

## Status/erfaringsrapport for UPN

### Pærer

- Ved overlevering fra tidligere UPN-gruppe fik vi at vide, at der ikke fandtes noget lager af pærer og derfor blev der indkøbt nye. Vi har siden genfundet pærelageret i Ølkælderens og har nu et lille lager, så der ikke behøver at købes stort ind det næste stykke tid.
- Fra Alex har vi fået en dokument med en grunding gennemgang af hvilke pærer der er valgt til de forskellige lamper på kollegiet og hvorfor. Dokumentet er vedhæftet i halen af denne rapport.
- Indløb af pærer har foregået fra <http://www.elvvs.dk/> og seneste indkøblist kommer i UPN-mappen så kommende grupper kan se præcis hvad der er blevet købt.
- Der mangler at blive indkøbt spotlights til Tinas kontors badeværelse, til disken over køleskabene mellem kolde køkken og spisesalen, samt enkelte lysstofrør.

### Nøgler

- Nøglebundet mangler en enkelt nøgle, til Joakims værelse (06), og der hænger heller ikke en nøgle i nøgleskabet til dette værelse. Jeg har bedt Joakim om at kopiere nøglen eller låne en af hans nøgler til mig så jeg kan kopiere den. Han har ikke reageret på det, så det skal vi lige være opmærksomme på næste gang han flytter værelse.

### Medicin

- Førstehjælpskasserne blev sidst gennemgået i maj 2014, hvor der mangle plaster i de fleste kasser. Vi tjekker op på førstehjælpskasserne inden udgangen af embedsgruppeperioden.

### Ure

- Intet nyt

## **Notes from Alex:**

### **General comments on fluorescent (Sparepærer)**

There is MANY different models of fluorescent from the same manufacturer. Each model is trying to optimize something, either

- price
- longevity,
- quick turn-on
- number of on/off
- amount of mercury used (influence the longevity...)

Do not just read the headline, for example the SUPERSTAR MICRO TWIST is quoted to last “20 years”, but this is at ~2.5h per day. In the corridors where it's “on” 24h/365days, then the lifetime is only 1.5 year. You need to get the datasheet for the lamps. OSRAM is doing a pretty good job of documenting their lamps for each application.

[http://www.osram.com/osram\\_com/products/lamps/compact-fluorescent-lamps/index.jsp](http://www.osram.com/osram_com/products/lamps/compact-fluorescent-lamps/index.jsp)

Most “cheap” lights for home use are trying to optimize the price and this has a direct influence to the longevity and number of on/off. At the kollegium, we should stay in the professional products from OSRAM, except in each private room.

### **General comments on LED**

LED are starting to be good, but I want to be cautious and not go into the LED crazyness going on at the moment. LEDs are better for some application, “spot” light being one of them. For general lightning there is a place for all type of light.

### **Festsal/Spisesal (loft)**

PHILIPS ECOCLASSIC30 KLAR STANDARDPÆRE 53W E27 230V - DÆMPBAR

Motivation:

- DÆMPBAR is required

- Maximum of 600 Watts in total for spisesal, 1000W (or 2000W?, not sure) for festsalen
- Light uniformity with age

#### History:

The lamp system in spisesal was changed during the big reconstruction (flood #1). For a cost reason, the electrician firm didn't want to install dimmable fluorescent, and installed a system that can only take "old style" lamps.

The PHILIPS ECOCLASSIC30 are ~30% better than a discontinued 75 Watt.

I researched quite a bit into installing dimmable fluorescent in standard E27 socket, but there is some issues with the 600Watt dimmer controller, and doing the experiment (changing all of them) could cost a total of ~2000DKK for the electrician + a new controller. Then with that technology, I am not certain how the light intensity would change with time, and it would look weird if there is very bright lights and some other bulbs are darker. Fluorescent tubes light intensity decrease by up to 50% across their lifetime.....

Maybe dimmable LED could be used, but they may suffer the same limitation from the 600Watt controller. If you want the electronic explanation of this potential problem, let me know.

Short of changing the whole system in spisesal, there is no better solution right now. If you want to change the system, contact me and I can suggest a good solution.

#### **Læsesal (spots)**

OSRAM DECOSTAR IRC 50W/12V 24GR GU5,3 - 48870FL

#### Motivation:

- This is what fit there....
- Only choices are for 24GR (24 degree beam angle) or 38GR (38 degree) and 60GR (60 degree)

#### History:

The architect who designed the Læsesal decided to install those spot light. They consume an insane amount of electricity. I've never looked into a different solution, but something may already exist with LED, using a different "lamp holder" but the same "track" to carry the power.

#### **Gangene**

## OSRAM DULUX SUPERSTAR MICRO TWIST 11W/825 E27

### Motivation:

- Longevity, the superstar are rated for 10'000 hours or 12'000h depending on the version. One year is 8760 hours. Normal fluorescent are approx 8000h, maybe less for cheap ones.
- One newer alternative is elvvs #5655000719, Osram DULUX Intelligent Longlife 11W/825 E27 med Quicklight start. This is 20'000h. Please make the numbers with the raw cost per hours of longevity.

### History:

When I looked into this area, about 3 years ago, the superstar where the best ratio quality vs price. It may have changed. LED may be one option, but still \$\$\$\$. Before going “all in” into the LED, it would be worth finding a good LED which will project light in all directions. LED are normally projecting light in one direction (approx 170 degree beam angle), which mean that the ceiling would not receive any light....

## **Kolde trappe**

### PHILIPS PL-S MASTER 9W/827 G23 2PIN

### Motivation:

- This is what fit there....

### History:

Those light fixtures where changed during the last big renovation (~flood #1). I suspect that they are not meant to be turned on/off as often as we do. Also, they may have a problem with cold temperature. This is my theories as to why we need to change them as often as we do.

There is pretty much nothing to do except changing the whole light fixture and finding a better one.

## **Varme trappe**

### Osram DULUX Intelligent Facility 14W/825 E27 med Quicklight start

### Motivation:

- The Intelligent Facility series is meant to be turned on/off MANY times. Rating is 1 million

on/off! Typical fluorescent are only rated for ~5000 on/off

- Long lifetime, 20'000h
- Fast turn on (30 sec)

History:

I made the numbers 3 years ago, and at 20 on/off per day (which is on the low side), we're talking about 7300 on/off per year. Most fluorescent are not rated for that many cycles, and some are rated for only 2000 cycles...

This Intelligent Facility series is quite expensive, and should only be used where necessary. The 14Watt version is giving a better light output compared to the 11Watt which I tried and is probably still in place.

### **Gangtoilet (loft)**

OSRAM DULUX T/E 26W/830 GX24Q-3 4PIN

Motivation:

- This is what fit there....

History:

This is probably the best lamp at the kollegium. They are rated for 50'000 hours and pretty much unlimited on/off. I've personally changed only 4 of them in my 8 years at GAHK. I also had to change 2 "transformers/controller" that died.

Also, the motion sensors die once in a while....

FUGA PIR INDSATS 180GR 230V 10A HVID, 506D6306

ELVVS #1024000988

---> also need some screws, similar to ELVVS #1039015641, but not sure of the correct length.

Controller part number:

OSRAM HF MULTIWATT QT-M 1X26-42W 230V 103X67X31MM

ELVVS #5649903806