

Appendix A

RF Test Data for BT V5.0(BDR/EDR) (Conducted Measurement)

Product Name: 8-Person Instant Cabin Tent with Built-in LED Lights and Bluetooth Speaker

Trade Mark: Ozark Trail

Test Model: 2ARCG8PB

Environmental Conditions

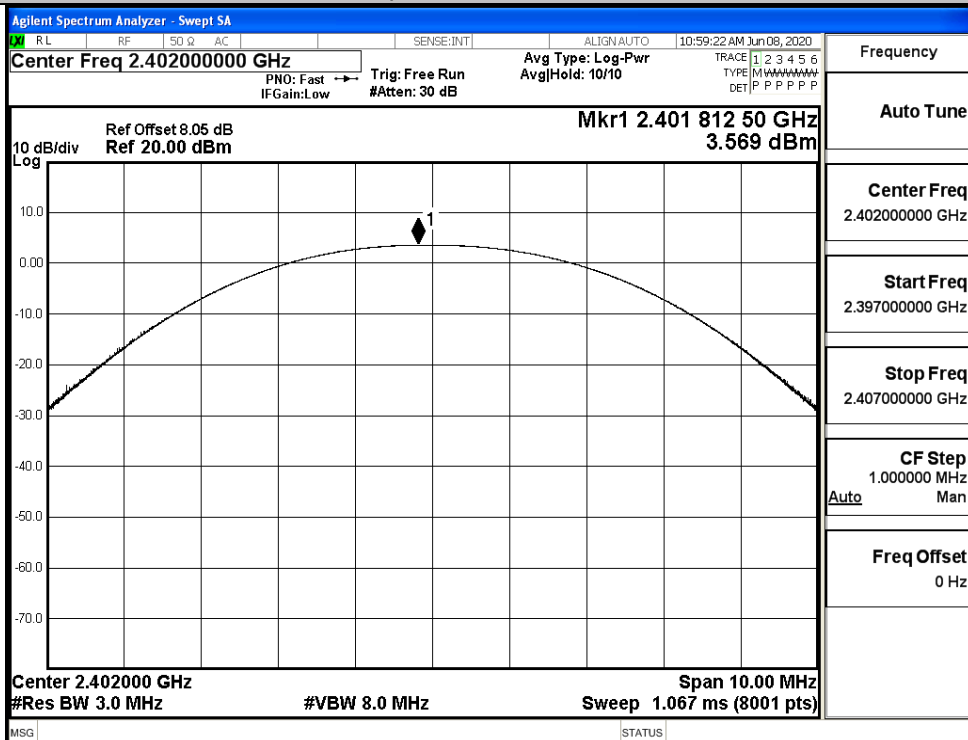
Temperature:	23.5 ° C
Relative Humidity:	53.1%
ATM Pressure:	100.0 kPa
Test Engineer:	Scout Wu
Supervised by:	Li Huan

A.1 Maximum Conducted Peak Output Power

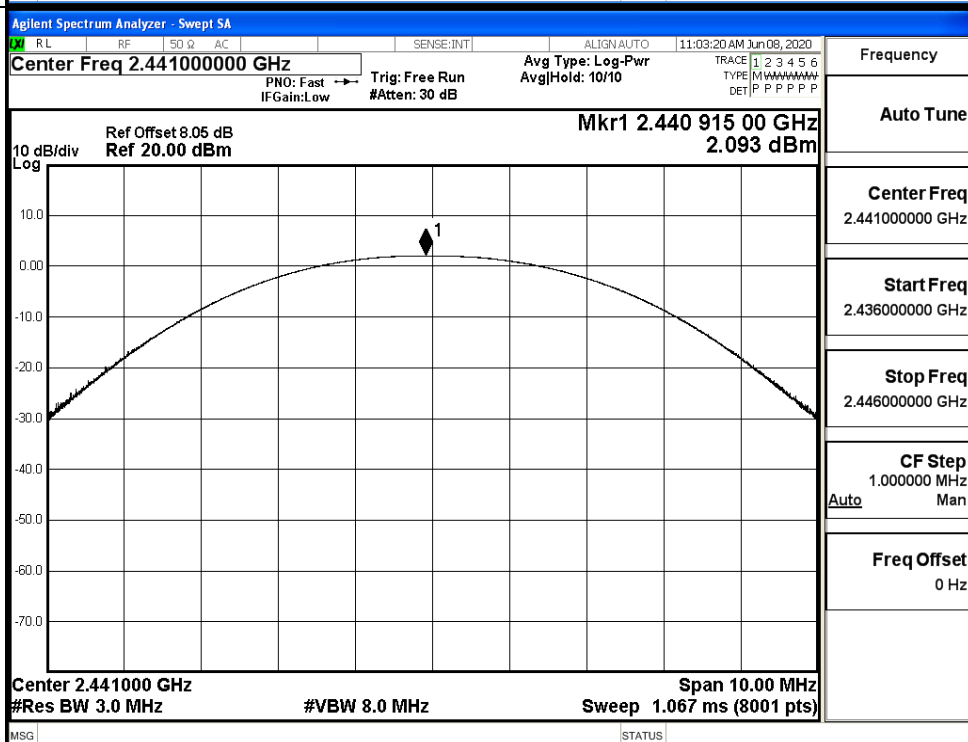
Mode	Channel.	Maximum Peak Output Power [dBm]	Limit [dBm]	Verdict
GFSK	LCH	3.569	21	PASS
	MCH	2.093	21	PASS
	HCH	0.423	21	PASS
$\pi/4$ DQPSK	LCH	3.110	21	PASS
	MCH	1.508	21	PASS
	HCH	-0.174	21	PASS
8DPSK	LCH	3.451	21	PASS
	MCH	1.921	21	PASS
	HCH	0.216	21	PASS

Test Graphs

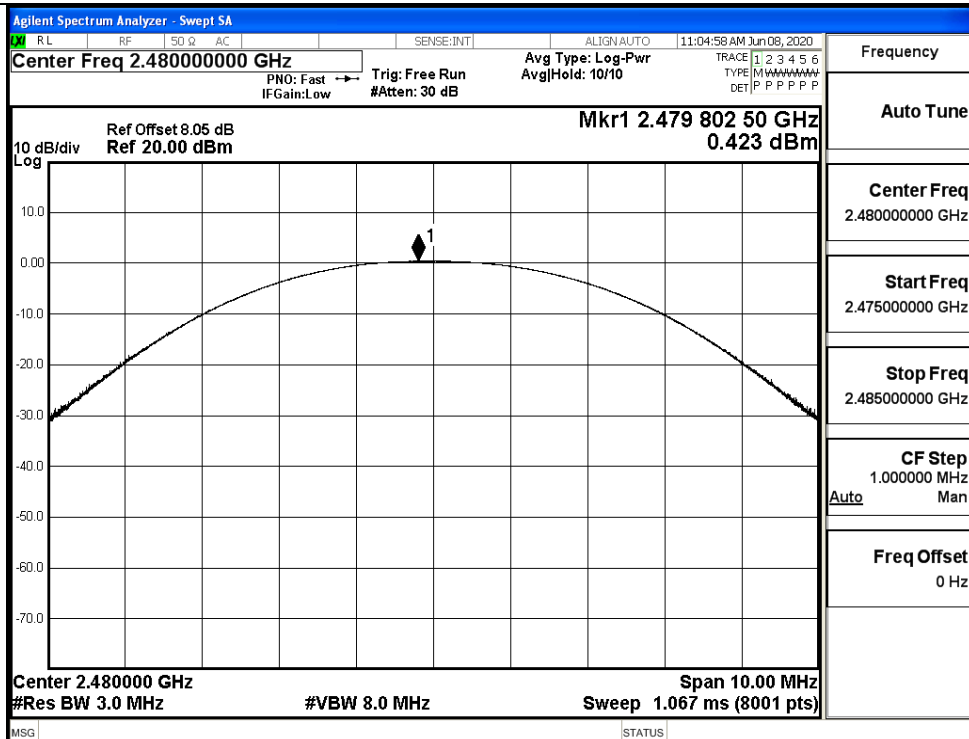
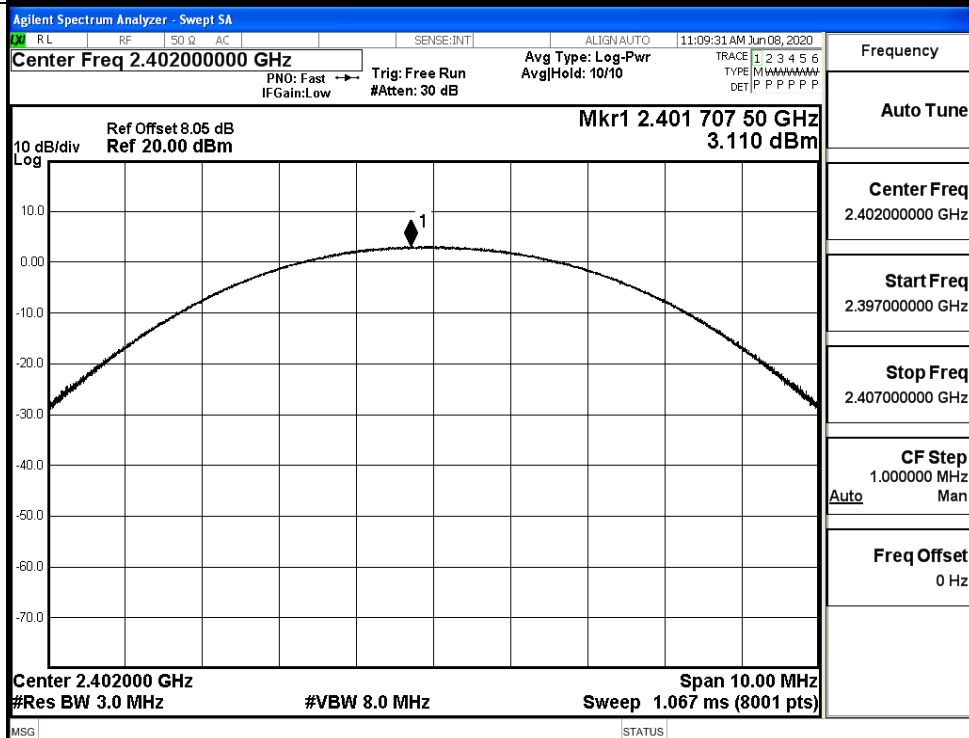
GFSK/LCH

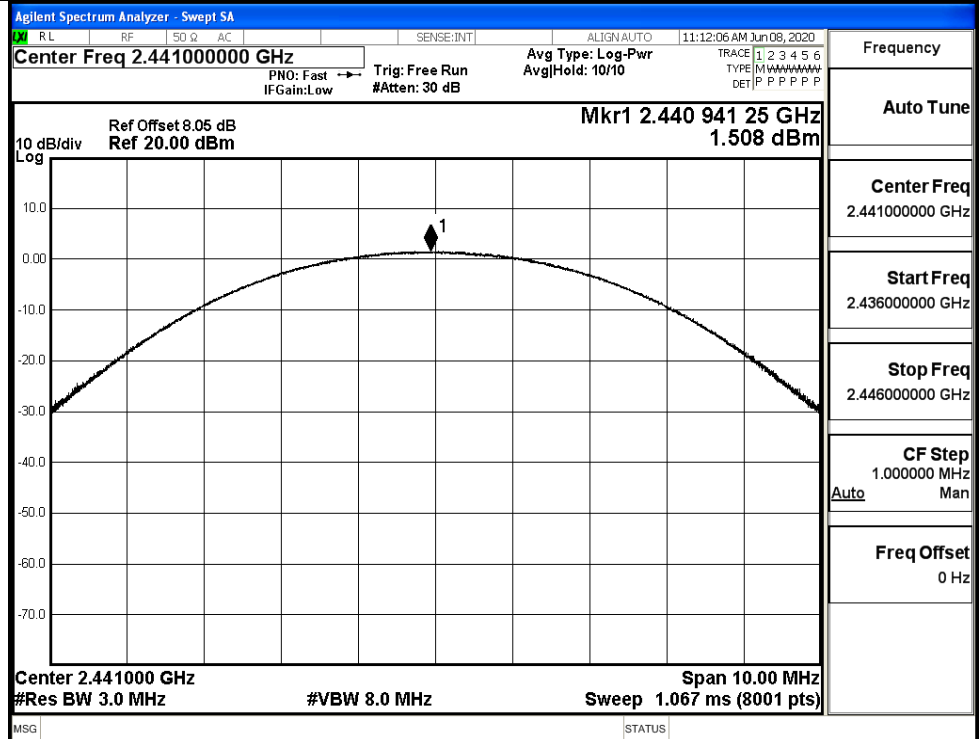
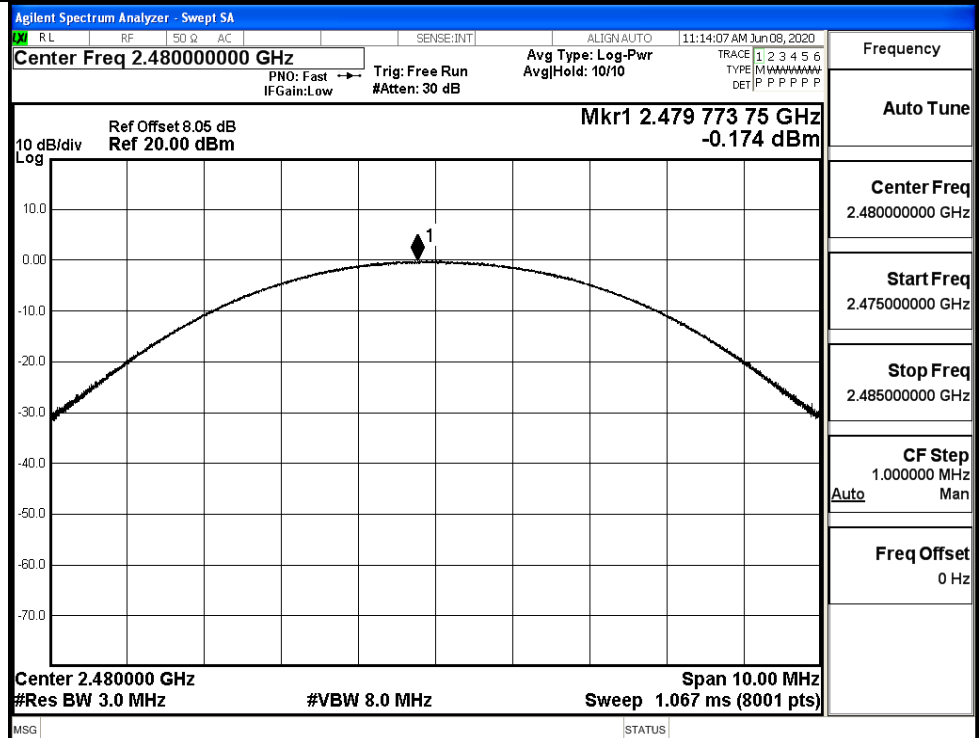


GFSK/MCH

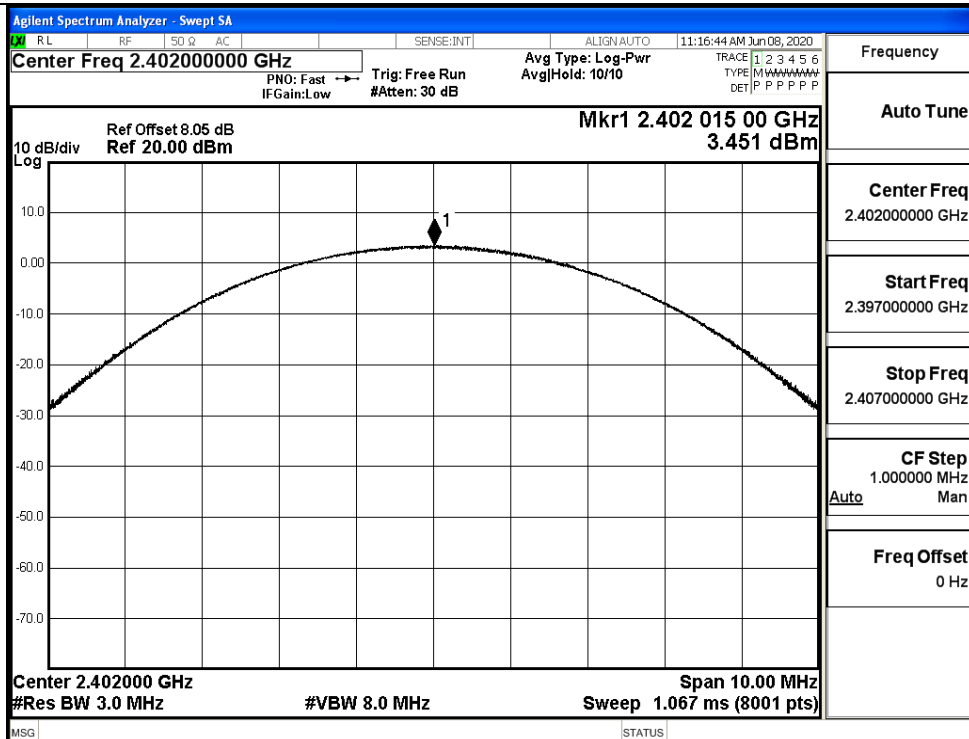


GFSK/HCH

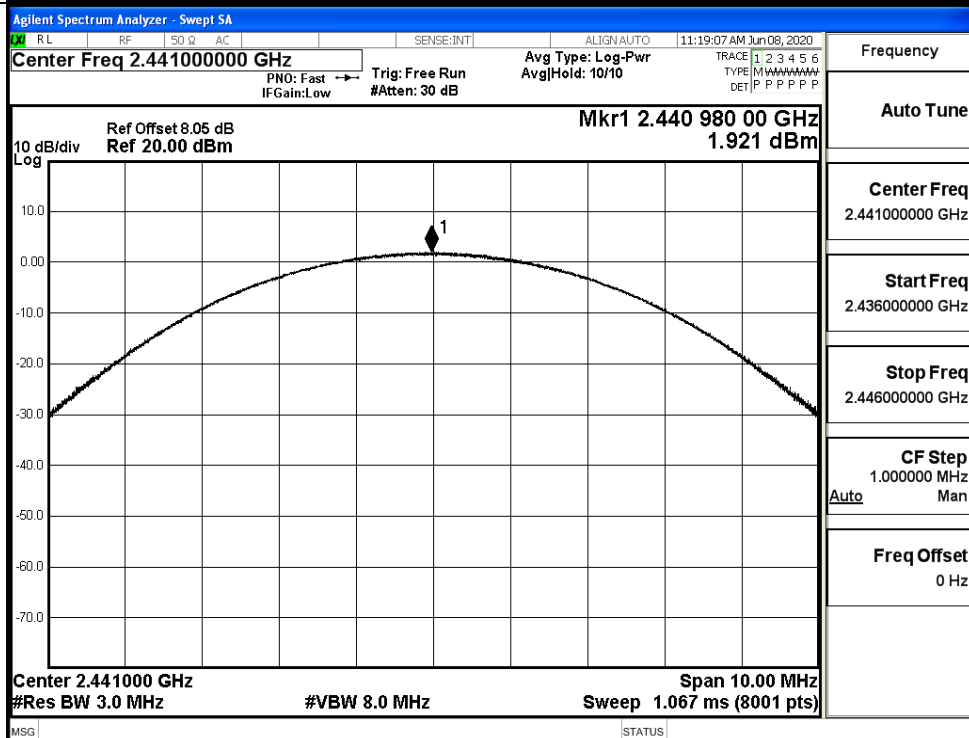
 $\pi/4$ DQPSK/LCH

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

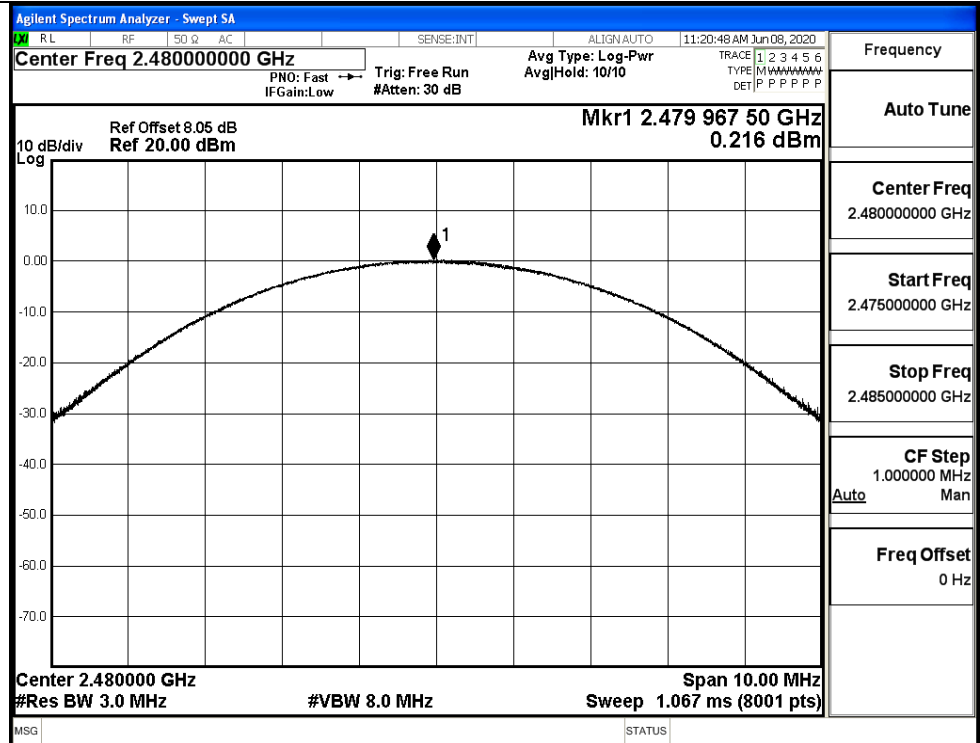
8DPSK/LCH



8DPSK/MCH



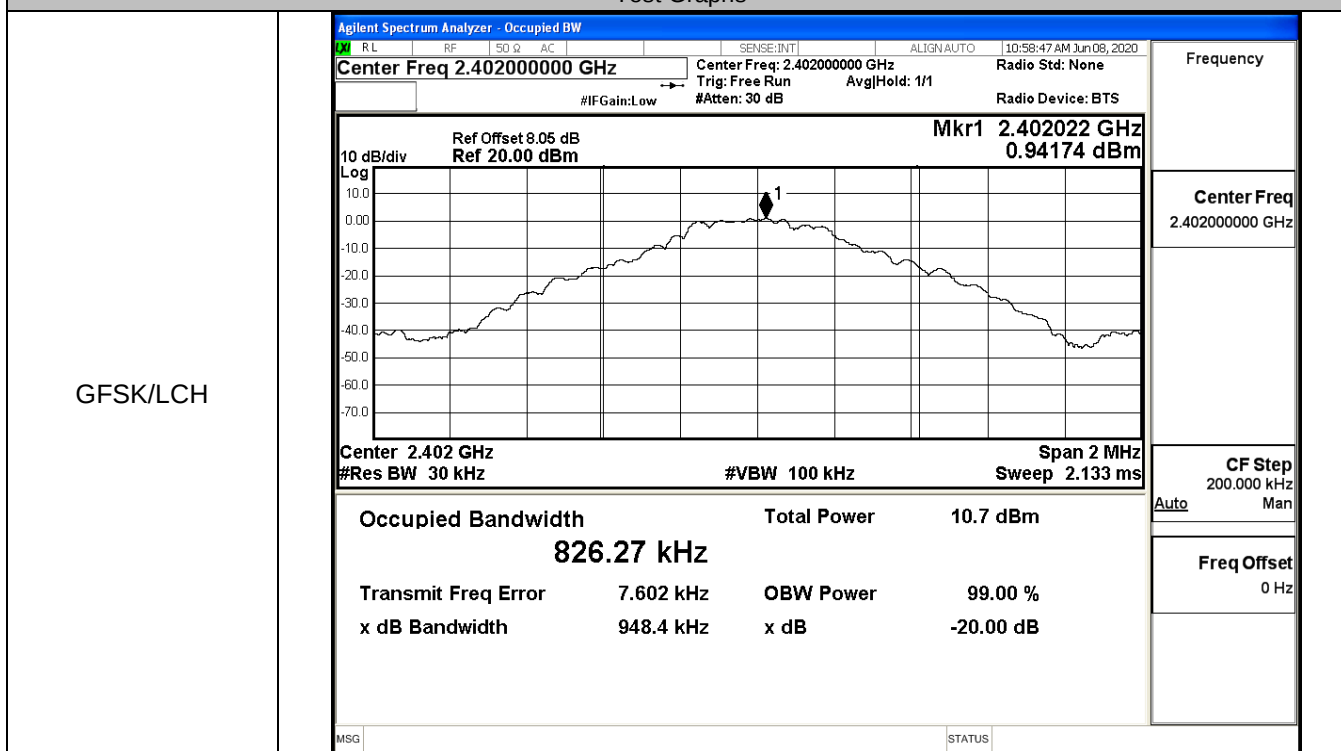
8DPSK/HCH



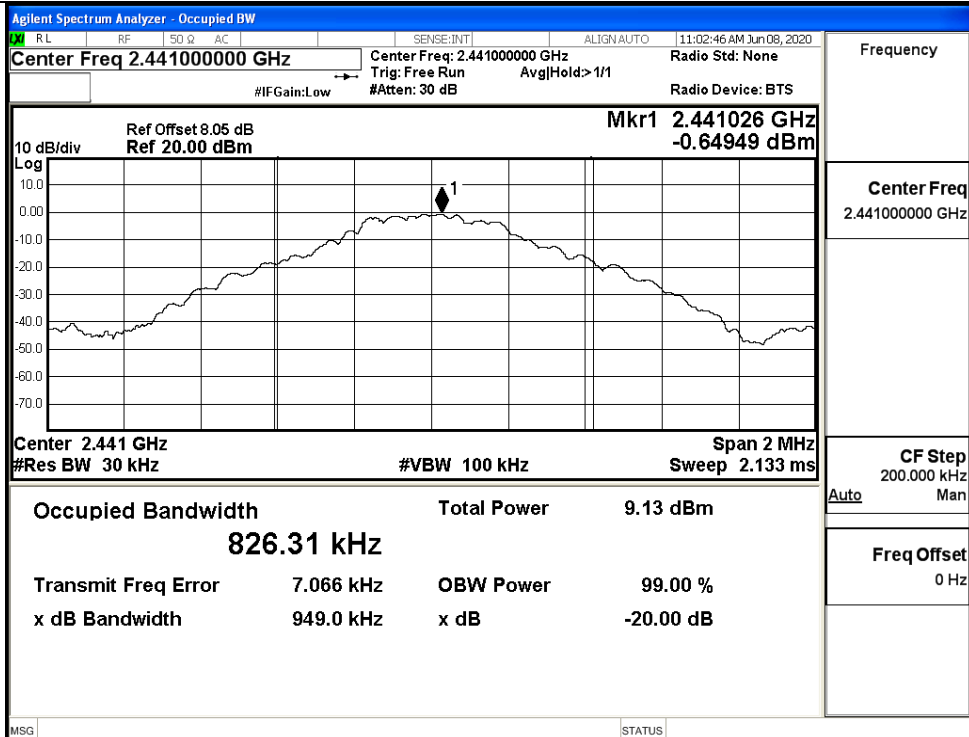
A.2 20dB Bandwidth

Mode	Channel.	20dB Bandwidth [MHz]	Limit [MHz]	Verdict
GFSK	LCH	0.9484	Not Specified	PASS
	MCH	0.9490	Not Specified	PASS
	HCH	0.9485	Not Specified	PASS
$\pi/4$ DQPSK	LCH	1.322	Not Specified	PASS
	MCH	1.322	Not Specified	PASS
	HCH	1.322	Not Specified	PASS
8DPSK	LCH	1.298	Not Specified	PASS
	MCH	1.300	Not Specified	PASS
	HCH	1.310	Not Specified	PASS

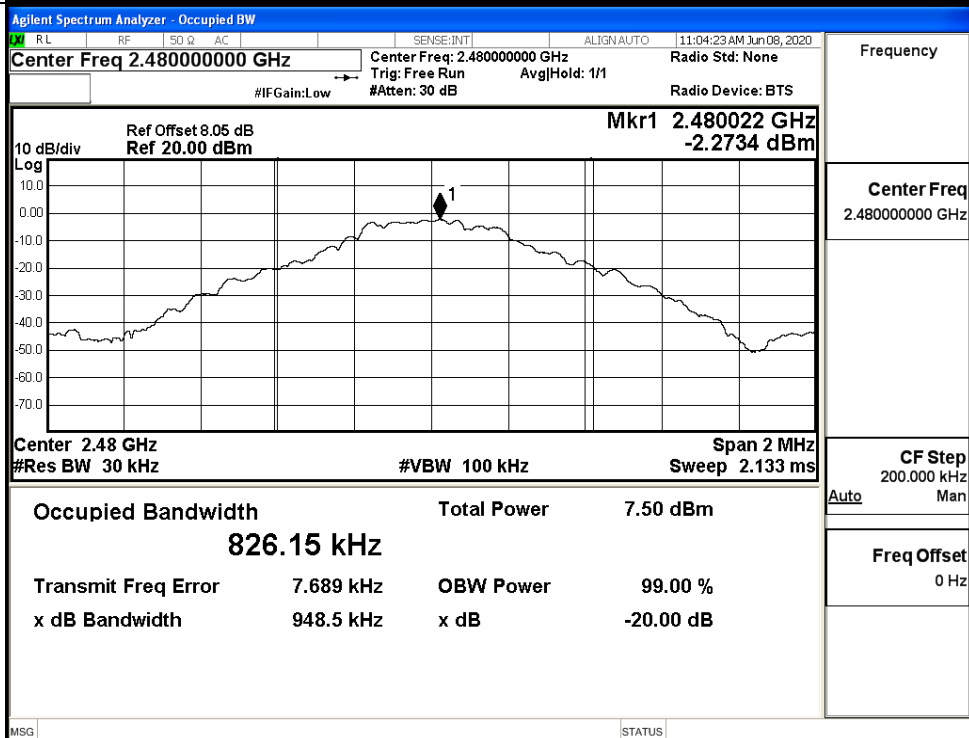
Test Graphs

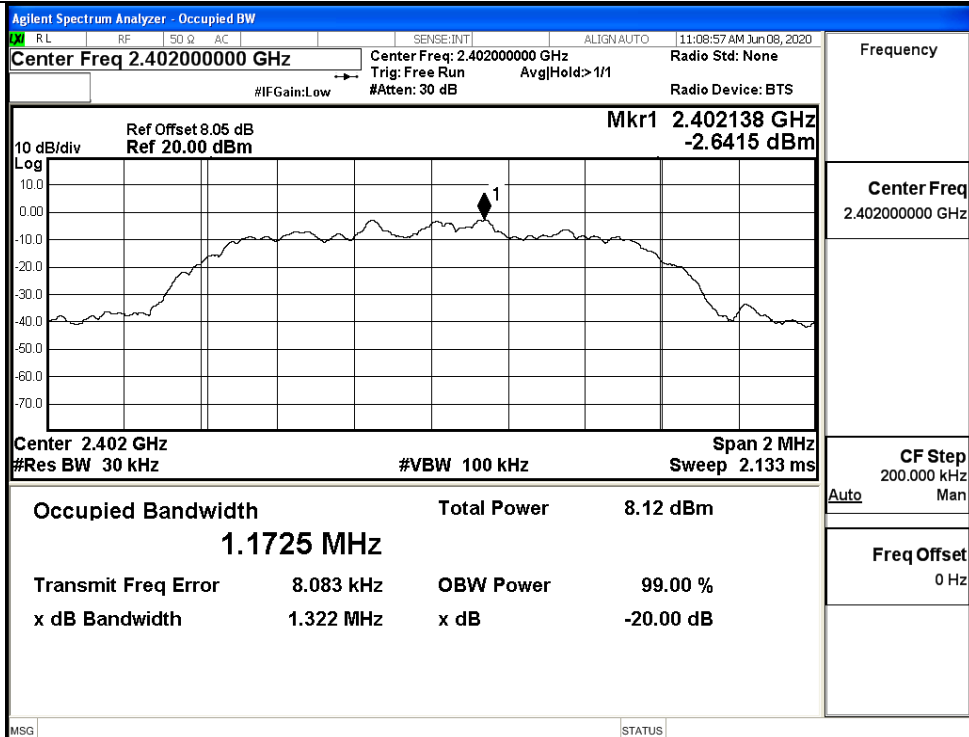
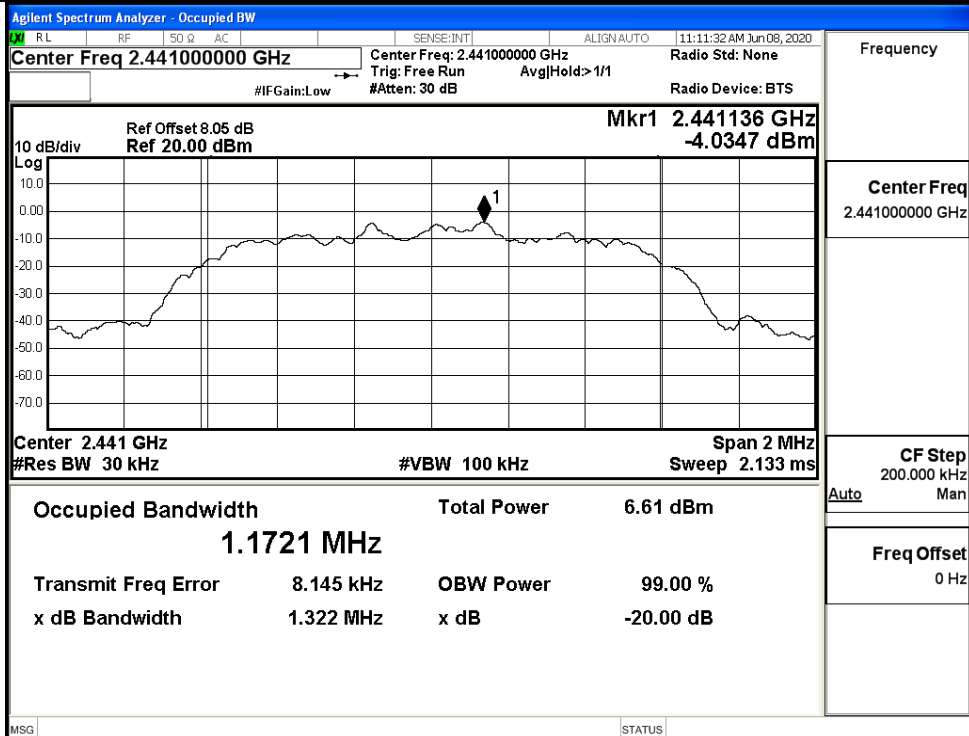


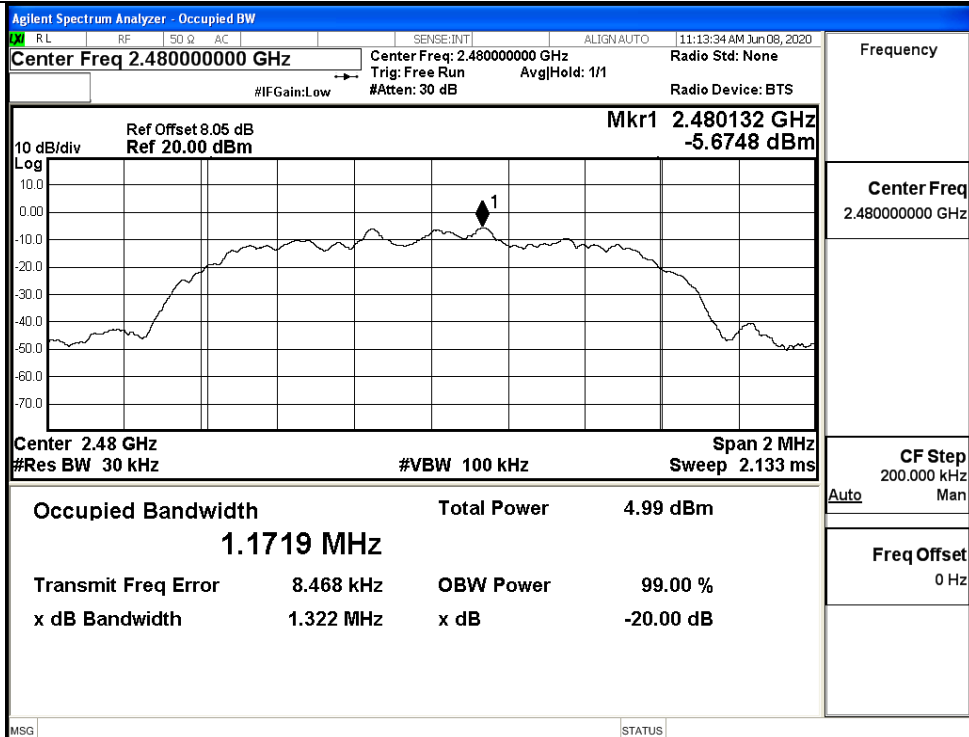
GFSK/MCH



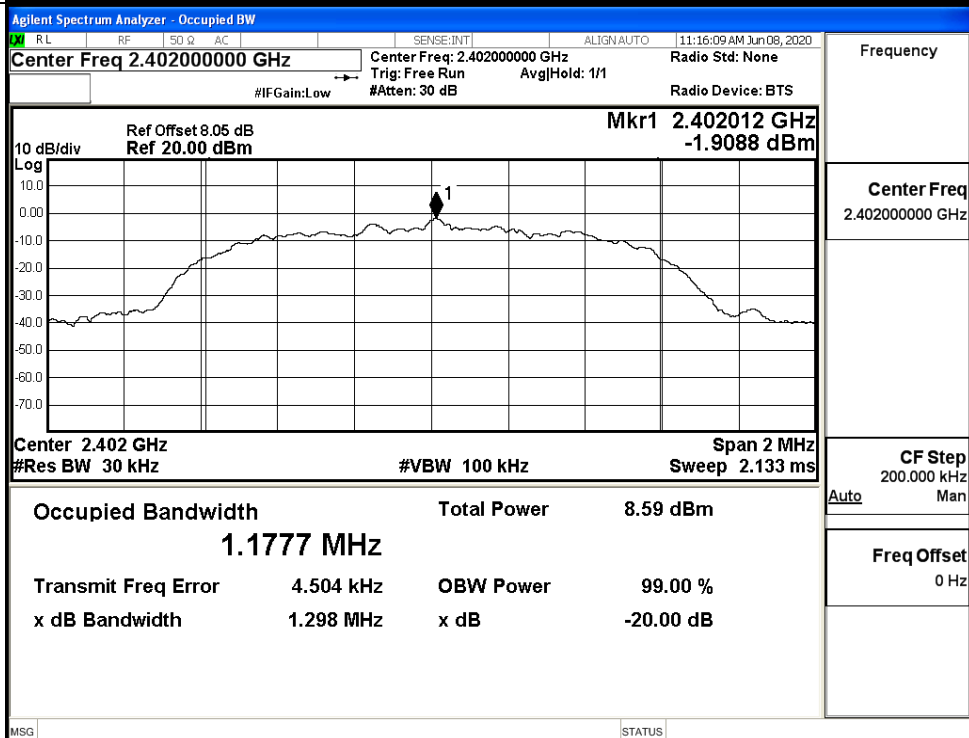
GFSK/HCH



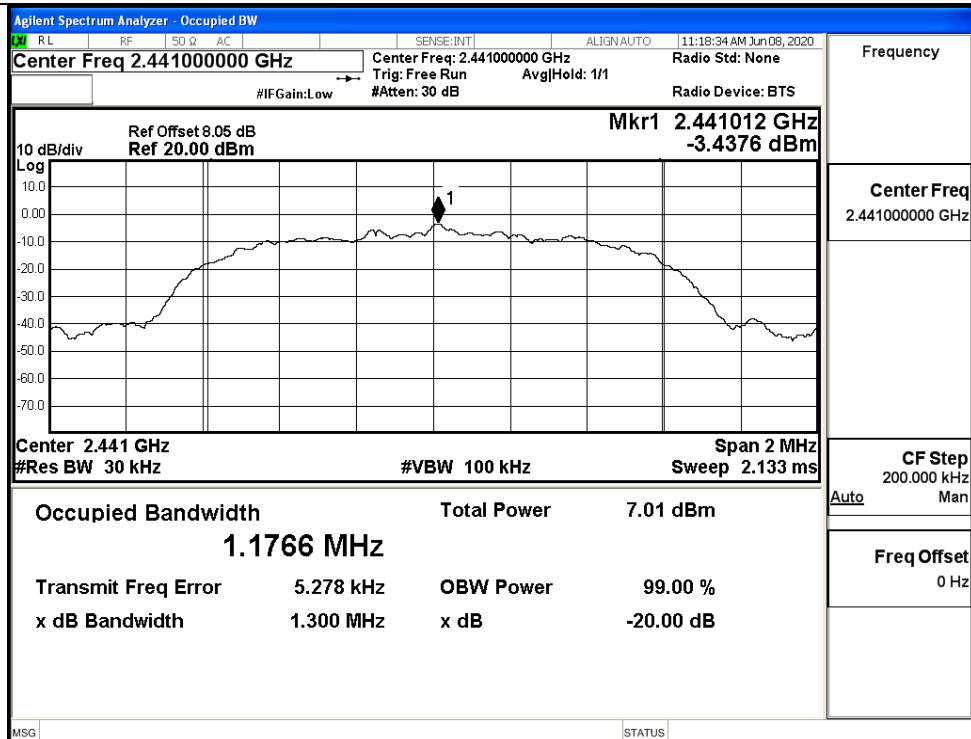
$\pi/4$ DQPSK/LCH $\pi/4$ DQPSK/MCH

$\pi/4$ DQPSK/HCH

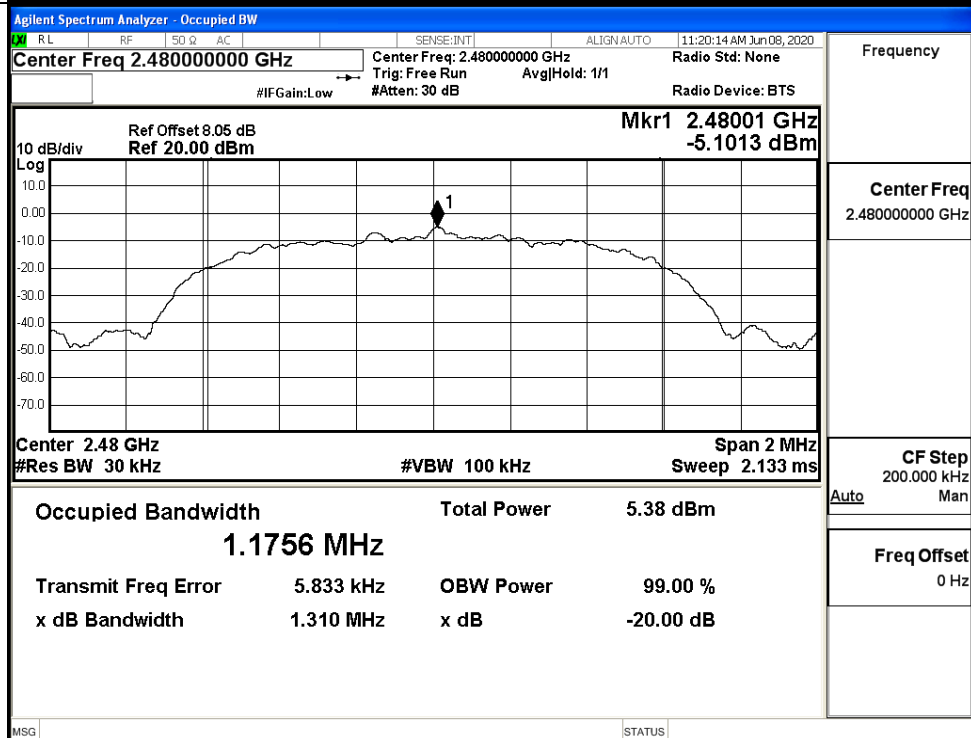
8DPSK/LCH



8DPSK/MCH



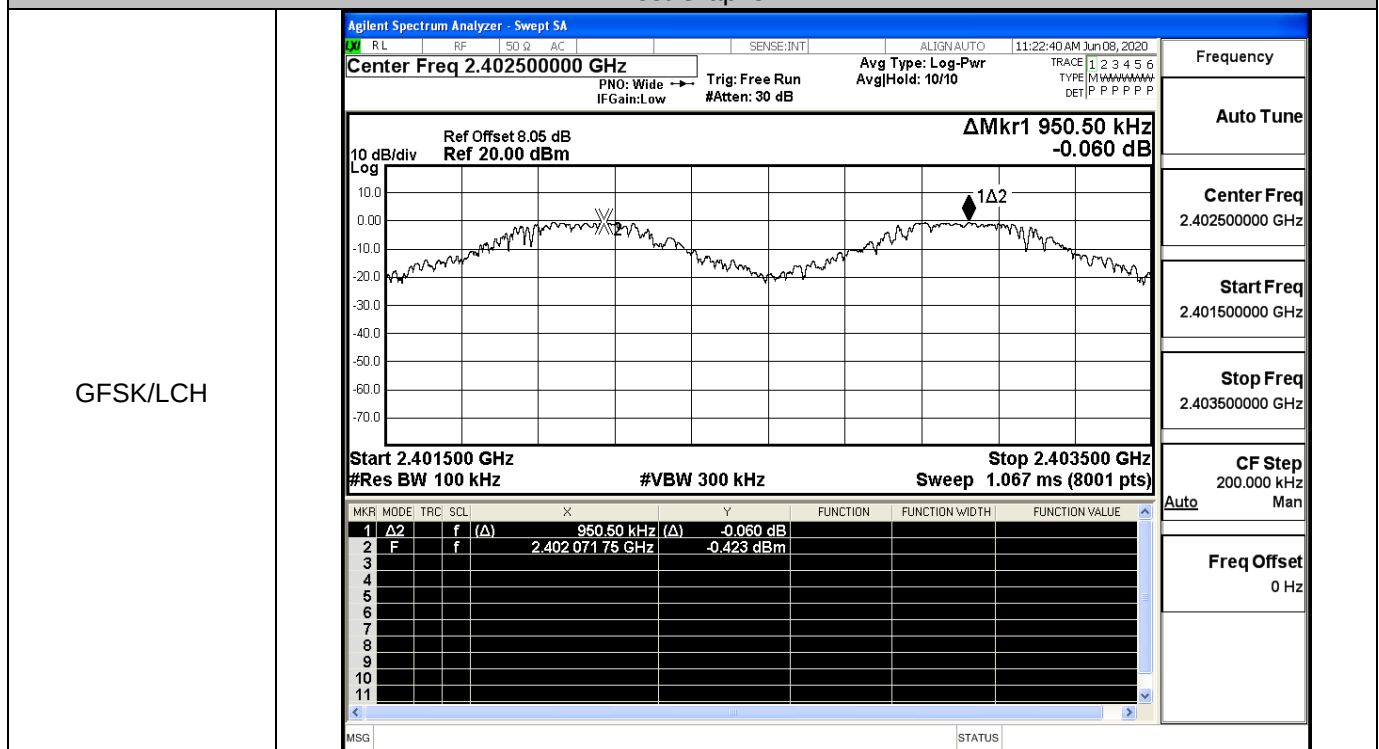
8DPSK/HCH



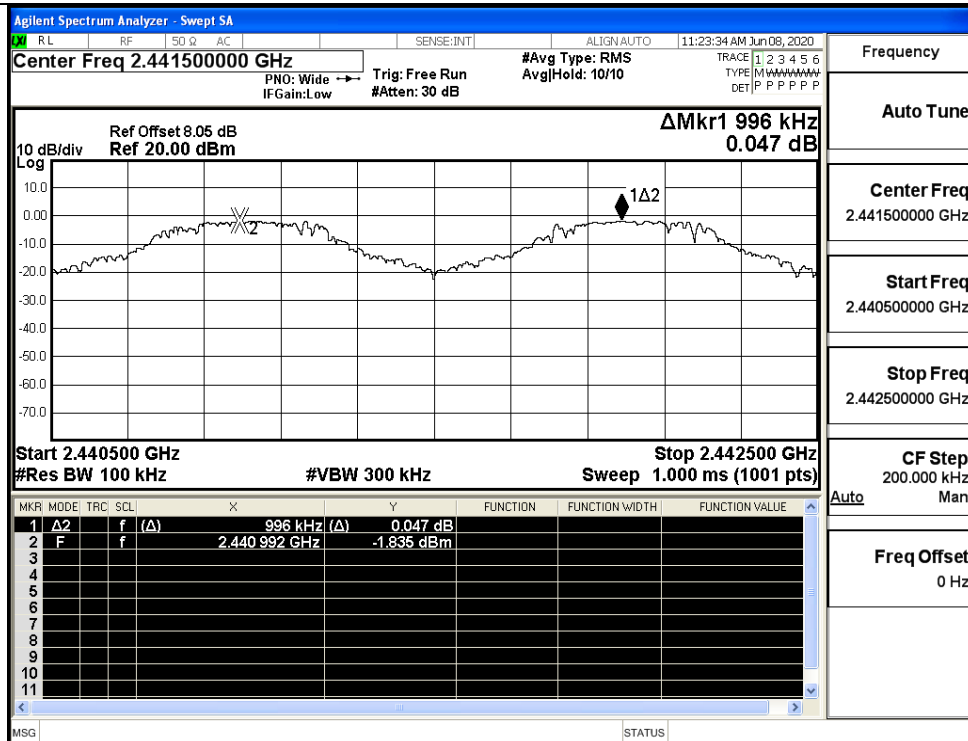
A.3 Carrier Frequency Separation

Mode	Channel.	Carrier Frequency Separation [MHz]	Limit [MHz]	Verdict
GFSK	LCH	0.950	0.633	PASS
	MCH	0.996	0.633	PASS
	HCH	1.012	0.633	PASS
$\pi/4$ DQPSK	LCH	1.250	0.881	PASS
	MCH	1.194	0.881	PASS
	HCH	1.210	0.881	PASS
8DPSK	LCH	1.106	0.873	PASS
	MCH	1.134	0.873	PASS
	HCH	1.020	0.873	PASS

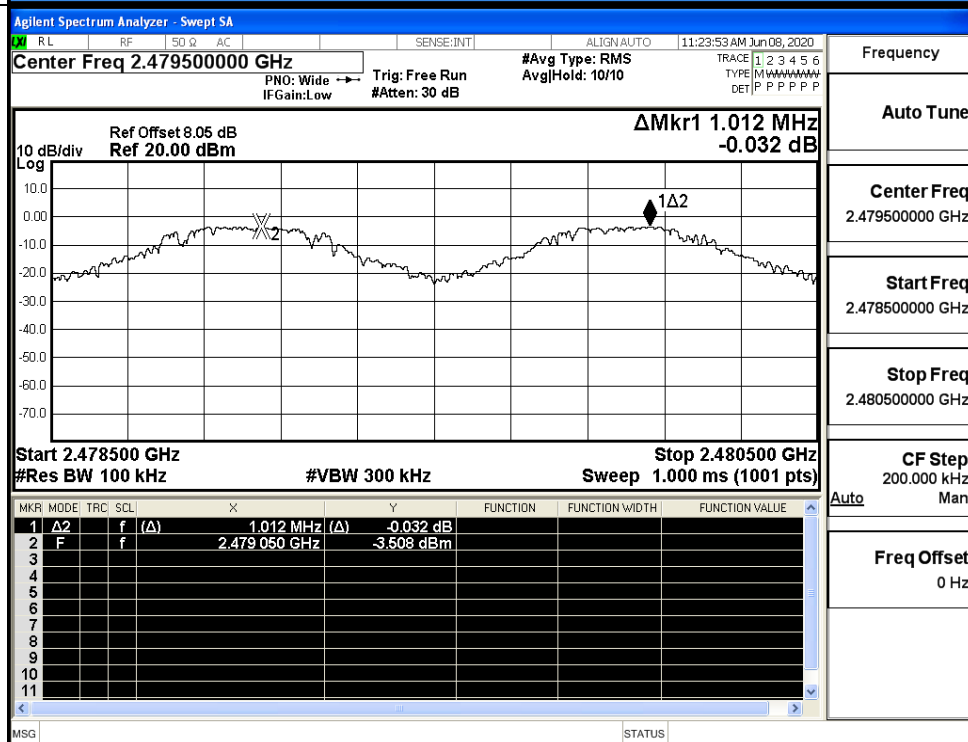
Test Graphs

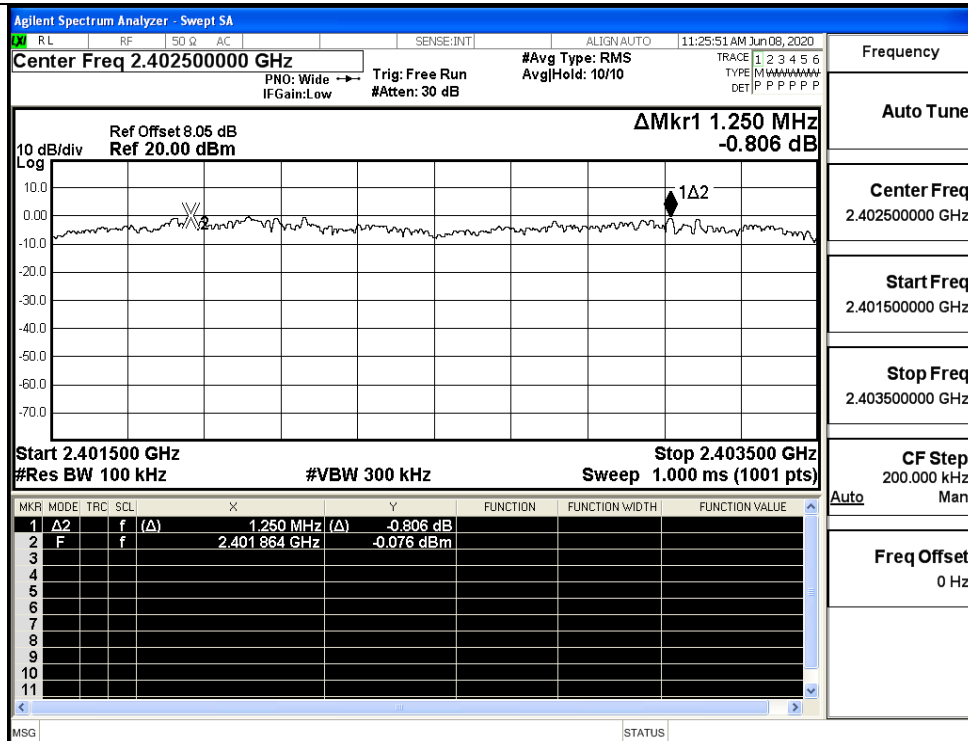


GFSK/MCH



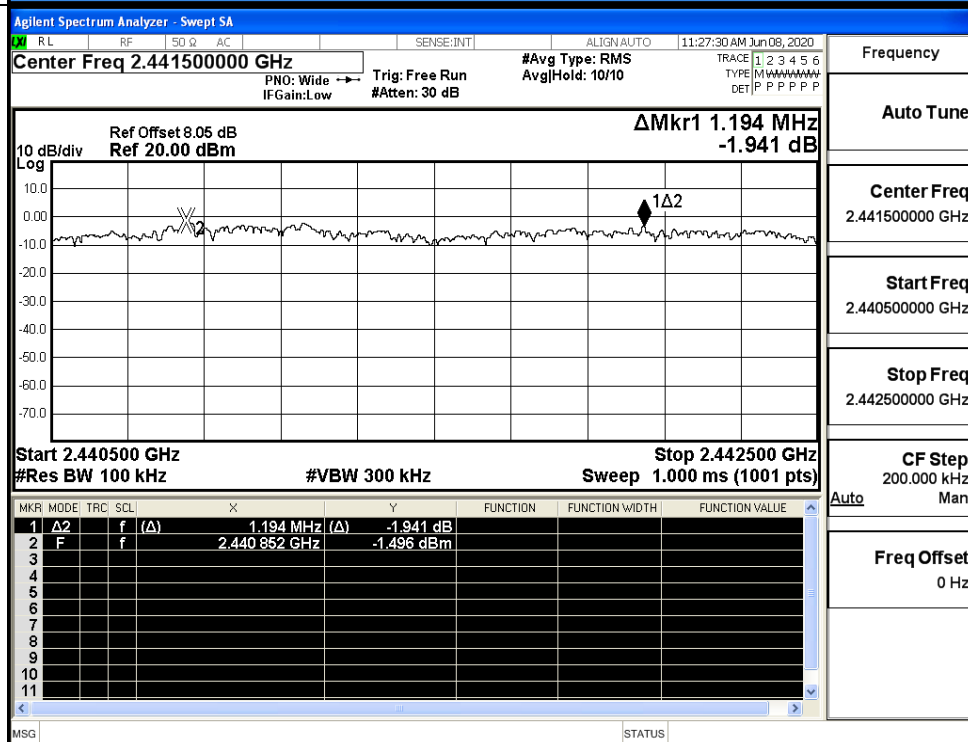
GFSK/HCH



$\pi/4$ DQPSK/LCH

Frequency

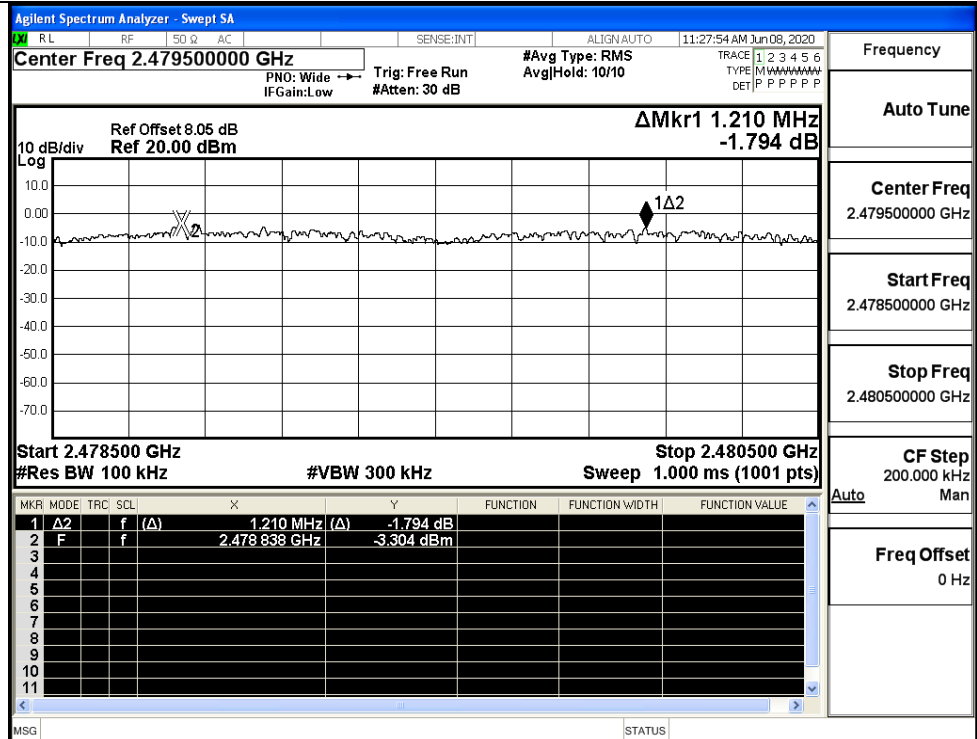
Auto Tune

Center Freq
2.402500000 GHzStart Freq
2.401500000 GHzStop Freq
2.403500000 GHzCF Step
200.000 kHz
ManFreq Offset
0 Hz $\pi/4$ DQPSK/MCH

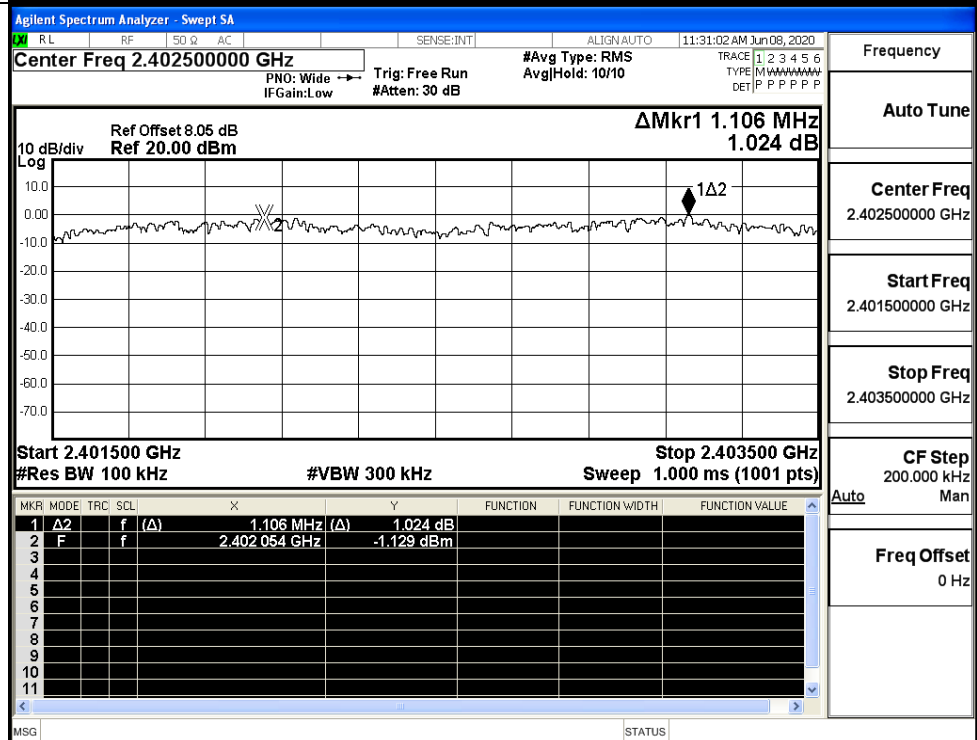
Frequency

Auto Tune

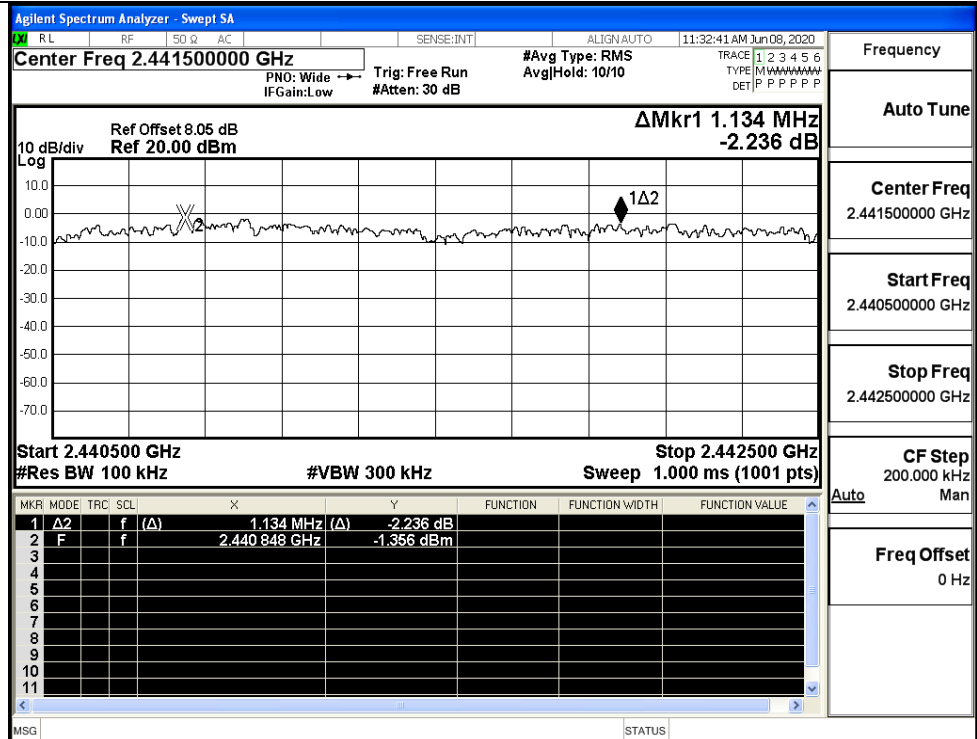
Center Freq
2.441500000 GHzStart Freq
2.440500000 GHzStop Freq
2.442500000 GHzCF Step
200.000 kHz
ManFreq Offset
0 Hz

$\pi/4$ DQPSK/HCH

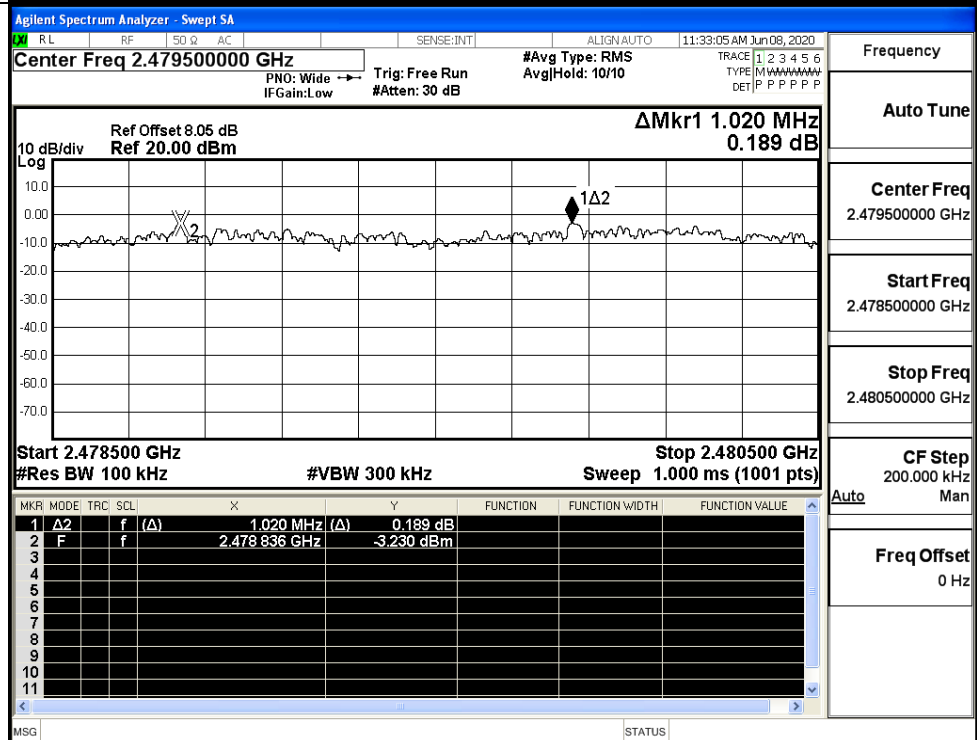
8DPSK/LCH



8DPSK/MCH



8DPSK/HCH

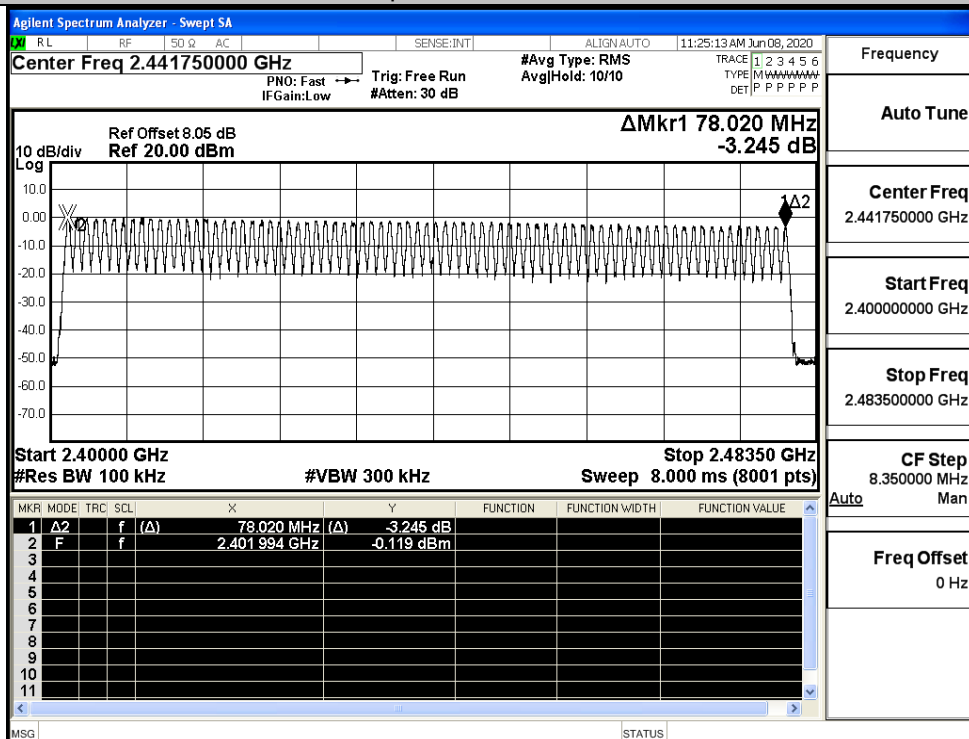


A.4 Hopping Channel Number

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

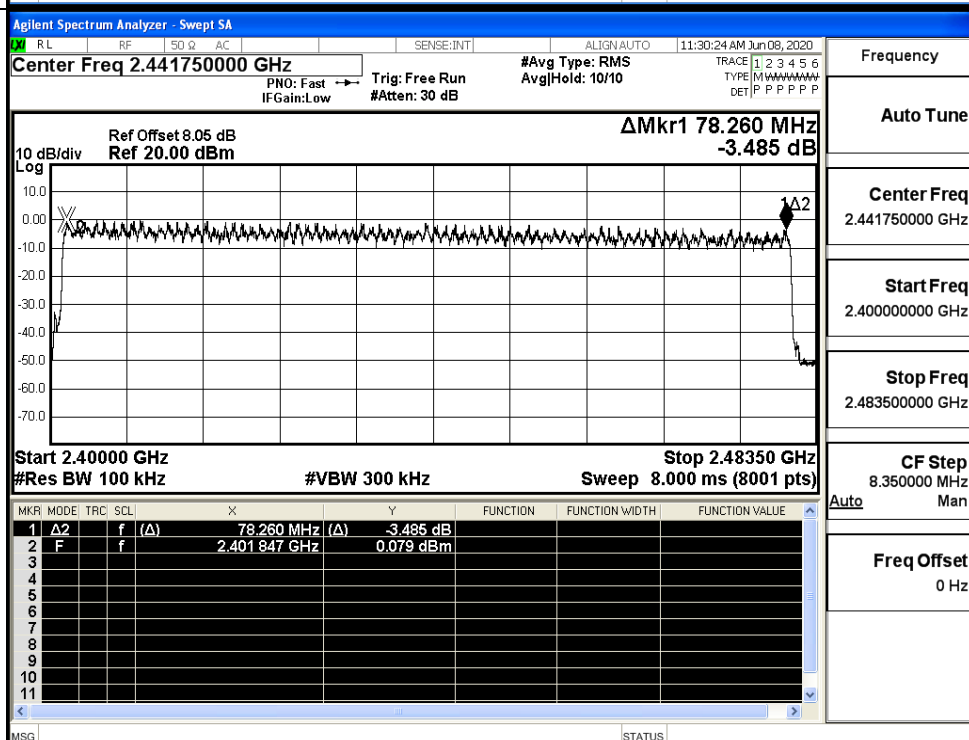
Test Graphs

GFSK/Hop



Frequency

Auto Tune

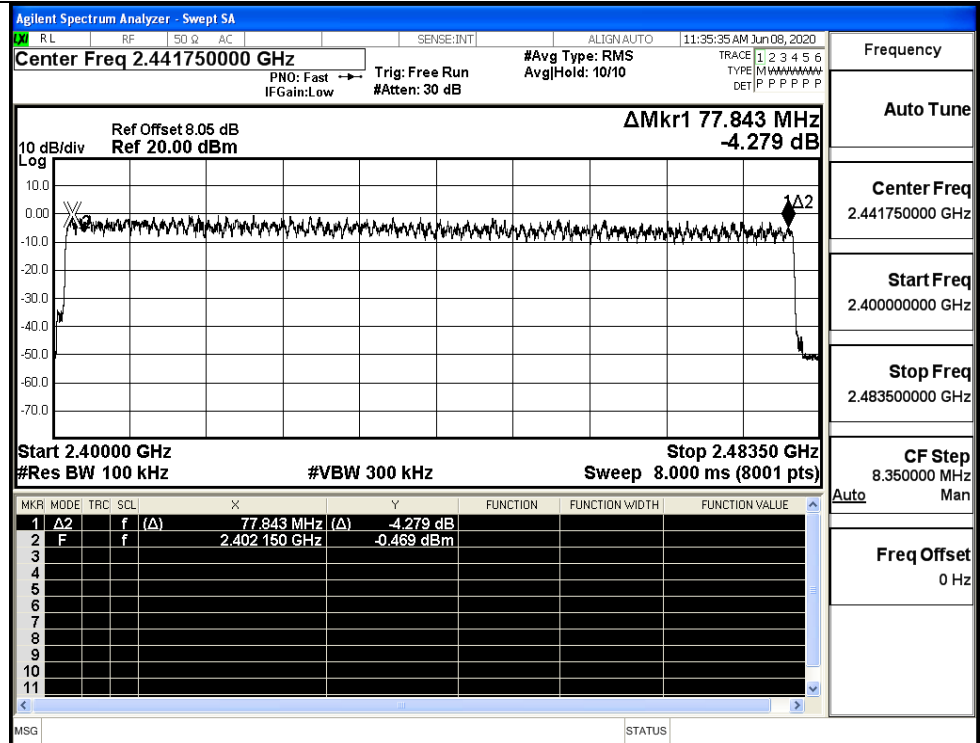
Center Freq
2.441750000 GHzStart Freq
2.400000000 GHzStop Freq
2.483500000 GHzCF Step
8.350000 MHz
Auto ManFreq Offset
0 Hz $\pi/4$ DQPSK/Hop

Frequency

Auto Tune

Center Freq
2.441750000 GHzStart Freq
2.400000000 GHzStop Freq
2.483500000 GHzCF Step
8.350000 MHz
Auto ManFreq Offset
0 Hz

8DPSK/Hop

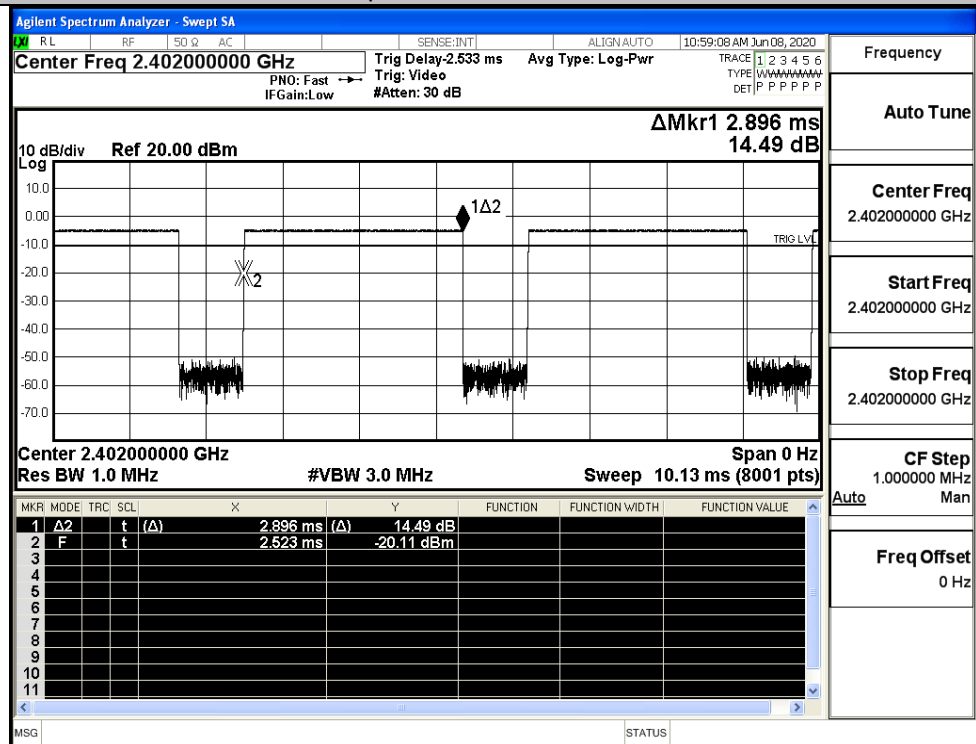


A.5 Dwell Time

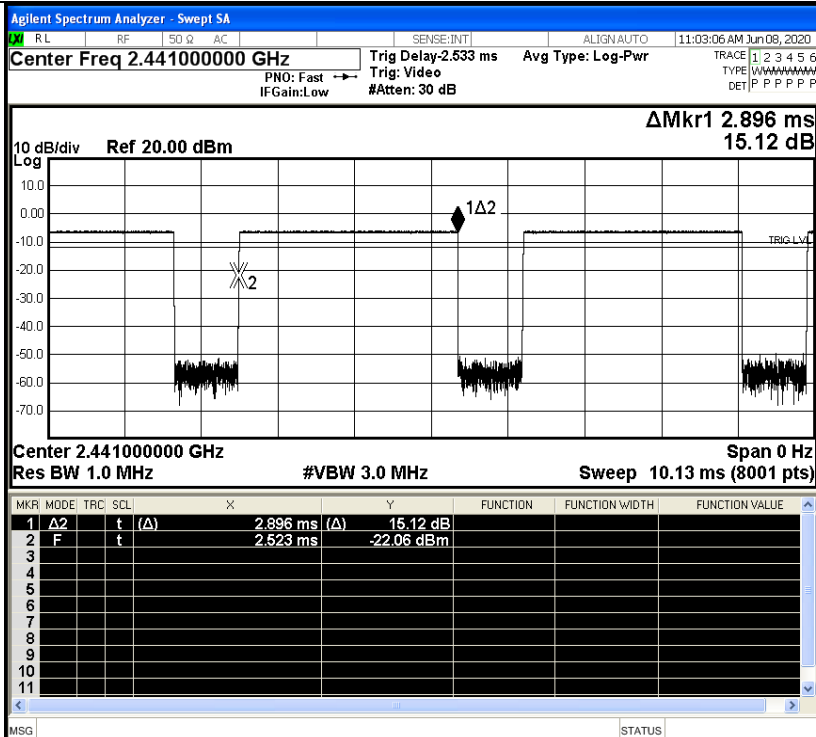
Mode	Packet	Channel	Burst Width [ms/hop/ch]	Total Hops[hop*ch]	Dwell Time[s]	Limit [s]	Verdict
GFSK	DH5	LCH	2.9	106.7	0.309	0.4	PASS
	DH5	MCH	2.9	106.7	0.309	0.4	PASS
	DH5	HCH	2.9	106.7	0.309	0.4	PASS
$\pi/4$ DQPSK	2DH5	LCH	2.9	106.7	0.309	0.4	PASS
	2DH5	MCH	2.9	106.7	0.309	0.4	PASS
	2DH5	HCH	2.9	106.7	0.309	0.4	PASS
8DPSK	3DH5	LCH	2.9	106.7	0.309	0.4	PASS
	3DH5	MCH	2.9	106.7	0.309	0.4	PASS
	3DH5	HCH	2.9	106.7	0.309	0.4	PASS

Test Graphs

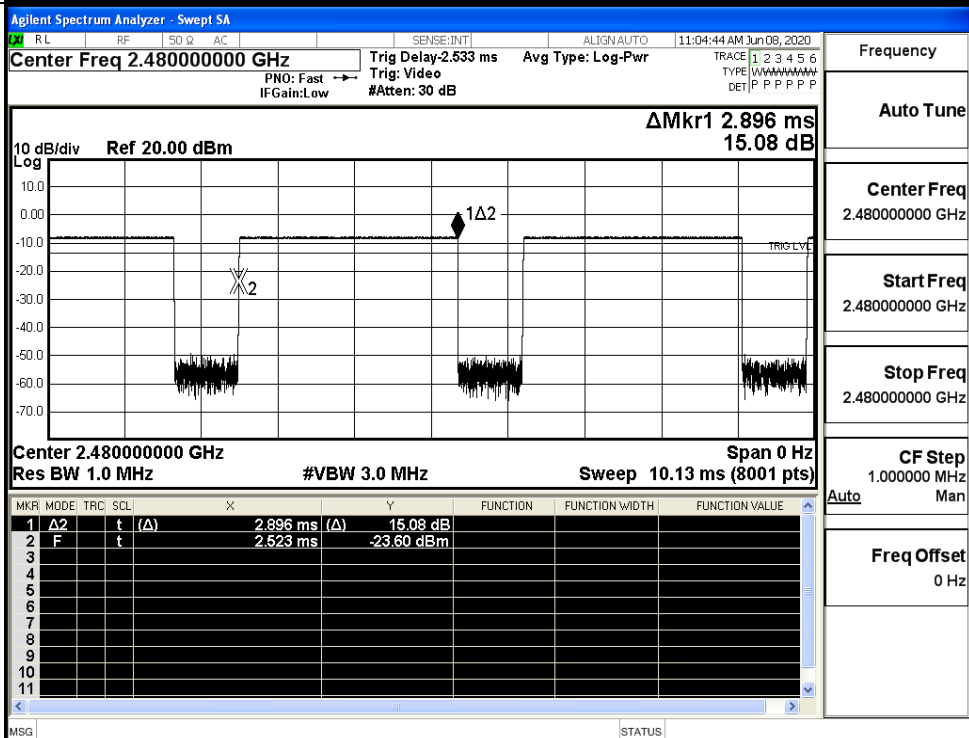
GFSK_DH5/LCH



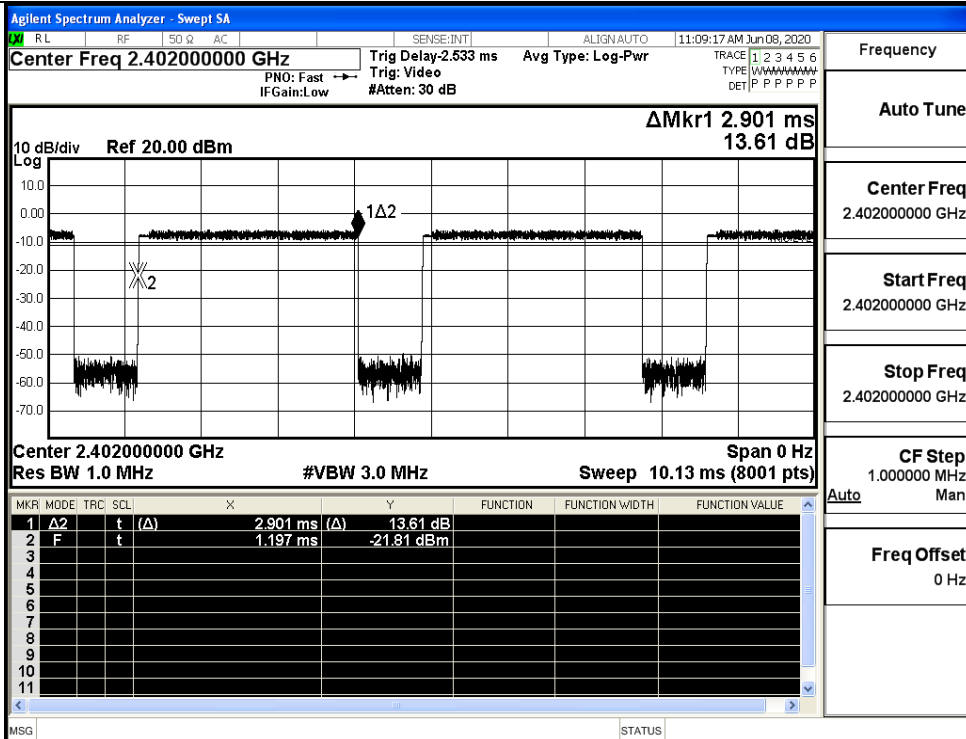
GFSK_DH5/MCH



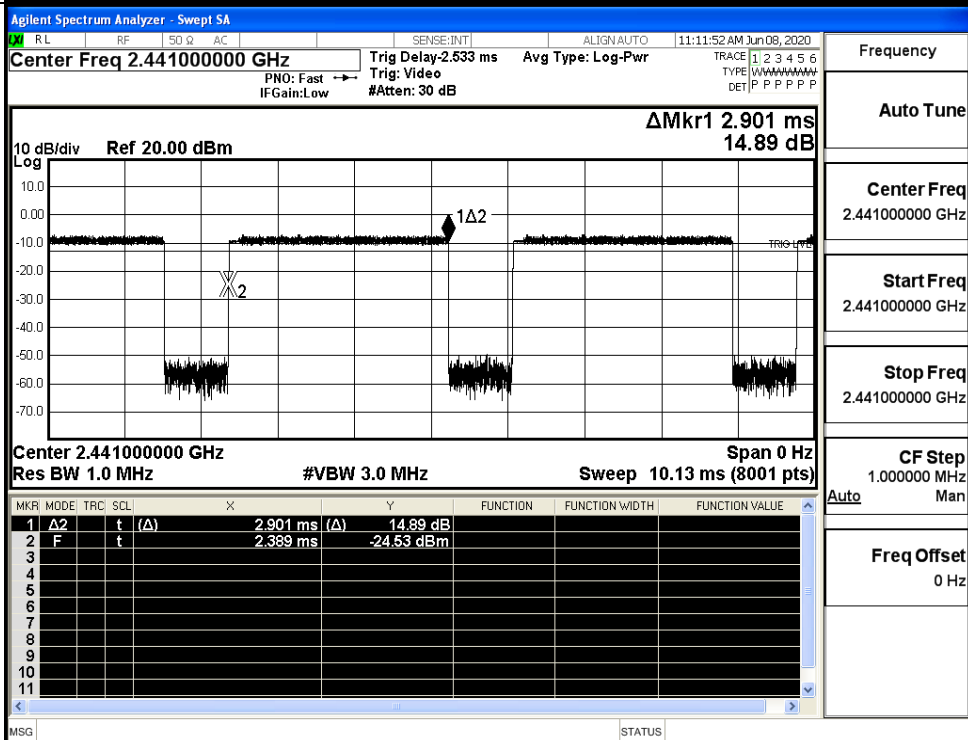
GFSK_DH5/HCH



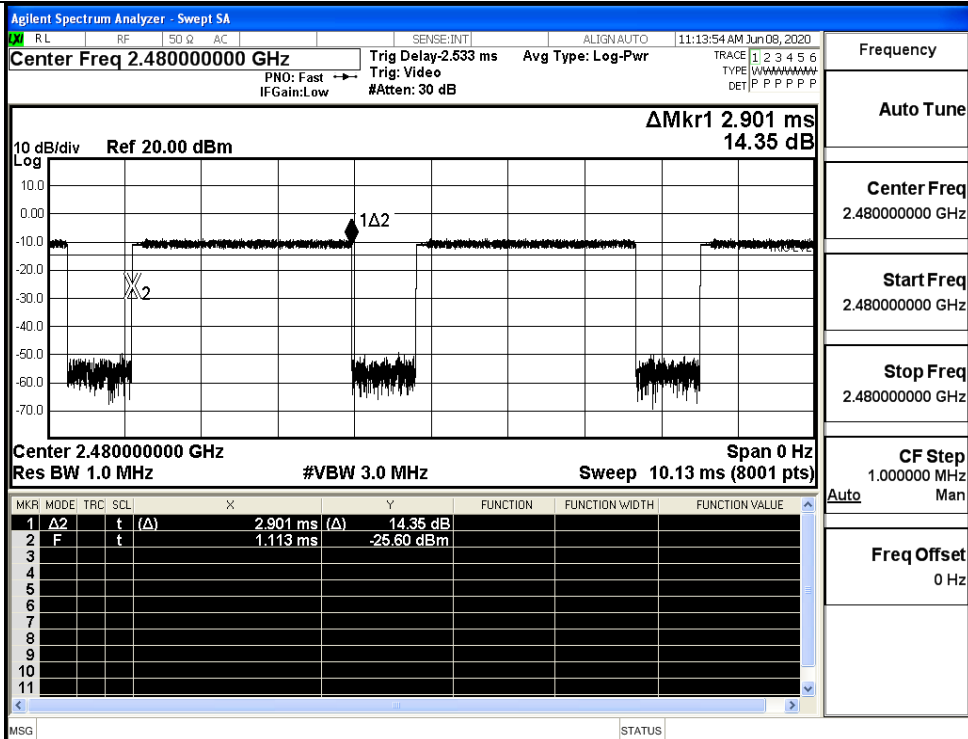
$\pi/4$ DQPSK
_2DH5/LCH



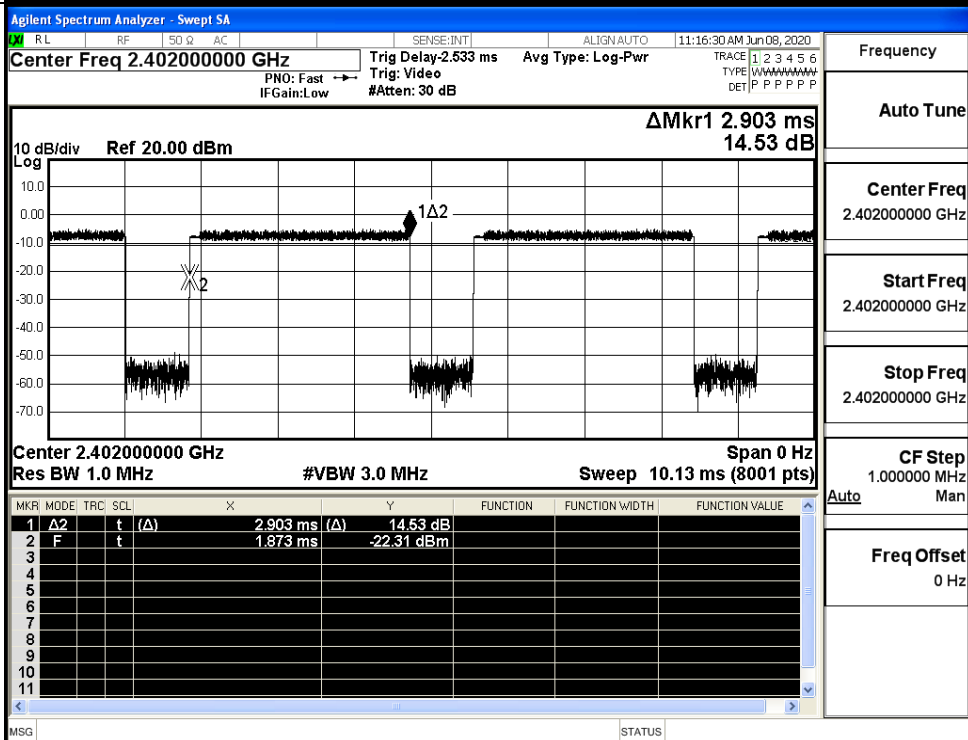
$\pi/4$ DQPSK
_2DH5/MCH



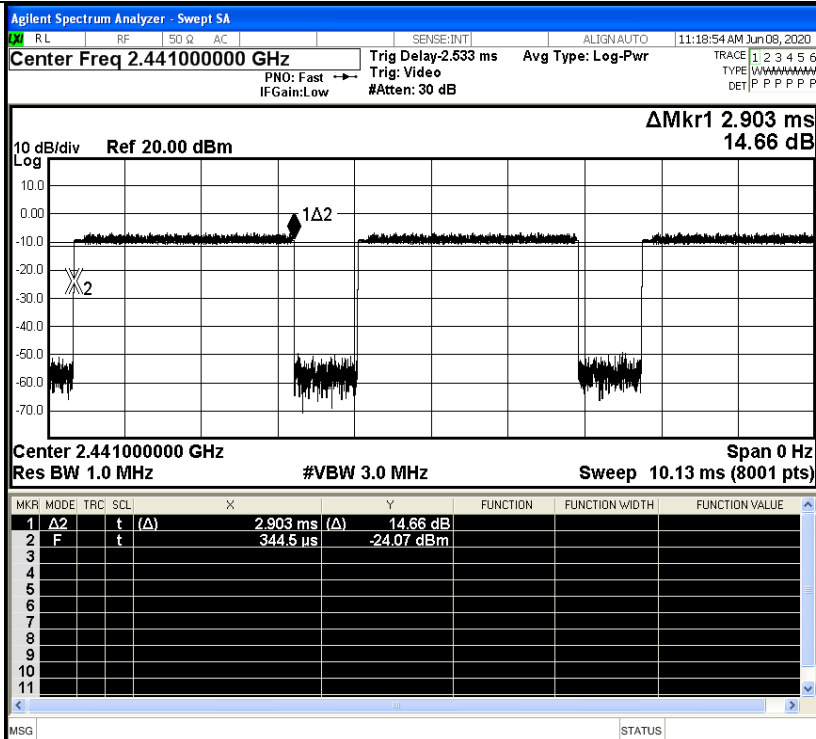
$\pi/4$ DQPSK
_2DH5/HCH



8DPSK _3DH5/LCH



8DPSK_3DH5/MCH

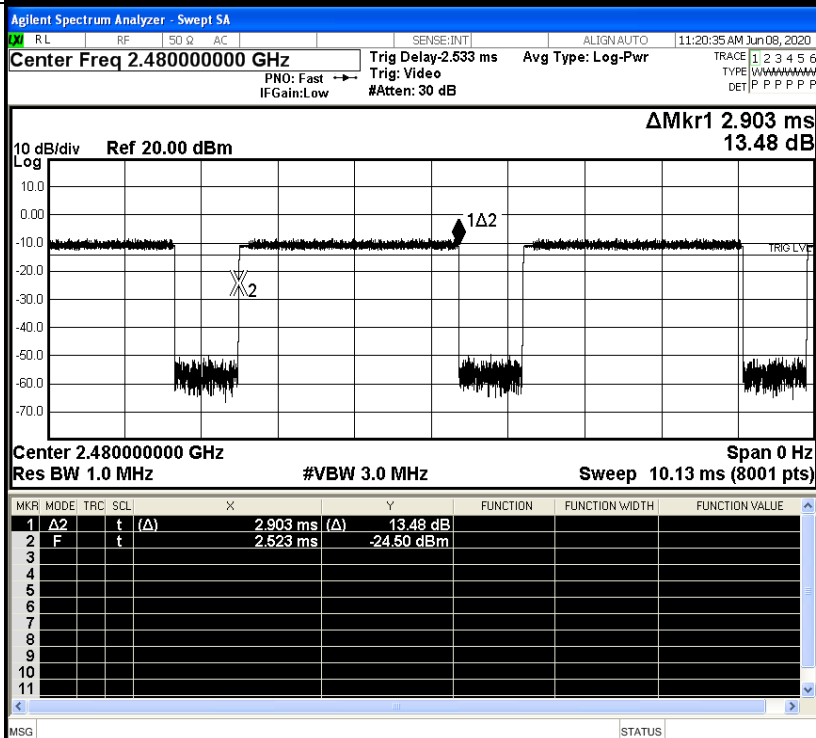


Frequency

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

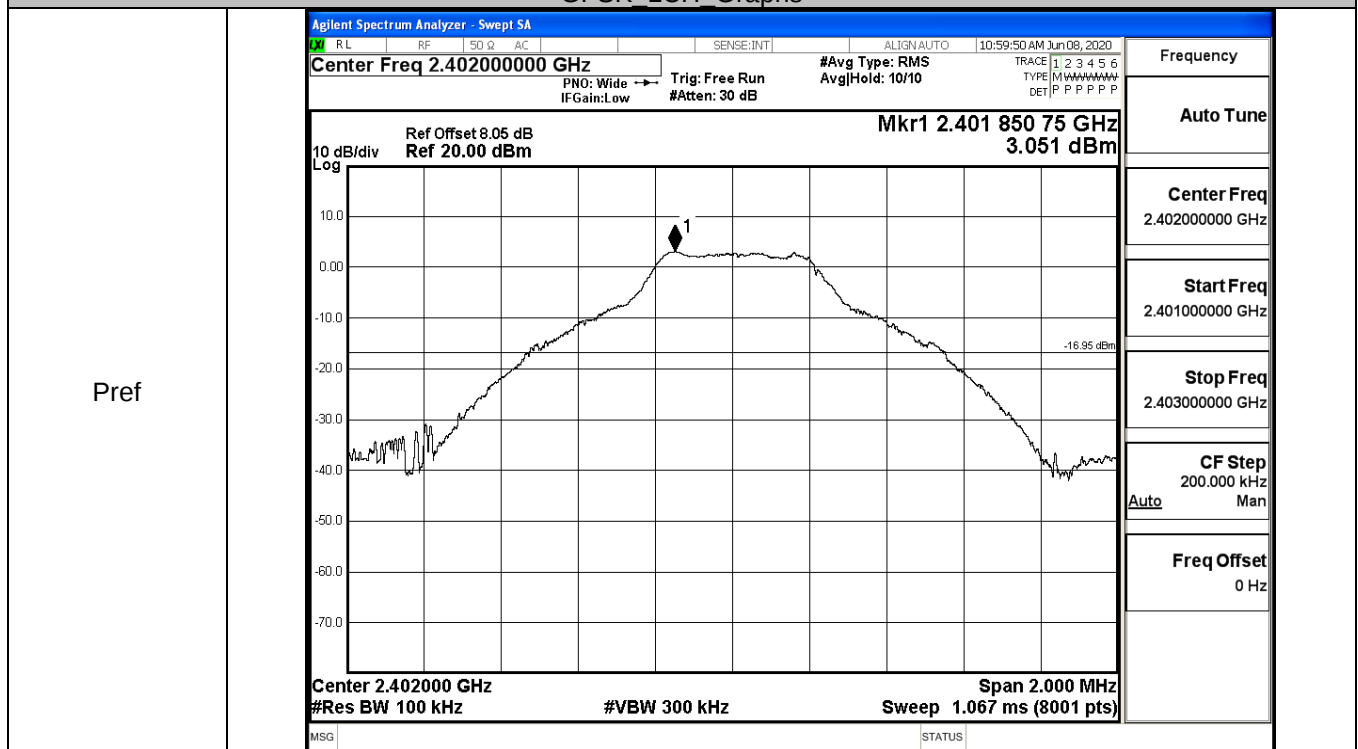
Auto Tune

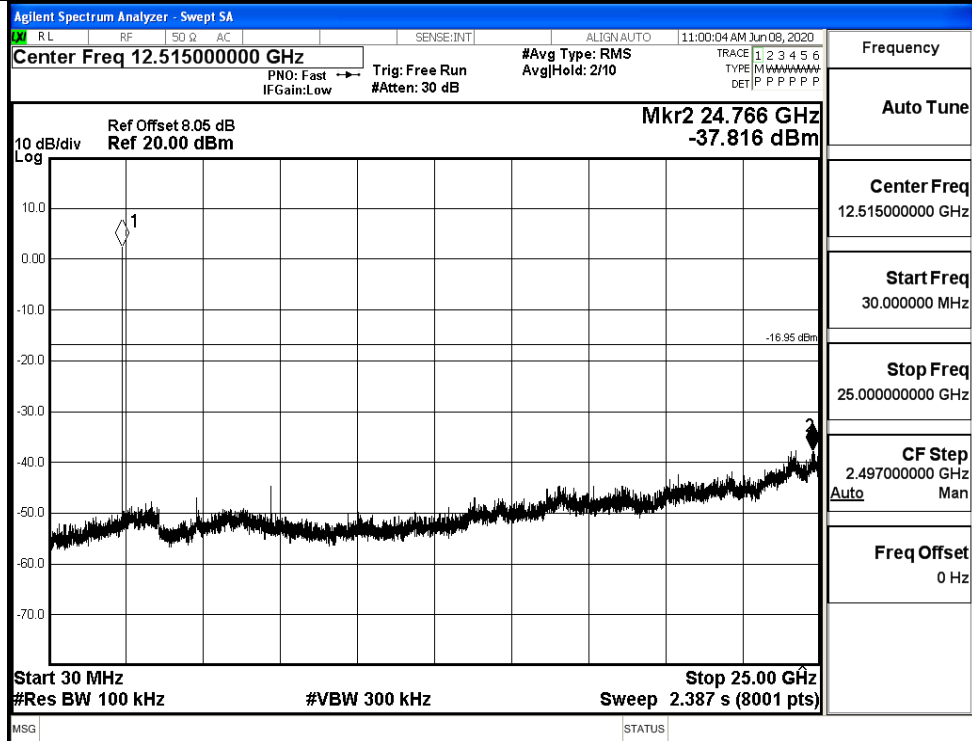
Center Freq
2.480000000 GHzStart Freq
2.480000000 GHzStop Freq
2.480000000 GHzCF Step
1.000000 MHz
Auto ManFreq Offset
0 Hz

A.6 RF Conducted Spurious Emissions

Mode	Channel	Pref [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
GFSK	LCH	3.051	-37.816	-16.949	PASS
	MCH	1.561	-37.478	-18.439	PASS
	HCH	-0.069	-37.816	-20.069	PASS
$\pi/4$ DQPSK	LCH	0.048	-37.427	-19.952	PASS
	MCH	-1.494	-38.107	-21.494	PASS
	HCH	-3.096	-37.425	-23.096	PASS
8DPSK	LCH	0.096	-37.378	-19.904	PASS
	MCH	-1.369	-37.320	-21.369	PASS
	HCH	-2.988	-37.016	-22.988	PASS

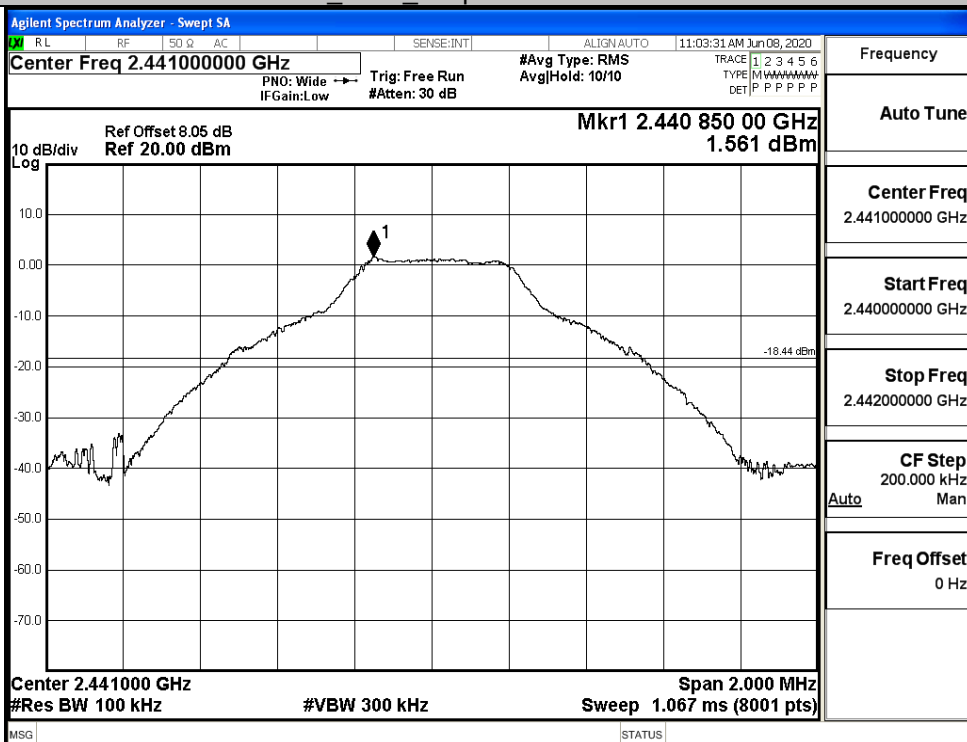
GFSK LCH Graphs



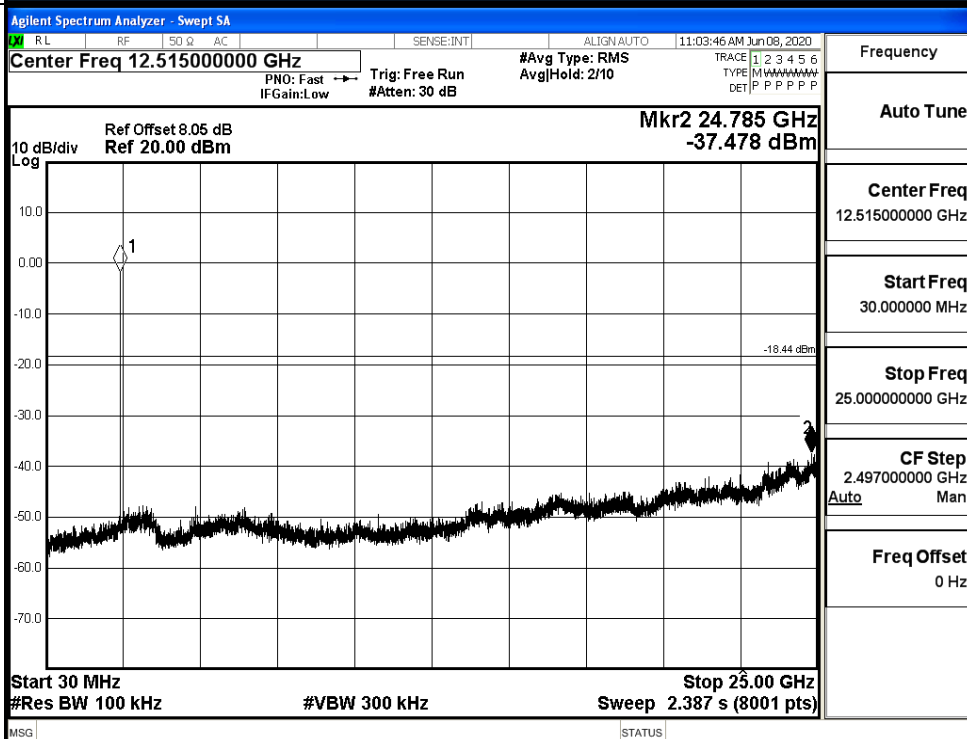
P_uw

GFSK_MCH_Graphs

Pref

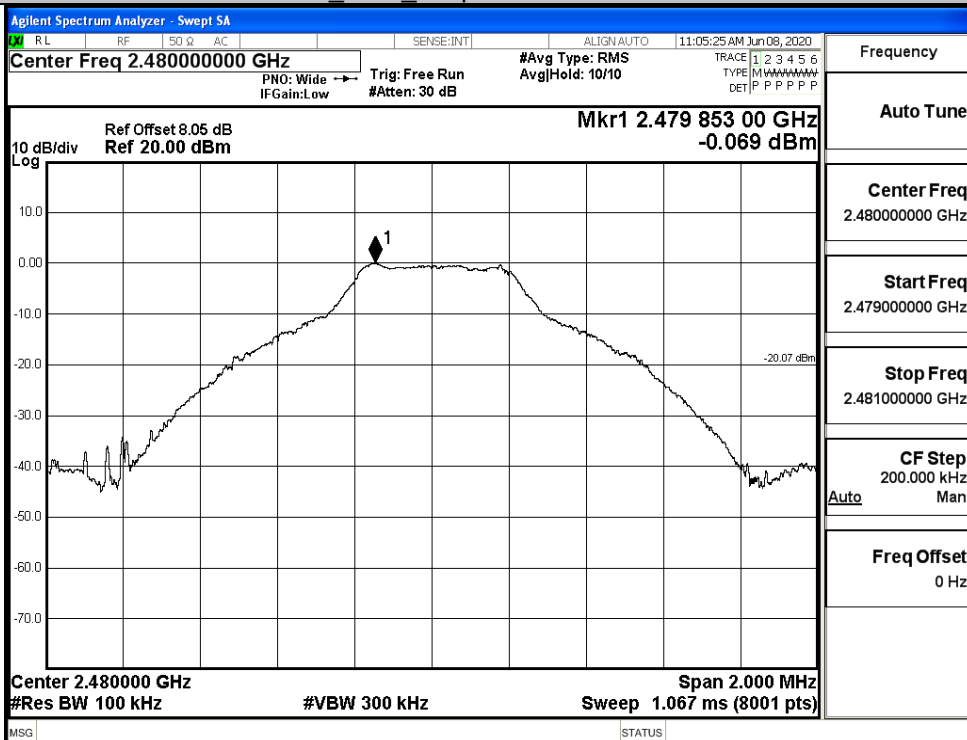


Puw

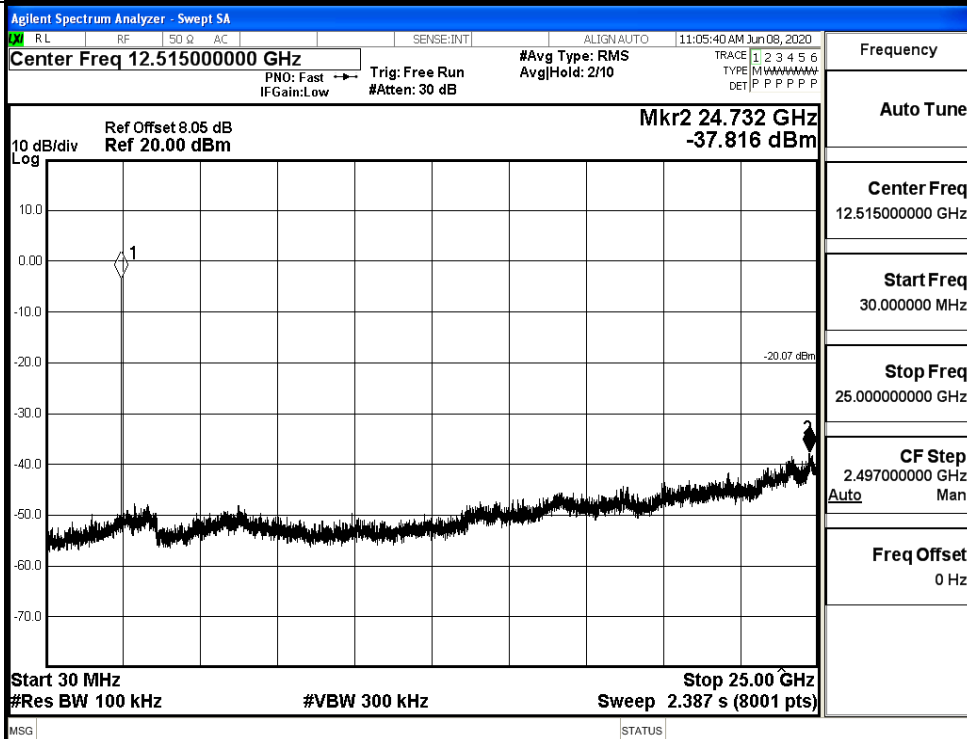


GFSK HCH_Graphs

Pref

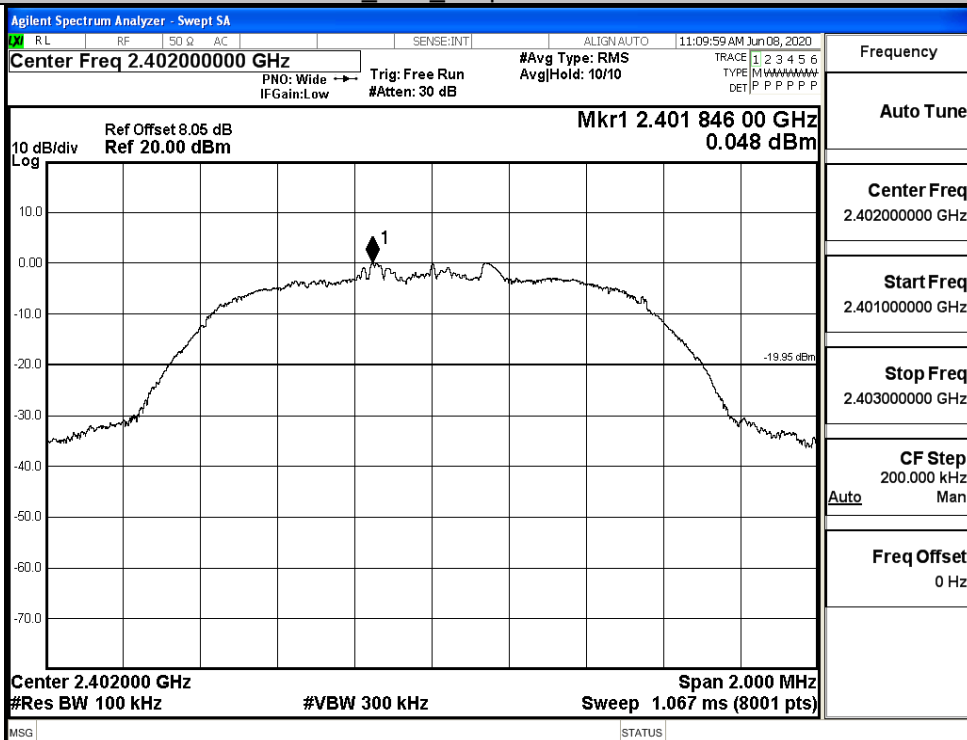


Puw

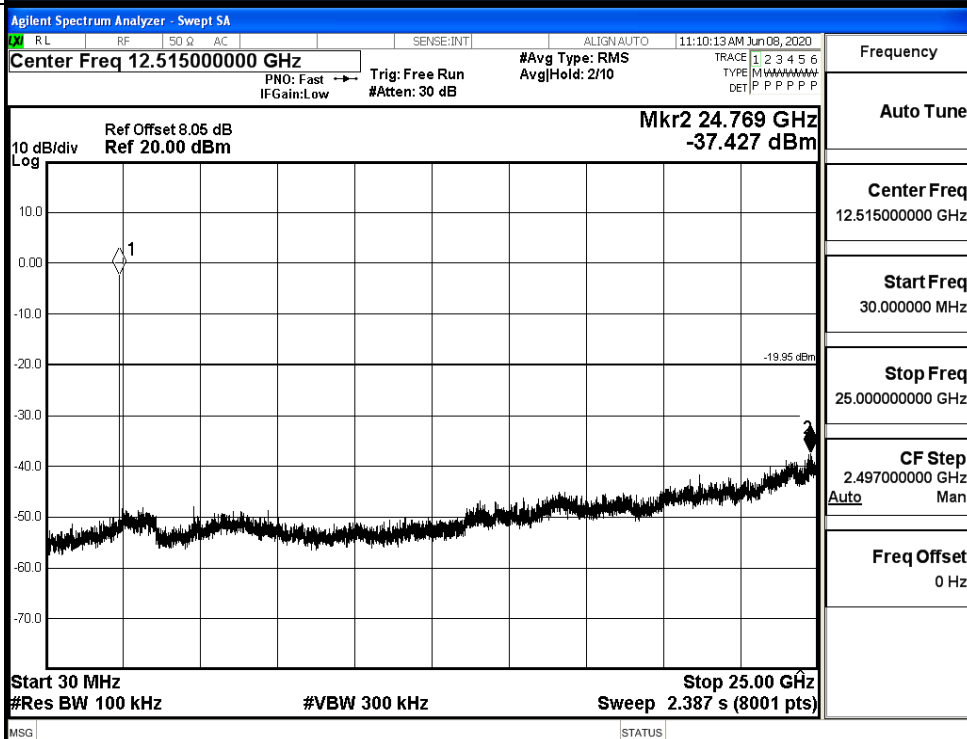


$\pi/4$ DQPSK_LCH_Graphs

Pref

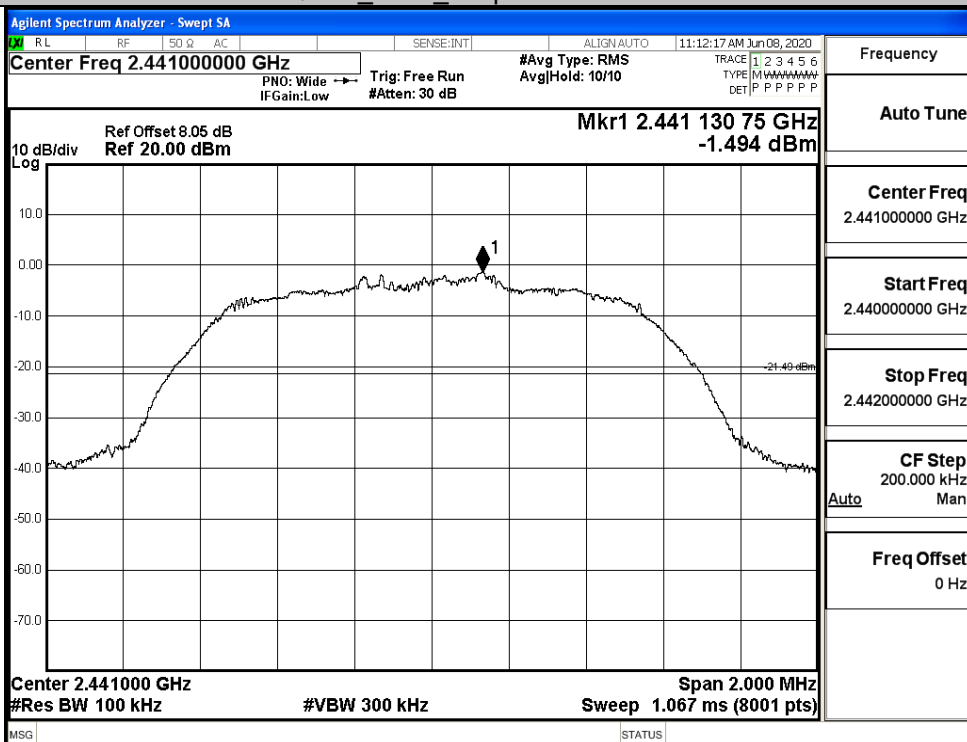


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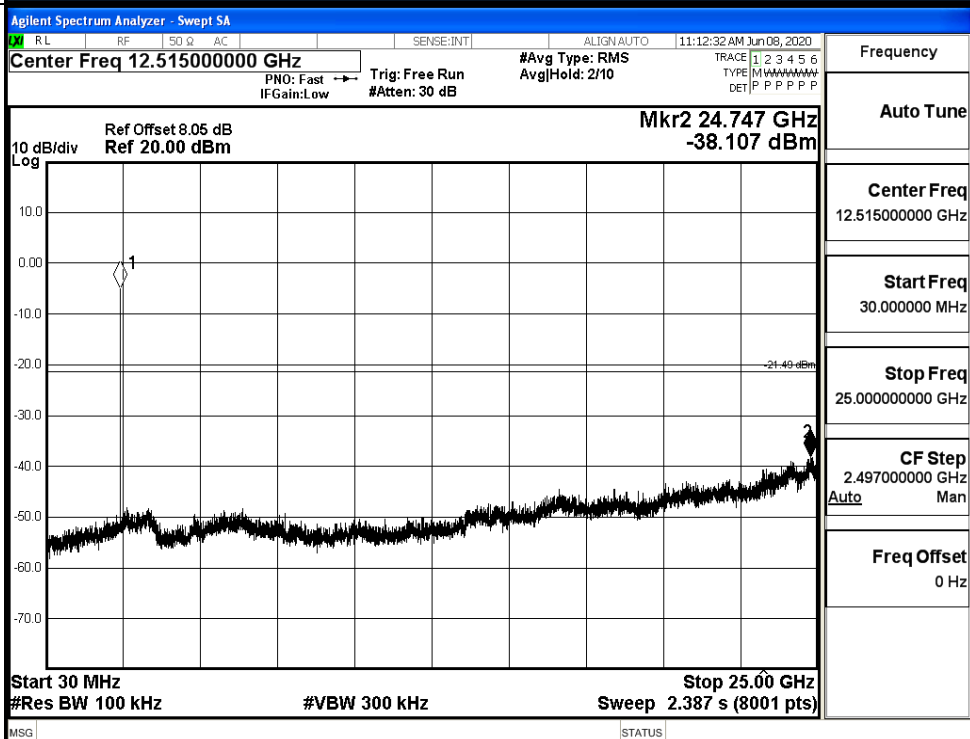


$\pi/4$ DQPSK_MCH_Graphs

Pref

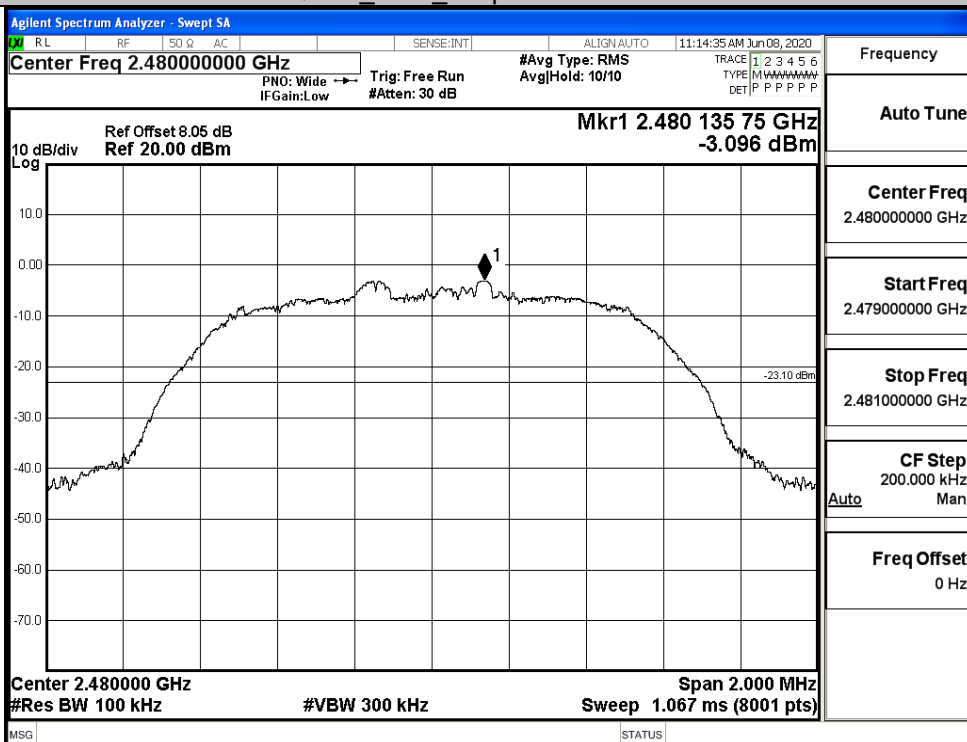


Puw

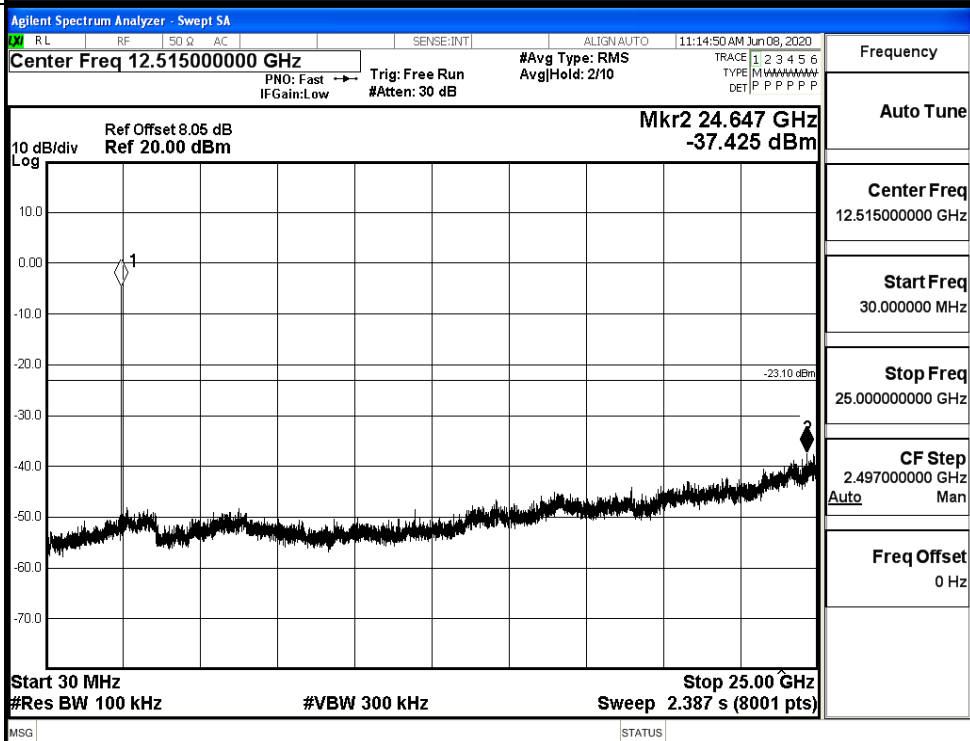


$\pi/4$ DQPSK_HCH_Graphs

Pref

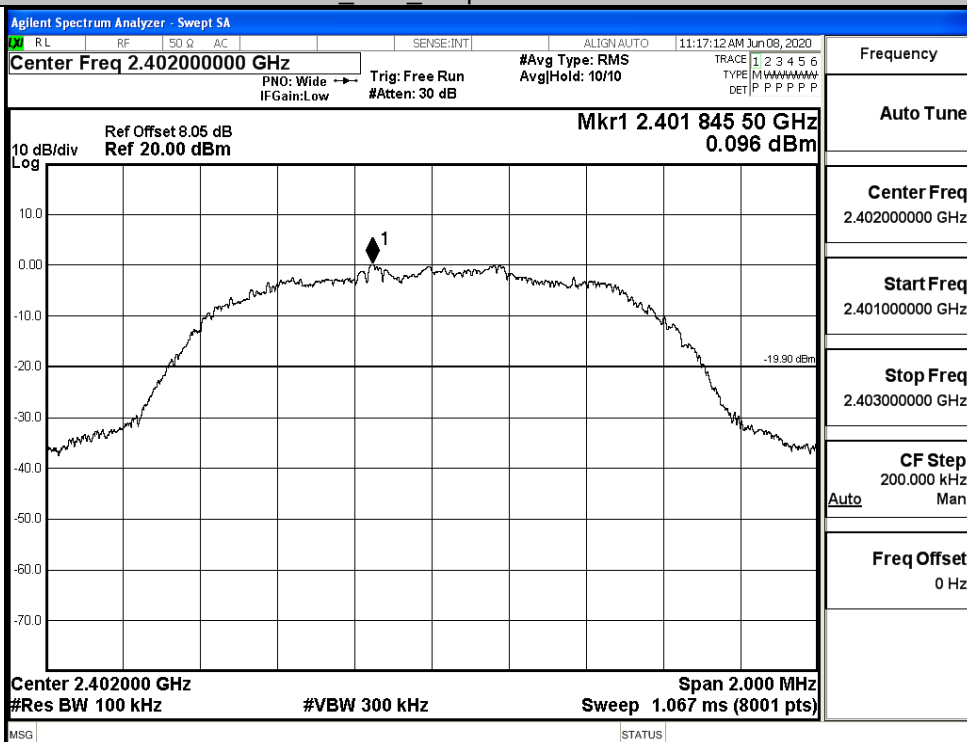


Puw

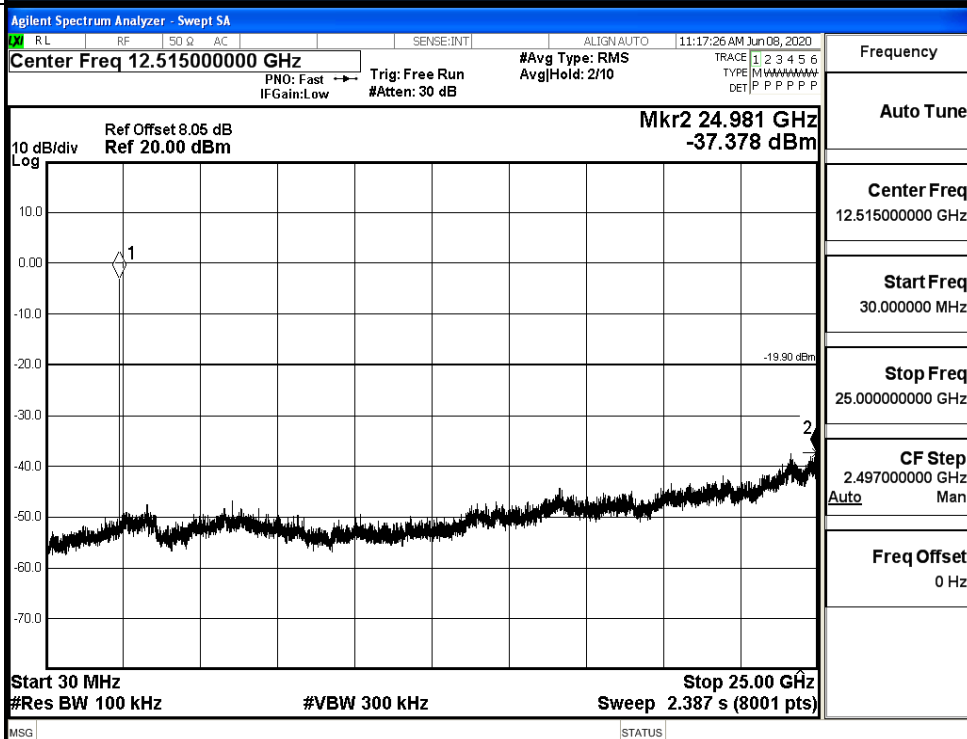


8DPSK_LCH_Graphs

Pref

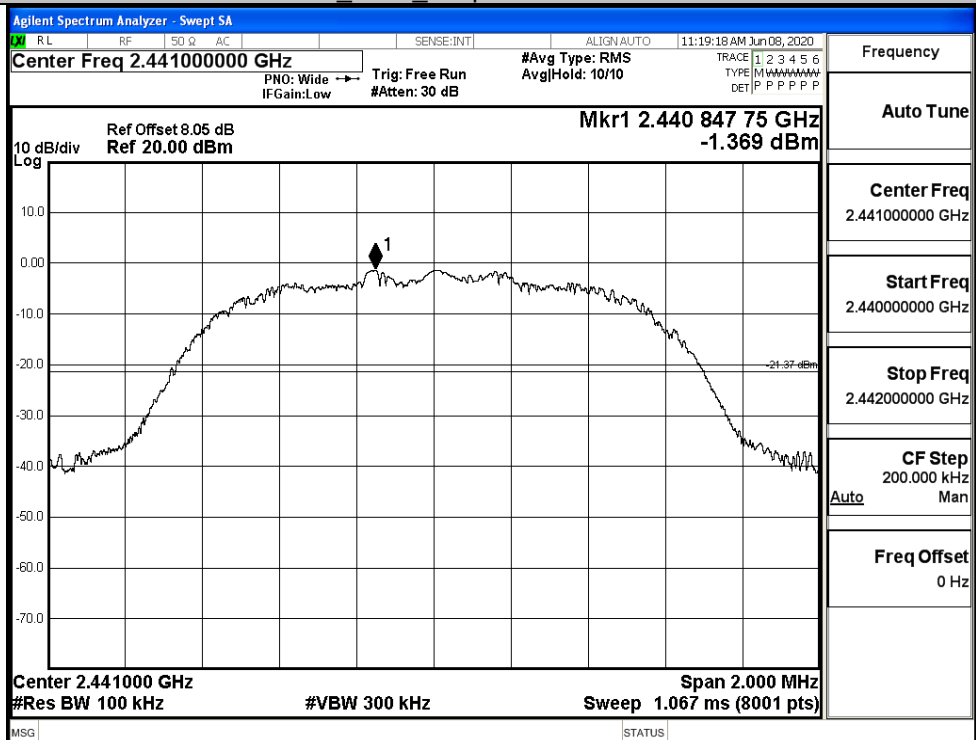


Puw

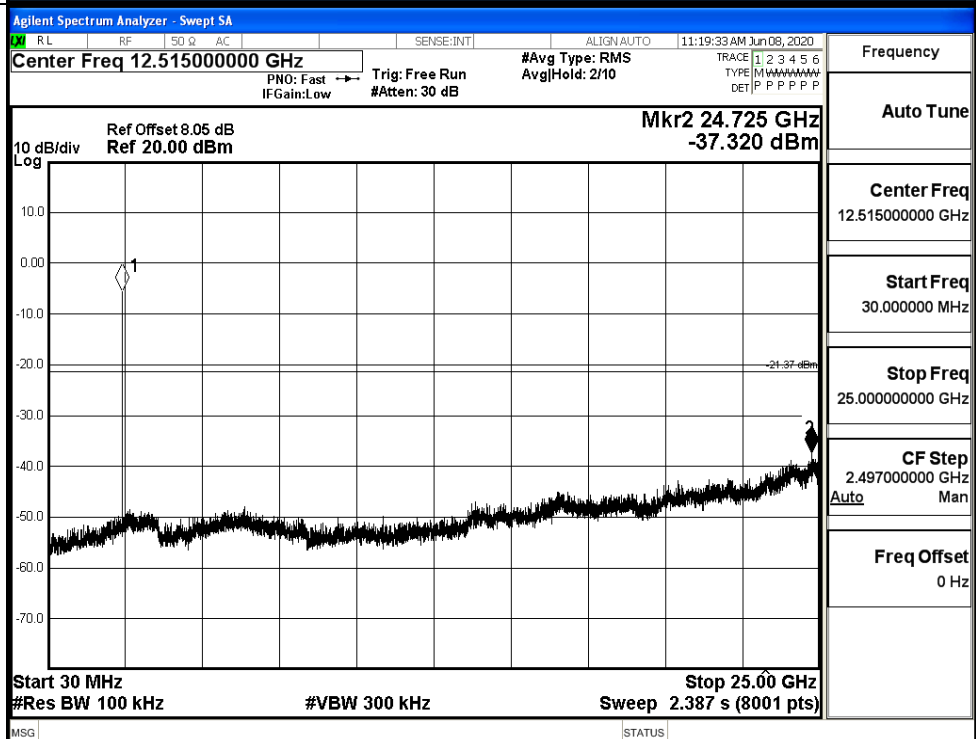


8DPSK_MCH_Graphs

Pref

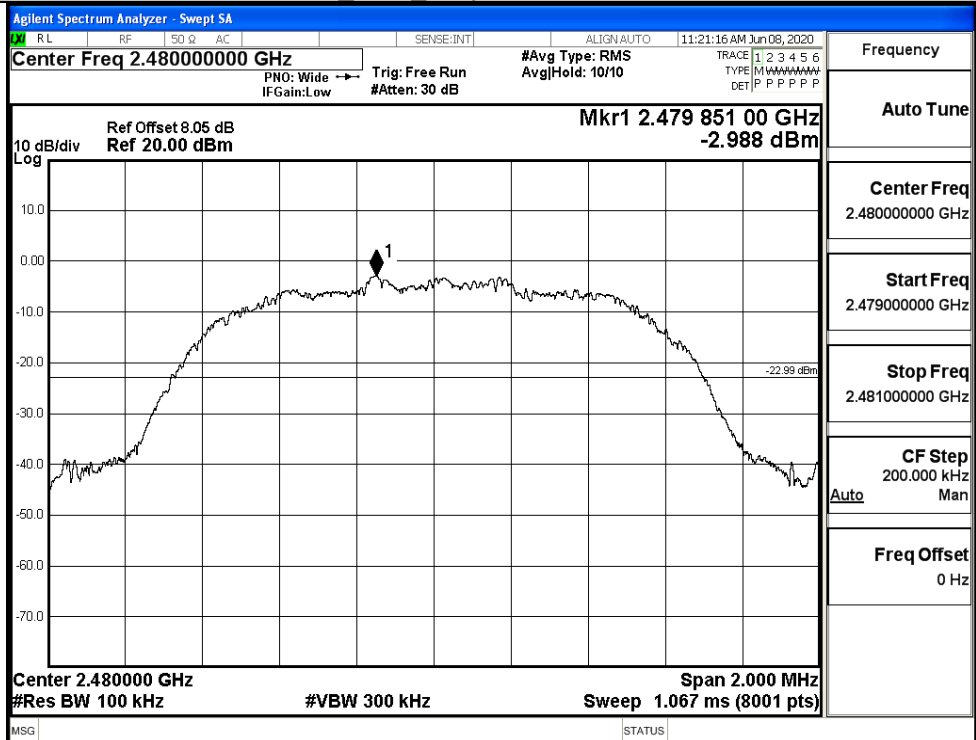


Puw



8DPSK_HCH_Graphs

Pref



Puw

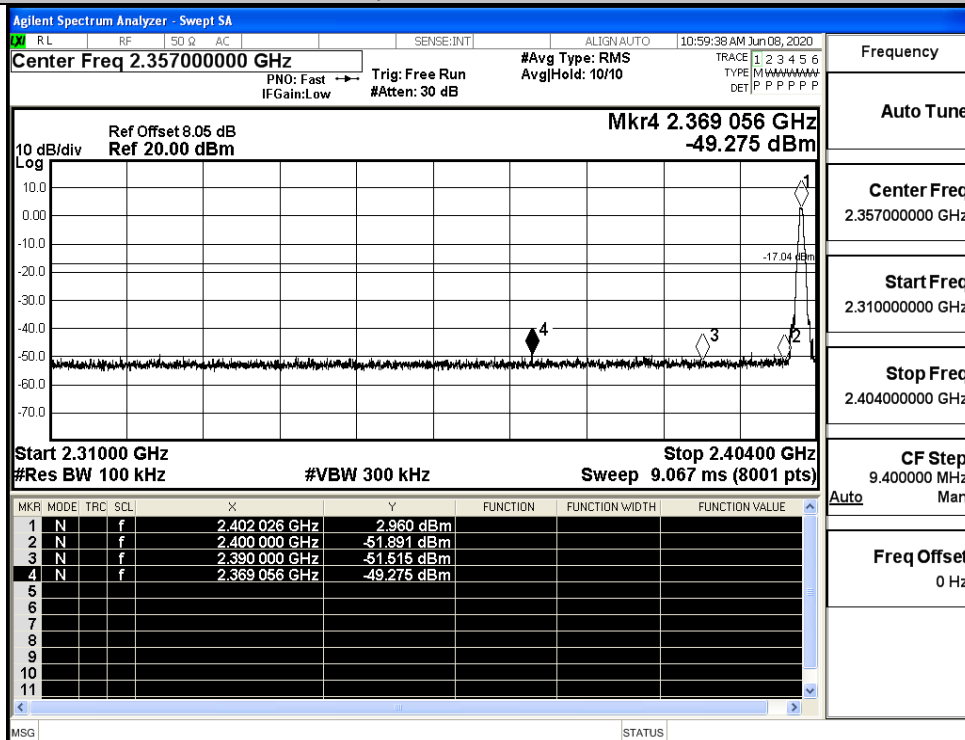


A.7 Band-edge for RF Conducted Emissions

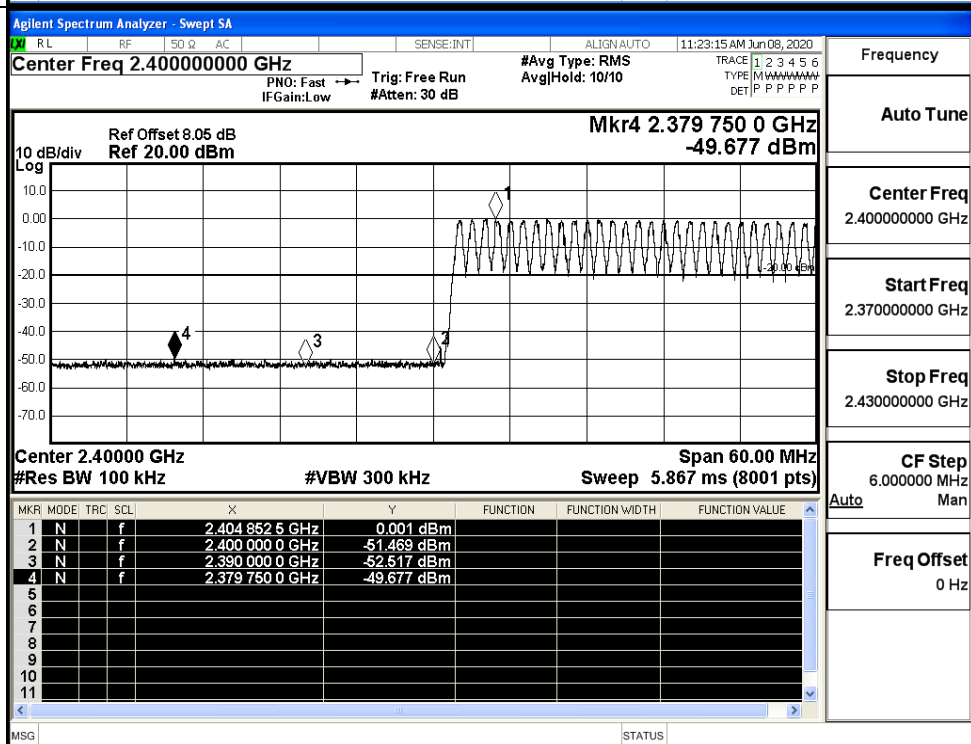
Mode	Channel	Carrier Frequency [MHz]	Carrier Power [dBm]	Frequency Hopping	Max Spurious Level [dBm]	Limit [dBm]	Verdict
GFSK	LCH	2402	2.960	Off	-49.275	-17.04	PASS
			0.001	On	-49.677	-20	PASS
	HCH	2480	0.035	Off	-48.795	-19.97	PASS
			-2.278	On	-48.982	-22.28	PASS
$\pi/4$ DQPSK	LCH	2402	0.201	Off	-49.270	-19.8	PASS
			-0.033	On	-49.098	-20.03	PASS
	HCH	2480	-2.879	Off	-49.387	-22.88	PASS
			-1.900	On	-48.759	-21.9	PASS
8DPSK	LCH	2402	-0.128	Off	-49.617	-20.13	PASS
			0.075	On	-49.155	-19.93	PASS
	HCH	2480	-2.839	Off	-48.830	-22.84	PASS
			-2.169	On	-48.434	-22.17	PASS

Test Graphs

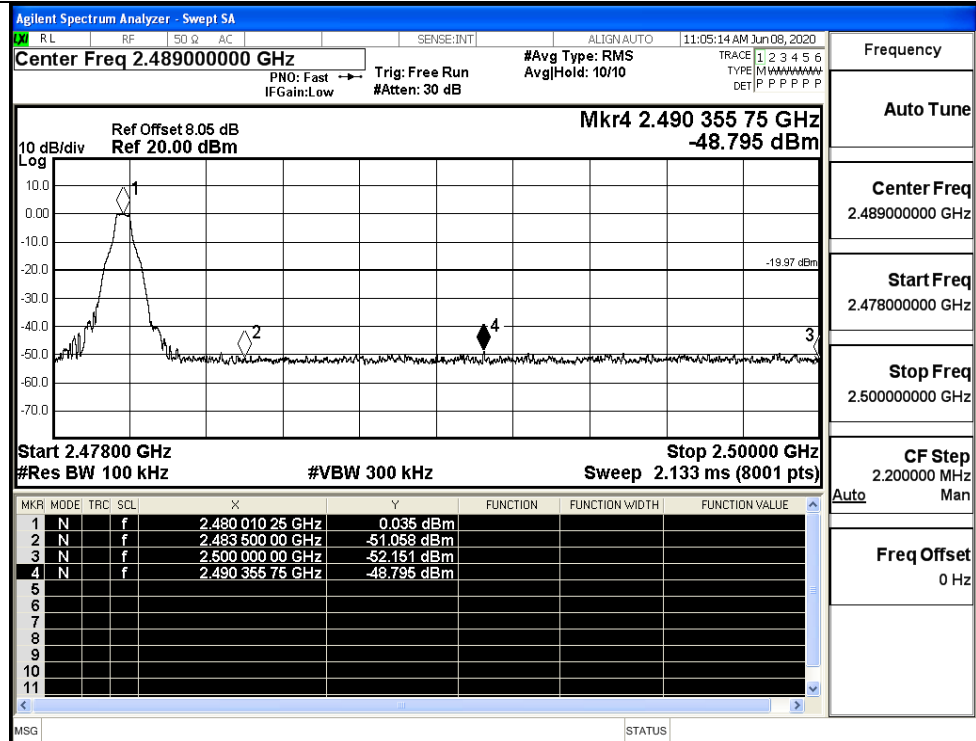
GFSK/LCH/No Hop



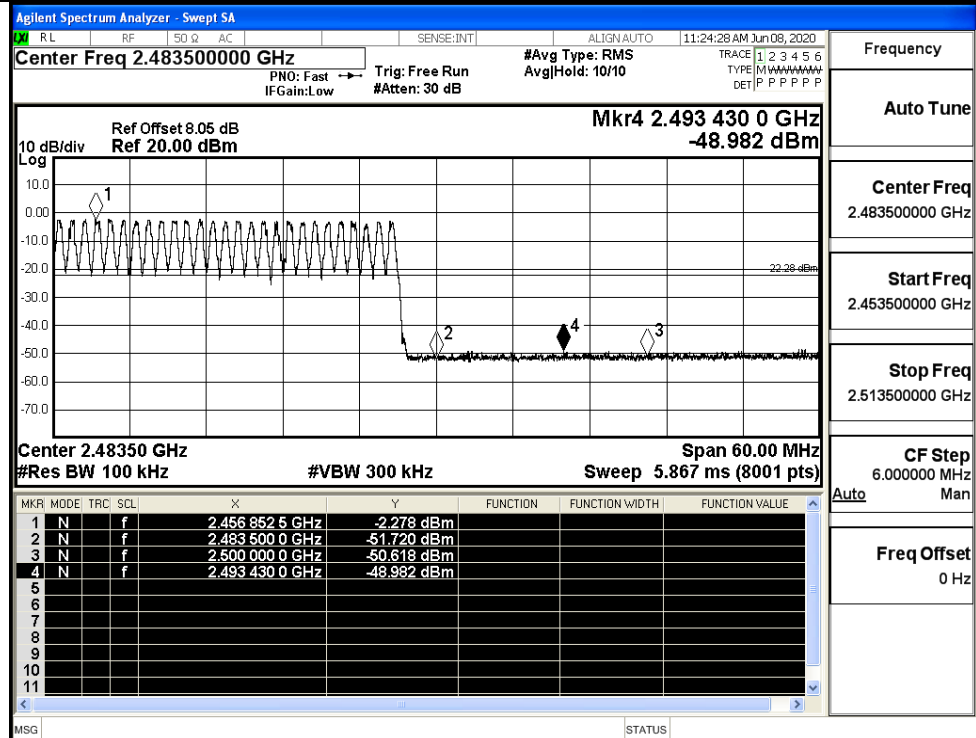
GFSK/LCH/Hop



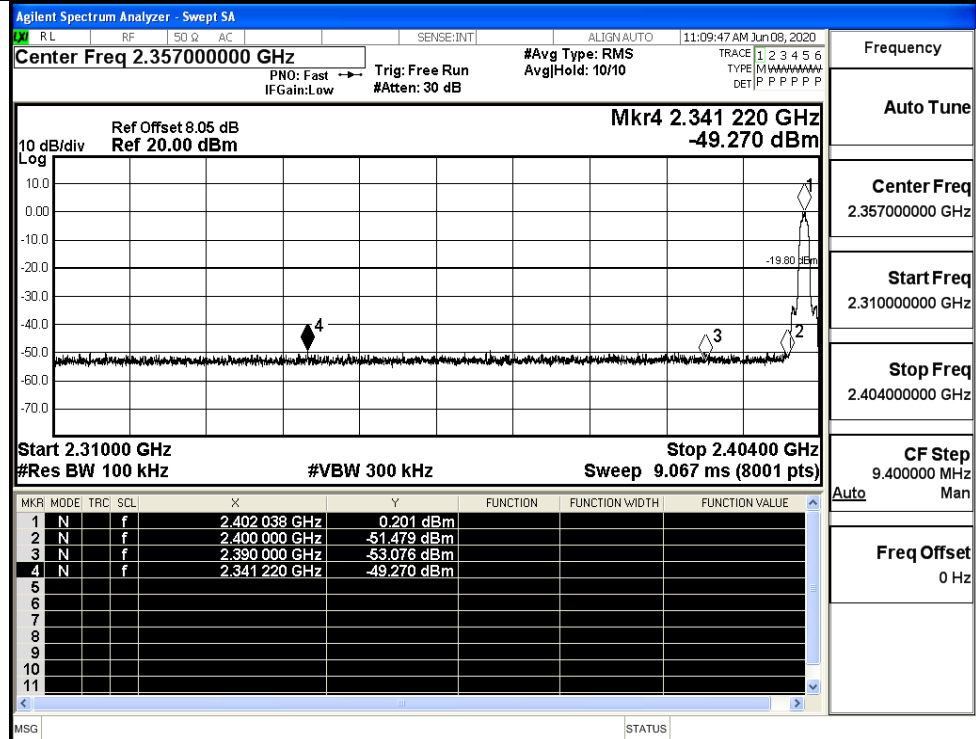
GFSK/HCH/No Hop



GFSK/HCH/Hop



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

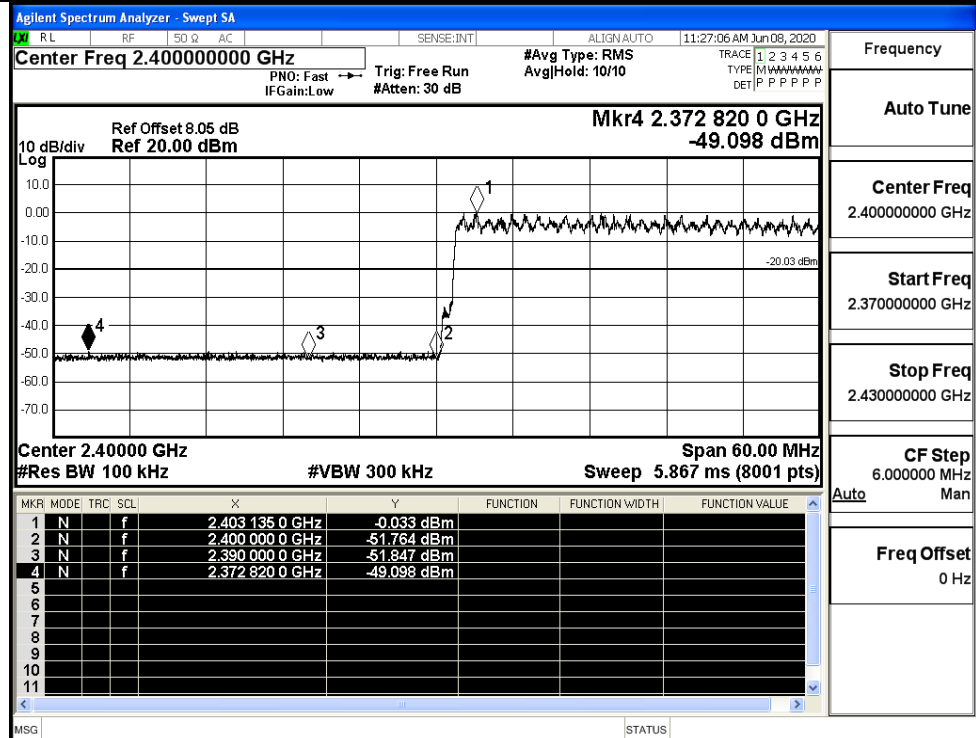


Frequency

Auto Tune

Center Freq
2.357000000 GHzStart Freq
2.310000000 GHzStop Freq
2.404000000 GHzCF Step
9.400000 MHz
Auto ManFreq Offset
0 Hz

$\pi/4$ DQPSK/LCH/Hop

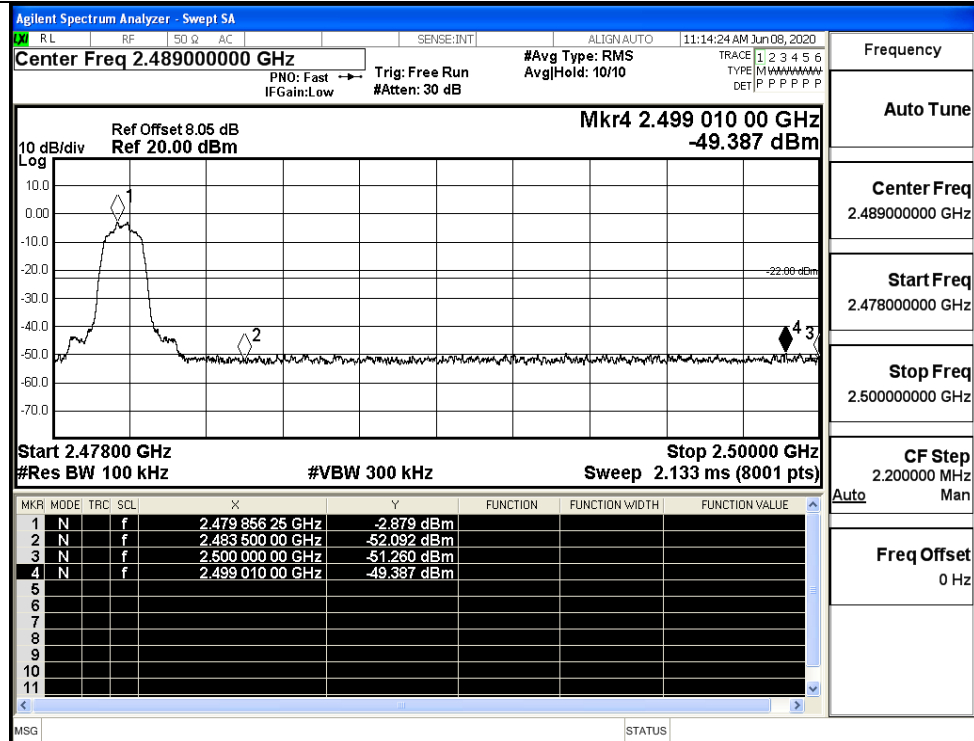


Frequency

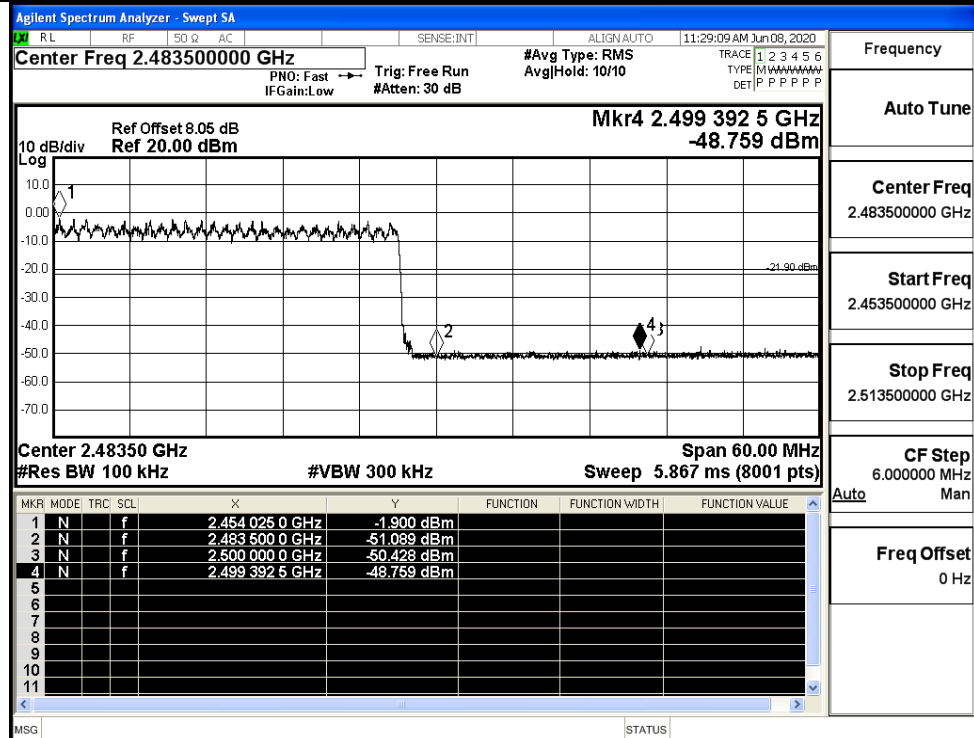
Auto Tune

Center Freq
2.400000000 GHzStart Freq
2.370000000 GHzStop Freq
2.430000000 GHzCF Step
6.000000 MHz
Auto ManFreq Offset
0 Hz

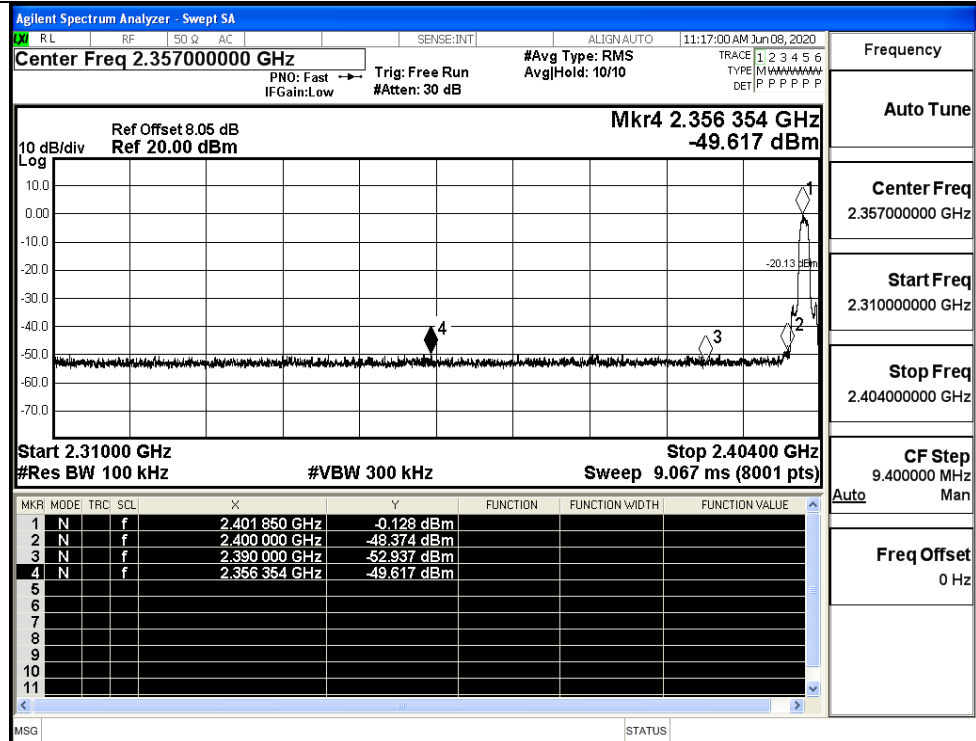
$\pi/4$ DQPSK/HCH/No
Hop



$\pi/4$ DQPSK/HCH/Hop



8DPSK/LCH/No Hop

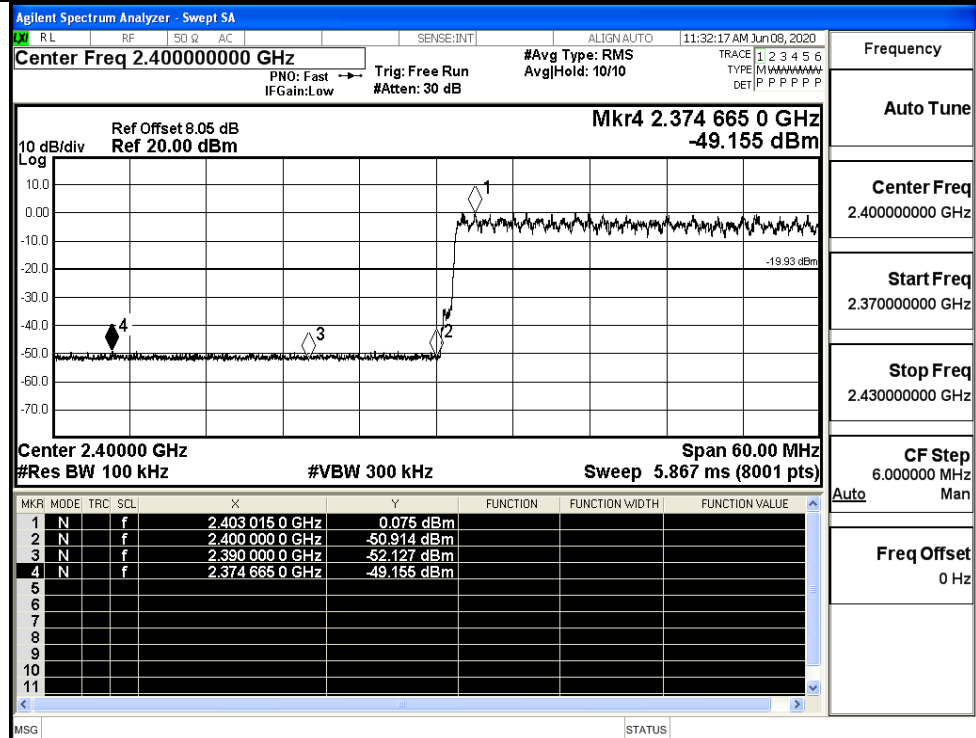


Frequency

Auto Tune

Center Freq
2.357000000 GHzStart Freq
2.310000000 GHzStop Freq
2.404000000 GHzCF Step
9.400000 MHz
Auto ManFreq Offset
0 Hz

8DPSK/LCH/Hop

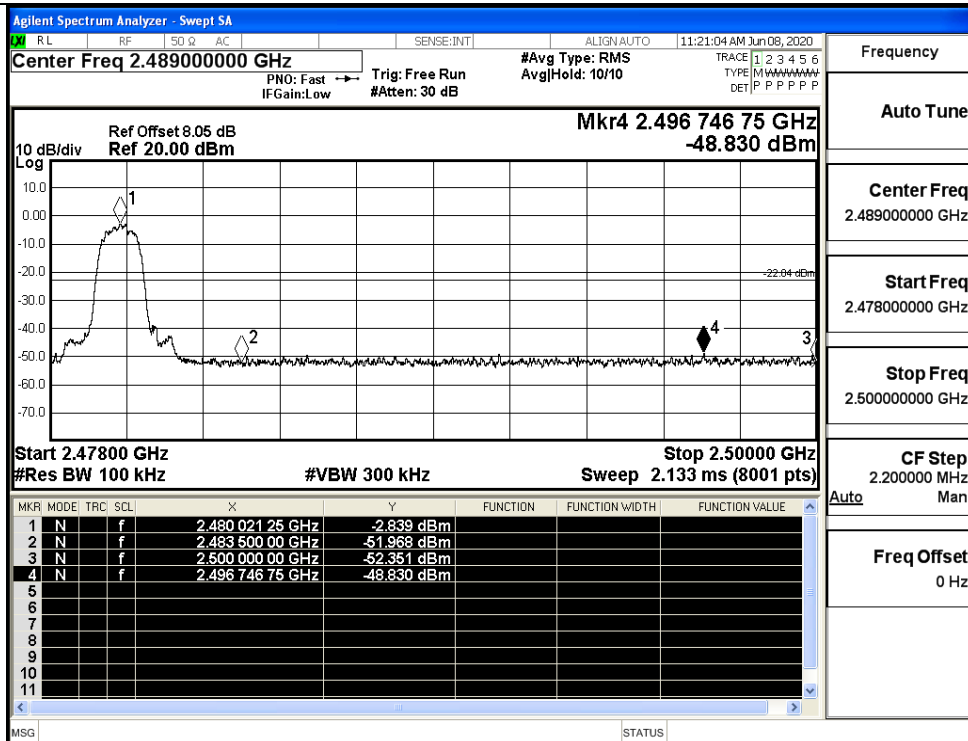


Frequency

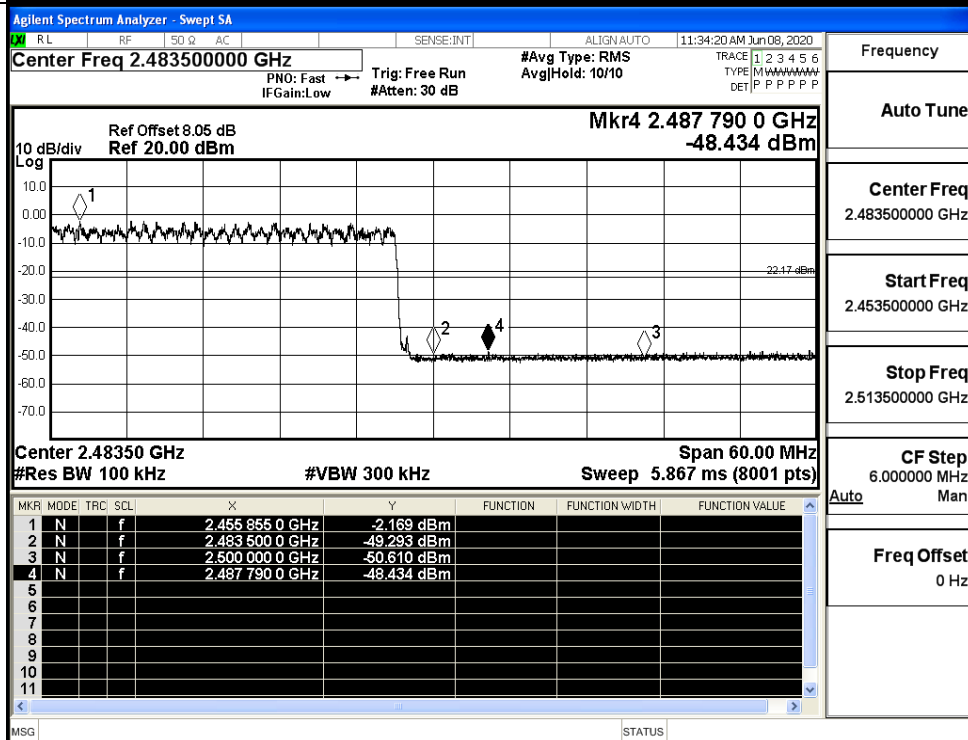
Auto Tune

Center Freq
2.400000000 GHzStart Freq
2.370000000 GHzStop Freq
2.430000000 GHzCF Step
6.000000 MHz
Auto ManFreq Offset
0 Hz

8DPSK/HCH/No Hop



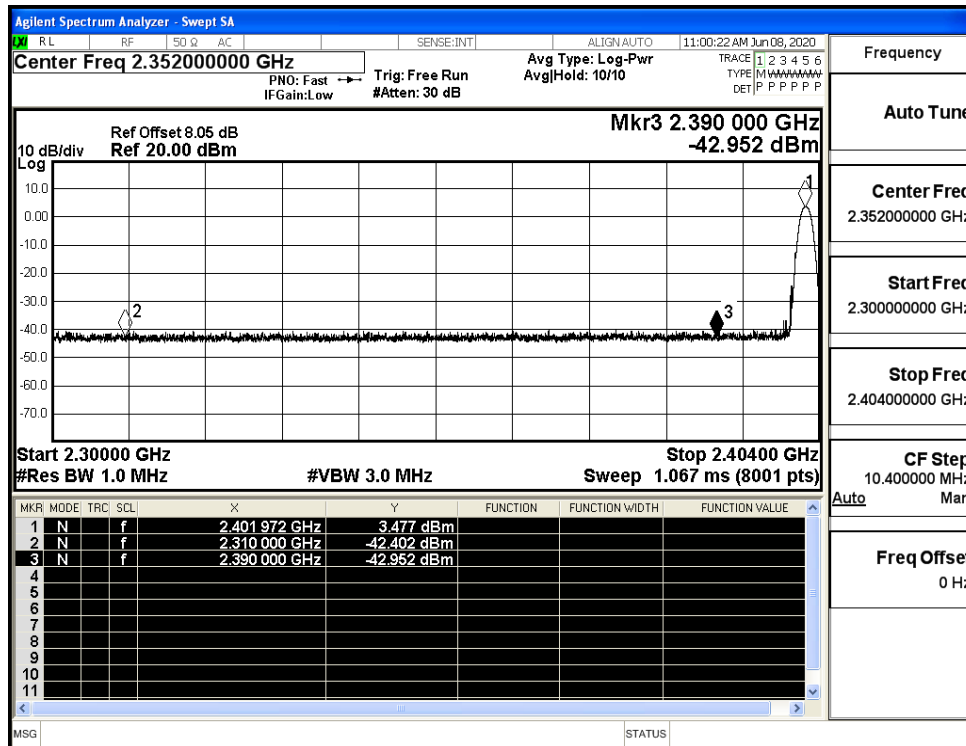
8DPSK/HCH/Hop



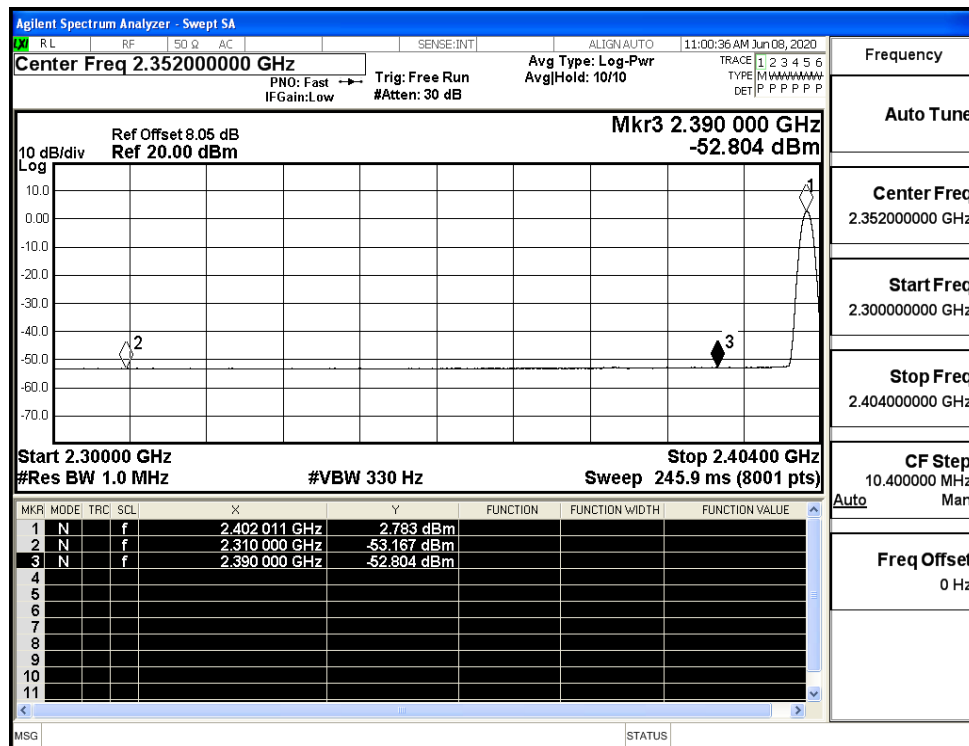
A.8 Restrict-band band-edge measurements

Test Mode	Hopping	Freq.	Power [dBm]	Gain	Ground Factor	E [dBuV/m]	Detector	Limit [dBuV/m]	Verdict
GFSK	Off	2310.0	-42.40	2.0	0	52.86	PEAK	74	PASS
	Off	2310.0	-53.17	2.0	0	42.09	AV	54	PASS
	Off	2390.0	-42.95	2.0	0	52.31	PEAK	74	PASS
	Off	2390.0	-52.80	2.0	0	42.45	AV	54	PASS
	Off	2483.5	-41.44	2.0	0	53.82	PEAK	74	PASS
	Off	2483.5	-52.40	2.0	0	42.86	AV	54	PASS
	Off	2500.0	-42.30	2.0	0	52.96	PEAK	74	PASS
	Off	2500.0	-52.33	2.0	0	42.93	AV	54	PASS
$\pi/4$ DQPSK	Off	2310.0	-42.85	2.0	0	52.41	PEAK	74	PASS
	Off	2310.0	-53.23	2.0	0	42.03	AV	54	PASS
	Off	2390.0	-42.59	2.0	0	52.67	PEAK	74	PASS
	Off	2390.0	-52.87	2.0	0	42.39	AV	54	PASS
	Off	2483.5	-43.34	2.0	0	51.92	PEAK	74	PASS
	Off	2483.5	-52.32	2.0	0	42.94	AV	54	PASS
	Off	2500.0	-41.32	2.0	0	53.94	PEAK	74	PASS
	Off	2500.0	-52.18	2.0	0	43.08	AV	54	PASS
8DPSK	Off	2310.0	-44.13	2.0	0	51.12	PEAK	74	PASS
	Off	2310.0	-53.32	2.0	0	41.94	AV	54	PASS
	Off	2390.0	-43.65	2.0	0	51.60	PEAK	74	PASS
	Off	2390.0	-53.07	2.0	0	42.19	AV	54	PASS
	Off	2483.5	-42.37	2.0	0	52.89	PEAK	74	PASS
	Off	2483.5	-52.44	2.0	0	42.81	AV	54	PASS
	Off	2500.0	-43.10	2.0	0	52.16	PEAK	74	PASS
	Off	2500.0	-52.38	2.0	0	42.88	AV	54	PASS

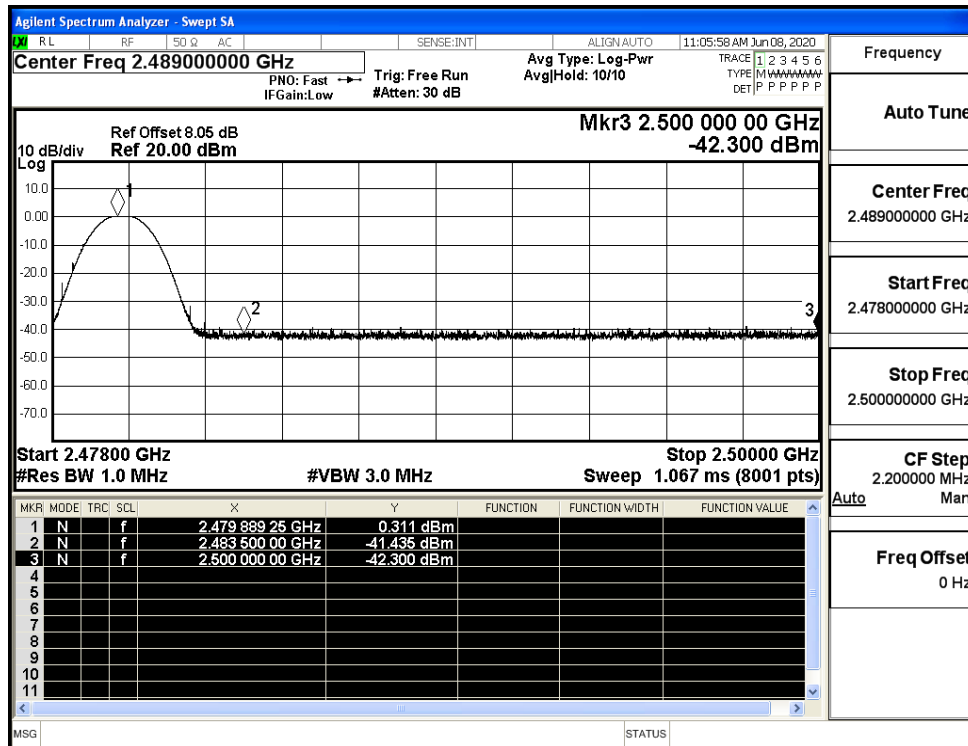
Restrict-band band-edge measurements_Hopping Off_GFSK_PEAK (Low Channel)



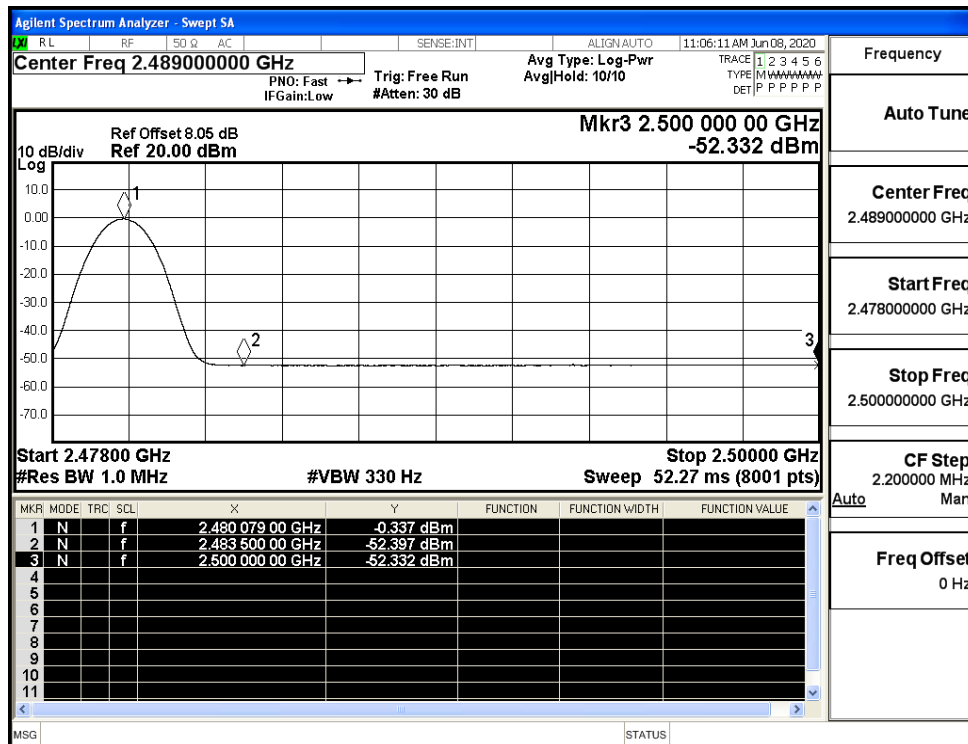
Restrict-band band-edge measurements_Hopping Off_GFSK_Average (Low Channel)

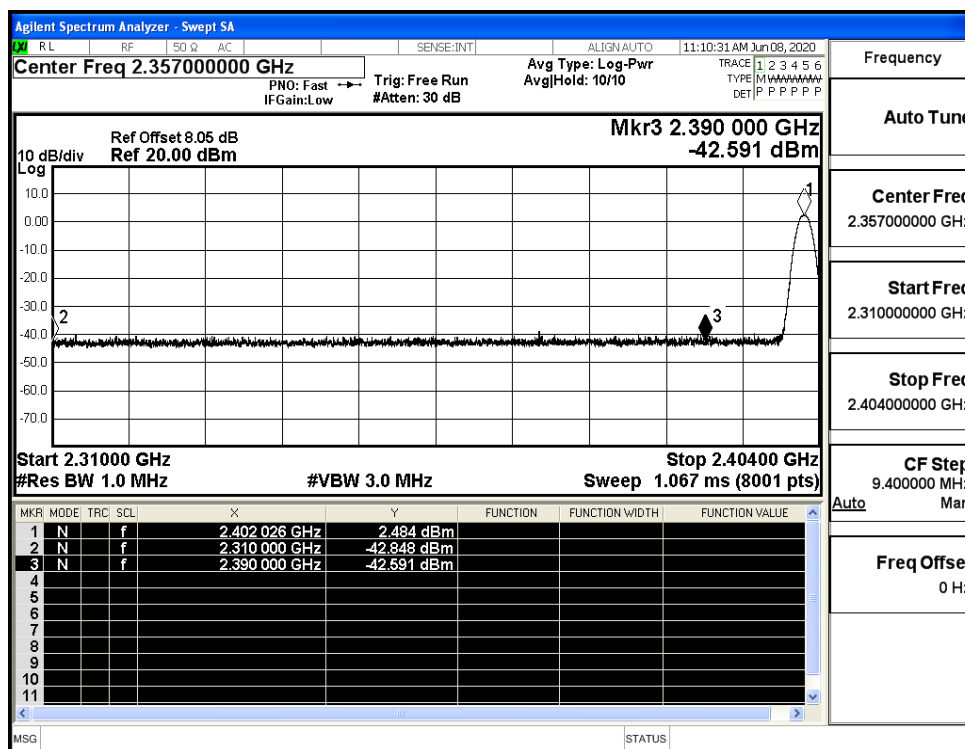
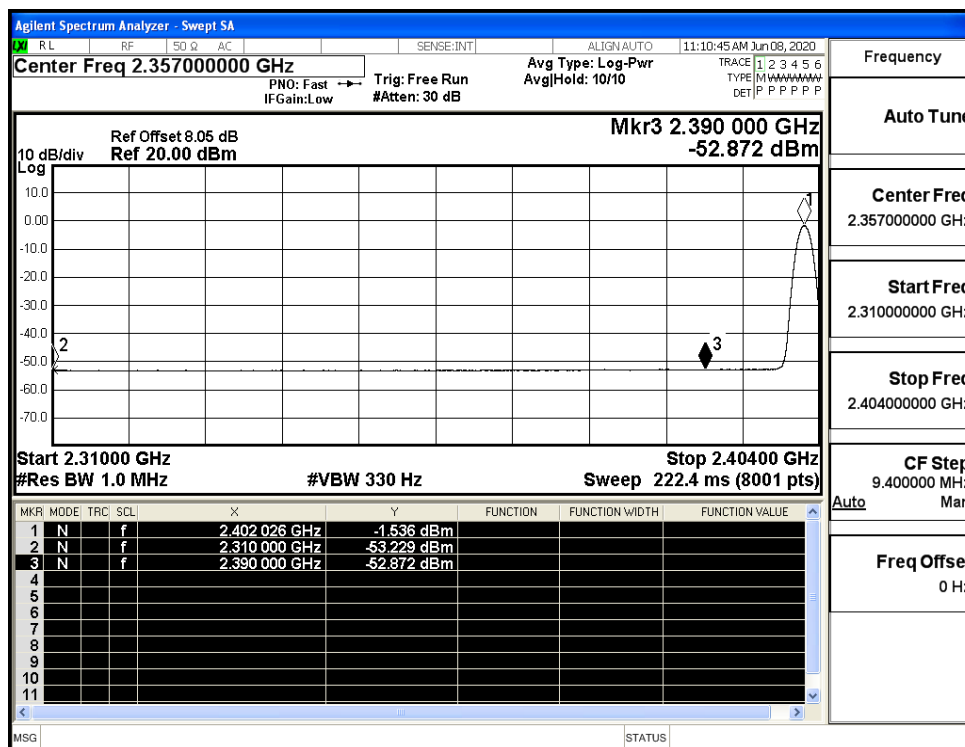


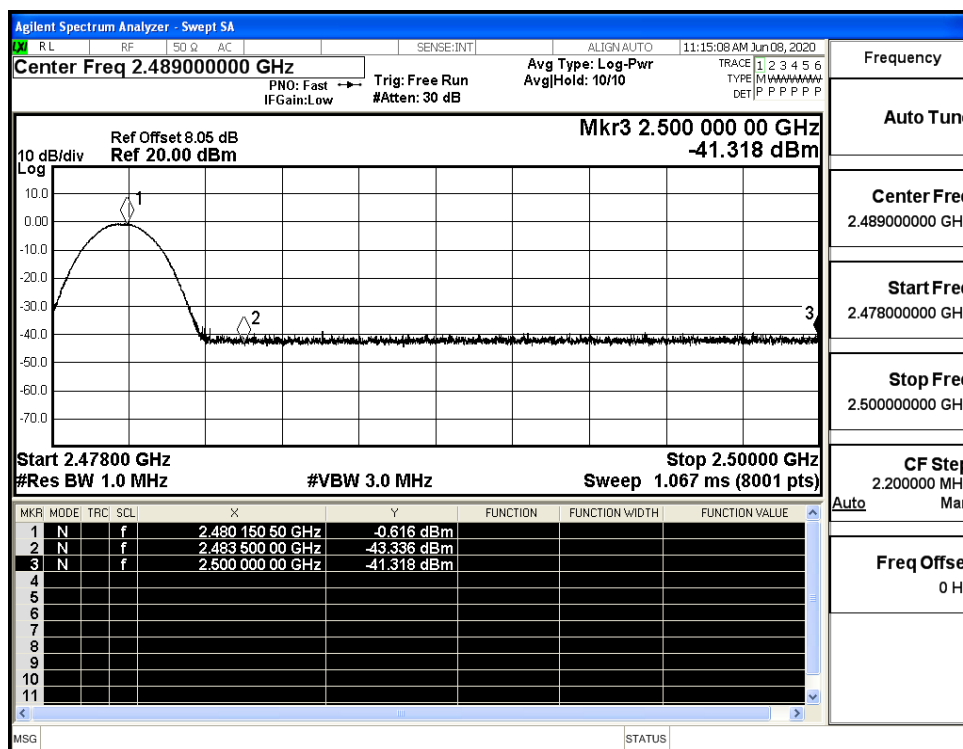
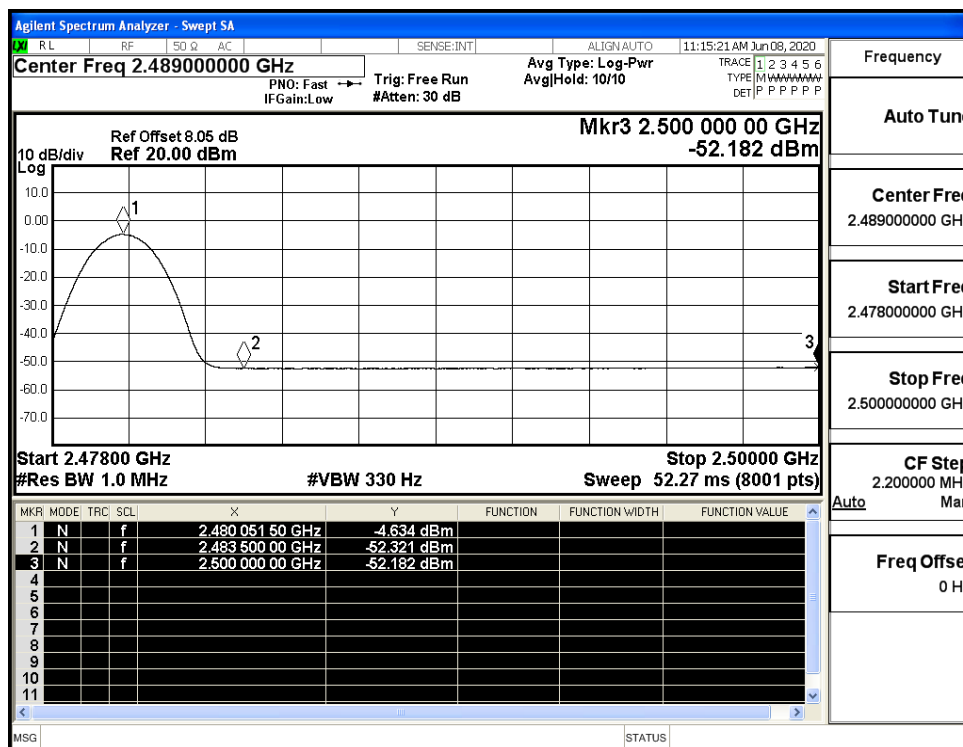
Restrict-band band-edge measurements_Hopping Off_GFSK_PEAK (High Channel)



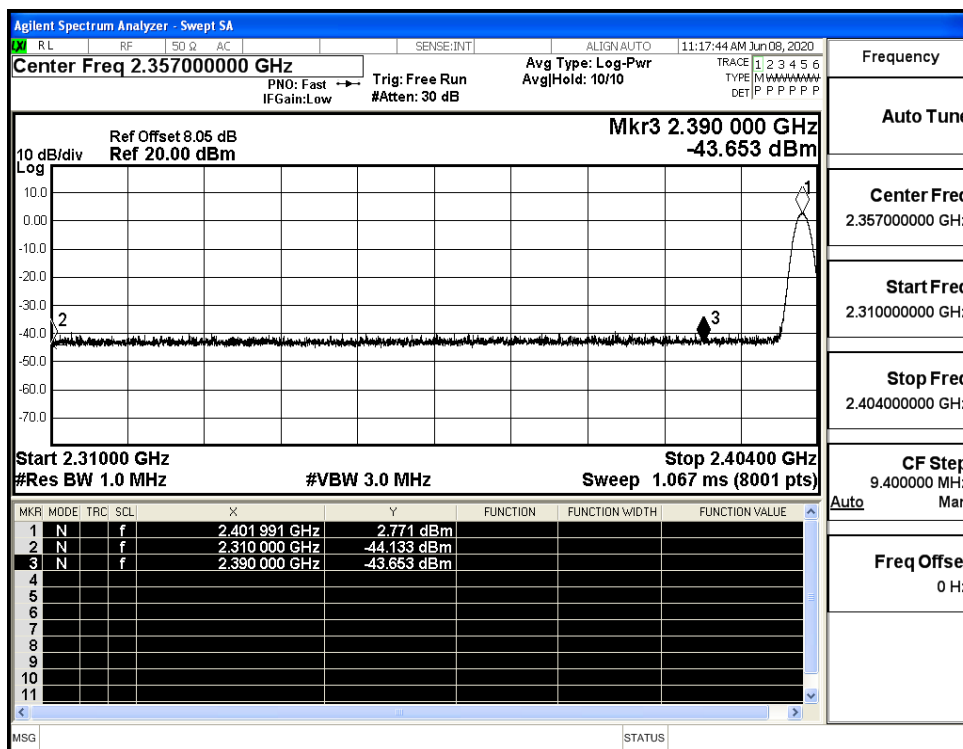
Restrict-band band-edge measurements_Hopping Off_GFSK_Average (High Channel)



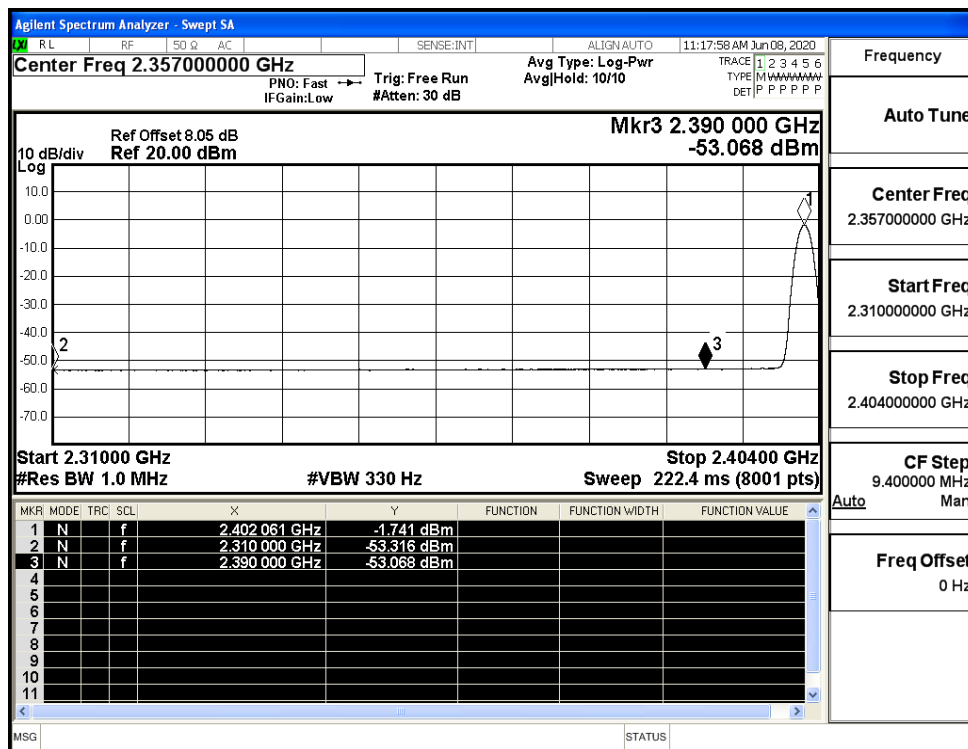
Restrict-band band-edge measurements_Hopping Off $\pi/4$ -DQPSK_PEAK (Low Channel)Restrict-band band-edge measurements_Hopping Off $\pi/4$ -DQPSK_Average (Low Channel)

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)

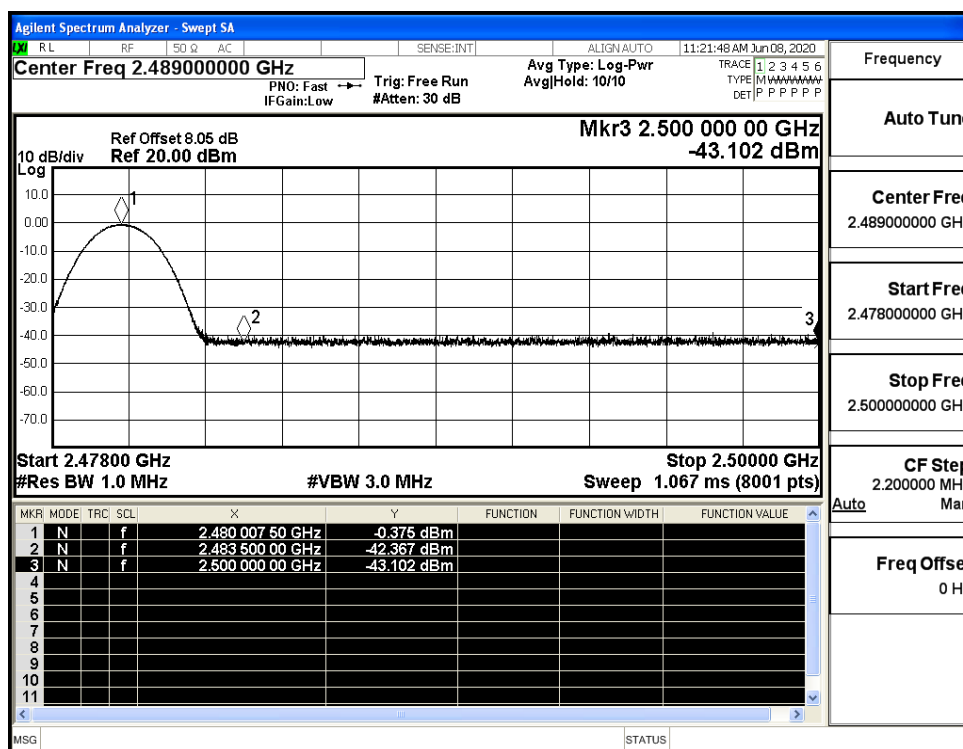
Restrict-band band-edge measurements_Hopping Off_8DPSK_PEAK (Low Channel)



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)

