

Appendix A

RF Test Data for BT V3.0 (BDR/EDR) (Conducted Measurement)

Product Name: Buletooh_shutter

Trade Mark: Ubeesize

Test Model: TBC001

Environmental Conditions

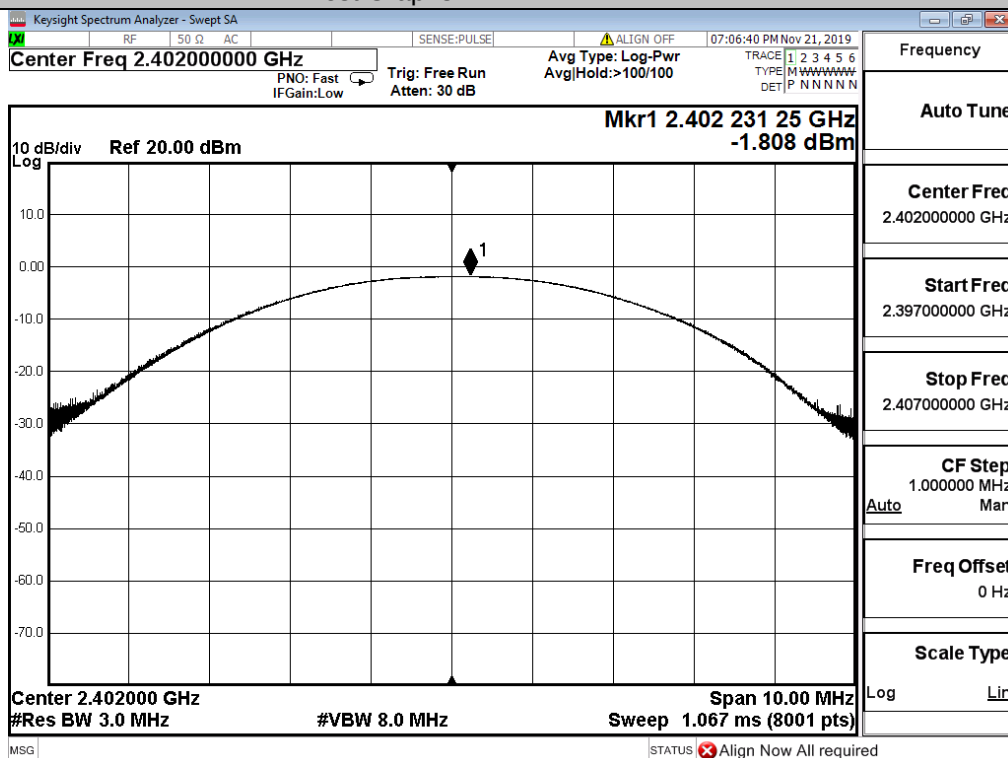
Temperature:	23.5 °C
Relative Humidity:	55%
ATM Pressure:	100.0 kPa
Test Engineer:	Kay Hu
Supervised by:	Jayden.Zhuo

A.1 Maximum Conducted Peak Output Power

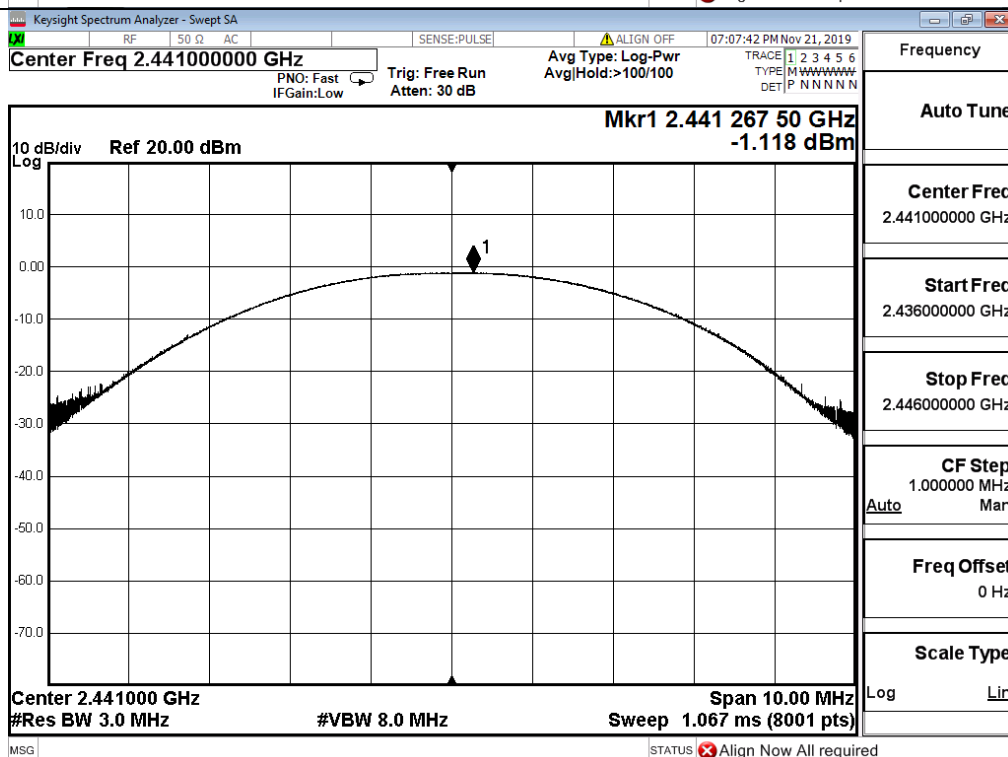
Mode	Channel.	Maximum Peak Output Power [dBm]	Limit [dBm]	Verdict
GFSK	LCH	-1.808	21	PASS
	MCH	-1.118	21	PASS
	HCH	-1.458	21	PASS

Test Graphs

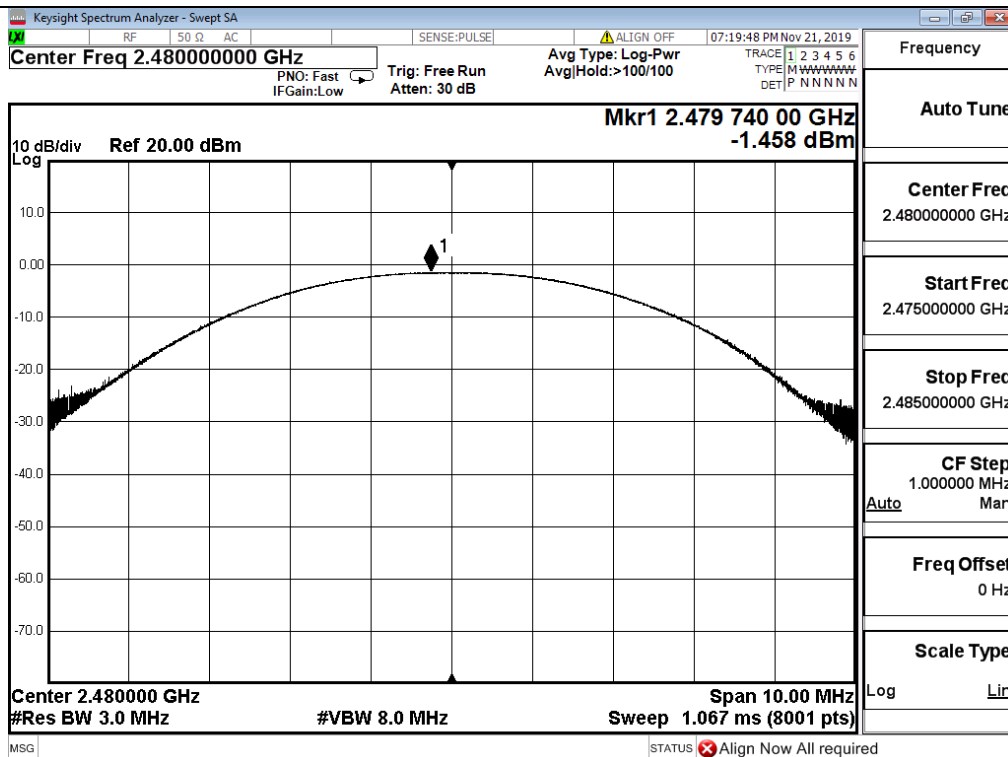
GFSK/LCH



GFSK/MCH

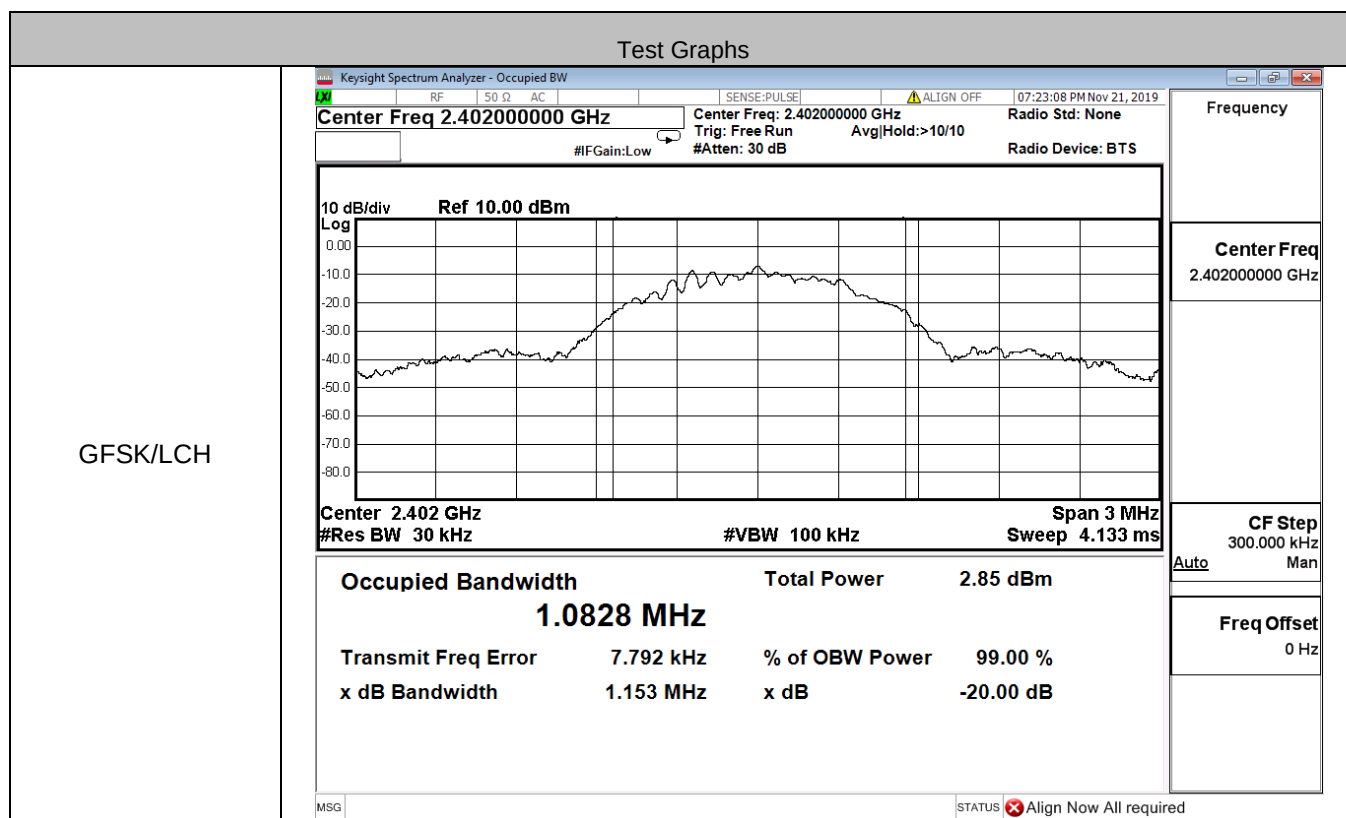


GFSK/HCH

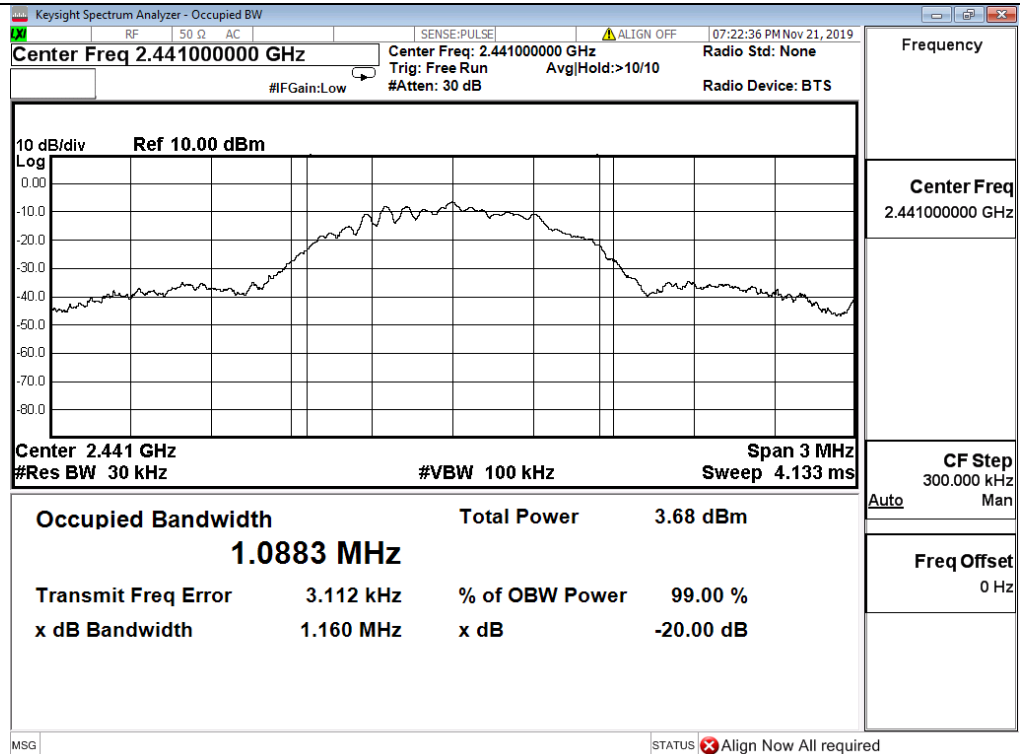


A.2 99% and 20dB Bandwidth

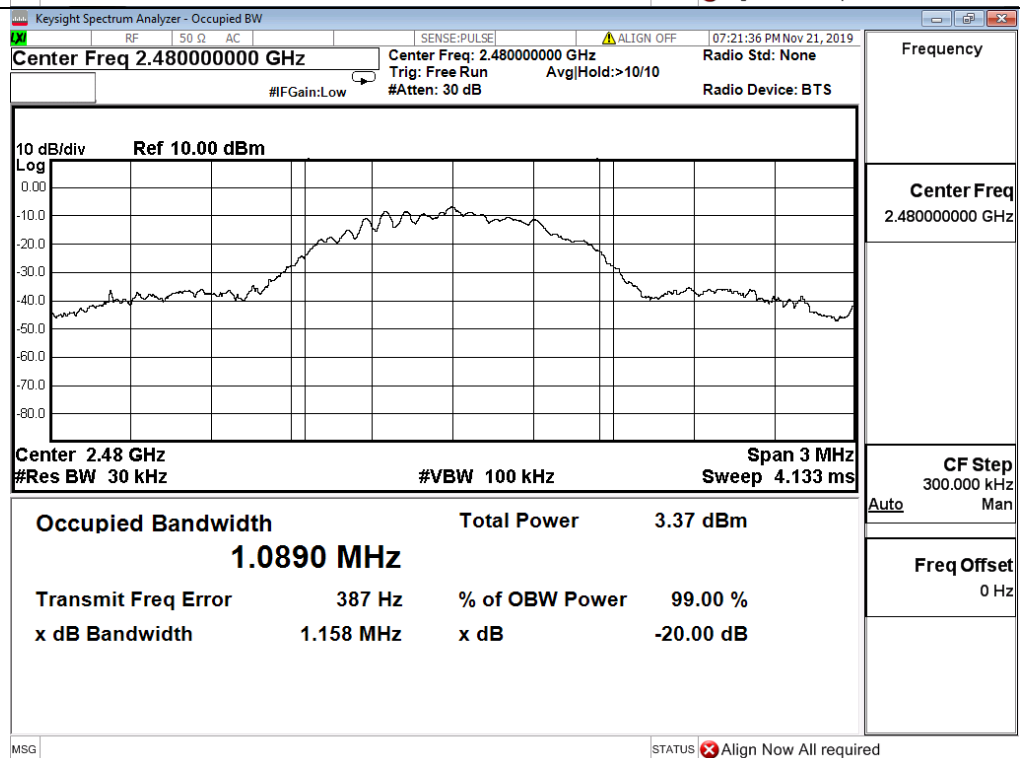
Mode	Channel.	99% Bandwidth [MHz]	20dB Bandwidth [MHz]	Limit [MHz]	Verdict
GFSK	LCH	1.0828	1.153	Not Specified	PASS
	MCH	1.0883	1.160	Not Specified	PASS
	HCH	1.0890	1.158	Not Specified	PASS



GFSK/MCH

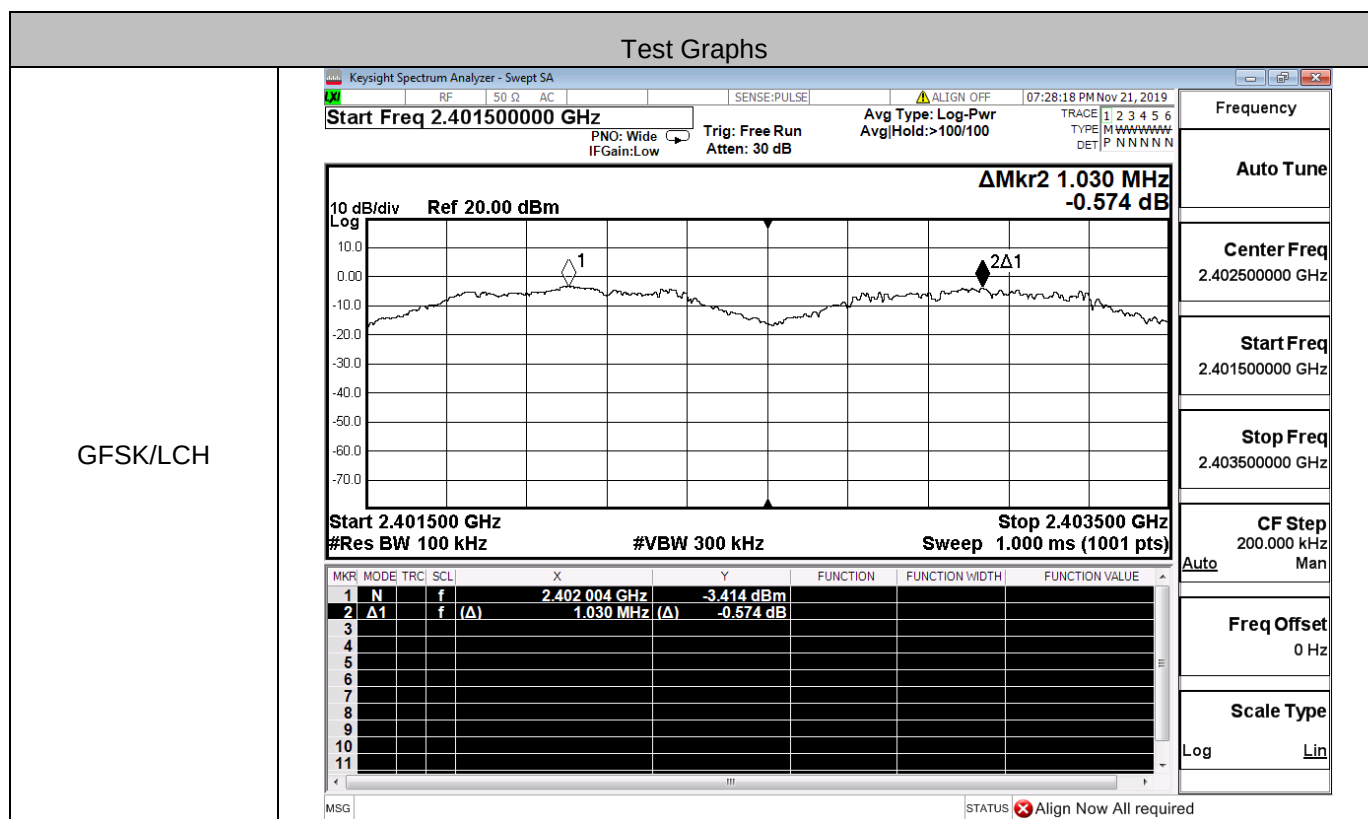


GFSK/HCH

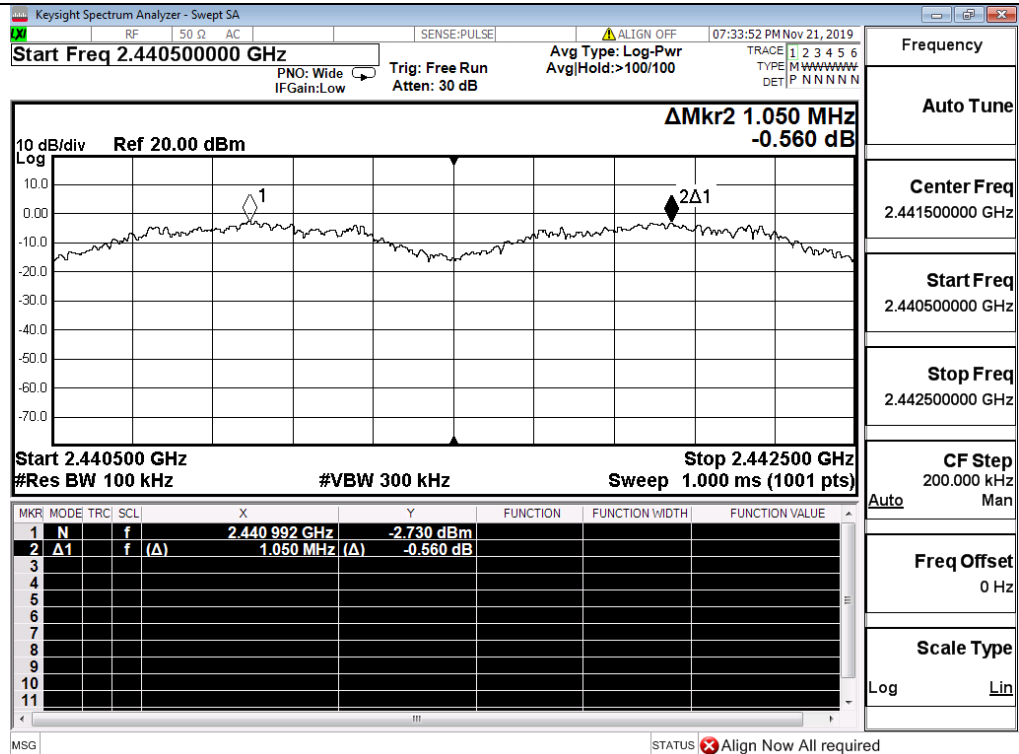


A.3 Carrier Frequency Separation

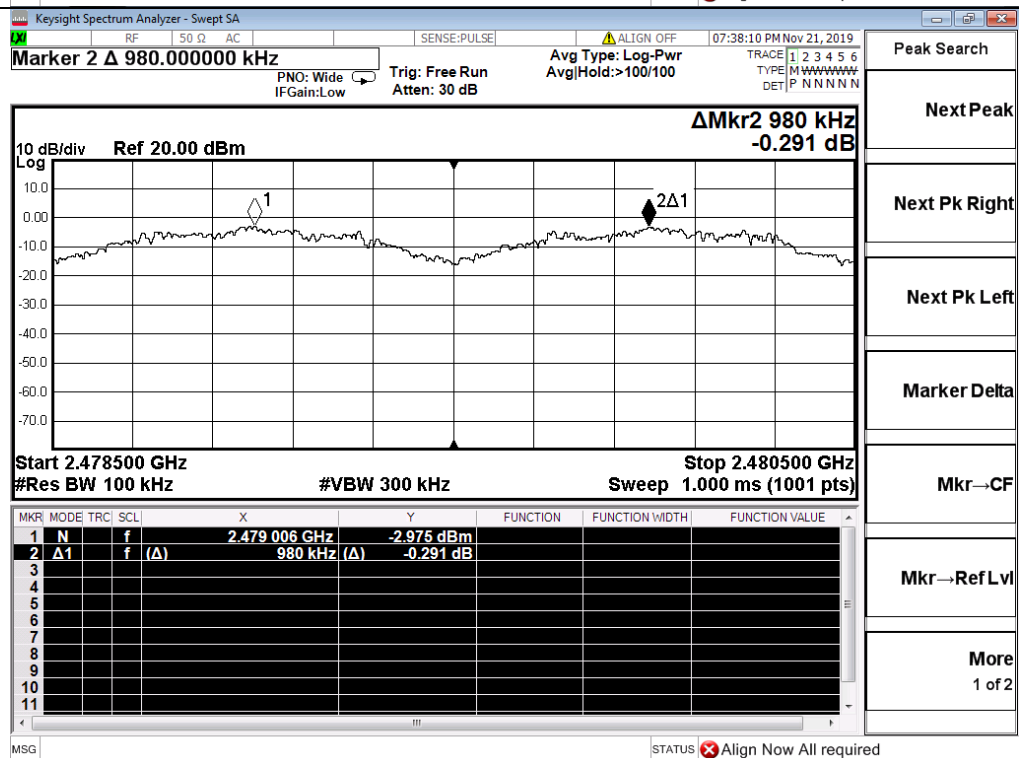
Mode	Channel.	Carrier Frequency Separation [MHz]	Limit [MHz]	Verdict
GFSK	LCH	1.030	0.77	PASS
	MCH	1.050	0.77	PASS
	HCH	0.980	0.77	PASS



GFSK/MCH



GFSK/HCH

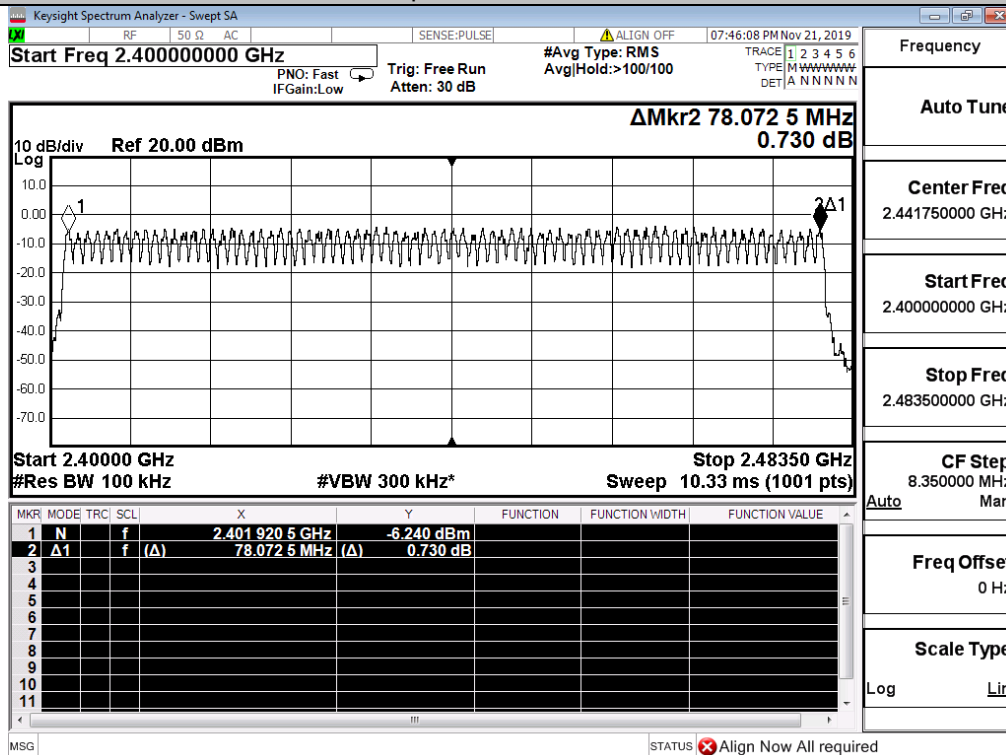


A.4 Hopping Channel Number

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

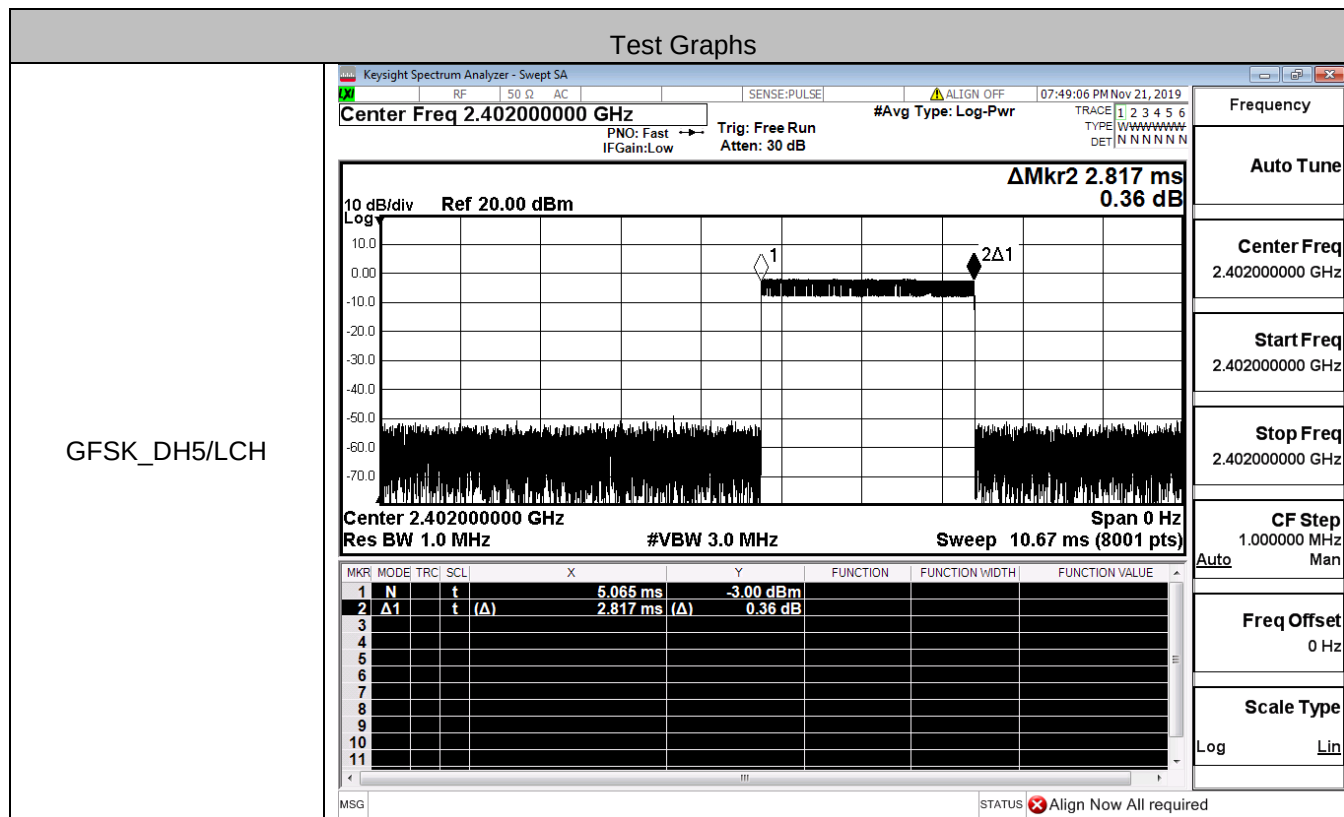
Test Graphs

GFSK/Hop

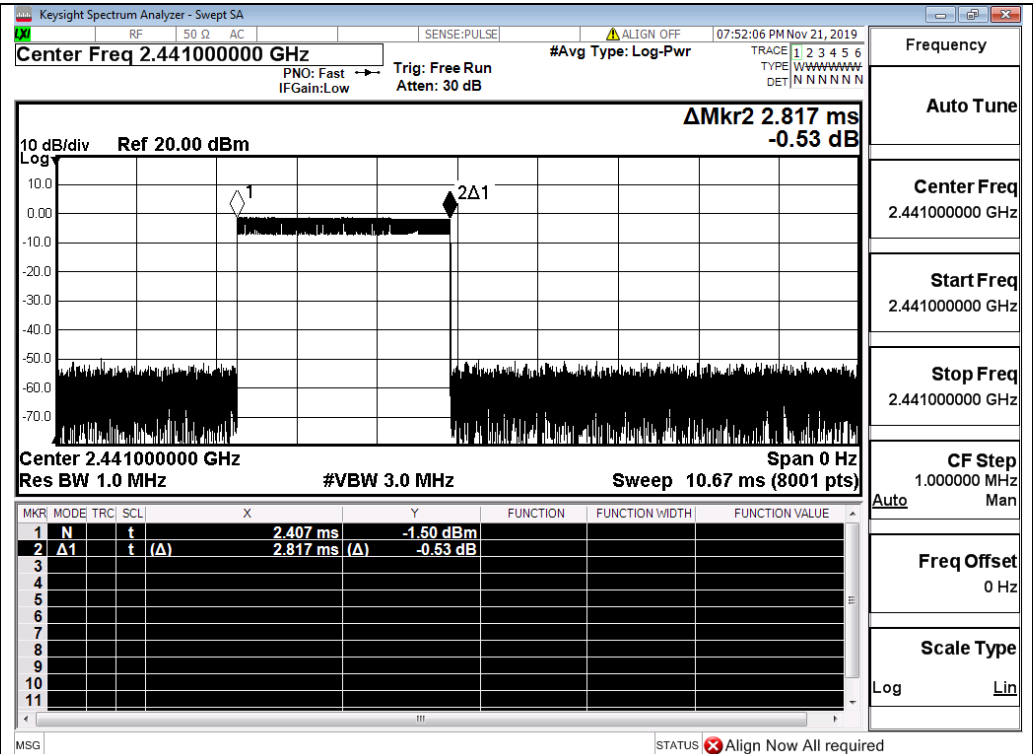


A.5 Dwell Time

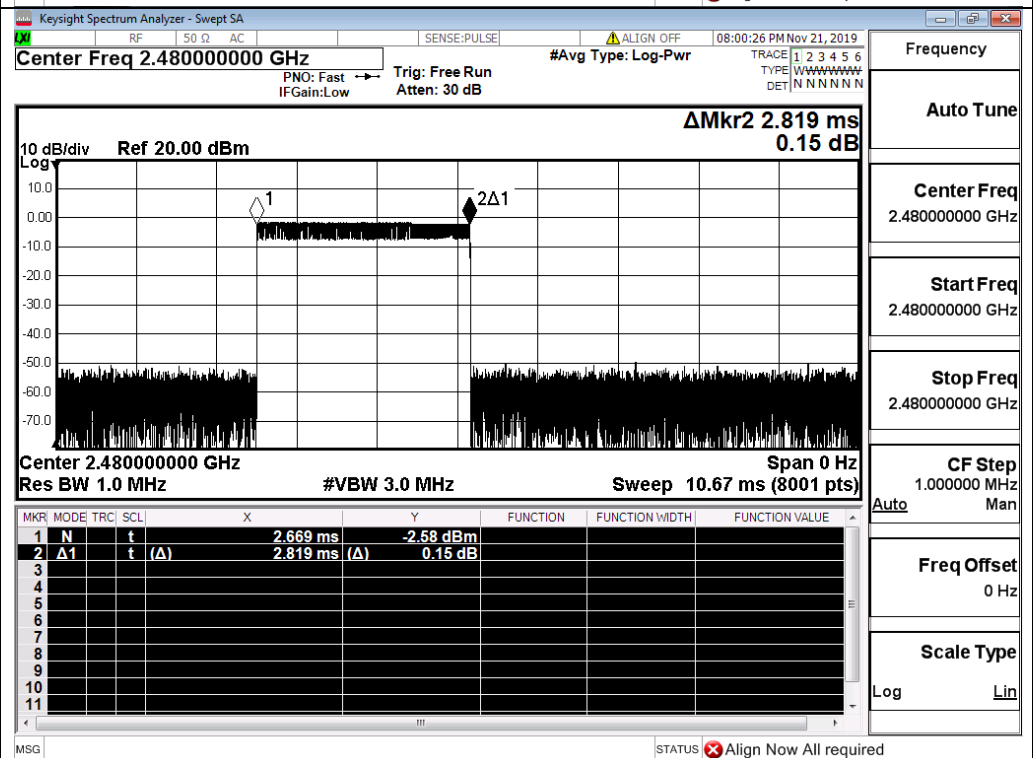
Mode	Packet	Channel	Burst Width [ms/hop/ch]	Total Hops[hop*ch]	Dwell Time[s]	Limit [s]	Verdict
GFSK	DH5	LCH	2.817	106.7	0.30	0.4	PASS
	DH5	MCH	2.817	106.7	0.30	0.4	PASS
	DH5	HCH	2.819	106.7	0.30	0.4	PASS



GFSK_DH5/MCH

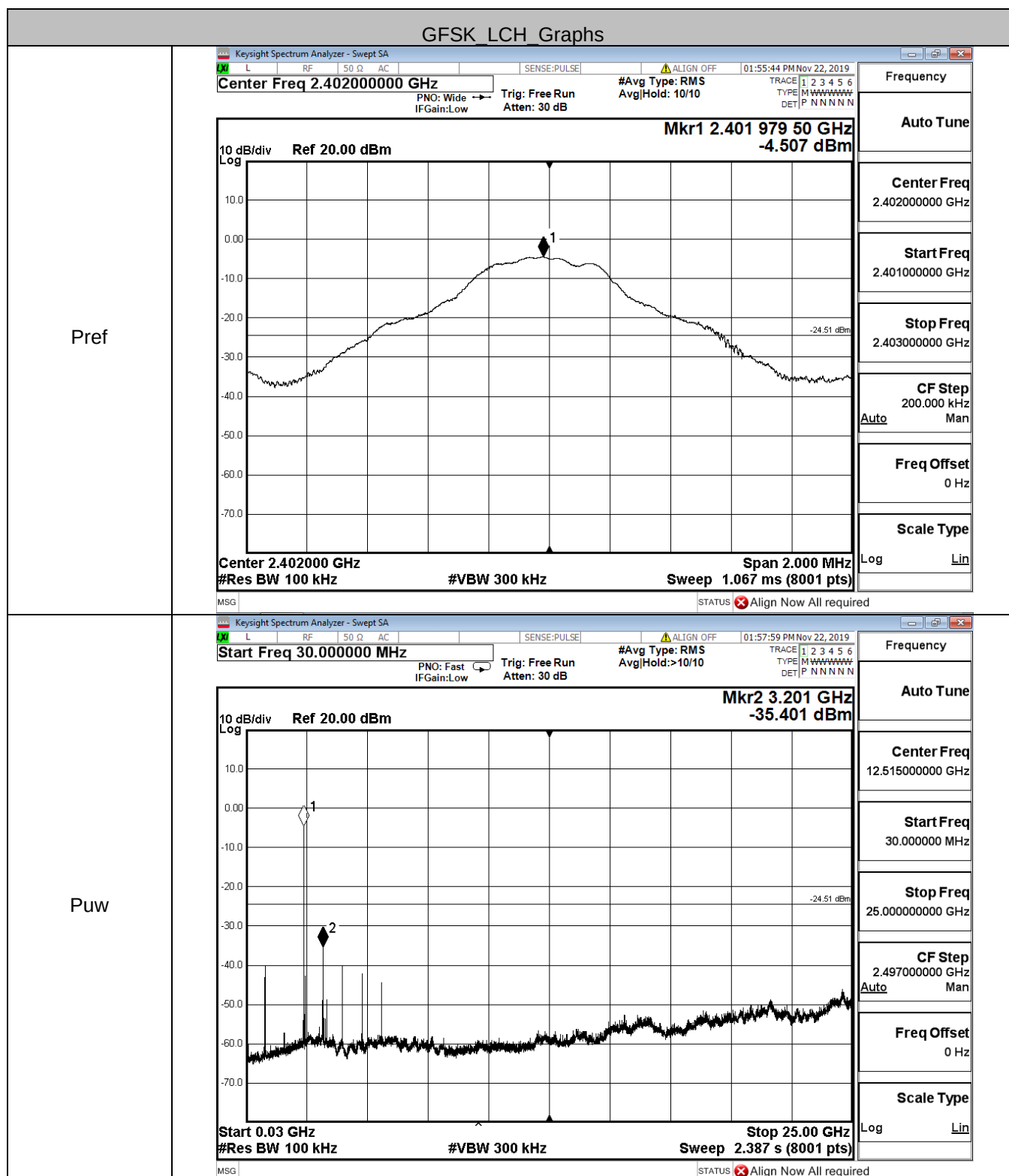


GFSK_DH5/HCH



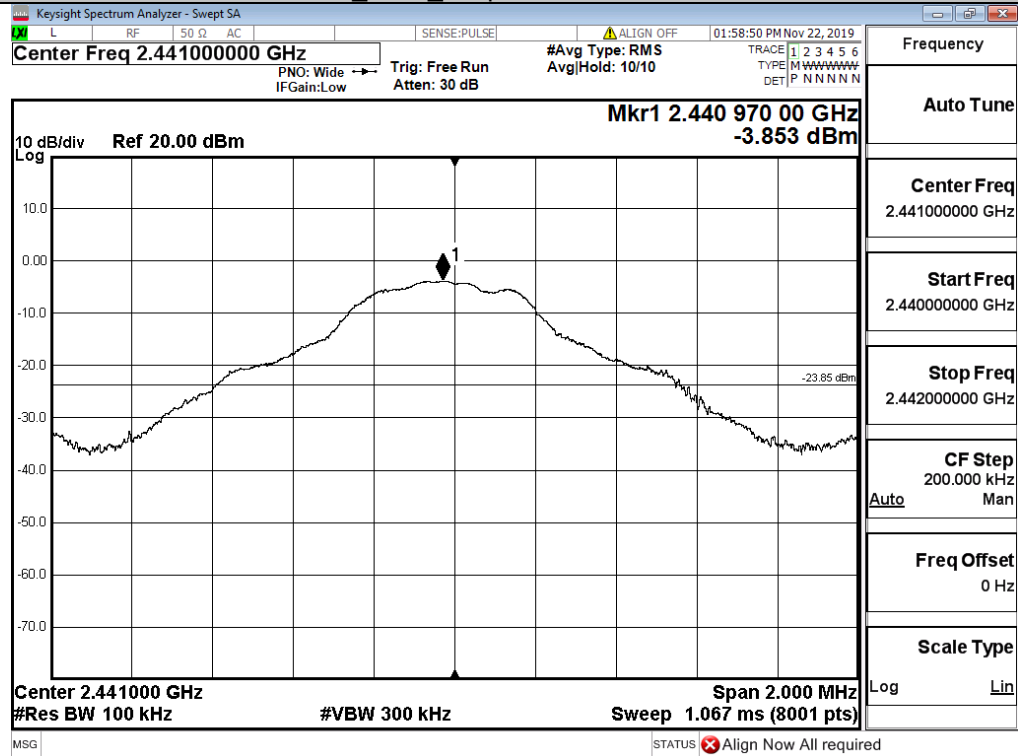
A.6 RF Conducted Spurious Emissions

Mode	Channel	Pref [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
GFSK	LCH	-4.507	-35.401	-24.51	PASS
	MCH	-3.853	-35.350	-23.85	PASS
	HCH	-3.933	-36.447	-23.93	PASS

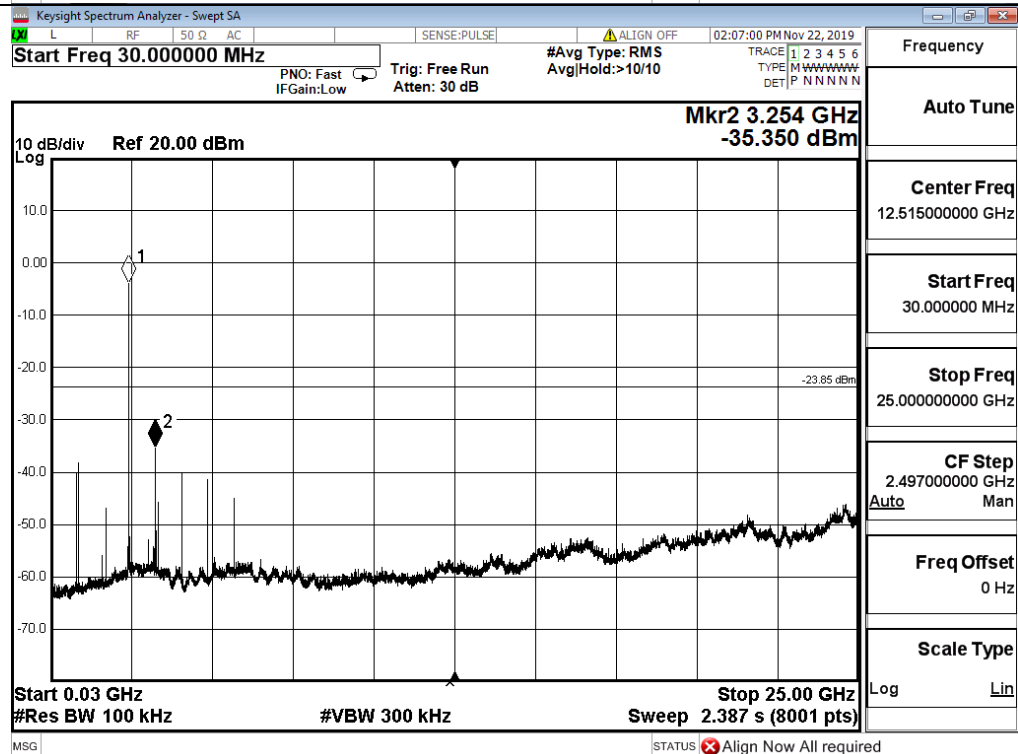


GFSK_MCH_Graphs

Pref

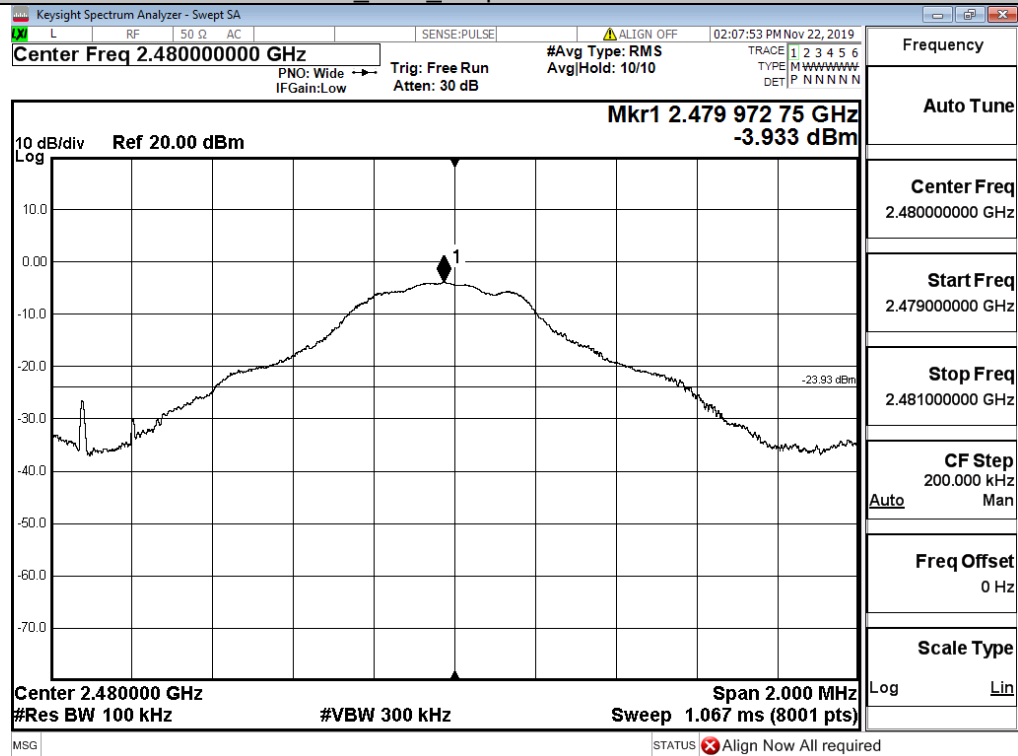


Puw

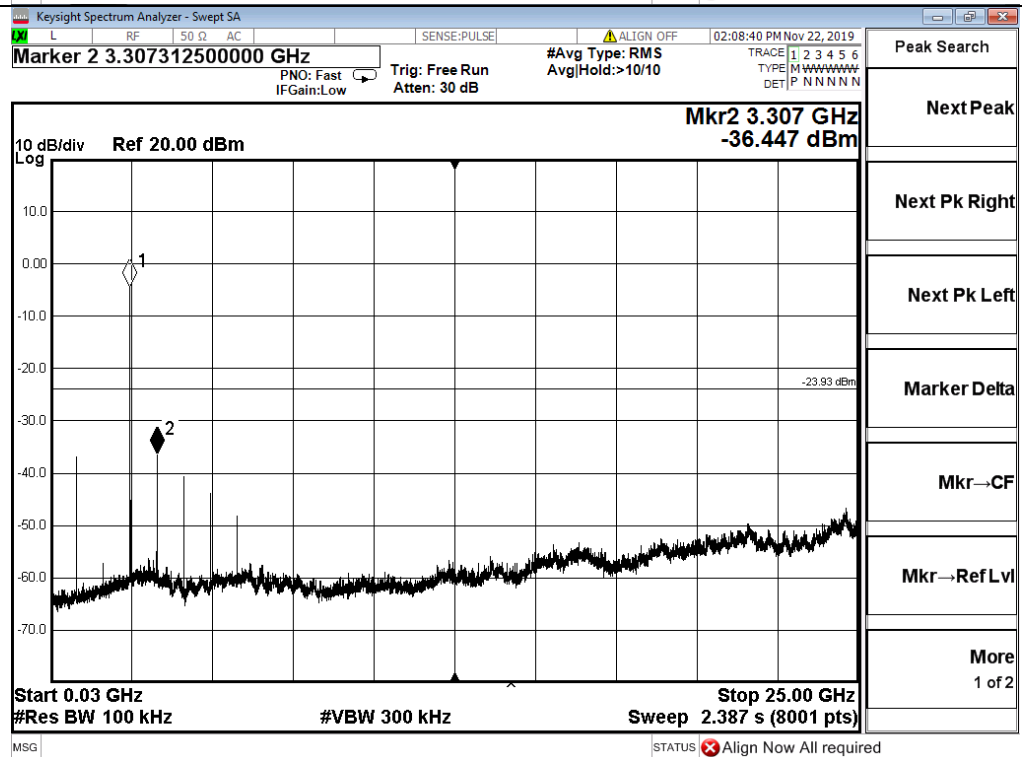


GFSK_HCH_Graphs

Pref



Puw

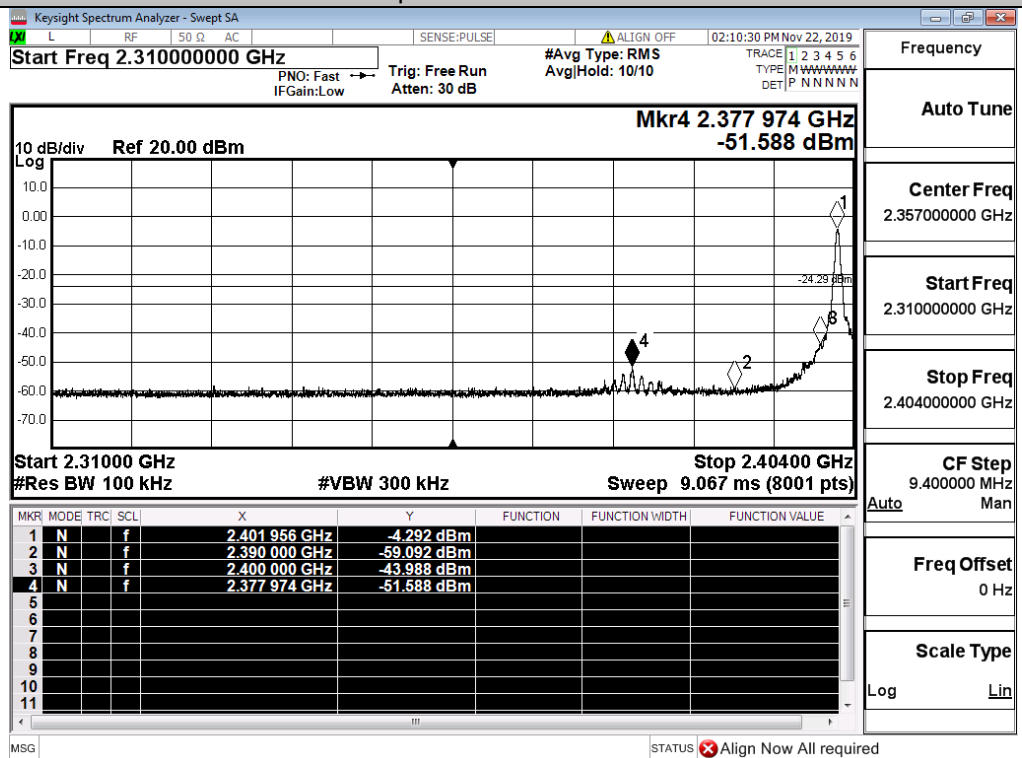


A.7 Band-edge for RF Conducted Emissions

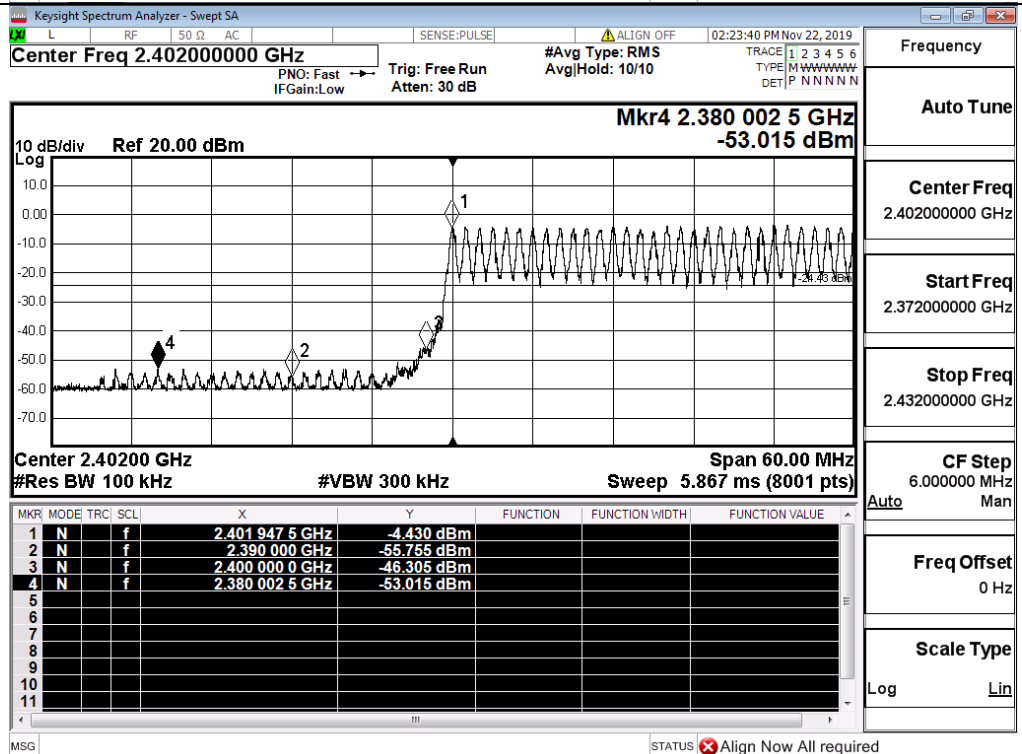
Mode	Channel	Carrier Frequency [MHz]	Carrier Power [dBm]	Frequency Hopping	Max Spurious Level [dBm]	Limit [dBm]	Verdict
GFSK	LCH	2402	-4.292	Off	-51.588	-24.29	PASS
			-4.430	On	-53.015	-24.43	PASS
	HCH	2480	-3.753	Off	-43.749	-23.75	PASS
			-4.149	On	-53.569	-24.15	PASS

Test Graphs

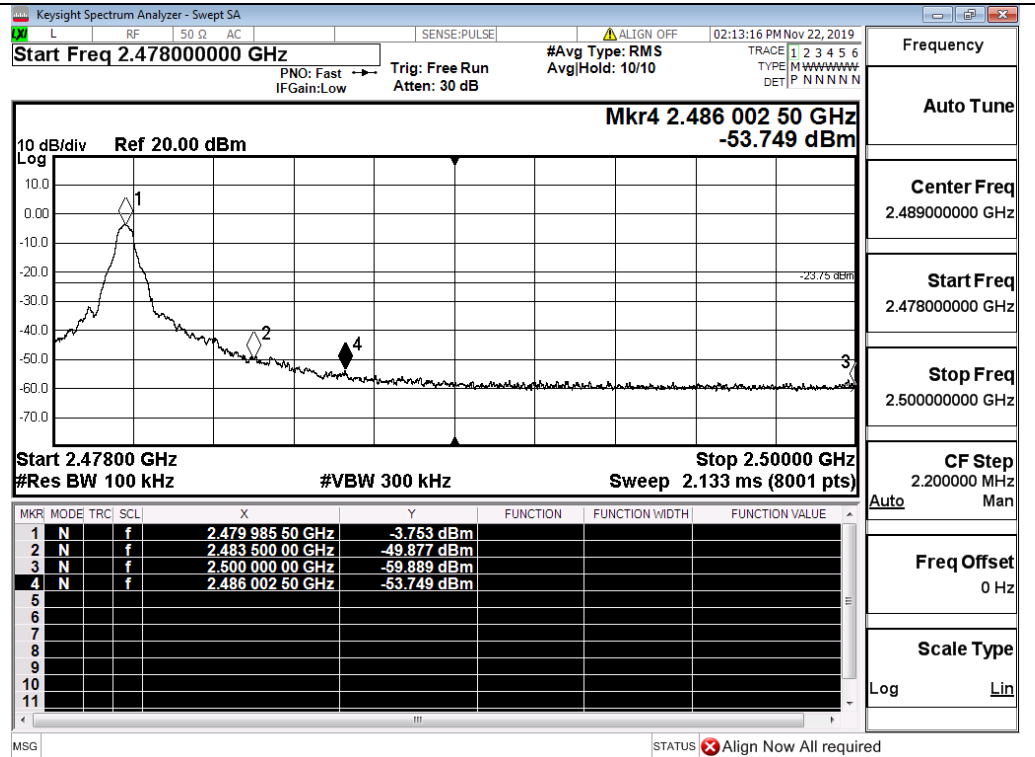
GFSK/LCH/No Hop



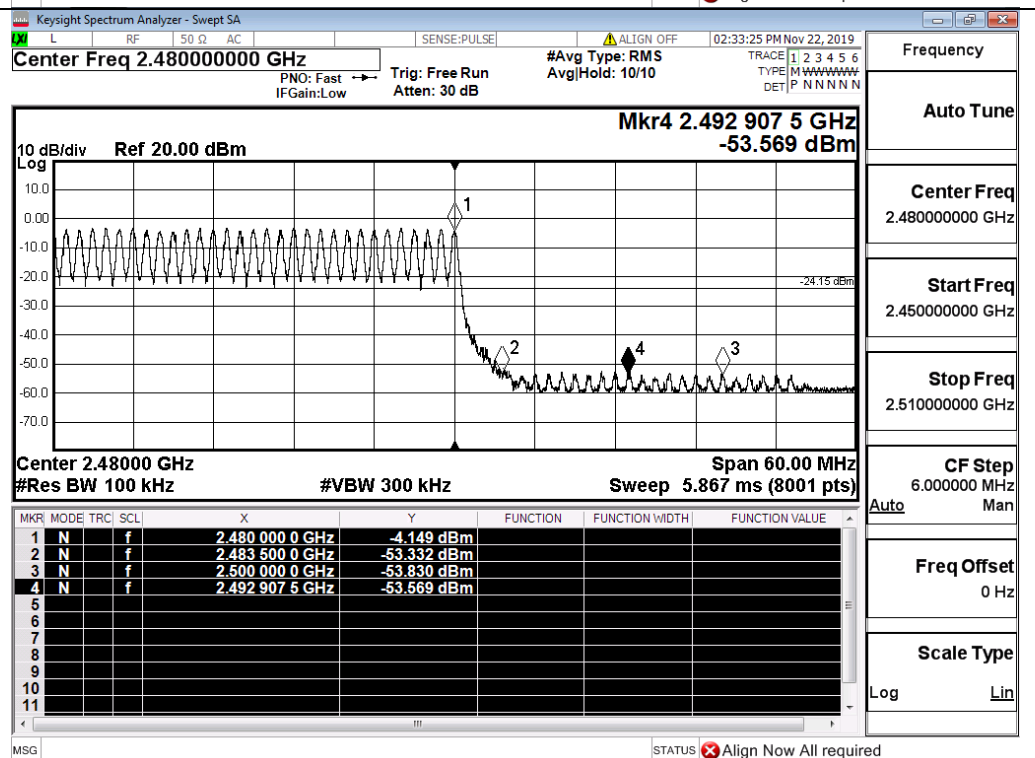
GFSK/LCH/Hop



GFSK/HCH/No Hop



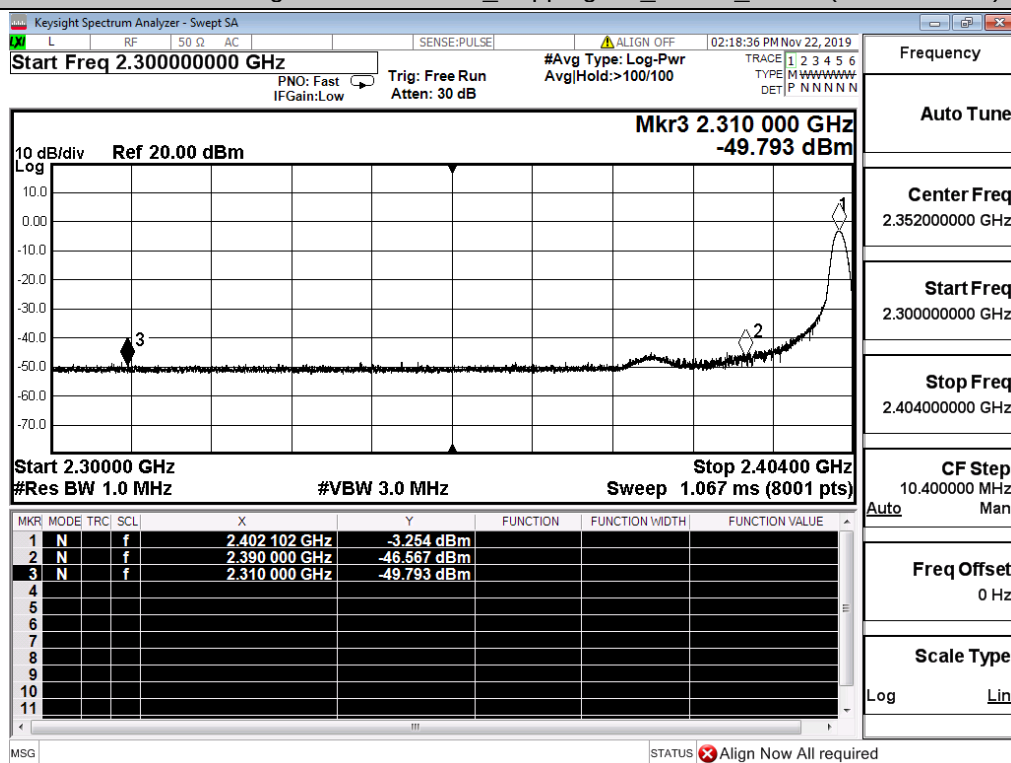
GFSK/HCH/Hop



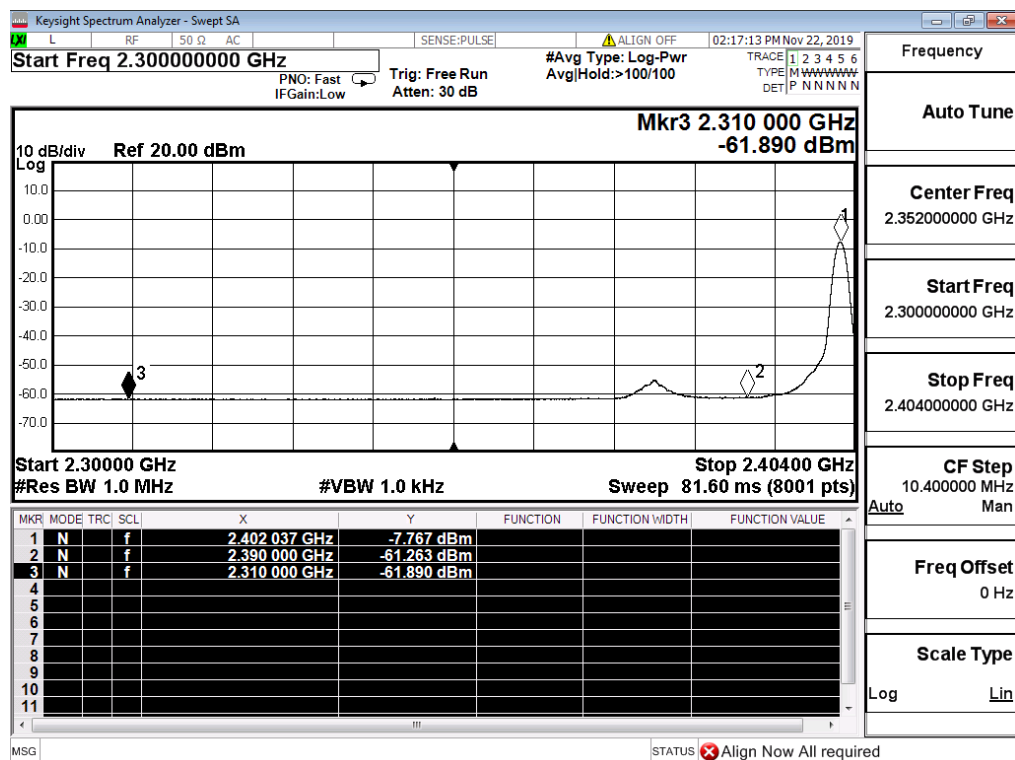
A.8 Restrict-band band-edge measurements

Test Mode	Hopping	Freq.	Power [dBm]	Gain	Ground Factor	E [dBuV/m]	Detector	Limit [dBuV/m]	Verdict
GFSK	Off	2310.0	-49.793	2	0	47.47	PEAK	74	PASS
	Off	2310.0	-61.890	2	0	35.37	AV	54	PASS
	Off	2390.0	-46.567	2	0	50.69	PEAK	74	PASS
	Off	2390.0	-61.263	2	0	36.00	AV	54	PASS
	Off	2483.5	-34.662	2	0	62.60	PEAK	74	PASS
	Off	2483.5	-51.800	2	0	45.46	AV	54	PASS
	Off	2500.0	-47.549	2	0	49.71	PEAK	74	PASS
	Off	2500.0	-60.737	2	0	36.52	AV	54	PASS

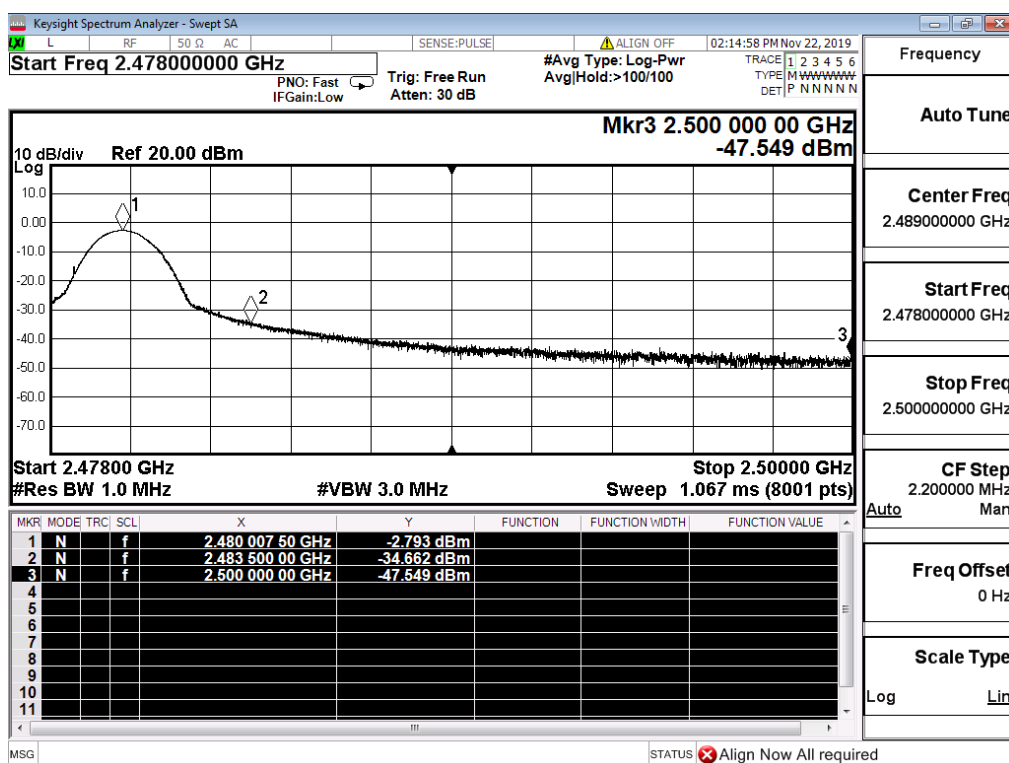
Restrict-band band-edge measurements_Hopping Off_GFSK_PEAK (Low Channel)



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)

