

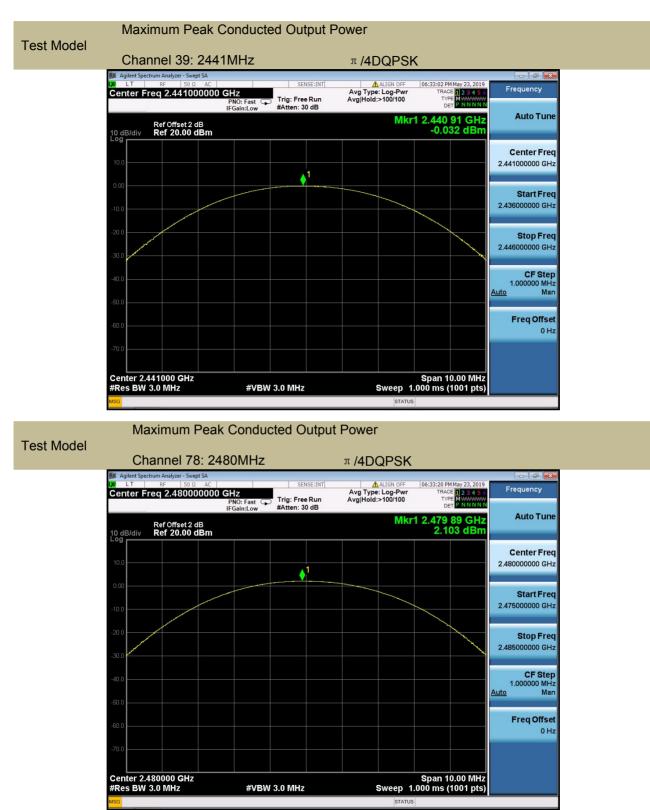
Center 2.402000 GHz #Res BW 3.0 MHz

#VBW 3.0 MHz

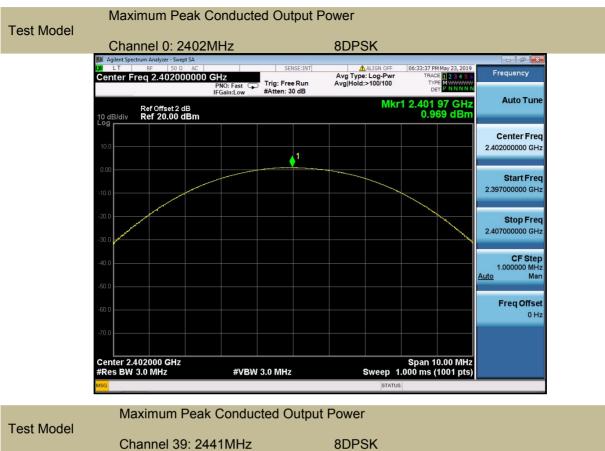
Freq Offset 0 Hz

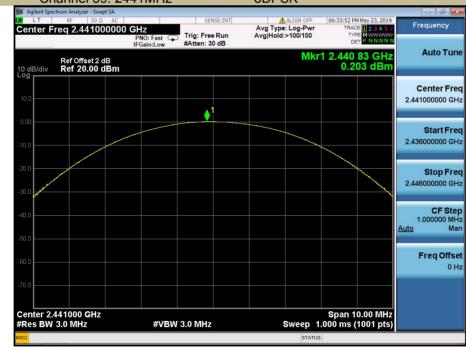
Span 10.00 MHz Sweep 1.000 ms (1001 pts)



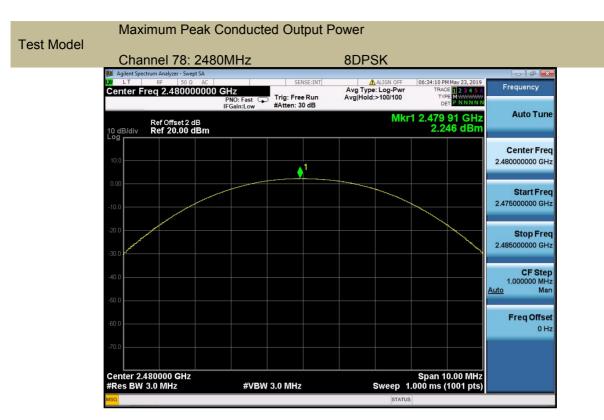














### 9.6 CONDUCTED SUPRIOUS EMISSION

#### 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  $\ge$  3 x 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  $\ge$  1% of the span=100kHz Set VBW  $\ge$  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

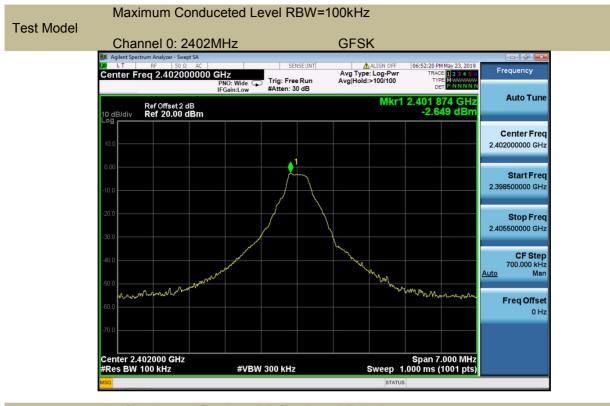
# 25GHz). Set RBW = 100 kHz Set VBW $\ge$ RBW

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.



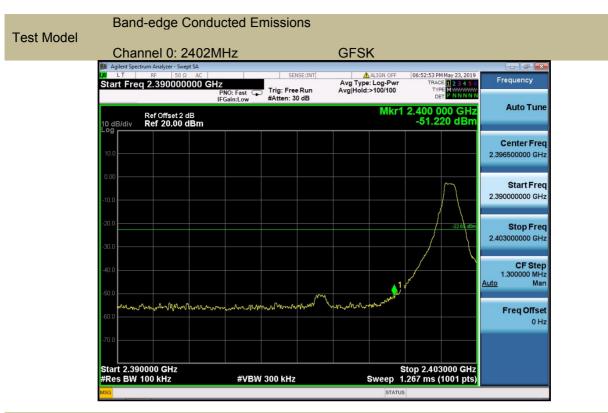
#### 9.6.5 Test Results



**Test Model** 

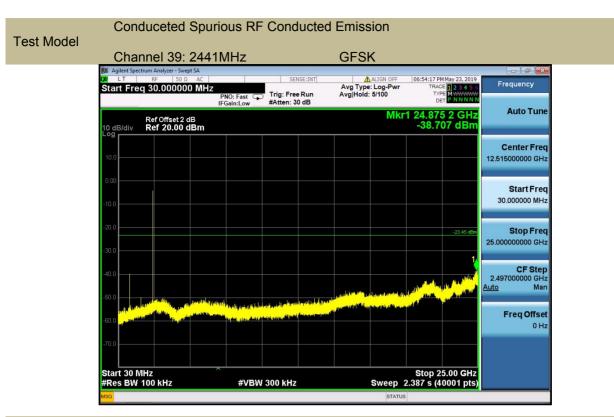


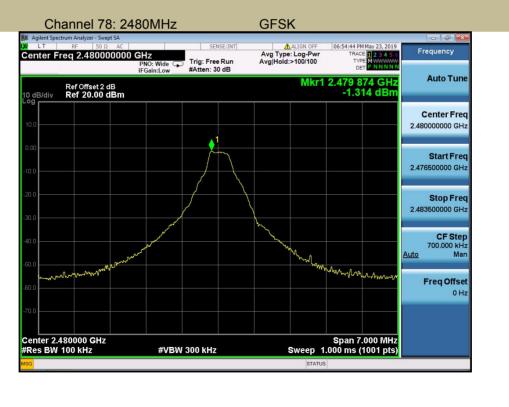








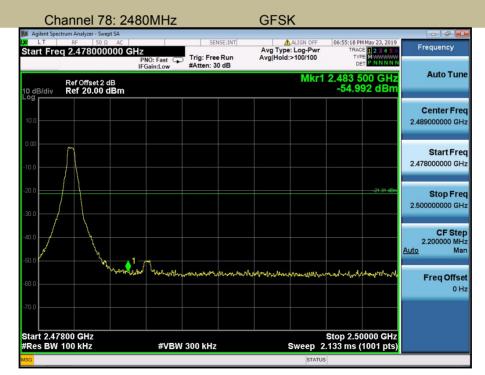






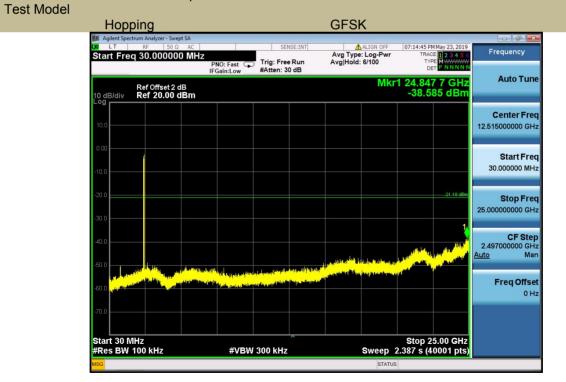


Band-edge Conducted Emissions

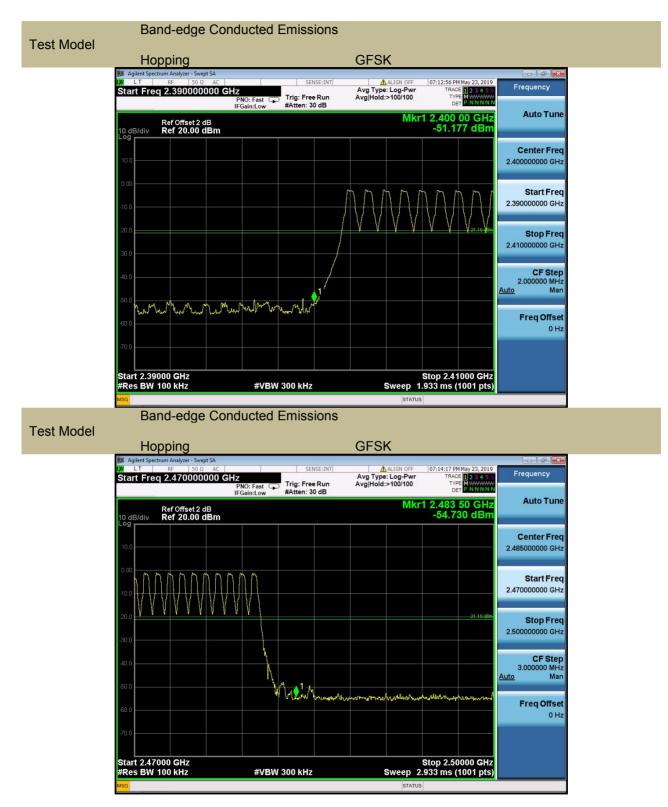




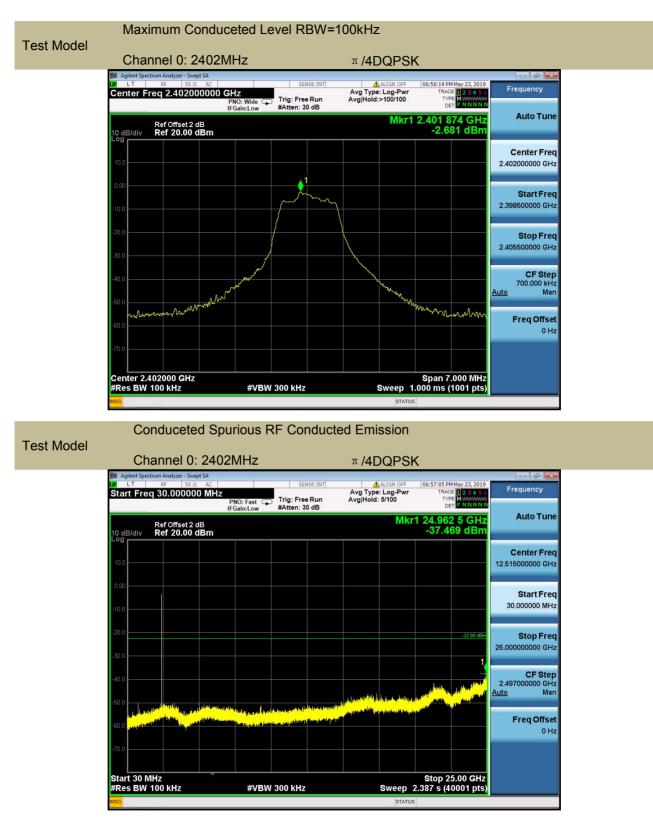




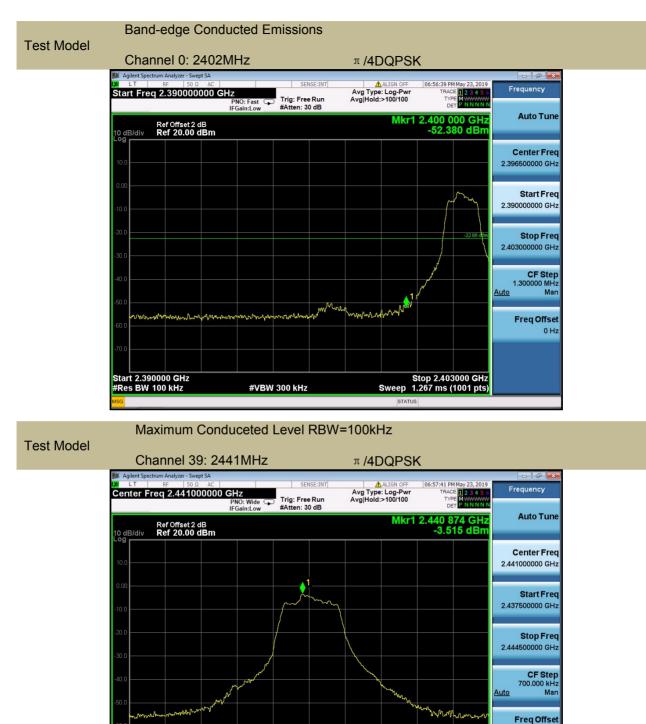












Center 2.441000 GHz #Res BW 100 kHz

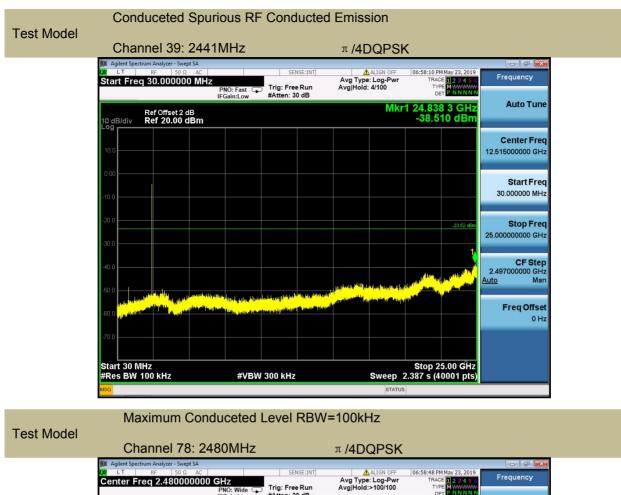
#VBW 300 kHz

Span 7.000 MHz Sweep 1.000 ms (1001 pts)

STATUS

0 Hz











Band-edge Conducted Emissions

Channel 78: 2480MHz π/4DQPSK Agilent Spectrum Analyzer - Swept SA ALIGN OFF Avg Type: Log-Pwr Avg|Hold:>100/100 06:59:25 PM May 23, 2019 Frequency TRACE 1 2 3 4 5 TYPE MWWW DET P NNNN Start Freq 2.478000000 GHz PNO: Fast Trig: Free Run IFGain:Low #Atten: 30 dB Auto Tune Mkr1 2.483 500 GHz -55.748 dBm Ref Offset 2 dB Ref 20.00 dBm 10 dB/div **Center Freq** 2.489000000 GHz Start Freq 2.478000000 GHz Stop Freq 2.50000000 GHz CF Step 2.200000 MHz Man Auto Wind I W - alala JAG. IL **Freq Offset** 0 Hz Start 2.47800 GHz #Res BW 100 kHz Stop 2.50000 GHz Sweep 2.133 ms (1001 pts) #VBW 300 kHz STATUS



