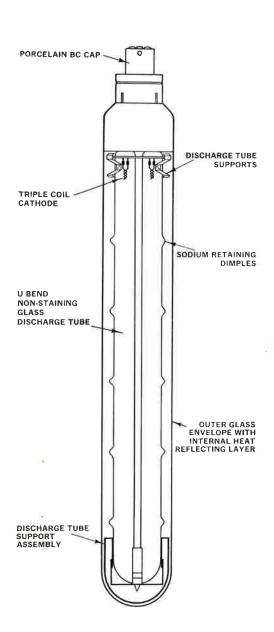
# PHILIPS

# **SOX Lamps**

CI/SfB ,(63.3), UDC 628.94/.95





# **Application & Principal Advantages**

The most efficient lamps available in the world. They are a natural development of the SOI/H lamps and existing SOX lamps which they replace. They achieve a new degree of efficiency even exceeding the highly efficient SOX lamps thanks to an exclusive indium oxide coating giving up to 175 lumens/watt. They are very much a first choice for street lighting applications since they operate on the same control gear as SOI/H and existing SOX equivalents and fit the same lanterns. They are also ideally suited for installation where efficiency is of prime importance such as area lighting, e.g. car parks, docks etc. and many other floodlighting applications. Sodium lamps have hitherto scored over all other types of lamp because of their higher efficiency. Now NEW SOX increase that efficiency and lower running costs. Never before have lamps given 175 lumens/watt or achieved such lighting design lumens.

#### Construction

The lamp is of integral design whereby the arc tube is sealed into an outer jacket and the inner surface of the jacket is indium oxide coated. This coating acts as an infra-red reflector which keeps the discharge tube temperature at optimum thereby maintaining highest efficiency. The dimple construction provides cool spots to retain sodium — no mirroring. Features also include single B.C. cap for strength and simplicity, triple coil cathodes, non-staining glass discharge tube, all of which result in longer life and minimum depreciation.

## Starting

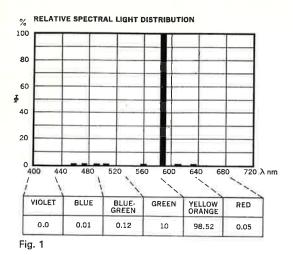
The run-up characteristics are shown on Fig. 3 overleaf. Full light output is reached in approx. 15 minutes.

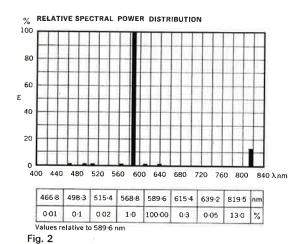
# **Burning Position**

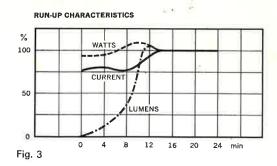
Generally intended for burning in a horizontal position. As with SOI/H lamps, however, the SOX range of lamps can be operated at 20° above or below the horizontal. The 35W and 55W lamps can also be operated in the vertical "cap-up" position.

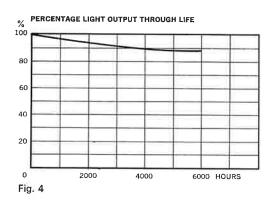
### **Light Output**

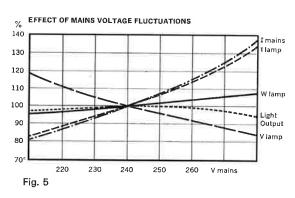
The depreciation in lumen output against lamp life is shown in Fig. 4. For lighting design purposes the value shown in the table is the average during the first 6000 hours of life. The guaranteed life is 4000 hours and the average rated life is 6000 hours.











Rating W		Lighting Design Lumens		Lamp Lamp Current Dimensions Volts A Nominal O/A Length		mm Dia					
NEW SOX	sox	NEW SOX	SOX	NEW SOX	NEW SOX	NEW SOX	NEW SOX	Cap	Ballast	P.F.C. Capacitor	Packing Quantity
35	40	4300	4200	70	0.6	310	52	ВС	L4045/BX	L4015/04	9
55	60	7150	7050	104	0.6	425	52	ВС	L4045/BX	L4015/04	9
90	100	12250	12250	112	0.95	528	66	ВС	L4140/BX	L4025/04	9
135	150	21200	19500	164	0.95	775	66	ВС	L4135	L5020/03	9
180	200	31500	28500	245	0.90	1120	66	ВС	L4135	L5020/03	9

**NOTE:** Items printed in bold figures indicate new data \*L4135 ballast must be operated in conjunction with L5020/03 Capacitor