

Appendix A

RF Test Data (Conducted Measurement)

Product Name: water and gas module

Trade Mark: Vision Metering, LLC

Test Model: GLC-005

Environmental Conditions

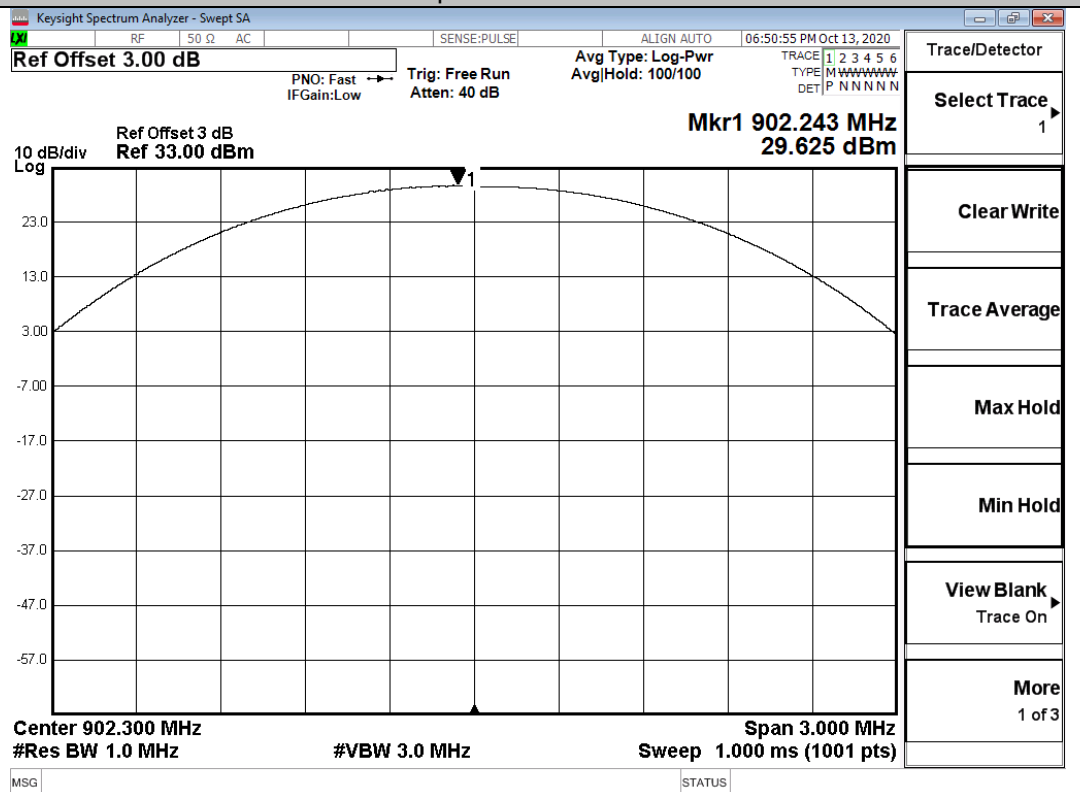
Temperature:	22.8° C
Relative Humidity:	53.7%
ATM Pressure:	100.0 kPa
Test Engineer:	Jay Li
Supervised by:	Li Huan

A.1 Maximum Conducted Peak Output Power

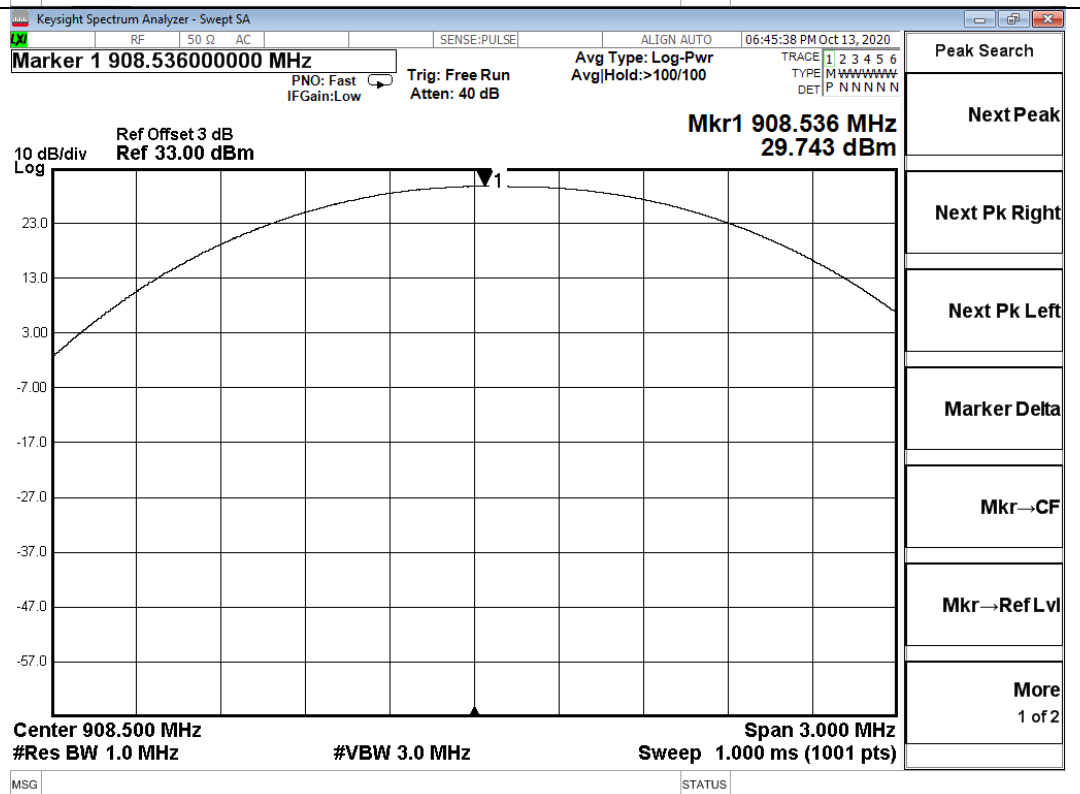
Mode	Channel.	Maximum Peak Output Power [dBm]	Limit [dBm]	Verdict
LORA	LCH	29.625	30	PASS
	MCH	29.743	30	PASS
	HCH	29.630	30	PASS

Test Graphs

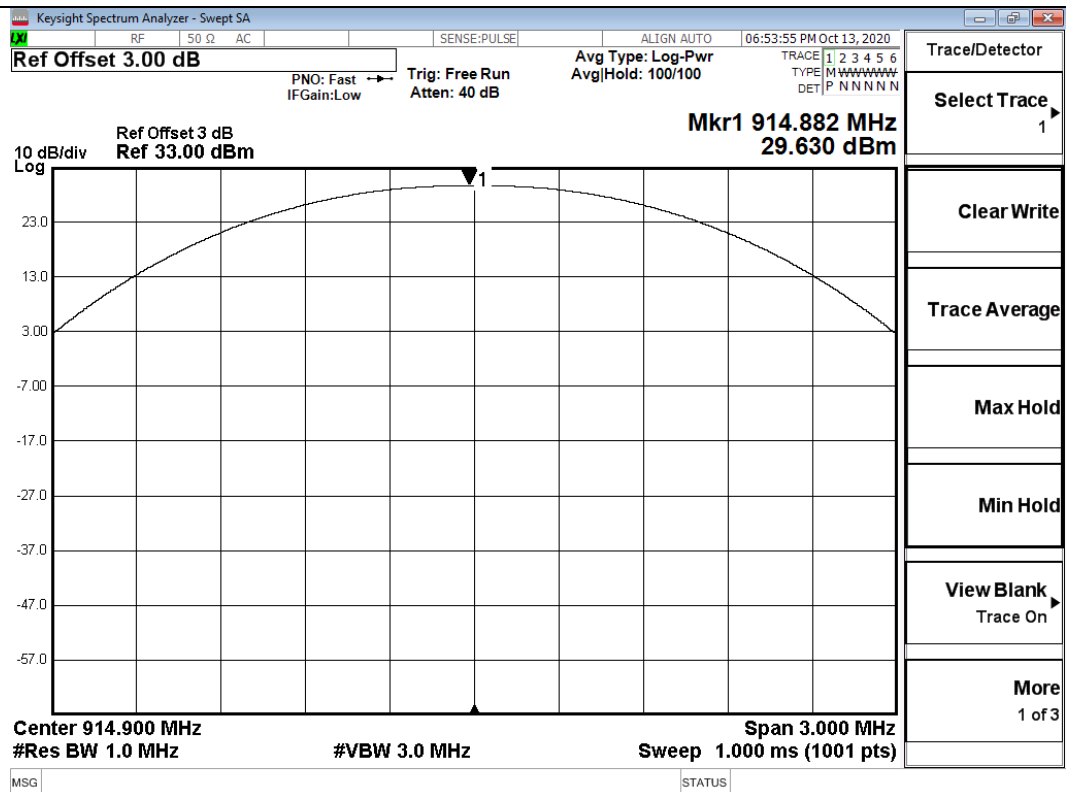
LORA/LCH



LORA/MCH

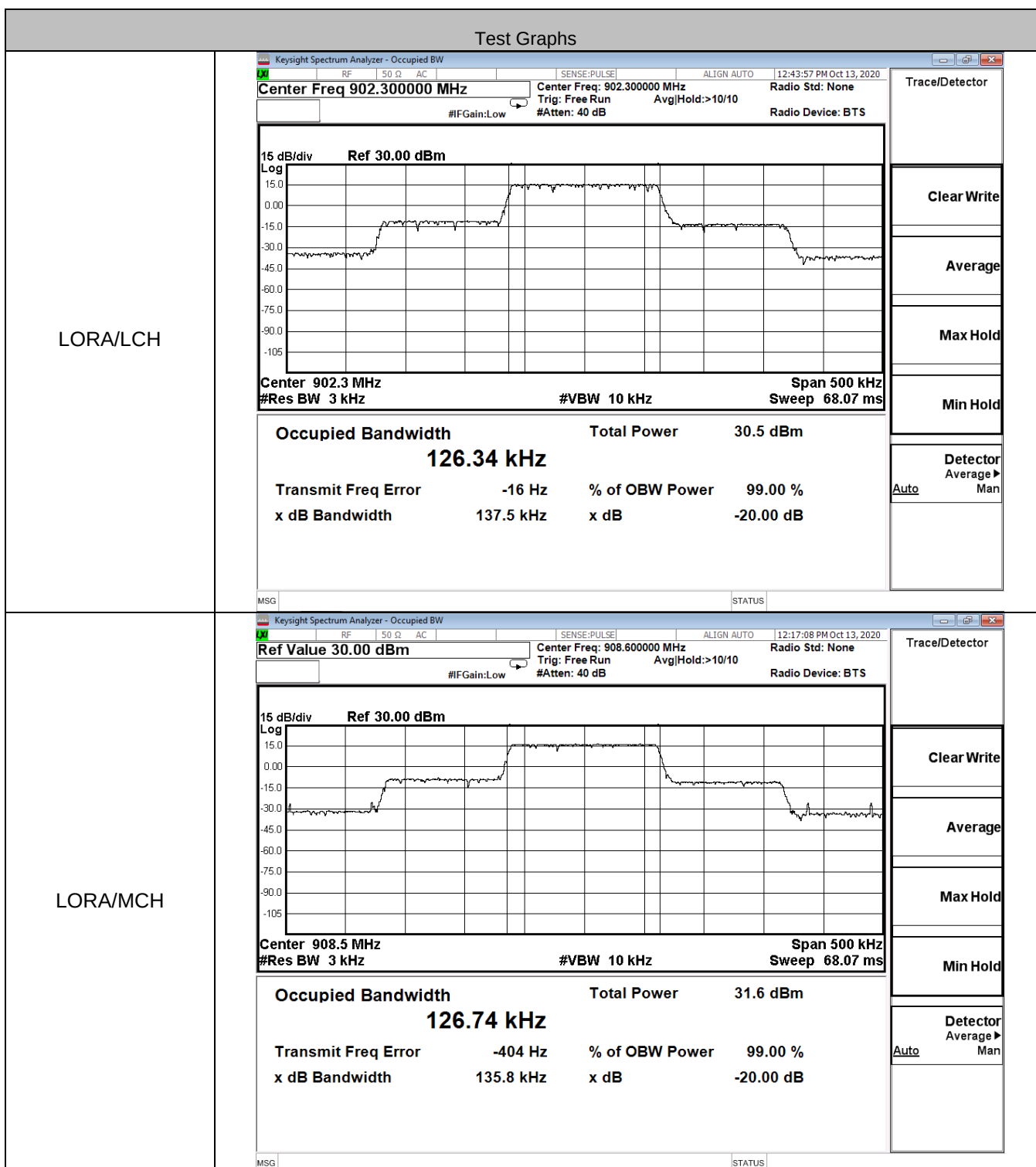


LORA/HCH

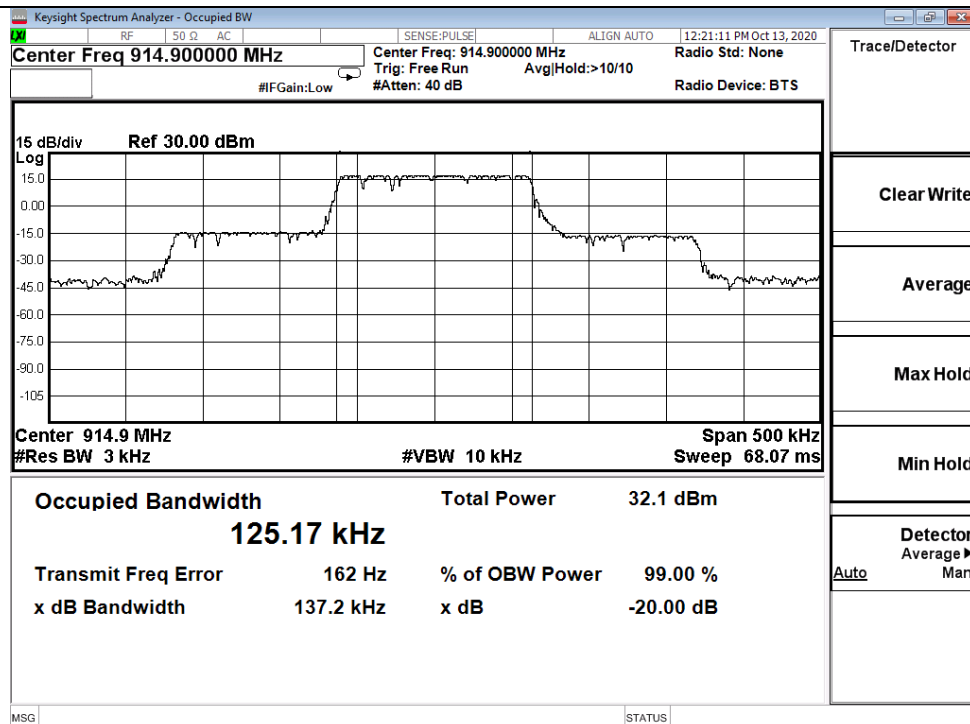


A.2 20dB Bandwidth

Mode	Channel.	20dB Bandwidth [KHz]	Limit [KHz]	Verdict
LORA	LCH	137.5	Not Specified	PASS
	MCH	135.8	Not Specified	PASS
	HCH	137.2	Not Specified	PASS

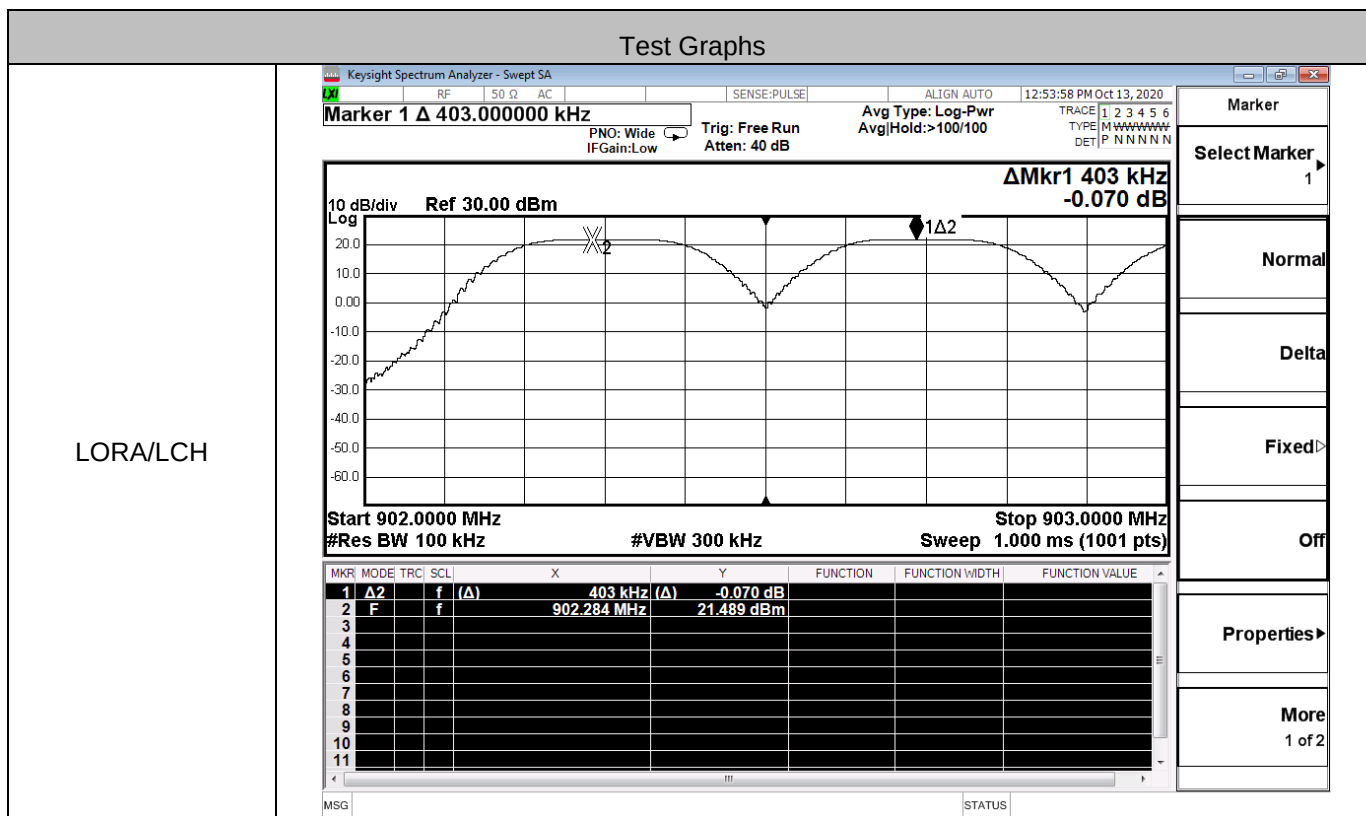


LORA/HCH

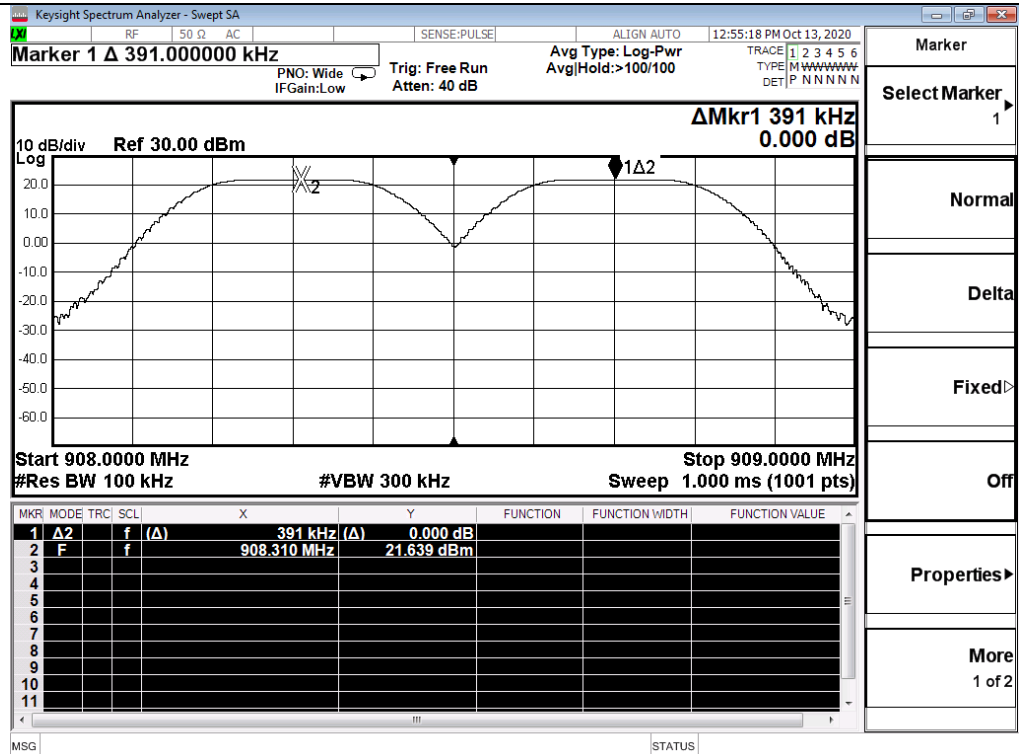


A.3 Carrier Frequency Separation

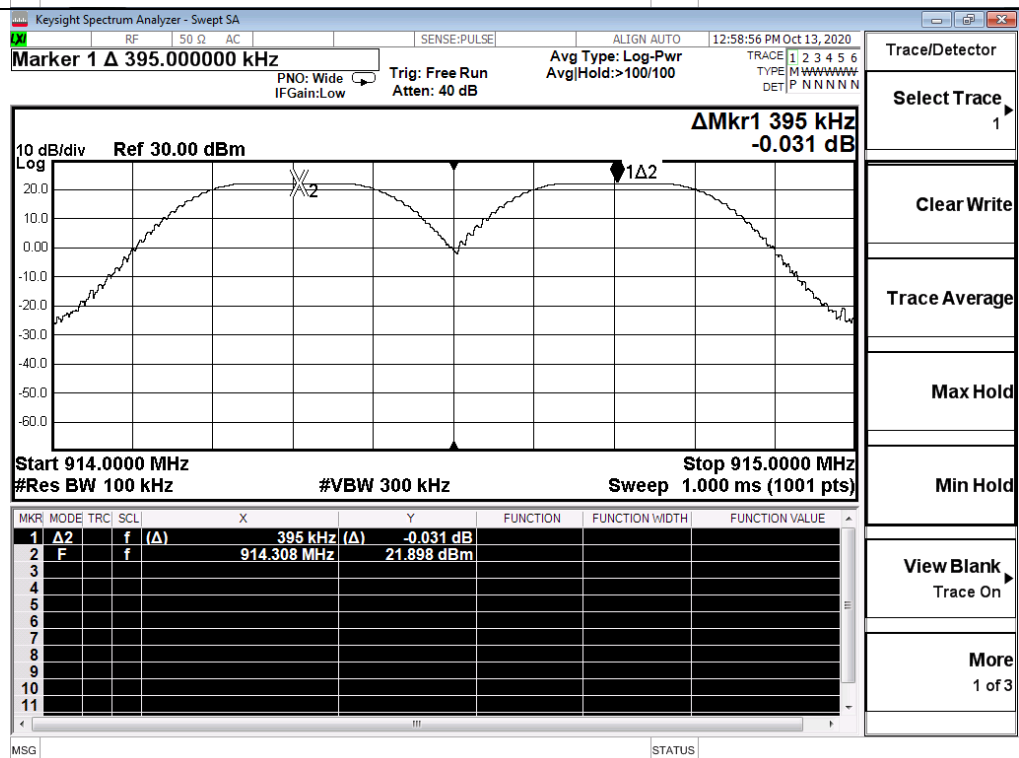
Mode	Channel.	Carrier Frequency Separation [KHz]	Limit [KHz]	Verdict
LORA	LCH	403	137.5	PASS
	MCH	391	135.8	PASS
	HCH	395	137.2	PASS



LORA/MCH



LORA/HCH



Mode	Channel.	Number of Hopping Channel [N]	Limit [N]	Verdict
LORA	Hop	64	≥ 50	PASS

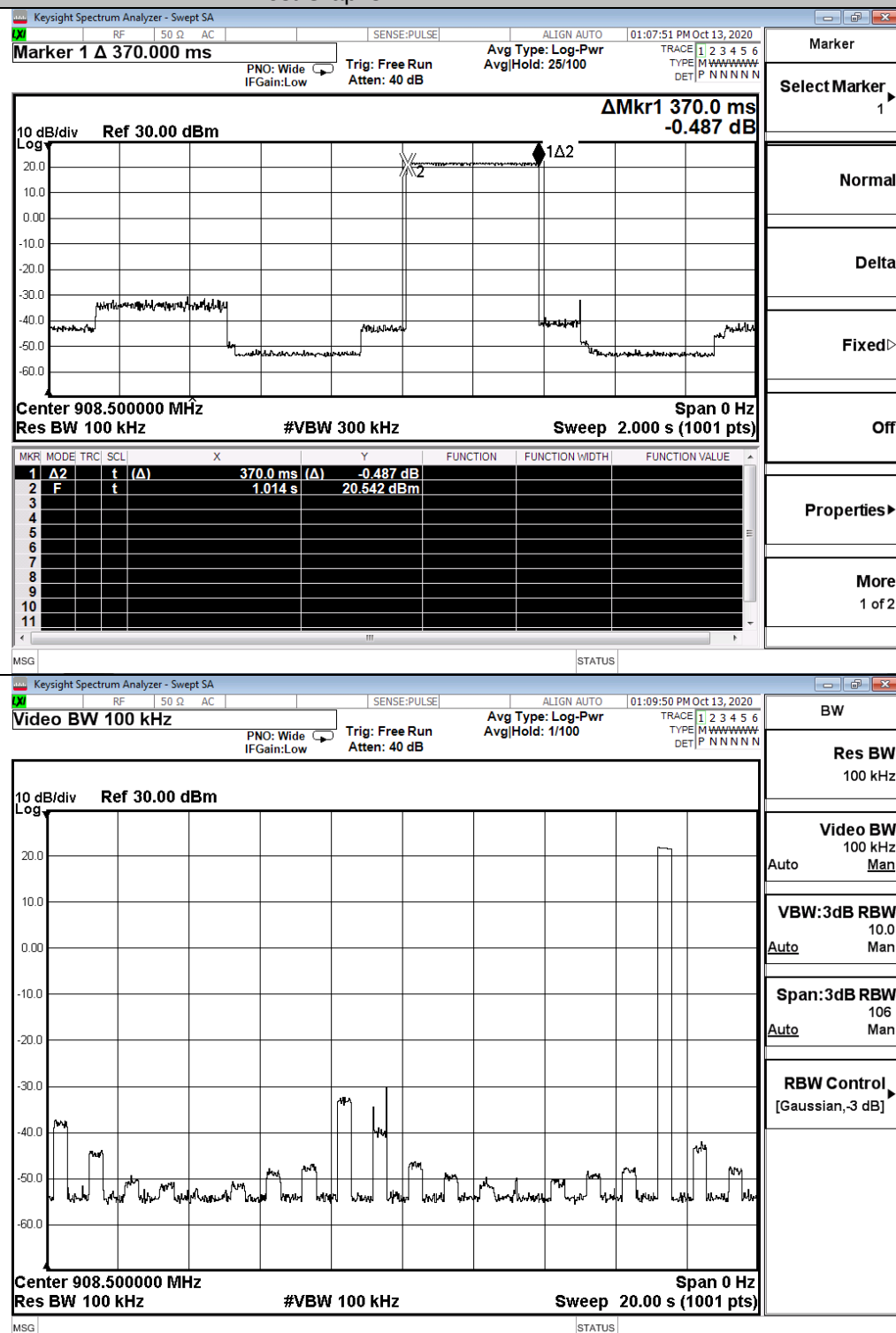


A.5 Dwell Time

Mode	Frequency (MHz)	Burst Width [ms/hop/ch]	Total Hops[hop*ch]	Dwell Time[s]	Limit [s]	Verdict
LORA	908.5	370	1	0.370	0.4	PASS

Test Graphs

LORA MCH

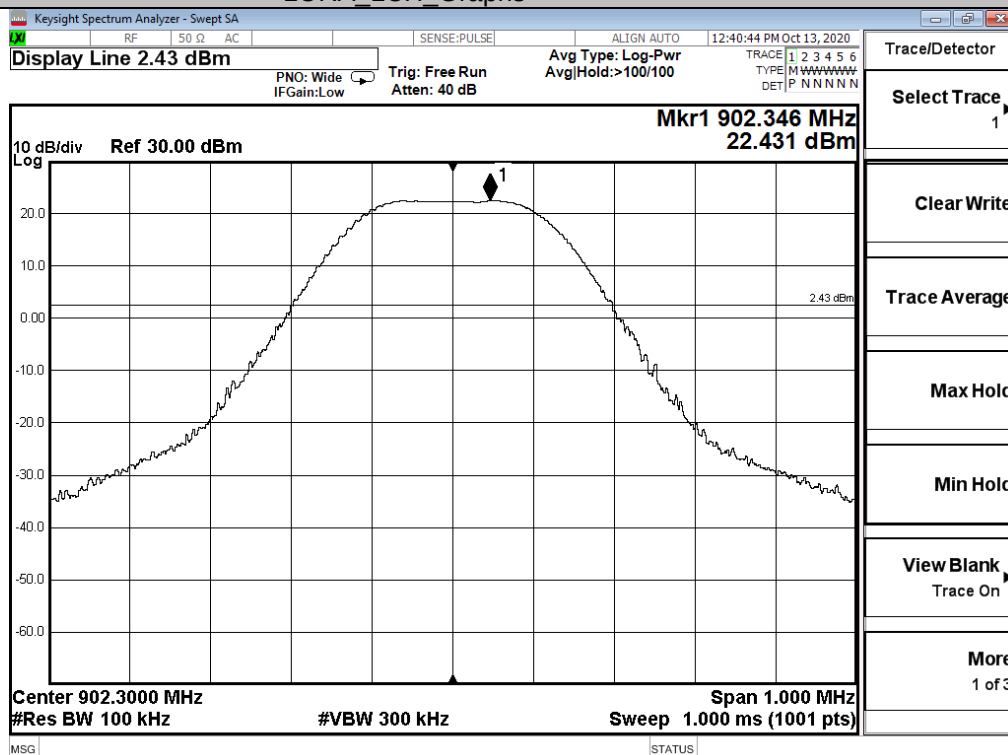


A.6 RF Conducted Spurious Emissions

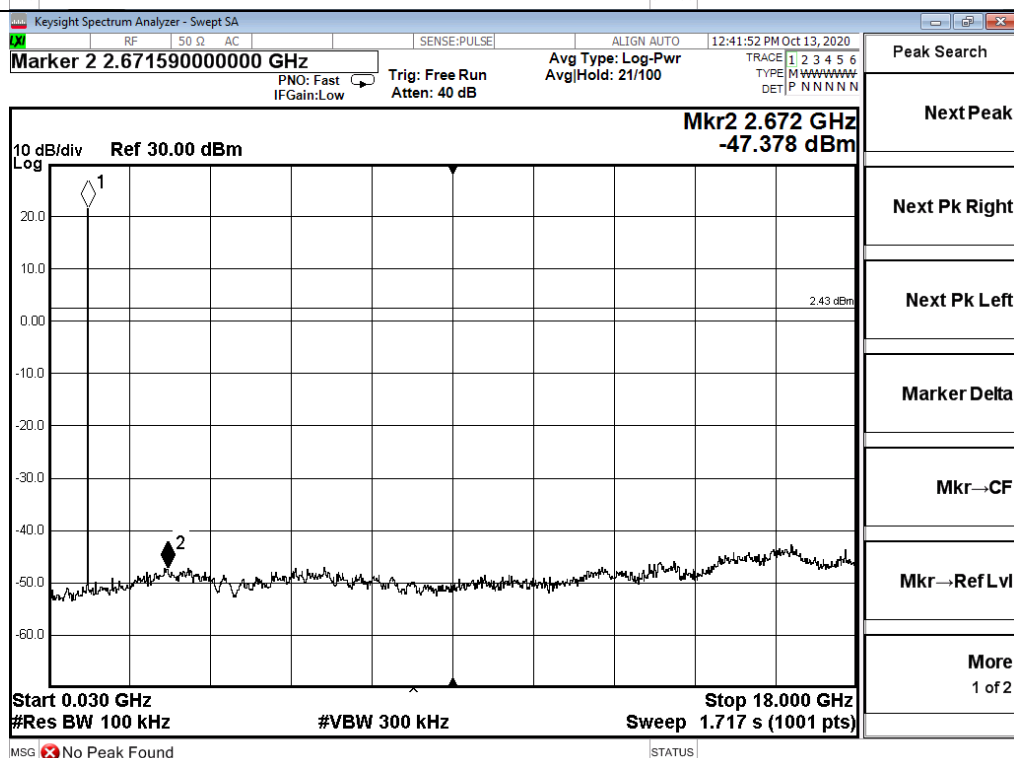
Mode	Channel	Pref [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
LORA	LCH	22.431	-47.378	2.43	PASS
	HCH	22.237	-46.264	2.24	PASS

LORA_LCH_Graphs

Pref

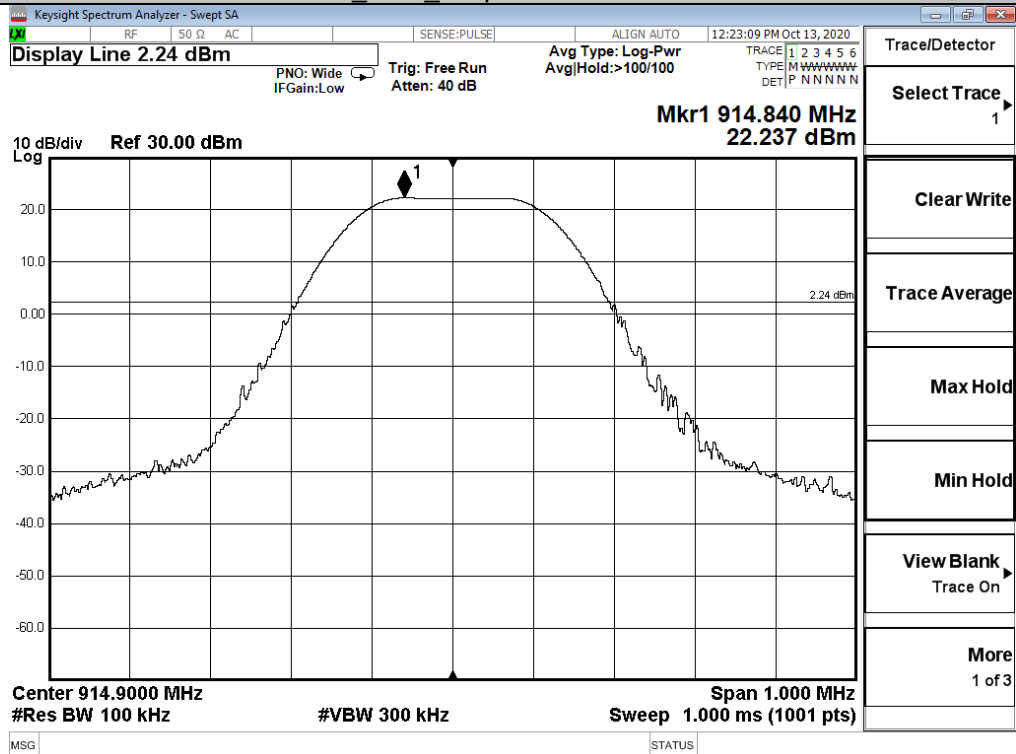


Puw

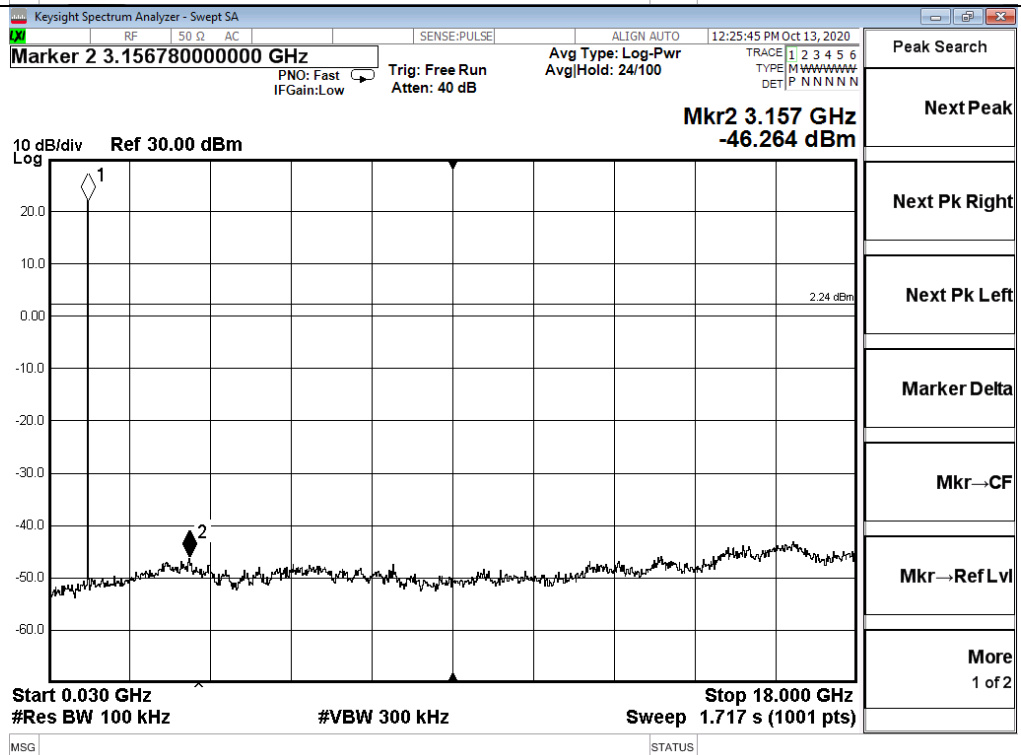


LORA_HCH_Graphs

Pref



Puw

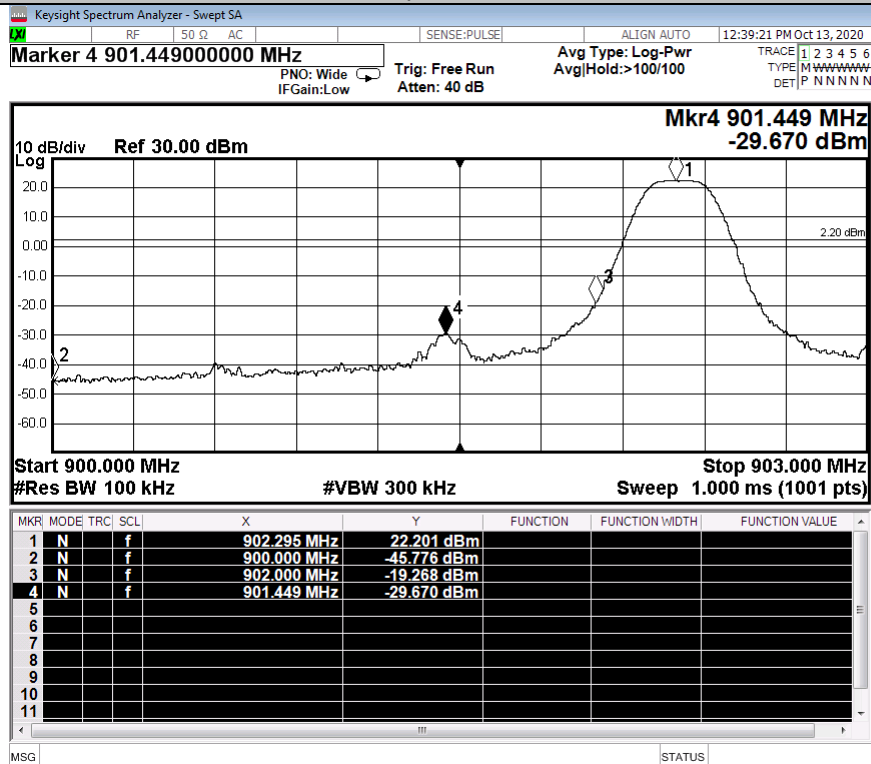


A.7 Band-edge for RF Conducted Emissions

Mode	Channel	Carrier Frequency [MHz]	Carrier Power [dBm]	Frequency Hopping	Max Spurious Level [dBm]	Limit [dBm]	Verdict
LORA	LCH	902.3	22.201	Off	-19.268	2.20	PASS
			21.784	On	-37.196	1.78	PASS
	HCH	914.9	21.550	Off	-31.695	1.55	PASS
			22.000	On	-44.704	2.00	PASS

Test Graphs

LORA/LCH/No Hop



Peak Search

Next Peak

Next Pk Right

Next Pk Left

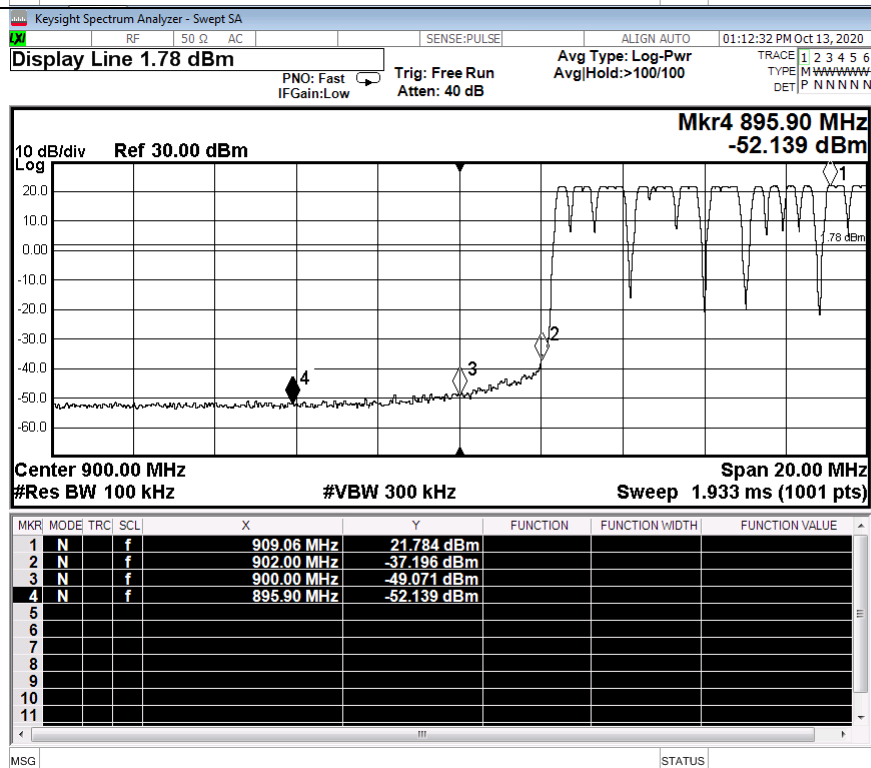
Marker Delta

Mkr→CF

Mkr→Ref Lvl

More
1 of 2

LORA/LCH/Hop



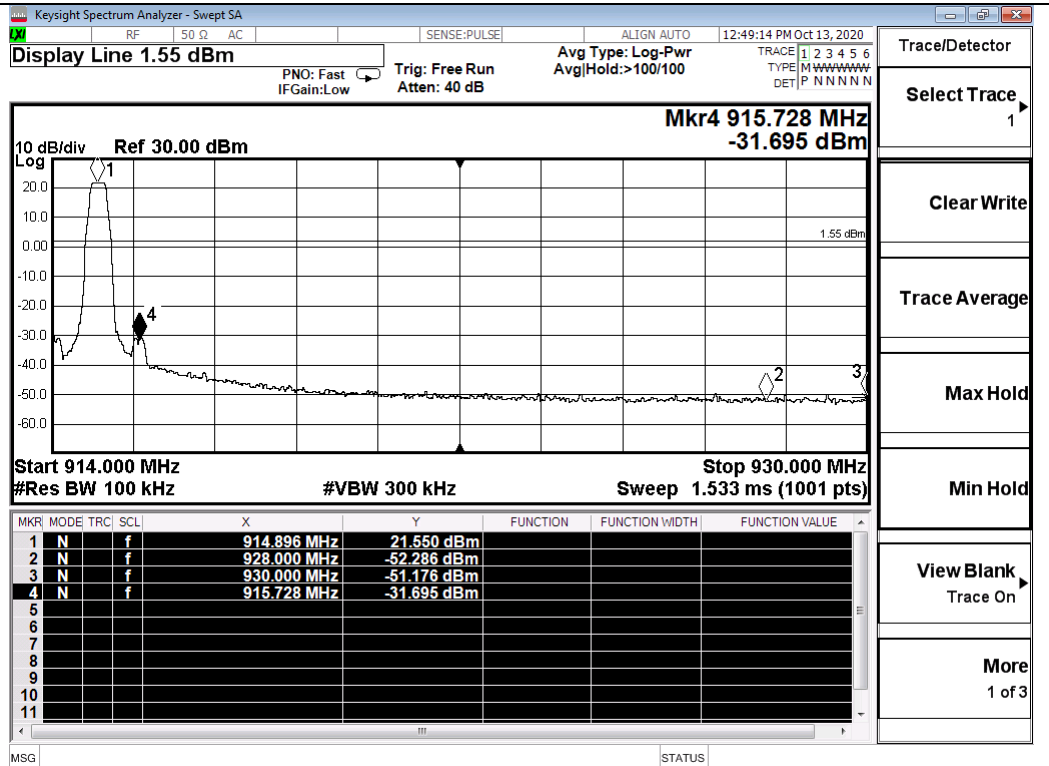
Display

Annotation▶

Title▶

Graticule
On OffDisplay Line
1.78 dBm
On OffSystem
Display▶
Settings

LORA/HCH/No Hop



LORA/HCH/Hop

