Product Document

Color Pen Demo
ams.com/AS7341

AS7341 – Color Pen / Stylus Demo

- Demo with integrated light source for contact-based spectral color measurements
- Color teaching mode to setup own reference colors
- Compact optical stackup of 4,5 mm height and 9 mm in diameter
- Optical measurement based on a 45°/0° principle

Sensing is life.

General Description

In the professional design world, color is described with very high accuracy and precision by color reference systems or color standards. The spectral complexity of light & color means that the human eye can be fooled into perceiving the 'wrong' color – one such phenomenon is known as metamerism: two objects with different spectral characteristics may be perceived as the same color by the human eye under one lighting condition, but appear to be different colors under another lighting condition. For example, two 'orange' objects may no longer appear to be the same color when viewed under incandescent lighting with a strong red component. Therefore finding the right colors online on products can be a difficult task.

The AS7341 is an advanced 11-channel spectral sensor that enables high accuracy color measurements. Combined with simple optical components it enables users to measure color of objects or surfaces or even calibrate displays. Consumers and professionals alike will now be able to identify and share product colors, making it easier to search product catalogs and select color-critical items with confidence.

This compact demo shows a slick implementation as a measurement device that can literally fit as pen in your shirt pocket. Combining the features of a stylus as well as a miniaturized color spectrometer.
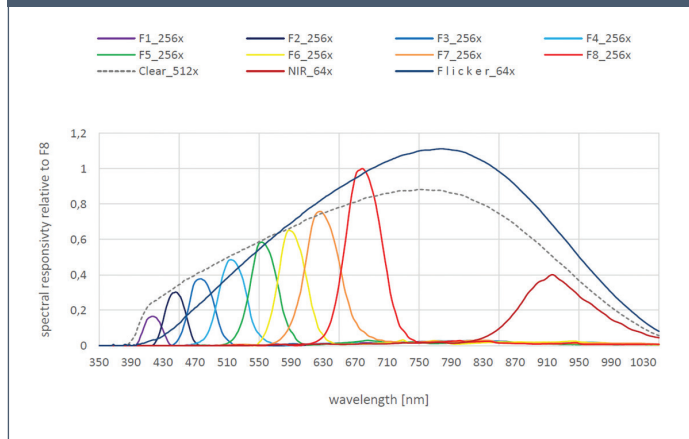
Applications

- Color matching and display calibration for consumer eletronics devices
- Compatible stylus reference design form factor for mobile phone, tablet, computer or accessory markets
- Enhancement of Artificial Intelligence based on color values for accurate color shopping (eCommerce boost)

Features

- Average △E of < 1,5 on the X-Rite ColorChecker with simple calibration
- Compact optical stackup of 4,5 mm height and 9 mm in diameter
- Color teaching mode to setup own reference colors
- Spectral value output to minimize the effects of metamerism ('wrong' color perception)

AS7341 Spectral responsivity

AS7341 Pen Demo (Optical stackup)