

A typical one-to-one replacement: 120 high-pressure sodium (HPS) 250 W luminaires with LED Prom 200W. The same formula and default values as in the calculator on the site.

Input data

Type of luminaire installed now	HPS 250 W
Power draw of one unit, W	275
Quantity, units	120 pcs
Hours per day	12
Days per year	300
Tariff, UZS per kWh	1,100
Replacement model	SVO 01 Prom 200W
How many new luminaires per one old one	1:1, one for one

What you get

Savings

35,640,000 UZS per year

Payback

51.8 months

Consumption now	118,800 kWh per year
Consumption after replacement	86,400 kWh per year
Luminous flux now	3,600,000 lm
Luminous flux after replacement	3,120,000 lm
Change in flux	-13 %
Power freed up	9.0 kW
New luminaires	120 pcs
Luminaires at list price	153,820,800 UZS
Share of electricity saved	27 %

Luminous flux drops by more than 10%: replacing at this quantity will reduce illuminance on site. Here the nominal output of the old lamps is compared with luminaire flux, so the drop is overstated, and a DIALux calculation usually arrives at a lower replacement ratio than this. Take the quantity from a DIALux calculation rather than from here.

The flux of the new luminaire is taken from its 2018 IES file. The flux of the old luminaire is the nominal output of new lamps from manufacturer catalogues (Lisma, Philips, OSRAM), before losses inside the housing and before lamp depreciation: on site it is lower, so the real drop is smaller than the figure above. For LED luminaires of 2013 to 2016 we take 100 lm/W, the rating of a new luminaire of that time.

The default tariff of 1,100 UZS per kWh including VAT is the price for legal entities (consumer groups I, II and IV) under Annex 1 to Cabinet of Ministers Resolution No. 243 of 15 May 2026, in force since 1 June 2026, checked against the text on 17 September 2026. The resolution has no time-of-day zones or voltage-level steps; if you have a contract or multi-rate tariff, enter your own in the calculator field.

Model power ratings and prices come from the price list dated 21 September 2026, including 12% VAT.

What the calculator does and does not count

- It uses one formula: quantity × power × hours per day × days per year. The old luminaire power includes control gear.
- It counts luminous flux before and after the replacement: quantity × flux of one luminaire. Old-lamp flux is a catalogue nominal, new-luminaire flux comes from the IES file wherever there is one.
- It does not account for mounting height, the illuminance required by ShNK 2.01.05-24 or uniformity: because of them the new luminaire count is usually lower than the old one.
- It does not include installation, cable, breakers or removal of the old luminaires.
- It does not include maintenance and lamp replacement, although for high-pressure sodium (HPS) and metal halide lamps that is a noticeable share of the cost: 20,000 to 24,000 hours by catalogue against a calculated 50,000 hours for the LED module.
- Prices come from the price list dated 21 September 2026 including 12% VAT; the Prom 600W price is set per project.

A rough estimate. The accurate figure comes from a DIALux calculation on your drawing: it is free and accounts for mounting height, the required illuminance and the real number of luminaires.

Get an accurate DIALux calculation: silasveta.uz/en/calculation/

Generated by the savings calculator on silasveta.uz. The figures are a preliminary estimate from rated values, not a design.