

Appendix A

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

Product Name: Bluetooth mechanical keyboard

Trade Mark: N/A

Test Model: keychron K2

FCC ID: 2ASF4-K2

Environmental Conditions

Temperature:	22.7° C
Relative Humidity:	50%
ATM Pressure:	100.0 kPa
Test Engineer:	Gary Qian
Supervised by:	Eden Hu

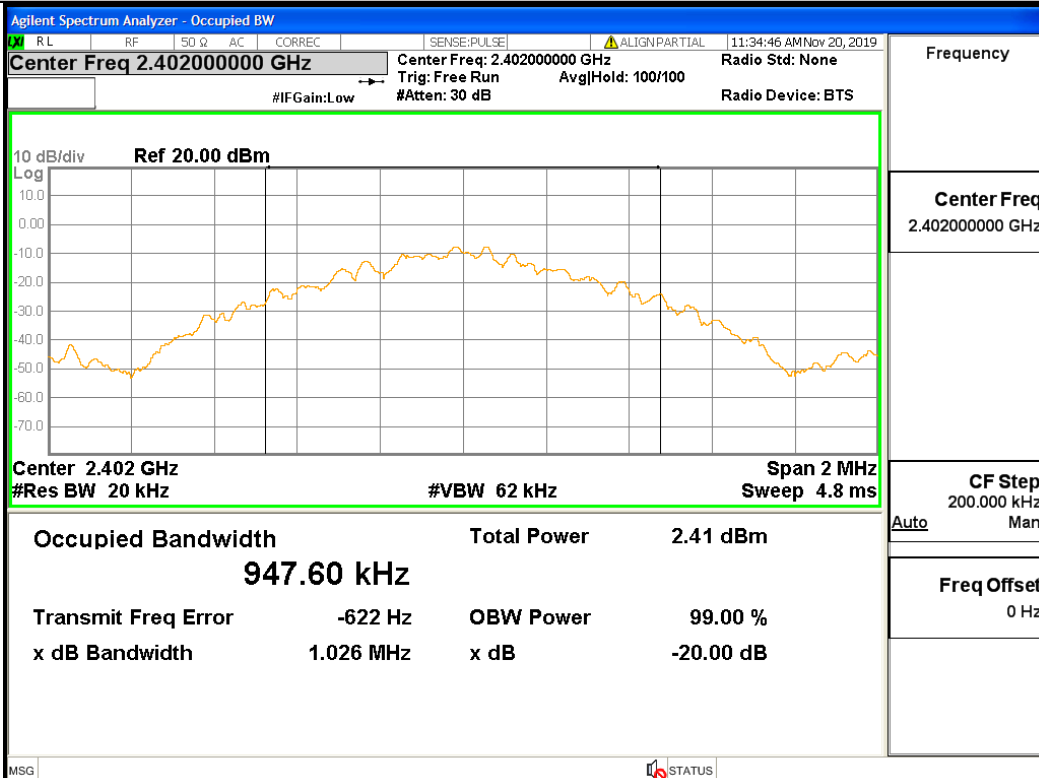
A.1 20 dB Bandwidth

Mode	Channel.	20dB Bandwidth [MHz]	Limit(MHz)	Verdict
GFSK	LCH	1.026	Not Specified	PASS
GFSK	MCH	1.083	Not Specified	PASS
GFSK	HCH	1.021	Not Specified	PASS

Test Graph

Graphs

GFSK/LCH



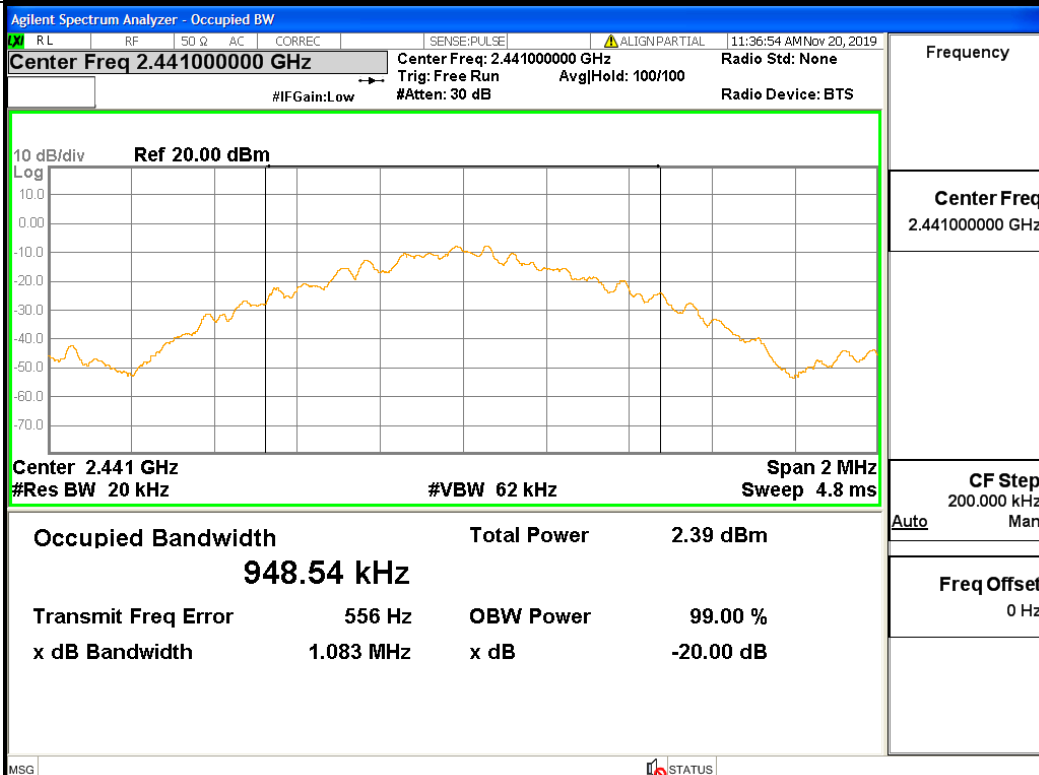
Frequency

Center Freq
2.40200000 GHz

CF Step
200.000 kHz
Auto Man

Freq Offset
0 Hz

GFSK/MCH

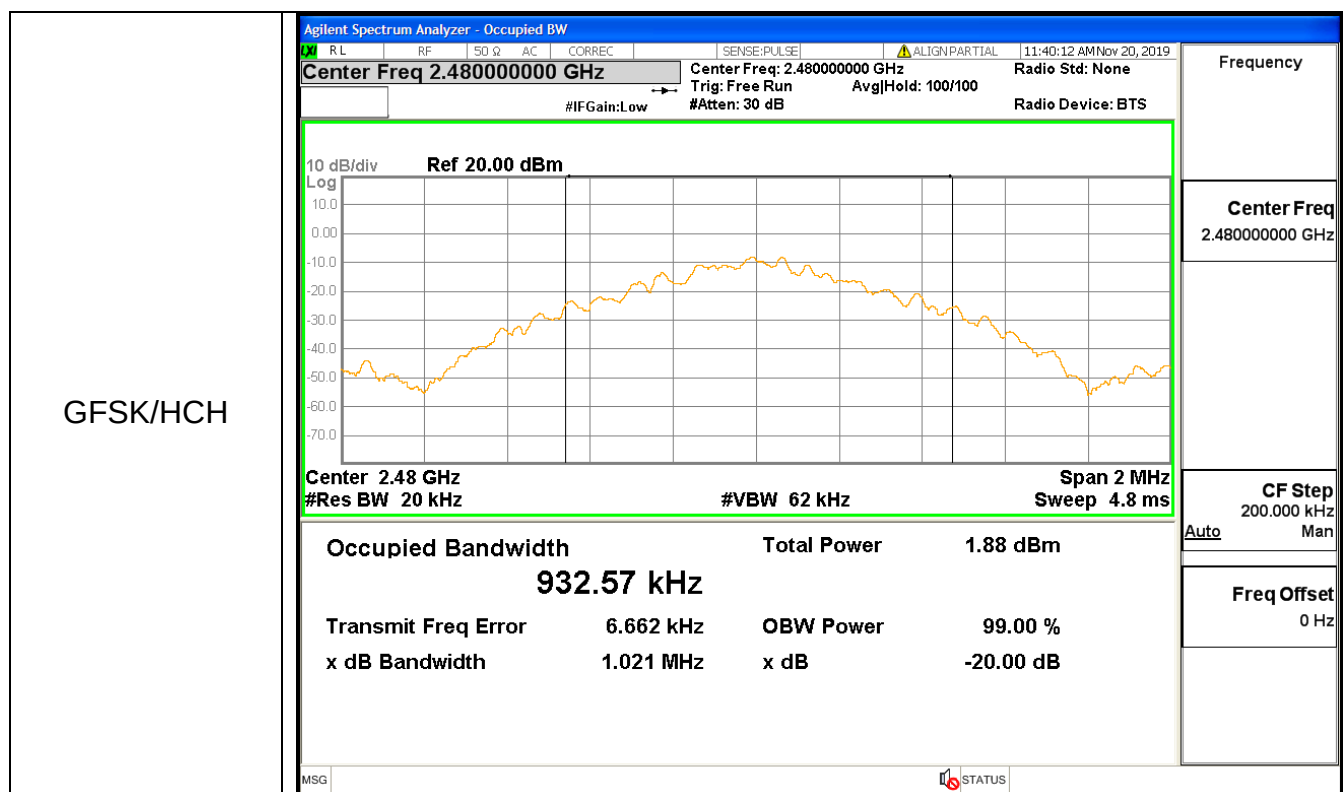


Frequency

Center Freq
2.44100000 GHz

CF Step
200.000 kHz
Auto Man

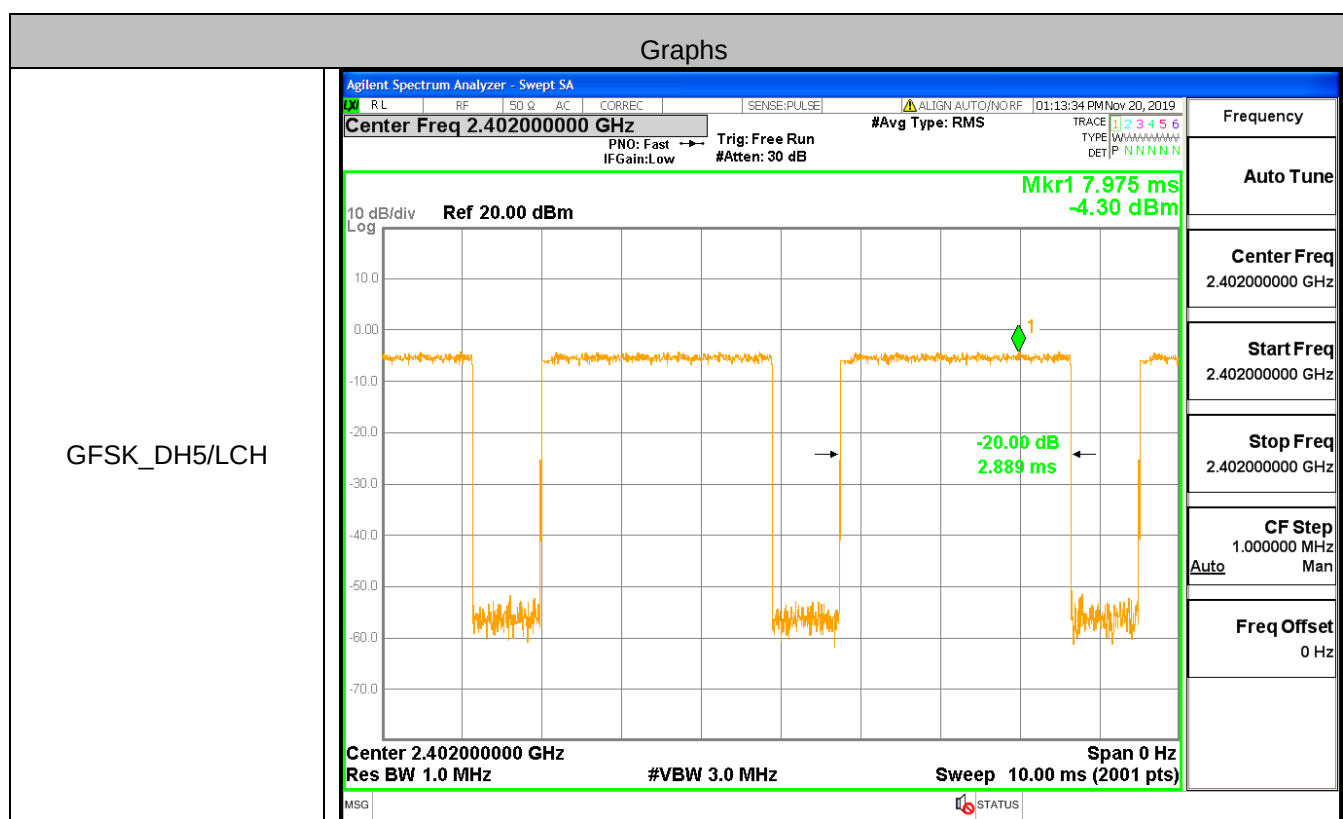
Freq Offset
0 Hz

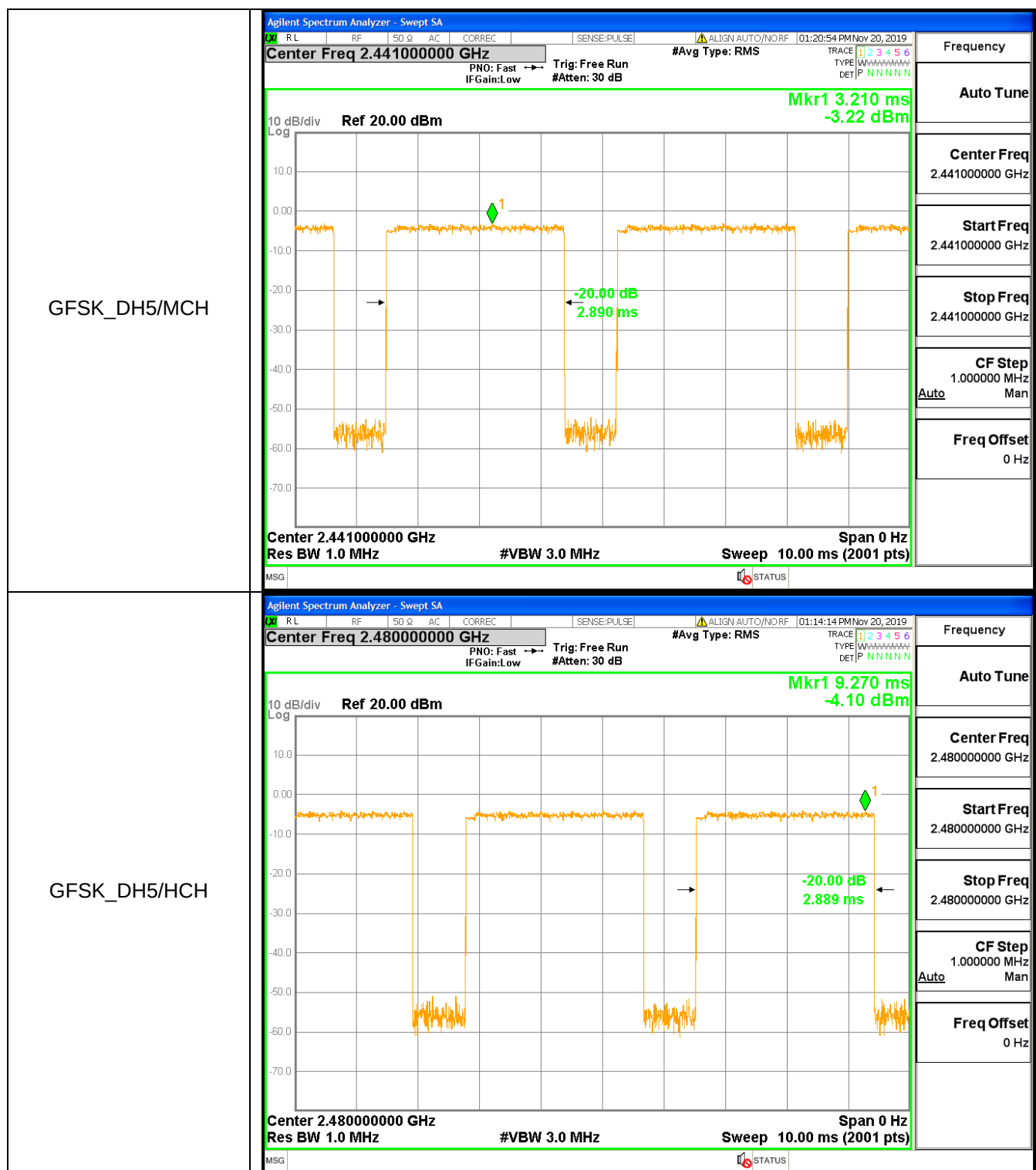


A.2 Dwell Time

Mode	Packet	Channel	Burst Width [s/hop/ch]	Total Hops[hop*ch]	Dwell Time[s]	Limit [s]	Verdict
GFSK	DH5	LCH	0.002889	106.7	0.308304	0.4	PASS
GFSK	DH5	MCH	0.002890	106.7	0.308365	0.4	PASS
GFSK	DH5	HCH	0.002889	106.7	0.308293	0.4	PASS

Test Graph

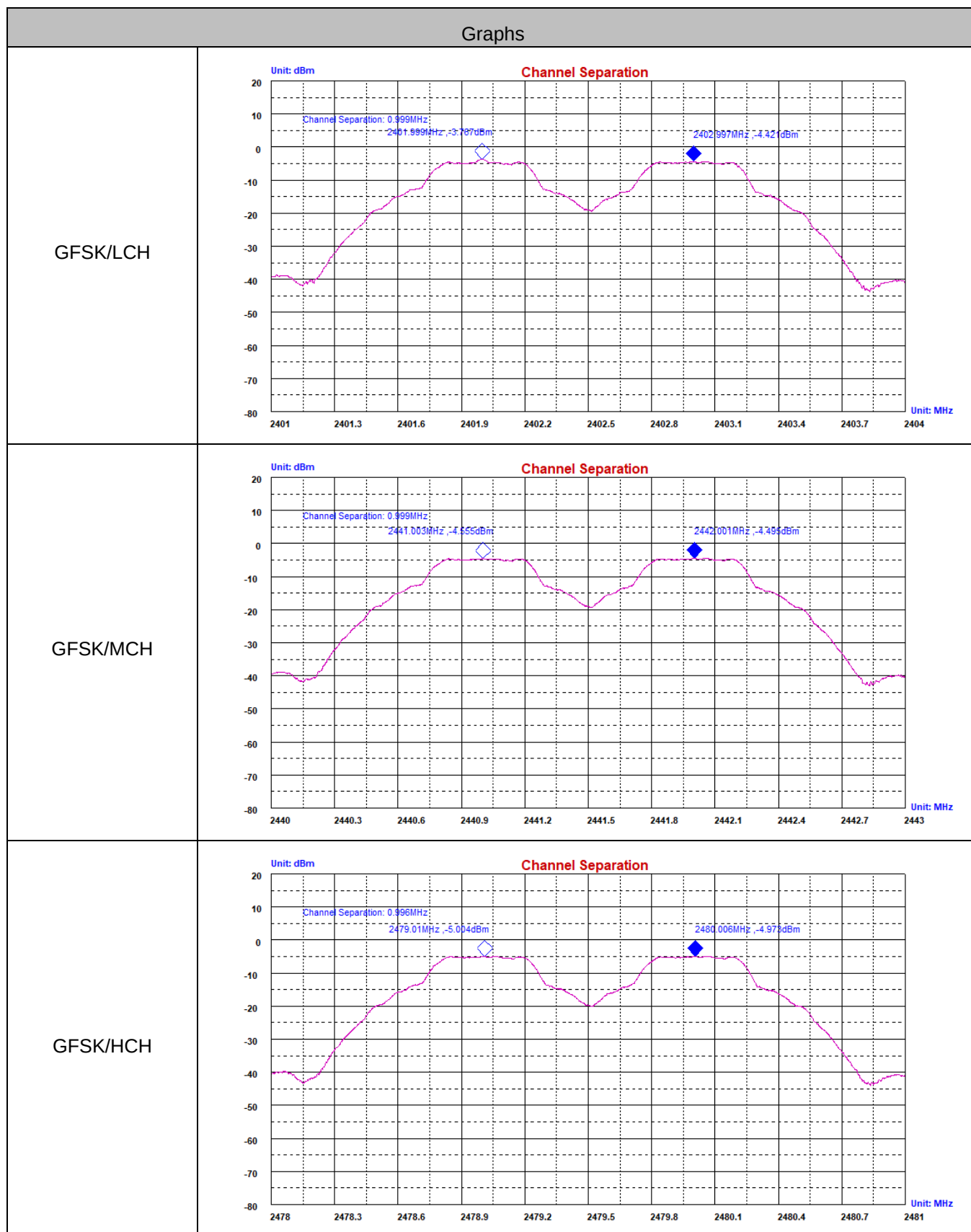




A.3 Carrier Frequency Separation

Mode	Channel.	Carrier Frequency Separation [MHz]	Limit [MHz]	Verdict
GFSK	LCH	0.999	0.681	PASS
GFSK	MCH	0.999	0.722	PASS
GFSK	HCH	0.996	0.681	PASS

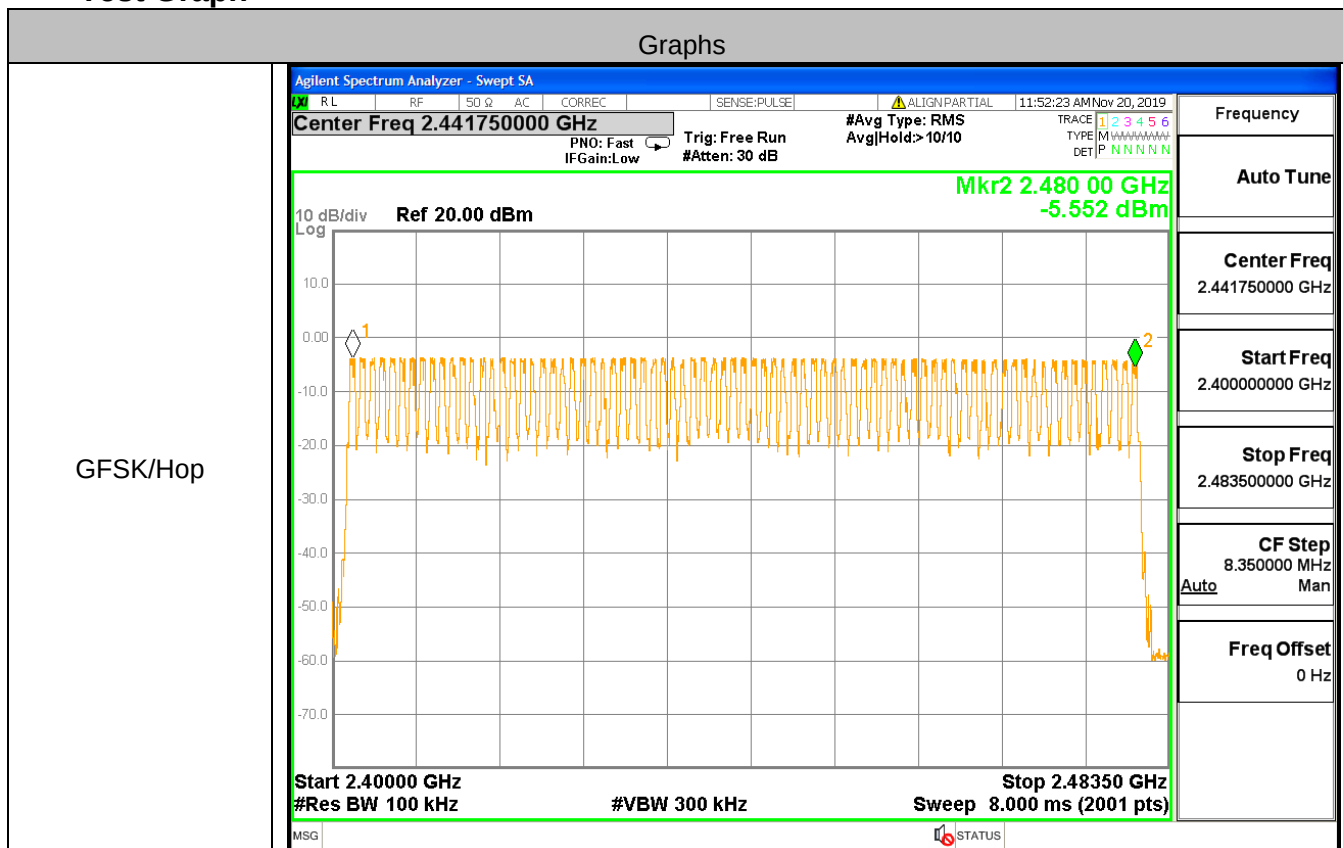
Test Graph



A.4 Hopping Channel Number

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

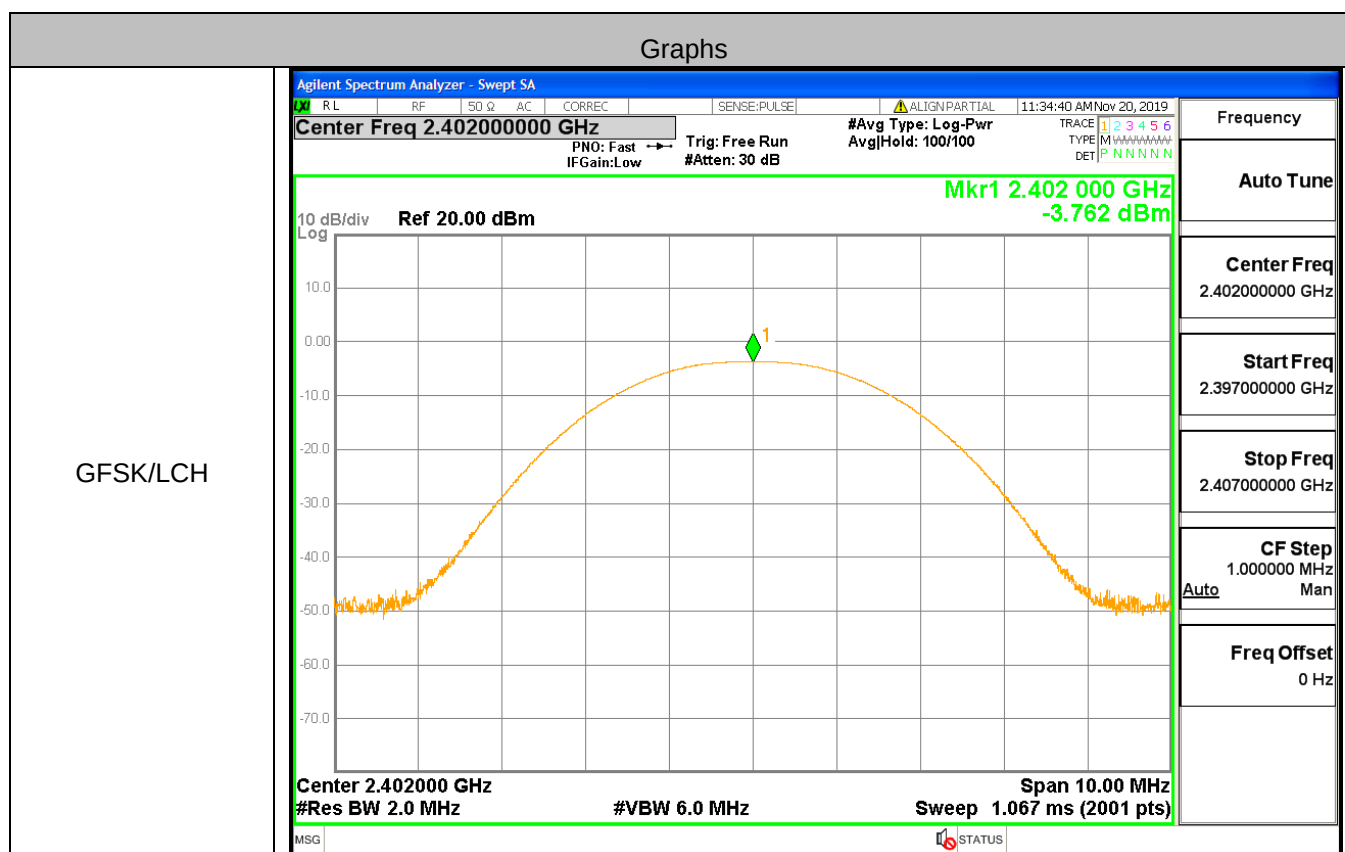
Test Graph

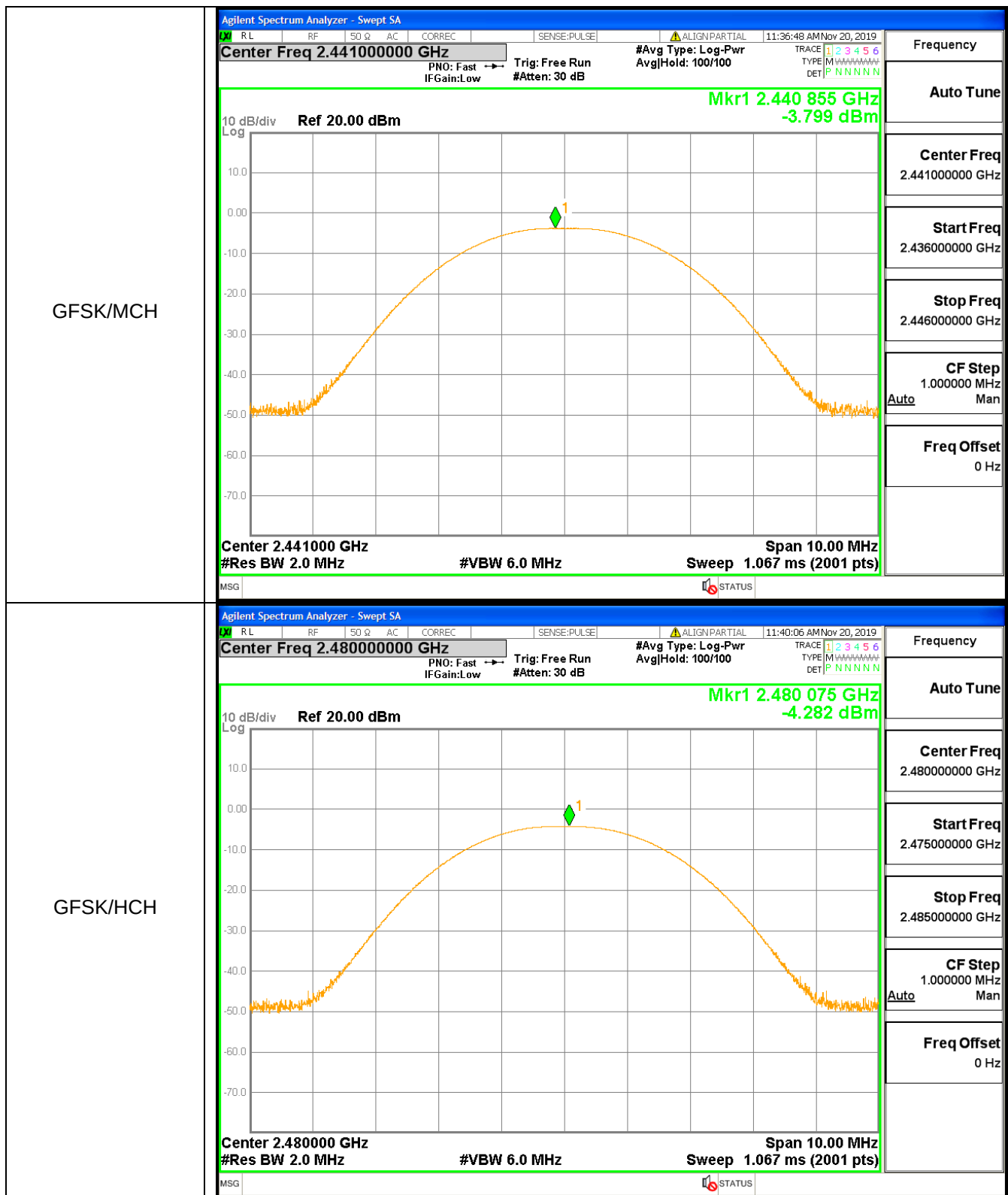


A.5 Conducted Peak Output Power

Mode	Channel.	Maximum Peak Output Power [dBm]	Limit [dBm]	Verdict
GFSK	LCH	-3.762	21	PASS
GFSK	MCH	-3.799	21	PASS
GFSK	HCH	-4.282	21	PASS

Test Graph

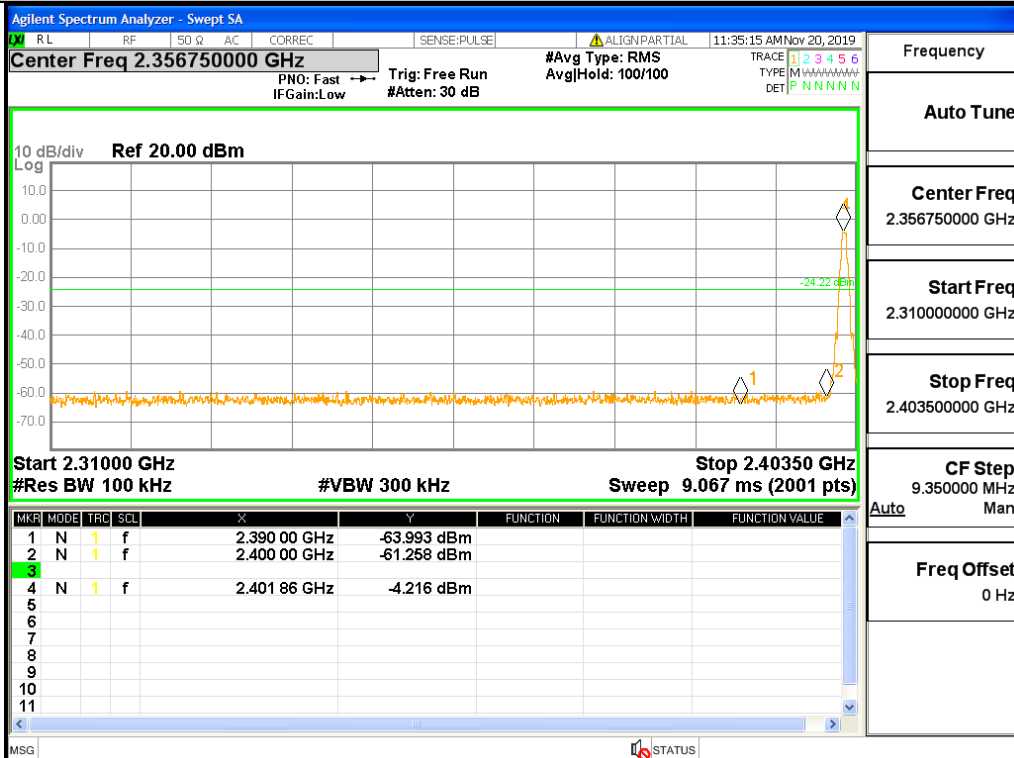




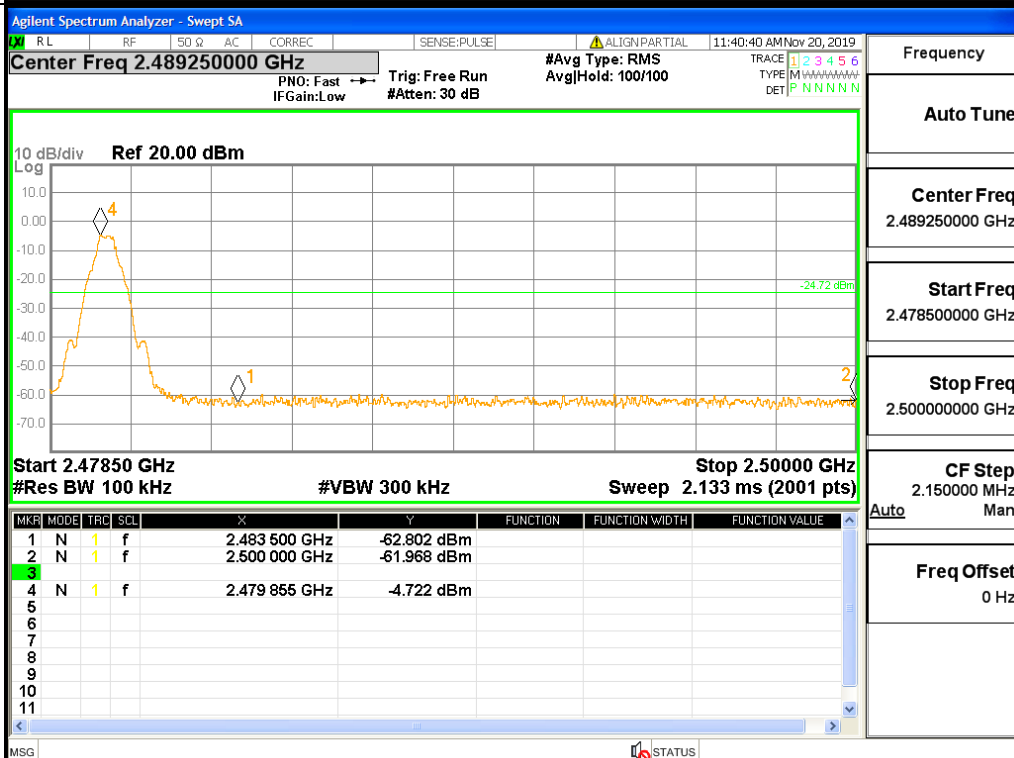
A.6 Band-edge for RF Conducted Emissions

Type	Carrier Frequency(MHz)	Frequency(MHz)	Carrier Frequency Power [dBm]	Bandedge Peak(dBm)	Upper limit(dBm)	Conclusion
1DH5	2402	2400	-4.216	-61.26	-24.216	Pass
1DH5	2480	2500	-4.722	-61.97	-24.722	Pass
1DH5-Hopping	2402	2399.61	-3.658	-50.932	-23.658	Pass
1DH5-Hopping	2480	2483.5	-3.883	-59.29	-23.883	Pass

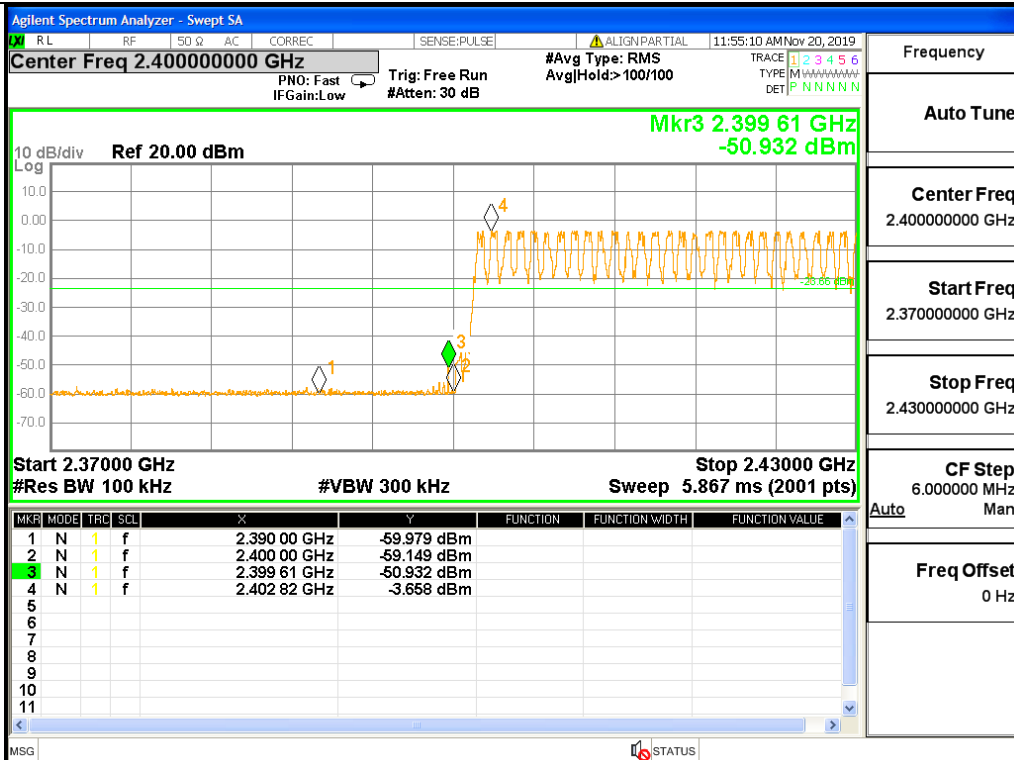
GFSK/LCH/No Hop



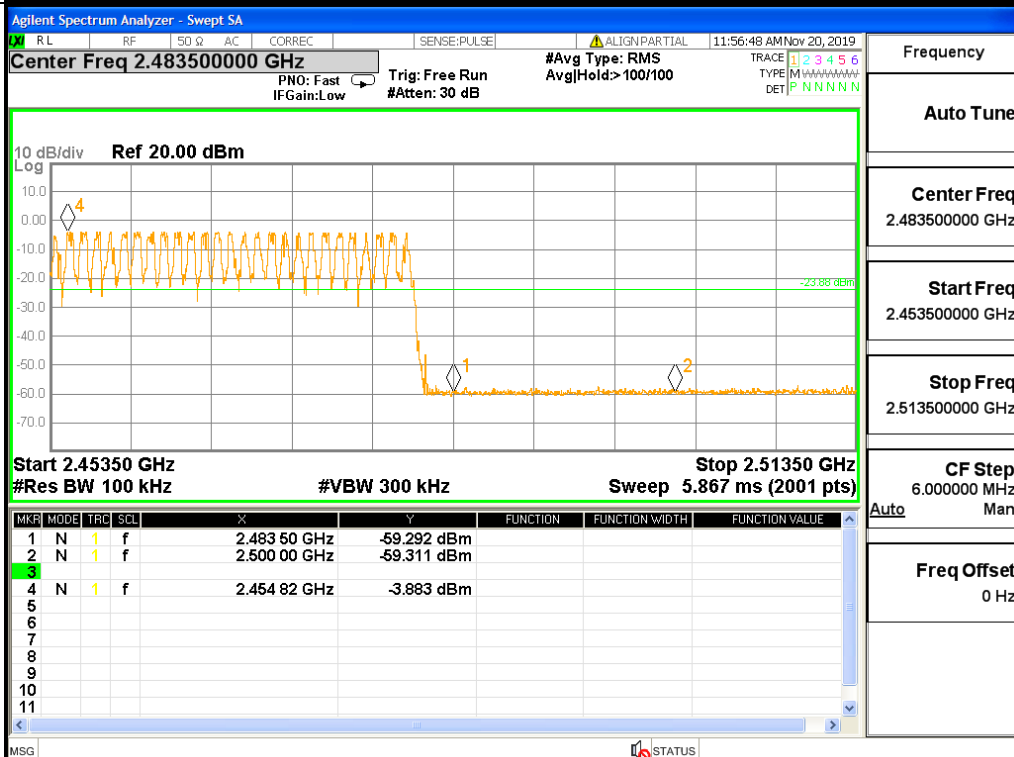
GFSK/HCH/No Hop



GFSK/LCH/Hop

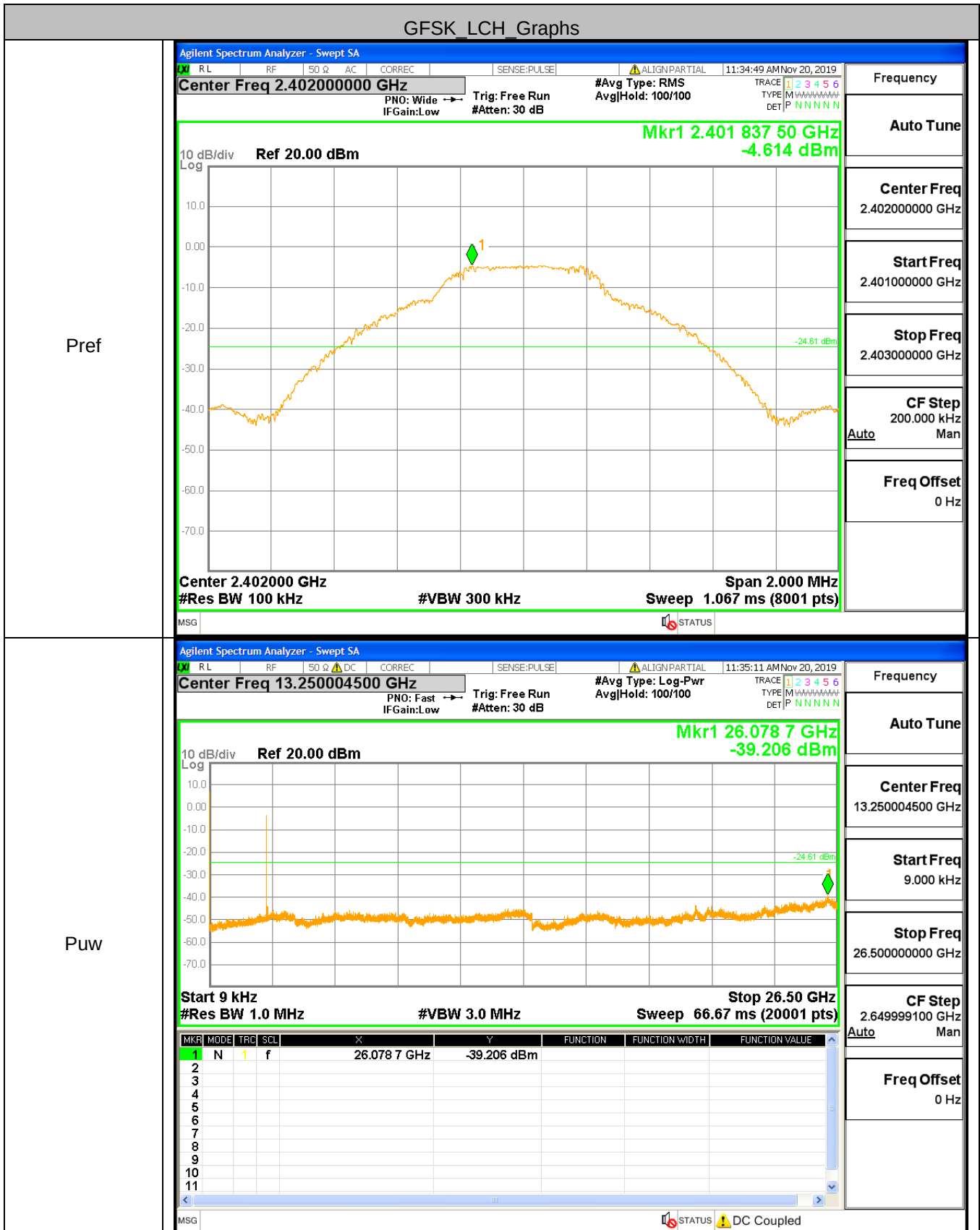


GFSK/HCH/Hop



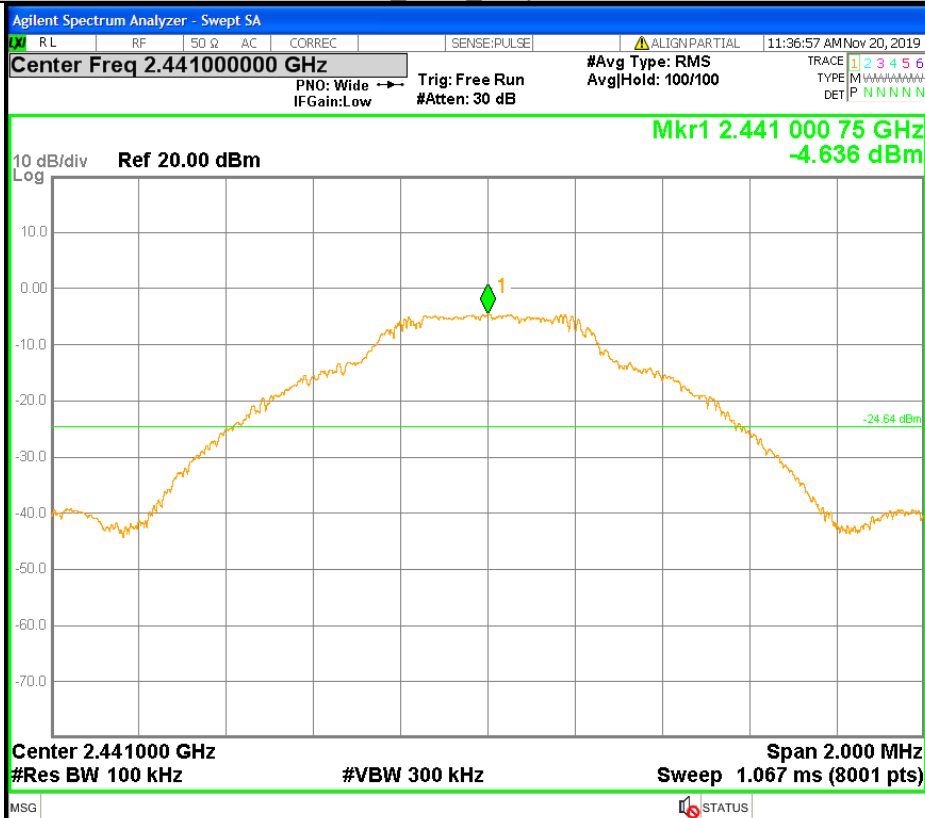
A.7 RF Conducted Spurious Emissions

Test Graph

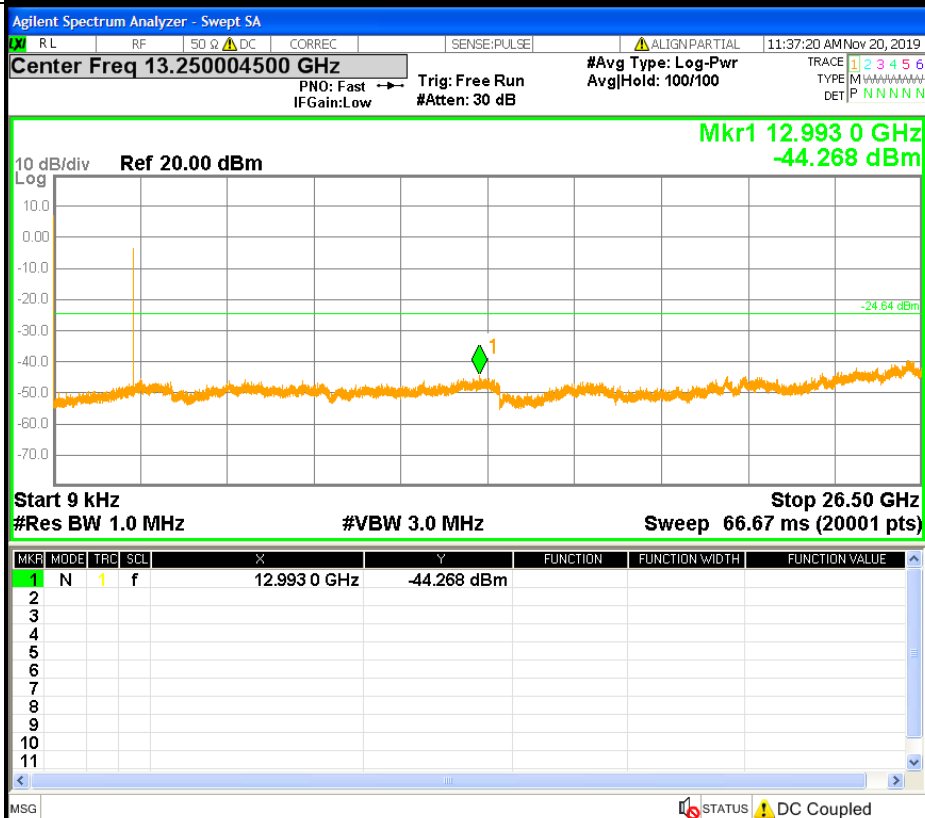


GFSK MCH Graphs

Pref

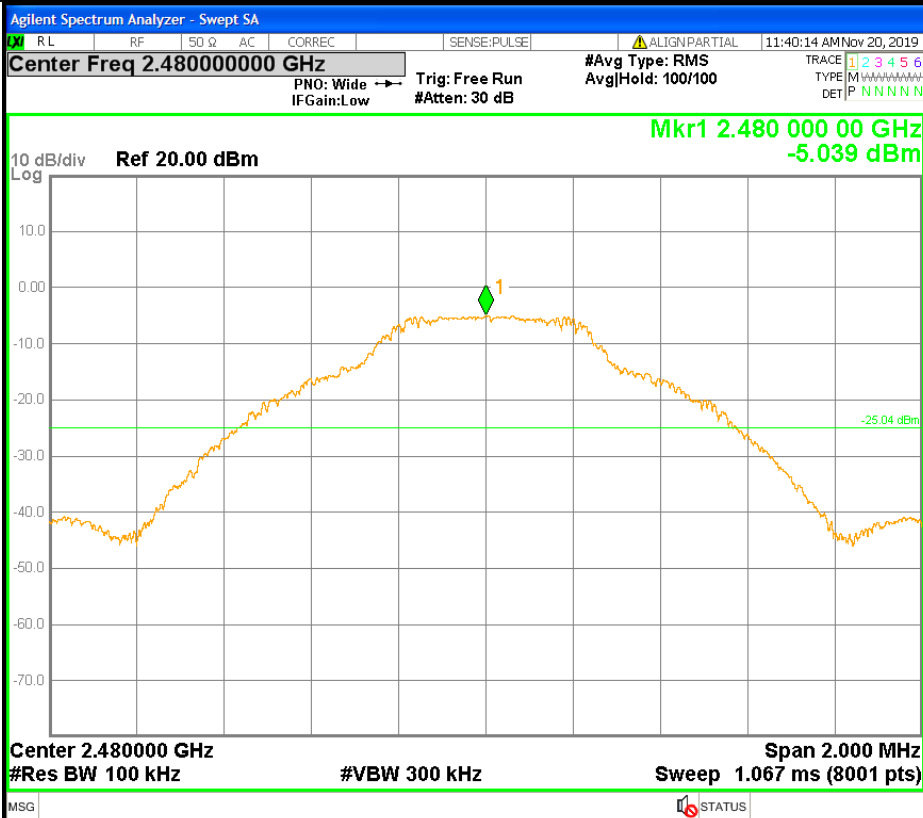


Puw

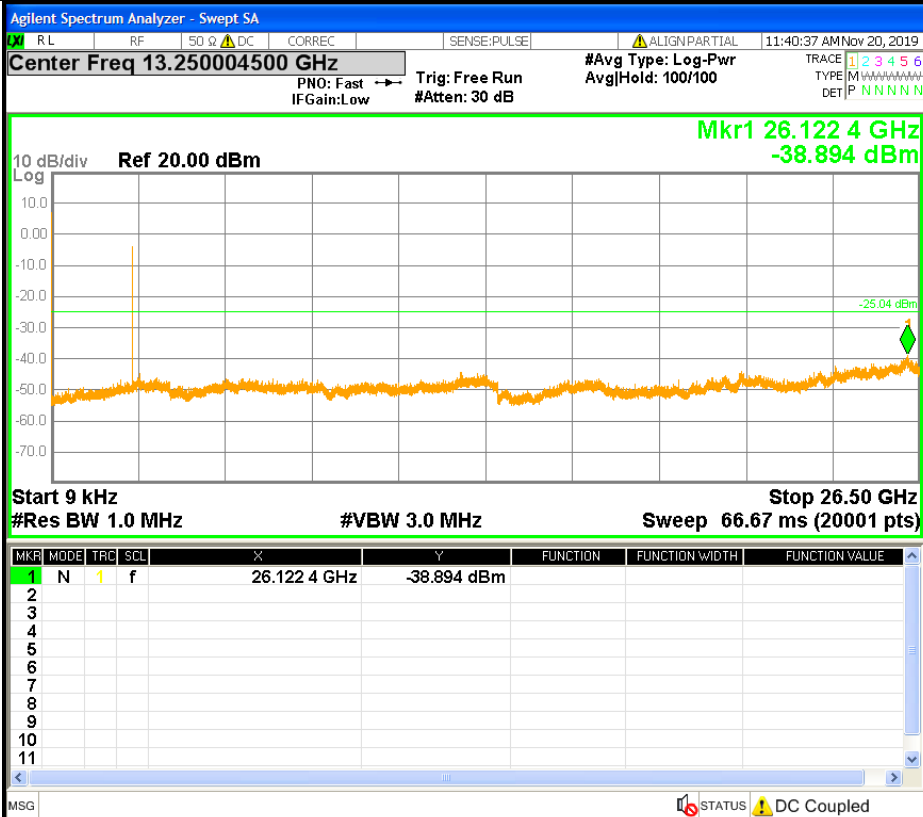


GFSK HCH Graphs

Pref



Puw

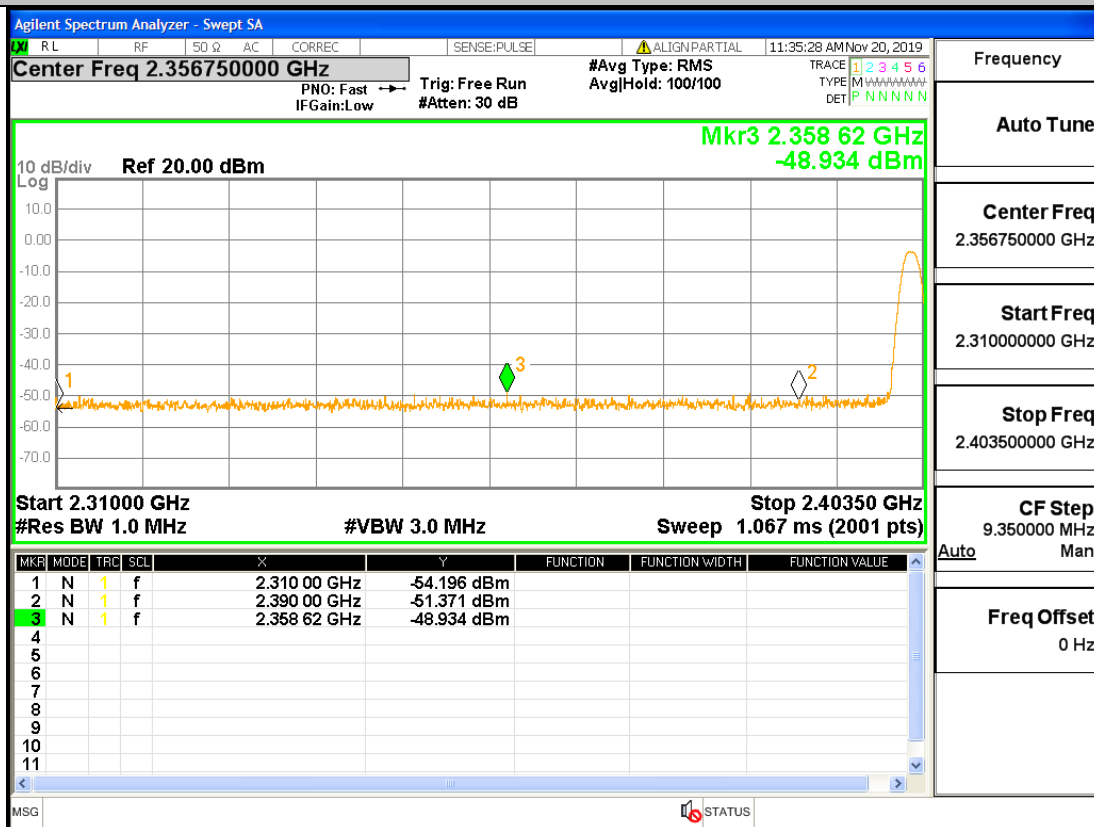


A.8 Restrict-band band-edge measurements

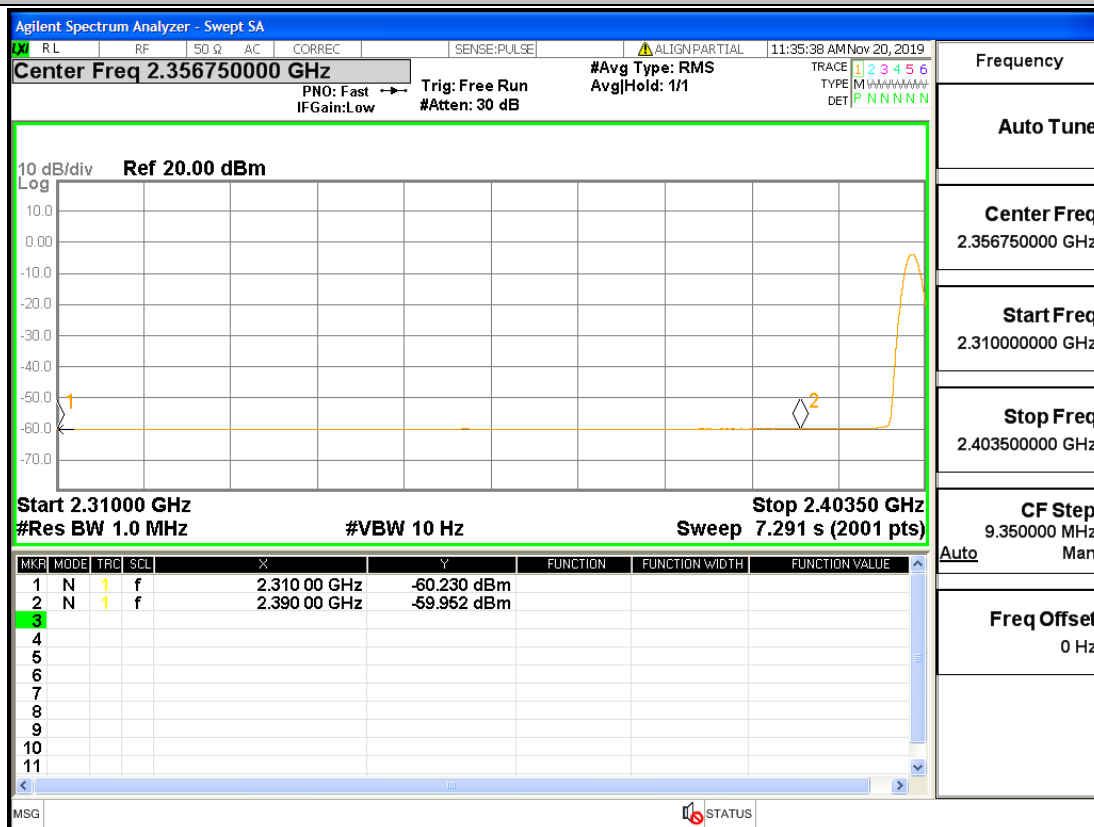
Type	Carrier Frequency (MHz)	Frequency(MHz)	Gain (dBi)	Ground Factor(dB)	Peak Value(dBm)	E [dBuV/m]	Limit [dBuV/m]	Conclusion
1DH5	2402	2358.62	2.00	0.00	-48.934	48.266	74	Pass
1DH5	2480	2500	2.00	0.00	-50.372	46.828	74	Pass

Type	Carrier Frequency (MHz)	Frequency(MHz)	Gain (dBi)	Ground Factor(dB)	Average Value(dBm)	E [dBuV/m]	Limit [dBuV/m]	Conclusion
1DH5	2402	2358.62	2.00	0.00	-59.952	37.248	54	Pass
1DH5	2480	2500	2.00	0.00	-58.367	38.833	54	Pass

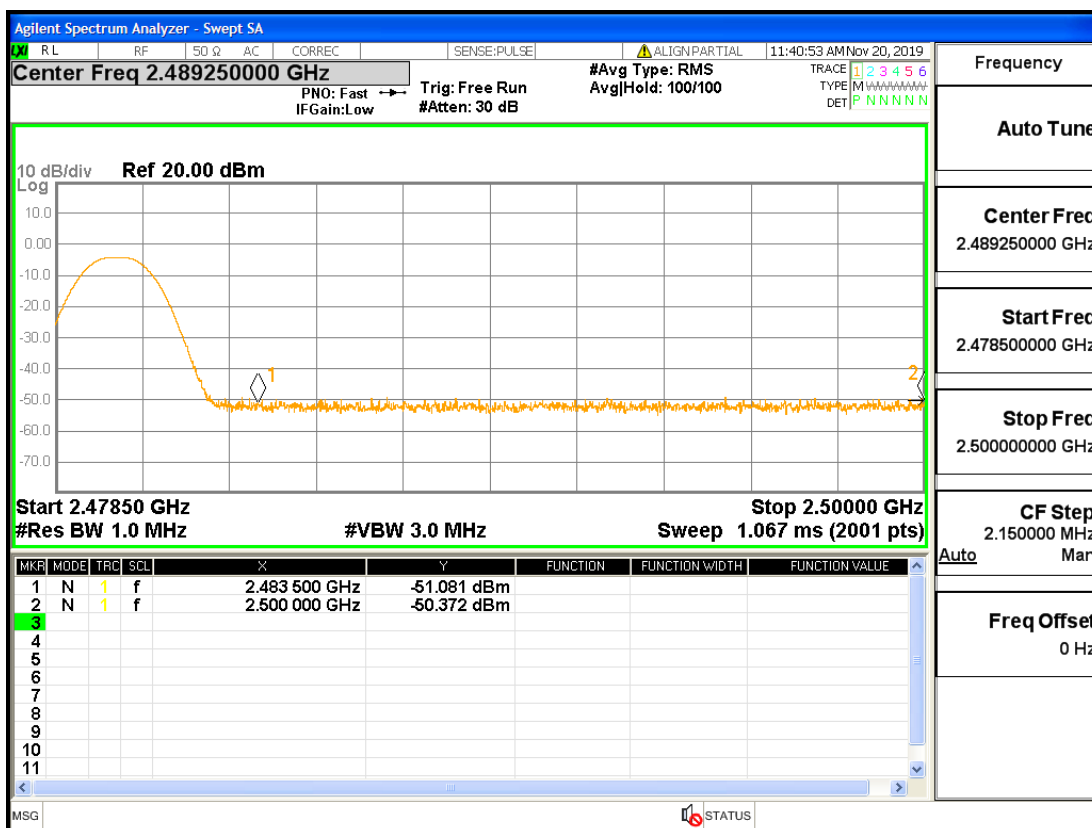
Restrict-band band-edge measurements_2402_PEAK_DH5



Restrict-band band-edge measurements_2402_AV_DH5



Restrict-band band-edge measurements_2480_PEAK_DH5



Restrict-band band-edge measurements_2480_AV_DH5

