

## **Test Setups for 2.4ZRA Range Extender Emissions**



Photo 1: Test setup for radiated spurious between 9kHz and 30MHz with EMCO 6502 Loop Antenna shown with Range Extender



Photo 2: Test setup for radiated spurious between 9kHz and 30MHz with EMCO 6502 Loop Antenna shown with Range Extender



Photo 3: Test setup for radiated spurious between 9kHz and 30MHz with EMCO 6502 Loop Antenna shown with Range Extender

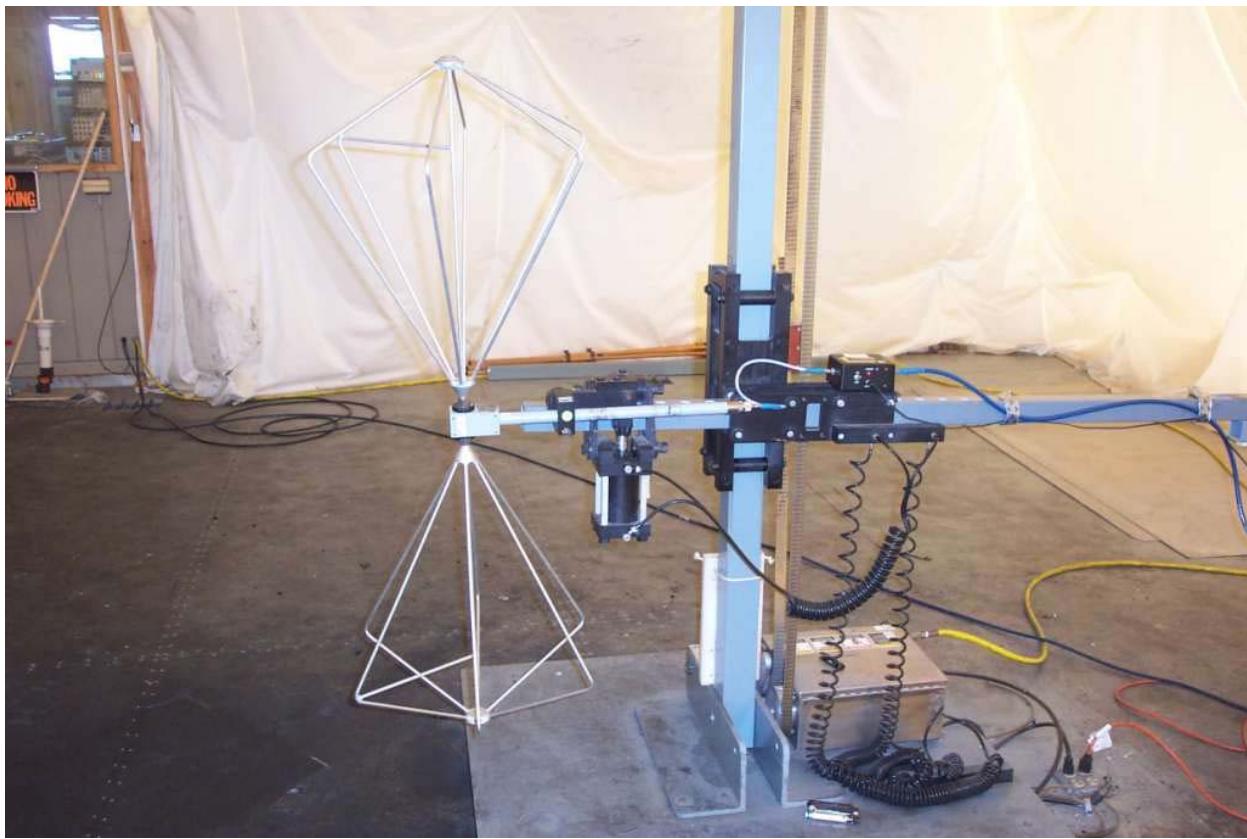


Photo 4: Test Setup for Radiated Spurious measurements between 30MHz and 300MHz with AH Systems PAM 0126 amplifier and EMCO 3110B Biconical antenna in vertical orientation

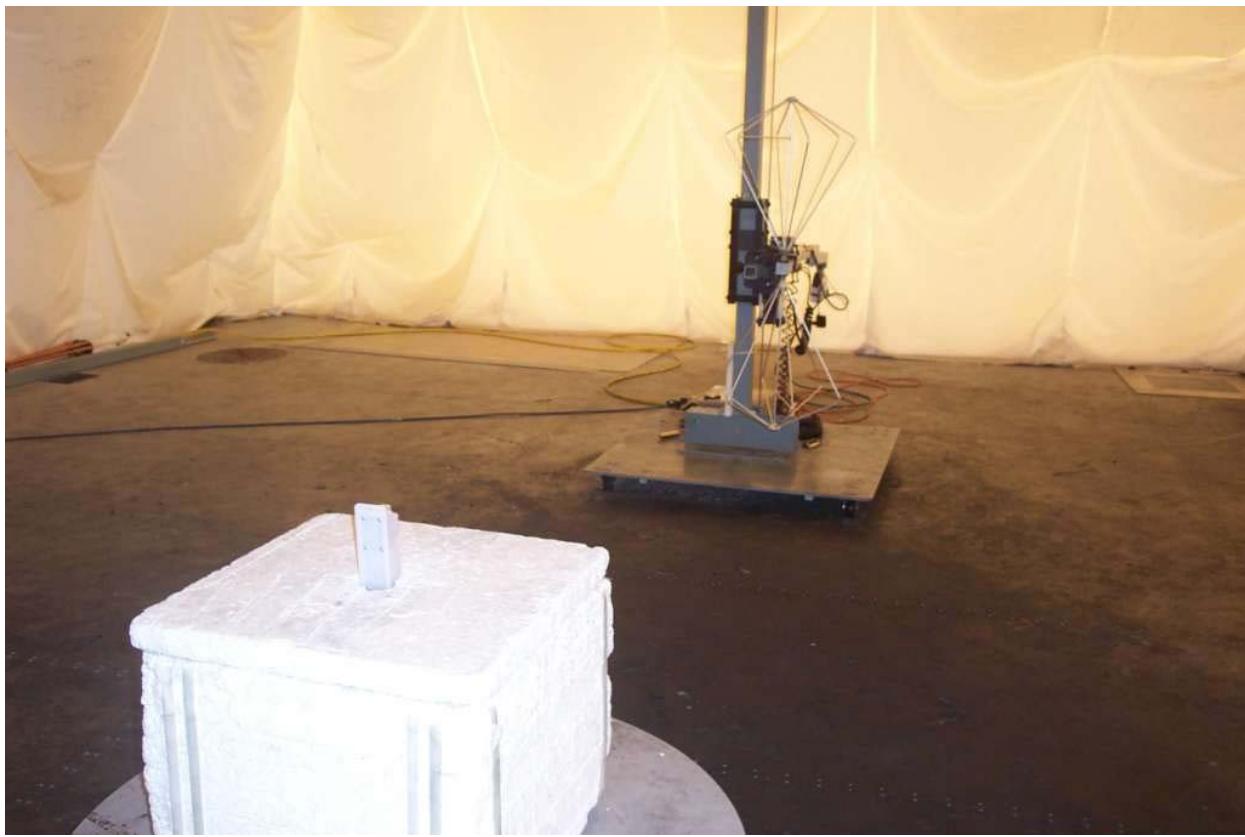


Photo 5: Test Setup for Radiated Spurious measurements between 30MHz and 300MHz using EMCO 3110B Biconical antenna shown here in vertical orientation and Range Extender in foreground

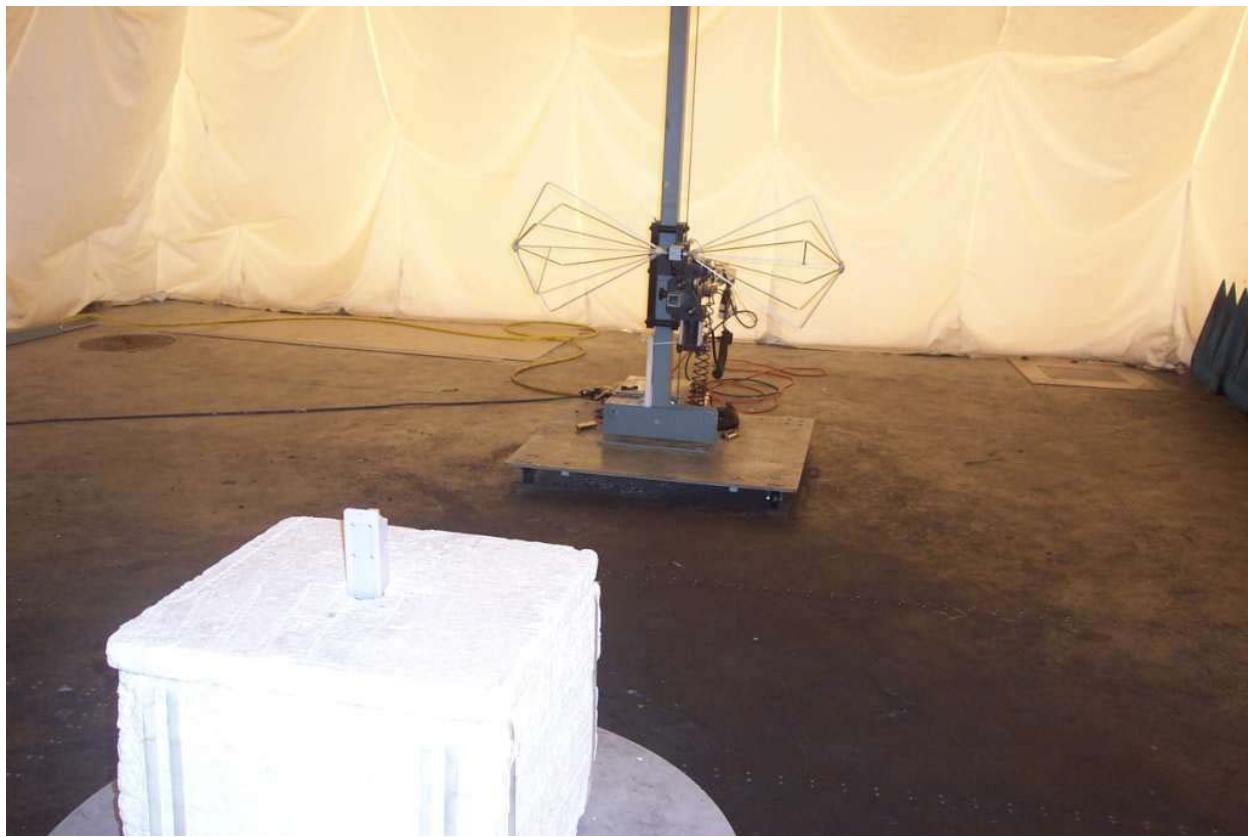


Photo 6: Test Setup for Radiated Spurious measurements between 30MHz and 300MHz using EMC 3110B Biconical antenna shown here in horizontal orientation and Range Extender in foreground

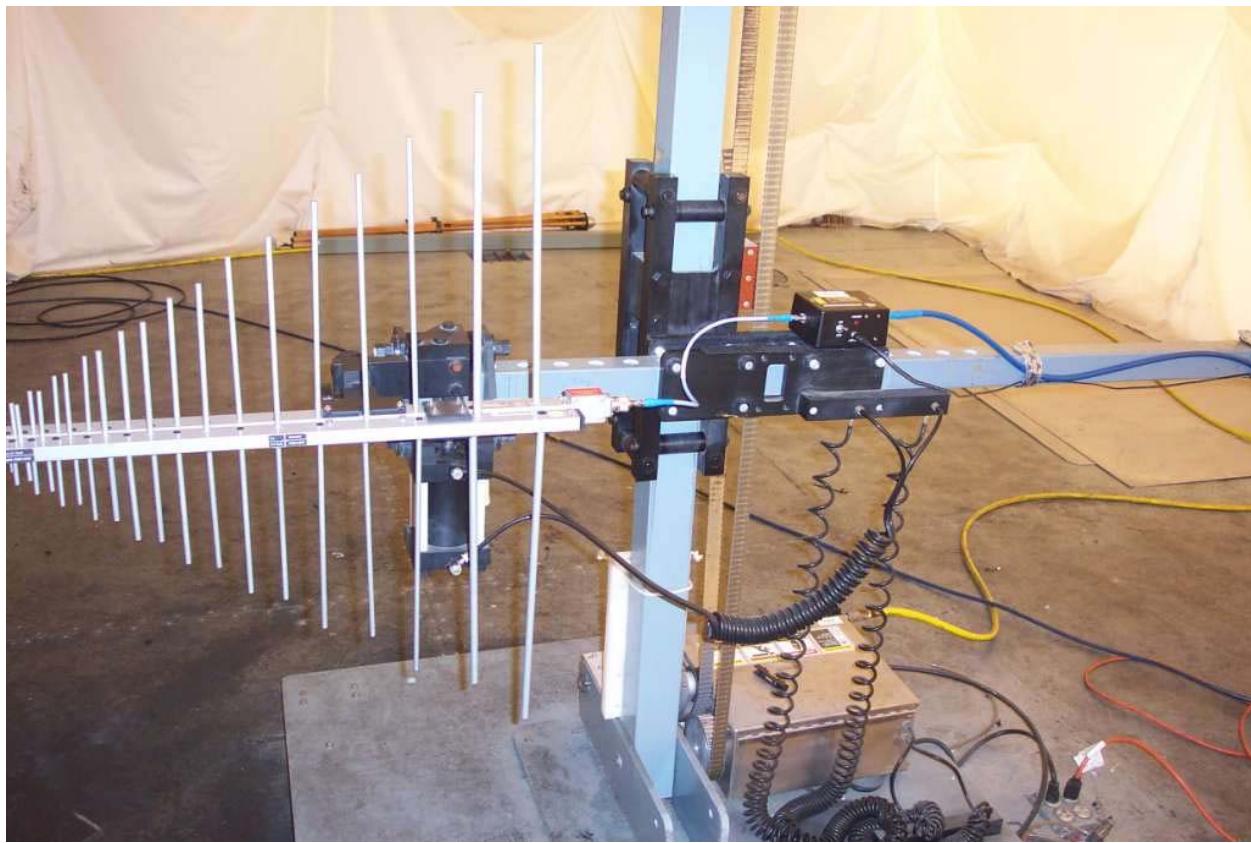


Photo 7: Test setup for RX radiated spurious between 200MHz and 2GHz with AH Systems PAM 0126 amplifier and EMCO 3148 Log Periodic in vertical orientation

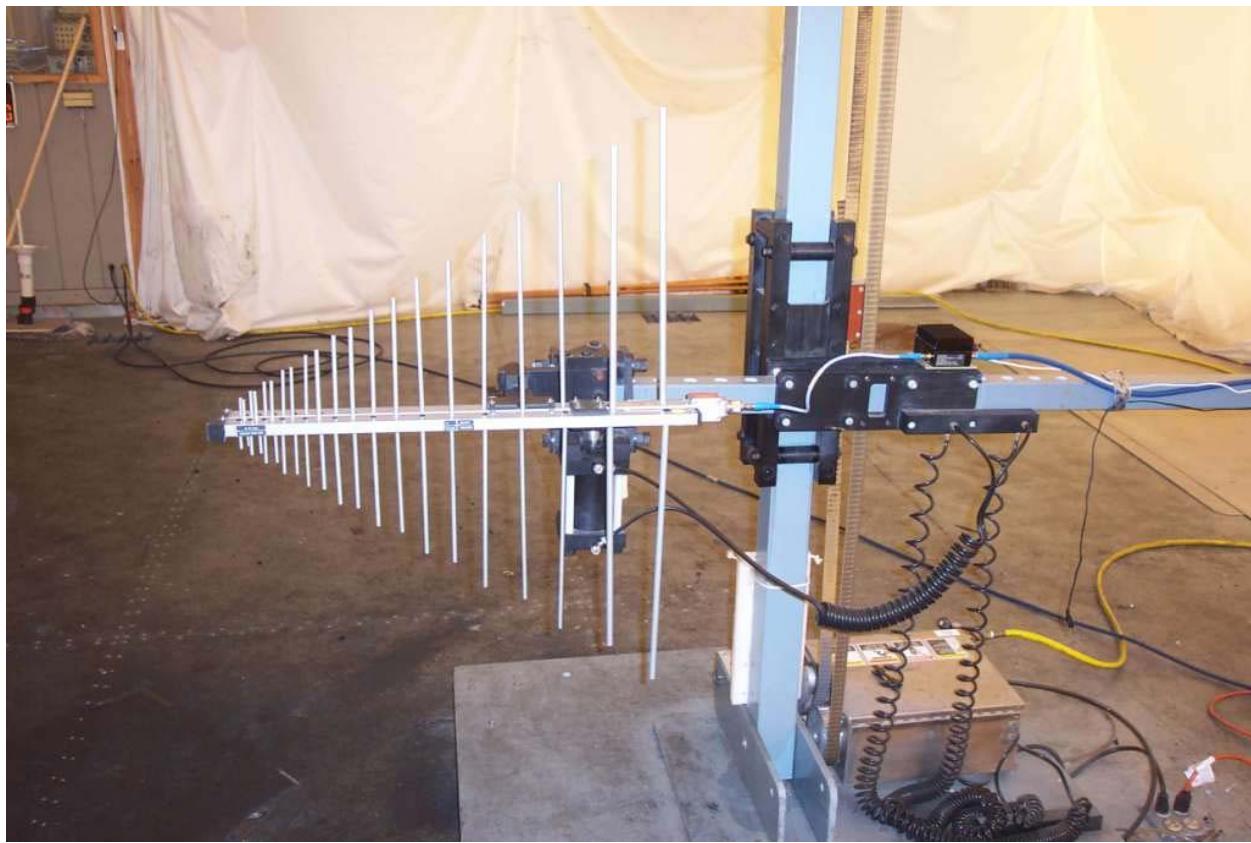


Photo 8: Test setup for TX radiated spurious between 200MHz and 2GHz with MiniCircuits ZHL 1042J amplifier and EMCO 3148 Log Periodic in vertical orientation



Photo 9: Test setup for radiated spurious between 200MHz and 2GHz with EMCO 3148 Log Periodic in vertical orientation shown with Range Extender in foreground

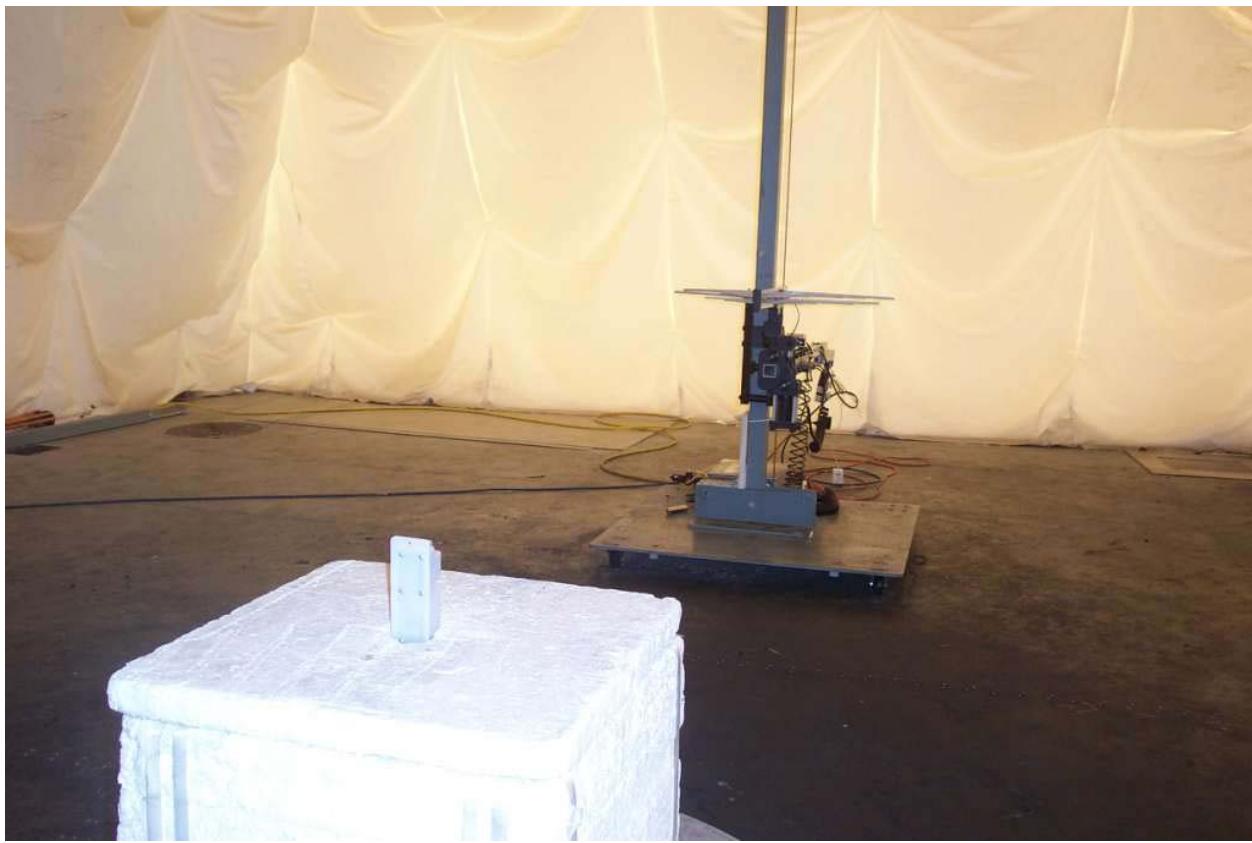


Photo 10: Test setup for radiated spurious between 200MHz and 2GHz with EMCO 3148 Log Periodic in horizontal orientation shown with Range Extender in foreground

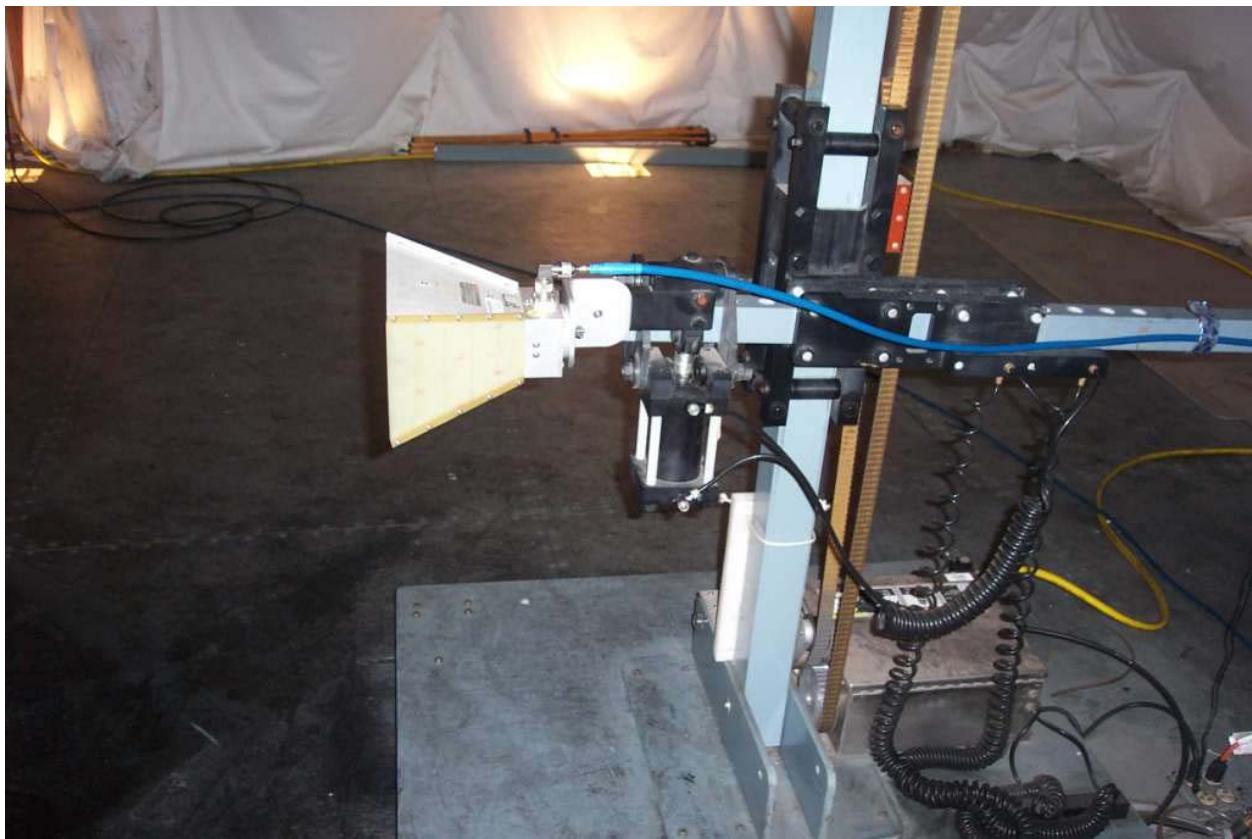


Photo 11: Test setup for TX fundamental radiated emission with EMCO 3115 horn antenna in vertical polarity (no amp or high pass filter)

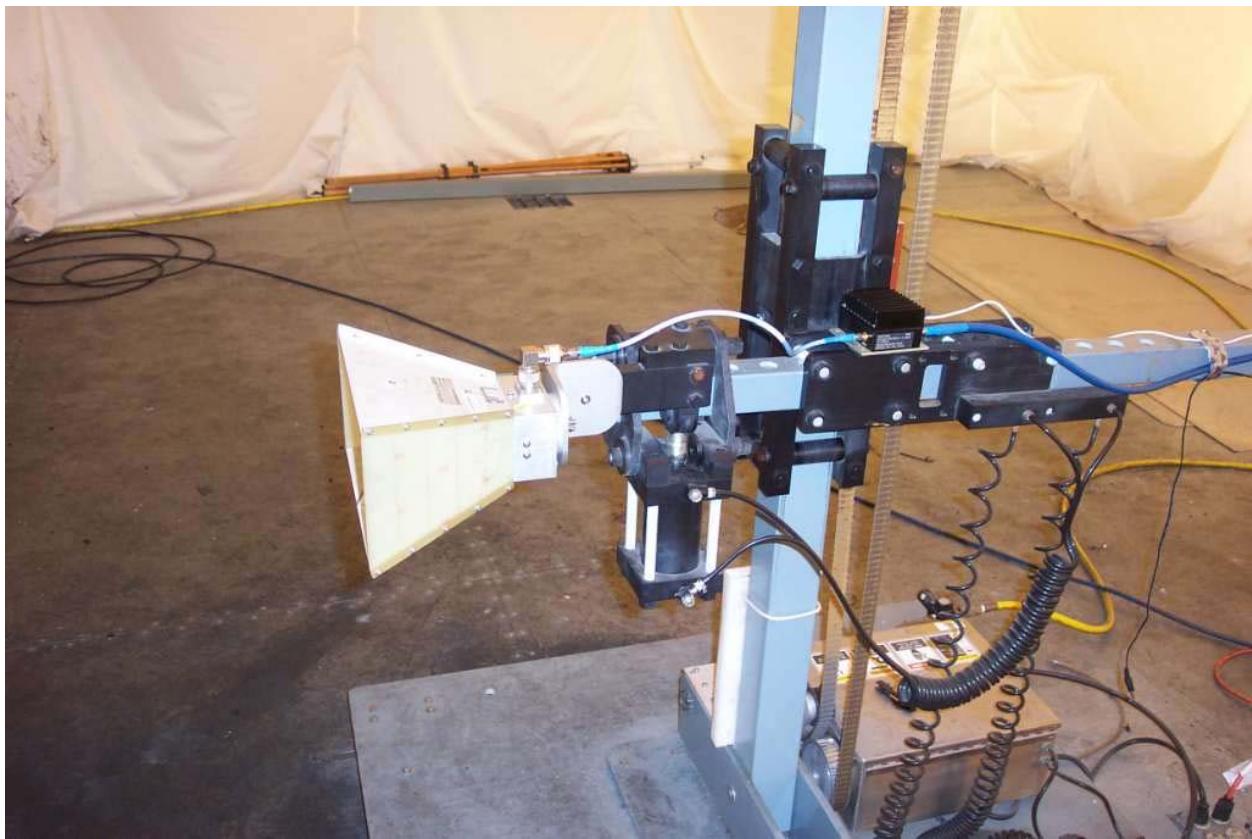


Photo 12: Test setup for TX radiated spurious emissions between 1 and 3GHz with MiniCircuits ZHL 1042J amp and EMCO 3115 horn antenna in vertical polarity (no highpass filter)

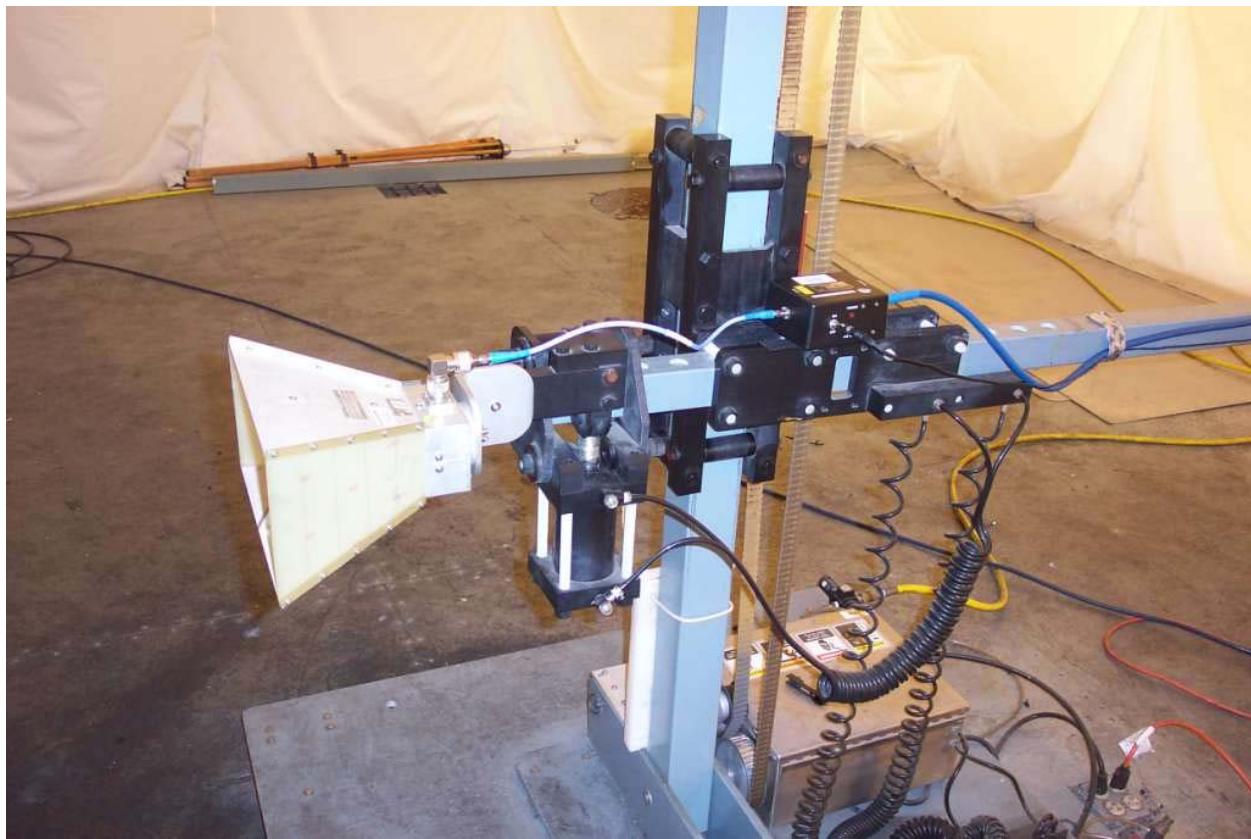


Photo 13: Test setup for RX radiated spurious emissions between 1 and 18GHz with AH Systems amp and EMCO 3115 horn antenna in vertical polarity (no highpass filter)

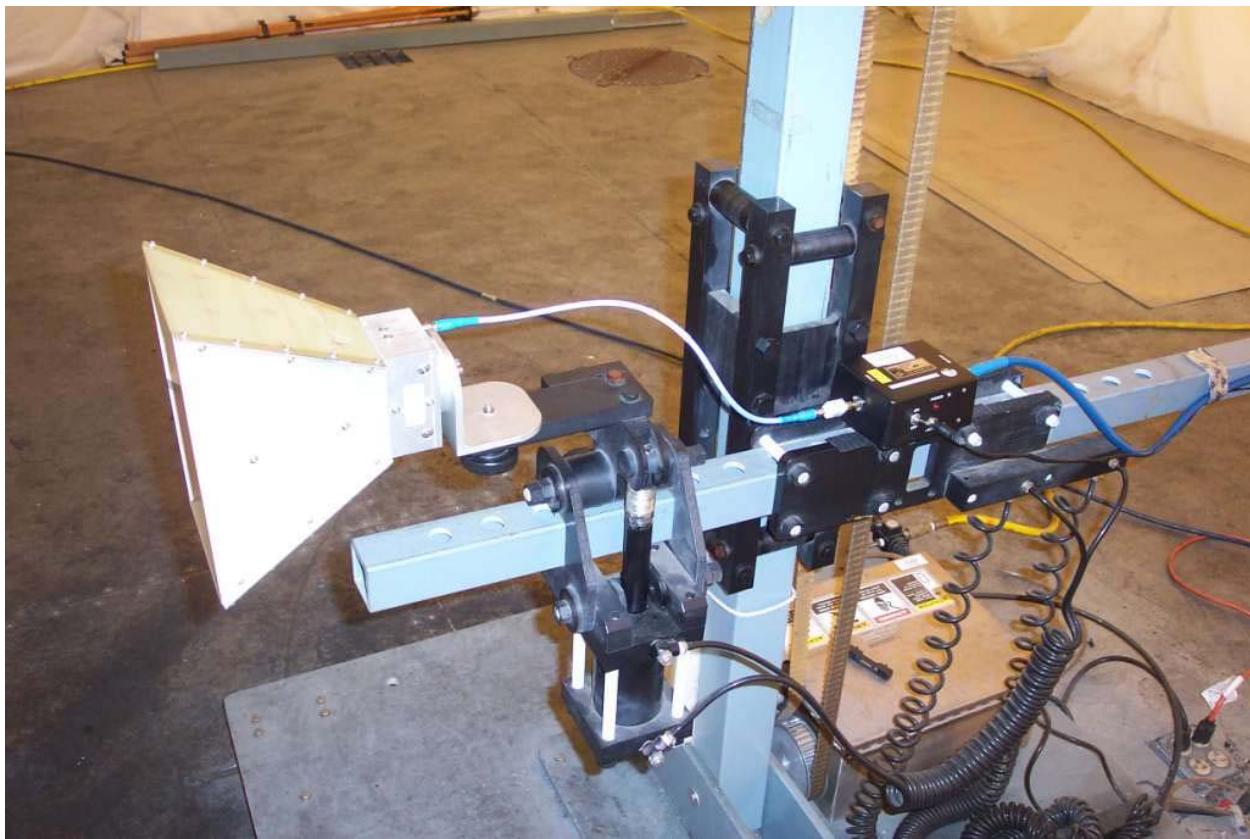


Photo 14: Test setup for TX radiated spurious emissions between 3 and 18GHz with AH Systems PAM 0126 amp and highpass filter and EMCO 3115 horn antenna in horizontal polarity



Photo 15: Test setup for radiated spurious emissions between 1 and 18GHz with EMCO 3115 horn antenna in horizontal polarity and Range Extender on turntable

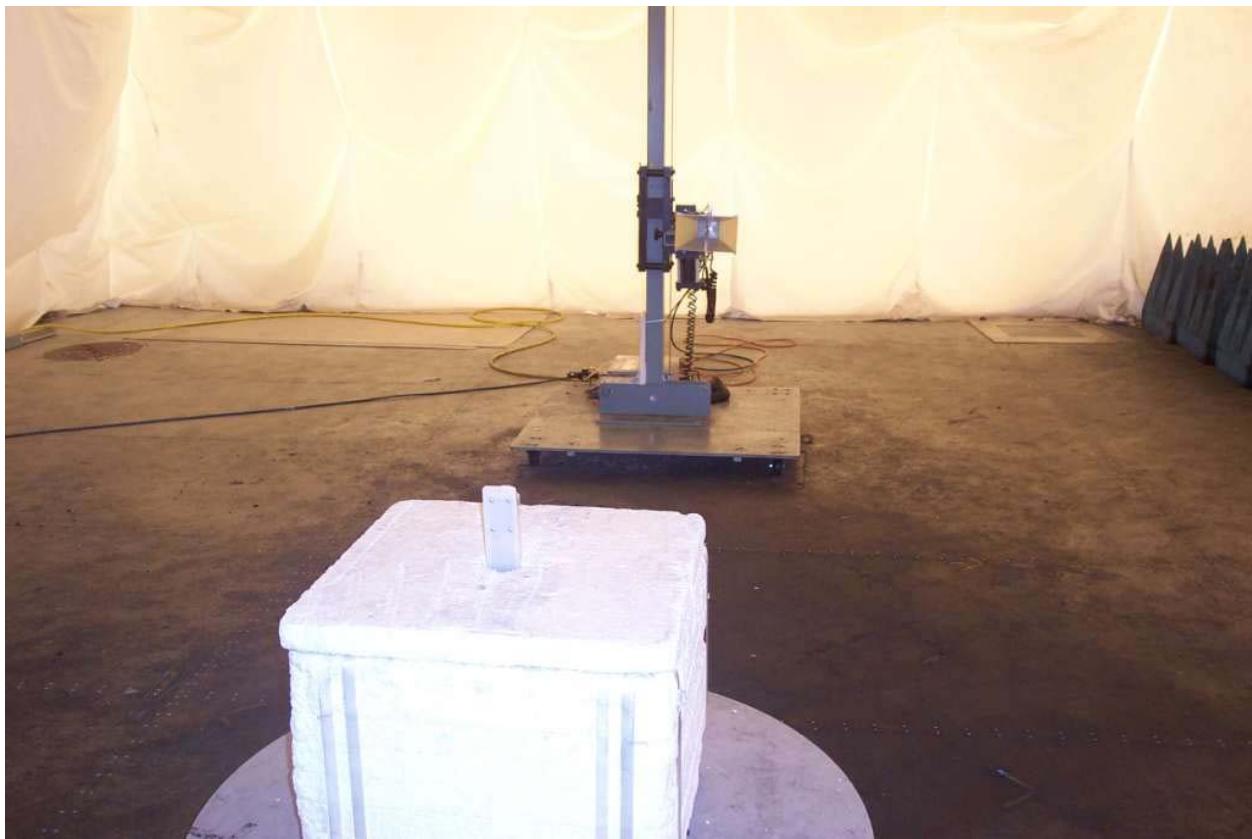


Photo 16: Test setup for radiated spurious emissions between 1 and 18GHz with EMCO 3115 horn antenna in vertical polarity and Range Extender on turntable

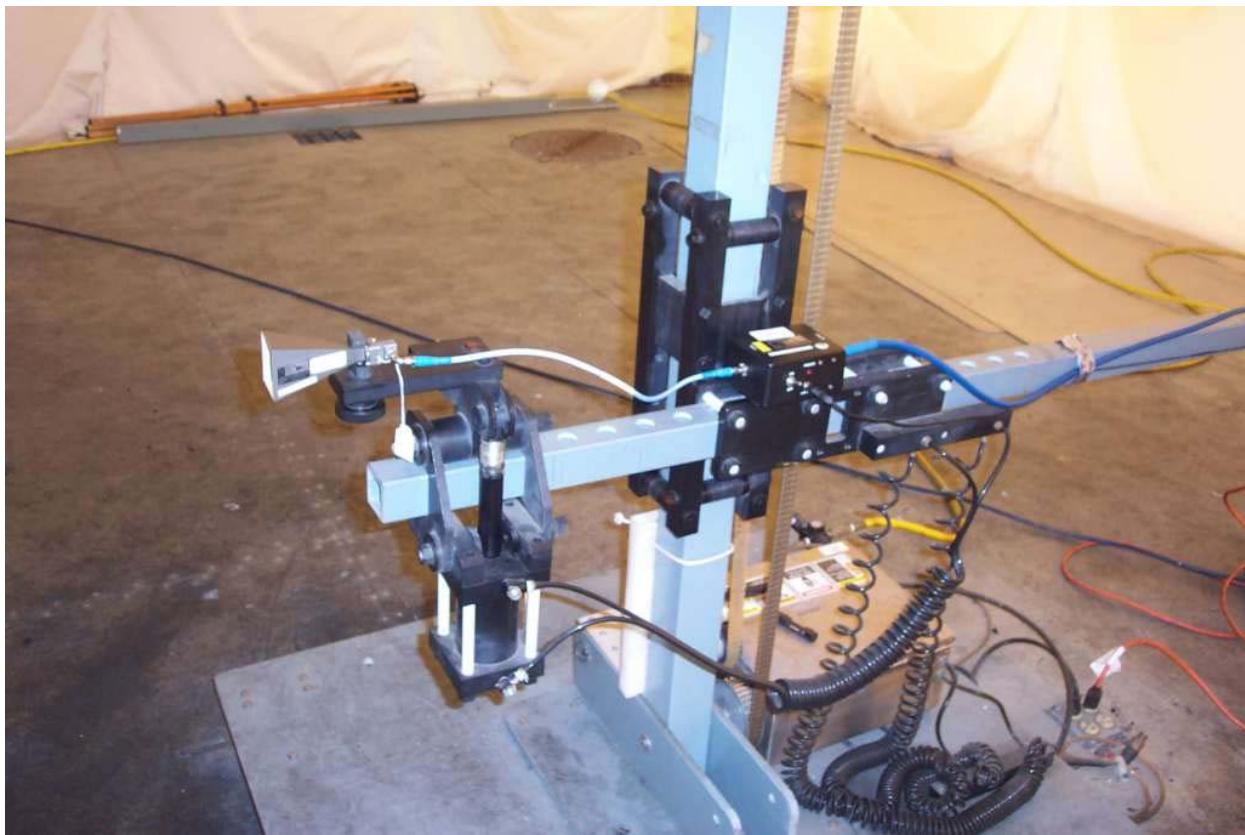


Photo 17: Test setup for radiated spurious emissions above 18GHz with PAM 0126 amplifier and AH systems SAS-572 Horn antenna in horizontal polarity (high pass filtering is accomplished with horn antenna)

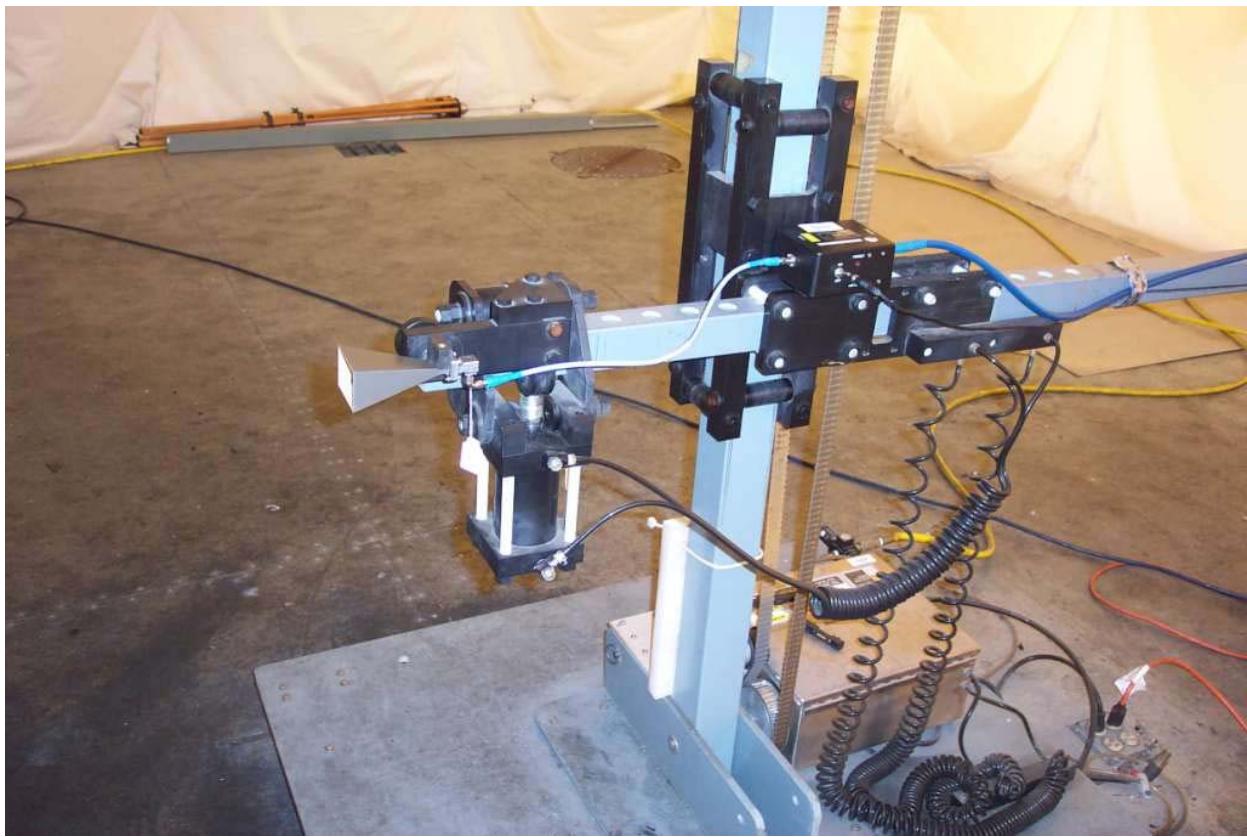


Photo 18: Test setup for radiated spurious emissions above 18GHz with PAM 0126 amplifier and AH systems SAS-572 Horn antenna in vertical polarity (high pass filtering is accomplished with horn antenna)

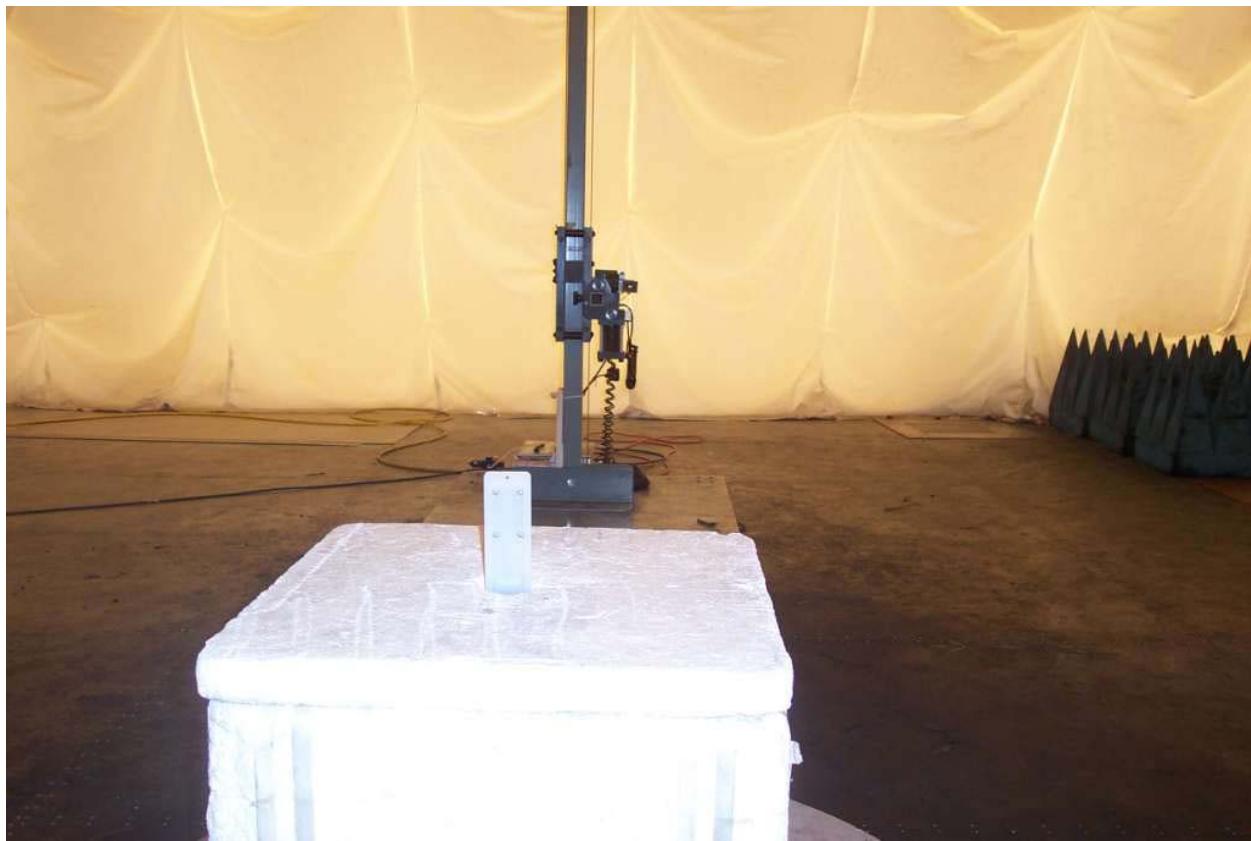


Photo 19: Test setup for radiated spurious emissions above 18GHz with AH Systems SAS-572 horn antenna in vertical polarity and Range Extender on turntable

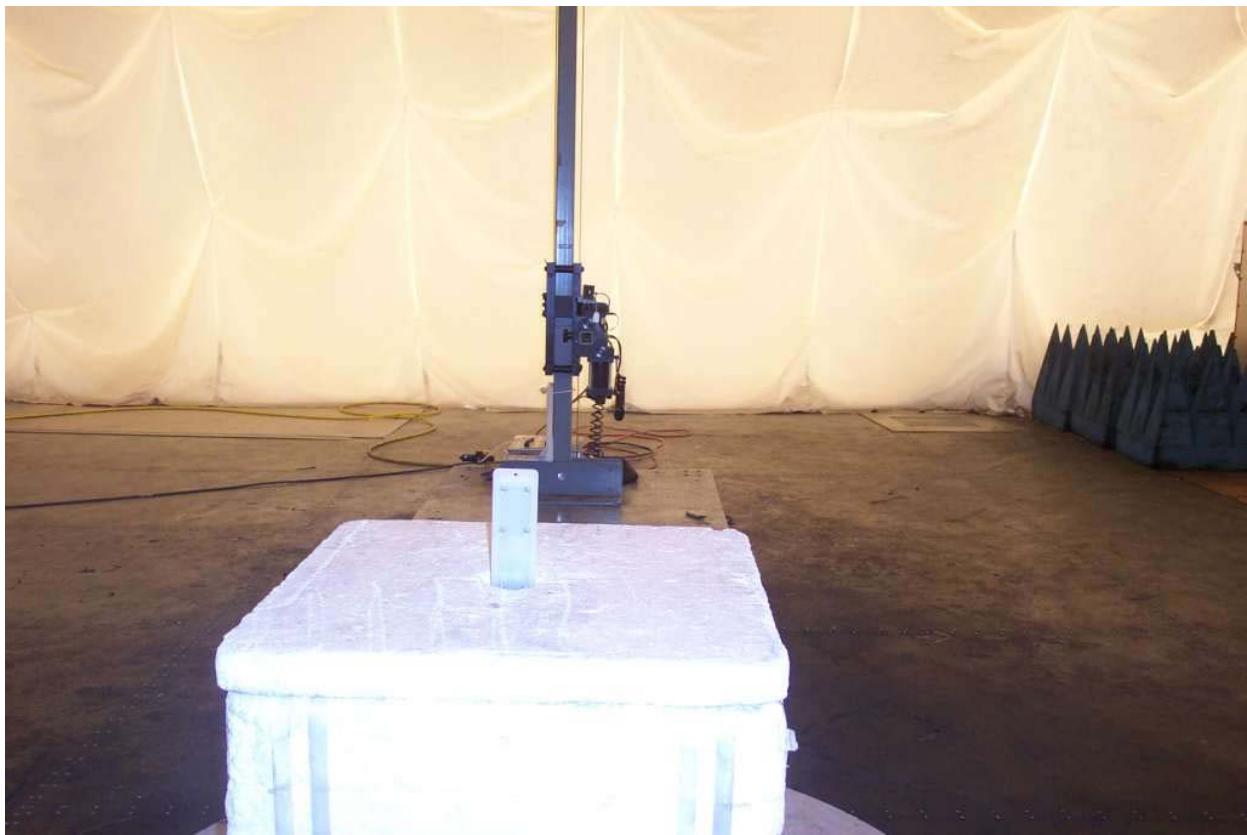


Photo 20: Test setup for radiated spurious emissions above 18GHz with AH Systems SAS-572 horn antenna in horizontal polarity and Range Extender on turntable

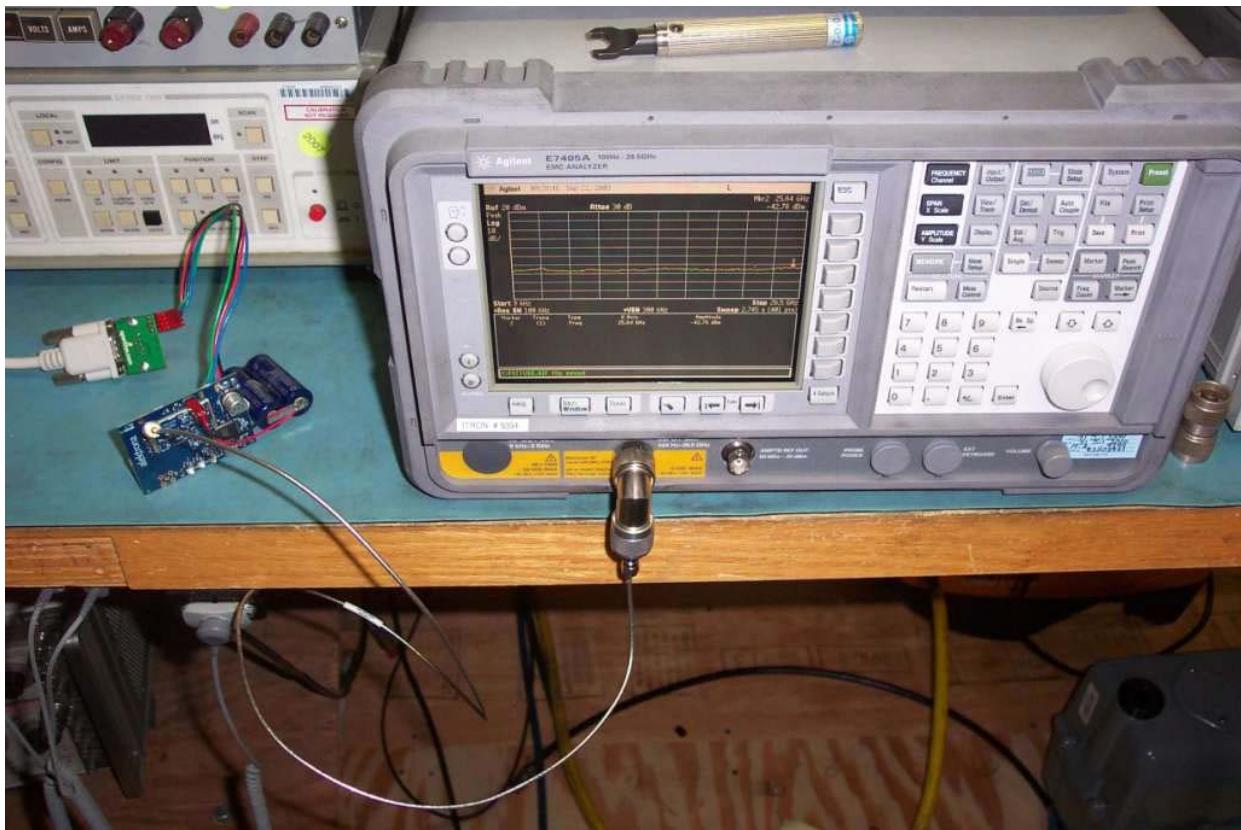


Photo 21: TX conducted spurious measurement with Range Extender board and Agilent E7405A Spectrum Analyzer

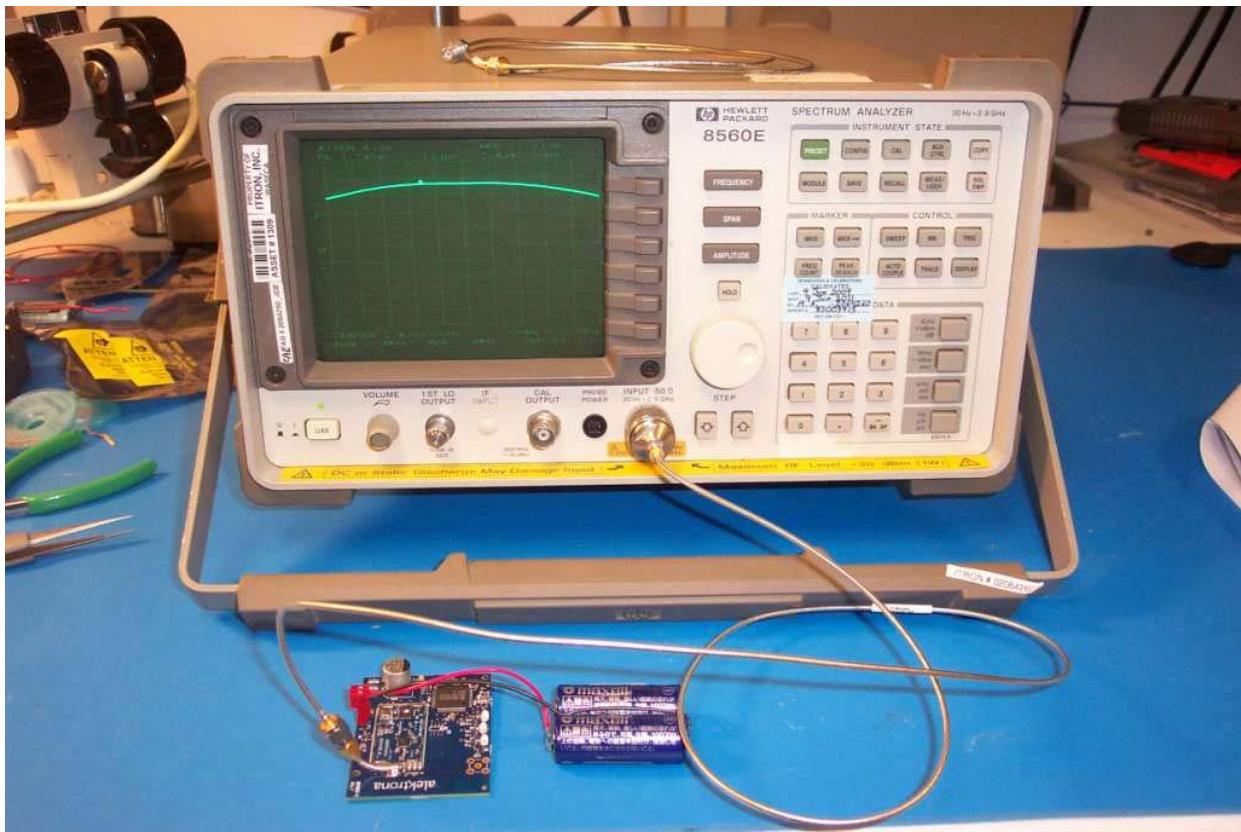


Photo 22: TX conducted measurements (TX conducted power out, 6dB Bandwidth, Bandwidth of Momentary signals (99%BW), TX power spectral density, TX conducted band edge), of Range Extender board using HP8560E Spectrum Analyzer