



## NVG LIGHTING CONFORMITY TEST KIT LM-33-550

### BACKGROUND

The NVG Lighting Conformity Test Kit (LM-33-550) provides the equipment components, processes and procedures for testing NVG modified cockpits. It provides standardized components for repeatable test results to ensure compliance with regulatory guidance in the Instructions for Continued Airworthiness of an NVG Lighting Original Equipment Manufacturer (OEM).

### MARKET NEED/CHALLENGE

Operators face the challenge of maintaining the continued airworthiness of aircraft NVG lighting. The modification of lighting within the aircraft is due to the requirement to filter out offensive light from affecting the performance of the night vision goggle.

Related issues include:

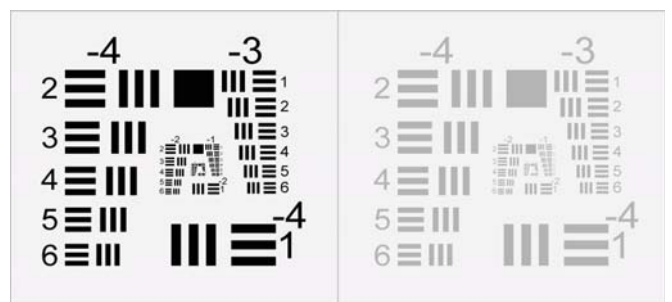
- Maintainers haven't received the training nor do they have access to the tools required to validate the airworthiness of the aircraft and ensure conformity.
- Maintenance programs do not address continued airworthiness inspection, certification, and conformity in NVG operations/maintenance manuals.
- Maintainers have no mechanism in place to ensure compliance with the lighting Instructions for Continued Airworthiness (ICA).
- Process and procedures used by NVG maintainers to inspect NVG modified aircraft lack standardization.
- Operators lack the equipment and procedures to inspect NVG modified aircraft in a method comparative to initial FAA or other regulatory certification authorities.

### SOLUTION OVERVIEW

The NVG Lighting Conformity Test Kit is a turnkey solution for maintaining aircraft NVG lighting featuring a USAF 1951 high and medium contrast resolution target, illumination source, digital light meter, light stands, tape measure, and an operator computer based training (CBT) program with evaluation checklists, packaged in a lightweight portable storage/transport case.



LM-33-550 Test Kit Contents



USAF 1951 High & Medium Resolution Target included for standard and repeatable test results

## FEATURE

### United States Air Force (USAF) 1951 Resolution Target

Resolution target is rugged and durable, designed to withstand over time for standardized and repeatable test results.

### Illumination Source

Provides simulated night sky illumination levels to ensure accurate NVG cockpit lighting conformity testing.

### Light Stands

Two (2) rugged and portable light stands provide precise positioning of the inspection system to the orientation of the aircraft cockpit.

### Digital Light Meter

Certified digital, easy to read light meter to accurately measure the luminance precisely to 1/100th lux measurements to precisely position test equipment for accurate and repeatable test results.

### Tape Measure

Tape measure provided to accurately position test kit components for precise and repeatable test results.

### Transport Case

A rugged portable case designed for easy transport and protection of the entire system.

### Training Program

Intuitive computer based training (CBT) program included to ensure standardized processes. Includes complete NVG lighting conformity evaluation procedures and checklists as used by regulatory authorities.

## BENEFITS

- Lightweight, durable, portable and cost effective solution.
- Ensures standardization of maintenance process and procedures.
- Designed to meet regulatory and lighting OEM compliance requirements.
- Intuitive, instructional training simplifies set-up and standardizes testing process.

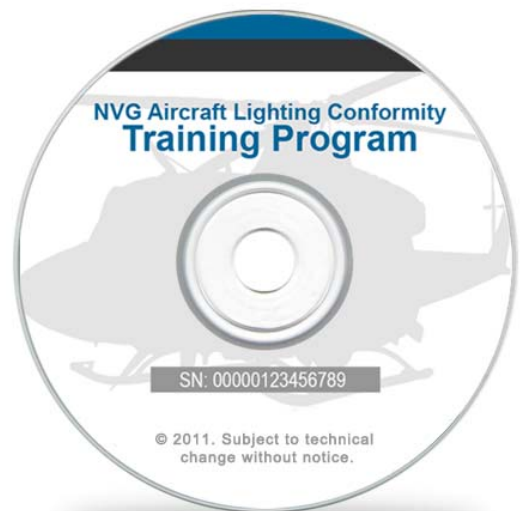
## RECOMMENDED ADDITIONAL EQUIPMENT:

### COCKPIT INSPECTION SCOPE NVG-104



The NVG-104 Inspection Scope is a handheld night vision monocular with a precisely tuned and calibrated proprietary filter that only allows the user to view energy that would decrease night vision goggle acuity. The NVG-104 is an easy to use, cost effective way to inspect the crewstation to ensure flight safety.

*Export of the NVG-104 is regulated by U.S. State Department, ITAR, Title 22, CFR 120-130*



NVG Aircraft Lighting Conformity Training CD



Hoffman Engineering leads the Aircraft Lighting and Night Vision Device (NVD) industries through the design and development of innovative solutions. With over 50 years experience and the world's most complete NIST traceable laboratory, Hoffman Engineering is an unrivalled resource for civil and military operations.

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