

Appendix A

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

Product Name: Bluetooth mechanical keyboard

Trade Mark: N/A

Test Model: keychron K6

FCC ID: 2ASF4-K6

Environmental Conditions

Temperature:	22.8° C
Relative Humidity:	56%
ATM Pressure:	100.0 kPa
Test Engineer:	Nancy Li
Supervised by:	Hugo Chen

A.1 20 dB Bandwidth

Mode	Channel.	20dB Bandwidth [MHz]	Limit(MHz)	Verdict
GFSK	LCH	1.017	Not Specified	PASS
GFSK	MCH	1.018	Not Specified	PASS
GFSK	HCH	0.961	Not Specified	PASS

Test Graph

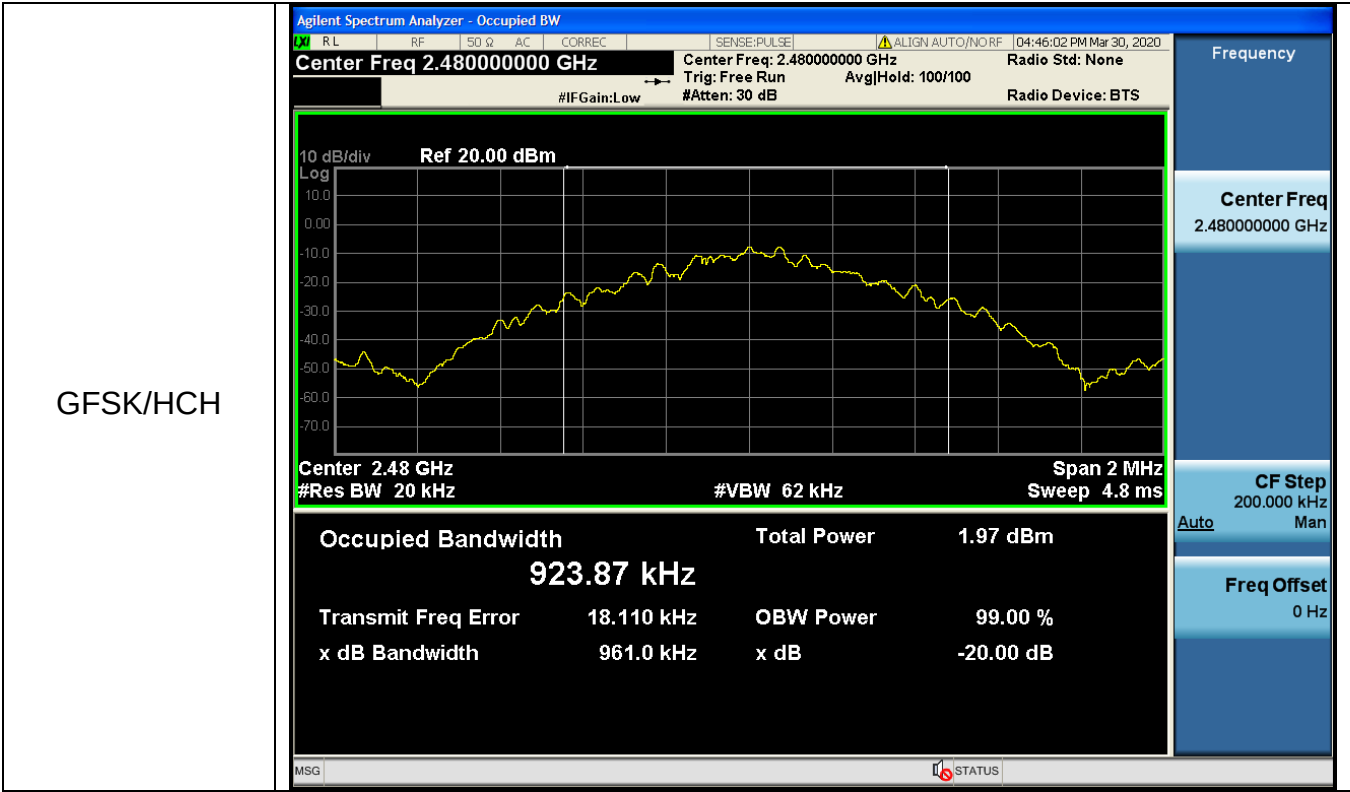
Graphs

GFSK/LCH



GFSK/MCH

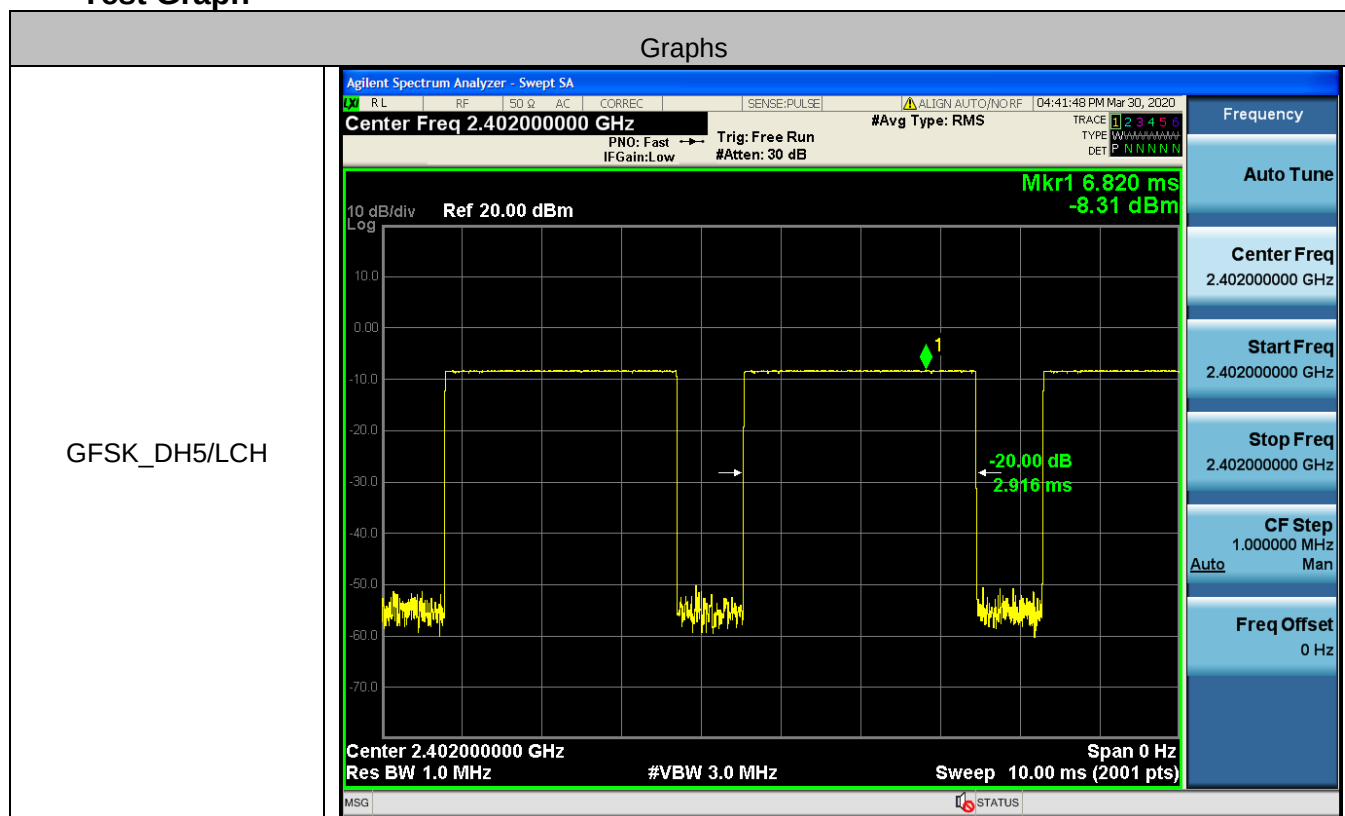




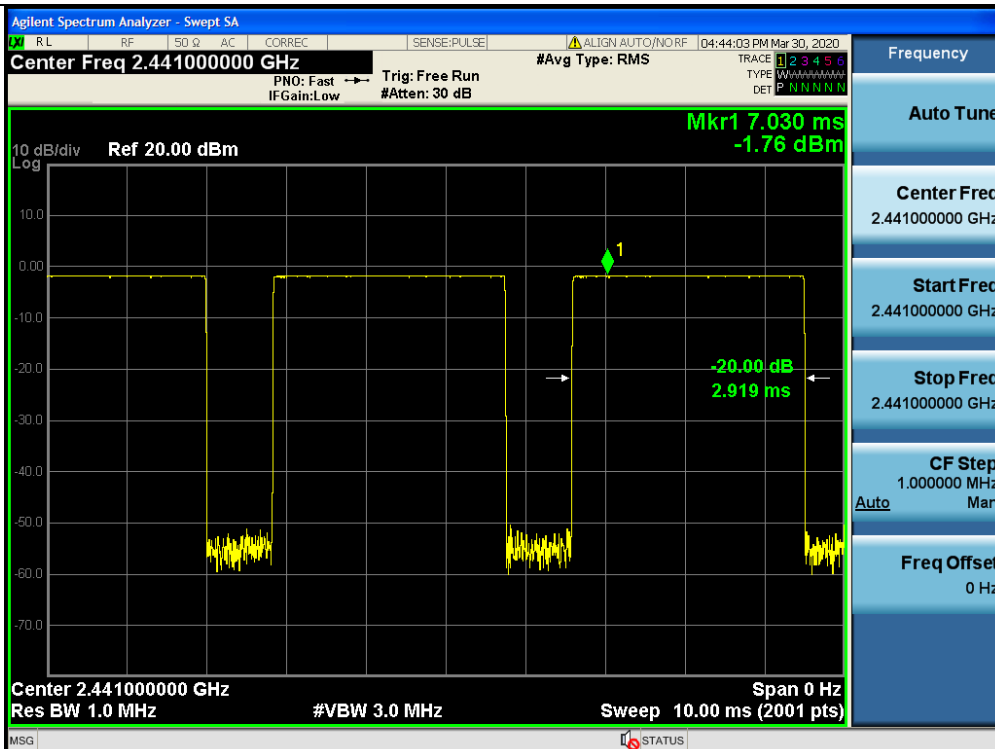
A.2 Dwell Time

Mode	Packet	Channel	Burst Width [ms/hop/ch]	Total Hops[hop*ch]	Dwell Time[s]	Limit [s]	Verdict
GFSK	DH5	LCH	2.916	106.7	0.311	0.4	PASS
GFSK	DH5	MCH	2.919	106.7	0.311	0.4	PASS
GFSK	DH5	HCH	2.920	106.7	0.312	0.4	PASS

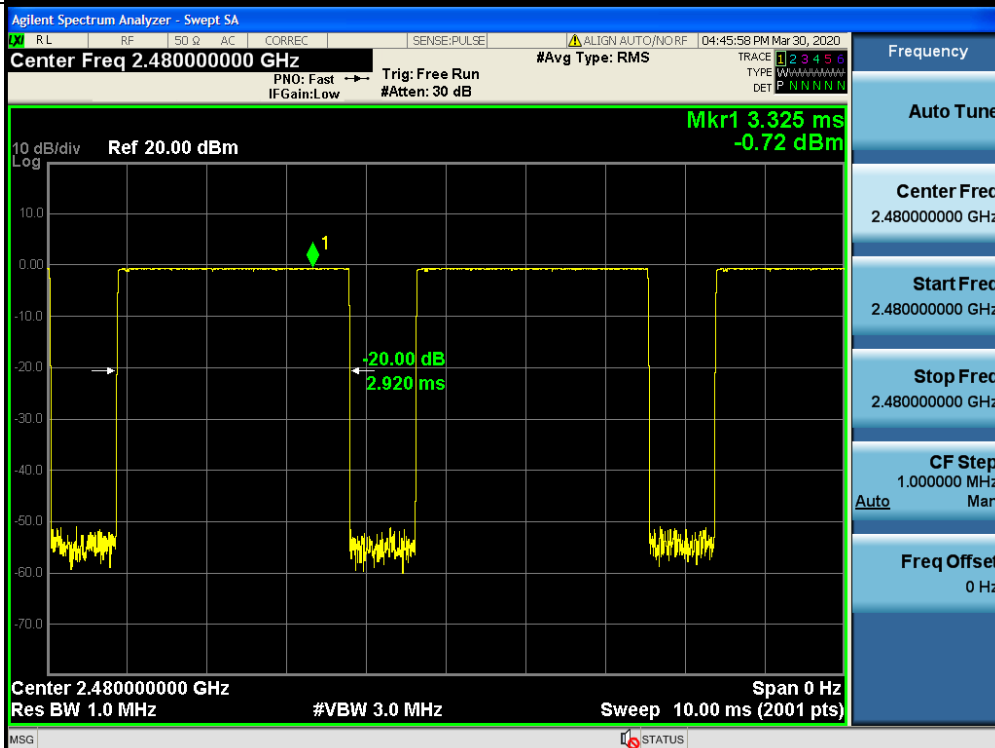
Test Graph



GFSK_DH5/MCH



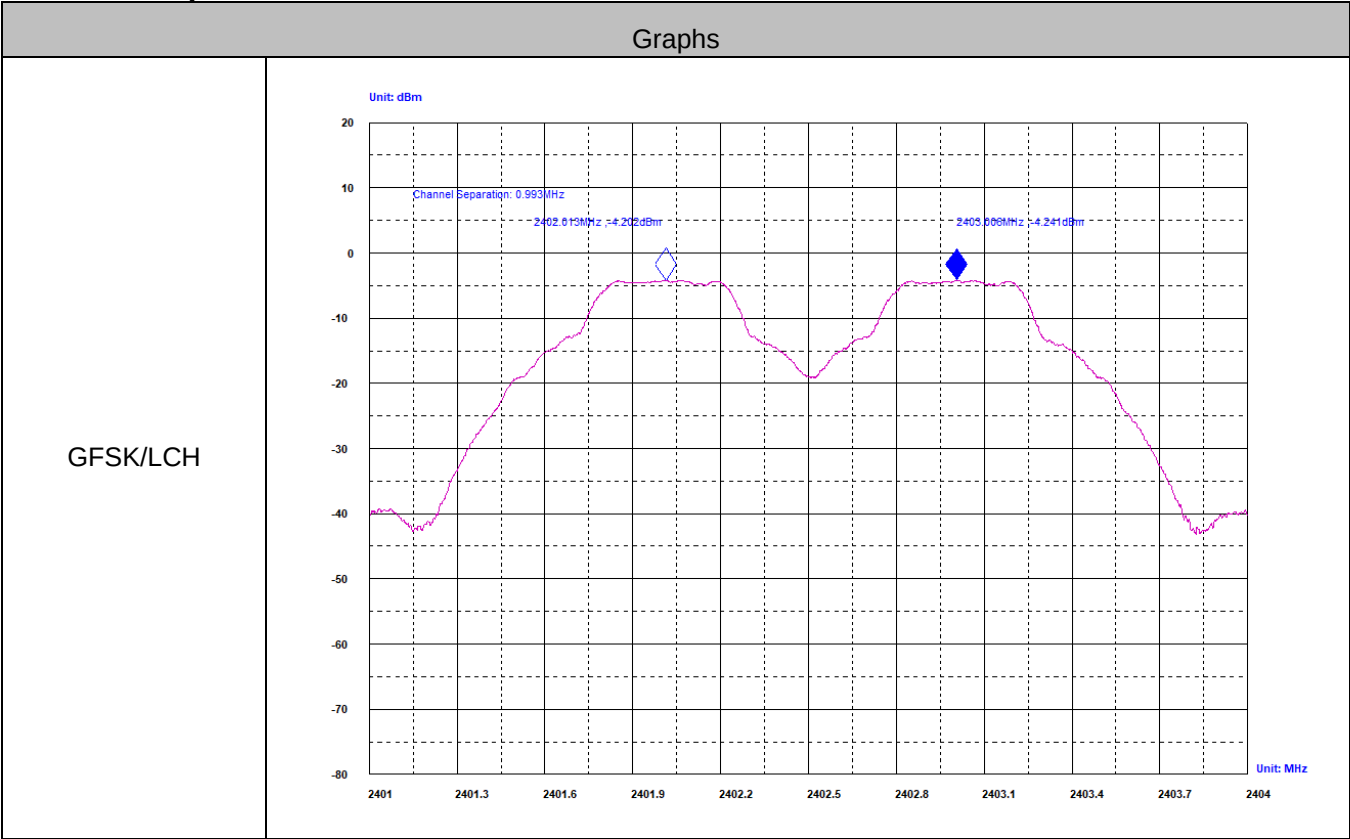
GFSK_DH5/HCH

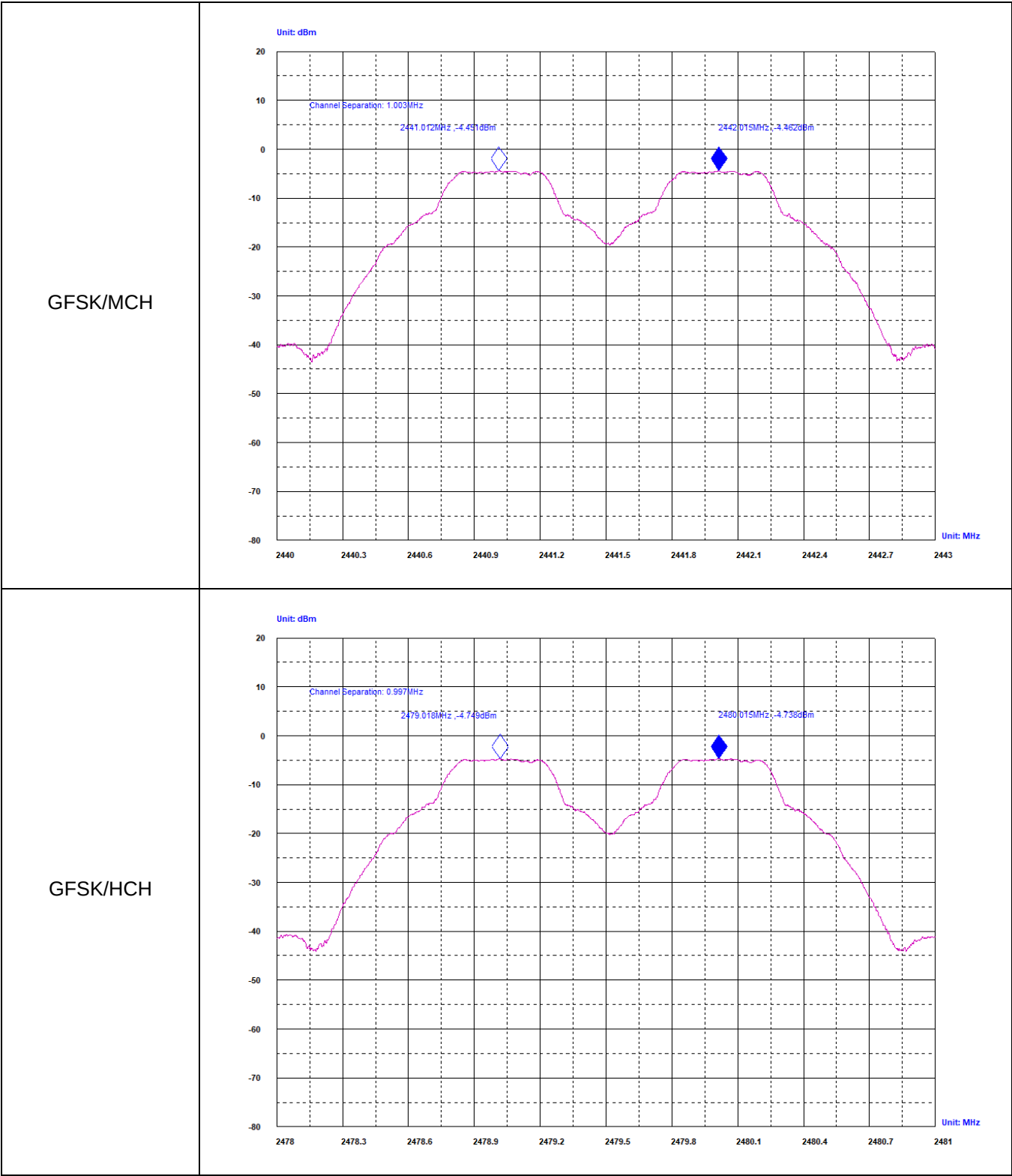


A.3 Carrier Frequency Separation

Mode	Channel.	Carrier Frequency Separation [MHz]	Limit [MHz]	Verdict
GFSK	LCH	0.993	0.678	PASS
GFSK	MCH	1.003	0.679	PASS
GFSK	HCH	0.997	0.641	PASS

Test Graph

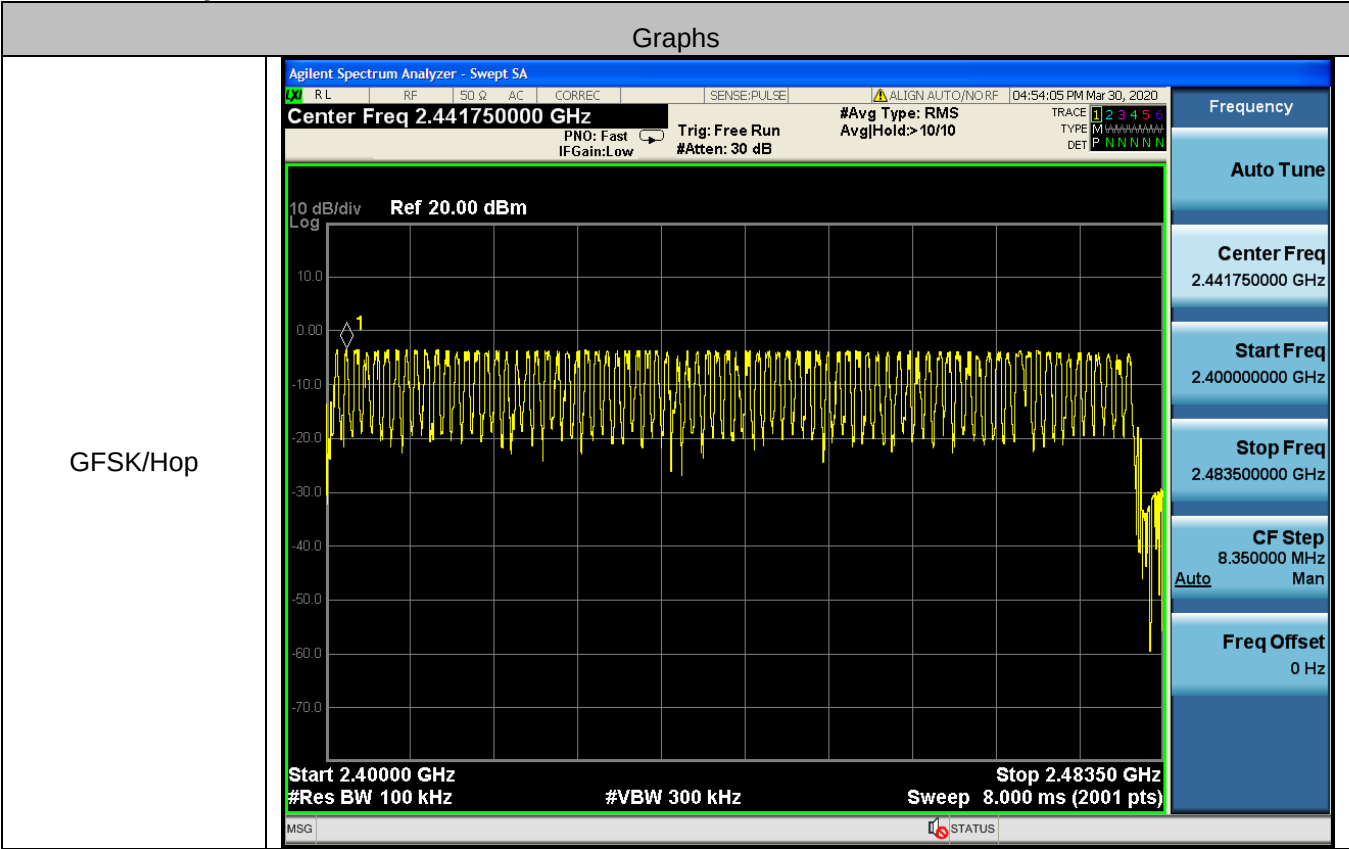




A.4 Hopping Channel Number

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

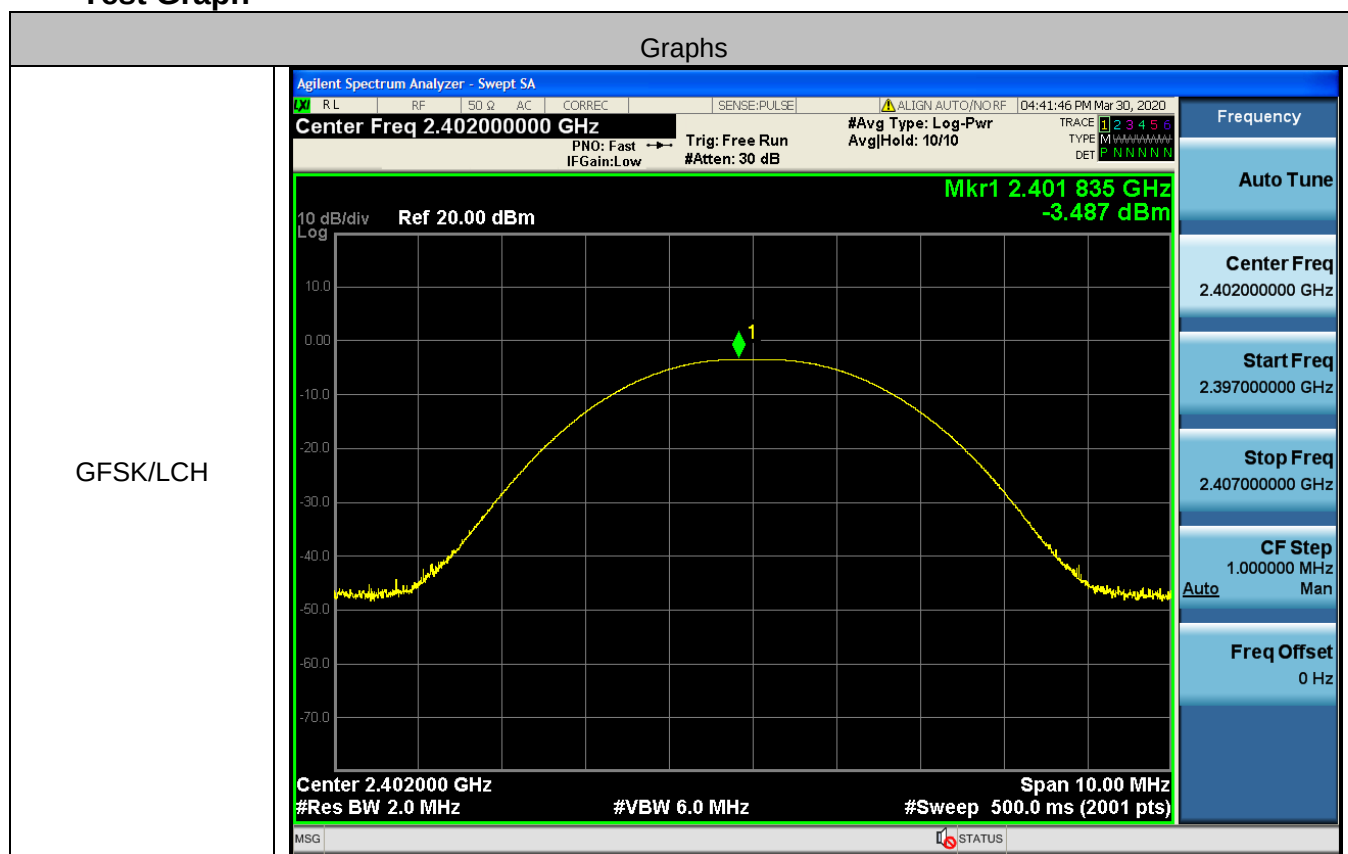
Test Graph



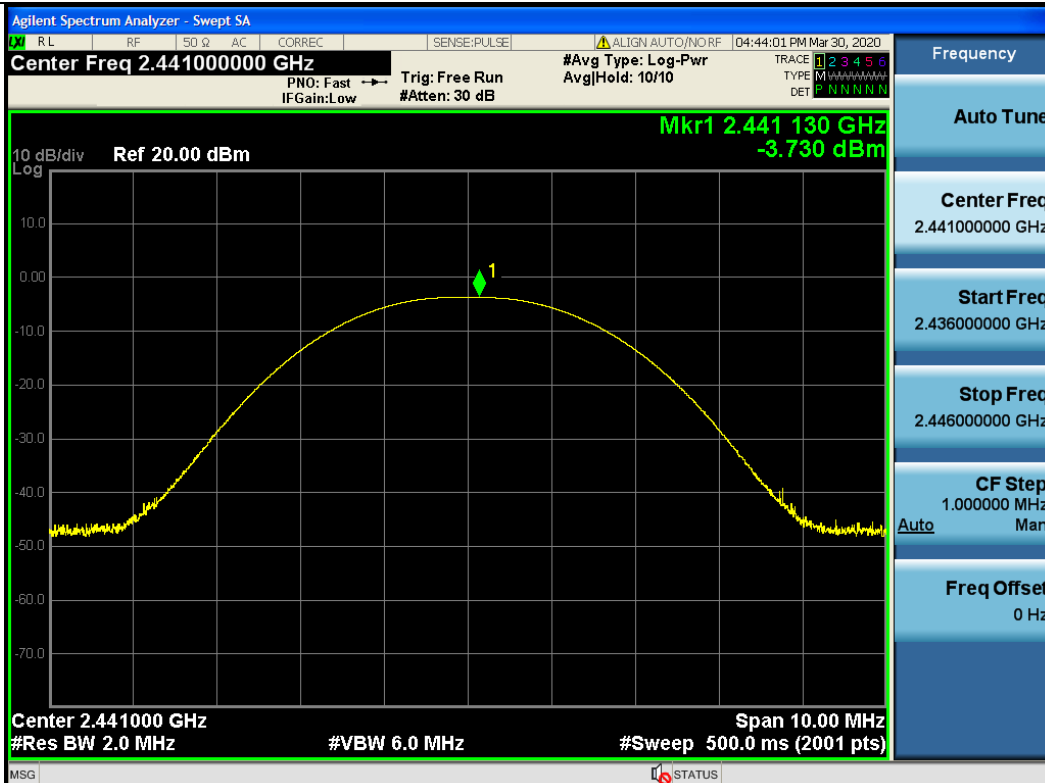
A.5 Conducted Peak Output Power

Mode	Channel.	Maximum Peak Output Power [dBm]	Limit [dBm]	Verdict
GFSK	LCH	-3.487	21	PASS
GFSK	MCH	-3.730	21	PASS
GFSK	HCH	-4.114	21	PASS

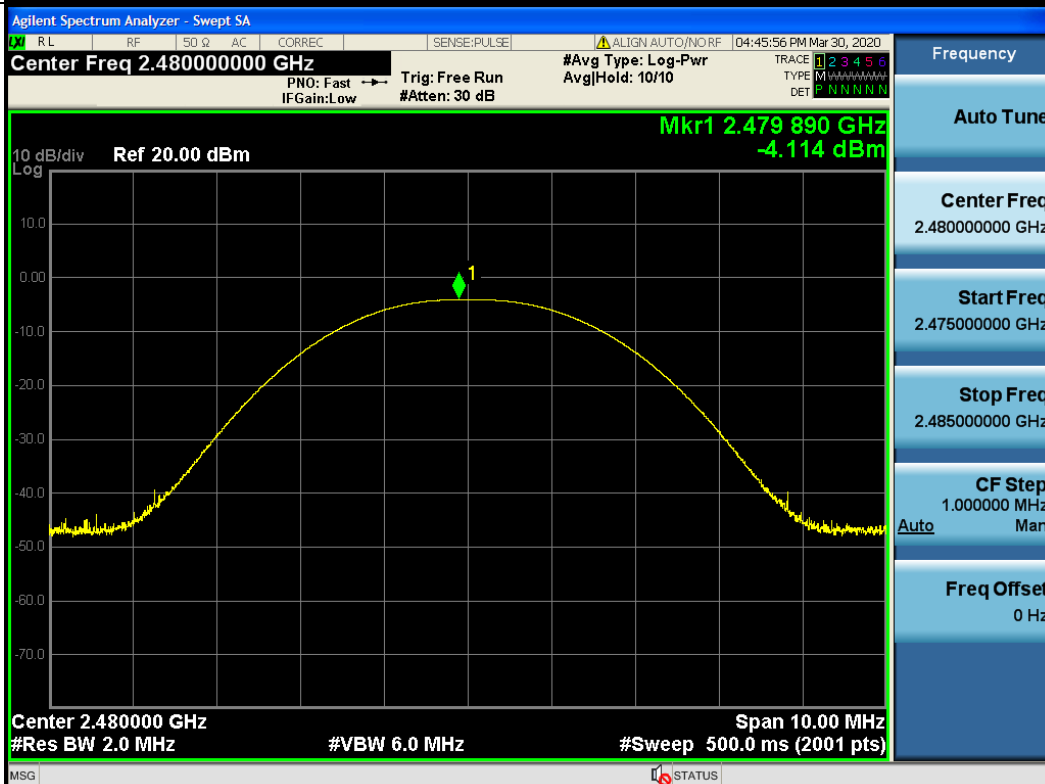
Test Graph



GFSK/MCH



GFSK/HCH



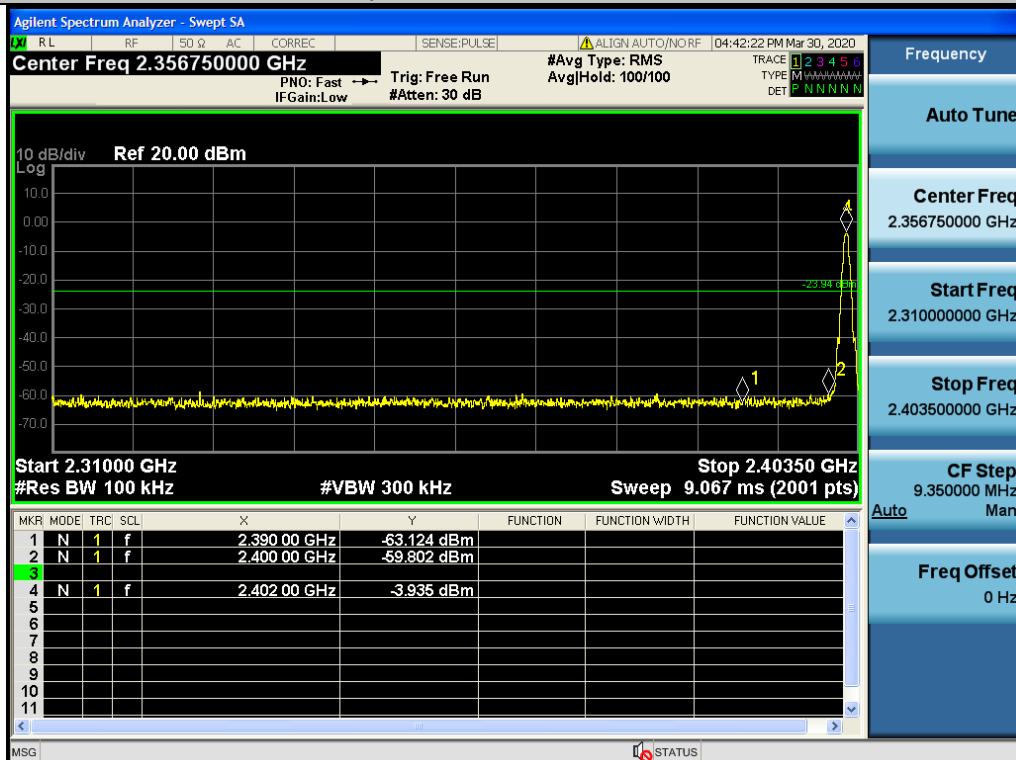
A.6 Band-edge for RF Conducted Emissions

Type	Carrier Frequency(MHz)	Frequency(MHz)	Carrier Frequency Power [dBm]	Bandedge Peak(dBm)	Upper limit(dBm)	Conclusion
1DH5	2402	2400	-3.935	-59.8	-23.935	Pass
1DH5	2480	2488.326	-4.495	-57.042	-24.495	Pass
1DH5-Hopping	2402	2399.37	-3.494	-52.561	-23.494	Pass
1DH5-Hopping	2480	2500	-3.813	-58.96	-23.813	Pass

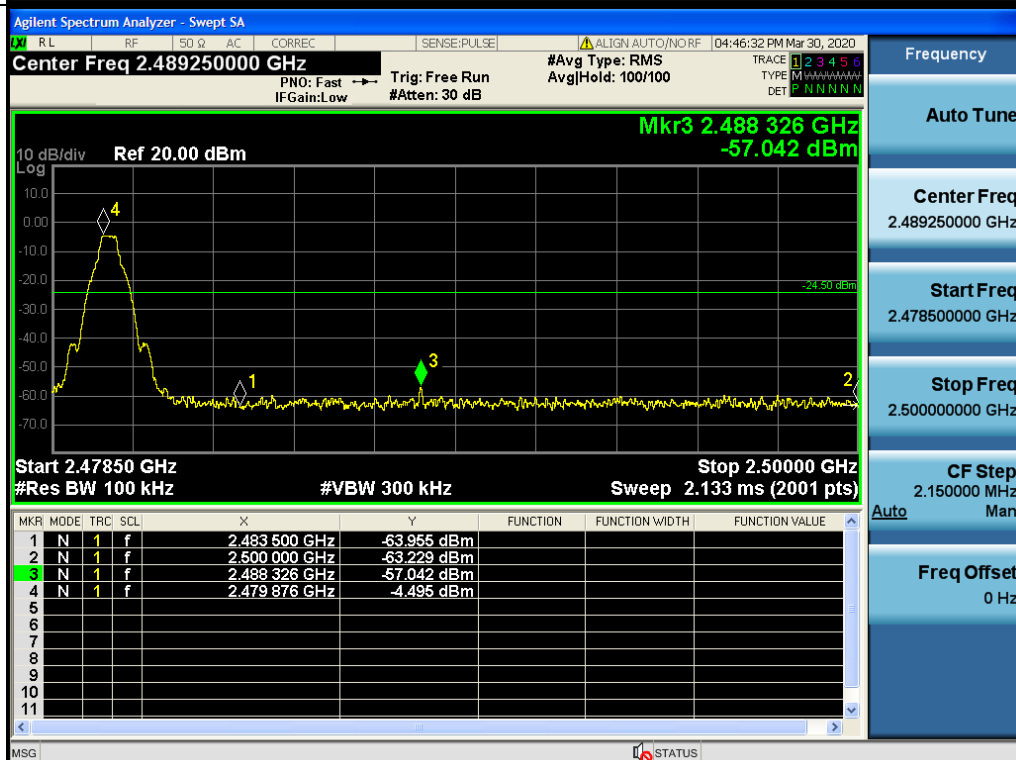
Test Graph

Graphs

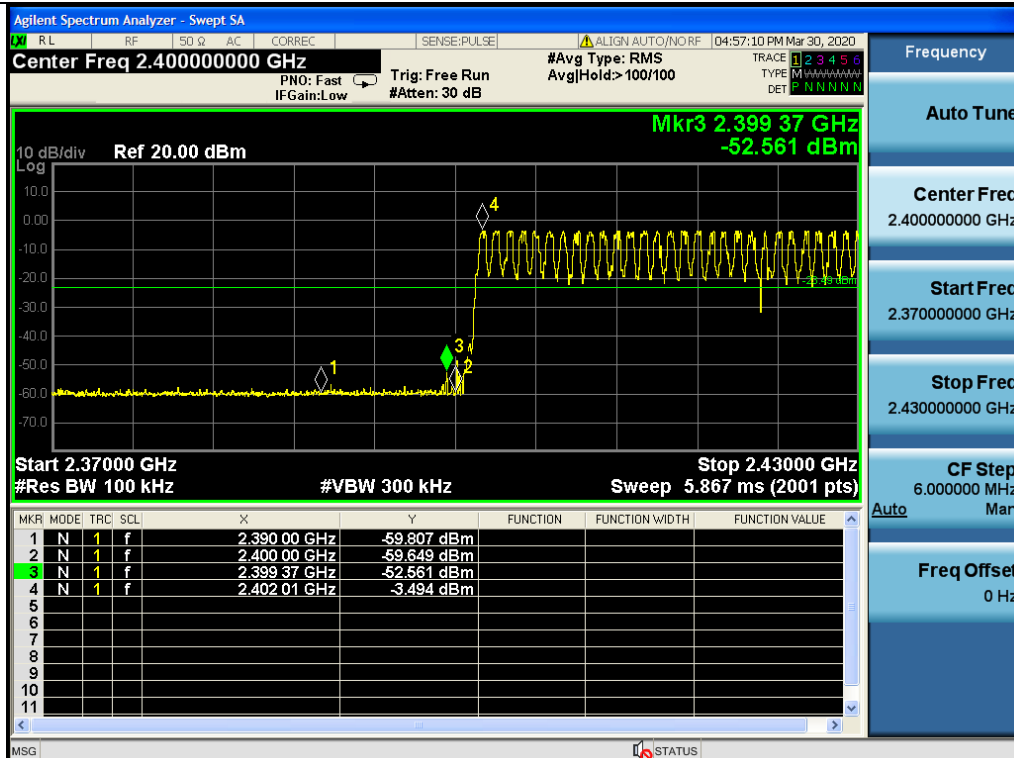
GFSK/LCH/No Hop



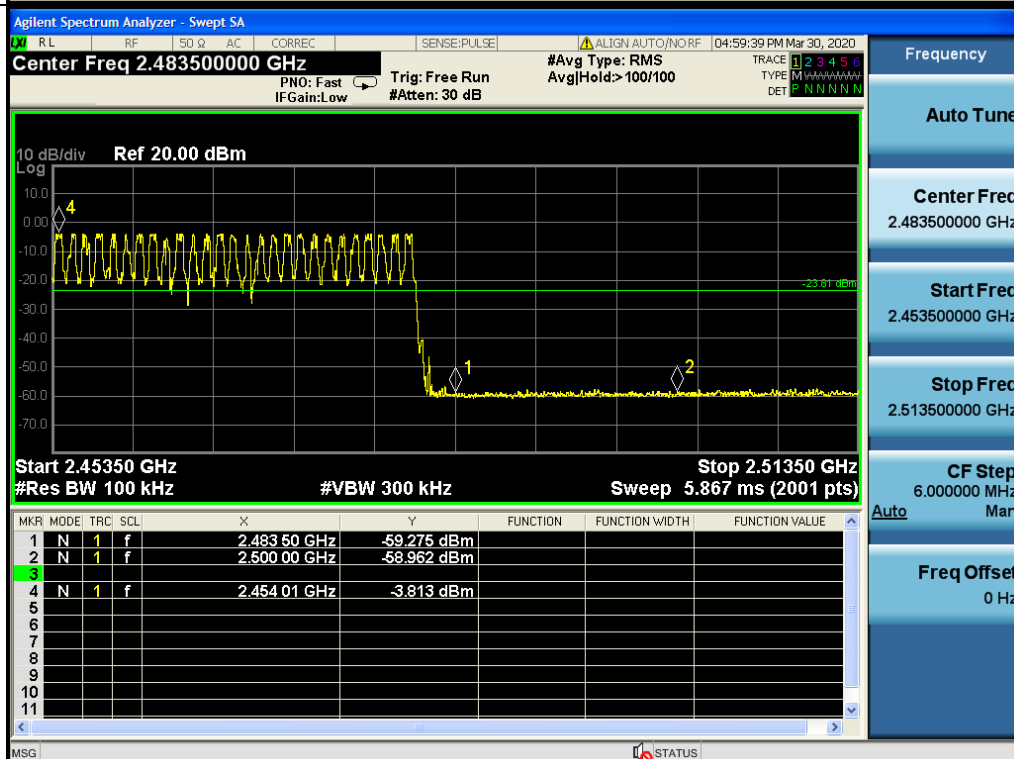
GFSK/HCH/No Hop



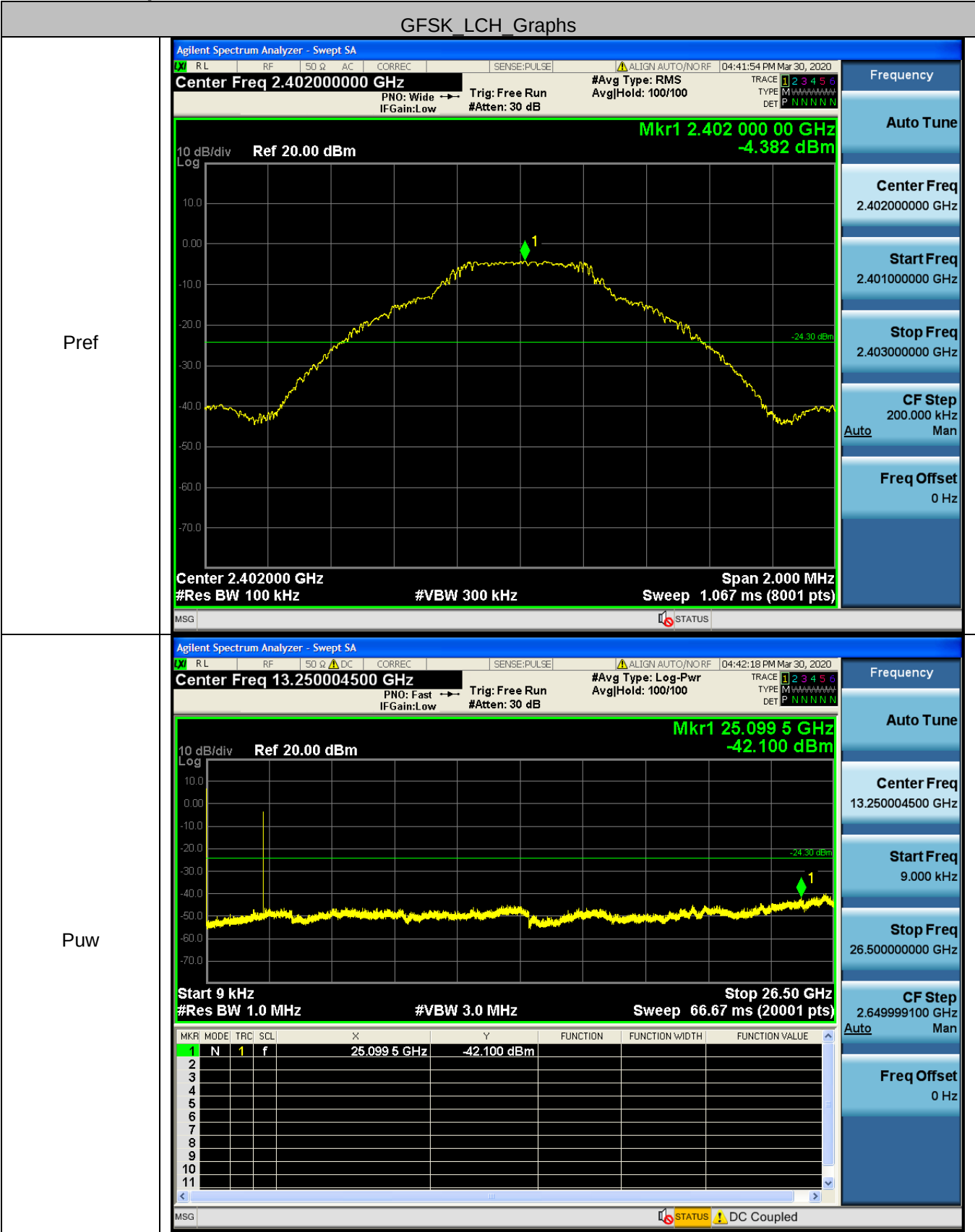
GFSK/LCH/Hop



GFSK/HCH/Hop

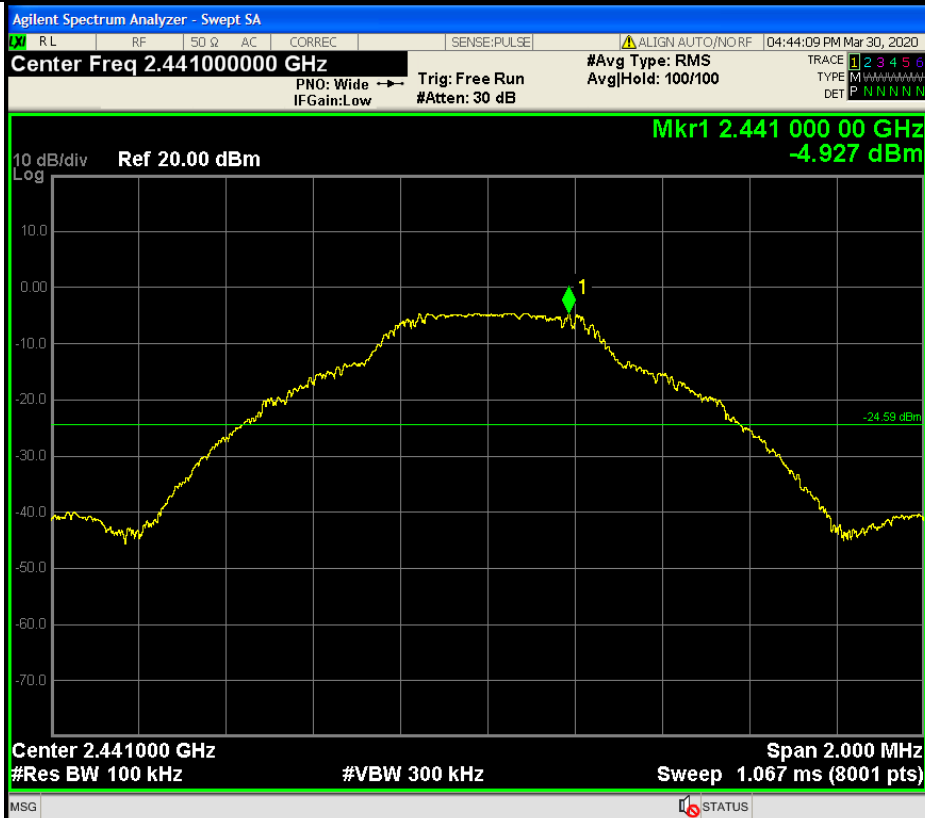


A.7 RF Conducted Spurious Emissions
Test Graph

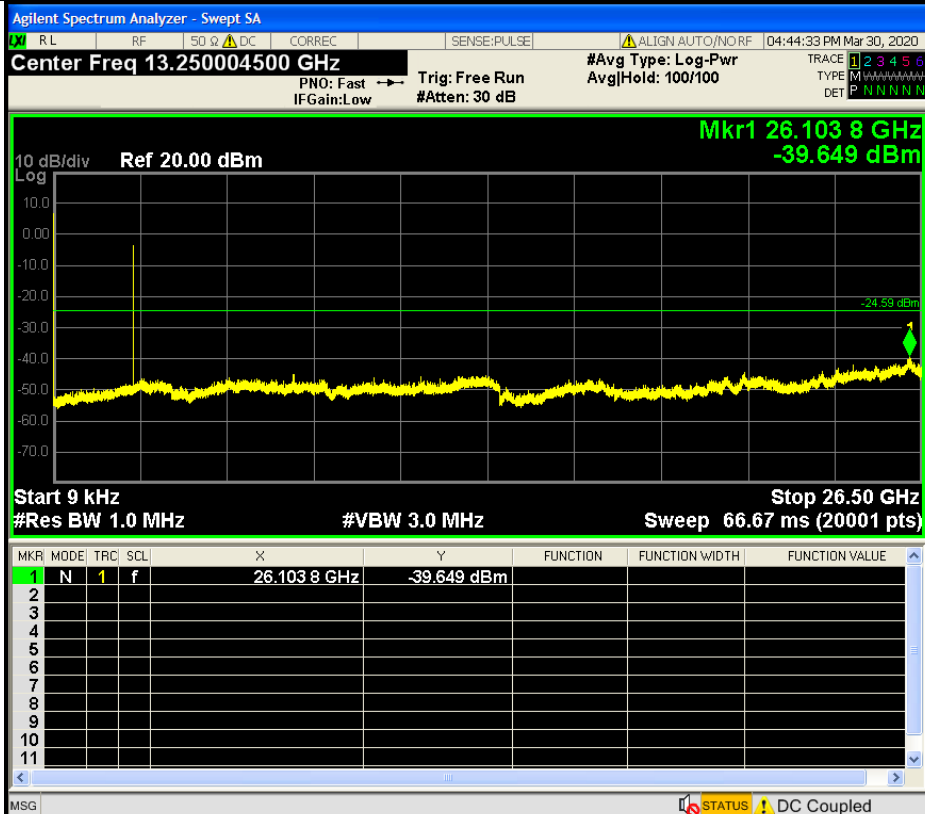


GFSK MCH Graphs

Pref

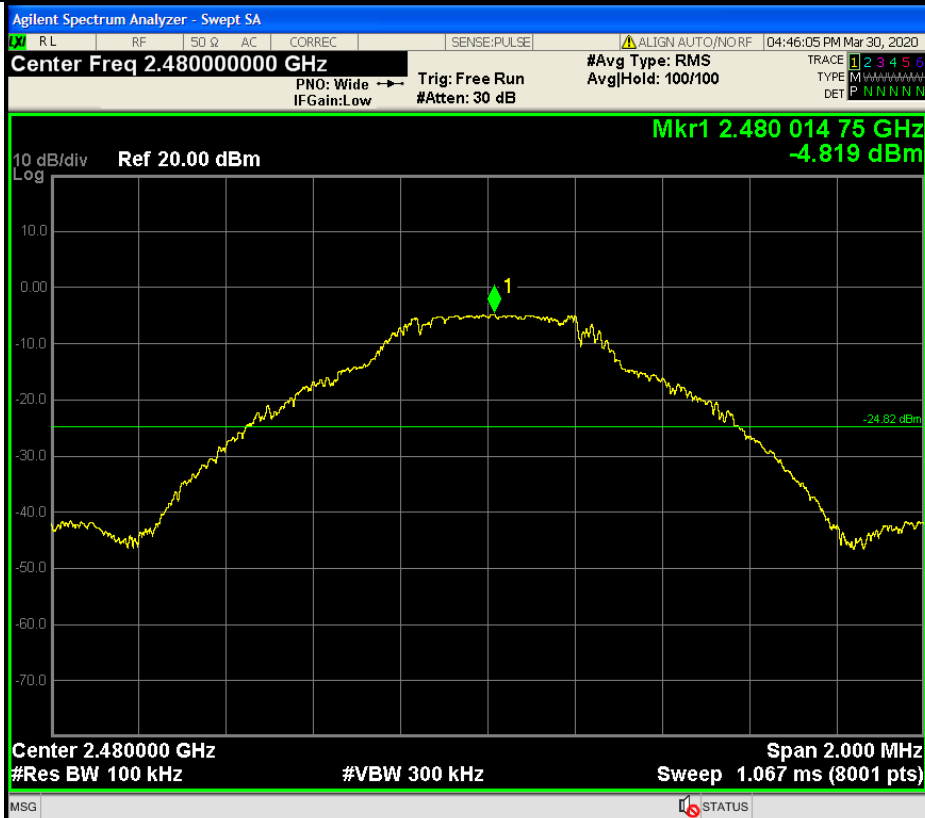


Puw



GFSK_HCH_Graphs

Pref

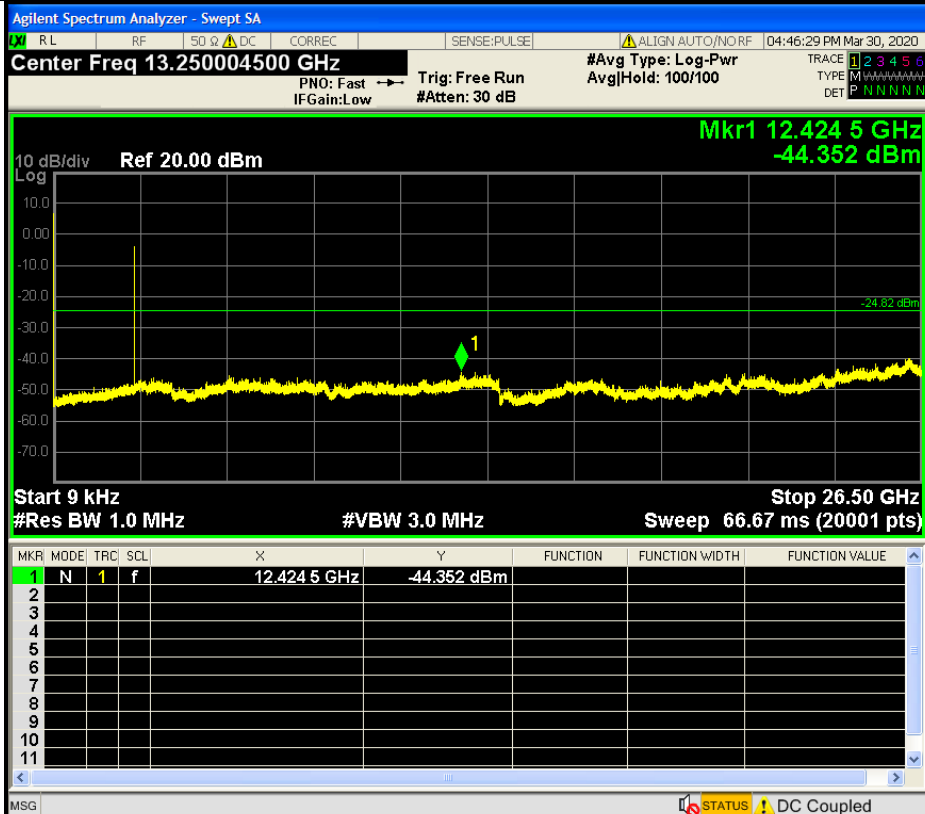


Frequency

Auto Tune

Center Freq
2.480000000 GHzStart Freq
2.479000000 GHzStop Freq
2.481000000 GHzCF Step
200.000 kHz
Auto ManFreq Offset
0 Hz

Puw



Frequency

Auto Tune

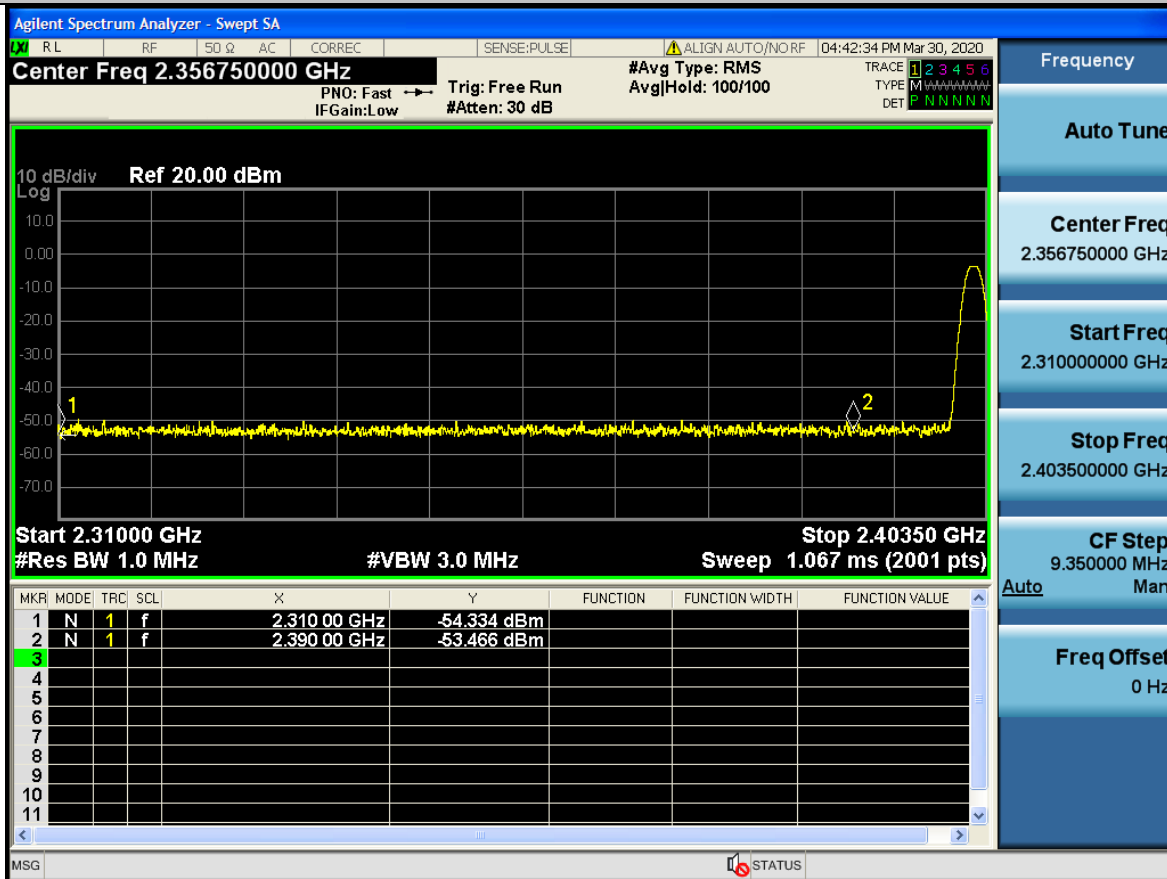
Center Freq
13.250004500 GHzStart Freq
9.000 kHzStop Freq
26.500000000 GHzCF Step
2.649999100 GHz
Auto ManFreq Offset
0 Hz

A.8 Restrict-band band-edge measurements

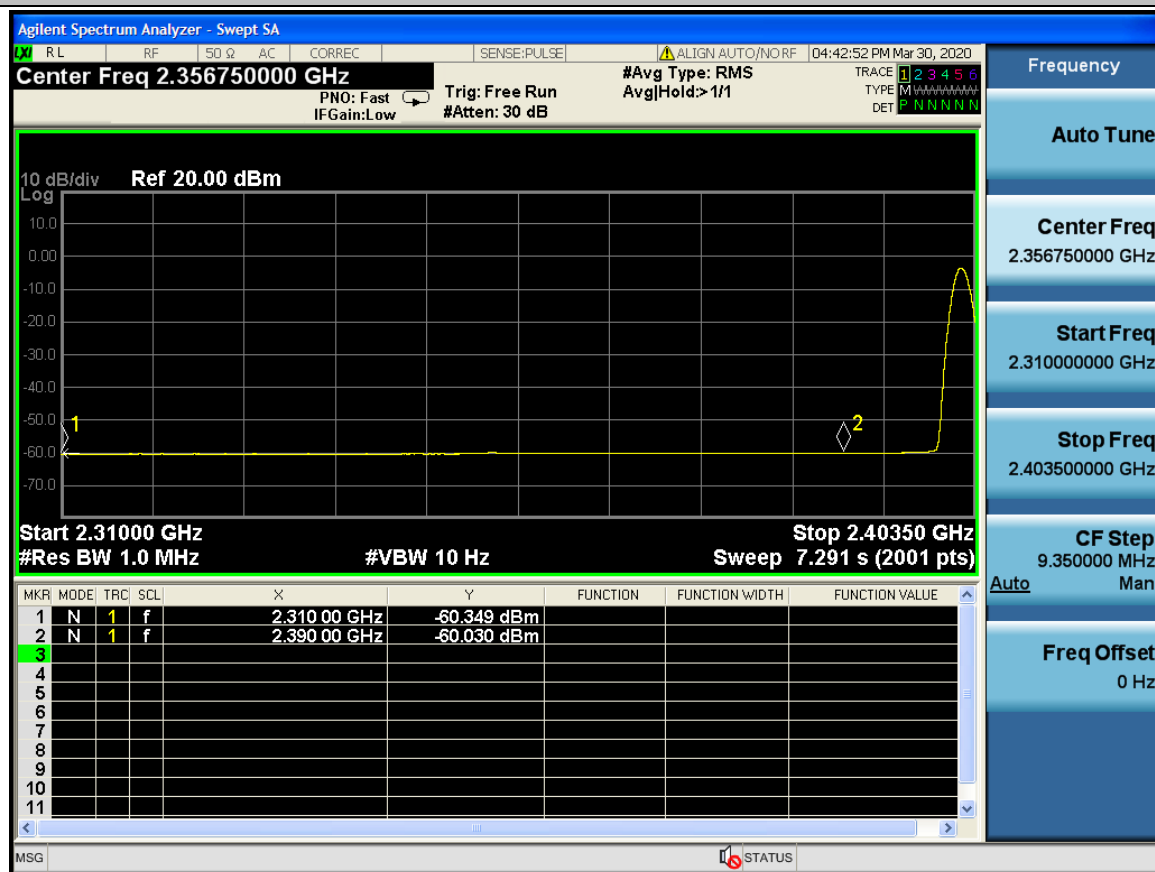
Type	Carrier Frequency (MHz)	Frequency(M Hz)	Gain	Ground Factor	Peak Value(dBm)	E [dBuV/m]	Limit [dBuV/m]	Conclusion
1DH5	2402	2390	2.00	0.00	-53.466	43.734	74	Pass
1DH5	2480	2500	2.00	0.00	-50.953	46.247	74	Pass

Type	Carrier Frequency (MHz)	Frequency(M Hz)	Gain	Ground Factor	Average Value(dBm)	E [dBuV/m]	Limit [dBuV/m]	Conclusion
1DH5	2402	2390	2.00	0.00	-60.030	37.17	54	Pass
1DH5	2480	2500	2.00	0.00	-58.418	38.782	54	Pass

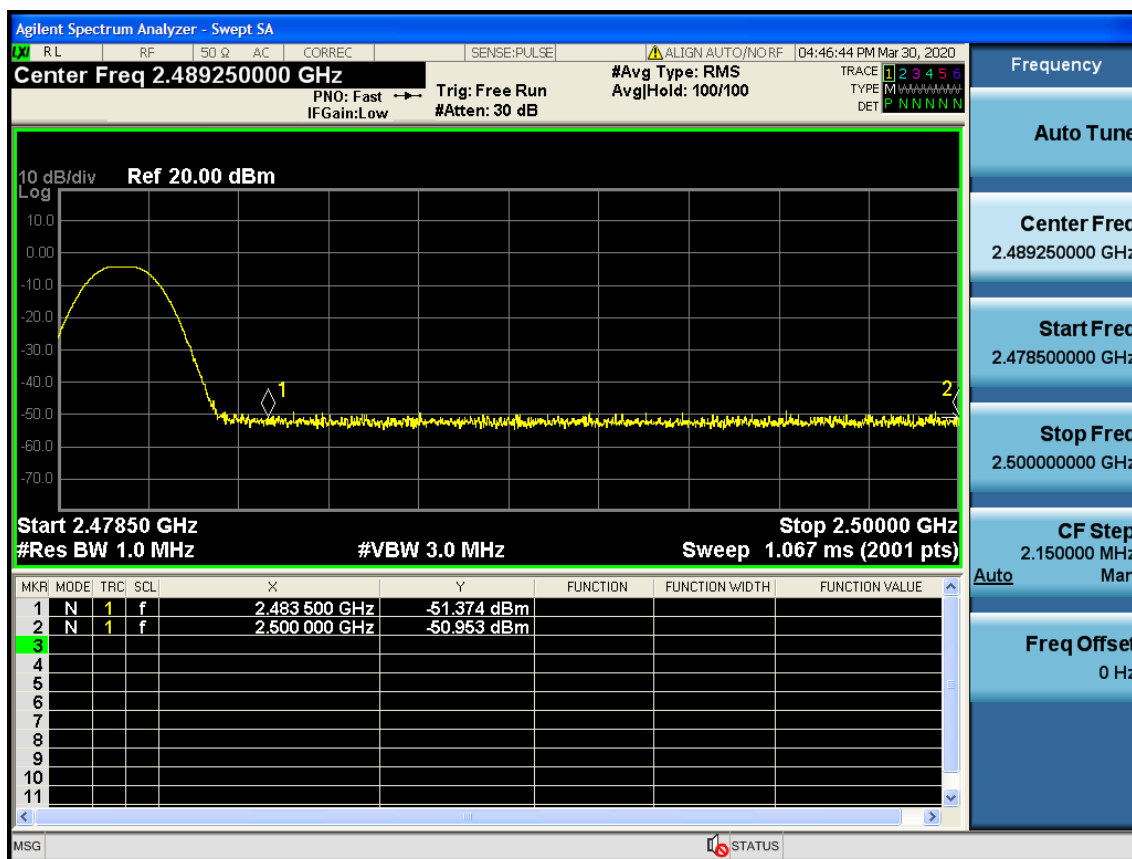
Restrict-band band-edge measurements_2402_PEAK_DH5



Restrict-band band-edge measurements_2402_AV_DH5



Restrict-band band-edge measurements_2480_PEAK_DH5



Restrict-band band-edge measurements_2480_AV_DH5

