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A HALMA GROUP COMPANY

CC-3 Series Cosine-corrected Irradiance Probes

Instructions

Overview

The CC-3 Cosine-corrected Irradiance Probes are spectroradiometric sampling optics designed to collect radiation (light) from approximately a 180° field of view, thus eliminating light collection interface problems inherent to other sampling devices.

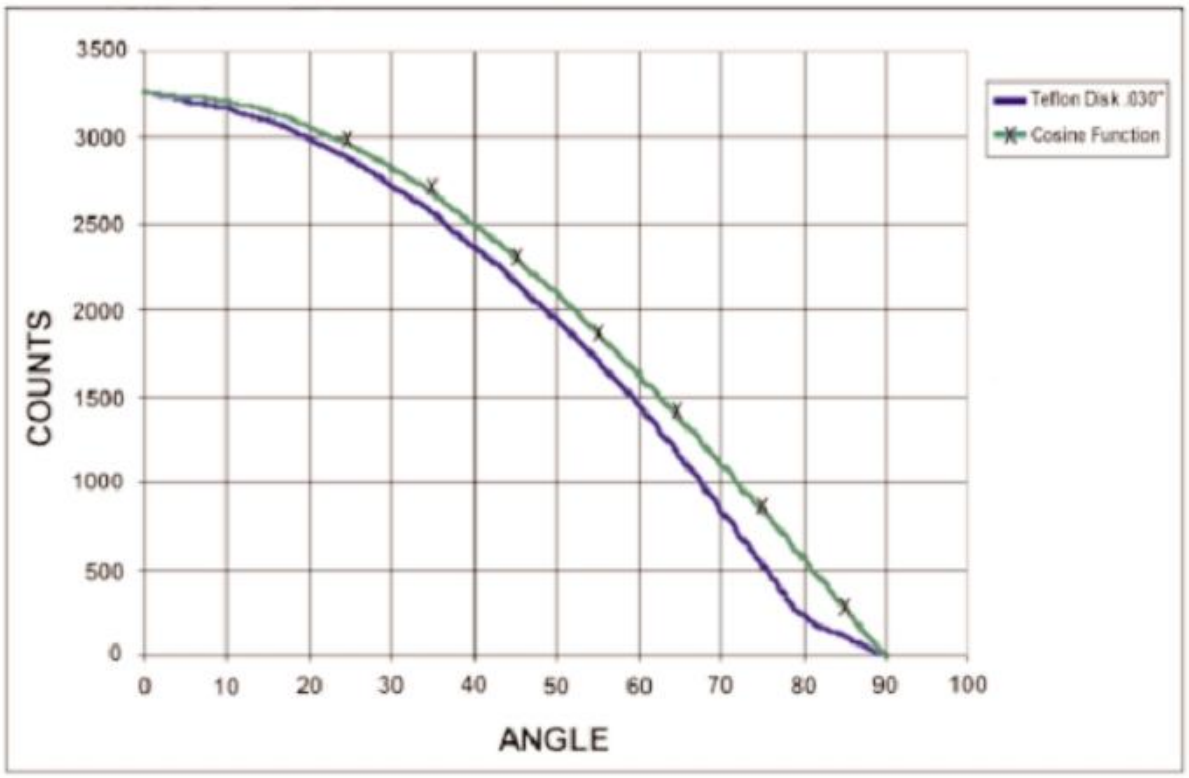
The following models are available:

- CC-3 – Has Opaline glass-diffusing for a wavelength range of 350 – 1000 nm
- CC-3-UV-S – Has Spectralon™ material for a wavelength of 200–2500 nm
- CC-3-UV-T – Has PTFE material for a wavelength of 200 –750 nm
- CC-3-DA – Has Spectralon material for a wavelength of 200–2500 nm

Operation

The CC-3-UV-T Cosine Corrector's Teflon™ diffusing material is a thin disk that sits at the end of the barrel (the Teflon material is 0.030" thick), while the CC-3-UV-S and CC-3-DA (Spectralon diffuser) have a much thinner material (0.007" thick) which is substantially more dense than the Teflon. Both cosine corrector types have a 0.25" OD barrel with a smooth yet rugged black oxide finish. Both the CC-3 and the CC-3-UV models are screwed onto the end of an optical fiber, making an irradiance probe. The probe couples to a spectrometer to measure the intensity of light normal to the probe surface. When coupled to a spectrometer, these irradiance probes can be used to measure UV-A and UV-B solar radiation, environmental light fields, lamps and other emission sources.

The CC-3-DA screws directly onto the SMA 905 connector of a spectrometer, creating a complete spectroradiometric system and eliminating the need for an optical fiber.



CC-3-UV-T Cosine Corrector Function Test

Specifications

Specification	CC-3	CC-3-UV-S	CC-3-UV-T	CC-3-DA
Diffusing Material	Opaline glass	Spectralon	PTFE	Spectralon
Wavelength range	350 – 1000 nm	200 – 2500 nm	200 – 750 nm	200 – 2500 nm
Dimensions	6.35 mm OD	6.35 mm OD	6.35 mm OD	12.7 mm OD
Field of View (approximately)	180°	180°	180°	180°