

# Project Knowledge – LED Plant Growth Lights by University of Manchester



## BEFORE:

- 6 x 90 W, T12 Fluoro
- 540 W consumed
- £390 /year running cost

## AFTER:

- 1 Units at £180 installed
- Post - 120 W load reduced by 75%
- £1,064 /year savings
- Payback of 1 year
- 5.2 tCO<sub>2</sub> saved per year



[Project completion date – June 2009](#)

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## Supporting Comments:

- One light covers 13 m<sup>2</sup> at a height of 1.2 m
- Less heat generated by LED so less cooling required in growth chambers
- 50,000 hour lifespan in comparison to 10,000 hour T12 lifespan
- Outputs light in 3 specific spectrums for optimal plant growth
- Red – 660 nm, Blue – 460 nm & Orange – 612 nm

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