

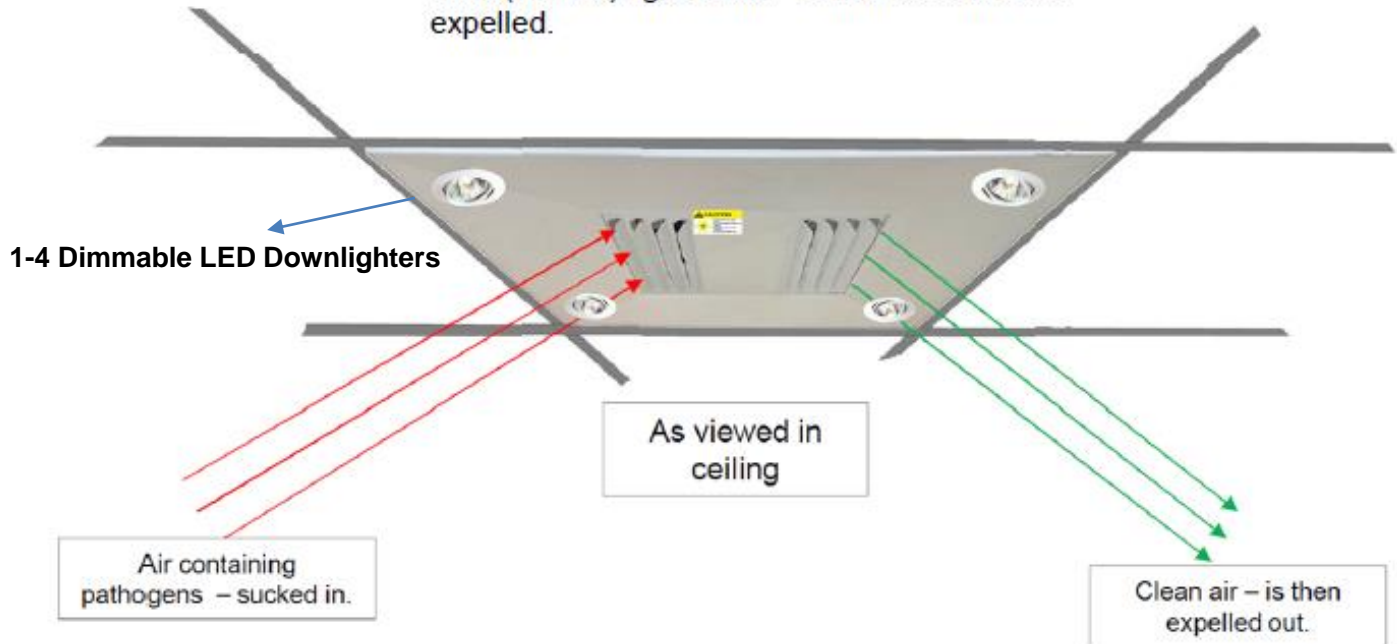


BIO VAC LUMINAIRE

Antiseptic and Anti-virus Air Cleansing LED Luminaire

Lay in 595 x 595 mm air purification unit – simply drops into ceiling grid – like a panel light.

Dirty pathogens are sucked in – destroyed by the UVC (254nm) light within – and the clean air is expelled.



Once lid is removed – a safety switch disconnects – ensuring harmful UVC lamps are off – keeping maintenance staff safe.



View of back – with 'lid' in place.



View of back – with 'lid' removed – to access lamps for replacement.

Repeated applications may be required – only for use by trained professional users



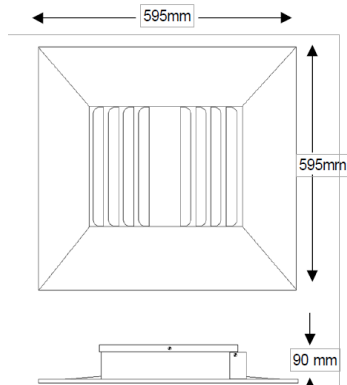
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Product Parameter

Details	
Body construction	Acrylonitrile Butadiene Styrene (ABS - Engineering plastic) – self extinguishing
Louvre and UVC chamber	Louvre – punched steel – powder coated white. UVC chamber – aluminium – anodised.
Colour of trim	Standard is ferrograin white – ABS can be wet sprayed for special colours – on request.
UVC lamp type	Osram or Phillips UVC 18W (x2) – in PL or Dulux shape. Wavelength is 254nm
Power supply for lamps	Tridonic or Helvar or VS – electronic.
Fan Type	2 x MAGLEV fans (Magnetic Levitation – so no ball bearings or bushes – hence the 50 000 hour plus life.
Effective lamp life	8000 hours. An hour meter can be added – to enable maintenance staff to accurately monitor the lamp life.
Supply voltage	230V AC 50HZ
Wattage and power factor	72W – including 2 lamps plus 2 MagLEV fans Power factor is plus 0,95
Effective UVC wattage – when new	11W of 254nm
IP rating	IP 20
Surge arrestor	Either 10 or 20kVA within – this item will protect up to 20 events (like a transient spike caused by load shedding) thereafter it would need replacing. Once the surge arrestor has used up its 20 lives – it disconnects the mains feed to all other control gear protecting all gear.

Due to the nature of UVC radiation – within the radiation chamber – plastic items like plastic finger guards on the filters will degrade over time and will need replacing from time to time



Air is sucked in on the left side – through the slots, through a sponge filter – then into a chamber containing 2 x UVC lamps (254nm) – the UVC lamps destroy the pathogens in the air and the air is then expelled through the vents on the right.

One of these UVC air scrubbers can clean a room of 5m x 5m x 2,6m - 3 -4 times an hour.

As the UVC lamps are not exposed - this unit is safe to use while humans are in the room.

Please note – this device is for the destruction of air borne pathogens – it will **not** clean surfaces – like table tops.
For the destruction of surface mounted pathogens – please make use of our hand held 'Magic Wand UVC cleaner

Laboratory test results

Classification	Type	Effect
Virus	H1N1	99.99% of virus is eliminated after 20 minutes
	Enterovirus	99.99% of virus is eliminated after 20 minutes
	Respiratory mixed virus	Inhibiting ability reaches 90.0%
Bacteria	Superbug	Antiseptic rate after 24 hours >99%
	Tuvercle	Inhabiting rate of tubercle >80.8%
	Pseudomonas aeruginosa	Antiseptic rate after 24 hours >99%
	Staphylococcus	Antiseptic rate after 24 hours >99%
	Colibacillosis	Antiseptic rate after 24 hours >99%
	White Candida	Antiseptic rate after 10 minutes >99%
	Pneumophilia	Antiseptic rate after 24 hours >99%
	Salmonella	Antiseptic rate after 30 minutes >99%

Test and Verification for Organic Gas Decomposition

Classification	Type	Effect
Microbe	5 common microbes	No microbe growing after 28-day culture
Environment	Formaldehyde	Antiseptic rate after 24 hours >99%
	TVOC	Antiseptic rate after 24 hours >99%
	RoHS	No Pb, Hg, Cd, Cr, PBB, PBDE



Tel: 0128191683 or Cell: 0826005484 / 0828011747
marketing@thornlite.co.za

