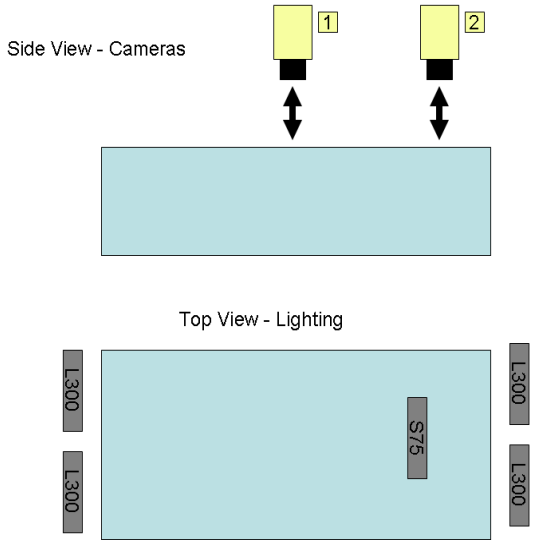
APPLICATION DATA

Presence/Absence Automobile Headliner | Multiple Light Array

description of application

The goal of the application is to identify the presence or absence of various features on an automobile head liner and attempt to verify the complete assembly and ensure that all parts are present.

setup for inspection



Illumination: (4) **L300-505-W** [300mm Linear Light 505nm Cyan - "Connect-A-Light"]
(1) **S75-505** [75mm Spot Light 505nm Cyan - "Brick Light"]

Filter: (2) **BP505**

(A) Lens Working Distance: 8’

(B) Light Working Distance: 8”

(C) Horizontal FOV: 63” Reading Light: 9”

evaluation

This evaluation is broken down into two different areas (1) Inspection of complete part (2) Inspection to ensure that the reading light module is in place and fully seated. All of the headliner components that must be detected are large enough to view with a single camera and full field of view. This provides ample contrast to verify absence or presence of all components. By using cyan lights the items of interest really pop out due to the back due to the color of material and camera’s sensitivity to this wavelength range. Due to extra interest in the map light location, an additional S75 Brick Spot Light with wide angle lenses, to further highlight this area. The large field of view requires multiple light arrays utilizing wide angle lenses. This solution provides full even illumination across the surface of the headliner highlighting all areas of interest.

application images