

ZEPTER HYPER LIFE

ZEPTER INTERNATIONAL
BUSINESS CONFERENCE

PRAGUE, 18TH JULY 2018



Zepter presents: GLASSES with fullerene

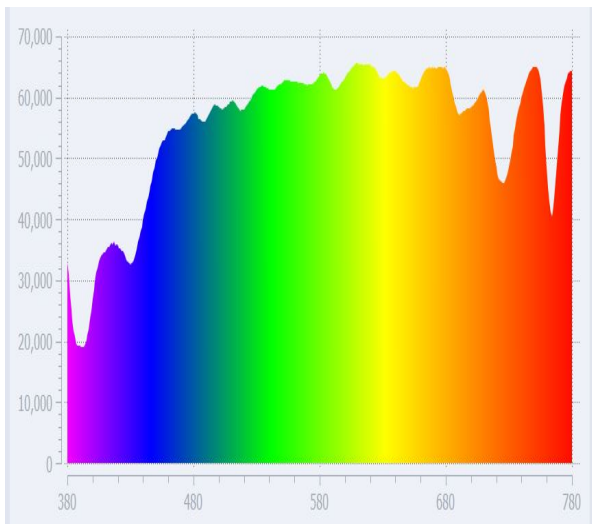


TESLA LIGHT WEAR



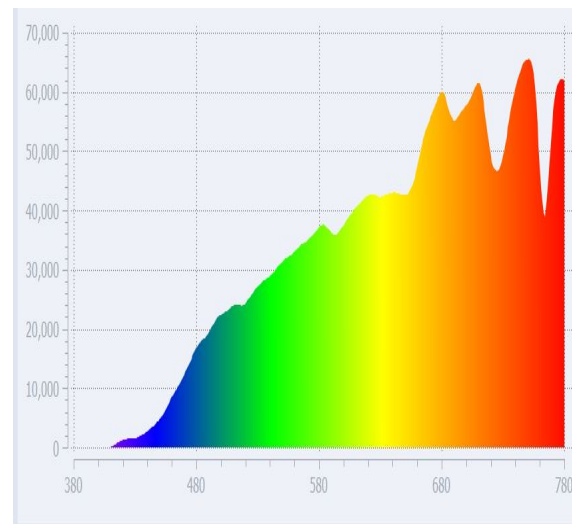
Sunny day

Spectra of sunny day



Specific energy density (mW/cm ²)	
VIS 380-780 nm	UV/VIS/IR (320-14.000 nm)
1.680	5.220

Spectra of sunny day + Tesla LightWear



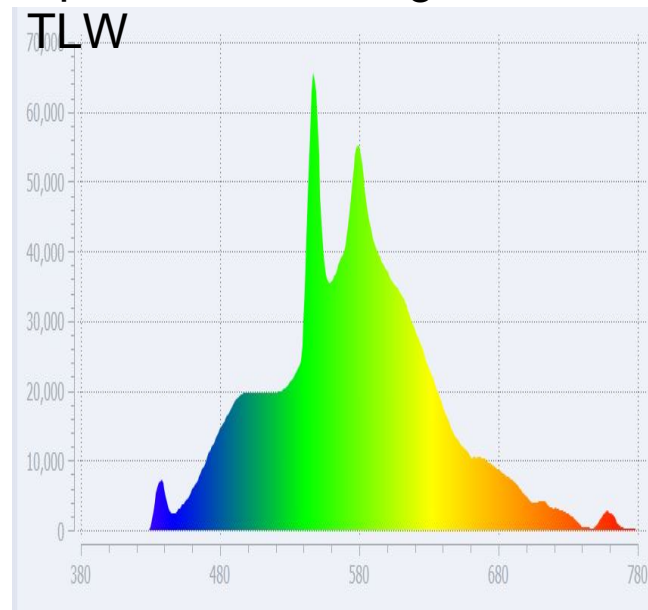
Specific energy density (mW/cm ²)	
VIS 380-780 nm	UV/VIS/IR (320-14.000 nm)
870	3.690

Spectra of neon light



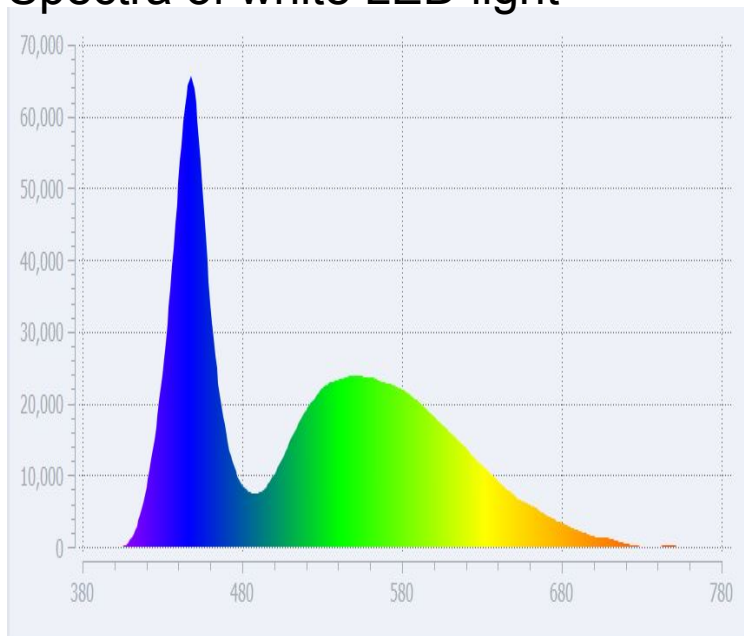
Specific energy density (mW/cm ²)	
VIS 380-780 nm	UV/VIS/IR (320-14.000 nm)
3,06	5,81

Spectra of neon light + TLW



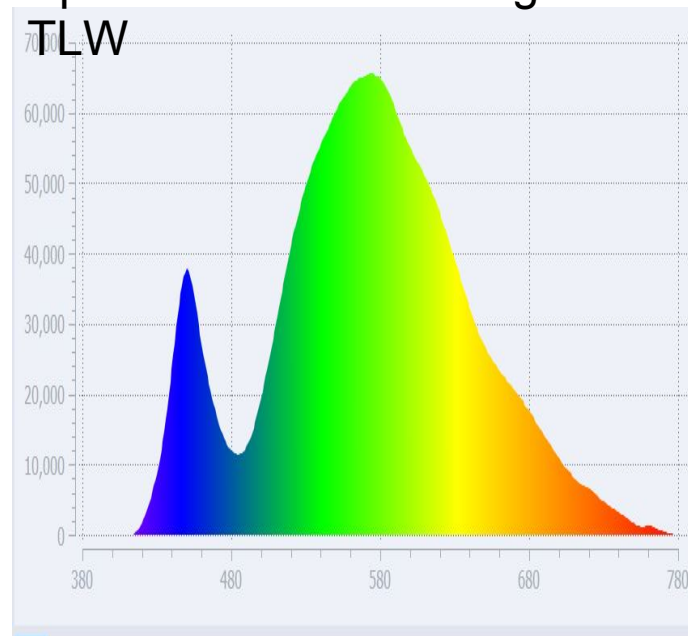
Specific energy density (mW/cm ²)	
VIS 380-780 nm	UV/VIS/IR (320-14.000 nm)
1,12	2,42

Spectra of white LED light



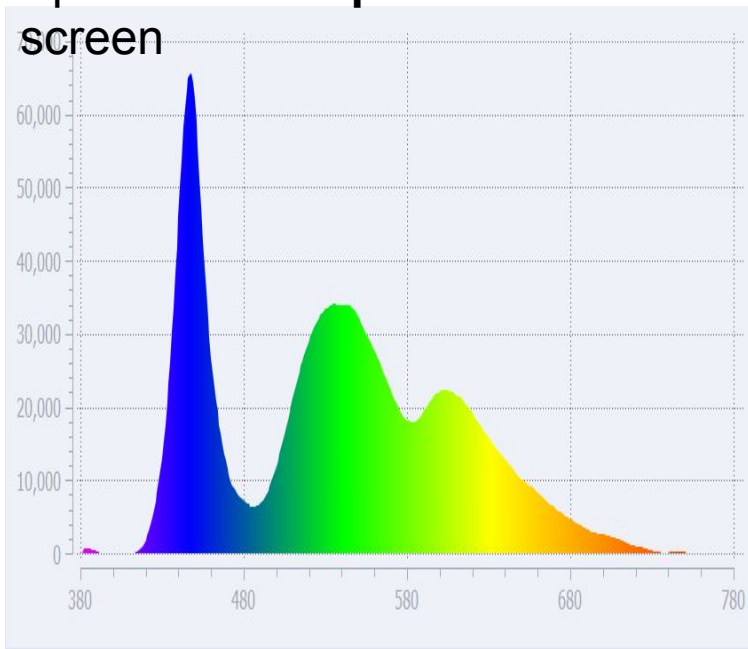
Specific energy density (mW/cm ²)	
VIS 380-780 nm	UV/VIS/IR (320-14.000 nm)
50,30	84,22

Spectra of white LED light + TLW



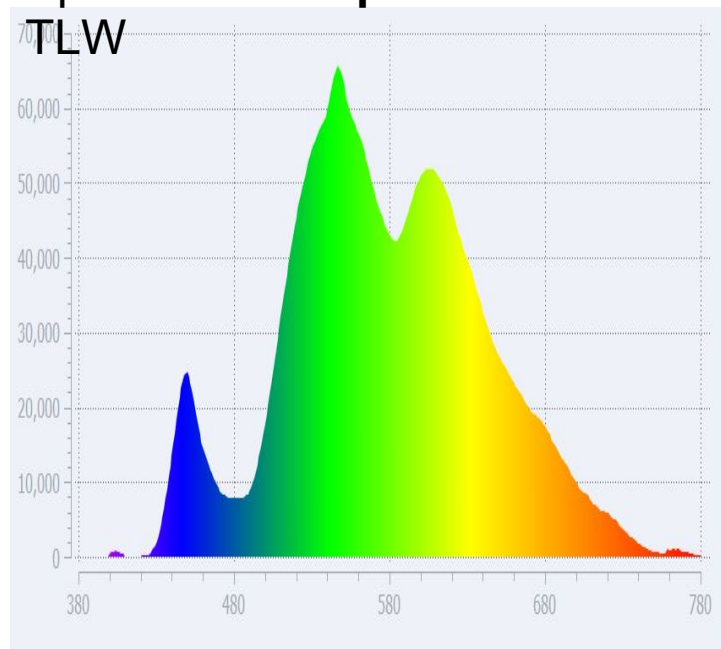
Specific energy density (mW/cm ²)	
VIS 380-780 nm	UV/VIS/IR (320-14.000 nm)
18,74	57.8

Spectra of **computer screen**



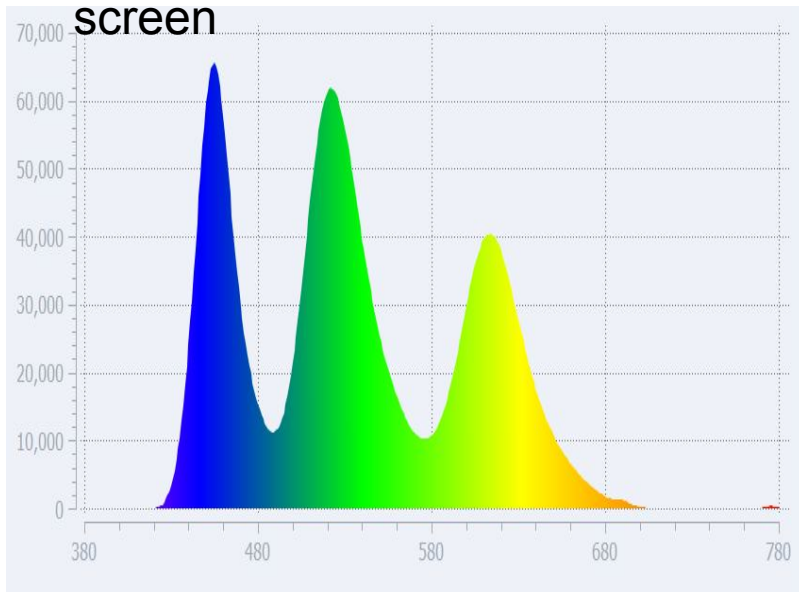
Specific energy density (mW/cm ²)	
VIS 380-780 nm	UV/VIS/IR (320-14.000 nm)
1.97	5.82

Spectra of **computer screen + TLW**



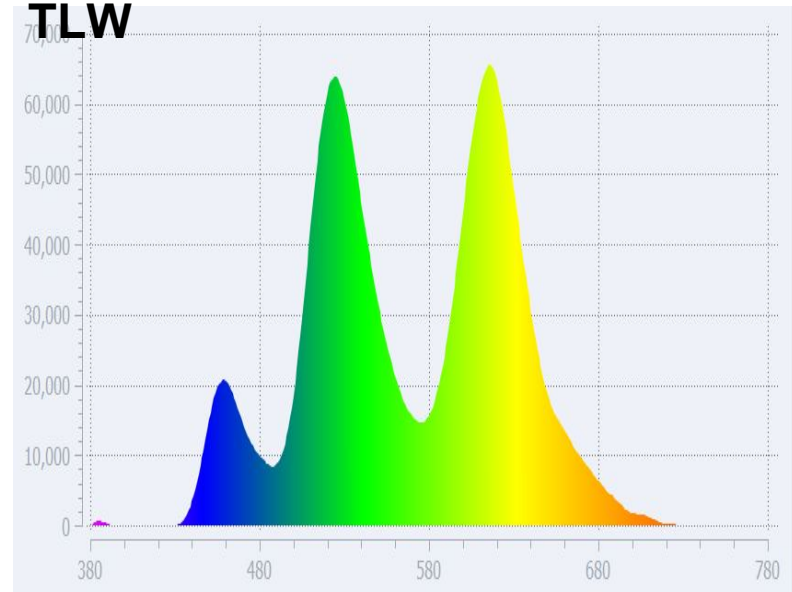
Specific energy density (mW/cm ²)	
VIS 380-780 nm	UV/VIS/IR (320-14.000 nm)
0.67	2,57

Spectra of mobile phone screen



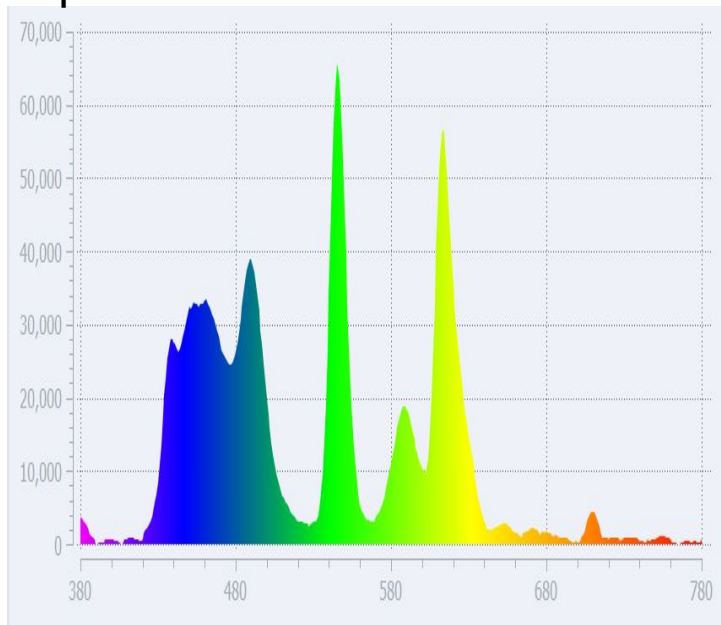
Specific energy density (mW/cm ²)	
VIS 380-780 nm	UV/VIS/IR (320-14.000 nm)
3,66	4,45

Spectra of mobile phone screen + TLW



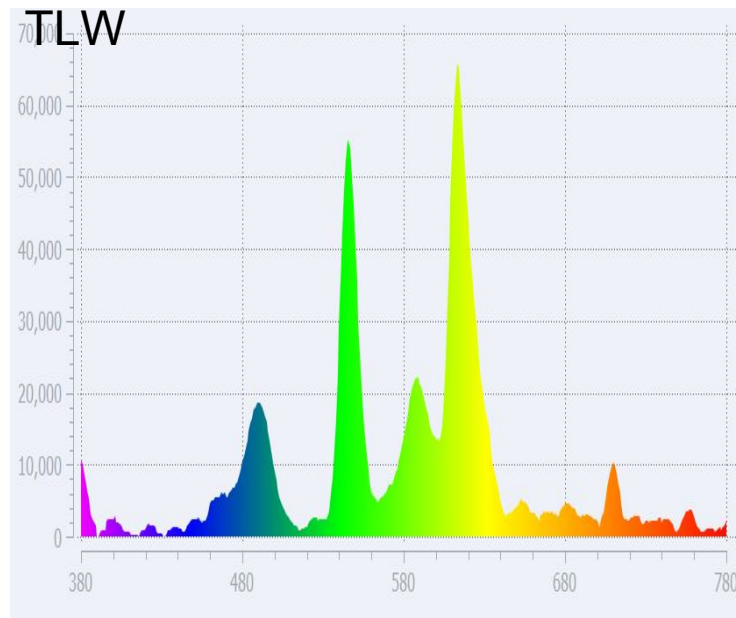
Specific energy density (mW/cm ²)	
VIS 380-780 nm	UV/VIS/IR (320-14.000 nm)
1,46	1,58

Spectra of TV screen



Specific energy density (mW/cm ²)	
VIS 380-780 nm	UV/VIS/IR (320-14.000 nm)
0.34	0.86

Spectra of TV screen + TLW



Specific energy density (mW/cm ²)	
VIS 380-780 nm	UV/VIS/IR (320-14.000 nm)
0.07	0.62

How smartphone light affects the brain and the body

By disturbing melatonin levels, **smartphone light disrupts the sleep schedule.**
This in turn leads to a variety of health issues:



In the long run, sleep deprivation can lead to **the accumulation of neurotoxins**, which makes it even harder to have a good night's sleep.



Poor quality of sleep caused by smartphone light leads to **learning difficulties**.

Disrupting the sleep schedule may cause disorientation and **impair the efficiency of memory function** on the following day.



By disturbing the level of melatonin/ sleep, smartphone light can also negatively impact the levels hormones that regulate hunger, thus potentially increasing the **risk of developing obesity**.



Individuals with lowered levels of melatonin and not following their biological clock due to the exposure to light are more prone to **depression**.



There is a correlation between the exposure to light at night and the consequent sleep disturbance, and the increased risk of **breast and prostate cancer**.



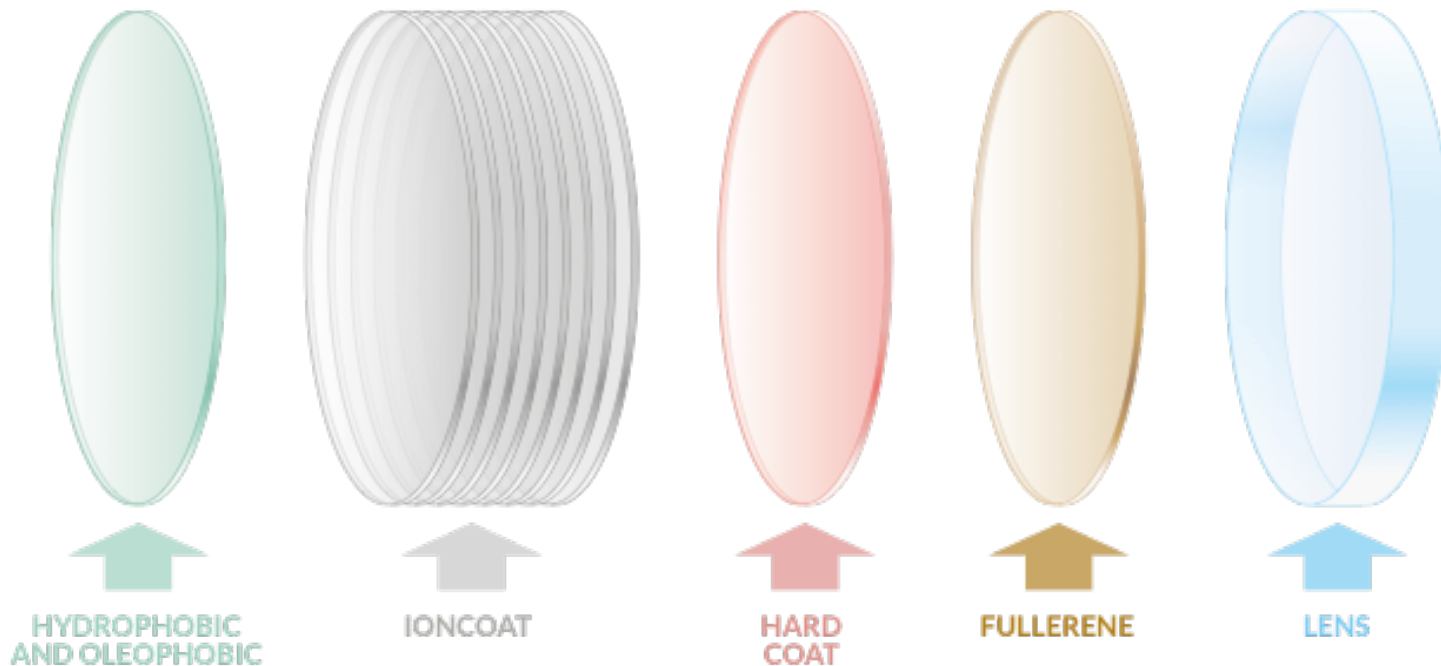
Scientists are researching into whether blue light can lead to **cataracts**.

There is evidence that blue light can **damage our eyesight by gradually heating up the retina** – it requires more detailed research, however.



Nanophoton glasses

- Made of PMMA (polymethylmethacrylate) with an addition of the C60 molecule.
- Block UV radiation. As they block high-energy blue light, they are recommended as a preventive measure to be used by children older than 3, and to be worn when working with a computer screen
- Provide a sense of brighter vision through the glass
- Help to harmonise brain function (EEG signals)
- Can be used as part of a depression treatment
- Affect the daily rhythm



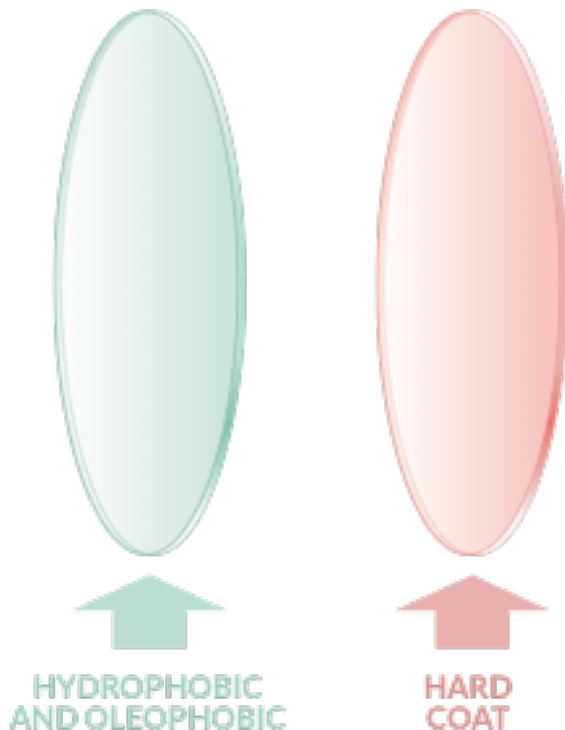


IONCOAT

eight layers
reduces reflections
below 1%
better visibility
(both sides)

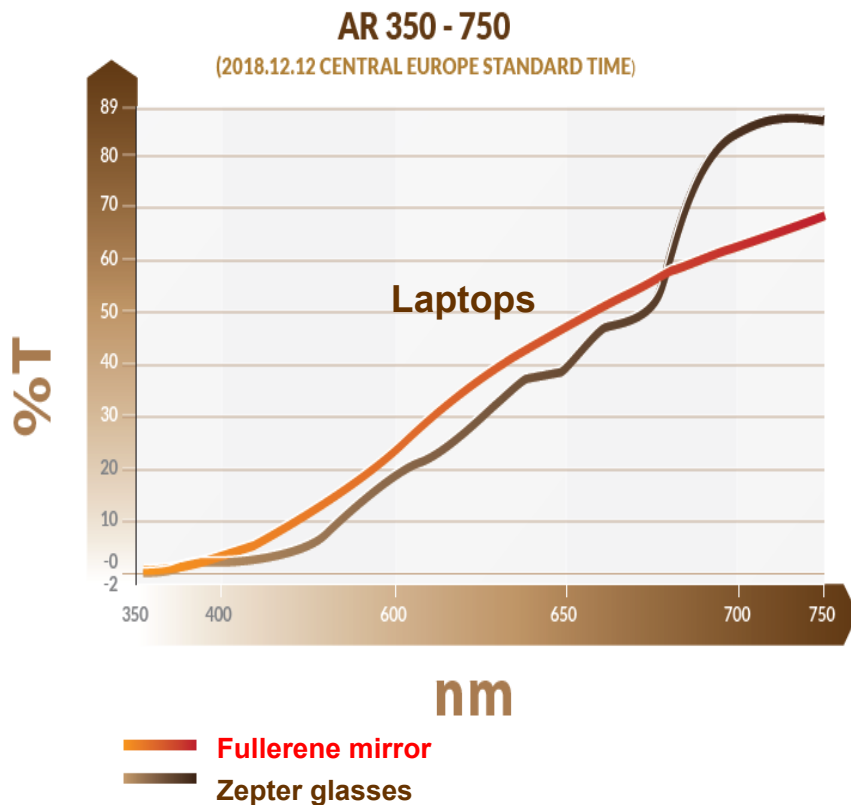
Effects of the IONcoatFC layer

IONcoatFC – an anti-reflective blue layer that eliminates harmful blue light. The layer is extremely resistant to scratching, it is easy to clean, and reflects dirt particles.



BLUEcut filter – a multilayer surface coat that reduces the impact of blue light on our eyesight. It stops more than 25% of blue light. It reflects light at wavelengths between 380 and 500 nm, in the blue part of the spectrum. At the same time, it protects the transmission from 99% in the remaining visible part of the spectrum.

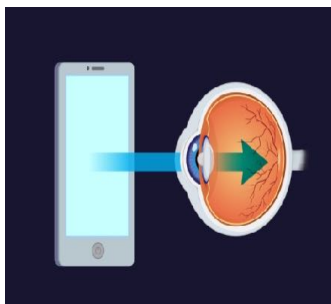
It consists of a hard layer that protects the susceptible surface of the plastic lens, a multi-layered structure that reflects blue light, and a super-hydrophobic component that speeds up the deflection of water droplets, dust particles, and other impurities away from the lens surface



The glasses block the harmful light spectrum

Protect your eyes

against harmful blue spectrum emitted by LCD and LED screens



Smartphones



Tablets



Laptops

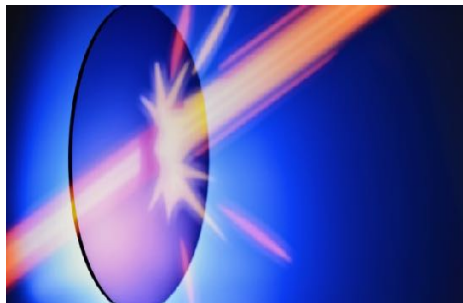


TVs



Application of fullerene layer

Fullerene filter – enables hyperpolarisation of light. Patented Bioptron nanophoton lens. Harmonises the light over time. Enables the benefits of HPL hyperpolarised light



Protect your eyes

Basing on our patented technology and initial pilot studies, we recommend wearing Bioptron glasses with an addition of fullerene

as a replacement for sunglasses, as they:

- block UV radiation
- block high-energy blue sunlight.
- protect against harmful blue spectrum emitted by LCD and LED screens
- stimulate intellectual potential and offer stress relief

We recommend the glasses due to their possible relaxing effect and improved decision making.

Study



During tests with volunteers EEG signals were recorded for 10 minutes before putting on the glasses, and a graph with mean values was plotted.

In the same conditions the test subjects wore nanophoton glasses, and their EEG signals were recorded for 10 minutes. The mean values were once again plotted as a graph.

The analysis of the graph revealed that wearing glasses affected the EEG signals in all the subjects.

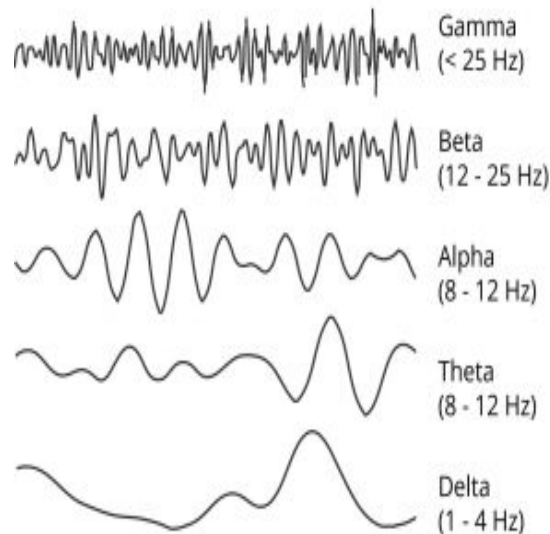
Harmonised light therefore interacted, via visual cortex, with CLATHRIN – a protein whose structure is identical with that of the light.

Nanophoton glasses were made for the purpose of the study.

1.5mm thick glass was coated with a thin 100nm film of C60 molecules. The film was covered with a 1mm layer of glass.

The results revealed that harmonised light affects brain function – it regulates the secretion of neurotransmitters at synapses.

Such impact of light on the central nervous system can be used in the treatment of all diseases, both those with organic causes and psychosomatic ones (e.g. psoriasis).



Scientific research

A pilot study of the EEG activity of the brain demonstrated that glasses equipped with nanophotonic lenses with an addition of fullerene fostered the activation of the posterior cortex in the brain, which points to the improvement in inter-regional interactions related to the coordination of visual information, attention, assessment of body position, inhibition of irrelevant information, and optimisation of decision-making processes, thus leading to the increase in the speed of central information processing.



Compared to glasses with a monochrome filter (neutral density filter, control sample), the focus shifted from image processing to decision making. Future research will focus on possible faster reactions.



Hyper LightWear

by **BIOPTRON**[®] 
LIGHT THERAPY SYSTEMS by Zepter Group