

Appendix A

RF Test Data (Conducted Measurement)

Product Name: Remote controller

Trade Mark: SUPERBRIGHTLEDS.COM

Test Model: LPD2VCT-RC

Environmental Conditions

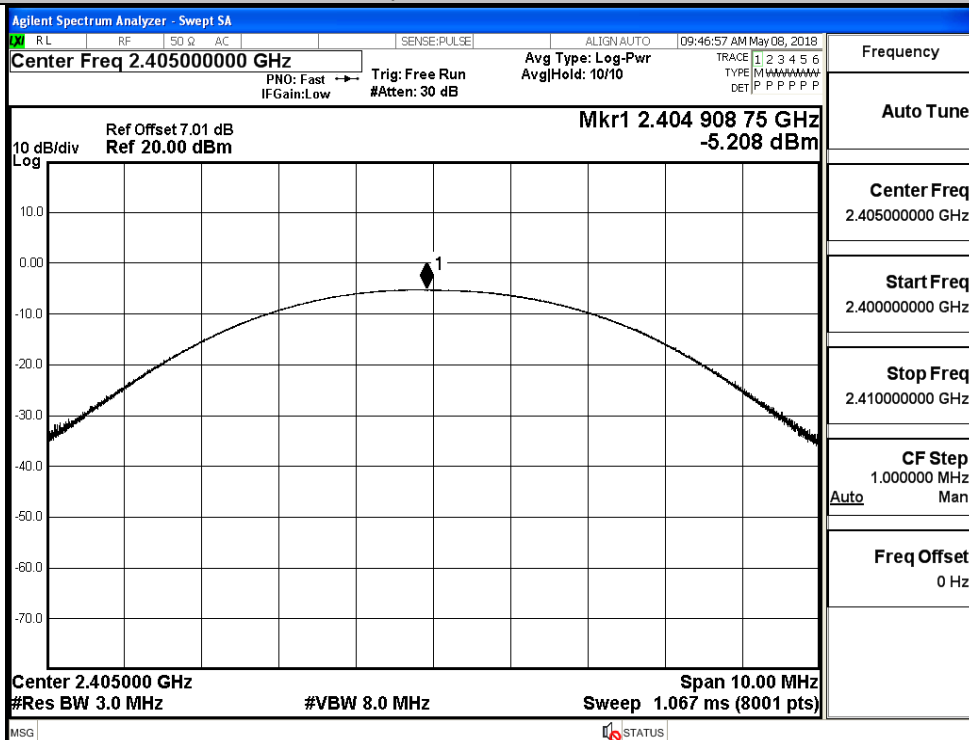
Temperature:	25°C
Relative Humidity:	60%
ATM Pressure:	100.0 kPa
Test Engineer:	Wang Chuang
Supervised by:	Jayden.Zhuo

A.1 Maximum Conducted Peak Output Power

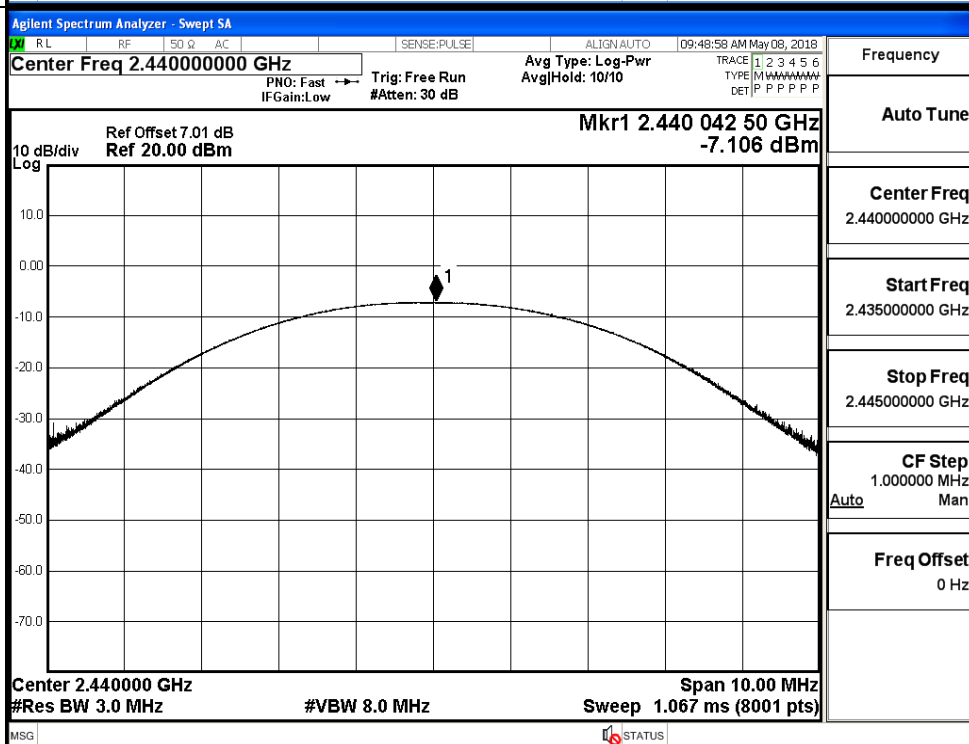
Mode	Channel.	Maximum Peak Output Power [dBm]	Limit [dBm]	Verdict
GFSK	LCH	-5.208	30	PASS
	MCH	-7.106	30	PASS
	HCH	-7.993	30	PASS

Test Graphs

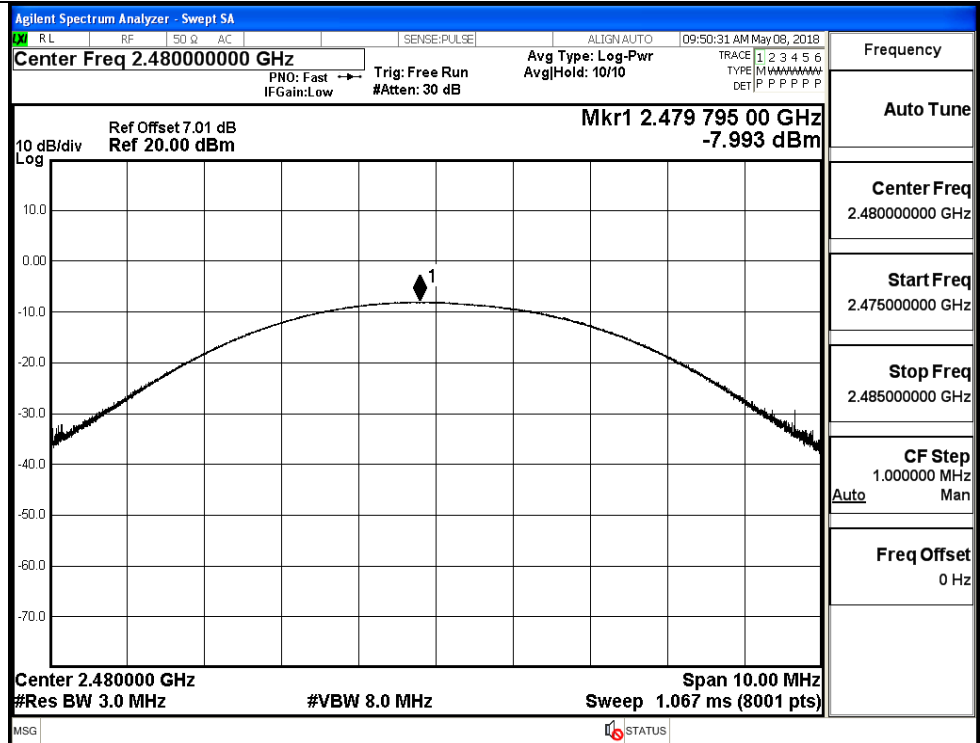
GFSK/LCH



GFSK/MCH

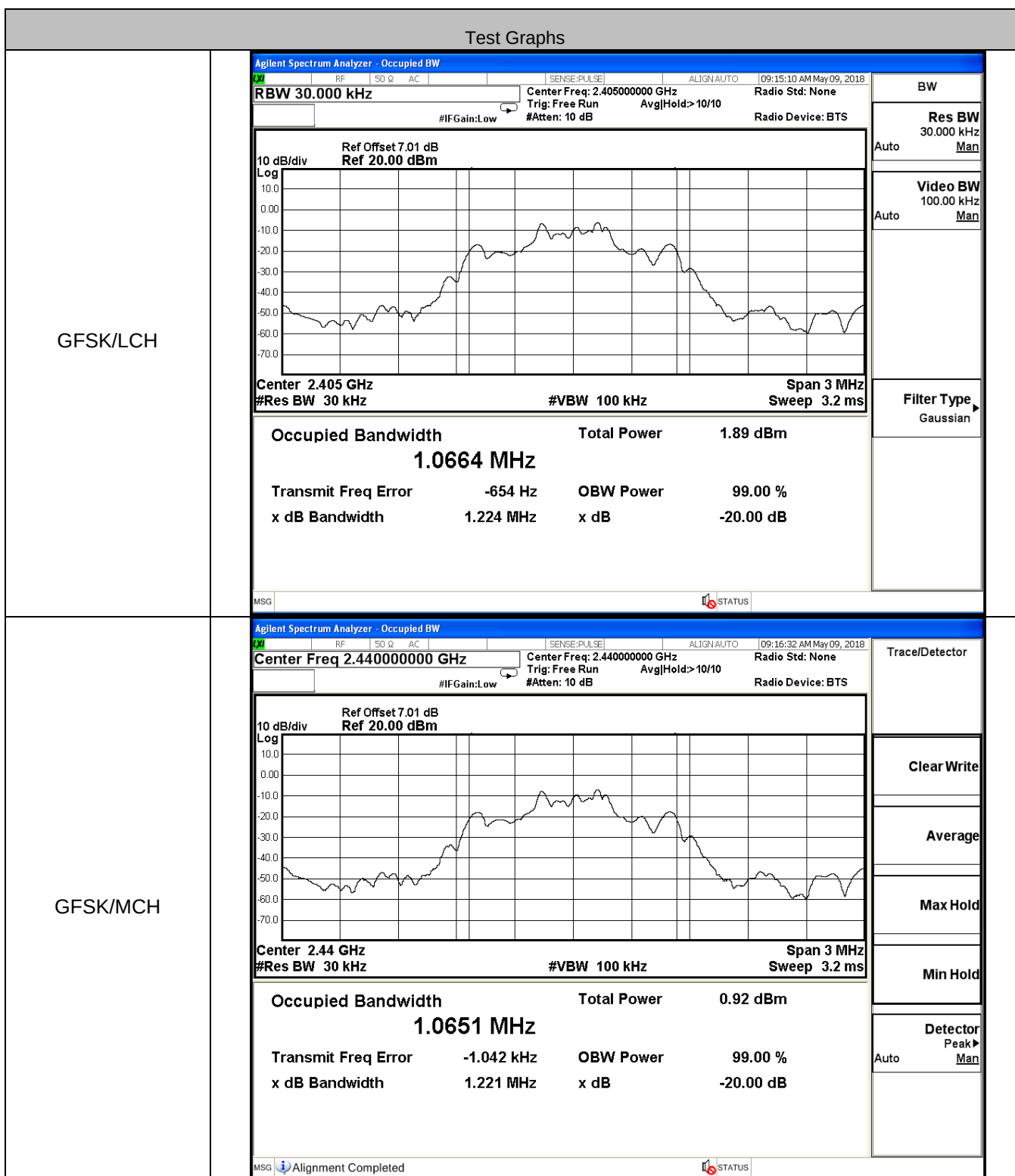


GFSK/HCH

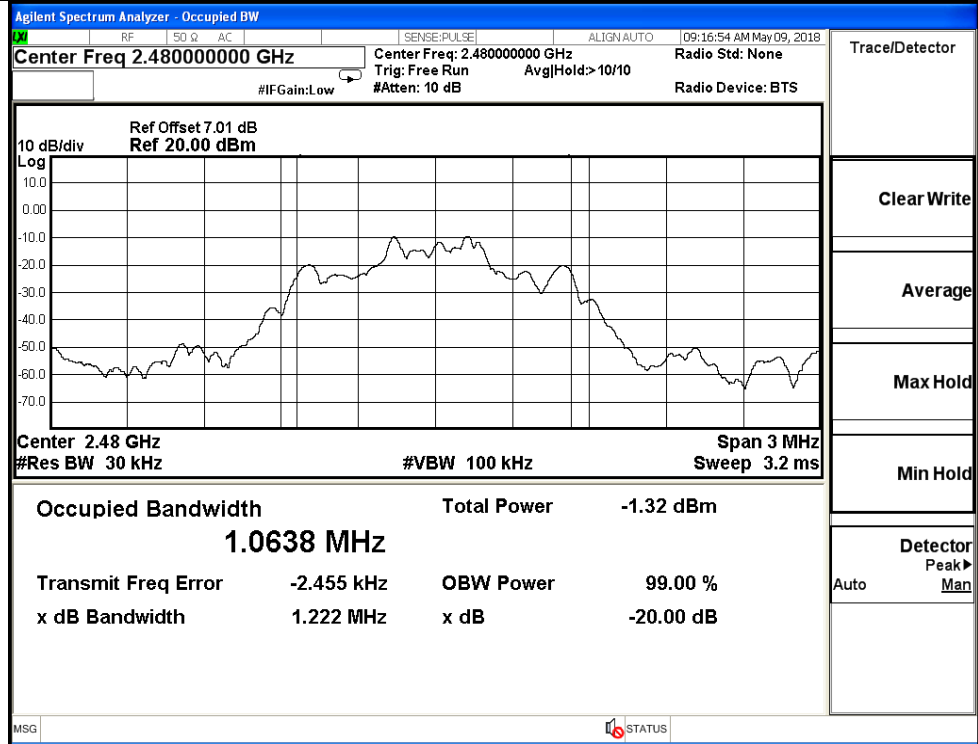


A.2 20dB Bandwidth

Mode	Channel.	20dB Bandwidth [MHz]	Limit [MHz]	Verdict
GFSK	LCH	1.224	Not Specified	PASS
	MCH	1.221	Not Specified	PASS
	HCH	1.222	Not Specified	PASS

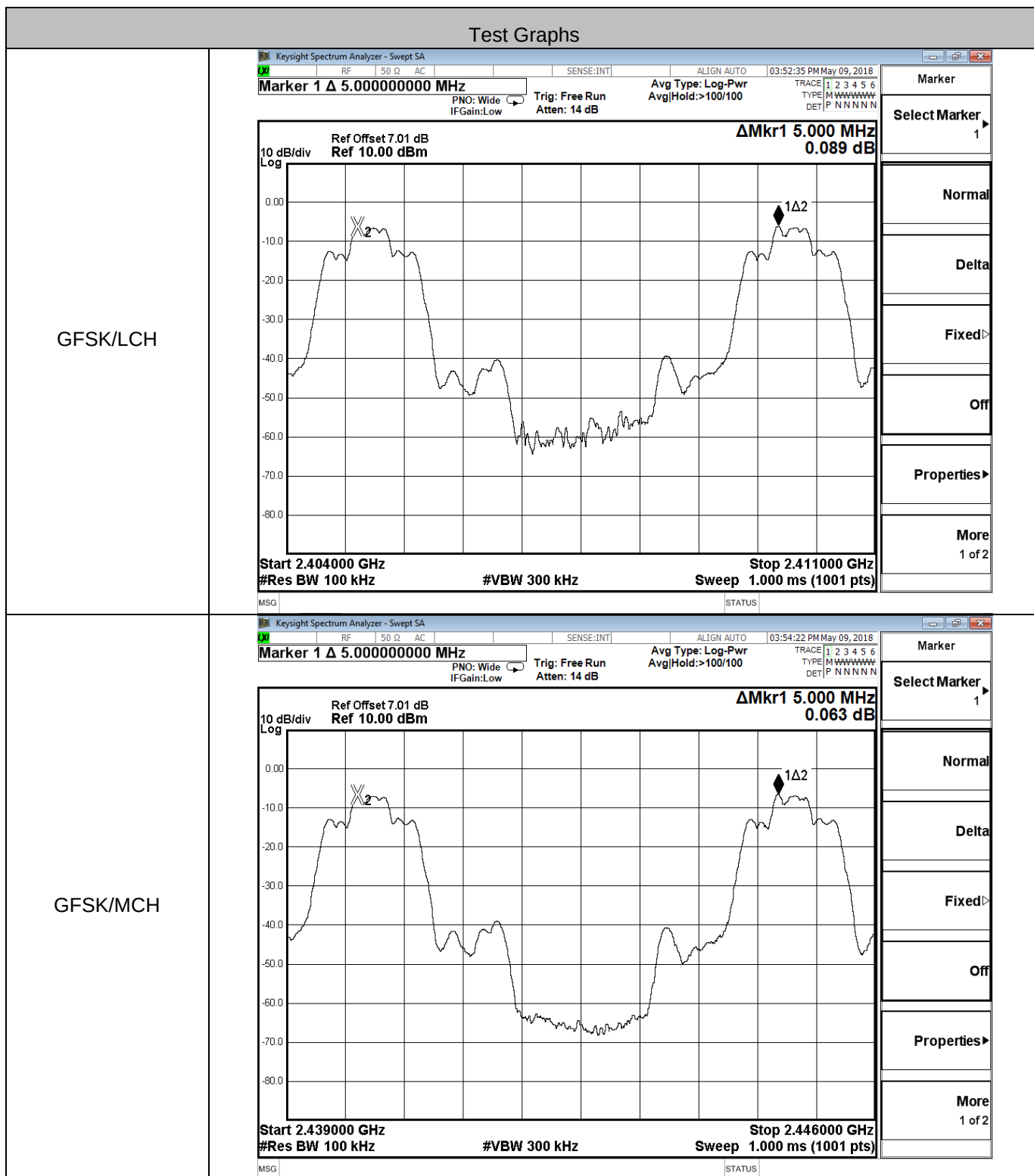


GFSK/HCH

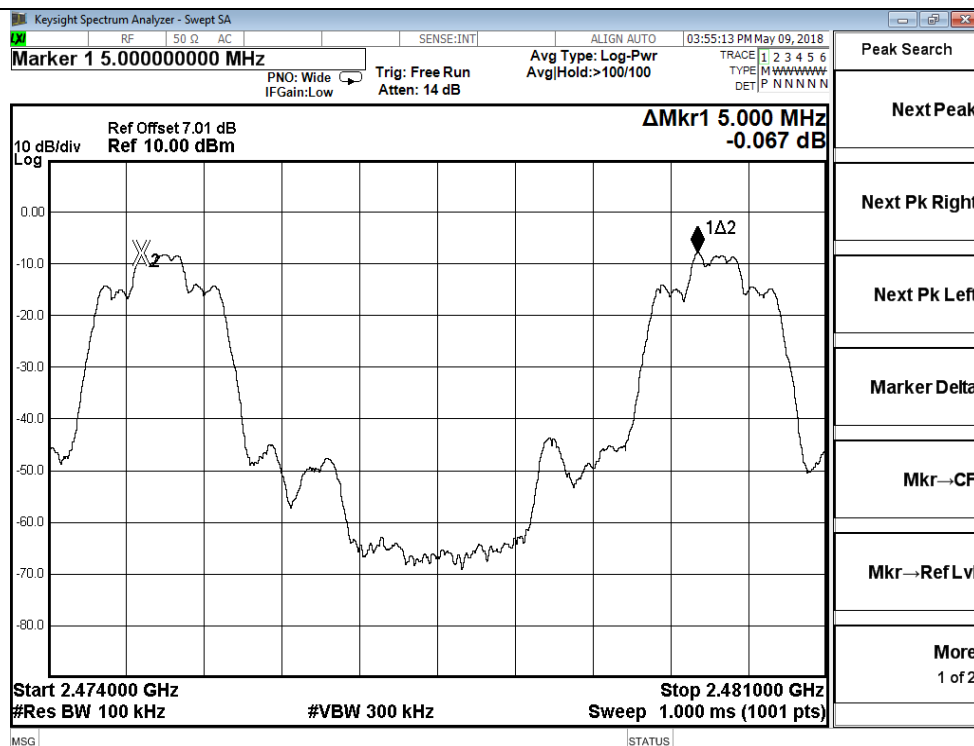


A.3 Carrier Frequency Separation

Mode	Channel.	Carrier Frequency Separation [MHz]	Limit [MHz]	Verdict
GFSK	LCH	5	1.224	PASS
	MCH	5	1.221	PASS
	HCH	5	1.222	PASS



GFSK/HCH

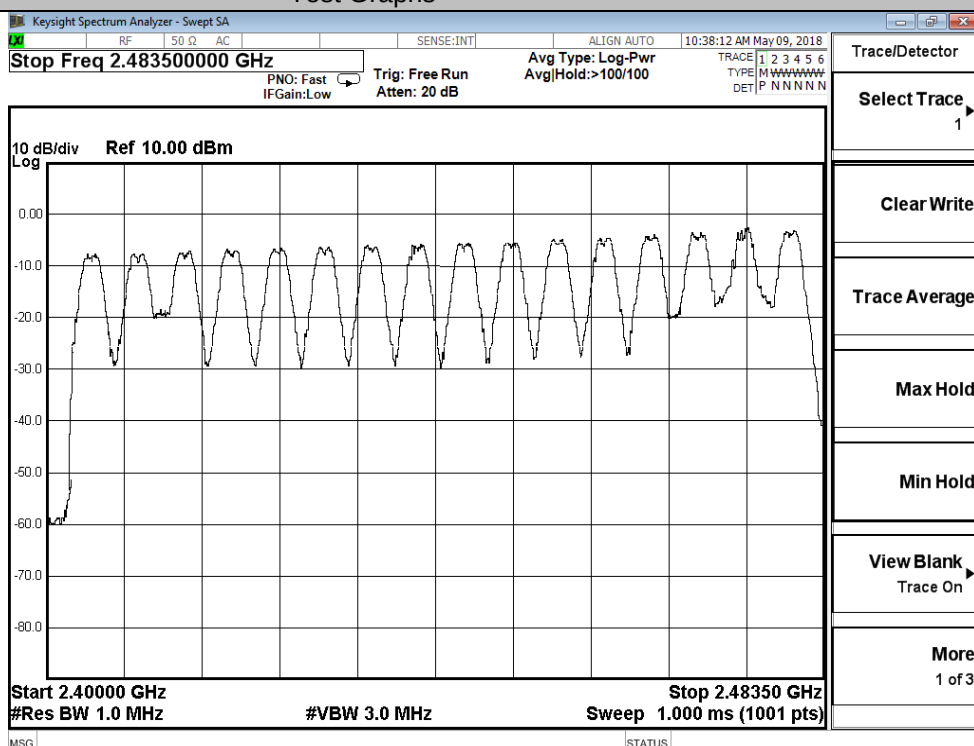


A.4 Hopping Channel Number

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

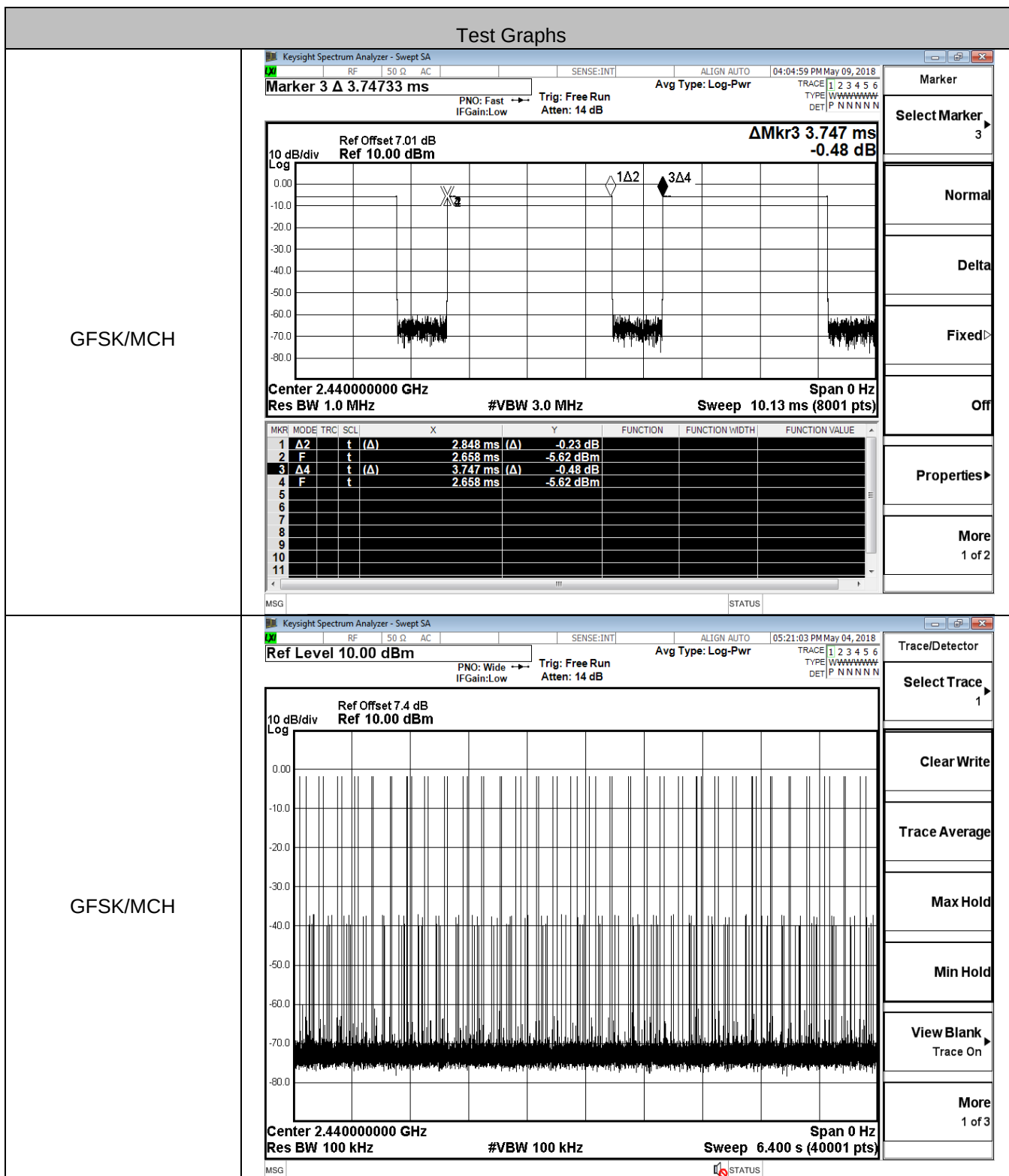
Test Graphs

GFSK/Hop



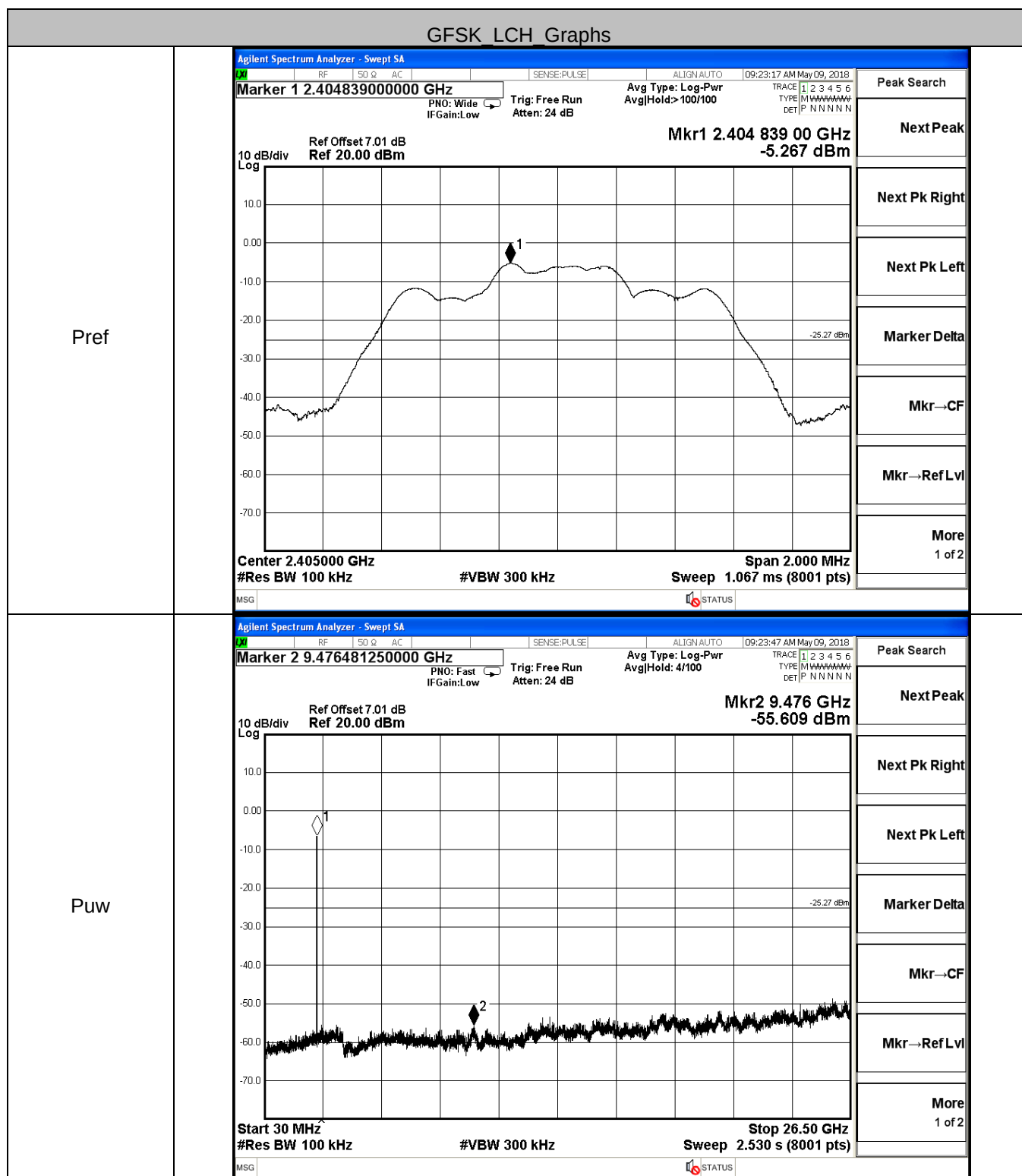
A.5 Dwell Time

Mode	Channel	Pulse Width (ms)	The Number of Pulses	Dwell Time[s]	Limit [s]	Verdict
GFSK	MCH	2.848	64	0.182	0.4	PASS



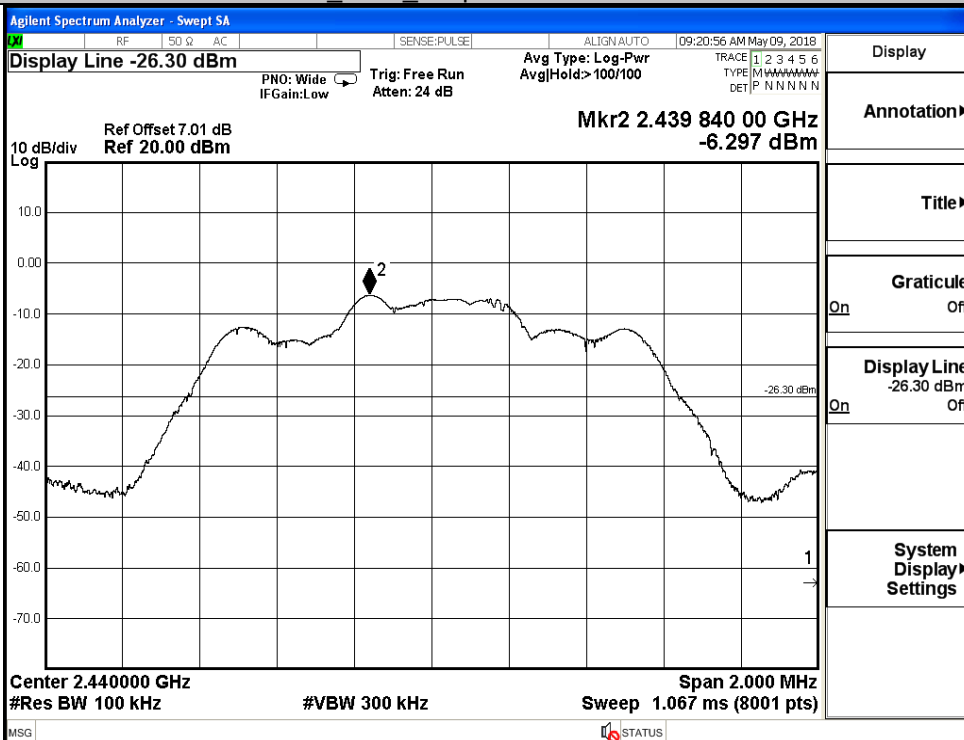
A.6 RF Conducted Spurious Emissions

Mode	Channel	Pref [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
GFSK	LCH	-5.267	-55.609	-25.267	PASS
	MCH	-6.297	-55.165	-26.297	PASS
	HCH	-8.300	-54.685	-28.300	PASS

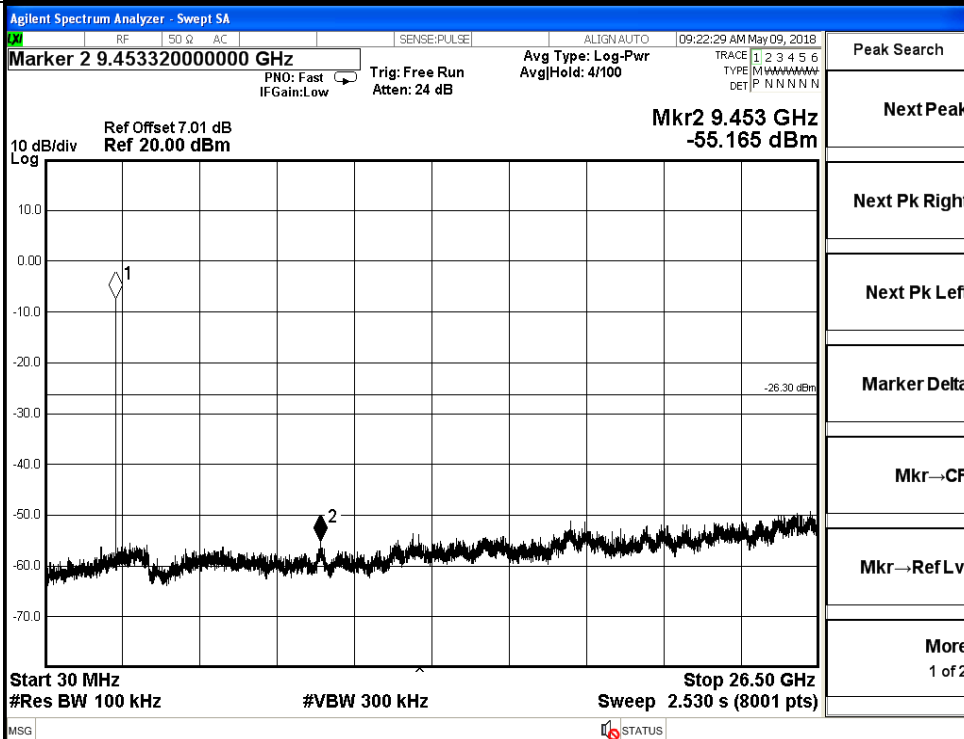


GFSK_MCH_Graphs

Pref

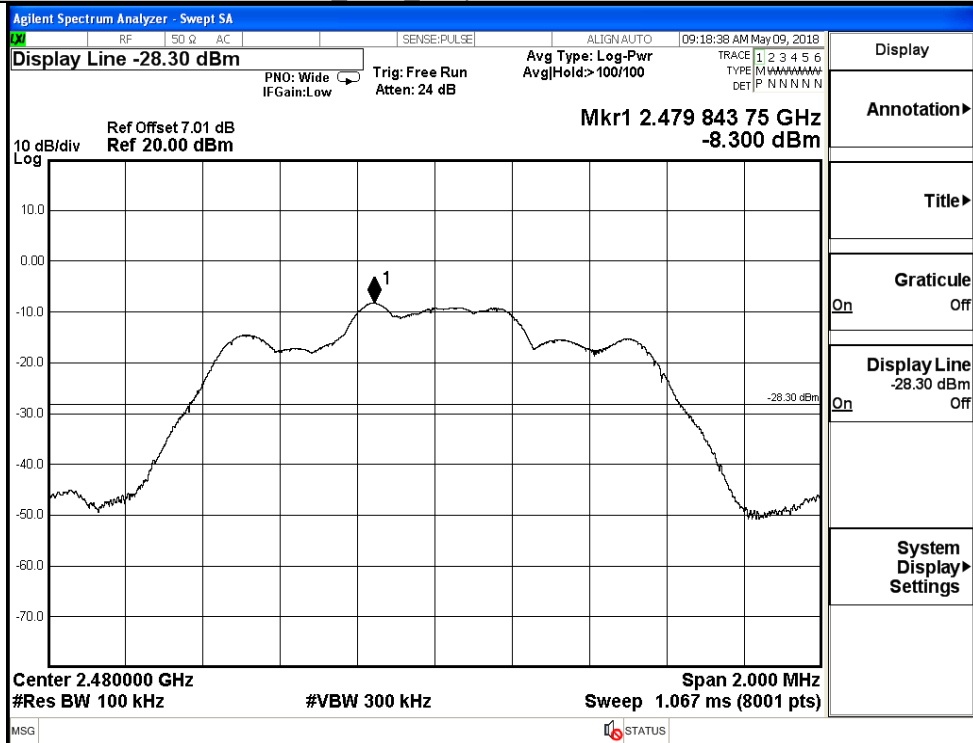


Puw

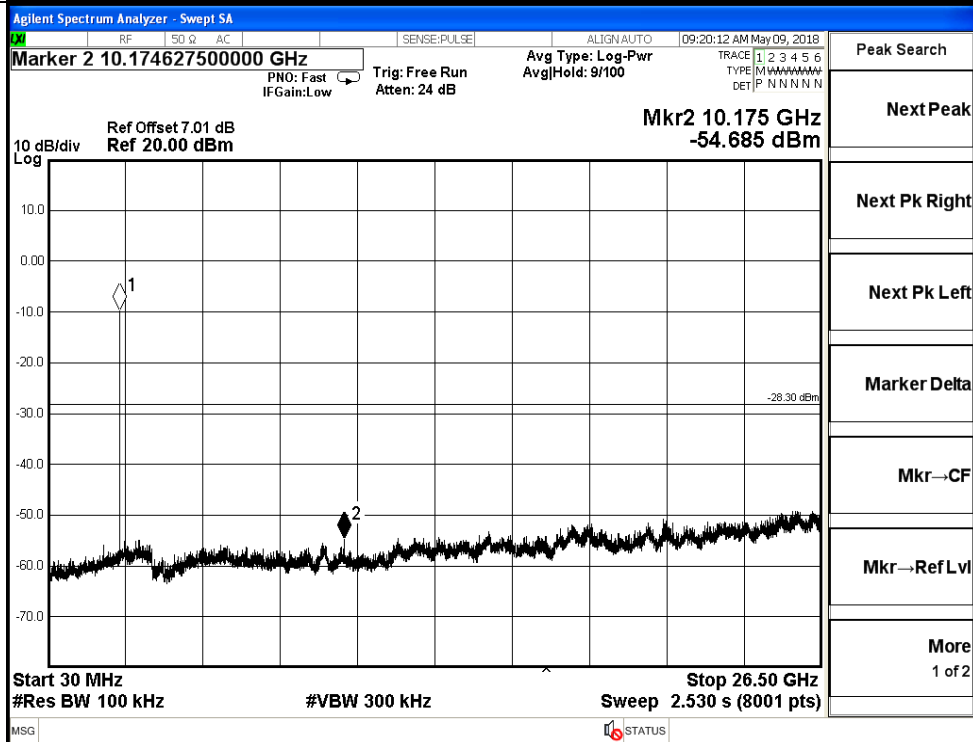


GFSK HCH_Graphs

Pref



Puw

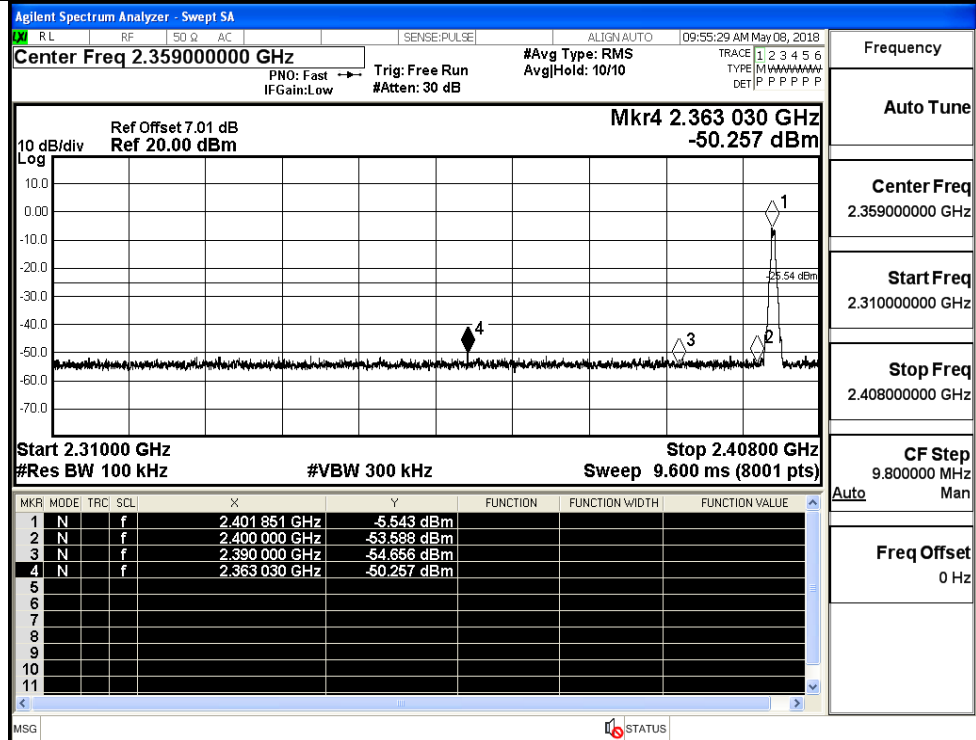


A.7 Band-edge for RF Conducted Emissions

Mode	Channel	Carrier Frequency [MHz]	Carrier Power [dBm]	Frequency Hopping	Max Spurious Level [dBm]	Limit [dBm]	Verdict
GFSK	LCH	2405	-5.543	Off	-50.257	-25.54	PASS
			-6.132	On	-66.988	-26.13	PASS
	HCH	2480	-7.930	Off	-50.540	-27.93	PASS
			-7.729	On	-67.444	-27.73	PASS

Test Graphs

GFSK/LCH/No Hop



Frequency

Auto Tune

Center Freq
2.359000000 GHz

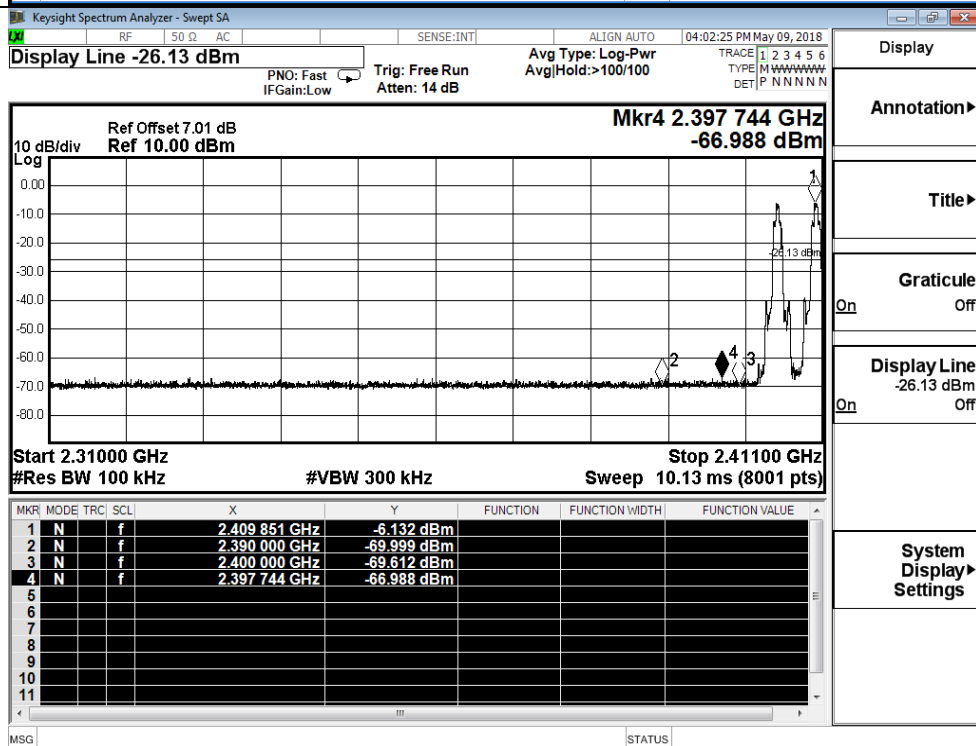
Start Freq
2.310000000 GHz

Stop Freq
2.408000000 GHz

CF Step
9.800000 MHz

Freq Offset
0 Hz

GFSK/LCH/Hop



Display

Annotation▶

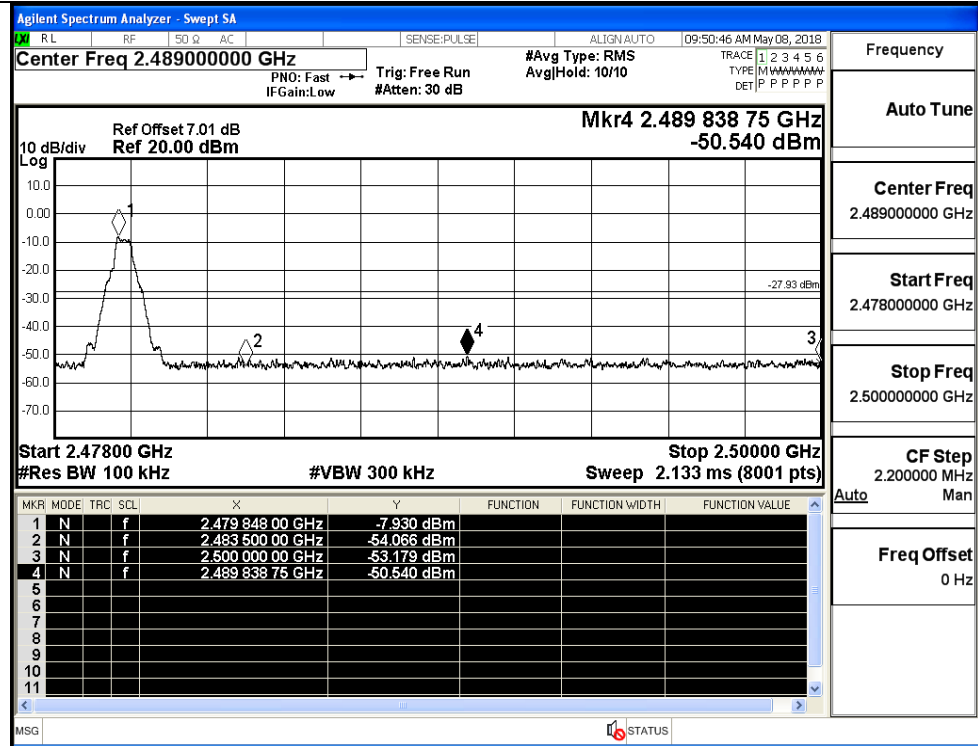
Title▶

Graticule
On Off

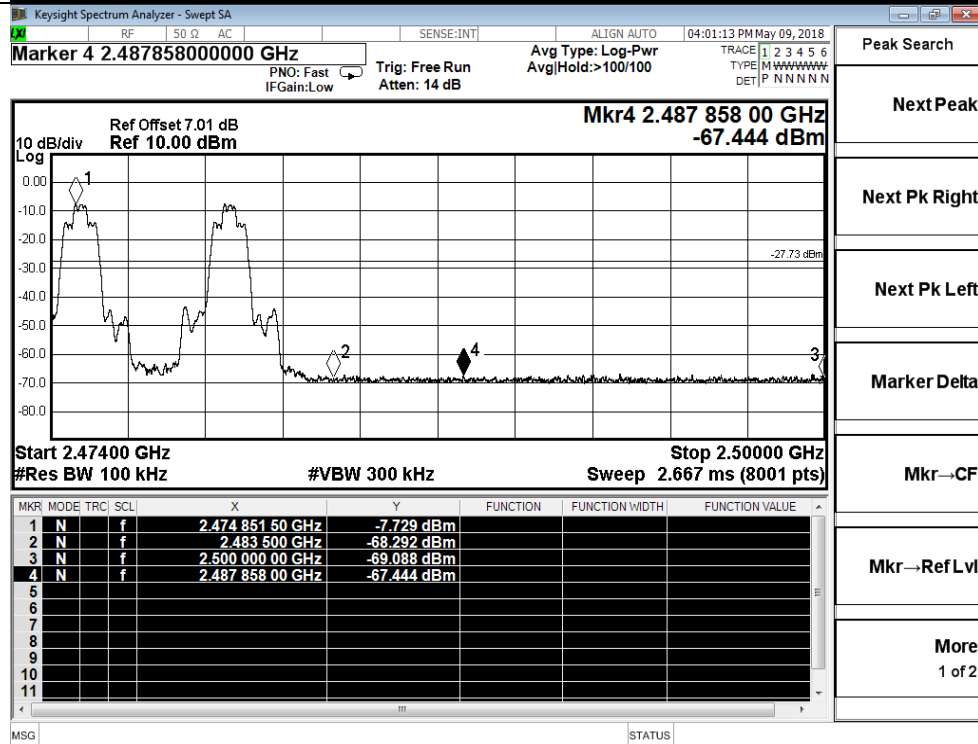
Display Line
On Off -26.13 dBm

System Display▶
Settings

GFSK/HCH/No Hop



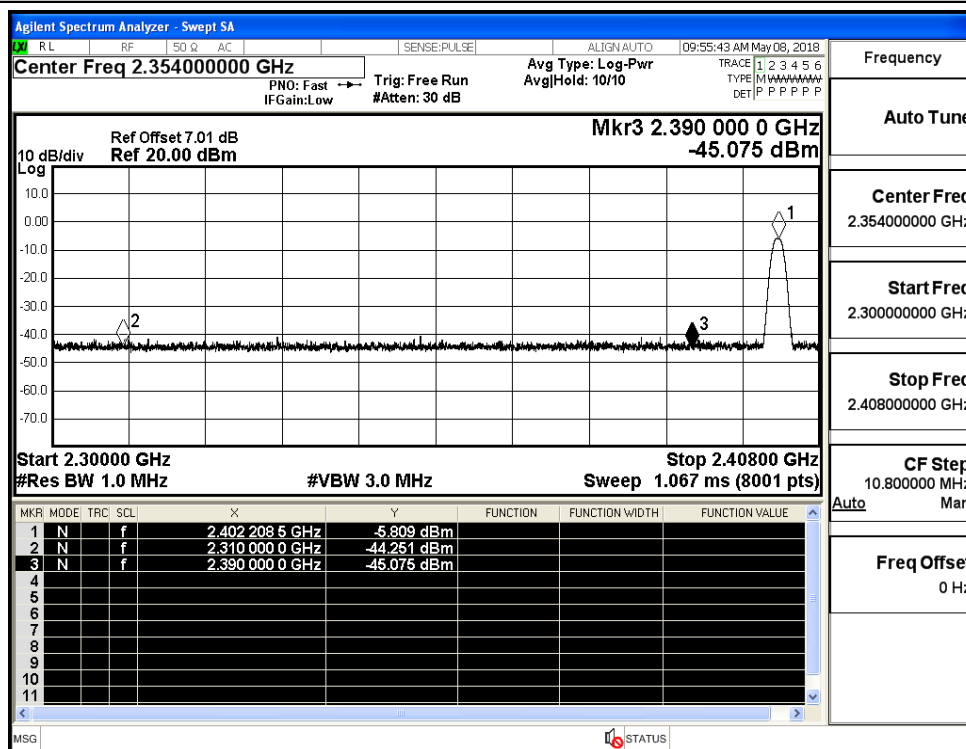
GFSK/HCH/Hop



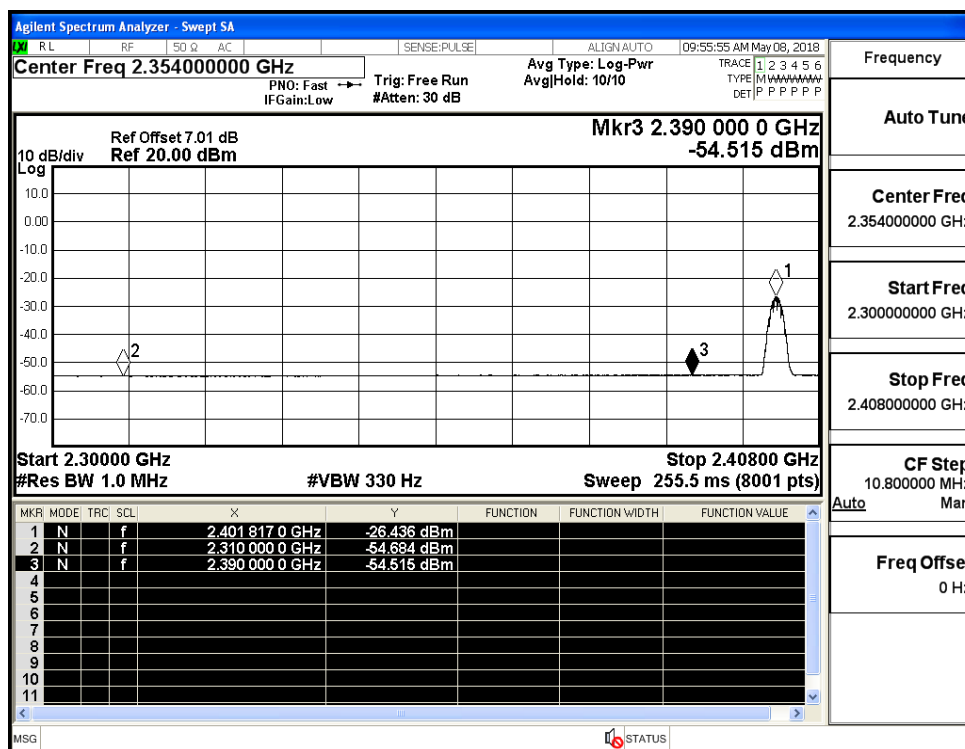
A.8 Restrict-band band-edge measurements

Test Mode	Hopping	Freq.	Power [dBm]	Gain	Ground Factor	E [dBuV/m]	Detector	Limit [dBuV/m]	Verdict
GFSK	Off	2310.0	-44.25	2.0	0	51.01	PEAK	74	PASS
	Off	2310.0	-54.68	2.0	0	40.57	AV	54	PASS
	Off	2390.0	-45.08	2.0	0	50.18	PEAK	74	PASS
	Off	2390.0	-54.52	2.0	0	40.74	AV	54	PASS
	Off	2483.5	-44.25	2.0	0	51.01	PEAK	74	PASS
	Off	2483.5	-54.22	2.0	0	41.04	AV	54	PASS
	Off	2500.0	-44.30	2.0	0	50.96	PEAK	74	PASS
	Off	2500.0	-54.03	2.0	0	41.23	AV	54	PASS

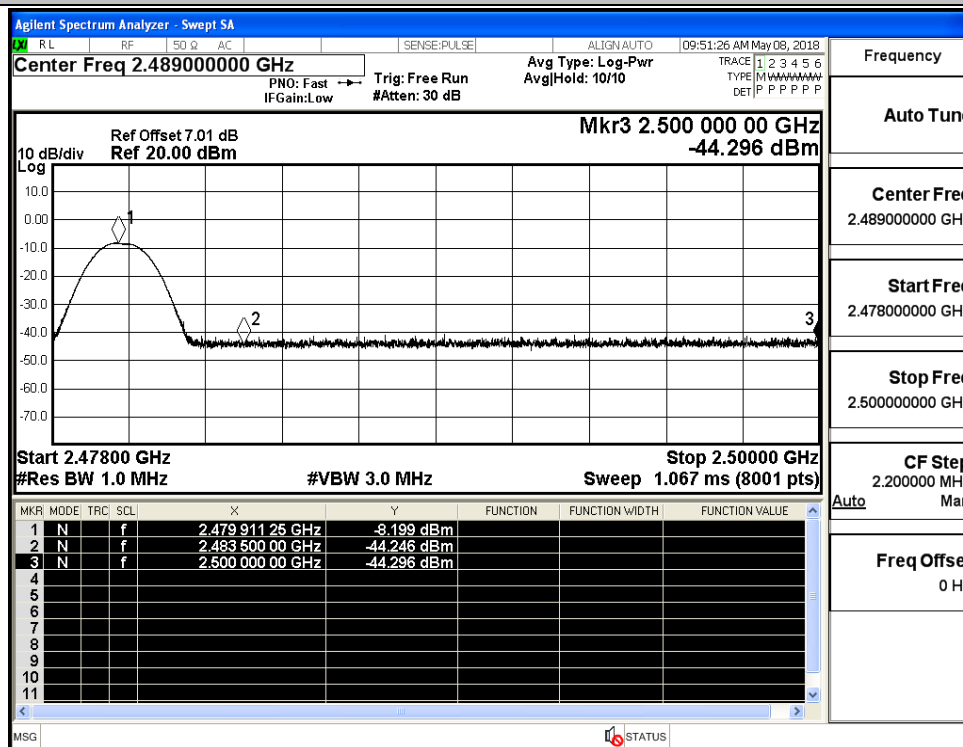
Restrict-band band-edge measurements_Hopping Off_GFSK_PEAK (Low Channel)



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)

