TEST   REPORT

Figure 25: Conducted Spurious Emission & Authorized-band band-edge, 2402MHz, 8-DPSK
Carrier Level
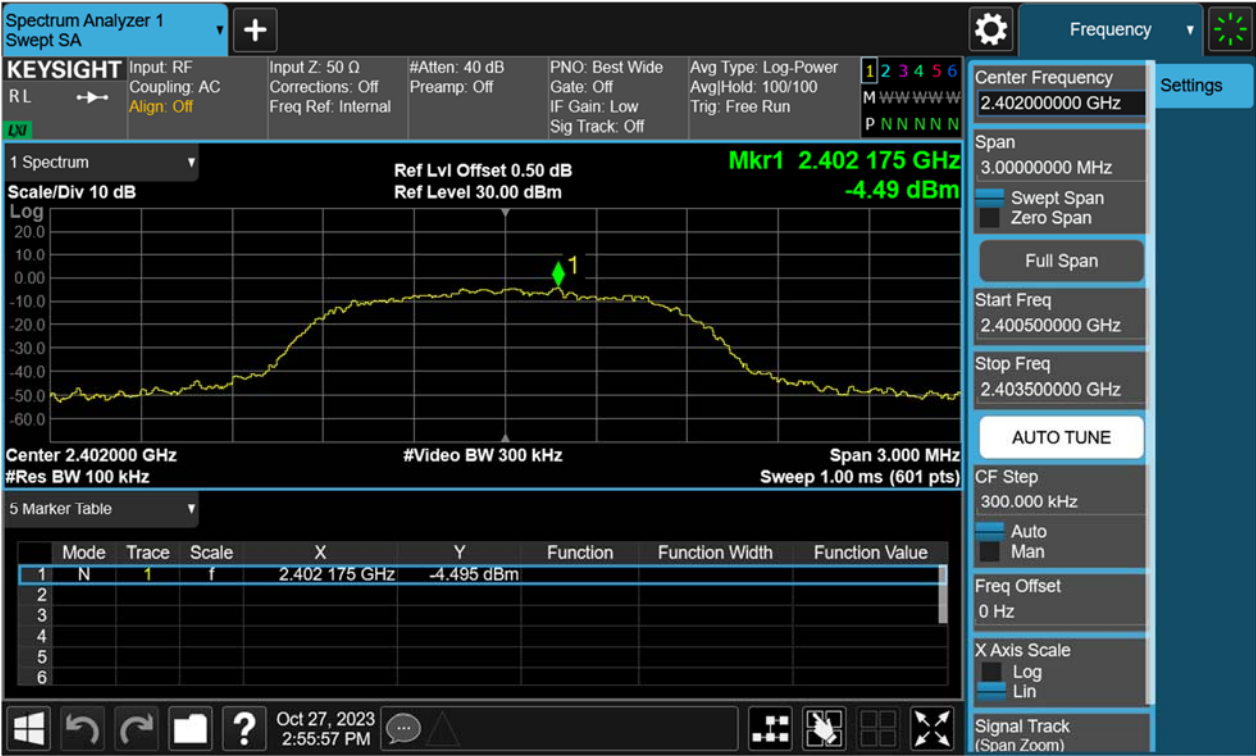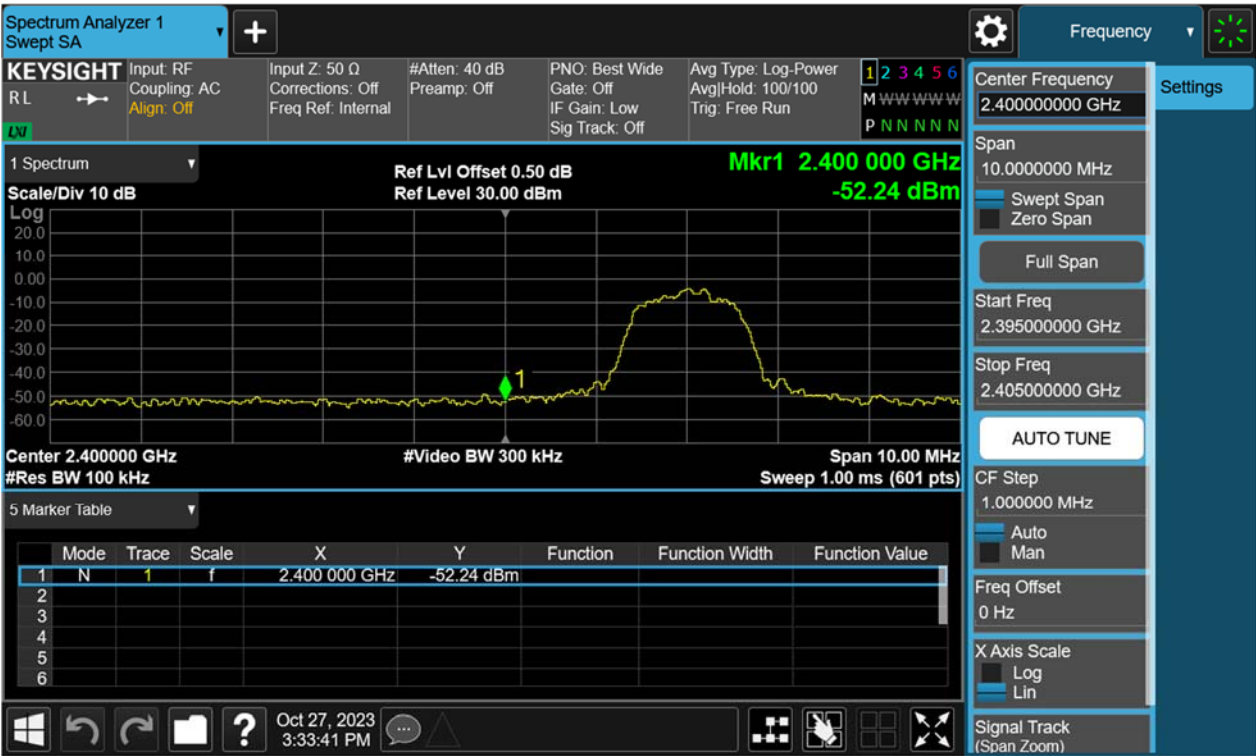
Band Edge

TEST   REPORT
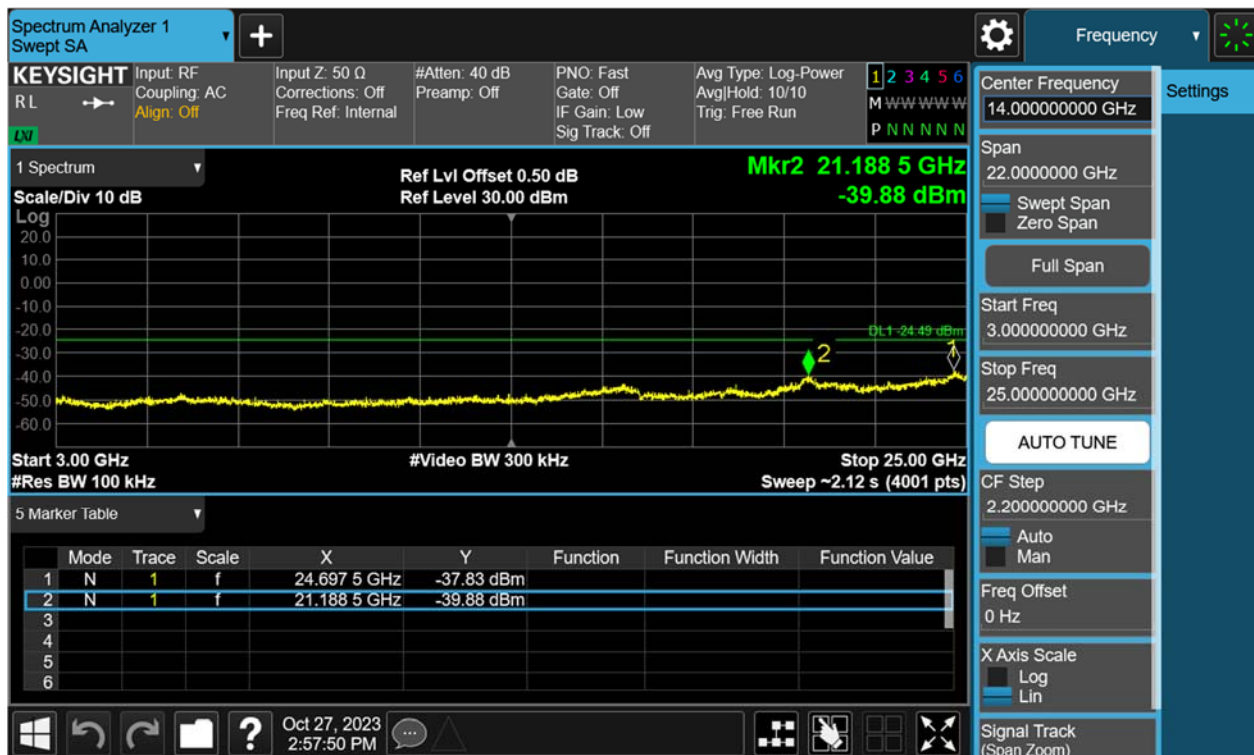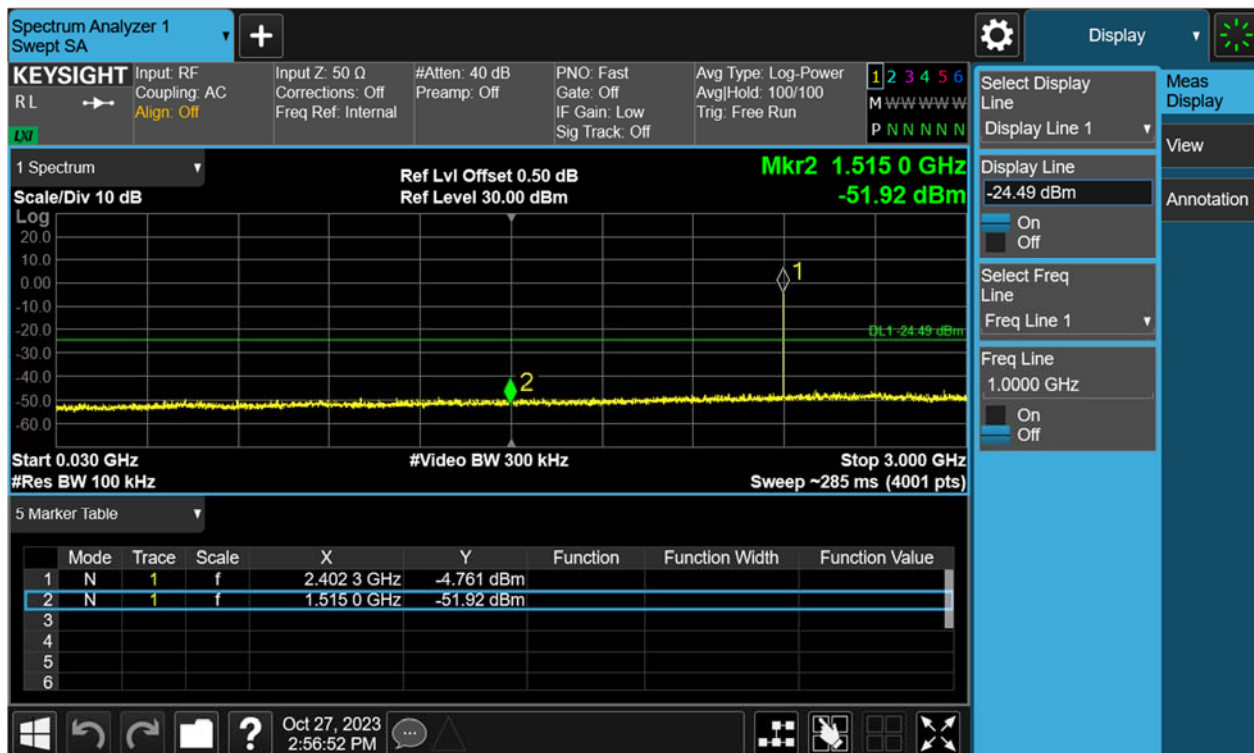
Conducted spurious emissions 30MHz-25GHz

TEST   REPORT

Figure 26: Conducted Spurious Emission & Authorized-band band-edge, 2441MHz, 8-DPSK Carrier Level
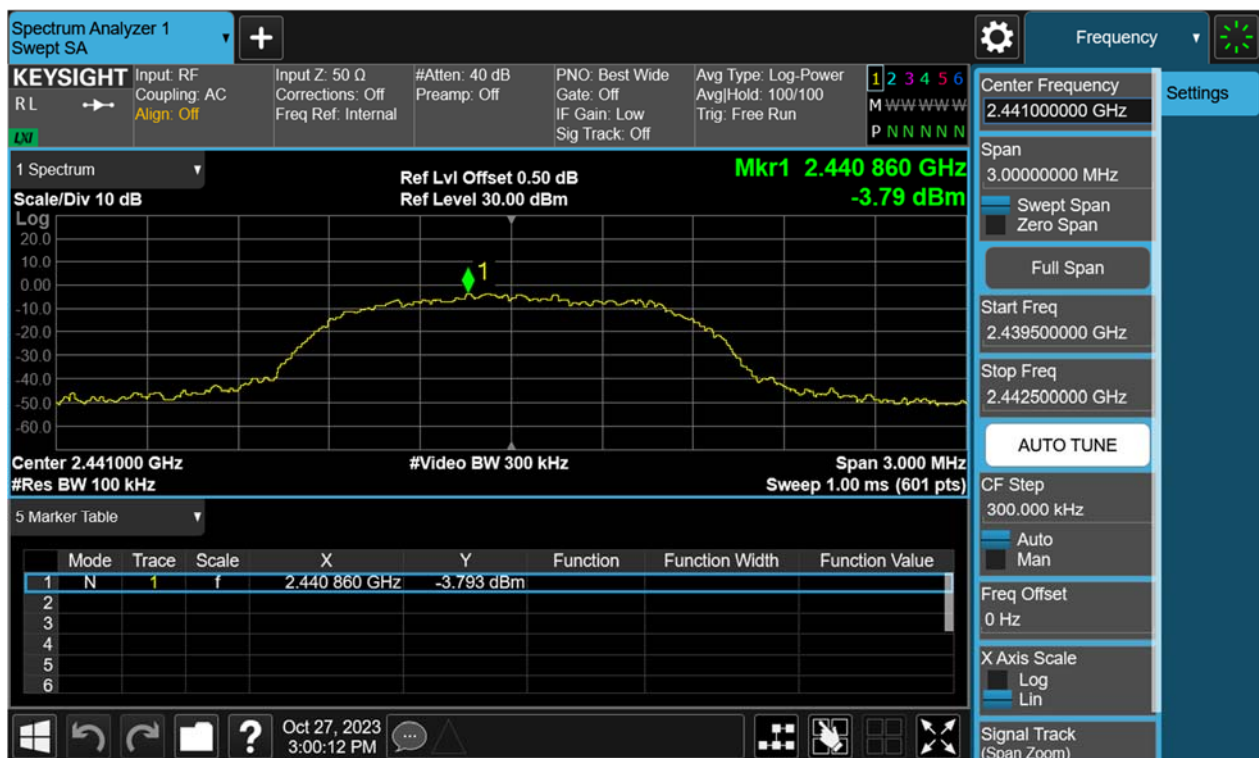
Conducted spurious emissions 30MHz-25GHz
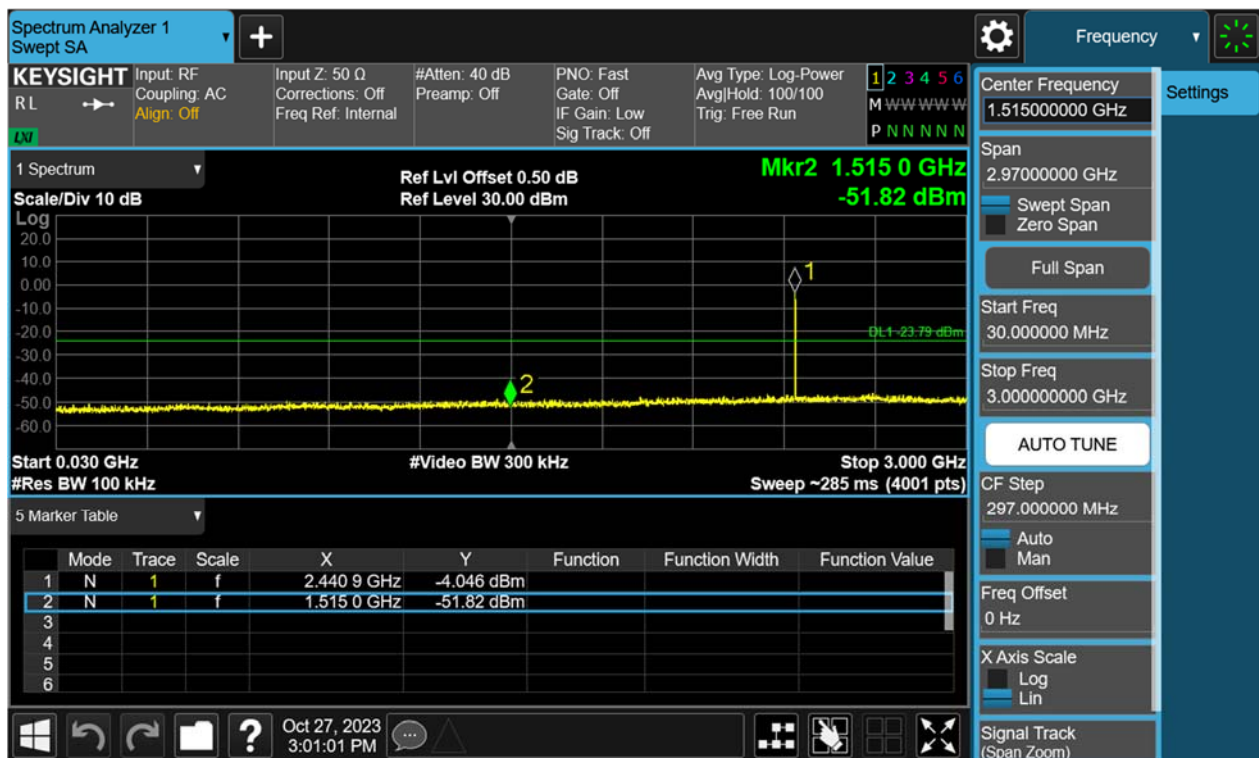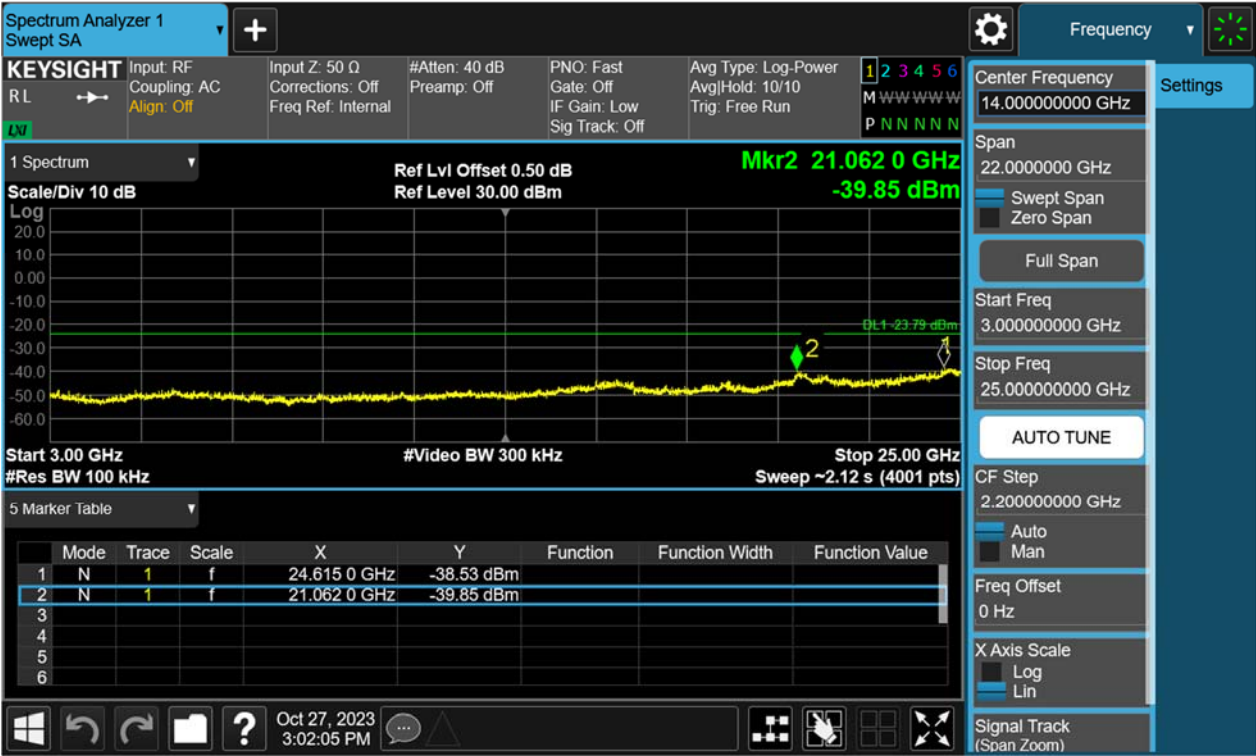
TEST   REPORT

Figure 27: Conducted Spurious Emission & Authorized-band band-edge, 2480MHz, 8-DPSK Carrier Level

TEST   REPORT

Band Edge

Conducted spurious emissions 30MHz-25GHz
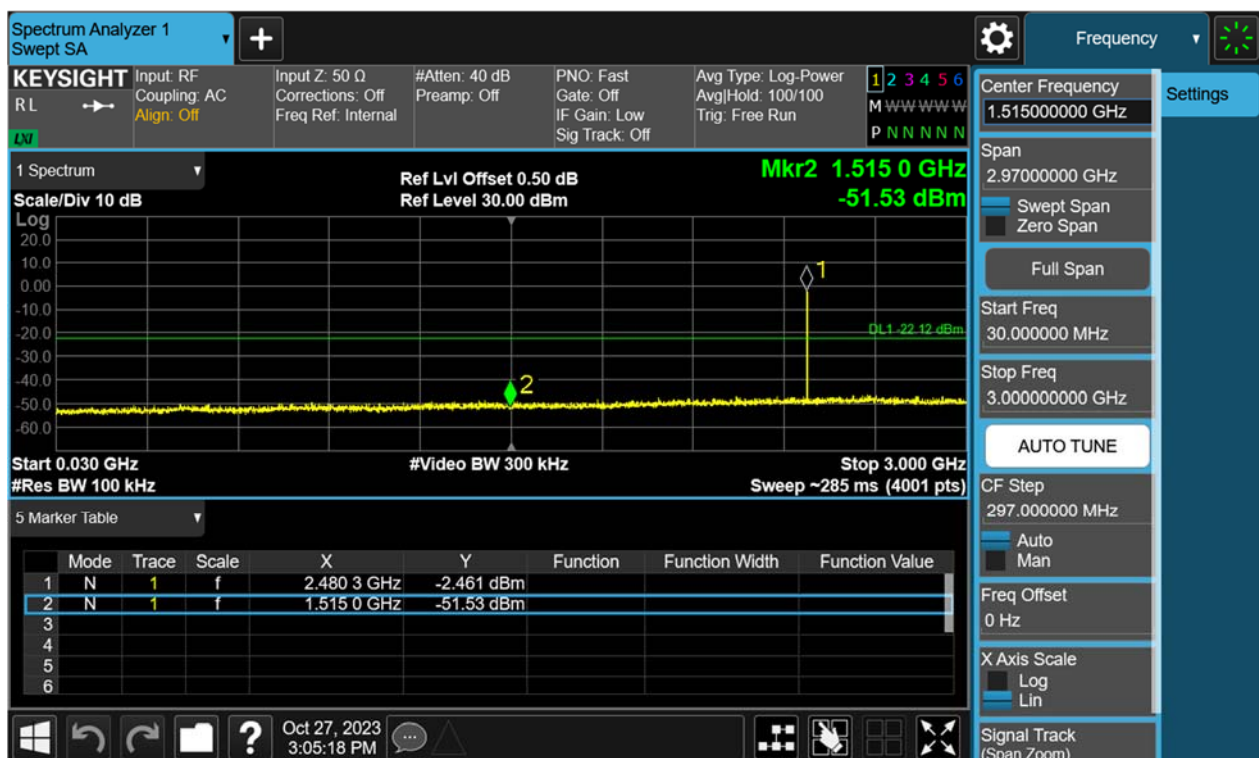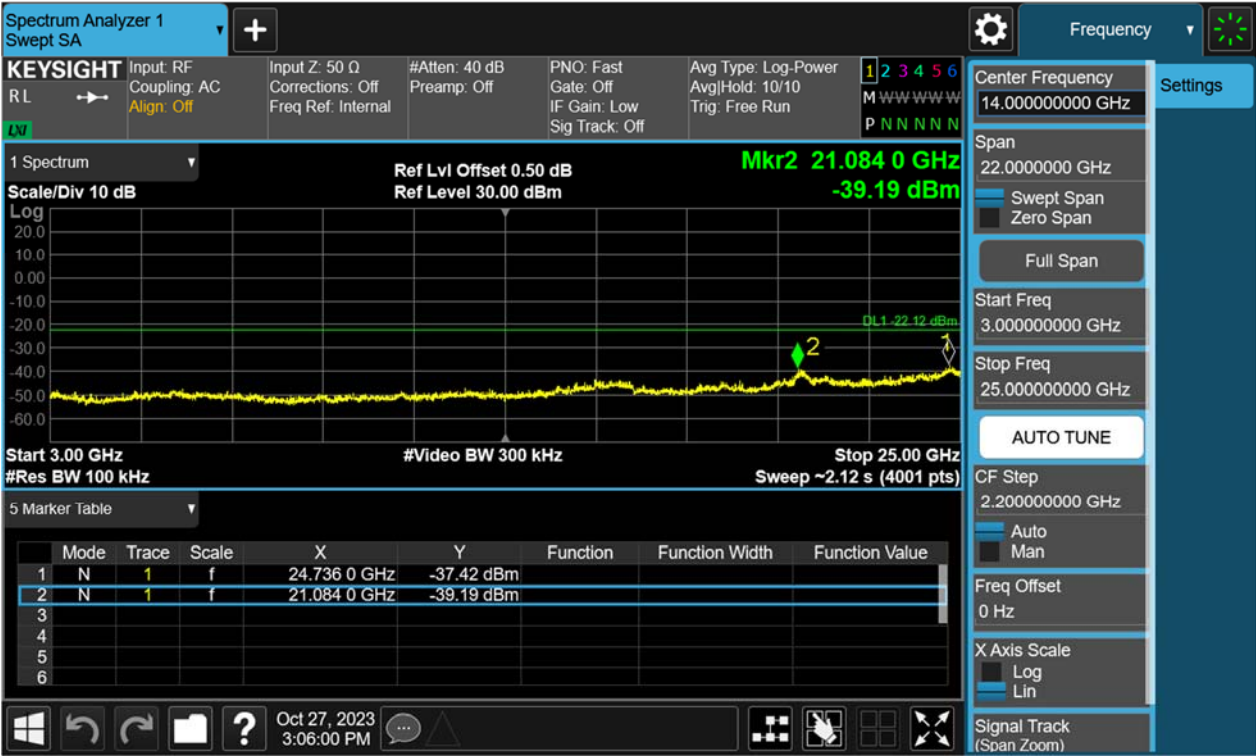
TEST   REPORT

Figure 28: Conducted Spurious Emission & Authorized-band band-edge, Hopping Mode, GFSK Carrier Level
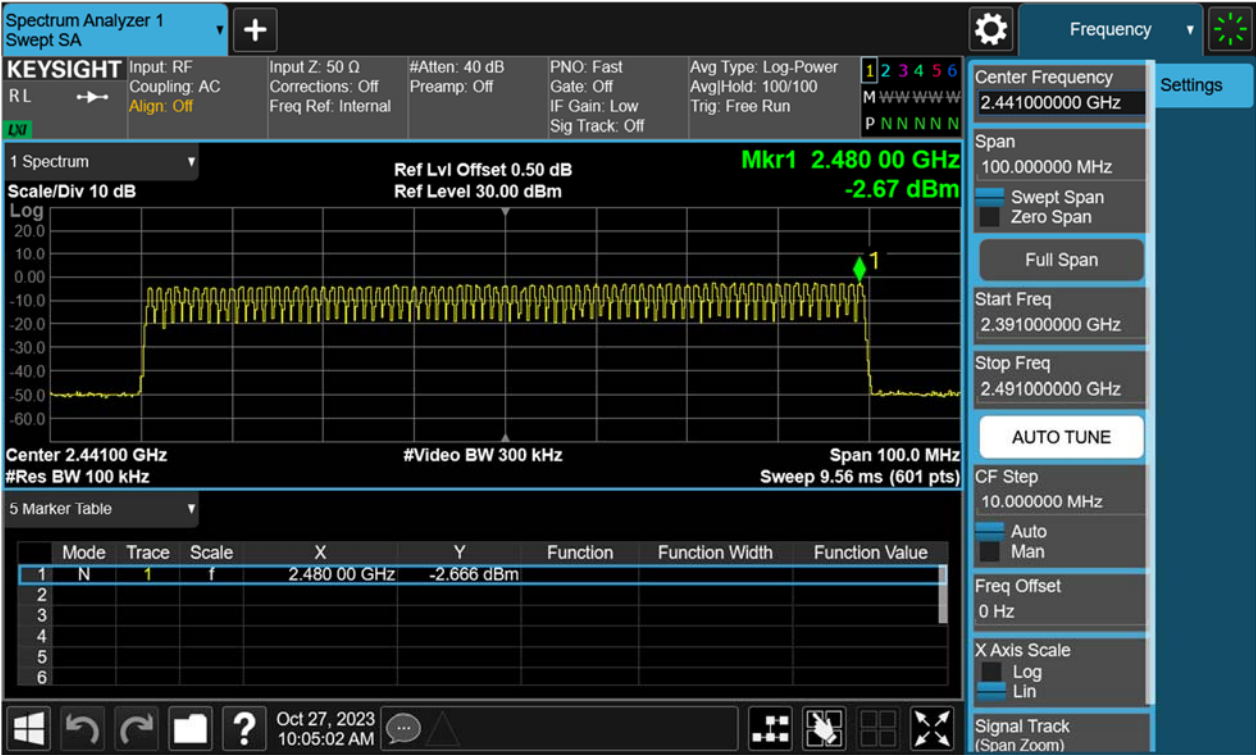
TEST   REPORT

Band Edge(Low)
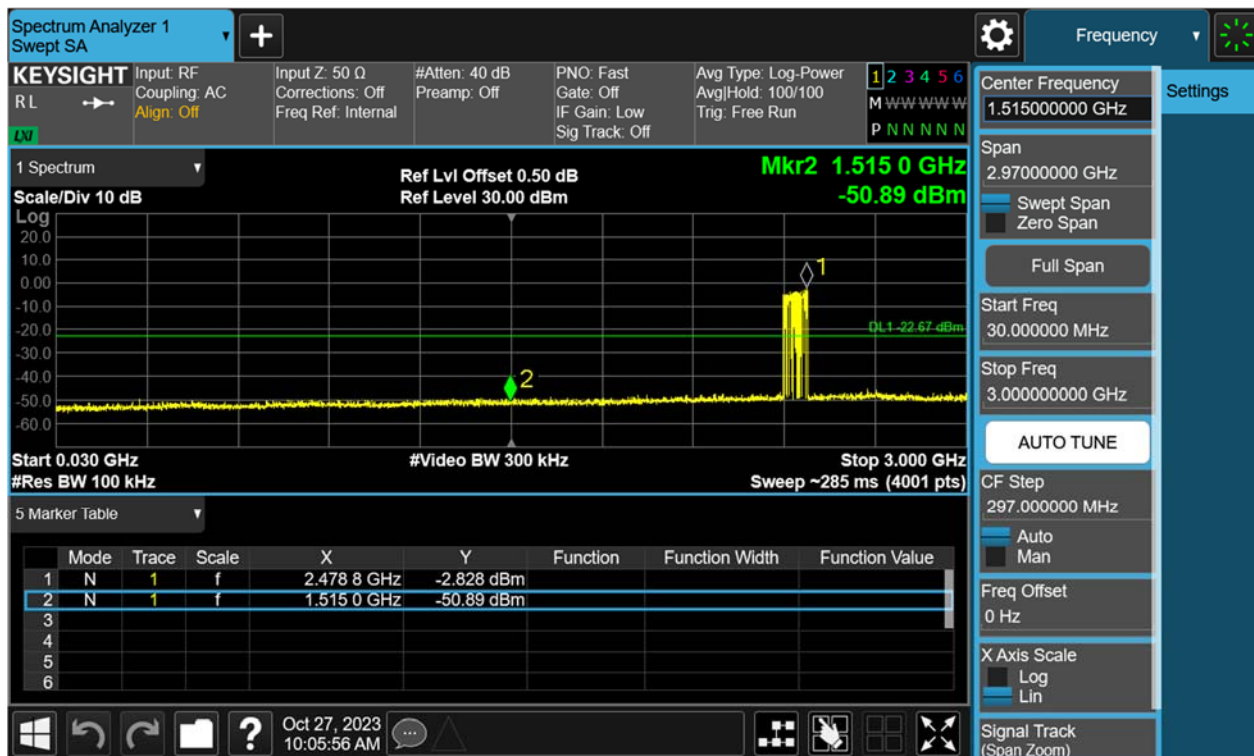
Band Edge(High)

TEST   REPORT

Conducted spurious emissions 30MHz-25GHz

TEST   REPORT

Figure 29: Conducted Spurious Emission & Authorized-band band-edge, Hopping Mode, π /4-DQPSK Carrier Level
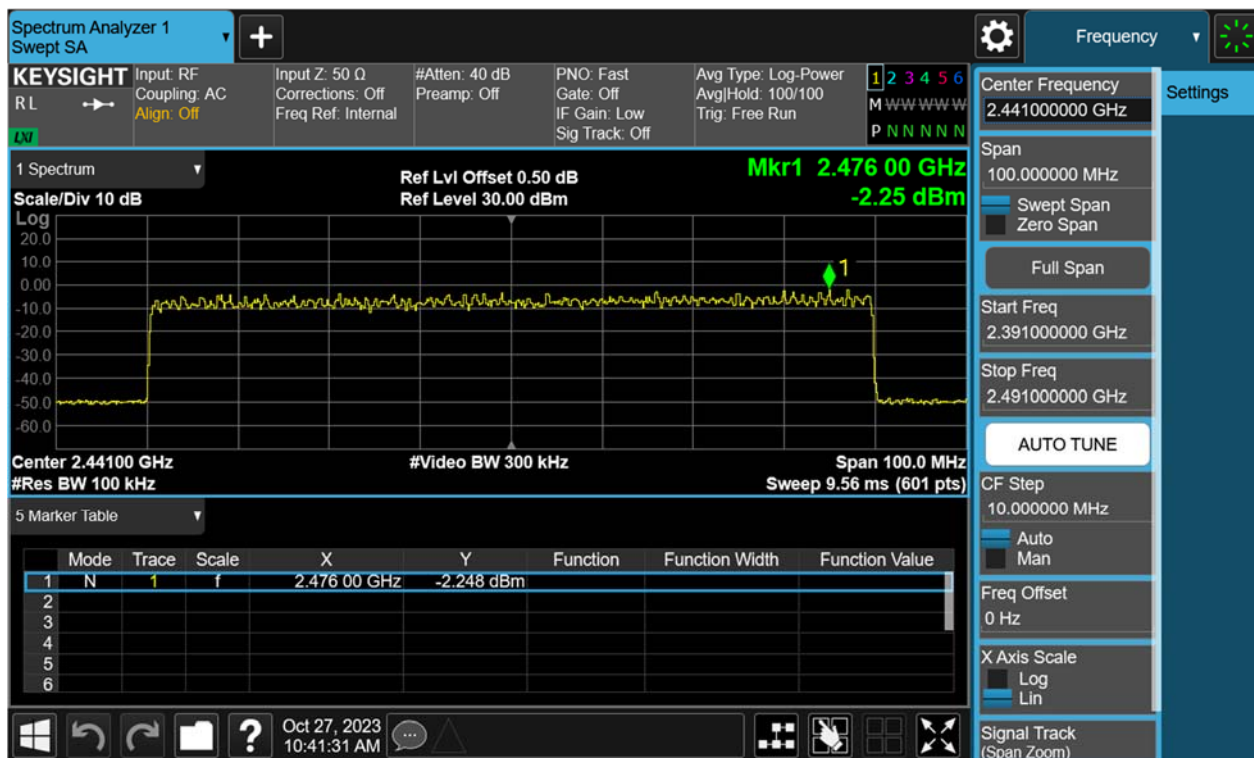
Band Edge(Low)

TEST   REPORT

Band Edge(High)

Conducted spurious emissions 30MHz-25GHz
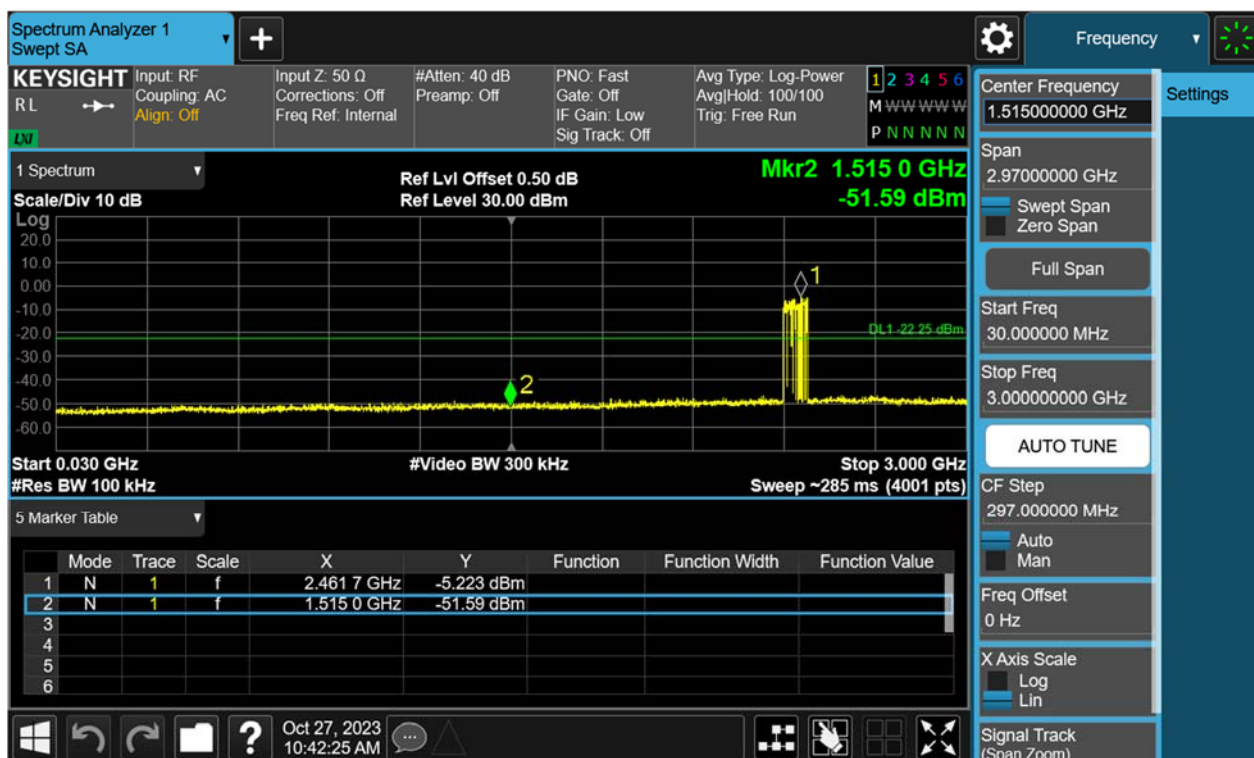
TEST　　REPORT

Figure 30: Conducted Spurious Emission & Authorized-band band-edge, Hopping Mode, 8-DPSK Carrier Level
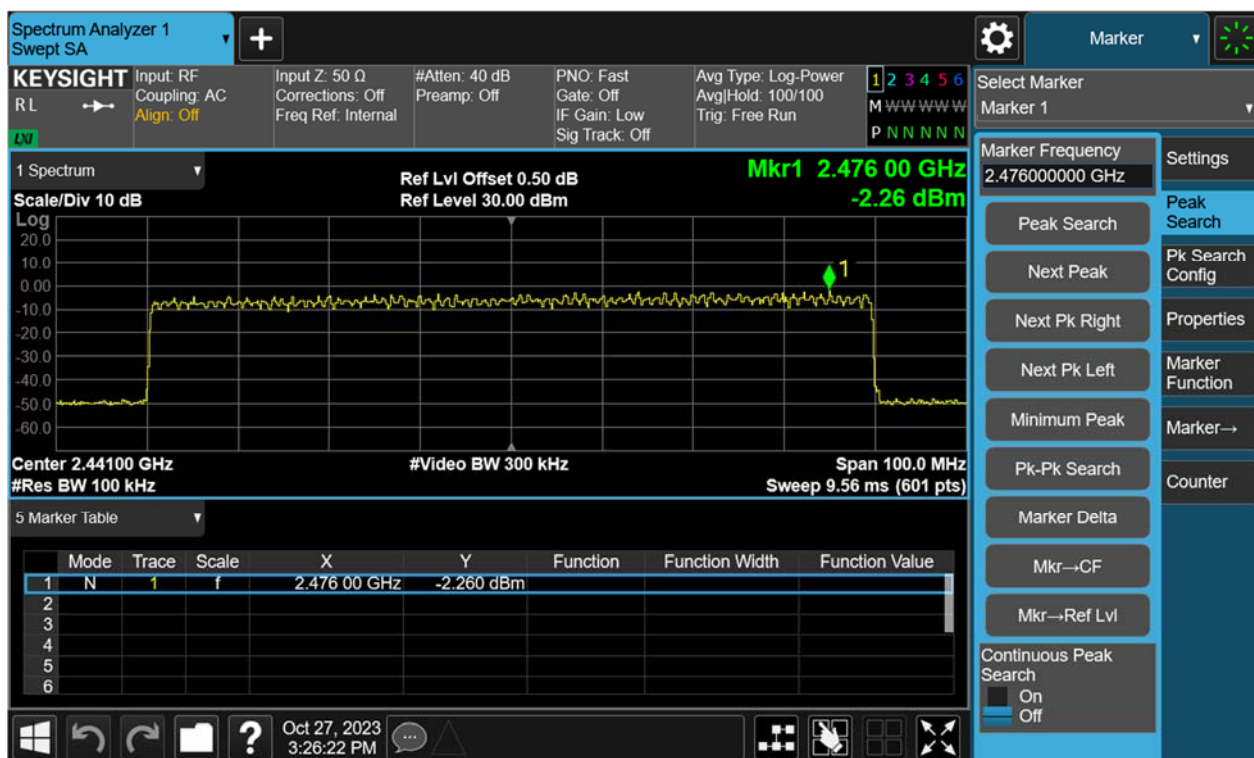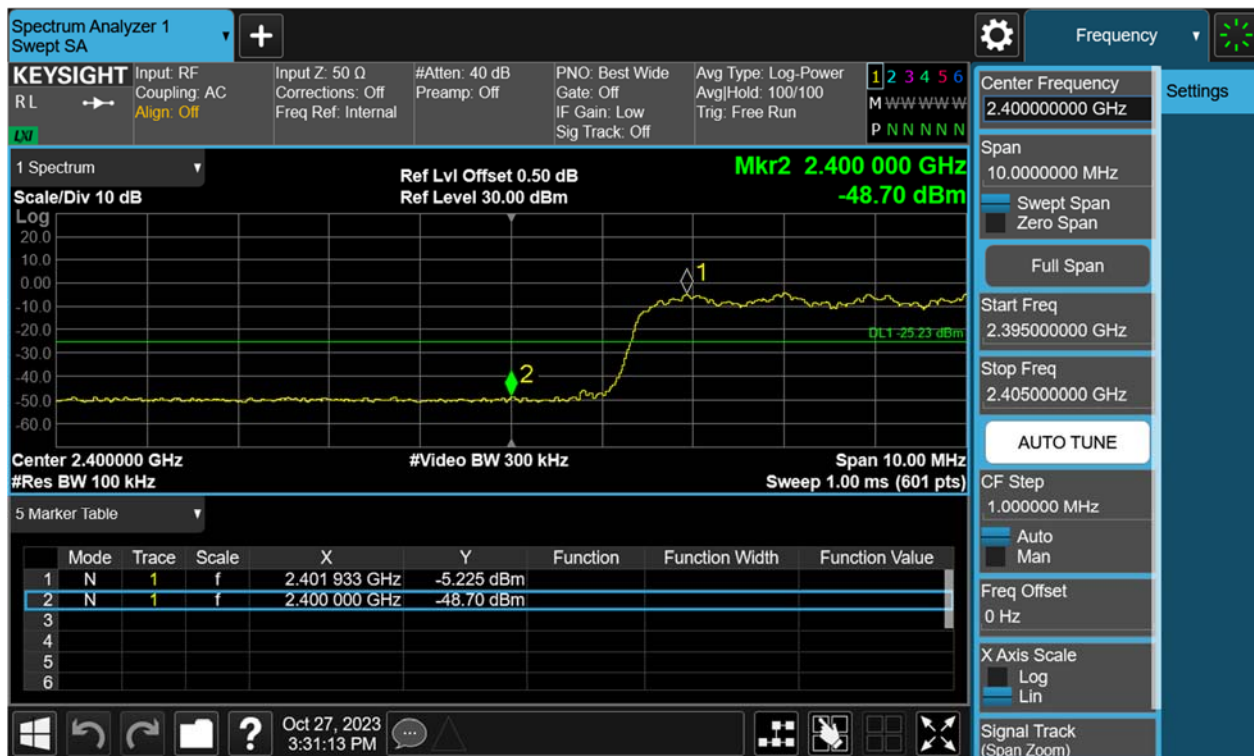
TEST   REPORT

Band Edge(Low)

Band Edge(High)
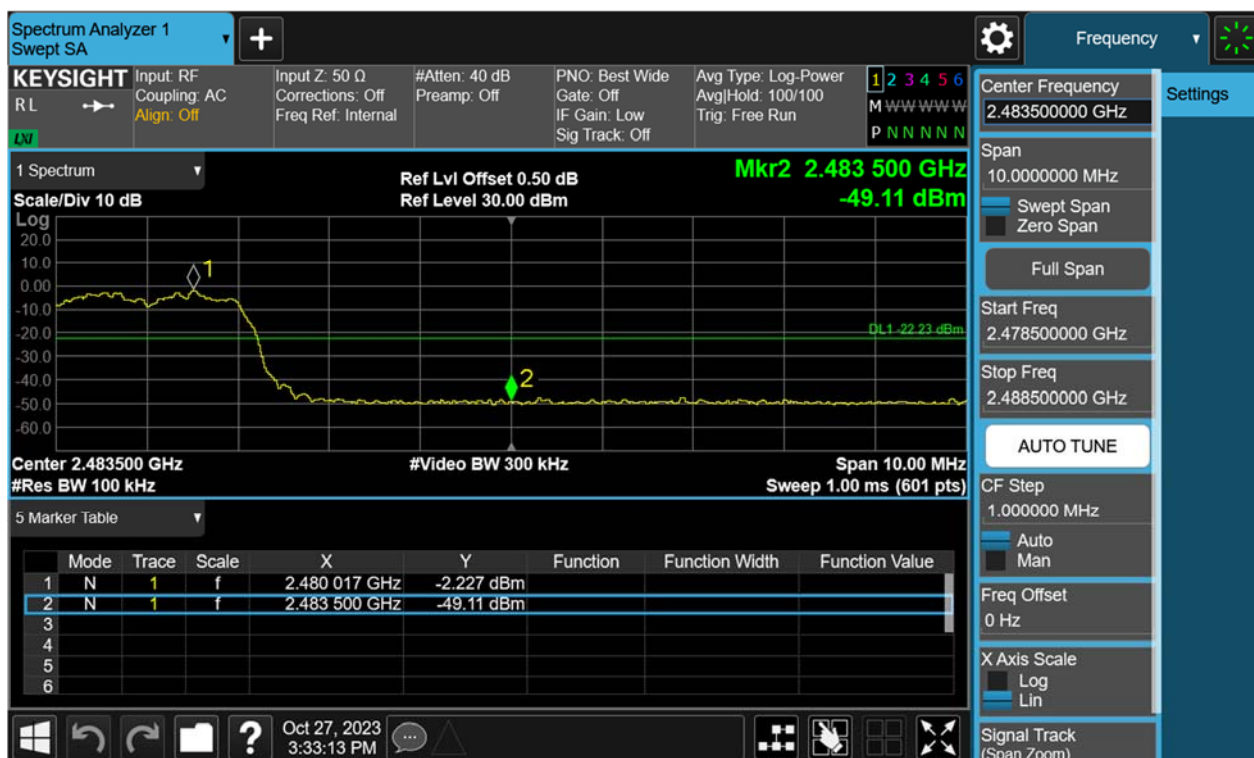
TEST   REPORT

Conducted spurious emissions 30MHz-25GHz
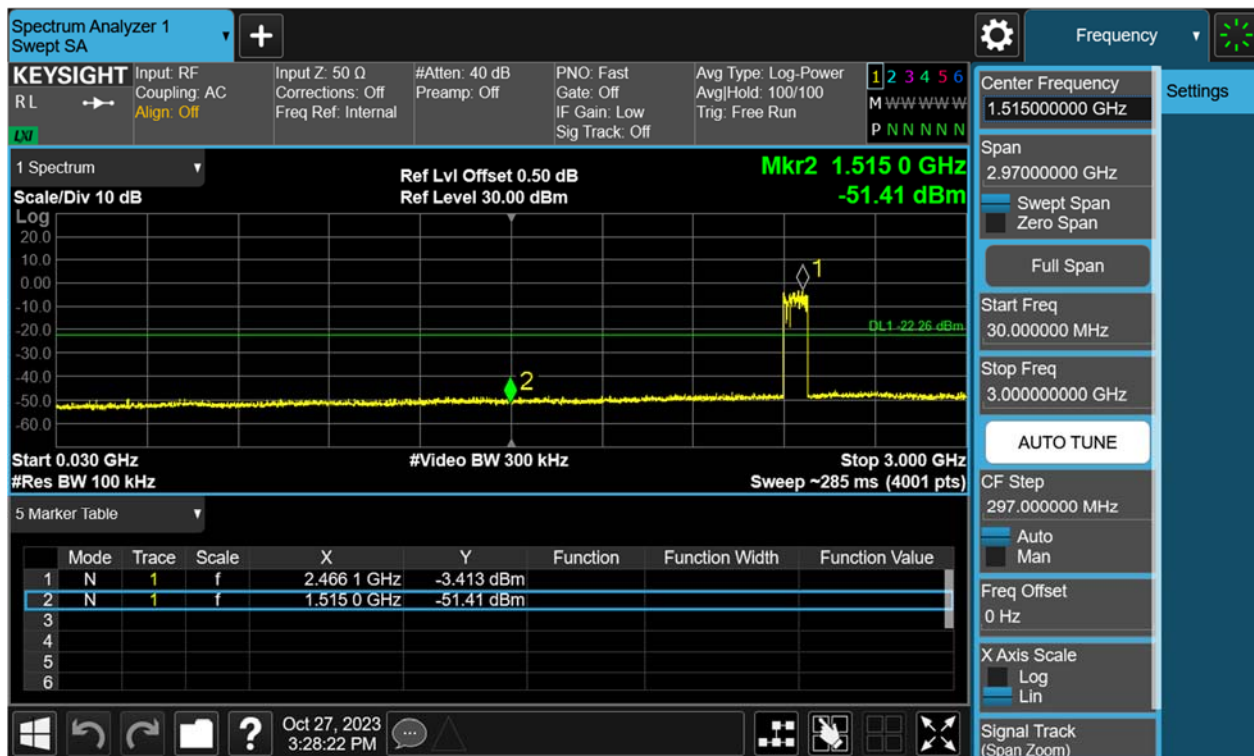
TEST   REPORT

4.1.5 Radiated Spurious Emission
RESULT: **PASS**

Test standard	:	FCC Part 15.247(d), 15.205, 15.209
		RSS-GEN 8.9
Requirement	:	ANSI C63.10-2013, Clause 7.8.8
Kind of test site	:	3m Semi-Anechoic Chamber

Test setup

Test Channel	:	Low/Middle/High
Operation Mode	:	A
Ambient temperature	:	23.5°C
Relative humidity	:	54%

Notes

Test plots please refer to the annex document "SHE23100070-02DE DATA BR&EDR-TX EXHIBIT A".

1. For 9 kHz ~ 30 MHz, the amplitude of spurious emissions that are attenuated by more than 20dB below the permissible. The value has no need to be reported.

2. The spurious above 18GHz is noise only and 20dB below the limit. The value has no need to be reported.

3. All test mode had been pre-test. Only the worst mode data of GFSK&8DPSK-hopping-DH5 and GFSK&8DPSK_Middle channel (below 1GHz) were recorded in the test report.

4. The EUT was pretested with 3 orientations placed on the table for the radiated emission measurement –X, Y, and Z-plane. The X-plane results were found as the worst case and were shown in this report.

TEST   REPORT

4.1.6 Band Edge (Restricted-band band-edge)

RESULT: **PASS**

Test standard	:	FCC Part 15.247(d), 15.205, 15.209
		RSS-GEN 8.10
Requirement	:	ANSI C63.10-2013, Clause 7.8.6
Kind of test site	:	3m Semi-Anechoic Chamber

Test setup

Test Channel	:	Low/Middle/High
Operation Mode	:	A.1
Ambient temperature	:	23.5°C
Relative humidity	:	54%

Notes

1. Test plots please refer to the annex document "SHE231000070-02DE DATA BR&EDR-TX EXHIBIT A".

2. The EUT was pretested with 3 orientations placed on the table for the radiated emission measurement –X, Y, and Z-plane. The X-plane results were found as the worst case and were shown in this report.

TEST REPORT

4.1.7 Hopping Frequency Separation

RESULT: **PASS**

Test standard   : FCC Part 15.247(a)(1), RSS-247 5.1(b)
Requirement   : ANSI C63.10-2013, Clause 7.8.2
                                         KDB 558074 D01 v05r02, Clause 2.2
Kind of test site   : Shielded room

Test setup
Test Channel   : Hopping
Operation Mode   : A.1.a.iv
Ambient temperature   : 24.9°C
Relative humidity   : 51%

Table 4: Hopping Frequency Separation

Mode	Frequency (MHz)	Channel Separation (MHz)	Limit (MHz)
GFSK	2441	0.990	0.9556
π/4-DQPSK	2441	1.012	0.8793
8-DPSK	2441	1.000	0.8720

*Note: The systems operate with an output power no greater than 125mW (π/4-DQPSK, 8-DPSK).

TEST   REPORT

Figure 31: Hopping Frequency Separation, Hopping Mode, GFSK
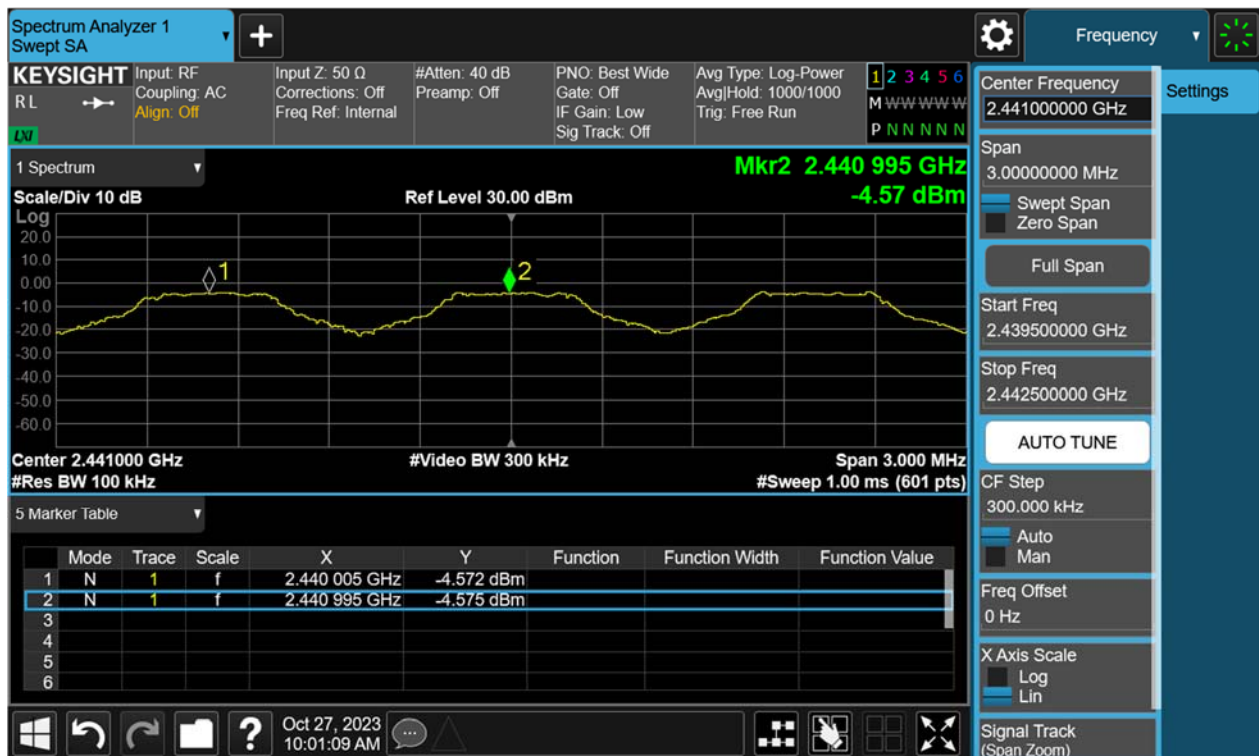
Figure 32: Hopping Frequency Separation, Hopping Mode, π/4-DQPSK

Figure 33: Hopping Frequency Separation, Hopping Mode, 8DPSK

TEST   REPORT

4.1.8 Number of Hopping Frequency

RESULT: **PASS**

Test standard	:	FCC Part 15.247(a)(1)(iii), RSS-247 5.1(d)
Requirement	:	ANSI C63.10-2013, Clause 7.8.3
		KDB 558074 D01 v05r02, Clause 2.2
Kind of test site	:	Shielded room

Test setup

Test Channel	:	Hopping
Operation Mode	:	A.1.a.iv
Ambient temperature	:	24.9°C
Relative humidity	:	51%

Table 5: Number of Hopping Frequency

Mode	Frequency Range	Measured Quantity of Hopping Channel	Limit
GFSK	2400 – 2483.5	79	≥15
π/4-DQPSK	2400 – 2483.5	79	≥15
8-DPSK	2400 – 2483.5	79	≥15

Figure 34: Number of Hopping Frequency, Hopping Mode, GFSK
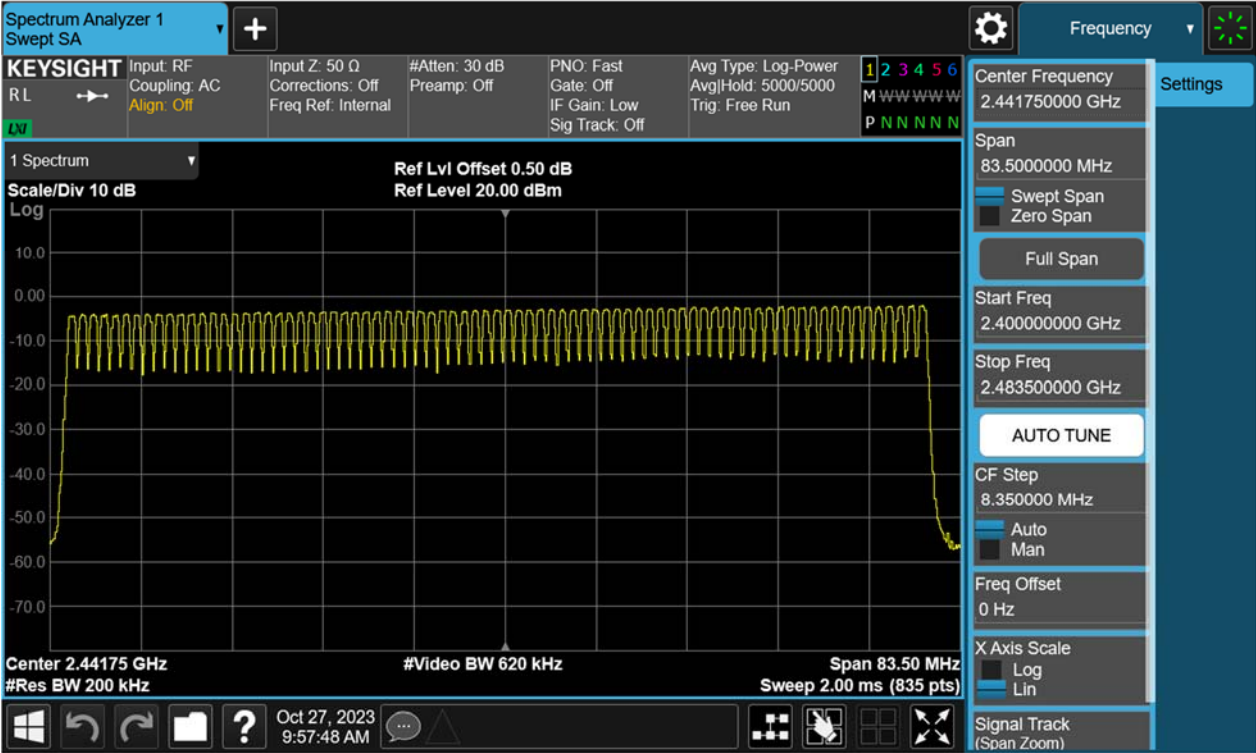
Figure 35: Number of Hopping Frequency, Hopping Mode, π/4-DQPSK
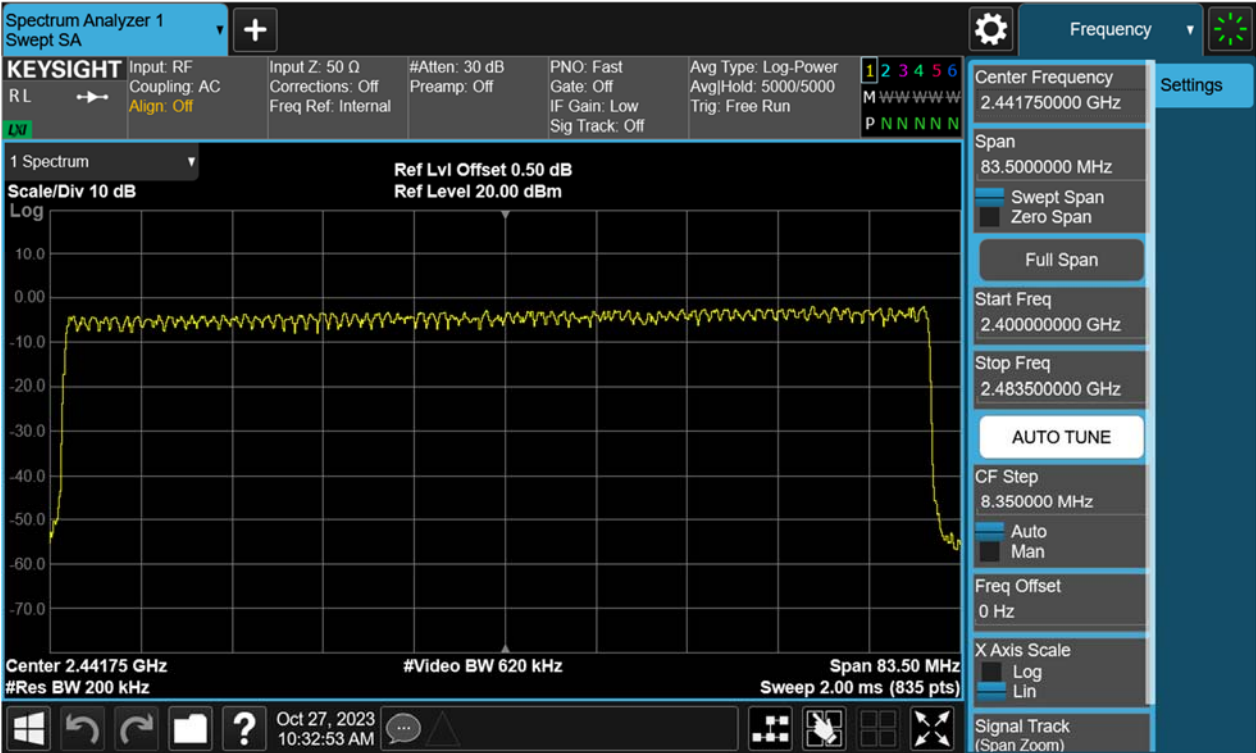
TEST   REPORT
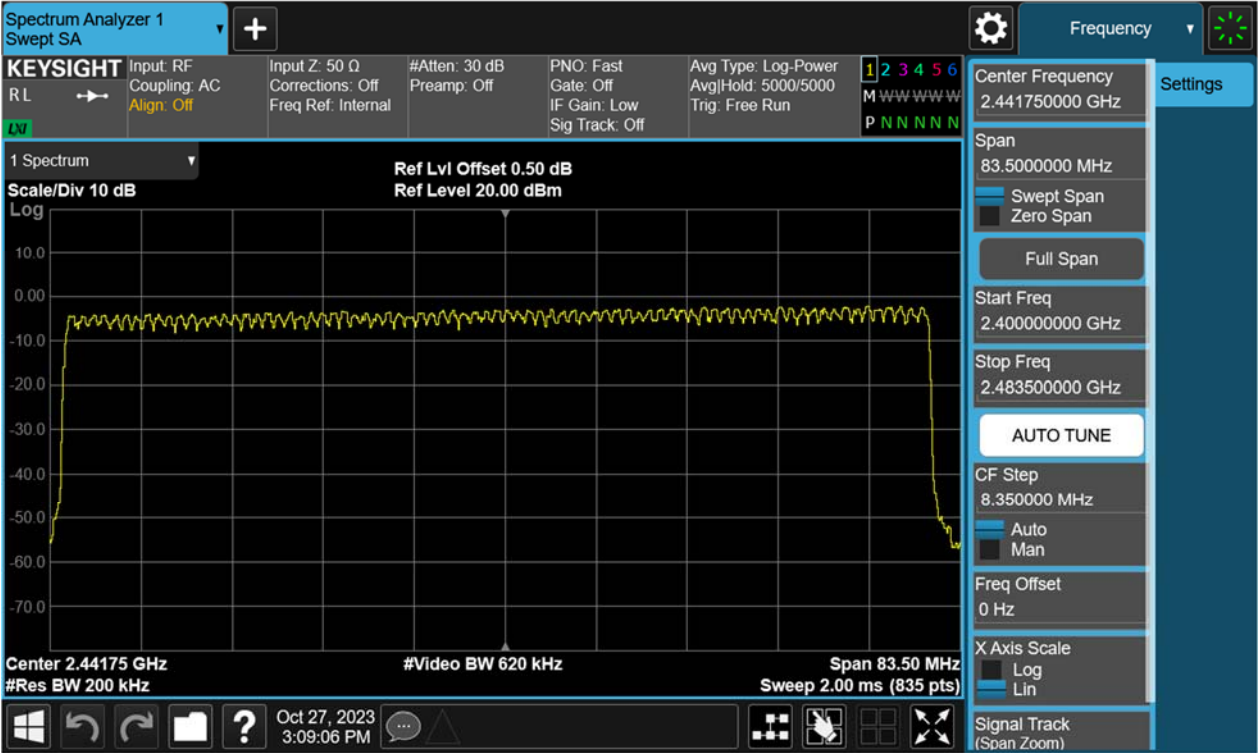
Figure 36: Number of Hopping Frequency, Hopping Mode, 8-DPSK

TEST REPORT

4.1.9 Time of Occupancy

RESULT: **PASS**

Test standard	:	FCC Part 15.247(a)(1)(iii), RSS-247 5.1(d)
Requirement	:	ANSI C63.10-2013, Clause 7.8.4
		KDB 558074 D01 v05r02, Clause 2.2
Kind of test site	:	Shielded room

Test setup

Test Channel	:	Middle
Operation Mode	:	A.1.a
Ambient temperature	:	24.9°C
Relative humidity	:	51%

Table 6: Time of Occupancy

Mode	Packet Type	Pulse Time (ms)	Total of Dwell Time (ms)	Total of Dwell Time (s)	Limit (s)
GFSK	DH1	0.3967	126.94	0.1269	0.4
	DH3	1.6550	264.80	0.2648	0.4
	DH5	2.9000	309.33	0.3093	0.4
π /4-DQPSK	DH1	0.4067	130.14	0.1301	0.4
	DH3	1.6550	264.80	0.2648	0.4
	DH5	2.9070	310.08	0.3101	0.4
8-DPSK	DH1	0.4067	130.14	0.1301	0.4
	DH3	1.6550	264.80	0.2648	0.4
	DH5	2.9070	310.08	0.3101	0.4

Note:

For DH1 package type:

Total of Dwell = Pulse Time*(1600/2)/Number of Hopping Frequency*Period

Period = 0.4* Number of Hopping Frequency

For DH3 package type:

Total of Dwell = Pulse Time*(1600/4)/Number of Hopping Frequency*Period

Period = 0.4* Number of Hopping Frequency

For DH5 package type:

Total of Dwell = Pulse Time*(1600/6)/Number of Hopping Frequency*Period

Period = 0.4* Number of Hopping Frequency

Figure 37: Time of Occupancy, 2441MHz, GFSK DH1

Figure 38: Time of Occupancy, 2441MHz, GFSK DH3