

Appendix A

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

Product Name: Smatree Extendable Bluetooth Selfie Stick

Trade Mark: Smatree

Test Model: SmaStick

Environmental Conditions

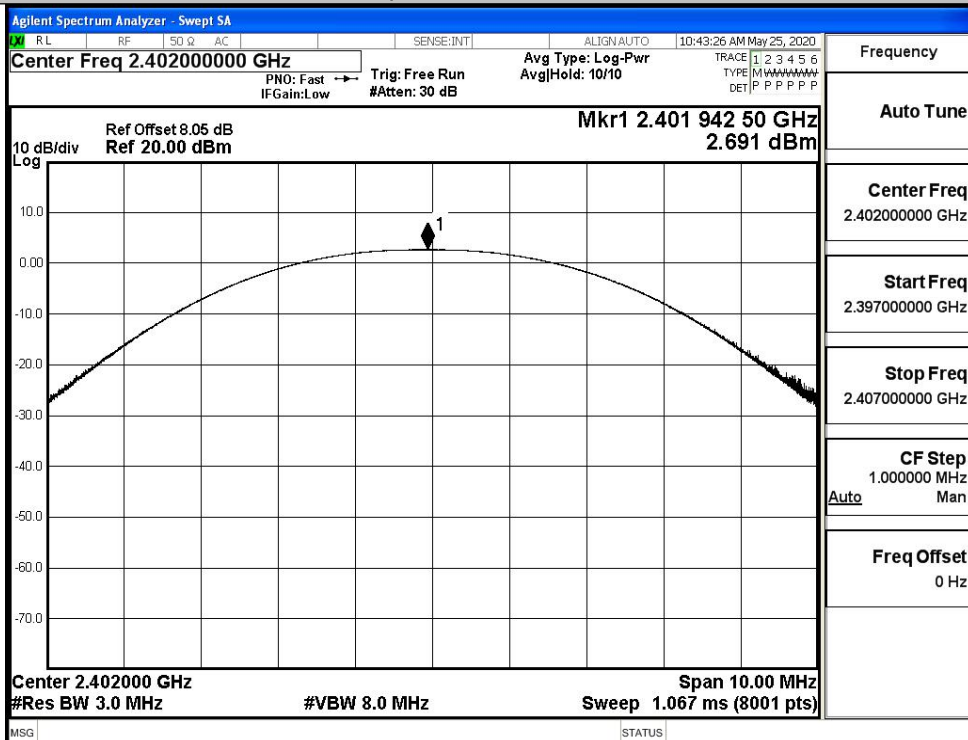
Temperature:	22.8 ° C
Relative Humidity:	53.3%
ATM Pressure:	100.0 kPa
Test Engineer:	Scout Wu
Supervised by:	Li Huan

A.1 Maximum Conducted Peak Output Power

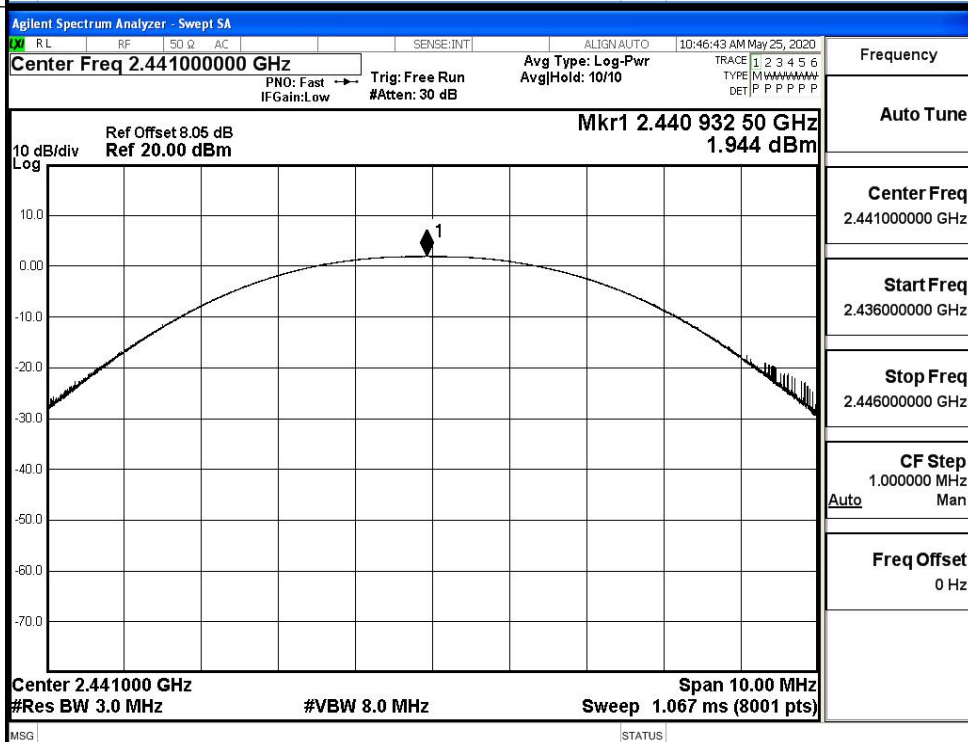
Mode	Channel.	Maximum Peak Output Power [dBm]	Limit [dBm]	Verdict
GFSK	LCH	2.691	30	PASS
	MCH	1.944	30	PASS
	HCH	0.836	30	PASS

Test Graphs

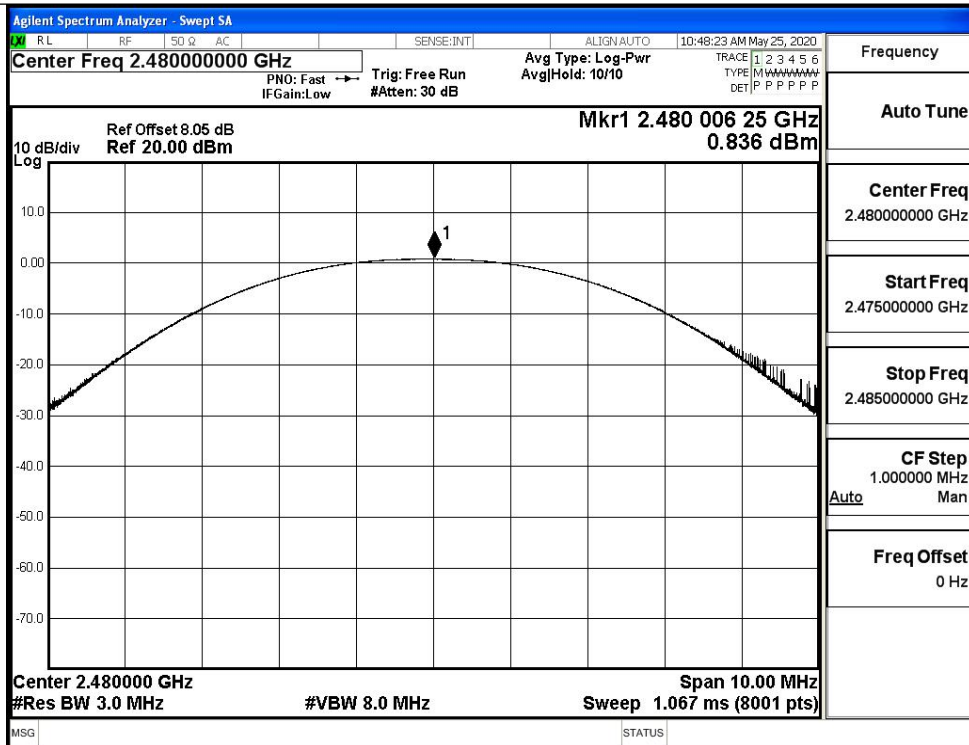
GFSK/LCH



GFSK/MCH



GFSK/HCH

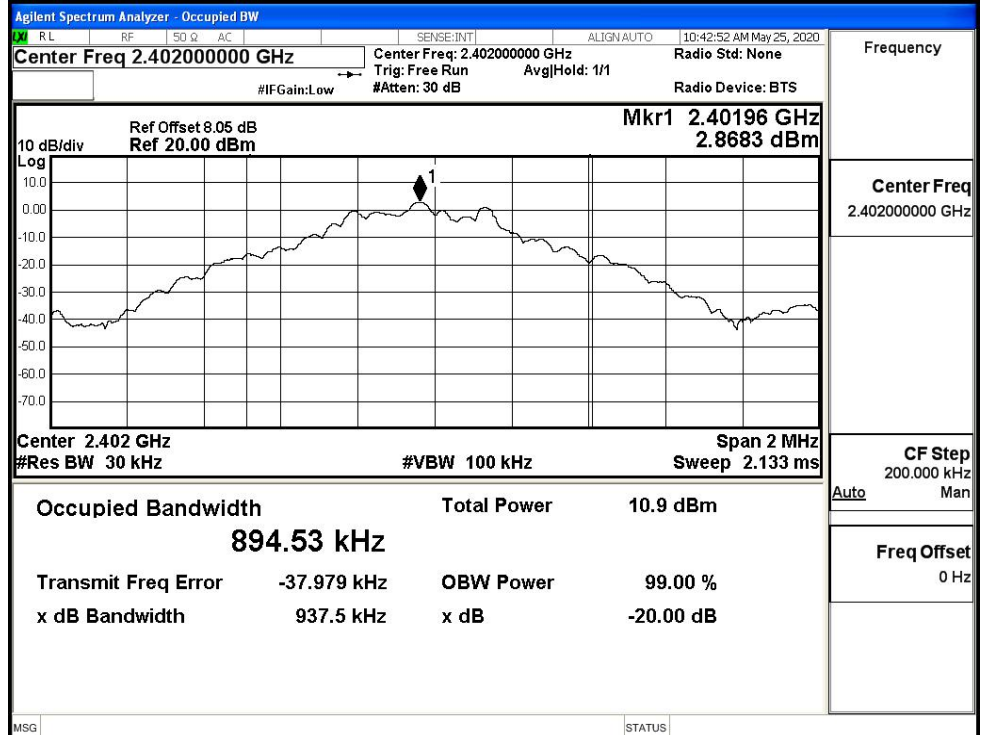


A.2 20dB Bandwidth

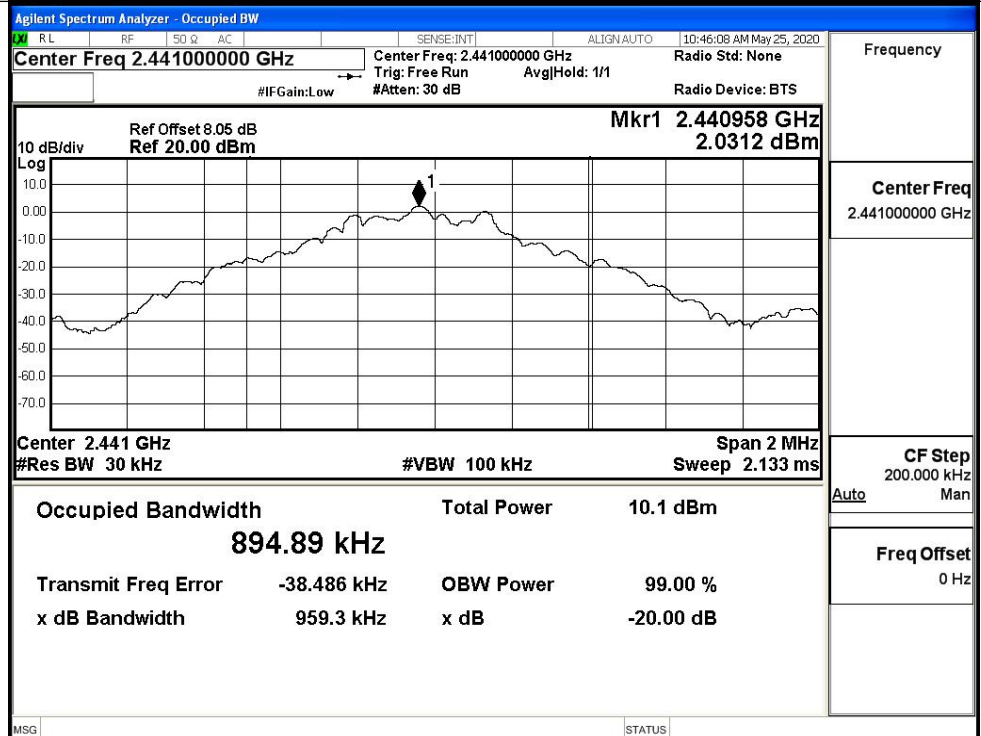
Mode	Channel.	20dB Bandwidth [MHz]	Limit [MHz]	Verdict
GFSK	LCH	0.9375	Not Specified	PASS
	MCH	0.9593	Not Specified	PASS
	HCH	0.9362	Not Specified	PASS

Test Graphs

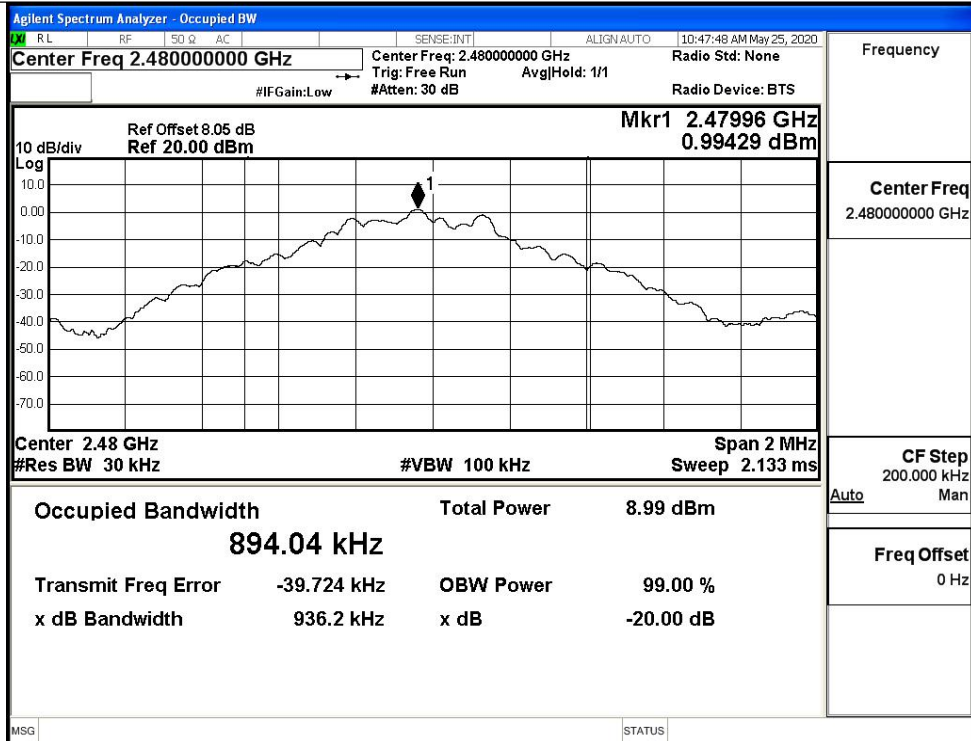
GFSK/LCH



GFSK/MCH



GFSK/HCH

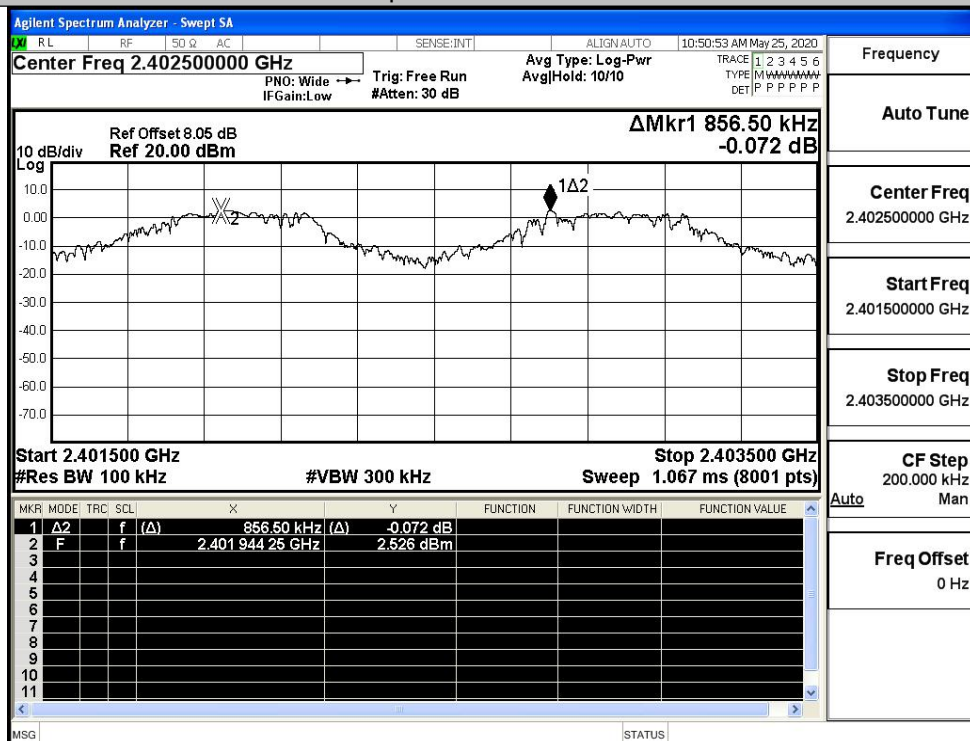


A.3 Carrier Frequency Separation

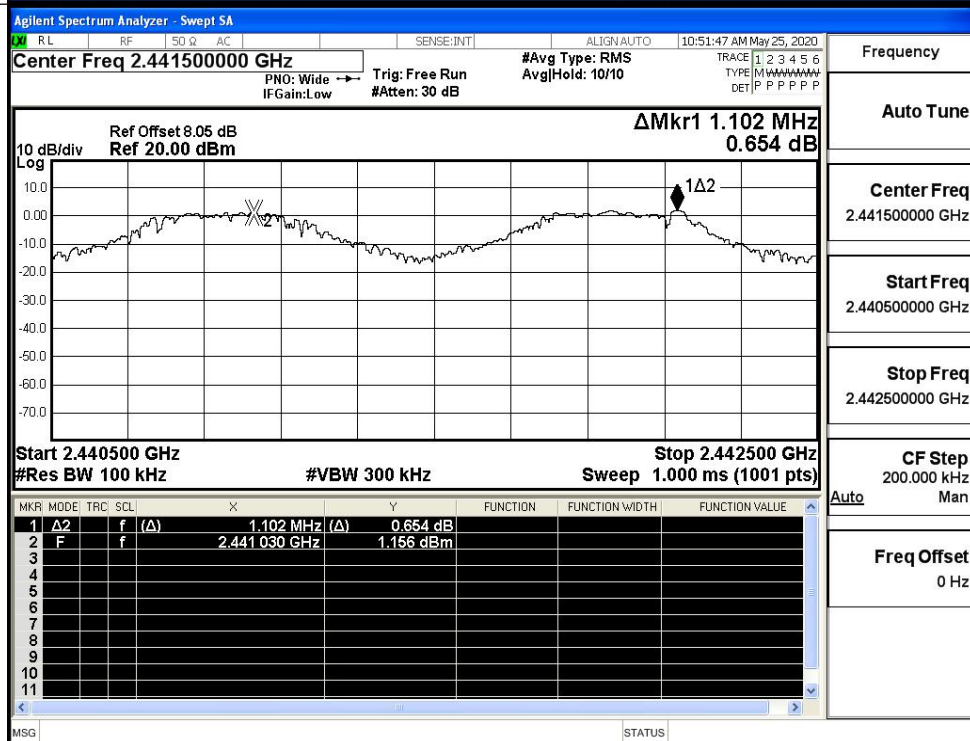
Mode	Channel.	Carrier Frequency Separation [MHz]	Limit [MHz]	Verdict
GFSK	LCH	0.856	0.625	PASS
	MCH	1.102	0.640	PASS
	HCH	1.208	0.624	PASS

Test Graphs

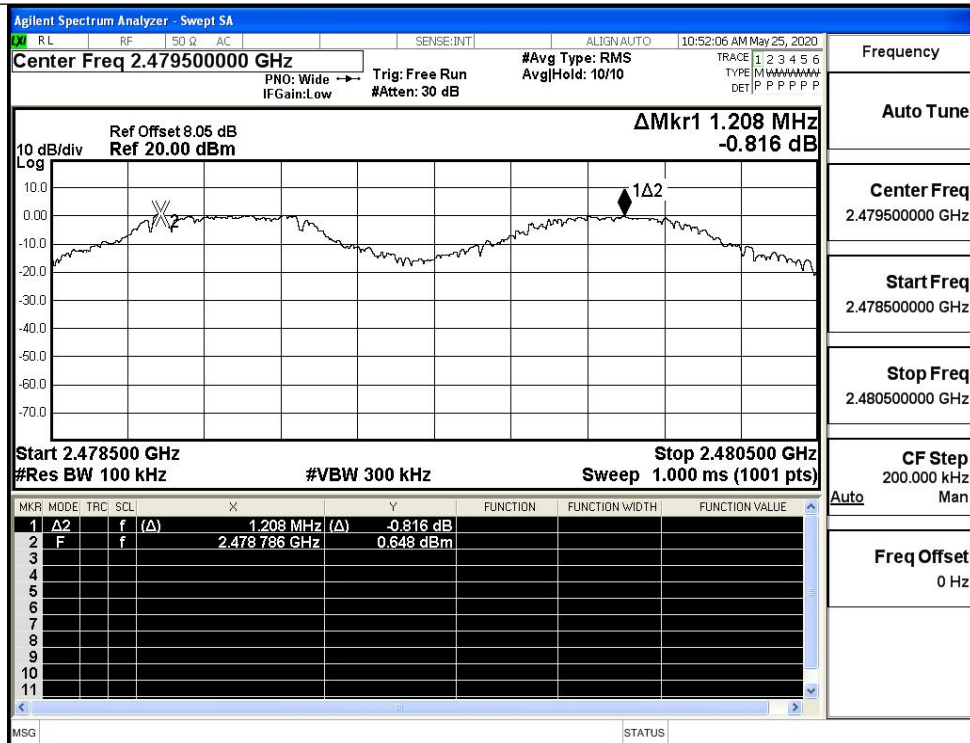
GFSK/LCH



GFSK/MCH



GFSK/HCH

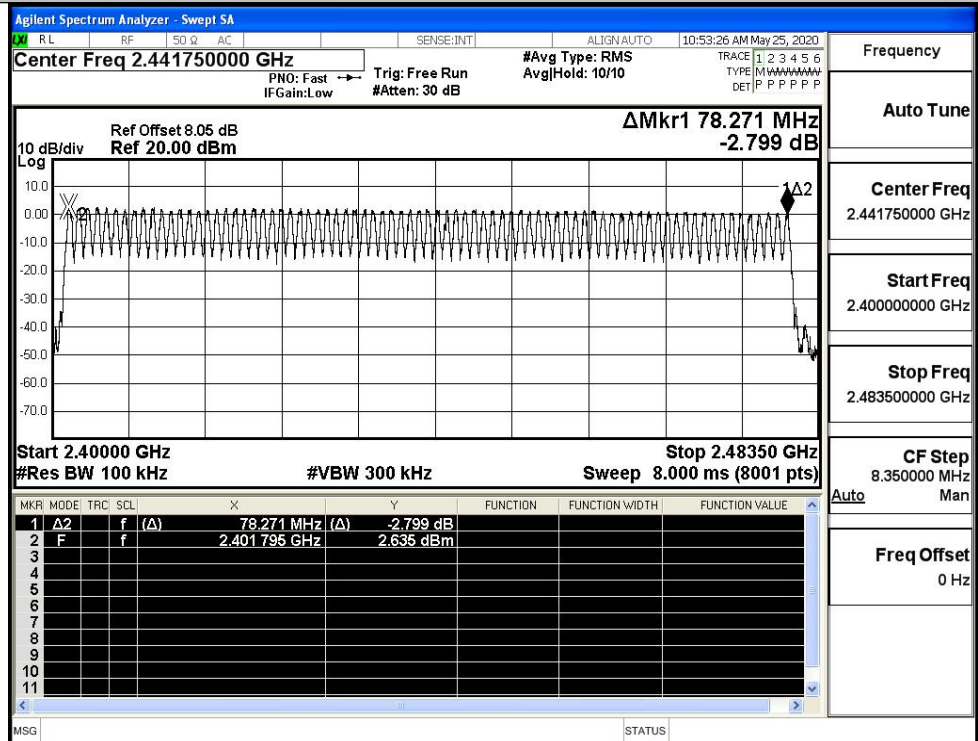


A.4 Hopping Channel Number

Mode	Channel.	Number of Hopping Channel [N]	Limit [N]	Verdict
GFSK	Hop	79	>=15	PASS

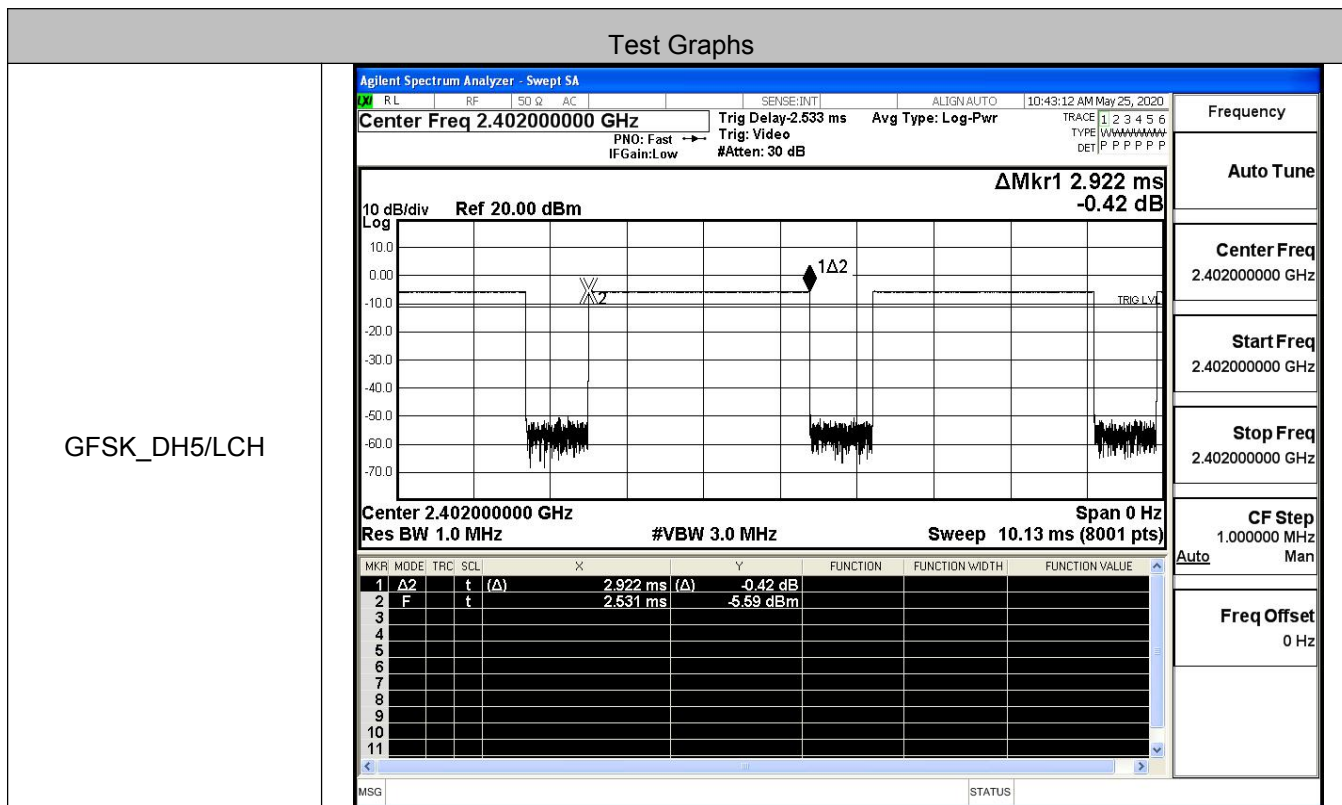
Test Graphs

GFSK/Hop

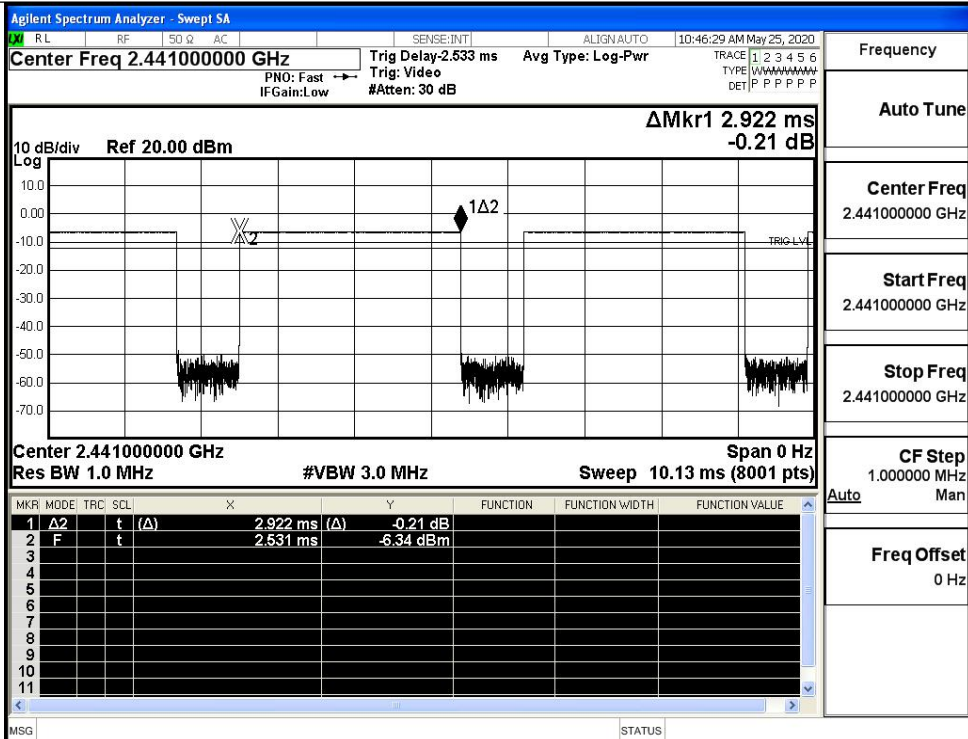


A.5 Dwell Time

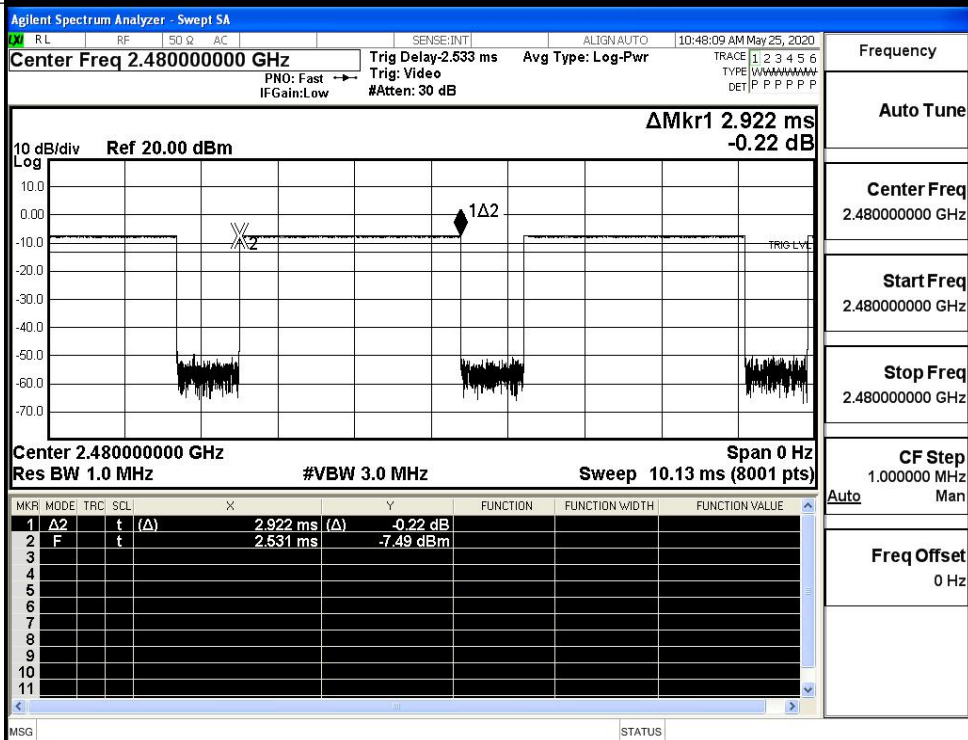
Mode	Packet	Channel	Burst Width [ms/hop/ch]	Total Hops[hop*ch]	Dwell Time[s]	Limit [s]	Verdict
GFSK	DH5	LCH	2.92	106.7	0.312	0.4	PASS
	DH5	MCH	2.92	106.7	0.312	0.4	PASS
	DH5	HCH	2.92	106.7	0.312	0.4	PASS



GFSK_DH5/MCH



GFSK_DH5/HCH

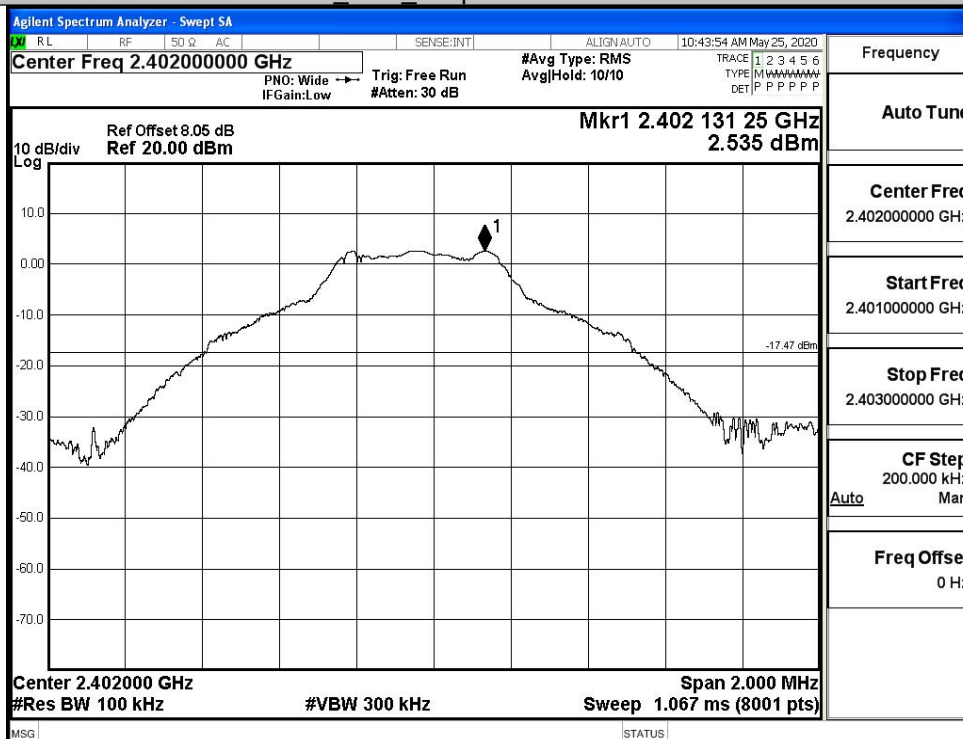


A.6 RF Conducted Spurious Emissions

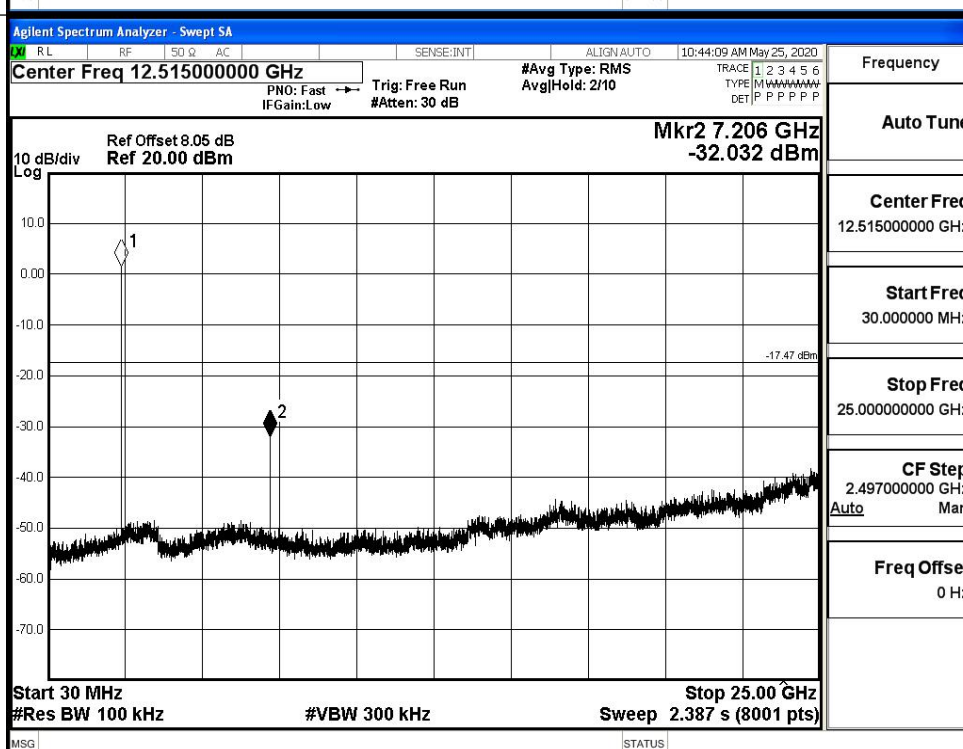
Mode	Channel	Pref [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
GFSK	LCH	2.535	-32.032	-17.465	PASS
	MCH	1.776	-34.825	-18.224	PASS
	HCH	0.655	-34.159	-19.345	PASS

GFSK_LCH_Graphs

Pref

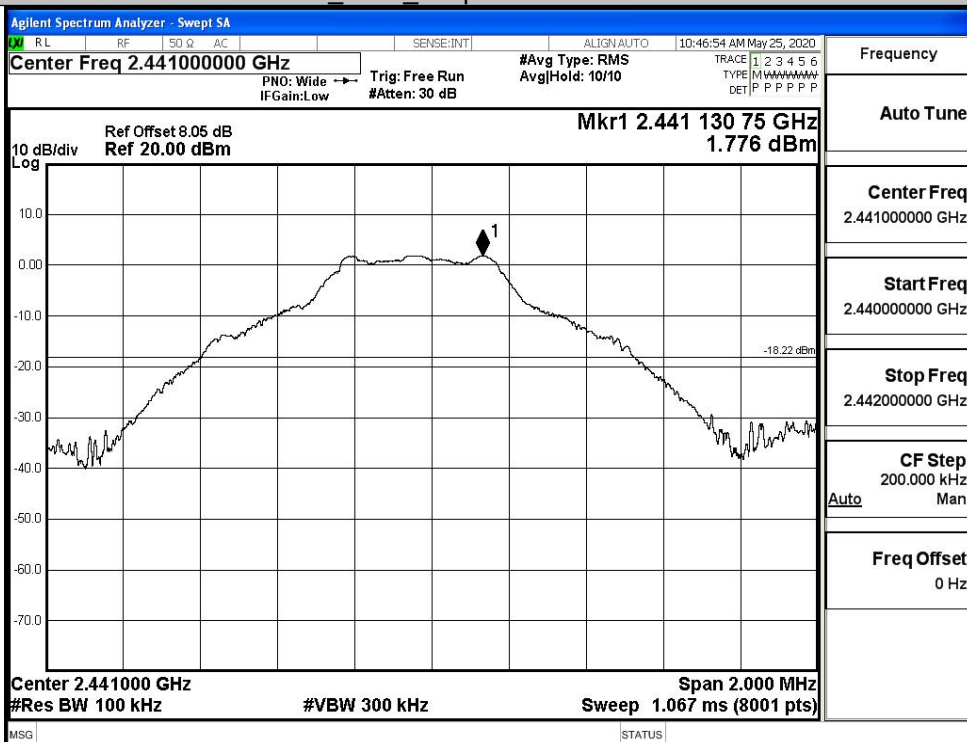


Puw

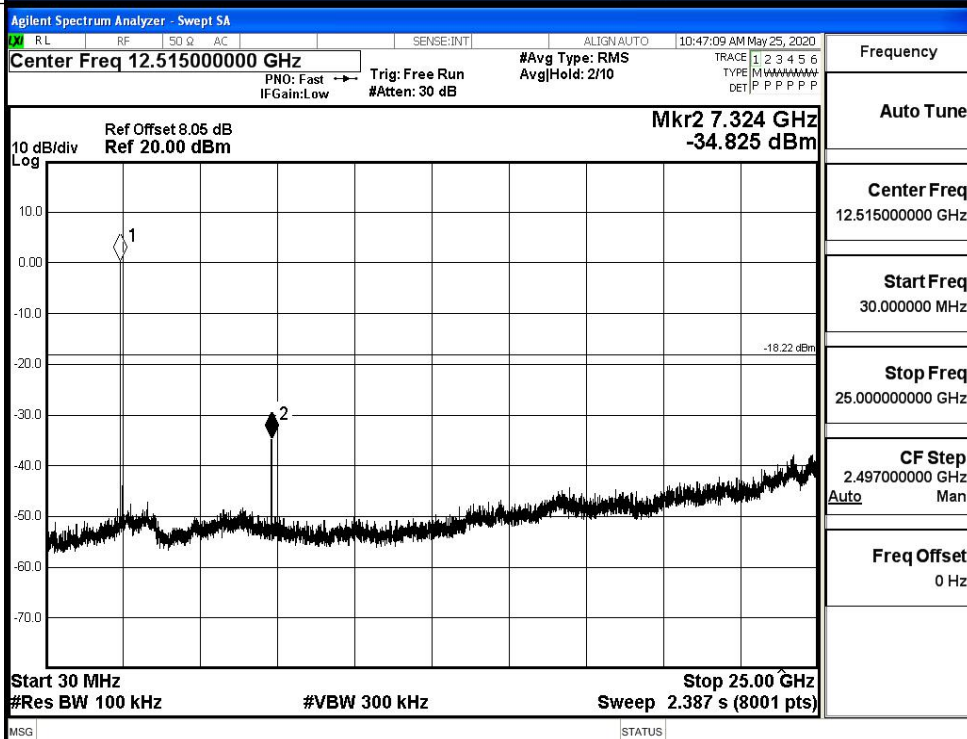


GFSK_MCH_Graphs

Pref

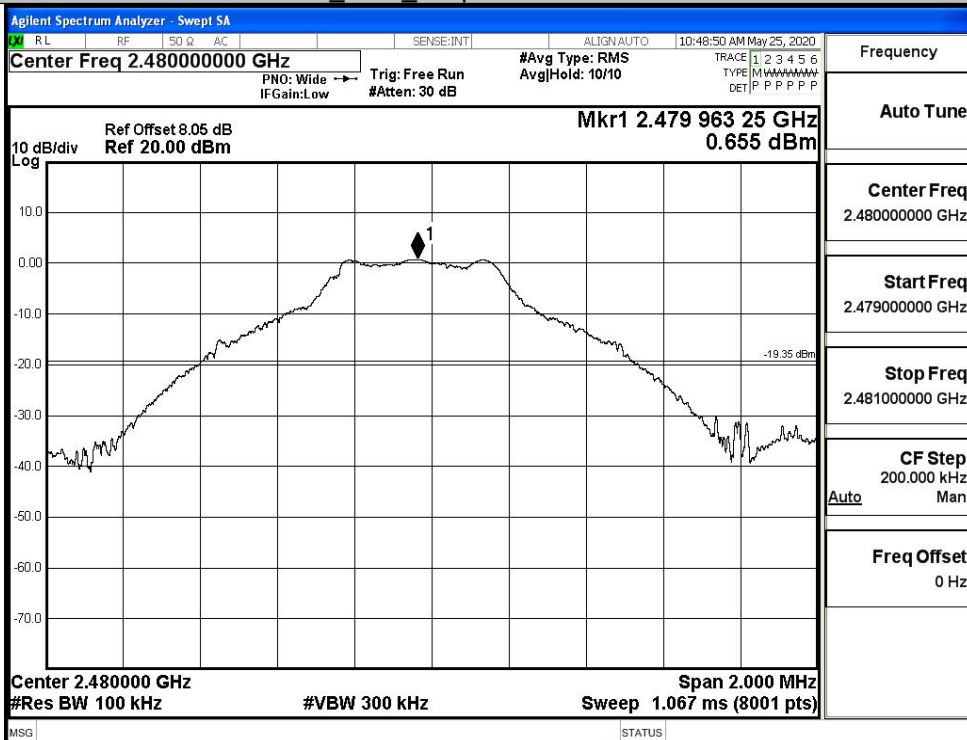


Puw

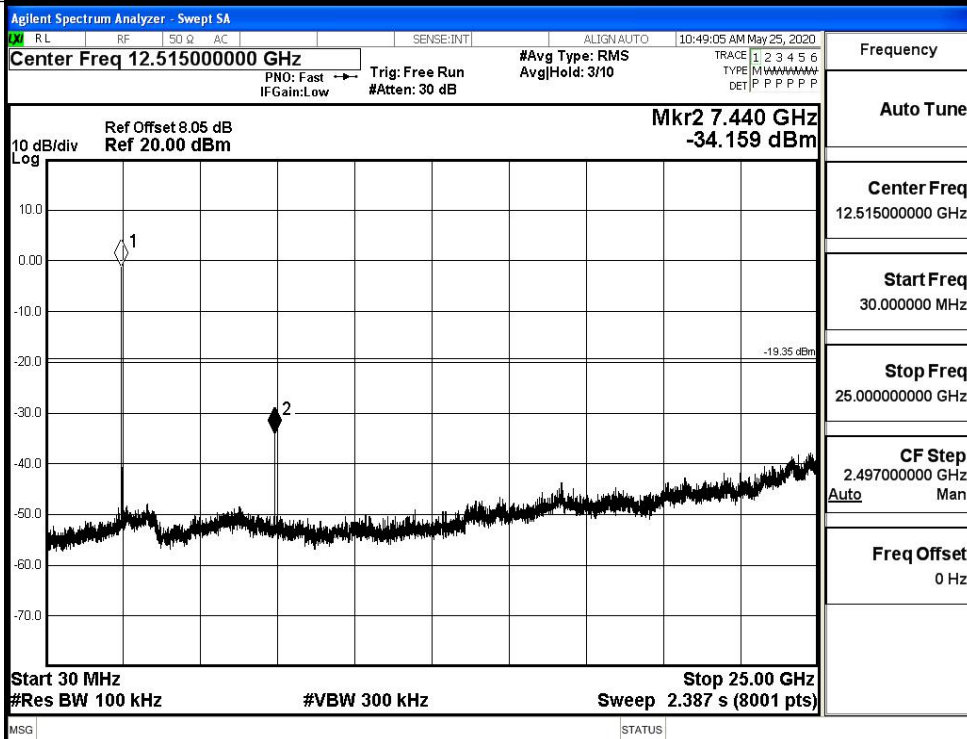


GFSK_HCH_Graphs

Pref



Puw

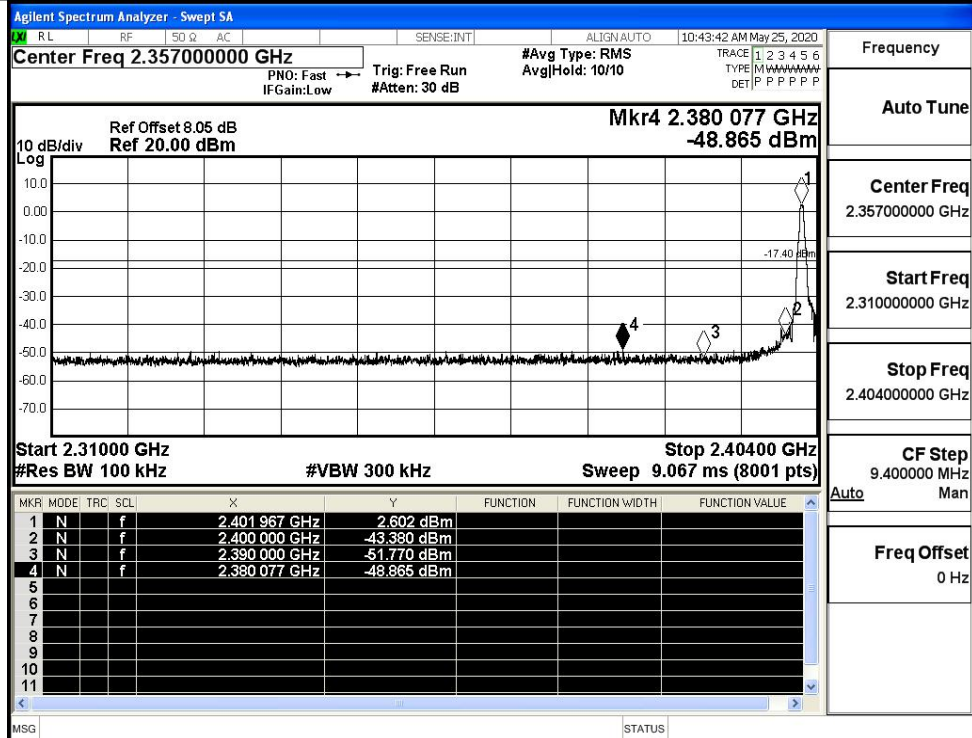


A.7 Band-edge for RF Conducted Emissions

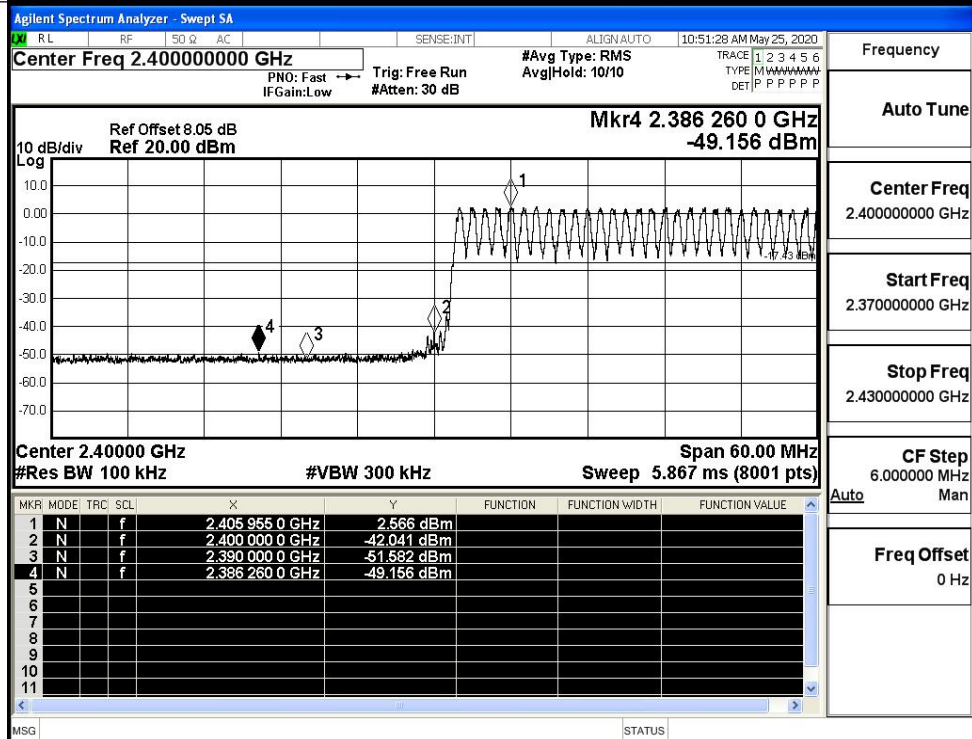
Mode	Channel	Carrier Frequency [MHz]	Carrier Power [dBm]	Frequency Hopping	Max Spurious Level [dBm]	Limit [dBm]	Verdict
GFSK	LCH	2402	2.602	Off	-48.865	-17.4	PASS
			2.566	On	-49.156	-17.43	PASS
	HCH	2480	0.663	Off	-45.406	-19.34	PASS
			1.377	On	-46.310	-18.62	PASS

Test Graphs

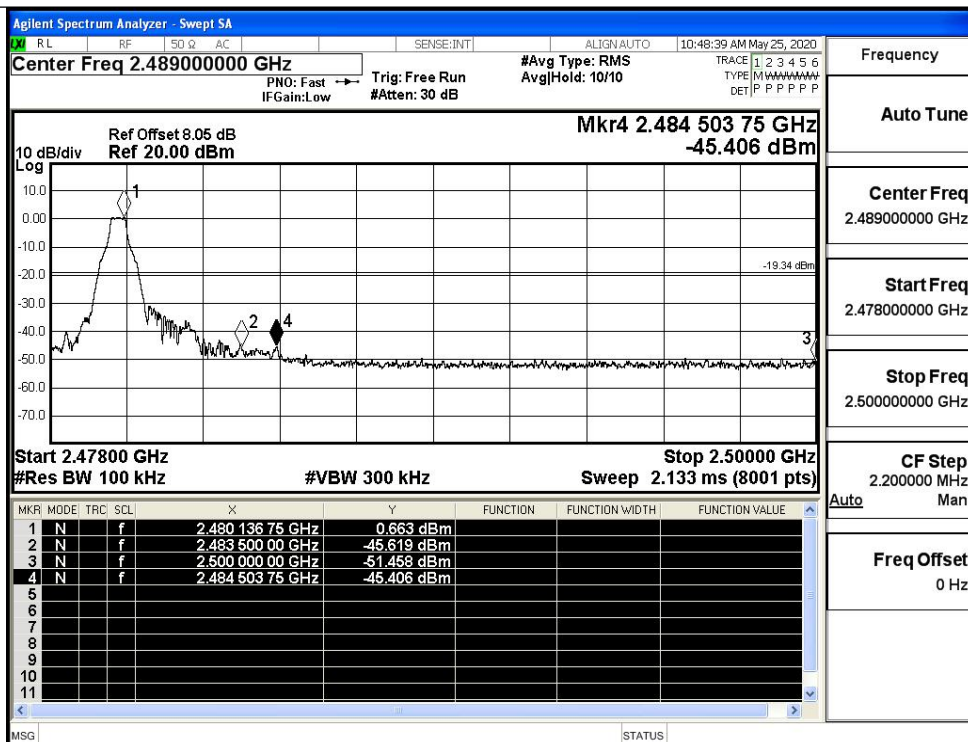
GFSK/LCH/No Hop



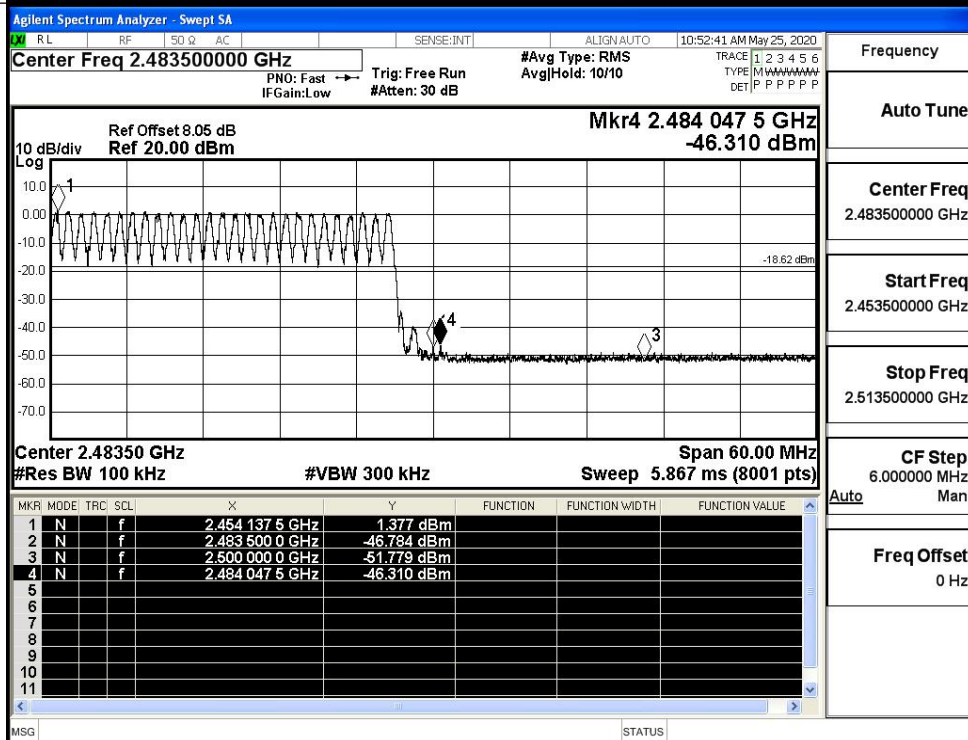
GFSK/LCH/Hop



GFSK/HCH/No Hop



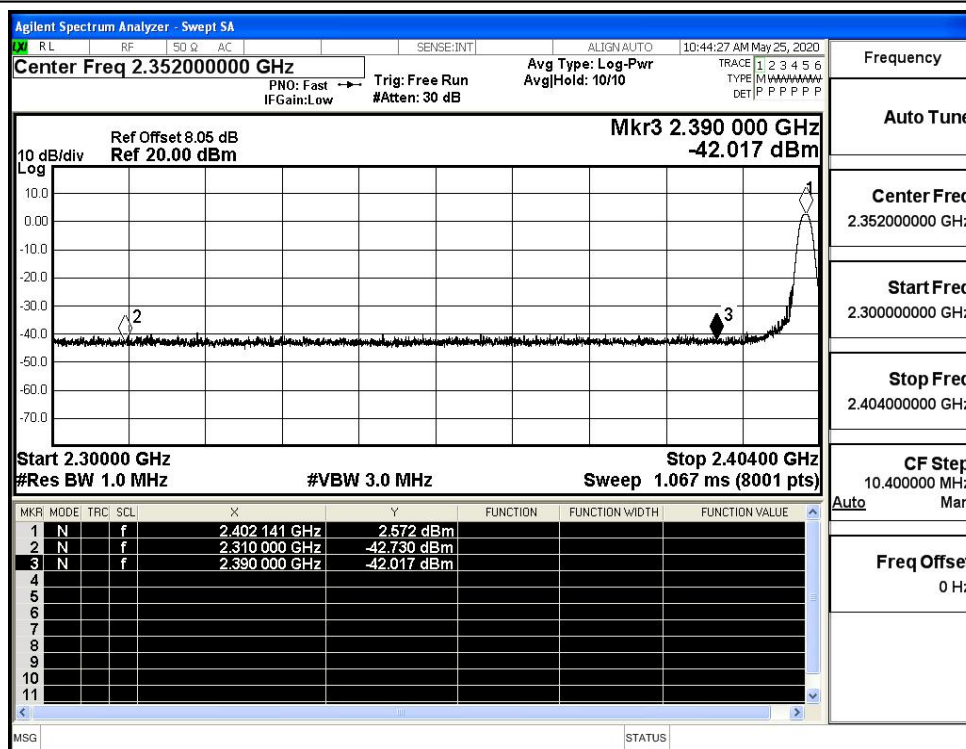
GFSK/HCH/Hop



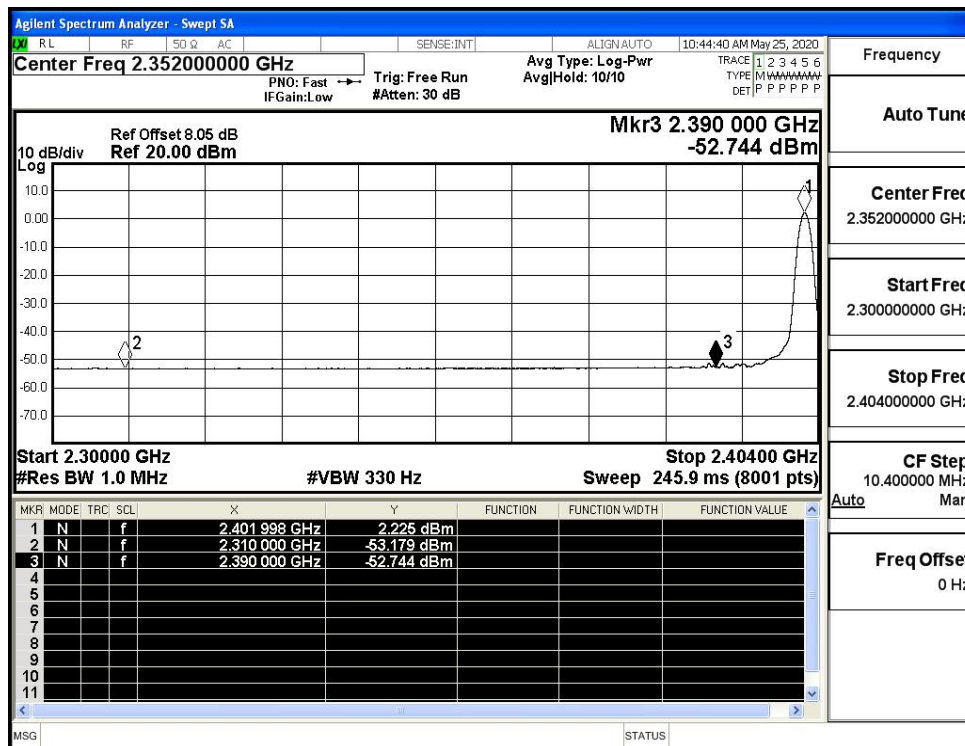
A.8 Restrict-band band-edge measurements

Test Mode	Hopping	Freq.	Power [dBm]	Gain	Ground Factor	E [dBuV/m]	Detector	Limit [dBuV/m]	Verdict
GFSK	Off	2310.0	-42.73	2.3	0	54.80	PEAK	74	PASS
	Off	2310.0	-53.18	2.3	0	44.35	AV	54	PASS
	Off	2390.0	-42.02	2.3	0	55.51	PEAK	74	PASS
	Off	2390.0	-52.74	2.3	0	44.79	AV	54	PASS
	Off	2483.5	-38.40	2.3	0	59.13	PEAK	74	PASS
	Off	2483.5	-48.01	2.3	0	49.52	AV	54	PASS
	Off	2500.0	-41.57	2.3	0	55.96	PEAK	74	PASS
	Off	2500.0	-52.29	2.3	0	45.24	AV	54	PASS

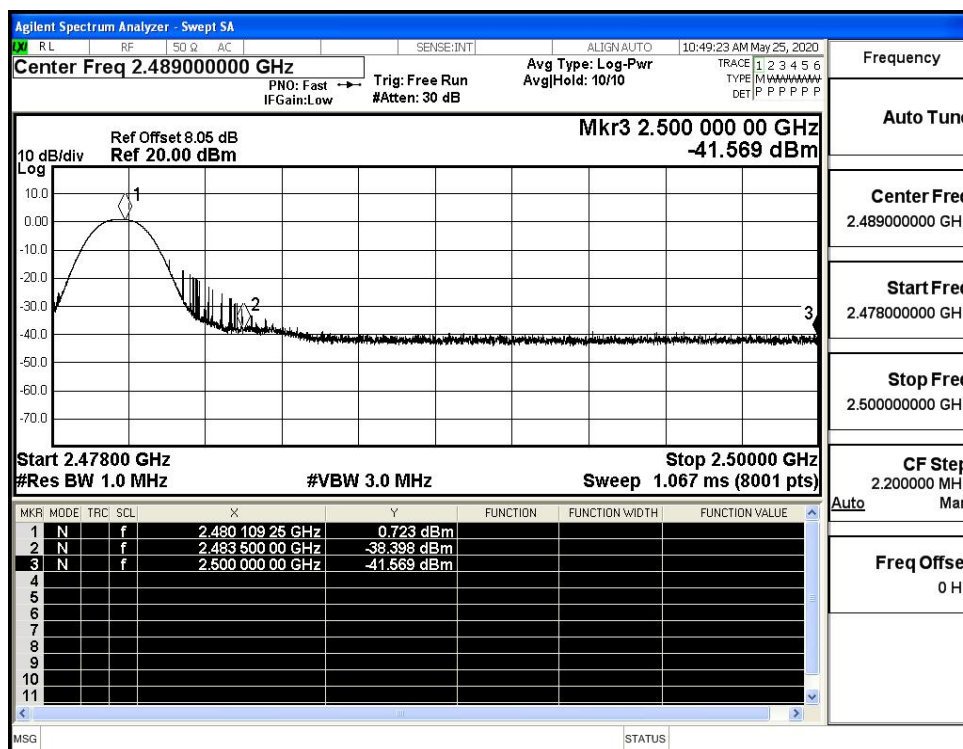
Restrict-band band-edge measurements_Hopping Off_GFSK_PEAK (Low Channel)



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)

