EVLA MONITOR & CONTROL CDR

RFI TEST RESULTS
MIB Board Test Results

![Graph showing RFI levels](image)

- **dbuV/m at 3m** vs **MHz**
  - **Green = FCC Part 15-B RFI Limit**
  - **Sky blue = Co. Lab cal. OATS Level**
  - **Dark blue = MIB chamber test**
  - **Red = EVLA Harmful Level**
MIB Board Test Results

- MIB Is 25 dB Below FCC Part 15-B RFI Limit
- MIB is 48 dB Below Commercial VCMA9 Board
Shielding Function Applied To MIB RFI

- MIB Is Below EVLA Harmful Levels When Shielding Function Is Applied To Type II (Double Wide) Module
Shielding Function Applied To MIB RFI
Explanation Of Previous Slide

MIB PCB RFI emission levels are shown in dark blue. Note that they are well below the required FCC part 15B RFI standard in sky blue. The yellow triangles are levels as measured at an outdoor lab in Colorado. The type II module shielding function is applied to the MIB PCB emission levels to result in a final RFI level (purple) that is well below the required EVLA harmful level seen in pink.

Thank You
Robert Ridgeway
IPG Engineer
Commercial Board Test Results

VCMA 9

Green=FCC Part 15B Limit

Frequency (MHz)

ERIP (dBW)

-100.00
-90.00
-80.00
-70.00
-60.00
-50.00
Cost Savings

- Less Shielding Needed
- Wires Attached To MIB And Leading Out Of RFI Enclosure Must Be Shielded