



RFID Alliance Lab: Testing Performance

February 27, 2006

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About RFID Alliance Lab

- ◆ Evaluate RFID products in a *scientific* way
- ◆ Provide useful, timely, credible, and unbiased data to end users of RFID products
- ◆ Constituents
 - ◆ **University of Kansas / ITTC**: Primary research contributor
 - ◆ **RFID Journal**: Initial funding, distributor, advertisement
 - ◆ **Rush Tracking Systems**: Initiator, subject expert, industry liaison
- ◆ Business model
 - ◆ Sell reports (~\$1,000 / report) to finance future reports
 - ◆ Consulting / research projects



Important Findings

- ◆ *The hype stops here*
- ◆ Tag variance: distribution of performance of tag models
- ◆ Metal, water performance: what works, what doesn't, and how well
- ◆ Speeds: fast, slow, and slower
- ◆ Frequency dependence: not ready for world-wide operation



Collaboration & Research

- ◆ Yield verification
- ◆ UHF RFID on PDAs, cell phones, laptops
- ◆ Focused read field technologies
- ◆ RFID on aircraft

- ◆ Inexpensive, high-performance, low profile, passive UHF work-on-anything tag
- ◆ CDMA and passive RFID
- ◆ Integral privacy: RFID past the supply chain