

Black Magic

from Osram-GEC

Black Magic is a lamp that produces ultra-violet energy without the need for any form of control gear.

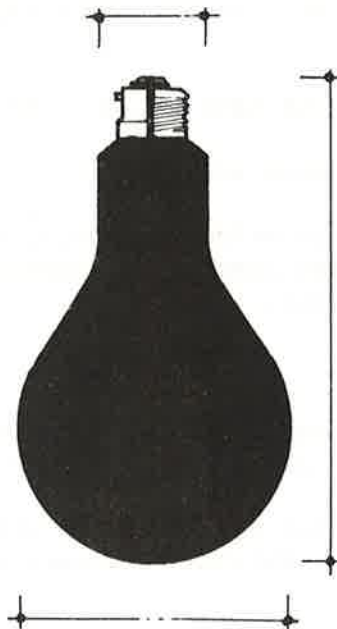
Previously to obtain U.V. it has been necessary to use a 125 watt MBW/U lamp with it's associated control gear, or a special 'fluorescent' tube and fitting.

Black Magic is a high pressure mercury lamp with a tungsten filament inside, which acts as a ballast, which means no controlgear; just plug-in. The light from the tungsten filament is masked by the black glass envelope (Wood's glass).

Dimensions:

Cap

B.C.
or
E.S.



Overall length $174 \pm 4\text{mm.}$
Bulb diameter $90 \pm 1\text{mm.}$
Neck diameter $39 \pm 1\text{mm.}$

Technical Lamp Description:

175 Watt MBTW/V

Supply Voltage:

220 - 240V (at 220v the lamp wattage is 160)

Starting Characteristic:

Radiates some u.v. immediately on switching, but needs about 5 minutes to fully warm up.

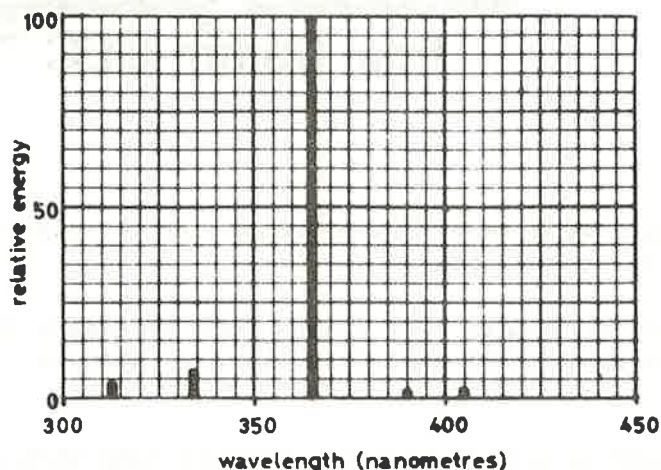
When switched off, the lamp will not restart until cool, up to 10 minutes may elapse, the switch can be left on during this time

Burning Position:

May be burnt in any position but occasionally when operated horizontally the lamp may run-up and extinguish, and then restart again.

Radiation:

Gives virtually no visible light but transmits near u.v., mostly at 365 n.m.



Typical Relative Spectral Energy Curve

Safety

No health hazard at all, but prolonged direct view of the lamp should be avoided, as u.v. causes the eye itself to fluoresce faintly, giving a sensation of 'fuzzy' vision.

If the outer bulb is broken, the lamp extinguishes.

Life Approx. 3000 hours objective average.

Application: For examining objects which fluoresce, e.g. laundry marks, examination of documents for forgery detection, porcelain for repair, in philately, entertainment and stage presentations.

Special effects

Some substances fluoresce, natural teeth and the white of the eye; most synthetic soap powders and fabrics washed in them fluoresce.

U.V. treated papers, and special paints can be obtained from Rank Strand Electric (the latter not for use on skin). U.V. sensitised fabrics can be obtained from most theatrical costumiers.

U.V. energy can be reflected by suitable fittings and reflectors, e.g. the Osram G.E.C. fitting F45011 Gecoray.

Complete darkness is essential to obtain spectacular effects.

Dimming

Cannot be dimmed, but strobing and pulsing effects can be achieved by modulating the other lighting.

The information given above is typical and must not be considered a guarantee of individual lamp characteristics or performance. The material listed in this publication is subject to the Company's terms of business and condition of sale, a copy of which may be obtained on request.

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Osram (S.&C.) Limited P.O. Box 17, East Lane, Wembley, HA9 7PG