

Appendix: LORA FHSS

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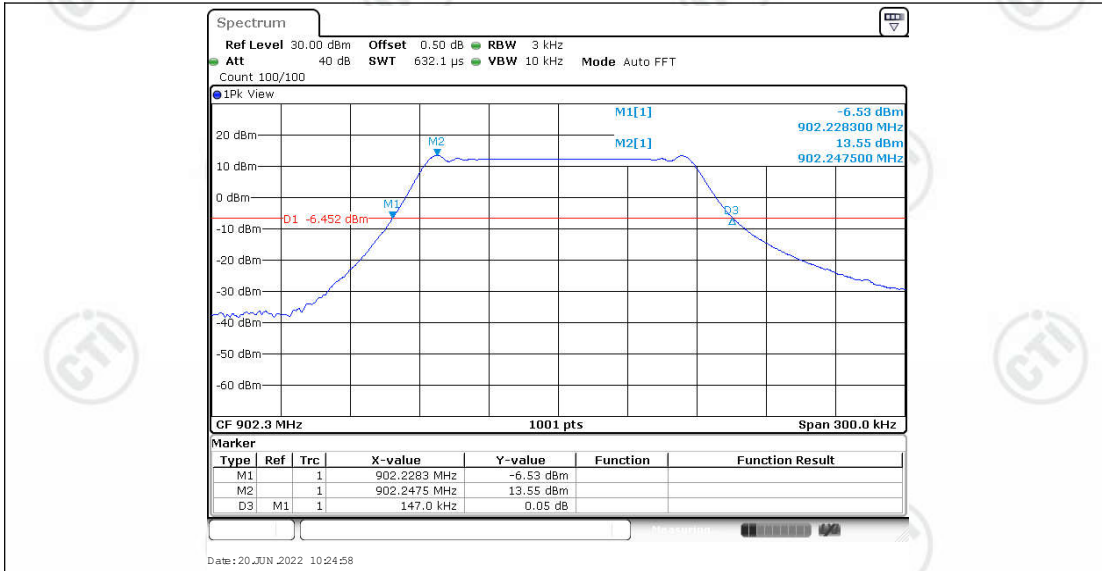
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## Appendix A: 20dB Emission Bandwidth

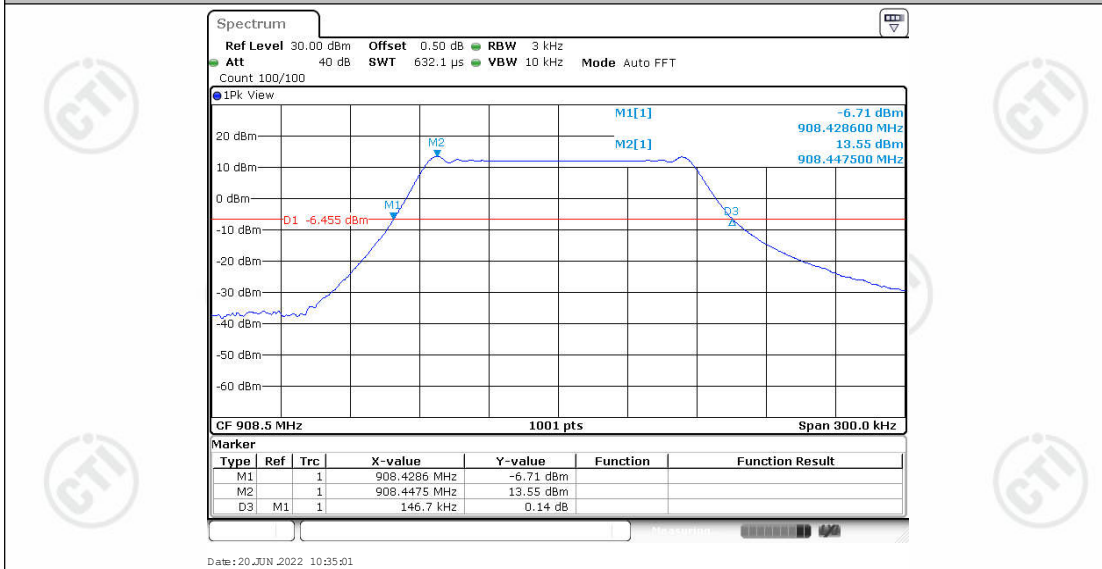
### Test Result

Test Mode	Antenna	Channel	20db EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BW125K	Ant1	902.3	0.147	902.228	902.375	---	PASS
		908.5	0.147	908.429	908.575	---	PASS
		914.9	0.147	914.828	914.975	---	PASS

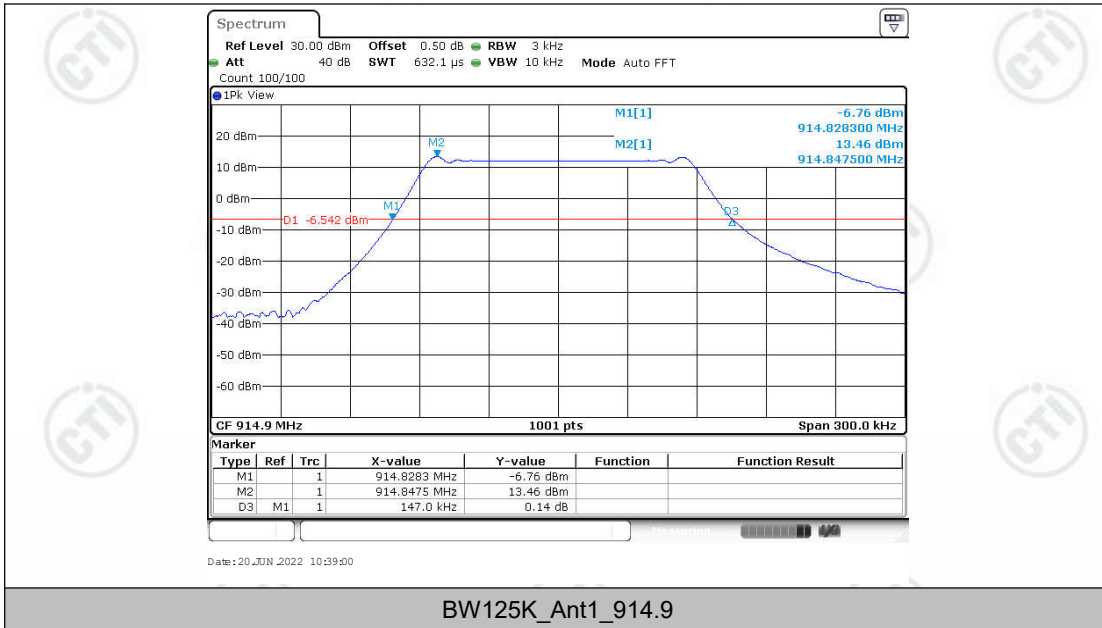
## Test Graphs



BW125K\_Ant1\_902.3



BW125K\_Ant1\_908.5

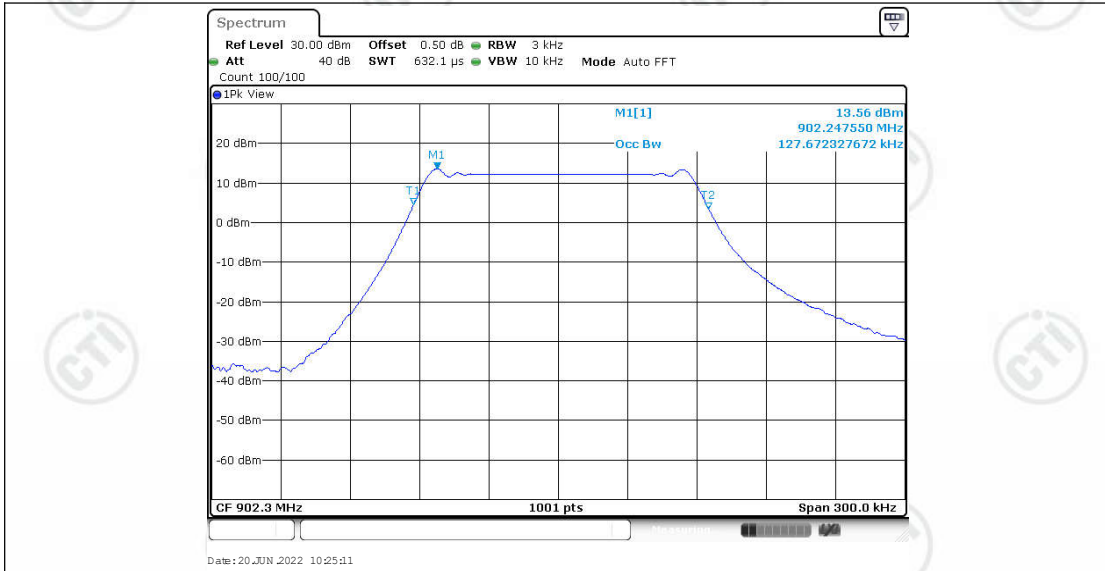


## Appendix B: Occupied Channel Bandwidth

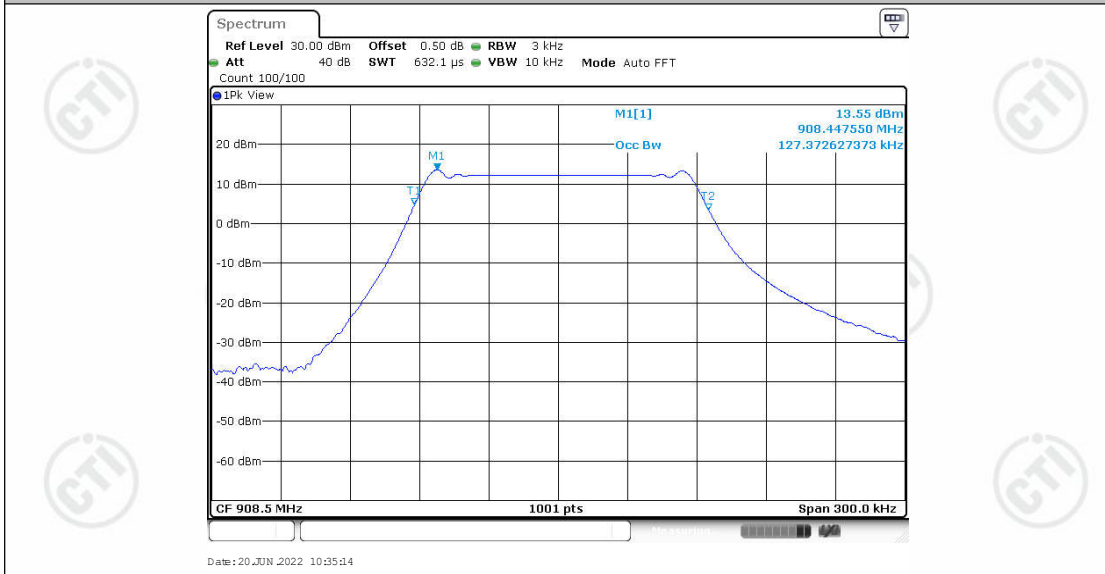
### Test Result

Test Mode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BW125K	Ant1	902.3	0.128	902.237	902.365	---	PASS
		908.5	0.127	908.438	908.565	---	PASS
		914.9	0.128	914.837	914.965	---	PASS

## Test Graphs

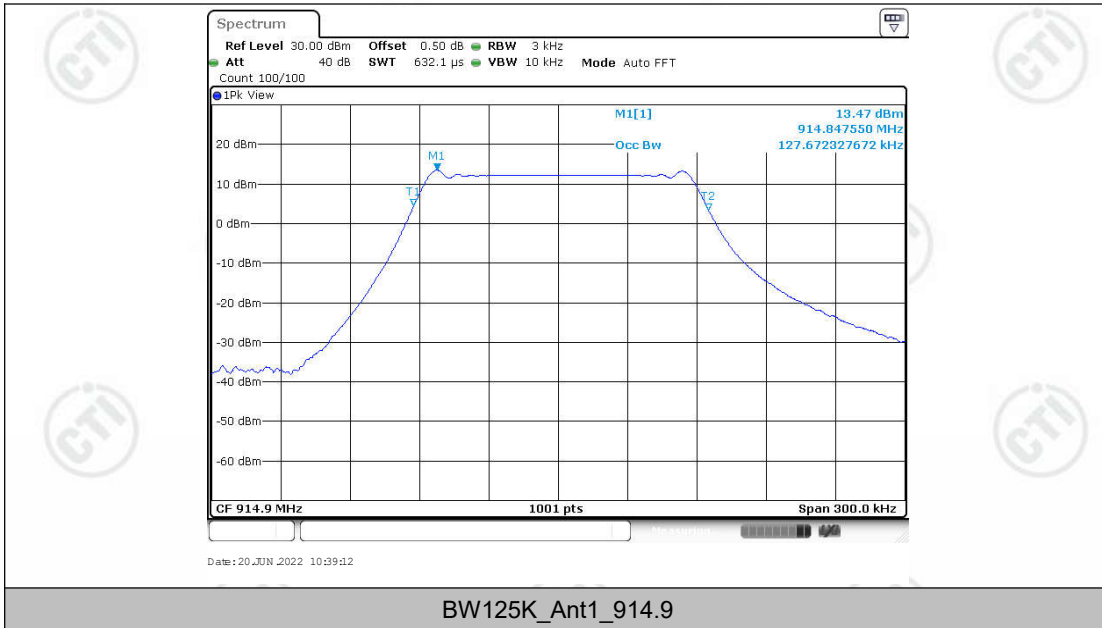


BW125K\_Ant1\_902.3



BW125K\_Ant1\_908.5





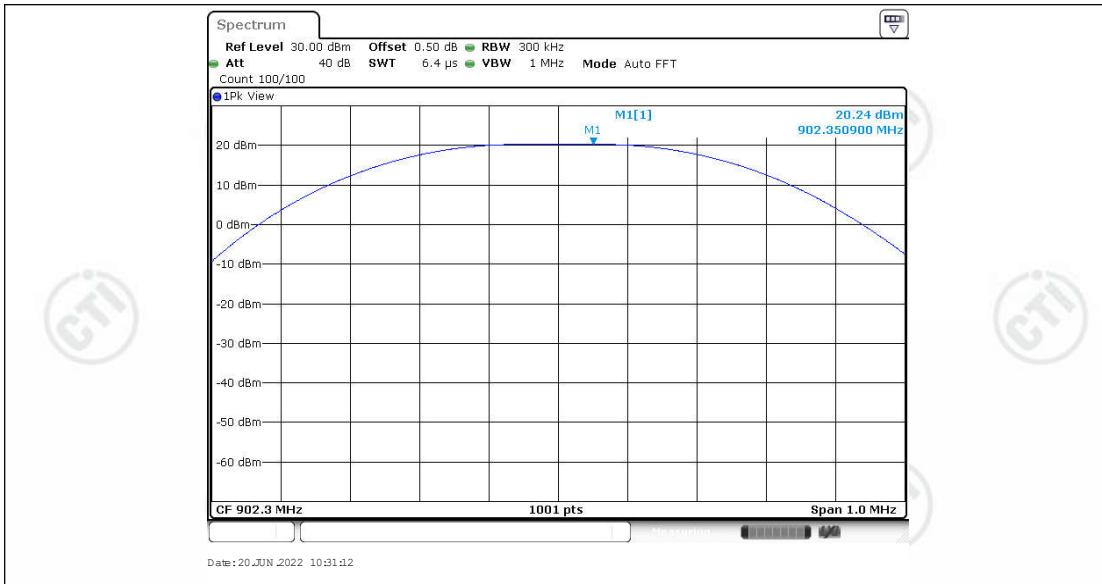
BW125K\_Ant1\_914.9



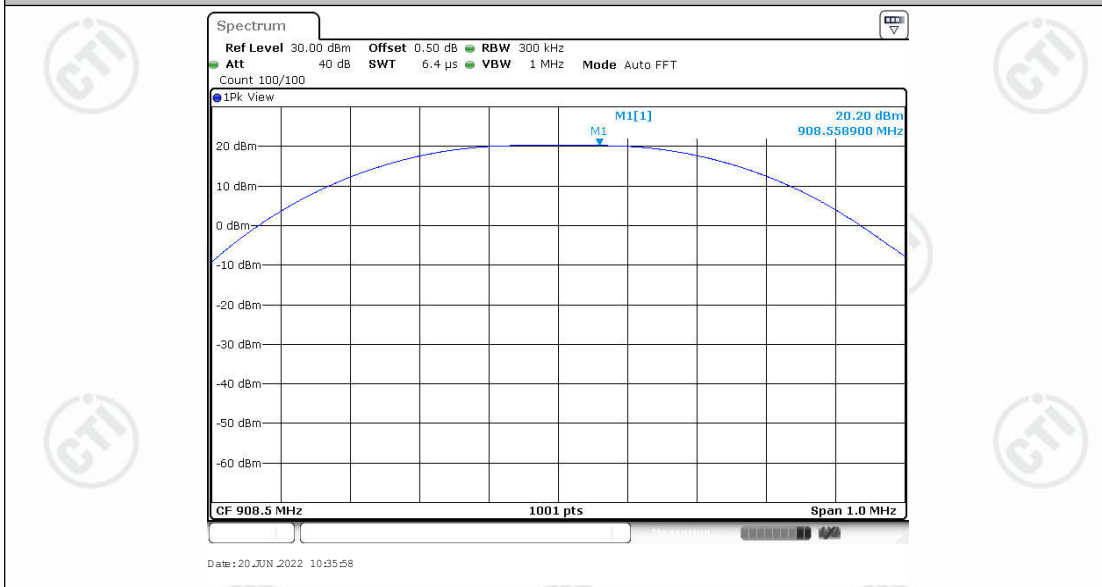
**Appendix C: Maximum conducted output power****Test Result**

Test Mode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
BW125K	Ant1	902.3	20.24	<=30	PASS
		908.5	20.2	<=30	PASS
		914.9	19.97	<=30	PASS

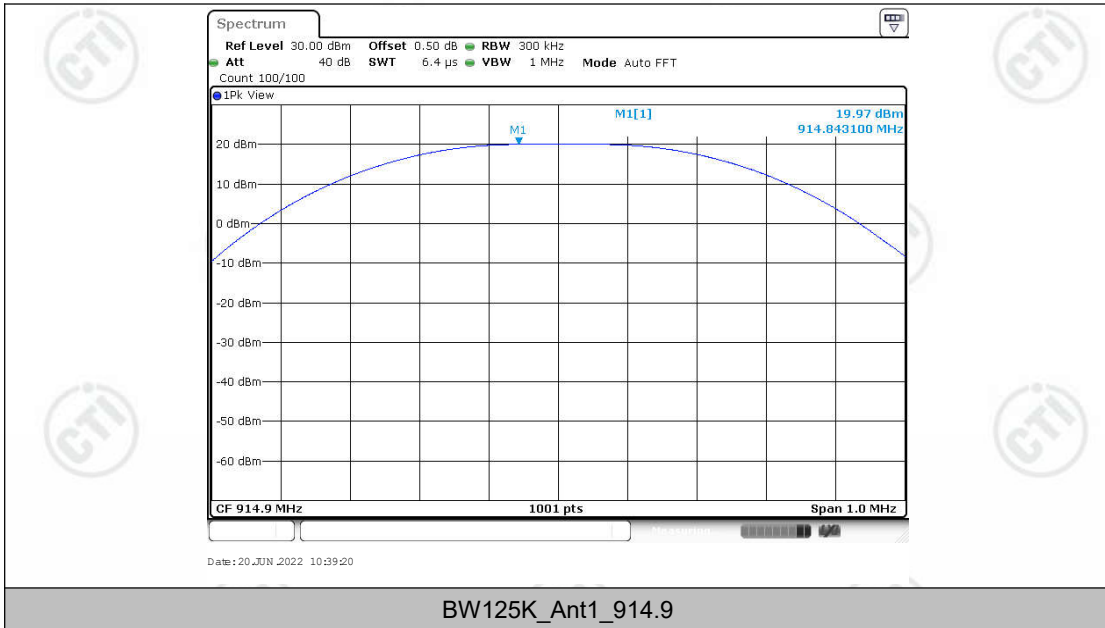
## Test Graphs



BW125K\_Ant1\_902.3



BW125K\_Ant1\_908.5

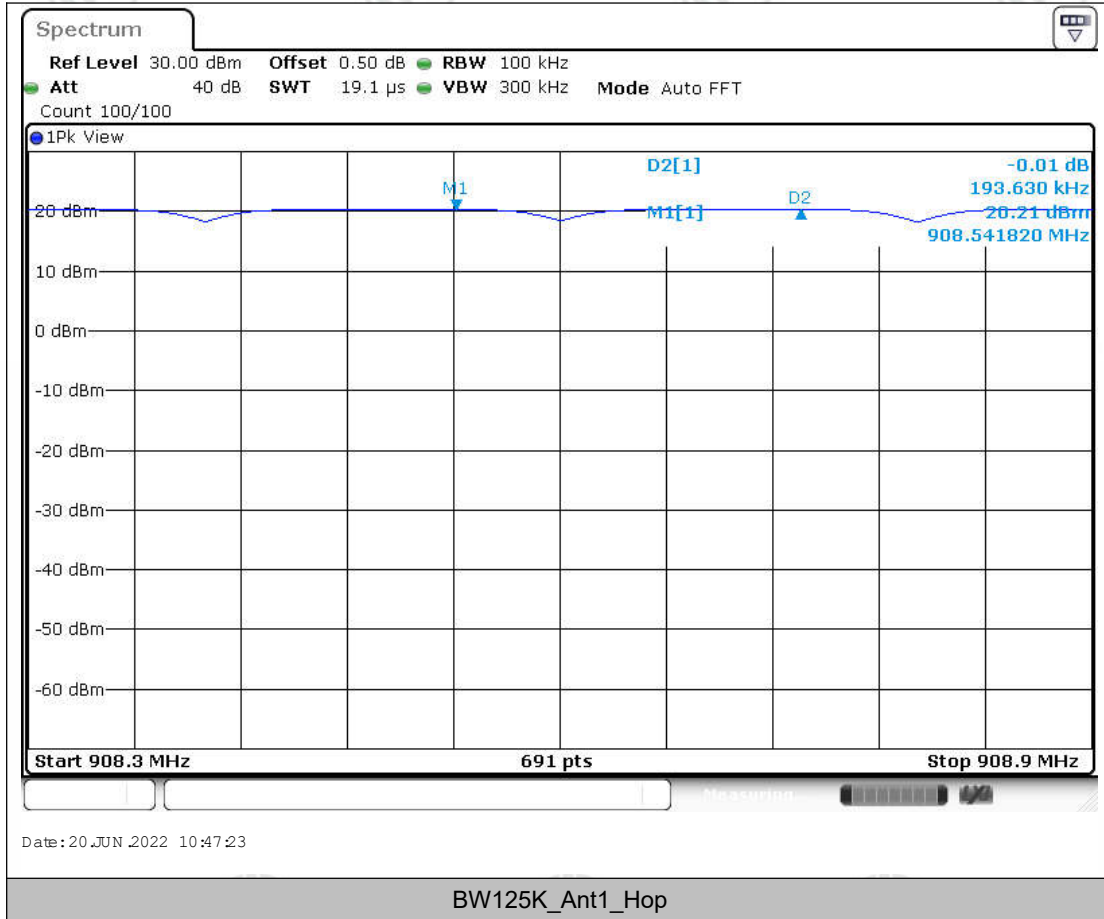


## Appendix D: Carrier frequency separation

### Test Result

Test Mode	Antenna	Channel	Result[MHz]	Limit[MHz]	Verdict
BW125K	Ant1	HOP	0.194	$\geq 0.098$	Verdict

## Test Graphs

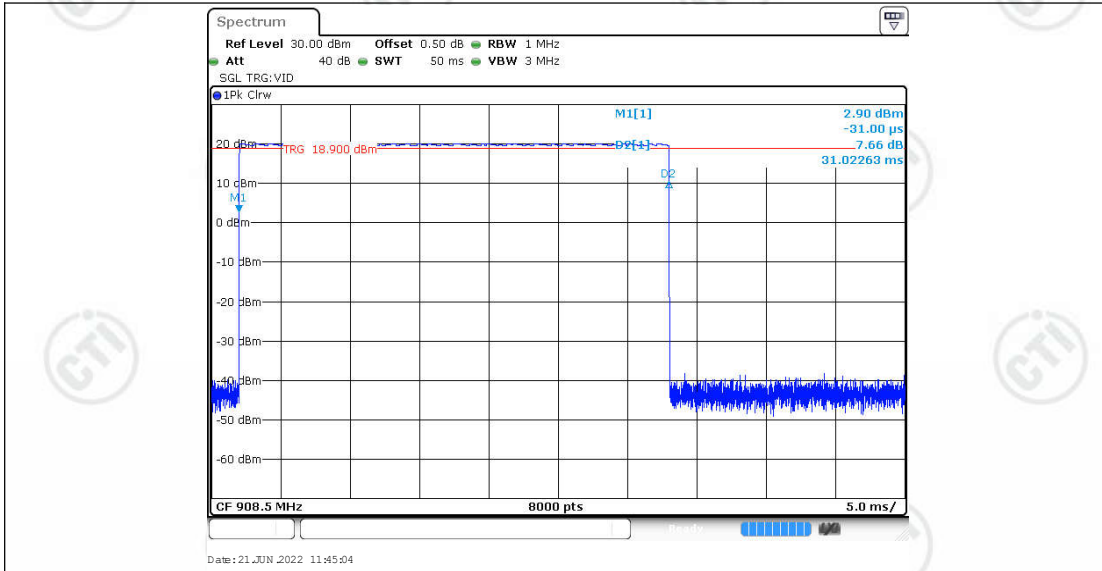


## Appendix E: Time of occupancy

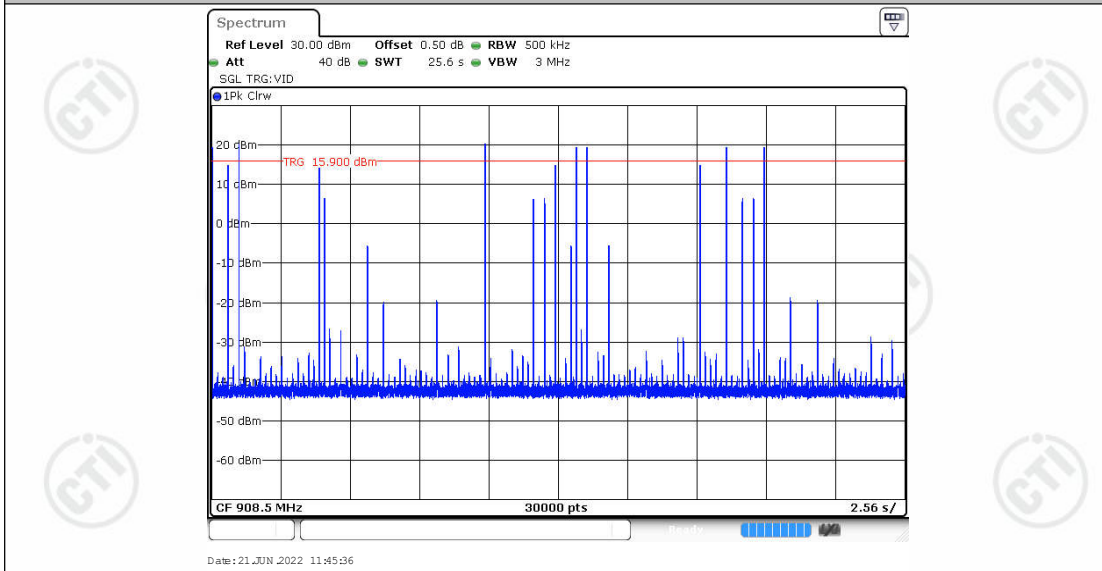
### Test Result

Test Mode	Antenna	Channel	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
BW125K	Ant1	Hop	31.02	11	0.341	<=0.4	PASS

## Test Graphs



BW125K\_Ant1\_Hop



BW125K\_Ant1\_Hop

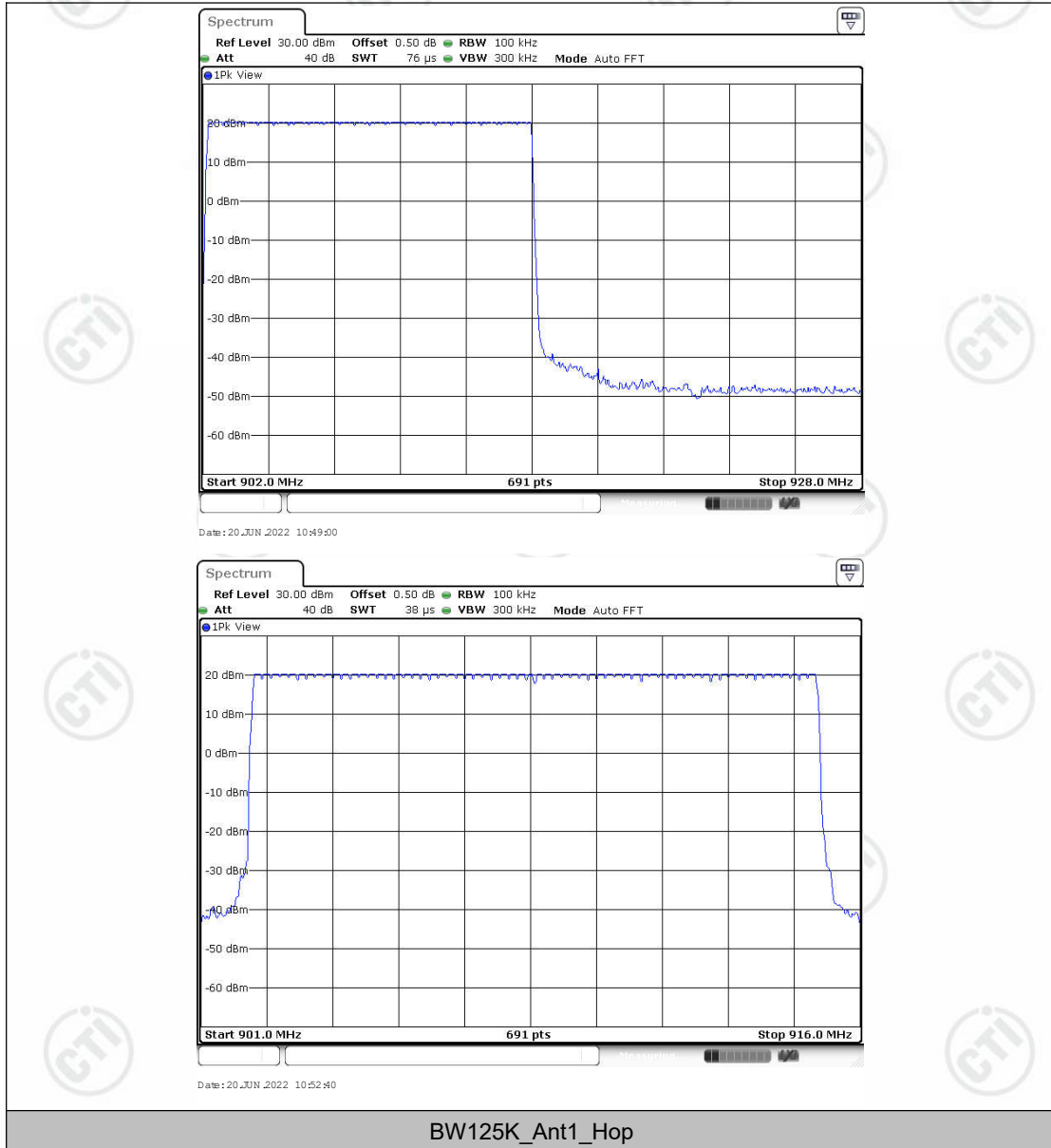


## Appendix F: Number of hopping channels

### Test Result

Test Mode	Antenna	Channel	Result[Num]	Limit[Num]	Verdict
BW125K	Ant1	Hop	64	$\geq 15$	PASS

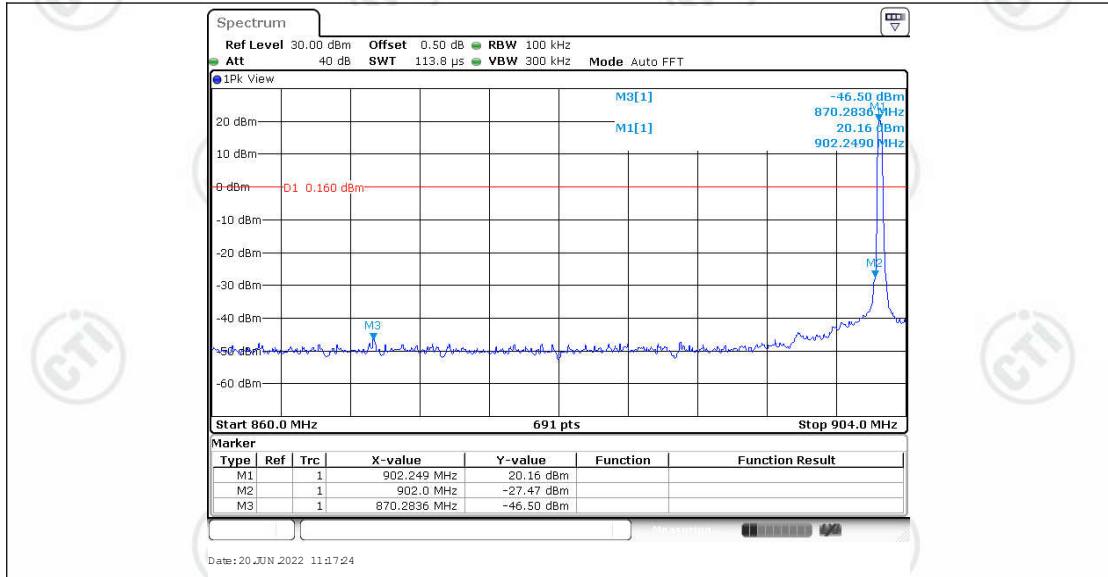
## Test Graphs



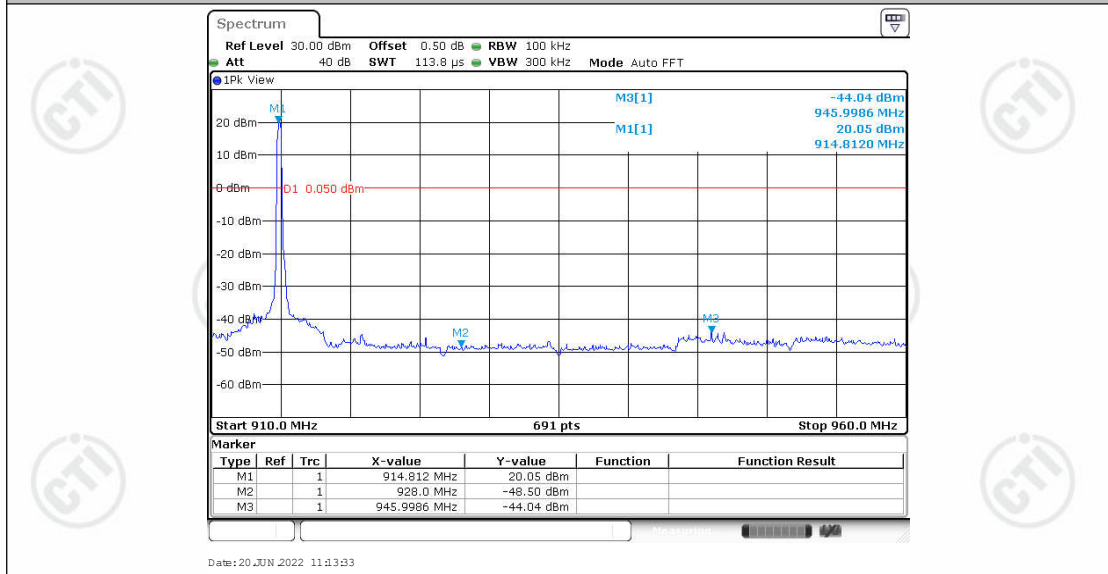
**Appendix G: Band edge measurements****Test Result**

Test Mode	Antenna	ChName	Channel	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
BW125K	Ant1	Low	902.3	20.16	-27.47	<=0.16	PASS
		High	914.9	20.05	-48.5	<=0.05	PASS
		Low	Hop-902.3	20.16	-27.47	<=0.16	PASS
		High	Hop-914.9	20.07	-49.43	<=0.07	PASS

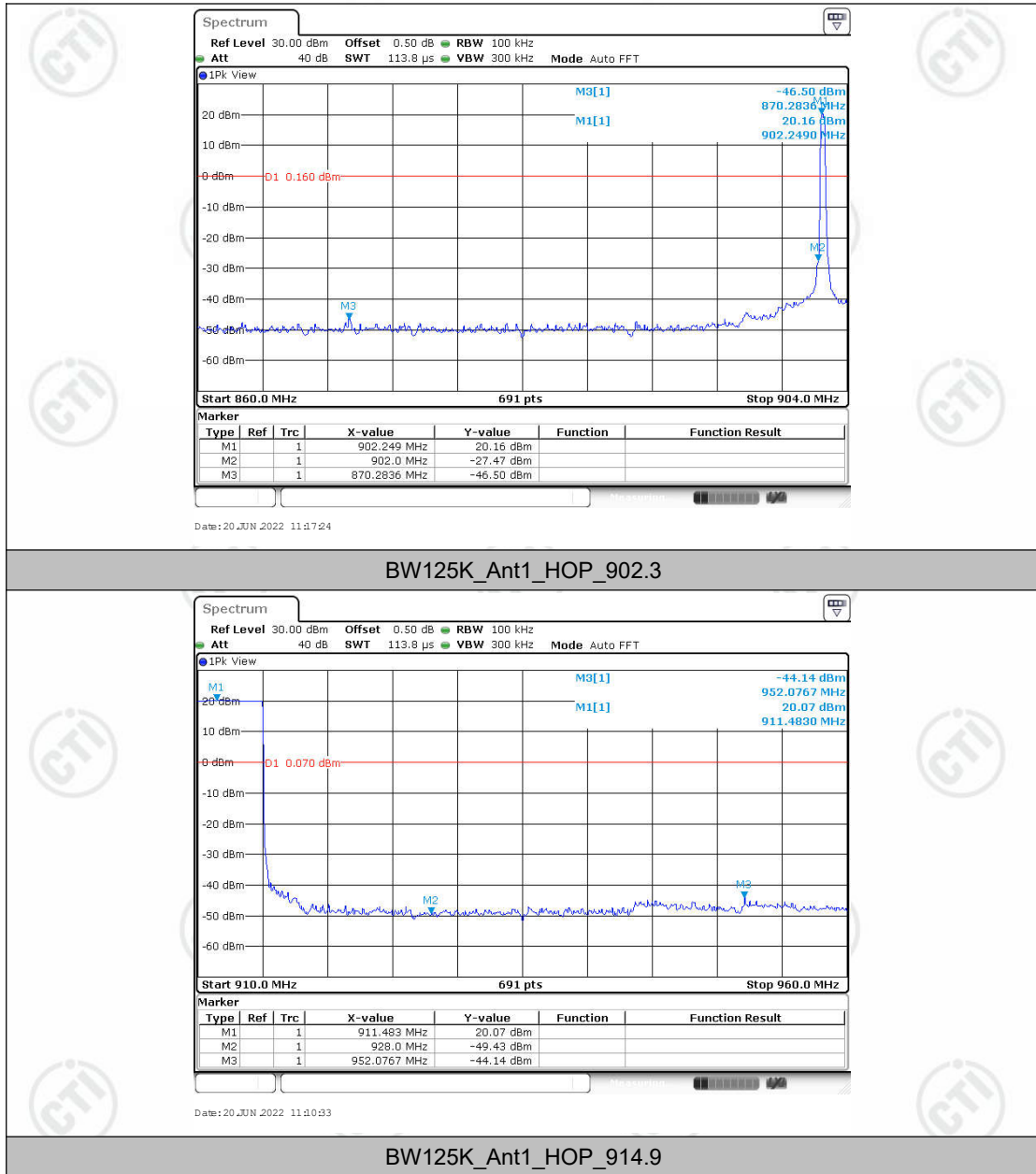
## Test Graphs



BW125K\_Ant1\_902.3



BW125K\_Ant1\_914.9



## Appendix H: Conducted Spurious Emission

### Test Result

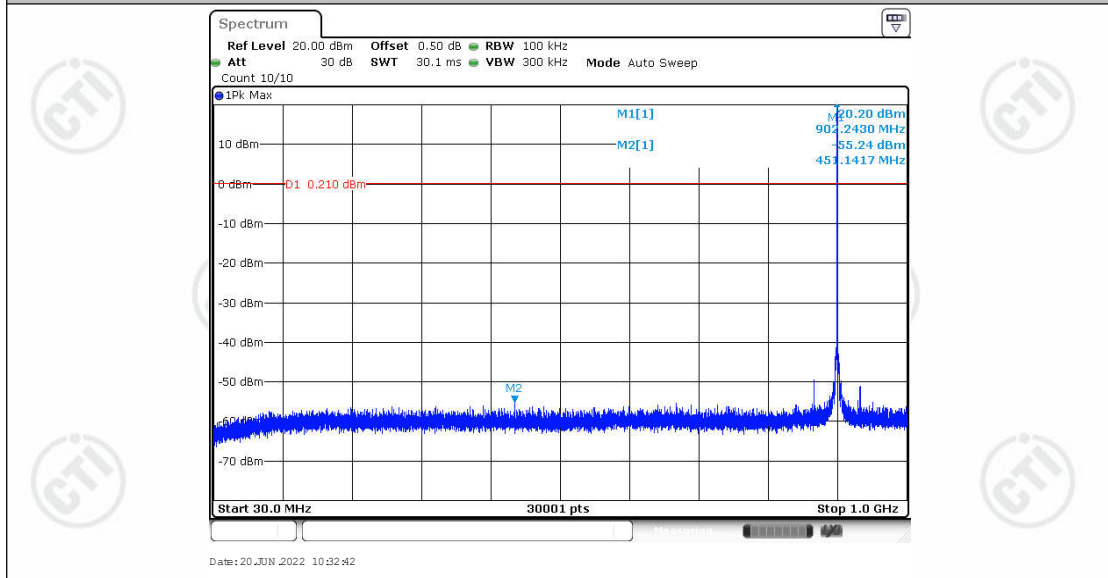
Test Mode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
BW125K	Ant1	902.3	Reference	20.21	20.21	---	PASS
			30~1000	---	-55.24	<=0.21	PASS
			1000~26500	---	-41.52	<=0.21	PASS
		908.5	Reference	20.16	20.16	---	PASS
			30~1000	---	-55.53	<=0.16	PASS
			1000~26500	---	-41.54	<=0.16	PASS
		914.9	Reference	19.98	19.98	---	PASS
			30~1000	---	-54.56	<=-0.02	PASS
			1000~26500	---	-41.82	<=-0.02	PASS



## Test Graphs

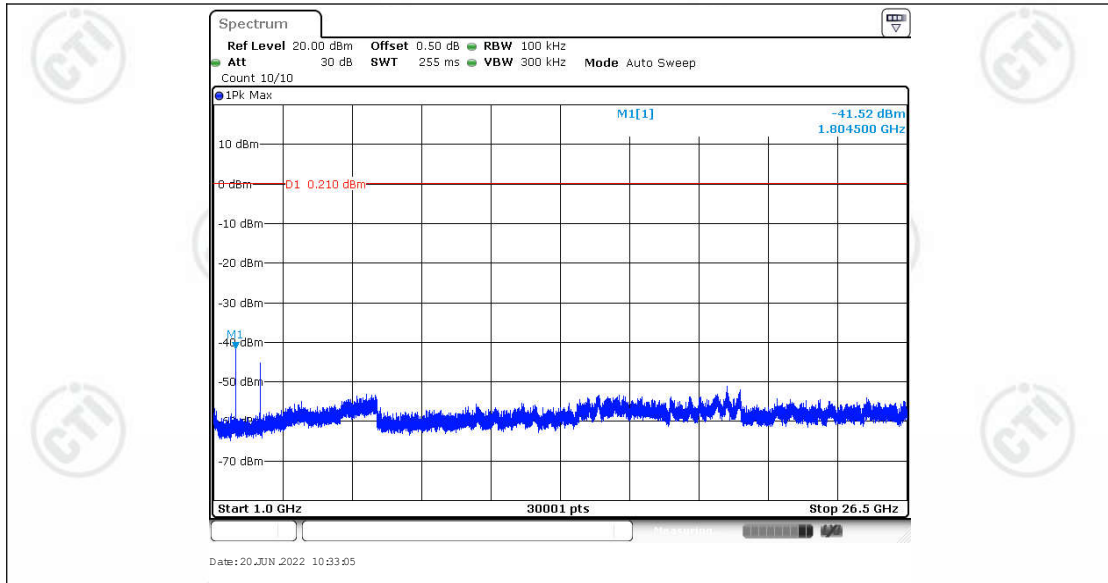


BW125K\_Ant1\_902.3\_0~Reference

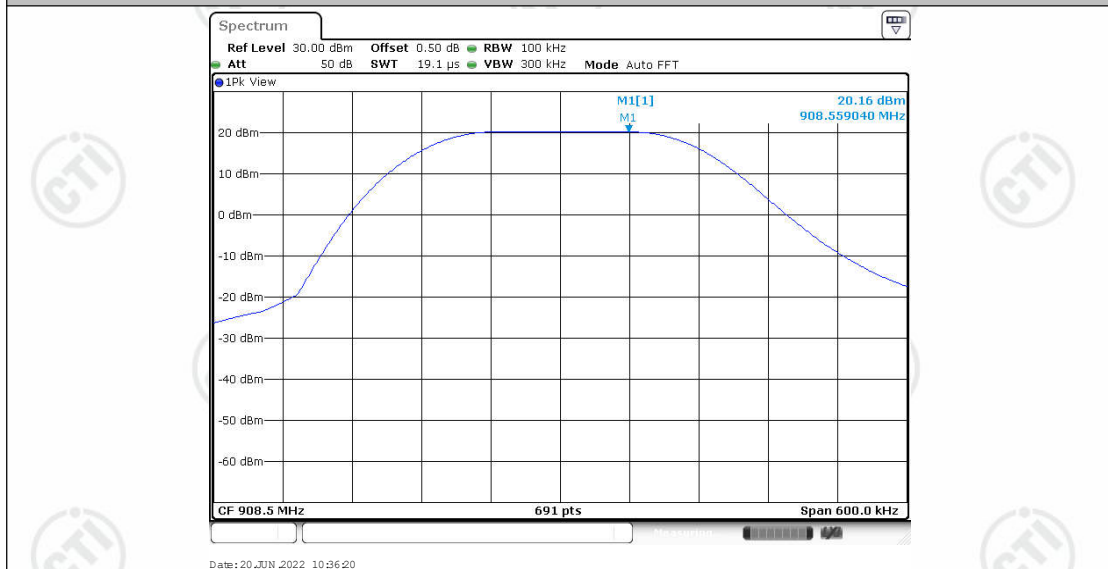


BW125K\_Ant1\_902.3\_30~1000

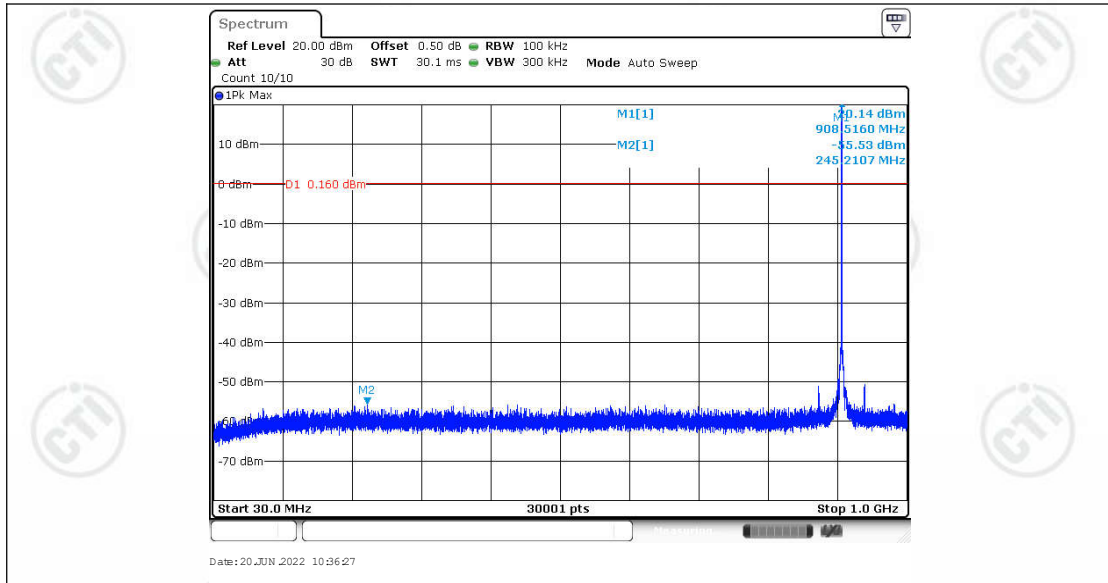




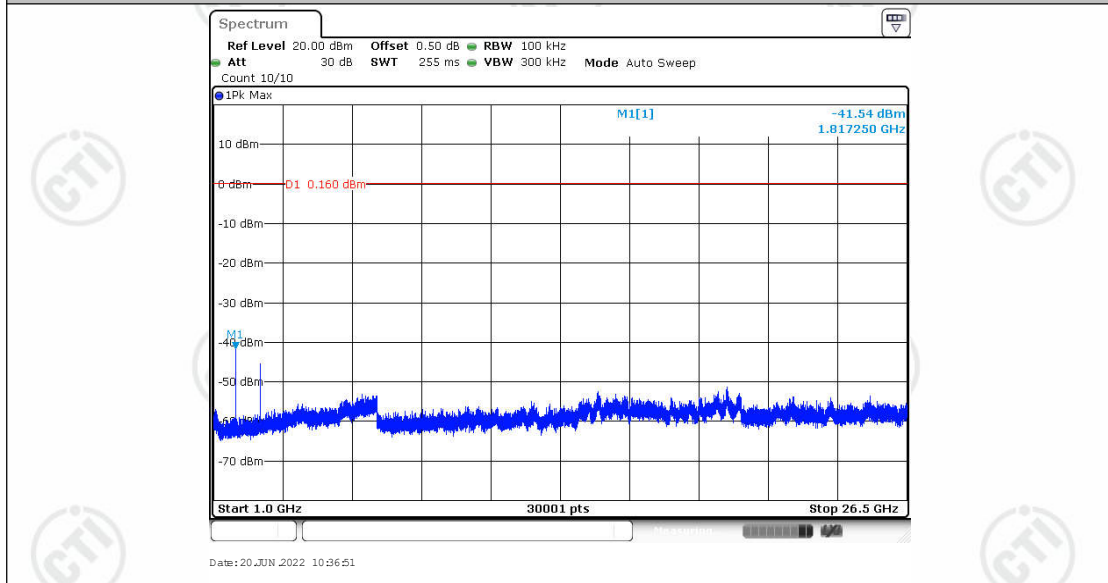
BW125K\_Ant1\_902.3\_1000~26500



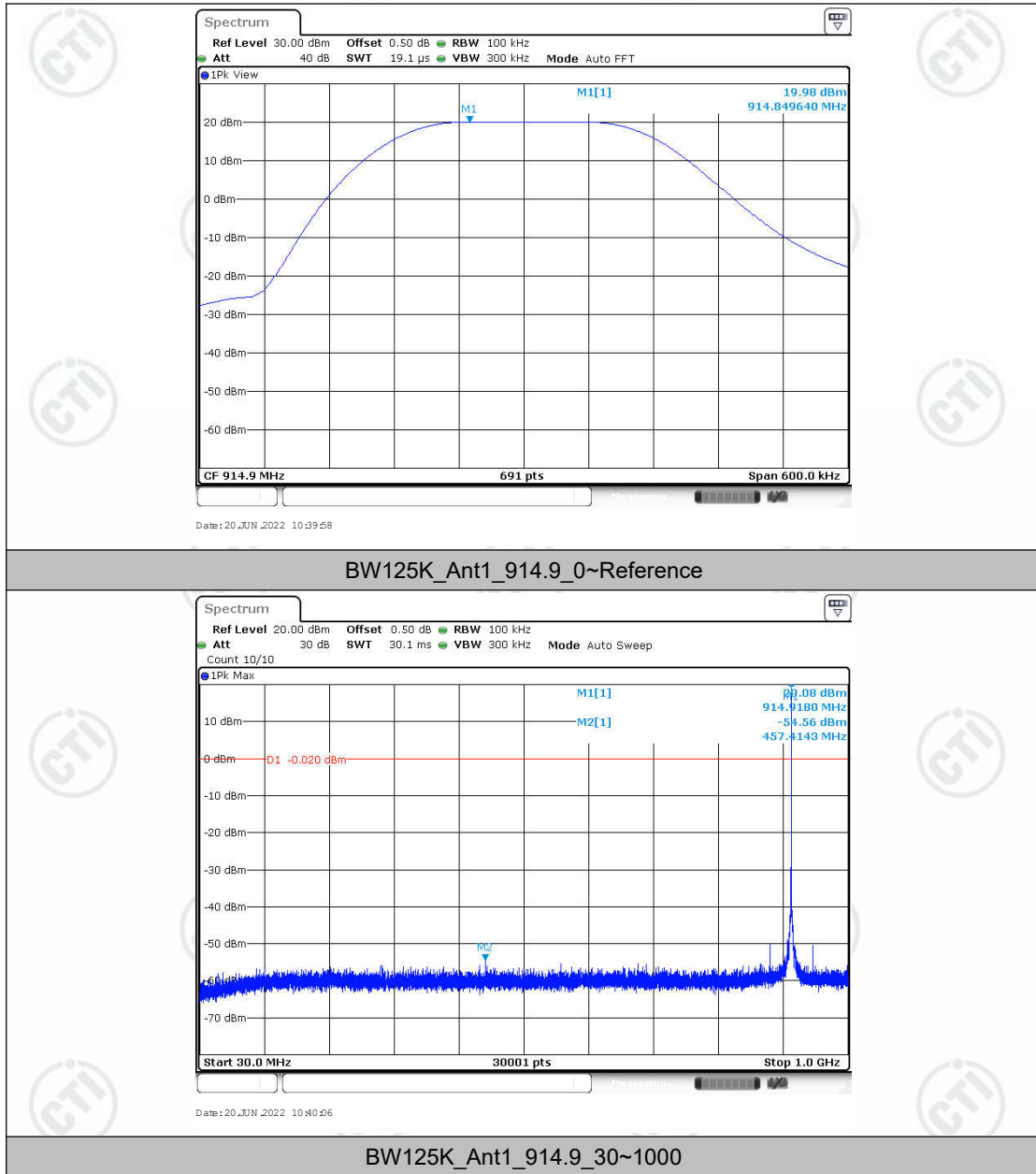
BW125K\_Ant1\_908.5\_0~Reference

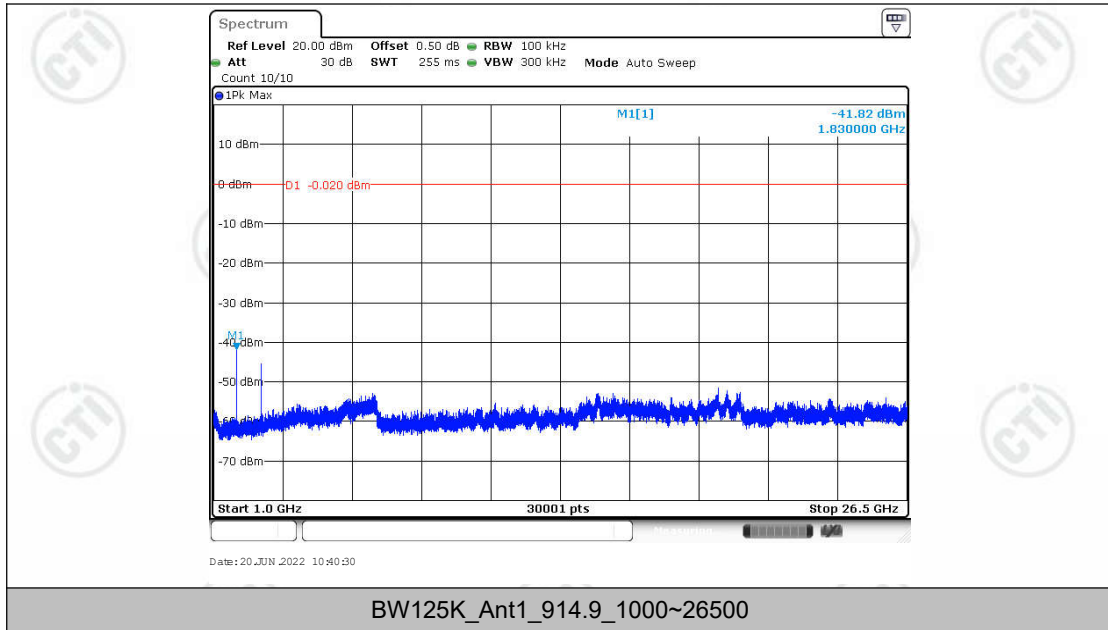


BW125K\_Ant1\_908.5\_30~1000



BW125K\_Ant1\_908.5\_1000~26500



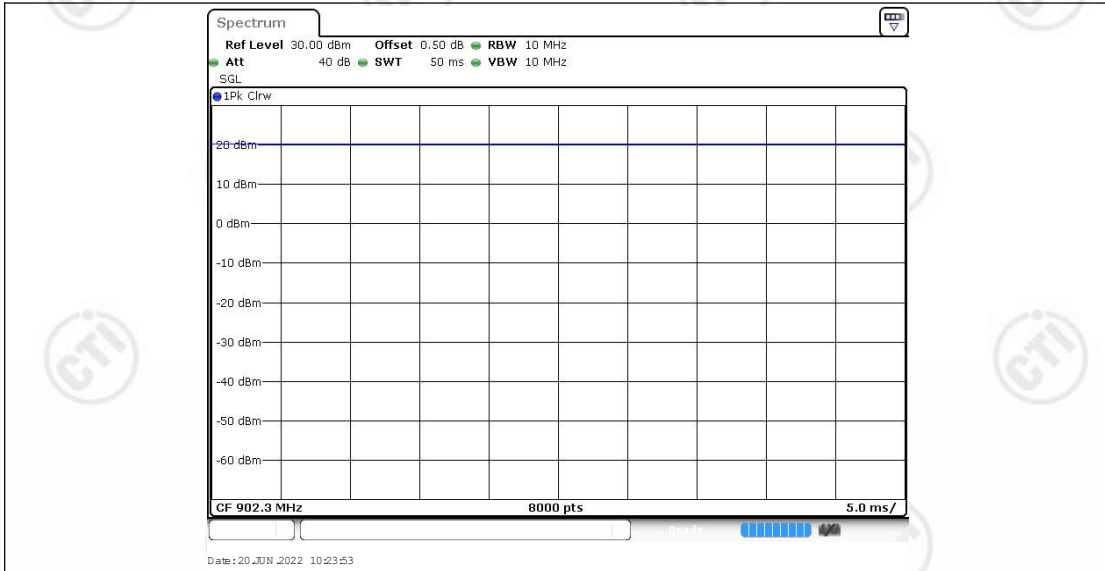


## Appendix I: Duty Cycle

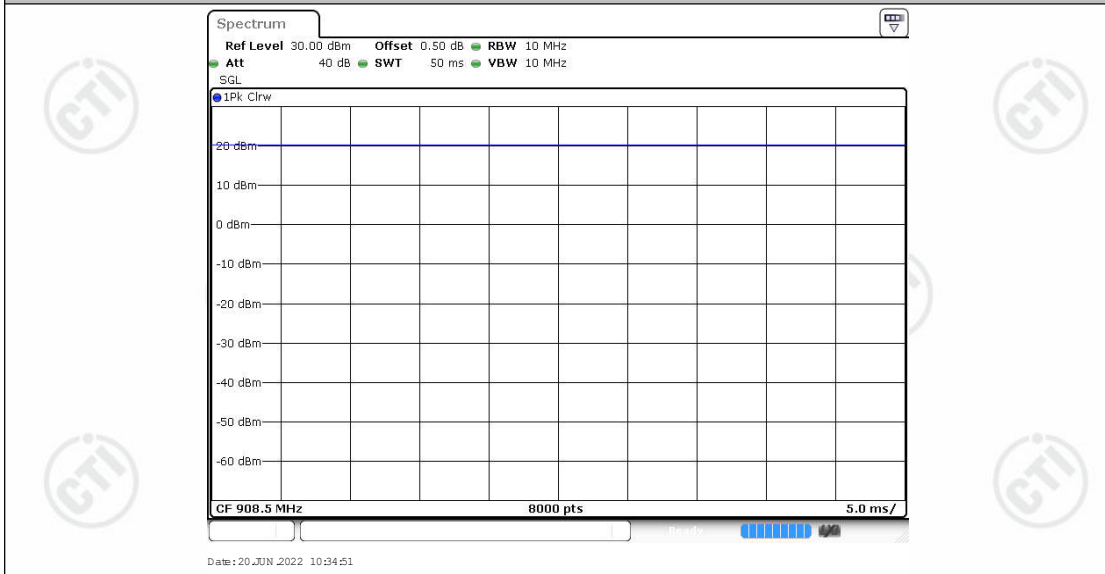
### Test Result

Test Mode	Antenna	Channel	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	Limit	Verdict
BW125K	Ant1	902.3	50.00	50.00	100.00	---	PASS
		908.5	50.00	50.00	100.00	---	PASS
		914.9	50.00	50.00	100.00	---	PASS

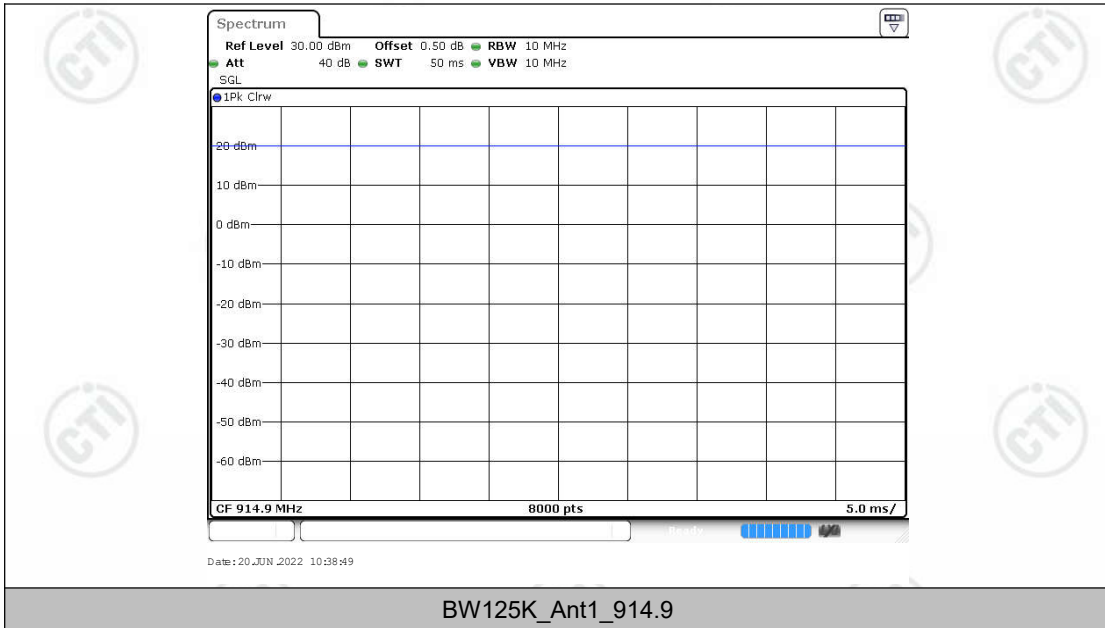
## Test Graphs



BW125K\_Ant1\_902.3



BW125K\_Ant1\_908.5



\*\*\* End of Report \*\*\*