RECOMMENDS

LITA LED HIGH BAY

POWER: 186W
OUTPUT: 11,320 lumens
EFFICACY: 61 lm/W
NOMINAL LIFE: 50,000 hours

★★★

In our tests, the efficacy of this high bay matches the industry average for 250W metal halide lamps. So no reason to switch on that alone. But the LED wins hands down on maintenance – it shouldn't need any. If maintenance is important to you, get LED. If the lit environment is, stick with metal halide for now.

LEDs reach new heights

Can LEDs kill another category? High bays have been the preserve of HID lamps for years, but can a solid state challenger make the cut? We decided to see for ourselves – by giving one of the best available the famous Lux benchtest. **Ray Molony** reports

Everyone says T5 fluorescent will be the last category to fall to LED. That was certainly the thinking a few years ago, but now the Big Three have all unveiled LED tubes with decent stats, no-one's quite sure.

The smart money has been on high bay luminaires as the last bastion of traditional light sources; after all, you need a hell of a lot of poke to illuminate an out-of-town branch of PC World and the only man for the job is a metal halide. But a new wave of LED high bays from the Far East is hitting the market – so we decided to choose one of the best and subject it to *Lux* magazine's famous – and famously rigorous – benchtest.

Where to start? Well, we've been really impressed by the kit that Dublin-based engineering company Lita Lighting has been bringing out. Originally a Spanish company, Lita Lighting is headed by entrepreneur Sean Carthy, who is an evangelist for LED lighting.

The company's first high bay features a Chinese-assembled array and body, with the LEDs themselves coming from Taiwan.

The test results were impressive for this technology: we measured an output of 11,320 lumens at an input power of 185.57 watts, giving an efficacy of 61 lumens per watt. Now while that doesn't sound like a traffic-stopping metric, consider this: the 150W metal halide-based high bays on the market have outputs between 9,600 and 11,500 lumens. The best of them – Cooper's Pacemaker – has an efficacy of 67.1 lumens per watt and the average lumen package of a 150W high bay is 61.3 lumens per watt.

Holding its own

So the Lita LED high bay can more than hold its own in metal halide company. The maintenance story is very compelling – after all, these could almost be marketed as fit and forget.

We didn't get the photometric results of the Lita High Bay in time for this issue, but we suspect that the distribution may let them down for certain applications. If you are looking for light on the ceiling and upper reaches of the walls, then this is not for you. But if you want put light downwards, and don't ever want to see a cherry picker or scaffolding tower, then you should consider LED.

Lita says it's in the process of developing a 200W version for ceiling heights of up to 15 metres. It says this fitting will hit the 80 lumens per watt mark. This efficacy will beat all the 250W metal halides on the market at the moment – and most of the 250W SONs too.

Still it's horses for courses. As we always say, efficacy isn't everything. Where an attractive lit environment is crucial – such as in retail – distribution and colour rendering will be equally important.

HOW WE DID THE TESTS

The benchtest took place at *Lux* magazine's official test house, the highly respected laboratories of 42 Partners in Wolverhampton. The tests were conducted in a 3.5m integrating sphere, one of the largest in the UK, and all measurements were taken in accordance with EN13032 and performed with the luminaire in a horizontal, LEDs down orientation. The photometric centre of the luminaire was taken as the geometric centre of the cover and the photometric nadir was taken to be perpendicular to the front face.

The lumen output and power consumption of the lamp was determined at 25ºC after 100 hours of burn-in.

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