

# CASE STUDY

## FREEDOM HALL CIVIC CENTER LIGHTING RETROFIT and UPGRADE

Located in Johnson City, TN, the Freedom Hall Civic Center was opened over 40 years ago to be the main venue for all concerts and shows in the Johnson City Metro Area. It is also now home to the East Tennessee State basketball teams.

The venue has a seating capacity of 8,500 and is used for event ranging from basketball games to concerts to ice skating shows.

### THE CLIENT CHALLENGE

As 40 year old facility, Freedom Hall had antiquated lighting systems that limited energy conservation, lighting control, and light quality. The challenge was to design a new lighting system that addressed NCAA requirements, while conserving energy and providing the level of control needed for arena lighting.

### THE LIGHTING SOLUTION

Retro-Tech performed a facility wide lighting upgrade. The project included upgrading the arena lighting, the concourses, and the back of house areas using primarily LED technology. The use of LEDs allows Freedom Hall to more effectively control the lighting in the arena area and also dramatically reduced maintenance costs due the the significantly longer life of the LEDs.

### THE RESULTS

The energy savings for a project of this magnitude were significant. Freedom Hall expects to save close to \$100,000 per year in electricity costs with another \$7,000 in material maintenance savings. While improvements were made through out the facility, it is the arena lighting that is perhaps the most impressive improvement to the facility. Older HID technology was replaced with new, high performance LED to improve both the quality of the light as well as the ability to control it effectively, without long warm up times.