Resonant power absorption experiments on the Radially Localized Helicon mode  C. LEE, G. CHEN, D. BERISFORD, R. BENGTSON, T. SCARBOROUGH, University of Texas at Austin — We present results of a series of experiments exploring the resonant power absorption as it relates to the Radially Localized Helicon (RLH) mode. We expand on previous work on this field by doing a frequency scan using a second RF generator as a frequency probe. We increase the measured frequency range to include the lower hybrid resonance (LHR) frequency as well frequencies above the driving frequency. The external magnetic field is varied in order to change LHR frequency conditions. Measurements of power absorption are taken using an in-situ RF sensor to measure voltage, current, and phase.