

Appendix A

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

Product Name: 4G Smartphones

Trade Mark: Kenxinda, Ken mobile, KXD, E&L, EL

Test Model: Y50

Environmental Conditions

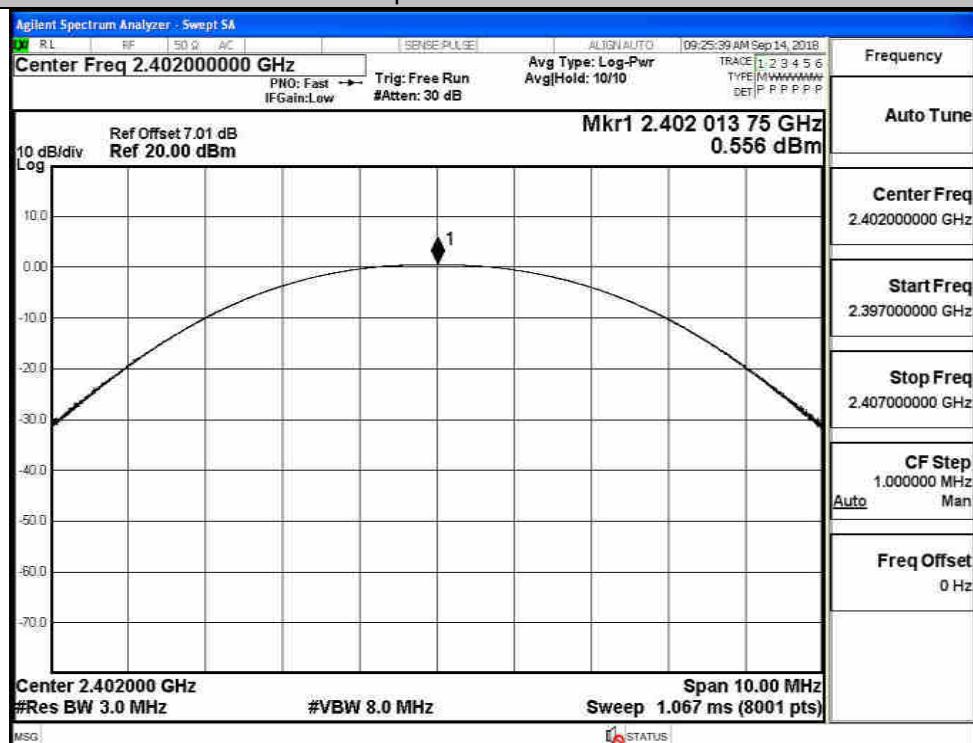
Temperature:	24.6 ° C
Relative Humidity:	52.6%
ATM Pressure:	100.0 kPa
Test Engineer:	Mina.Xu
Supervised by:	Jayden.Zhuo

A.1 Maximum Conducted Peak Output Power

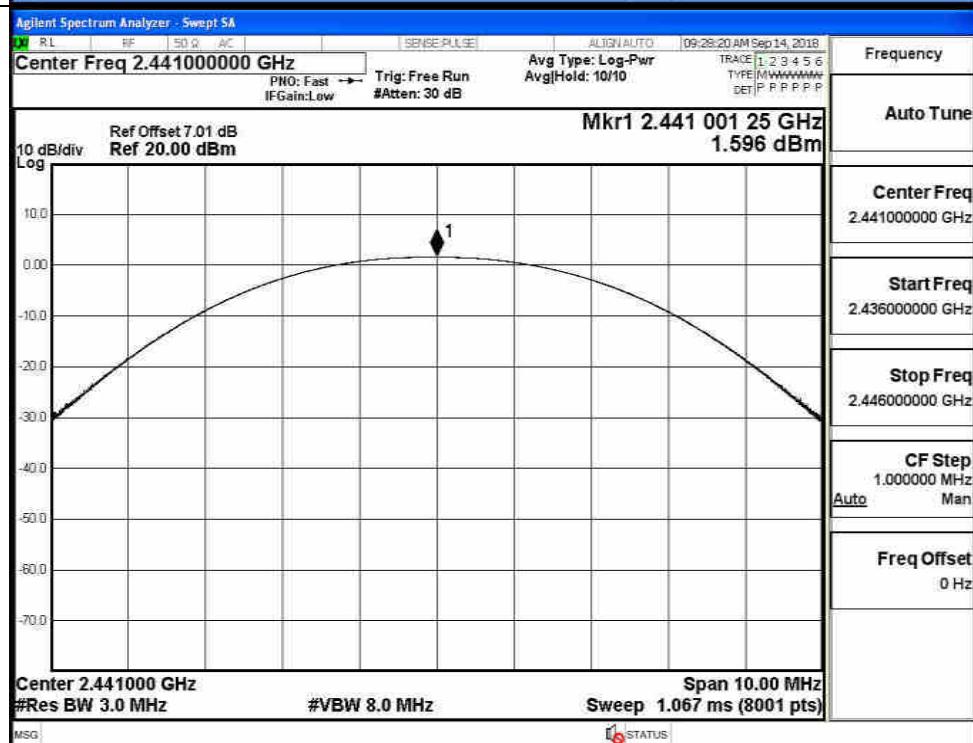
Mode	Channel.	Maximum Peak Output Power [dBm]	Limit [dBm]	Verdict
GFSK	LCH	0.556	21	PASS
	MCH	1.596	21	PASS
	HCH	1.783	21	PASS
$\pi/4$ DQPSK	LCH	0.285	21	PASS
	MCH	1.381	21	PASS
	HCH	1.572	21	PASS
8DPSK	LCH	0.400	21	PASS
	MCH	1.490	21	PASS
	HCH	1.679	21	PASS

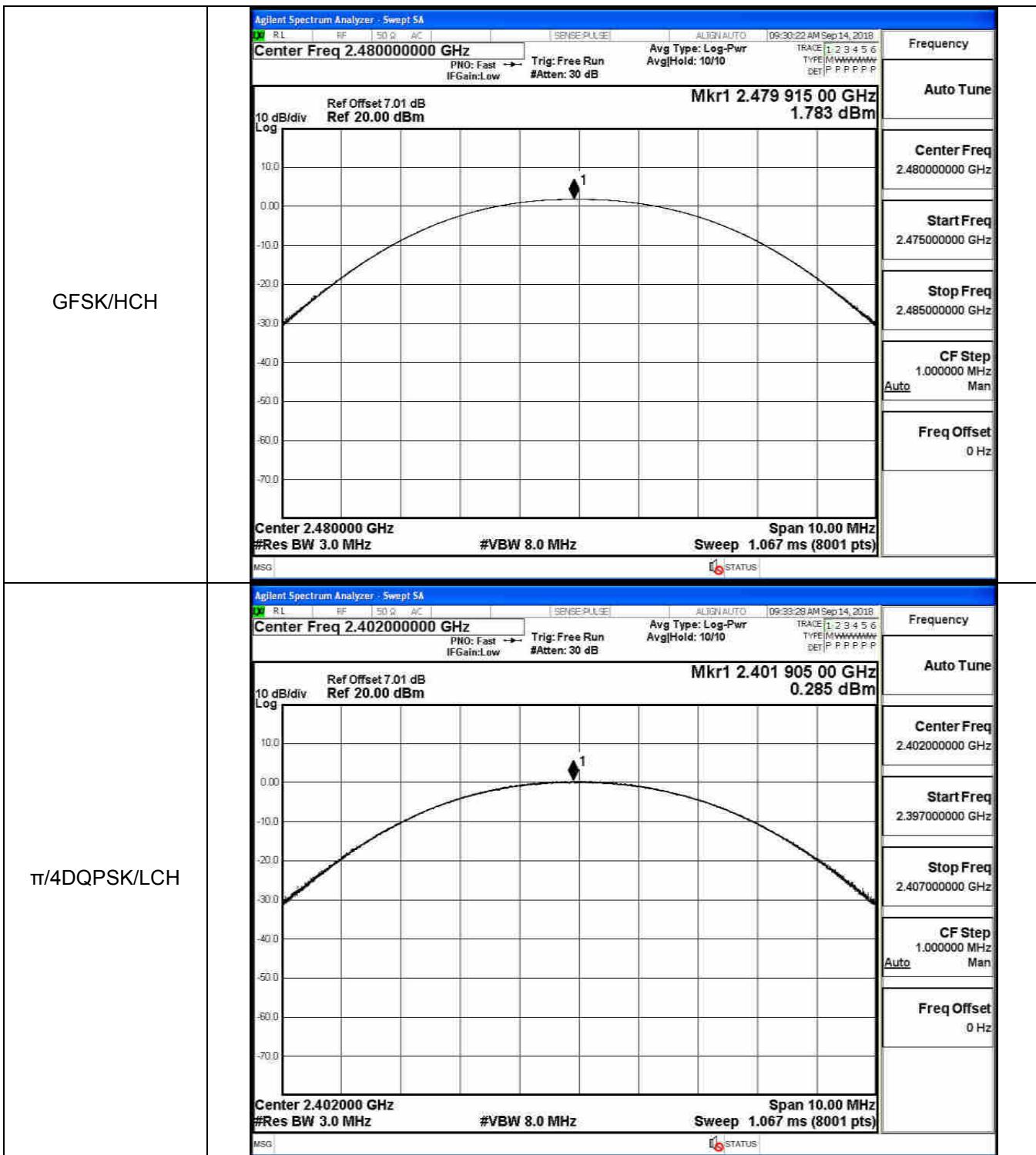
Test Graphs

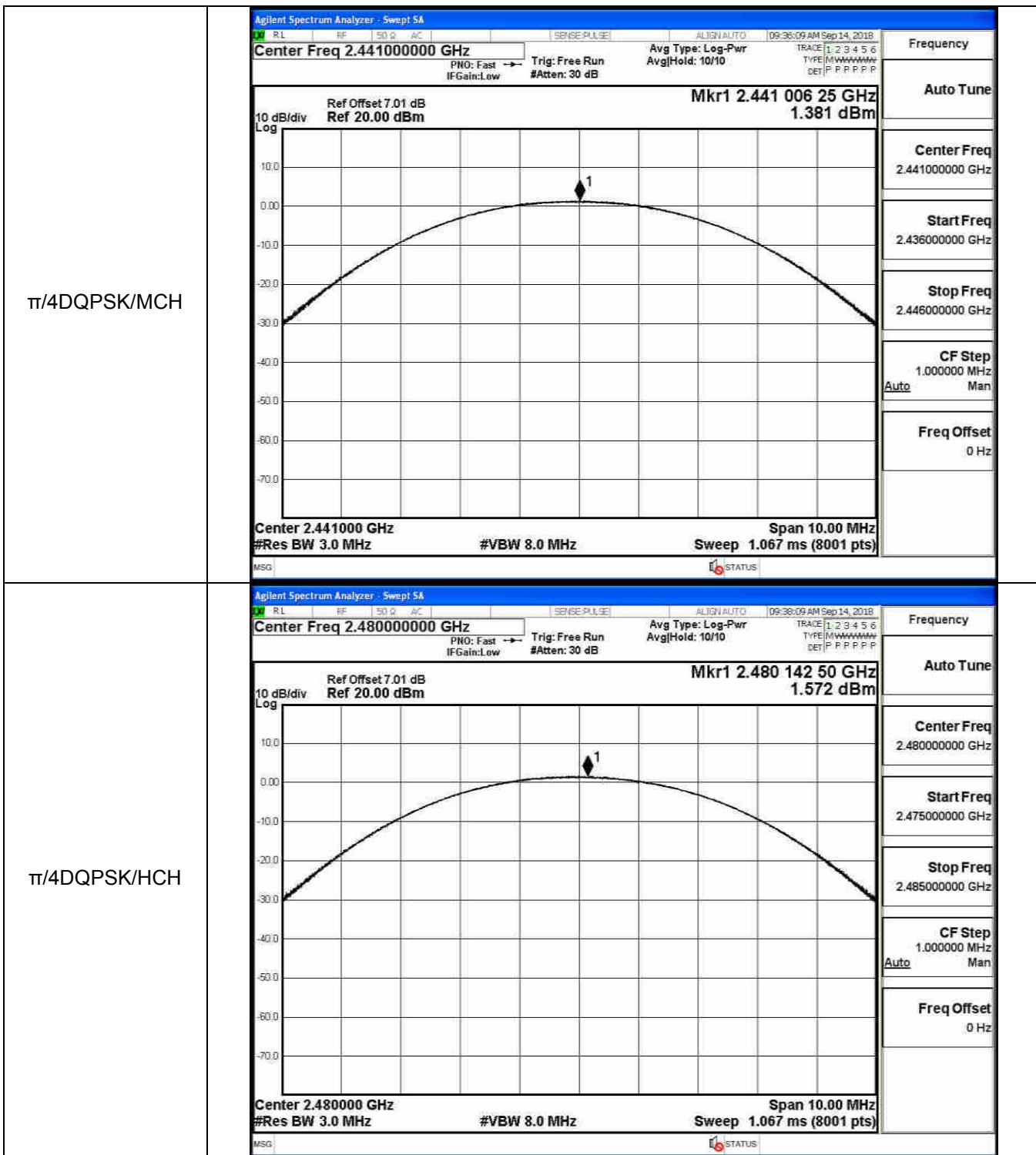
GFSK/LCH

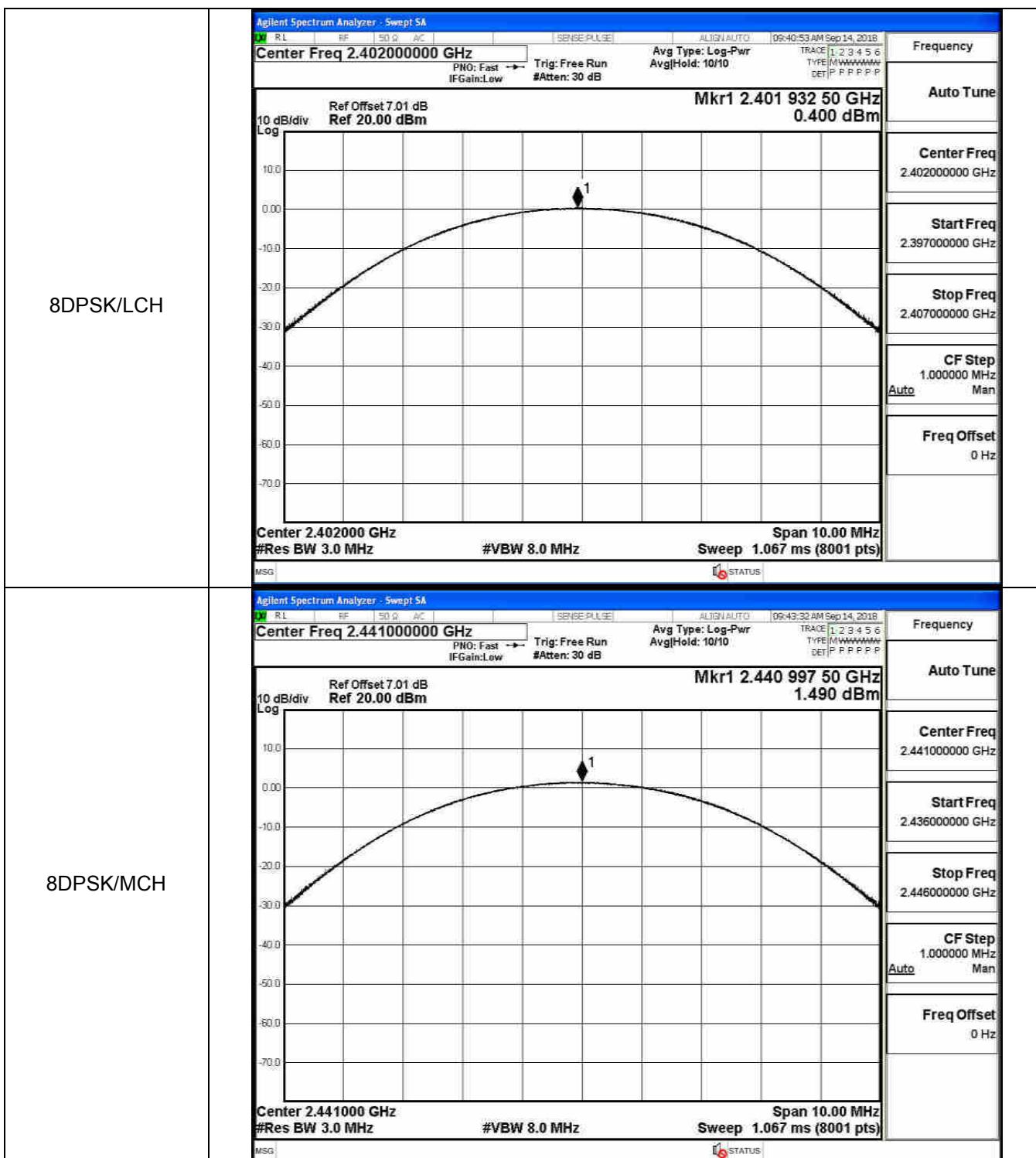


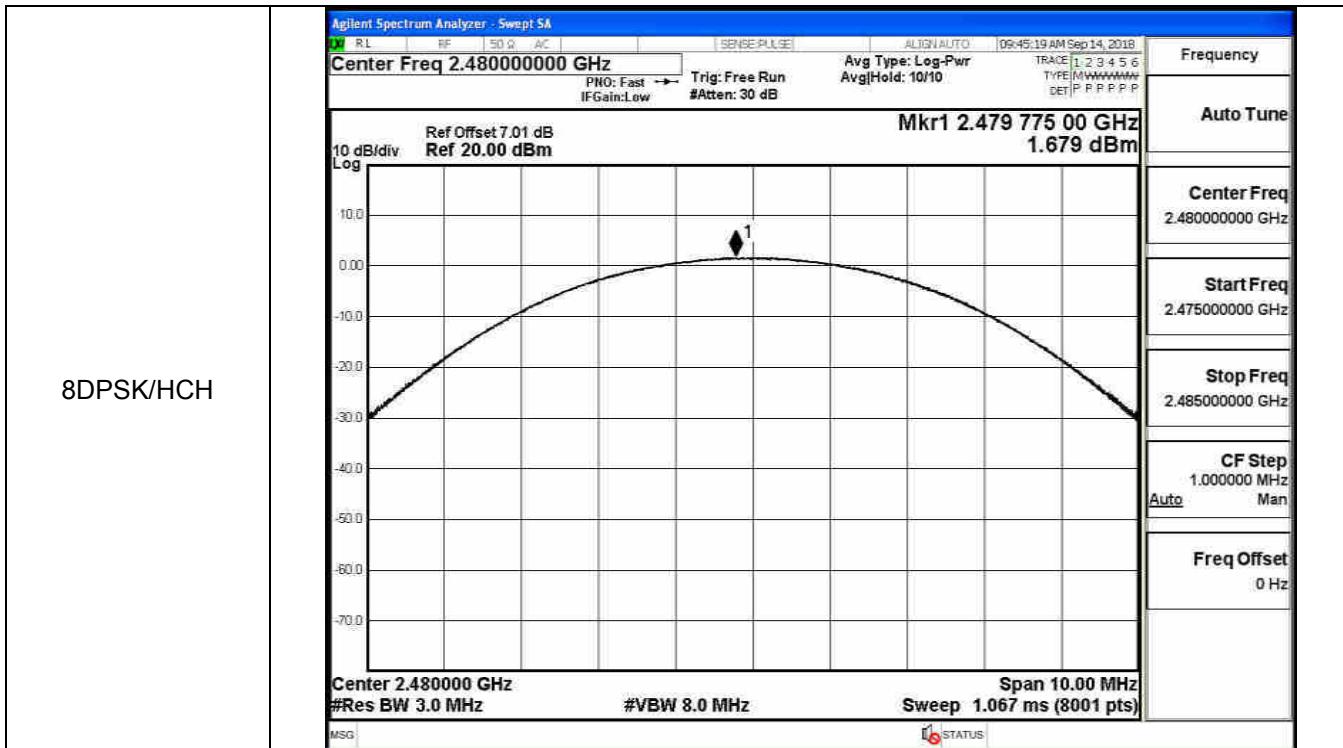
GFSK/MCH





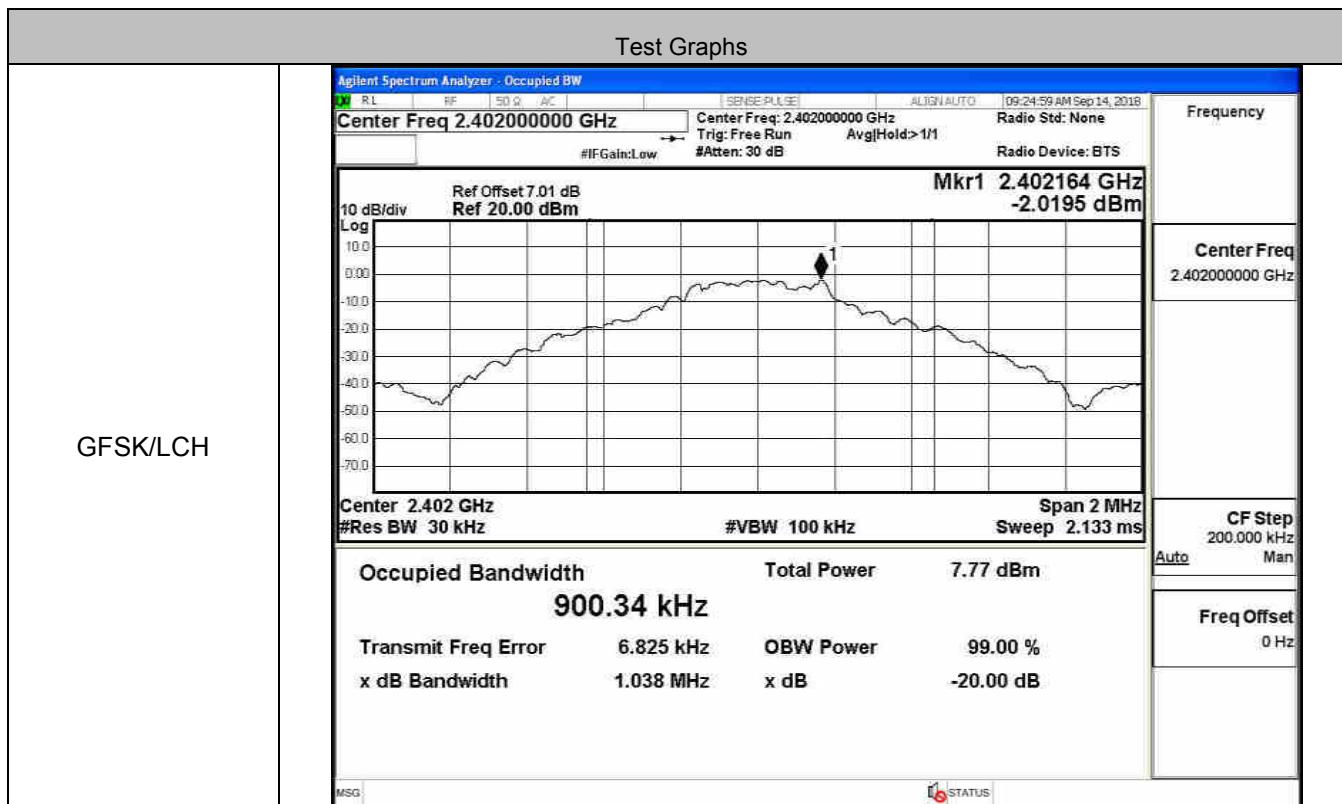


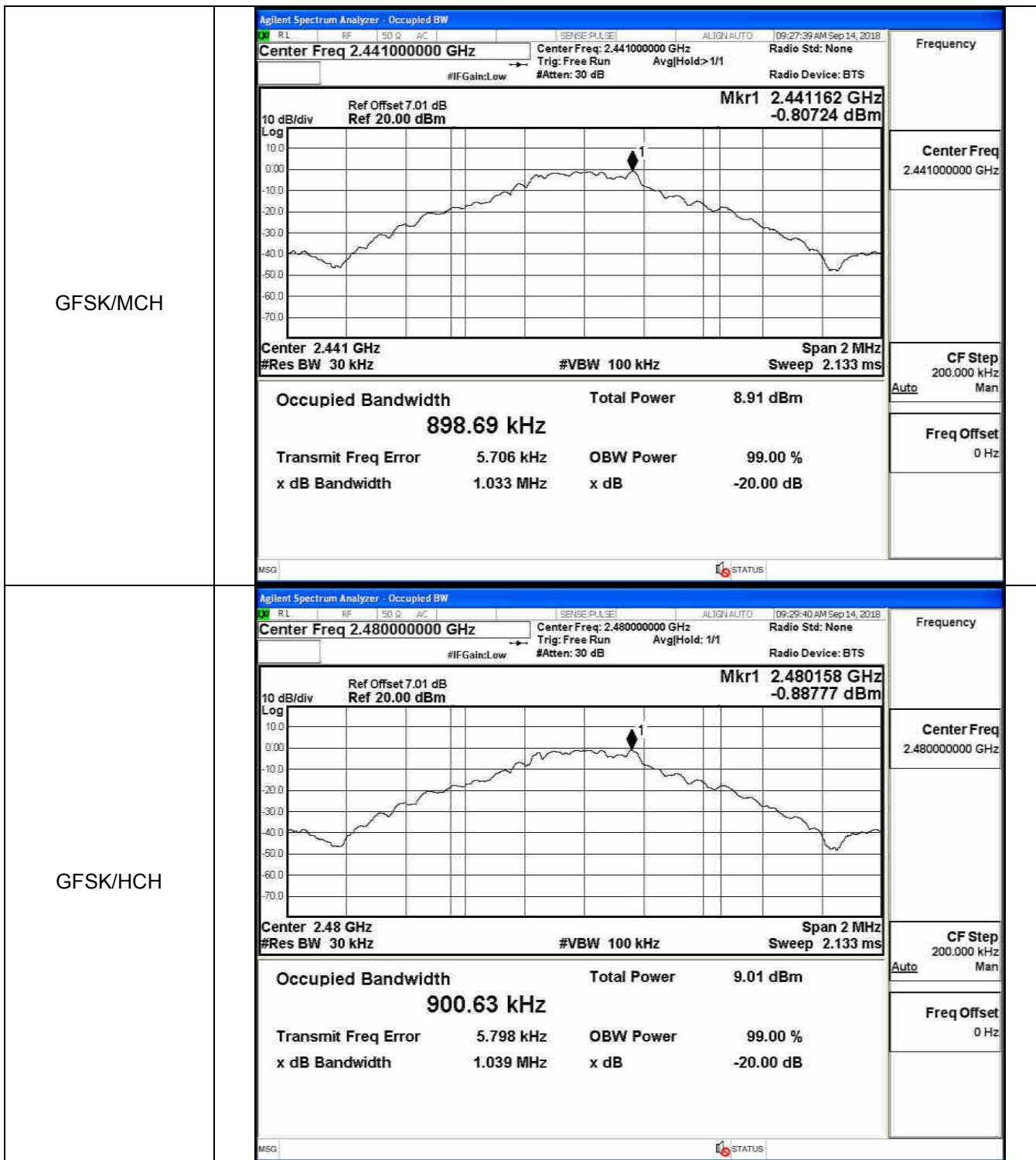


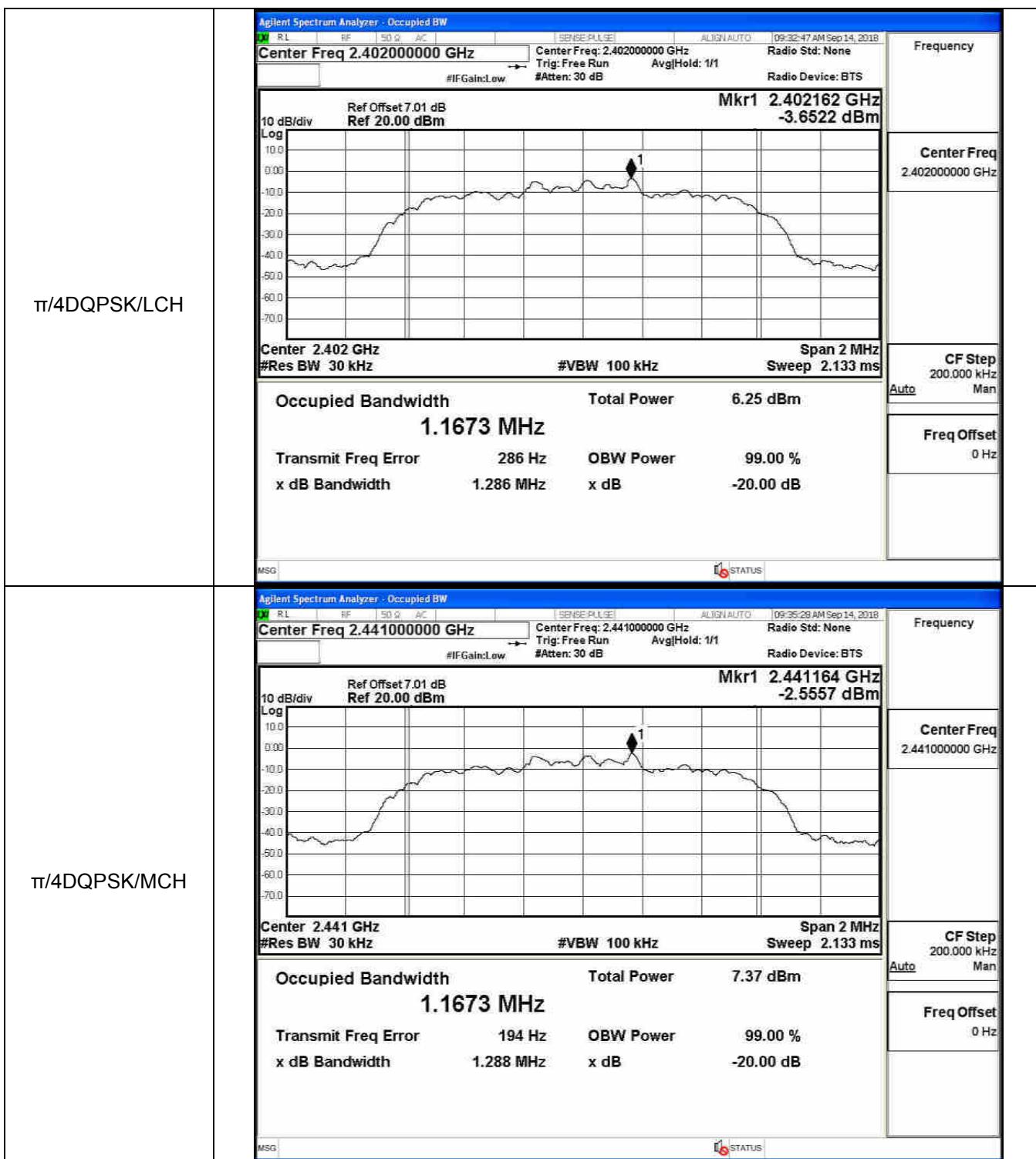


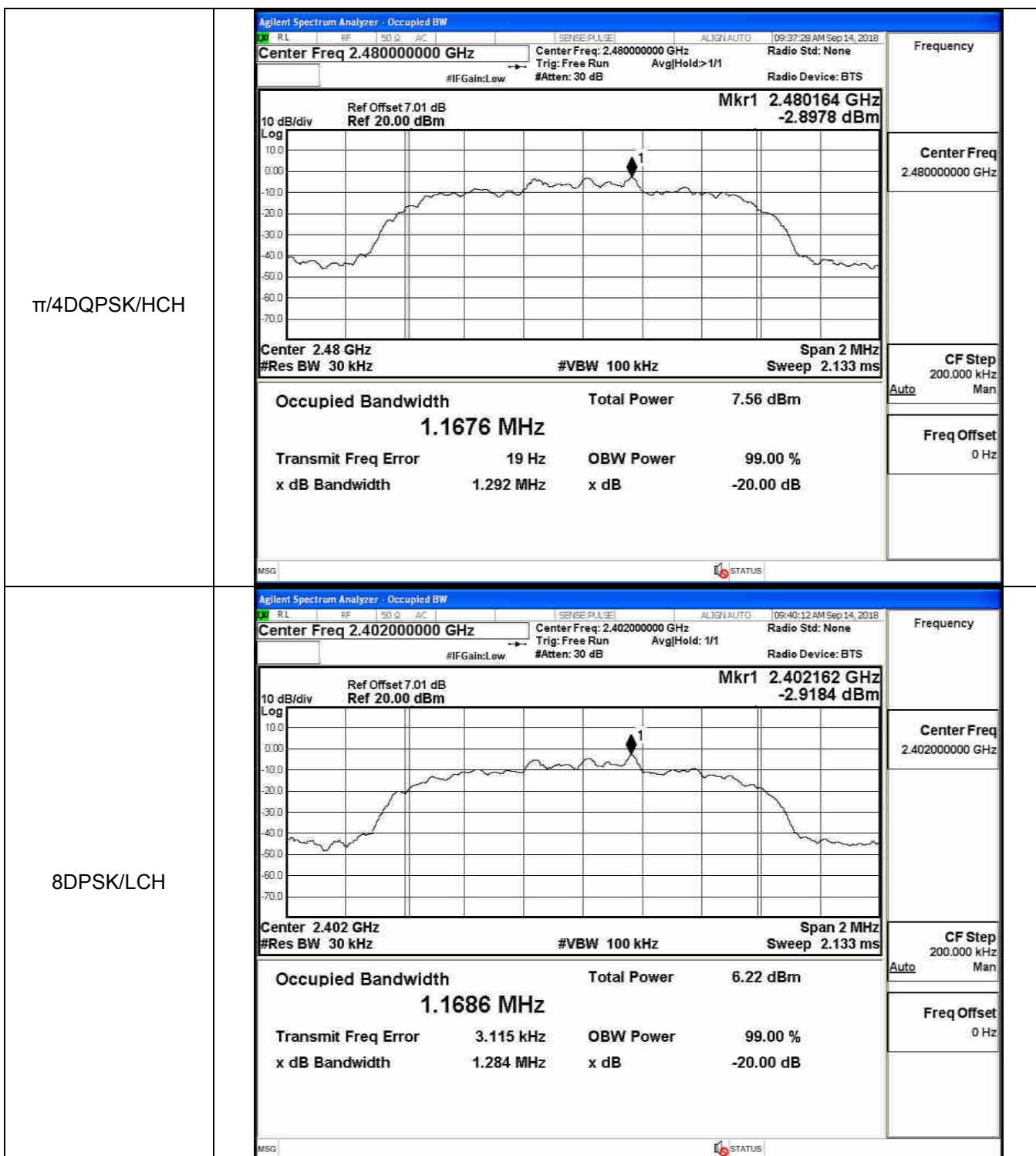
A.2 20dB Bandwidth

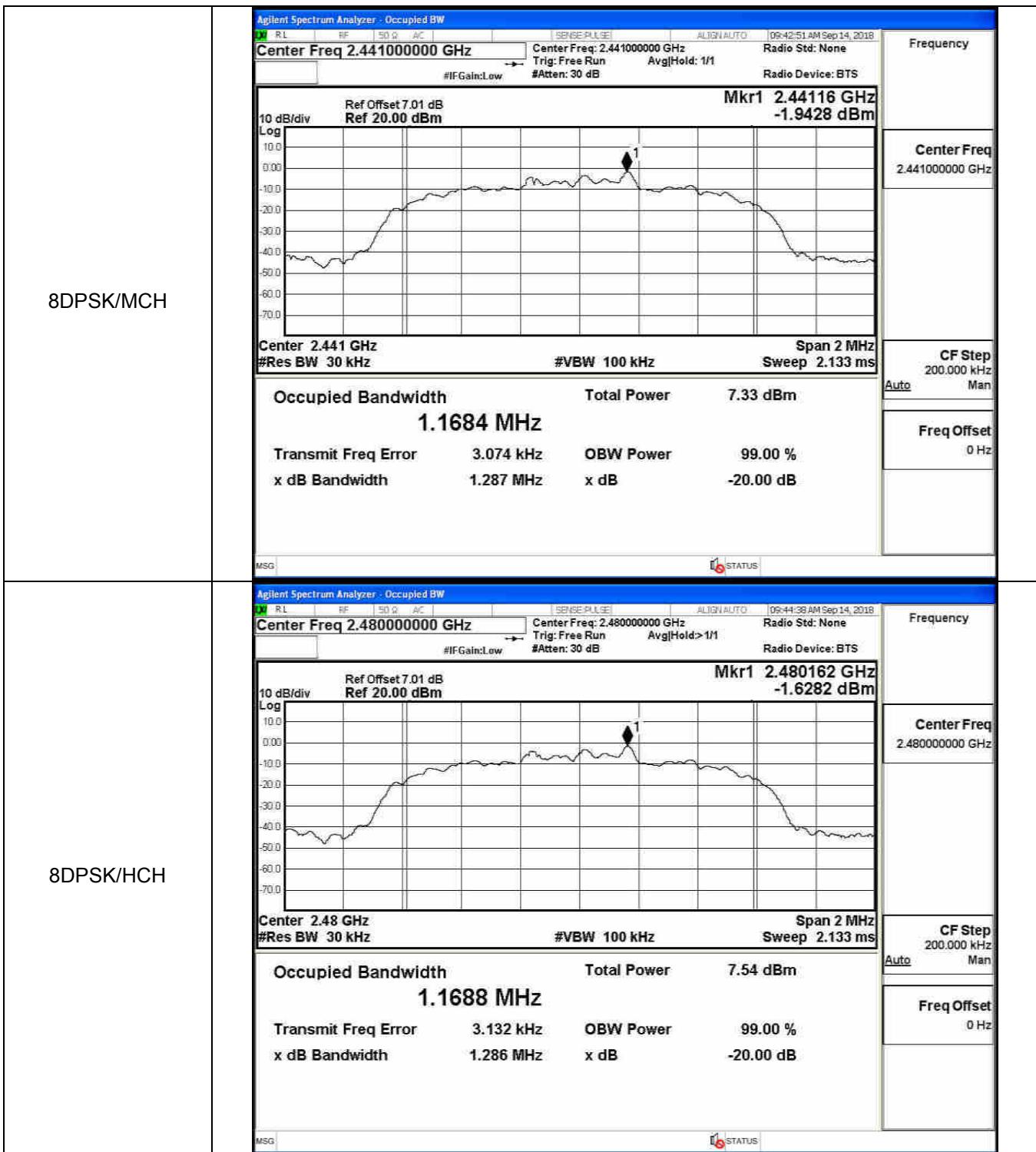
Mode	Channel.	20dB Bandwidth [MHz]	Limit [MHz]	Verdict
GFSK	LCH	1.038	Not Specified	PASS
	MCH	1.033	Not Specified	PASS
	HCH	1.039	Not Specified	PASS
$\pi/4$ DQPSK	LCH	1.286	Not Specified	PASS
	MCH	1.288	Not Specified	PASS
	HCH	1.292	Not Specified	PASS
8DPSK	LCH	1.284	Not Specified	PASS
	MCH	1.287	Not Specified	PASS
	HCH	1.286	Not Specified	PASS





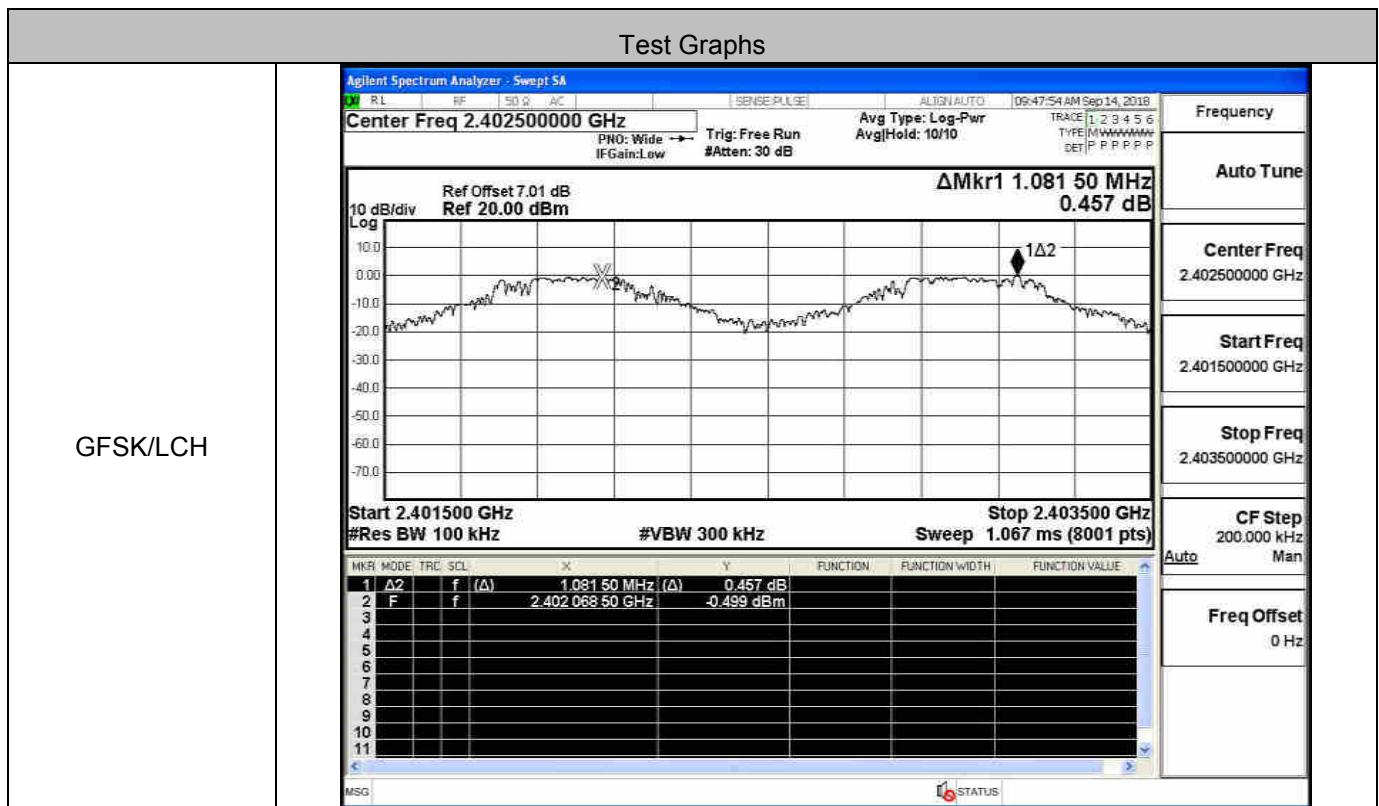


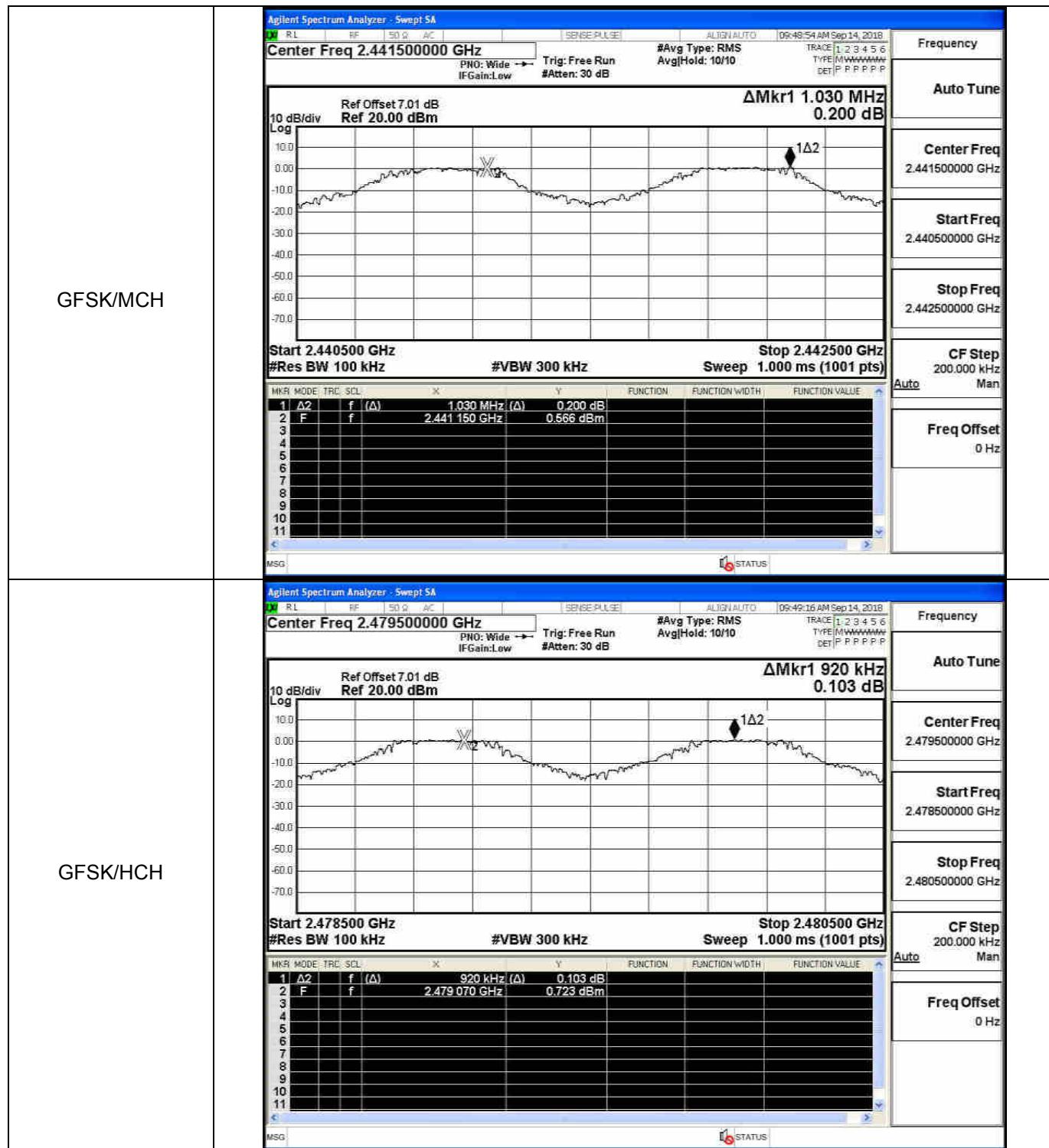


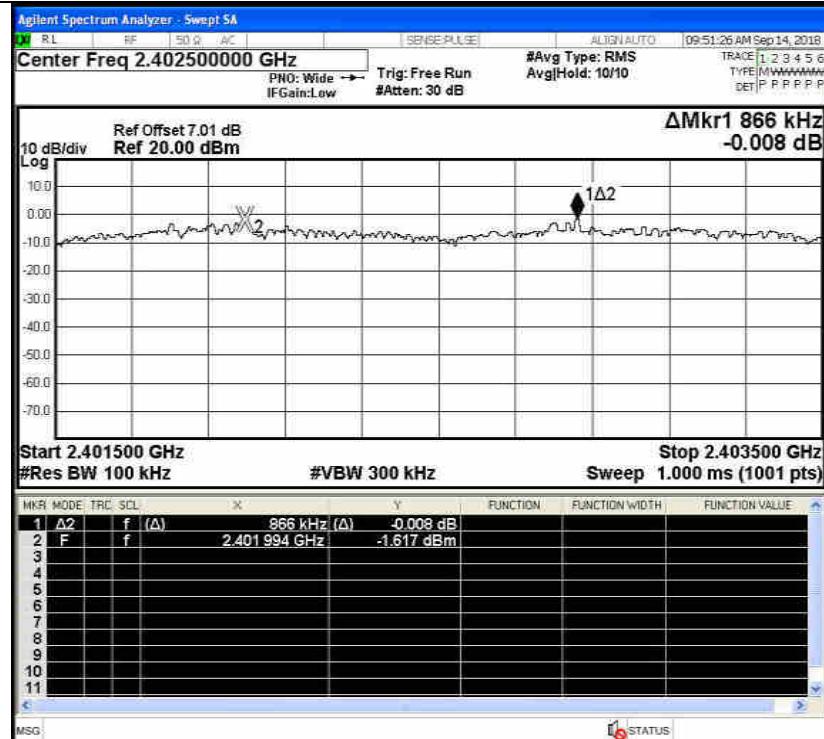


A.3 Carrier Frequency Separation

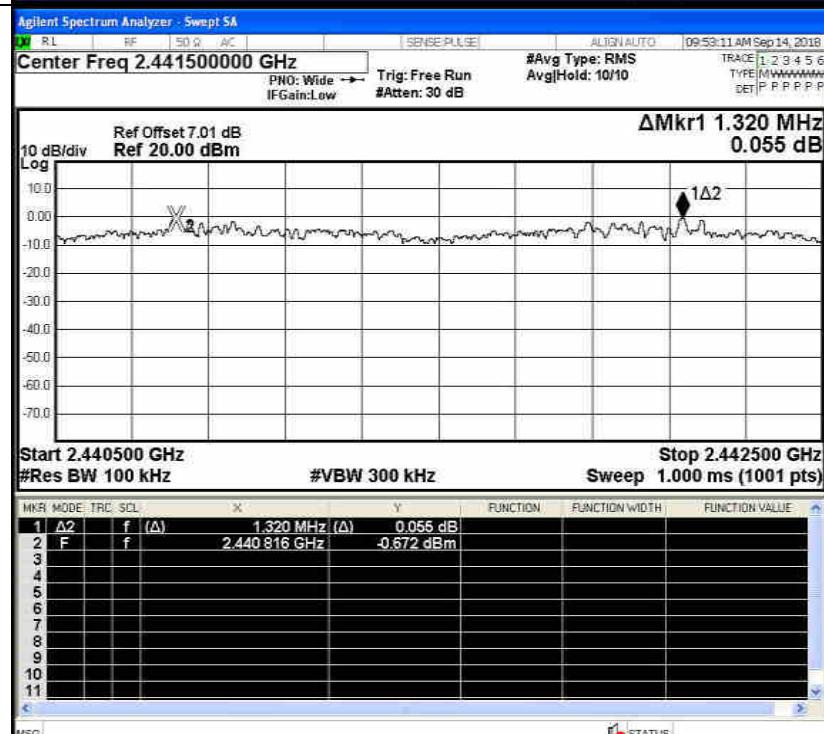
Mode	Channel.	Carrier Frequency Separation [MHz]	Limit [MHz]	Verdict
GFSK	LCH	1.082	0.693	PASS
	MCH	1.030	0.693	PASS
	HCH	0.920	0.693	PASS
$\pi/4$ DQPSK	LCH	0.866	0.861	PASS
	MCH	1.320	0.861	PASS
	HCH	1.050	0.861	PASS
8DPSK	LCH	1.274	0.858	PASS
	MCH	1.216	0.858	PASS
	HCH	1.122	0.858	PASS



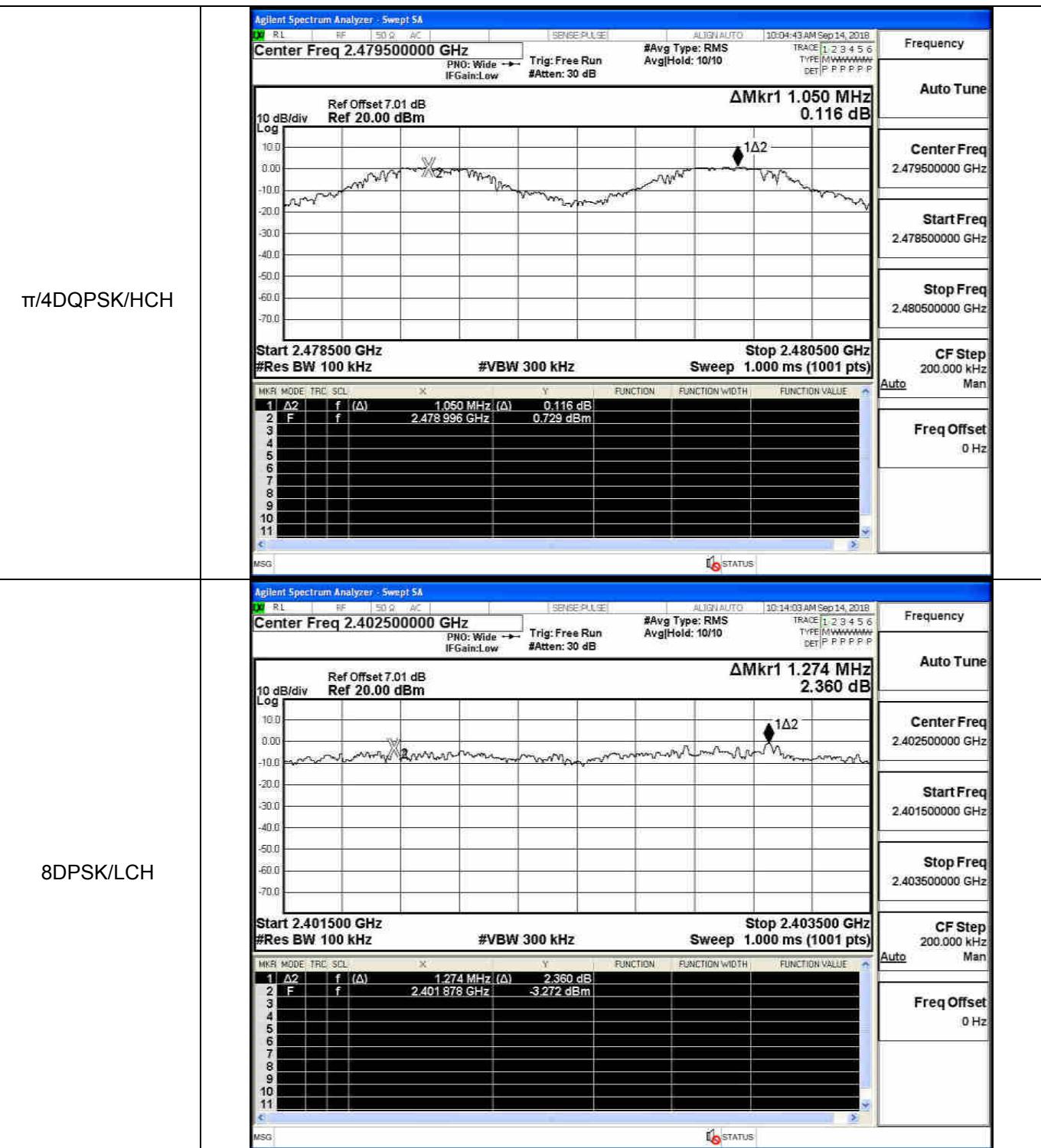


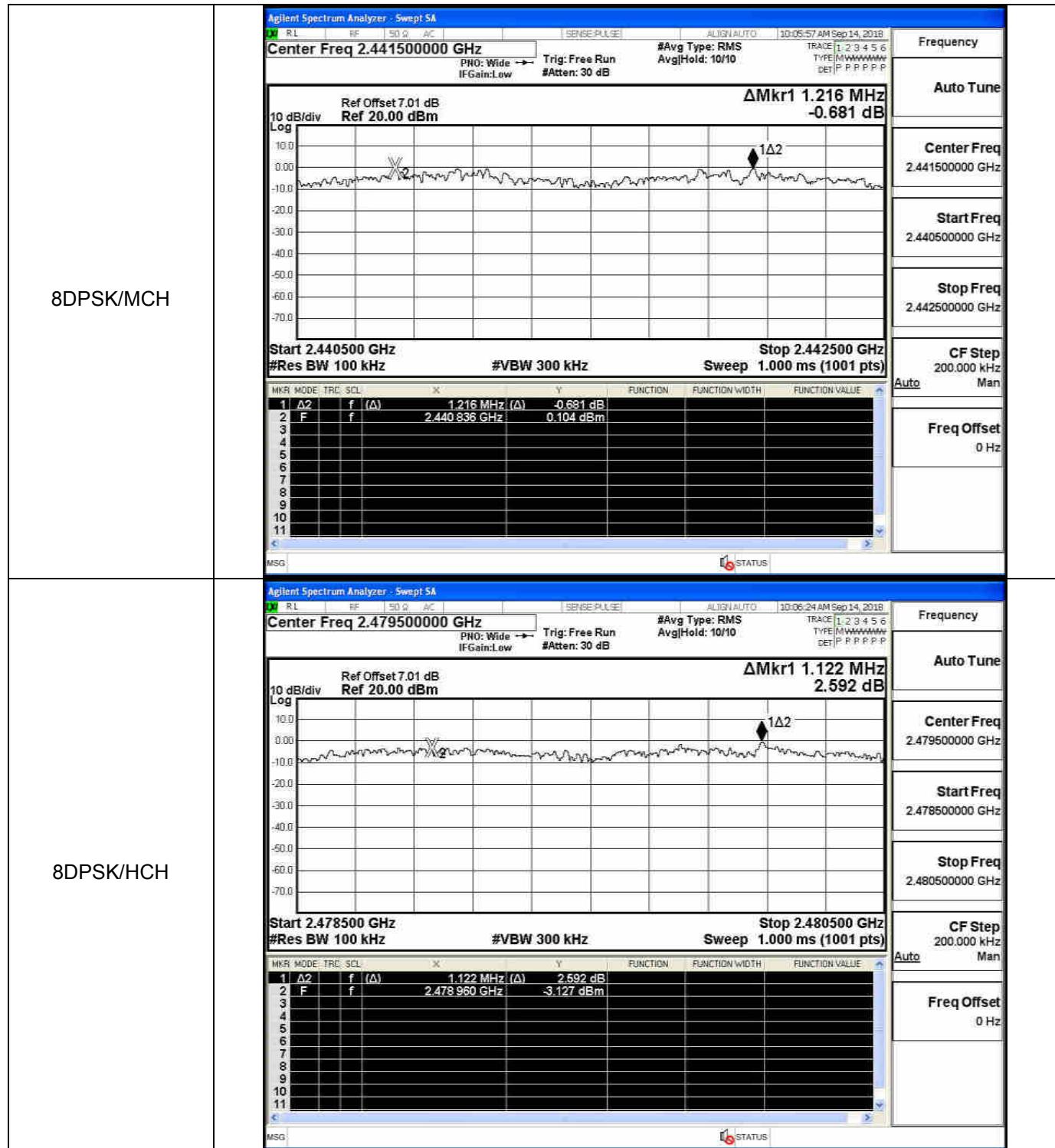
$\pi/4$ DQPSK/LCH

Frequency
Auto Tune
Center Freq 2.402500000 GHz
Start Freq 2.401500000 GHz
Stop Freq 2.403500000 GHz
CF Step 200.000 kHz Auto Man
Freq Offset 0 Hz

 $\pi/4$ DQPSK/MCH

Frequency
Auto Tune
Center Freq 2.441500000 GHz
Start Freq 2.440500000 GHz
Stop Freq 2.442500000 GHz
CF Step 200.000 kHz Auto Man
Freq Offset 0 Hz



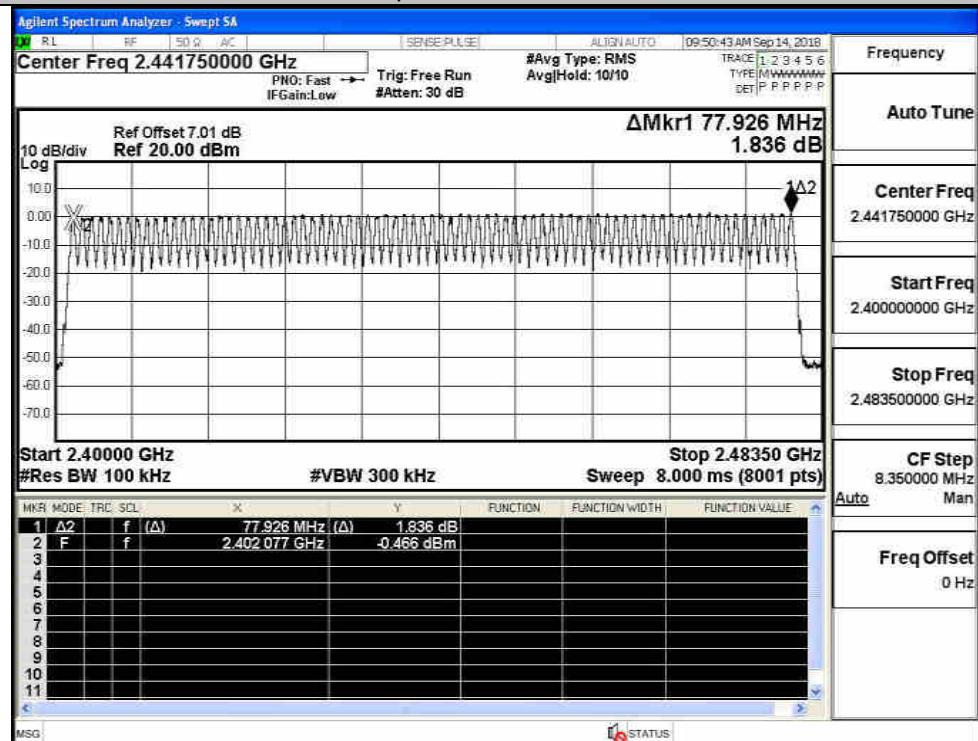


A.4 Hopping Channel Number

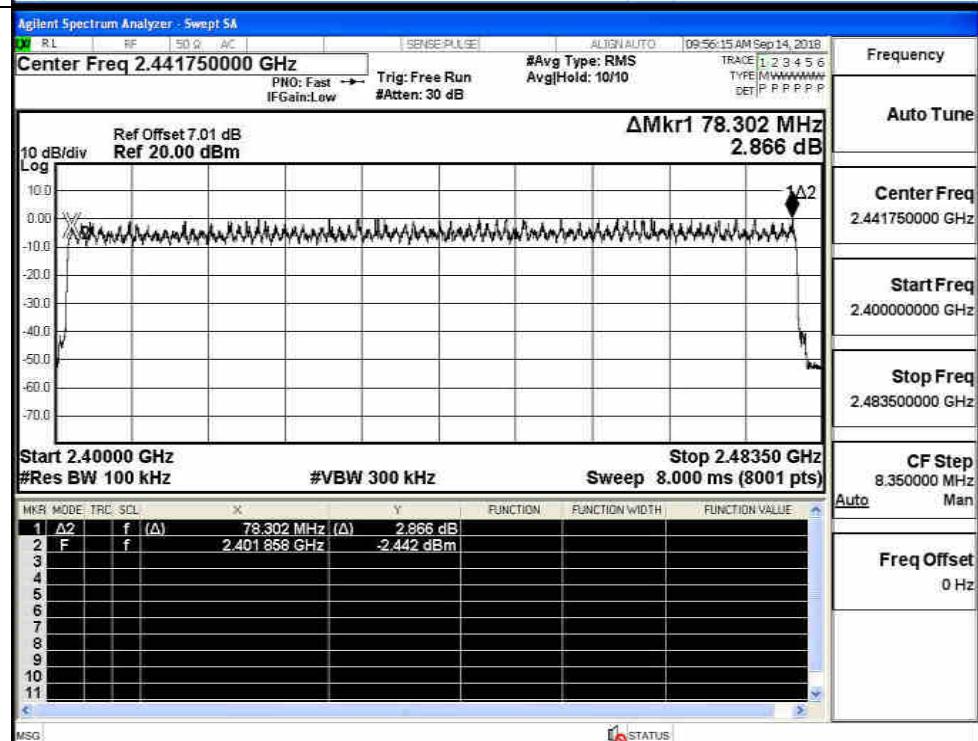
Mode	Channel.	Number of Hopping Channel [N]	Limit [N]	Verdict
GFSK	Hop	79	>=15	PASS
π/4DQPSK	Hop	79	>=15	PASS
8DPSK	Hop	79	>=15	PASS

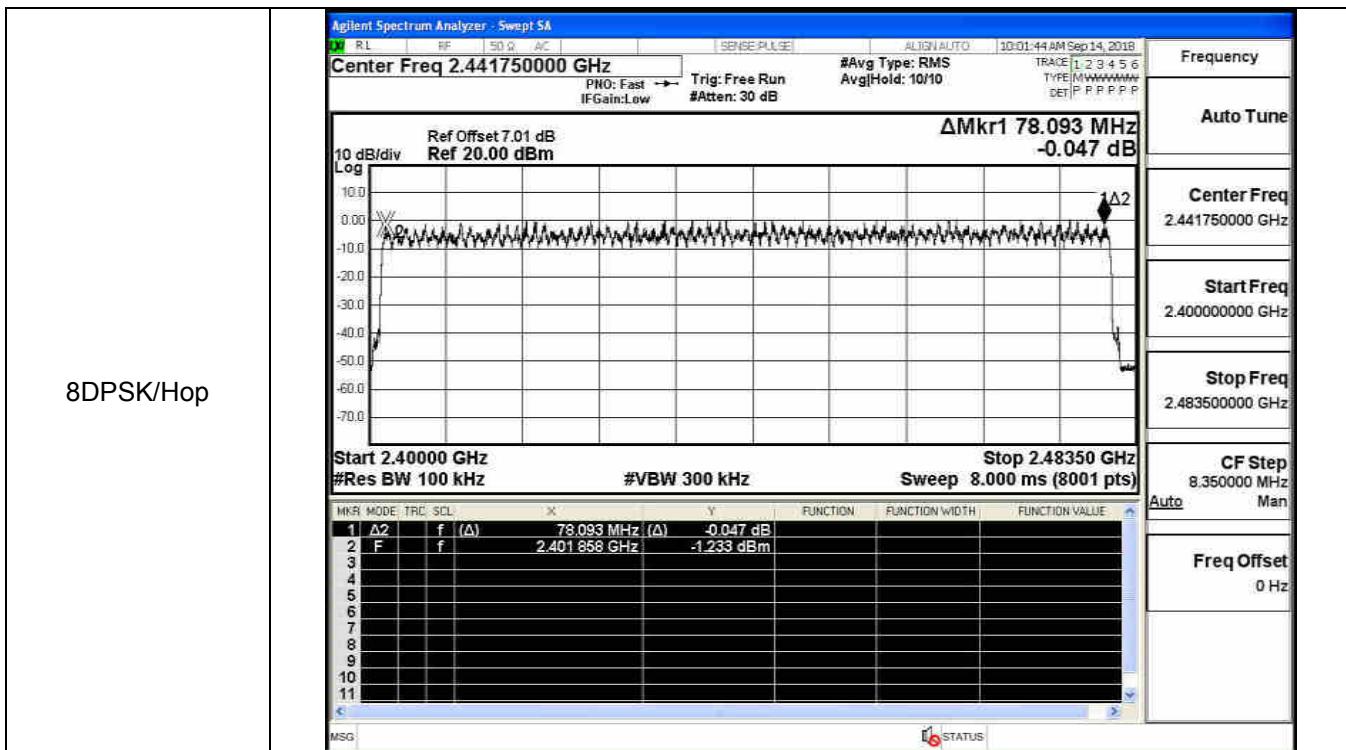
Test Graphs

GFSK/Hop



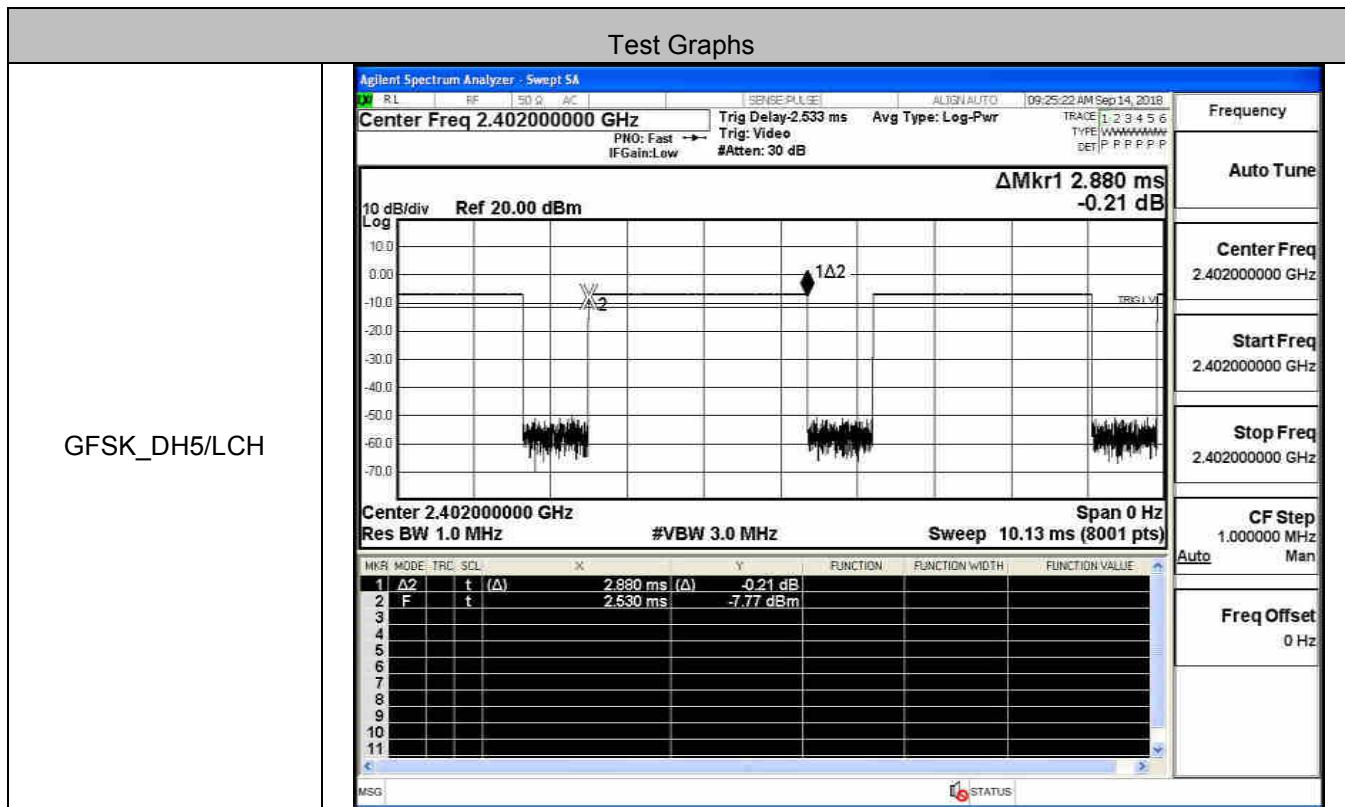
π/4DQPSK/Hop

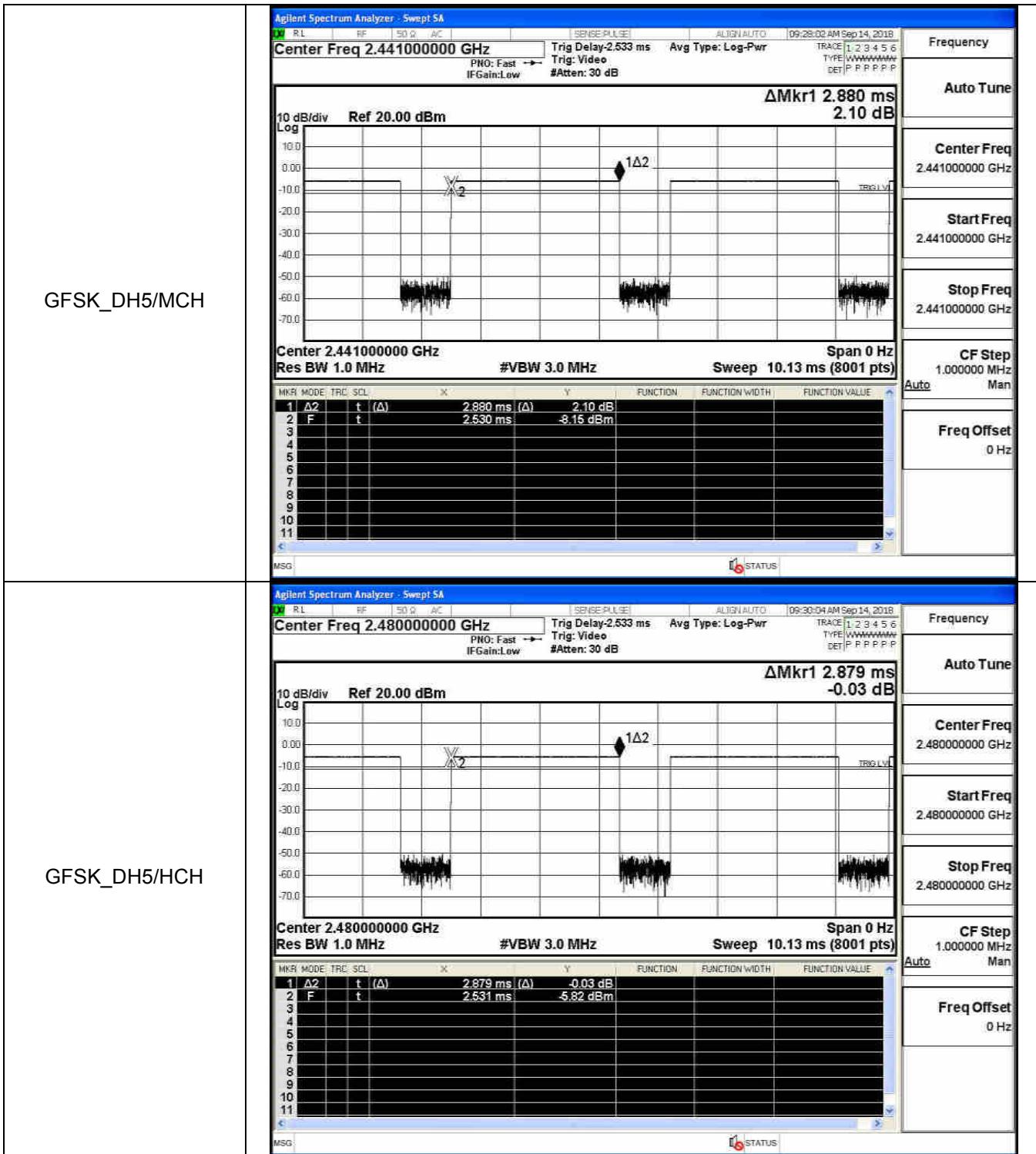




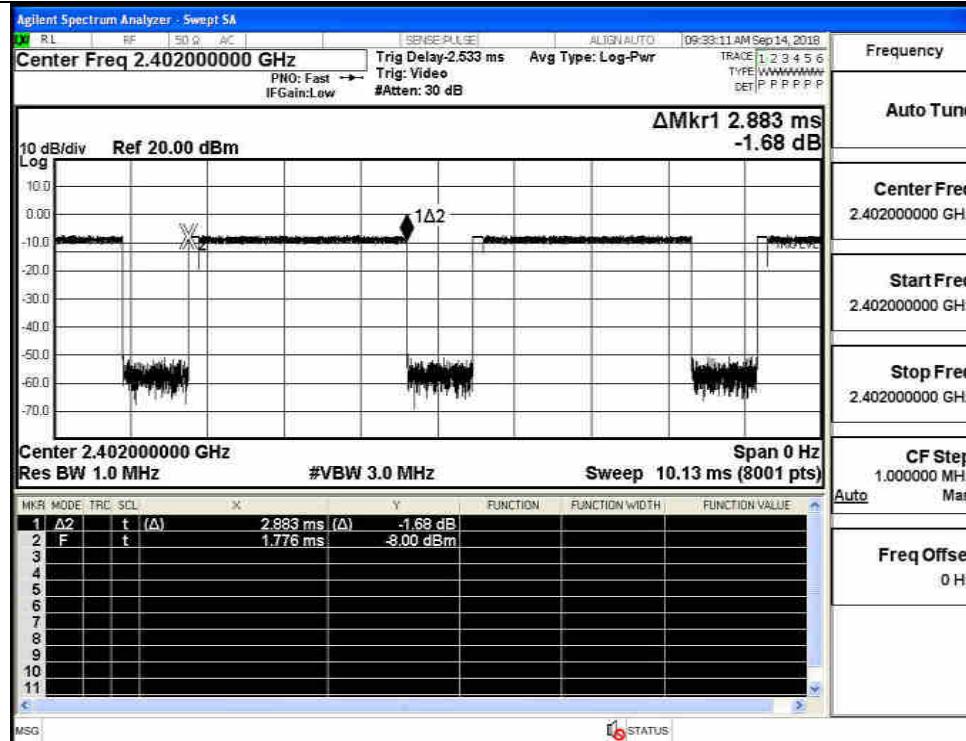
A.5 Dwell Time

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

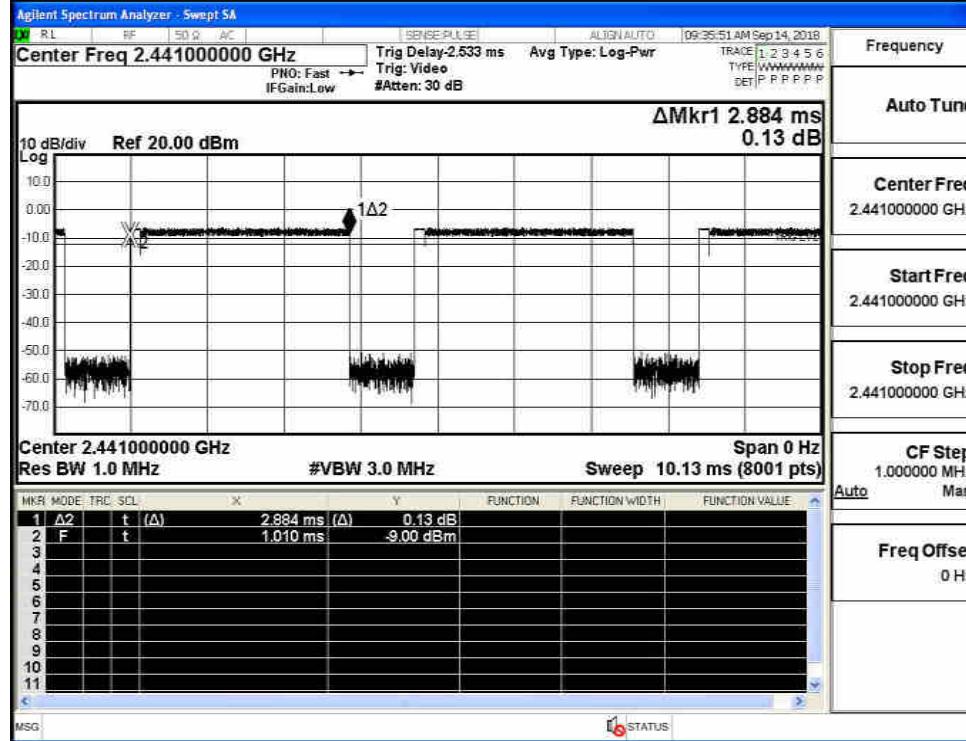




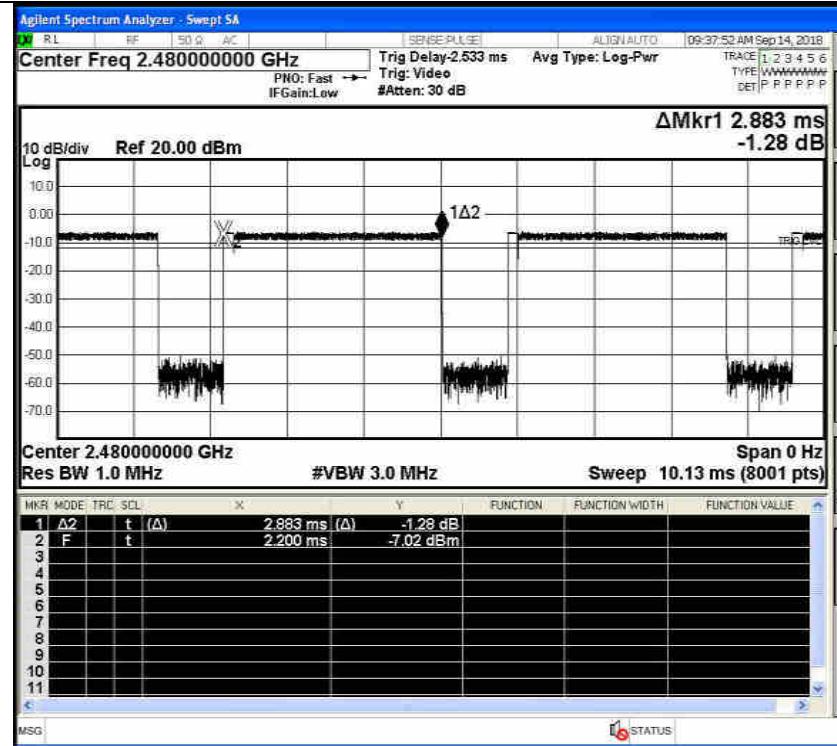
$\pi/4$ DQPSK
_2DH5/LCH



$\pi/4$ DQPSK
_2DH5/MCH

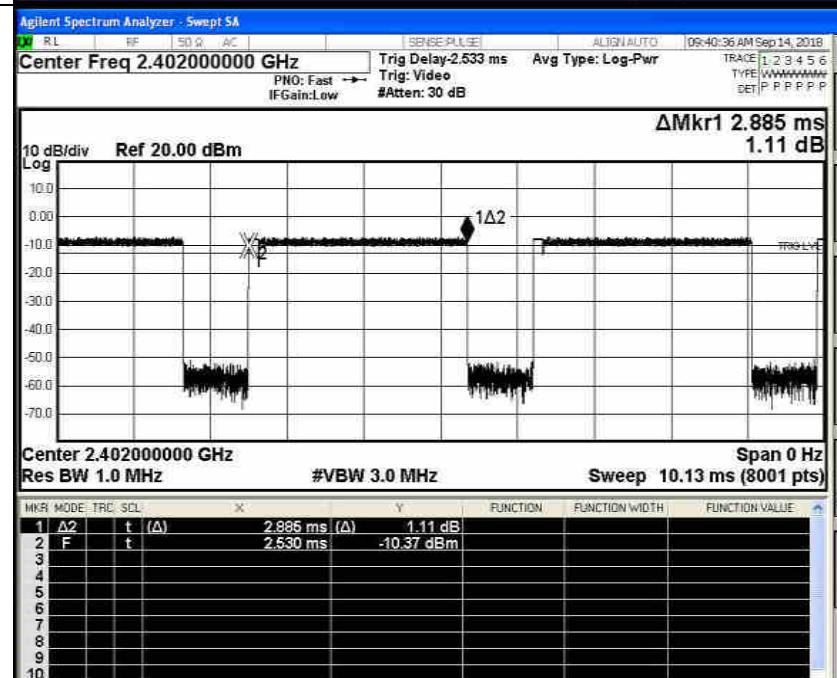


$\pi/4$ DQPSK
_2DH5/HCH



Frequency
Auto Tune
Center Freq
2.480000000 GHz
Start Freq
2.480000000 GHz
Stop Freq
2.480000000 GHz
CF Step
1.000000 MHz
Auto Man
Freq Offset
0 Hz

8DPSK _3DH5/LCH

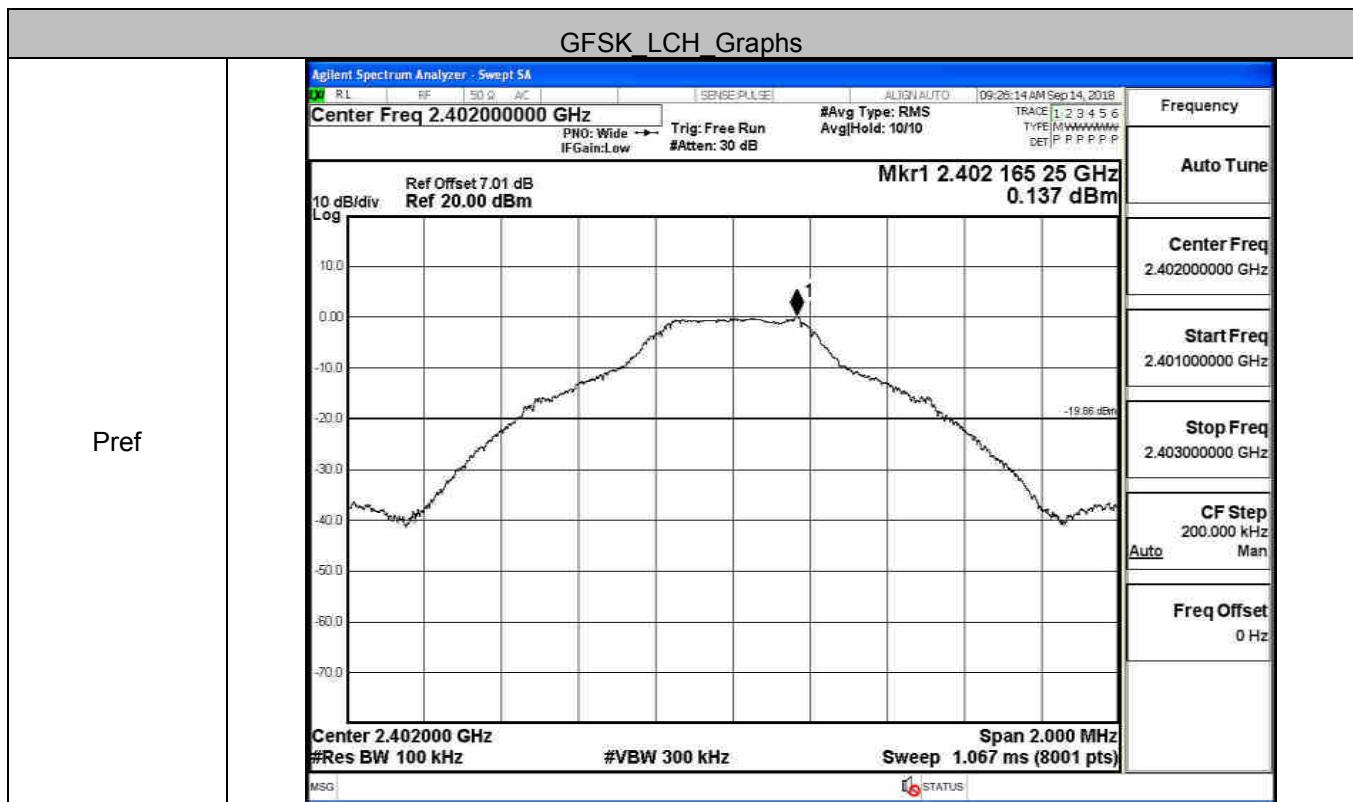


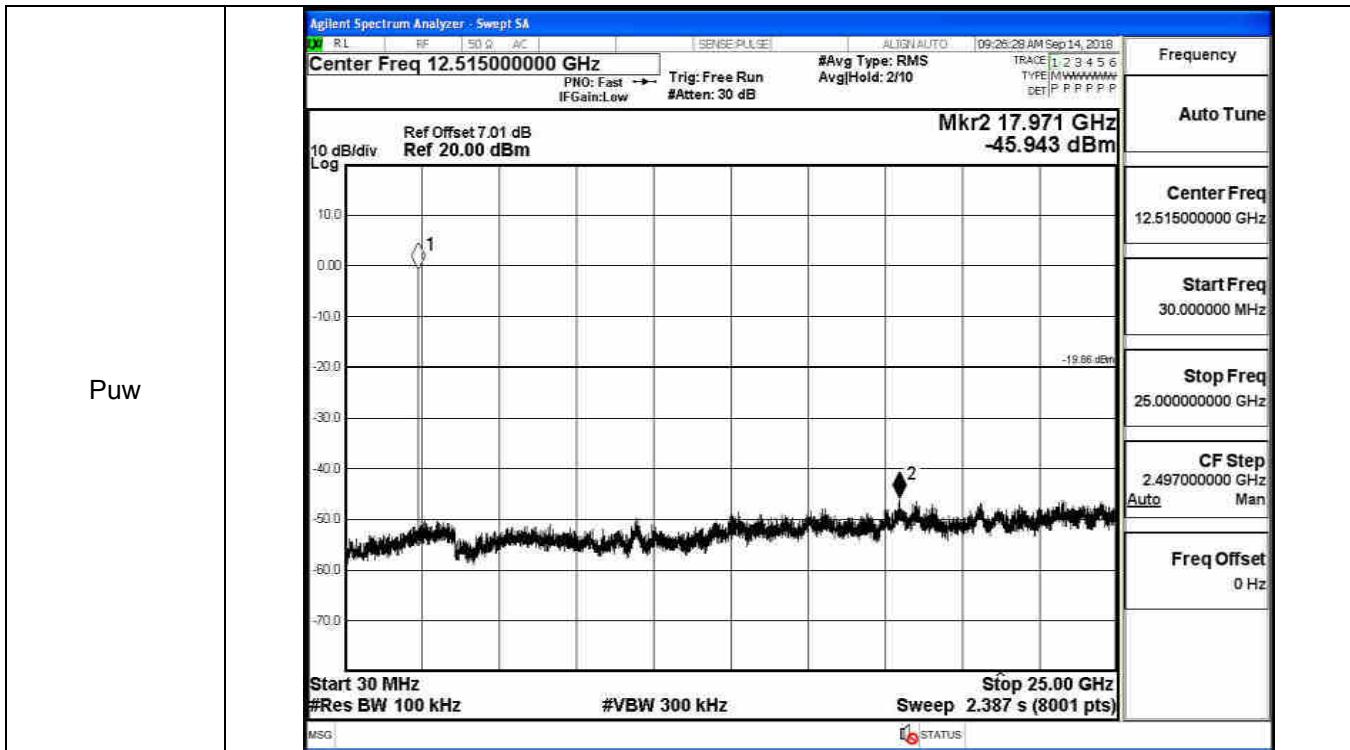
Frequency
Auto Tune
Center Freq
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Start Freq
2.402000000 GHz
Stop Freq
2.402000000 GHz
CF Step
1.000000 MHz
Auto Man
Freq Offset
0 Hz

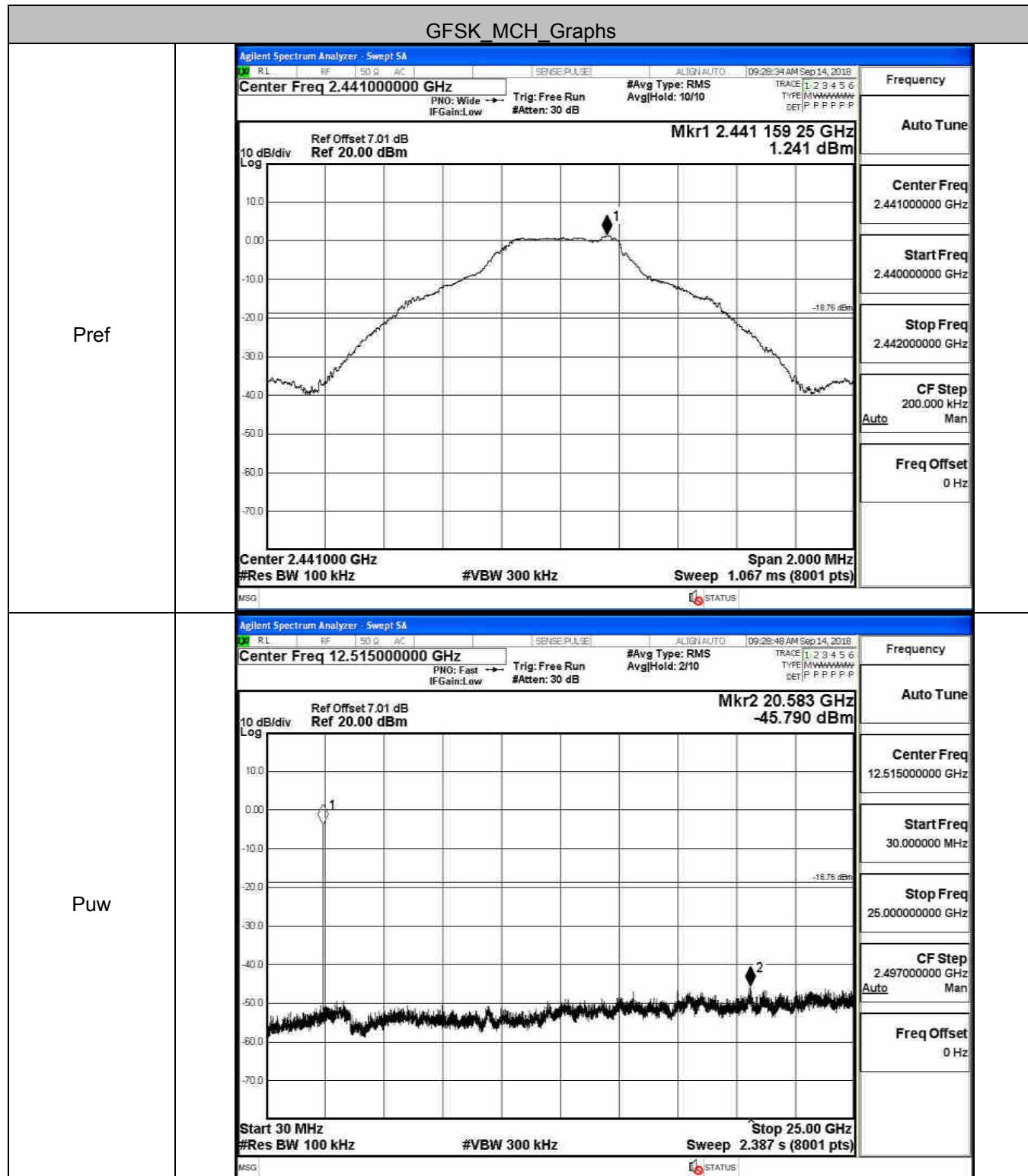


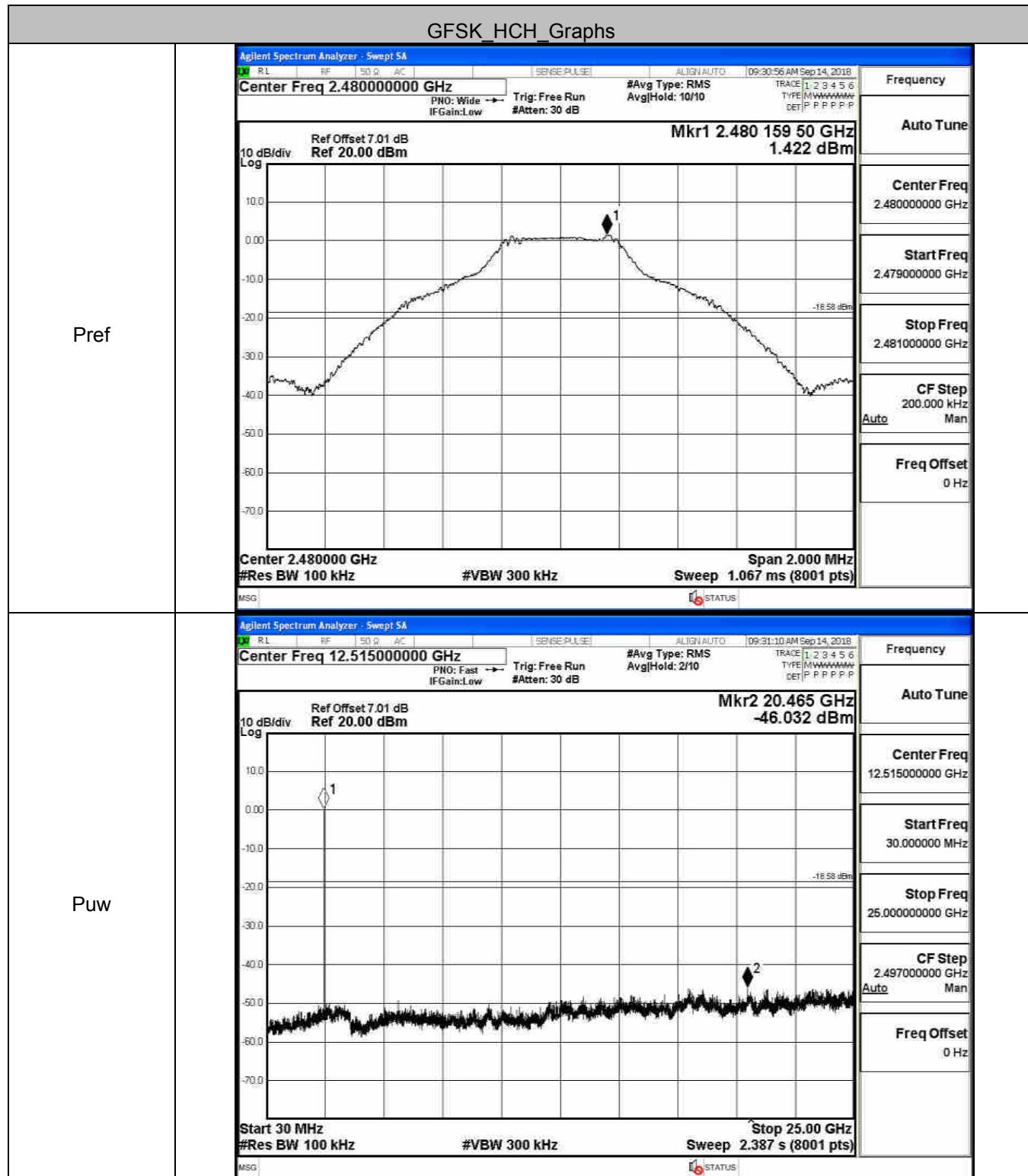
A.6 RF Conducted Spurious Emissions

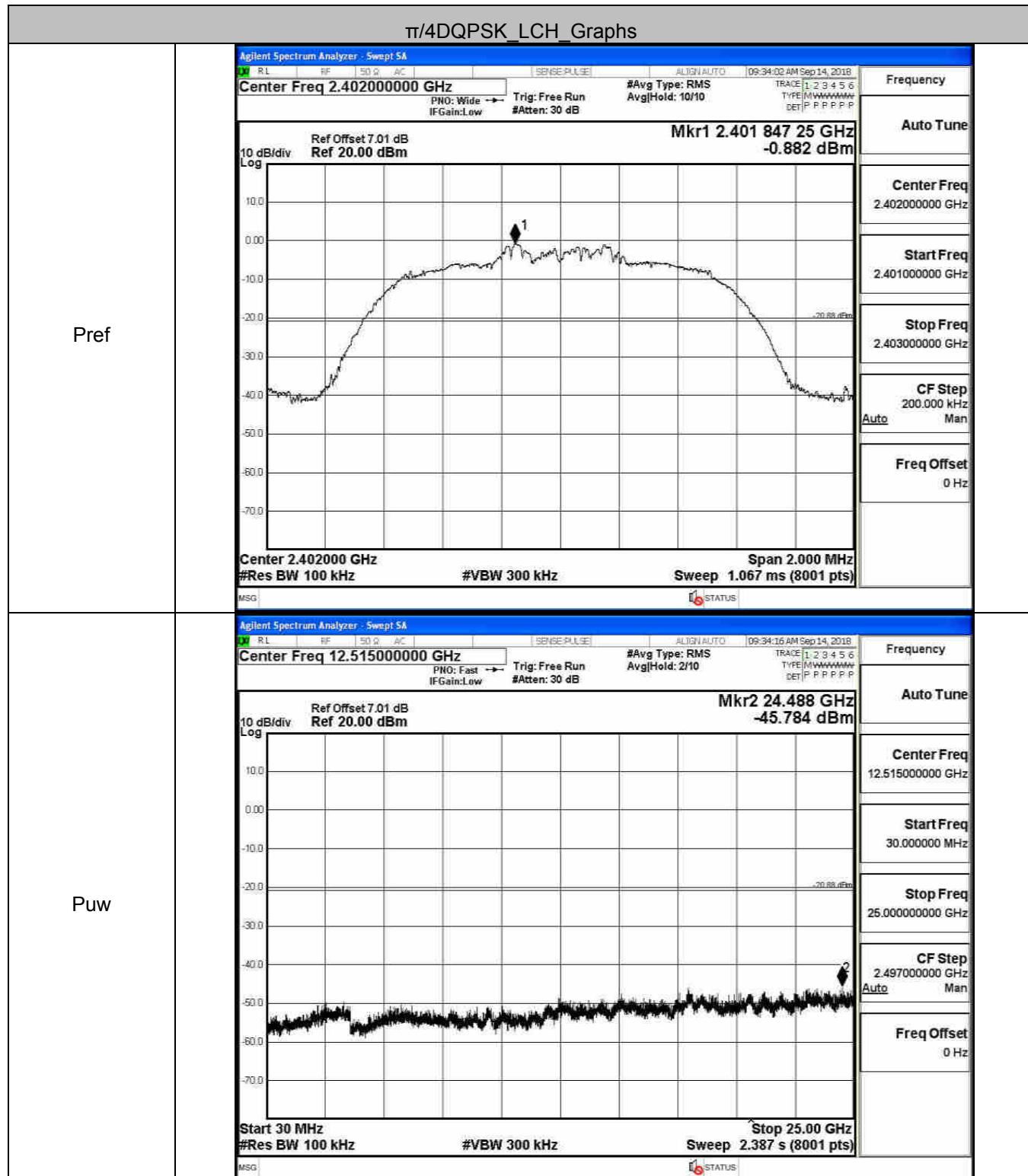
Mode	Channel	Pref [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
GFSK	LCH	0.137	-45.943	-19.863	PASS
	MCH	1.241	-45.790	-18.759	PASS
	HCH	1.422	-46.032	-18.578	PASS
$\pi/4$ DQPSK	LCH	-0.882	-45.784	-20.882	PASS
	MCH	0.185	-45.579	-19.815	PASS
	HCH	0.461	-44.784	-19.539	PASS
8DPSK	LCH	-0.832	-45.134	-20.832	PASS
	MCH	0.219	-46.185	-19.781	PASS
	HCH	0.231	-44.776	-19.769	PASS

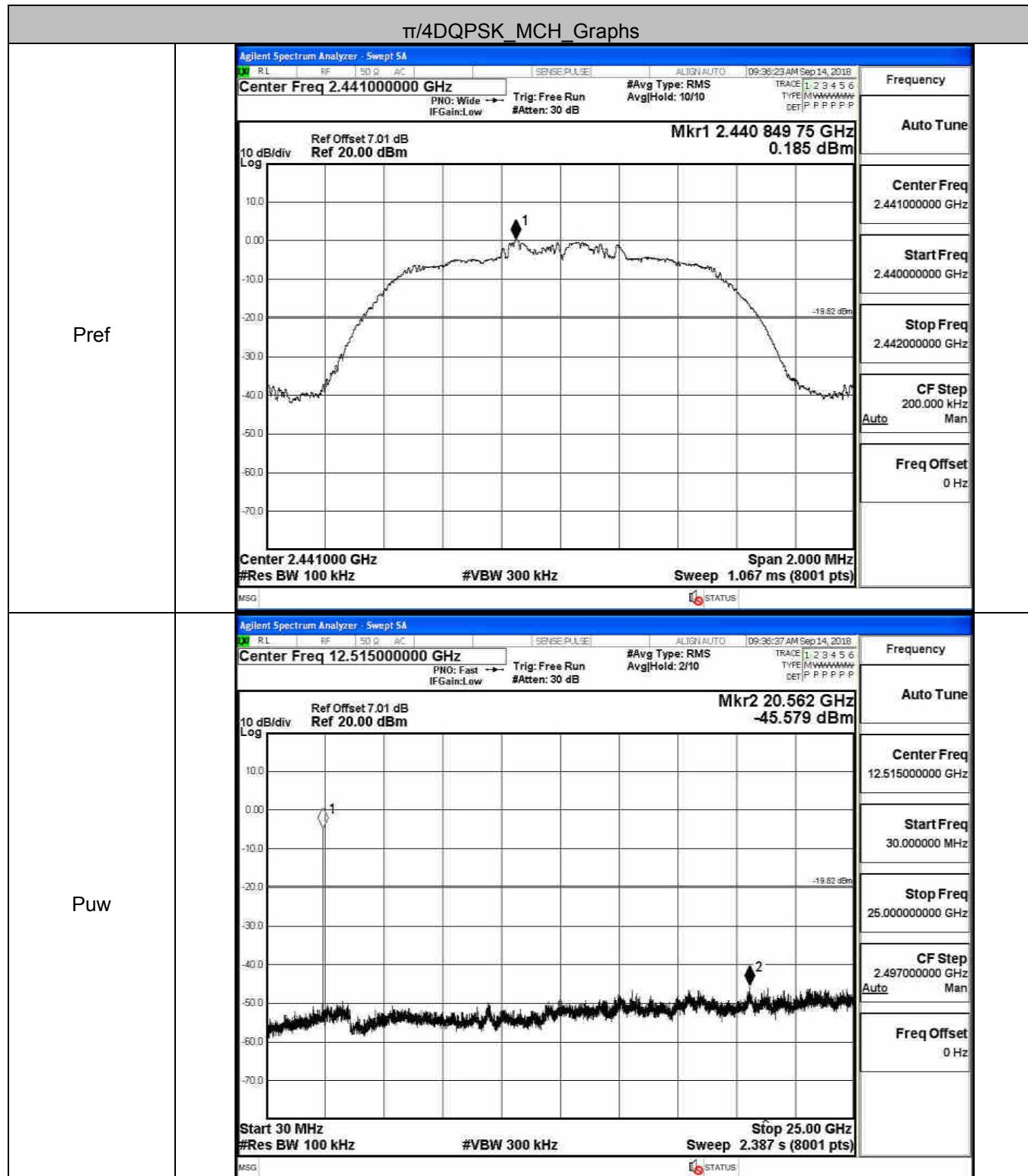


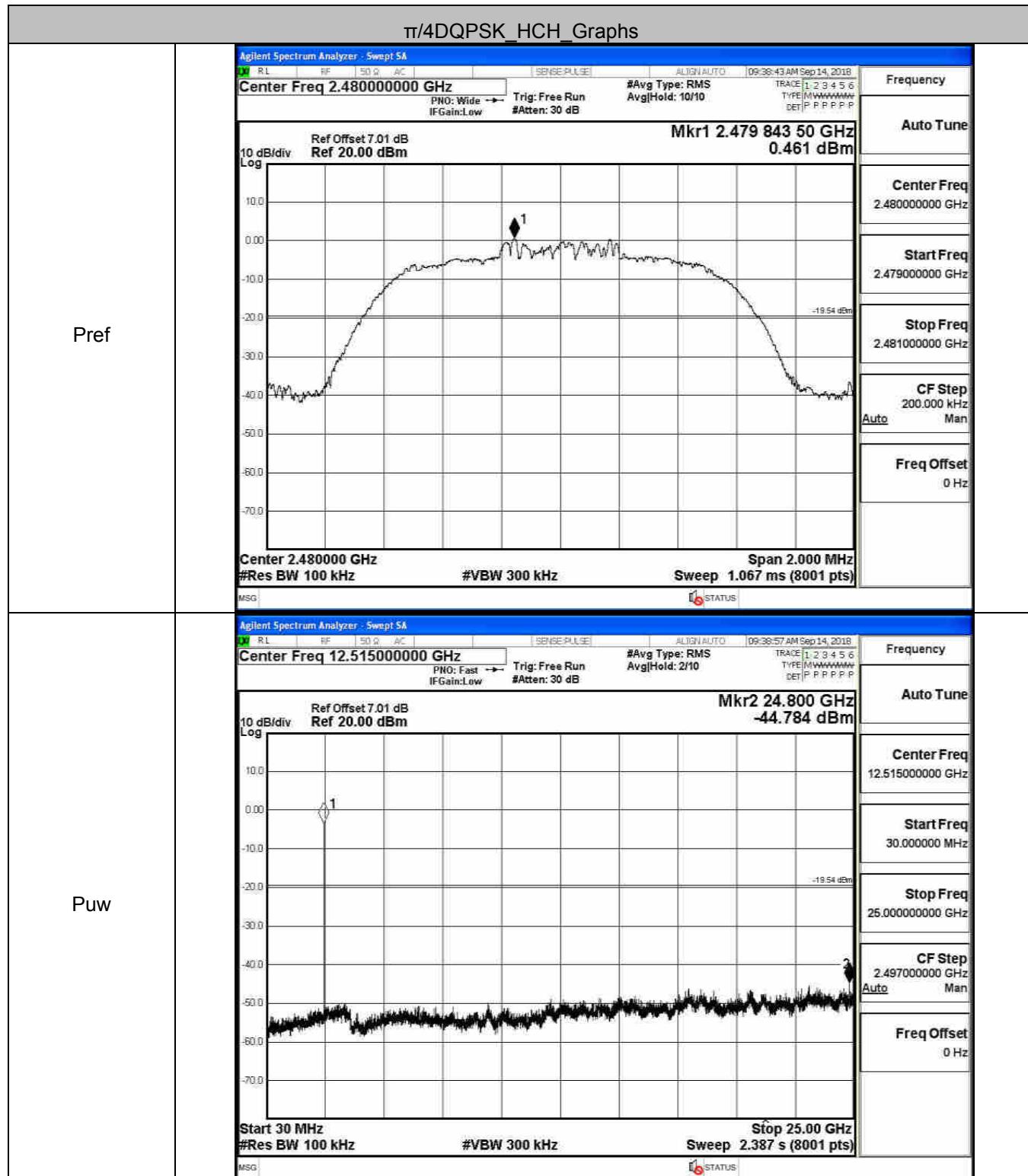


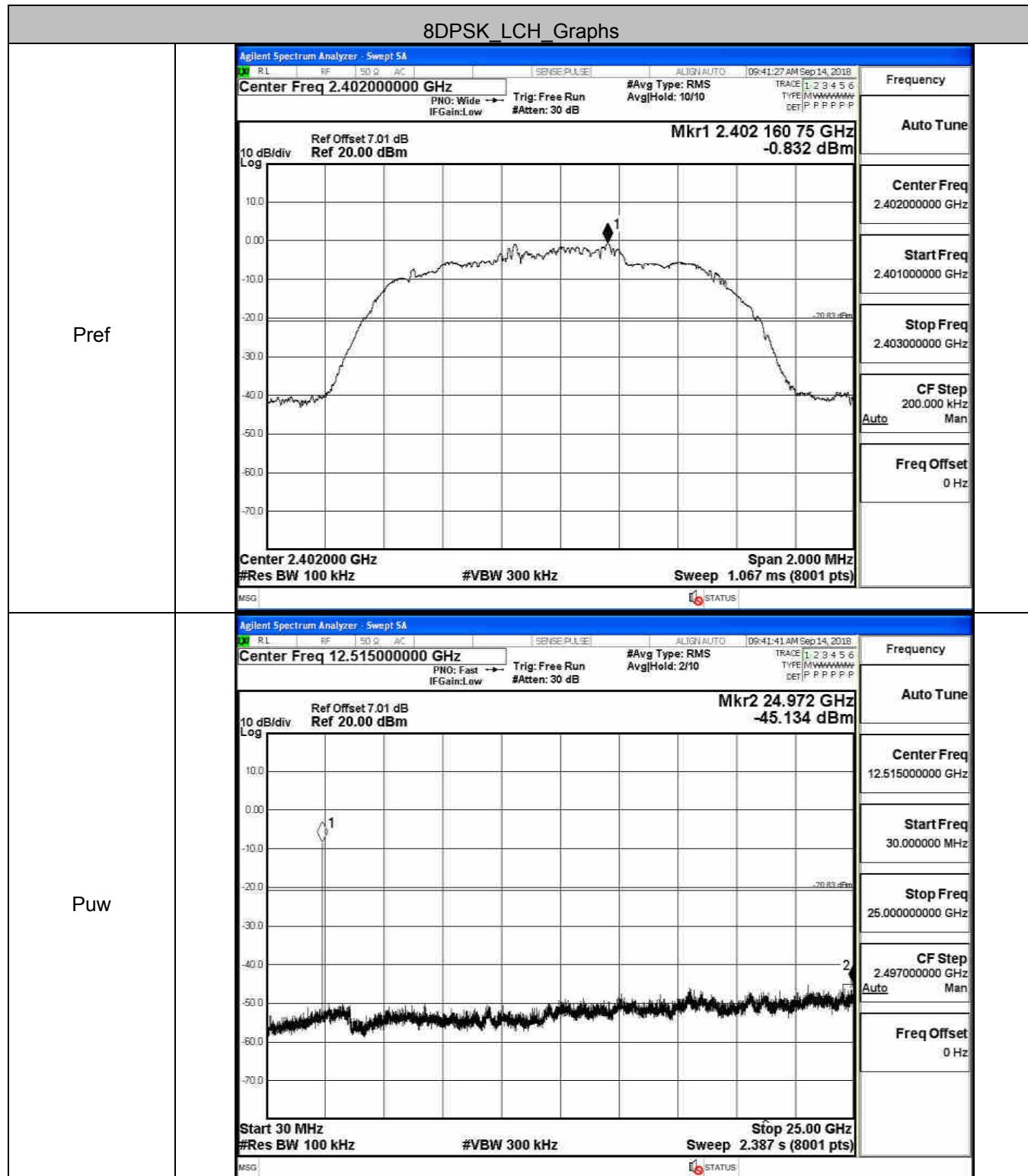


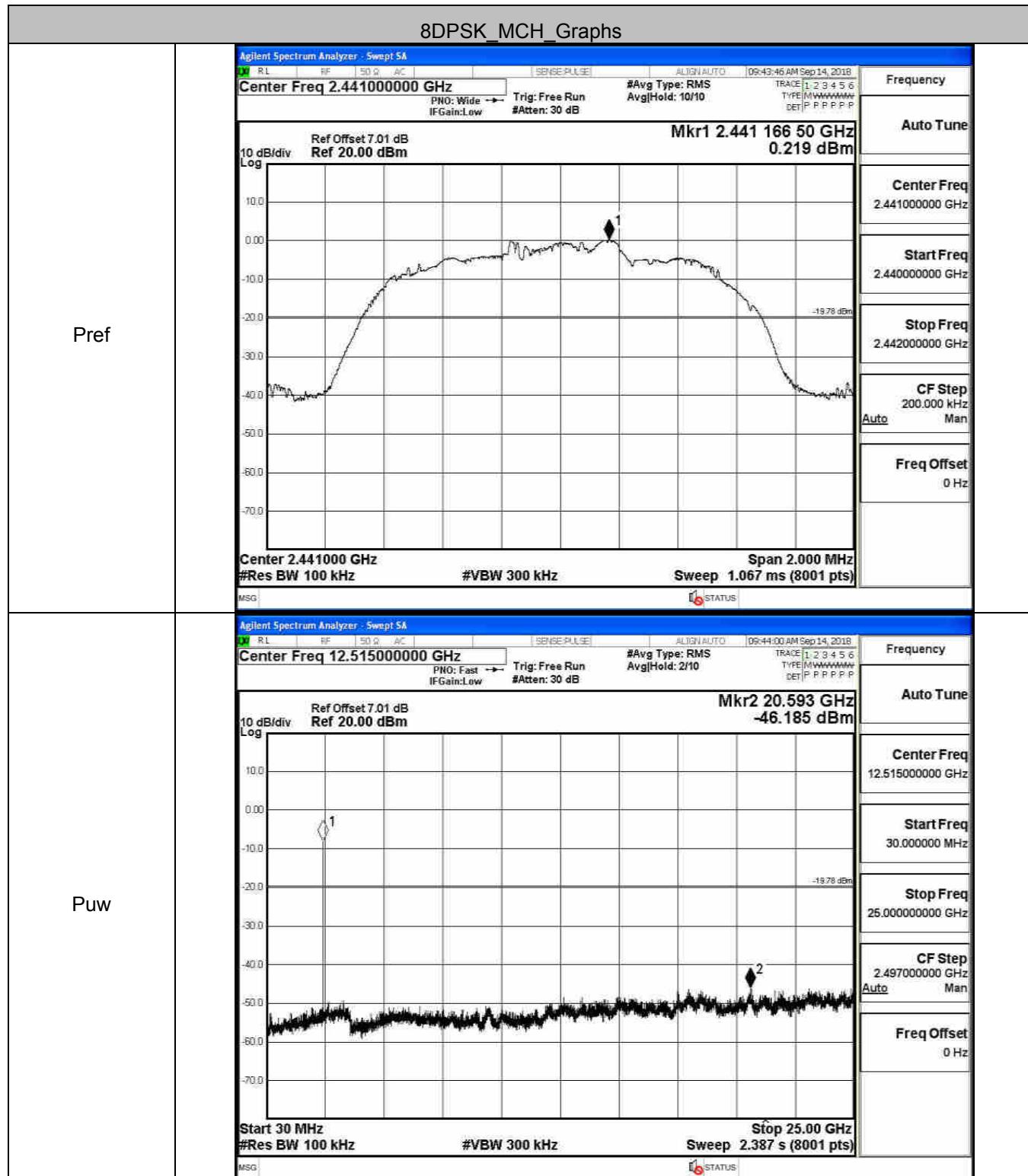


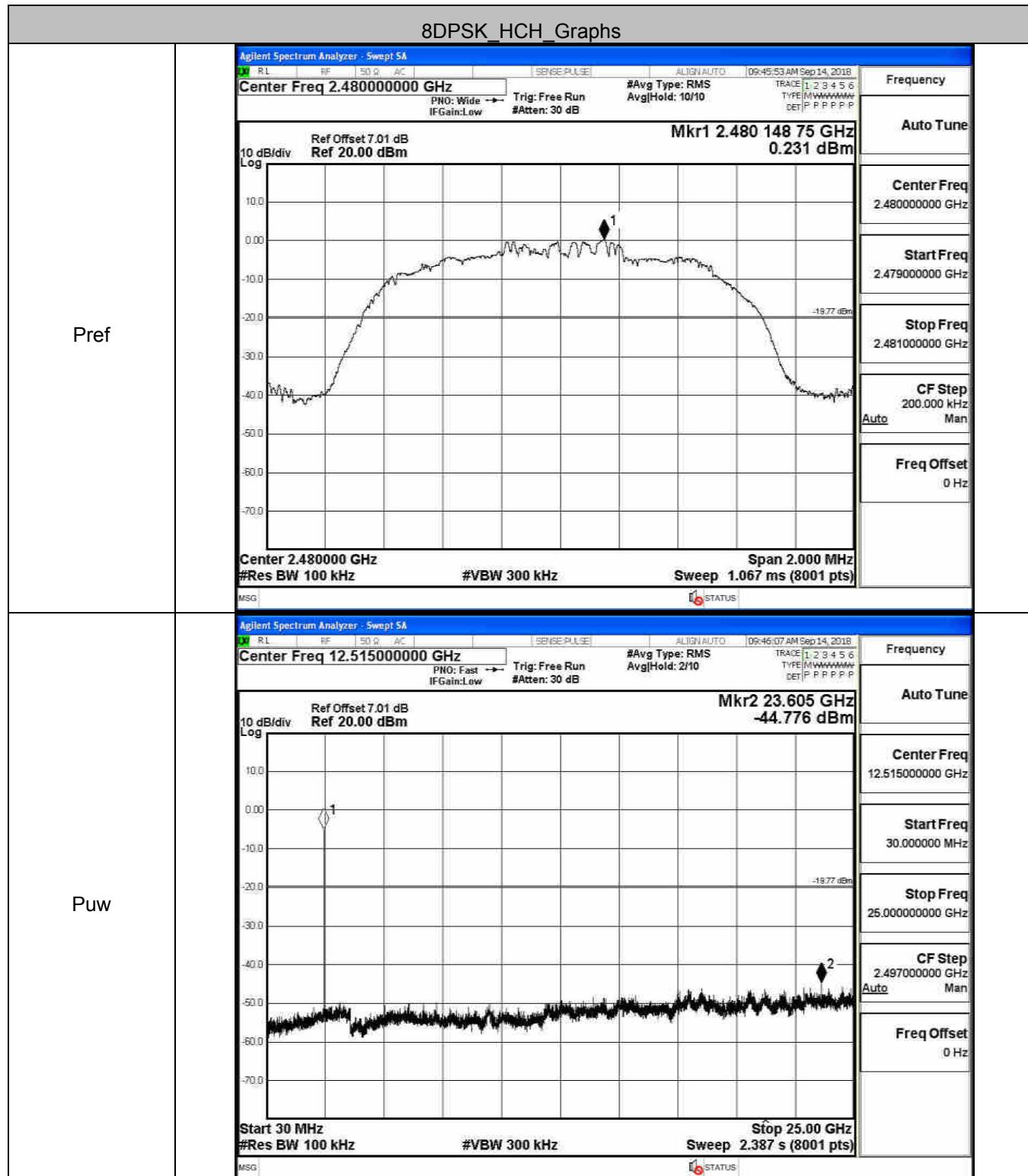










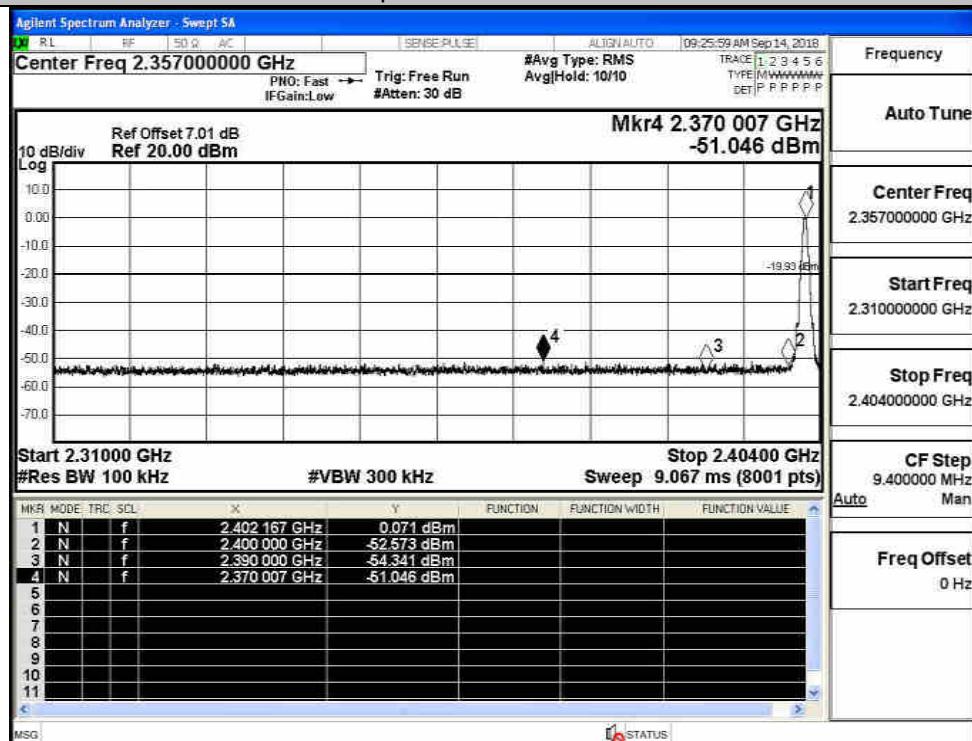


A.7 Band-edge for RF Conducted Emissions

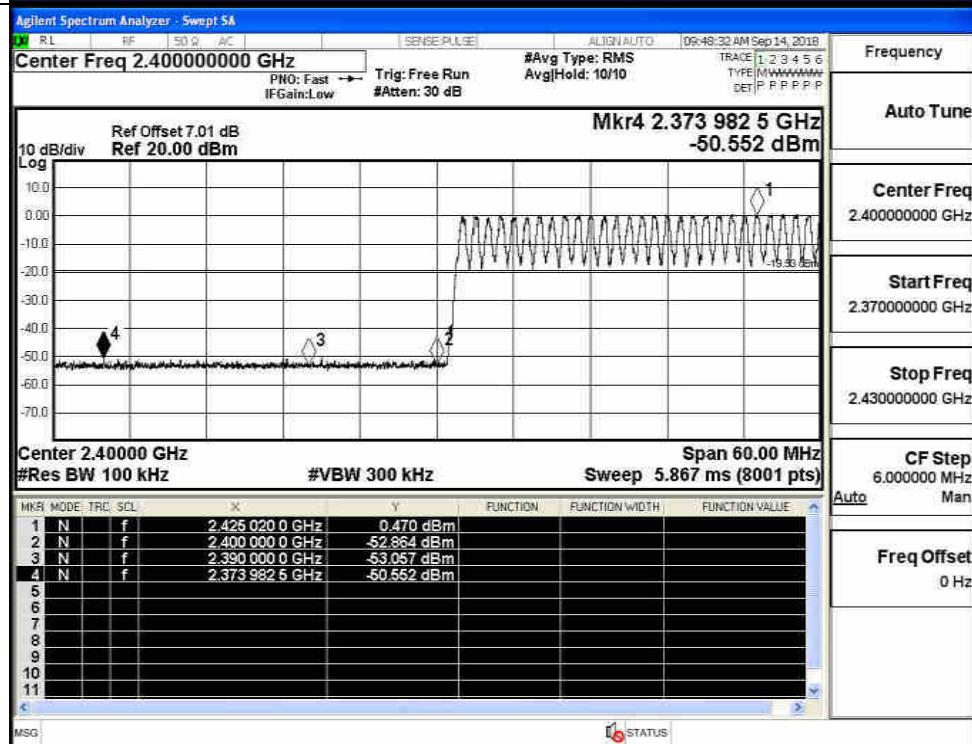
Mode	Channel	Carrier Frequency [MHz]	Carrier Power [dBm]	Frequency Hopping	Max Spurious Level [dBm]	Limit [dBm]	Verdict
GFSK	LCH	2402	0.071	Off	-51.046	-19.93	PASS
			0.470	On	-50.552	-19.53	PASS
	HCH	2480	1.411	Off	-50.828	-18.59	PASS
			1.366	On	-50.332	-18.63	PASS
$\pi/4$ DQPSK	LCH	2402	-0.873	Off	-50.913	-20.87	PASS
			-0.148	On	-50.588	-20.15	PASS
	HCH	2480	0.507	Off	-50.916	-19.49	PASS
			0.393	On	-50.133	-19.61	PASS
8DPSK	LCH	2402	-0.945	Off	-50.728	-20.95	PASS
			-0.060	On	-50.552	-20.06	PASS
	HCH	2480	0.391	Off	-50.717	-19.61	PASS
			0.469	On	-50.188	-19.53	PASS

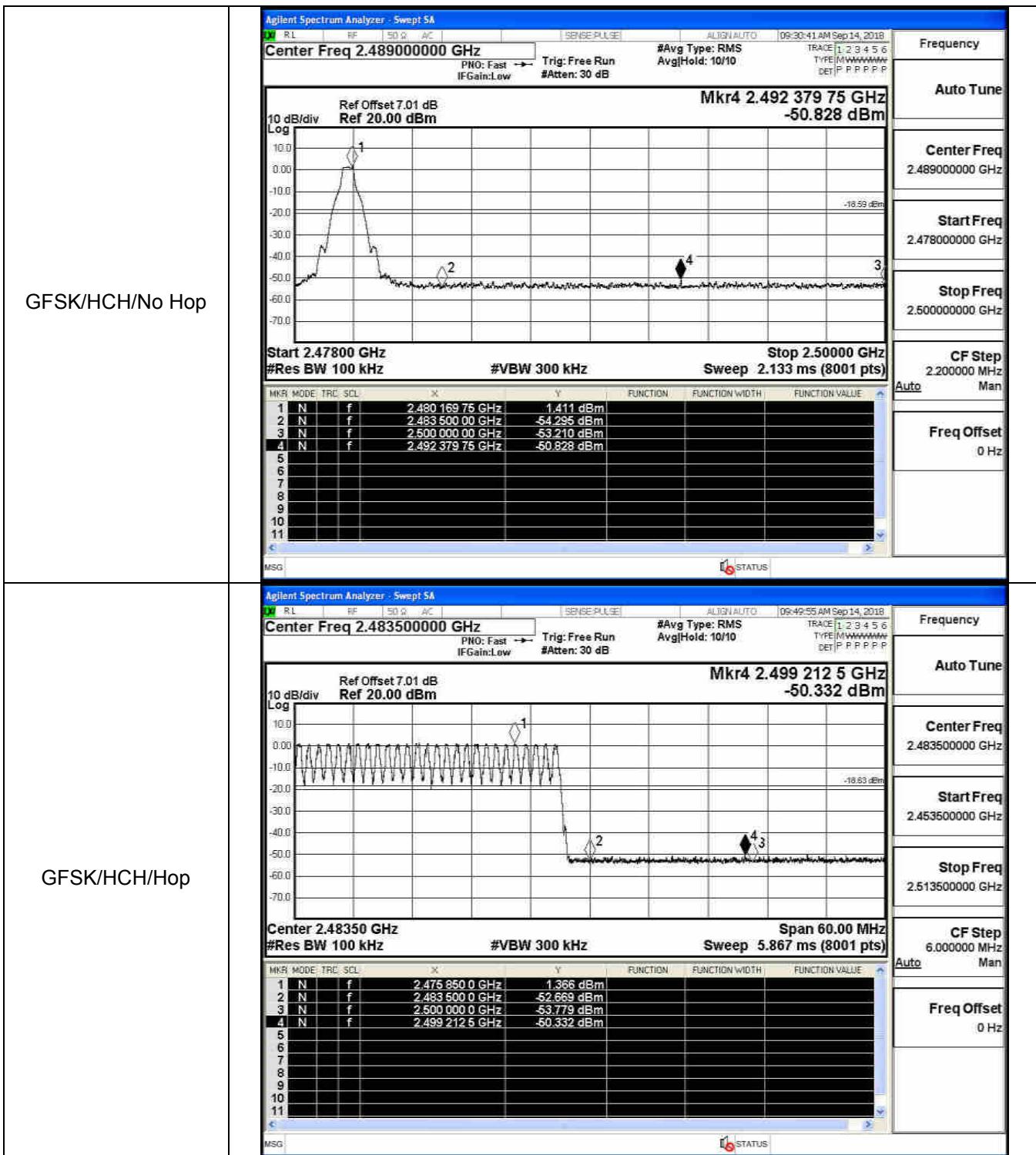
Test Graphs

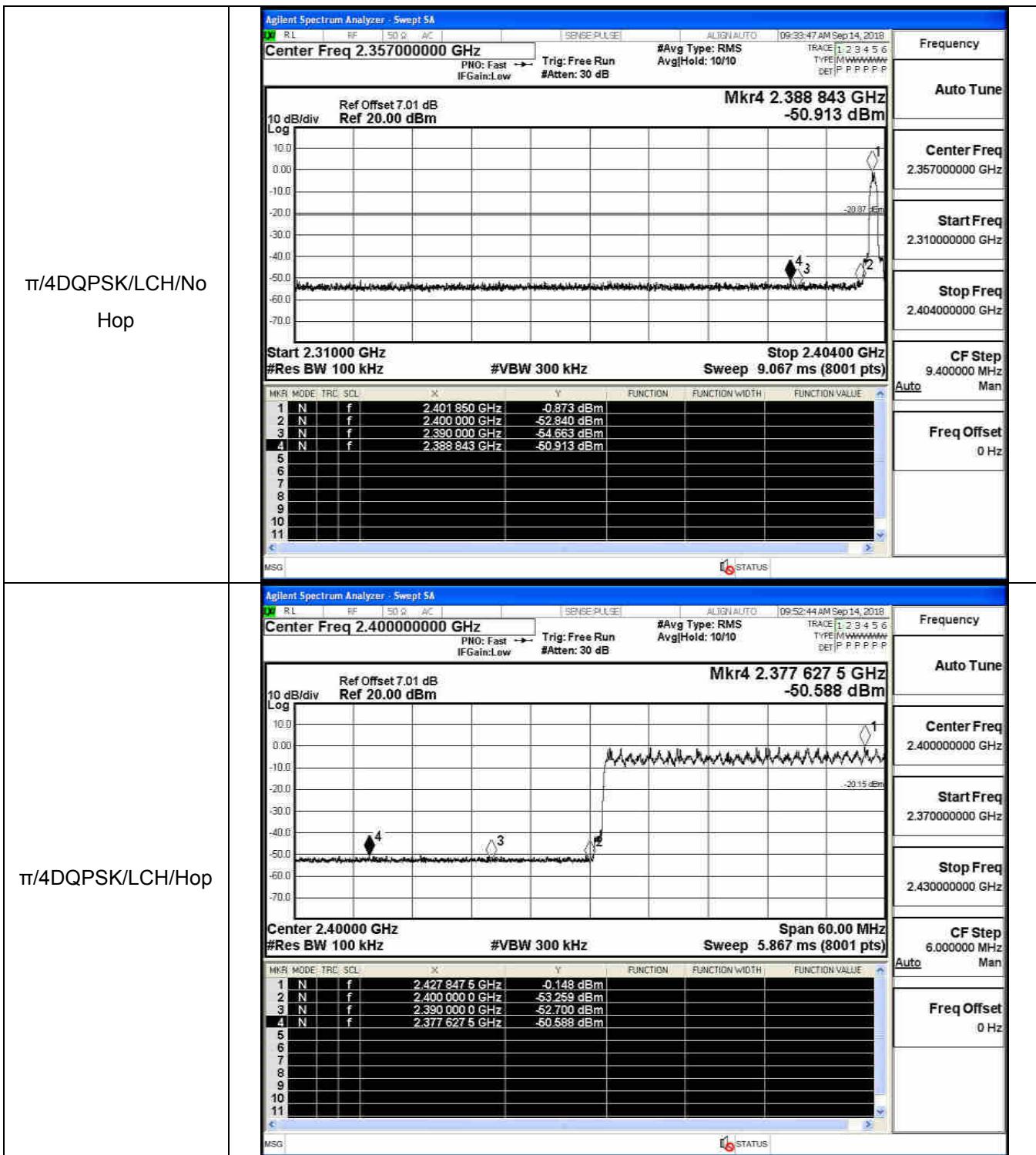
GFSK/LCH/No Hop

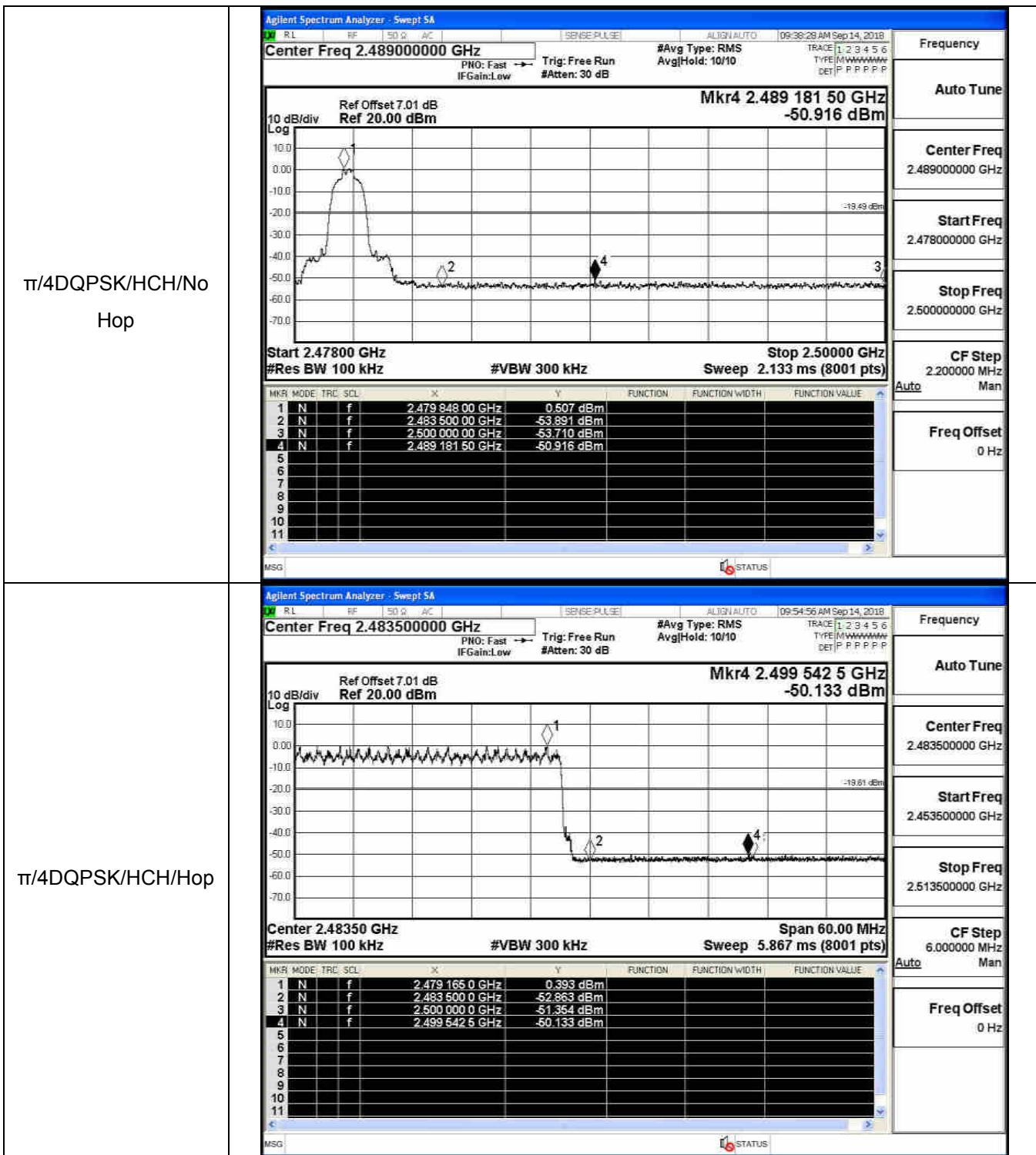


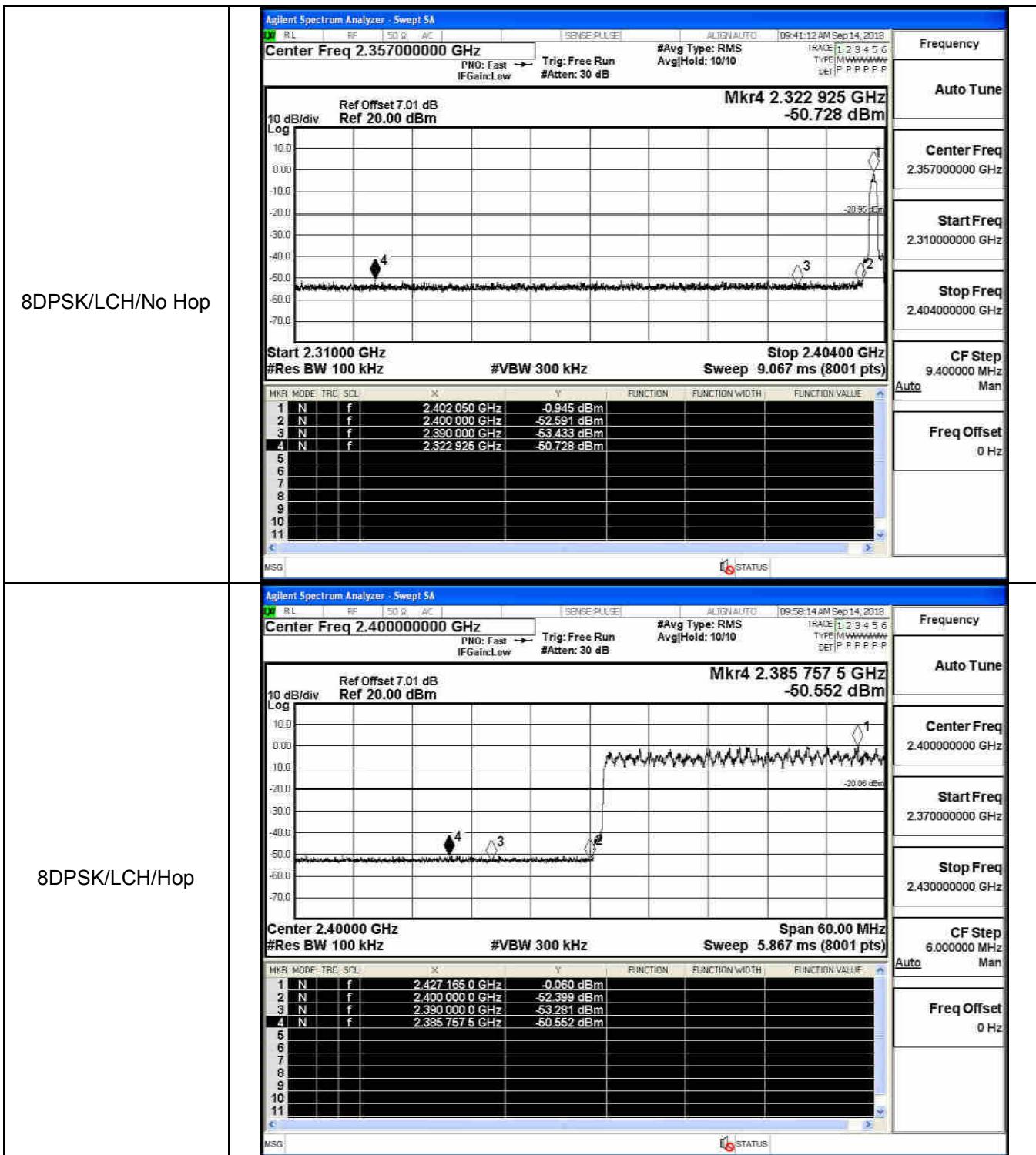
GFSK/LCH/Hop

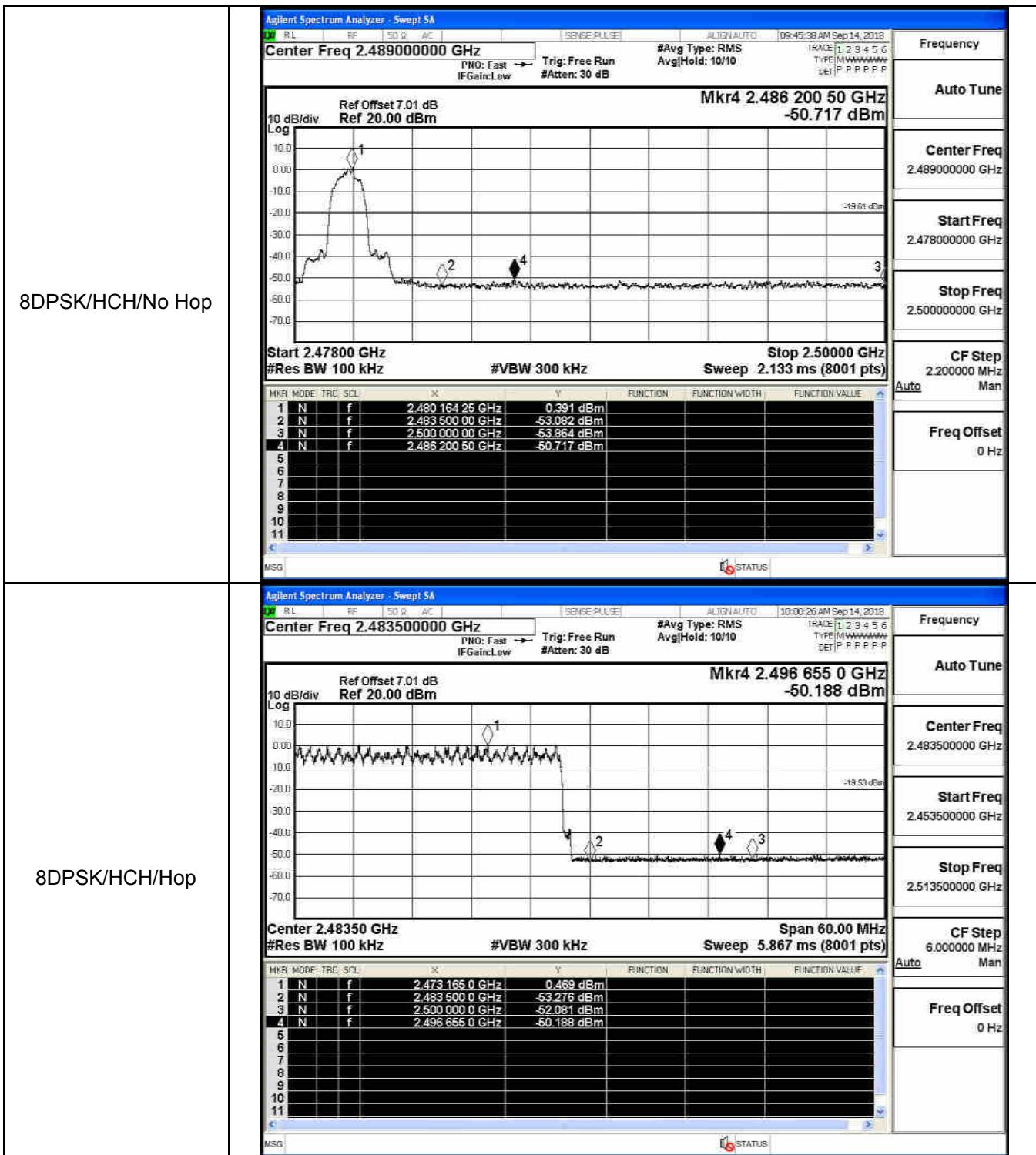








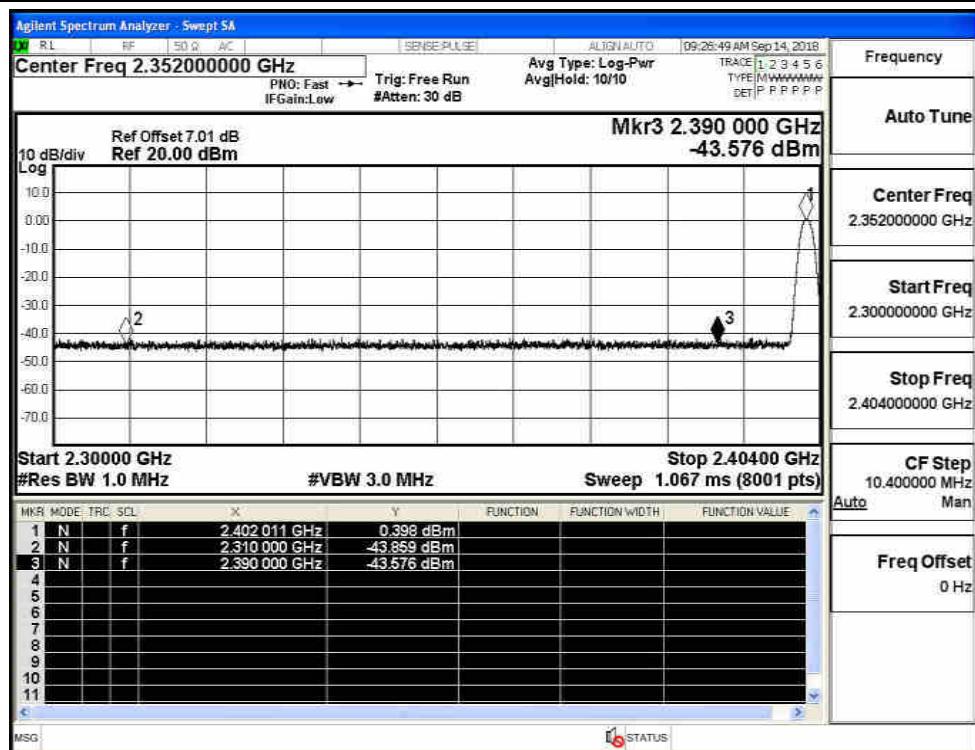




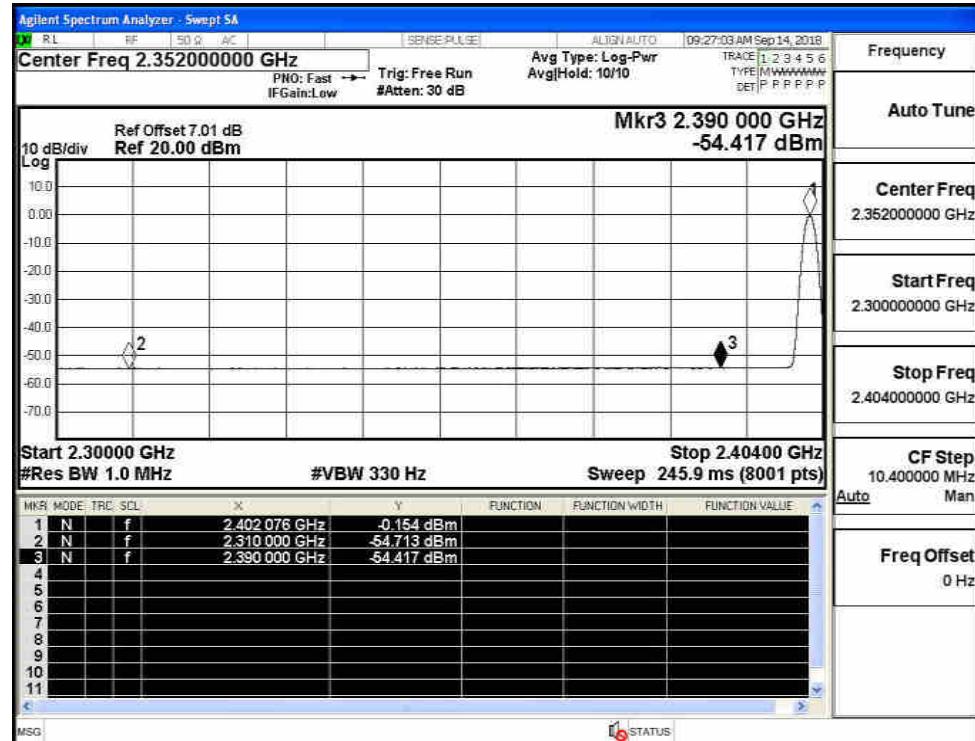
A.8 Restrict-band band-edge measurements

Test Mode	Hopping	Freq.	Power [dBm]	Gain	Ground Factor	E [dBuV/m]	Detector	Limit [dBuV/m]	Verdict
GFSK	Off	2310.0	-43.86	2.0	0	53.37	PEAK	74	PASS
	Off	2310.0	-54.71	2.0	0	42.52	AV	54	PASS
	Off	2390.0	-43.58	2.0	0	53.65	PEAK	74	PASS
	Off	2390.0	-54.42	2.0	0	42.81	AV	54	PASS
	Off	2483.5	-43.26	2.0	0	53.97	PEAK	74	PASS
	Off	2483.5	-54.01	2.0	0	43.22	AV	54	PASS
	Off	2500.0	-43.41	2.0	0	53.82	PEAK	74	PASS
	Off	2500.0	-54.07	2.0	0	43.16	AV	54	PASS
$\pi/4$ DQPSK	Off	2310.0	-43.66	2.0	0	53.57	PEAK	74	PASS
	Off	2310.0	-54.61	2.0	0	42.62	AV	54	PASS
	Off	2390.0	-43.44	2.0	0	53.79	PEAK	74	PASS
	Off	2390.0	-54.35	2.0	0	42.88	AV	54	PASS
	Off	2483.5	-44.61	2.0	0	52.62	PEAK	74	PASS
	Off	2483.5	-54.02	2.0	0	43.21	AV	54	PASS
	Off	2500.0	-44.75	2.0	0	52.48	PEAK	74	PASS
	Off	2500.0	-54.06	2.0	0	43.17	AV	54	PASS
8DPSK	Off	2310.0	-43.30	2.0	0	53.93	PEAK	74	PASS
	Off	2310.0	-54.62	2.0	0	42.61	AV	54	PASS
	Off	2390.0	-44.36	2.0	0	52.87	PEAK	74	PASS
	Off	2390.0	-54.36	2.0	0	42.87	AV	54	PASS
	Off	2483.5	-41.65	2.0	0	55.58	PEAK	74	PASS
	Off	2483.5	-53.95	2.0	0	43.28	AV	54	PASS
	Off	2500.0	-44.46	2.0	0	52.77	PEAK	74	PASS
	Off	2500.0	-53.99	2.0	0	43.24	AV	54	PASS

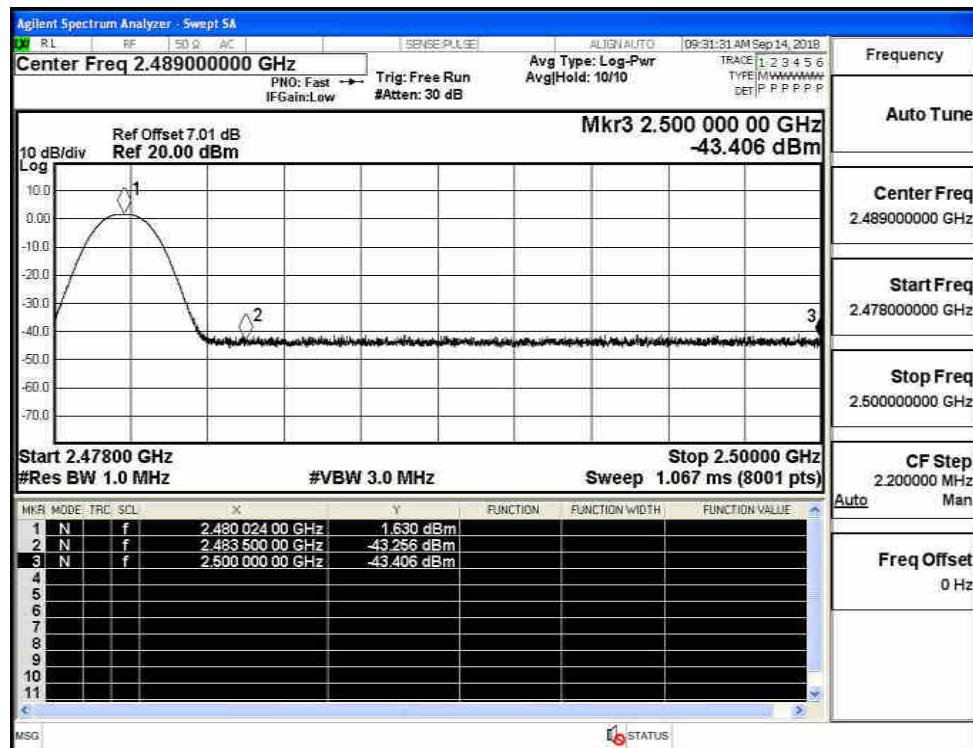
Restrict-band band-edge measurements_Hopping Off_GFSK_PEAK (Low Channel)



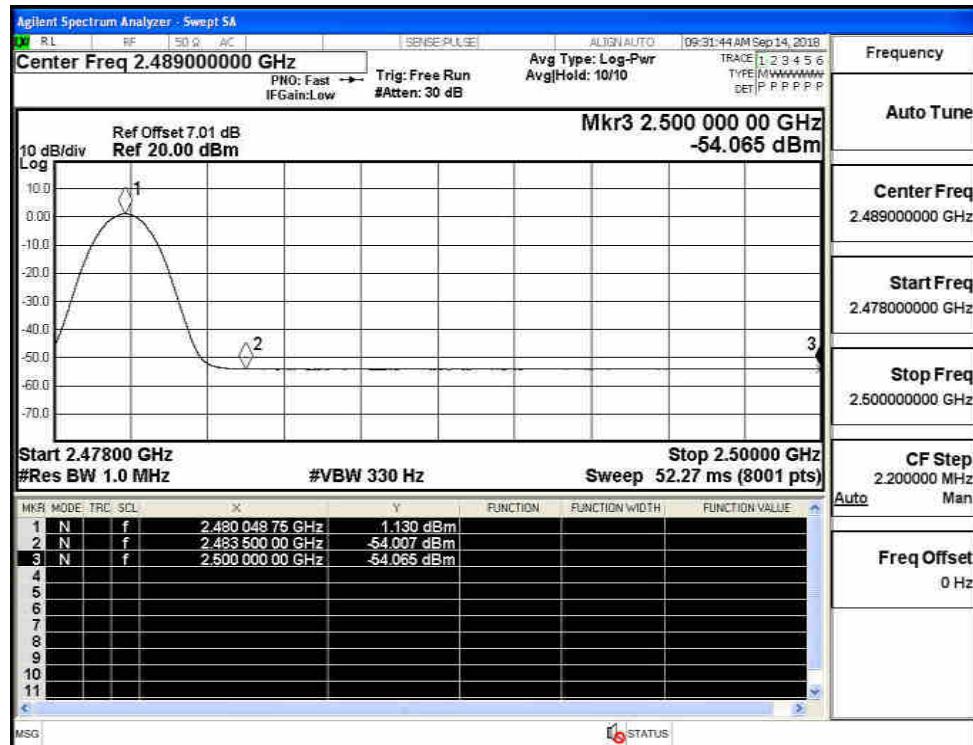
Restrict-band band-edge measurements_Hopping Off_GFSK_Average (Low Channel)



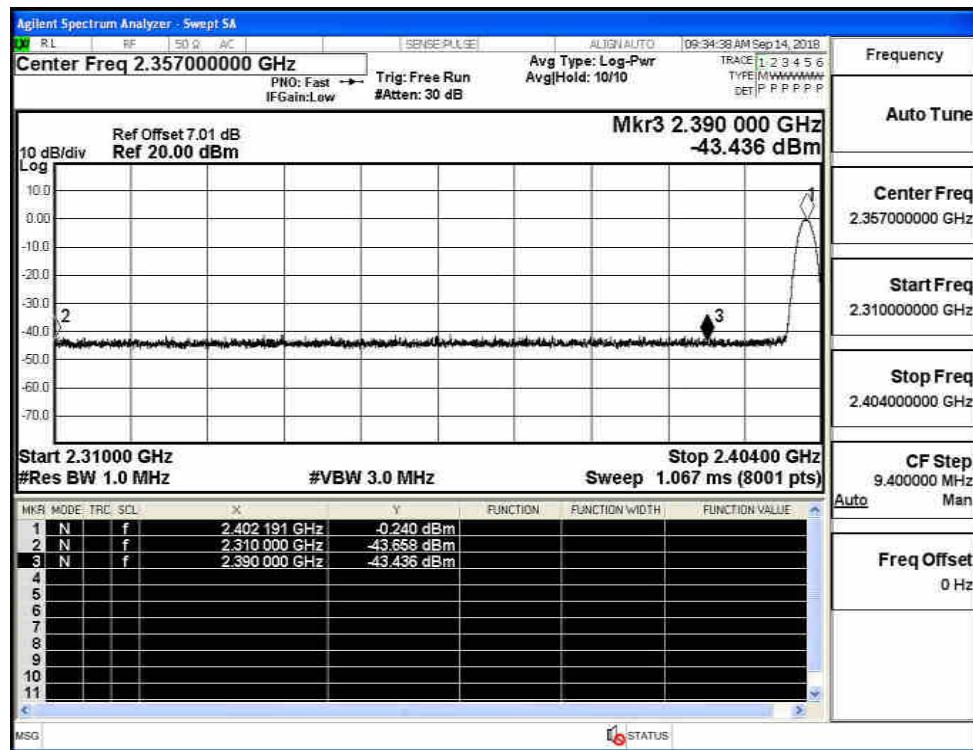
Restrict-band band-edge measurements_Hopping Off_ GFSK_PEAK (High Channel)



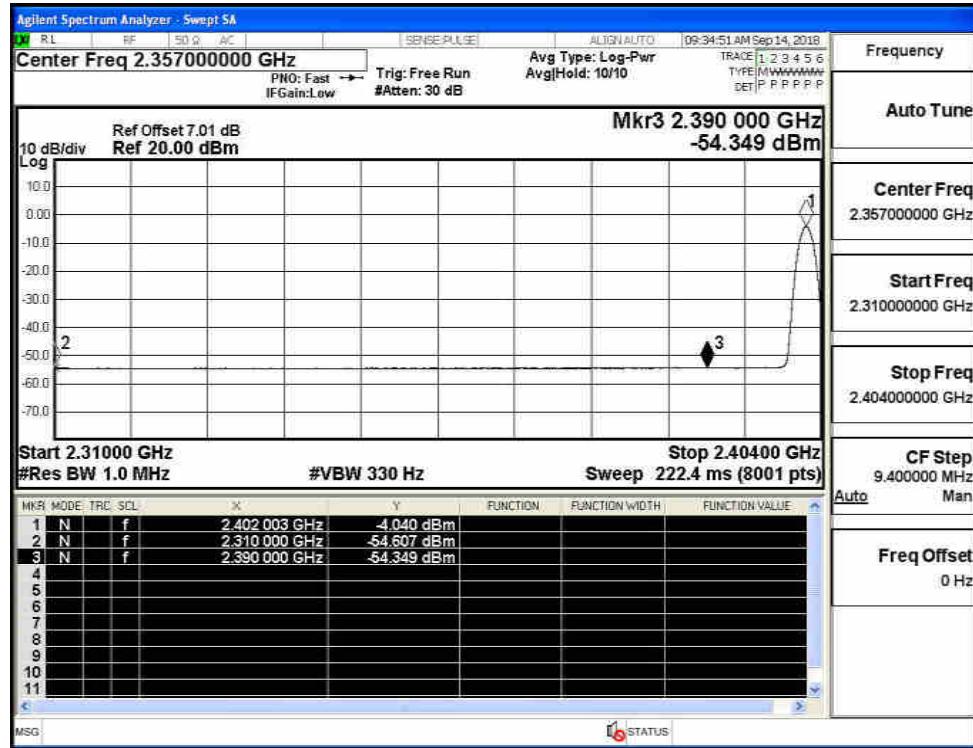
Restrict-band band-edge measurements_Hopping Off_ GFSK_Average (High Channel)



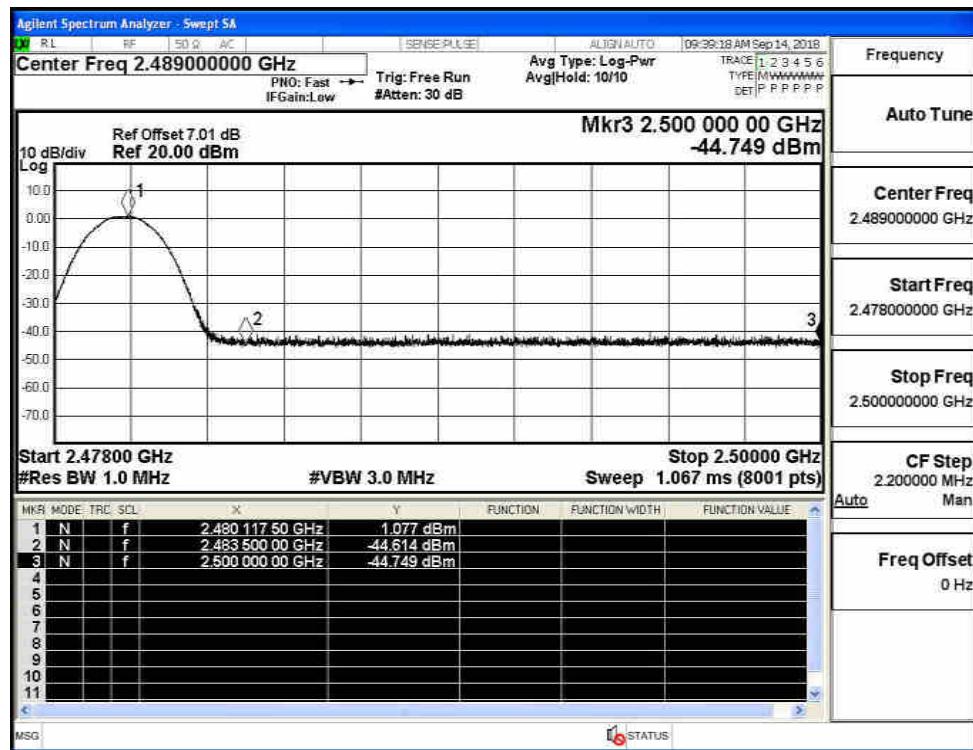
Restrict-band band-edge measurements_Hopping Off_π/4-DQPSK_PEAK (Low Channel)



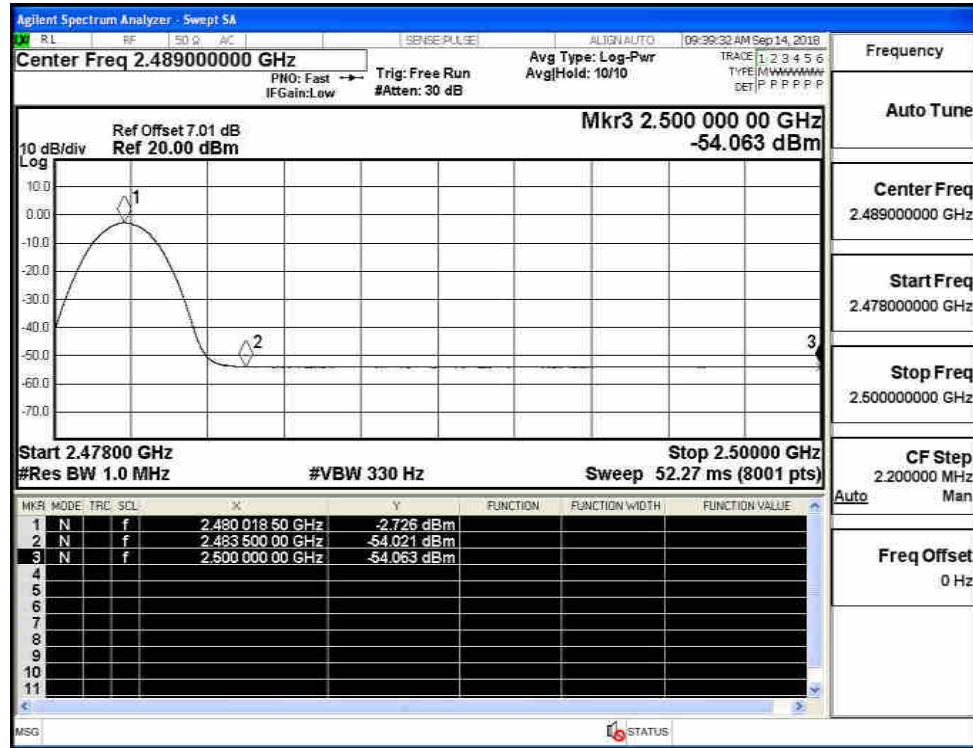
Restrict-band band-edge measurements_Hopping Off_π/4-DQPSK_Average (Low Channel)



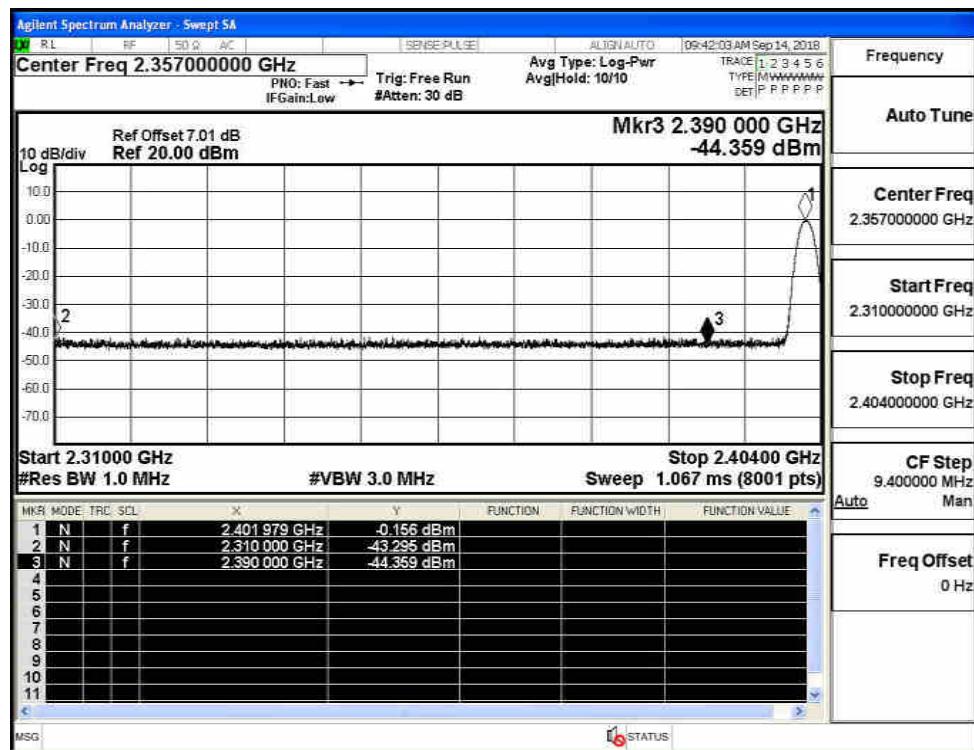
Restrict-band band-edge measurements_Hopping Off_π/4-DQPSK_PEAK (High Channel)



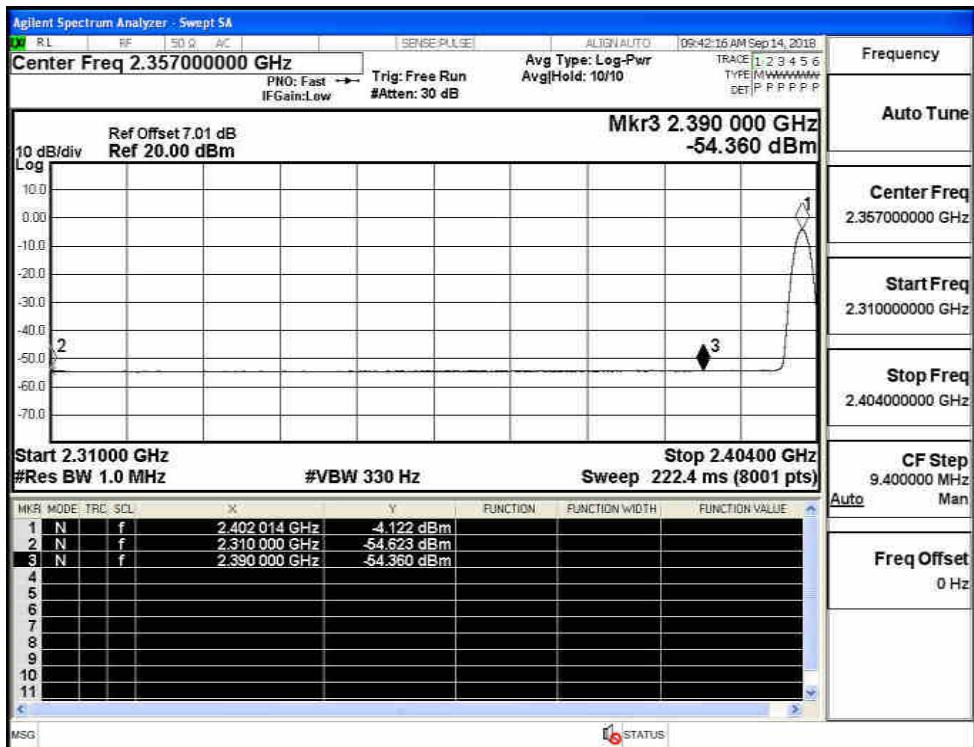
Restrict-band band-edge measurements_Hopping Off_π/4-DQPSK_Average (High Channel)



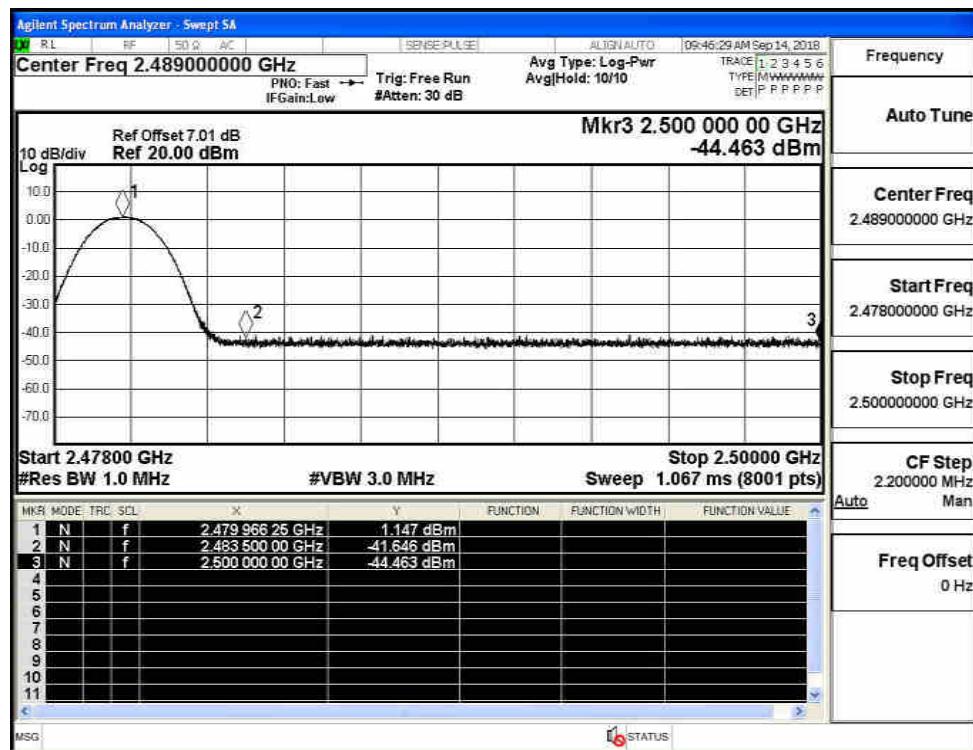
Restrict-band band-edge measurements_Hopping Off_8DPSK_PEAK (Low Channel)



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)

