

Test Results of 36W Tubelights

4 FEET, COOL DAY LIGHT

Best Buys

Since there was not much difference found in the prices of the brands, we have based our Best Buys on the overall performance scores.

BEST BUY Bajaj

Bajaj scored the highest with 98 and is recommended as our Best Buy.

BEST BUY Osram

Osram is the second highest scorer with 91 and also recommended as our Best Buy.

BEST BUY Surya HBT

Surya HBT is the third highest scorer with 74 and is recommended as our Best Buy.

Brands/Standards IS: 2418-1977 **(rated lumens)	Rank	Overall score	M.R.P.* (in Rs.)	BIS LUMEN				Non-BIS			
				Initial lumen [NLT 2231 lumens] (out of 15 samples)		Lumen after 2000 hrs [NLT 85% of initial lumen] (out of 10 samples)		Efficacy (Lumen/Wattage) Ideal Efficacy for: 2450 lumens =68.05 2425 lumens =67.36		Cost of energy consumption per year (lower the better) (in Rs.)	
				Average	(Wtd. score)	Average	(Wtd. score)	Average	(Wtd. score)	Average	(Wtd. score)
CONFORMING											
BAJAJ (2425 lumens)**	1	98	43.00	2496	30.0	90.74	14.2	67.57	35.0	215.73	19.2
OSRAM (2425 lumens)**	2	91	38.00	2457	25.6	89.81	11.9	66.86	34.6	214.62	19.3
SURYA HBT SLIMLITE (2425 lumens)**	3	74	41.00	2359	14.5	87.70	6.7	64.52	33.4	213.51	19.4
CROMPTON SUPER SAVER XLR-36 (2450 lumens)**	4	72	41.00	2331	11.3	88.39	8.4	63.83	33.1	213.28	19.4
ANCHOR SLIMLINE (2425 lumens)**	4										
WIPRO SLIMLITE (2425 lumens)**	5	71	41.00	2346	13.0	87.18	5.4	64.10	33.2	213.74	19.3

Key : NLT = Not less than

1 Neither are tubelights covered under the Quality Control Order (QCO) nor is the Bureau of Indian Standards (BIS) certification mandatory. However, since all the manufacturers went for voluntary certification and the BIS mark, we carried out the test as per the BIS Standards: BIS 2418-1977 (Part-1) with 4 amendments; BIS 2418-1977 (Part-2) with 2 amendments; BIS 2418-1977 (Part-3) with 1 amendment; and BIS 2418-1977 (Part-4).
 2 As per BIS, the initial lumen of individual lamp for 36W should not be less than 2231 for rated lumens 2425 and 2254 for rated lumens of 2450.
 3 Lumen maintenance (%) of individual lamp after 2000 hrs. should not be less than 85 % of initial lumen measured for 36W as per BIS.
 4 Cost of energy consumption/year is calculated by taking average power consumption of 15 samples rating test quantity (RTQ) [initial lamp wattage measured with reference to chokes (ballasts)], use of tubelight for 4 hrs/day up

to one year and energy cost of Rs. 4/KWh. The calculations are based on an average household energy consumption for 1 tubelight. In the case of office, shops, etc. where usage is more than 4 hrs/day and more tubelights are used, the energy consumption will be higher.

Notes

- Apart from life, lumen and wattage, the tubelights were tested also for mechanical and physical characteristics, lamp voltage, starting and burning test, aging, torsion, insulation resistance, rated colour temperature, starting at low temperature and lamp dimensions. All the brands conformed to these parameters. The brands also complied with the marking requirements as specified.

* We have the individual readings of all samples of each brand on record. The averages have been mentioned only for readers' convenience. The readings may be available on request.

** Lumens marked on individual cartons of each brand.

* Price at the time of purchase

Rating & Ranking

For rating and ranking we assigned 30 per cent to average initial lumen, 15 per cent to average lumen (after 2000 hrs.), 35 per cent to average efficacy and 20 per cent to cost of energy consumption per year. The other parameter scores were not included as all the brands complied. The overall score was therefore based on these four weighted scores.

✦ We also tested 36W Philips Slimlite tubelight marked with rated lumens 2450. But Philips informed us that it has stopped manufacturing the 36W "Slimlite" tubelight brands. With an overall score of 93 it would have been otherwise placed second in rank. Philips Slimlite has (average) initial lumen of 2452, lumen after 2000 hrs is 90.97 and the cost of energy consumption per year is Rs. 216.84. The brand has an efficacy of 66.04. Philips have now introduced a new brand Life Max 36W, but since it came into the market after our testing we could not include it in our testing.