EEP18 Input paper

Agenda item 5.4

Task Number M4

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Developments in New Light Sources

# Summary

As the title suggests, the author is requested to report on new developments in light sources.

## Action arising from the input of the document

For information, although any members having experience or developing light sources are invited to contribute to this input paper in future sessions.

## Related documents

IALA Guideline 1043 on Light Sources

# Background

This rapporteurship was established at EEP8, with a view to providing members the latest update on light source technology.

# Developments

## ANd9GcTWN9XI8dqUNDSGixqC1L3SGXu8Pbg__gUAmhbomkF8edb72HEHQgCarbon Filament

With the imminent withdrawal of tungsten filament lamps\*, carbon filament lamps are becoming available. Mostly for decorative purposes, but may become viable for use in AtoN in the future because of the various filament shapes that can be achieved.

## Tungsten Filament\*

The progressive withdrawal of tungsten filament lamps has met some resistance in the USA. However, most specialist filament lamps (e.g. BSL) are exempt.

## [V5](http://www.venturelightingeurope.com/en/new-products/)Metal Halide

Venture Lighting has added four new lamps to their ceramic range. Available in 45W, 60W, 90W and 140W with energy savings ranging from 30-70%

Helvar has launched its HID electronic ballast range with over 85% efficiency.

## Light Emitting Diodes

R&RNAV have continued to use their six-sided LED light source as a replacement for traditional sources with great success. Measurements in small 3rd, 3rd, 2nd & 1st order rotating/fixed optics have given ranges of 15-20M. A smaller centre light source is being developed for use in smaller optics.

## Plasma

The LiFi-STA product series from LUXIM is designed for use in outdoor, commercial, infrastructure, growth and industrial lighting. STA products incorporate Luxim's Light Emitting Plasma technology to provide the following primary benefits:

* Lowest Cost of Ownership
* Energy Efficiency
* Reliability & Long Life
* Brilliant White Light

12,000 initial lumens, 50,000hrs life &160W at 6.3A

# References

1. http://www.venturelightingeurope.com/en/metal-halide-lamps/lamps.php?code=cm-city
2. http://www.helvar.com/default.asp?path=3386,3400,3475,3476&article=7565&index=X&page=1
3. <http://www.luxim.com/dynamic/display.php/71>

# Action requested of the Committee

The Committee is requested to:

1. Note the information above and provide any input for EEP19 to the author.