

From: Barry Hackworth

To: Jose Trevino

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Message:

Electrical setup

Figure 1, UUT inside Grounded RF Hood and Grounded Temp/Alt/Humidity Chamber

Figure 2, Timing sequence for Pulse modulation at 149MHz

The array will be assembled into the RF Hood. The RF Hood will be grounded and tested for leakage in a RF enclosure. The Shielding Effectiveness (SE) for the RF Hood will be determined. It will be at least 60dB. The array will be placed inside the Temp/Alt/Humidity chamber (tested at 40 dB SE) and grounded. A monitoring Spectrum Analyzer will be setup to monitor any leakage not to exceed IEEE Std C95.1-2006. The levels (149MHz carrier, Pulse Modulated at 279Hz at 20% duty, 716us) will be monitored at 500W, 2000W and 3000W for 5 minutes at each input level at ambient and tested, turned off, then temperature will be raised to 60°C turned on and tested, turned off, while at 60°C and 95% Humidity turned on and tested, turned off, and finally at 15,000 feet turned on and tested.

We are trying to determine if the array as designed will arch under any of these conditions.