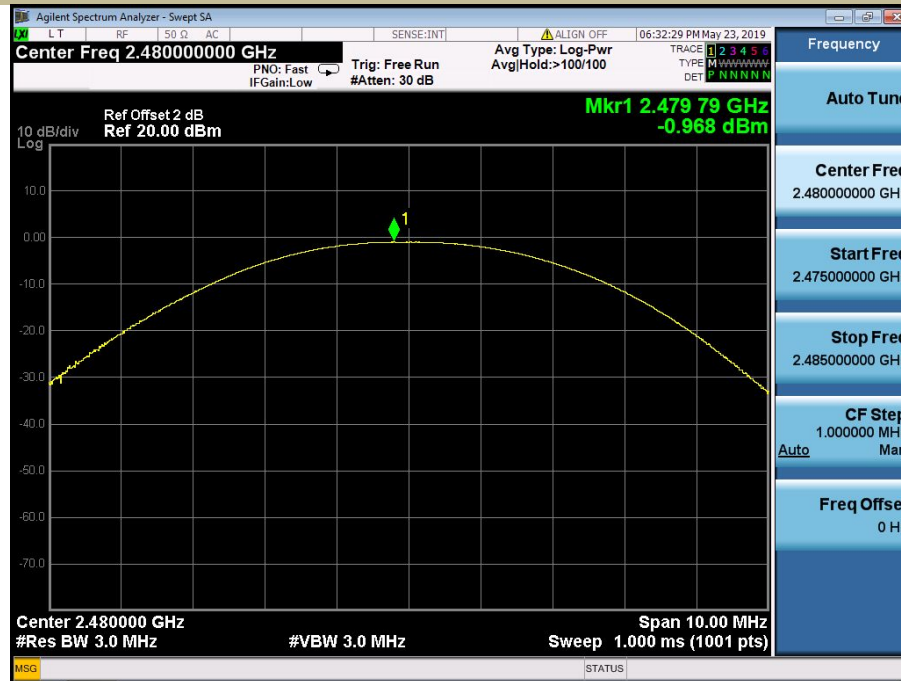


Test Model

Maximum Peak Conducted Output Power

Channel 78: 2480MHz

GFSK

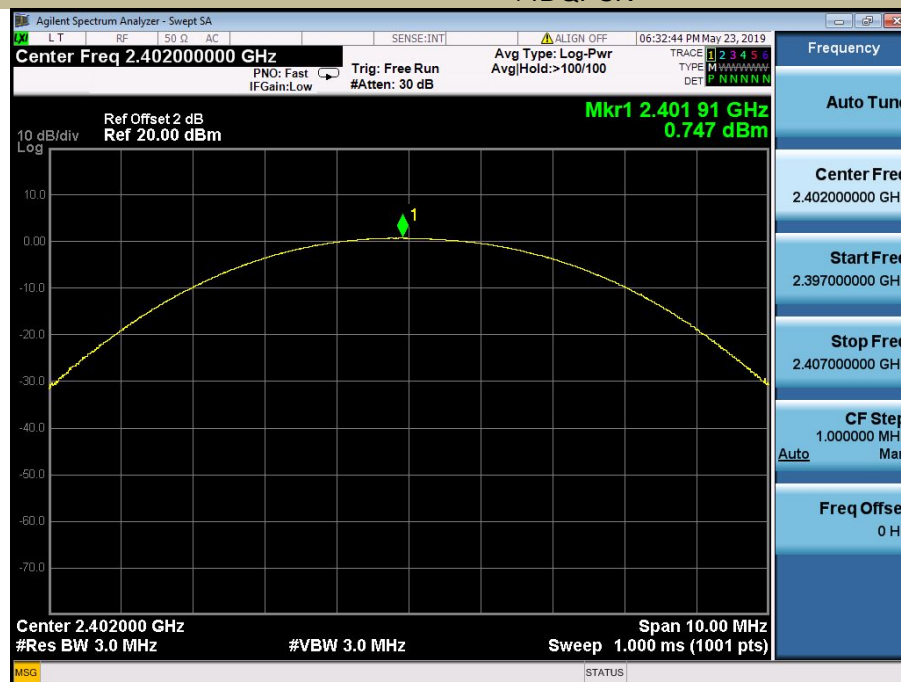


Test Model

Maximum Peak Conducted Output Power

Channel 0: 2402MHz

π /4DQPSK

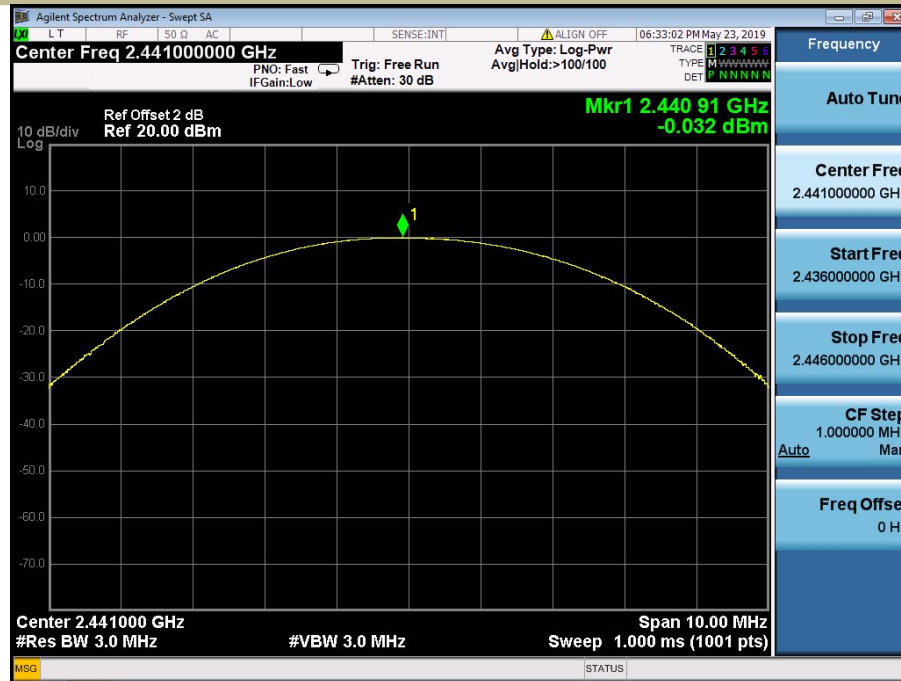


Test Model

Maximum Peak Conducted Output Power

Channel 39: 2441MHz

π /4DQPSK

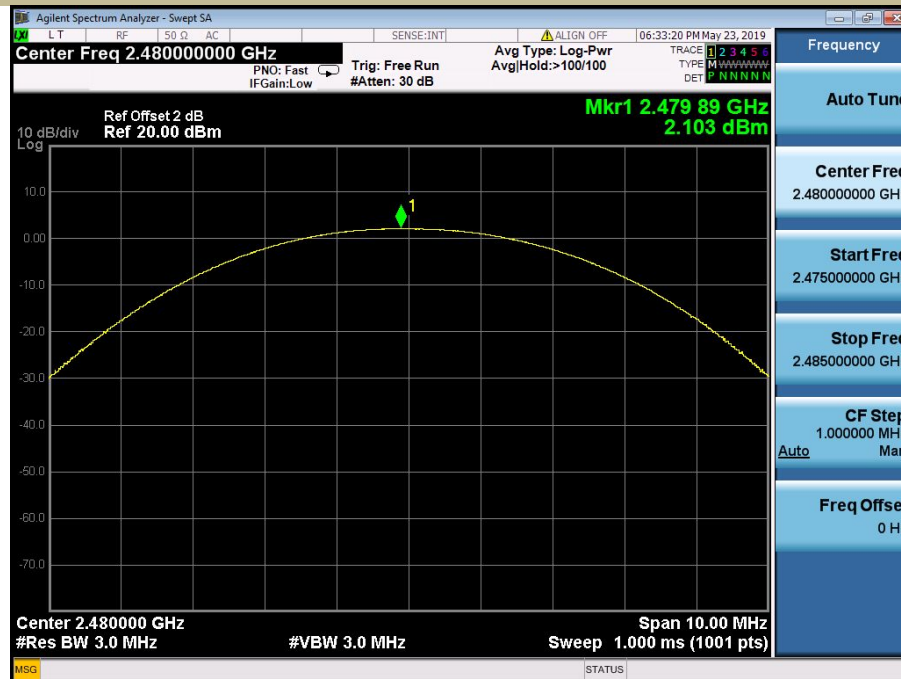


Test Model

Maximum Peak Conducted Output Power

Channel 78: 2480MHz

π /4DQPSK

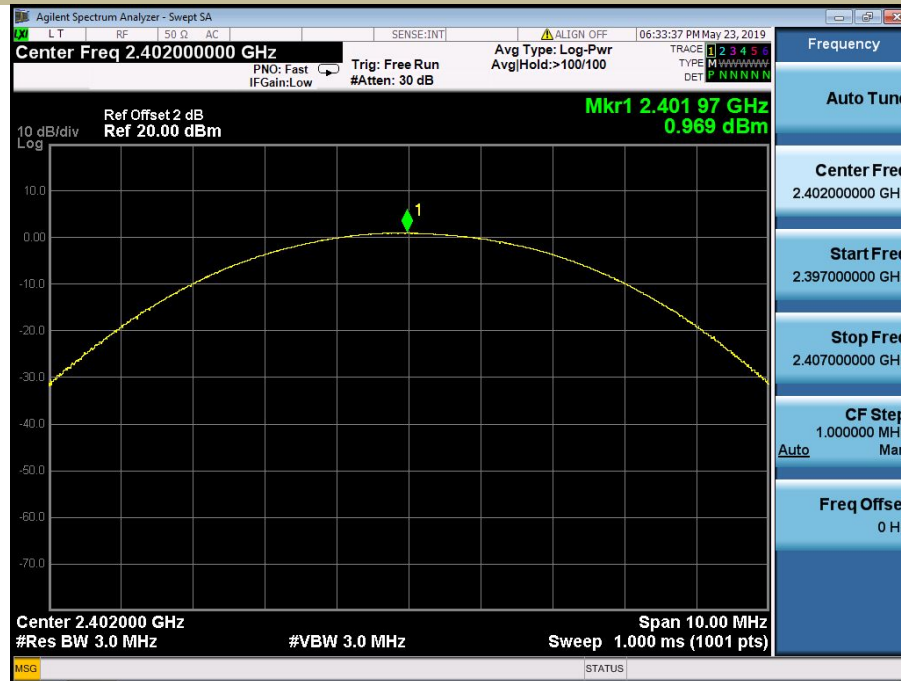


Test Model

Maximum Peak Conducted Output Power

Channel 0: 2402MHz

8DPSK

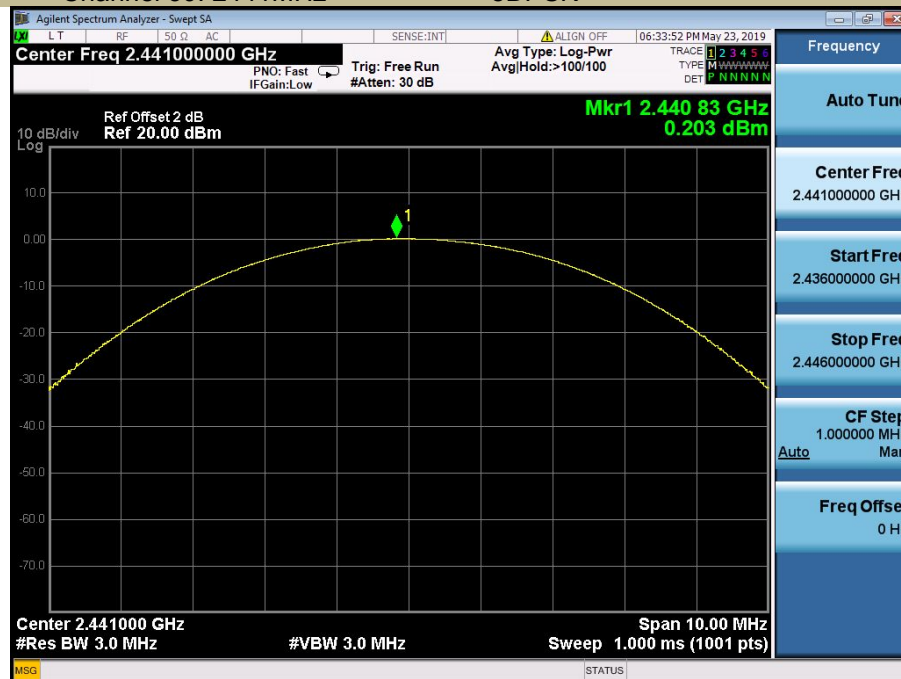


Test Model

Maximum Peak Conducted Output Power

Channel 39: 2441MHz

8DPSK

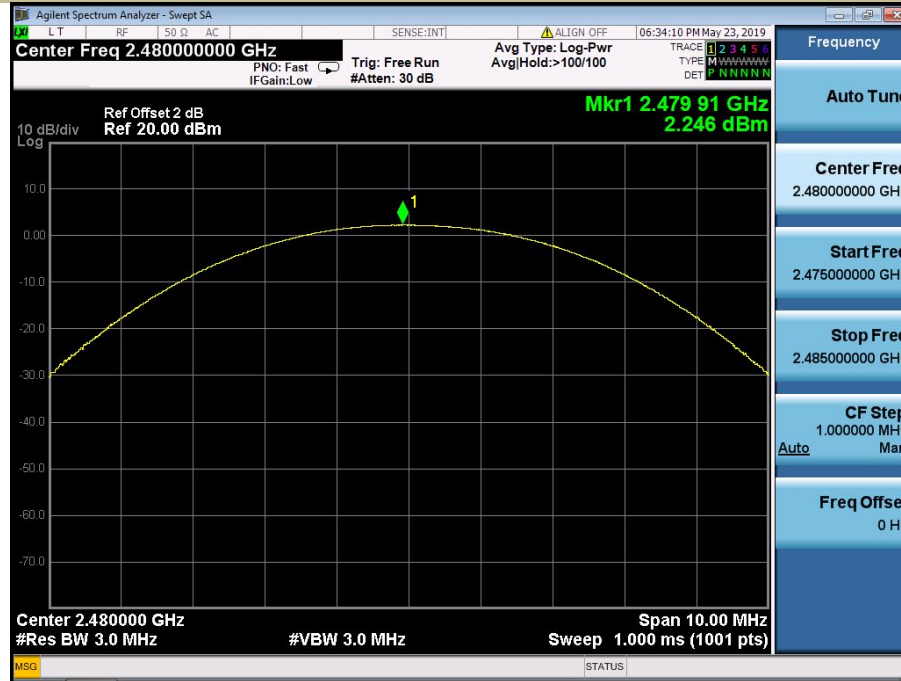


Test Model

Maximum Peak Conducted Output Power

Channel 78: 2480MHz

8DPSK



9.6 CONDUCTED SUPRIIOUS EMISSION

9.6.1 Applicable Standard

According to FCC Part 15.247(d) and KDB 558074 D01 15.247 MEAS GUIDANCE v05r02

9.6.2 Conformance Limit

According to FCC Part 15.247(d):

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted, provided the transmitter demonstrates compliance with the peak conducted power limits.

9.6.3 Test Configuration

Test according to clause 7.1 radio frequency test setup 1

9.6.4 Test Procedure

The transmitter output (antenna port) was connected to the spectrum analyzer

■ Reference level measurement

Establish a reference level by using the following procedure:

Set instrument center frequency to DSS channel center frequency.

Set Span = approximately 5 times the 20 dB bandwidth, centered on a hopping channel.

Set the RBW = 100 kHz. Set the VBW $\geq 3 \times$ RBW.

Set Detector = peak. Set Sweep time = auto couple.

Set Trace mode = max hold. Allow trace to fully stabilize.

Use the peak marker function to determine the maximum Maximum conduceted level.

Note that the channel found to contain the maximum conduceted level can be used to establish the reference level.

■ Band-edge Compliance of RF Conducted Emissions

Use the following spectrum analyzer settings:

Span = wide enough to capture the peak level of the emission operating on the channel closest to the band-edge, as well as any modulation products which fall outside of the authorized band of operation

Set RBW $\geq 1\%$ of the span=100kHz Set VBW $\geq$ RBW

Set Sweep = auto Set Detector function = peak Set Trace = max hold

Allow the trace to stabilize. Set the marker on the emission at the bandedge, or on the highest modulation product outside of the band, if this level is greater than that at the bandedge. Enable the marker-delta function, then use the marker-to-peak function to move the marker to the peak of the in-band emission.

The marker-delta value now displayed must comply with the limit specified in this Section.

Now, using the same instrument settings, enable the hopping function of the EUT. Allow the trace to stabilize. Follow the same procedure listed above to determine if any spurious emissions caused by the hopping function also comply with the specified limit.

■ Conduceted Spurious RF Conducted Emission

Use the following spectrum analyzer settings:

Span = wide enough to capture the peak level of the in-band emission and all spurious emissions (e.g., harmonics) from the lowest frequency generated in the EUT up through the 10th harmonic.(30MHz to 25GHz). Set RBW = 100 kHz Set VBW $\geq$ RBW

Set Sweep = auto Set Detector function = peak Set Trace = max hold

Allow the trace to stabilize. Set the marker on the peak of any spurious emission recorded. The level displayed must comply with the limit specified in this Section.

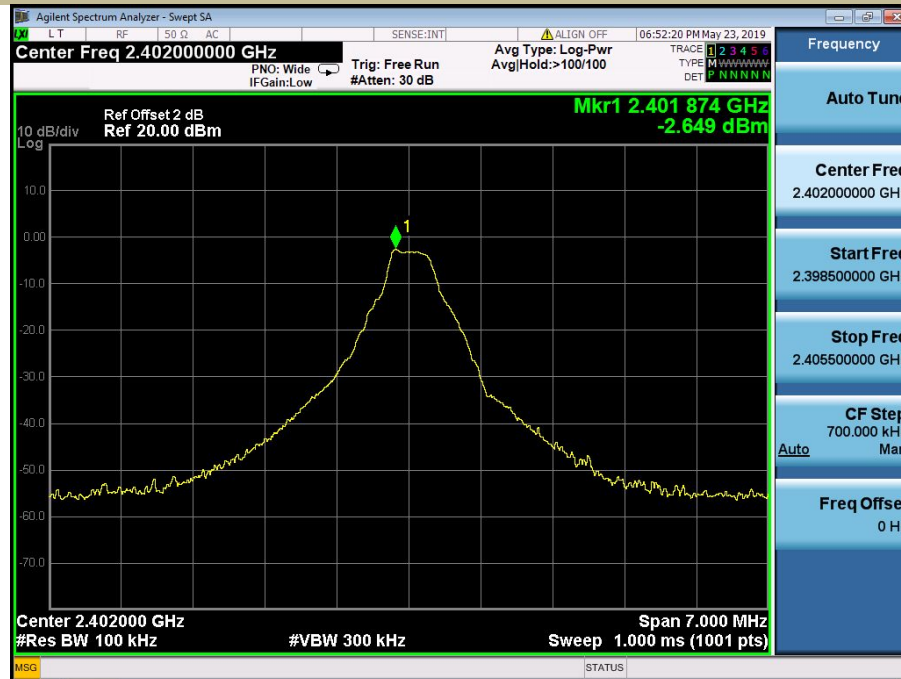
9.6.5 Test Results

Maximum Conduceted Level RBW=100kHz

Test Model

Channel 0: 2402MHz

GFSK

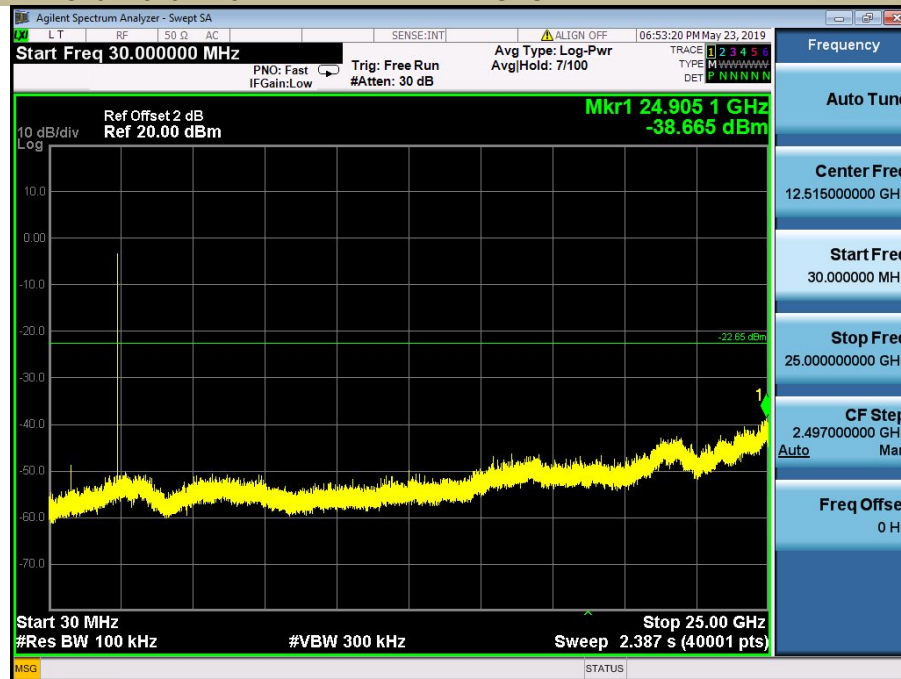


Conduceted Spurious RF Conducted Emission

Test Model

Channel 0: 2402MHz

GFSK

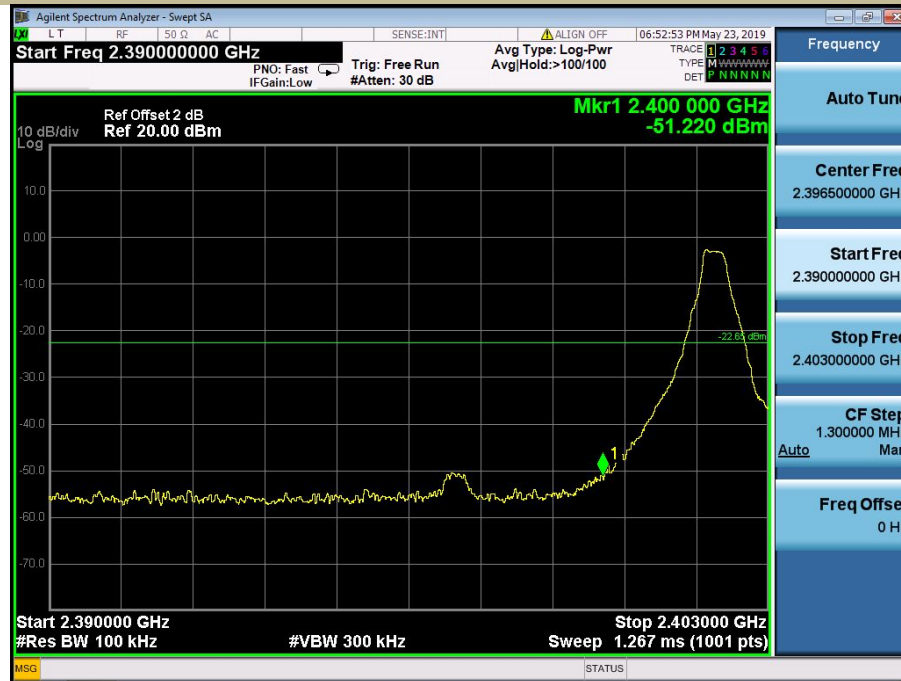


Test Model

Band-edge Conducted Emissions

Channel 0: 2402MHz

GFSK

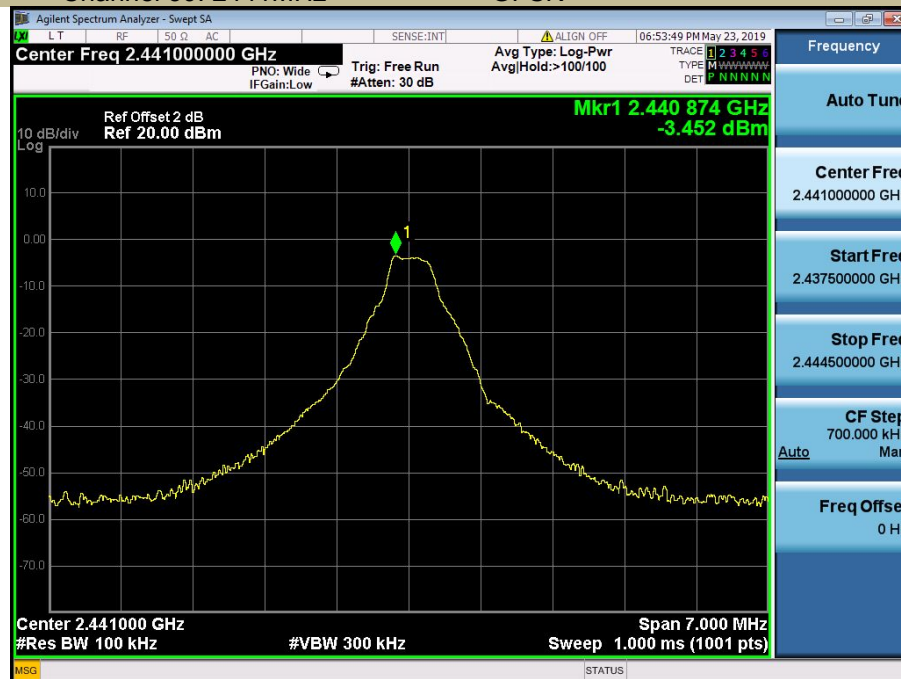


Test Model

Maximum Conducted Level RBW=100kHz

Channel 39: 2441MHz

GFSK

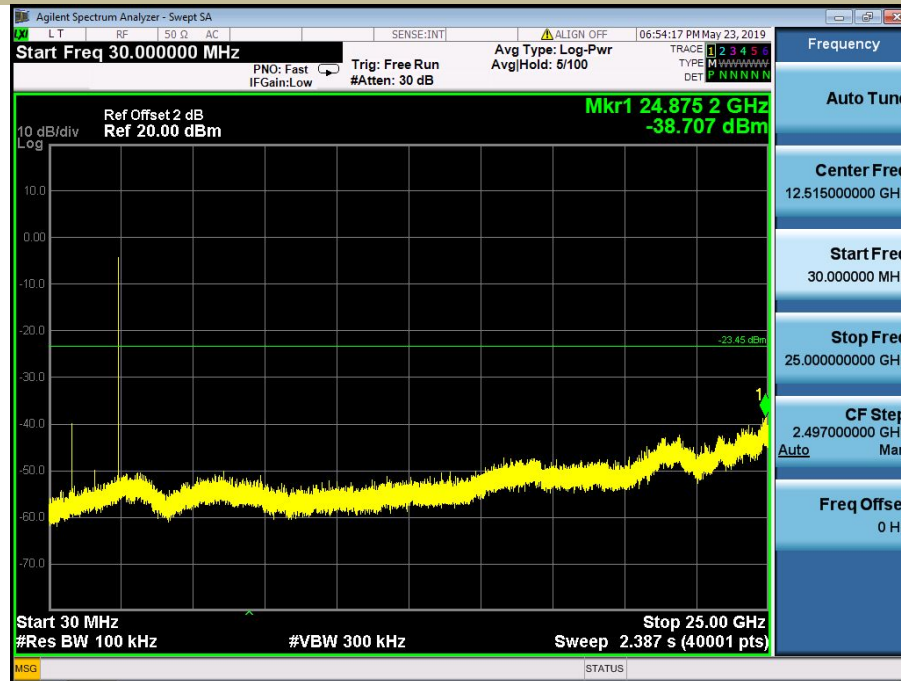


Test Model

Conducted Spurious RF Conducted Emission

Channel 39: 2441MHz

GFSK

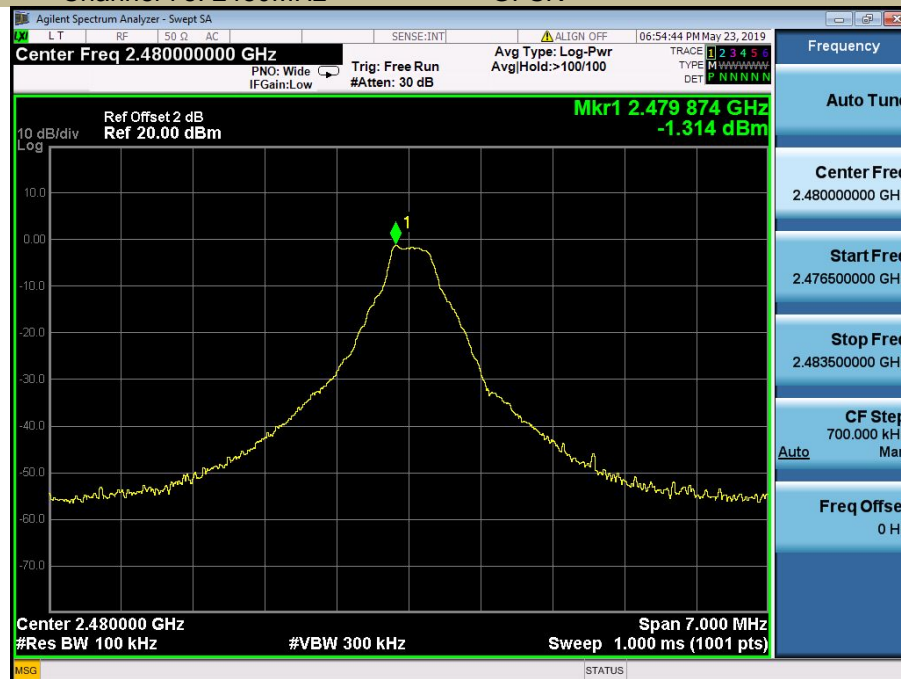


Test Model

Maximum Conducted Level RBW=100kHz

Channel 78: 2480MHz

GFSK

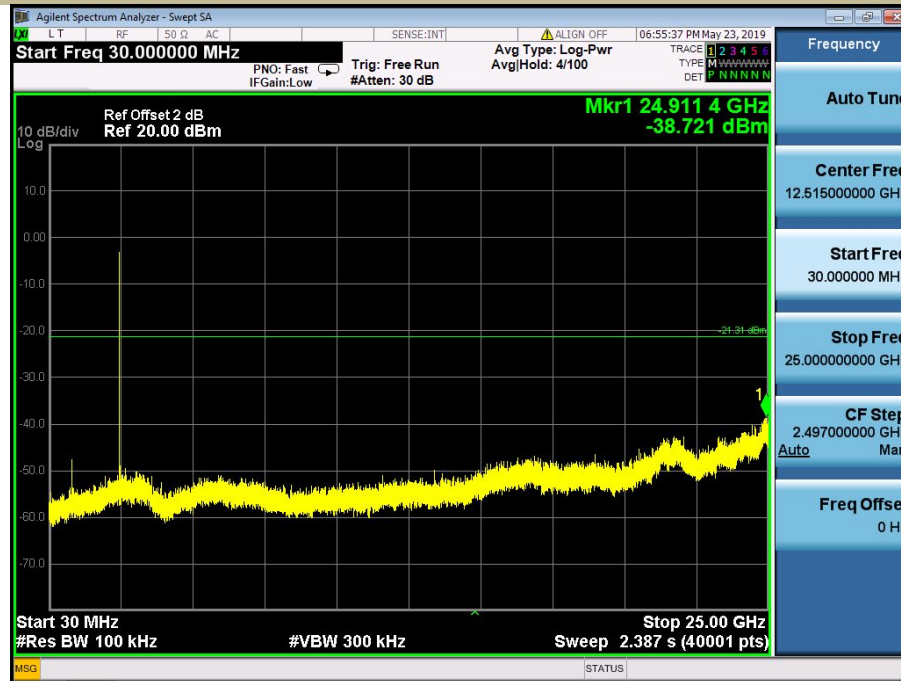


Test Model

Conducted Spurious RF Conducted Emission

Channel 78: 2480MHz

GFSK

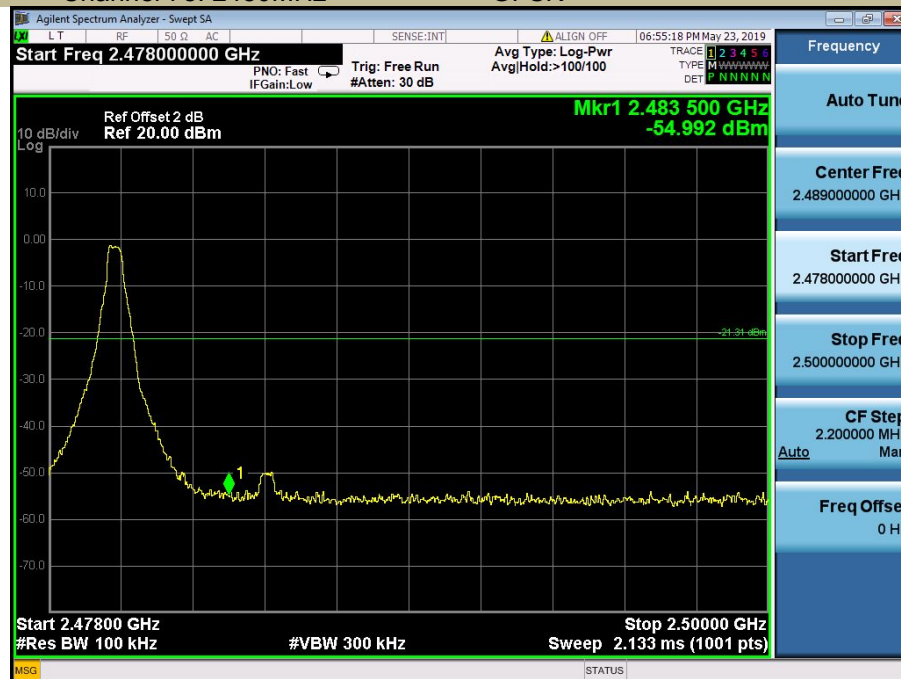


Test Model

Band-edge Conducted Emissions

Channel 78: 2480MHz

GFSK

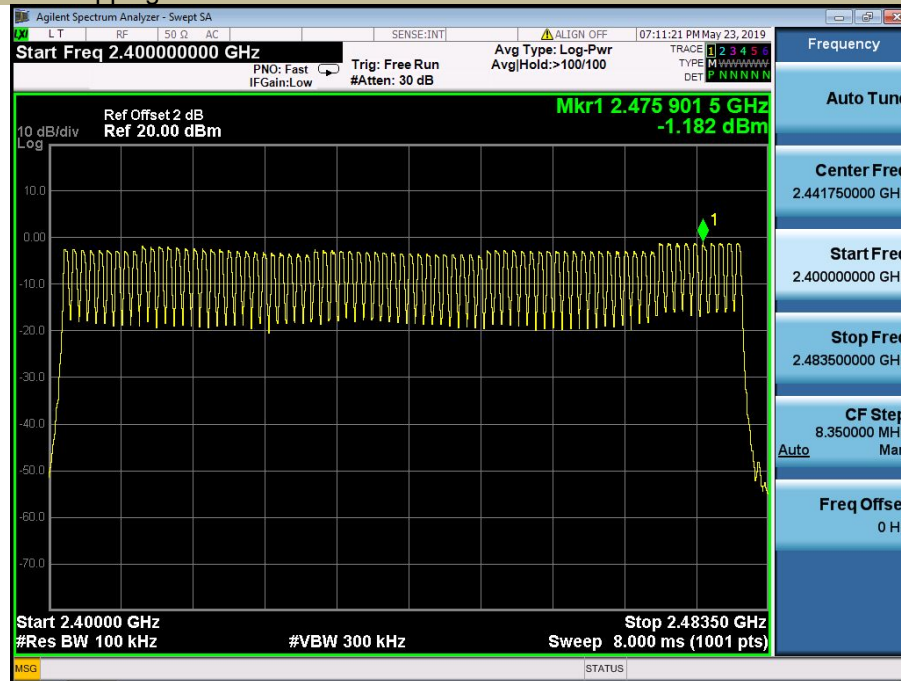


Test Model

Maximum Conducted Level RBW=100kHz

Hopping

GFSK

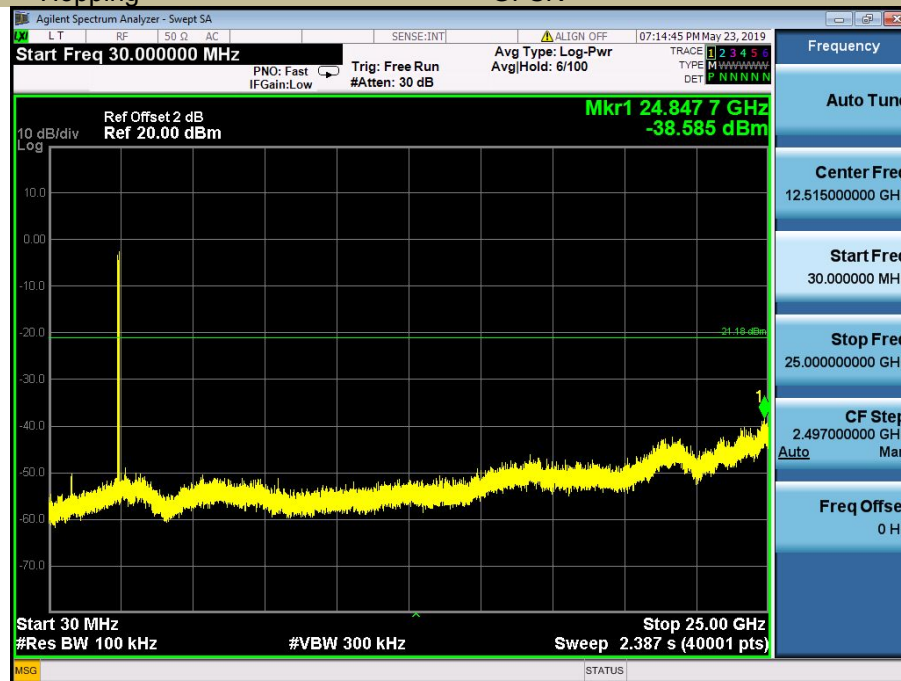


Test Model

Conducted Spurious RF Conducted Emission

Hopping

GFSK

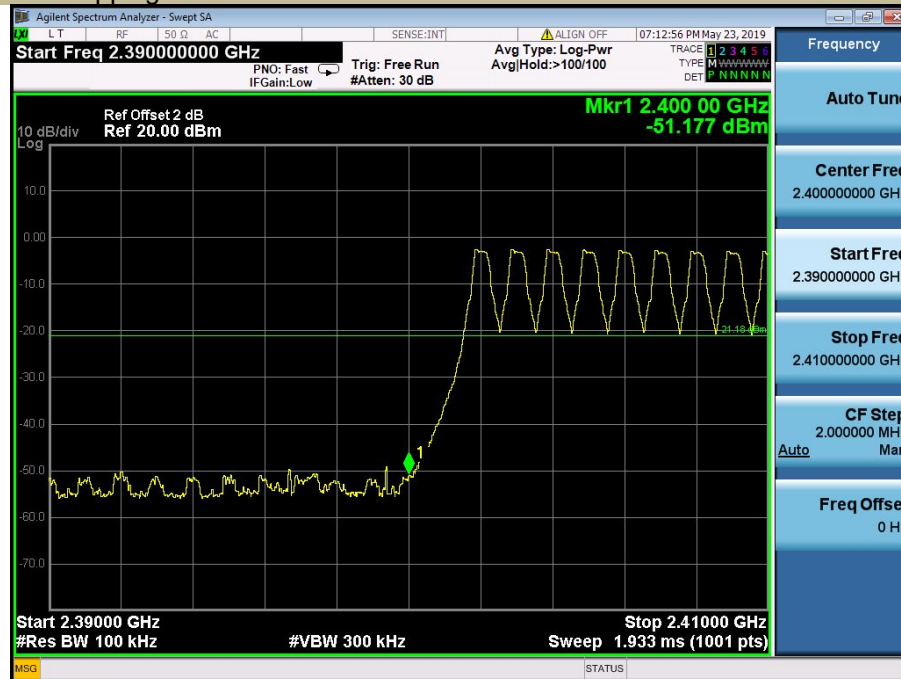


Test Model

Band-edge Conducted Emissions

Hopping

GFSK

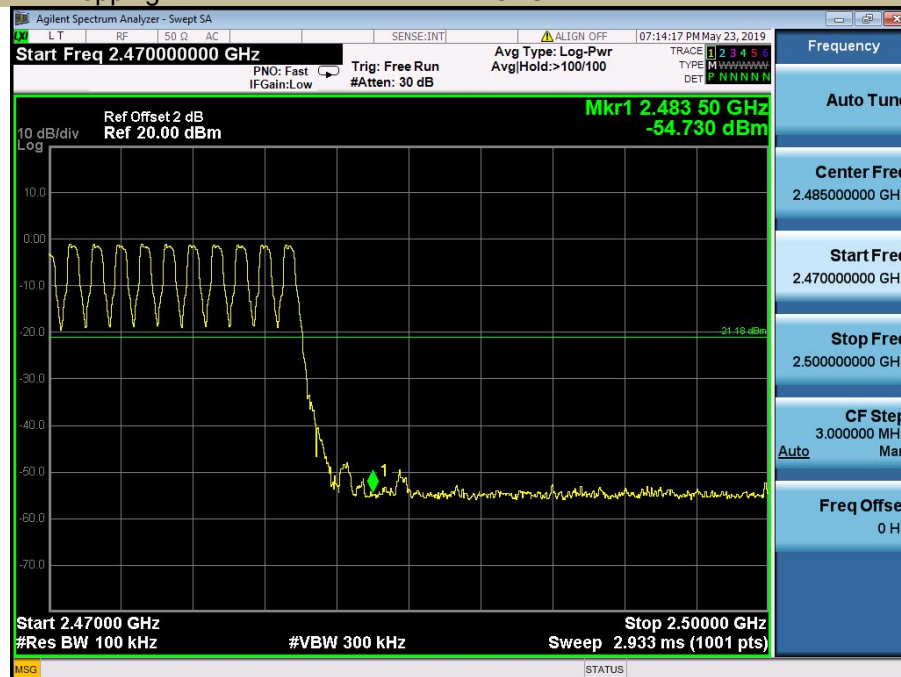


Test Model

Band-edge Conducted Emissions

Hopping

GFSK

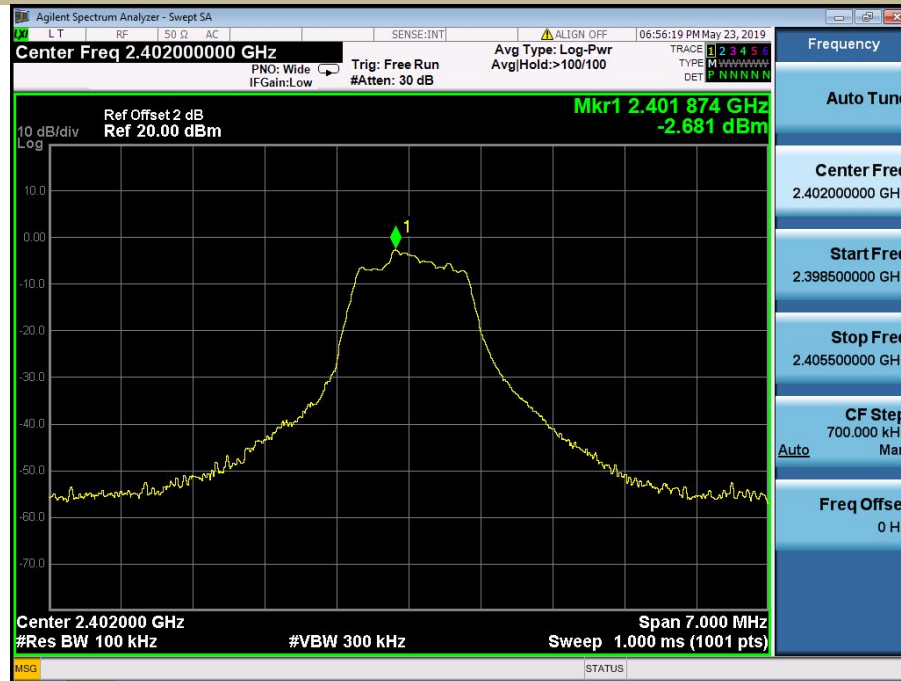


Test Model

Maximum Conduced Level RBW=100kHz

Channel 0: 2402MHz

π /4DQPSK

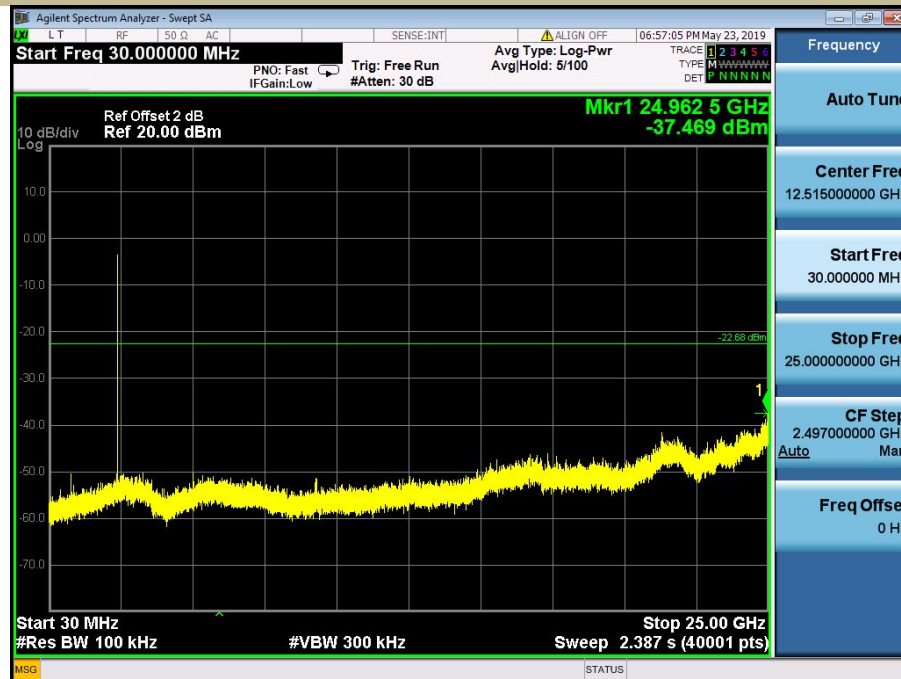


Test Model

Conduced Spurious RF Conducted Emission

Channel 0: 2402MHz

π /4DQPSK

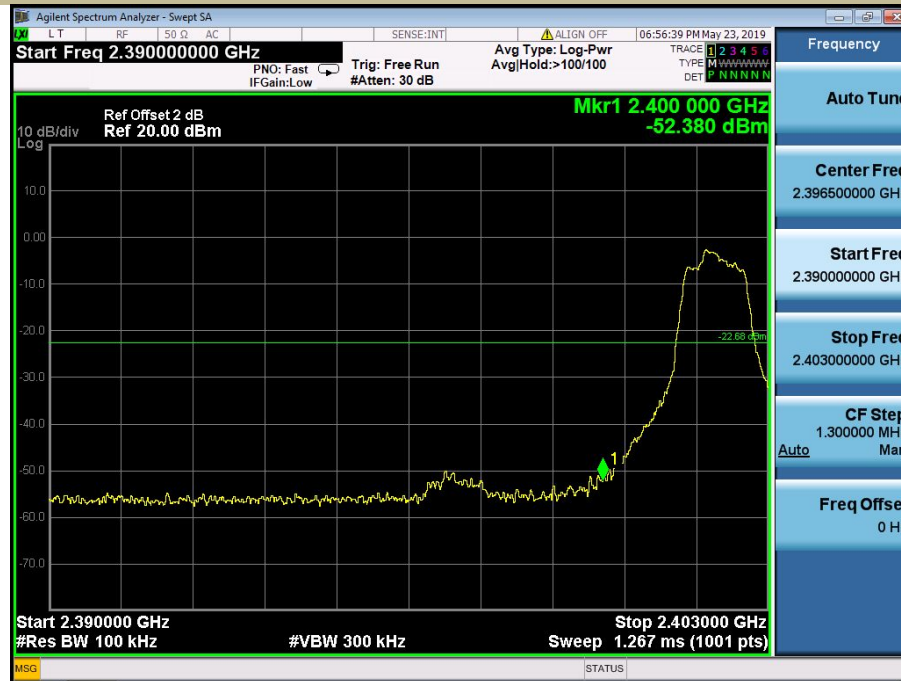


Test Model

Band-edge Conducted Emissions

Channel 0: 2402MHz

π /4DQPSK

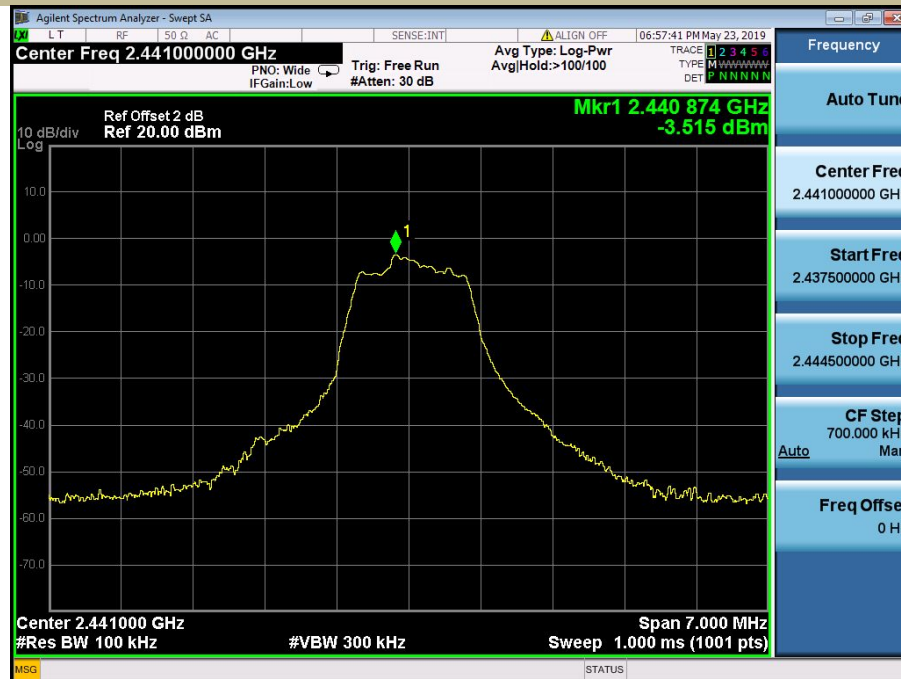


Test Model

Maximum Conducted Level RBW=100kHz

Channel 39: 2441MHz

π /4DQPSK

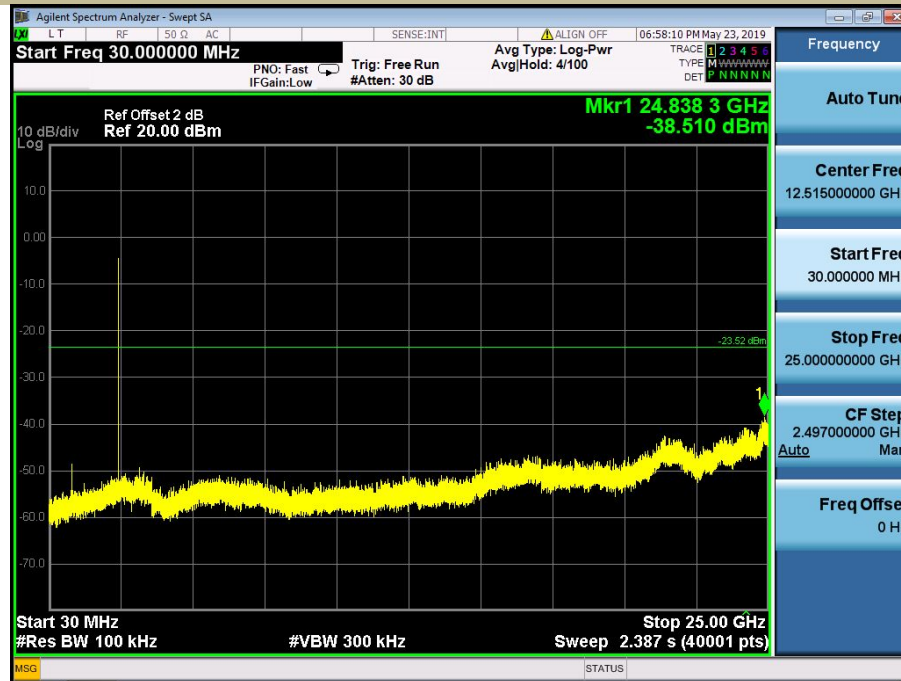


Test Model

Conducted Spurious RF Conducted Emission

Channel 39: 2441MHz

π /4DQPSK



Test Model

Maximum Conducted Level RBW=100kHz

Channel 78: 2480MHz

π /4DQPSK

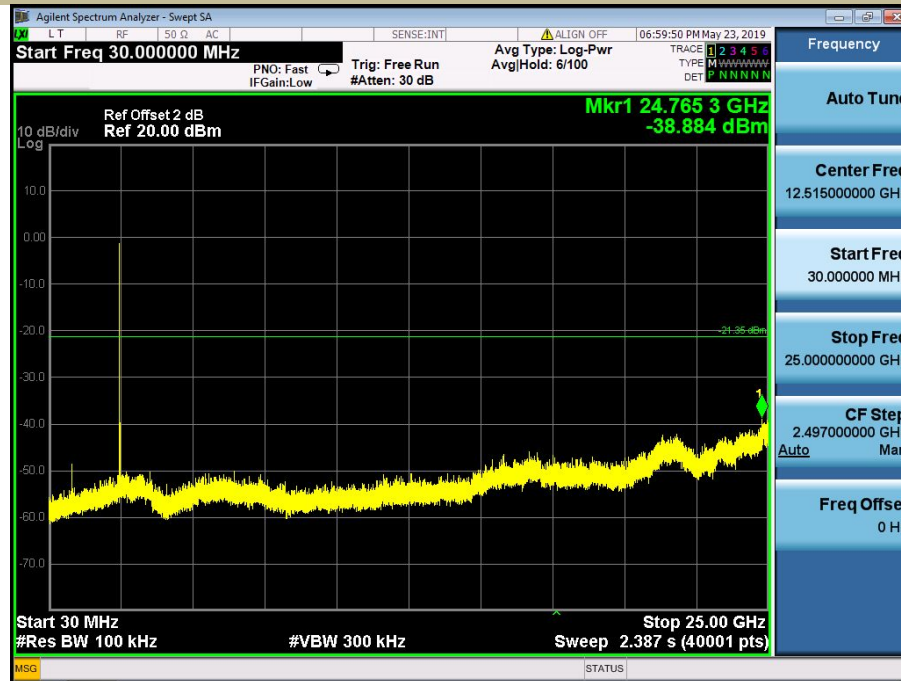


Test Model

Conducted Spurious RF Conducted Emission

Channel 78: 2480MHz

π /4DQPSK

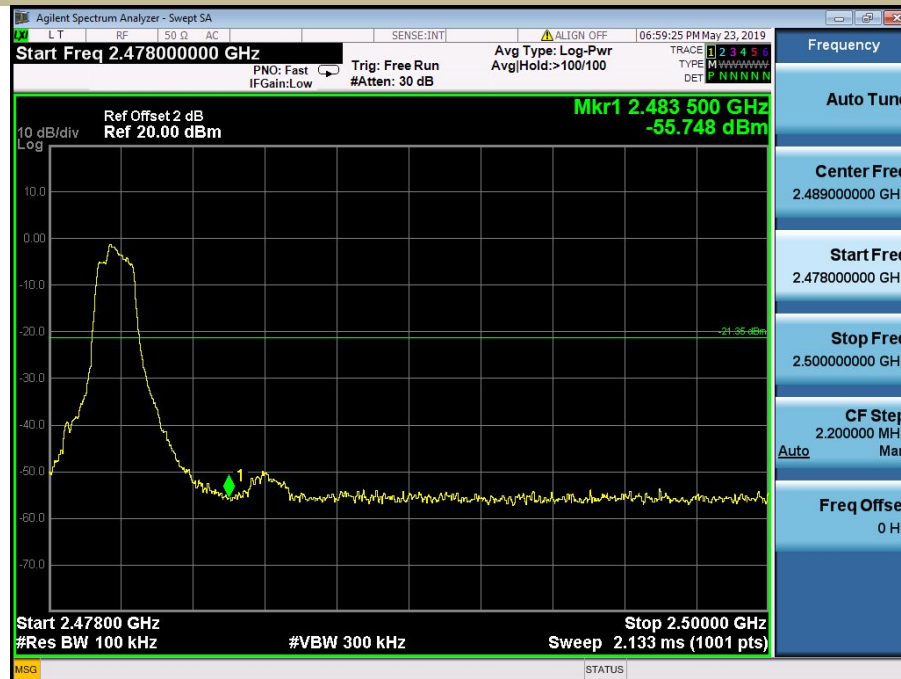


Test Model

Band-edge Conducted Emissions

Channel 78: 2480MHz

π /4DQPSK

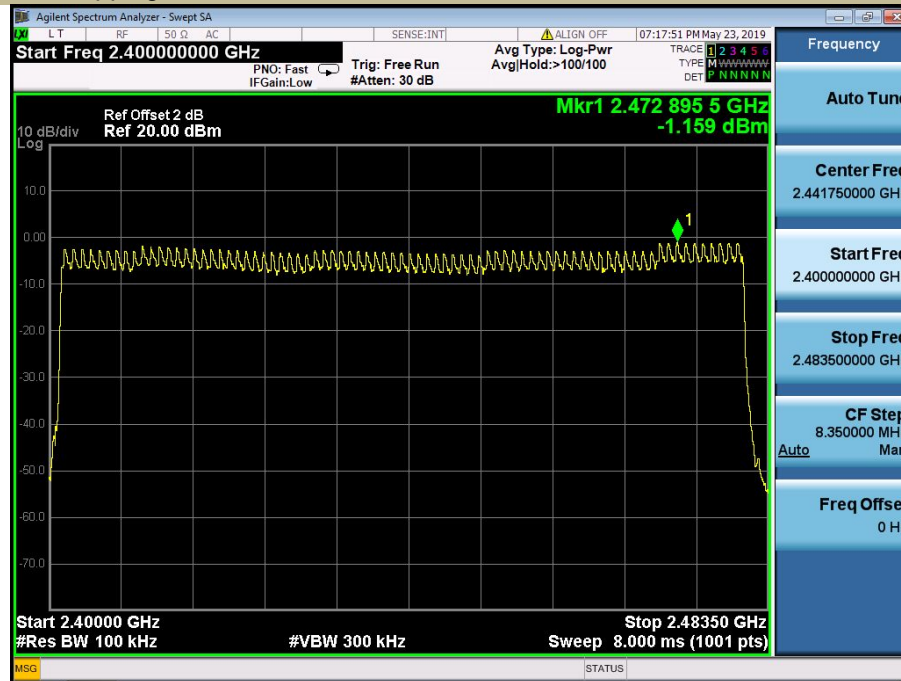


Test Model

Maximum Conducted Level RBW=100kHz

Hopping

π /4DQPSK

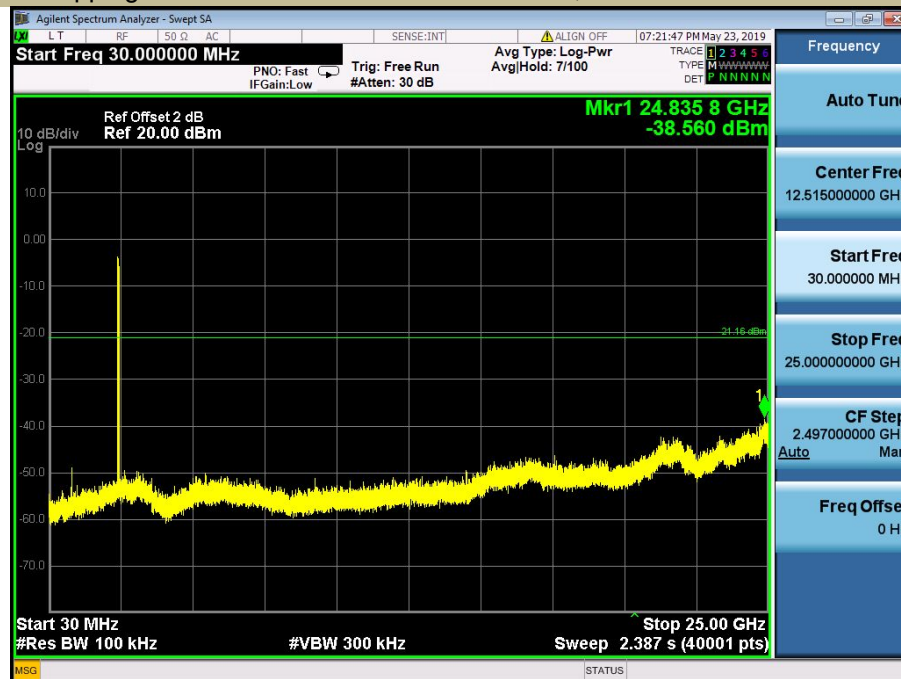


Test Model

Conducted Spurious RF Conducted Emission

Hopping

π /4DQPSK

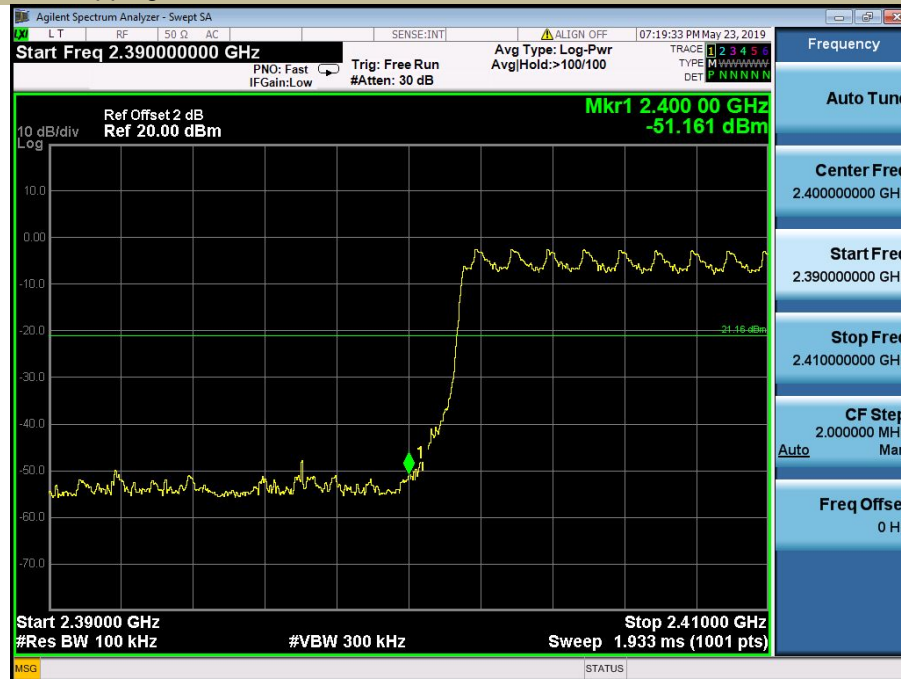


Test Model

Band-edge Conducted Emissions

Hopping

π /4DQPSK

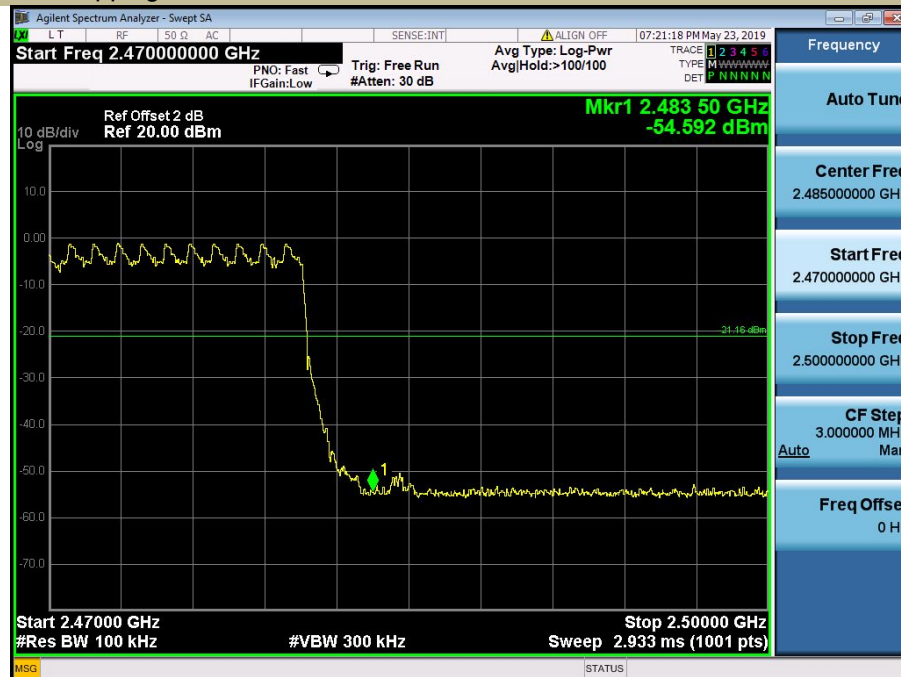


Test Model

Band-edge Conducted Emissions

Hopping

π /4DQPSK

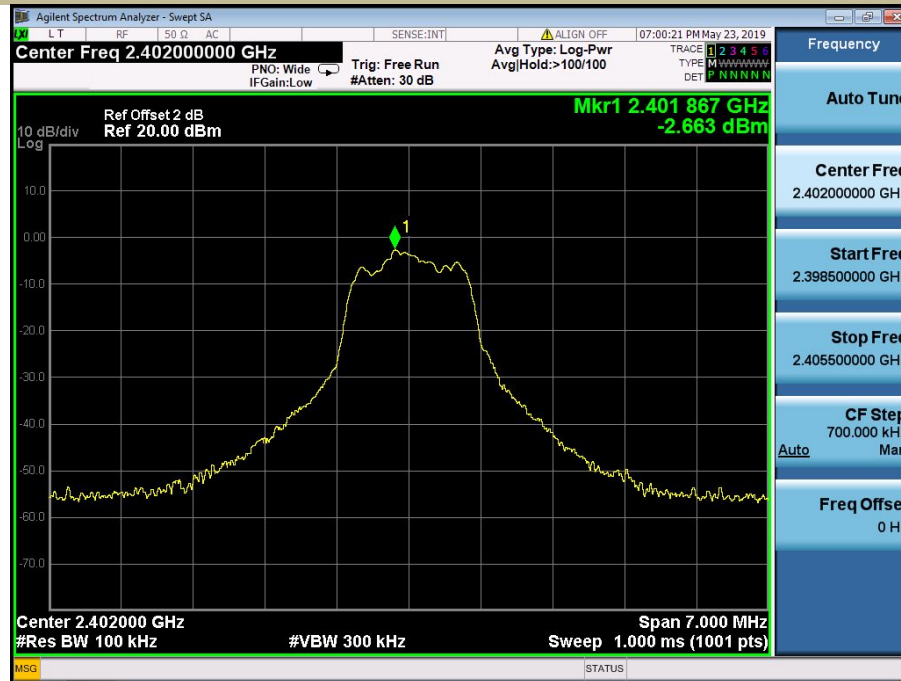


Test Model

Maximum Conducted Level RBW=100kHz

Channel 0: 2402MHz

8DPSK

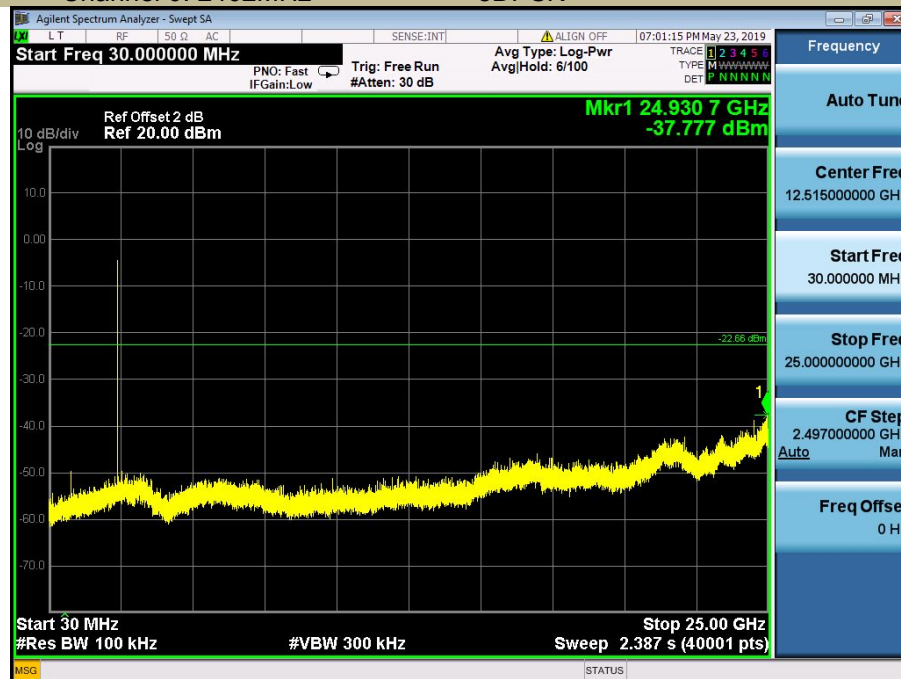


Test Model

Conducted Spurious RF Conducted Emission

Channel 0: 2402MHz

8DPSK

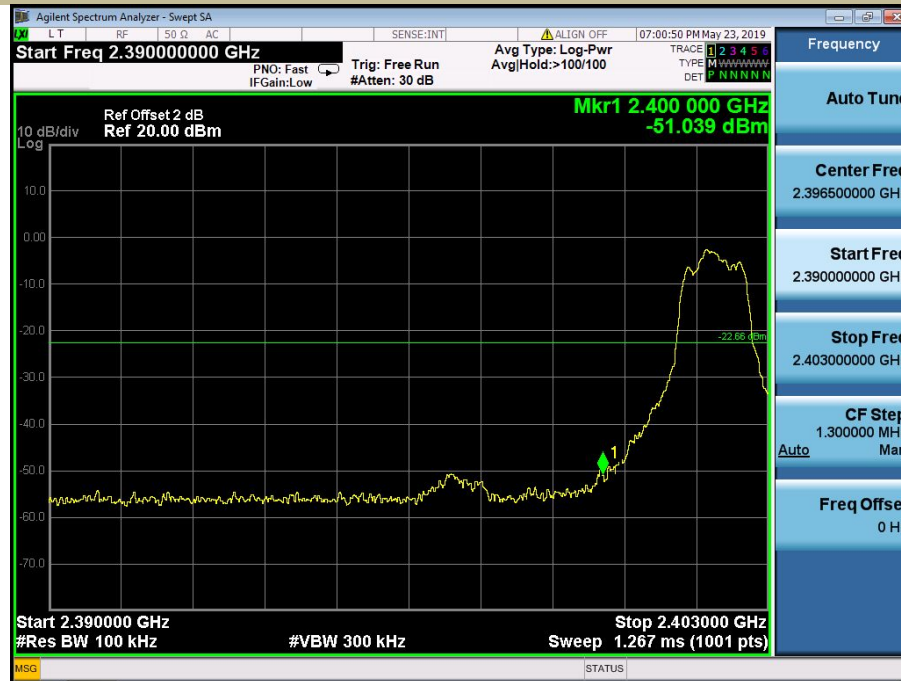


Test Model

Band-edge Conducted Emissions

Channel 0: 2402MHz

8DPSK

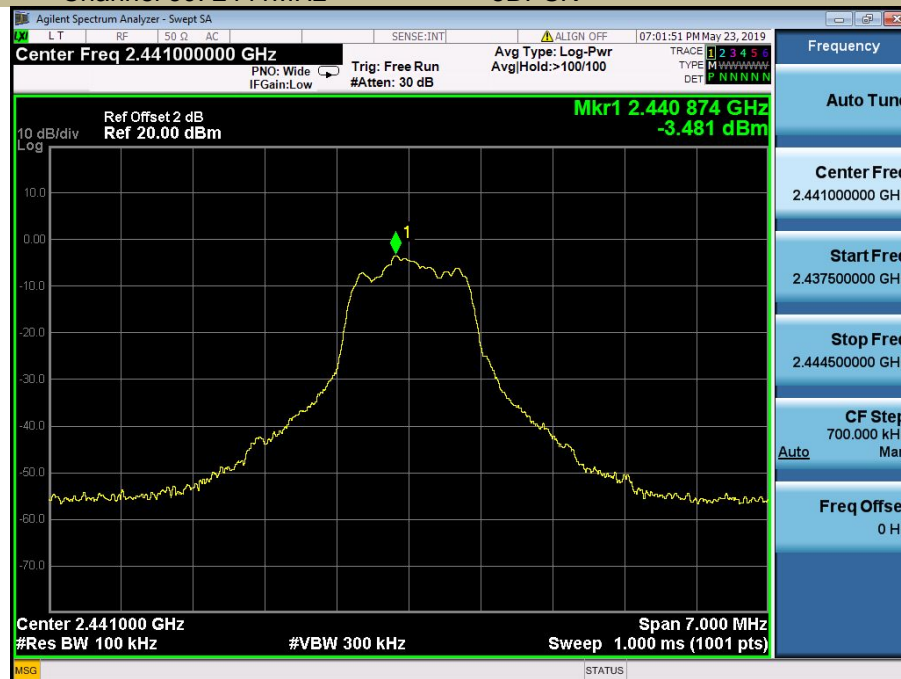


Test Model

Maximum Conducted Level RBW=100kHz

Channel 39: 2441MHz

8DPSK

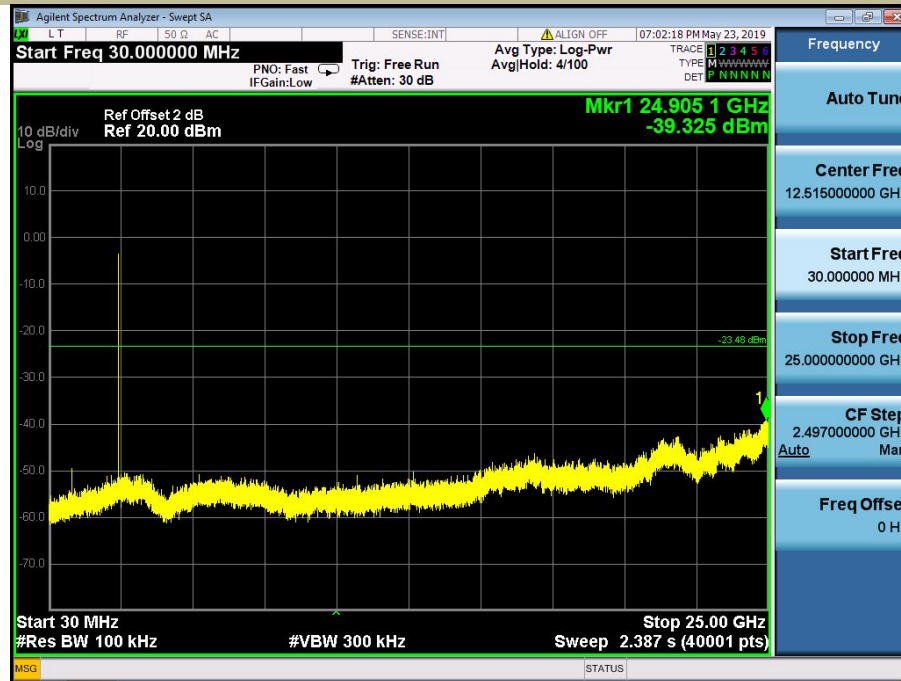


Test Model

Conducted Spurious RF Conducted Emission

Channel 39: 2441MHz

8DPSK



Test Model

Maximum Conducted Level RBW=100kHz

Channel 78: 2480MHz

8DPSK

