



Features

- Active control of artificial lighting
- 5% accuracy
- Maximum energy efficiency
- Flush or Surface mount options
- Optimise light levels
- Precalibrated in Lux for ease of installation

Technical Data

Power supply	24Vac/dc
Sensor reference	Photo-diode
Measuring range	10-2000lux
Output signal	0-10Vdc
Ambient temp.	-10...+40degree
Field of view	360degree
Accuracy	+/- 5% across the range
Coverage	7 metres max
Installation	Ceiling
Enclosure	Flame retardant ABS, polypropylene
Dimensions	see page wo
Protection class	IP30 according to IEC529
Standards	EMC, LVD, CE-marked

Application

The LFT 010 is a light level transmitter designed for use in the active control of artificial lighting, both to optimise light levels and to achieve maximum energy efficiency.

The LFT 010 transmitter uses a photo-diode cell to detect light levels in the 10-2000 lux range, providing a linear 0-10Vdc output.

The LFT 010 is designed to be ceiling mounted for the measurement of all types of light levels.

The LFT 010 is designed for room and indoor facilities.

The light level increases or decreases automatically via control equipment depending on the level of light alternative switch off/on depending on lux value.

Ordering Codes

LFT 010	Ceiling Light Sensor 0-10Vdc 10-2000lux, flush mount
LFT 010S	Ceiling Light Sensor 0-10Vdc 10-2000lux, surface mount



Internal Ceiling Mounted Light Level Transmitter

LFT 010

Nov.09

Installation and Connection Details

All connections to BEMS controllers, data recorders etc. should be made using screened cable.

Normally, the screen should be earthed at one end only (usually the controller end) to avoid earth hum loops which can create noise.

Low voltage signal and supply cables should be routed separately from high voltage or mains cabling.

Separate conduit or cable tray should be used.

Where possible, the controller's earth should be connected to a FUNCTIONAL EARTH, rather than the mains safety earth.

This will provide better immunity to high frequency noise.

Most modern buildings have a separate earth for this purpose.

There are small cable entry points at the top and bottom of the enclosure rear cover.

Avoid direct sunlight entering the sensor

Do not site within 1m of forced air heating or ventilation

Do not site within 1m of any lighting

Do not fix to a vibrating surface

Flush Mounting

Flush mounting is achieved using the plastic bracket and clips provided.

The LFT should be installed in a ceiling tile through a 64mm hole.

Ensure that the ceiling tile is of suitable material to support the weight of the unit and that there is sufficient clearance above the ceiling.

No access is required to the ceiling void, other than for wiring.

Surface Mounting

Surface mounting is effected using the optional surface back box.

Side knockouts are provided for cable entry.

Fixing lugs allow mounting to BESA boxes or metal boxes.

Optional security screws can be fitted to prevent removal.

Operational Data

Typical Daylight Conditions:

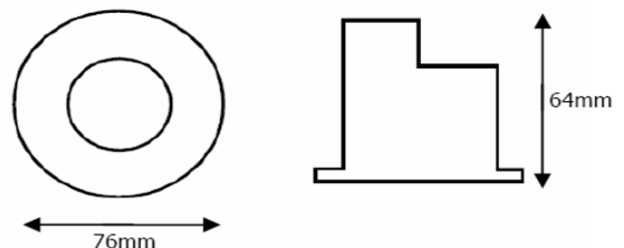
Dusk	15-20lux
Average daylight	2000lux
Bright sunlight	20000+lux

Service Illuminations:

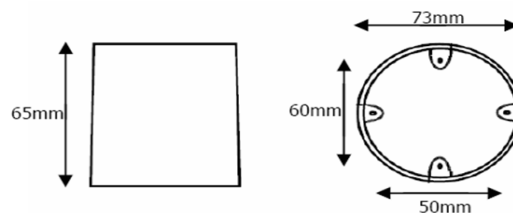
Minimum for outdoor areas	25lux
Exterior walkways & carparks	50lux
Industrial circulation areas, stores etc	150lux
Minimum task lighting	200lux
General offices & retail areas	500lux
Fine task, machine operation, precision ass.	1500lux

Dimensions

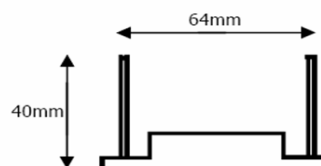
Main Housing:



Surface Back Box



Flush Mounting Bracket:



Electrical Connections

24V = Supply

0v = Gnd

O/P = 0-10Vdc output