

PHILIPS

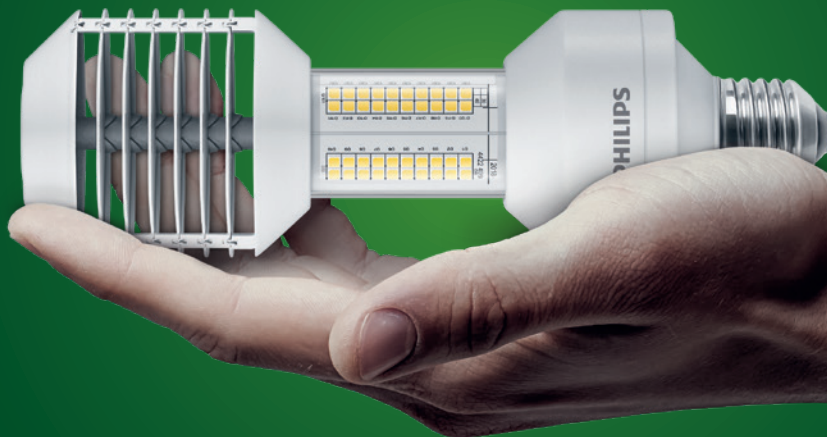
Public lighting

TrueForce LED SON-T



Lighting mess or road to success?

Real professionals count on **Philips TrueForce LED SON-T** –
a cost effective LED lamp alternative for street lighting



**REAL
PROs**
**REAL
QUALITY**

This is the TrueForce LED SON-T

- ✓ A real retrofit alternative: replacement for conventional SON-T with almost the same light distribution
- ✓ No rewiring necessary: works in existing luminaires with conventional ballasts – even with ignitors.
- ✓ Good colour rendering with Ra 70 and a colour temperature of 3.000 and 4.000 Kelvin
- ✓ High efficiency with up to 177lm/W
- ✓ Good protection rating with IP40
- ✓ Easy replacement thanks to small size and weight (200 × 61mm/250g for 25/35W and 262 × 71mm/ <525g for 55/68W) E27 socket and good fit.
- ✓ 50,000-hour service life and 5-year warranty
- ✓ Perfectly suited for street lighting luminaires designed for SON-T operation



* For warranty conditions, visit www.lighting.philips.com/main/support/support/warranty

You'll be amazed by the TrueForce LED SON-T

- ✓ Certified quality with reduced energy consumption of up to 55 % compared to conventional lamps.
- ✓ No fixture changes necessary: igniter (if applicable) and conventional ballast can still be used for optimal luminaire conformity.
- ✓ TrueForce LED SON-T uses conventional optics designed around traditional HID lights. With its omni-directional light, it delivers almost the same light distribution as conventional SON-T installations.
- ✓ Its soft, white and CRI 70 light creates a safer, more pleasant atmosphere in outdoor environments.
- ✓ Philips TrueForce LED SON-T pays off with energy savings higher than the price of the lamp in just two years.
- ✓ Gets noticed thanks to passive heat management and a 6kV surge protector.
- ✓ Extremely long-lasting with a service life three times longer than that of conventional lamps. Instant 100 % brightness without start-up delay or flickering.
- ✓ No toxic substances and 100 % mercury-free
- ✓ Meets highest quality standards with up to a five-year warranty.*



Small start or big savings?

LED lamps are up to 55% more efficient than sodium lamps and save energy and costs while providing a consistently high quality of light. The table below shows energy savings per Watt in relation to time spent in use and energy costs.

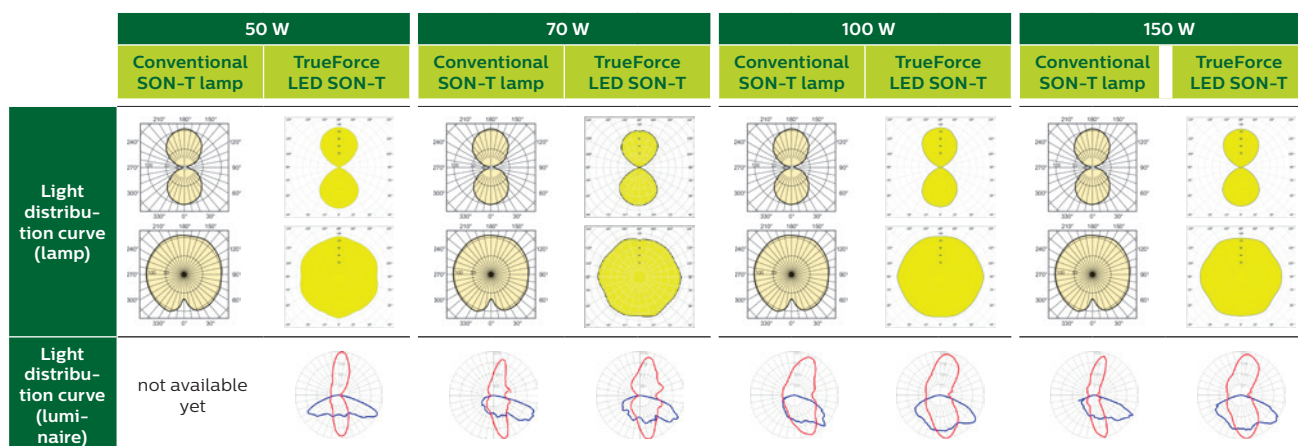
LED compared with a conventional solution	TrueForce LED SON-T replacement 50 W		TrueForce LED SON-T replacement 70 W		TrueForce LED SON-T replacement 100 W		TrueForce LED SON-T replacement 150 W	
Lamp wattage	50 W	25 W	73 W	35 W	100 W	55 W	154 W	68 W
Ballast power loss	5 W	2,5 W	7,3 W	3,5 W	10 W	5,5 W	15,4 W	6,8 W
System output	55 W	27,5 W	80,3 W	38,5 W	110 W	60,5 W	169,4 W	74,8 W
Savings per year		27,5 W		41,8 W		49,5 W		94,6 W

Energy savings from replacing a conventional SON-T lamp with a TrueForce LED SON-T lamp, per year.***																
Lighting time per year	50 W				70 W				100 W				150 W			
	0.15 ct**	0.17 ct**	0.19 ct**	0.21 ct**	0.15 ct**	0.17 ct**	0.19 ct**	0.21 ct**	0.15 ct**	0.17 ct**	0.19 ct**	0.21 ct**	0.15 ct**	0.17 ct**	0.19 ct**	0.21 ct**
1,000	€ 5,49	€ 6,22	€ 6,95	€ 7,69	€ 6,27	€ 7,11	€ 7,94	€ 8,78	€ 7,43	€ 8,42	€ 9,41	€ 10,40	€ 14,19	€ 16,08	€ 17,97	€ 19,87
1,500	€ 8,24	€ 9,33	€ 10,43	€ 11,53	€ 9,41	€ 10,66	€ 11,91	€ 13,17	€ 11,14	€ 12,62	€ 14,11	€ 15,59	€ 21,29	€ 24,12	€ 26,96	€ 29,80
2,000	€ 10,98	€ 12,44	€ 13,91	€ 15,37	€ 12,54	€ 14,21	€ 15,88	€ 17,56	€ 14,85	€ 16,83	€ 18,81	€ 20,79	€ 28,38	€ 32,16	€ 35,95	€ 39,73
5,000	€ 27,45	€ 31,11	€ 34,77	€ 38,43	€ 31,35	€ 35,53	€ 39,71	€ 43,89	€ 37,13	€ 42,08	€ 47,03	€ 51,98	€ 70,95	€ 80,41	€ 89,87	€ 99,33

** Electricity price/kWh per year

*** Mains voltage input allows to save additional 10% as there is no ballast power loss.

Light distribution

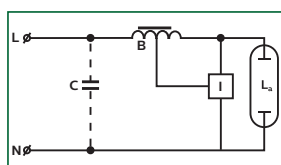


TrueForce LED SON-T mimics light distribution of conventional SON-T lamp thanks to the same burning arc location. Existing optics design around conventional HID are optimally used, even after lamp replacement.

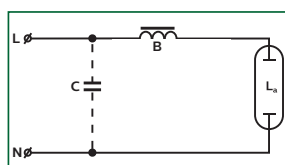
Simple installation in existing road lights with SON/HPI ballast.

The TrueForce LED SON-T is a real SON/HPI retrofit alternative which works with existing fixtures, equipped with an electromagnetic ballast. There is no need to rewire or modify the luminaire, also ignitor can stay in the system. The minimum dimensions requirement on lamp compartment is (L x Ø) 220 x 170mm (25/35W) and 280 x 180mm (55/68W).

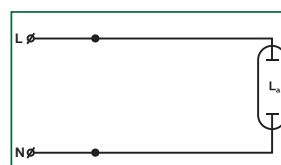
Circuit diagram for SON/
high-pressure sodium lamp




Circuit diagram for HPI/
mercury-vapor lamp



Circuit diagram for mains
voltage input directly



Specifications

Product name	Traditional	LED	CCT	CRI	Voltage	"Input current"	Lifetime	Dim- mable	Lumen output		Dimen- sions	Pack	EOC
TrueForce LED SON-T	(W)	(W)	(K)		(Vac)	(mA)	(hrs.)				(H × W)	(pcs)	871869
25W E27 730 InstantFit													
38-25W E27 730	50	25	3000	70	50-60	800	50,000	no	4000	A ⁺⁺	200 × 61	6	963251900
40-25W E27 740		25	4000	70	50-60	800	50,000	no	4200	A ⁺⁺	200 × 61	6	963253300
55-35W E27 730	70	35	3000	70	70-80	920	50,000	no	5500	A ⁺⁺	200 × 61	6	681115300
60-35W E27 740		35	4000	70	70-80	920	50,000	no	6000	A ⁺⁺	200 × 61	6	681117700
84-55W E40 730	100	55	3000	70	88-98	1000	50,000	no	8400	A ⁺⁺	262 × 71	6	963904400
90-55W E40 740		55	4000	70	88-98	1000	50,000	no	9000	A ⁺⁺	262 × 71	6	963906800
112-68W E40 730	100-150	68	3000	70	80-90	1650	50,000	no	11,200	A ⁺⁺	262 × 71	6	963908200
120-68W E40 740		68	4000	70	80-90	1650	50,000	no	12,000	A ⁺⁺	262 × 71	6	963910500
25W E27 730 EM/Mains													871
38-25W E27 730	50	25	3000	70	100-277	322-125	50,000	no	4000	A ⁺⁺	200 × 61	6	9514331570
40-25W E27 740		25	4000	70	100-277	322-125	50,000	no	4200	A ⁺⁺	200 × 61	6	9514331594
55-35W E27 730	70	35	3000	70	100-277	140-390	50,000	no	5500	A ⁺⁺	200 × 61	6	8699674830
60-35W E27 740		35	4000	70	100-277	140-390	50,000	no	6000	A ⁺⁺	200 × 61	6	8699674854
84-55W E40 730	100	55	3000	70	100-277	220-610	50,000	no	8400	A ⁺⁺	262 × 71	6	8699674779
90-55W E40 740		55	4000	70	100-277	220-610	50,000	no	9000	A ⁺⁺	262 × 71	6	8699674793
112-68W E40 730	100-150	68	3000	70	100-277	635-290	50,000	no	11,200	A ⁺⁺	262 × 71	6	8699705831
120-68W E40 740		68	4000	70	100-277	635-290	50,000	no	12,000	A ⁺⁺	262 × 71	6	8699705855



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