

## Appendix A

### RF Test Data for Lora-DTS (902-928MHz DTS Mode)

Product Name: LoRa+BLE module

Trade Mark: RAK

Test Model: RAK4600(H)

FCC ID: 2AF6B- RAK4600H

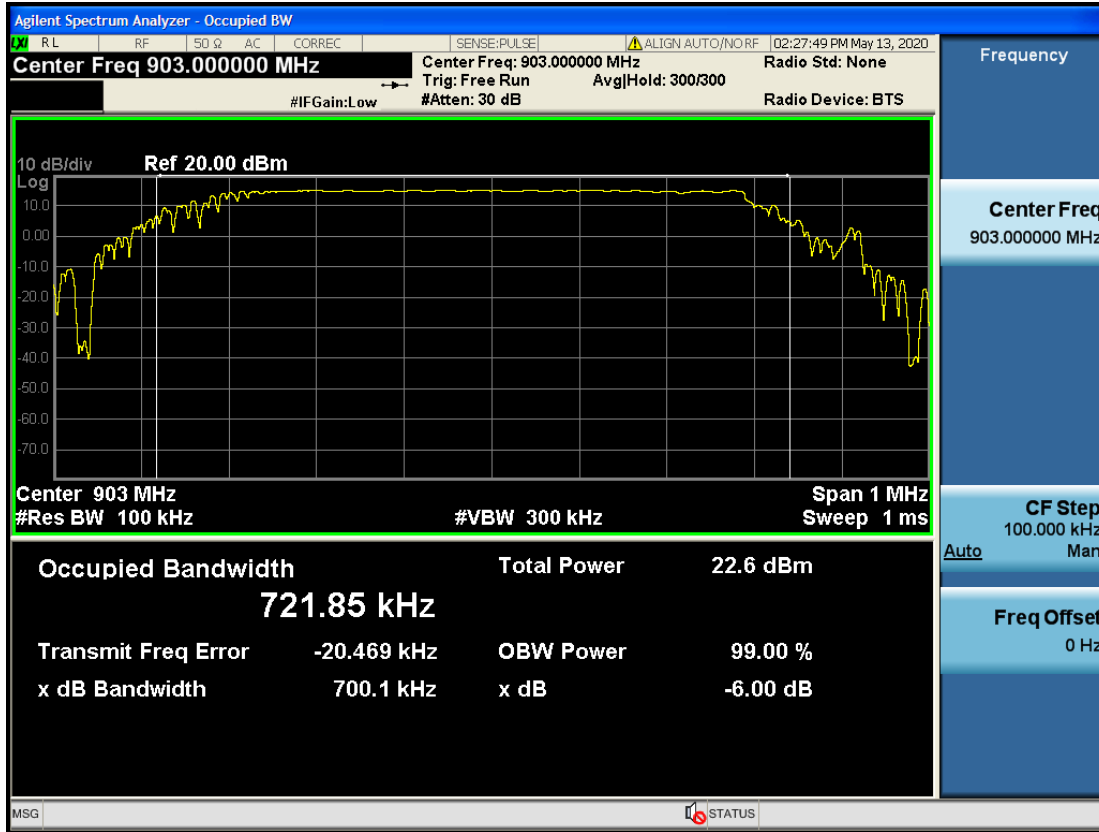
### Environmental Conditions

Temperature:	24.3° C
Relative Humidity:	55%
ATM Pressure:	100.0 kPa
Test Engineer:	Anna Hu
Supervised by:	Hugo Chen
NOTE	N/A

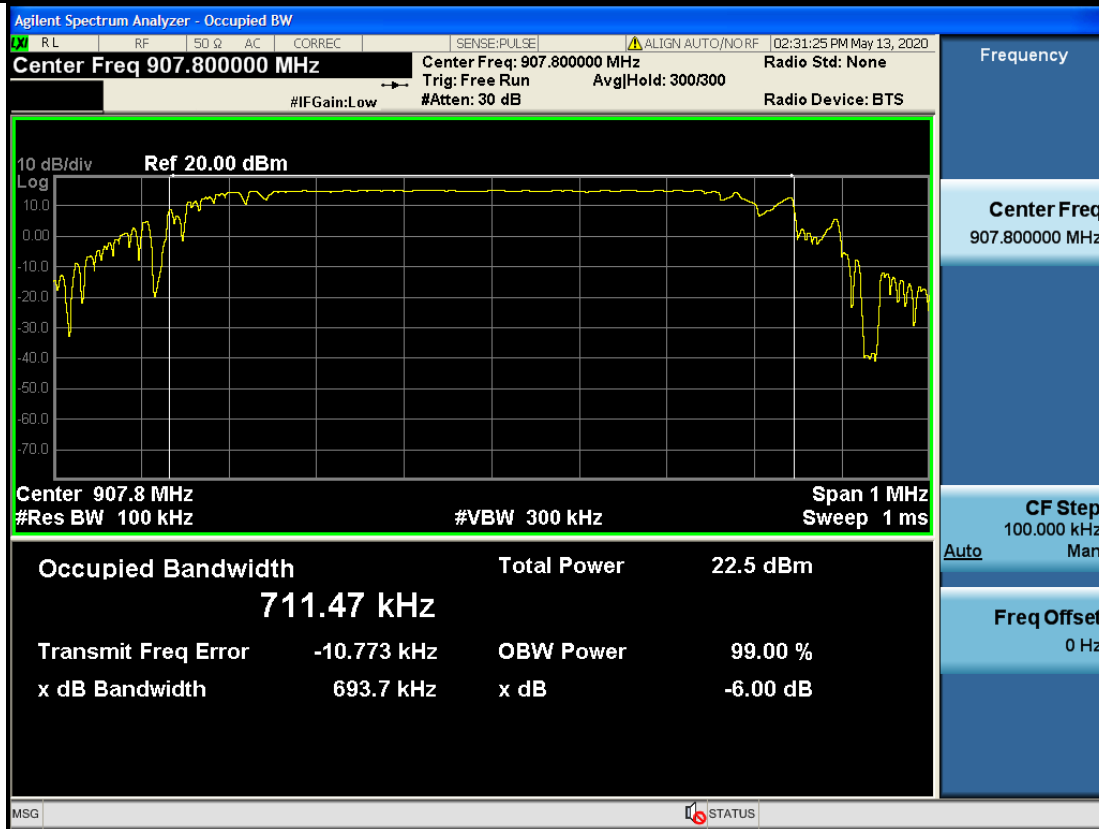
#### 1.6dB Bandwidth

Test Mode	Test Channel	Ant	EBW[MHz]	Limit	Verdict
Lora-DTS	LCH	Ant1	0.700	0.5	PASS
Lora-DTS	MCH	Ant1	0.694	0.5	PASS
Lora-DTS	HCH	Ant1	0.732	0.5	PASS

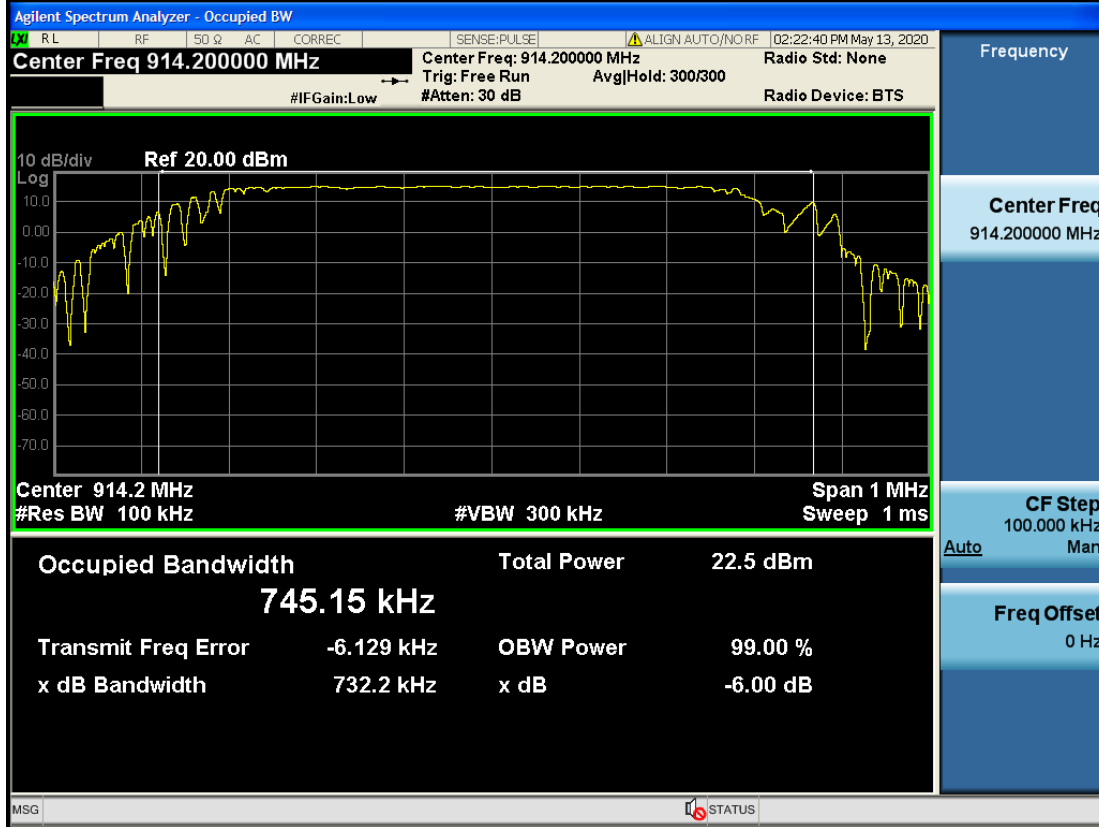
6dB Bandwidth\_LCH\_Ant1



6dB Bandwidth\_MCH\_Ant1



6dB Bandwidth\_HCH\_Ant1



**2.Occupied Bandwidth**

Test Mode	Test Channel	Ant	OBW[MHz]	Limit[MHz]	Verdict
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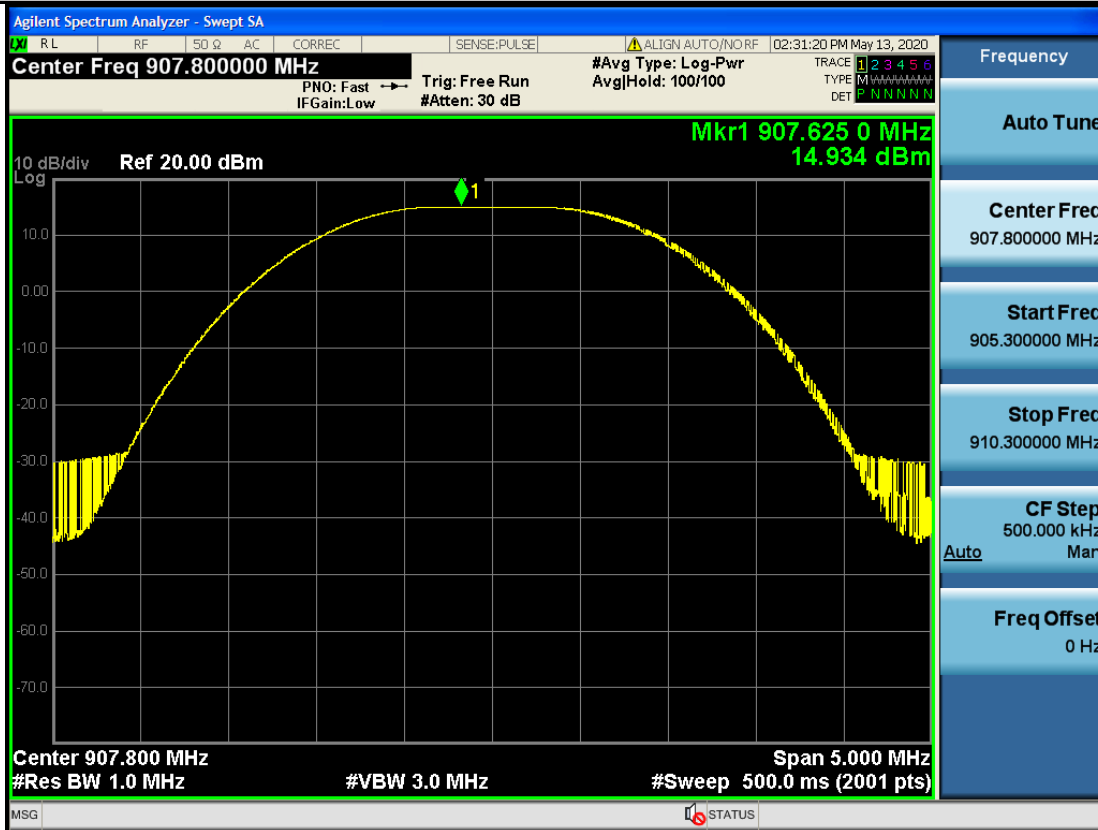
**3.Maximum peak conducted output power**

Test Mode	Channel	Ant	Power[dBm]	Limit[dBm]	Verdict
Lora-DTS	LCH	Ant1	14.938	30	PASS
Lora-DTS	MCH	Ant1	14.934	30	PASS
Lora-DTS	HCH	Ant1	14.937	30	PASS

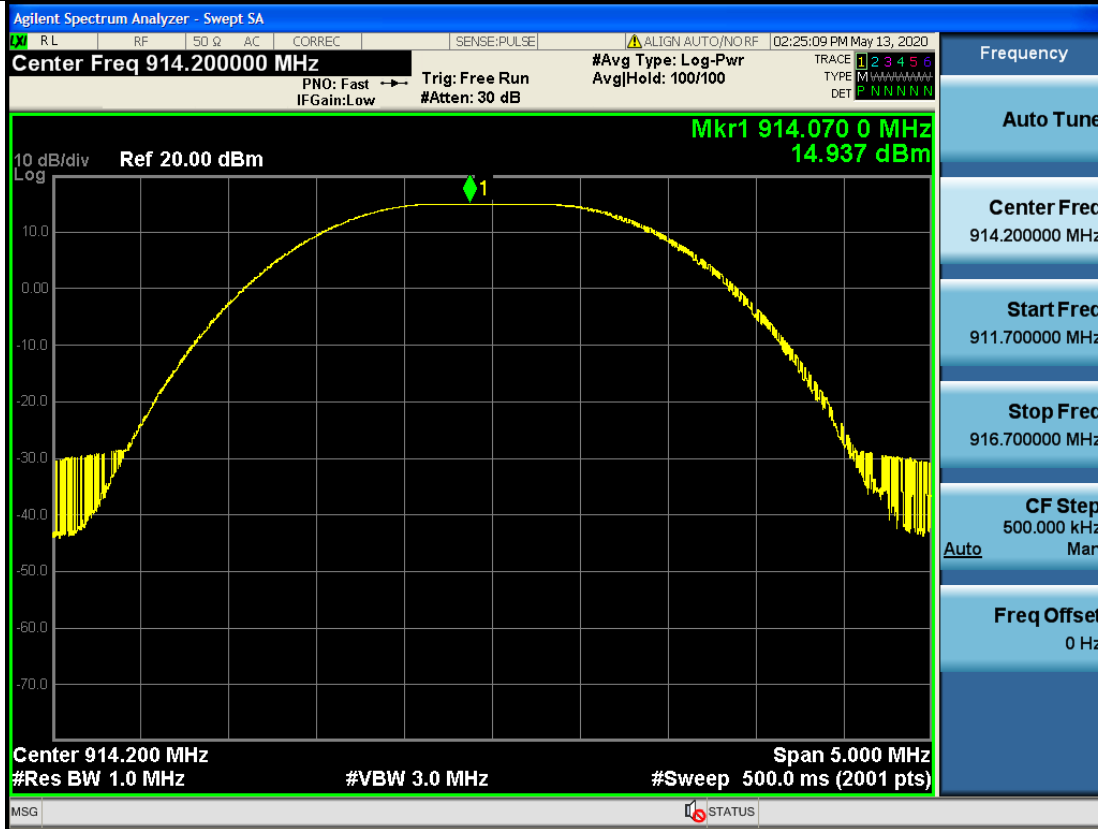
Maximum peak conducted output power\_LCH\_Ant1



Maximum peak conducted output power\_MCH\_Ant1



Maximum peak conducted output power\_HCH\_Ant1



**4.Maximum Peak power spectral density**

Test Mode	Test Channel	Ant	PSD[dBm/3KHz]	Limit[dBm/3KHz]	Verdict
Lora-DTS	LCH	Ant1	1.631	8.00	PASS
Lora-DTS	MCH	Ant1	1.657	8.00	PASS
Lora-DTS	HCH	Ant1	1.871	8.00	PASS

Maximum Peak power spectral density\_LCH\_Ant1



Maximum Peak power spectral density\_MCH\_Ant1





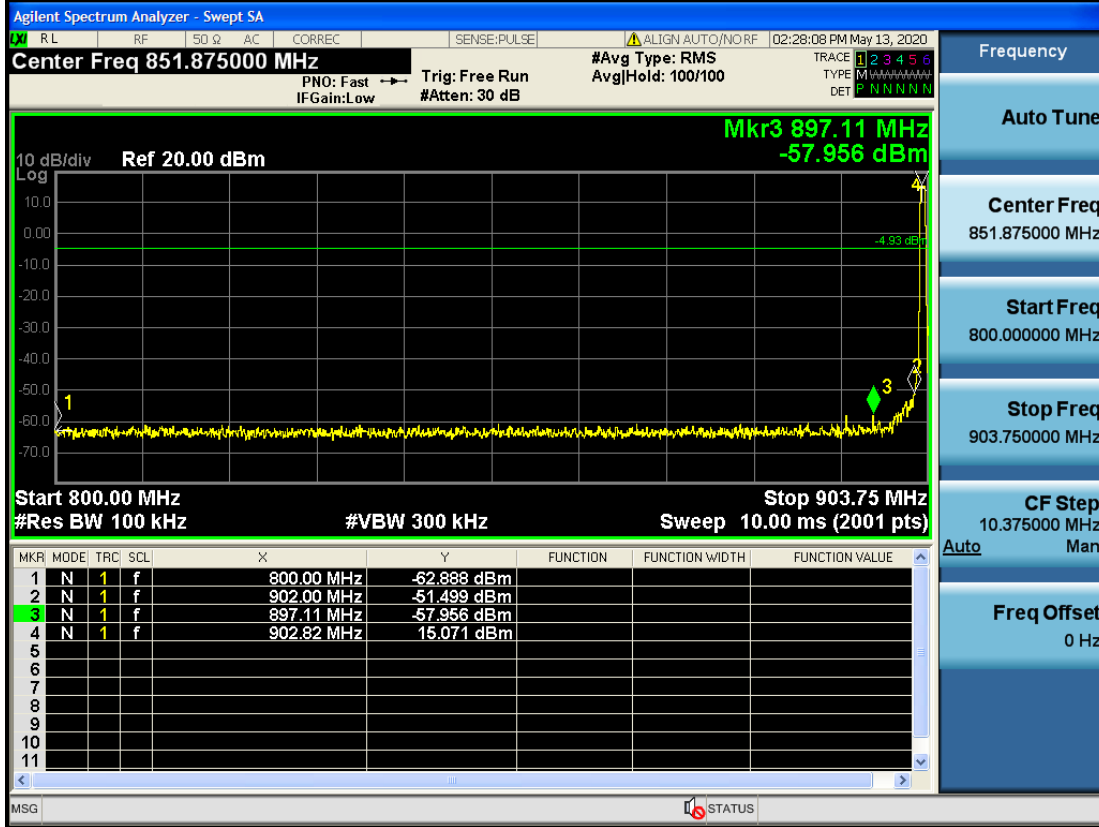
Maximum Peak power spectral density\_HCH\_Ant1



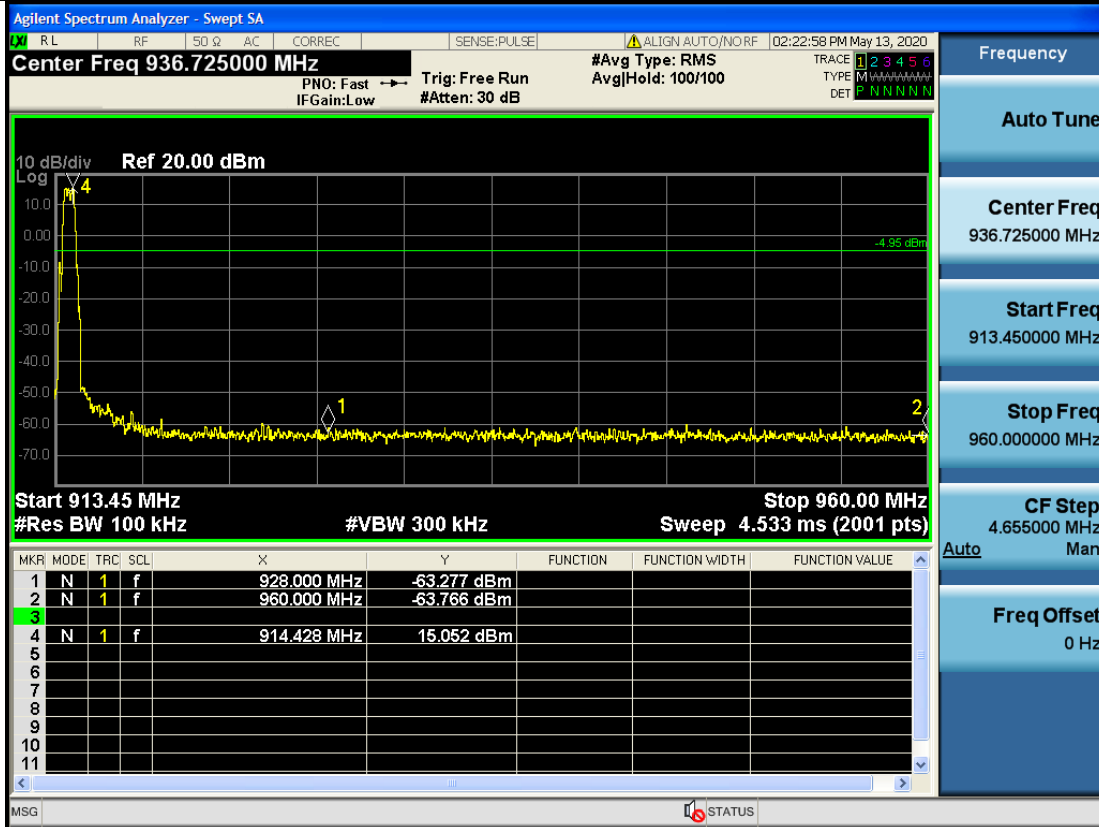
**5.Band-edge for RF Conducted Emissions**

Type	Carrier Frequency(MHz)	Frequency(MHz)	Carrier Frequency Power [dBm]	Bandedge Peak(dBm)	Upper limit(dBm)	Conclusion
Lora-DTS	903	902	15.071	-51.5	-4.929	Pass
Lora-DTS	914.2	928	15.052	-63.28	-4.948	Pass

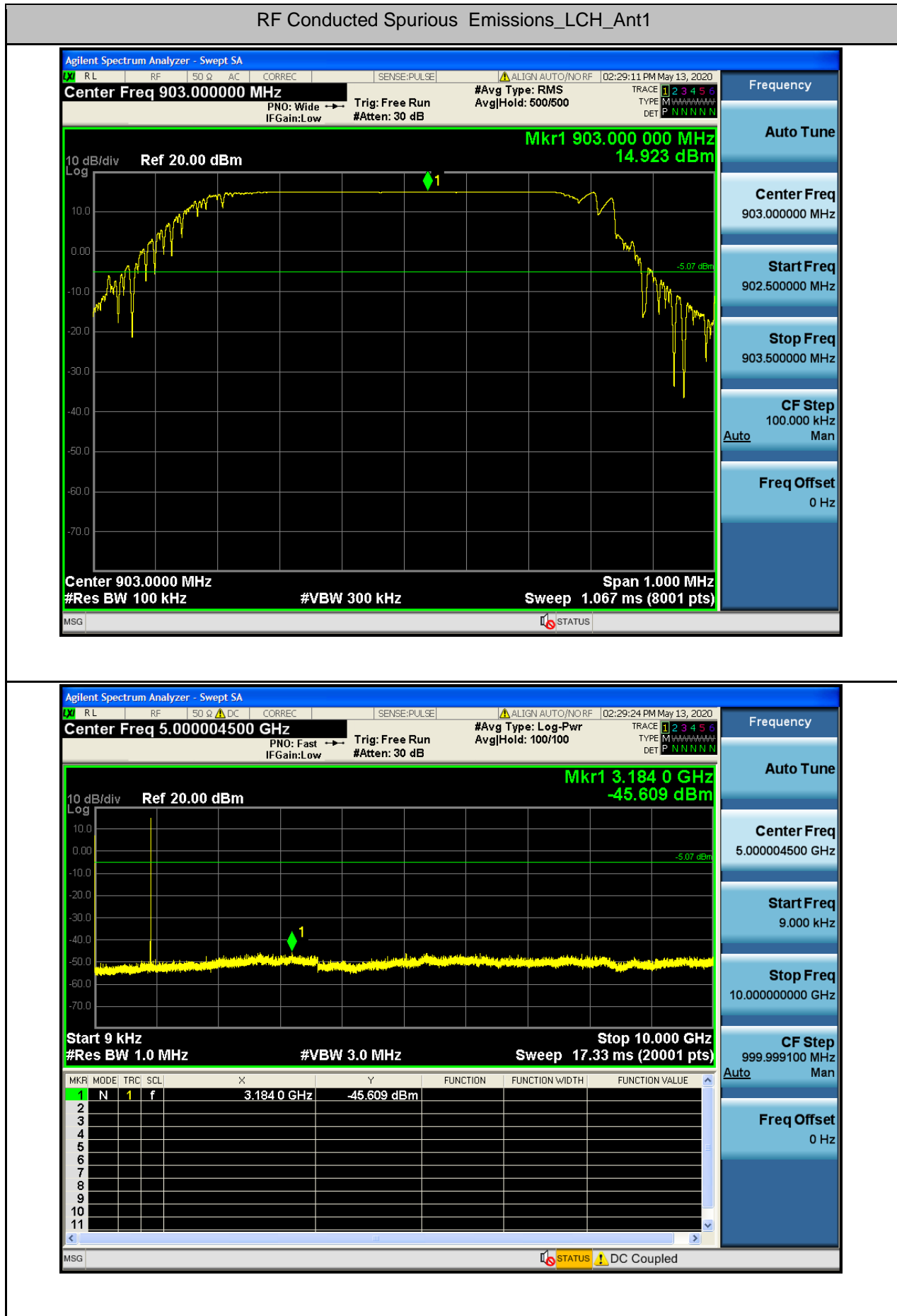
Band-edge for RF Conducted Emissions\_LCH\_Ant1



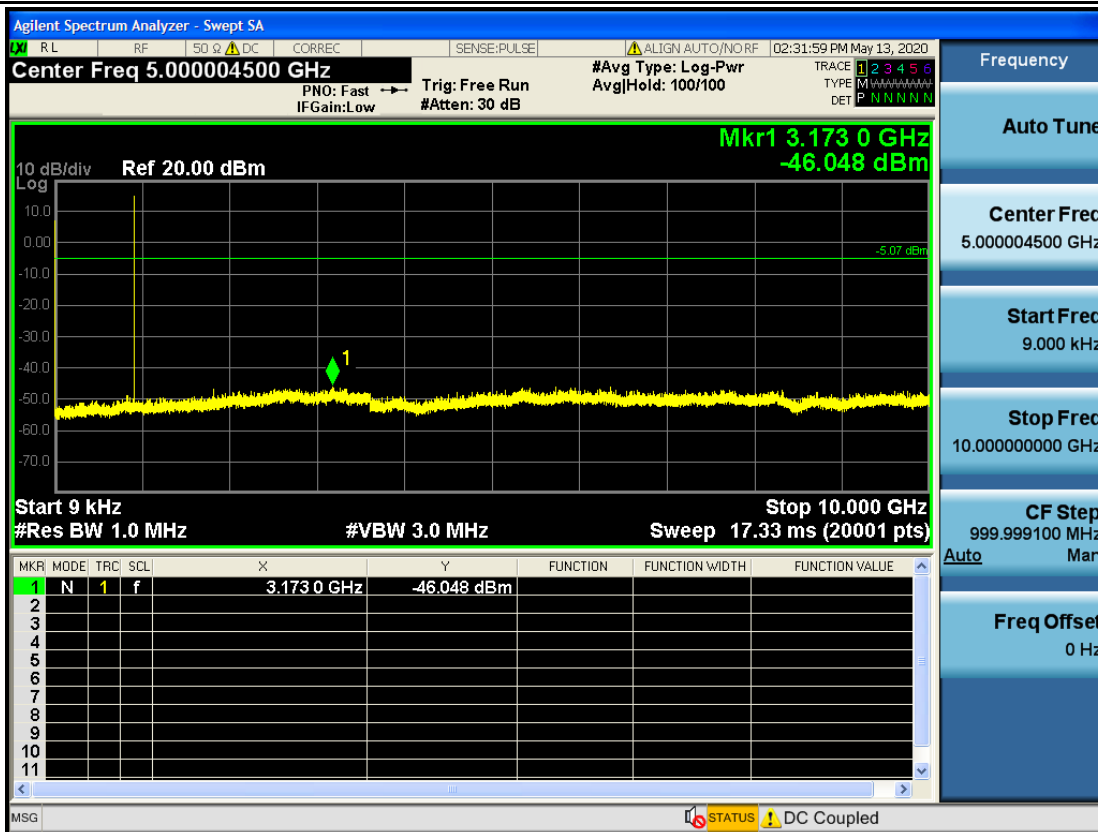
Band-edge for RF Conducted Emissions\_HCH\_Ant1



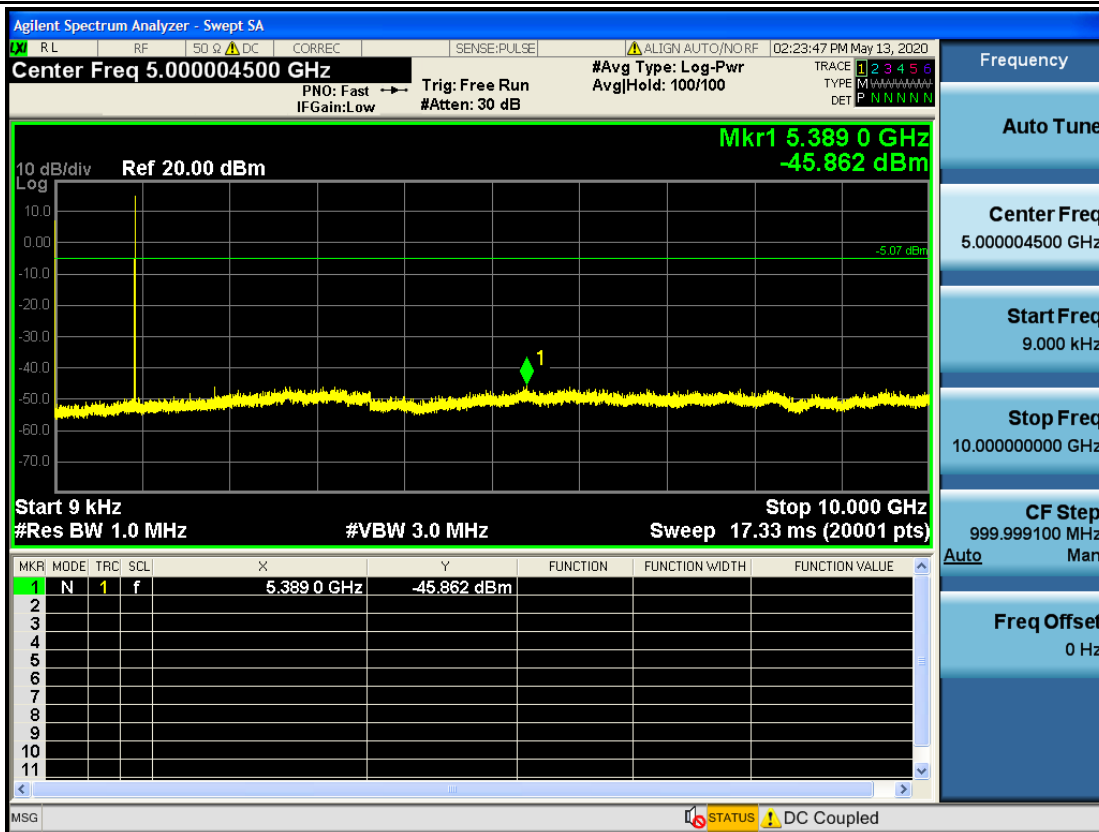
6.RF Conducted Spurious Emissions



RF Conducted Spurious Emissions\_MCH\_Ant1



RF Conducted Spurious Emissions\_HCH\_Ant1



8.Duty Cycle

Test Mode	Test Channel	Ant	Duty Cycle[%]	Verdict
BLE	903	Ant1	15.27	PASS

