

Appendix A

RF Test Data for BT V4.0(BDR/EDR) (Conducted Measurement)

Product Name: Tablet PC

Trade Mark: FUSION5

Test Model: FWIN232 Pro

Environmental Conditions

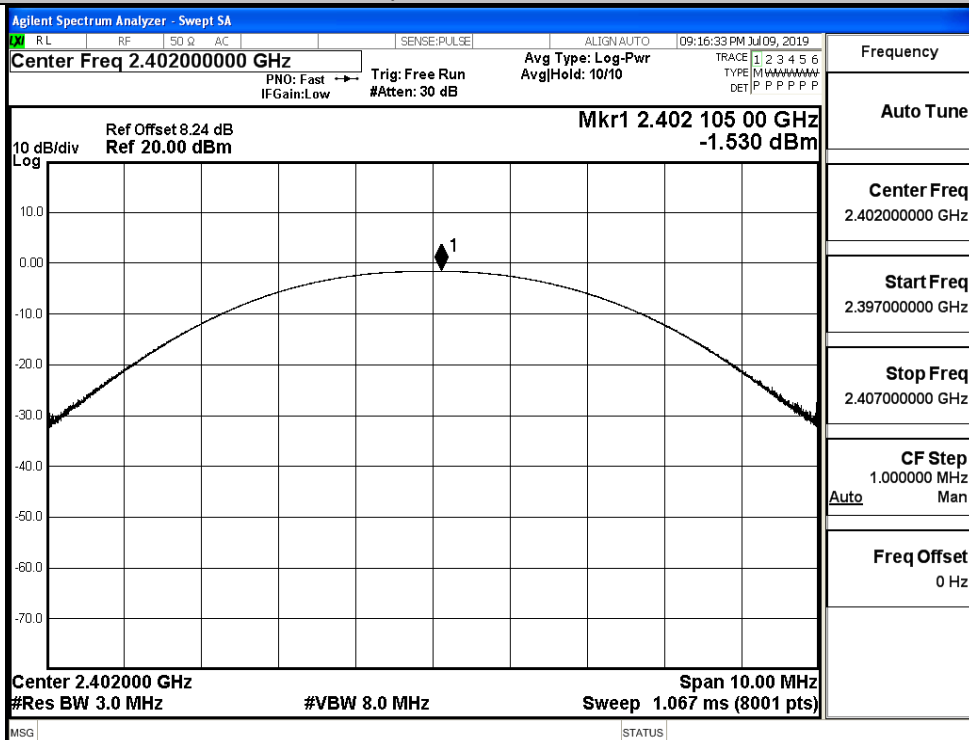
Temperature:	24.1°C
Relative Humidity:	53.6%
ATM Pressure:	100.0 kPa
Test Engineer:	Li Huan
Supervised by:	Wang.Chuang

A.1 Maximum Conducted Peak Output Power

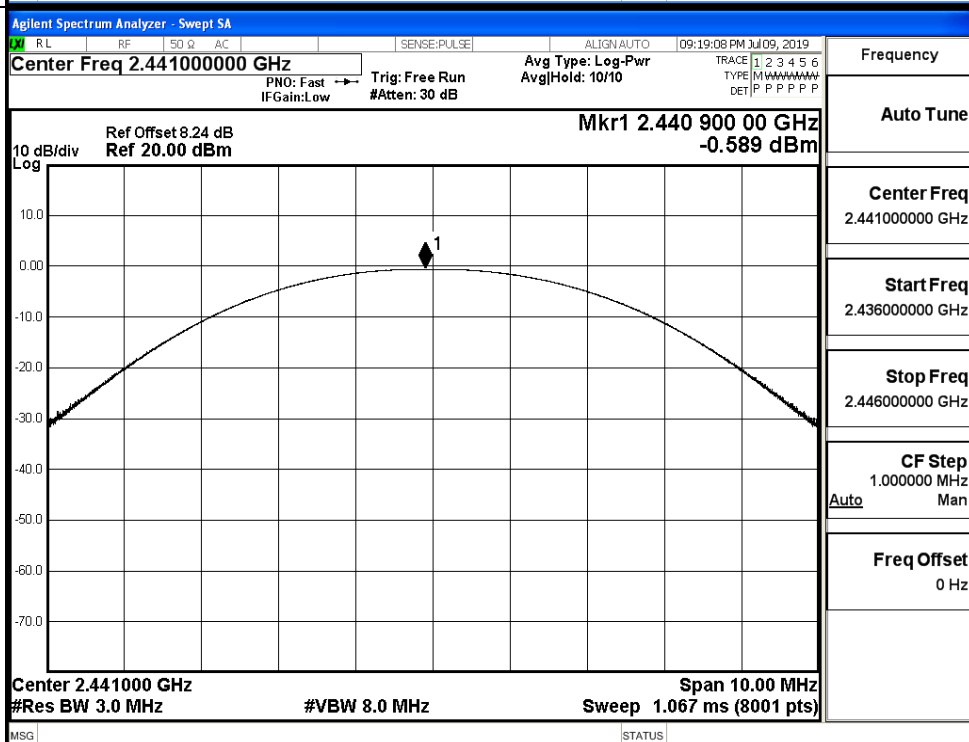
Mode	Channel.	Maximum Peak Output Power [dBm]	Limit [dBm]	Verdict
GFSK	LCH	-1.530	30	PASS
	MCH	-0.589	30	PASS
	HCH	-1.620	30	PASS
$\pi/4$ DQPSK	LCH	-2.339	21	PASS
	MCH	-1.233	21	PASS
	HCH	-2.365	21	PASS
8DPSK	LCH	-2.111	21	PASS
	MCH	-1.014	21	PASS
	HCH	-2.113	21	PASS

Test Graphs

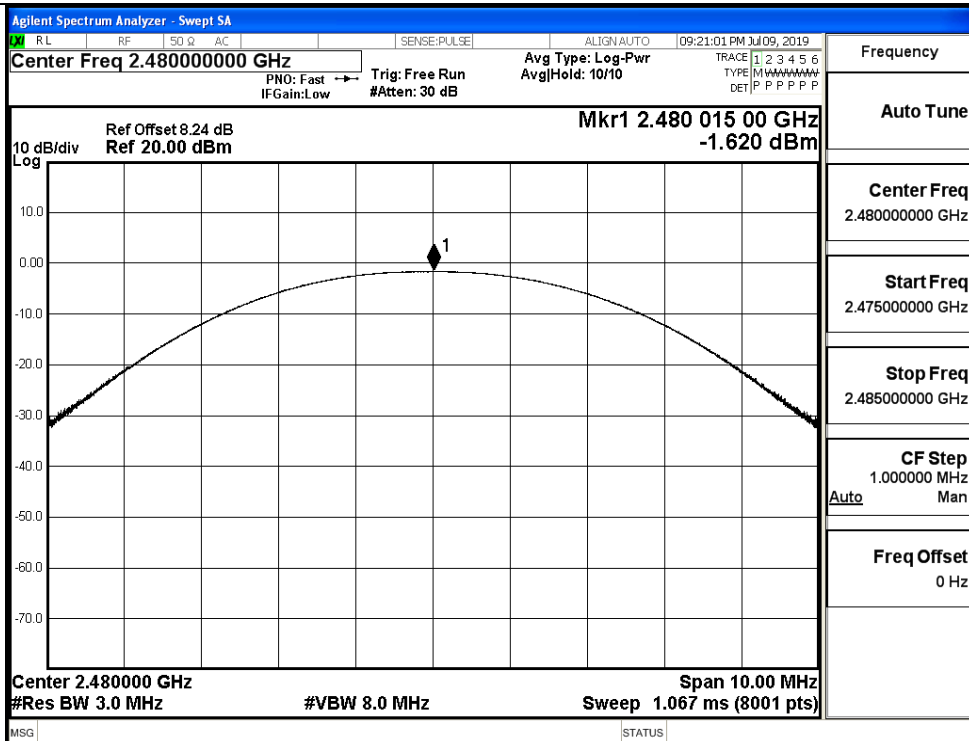
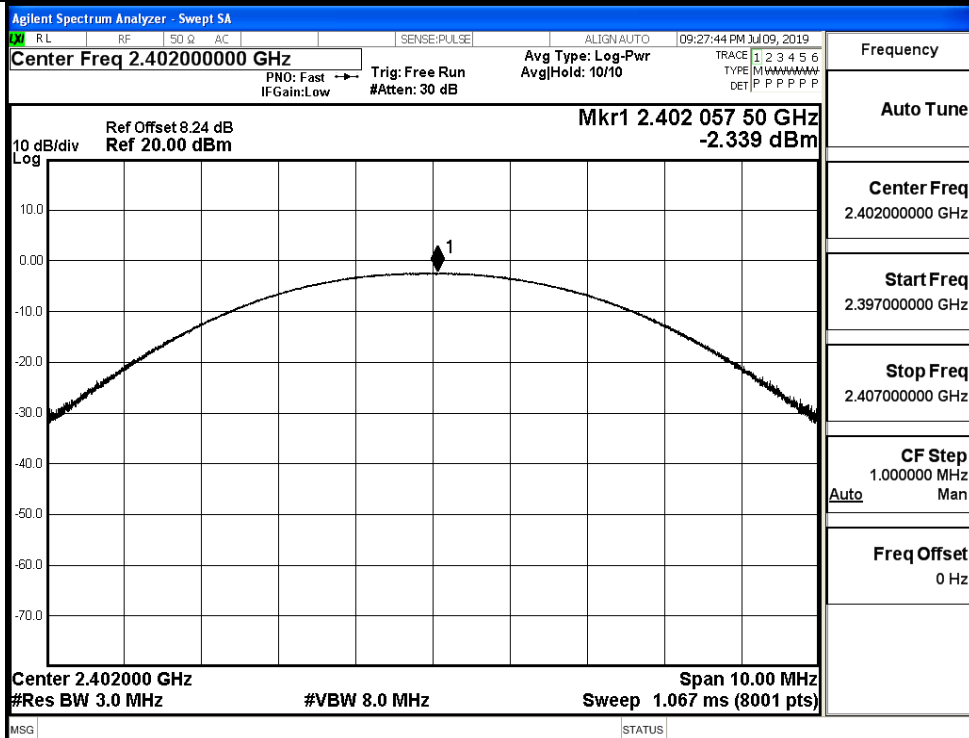
GFSK/LCH

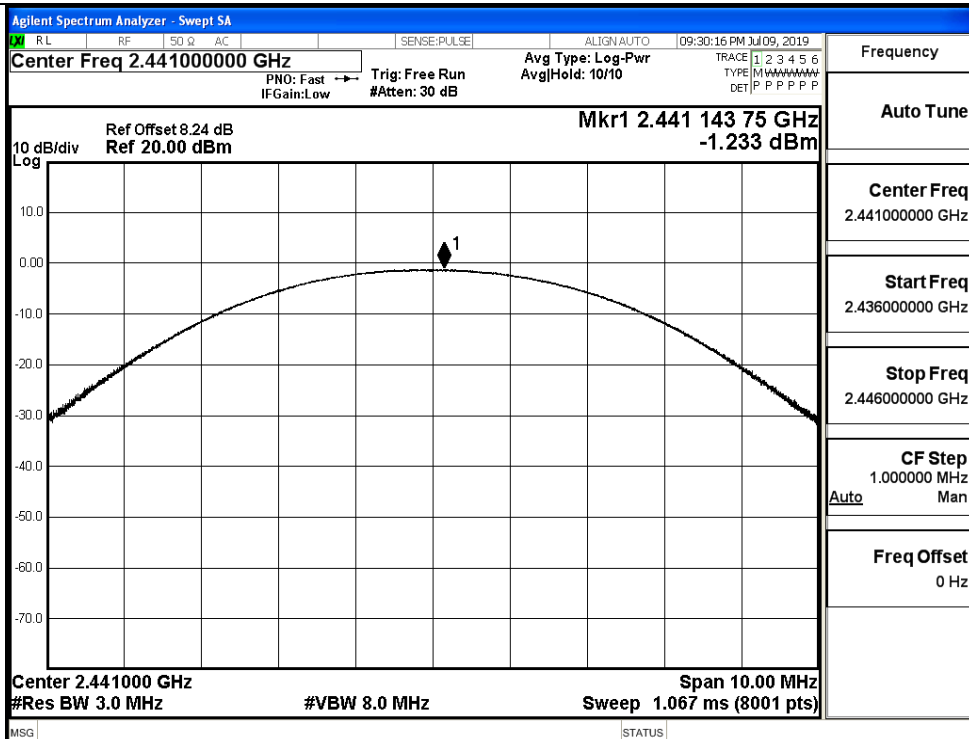
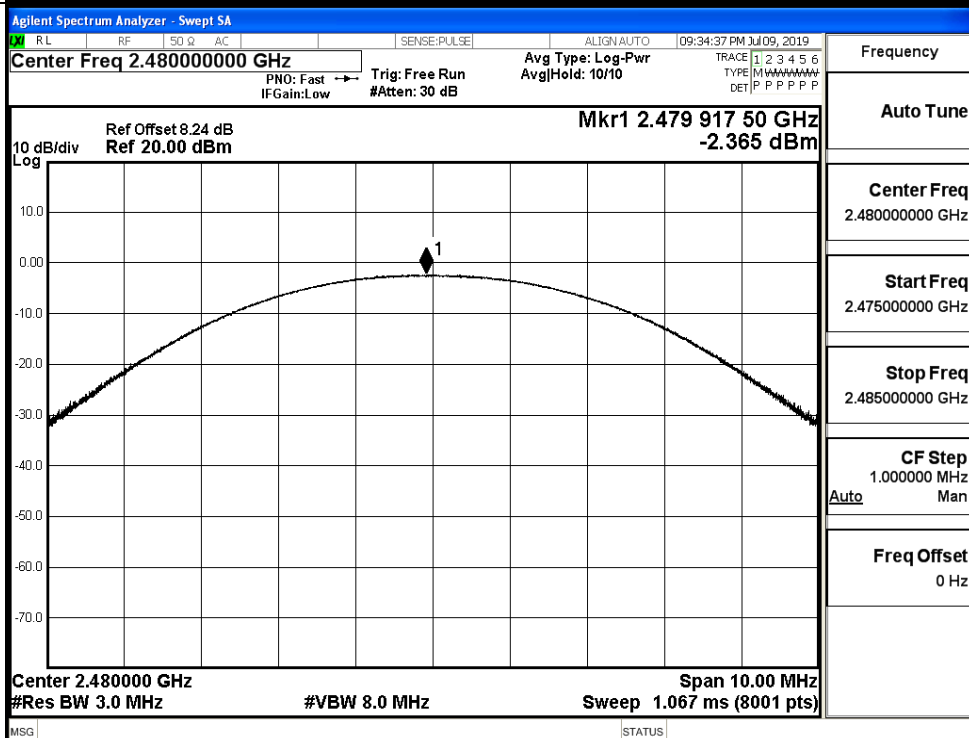


GFSK/MCH

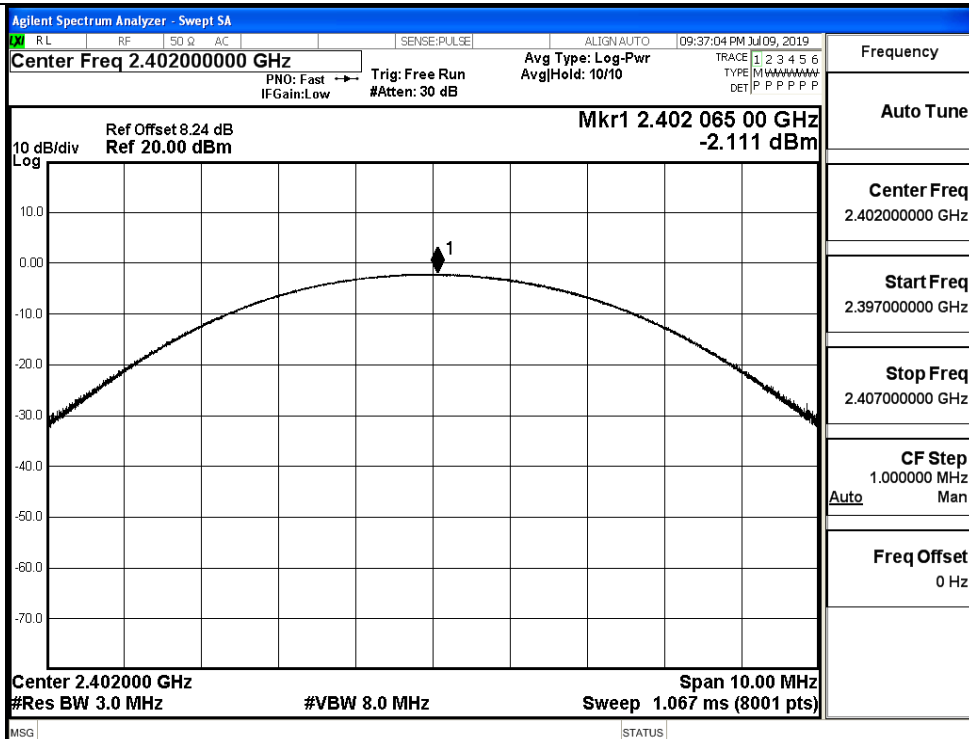


GFSK/HCH

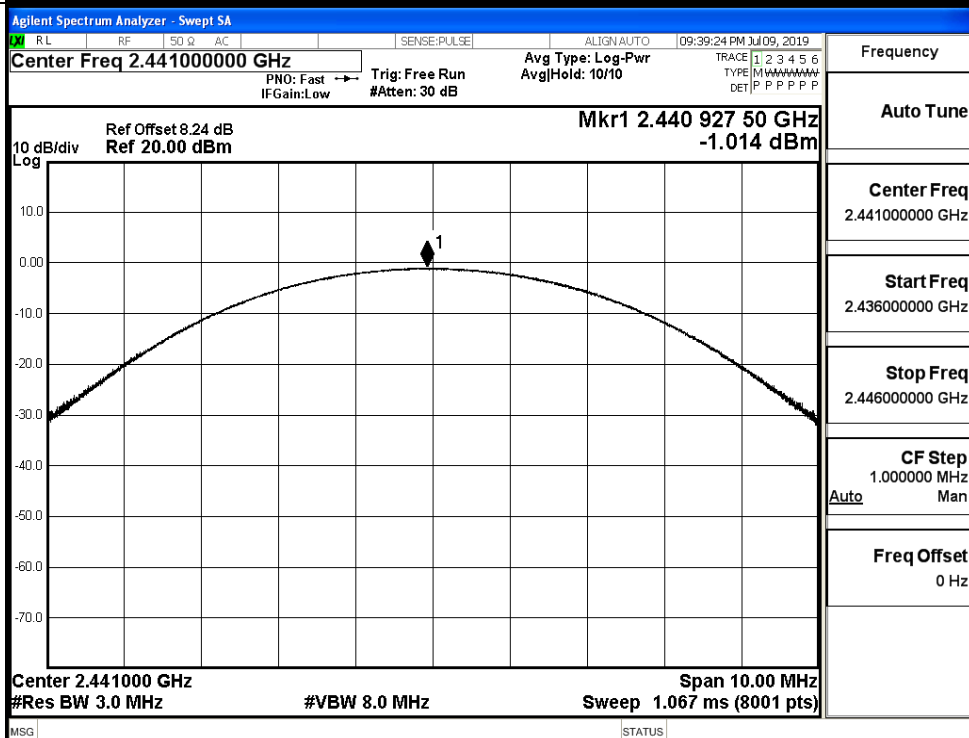
 $\pi/4$ DQPSK/LCH

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

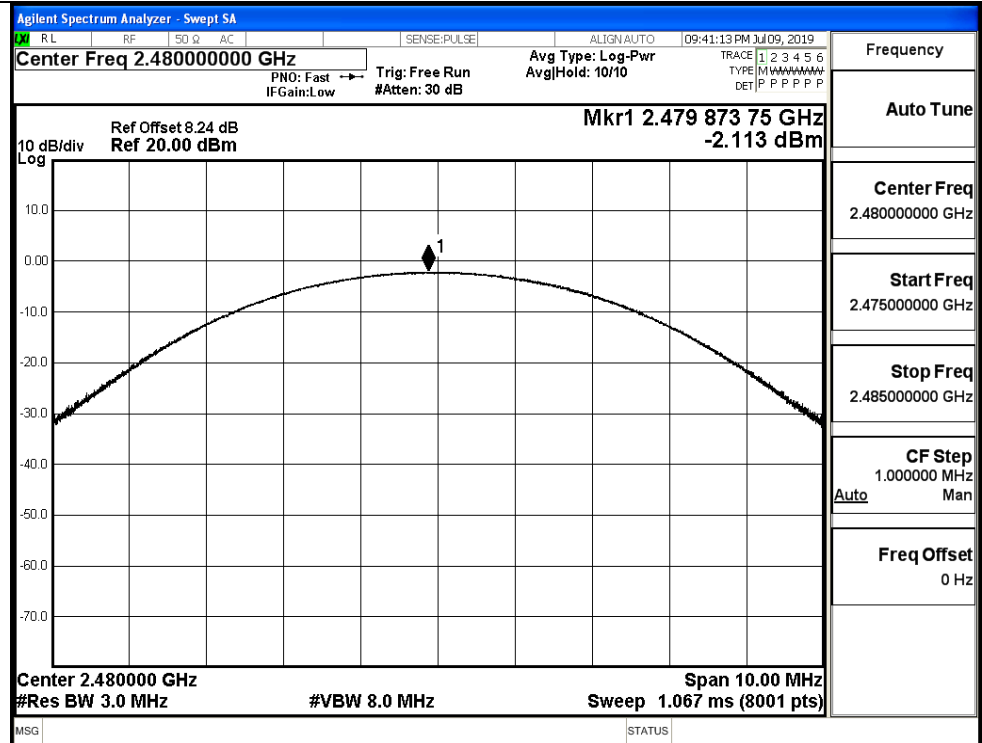
8DPSK/LCH



8DPSK/MCH

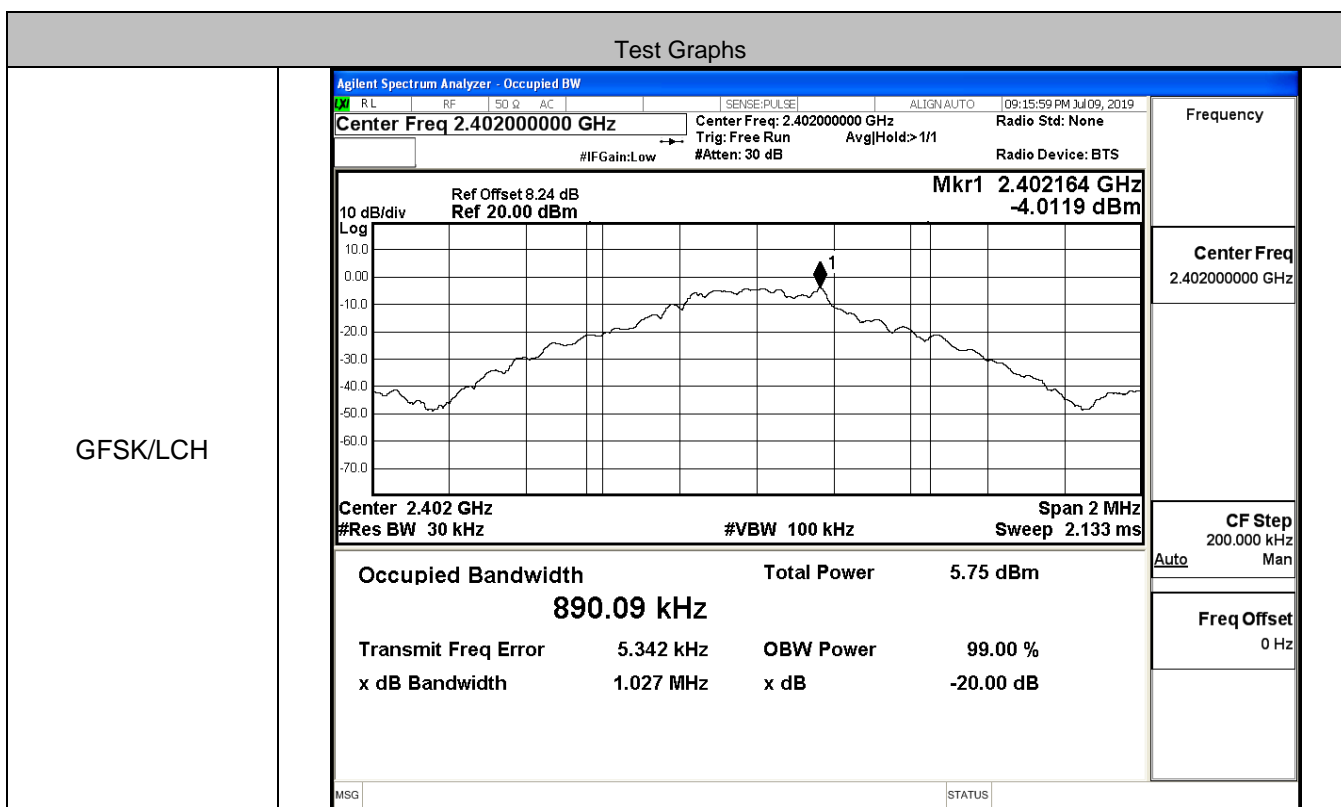


8DPSK/HCH

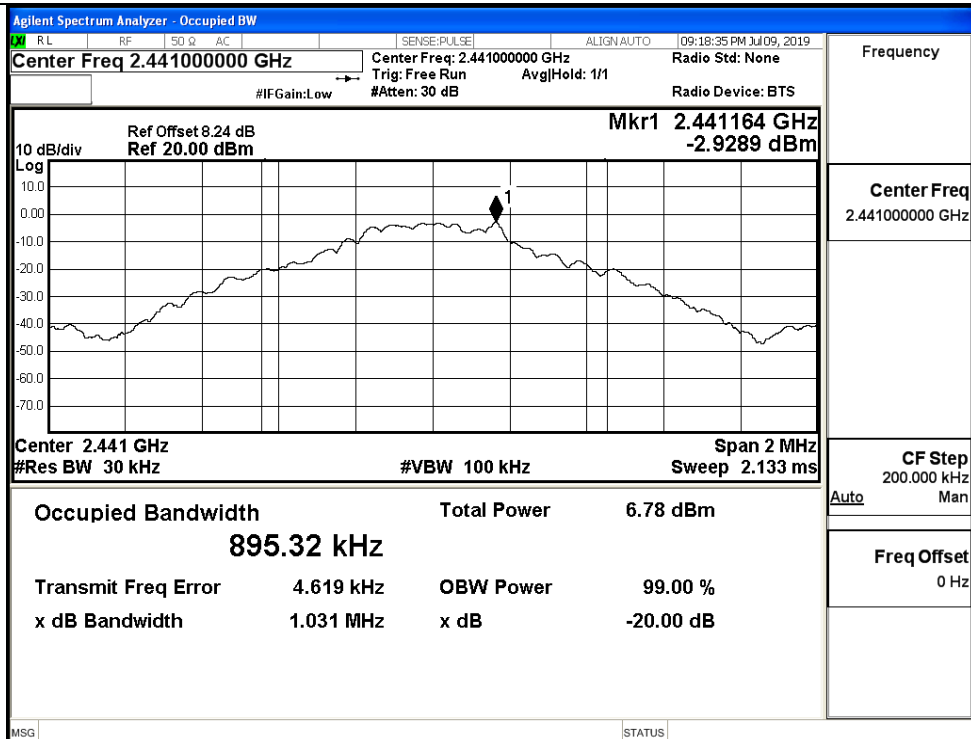


A.2 20dB Bandwidth

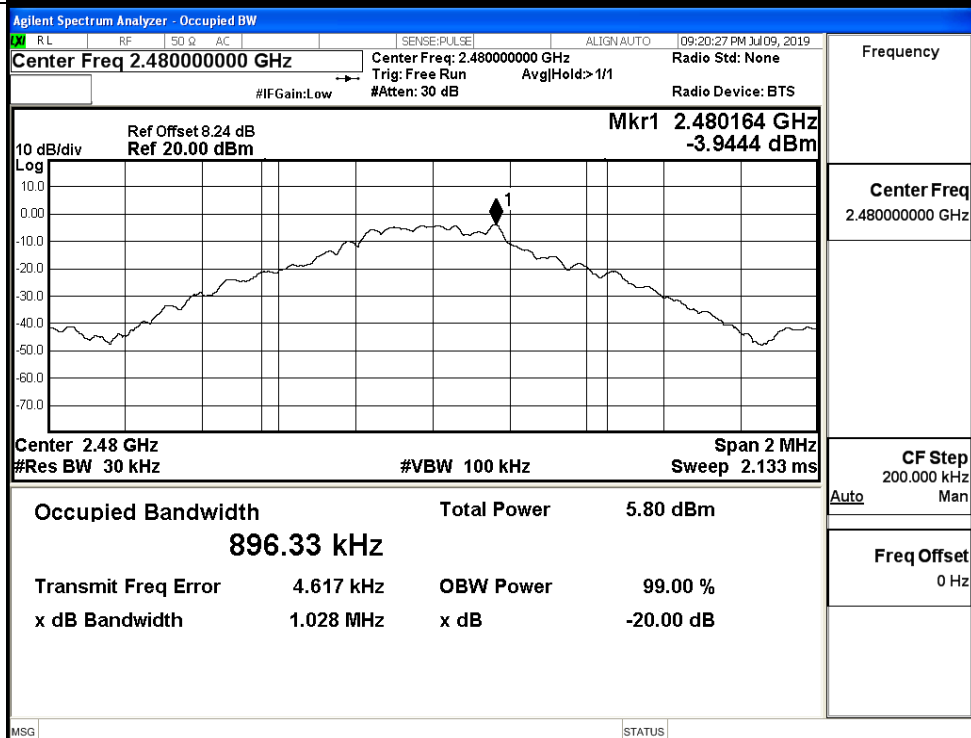
Mode	Channel.	20dB Bandwidth [MHz]	Limit [MHz]	Verdict
GFSK	LCH	1.027	Not Specified	PASS
	MCH	1.031	Not Specified	PASS
	HCH	1.028	Not Specified	PASS
$\pi/4$ DQPSK	LCH	1.312	Not Specified	PASS
	MCH	1.292	Not Specified	PASS
	HCH	1.306	Not Specified	PASS
8DPSK	LCH	1.300	Not Specified	PASS
	MCH	1.296	Not Specified	PASS
	HCH	1.305	Not Specified	PASS

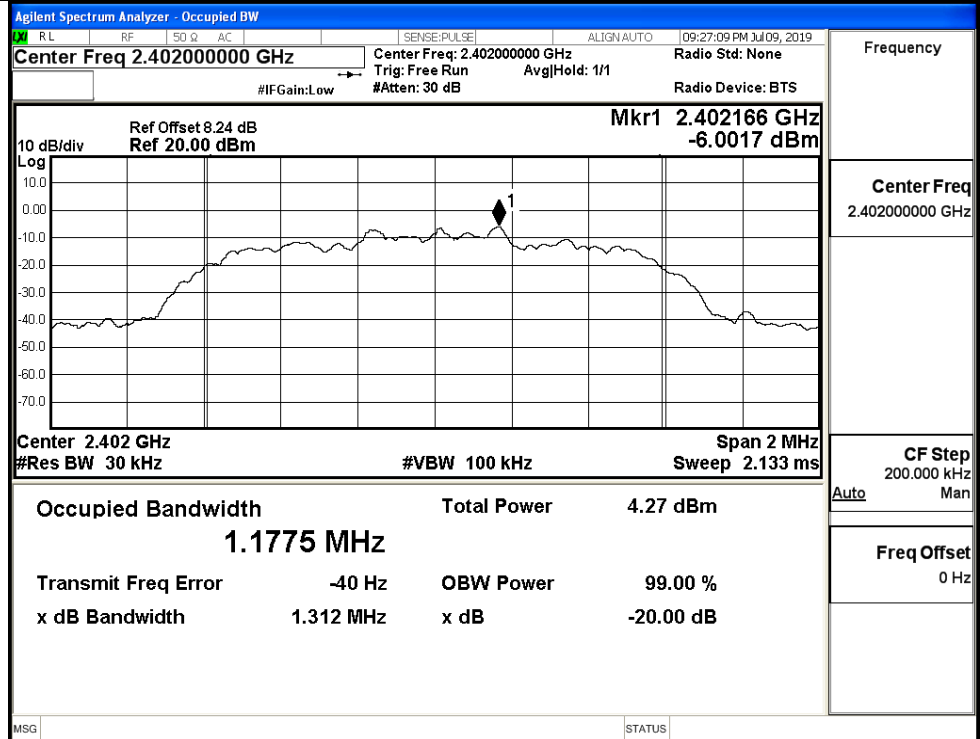
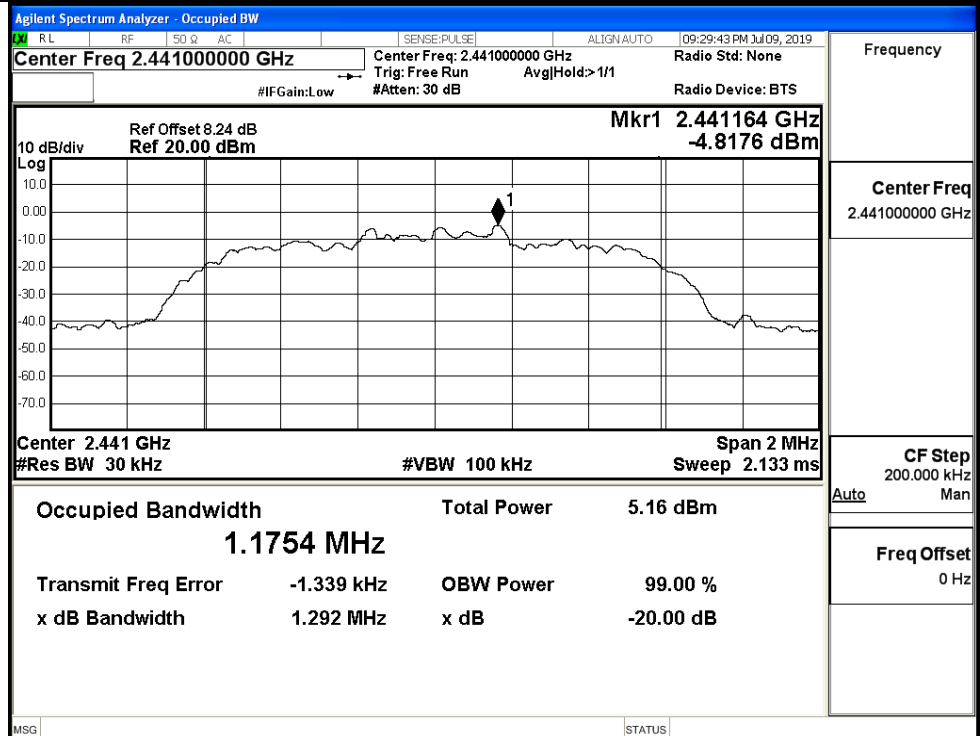


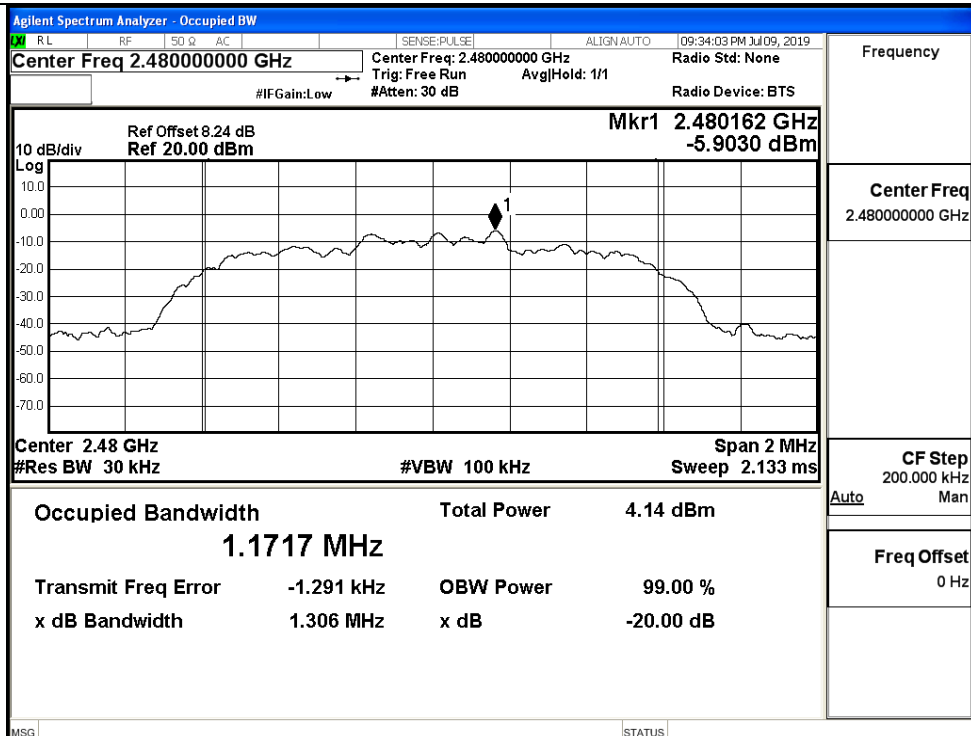
GFSK/MCH



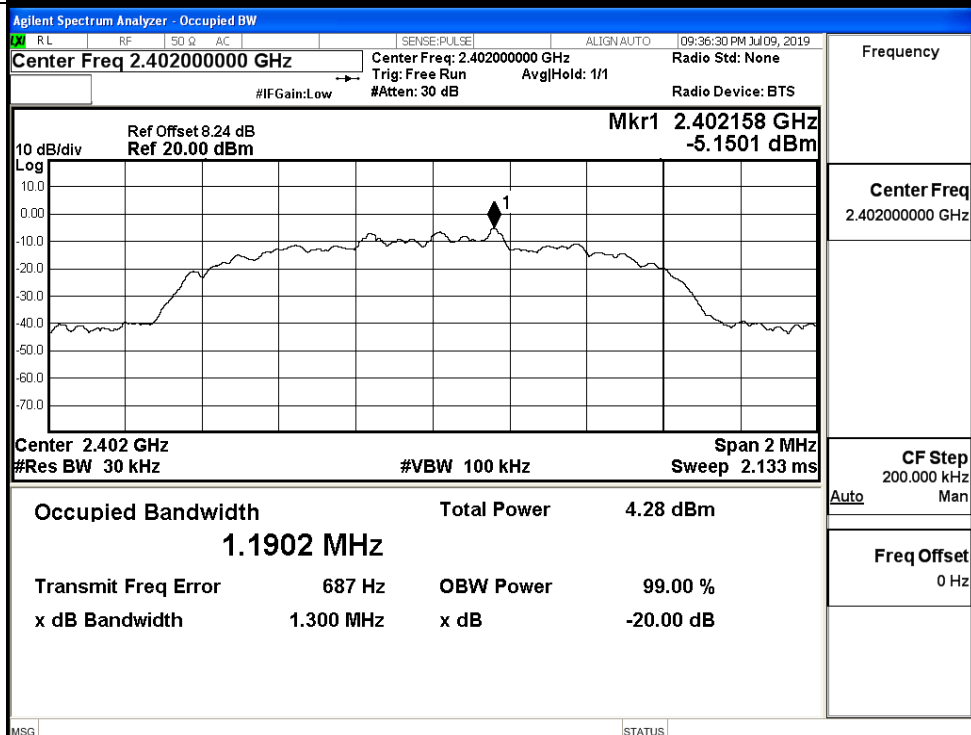
GFSK/HCH



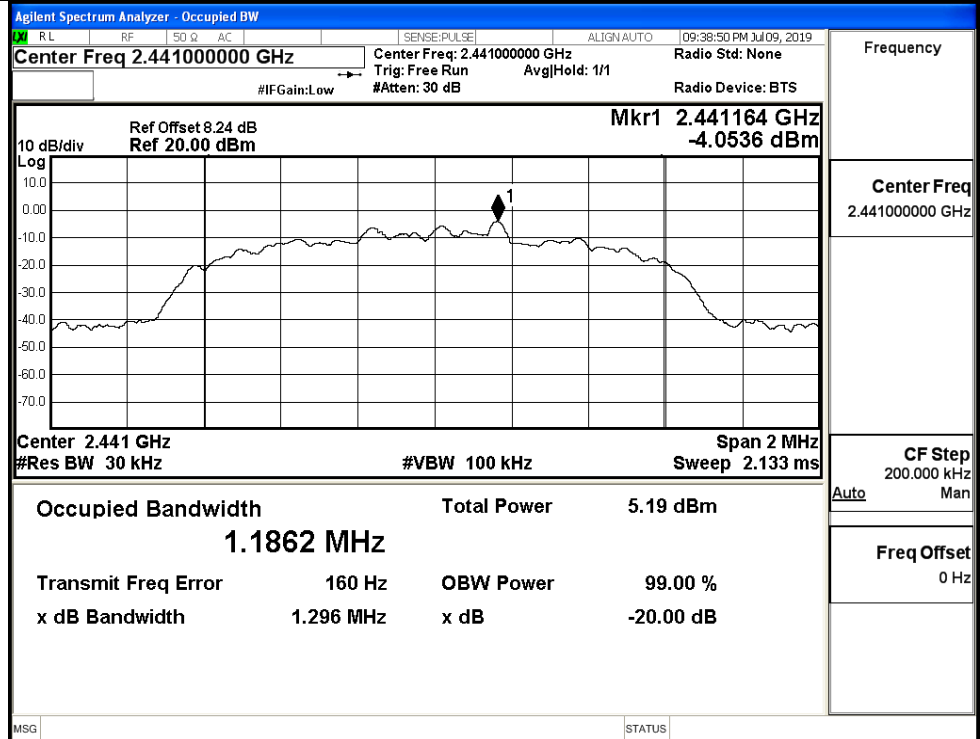
$\pi/4$ DQPSK/LCH $\pi/4$ DQPSK/MCH

$\pi/4$ DQPSK/HCH

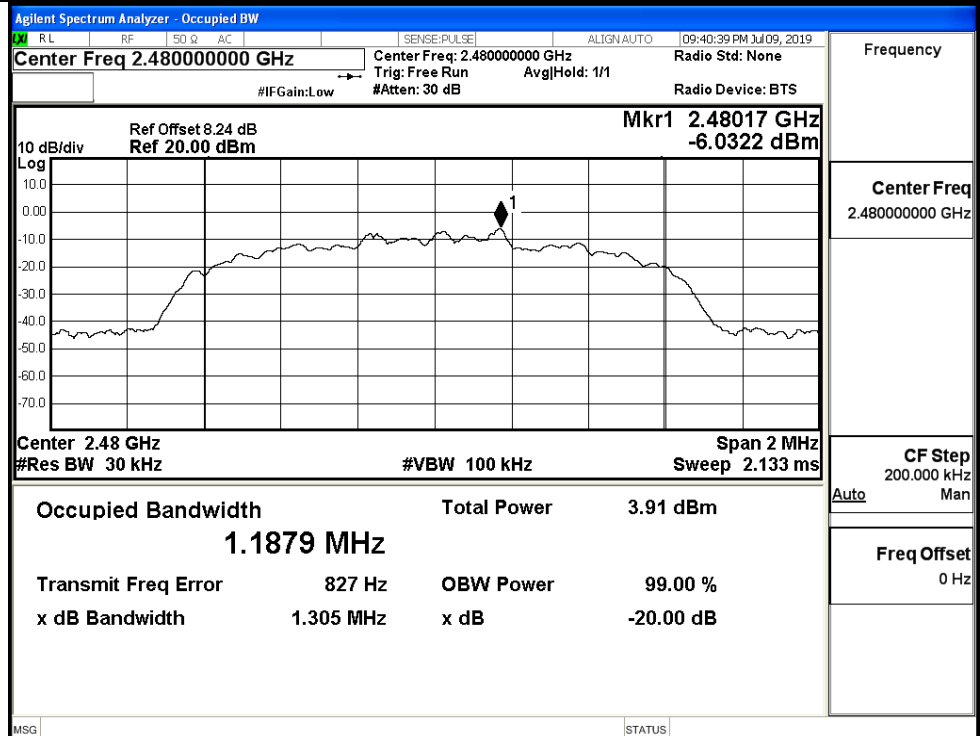
8DPSK/LCH



8DPSK/MCH



8DPSK/HCH

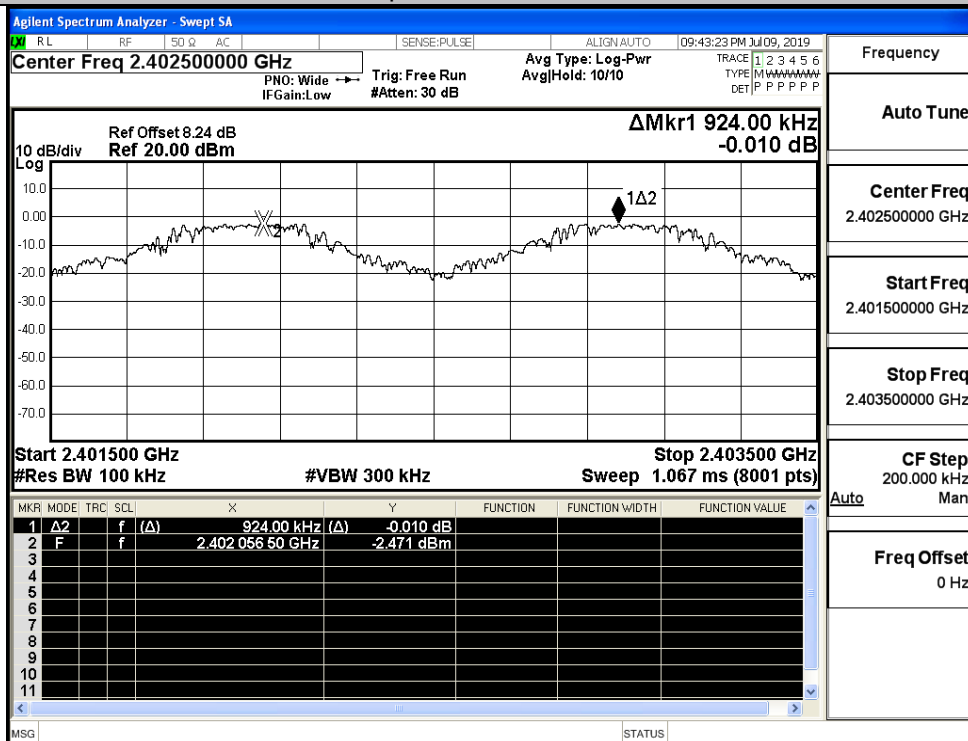


A.3 Carrier Frequency Separation

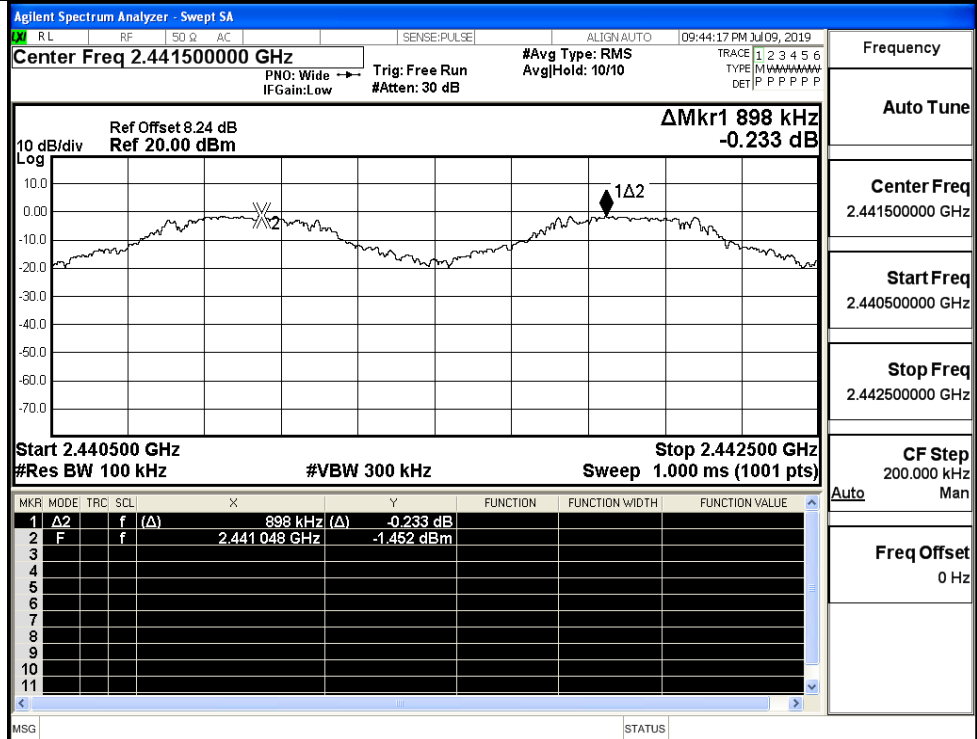
Mode	Channel.	Carrier Frequency Separation [MHz]	Limit [MHz]	Verdict
GFSK	LCH	0.924	0.687	PASS
	MCH	0.898	0.687	PASS
	HCH	1.052	0.687	PASS
$\pi/4$ DQPSK	LCH	1.260	0.875	PASS
	MCH	0.904	0.875	PASS
	HCH	1.002	0.875	PASS
8DPSK	LCH	1.108	0.870	PASS
	MCH	1.034	0.870	PASS
	HCH	0.960	0.870	PASS

Test Graphs

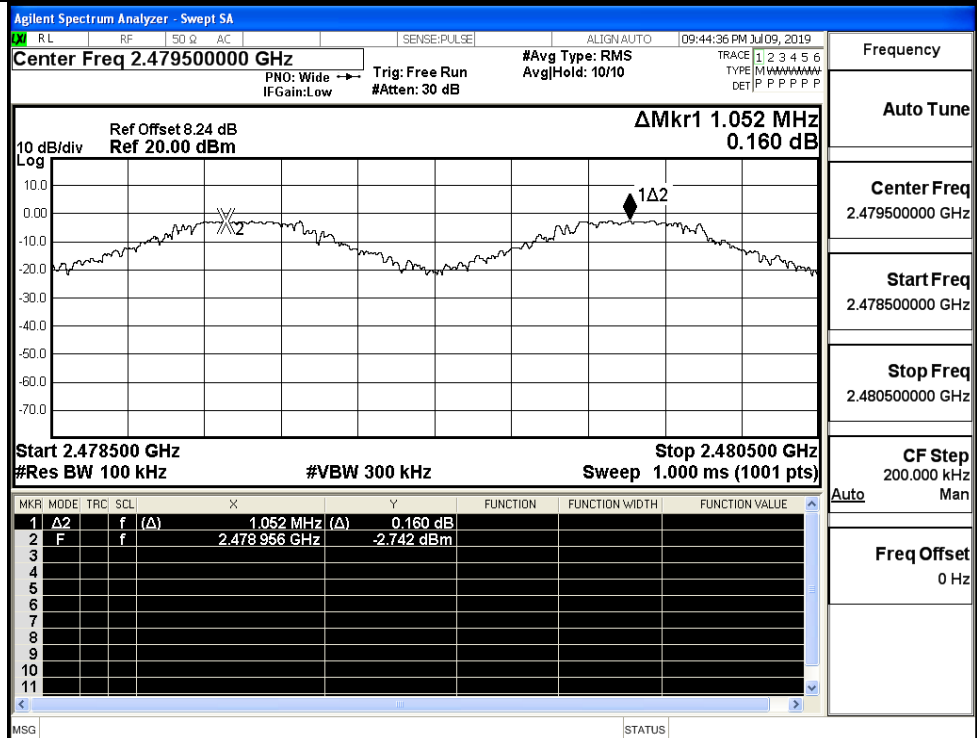
GFSK/LCH

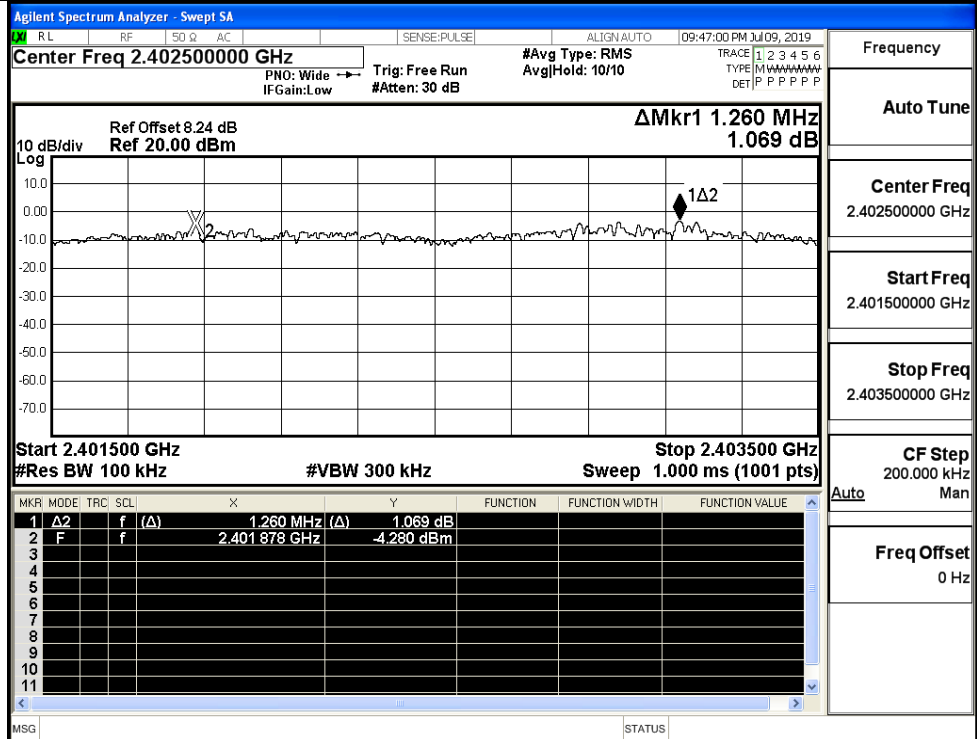
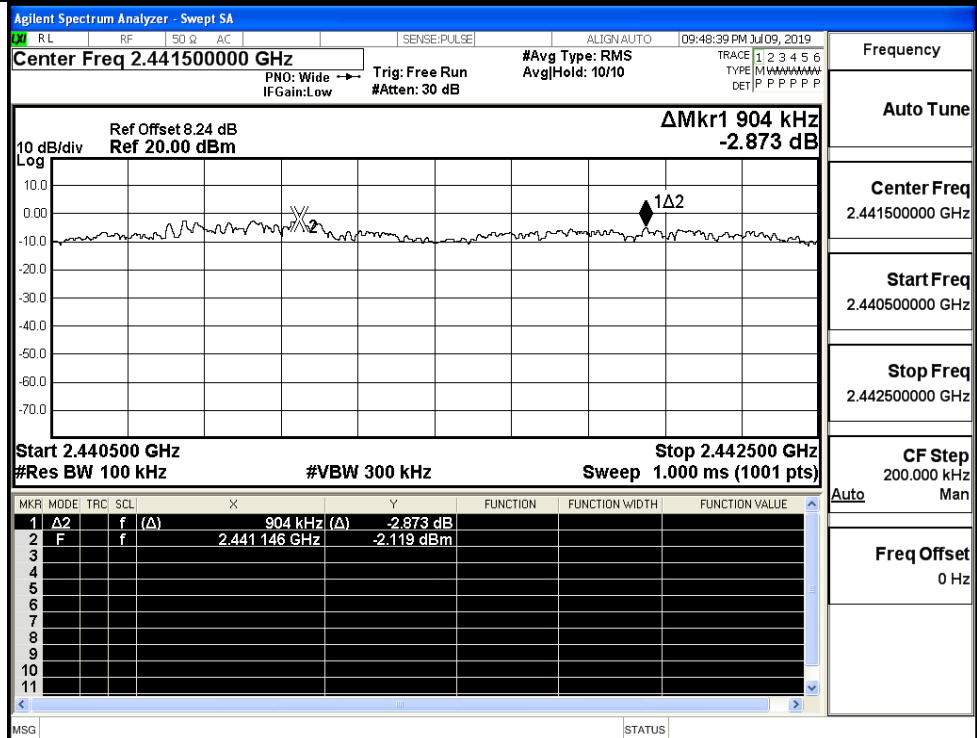


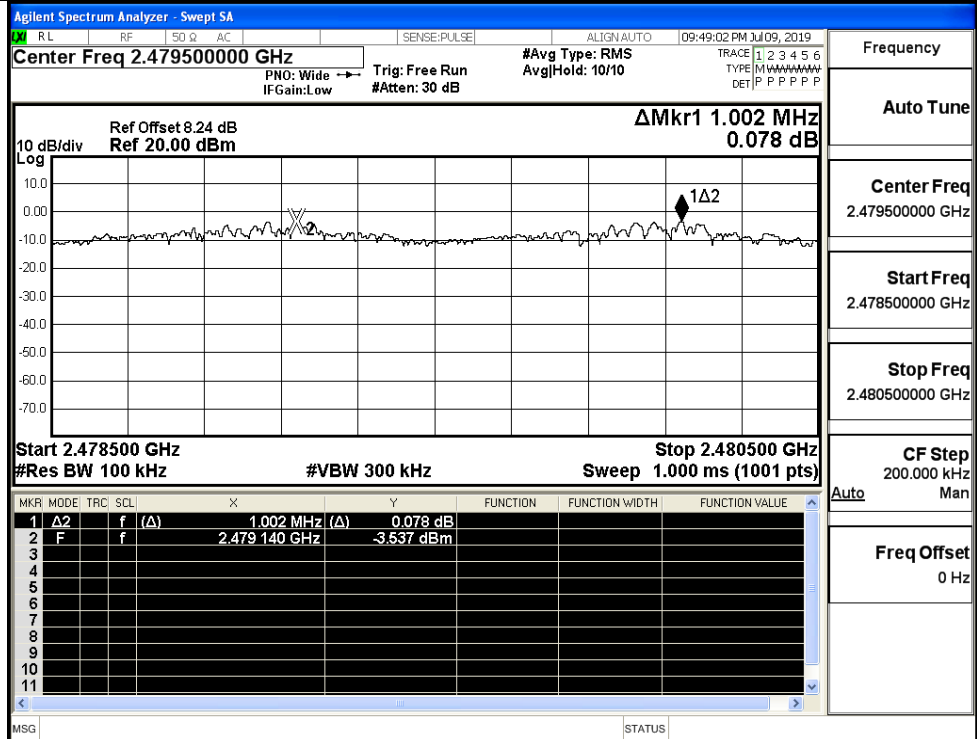
GFSK/MCH



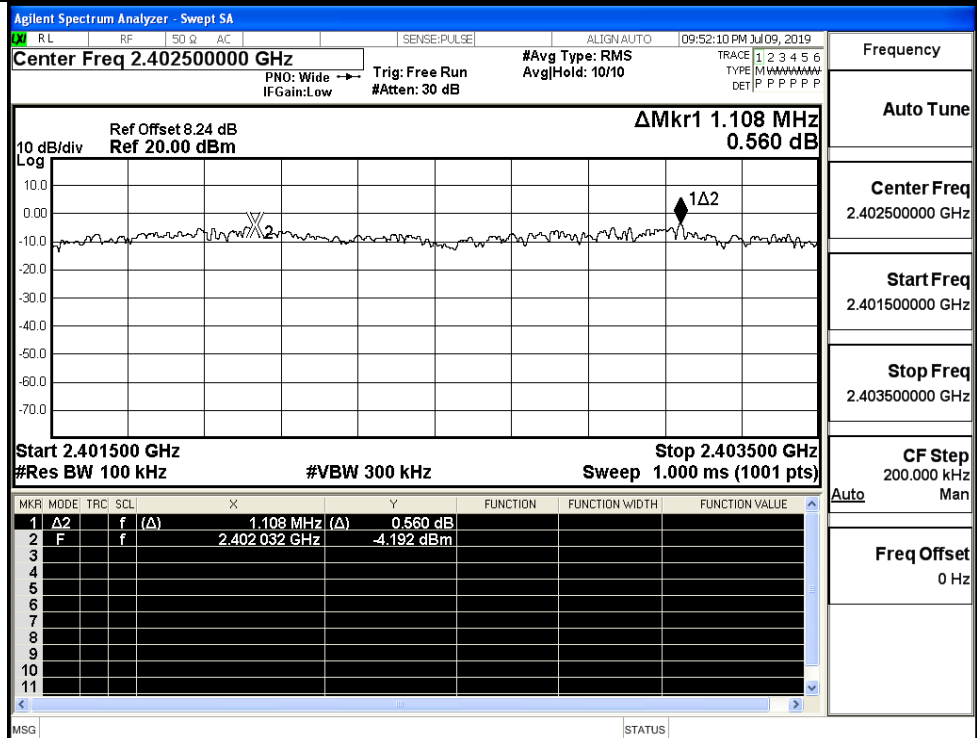
GFSK/HCH



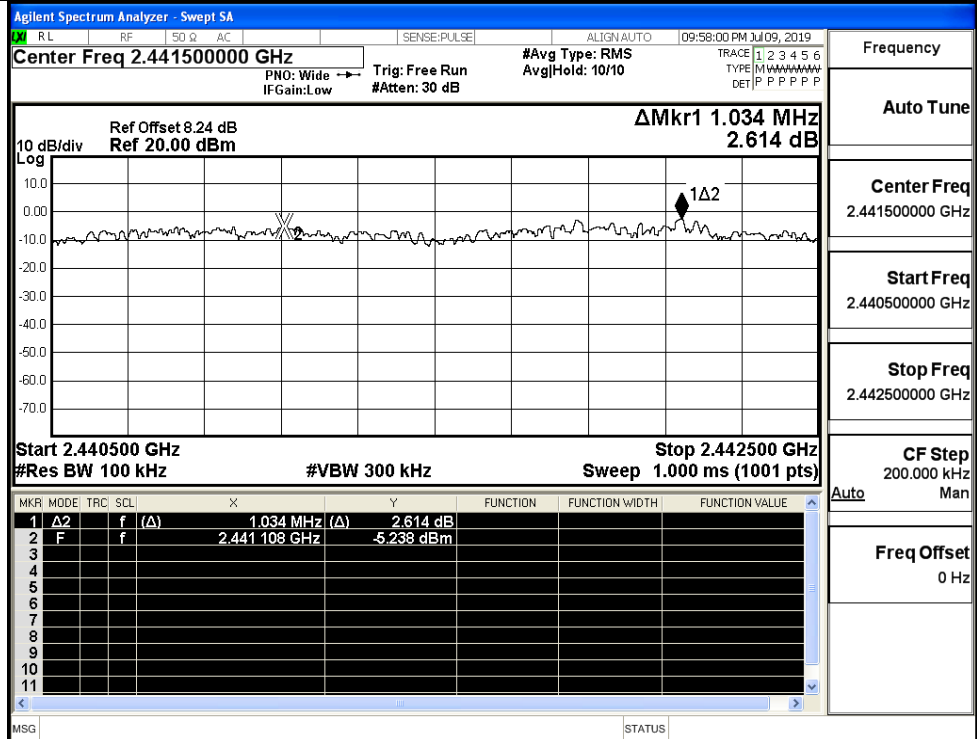
$\pi/4$ DQPSK/LCH $\pi/4$ DQPSK/MCH

$\pi/4$ DQPSK/HCH

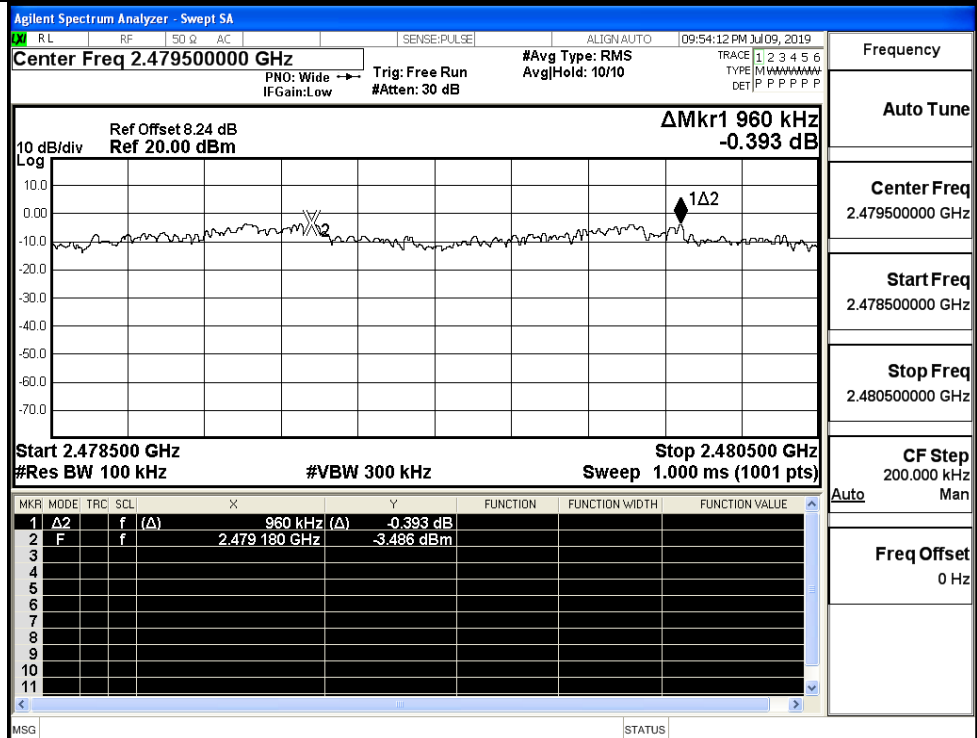
8DPSK/LCH



8DPSK/MCH



8DPSK/HCH

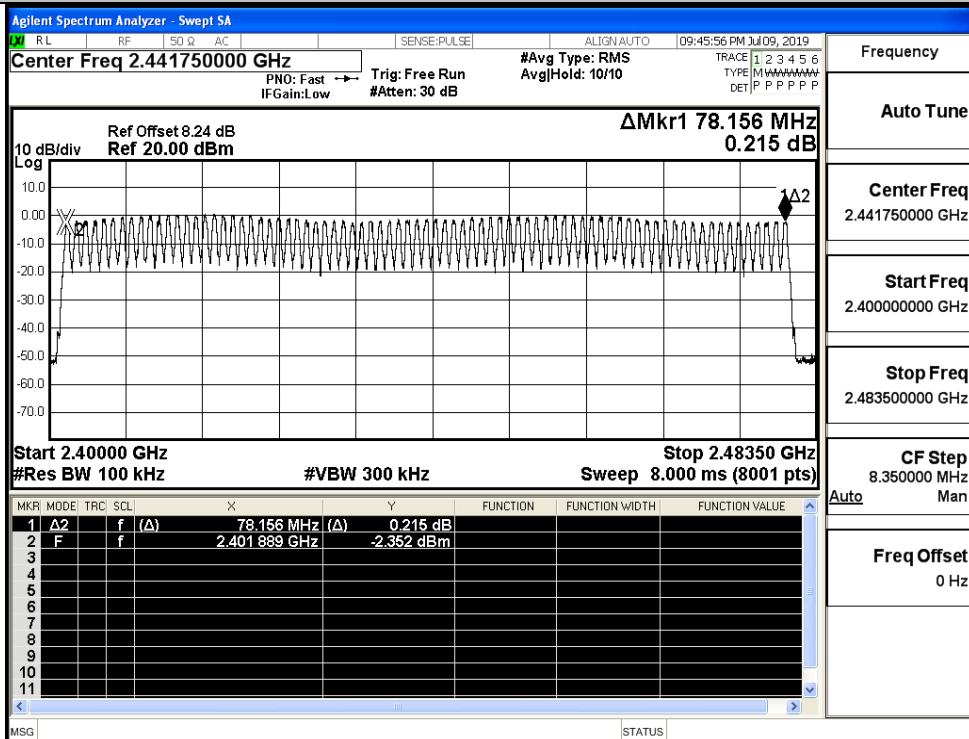
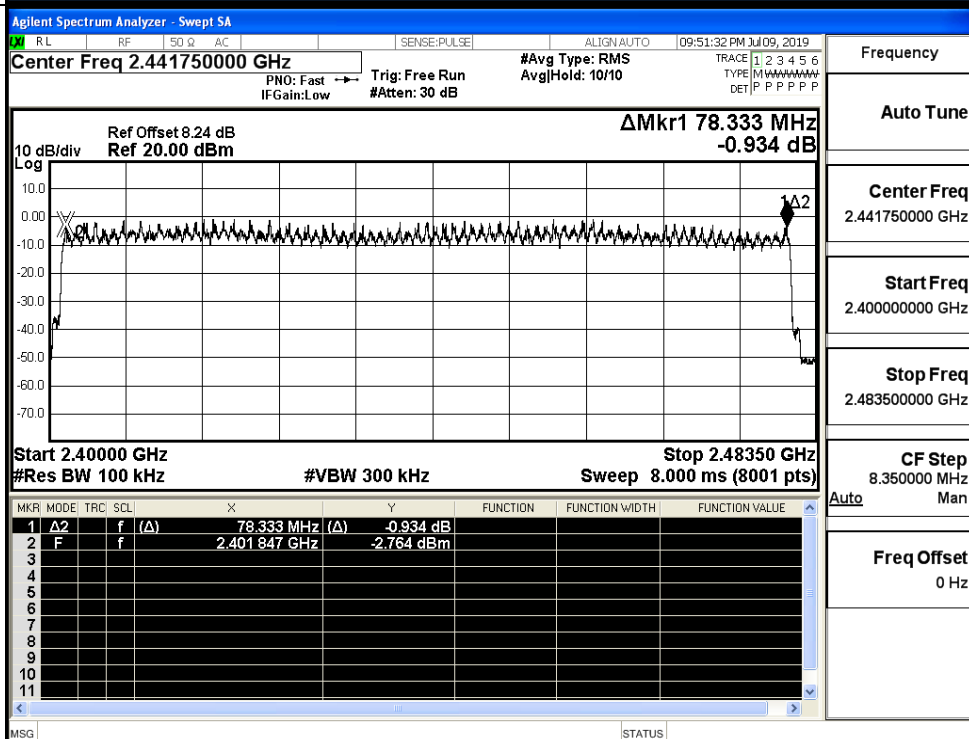


A.4 Hopping Channel Number

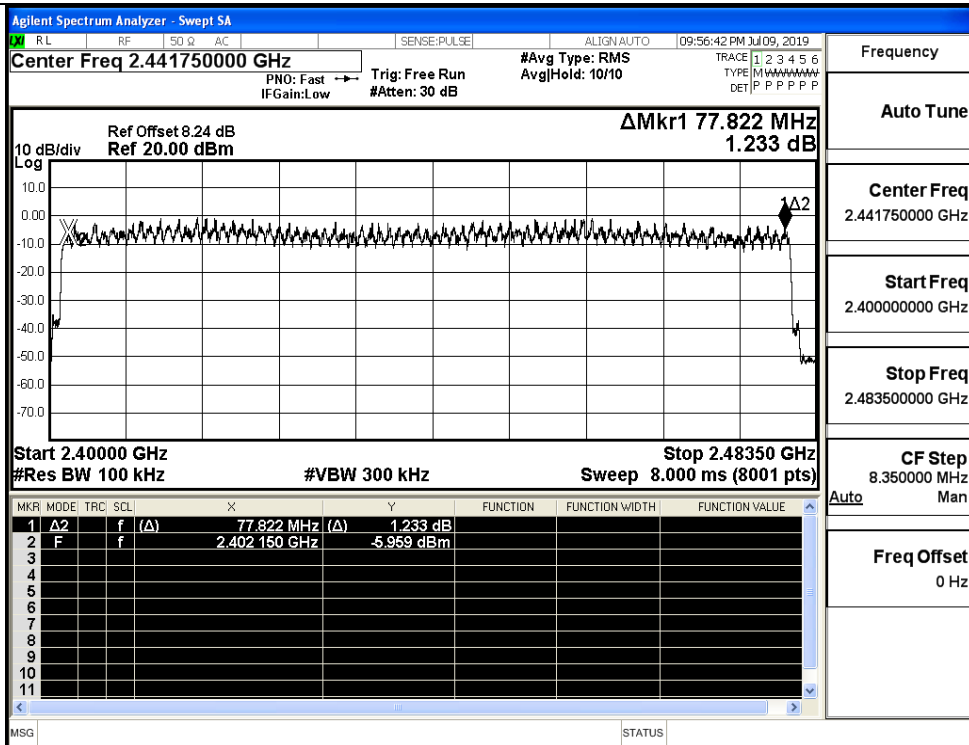
Mode	Channel.	Number of Hopping Channel [N]	Limit [N]	Verdict
GFSK	Hop	79	≥ 15	PASS
$\pi/4$ DQPSK	Hop	79	≥ 15	PASS
8DPSK	Hop	79	≥ 15	PASS

Test Graphs

GFSK/Hop

 $\pi/4$ DQPSK/Hop

8DPSK/Hop

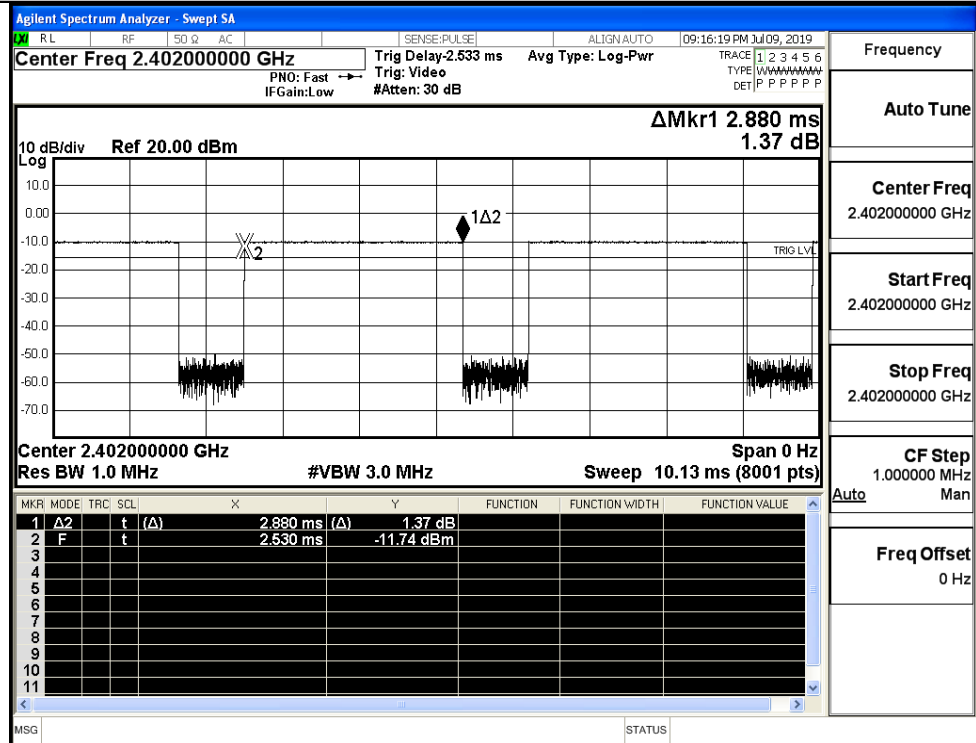


A.5 Dwell Time

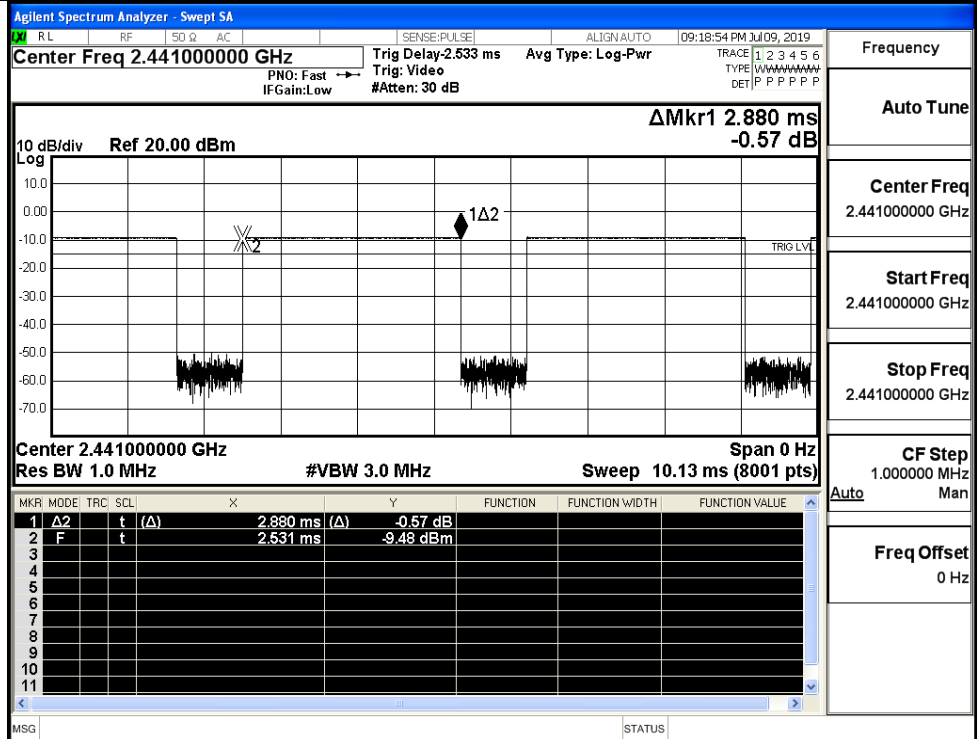
Mode	Packet	Channel	Burst Width [ms/hop/ch]	Total Hops[hop*ch]	Dwell Time[s]	Limit [s]	Verdict
GFSK	DH5	LCH	2.88	106.7	0.307	0.4	PASS
	DH5	MCH	2.88	106.7	0.307	0.4	PASS
	DH5	HCH	2.88	106.7	0.307	0.4	PASS
$\pi/4$ DQPSK	2DH5	LCH	2.88	106.7	0.307	0.4	PASS
	2DH5	MCH	2.88	106.7	0.307	0.4	PASS
	2DH5	HCH	2.88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

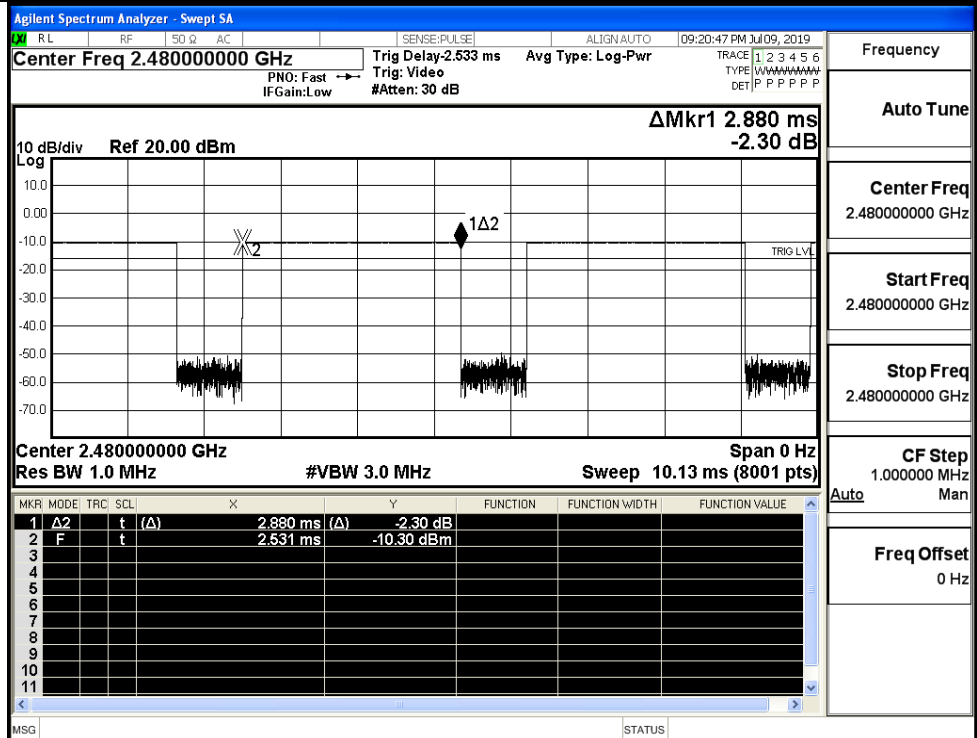
GFSK_DH5/LCH



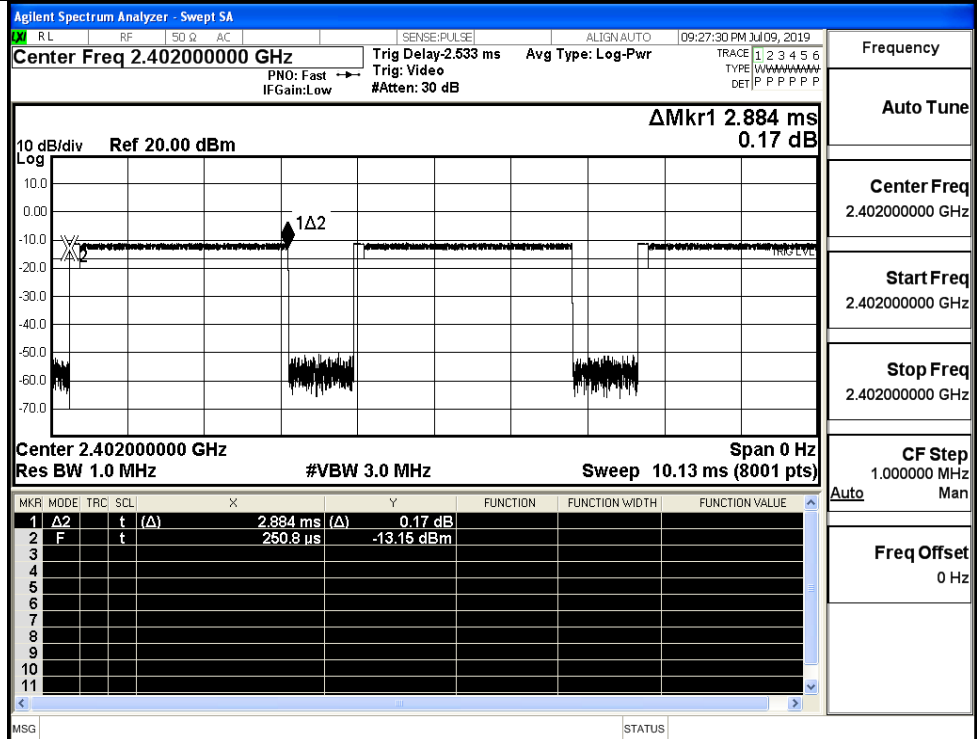
GFSK_DH5/MCH



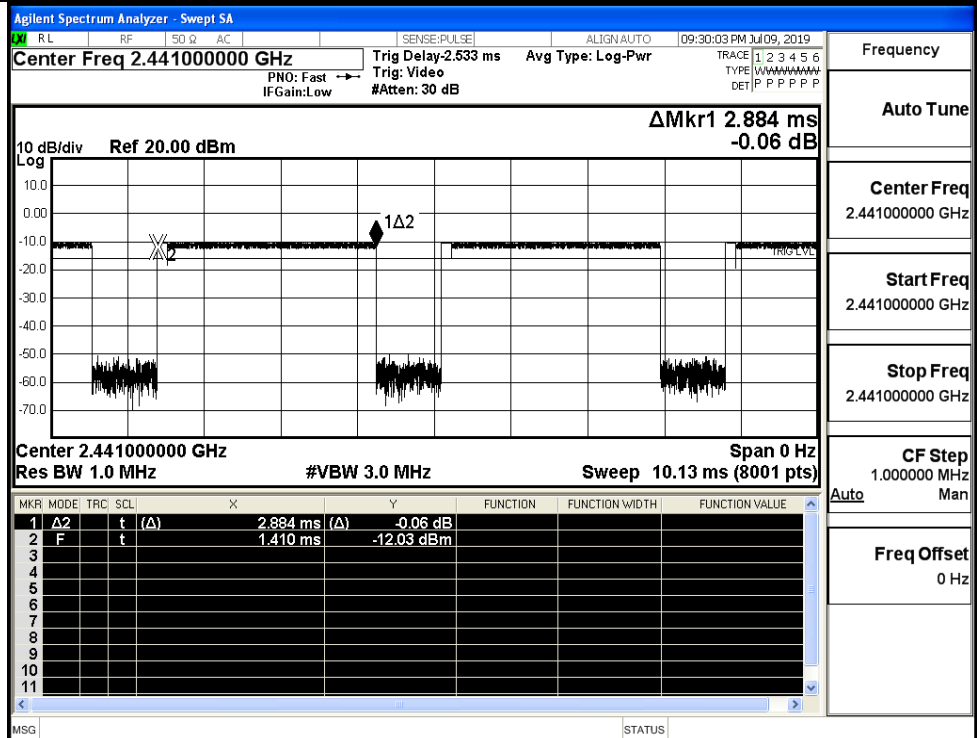
GFSK_DH5/HCH



$\pi/4$ DQPSK
_2DH5/LCH



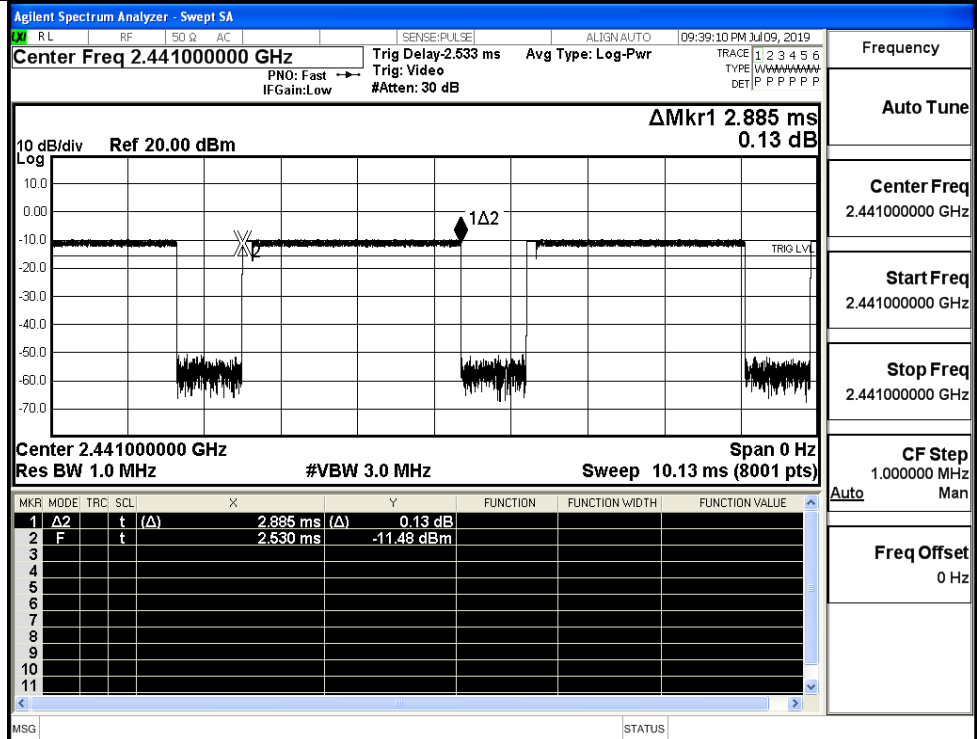
$\pi/4$ DQPSK
_2DH5/MCH



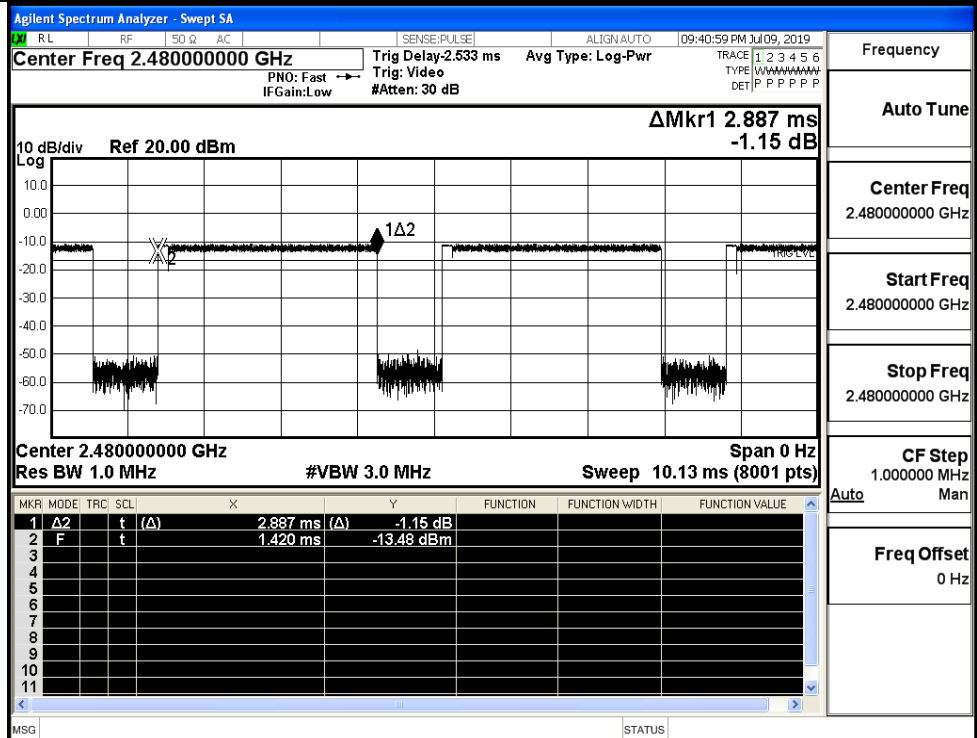
Frequency	
Auto Tune	
Center Freq	2.480000000 GHz
Start Freq	2.480000000 GHz
Stop Freq	2.480000000 GHz
CF Step	1.000000 MHz
Auto	Man
Freq Offset	0 Hz

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

8DPSK_3DH5/MCH



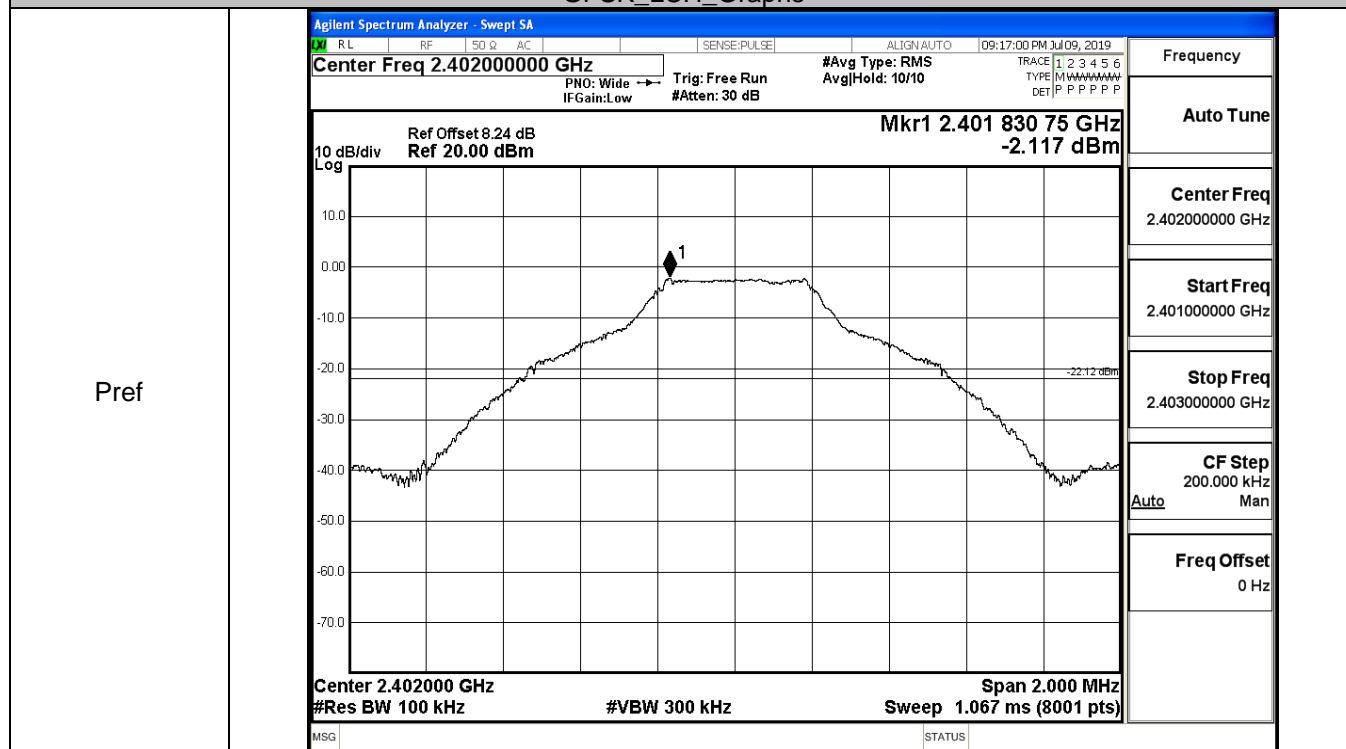
8DPSK_3DH5/HCH



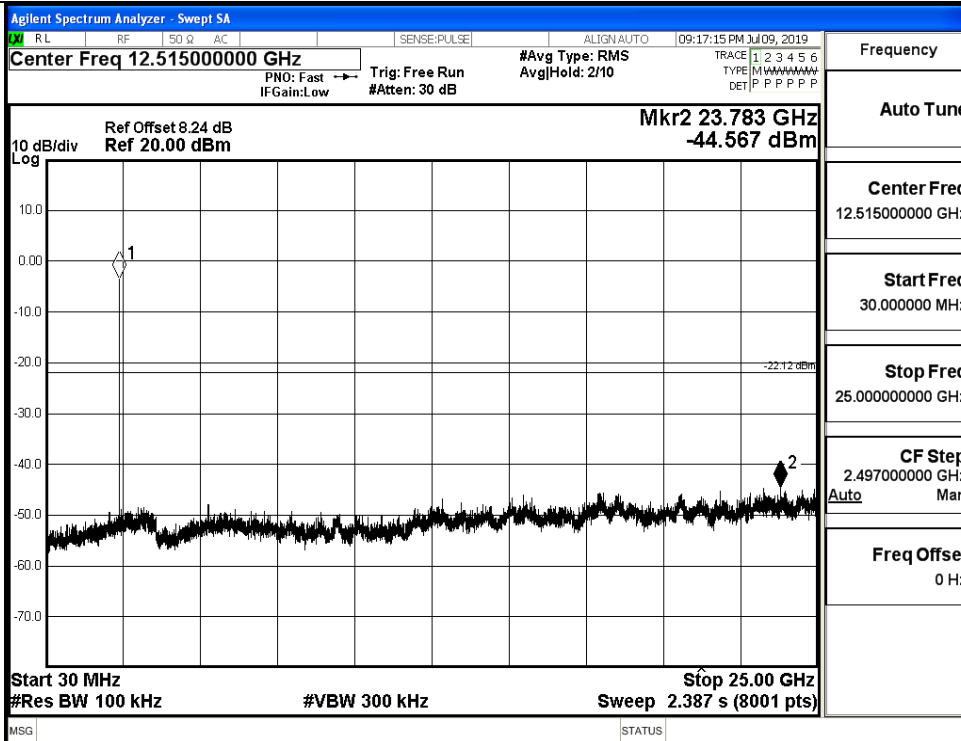
A.6 RF Conducted Spurious Emissions

Mode	Channel	Pref [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
GFSK	LCH	-2.117	-44.567	-22.117	PASS
	MCH	-0.861	-44.728	-20.861	PASS
	HCH	-2.3	-45.123	-22.300	PASS
$\pi/4$ DQPSK	LCH	-3.231	-43.590	-23.231	PASS
	MCH	-2.314	-44.747	-22.314	PASS
	HCH	-3.807	-45.263	-23.807	PASS
8DPSK	LCH	-3.027	-41.796	-23.027	PASS
	MCH	-2.063	-45.045	-22.063	PASS
	HCH	-3.308	-44.897	-23.308	PASS

GFSK_LCH_Graphs

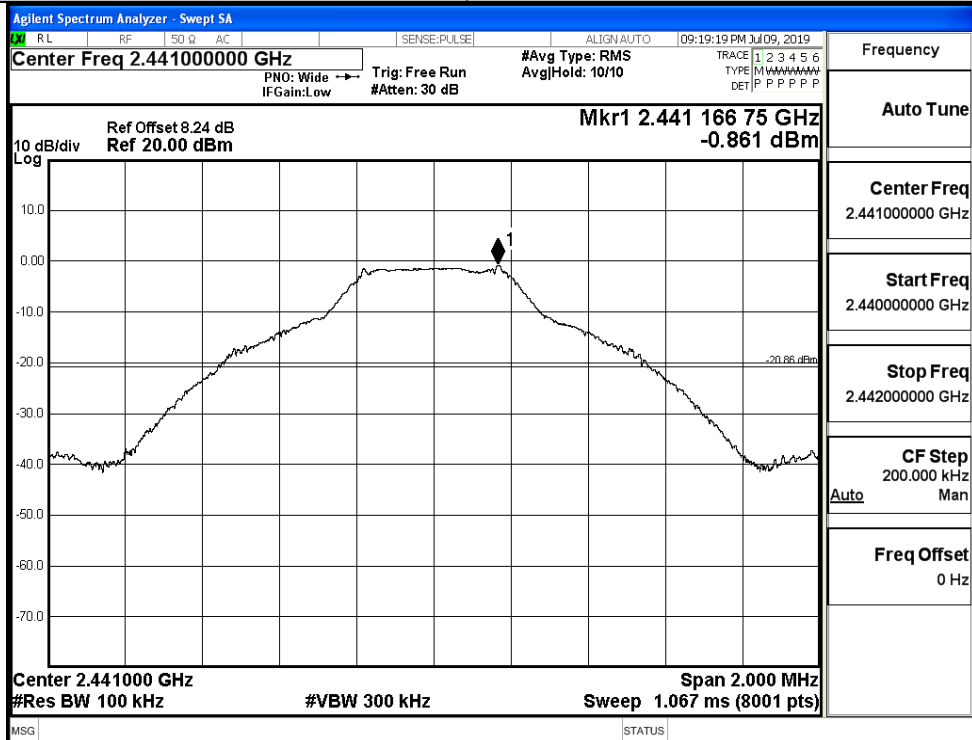


Puw

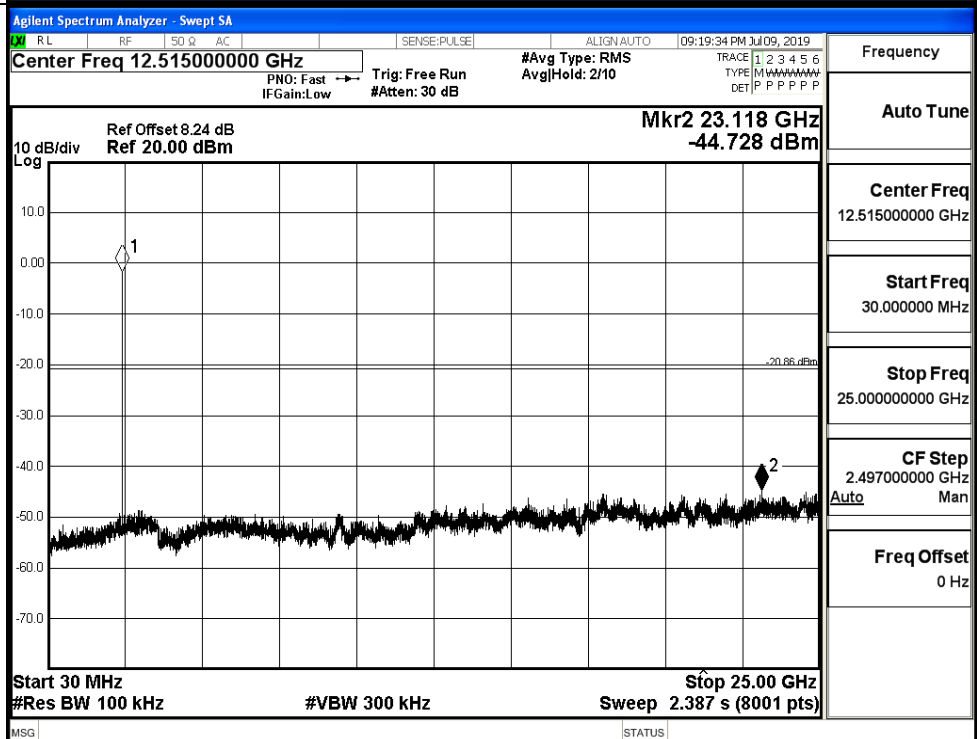


GFSK_MCH_Graphs

Pref

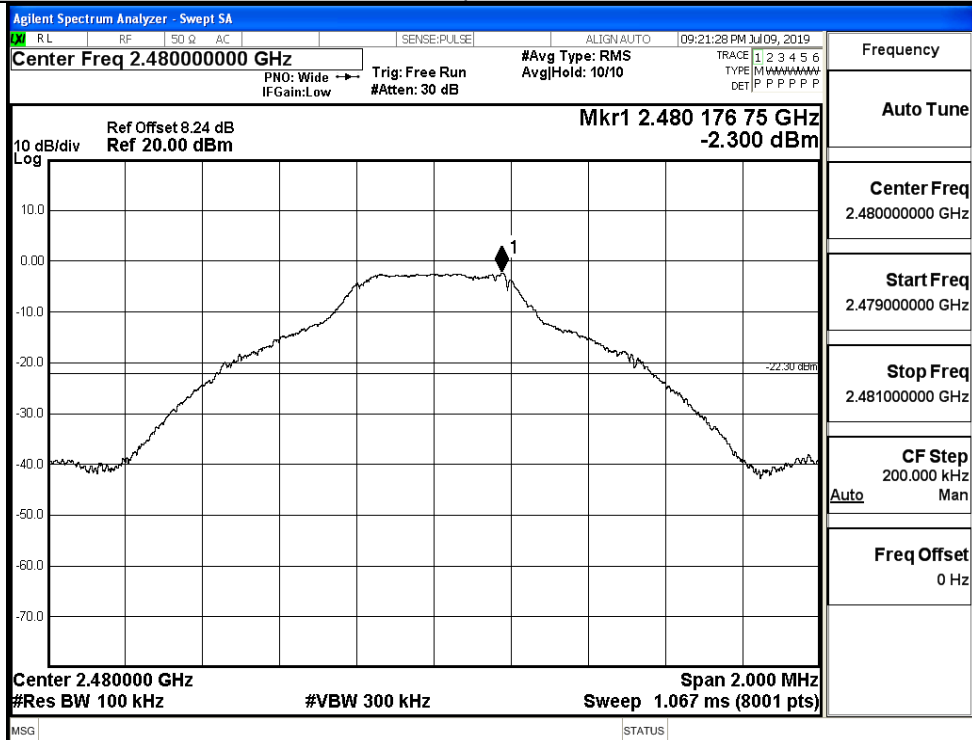


Puw

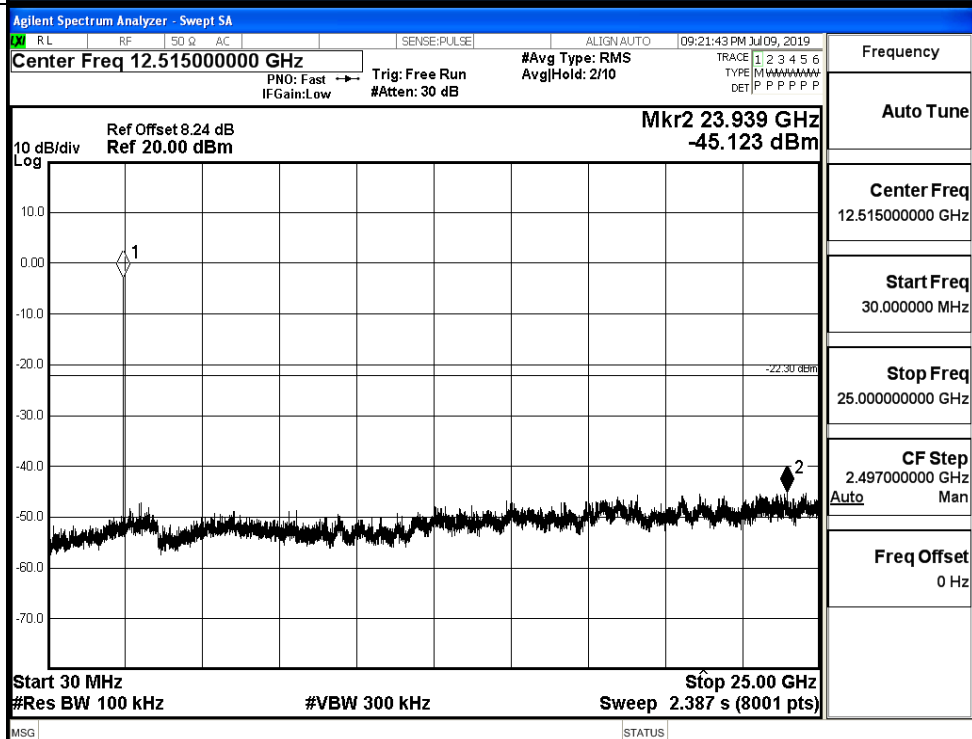


GFSK_HCH_Graphs

Pref

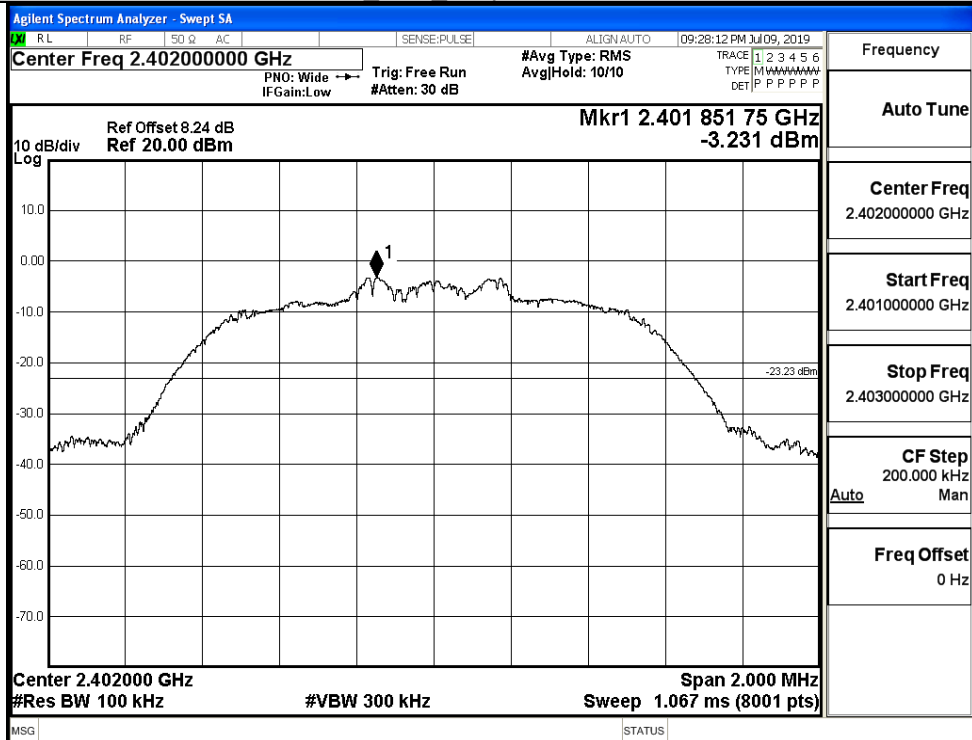


Puw

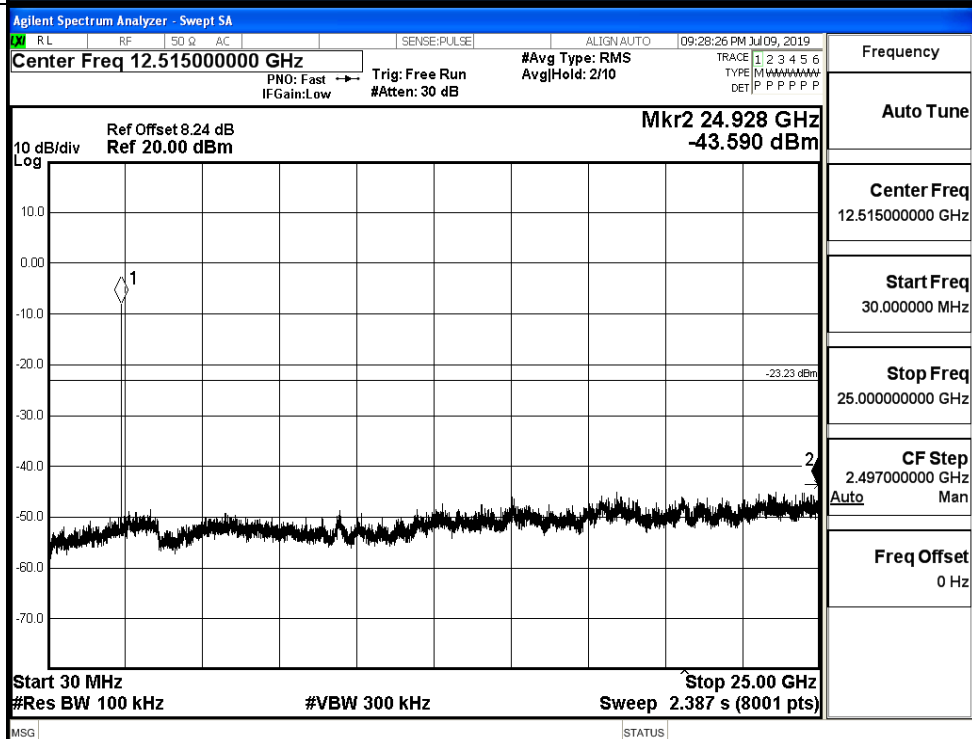


$\pi/4$ DQPSK_LCH_Graphs

Pref

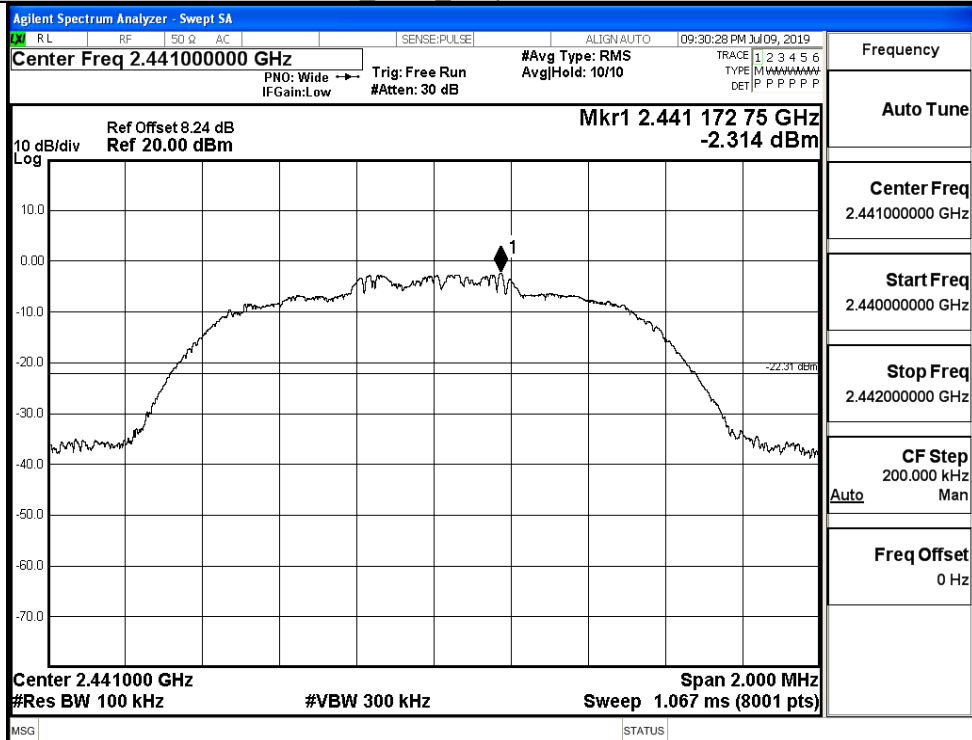


Puw

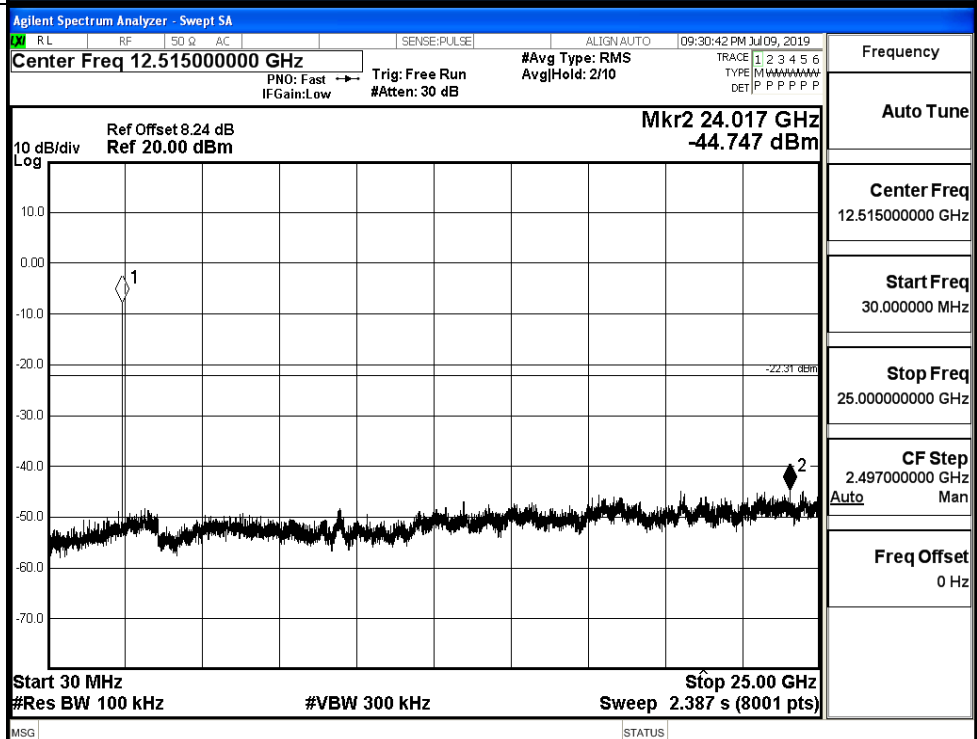


π /4DQPSK_MCH_Graphs

Pref

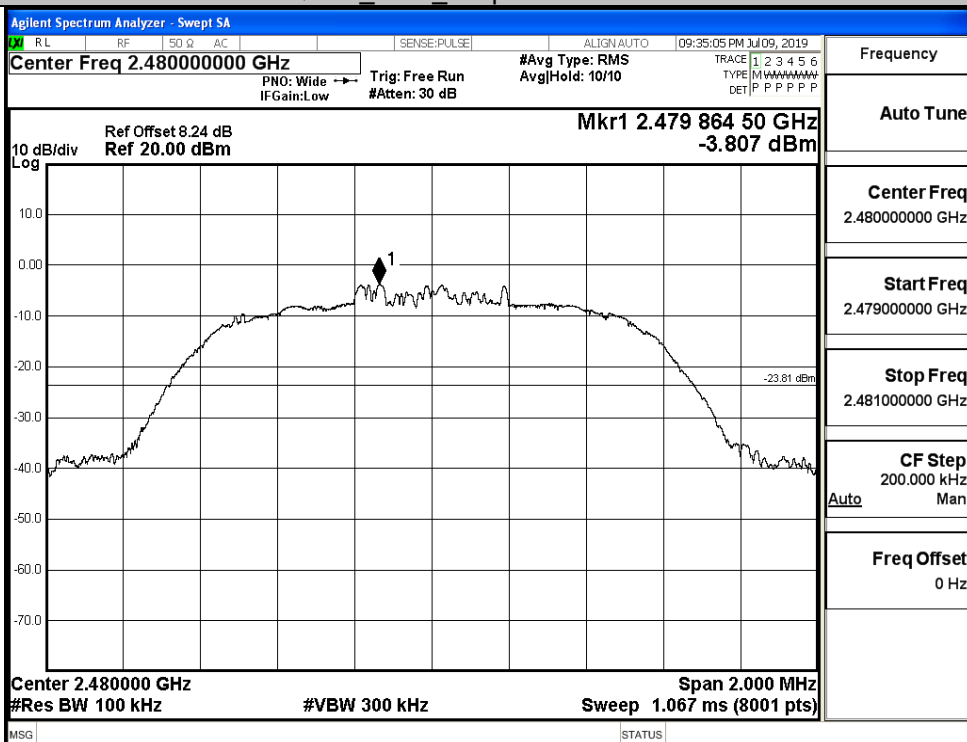


Puw

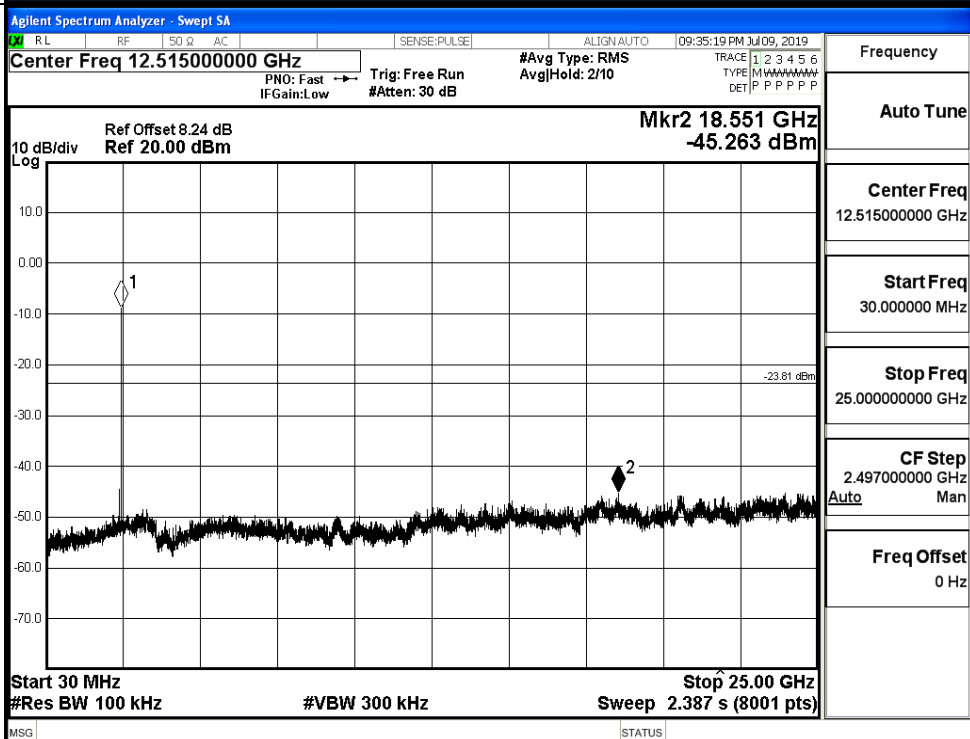


$\pi/4$ DQPSK_HCH_Graphs

Pref

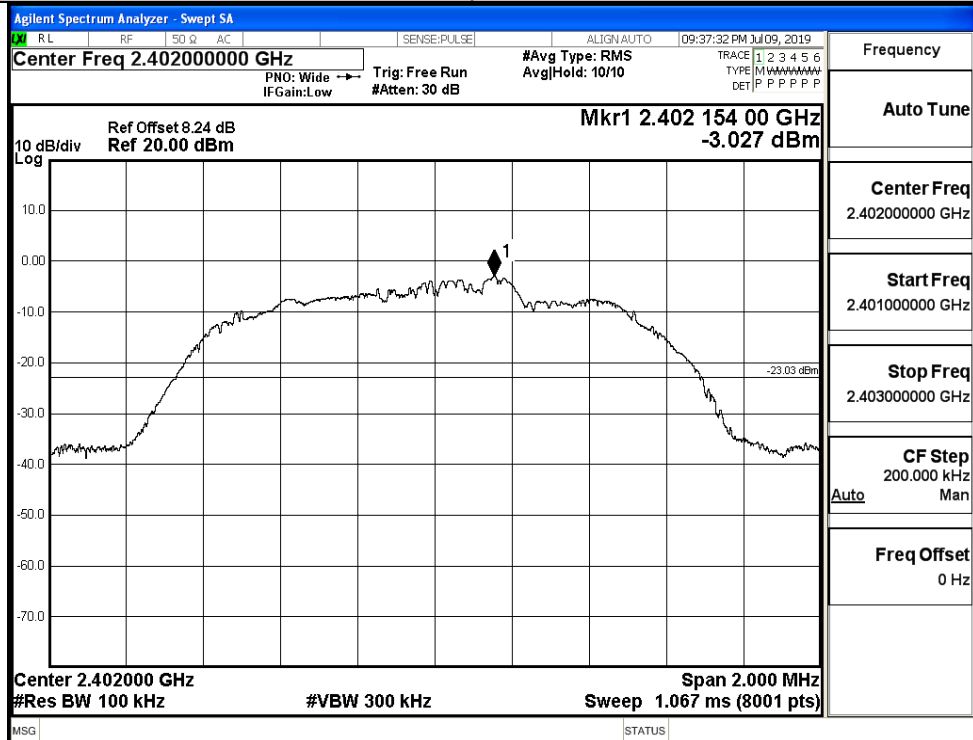


Puw

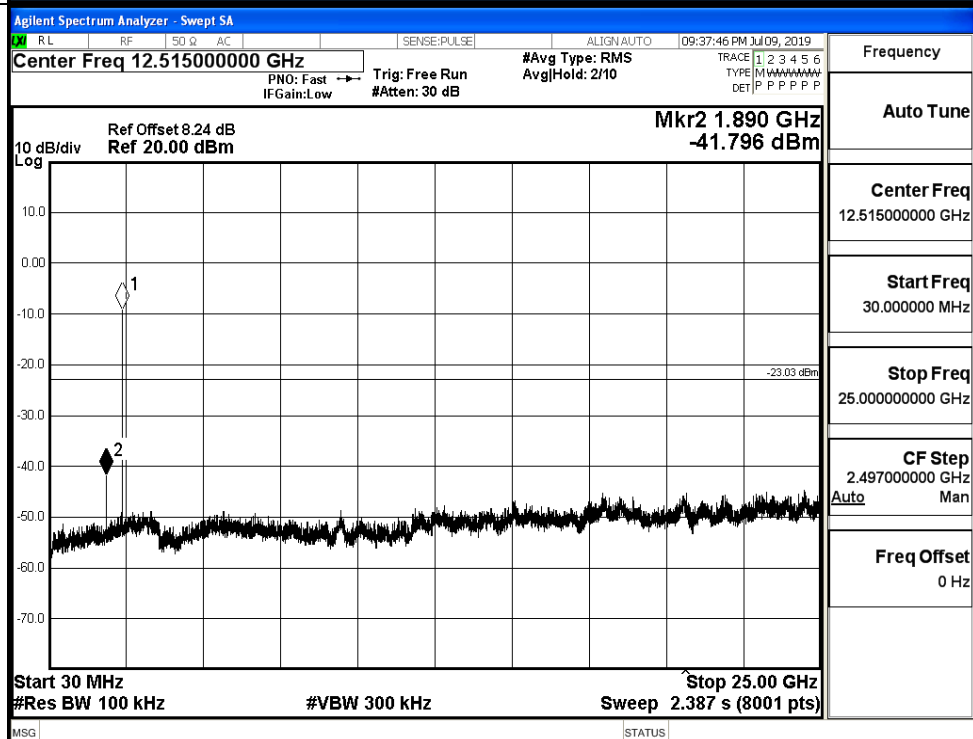


8DPSK_LCH_Graphs

Pref

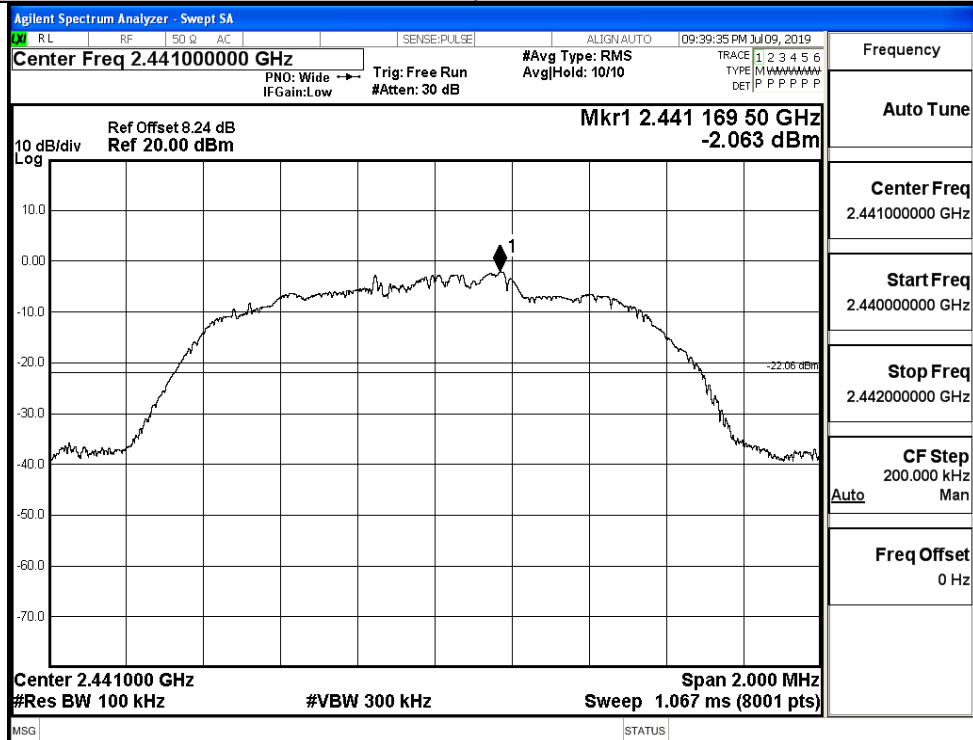


Puw

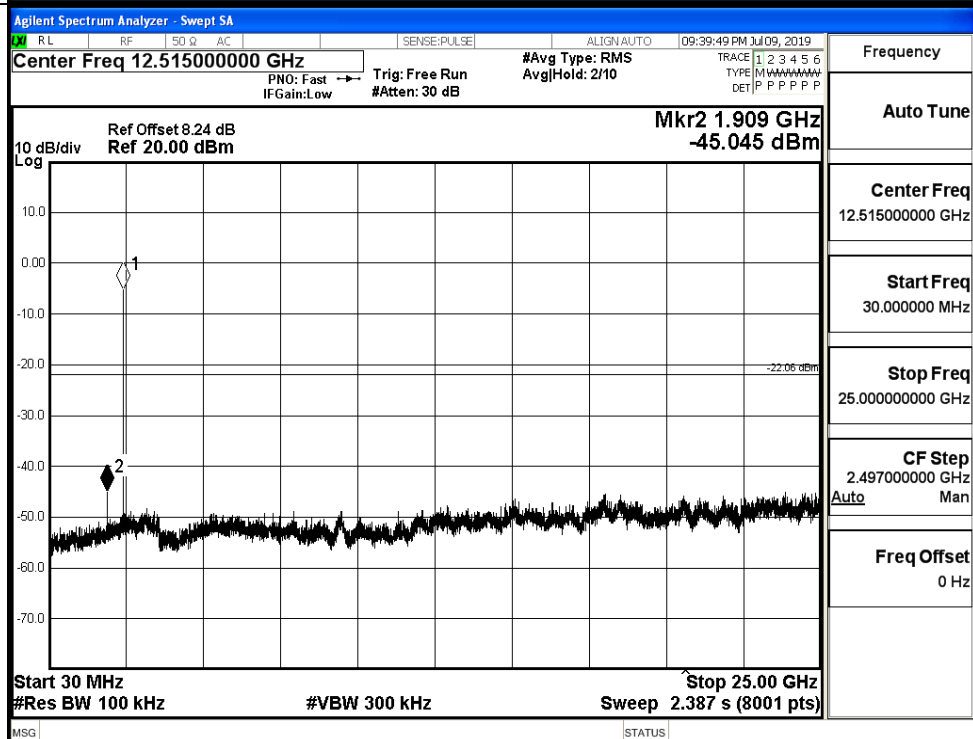


8DPSK_MCH_Graphs

Pref

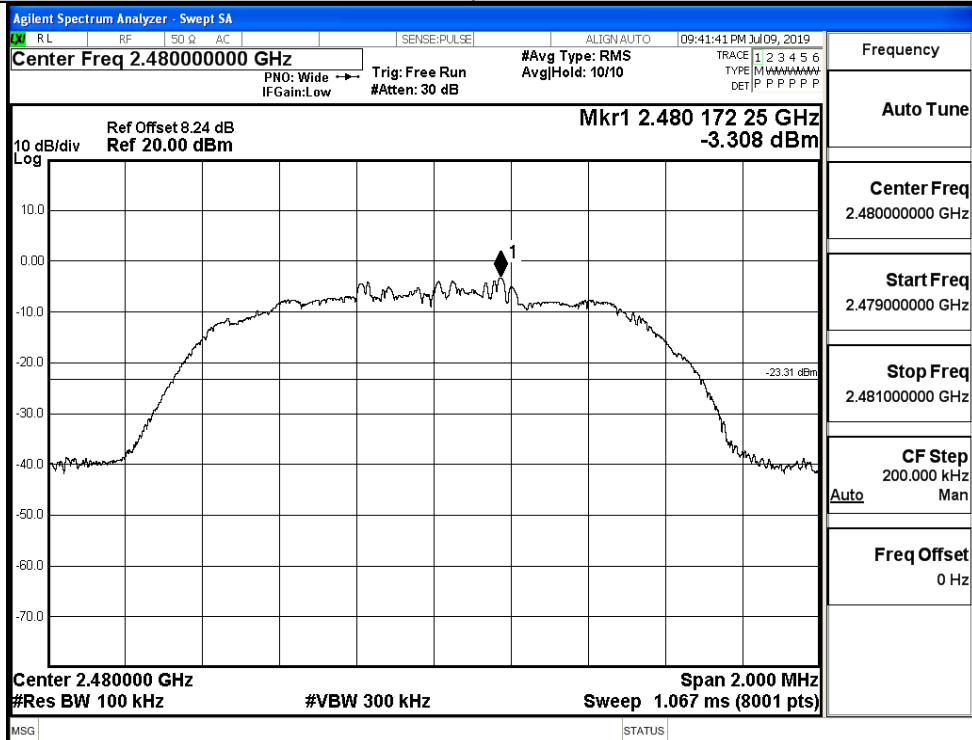


Puw

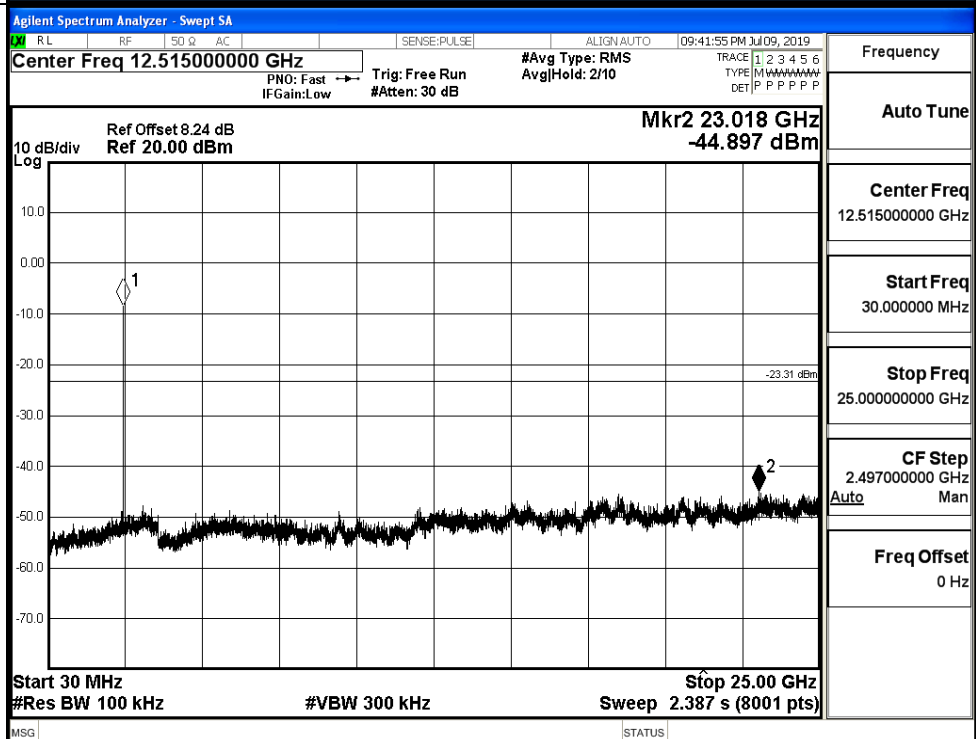


8DPSK_HCH_Graphs

Pref



Puw

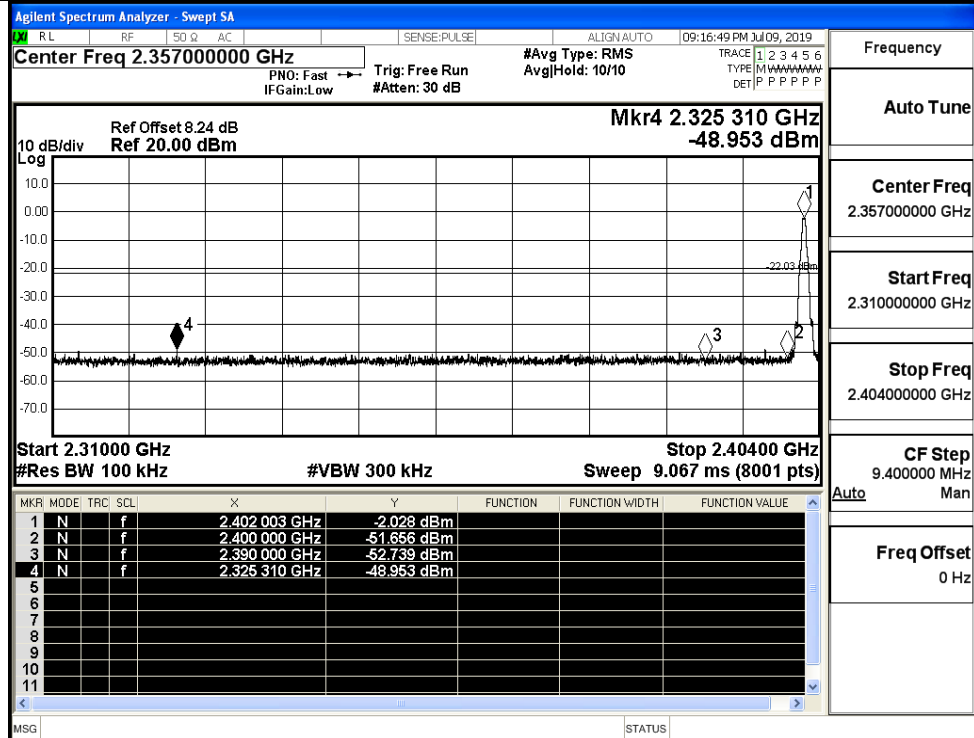


A.7 Band-edge for RF Conducted Emissions

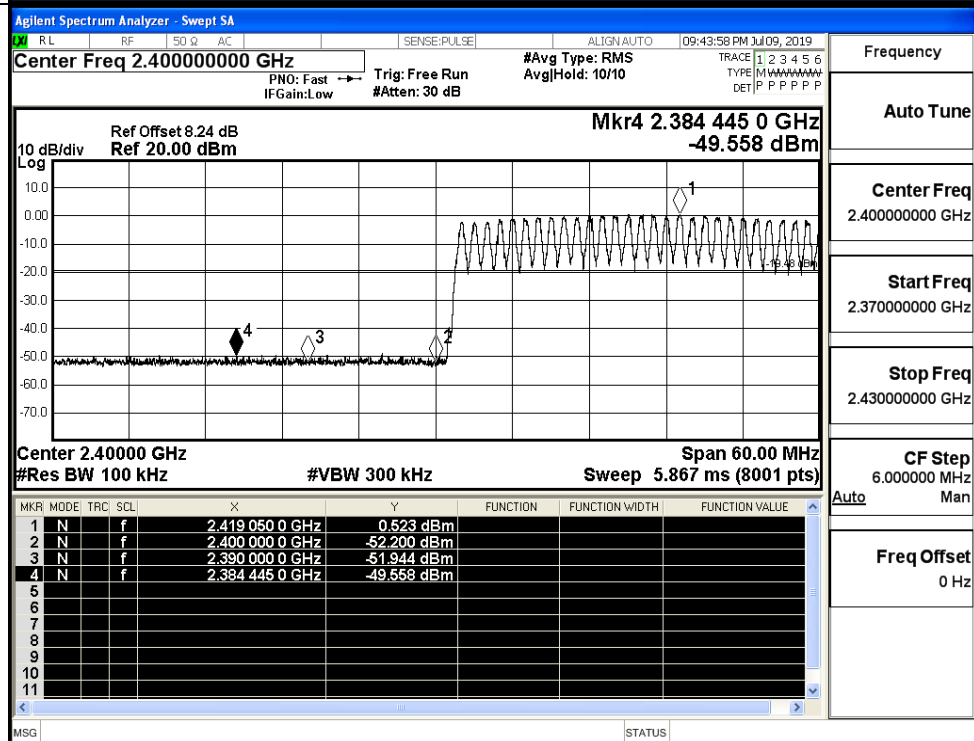
Mode	Channel	Carrier Frequency [MHz]	Carrier Power [dBm]	Frequency Hopping	Max Spurious Level [dBm]	Limit [dBm]	Verdict
GFSK	LCH	2402	-2.028	Off	-48.953	-22.03	PASS
			0.523	On	-49.558	-19.48	PASS
	HCH	2480	-1.842	Off	-49.313	-21.84	PASS
			0.242	On	-49.156	-19.76	PASS
$\pi/4$ DQPSK	LCH	2402	-2.966	Off	-49.914	-22.97	PASS
			-0.775	On	-49.102	-20.78	PASS
	HCH	2480	-3.441	Off	-49.496	-23.44	PASS
			-1.202	On	-48.155	-21.2	PASS
8DPSK	LCH	2402	-4.265	Off	-49.156	-24.27	PASS
			-0.799	On	-49.343	-20.8	PASS
	HCH	2480	-3.133	Off	-49.104	-23.13	PASS
			-0.968	On	-48.535	-20.97	PASS

Test Graphs

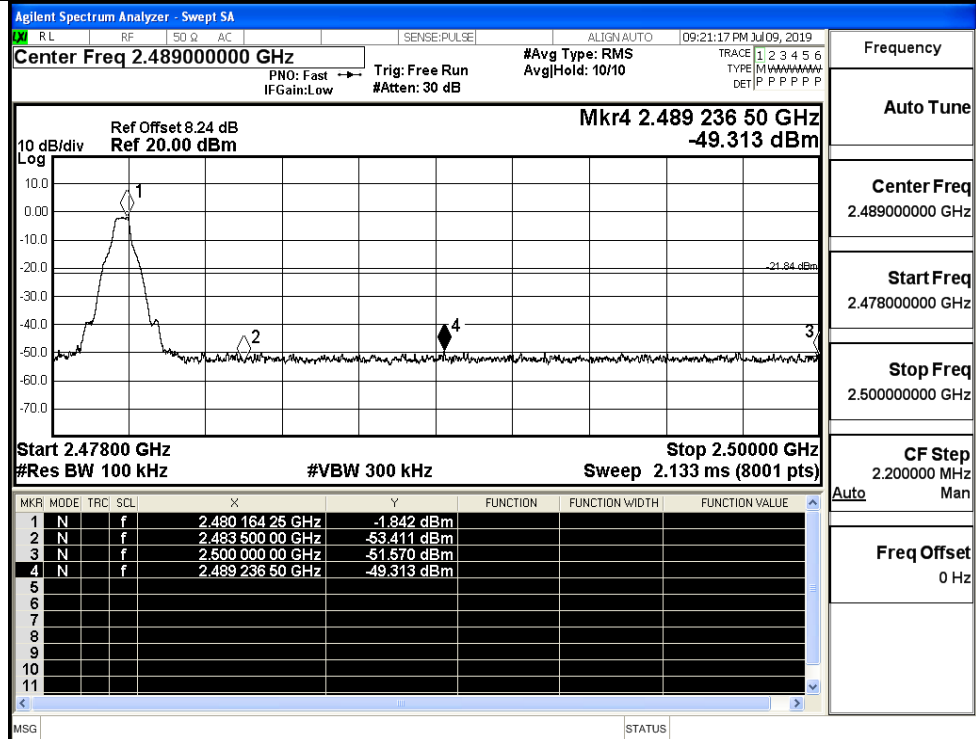
GFSK/LCH/No Hop



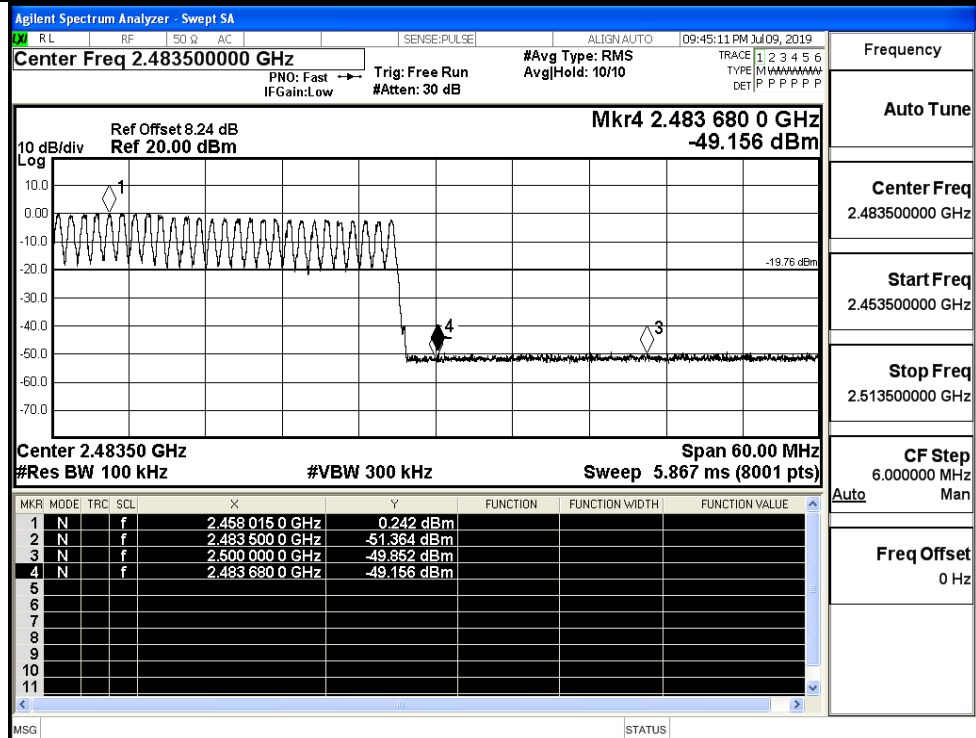
GFSK/LCH/Hop



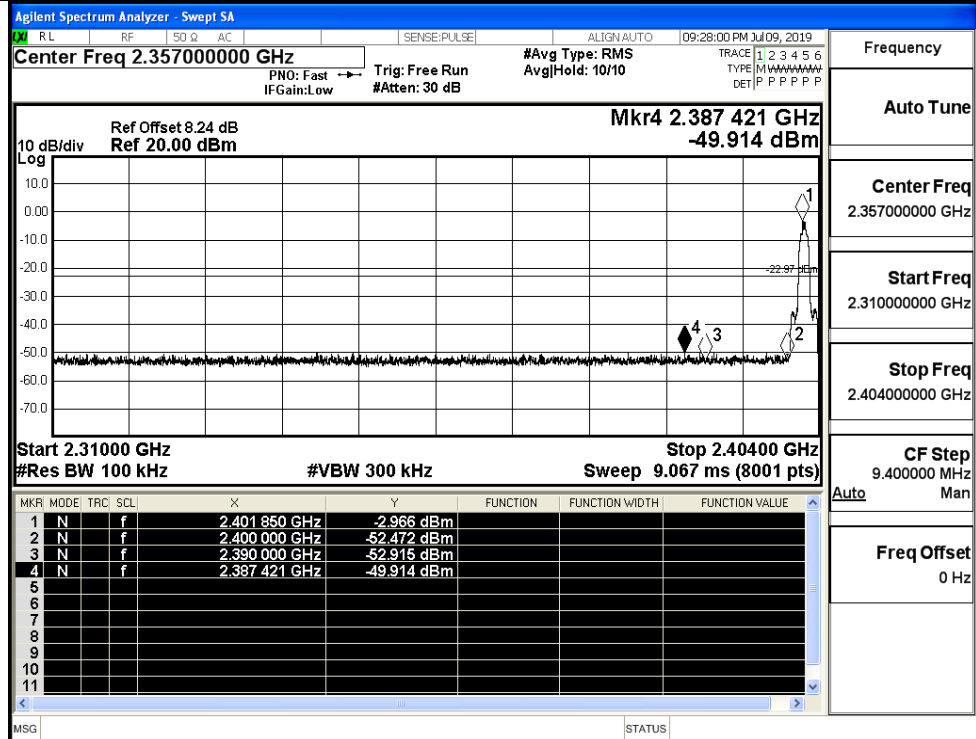
GFSK/HCH/No Hop



GFSK/HCH/Hop



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



Frequency

Auto Tune

Center Freq
2.357000000 GHz

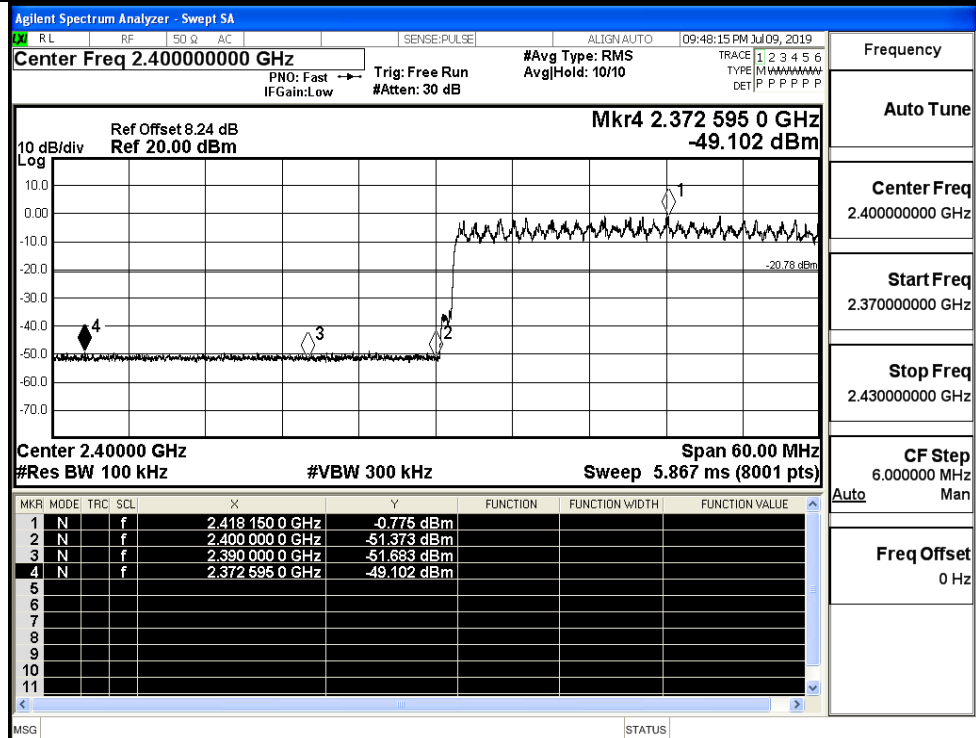
Start Freq
2.310000000 GHz

Stop Freq
2.404000000 GHz

CF Step
9.400000 MHz
Auto Man

Freq Offset
0 Hz

$\pi/4$ DQPSK/LCH/Hop



Frequency

Auto Tune

Center Freq
2.400000000 GHz

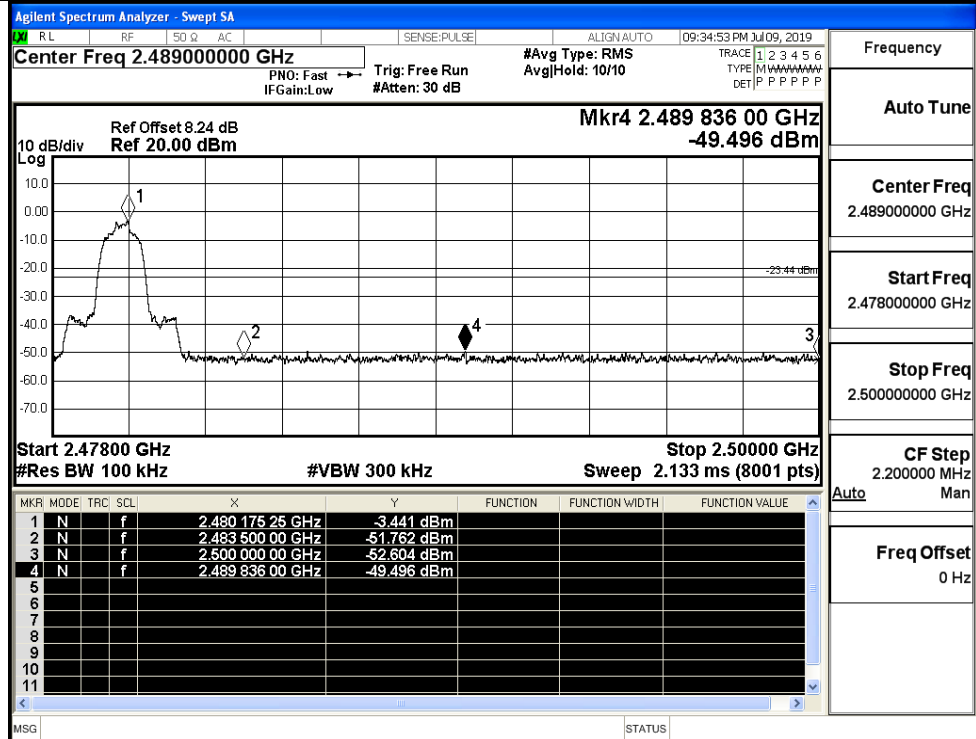
Start Freq
2.370000000 GHz

Stop Freq
2.430000000 GHz

CF Step
6.000000 MHz
Auto Man

Freq Offset
0 Hz

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



Frequency

Auto Tune

Center Freq
2.489000000 GHz

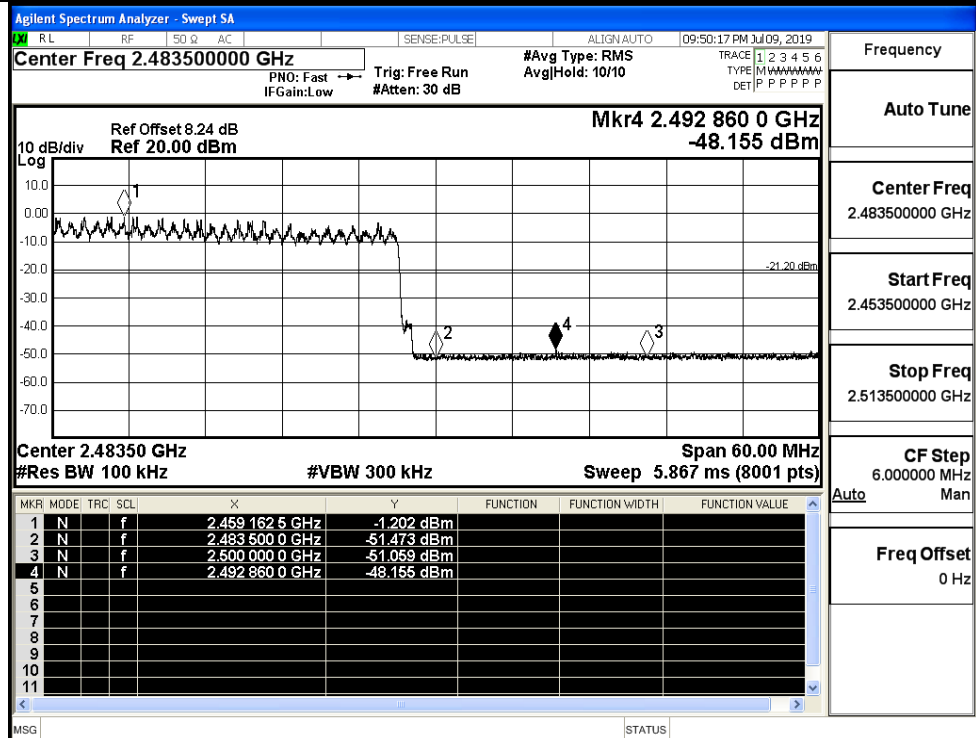
Start Freq
2.478000000 GHz

Stop Freq
2.500000000 GHz

CF Step
2.200000 MHz
Auto Man

Freq Offset
0 Hz

$\pi/4$ DQPSK/HCH/Hop



Frequency

Auto Tune

Center Freq
2.483500000 GHz

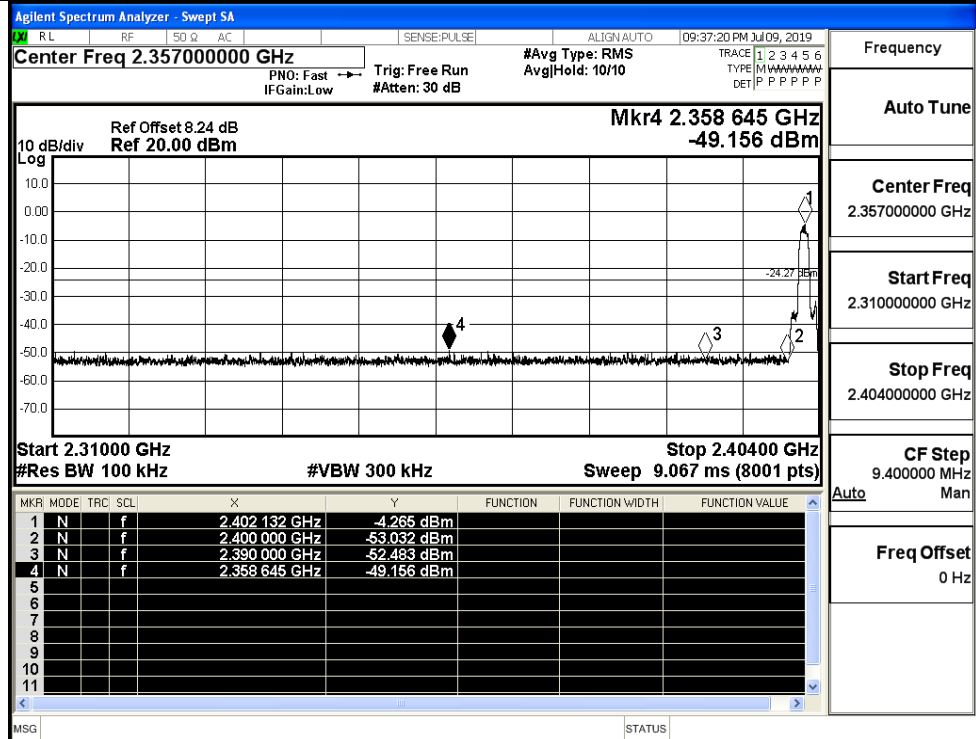
Start Freq
2.453500000 GHz

Stop Freq
2.513500000 GHz

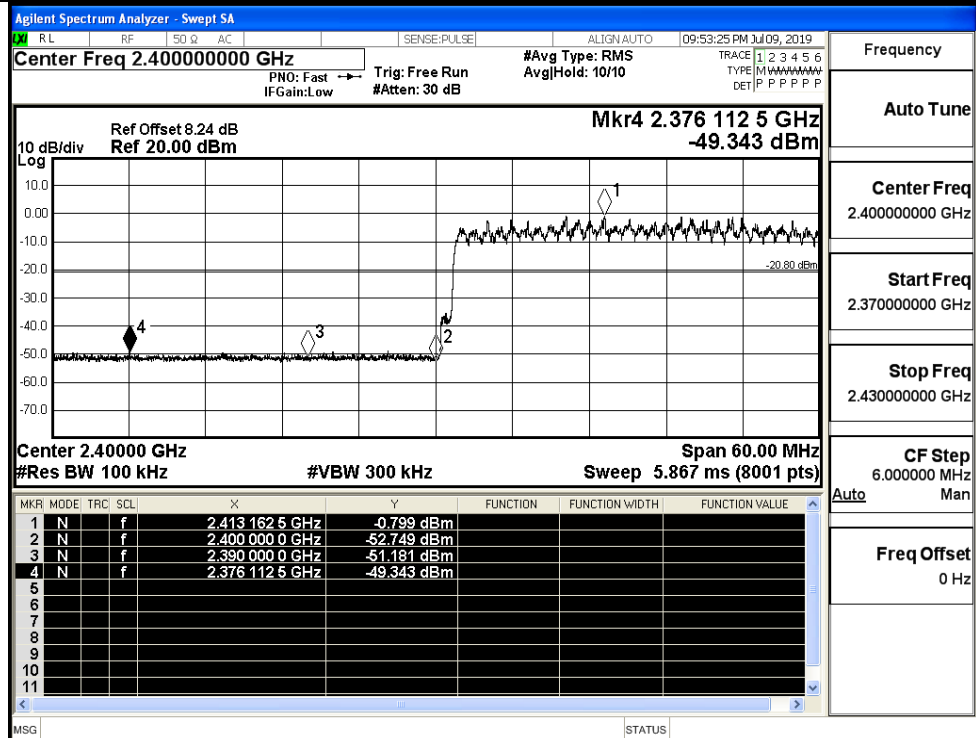
CF Step
6.000000 MHz
Auto Man

Freq Offset
0 Hz

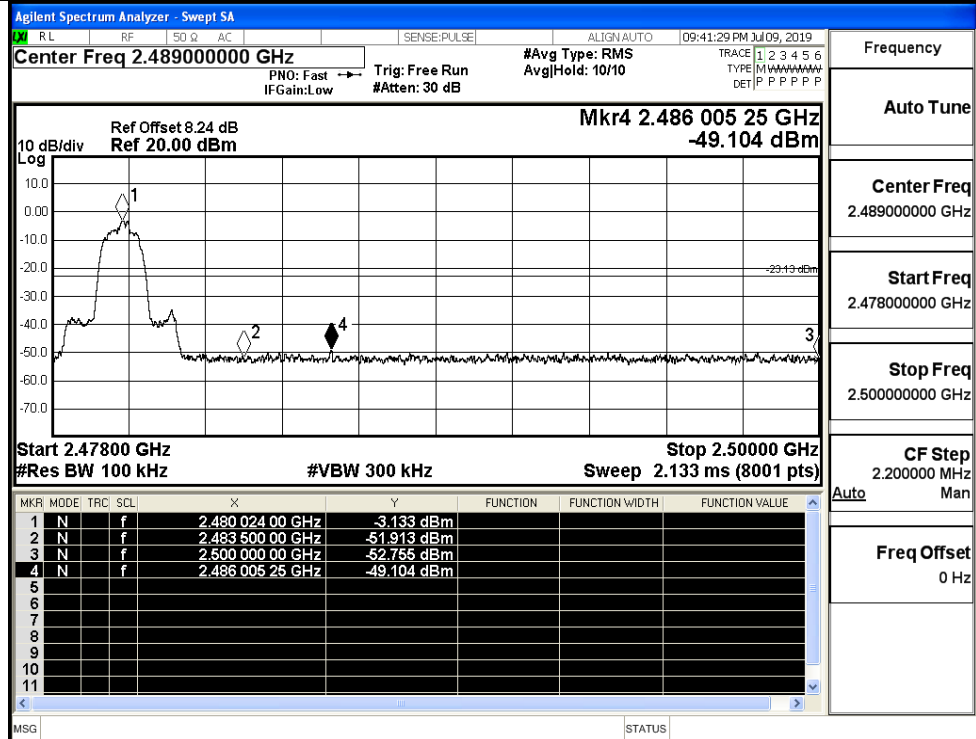
8DPSK/LCH/No Hop



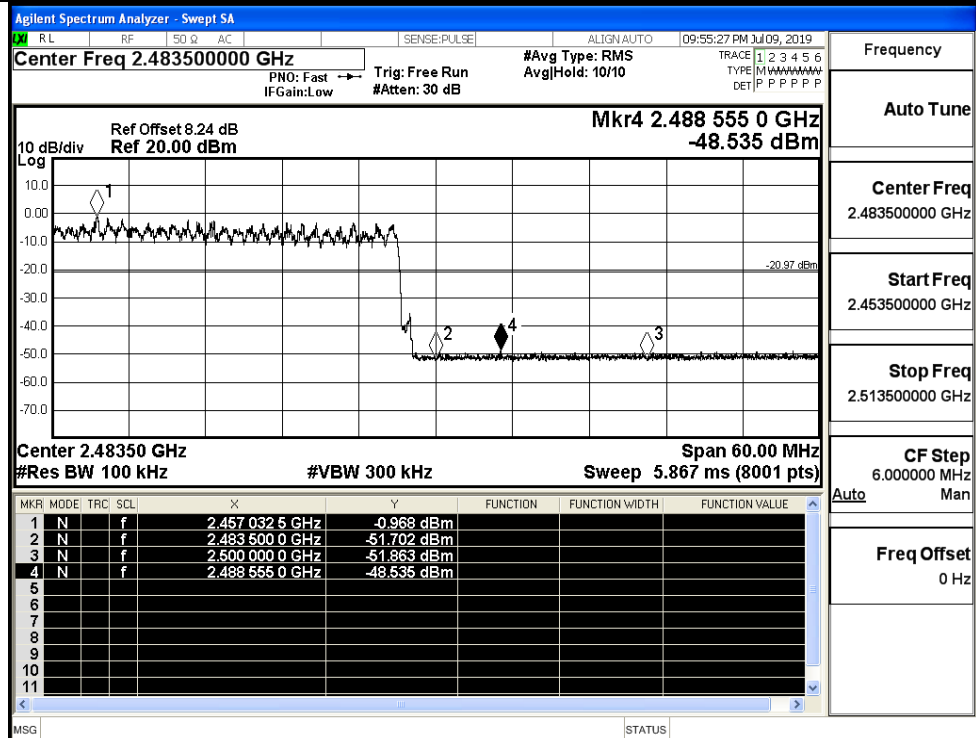
8DPSK/LCH/Hop



8DPSK/HCH/No Hop



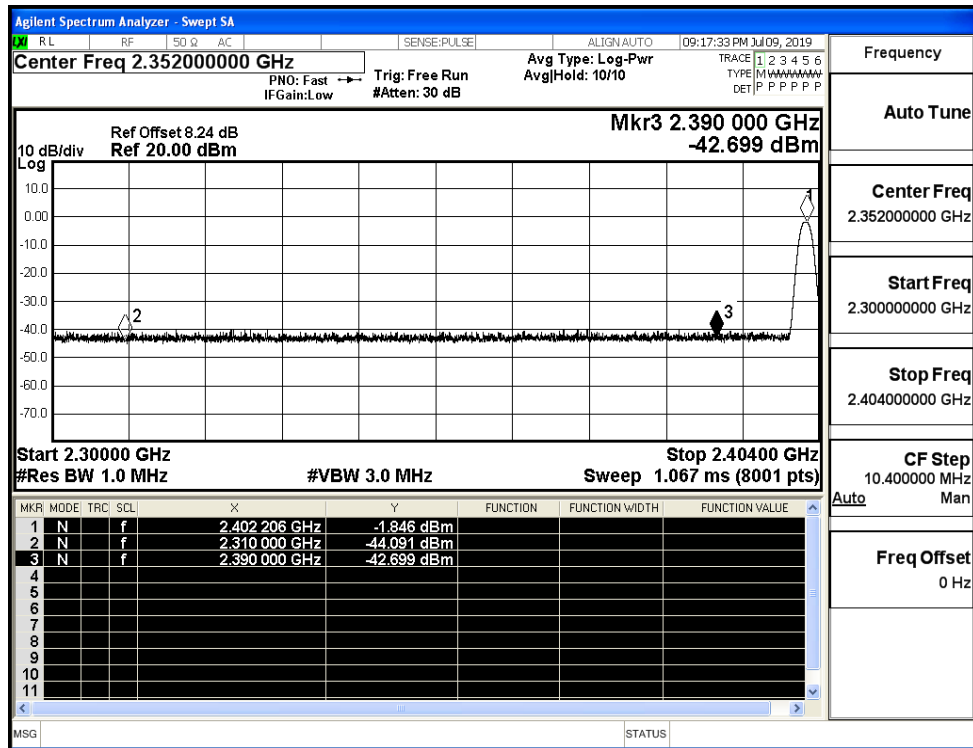
8DPSK/HCH/Hop



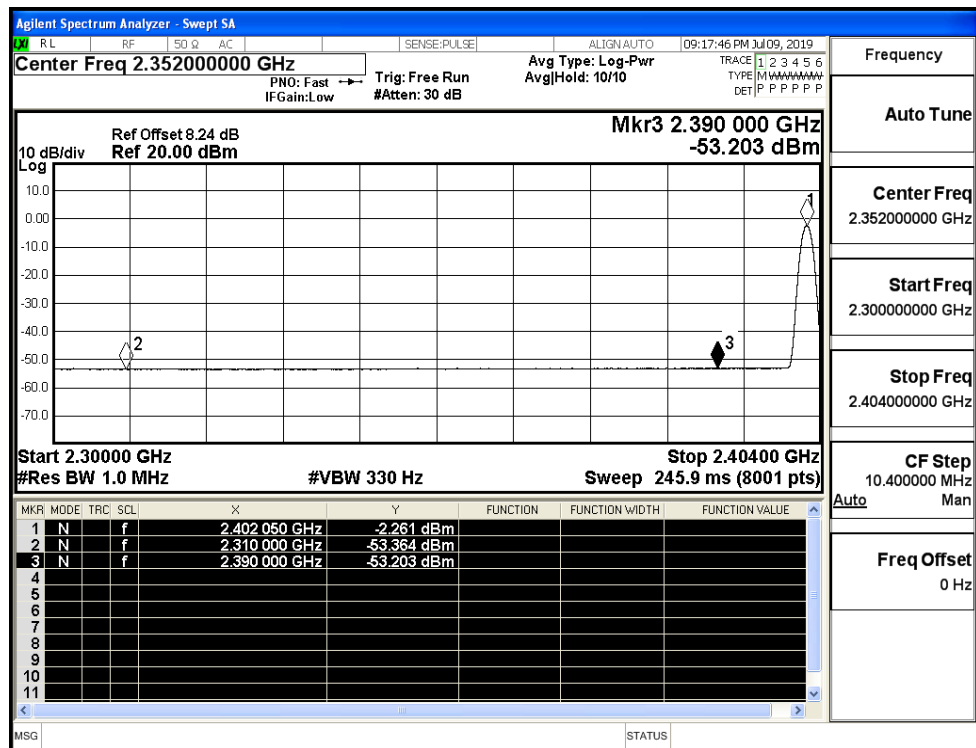
A.8 Restrict-band band-edge measurements

Test Mode	Hopping	Freq.	Power [dBm]	Gain	Ground Factor	E [dBuV/m]	Detector	Limit [dBuV/m]	Verdict
GFSK	Off	2310.0	-44.09	2.0	0	51.17	PEAK	74	PASS
	Off	2310.0	-53.36	2.0	0	41.89	AV	54	PASS
	Off	2390.0	-42.70	2.0	0	52.56	PEAK	74	PASS
	Off	2390.0	-53.20	2.0	0	42.05	AV	54	PASS
	Off	2483.5	-43.24	2.0	0	52.02	PEAK	74	PASS
	Off	2483.5	-52.80	2.0	0	42.46	AV	54	PASS
	Off	2500.0	-42.99	2.0	0	52.27	PEAK	74	PASS
	Off	2500.0	-52.79	2.0	0	42.46	AV	54	PASS
$\pi/4$ DQPSK	Off	2310.0	-43.06	2.0	0	52.20	PEAK	74	PASS
	Off	2310.0	-53.31	2.0	0	41.95	AV	54	PASS
	Off	2390.0	-43.31	2.0	0	51.94	PEAK	74	PASS
	Off	2390.0	-53.09	2.0	0	42.17	AV	54	PASS
	Off	2483.5	-41.93	2.0	0	53.33	PEAK	74	PASS
	Off	2483.5	-52.89	2.0	0	42.36	AV	54	PASS
	Off	2500.0	-41.84	2.0	0	53.42	PEAK	74	PASS
	Off	2500.0	-52.76	2.0	0	42.50	AV	54	PASS
8DPSK	Off	2310.0	-43.43	2.0	0	51.83	PEAK	74	PASS
	Off	2310.0	-53.42	2.0	0	41.83	AV	54	PASS
	Off	2390.0	-42.97	2.0	0	52.28	PEAK	74	PASS
	Off	2390.0	-53.08	2.0	0	42.18	AV	54	PASS
	Off	2483.5	-42.46	2.0	0	52.80	PEAK	74	PASS
	Off	2483.5	-52.83	2.0	0	42.43	AV	54	PASS
	Off	2500.0	-42.73	2.0	0	52.53	PEAK	74	PASS
	Off	2500.0	-52.72	2.0	0	42.54	AV	54	PASS

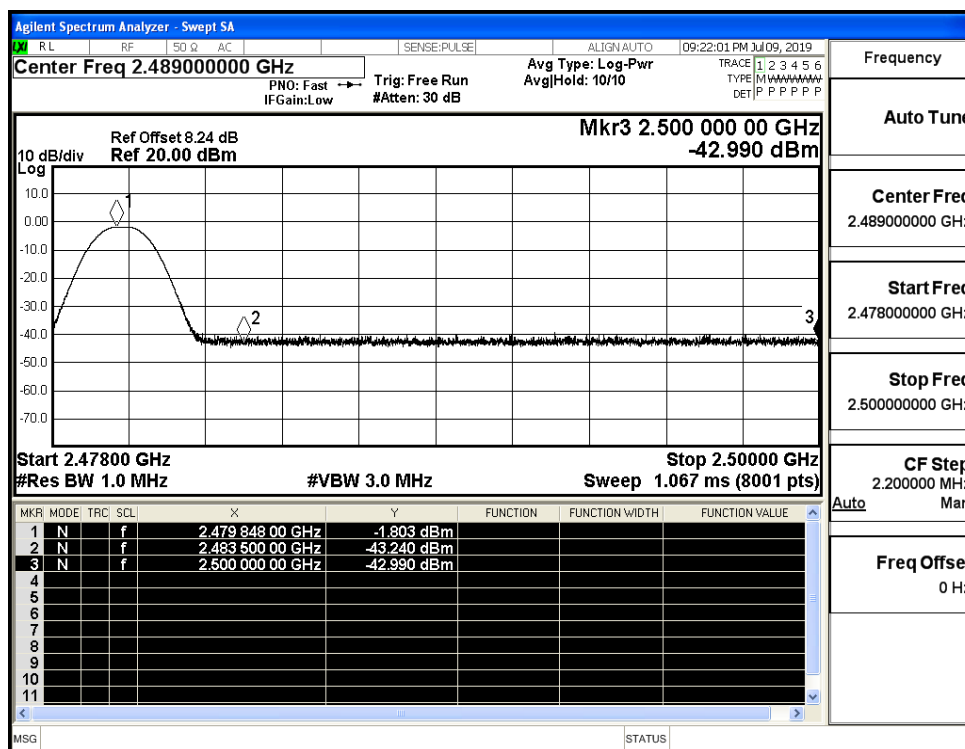
Restrict-band band-edge measurements_Hopping Off_GFSK_PEAK (Low Channel)



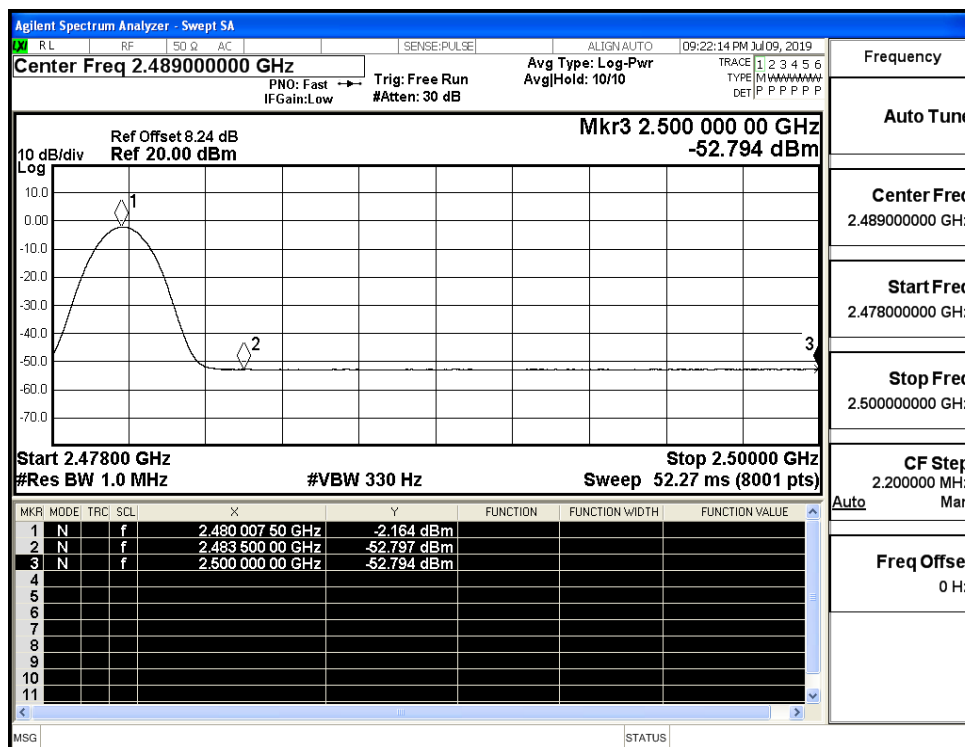
Restrict-band band-edge measurements_Hopping Off_GFSK_Average (Low Channel)

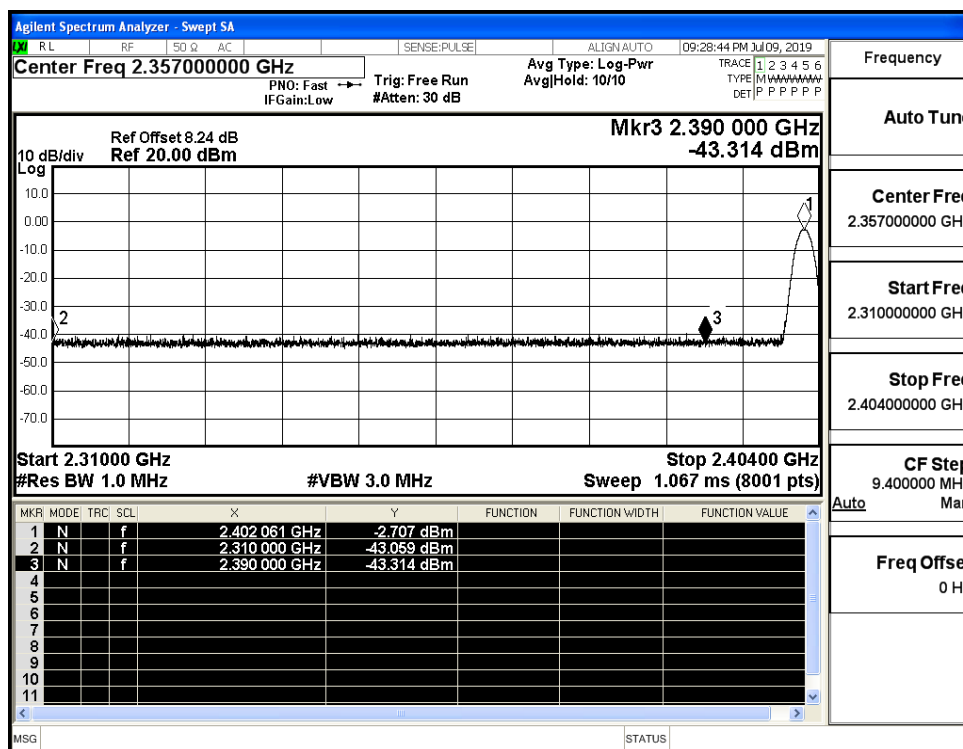
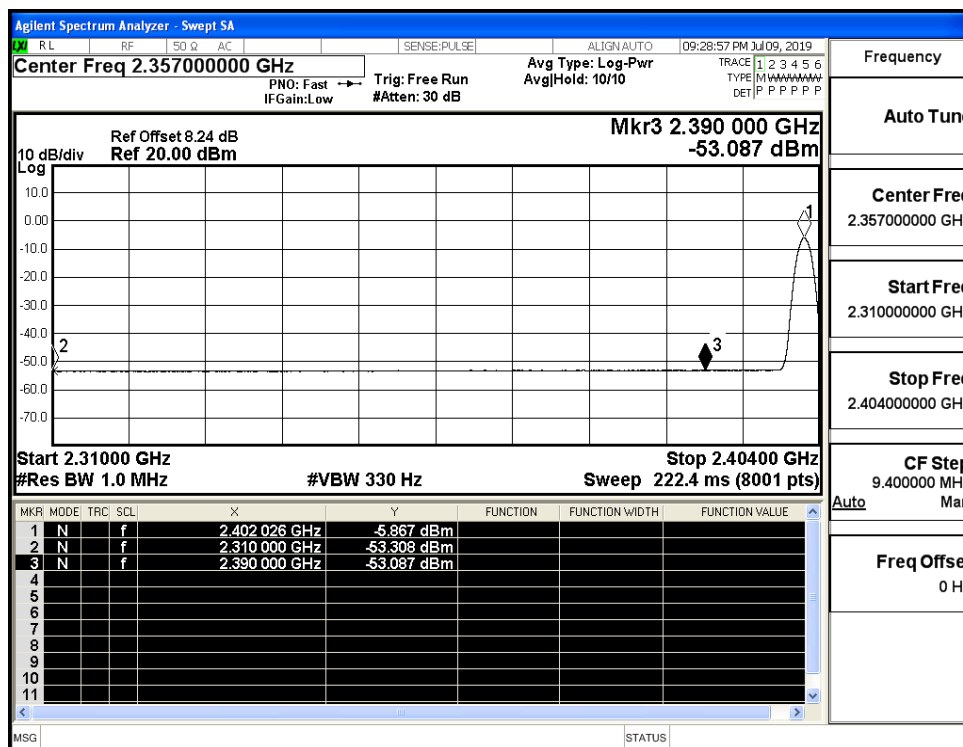


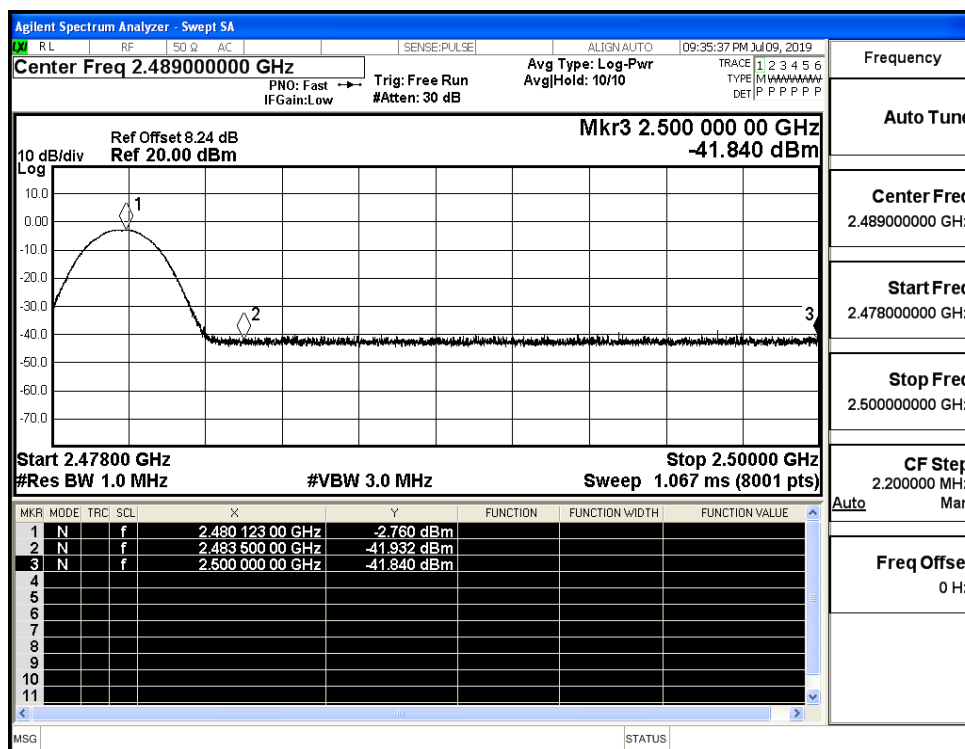
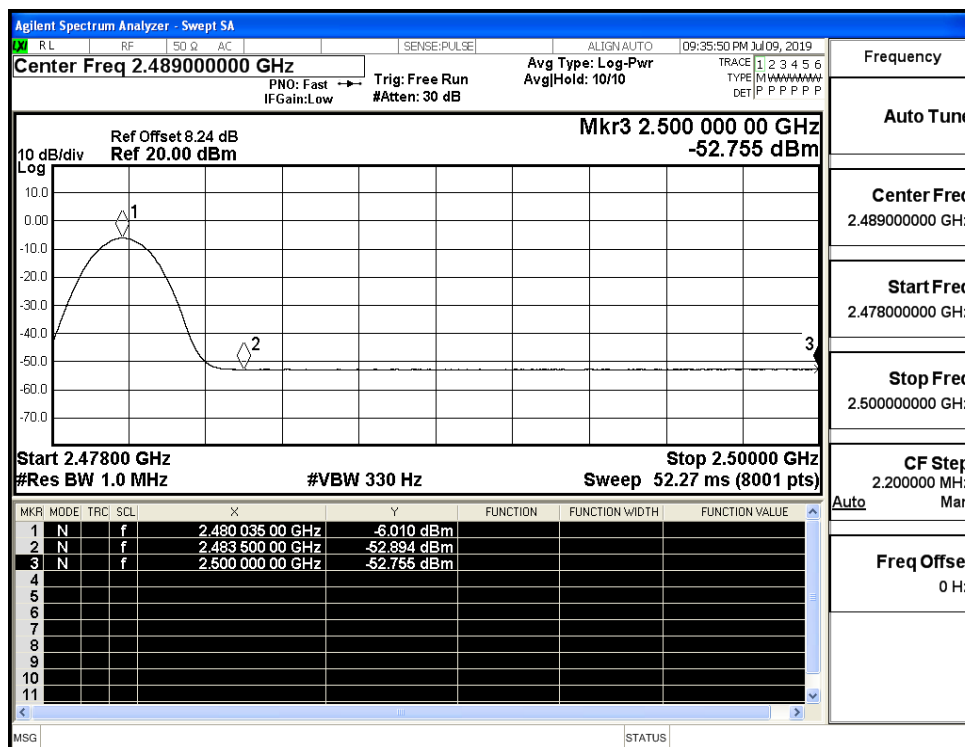
Restrict-band band-edge measurements_Hopping Off_ GFSK_PEAK (High Channel)



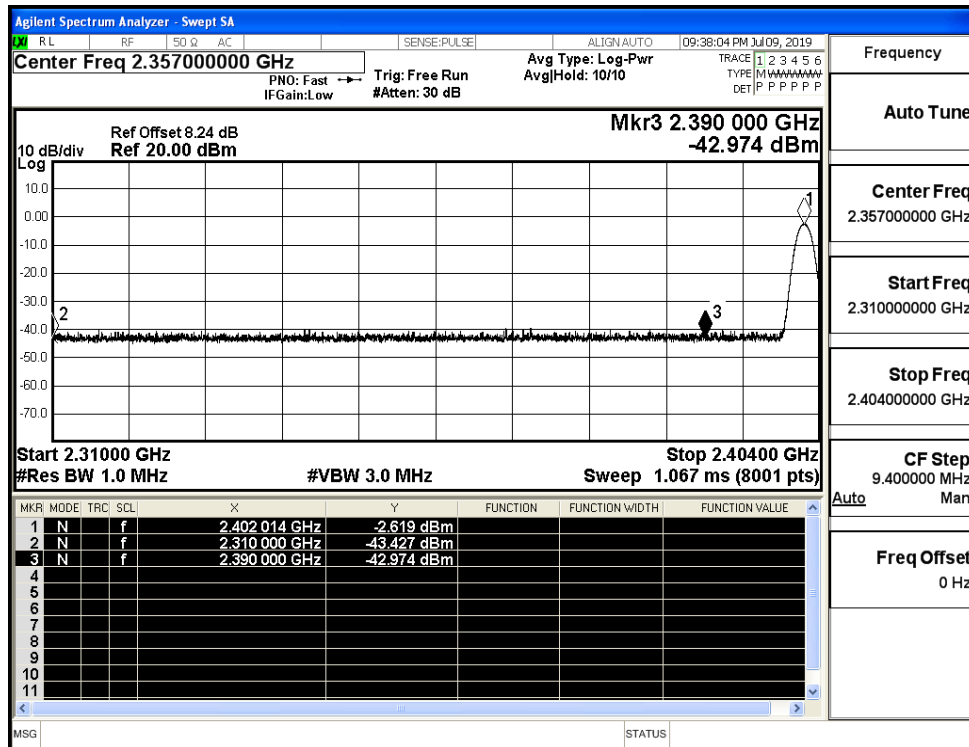
Restrict-band band-edge measurements_Hopping Off_ GFSK_Average (High Channel)



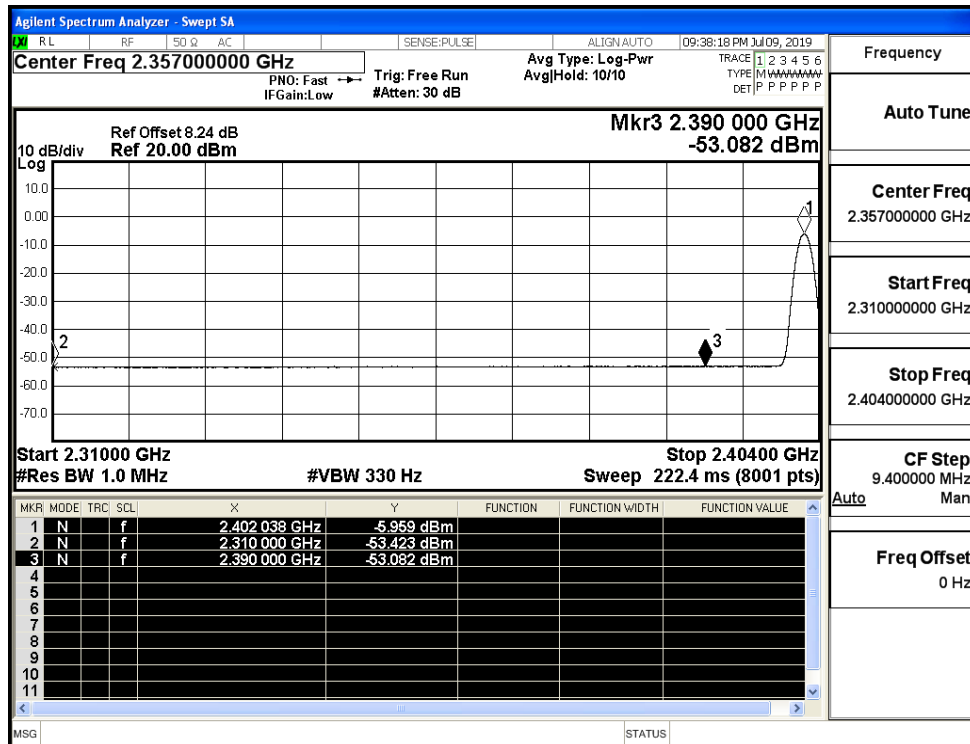
Restrict-band band-edge measurements_Hopping Off $\pi/4$ -DQPSK_PEAK (Low Channel)Restrict-band band-edge measurements_Hopping Off $\pi/4$ -DQPSK_Average (Low Channel)

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

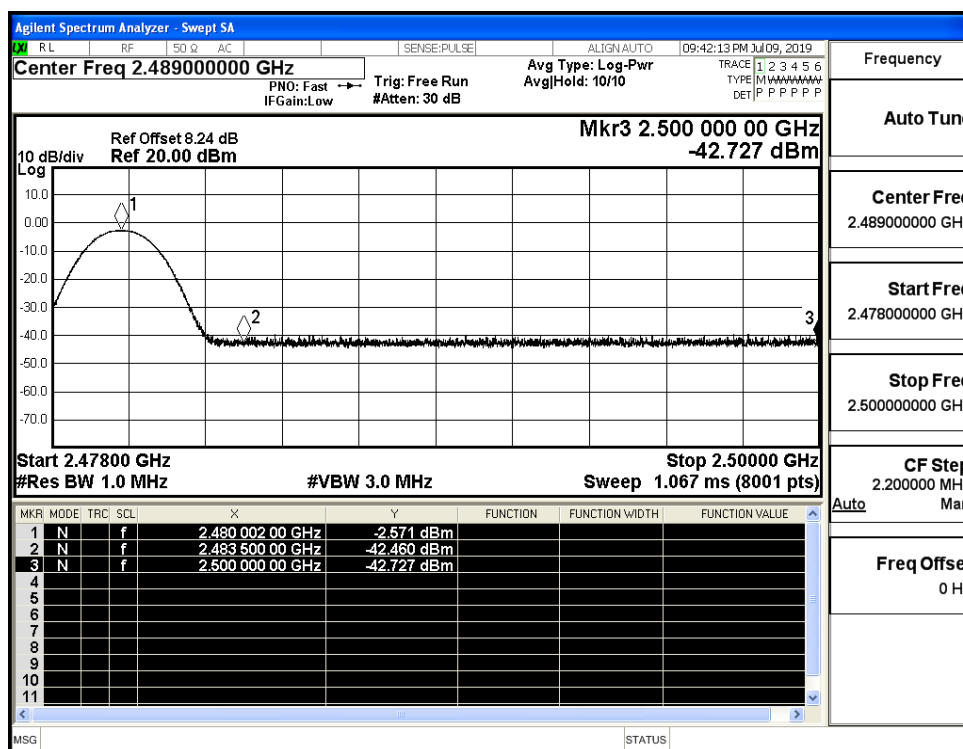
Restrict-band band-edge measurements_Hopping Off_8DPSK_PEAK (Low Channel)



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)

