

Appendix A

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

Product Name: FIT Magnetic Wireless Headset

Trade Mark: N/A

Test Model: 72961

Environmental Conditions

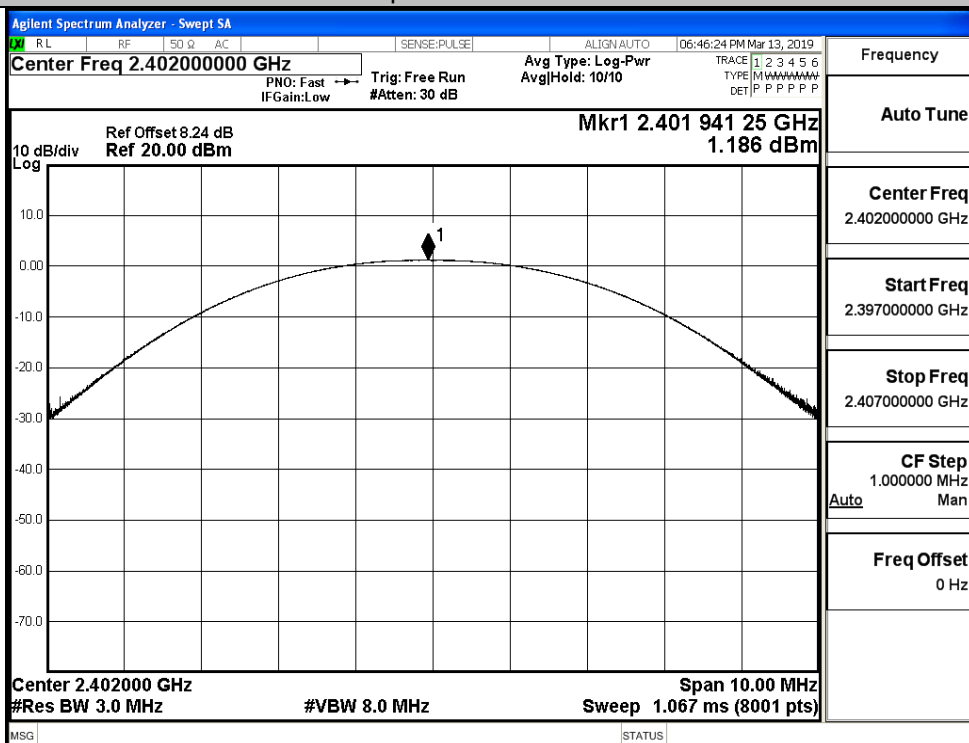
Temperature:	23.2 ° C
Relative Humidity:	53.4%
ATM Pressure:	100.0 kPa
Test Engineer:	Diamond.Lu
Supervised by:	Jayden.Zhuo

A.1 Maximum Conducted Peak Output Power

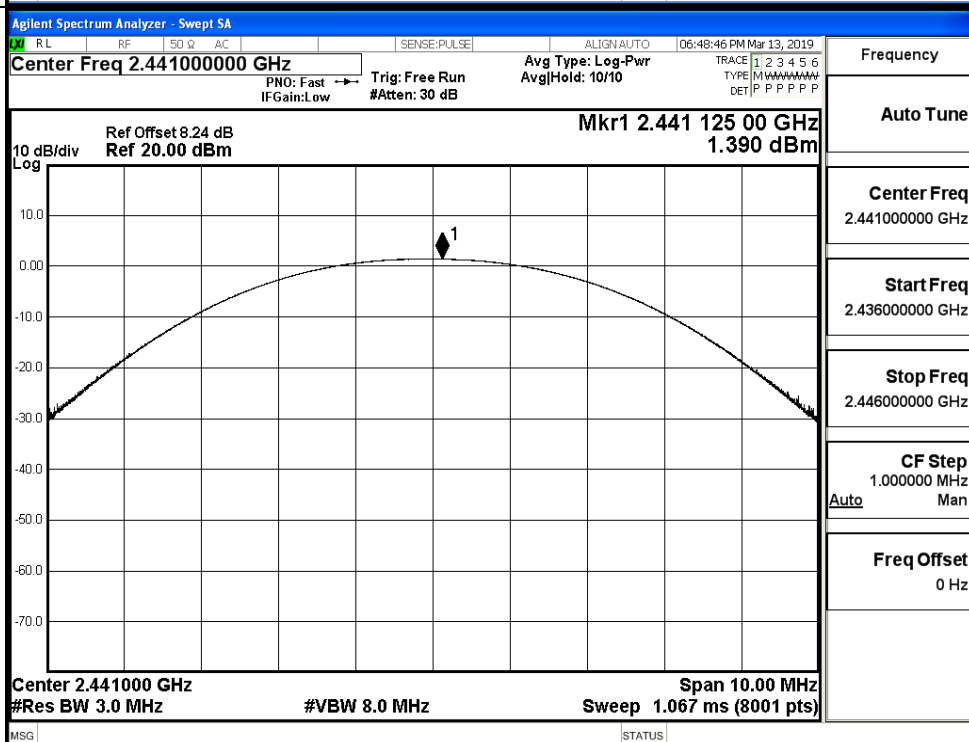
Mode	Channel.	Maximum Peak Output Power [dBm]	Limit [dBm]	Verdict
GFSK	LCH	1.186	21	PASS
	MCH	1.390	21	PASS
	HCH	1.488	21	PASS
$\pi/4$ DQPSK	LCH	1.067	21	PASS
	MCH	0.703	21	PASS
	HCH	0.684	21	PASS

Test Graphs

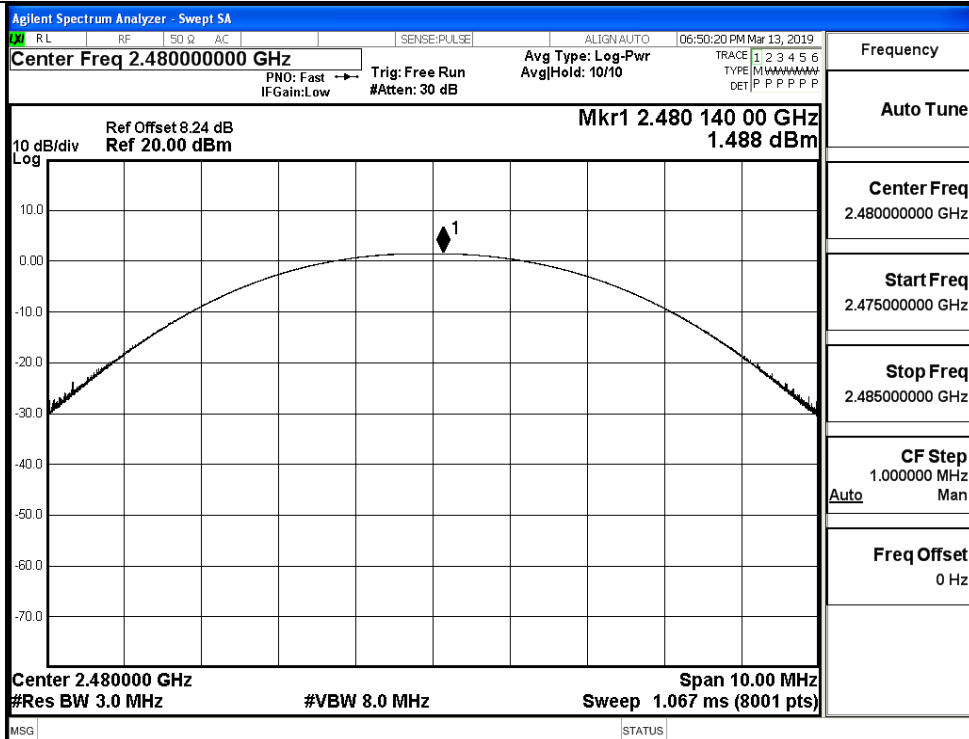
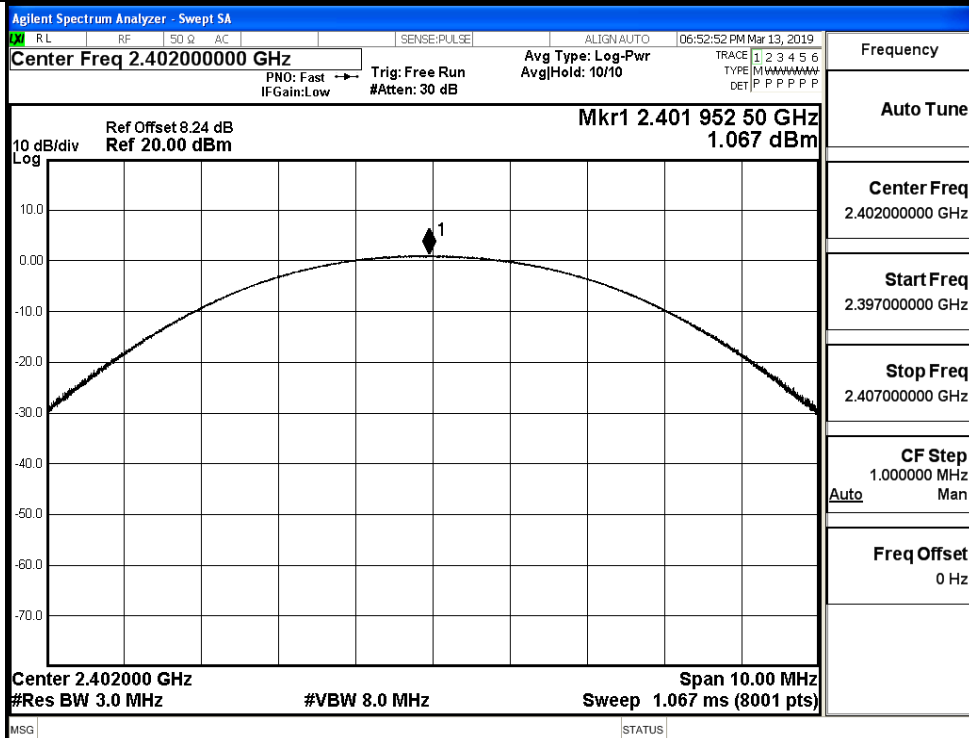
GFSK/LCH

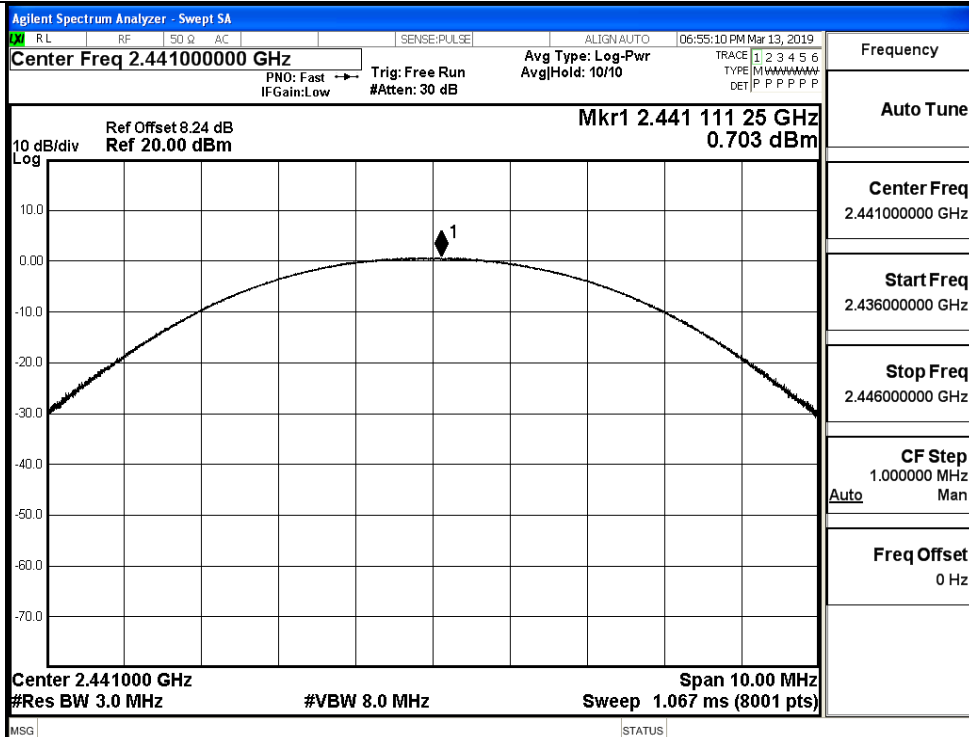
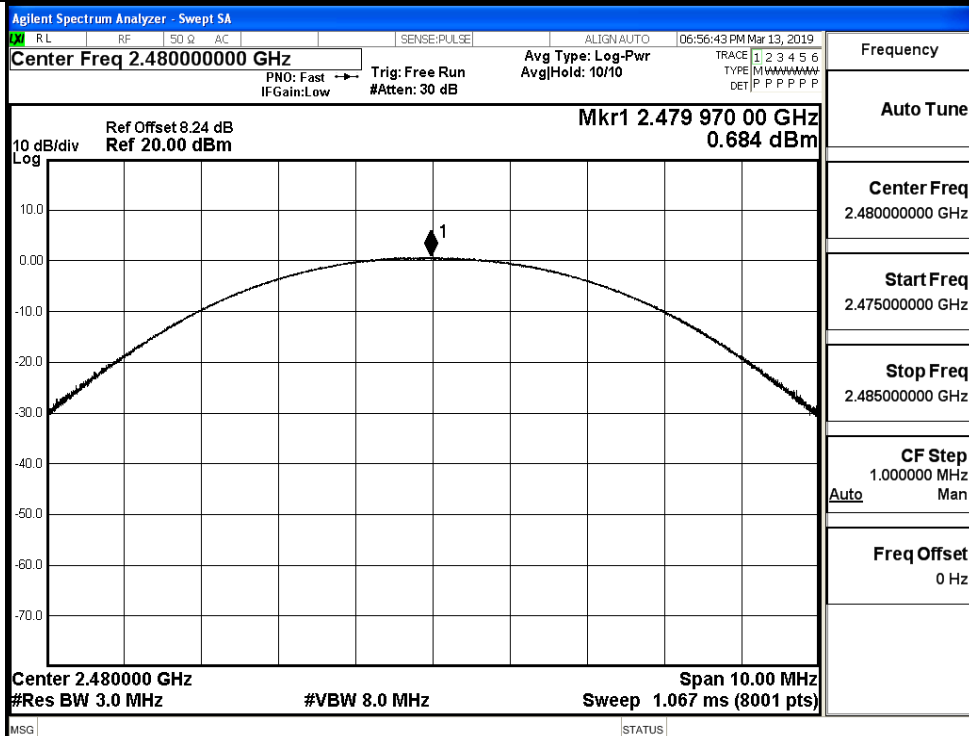


GFSK/MCH



GFSK/HCH

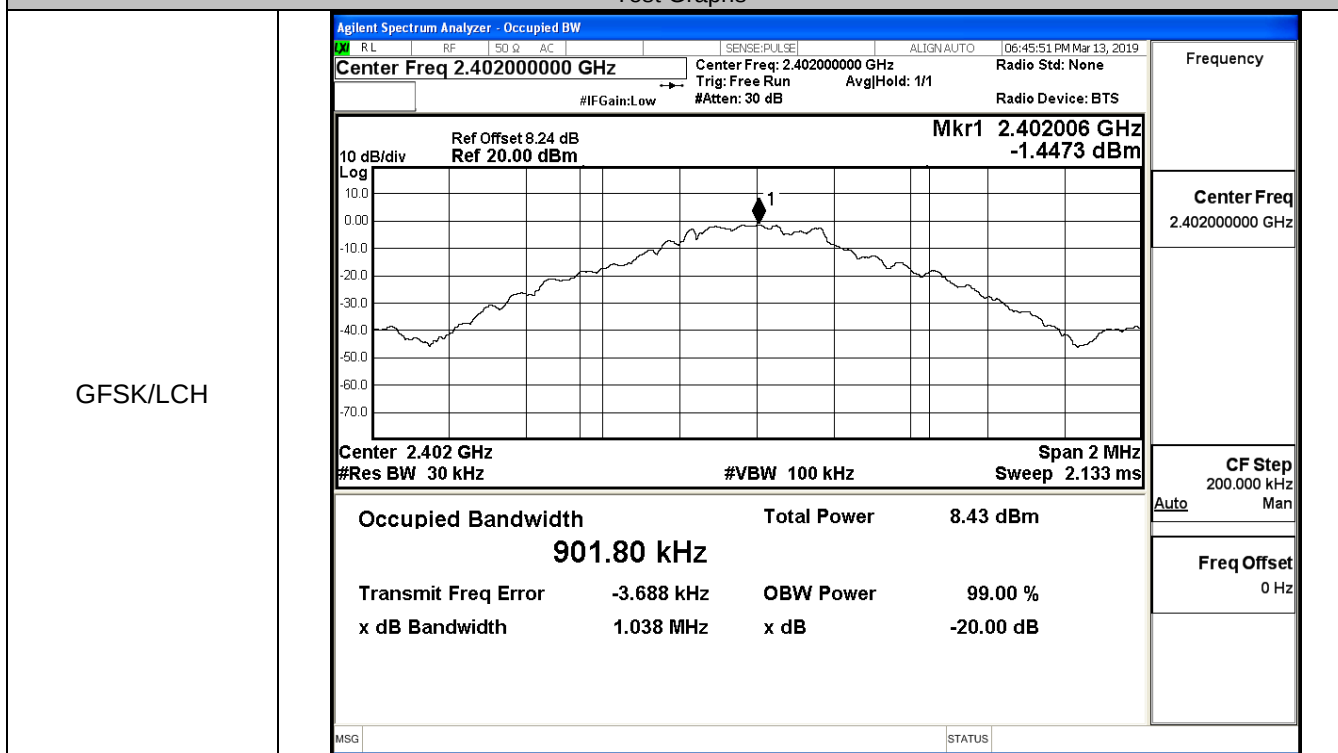
 $\pi/4$ DQPSK/LCH

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

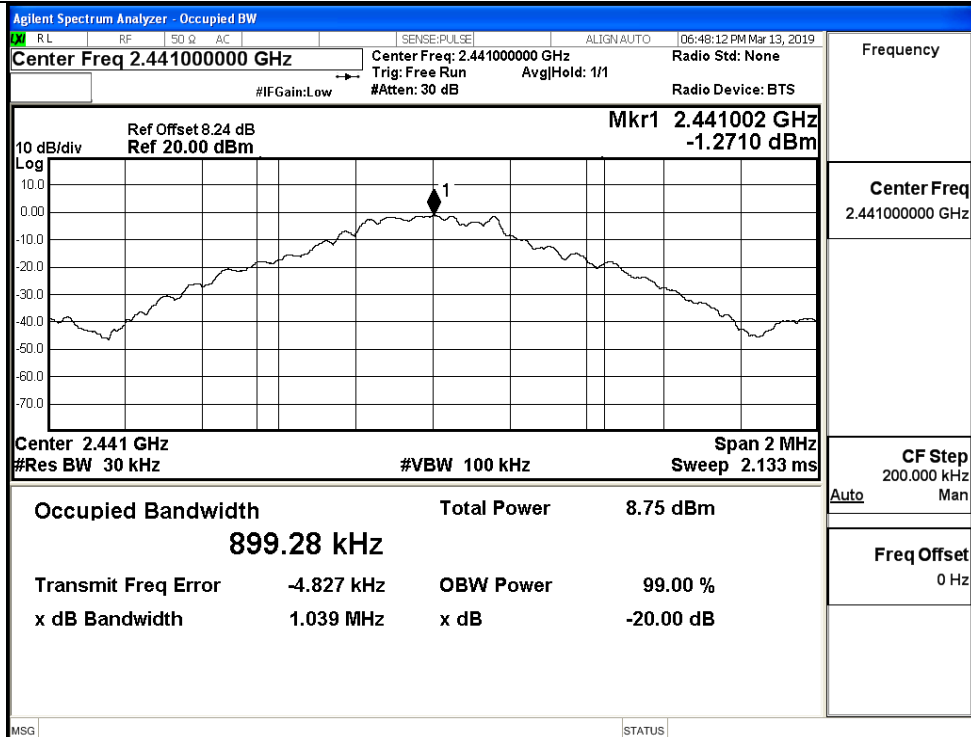
A.2 20dB Bandwidth

Mode	Channel.	20dB Bandwidth [MHz]	Limit [MHz]	Verdict
GFSK	LCH	1.038	Not Specified	PASS
	MCH	1.039	Not Specified	PASS
	HCH	1.034	Not Specified	PASS
$\pi/4$ DQPSK	LCH	1.292	Not Specified	PASS
	MCH	1.291	Not Specified	PASS
	HCH	1.291	Not Specified	PASS

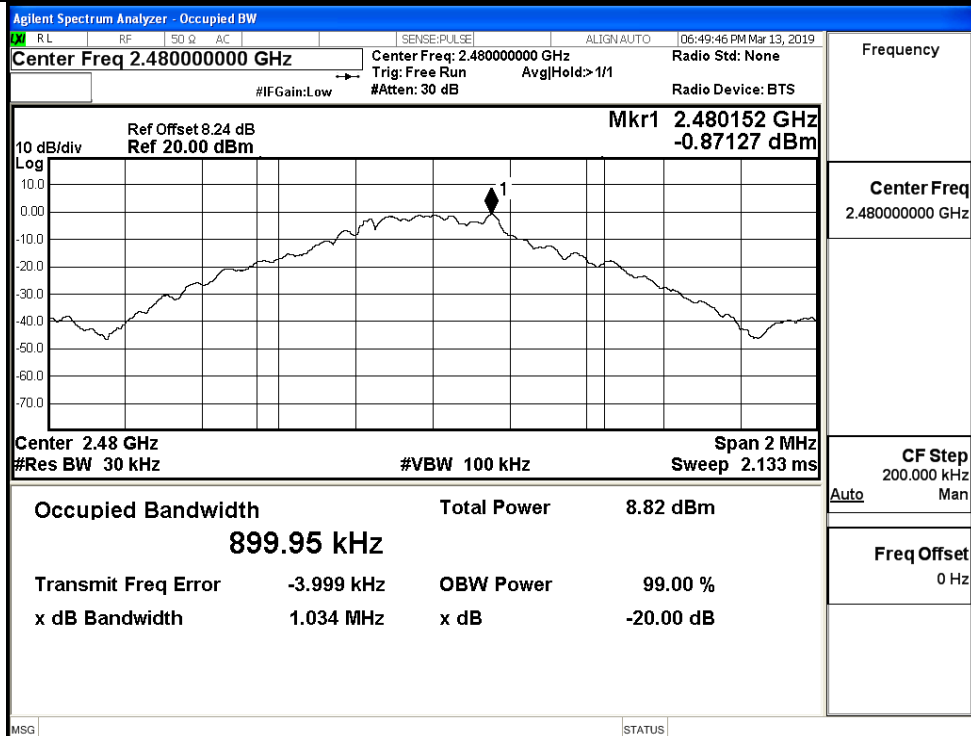
Test Graphs

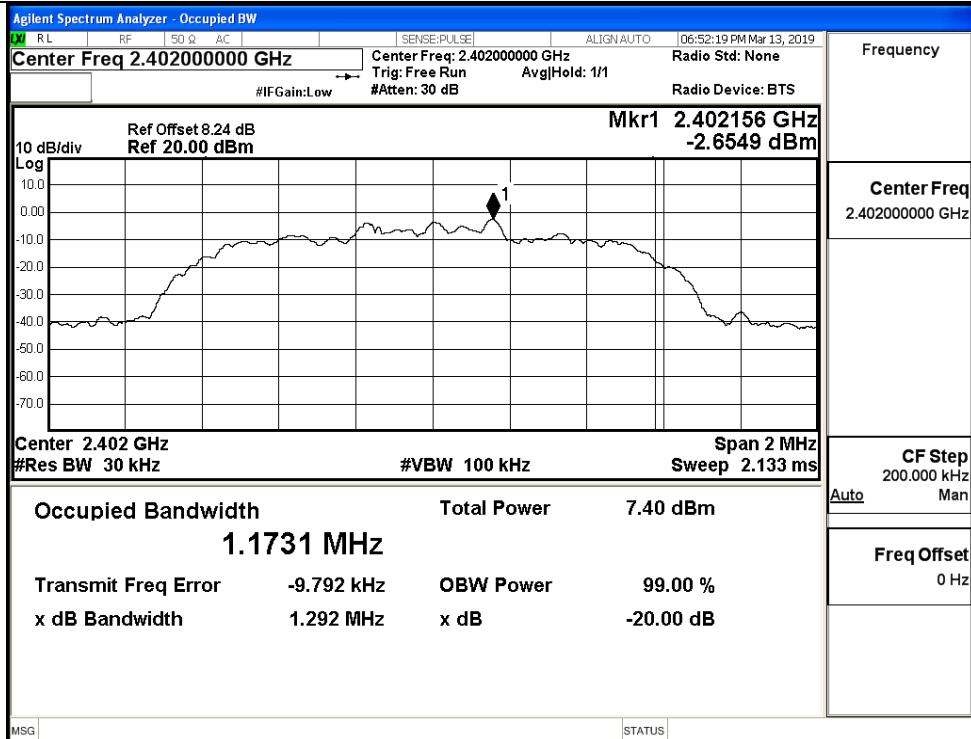
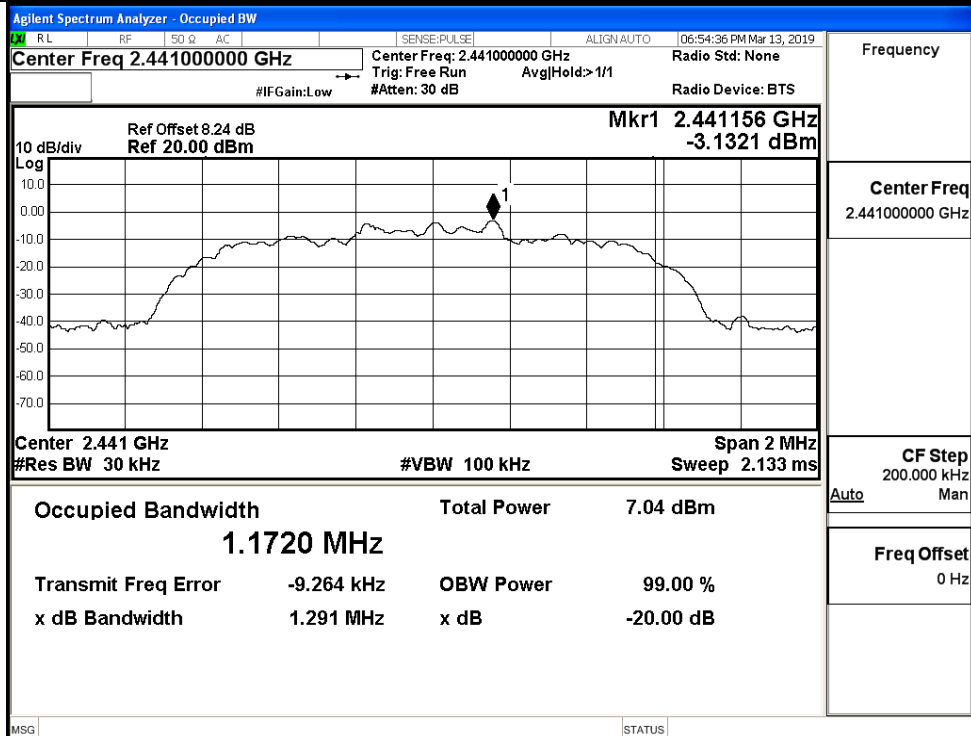


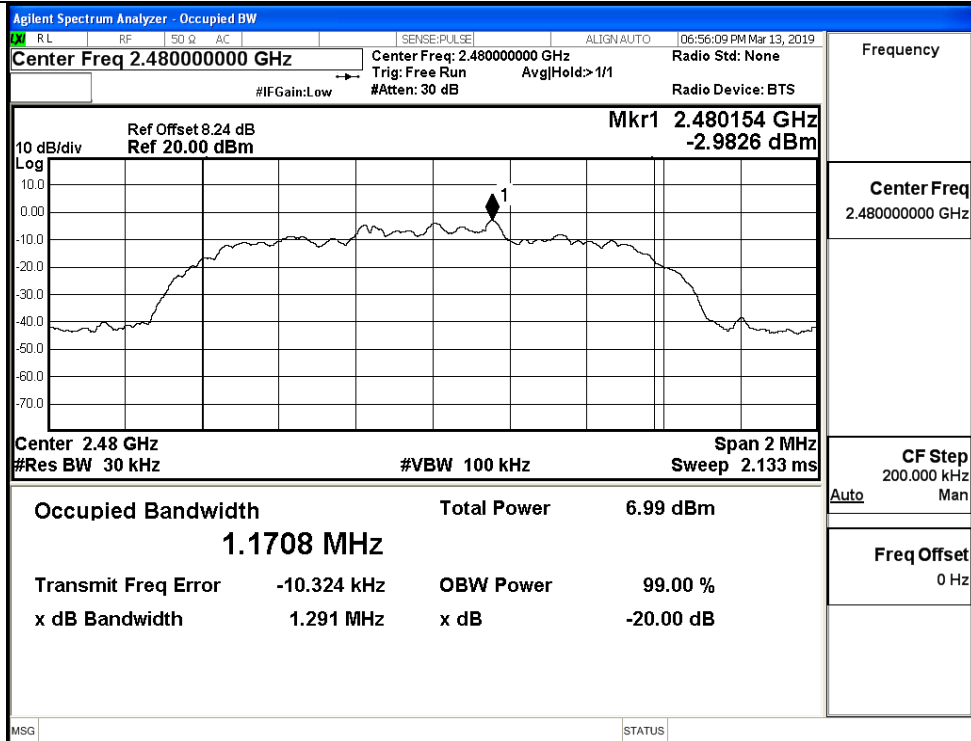
GFSK/MCH



GFSK/HCH



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

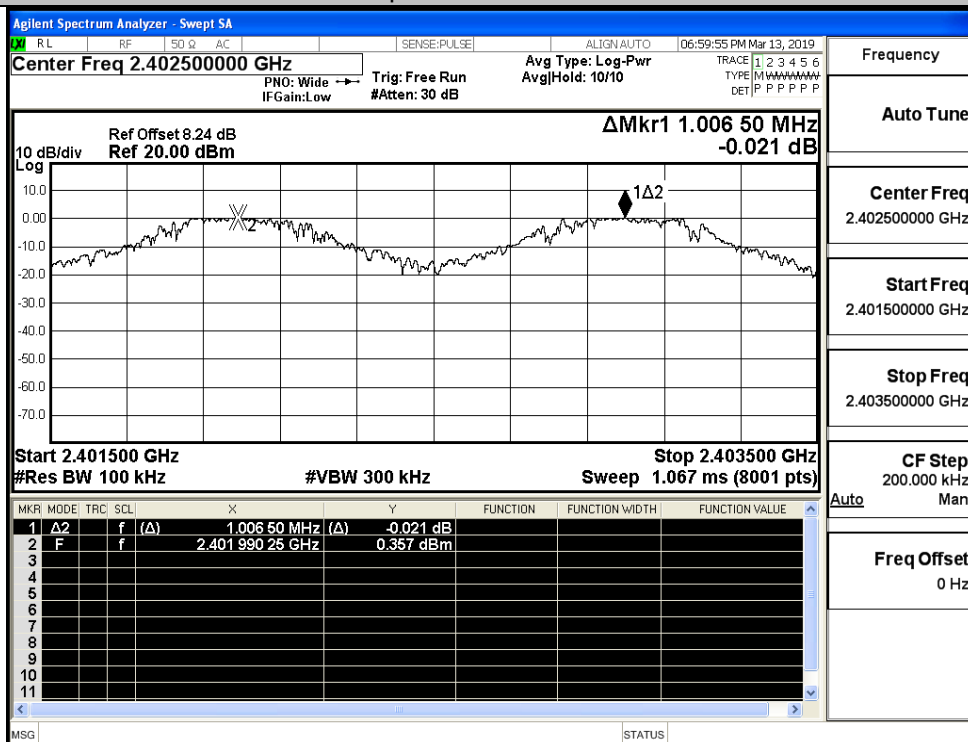
$\pi/4$ DQPSK/HCH

A.3 Carrier Frequency Separation

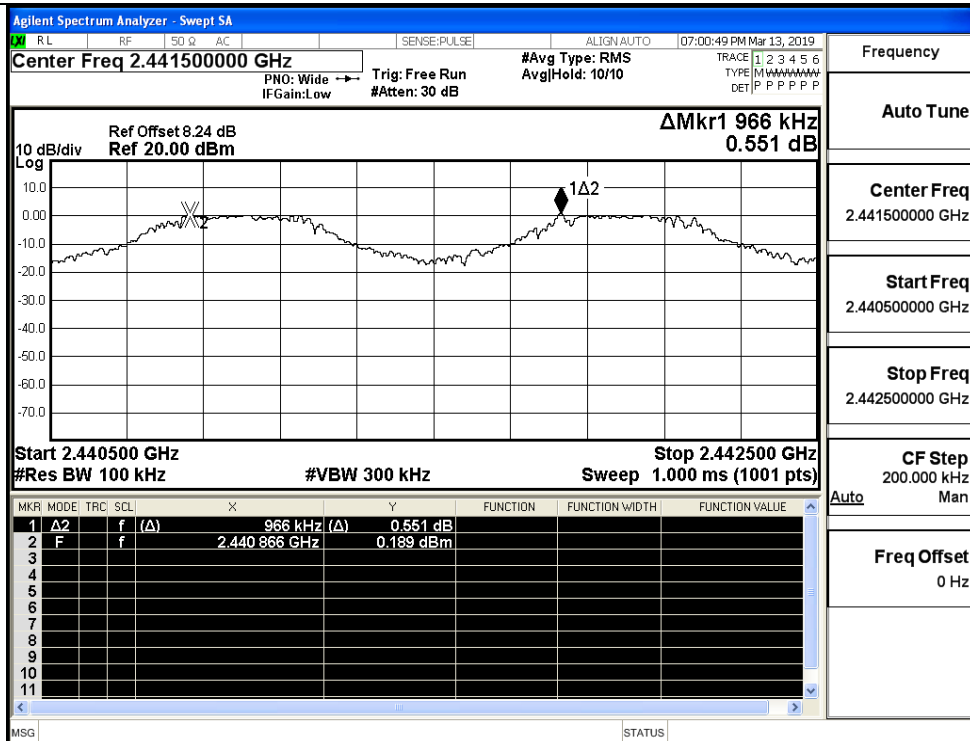
Mode	Channel.	Carrier Frequency Separation [MHz]	Limit [MHz]	Verdict
GFSK	LCH	1.006	0.693	PASS
	MCH	0.966	0.693	PASS
	HCH	1.012	0.693	PASS
π /4DQPSK	LCH	0.912	0.861	PASS
	MCH	1.014	0.861	PASS
	HCH	0.956	0.861	PASS

Test Graphs

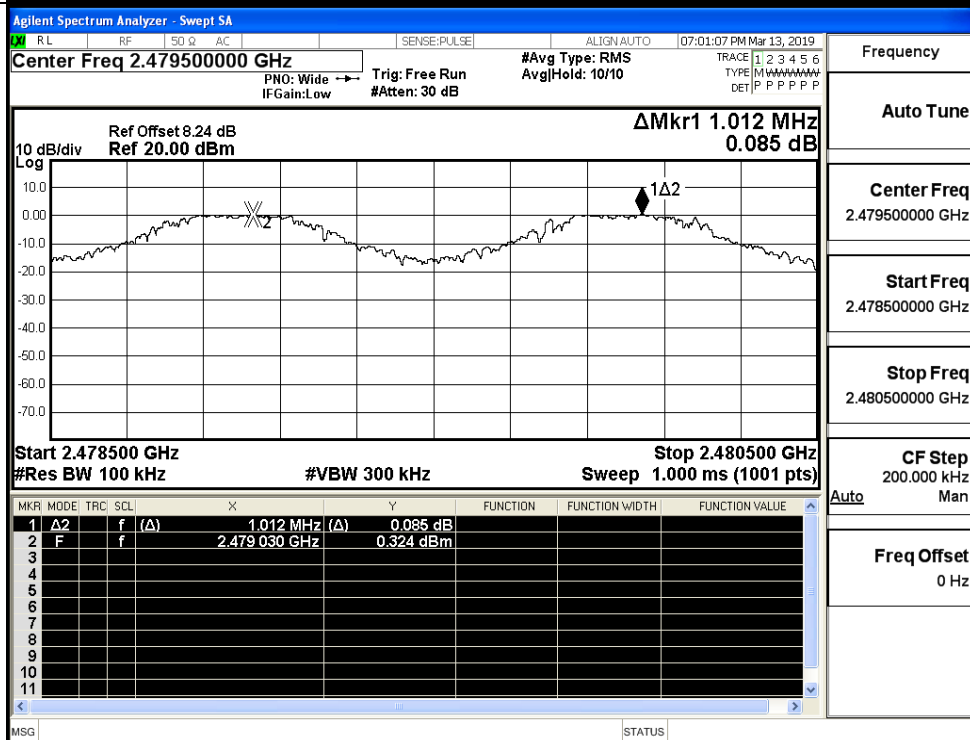
GFSK/LCH

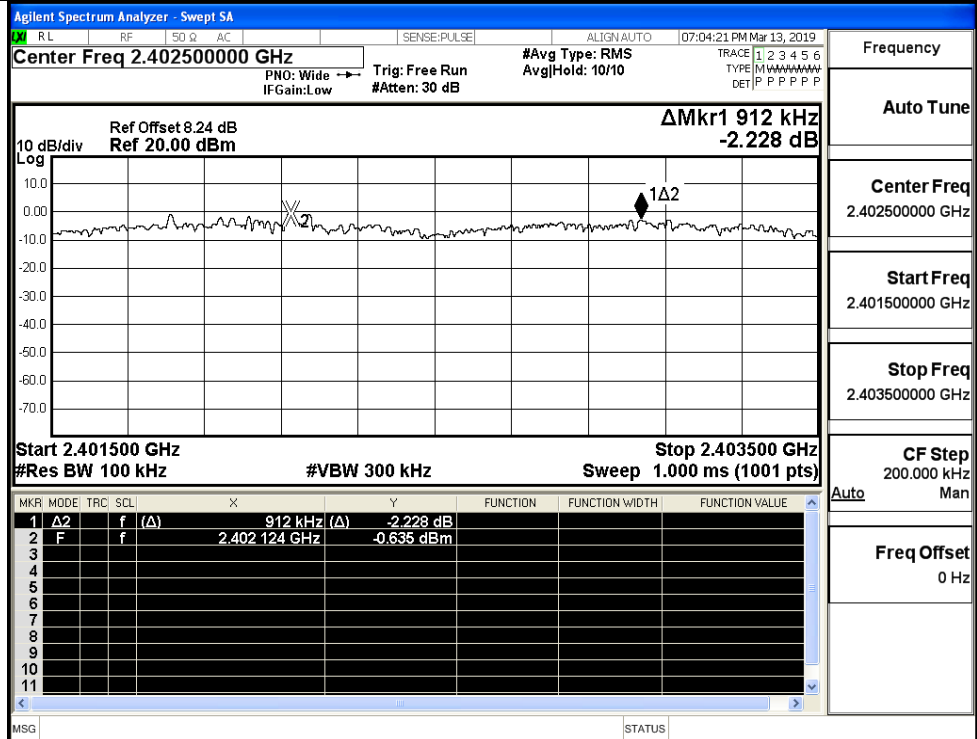
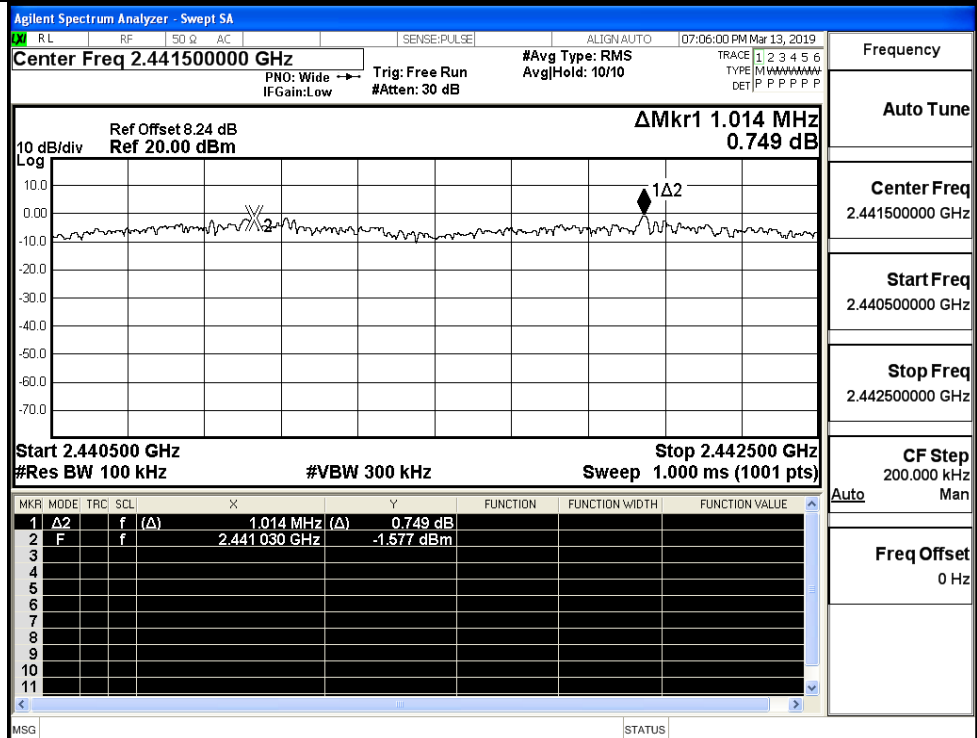


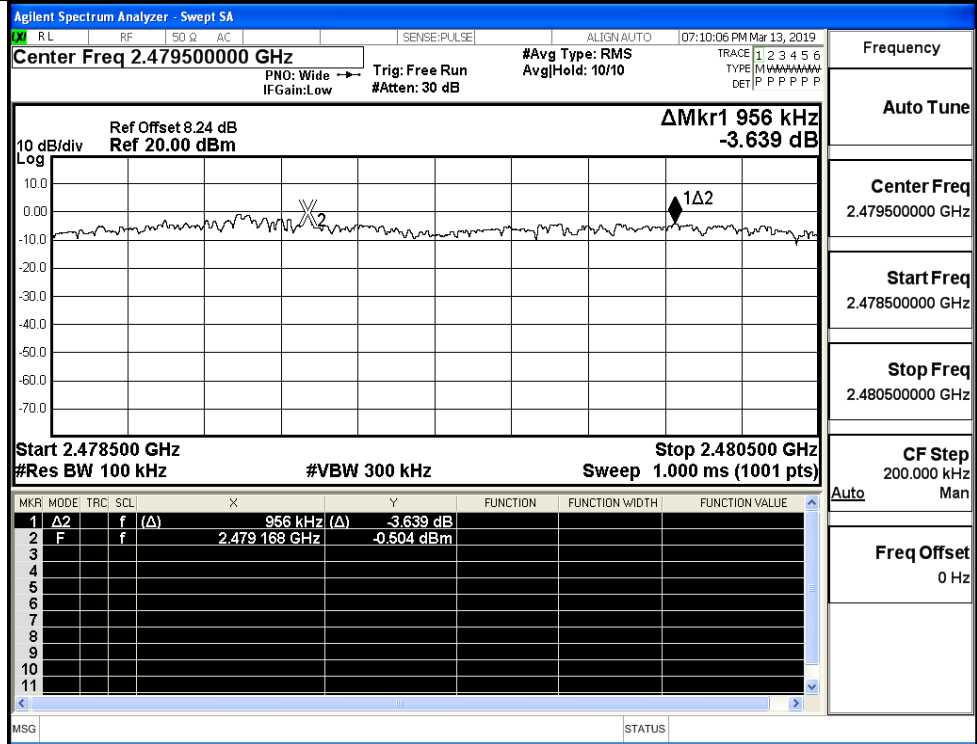
GFSK/MCH



GFSK/HCH



π /4DQPSK/LCH π /4DQPSK/MCH

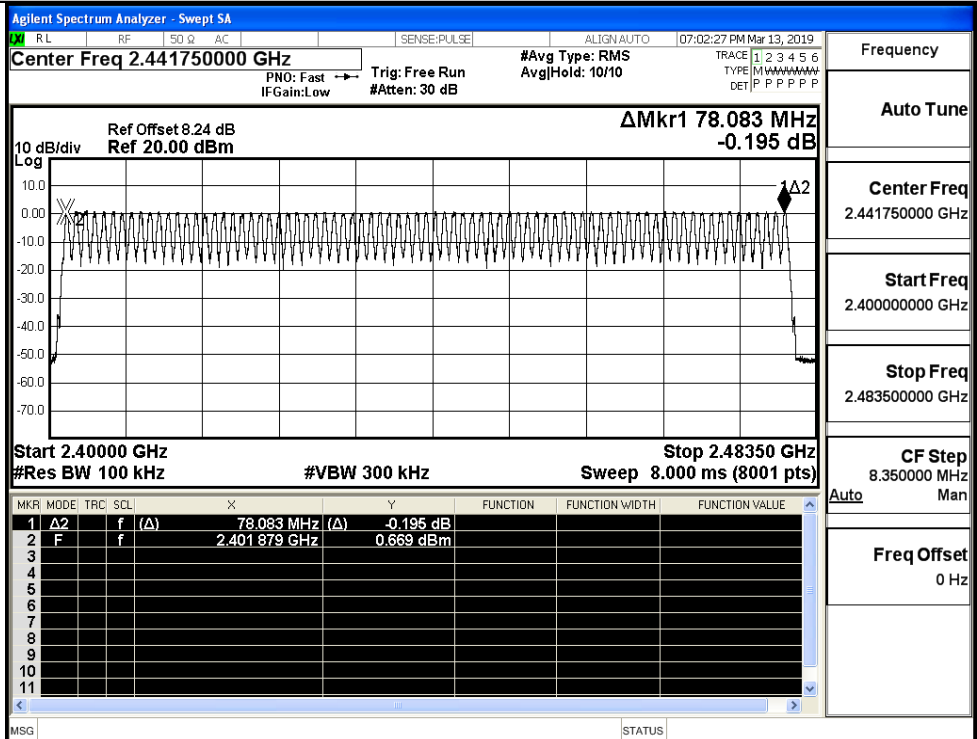
$\pi/4$ DQPSK/HCH

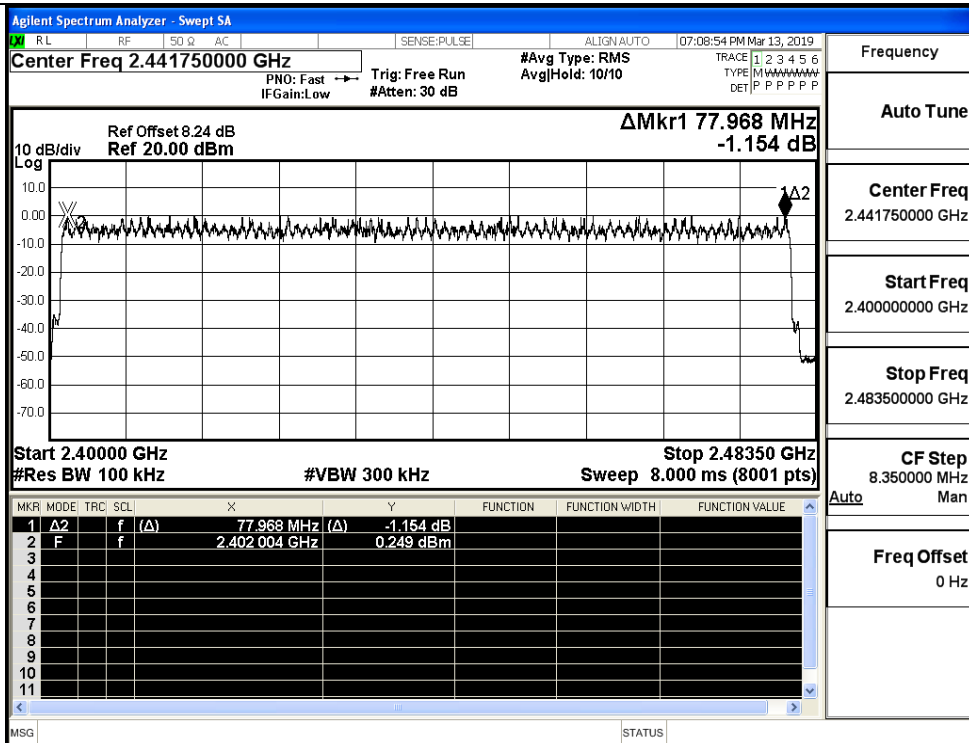
A.4 Hopping Channel Number

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

Test Graphs

GFSK/Hop



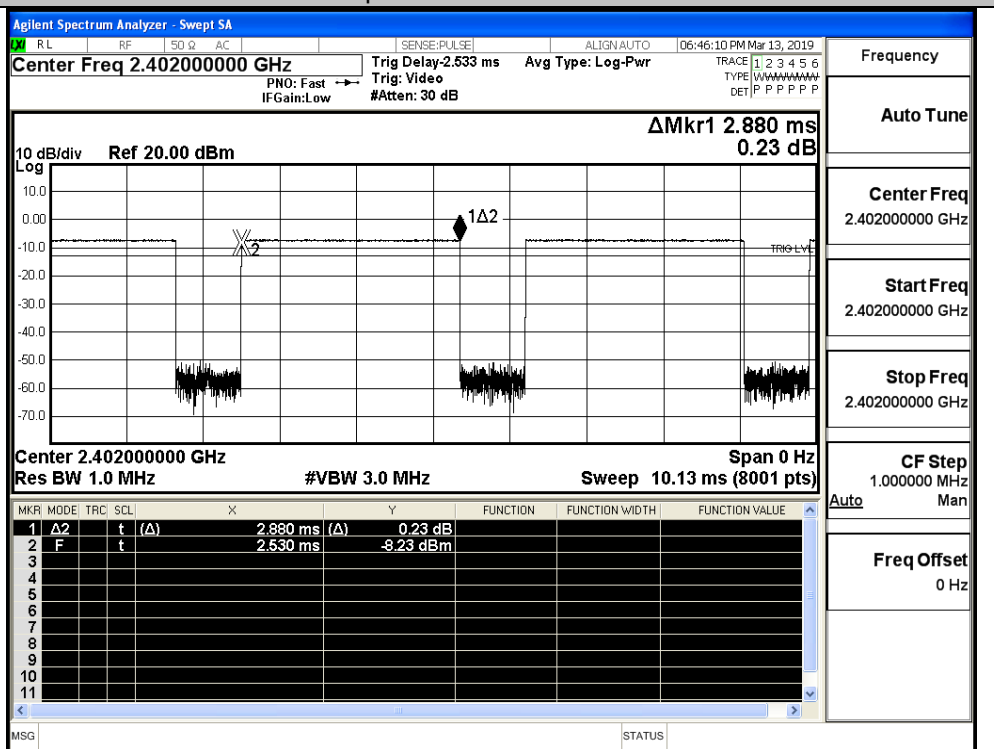
$\pi/4$ DQPSK/Hop

A.5 Dwell Time

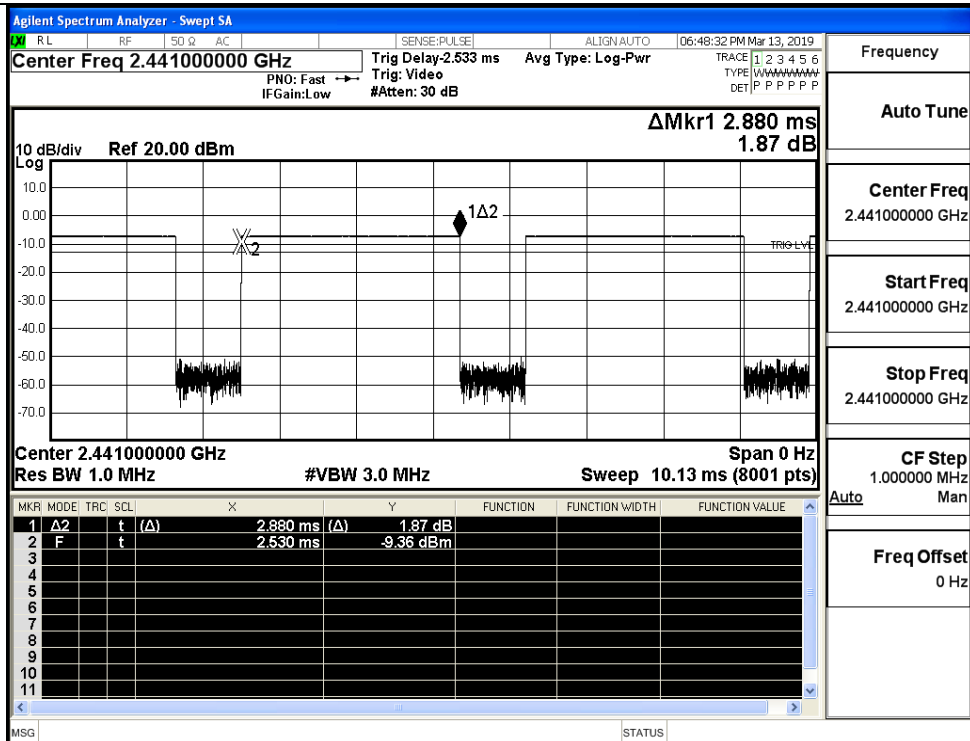
Mode	Packet	Channel	Burst Width [ms/hop/ch]	Total Hops[hop*ch]	Dwell Time[s]	Limit [s]	Verdict
GFSK	DH5	LCH	2.88	106.7	0.307	0.4	PASS
	DH5	MCH	2.88	106.7	0.307	0.4	PASS
	DH5	HCH	2.88	106.7	0.307	0.4	PASS
$\pi/4$ DQPSK	2DH5	LCH	2.88	106.7	0.307	0.4	PASS
	2DH5	MCH	2.88	106.7	0.307	0.4	PASS
	2DH5	HCH	2.88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

Test Graphs

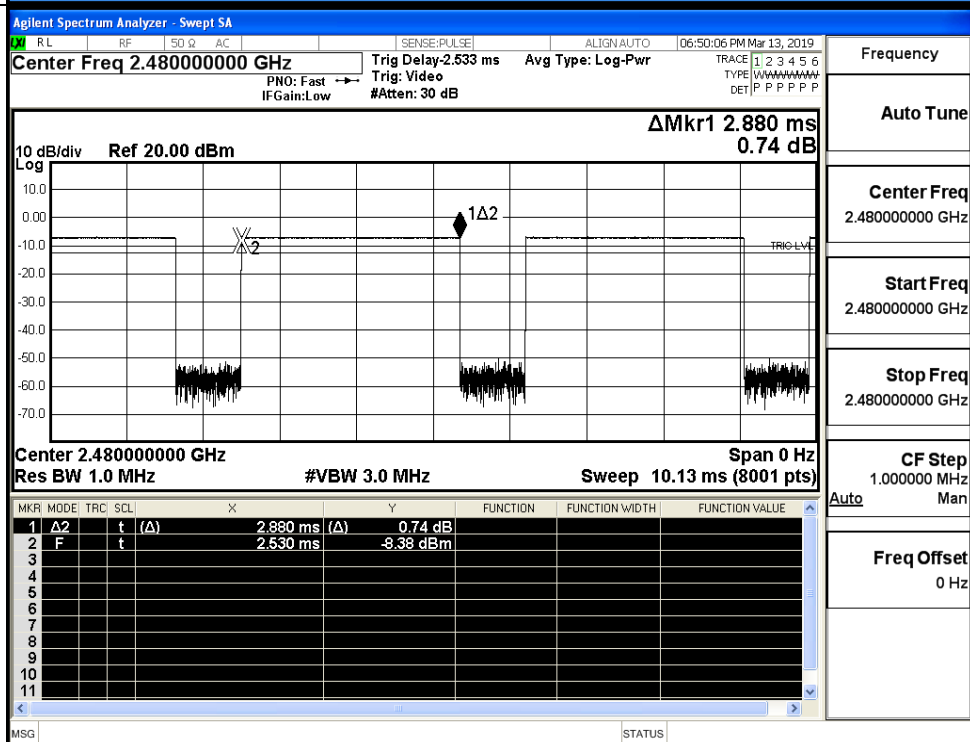
GFSK_DH5/LCH



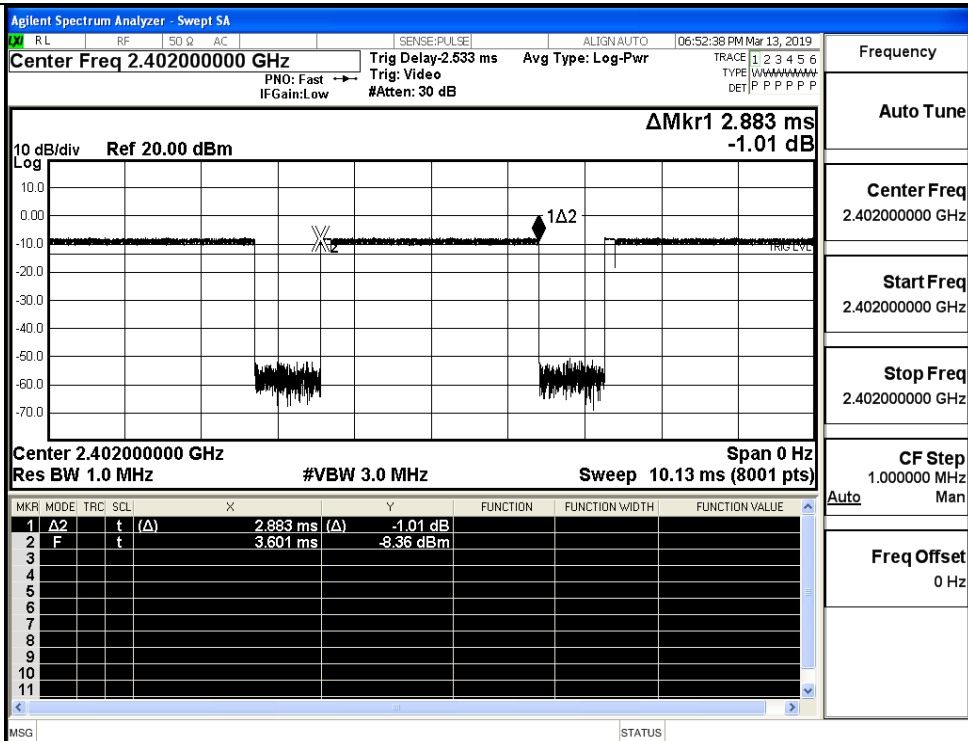
GFSK_DH5/MCH



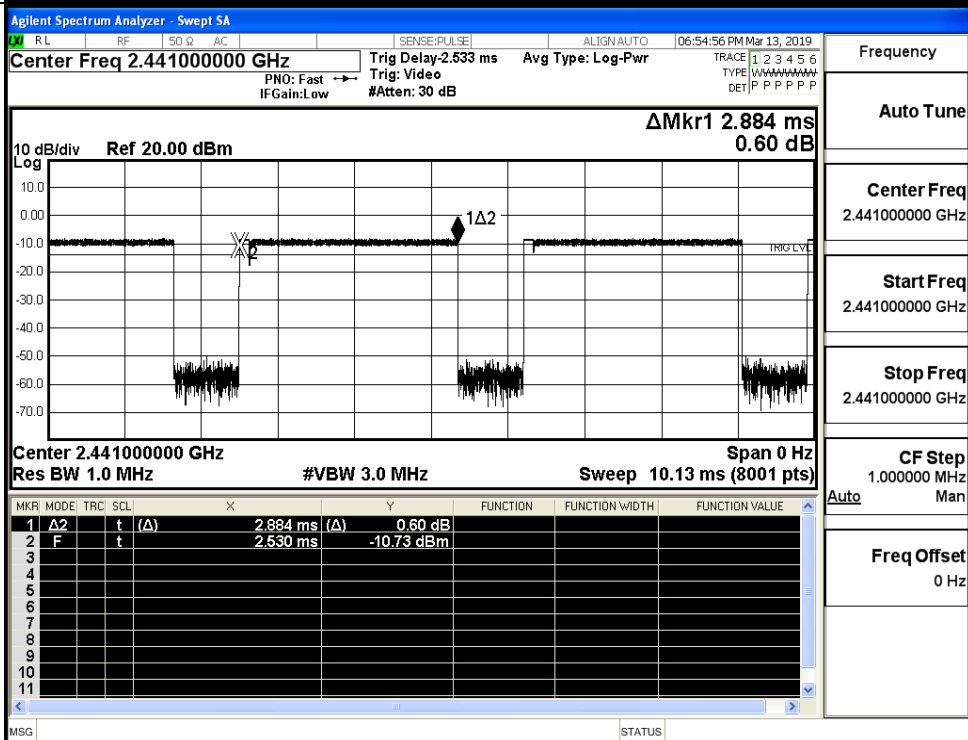
GFSK_DH5/HCH



$\pi/4$ DQPSK
_2DH5/LCH



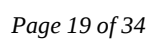
$\pi/4$ DQPSK
_2DH5/MCH



A.6 RF Conducted Spurious Emissions

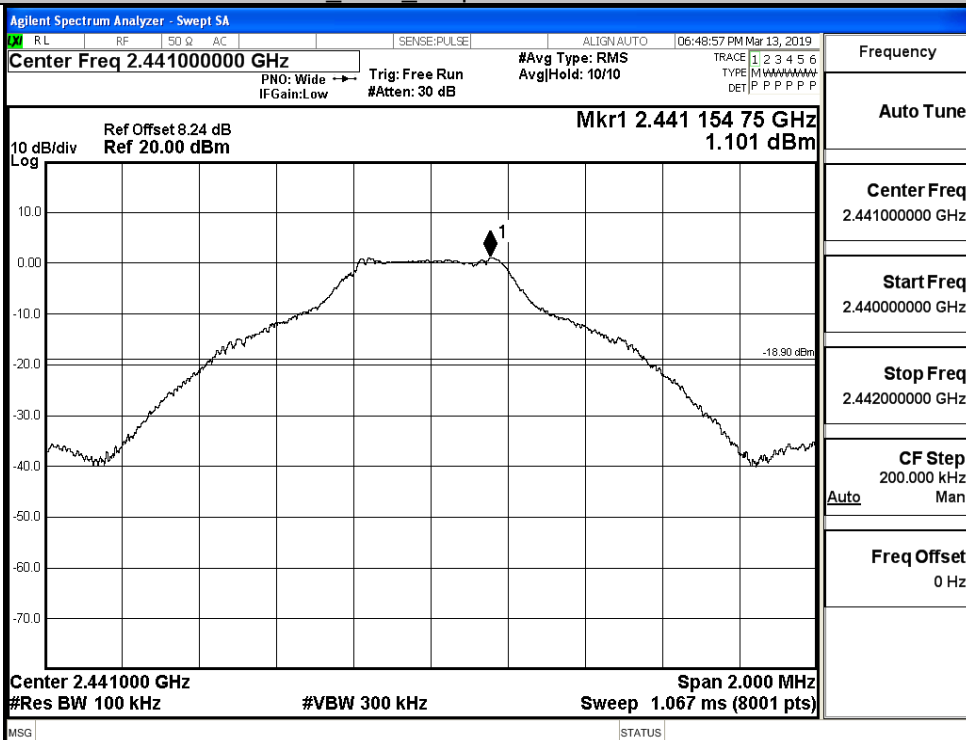
Mode	Channel	Pref [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
GFSK	LCH	0.387	-44.186	-19.613	PASS
	MCH	1.101	-44.598	-18.899	PASS
	HCH	1.162	-44.776	-18.838	PASS
$\pi/4$ DQPSK	LCH	0.167	-44.119	-19.833	PASS
	MCH	-0.24	-44.441	-20.240	PASS
	HCH	-0.585	-43.782	-20.585	PASS

Pref

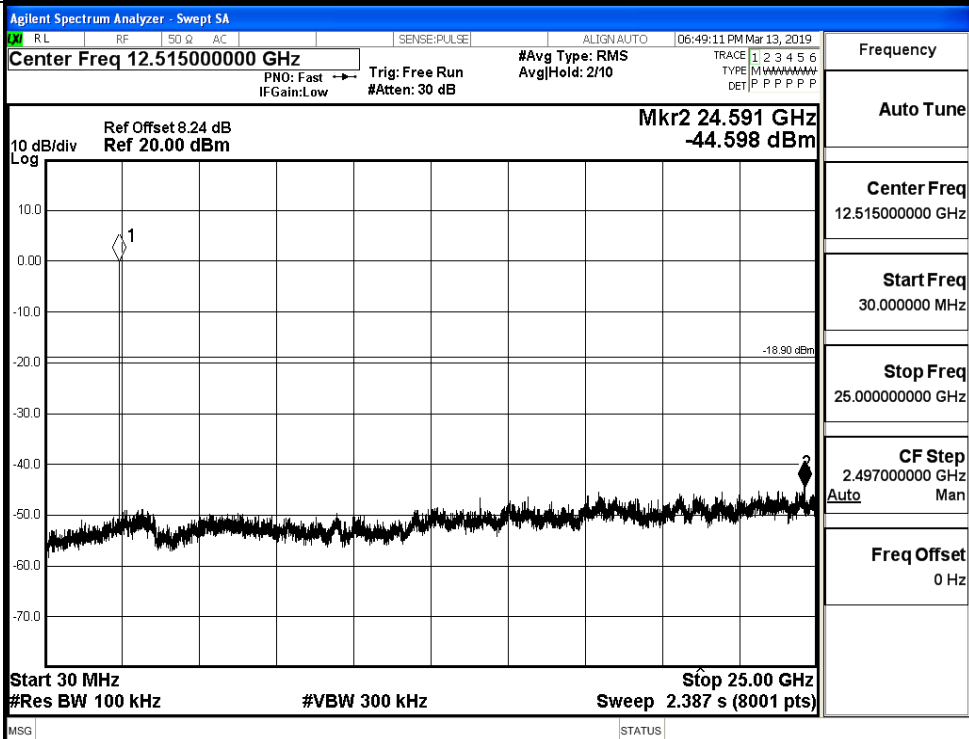


GFSK_MCH_Graphs

Pref

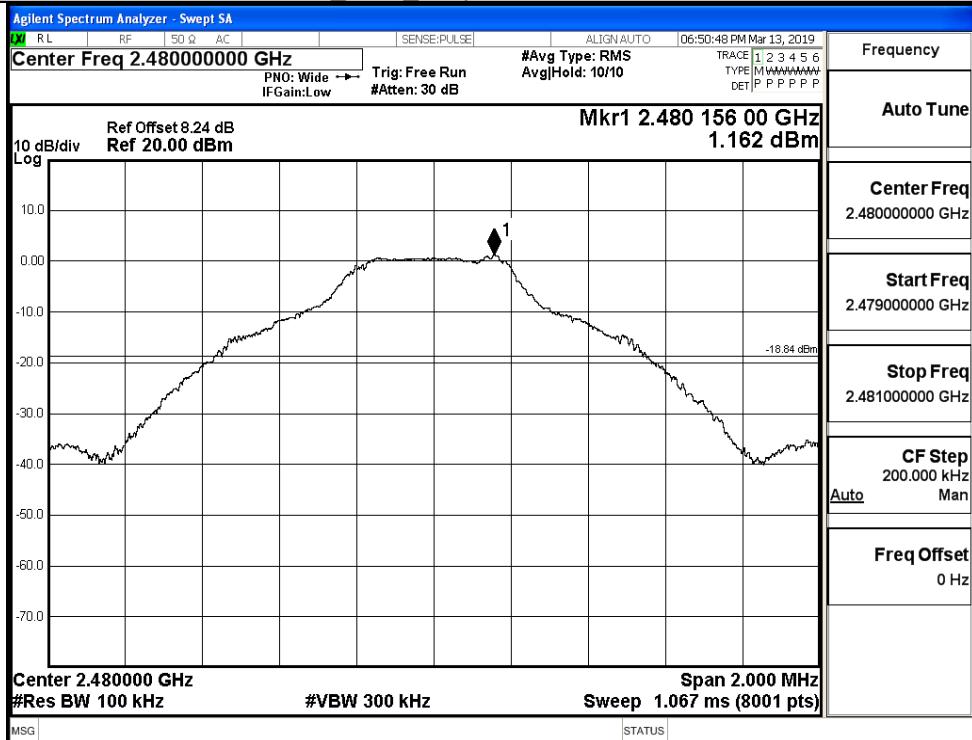


Puw

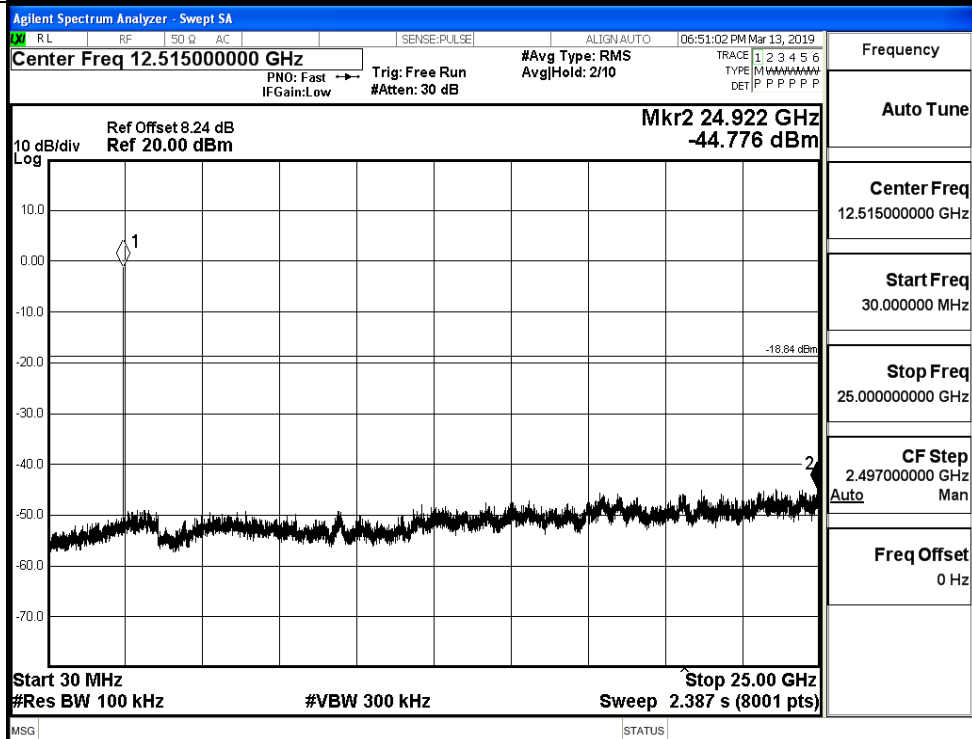


GFSK_HCH_Graphs

Pref

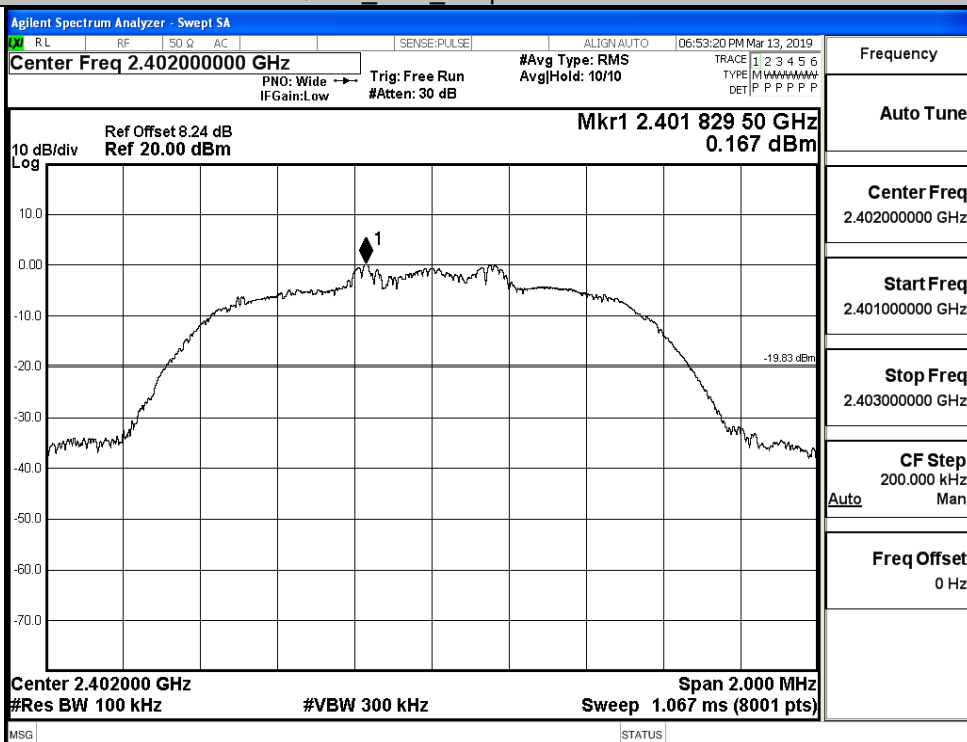


Puw

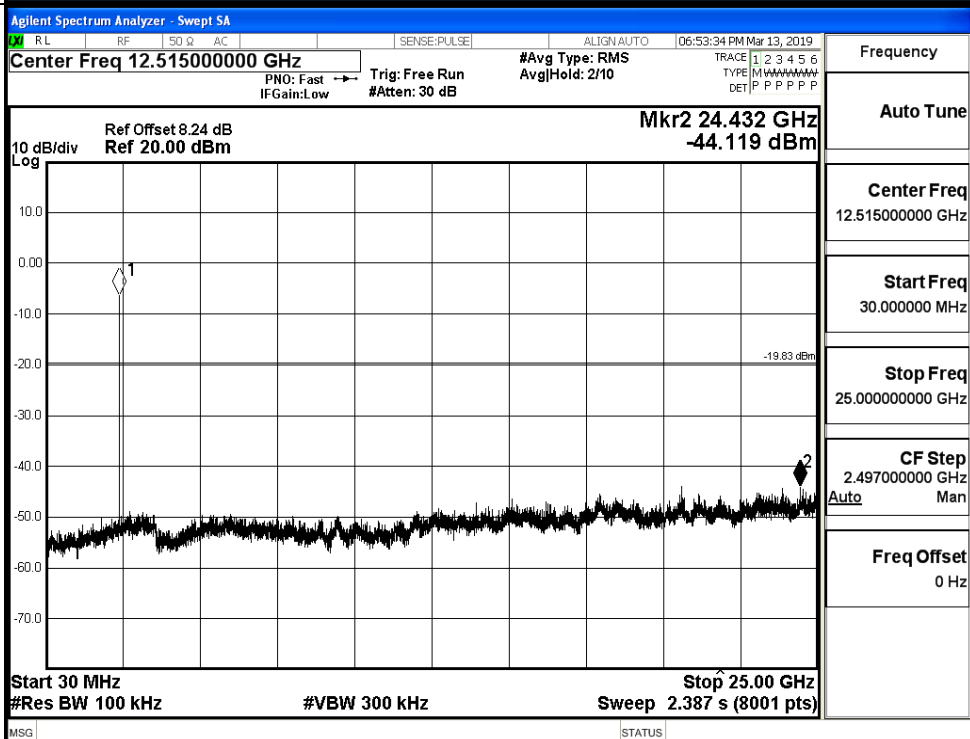


$\pi/4$ DQPSK_LCH_Graphs

Pref

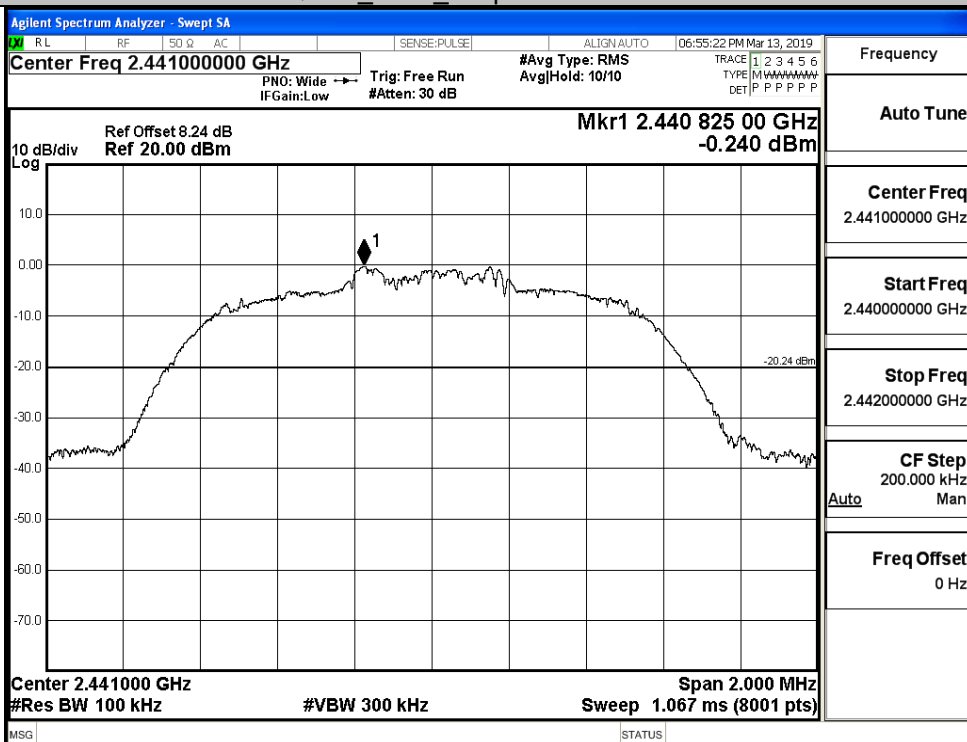


Puw

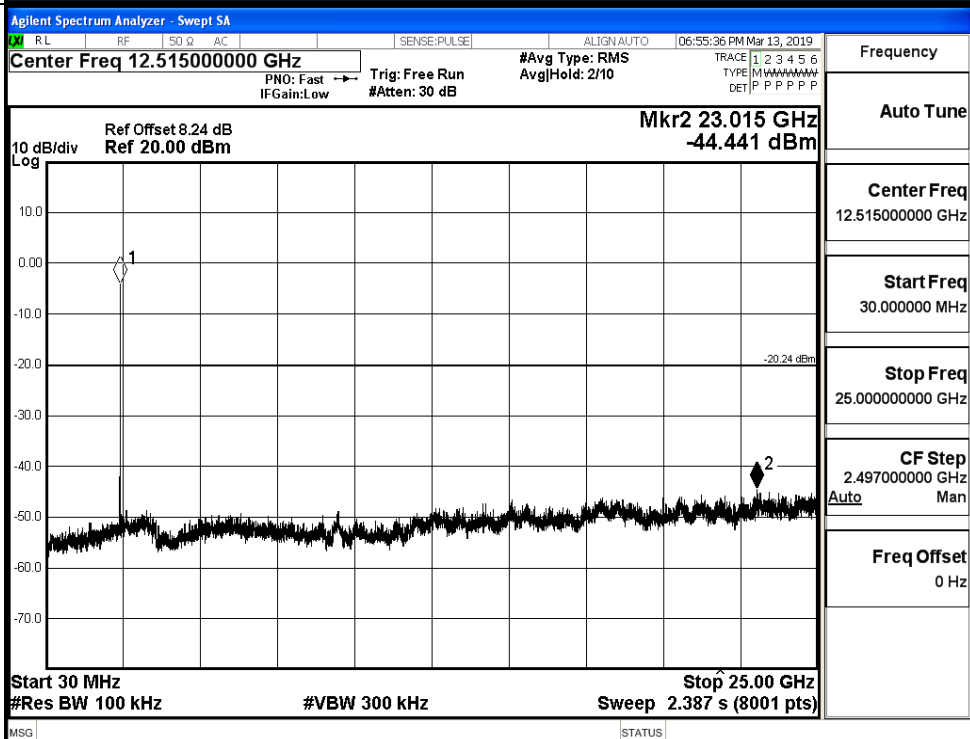


π /4DQPSK_MCH_Graphs

Pref

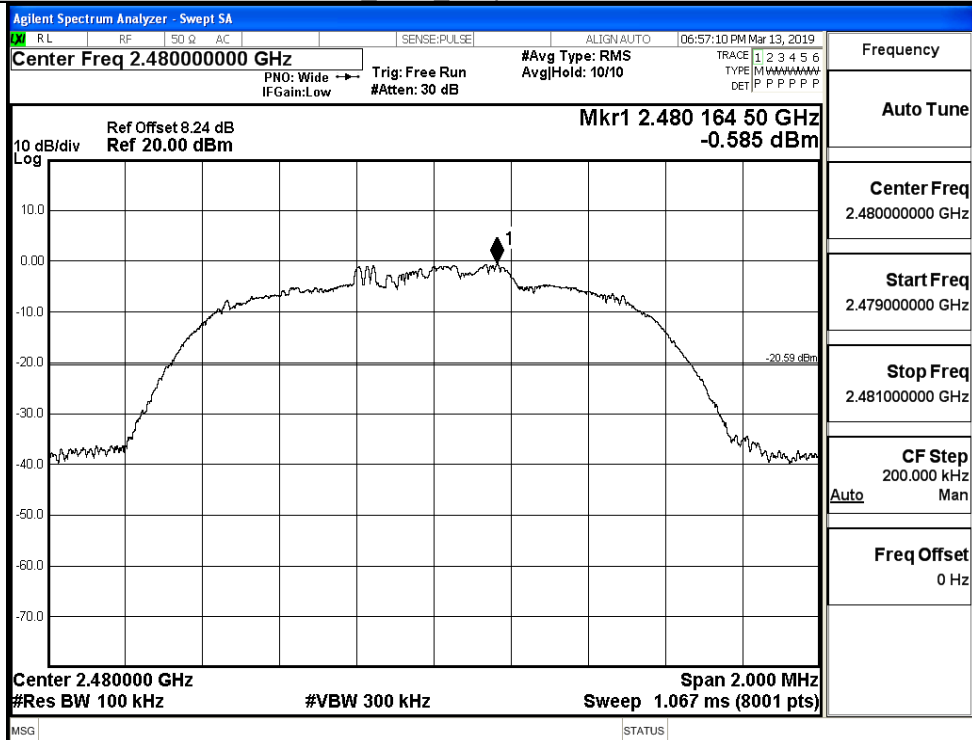


Puw

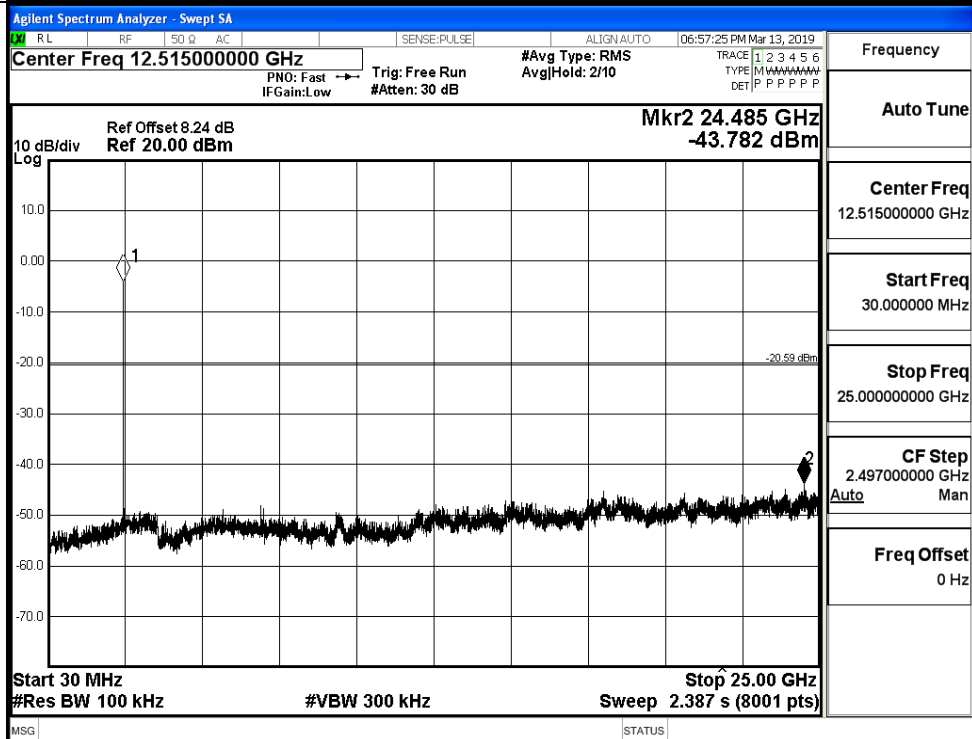


$\pi/4$ DQPSK_HCH_Graphs

Pref



Puw

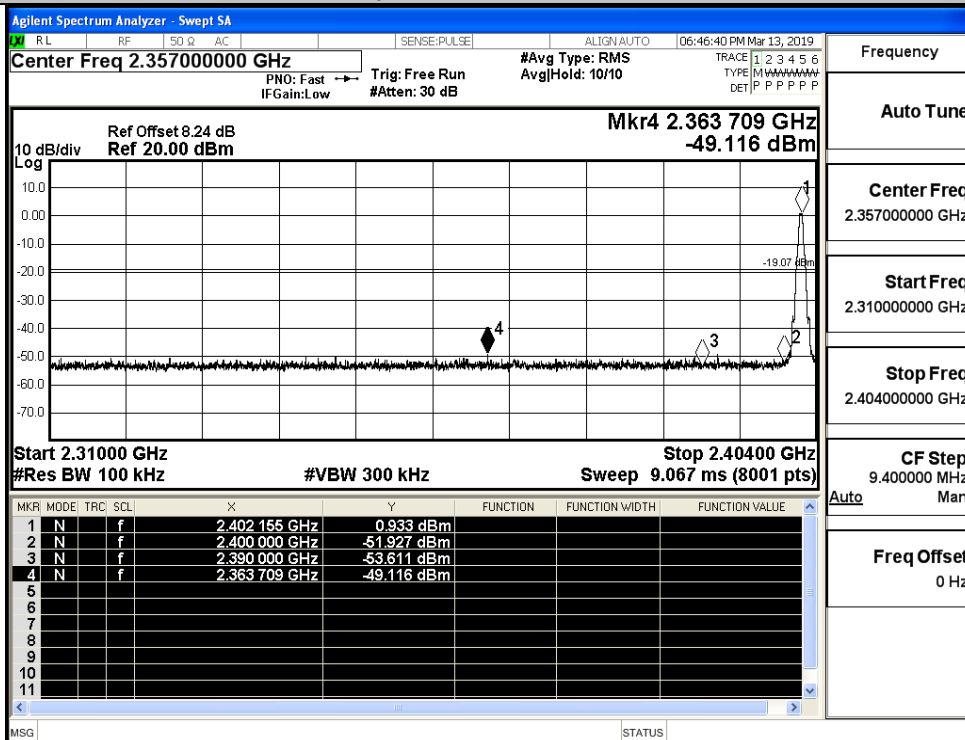


A.7 Band-edge for RF Conducted Emissions

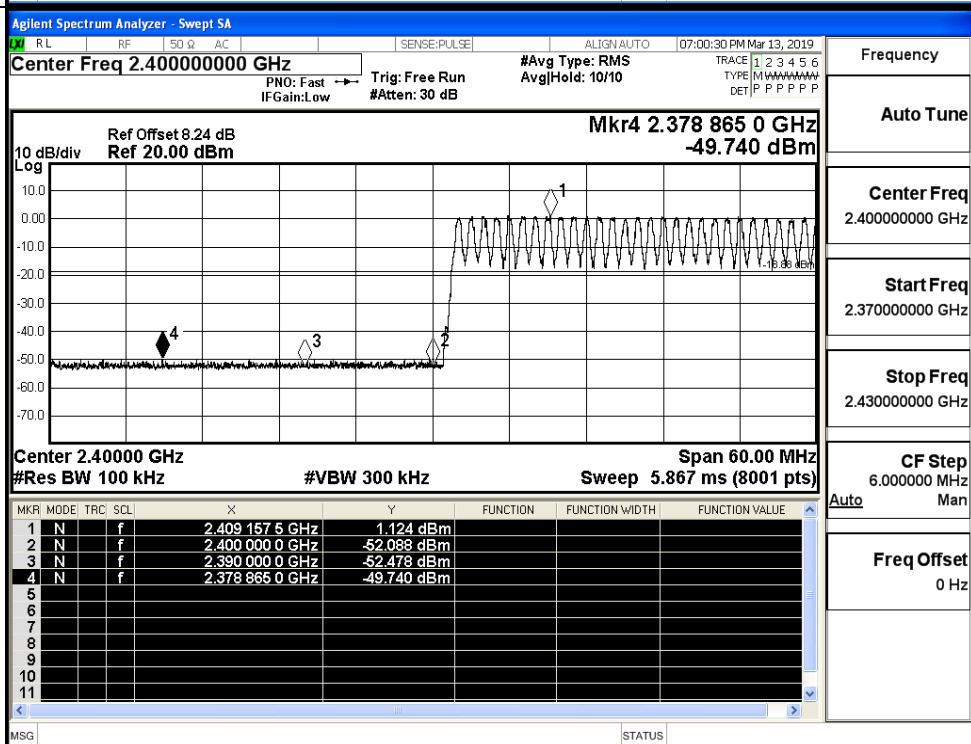
Mode	Channel	Carrier Frequency [MHz]	Carrier Power [dBm]	Frequency Hopping	Max Spurious Level [dBm]	Limit [dBm]	Verdict
GFSK	LCH	2402	0.933	Off	-49.116	-19.07	PASS
			1.124	On	-49.740	-18.88	PASS
	HCH	2480	1.306	Off	-49.200	-18.69	PASS
			0.881	On	-49.742	-19.12	PASS
$\pi/4$ DQPSK	LCH	2402	-1.135	Off	-49.538	-21.14	PASS
			0.319	On	-48.785	-19.68	PASS
	HCH	2480	-0.451	Off	-48.485	-20.45	PASS
			-0.010	On	-48.885	-20.01	PASS

Test Graphs

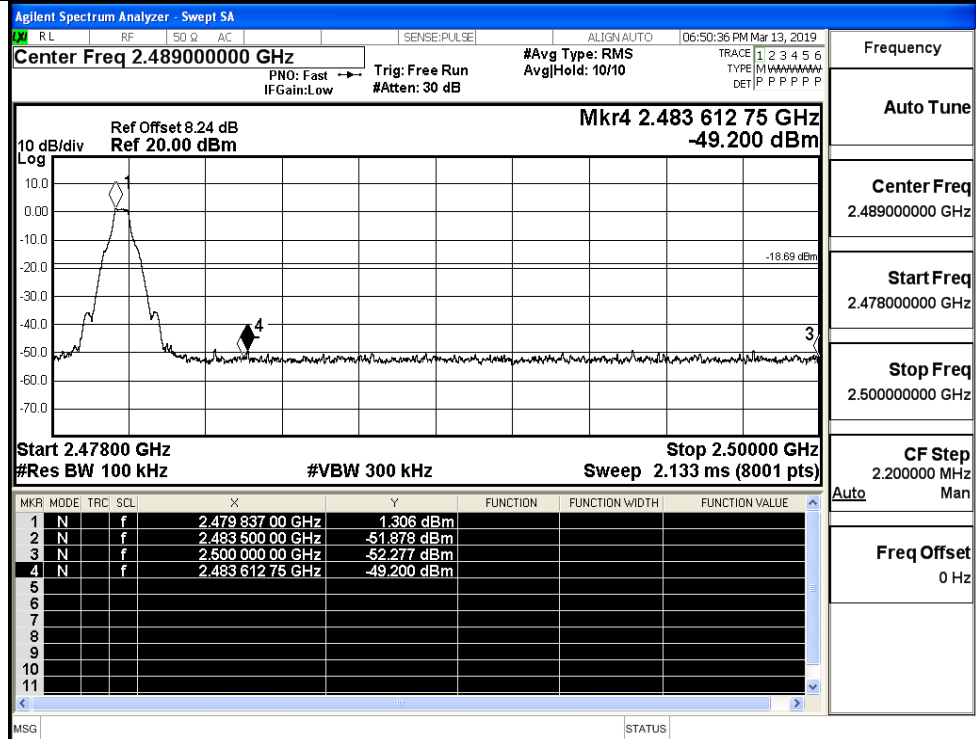
GFSK/LCH/No Hop



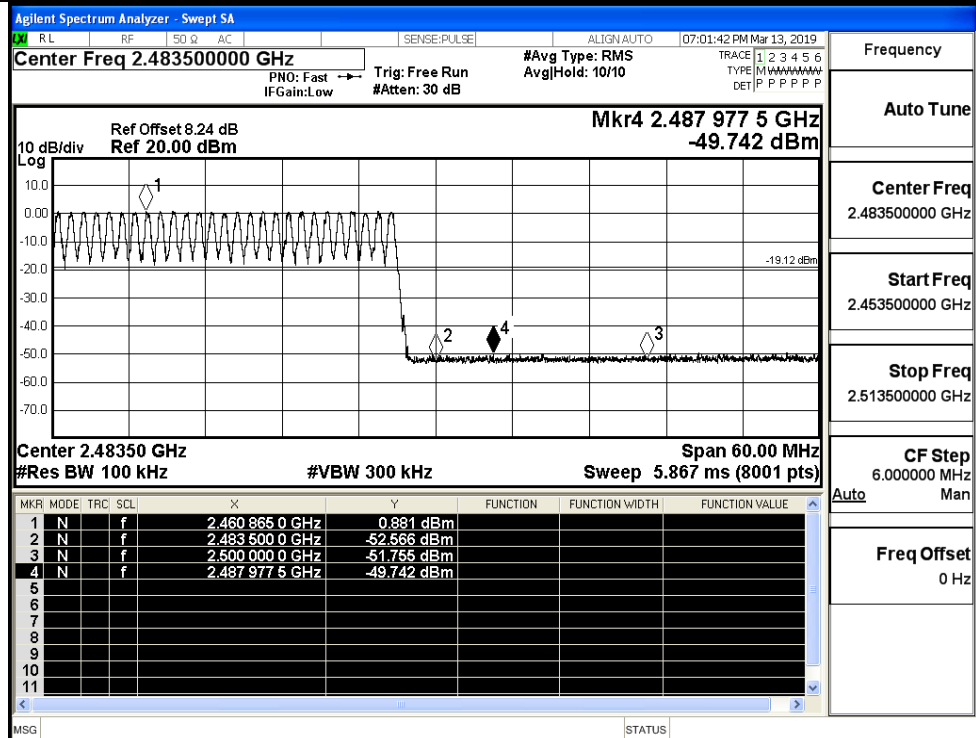
GFSK/LCH/Hop



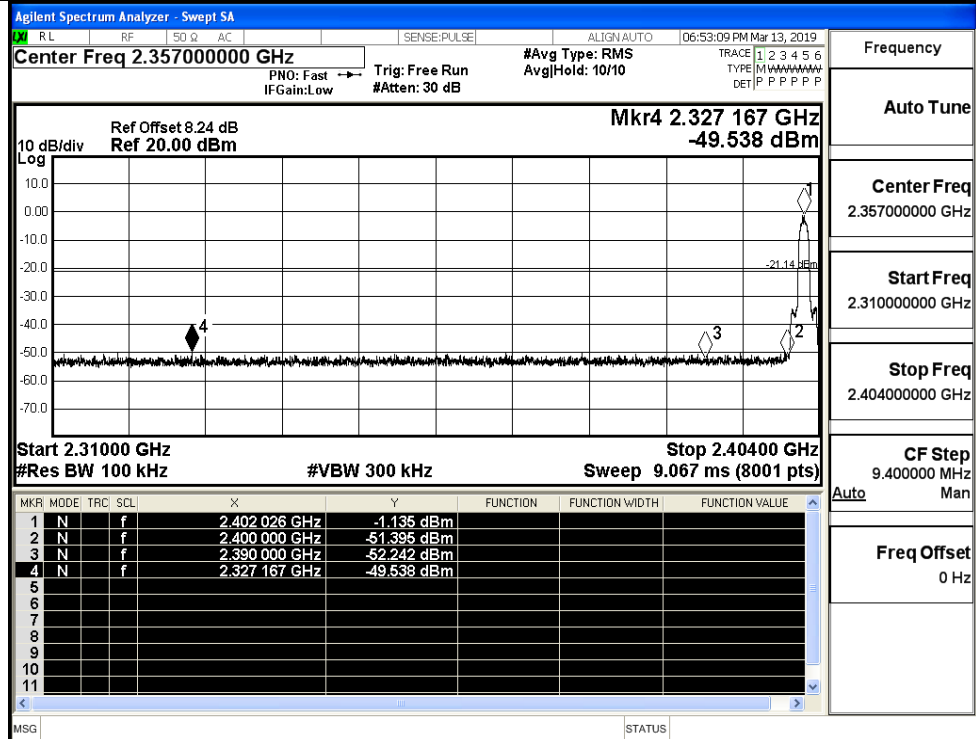
GFSK/HCH/No Hop



GFSK/HCH/Hop



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



Frequency

Auto Tune

Center Freq
2.357000000 GHz

Start Freq
2.310000000 GHz

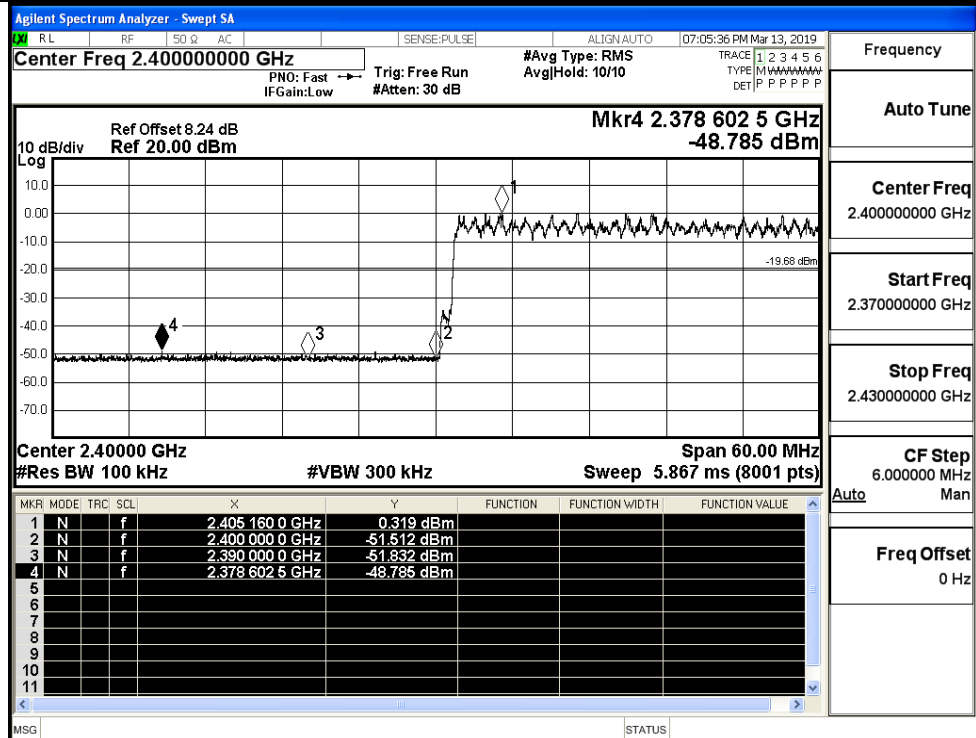
Stop Freq
2.404000000 GHz

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

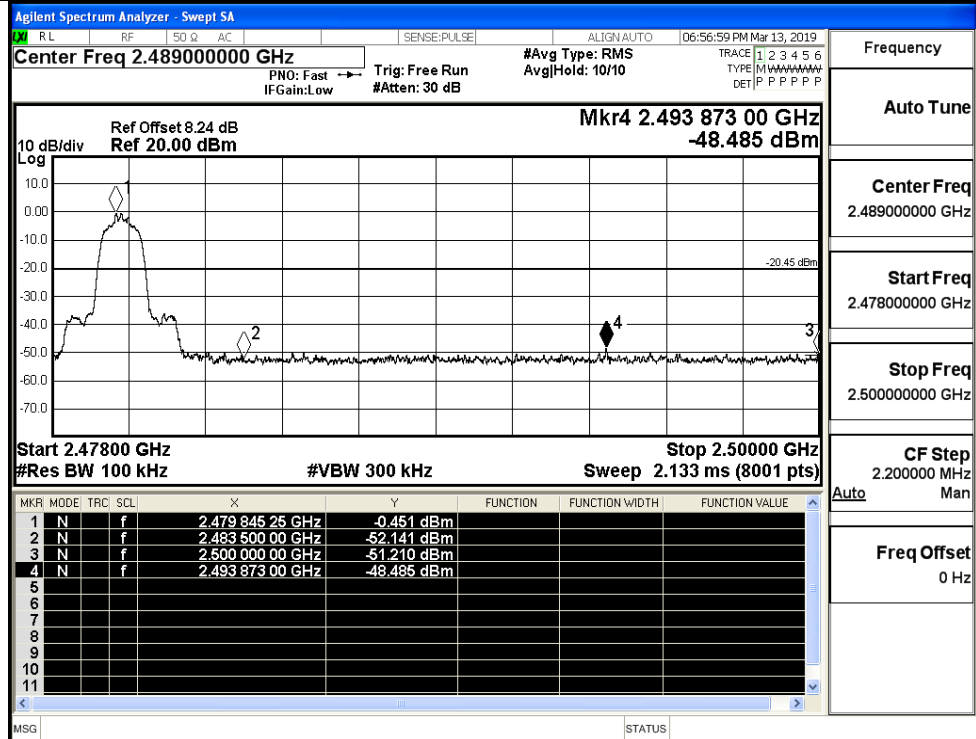
Stop Freq
2.430000000 GHz

CF Step
6.000000 MHz

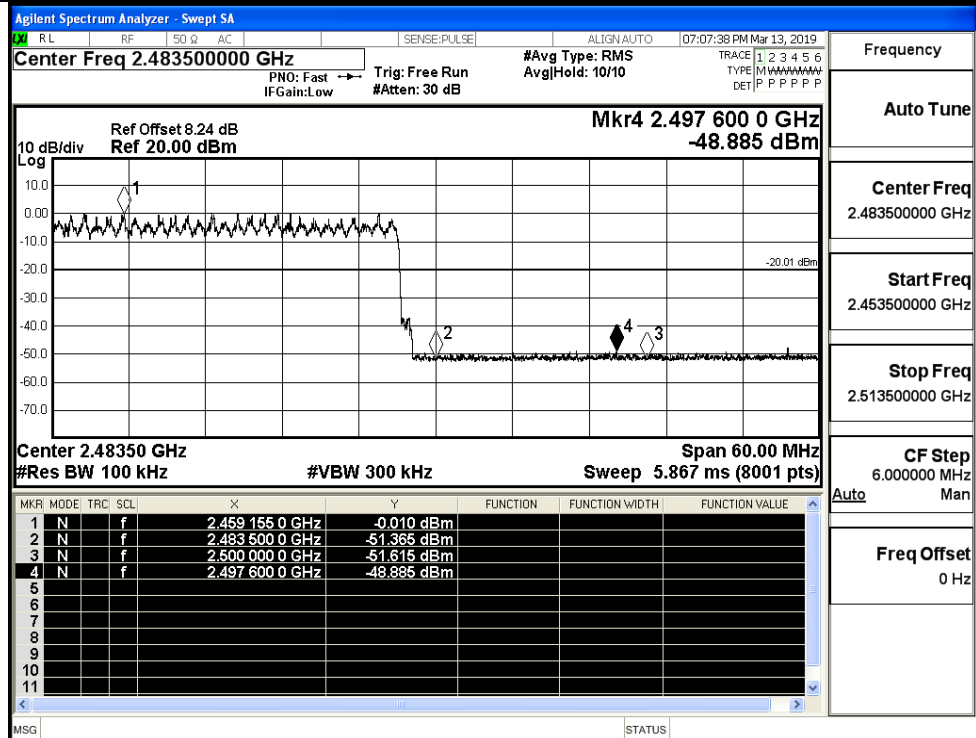
Auto Man

Freq Offset
0 Hz

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



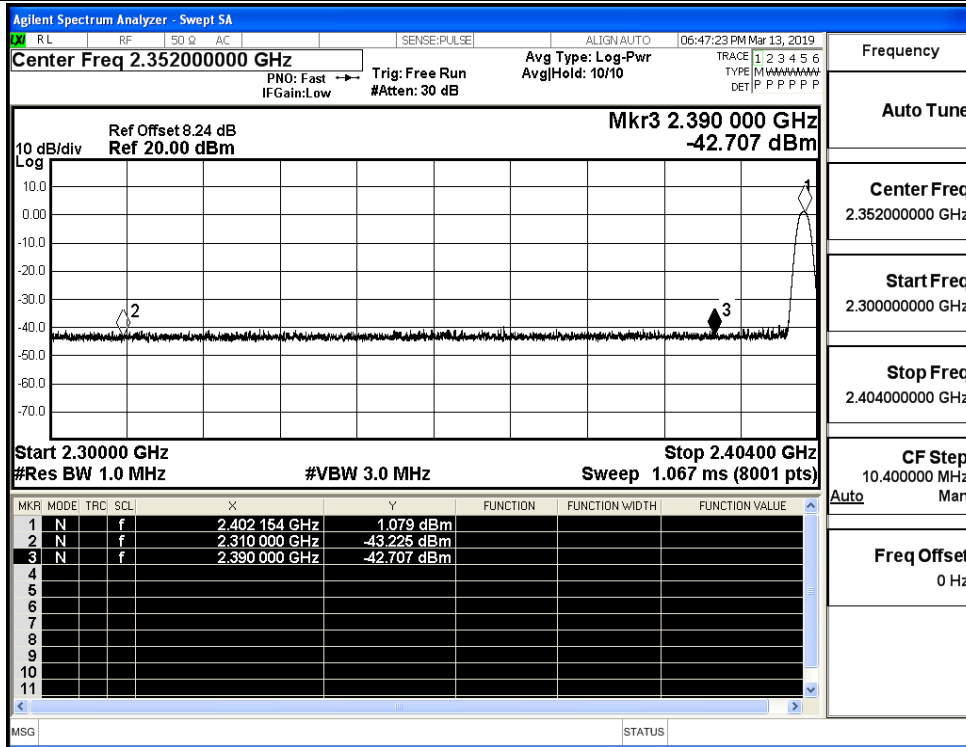
$\pi/4$ DQPSK/HCH/Hop



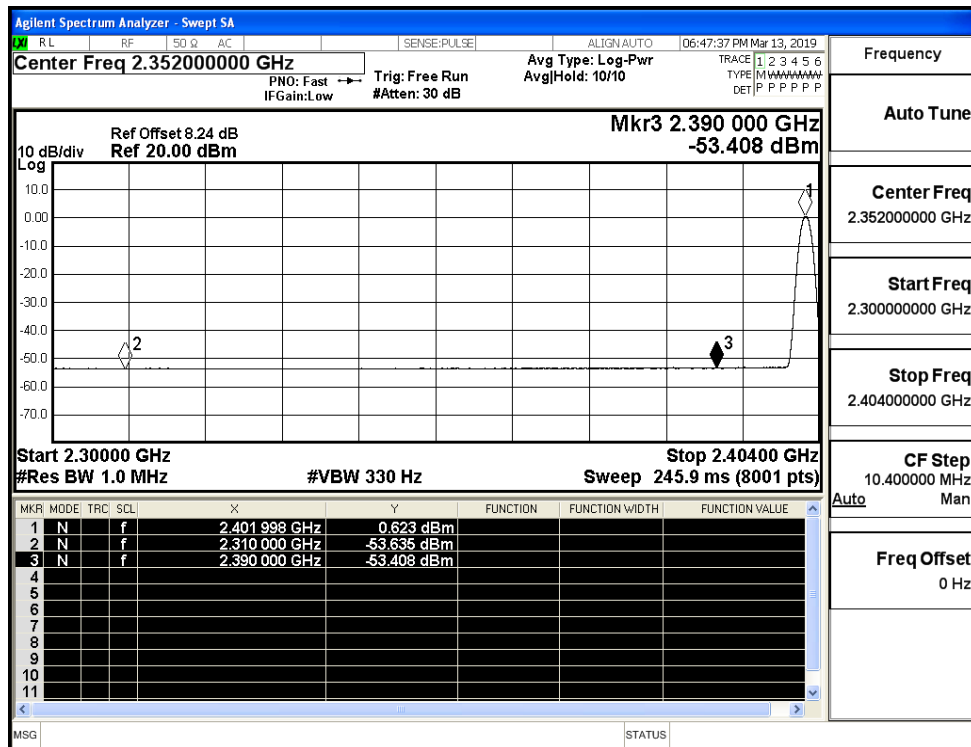
A.8 Restrict-band band-edge measurements

Test Mode	Hopping	Freq.	Power [dBm]	Gain	Ground Factor	E [dBuV/m]	Detector	Limit [dBuV/m]	Verdict
GFSK	Off	2310.0	-43.23	2.0	0	52.03	PEAK	74	PASS
	Off	2310.0	-53.64	2.0	0	41.62	AV	54	PASS
	Off	2390.0	-42.71	2.0	0	52.55	PEAK	74	PASS
	Off	2390.0	-53.41	2.0	0	41.85	AV	54	PASS
	Off	2483.5	-41.98	2.0	0	53.28	PEAK	74	PASS
	Off	2483.5	-52.95	2.0	0	42.31	AV	54	PASS
	Off	2500.0	-43.60	2.0	0	51.66	PEAK	74	PASS
	Off	2500.0	-53.06	2.0	0	42.20	AV	54	PASS
$\pi/4$ DQPSK	Off	2310.0	-43.61	2.0	0	51.65	PEAK	74	PASS
	Off	2310.0	-53.52	2.0	0	41.73	AV	54	PASS
	Off	2390.0	-43.62	2.0	0	51.64	PEAK	74	PASS
	Off	2390.0	-53.48	2.0	0	41.78	AV	54	PASS
	Off	2483.5	-42.33	2.0	0	52.93	PEAK	74	PASS
	Off	2483.5	-53.00	2.0	0	42.26	AV	54	PASS
	Off	2500.0	-43.07	2.0	0	52.19	PEAK	74	PASS
	Off	2500.0	-52.98	2.0	0	42.28	AV	54	PASS

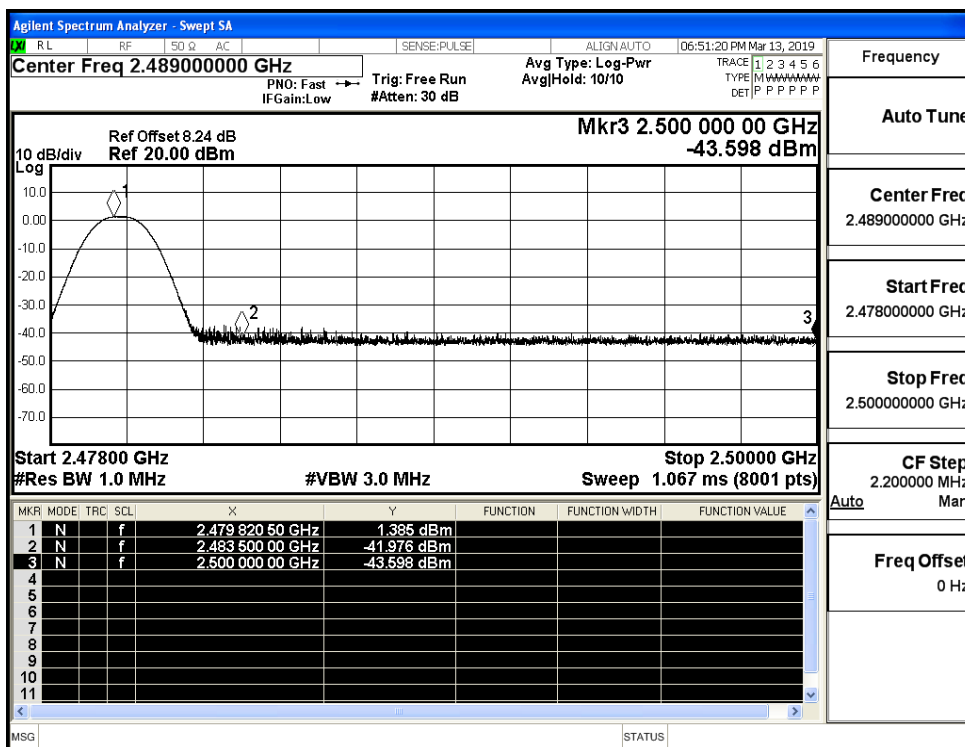
Restrict-band band-edge measurements_Hopping Off_GFSK_PEAK (Low Channel)



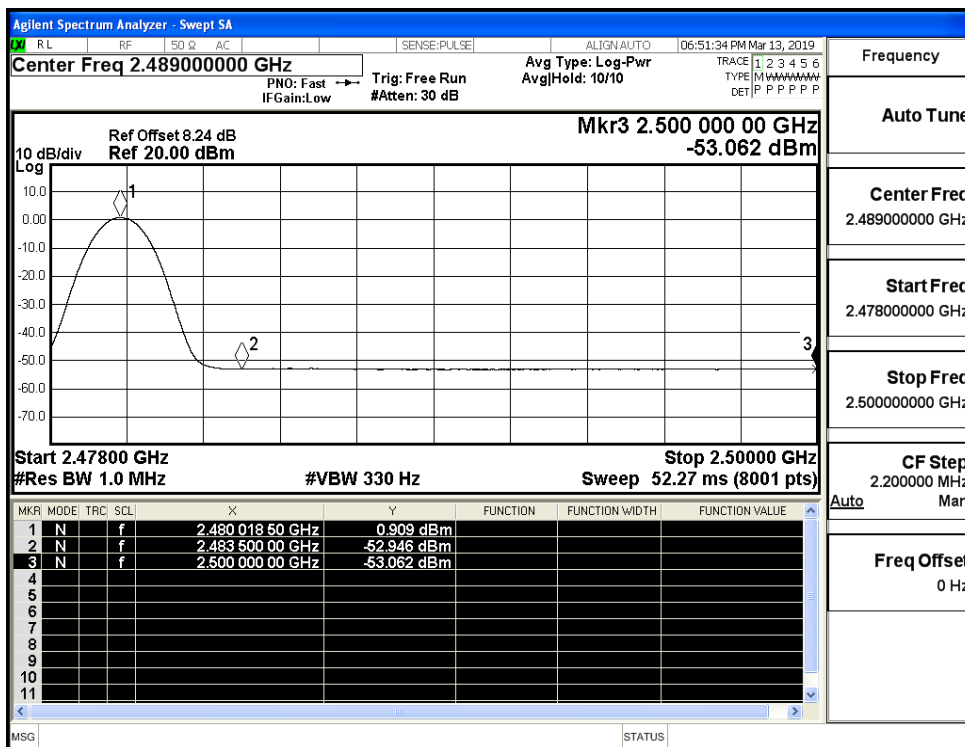
Restrict-band band-edge measurements_Hopping Off_GFSK_Average (Low Channel)



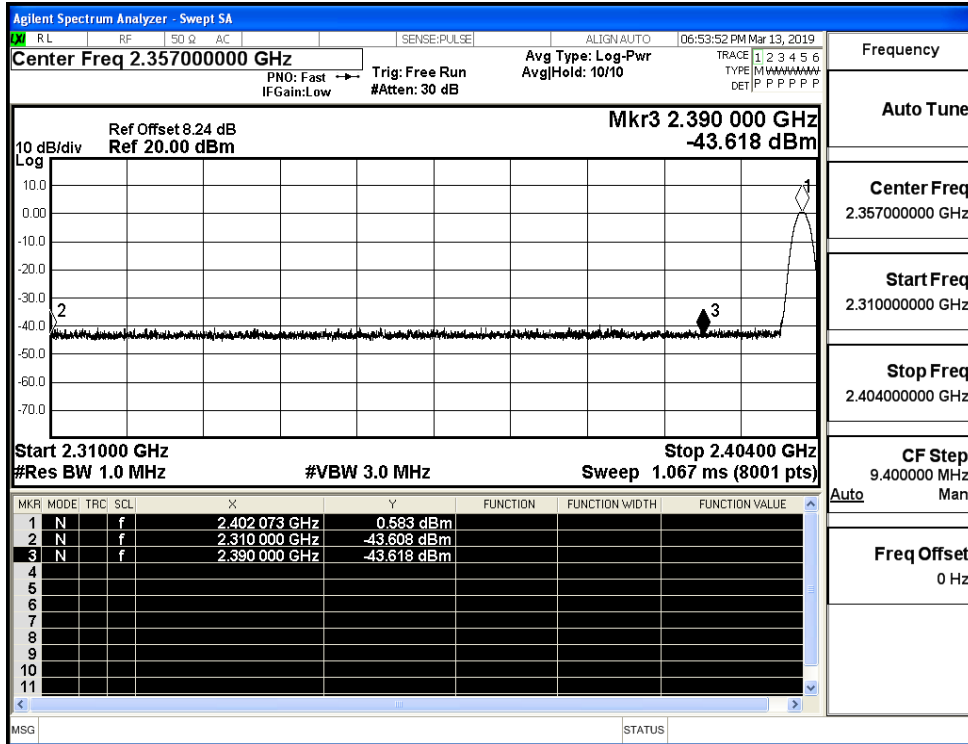
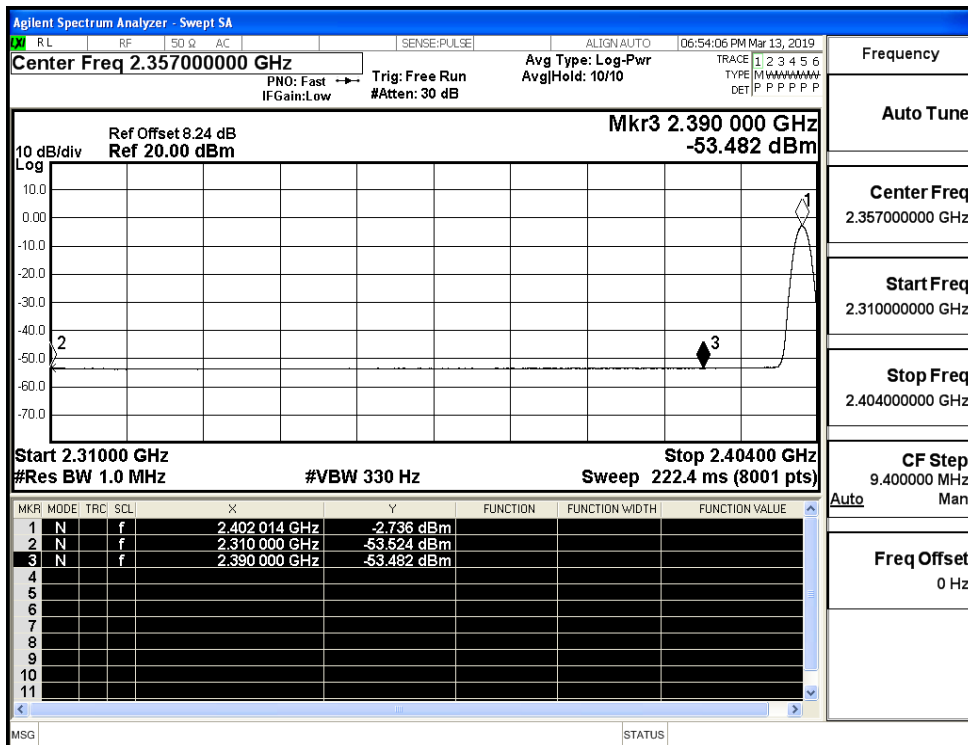
Restrict-band band-edge measurements_Hopping Off_GFSK_PEAK (High Channel)

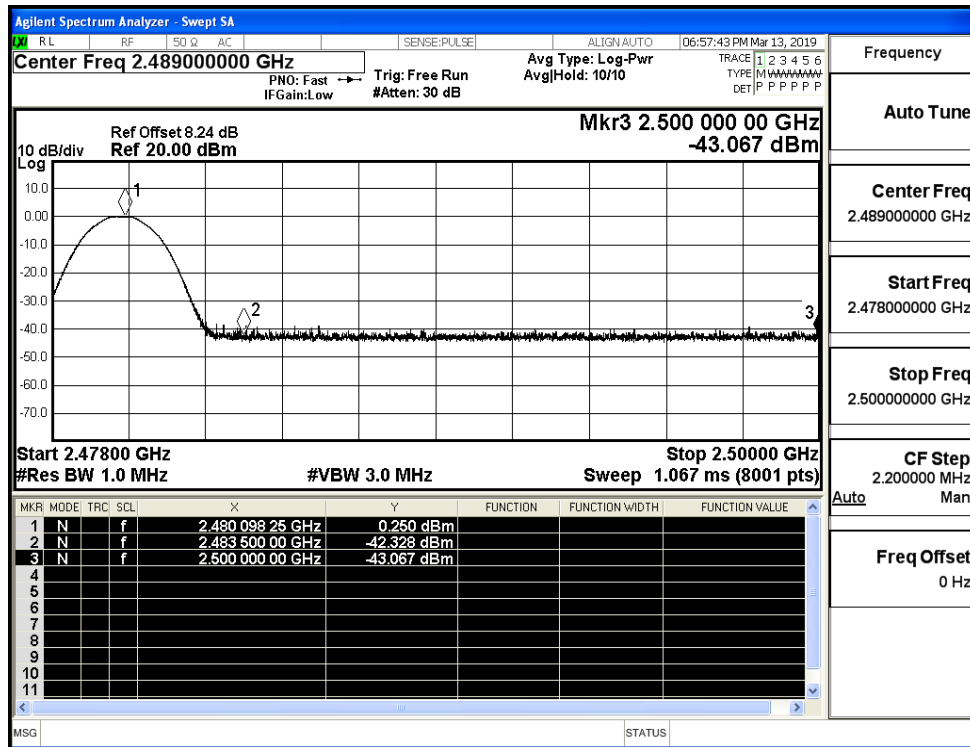


Restrict-band band-edge measurements_Hopping Off_GFSK_Average (High Channel)



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

