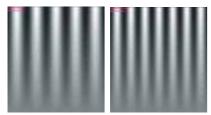
# **Human Vision Diagnostics and Therapy**



Illustrations of sinusoidal gratings of varying contrast



Illustrations of sinusoidal gratings of constant contrast: five lines at 100% contrast (on the left) and eight lines at 69% contrast.

# **Technology Opportunities**

- Holographic model of physiological optics.
- Technique for holographic diagnostics and training of the entire visionary tract
- Holographic visual analyzer for eyesight diagnostics and treatment.

### Unique Features

- Diagnostics and treatment of the diseases associated with the abnormality in transferring and processing visual stimuli.
- Formation of an interference pattern of the given spatial frequency and of any other pattern of any degree of complexity, which are needed for patient's treatment.
- Test grating distortions arising from the imperfection of eye optics are compensated
- Efficient and provides needed contrast

## **Business Opportunities**

• Joint venture to produce a holographic visual analyzer for eyesight diagnostics and treatment

### **Technical Contact:**

Professor **Ilya Zalyubovsky** Professor **Dmitry Batrakov** 

Kharkiv V. Karazin National University

Kharkiv, Ukraine

Tel: +380 57 707 52 57 Fax: +380 57 705 12 61

E-mail: Dmitry.O.Batrakov@univer.kharkov.ua

### **STCU Contacts:**

Tel: +380 44 490 71 50 Fax: +380 44 490 71 45

#### Lyubov Taranenko,

Governmental Partnerships Manager E-mail: lyubov.taranenko@stcu.int

#### **Boris Komarov**,

Non - Governmental Partnerships Manager

E-mail: boris.komarov@stcu.int