

FREQUENTLY ASKED QUESTIONS

TOTAL LUMEN OUTPUT IS LOWER THAN COMPARABLE T5 LAMP, HOW CAN THE CALCULATED LIGHT LEVELS BE HIGHER?

LED's are a "directional" source, ie they produce light in a defined beam angle rather than 360deg emittance like a fluorescent lamp. They push light straight out towards the front face of the diffuser and therefore almost all the LED light produced is effective light distributed more efficiently out of the luminaire with far lower losses due to reflection and re-reflection within the fitting as in a fluorescent luminaire. This accounts for why the LED output may be lower but the actual "design" lumens and resultant illuminance levels in a design or area are actually higher.

WHY IS THERE NO LIGHT OUTPUT RATIO FOR LED LUMINAIRES?

LED luminaires are tested using a method known as LM79. This method measures and reports the total light output of a luminaire (absolute) whereas T5 uses relative photometry.

WHY IS THERMAL MANAGEMENT OF LED'S SO IMPORTANT?

LED's are particularly sensitive to heat and their life and light output are adversely affected when the heat generated is not dissipated effectively away from the boards. Austube Greenstar LED luminaires have been specifically manufactured with this at the forefront of design and then NATA certified thermal testing is carried out to ensure that the LED's are well within the manufacturers tolerances to ensure maximum life and performance.

DO DIFFERENT COLOURS HAVE DIFFERENT LIGHT OUTPUTS?

Similar to T5 lamps, there are some differences. Typically the difference between 3000K and 4000K is 4%.

HOW DOES ONE CALCULATE THE TOTAL SYSTEM POWER?

This information is contained within the ies file for each of the tested Blade Lighting luminaires and/or can be obtained from the control/LED manufacturers data sheets. Better still, consult your Blade Lighting Lighting Consultant.

BLADE LIGHTING

Proudly designed in NZ and to the highest quality standards, BLADE LIGHTING has an award winning track record celebrating excellence in form and function. BLADE is highly regarded for its fine architectural detailing allowing for perfect integration into most modern residential and commercial spaces.

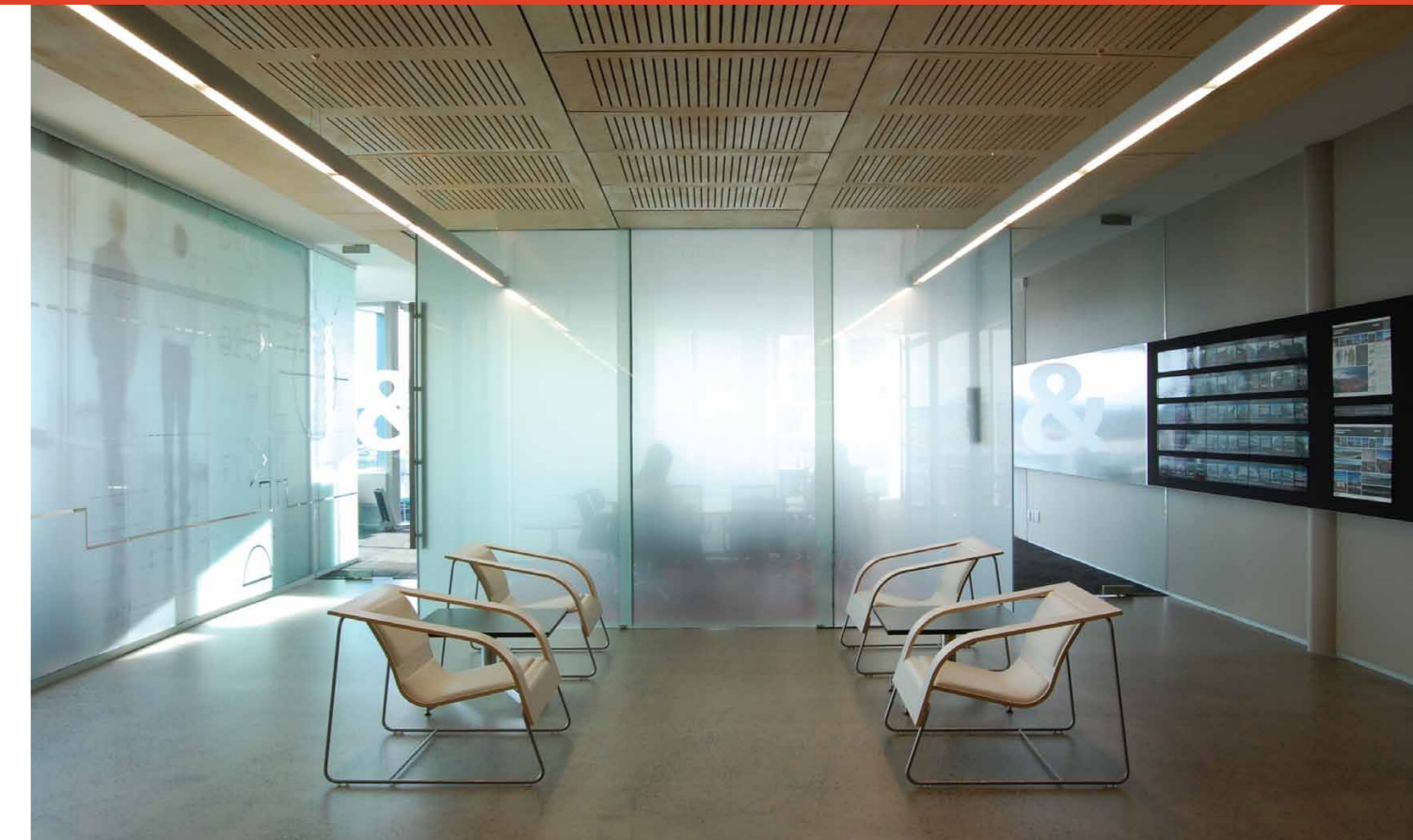


BLADE 150

BLADE 95

BLADE 50

BLADE 190



KEY FEATURES & BENEFITS

Extruded Aluminium

Low power consuming fluorescent lamps, electronics and new LED

5 year warranty

Customised to the Application

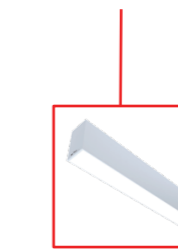
High Quality Finish and Detail

Dimmable

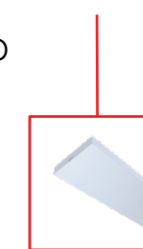
ZHAGA compliant

LED upgrade for Blade Lighting Bestsellers

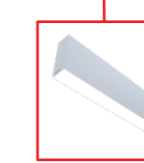
BLADE 90 LED



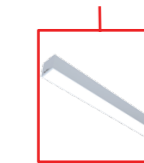
BLADE 190 LED



BLADE 150 DID LED

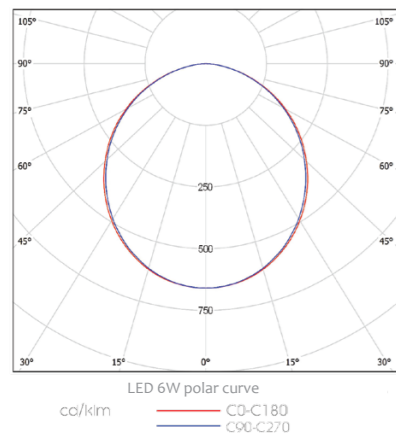


BLADE 50 LED

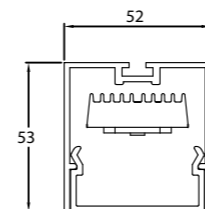


INTRODUCING THE NEW BLADE 150 | BLADE 90 | BLADE 190 AND BLADE 50 - NOW FULLY FLEXIBLE WITH A CHOICE OF T5 FLUORESCENT OR LED. A FAST INSTALLATION, HIGH PERFORMING LUMINAIRE THAT REVOLUTIONISES LED IN LINEAR LIGHTING APPLICATIONS.

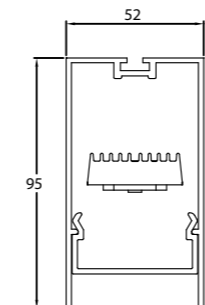
FEATURES	BENEFITS
Lower Wattage 50,000 hrs LED Life 5 year warranty Digital dimming Up to 125lm/W Continuous gap free runs Optional Emergency lighting circuit on board Integrated heat sink High colour rendering (CRI>80) Mercury free lamps	Low energy consumption and reduced energy cost Lower maintainance system and reduced cost of ownership Extended warranty period System flexibility with variable light and power output High system efficiency No dark spots between gear trays/ smooth appearance Simplifies components for emergency and saves space Thermal management maintaining LED output and life Visual acuity Environmentally friendly
FINISH	Natural anodised, pearl white as standard. Custom powdercoat, coloured anodised on request
LIGHT SOURCE	T5 fluorescent or Tridonic LED modules, Digital dimmable or fixed output LED, Standard or high output
DIFFUSER	Plexi LED or ICE with T5 fluorescent
ACCESSOIRES	LED Emergency (on board), LED spitfire, LED downlight, others on request
MOUNTING OPTIONS	Wire suspension, Rod suspension, Gyprock bracktes, bends, wall brackets
	Zhaga compliant
	Dimmable via DSI digital or Dali
	Available in 3000k and 4000k colour temp
	IES files available upon request



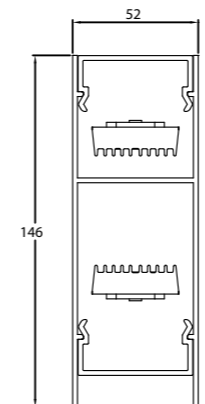
BLADE 50



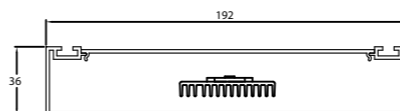
BLADE 90



BLADE 150
Direct/Indirect



BLADE 190
Direct only
Indirect only
Direct/Indirect



NOTE: Blade 190 LED coming soon. All others in LED available

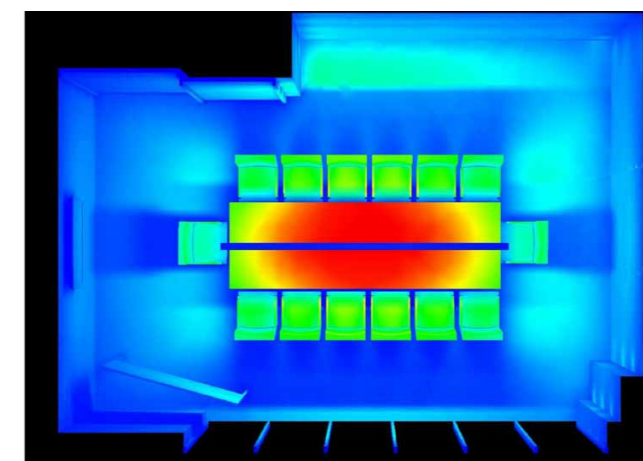
LINE DRAWINGS | TECHNICAL DATA

COMPARISON CHART

Comparison chart based on dimmable T5 versus dimmable LED - both systems are comparable in price.

4 x 6W LED BOARD	28W T5 FLUORESCENT
750 Lm (1 x 28mm 6W board) = 3000Lm	2900 Lm at 35°
5 year warranty	1 year warranty
50,000 hours lamp life	20,000 hours lamp life
System power 28.2W	System power 32W

LIGHTING CALCULATION RENDERS



Reflectances:	Ground=0.2, Walls=0.5, Ceiling=0.8	
Maintenance Factor:	0.8	
Calculation Plane Height:	0.8m	
Profile Height:	2.5m	

BOARDROOM LAYOUT COMPARISON

CALCULATION SUMMARY	CALC TYPE	UNITS	TOTAL WATTS	AVG	MAX	MIN	MIN/AVG
28W T5 fluorescent	Illuminance	Lux	32	273.36	343	176	0.64
4 x 6 W board	Illuminance	Lux	28.2	303.67	381	197	0.65

In summary, the above lighting calculation comparison using the new 4 x 6W LED boards to a 28W T5 fluorescent indicates the LED solution has an overall higher output of approximately 10% with 12% reduced energy consumption.