

SMART LIGHTING FACT SHEET



GENTEX
CORPORATION

 **MAYO CLINIC**

Gentex Corporation and Mayo Clinic have co-developed a smart lighting system for medical applications. The system combines ambient room lighting with camera-controlled, adaptive task lighting to optimize illumination for surgical and patient-care environments.

Lighting Functionality/Features

- The smart lighting system allows medical staff to place focused illumination when and where it's needed most
- Unique lighting units contain banks of camera-controlled, dynamically adjustable LED arrays, which work in concert to optimize light for surgical and patient-care environments
- Features:
 - Flush, ceiling-mounted design
 - Lighting units incorporate ambient and adaptive task lighting
 - Hands-free user interface – lighting controlled via voice command, hand gestures or hand-held tracking device
 - Shadow mitigation
 - Polarized lensing to minimize glare from tissue and instruments
 - Integrated UVGI system
 - Integrated machine-vision camera orchestrates light-array activation, intensity, and direction to mitigate shadows and create optimal lighting conditions within the defined surgical field

About Gentex

- Technology company
 - Focused competency in electro-optical products – technologies that control/manipulate light
- Industries
 - Automotive
 - Digital Vision
 - Connectivity & Sensing
 - Dimmable Glass
 - Aerospace
 - Dimmable Aircraft Windows
 - Electronic Control Units
 - Fire Protection
 - Commercial Smoke Detectors
 - Signaling Devices
- Core Competencies
 - Product Design/Engineering
 - Microelectronics/Camera Development
 - Electronics
 - Glass Bending/Processing
 - Chemical Development/Coatings
 - Software Design
 - Displays

