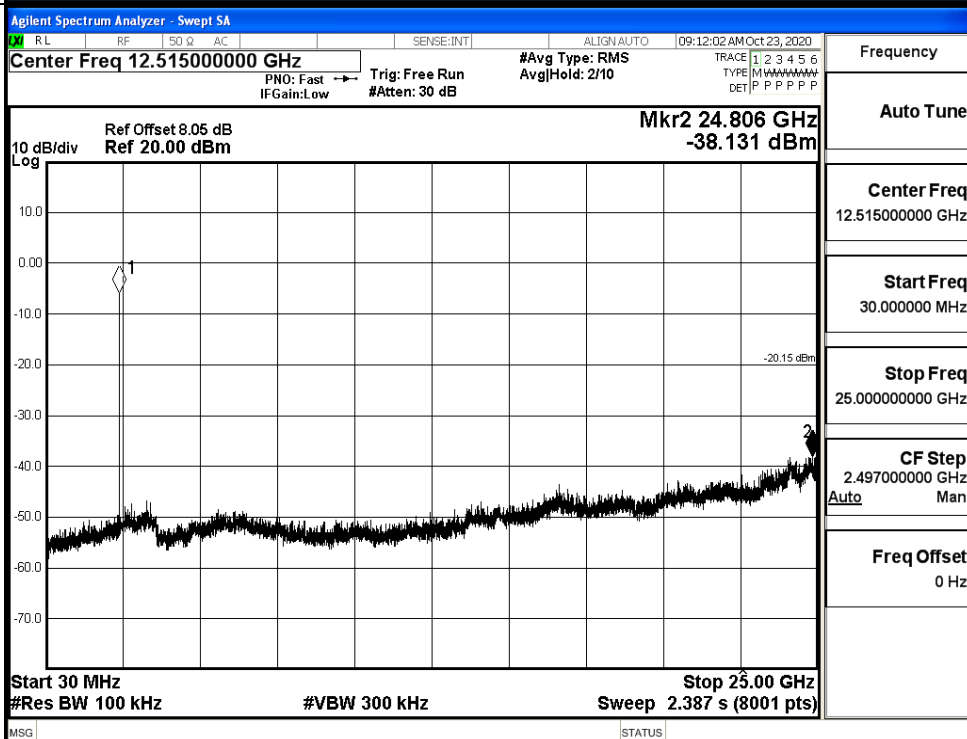


$\pi/4$ DQPSK LCH Graphs

Pref

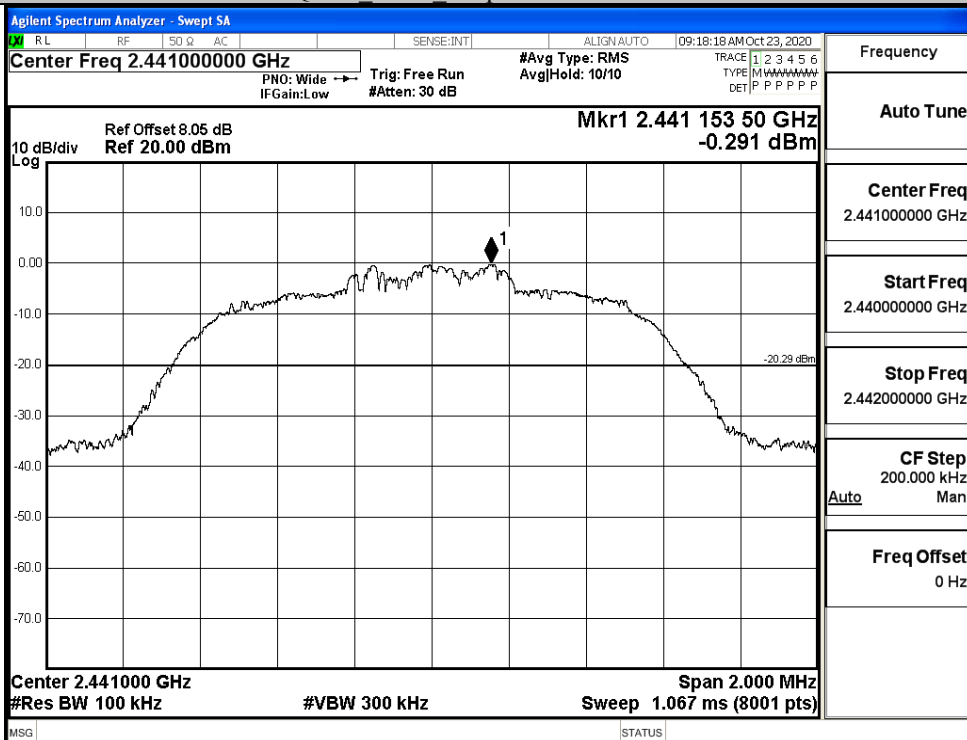


Puw

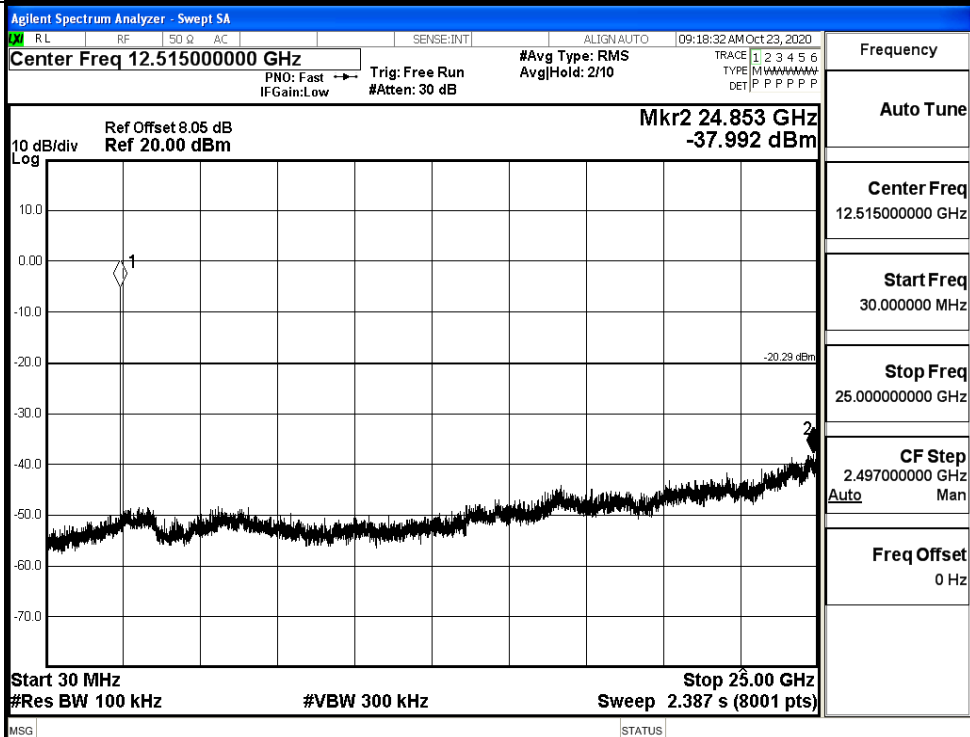


$\pi/4$ DQPSK MCH Graphs

Pref

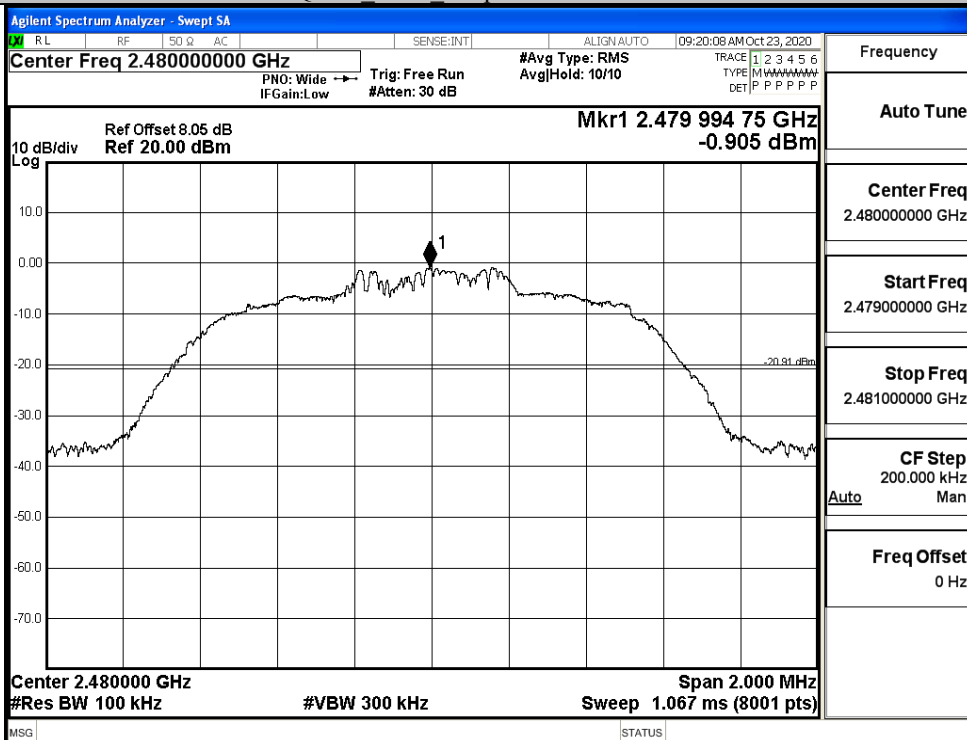


Puw

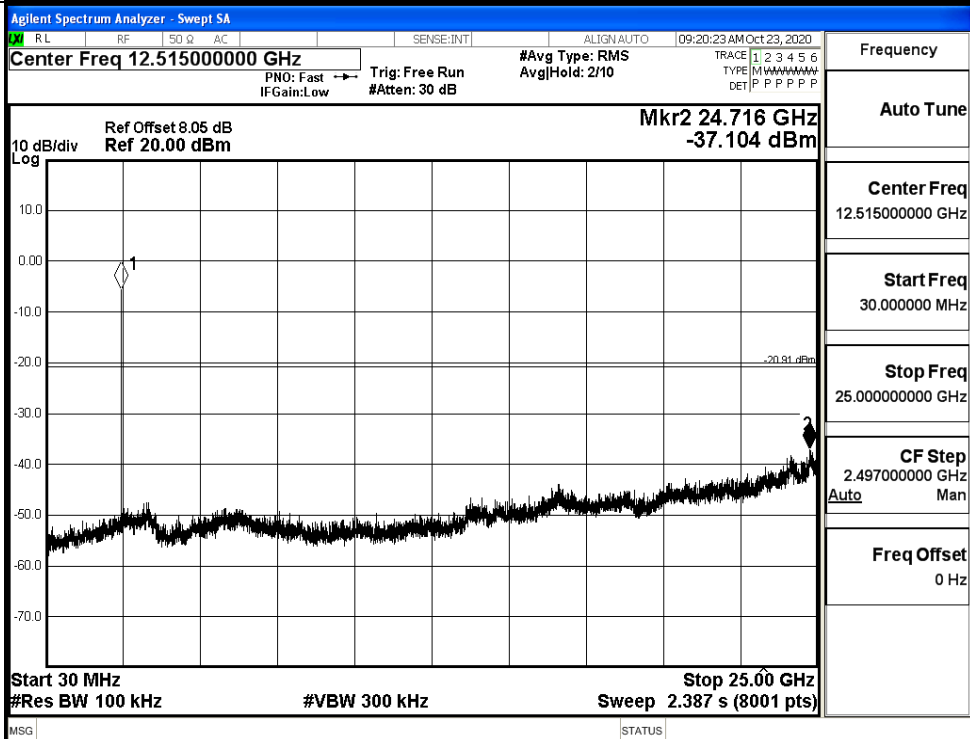


$\pi/4$ DQPSK HCH Graphs

Pref

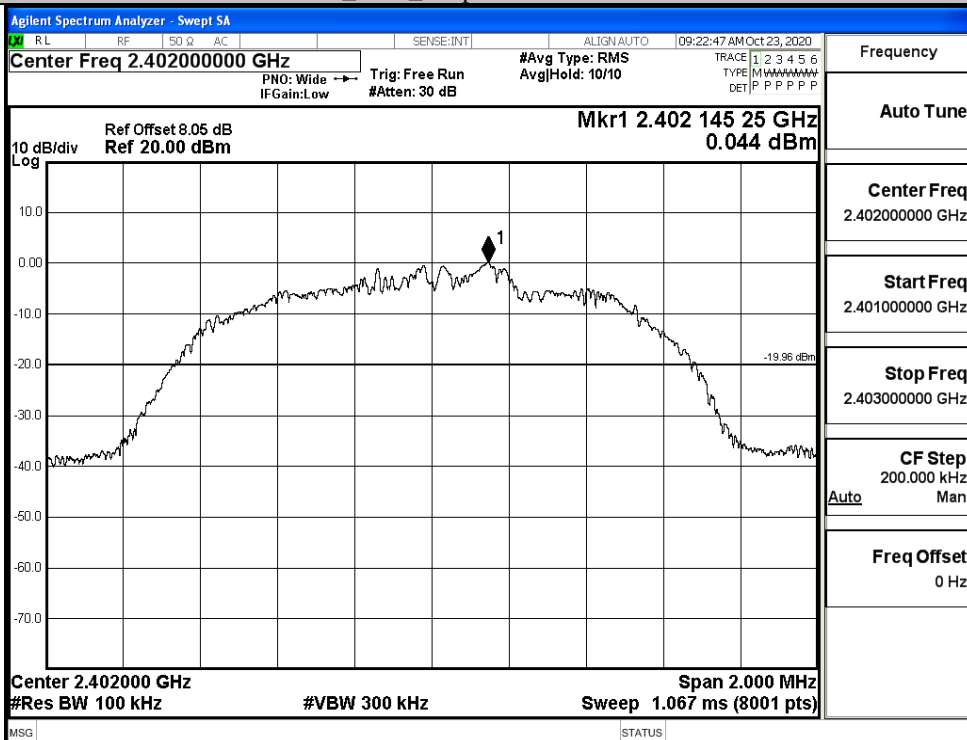


Puw

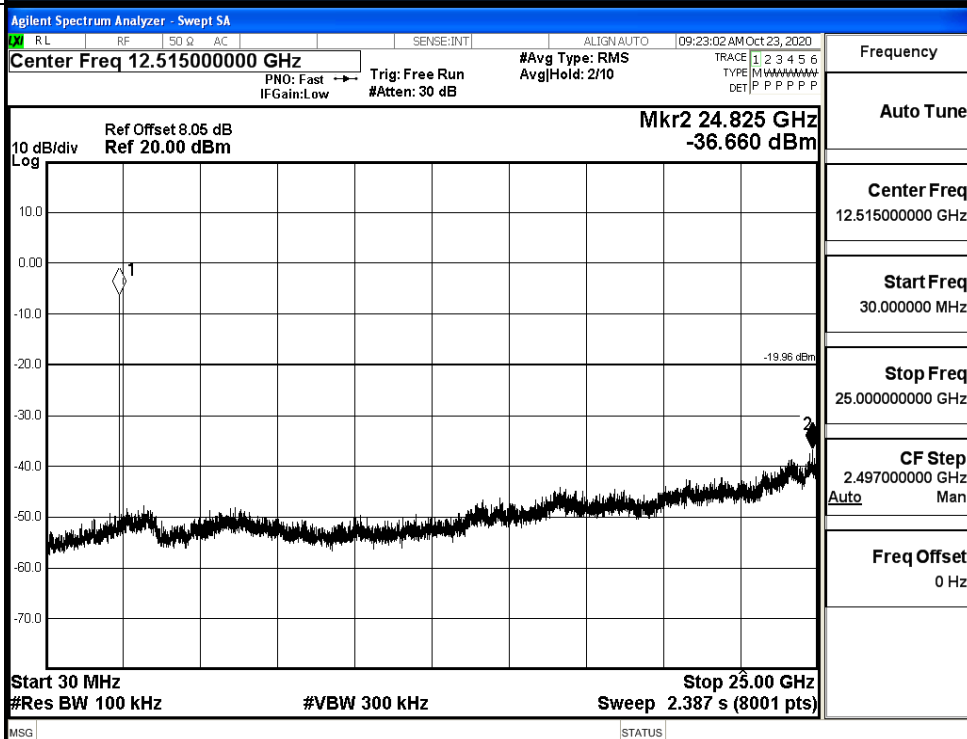


8DPSK_LCH_Graphs

Pref

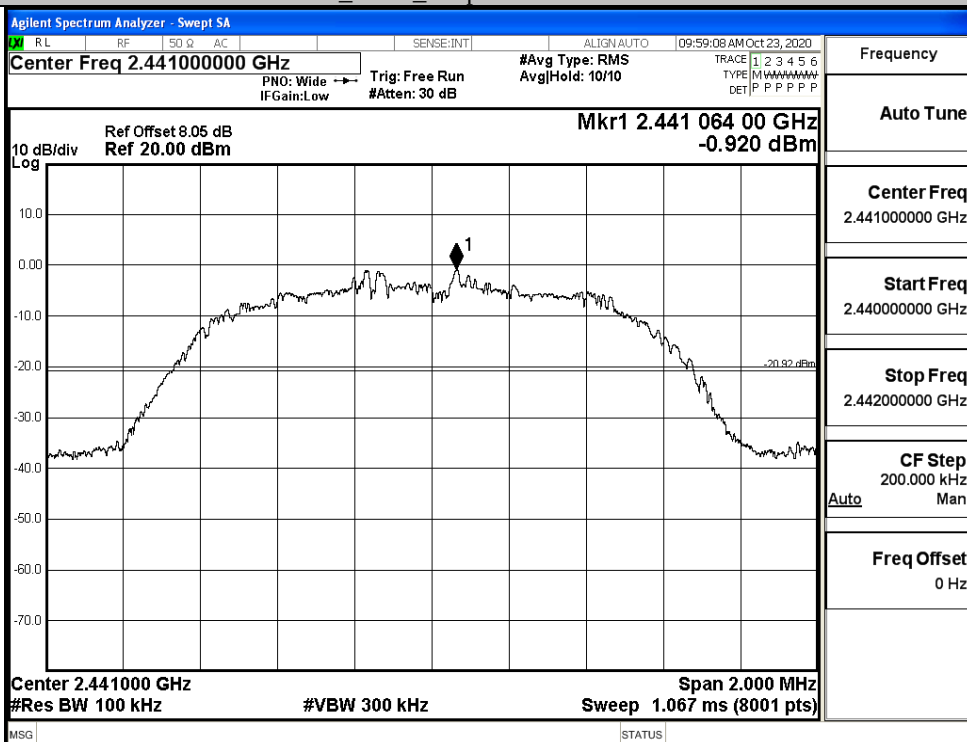


Puw

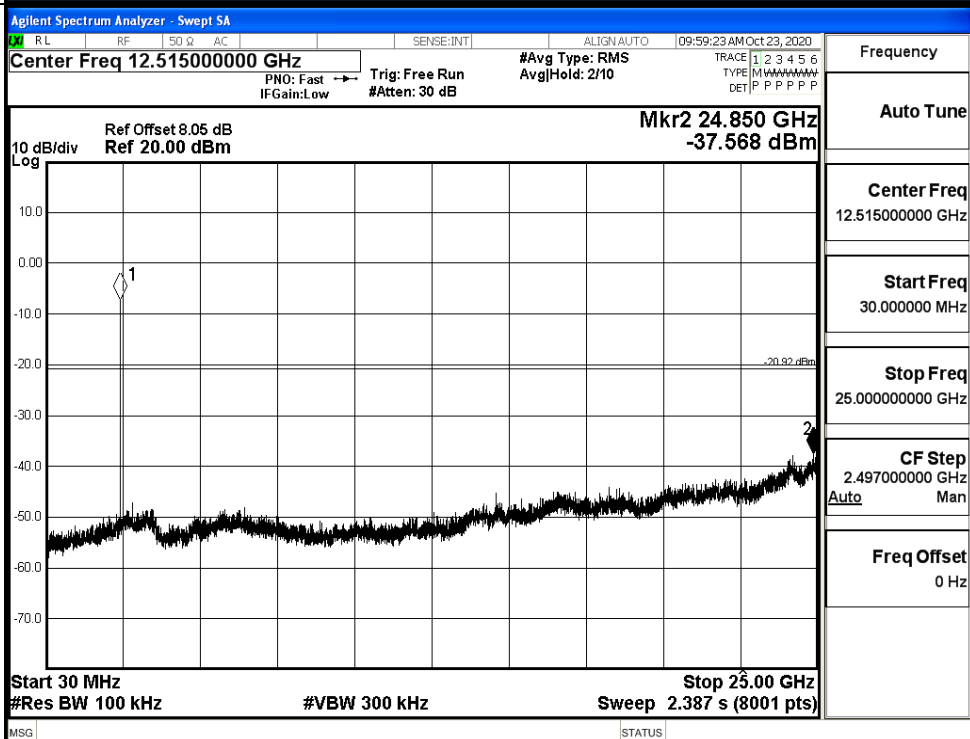


8DPSK_MCH_Graphs

Pref

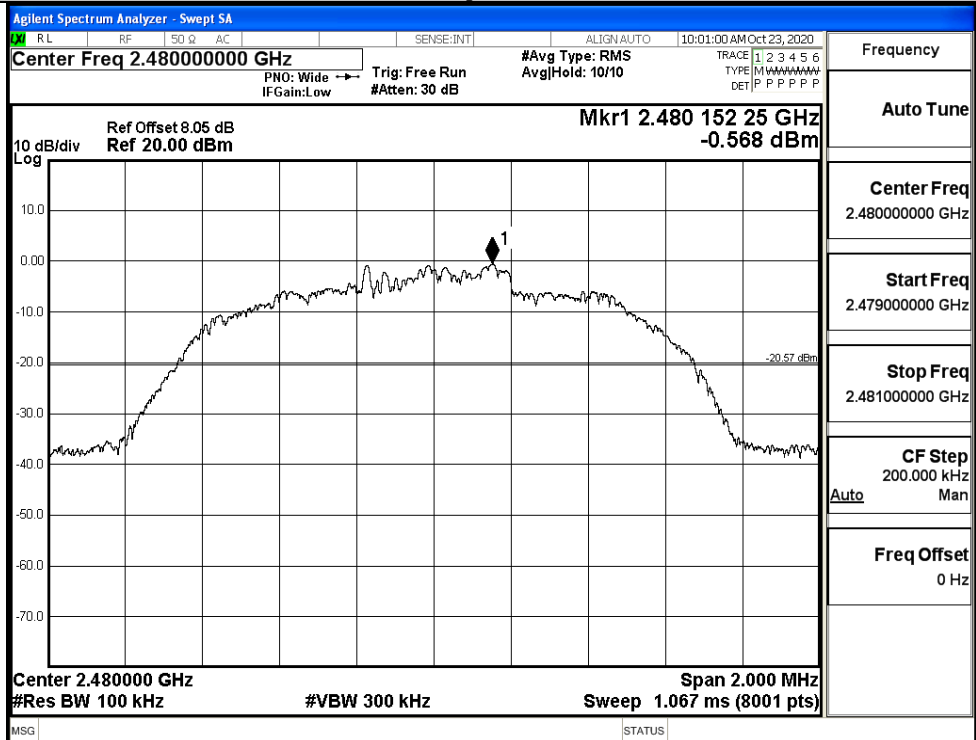


Puw



8DPSK_HCH_Graphs

Pref



Puw

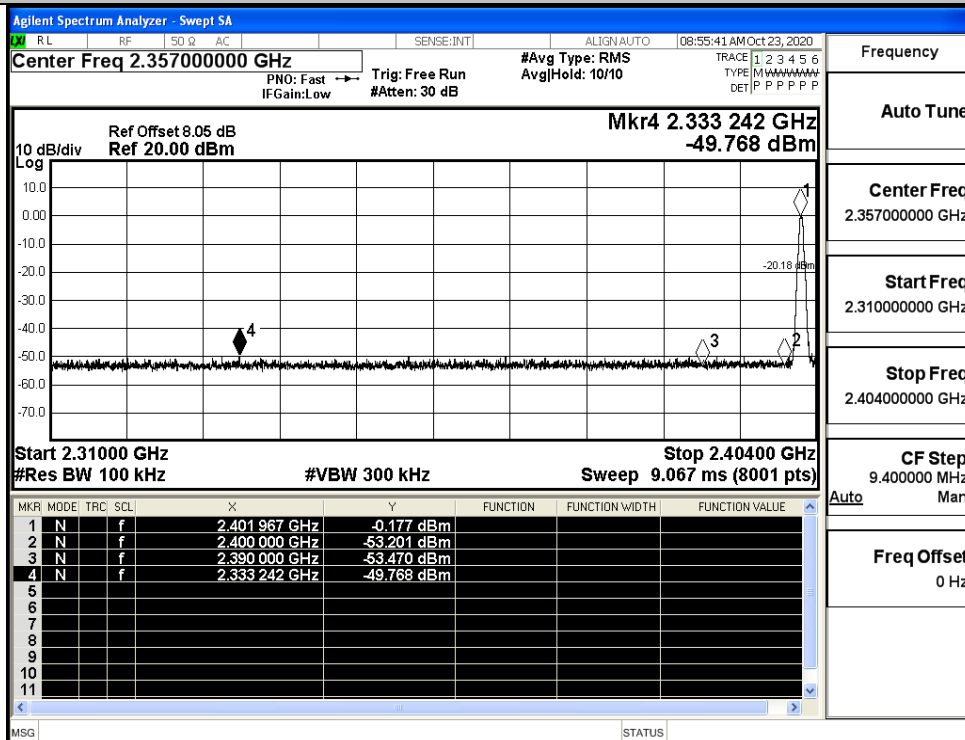


A.7 Band-edge for RF Conducted Emissions

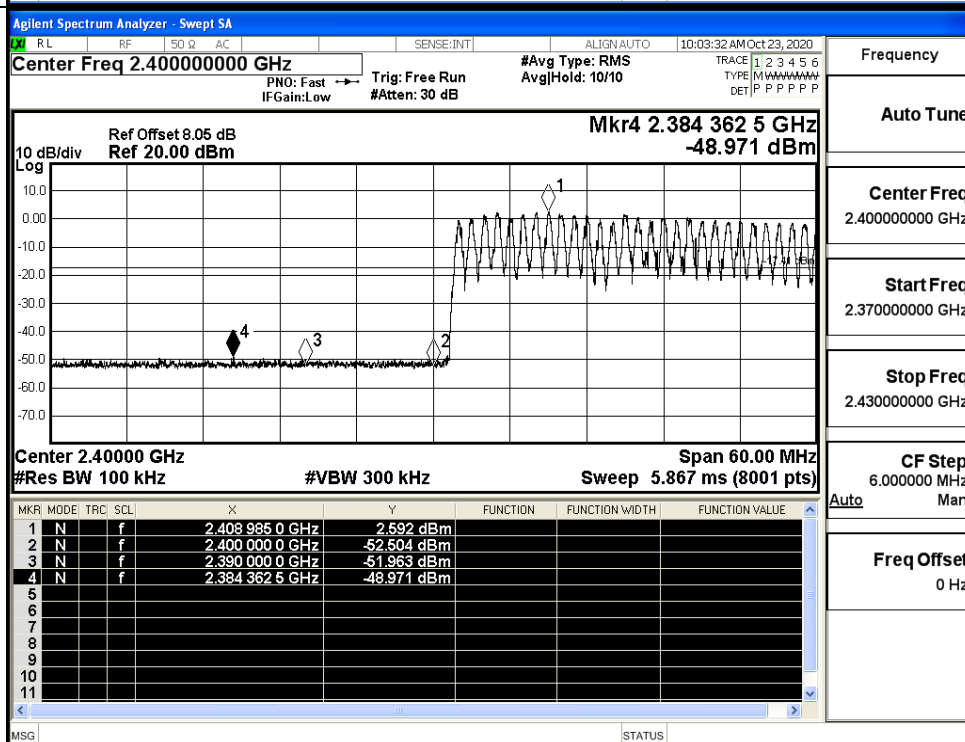
Mode	Channel	Carrier Frequency [MHz]	Carrier Power [dBm]	Frequency Hopping	Max Spurious Level [dBm]	Limit [dBm]	Verdict
GFSK	LCH	2402	-0.177	Off	-49.768	-20.18	PASS
			2.592	On	-48.971	-17.41	PASS
	HCH	2480	-0.933	Off	-48.976	-20.93	PASS
			5.083	On	-47.944	-14.92	PASS
$\pi/4$ DQPSK	LCH	2402	0.013	Off	-49.790	-19.99	PASS
			2.271	On	-48.952	-17.73	PASS
	HCH	2480	-0.514	Off	-49.175	-20.51	PASS
			2.916	On	-48.528	-17.08	PASS
8DPSK	LCH	2402	-2.049	Off	-49.437	-22.05	PASS
			0.706	On	-48.983	-19.29	PASS
	HCH	2480	-0.878	Off	-49.340	-20.88	PASS
			1.169	On	-47.988	-18.83	PASS

Test Graphs

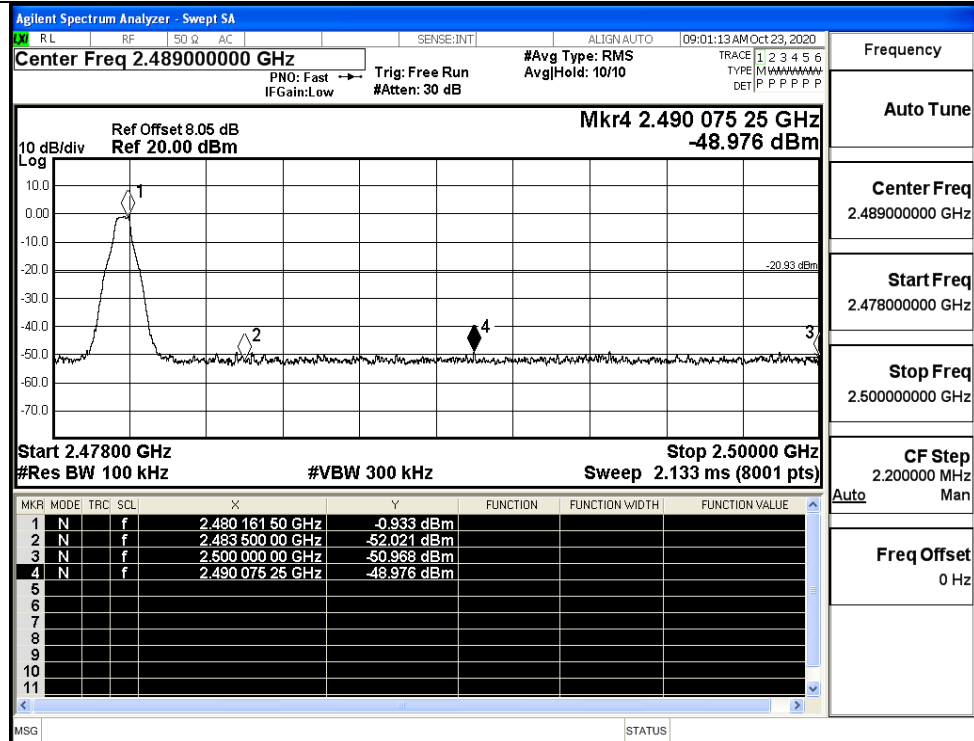
GFSK/LCH/No Hop



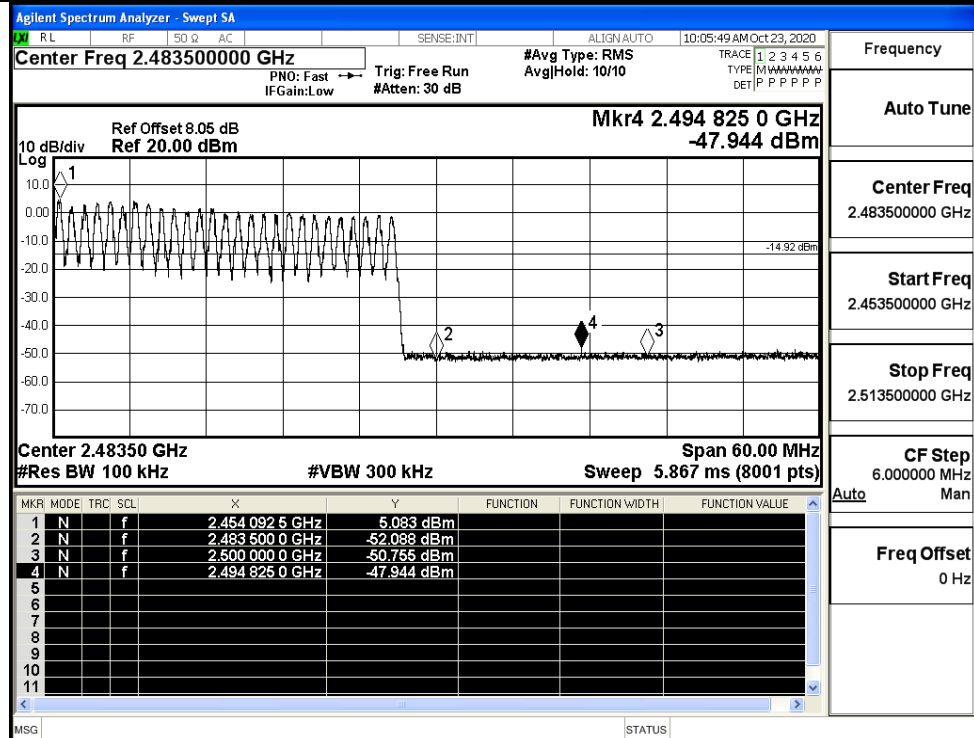
GFSK/LCH/Hop



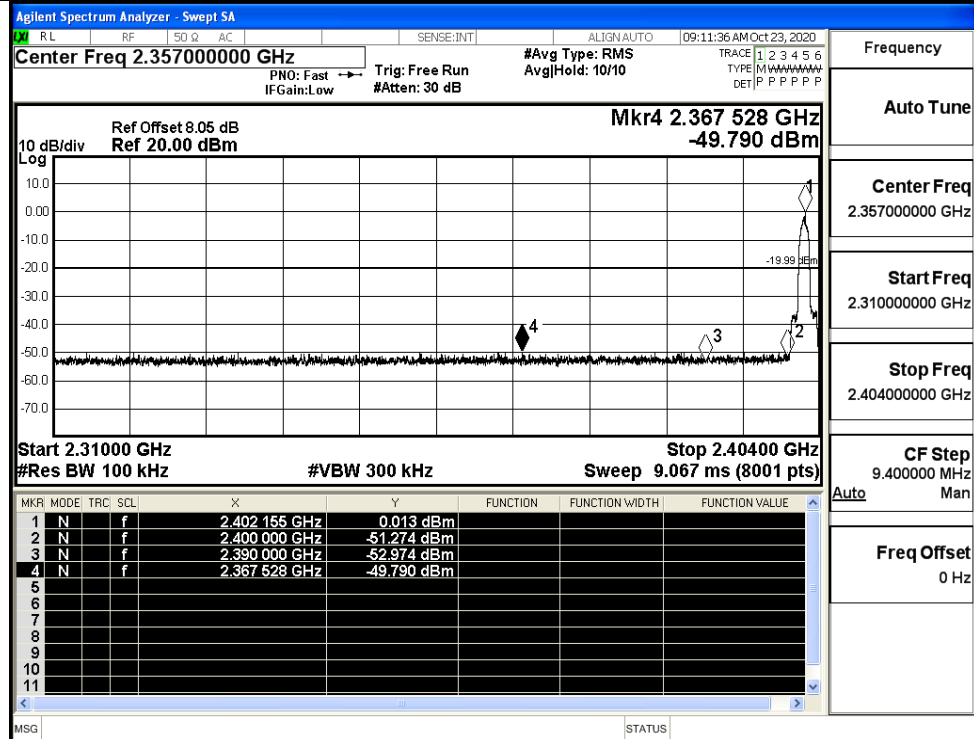
GFSK/HCH/No Hop



GFSK/HCH/Hop



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



Frequency

Auto Tune

Center Freq
2.357000000 GHz

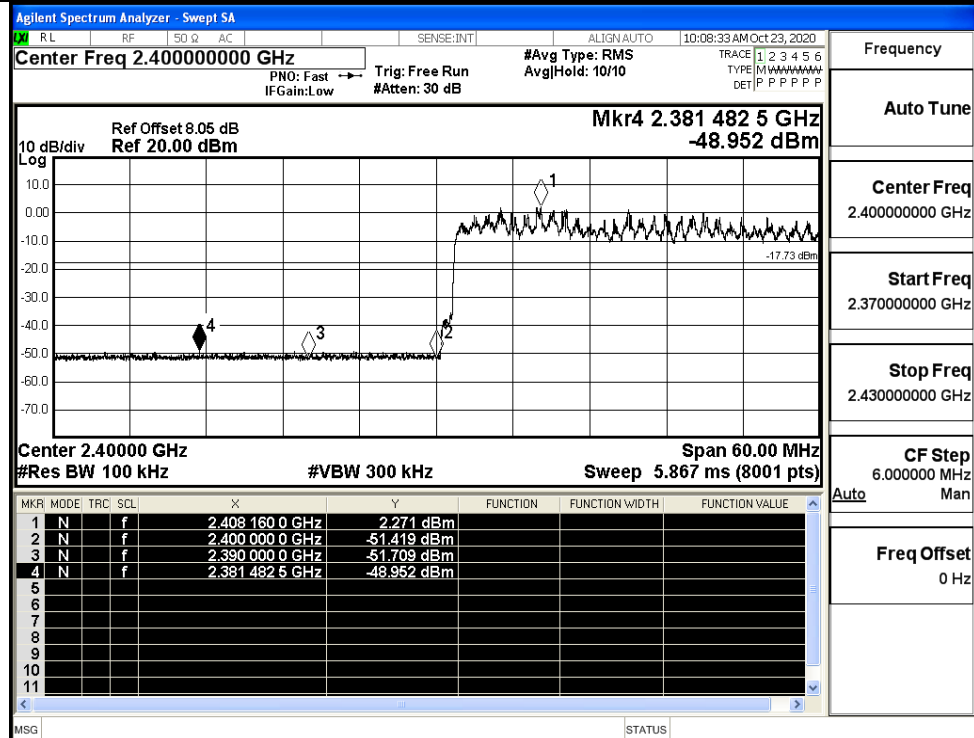
Start Freq
2.310000000 GHz

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

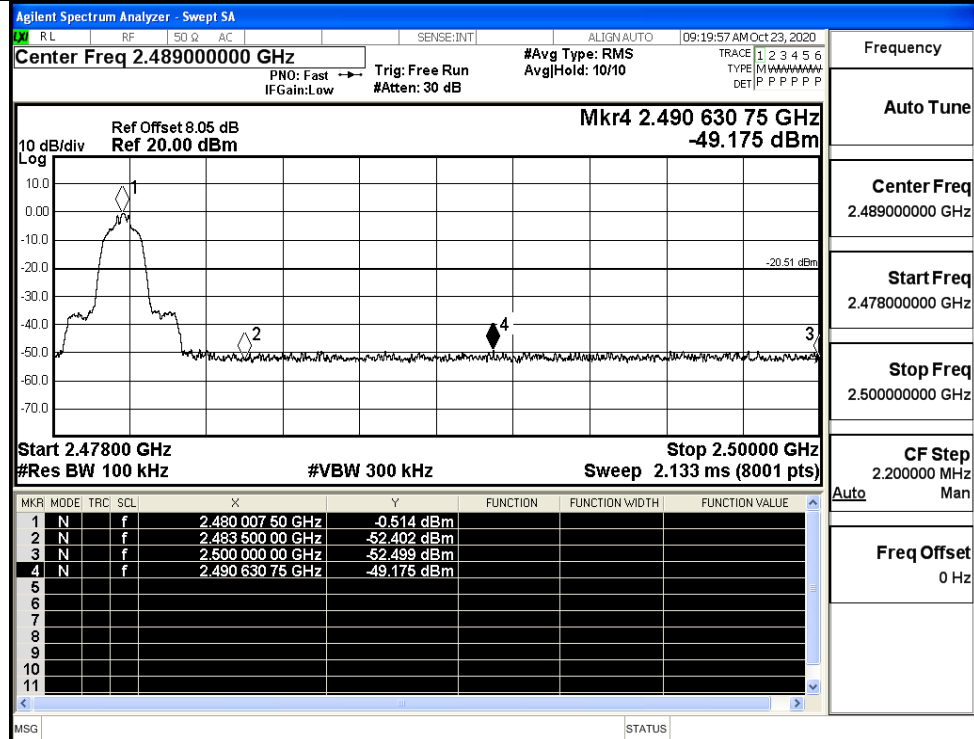
Start Freq
2.370000000 GHz

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

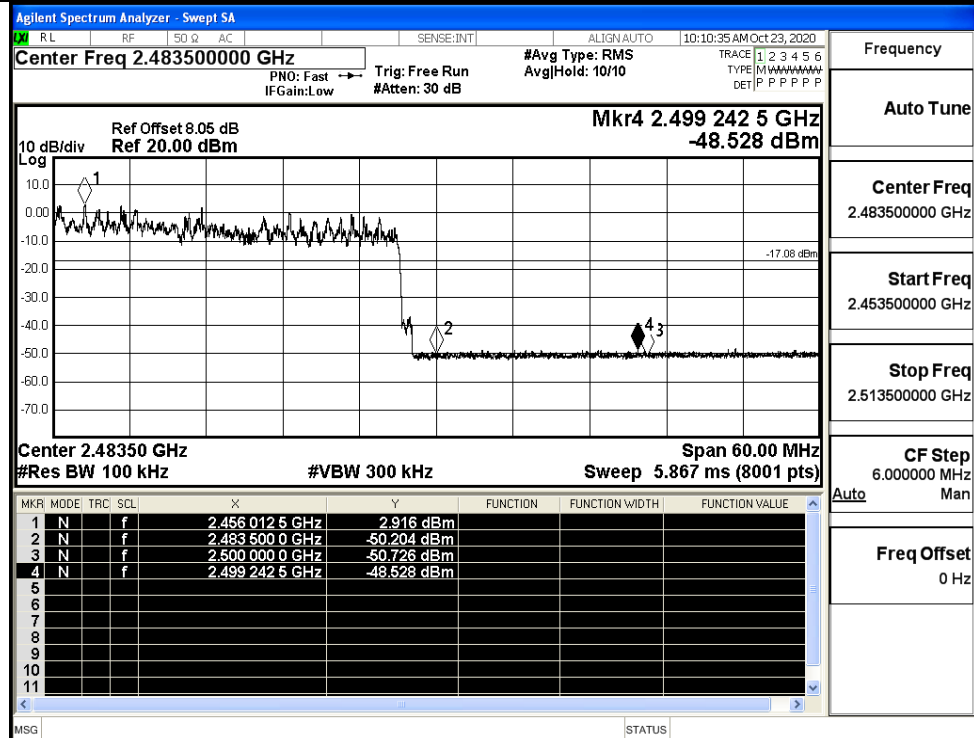
Start Freq
2.478000000 GHz

Stop Freq
2.500000000 GHz

CF Step
2.200000 MHz
Auto Man

Freq Offset
0 Hz

$\pi/4$ DQPSK/HCH/Hop



Frequency

Auto Tune

Center Freq
2.483500000 GHz

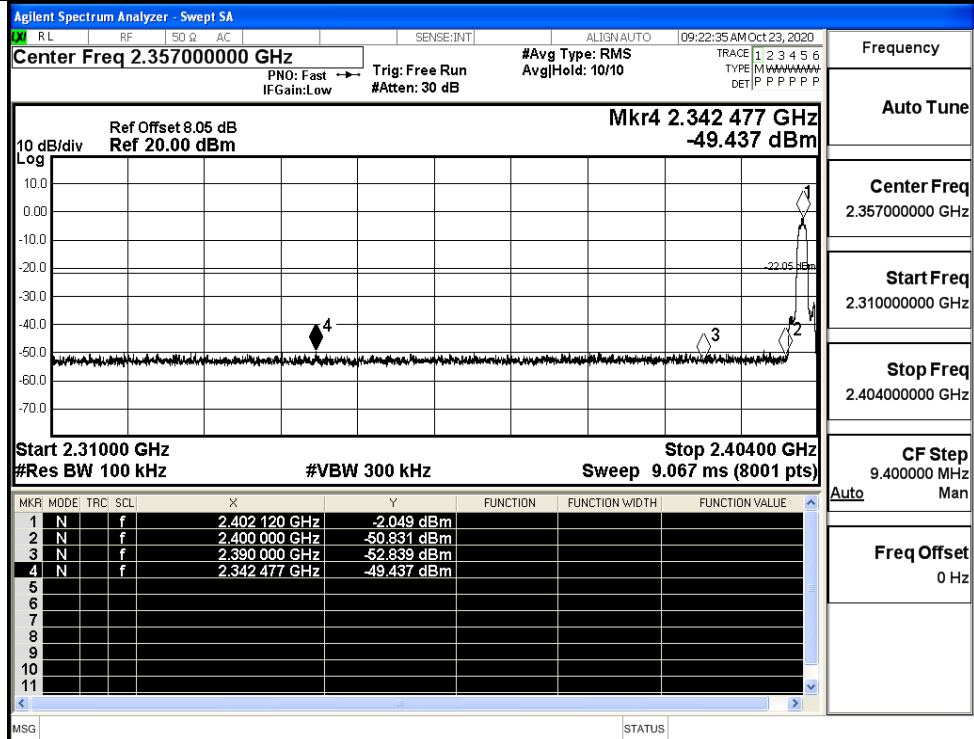
Start Freq
2.453500000 GHz

Stop Freq
2.513500000 GHz

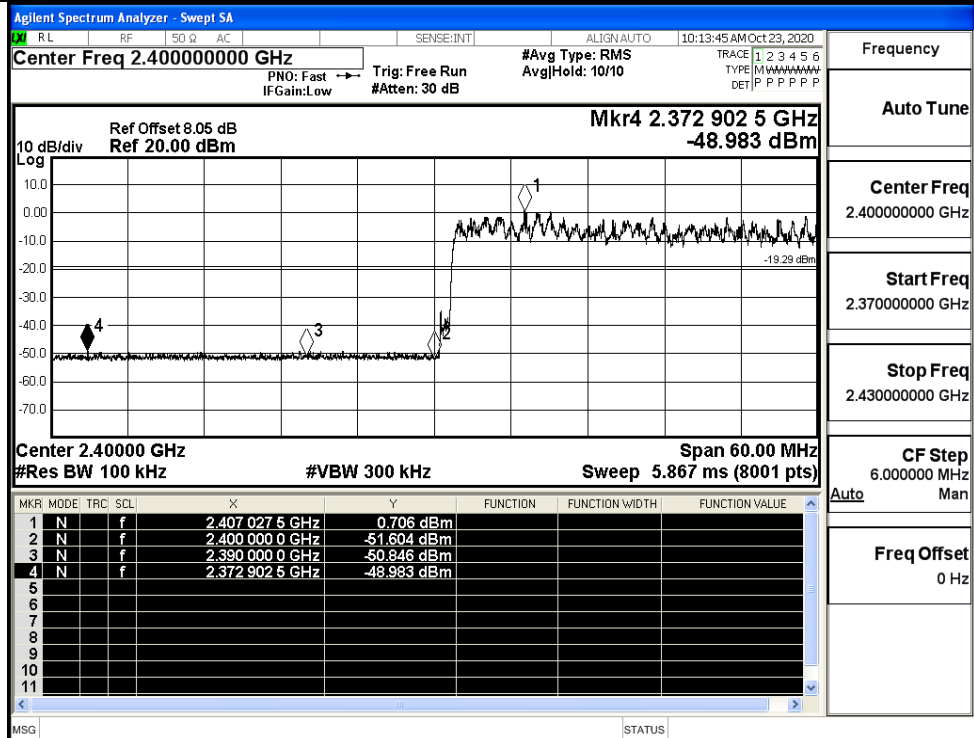
CF Step
6.000000 MHz
Auto Man

Freq Offset
0 Hz

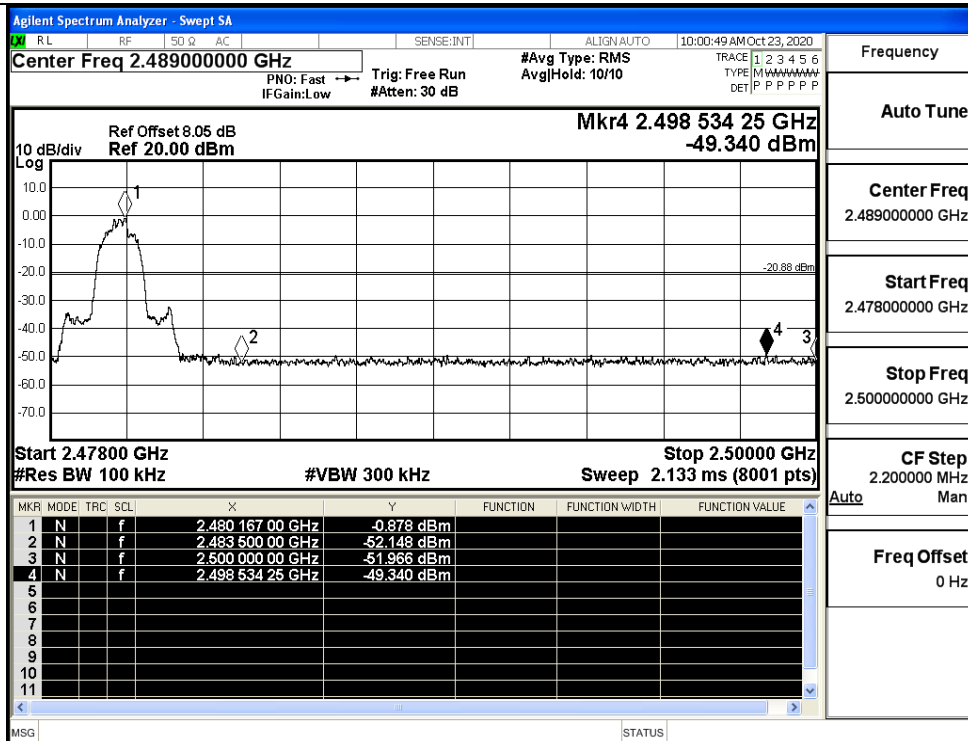
8DPSK/LCH/No Hop



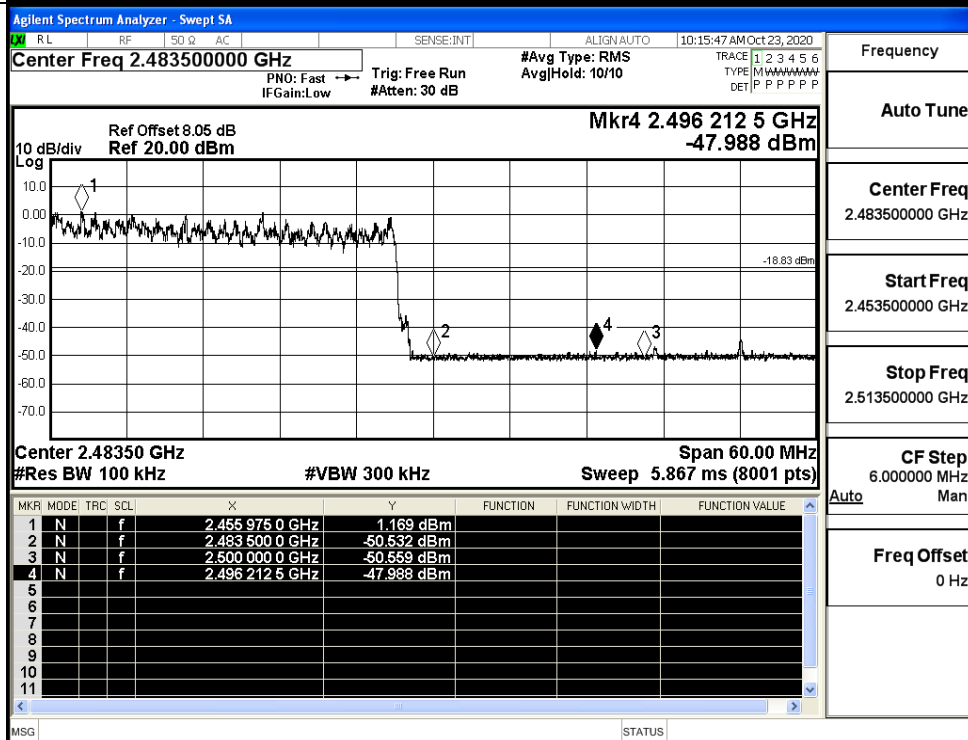
8DPSK/LCH/Hop



8DPSK/HCH/No Hop



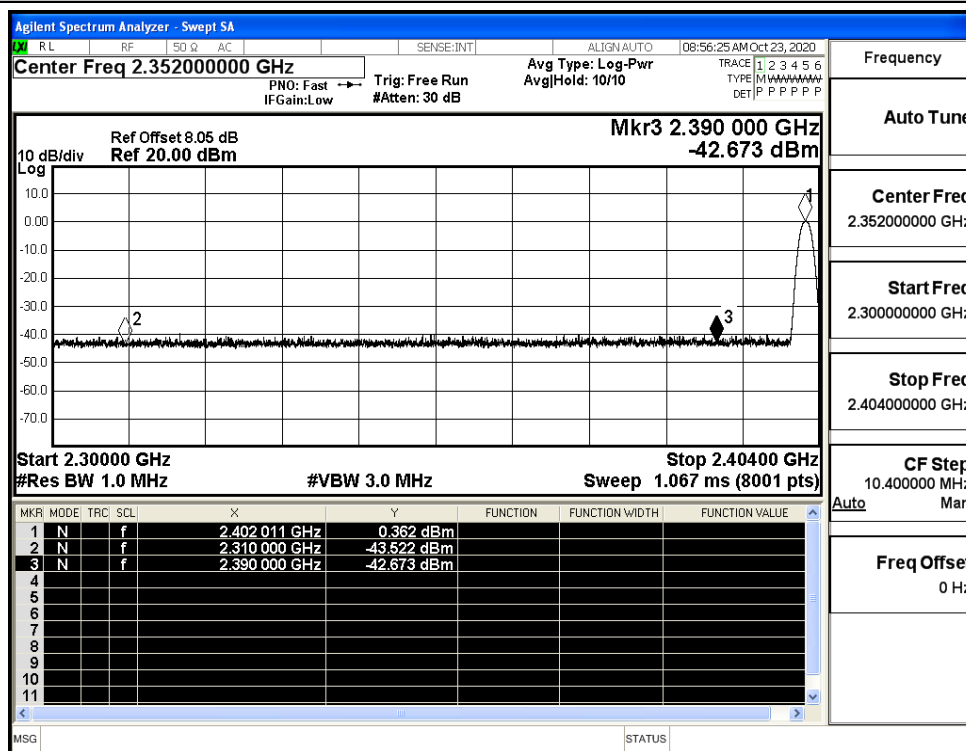
8DPSK/HCH/Hop



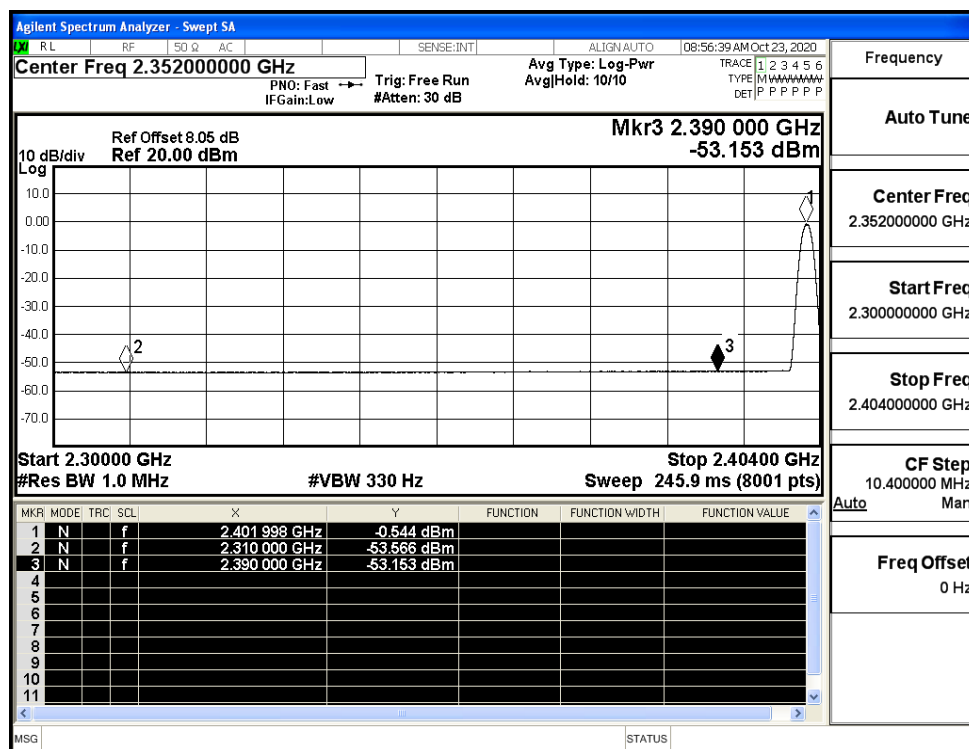
A.8 Restrict-band band-edge measurements

Test Mode	Hopping	Freq.	Power [dBm]	Gain	Ground Factor	E [dBuV/m]	Detector	Limit [dBuV/m]	Verdict
GFSK	Off	2310.0	-43.52	2.15	0	53.86	PEAK	74	PASS
	Off	2310.0	-53.57	2.15	0	43.81	AV	54	PASS
	Off	2390.0	-42.67	2.15	0	54.71	PEAK	74	PASS
	Off	2390.0	-53.15	2.15	0	44.23	AV	54	PASS
	Off	2483.5	-41.23	2.15	0	56.15	PEAK	74	PASS
	Off	2483.5	-52.50	2.15	0	44.88	AV	54	PASS
	Off	2500.0	-42.52	2.15	0	54.86	PEAK	74	PASS
	Off	2500.0	-52.41	2.15	0	44.97	AV	54	PASS
$\pi/4$ DQPSK	Off	2310.0	-43.23	2.15	0	54.15	PEAK	74	PASS
	Off	2310.0	-53.28	2.15	0	44.10	AV	54	PASS
	Off	2390.0	-41.74	2.15	0	55.64	PEAK	74	PASS
	Off	2390.0	-53.03	2.15	0	44.35	AV	54	PASS
	Off	2483.5	-42.22	2.15	0	55.16	PEAK	74	PASS
	Off	2483.5	-52.43	2.15	0	44.95	AV	54	PASS
	Off	2500.0	-41.80	2.15	0	55.58	PEAK	74	PASS
	Off	2500.0	-52.24	2.15	0	45.14	AV	54	PASS
8DPSK	Off	2310.0	-43.91	2.15	0	53.47	PEAK	74	PASS
	Off	2310.0	-53.33	2.15	0	44.05	AV	54	PASS
	Off	2390.0	-43.35	2.15	0	54.03	PEAK	74	PASS
	Off	2390.0	-52.91	2.15	0	44.47	AV	54	PASS
	Off	2483.5	-42.54	2.15	0	54.84	PEAK	74	PASS
	Off	2483.5	-52.36	2.15	0	45.02	AV	54	PASS
	Off	2500.0	-41.05	2.15	0	56.33	PEAK	74	PASS
	Off	2500.0	-52.30	2.15	0	45.08	AV	54	PASS

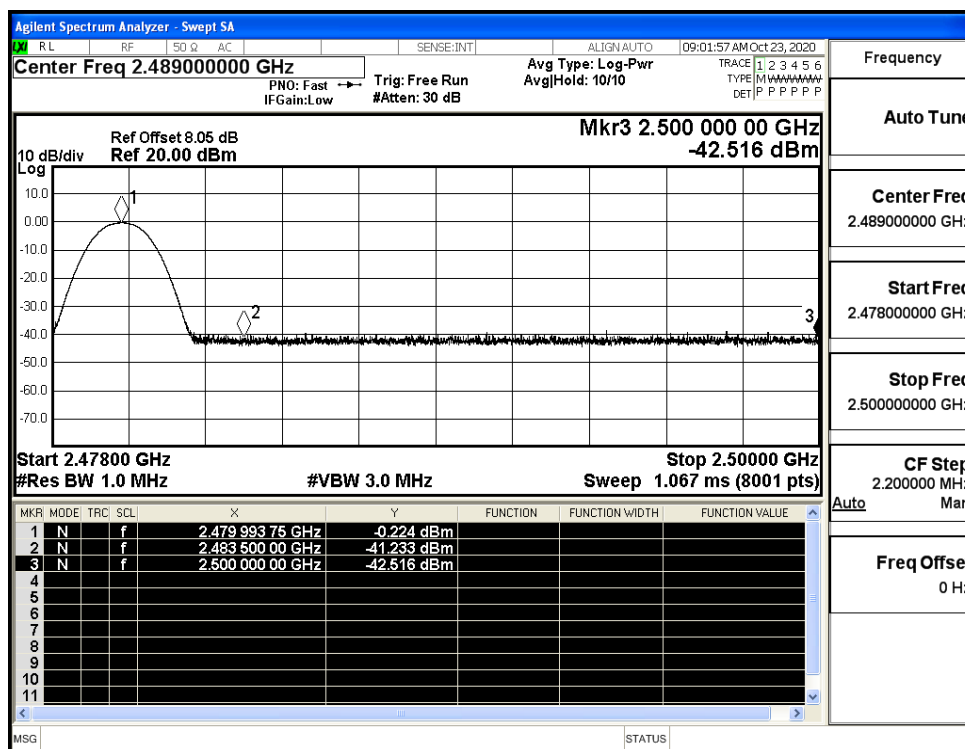
Restrict-band band-edge measurements_Hopping Off_GFSK_PEAK (Low Channel)



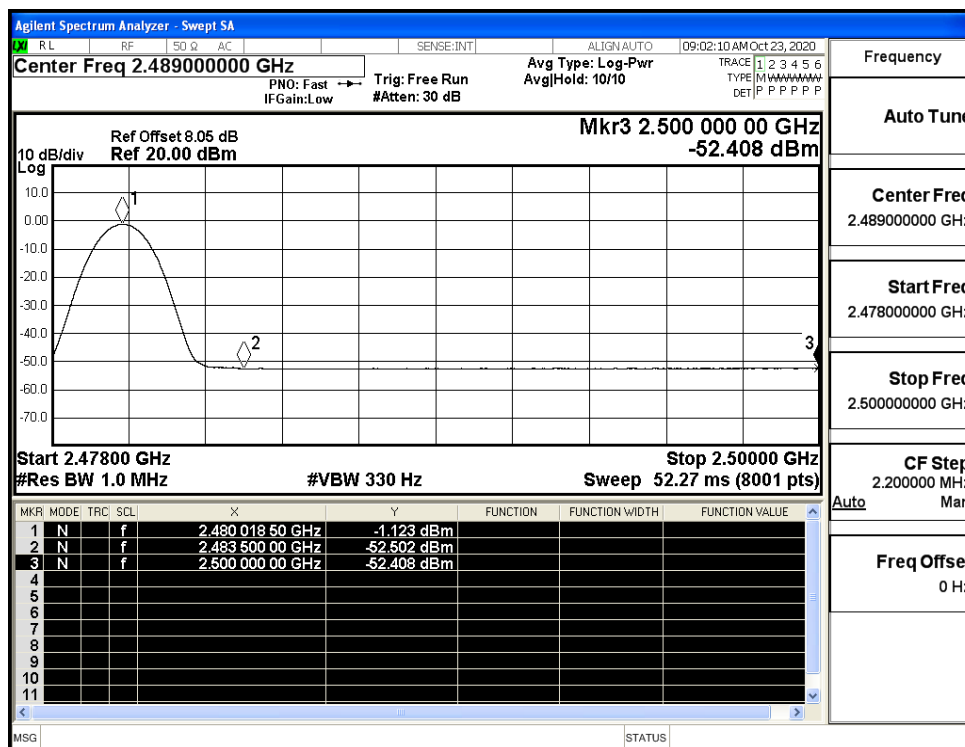
Restrict-band band-edge measurements_Hopping Off_GFSK_Average (Low Channel)

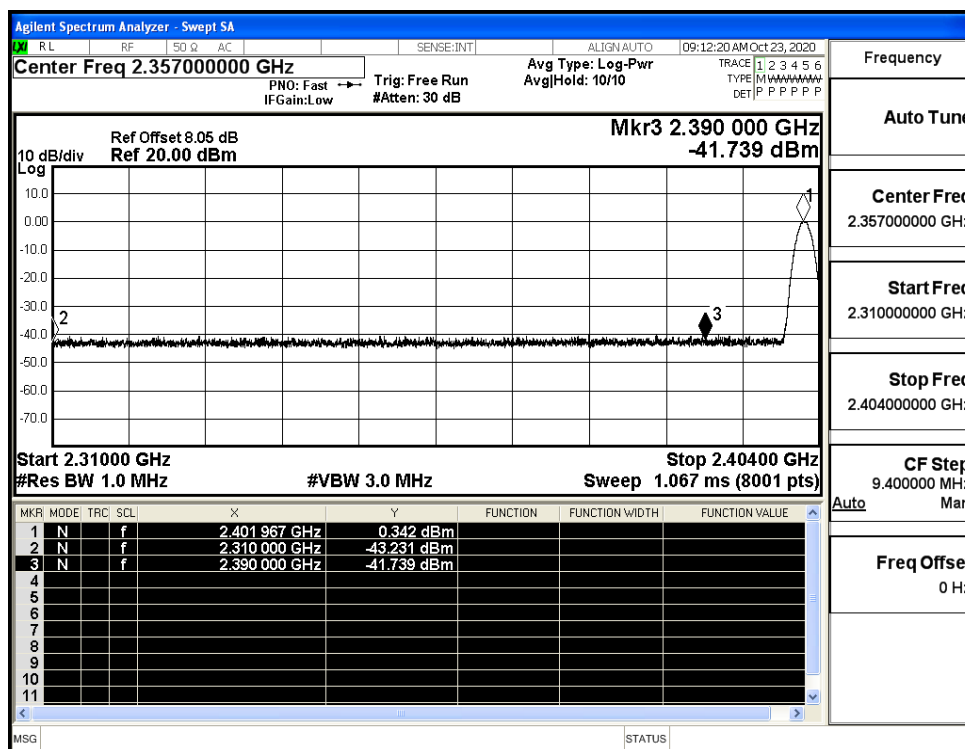
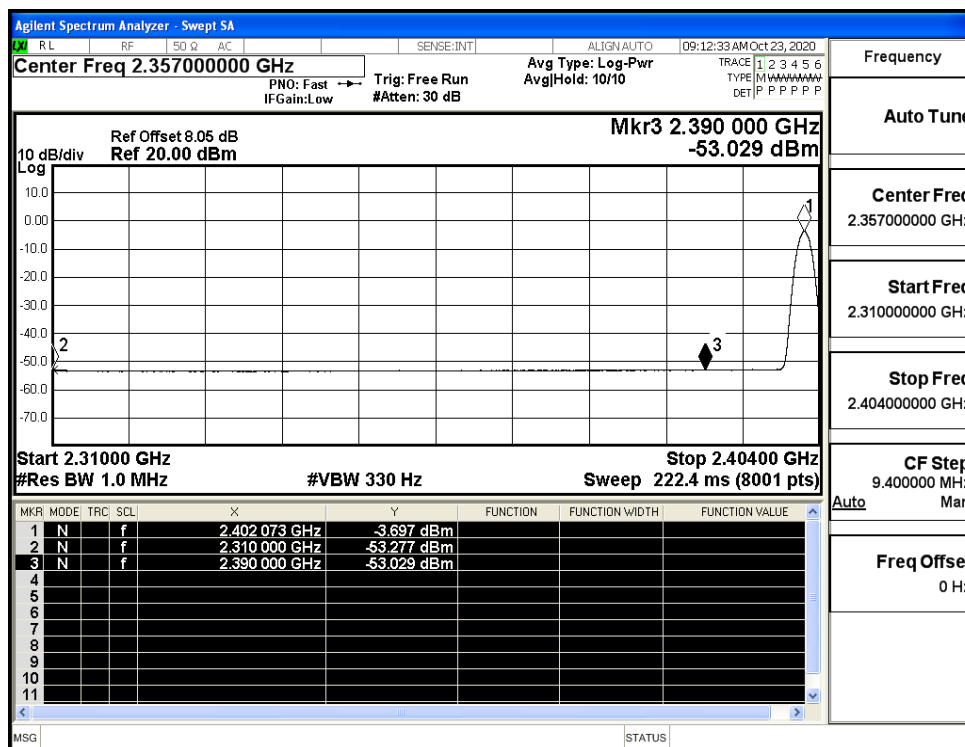


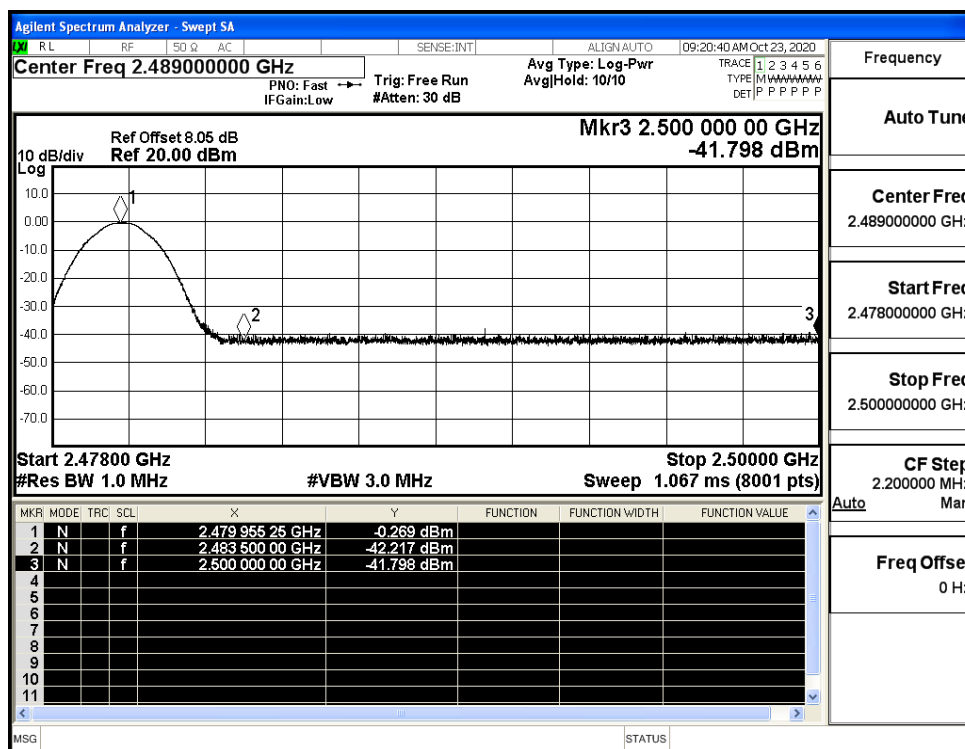
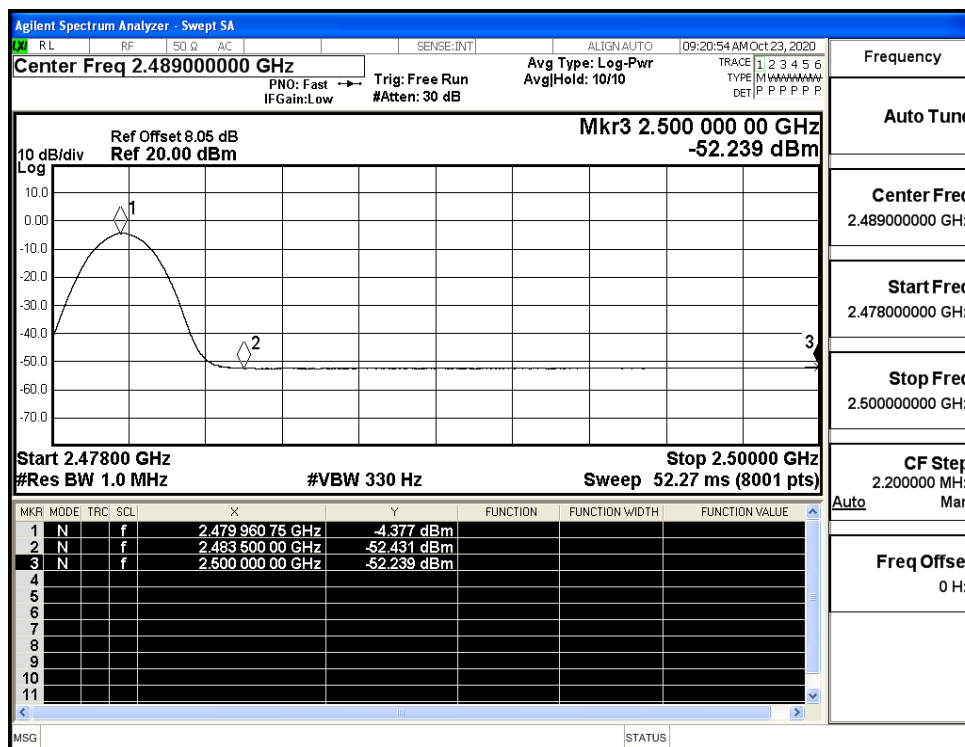
Restrict-band band-edge measurements_Hopping Off_ GFSK_PEAK (High Channel)



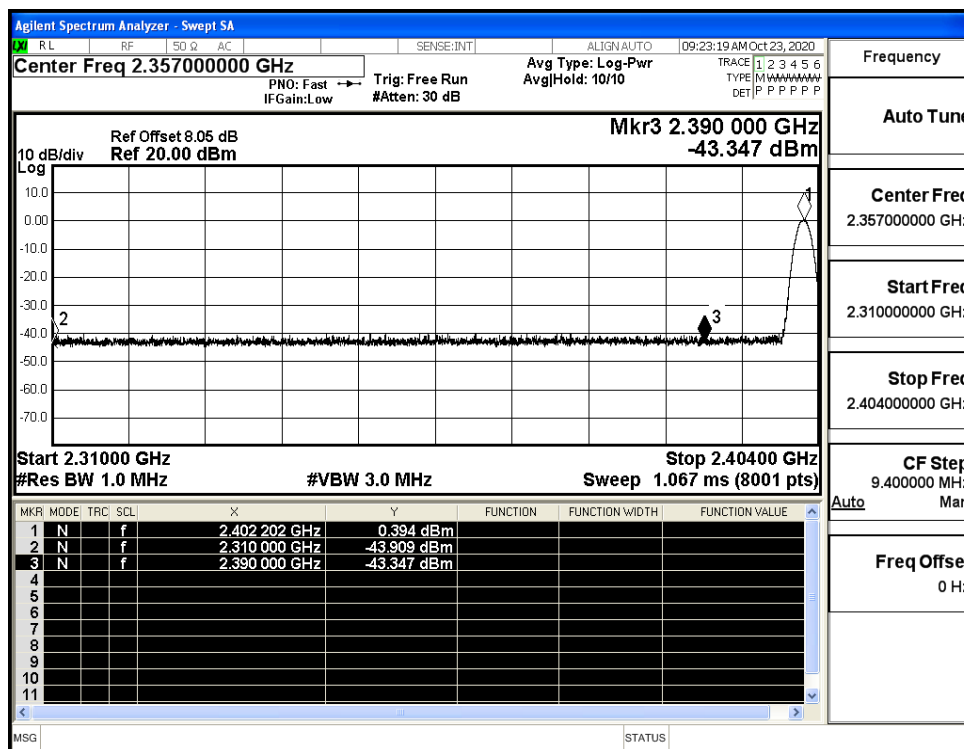
Restrict-band band-edge measurements_Hopping Off_ GFSK_Average (High Channel)



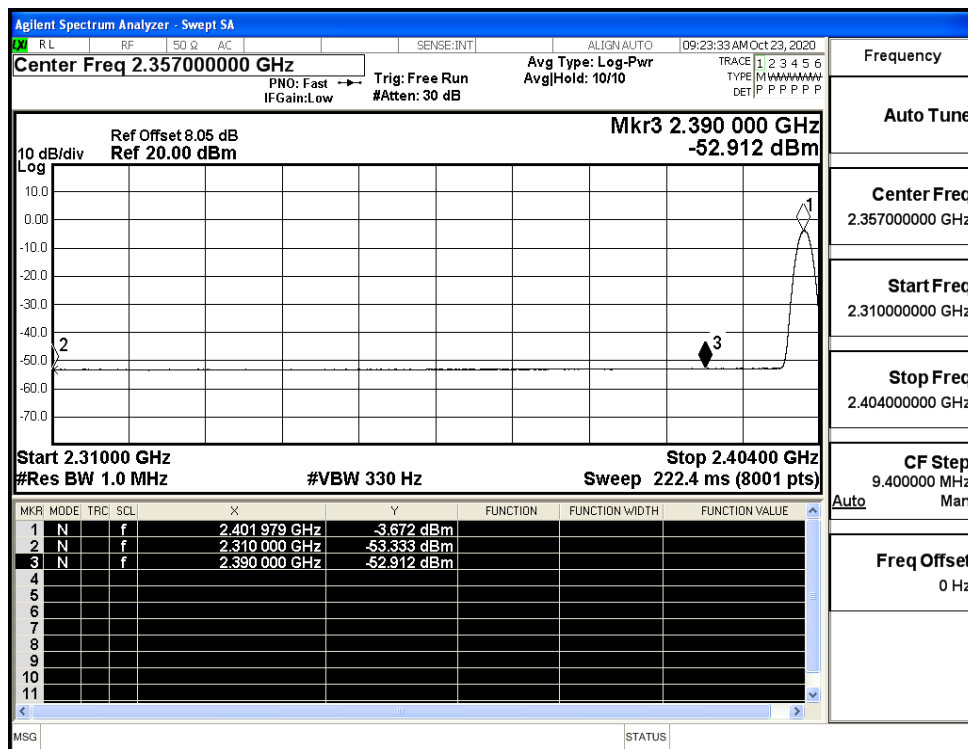
Restrict-band band-edge measurements_Hopping Off $\pi/4$ -DQPSK_PEAK (Low Channel)Restrict-band band-edge measurements_Hopping Off $\pi/4$ -DQPSK_Average (Low Channel)

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)

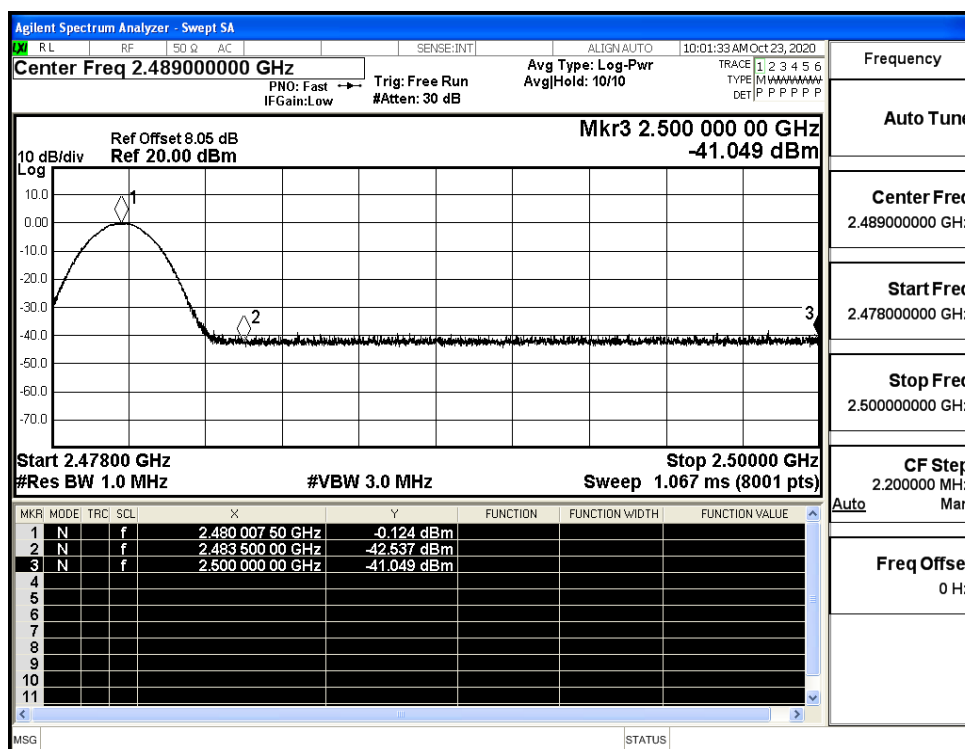
Restrict-band band-edge measurements_Hopping Off_8DPSK_PEAK (Low Channel)



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)

