



Test Report White Paper:

Operation Through Concrete Floor Tested using IEEE802.15.4 2.4GHz Physical
Layer

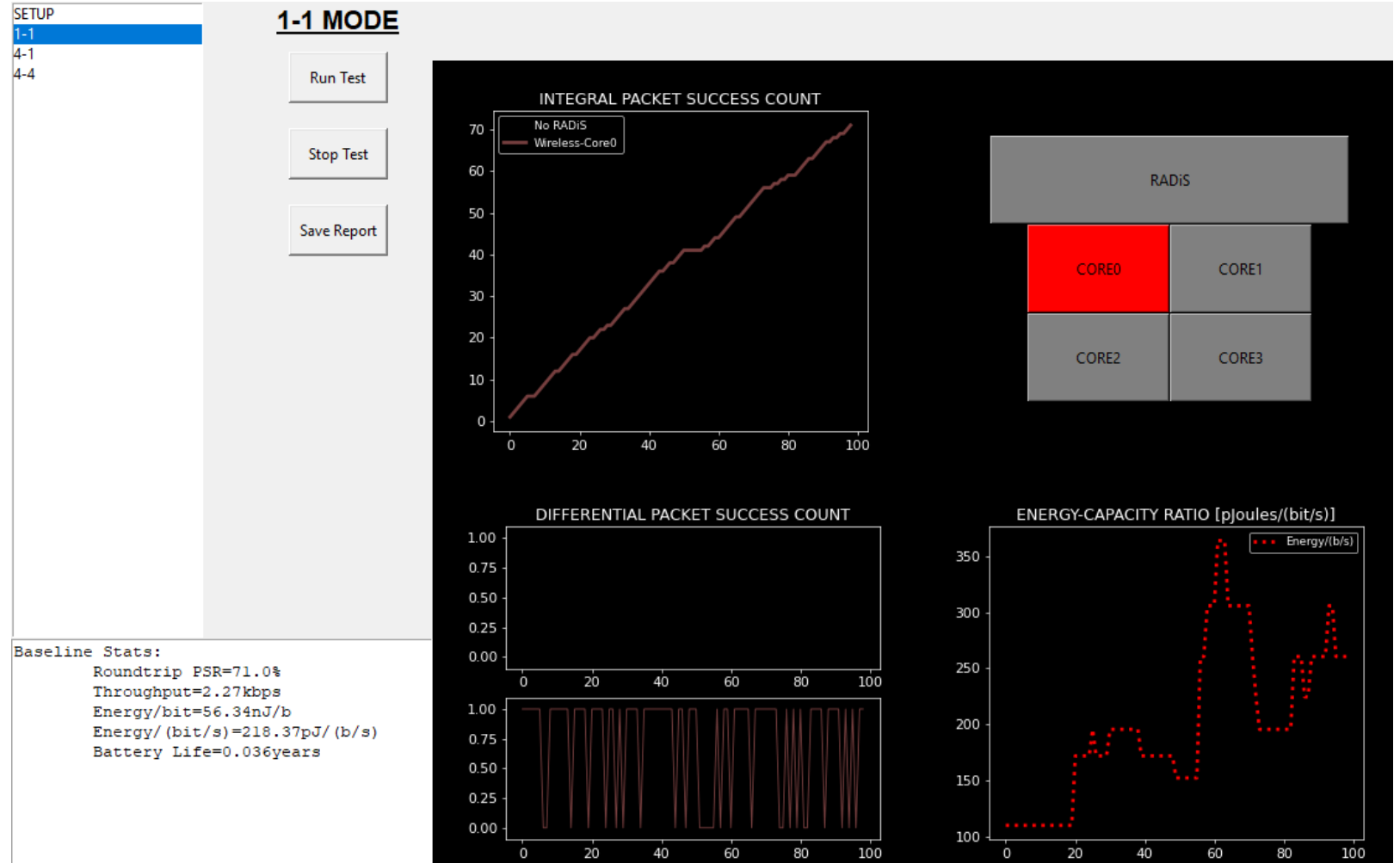
5/6/2024

SPX210C4 Data Through Concrete Floor

- Steel reinforced concrete walls and floors are among the most hostile aggressors for 2.4GHz wireless
- These slides show results of multi-core performance as the access point and device side are separated by a concrete floor between one level of a parking garage and the next level.
- **Result: 98% packet success rate through concrete floor**

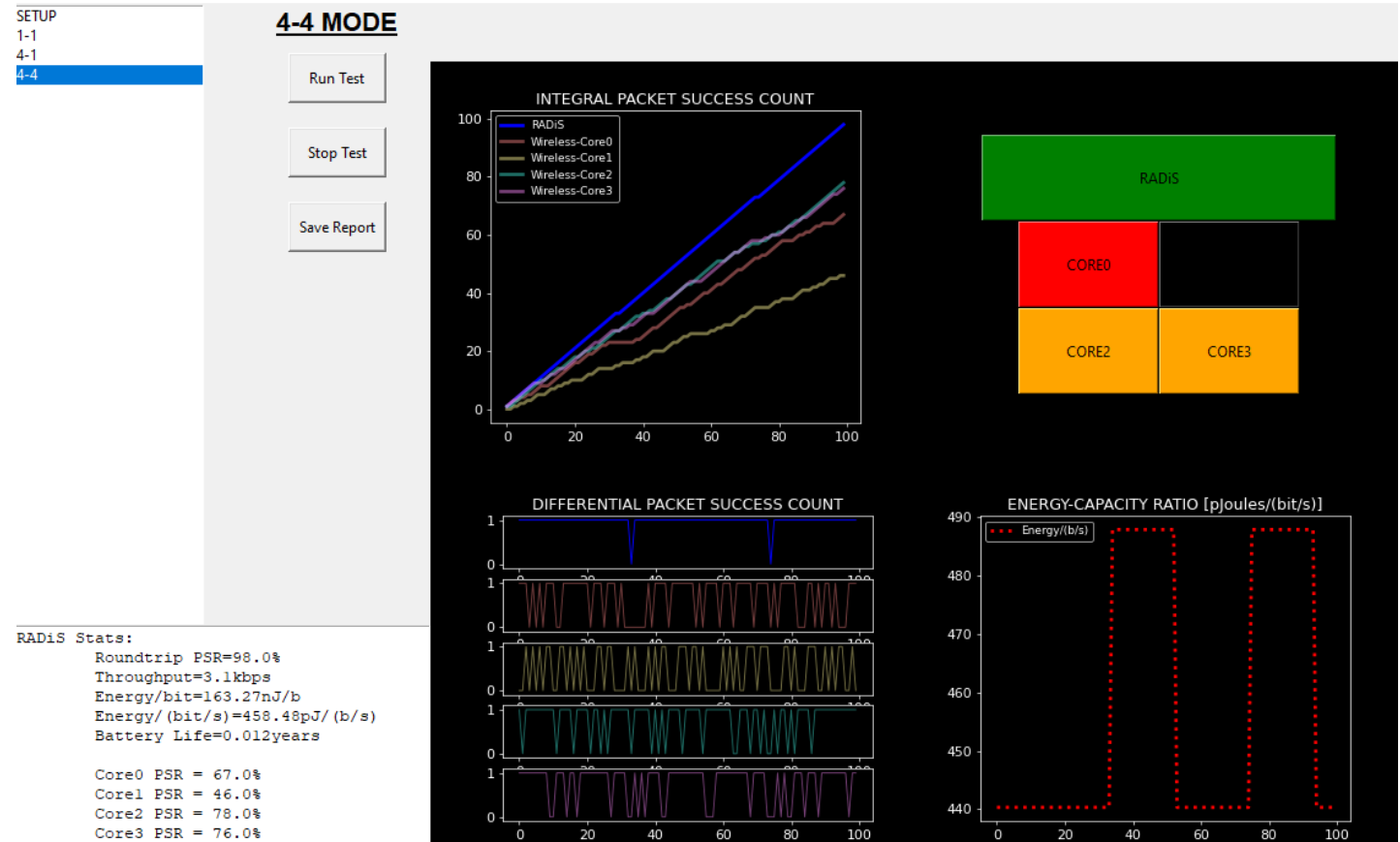
Test 1 to 1 Baseline: 71%

- Baseline using single core penetrating through a floor of reenforced concrete limps along at 71% packet success rate



RADiS™ 4 to 4 Mode Solves the Problem: 98%

- Diversity achieved with 4 to 4 mode RADiS™ multi-core penetrates with stronger signal and recovers PSR to 98%, battery life and improves network total cost of ownership



Thank you