

Photonic Band Gap Accelerating Structures Progress Report

2Q FY19

This project is out of money and is awaiting further funding. The field work proposal is under review at DOE.

The high gradient testing of the PBG cell with elliptical rods at SLAC was conducted and failed. The structure was cut apart and examined with a scanning electron microscope (SEM). It was discovered that the failure was due to one of the PBG rod not brazed to the wall of the resonator during the brazing operation at SLAC. The photograph below shows a 10 micron gap between the PBG rod and the wall of the resonator and the traces of the multiple breakdowns surrounding the defect.

