

# Colorimeter

**High Speed | High Accuracy | High Sensitivity** 

### CHARACTERISTIC

#### • HIGH SENSITIVE COLORIMETER

.High Transmittance Filter

.High Sensitive Photo Diode

.Low Noise, High Sensitive Board Design

#### HIGH SPEED HIGH ACCURACY

.Iterative Precision:  $\pm 0.5\%$  (Lv), 0.001 (x,y)

.Accuracy:  $\pm 3\%$ (Lv),0.003(x,y)

 $.(\leq 5cd/m^2, Tack Time 0.5sec)$ 



### **ADVANTAGE**

#### DARK(ZERO) CALIBRATION

.Measurement Dark(Zero) automatically .Imperviousness to temperature and humidity

#### WIDE LUMINANCE MEASUREMENT RANGE

.0.01cd/m^2~20,000cd/m^2

.Fast measurement during radical change of Luminance through smart auto-gain Algorithm

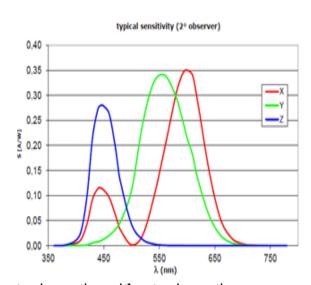
#### FLICKER MEASUREMENT

.Accurate Measurement with High Frequency .Provide Flicker and Luminance Measurement

#### SPECTRAL CHARACTERISTIC

.The filter response curves are based on the CIE1931 standard

.Spectral tolerance of filter curve:  $\leq \pm 1\% * \lambda$ 



<sup>\*</sup>Specifications and appearance are subject to change without prior notice without prior notice.





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## **SPECIFICATION**

Model	CM-10M	
Receptor	Silicon photo cell(CIE 1931 XYZ filter)	
Measurement area	Ø10mm or Ø27mm	
Working Distance	$30\pm5$ mm	
Acceptance angle	5°	
Expose time	lmsec~5sec	
A/D resolution	16bit	
Display Range	0.0001 to 20,000cd/m^2	
Luminance	Measurement range	0.01 to 20,000cd/m^2
	Accuracy*1	$0.1\sim$ 5cd/m $^2$ $\pm 3\%$ (5sec)
		≥5cd/m^2 ±2%(0.5sec)
	Repeatability( o )*1	0.1~5cd/m^2 1%(5sec)
		≥5cd/m^2 0.5%(0.5sec)
Chromaticity	Accuracy*1	$0.1$ ~5cd/m^2 $\pm 0.005$ (5sec,at white)
		$\geq$ 5cd/m <sup>2</sup> $\pm 0.003$ (0.5sec,at white/mono)
	Repeatability( o )*1	0.1~5cd/m^2 0.005(5sec)
		≥5cd/m^2 0.001(0.5sec)
Flicker	FMA	Display Range:0~100%;Accuracy:±1%
	JEITA	Measurement range: ≥10 cd/m^2
		Frequency range:0~128HZ
		Accuracy: $\pm 0.5$ db
Measurement Speed	0.1~5cd/m^2	5sec
	≥5cd/m^2	20/sec
	Flicker(JEITA or FMA)	1024/sec
Interface	USB2.0	
Operating temperature	5 to 50° C	
Input Voltage	USB 5V	

<sup>\*1.</sup> Measurement of luminance and chrominance measurement in the Rayclouds conditions (using the standard LCD screen (6500K, 9300K)).