CP04 gold overspray measurement The worst overspray is at the top near the ESD harness connection at places the gap is as small as 2.5 mm.

See summary on page 11 of this document.

## From Rich Abbott:

To clarify our measurements, we used a Keithley 2450 Source Meter (can source up to 200VDC while simultaneously measuring current down to $\sim 0.1 \mathrm{nA}$ ) to drive the bias to quadrant connections in an effort to measure the resistance and hopefully catch any inadvertent low impedances (see page 104 of my notebook \#5 in case I have to elaborate in the future).
With 40VDC applied, we measured the leakage current from the bias electrode to each quadrant and found it to be less than 0.1 nA . This sets a lower limit of 400 G -ohms. We also noticed the leakage current would increase to 100 s of uA when we approached the edge of an electrified electrode. We took this to mean that the discolored region extending a fraction of a mm around some of the electrodes is actually real metalization, albeit thin, and likely extends the electrostatic profile of each electrode slightly beyond the design 5 mm gap $/ 5 \mathrm{~mm}$ electrode.





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G. Billingsley 10-27-16


