

### Introduction

The Waterloo Luminaire unit is a technically advanced form of light and air terminal which provides multi-directional supply air capability.

Available in both supply and extract versions, the units are designed as a 'tile replacement' fitting which simply drops into any standard 600mm square 'T' grid. Furthermore, the use of a special lightweight plenum construction limits the overall weight of the supply unit to 9.6kg for the basic unit and 10.3kg with the emergency pack, thereby eliminating the requirement for additional overhead support.

Plenums are provided with a 'quick fix' clip enabling the inlet spigot to be conveniently configured to suit the supply duct arrangement.

Both supply and extract units are available with optional emergency power supplies and all come pre-wired with 2m of flying lead.

Supply units can be specified with optional cord operated dampers, which together with the calibration port on the light case (accessible after removal of the light diffuser), make site commissioning a quick and simple procedure.

### Features

- Multi-directional air throw capability, quickly and easily adjustable from face of unit
- Lightweight construction
- Clip fixed plenum for on-site versatility
- Integrated commissioning port
- All units supplied complete with pre-wired flying lead
- Innovative heat extraction system from light fitting
- LGC 3 Cat fitting c/w airhandling linear slot diffuser

### Benefits

- Can be installed in central areas or adjacent to walls without degradation of performance or appearance
- Units can be quickly and easily relocated and re-commissioned if site layouts alter
- Supply and extract versions can be fitted into ceiling grid without overhead support
- Simple air flow measurement on site via built in port
- Aids reduction of heat load from lighting in occupied zone

### Lamp Types

- 36W, TC-L compact fluorescent, cap: 2G11

### Finishes

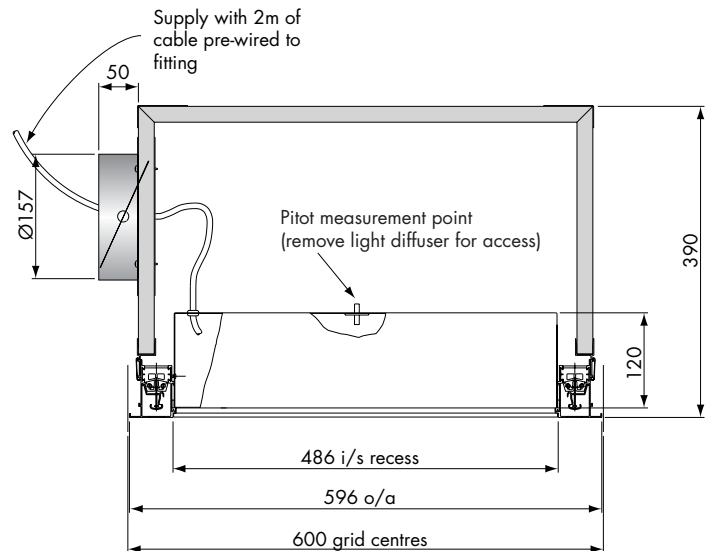
Plenum Box: Class "O" rated fire retardant board.

Diffuser : Galvanised Steel

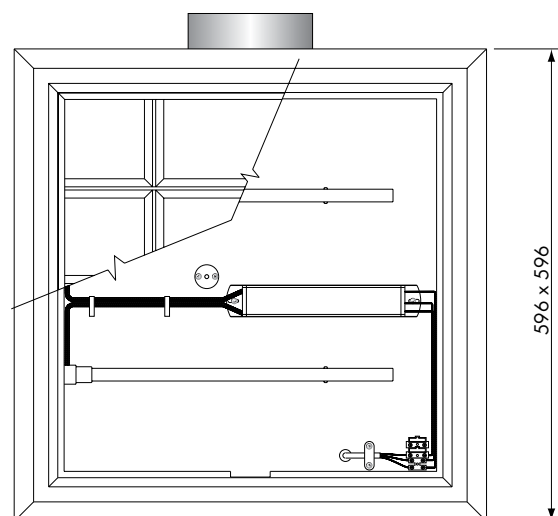
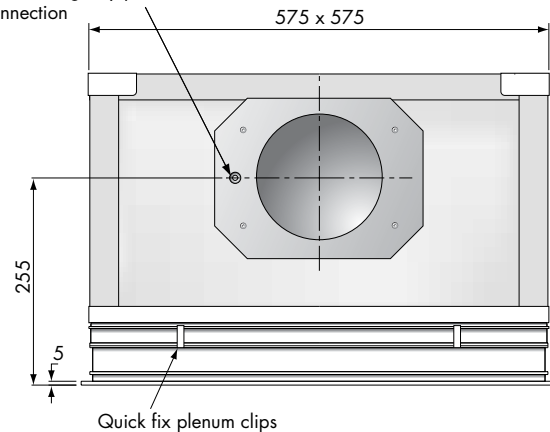
### Order Example

**LUMDF-S/PPM9010/0001/EP/FDC**

Type \_\_\_\_\_  
 Supply \_\_\_\_\_  
 Finish \_\_\_\_\_  
 Project Reference \_\_\_\_\_  
 Optional Emergency Pack \_\_\_\_\_  
 Optional Damper \_\_\_\_\_



6.5mm cable grommet for mains power and emergency power pack connection



### Standards

Designed and manufactured to comply with EN 605982.1. Emergency versions with louvre or TP(a) diffuser attachments comply with EN 60598 .2.22. Class 1 Electrical, CIBSE LG3 VDT, CE Mark



## Performance

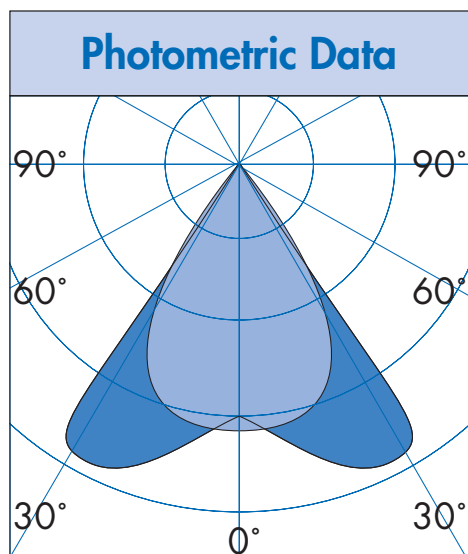
Jet throws are based on the horizontal distance from the centre of the unit to the point where the jet velocity has decayed to 0.5 m/s.

Data is valid for isothermal conditions or cooling differentials of up to 10°C.

Noise levels are based on peak sound power level plotted onto NR and assume a typical room absorption allowance of 8dB (LR<sub>p</sub> ref 8dB abs.)

Octave band sound power level data is available on request.

## Performance Data



Emergency factor					
Room index	1	2	3	4	5
LP	0.09	0.10	0.10	0.10	0.10

URF							
C	W	F	1	2	3	4	5
0.6	0.6	0.2	0.58	0.65	0.67	0.68	0.69
	0.5		0.56	0.63	0.66	0.66	0.69
	0.3		0.53	0.61	0.65	0.64	0.67
0.7	0.6	0.2	0.57	0.64	0.66	0.68	0.68
	0.5		0.55	0.63	0.65	0.67	0.67
	0.3		0.53	0.61	0.64	0.65	0.66
0.8	0.6	0.2	0.58	0.62	0.64	0.65	0.65
	0.5		0.54	0.61	0.63	0.64	0.65
	0.3		0.53	0.59	0.62	0.63	0.64

4 Way Pattern	Air flow rate (l/s)					
	40	50	60	70	80	90
Throw (m)	1.25	1.5	2.0	2.25	2.5	3.0
Pressure (Pa)	6	8	11	15	19	24
Noise Level NR <sub>LP</sub>	-	-	-	21	25	28

3 Way Pattern	Air flow rate (l/s)					
	40	50	60	70	80	90
Throw (m)	1.5	2.0	2.75	3.5		
Pressure (Pa)	8	12	17	22		
Noise Level NR <sub>LP</sub>	-	-	20	25		

2 Way Pattern	Air flow rate (l/s)					
	40	50	60	70	80	90
Throw (m)	2.5	3.0	4.0			
Pressure (Pa)	13	20	28			
Noise Level NR <sub>LP</sub>	-	22	28			

Exhaust	Air flow rate (l/s)					
	40	50	60	70	80	90
Pressure (Pa)	4	6	8	10	13	16

For additional lighting information refer to leaflets LAL011/1 issue 3 and LAL011/2 issue 3, copies of which are available upon request.