Home

The SEI Photometer

I am now offering a full service for the SEI, leds, rescaling, top chopping, calibration, repairs etc.
mail me: huw@huws.homelinux.org

The SEI Manual and the Accessories for Densitometry, an old advert and service manual

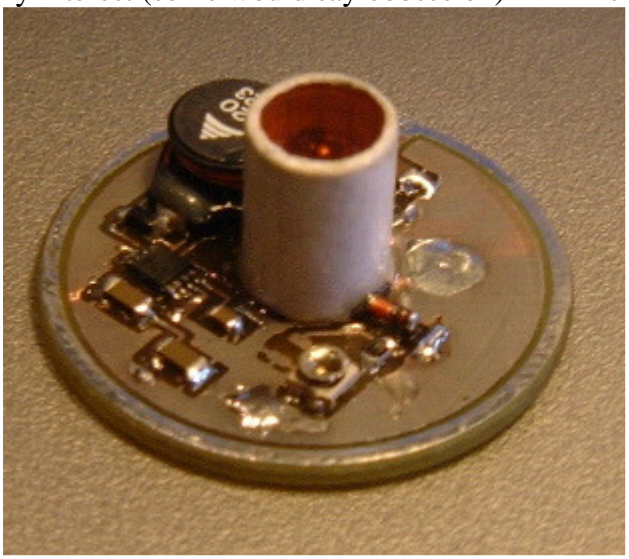
Photocell degredation
A few words about the degreadation of the photocell and how to fix it.

Simple calibration tests

Where to get bulbs for the SEI.
These bulbs and are not frosted, I have used one and it works perfectly without being frosted. They are MES (scerw in type) and the SEI bulb holder will need modifying a bit, just make shure the new lamp sticks up the same amount, if it is too high the photocell may be damaged.

From Farnell (.com) part 328285, you have to buy 10 but they take credit cards over the phone/web.

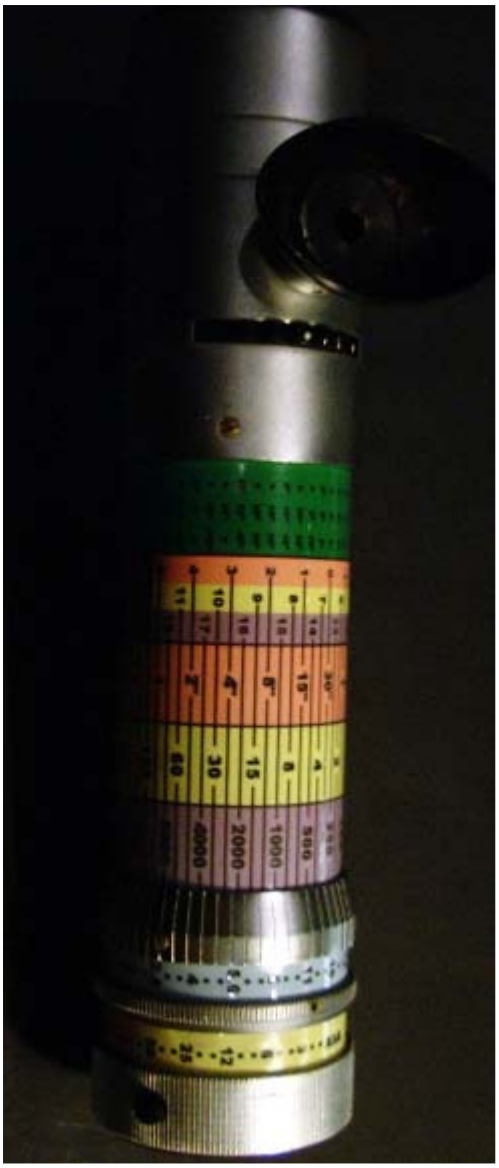
My interest (some would say obbsesion) in LEDs led (pun intended) me to this...



Prototype SEI LED

It just pops inside the photometer instead of the bulb tube, the cell is a bit loose but this doesn't matter. The circuit boosts the cell to 5V and the LED is adjusted using the potentiometer at the bottom to simulate the brightness of the original bulb, tungsten colour correction is done by the filter in the top of the tube. The original rheostat at the bottom is set to 'max', the circuit will keep a constant light output regardless of the state of the cell, unless it is flat. details here
Now for sale, mail me: huw@huws.homelinux.org

Sold some, so here are the SEI LED installation instructions



New scales on an old SEI.
Top green reciprocy failure tables
Middle LV scales
Bottom shutter speed in modern format

OK you purists, it has been done, no meter anymore.
This is real not 'photoshopped'.

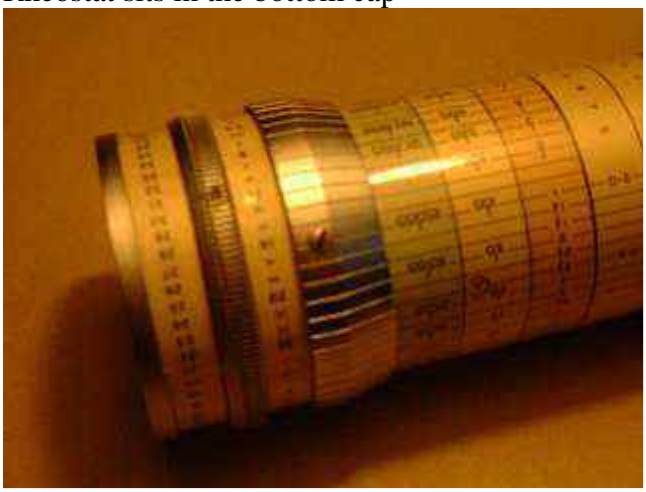
This is a few things about it and will get much bigger.

As an engineer and in good old Linux tradition 'read the source' so here are a few pics...

There it is!

The meter, used with rheostat on bottom to set the internal reference bulb brightness.

Bottom unscrewed, to change bulb or battery.
Rheostat sits in the bottom cap



Remove this screw and unscrew collar it is in.

The gear on top of the sleeve moves the two ND filters
the slot is for photocell electrical connexion

Remove 4 screws round the top section, one is covered in a wax seal.

Left, the two graduated ND filters to control the brightness 100:1 ratio. Right, lens to photometer cube and meter contact

The viewing telescope with hole to photometer cube and ND's for 100, 10000 & 1000000 ranges plus tungsten/daylight filters.