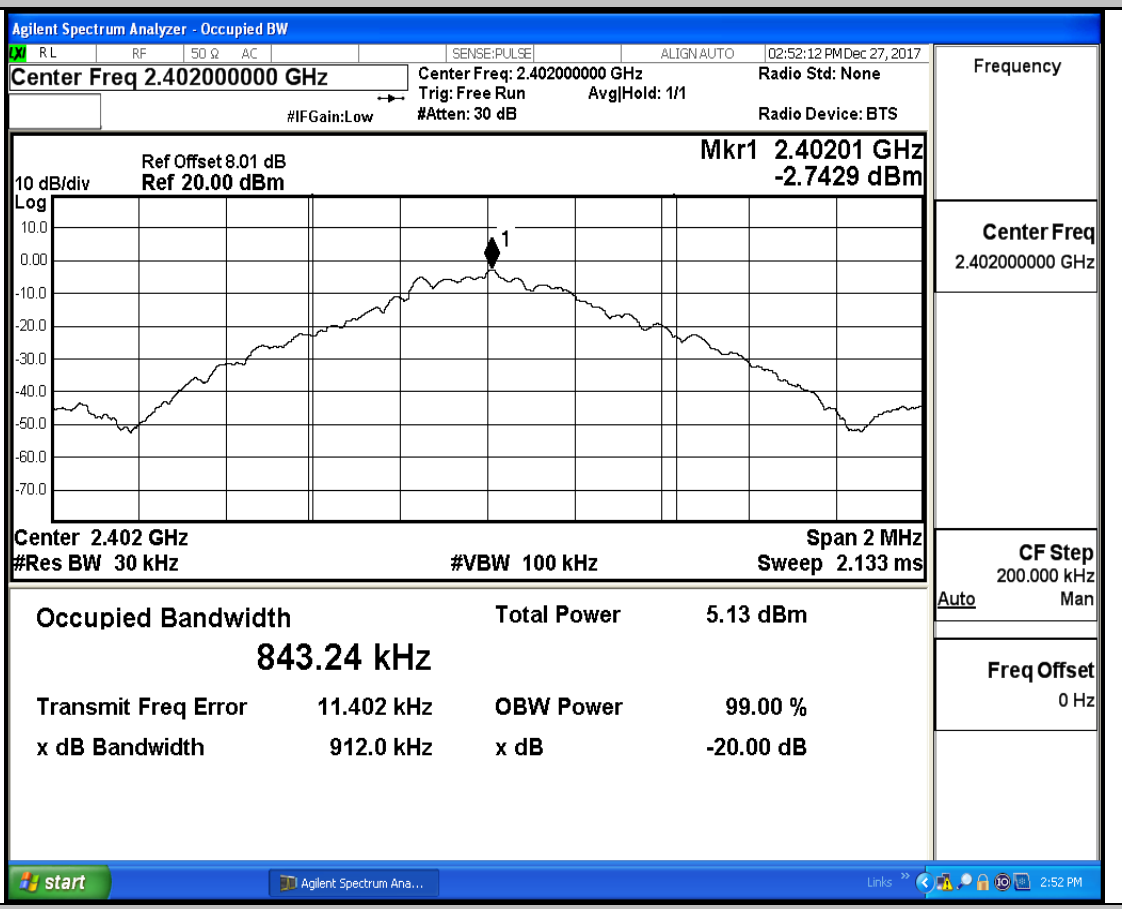
Appendix A
RF Test Data for BT V4.2(BDR/EDR) (Conducted Measurement)

Product Name: BLUETOOTH AUDIO RECEIVER ADAPTER
Trade Mark: blackweb
Test Model: 17LY43
FCC ID: 2AKI8-BWBTRECEIVER

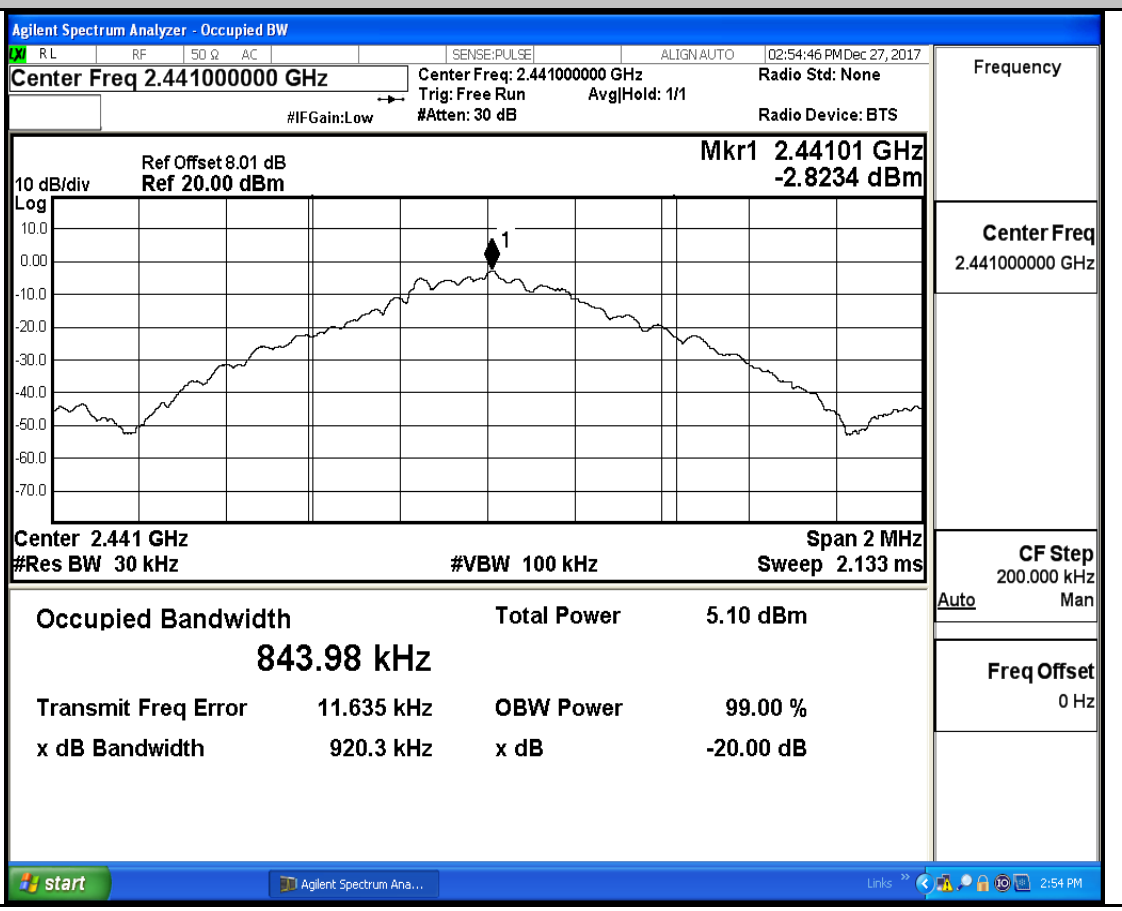
A.1 20 dB Bandwidth

Test Mode	Test Channel	EBW[MHz]	Limit[MHz]	Verdict
GFSK	2402	0.9120	---	PASS
	2441	0.9203	---	PASS
	2480	0.9235	---	PASS
π/4-DQPSK	2402	1.227	---	PASS
	2441	1.222	---	PASS
	2480	1.232	---	PASS

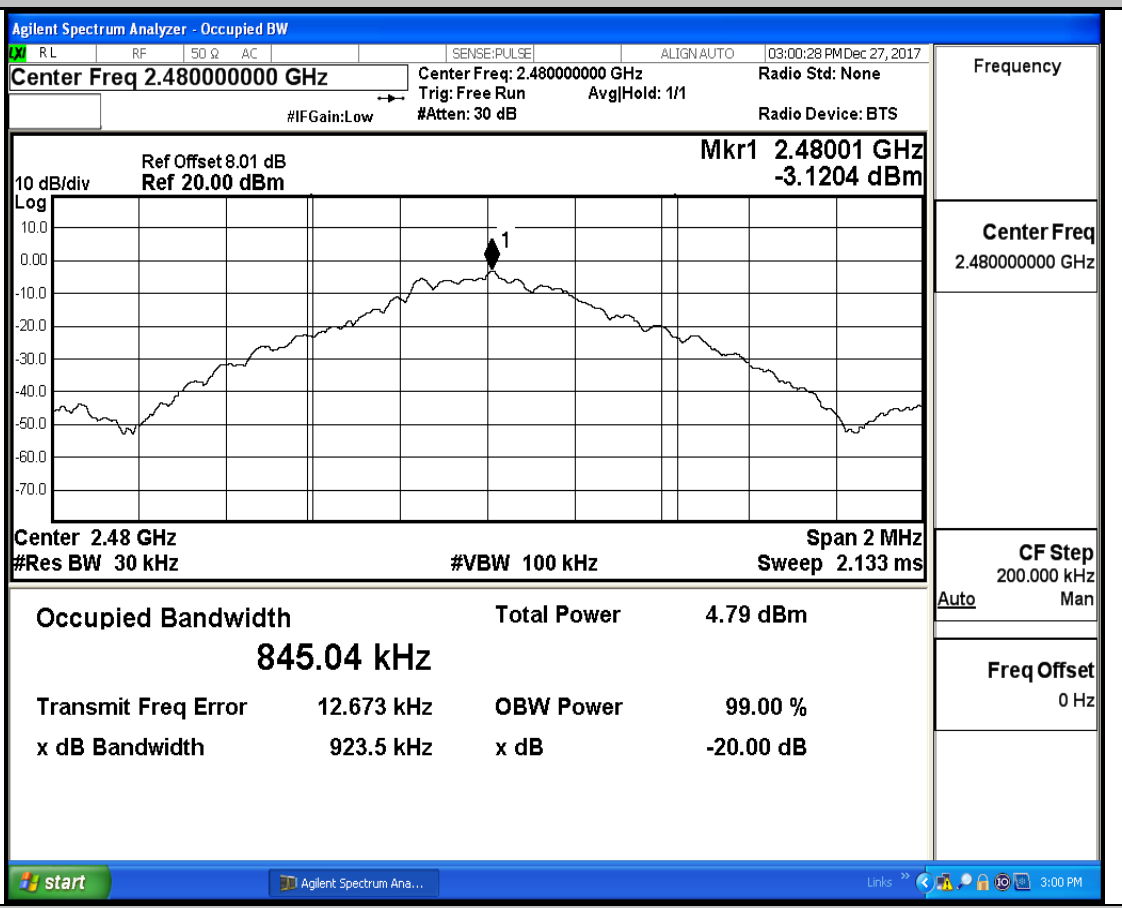
20 dB Bandwidth_GFSK_2402



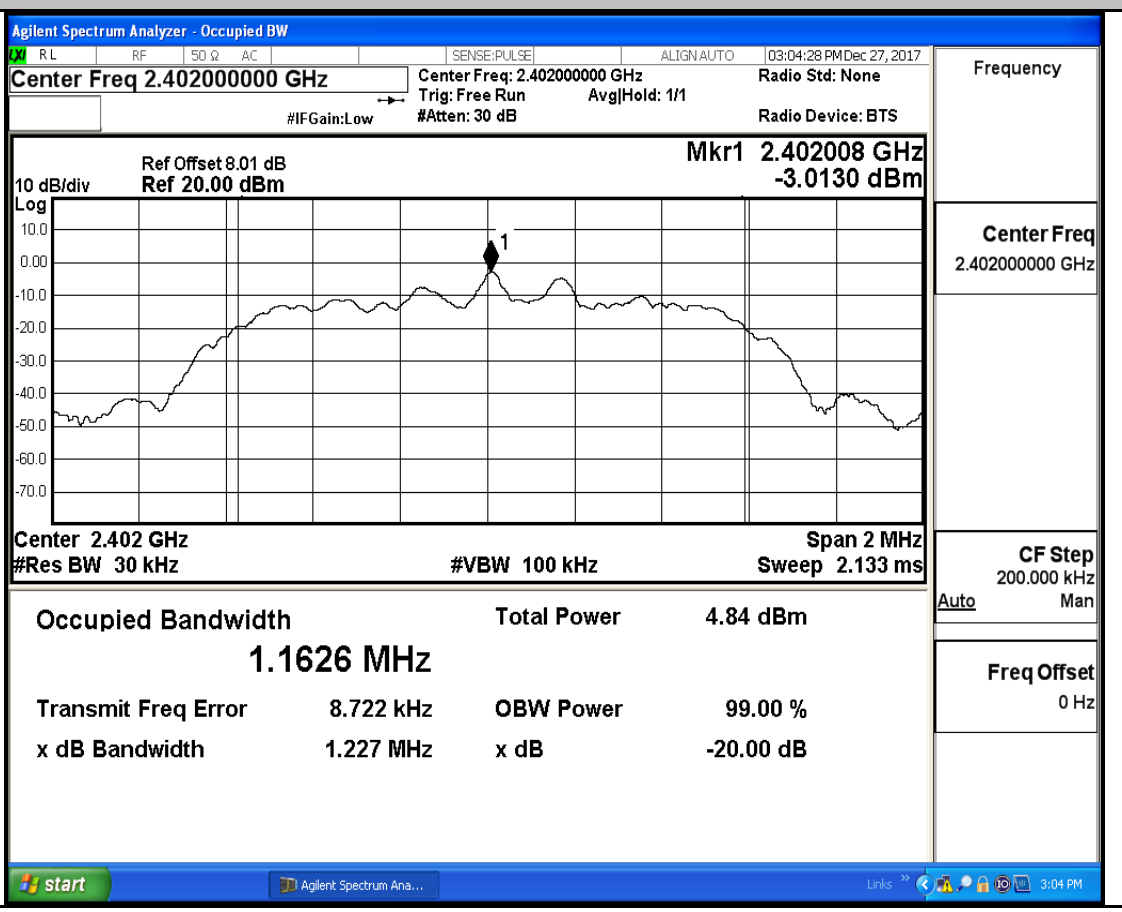
20 dB Bandwidth_GFSK_2441



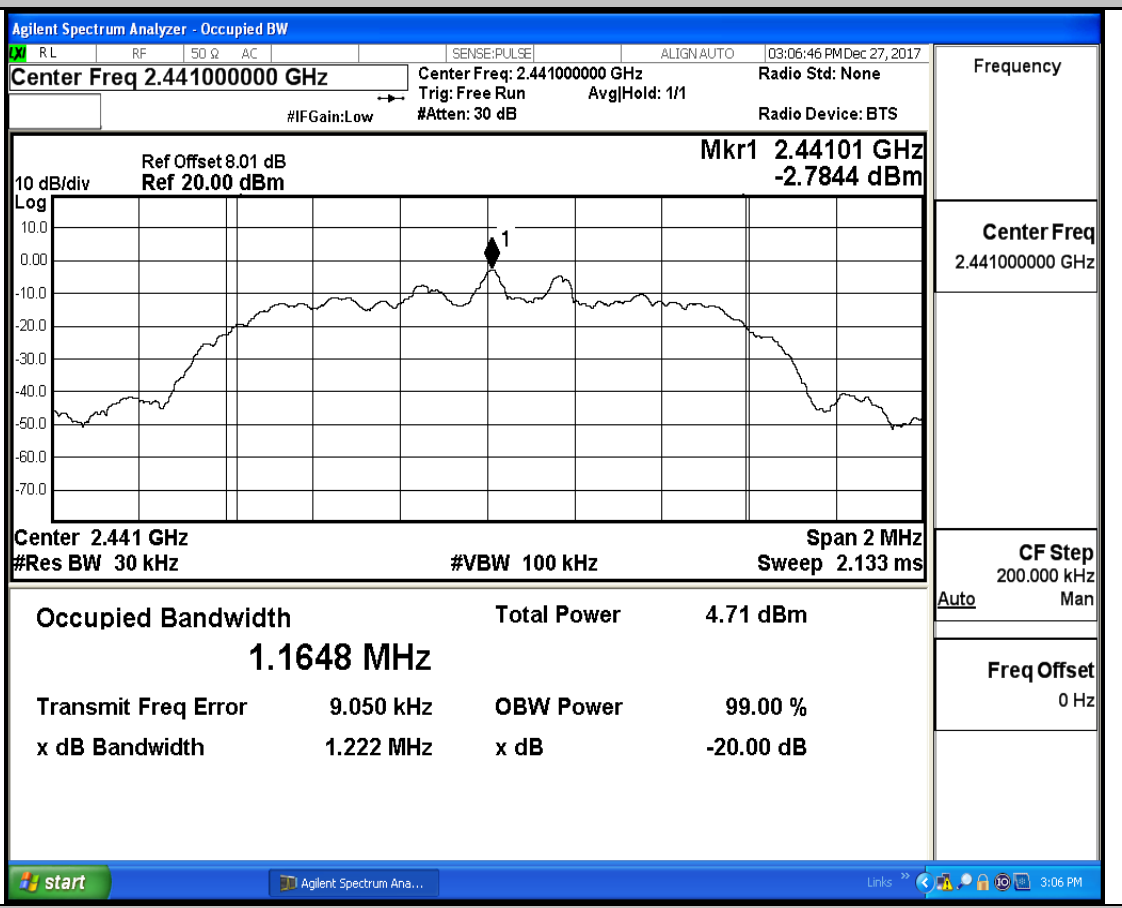
20 dB Bandwidth_GFSK_2480



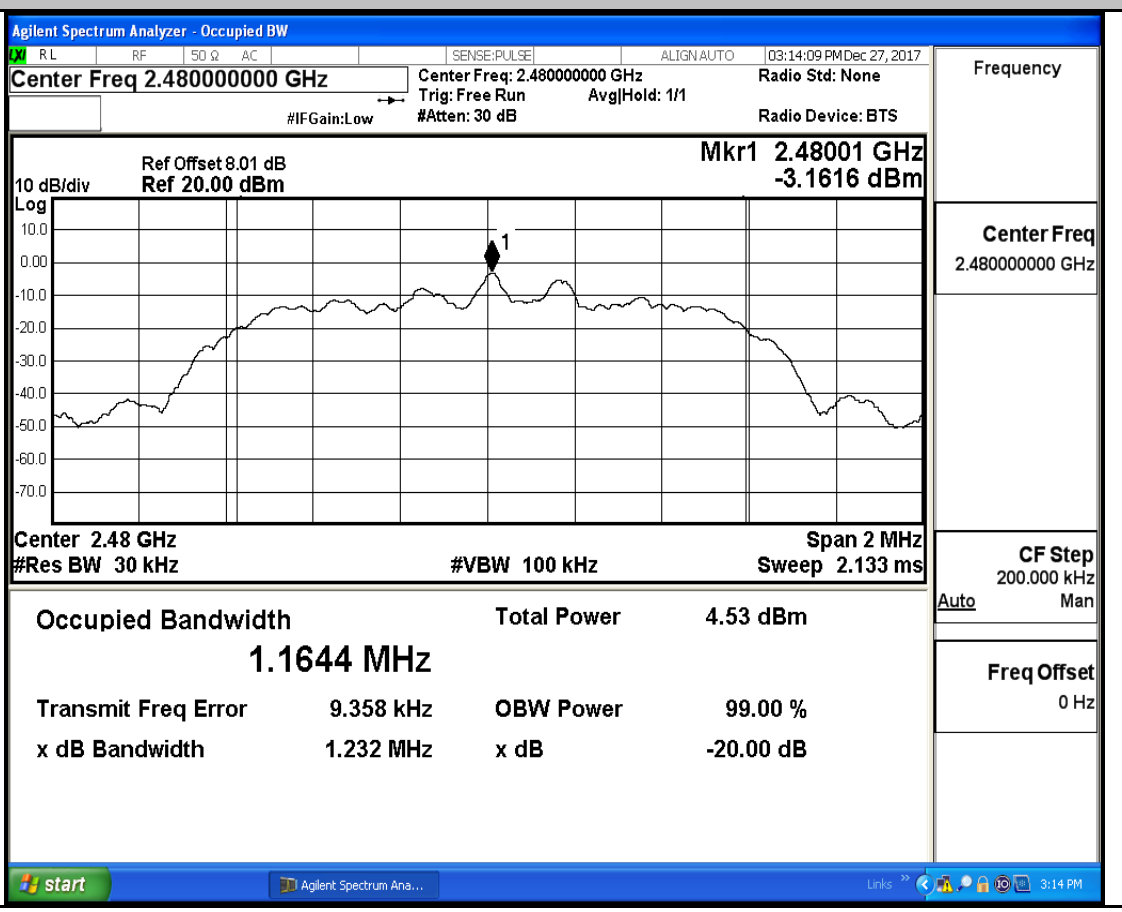
20 dB Bandwidth_π/4-DQPSK_2402



20 dB Bandwidth_π/4-DQPSK_2441



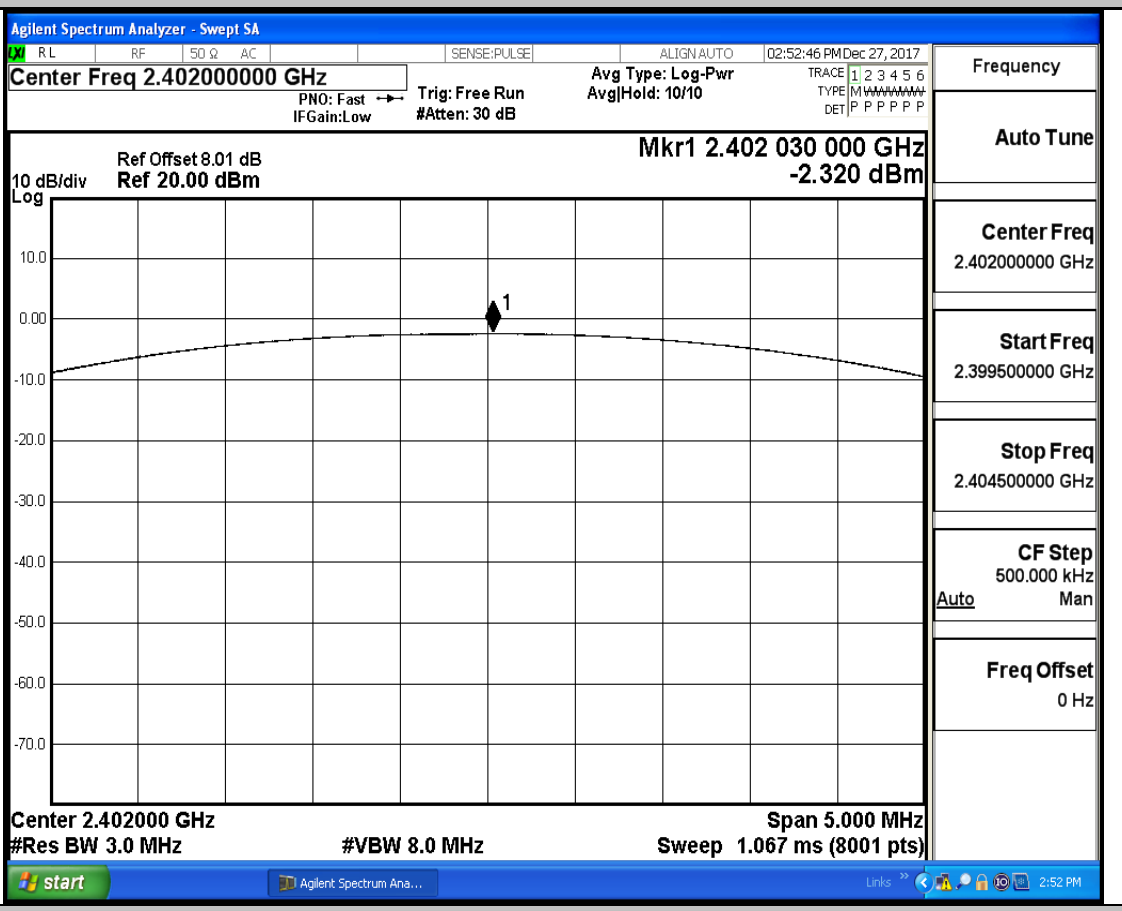
20 dB Bandwidth_π/4-DQPSK_2480



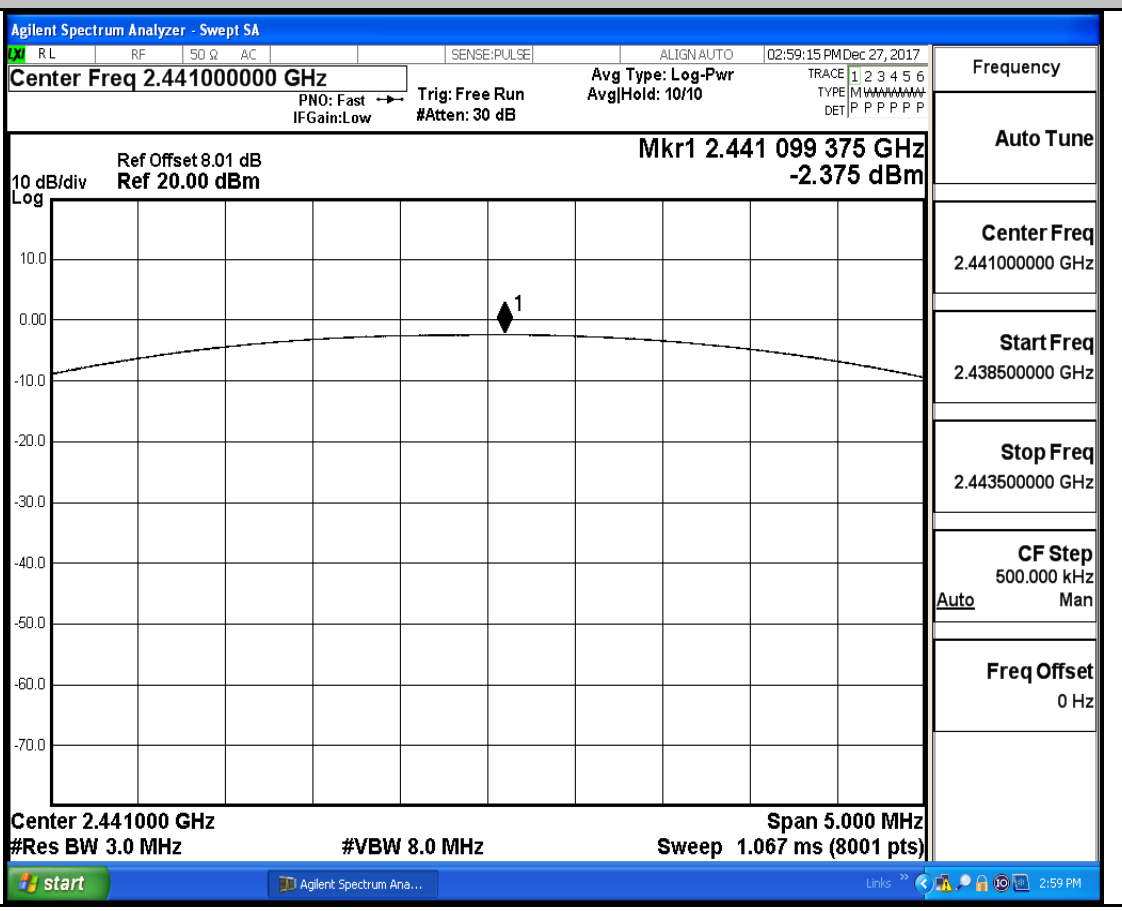
A.2 Conducted Peak Output Power

Test Mode	Test Channel	Power[dBm]	Limit[dBm]	Verdict
GFSK	2402	-2.320	30	PASS
	2441	-2.375	30	PASS
	2480	-2.743	30	PASS
π/4-DQPSK	2402	-1.232	21	PASS
	2441	-1.271	21	PASS
	2480	-1.598	21	PASS

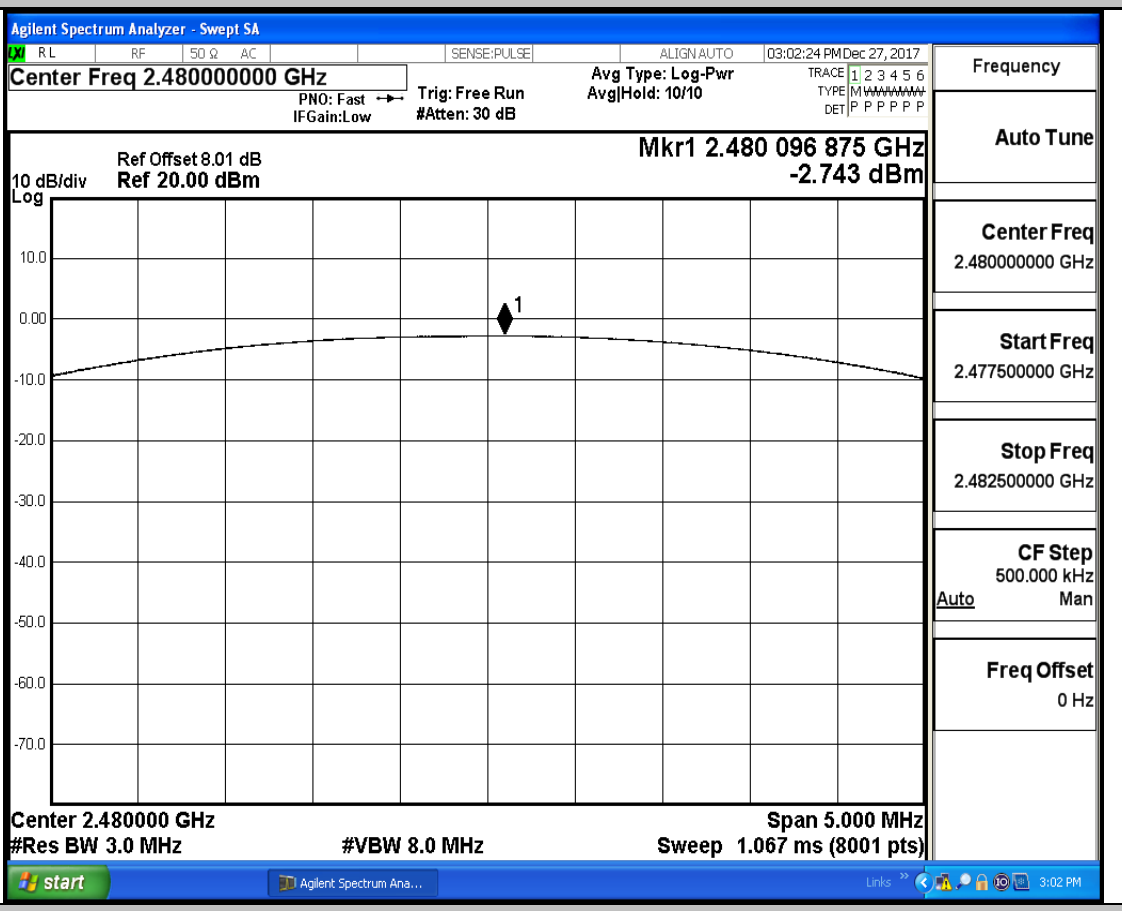
Conducted Peak Output Power_GFSK_2402



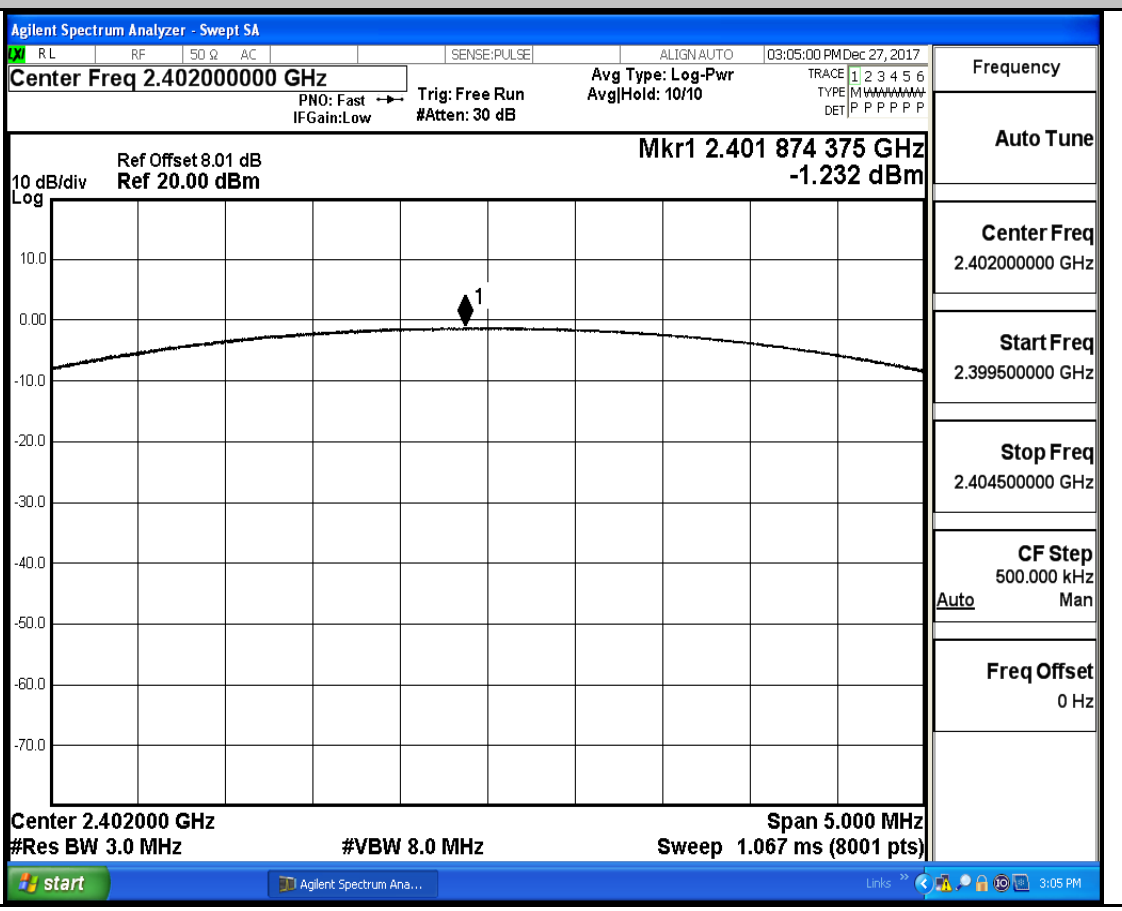
Conducted Peak Output Power_GFSK_2441



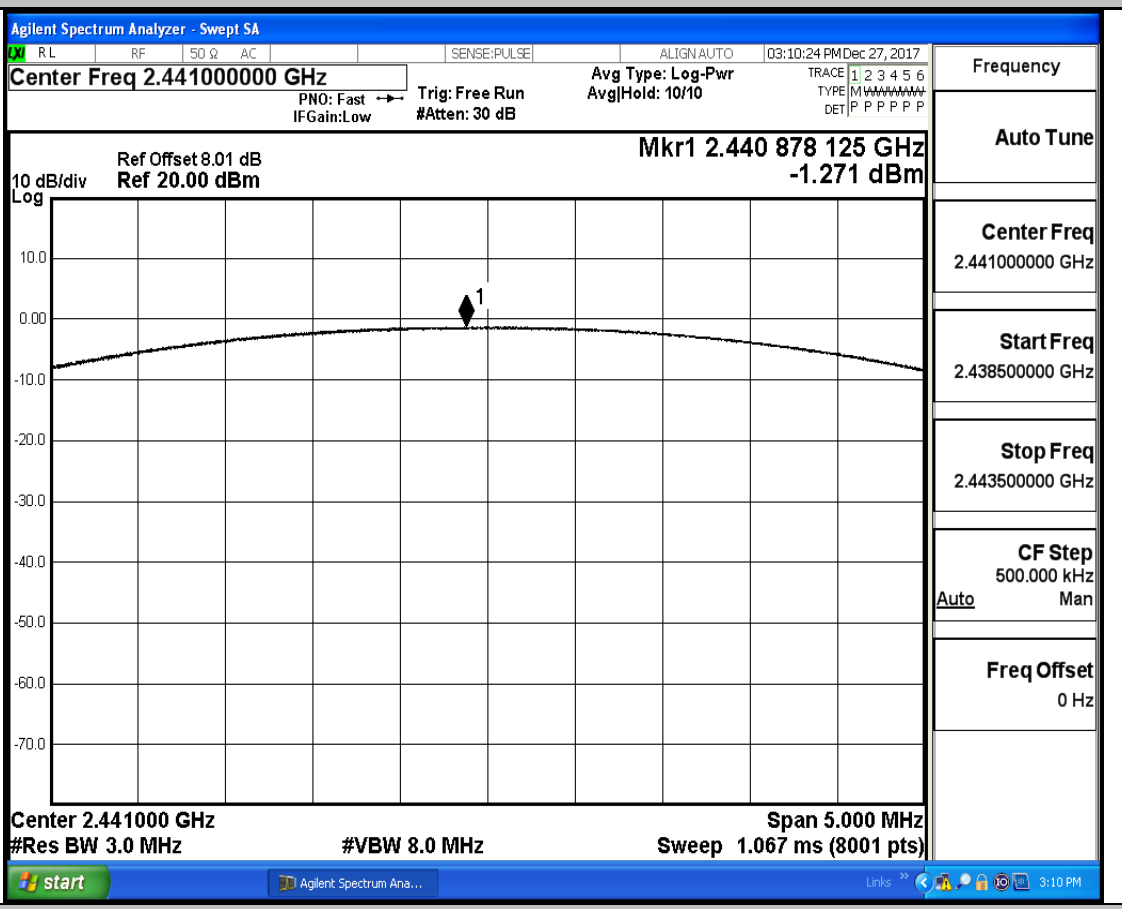
Conducted Peak Output Power_GFSK_2480



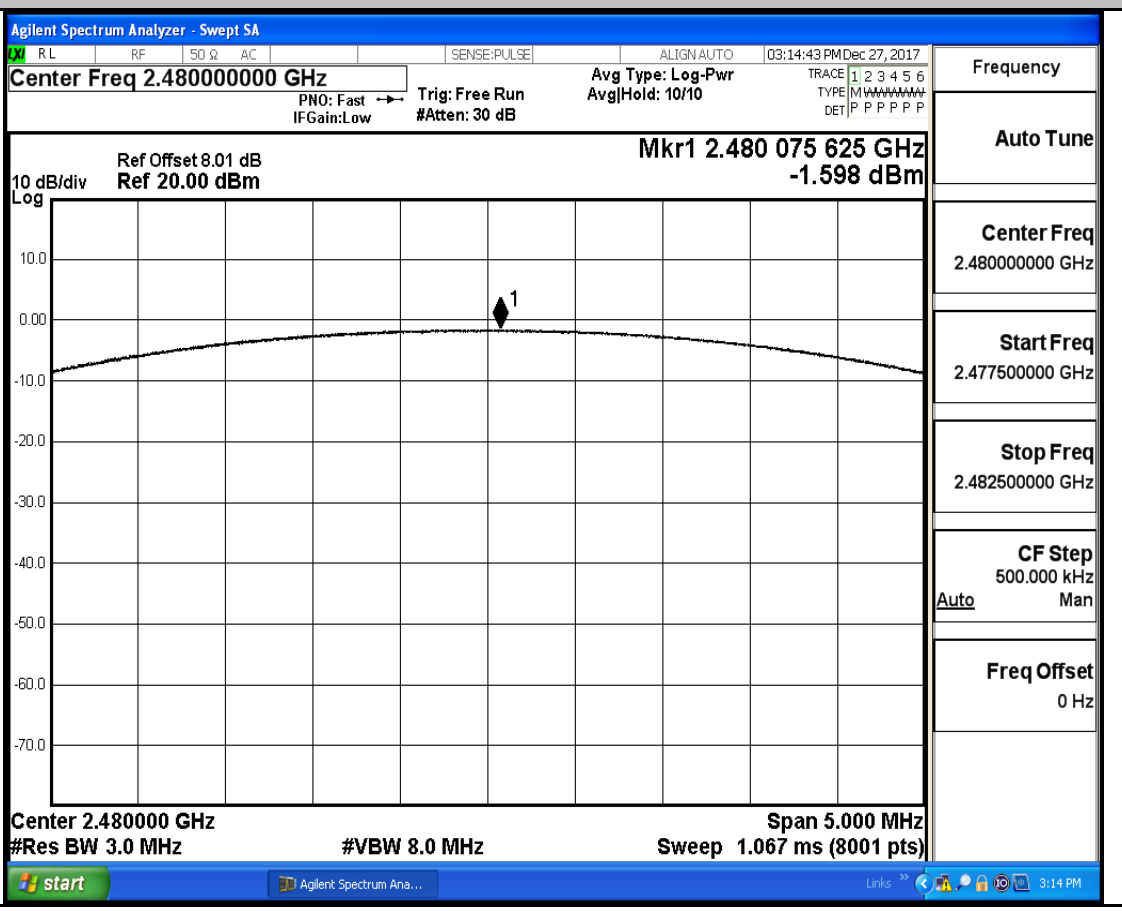
Conducted Peak Output Power_π/4-DQPSK_2402



Conducted Peak Output Power_π/4-DQPSK_2441



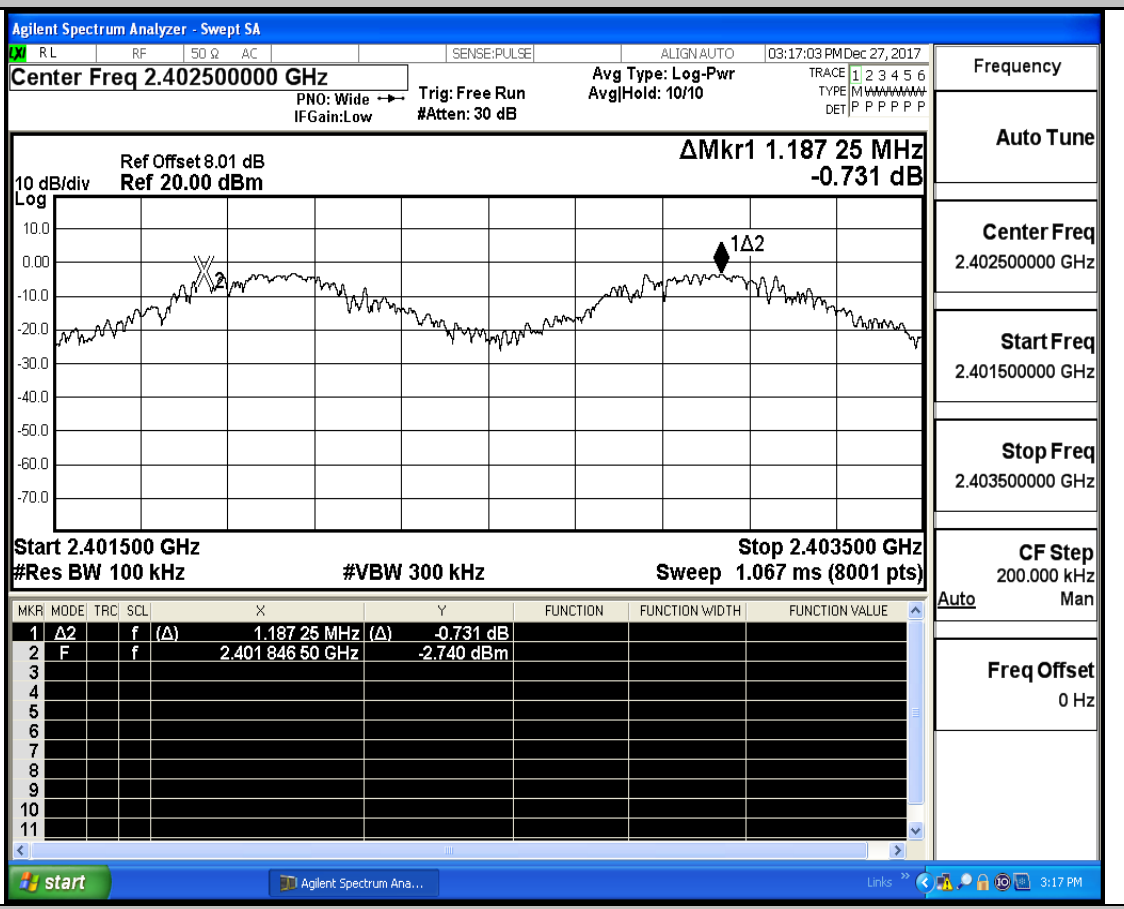
Conducted Peak Output Power_π/4-DQPSK_2480



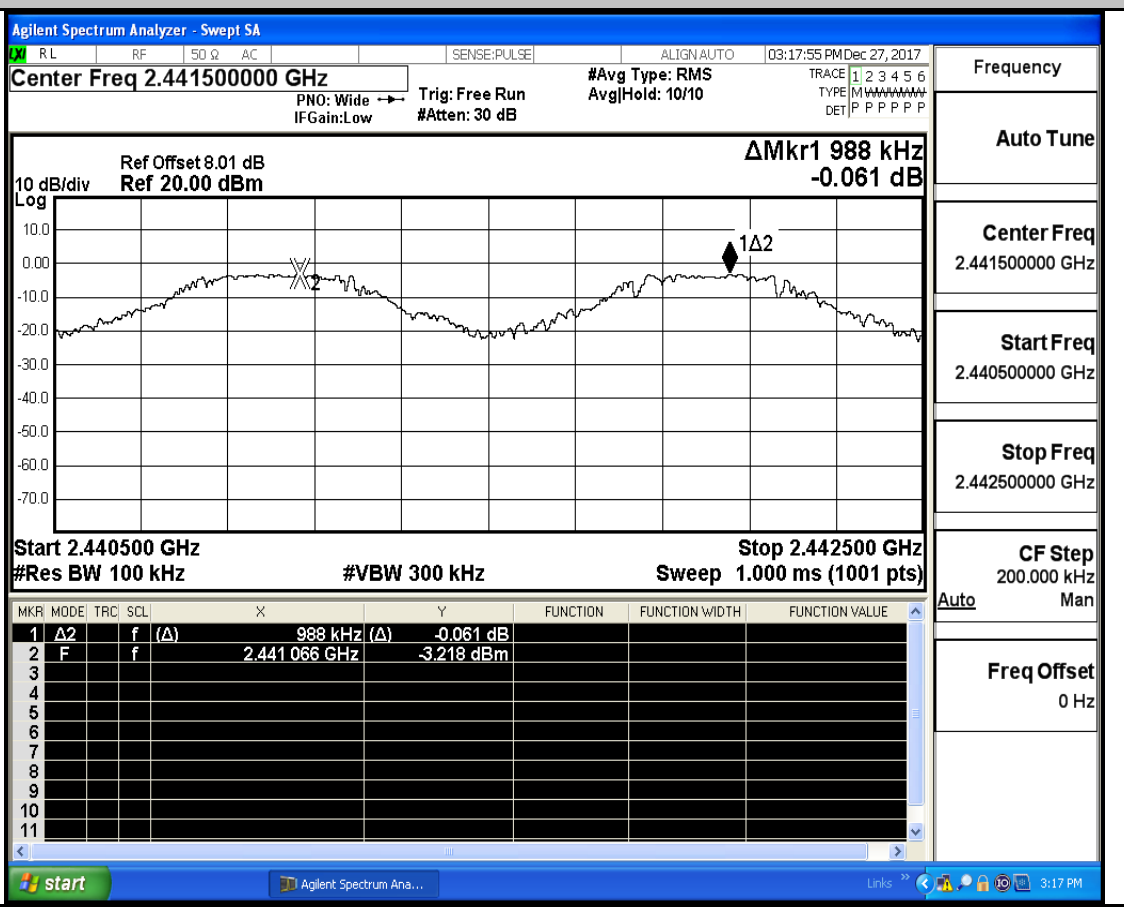
A.3 Carrier Frequency Separation

Test Mode	Test Channel	Result[MHz]	Limit[MHz]	Verdict
GFSK	2402	1.187	0.9120	PASS
	2441	0.988	0.9203	PASS
	2480	1.04	0.9235	PASS
π/4-DQPSK	2402	1.12	0.82	PASS
	2441	0.976	0.81	PASS
	2480	1	0.82	PASS

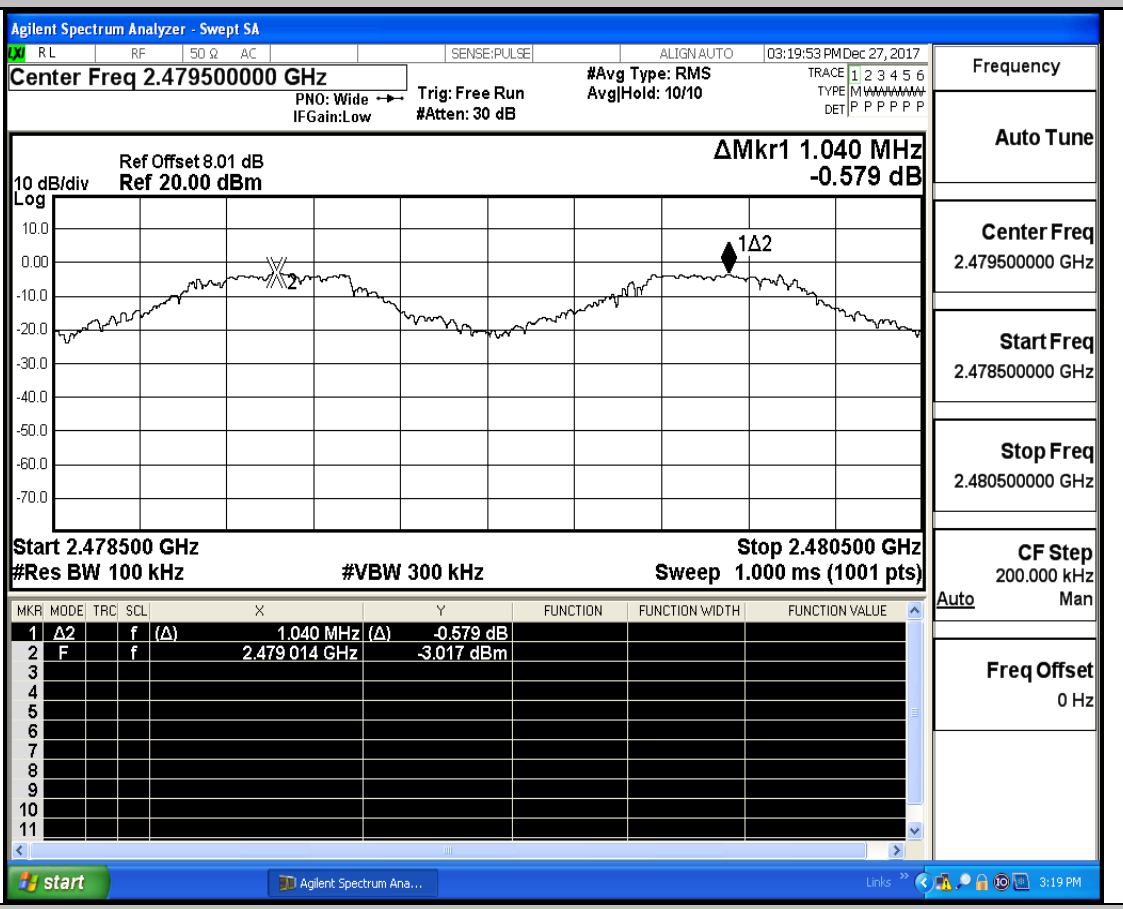
Carrier Frequency Separation_GFSK_2402



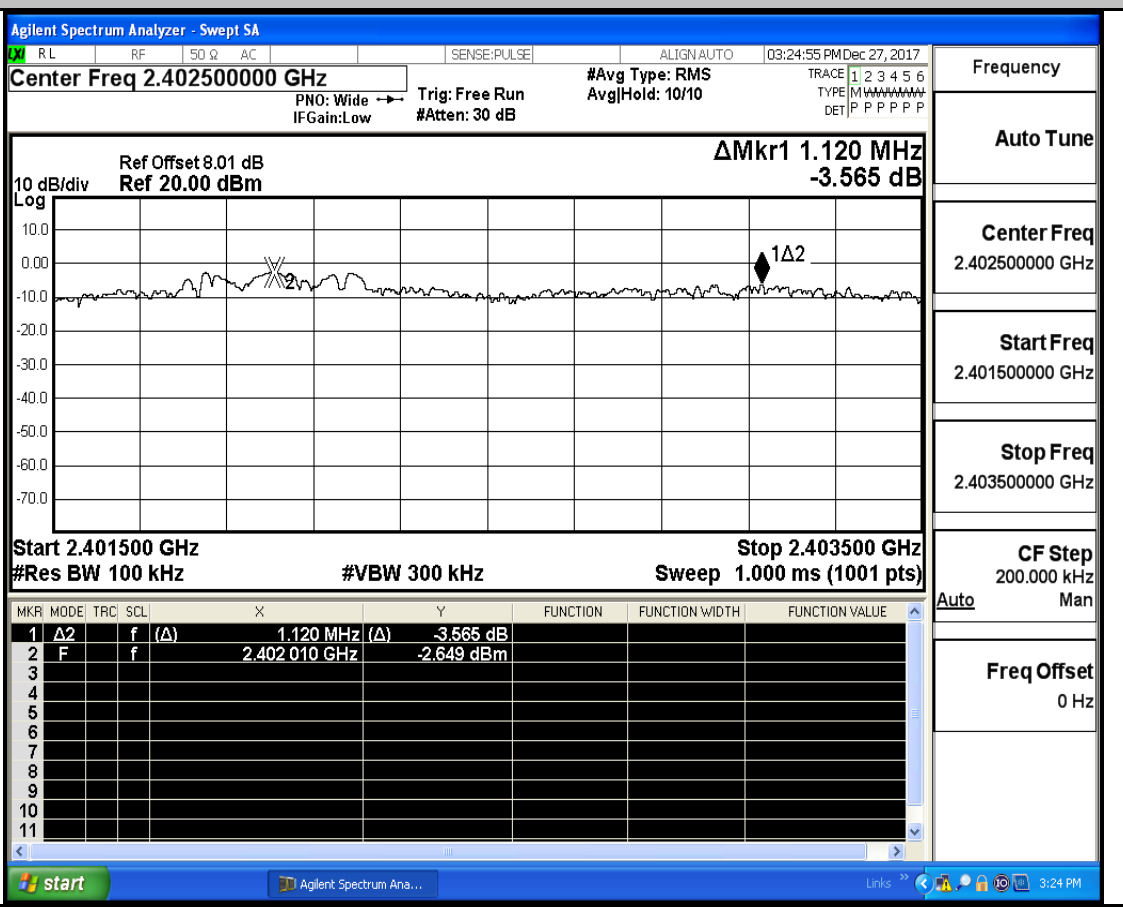
Carrier Frequency Separation_GFSK_2441



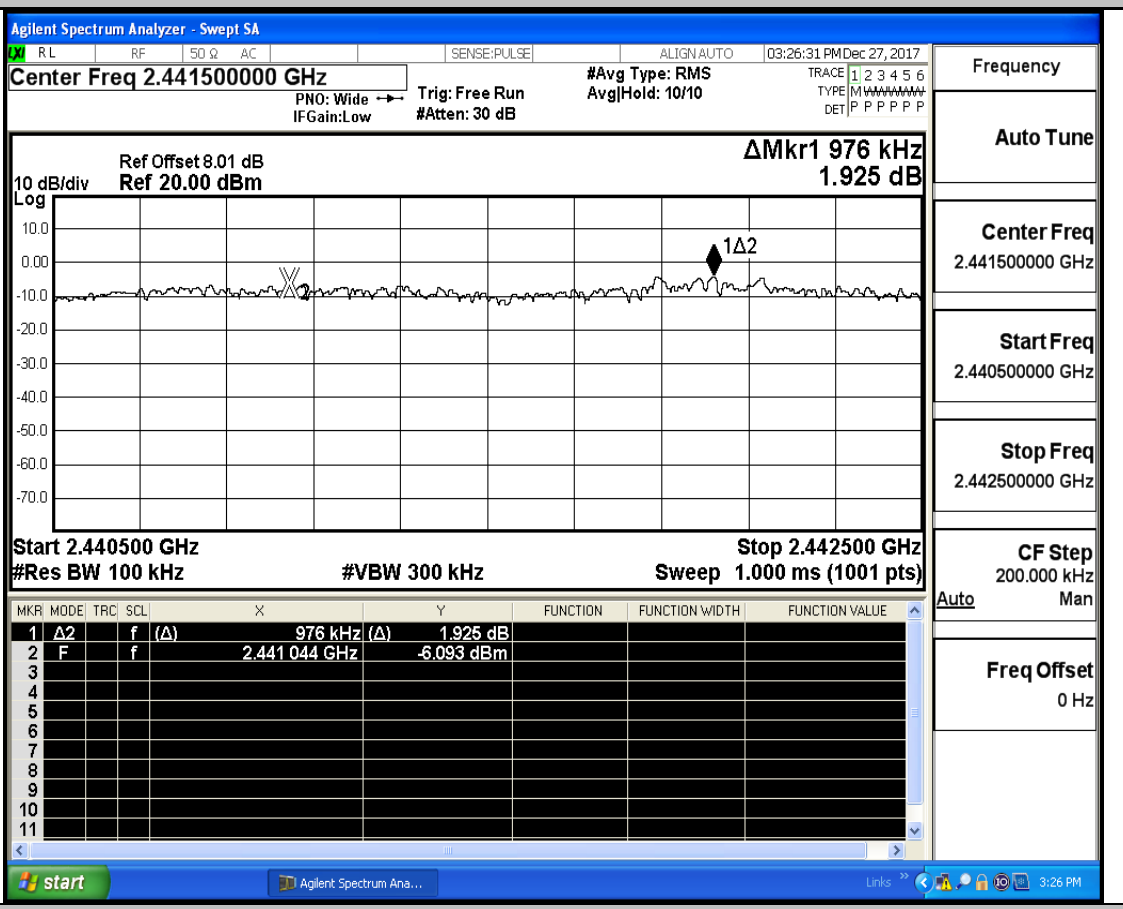
Carrier Frequency Separation_GFSK_2480



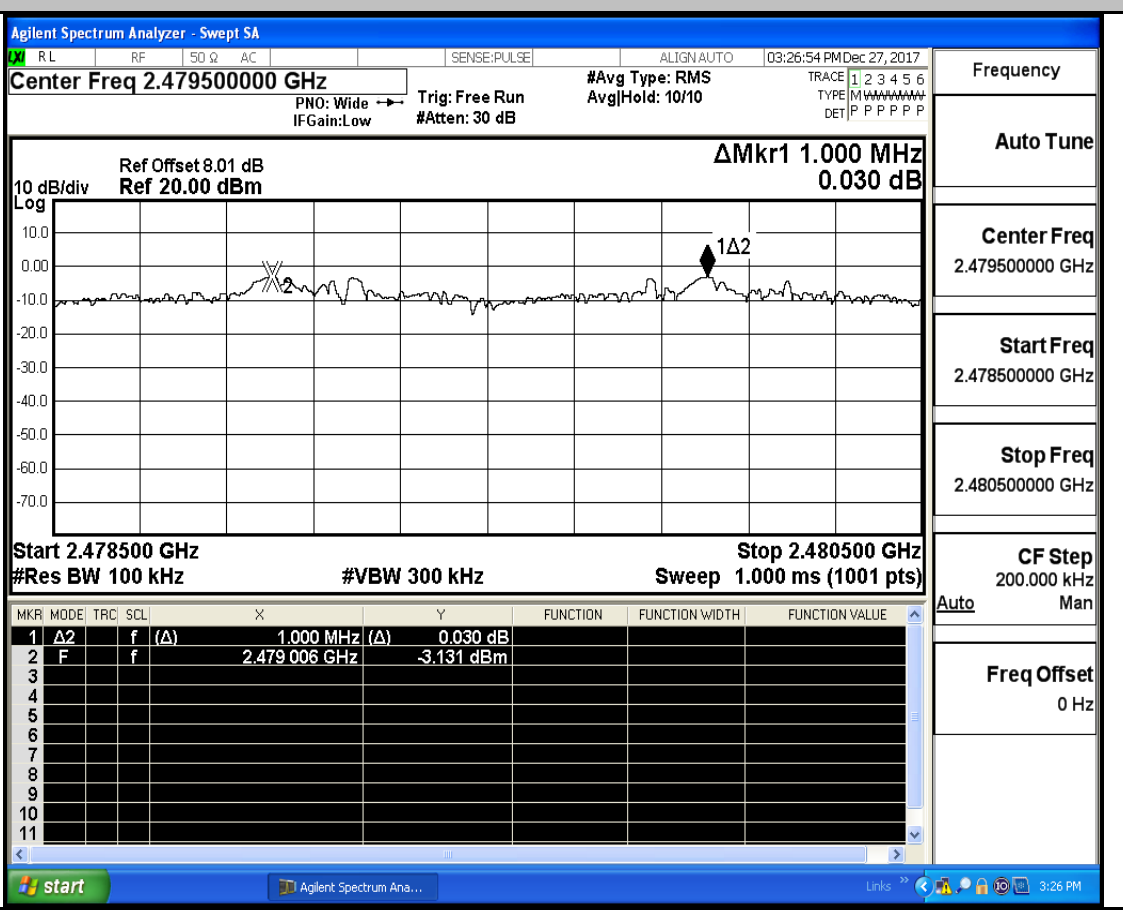
Carrier Frequency Separation_π/4-DQPSK_2402



Carrier Frequency Separation_π/4-DQPSK_2441



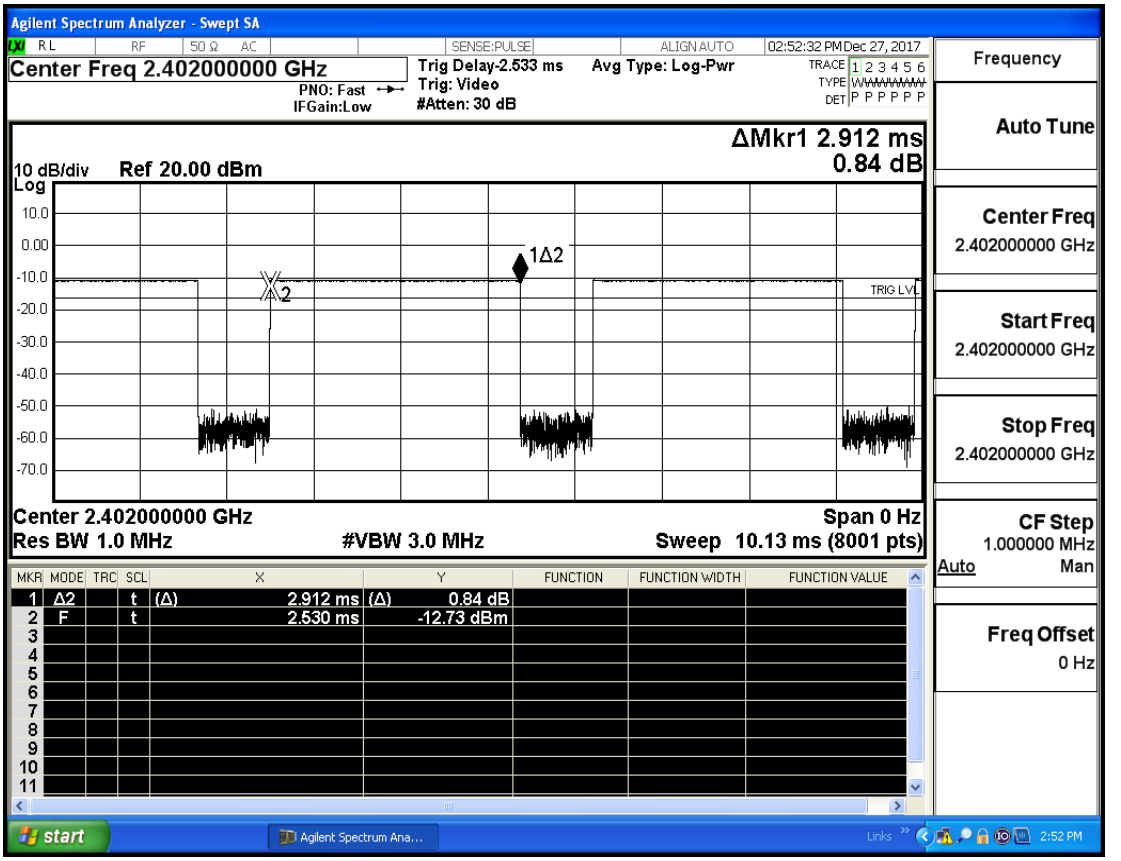
Carrier Frequency Separation_π/4-DQPSK_2480



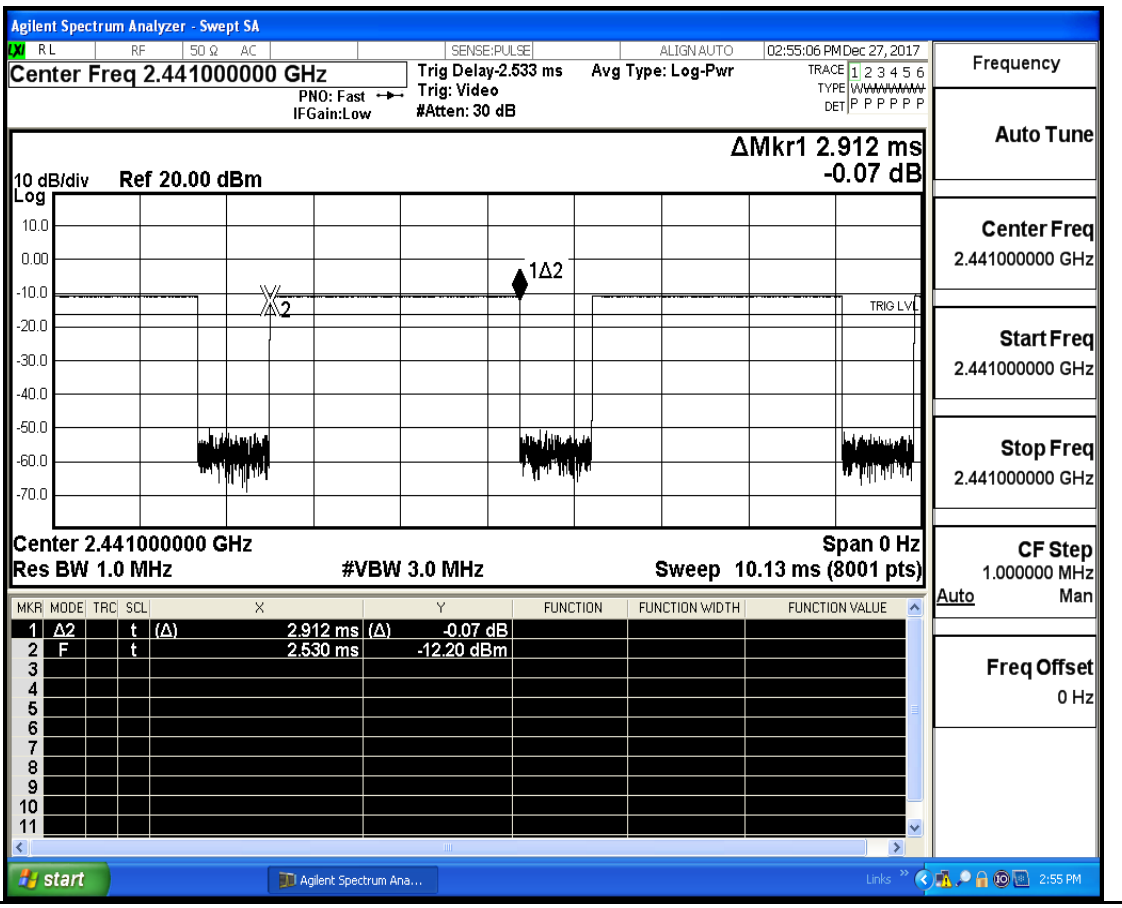
A.4 Dwell Time

Test Mode	Test Channel	Burst Width[ms/hop/ch]	Total Hops[hop*ch]	Dwell Time[s]	Limit[s]	Verdict
GFSK	2402	2.91	106.7	0.31	0.4	PASS
	2441	2.91	106.7	0.31	0.4	PASS
	2480	2.91	106.7	0.31	0.4	PASS
π/4-DQPSK	2402	2.92	106.7	0.312	0.4	PASS
	2441	2.92	106.7	0.312	0.4	PASS
	2480	2.92	106.7	0.312	0.4	PASS

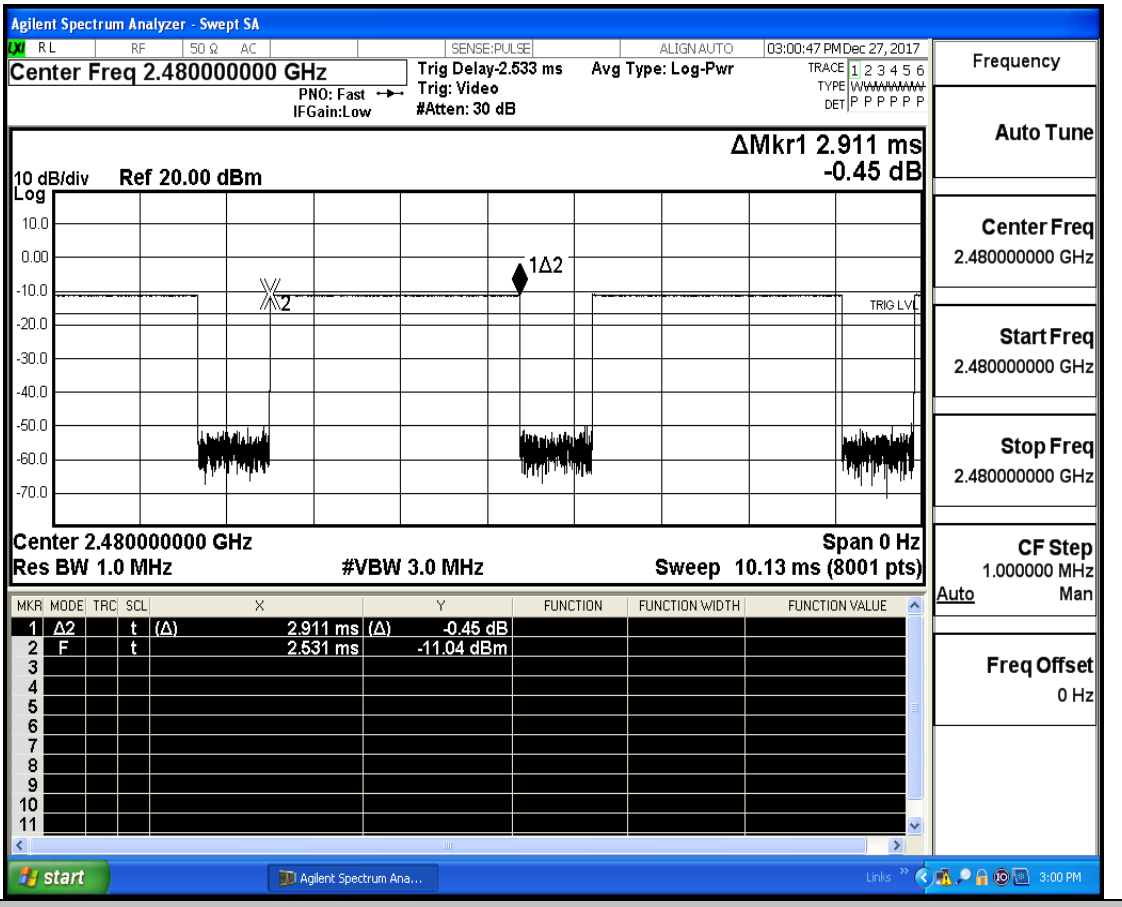
Dwell Time_GFSK_2402



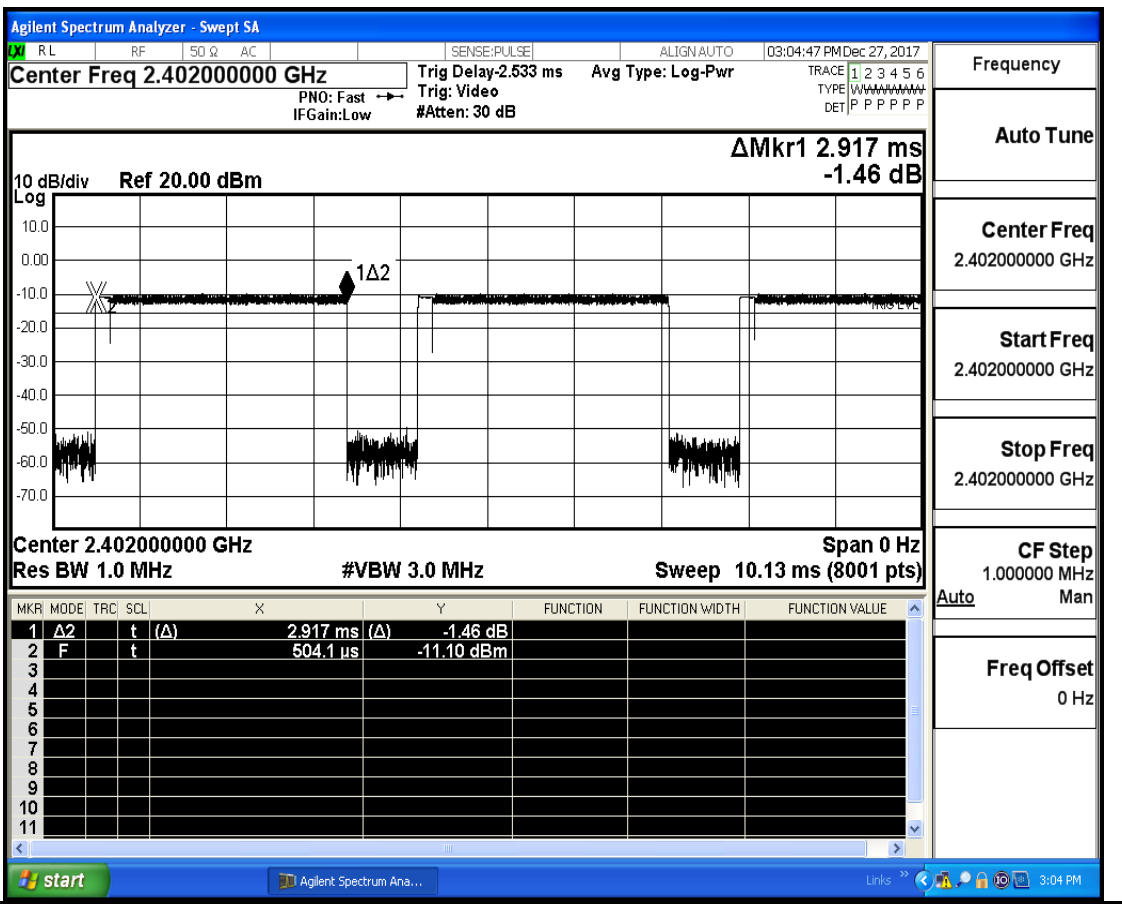
Dwell Time_GFSK_2441



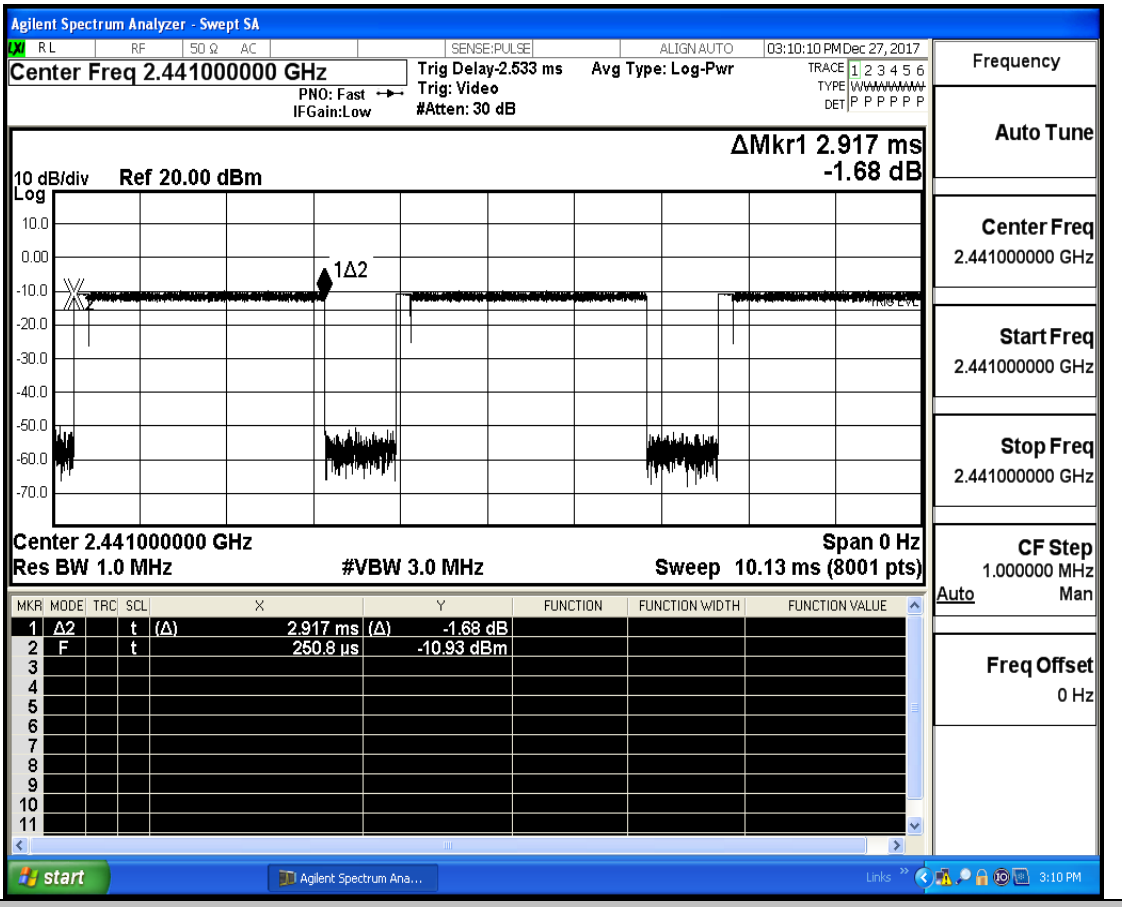
Dwell Time_GFSK_2480



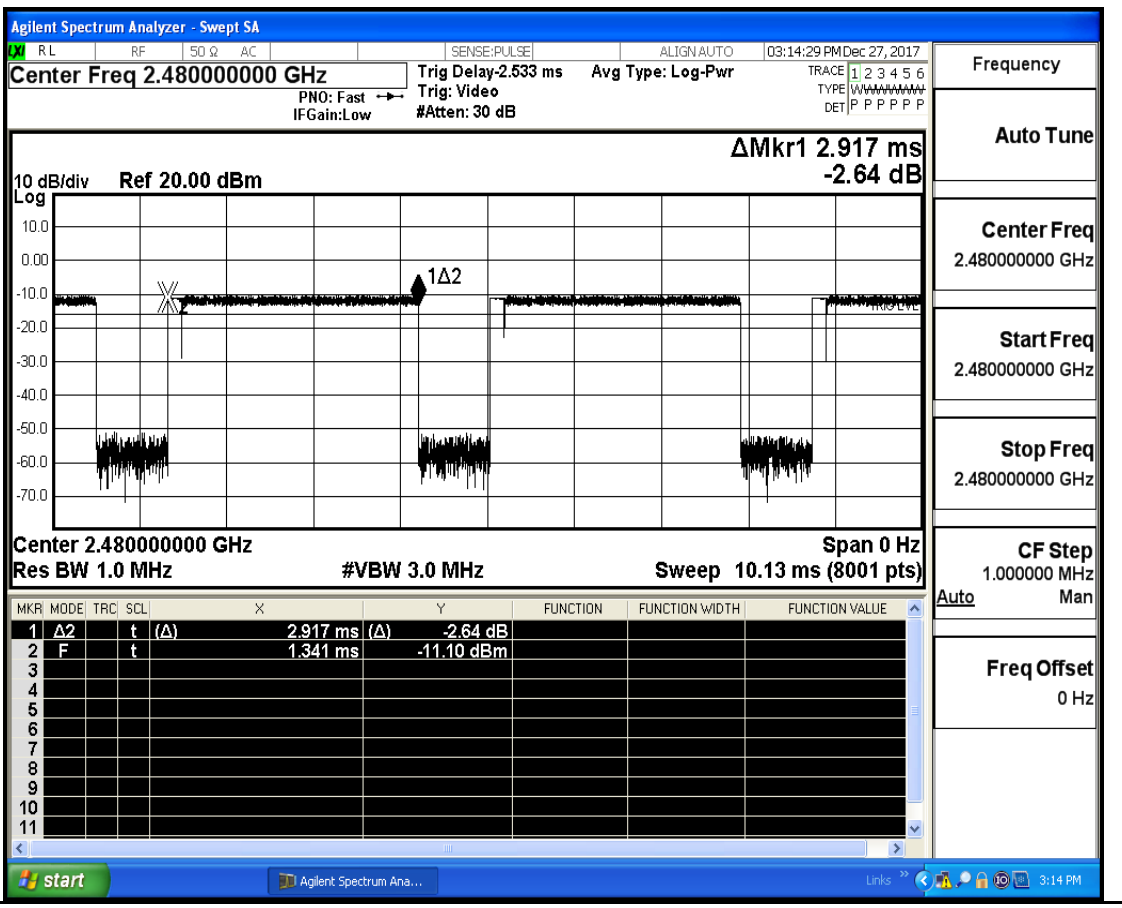
Dwell Time_π/4-DQPSK_2402



Dwell Time_π/4-DQPSK_2441



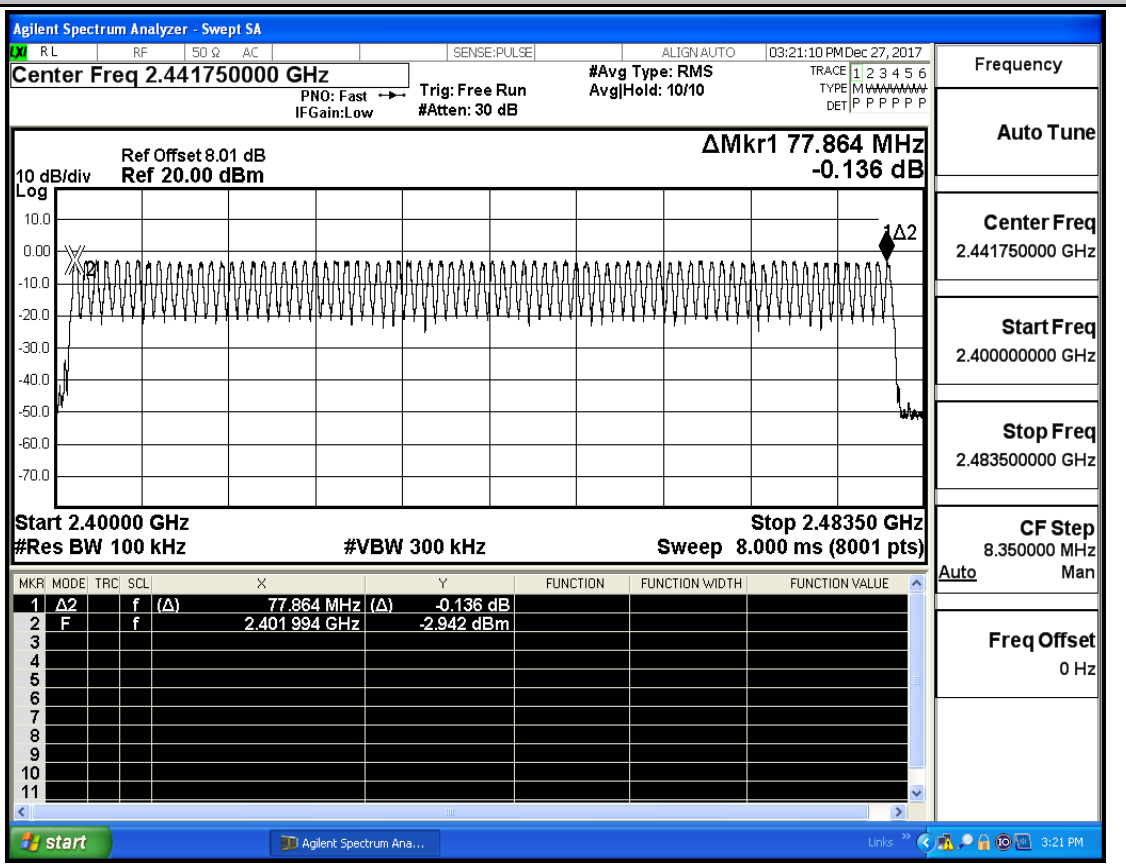
Dwell Time_π/4-DQPSK_2480



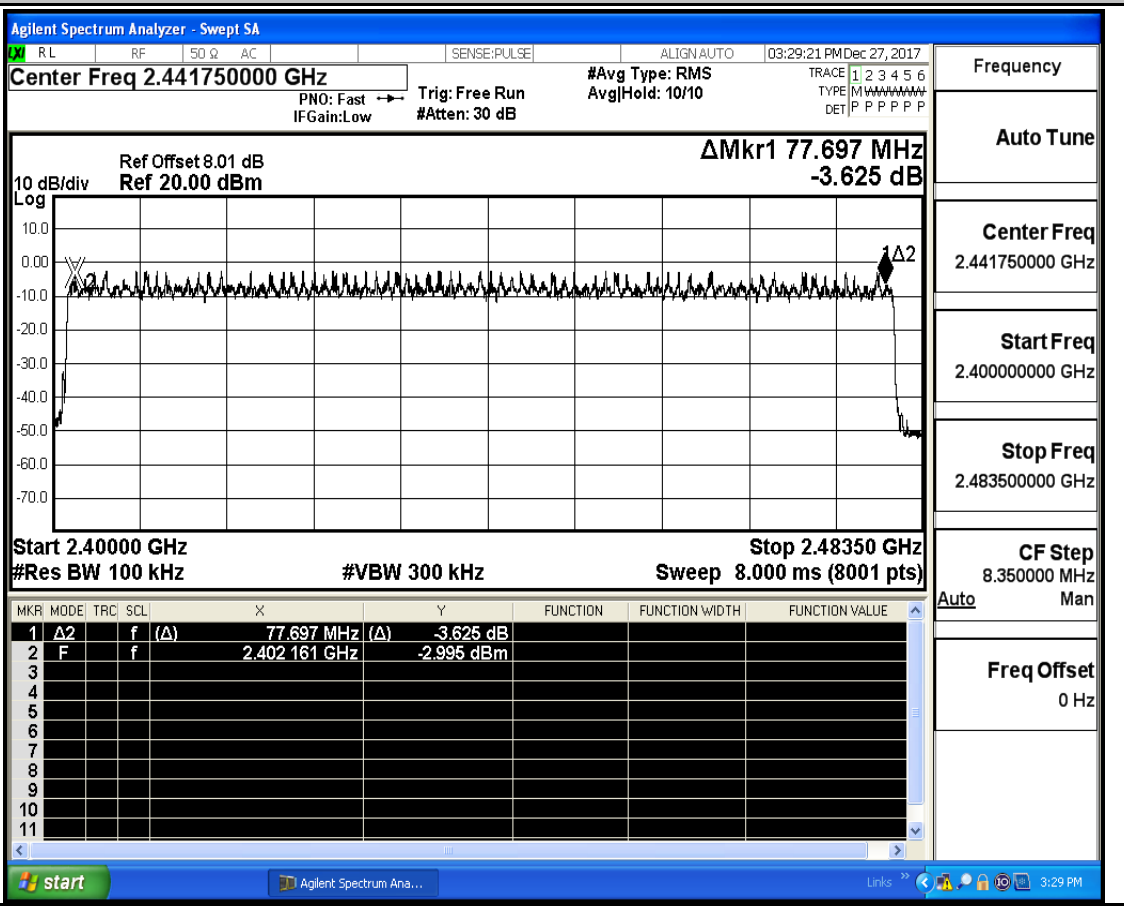
A.5 Hopping Channel Number

Test Mode	Test Channel	Number of Hopping Channel[N]	Limit[N]	Verdict
GFSK	2402	79	>=15	PASS
π/4-DQPSK	2402	79	>=15	PASS

Hopping Channel Number_GFSK_2402



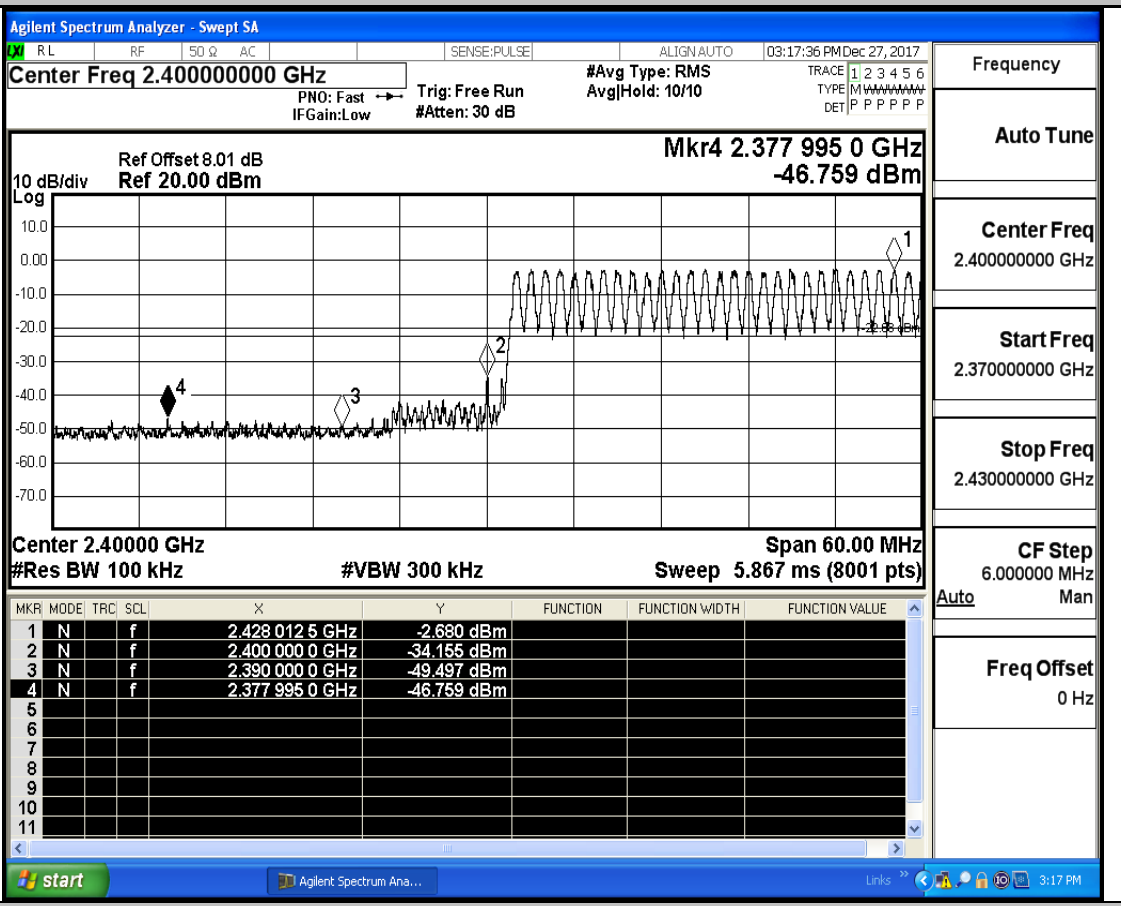
Hopping Channel Number_π/4-DQPSK_2402



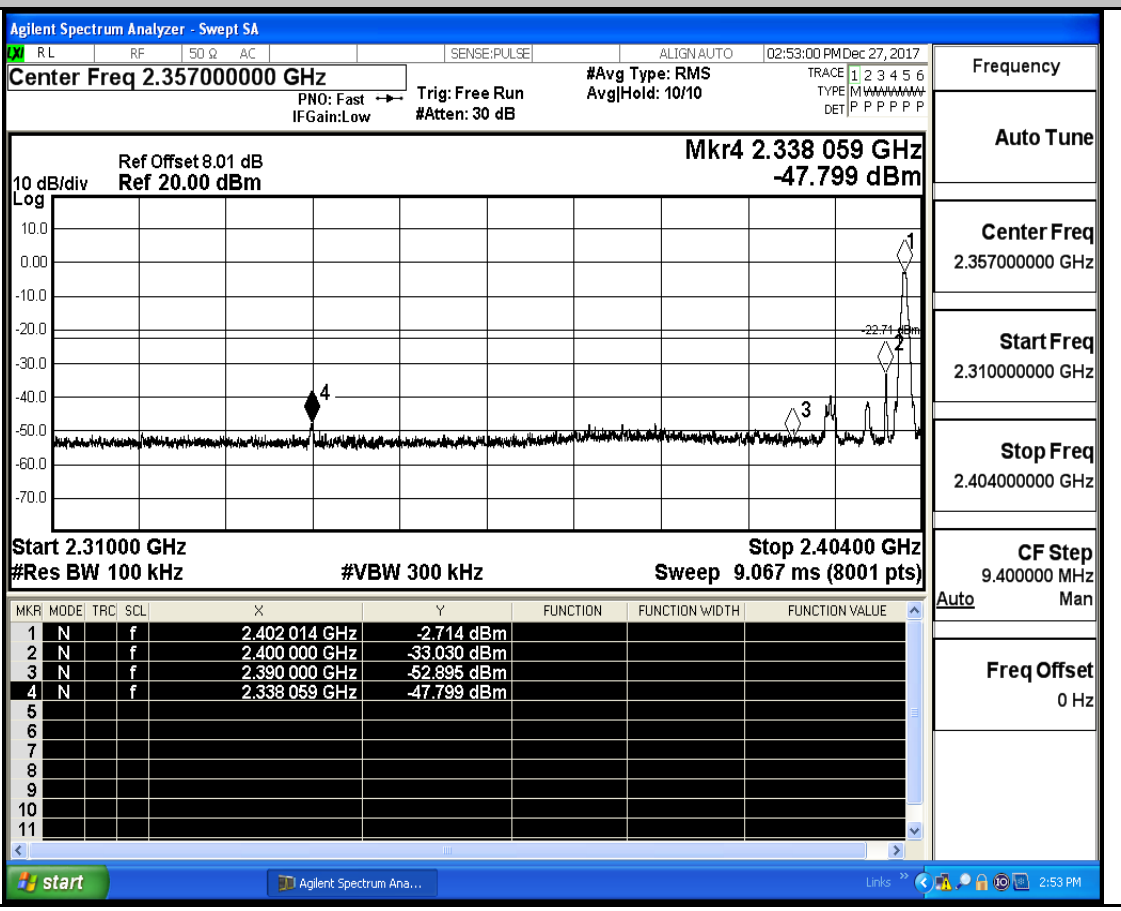
A.6 Band-edge for RF Conducted Emissions

Test Mode	Test Channel	Hopping	Carrier Power[dBm]	Max. Spurious Level [dBm]	Limit[dBm]	Verdict
GFSK	2402	On	-2.680	-46.759	-22.68	PASS
	2402	Off	-2.714	-47.799	-22.71	PASS
	2480	On	-2.789	-45.965	-22.79	PASS
	2480	Off	-3.033	-46.407	-23.03	PASS
π/4-DQPSK	2402	On	-2.553	-44.855	-22.55	PASS
	2402	Off	-2.700	-48.751	-22.7	PASS
	2480	On	-2.692	-45.865	-22.69	PASS
	2480	Off	-2.965	-47.865	-22.97	PASS

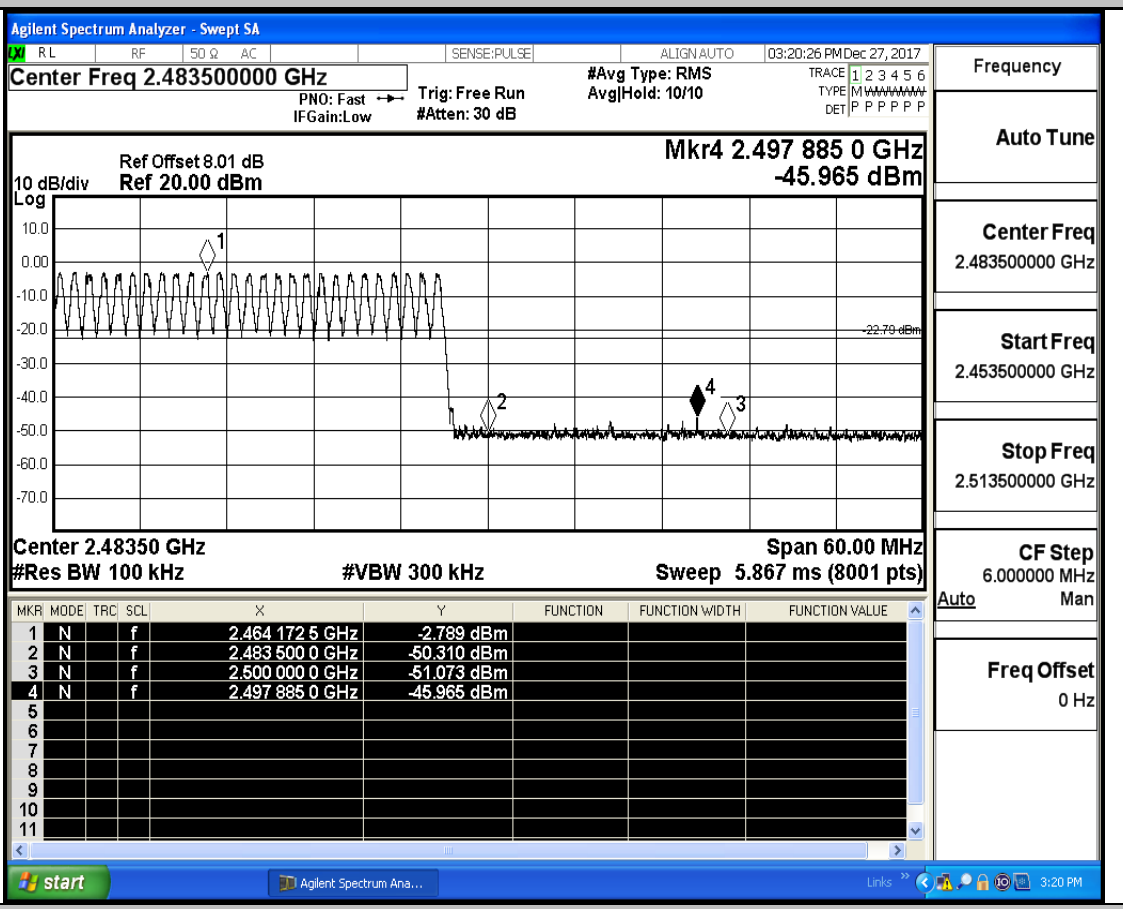
Band-edge for RF Conducted Emissions_GFSK_2402_Hopping On



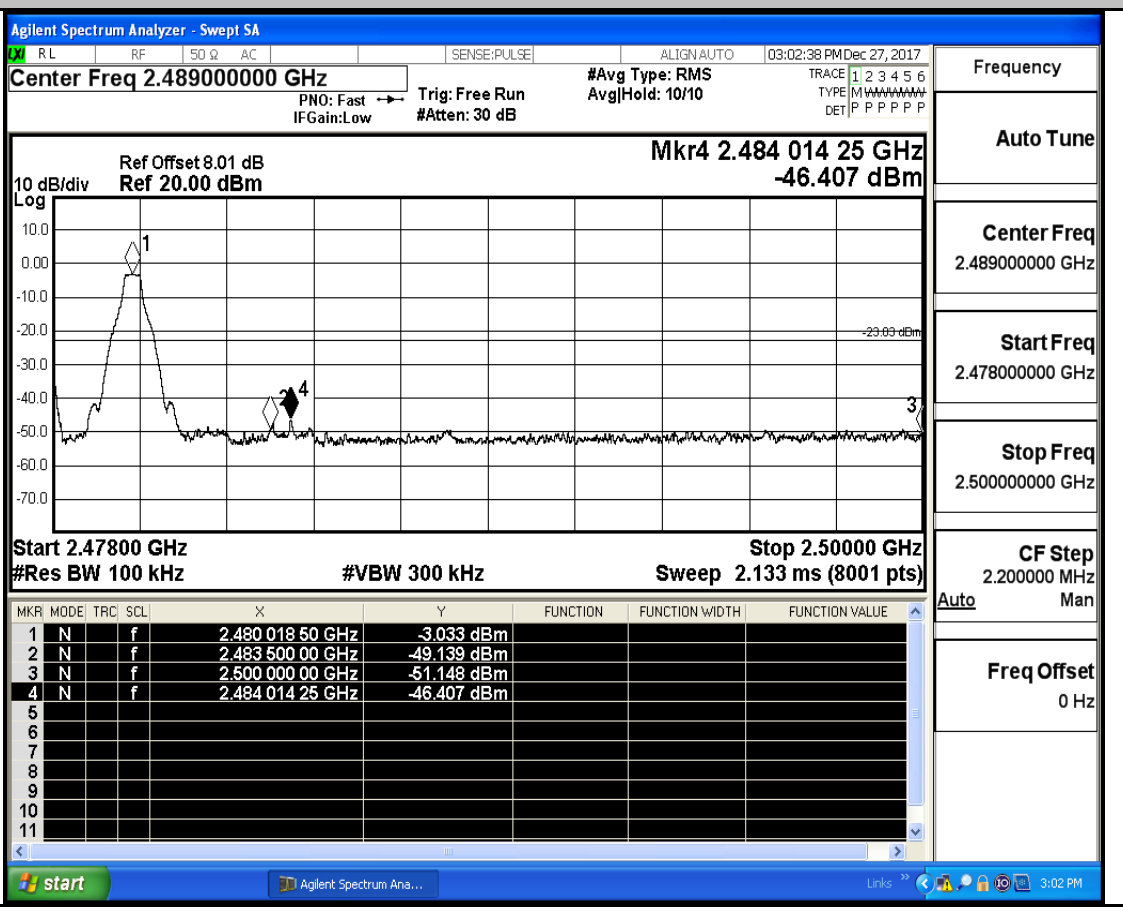
Band-edge for RF Conducted Emissions_GFSK_2402_Hopping Off



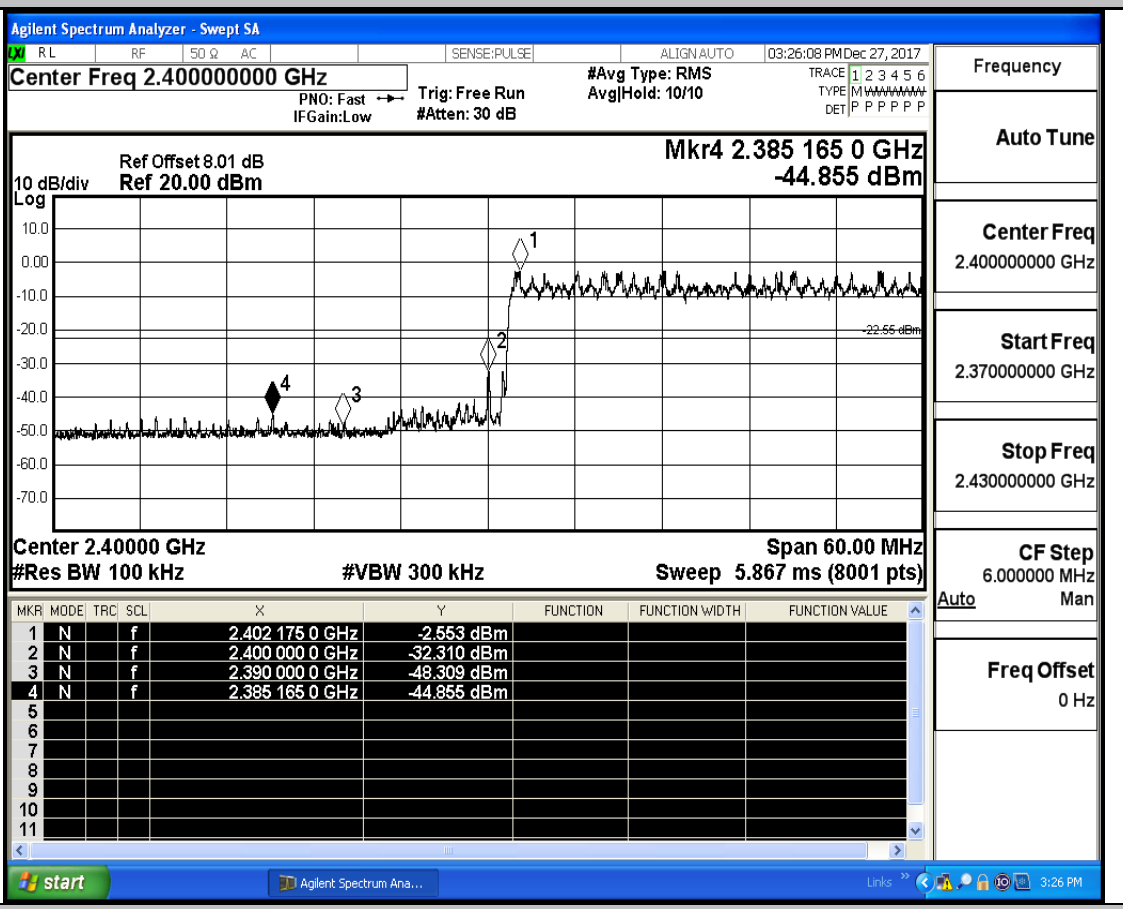
Band-edge for RF Conducted Emissions_GFSK_2480_Hopping On



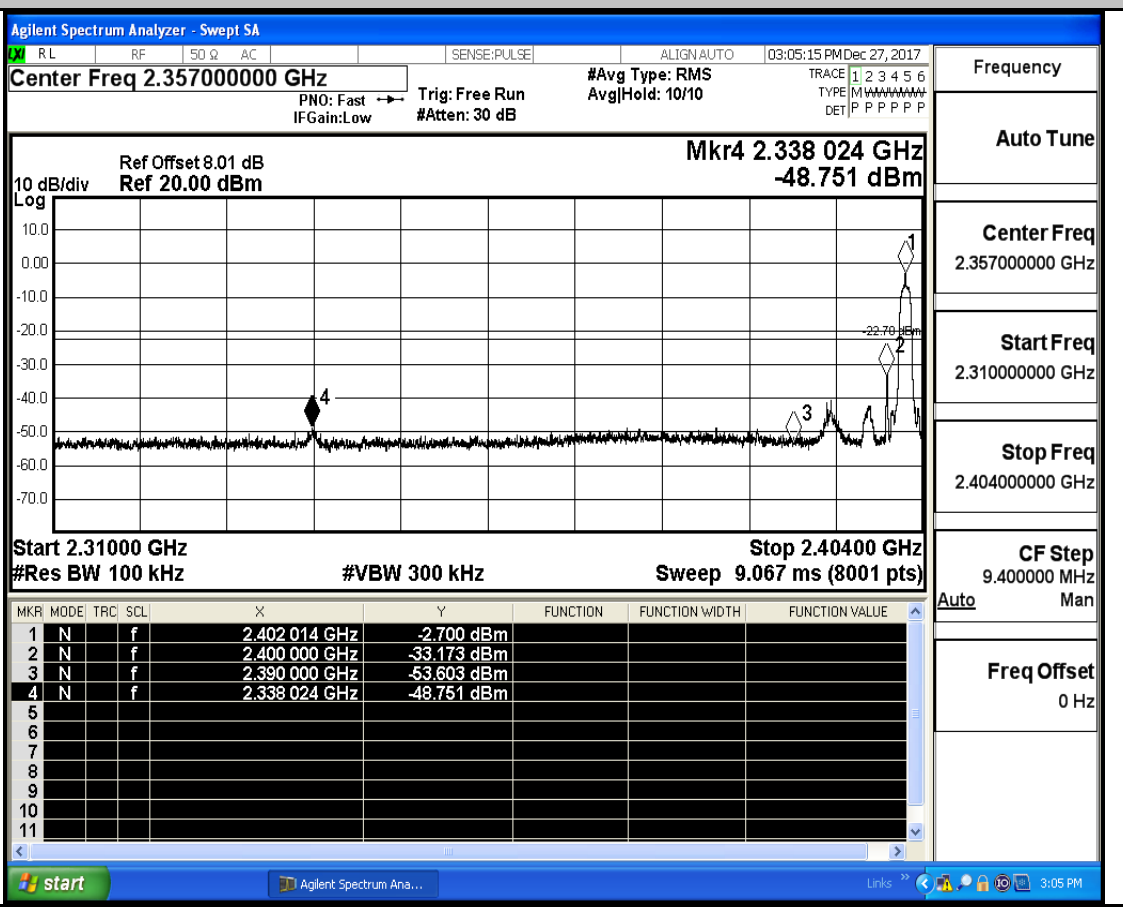
Band-edge for RF Conducted Emissions_GFSK_2480_Hopping Off



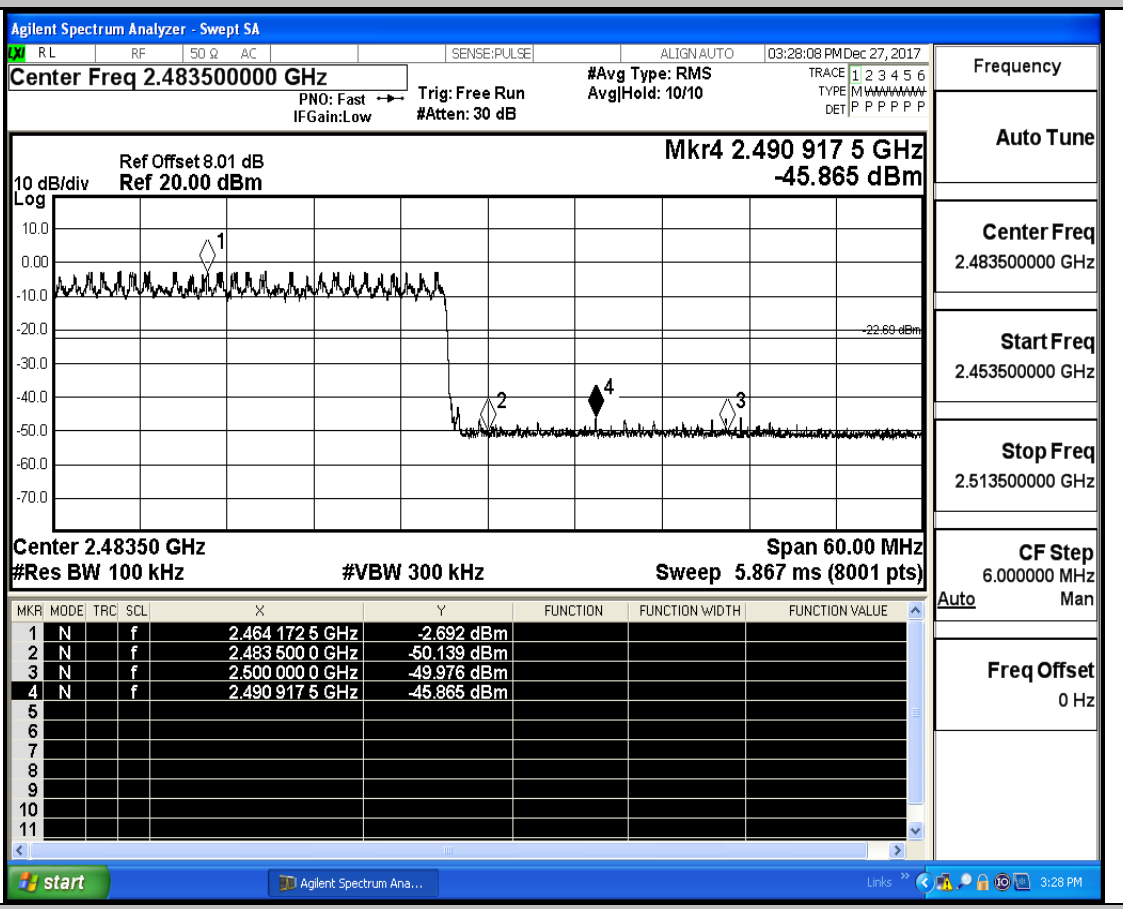
Band-edge for RF Conducted Emissions_π/4-DQPSK_2402_Hopping On



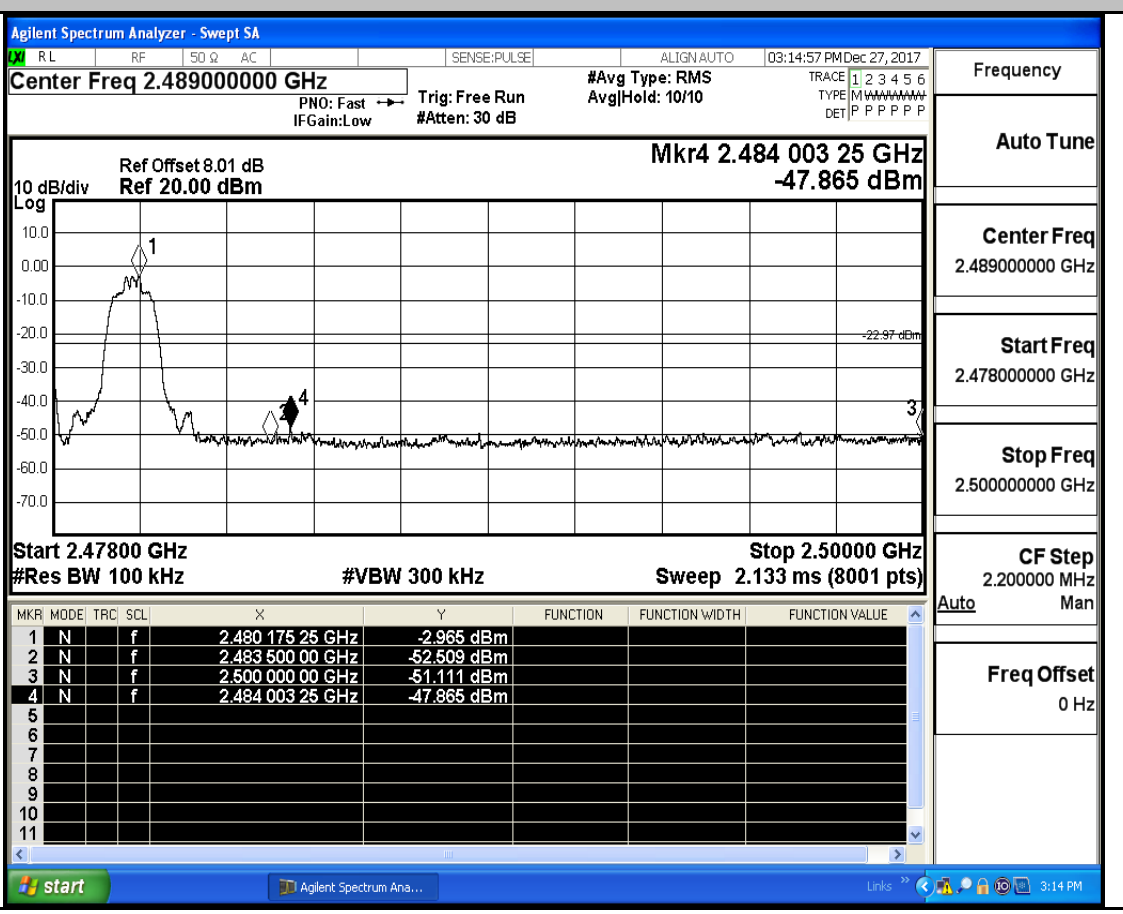
Band-edge for RF Conducted Emissions_π/4-DQPSK_2402_Hopping Off



Band-edge for RF Conducted Emissions_π/4-DQPSK_2480_Hopping On



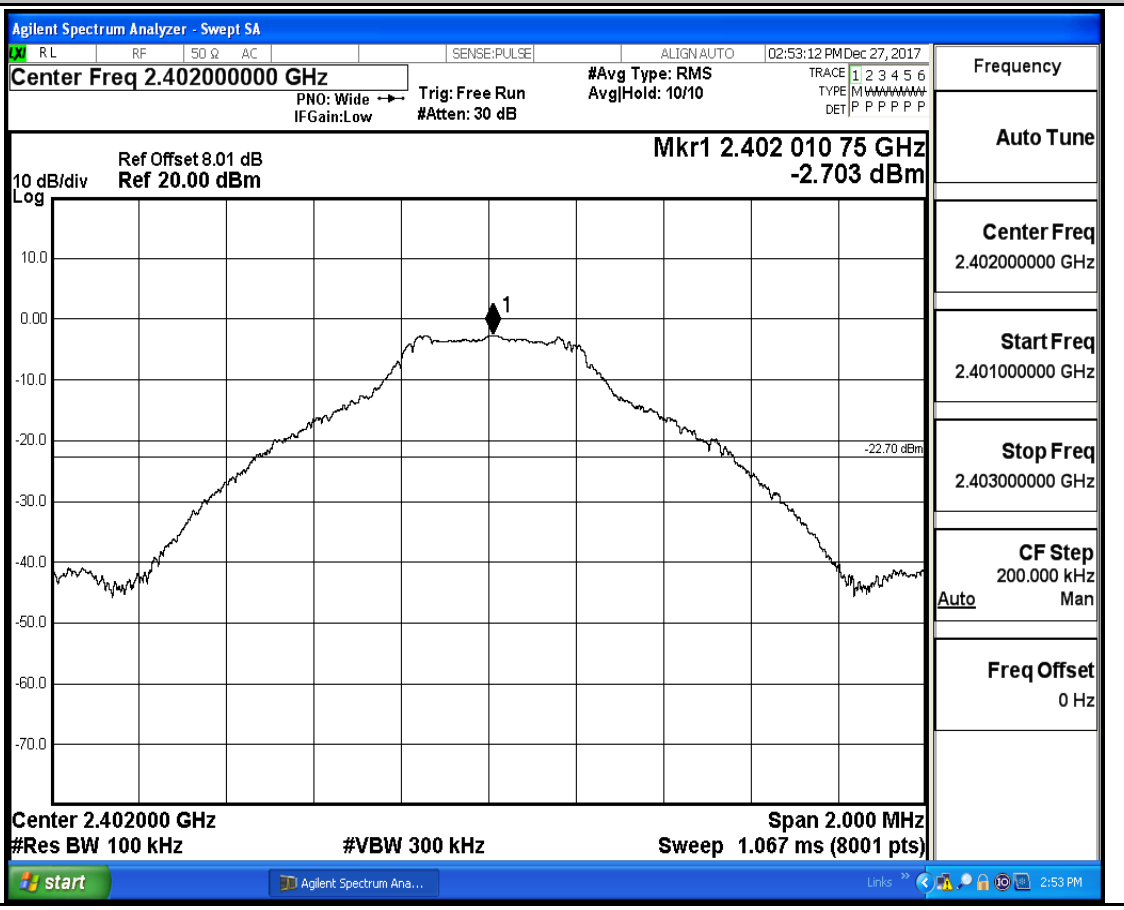
Band-edge for RF Conducted Emissions_π/4-DQPSK_2480_Hopping Off

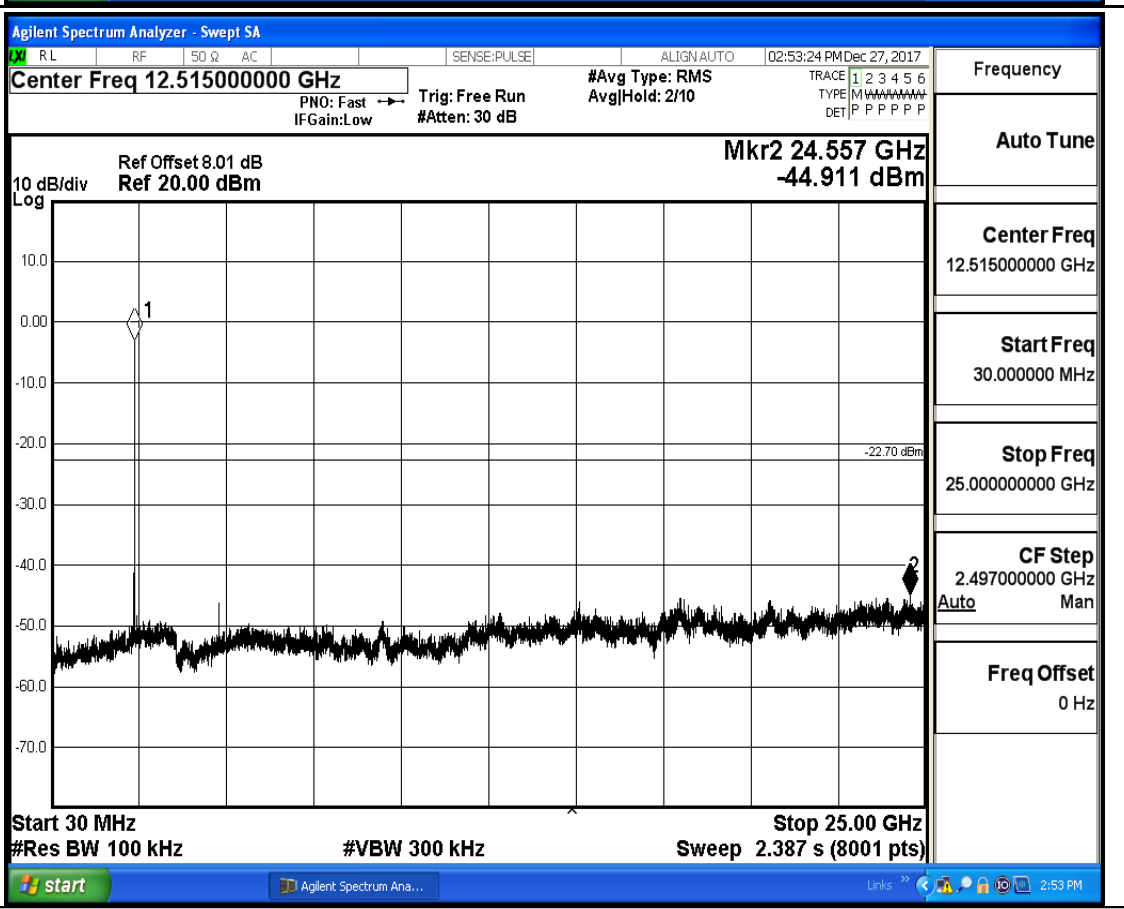


A.7 RF Conducted Spurious Emissions

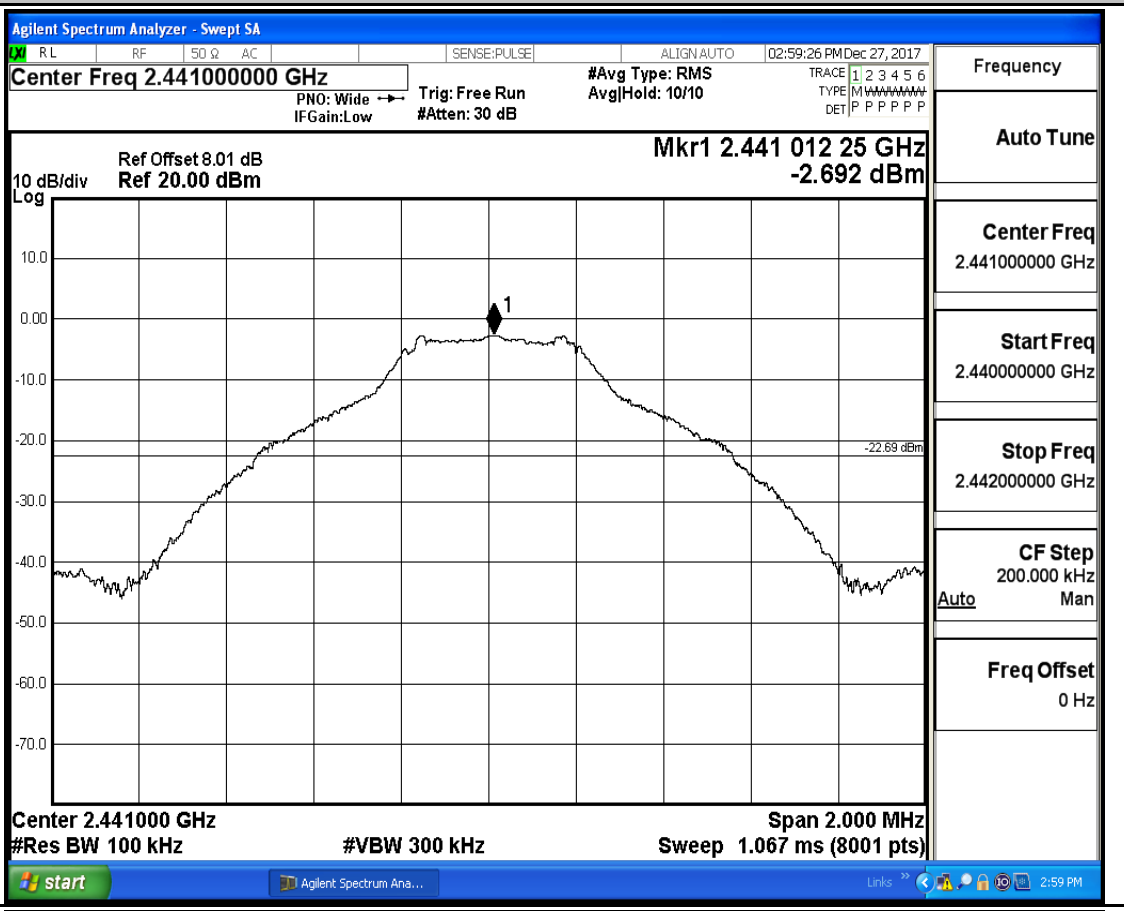
Test Mode	Test Channel	StartFre [MHz]	StopFre [MHz]	RBW [kHz]	VBW [kHz]	Pref[dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
GFSK	2402	30	25000	100	300	-2.703	-44.911	<-22.703	PASS
	2441	30	25000	100	300	-2.692	-43.963	<-22.692	PASS
	2480	30	25000	100	300	-3.027	-44.863	<-23.027	PASS
π/4-DQPSK	2402	30	25000	100	300	-2.694	-44.623	<-22.694	PASS
	2441	30	25000	100	300	-2.689	-44.782	<-22.689	PASS
	2480	30	25000	100	300	-3.029	-44.851	<-23.029	PASS

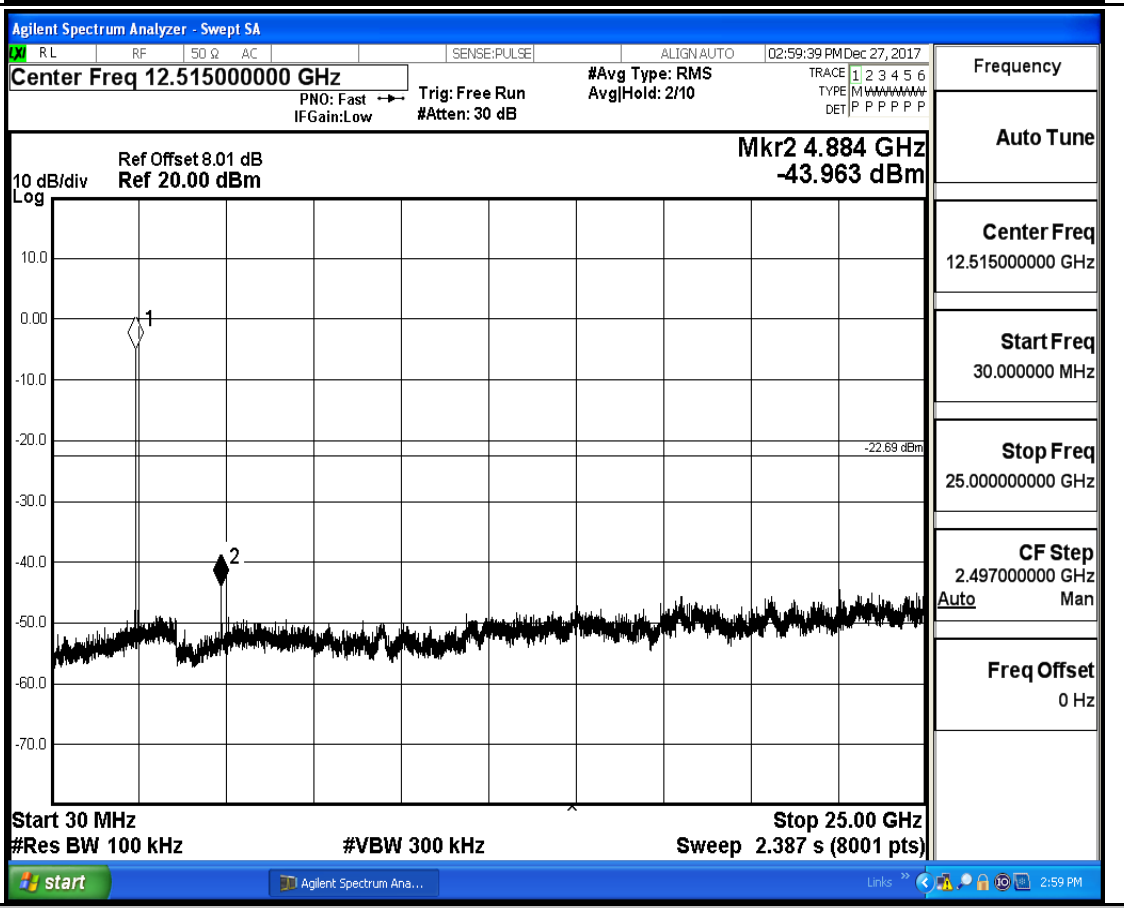
RF Conducted Spurious Emissions_GFSK_2402



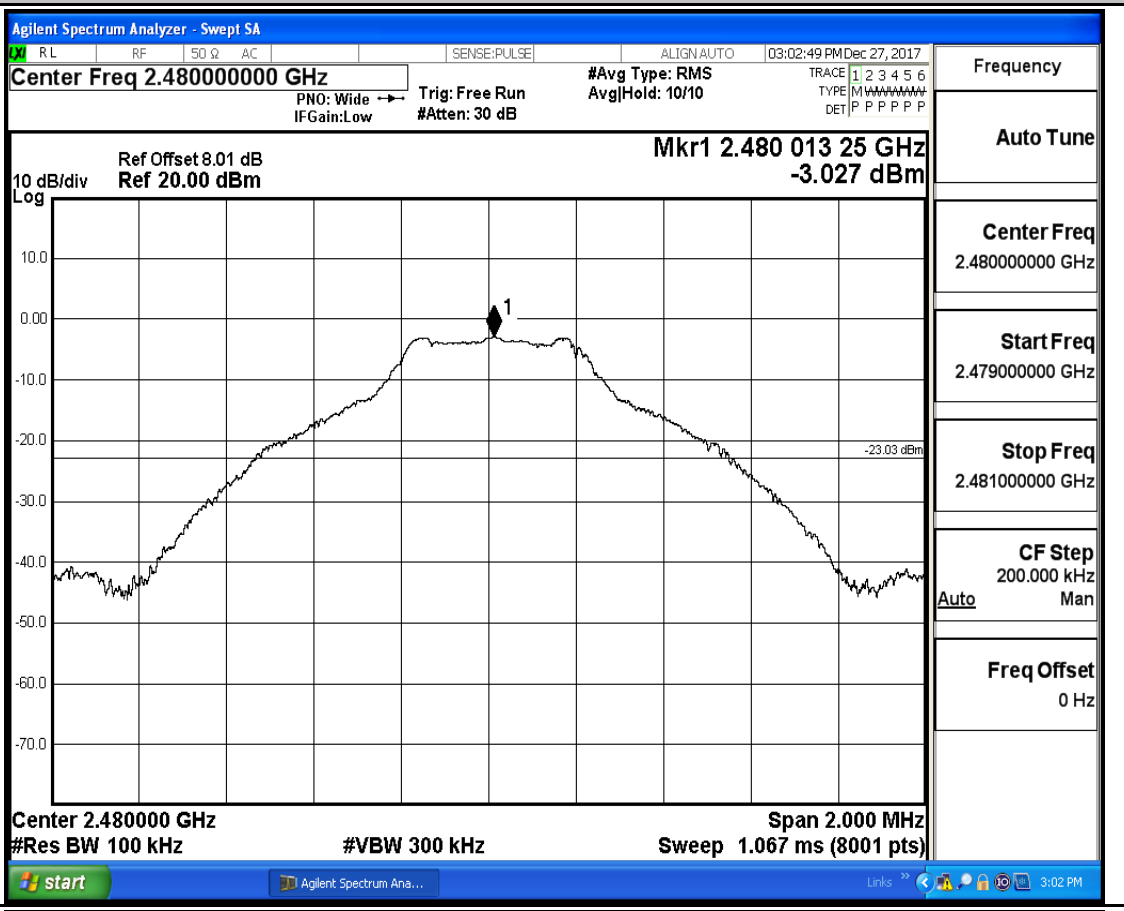


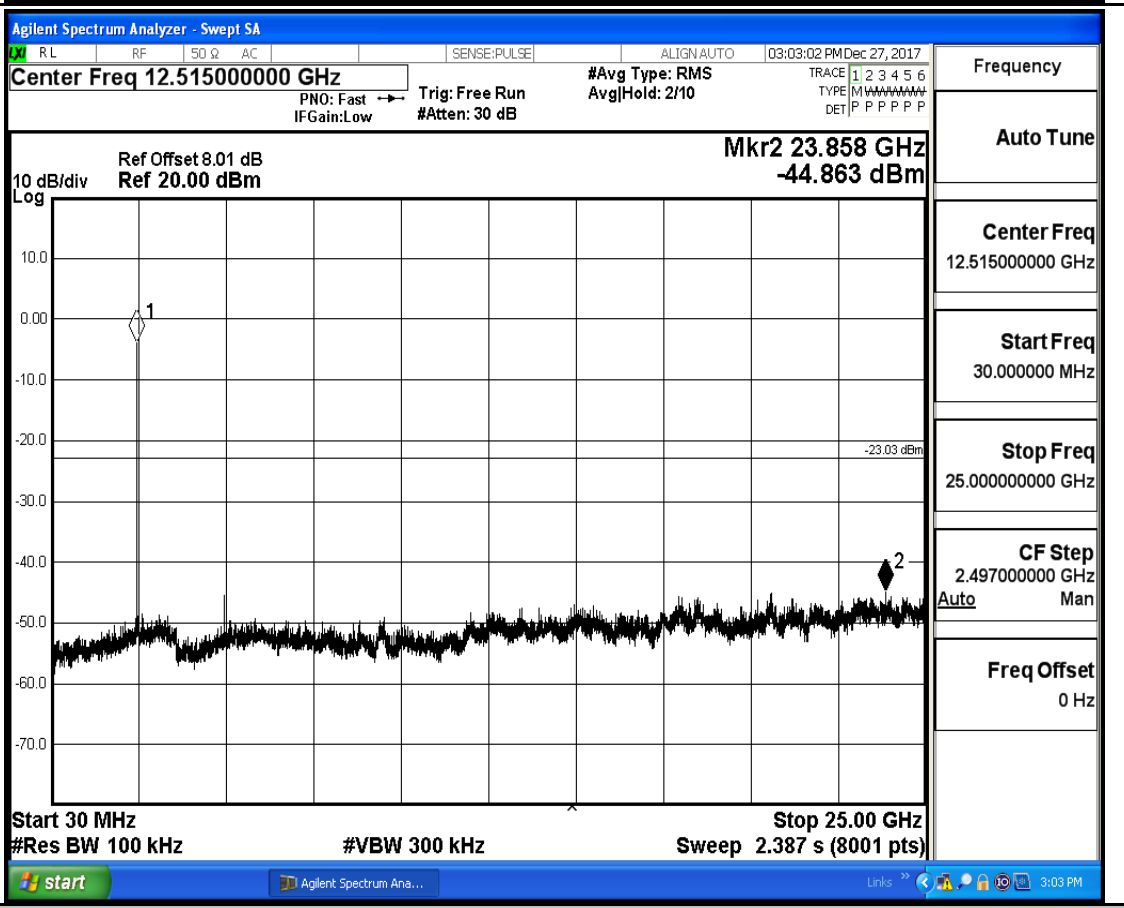
RF Conducted Spurious Emissions_GFSK_2441



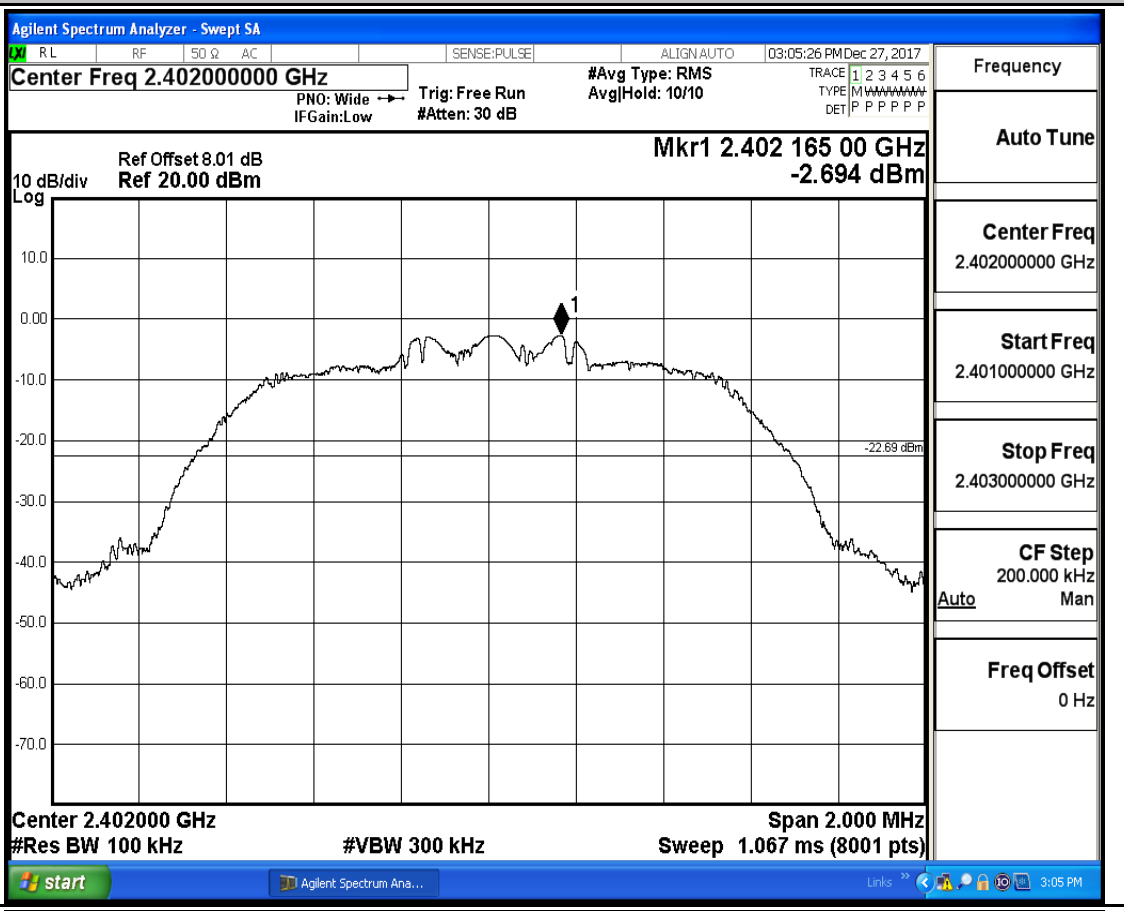


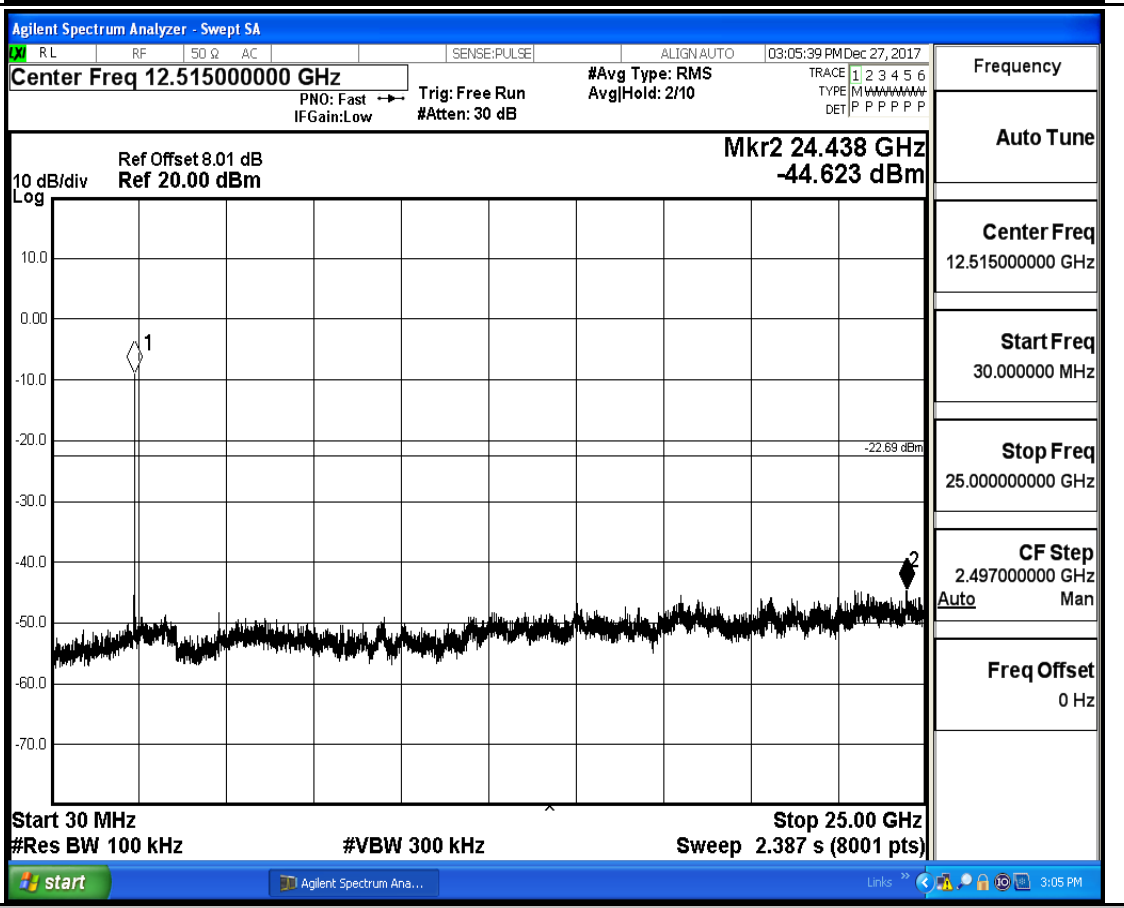
RF Conducted Spurious Emissions_GFSK_2480



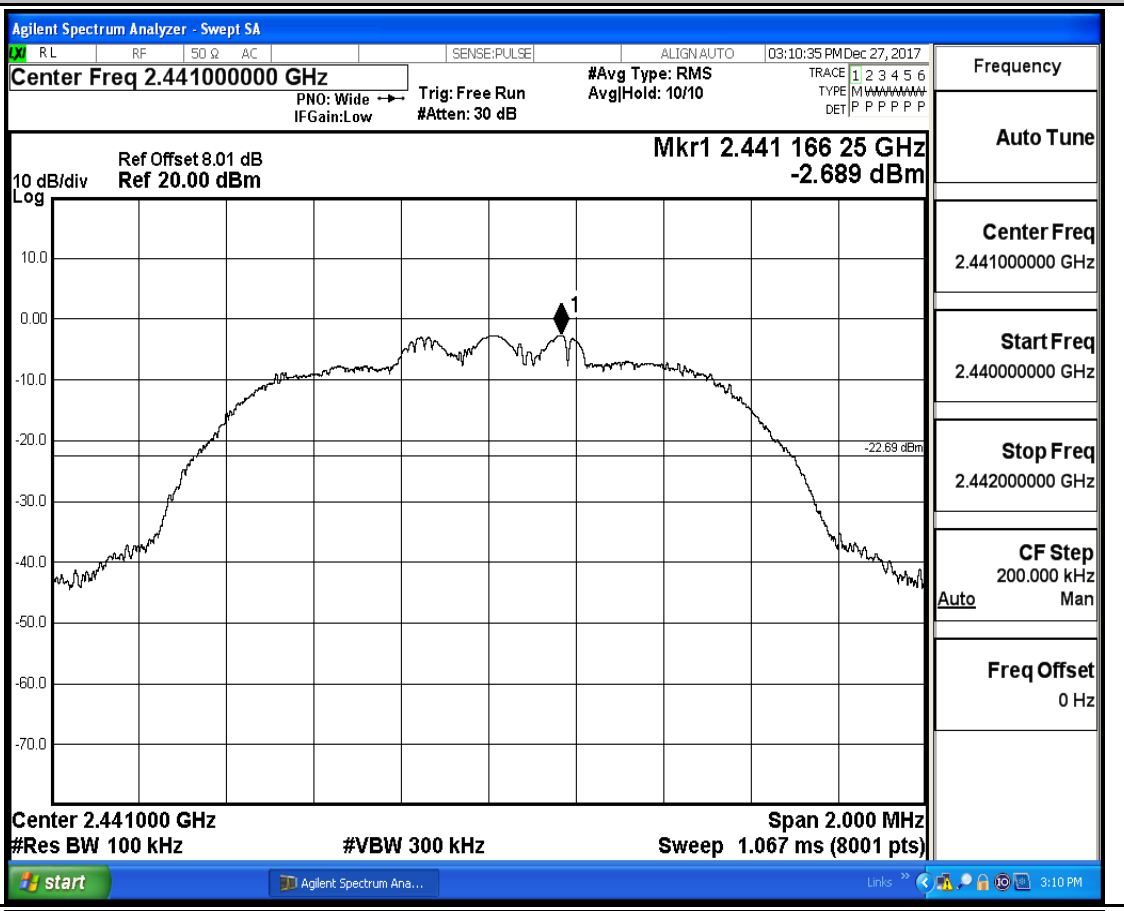


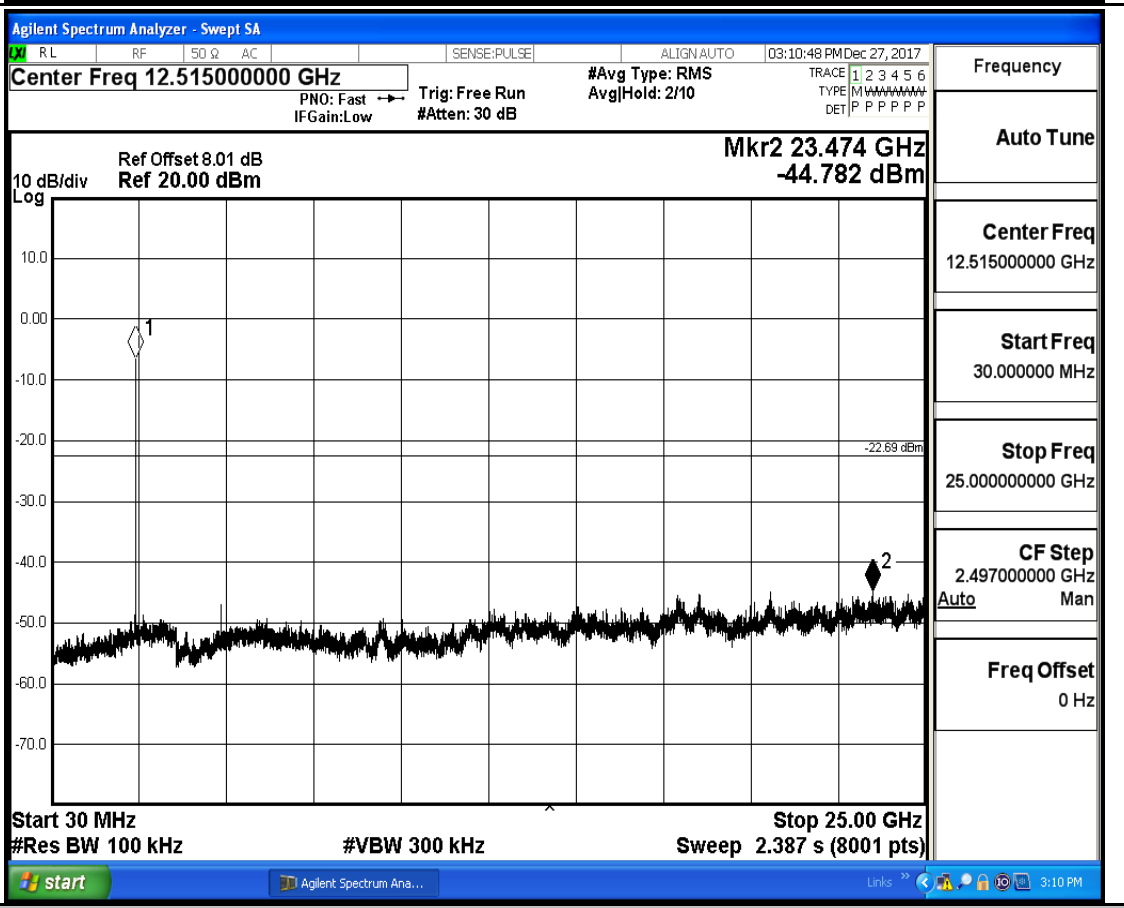
RF Conducted Spurious Emissions_π/4-DQPSK_2402



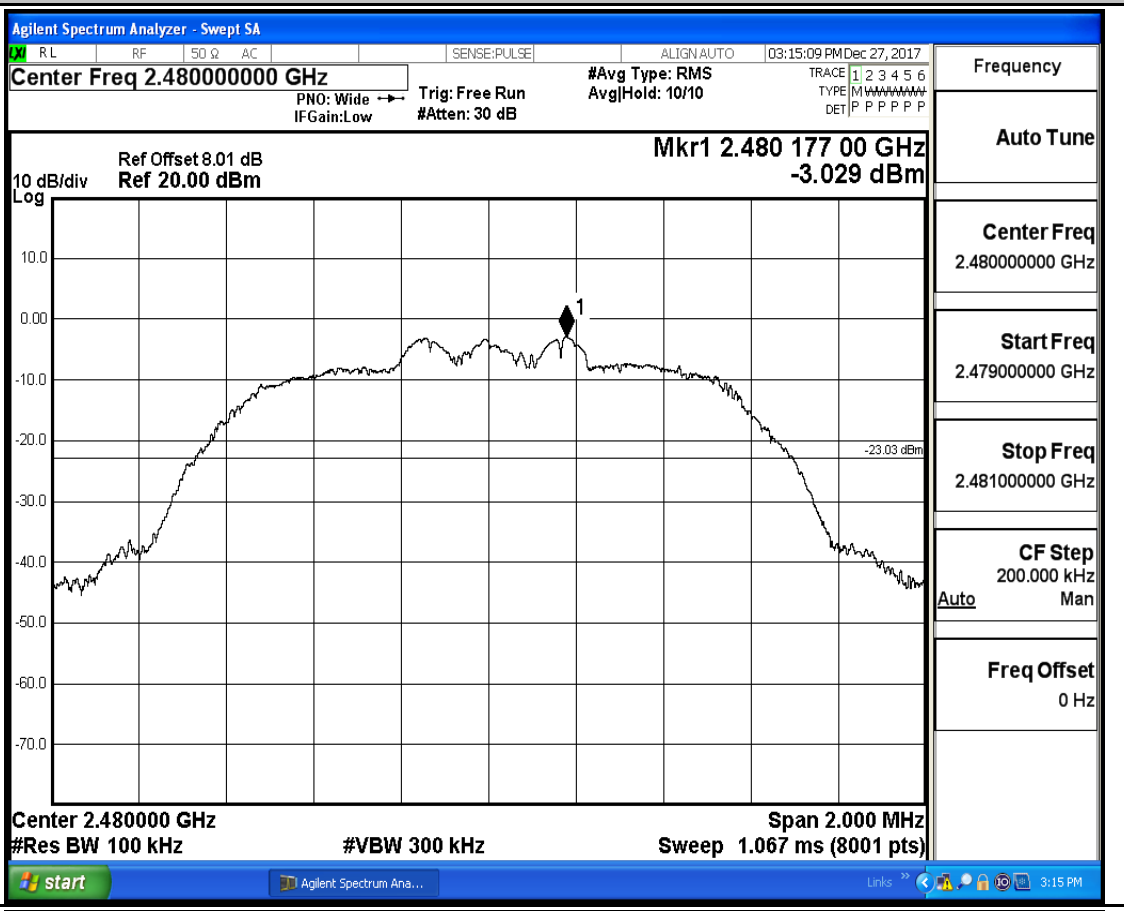


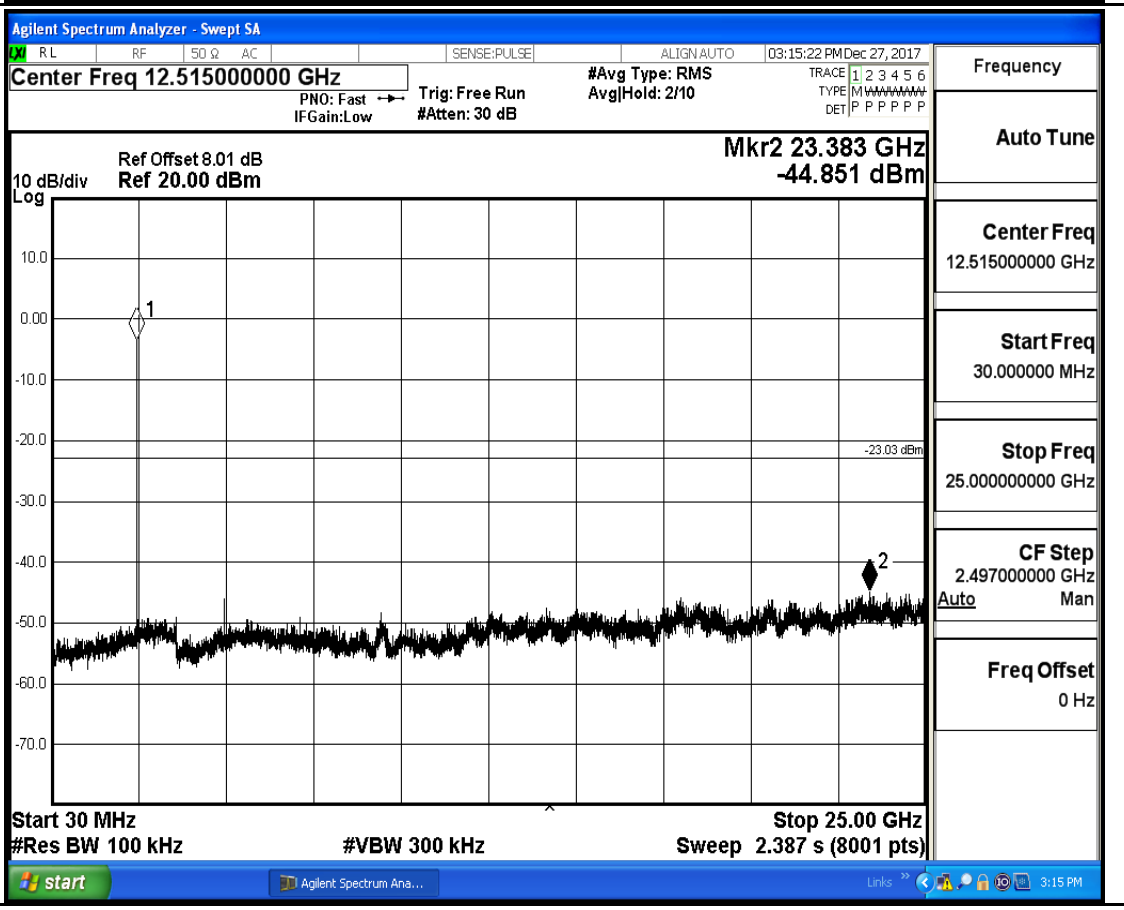
RF Conducted Spurious Emissions_π/4-DQPSK_2441





RF Conducted Spurious Emissions_π/4-DQPSK_2480

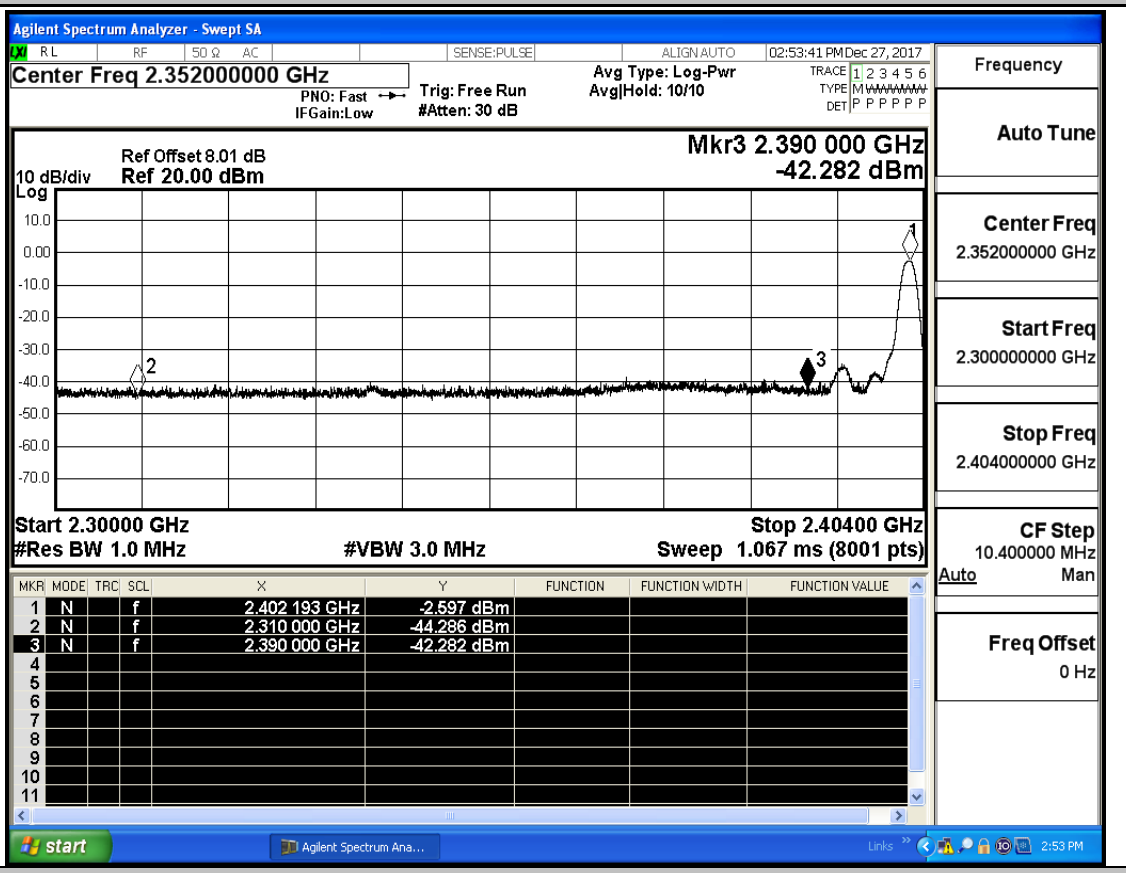




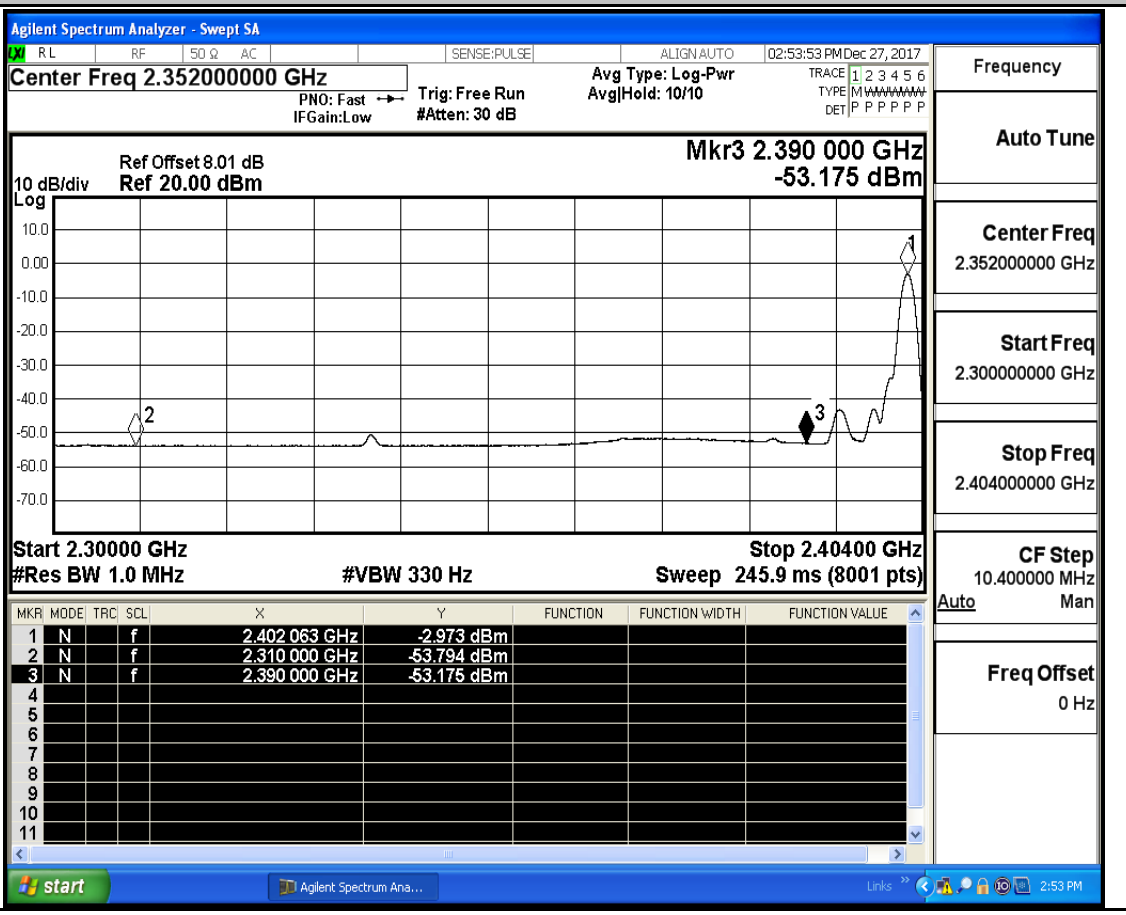
A.8 Restrict-band band-edge measurements

Test Mode	Hopping	Freq.	Power [dBm]	Gain	Ground Factor	E [dBuV/m]	Detector	Limit [dBuV/m]	Verdict
GFSK	Off	2310.0	-44.29	-0.68	0	52.97	PEAK	74	PASS
	Off	2310.0	-53.79	-0.68	0	43.46	AV	54	PASS
	Off	2390.0	-42.28	-0.68	0	54.98	PEAK	74	PASS
	Off	2390.0	-53.18	-0.68	0	44.08	AV	54	PASS
	Off	2483.5	-40.86	-0.68	0	56.39	PEAK	74	PASS
	Off	2483.5	-51.13	-0.68	0	46.13	AV	54	PASS
	Off	2500.0	-42.42	-0.68	0	54.84	PEAK	74	PASS
	Off	2500.0	-51.87	-0.68	0	45.39	AV	54	PASS
π/4-DQPSK	Off	2310.0	-44.02	-0.68	0	53.24	PEAK	74	PASS
	Off	2310.0	-53.88	-0.68	0	43.38	AV	54	PASS
	Off	2390.0	-42.93	-0.68	0	54.33	PEAK	74	PASS
	Off	2390.0	-53.24	-0.68	0	44.02	AV	54	PASS
	Off	2483.5	-41.76	-0.68	0	55.50	PEAK	74	PASS
	Off	2483.5	-51.93	-0.68	0	45.33	AV	54	PASS
	Off	2500.0	-42.42	-0.68	0	54.84	PEAK	74	PASS
	Off	2500.0	-51.90	-0.68	0	45.36	AV	54	PASS

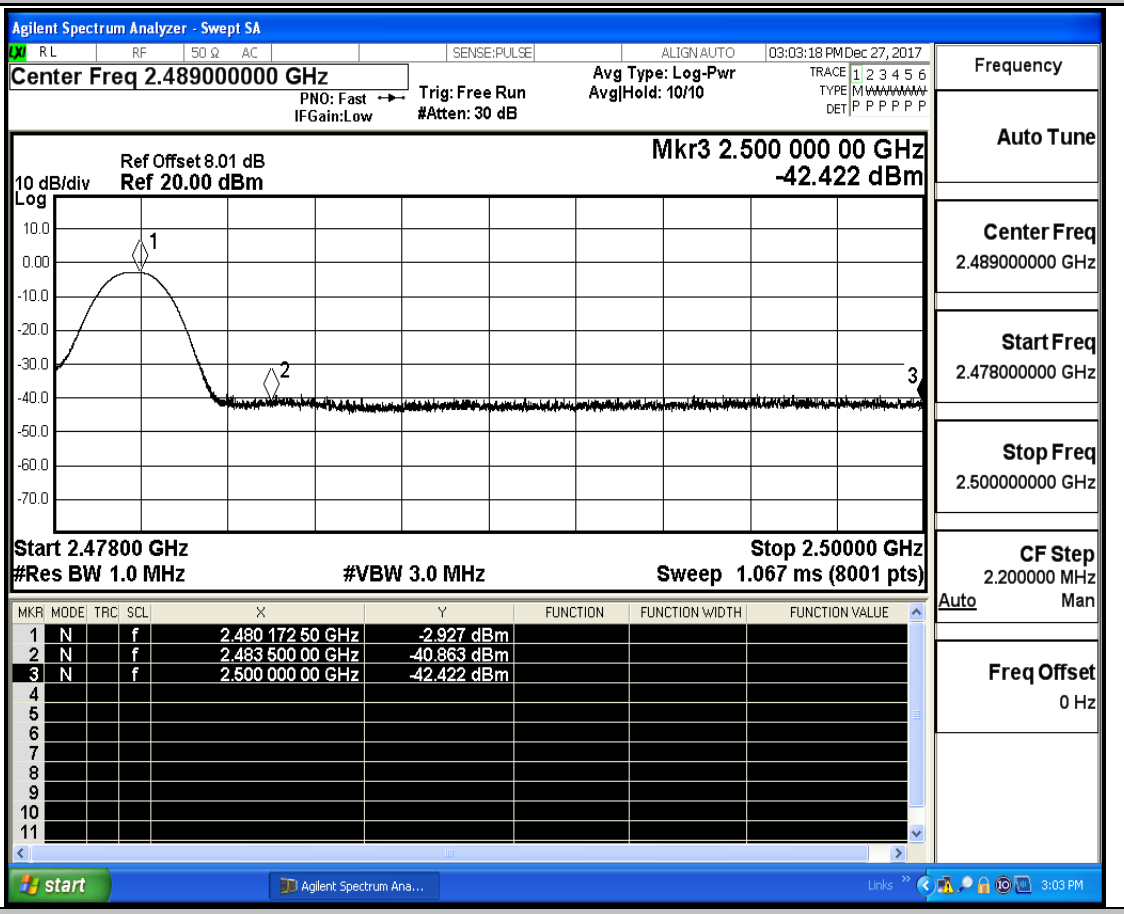
Restrict-band band-edge measurements_Hopping Off_ GFSK_PEAK



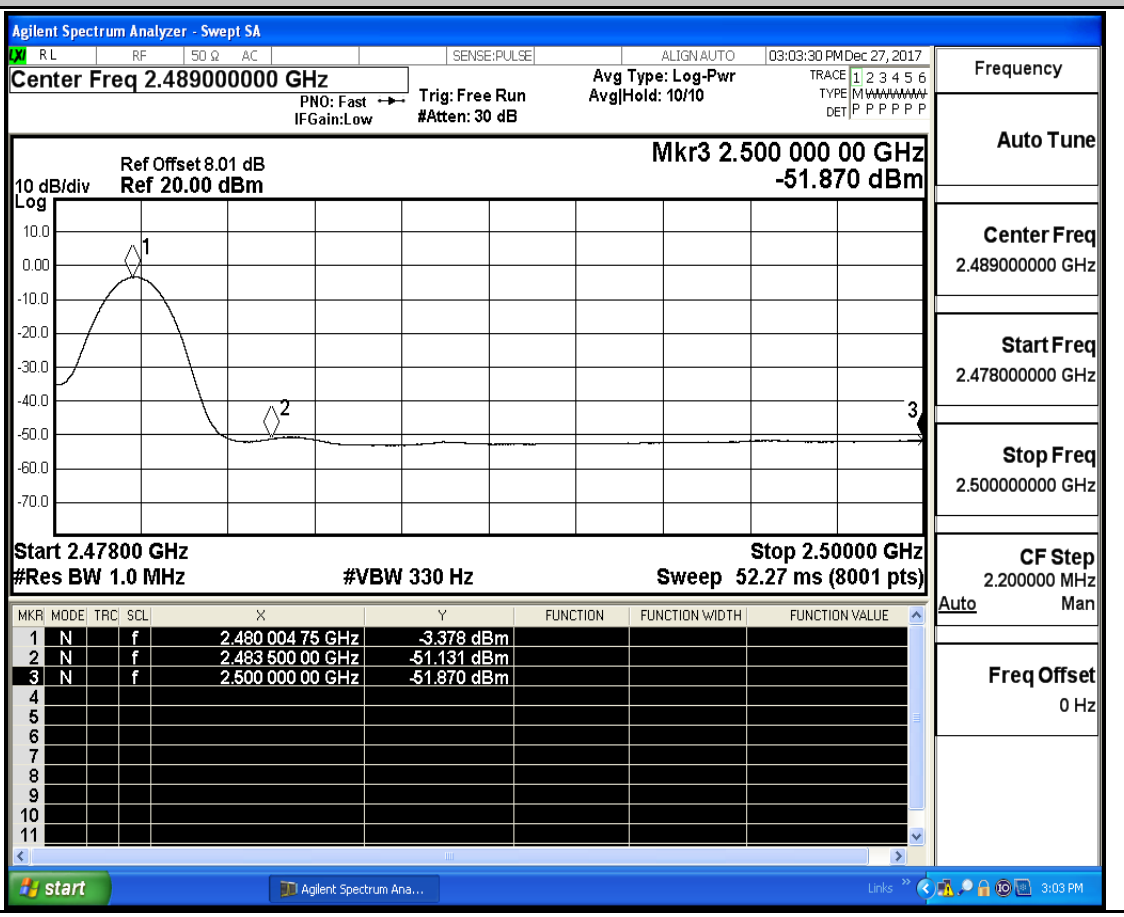
Restrict-band band-edge measurements_Hopping Off_ GFSK_Average



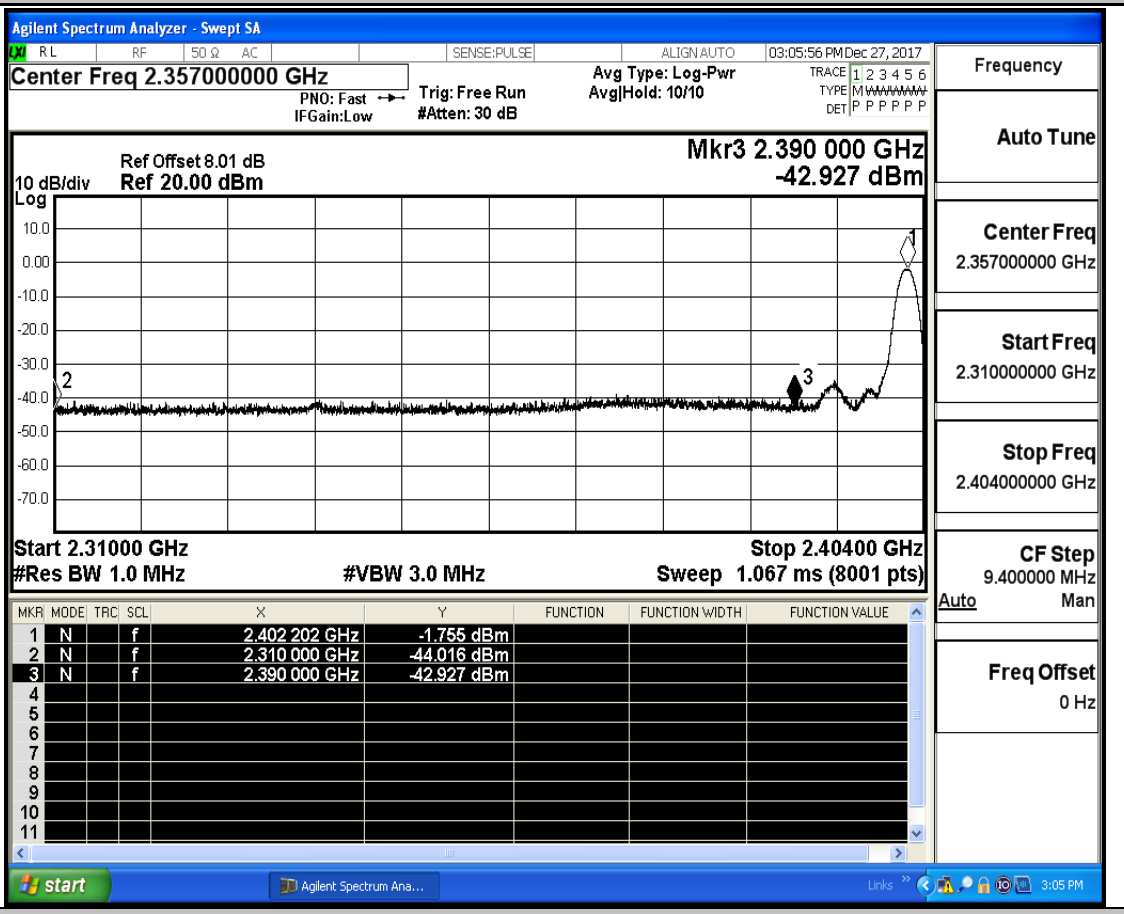
Restrict-band band-edge measurements_Hopping Off_ GFSK_PEAK



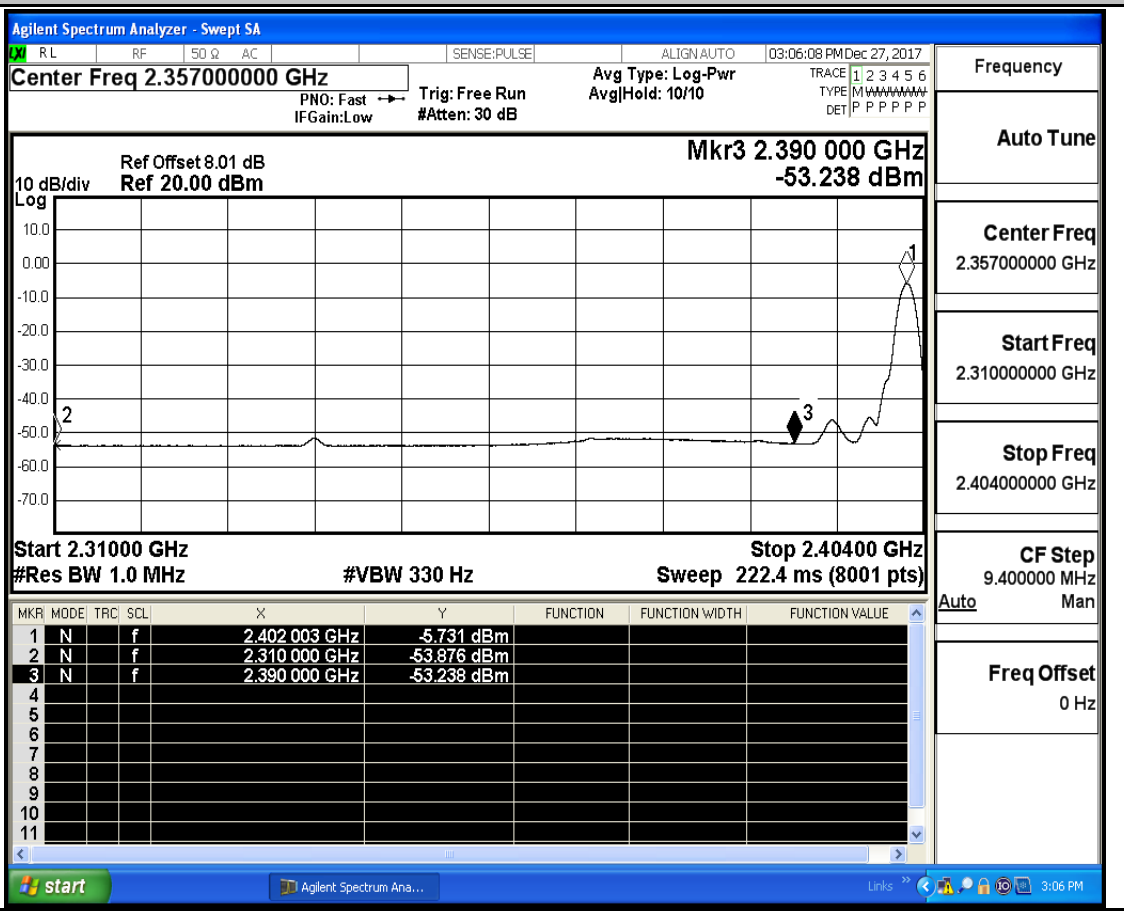
Restrict-band band-edge measurements_Hopping Off_ GFSK_Average



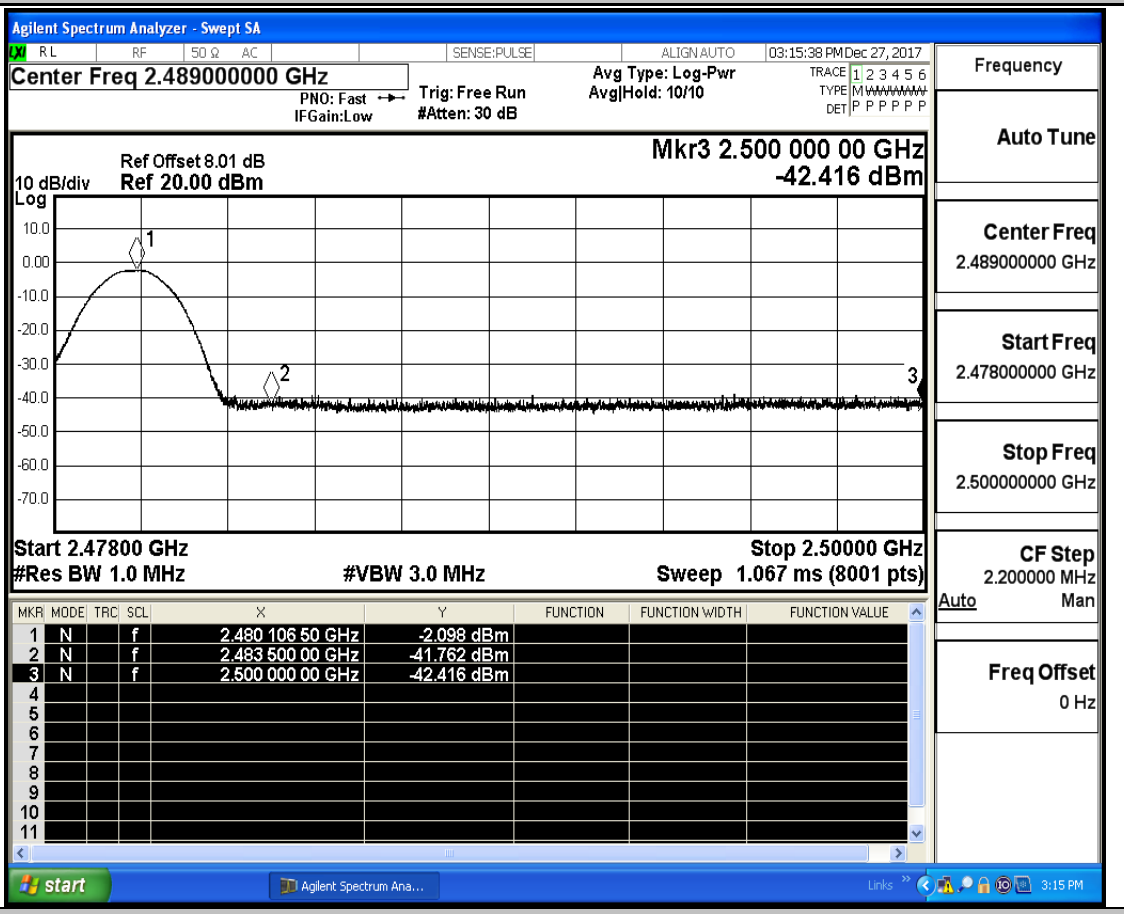
Restrict-band band-edge measurements_Hopping Off_π/4-DQPSK_PEAK



Restrict-band band-edge measurements_Hopping Off_π/4-DQPSK_Average



Restrict-band band-edge measurements_Hopping Off_π/4-DQPSK_PEAK



Restrict-band band-edge measurements_Hopping Off_π/4-DQPSK_Average