

## 13. GFSK.50 kbps Condition 3

### 13.1. Appendix A3: DUTY CYCLE

#### 13.1.1. Test Result

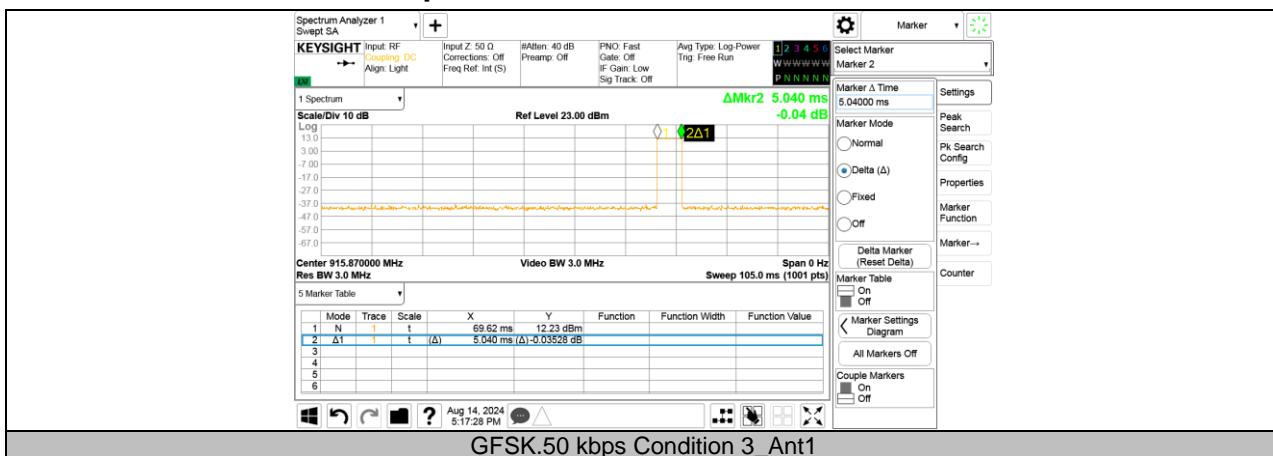
Test Mode	On Time (msec)	Period (msec)	Duty Cycle $\times$ (Linear)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)
GFSK.50 kbps Condition 3	5.04	100	0.0504	5.04	-25.95

Note:

Duty Cycle Correction Factor=20log (x).

Where: x is Duty Cycle (Linear)

### 13.1.2. Test Graphs

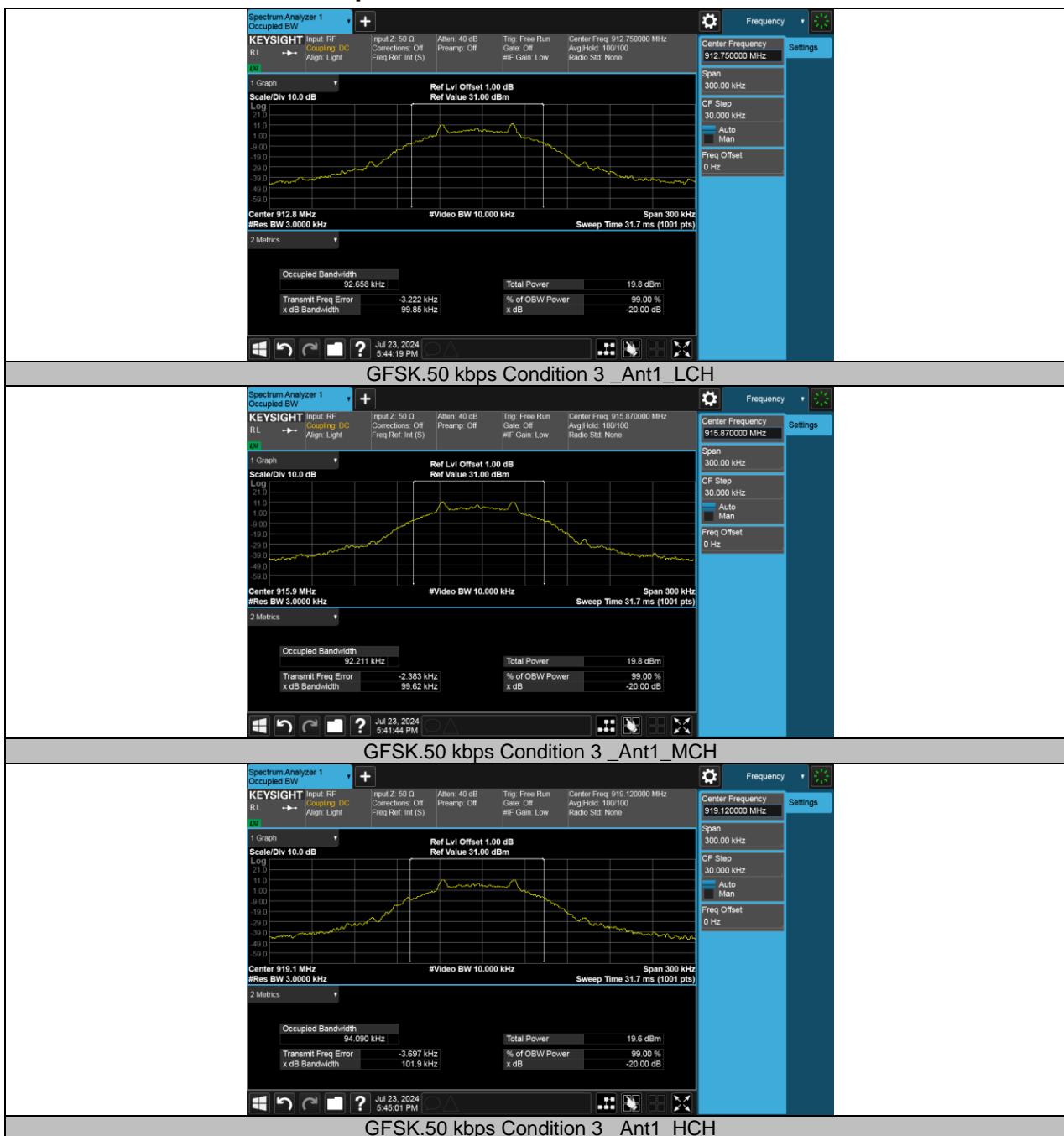


## 13.2. Appendix B3: 20DB BANDWIDTH & OCCUPIED CHANNEL BANDWIDTH

### 13.2.1. Test Result

Test Mode	Antenna	Channel	20db EBW[MHz]	OCB [MHz]	Verdict
GFSK.50 kbps Condition 3	Ant1	LCH	0.09985	0.092658	PASS
		MCH	0.09962	0.092211	PASS
		HCH	0.10190	0.094090	PASS

### 13.2.2. Test Graphs



### 13.3. Appendix C3: CONDUCTED OUTPUT POWER

#### 13.3.1. Test Result

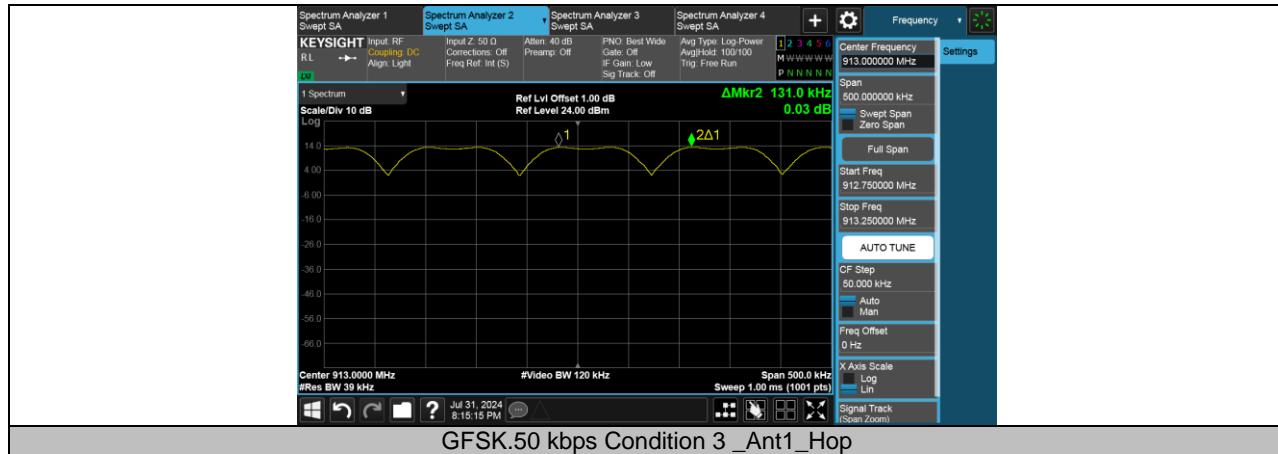
Test Mode	Antenna	Channel	PEAK Result[dBm]	Limit[dBm]	Verdict
GFSK.50 kbps Condition 3	Ant1	LCH	13.31	≤30	PASS
		MCH	13.28	≤30	PASS
		HCH	13.35	≤30	PASS

## 13.4. Appendix D3: CARRIER FREQUENCY SEPARATION

### 13.4.1. Test Result

Test Mode	Antenna	Channel	Result [MHz]	Limit[MHz]	Verdict
GFSK.50 kbps Condition 3	Ant1	Hop	0.1310	≥0.10190	PASS

### 13.4.2. Test Graphs

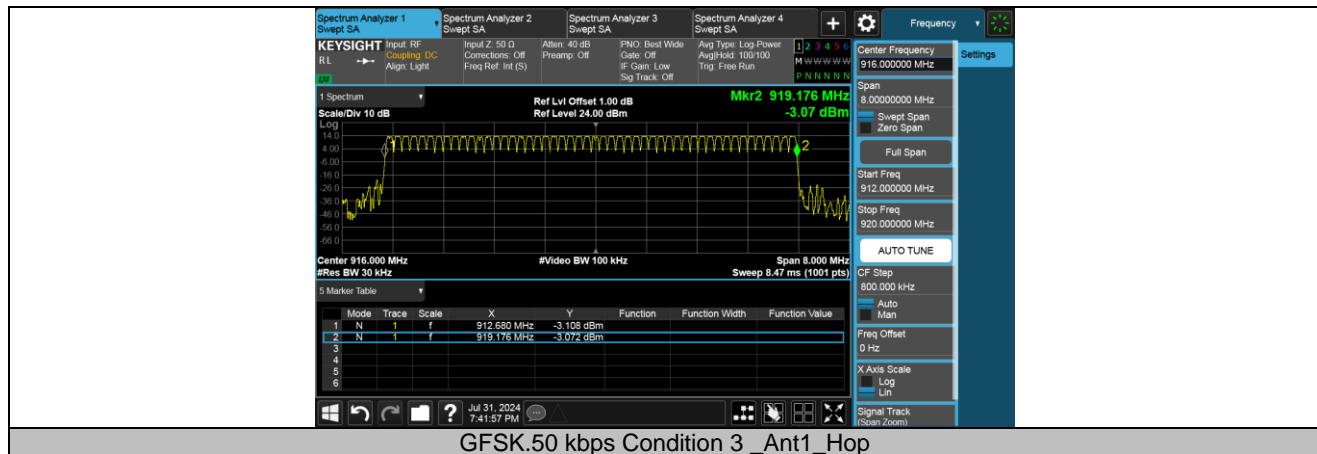


## 13.5. Appendix E3: NUMBER OF HOPPING FREQUENCIES

### 13.5.1. Test Result

Test Mode	Antenna	Channel	Result[Num]	Limit[Num]	Verdict
GFSK.50 kbps Condition 3	Ant1	Hop	50	≥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]	The number of hop channel appear	Burst Width 1 [ms/hop/ch]
GFSK.50 kbps Condition 3	Ant1	Hop	5.58	28	156.24

Test Mode	Antenna	Channel	Dwell Time [ms]	Limit [ms]	Results
GFSK.50 kbps Condition 3	Ant1	Hop	156.34	400	PASS

Note:

GFSK.50 kbps Condition 3: 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



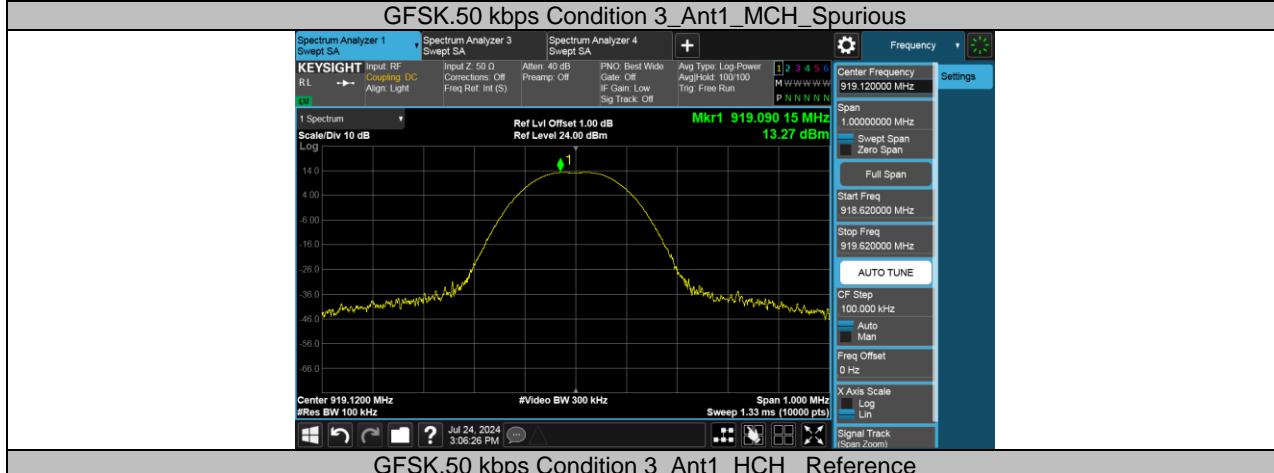
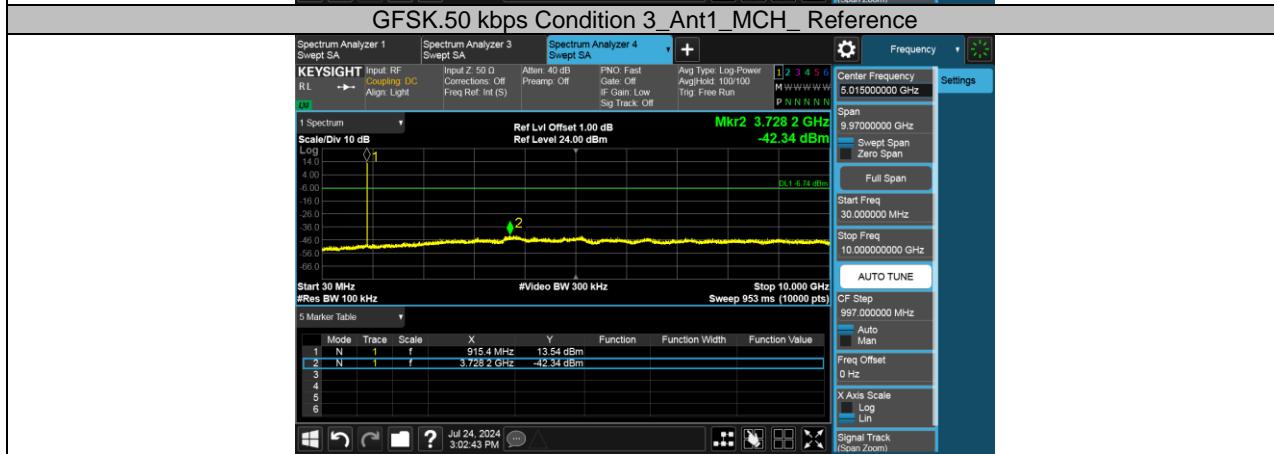
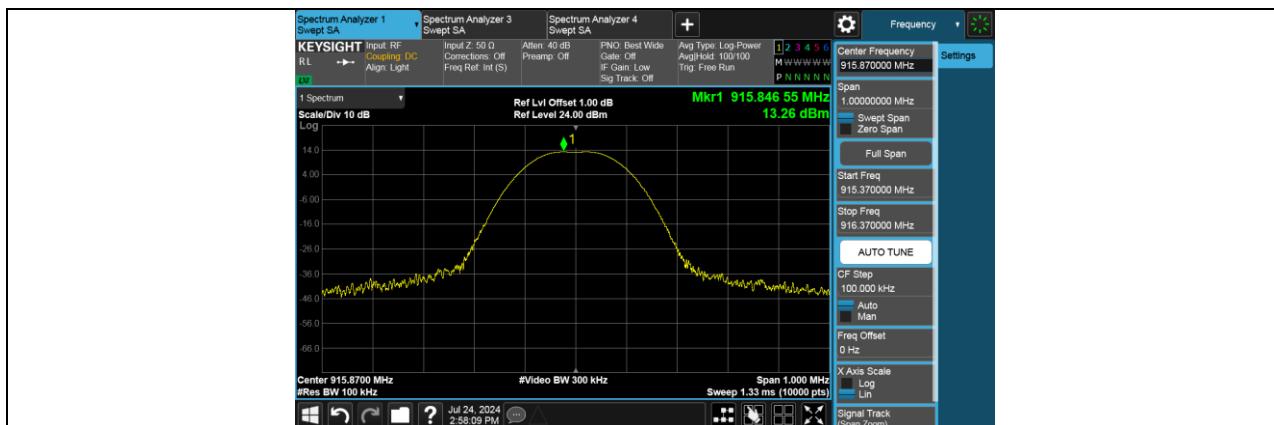
## 13.7. Appendix G3: CONDUCTED BAND EDGE AND SPURIOUS EMISSION

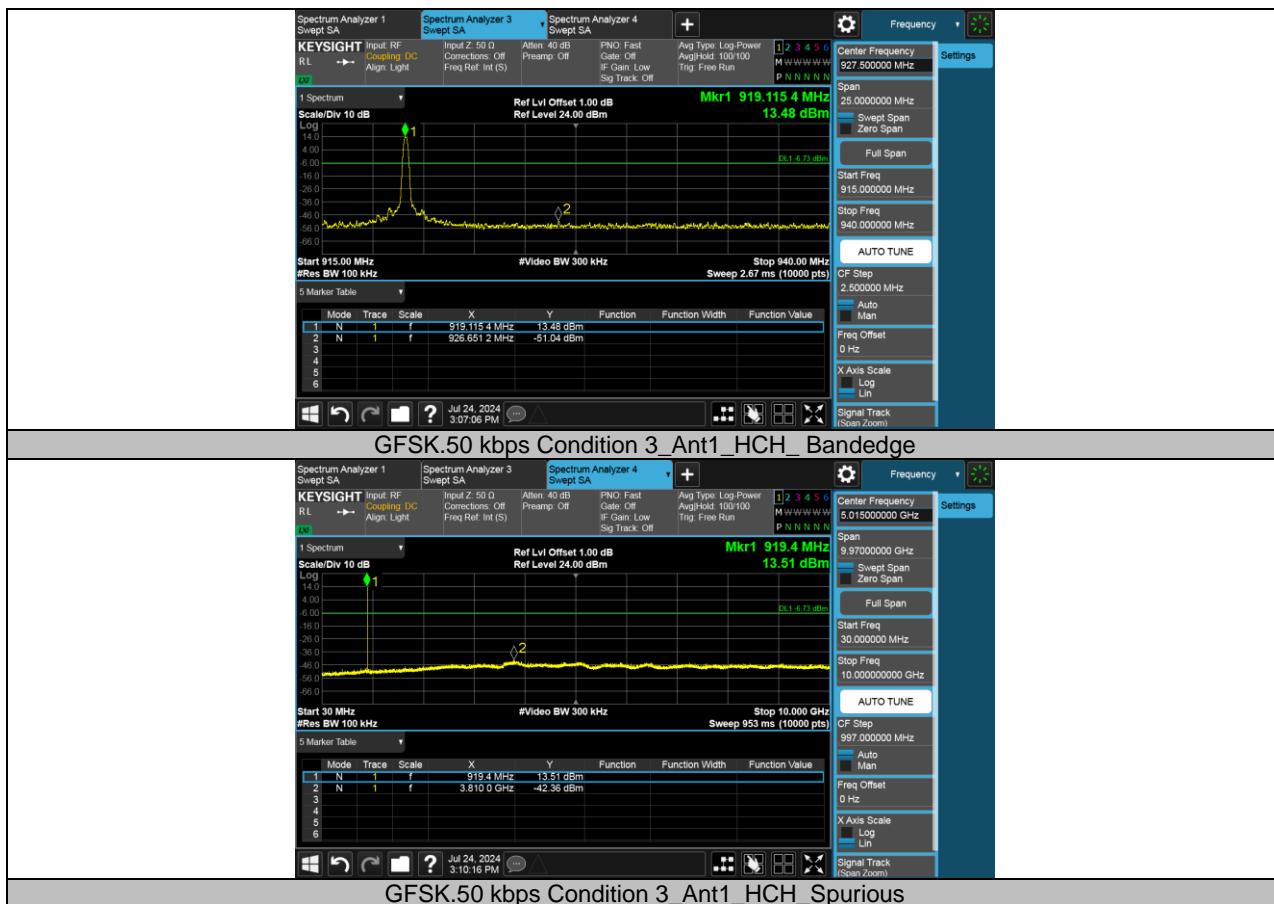
### 13.7.1. Test Result

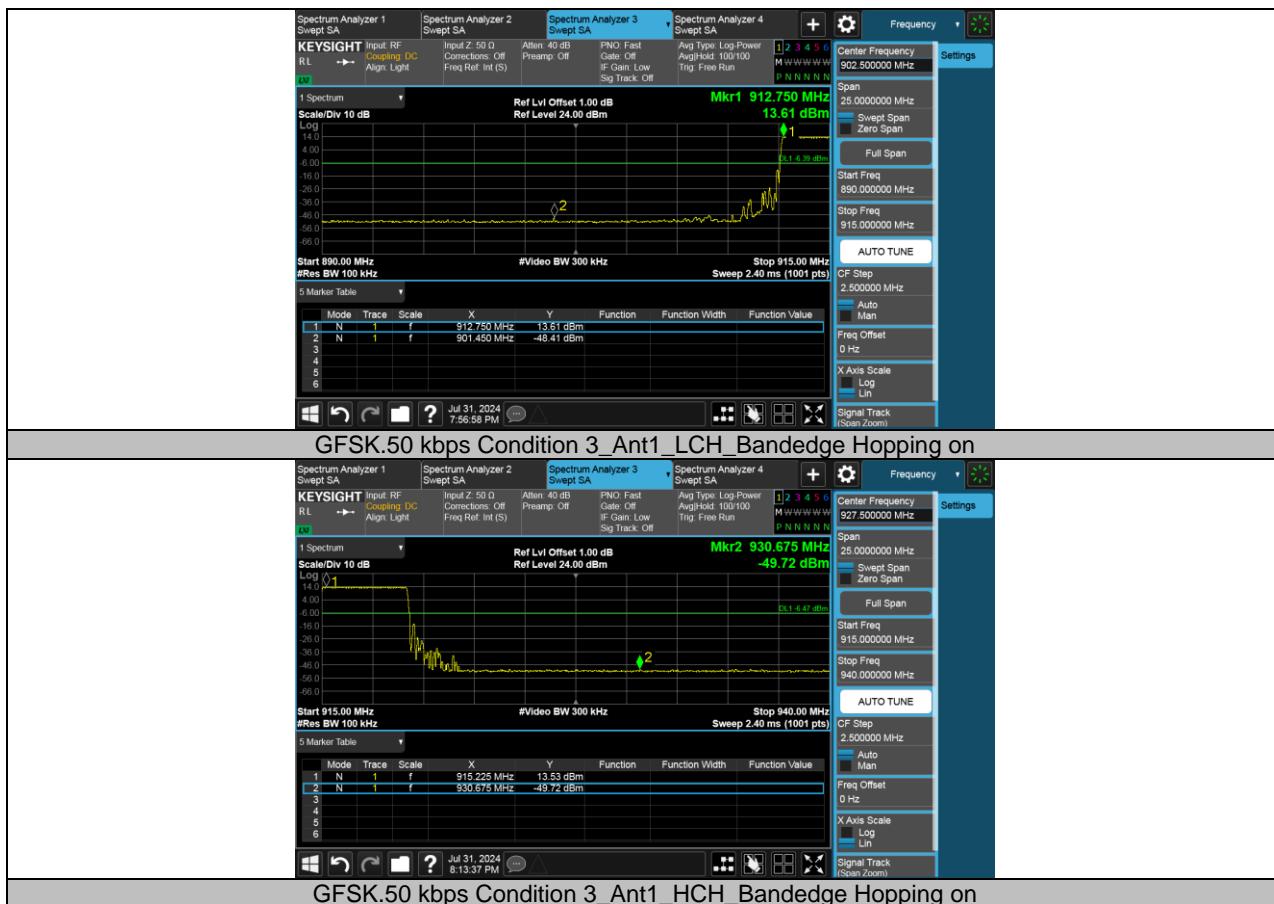
Test Mode	Antenna	ChName	Result [dBm]	Verdict
GFSK.50 kbps Condition 3	Ant1	LCH	See the below graphs	PASS
		MCH		PASS
		HCH		PASS
		Hop_LCH		PASS
		Hop_HCH		PASS

### 13.7.2. Test Graphs









## 14. GFSK.50 kbps Condition 4

### 14.1. Appendix A4: DUTY CYCLE

#### 14.1.1. Test Result

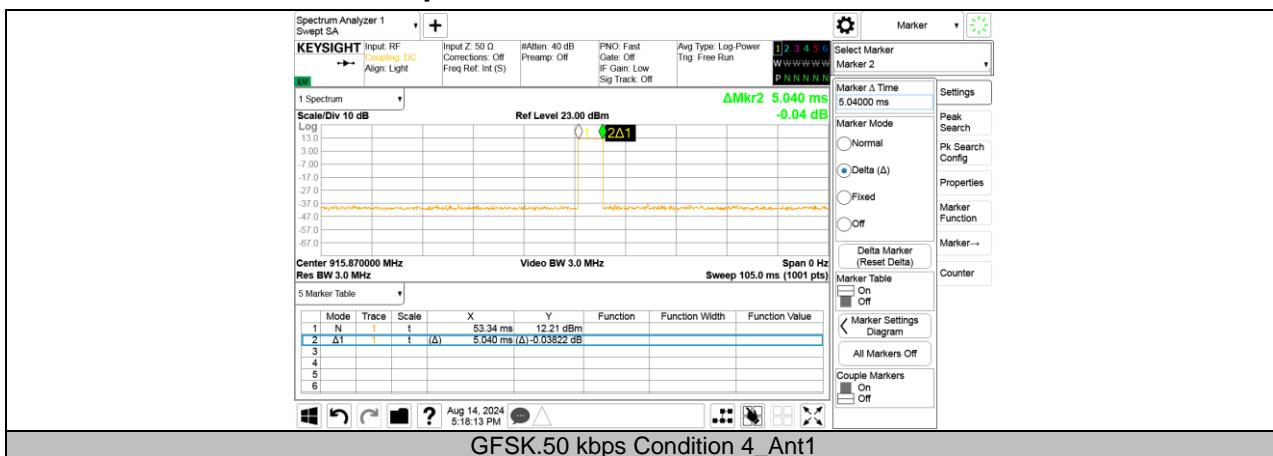
Test Mode	On Time (msec)	Period (msec)	Duty Cycle x (Linear)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)
GFSK.50 kbps Condition 4	5.04	100	0.0504	5.04	-25.95

Note:

Duty Cycle Correction Factor=20log (1/x).

Where: x is Duty Cycle (Linear)

### 14.1.2. Test Graphs

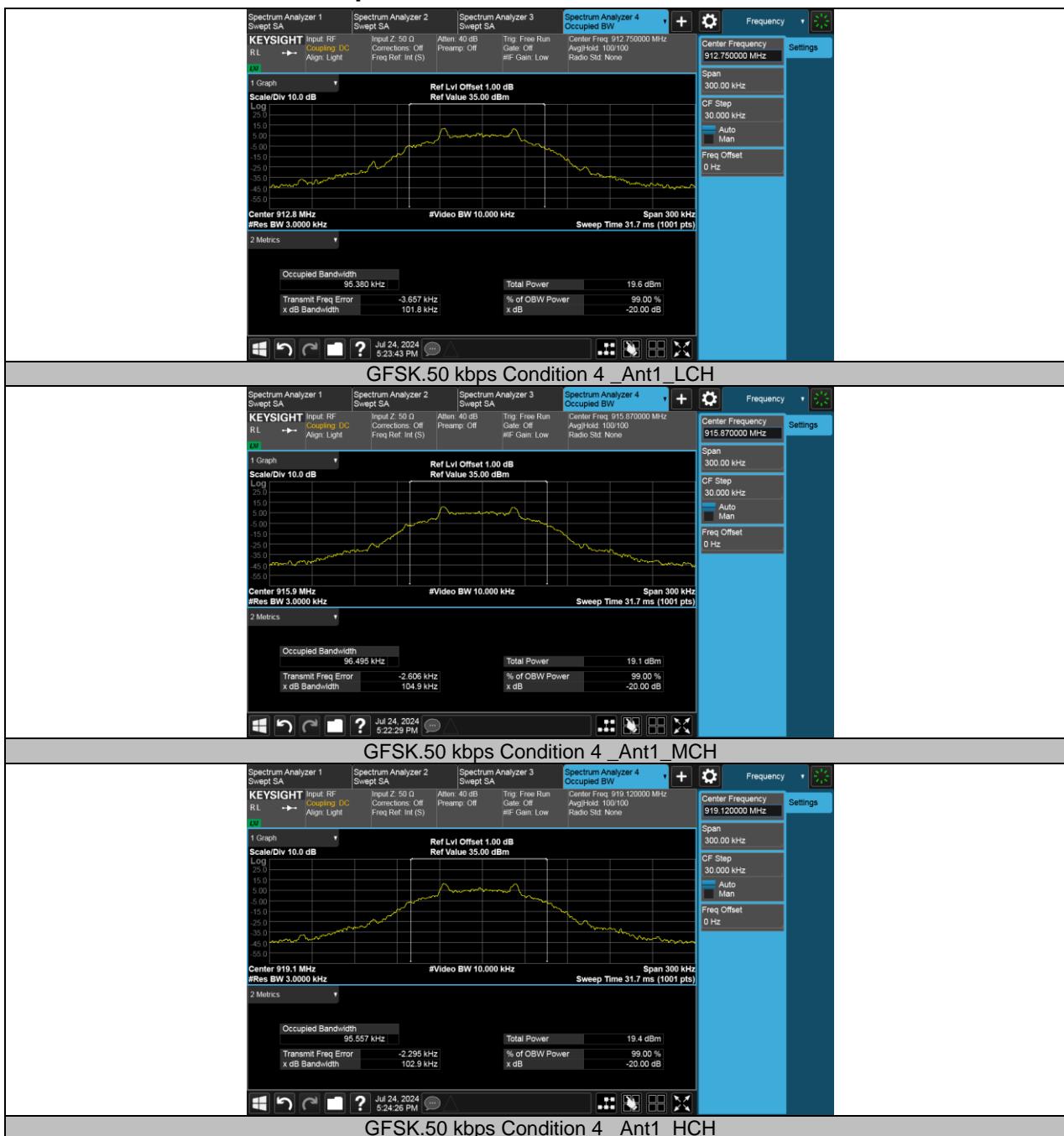


## 14.2. Appendix B4: 20DB BANDWIDTH & OCCUPIED CHANNEL BANDWIDTH

### 14.2.1. Test Result

Test Mode	Antenna	Channel	20db EBW[MHz]	OCB [MHz]	Verdict
GFSK.50 kbps Condition 4	Ant1	LCH	0.10180	0.095380	PASS
		MCH	0.10490	0.096495	PASS
		HCH	0.10290	0.095557	PASS

## 14.2.2. Test Graphs



## 14.3. Appendix C4: CONDUCTED OUTPUT POWER

### 14.3.1. Test Result

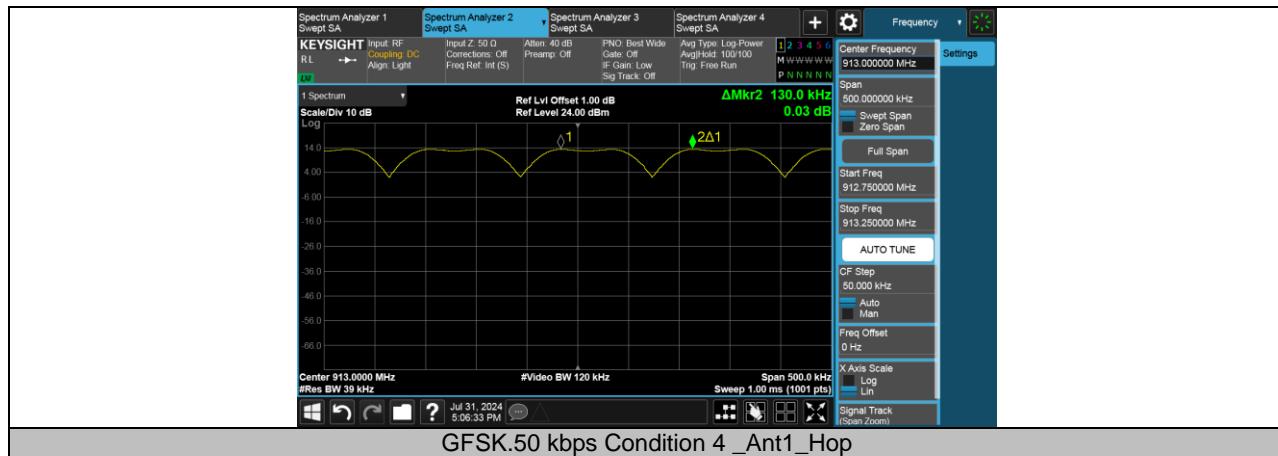
Test Mode	Antenna	Channel	PEAK Result[dBm]	Limit[dBm]	Verdict
GFSK.50 kbps Condition 4	Ant1	LCH	13.26	≤30	PASS
		MCH	13.22	≤30	PASS
		HCH	13.32	≤30	PASS

## 14.4. Appendix D4: CARRIER FREQUENCY SEPARATION

### 14.4.1. Test Result

Test Mode	Antenna	Channel	Result [MHz]	Limit[MHz]	Verdict
GFSK.50 kbps Condition 4	Ant1	Hop	0.1300	≥0.10490	PASS

### 14.4.2. Test Graphs

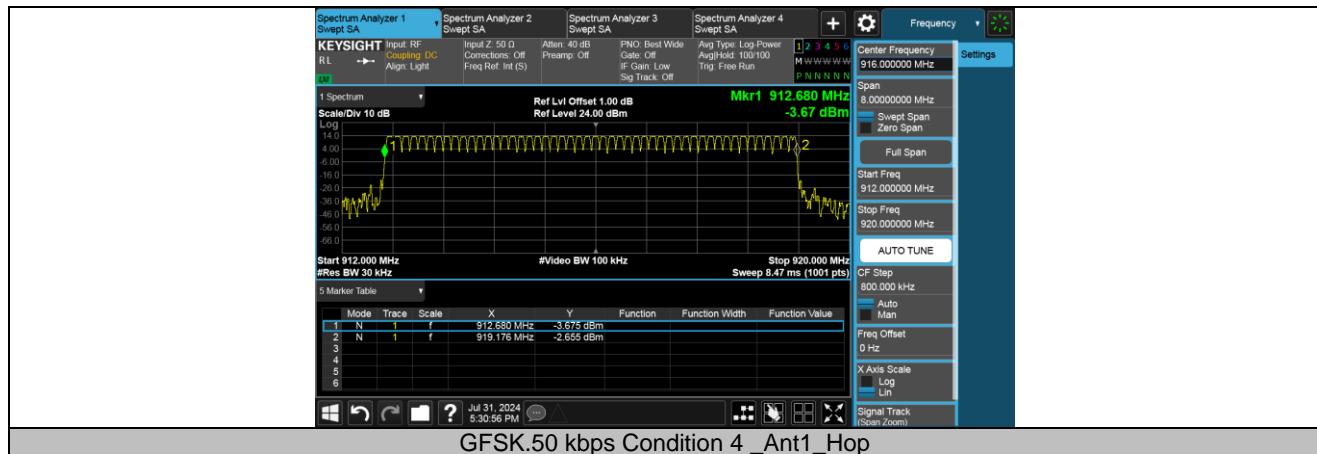


## 14.5. Appendix E4: NUMBER OF HOPPING FREQUENCIES

### 14.5.1. Test Result

Test Mode	Antenna	Channel	Result[Num]	Limit[Num]	Verdict
GFSK.50 kbps Condition 4	Ant1	Hop	50	≥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]	The number of hop channel appear	Burst Width 1 [ms/hop/ch]
GFSK.50 kbps Condition 4	Ant1	Hop	5.58	28	156.24

Test Mode	Antenna	Channel	Dwell Time [ms]	Limit [ms]	Results
GFSK.50 kbps Condition 4	Ant1	Hop	156.34	400	PASS

Note:

GFSK.50 kbps Condition 4: 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

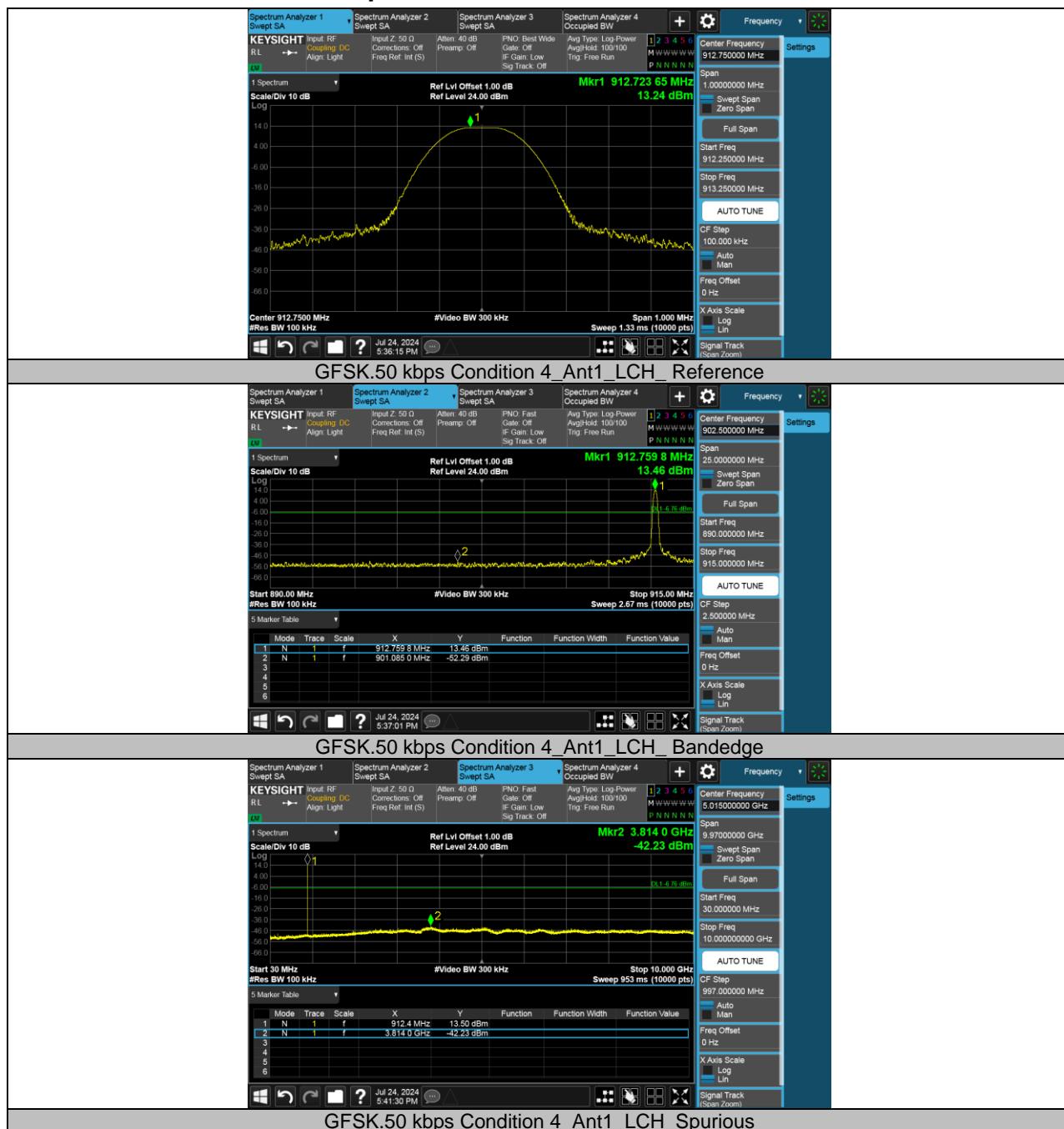


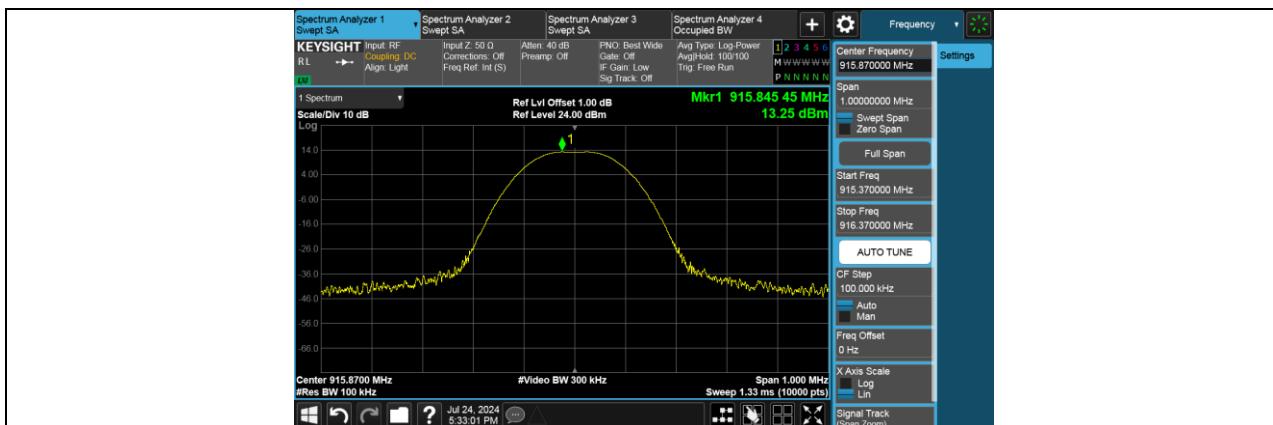
## 14.7. Appendix G4: CONDUCTED BAND EDGE AND SPURIOUS EMISSION

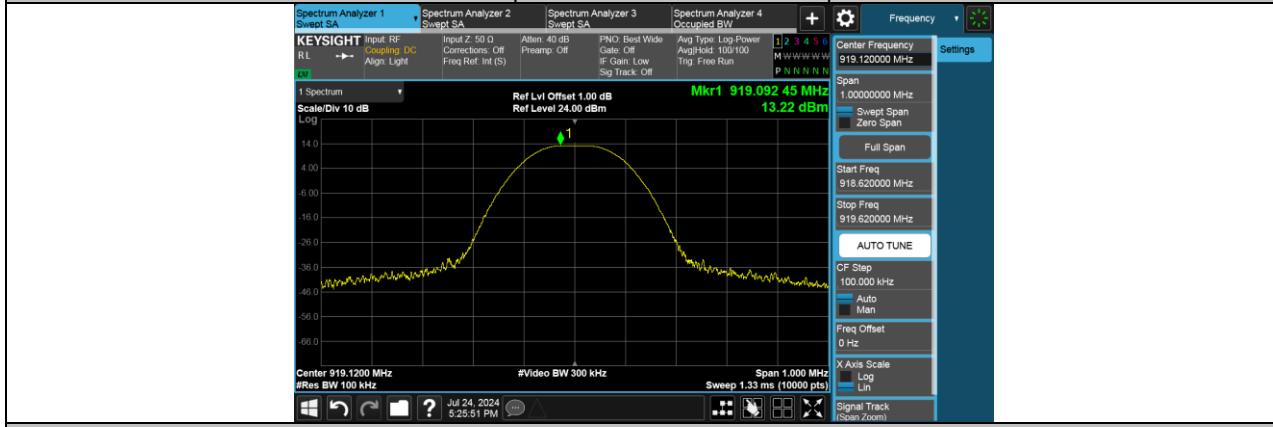
### 14.7.1. Test Result

Test Mode	Antenna	ChName	Result [dBm]	Verdict
GFSK.50 kbps Condition 4	Ant1	LCH	See the below graphs	PASS
		MCH		PASS
		HCH		PASS
		Hop_LCH		PASS
		Hop_HCH		PASS

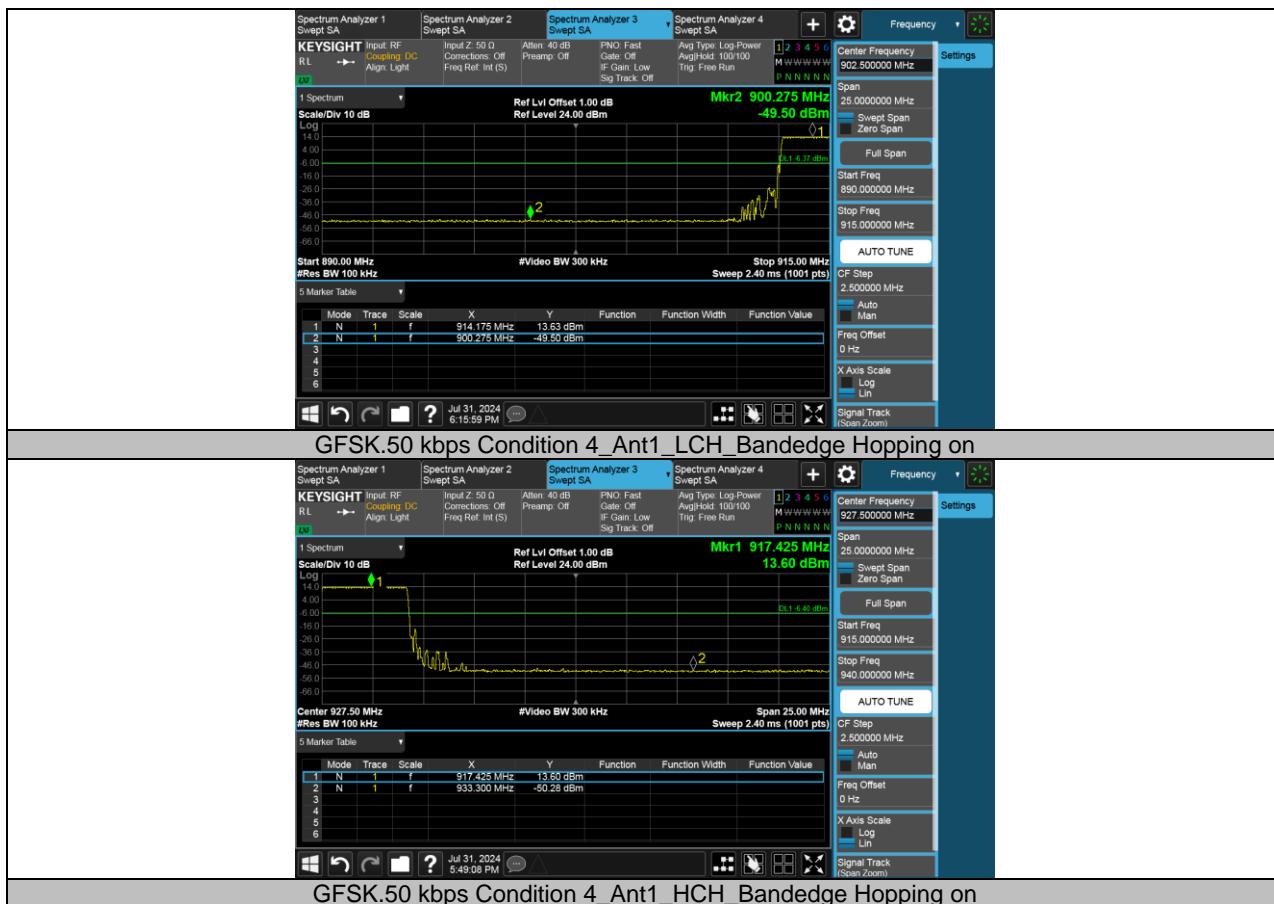
## 14.7.2. Test Graphs




**GFSK.50 kbps Condition 4\_Ant1\_MCH\_Reference**

**GFSK.50 kbps Condition 4\_Ant1\_MCH\_Spurious**

**GFSK.50 kbps Condition 4\_Ant1\_HCH\_Reference**





## 15. GFSK.50 kbps Condition 5

### 15.1. Appendix A5: DUTY CYCLE

#### 15.1.1. Test Result

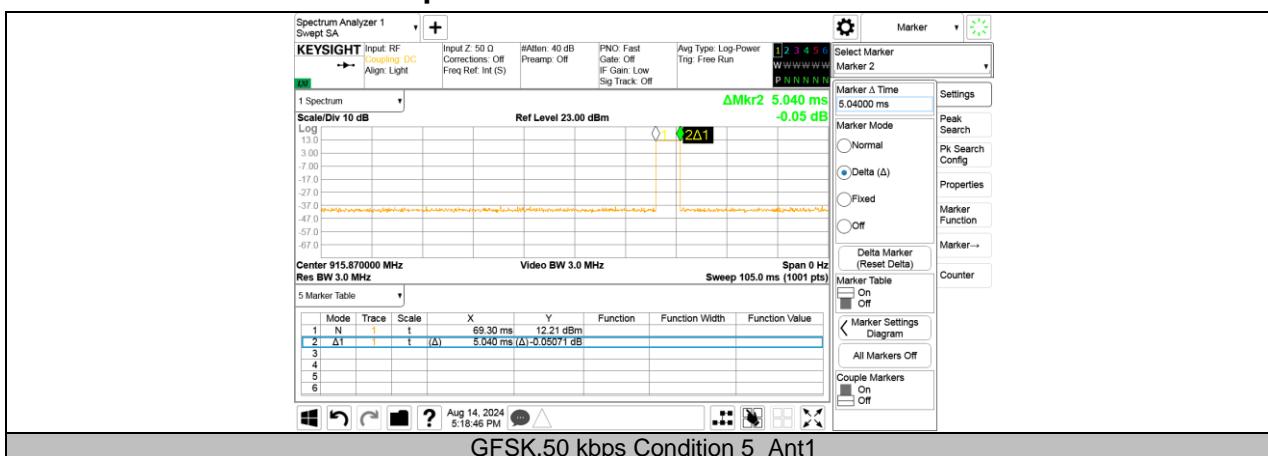
Test Mode	On Time (msec)	Period (msec)	Duty Cycle $\times$ (Linear)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)
GFSK.50 kbps Condition 5	5.04	100	0.0504	5.04	-25.95

Note:

Duty Cycle Correction Factor=20log (x).

Where: x is Duty Cycle (Linear)

### 15.1.2. Test Graphs

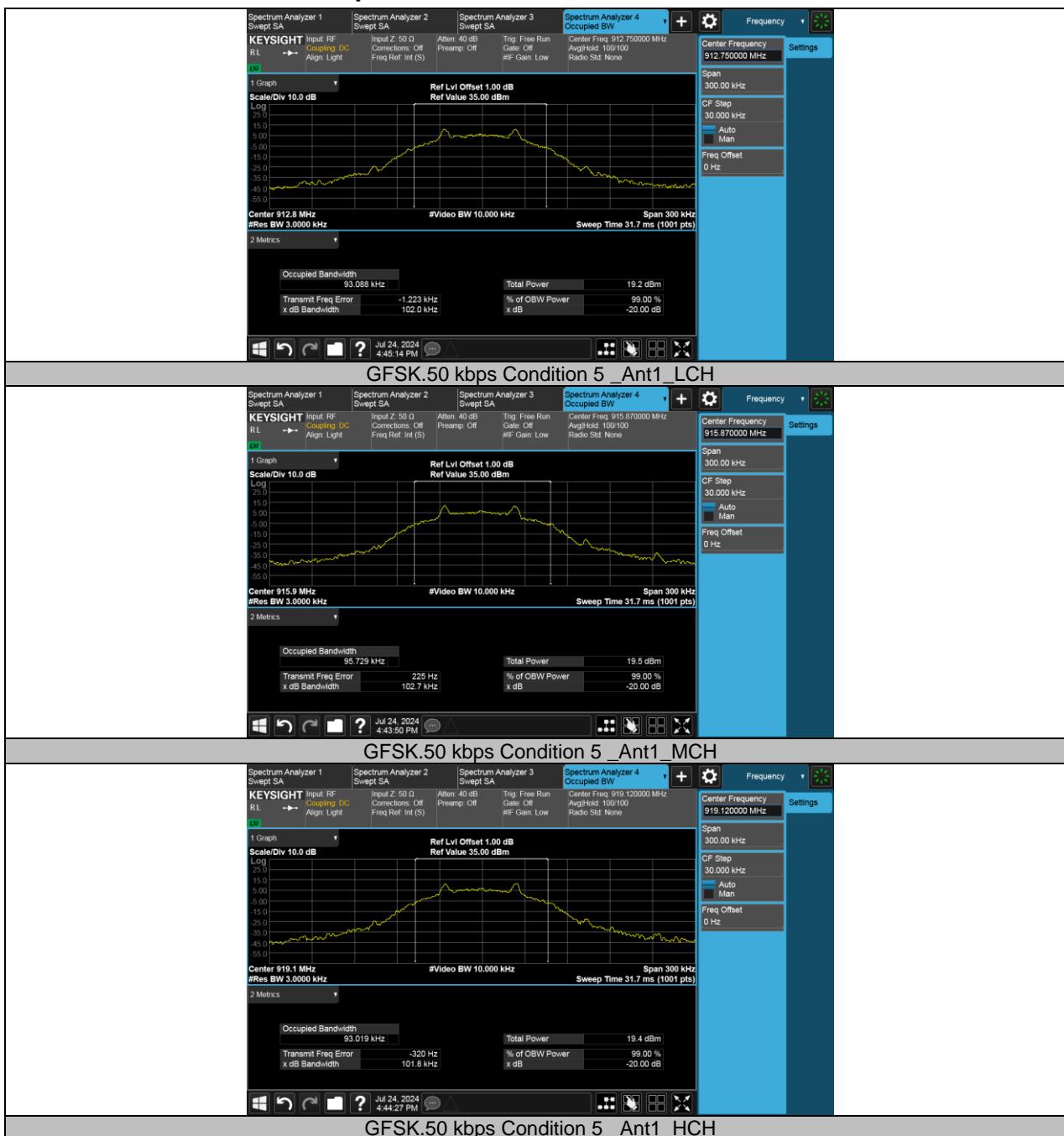


## 15.2. Appendix B5: 20DB BANDWIDTH & OCCUPIED CHANNEL BANDWIDTH

### 15.2.1. Test Result

Test Mode	Antenna	Channel	20db EBW[MHz]	OCB [MHz]	Verdict
GFSK.50 kbps Condition 5	Ant1	LCH	0.10200	0.093088	PASS
		MCH	0.10270	0.095729	PASS
		HCH	0.10180	0.093019	PASS

## 15.2.2. Test Graphs



### 15.3. Appendix C5: CONDUCTED OUTPUT POWER

#### 15.3.1. Test Result

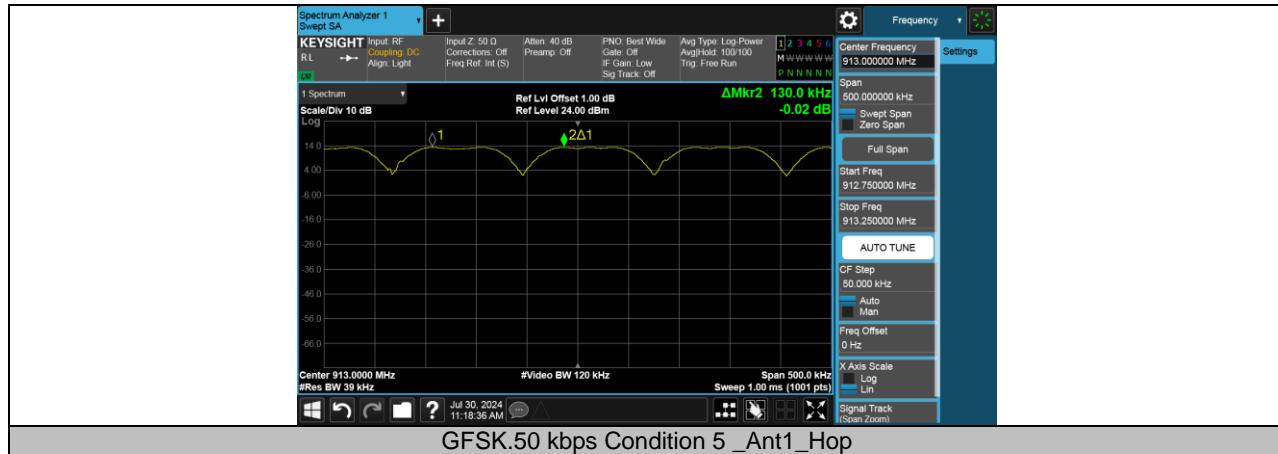
Test Mode	Antenna	Channel	PEAK Result[dBm]	Limit[dBm]	Verdict
GFSK.50 kbps Condition 5	Ant1	LCH	13.22	≤30	PASS
		MCH	13.20	≤30	PASS
		HCH	13.27	≤30	PASS

## 15.4. Appendix D5: CARRIER FREQUENCY SEPARATION

### 15.4.1. Test Result

Test Mode	Antenna	Channel	Result [MHz]	Limit[MHz]	Verdict
GFSK.50 kbps Condition 5	Ant1	Hop	0.1300	≥0.10270	PASS

### 15.4.2. Test Graphs

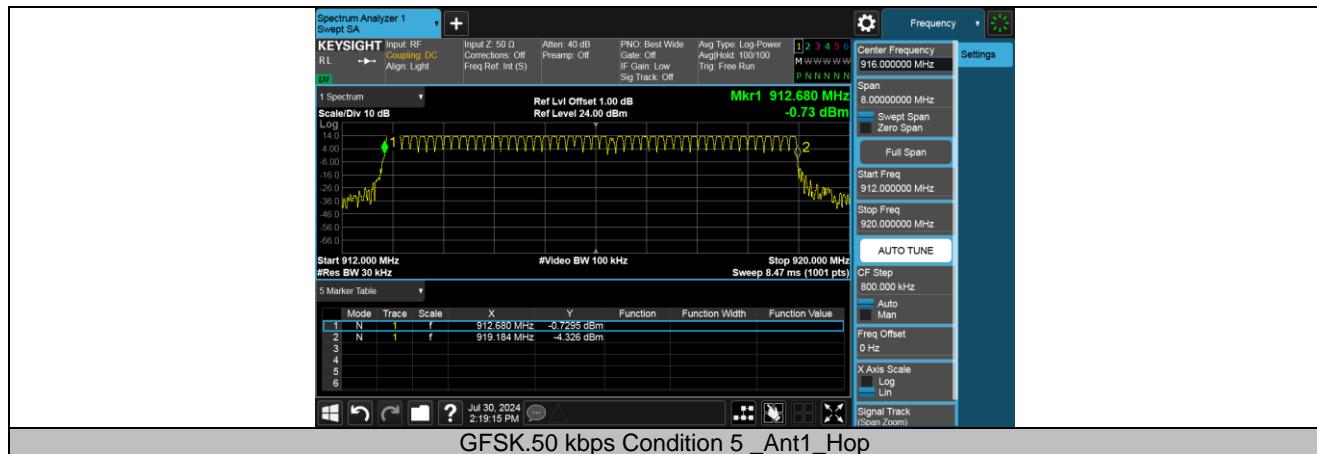


## 15.5. Appendix E5: NUMBER OF HOPPING FREQUENCIES

### 15.5.1. Test Result

Test Mode	Antenna	Channel	Result[Num]	Limit[Num]	Verdict
GFSK.50 kbps Condition 5	Ant1	Hop	50	≥50	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]	The number of hop channel appear	Burst Width 1 [ms/hop/ch]
GFSK.50 kbps Condition 5	Ant1	Hop	5.58	28	156.24

Test Mode	Antenna	Channel	Dwell Time [ms]	Limit [ms]	Results
GFSK.50 kbps Condition 5	Ant1	Hop	156.34	400	PASS

Note:

GFSK.50 kbps Condition 5: 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



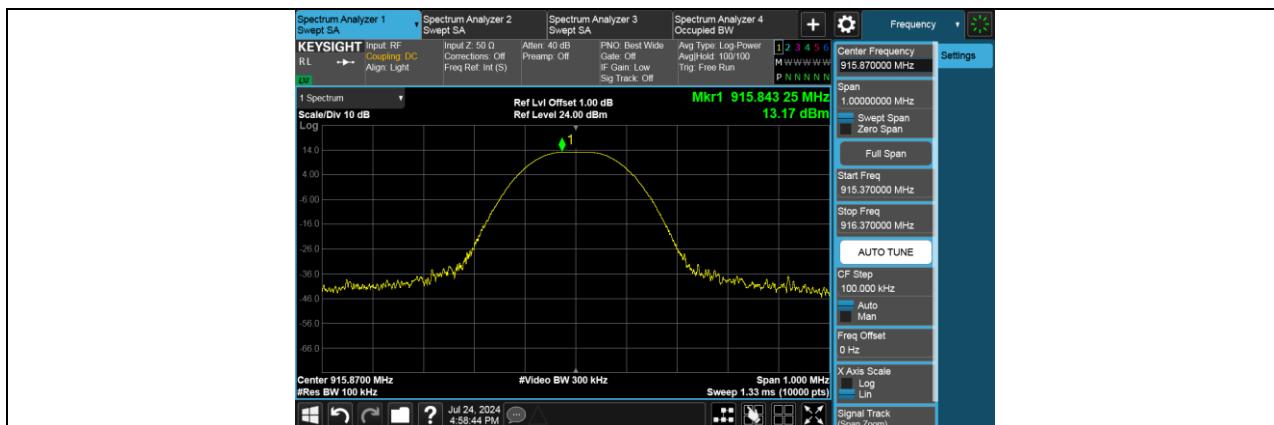
## 15.7. Appendix G5: CONDUCTED BAND EDGE AND SPURIOUS EMISSION

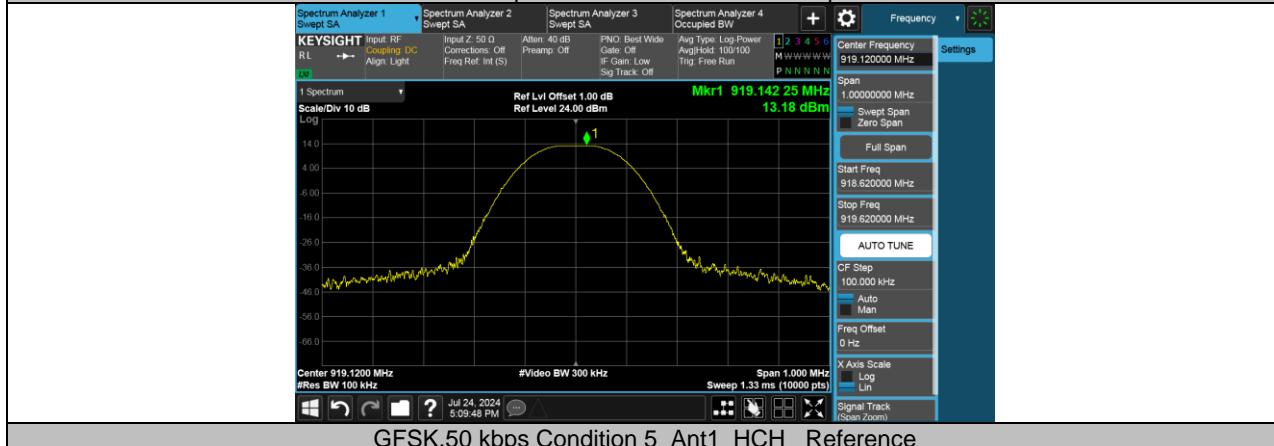
### 15.7.1. Test Result

Test Mode	Antenna	ChName	Result [dBm]	Verdict
GFSK.50 kbps Condition 5	Ant1	LCH	See the below graphs	PASS
		MCH		PASS
		HCH		PASS
		Hop_LCH		PASS
		Hop_HCH		PASS

## 15.7.2. Test Graphs




**GFSK.50 kbps Condition 5\_Ant1\_MCH\_Reference**

**GFSK.50 kbps Condition 5\_Ant1\_MCH\_Spurious**

**GFSK.50 kbps Condition 5\_Ant1\_HCH\_Reference**

