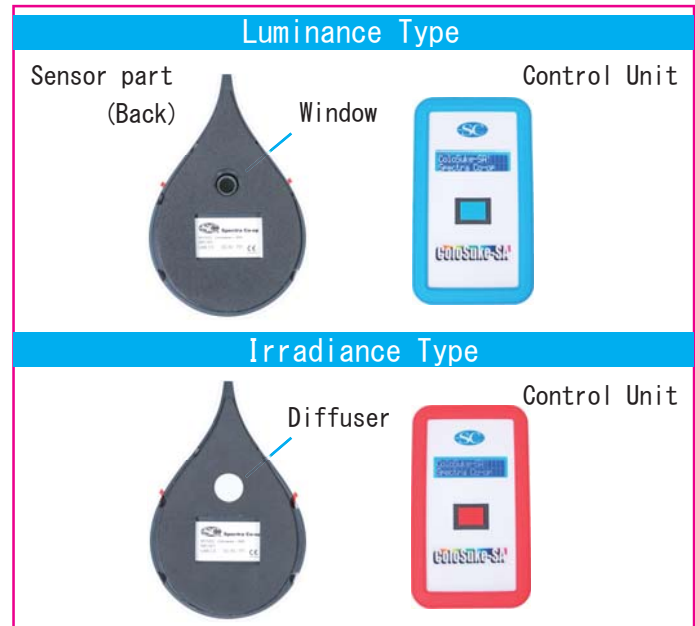


# ColoSuke-SA [Stand-Alone]



This Unique design named "ColoSuke-SA" has its own control unit with LCD display, it makes the "Stand-Alone Measurement" without PC. Both Sensor Part and Control unit are hand carried weight, and it is very convenient feature using anywhere, such as laboratory, factory, field work site...and so on.

This ColoSuke-SA is selectable between the Luminance Type and the Irradiance Type, And of course both type have measurement function for Chromaticity (x,y) and Correlated Colour Temperature (K).

Internal sensor is German made, this remarkable XYZ filter technology achieve the great repeatability. It also calibrated by NIST traceable light source and Carl Zeiss Spectrometer, to inject the real spectroscopy for the visible wavelength.

Of course you do choose your own spectrometer instead of CZ, if you want.

## Feature

- AA size battery drive
- Wide Dynamic Range
- High Repeatability (intensity:0.8%, chromaticity: 0.001)
- Incident angle characteristic in conformity to JIS AA class (Irradiance Type)
- Mobility to use, no use PC
- Measurement time is from 0.5ms to 1s
- Spectrometer calibration when it ship out. (by Carl Zeiss MCS CCD UV-NIR)
- Capable to be calibrated by any spectrometer as each standard

## Example of use

- Lighting Instrument
- Road traffic signs (LED) and Electrical scoreboards (LED and LCD)
- Display Measurement (LED back light LCD etc)
- Automobile component (Head/Brake light, Room light, Indicators)

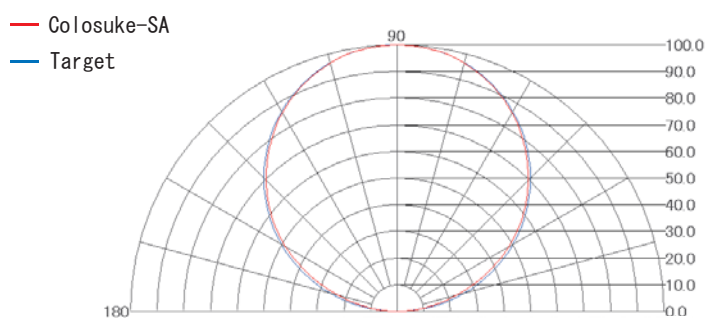
## Specification

Measurement	Data	Luminance ( $\text{cd}/\text{m}^2$ ) or Irradiance (lux), Chromaticity (x,y) ( $u', v'$ ) CCT (K)	
	Range	0.02–30000 $\text{cd}/\text{m}^2$ (typ.)	
	Diameter	8mm (approx.)	
Measurement Time	0.5–1000 msec		
Accuracy	Intensity	$\pm 4\%$	
	Chromaticity	0.02–0.09 $\text{cd}/\text{m}^2$ : $\pm 0.009$	5.00–39.99 $\text{cd}/\text{m}^2$ : $\pm 0.005$
		0.10–4.99 $\text{cd}/\text{m}^2$ : $\pm 0.008$	40.00 $\text{cd}/\text{m}^2$ < : $\pm 0.003$
Repeatability	Intensity	0.8% +1digit ( $2\sigma$ )	
	Chromaticity	0.02–0.09 $\text{cd}/\text{m}^2$ : 0.018 ( $2\sigma$ )	0.50–1.99 $\text{cd}/\text{m}^2$ : 0.003 ( $2\sigma$ )
		0.10–0.19 $\text{cd}/\text{m}^2$ : 0.015 ( $2\sigma$ )	2.00 $\text{cd}/\text{m}^2$ < : 0.001 ( $2\sigma$ )
	0.20–0.49 $\text{cd}/\text{m}^2$ : 0.006 ( $2\sigma$ )		
Display	LCD		
Interface	USB2.0		
Power Supply	AA size battery x 2		
Size	Sensor part : 71×111×35mm		Control Unit : 81×158×32mm
Weight	Sensor part : 100g		Control Unit : 230g

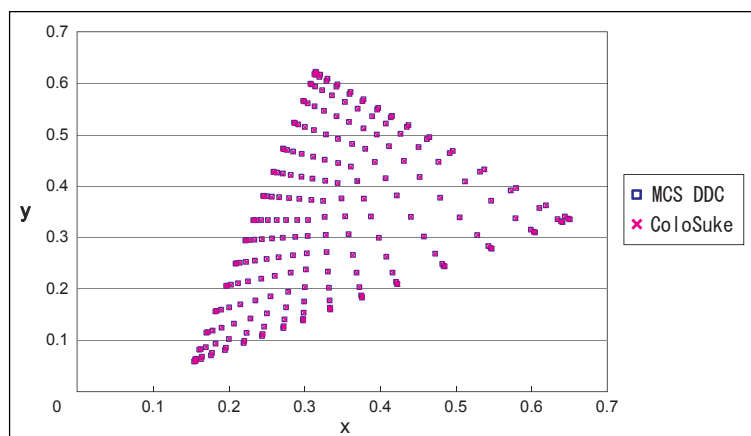
## Incident angle characteristic in conformity ( Irradiance Type )

Angle (°)	Intensity	Target	Tolerance	JISS AA Class Threshold (%)
0	1.000	1.000	0.00	
10	0.985	0.985	0.00	+/-1
20	0.937	0.940	-0.31	
30	0.861	0.866	-0.56	+/-2
40	0.755	0.766	-1.49	
50	0.629	0.643	-2.07	+/-6
60	0.482	0.500	-3.59	+/-7
70	0.311	0.342	-9.06	
80	0.150	0.174	-13.65	+/-25
90	0.000	0.000	0.00	

Graph for Incident angle characteristic in conformity



## Comparison (ColoSuke-SA and Carl Zeiss spectrometer)



Spectra Co-op

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