



Appendix B

RF Test Data for RF ID (Conducted Measurement)

Product Name: RFID handheld reader

Test Model: VANCH-VH

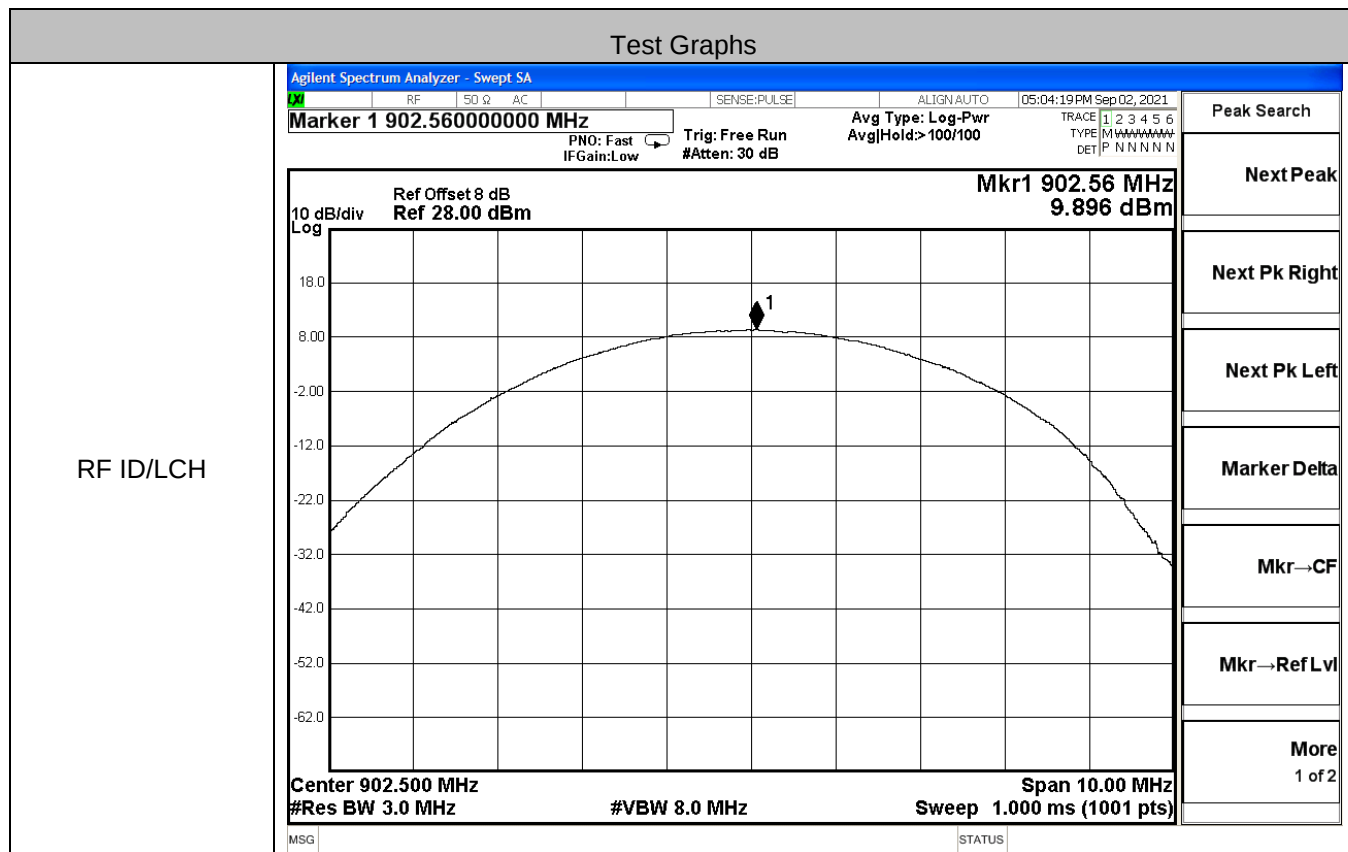
Environmental Conditions

Temperature:	21.2° C
Relative Humidity:	52.1%
ATM Pressure:	100.0 kPa
Test Engineer:	Kay Hu
Supervised by:	Li Huan



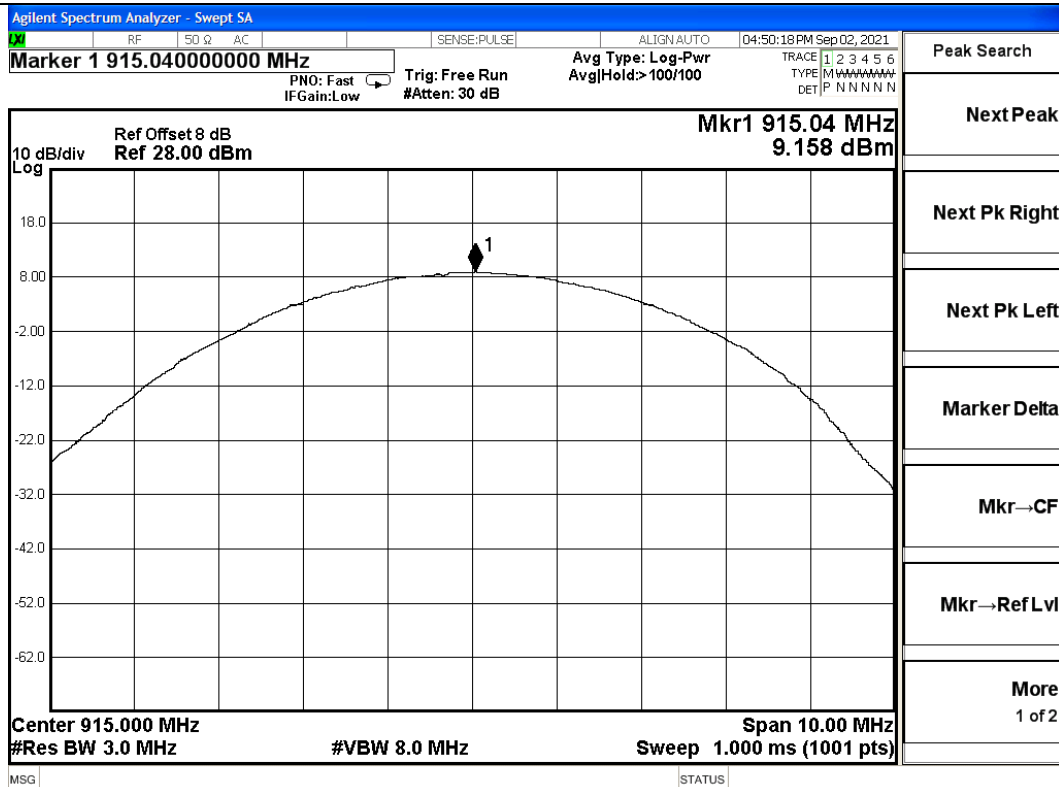
B.1 Maximum Conducted Peak Output Power

Mode	Channel.	Maximum Peak Output Power [dBm]	Limit [dBm]	Verdict
RF ID	LCH	9.896	30	PASS
	MCH	9.158	30	PASS
	HCH	9.925	30	PASS

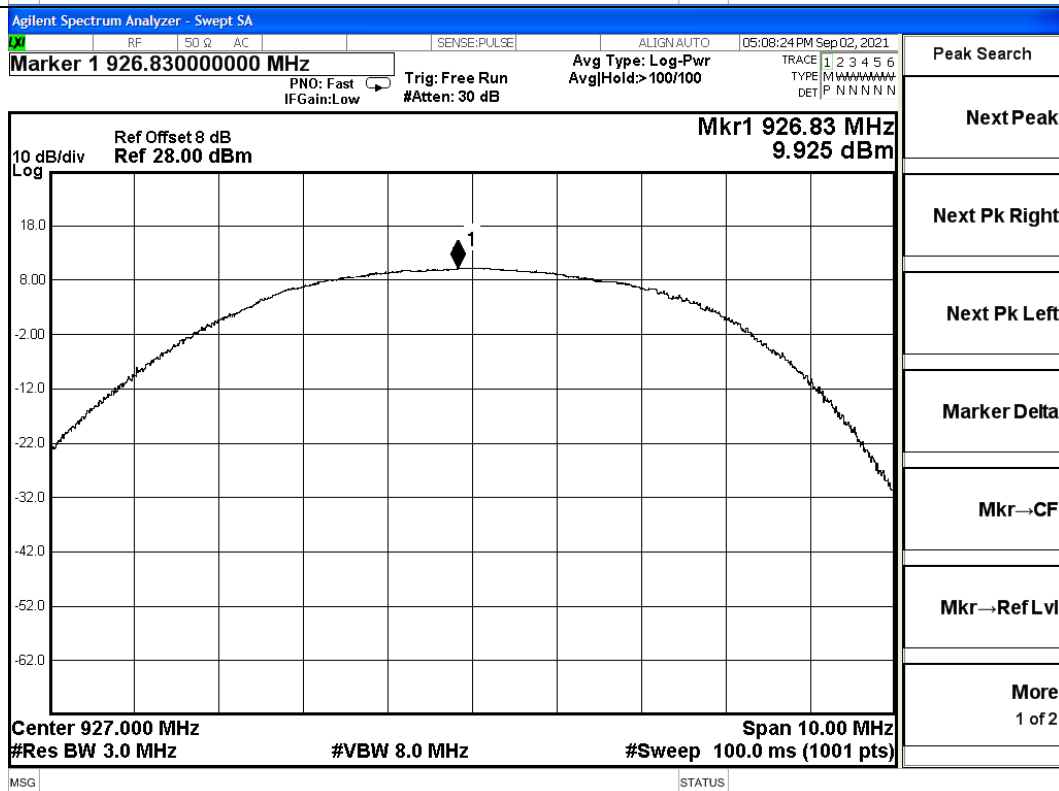




RF ID/MCH



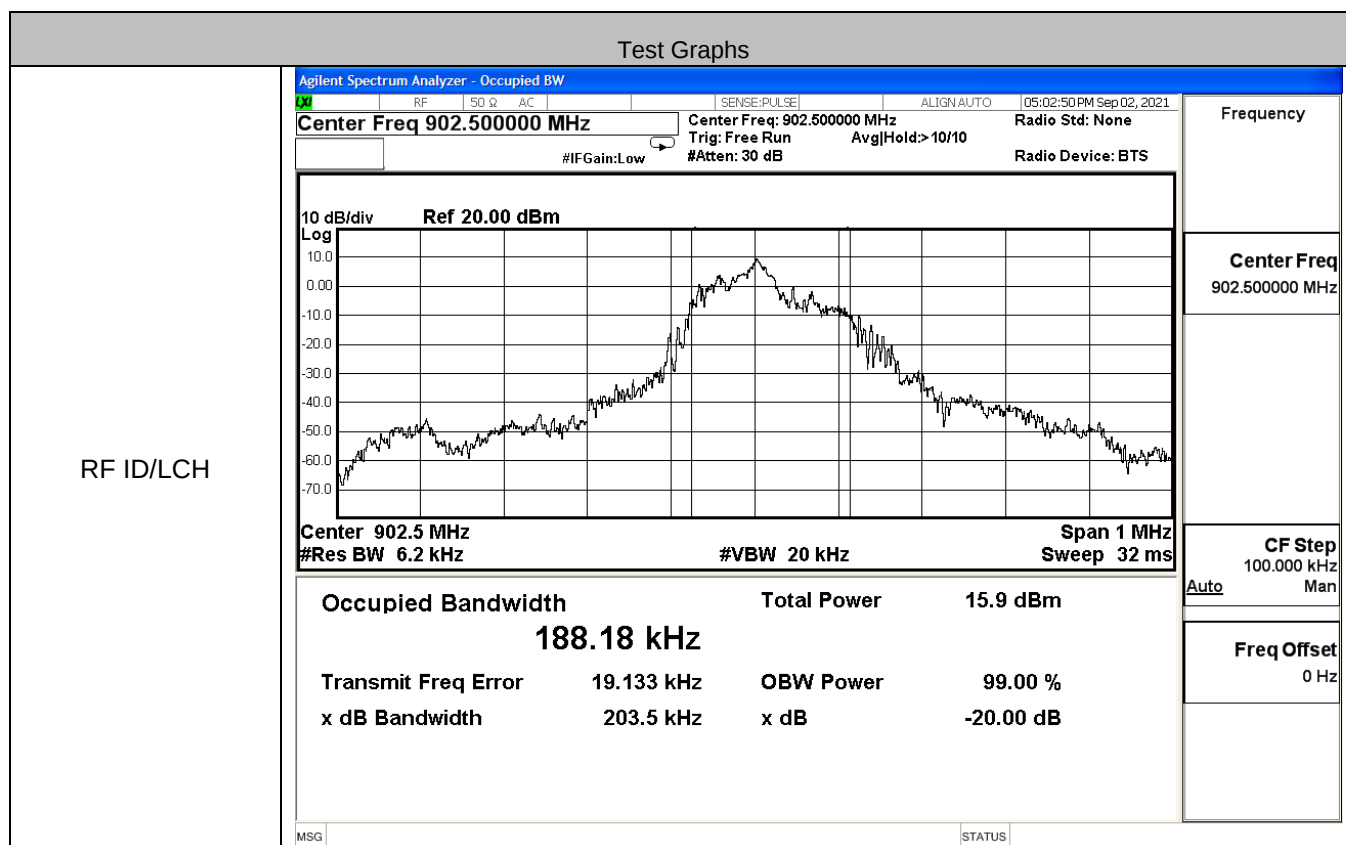
RF ID/HCH





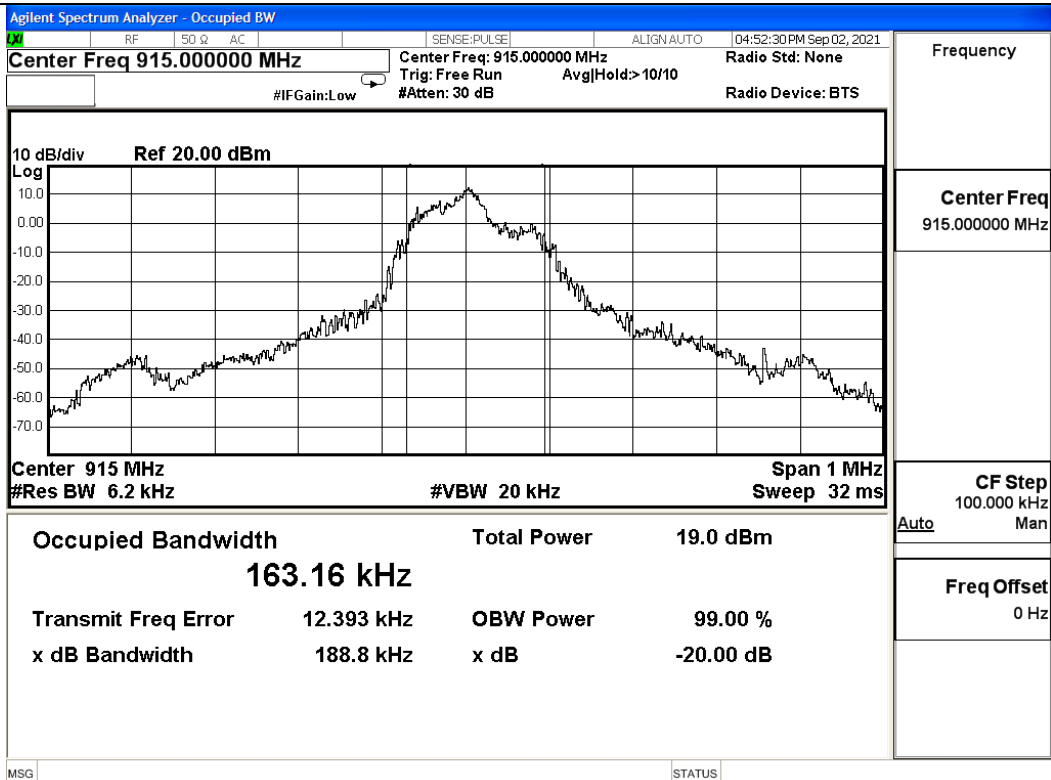
B.2 20dB Bandwidth

Mode	Channel.	20dB Bandwidth [kHz]	Limit [kHz]	Verdict
RF ID	LCH	203.5	<250	PASS
	MCH	188.8	<250	PASS
	HCH	79.25	<250	PASS

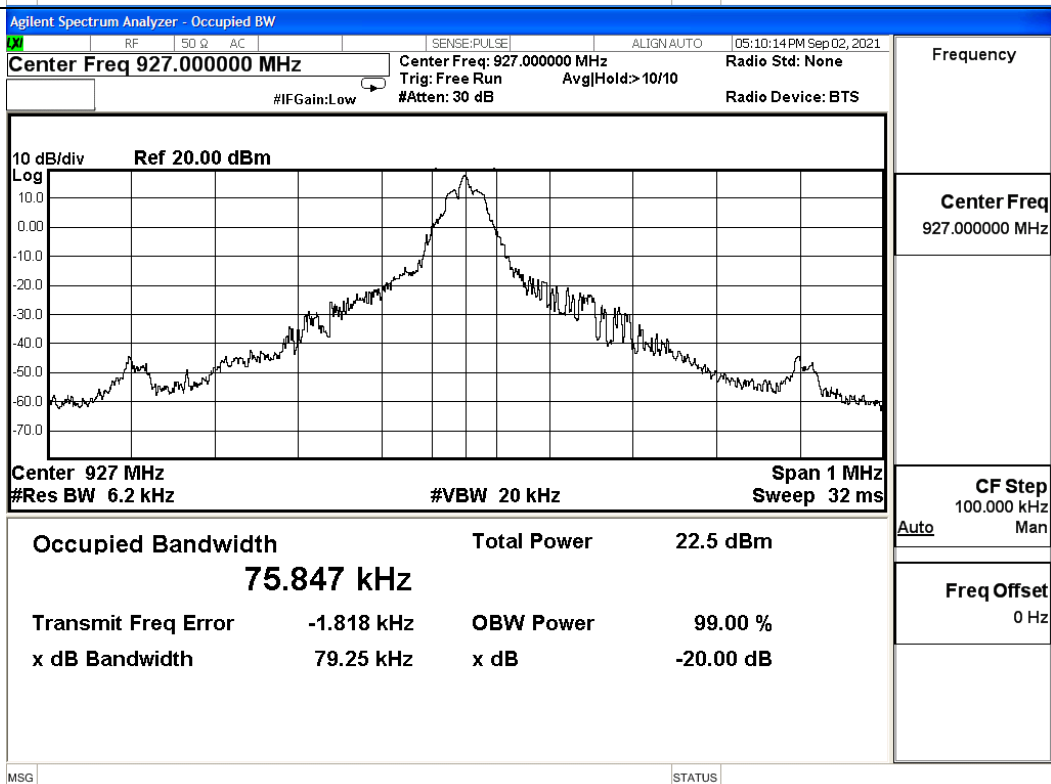




RF ID/MCH



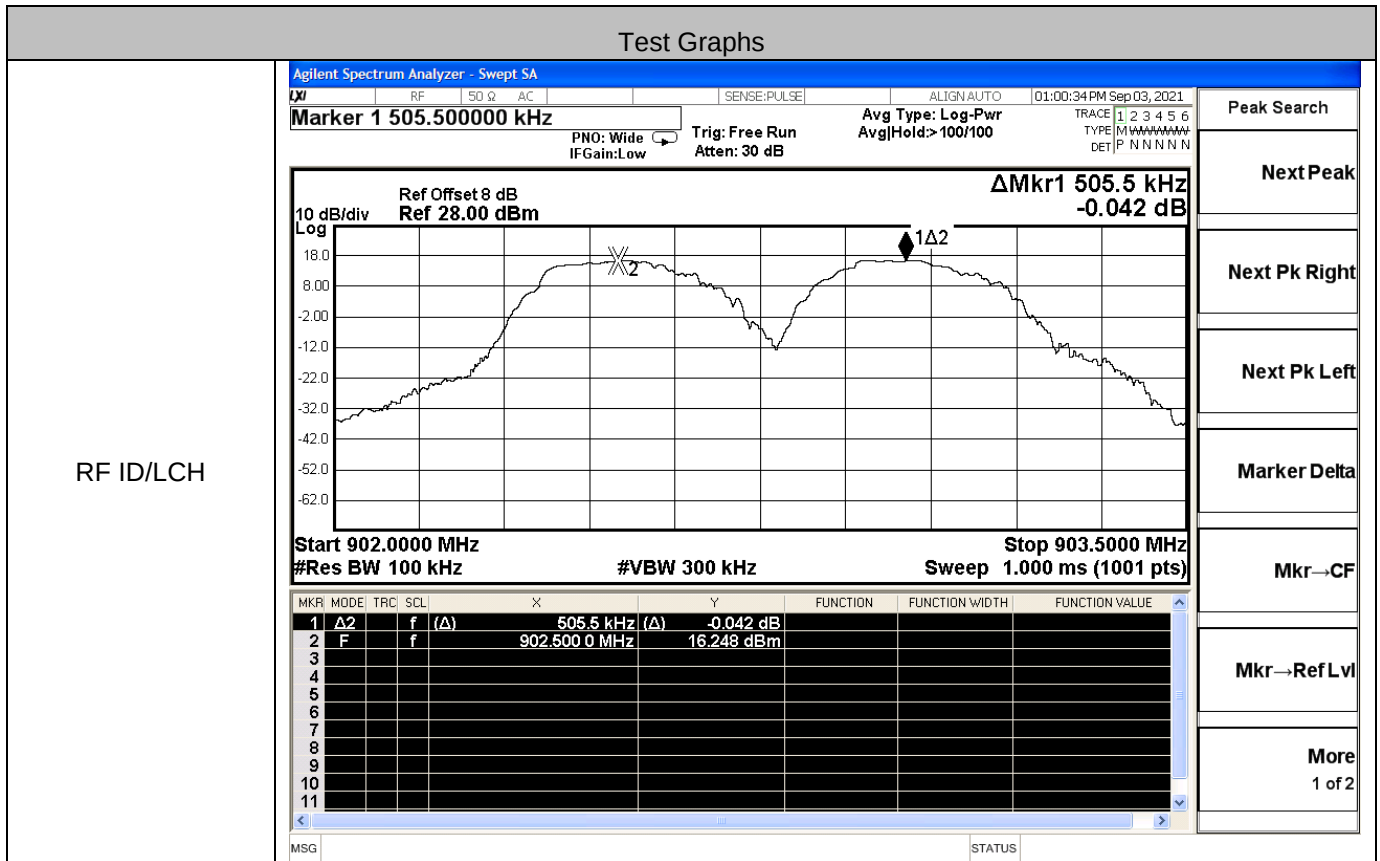
RF ID/HCH





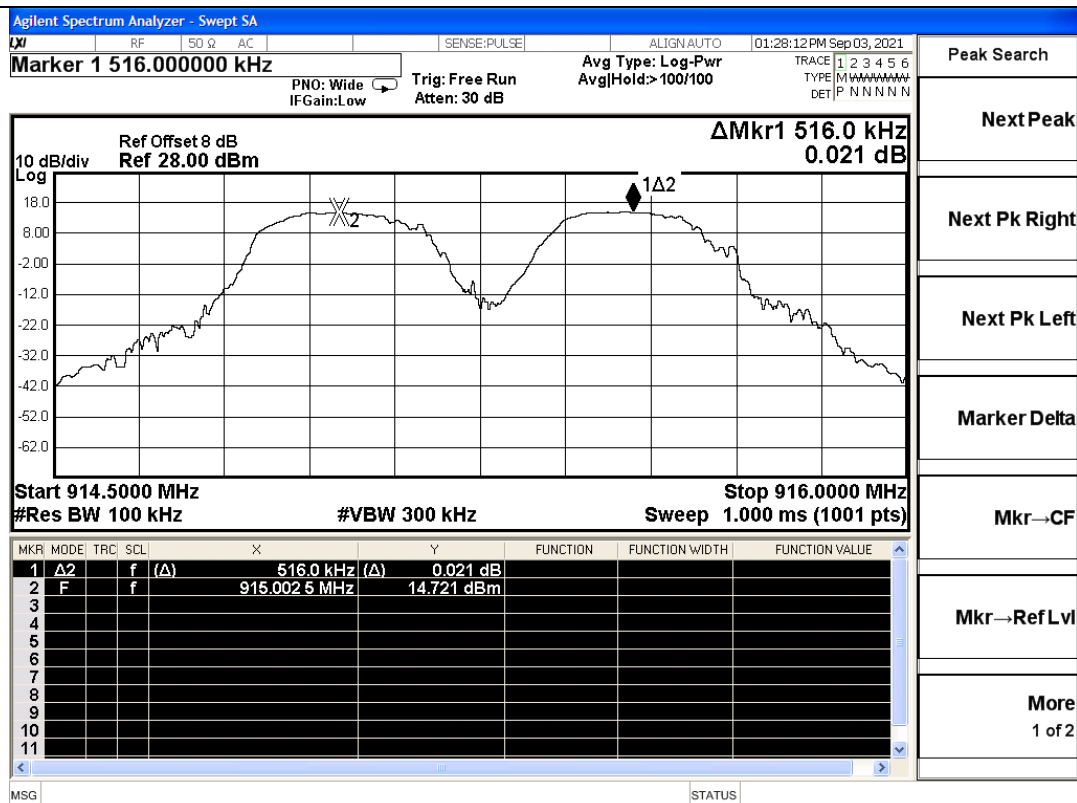
B.3 Carrier Frequency Separation

Mode	Channel.	Carrier Frequency Separation [kHz]	Limit [kHz]	Verdict
RF ID	LCH	505.5	203.5	PASS
	MCH	516	188.8	PASS
	HCH	513	79.25	PASS

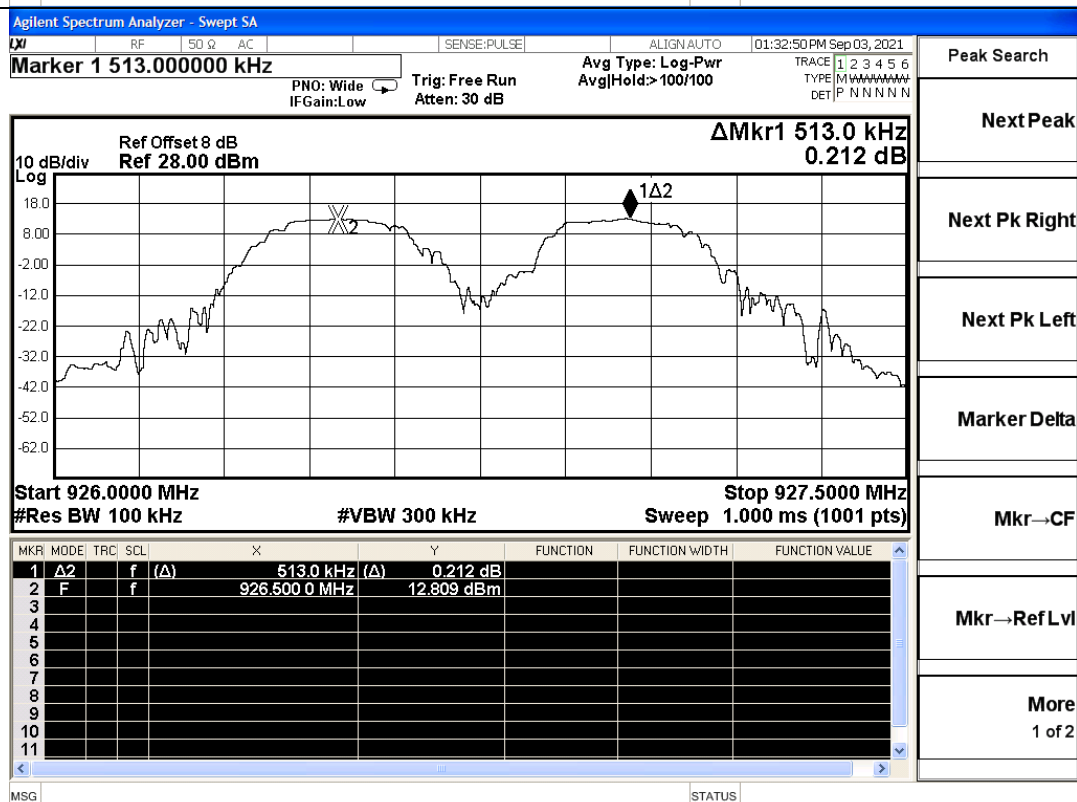




RF ID/MCH



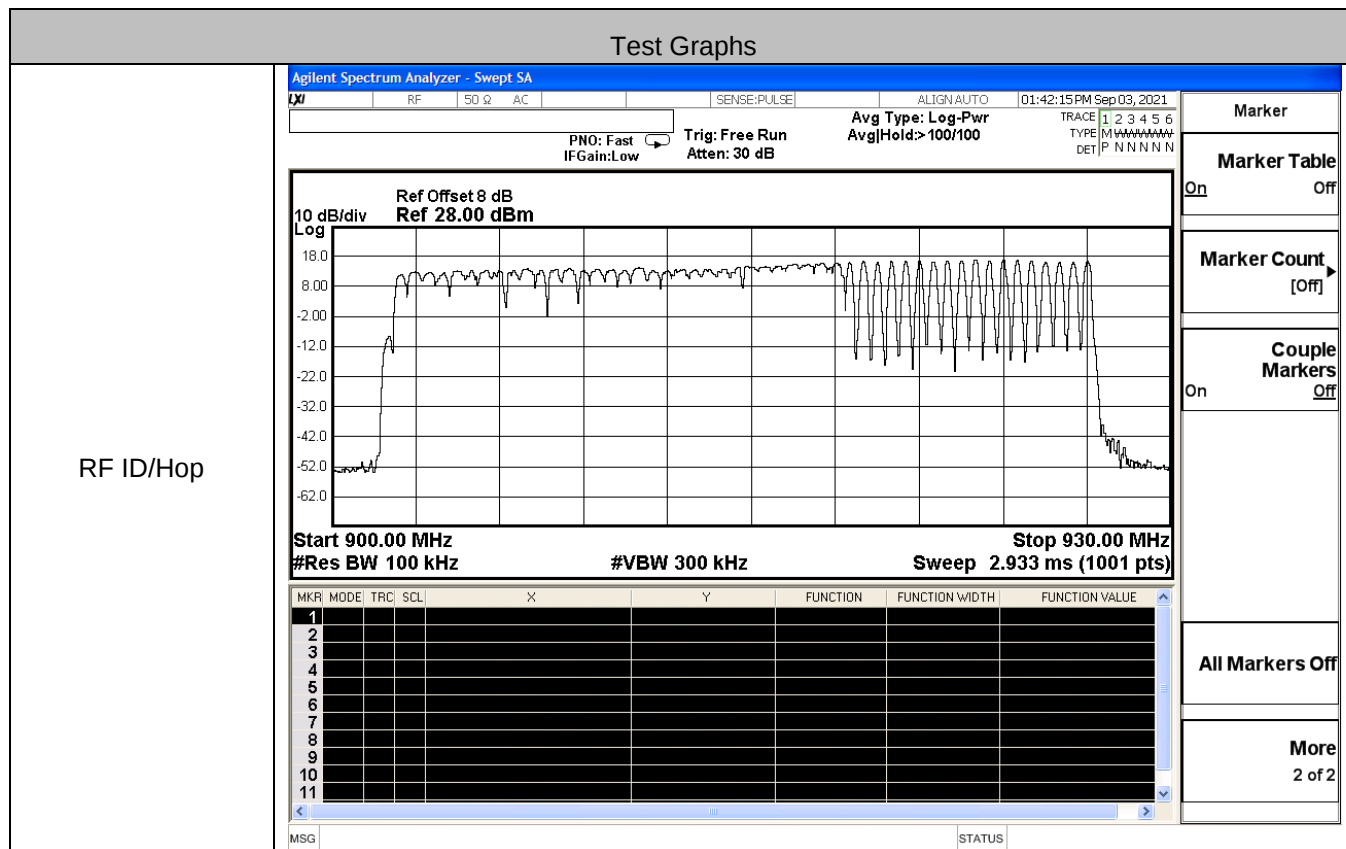
RF ID/HCH





B.4 Hopping Channel Number

Mode	Channel.	Number of Hopping Channel [N]	Limit [N]	Verdict
RF ID	Hop	51	≥ 50	PASS

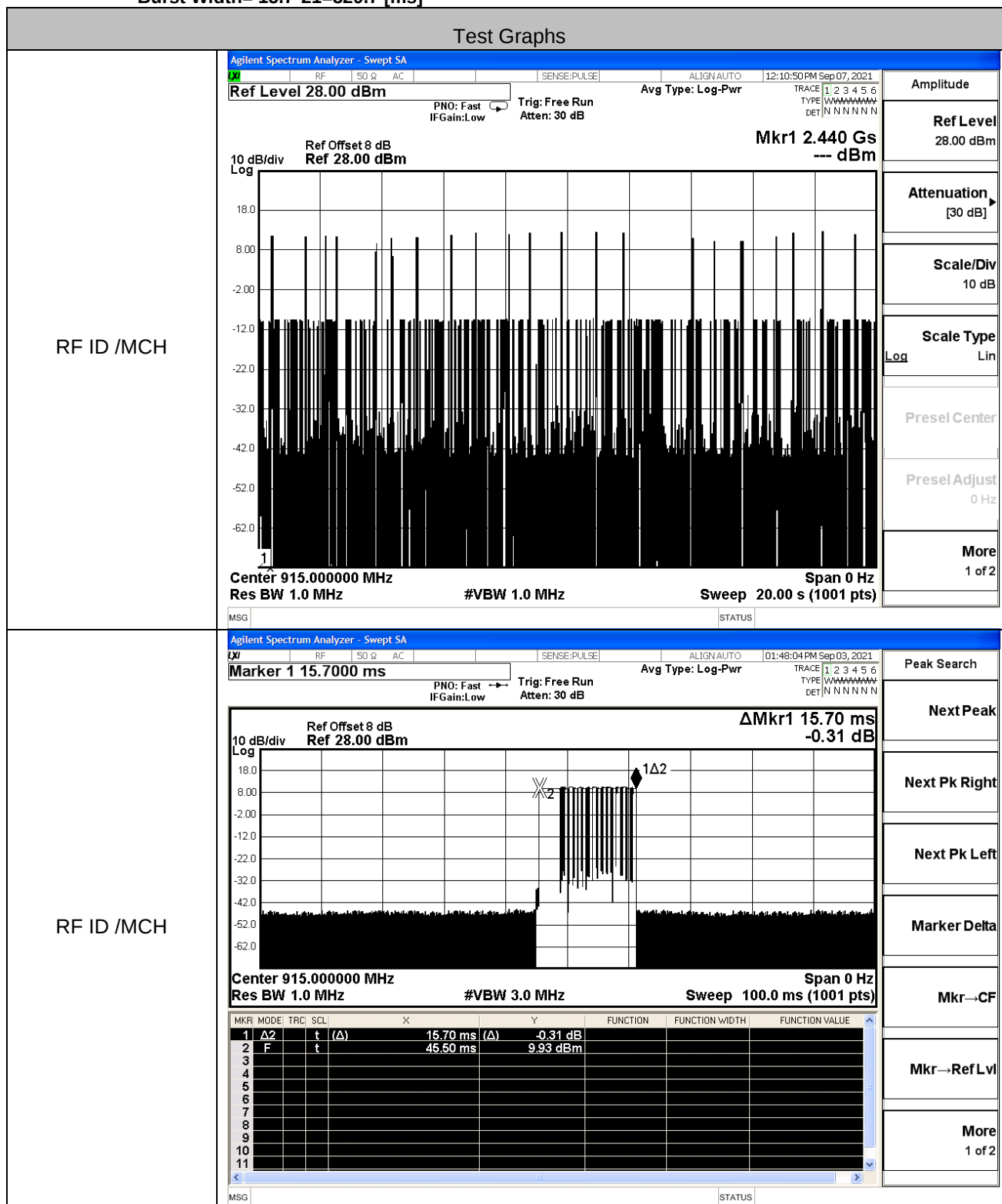




B.5 Dwell Time

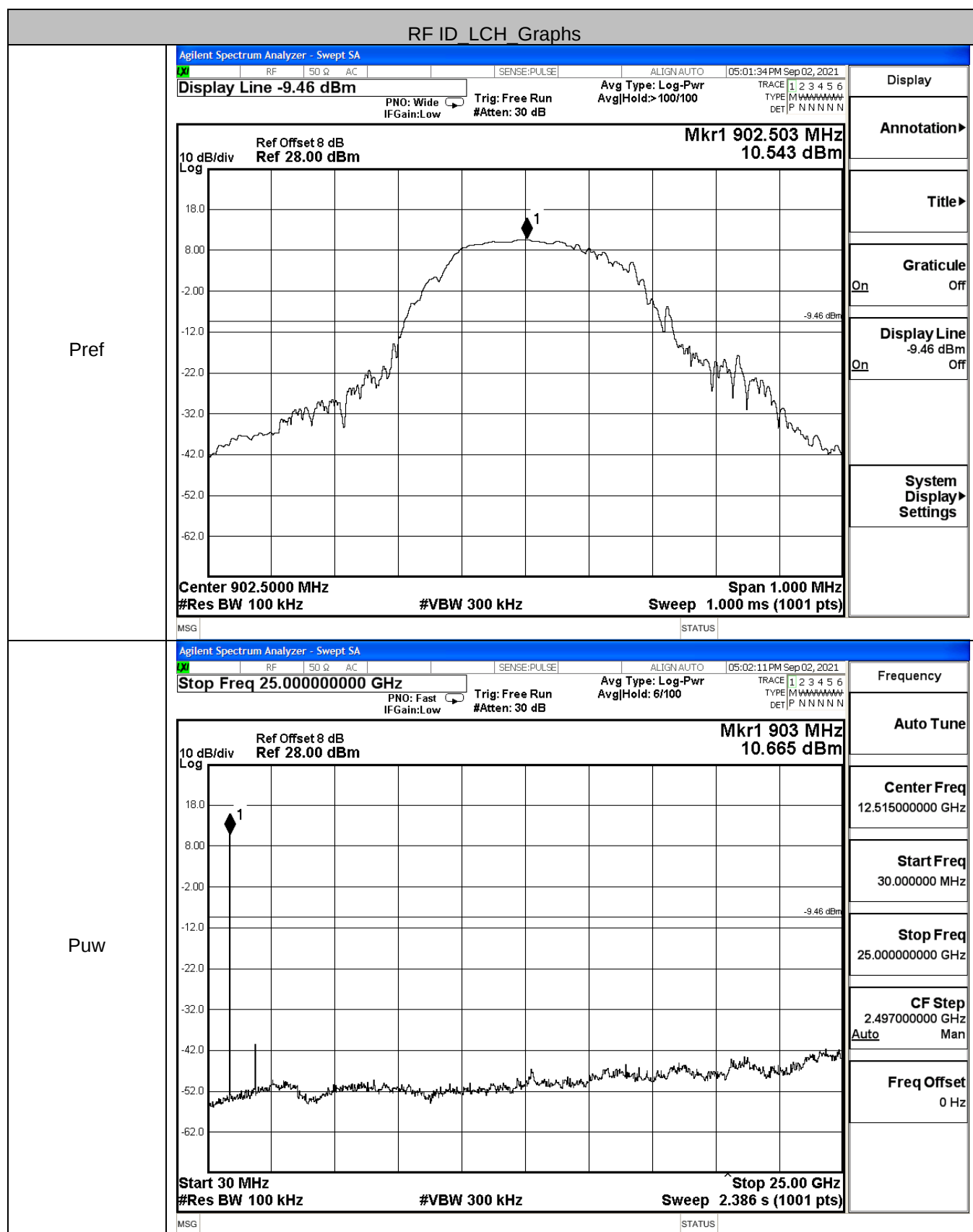
Mode	Burst Width [ms]	Dwell Time[s]	Limit [s]	Verdict
RF ID	329.7	0.329	0.4	PASS

Burst Width= 15.7*21=329.7 [ms]





B.6 RF Conducted Spurious Emissions





RF ID_MCH_Graphs

Pref

Agilent Spectrum Analyzer - Swept SA

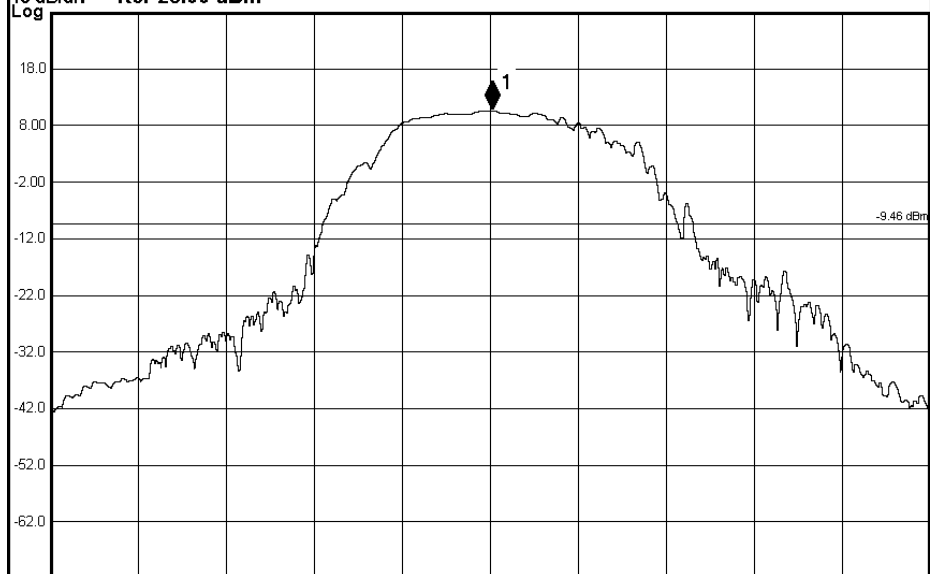
RF 50 Ω AC SENSE:PULSE ALIGN AUTO 05:01:34 PM Sep 02, 2021

Display Line -9.46 dBm

PNO: Wide
IFGain:LowTrig: Free Run
#Atten: 30 dB

Avg Type: Log-Pwr

Avg|Hold: 100/100

TRACE 1 2 3 4 5 6
TYPE M M M M M M M M
DET P N N N N N NRef Offset 8 dB
Ref 28.00 dBmMkr1 902.503 MHz
10.543 dBm

Center 902.5000 MHz

#Res BW 100 kHz

#VBW 300 kHz

Span 1.000 MHz

Sweep 1.000 ms (1001 pts)

MSG

STATUS

Display

Annotation▶

Title▶

Graticule

On

Off

Display Line

On

-9.46 dBm

Off

System
Display▶
Settings

PuW

Agilent Spectrum Analyzer - Swept SA

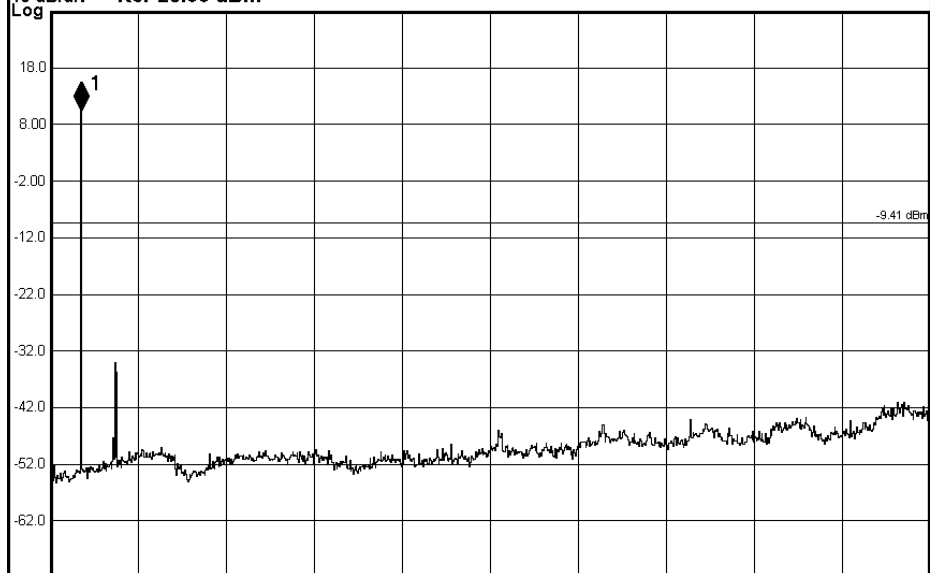
RF 50 Ω AC SENSE:PULSE ALIGN AUTO 04:59:09 PM Sep 02, 2021

Marker 1 903.950000000 MHz

PNO: Fast
IFGain:LowTrig: Free Run
#Atten: 30 dB

Avg Type: Log-Pwr

Avg|Hold: 14/100

TRACE 1 2 3 4 5 6
TYPE M M M M M M M M
DET P N N N N N NRef Offset 8 dB
Ref 28.00 dBmMkr1 904 MHz
10.287 dBm

Start 30 MHz

#Res BW 100 kHz

#VBW 300 kHz

Stop 25.00 GHz

Sweep 2.386 s (1001 pts)

MSG

STATUS

Peak Search

Next Peak

Next Pk Right

Next Pk Left

Marker Delta

Mkr→CF

Mkr→Ref Lvl

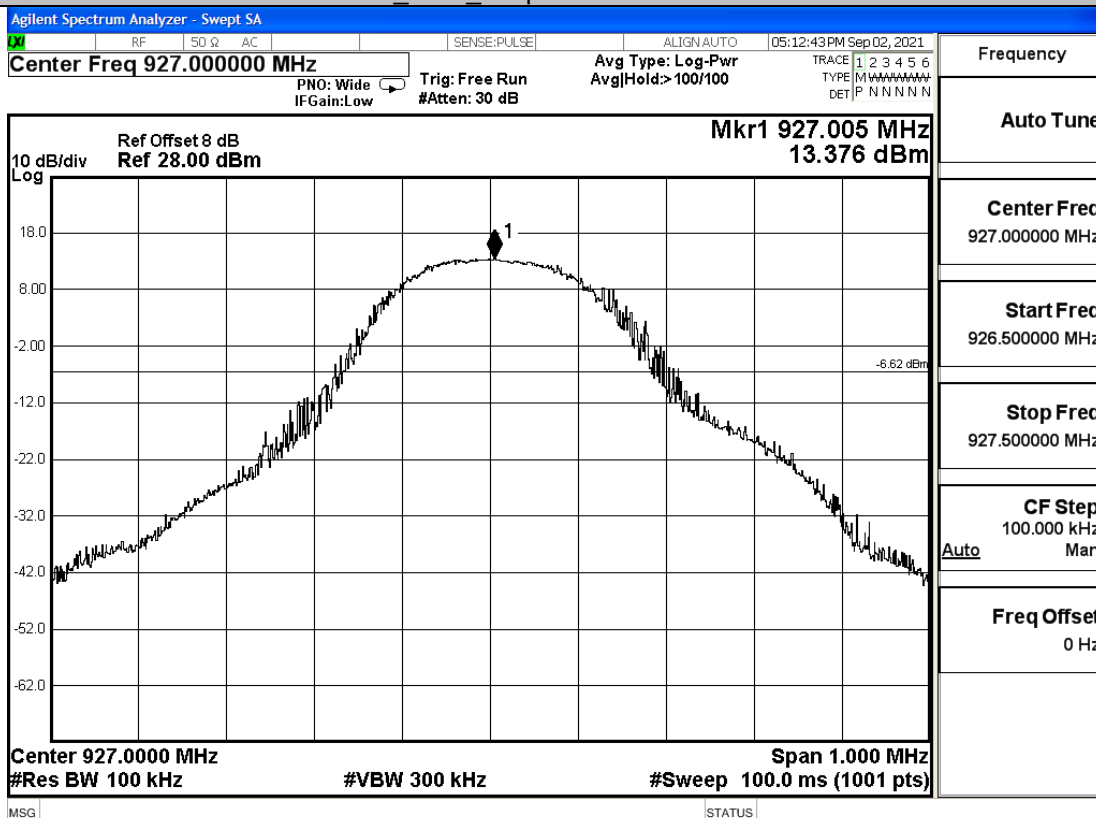
More

1 of 2

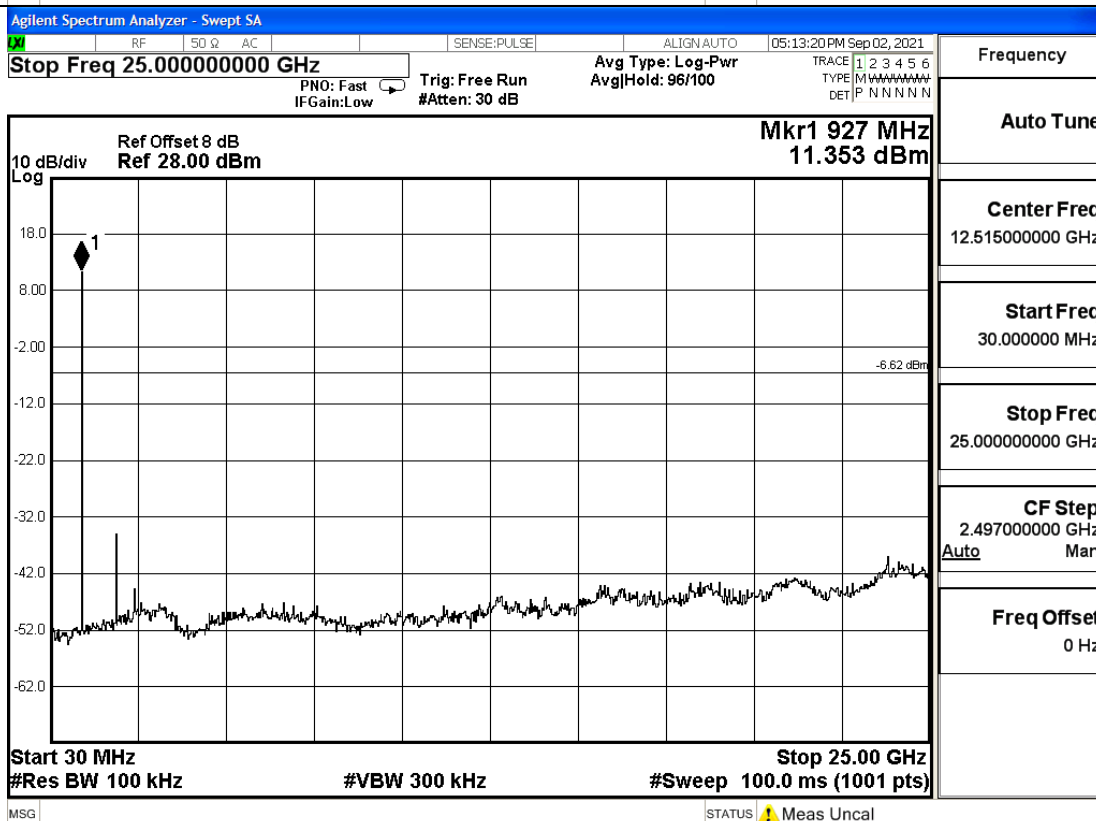


RF ID_HCH_Graphs

Pref

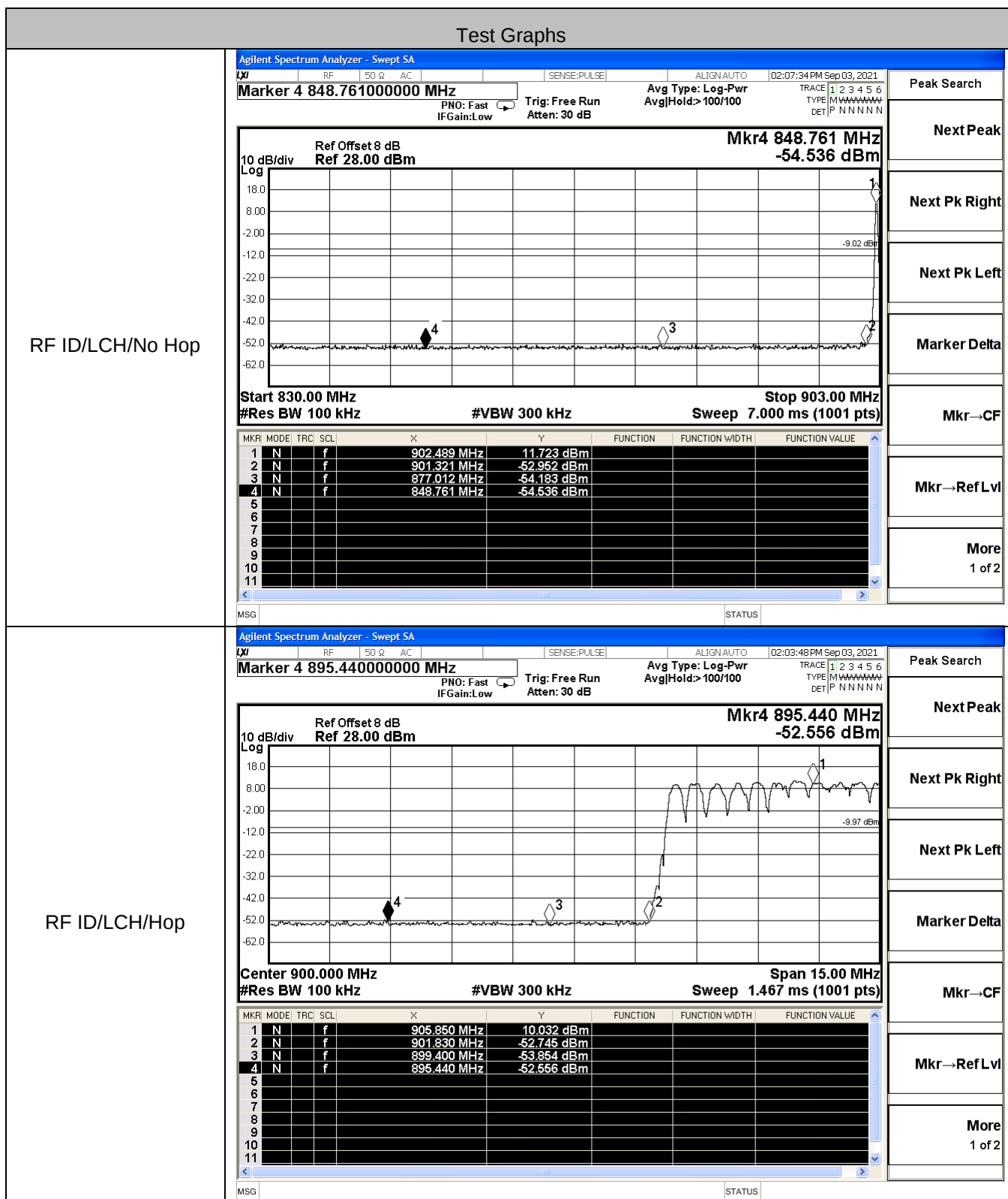


Puw



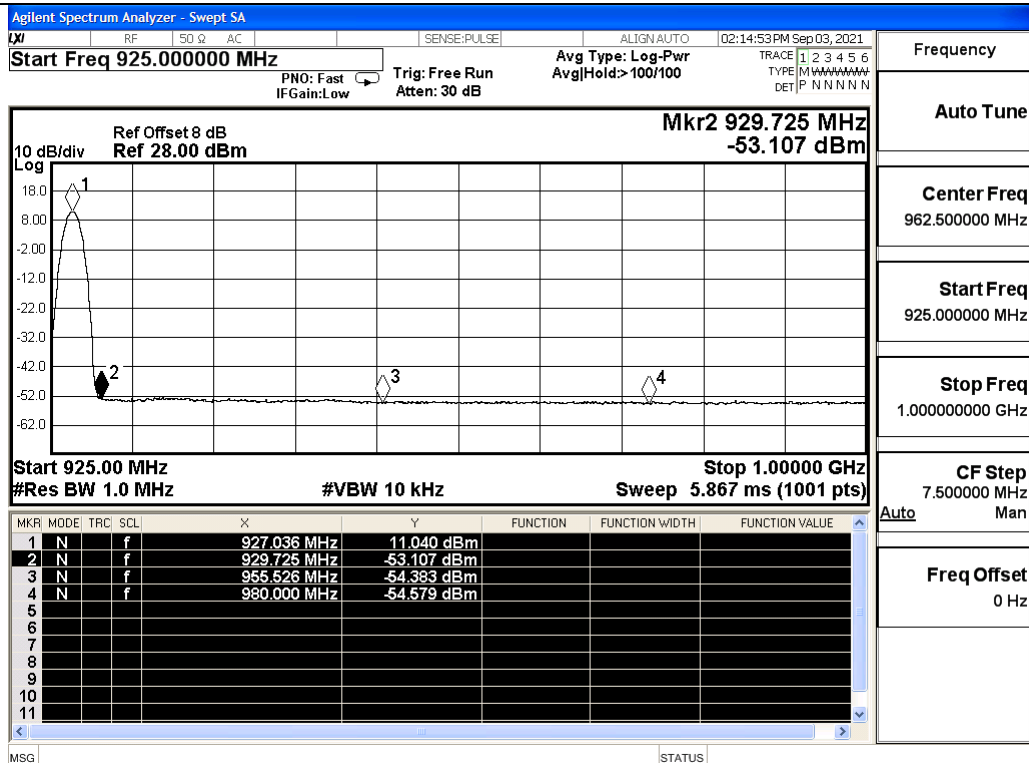


B.7 Band-edge for RF Conducted Emissions





RF ID/HCH/No Hop



RF ID/HCH/Hop

