

Appendix A

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

Product Name: MOVE WIRELESS EARBUDS WITH MIC

Trade Mark: N/A

Test Model: 18LY48

Environmental Conditions

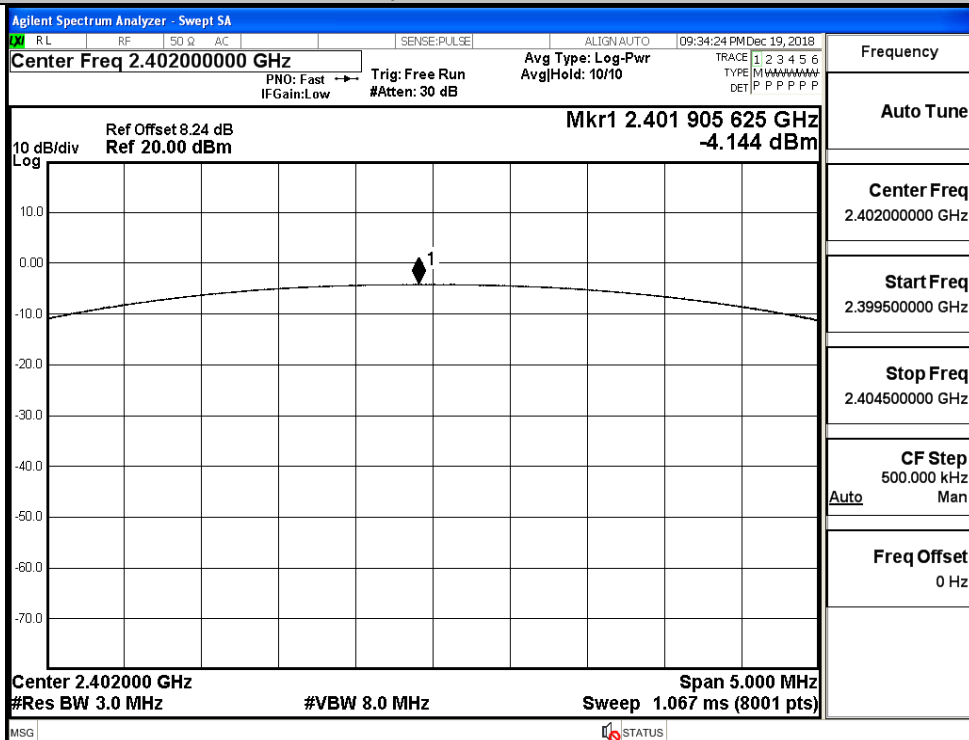
Temperature:	23.2 ° C
Relative Humidity:	53.8%
ATM Pressure:	100.0 kPa
Test Engineer:	David.Luo
Supervised by:	Jayden.Zhuo

A.1 Maximum Conducted Peak Output Power

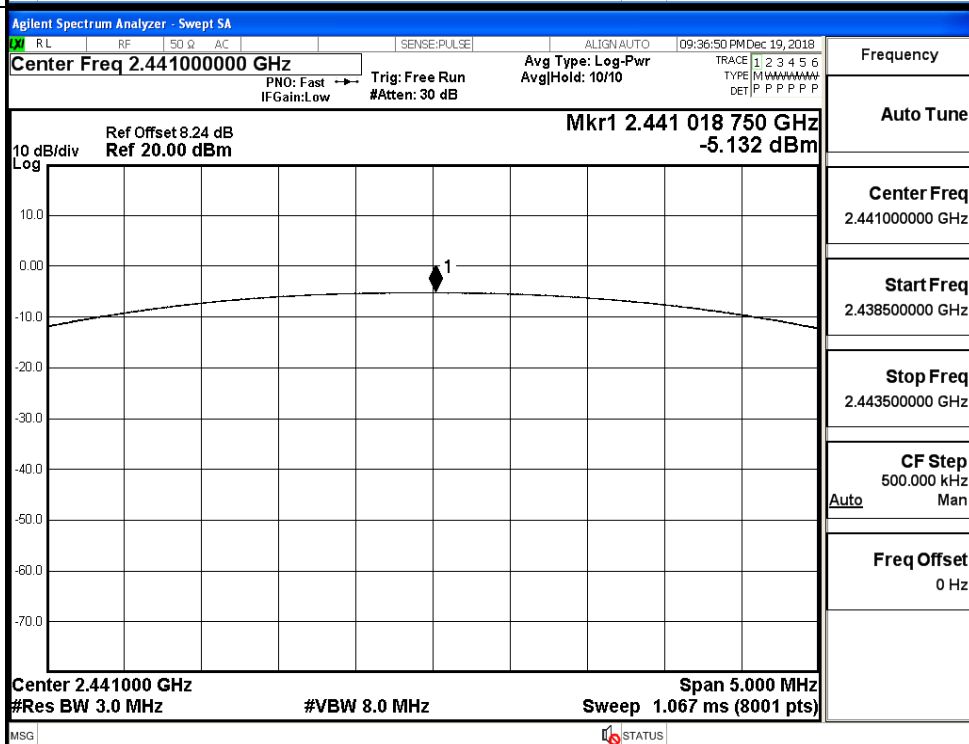
Mode	Channel.	Maximum Peak Output Power [dBm]	Limit [dBm]	Verdict
GFSK	LCH	-4.144	21	PASS
	MCH	-5.132	21	PASS
	HCH	-6.167	21	PASS
$\pi/4$ DQPSK	LCH	-2.059	21	PASS
	MCH	-3.212	21	PASS
	HCH	-4.403	21	PASS
8DPSK	LCH	-1.847	21	PASS
	MCH	-2.983	21	PASS
	HCH	-4.312	21	PASS

Test Graphs

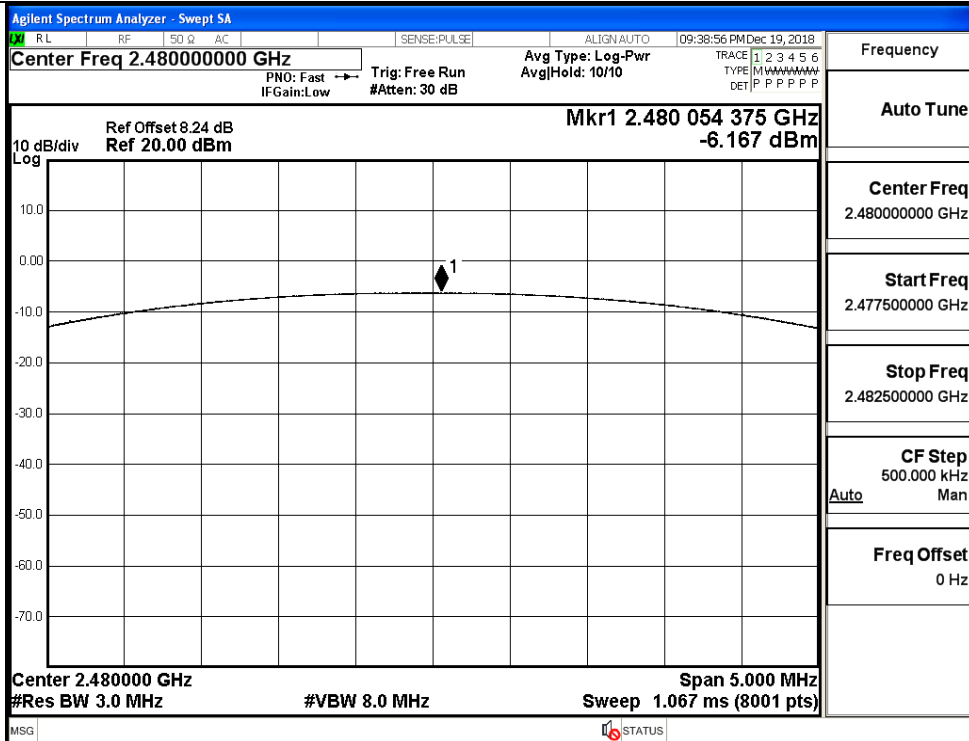
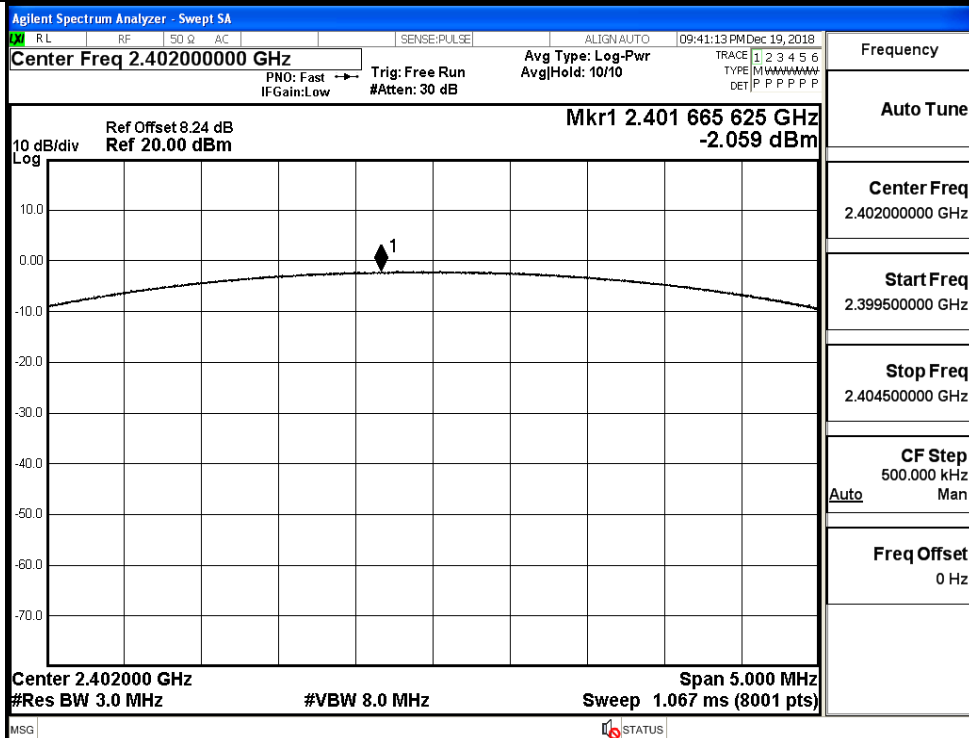
GFSK/LCH

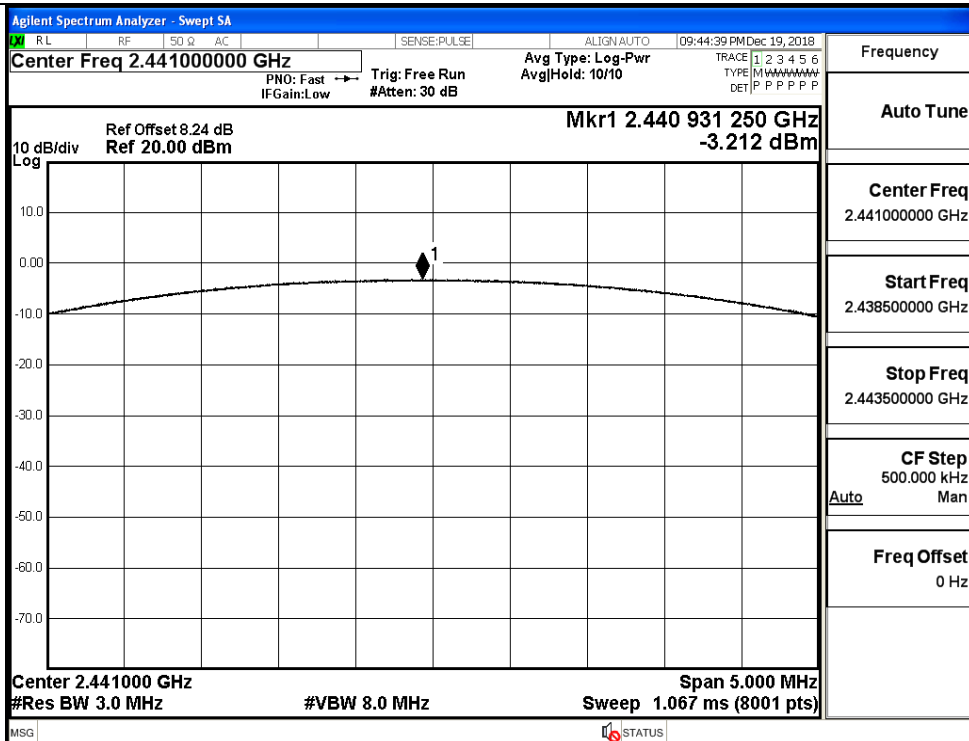
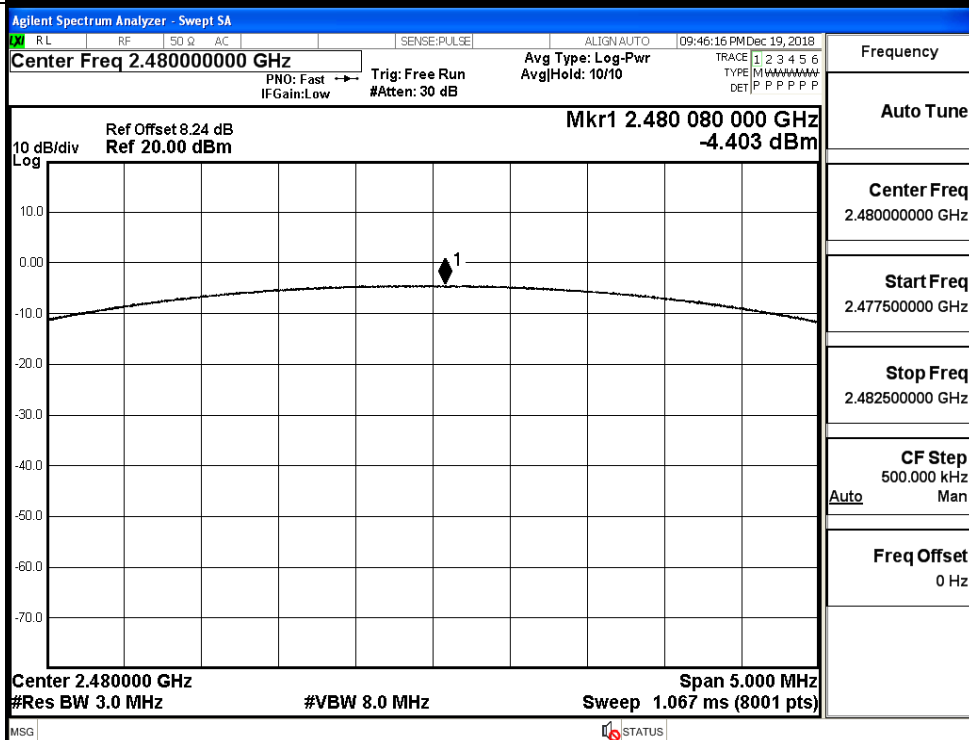


GFSK/MCH

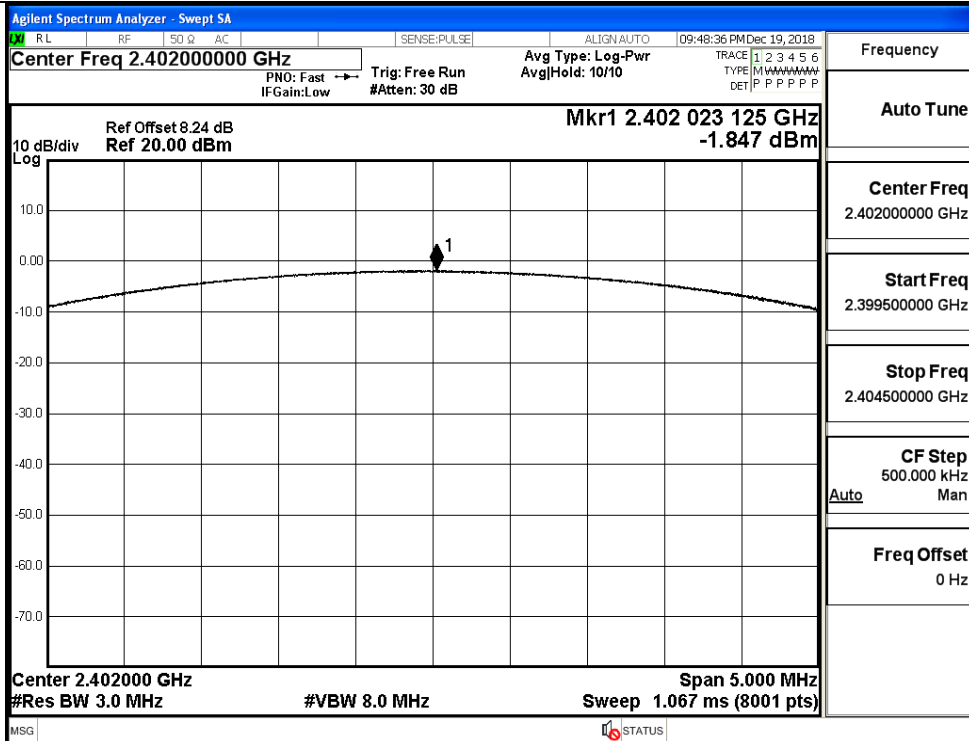


GFSK/HCH

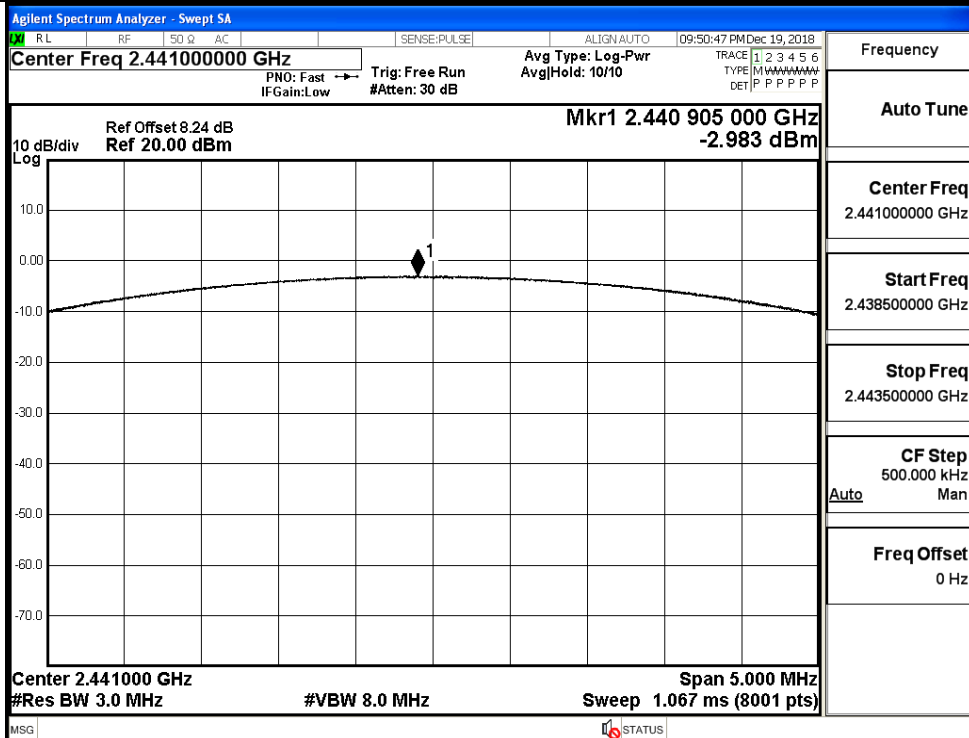
 π /4DQPSK/LCH

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

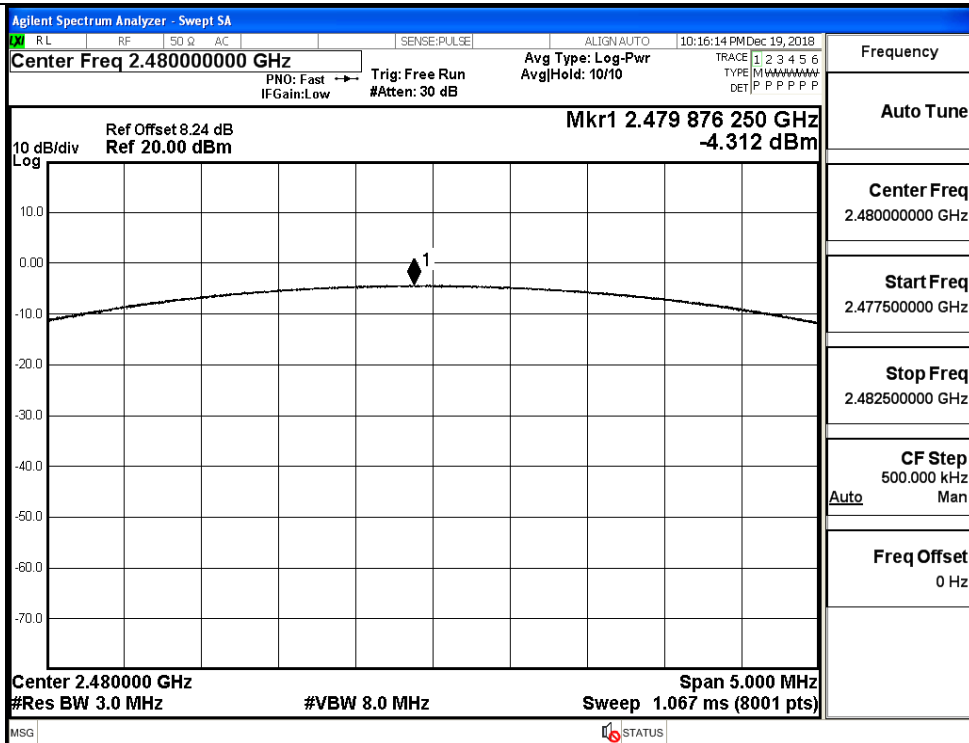
8DPSK/LCH



8DPSK/MCH



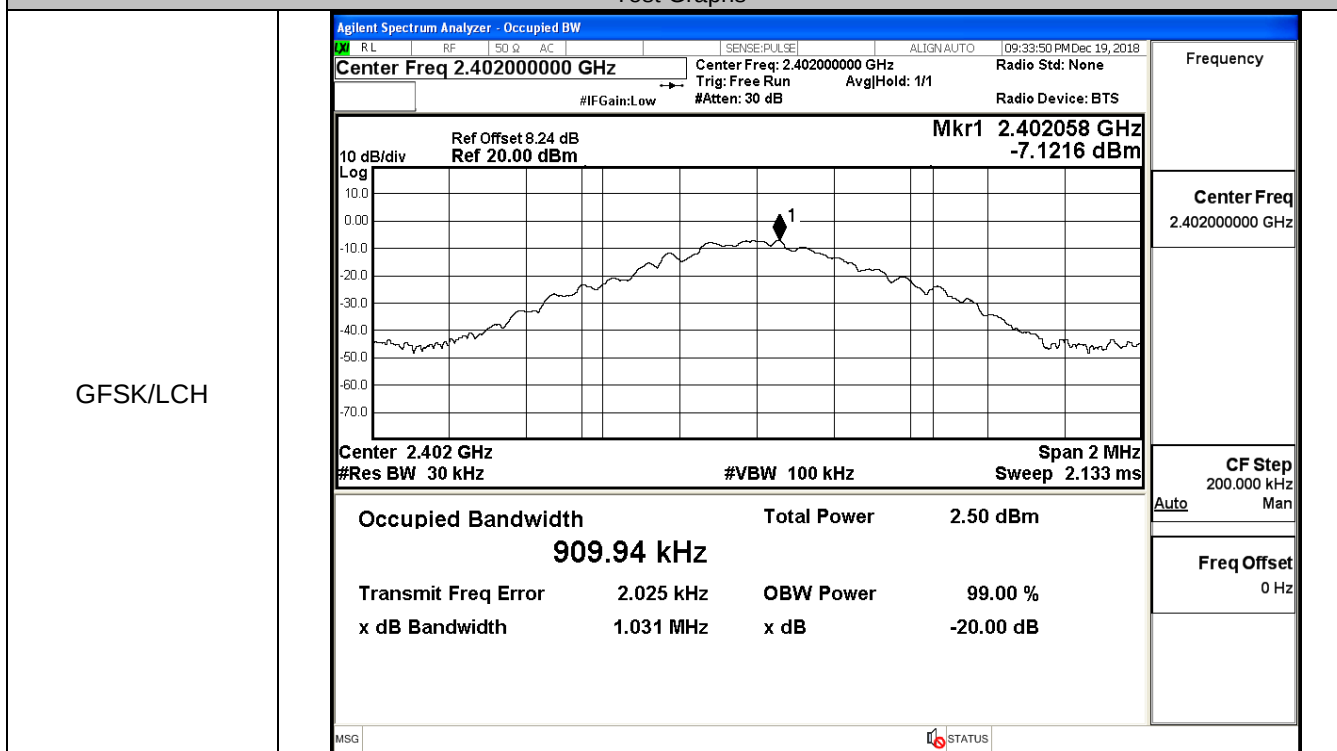
8DPSK/HCH



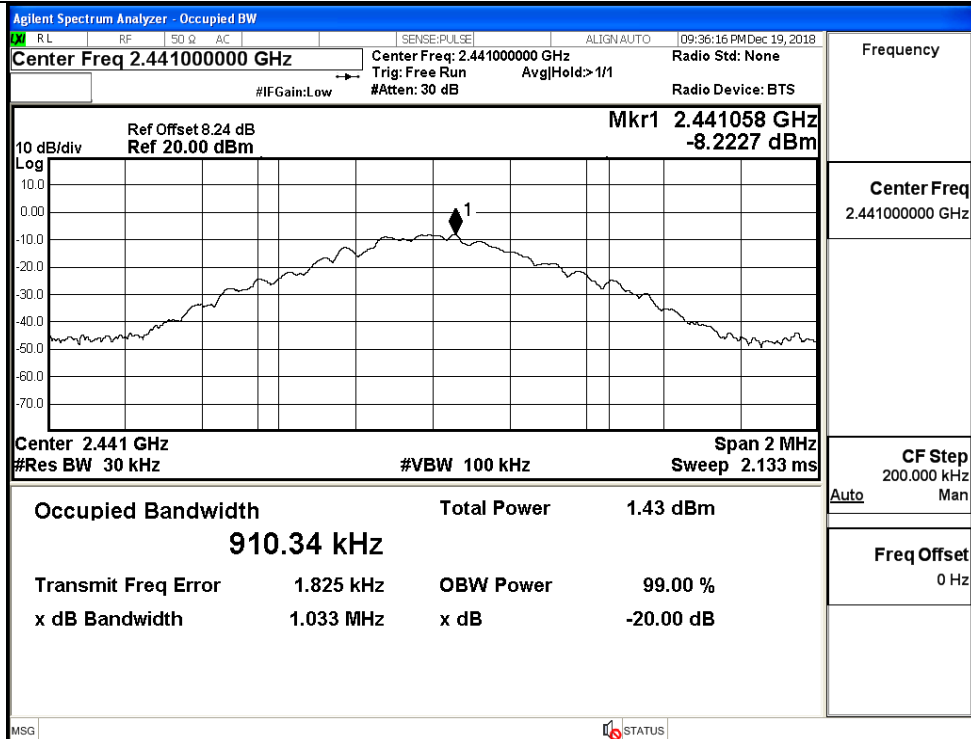
A.2 99% and 20dB Bandwidth

Mode	Channel.	99% Bandwidth [MHz]	20dB Bandwidth [MHz]	Limit [MHz]	Verdict
GFSK	LCH	0.90994	1.031	Not Specified	PASS
	MCH	0.91034	1.033	Not Specified	PASS
	HCH	0.90773	1.034	Not Specified	PASS
π /4DQPSK	LCH	1.1973	1.367	Not Specified	PASS
	MCH	1.2014	1.371	Not Specified	PASS
	HCH	1.2111	1.380	Not Specified	PASS
8DPSK	LCH	1.2060	1.347	Not Specified	PASS
	MCH	1.2089	1.351	Not Specified	PASS
	HCH	1.2161	1.359	Not Specified	PASS

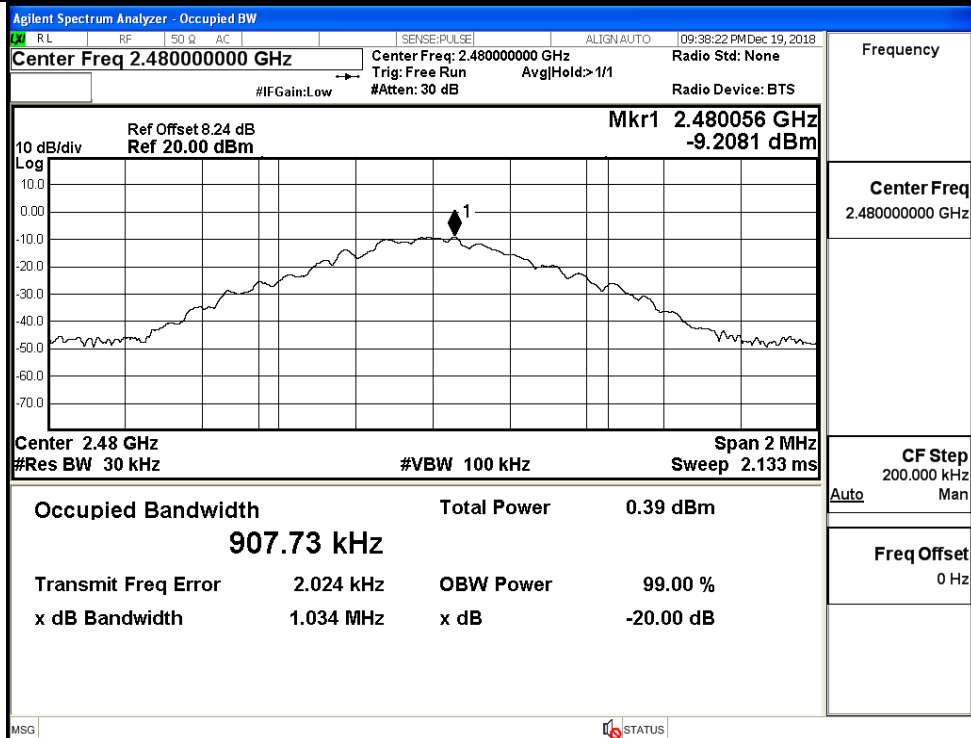
Test Graphs

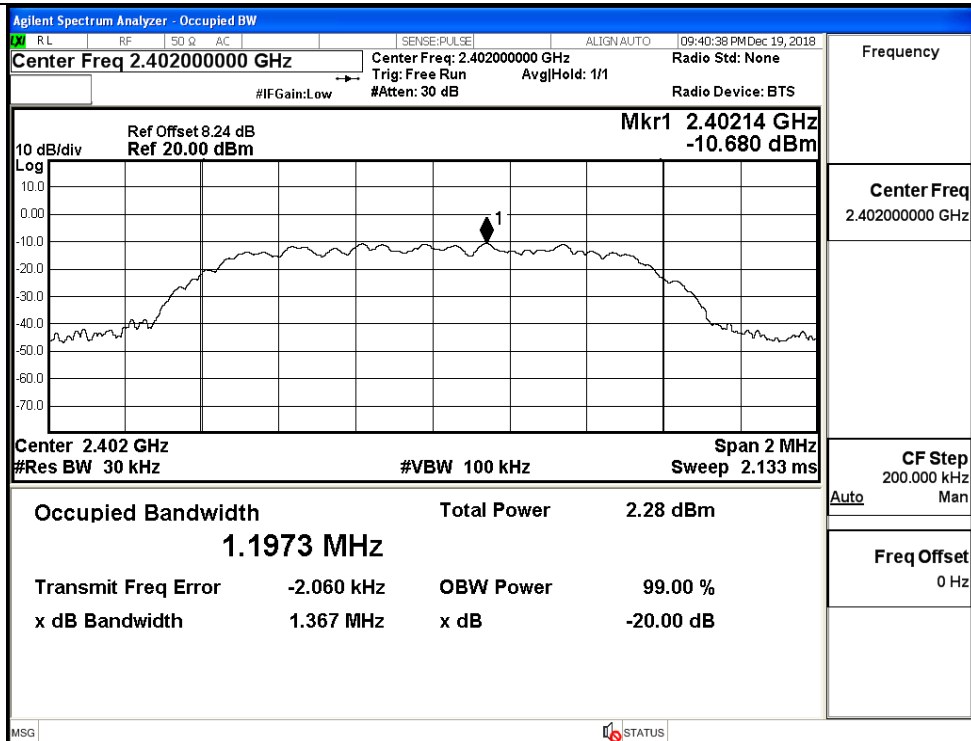


GFSK/MCH



GFSK/HCH

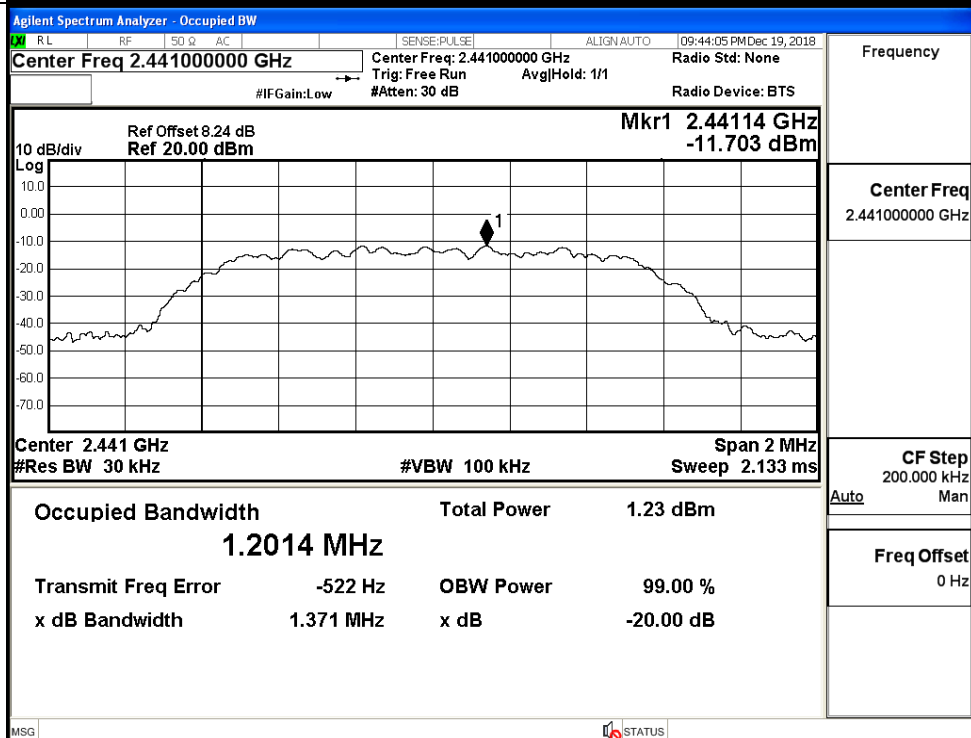


$\pi/4$ DQPSK/LCH

Frequency

Center Freq
2.40200000 GHzCF Step
200.000 kHz
Man

Auto

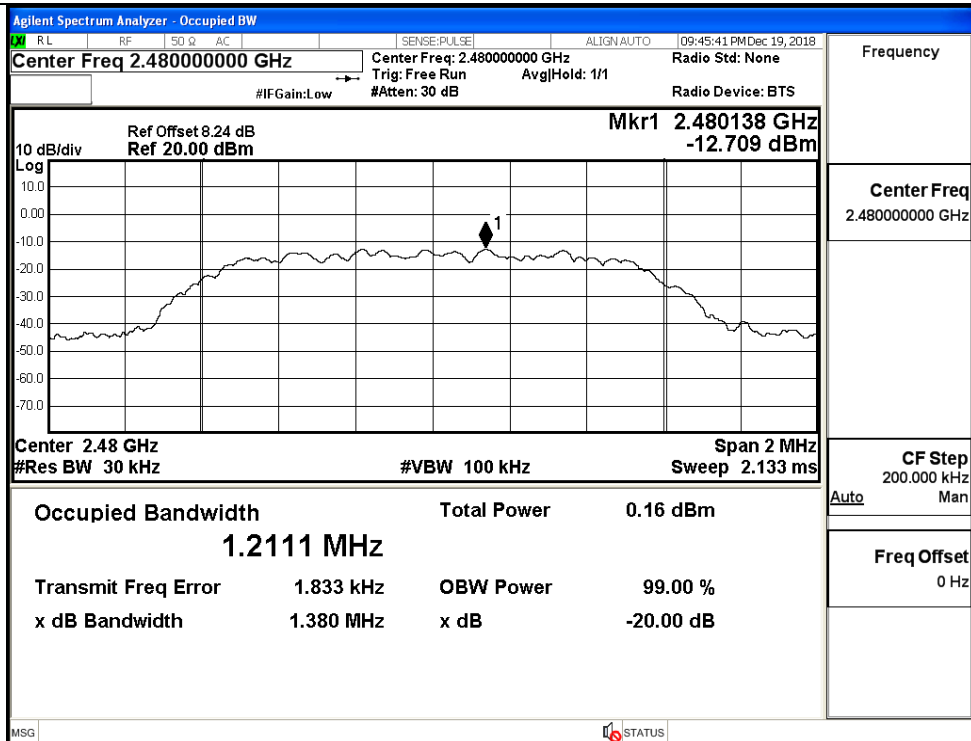
Freq Offset
0 Hz $\pi/4$ DQPSK/MCH

Frequency

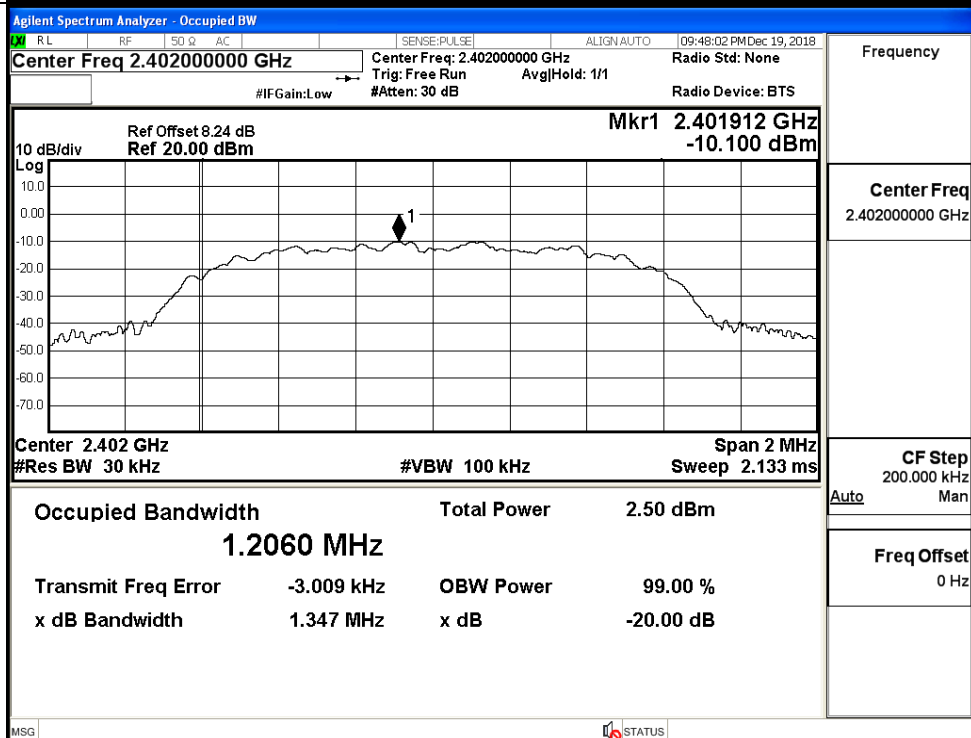
Center Freq
2.44100000 GHzCF Step
200.000 kHz
Man

Auto

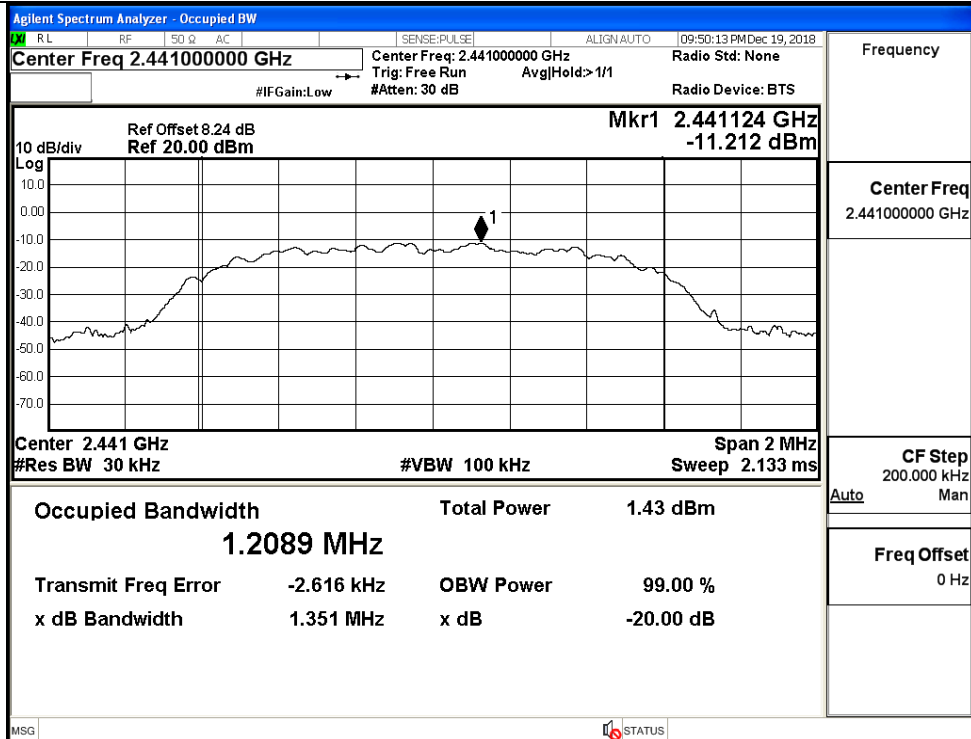
Freq Offset
0 Hz

$\pi/4$ DQPSK/HCH

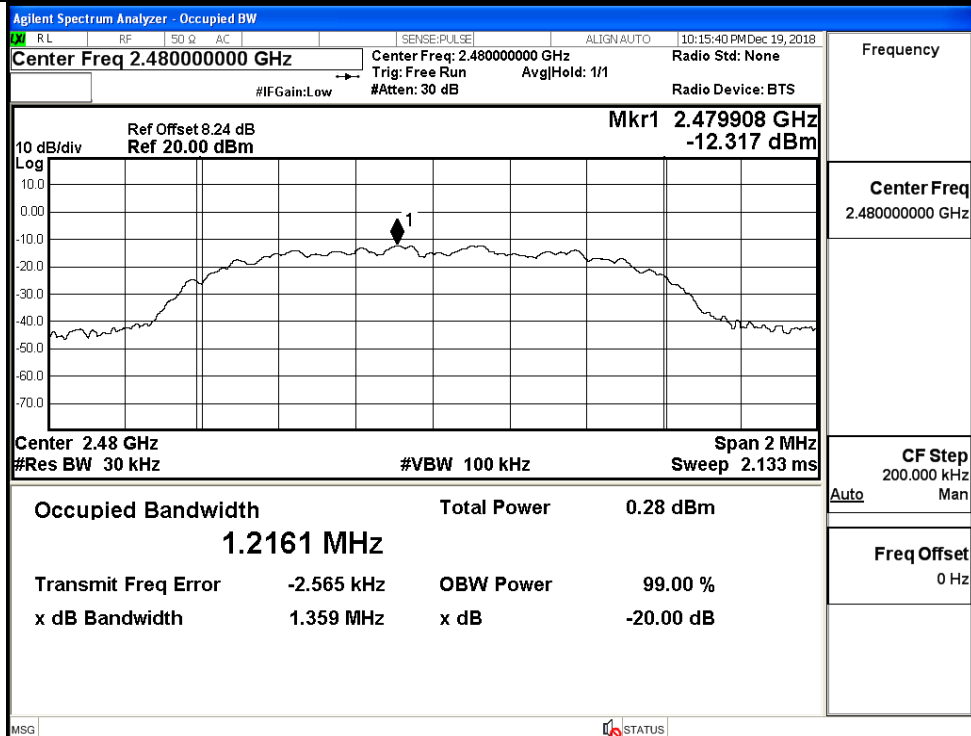
8DPSK/LCH



8DPSK/MCH



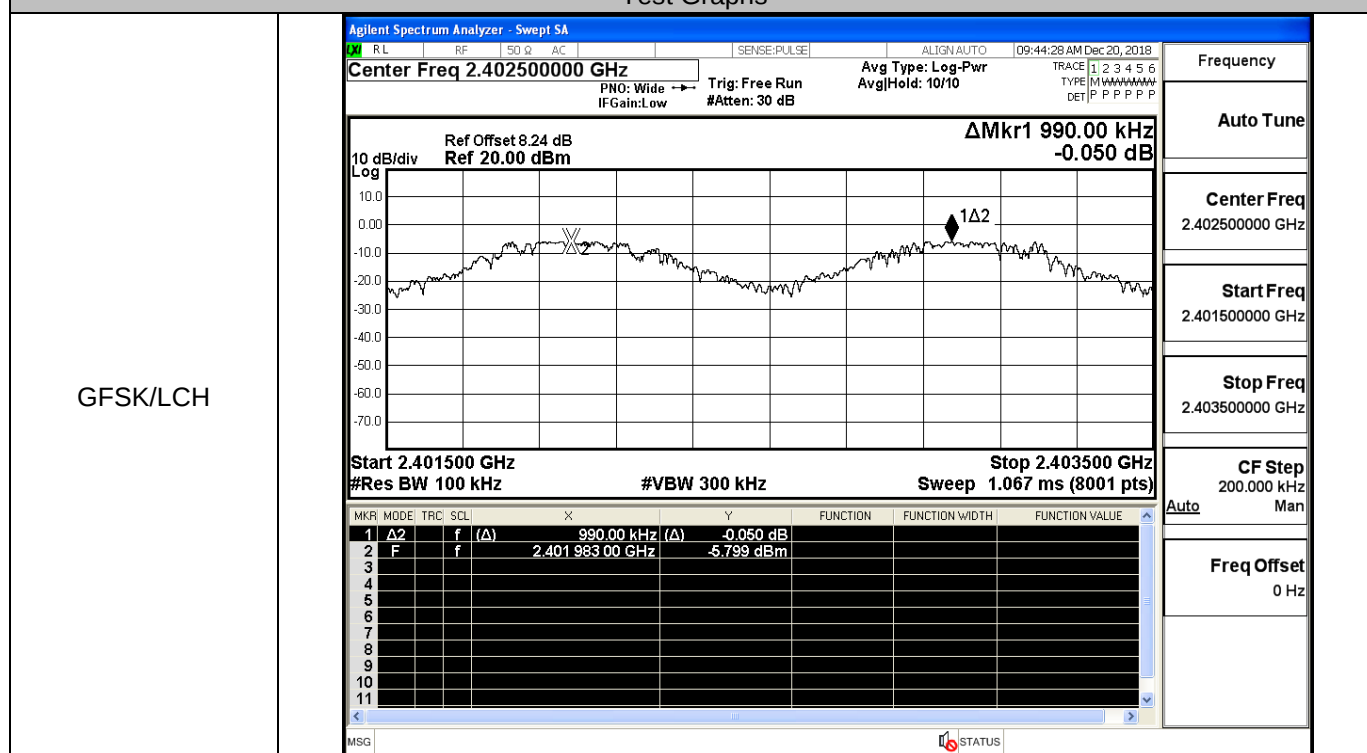
8DPSK/HCH



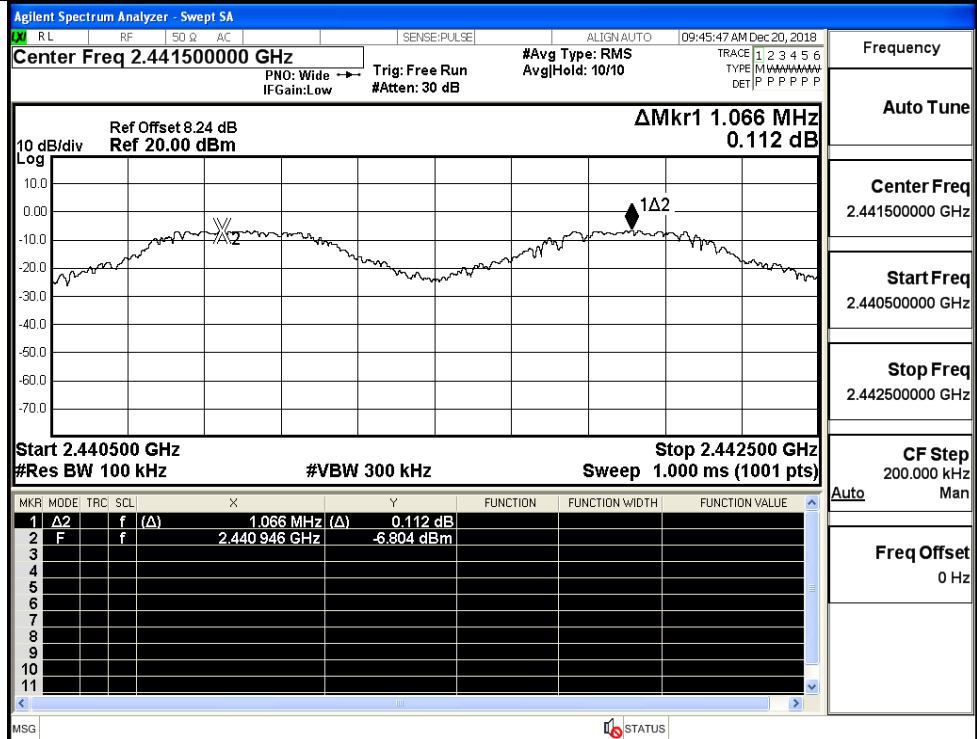
A.3 Carrier Frequency Separation

Mode	Channel.	Carrier Frequency Separation [MHz]	Limit [MHz]	Verdict
GFSK	LCH	0.990	0.689	PASS
	MCH	1.066	0.689	PASS
	HCH	0.982	0.689	PASS
π /4DQPSK	LCH	0.988	0.920	PASS
	MCH	0.996	0.920	PASS
	HCH	0.976	0.920	PASS
8DPSK	LCH	1.128	0.906	PASS
	MCH	1.010	0.906	PASS
	HCH	0.950	0.906	PASS

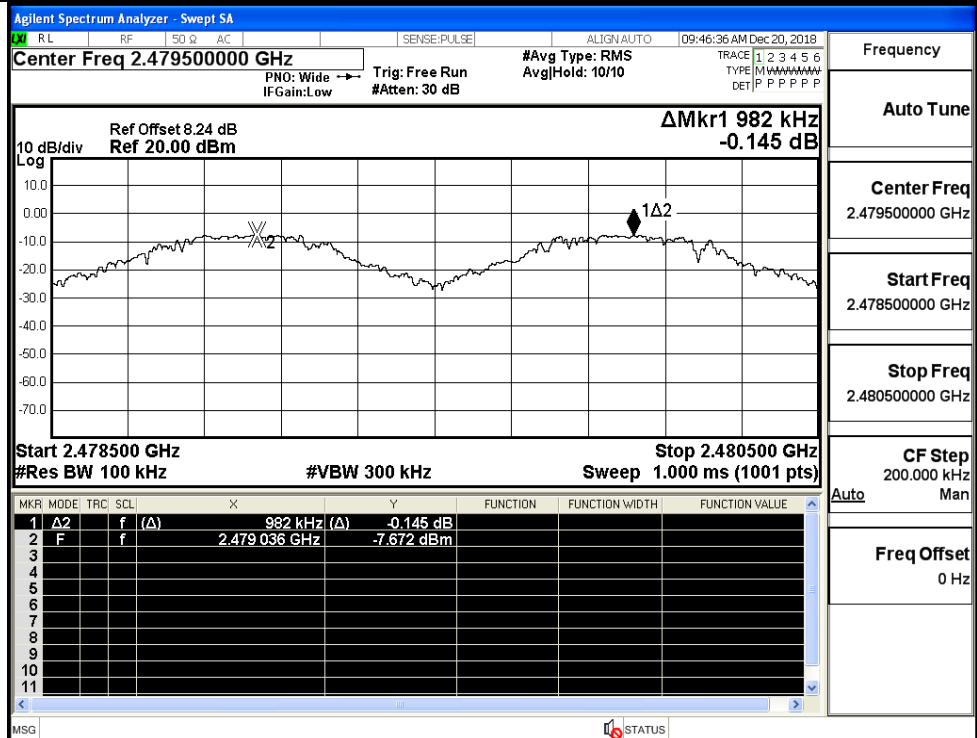
Test Graphs

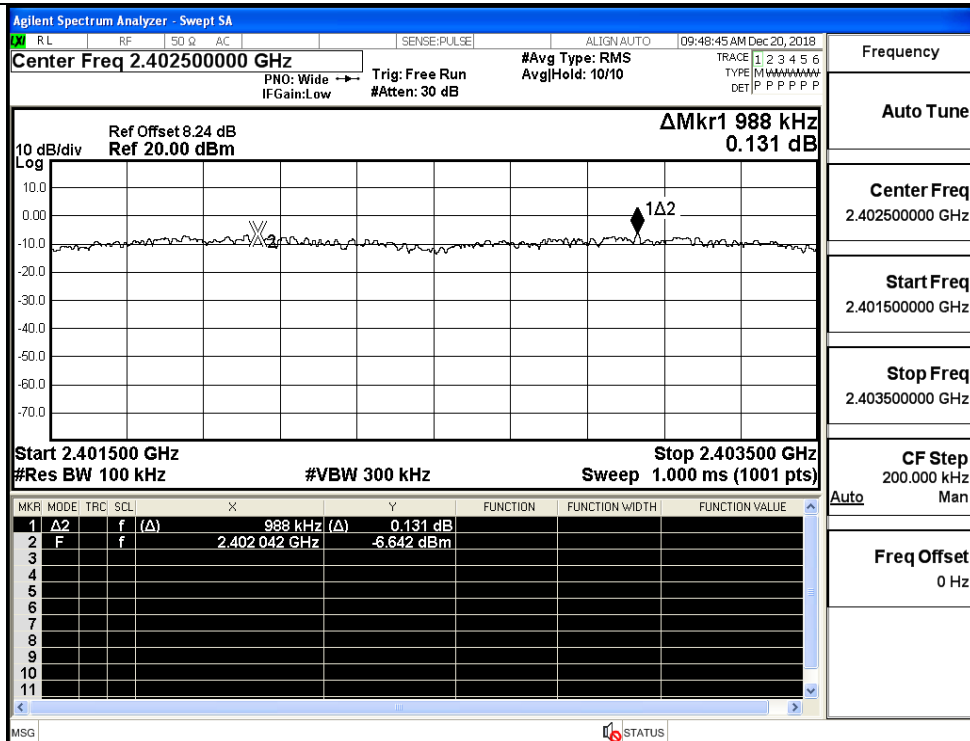
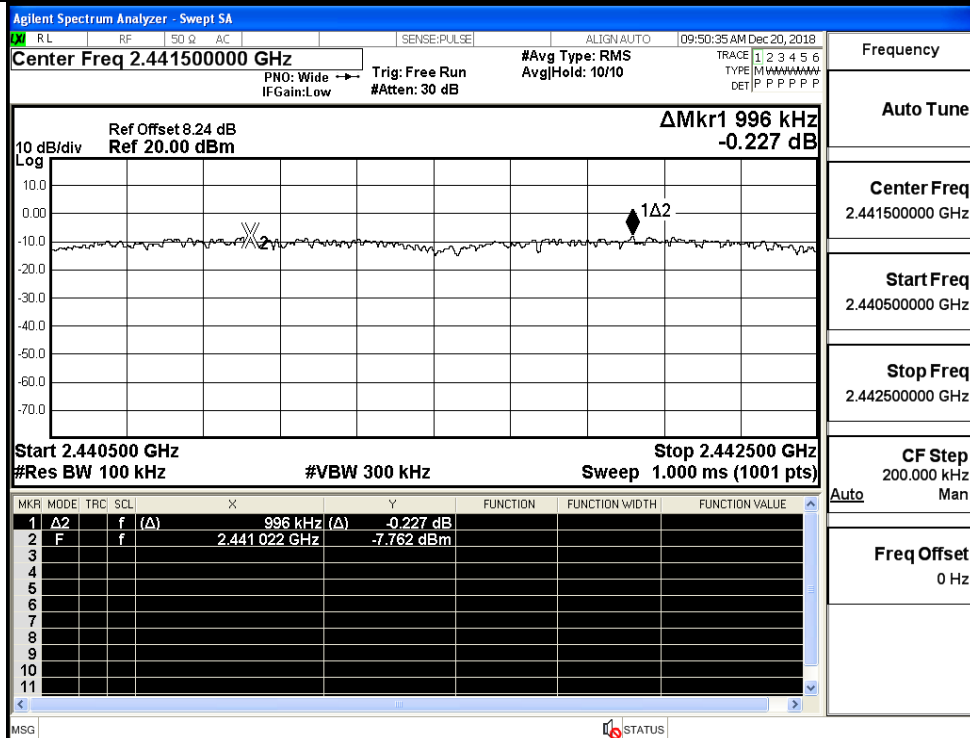


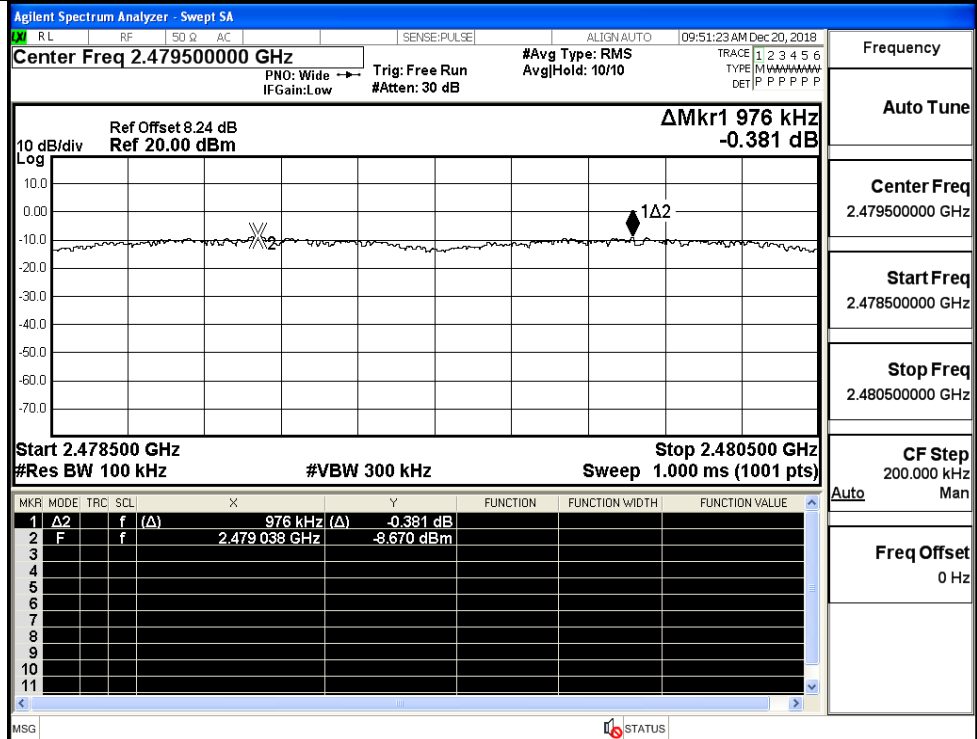
GFSK/MCH



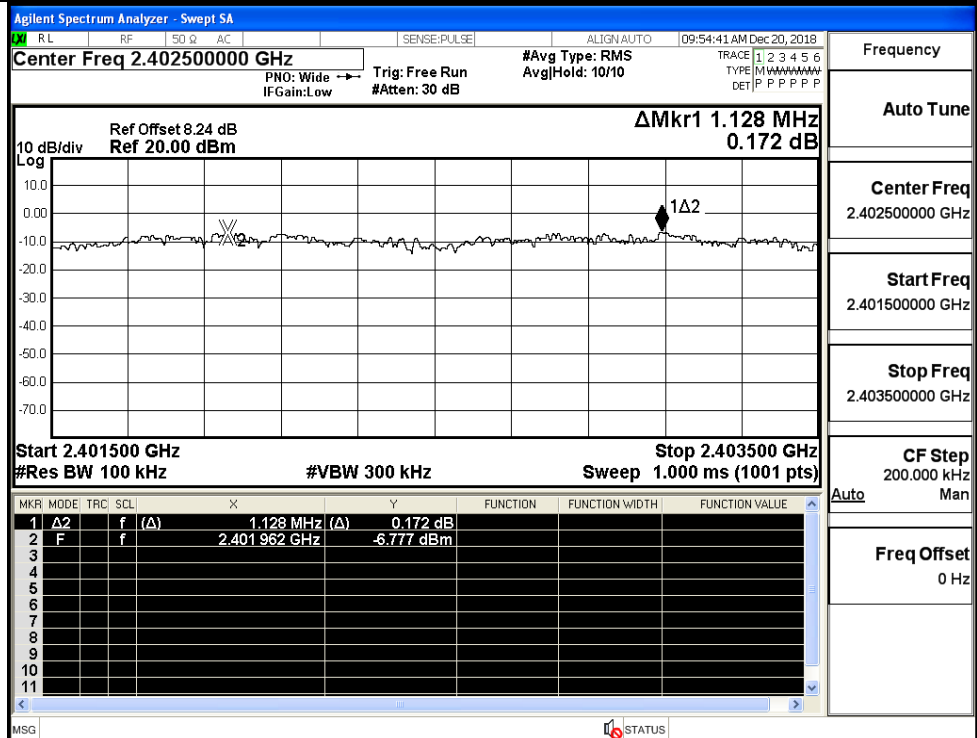
GFSK/HCH



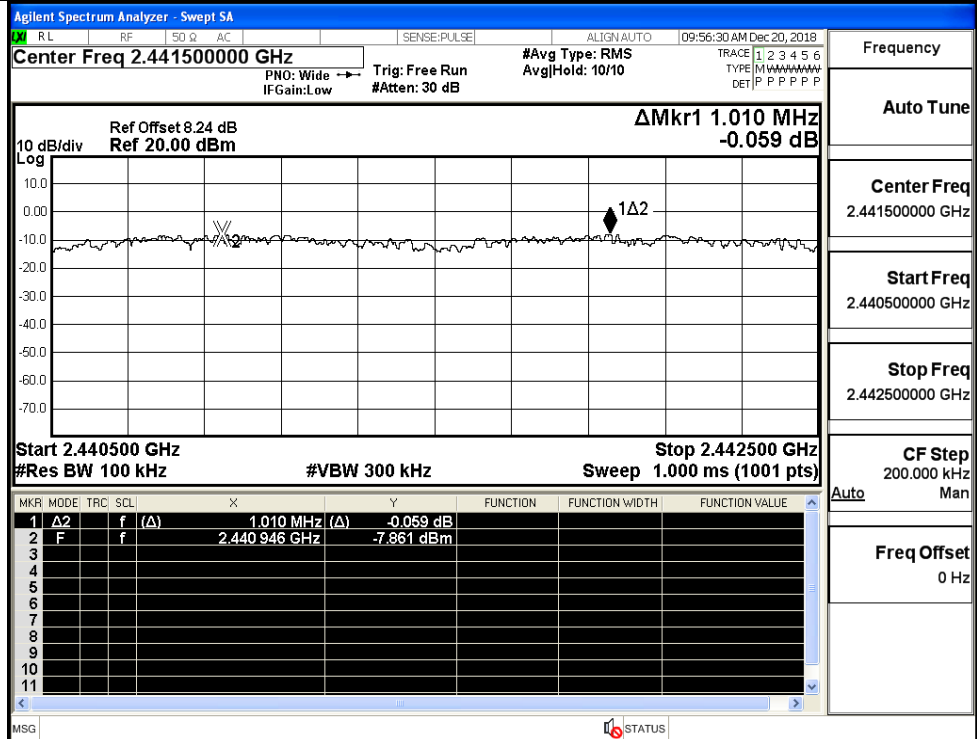
$\pi/4$ DQPSK/LCH $\pi/4$ DQPSK/MCH

$\pi/4$ DQPSK/HCH

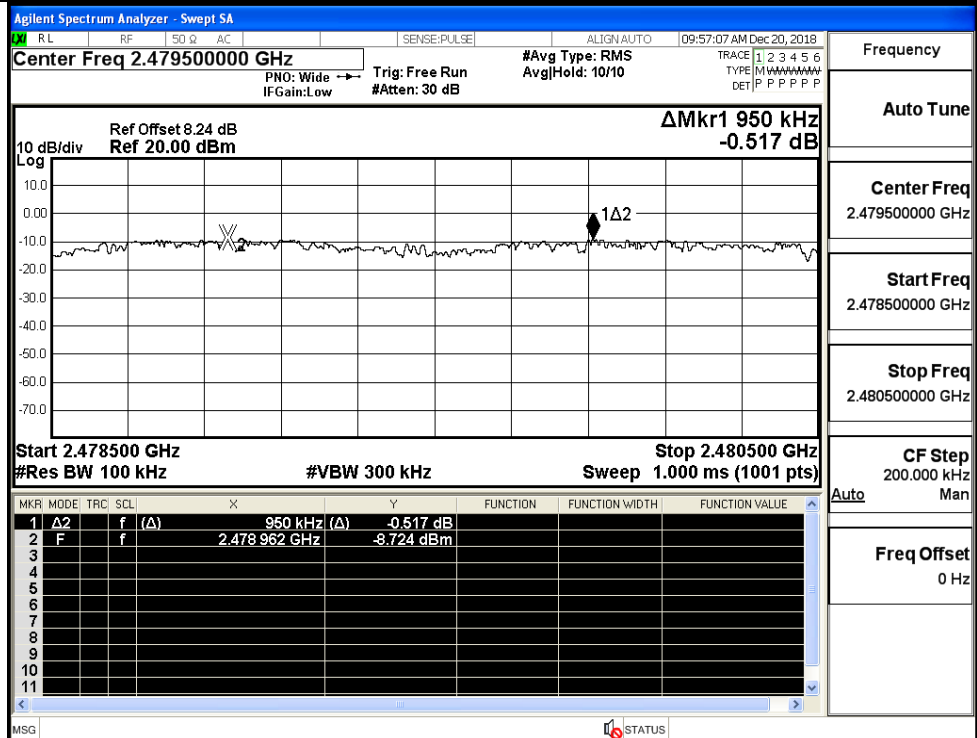
8DPSK/LCH



8DPSK/MCH



8DPSK/HCH

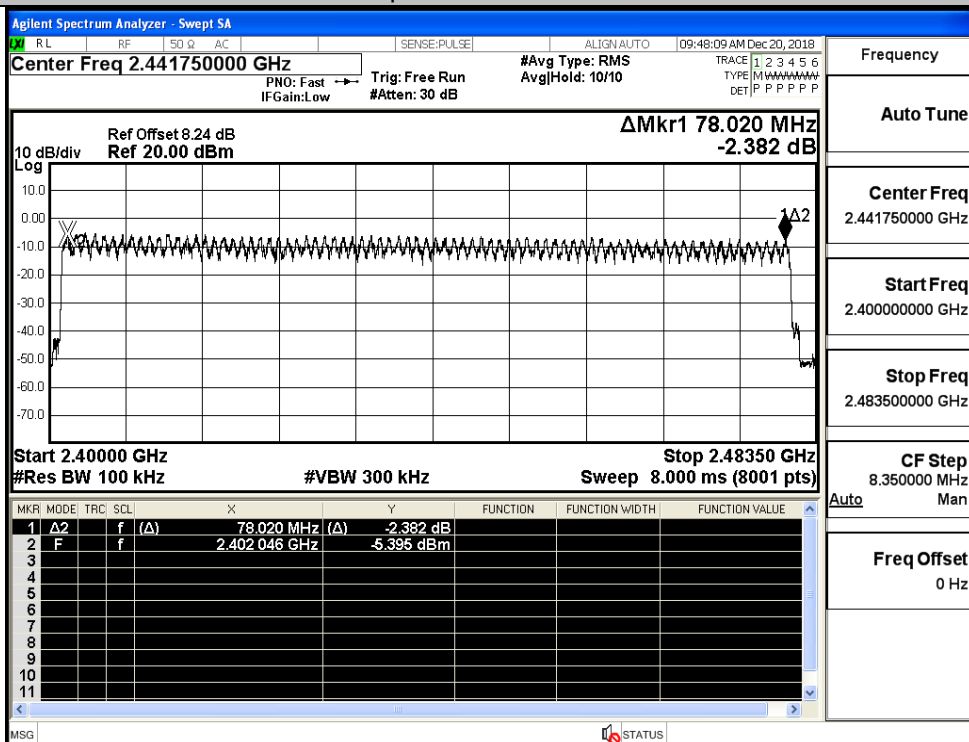
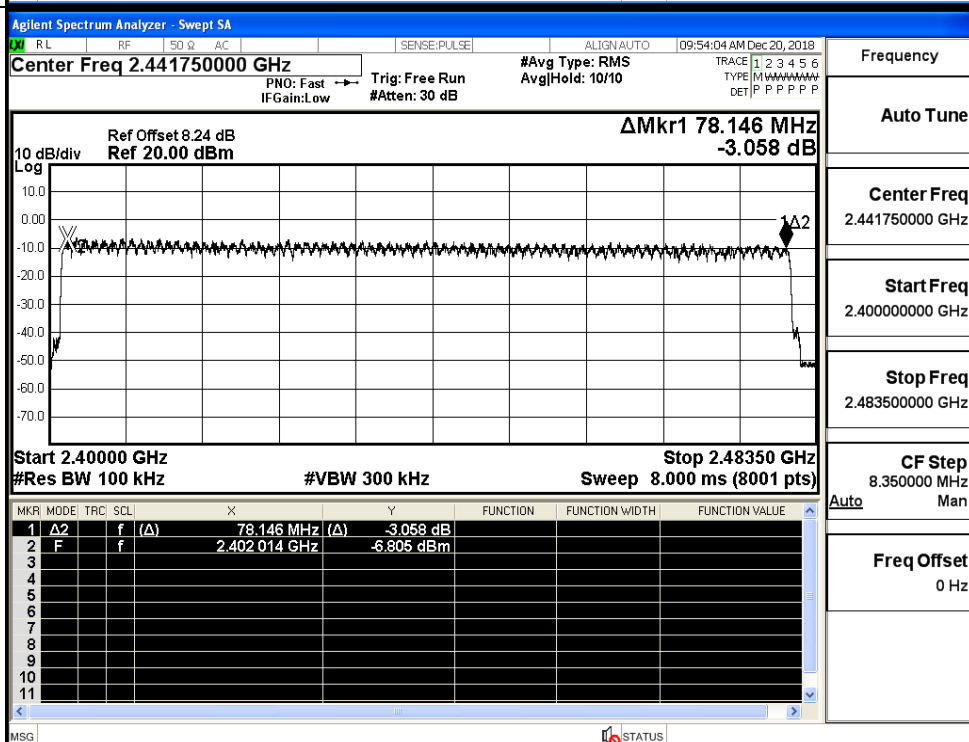


A.4 Hopping Channel Number

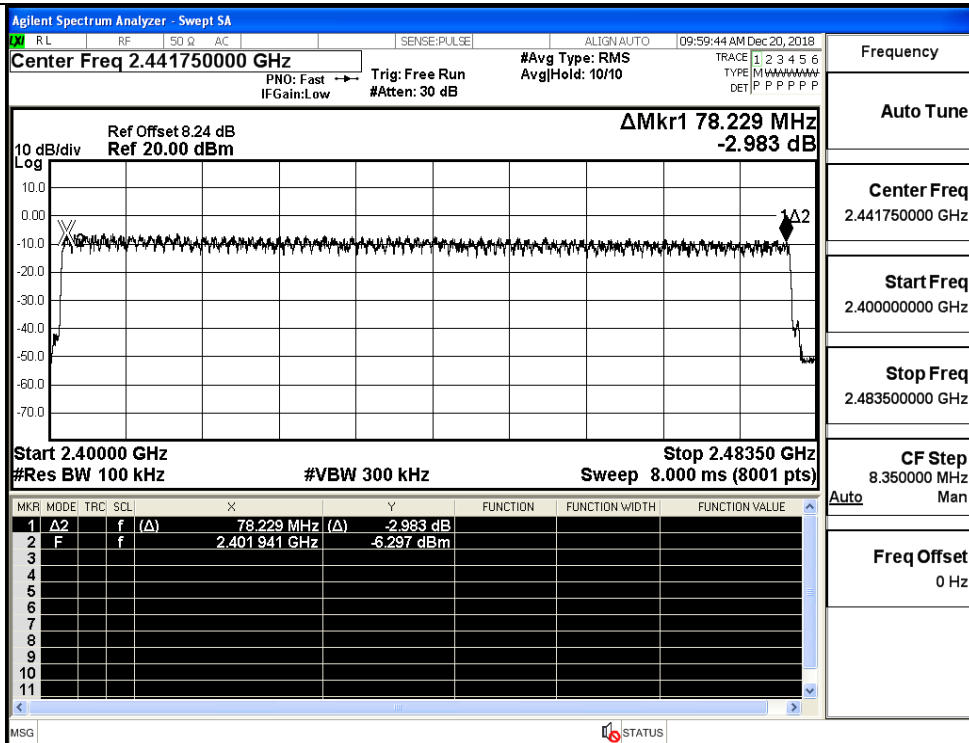
Mode	Channel.	Number of Hopping Channel [N]	Limit [N]	Verdict
GFSK	Hop	79	>=15	PASS
$\pi/4$ DQPSK	Hop	79	>=15	PASS
8DPSK	Hop	79	>=15	PASS

Test Graphs

GFSK/Hop

 $\pi/4$ DQPSK/Hop

8DPSK/Hop

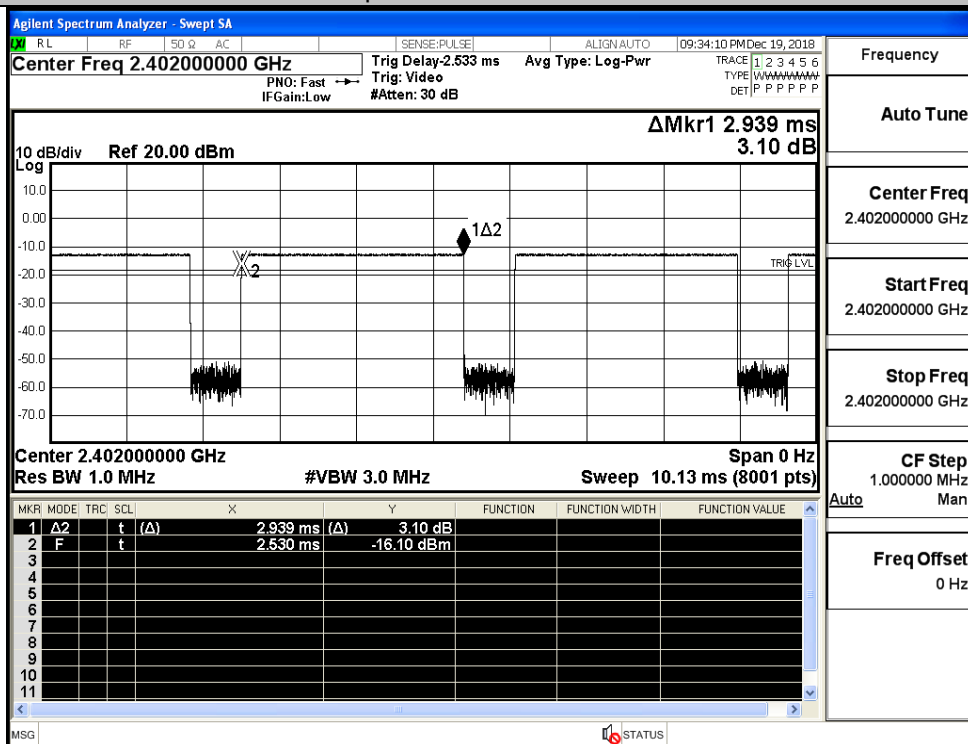


A.5 Dwell Time

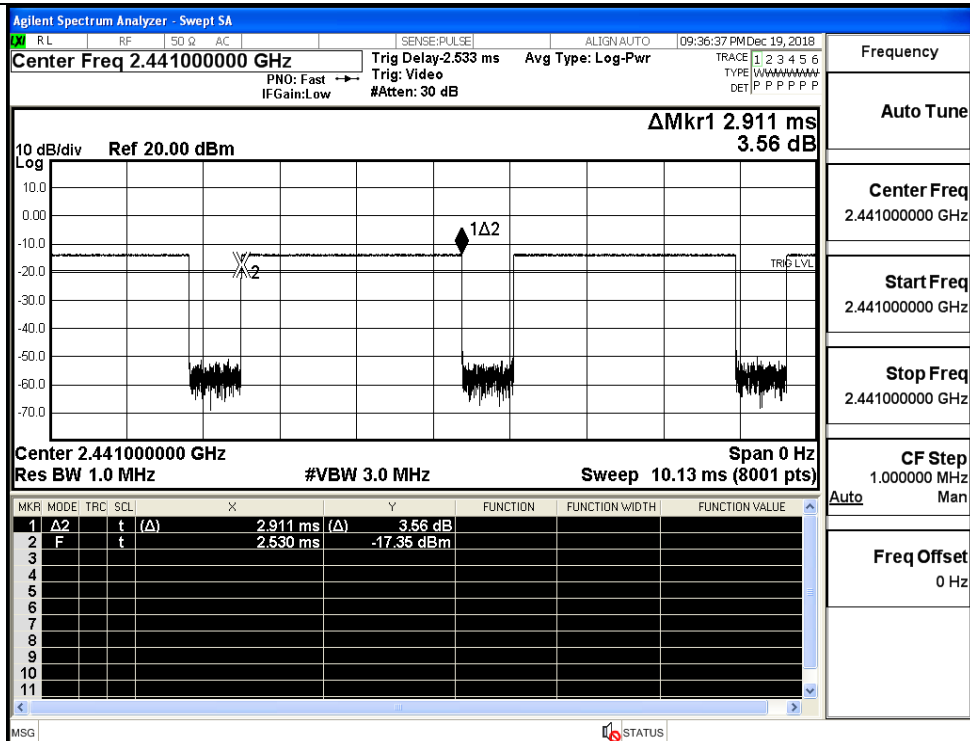
Mode	Packet	Channel	Burst Width [ms/hop/ch]	Total Hops[hop*ch]	Dwell Time[s]	Limit [s]	Verdict
GFSK	DH5	LCH	2.94	106.7	0.314	0.4	PASS
	DH5	MCH	2.91	106.7	0.310	0.4	PASS
	DH5	HCH	2.91	106.7	0.310	0.4	PASS
$\pi/4$ DQPSK	2DH5	LCH	2.93	106.7	0.313	0.4	PASS
	2DH5	MCH	2.93	106.7	0.313	0.4	PASS
	2DH5	HCH	2.94	106.7	0.314	0.4	PASS
8DPSK	3DH5	LCH	2.92	106.7	0.311	0.4	PASS
	3DH5	MCH	2.91	106.7	0.310	0.4	PASS
	3DH5	HCH	2.94	106.7	0.314	0.4	PASS

Test Graphs

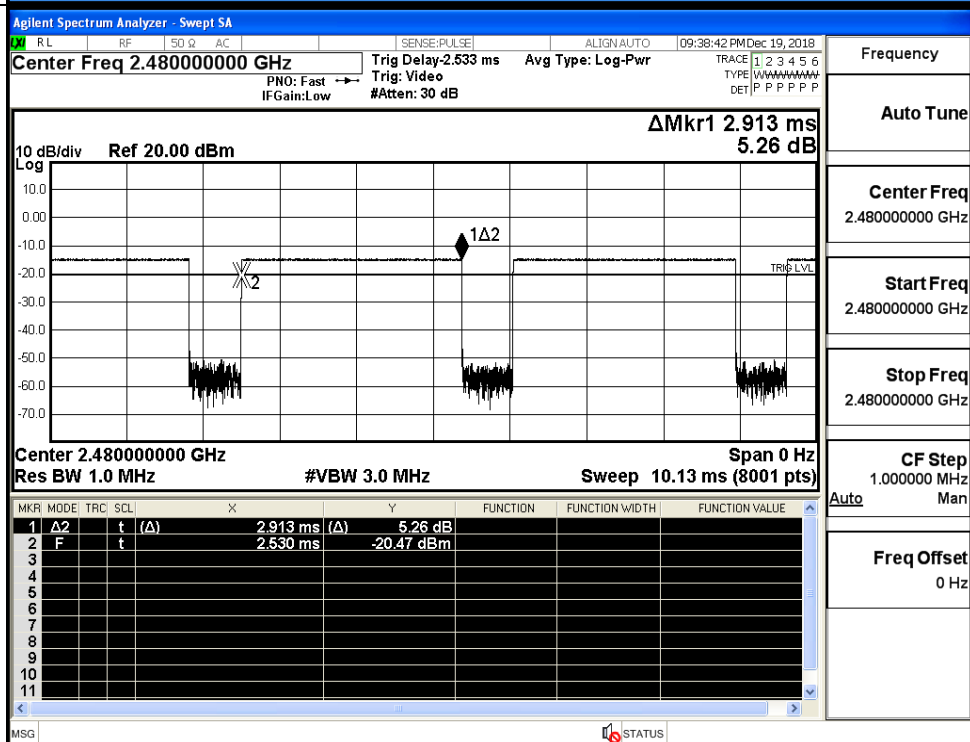
GFSK_DH5/LCH



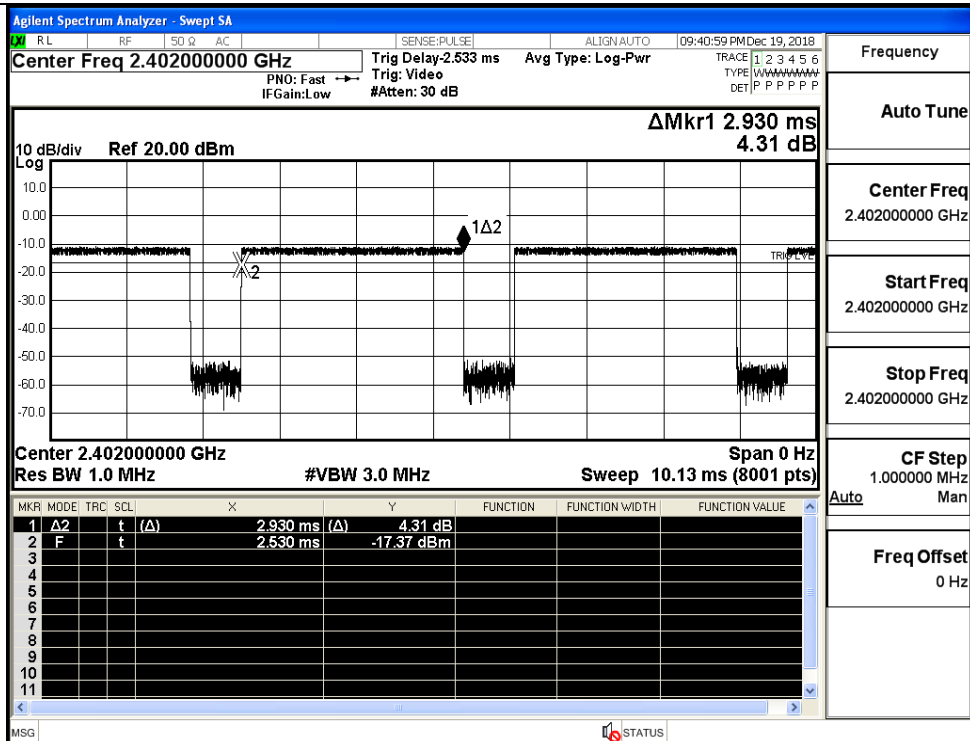
GFSK_DH5/MCH



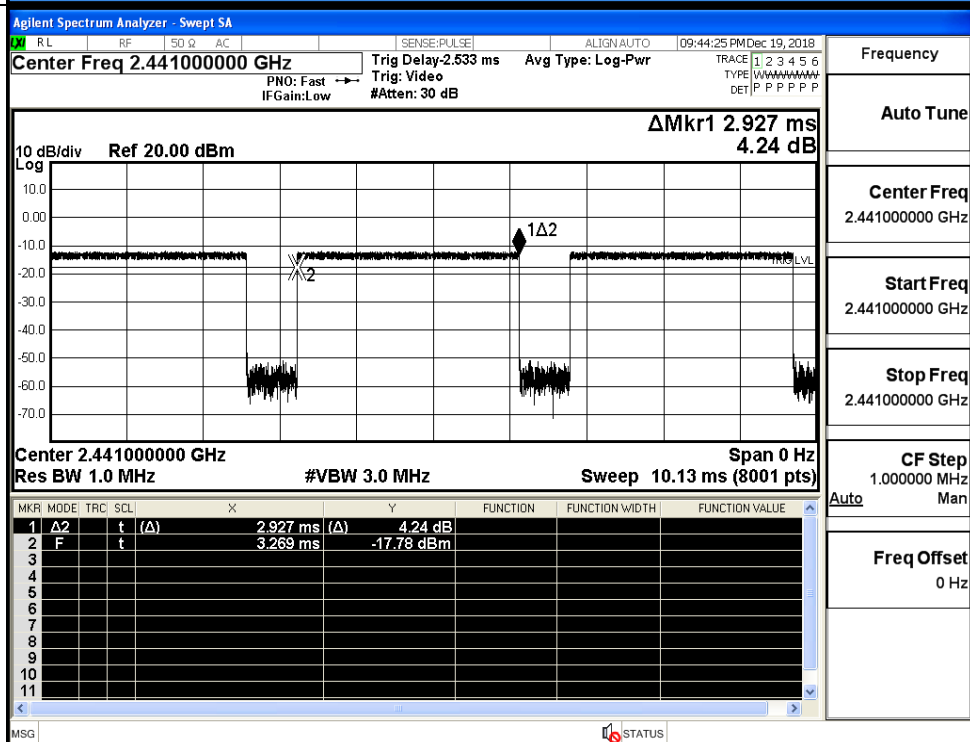
GFSK_DH5/HCH



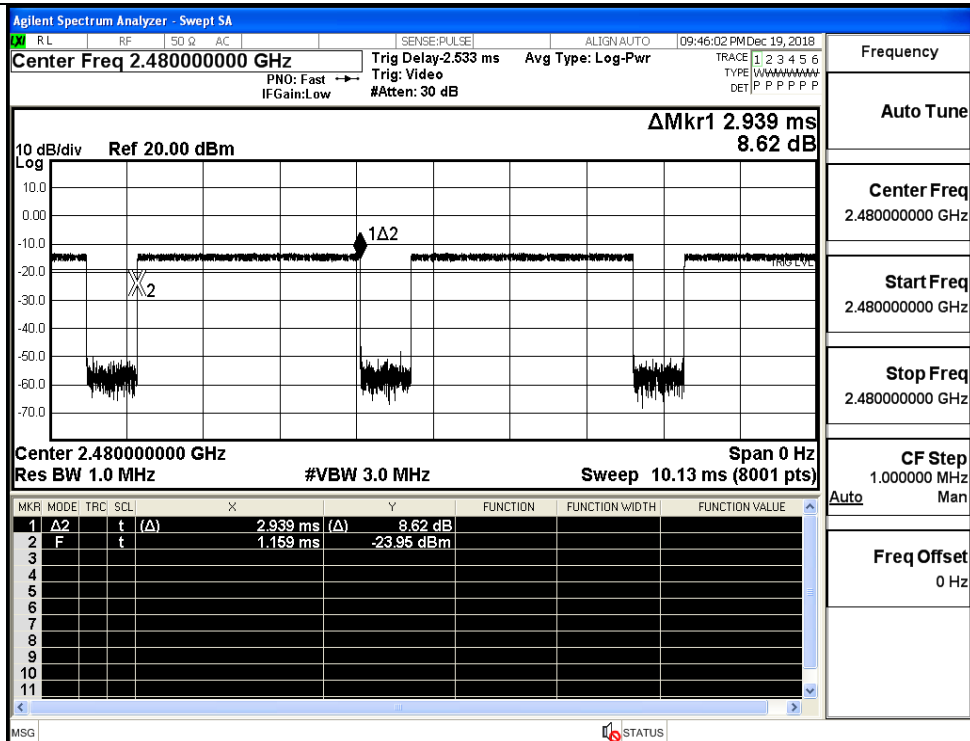
$\pi/4$ DQPSK
_2DH5/LCH



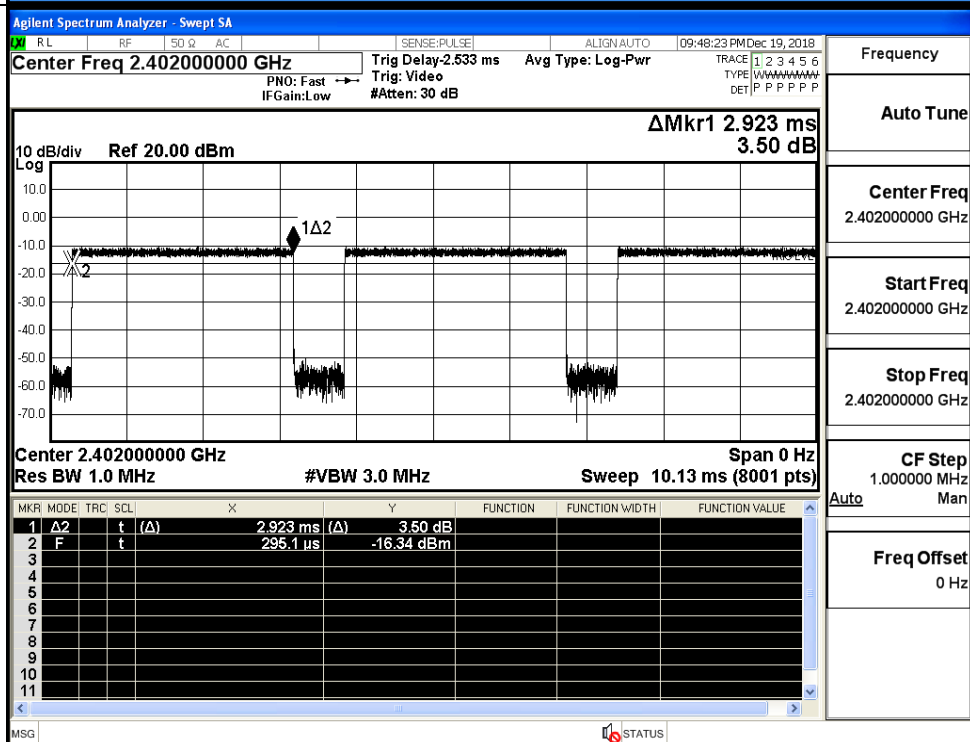
$\pi/4$ DQPSK
_2DH5/MCH



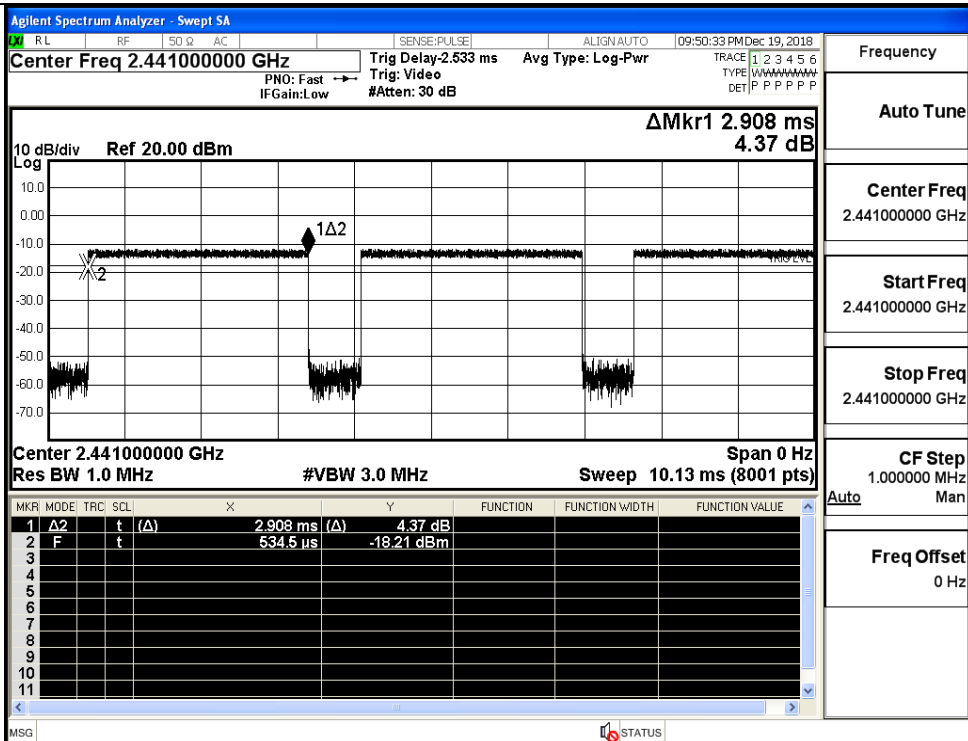
$\pi/4$ DQPSK
_2DH5/HCH



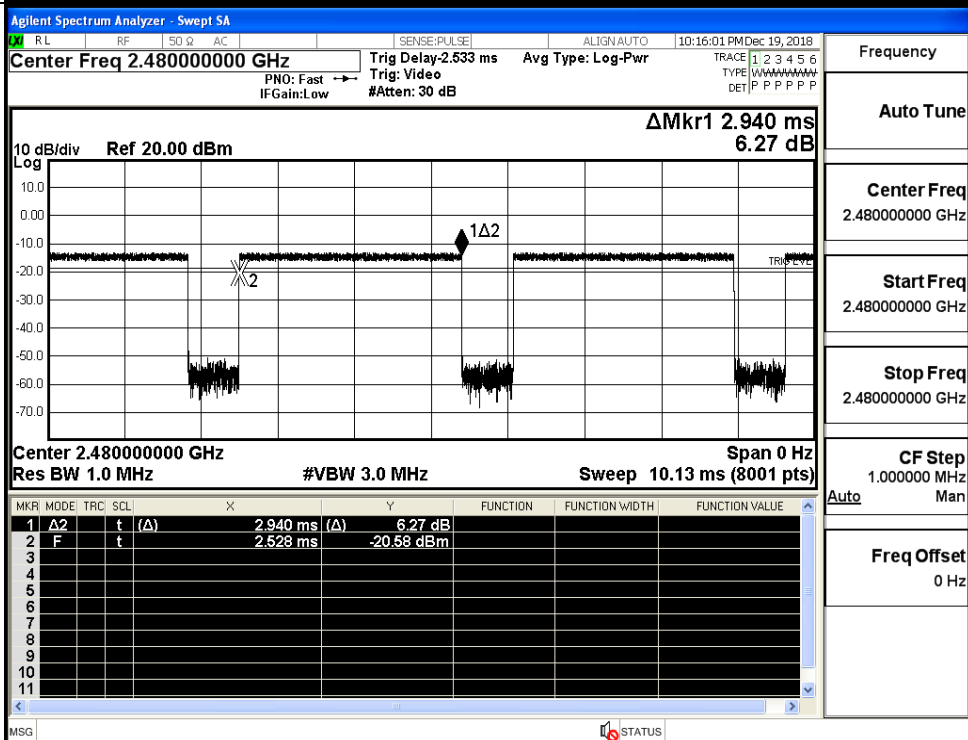
8DPSK _3DH5/LCH



8DPSK_3DH5/MCH



8DPSK_3DH5/HCH

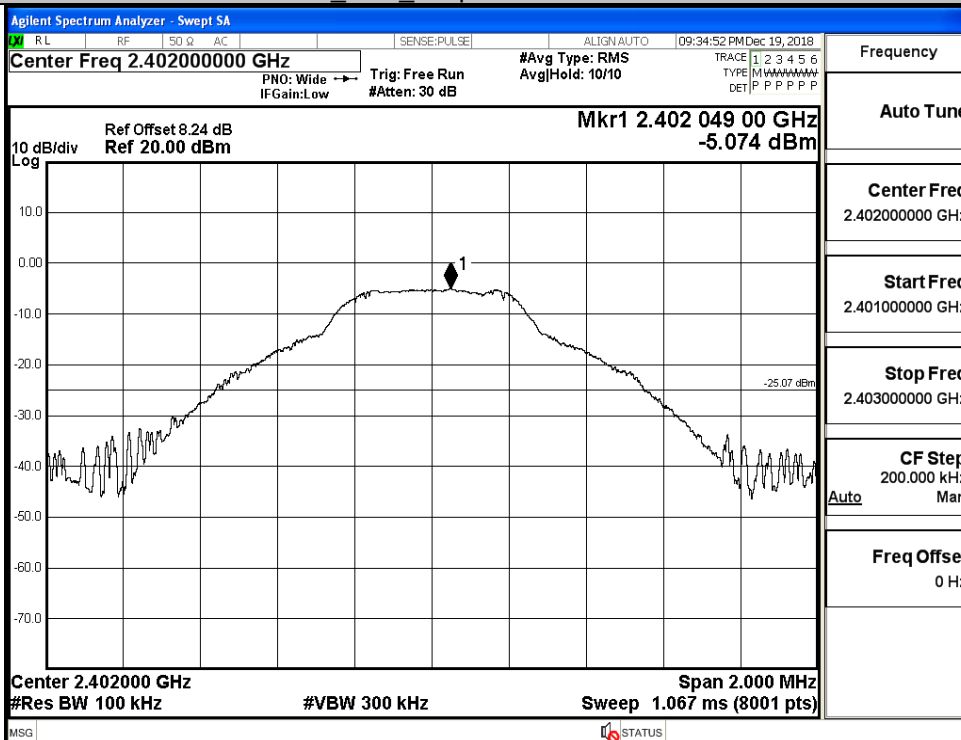


A.6 RF Conducted Spurious Emissions

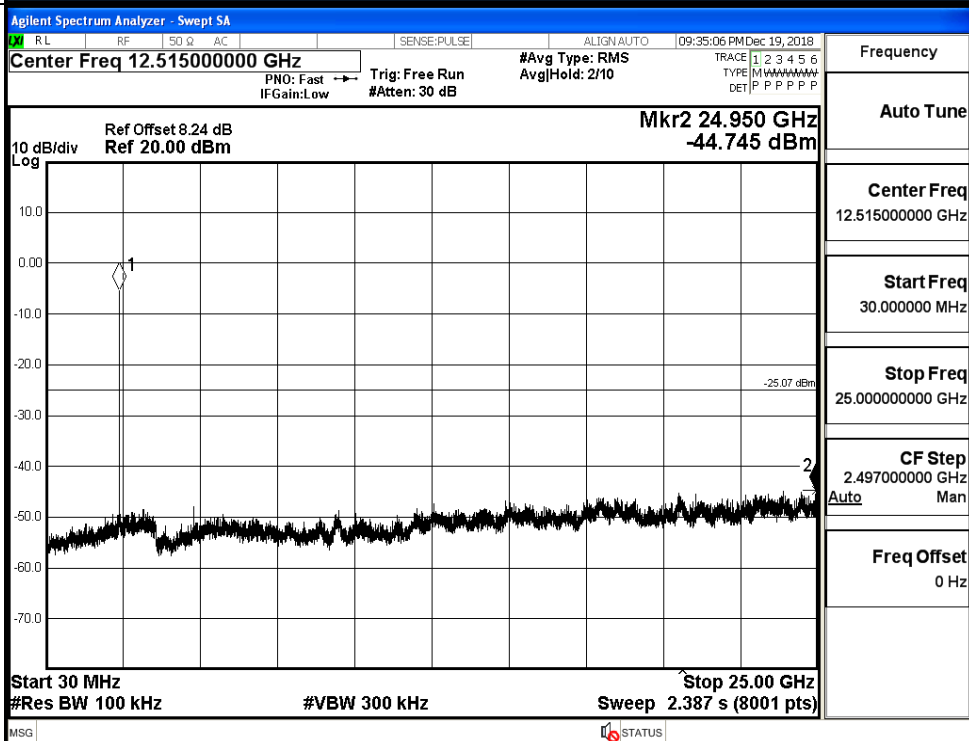
Mode	Channel	Pref [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
GFSK	LCH	-5.074	-44.745	-25.074	PASS
	MCH	-6.12	-43.950	-26.120	PASS
	HCH	-7.056	-44.064	-27.056	PASS
$\pi/4$ DQPSK	LCH	-6.098	-45.038	-26.098	PASS
	MCH	-7.192	-44.543	-27.192	PASS
	HCH	-8.258	-43.384	-28.258	PASS
8DPSK	LCH	-6.177	-44.168	-26.177	PASS
	MCH	-7.272	-45.278	-27.272	PASS
	HCH	-8.448	-44.936	-28.448	PASS

GFSK LCH Graphs

Pref

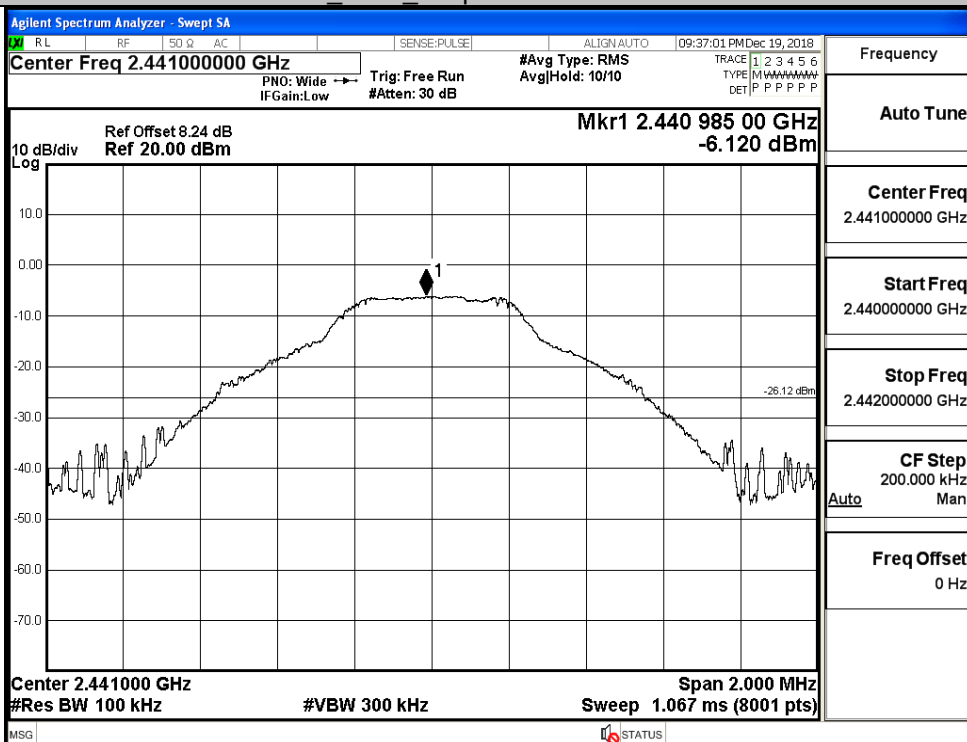


Puw

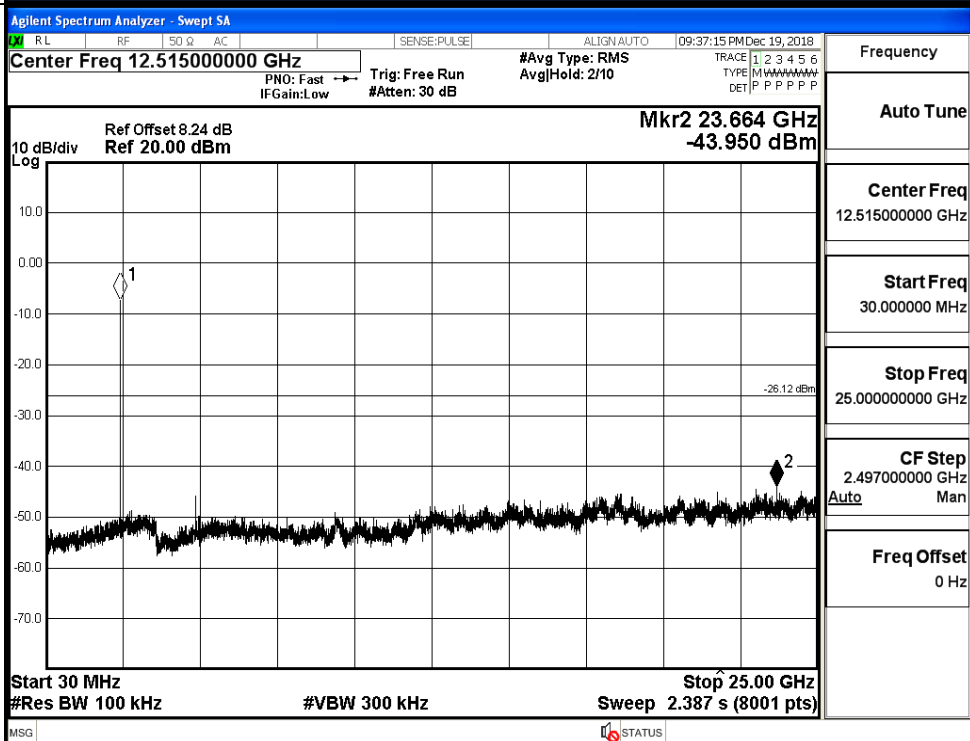


GFSK_MCH_Graphs

Pref

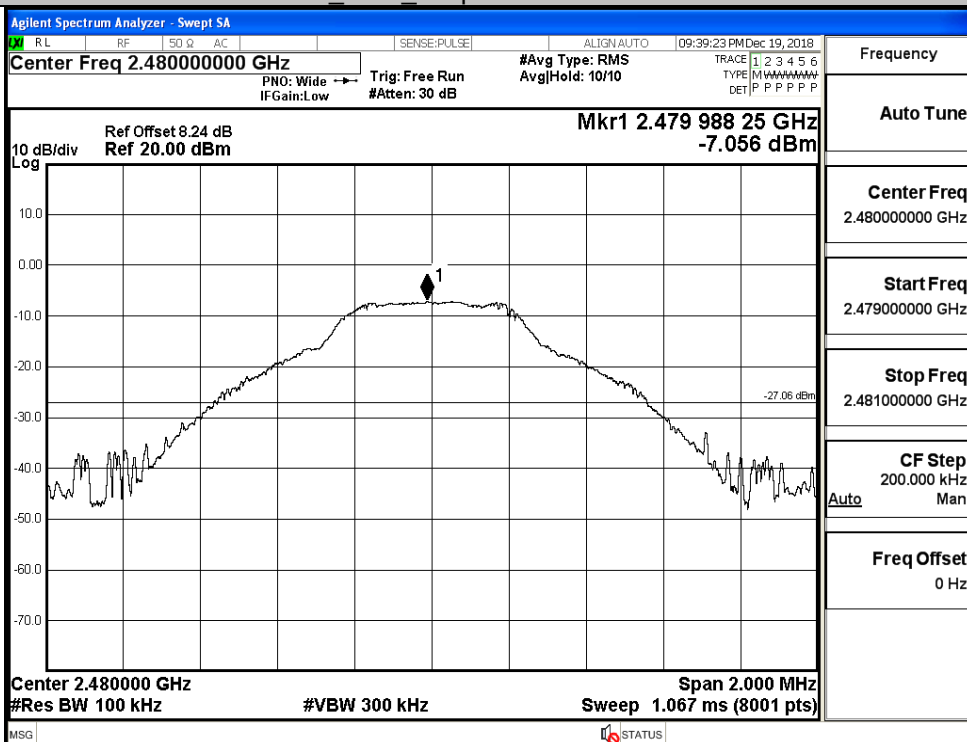


Puw

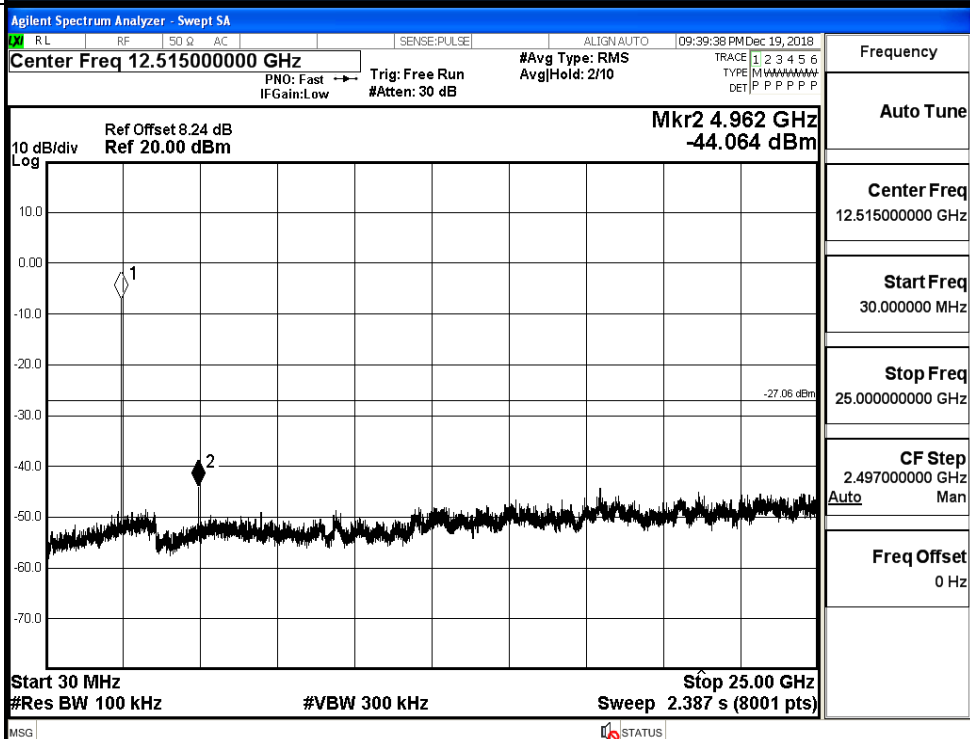


GFSK_HCH_Graphs

Pref

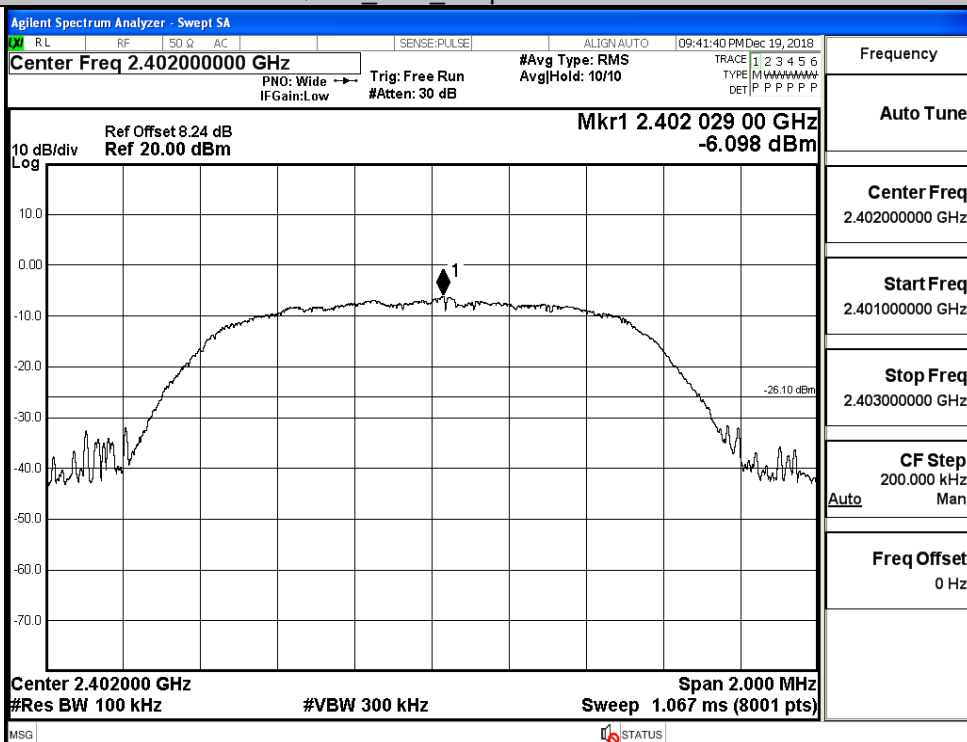


Puw

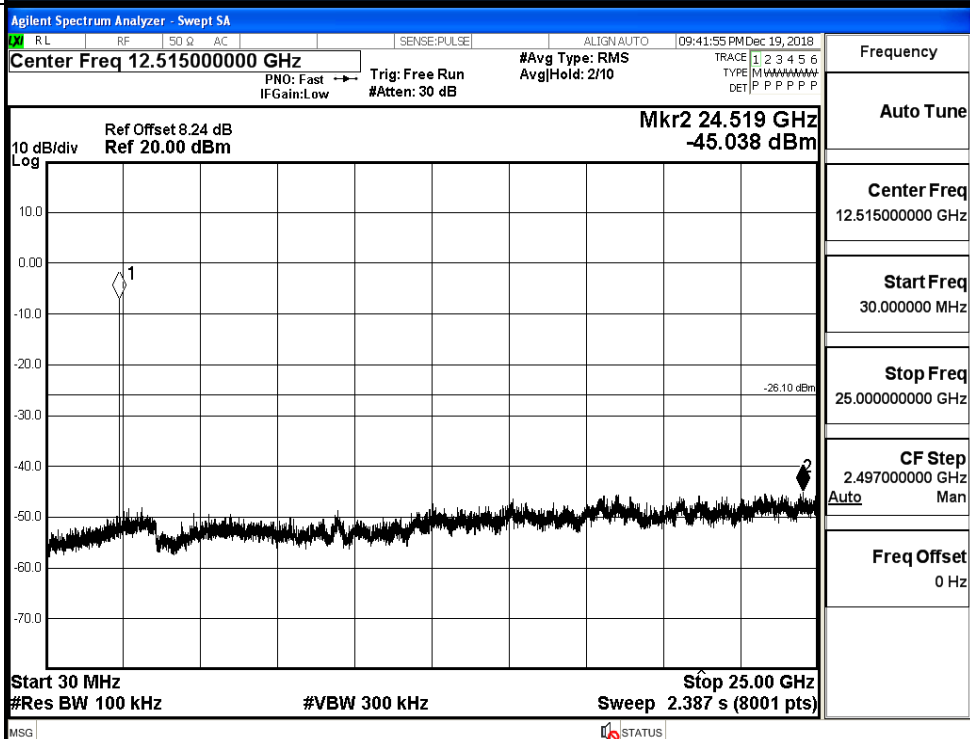


π /4DQPSK_LCH_Graphs

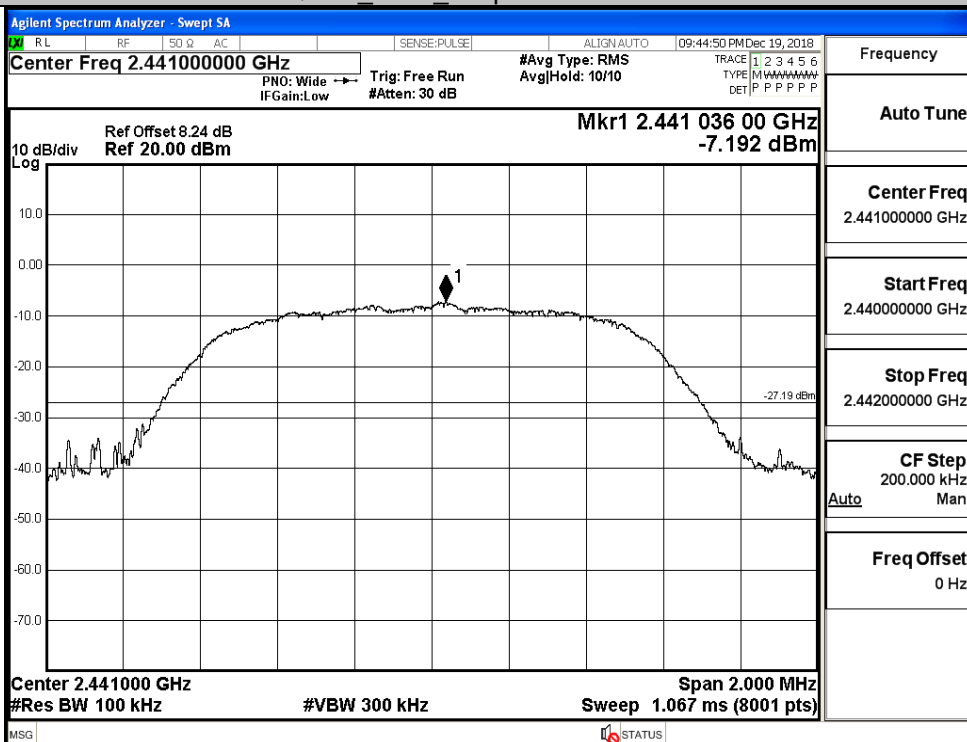
Pref



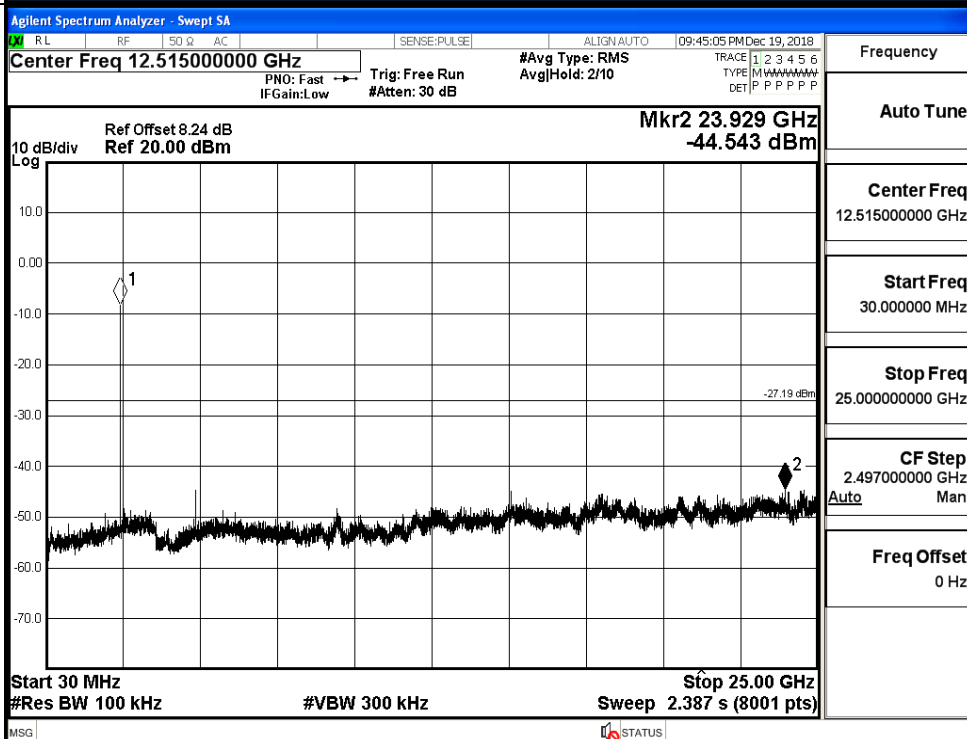
Puw



Pref

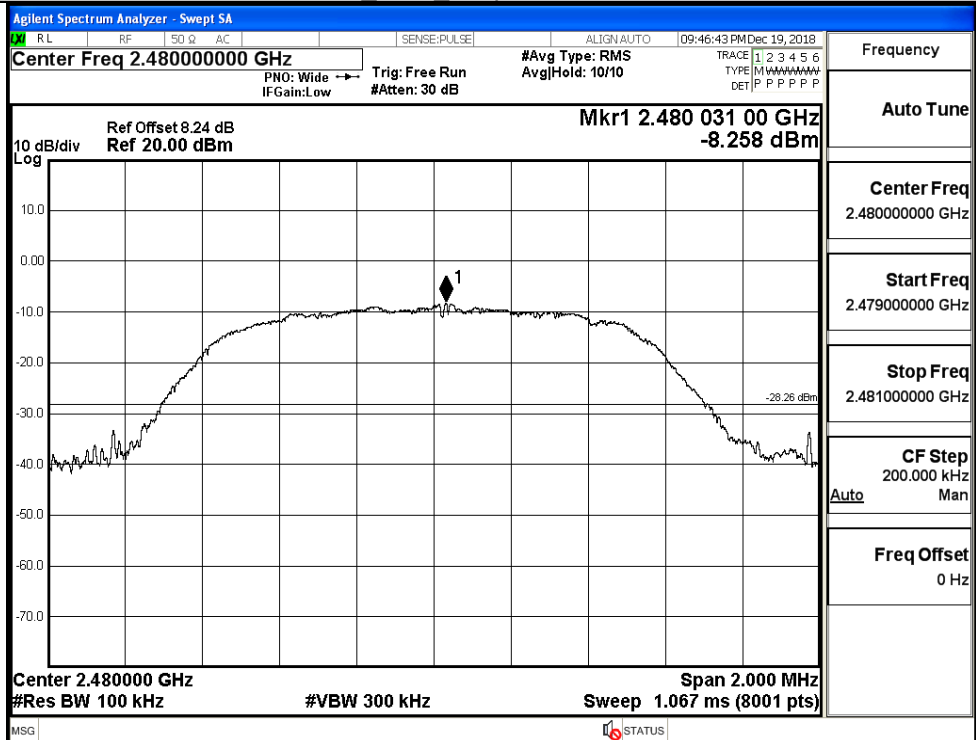


Puw

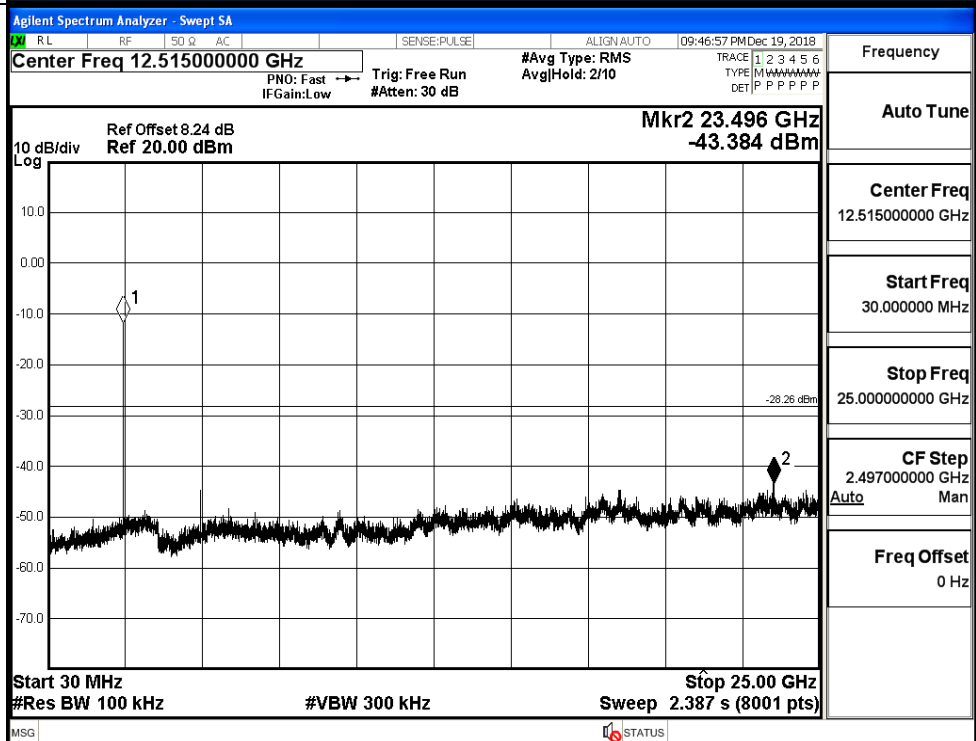


$\pi/4$ DQPSK_HCH_Graphs

Pref

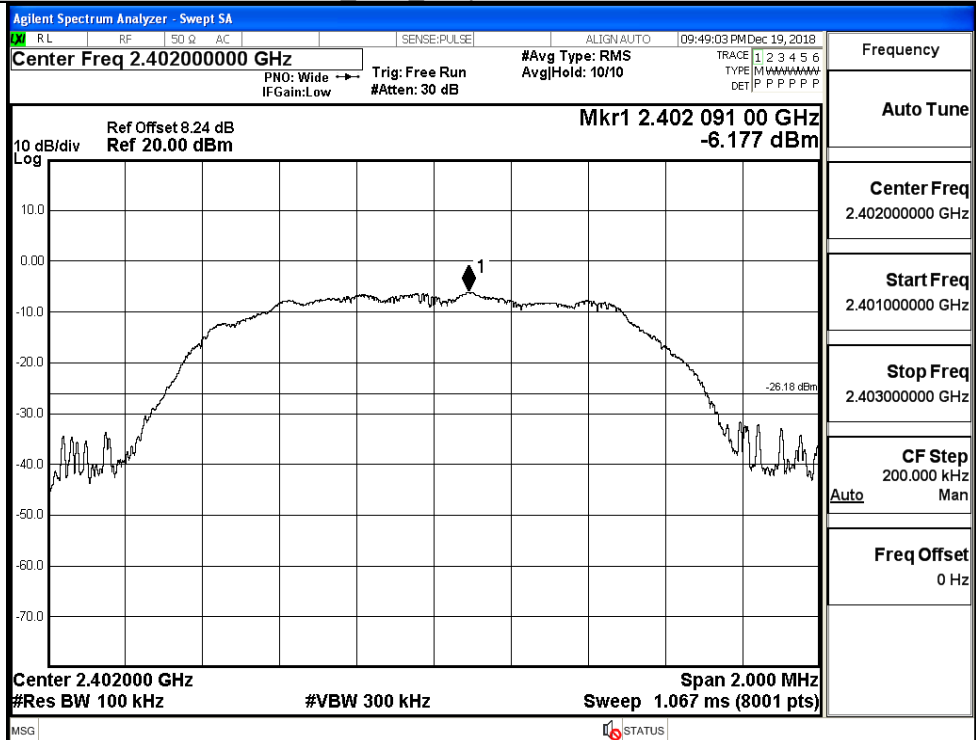


Puw

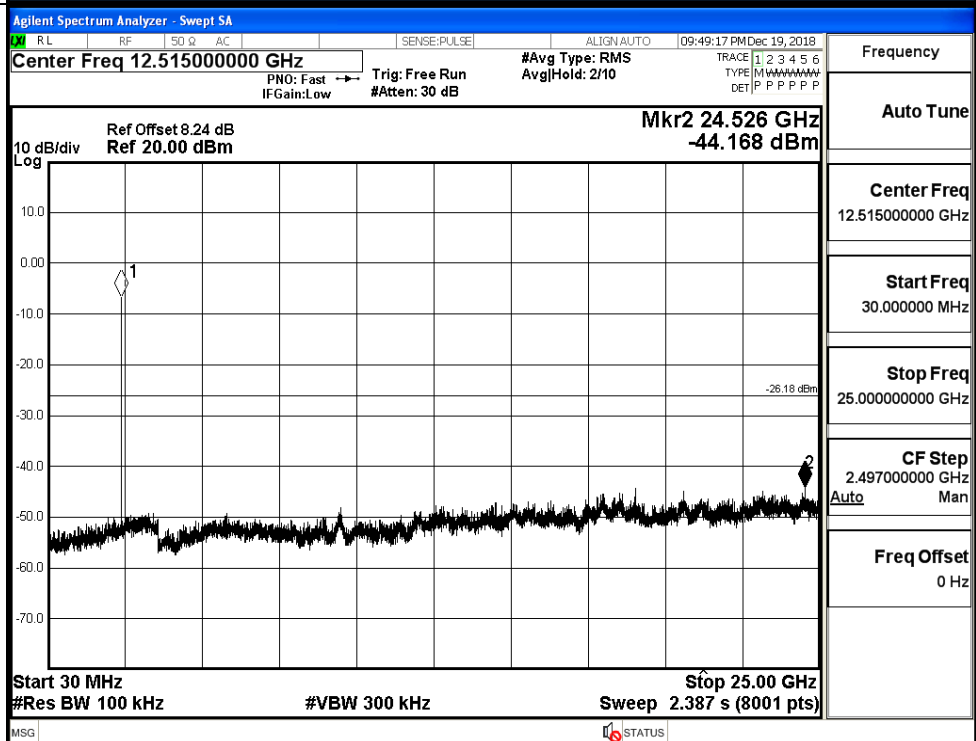


8DPSK_LCH_Graphs

Pref

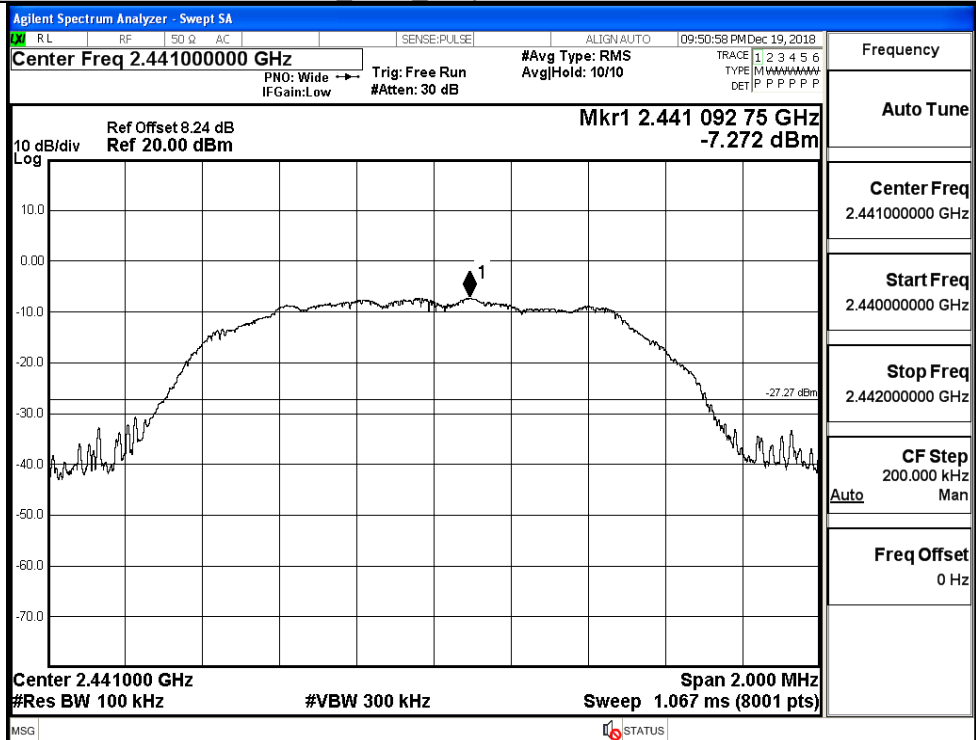


Puw

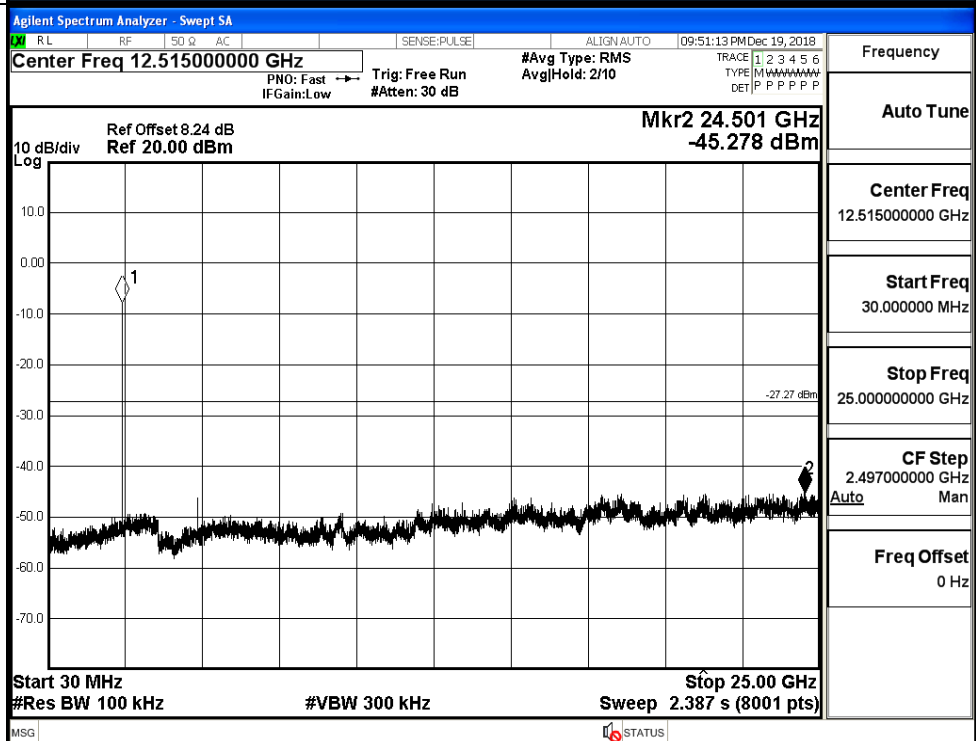


8DPSK_MCH_Graphs

Pref

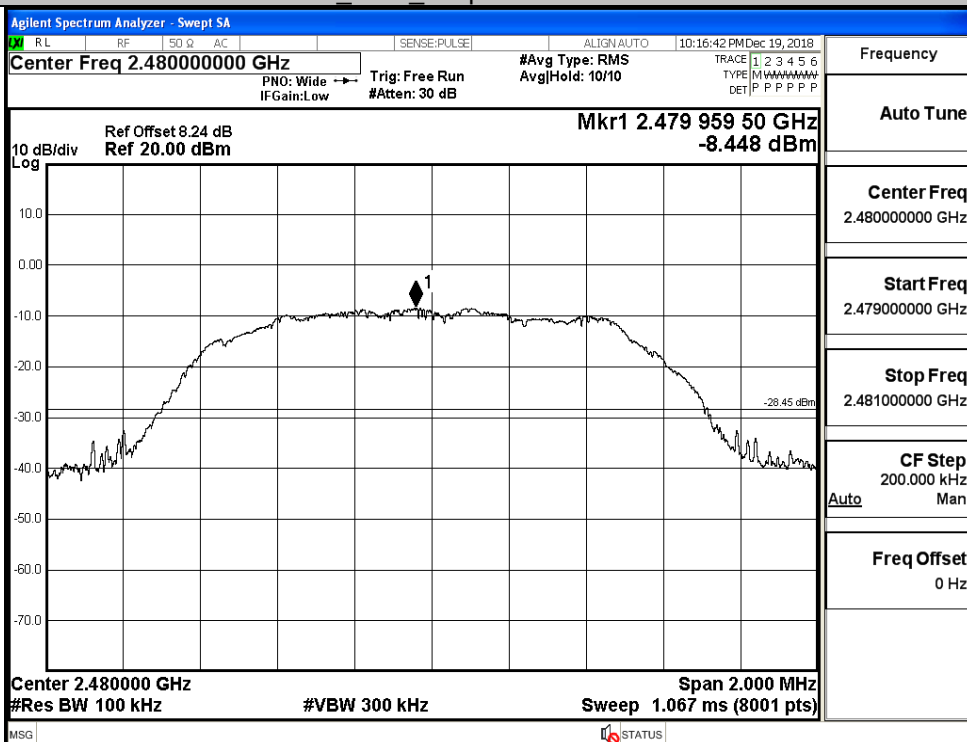


Puw

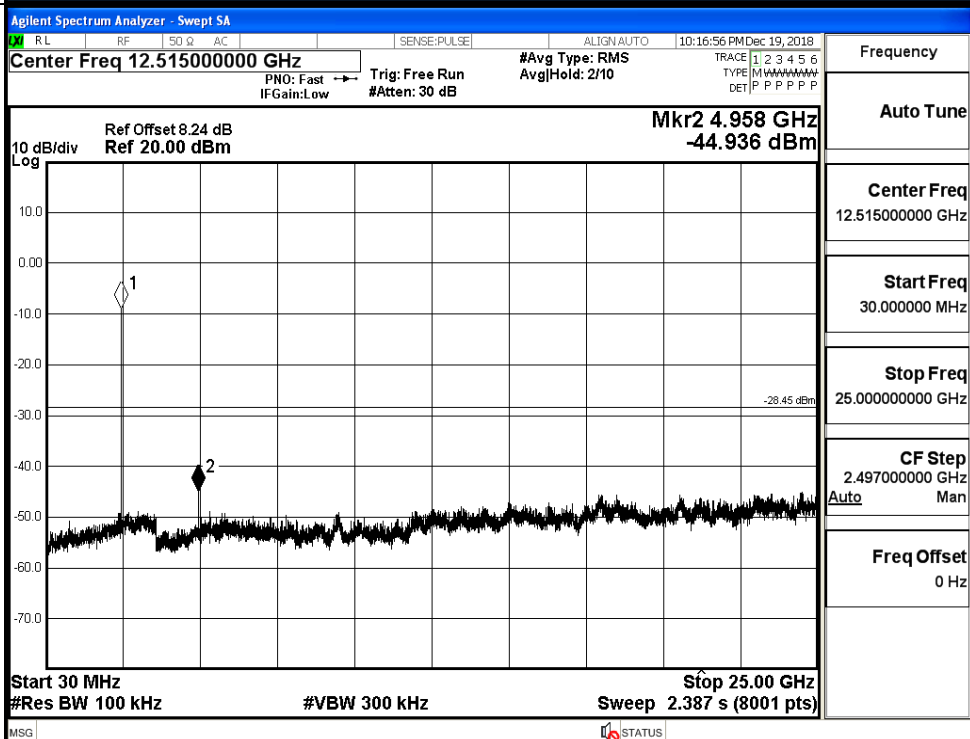


8DPSK_HCH_Graphs

Pref



Puw

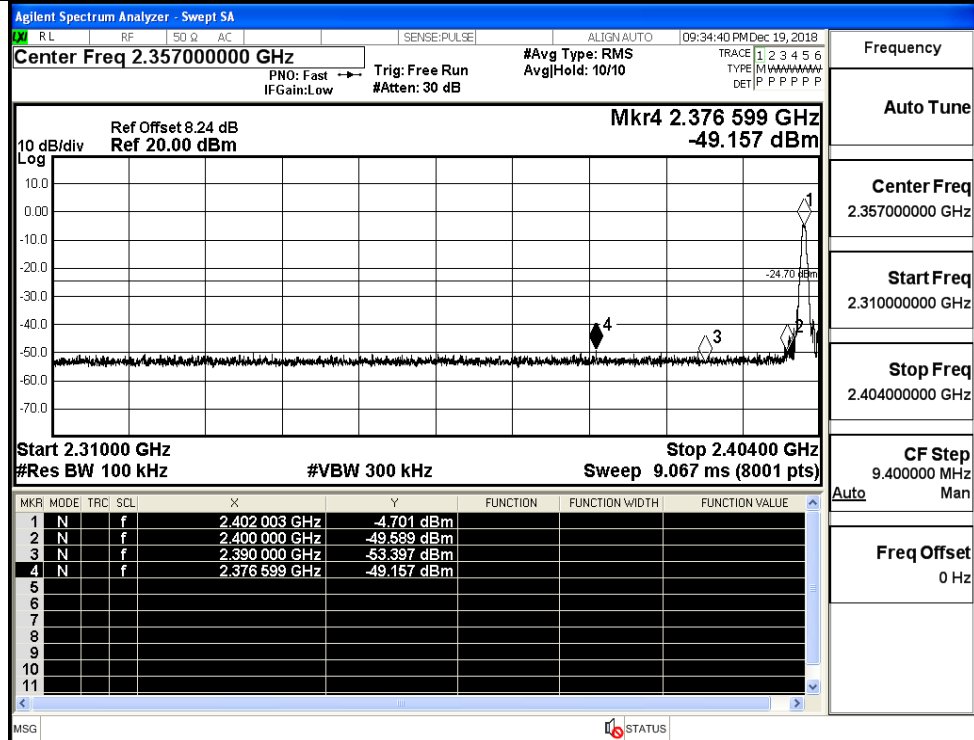


A.7 Band-edge for RF Conducted Emissions

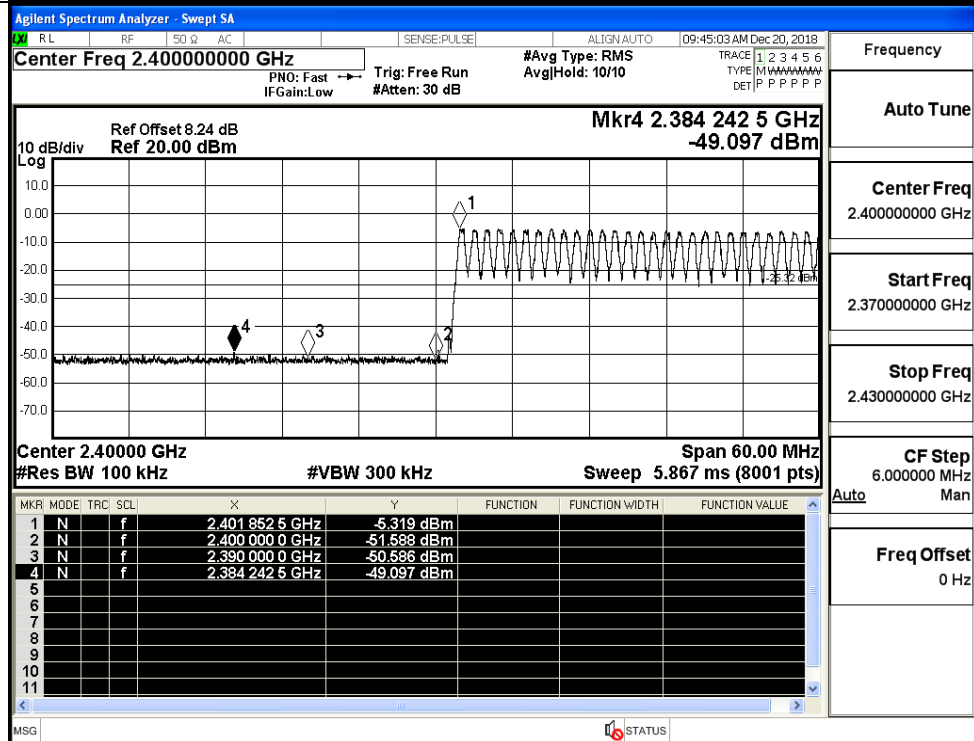
Mode	Channel	Carrier Frequency [MHz]	Carrier Power [dBm]	Frequency Hopping	Max Spurious Level [dBm]	Limit [dBm]	Verdict
GFSK	LCH	2402	-4.701	Off	-49.157	-24.7	PASS
			-5.319	On	-49.097	-25.32	PASS
	HCH	2480	-6.718	Off	-49.060	-26.72	PASS
			-6.878	On	-48.660	-26.88	PASS
$\pi/4$ DQPSK	LCH	2402	-5.941	Off	-49.432	-25.94	PASS
			-6.236	On	-48.540	-26.24	PASS
	HCH	2480	-8.343	Off	-49.443	-28.34	PASS
			-8.105	On	-49.050	-28.11	PASS
8DPSK	LCH	2402	-5.743	Off	-49.954	-25.74	PASS
			-6.183	On	-48.899	-26.18	PASS
	HCH	2480	-7.951	Off	-49.786	-27.95	PASS
			-7.768	On	-48.989	-27.77	PASS

Test Graphs

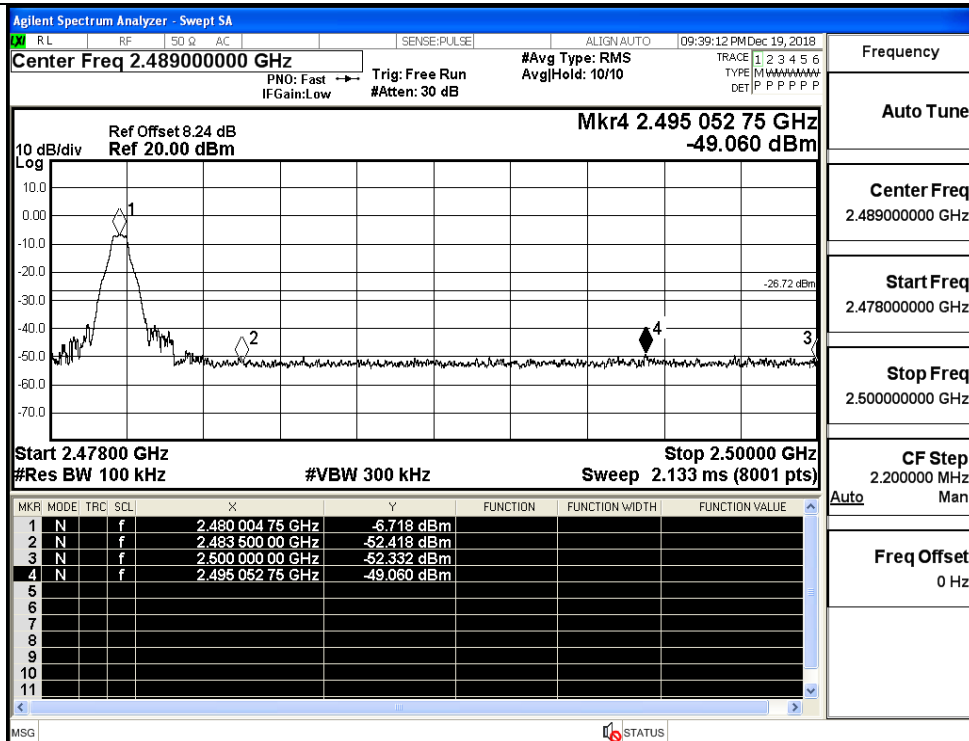
GFSK/LCH/No Hop



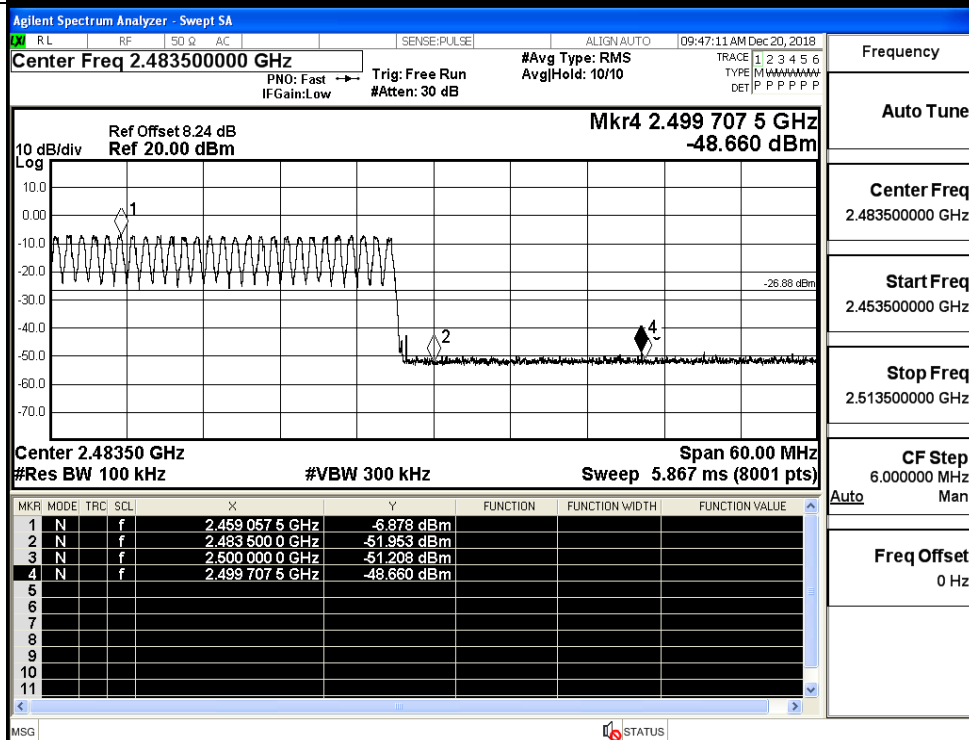
GFSK/LCH/Hop



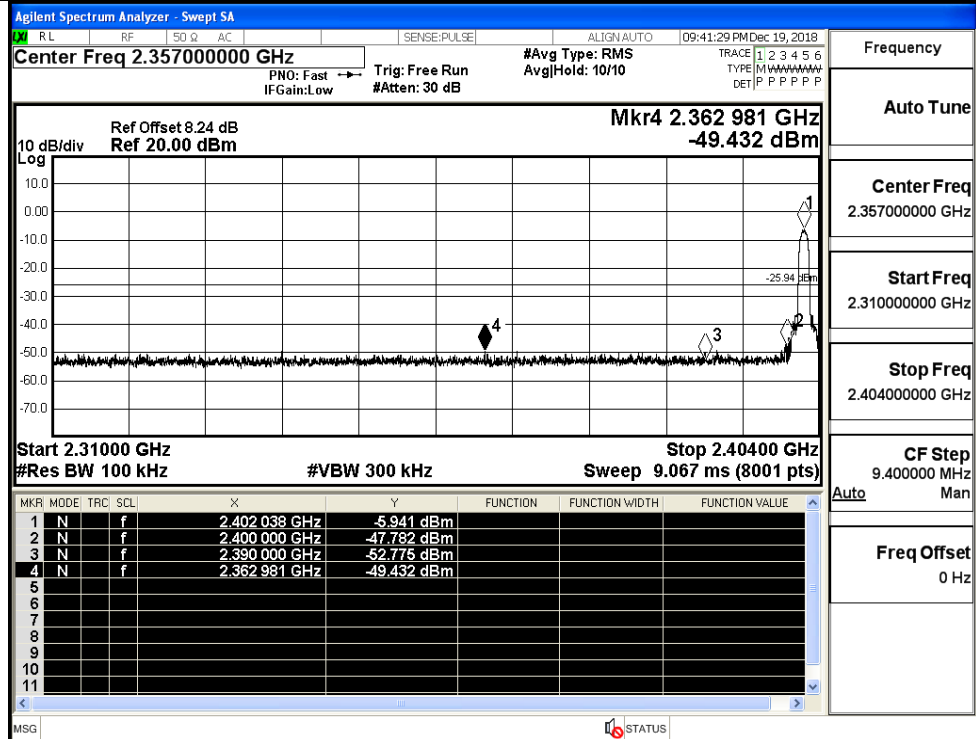
GFSK/HCH/No Hop



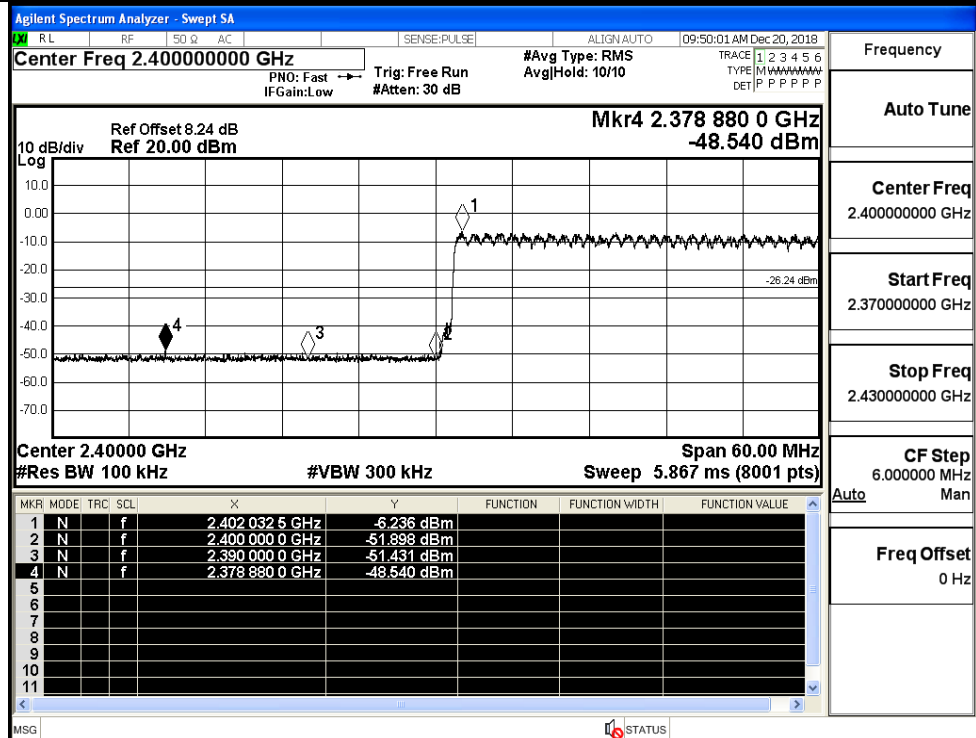
GFSK/HCH/Hop



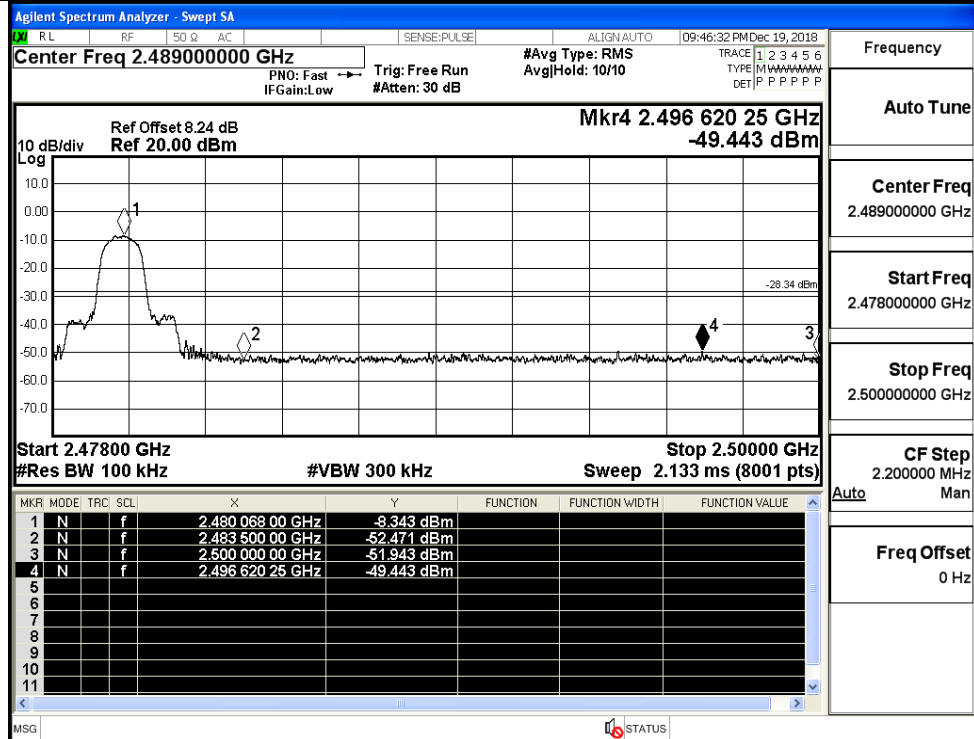
$\pi/4$ DQPSK/LCH/No
Hop



$\pi/4$ DQPSK/LCH/Hop



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

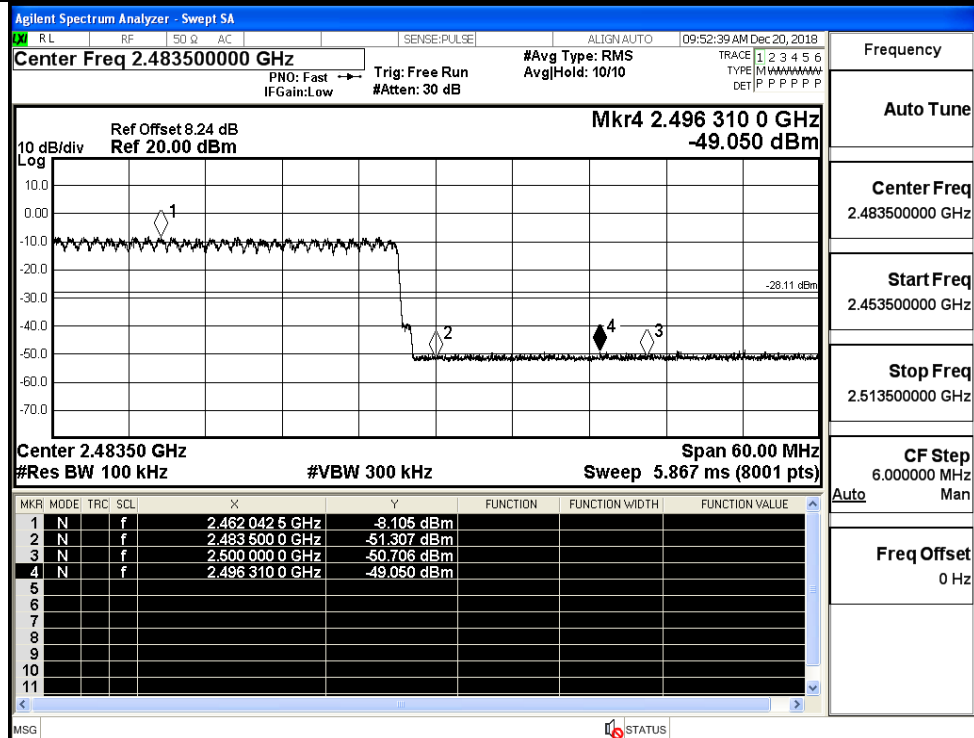


Frequency

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

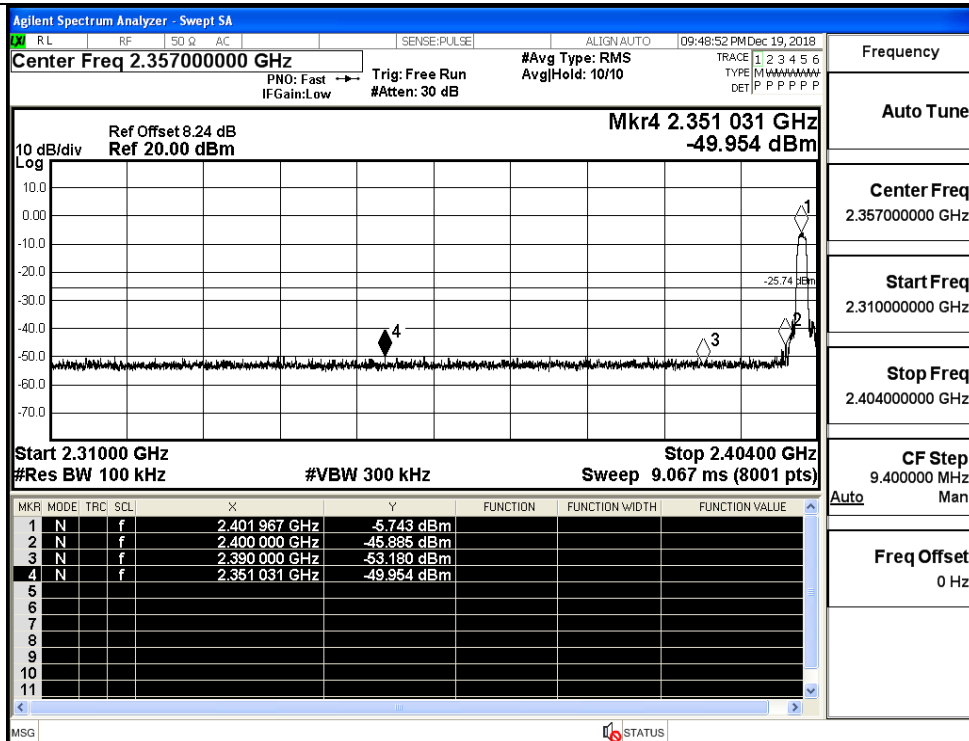


Frequency

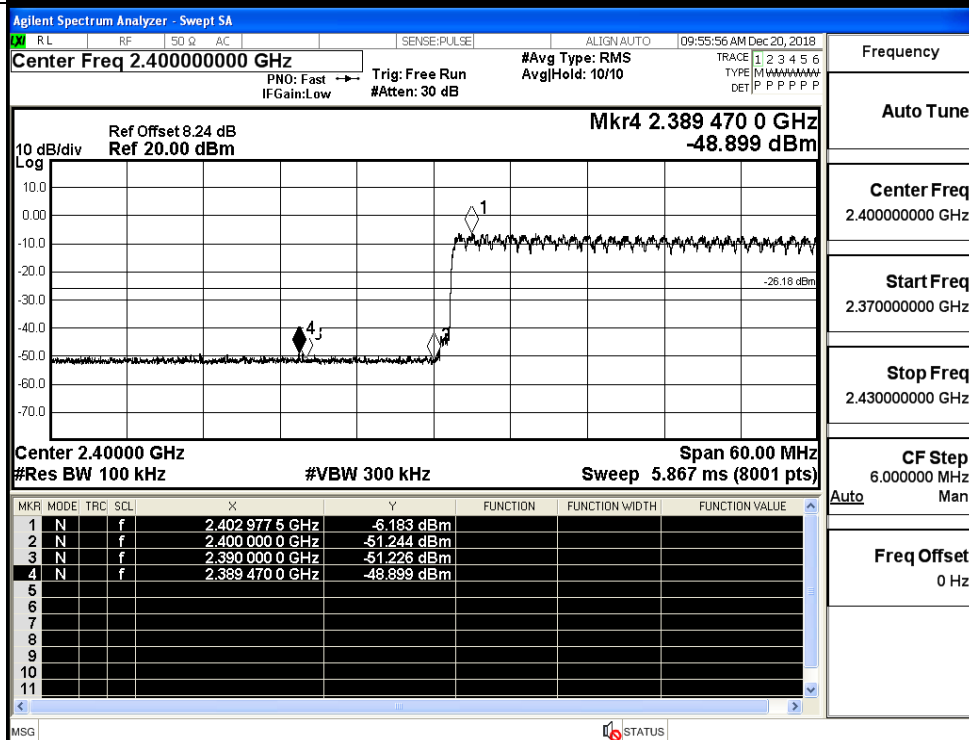
Auto Tune

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

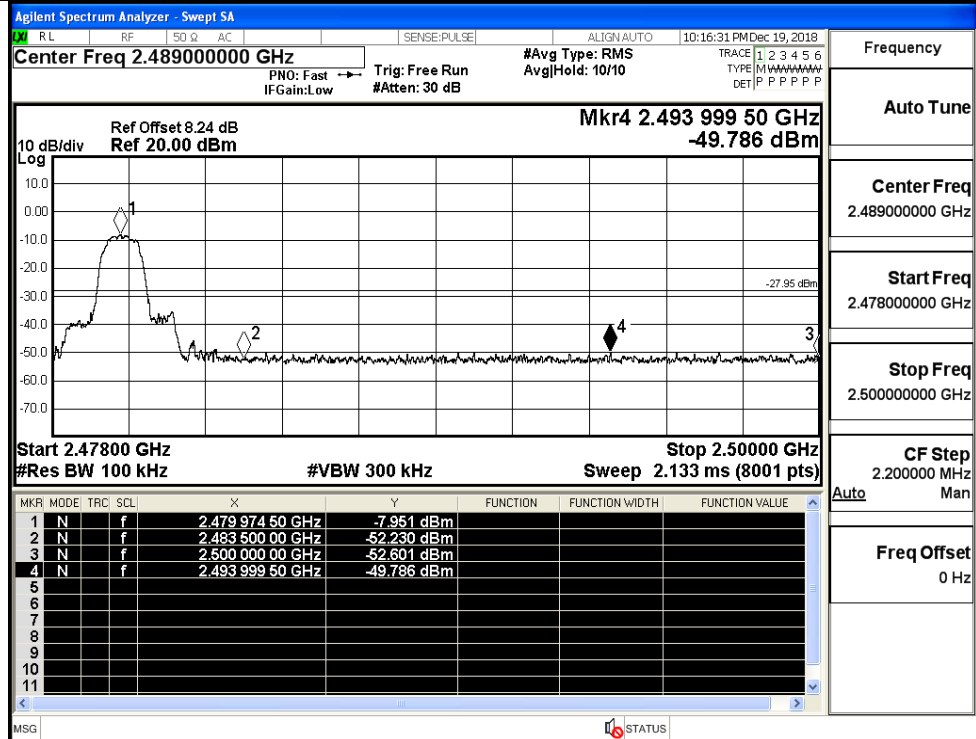
8DPSK/LCH/No Hop



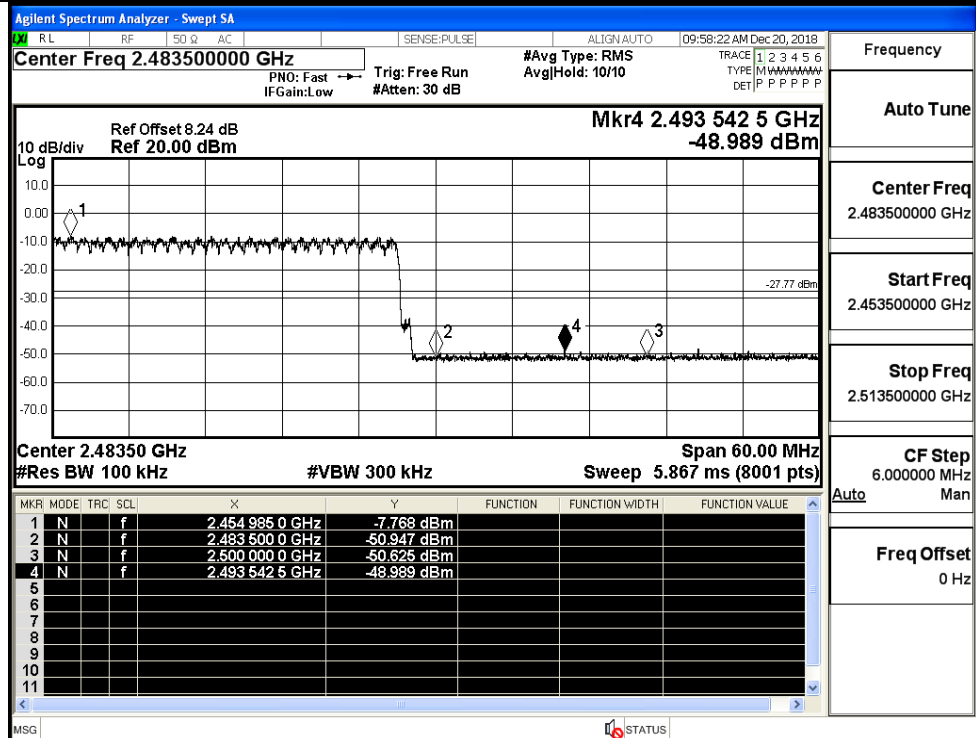
8DPSK/LCH/Hop



8DPSK/HCH/No Hop



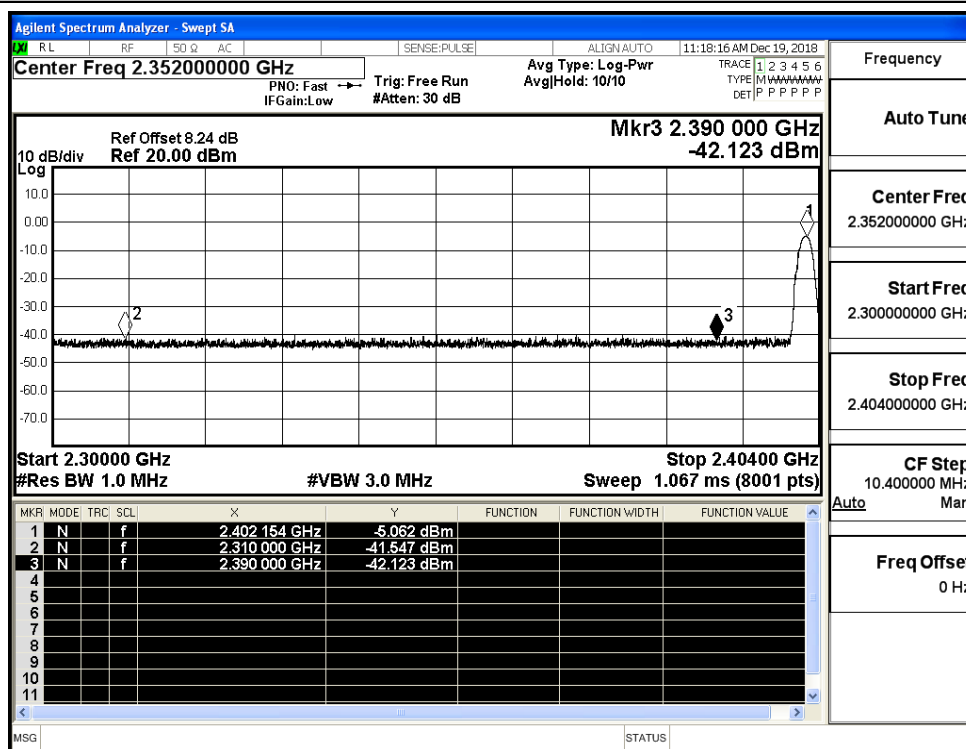
8DPSK/HCH/Hop



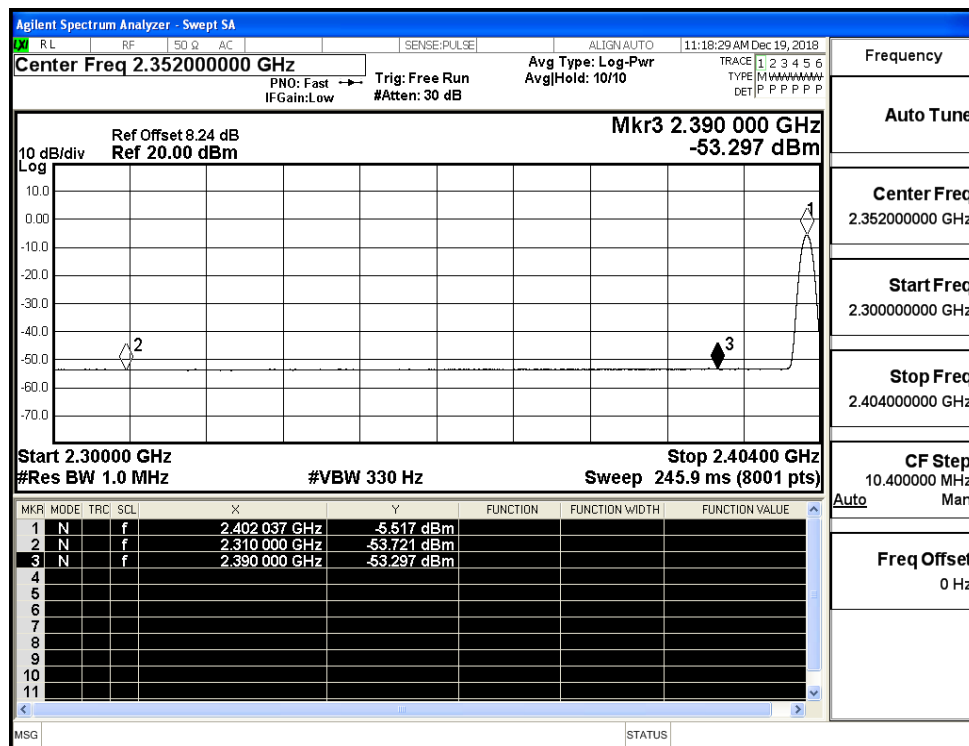
A.8 Restrict-band band-edge measurements

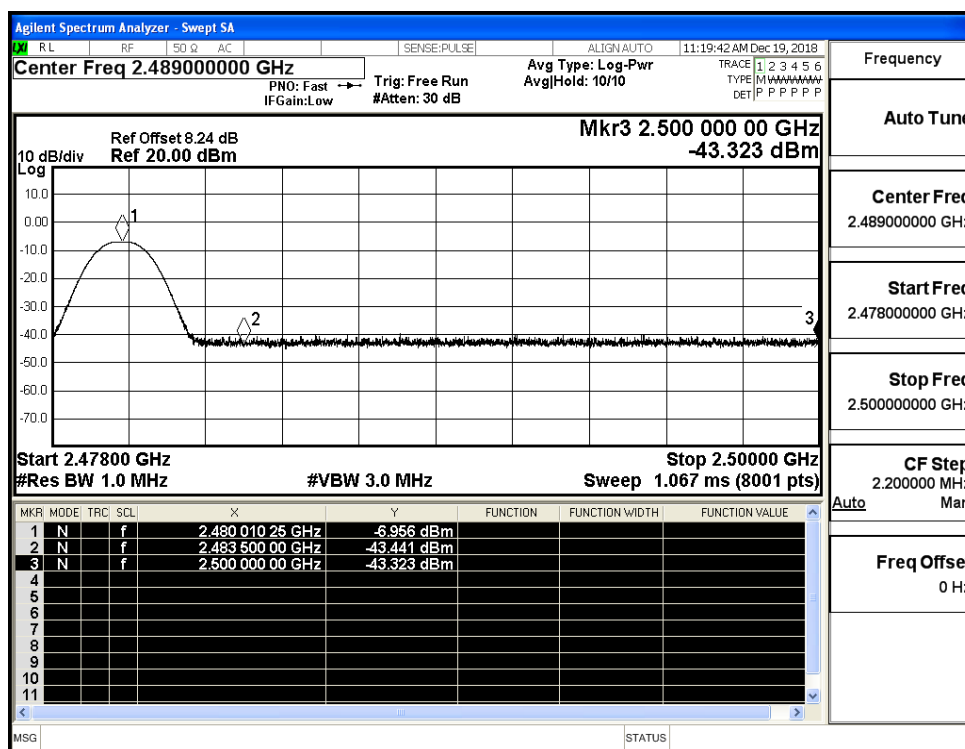
Test Mode	Hopping	Freq.	Power [dBm]	Gain	Ground Factor	E [dBuV/m]	Detector	Limit [dBuV/m]	Verdict
GFSK	Off	2310.0	-41.55	2.0	0	53.71	PEAK	74	PASS
	Off	2310.0	-53.72	2.0	0	41.54	AV	54	PASS
	Off	2390.0	-42.12	2.0	0	53.13	PEAK	74	PASS
	Off	2390.0	-53.30	2.0	0	41.96	AV	54	PASS
	Off	2483.5	-43.44	2.0	0	51.82	PEAK	74	PASS
	Off	2483.5	-53.16	2.0	0	42.10	AV	54	PASS
	Off	2500.0	-43.32	2.0	0	51.93	PEAK	74	PASS
	Off	2500.0	-52.94	2.0	0	42.32	AV	54	PASS
$\pi/4$ DQPSK	Off	2310.0	-43.07	2.0	0	52.19	PEAK	74	PASS
	Off	2310.0	-53.68	2.0	0	41.58	AV	54	PASS
	Off	2390.0	-43.18	2.0	0	52.08	PEAK	74	PASS
	Off	2390.0	-53.38	2.0	0	41.88	AV	54	PASS
	Off	2483.5	-44.02	2.0	0	51.23	PEAK	74	PASS
	Off	2483.5	-53.10	2.0	0	42.16	AV	54	PASS
	Off	2500.0	-40.58	2.0	0	54.68	PEAK	74	PASS
	Off	2500.0	-52.97	2.0	0	42.29	AV	54	PASS
8DPSK	Off	2310.0	-43.42	2.0	0	51.84	PEAK	74	PASS
	Off	2310.0	-53.63	2.0	0	41.63	AV	54	PASS
	Off	2390.0	-42.78	2.0	0	52.48	PEAK	74	PASS
	Off	2390.0	-53.39	2.0	0	41.87	AV	54	PASS
	Off	2483.5	-42.80	2.0	0	52.46	PEAK	74	PASS
	Off	2483.5	-53.08	2.0	0	42.18	AV	54	PASS
	Off	2500.0	-42.94	2.0	0	52.31	PEAK	74	PASS
	Off	2500.0	-52.86	2.0	0	42.40	AV	54	PASS

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

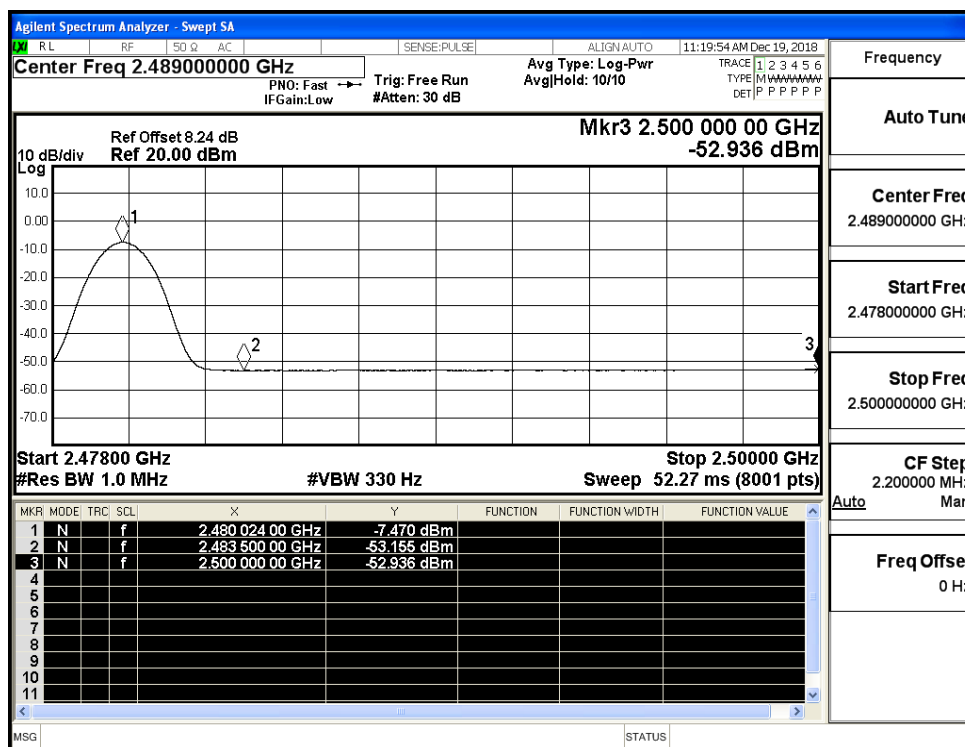


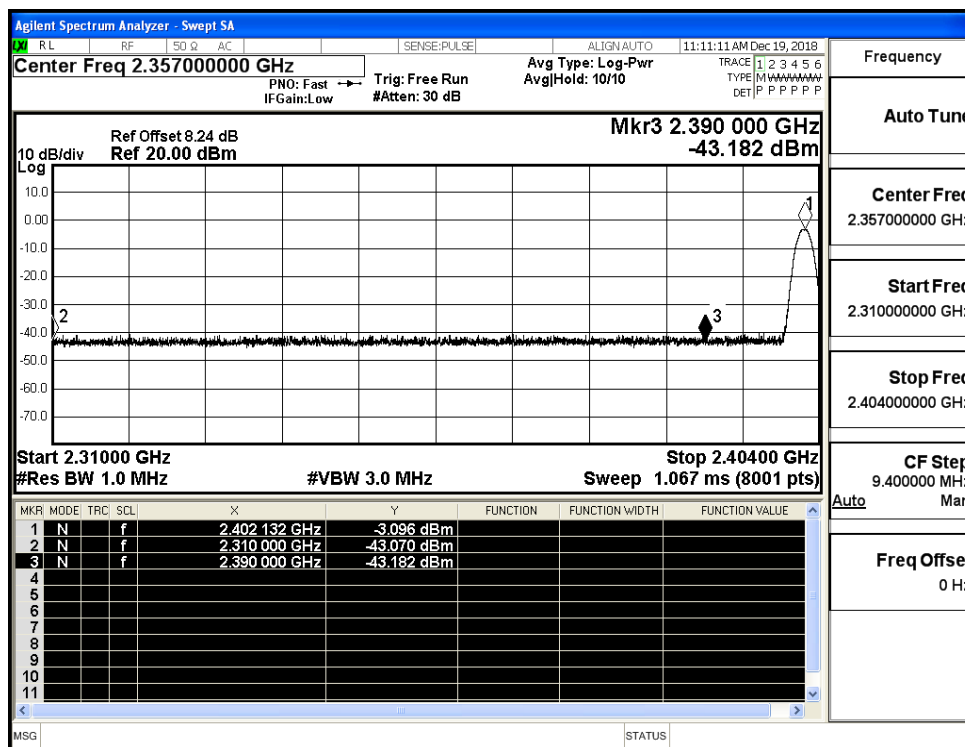
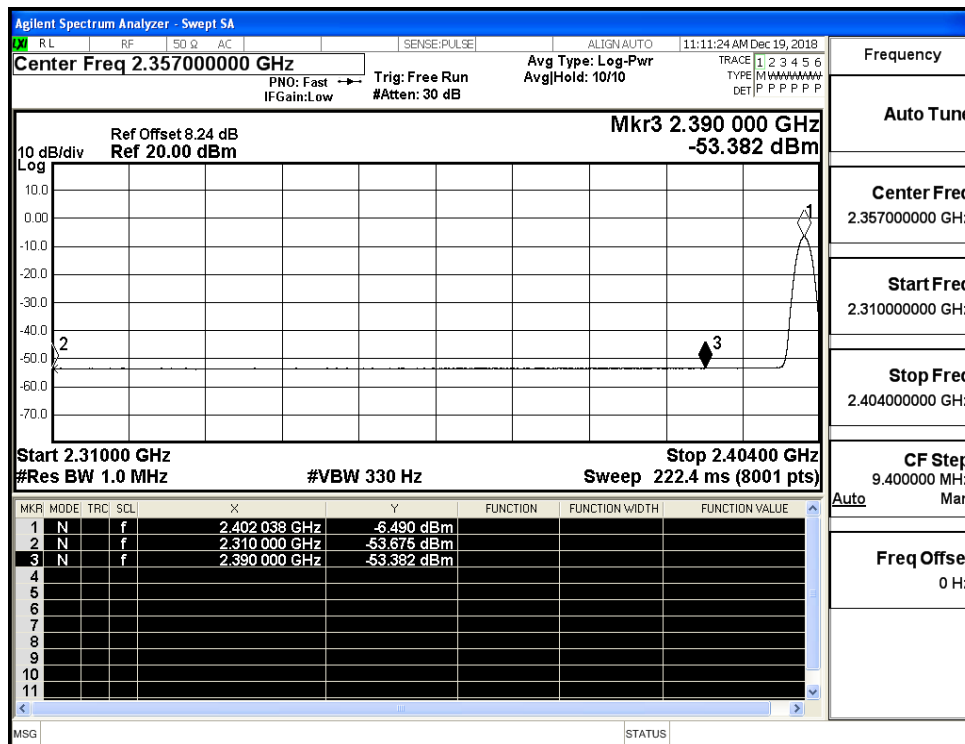
Restrict-band band-edge measurements_Hopping Off_GFSK_PEAK (High Channel)

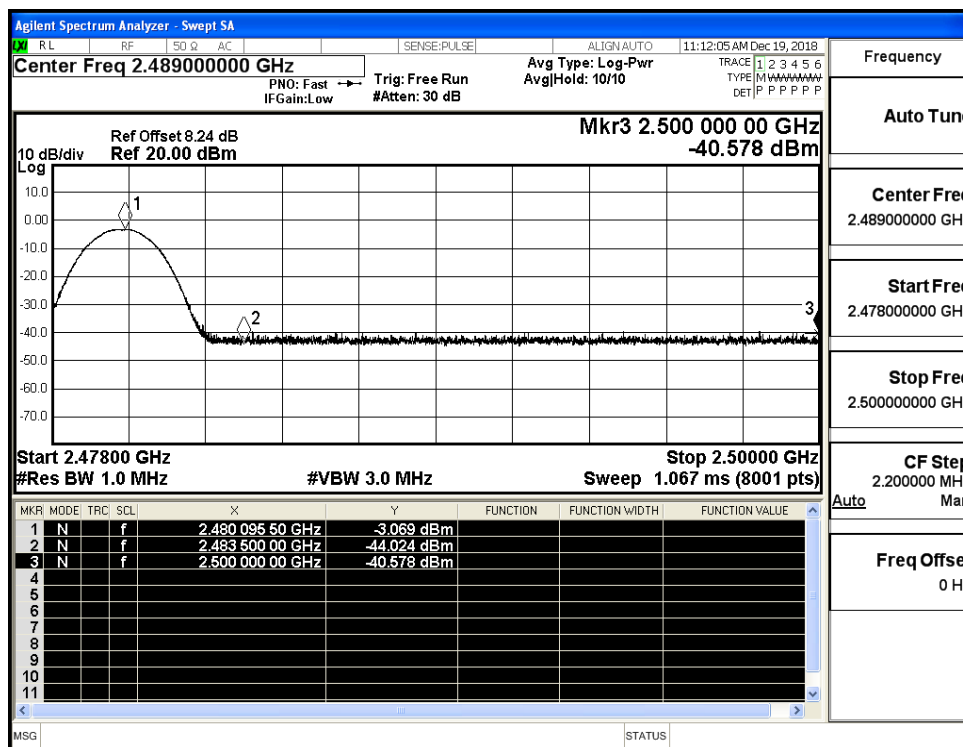
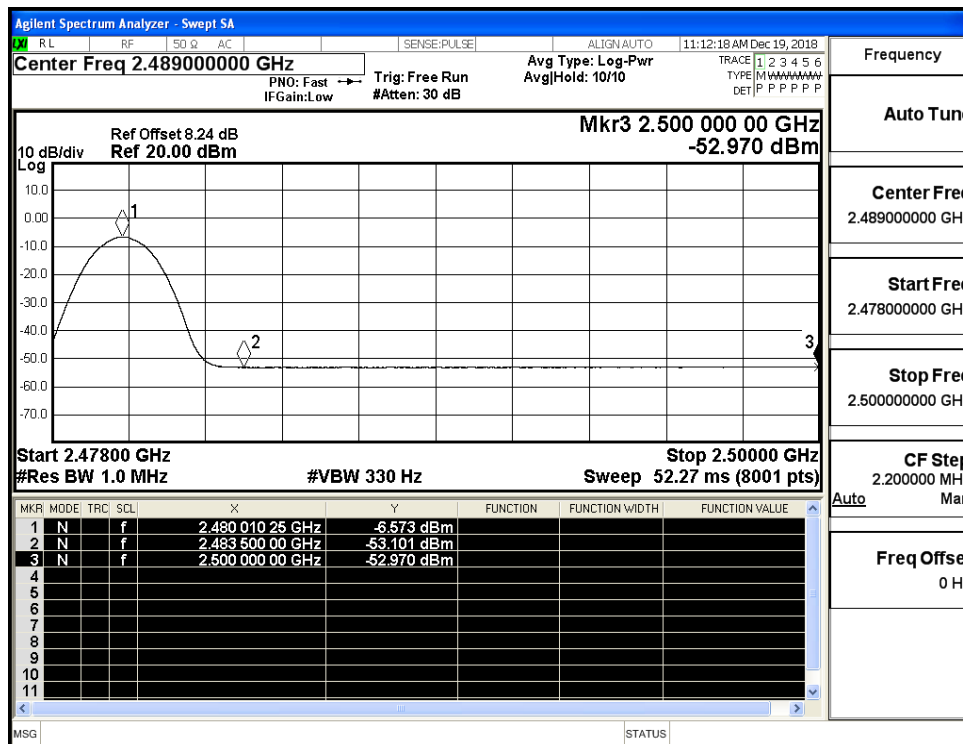


Restrict-band band-edge measurements_Hopping Off $\pi/4$ -DQPSK_PEAK (Low Channel)

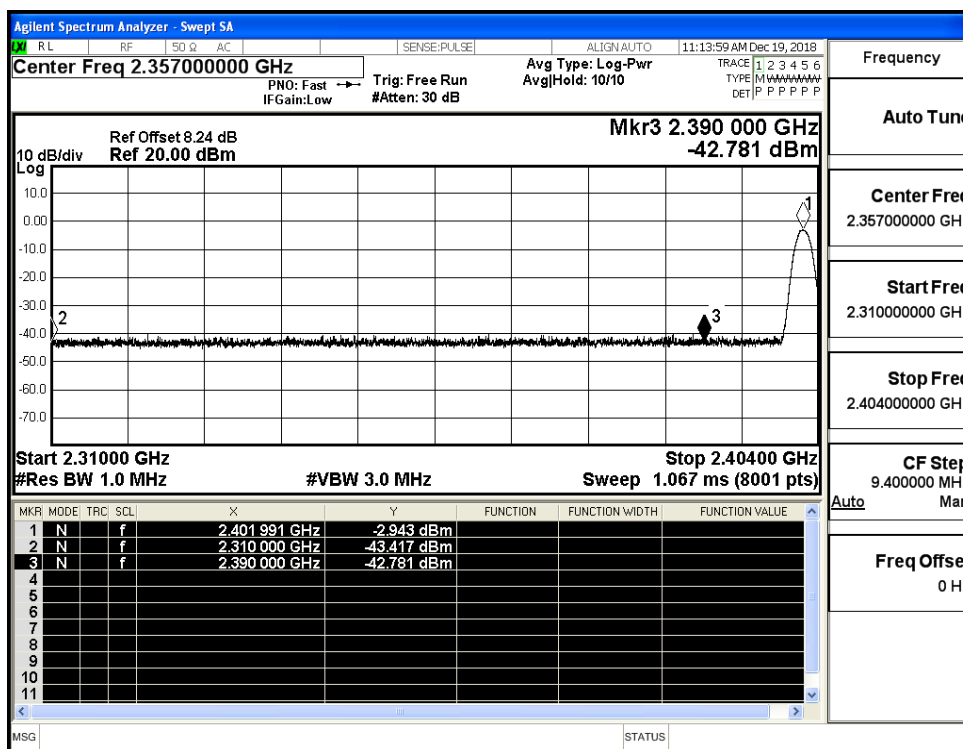
Restrict-band band-edge measurements_Hopping Off_GFSK_Average (High Channel)



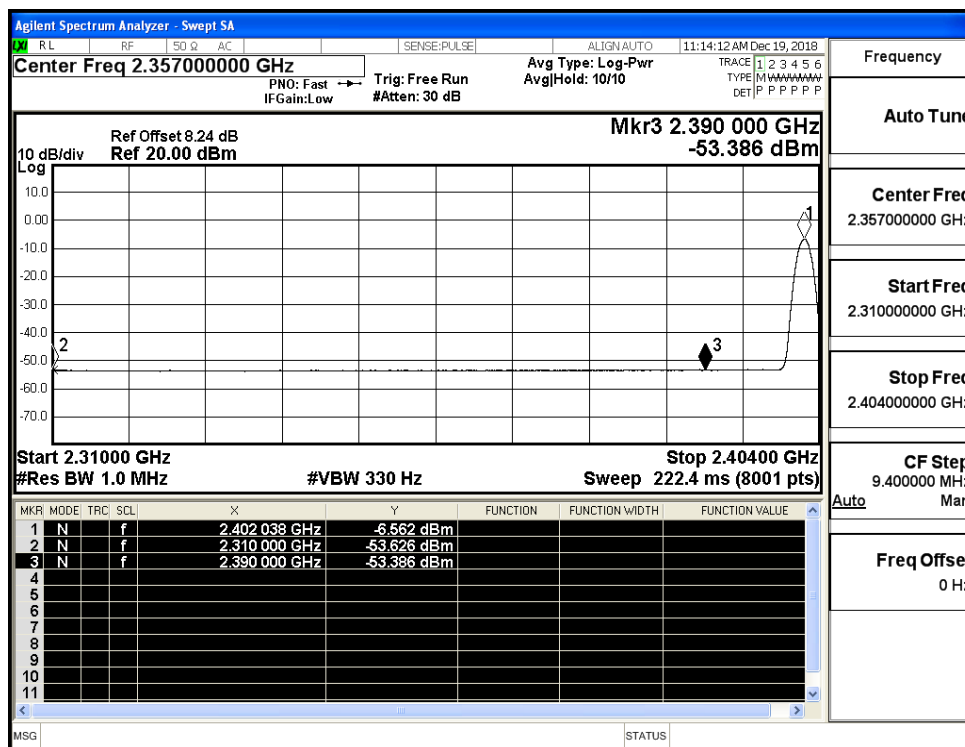
Restrict-band band-edge measurements_Hopping Off $\pi/4$ -DQPSK_PEAK (Low Channel)Restrict-band band-edge measurements_Hopping Off $\pi/4$ -DQPSK_PEAK (High Channel)

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)

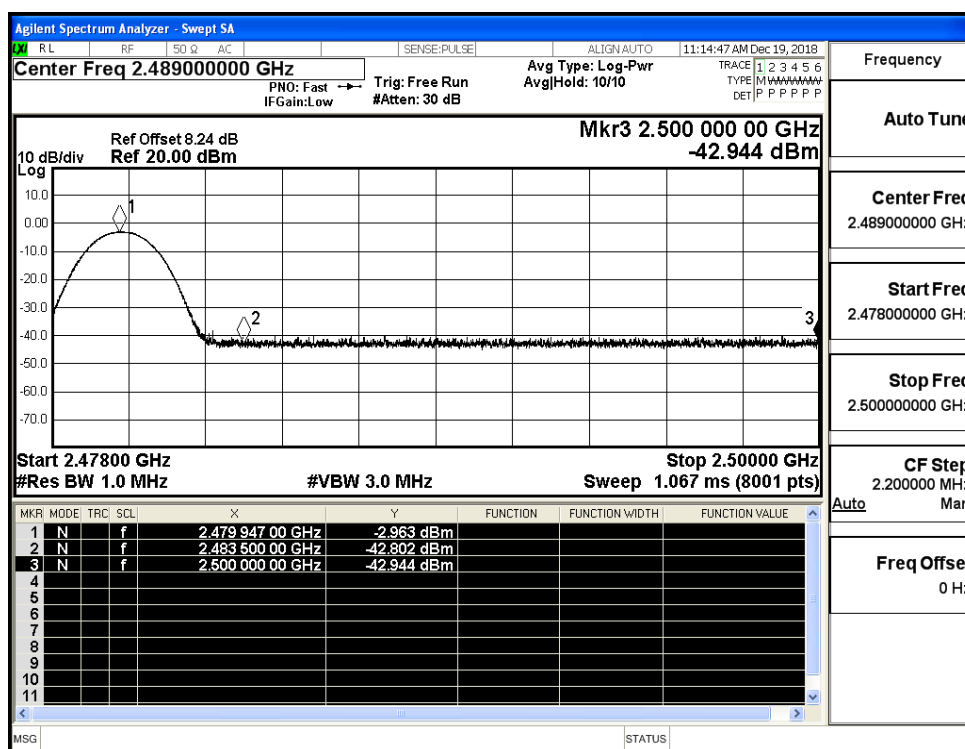
Restrict-band band-edge measurements_Hopping Off_8DPSK_PEAK (Low Channel)



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)

