

Transmittance Measurement of Blue Light Cut Glasses

INTRODUCTION

The blue light emitted from digital equipment such as flat panel TVs, personal computers, and cell phones has high energy and it is said to adversely affect eyes. The wavelength of this blue light is around 380- 500 nm and emits blue colored light.

Glasses with the function to cut blue light so as to protect eyes from this blue light are drawing people's attention.

As the luminous flux is diffused by a lens, the sample, $\phi 60$ full-sphere integrating sphere accessory was used for the measurement (Refer to "Hitachi Technical Data UV-VIS Sheet No. 136" for the details).

This time the transmission spectra of two types of glasses, with and without the blue light cut function, were measured. It is shown that the glasses with the blue light cut function cut the light in the blue light range.

SAMPLE

Sample : Glasses (with and without blue light cut function)

INSTRUMENT CONDITIONS

Instrument : U-4100 Spectrophotometer (solid sample measurement system)

Measurement wavelength range : 350 - 800 nm

Scan speed : 300 nm/min

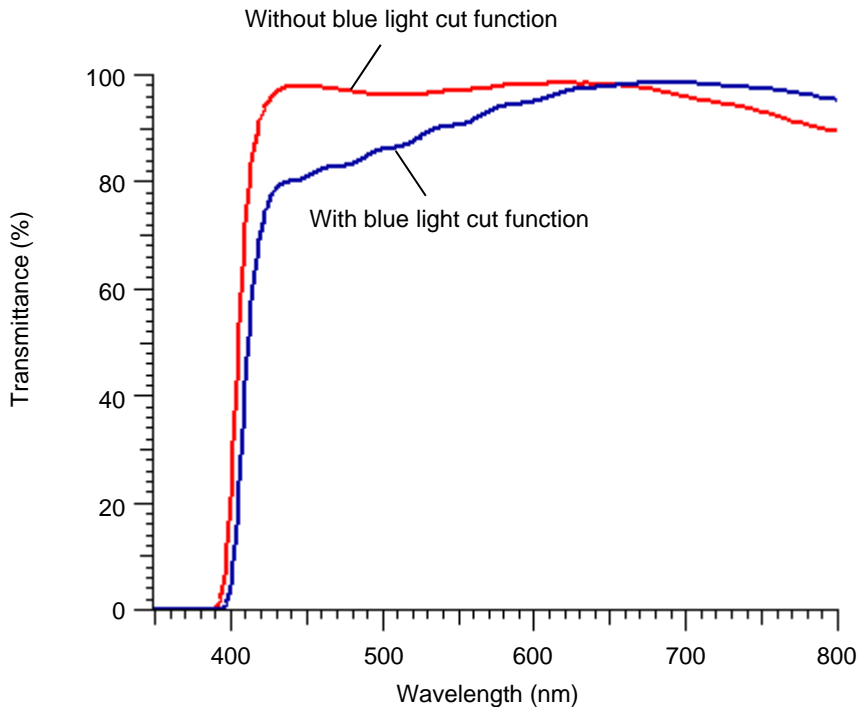
Slit : 8 nm

Sampling interval : 1 nm

ACCESSORY

Sample Holder
(P/N : 1J0-0202)

60 FULL-SPHERE
INTEGRATING SPHERE
ACCY.
(P/N : 134-0205)



KEY WORDS

Material/Processing Material Related,
Other Material/Processing Material Related,
Glasses, Lens, Blue Light, Transmission Spectrum, Transmittance,
Spectrophotometer, U-4100

Spectrophotometer (UV)

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