

Appendix A

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

Product Name: TABLET PC

Trade Mark: FUSION5

Test Model: FWIN232

Environmental Conditions

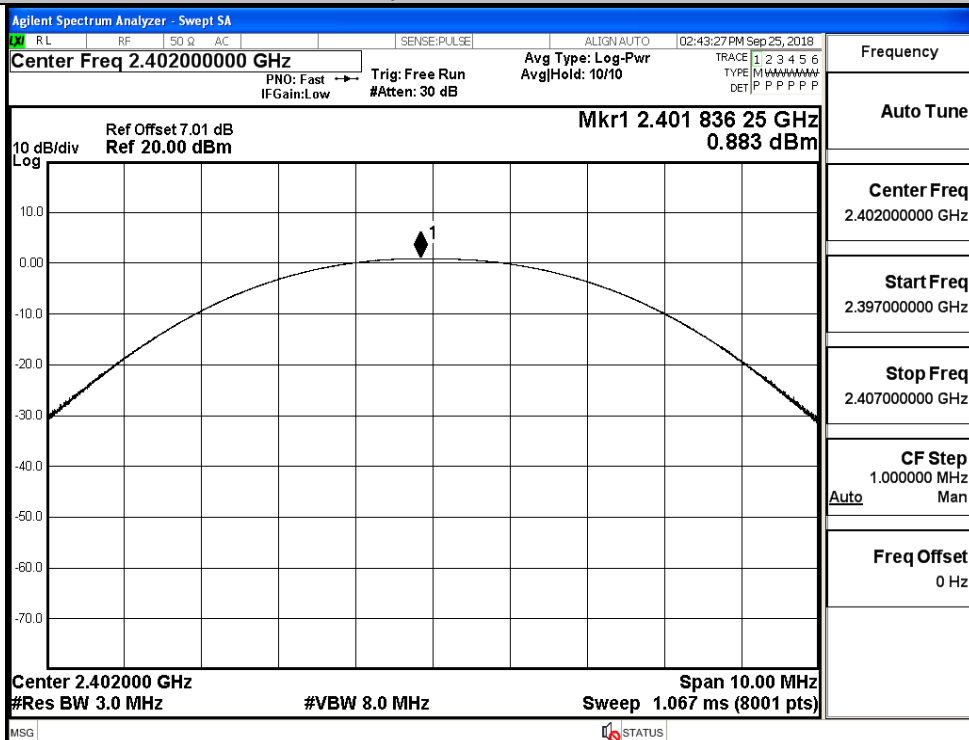
Temperature:	24.3 ° C
Relative Humidity:	53.4%
ATM Pressure:	100.0 kPa
Test Engineer:	Tom.Liu
Supervised by:	Jayden.Zhuo

A.1 Maximum Conducted Peak Output Power

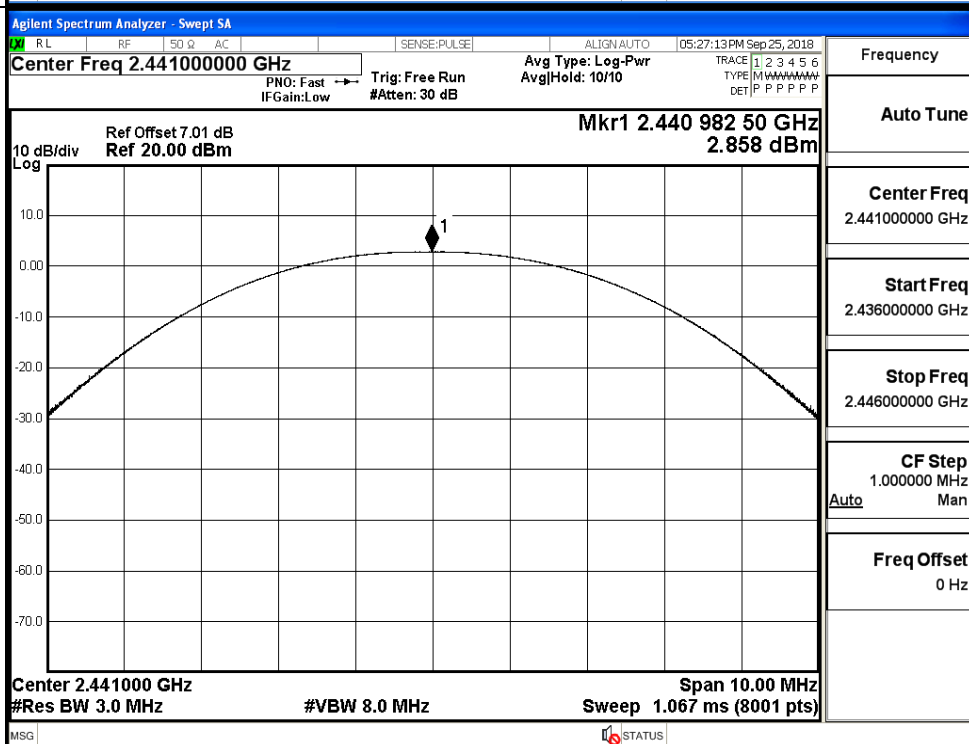
Mode	Channel.	Maximum Peak Output Power [dBm]	Limit [dBm]	Verdict
GFSK	LCH	0.883	21	PASS
	MCH	2.858	21	PASS
	HCH	2.548	21	PASS
$\pi/4$ DQPSK	LCH	0.651	21	PASS
	MCH	1.528	21	PASS
	HCH	1.667	21	PASS
8DPSK	LCH	0.591	21	PASS
	MCH	1.607	21	PASS
	HCH	1.387	21	PASS

Test Graphs

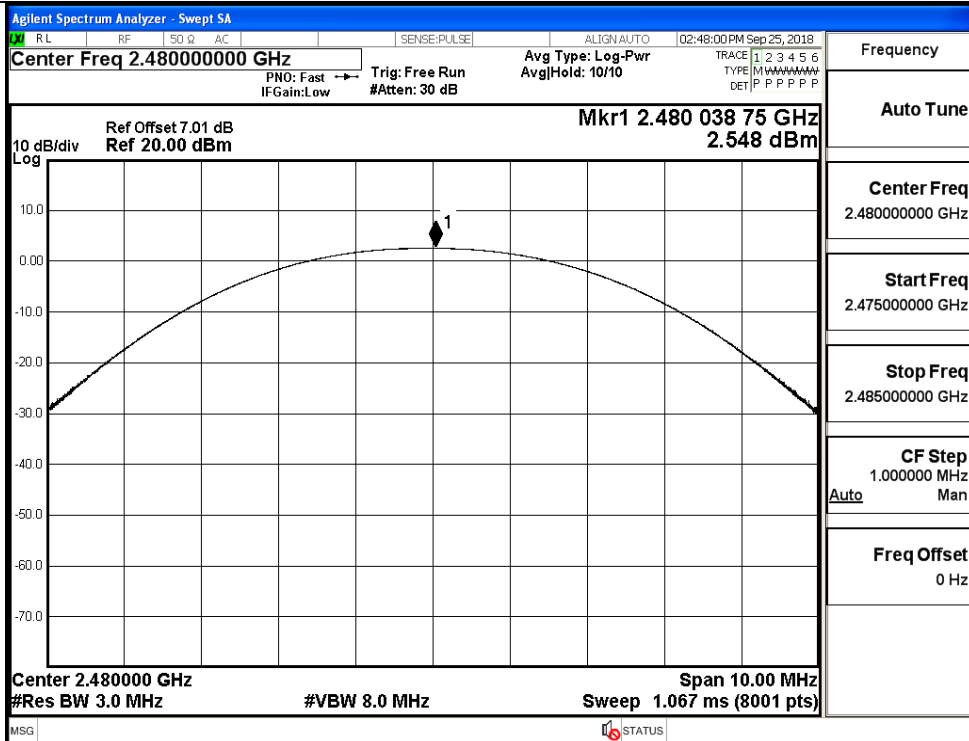
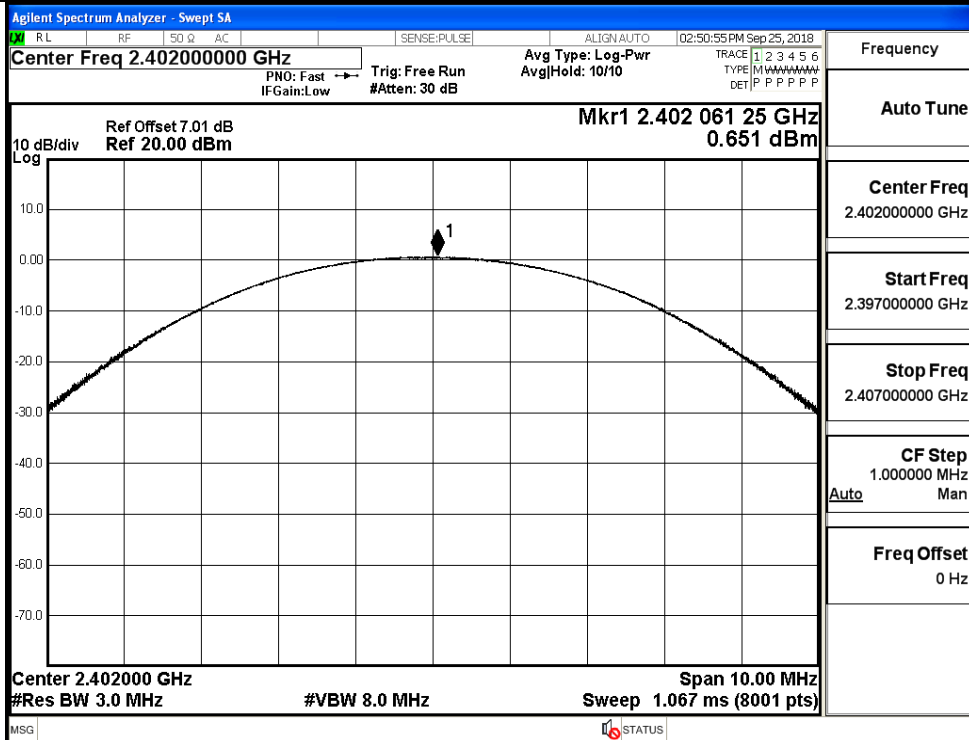
GFSK/LCH

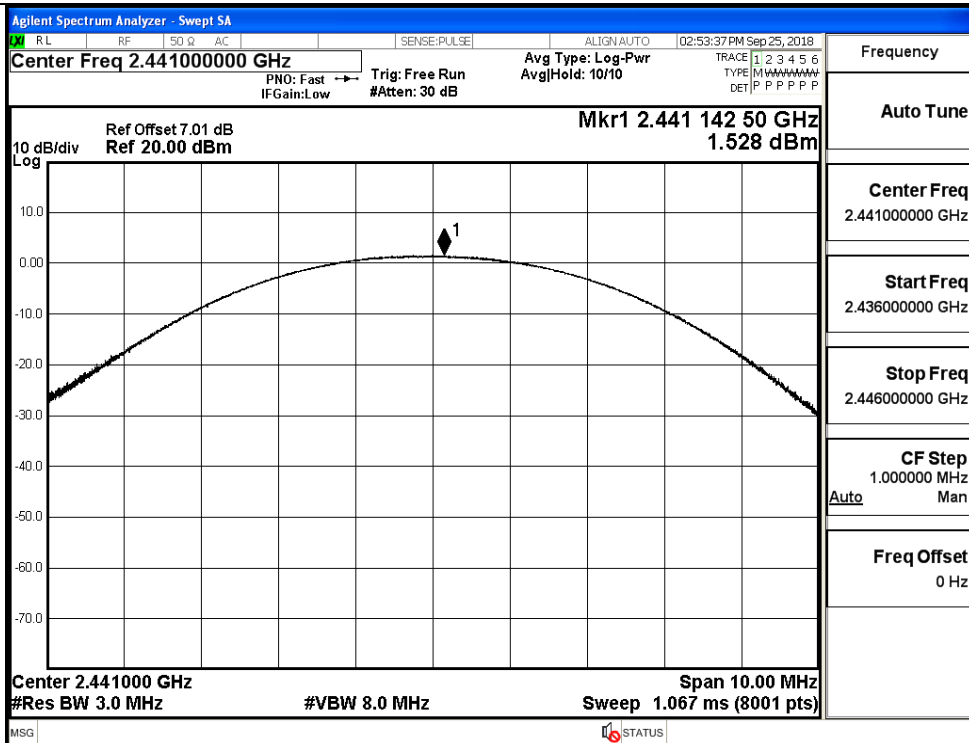
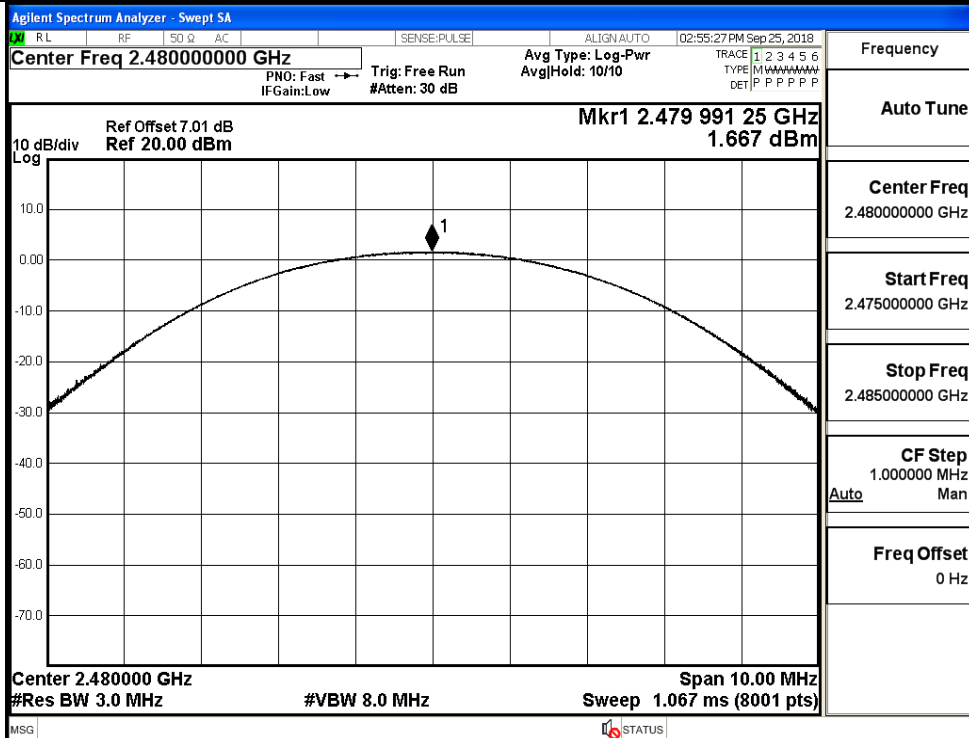


GFSK/MCH

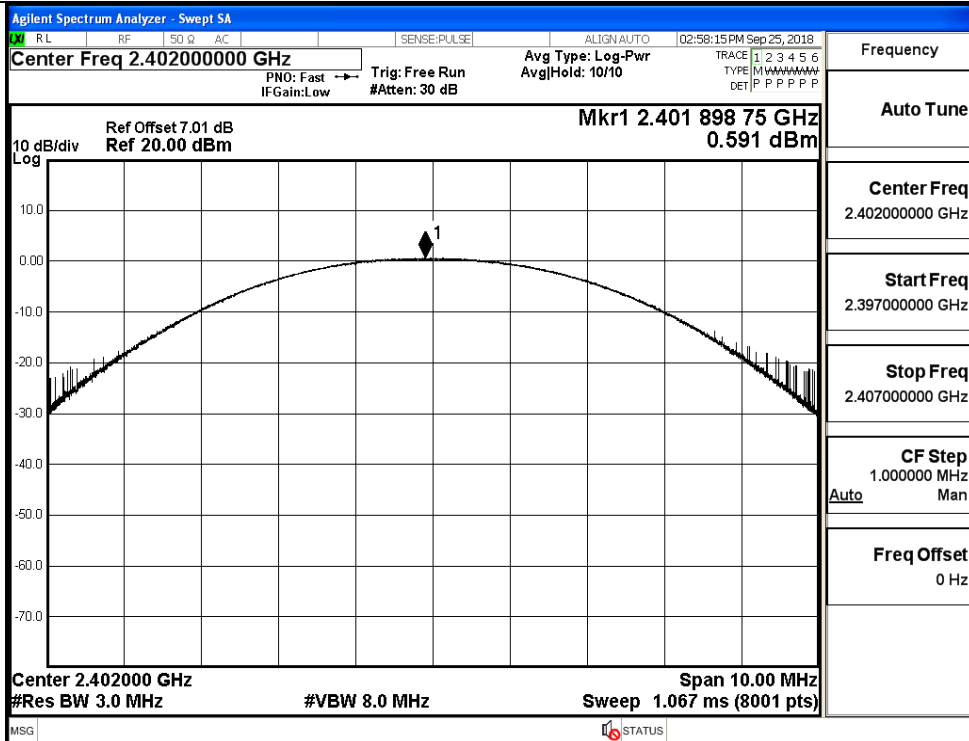


GFSK/HCH

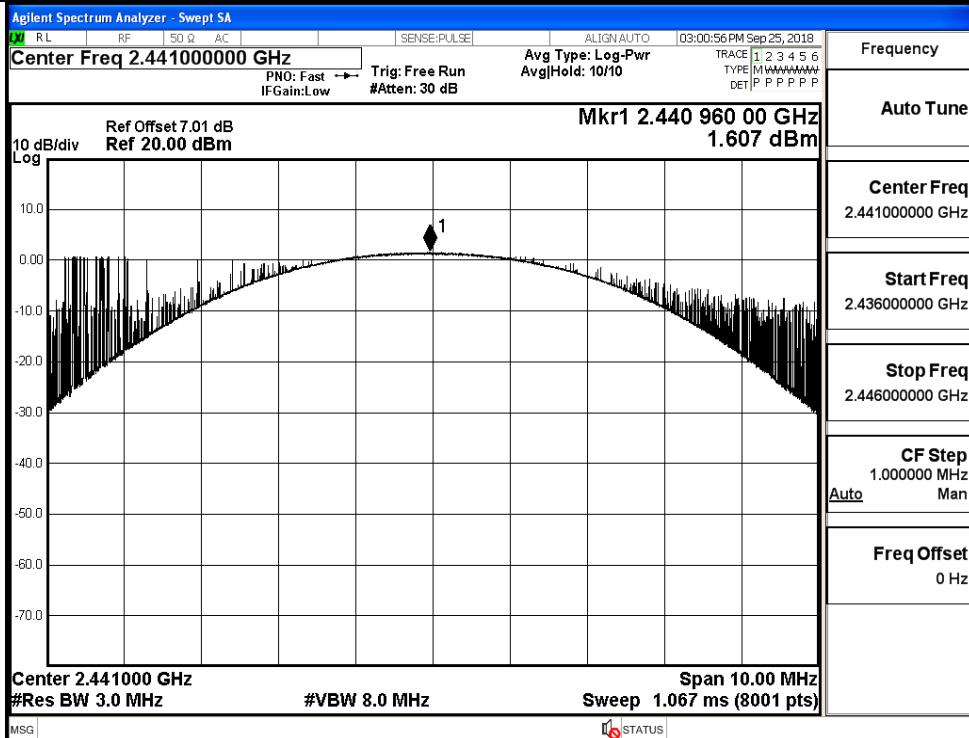
 $\pi/4$ DQPSK/LCH

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

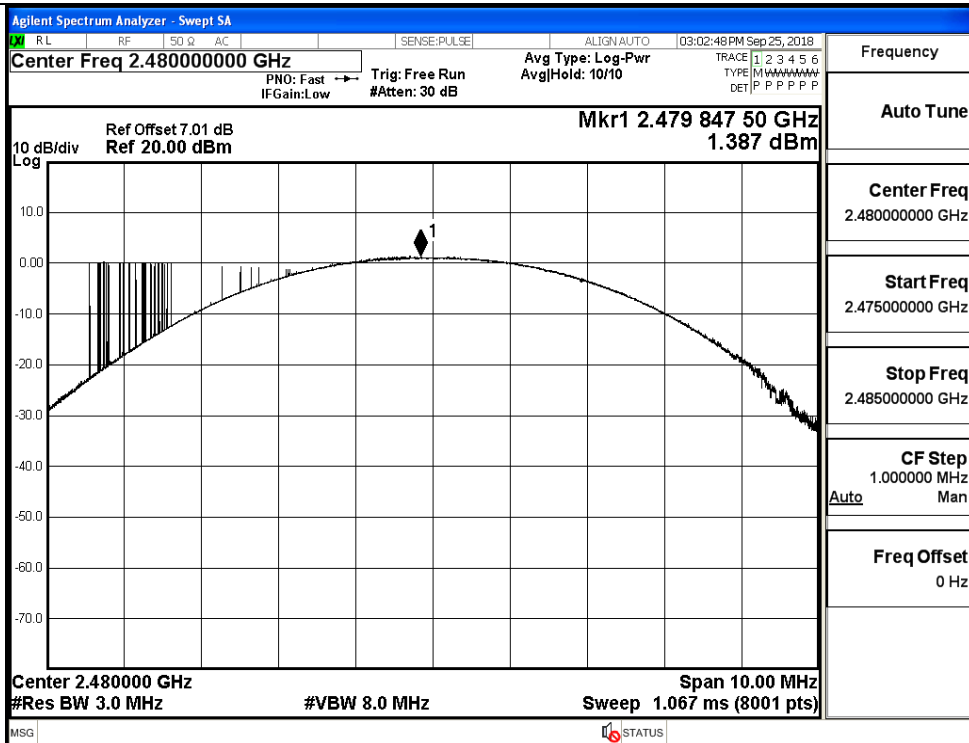
8DPSK/LCH



8DPSK/MCH



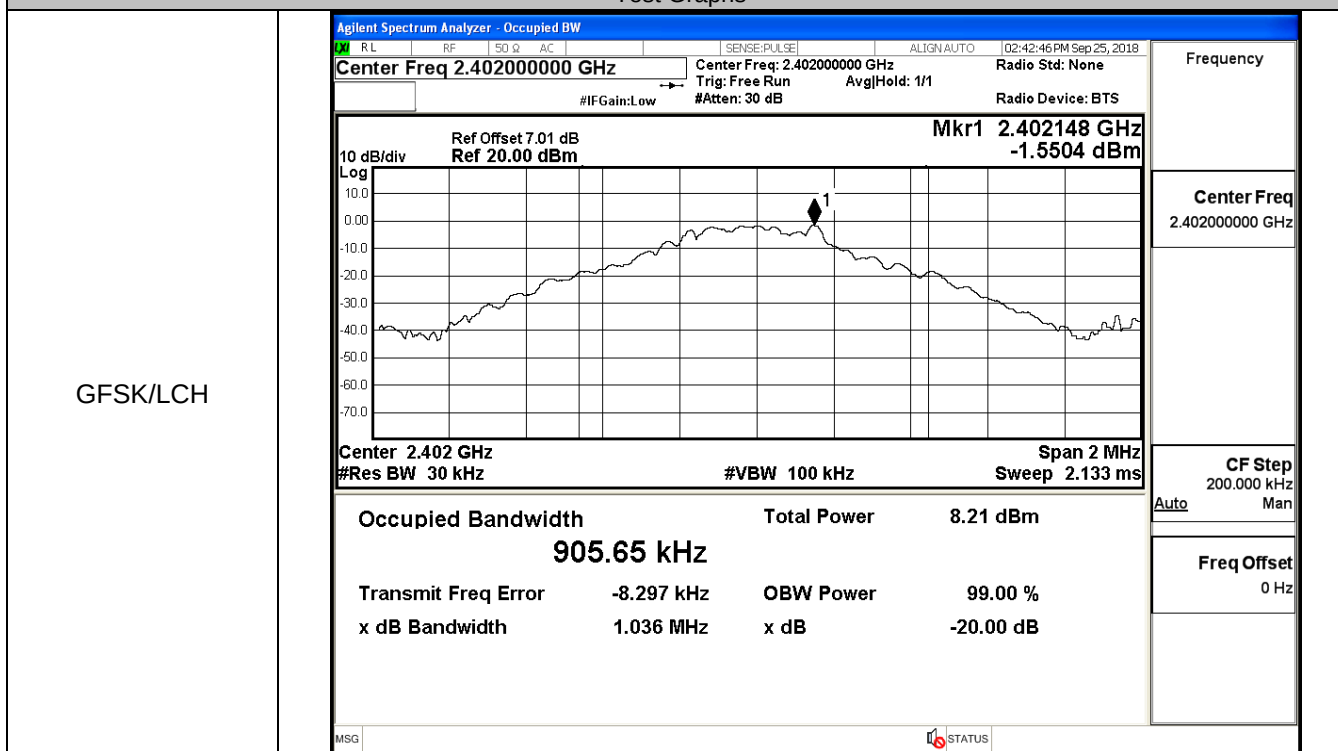
8DPSK/HCH



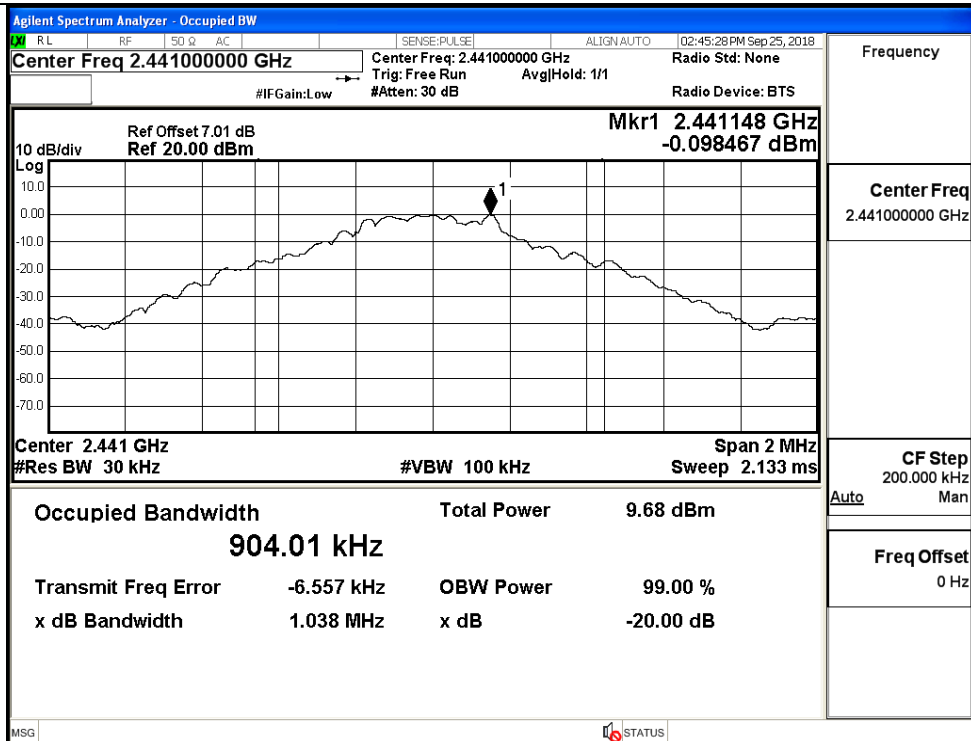
A.2 20dB Bandwidth

Mode	Channel.	99% Bandwidth [MHz]	20dB Bandwidth [MHz]	Limit [MHz]	Verdict
GFSK	LCH	0.90565	1.036	Not Specified	PASS
	MCH	0.90401	1.038	Not Specified	PASS
	HCH	0.90790	1.040	Not Specified	PASS
π /4DQPSK	LCH	1.1782	1.313	Not Specified	PASS
	MCH	1.1747	1.307	Not Specified	PASS
	HCH	1.1713	1.291	Not Specified	PASS
8DPSK	LCH	1.1850	1.313	Not Specified	PASS
	MCH	1.1904	1.327	Not Specified	PASS
	HCH	1.1667	1.211	Not Specified	PASS

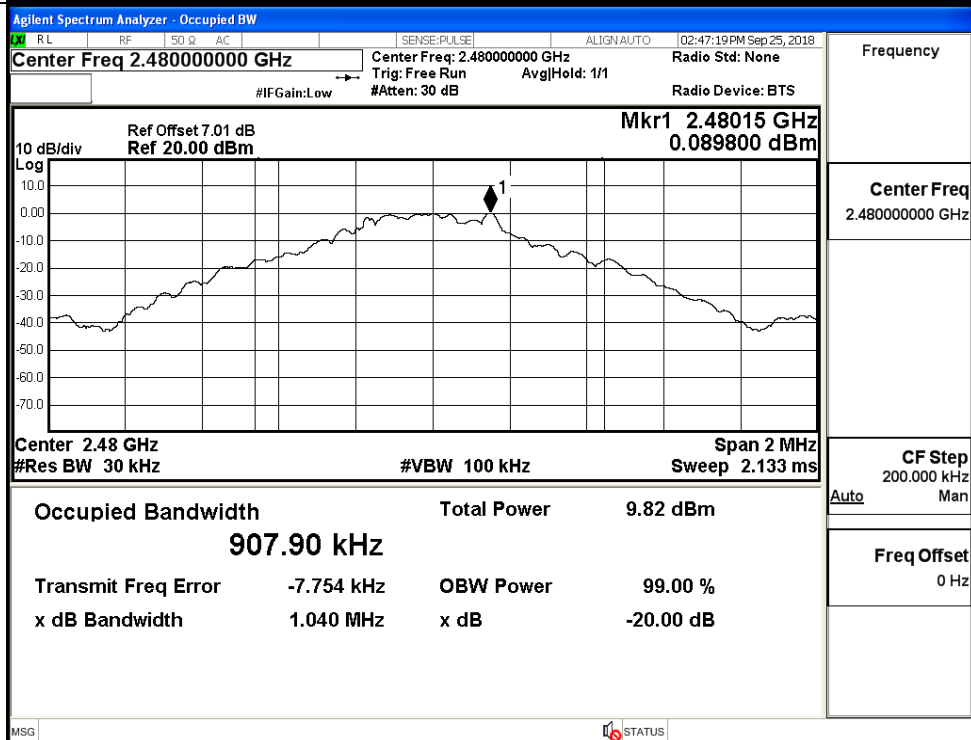
Test Graphs

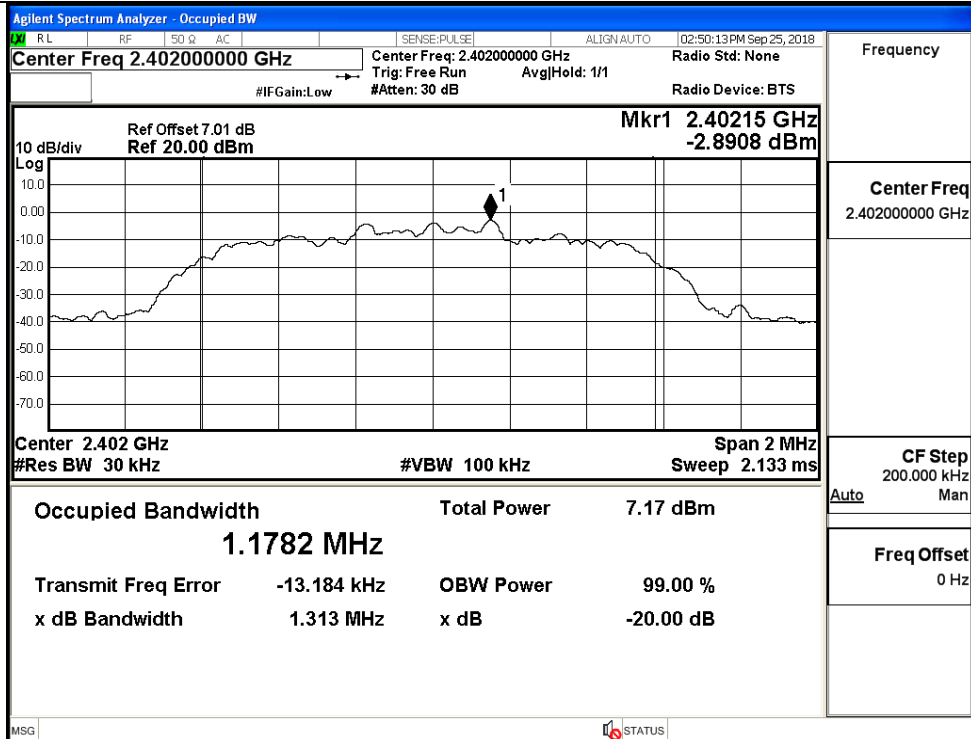
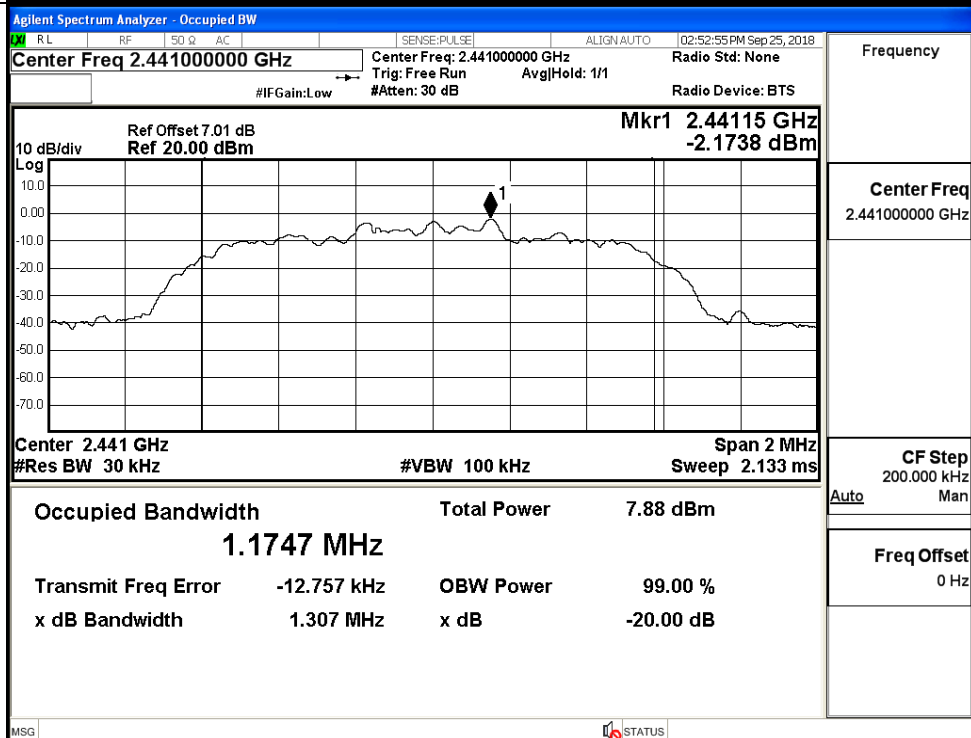


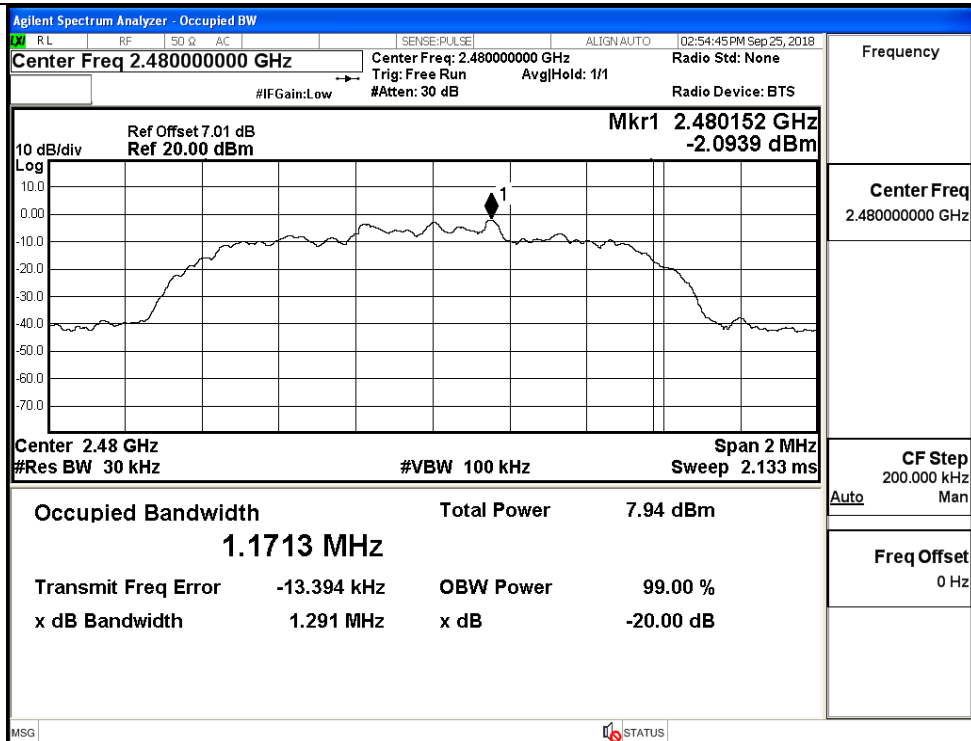
GFSK/MCH



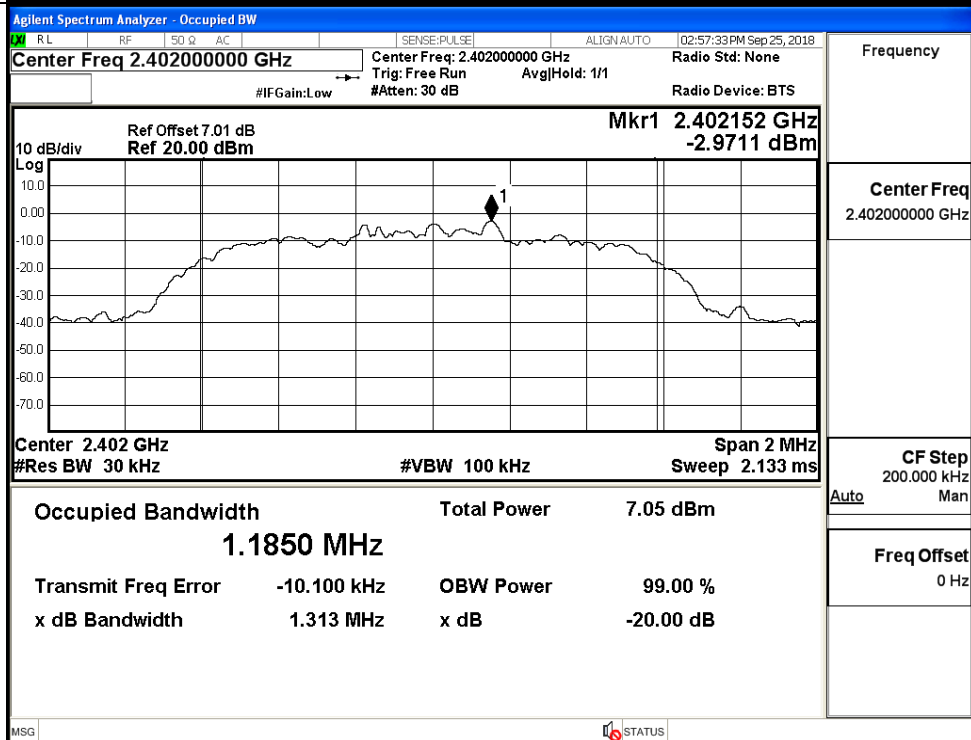
GFSK/HCH



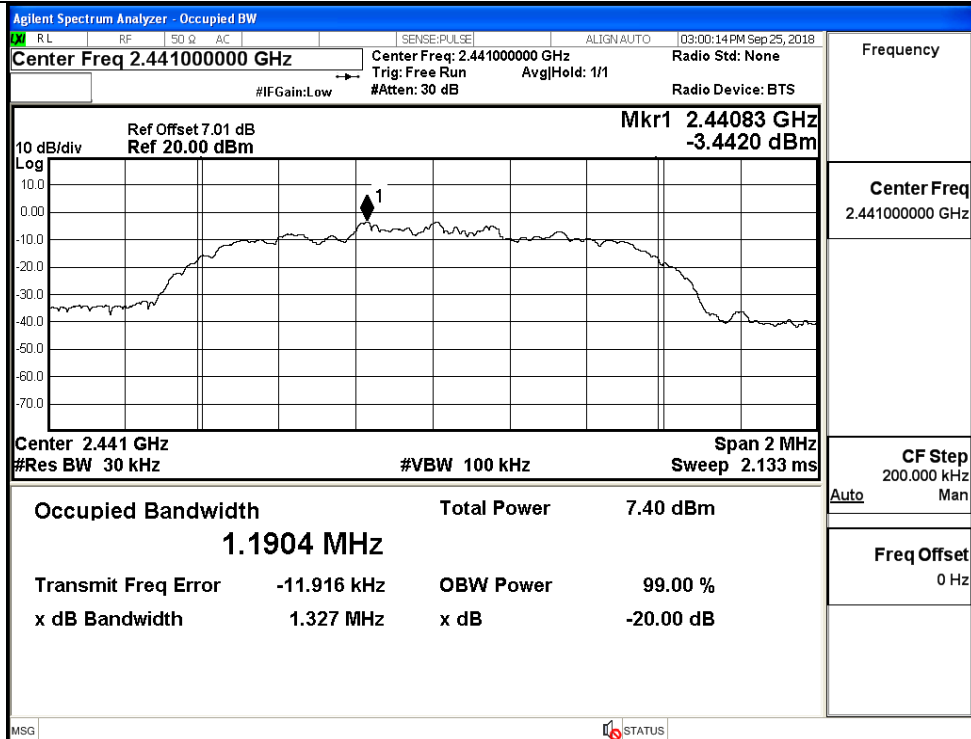
$\pi/4$ DQPSK/LCH $\pi/4$ DQPSK/MCH

$\pi/4$ DQPSK/HCH

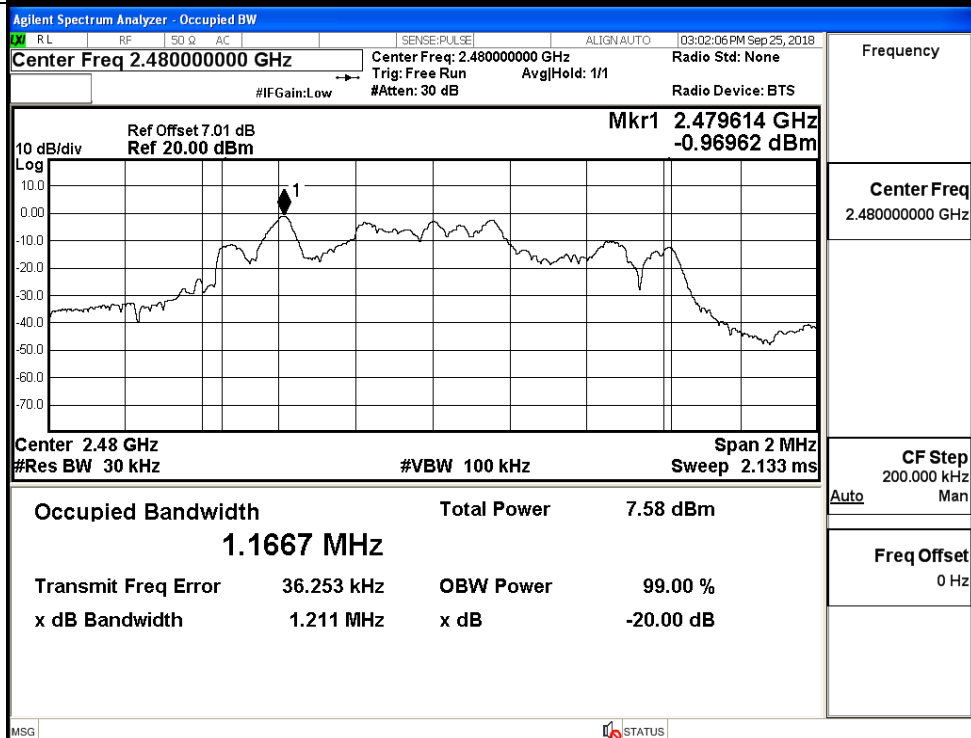
8DPSK/LCH



8DPSK/MCH



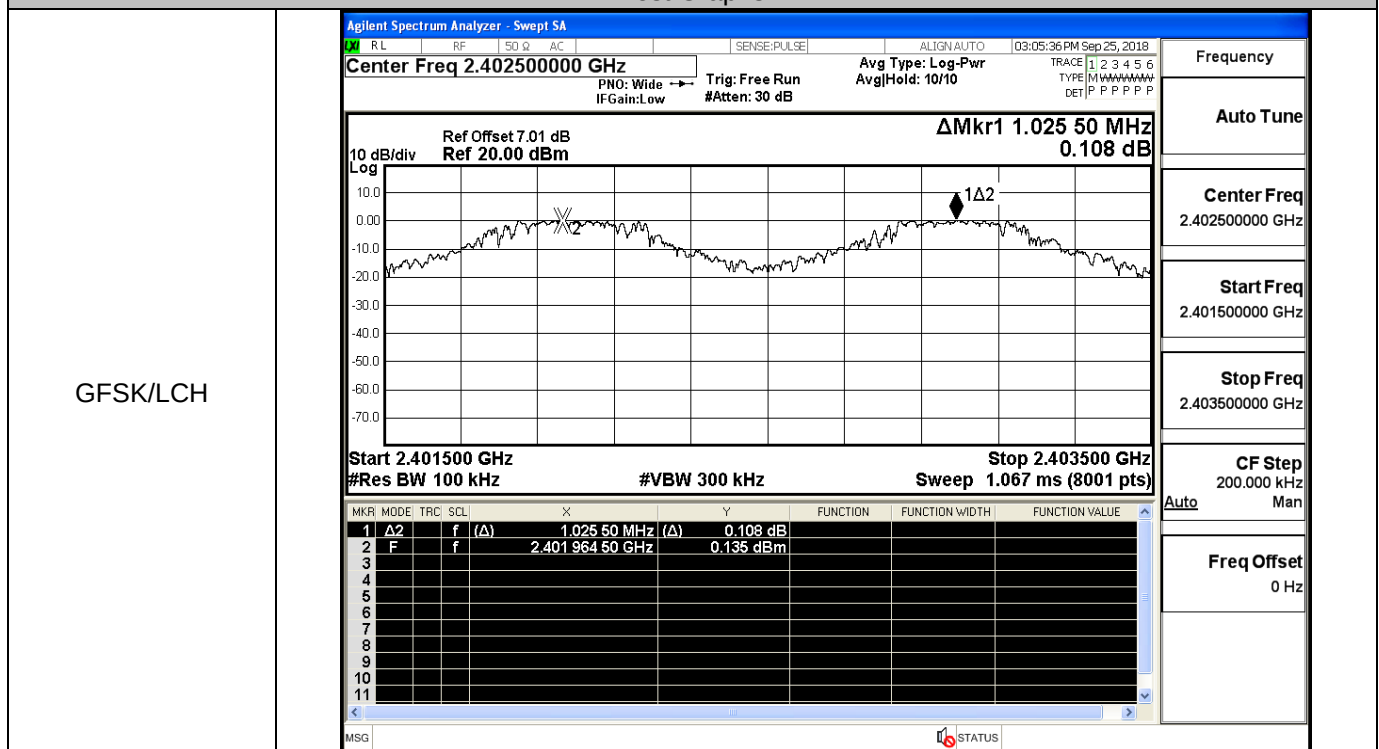
8DPSK/HCH



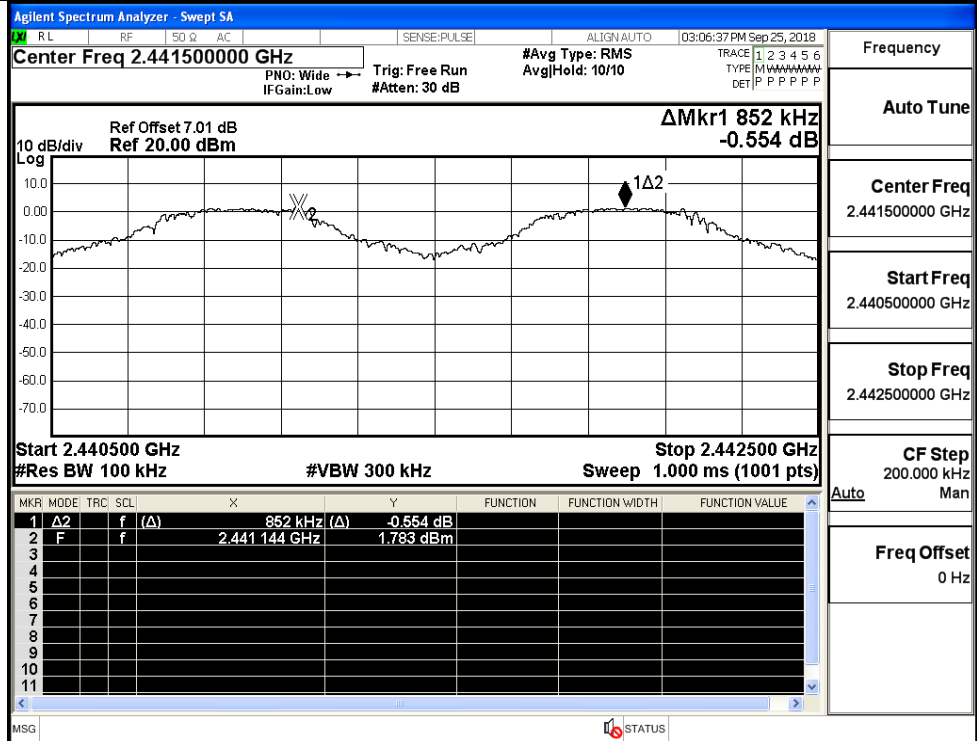
A.3 Carrier Frequency Separation

Mode	Channel.	Carrier Frequency Separation [MHz]	Limit [MHz]	Verdict
GFSK	LCH	1.025	0.693	PASS
	MCH	0.852	0.693	PASS
	HCH	1.186	0.693	PASS
$\pi/4$ DQPSK	LCH	0.978	0.875	PASS
	MCH	1.134	0.875	PASS
	HCH	1.134	0.875	PASS
8DPSK	LCH	1.026	0.885	PASS
	MCH	1.008	0.885	PASS
	HCH	1.138	0.885	PASS

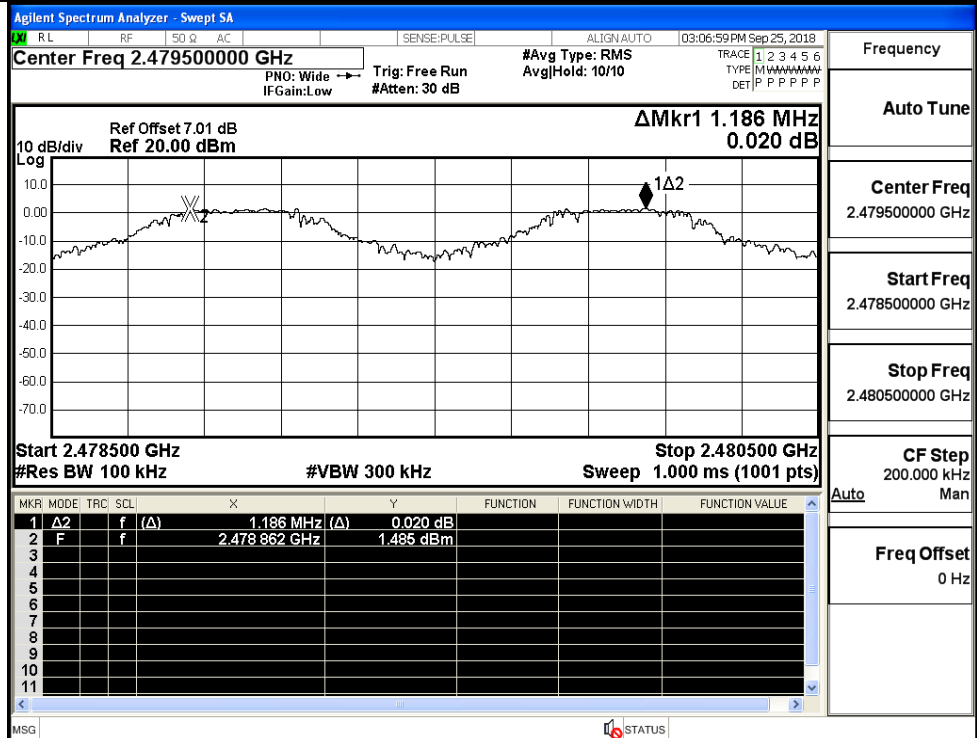
Test Graphs

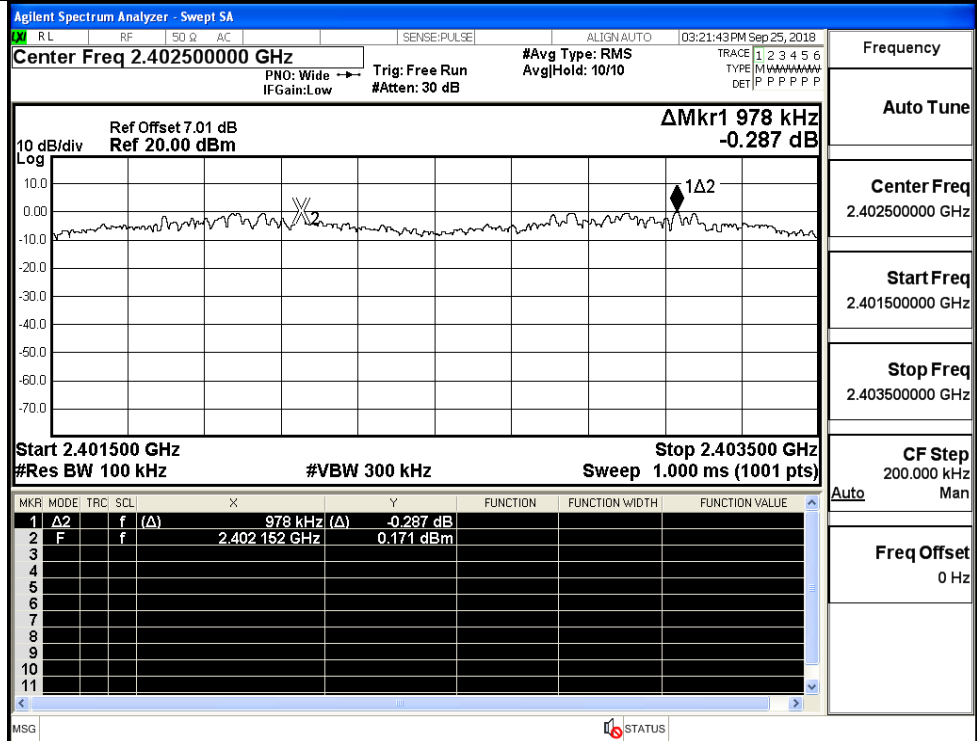
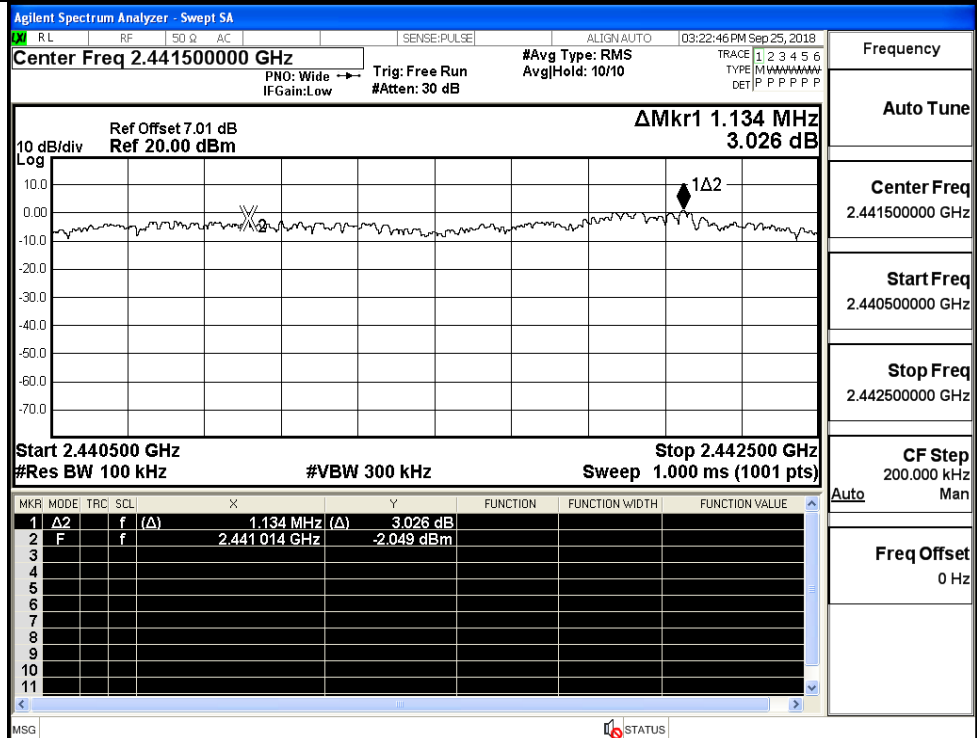


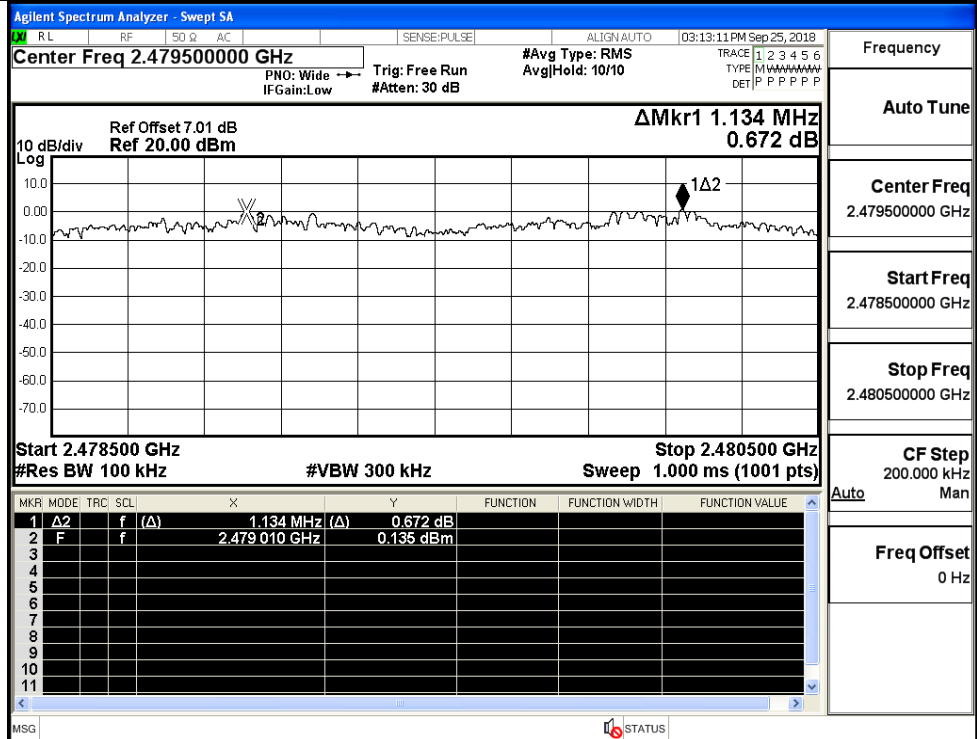
GFSK/MCH



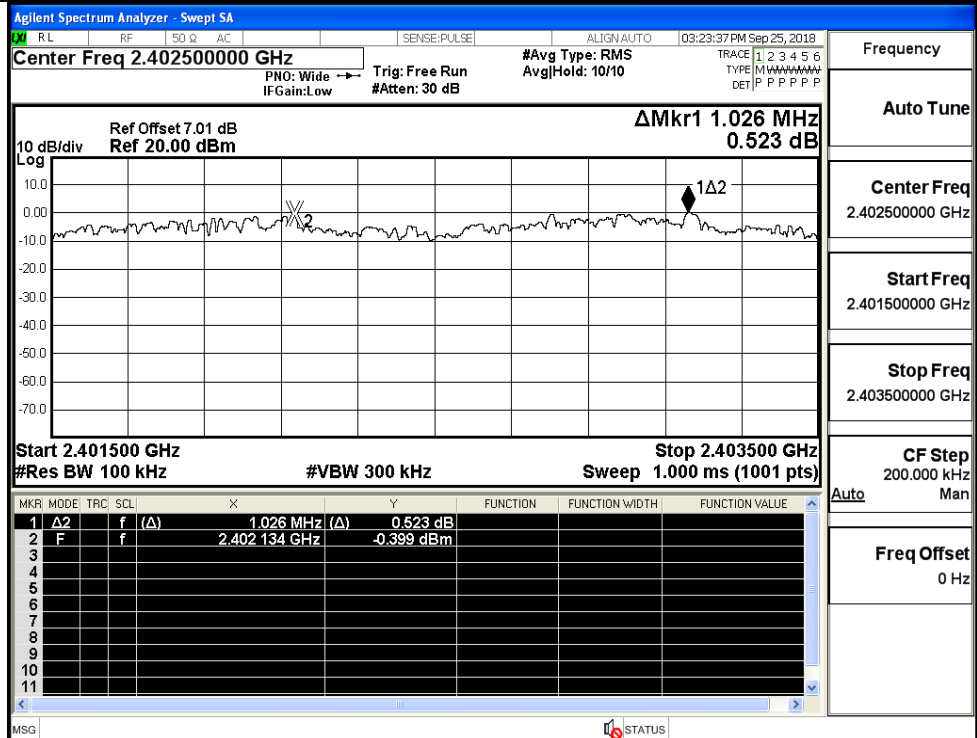
GFSK/HCH



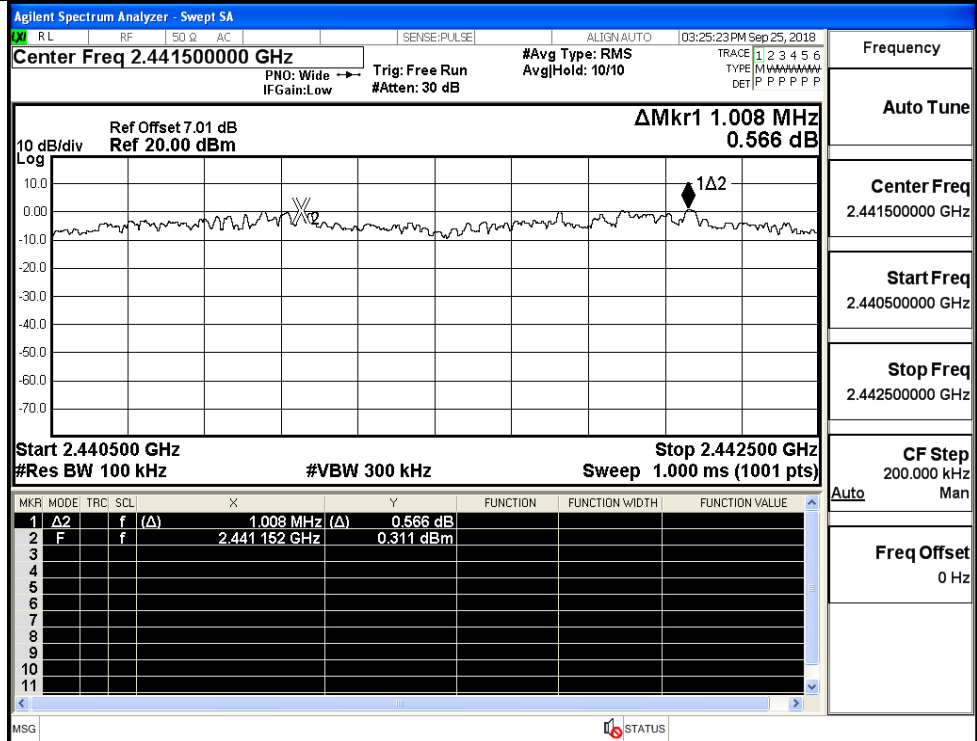
$\pi/4$ DQPSK/LCH $\pi/4$ DQPSK/MCH

$\pi/4$ DQPSK/HCH

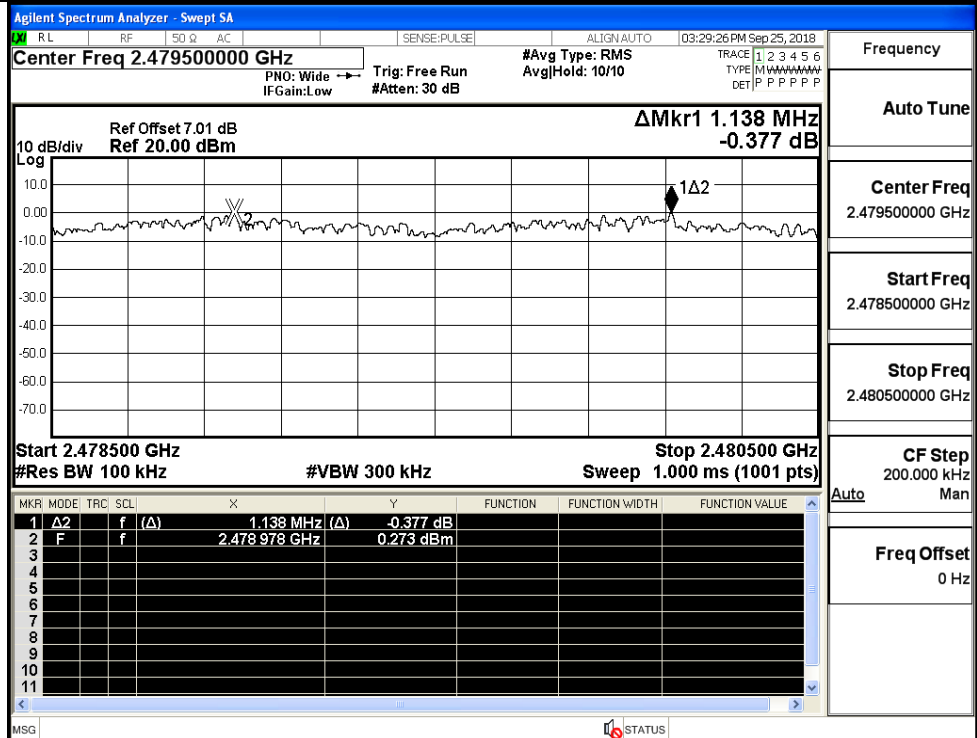
8DPSK/LCH



8DPSK/MCH



8DPSK/HCH

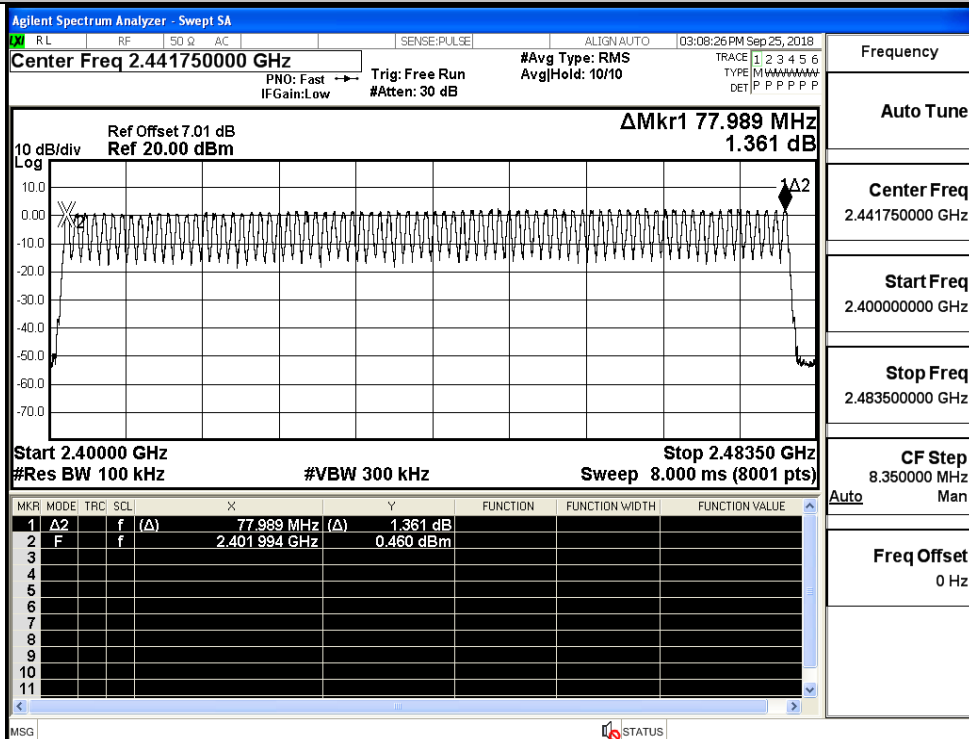
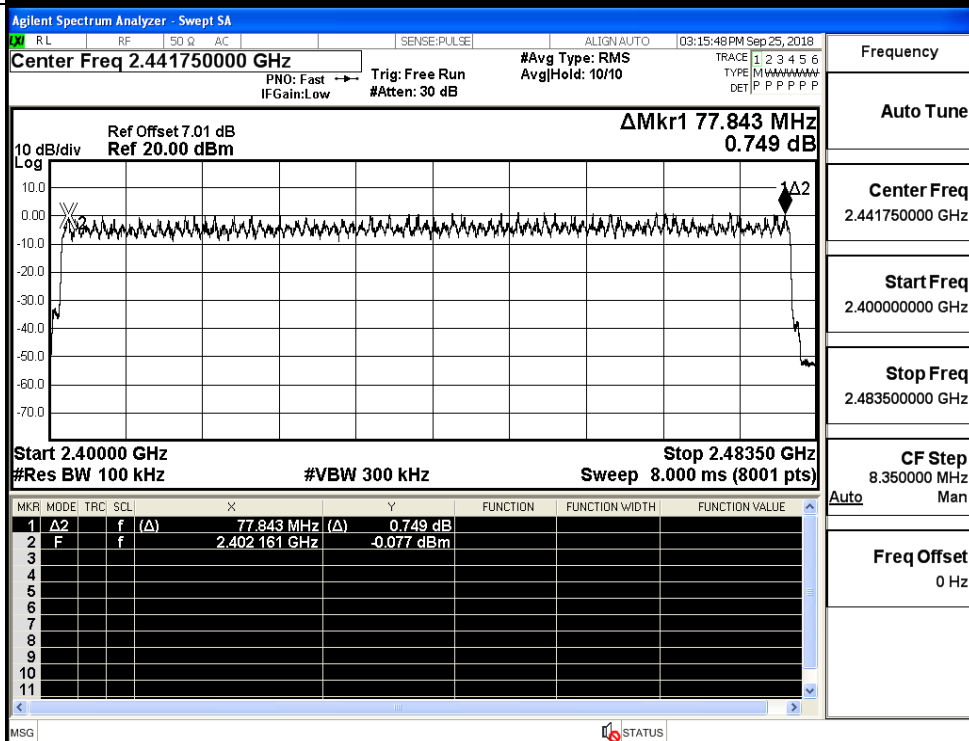


A.4 Hopping Channel Number

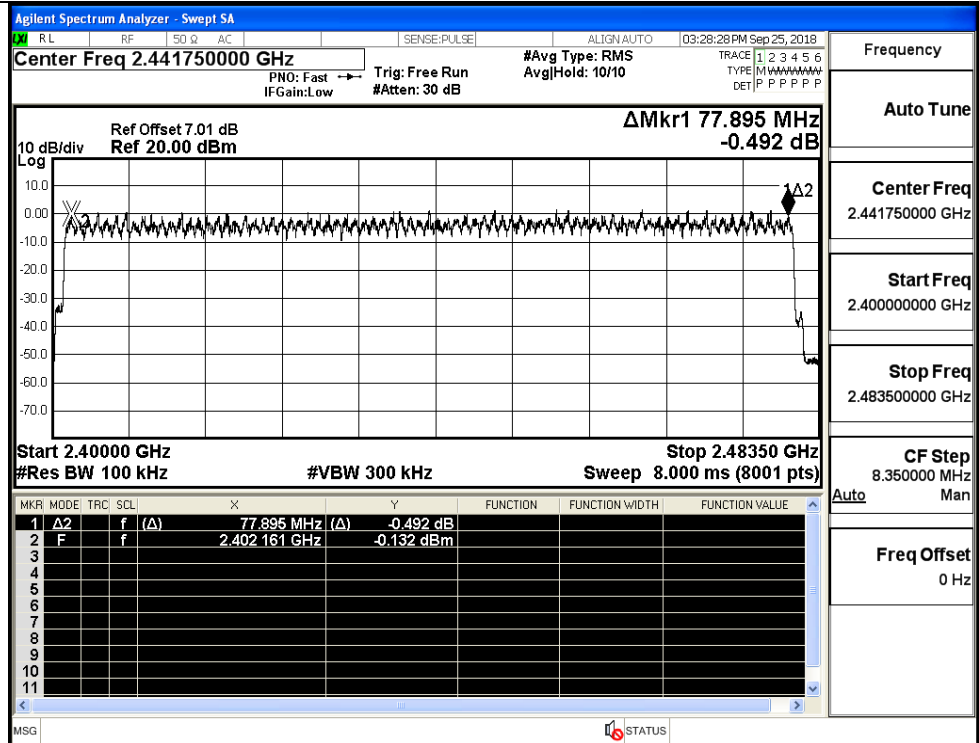
Mode	Channel.	Number of Hopping Channel [N]	Limit [N]	Verdict
GFSK	Hop	79	≥ 15	PASS
$\pi/4$ DQPSK	Hop	79	≥ 15	PASS
8DPSK	Hop	79	≥ 15	PASS

Test Graphs

GFSK/Hop

 $\pi/4$ DQPSK/Hop

8DPSK/Hop

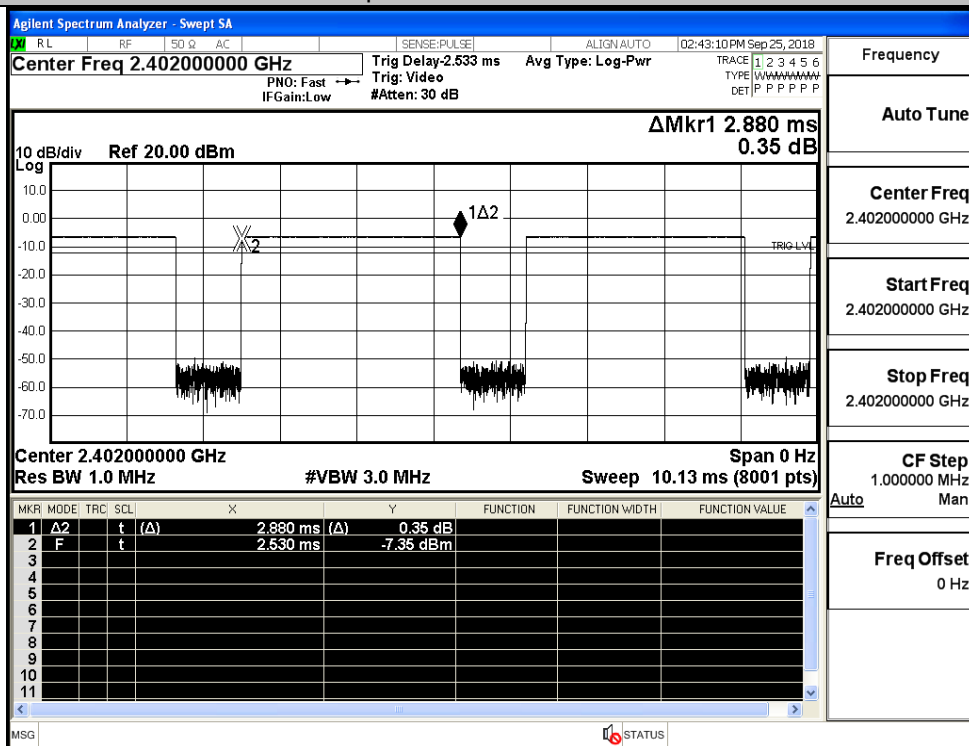


A.5 Dwell Time

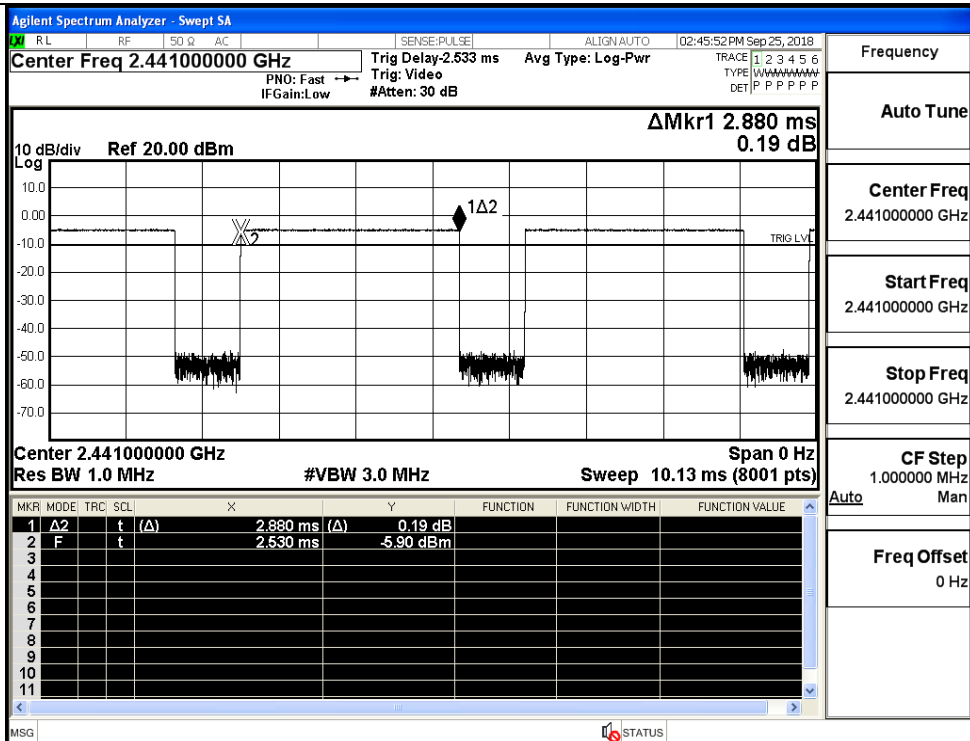
Mode	Packet	Channel	Burst Width [ms/hop/ch]	Total Hops[hop*ch]	Dwell Time[s]	Limit [s]	Verdict
GFSK	DH5	LCH	2.88	106.7	0.307	0.4	PASS
	DH5	MCH	2.88	106.7	0.307	0.4	PASS
	DH5	HCH	2.88	106.7	0.307	0.4	PASS
$\pi/4$ DQPSK	2DH5	LCH	2.88	106.7	0.307	0.4	PASS
	2DH5	MCH	2.88	106.7	0.307	0.4	PASS
	2DH5	HCH	2.88	106.7	0.307	0.4	PASS
8DPSK	3DH5	LCH	2.89	106.7	0.308	0.4	PASS
	3DH5	MCH	2.89	106.7	0.308	0.4	PASS
	3DH5	HCH	2.89	106.7	0.308	0.4	PASS

Test Graphs

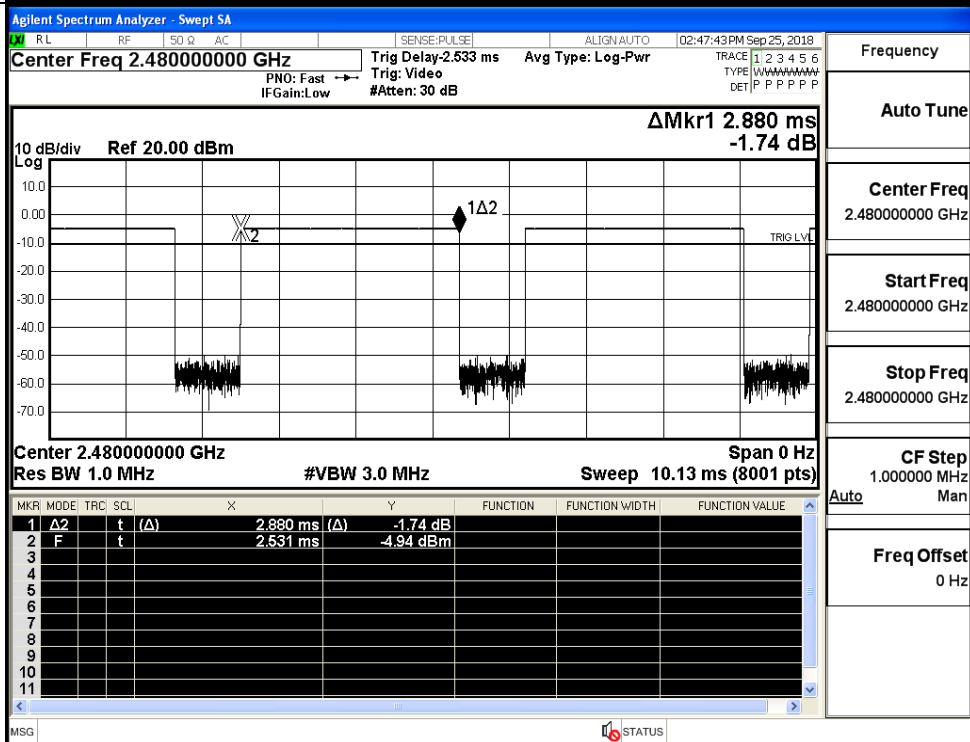
GFSK_DH5/LCH



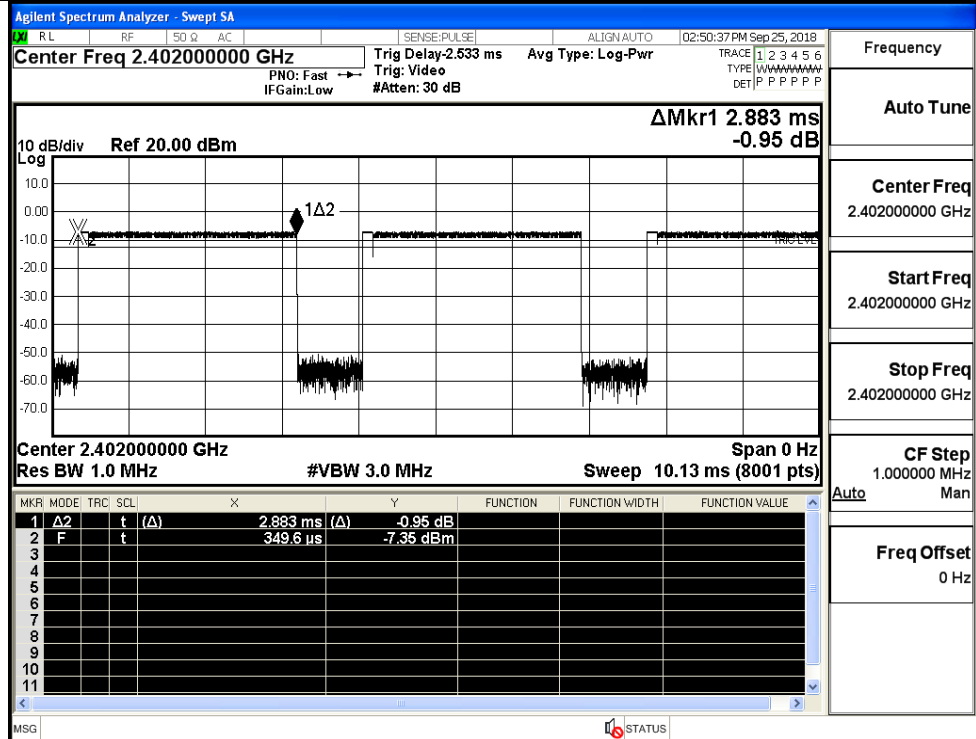
GFSK_DH5/MCH



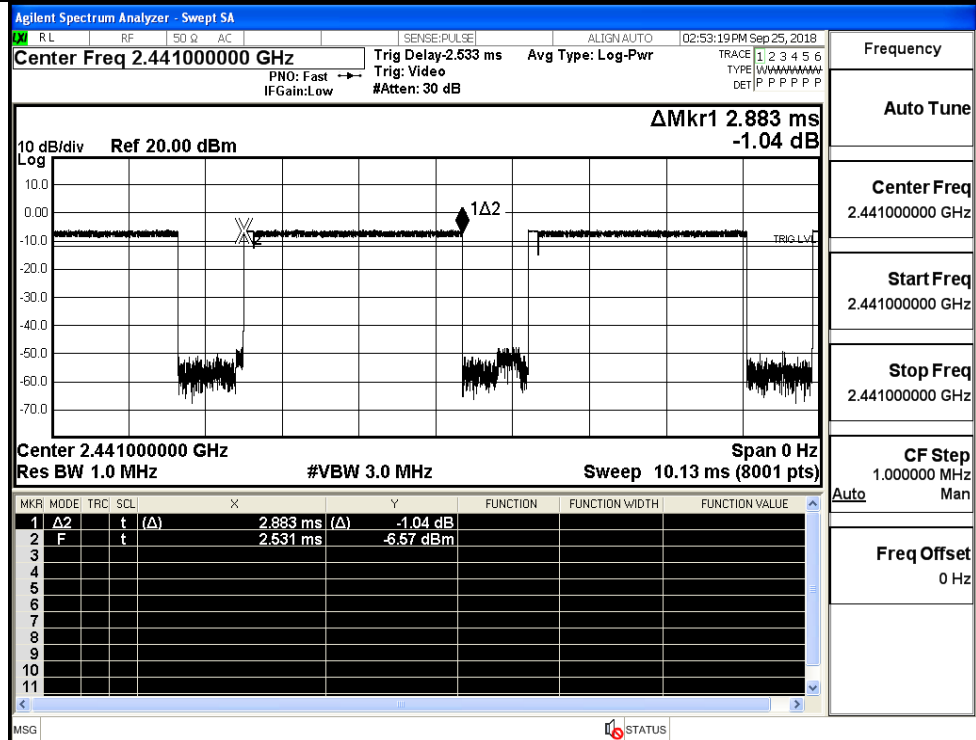
GFSK_DH5/HCH



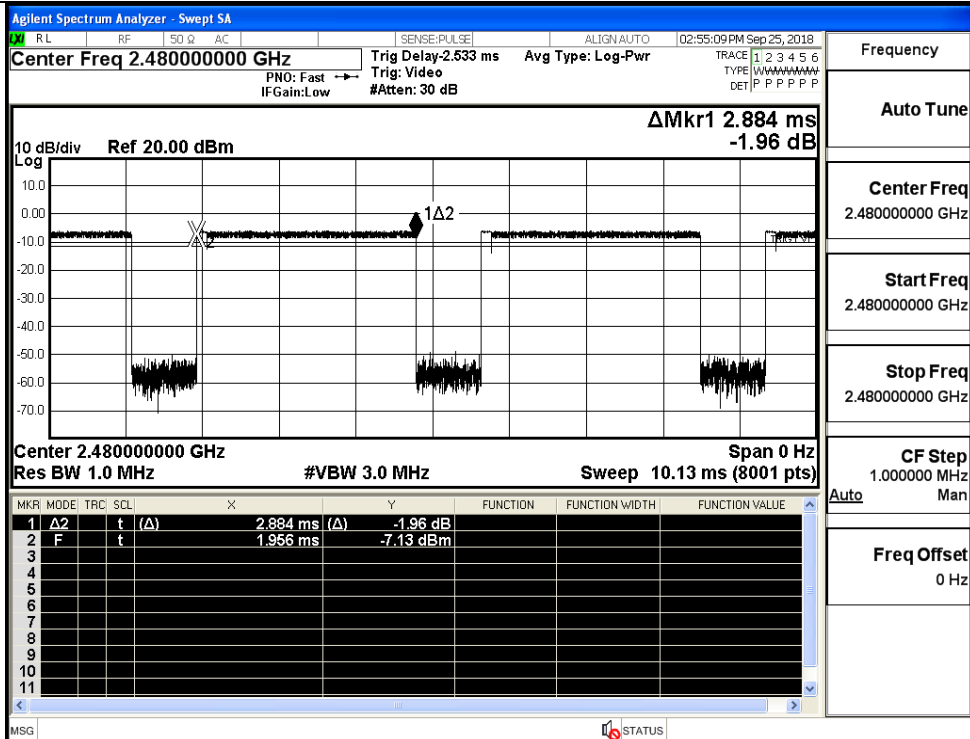
$\pi/4$ DQPSK
_2DH5/LCH



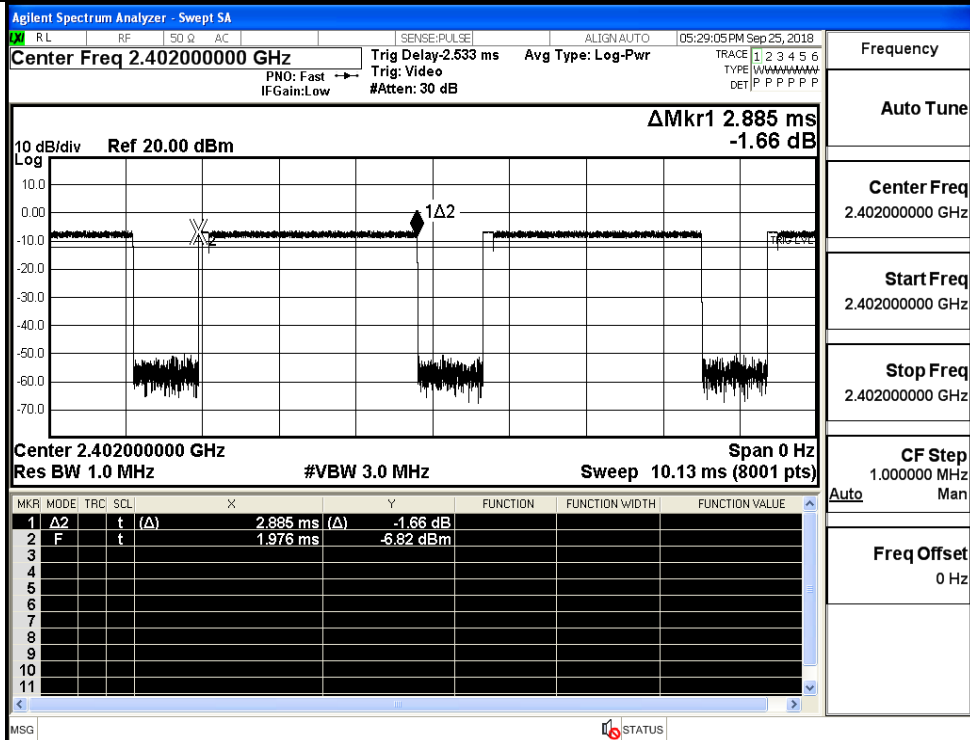
$\pi/4$ DQPSK
_2DH5/MCH



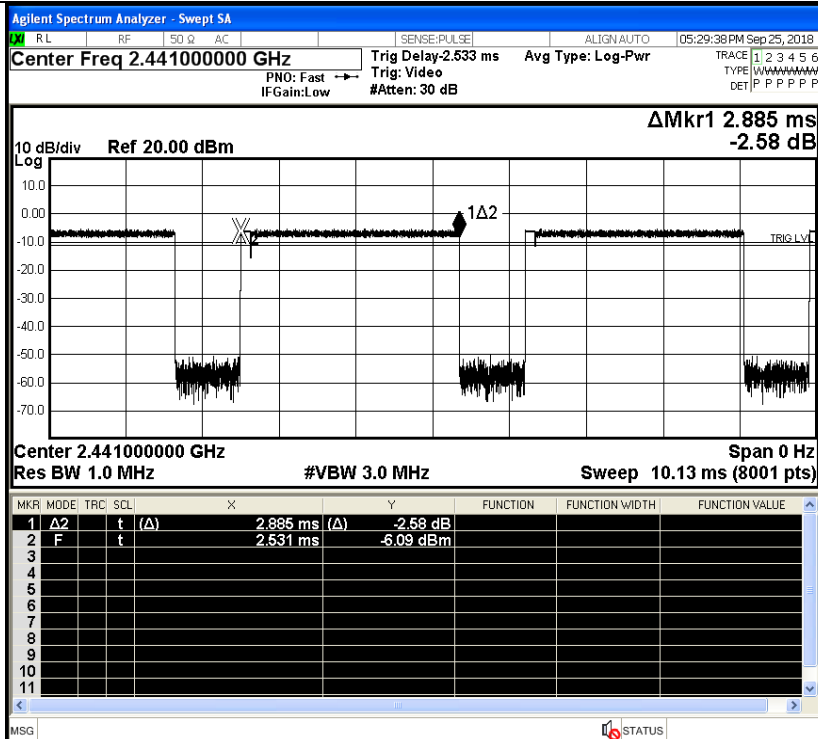
$\pi/4$ DQPSK
_2DH5/HCH



8DPSK _3DH5/LCH



8DPSK_3DH5/MCH

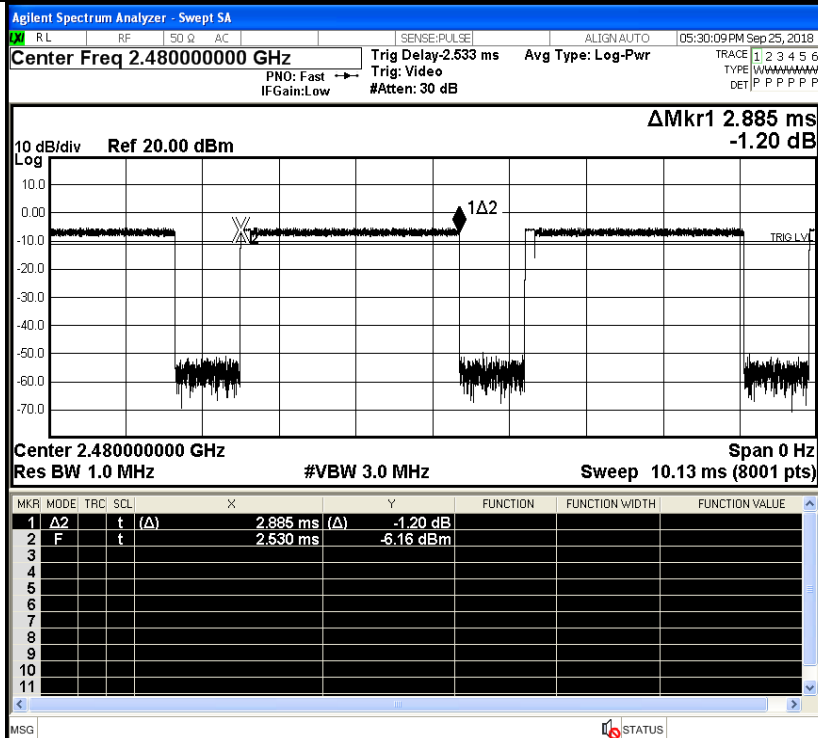


Frequency

Auto Tune

Center Freq
2.441000000 GHzStart Freq
2.441000000 GHzStop Freq
2.441000000 GHzCF Step
1.000000 MHz
Auto ManFreq Offset
0 Hz

8DPSK_3DH5/HCH



Frequency

Auto Tune

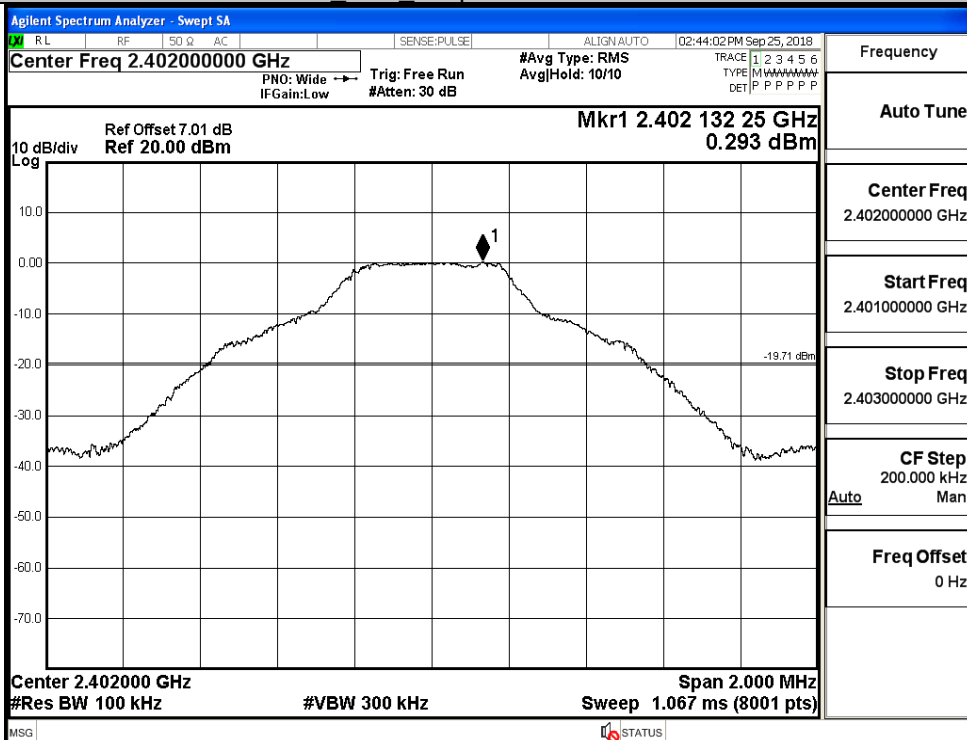
Center Freq
2.480000000 GHzStart Freq
2.480000000 GHzStop Freq
2.480000000 GHzCF Step
1.000000 MHz
Auto ManFreq Offset
0 Hz

A.6 RF Conducted Spurious Emissions

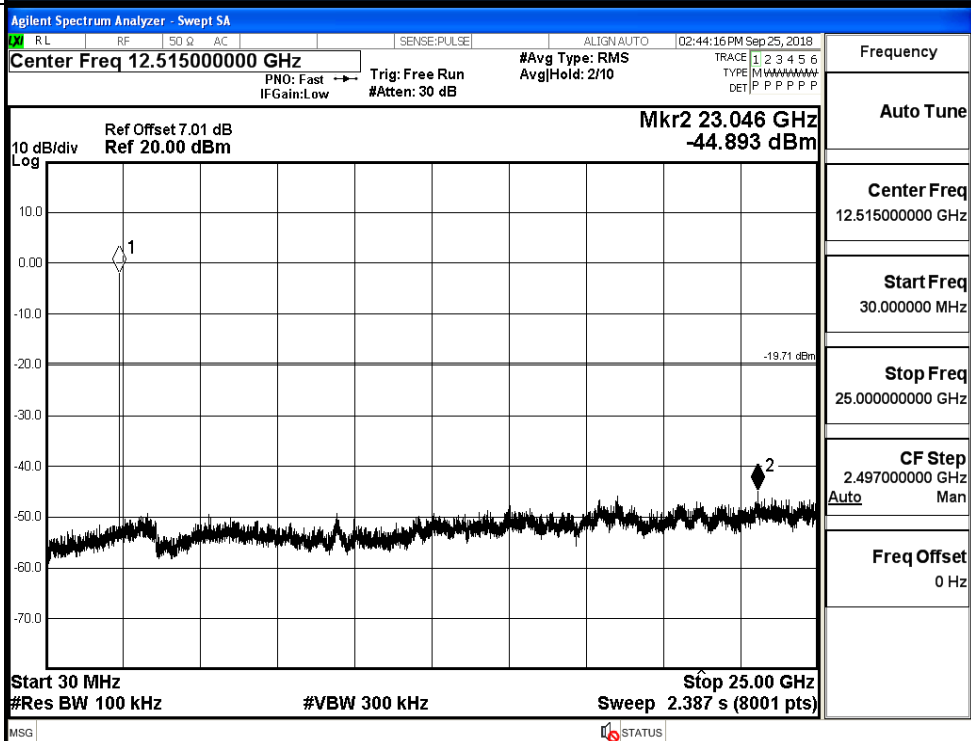
Mode	Channel	Pref [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
GFSK	LCH	0.293	-44.893	-19.707	PASS
	MCH	1.929	-45.980	-18.071	PASS
	HCH	2.18	-46.047	-17.820	PASS
$\pi/4$ DQPSK	LCH	-0.149	-45.592	-20.149	PASS
	MCH	1.236	-45.373	-18.764	PASS
	HCH	0.069	-45.958	-19.931	PASS
8DPSK	LCH	-0.752	-45.514	-20.752	PASS
	MCH	-0.004	-45.115	-20.004	PASS
	HCH	0.729	-45.445	-19.271	PASS

GFSK LCH Graphs

Pref

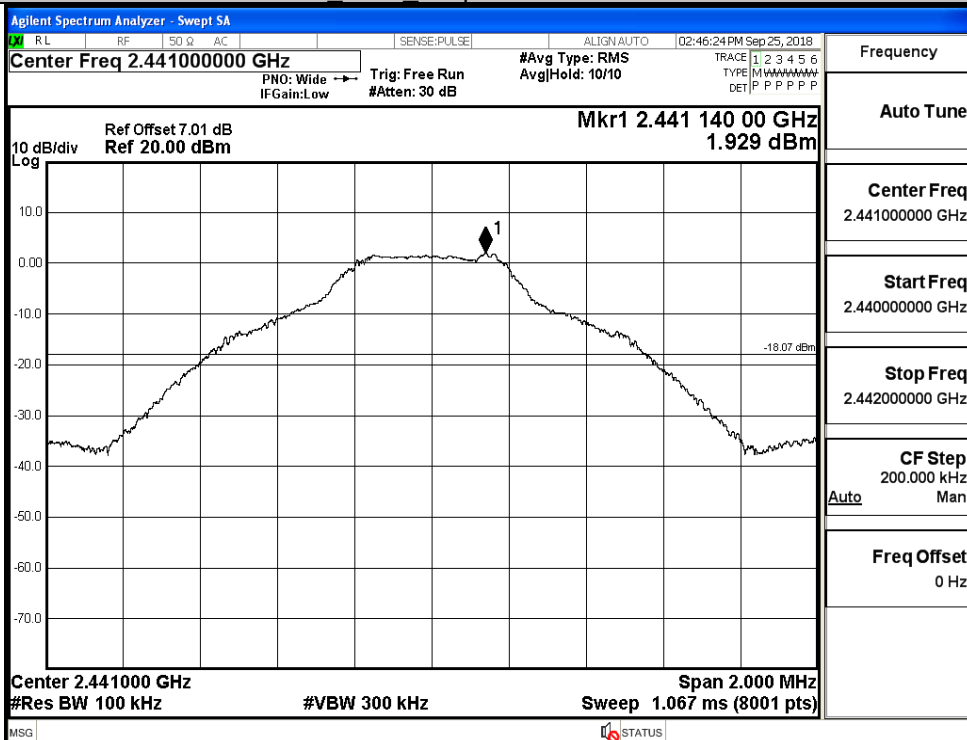


Puw

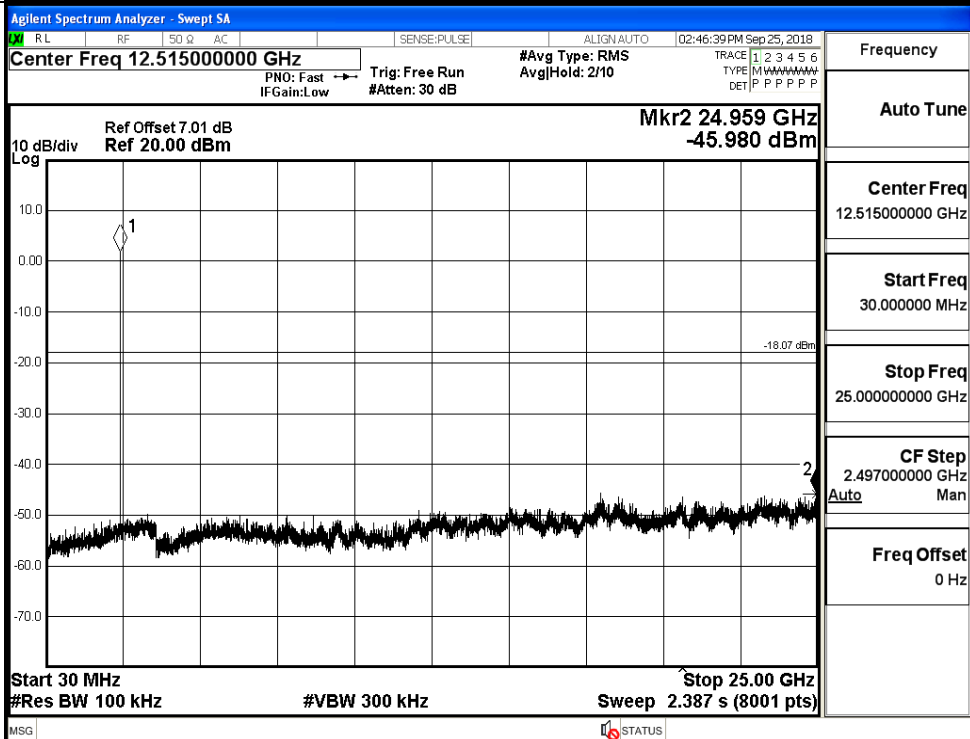


GFSK MCH Graphs

Pref

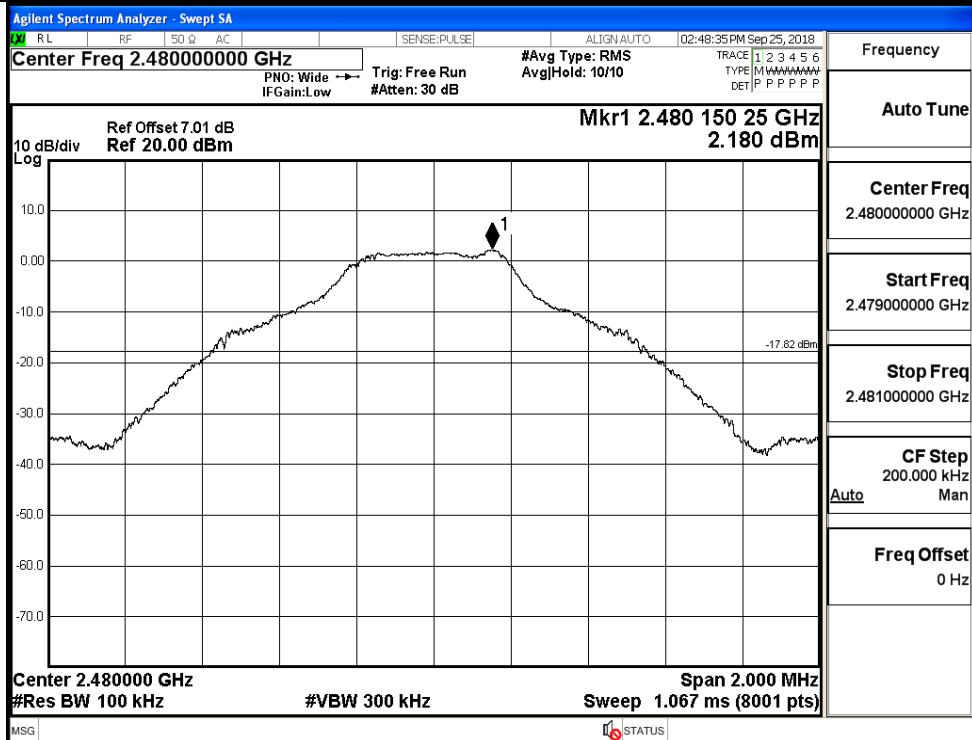


Puw

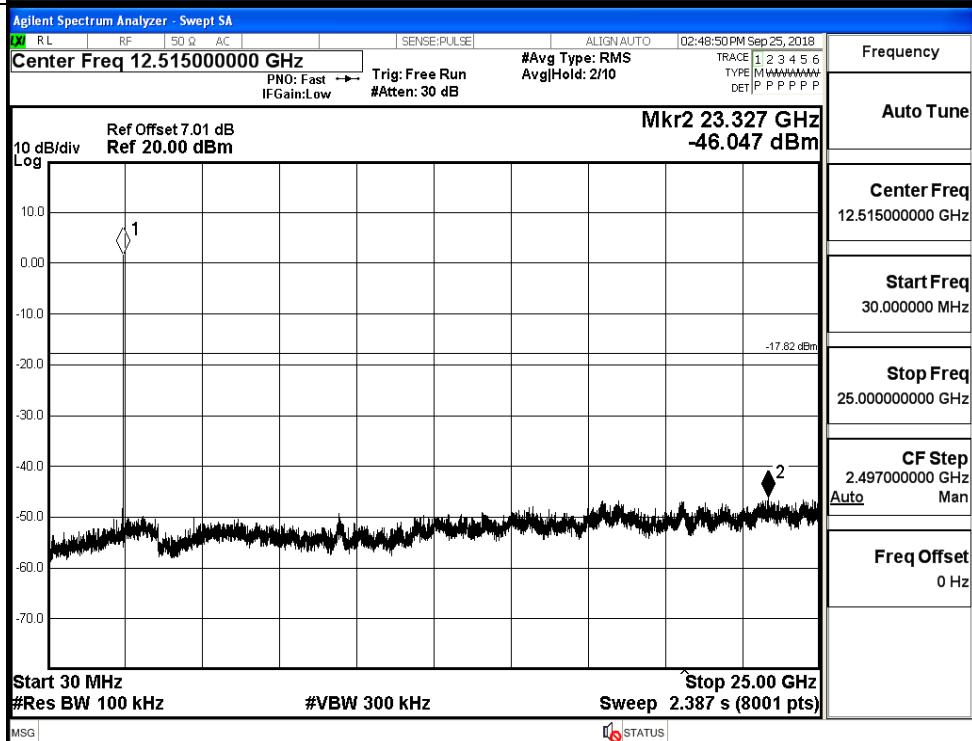


GFSK HCH Graphs

Pref

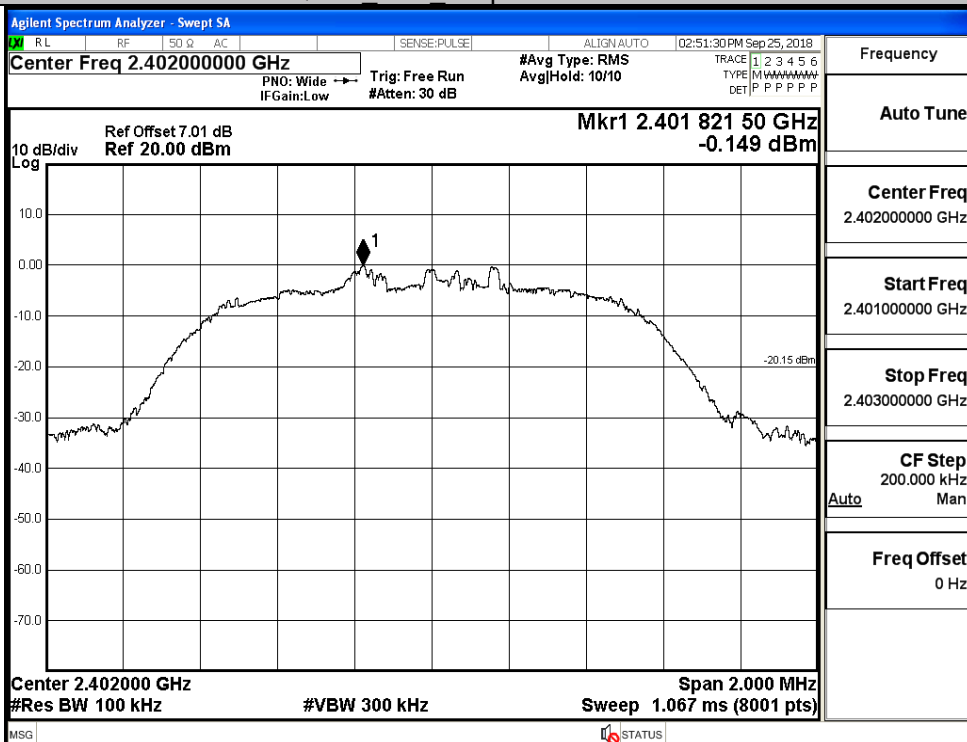


Puw

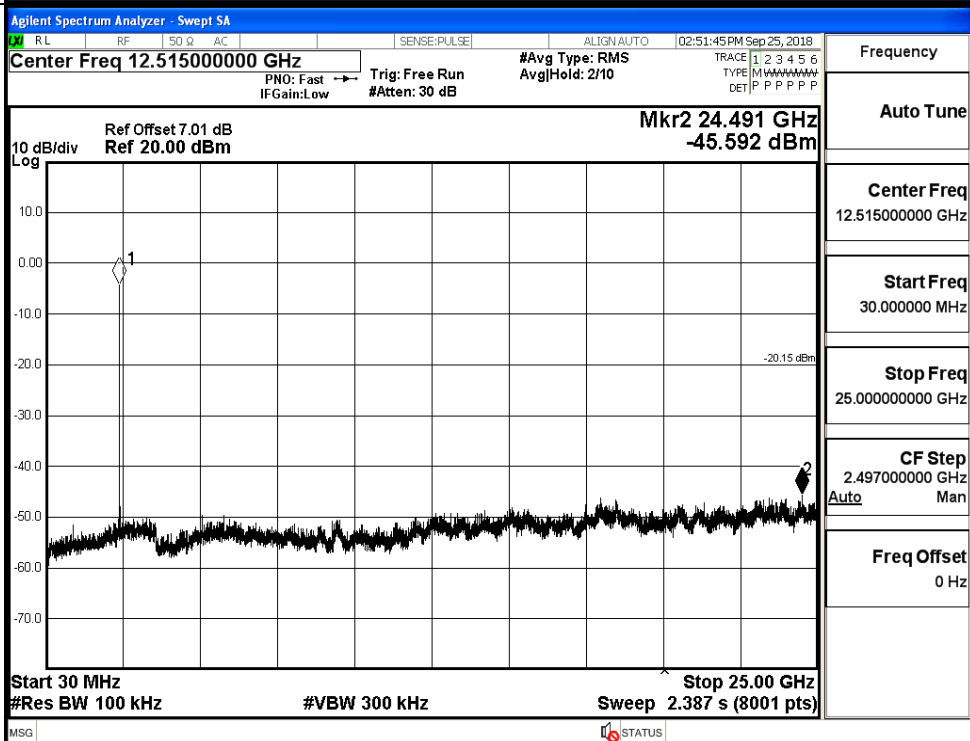


$\pi/4$ DQPSK LCH Graphs

Pref

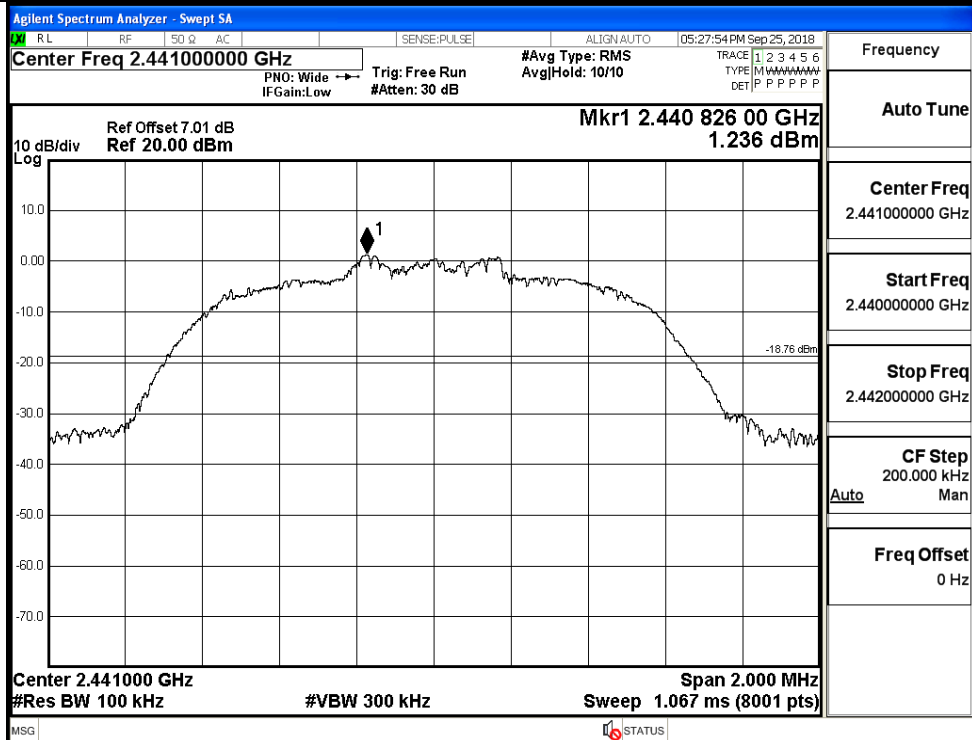


Puw

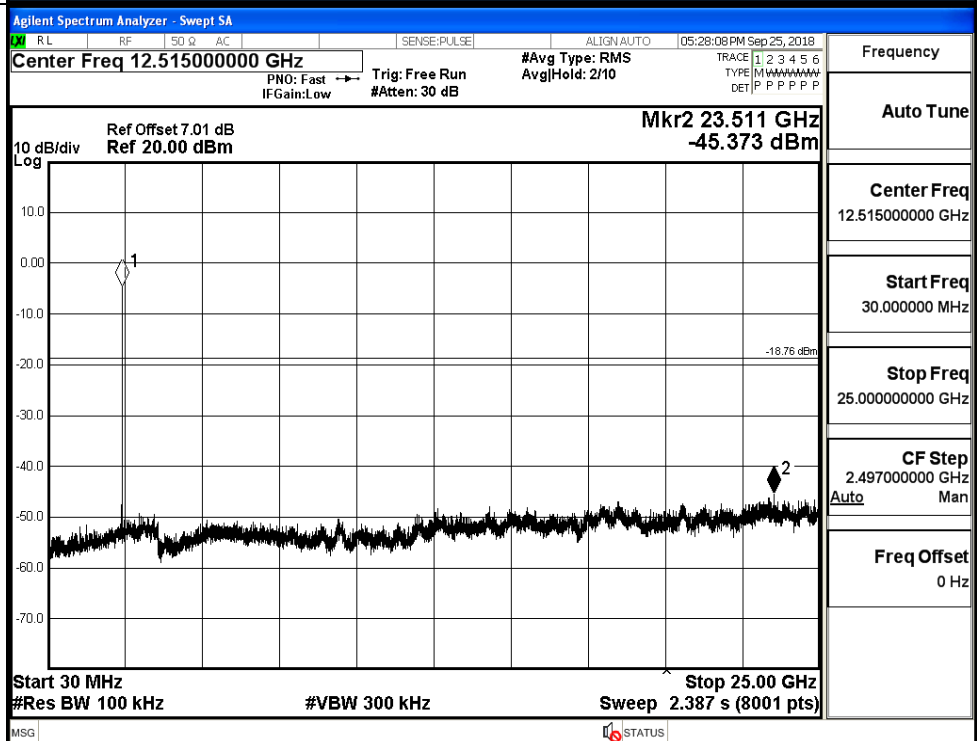


π /4DQPSK MCH Graphs

Pref

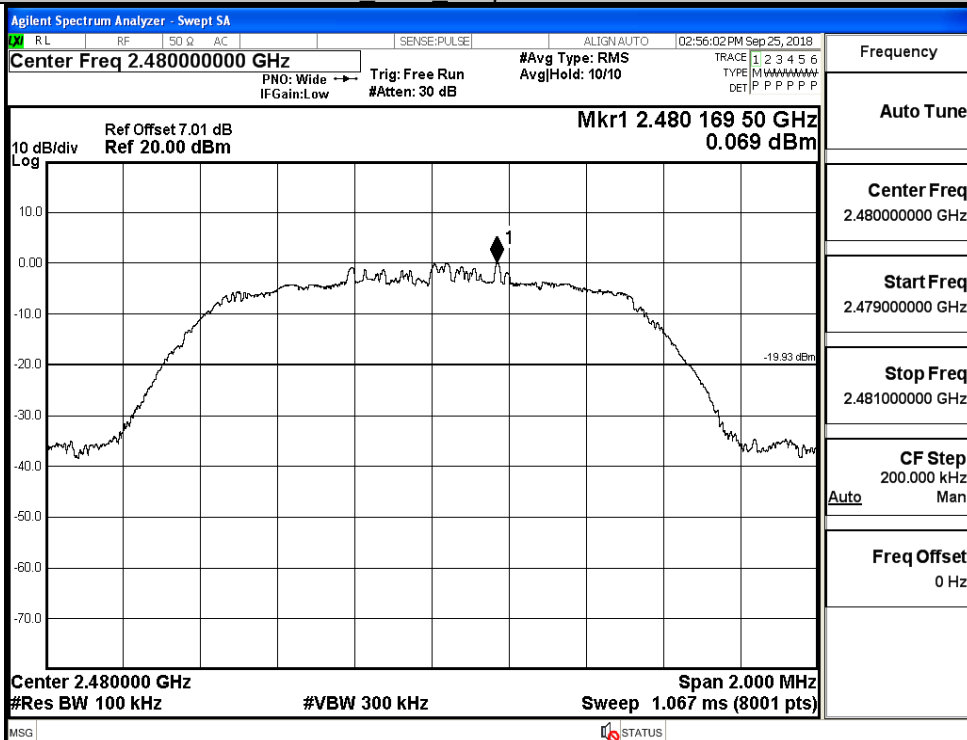


Puw

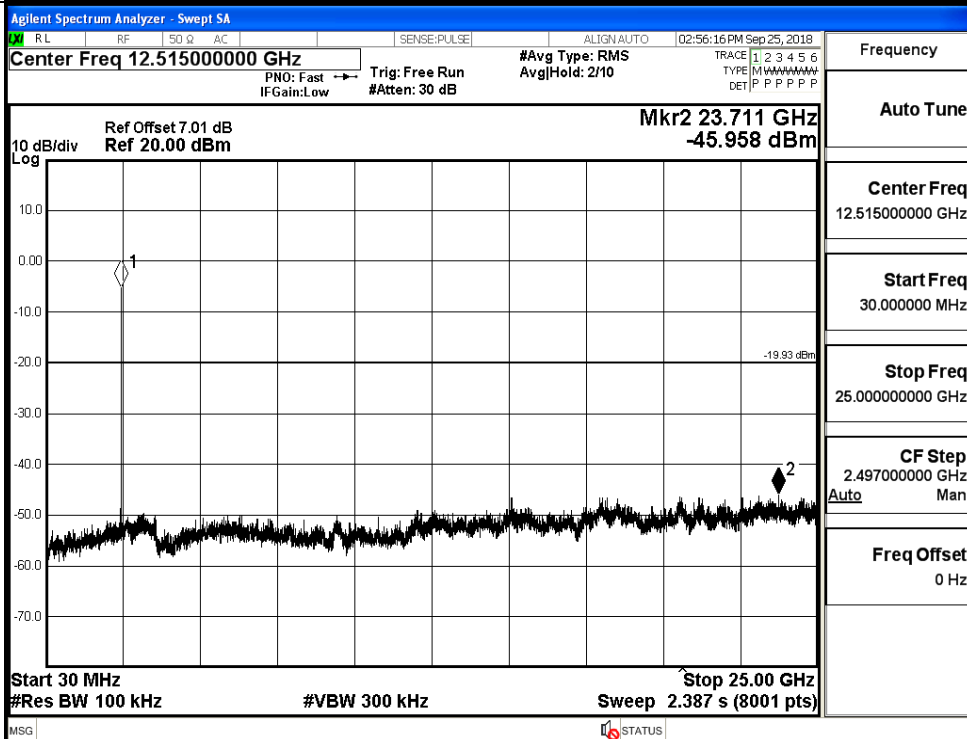


$\pi/4$ DQPSK HCH Graphs

Pref

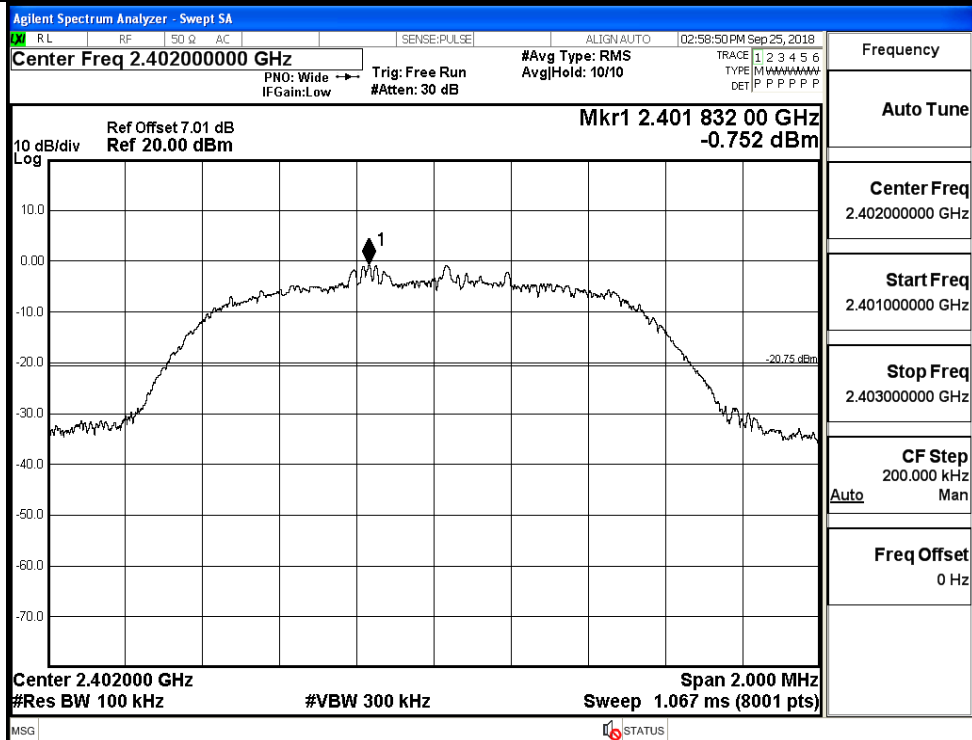


Puw

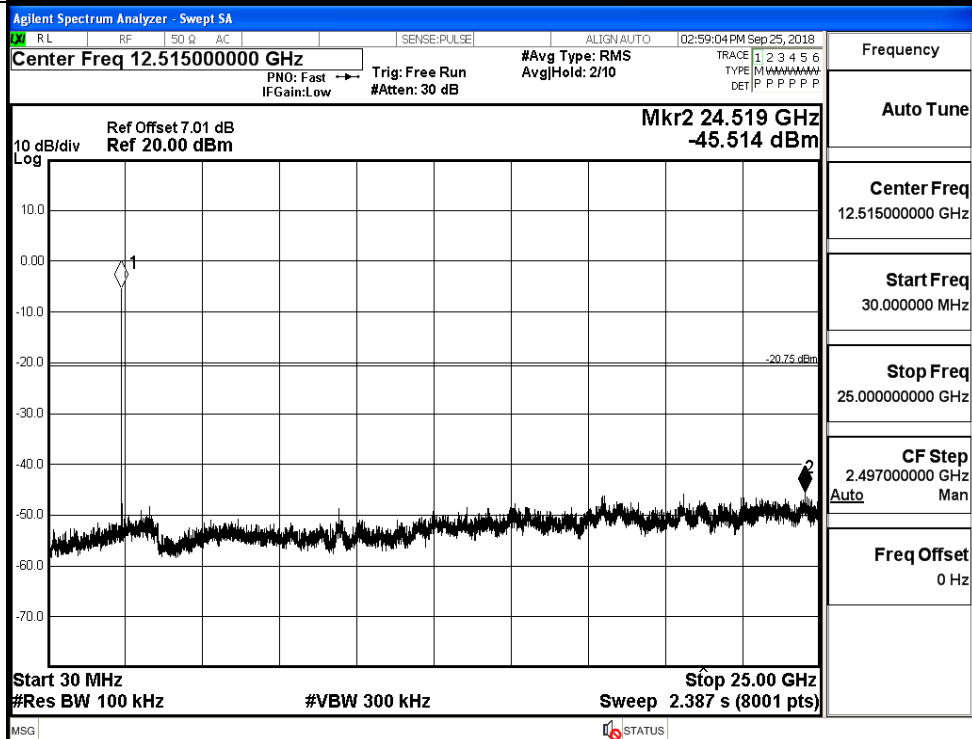


8DPSK LCH Graphs

Pref

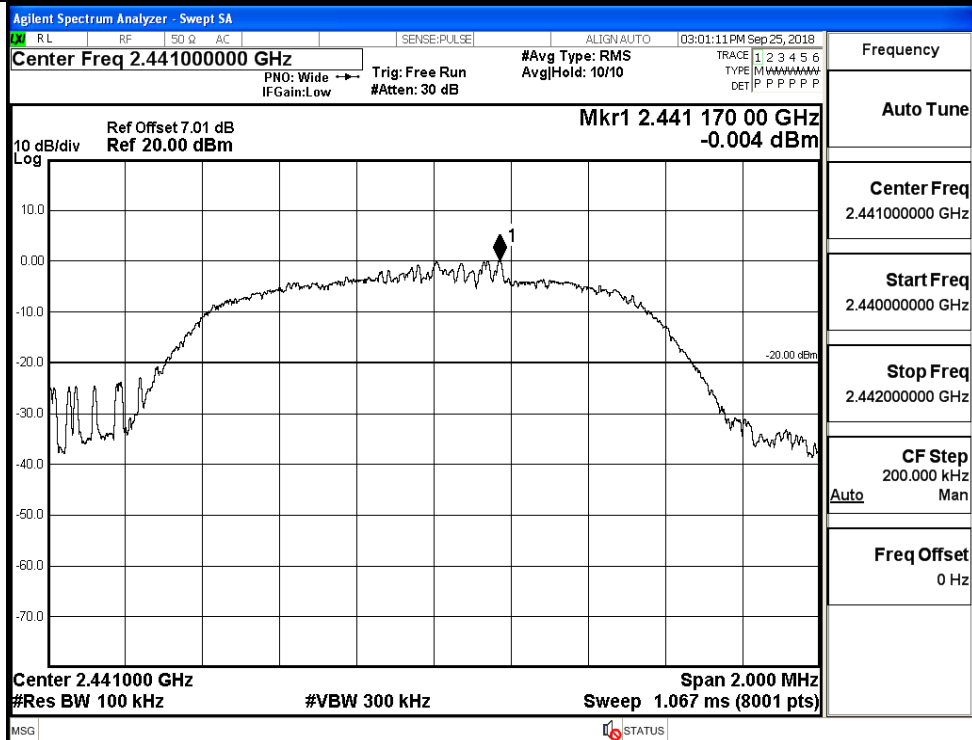


Puw

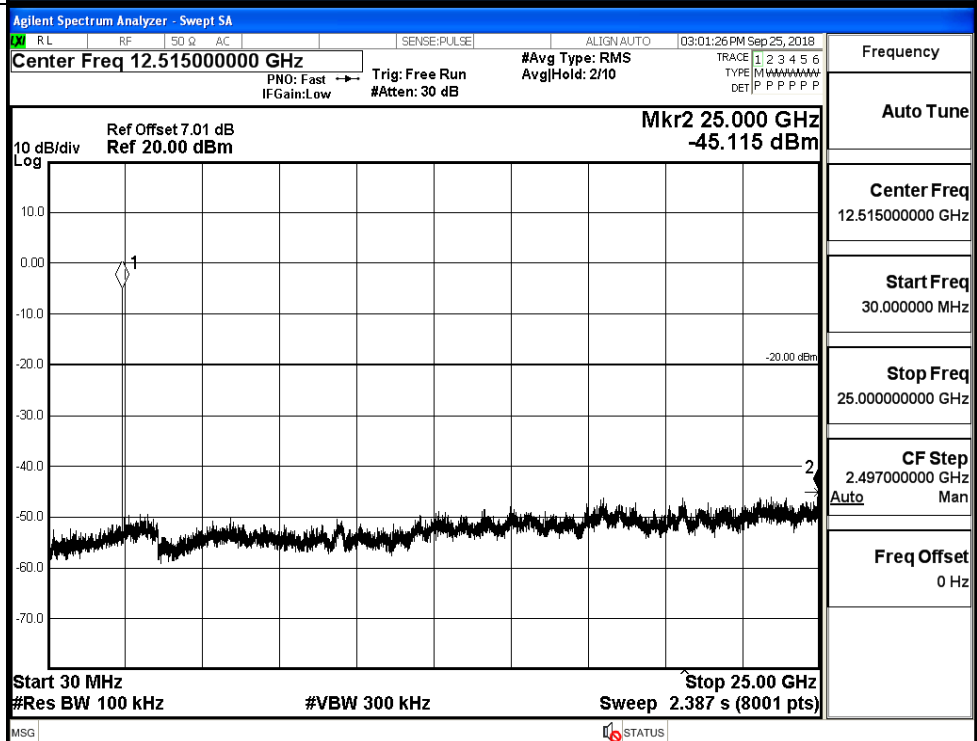


8DPSK MCH Graphs

Pref

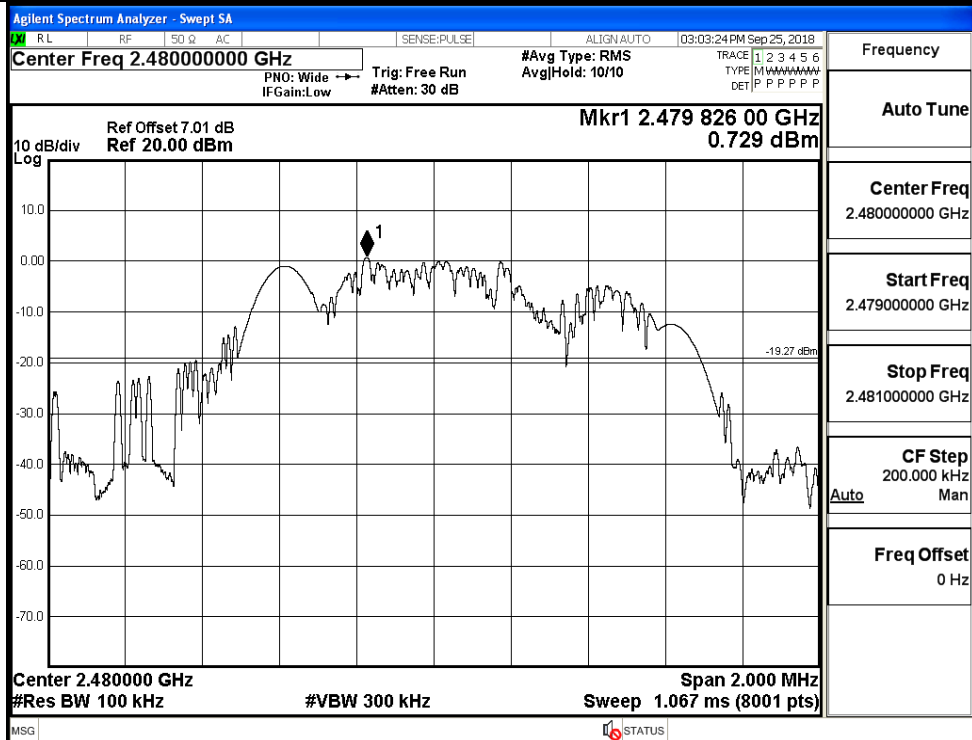


Puw

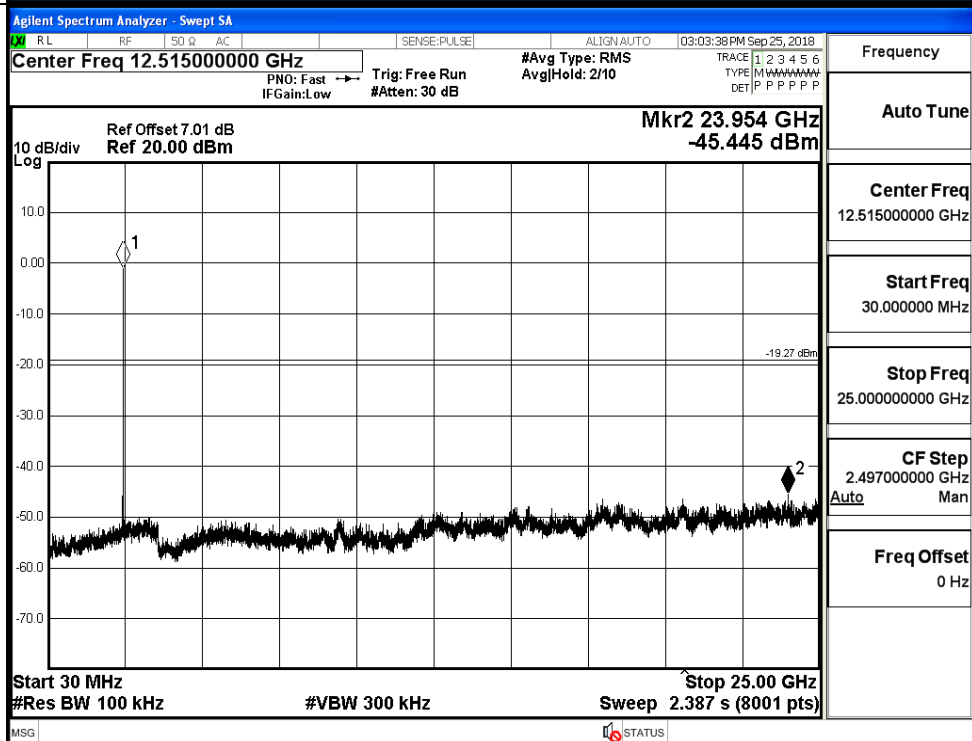


8DPSK_HCH Graphs

Pref



Puw

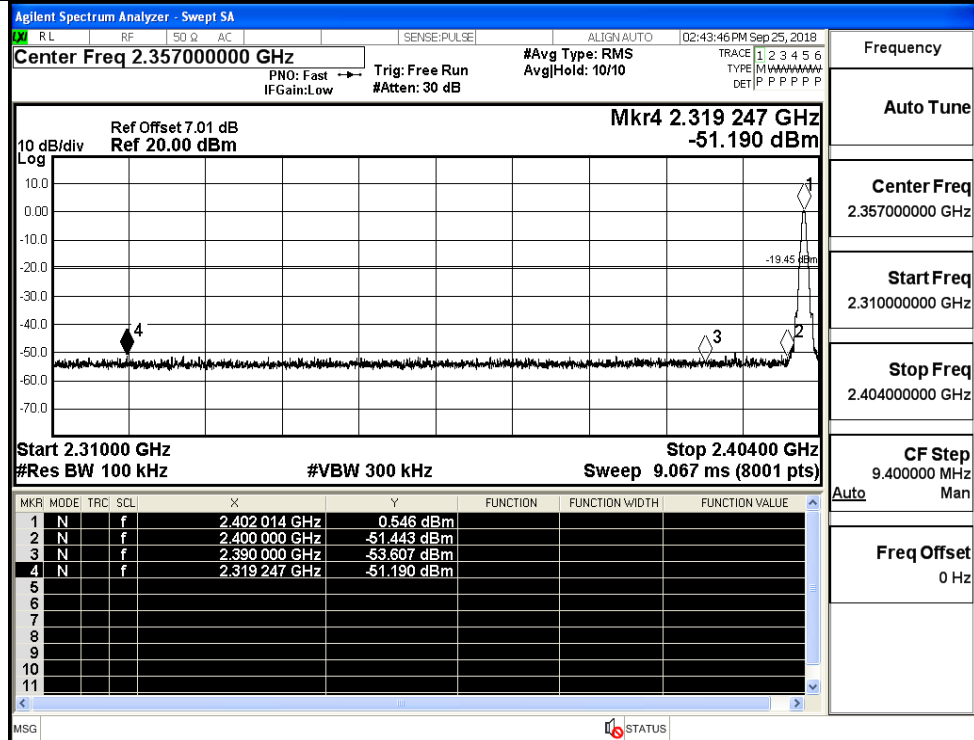


A.7 Band-edge for RF Conducted Emissions

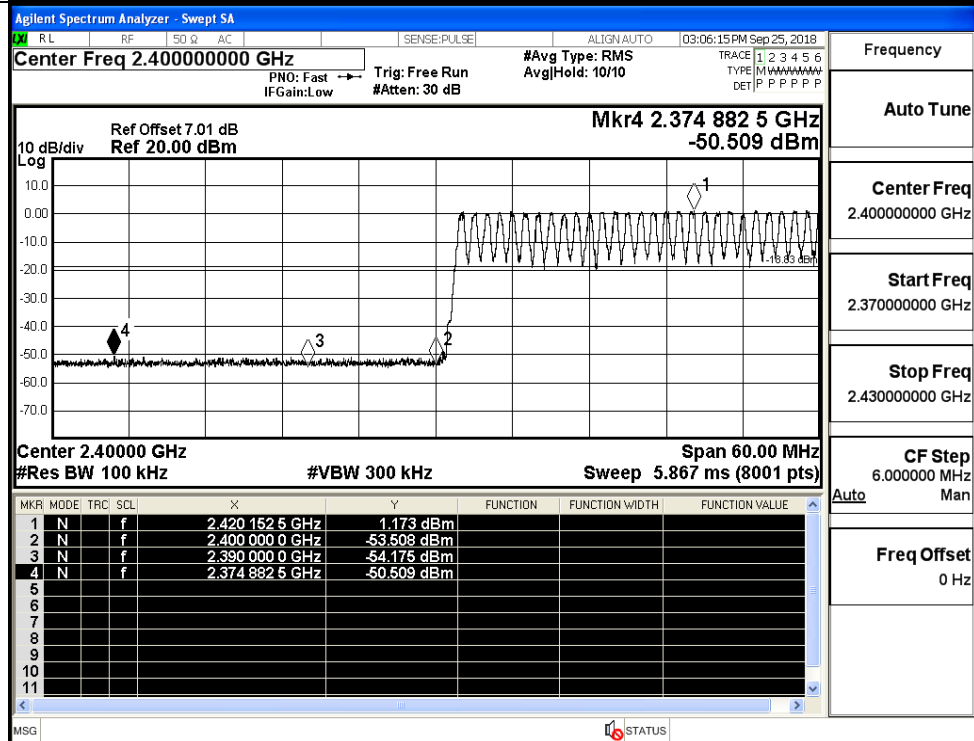
Mode	Channel	Carrier Frequency [MHz]	Carrier Power [dBm]	Frequency Hopping	Max Spurious Level [dBm]	Limit [dBm]	Verdict
GFSK	LCH	2402	0.546	Off	-51.190	-19.45	PASS
			1.173	On	-50.509	-18.83	PASS
	HCH	2480	2.292	Off	-50.087	-17.71	PASS
			2.131	On	-50.179	-17.87	PASS
$\pi/4$ DQPSK	LCH	2402	-0.150	Off	-37.325	-20.15	PASS
			0.412	On	-50.361	-19.59	PASS
	HCH	2480	0.748	Off	-30.423	-19.25	PASS
			1.124	On	-50.314	-18.88	PASS
8DPSK	LCH	2402	-0.685	Off	-50.357	-20.69	PASS
			0.580	On	-50.263	-19.42	PASS
	HCH	2480	0.808	Off	-50.491	-19.19	PASS
			1.265	On	-50.190	-18.74	PASS

Test Graphs

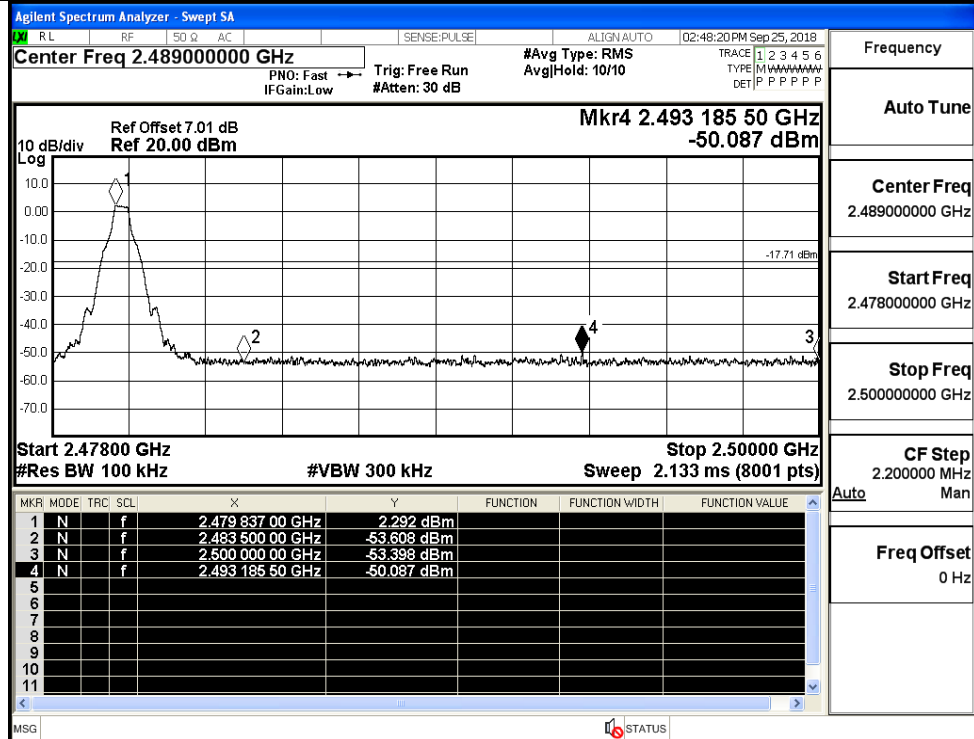
GFSK/LCH/No Hop



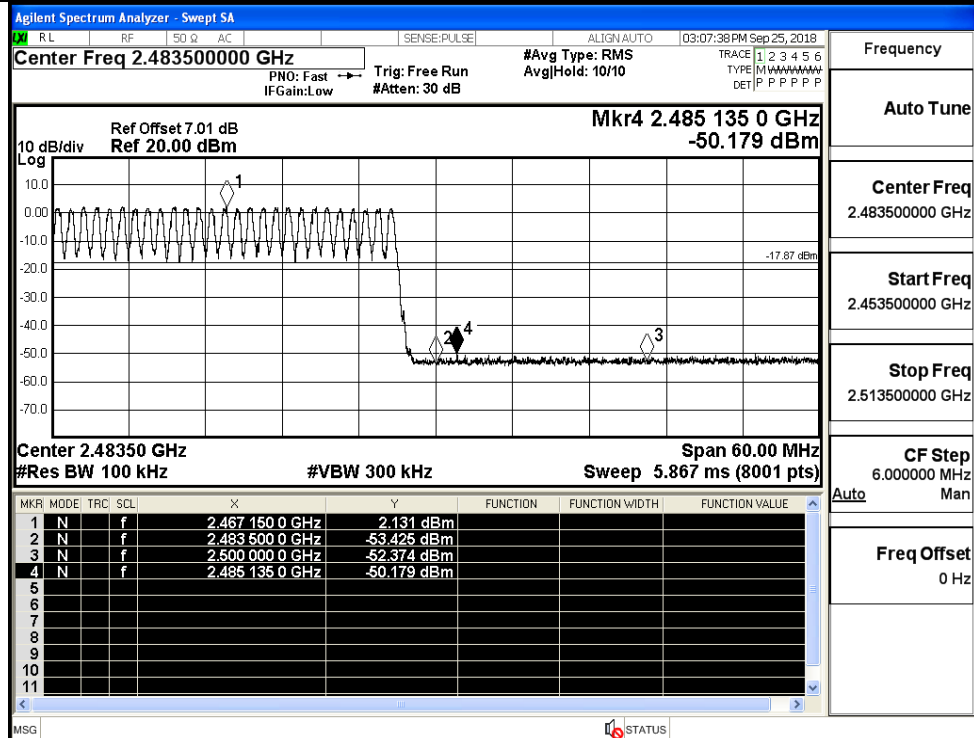
GFSK/LCH/Hop



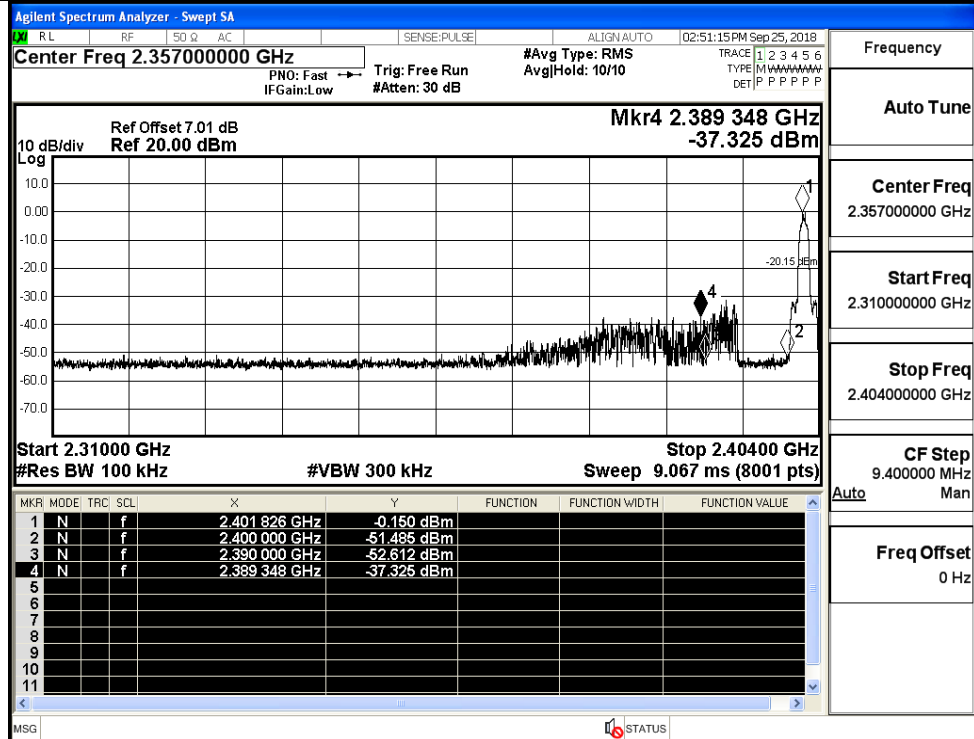
GFSK/HCH/No Hop



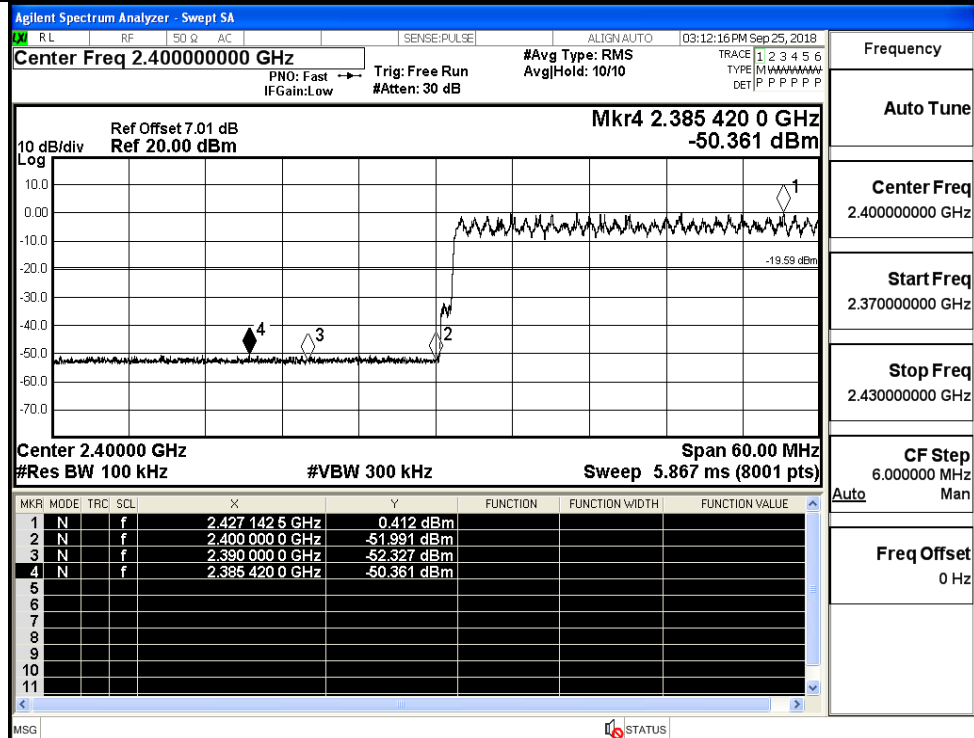
GFSK/HCH/Hop



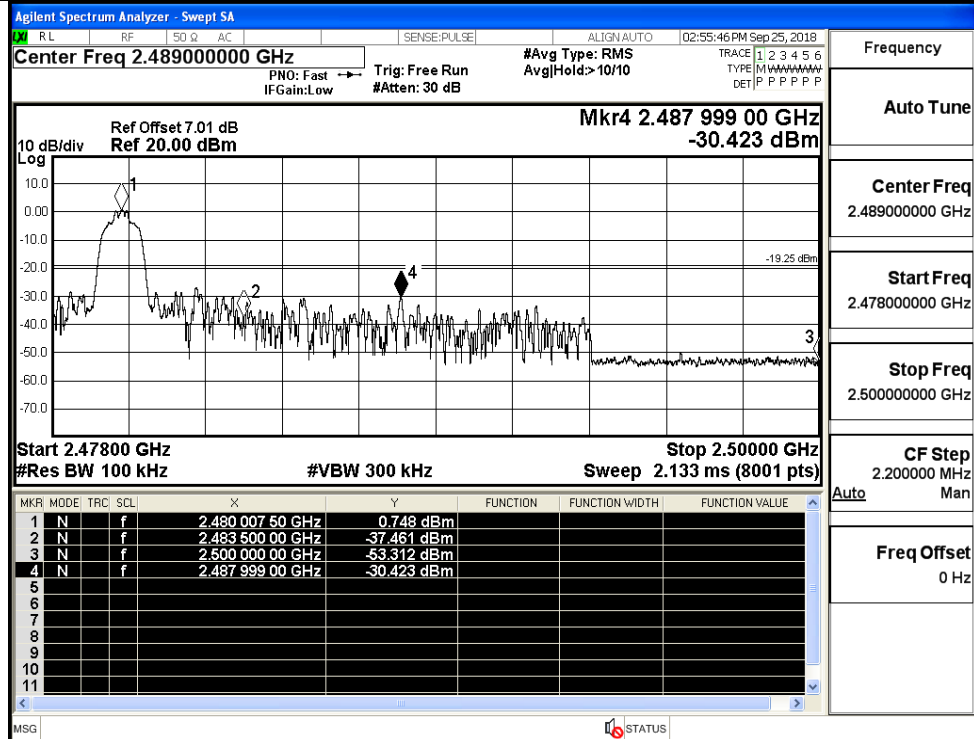
$\pi/4$ DQPSK/LCH/No
Hop



$\pi/4$ DQPSK/LCH/Hop



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

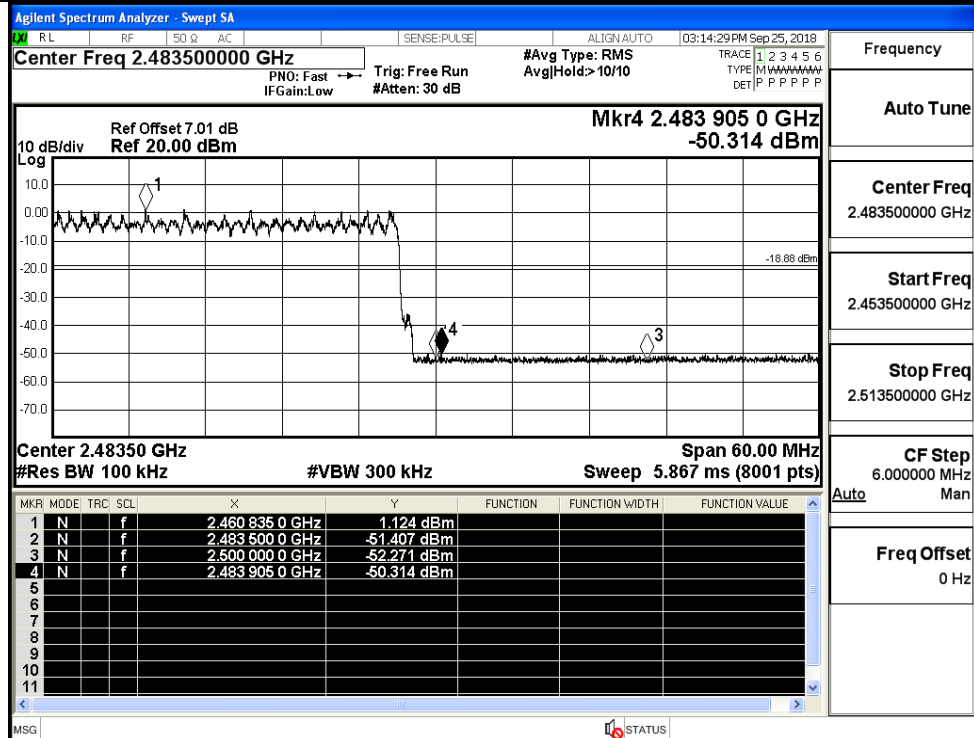


Frequency

Auto Tune

Center Freq
2.489000000 GHzStart Freq
2.478000000 GHzStop Freq
2.500000000 GHzCF Step
2.200000 MHz
Auto ManFreq Offset
0 Hz

$\pi/4$ DQPSK/HCH/Hop

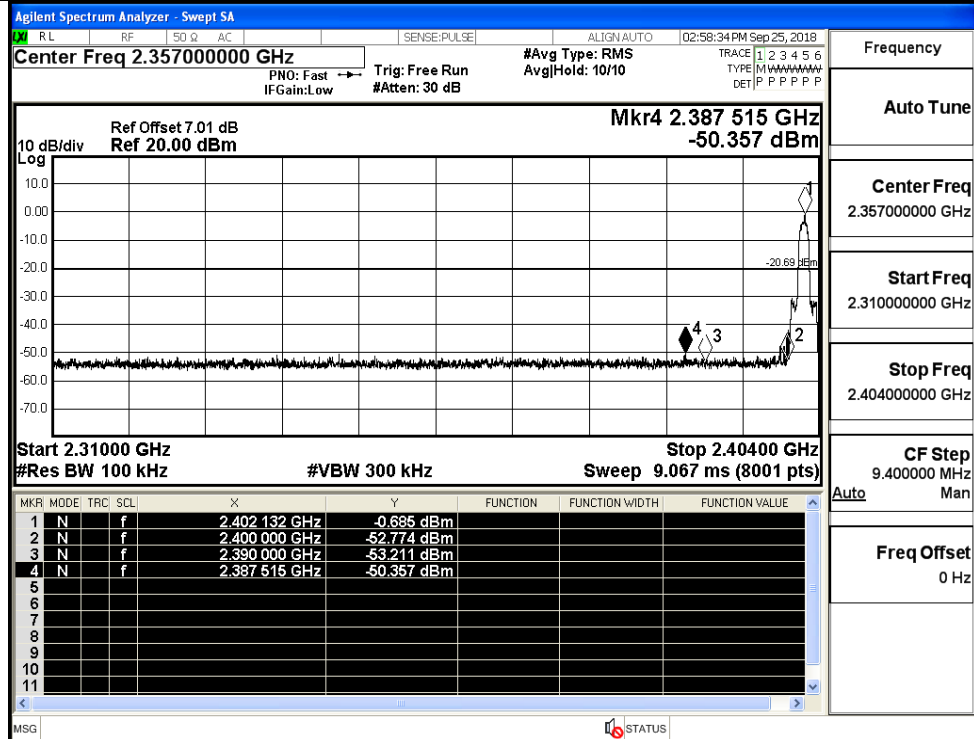


Frequency

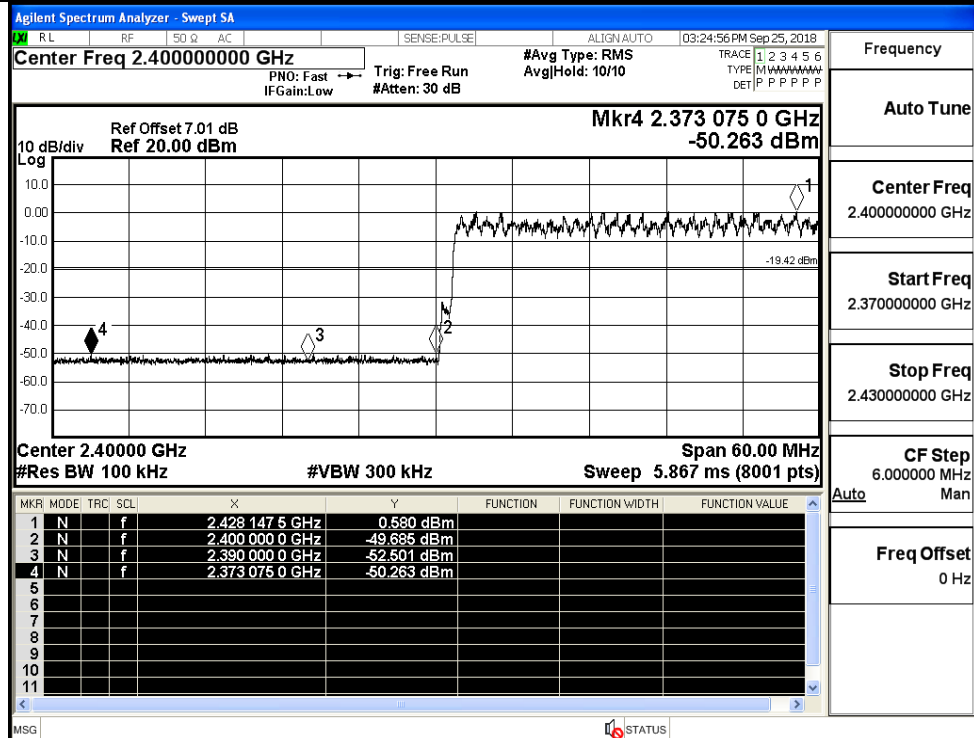
Auto Tune

Center Freq
2.483500000 GHzStart Freq
2.453500000 GHzStop Freq
2.513500000 GHzCF Step
6.000000 MHz
Auto ManFreq Offset
0 Hz

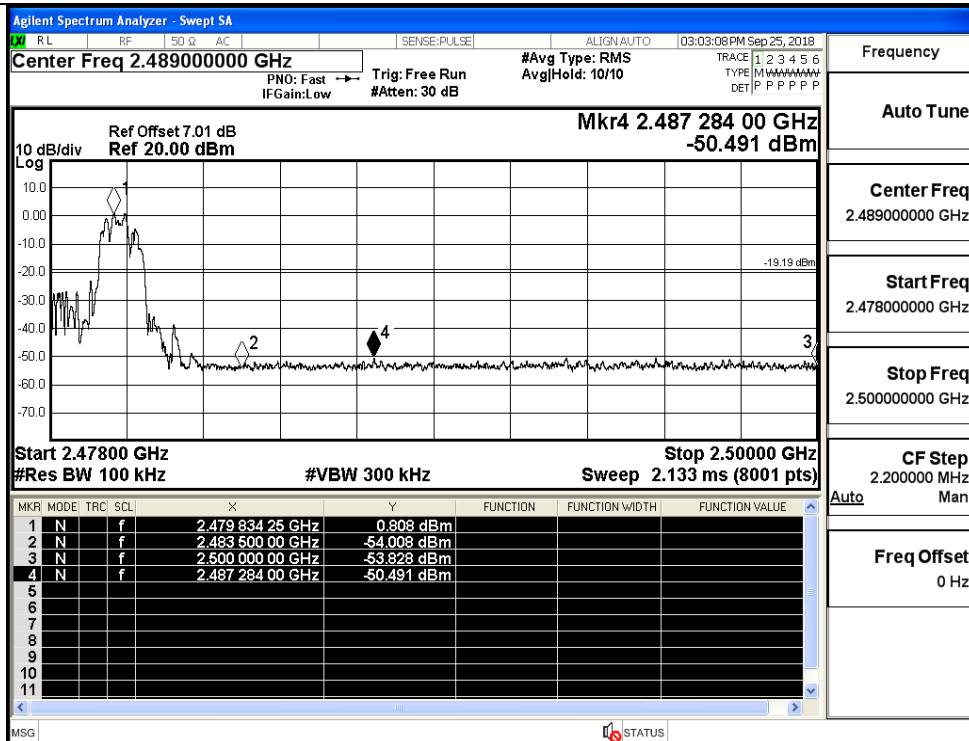
8DPSK/LCH/No Hop



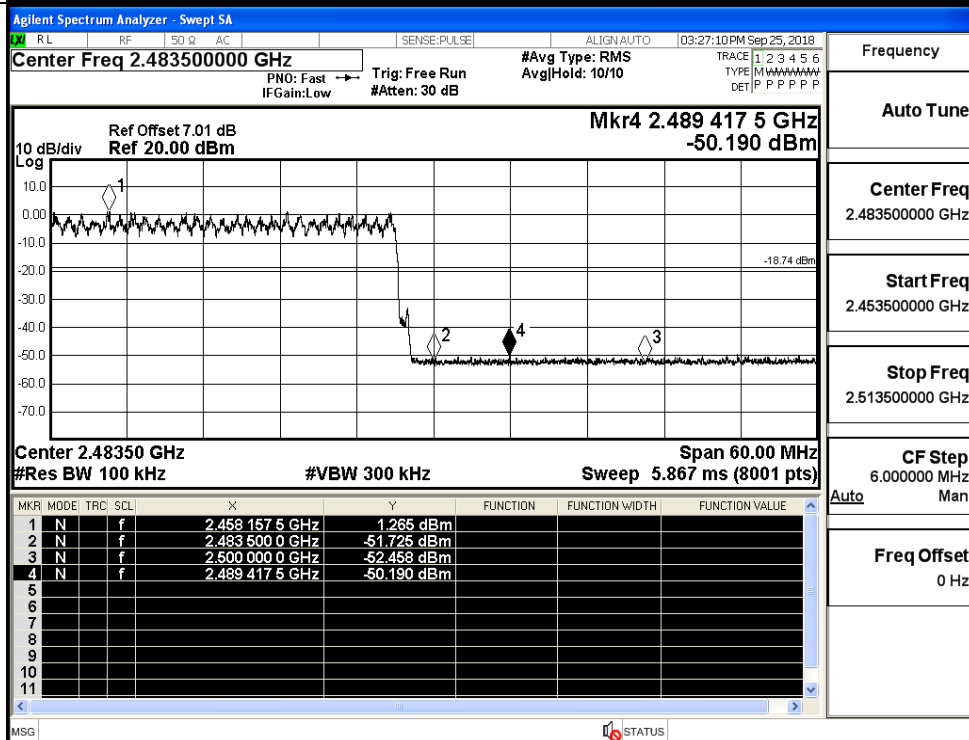
8DPSK/LCH/Hop



8DPSK/HCH/No Hop



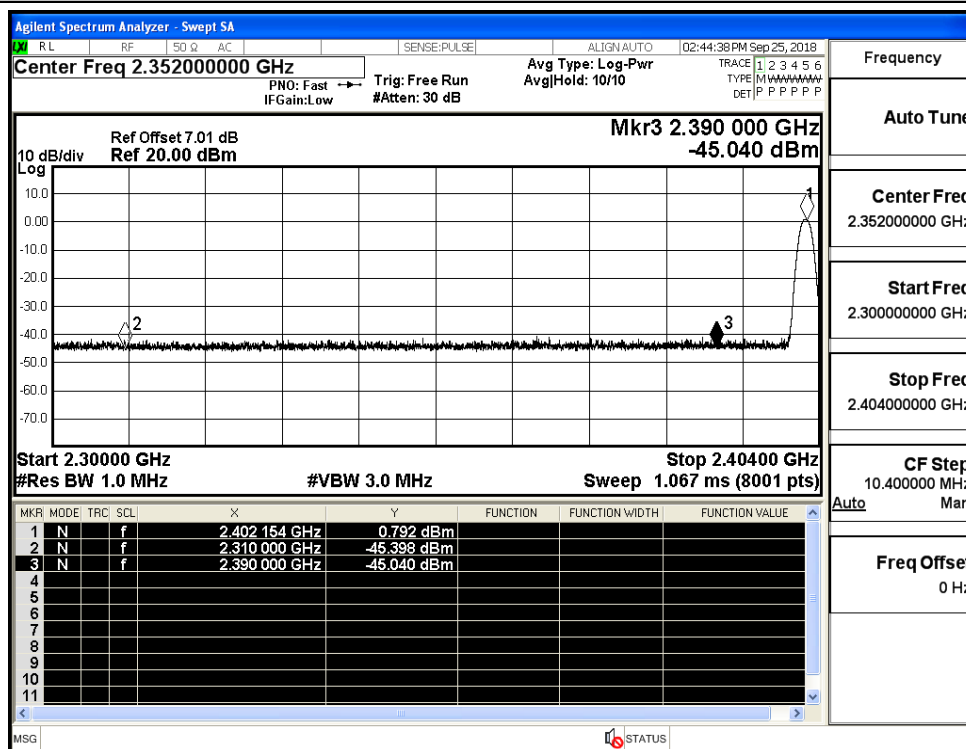
8DPSK/HCH/Hop



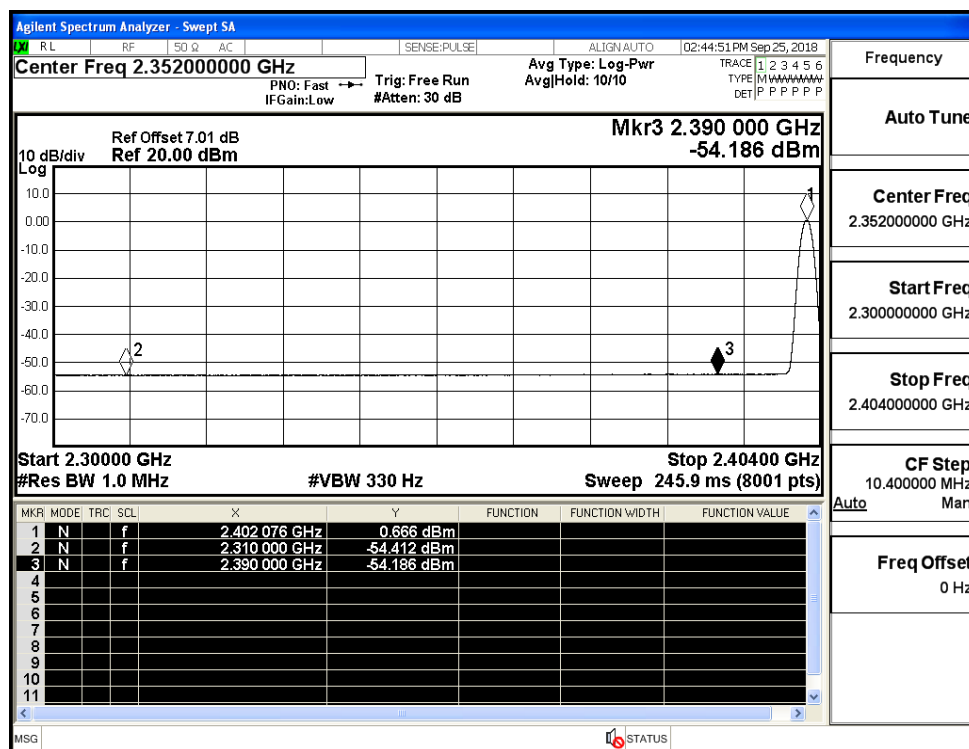
A.8 Restrict-band band-edge measurements

Test Mode	Hopping	Freq.	Power [dBm]	Gain	Ground Factor	E [dBuV/m]	Detector	Limit [dBuV/m]	Verdict
GFSK	Off	2310.0	-45.40	2.5	0	52.36	PEAK	74	PASS
	Off	2310.0	-54.41	2.5	0	43.35	AV	54	PASS
	Off	2390.0	-45.04	2.5	0	52.72	PEAK	74	PASS
	Off	2390.0	-54.19	2.5	0	43.57	AV	54	PASS
	Off	2483.5	-43.24	2.5	0	54.52	PEAK	74	PASS
	Off	2483.5	-53.88	2.5	0	43.88	AV	54	PASS
	Off	2500.0	-43.51	2.5	0	54.25	PEAK	74	PASS
	Off	2500.0	-53.83	2.5	0	43.93	AV	54	PASS
$\pi/4$ DQPSK	Off	2310.0	-43.41	2.5	0	54.35	PEAK	74	PASS
	Off	2310.0	-54.50	2.5	0	43.26	AV	54	PASS
	Off	2390.0	-43.44	2.5	0	54.32	PEAK	74	PASS
	Off	2390.0	-54.25	2.5	0	43.51	AV	54	PASS
	Off	2483.5	-43.26	2.5	0	54.5	PEAK	74	PASS
	Off	2483.5	-53.72	2.5	0	44.04	AV	54	PASS
	Off	2500.0	-41.80	2.5	0	55.96	PEAK	74	PASS
	Off	2500.0	-53.79	2.5	0	43.97	AV	54	PASS
8DPSK	Off	2310.0	-43.24	2.5	0	54.52	PEAK	74	PASS
	Off	2310.0	-54.41	2.5	0	43.35	AV	54	PASS
	Off	2390.0	-44.23	2.5	0	53.53	PEAK	74	PASS
	Off	2390.0	-54.17	2.5	0	43.59	AV	54	PASS
	Off	2483.5	-43.05	2.5	0	54.71	PEAK	74	PASS
	Off	2483.5	-53.89	2.5	0	43.87	AV	54	PASS
	Off	2500.0	-42.64	2.5	0	55.12	PEAK	74	PASS
	Off	2500.0	-53.81	2.5	0	43.95	AV	54	PASS

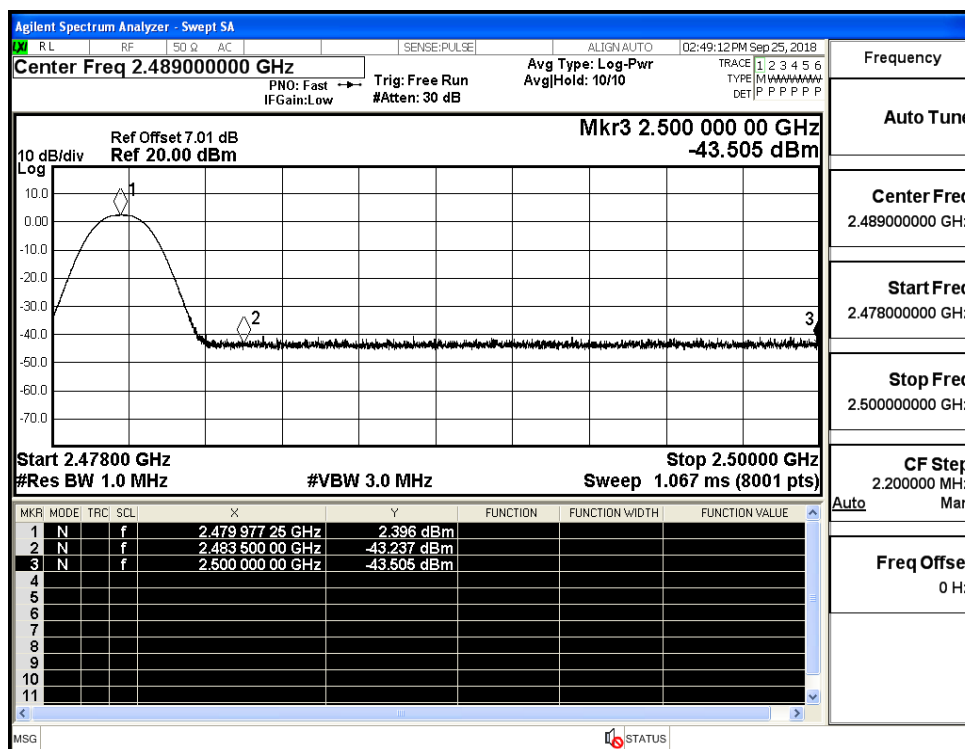
Restrict-band band-edge measurements_Hopping Off_GFSK_PEAK (Low Channel)



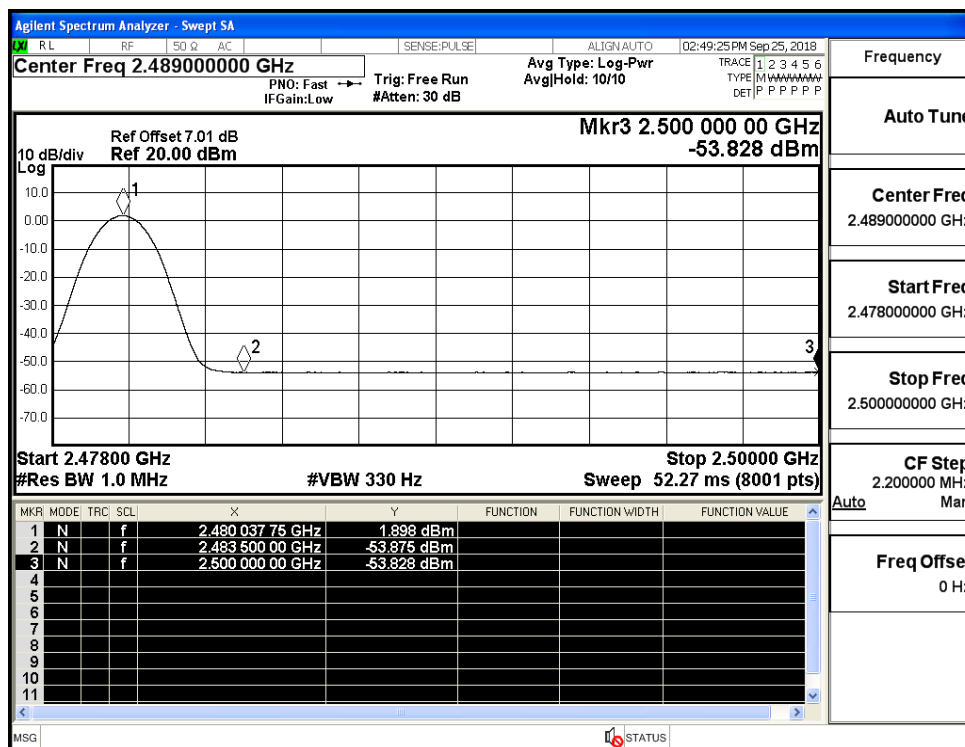
Restrict-band band-edge measurements_Hopping Off_GFSK_Average (Low Channel)

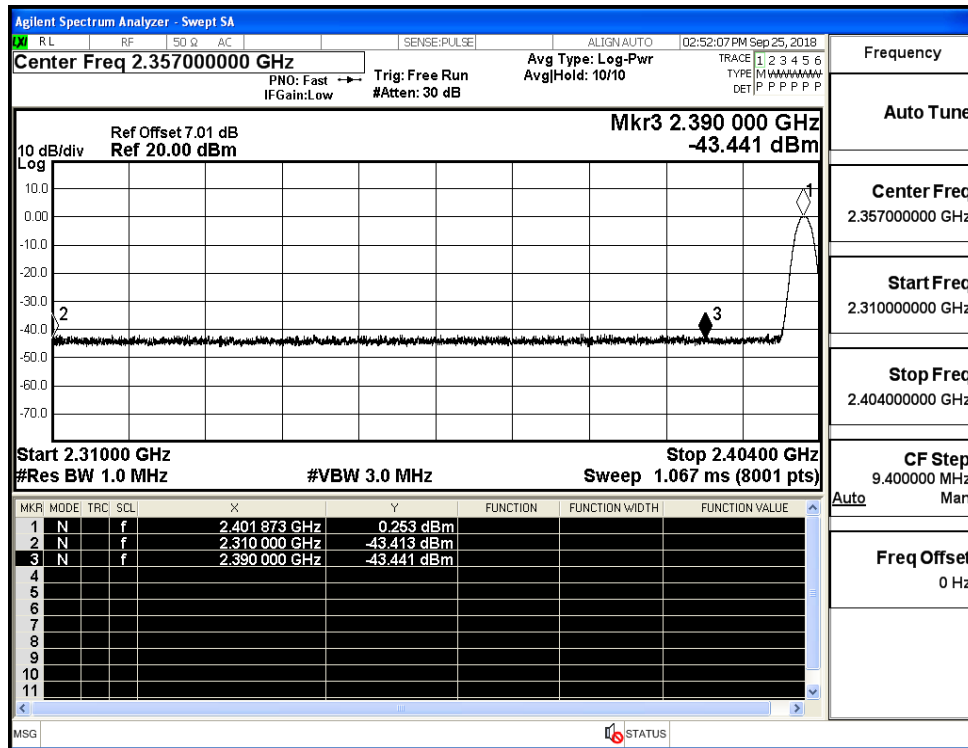
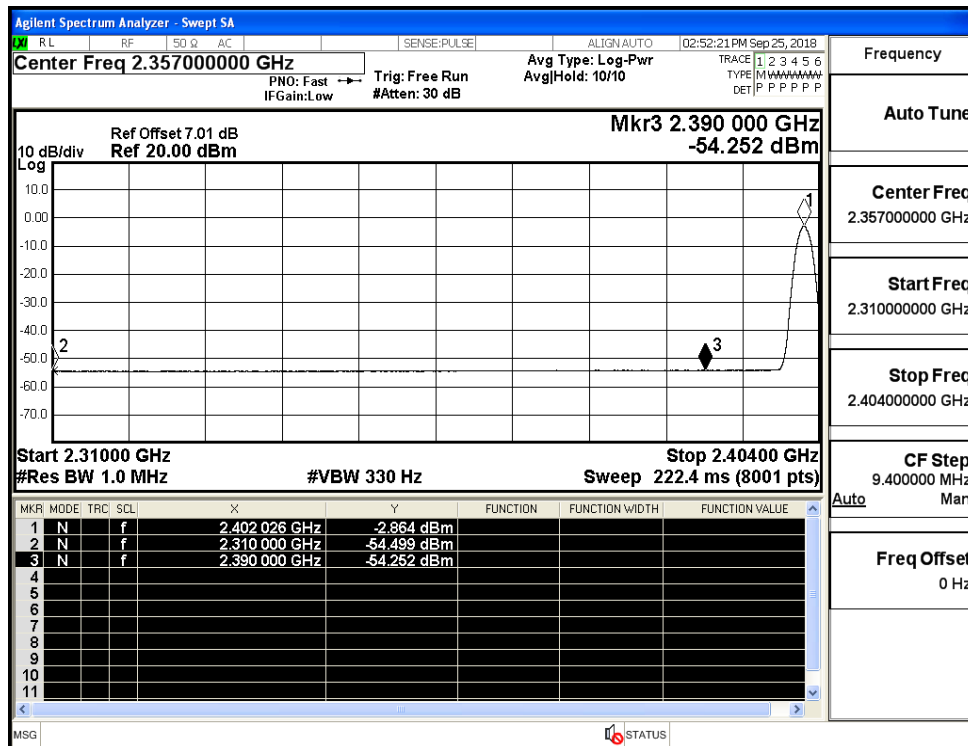


Restrict-band band-edge measurements_Hopping Off_GFSK_PEAK (High Channel)

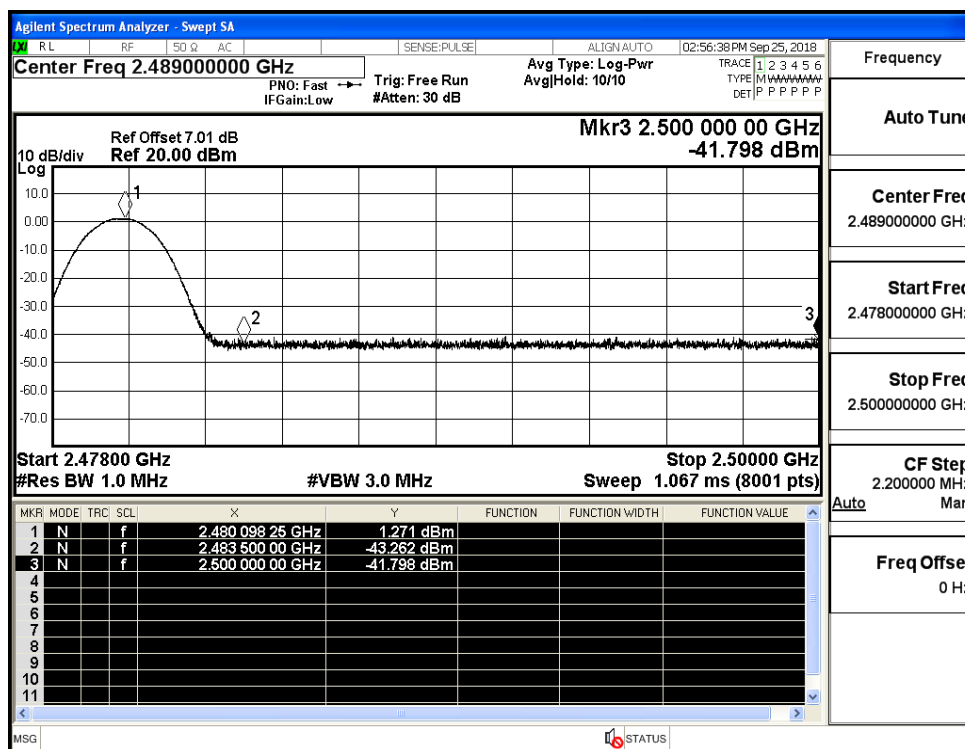


Restrict-band band-edge measurements_Hopping Off_GFSK_Average (High Channel)

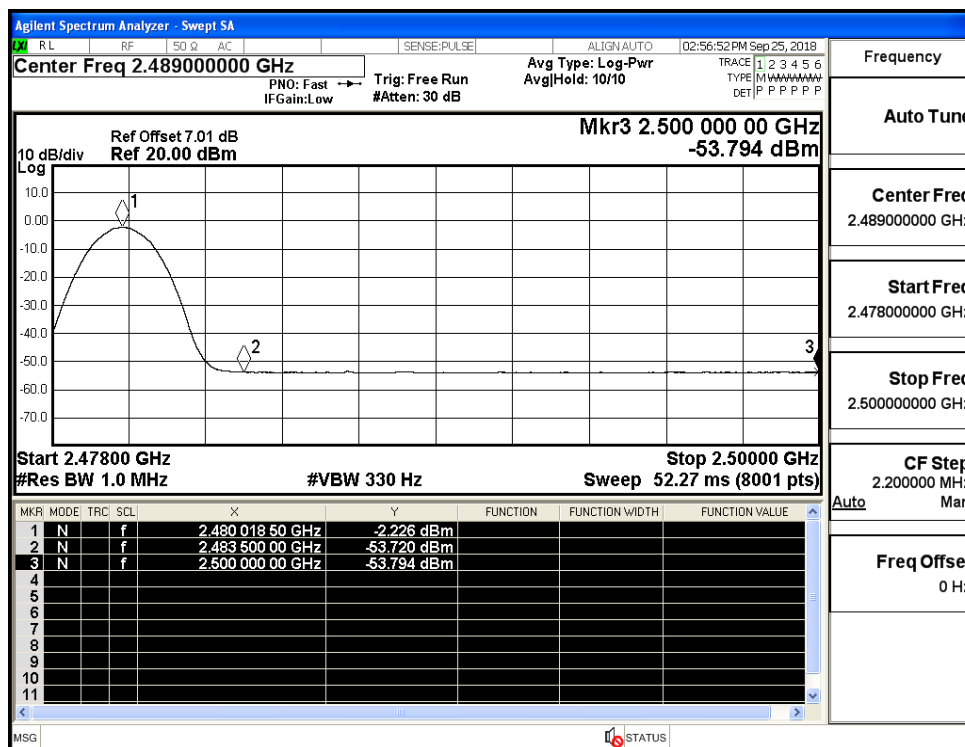


Restrict-band band-edge measurements_Hopping Off $\pi/4$ -DQPSK_PEAK (Low Channel)Restrict-band band-edge measurements_Hopping Off $\pi/4$ -DQPSK_Average (Low Channel)

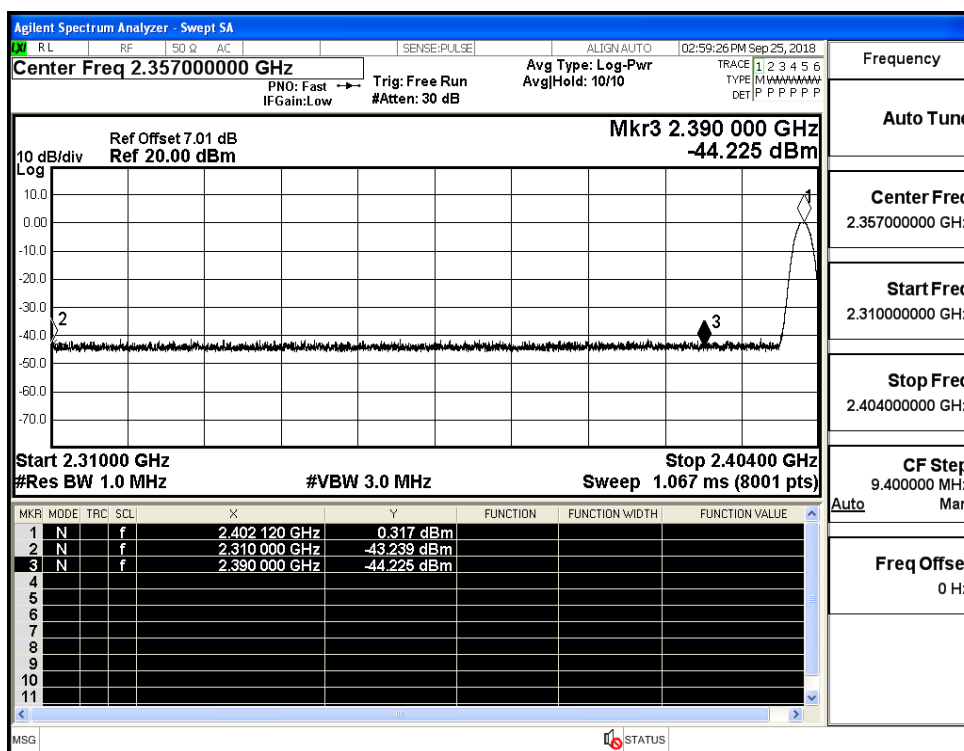
Restrict-band band-edge measurements_Hopping Off_π/4-DQPSK_PEAK (High Channel)



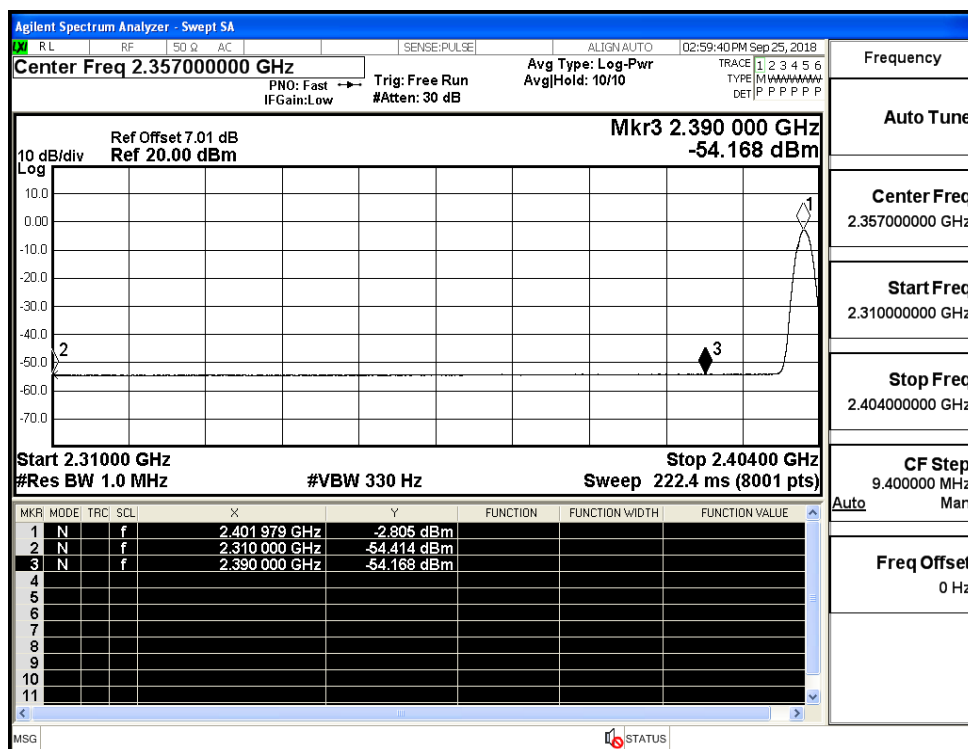
Restrict-band band-edge measurements_Hopping Off_π/4-DQPSK_Average (High Channel)



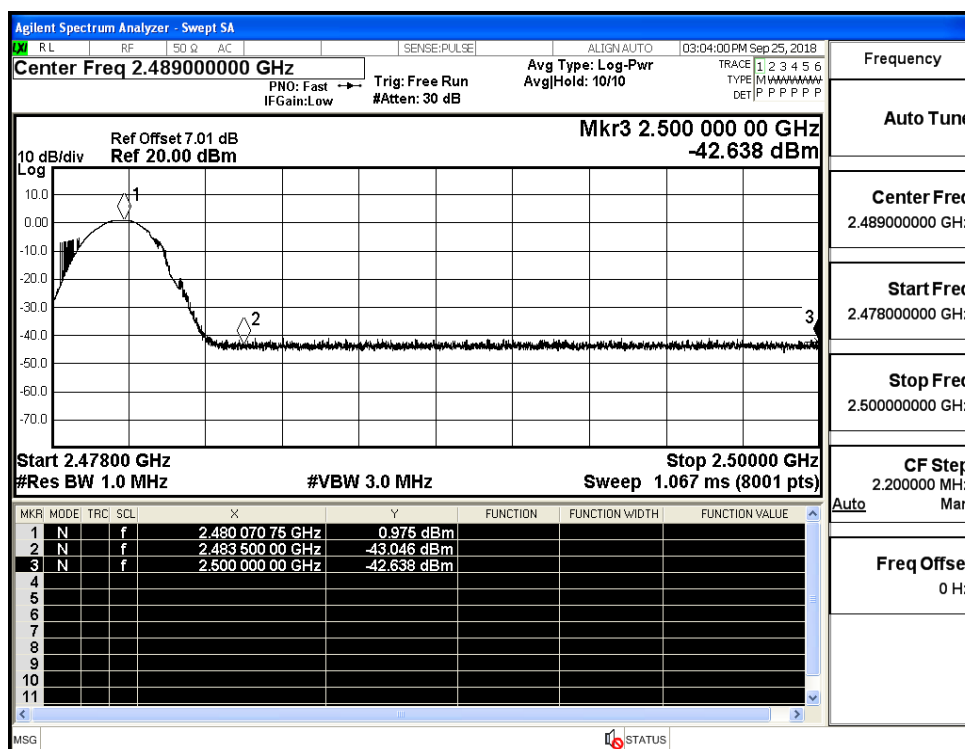
Restrict-band band-edge measurements_Hopping Off_8DPSK_PEAK (Low Channel)



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)

