

Appendix A

RF Test Data for BT V2.1 (BDR/EDR) (Conducted Measurement)

Product Name: Feature phone

Trade Mark: KENXINDA

Test Model: C3330

Environmental Conditions

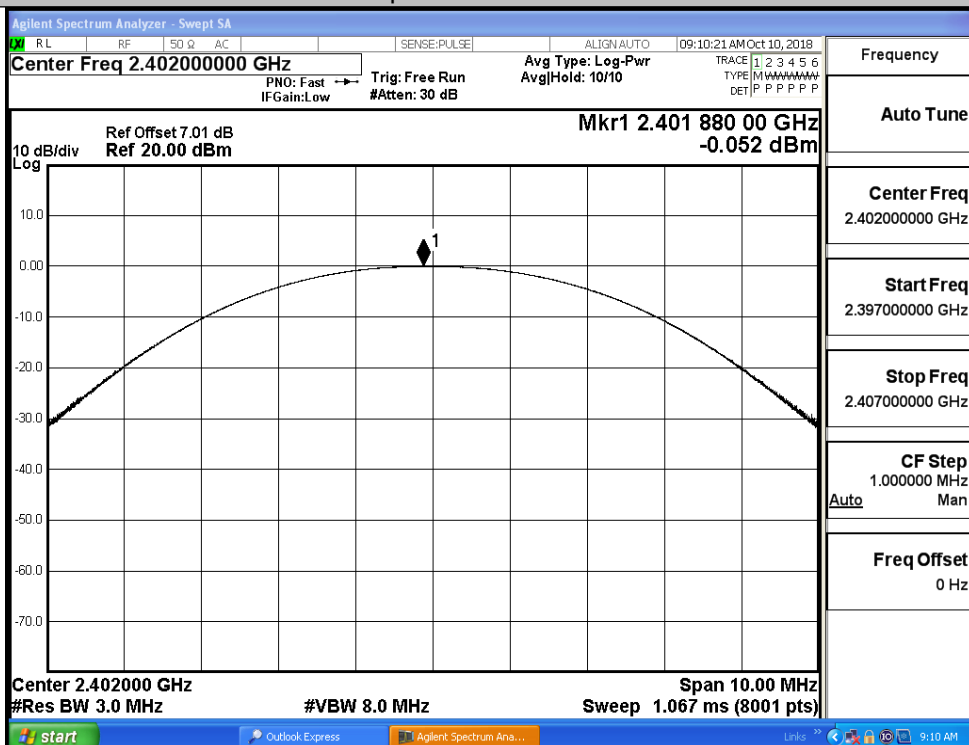
Temperature:	25.3°C
Relative Humidity:	54.3%
ATM Pressure:	100.0 kPa
Test Engineer:	Diamond.Lu
Supervised by:	Jayden.Zhuo

A.1 Maximum Conducted Peak Output Power

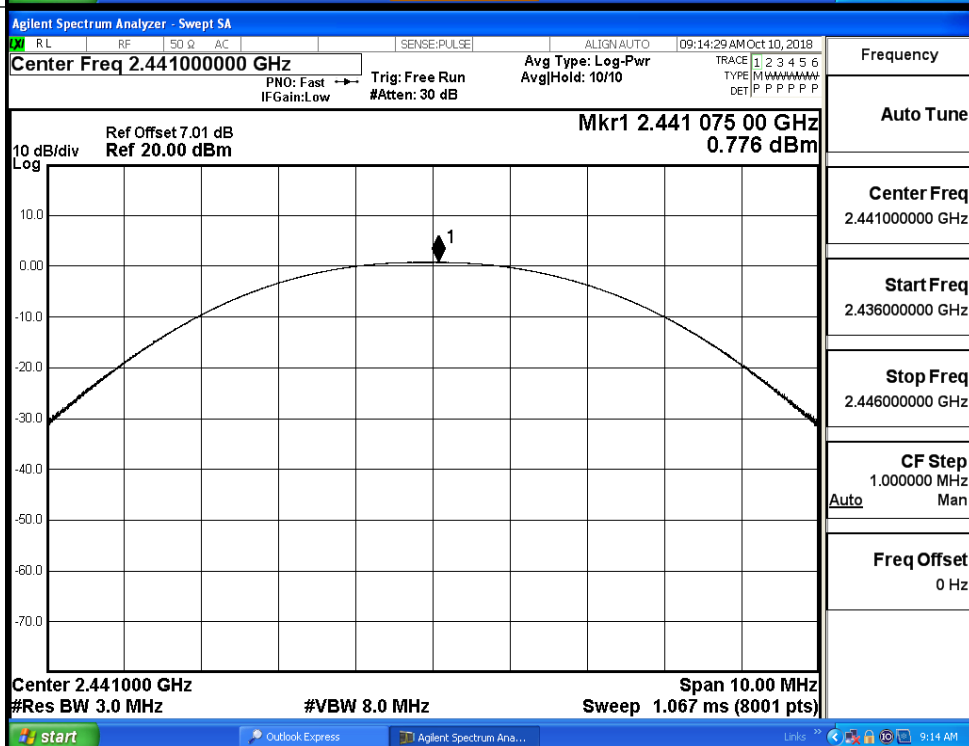
Mode	Channel.	Maximum Peak Output Power [dBm]	Limit [dBm]	Verdict
GFSK	LCH	-0.052	30	PASS
	MCH	0.776	30	PASS
	HCH	0.844	30	PASS
$\pi/4$ DQPSK	LCH	-0.709	21	PASS
	MCH	0.040	21	PASS
	HCH	-0.003	21	PASS
8DPSK	LCH	-0.577	21	PASS
	MCH	0.126	21	PASS
	HCH	0.053	21	PASS

Test Graphs

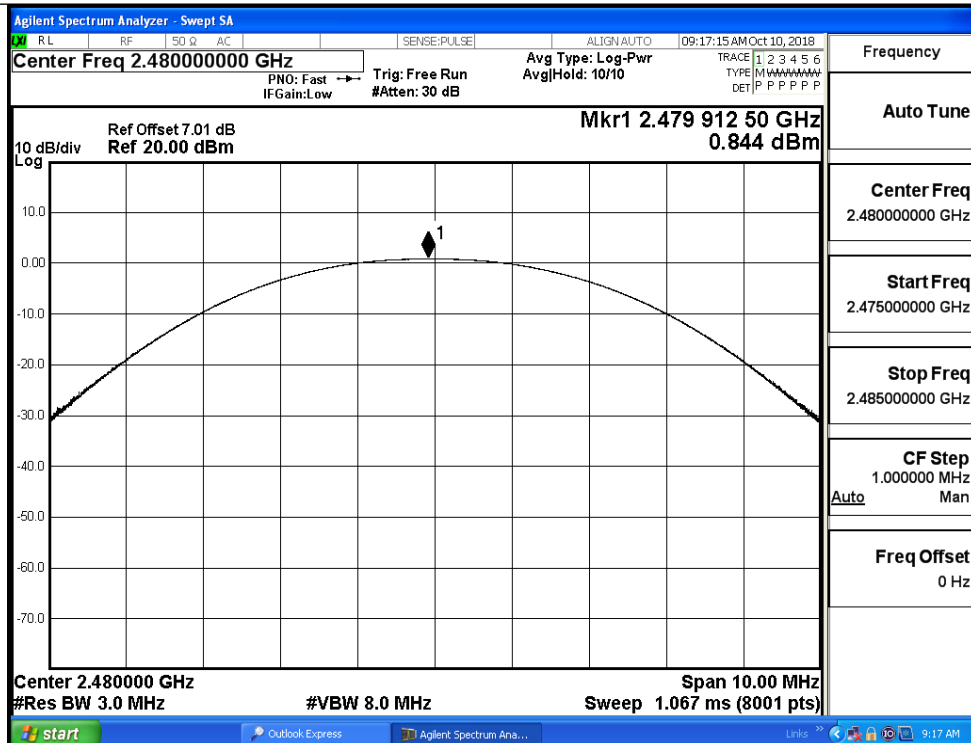
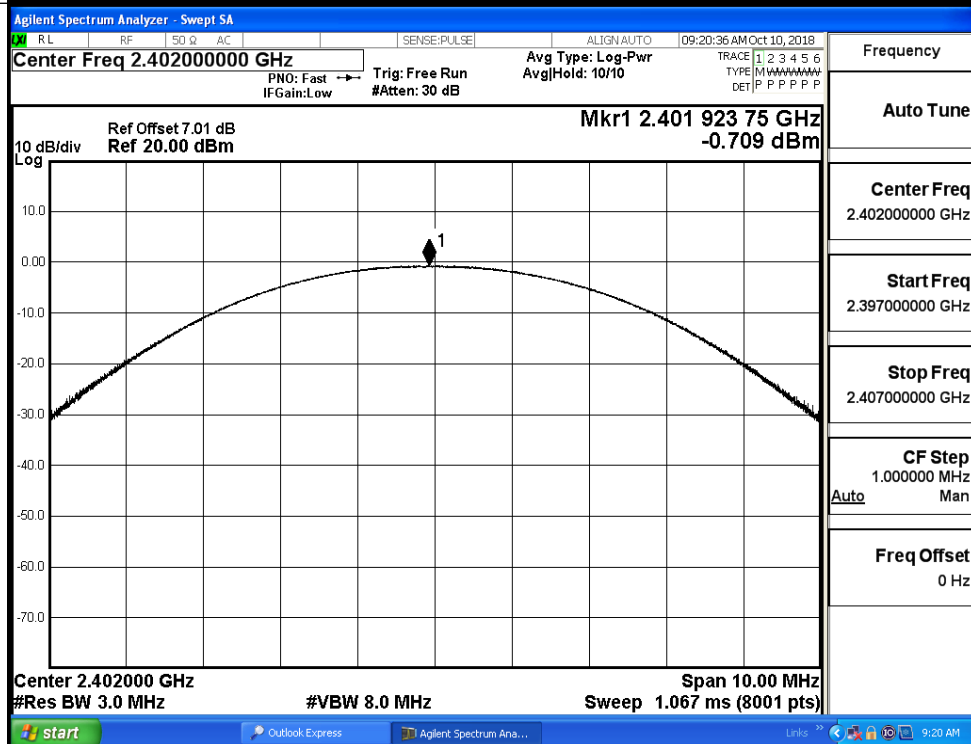
GFSK/LCH

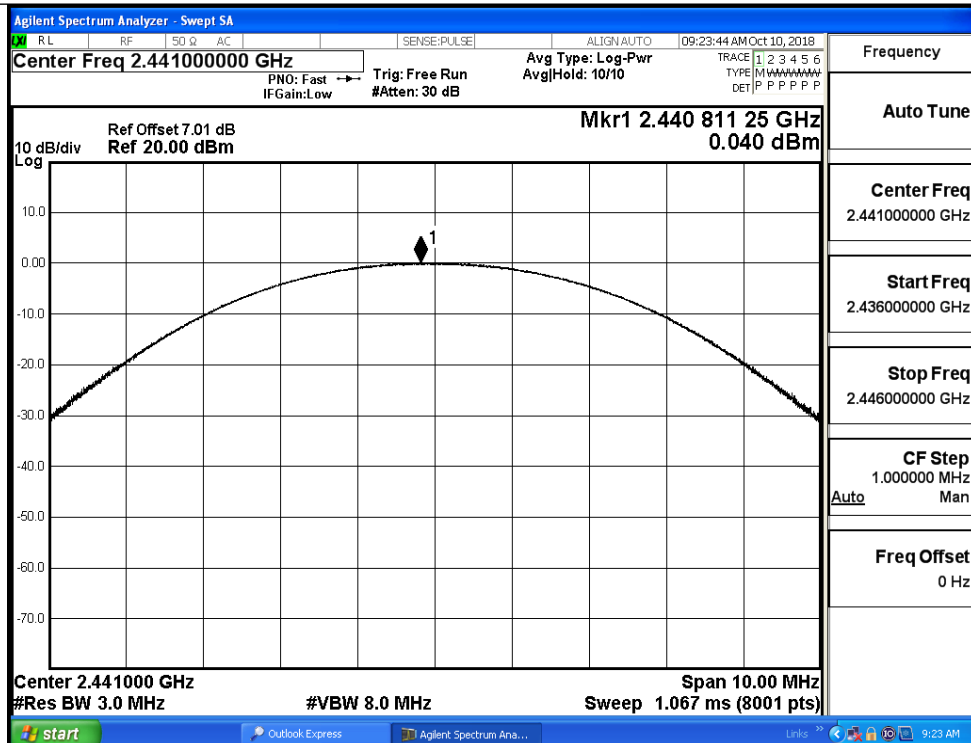
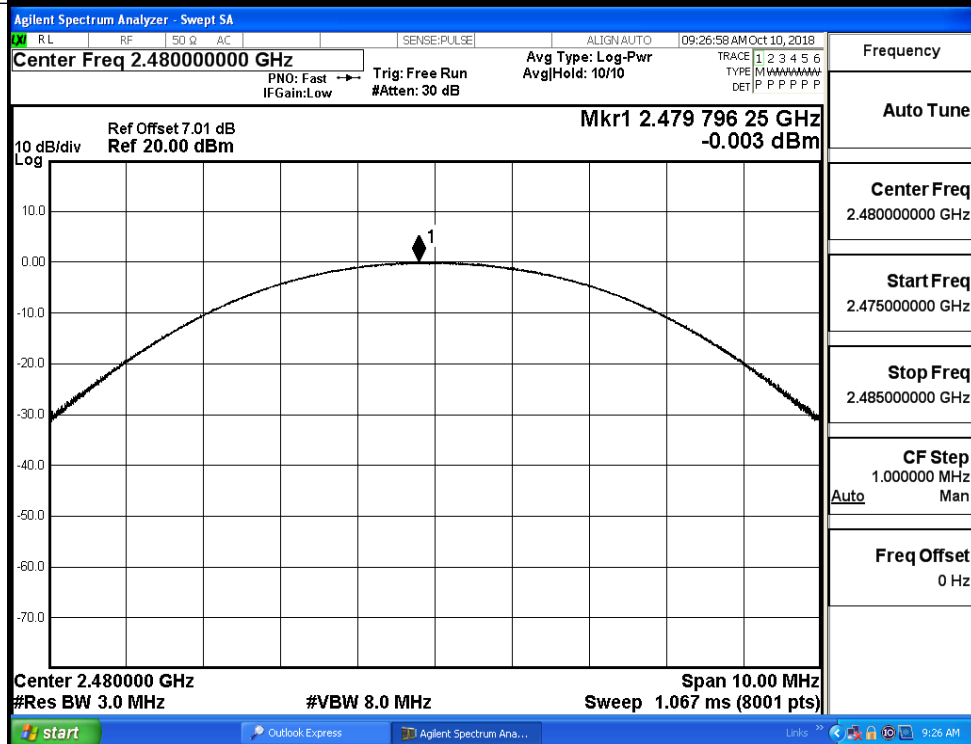


GFSK/MCH

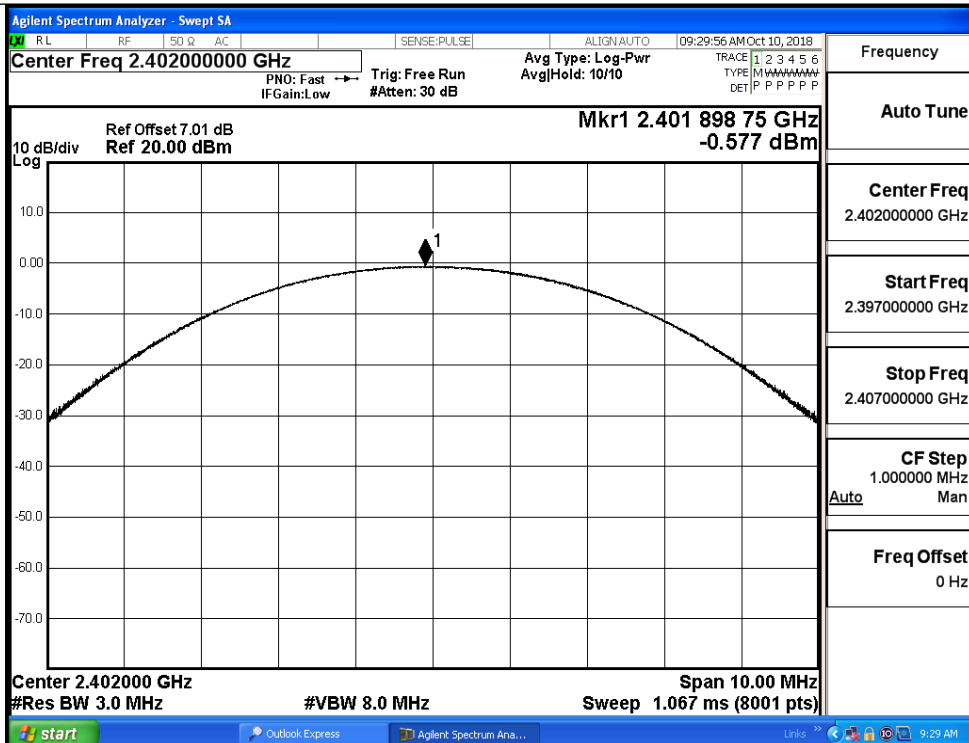


GFSK/HCH

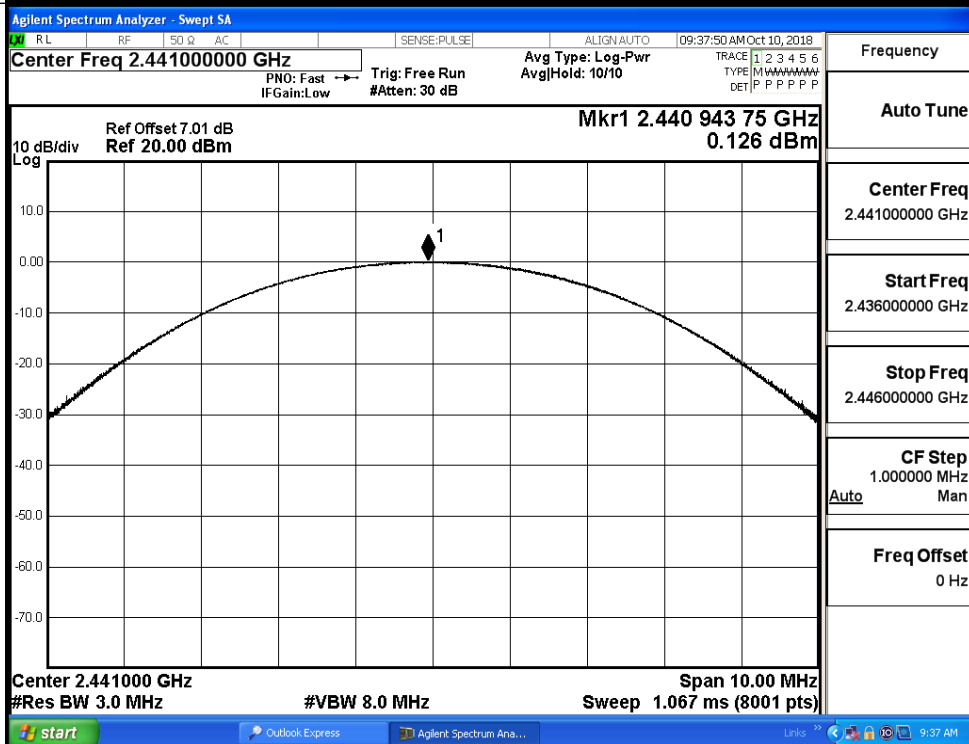
 π /4DQPSK/LCH

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

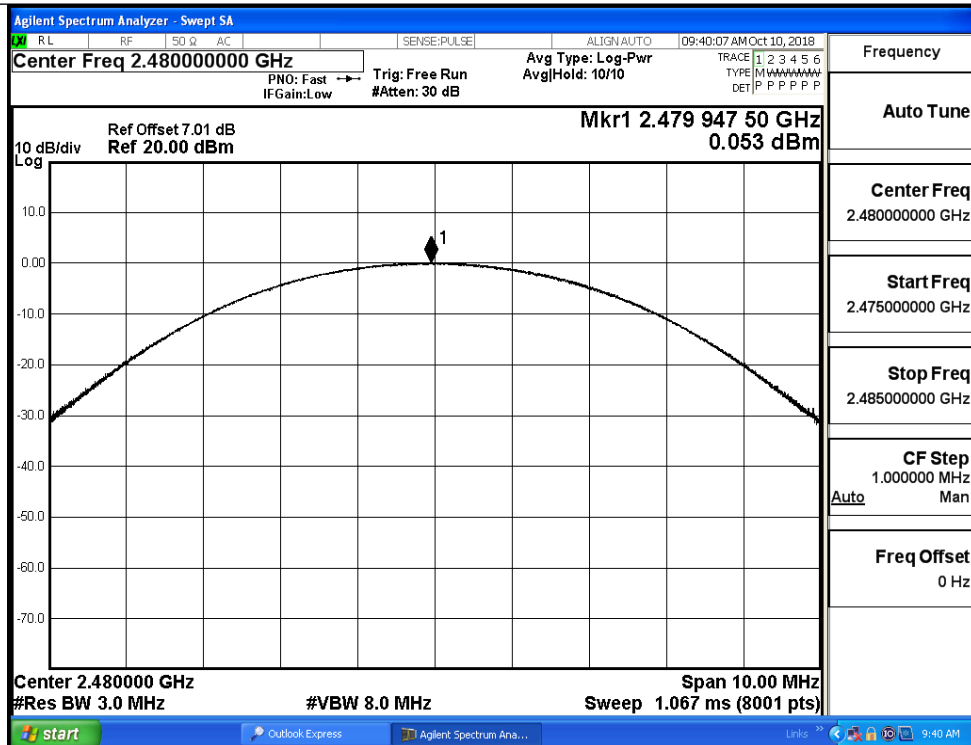
8DPSK/LCH



8DPSK/MCH



8DPSK/HCH

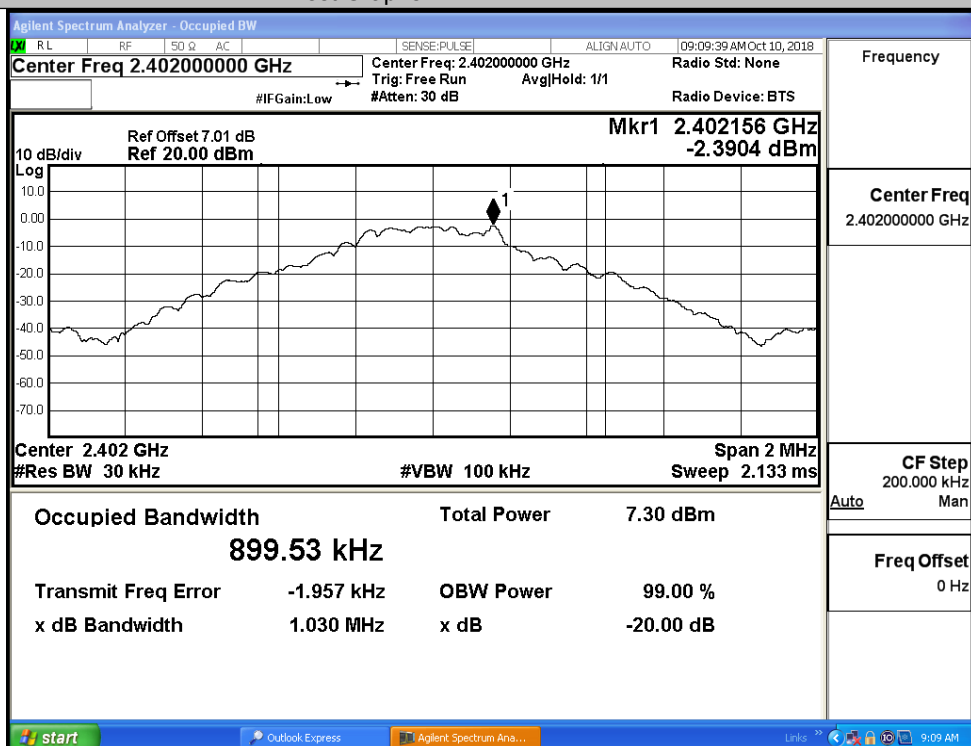


A.2 20dB Bandwidth

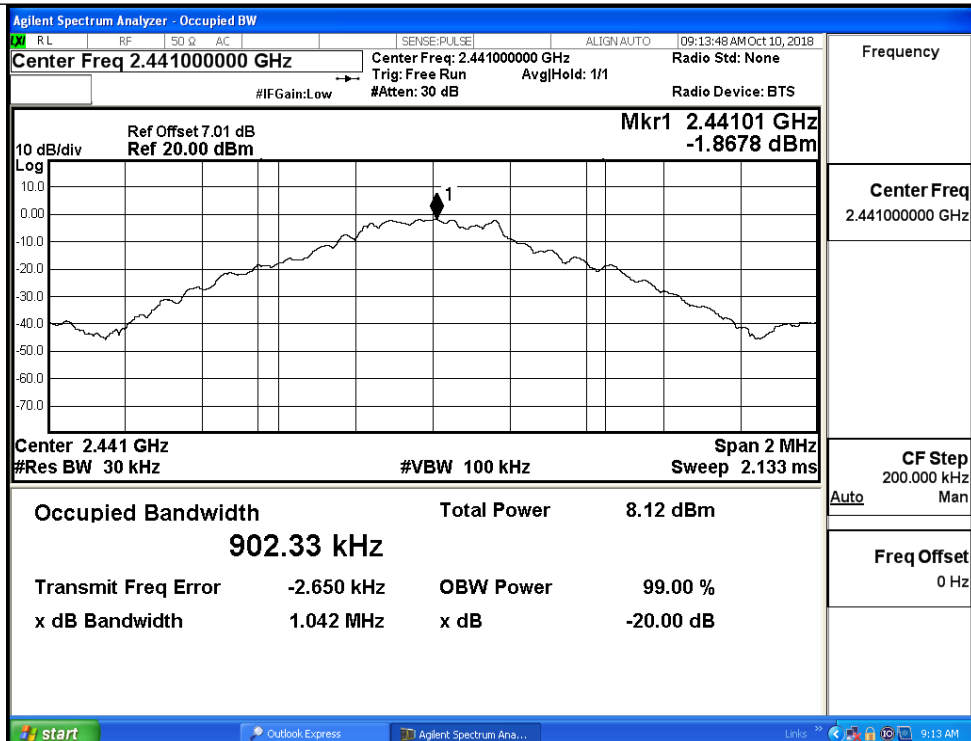
Mode	Channel.	20dB Bandwidth [MHz]	Limit [MHz]	Verdict
GFSK	LCH	1.030	Not Specified	PASS
	MCH	1.042	Not Specified	PASS
	HCH	1.037	Not Specified	PASS
$\pi/4$ DQPSK	LCH	1.292	Not Specified	PASS
	MCH	1.309	Not Specified	PASS
	HCH	1.291	Not Specified	PASS
8DPSK	LCH	1.299	Not Specified	PASS
	MCH	1.295	Not Specified	PASS
	HCH	1.293	Not Specified	PASS

Test Graphs

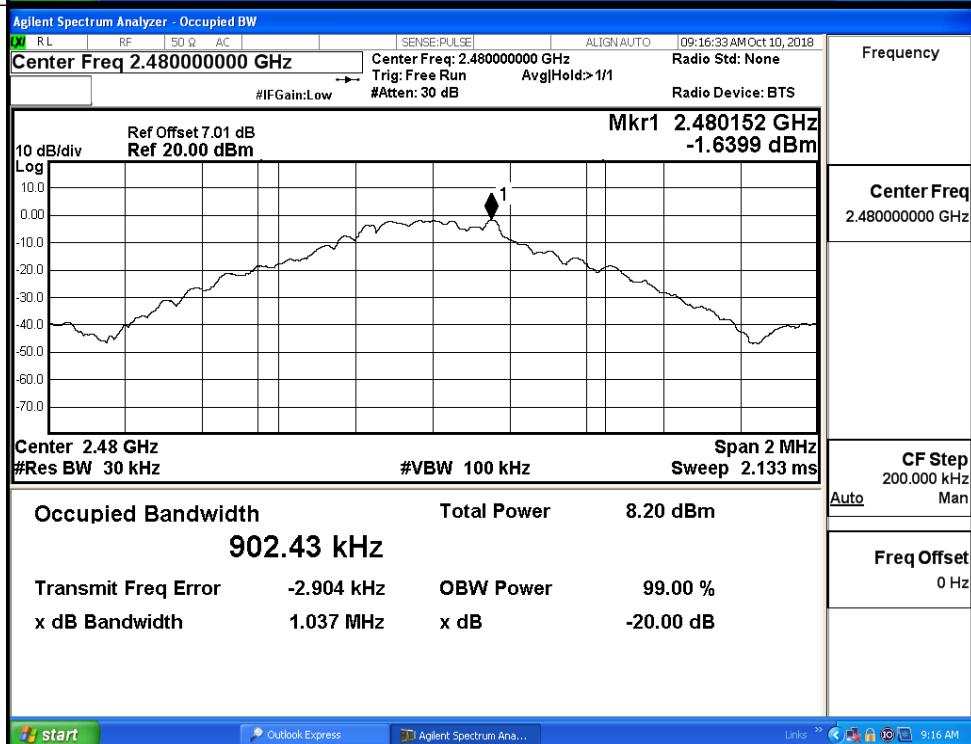
GFSK/LCH

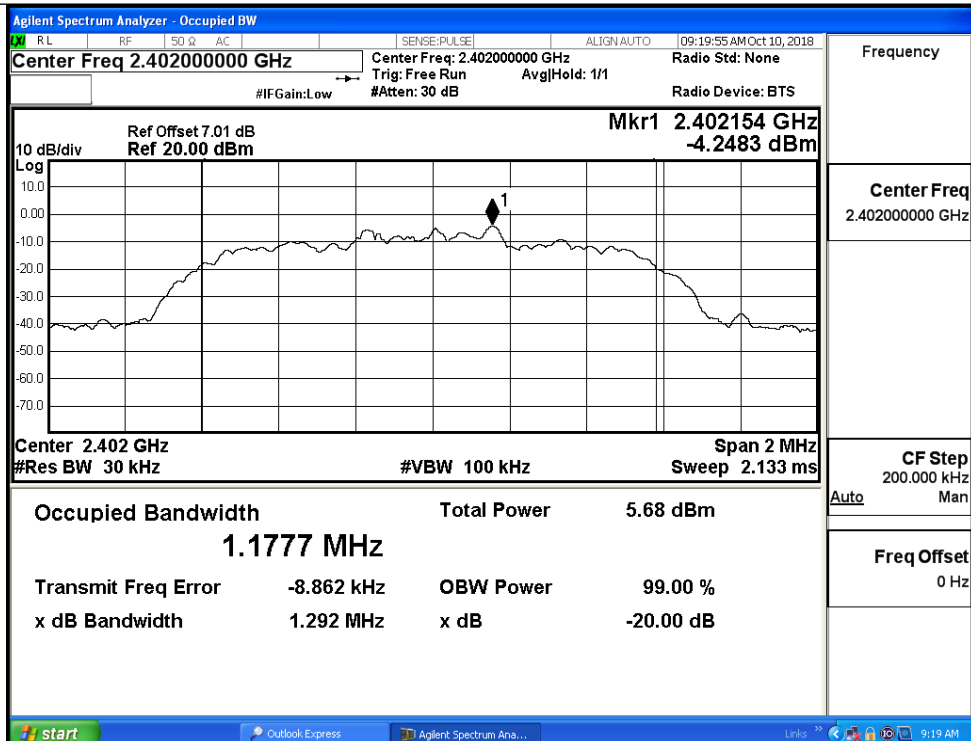
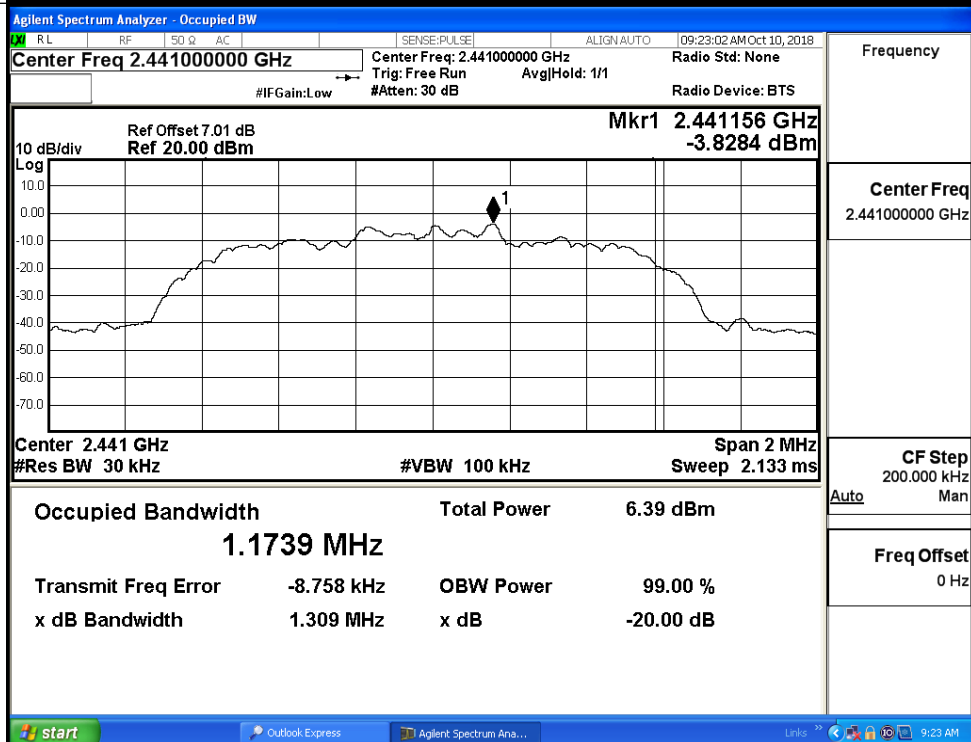


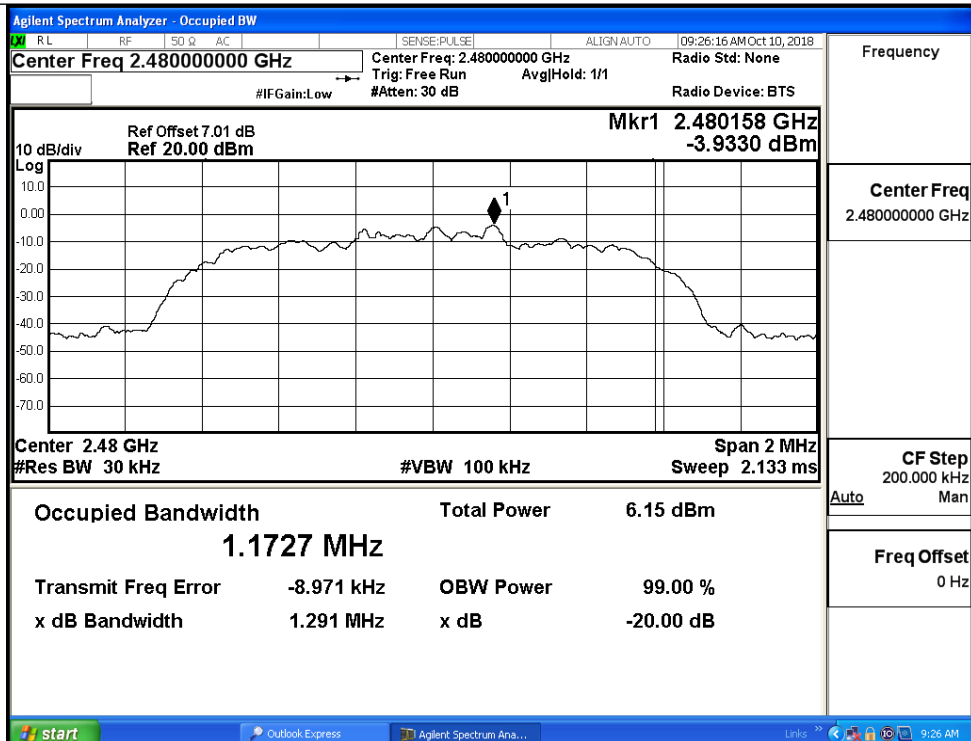
GFSK/MCH



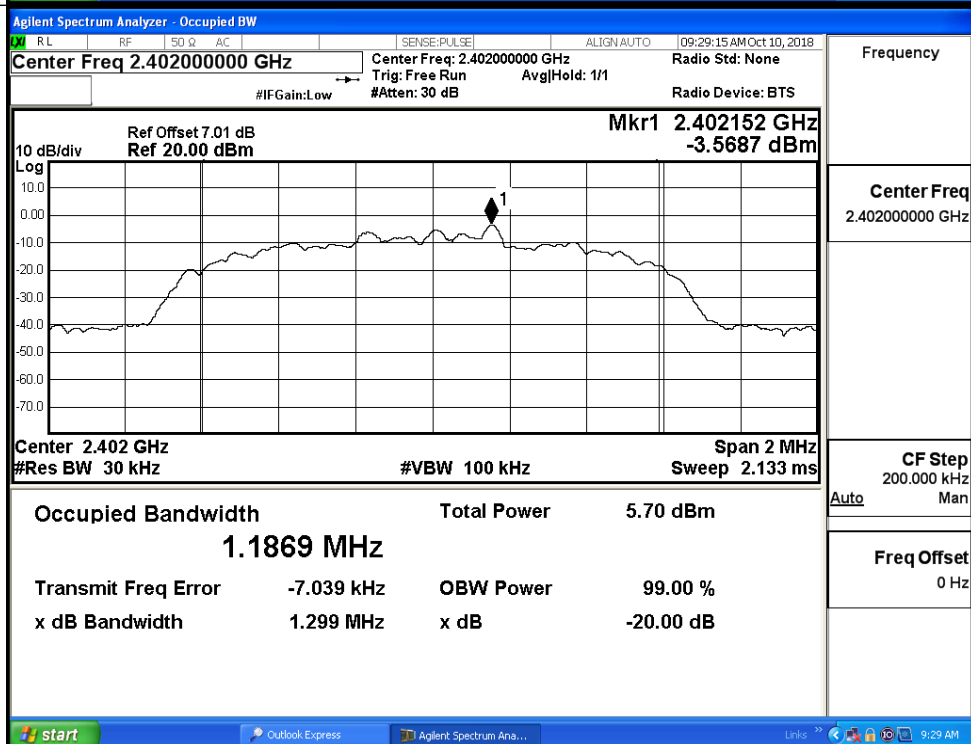
GFSK/HCH



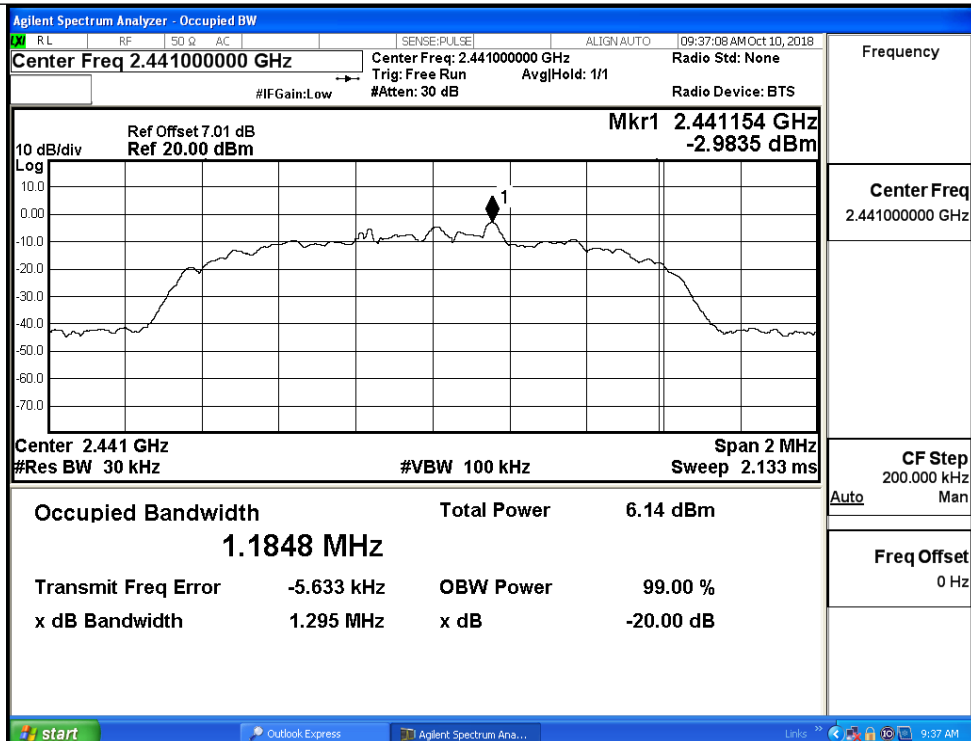
$\pi/4$ DQPSK/LCH $\pi/4$ DQPSK/MCH

$\pi/4$ DQPSK/HCH

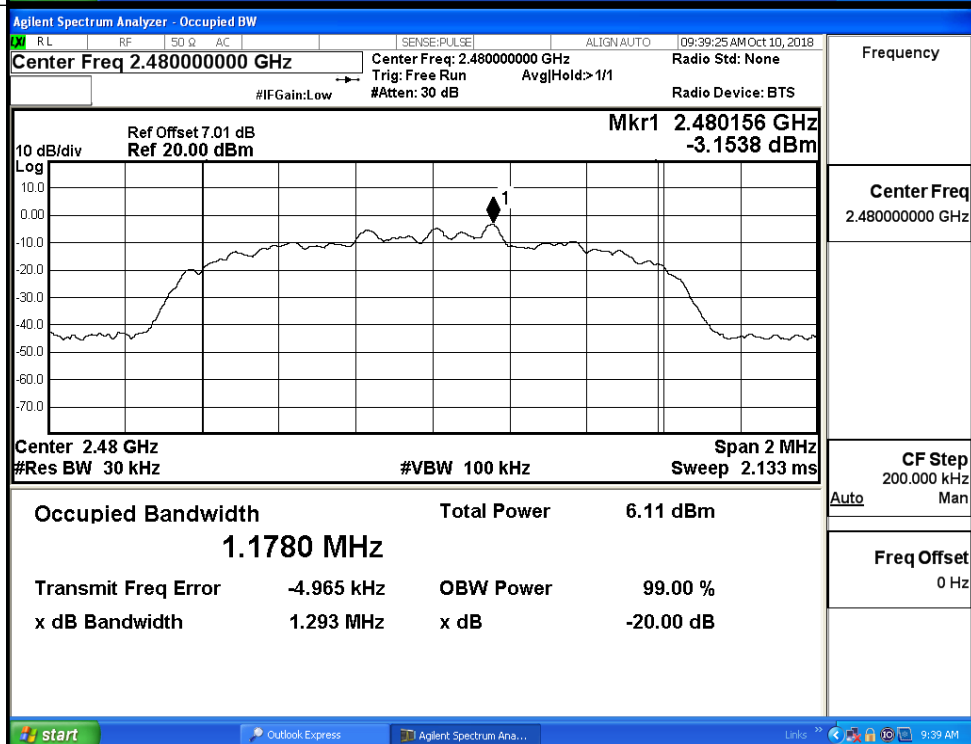
8DPSK/LCH



8DPSK/MCH



8DPSK/HCH

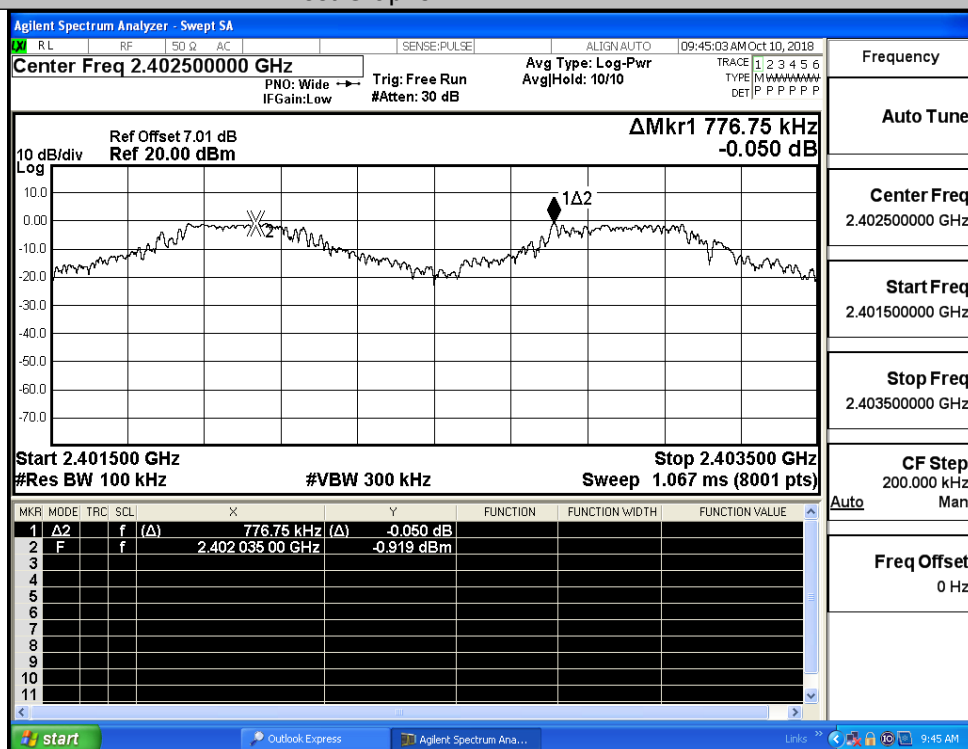


A.3 Carrier Frequency Separation

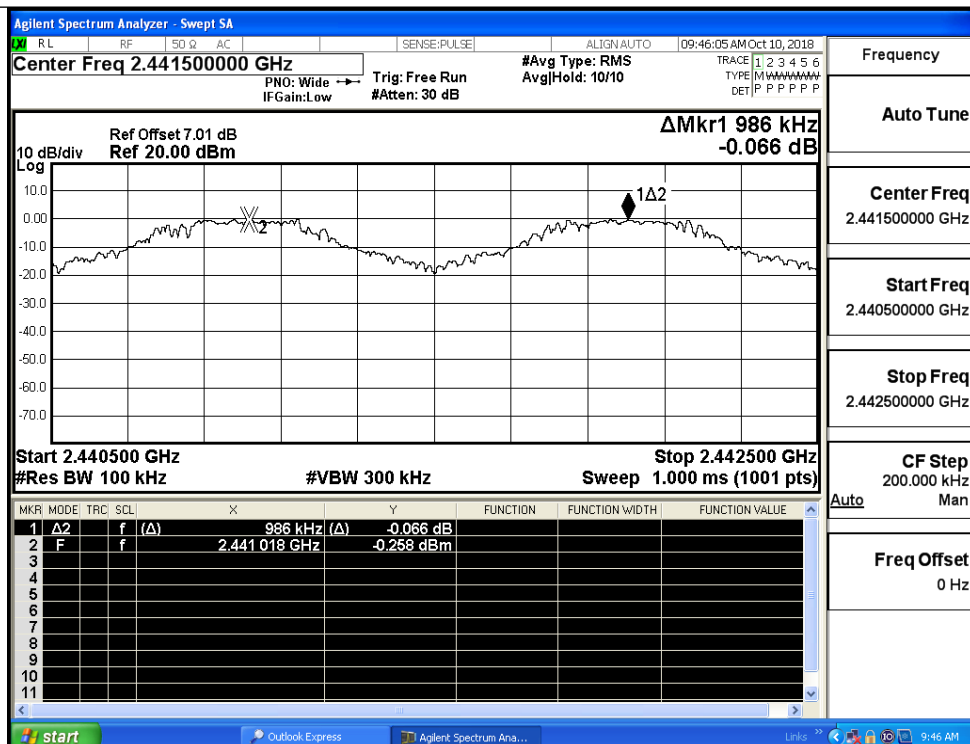
Mode	Channel.	Carrier Frequency Separation [MHz]	Limit [MHz]	Verdict
GFSK	LCH	0.777	0.695	PASS
	MCH	0.986	0.695	PASS
	HCH	0.844	0.695	PASS
$\pi/4$ DQPSK	LCH	1.114	0.873	PASS
	MCH	0.942	0.873	PASS
	HCH	0.918	0.873	PASS
8DPSK	LCH	0.870	0.866	PASS
	MCH	1.084	0.866	PASS
	HCH	0.986	0.866	PASS

Test Graphs

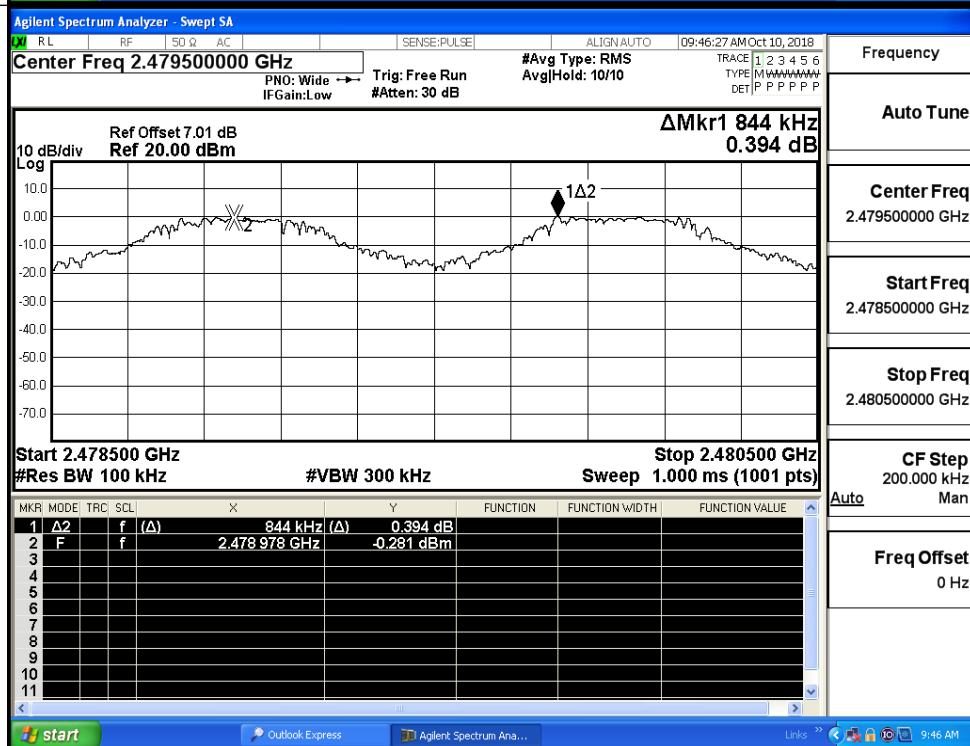
GFSK/LCH

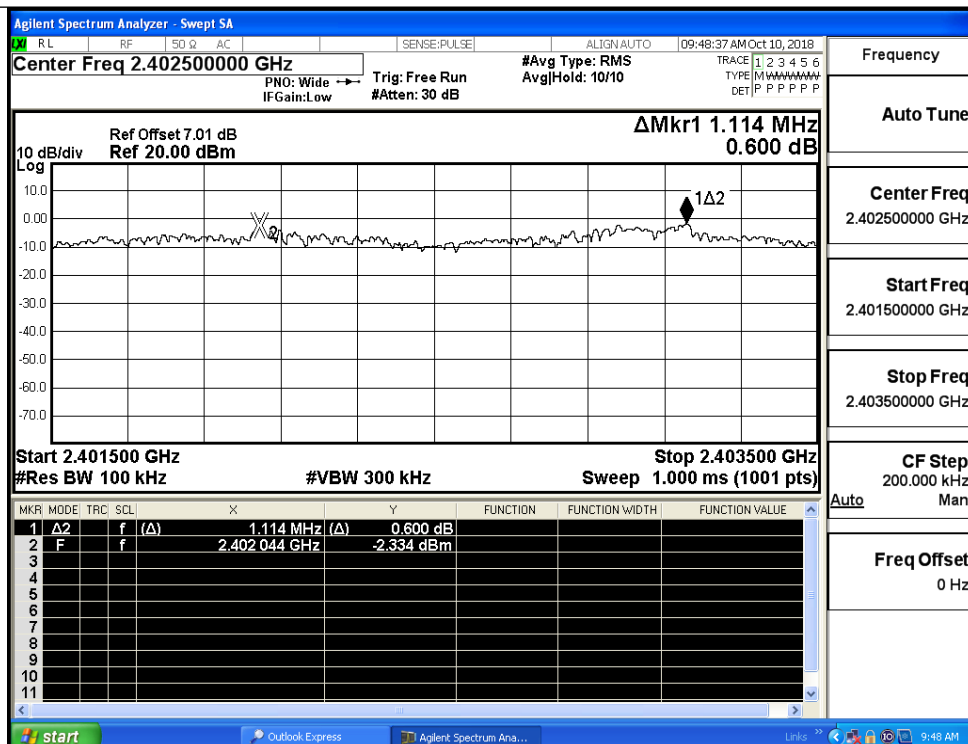
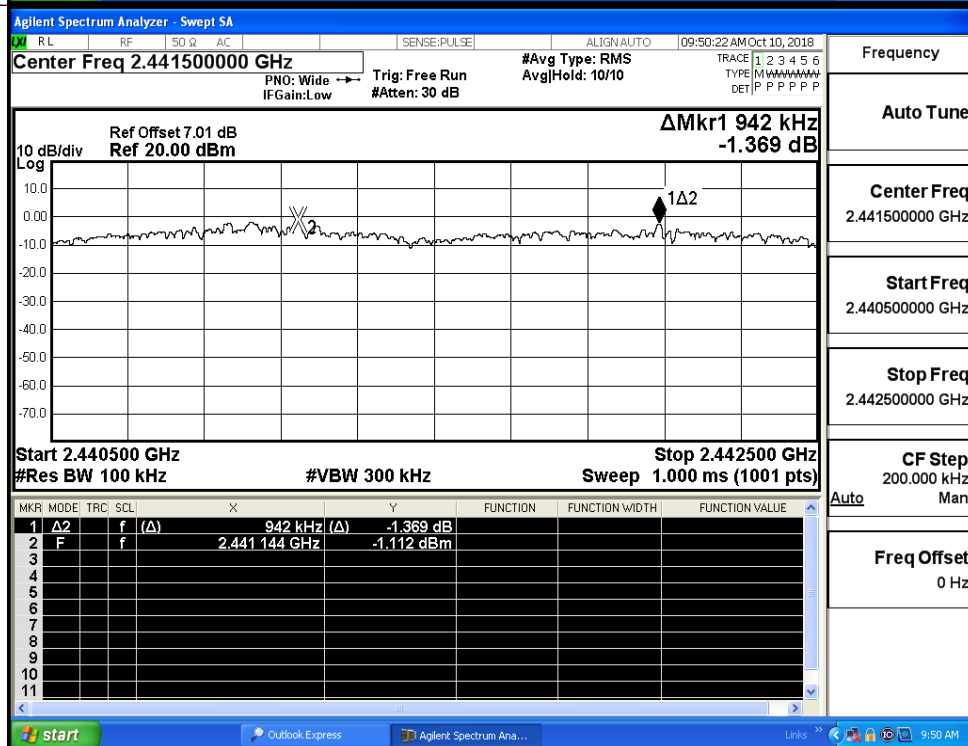


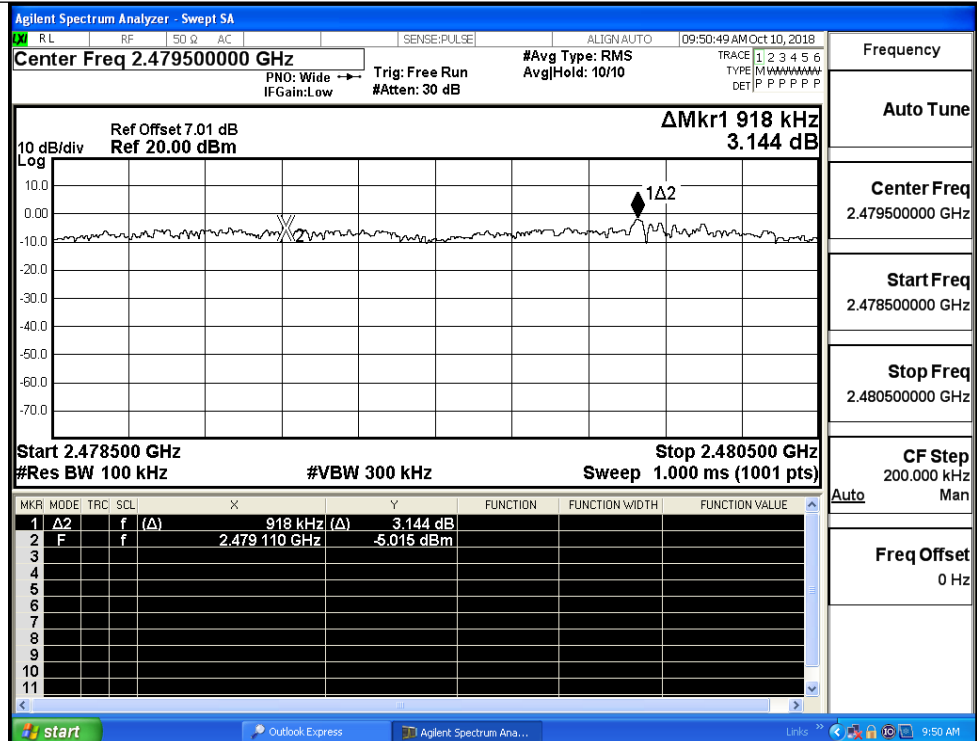
GFSK/MCH



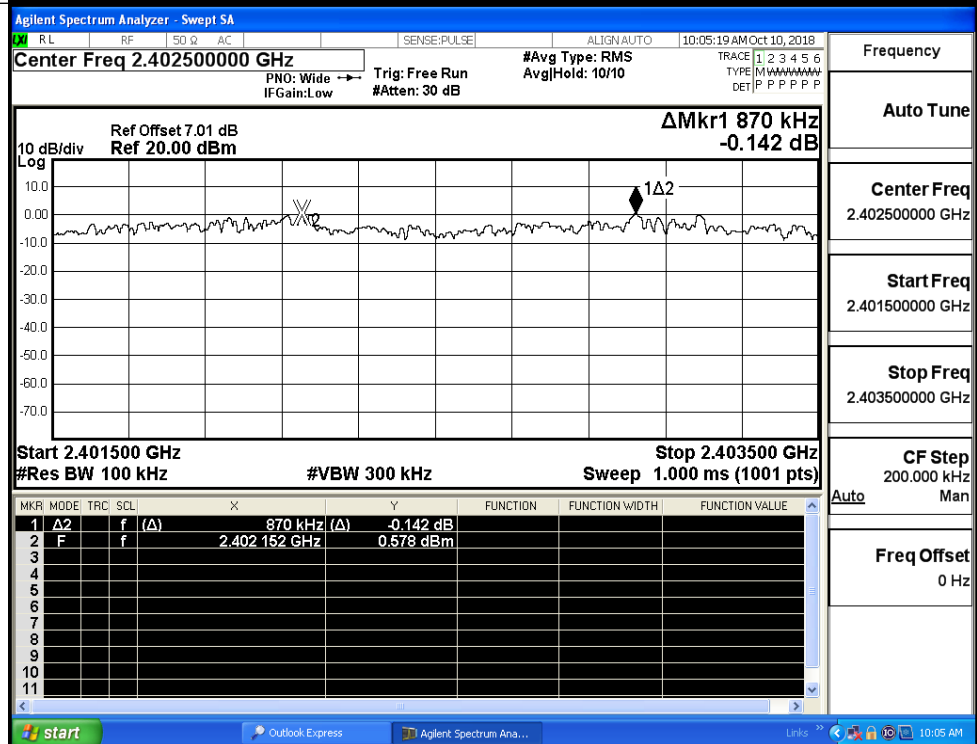
GFSK/HCH



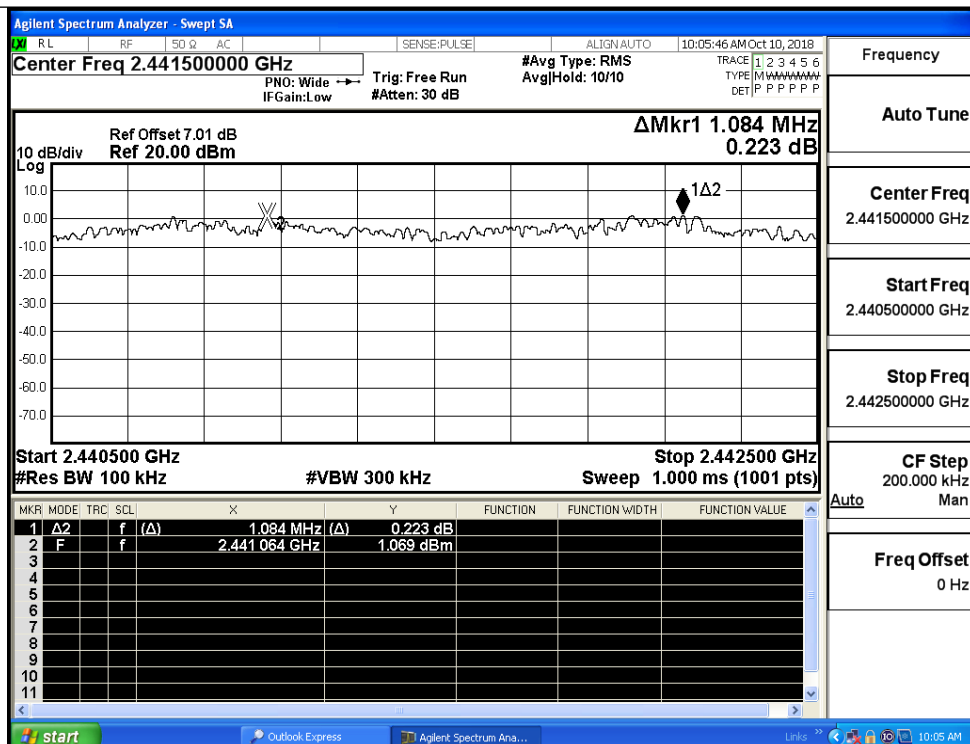
$\pi/4$ DQPSK/LCH $\pi/4$ DQPSK/MCH

$\pi/4$ DQPSK/HCH

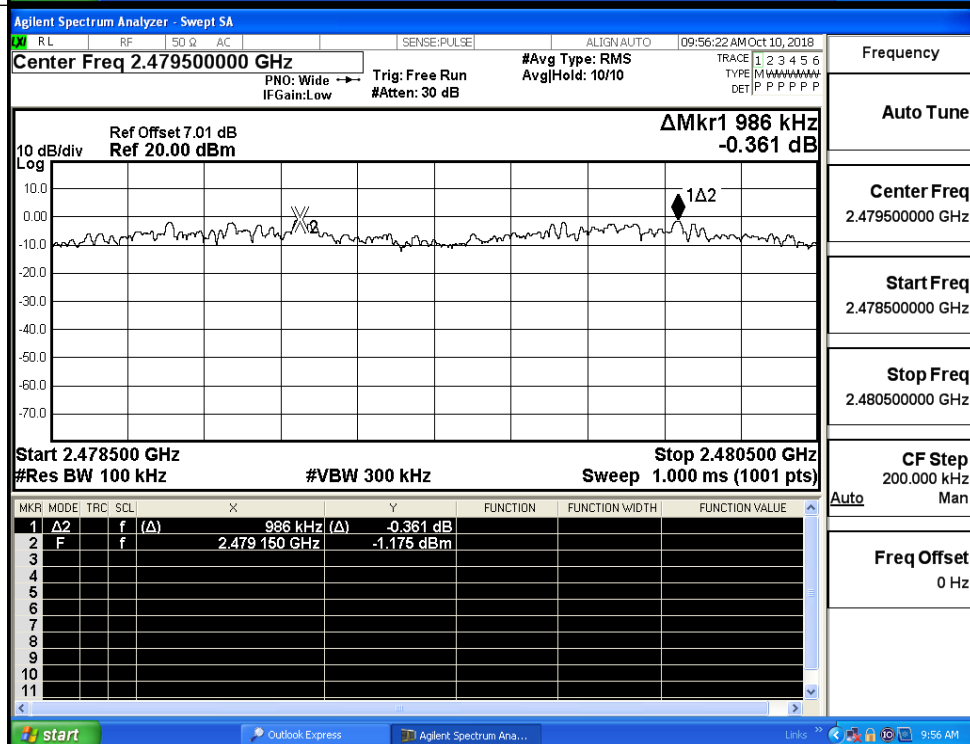
8DPSK/LCH



8DPSK/MCH



8DPSK/HCH

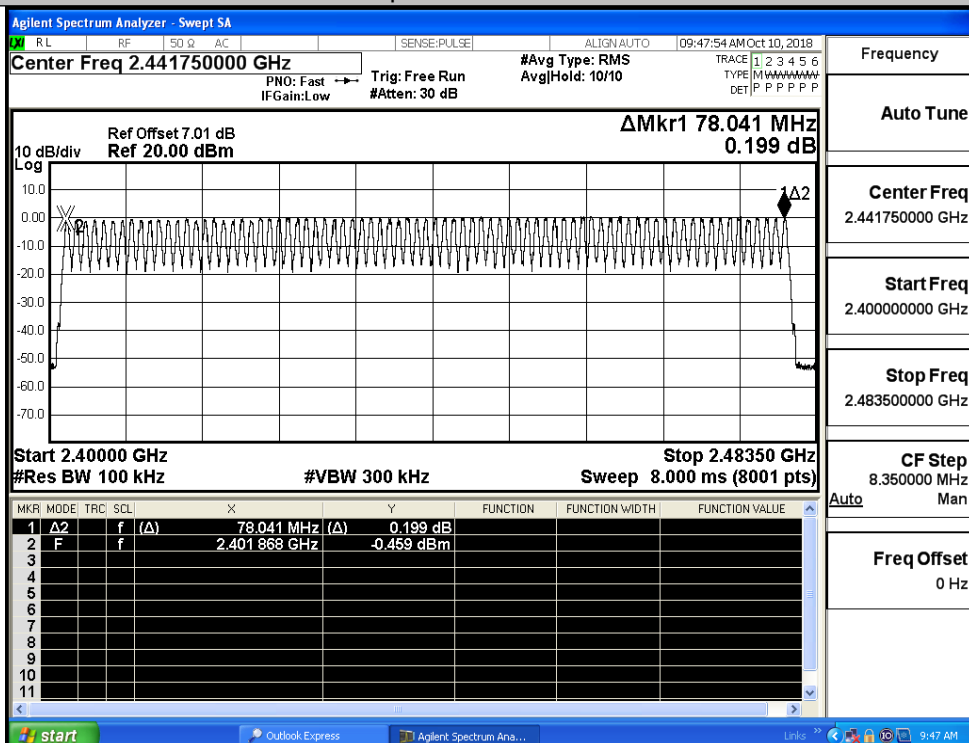
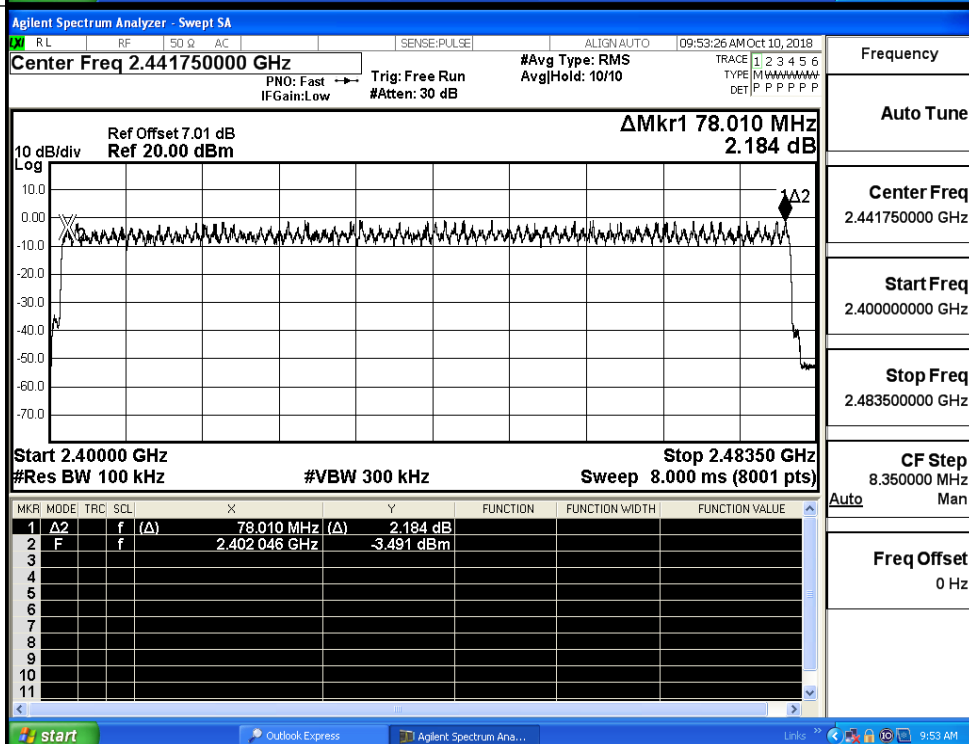


A.4 Hopping Channel Number

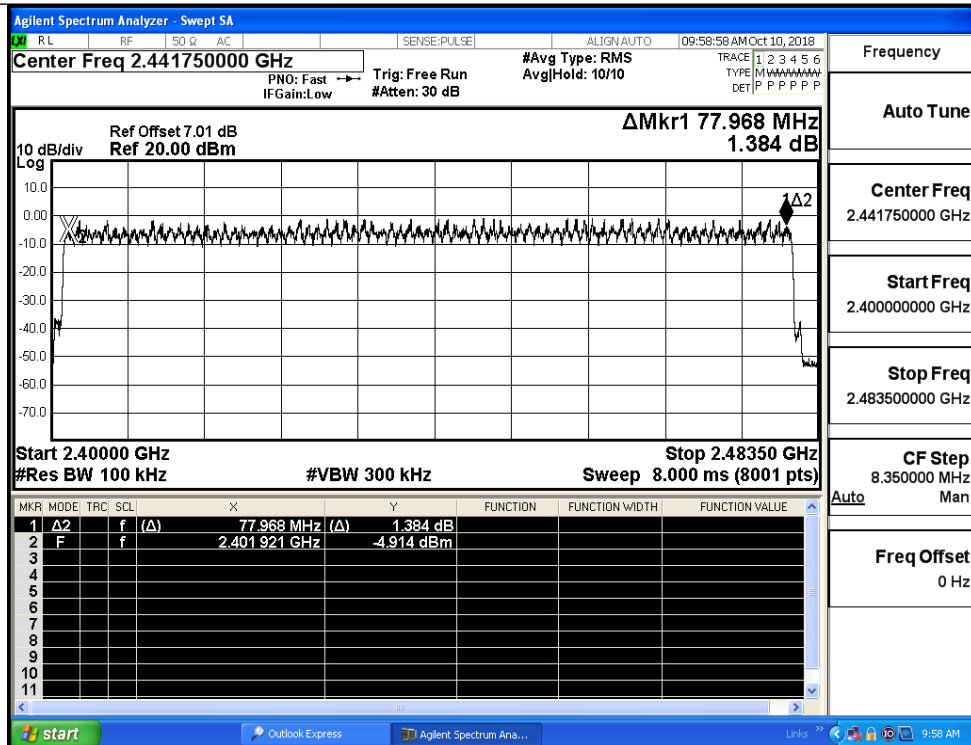
Mode	Channel.	Number of Hopping Channel [N]	Limit [N]	Verdict
GFSK	Hop	79	≥ 15	PASS
$\pi/4$ DQPSK	Hop	79	≥ 15	PASS
8DPSK	Hop	79	≥ 15	PASS

Test Graphs

GFSK/Hop

 $\pi/4$ DQPSK/Hop

8DPSK/Hop

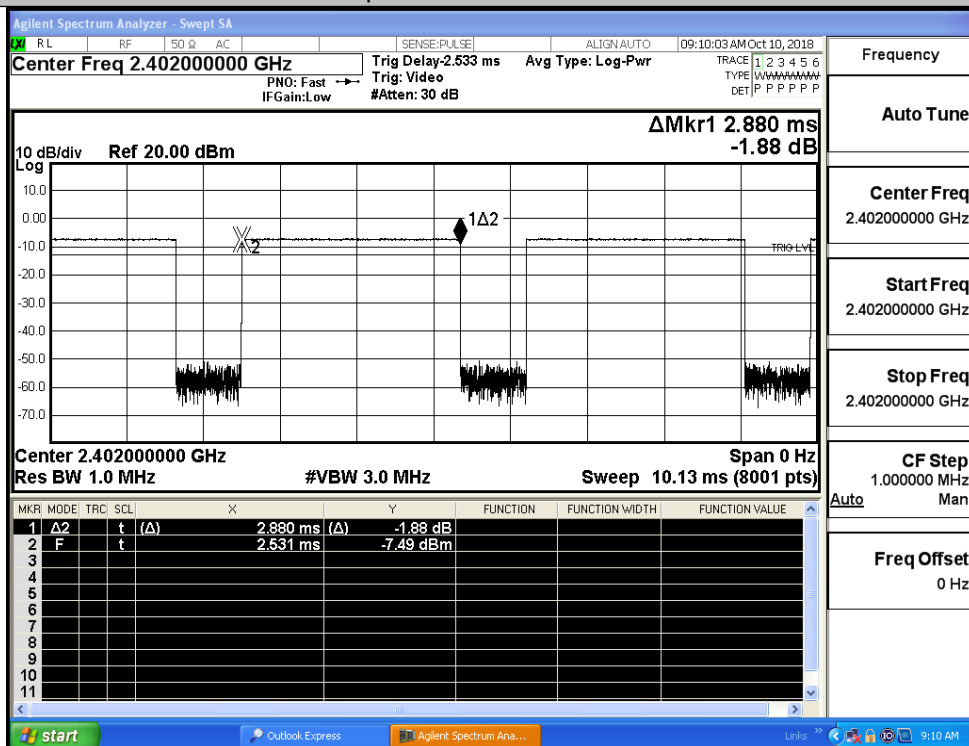


A.5 Dwell Time

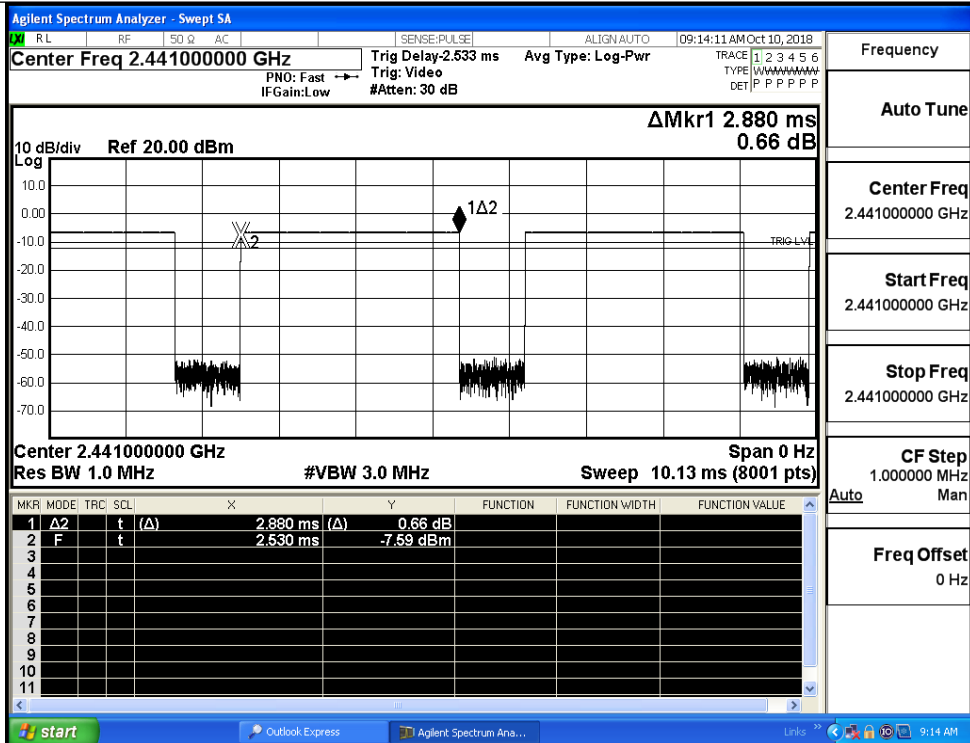
Mode	Packet	Channel	Burst Width [ms/hop/ch]	Total Hops[hop*ch]	Dwell Time[s]	Limit [s]	Verdict
GFSK	DH5	LCH	2.88	106.7	0.307	0.4	PASS
	DH5	MCH	2.88	106.7	0.307	0.4	PASS
	DH5	HCH	2.88	106.7	0.307	0.4	PASS
$\pi/4$ DQPSK	2DH5	LCH	2.88	106.7	0.307	0.4	PASS
	2DH5	MCH	2.88	106.7	0.307	0.4	PASS
	2DH5	HCH	2.88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

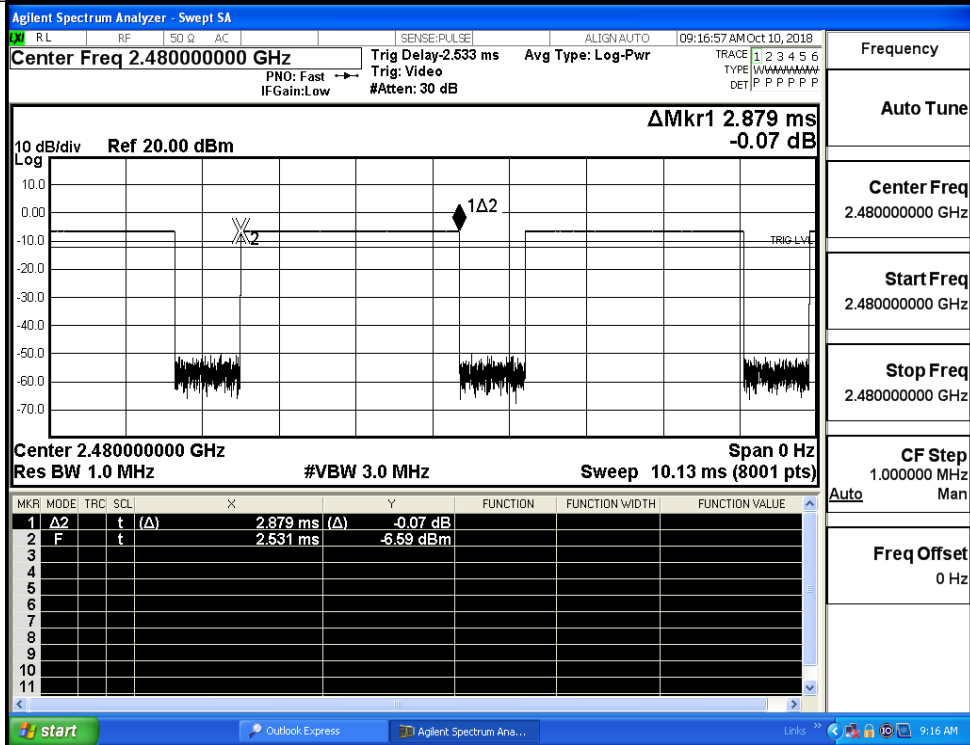
GFSK_DH5/LCH



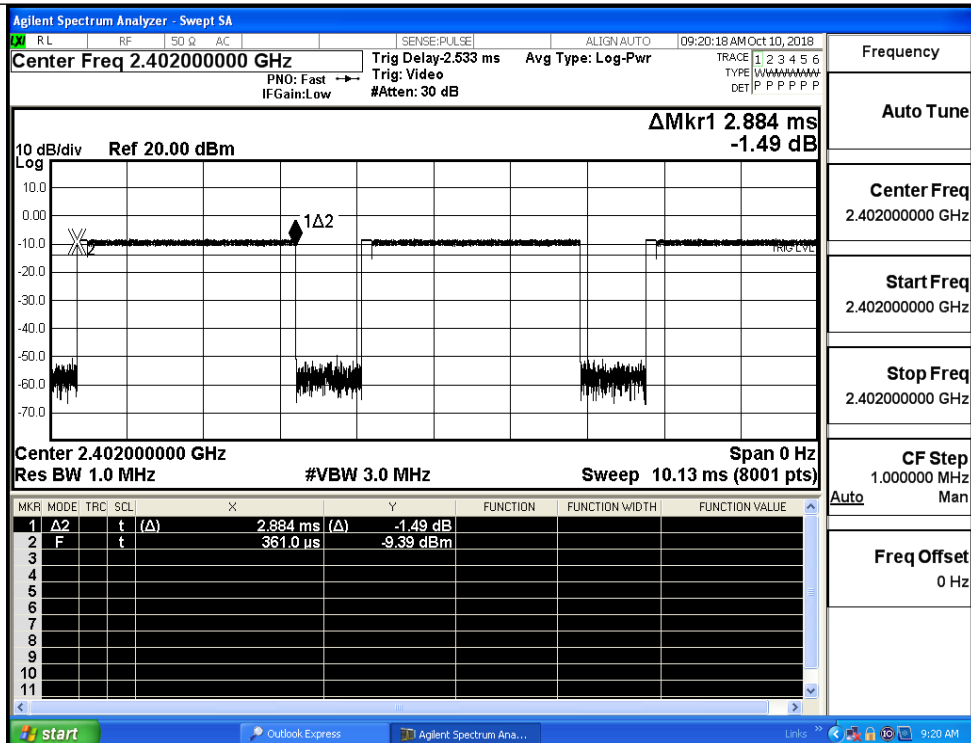
GFSK_DH5/MCH



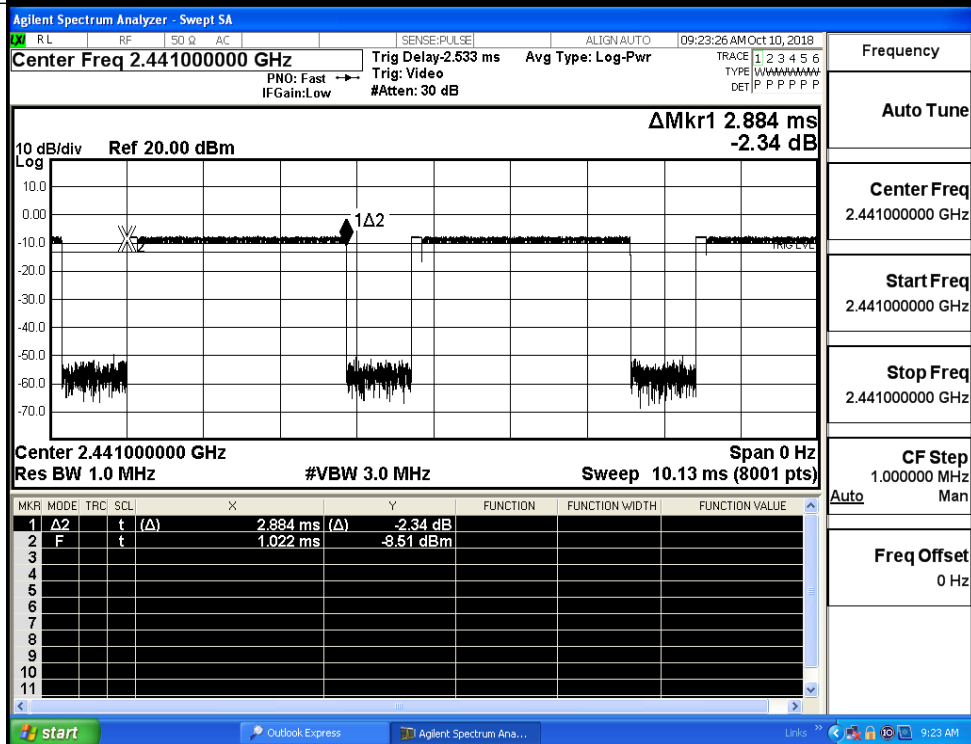
GFSK_DH5/HCH



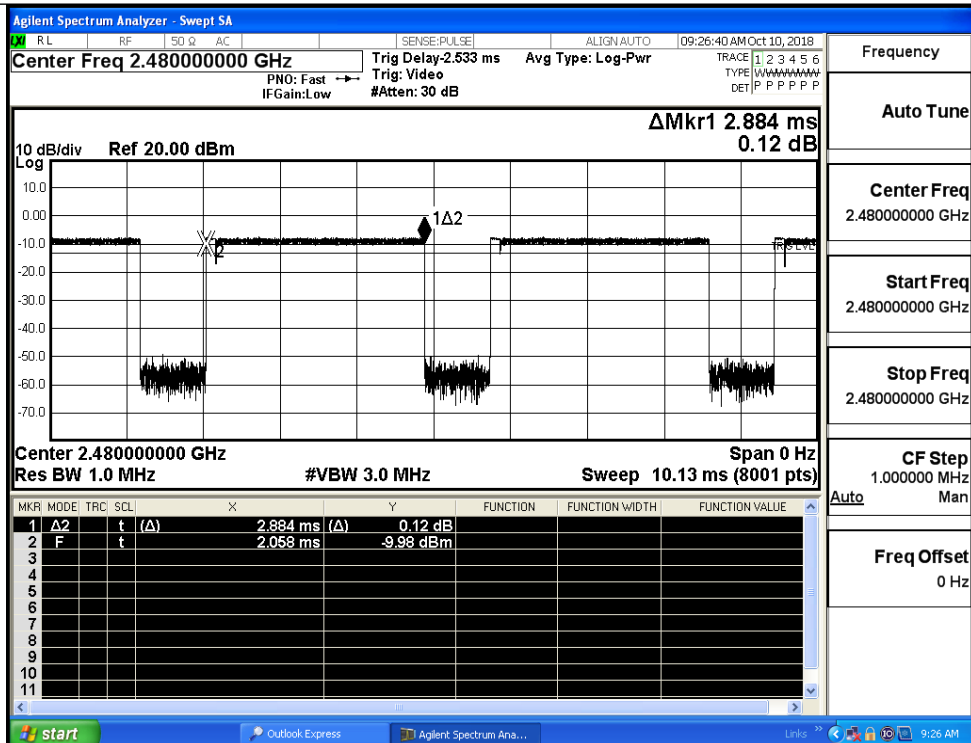
$\pi/4$ DQPSK
_2DH5/LCH



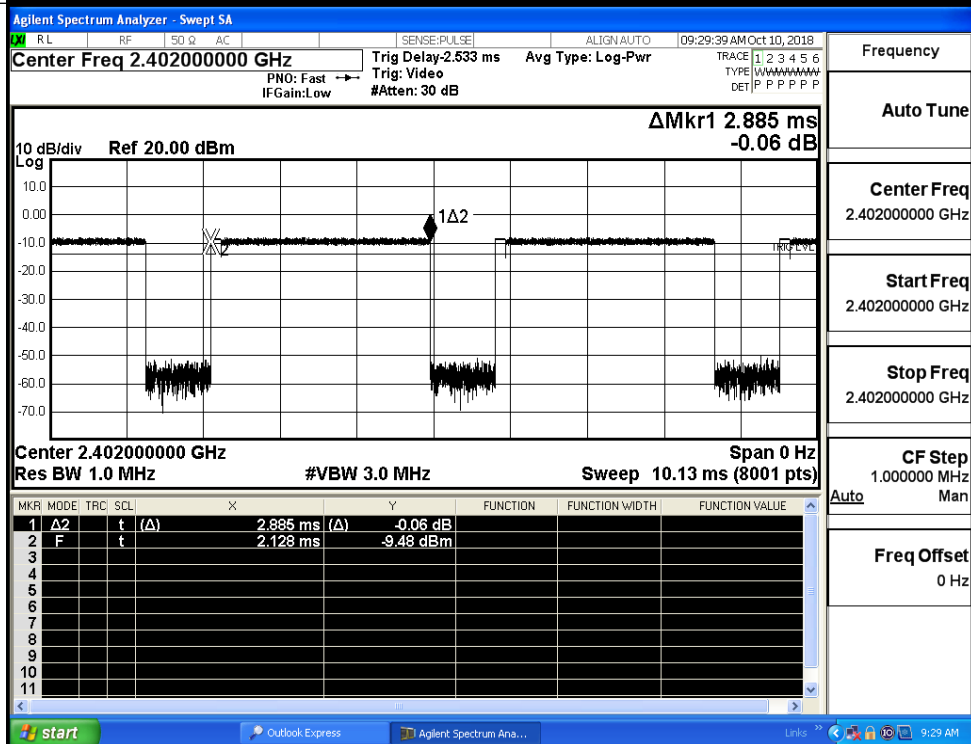
$\pi/4$ DQPSK
_2DH5/MCH



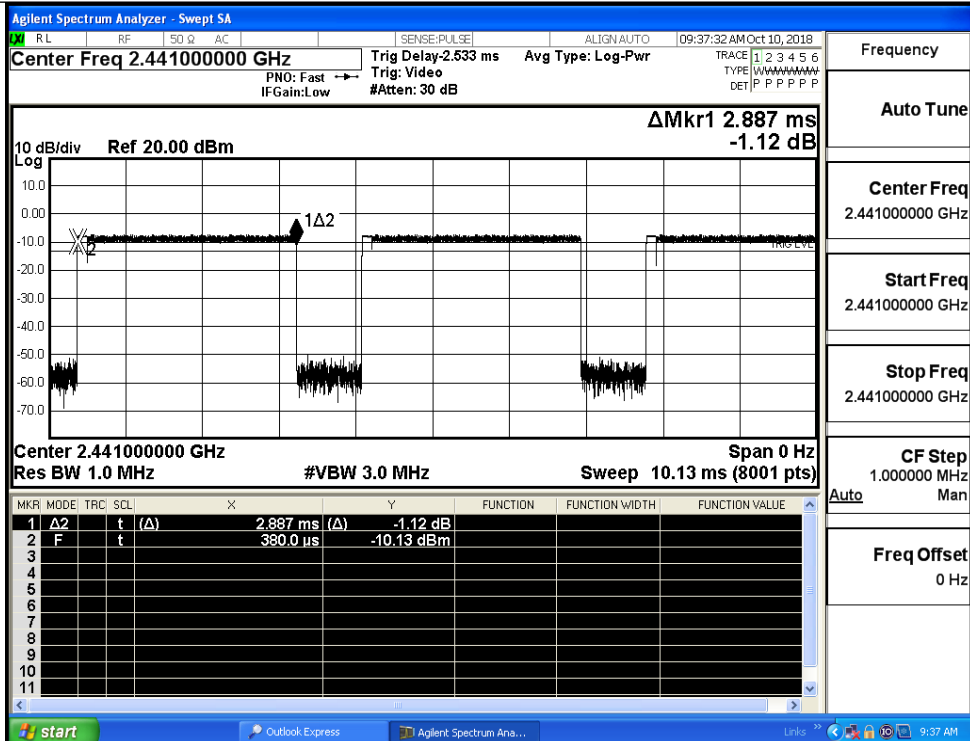
$\pi/4$ DQPSK
_2DH5/HCH



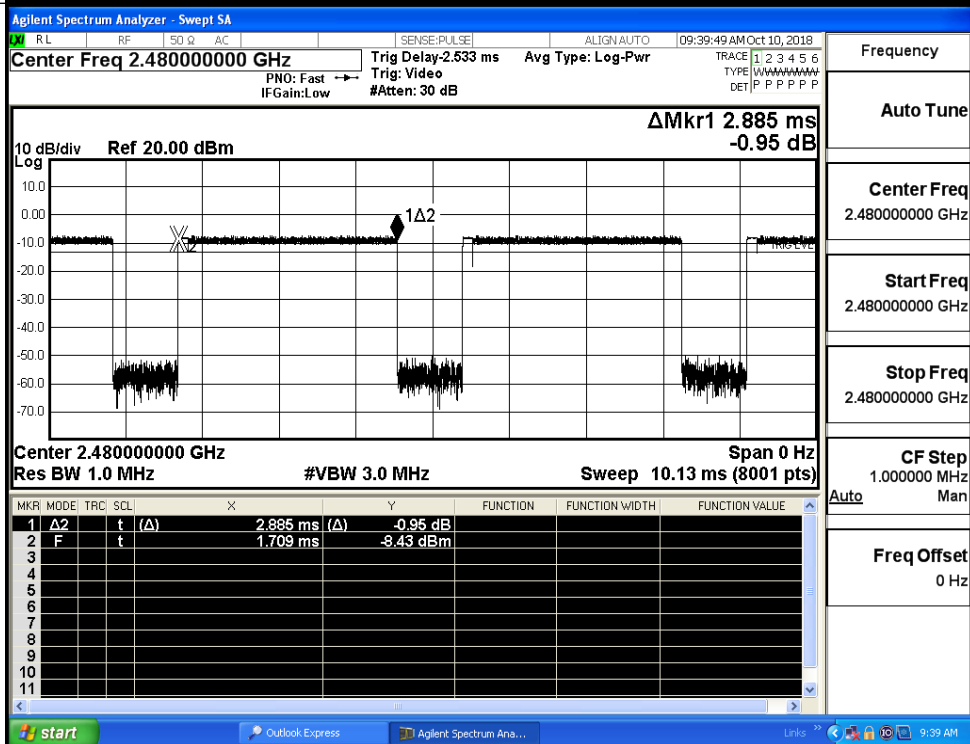
8DPSK _3DH5/LCH



8DPSK_3DH5/MCH



8DPSK_3DH5/HCH

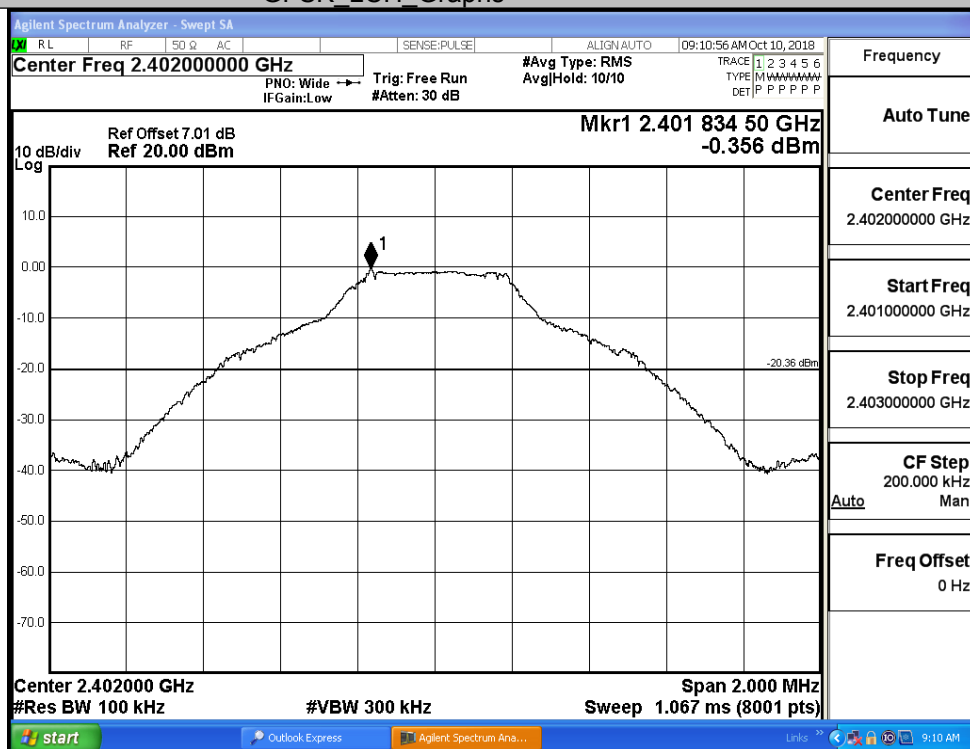


A.6 RF Conducted Spurious Emissions

Mode	Channel	Pref [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
GFSK	LCH	-0.356	-45.299	-20.356	PASS
	MCH	0.403	-45.843	-19.597	PASS
	HCH	0.535	-45.742	-19.465	PASS
$\pi/4$ DQPSK	LCH	-1.686	-46.374	-21.686	PASS
	MCH	-0.95	-24.865	-20.950	PASS
	HCH	-1.099	-45.307	-21.099	PASS
8DPSK	LCH	-1.937	-45.349	-21.937	PASS
	MCH	-1.003	-45.936	-21.003	PASS
	HCH	-1.043	-45.615	-21.043	PASS

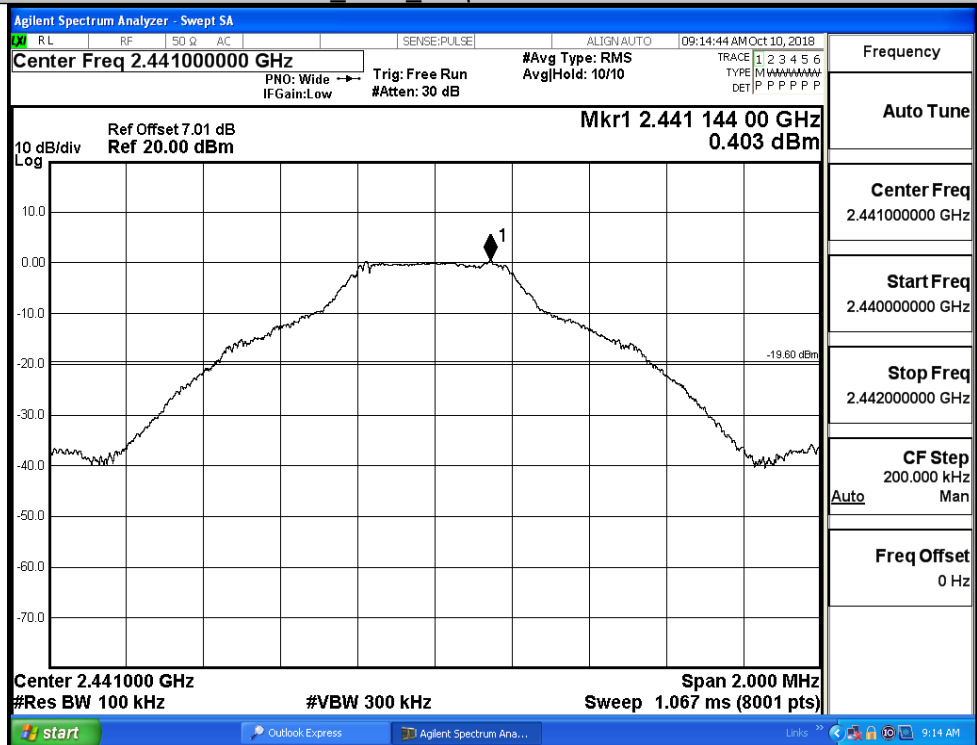
GFSK LCH Graphs

Pref

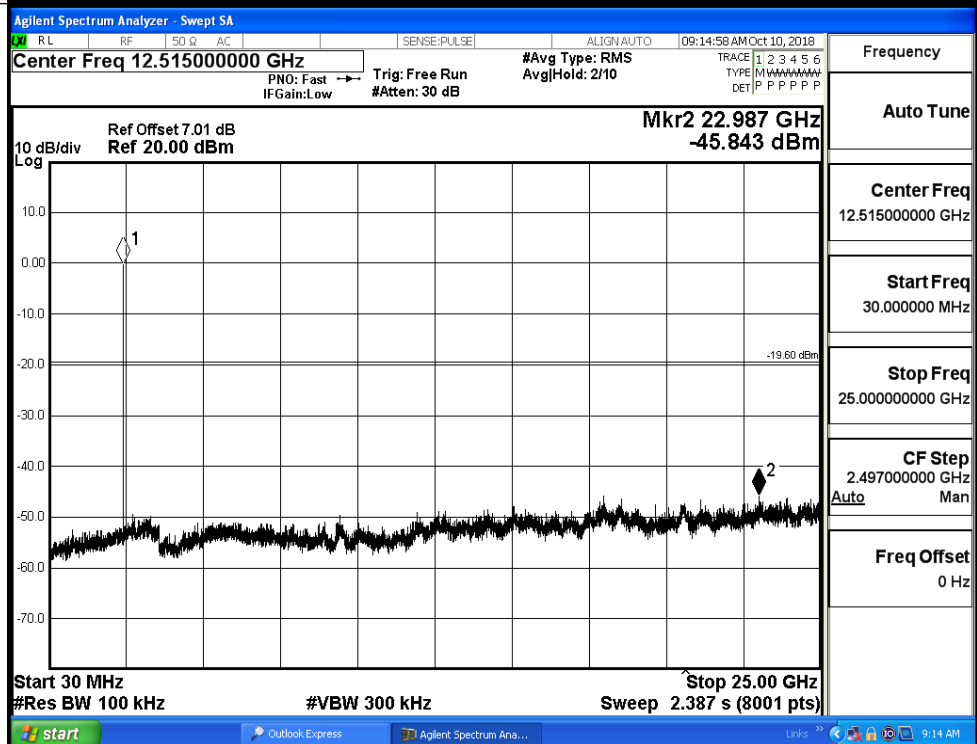


GFSK_MCH_Graphs

Pref

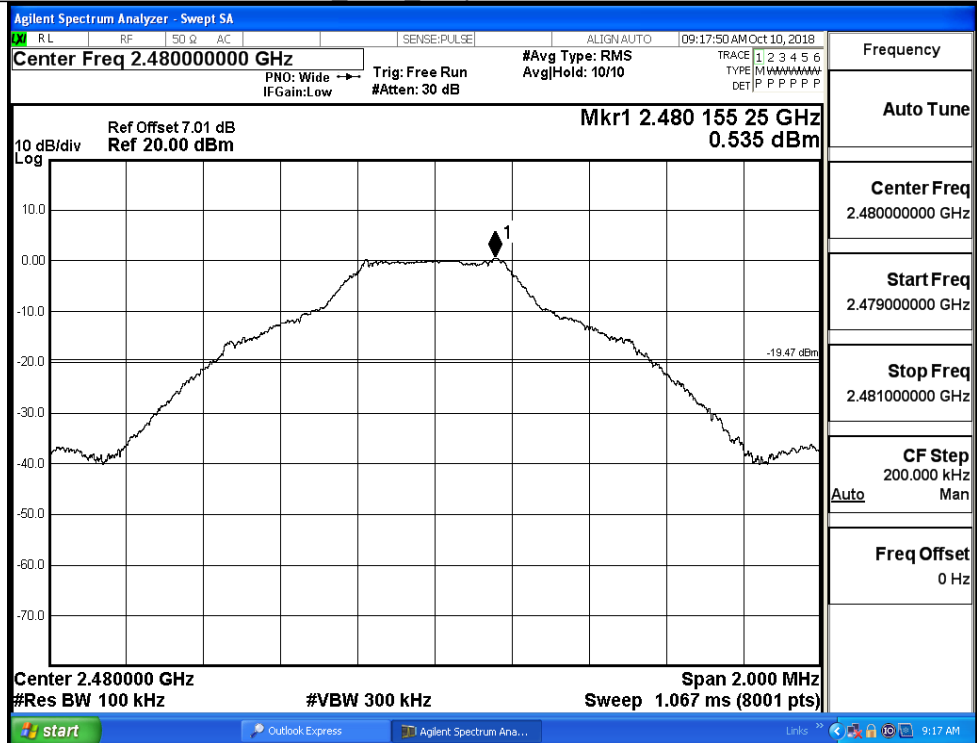


Puw

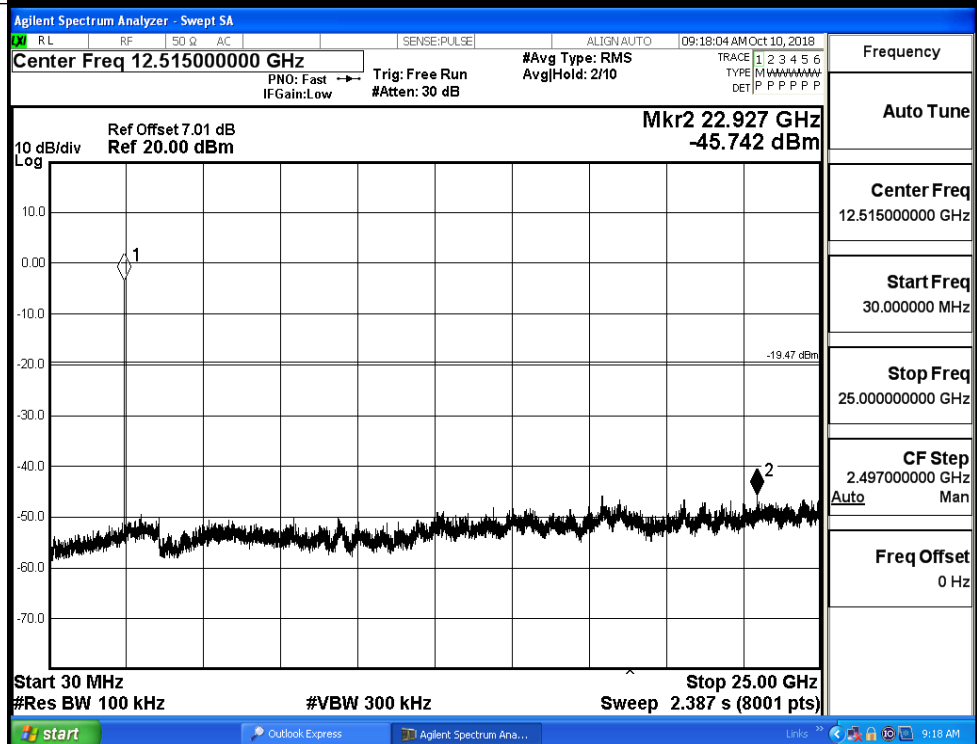


GFSK_HCH_Graphs

Pref

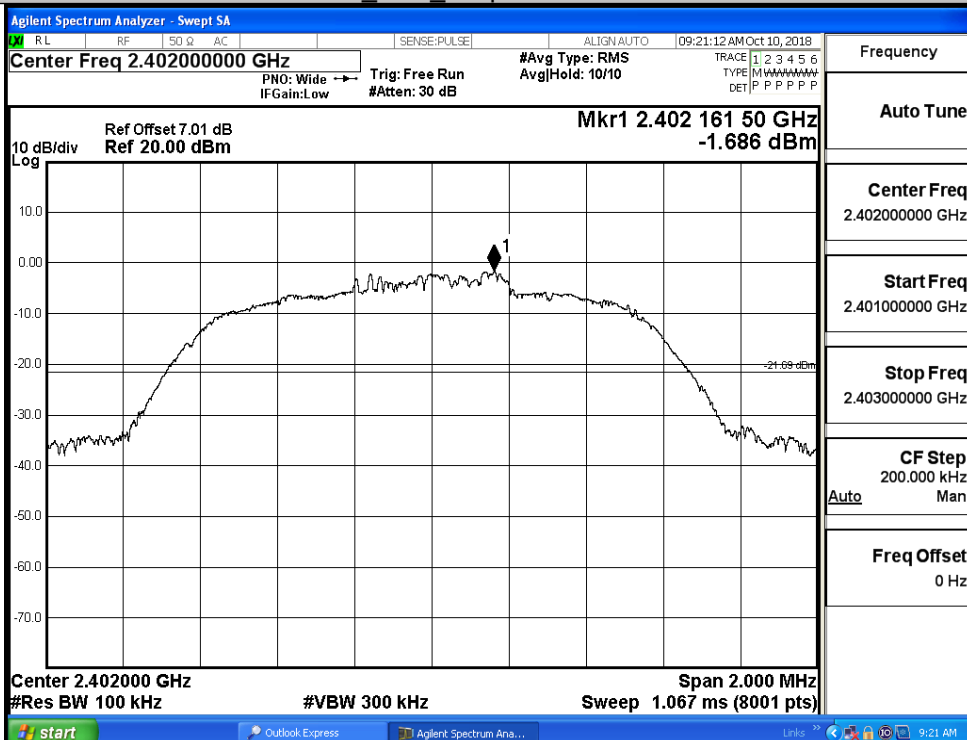


Puw

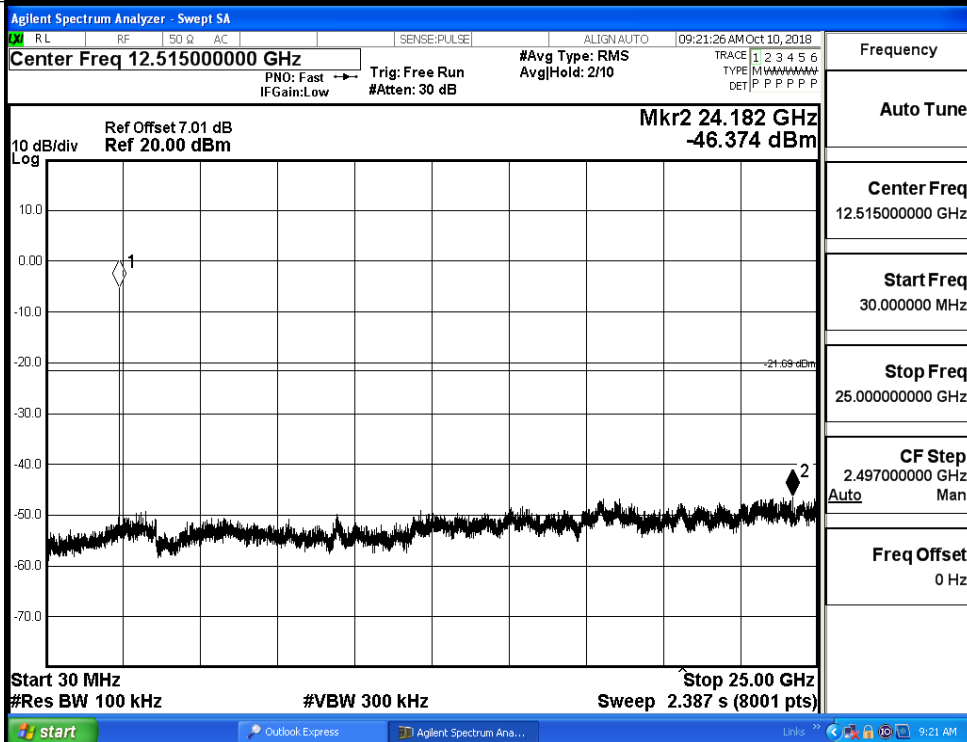


$\pi/4$ DQPSK_LCH_Graphs

Pref

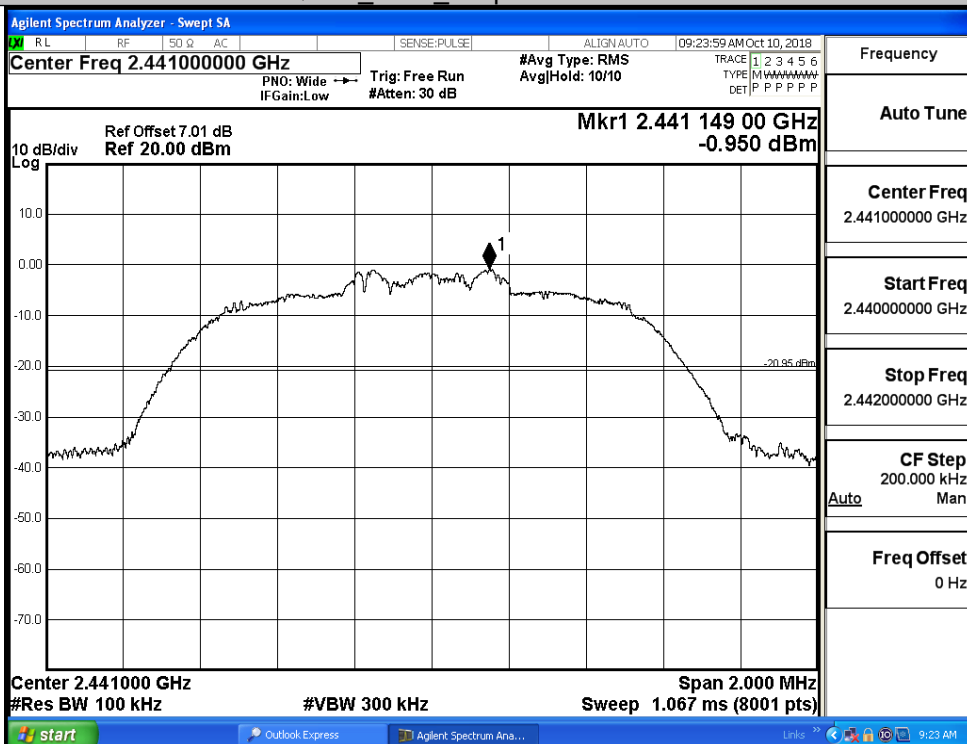


Puw

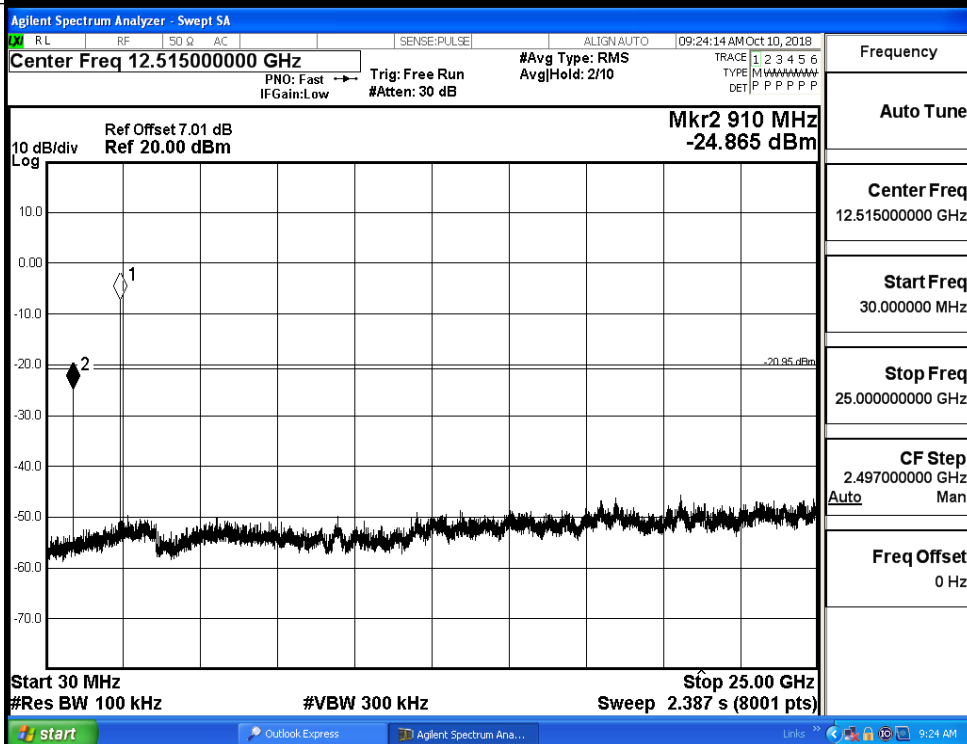


$\pi/4$ DQPSK_MCH_Graphs

Pref

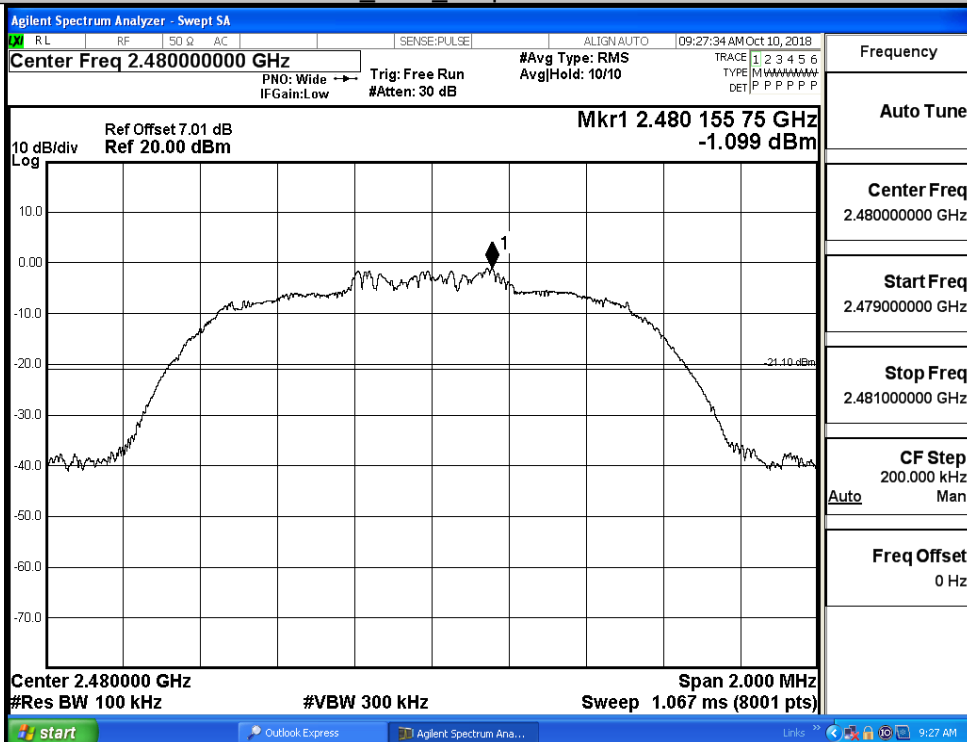


Puw

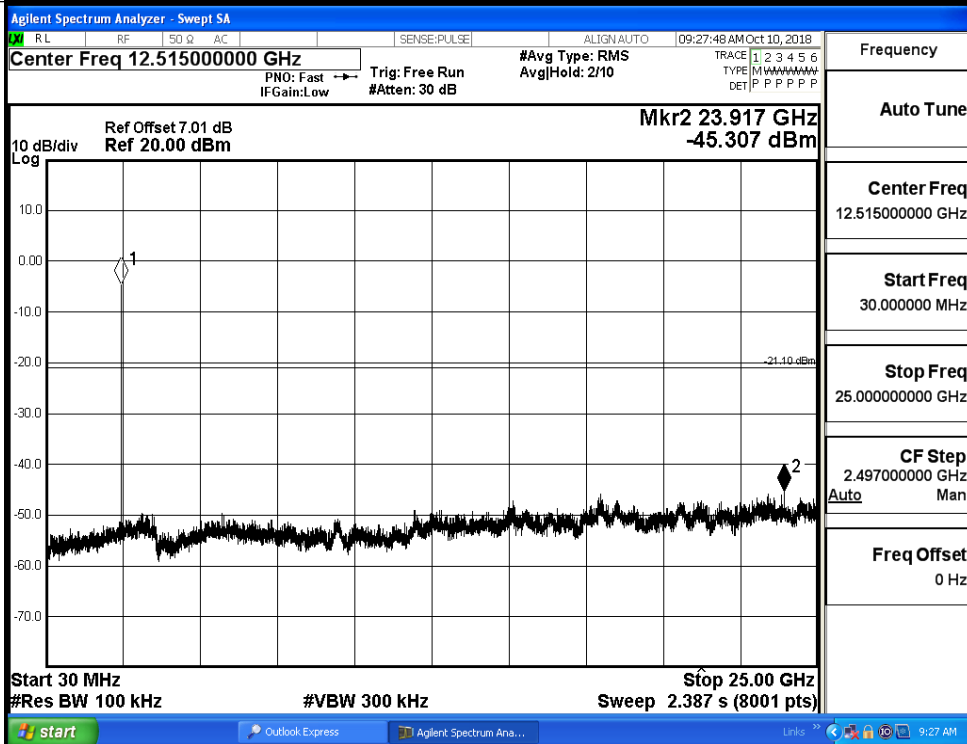


$\pi/4$ DQPSK_HCH_Graphs

Pref

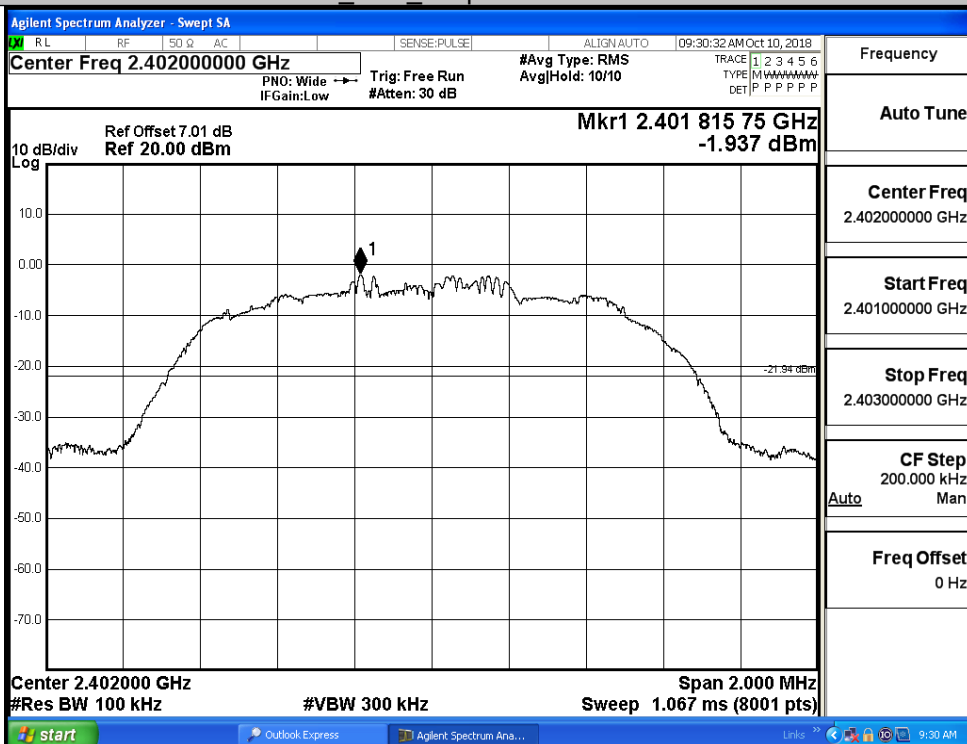


Puw

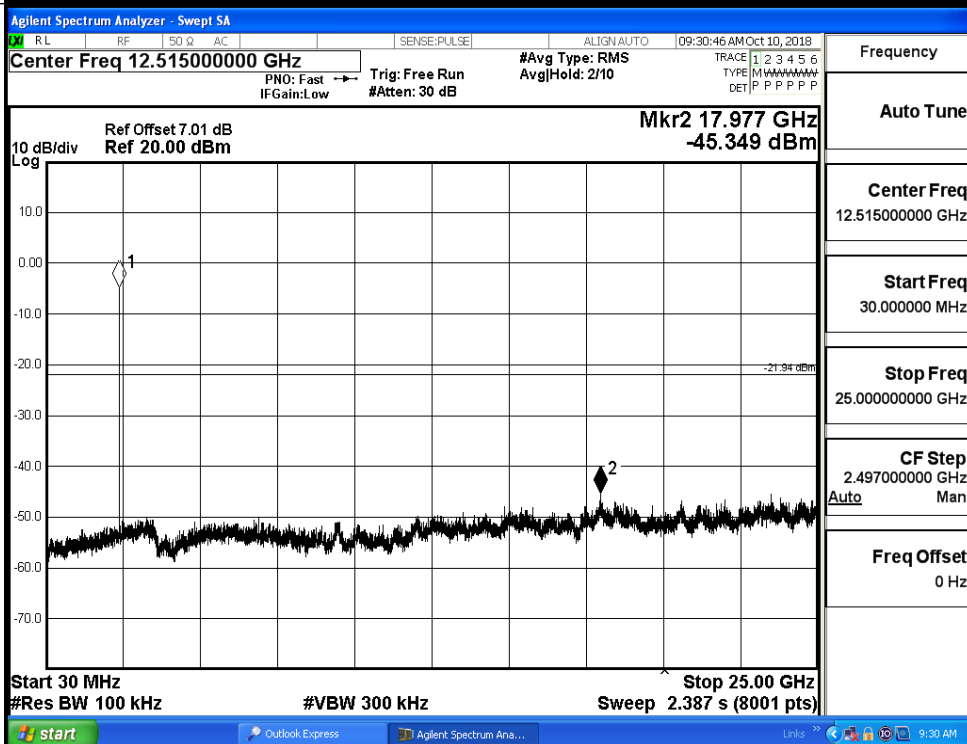


8DPSK_LCH_Graphs

Pref

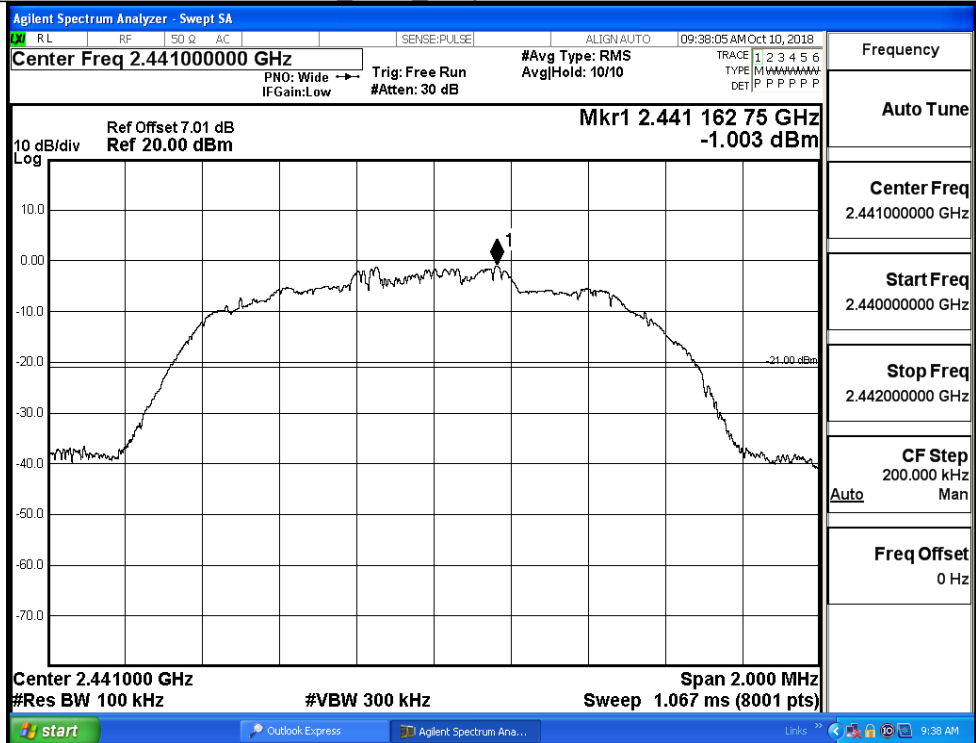


Puw

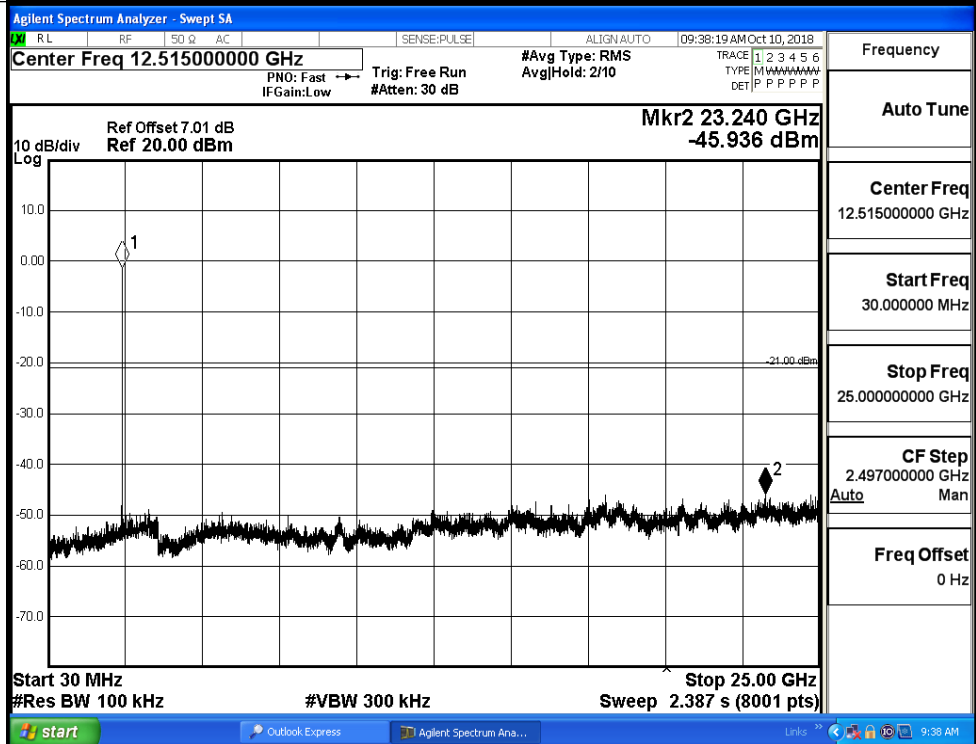


8DPSK_MCH_Graphs

Pref

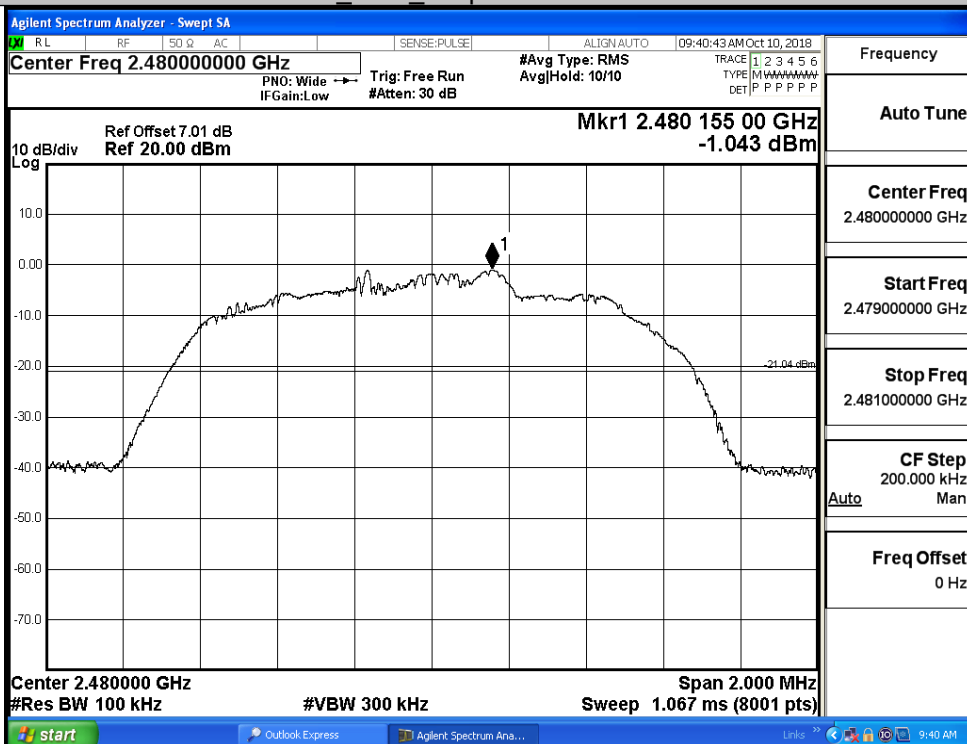


Puw

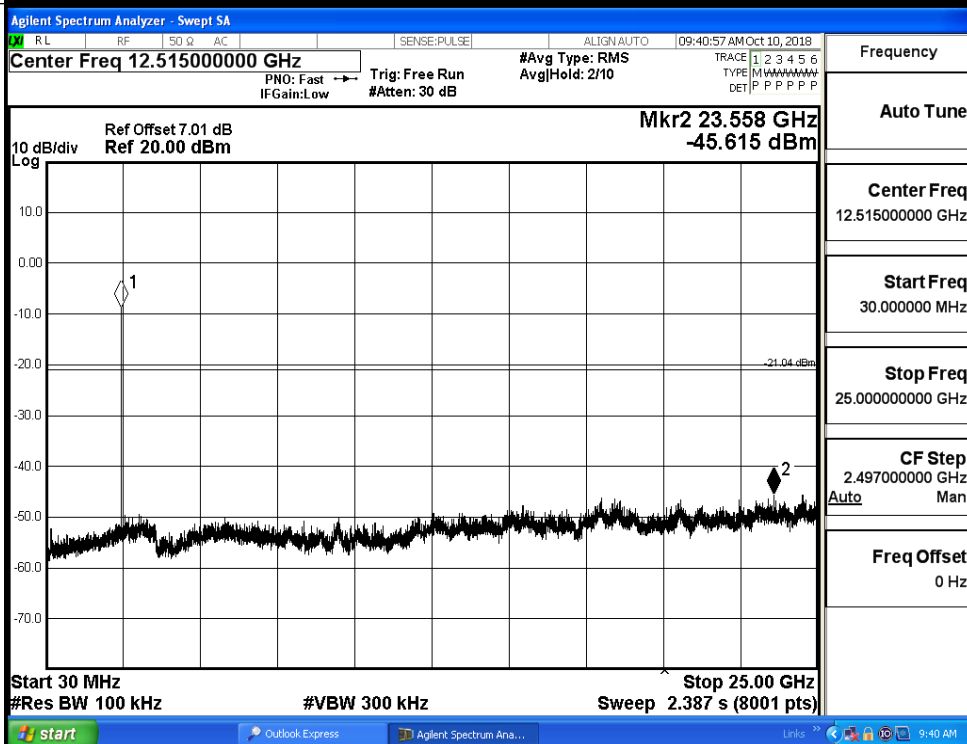


8DPSK_HCH_Graphs

Pref



Puw

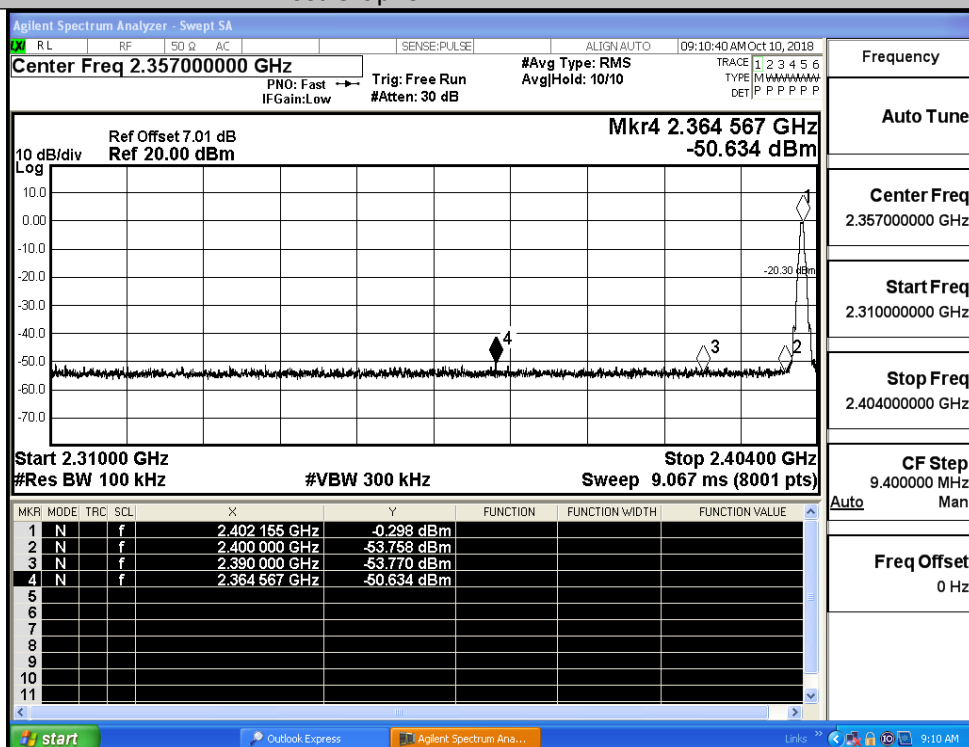


A.7 Band-edge for RF Conducted Emissions

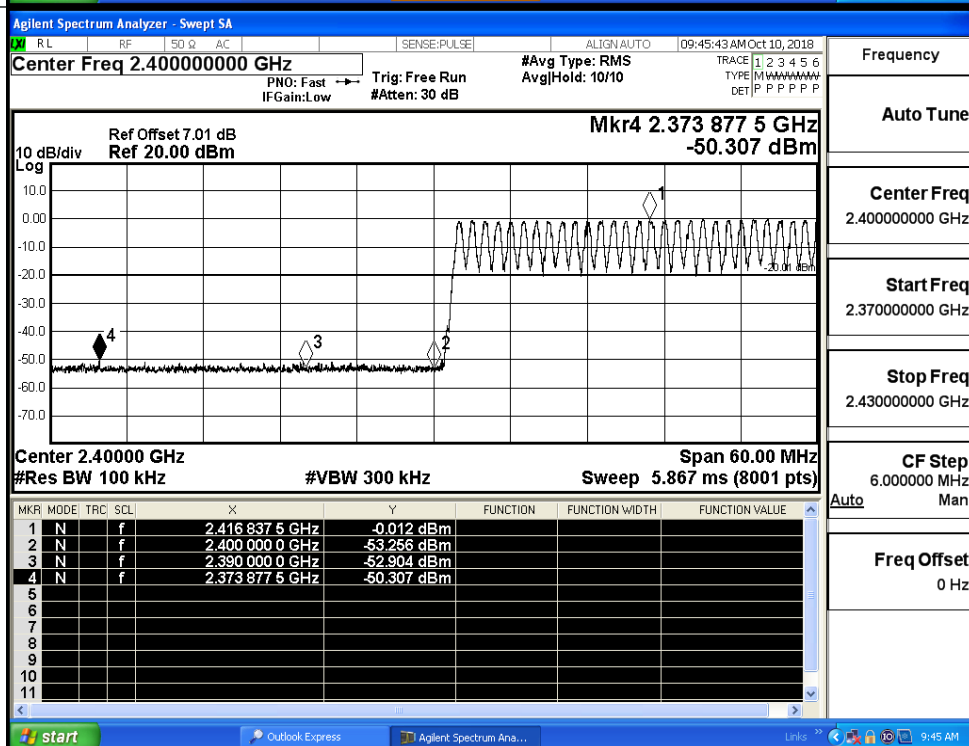
Mode	Channel	Carrier Frequency [MHz]	Carrier Power [dBm]	Frequency Hopping	Max Spurious Level [dBm]	Limit [dBm]	Verdict
GFSK	LCH	2402	-0.298	Off	-50.634	-20.3	PASS
			-0.012	On	-50.307	-20.01	PASS
	HCH	2480	0.547	Off	-50.201	-19.45	PASS
			0.346	On	-50.483	-19.65	PASS
$\pi/4$ DQPSK	LCH	2402	-1.537	Off	-51.141	-21.54	PASS
			-1.070	On	-49.496	-21.07	PASS
	HCH	2480	-2.038	Off	-51.175	-22.04	PASS
			-0.937	On	-50.243	-20.94	PASS
8DPSK	LCH	2402	-1.514	Off	-50.642	-21.51	PASS
			-1.236	On	-50.824	-21.24	PASS
	HCH	2480	-1.090	Off	-50.524	-21.09	PASS
			-0.964	On	-50.181	-20.96	PASS

Test Graphs

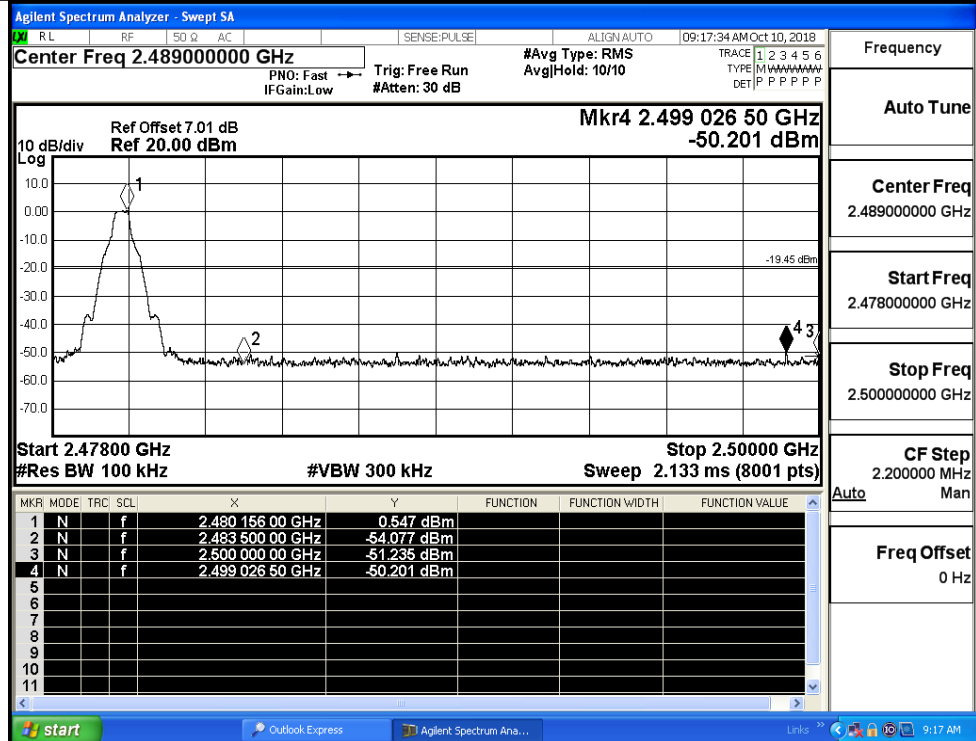
GFSK/LCH/No Hop



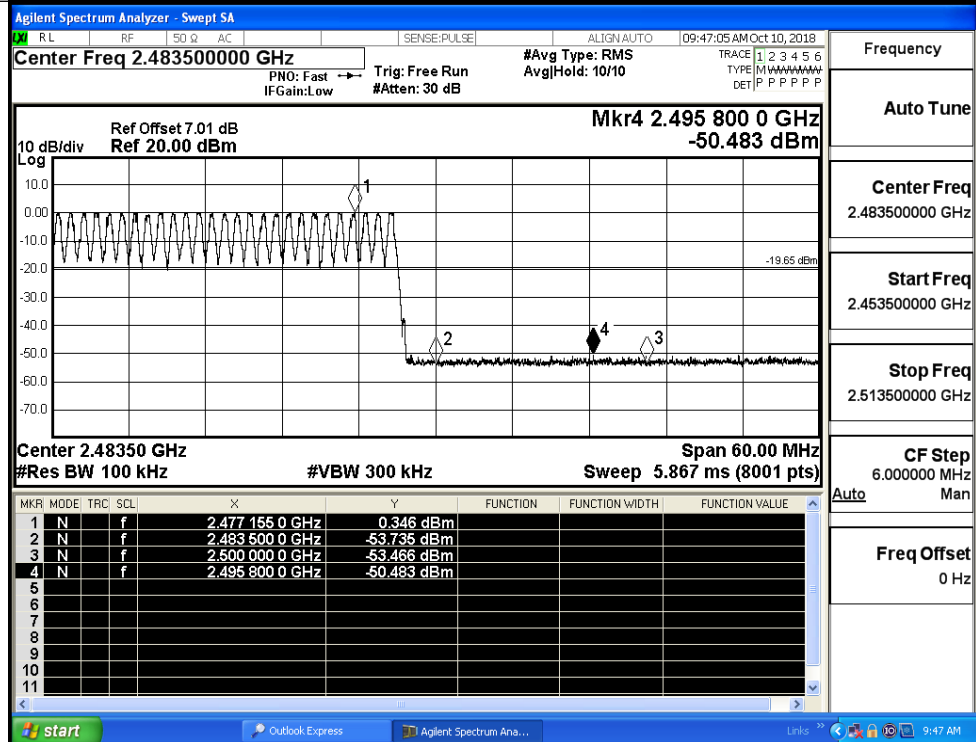
GFSK/LCH/Hop



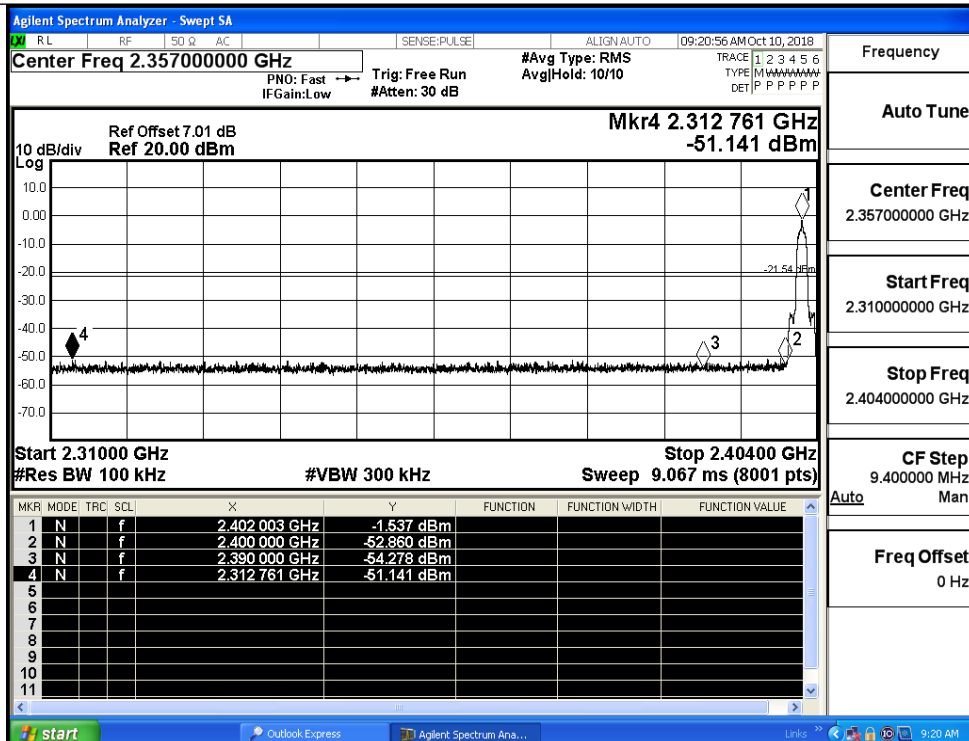
GFSK/HCH/No Hop



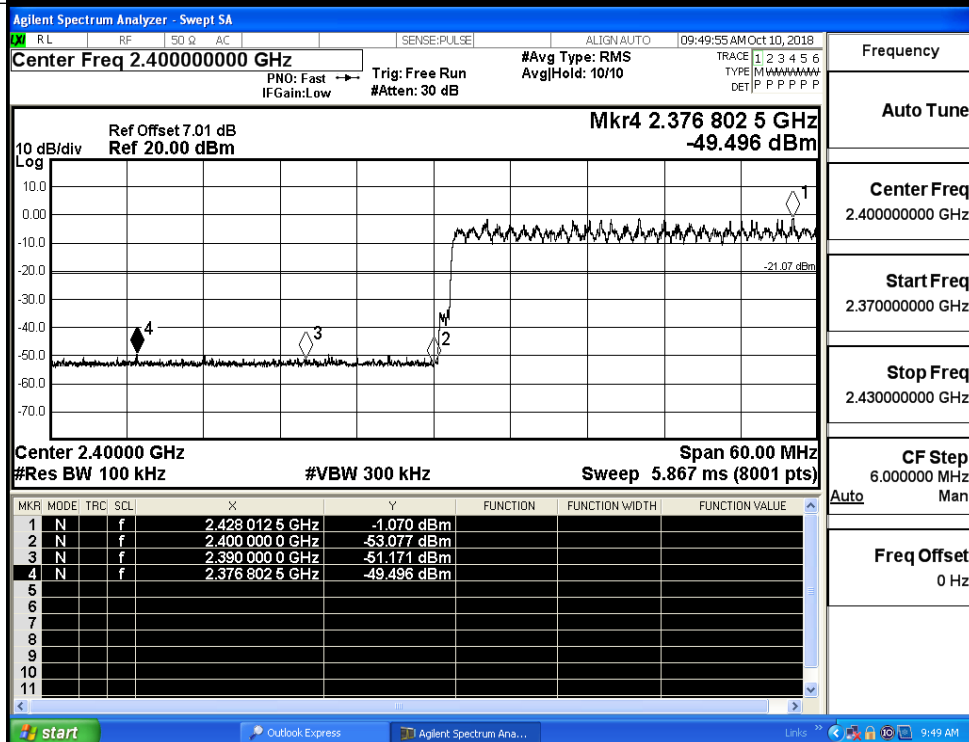
GFSK/HCH/Hop



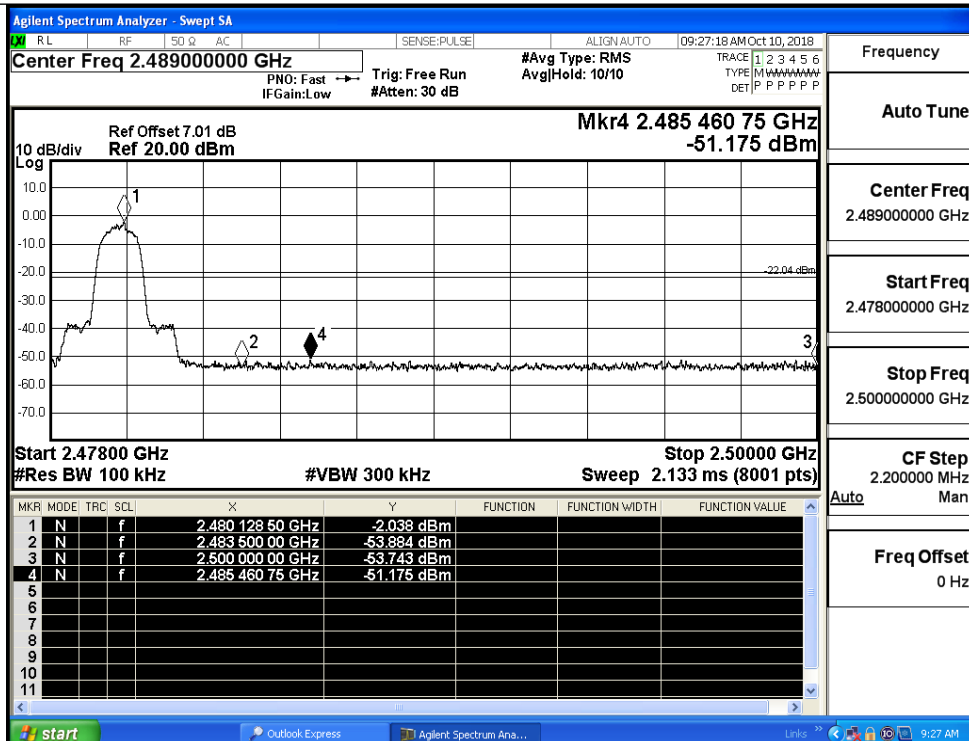
$\pi/4$ DQPSK/LCH/No
Hop



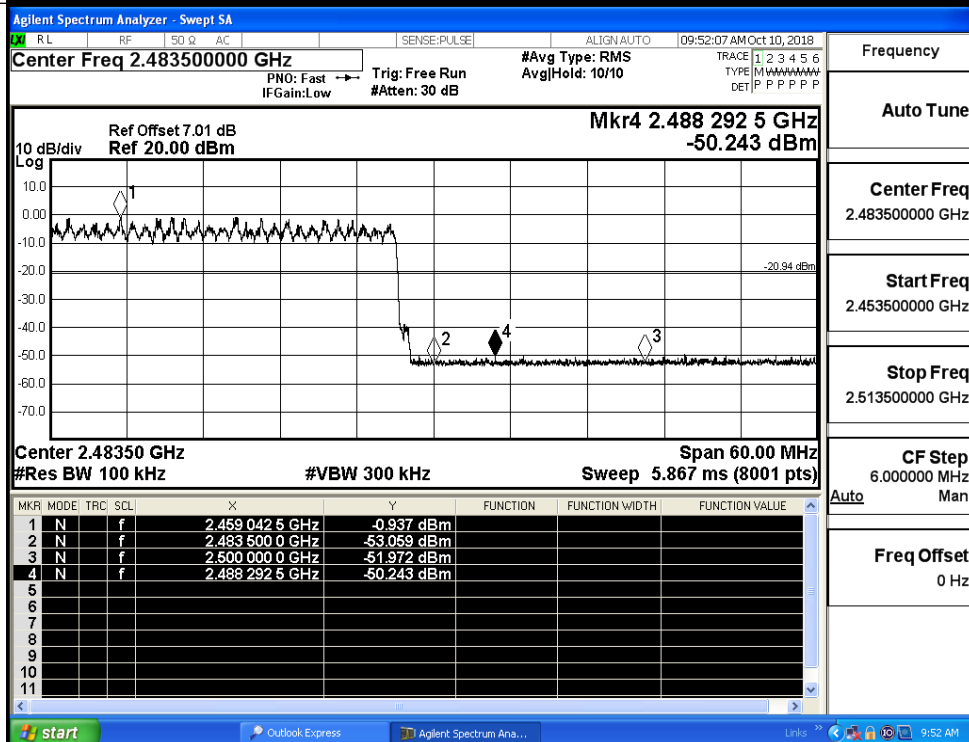
$\pi/4$ DQPSK/LCH/Hop



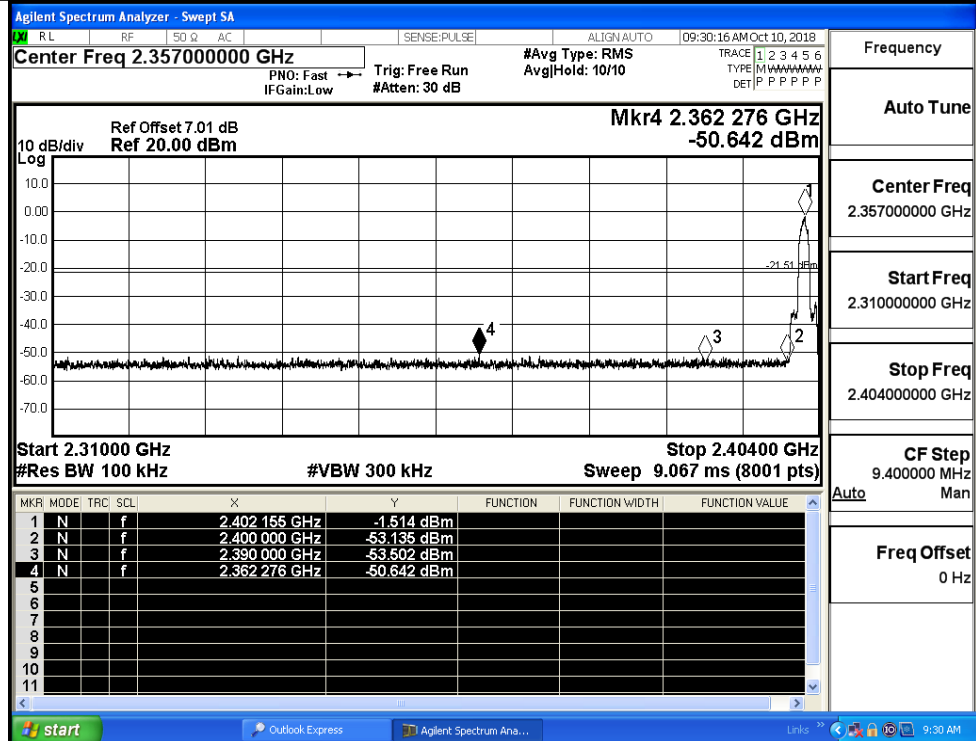
$\pi/4$ DQPSK/HCH/No
Hop



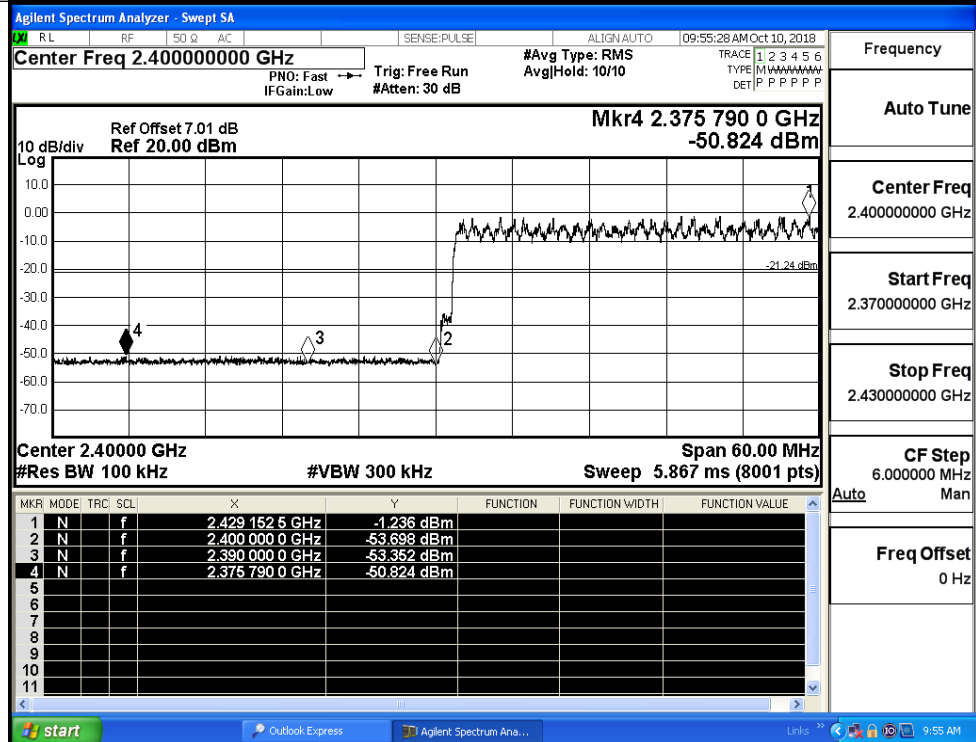
$\pi/4$ DQPSK/HCH/Hop



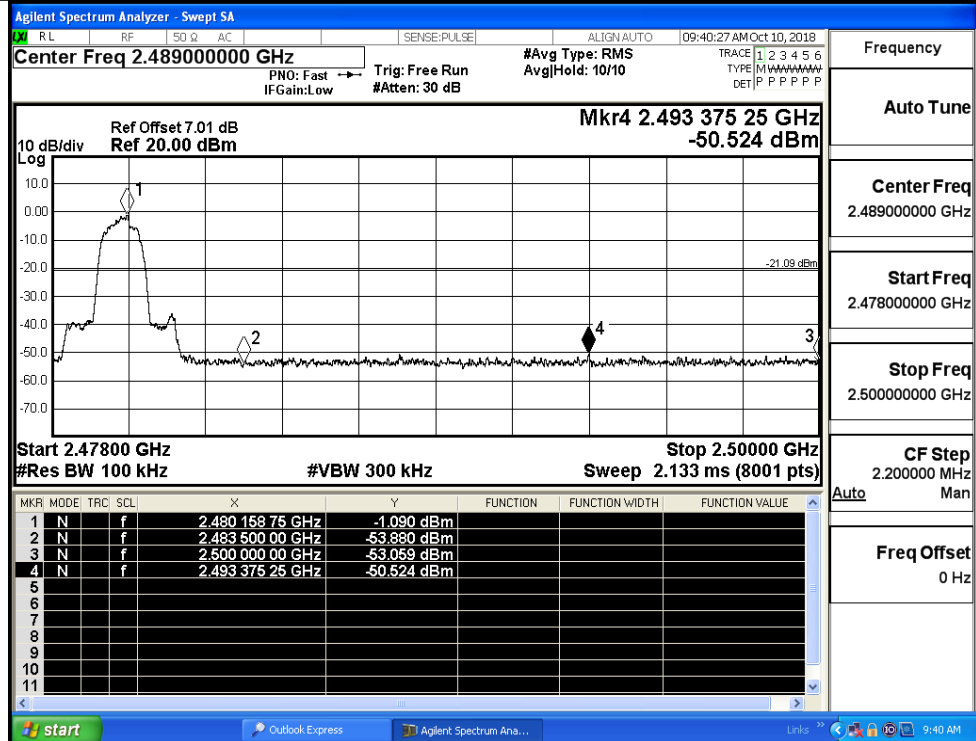
8DPSK/LCH/No Hop



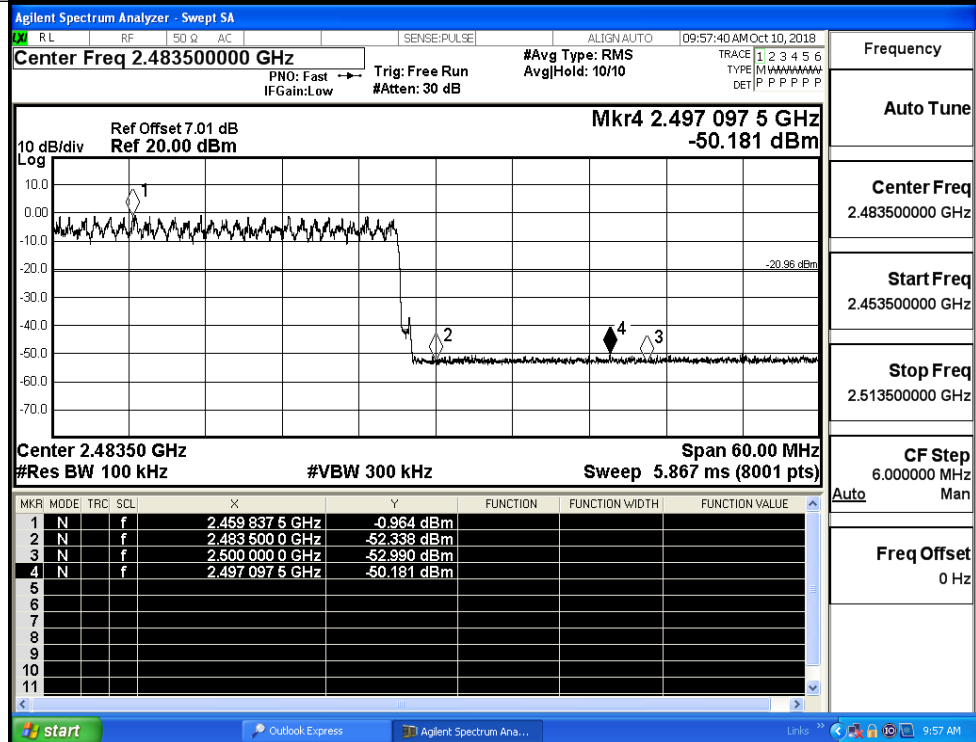
8DPSK/LCH/Hop



8DPSK/HCH/No Hop



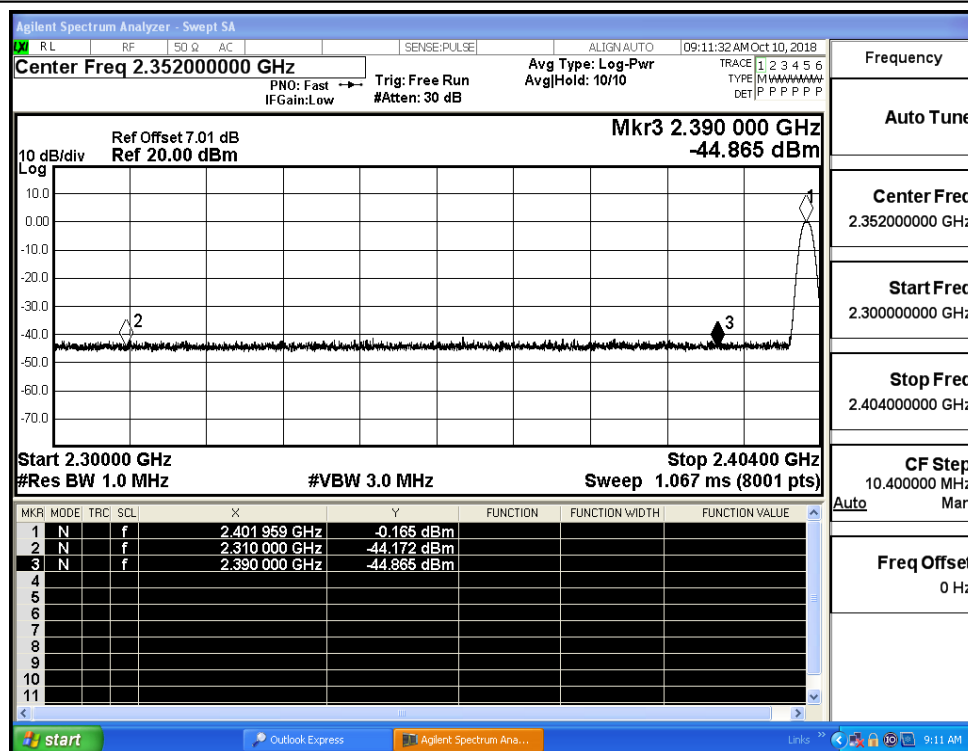
8DPSK/HCH/Hop



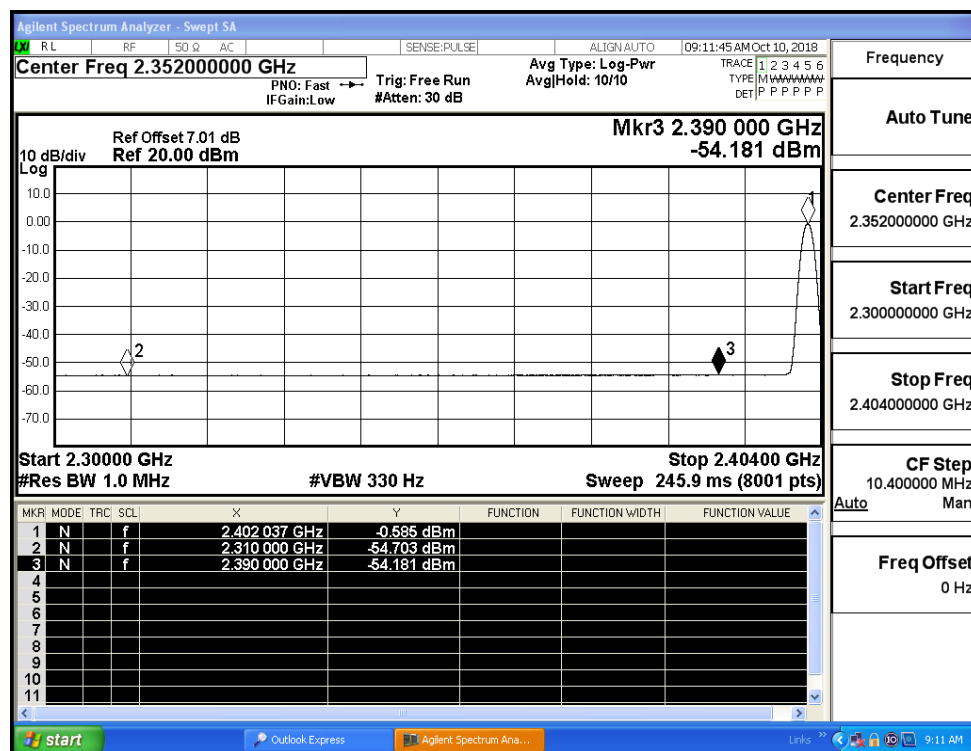
A.8 Restrict-band band-edge measurements

Test Mode	Hopping	Freq.	Power [dBm]	Gain	Ground Factor	E [dBuV/m]	Detector	Limit [dBuV/m]	Verdict
GFSK	Off	2310.0	-44.17	2.0	0	51.09	PEAK	74	PASS
	Off	2310.0	-54.70	2.0	0	40.55	AV	54	PASS
	Off	2390.0	-44.87	2.0	0	50.39	PEAK	74	PASS
	Off	2390.0	-54.18	2.0	0	41.08	AV	54	PASS
	Off	2483.5	-43.09	2.0	0	52.17	PEAK	74	PASS
	Off	2483.5	-53.97	2.0	0	41.28	AV	54	PASS
	Off	2500.0	-42.49	2.0	0	52.77	PEAK	74	PASS
	Off	2500.0	-53.88	2.0	0	41.37	AV	54	PASS
$\pi/4$ DQPSK	Off	2310.0	-44.07	2.0	0	51.19	PEAK	74	PASS
	Off	2310.0	-54.77	2.0	0	40.48	AV	54	PASS
	Off	2390.0	-44.12	2.0	0	51.13	PEAK	74	PASS
	Off	2390.0	-54.35	2.0	0	40.91	AV	54	PASS
	Off	2483.5	-44.58	2.0	0	50.68	PEAK	74	PASS
	Off	2483.5	-54.01	2.0	0	41.25	AV	54	PASS
	Off	2500.0	-43.56	2.0	0	51.70	PEAK	74	PASS
	Off	2500.0	-53.93	2.0	0	41.33	AV	54	PASS
8DPSK	Off	2310.0	-44.16	2.0	0	51.10	PEAK	74	PASS
	Off	2310.0	-54.70	2.0	0	40.56	AV	54	PASS
	Off	2390.0	-44.41	2.0	0	50.84	PEAK	74	PASS
	Off	2390.0	-54.28	2.0	0	40.98	AV	54	PASS
	Off	2483.5	-44.13	2.0	0	51.13	PEAK	74	PASS
	Off	2483.5	-54.09	2.0	0	41.17	AV	54	PASS
	Off	2500.0	-43.64	2.0	0	51.62	PEAK	74	PASS
	Off	2500.0	-53.98	2.0	0	41.28	AV	54	PASS

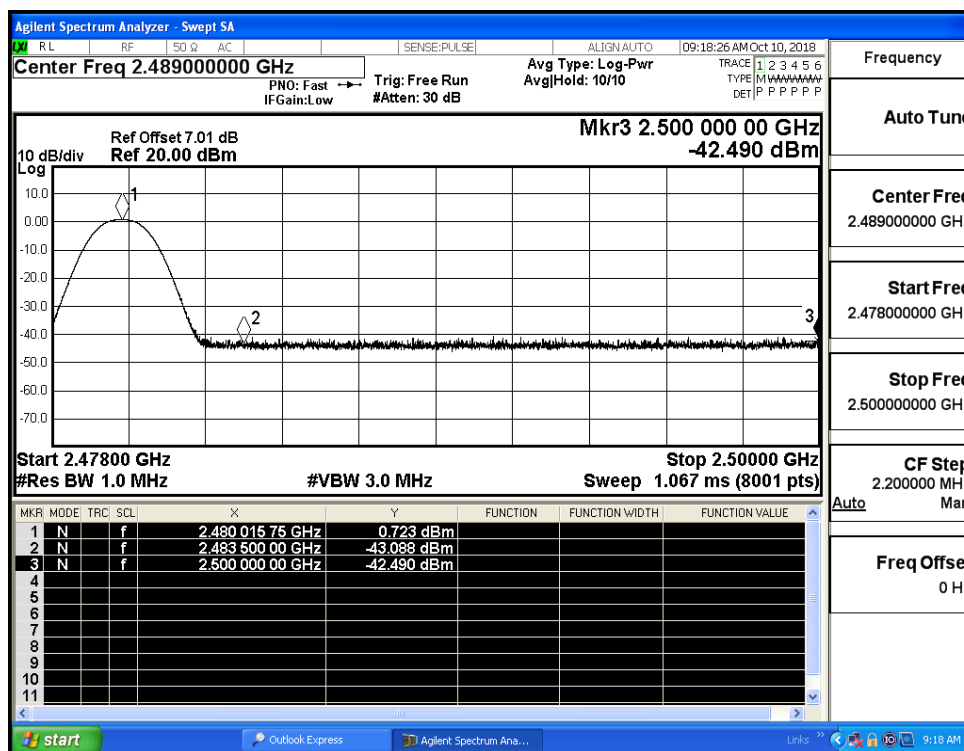
Restrict-band band-edge measurements_Hopping Off_GFSK_PEAK (Low Channel)



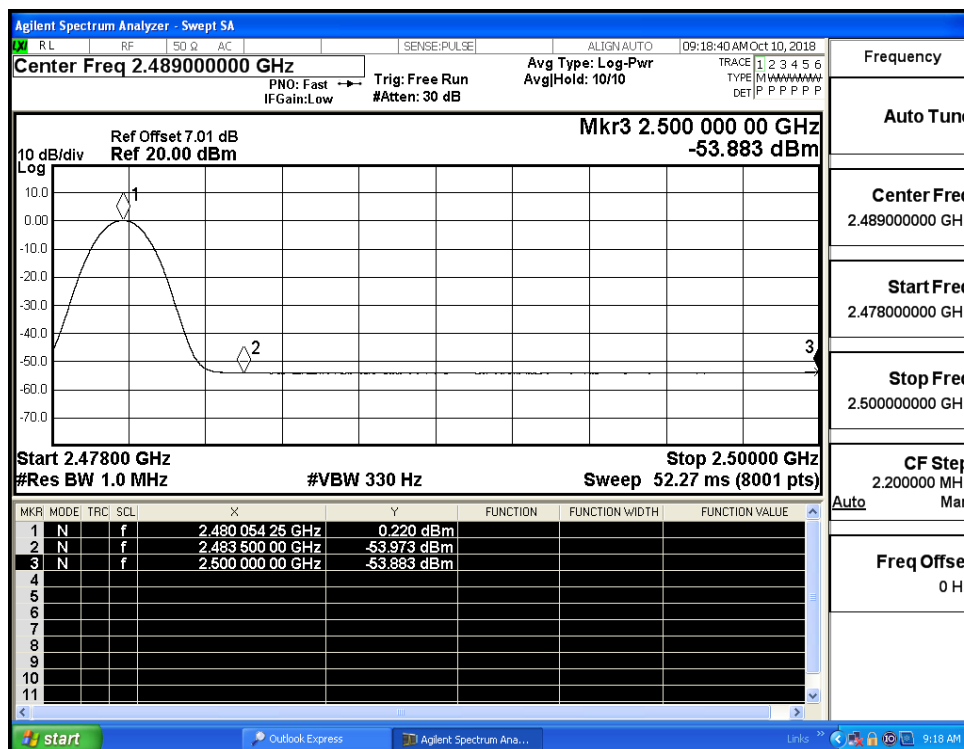
Restrict-band band-edge measurements_Hopping Off_GFSK_Average (Low Channel)

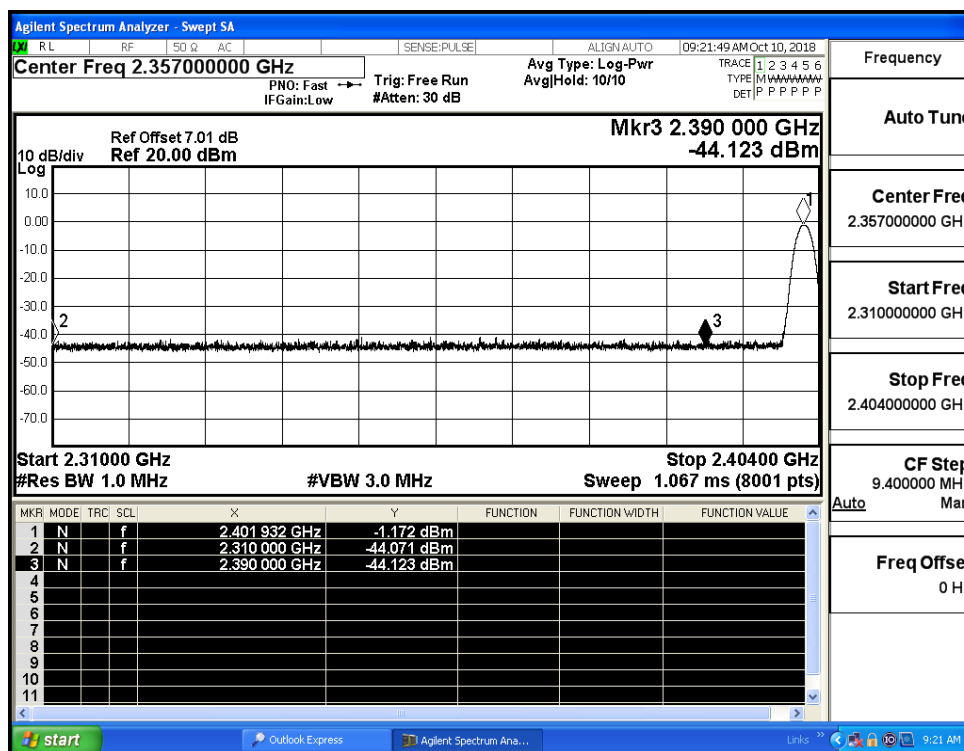
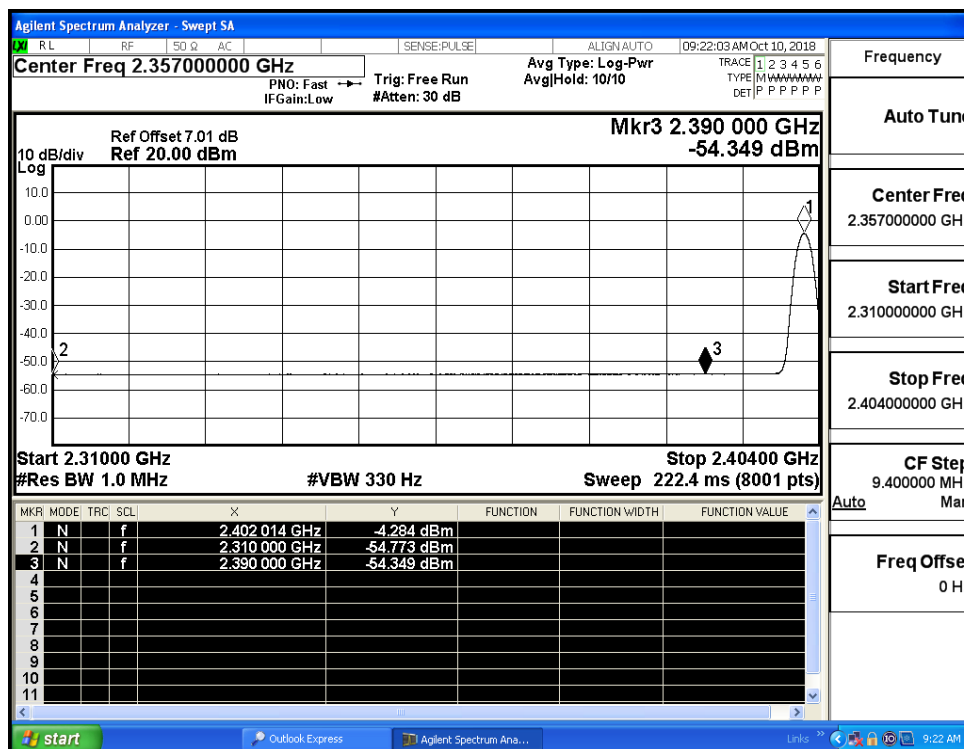


Restrict-band band-edge measurements_Hopping Off_ GFSK_PEAK (High Channel)

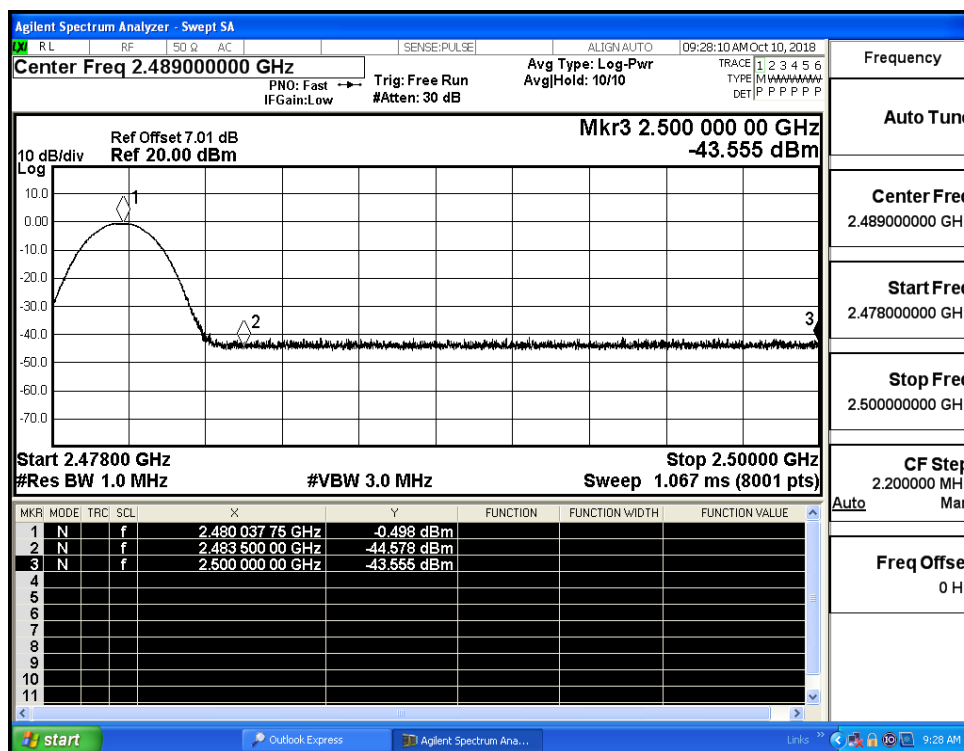


Restrict-band band-edge measurements_Hopping Off_ GFSK_Average (High Channel)

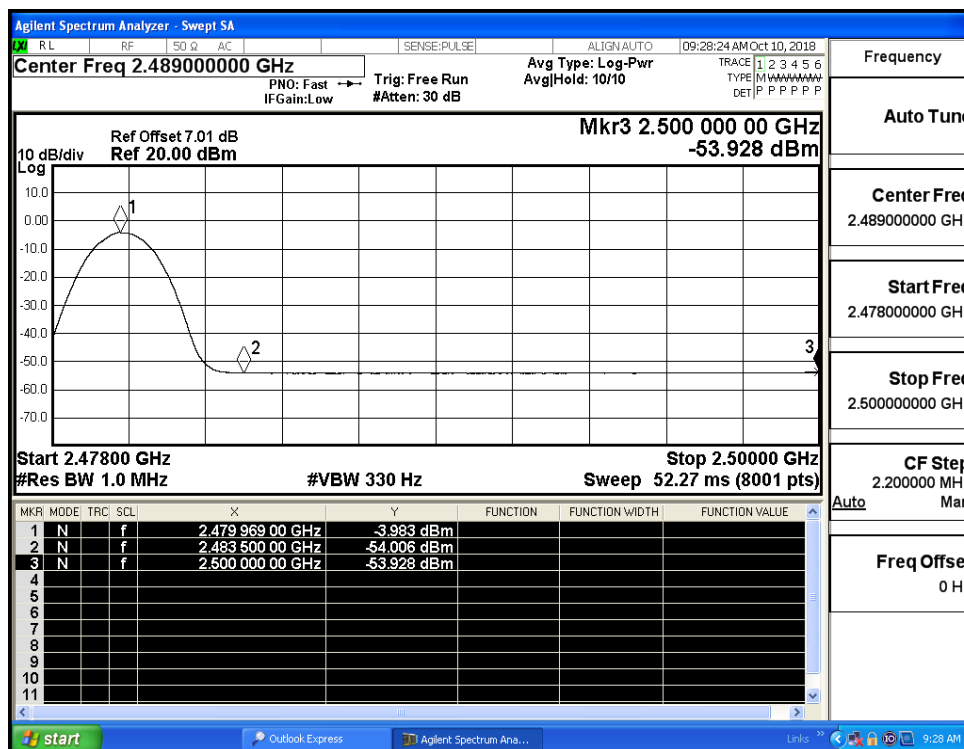


Restrict-band band-edge measurements_Hopping Off $\pi/4$ -DQPSK_PEAK (Low Channel)Restrict-band band-edge measurements_Hopping Off $\pi/4$ -DQPSK_Average (Low Channel)

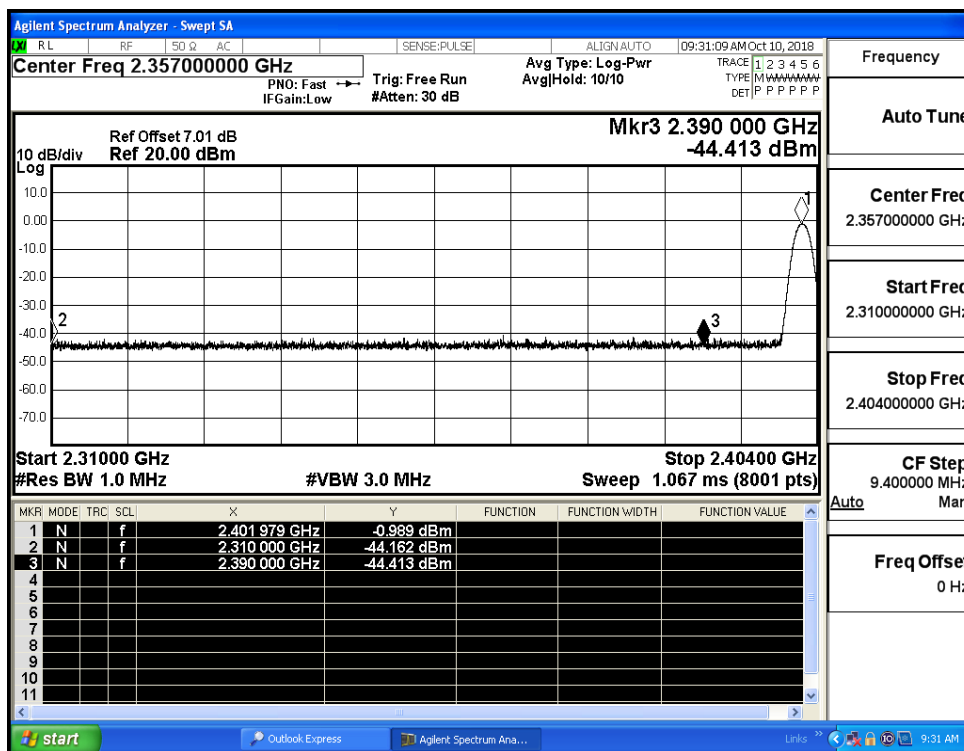
Restrict-band band-edge measurements_Hopping Off_π/4-DQPSK_PEAK (High Channel)



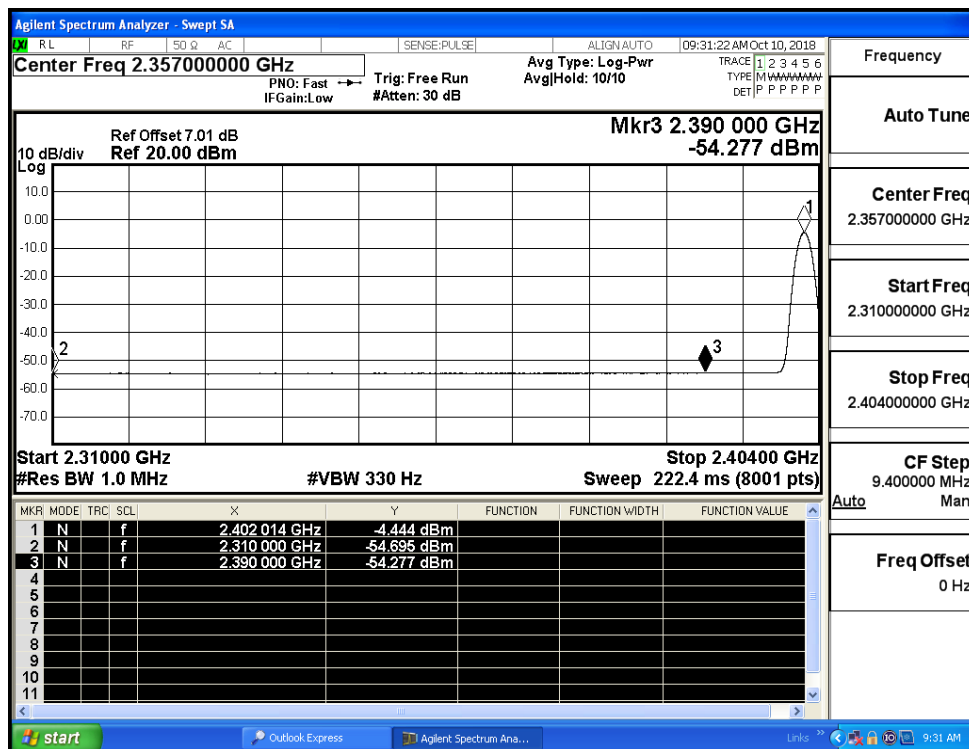
Restrict-band band-edge measurements_Hopping Off_π/4-DQPSK_Average (High Channel)



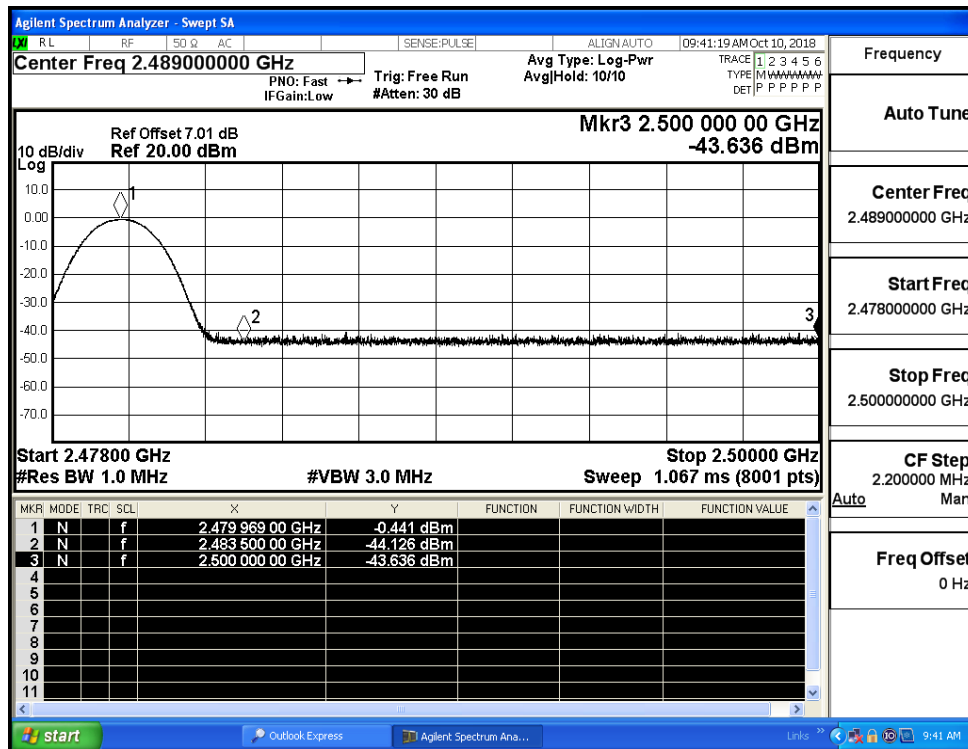
Restrict-band band-edge measurements_Hopping Off_8DPSK_PEAK (Low Channel)



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)

