

Appendix A

RF Test Data (Conducted Measurement)

Product Name: 2.4 GHz Wireless Paddles

Trade Mark: N/A

Test Model: ARC300

Environmental Conditions

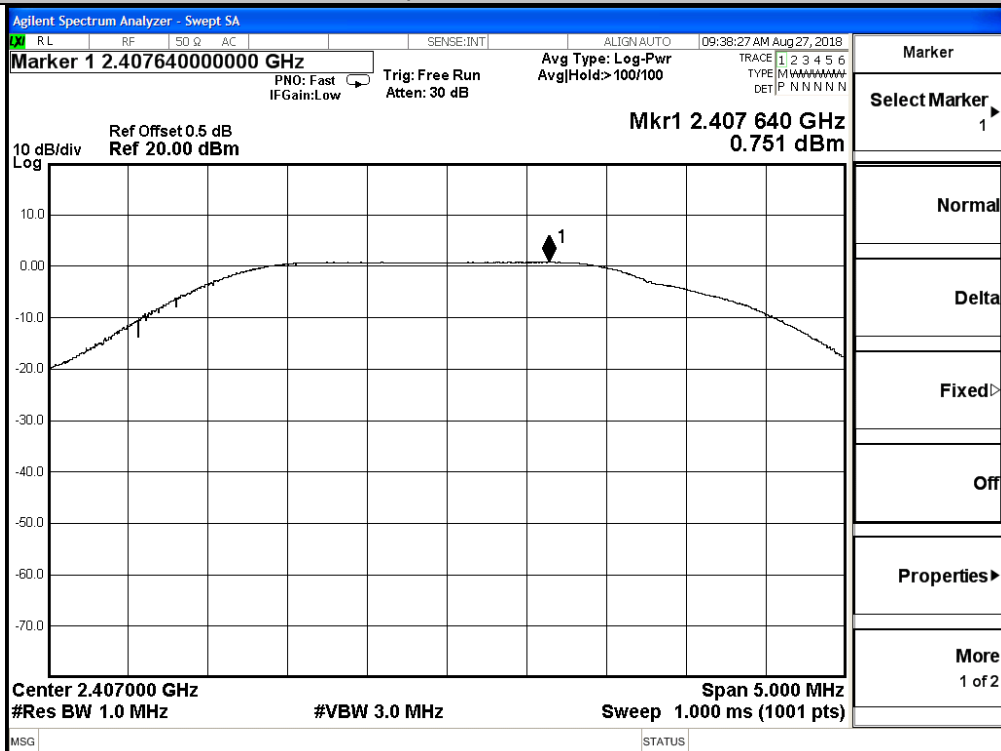
Temperature:	22.6 °C
Relative Humidity:	53.6%
ATM Pressure:	100.0 kPa
Test Engineer:	Wilson Hong
Supervised by:	Jayden.Zhuo

A.1 Maximum Conducted Peak Output Power

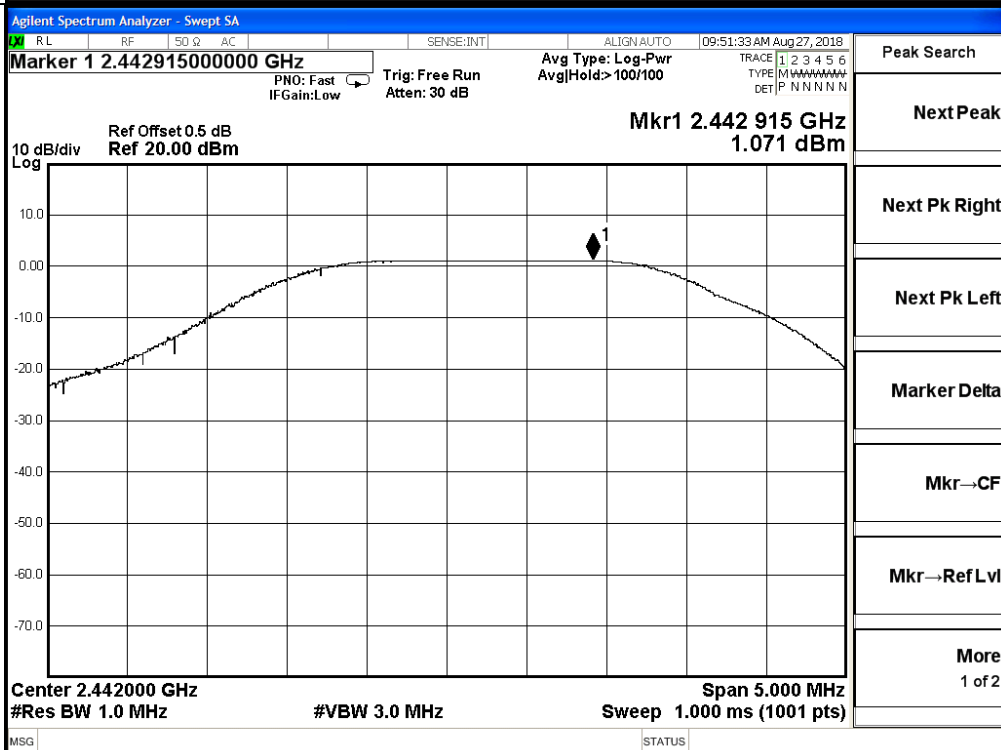
Mode	Channel.	Maximum Peak Output Power [dBm]	Limit [dBm]	Verdict
GFSK	LCH	0.751	30	PASS
	MCH	1.071	30	PASS
	HCH	1.129	30	PASS

Test Graphs

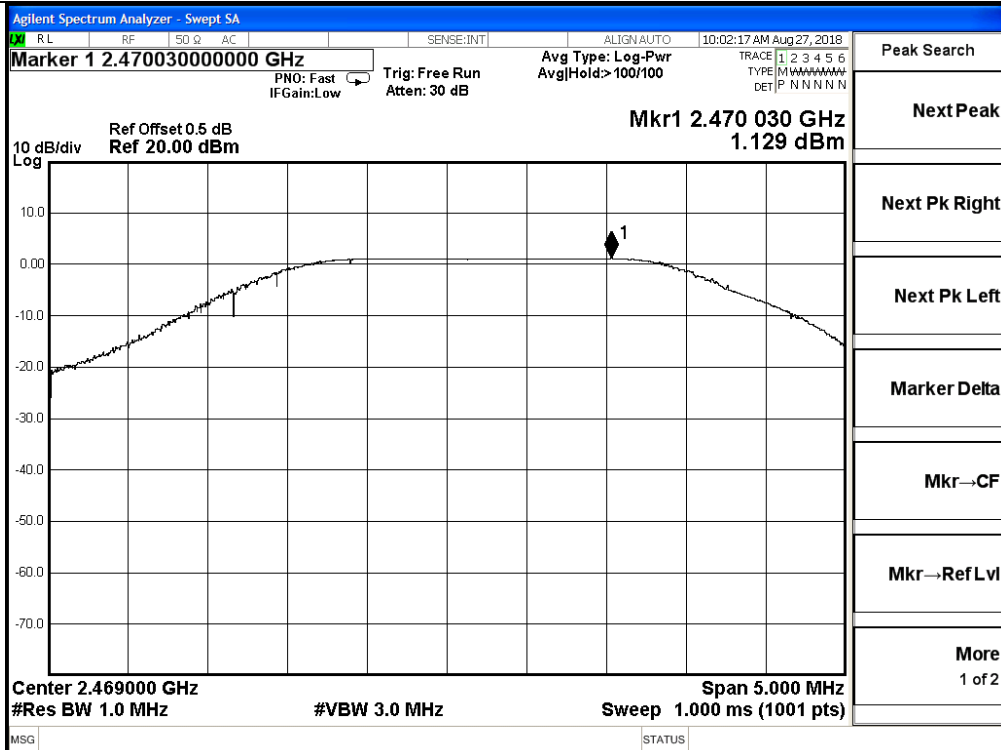
GFSK/LCH



GFSK/MCH

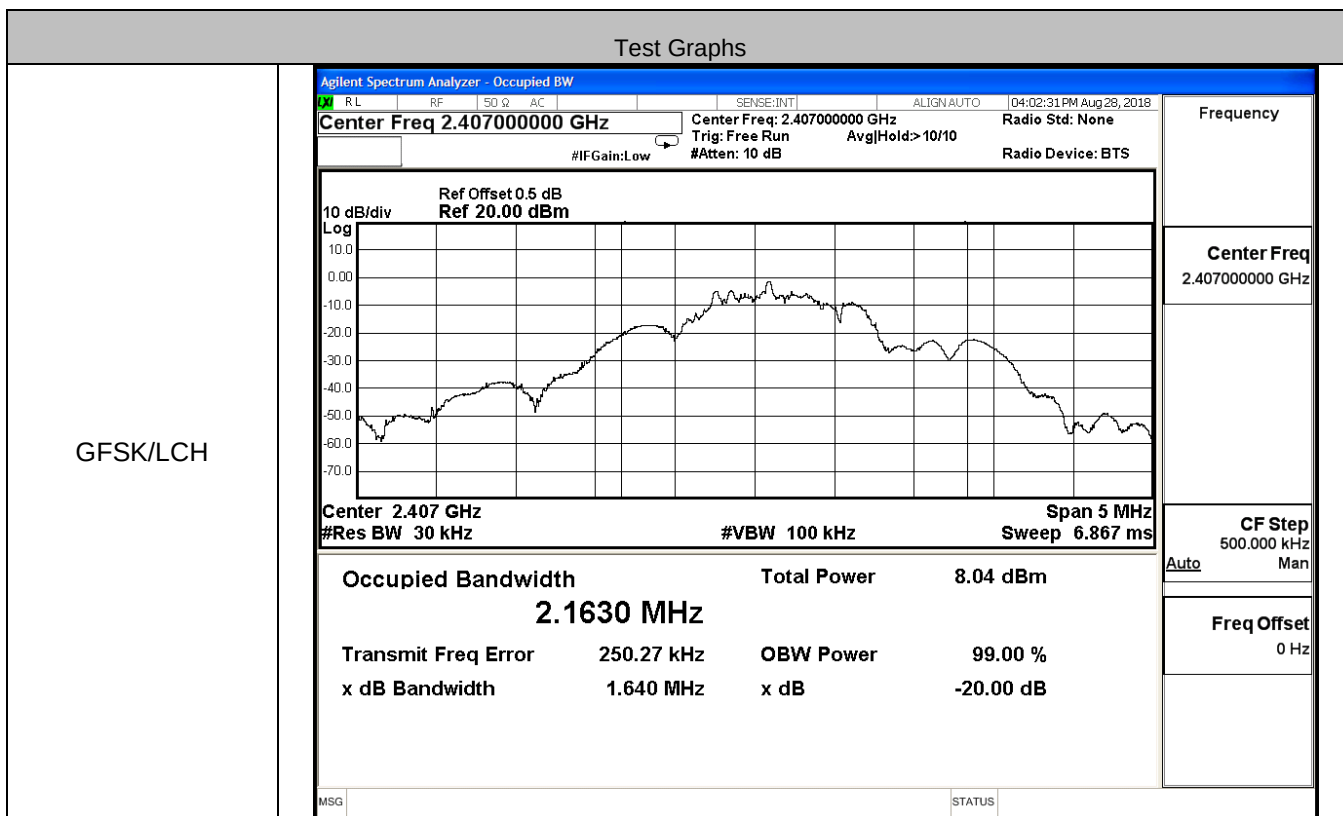


GFSK/HCH



A.2 99% and 20dB Bandwidth

Mode	Channel.	20dB Bandwidth [MHz]	99% Bandwidth [MHz]	Limit [MHz]	Verdict
GFSK	LCH	1.640	2.1630	Not Specified	PASS
	MCH	1.766	1.6594	Not Specified	PASS
	HCH	1.896	1.8265	Not Specified	PASS



GFSK/MCH

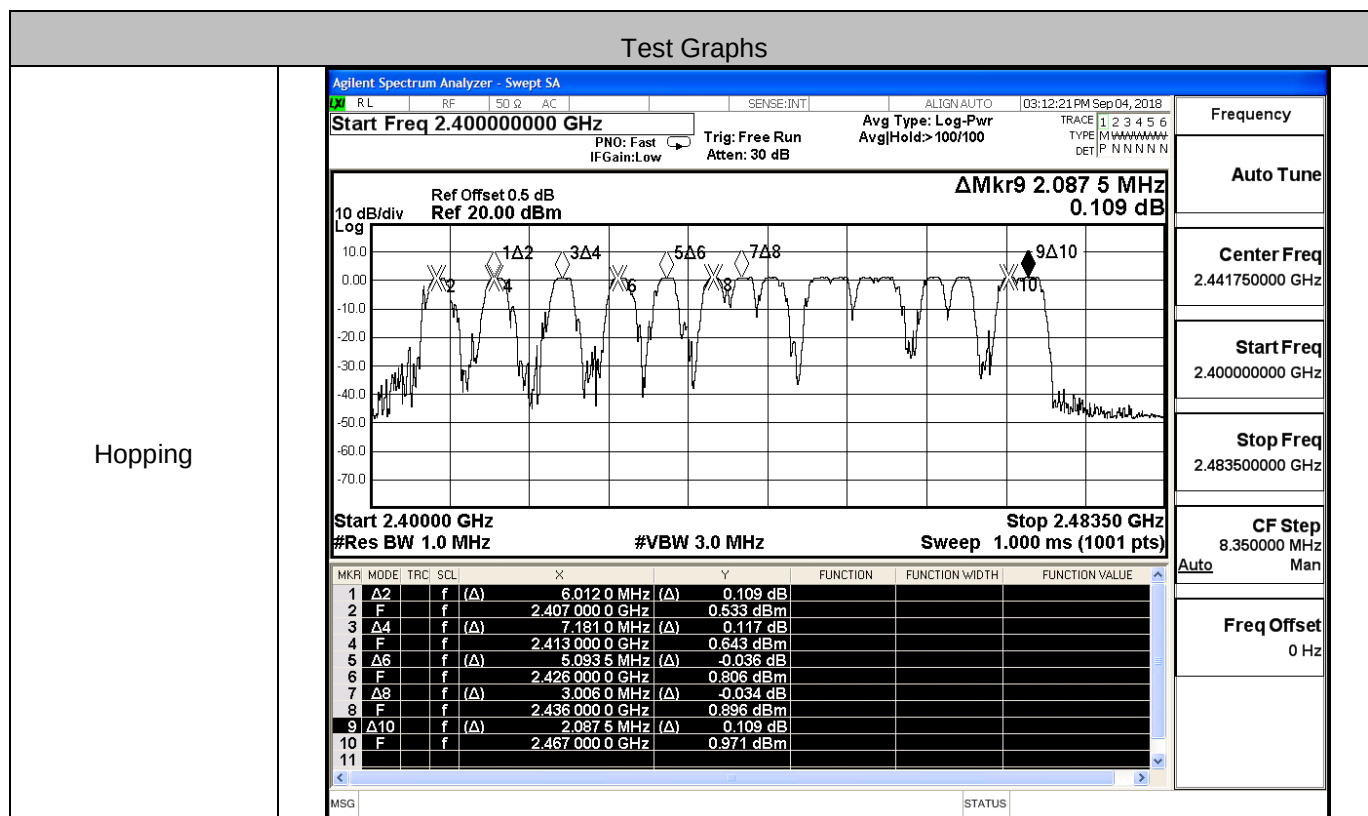


GFSK/HCH



A.3 Carrier Frequency Separation

Mode	Channel Bandwidth [MHz]	Carrier Frequency Separation [MHz]	Limit [MHz]	Verdict
GFSK	7	7.181	1.896	PASS
	6	6.012	1.896	PASS
	5	5.094	1.896	PASS
	3	3.006	1.896	PASS
	2	2.088	1.896	PASS

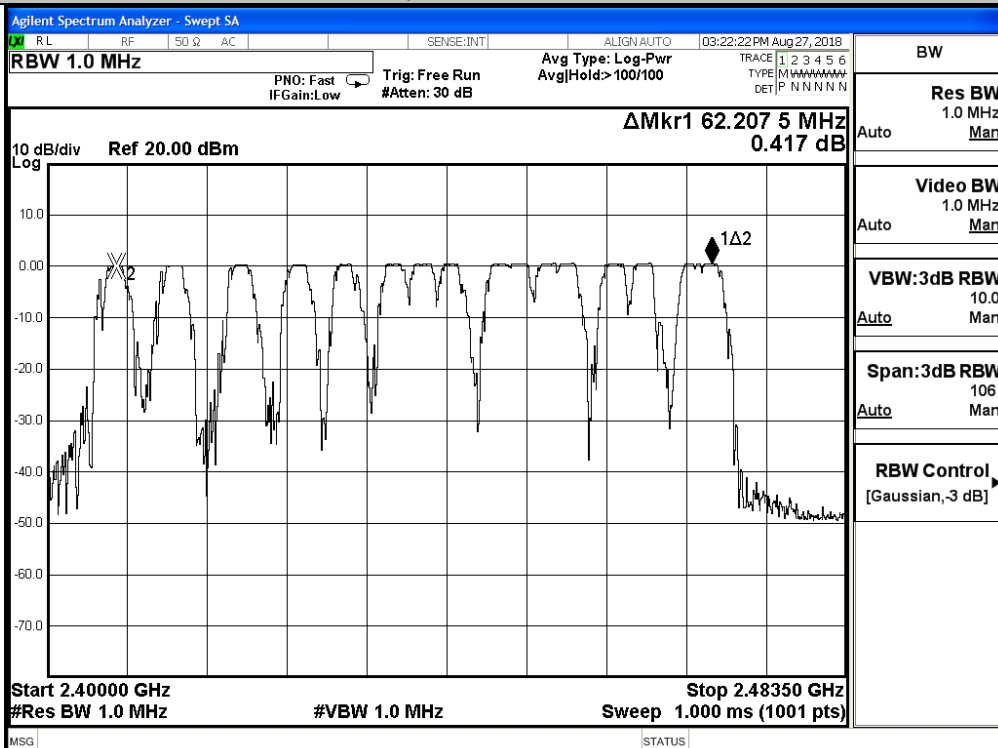


A.4 Hopping Channel Number

Mode	Channel.	Number of Hopping Channel [N]	Limit [N]	Verdict
GFSK	Hop	16	>=15	PASS

Test Graphs

GFSK/Hop

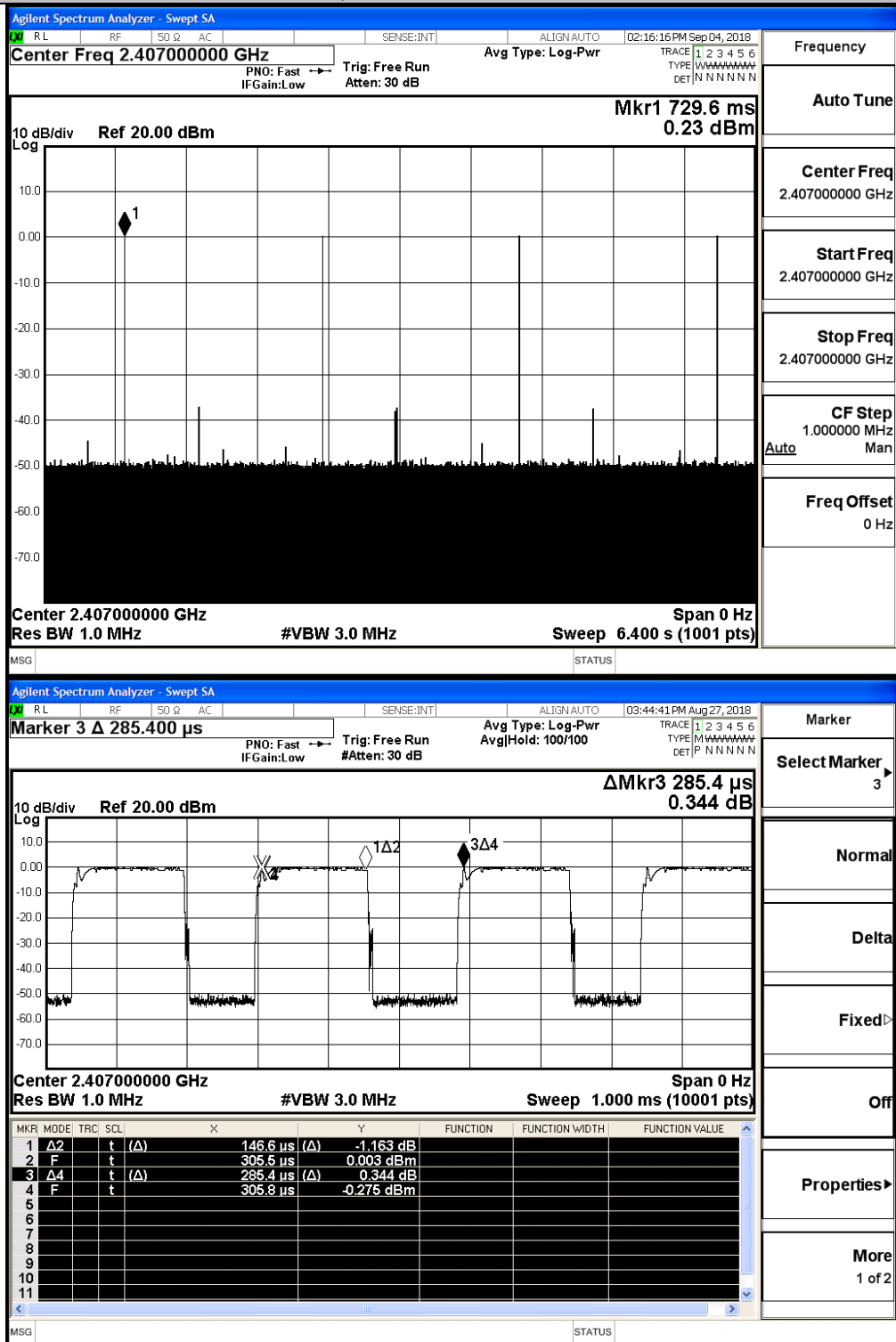


A.5 Dwell Time

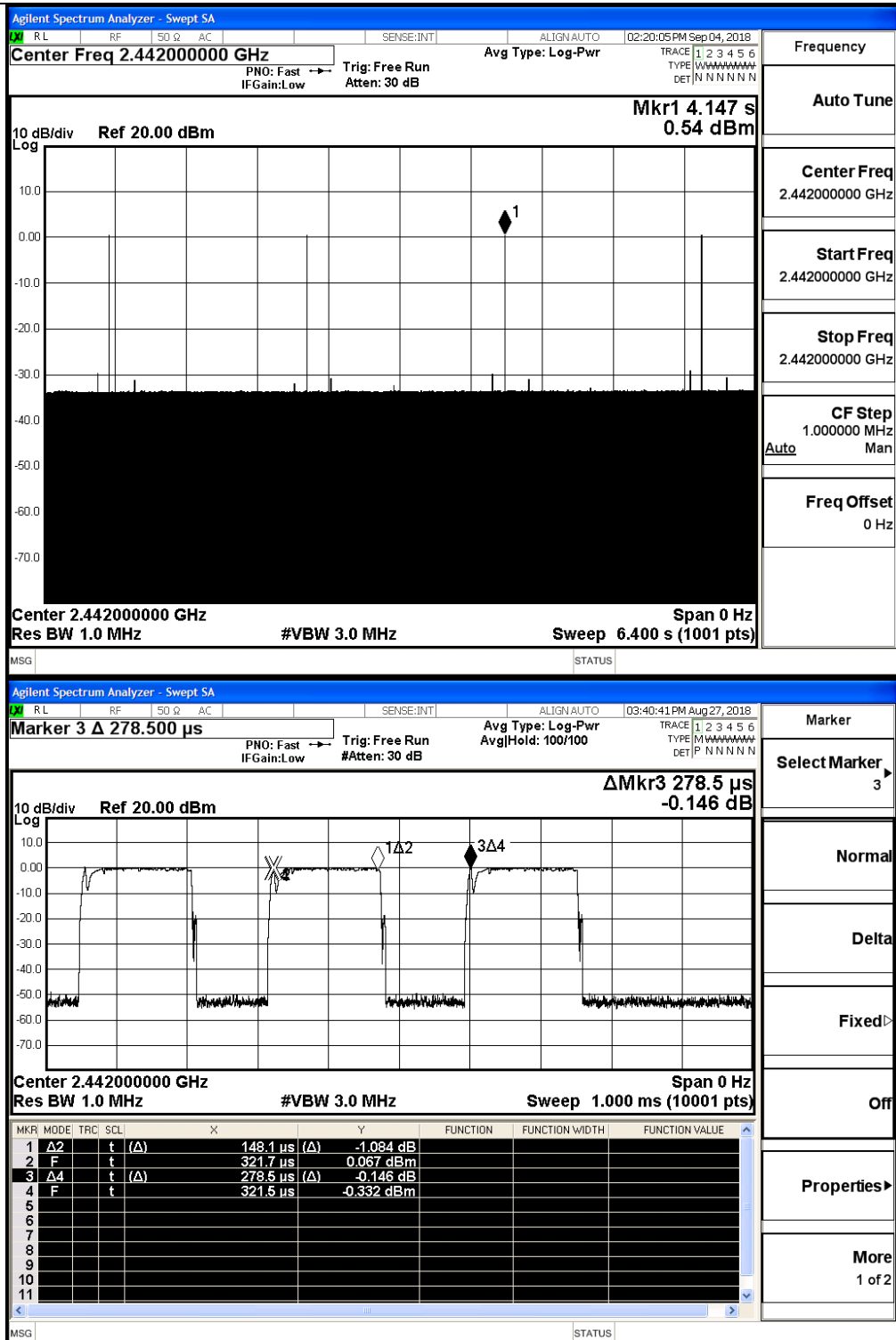
Mode	Channel	Burst Width [ms/hop/ch]	Total Hops[hop*ch]	Dwell Time[s]	Limit [s]	Verdict
GFSK	LCH	0.146	4	0.001	0.4	PASS
	MCH	0.148	4	0.001	0.4	PASS
	HCH	0.148	4	0.001	0.4	PASS

Test Graphs

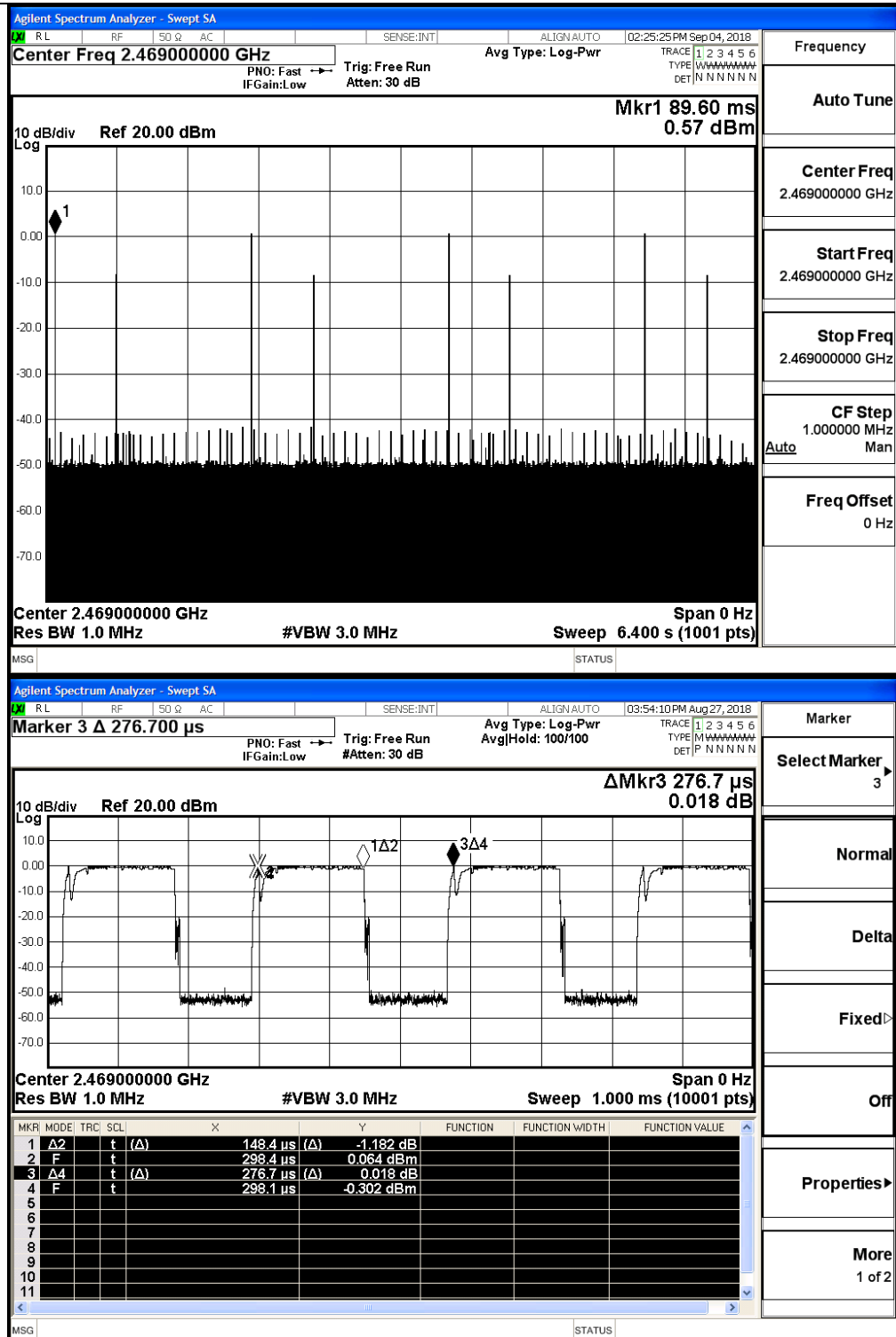
GFSK /LCH



GFSK /MCH



GFSK /HCH

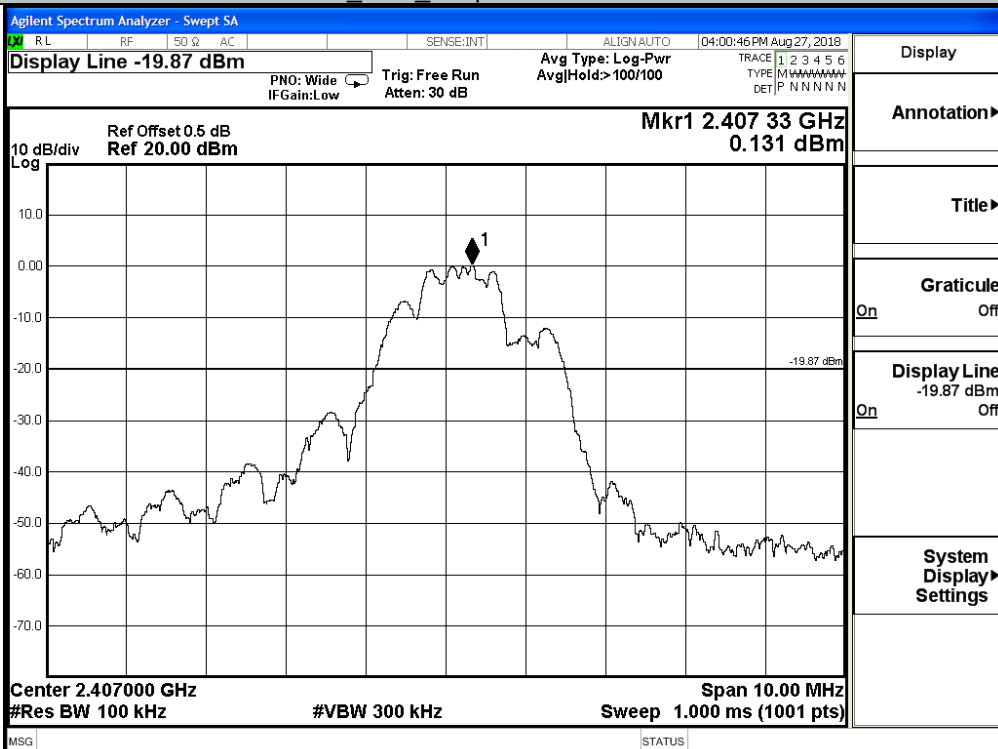


A.6 RF Conducted Spurious Emissions

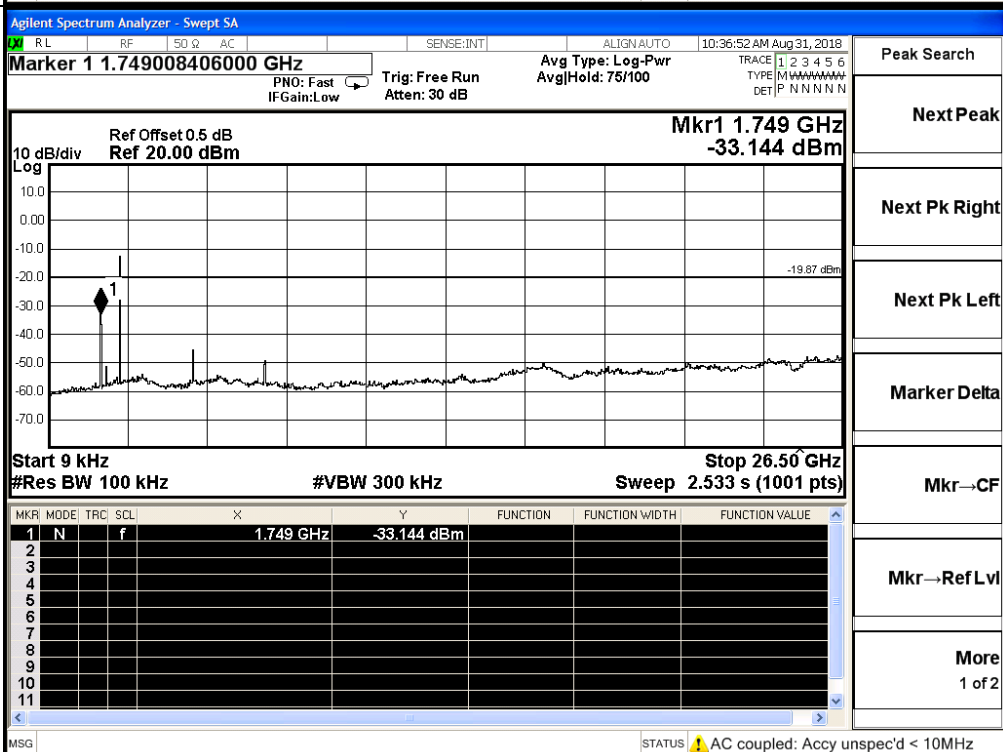
Mode	Channel	Max. Level [dBm]	Limit [dBm]	Verdict
GFSK	LCH	-33.144	-19.87	PASS
	MCH	-51.662	-19.86	PASS
	HCH	-30.302	-19.66	PASS

GFSK LCH Graphs

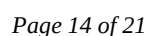
Pref



Puw

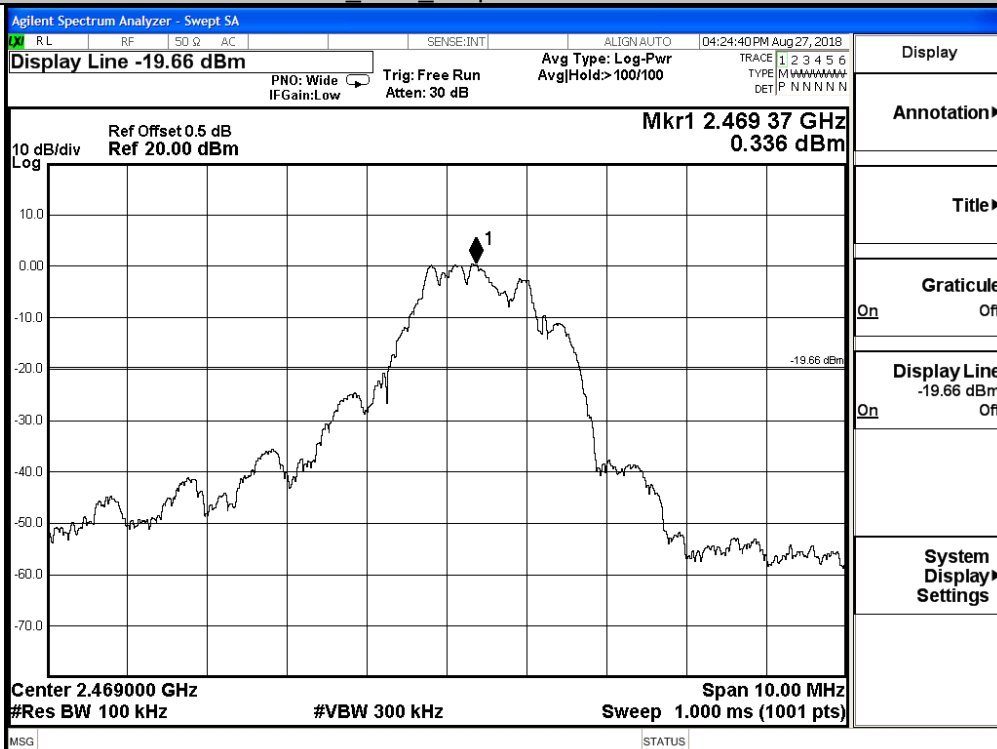


Pref

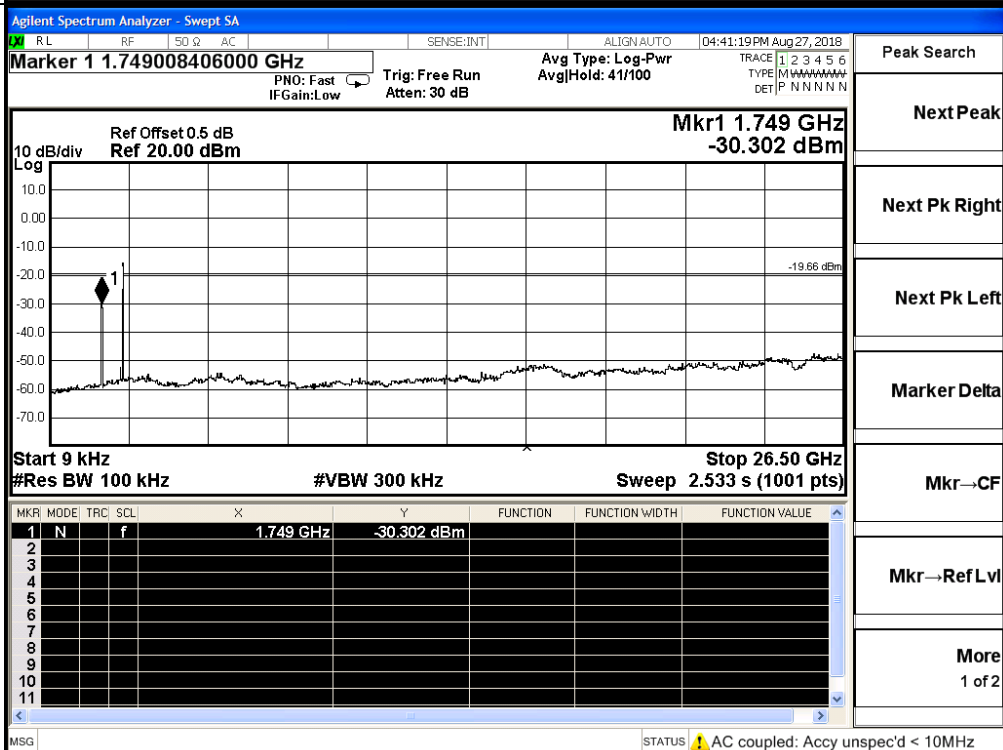


GFSK HCH_Graphs

Pref



Puw

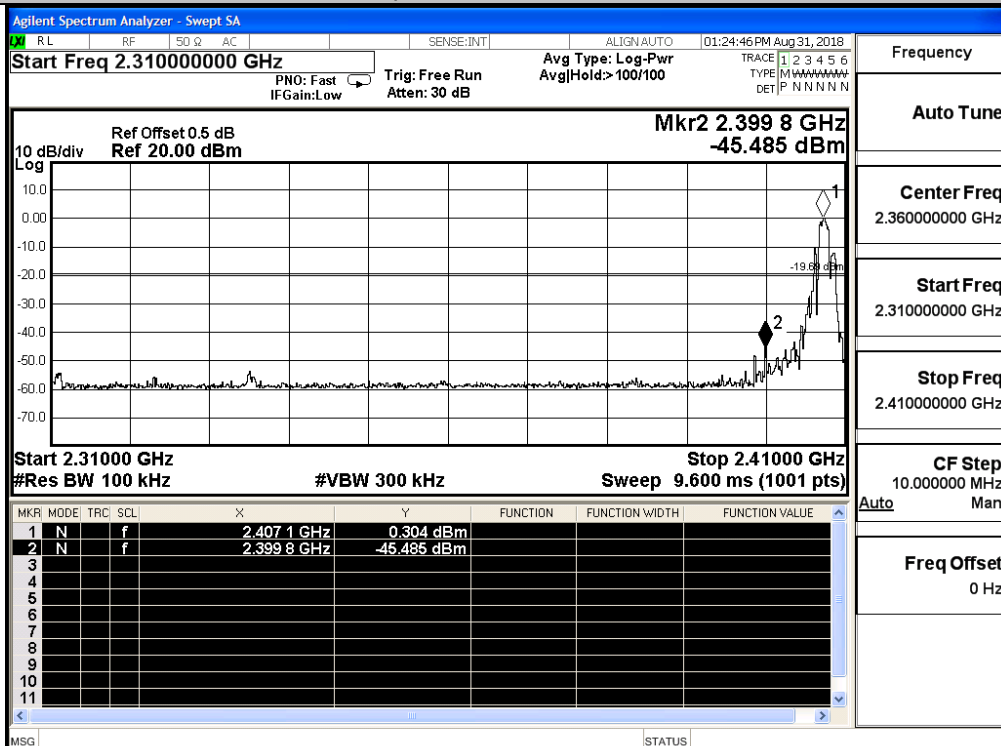


A.7 Band-edge for RF Conducted Emissions

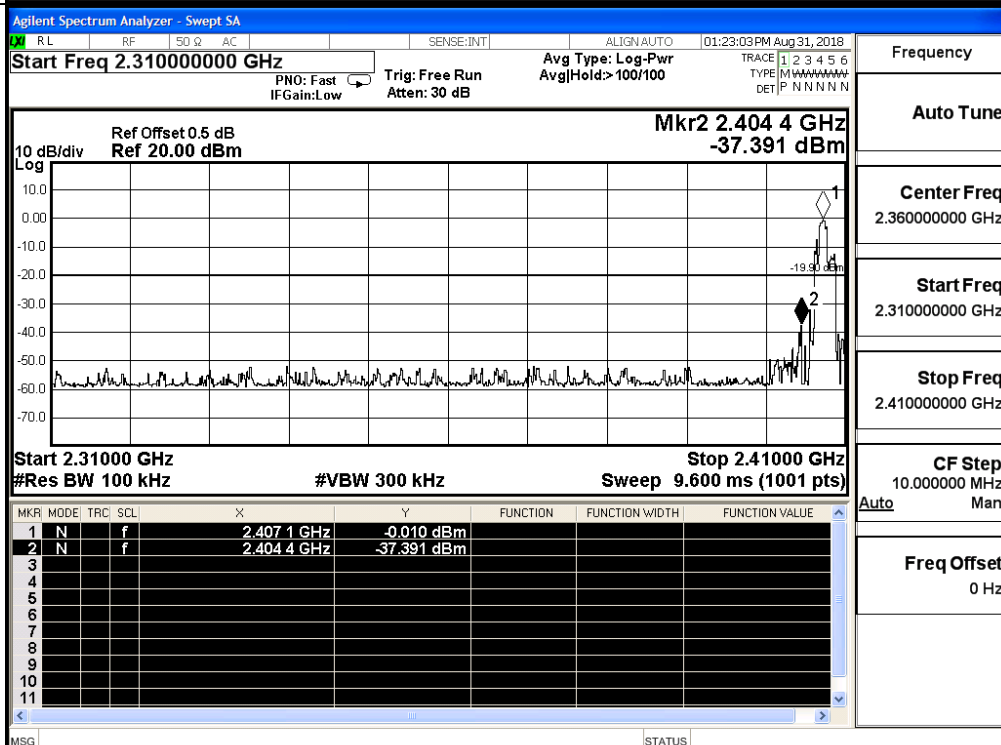
Mode	Channel	Carrier Frequency [MHz]	Carrier Power [dBm]	Frequency Hopping	Max Spurious Level [dBm]	Limit [dBm]	Verdict
GFSK	LCH	2407	0.304	Off	-45.485	-19.87	PASS
			-0.010	On	-37.391	-20.24	PASS
	HCH	2469	0.149	Off	-38.768	-19.25	PASS
			-0.373	On	-53.168	-23.17	PASS

Test Graphs

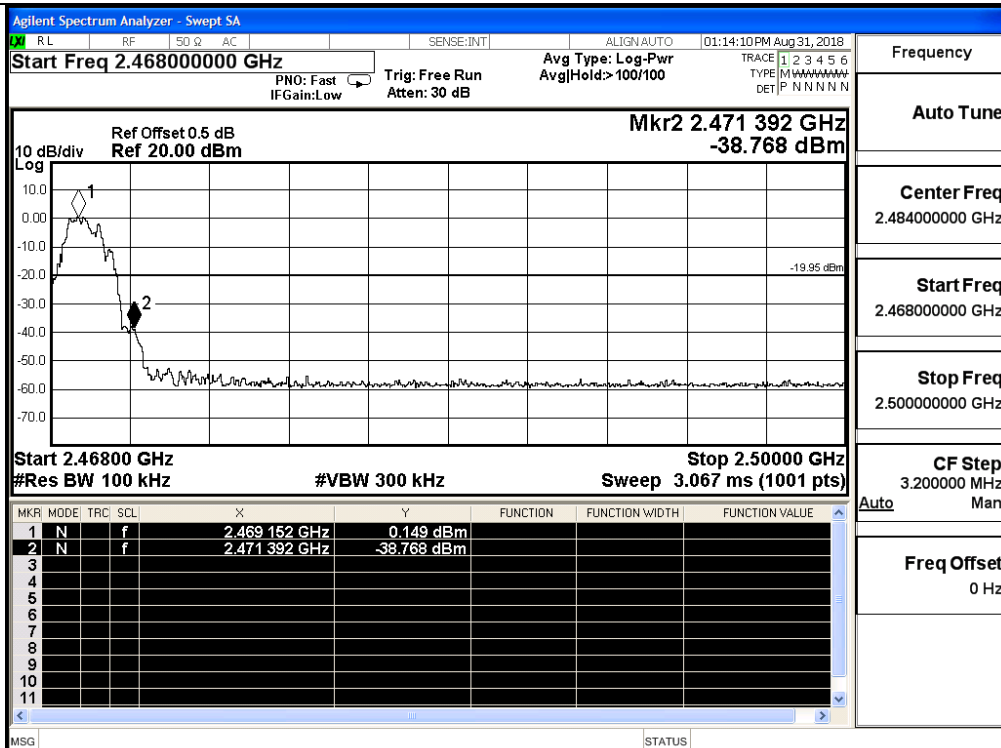
GFSK/LCH/No Hop



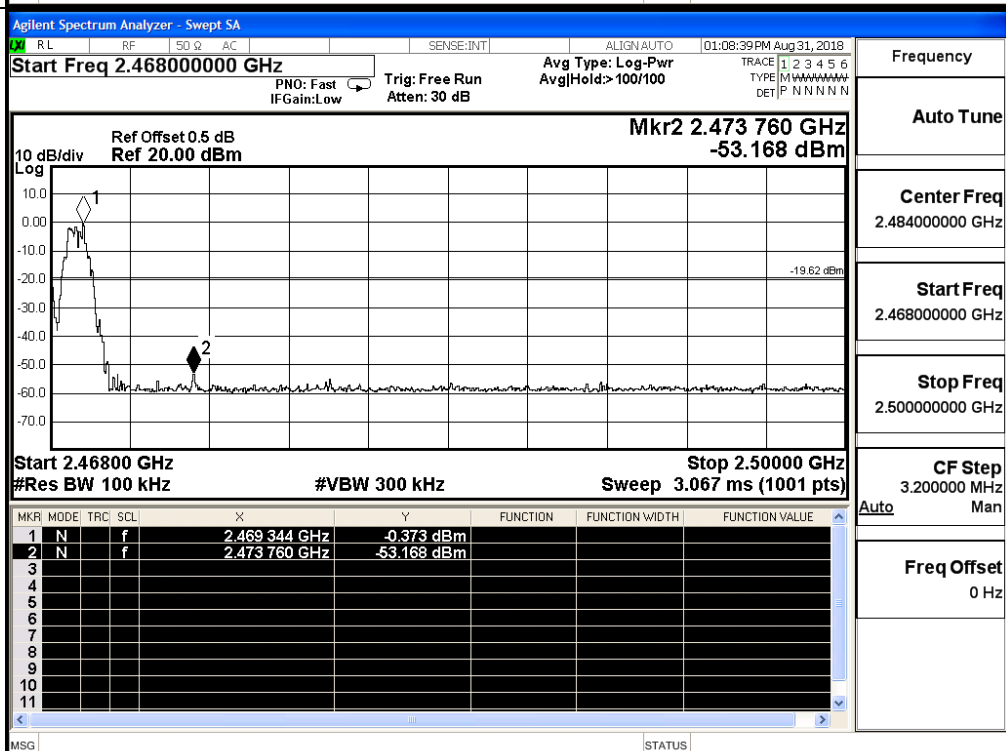
GFSK/LCH/Hop



GFSK/HCH/No Hop



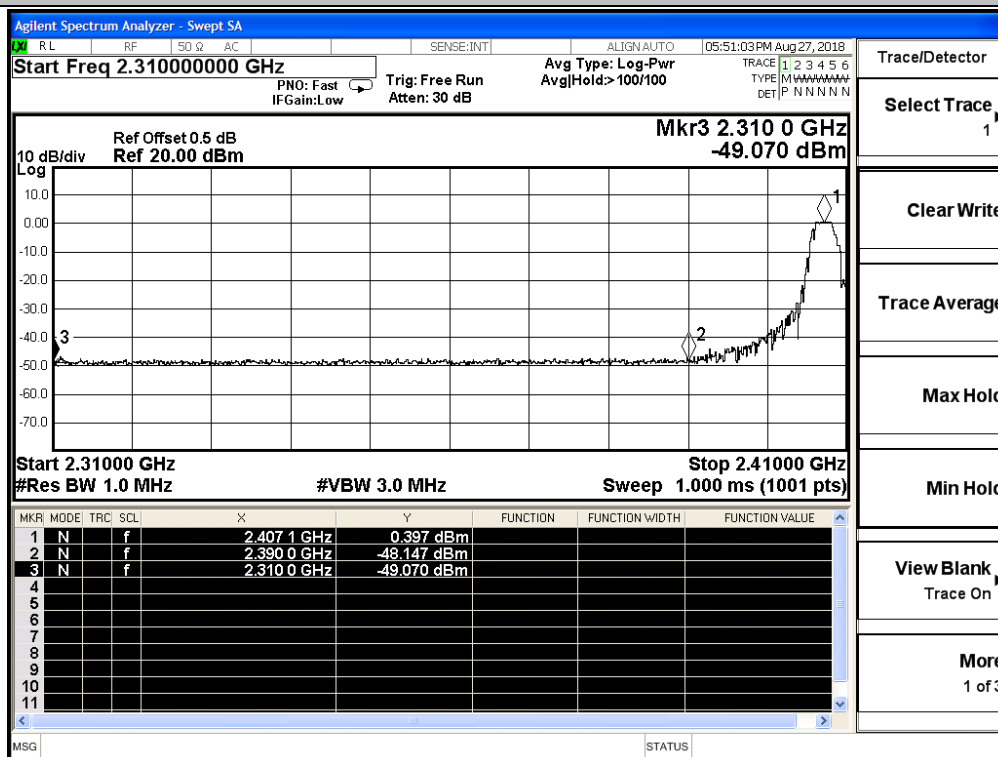
GFSK/HCH/Hop



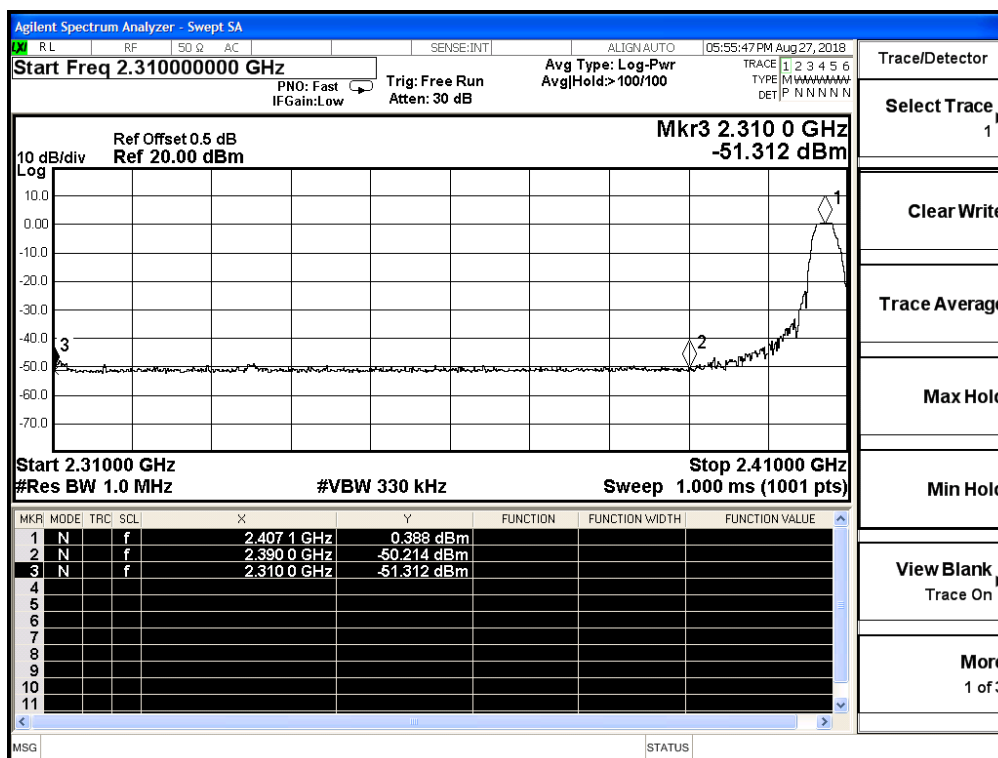
A.8 Restrict-band band-edge measurements

Test Mode	Hopping	Freq.	Power [dBm]	Gain	Ground Factor	E [dBuV/m]	Detector	Limit [dBuV/m]	Verdict
GFSK	Off	2310.0	-49.070	2.0	0	48.19	PEAK	74	PASS
	Off	2310.0	-51.312	2.0	0	45.95	AV	54	PASS
	Off	2390.0	-48.147	2.0	0	49.11	PEAK	74	PASS
	Off	2390.0	-50.214	2.0	0	47.05	AV	54	PASS
	Off	2483.5	-47.851	2.0	0	49.41	PEAK	74	PASS
	Off	2483.5	-51.380	2.0	0	45.88	AV	54	PASS
	Off	2500.0	-48.697	2.0	0	48.56	PEAK	74	PASS
	Off	2500.0	-50.617	2.0	0	46.64	AV	54	PASS

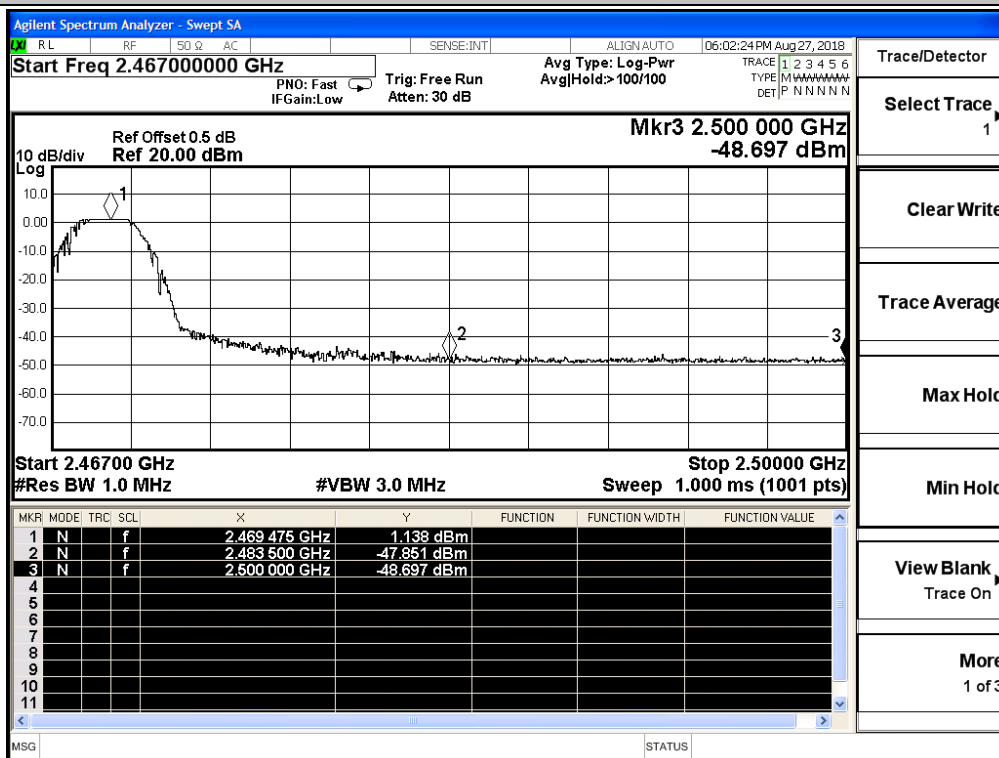
Restrict-band band-edge measurements_Hopping Off_GFSK_PEAK (Low Channel)



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)

