

Appendix A

RF Test Data for 2.4G (Conducted Measurement)

Product Name: RADIO TRANSMITTER

Trade Mark: NEEWER

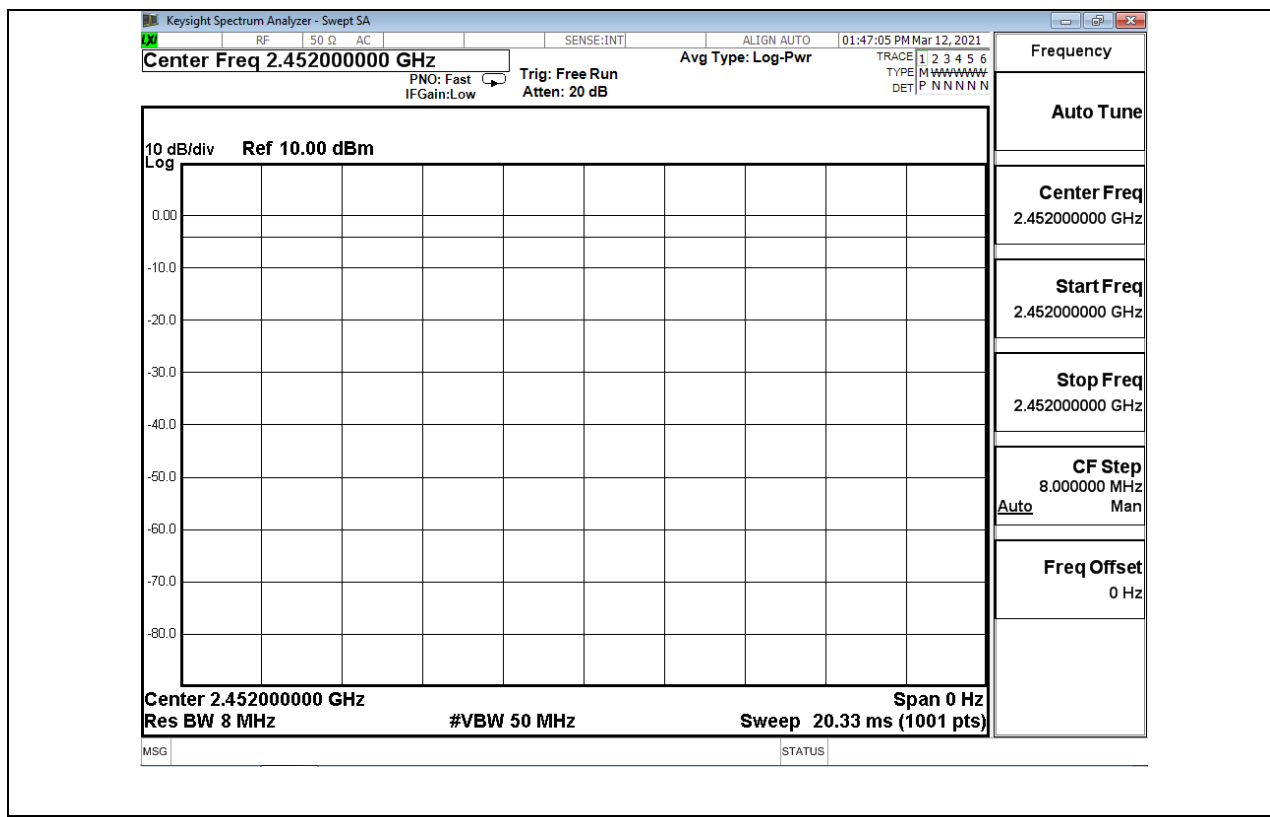
Test Model: VC-816TX

Environmental Conditions

Temperature:	25 ° C
Relative Humidity:	50%
ATM Pressure:	100.0 kPa
Test Engineer:	Kay Hu
Supervised by:	Li Huan

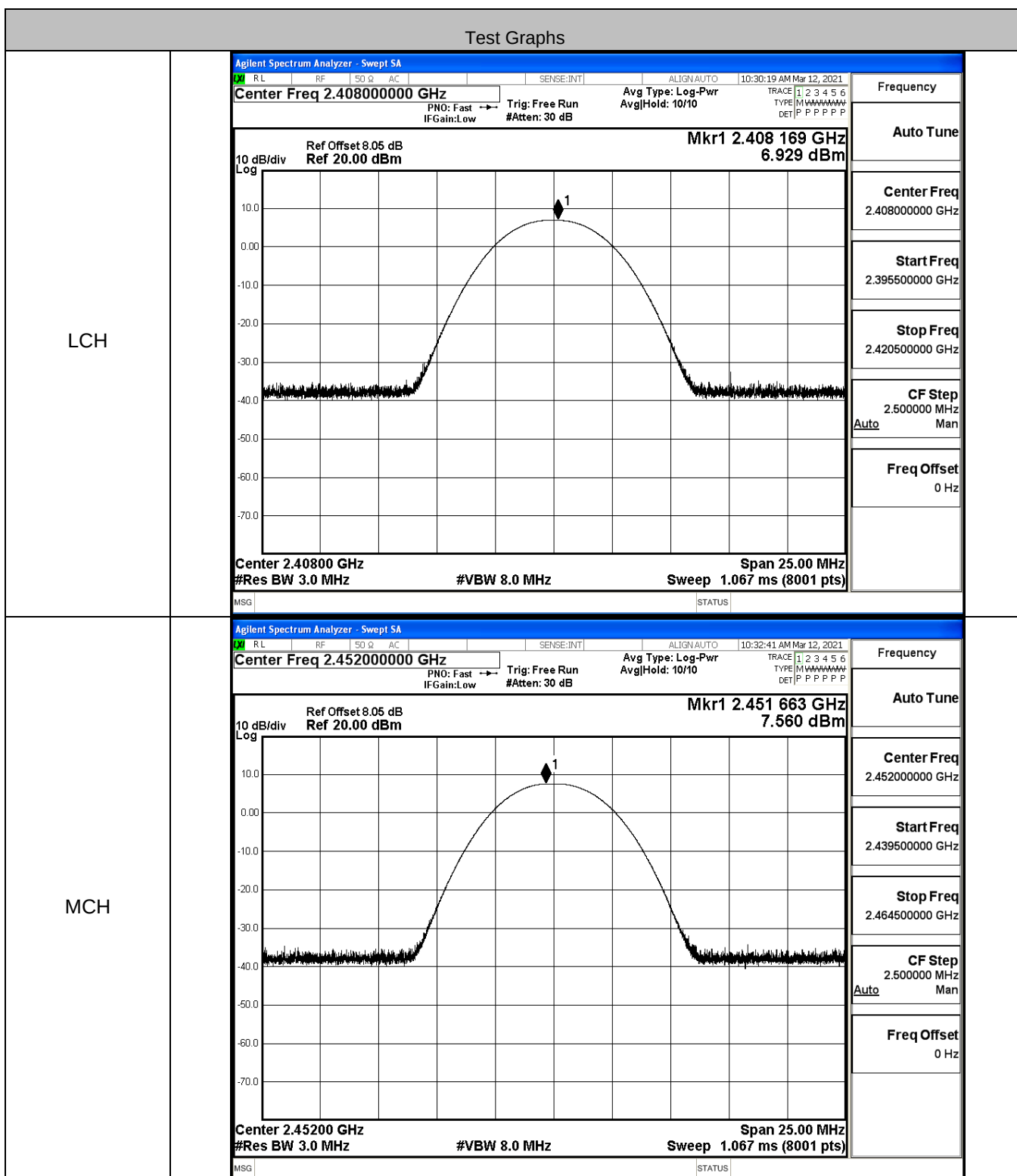
A.1 Duty Cycle

Test Mode	Test Channel	Ant	Duty Cycle[%]	Verdict
GFSK	2452	Ant1	100	PASS

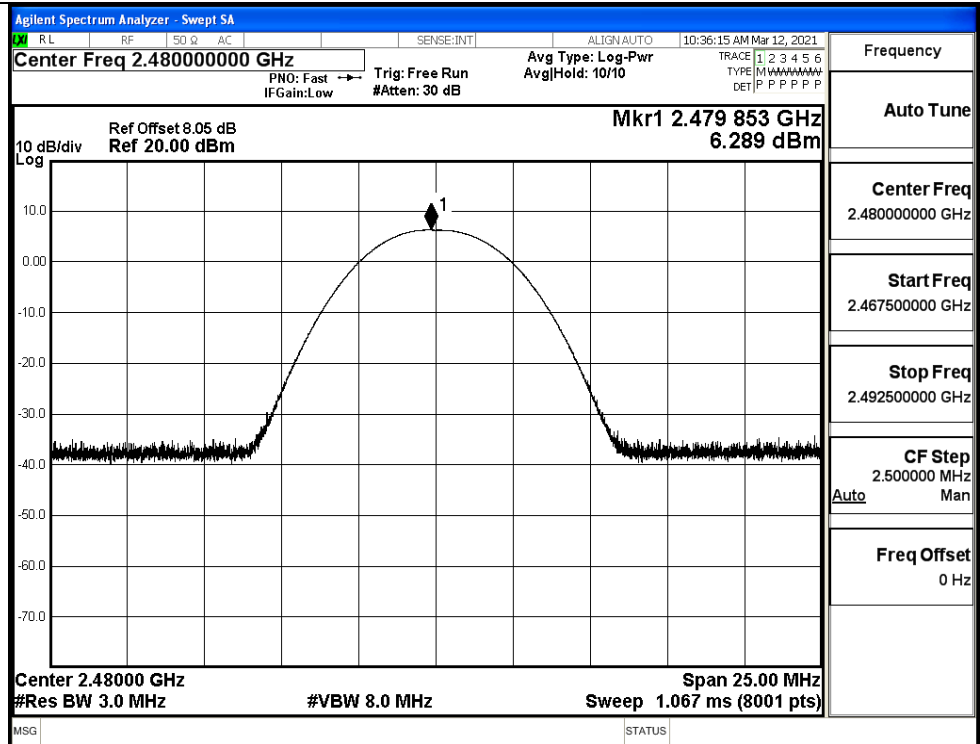


A.2 Maximum Conducted Peak Output Power

Mode	Channel	Conduct Peak Power[dBm]	Limit [dBm]	Verdict
GFSK	LCH	6.929	30	PASS
GFSK	MCH	7.56	30	PASS
GFSK	HCH	6.289	30	PASS



HCH

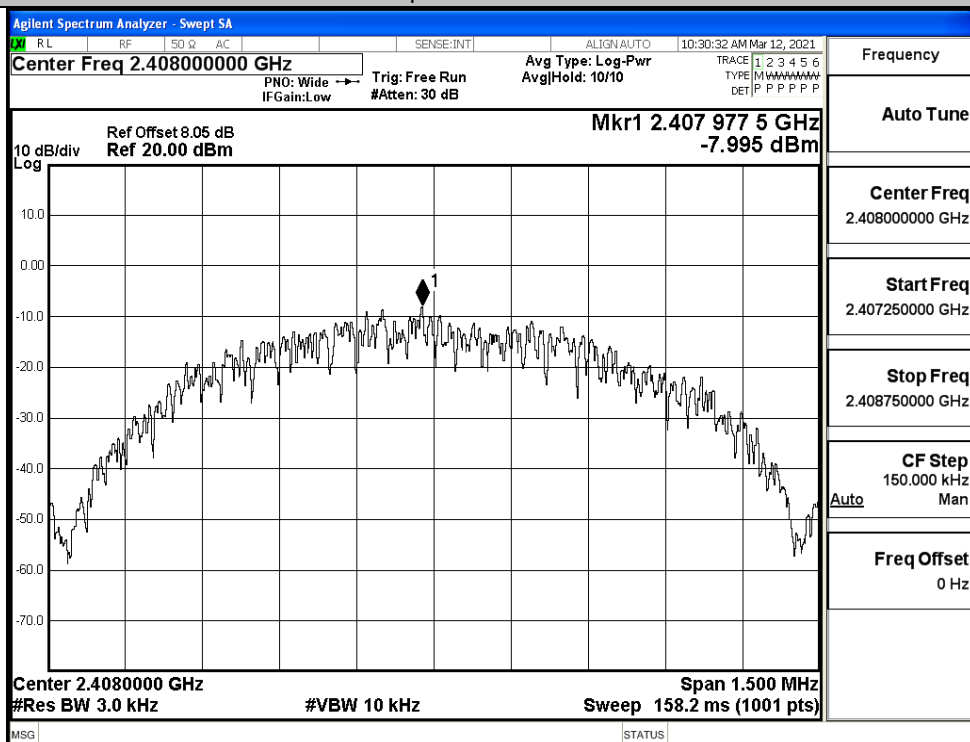


A.3 Maximum Power Spectral Density

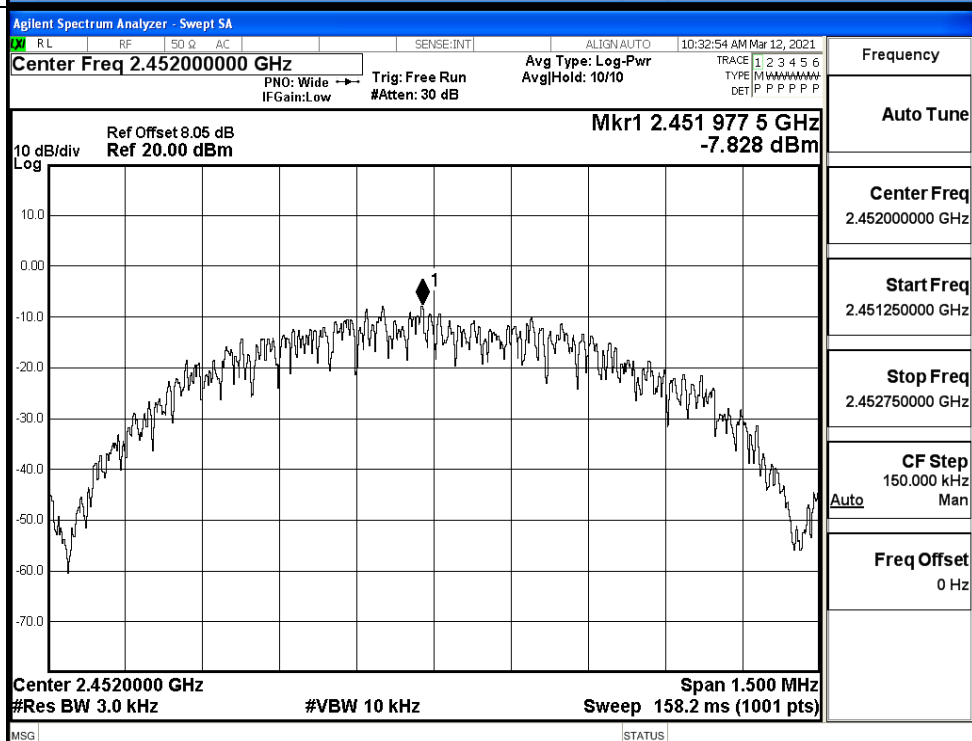
Mode	Channel	PSD [dBm/3KHz]	Limit [dBm/3KHz]	Verdict
GFSK	LCH	-7.995	8	PASS
GFSK	MCH	-7.828	8	PASS
GFSK	HCH	-8.654	8	PASS

Test Graphs

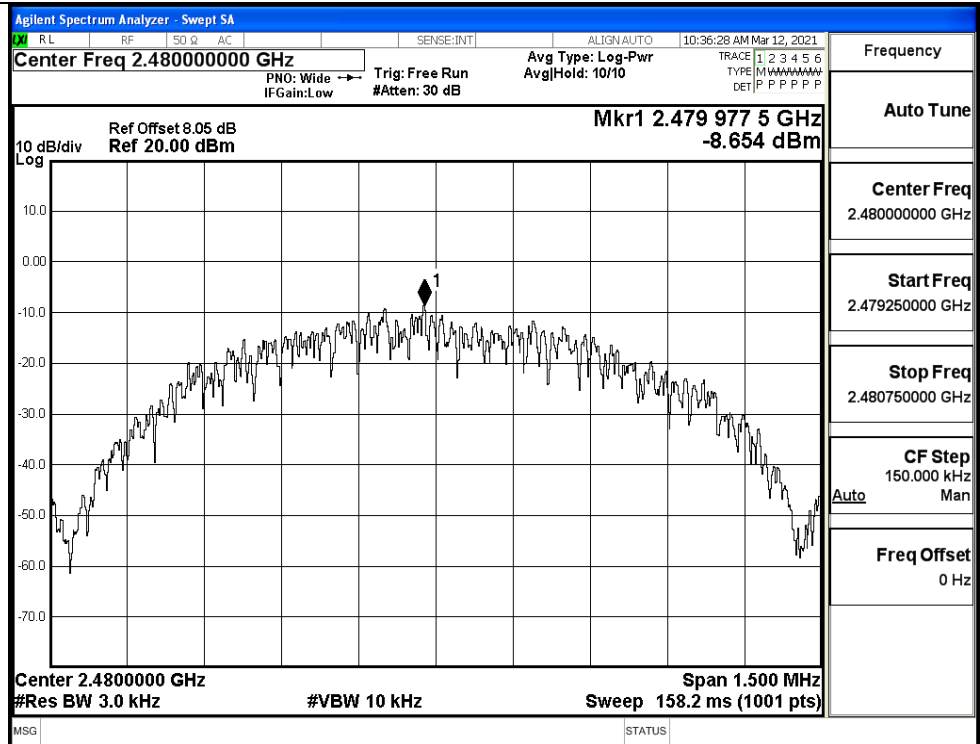
LCH



MCH



HCH

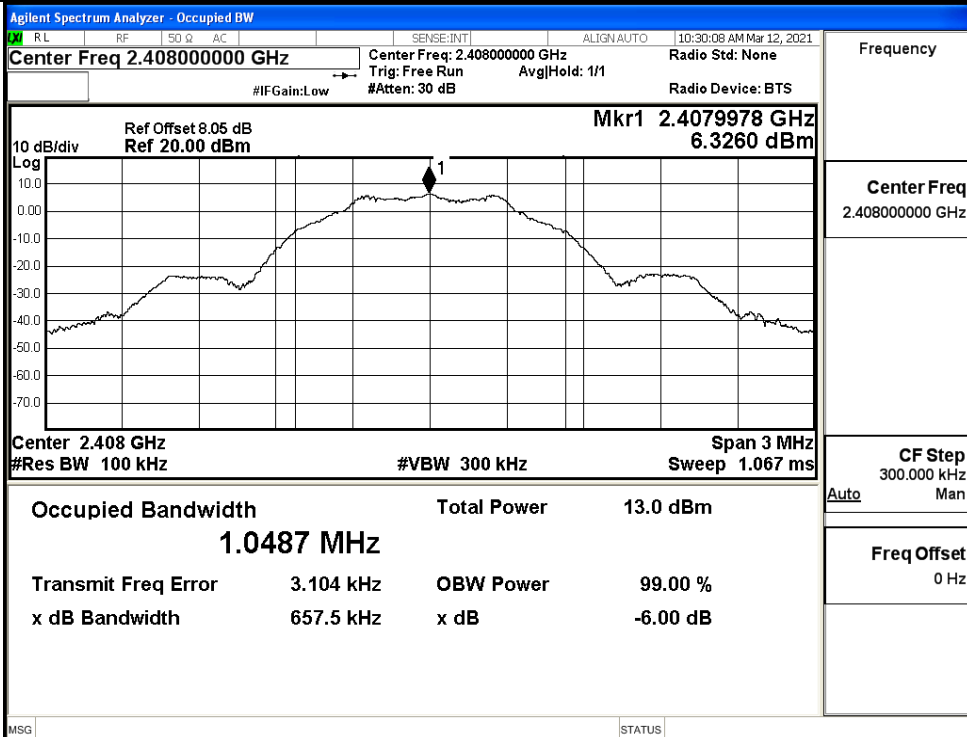


A.4 6dB Bandwidth

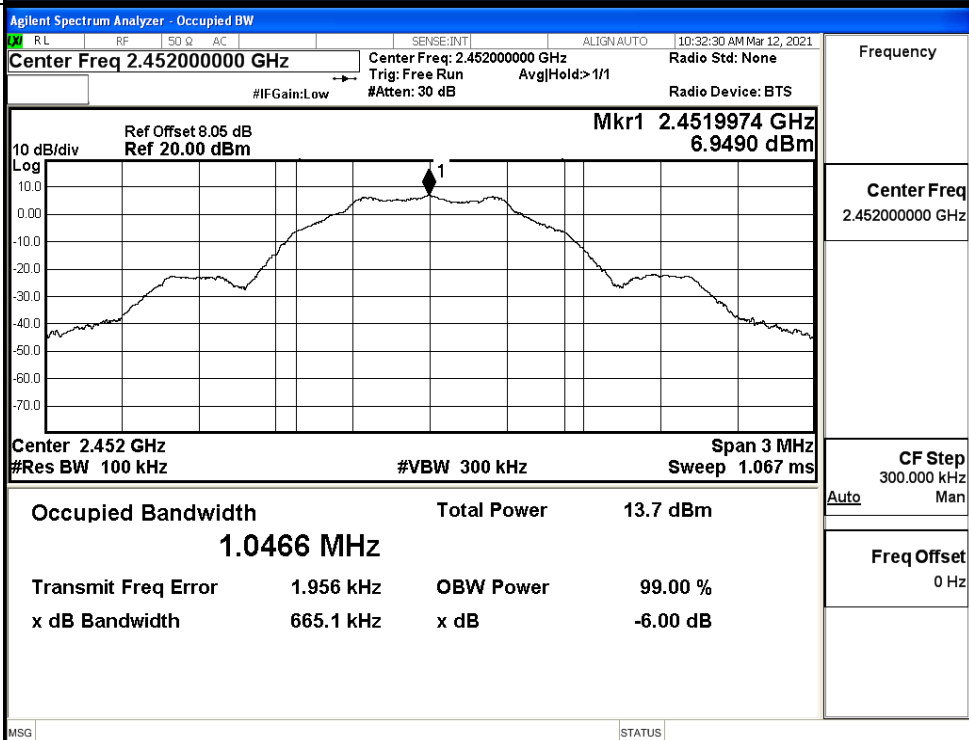
Mode	Channel	6dB Bandwidth [MHz]	Limit [MHz]	Verdict
GFSK	LCH	0.6575	≥ 0.5	PASS
GFSK	MCH	0.6651	≥ 0.5	PASS
GFSK	HCH	0.6712	≥ 0.5	PASS

Test Graphs

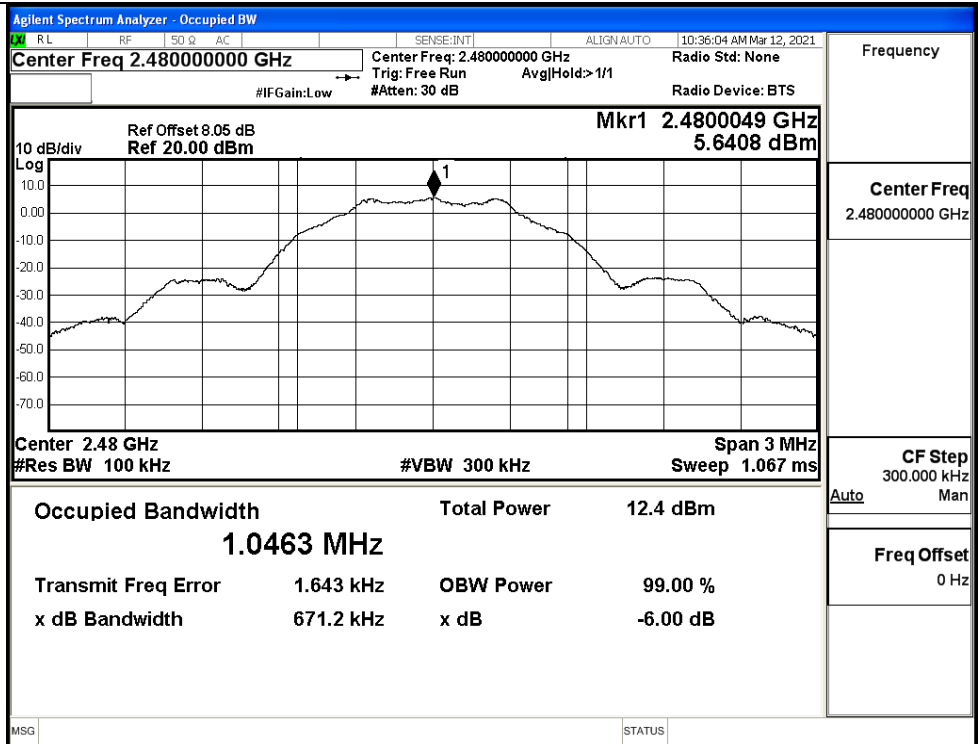
LCH



MCH



HCH

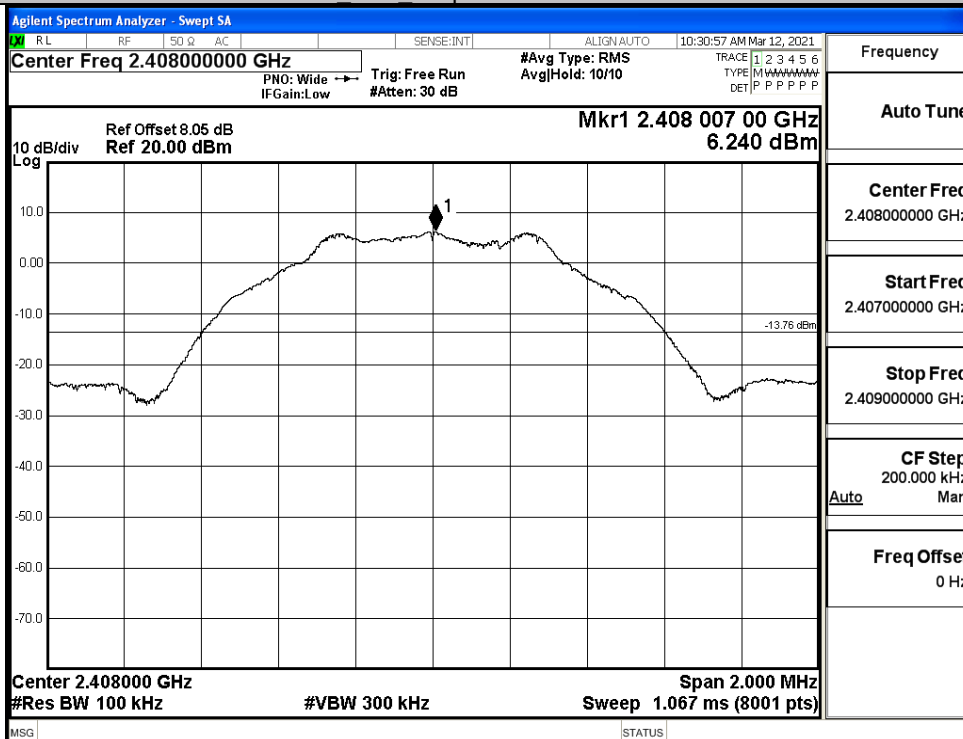


A.5 RF Conducted Spurious Emissions

Mode	Channel	Pref [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
GFSK	LCH	6.24	-38.742	-13.760	PASS
GFSK	MCH	6.957	-37.570	-13.043	PASS
GFSK	HCH	5.686	-38.371	-14.314	PASS

GFSK LCH Graphs

Pref/GFSK/LCH



Frequency

Auto Tune

Center Freq
2.408000000 GHz

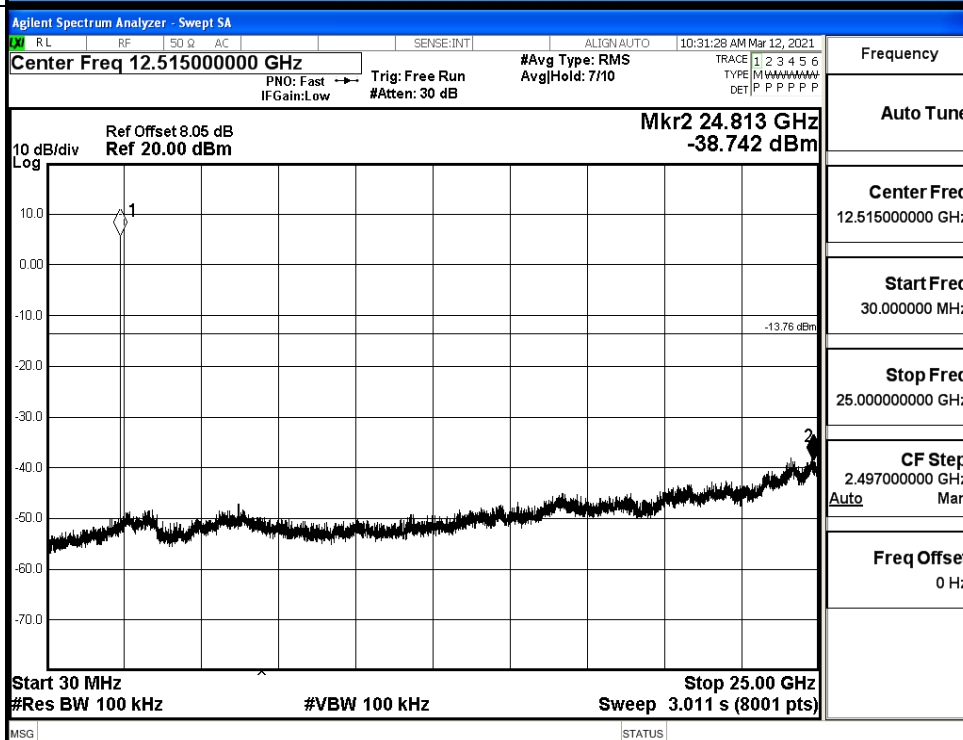
Start Freq
2.407000000 GHz

Stop Freq
2.409000000 GHz

CF Step
200.000 kHz
Auto Man

Freq Offset
0 Hz

Puw/GFSK/LCH



Frequency

Auto Tune

Center Freq
12.515000000 GHz

Start Freq
30.000000 MHz

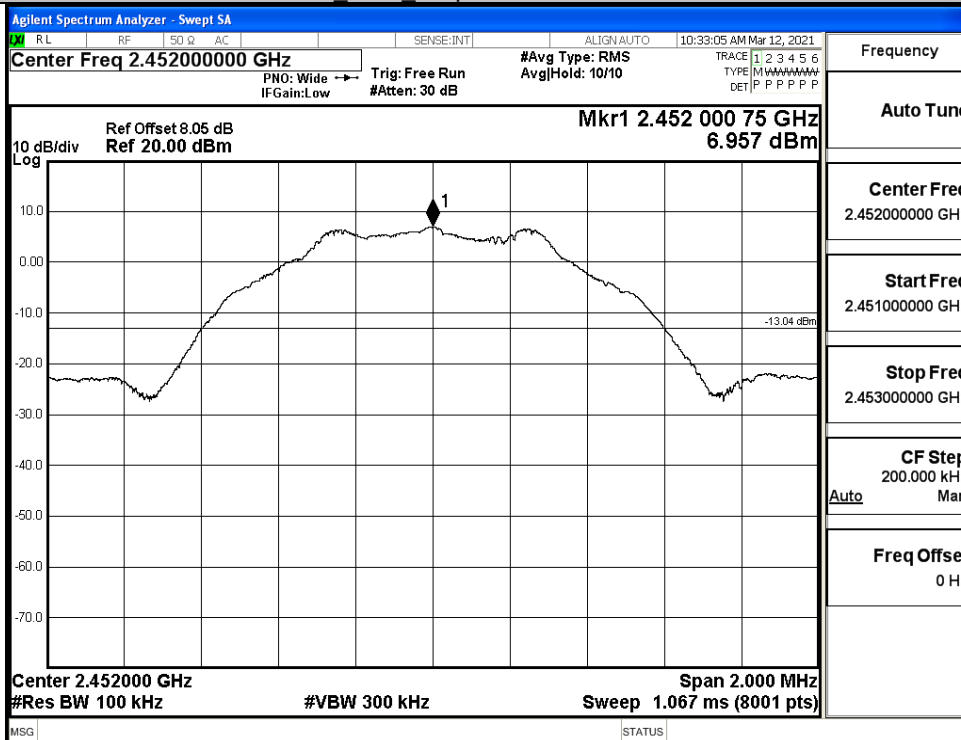
Stop Freq
25.000000000 GHz

CF Step
2.497000000 GHz
Auto Man

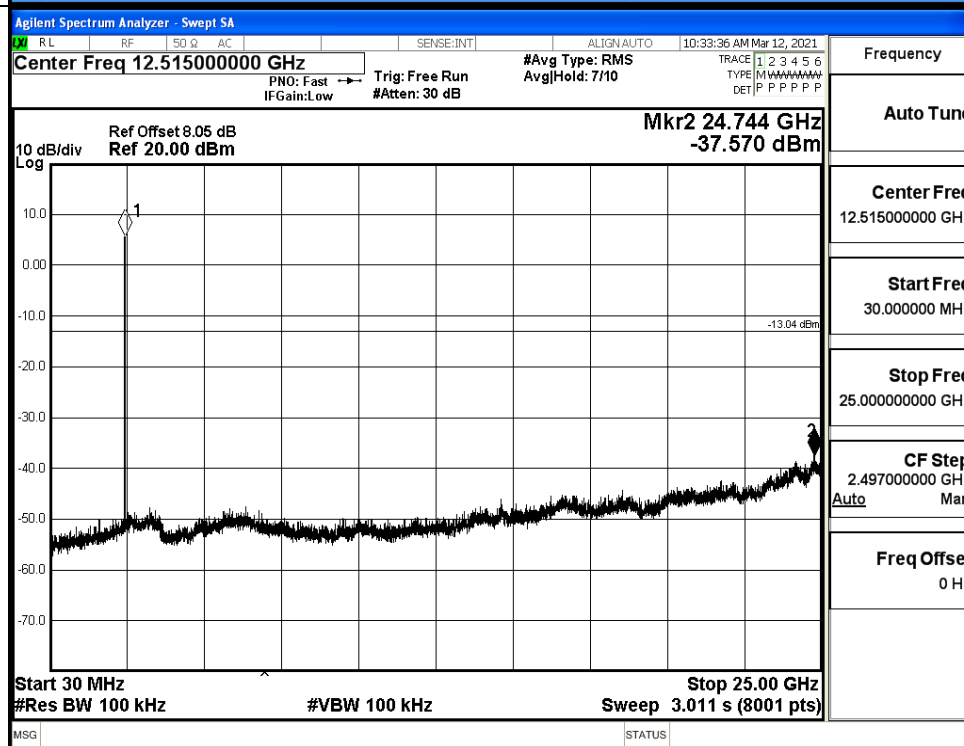
Freq Offset
0 Hz

GFSK MCH Graphs

Pref/GFSK/MCH

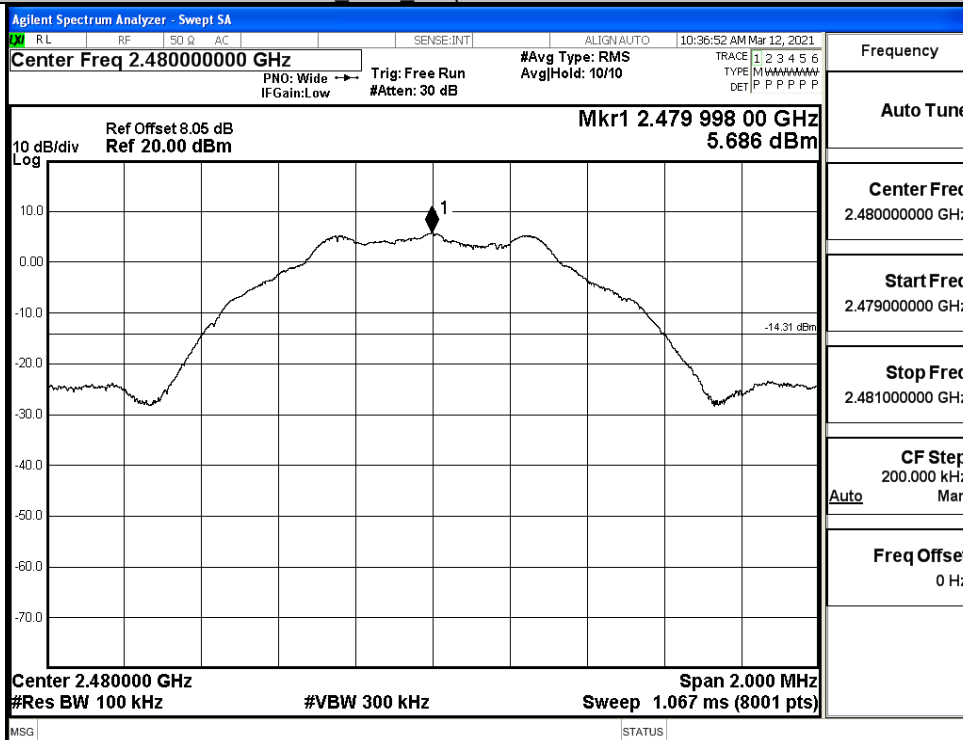


Puw/GFSK/MCH

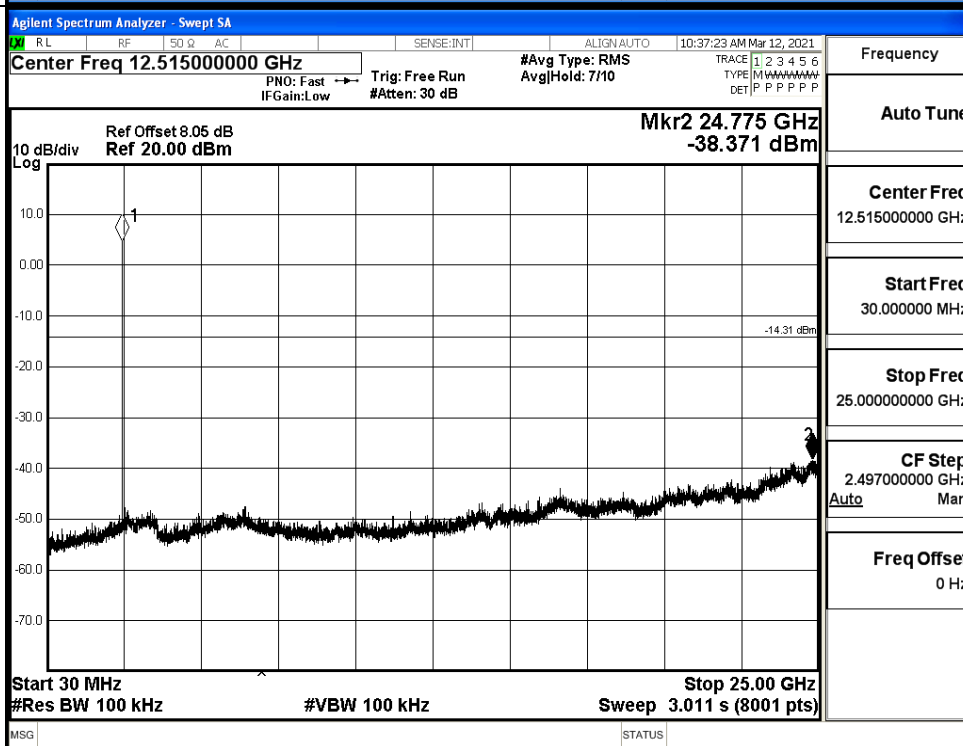


GFSK HCH Graphs

Pref/GFSK/HCH



Puw/GFSK/HCH

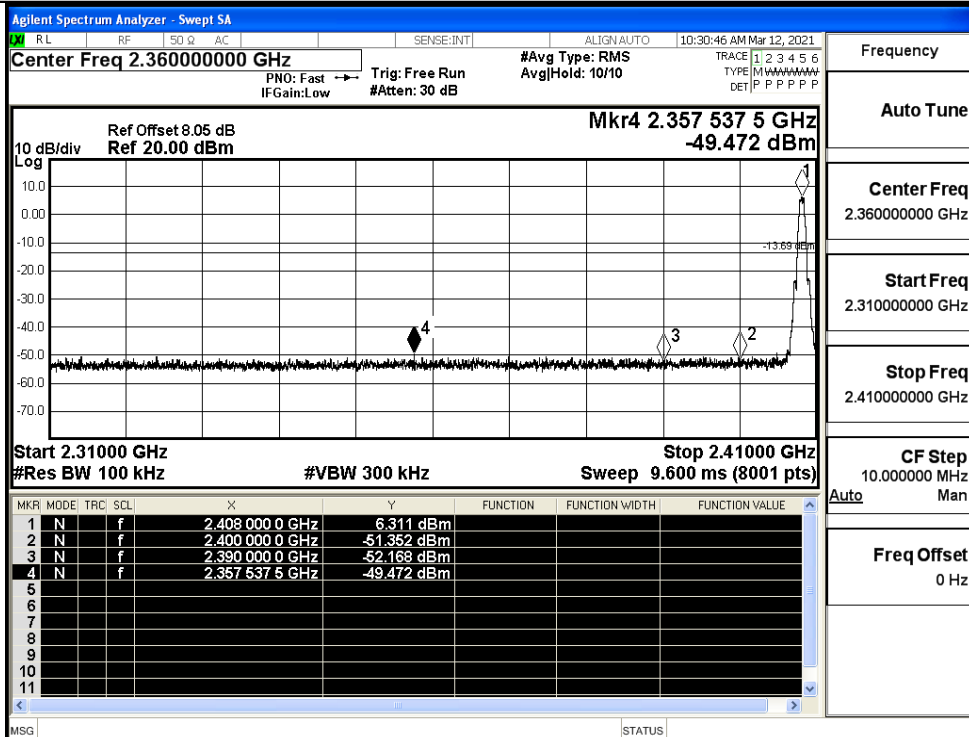


A.6 Band-edge for RF Conducted Emissions

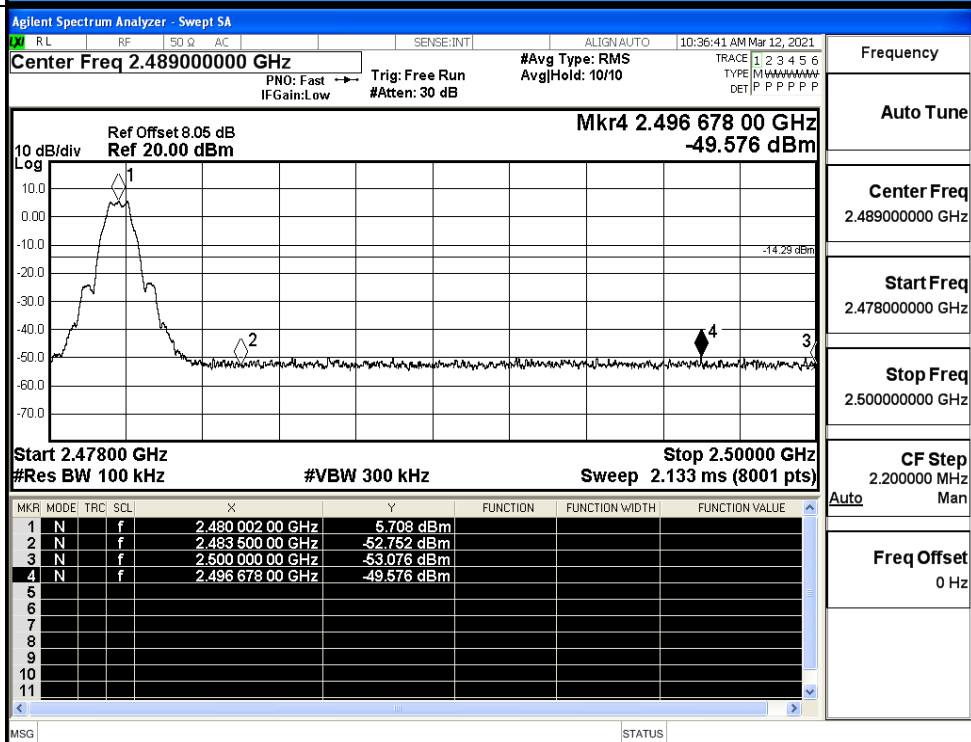
Mode	Channel	Carrier Power[dBm]	Max.Spurious Level [dBm]	Limit [dBm]	Verdict
GFSK	LCH	6.311	-49.472	-13.69	PASS
GFSK	HCH	5.708	-49.576	-14.29	PASS

Test Graphs

LCH



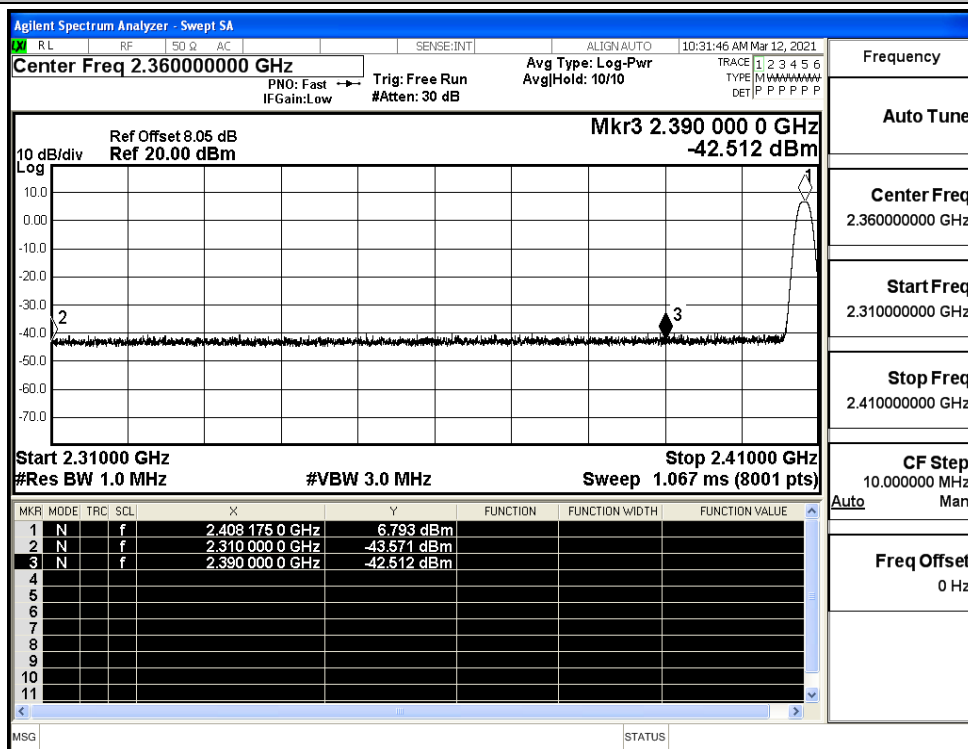
HCH



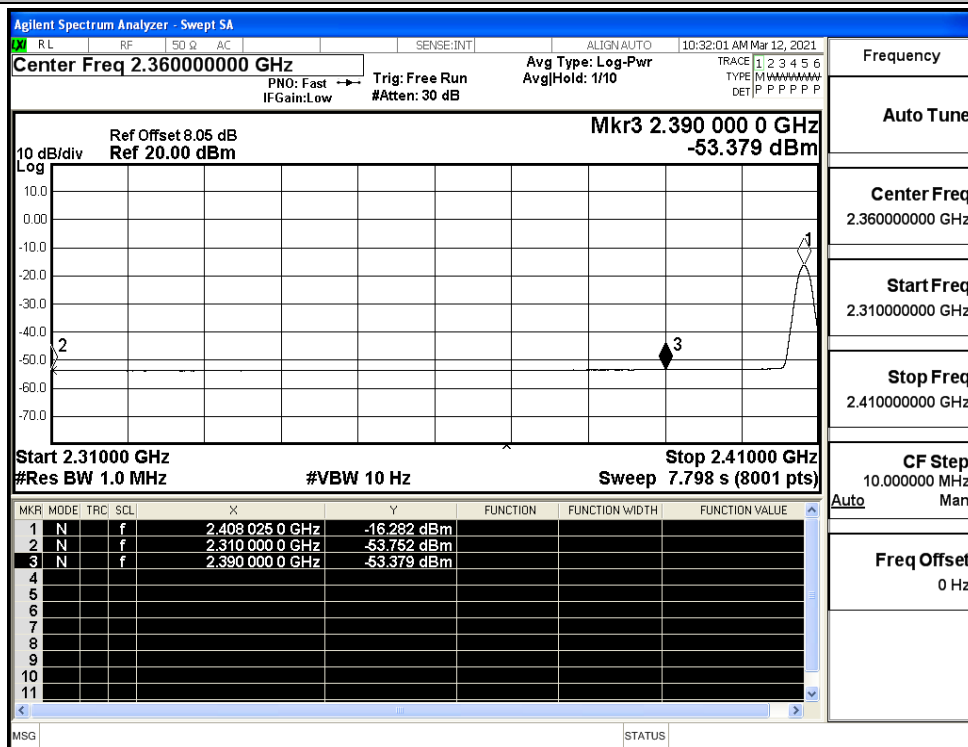
A.7 Restrict-band band-edge measurements

Test Mode	Test Channel	Ant	Freq.	Power [dBm]	Gain	Ground Factor	E [dBuV/m]	Detector	Limit [dBuV/m]	Verdi
GFSK	2408	Ant1	2310.0	-43.57	2.0	0	53.66	PEAK	74	PASS
		Ant1	2310.0	-53.75	2.0	0	43.48	AV	54	PASS
		Ant1	2390.0	-42.51	2.0	0	54.72	PEAK	74	PASS
		Ant1	2390.0	-53.38	2.0	0	43.85	AV	54	PASS
	2480	Ant1	2483.5	-40.62	2.0	0	56.61	PEAK	74	PASS
		Ant1	2483.5	-52.75	2.0	0	44.48	AV	54	PASS
		Ant1	2500.0	-41.38	2.0	0	55.85	PEAK	74	PASS
		Ant1	2500.0	-52.74	2.0	0	44.49	AV	54	PASS

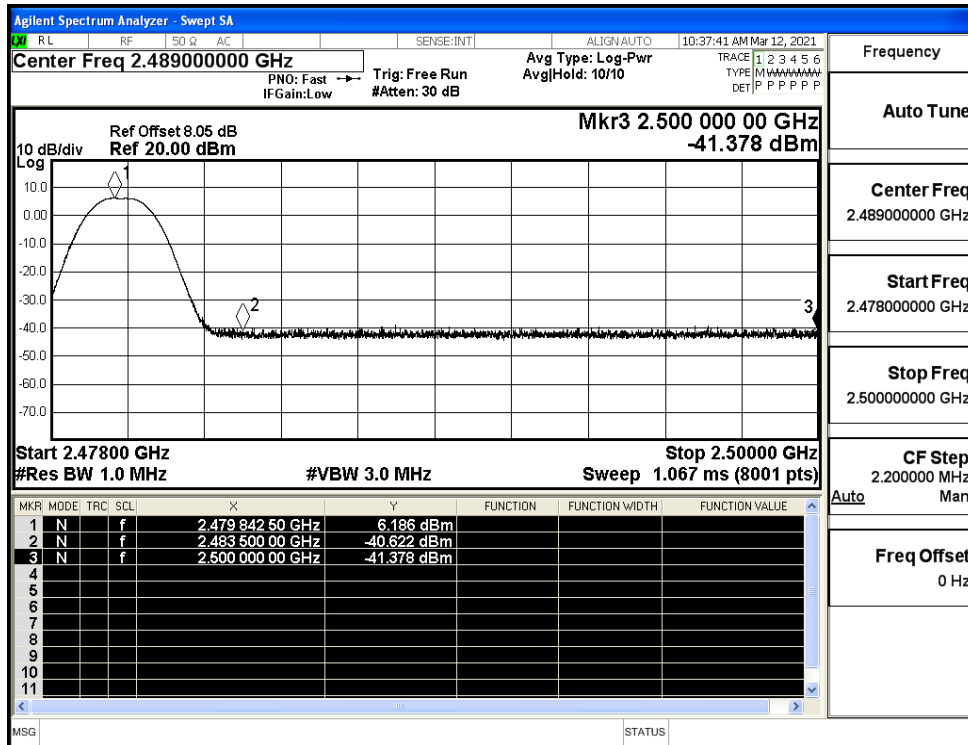
Restrict-band band-edge measurements_GFSK_2408_Ant1_PEAK



Restrict-band band-edge measurements_GFSK_2408_Ant1_AV



Restrict-band band-edge measurements_GFSK_2480_Ant1_PEAK



Restrict-band band-edge measurements_GFSK_2480_Ant1_AV

