Recently we have seen several QAM24’s come back from the field as non-functional. Analysis of the QAM24 assemblies has providing some insight into the possible root cause of these issues. This is mechanical/physical damage to the circuit boards. On several of the assemblies we analyzed there were parts missing from the top and/or bottom sides of the assembly. There was further evidence that the parts and been removed from the circuit card by some kind of mechanical force.

The most probable cause of this damage would be improper care being taken when these assemblies were installed or removed from the chassis. In the picture below I have highlighted in red the areas of the opening were you should not allow the circuit card to come into contact with the chassis. This could have the effect of raking/stripping components from the circuit card assembly.

You should remove the top cover from the chassis and use extra care when installing or removing a QAM24 from the chassis to avoid dragging the circuit board across the edges of the opening in the chassis.