

12.2.2. Test Graphs



12.3. Appendix C2: CONDUCTED OUTPUT POWER

12.3.1. Test Result

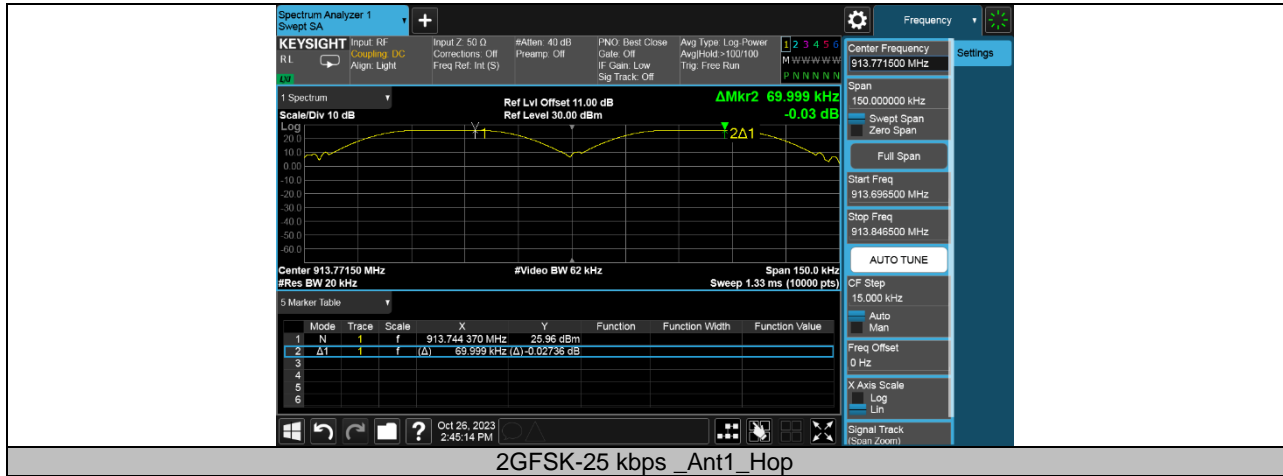
Test Mode	Antenna	Channel	PEAK Result[dBm]	AVG Result[dBm]	Limit[dBm]	Verdict
2GFSK-25 kbps	Ant1	LCH	25.99	25.96	≤30	PASS
		MCH	26.11	26.05	≤30	PASS
		HCH	26.01	25.88	≤30	PASS

12.4. Appendix D2: CARRIER FREQUENCY SEPARATION

12.4.1. Test Result

Test Mode	Antenna	Channel	Result [MHz]	Limit[MHz]	Verdict
2GFSK-25 kbps	Ant1	Hop	0.06999	0.02983	PASS

12.4.2. Test Graphs

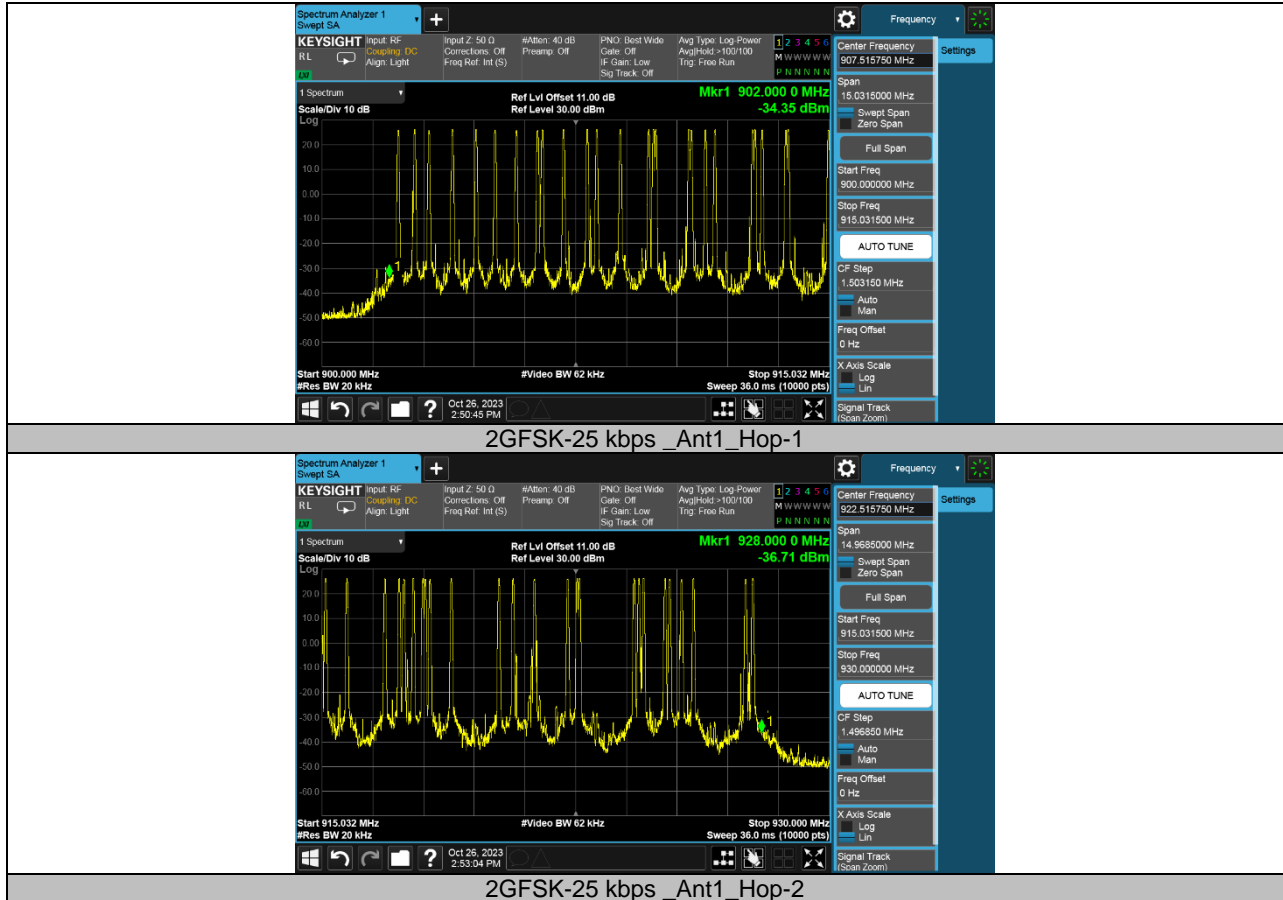


12.5. Appendix E2: NUMBER OF HOPPING FREQUENCIES

12.5.1. Test Result

Test Mode	Antenna	Channel	Result[Num]	Limit[Num]	Verdict
2GFSK-25 kbps	Ant1	Hop	51	≥50	PASS

12.5.2. Test Graphs



12.6. Appendix F2: TIME OF OCCUPANCY (DWELL TIME)

12.6.1. Test Result

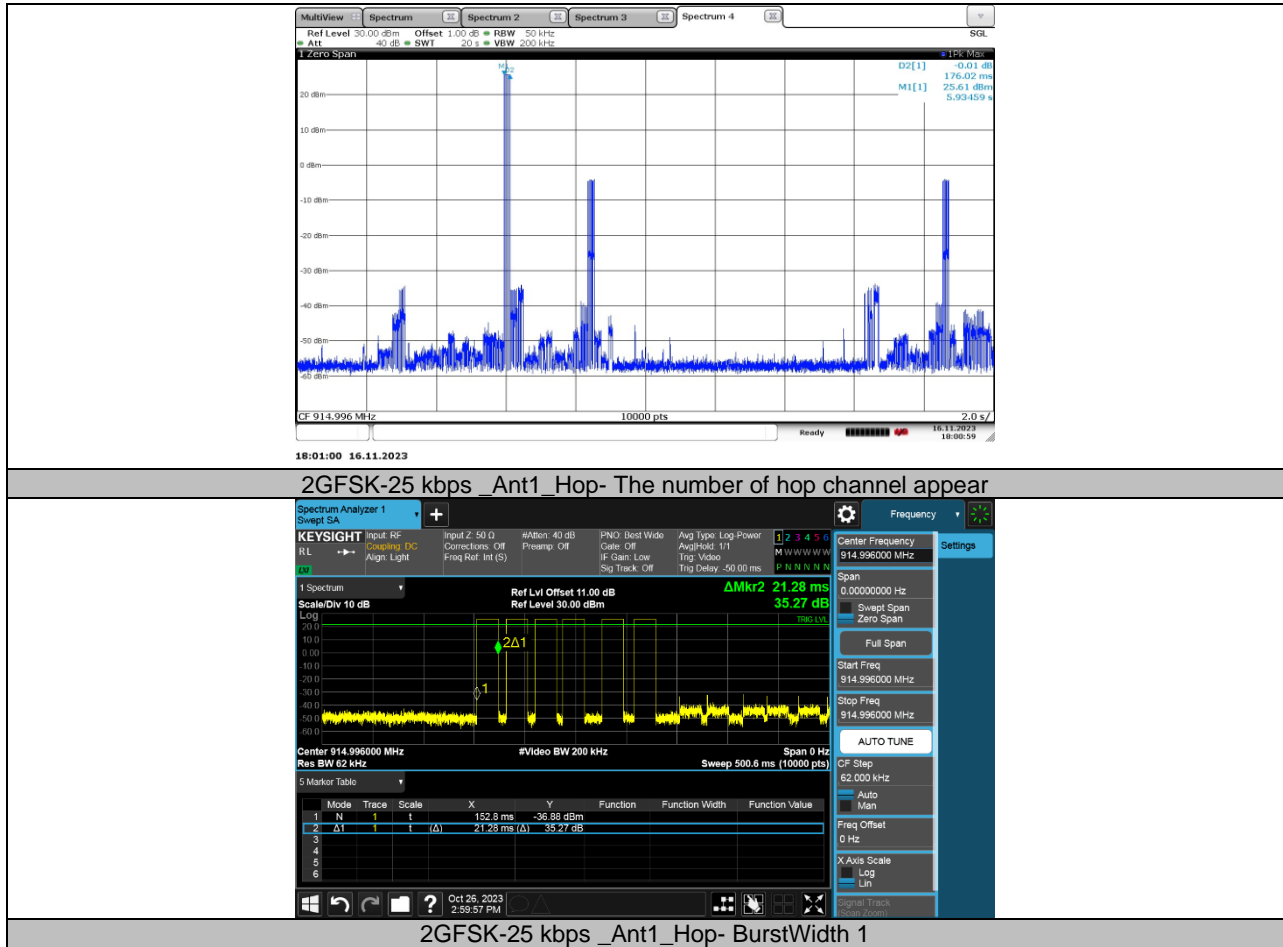
Test Mode	Antenna	Channel	Time of single slot 1 [ms]	number of single slot 1	Burst Width 1 [ms/hop/ch]	The number of hop channel appear
2GFSK-25 kbps	Ant1	Hop	21.28	6	127.68	1

Test Mode	Antenna	Channel	Dwell Time [ms]	Limit [ms]	Results
2GFSK-25 kbps	Ant1	Hop	127.68	400	PASS

Note:

2GFSK-150 kbps: The dwell time = Time of single slot * The number of hop channel appear within 20s
BurstWidth = Time of single slot * number of single slot

12.6.2. Test Graphs

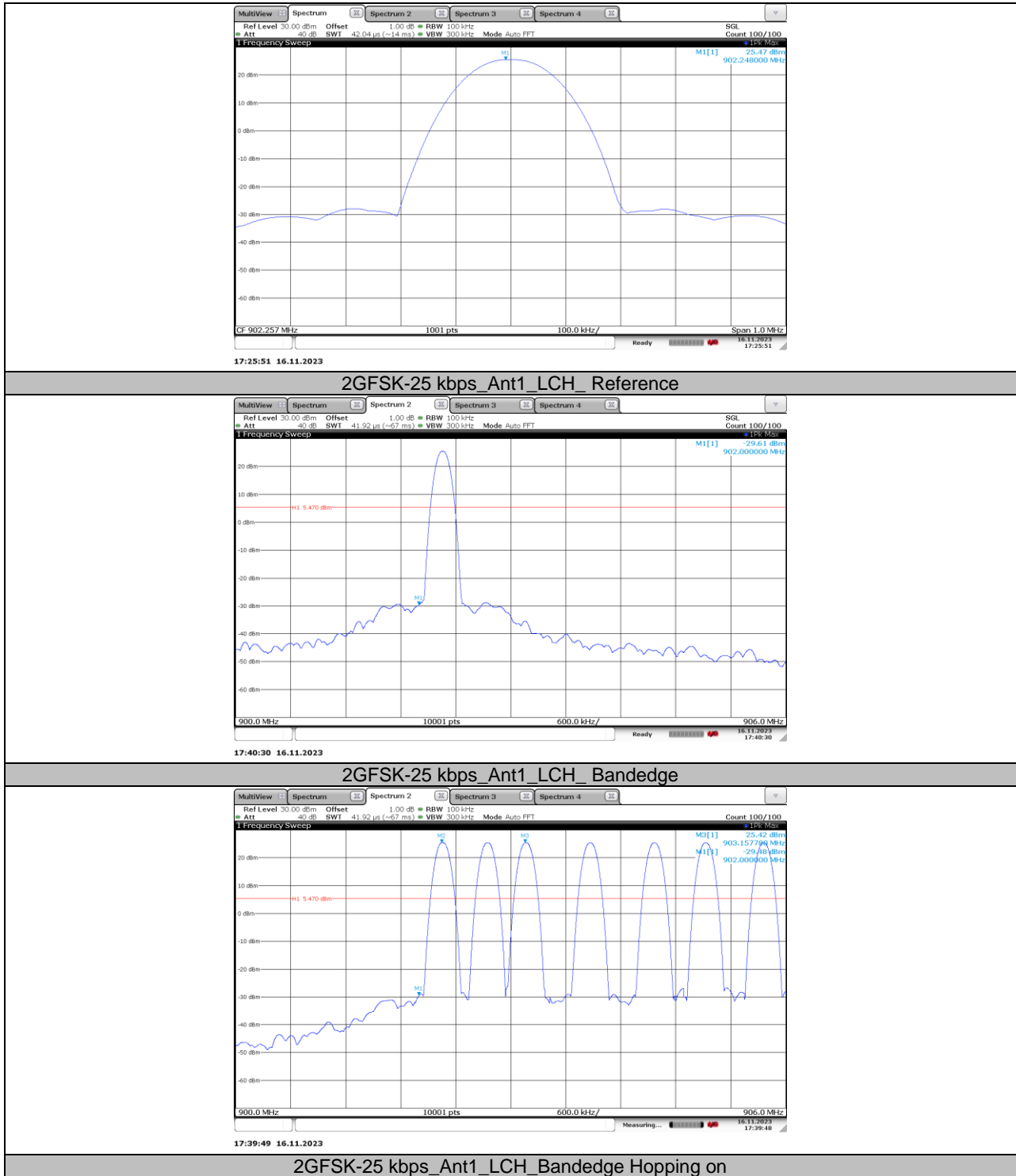


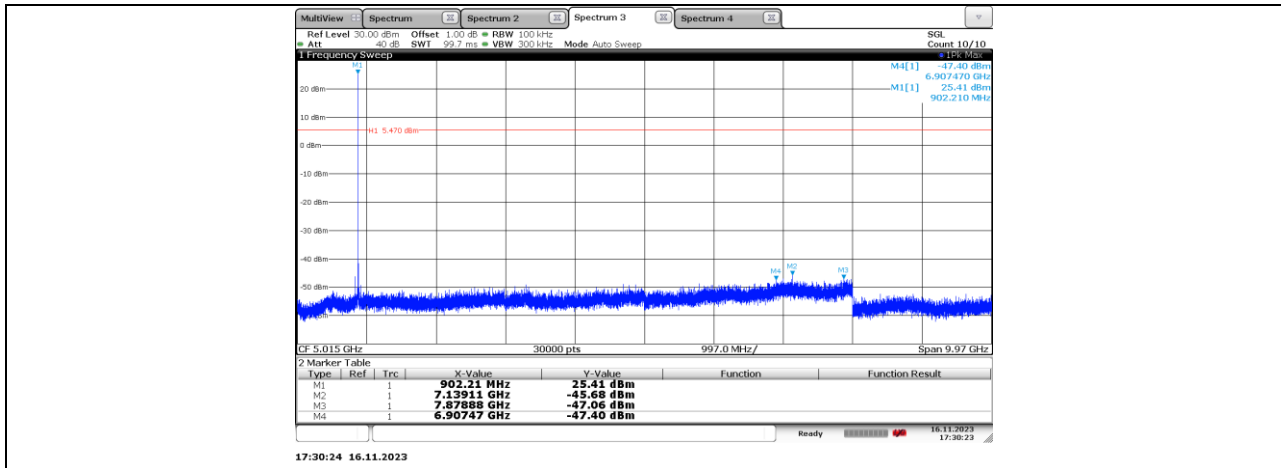
12.7. Appendix G2: CONDUCTED SPURIOUS EMISSION

12.7.1. Test Result

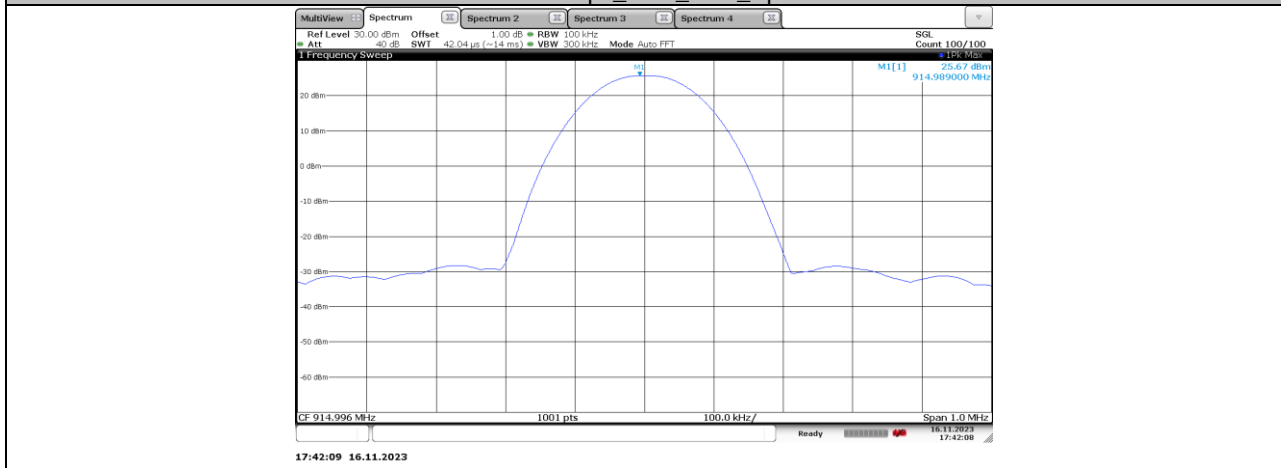
Test Mode	Antenna	ChName	Result [dBm]	Verdict
2GFSK-25 kbps	Ant1	LCH	See the below graphs	PASS
		MCH		PASS
		HCH		PASS
		Hop_ LCH		PASS
		Hop_ HCH		PASS

12.7.2. Test Graphs

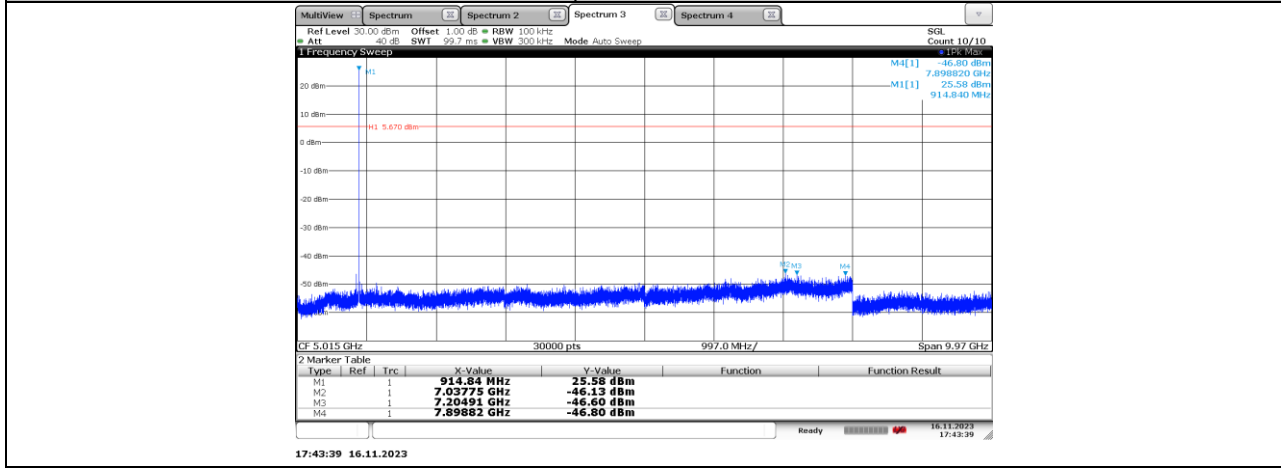




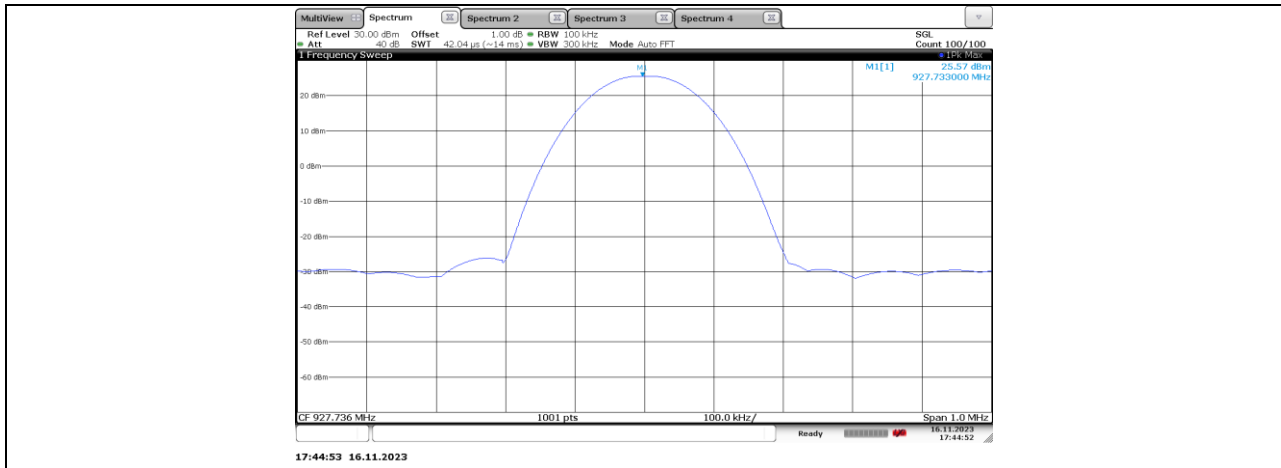
2GFSK-25 kbps_Ant1_LCH_Spurious



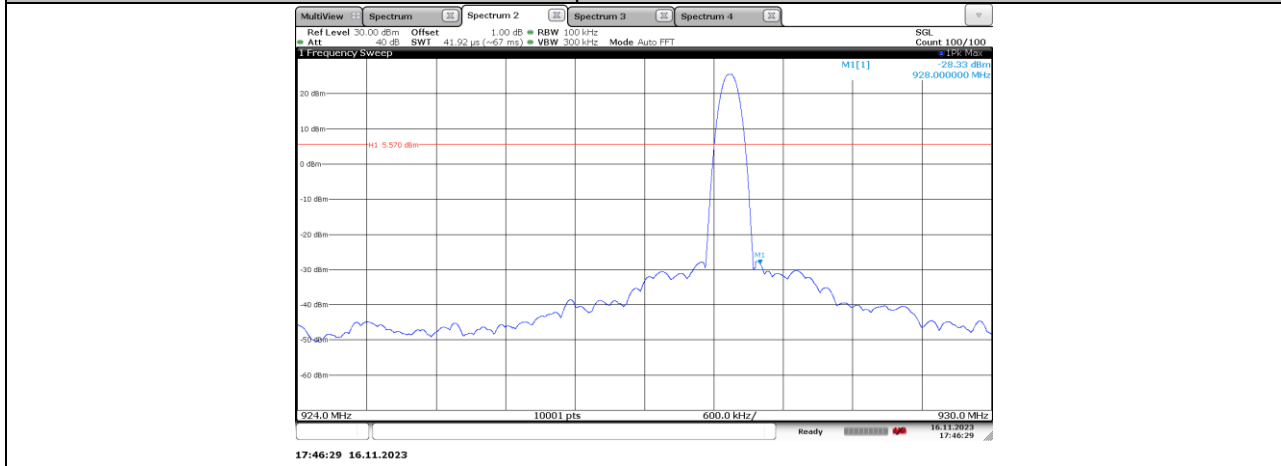
2GFSK-25 kbps_Ant1_MCH_Reference



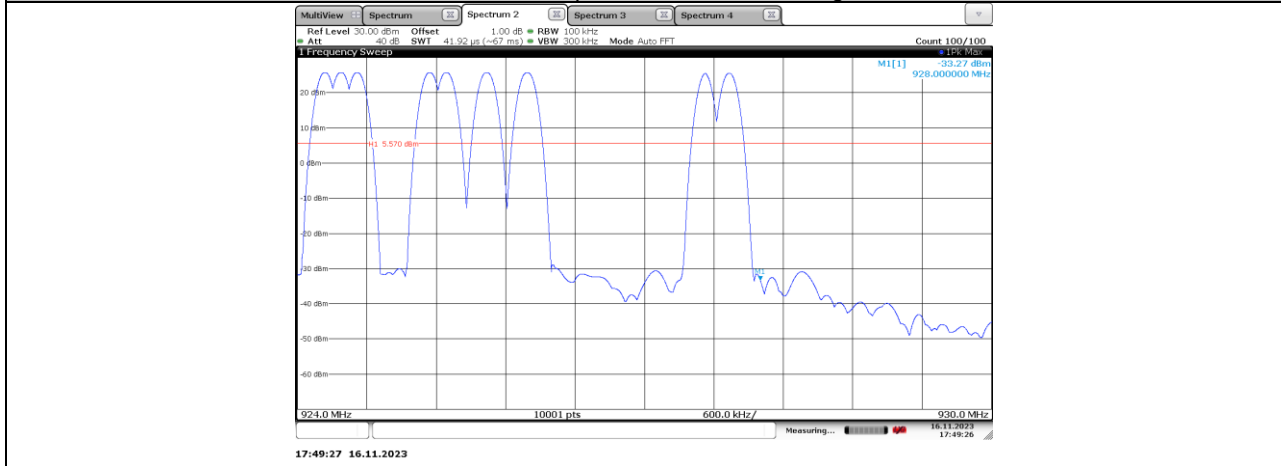
2GFSK-25 kbps_Ant1_MCH_Spurious



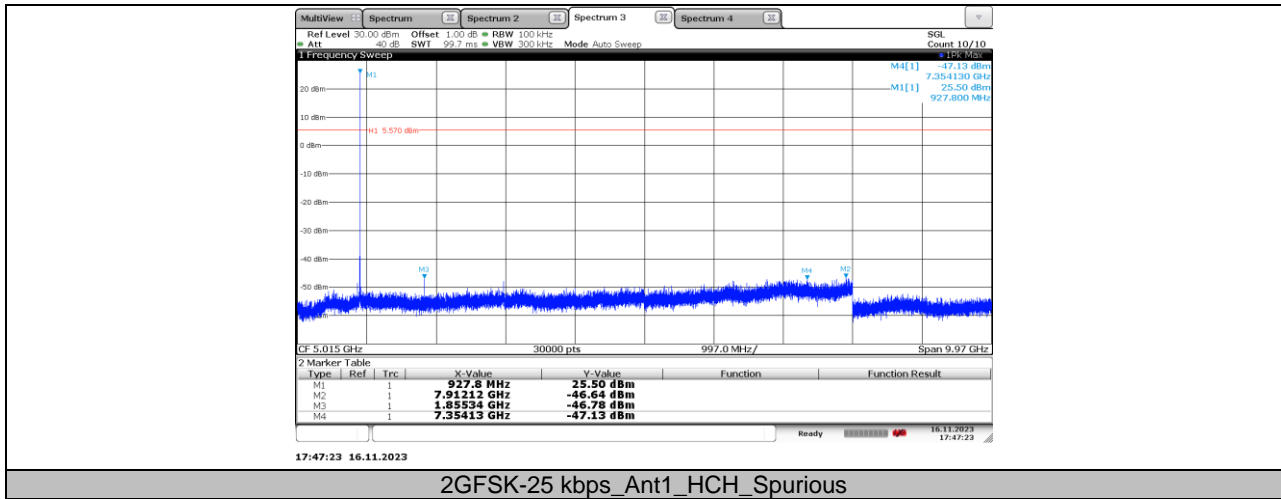
2GFSK-25 kbps_Ant1_HCH_Reference



2GFSK-25 kbps_Ant1_HCH_Bandedge



2GFSK-25 kbps_Ant1_HCH_Bandedge Hopping on



13. FCC.SubG.2GFSK.60kbps

13.1. Appendix A3: DUTY CYCLE

13.1.1. Test Result

Test Mode	On Time (msec)	Period (msec)	Duty Cycle x (Linear)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	1/T Minimum VBW (kHz)	Final setting For VBW (kHz)
2GFSK-60 kbps	225.561	499.81	0.4513	45.13	3.46	0.0044	1

Note:

Duty Cycle Correction Factor= $10\log(1/x)$.

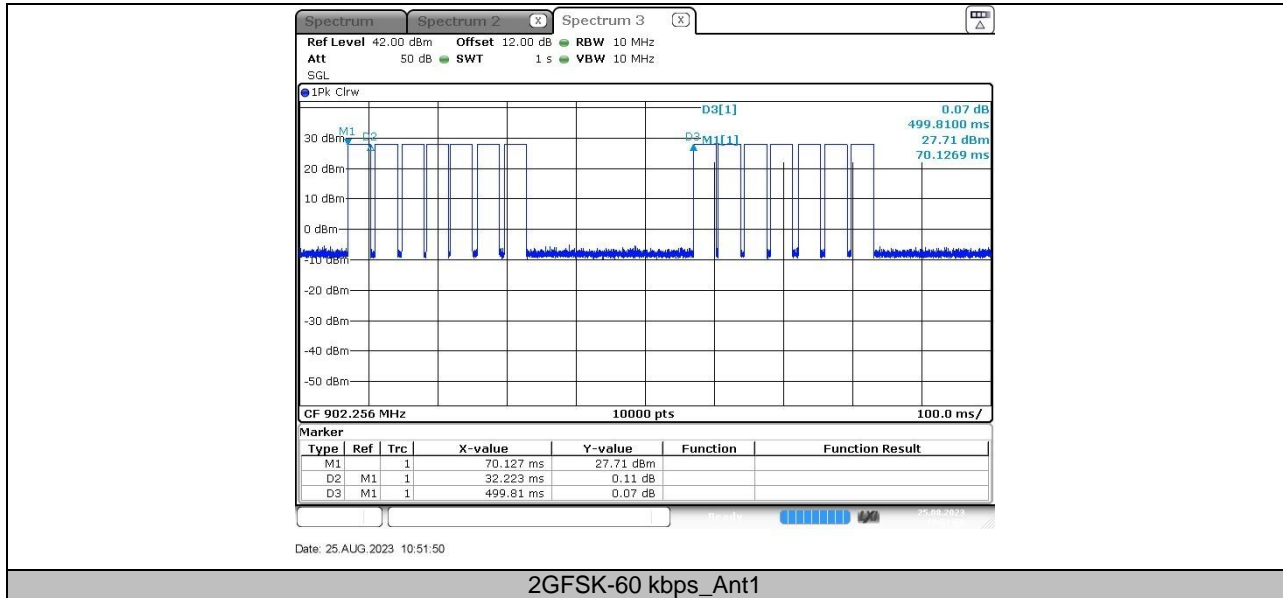
Where: x is Duty Cycle (Linear)

Where: T is On Time

On Time= $D \times 2 = 32.223 \times 7 = 225.561$ ms

If that calculated VBW is not available on the analyzer then the next higher value should be used.

Test Graphs



13.2. Appendix B3: 20DB BANDWIDTH & OCCUPIED CHANNEL BANDWIDTH

13.2.1. Test Result

Test Mode	Antenna	Channel	20db EBW[MHz]	OCB [MHz]	Verdict
2GFSK-60 kbps	Ant1	LCH	0.07314	0.066821	PASS
		MCH	0.07259	0.066627	PASS
		HCH	0.07307	0.066650	PASS

13.2.2. Test Graphs



13.3. Appendix C3: CONDUCTED OUTPUT POWER

13.3.1. Test Result

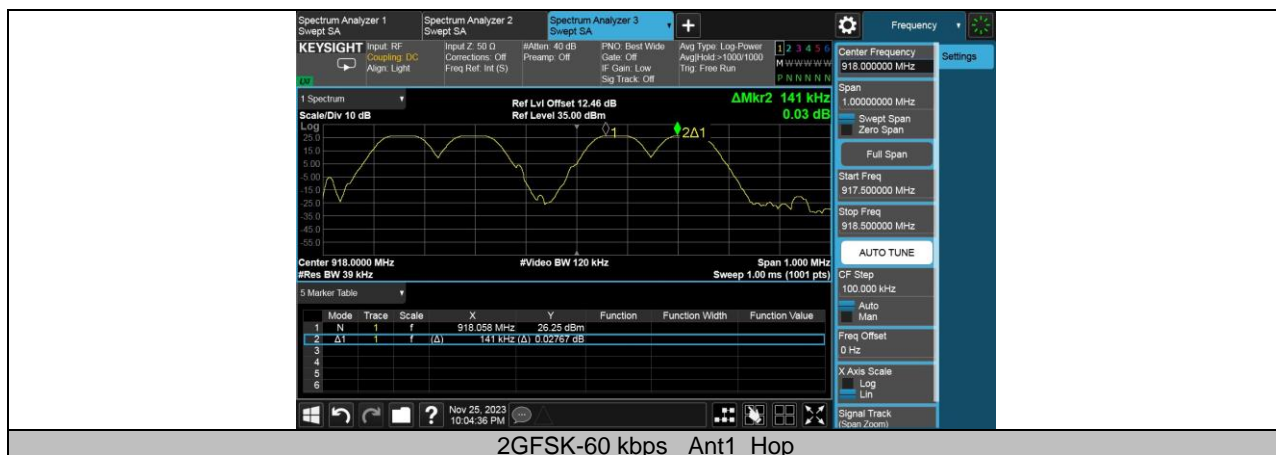
Test Mode	Antenna	Channel	PEAK Result[dBm]	AVG Result[dBm]	Limit[dBm]	Verdict
2GFSK-60 kbps	Ant1	LCH	25.98	25.96	≤30	PASS
		MCH	26.13	26.09	≤30	PASS
		HCH	26.05	25.97	≤30	PASS

13.4. Appendix D3: CARRIER FREQUENCY SEPARATION

13.4.1. Test Result

Test Mode	Antenna	Channel	Result [MHz]	Limit[MHz]	Verdict
2GFSK-60 kbps	Ant1	Hop	0.141	≥0.07314	PASS

13.4.2. Test Graphs

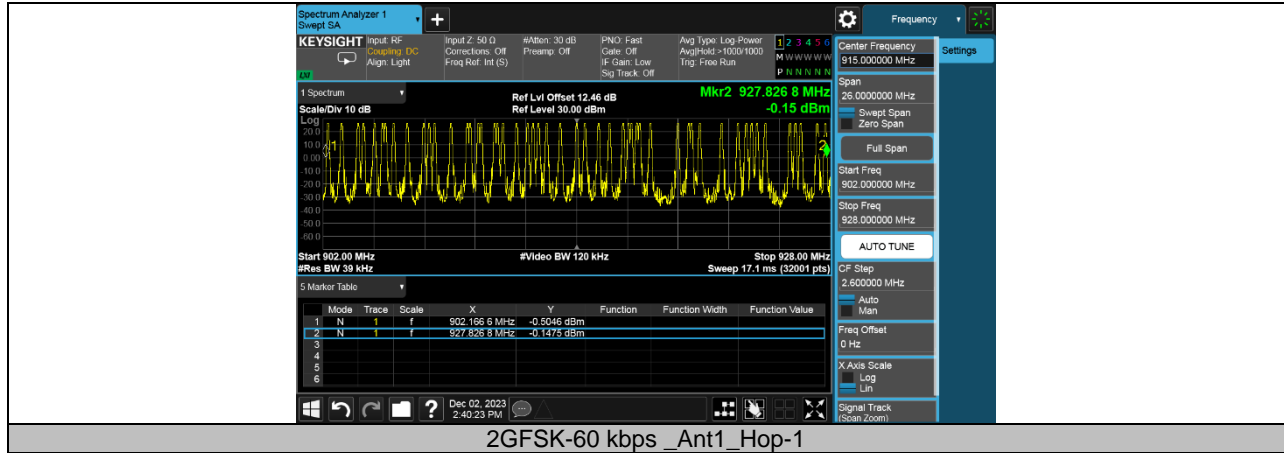


13.5. Appendix E3: NUMBER OF HOPPING FREQUENCIES

13.5.1. Test Result

Test Mode	Antenna	Channel	Result[Num]	Limit[Num]	Verdict
2GFSK-60 kbps	Ant1	Hop	51	≥50	PASS

13.5.2. Test Graphs



13.6. Appendix F3: TIME OF OCCUPANCY (DWELL TIME)

13.6.1. Test Result

Test Mode	Antenna	Channel	Time of single slot 1 [ms]	number of single slot 1	Burst Width 1 [ms/hop/ch]	The number of hop channel appear
2GFSK-60 kbps	Ant1	Hop	9.00	8	72.00	3

Test Mode	Antenna	Channel	Dwell Time [ms]	Limit [ms]	Results
2GFSK-60 kbps	Ant1	Hop	216.00	400	PASS

Note:

2GFSK-60 kbps: The dwell time = Time of single slot * The number of hop channel appear within 20s
BurstWidth =Time of single slot*number of single slot

13.6.2. Test Graphs

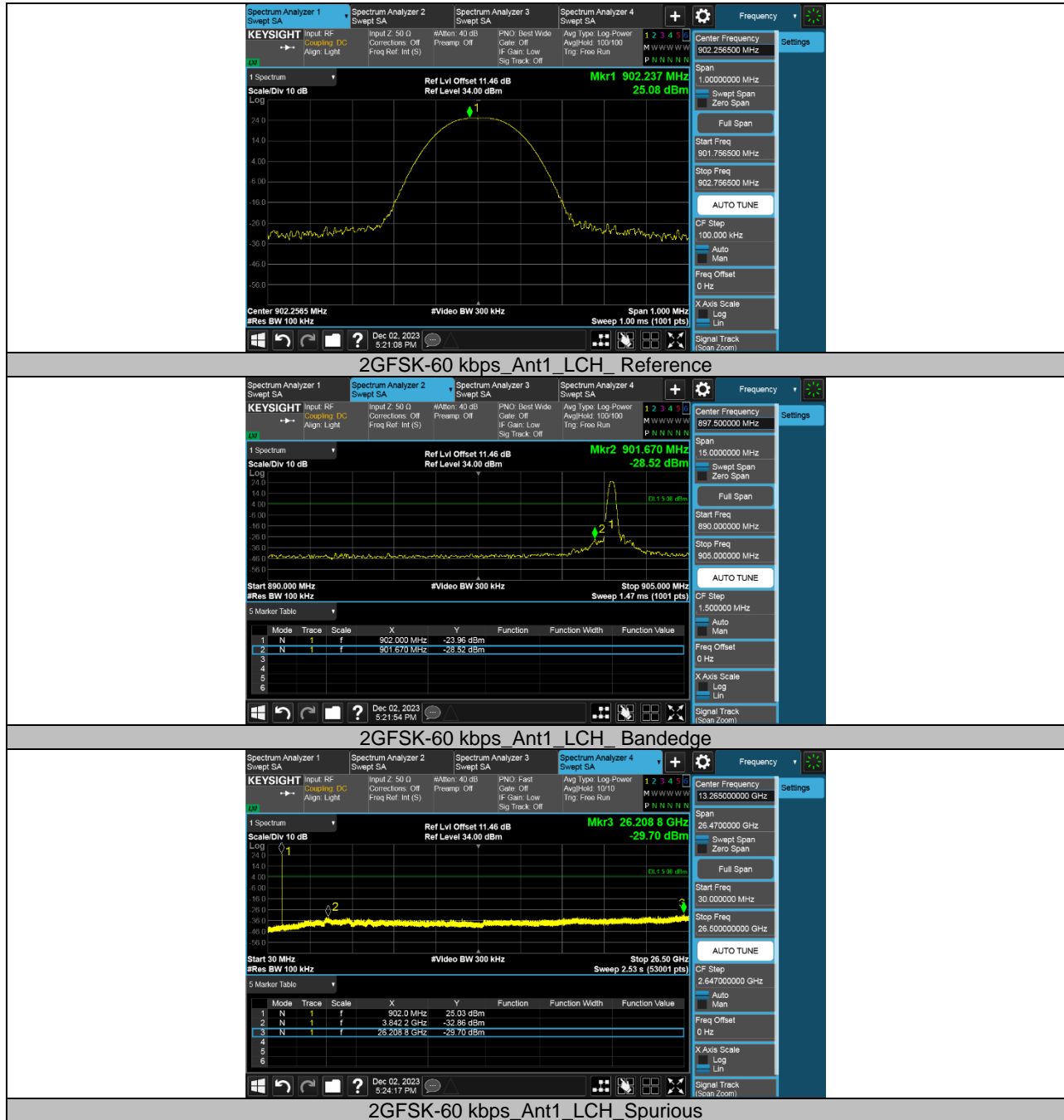


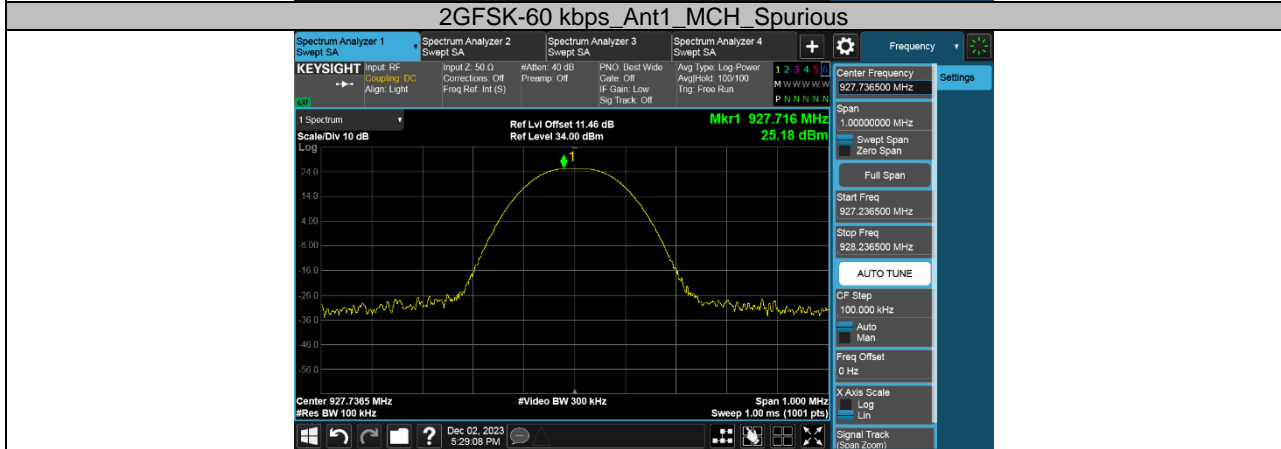
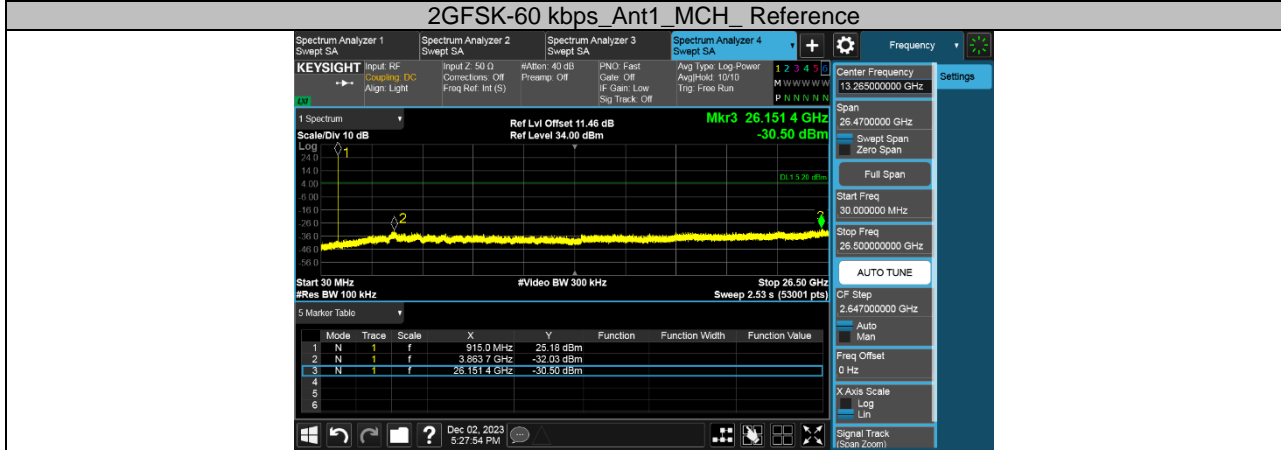
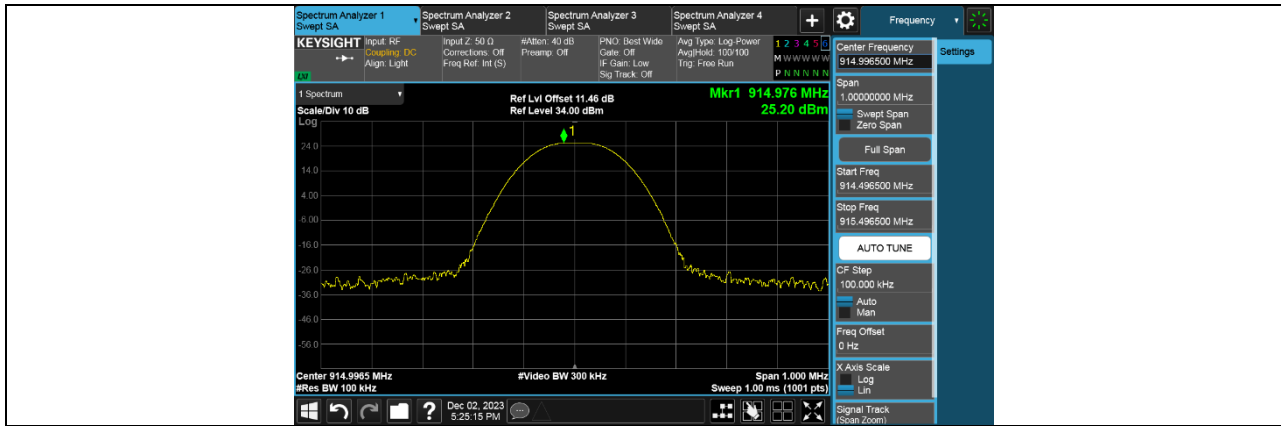
13.7. Appendix G3: CONDUCTED BAND EDGE AND SPURIOUS EMISSION

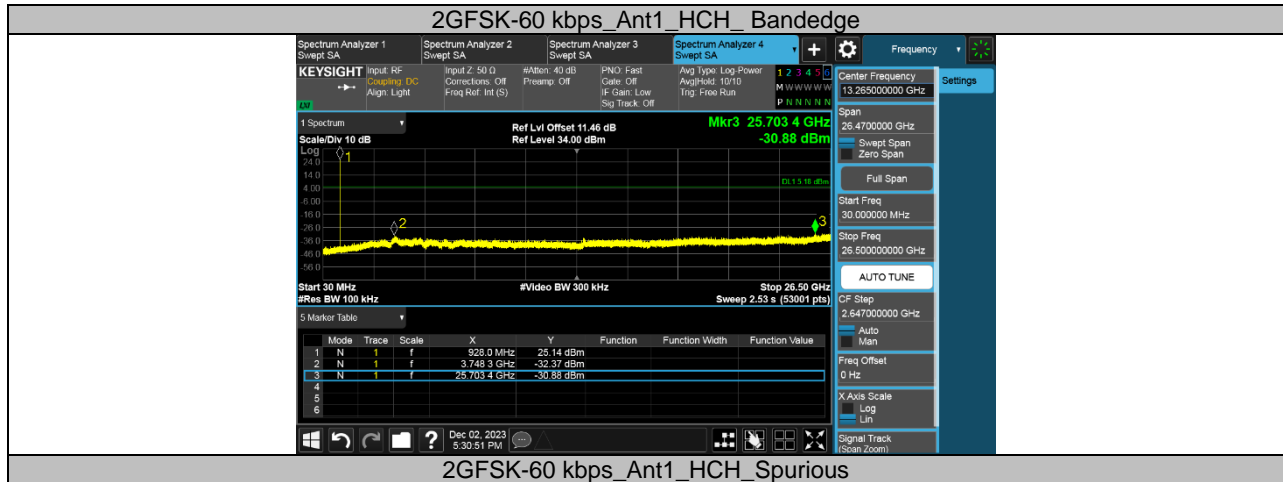
13.7.1. Test Result

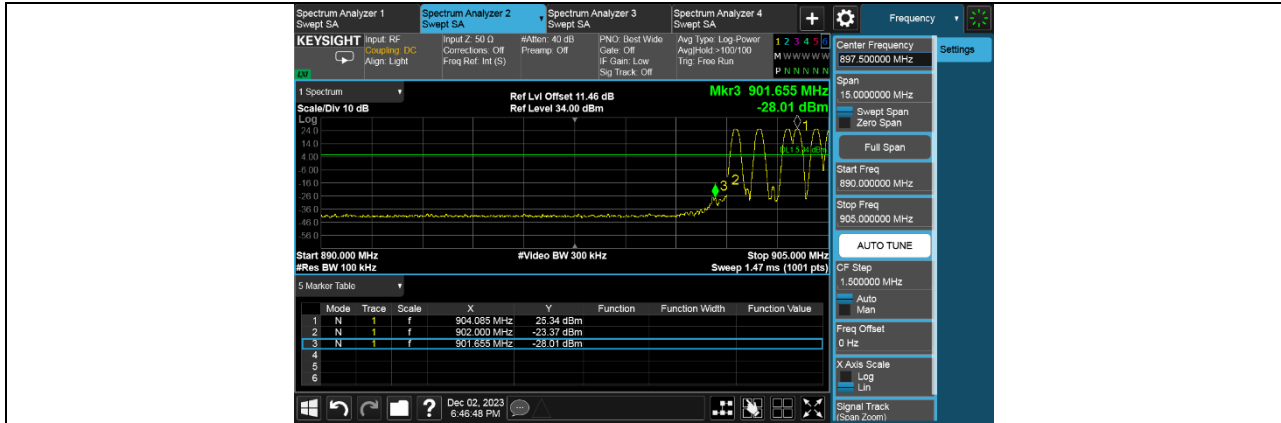
Test Mode	Antenna	ChName	Result [dBm]	Verdict
2GFSK-60 kbps	Ant1	LCH	See the below graphs	PASS
		MCH		PASS
		HCH		PASS
		Hop_ LCH		PASS
		Hop_ HCH		PASS

13.7.2. Test Graphs

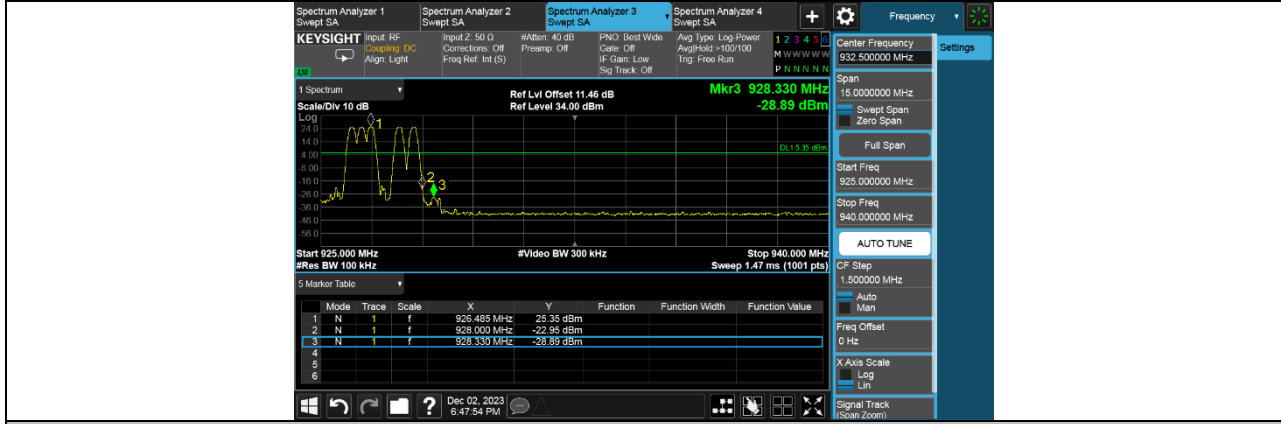








2GFSK-60 kbps_Ant1_LCH_Bandedge Hopping on



2GFSK-60 kbps_Ant1_HCH_Bandedge Hopping on

14. FCC.SubG.2GFSK.96kbps

14.1. Appendix A4: DUTY CYCLE

14.1.1. Test Result

Test Mode	On Time (msec)	Period (msec)	Duty Cycle x (Linear)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	1/T Minimum VBW (kHz)	Final setting For VBW (kHz)
2GFSK-96 kbps	220.242	503.81	0.4372	43.72	3.59	0.0045	1

Note:

Duty Cycle Correction Factor= $10\log(1/x)$.

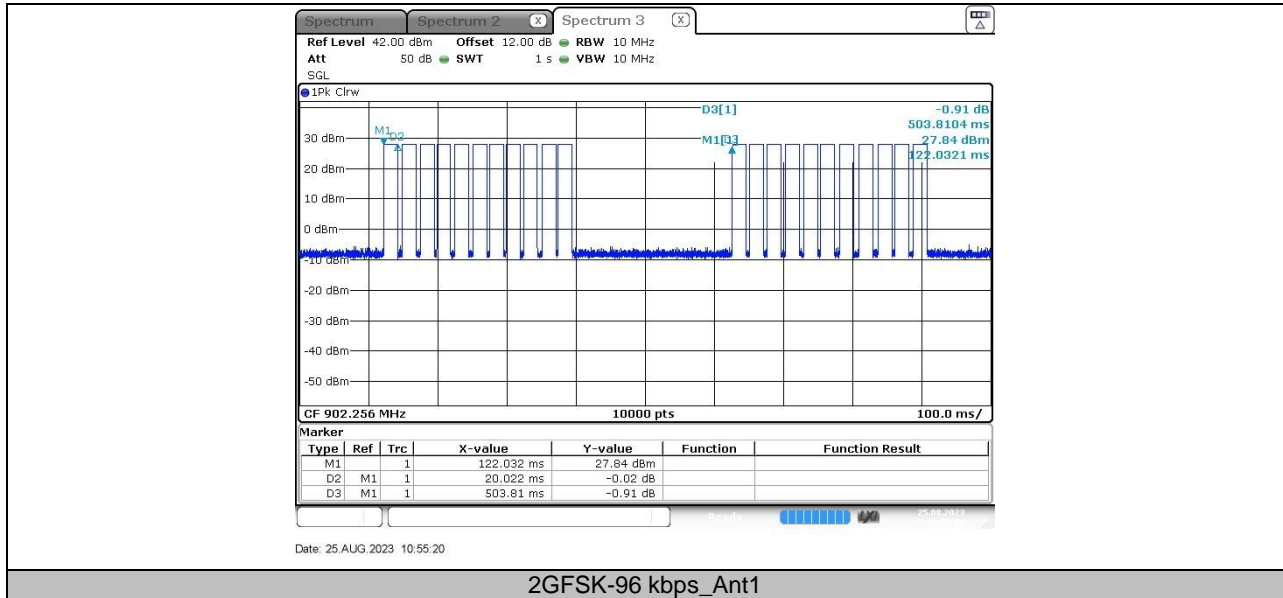
Where: x is Duty Cycle (Linear)

Where: T is On Time

On Time= $D2*2=20.022*11=220.242$ ms

If that calculated VBW is not available on the analyzer then the next higher value should be used.

Test Graphs



14.2. Appendix B4: 20DB BANDWIDTH & OCCUPIED CHANNEL BANDWIDTH

14.2.1. Test Result

Test Mode	Antenna	Channel	20db EBW[MHz]	OCB [MHz]	Verdict
2GFSK-96 kbps	Ant1	LCH	0.1148	0.10886	PASS
		MCH	0.1153	0.10851	PASS
		HCH	0.1159	0.10963	PASS

14.2.2. Test Graphs



14.3. Appendix C4: CONDUCTED OUTPUT POWER

14.3.1. Test Result

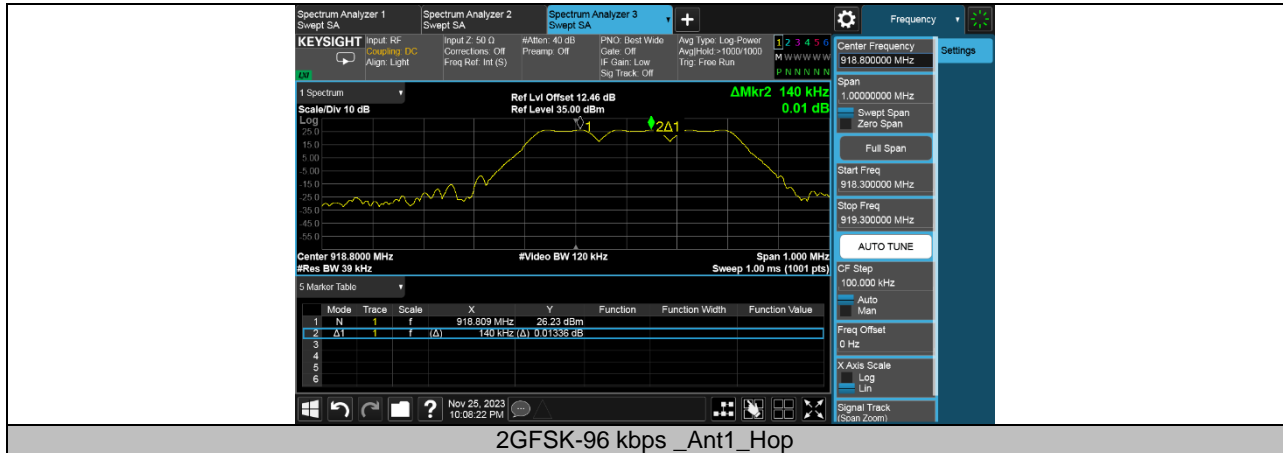
Test Mode	Antenna	Channel	PEAK Result[dBm]	AVG Result[dBm]	Limit[dBm]	Verdict
2GFSK-96 kbps	Ant1	LCH	26.05	26.02	≤30	PASS
		MCH	26.37	26.31	≤30	PASS
		HCH	26.09	26.05	≤30	PASS

14.4. Appendix D4: CARRIER FREQUENCY SEPARATION

14.4.1. Test Result

Test Mode	Antenna	Channel	Result [MHz]	Limit[MHz]	Verdict
2GFSK-96 kbps	Ant1	Hop	0.140	≥0.1159	PASS

14.4.2. Test Graphs

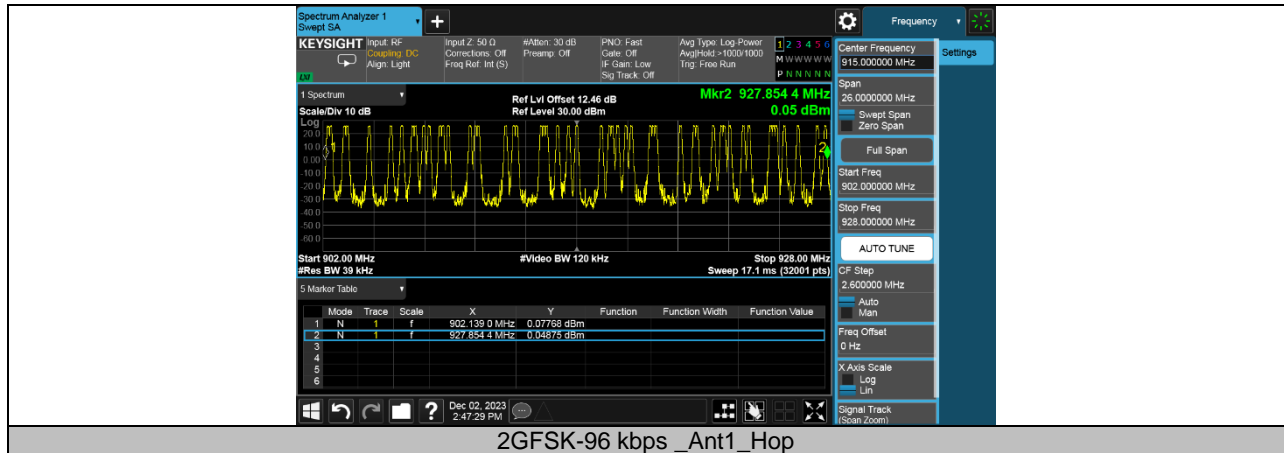


14.5. Appendix E4: NUMBER OF HOPPING FREQUENCIES

14.5.1. Test Result

Test Mode	Antenna	Channel	Result[Num]	Limit[Num]	Verdict
2GFSK-96 kbps	Ant1	Hop	51	≥50	PASS

14.5.2. Test Graphs



14.6. Appendix F4: TIME OF OCCUPANCY (DWELL TIME)

14.6.1. Test Result

Test Mode	Antenna	Channel	Time of single slot 1 [ms]	number of single slot 1	Burst Width 1 [ms/hop/ch]	The number of hop channel appear
2GFSK-96 kbps	Ant1	Hop	6.00	6	36.00	6

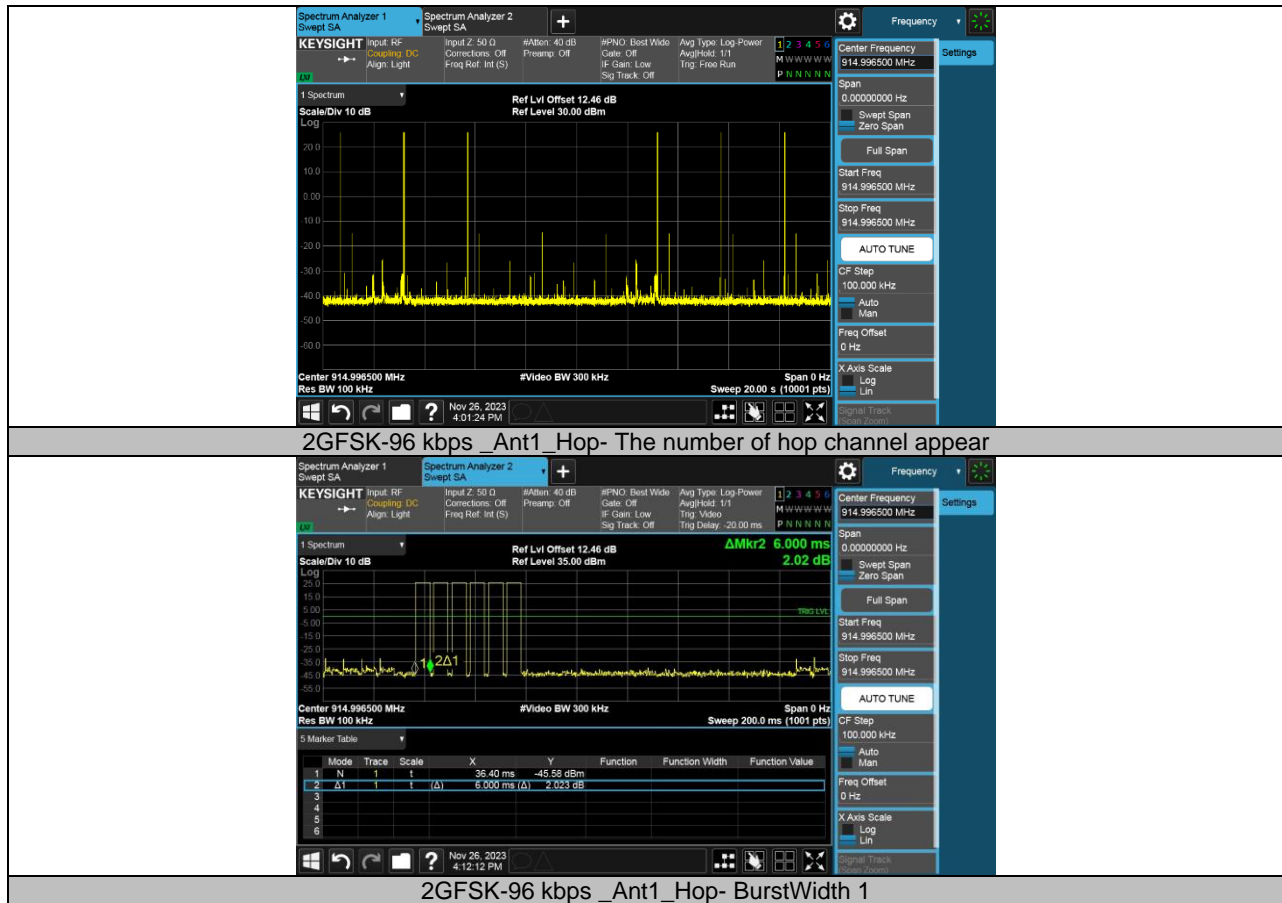
Test Mode	Antenna	Channel	Dwell Time [ms]	Limit [ms]	Results
2GFSK-96 kbps	Ant1	Hop	216.00	400	PASS

Note:

2GFSK-96 kbps: The dwell time = Time of single slot * The number of hop channel appear within 20s

BurstWidth = Time of single slot * number of single slot

14.6.2. Test Graphs

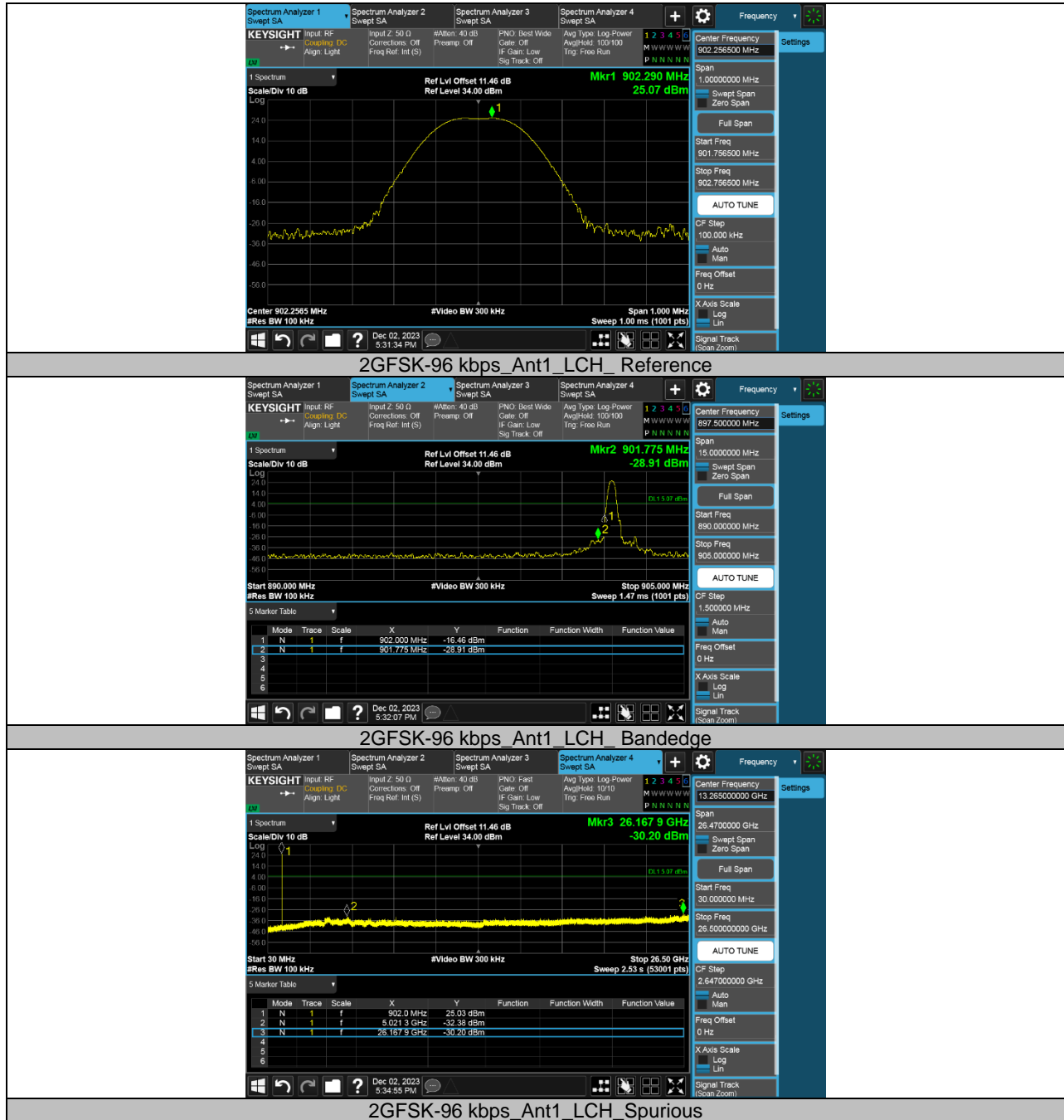


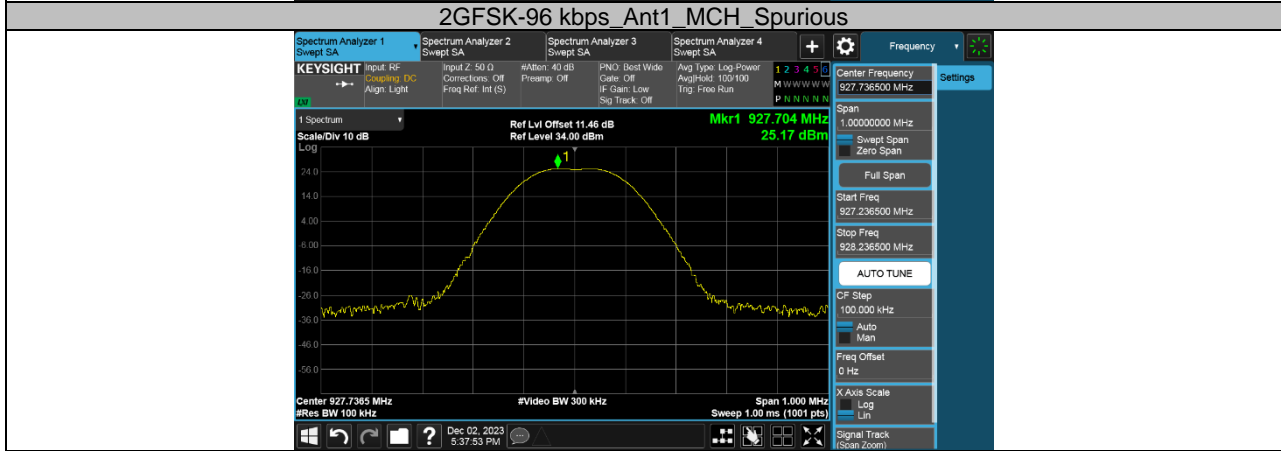
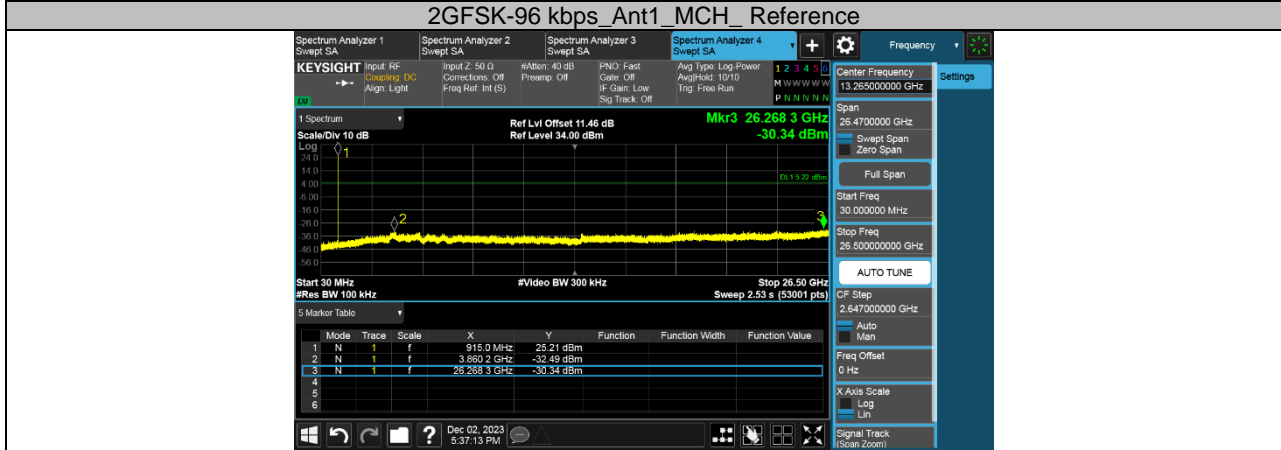
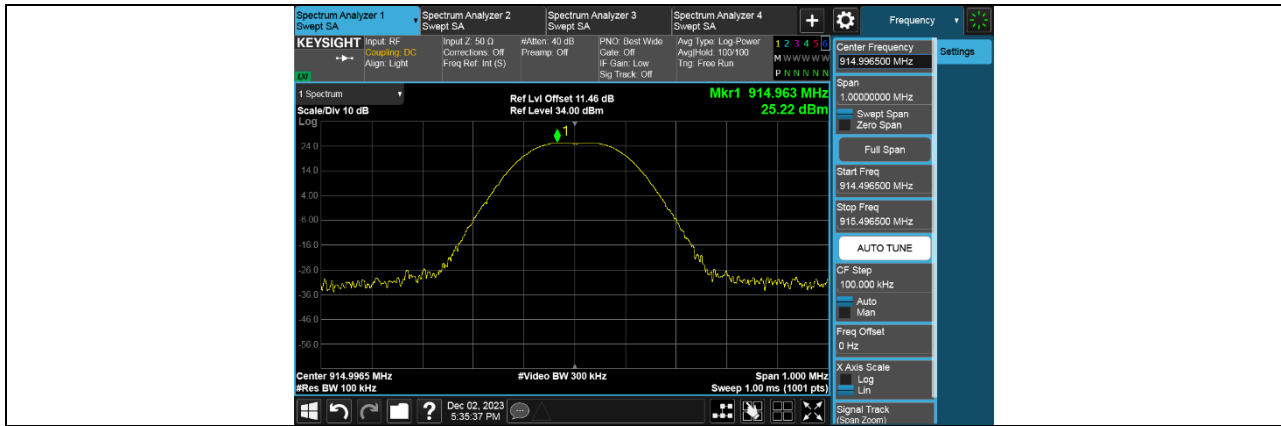
14.7. Appendix G4: CONDUCTED BAND EDGE AND SPURIOUS EMISSION

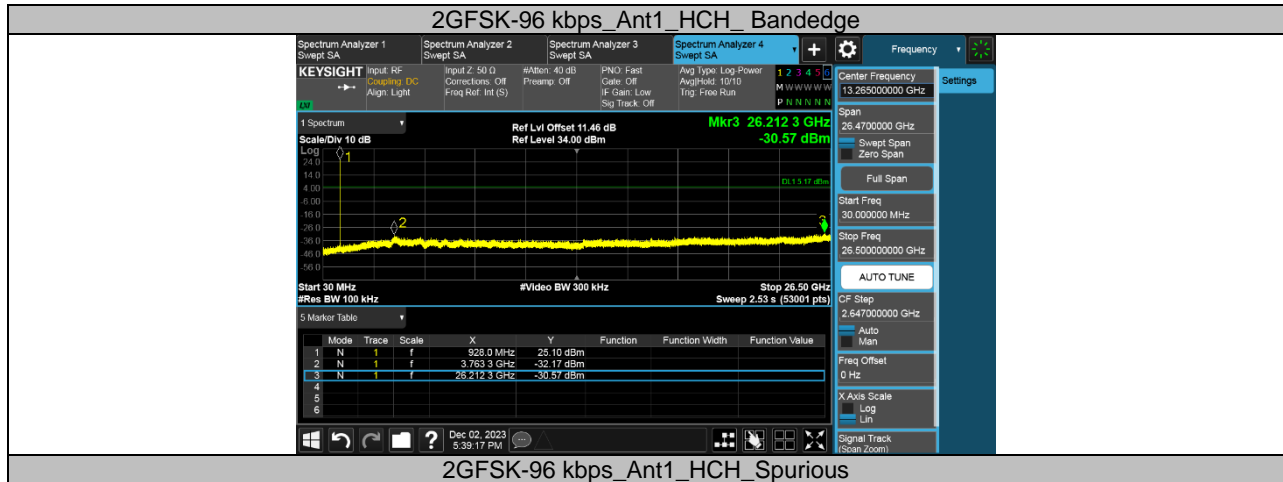
14.7.1. Test Result

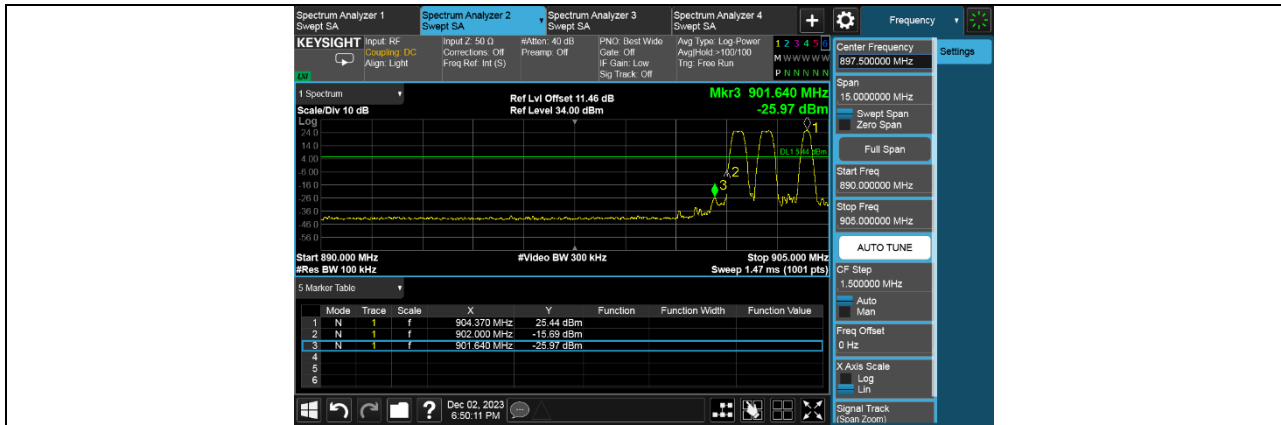
Test Mode	Antenna	ChName	Result [dBm]	Verdict
2GFSK-96 kbps	Ant1	LCH	See the below graphs	PASS
		MCH		PASS
		HCH		PASS
		Hop_ LCH		PASS
		Hop_ HCH		PASS

14.7.2. Test Graphs









15. FCC.SubG.2GFSK.150kbps

15.1. Appendix A5: DUTY CYCLE

15.1.1. Test Result

Test Mode	On Time (msec)	Period (msec)	Duty Cycle x (Linear)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	1/T Minimum VBW (kHz)	Final setting For VBW (kHz)
2GFSK-150 kbps	217.617	498.45	0.4366	43.66%	3.60	0.0046	1

Note:

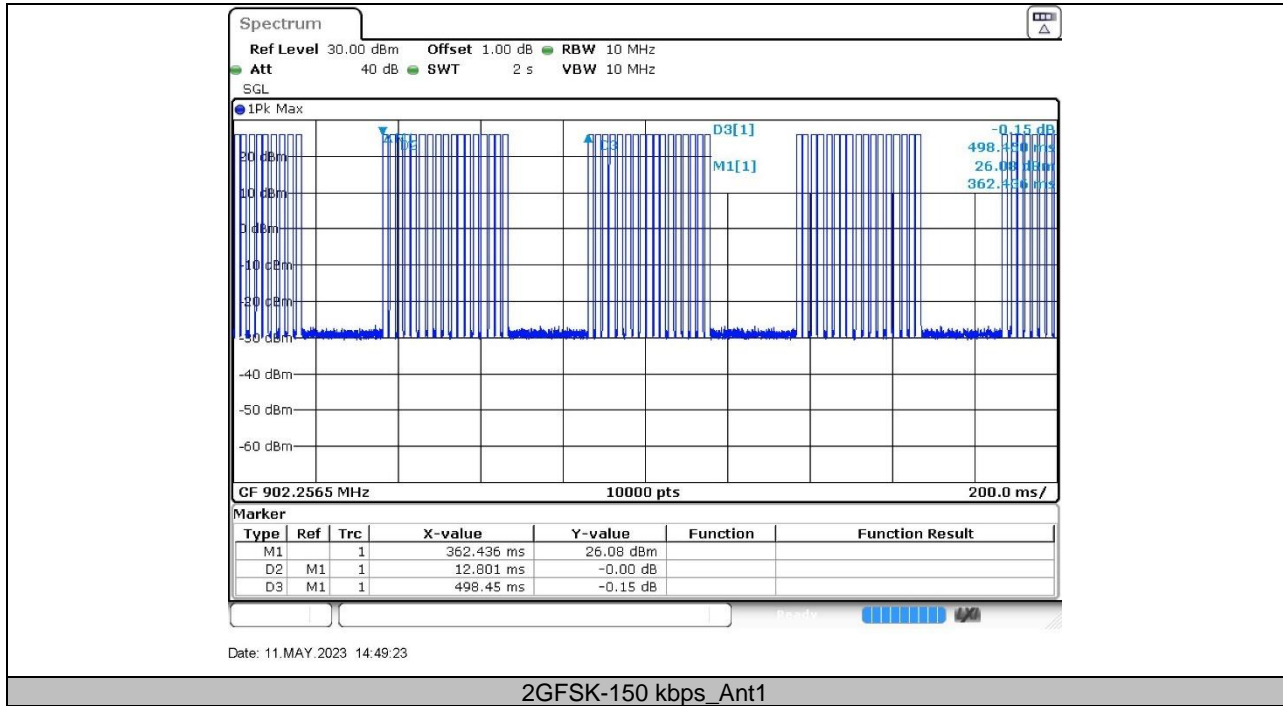
Duty Cycle Correction Factor=10log (1/x).

Where: x is Duty Cycle (Linear)

Where: T is On Time

If that calculated VBW is not available on the analyzer then the next higher value should be used.

Test Graphs

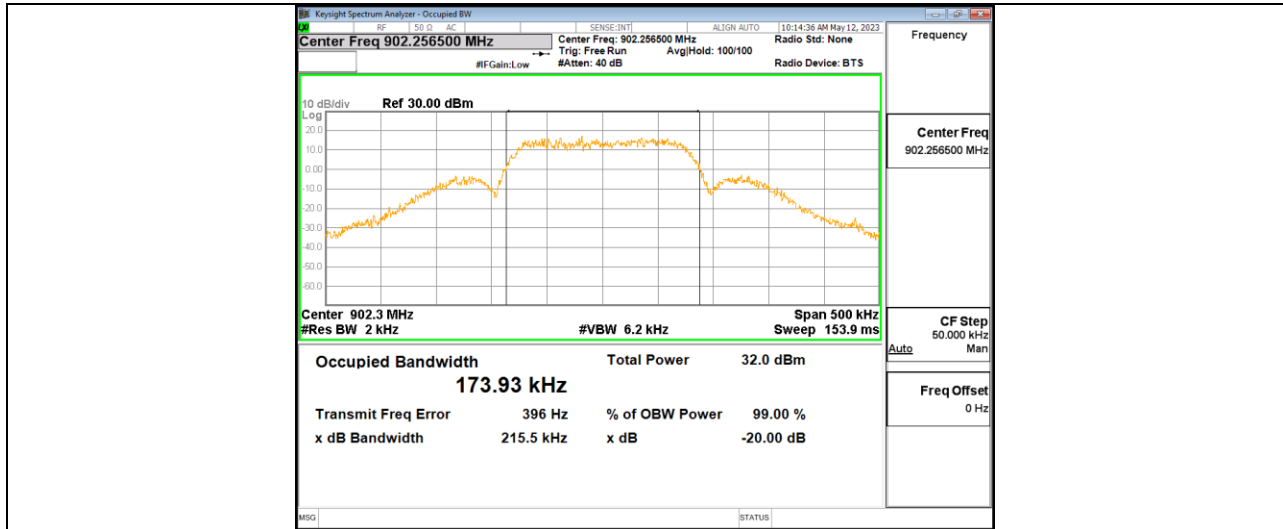


15.2. Appendix B5: 20DB BANDWIDTH & OCCUPIED CHANNEL BANDWIDTH

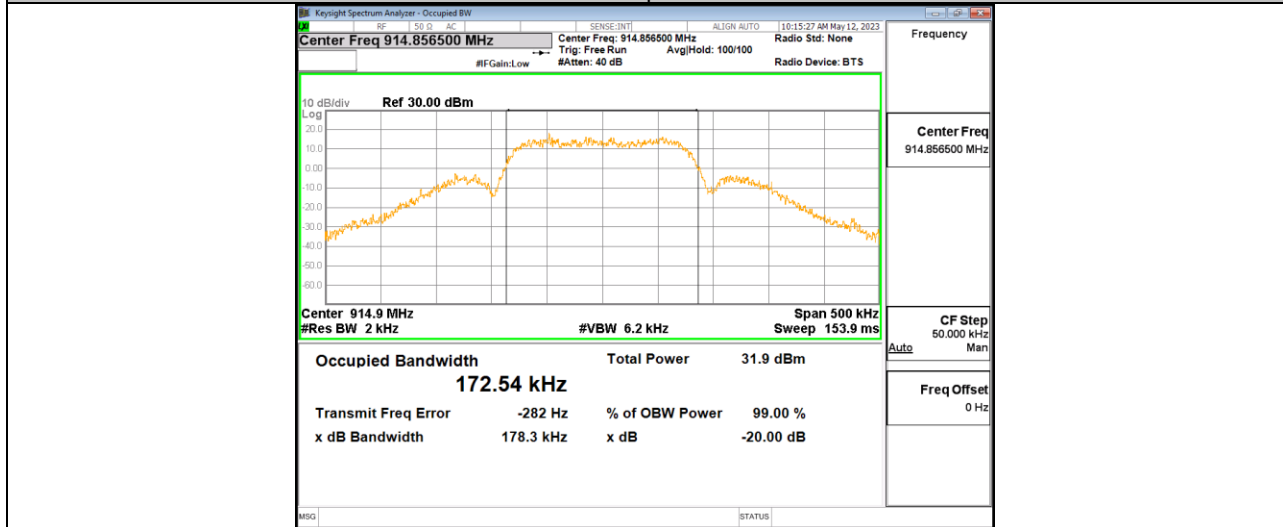
15.2.1. Test Result

Test Mode	Antenna	Channel	20db EBW[MHz]	OCB [MHz]	Verdict
2GFSK-150 kbps	Ant1	LCH	0.2155	0.17393	PASS
		MCH	0.17830	0.17254	PASS
		HCH	0.20370	0.17466	PASS

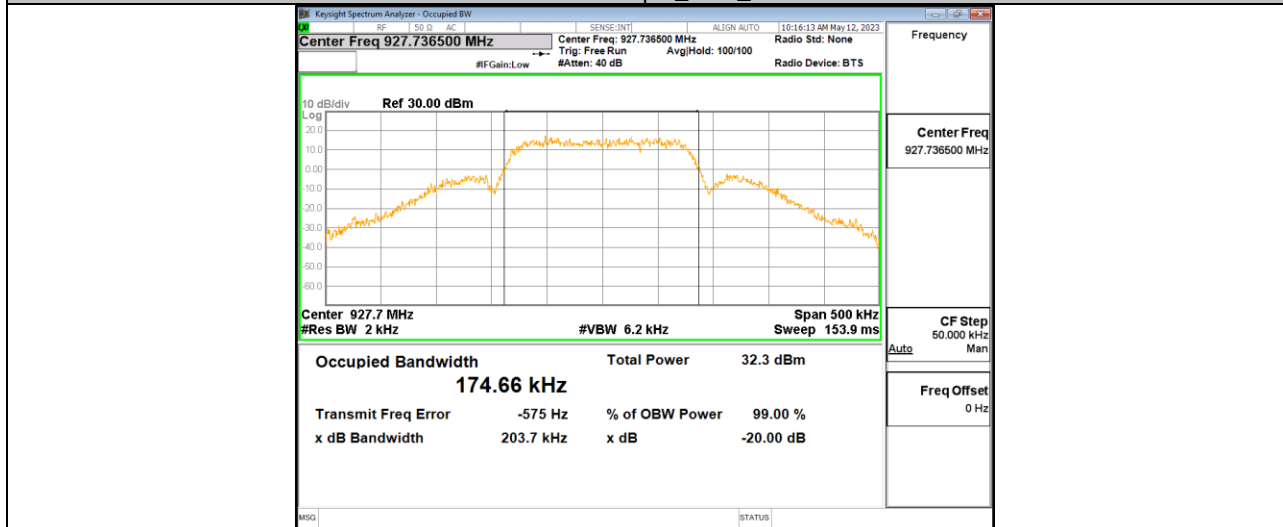
15.2.2. Test Graphs



2GFSK-150 kbps_Ant1_LCH



2GFSK-150 kbps_Ant1_MCH



2GFSK-150 kbps_Ant1_HCH

15.3. Appendix C5: CONDUCTED OUTPUT POWER

15.3.1. Test Result

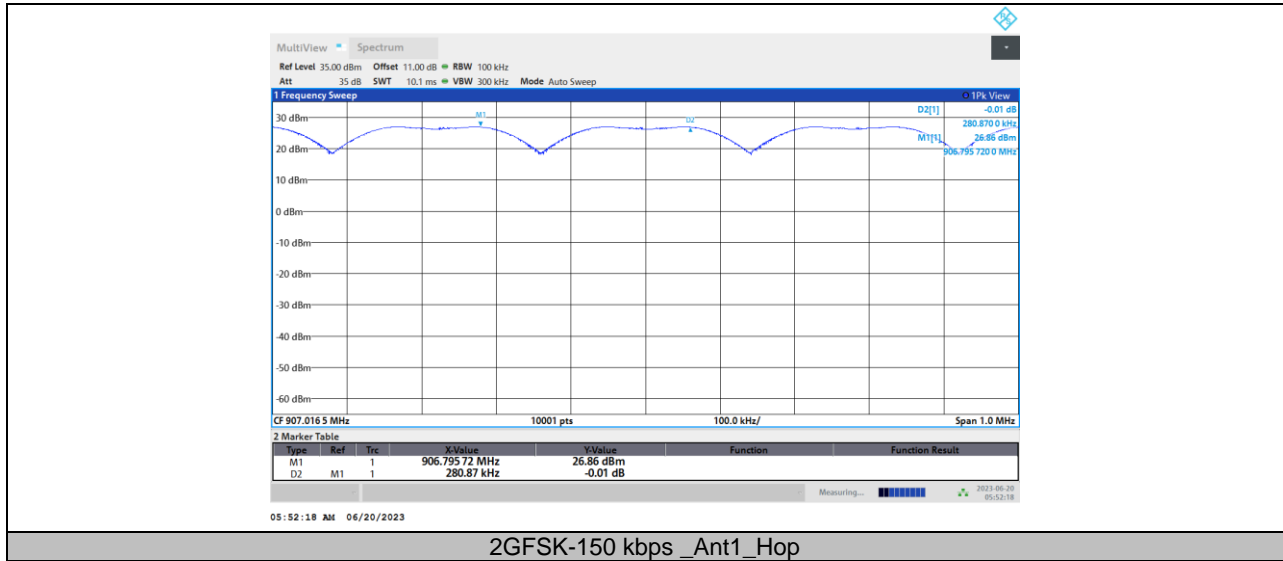
Test Mode	Antenna	Channel	PEAK Result[dBm]	AVG Result[dBm]	Limit[dBm]	Verdict
2GFSK-150 kbps	Ant1	Low	26.54	26.46	≤30	PASS
		Mid	26.43	26.39	≤30	PASS
		High	26.46	26.38	≤30	PASS

15.4. Appendix D5: CARRIER FREQUENCY SEPARATION

15.4.1. Test Result

Test Mode	Antenna	Channel	Result [MHz]	Limit[MHz]	Verdict
2GFSK-150 kbps	Ant1	Hop	0.281	0.216	PASS

15.4.2. Test Graphs

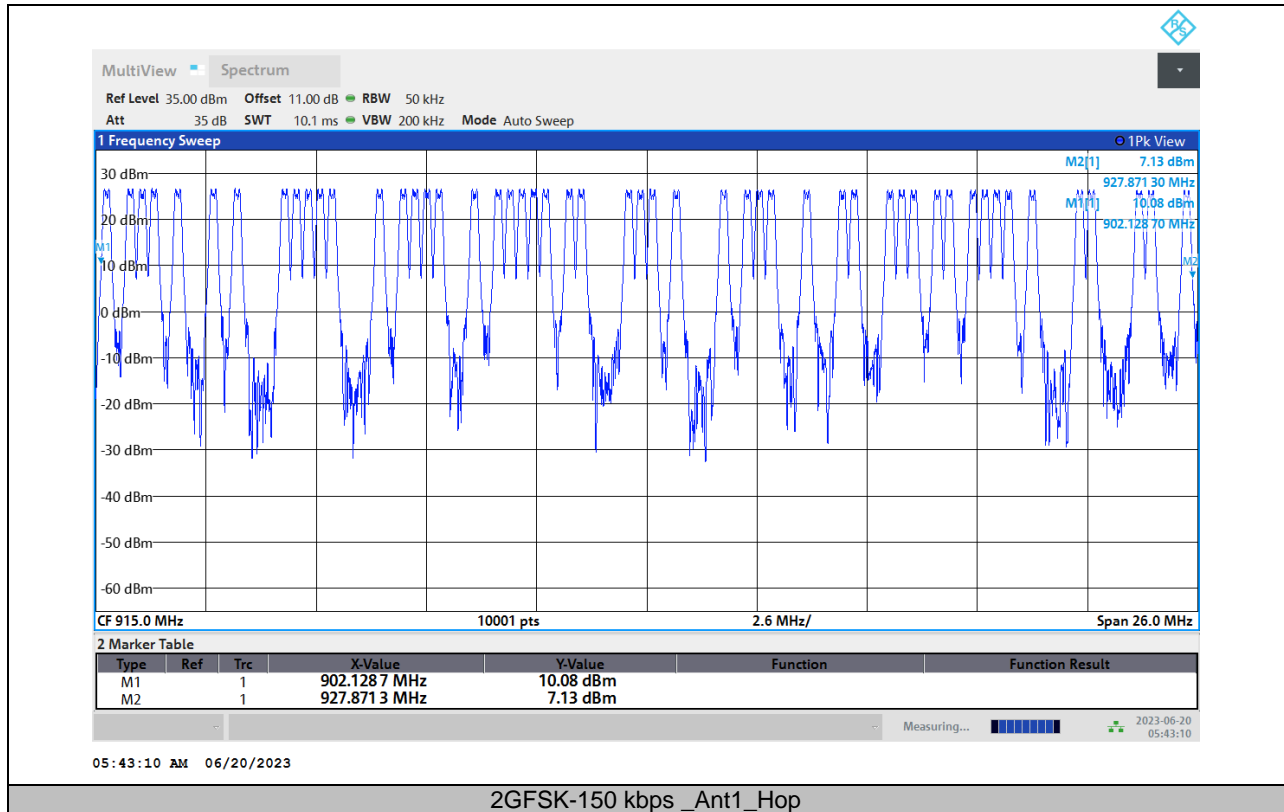


15.5. Appendix E5: NUMBER OF HOPPING FREQUENCIES

15.5.1. Test Result

Test Mode	Antenna	Channel	Result[Num]	Limit[Num]	Verdict
2GFSK-150 kbps	Ant1	Hop	51	≥25	PASS

15.5.2. Test Graphs



15.6. Appendix F5: TIME OF OCCUPANCY (DWELL TIME)

15.6.1. Test Result

Test Mode	Antenna	Channel	Time of single slot 1 [ms]	number of single slot 1	Burst Width 1 [ms/hop/ch]	The number of hop channel appear
2GFSK-150 kbps	Ant1	Hop	3.550	8	28.4	1

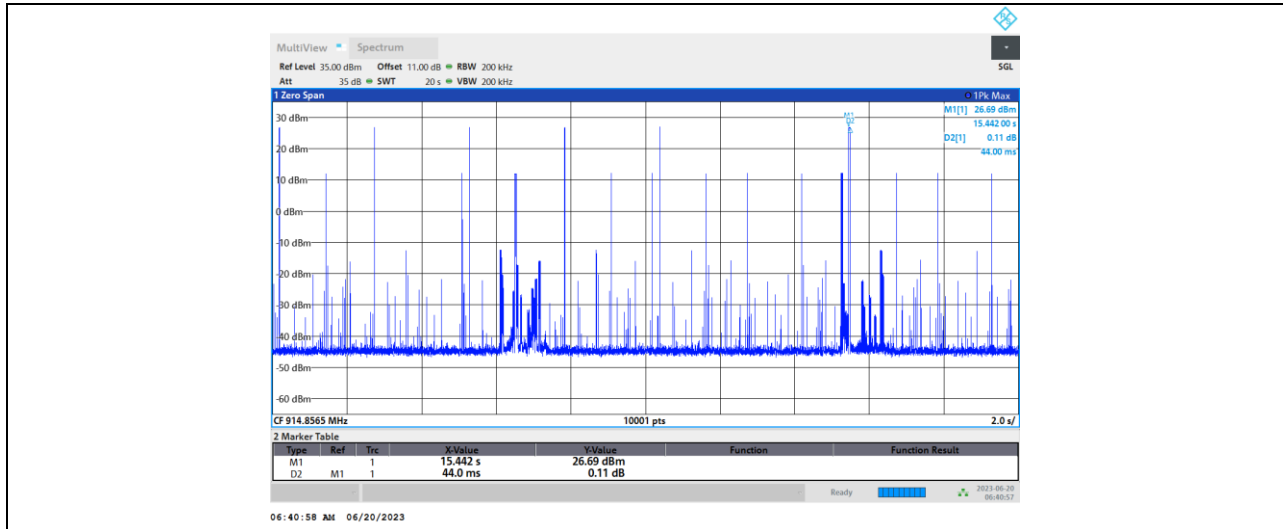
Test Mode	Antenna	Channel	Time of single slot 2 [ms]	number of single slot 2	Burst Width 2 [ms/hop/ch]	The number of hop channel appear
2GFSK-150 kbps	Ant1	Hop	2.061	1	2.061	5

Test Mode	Antenna	Channel	Dwell Time1 [ms]	Dwell Time 2 [ms]	Dwell Time [ms]	Limit [ms]	Results
2GFSK-150 kbps	Ant1	Hop	28.4	10.305	38.705	400	PASS

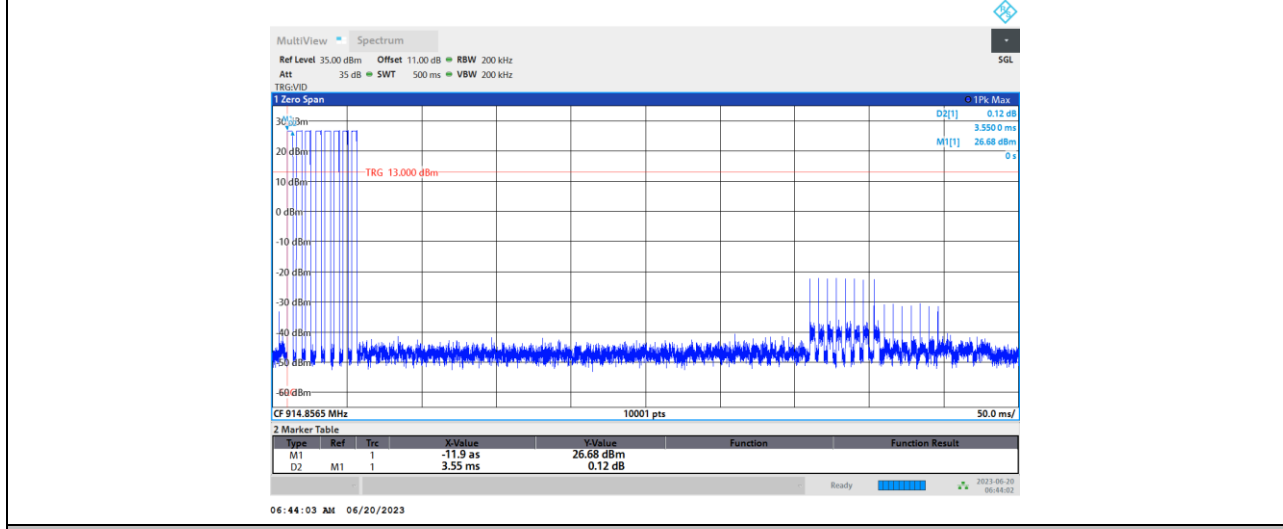
Note:
2GFSK-

150 kbps: The dwell time = Time of single slot * The number of hop channel appear within 20s
 BurstWidth = Time of single slot * number of single slot

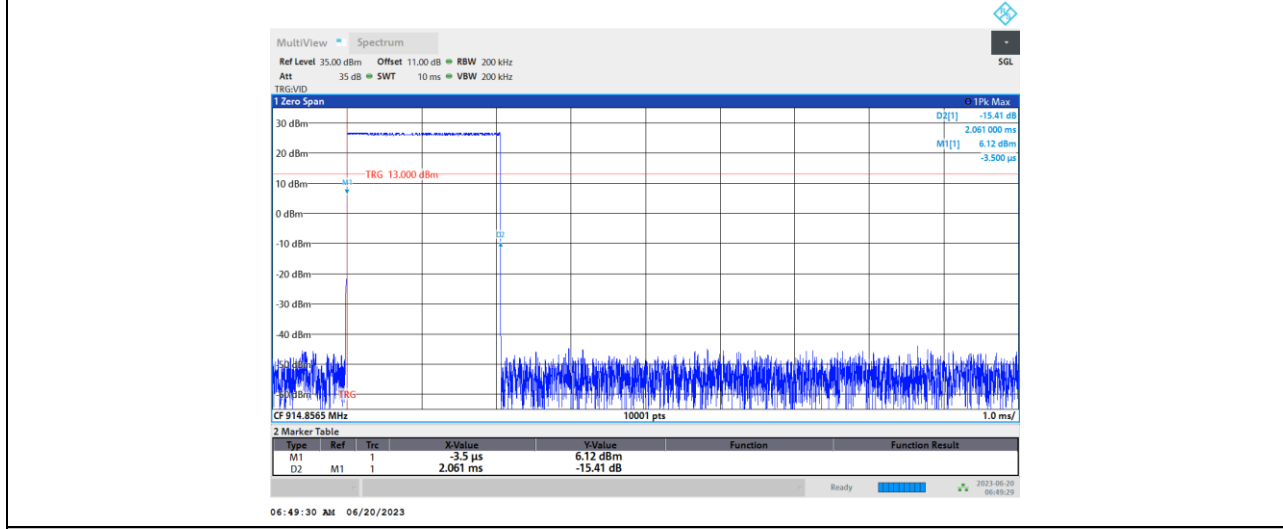
15.6.2. Test Graphs



2GFSK-150 kbps _Ant1_Hop- The number of hop channel appear



2GFSK-150 kbps _Ant1_Hop- BurstWidth 1



2GFSK-150 kbps _Ant1_Hop- BurstWidth 2

15.7. Appendix G5: CONDUCTED SPURIOUS EMISSION

15.7.1. Test Result

Test Mode	Antenna	ChName	Result [dBm]	Verdict
2GFSK-150 kbps	Ant1	LCH	See the below graphs	PASS
		MCH		PASS
		HCH		PASS
		Hop_Low		PASS
		Hop_High		PASS

15.7.2. Test Graphs

