

**Nanoimprint Div.  
Senior Chief Engineer**

**Dr. Tomonori Nakamura**

**SCIVAX**

# **Sensing Optics for DMS/LiDAR**

# SCIENCE

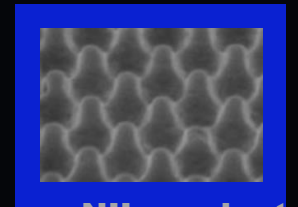
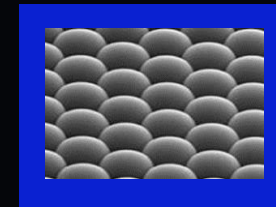
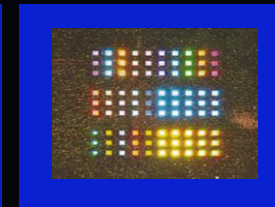
# VALUE

# MAXIMIZATION

**Ultrafine processing  
based on Nanoimprint Lithography**



NIL Foundry  
NIL M/C



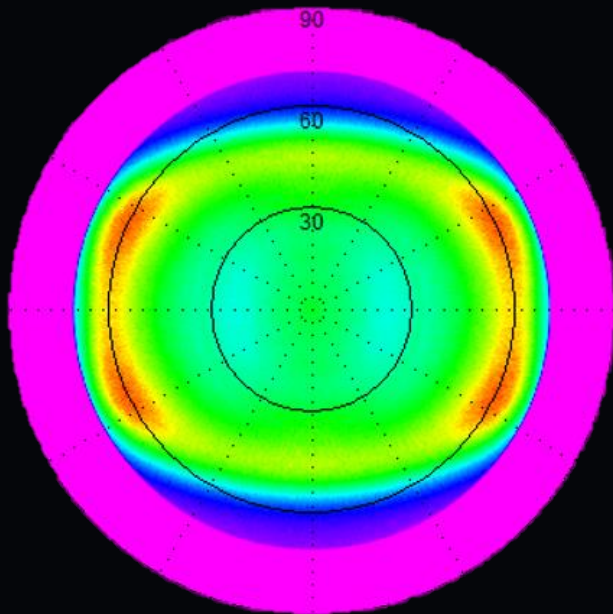
NIL products

**Nanoimprint + Advanced optical design**

THE BEST OPTICS  
FOR AUTOMOTIVE !

## THE BEST FOR DMS

FOI : 140°x110°

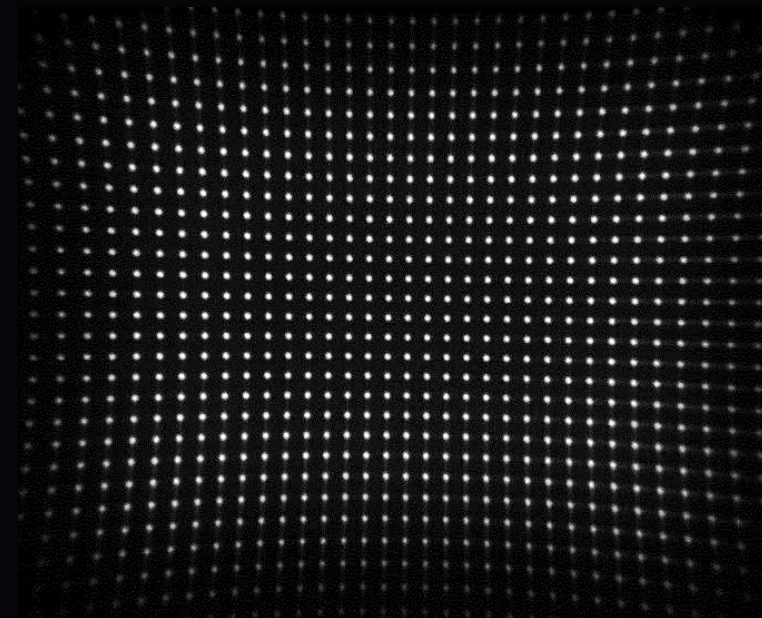


Platanus®  
Hybrid diffuser

**No interference**  
**Flexibility for light**  
**Low height of package**

## THE BEST FOR LiDAR(FLASH)

FOI : 60°x45° Dot # : ≒1000



Ardisia®  
Hybrid dot projector

**No limit of dot power**  
**Flexibility for light**  
**Low BOM cost**

# In-cabin, rear mirror position DMS (FOI : 140°x110°)

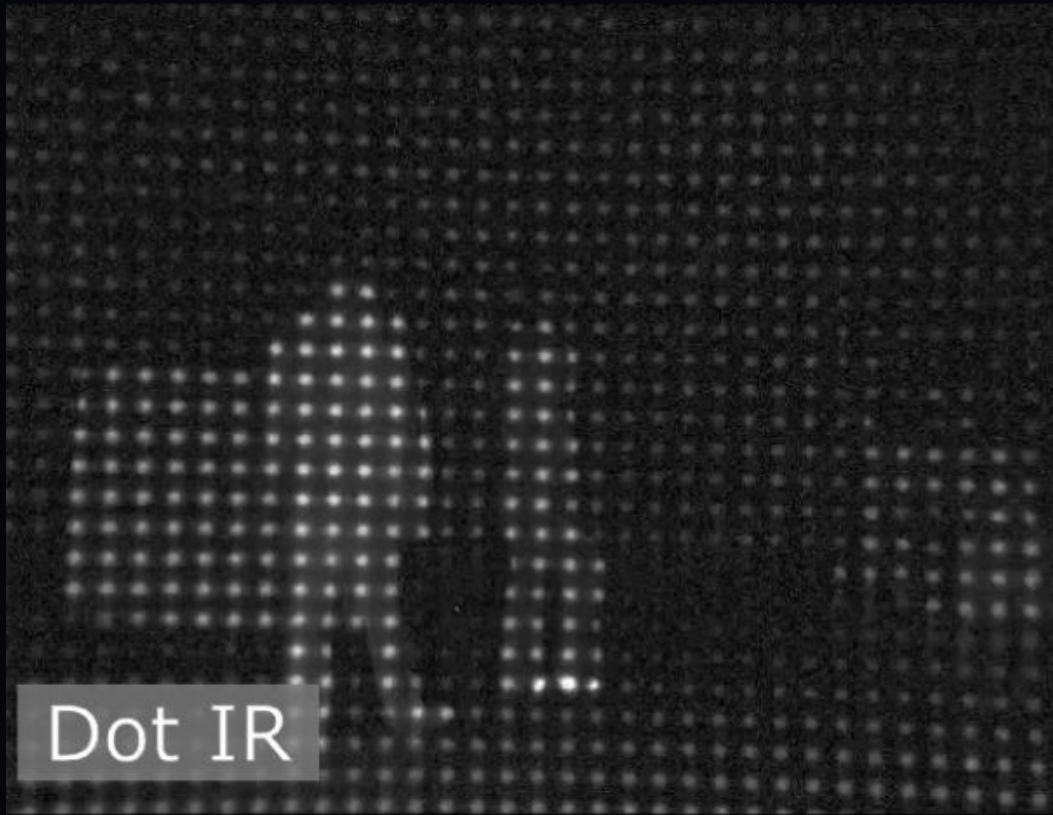


Melexis EVK-it + SCIVAX Platanus module : In collaboration with





# 10m depth image taken by Ardisia module (FOI : 60°x45°) (Out-cabin)

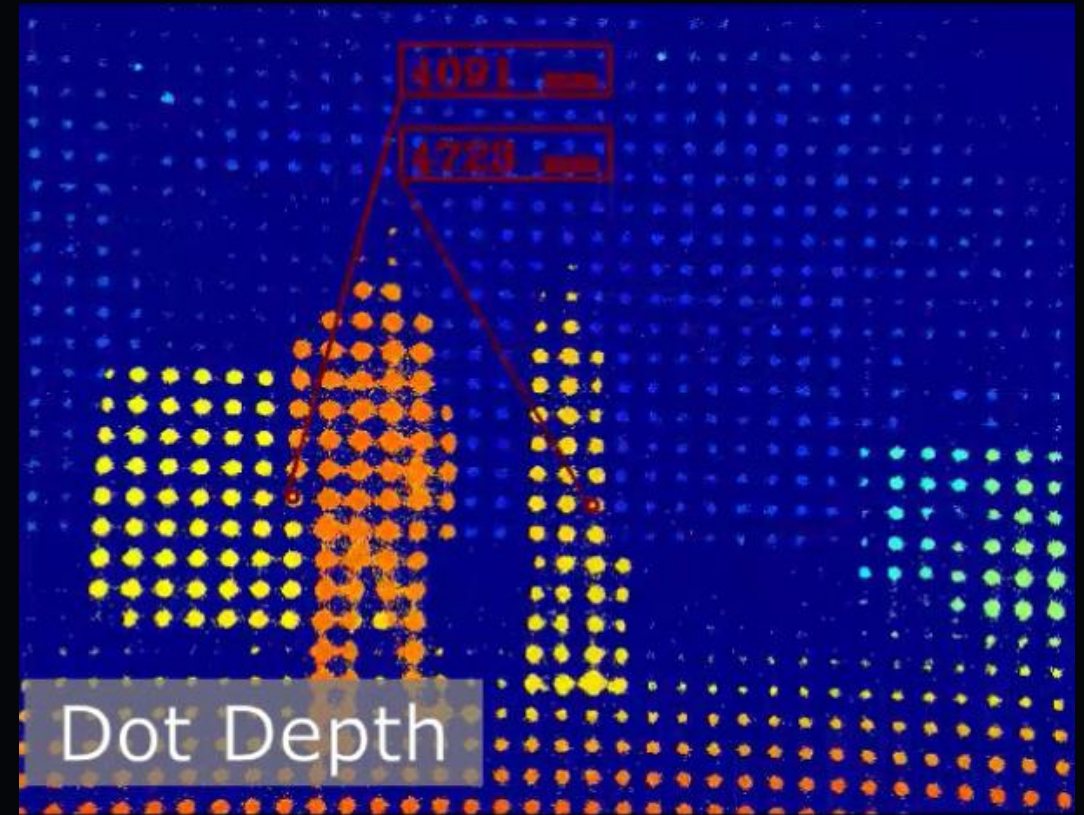


**Optical output power : 2W**

12m



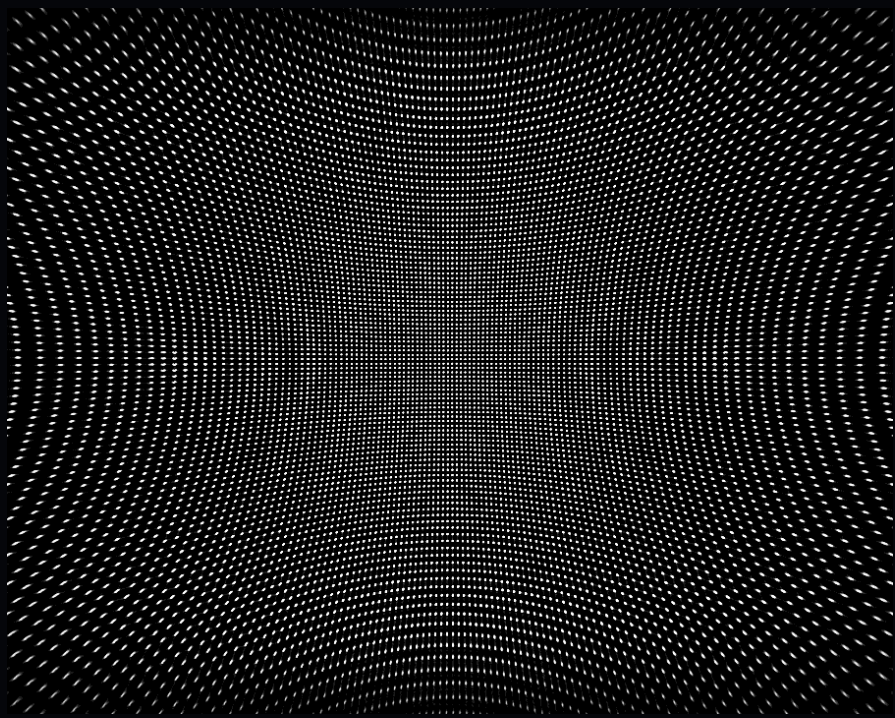
0m



**Expected range : over 30m at 10 W**

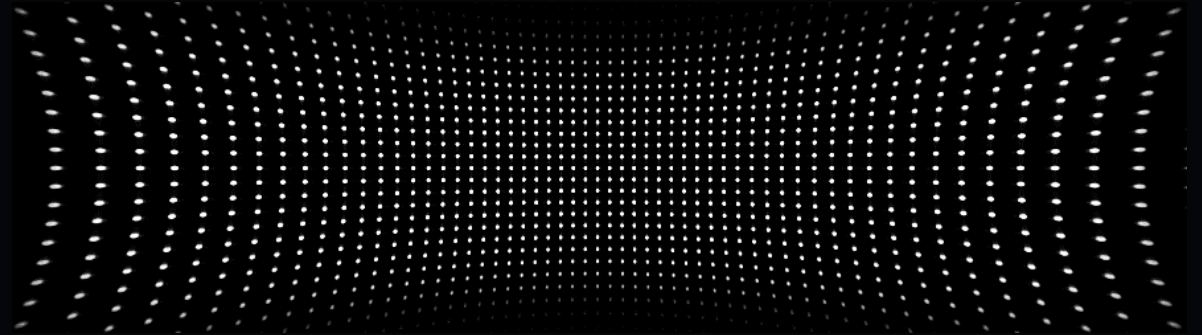
# Future Plans

**Long range DMS**



**Wide and high dot density**

**Longer range  
flash LiDAR**



**High aspect (110°x14°)**

**If we attract your interests, we welcome you. Because we are friends!**