

Appendix A

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

Product Name: Tablet PC

Trade Mark: MACROB

Test Model: MAC D4

Environmental Conditions

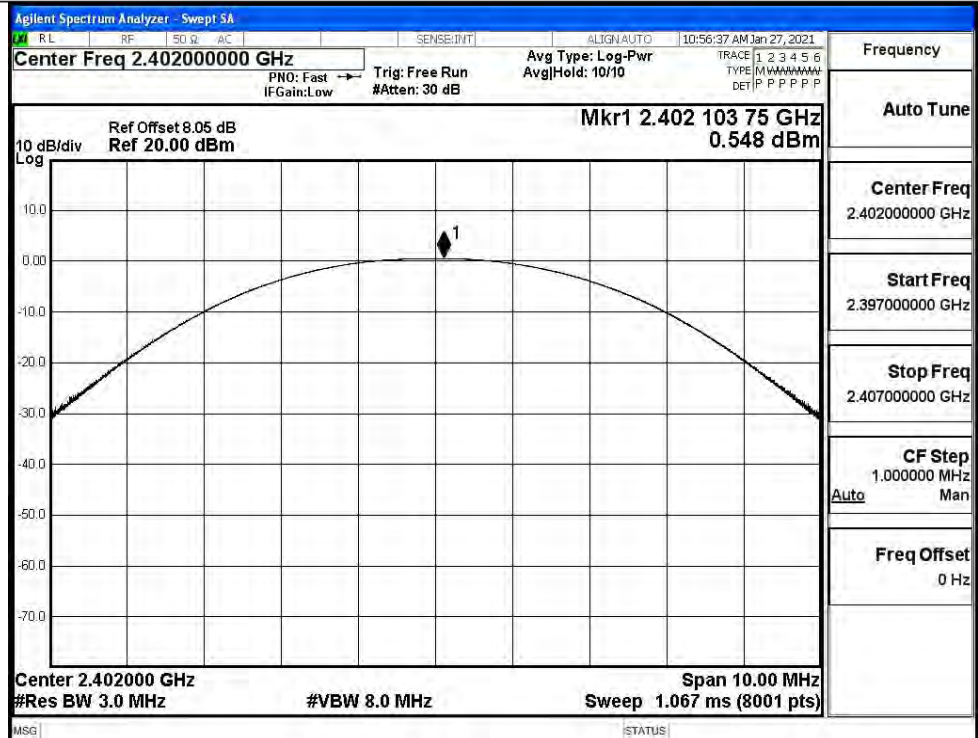
Temperature:	25.3 ° C
Relative Humidity:	54.3%
ATM Pressure:	100.0 kPa
Test Engineer:	LI HUAN
Supervised by:	Diamond Lu

A.1 Maximum Conducted Peak Output Power

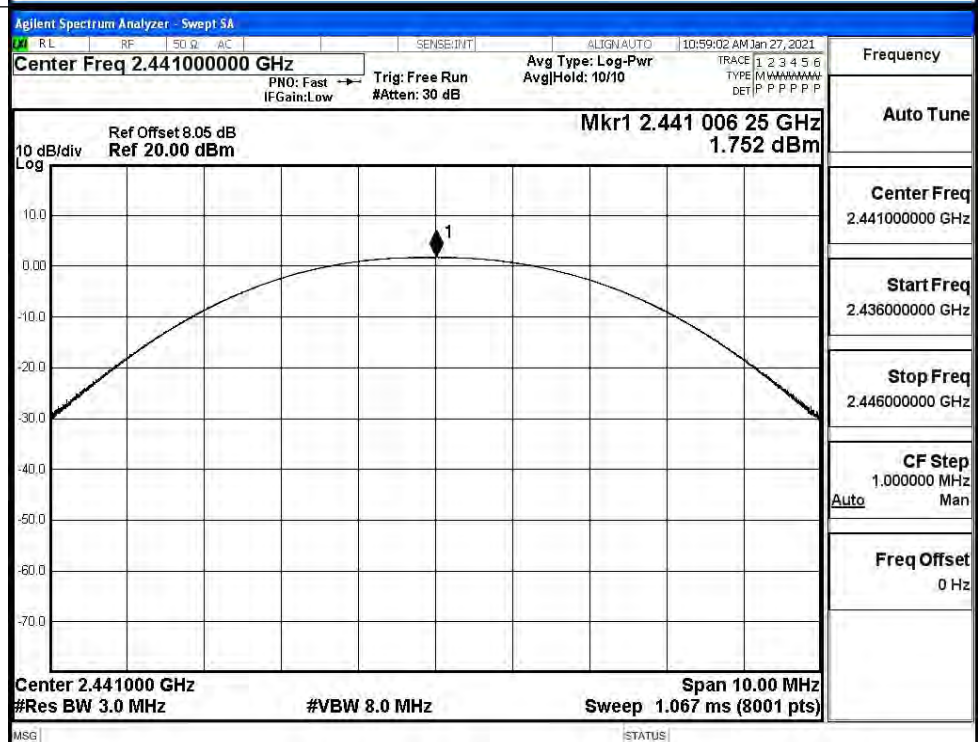
Mode	Channel.	Maximum Peak Output Power [dBm]	Limit [dBm]	Verdict
GFSK	LCH	0.548	21	PASS
	MCH	1.752	21	PASS
	HCH	0.140	21	PASS
$\pi/4$ DQPSK	LCH	-0.309	21	PASS
	MCH	0.970	21	PASS
	HCH	-0.612	21	PASS
8DPSK	LCH	-0.121	21	PASS
	MCH	1.080	21	PASS
	HCH	-0.503	21	PASS

Test Graphs

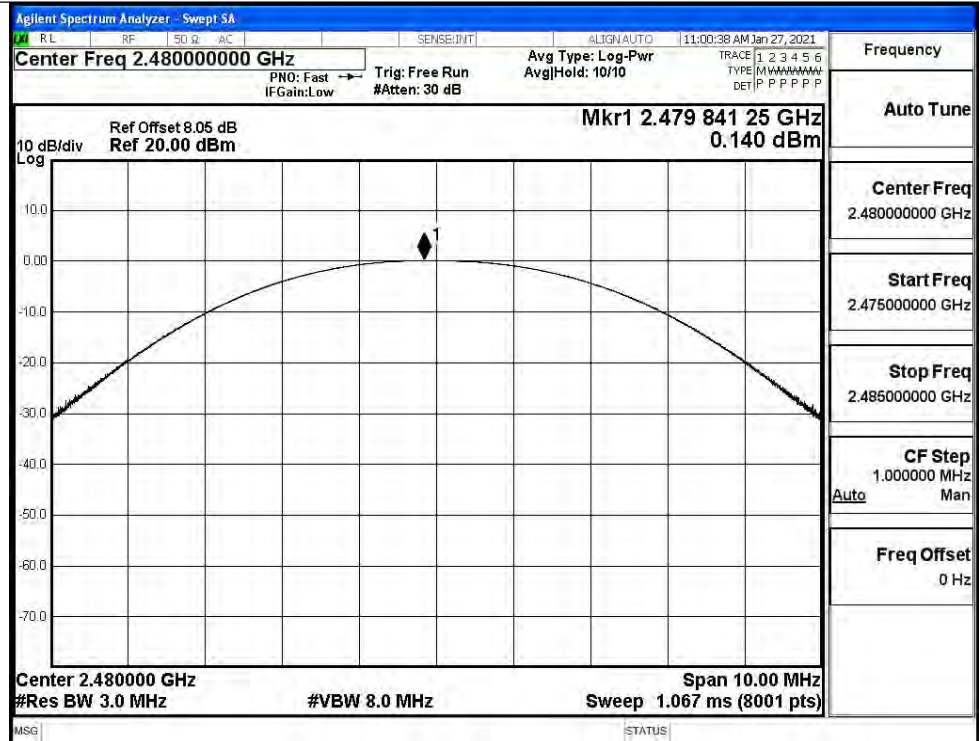
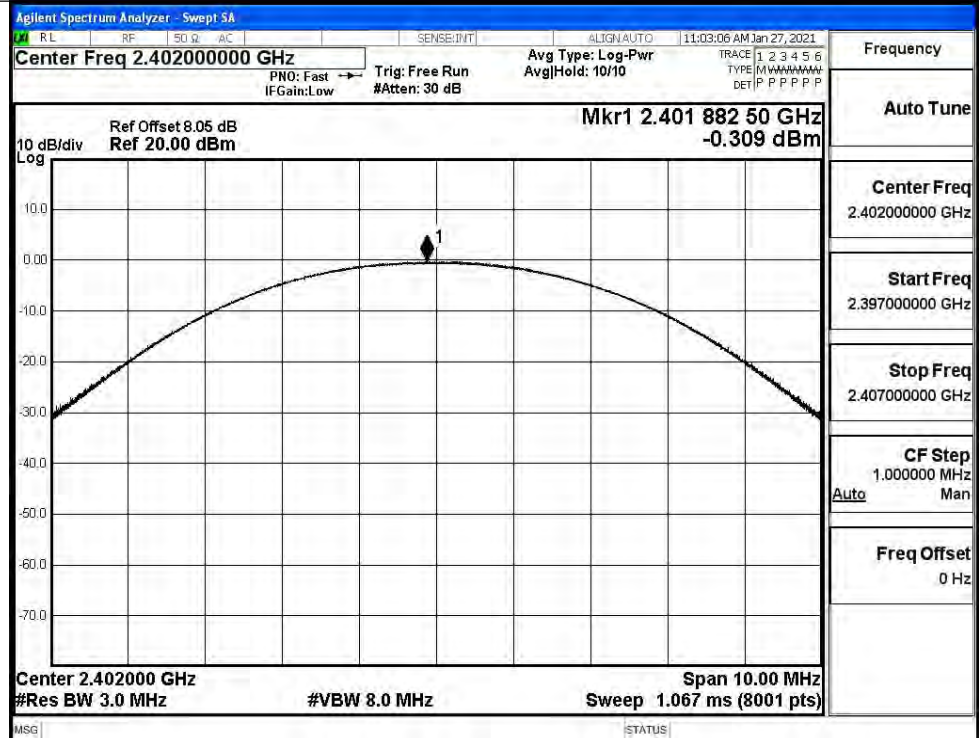
GFSK/LCH

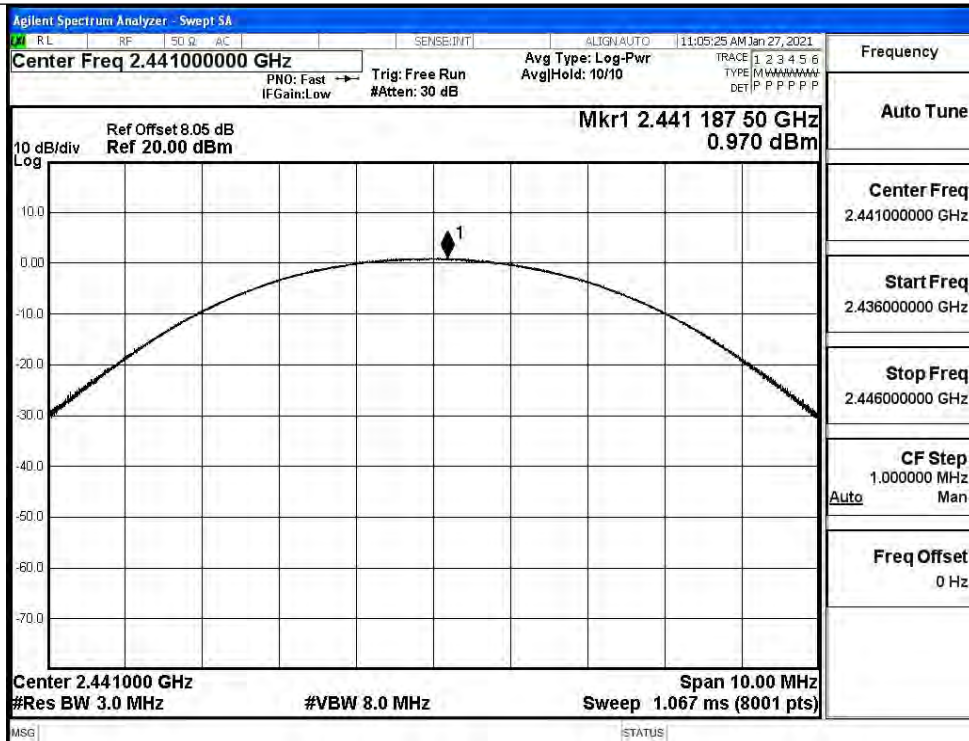
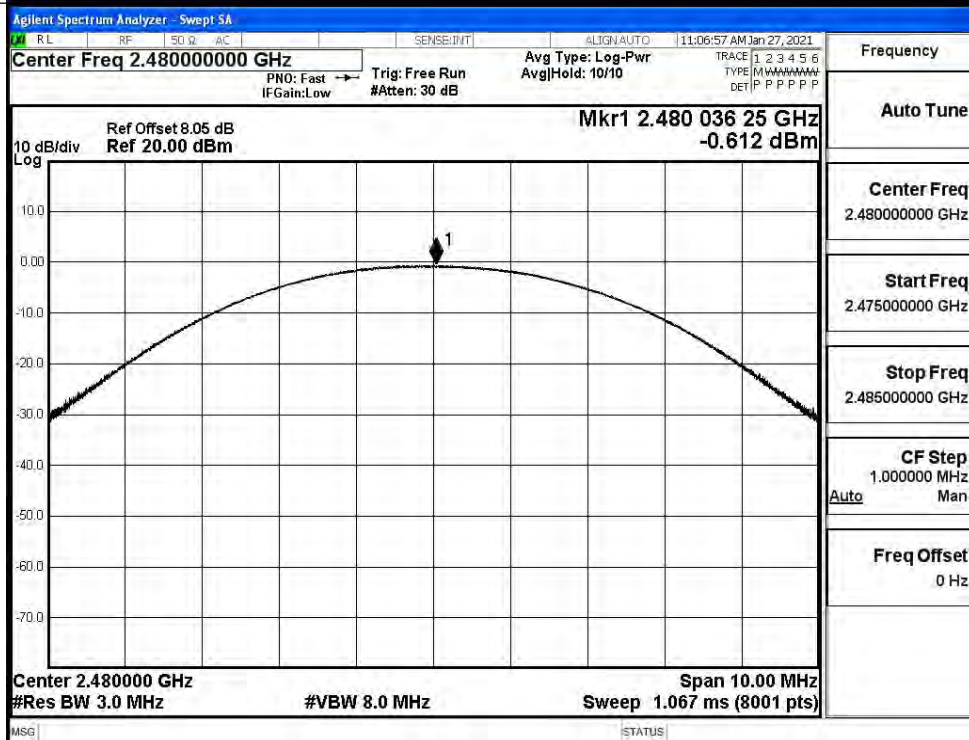


GFSK/MCH

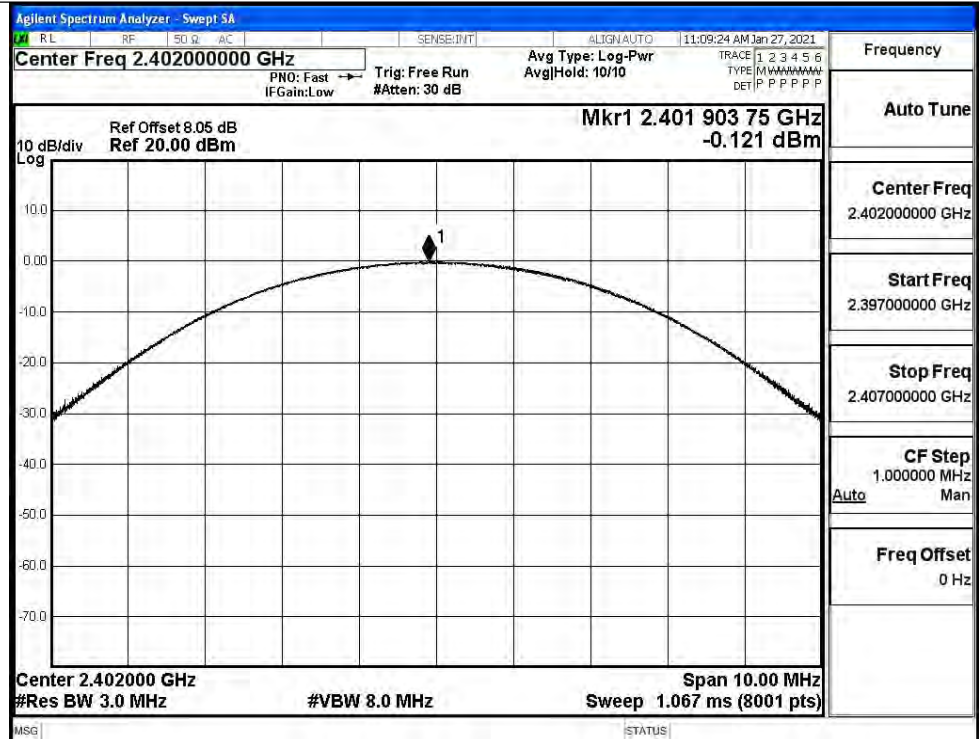


GFSK/HCH

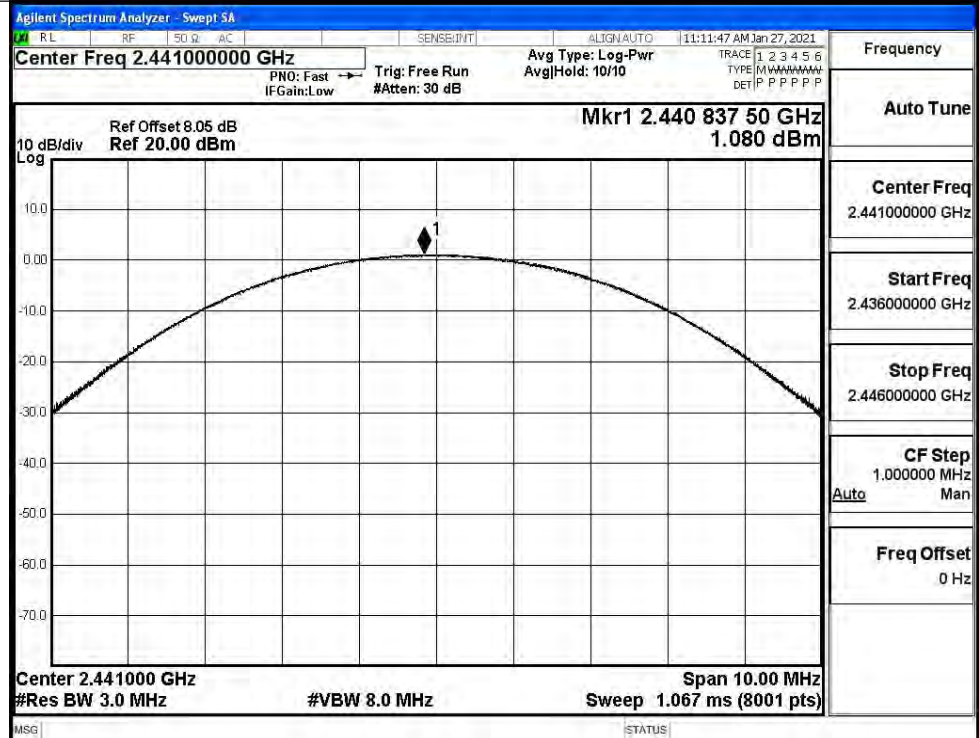
 $\pi/4$ DQPSK/LCH

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

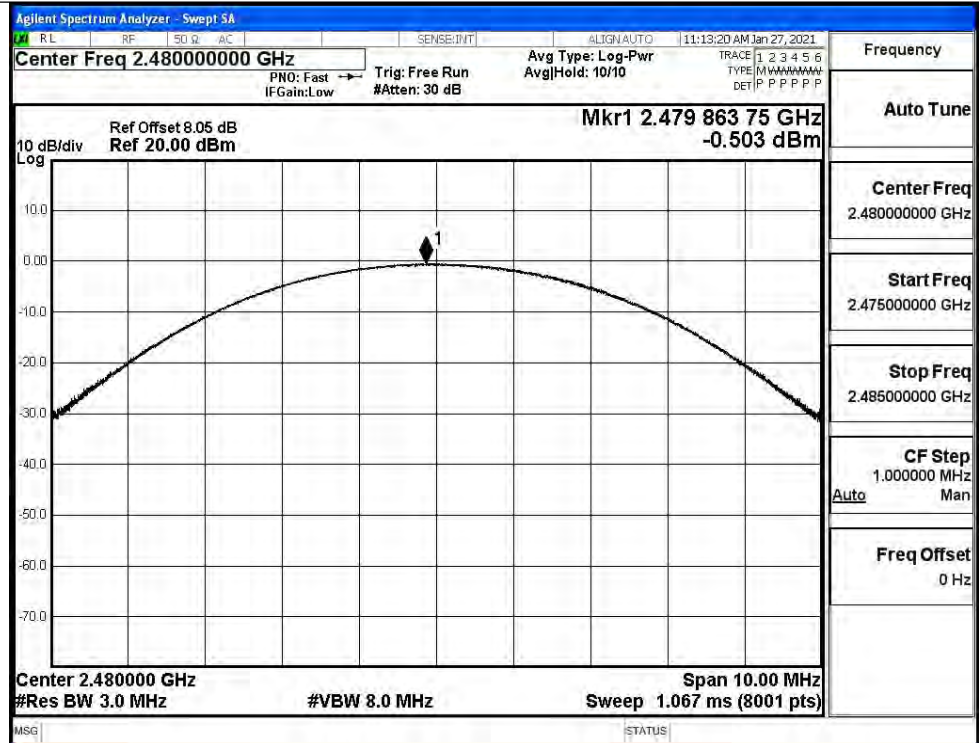
8DPSK/LCH



8DPSK/MCH



8DPSK/HCH

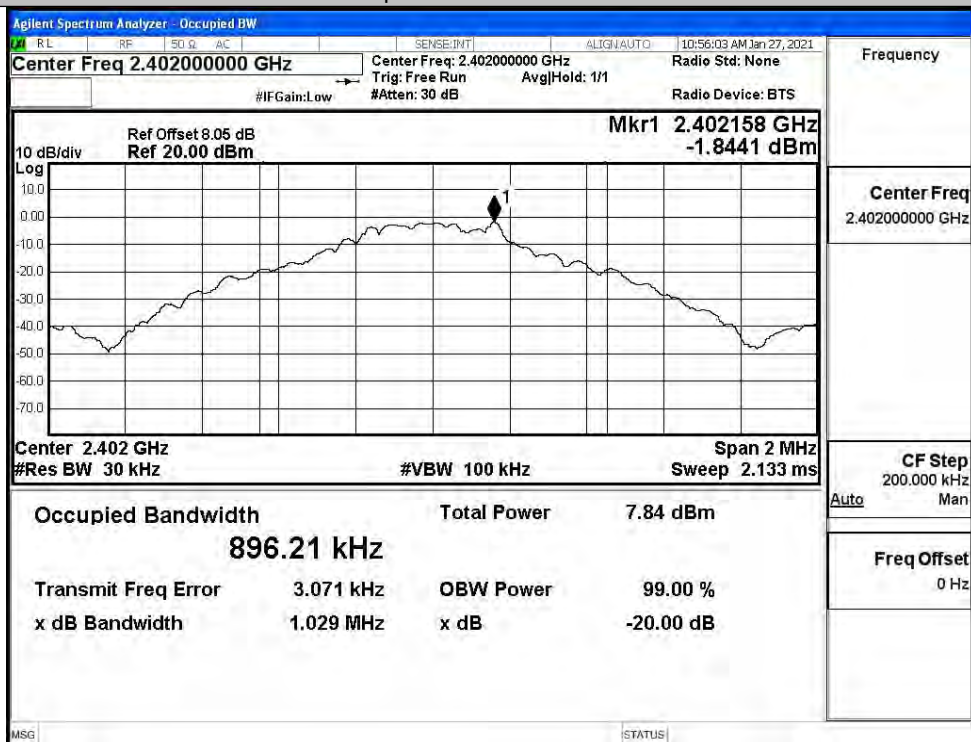


A.2 20dB Bandwidth

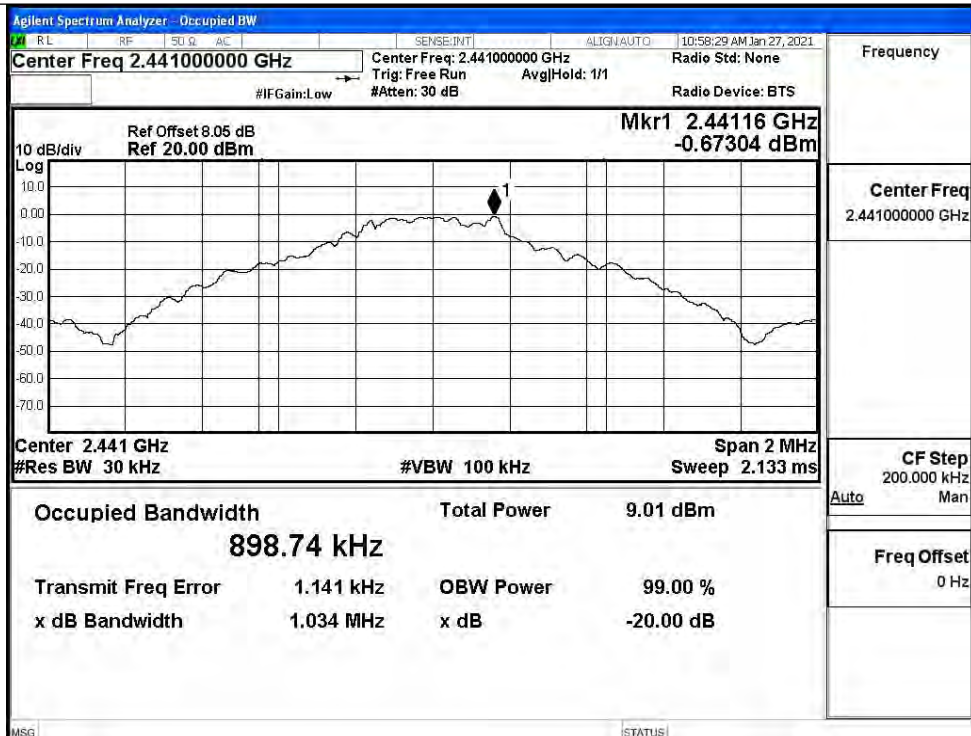
Mode	Channel.	20dB Bandwidth [MHz]	Limit [MHz]	Verdict
GFSK	LCH	1.029	Not Specified	PASS
	MCH	1.034	Not Specified	PASS
	HCH	1.039	Not Specified	PASS
$\pi/4$ DQPSK	LCH	1.288	Not Specified	PASS
	MCH	1.288	Not Specified	PASS
	HCH	1.289	Not Specified	PASS
8DPSK	LCH	1.300	Not Specified	PASS
	MCH	1.291	Not Specified	PASS
	HCH	1.290	Not Specified	PASS

Test Graphs

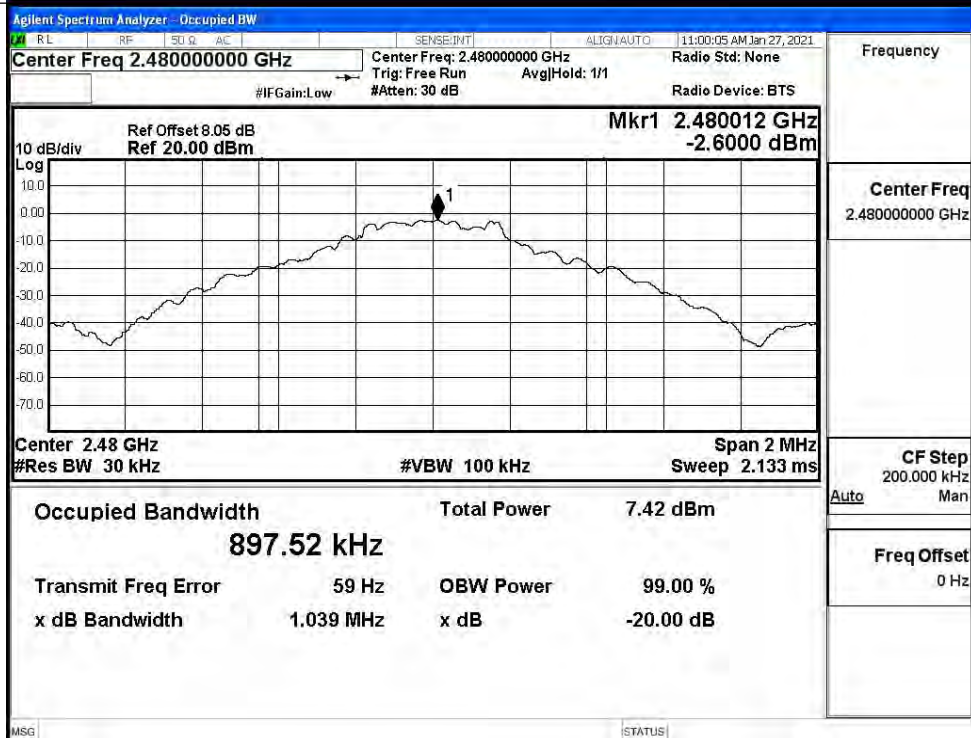
GFSK/LCH

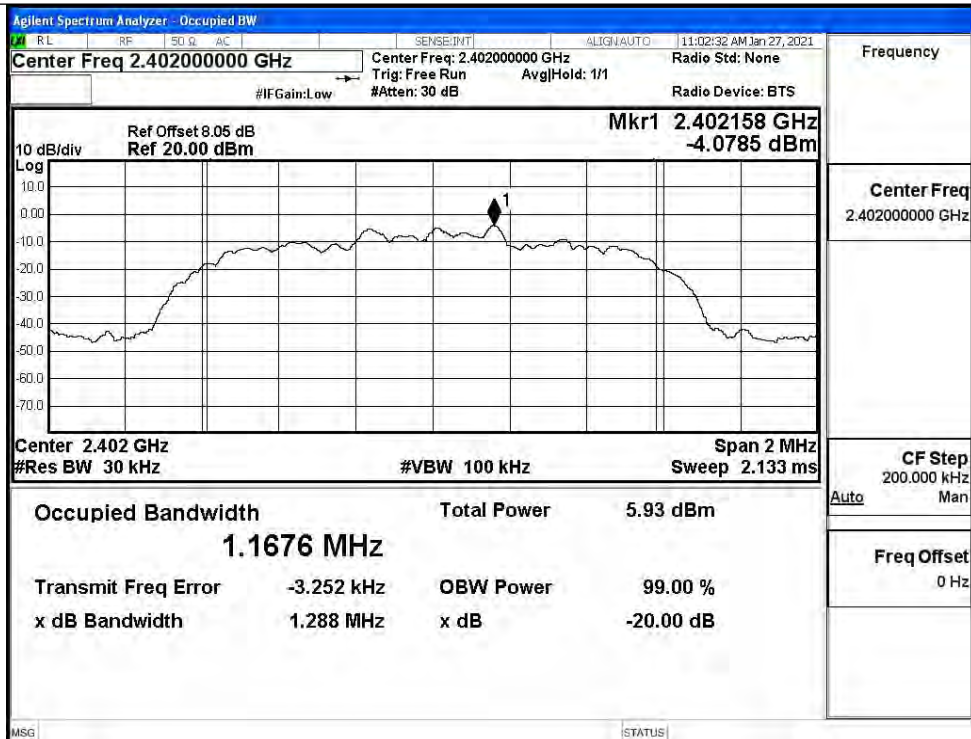
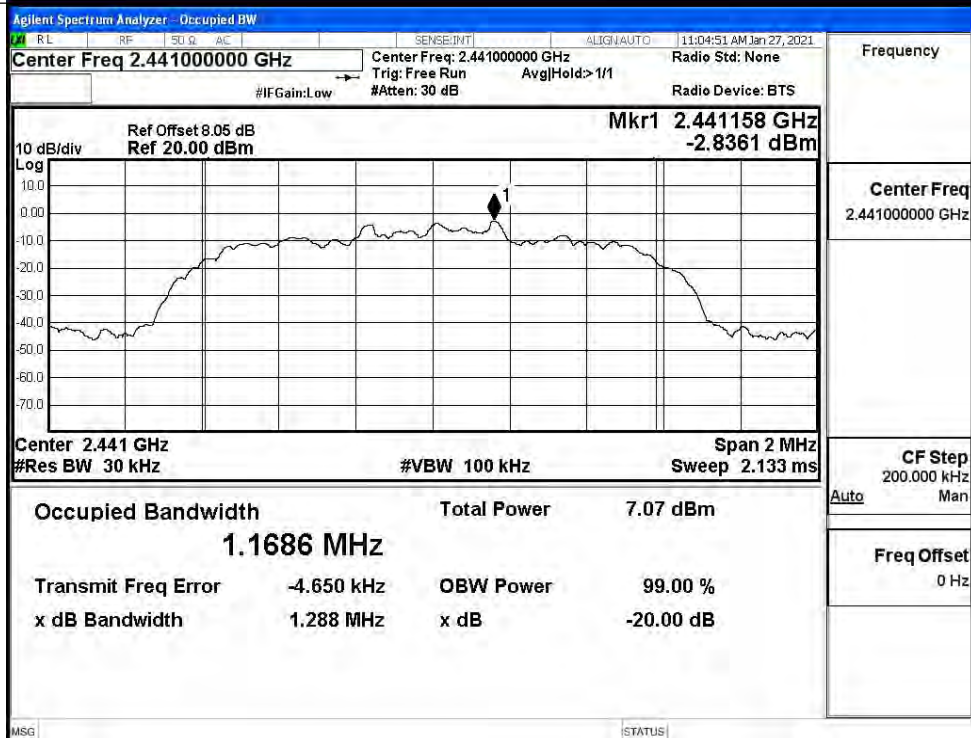


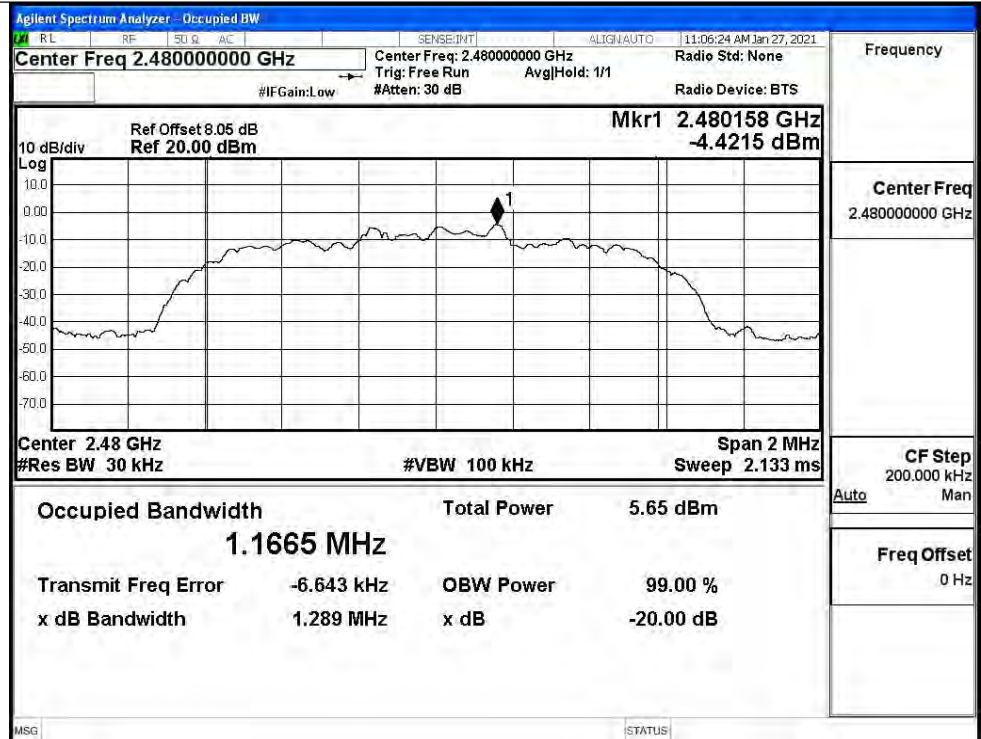
GFSK/MCH



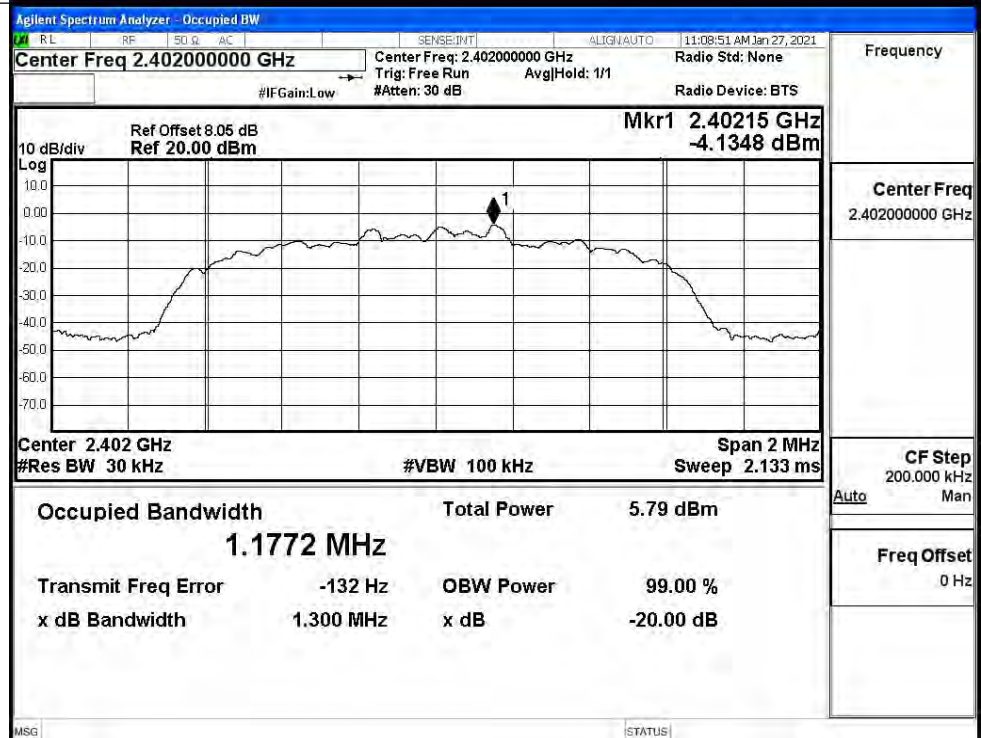
GFSK/HCH



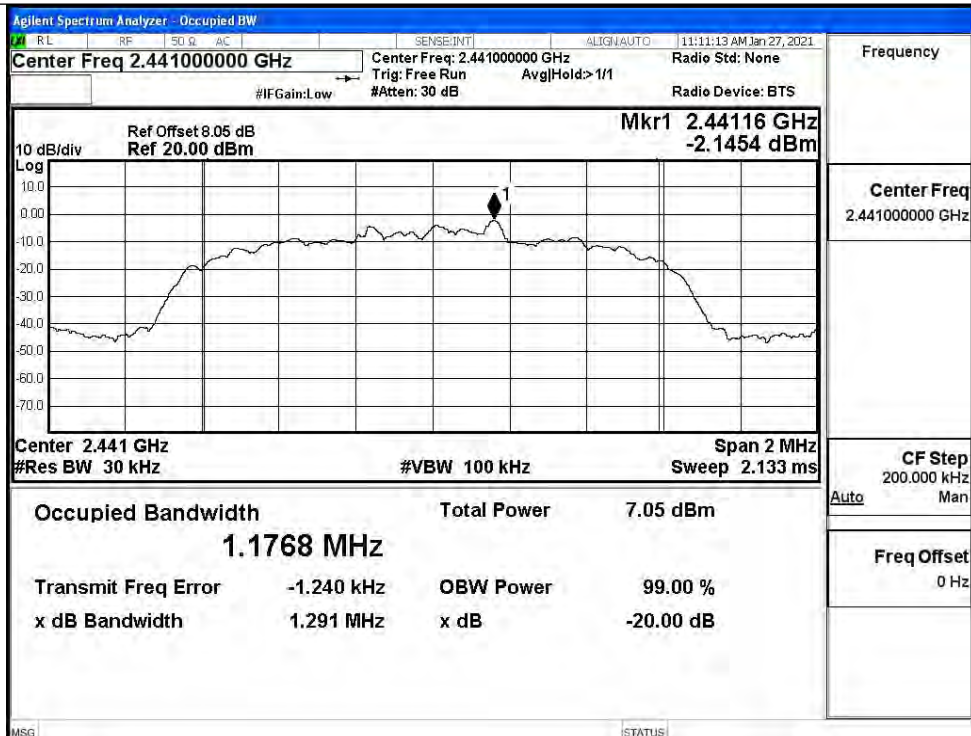
$\pi/4$ DQPSK/LCH $\pi/4$ DQPSK/MCH

$\pi/4$ DQPSK/HCH

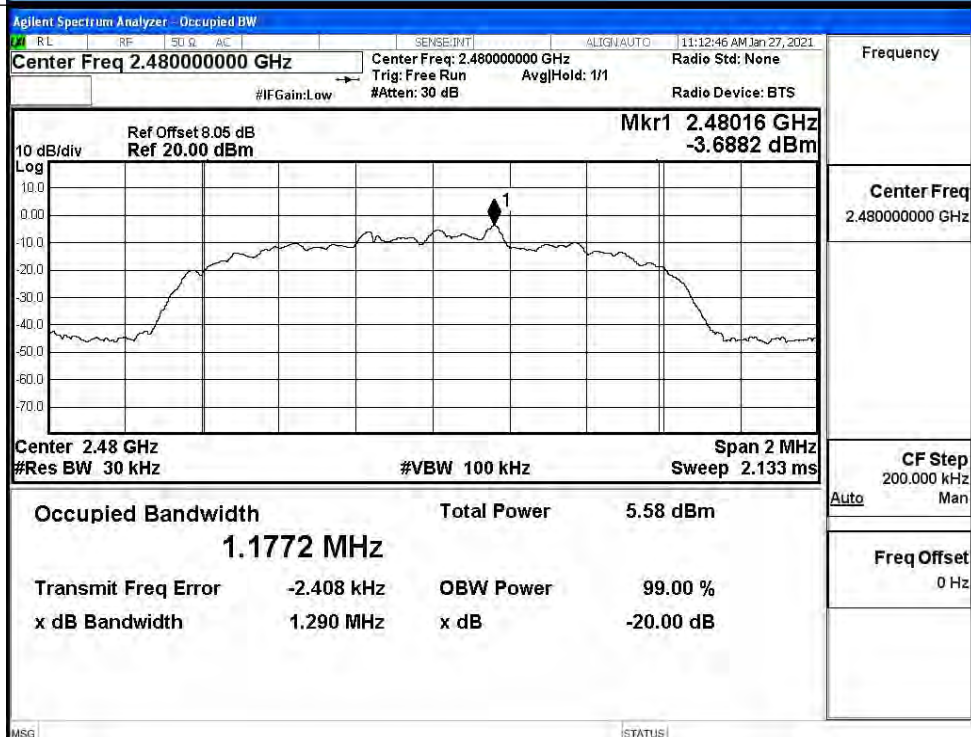
8DPSK/LCH



8DPSK/MCH



8DPSK/HCH

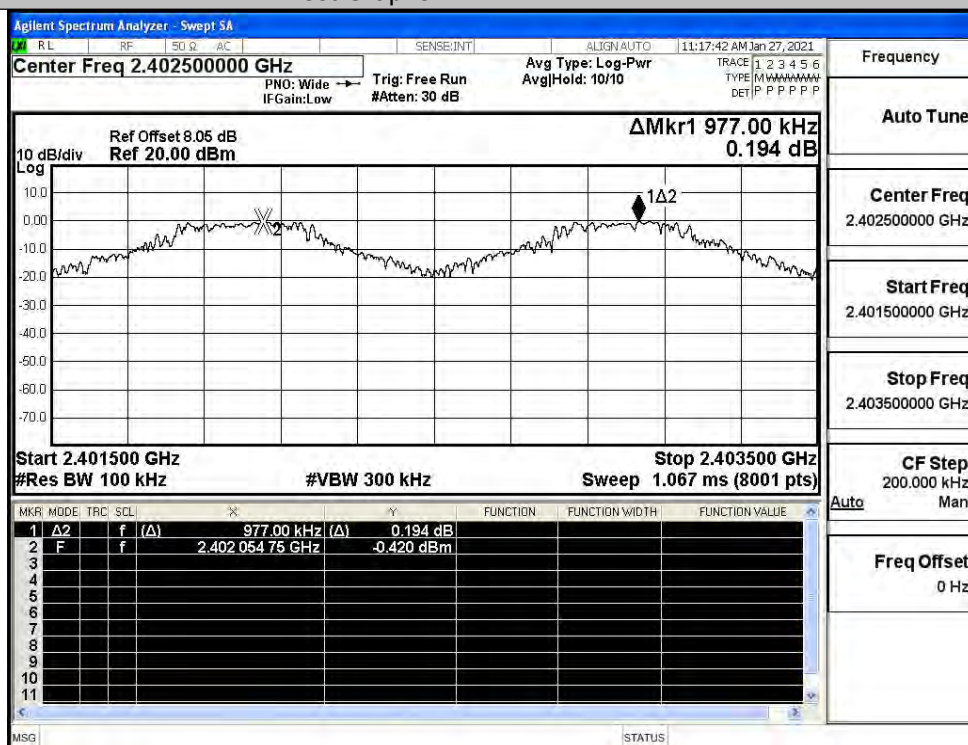


A.3 Carrier Frequency Separation

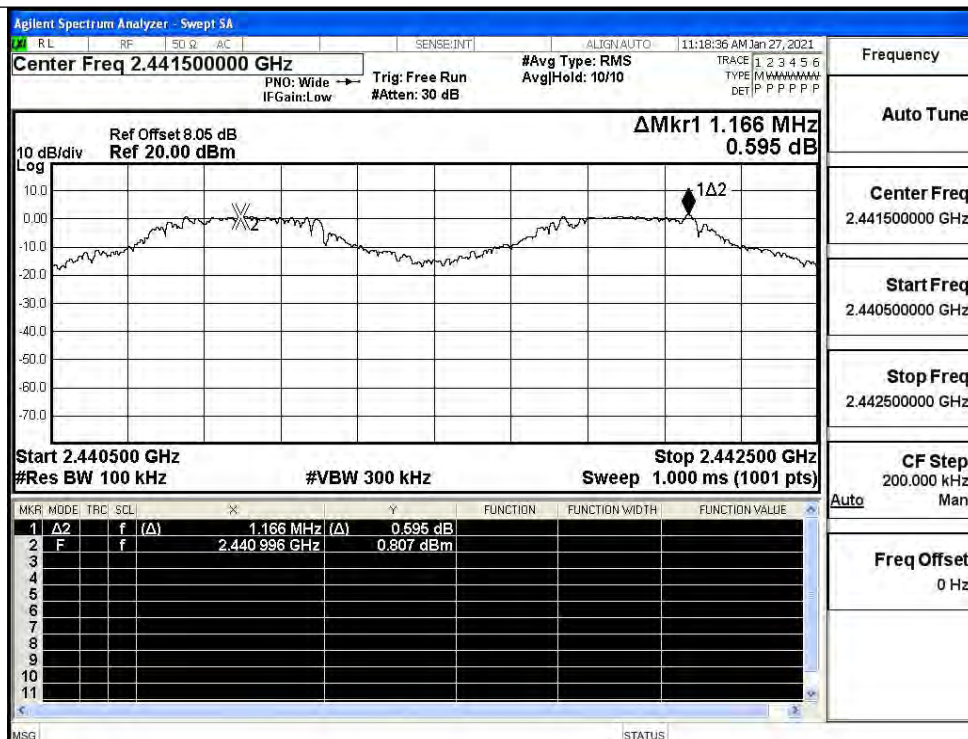
Mode	Channel.	Carrier Frequency Separation [MHz]	Limit [MHz]	Verdict
GFSK	LCH	0.977	0.686	PASS
	MCH	1.166	0.689	PASS
	HCH	1.020	0.693	PASS
$\pi/4$ DQPSK	LCH	1.110	0.859	PASS
	MCH	1.070	0.859	PASS
	HCH	1.026	0.859	PASS
8DPSK	LCH	0.920	0.867	PASS
	MCH	0.984	0.861	PASS
	HCH	0.926	0.860	PASS

Test Graphs

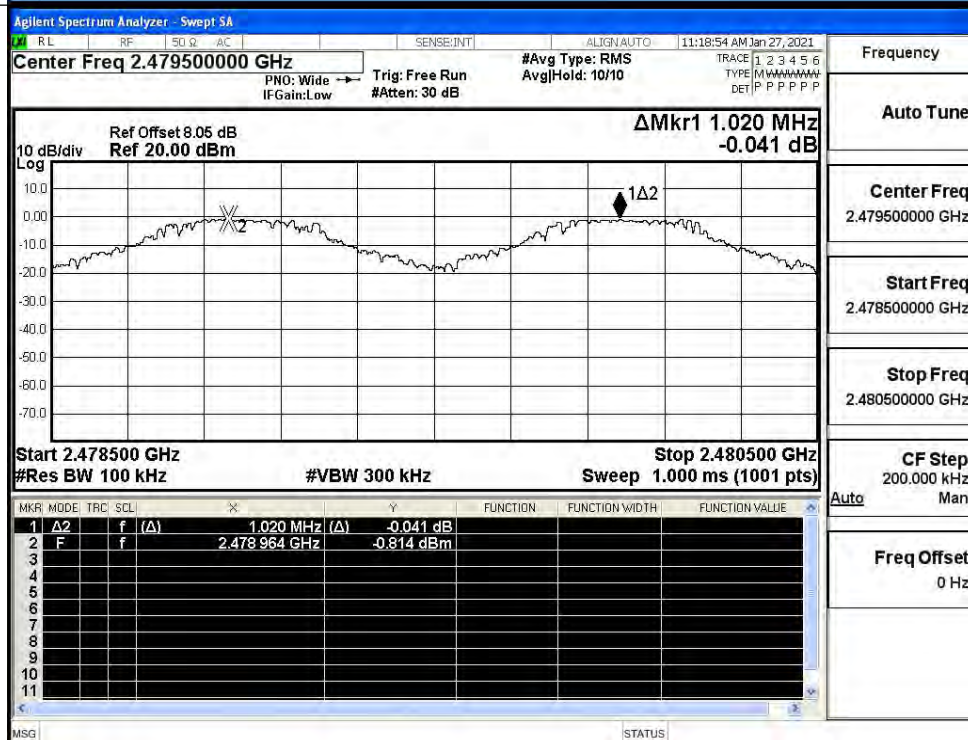
GFSK/LCH

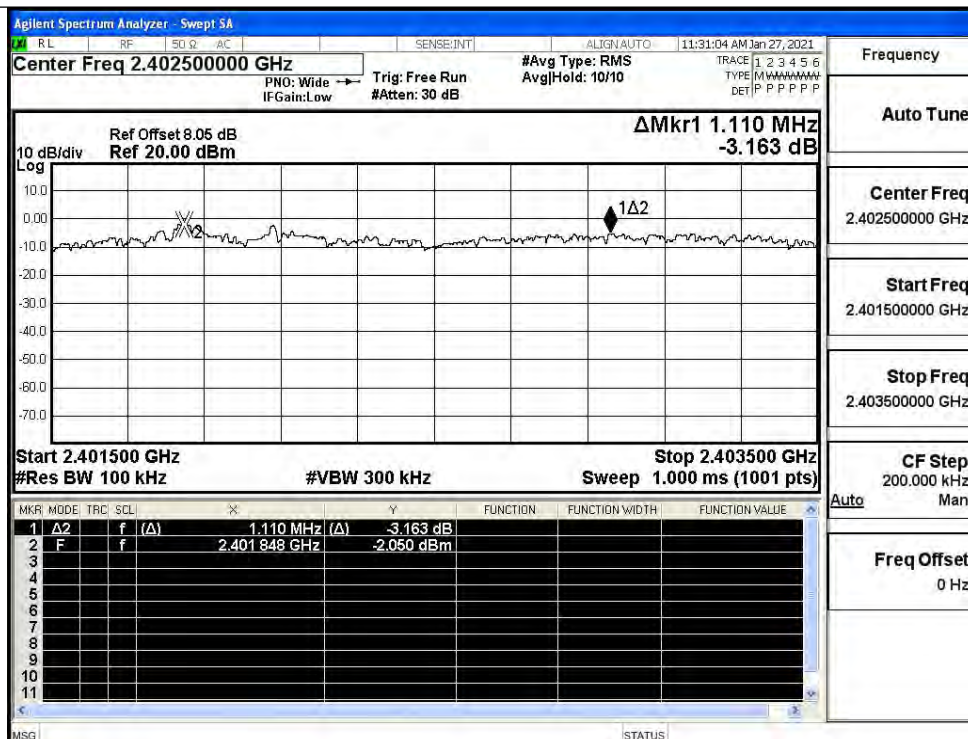
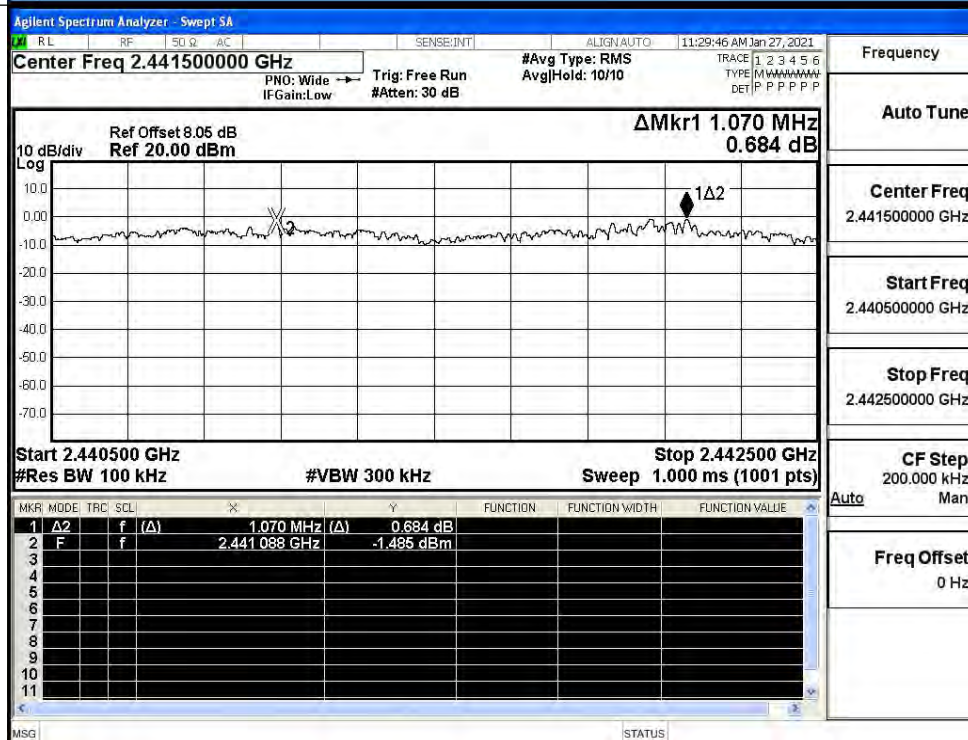


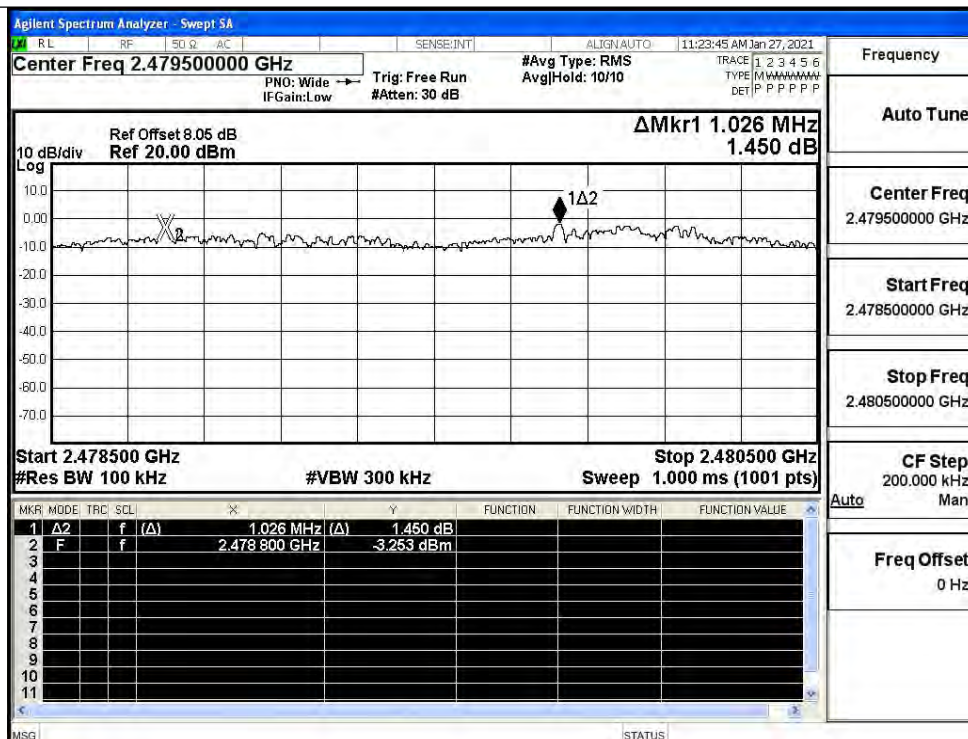
GFSK/MCH



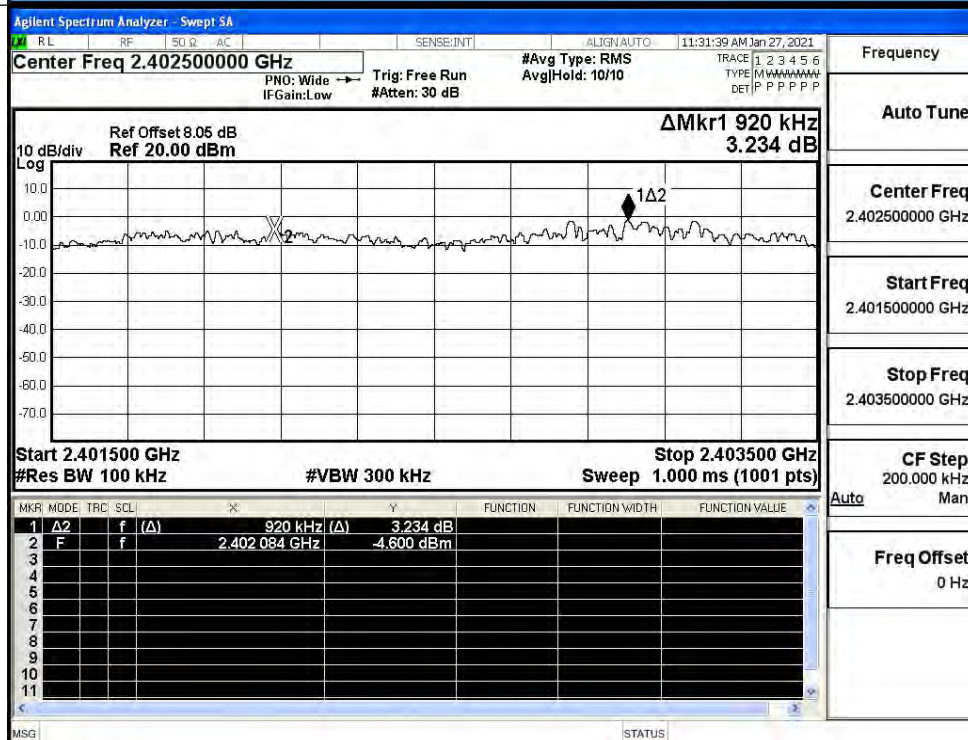
GFSK/HCH



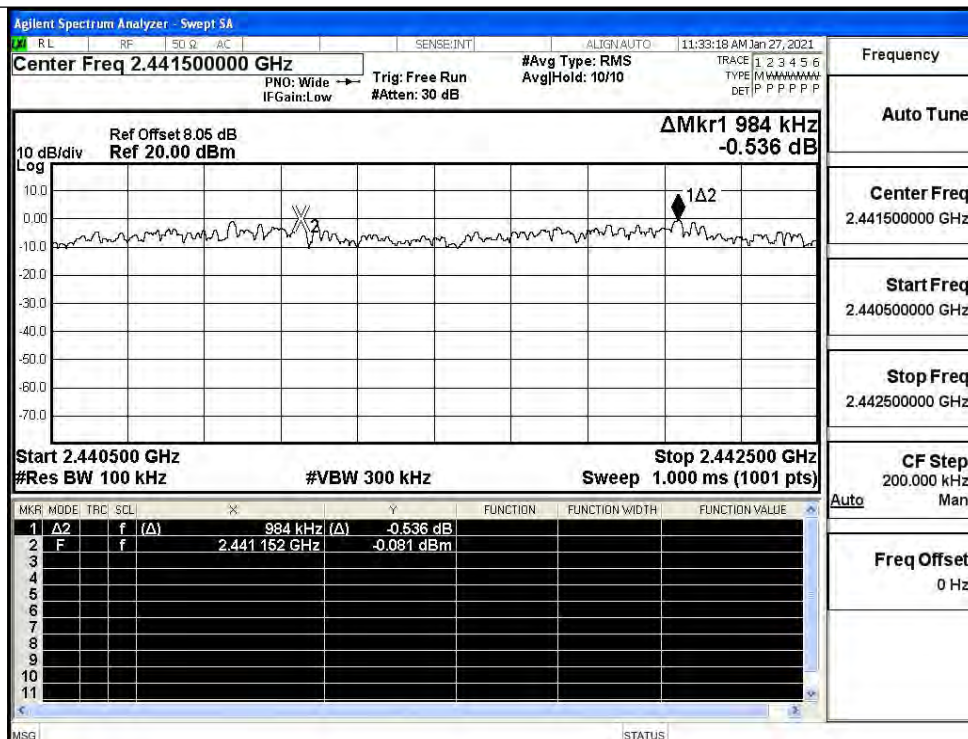
$\pi/4$ DQPSK/LCH $\pi/4$ DQPSK/MCH

$\pi/4$ DQPSK/HCH

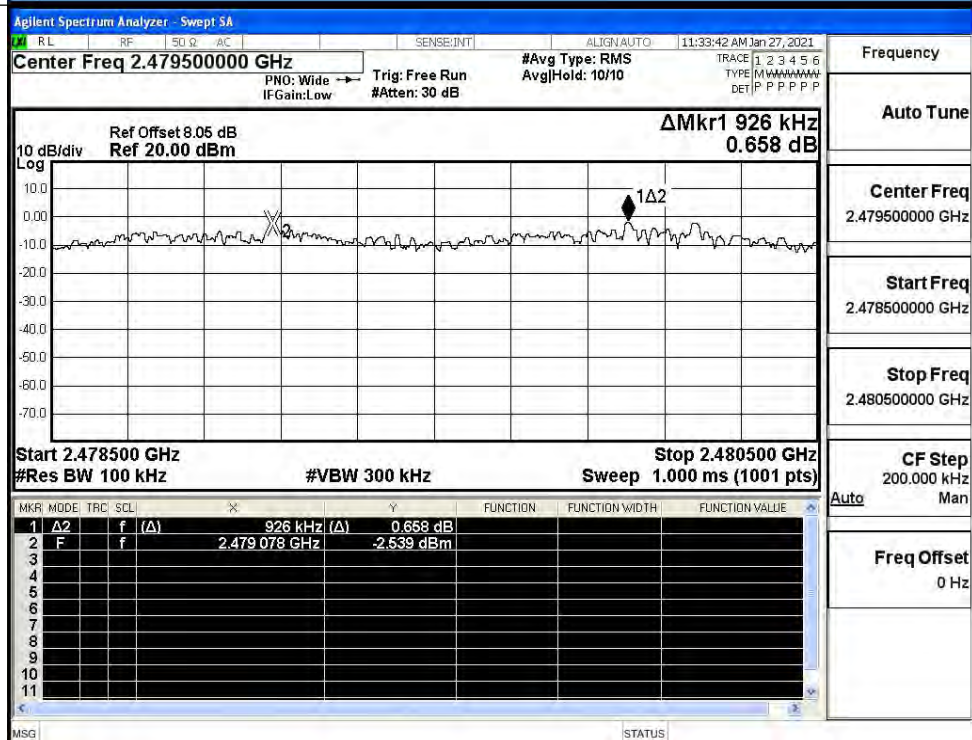
8DPSK/LCH



8DPSK/MCH



8DPSK/HCH

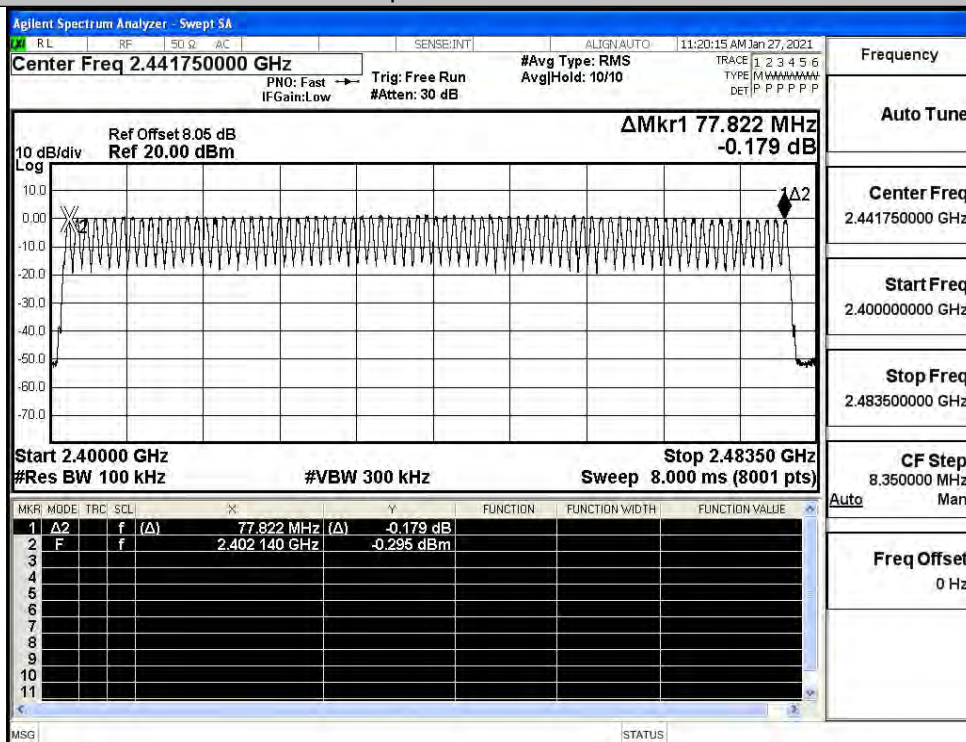
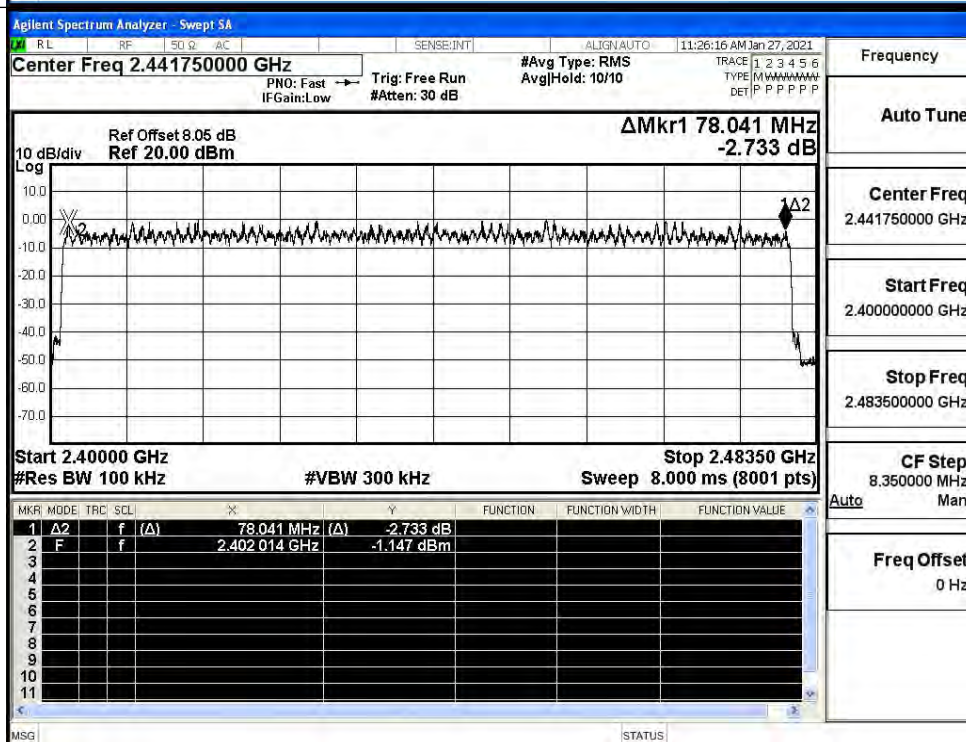


A.4 Hopping Channel Number

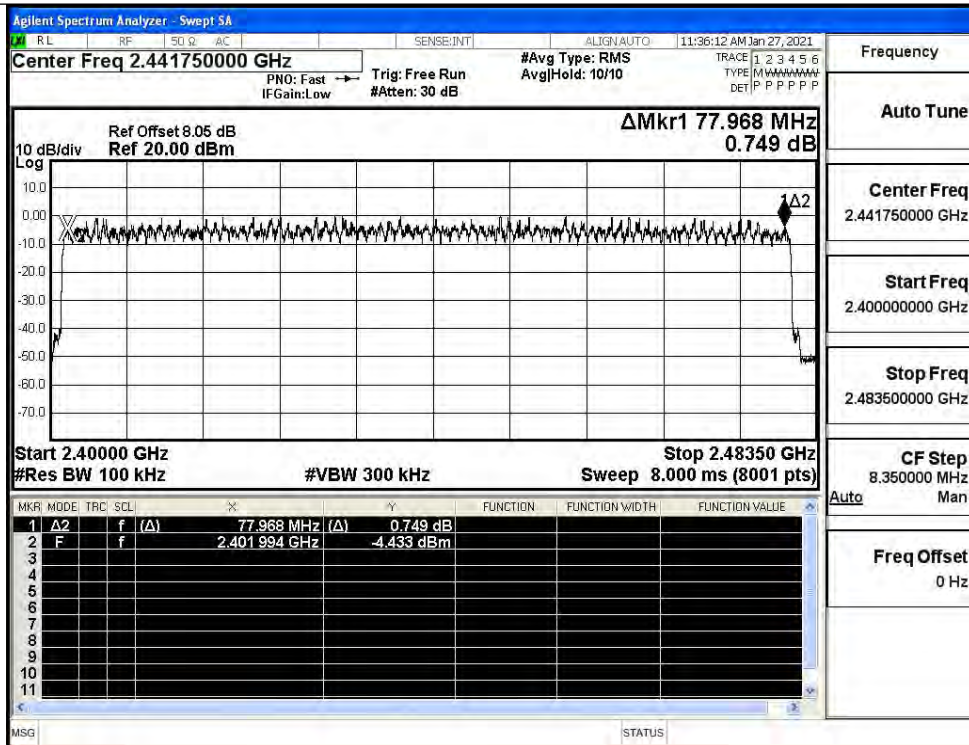
Mode	Channel.	Number of Hopping Channel [N]	Limit [N]	Verdict
GFSK	Hop	79	>=15	PASS
$\pi/4$ DQPSK	Hop	79	>=15	PASS
8DPSK	Hop	79	>=15	PASS

Test Graphs

GFSK/Hop

 $\pi/4$ DQPSK/Hop

8DPSK/Hop

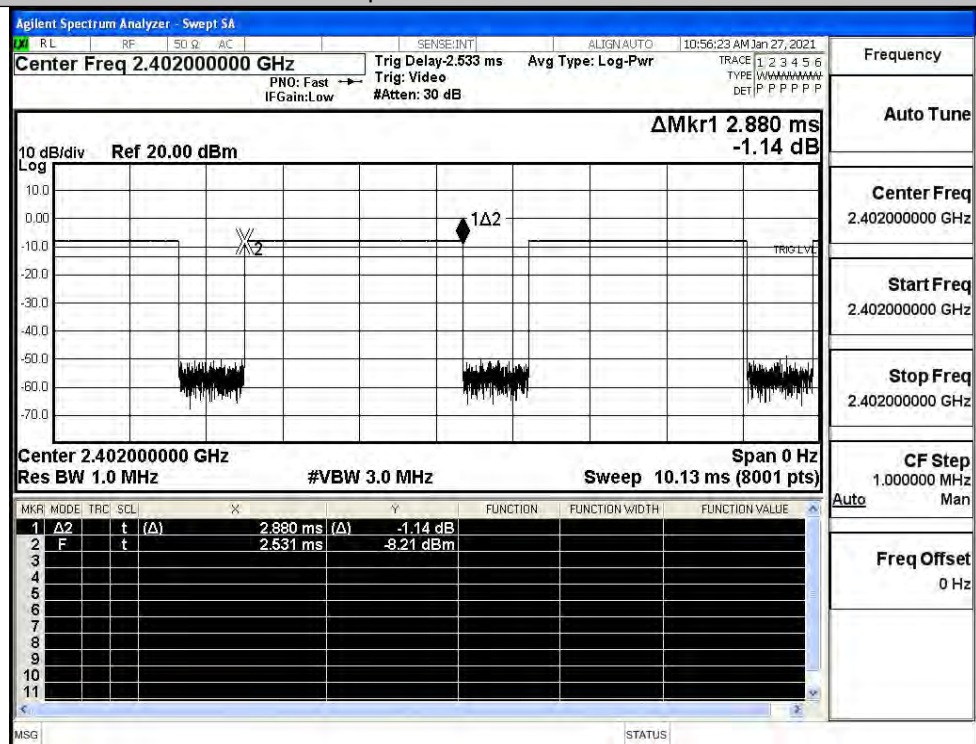


A.5 Dwell Time

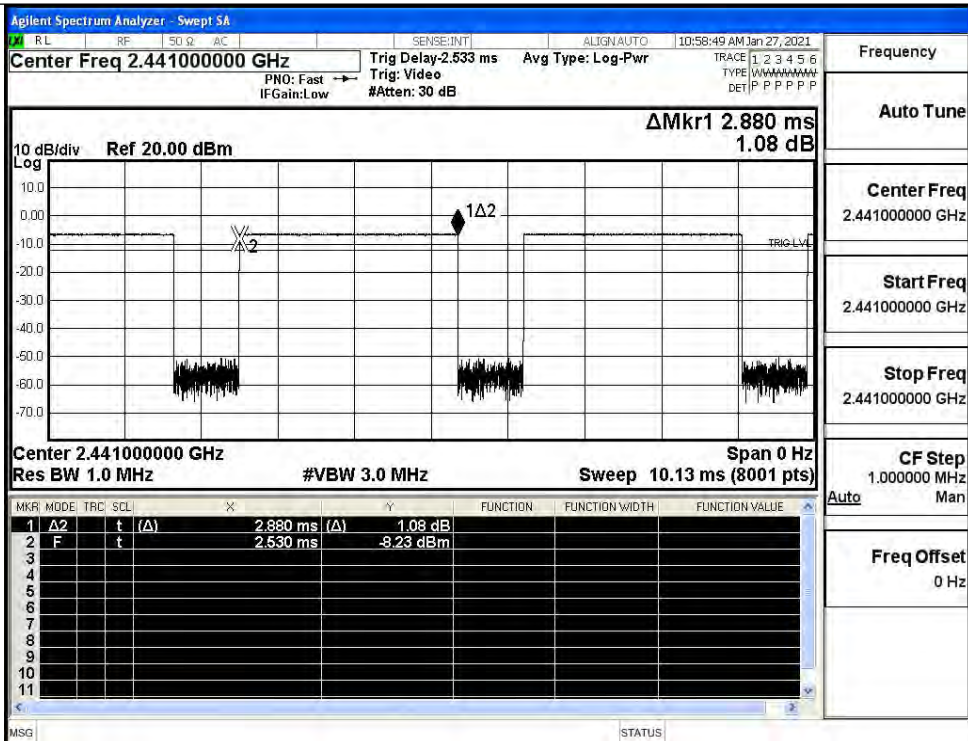
Mode	Packet	Channel	Burst Width [ms/hop/ch]	Total Hops[hop*ch]	Dwell Time[s]	Limit [s]	Verdict
GFSK	DH5	LCH	2.88	106.7	0.307	0.4	PASS
	DH5	MCH	2.88	106.7	0.307	0.4	PASS
	DH5	HCH	2.88	106.7	0.307	0.4	PASS
$\pi/4$ DQPSK	2DH5	LCH	2.88	106.7	0.307	0.4	PASS
	2DH5	MCH	2.88	106.7	0.307	0.4	PASS
	2DH5	HCH	2.88	106.7	0.307	0.4	PASS
8DPSK	3DH5	LCH	2.89	106.7	0.308	0.4	PASS
	3DH5	MCH	2.89	106.7	0.308	0.4	PASS
	3DH5	HCH	2.89	106.7	0.308	0.4	PASS

Test Graphs

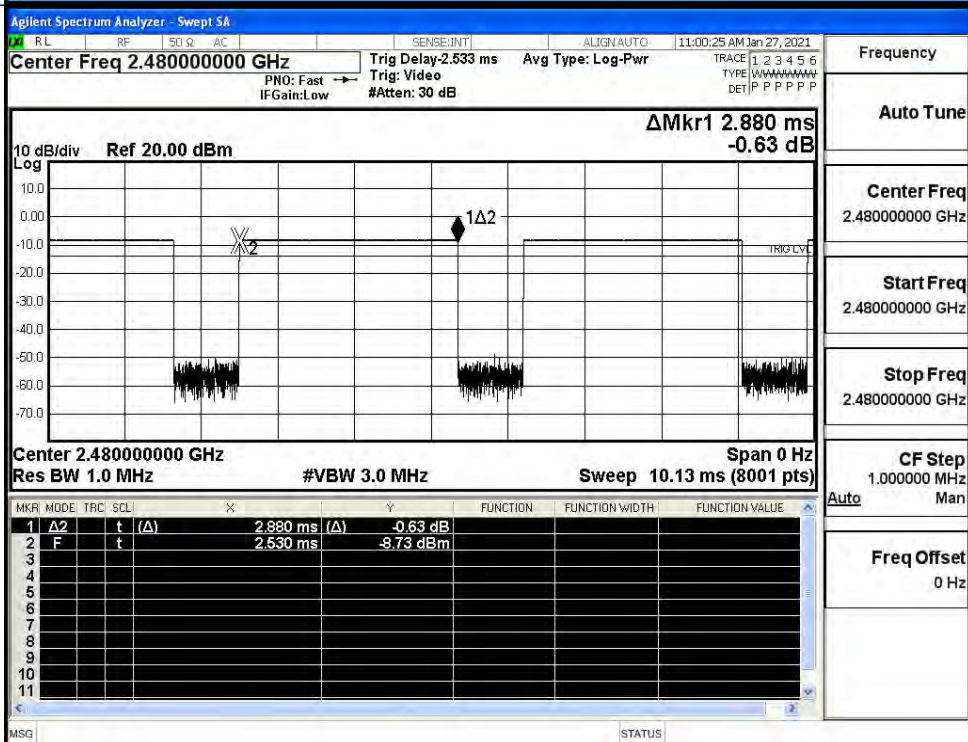
GFSK_DH5/LCH



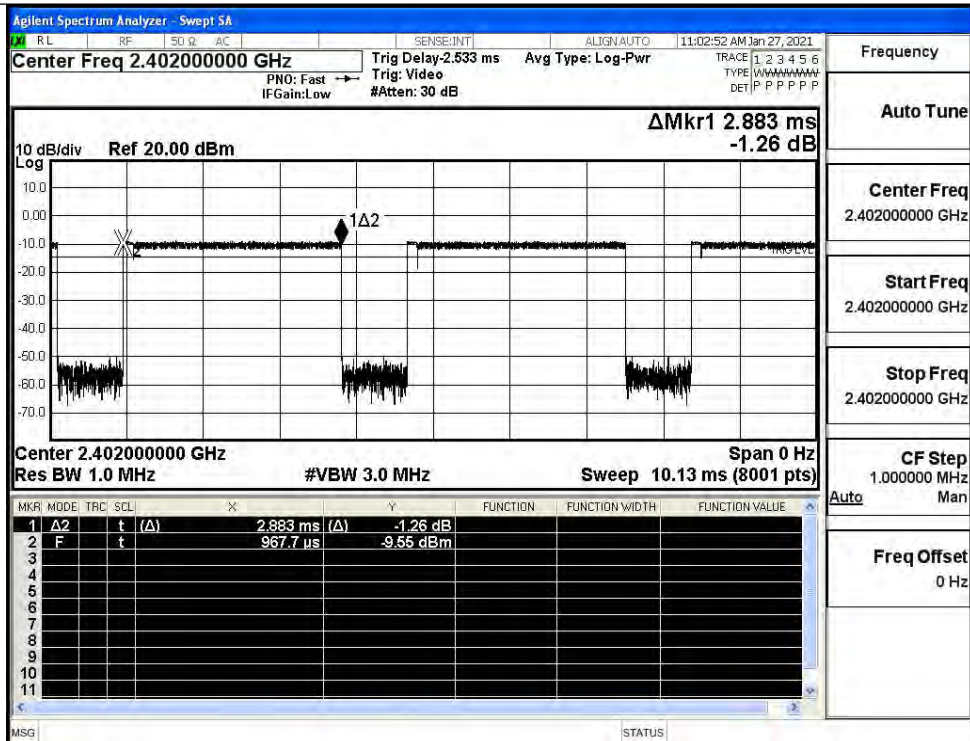
GFSK_DH5/MCH



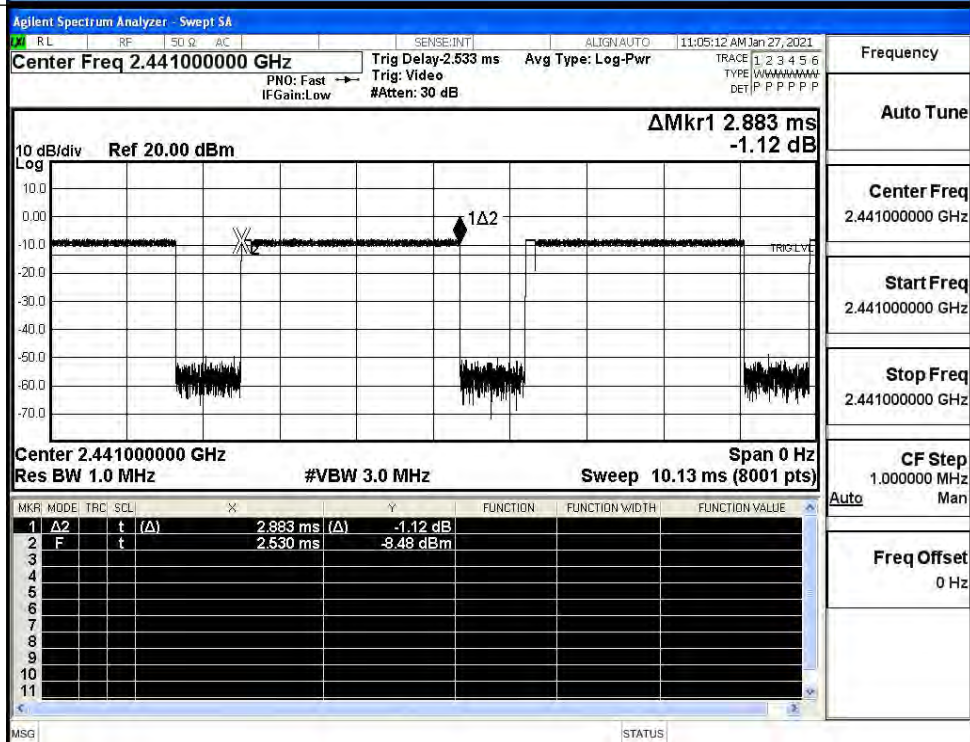
GFSK_DH5/HCH



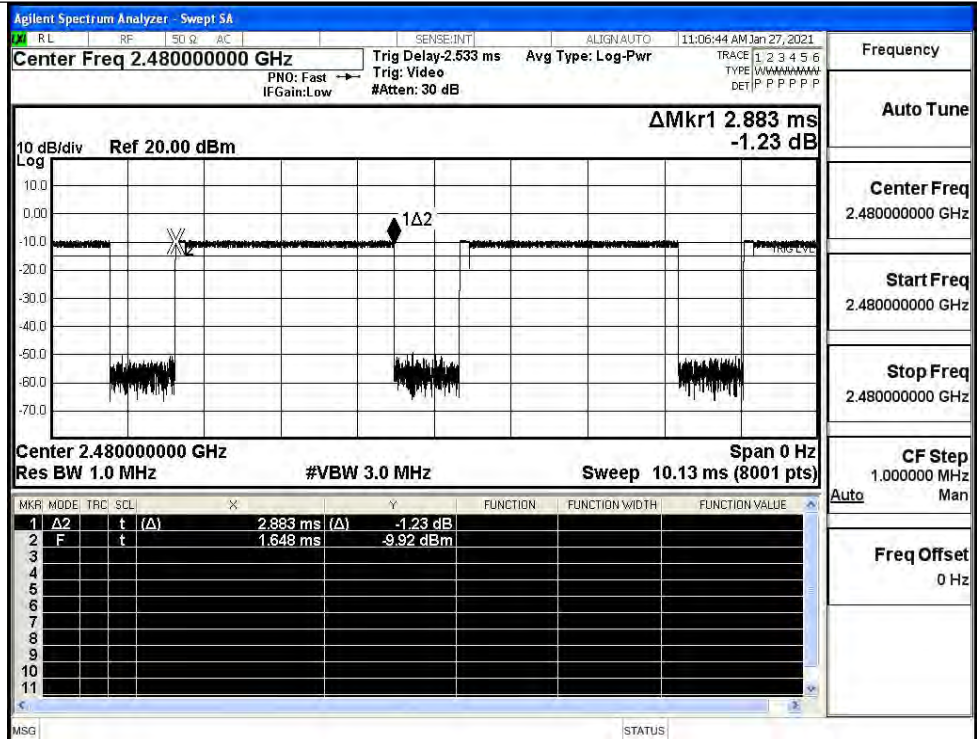
$\pi/4$ DQPSK
_2DH5/LCH



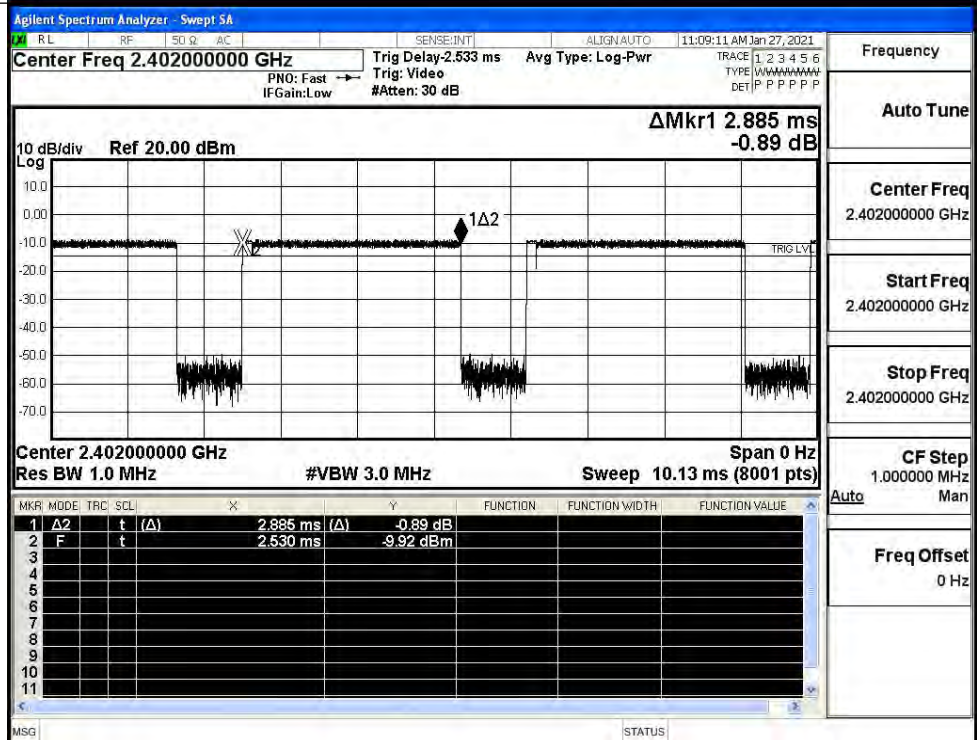
$\pi/4$ DQPSK
_2DH5/MCH



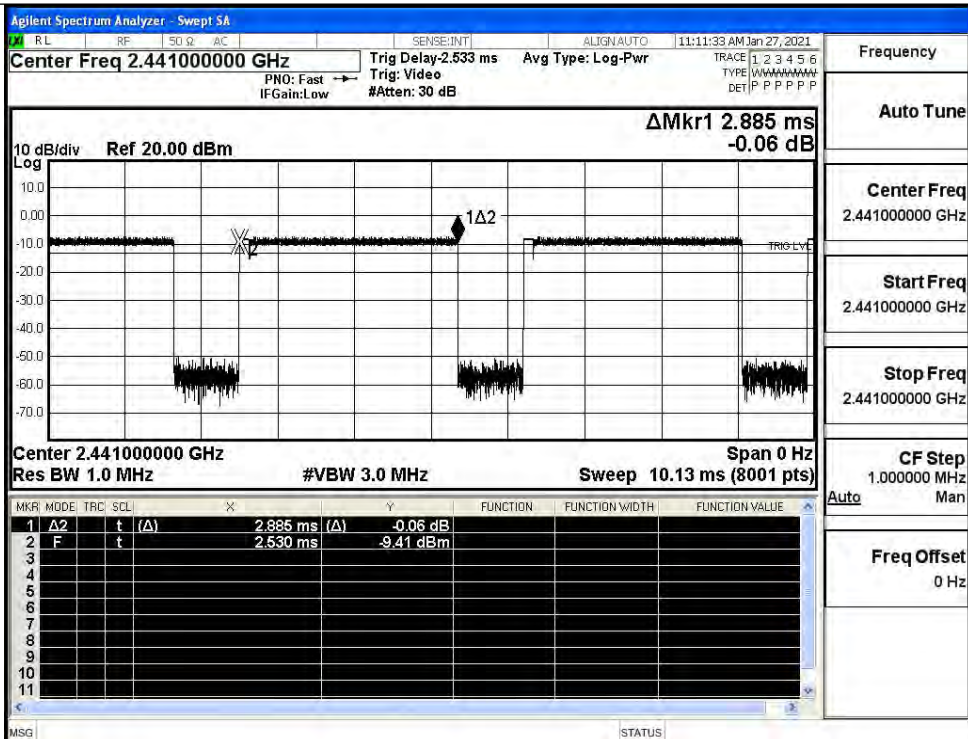
$\pi/4$ DQPSK
_2DH5/HCH



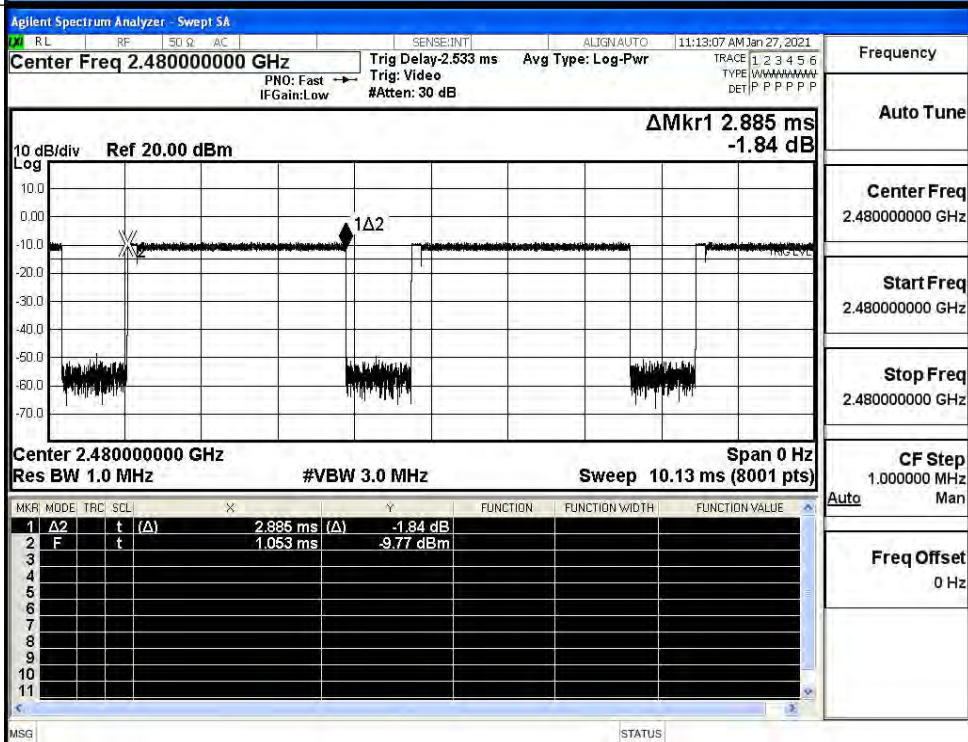
8DPSK _3DH5/LCH



8DPSK_3DH5/MCH



8DPSK_3DH5/HCH

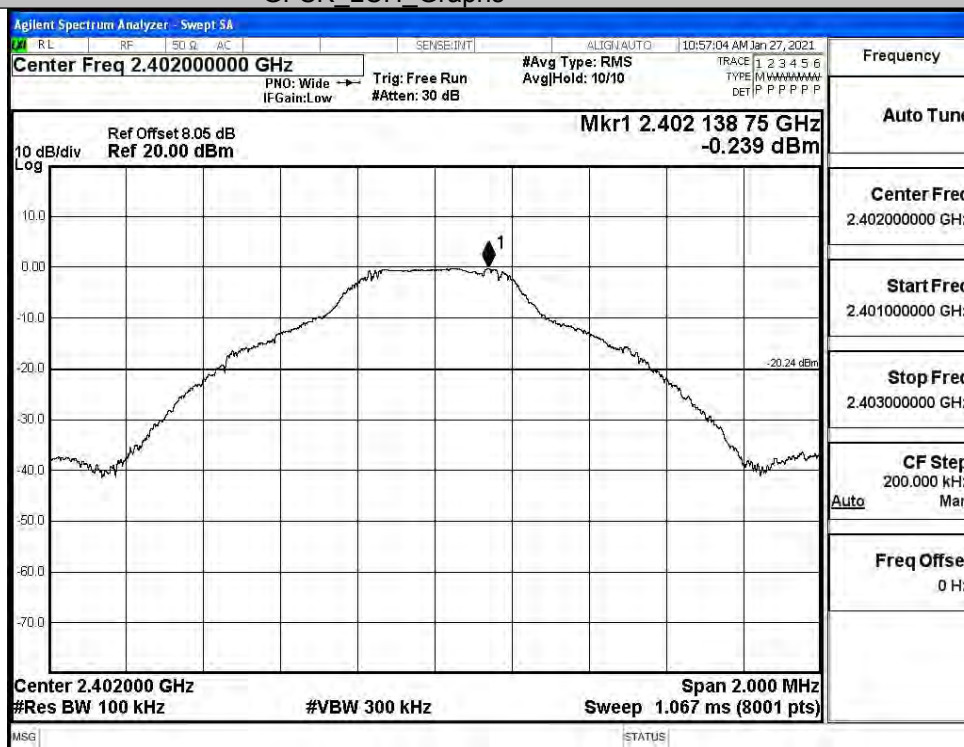


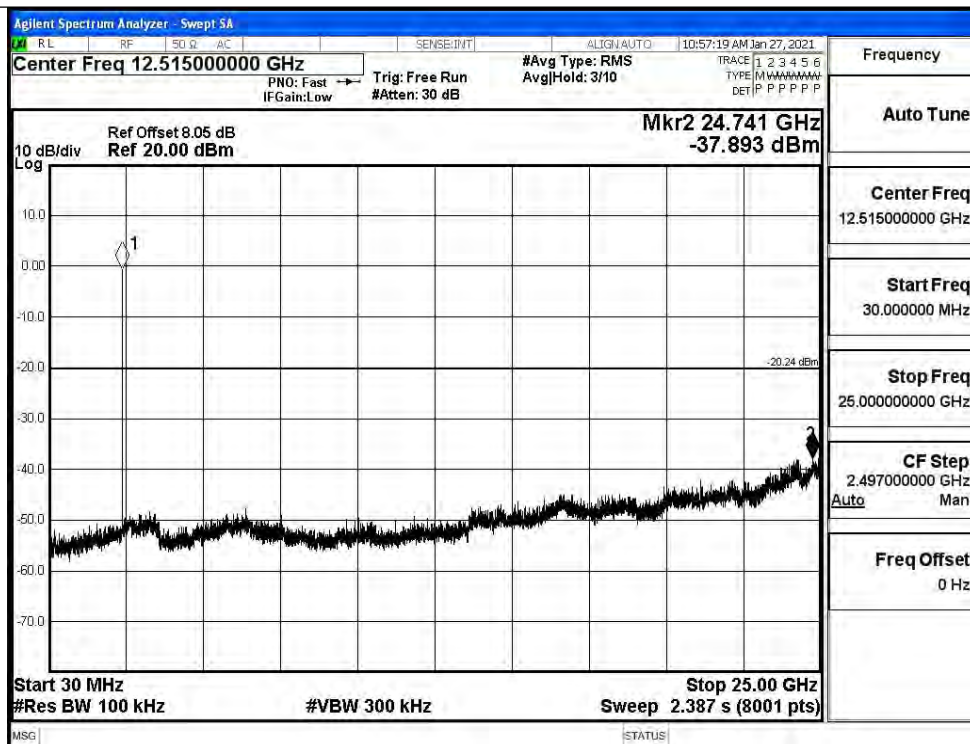
A.6 RF Conducted Spurious Emissions

Mode	Channel	Pref [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
GFSK	LCH	-0.239	-37.893	-20.239	PASS
	MCH	1.303	-38.208	-18.697	PASS
	HCH	-0.458	-38.089	-20.458	PASS
$\pi/4$ DQPSK	LCH	-1.492	-38.251	-21.492	PASS
	MCH	-0.292	-38.174	-20.292	PASS
	HCH	-1.57	-38.055	-21.570	PASS
8DPSK	LCH	-1.238	-38.018	-21.238	PASS
	MCH	-0.075	-37.519	-20.075	PASS
	HCH	-1.996	-37.120	-21.996	PASS

GFSK LCH Graphs

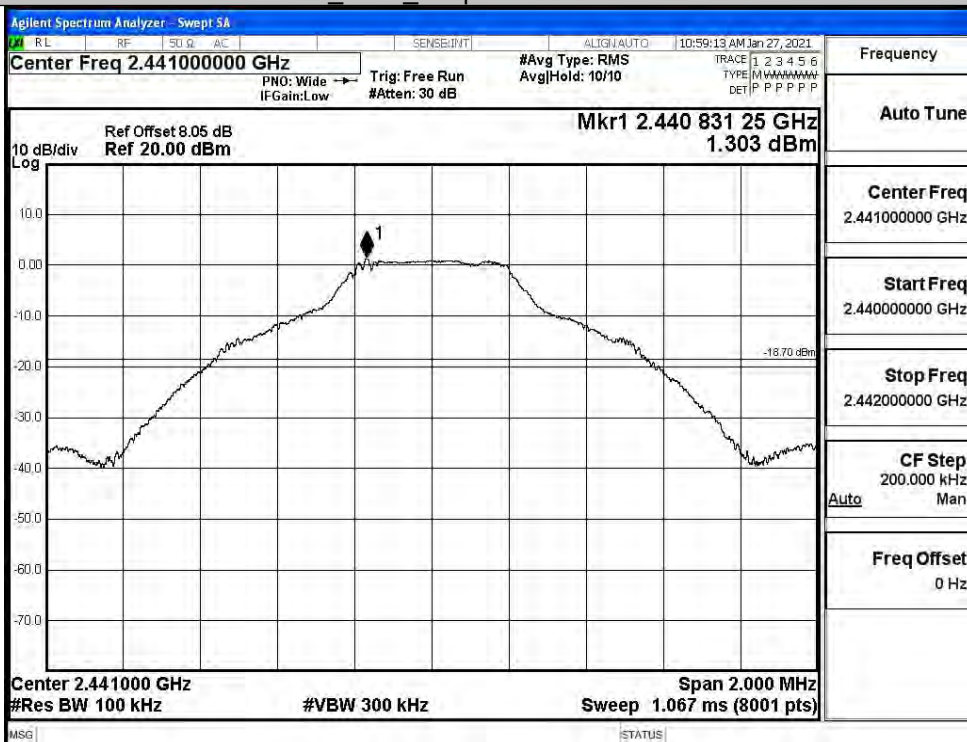
Pref





GFSK_MCH_Graphs

Pref

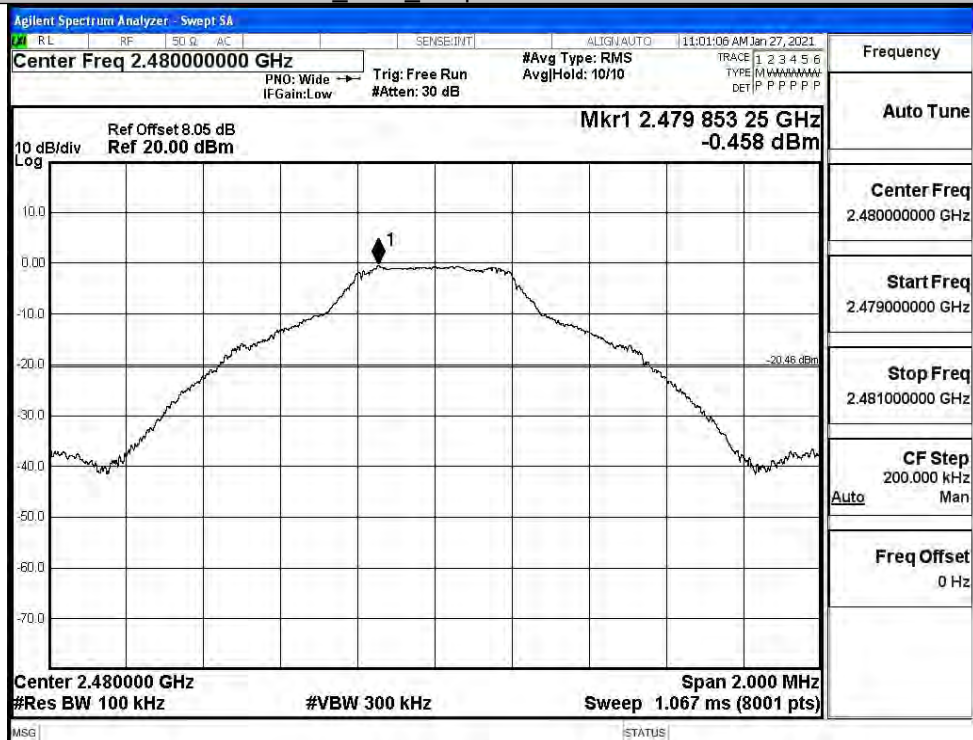


Puw

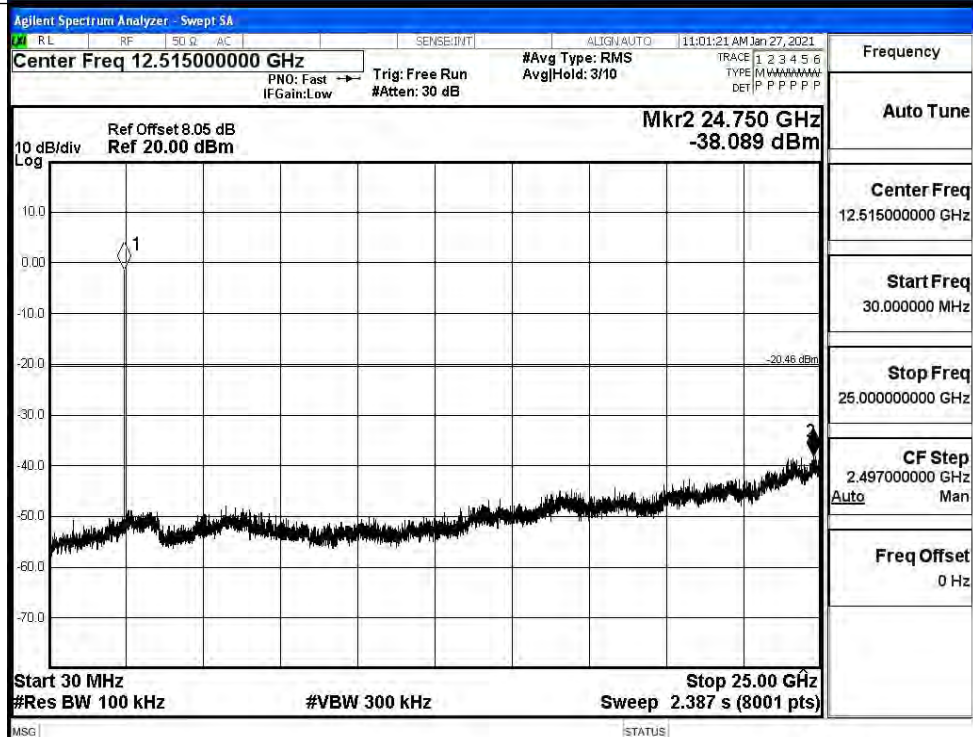


GFSK_HCH_Graphs

Pref

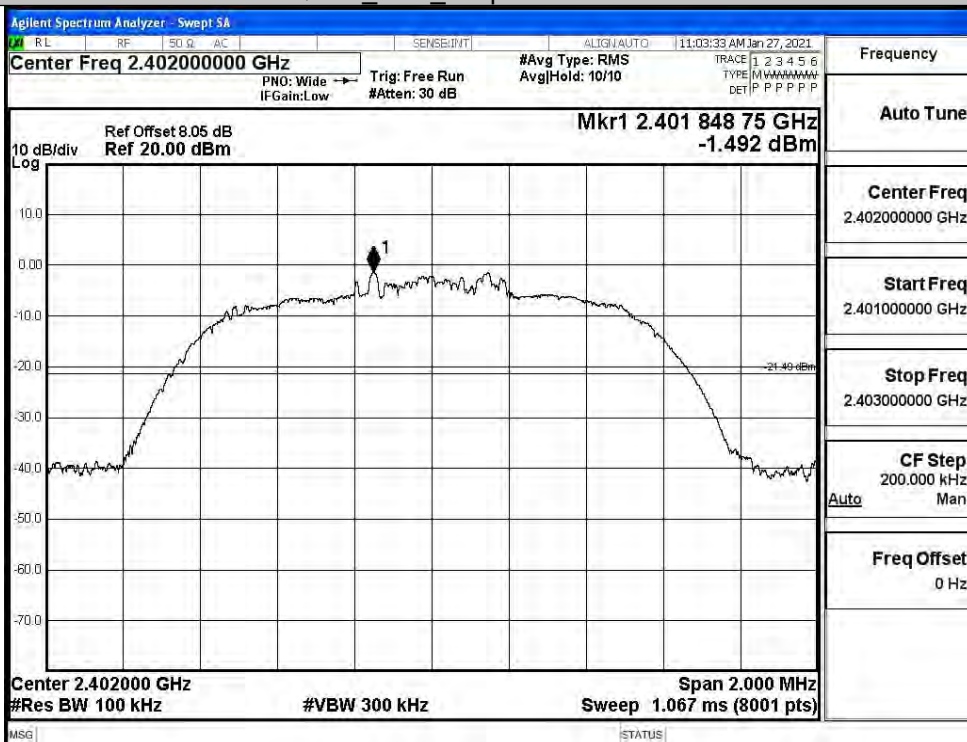


Puw

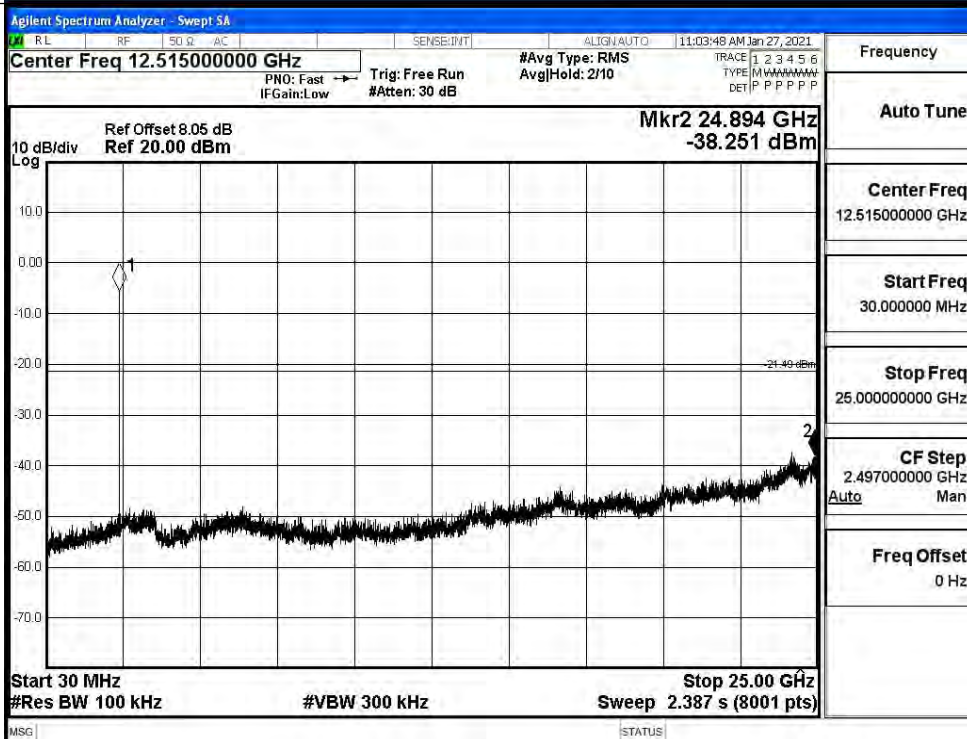


$\pi/4$ DQPSK_LCH_Graphs

Pref

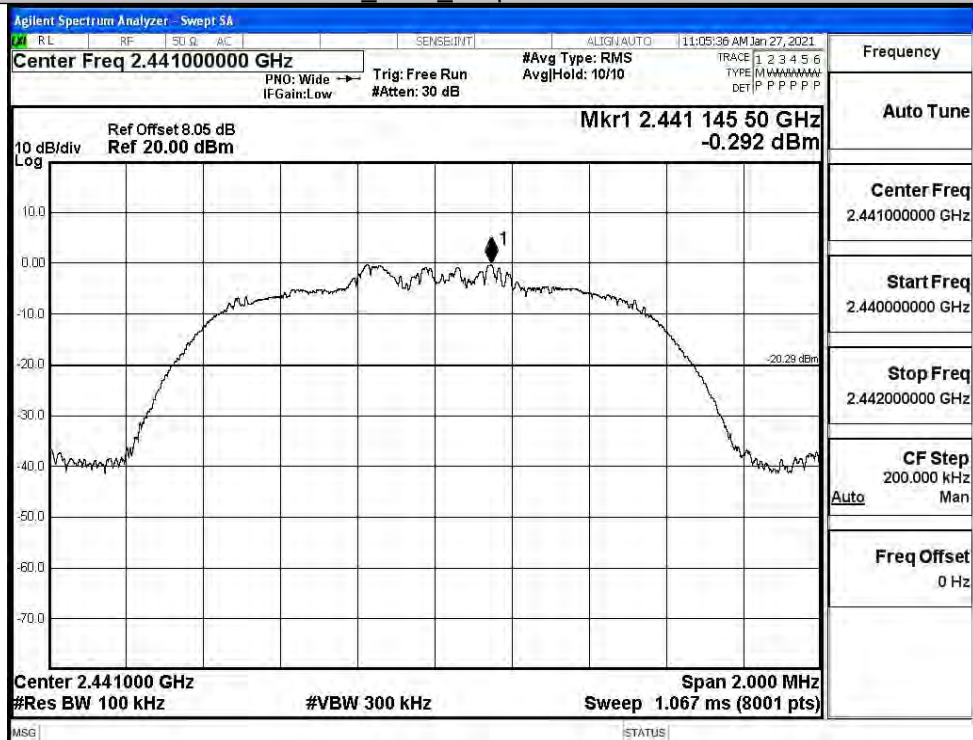


Puw

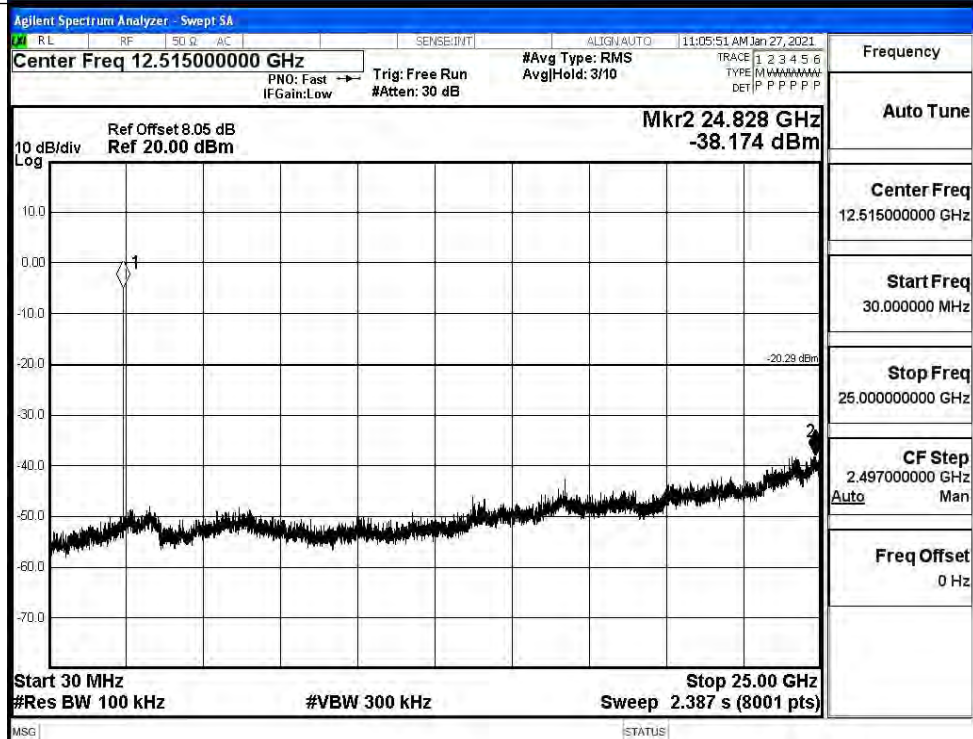


π /4DQPSK_MCH_Graphs

Pref

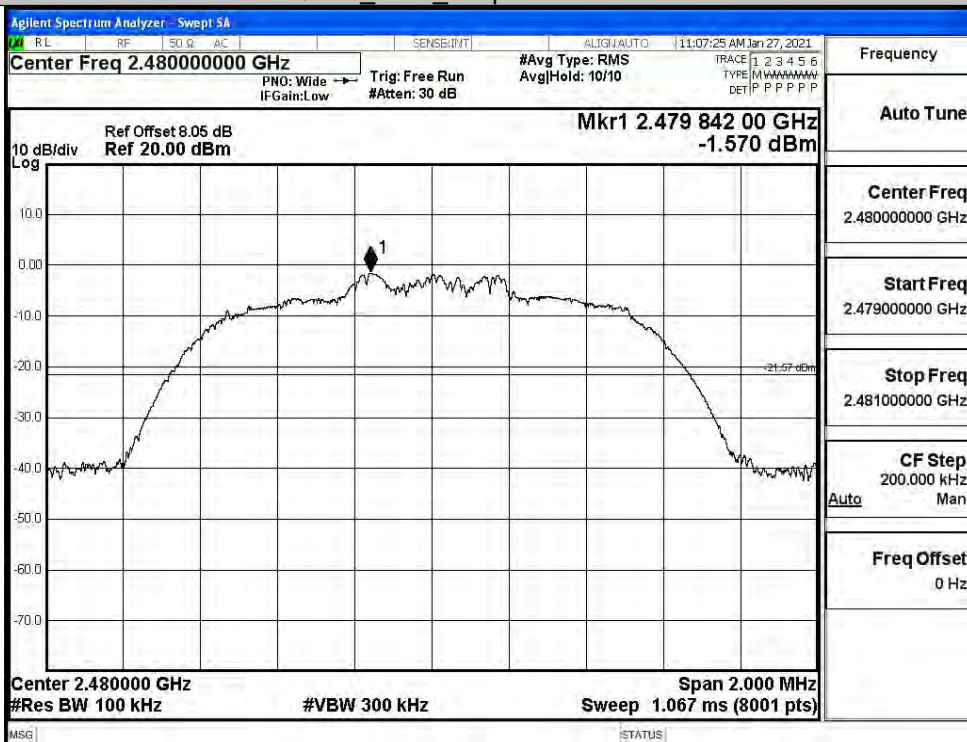


Puw

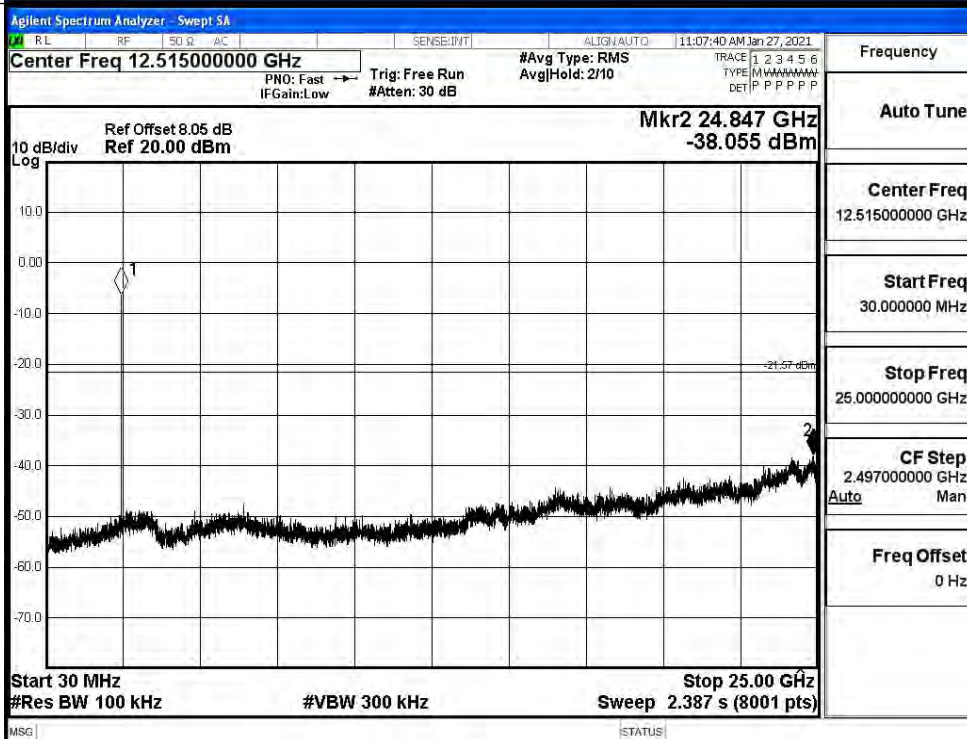


$\pi/4$ DQPSK_HCH_Graphs

Pref

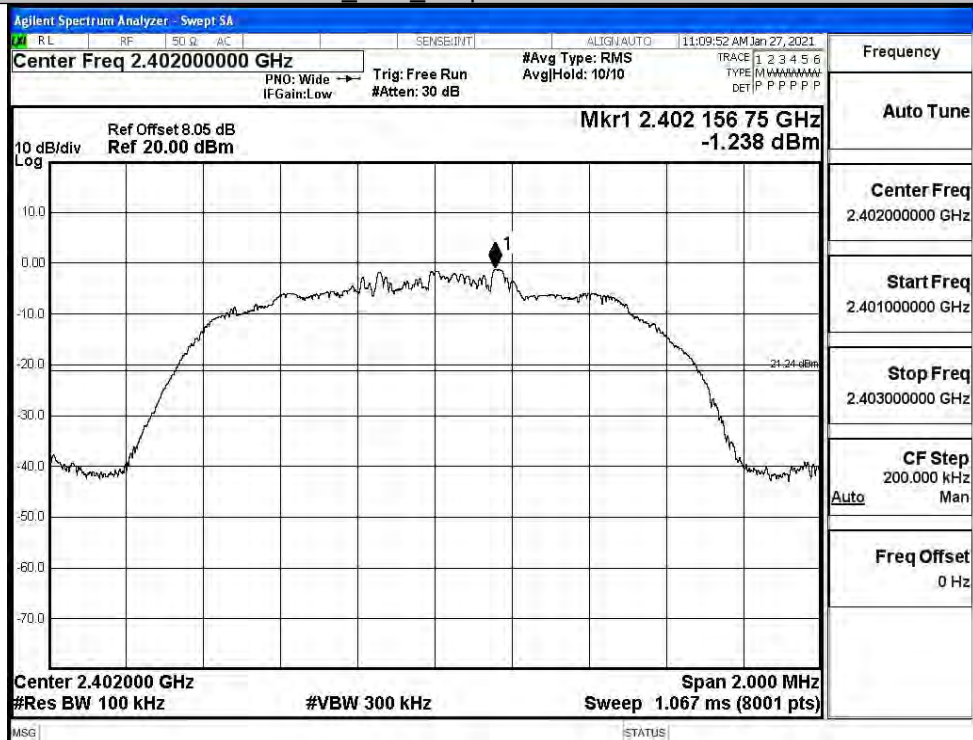


Puw

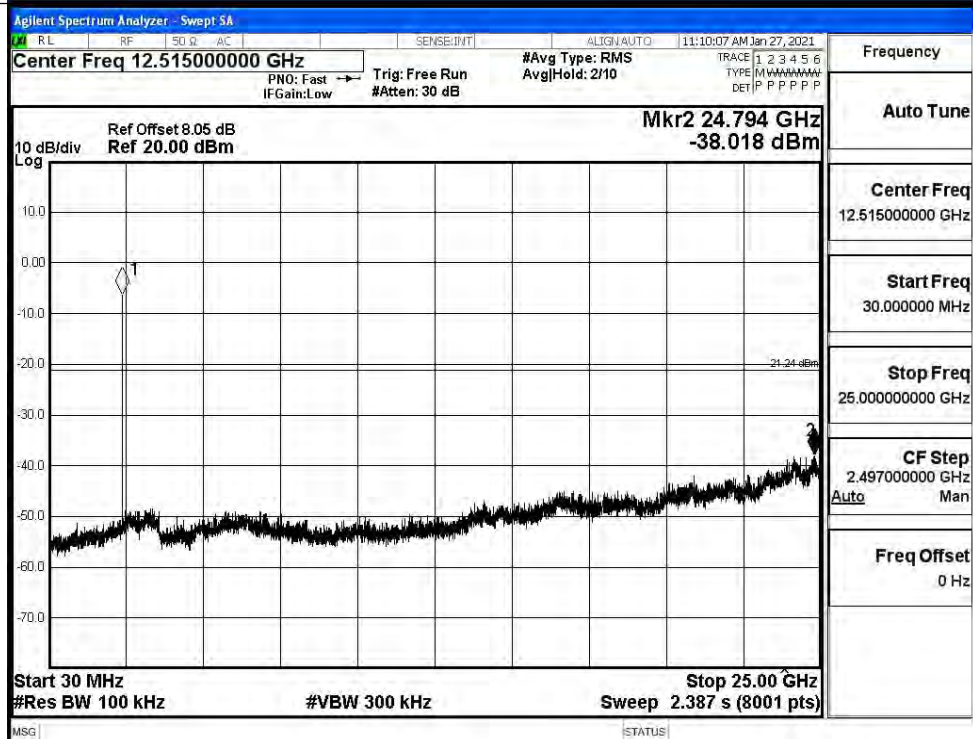


8DPSK_LCH_Graphs

Pref

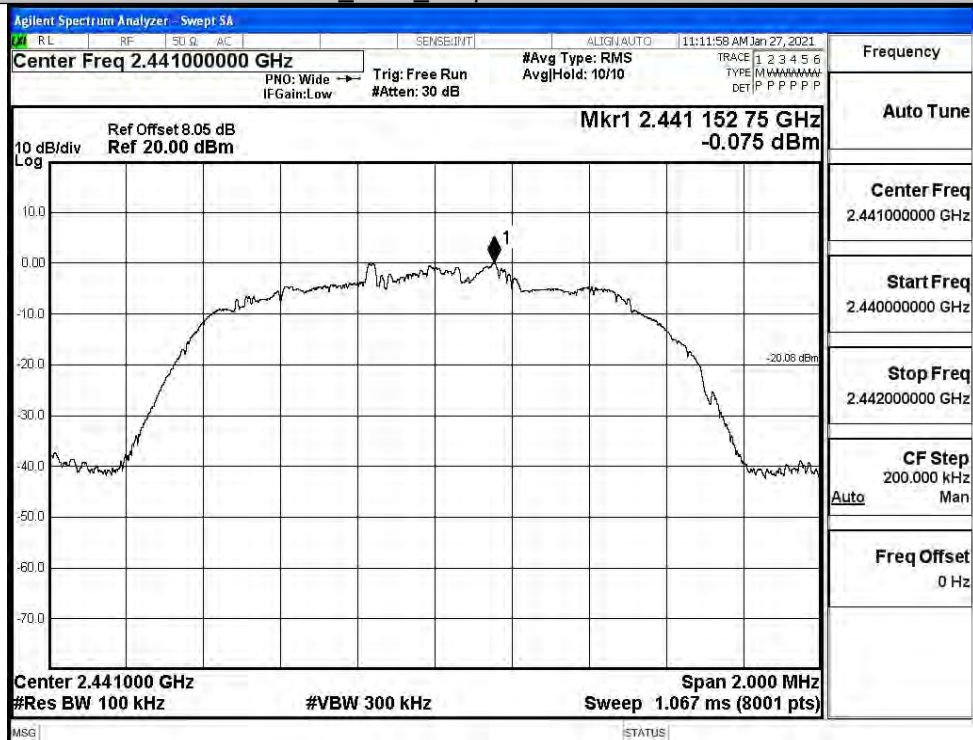


Puw

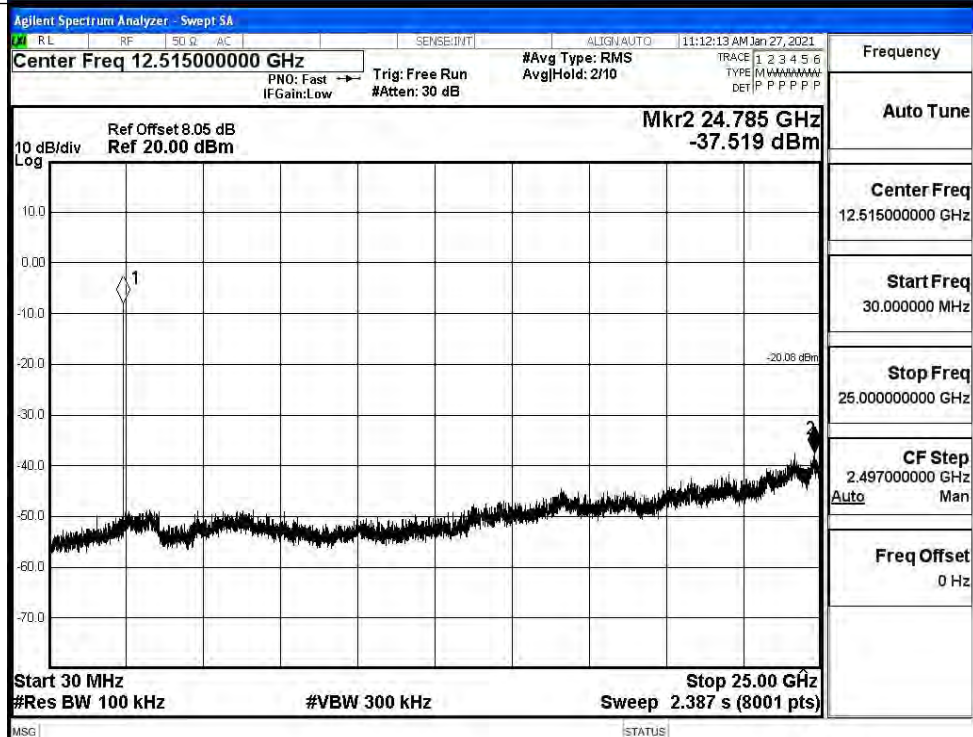


8DPSK_MCH_Graphs

Pref

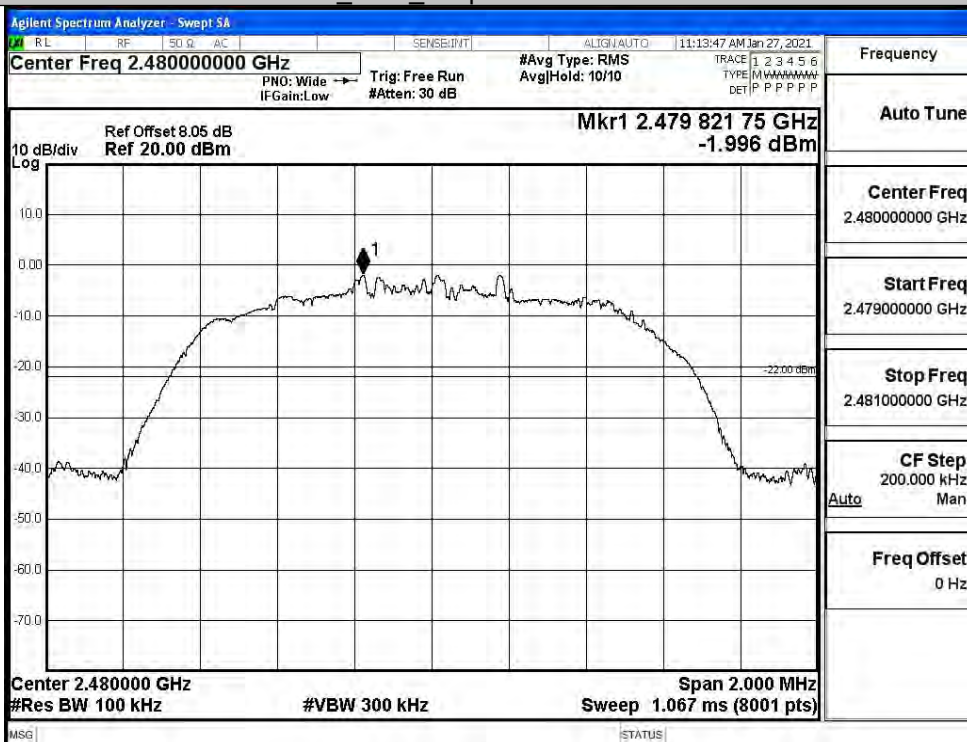


Puw

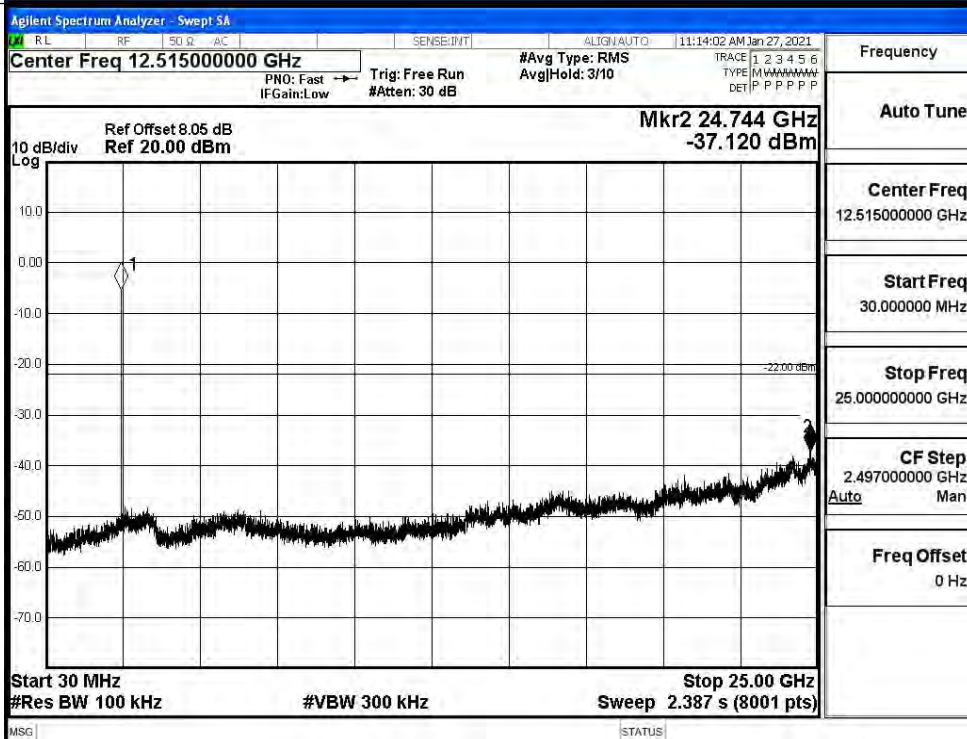


8DPSK_HCH_Graphs

Pref



Puw

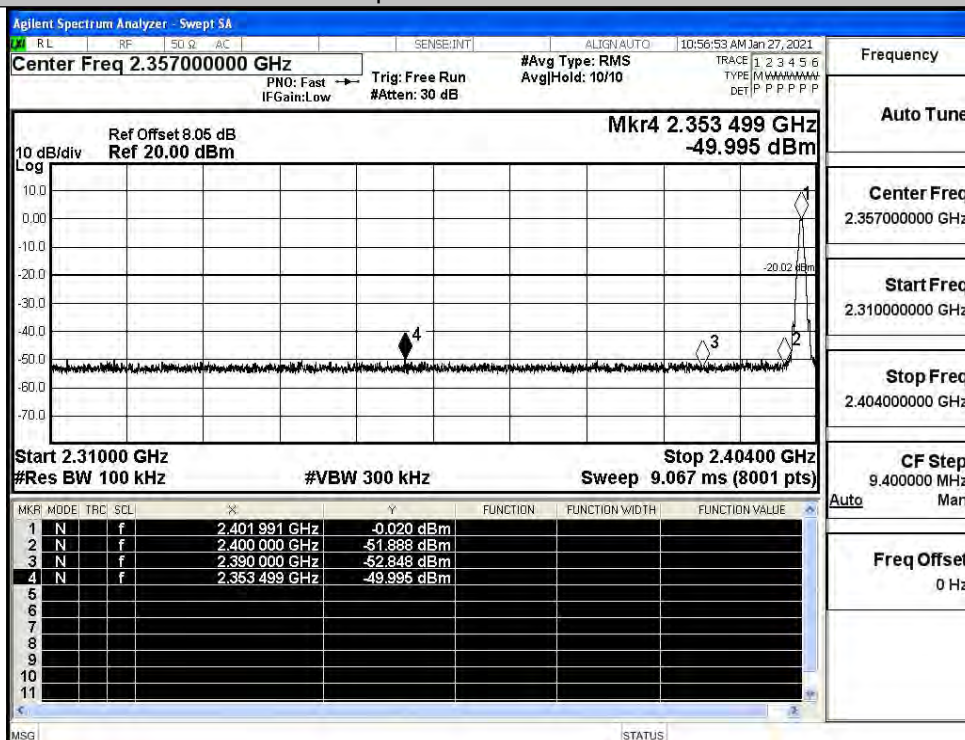


A.7 Band-edge for RF Conducted Emissions

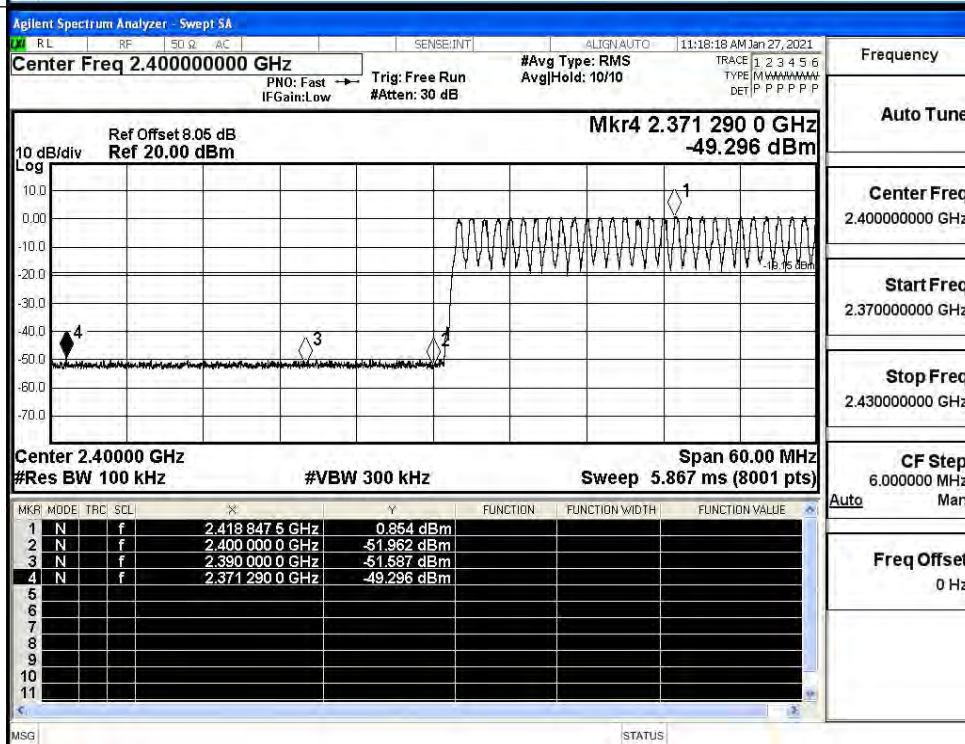
Mode	Channel	Carrier Frequency [MHz]	Carrier Power [dBm]	Frequency Hopping	Max Spurious Level [dBm]	Limit [dBm]	Verdict
GFSK	LCH	2402	-0.020	Off	-49.995	-20.02	PASS
			0.854	On	-49.296	-19.15	PASS
	HCH	2480	-0.164	Off	-49.579	-20.16	PASS
			1.253	On	-48.578	-18.75	PASS
$\pi/4$ DQPSK	LCH	2402	-1.230	Off	-49.504	-21.23	PASS
			-0.231	On	-49.190	-20.23	PASS
	HCH	2480	-1.940	Off	-48.543	-21.94	PASS
			-0.960	On	-47.902	-20.96	PASS
8DPSK	LCH	2402	-4.121	Off	-49.914	-24.12	PASS
			-0.550	On	-48.693	-20.55	PASS
	HCH	2480	-1.473	Off	-48.751	-21.47	PASS
			-0.209	On	-48.046	-20.21	PASS

Test Graphs

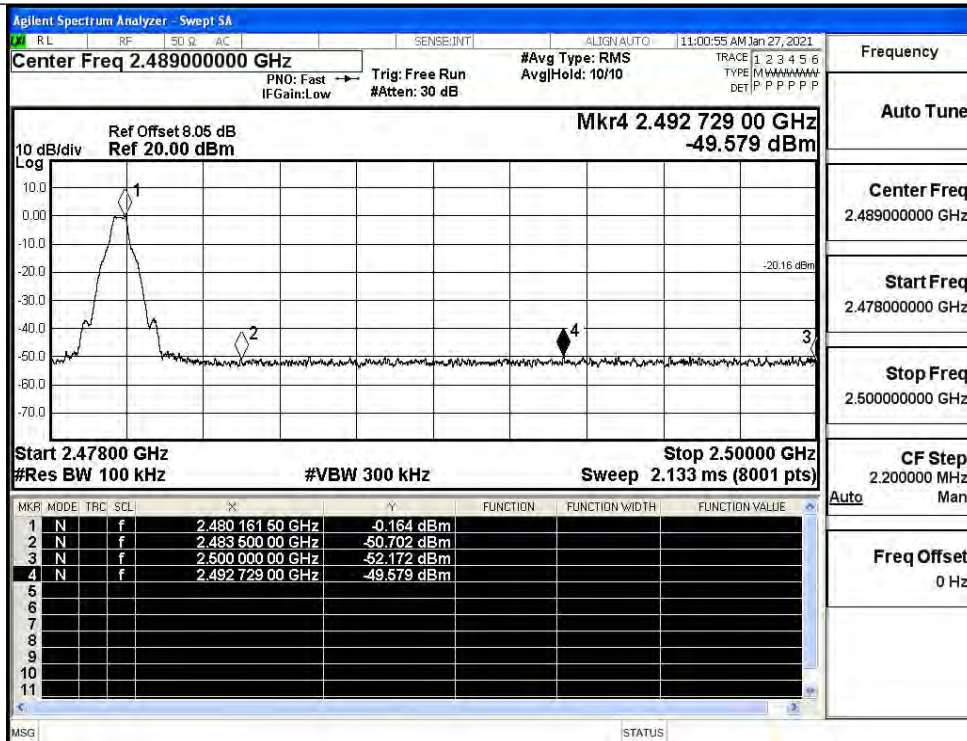
GFSK/LCH/No Hop



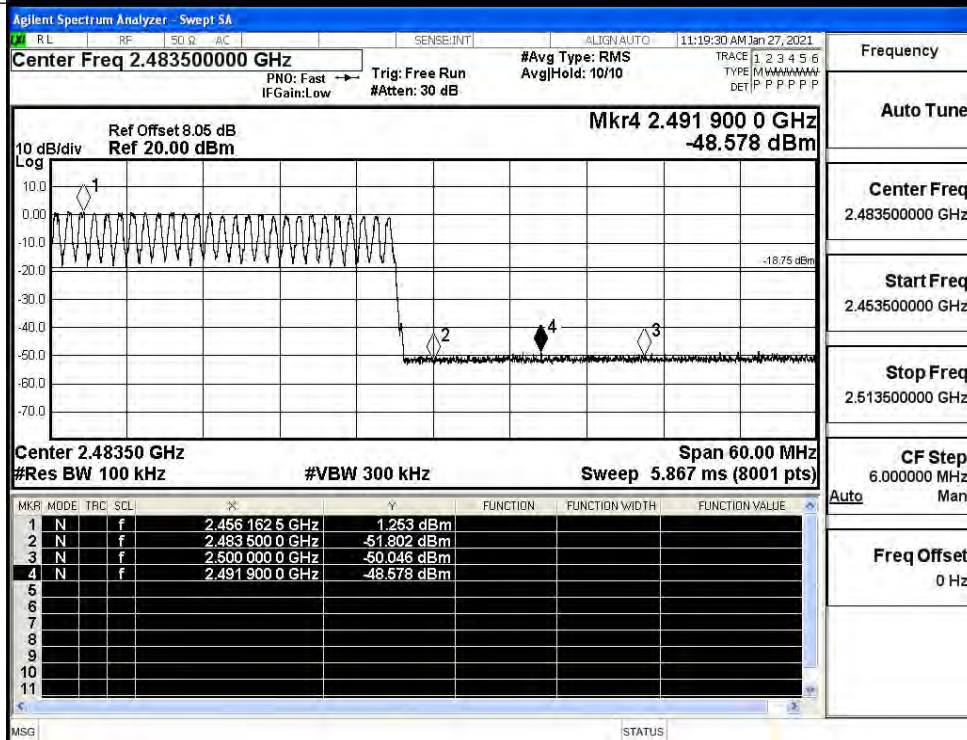
GFSK/LCH/Hop



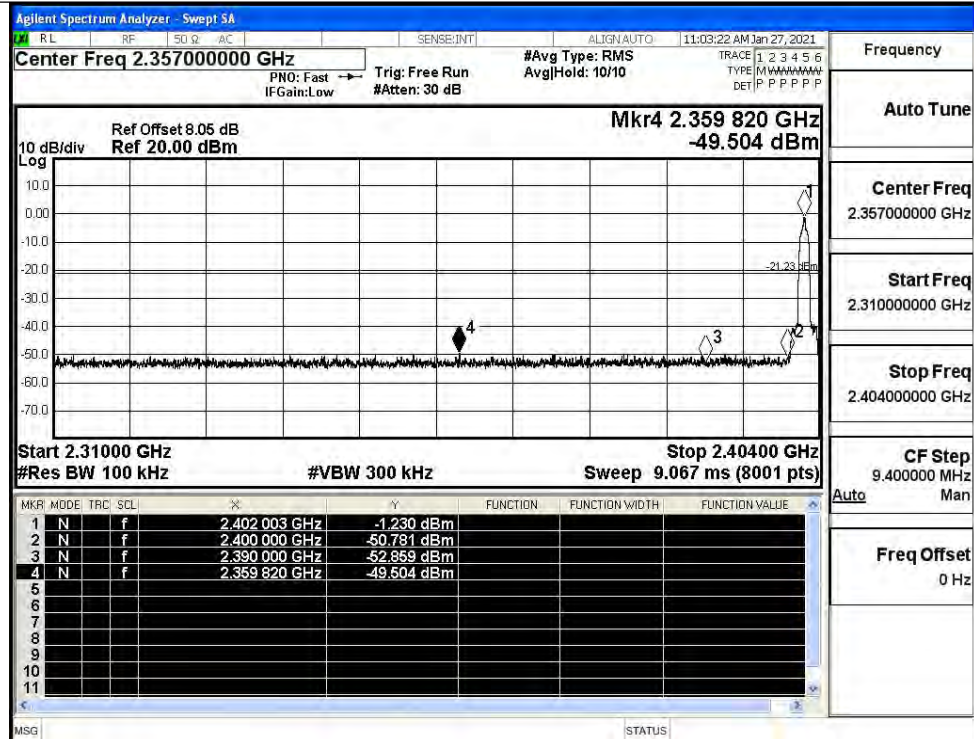
GFSK/HCH/No Hop



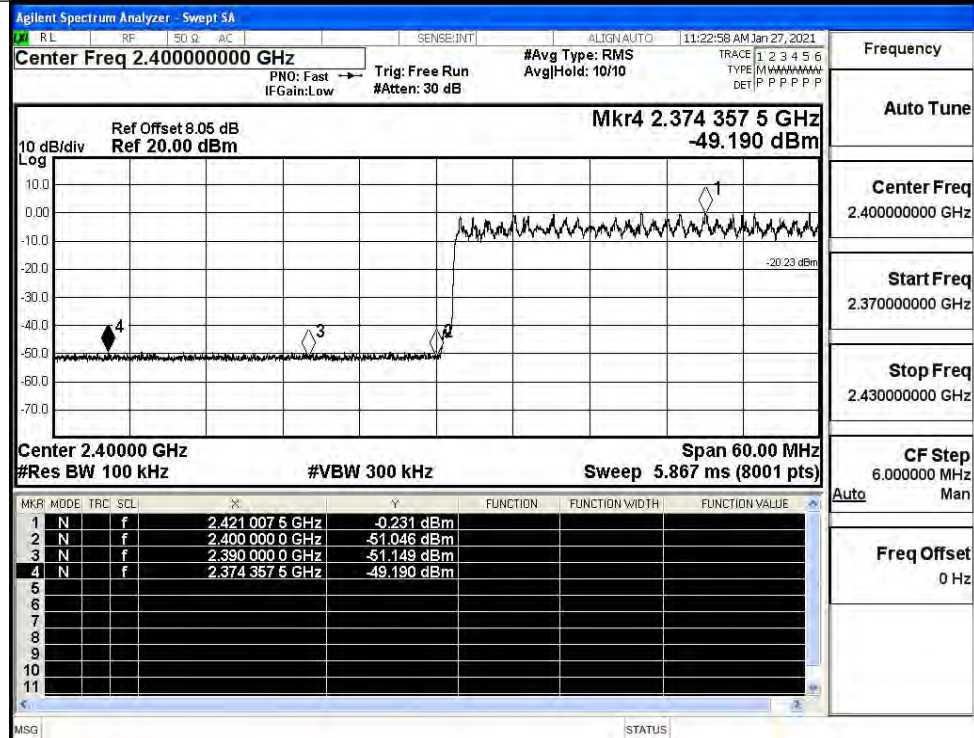
GFSK/HCH/Hop



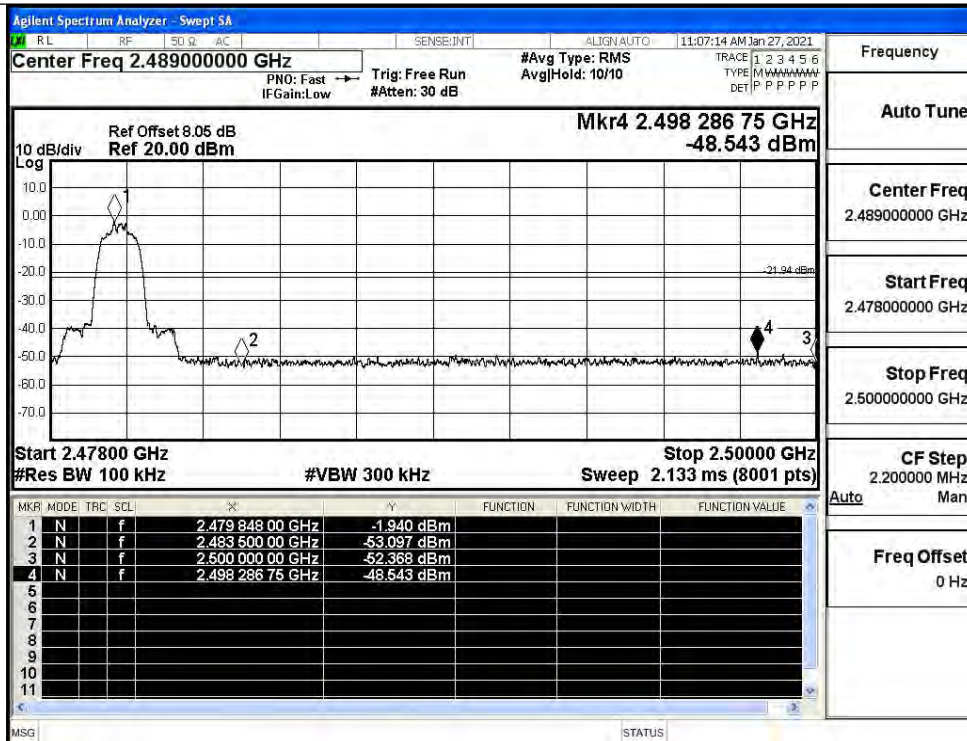
$\pi/4$ DQPSK/LCH/No
Hop



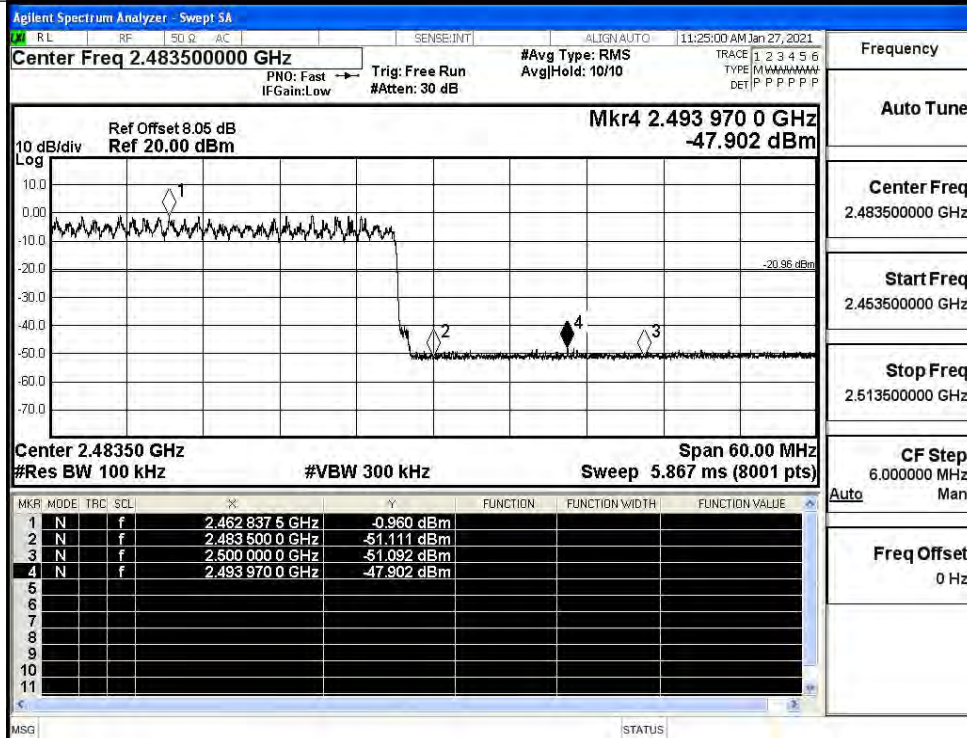
$\pi/4$ DQPSK/LCH/Hop



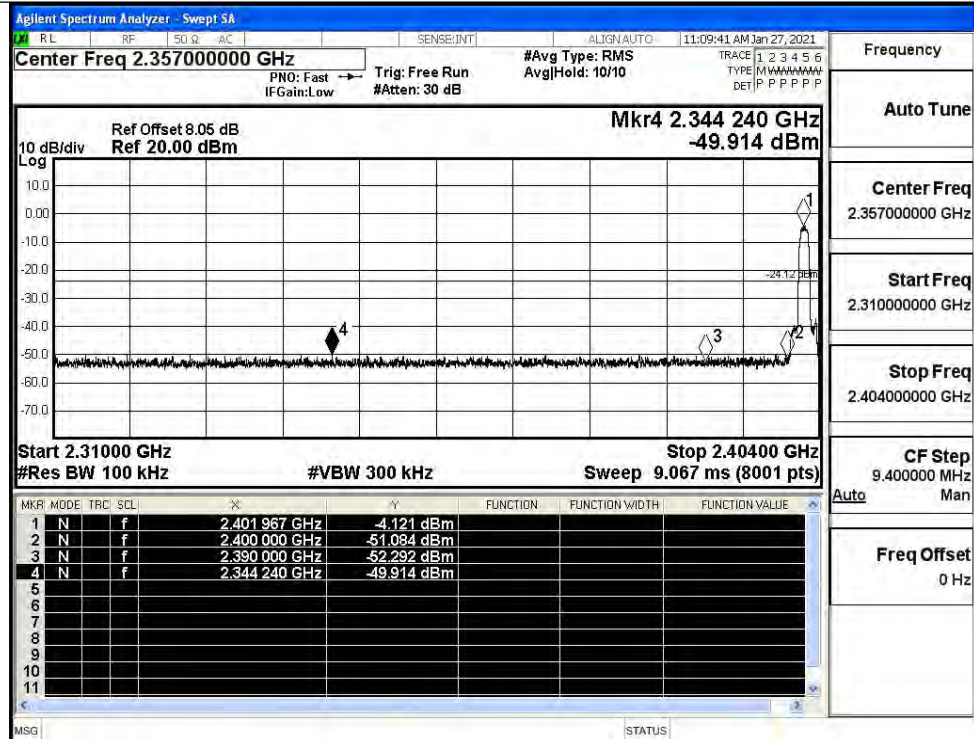
$\pi/4$ DQPSK/HCH/No
Hop



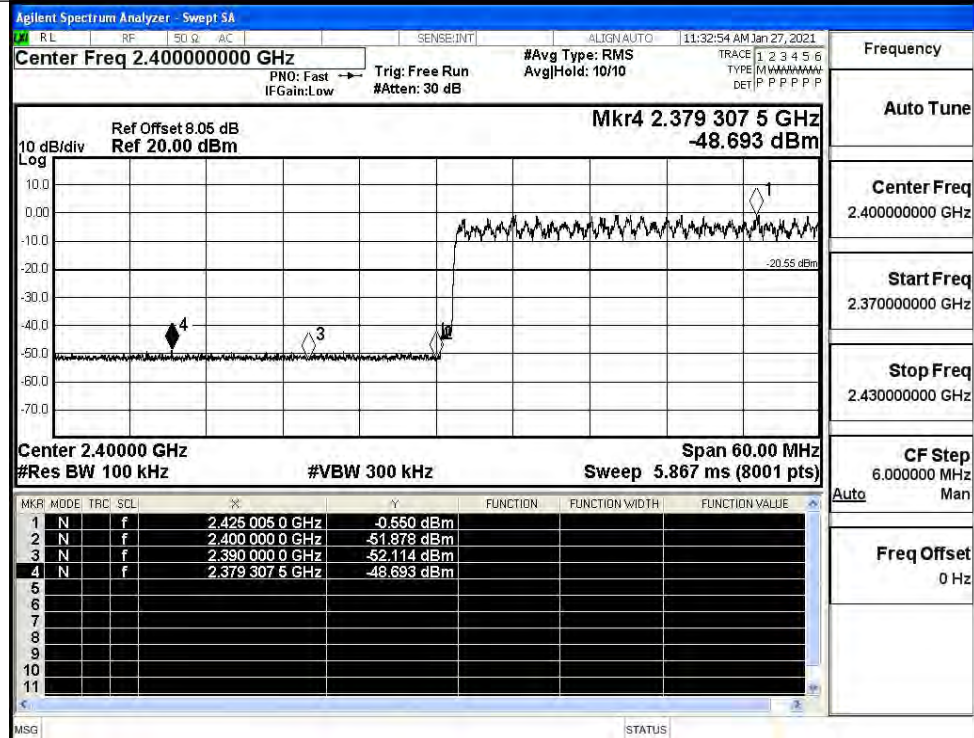
$\pi/4$ DQPSK/HCH/Hop



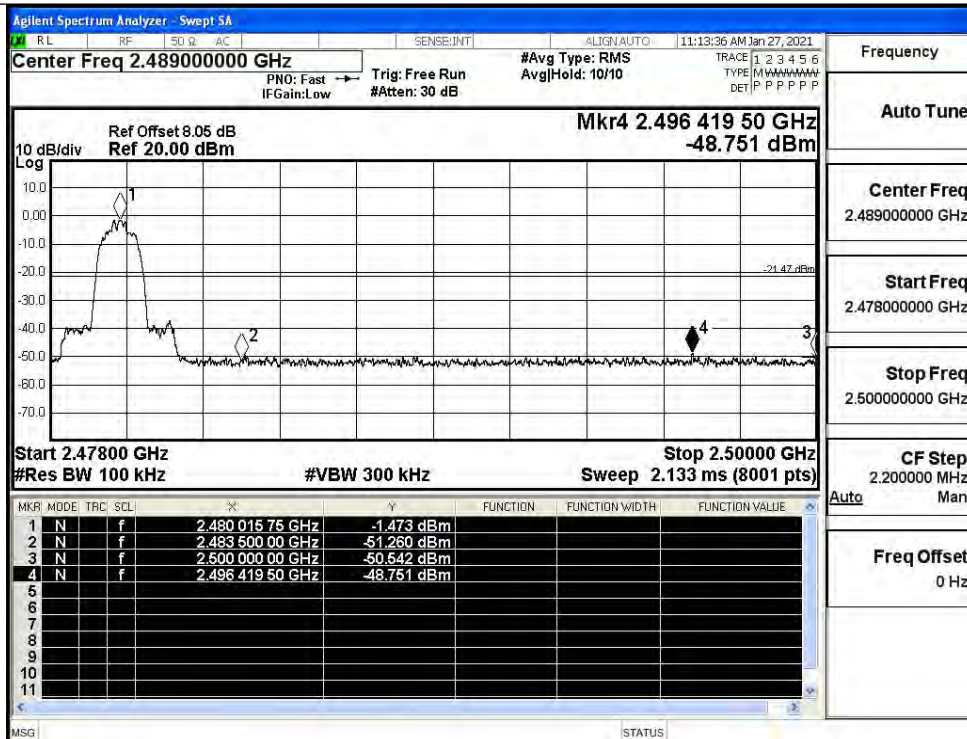
8DPSK/LCH/No Hop



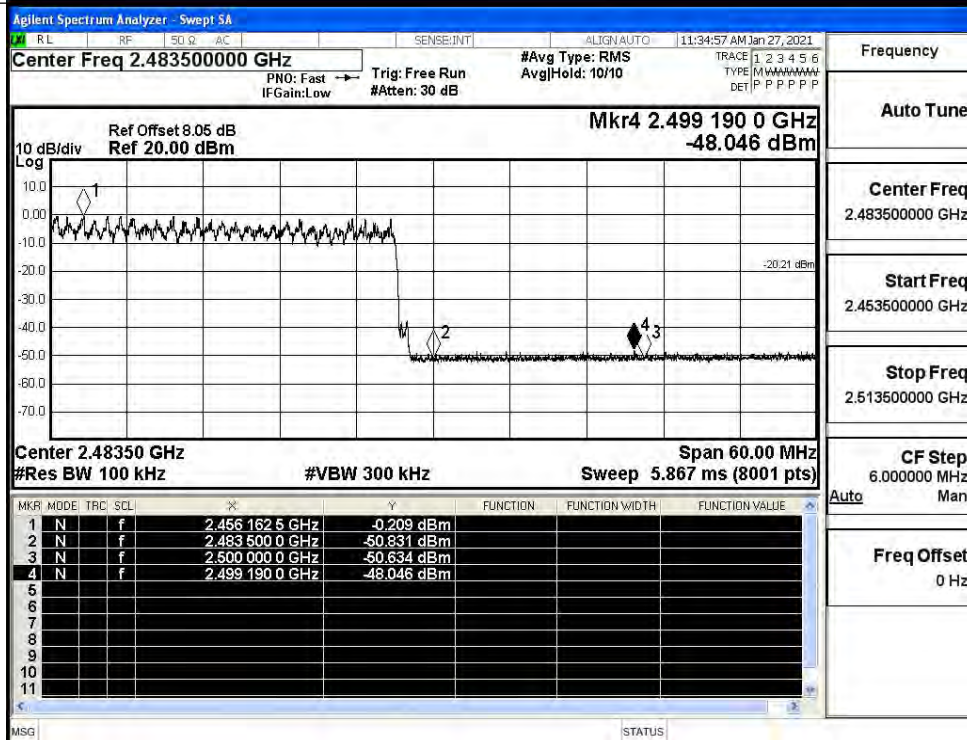
8DPSK/LCH/Hop



8DPSK/HCH/No Hop



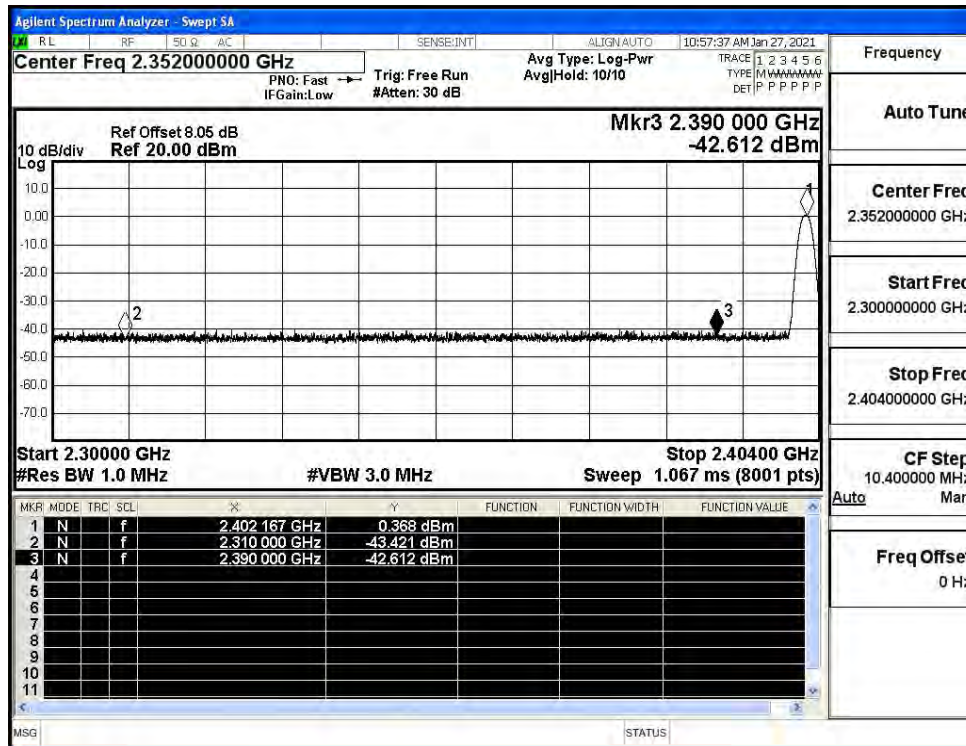
8DPSK/HCH/Hop



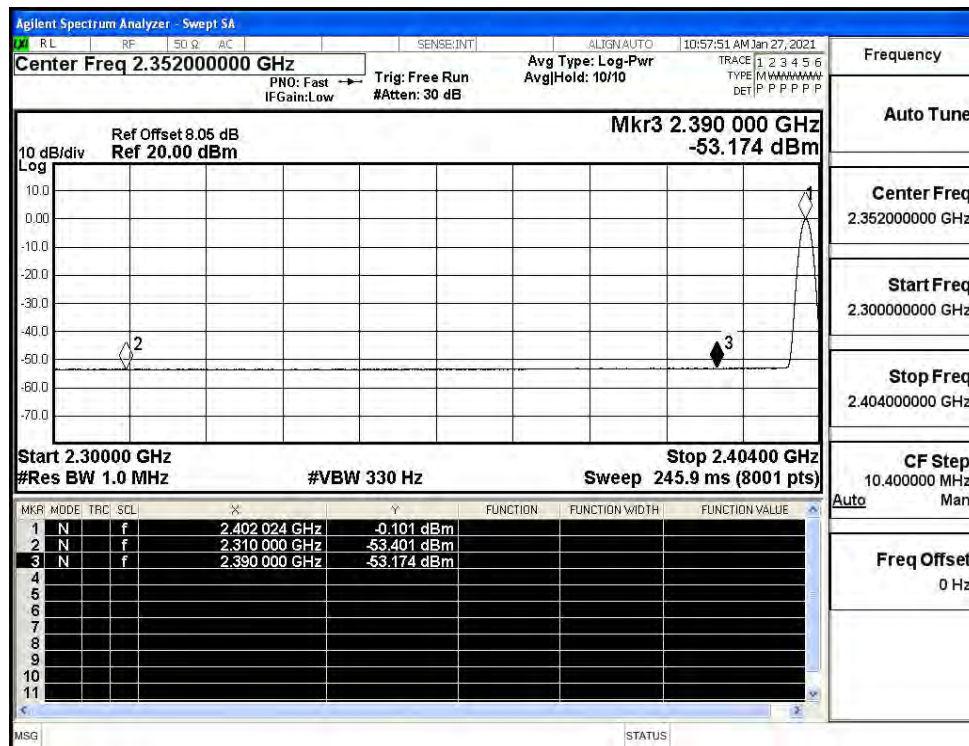
A.8 Restrict-band band-edge measurements

Test Mode	Hopping	Freq.	Power [dBm]	Gain	Ground Factor	E [dBuV/m]	Detector	Limit [dBuV/m]	Verdict
GFSK	Off	2310.0	-43.42	2.0	0	53.81	PEAK	74	PASS
	Off	2310.0	-53.40	2.0	0	43.83	AV	54	PASS
	Off	2390.0	-42.61	2.0	0	54.62	PEAK	74	PASS
	Off	2390.0	-53.17	2.0	0	44.06	AV	54	PASS
	Off	2483.5	-41.45	2.0	0	55.78	PEAK	74	PASS
	Off	2483.5	-52.62	2.0	0	44.61	AV	54	PASS
	Off	2500.0	-42.22	2.0	0	55.01	PEAK	74	PASS
	Off	2500.0	-52.59	2.0	0	44.64	AV	54	PASS
$\pi/4$ DQPSK	Off	2310.0	-44.88	2.0	0	52.35	PEAK	74	PASS
	Off	2310.0	-53.58	2.0	0	43.65	AV	54	PASS
	Off	2390.0	-42.84	2.0	0	54.39	PEAK	74	PASS
	Off	2390.0	-53.20	2.0	0	44.03	AV	54	PASS
	Off	2483.5	-41.71	2.0	0	55.52	PEAK	74	PASS
	Off	2483.5	-52.62	2.0	0	44.61	AV	54	PASS
	Off	2500.0	-42.11	2.0	0	55.12	PEAK	74	PASS
	Off	2500.0	-52.55	2.0	0	44.68	AV	54	PASS
8DPSK	Off	2310.0	-43.20	2.0	0	54.03	PEAK	74	PASS
	Off	2310.0	-53.52	2.0	0	43.71	AV	54	PASS
	Off	2390.0	-42.53	2.0	0	54.70	PEAK	74	PASS
	Off	2390.0	-53.18	2.0	0	44.05	AV	54	PASS
	Off	2483.5	-43.37	2.0	0	53.86	PEAK	74	PASS
	Off	2483.5	-52.69	2.0	0	44.54	AV	54	PASS
	Off	2500.0	-42.71	2.0	0	54.52	PEAK	74	PASS
	Off	2500.0	-52.55	2.0	0	44.68	AV	54	PASS

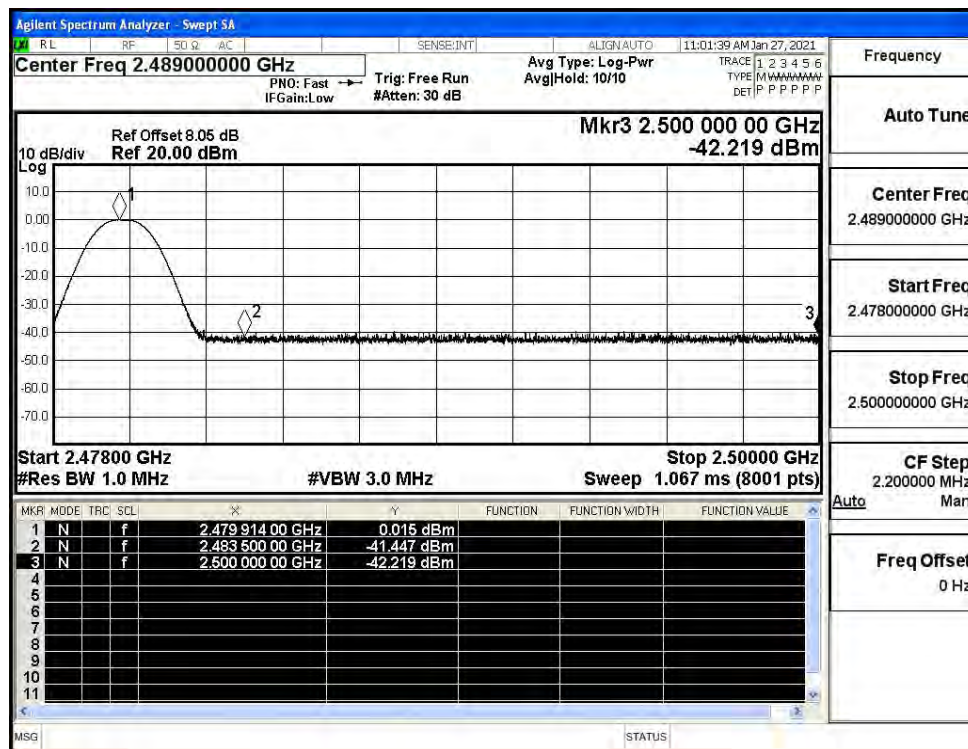
Restrict-band band-edge measurements_Hopping Off_ GFSK_PEAK (Low Channel)



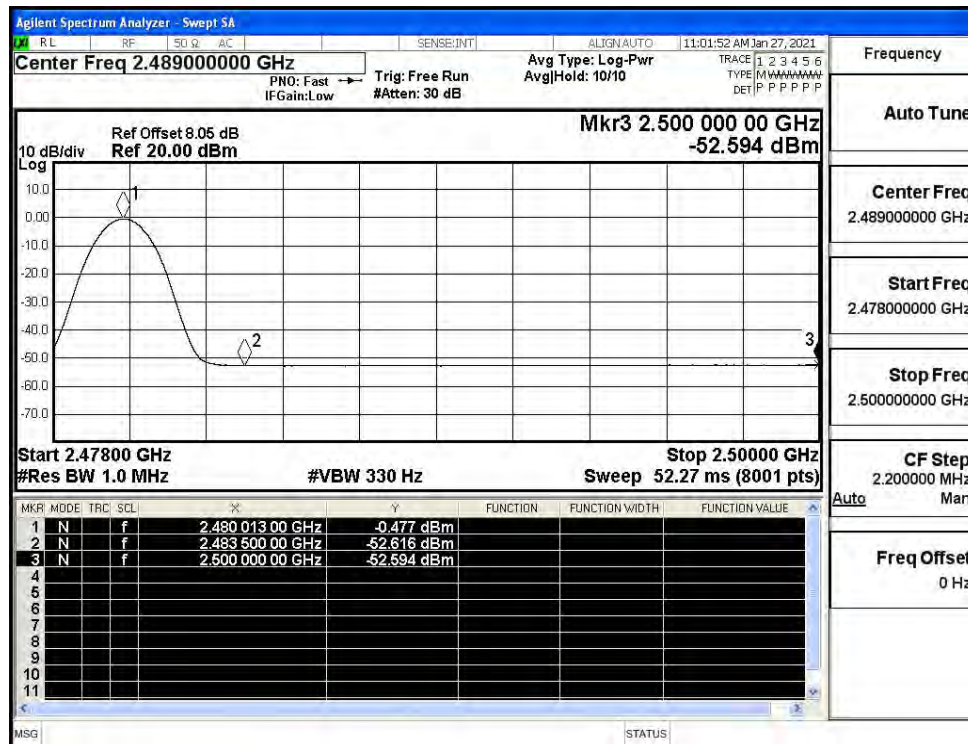
Restrict-band band-edge measurements_Hopping Off_ GFSK_Average (Low Channel)

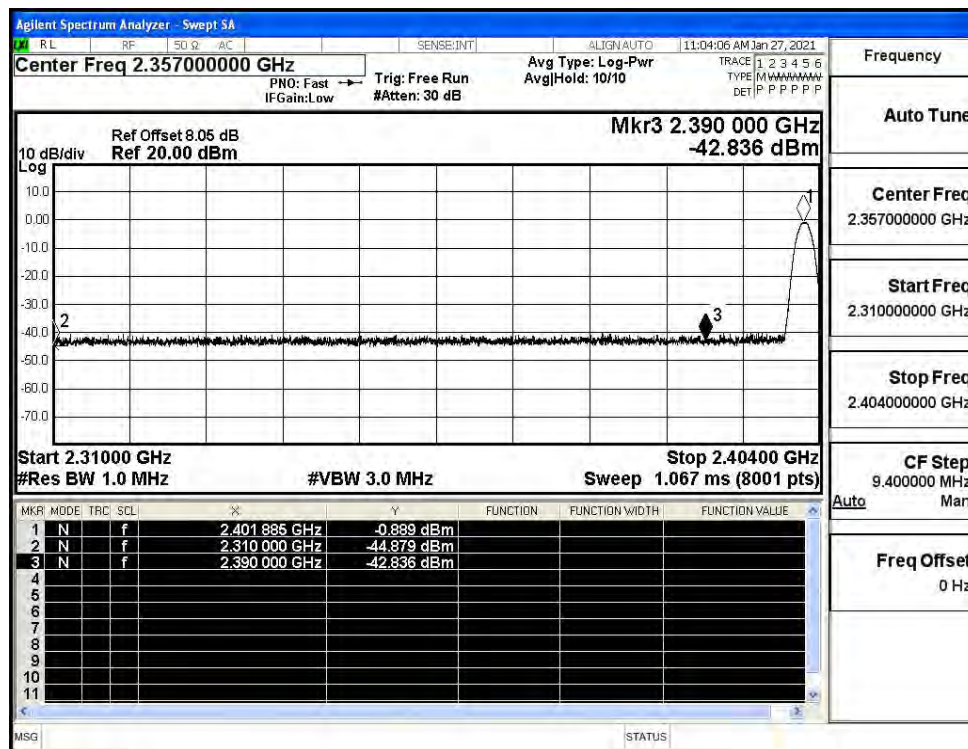
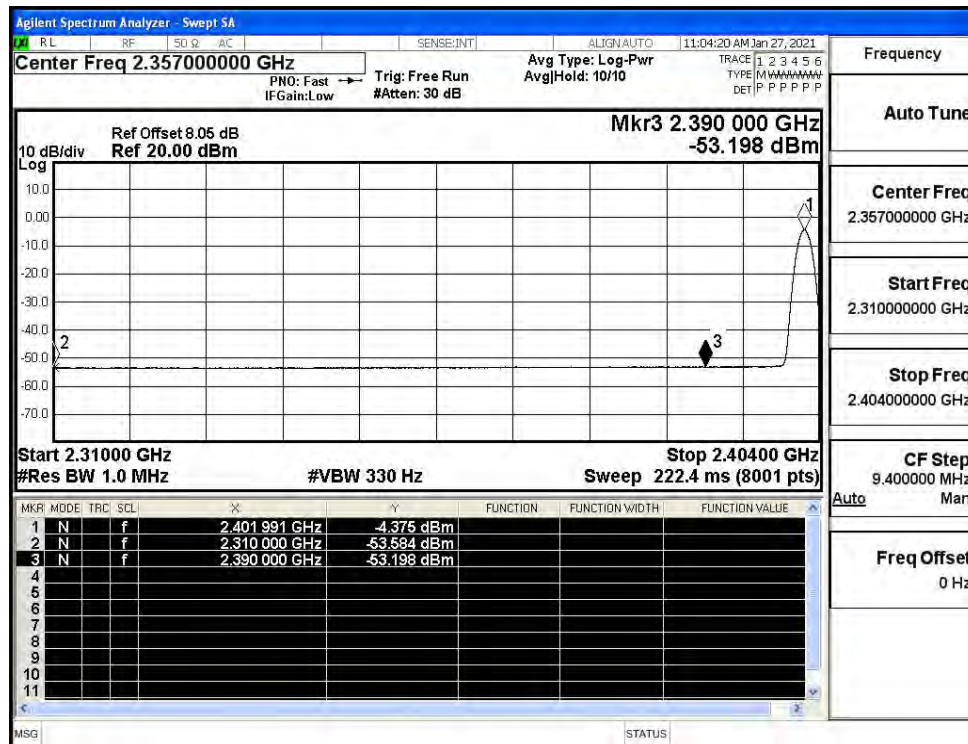


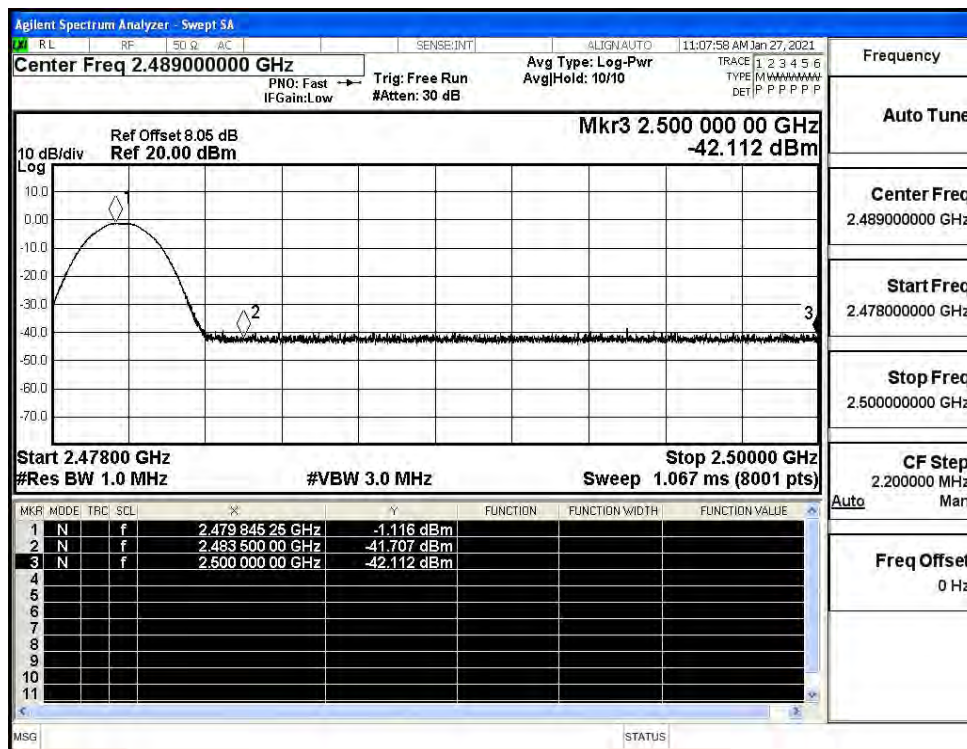
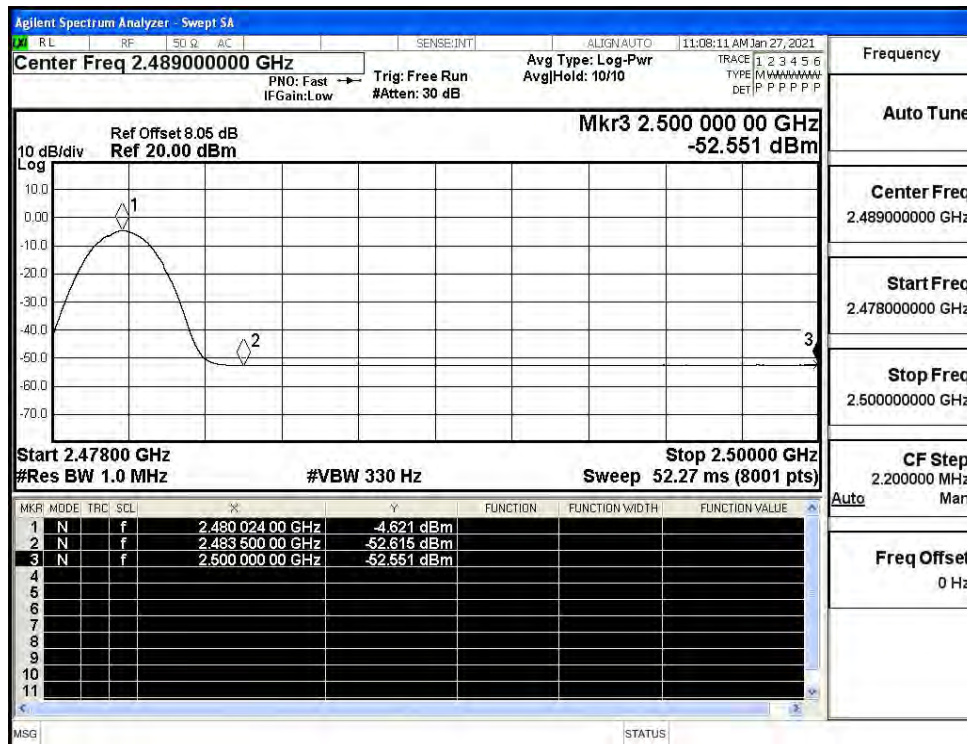
Restrict-band band-edge measurements_Hopping Off_ GFSK_PEAK (High Channel)



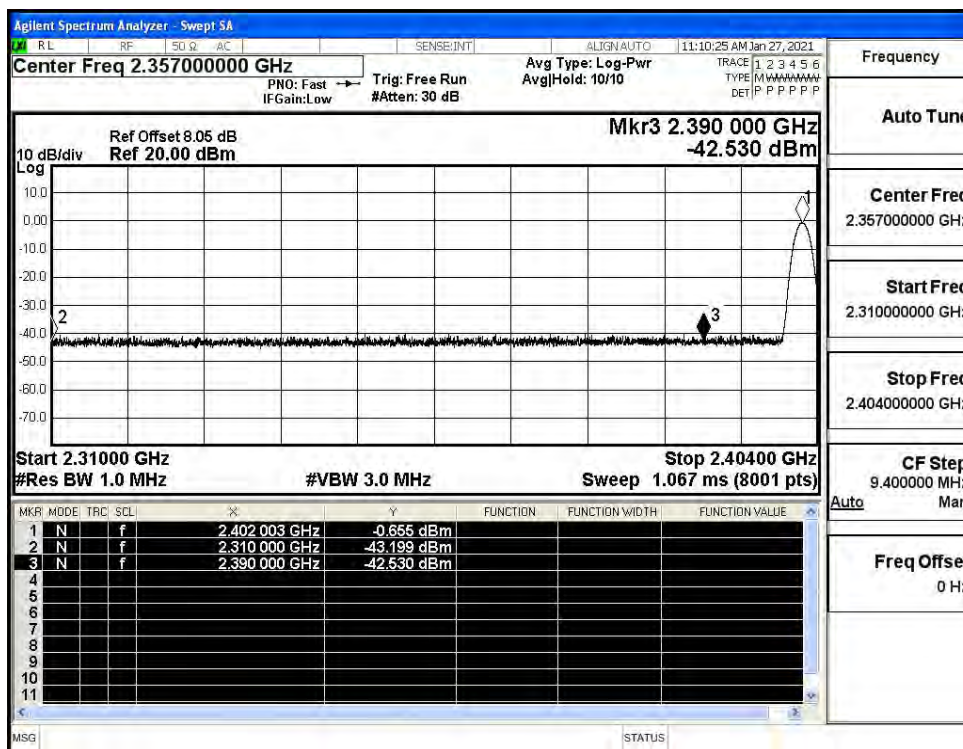
Restrict-band band-edge measurements_Hopping Off_ GFSK_Average (High Channel)



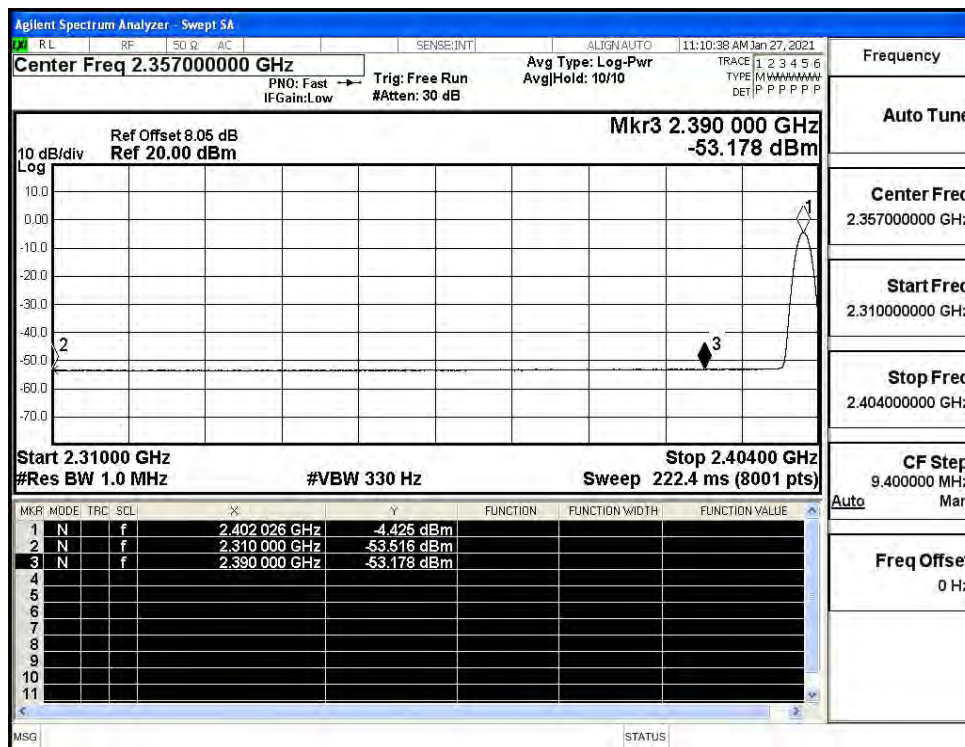
Restrict-band band-edge measurements_Hopping Off $\pi/4$ -DQPSK_PEAK (Low Channel)Restrict-band band-edge measurements_Hopping Off $\pi/4$ -DQPSK_Average (Low Channel)

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)

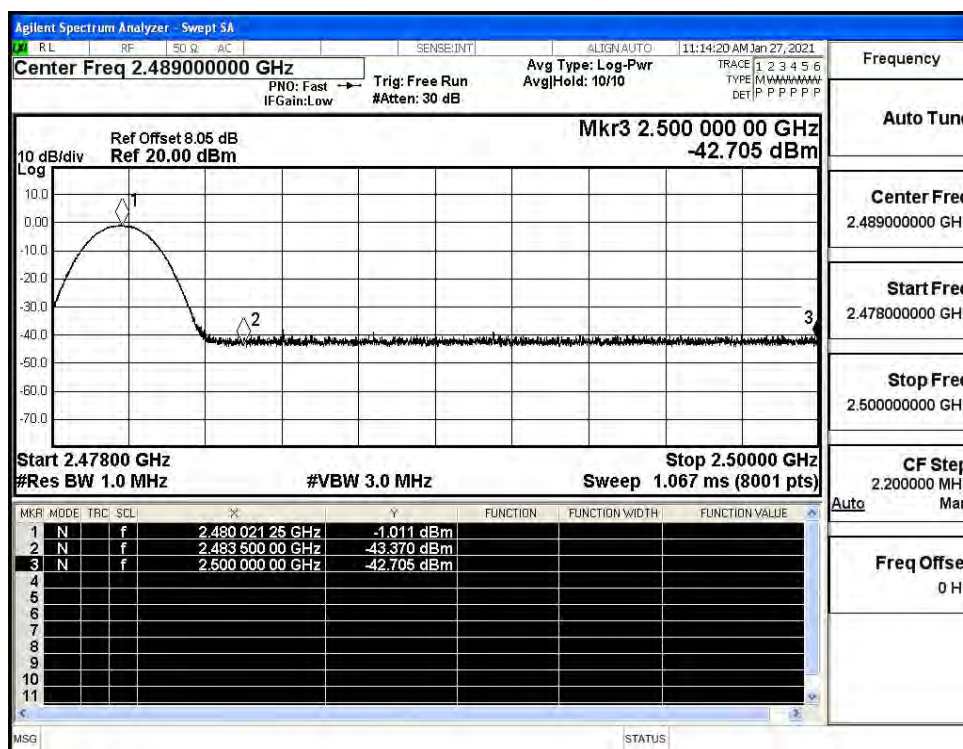
Restrict-band band-edge measurements_Hopping Off_8DPSK_PEAK (Low Channel)



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)

