

Appendix A

RF Test Data for RFID(902-928MHz Hopping Device)

(Conducted Measurement)

Product Name: RFID Reader

Trade Mark: BALLUFF

Test Model: BF-IDU05

FCC ID: 2AGZY-BFIDU05

IC: 20739-BFIDU05

Environmental Conditions

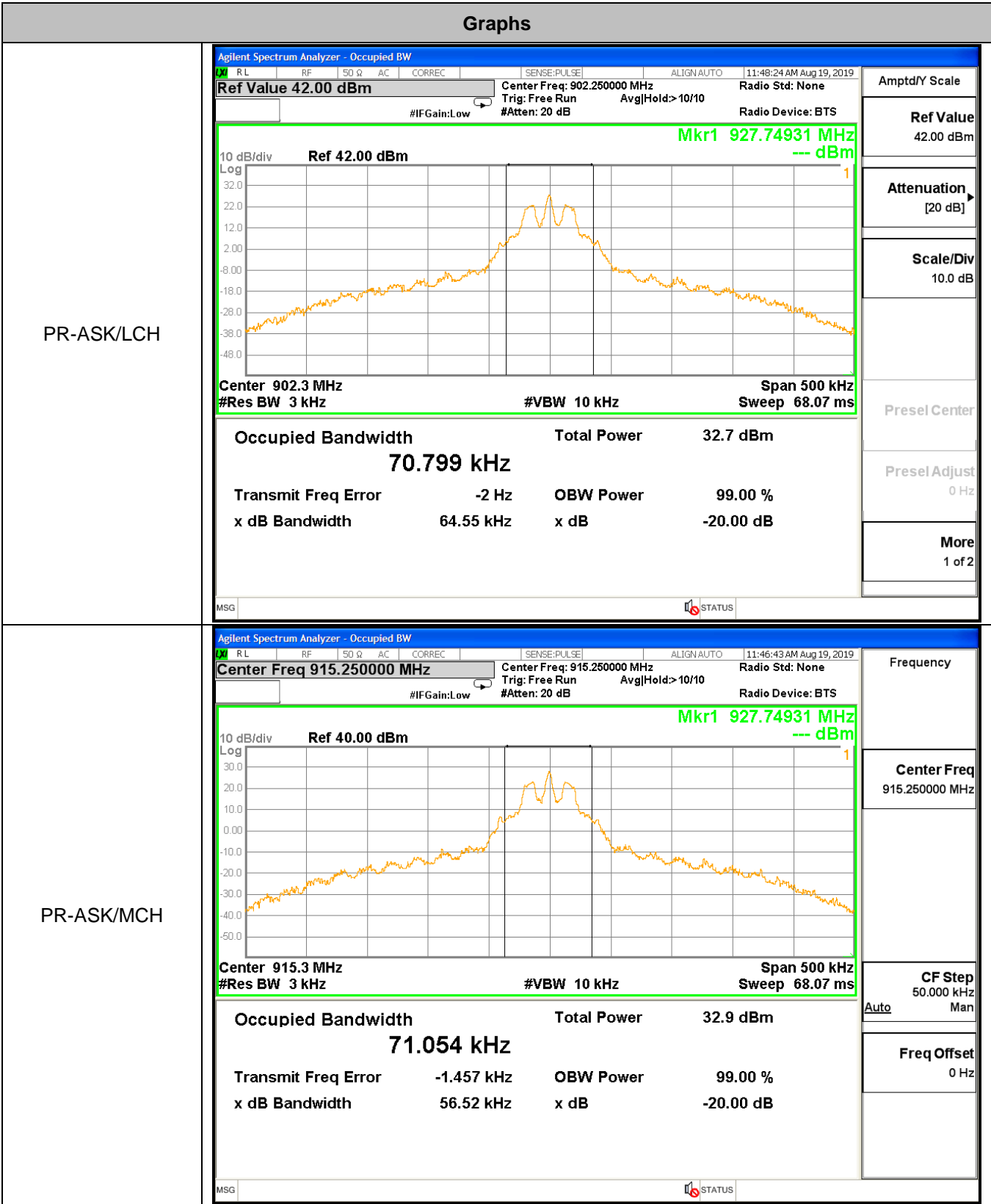
Temperature:	28.1℃
Relative Humidity:	58%
ATM Pressure:	100.0 kPa
Test Engineer:	Gary Qian
Supervised by:	Eden Hu

A.1 20 dB Bandwidth and 99% Occupied Bandwidth

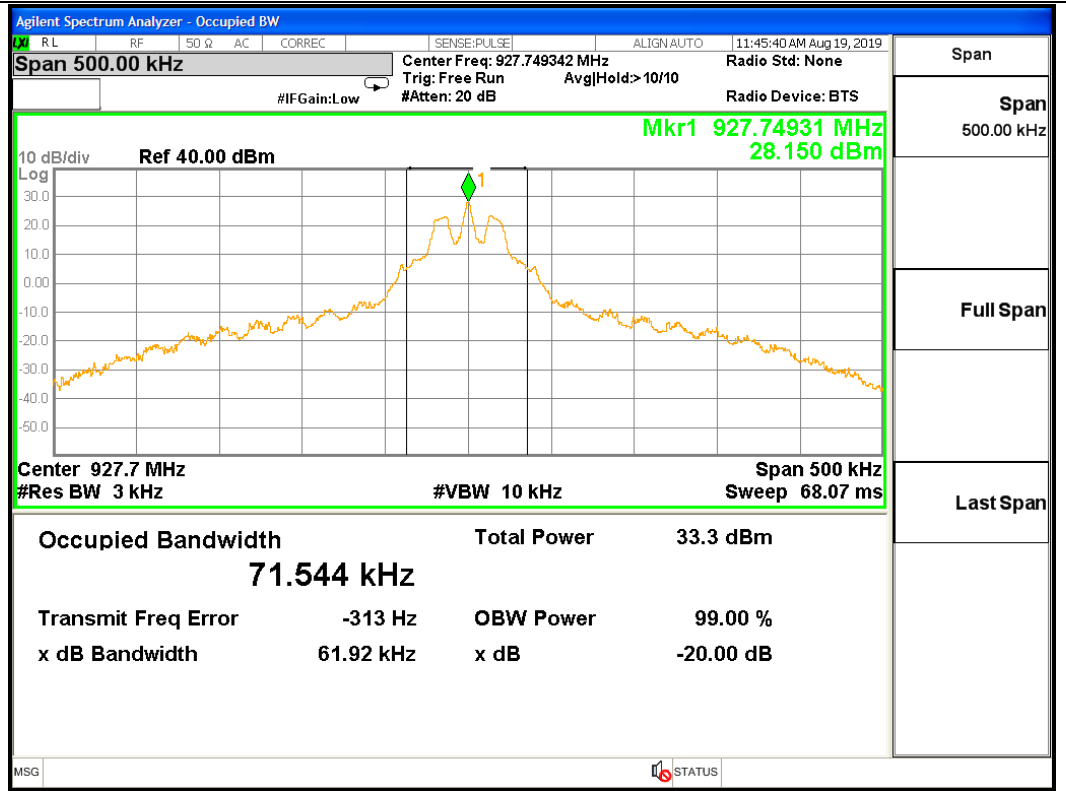
Mode	Channel.	20dB Bandwidth [KHz]	99% Occupied Bandwidth [KHz]	Limit(MHz)	Verdict
PR-ASK	LCH	64.55	70.80	Not Specified	PASS
PR-ASK	MCH	56.52	71.05	Not Specified	PASS
PR-ASK	HCH	61.92	71.54	Not Specified	PASS

Test Graph

Graphs



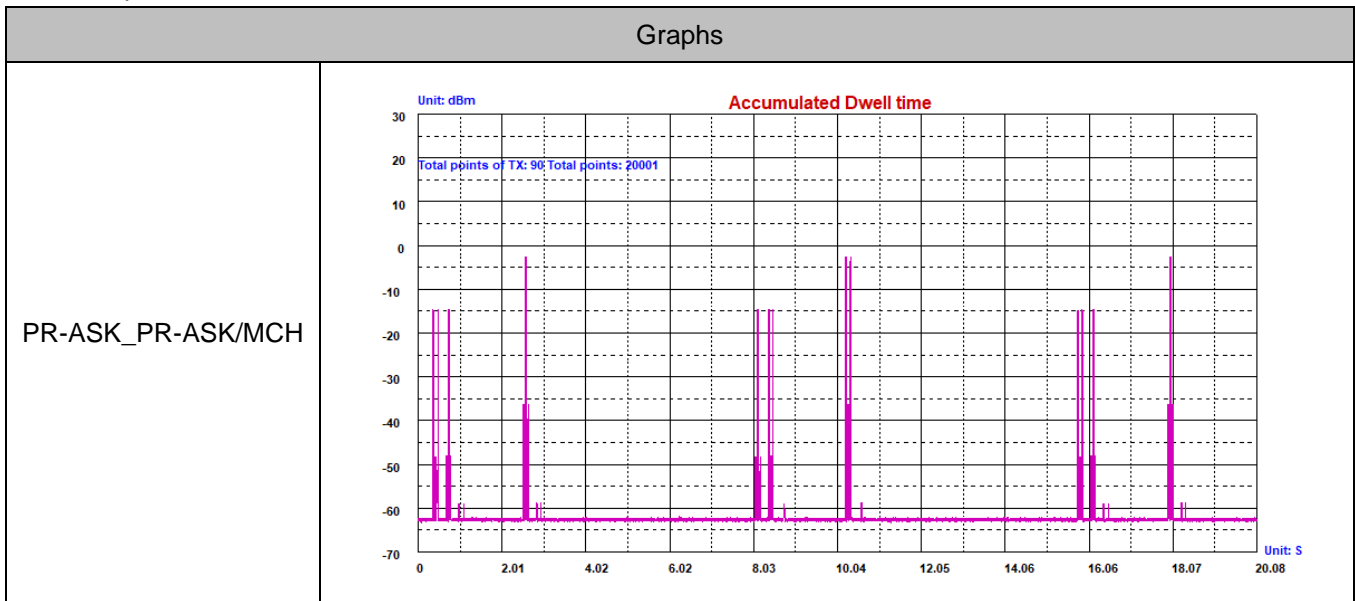
PR-ASK/HCH



A.2 Dwell Time

Mode	Channel	TX _{on} Points	Total Points	Dwell Time[s]	Limit [s]	Verdict
PR-ASK	MCH	90	20001	0.09	0.4	PASS

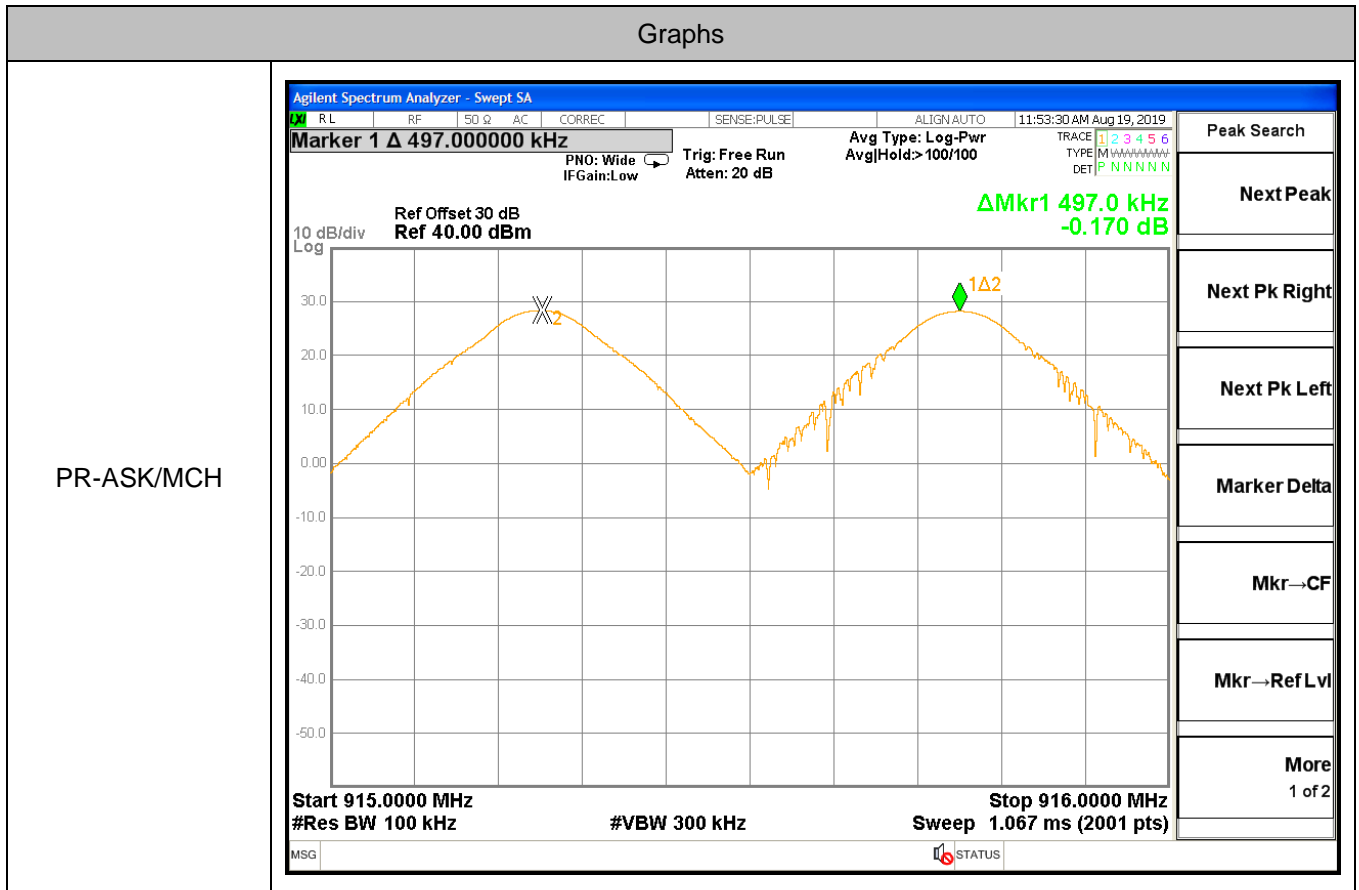
Test Graph



A.3 Carrier Frequency Separation

Mode	Channel.	Carrier Frequency Separation [KHz]	Limit [KHz]	Verdict
PR-ASK	MCH	497	64.55	PASS

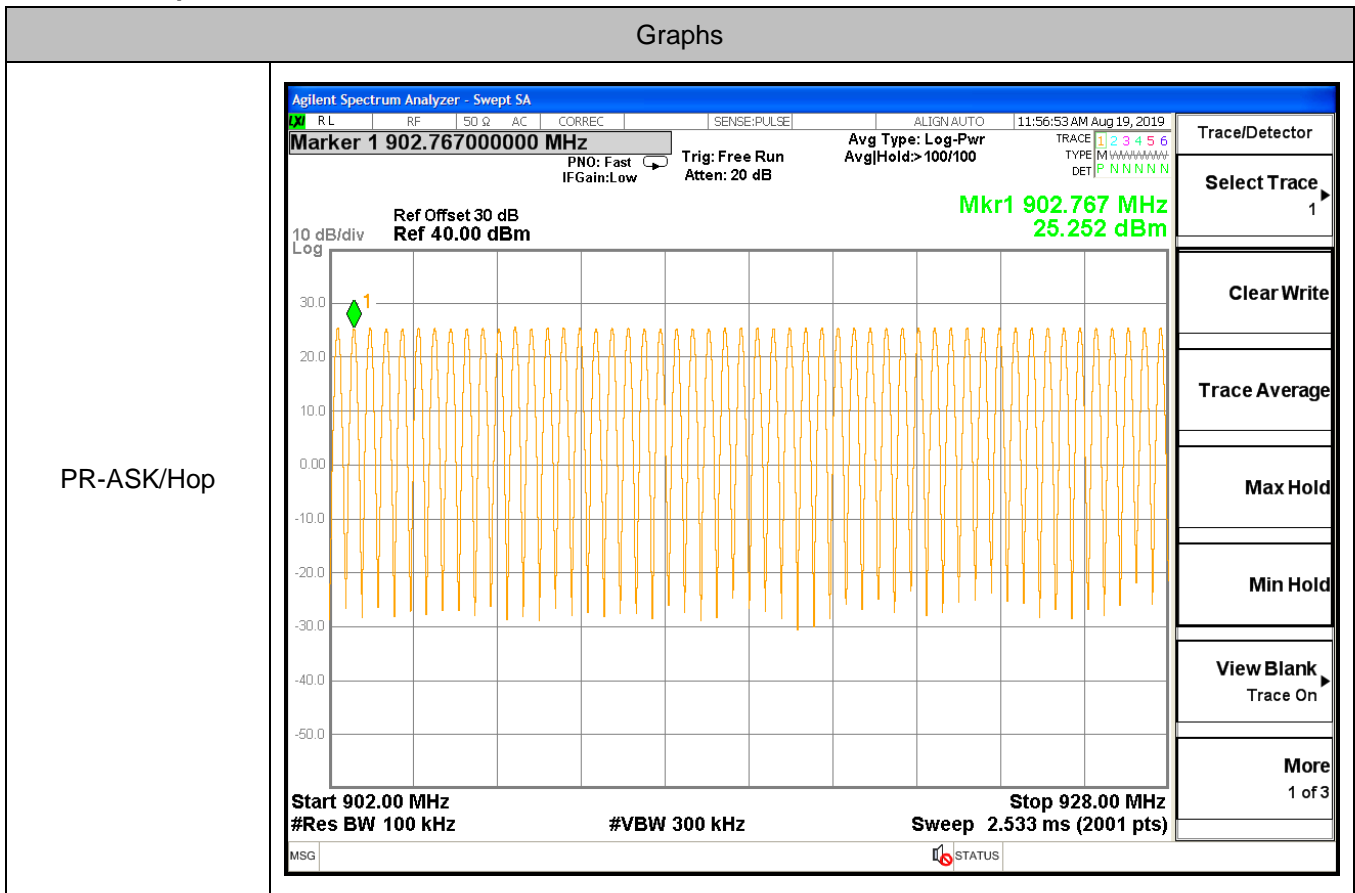
Test Graph



A.4 Hopping Channel Number

Mode	Channel.	Number of Hopping Channel[N]	Limit[N]	Verdict
PR-ASK	Hop	52	>=15	PASS

Test Graph

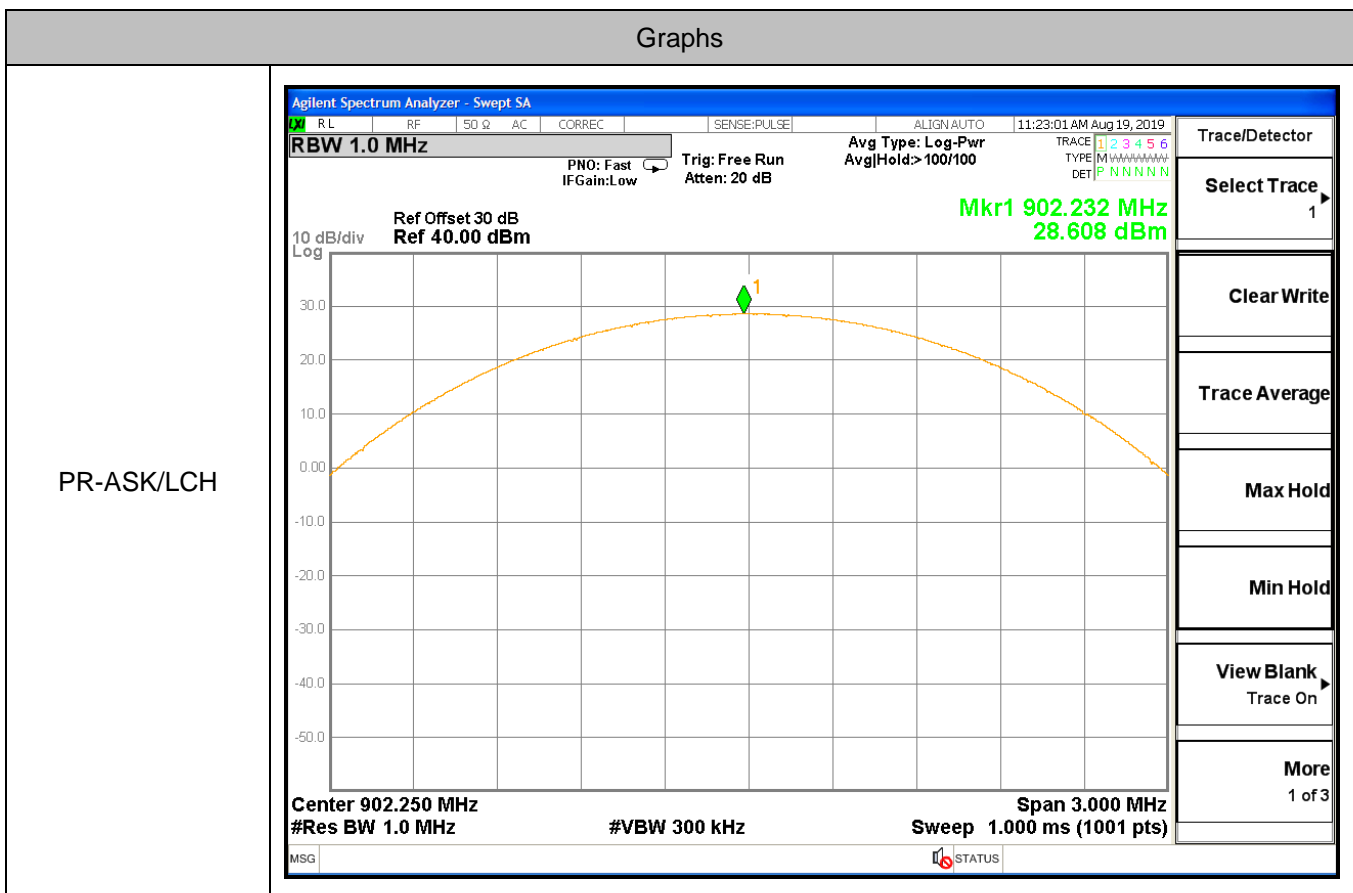


A.5 Conducted Peak Output Power

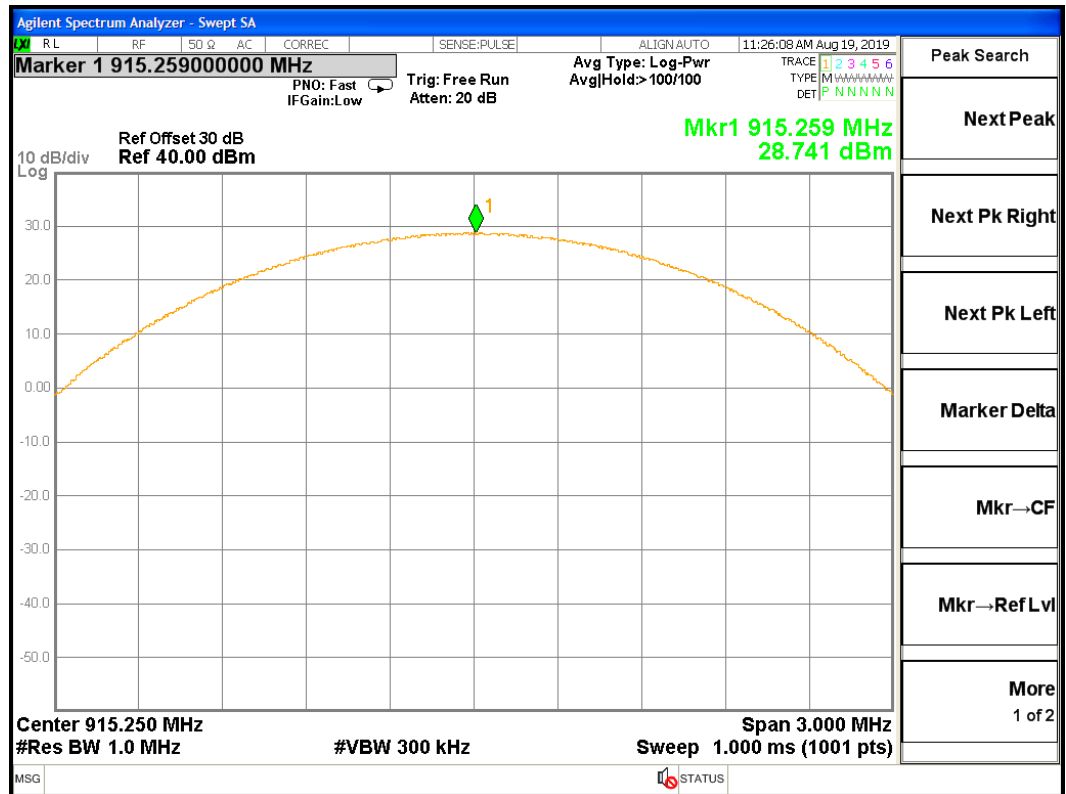
Mode	Channel.	Reading Value [dBm]	Limit [dBm]	Verdict
PR-ASK	LCH	28.61	30	PASS
PR-ASK	MCH	28.74	30	PASS
PR-ASK	HCH	29.00	30	PASS

Note 1: limit = 30 – Max(Antenna gain(dBi), 6) + 6

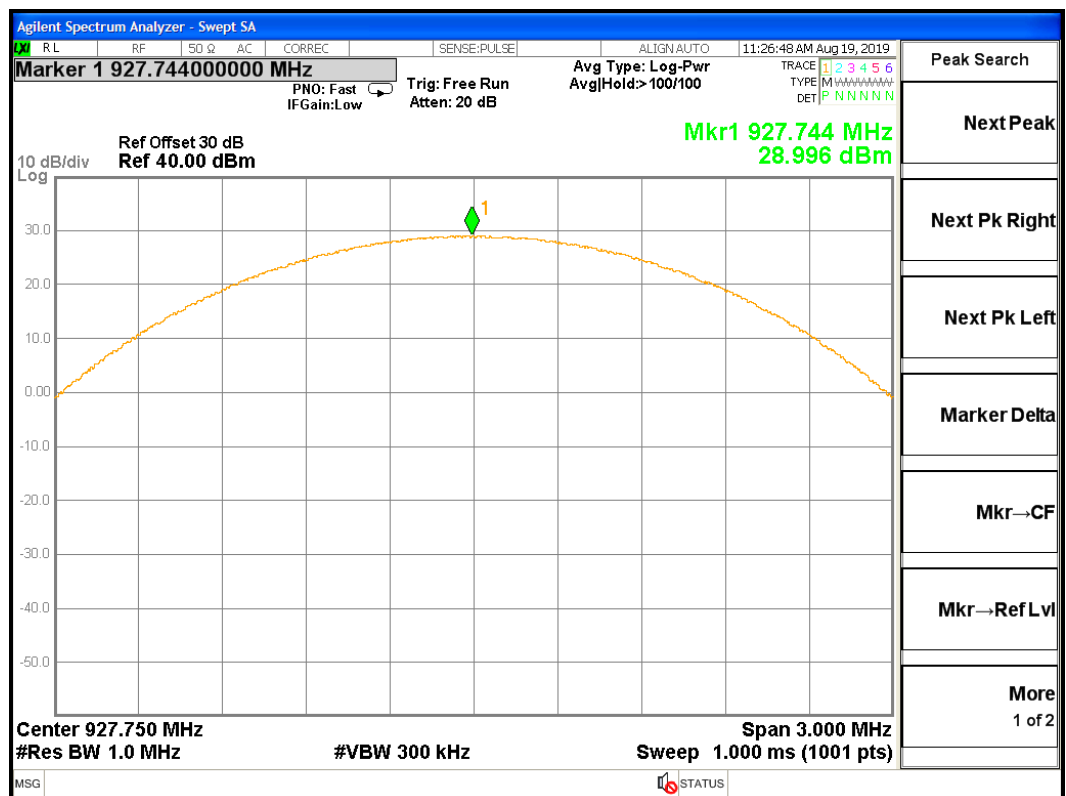
Test Graph



PR-ASK/MCH



PR-ASK/HCH



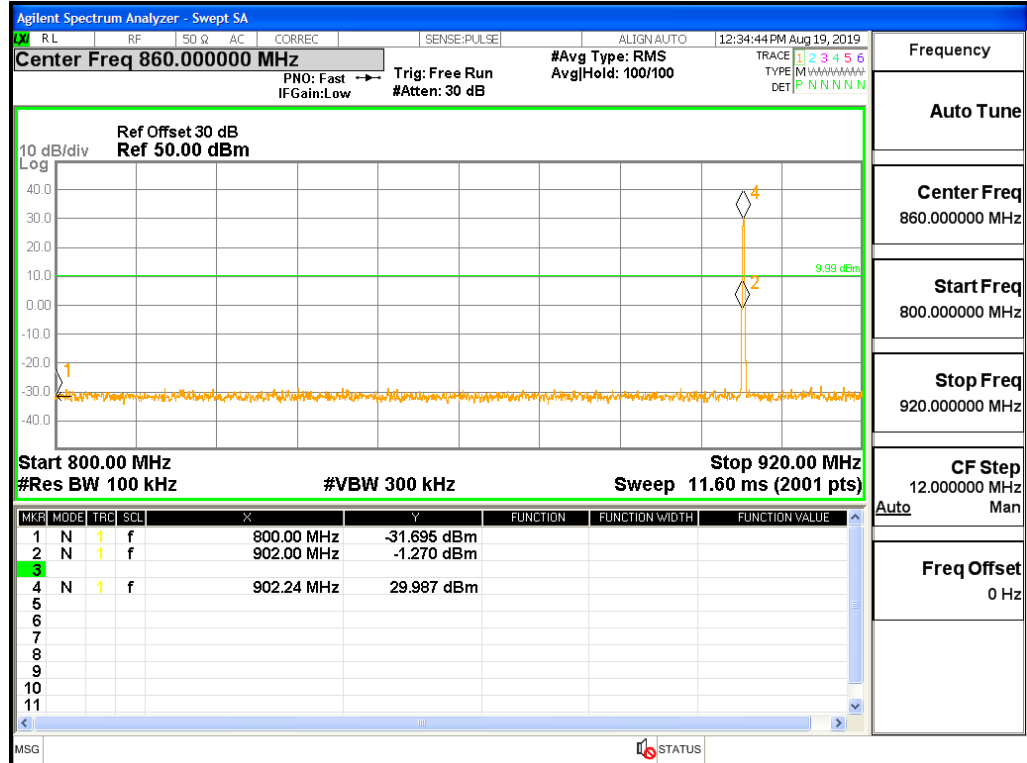
A.6 Band-edge for RF Conducted Emissions

Type	Carrier Frequency(MHz)	Frequency(MHz)	Carrier Frequency Power [dBm]	Bandedge Peak(dBm)	Upper limit(dBm)	Conclusion
PR-ASK	LCH	902	29.987	-1.27	9.987	Pass
PR-ASK	LCH	800	29.987	-31.70	9.987	Pass
PR-ASK	HCH	928	30.572	-0.78	10.572	Pass
PR-ASK	LCH	960	30.572	-32.27	10.572	Pass
PR-ASK	Hopping	902	27.374	-30.36	7.374	Pass
PR-ASK	Hopping	800	27.374	-29.59	7.374	Pass
PR-ASK	Hopping	928	27.664	-29.45	7.664	Pass
PR-ASK	Hopping	960	27.664	-30.27	7.664	Pass

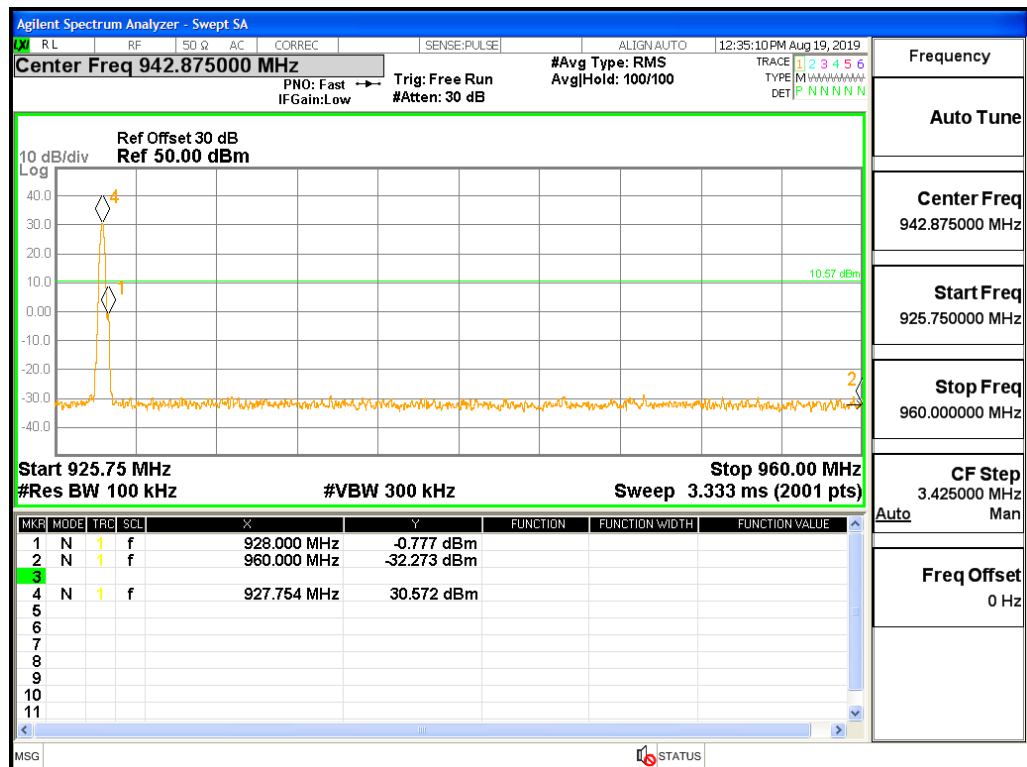
Test Graph

Graphs

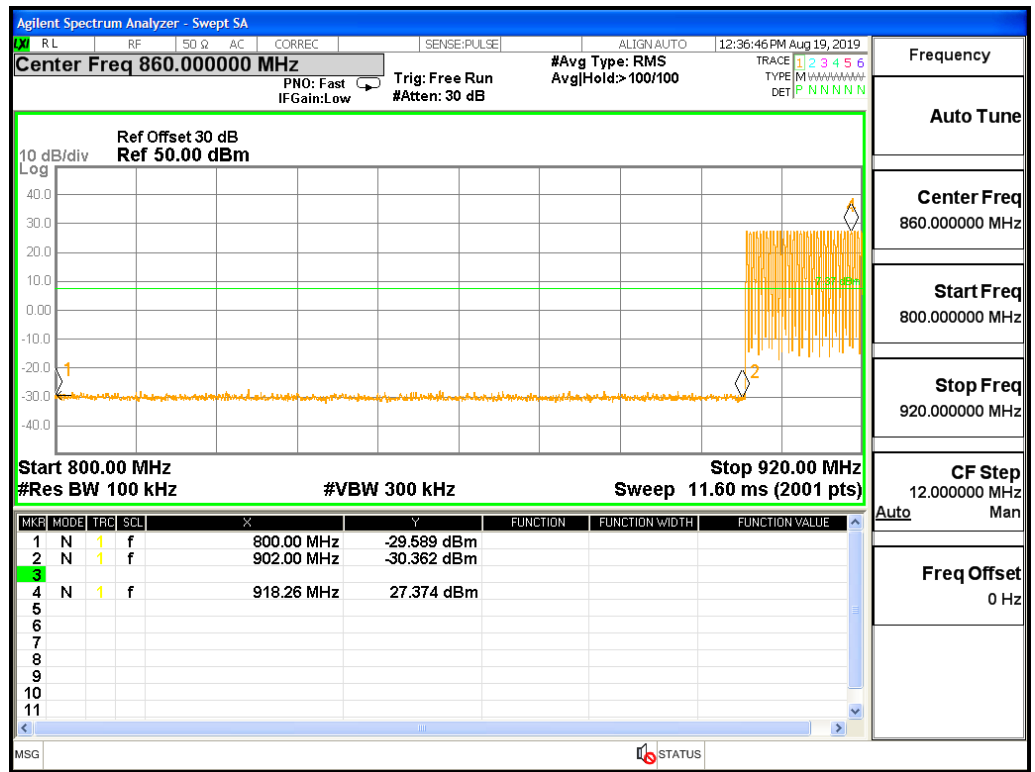
PR-ASK/LCH/No Hop



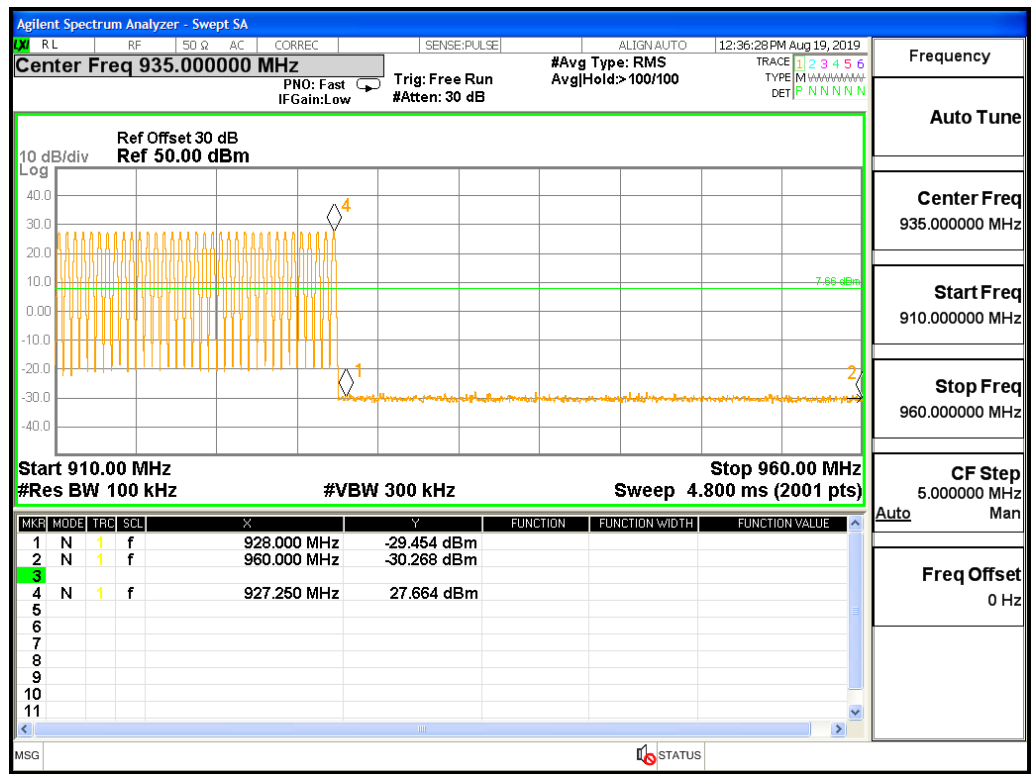
PR-ASK/HCH/No Hop



PR-ASK/LCH/Hop

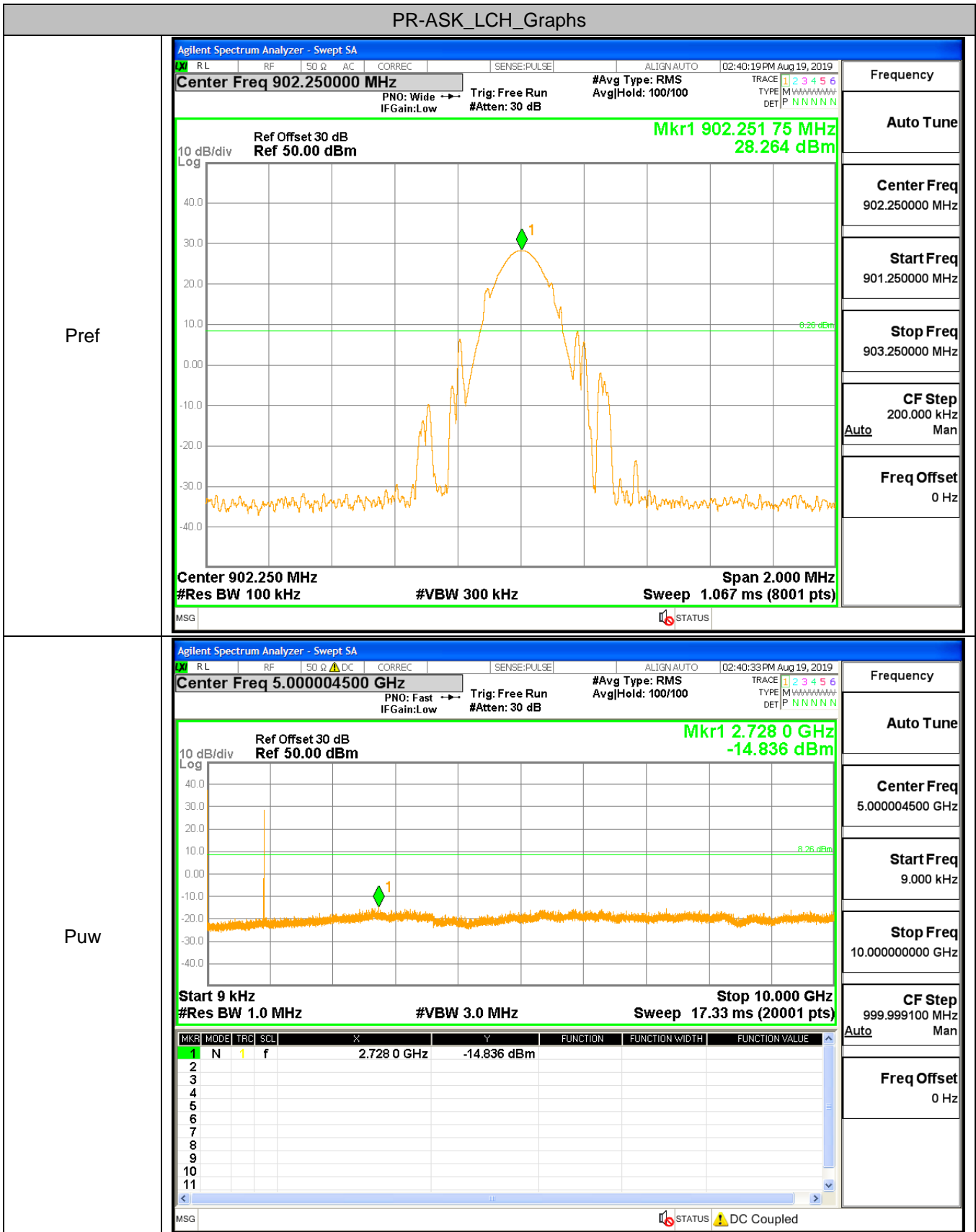


PR-ASK/HCH/Hop



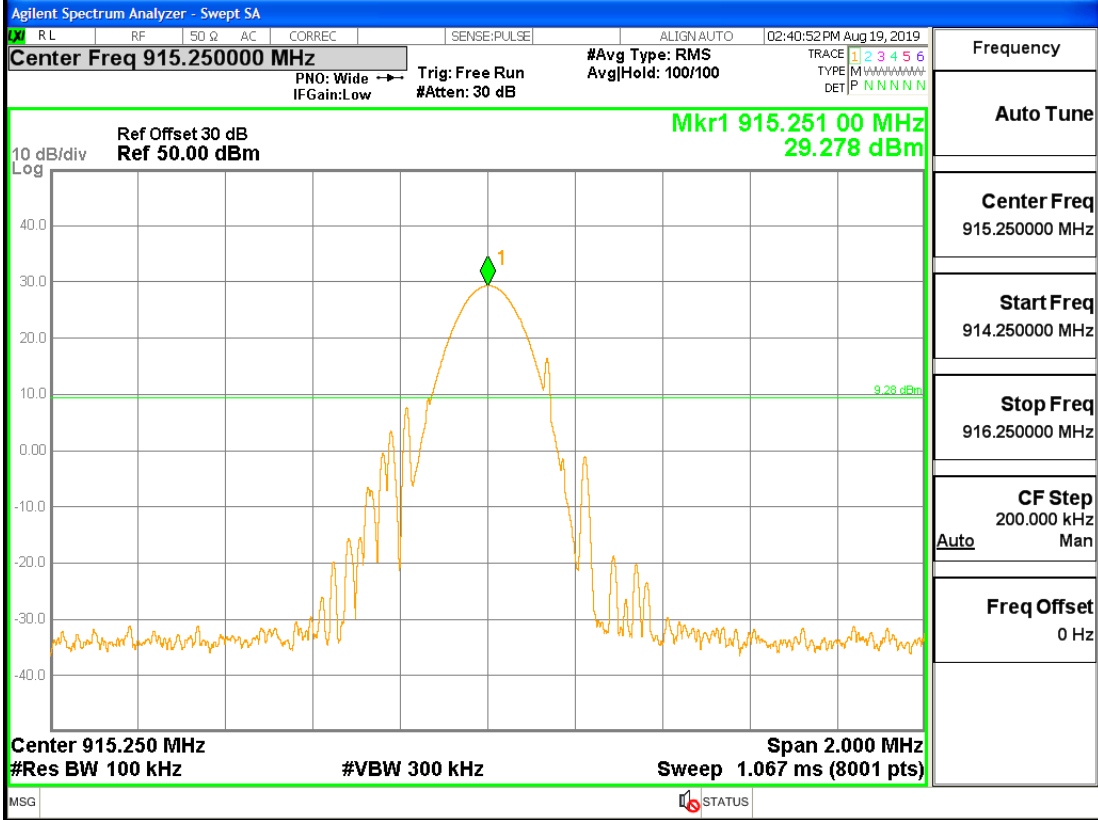
A.7 RF Conducted Spurious Emissions

Test Graph

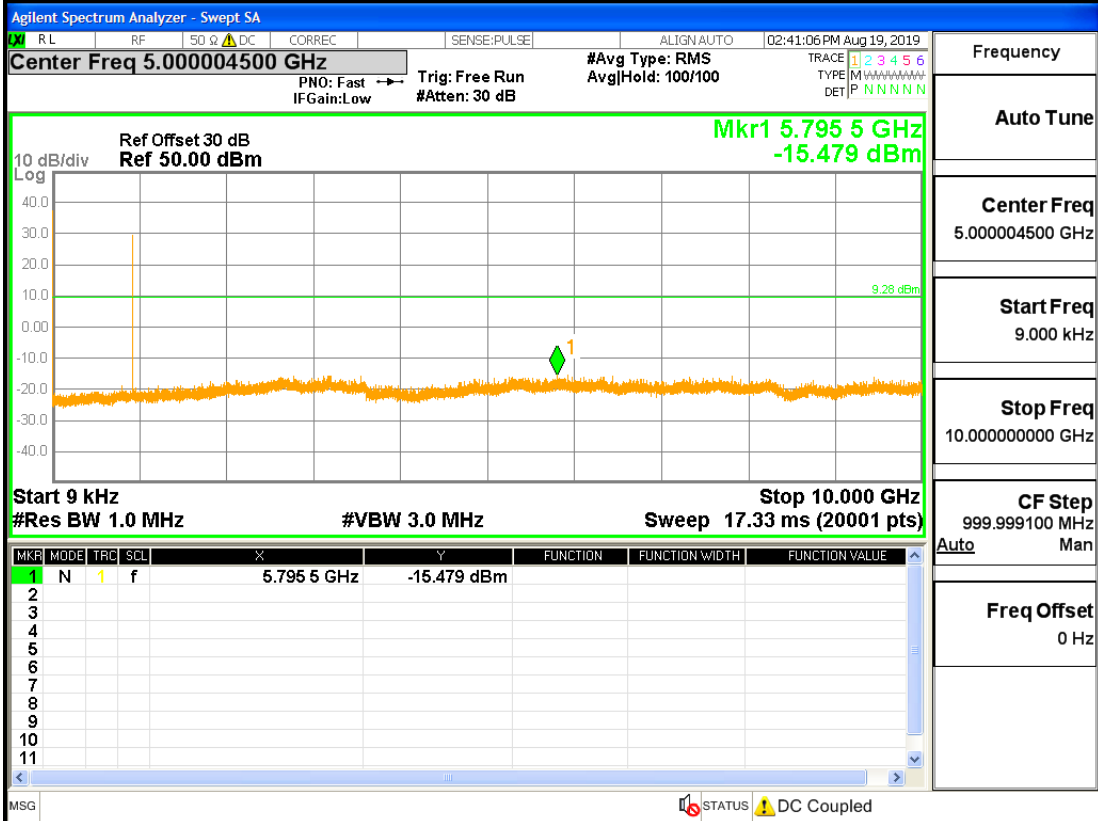


PR-ASK_MCH_Graphs

Pref

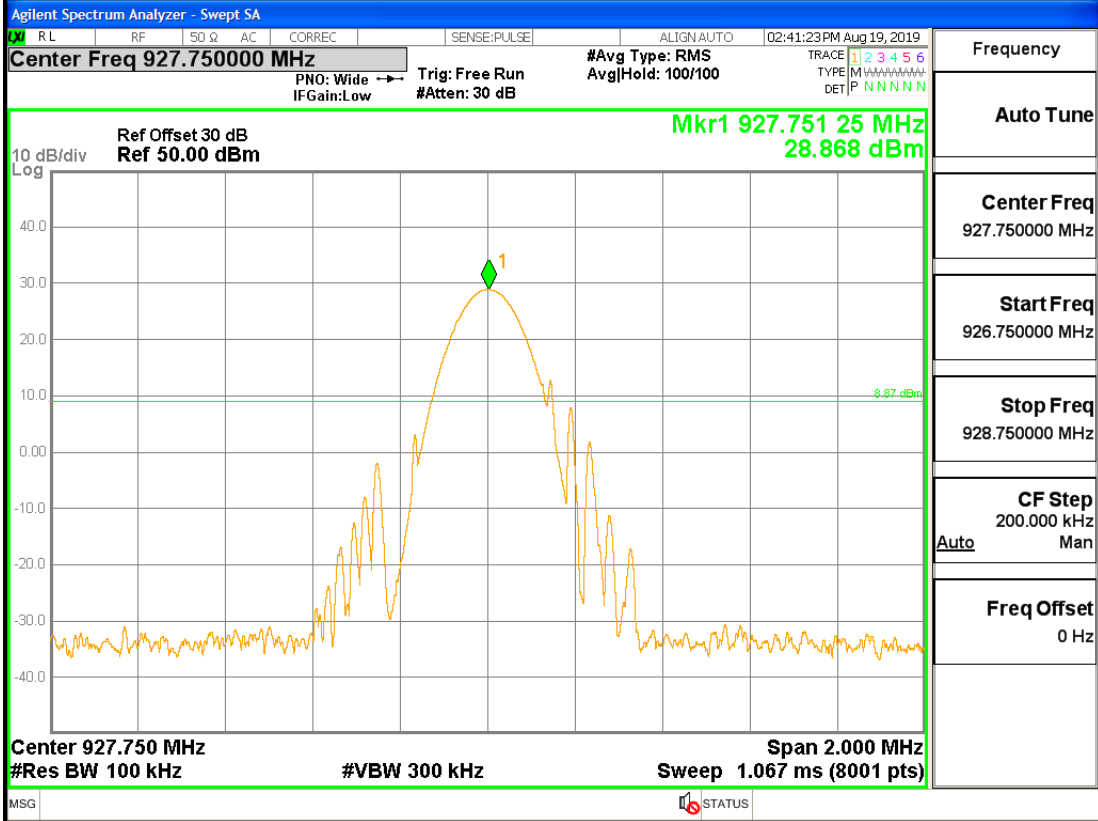


Puw



PR-ASK_HCH_Graphs

Pref



Puw

