Appendix A
RF Test Data for BT V4.1(BDR/EDR) (Conducted Measurement)

Product Name: Android tv box

Trade Mark: RL

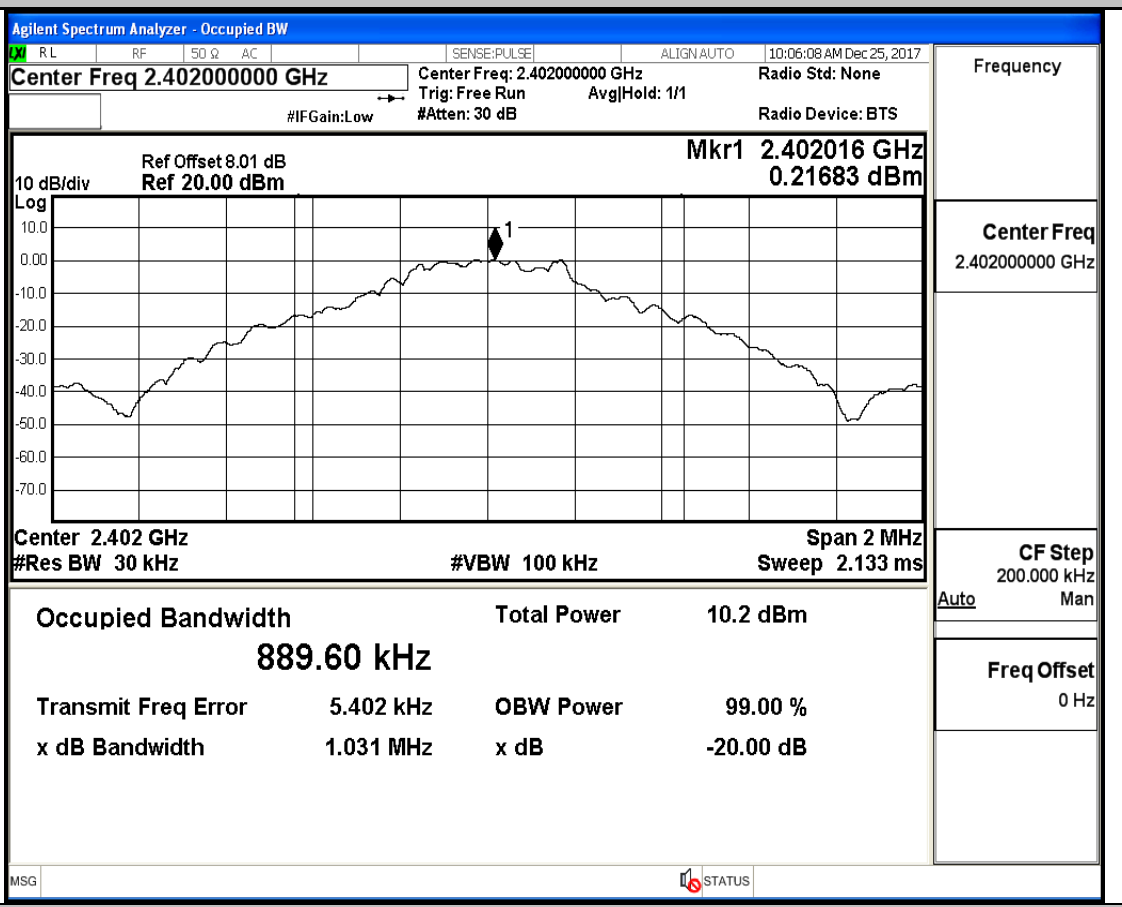
Test Model: RL

FCC ID: 2AF9R-RL

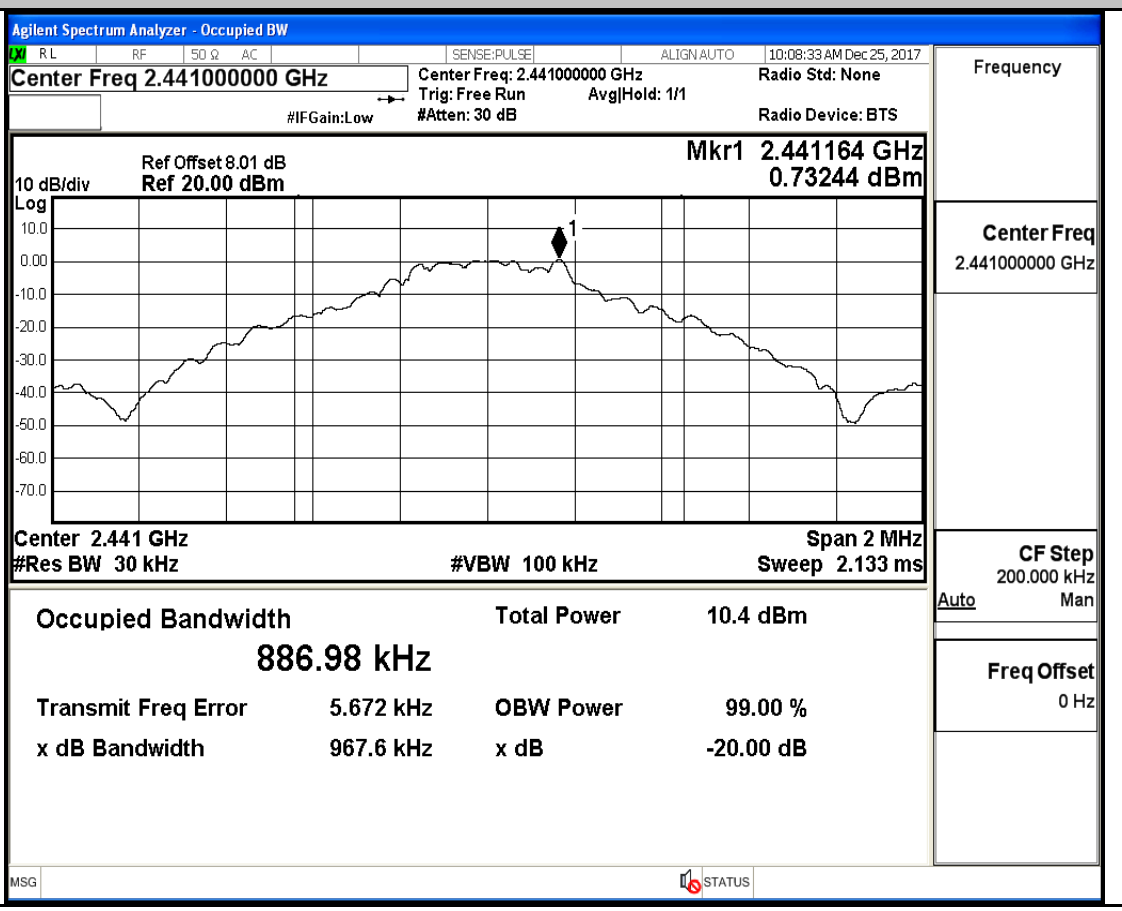
A.1 20 dB Bandwidth

Test Mode	Test Channel	EBW[MHz]	Limit[MHz]	Verdict
GFSK	2402	1.031	---	PASS
	2441	0.9676	---	PASS
	2480	0.9711	---	PASS
π/4-DQPSK	2402	1.289	---	PASS
	2441	1.288	---	PASS
	2480	1.286	---	PASS
8-DPSK	2402	1.293	---	PASS
	2441	1.294	---	PASS
	2480	1.298	---	PASS

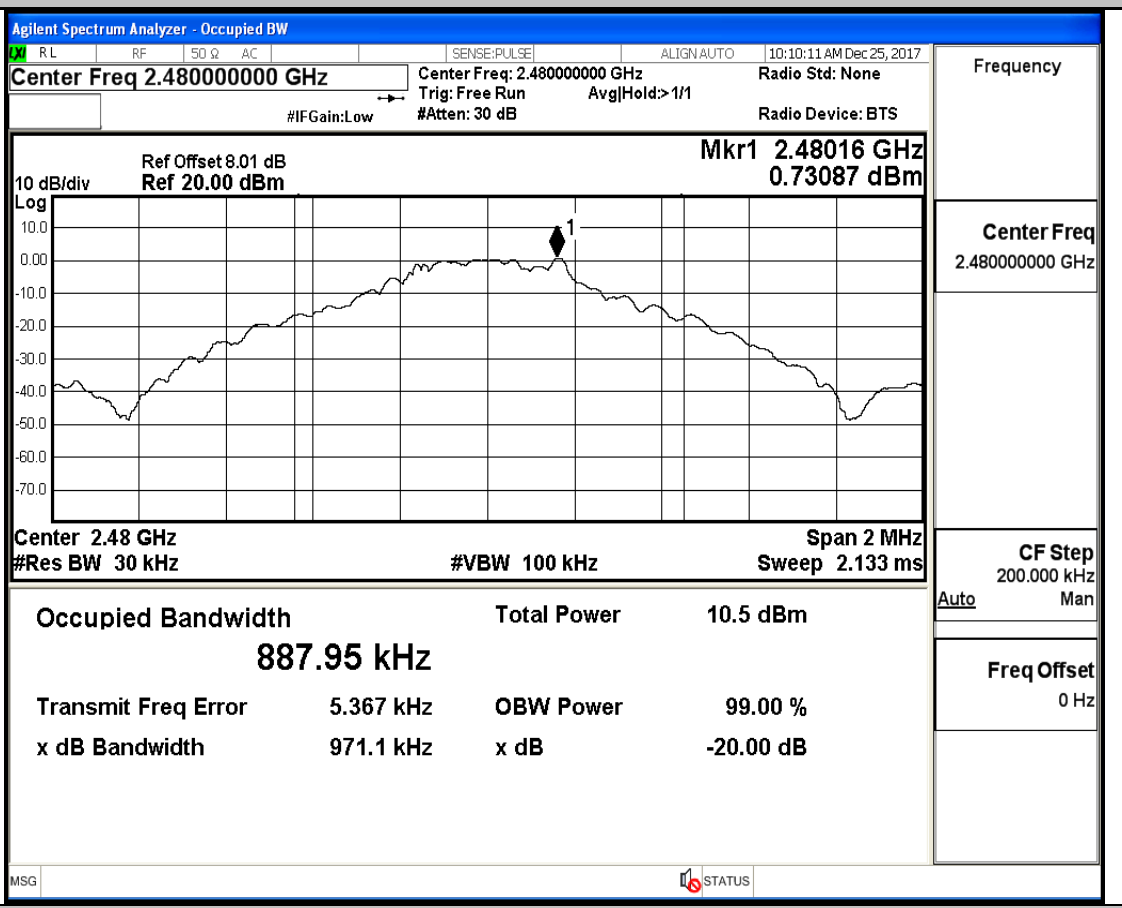
20 dB Bandwidth_GFSK_2402



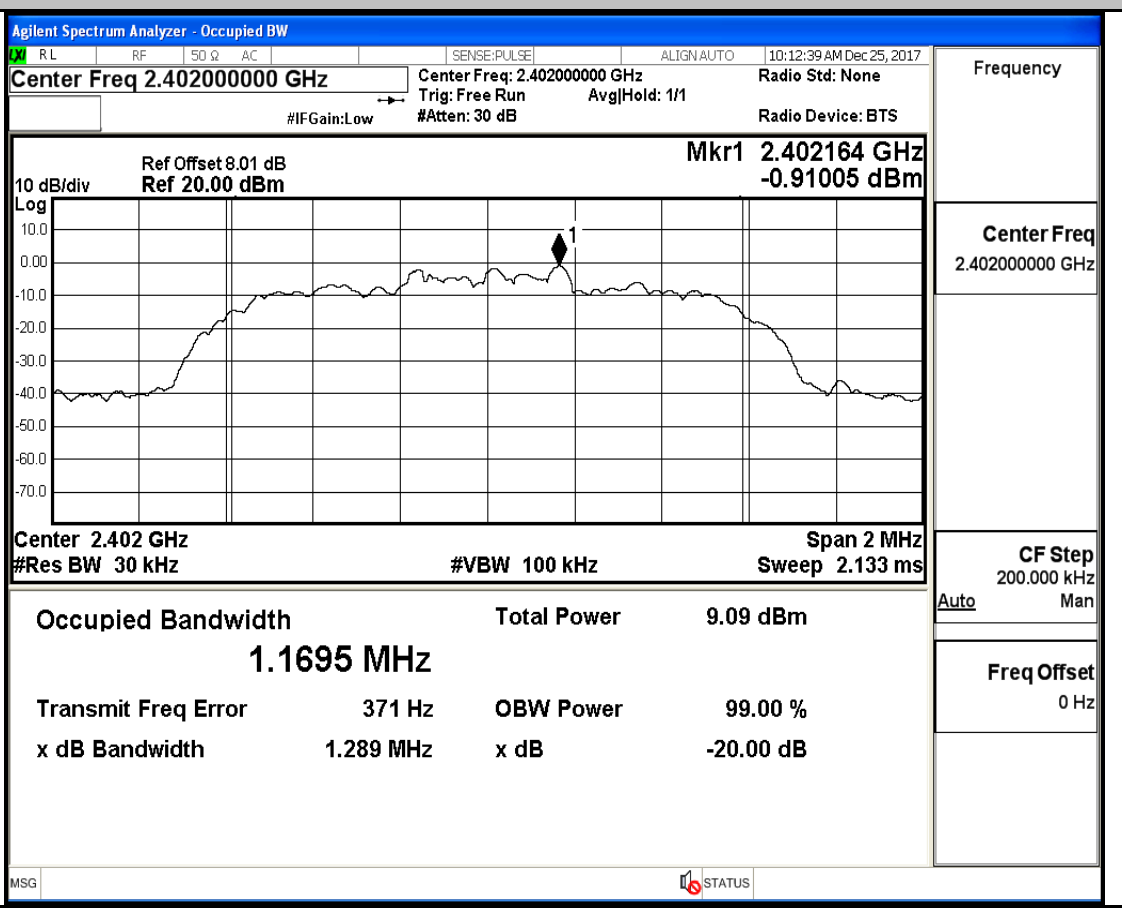
20 dB Bandwidth_GFSK_2441



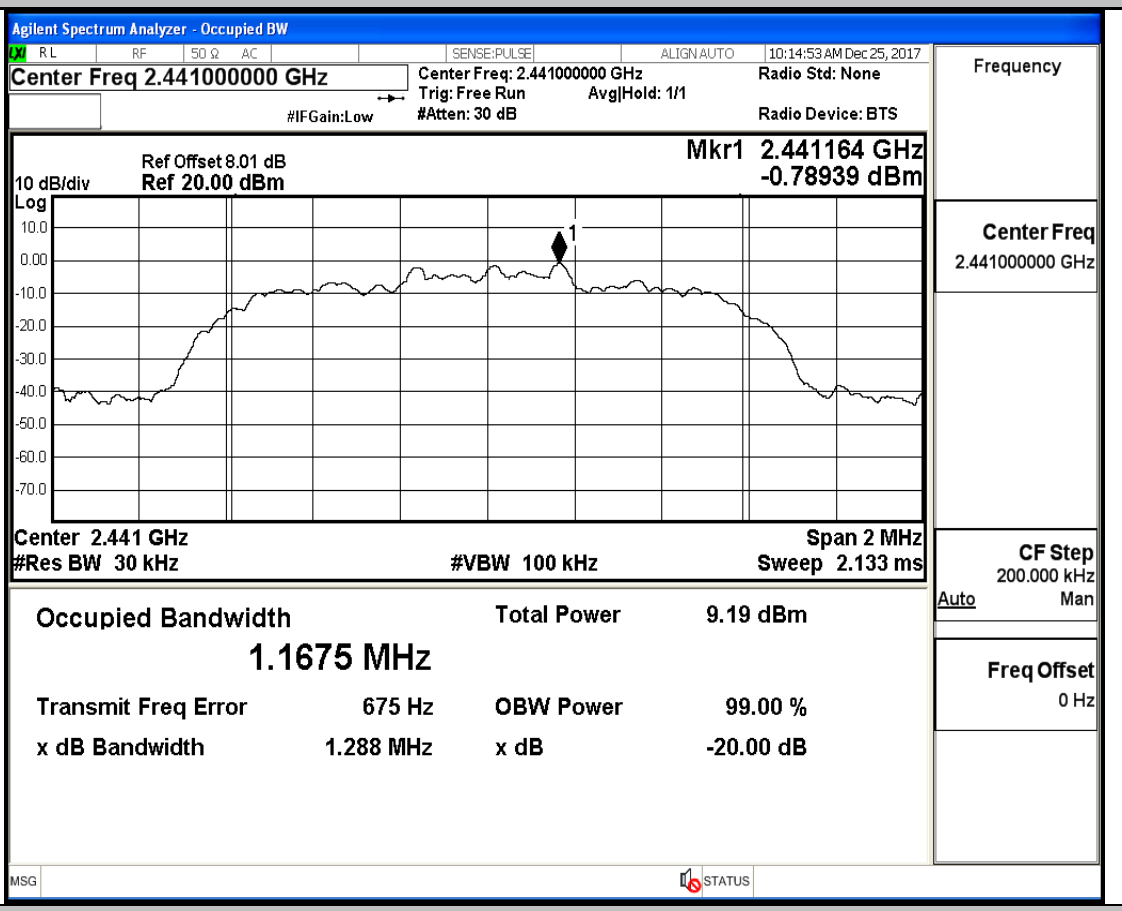
20 dB Bandwidth_GFSK_2480



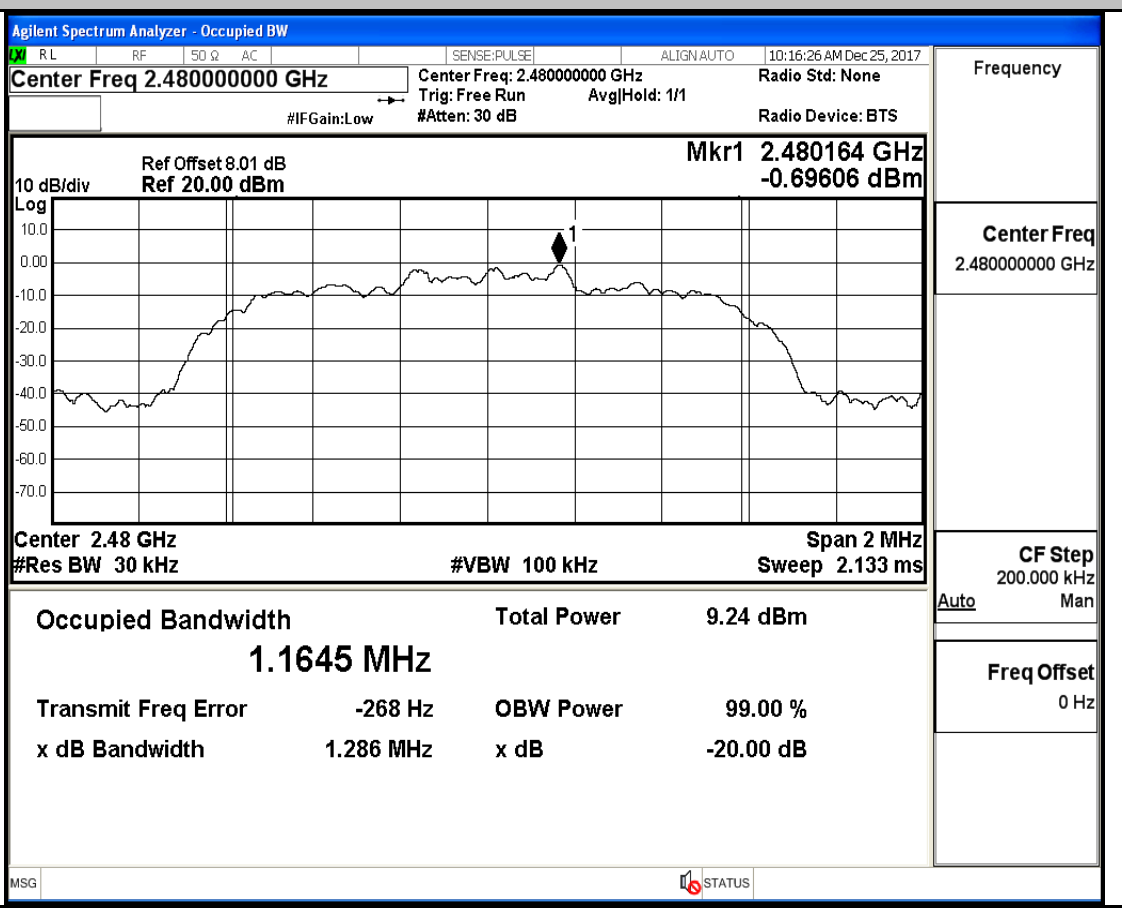
20 dB Bandwidth_π/4-DQPSK_2402



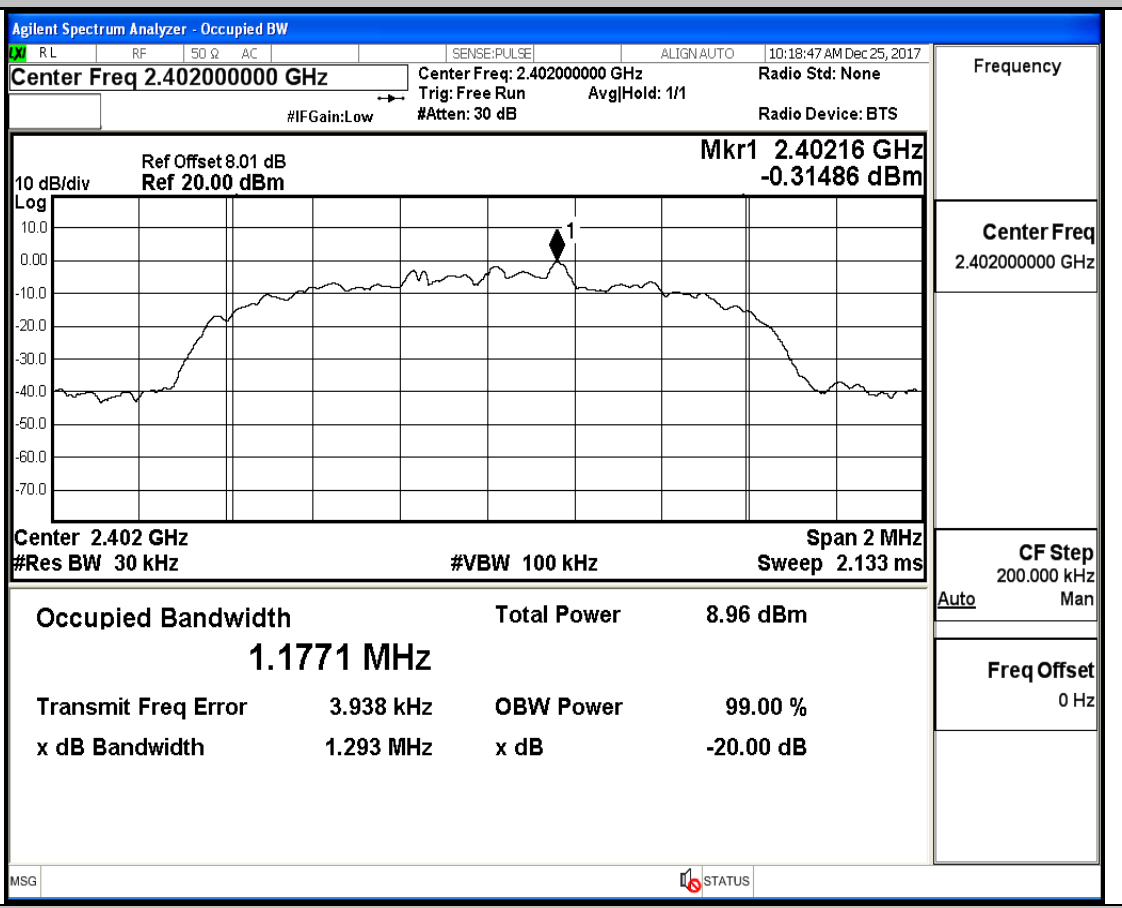
20 dB Bandwidth_π/4-DQPSK_2441



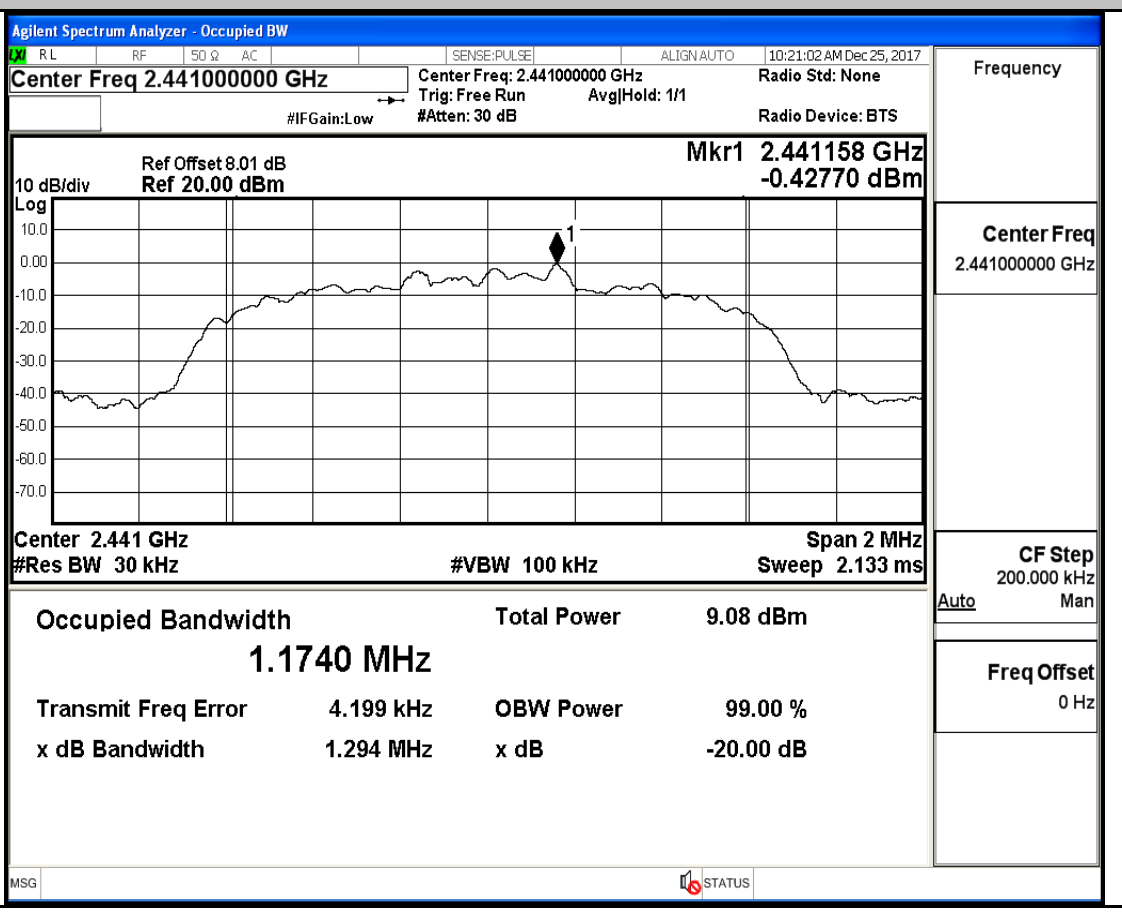
20 dB Bandwidth_π/4-DQPSK_2480



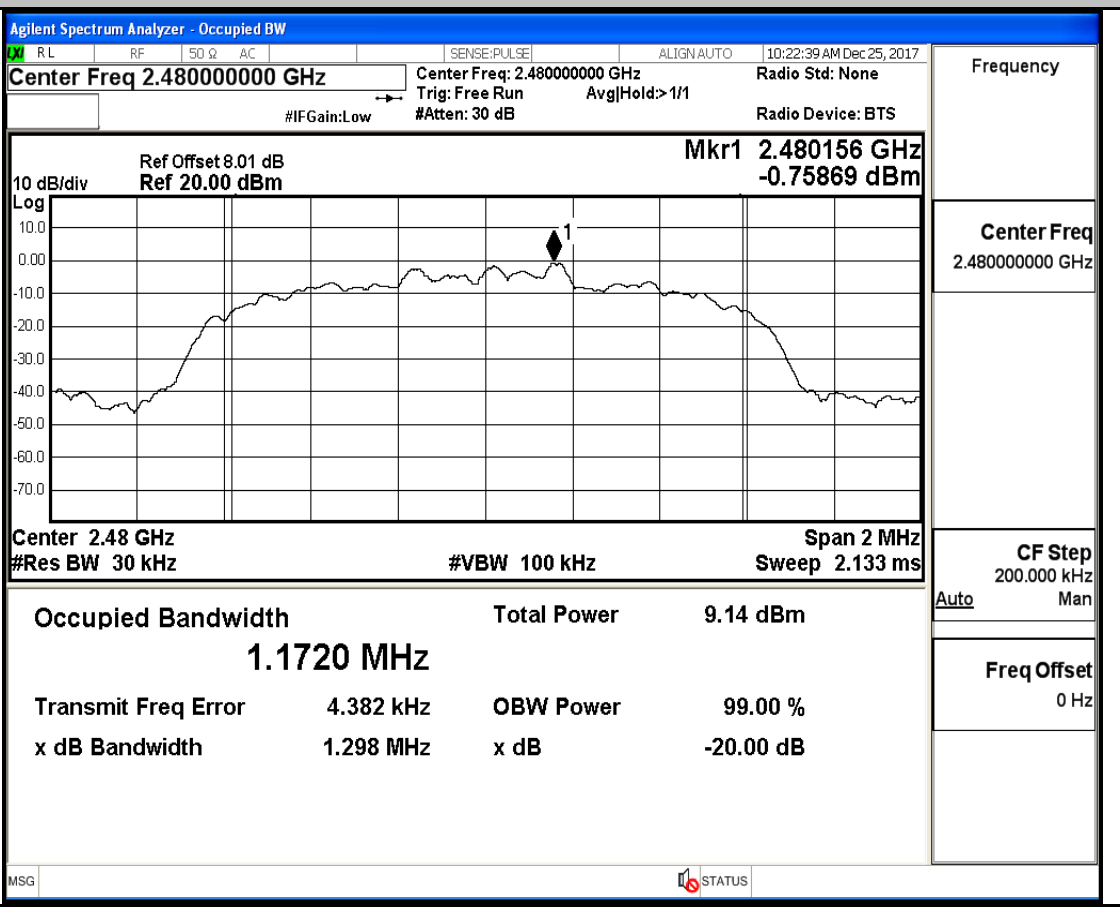
20 dB Bandwidth_8-DPSK_2402



20 dB Bandwidth_8-DPSK_2441



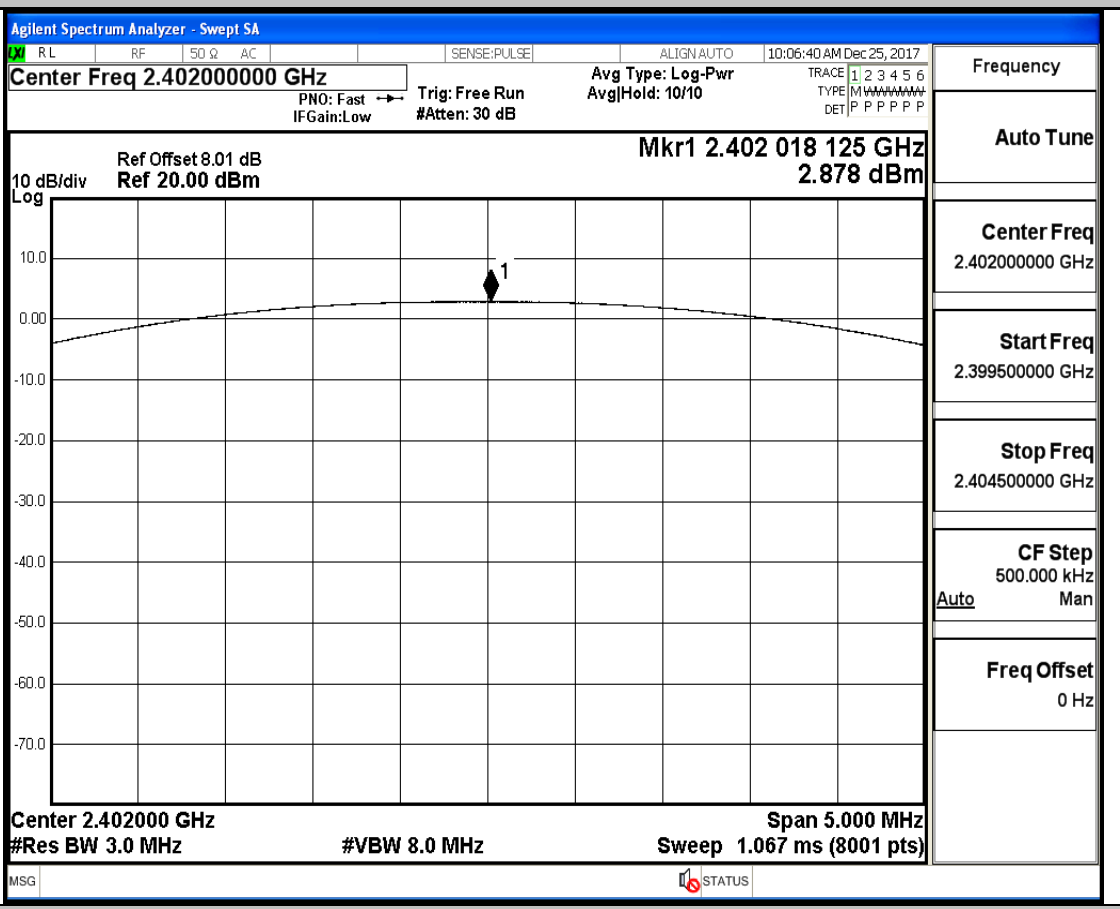
20 dB Bandwidth_8-DPSK_2480



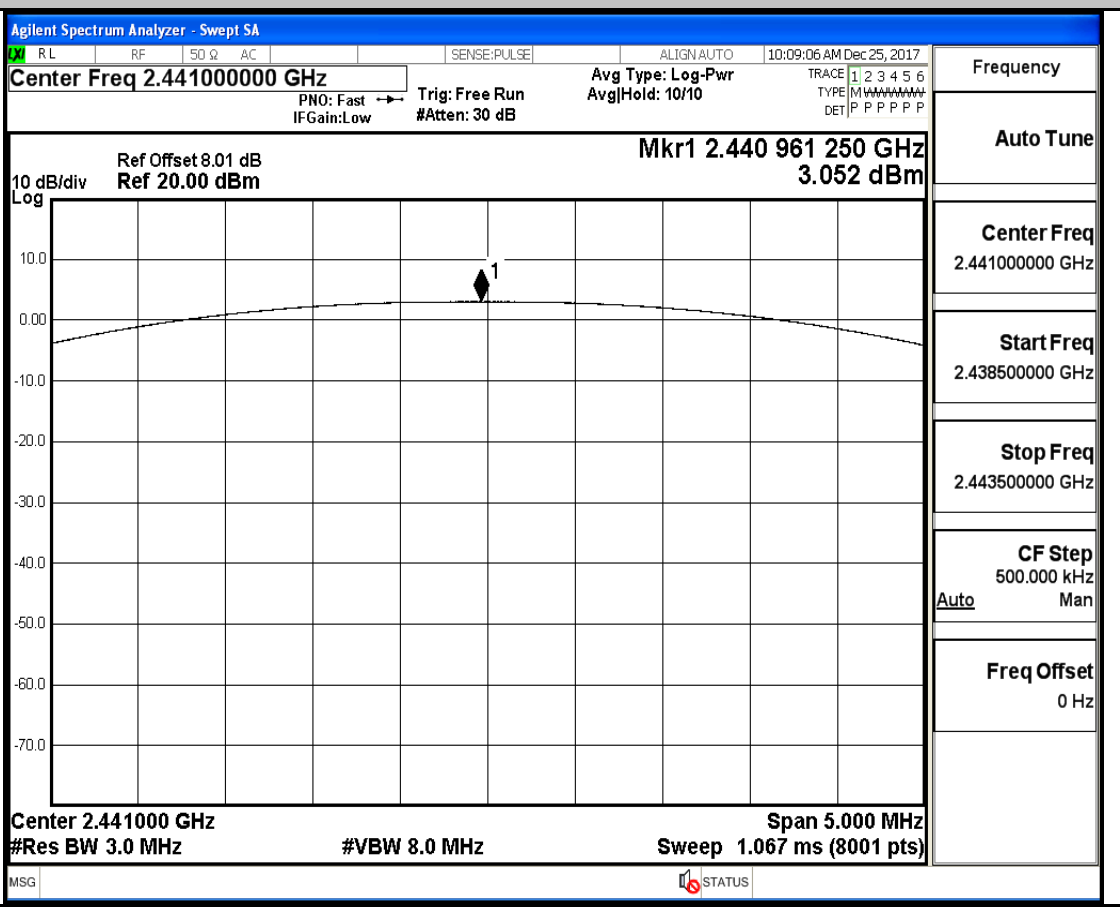
A.2 Conducted Peak Output Power

Test Mode	Test Channel	Power[dBm]	Limit[dBm]	Verdict
GFSK	2402	2.878	30	PASS
	2441	3.052	30	PASS
	2480	3.159	30	PASS
π/4-DQPSK	2402	2.768	21	PASS
	2441	2.927	21	PASS
	2480	3.025	21	PASS
8-DPSK	2402	2.904	21	PASS
	2441	3.068	21	PASS
	2480	3.168	21	PASS

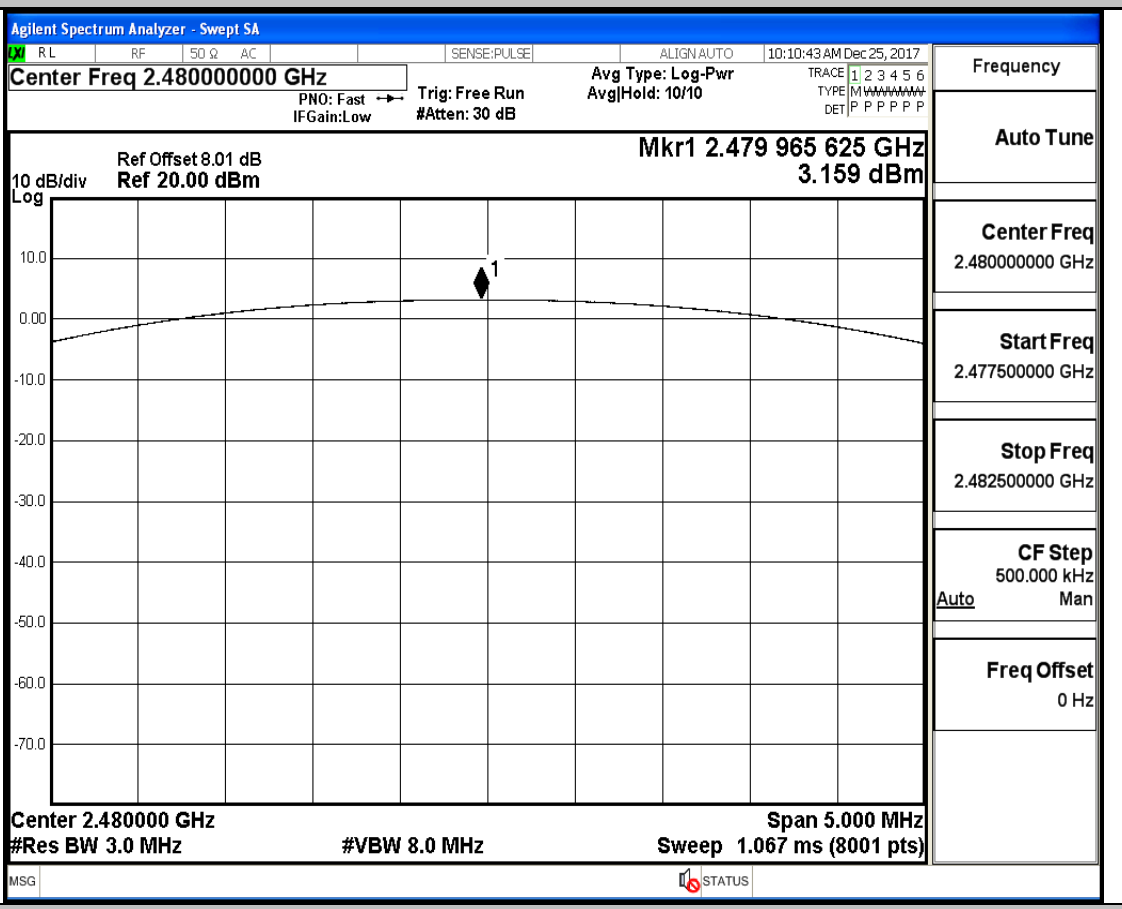
Conducted Peak Output Power_GFSK_2402



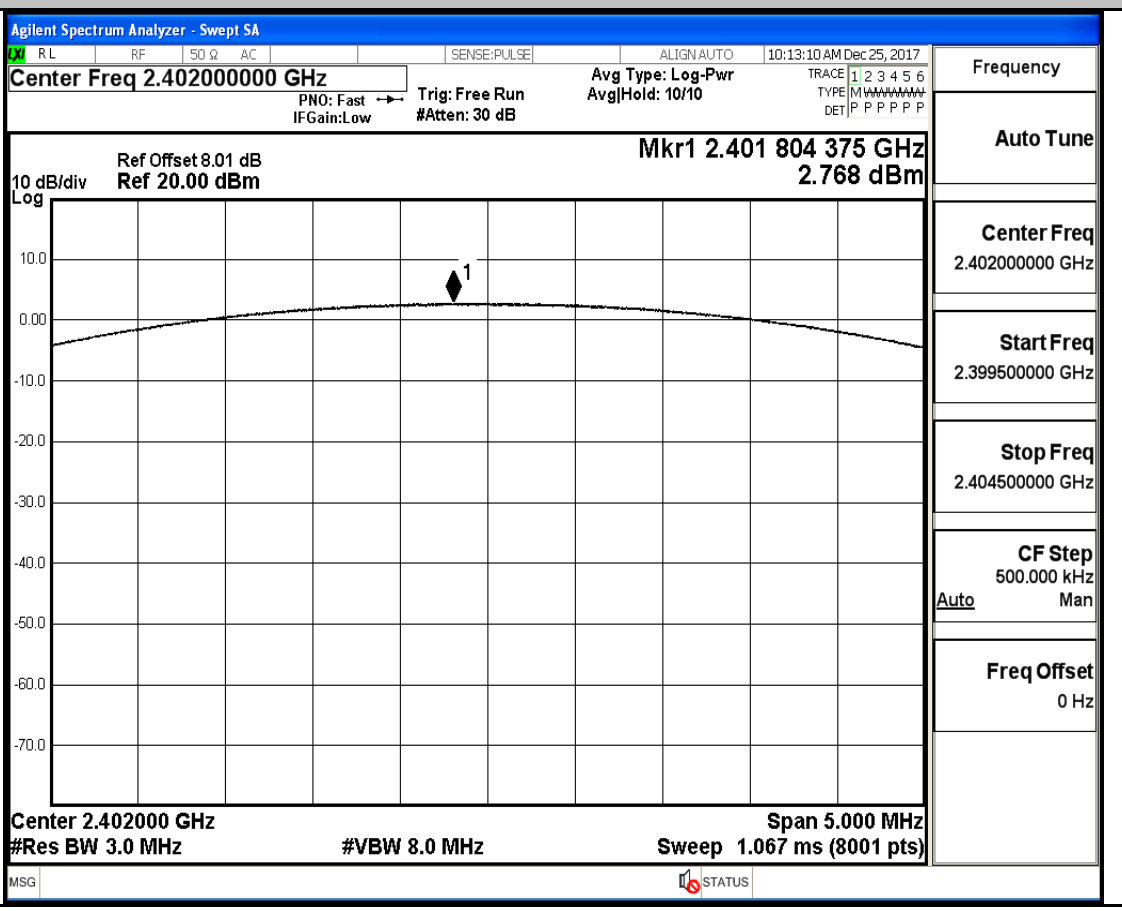
Conducted Peak Output Power_GFSK_2441



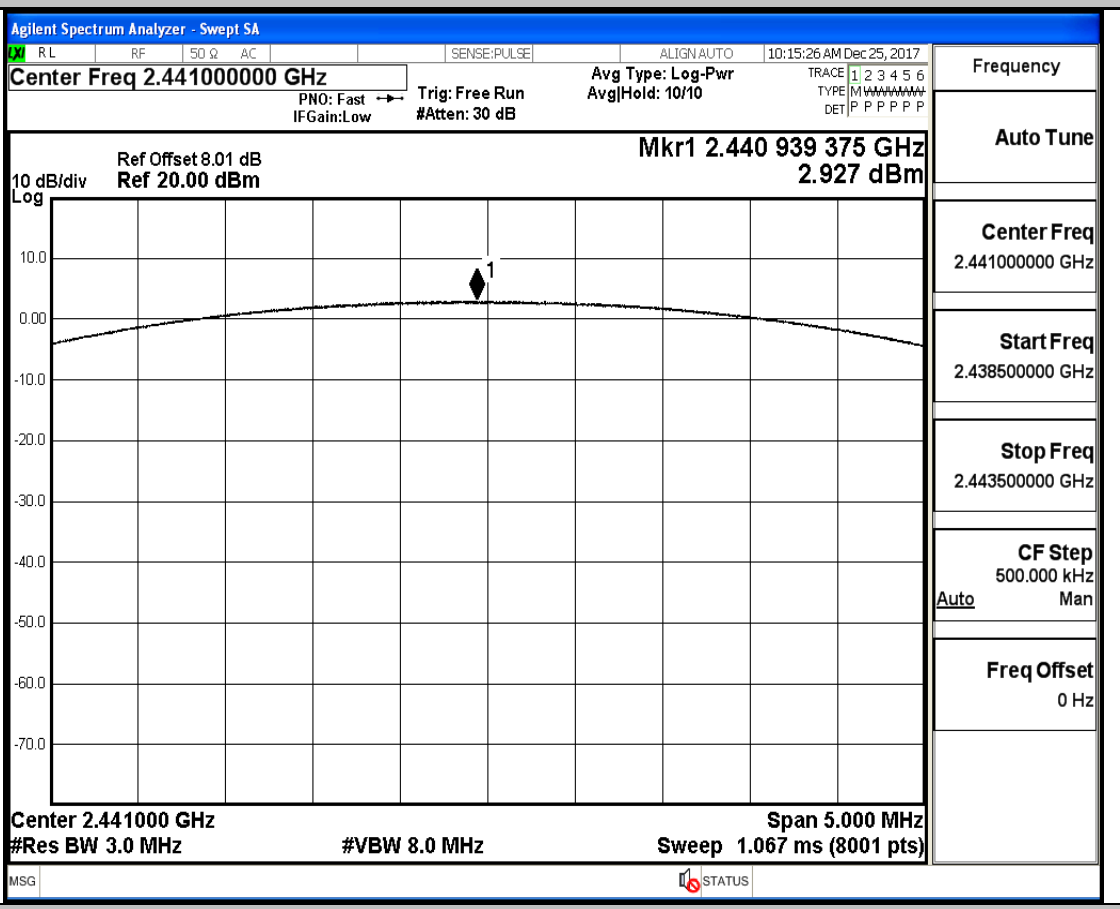
Conducted Peak Output Power_GFSK_2480



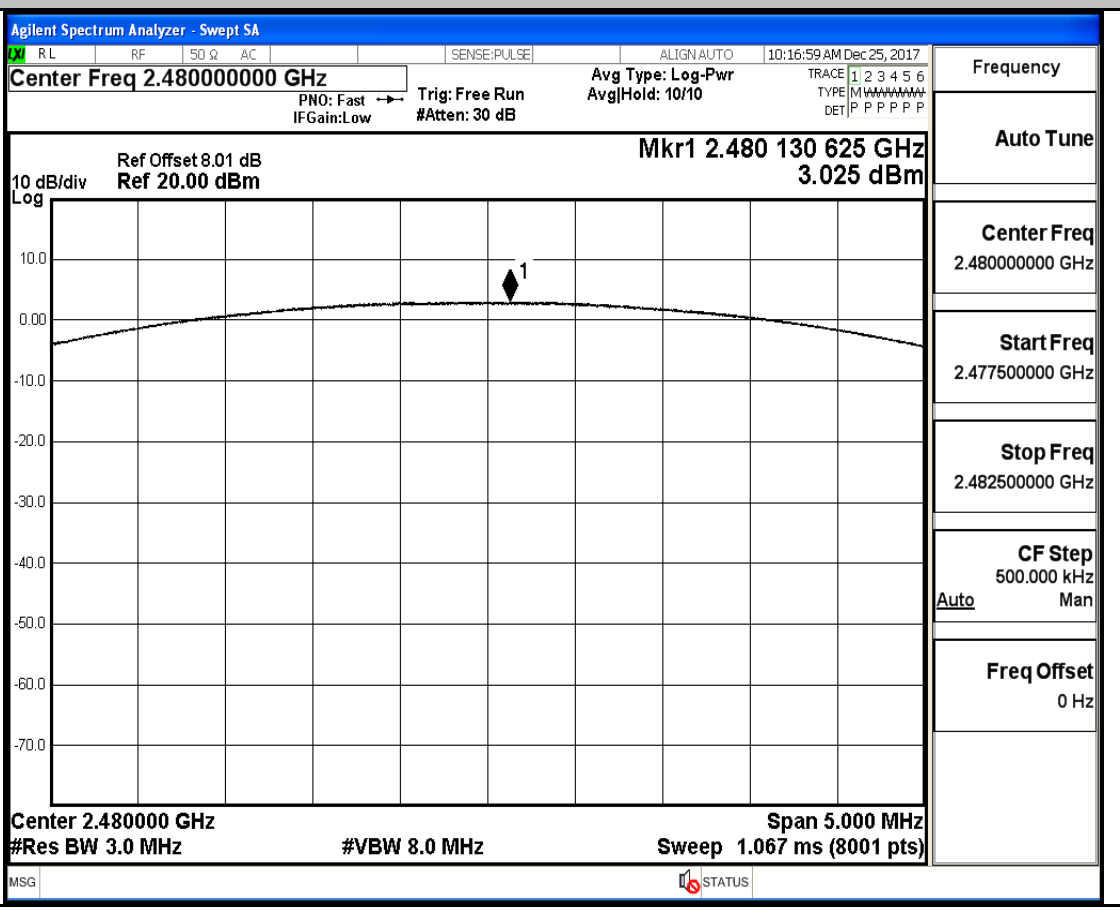
Conducted Peak Output Power_π/4-DQPSK_2402



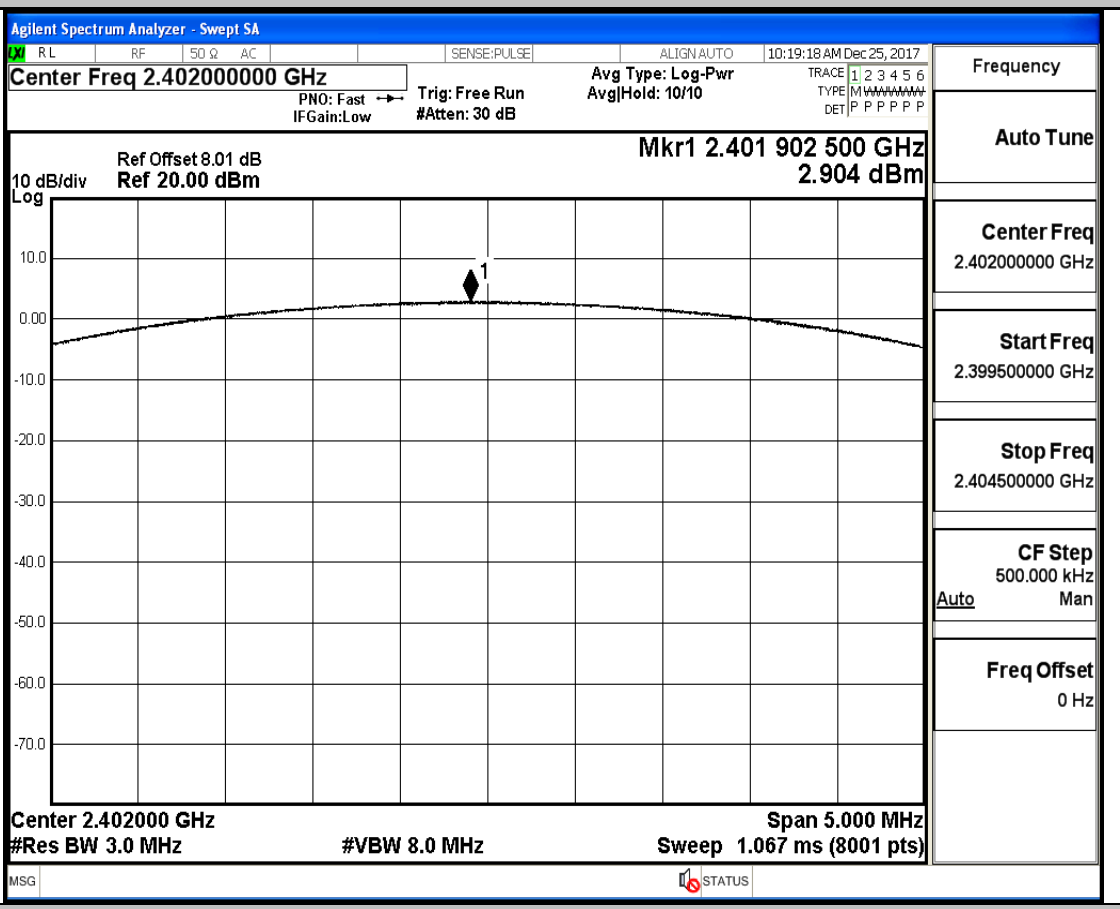
Conducted Peak Output Power_π/4-DQPSK_2441



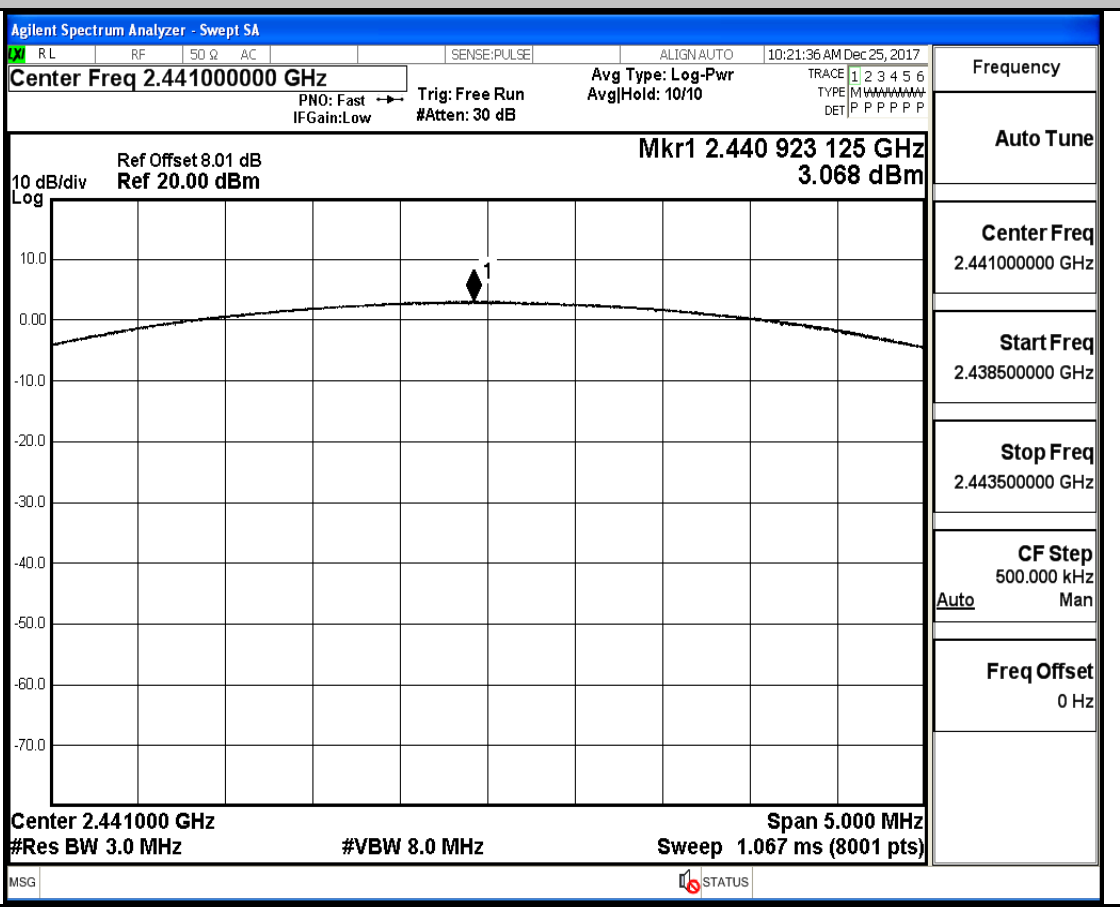
Conducted Peak Output Power_π/4-DQPSK_2480



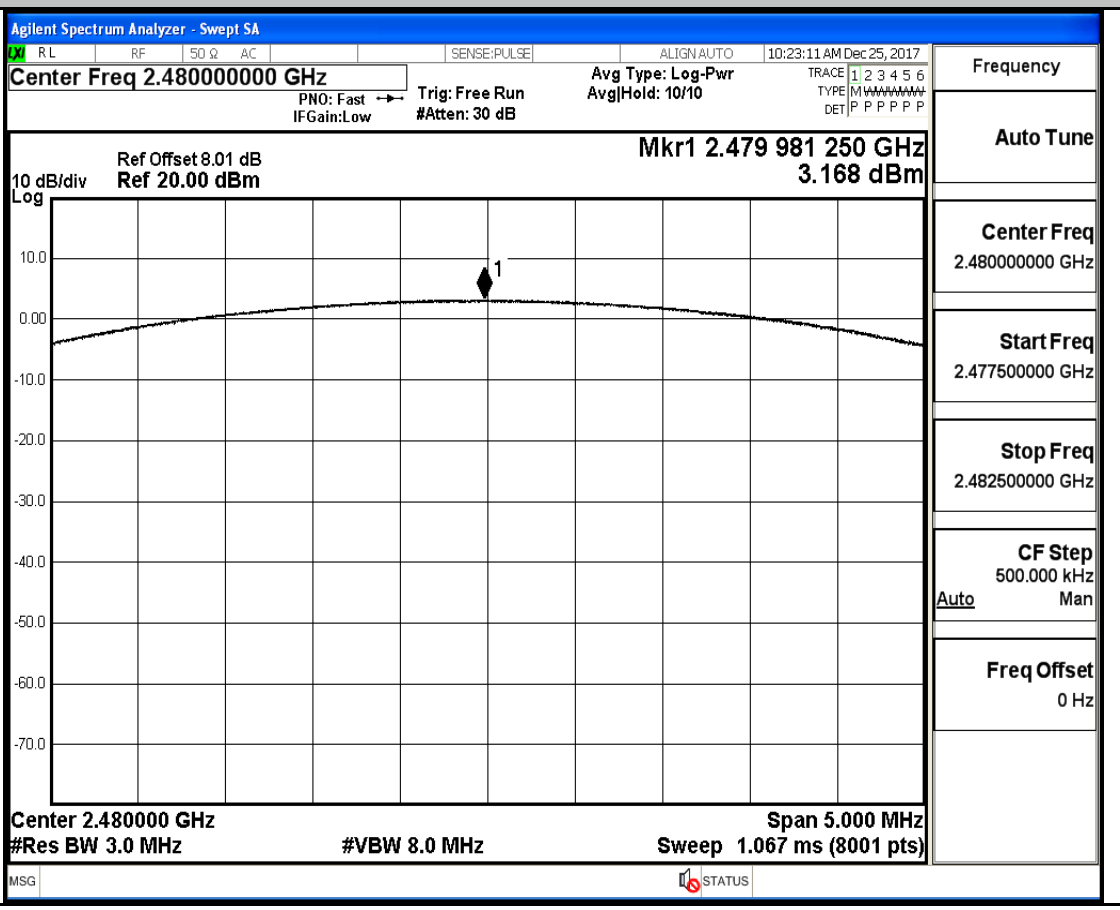
Conducted Peak Output Power_8-DPSK_2402



Conducted Peak Output Power_8-DPSK_2441



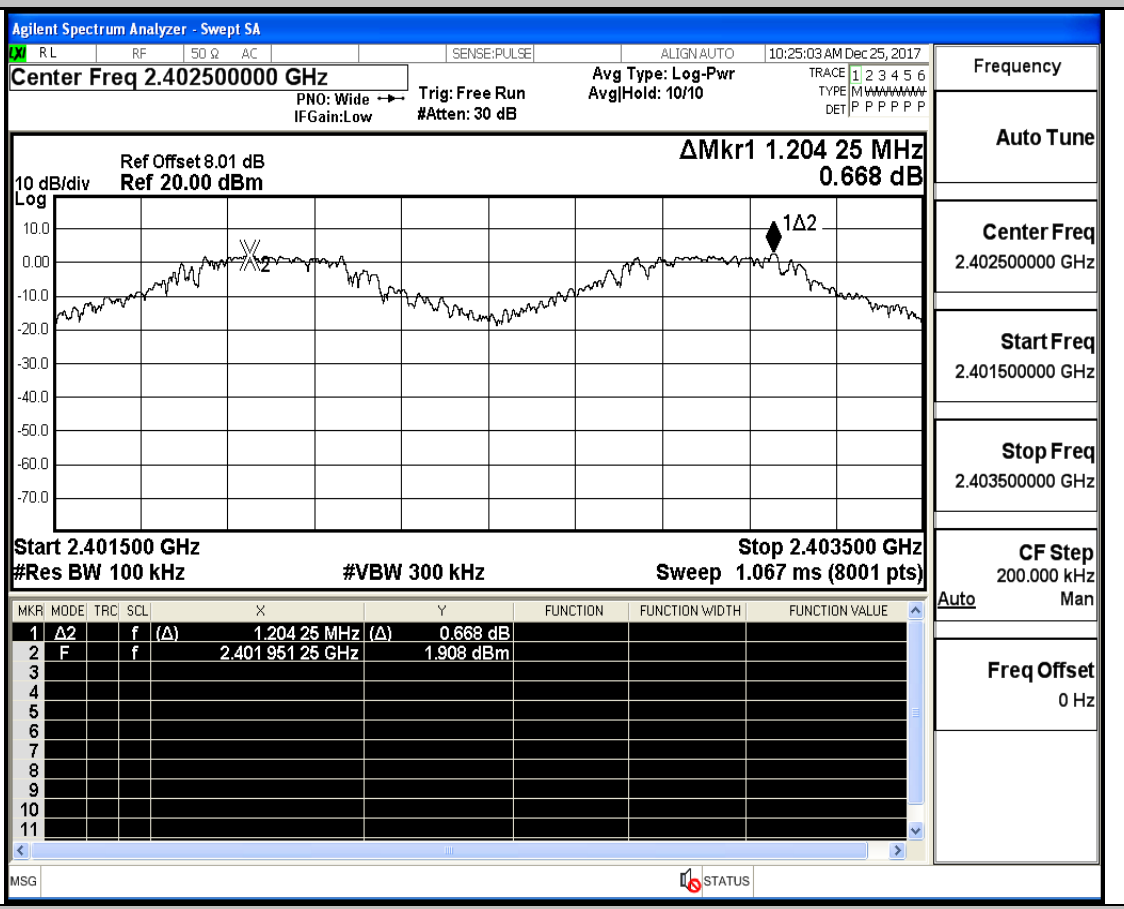
Conducted Peak Output Power_8-DPSK_2480



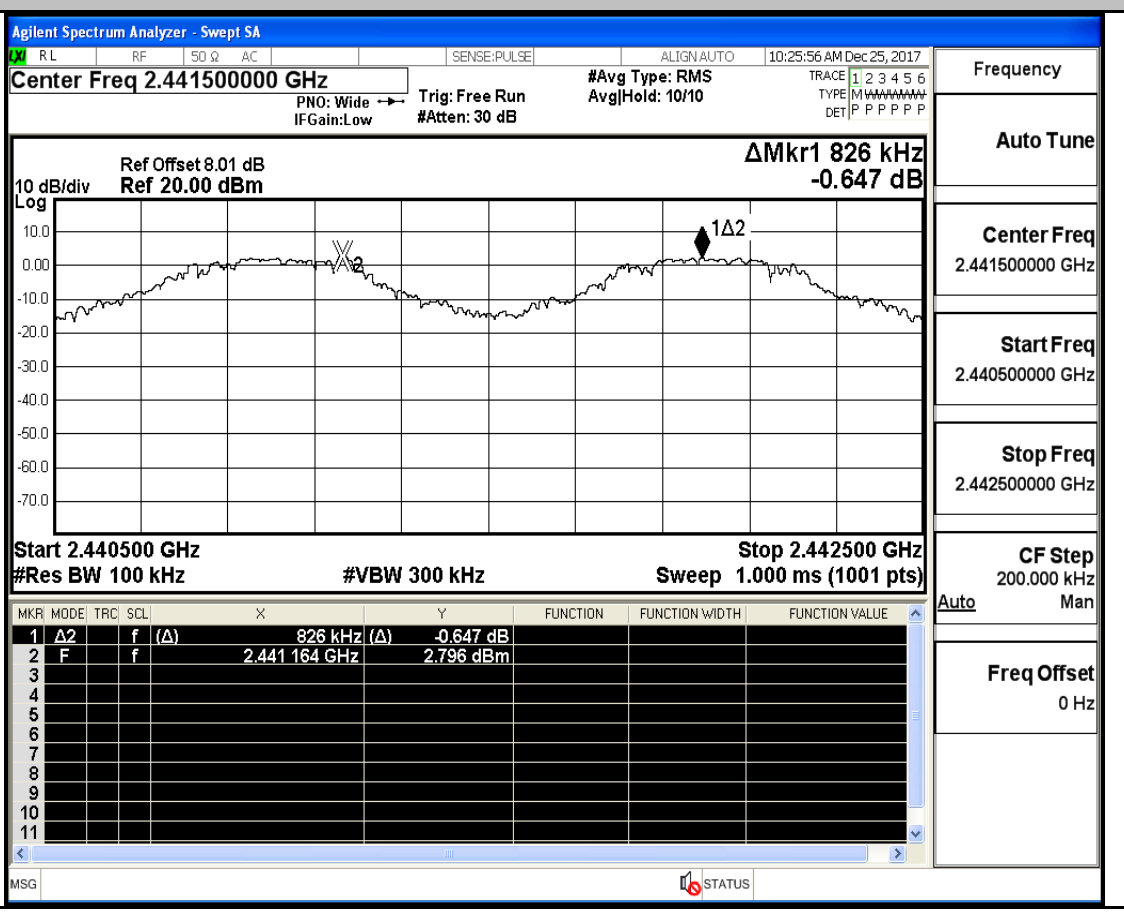
A.3 Carrier Frequency Separation

Test Mode	Test Channel	Result[MHz]	Limit[MHz]	Verdict
GFSK	2402	1.204	0.69	PASS
	2441	0.826	0.65	PASS
	2480	0.846	0.65	PASS
π/4-DQPSK	2402	0.984	0.86	PASS
	2441	1.17	0.86	PASS
	2480	1.004	0.86	PASS
8-DPSK	2402	0.984	0.86	PASS
	2441	1.282	0.86	PASS
	2480	1.08	0.87	PASS

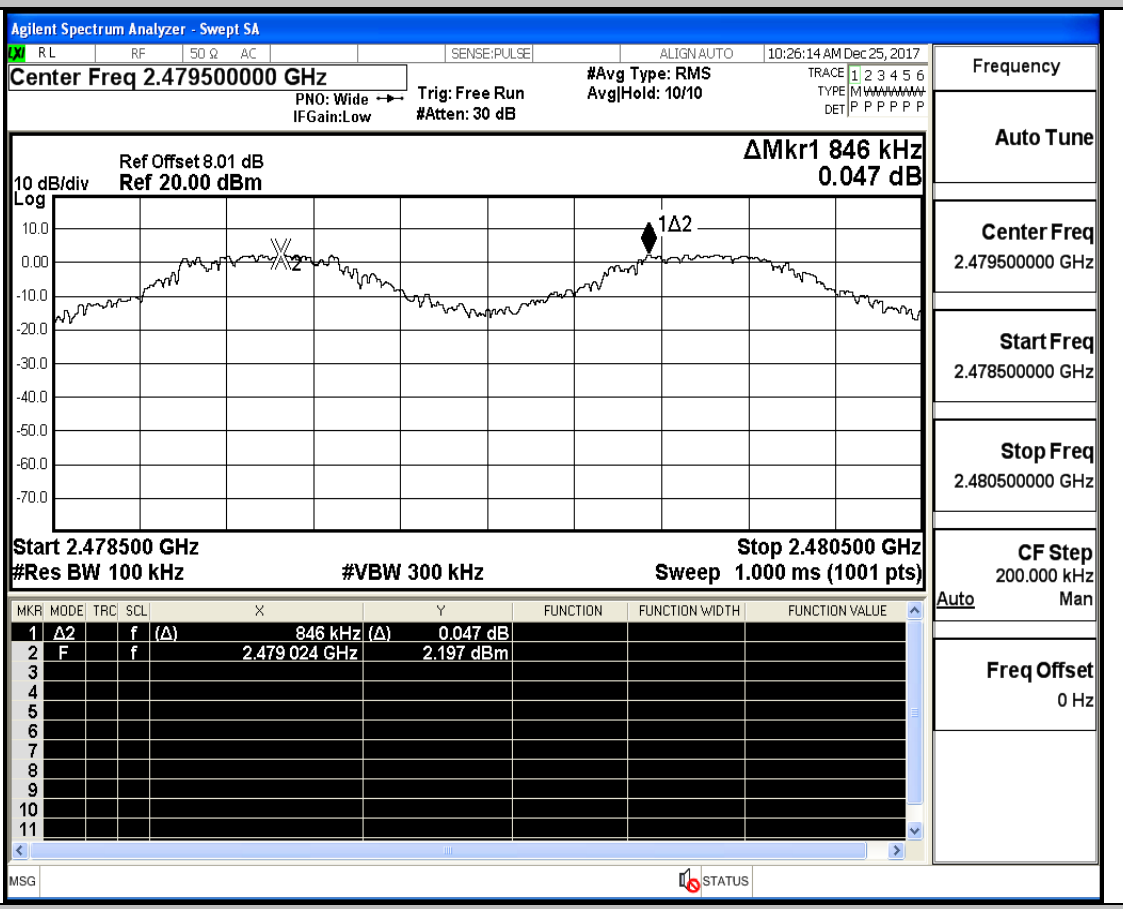
Carrier Frequency Separation_GFSK_2402



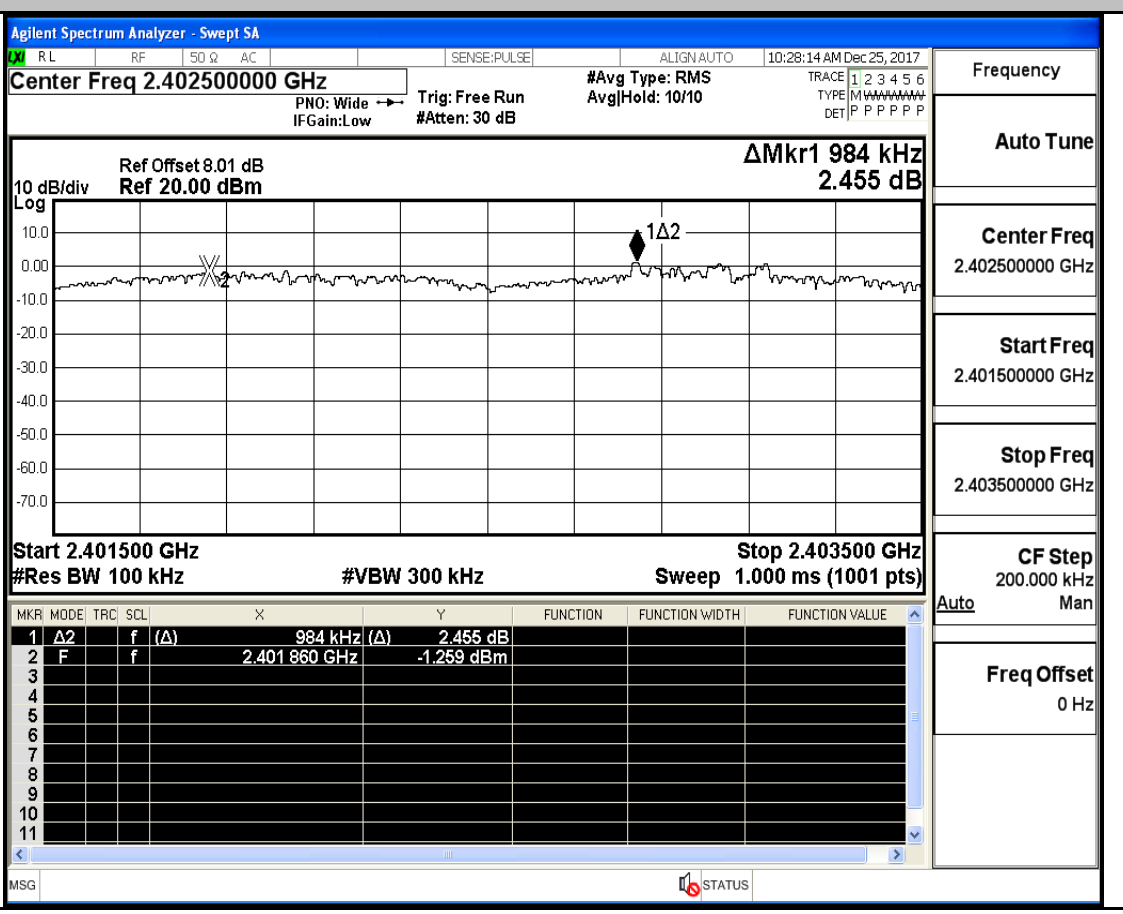
Carrier Frequency Separation_GFSK_2441



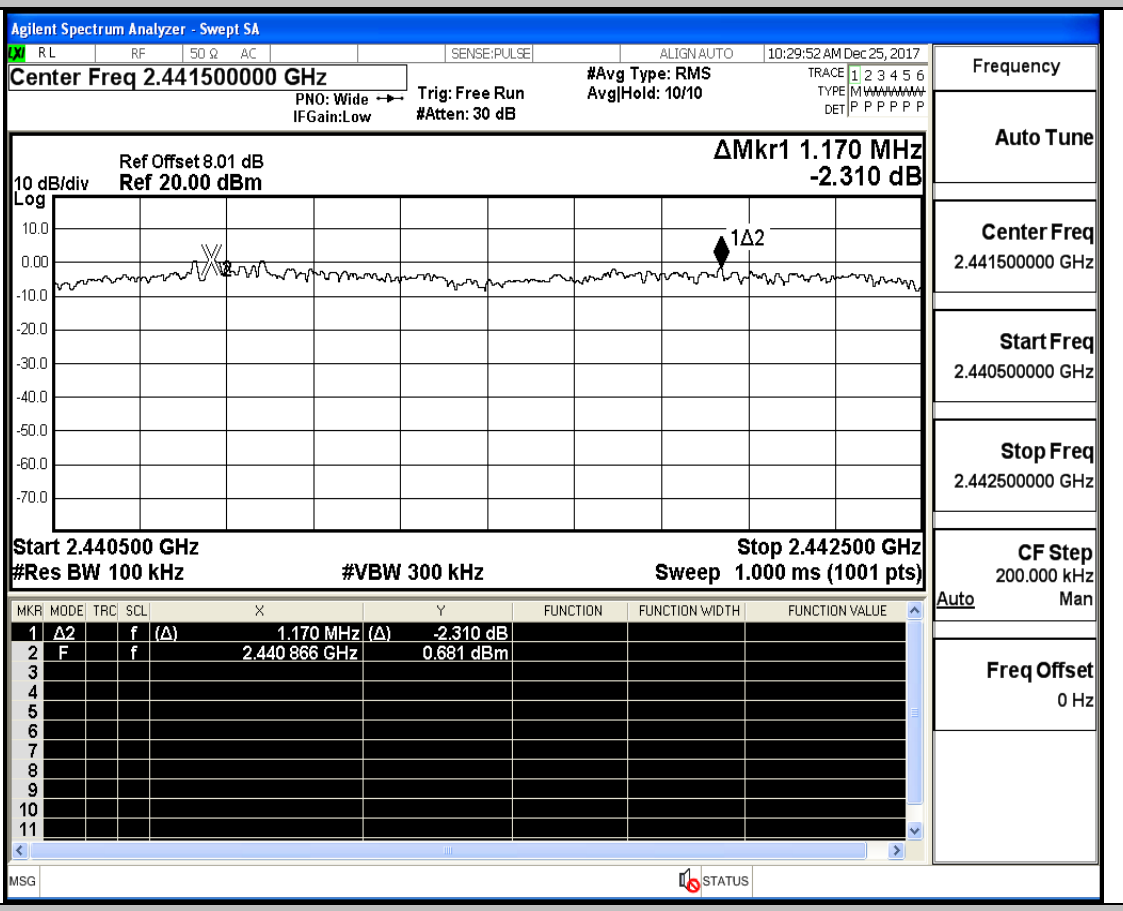
Carrier Frequency Separation_GFSK_2480



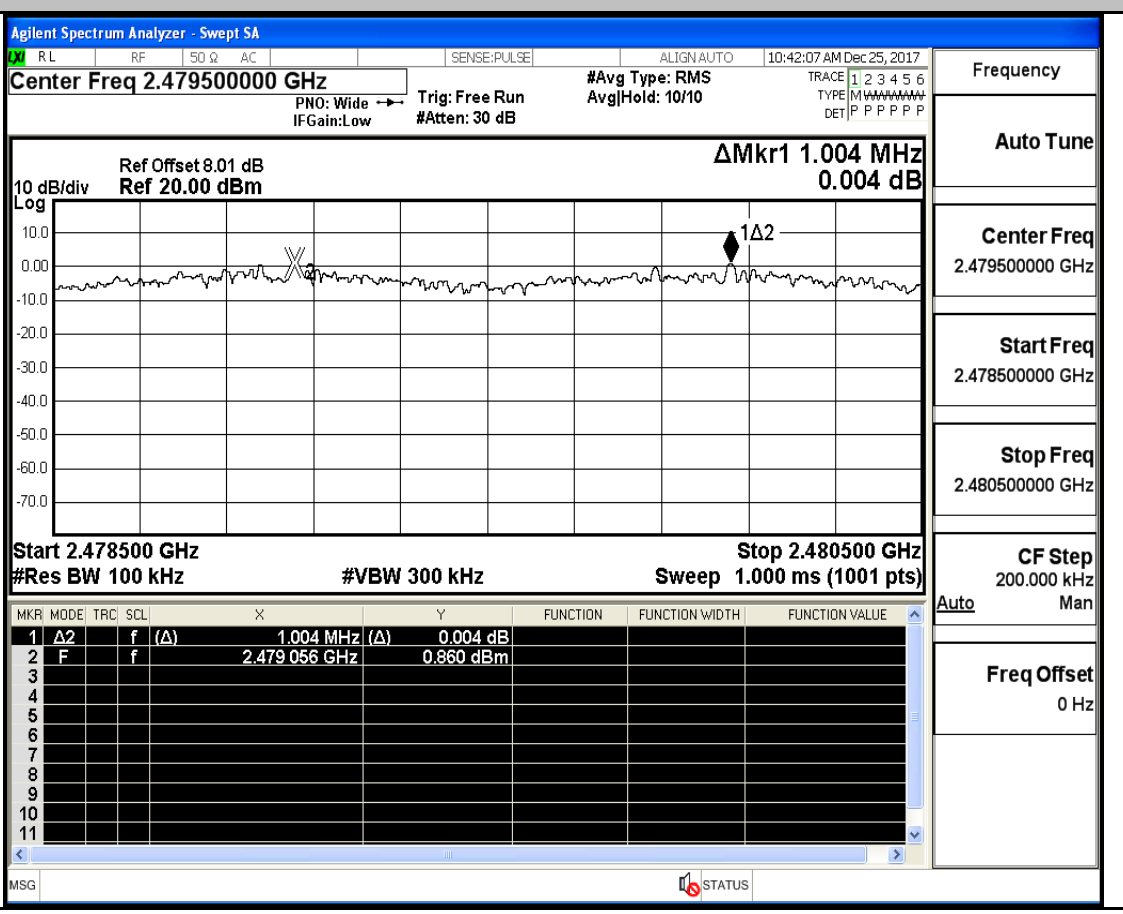
Carrier Frequency Separation_π/4-DQPSK_2402



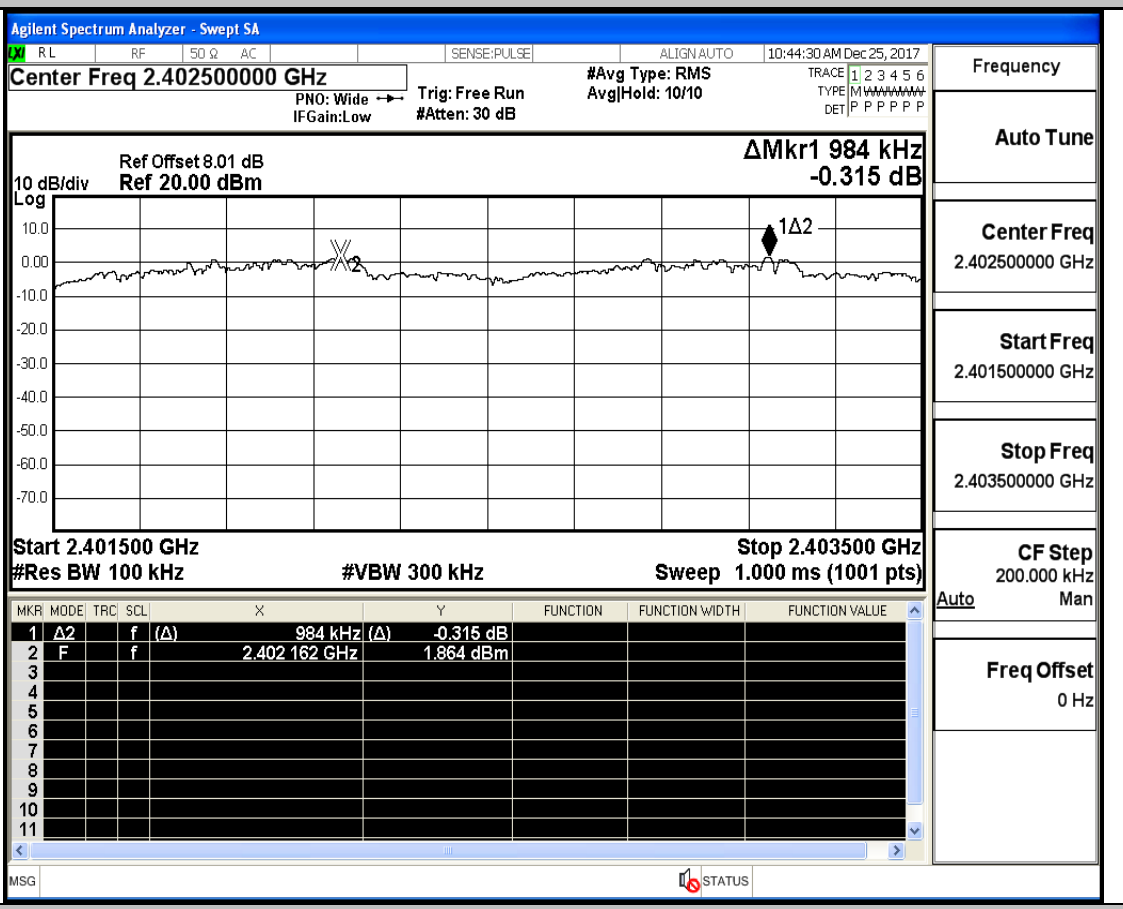
Carrier Frequency Separation_π/4-DQPSK_2441



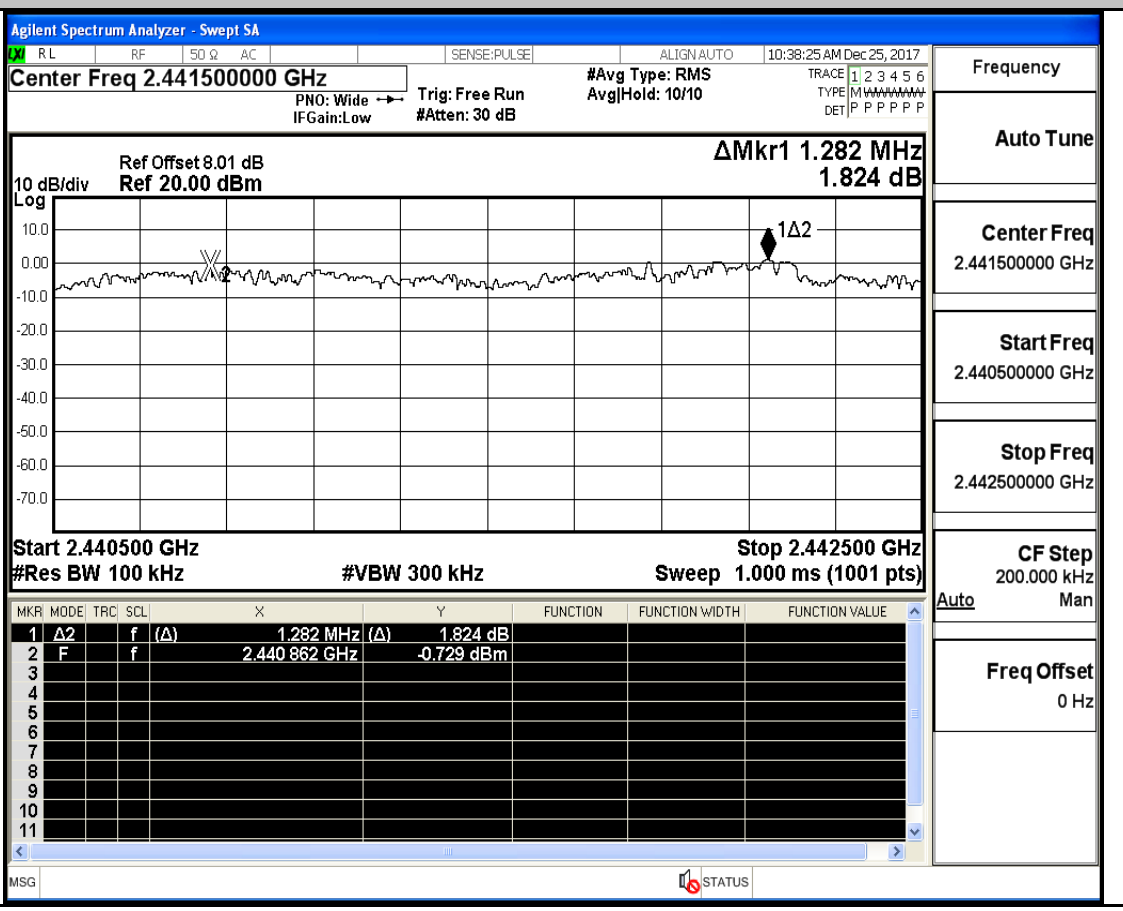
Carrier Frequency Separation_π/4-DQPSK_2480



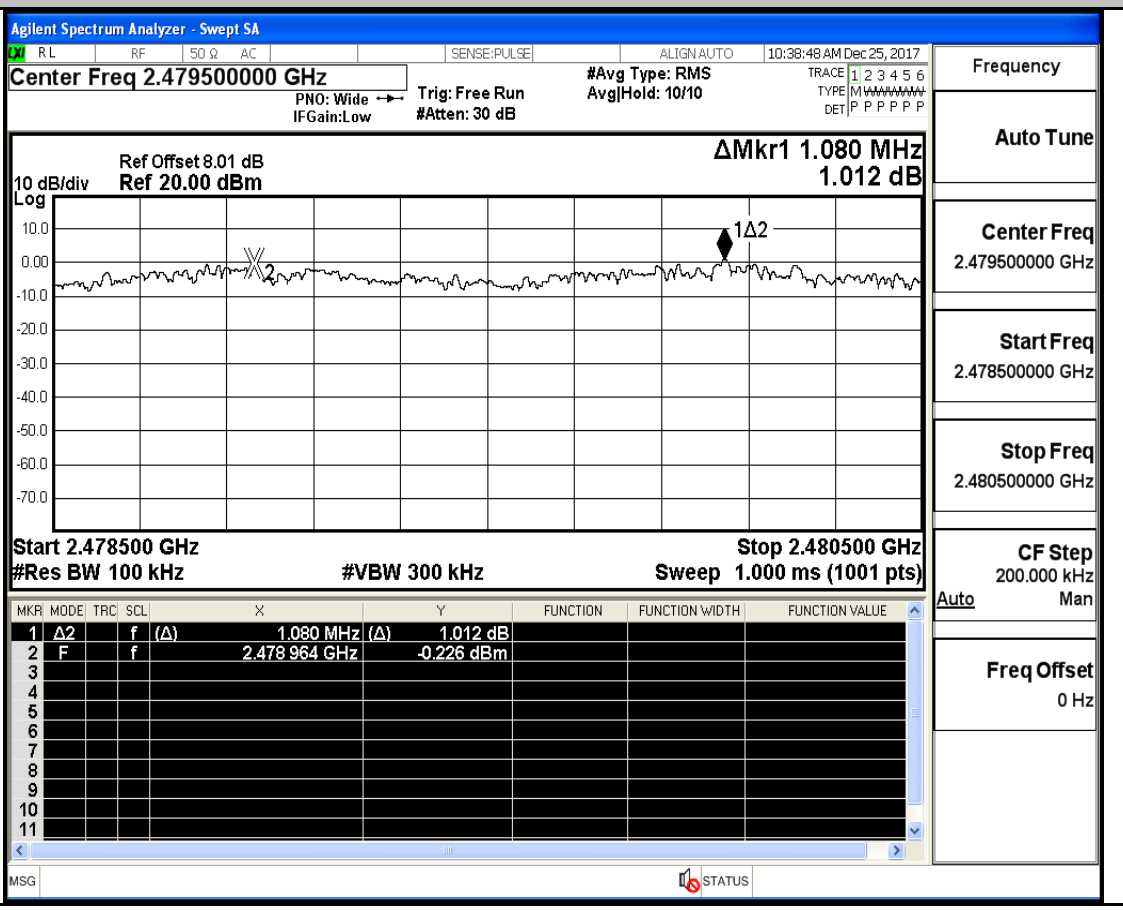
Carrier Frequency Separation_8-DPSK_2402



Carrier Frequency Separation_8-DPSK_2441



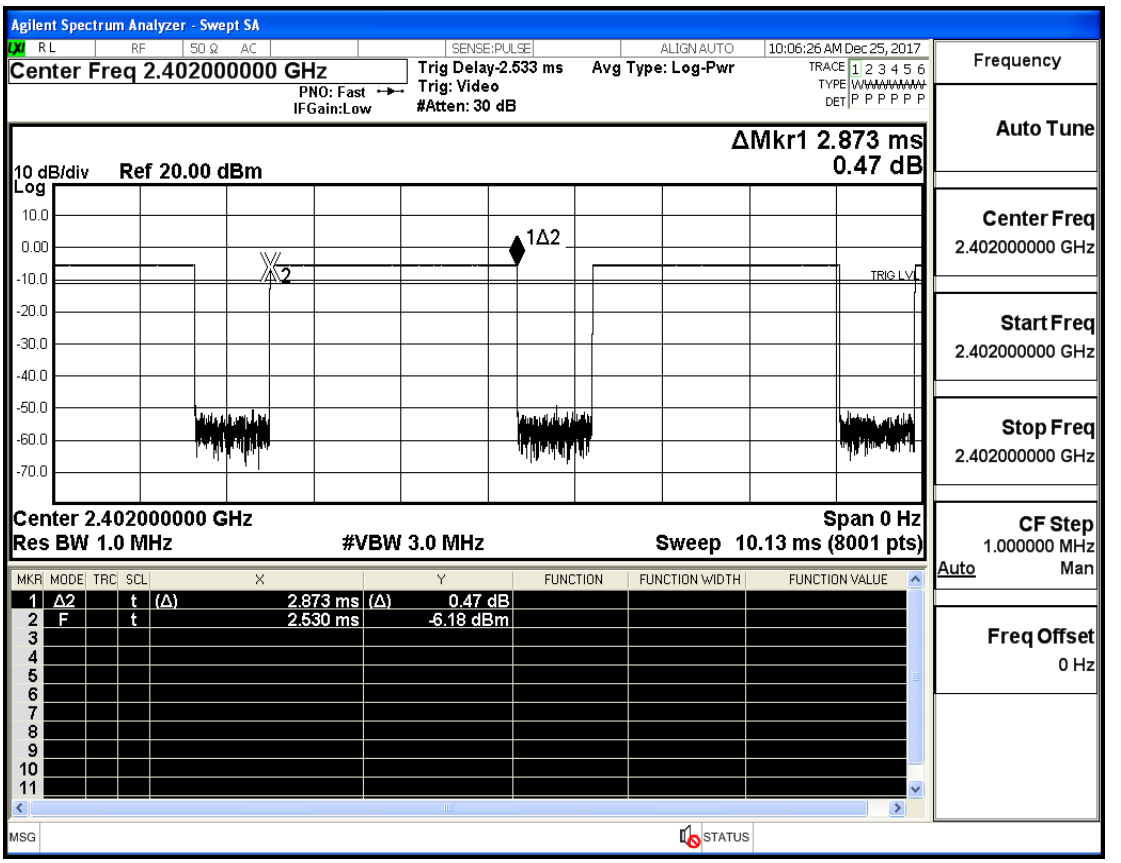
Carrier Frequency Separation_8-DPSK_2480



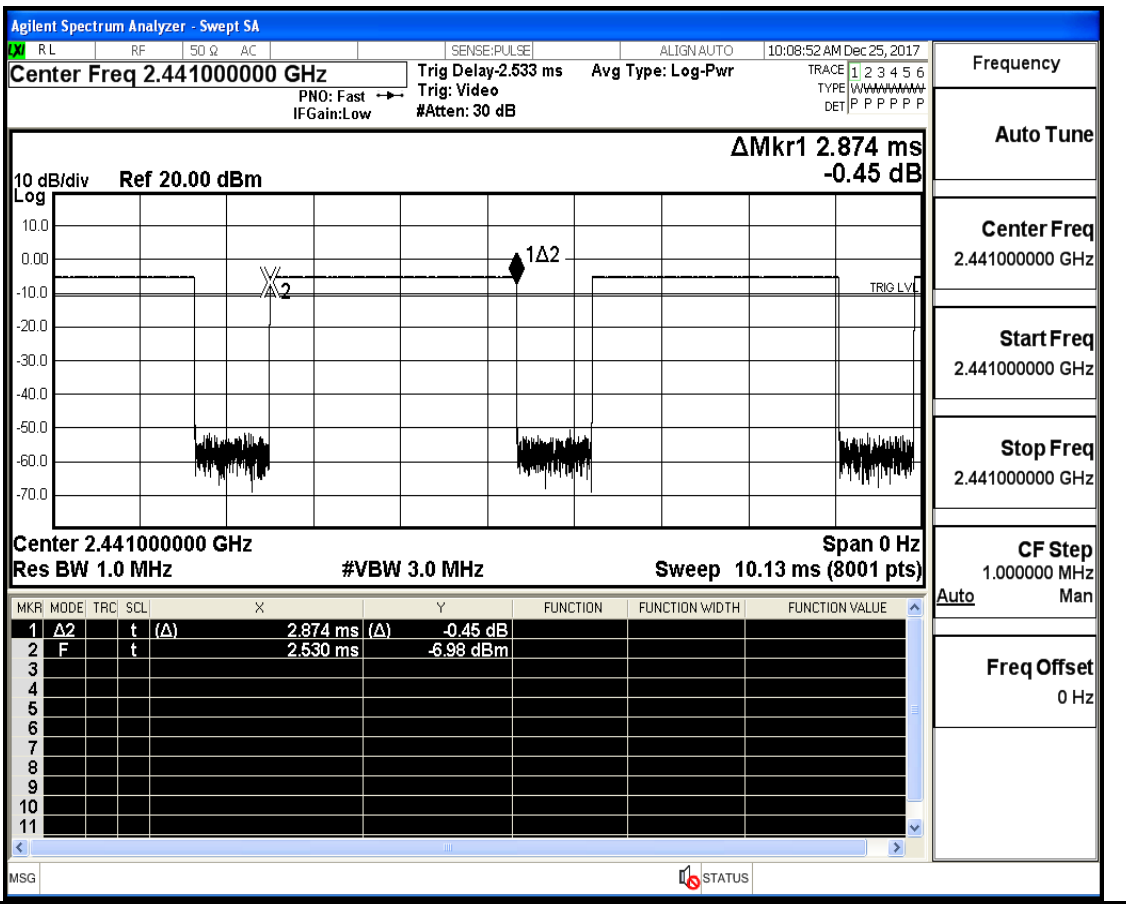
A.4 Dwell Time

Test Mode	Test Channel	Burst Width[ms/hop/ch]	Total Hops[hop*ch]	Dwell Time[s]	Limit[s]	Verdict
GFSK	2402	2.87	106.7	0.306	0.4	PASS
	2441	2.87	106.7	0.306	0.4	PASS
	2480	2.87	106.7	0.306	0.4	PASS
π/4-DQPSK	2402	2.88	106.7	0.307	0.4	PASS
	2441	2.88	106.7	0.307	0.4	PASS
	2480	2.88	106.7	0.307	0.4	PASS
8-DPSK	2402	2.88	106.7	0.307	0.4	PASS
	2441	2.88	106.7	0.307	0.4	PASS
	2480	2.88	106.7	0.307	0.4	PASS

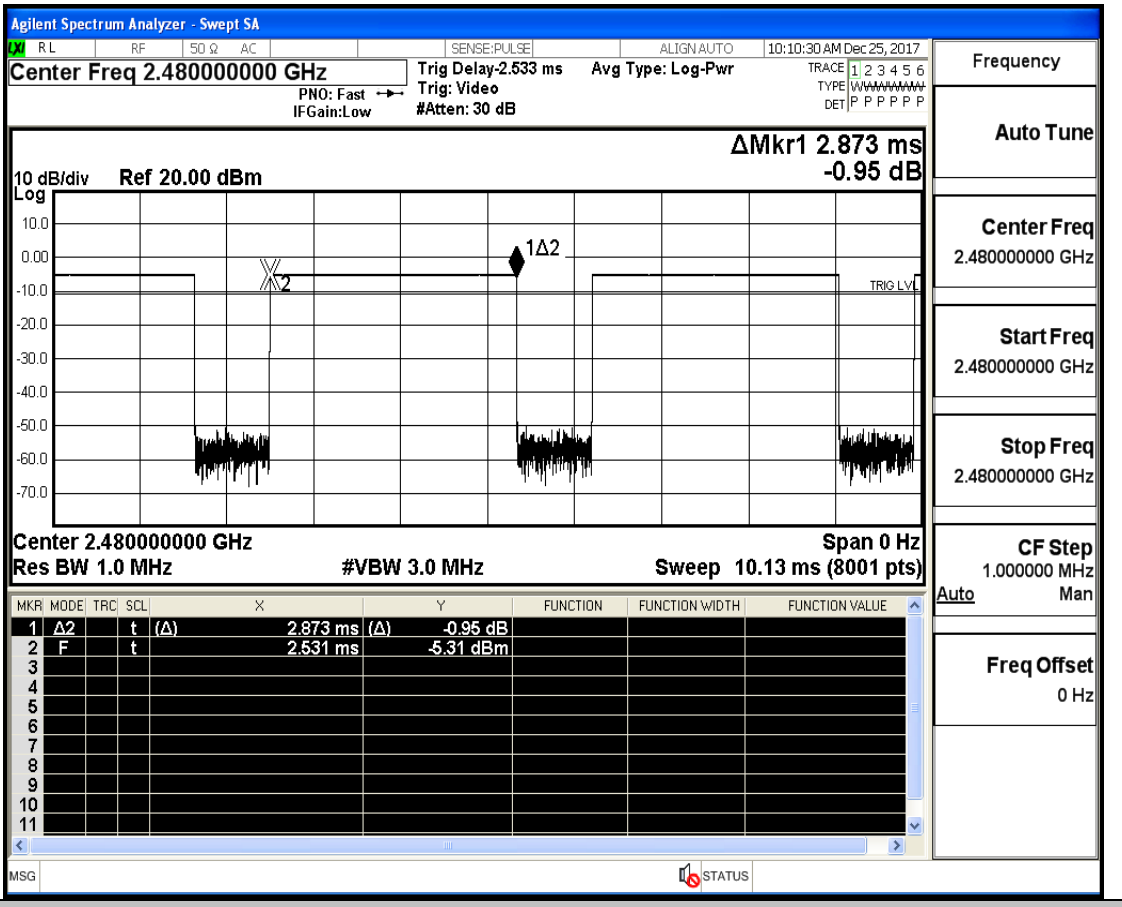
Dwell Time_GFSK_2402



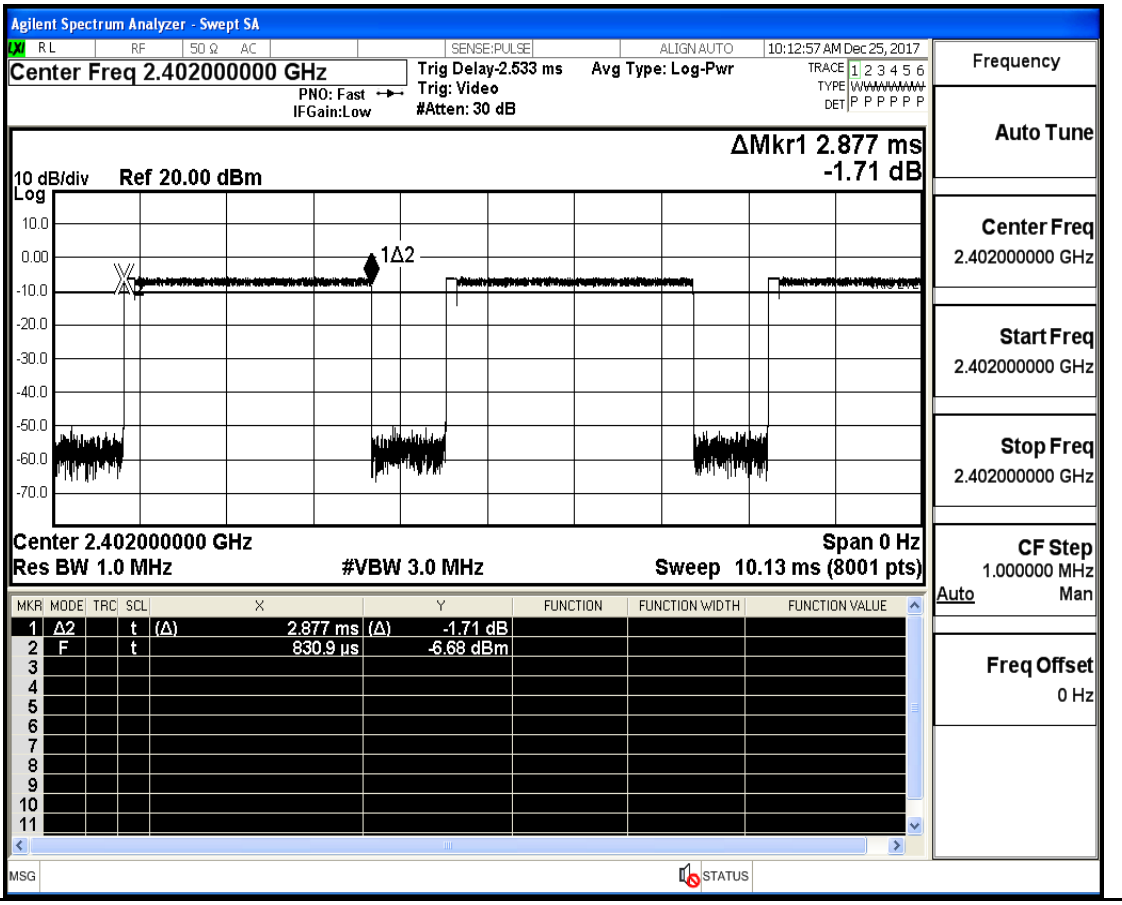
Dwell Time_GFSK_2441



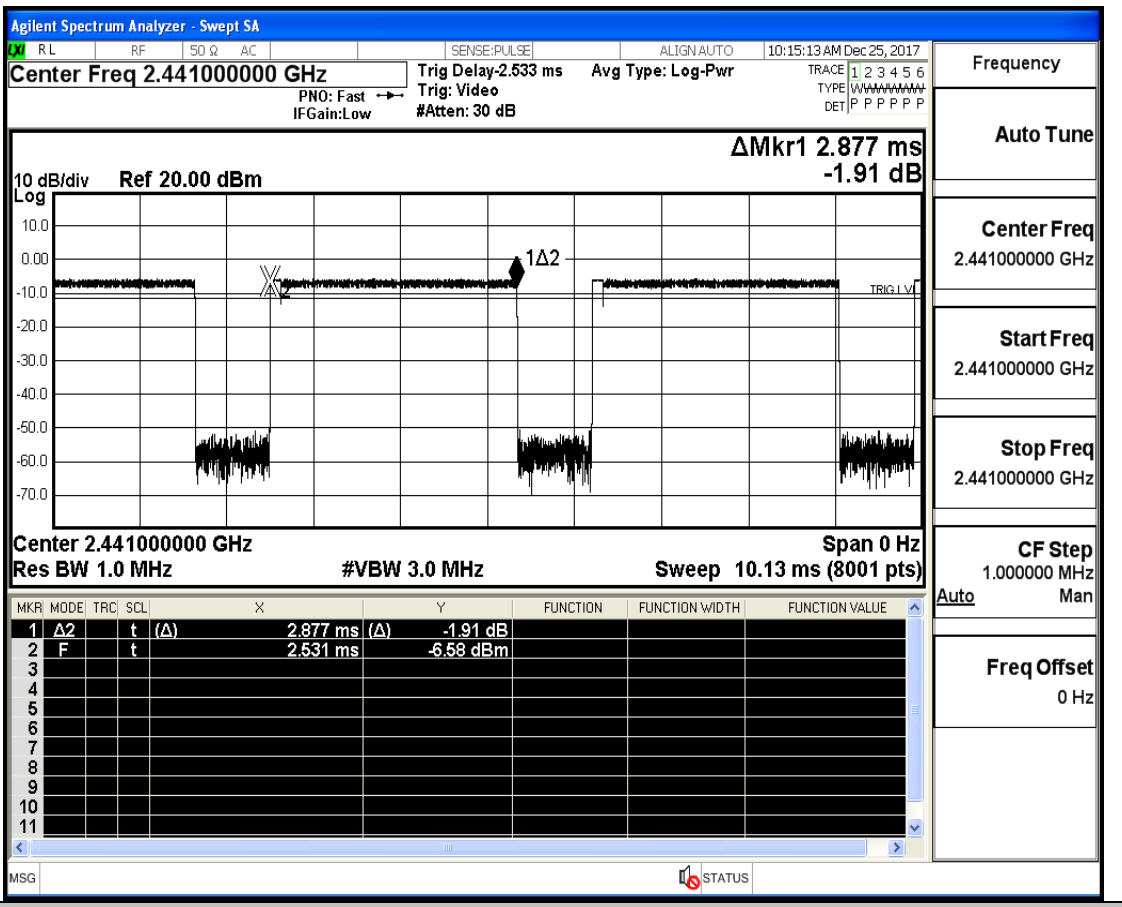
Dwell Time_GFSK_2480



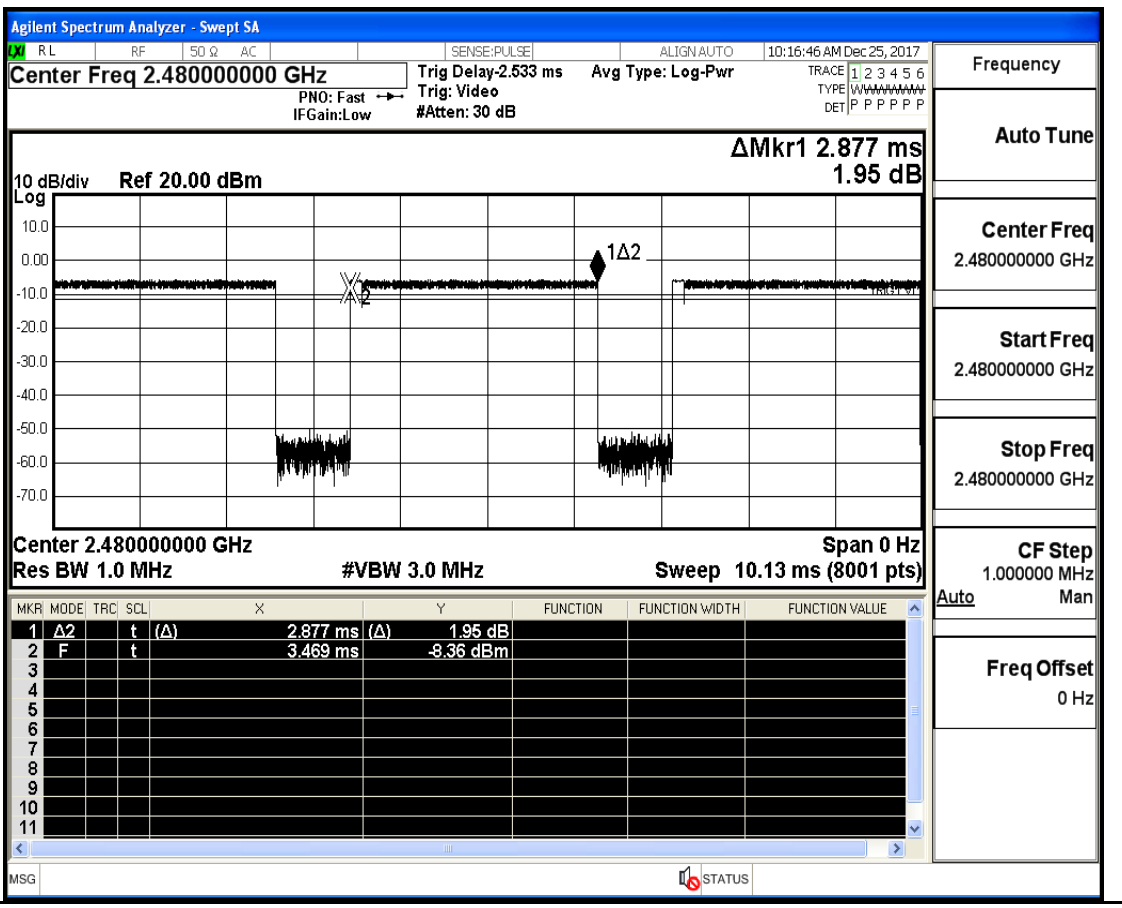
Dwell Time_π/4-DQPSK_2402



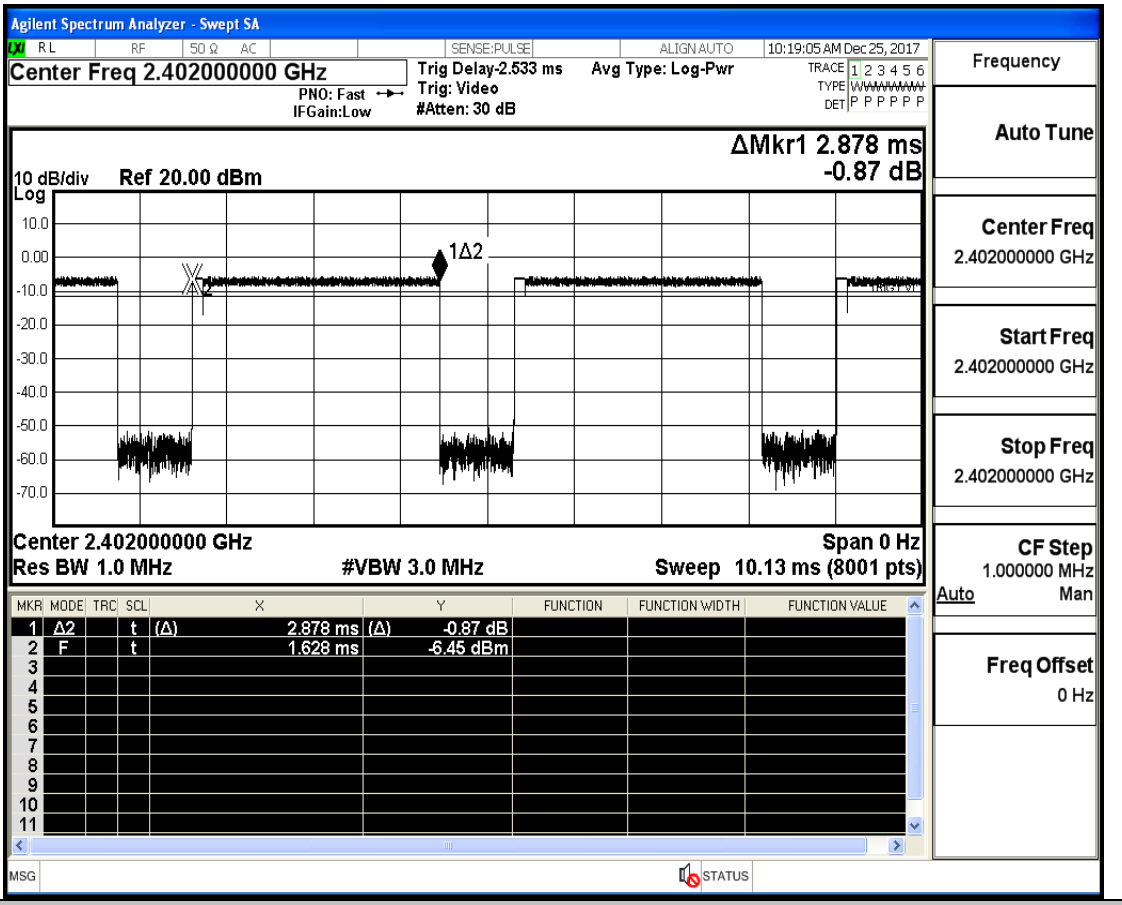
Dwell Time_π/4-DQPSK_2441



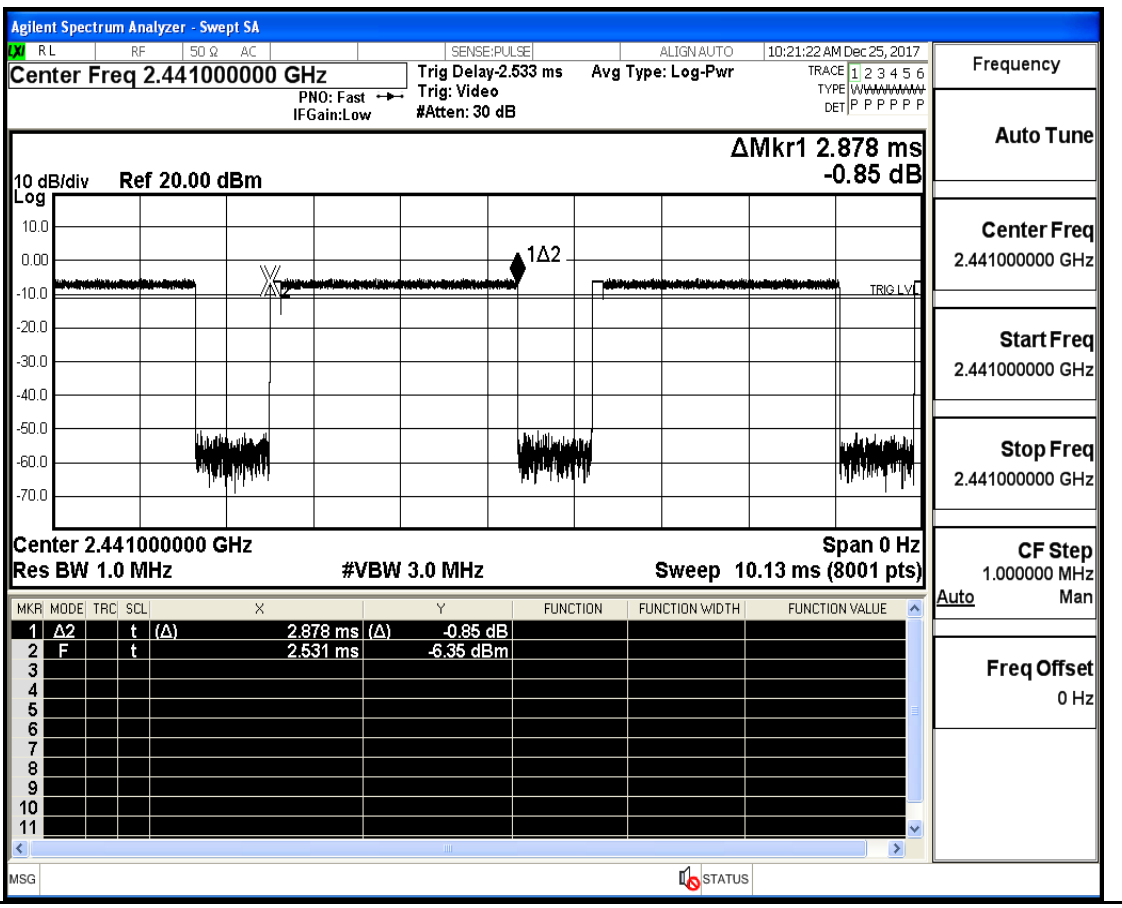
Dwell Time_π/4-DQPSK_2480



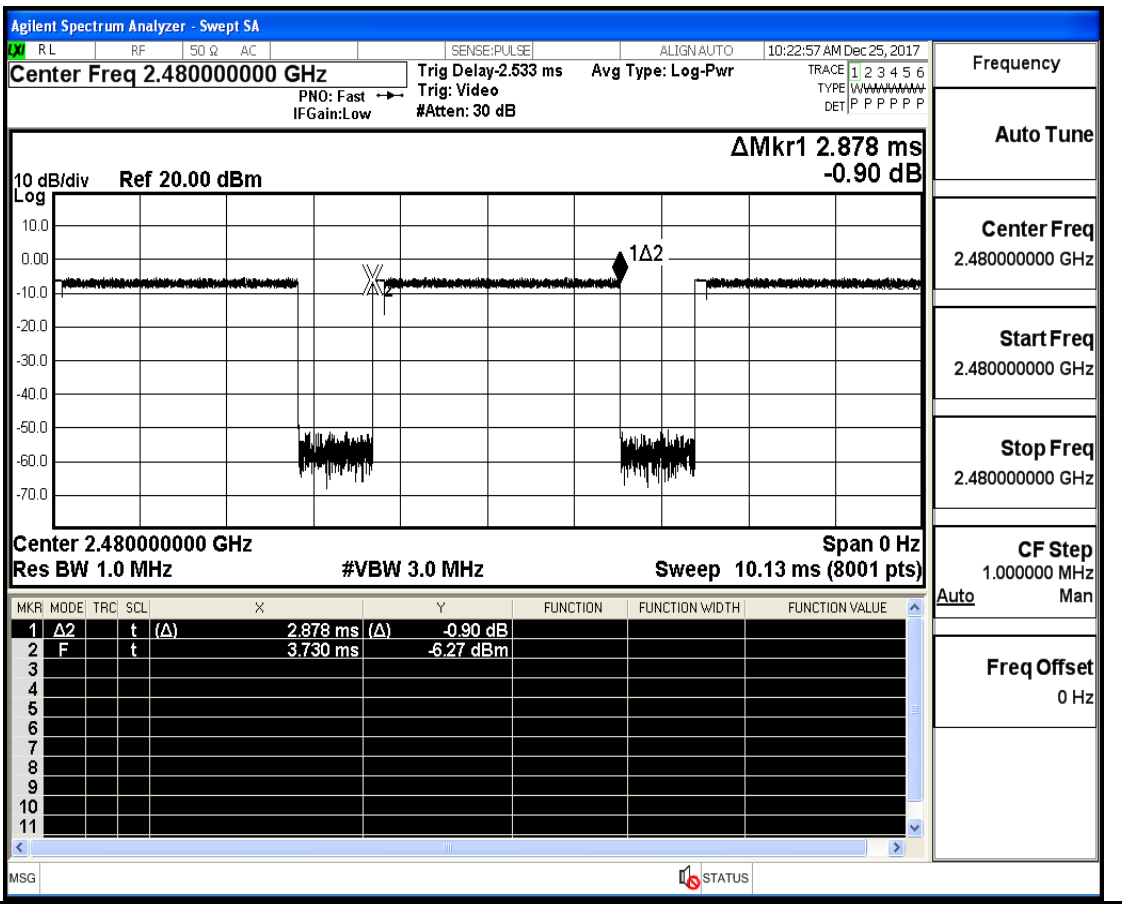
Dwell Time_8-DPSK_2402



Dwell Time_8-DPSK_2441



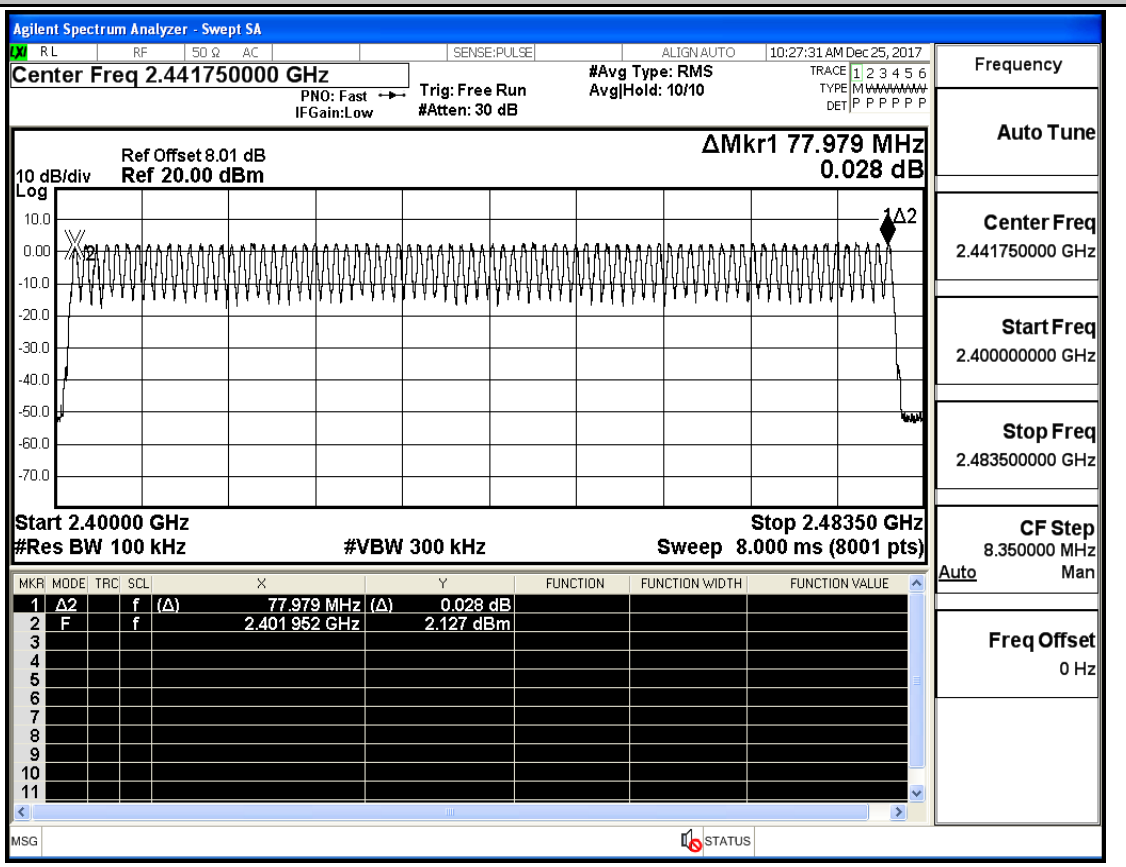
Dwell Time_8-DPSK_2480



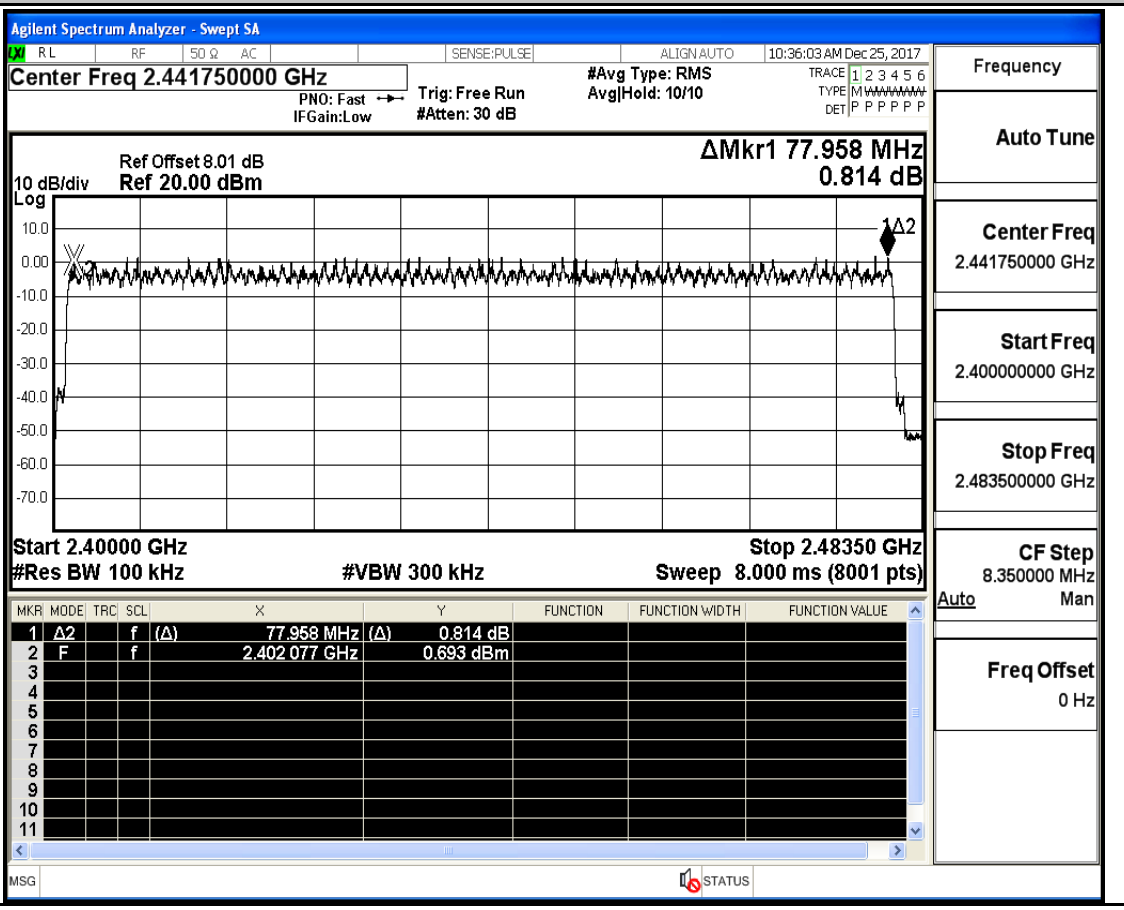
A.5 Hopping Channel Number

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

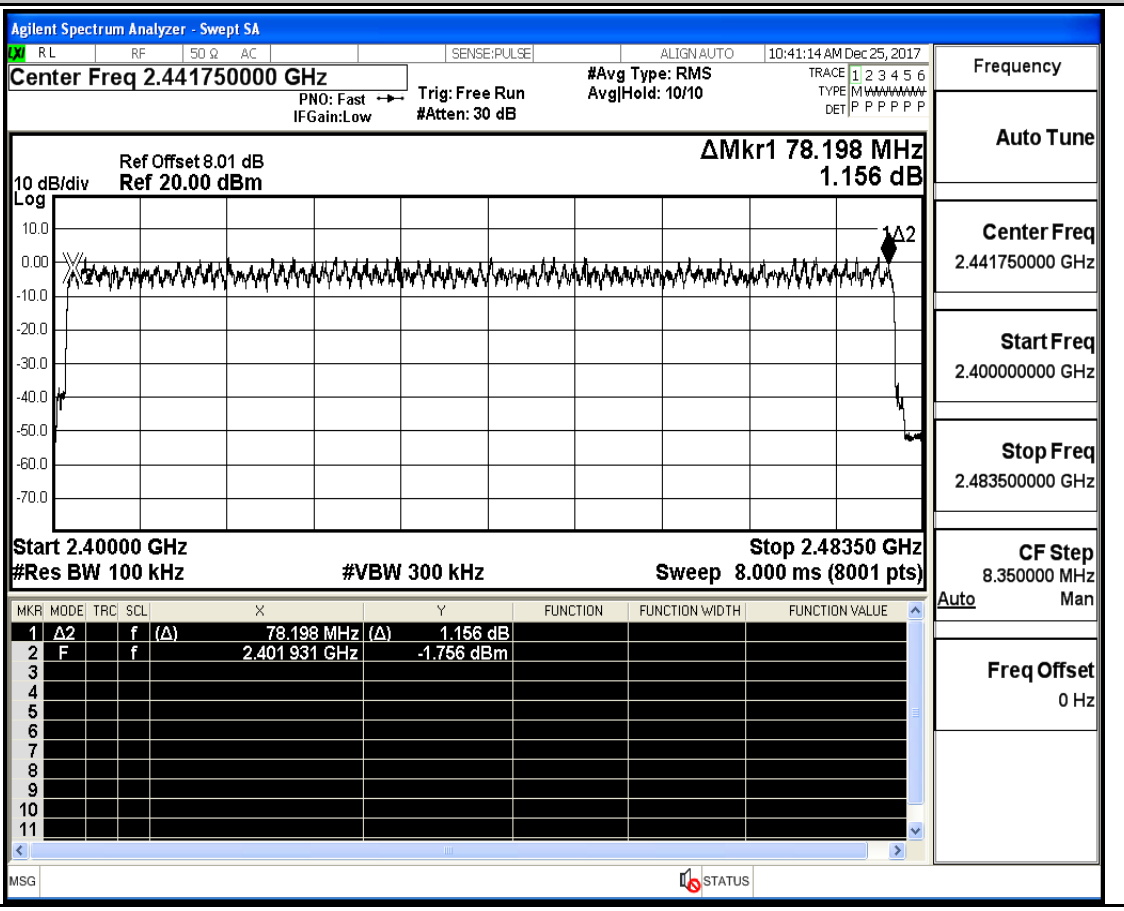
Hopping Channel Number_GFSK_2402



Hopping Channel Number_π/4-DQPSK_2402



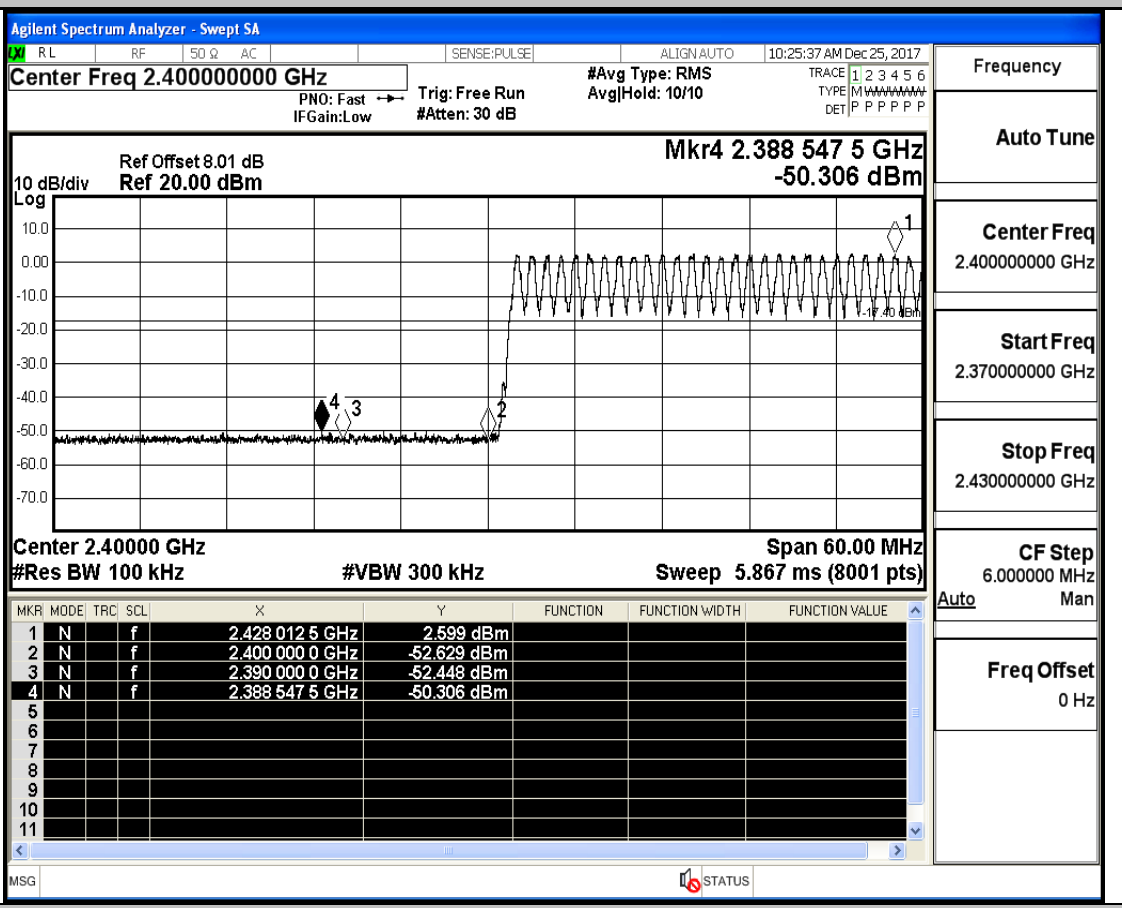
Hopping Channel Number_8-DPSK_2402



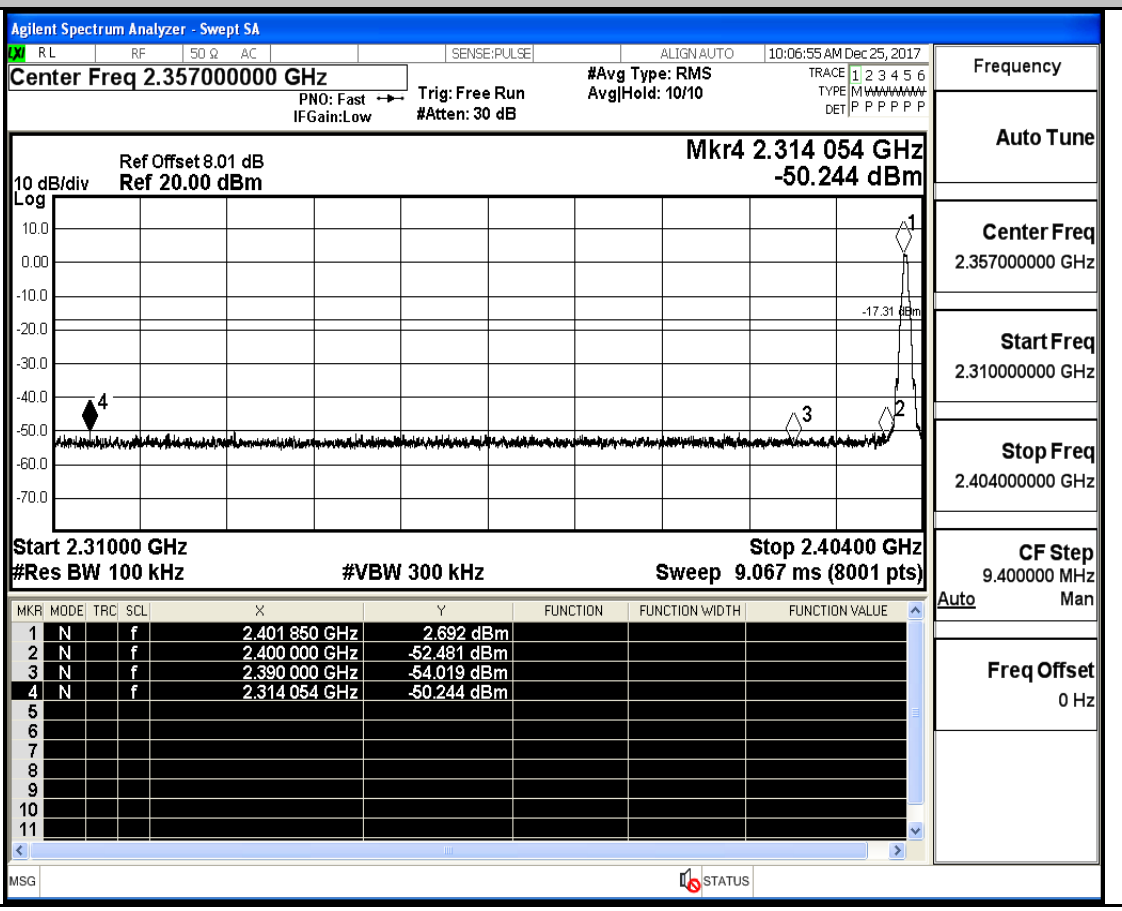
A.6 Band-edge for RF Conducted Emissions

Test Mode	Test Channel	Hopping	Carrier Power[dBm]	Max. Spurious Level [dBm]	Limit[dBm]	Verdict
GFSK	2402	On	2.599	-50.306	-17.4	PASS
	2402	Off	2.692	-50.244	-17.31	PASS
	2480	On	2.777	-49.581	-17.22	PASS
	2480	Off	2.757	-50.419	-17.24	PASS
π/4-DQPSK	2402	On	1.914	-49.757	-18.09	PASS
	2402	Off	1.922	-50.273	-18.08	PASS
	2480	On	1.716	-49.493	-18.28	PASS
	2480	Off	2.075	-50.203	-17.93	PASS
8-DPSK	2402	On	1.725	-49.031	-18.28	PASS
	2402	Off	1.914	-50.307	-18.09	PASS
	2480	On	1.654	-49.120	-18.35	PASS
	2480	Off	1.981	-50.271	-18.02	PASS

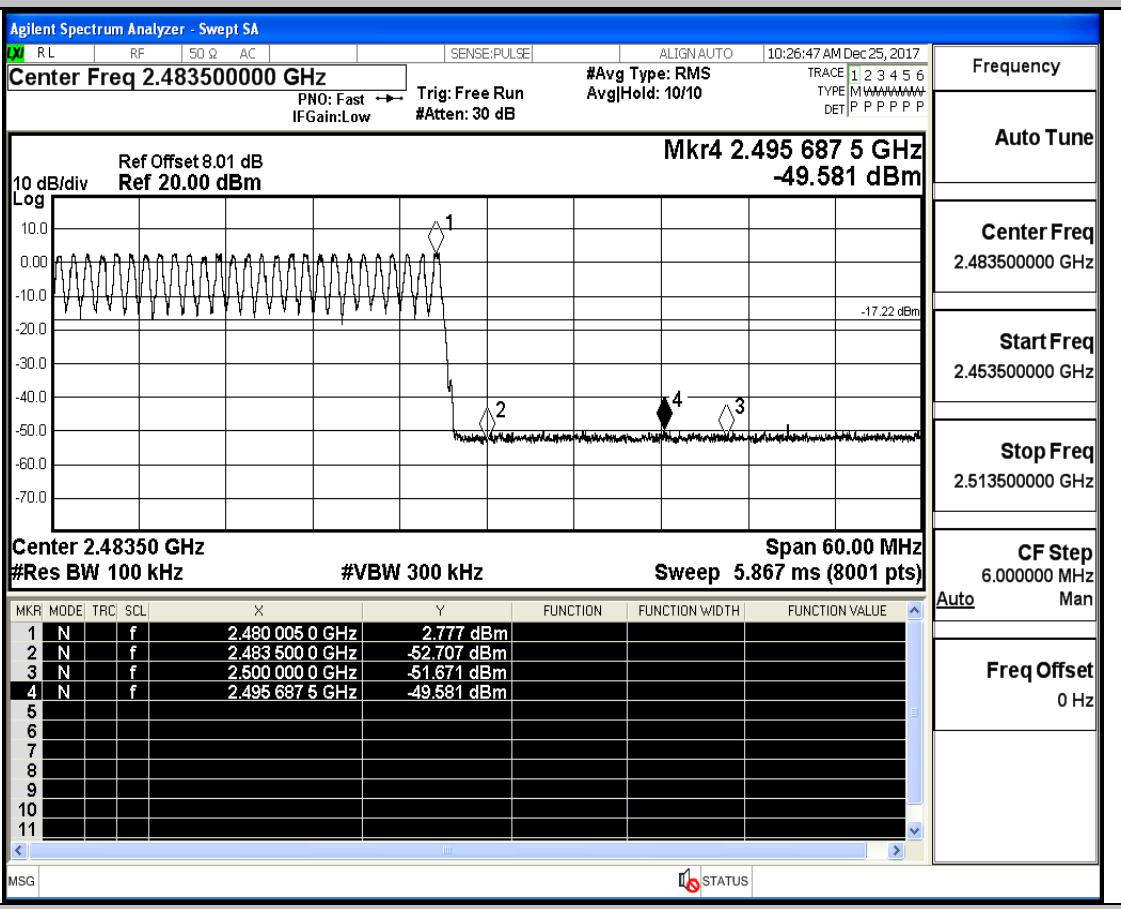
Band-edge for RF Conducted Emissions_GFSK_2402_Hopping On



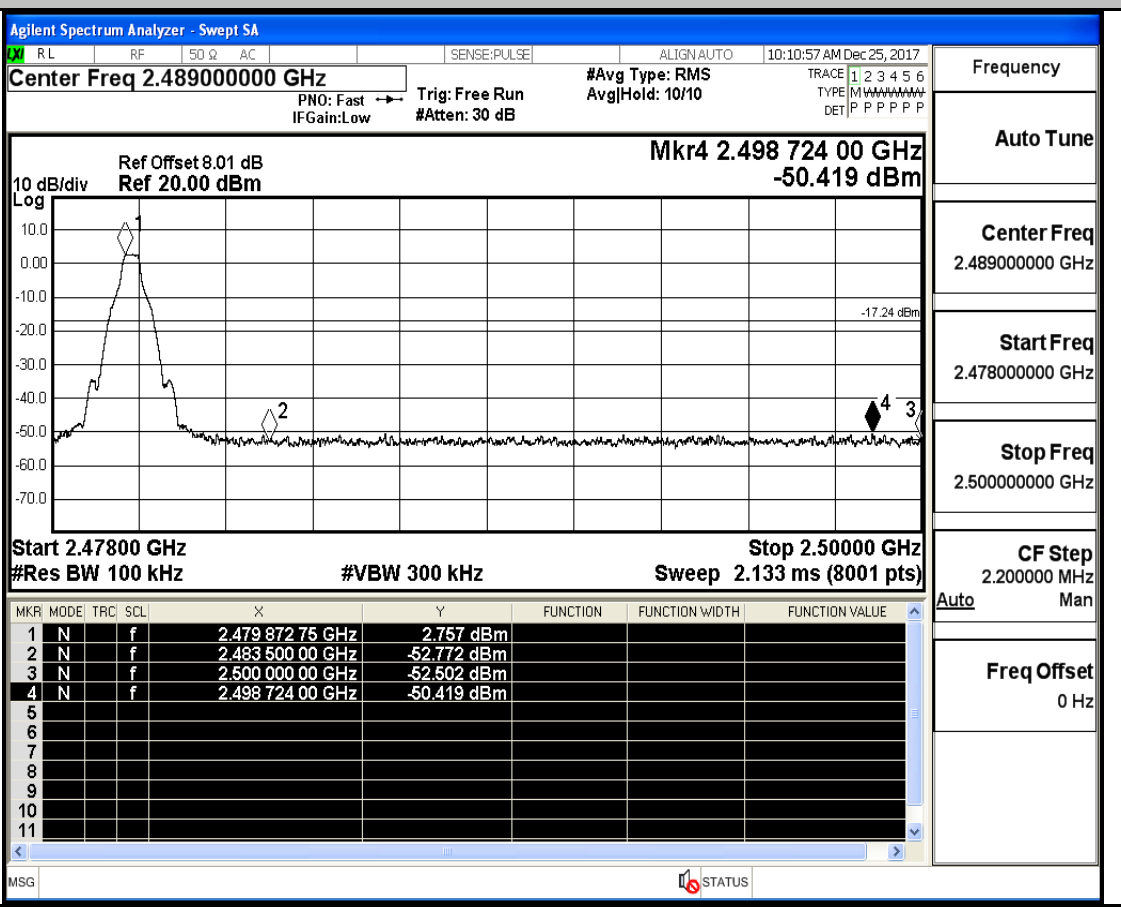
Band-edge for RF Conducted Emissions_GFSK_2402_Hopping Off



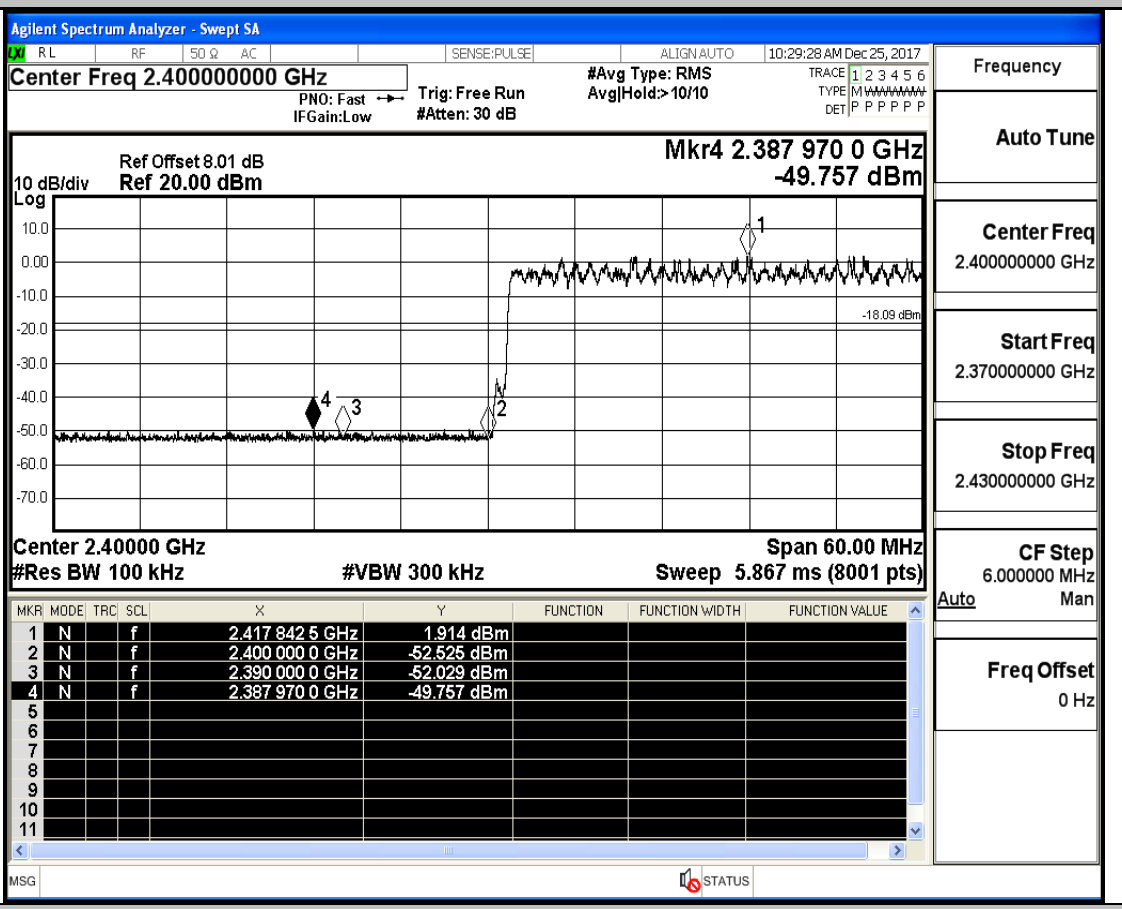
Band-edge for RF Conducted Emissions_GFSK_2480_Hopping On



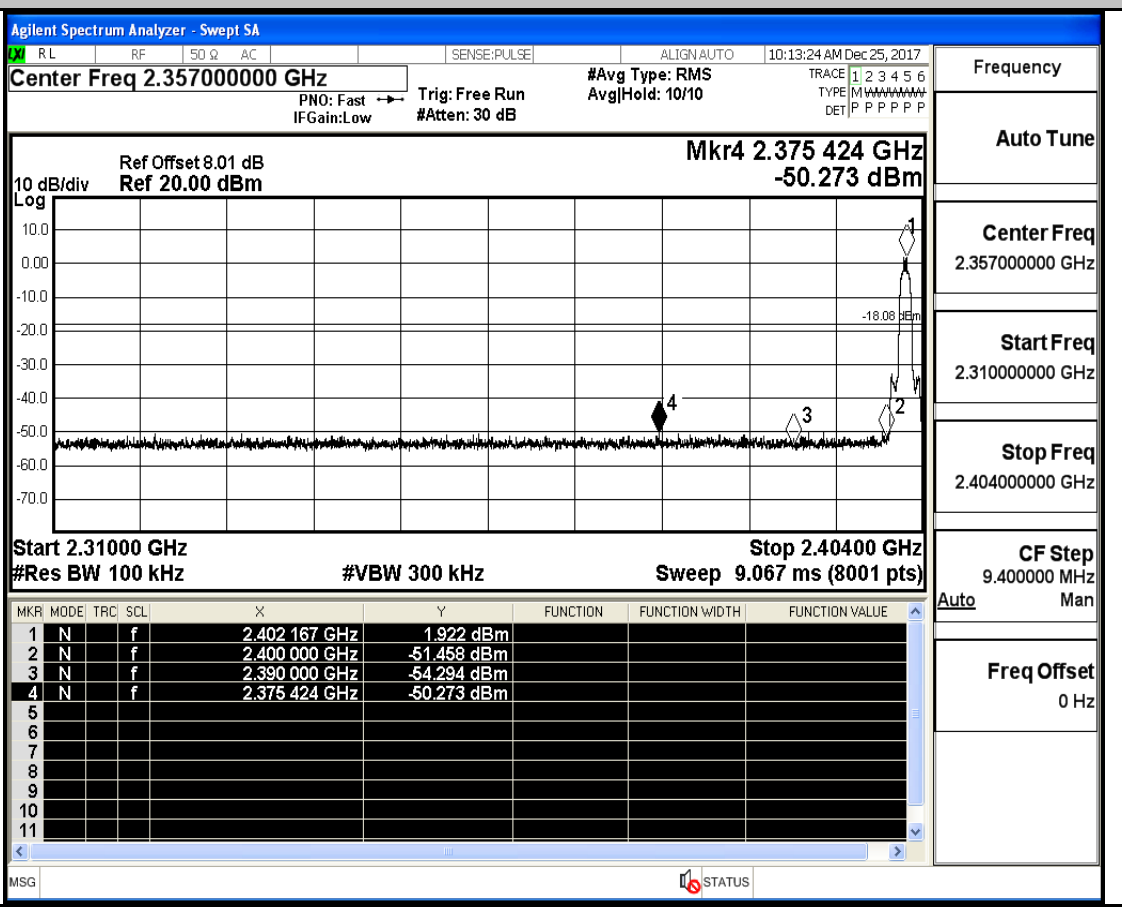
Band-edge for RF Conducted Emissions_GFSK_2480_Hopping Off



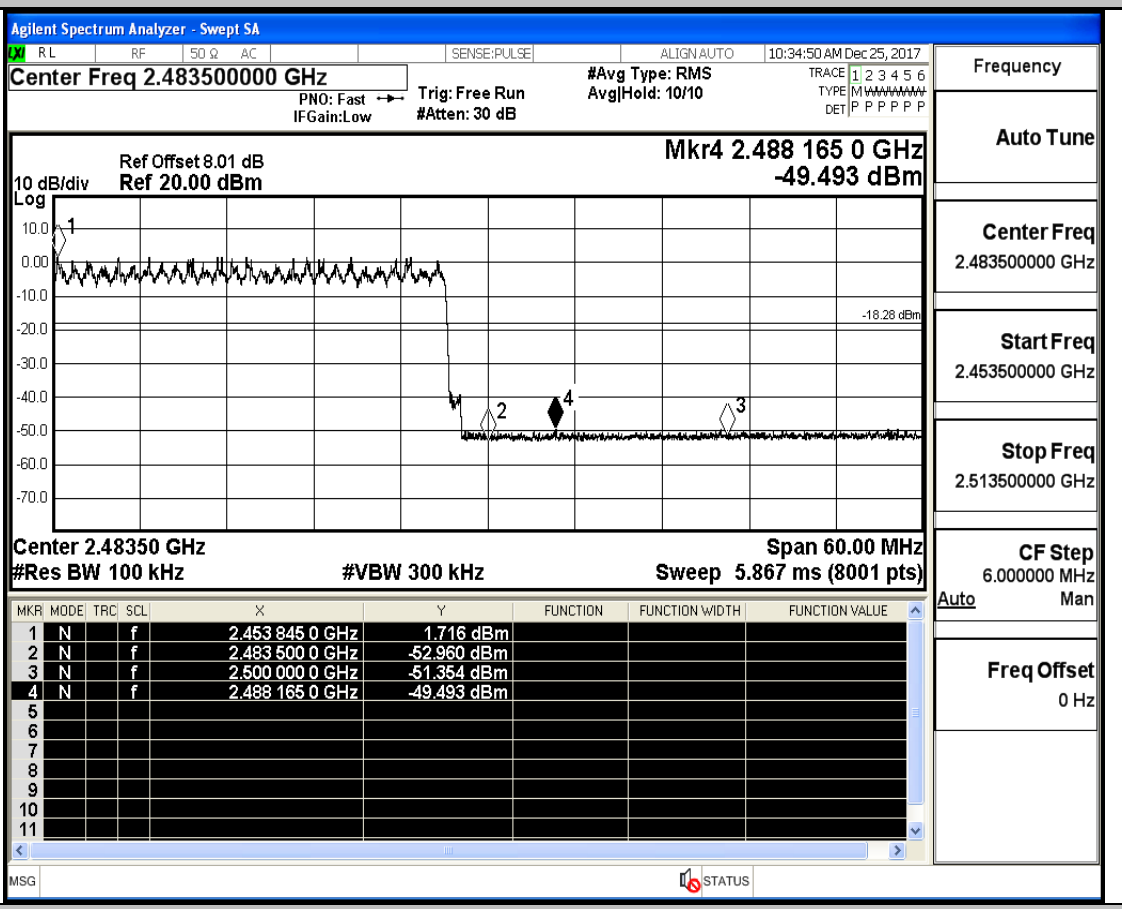
Band-edge for RF Conducted Emissions_π/4-DQPSK_2402_Hopping On



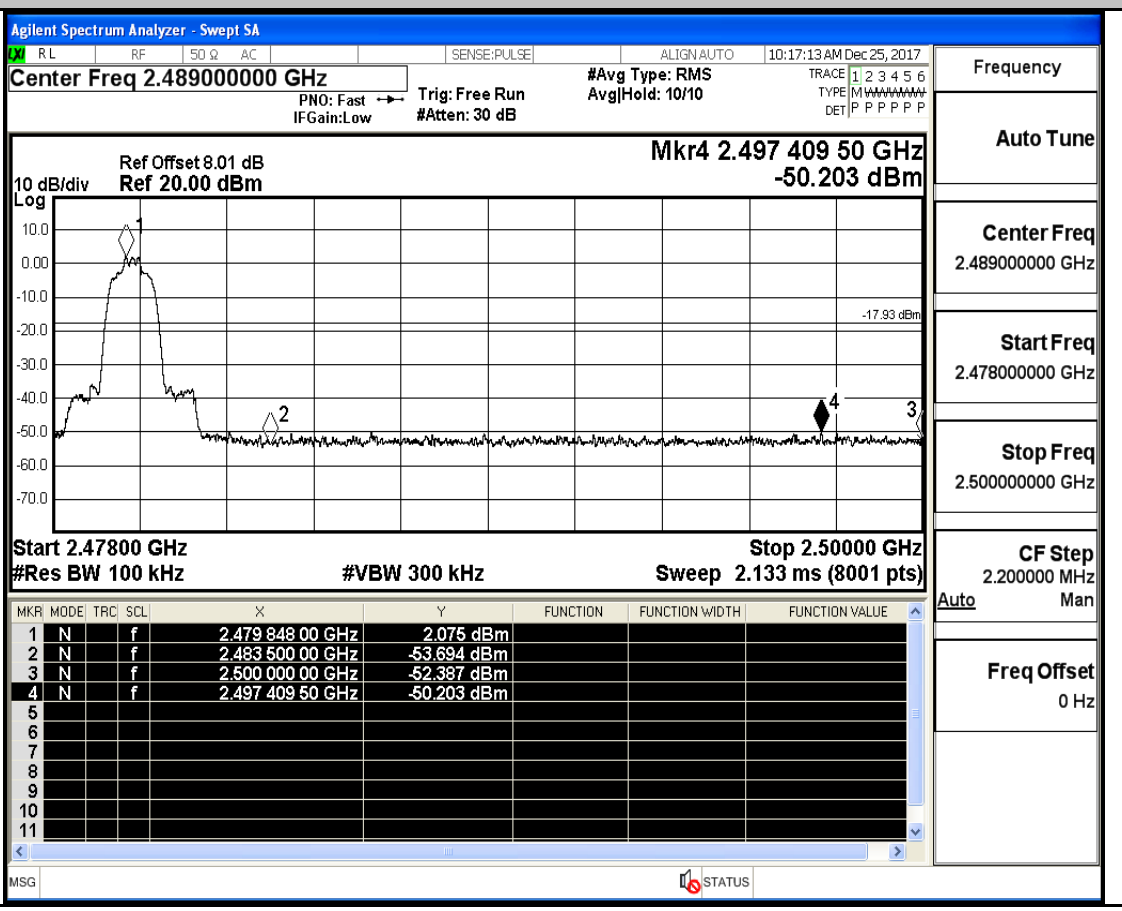
Band-edge for RF Conducted Emissions_π/4-DQPSK_2402_Hopping Off



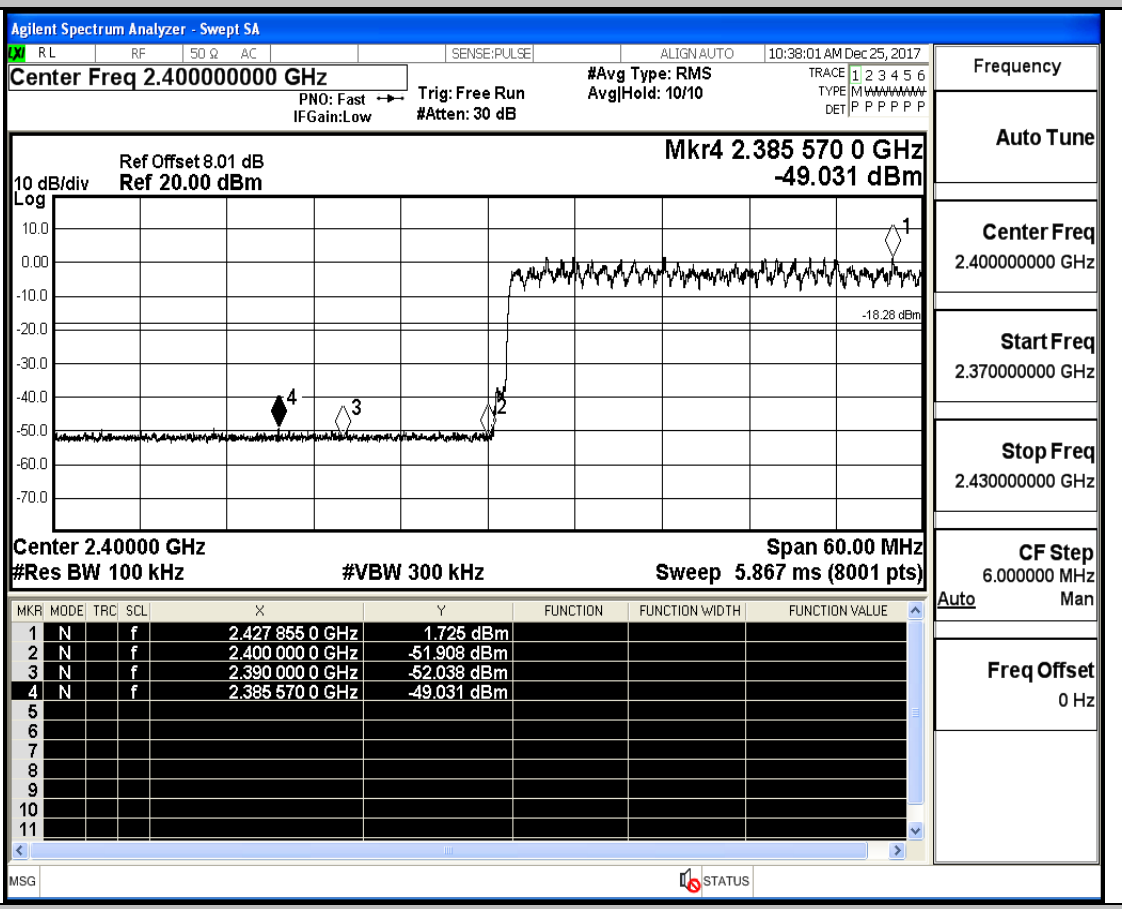
Band-edge for RF Conducted Emissions_π/4-DQPSK_2480_Hopping On



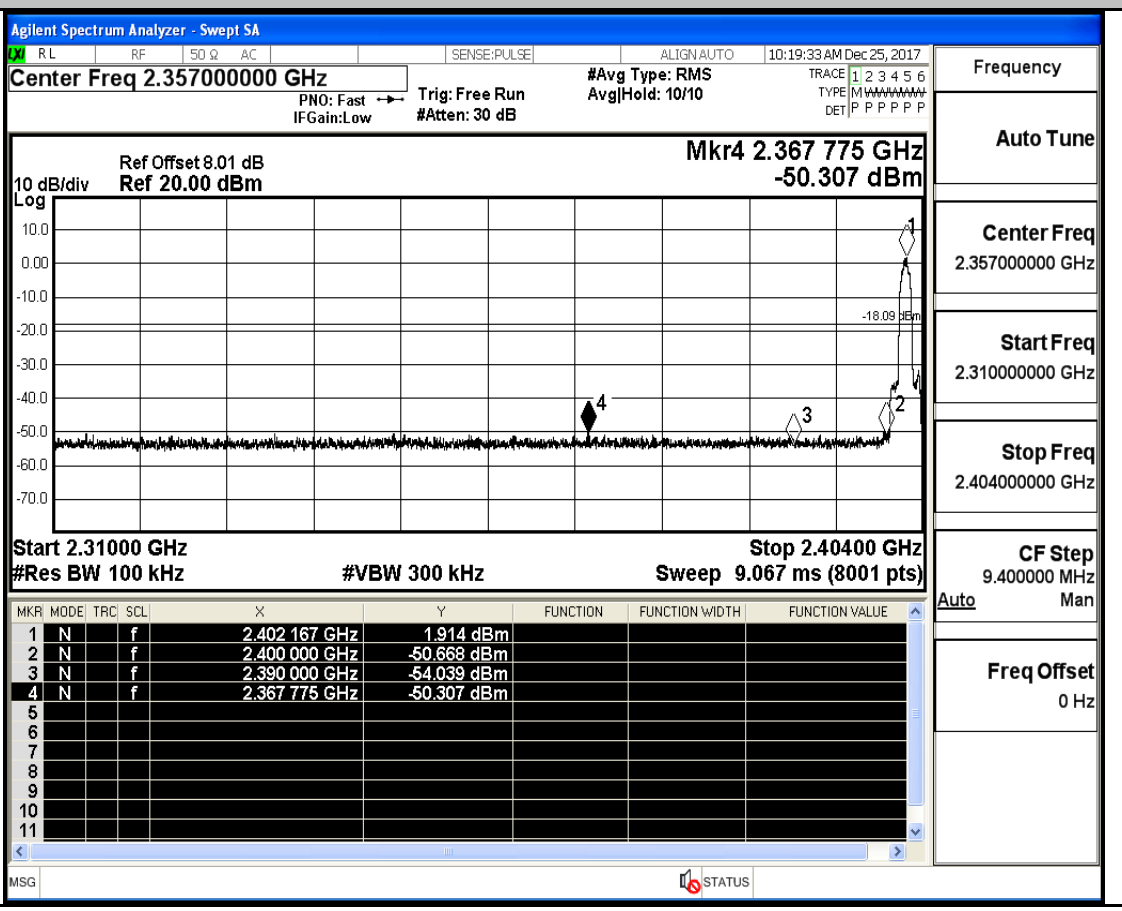
Band-edge for RF Conducted Emissions_π/4-DQPSK_2480_Hopping Off



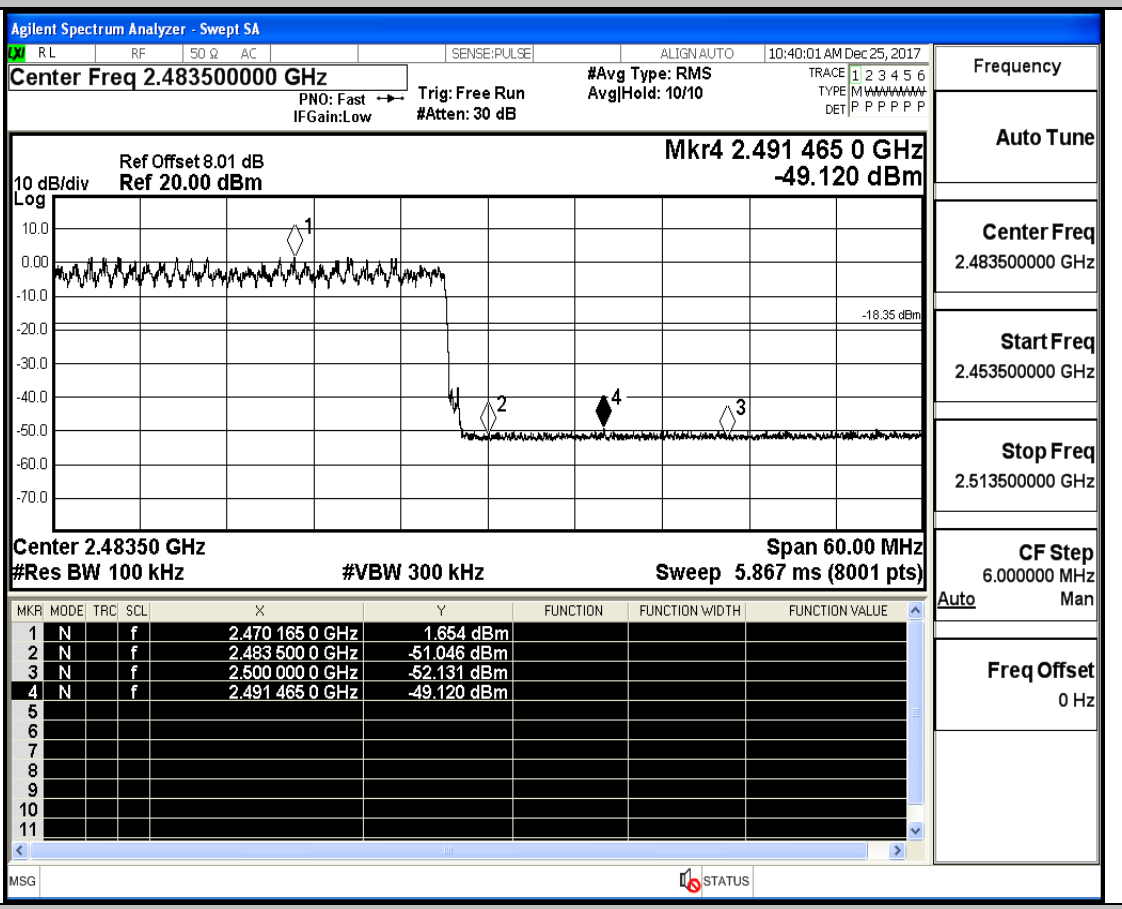
Band-edge for RF Conducted Emissions_8-DPSK_2402_Hopping On



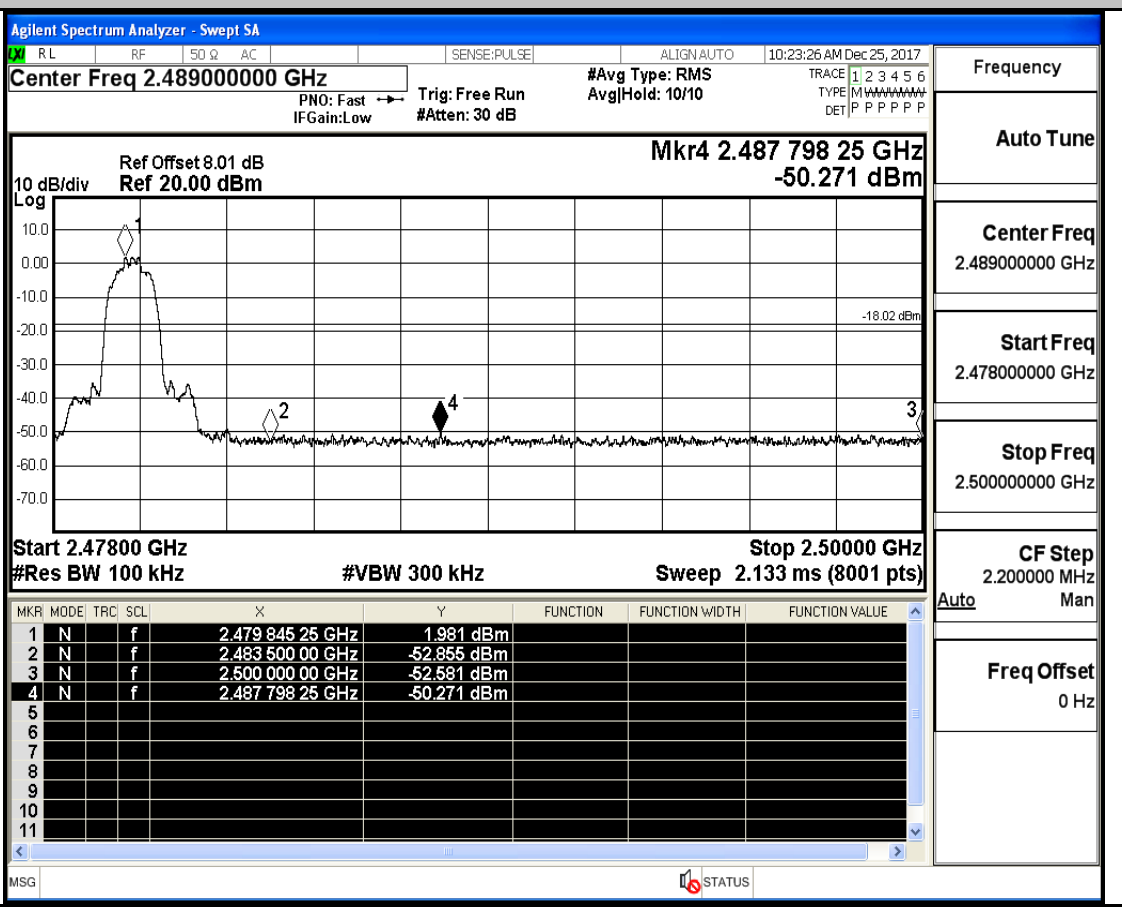
Band-edge for RF Conducted Emissions_8-DPSK_2402_Hopping Off



Band-edge for RF Conducted Emissions_8-DPSK_2480_Hopping On



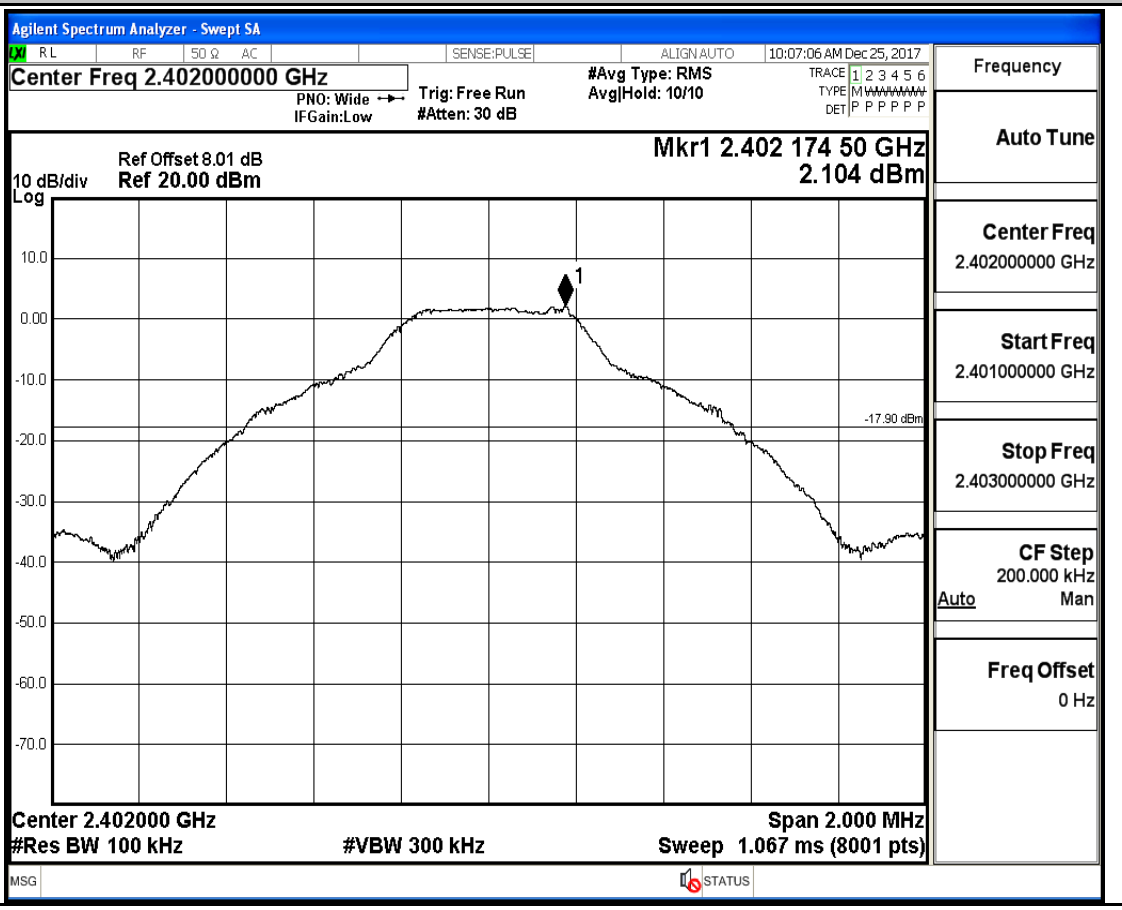
Band-edge for RF Conducted Emissions_8-DPSK_2480_Hopping Off

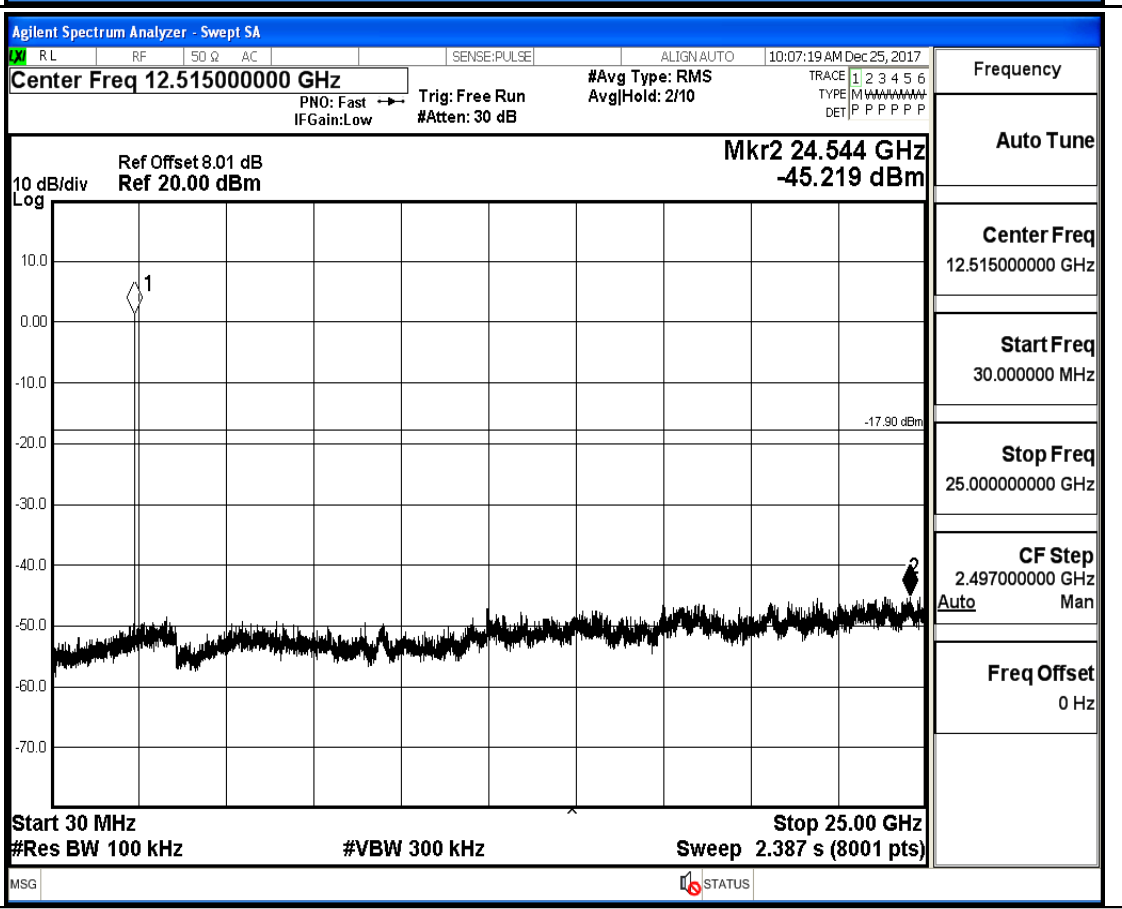


A.7 RF Conducted Spurious Emissions

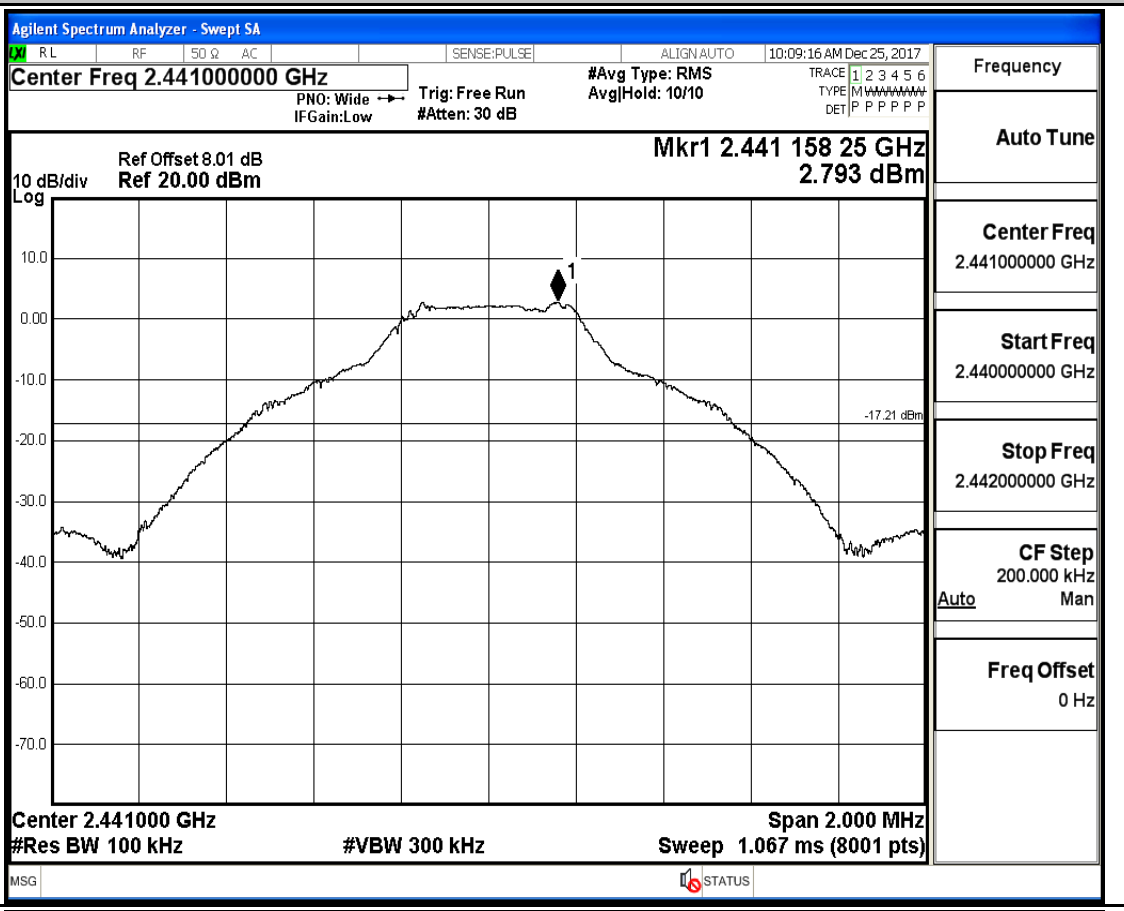
Test Mode	Test Channel	StartFre [MHz]	StopFre [MHz]	RBW [kHz]	VBW [kHz]	Pref[dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
GFSK	2402	30	25000	100	300	2.104	-45.219	<-17.896	PASS
	2441	30	25000	100	300	2.793	-44.531	<-17.207	PASS
	2480	30	25000	100	300	2.941	-44.159	<-17.059	PASS
π/4-DQPSK	2402	30	25000	100	300	1.789	-44.442	<-18.211	PASS
	2441	30	25000	100	300	1.863	-43.844	<-18.137	PASS
	2480	30	25000	100	300	1.952	-44.371	<-18.048	PASS
8-DPSK	2402	30	25000	100	300	1.461	-44.663	<-18.539	PASS
	2441	30	25000	100	300	1.568	-44.744	<-18.432	PASS
	2480	30	25000	100	300	1.462	-44.737	<-18.538	PASS

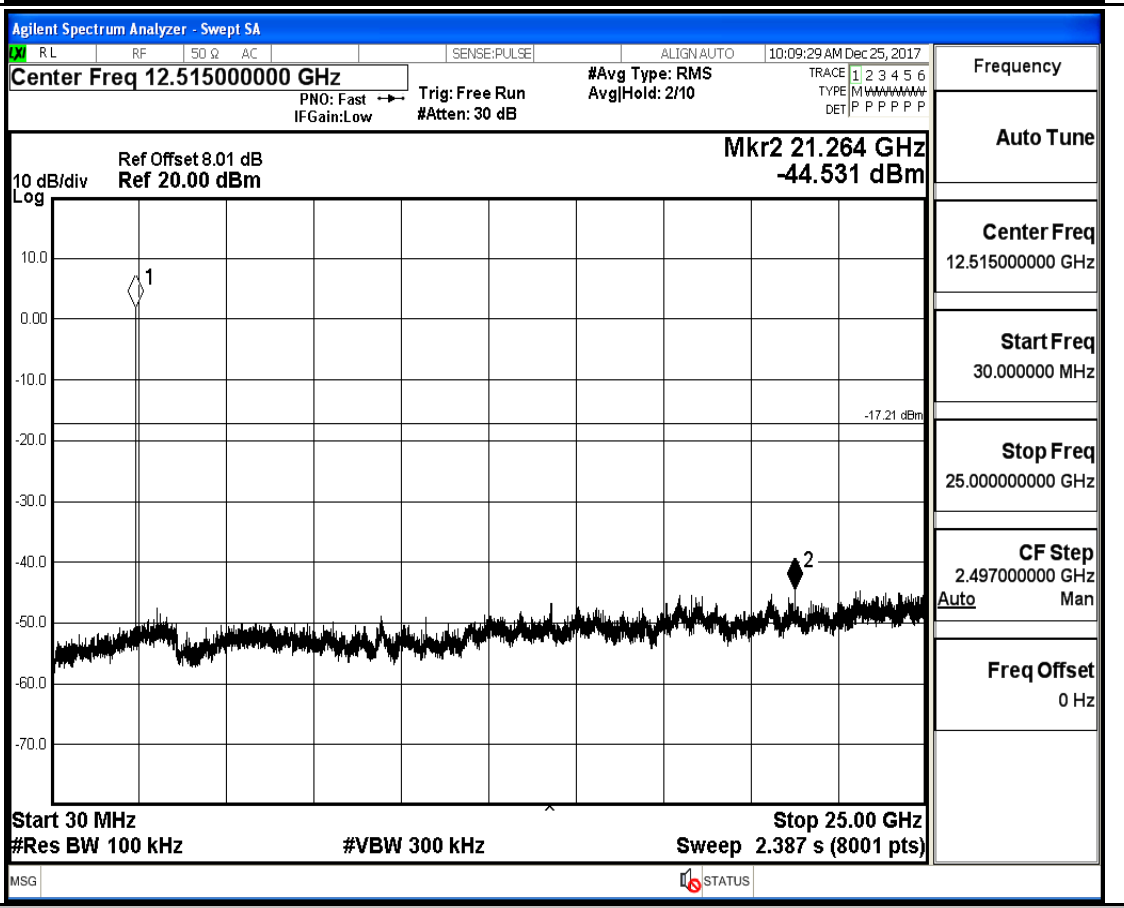
RF Conducted Spurious Emissions_GFSK_2402



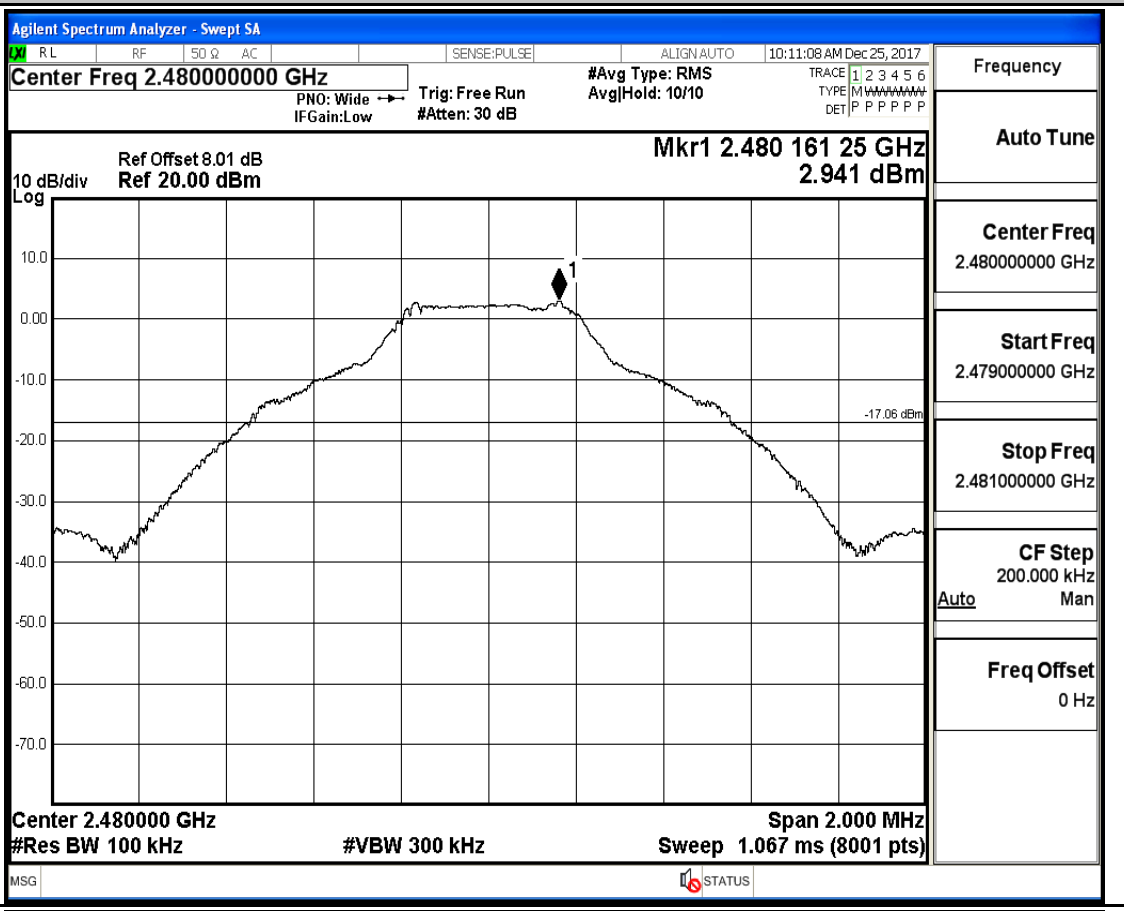


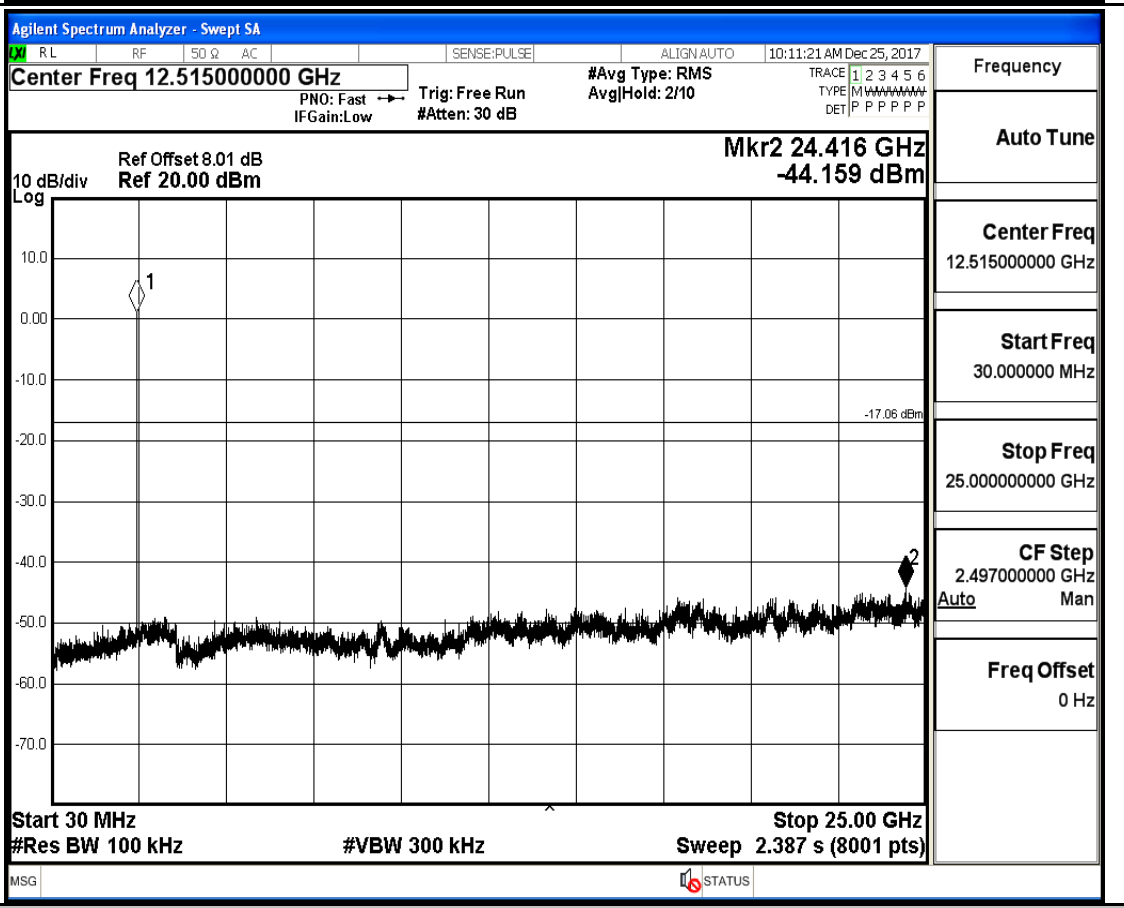
RF Conducted Spurious Emissions_GFSK_2441



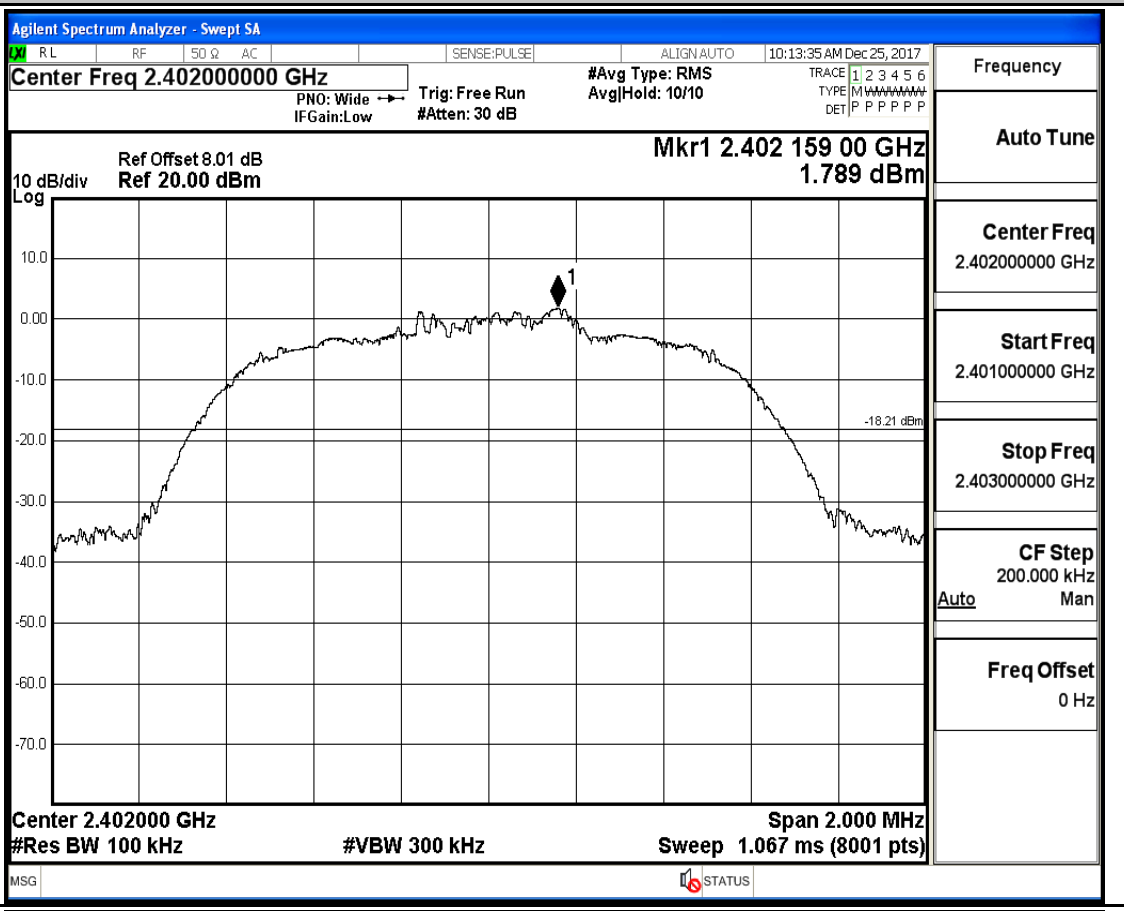


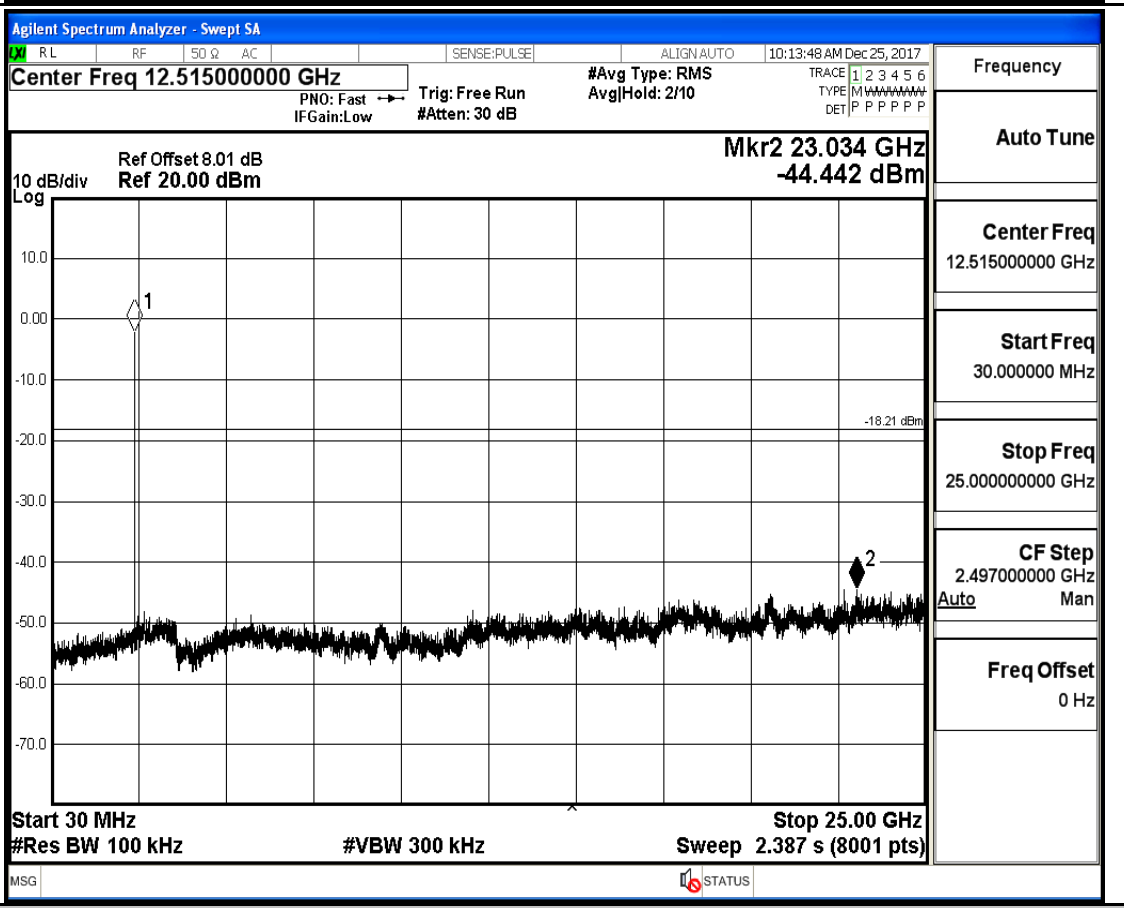
RF Conducted Spurious Emissions_GFSK_2480



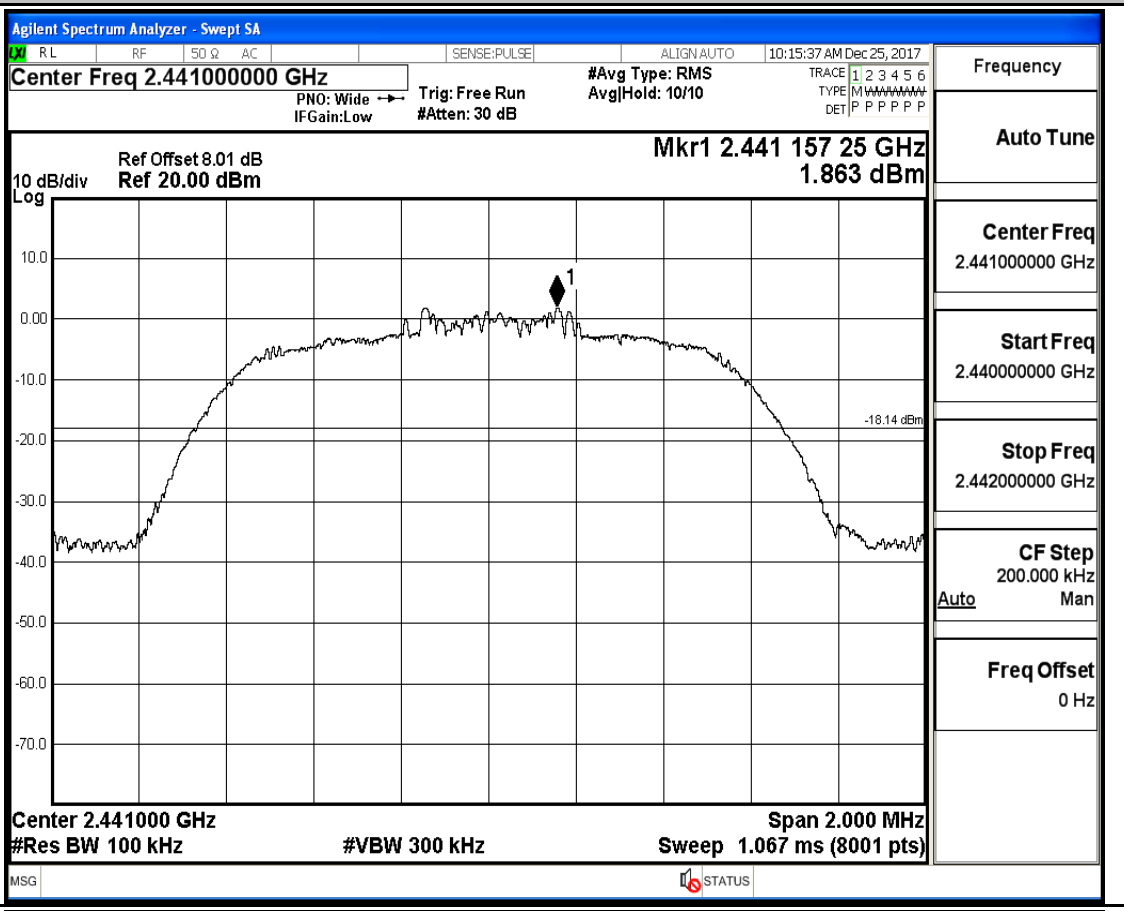


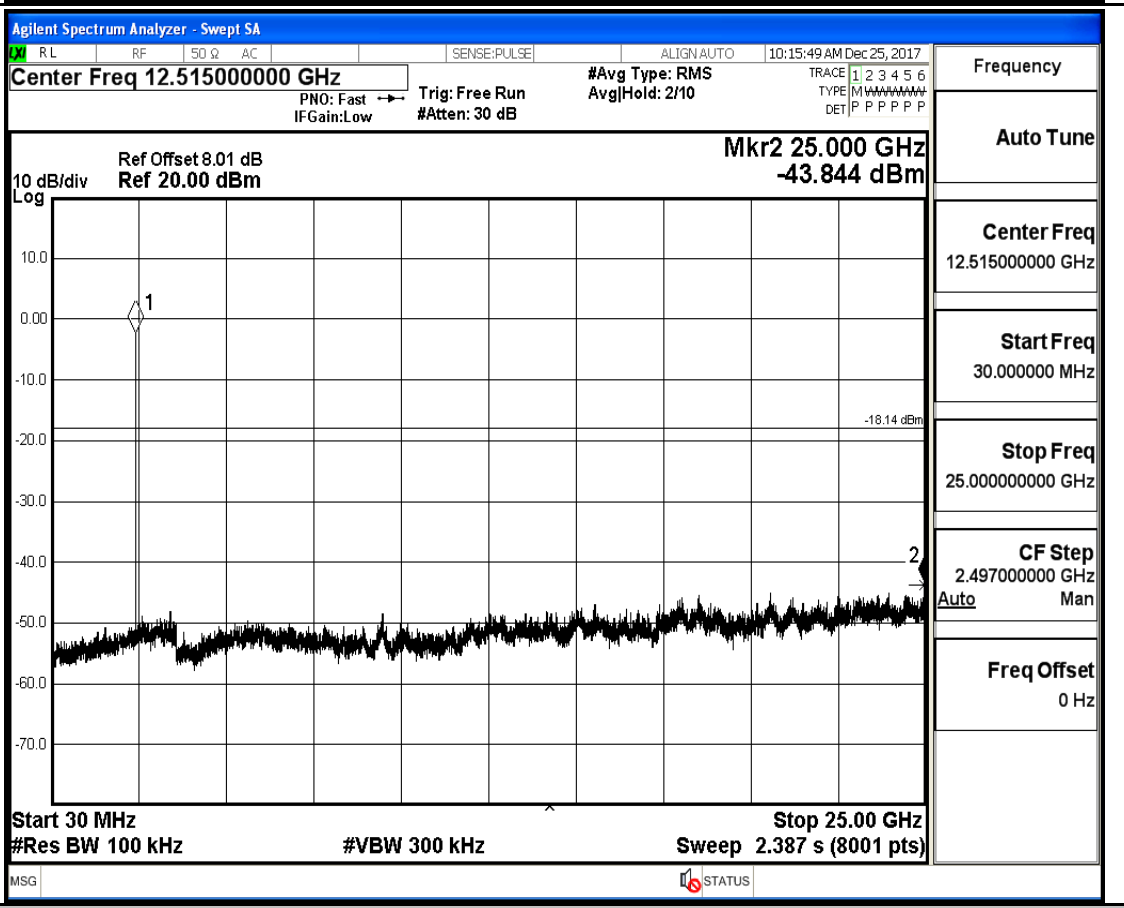
RF Conducted Spurious Emissions_π/4-DQPSK_2402



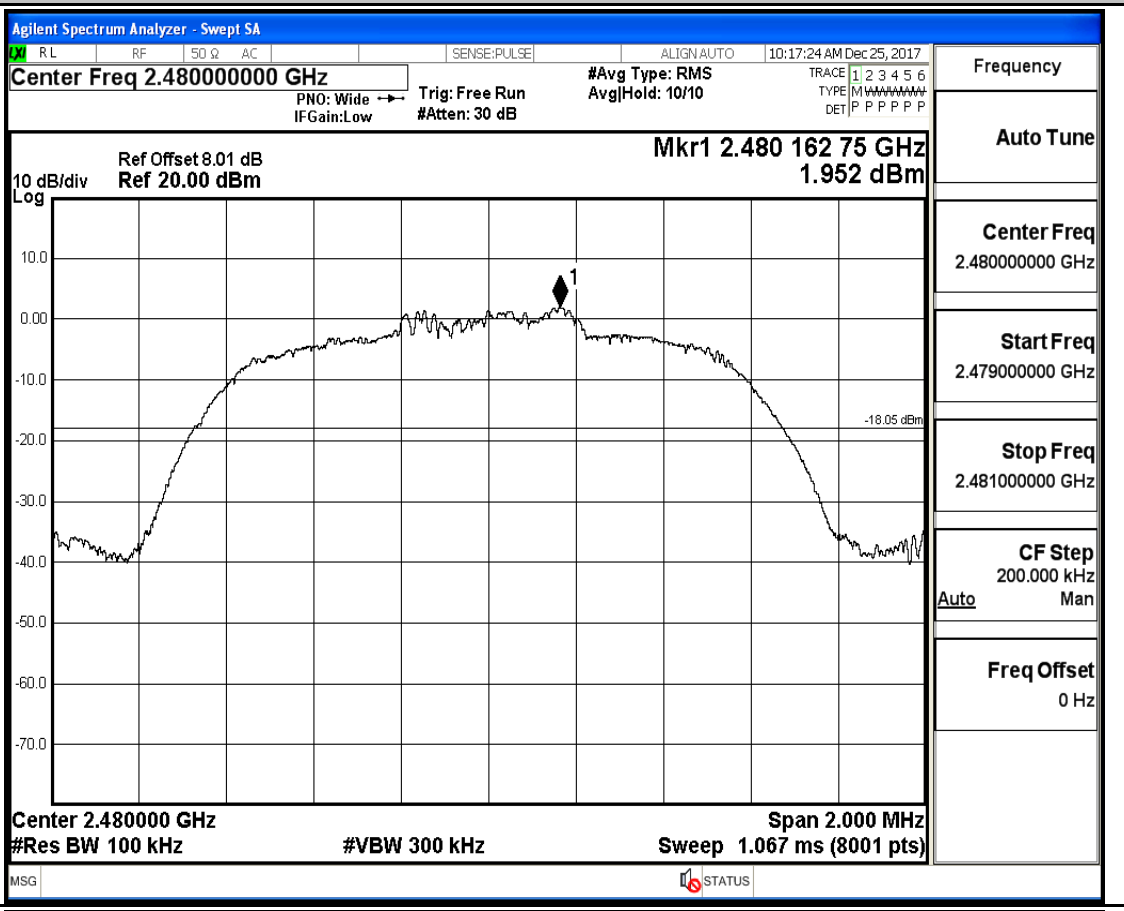


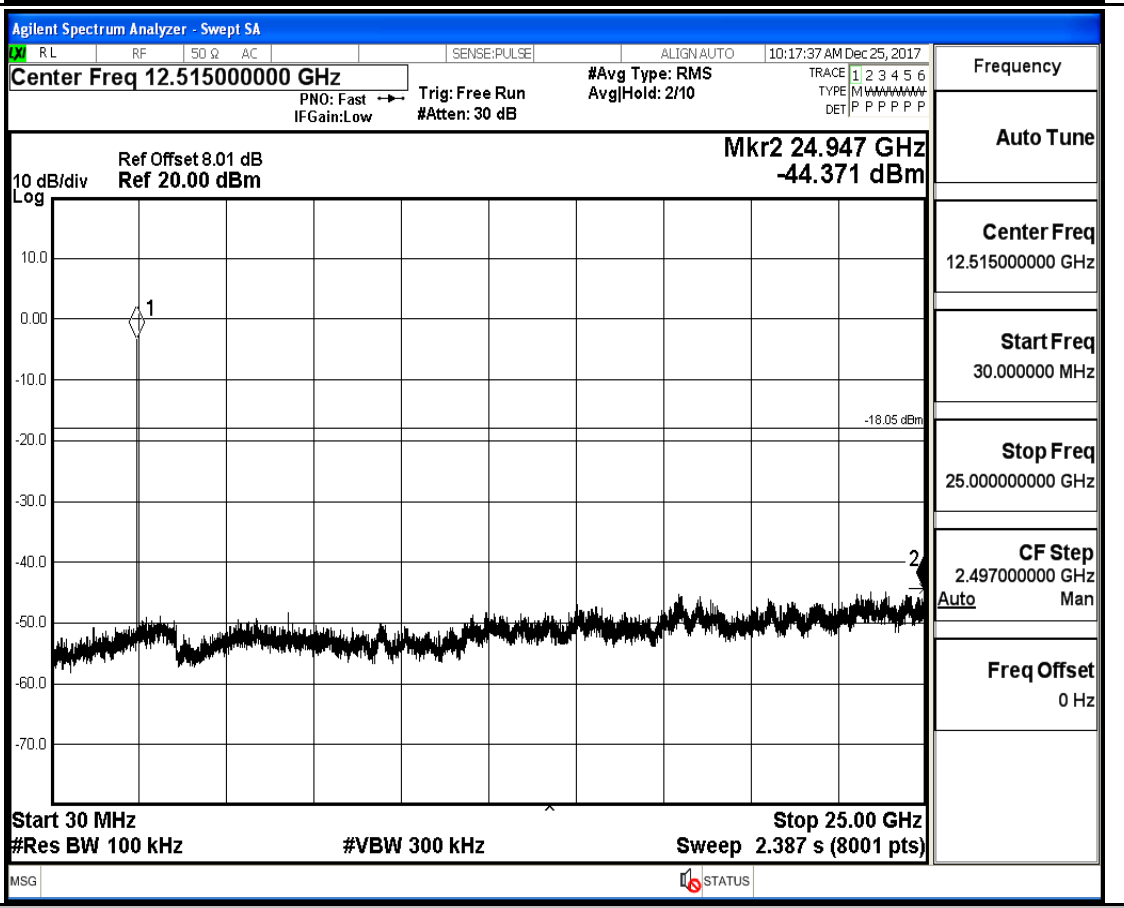
RF Conducted Spurious Emissions_π/4-DQPSK_2441



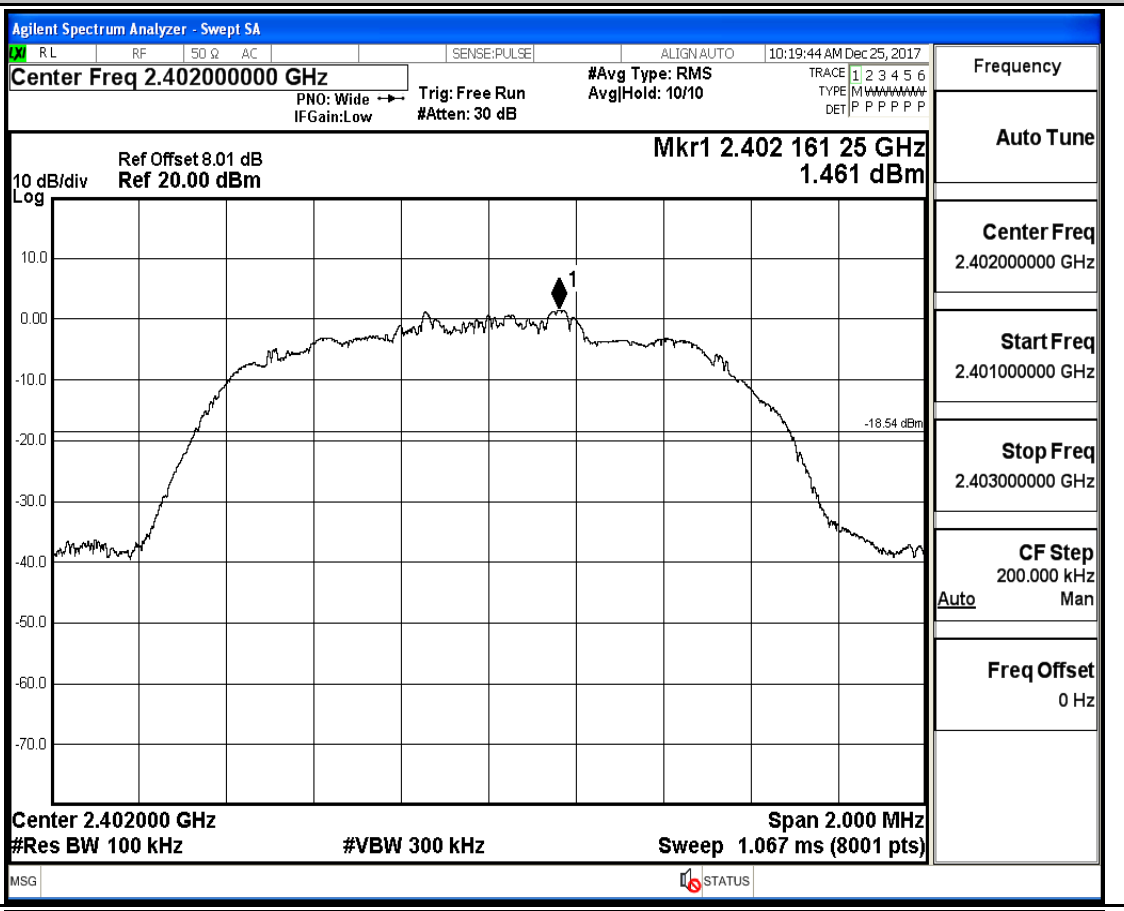


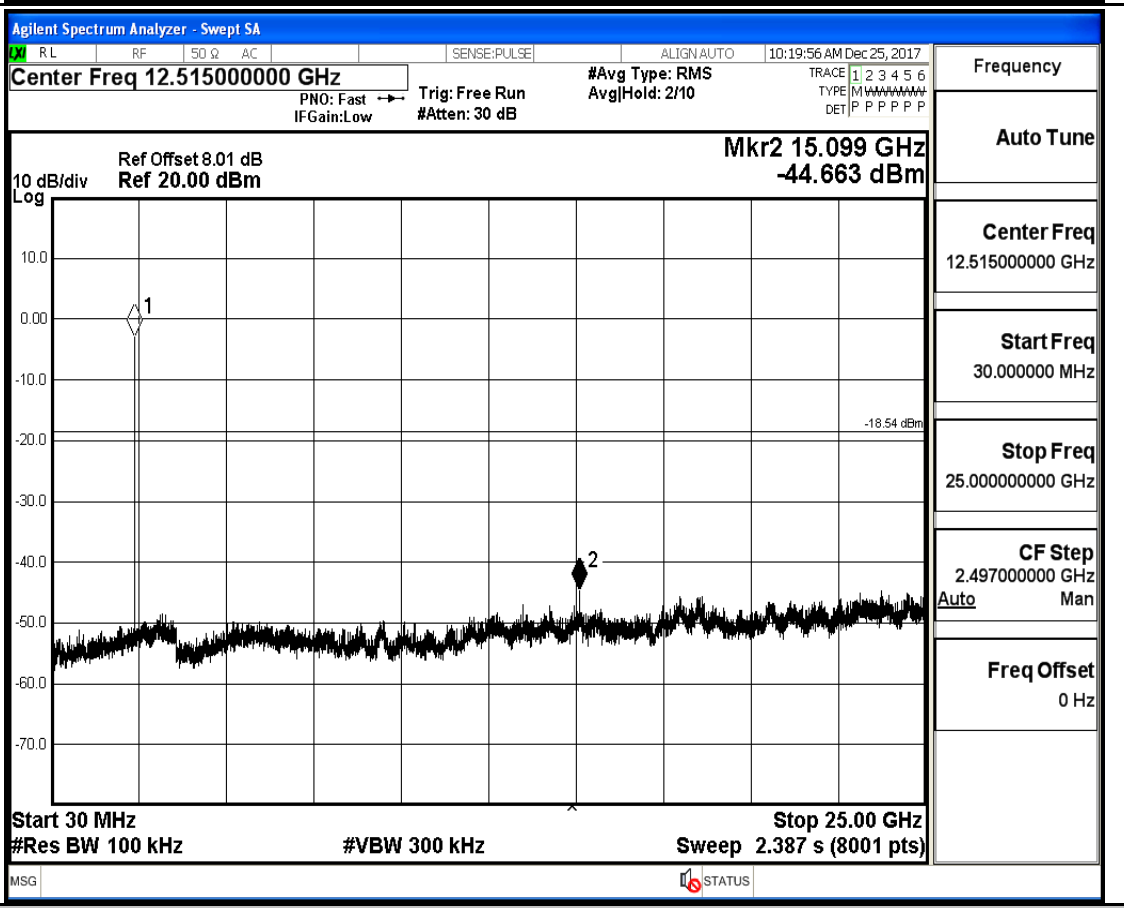
RF Conducted Spurious Emissions_π/4-DQPSK_2480



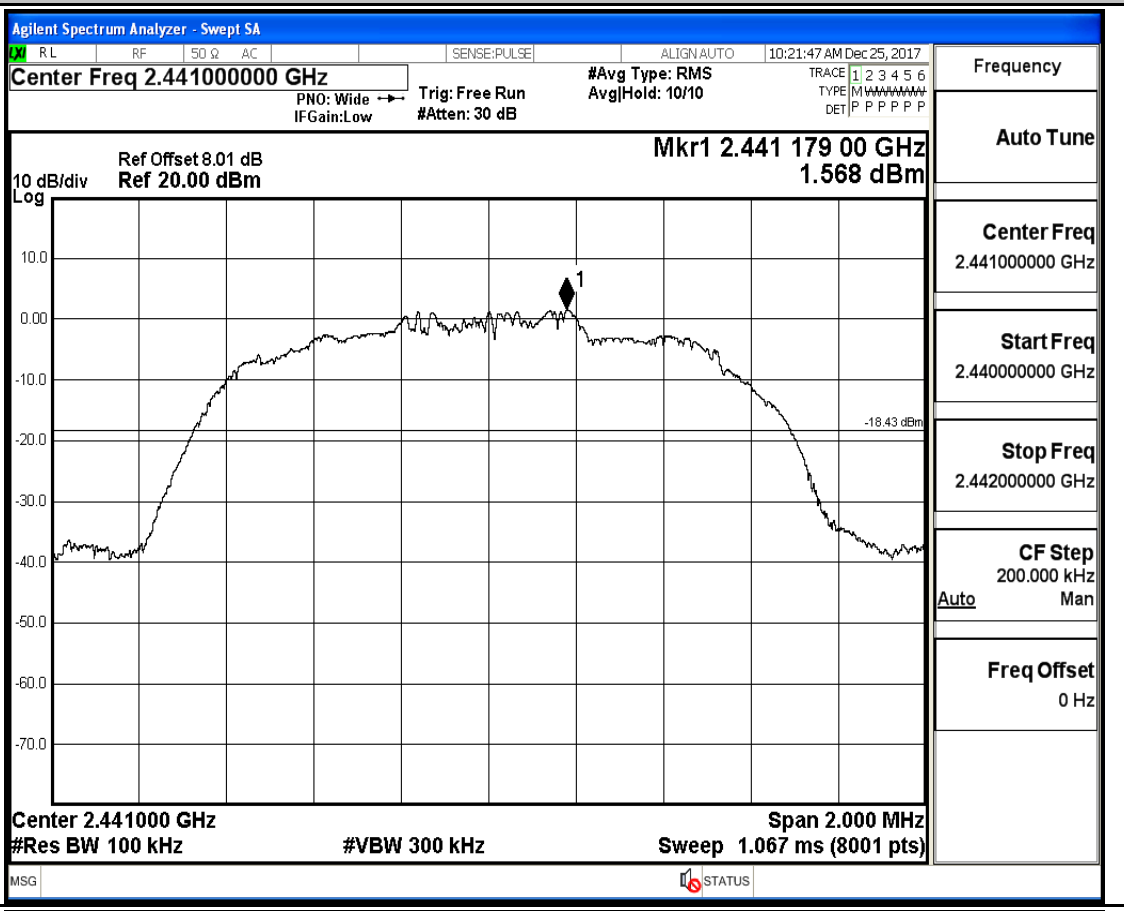


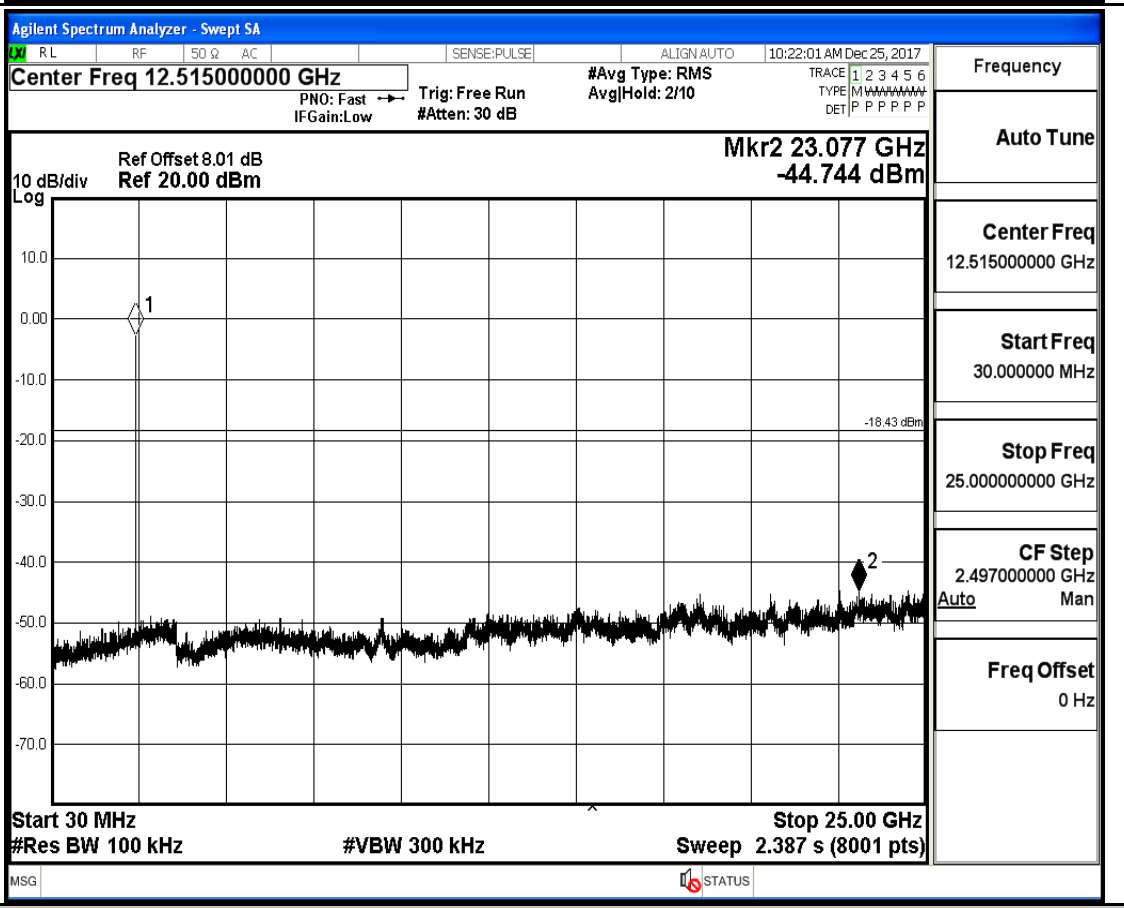
RF Conducted Spurious Emissions_8-DPSK_2402



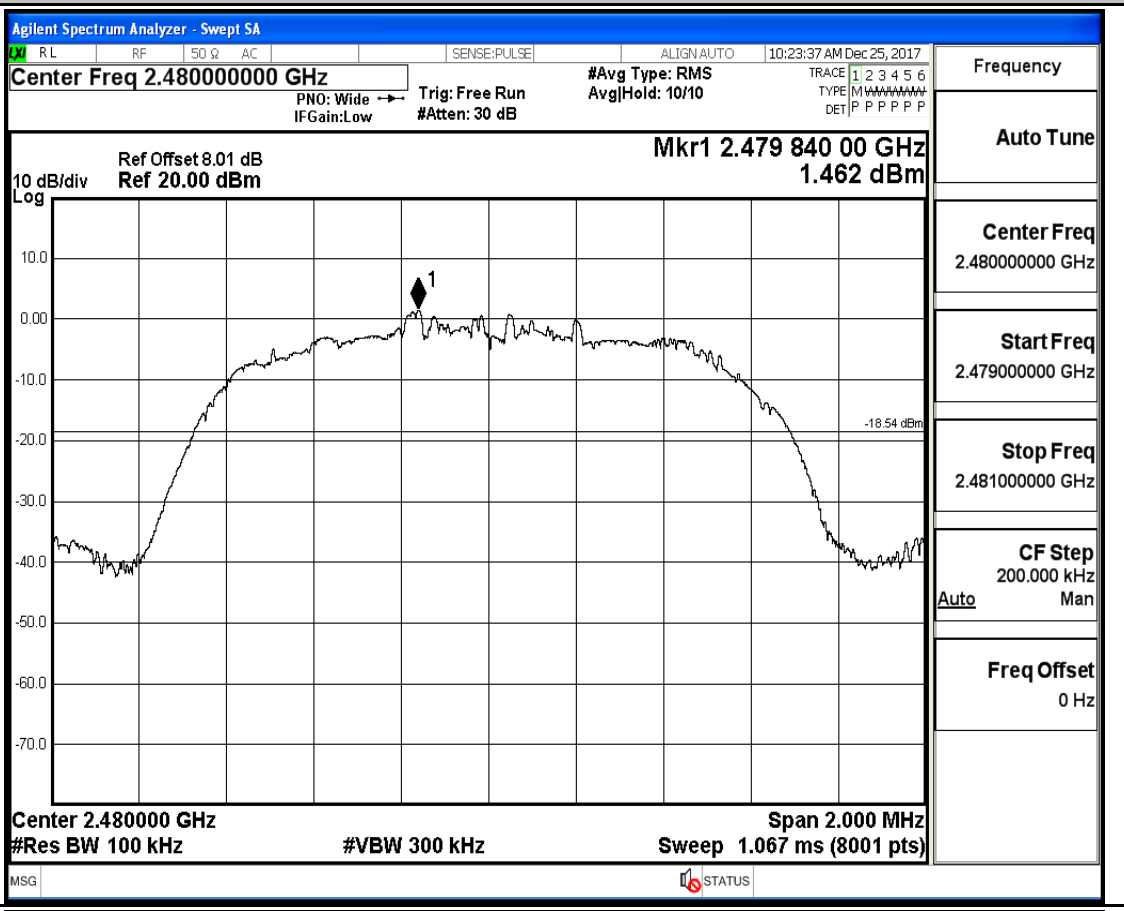


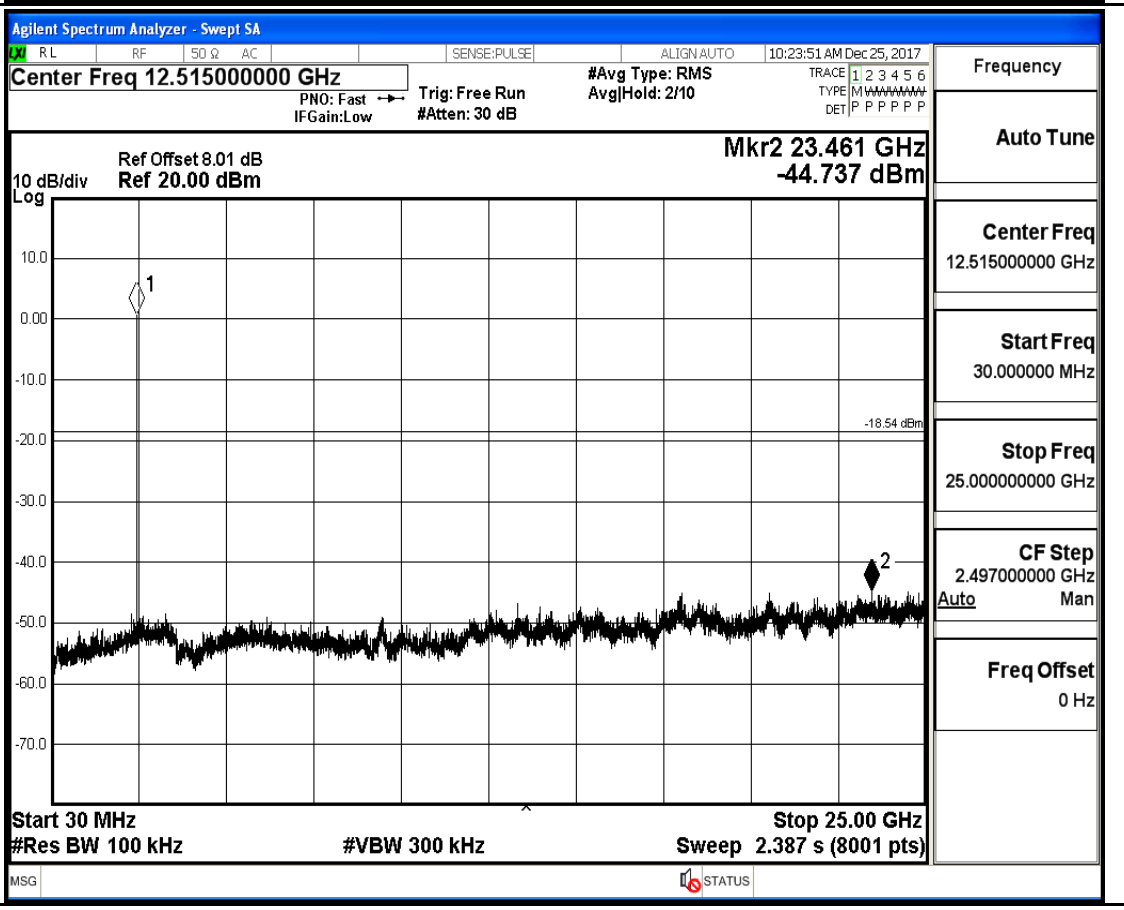
RF Conducted Spurious Emissions_8-DPSK_2441





RF Conducted Spurious Emissions_8-DPSK_2480

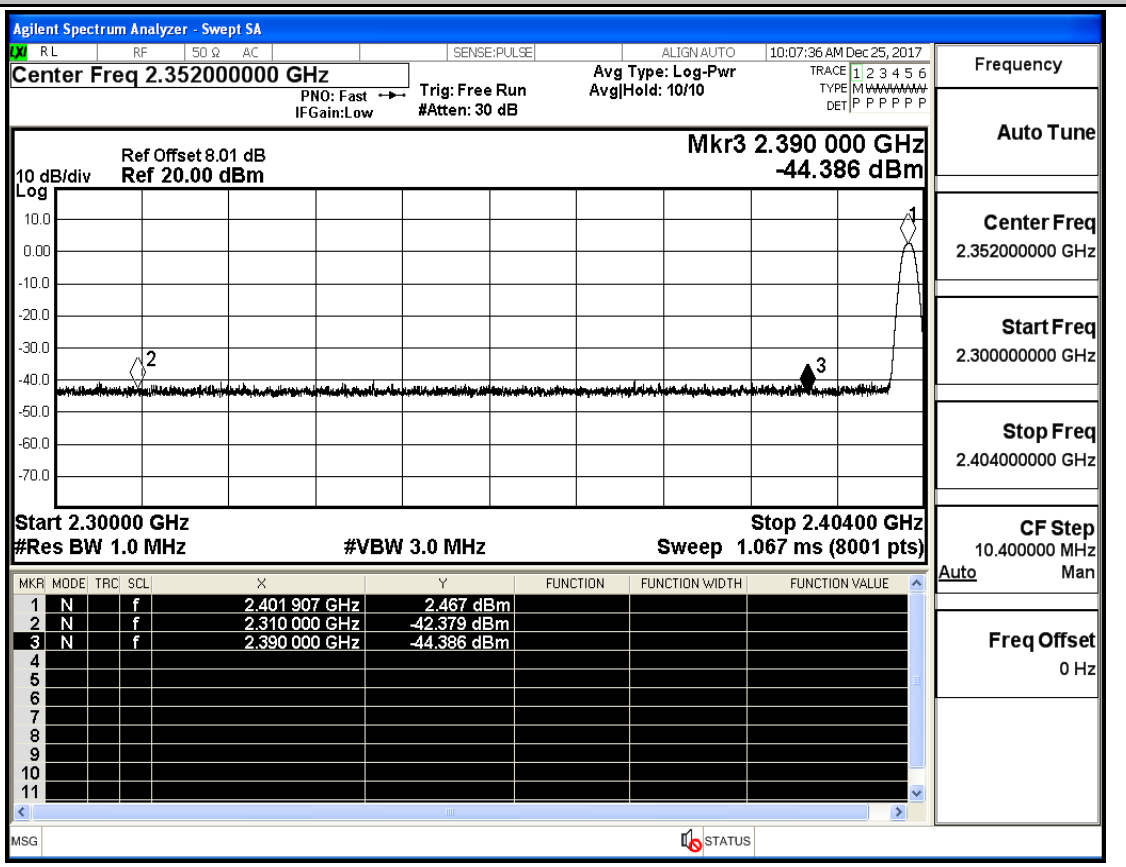




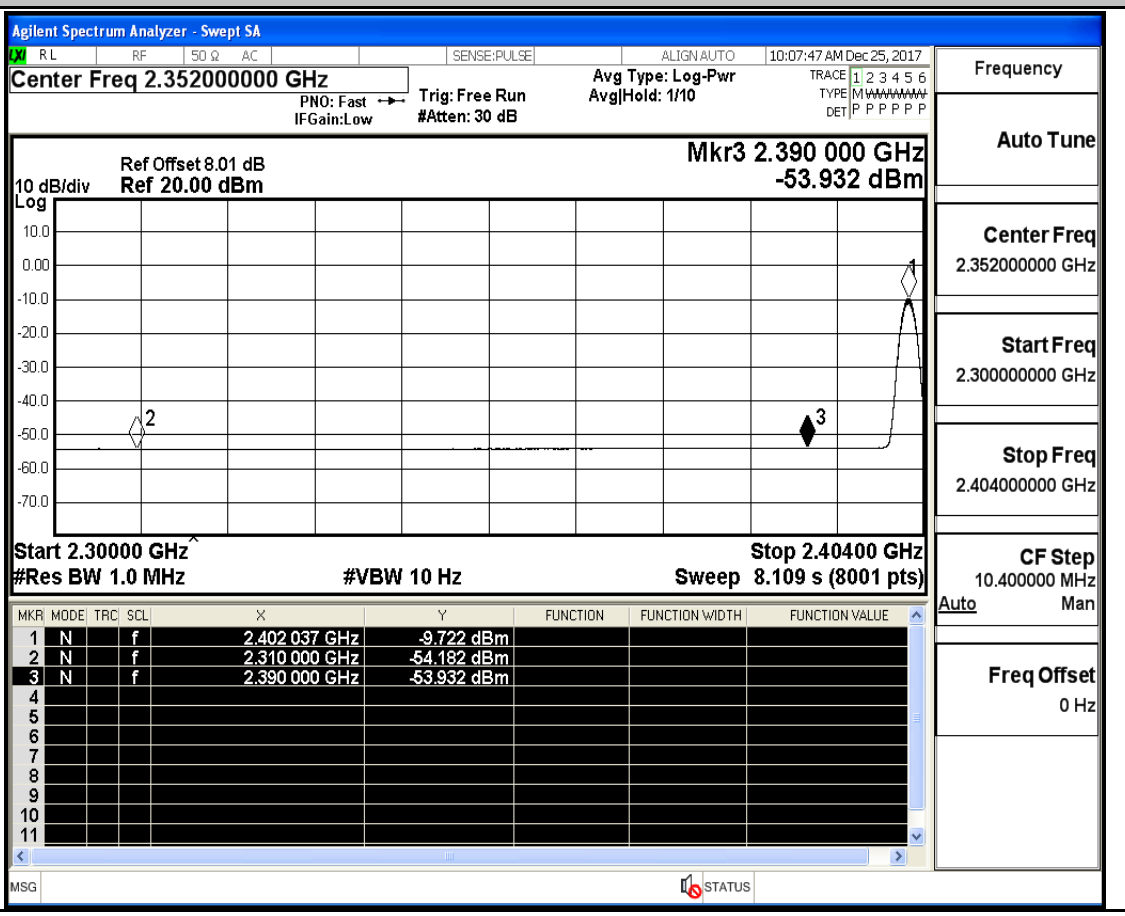
A.8 Restrict-band band-edge measurements

Test Mode	Hopping	Freq.	Power [dBm]	Gain	Ground Factor	E [dBuV/m]	Detector	Limit [dBuV/m]	Verdict
GFSK	Off	2310.0	-42.38	2	0	54.88	PEAK	74	PASS
	Off	2310.0	-54.18	2	0	43.08	AV	54	PASS
	Off	2390.0	-44.39	2	0	52.87	PEAK	74	PASS
	Off	2390.0	-53.93	2	0	43.33	AV	54	PASS
	Off	2483.5	-43.66	2	0	53.60	PEAK	74	PASS
	Off	2483.5	-53.69	2	0	43.57	AV	54	PASS
	Off	2500.0	-43.03	2	0	54.23	PEAK	74	PASS
	Off	2500.0	-53.61	2	0	43.65	AV	54	PASS
π/4-DQPSK	Off	2310.0	-43.75	2	0	53.51	PEAK	74	PASS
	Off	2310.0	-54.24	2	0	43.01	AV	54	PASS
	Off	2390.0	-43.19	2	0	54.07	PEAK	74	PASS
	Off	2390.0	-53.93	2	0	43.32	AV	54	PASS
	Off	2483.5	-43.93	2	0	53.33	PEAK	74	PASS
	Off	2483.5	-53.62	2	0	43.64	AV	54	PASS
	Off	2500.0	-43.11	2	0	54.15	PEAK	74	PASS
	Off	2500.0	-53.60	2	0	43.66	AV	54	PASS
8-DPSK	Off	2310.0	-44.14	2	0	53.12	PEAK	74	PASS
	Off	2310.0	-54.22	2	0	43.04	AV	54	PASS
	Off	2390.0	-42.92	2	0	54.34	PEAK	74	PASS
	Off	2390.0	-53.95	2	0	43.31	AV	54	PASS
	Off	2483.5	-43.54	2	0	53.72	PEAK	74	PASS
	Off	2483.5	-53.62	2	0	43.63	AV	54	PASS
	Off	2500.0	-43.54	2	0	53.72	PEAK	74	PASS
	Off	2500.0	-53.61	2	0	43.65	AV	54	PASS

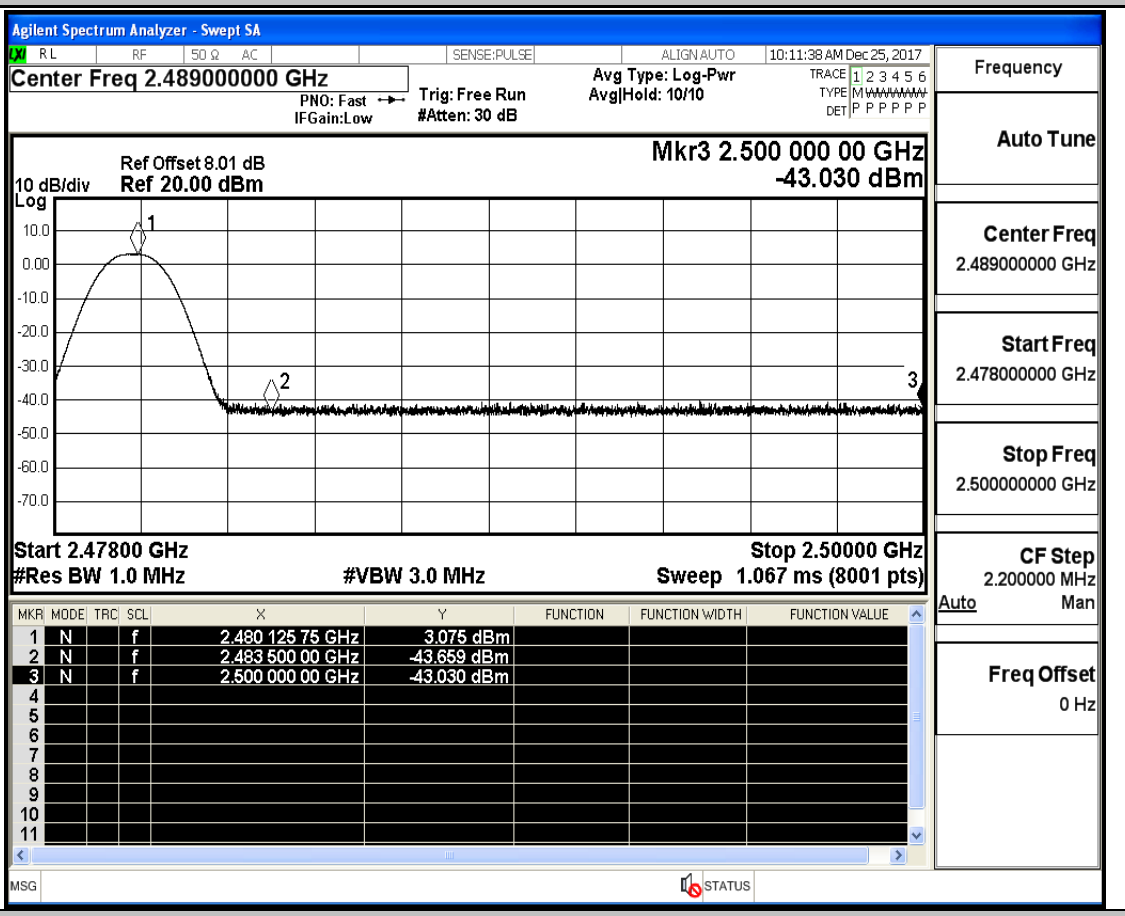
Restrict-band band-edge measurements_Hopping Off_ GFSK_PEAK



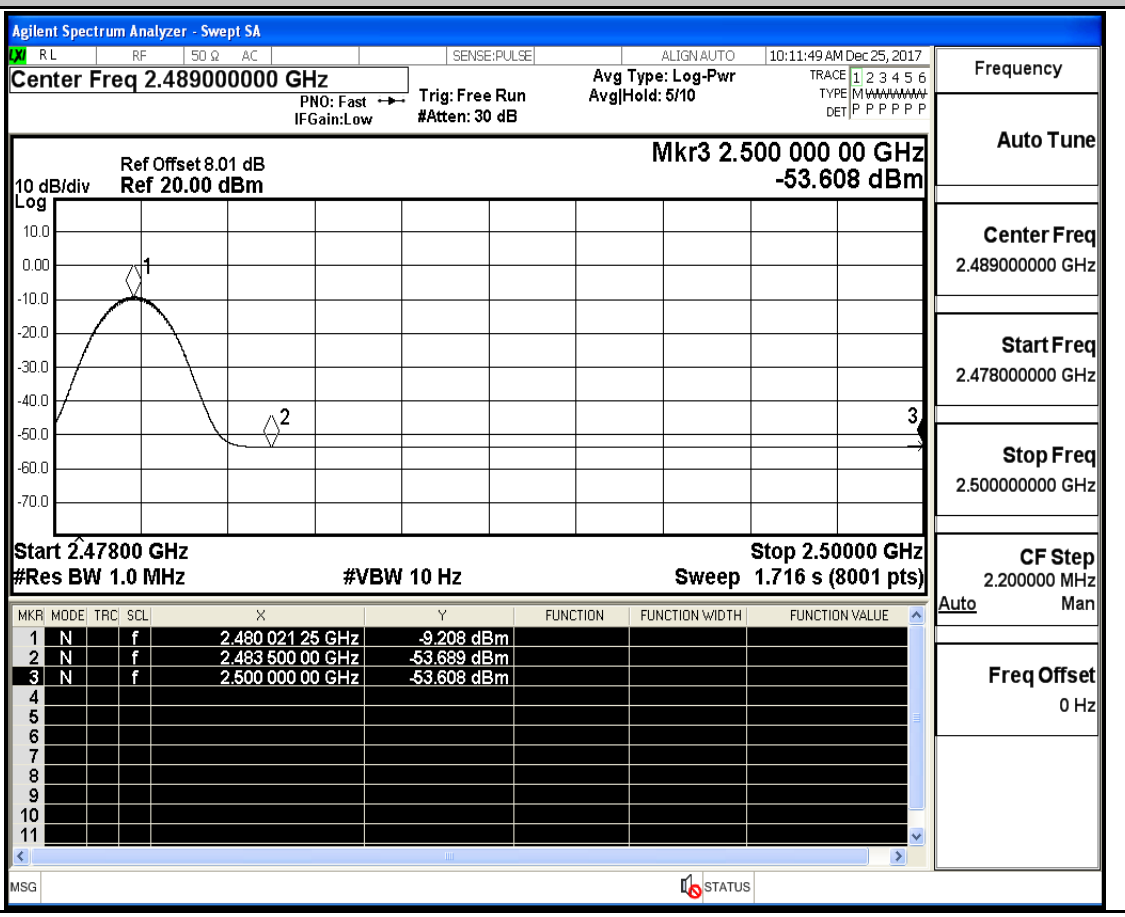
Restrict-band band-edge measurements_Hopping Off_ GFSK_Average



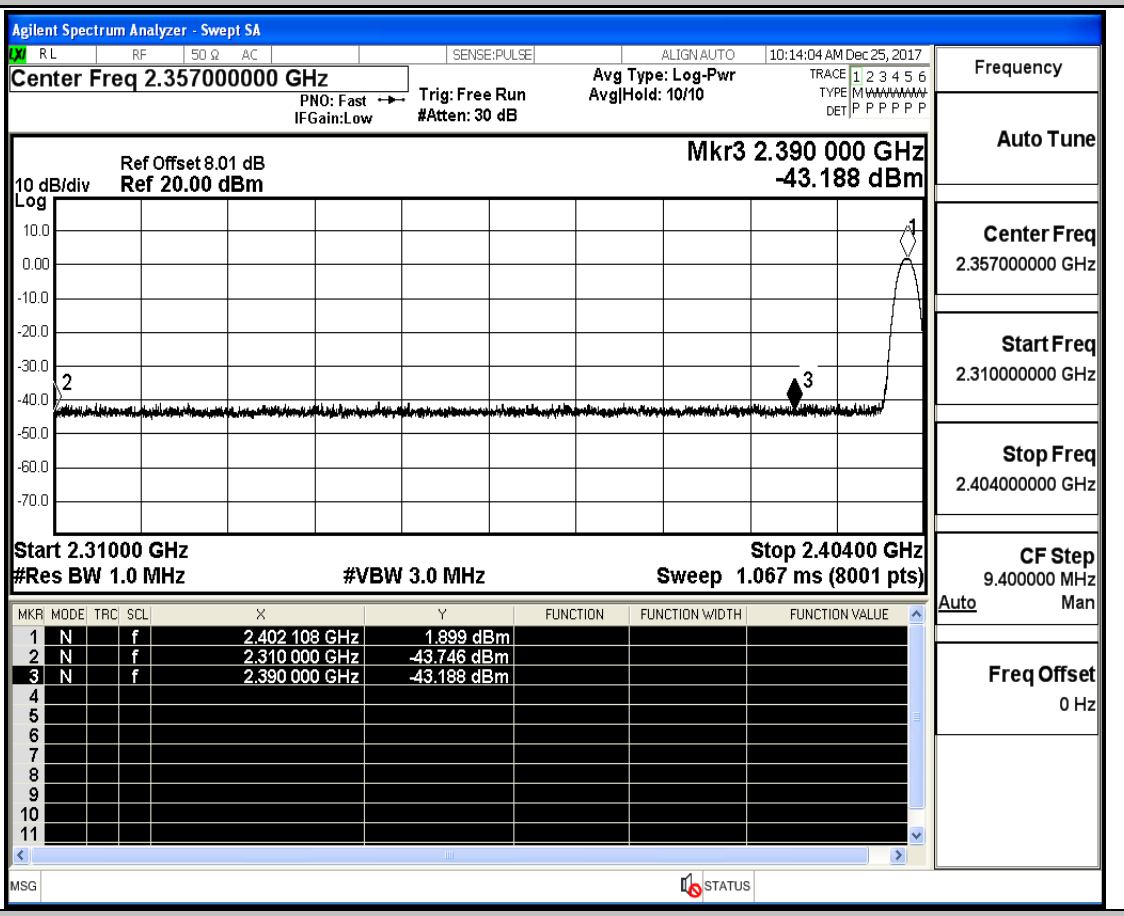
Restrict-band band-edge measurements_Hopping Off_ GFSK_PEAK



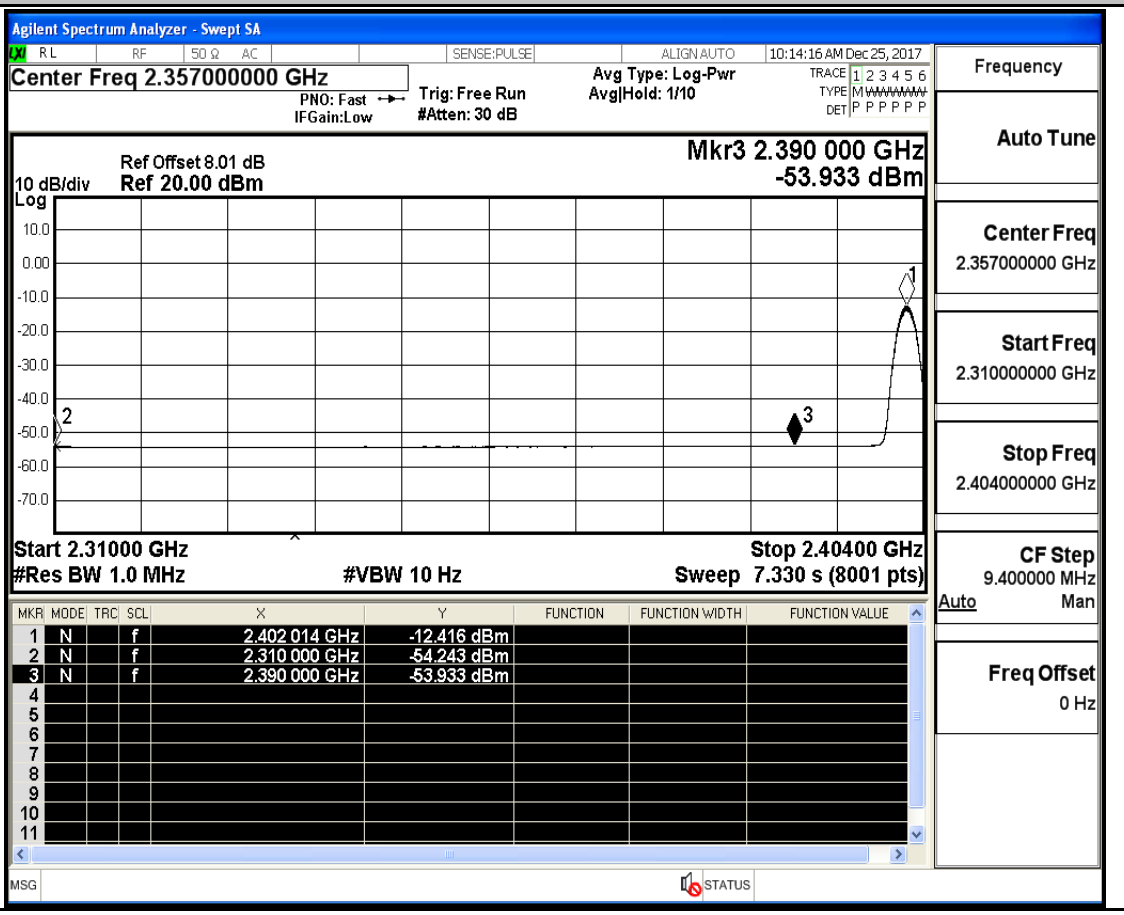
Restrict-band band-edge measurements_Hopping Off_ GFSK_Average



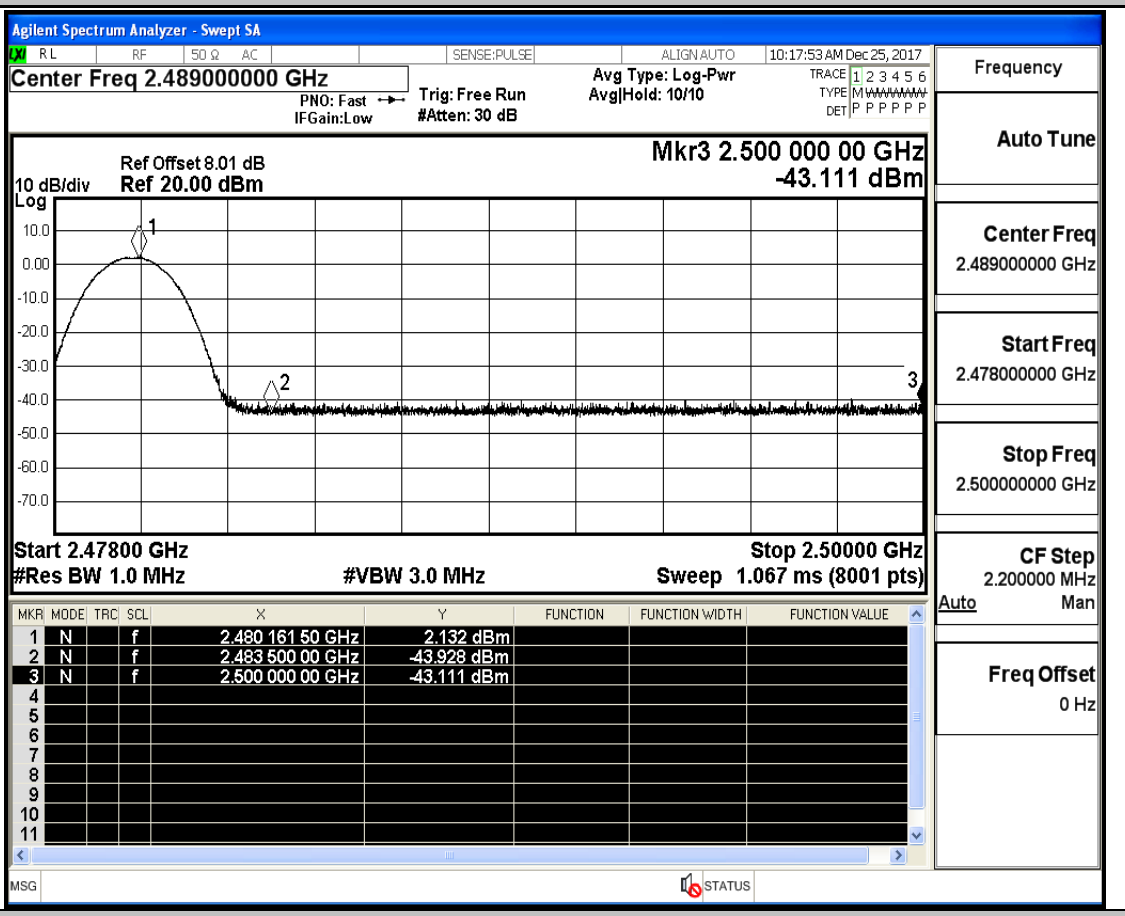
Restrict-band band-edge measurements_Hopping Off_π/4-DQPSK_PEAK



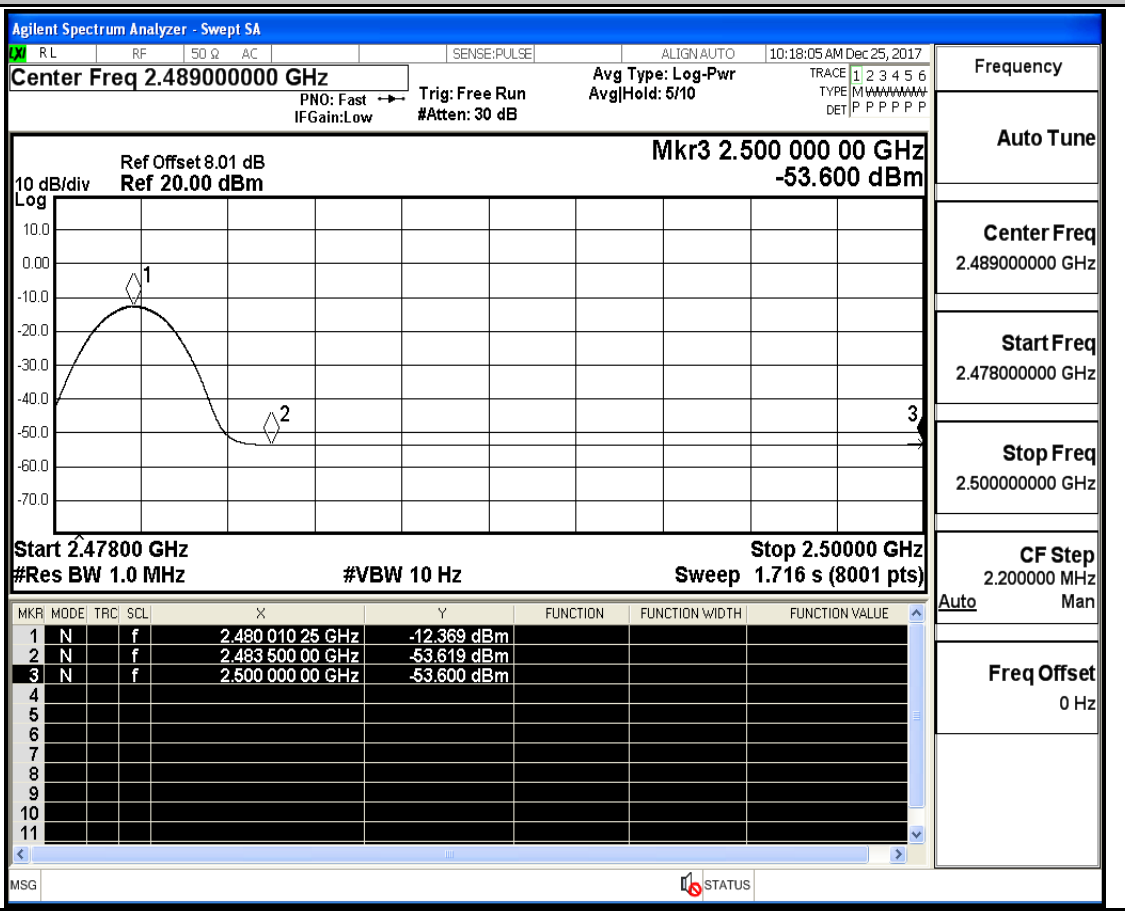
Restrict-band band-edge measurements_Hopping Off_π/4-DQPSK_Average



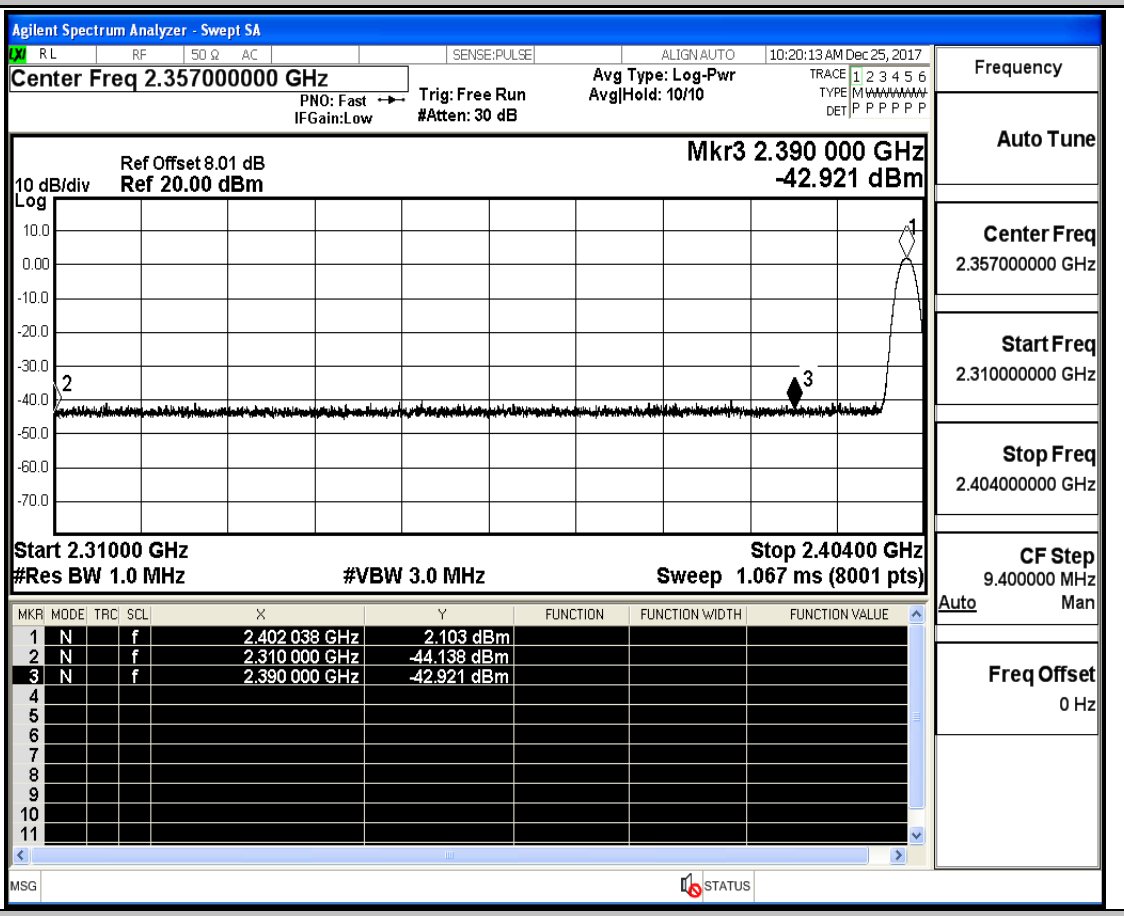
Restrict-band band-edge measurements_Hopping Off_π/4-DQPSK_PEAK



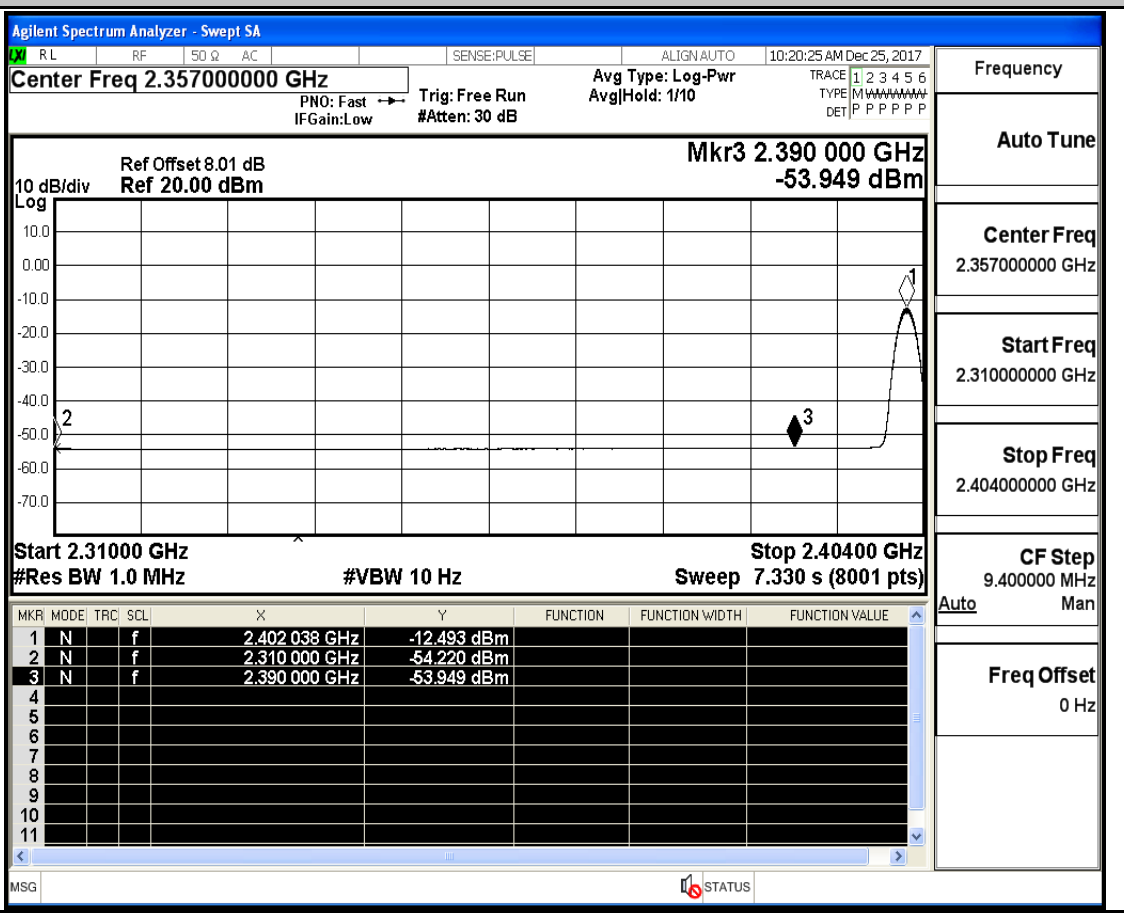
Restrict-band band-edge measurements_Hopping Off_π/4-DQPSK_Average



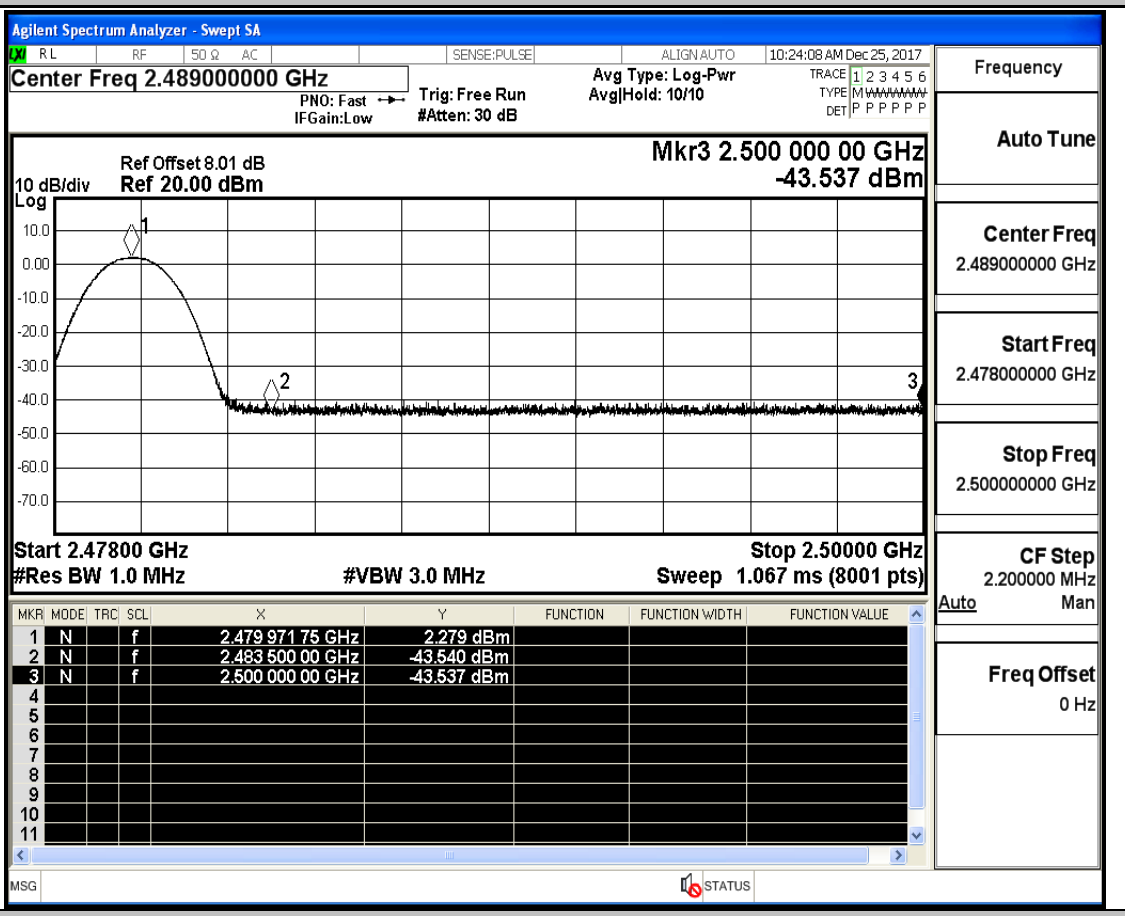
Restrict-band band-edge measurements_Hopping Off_8-DPSK_PEAK



Restrict-band band-edge measurements_Hopping Off_8-DPSK_Average



Restrict-band band-edge measurements_Hopping Off_8-DPSK_PEAK



Restrict-band band-edge measurements_Hopping Off_8-DPSK_Average