



La mejor sustitución de LED para lámparas de alumbrado vial HID y SON con MASTER-LED HID SON-T

TrueForce LED carreteras – sustitución de sodio

Las lámparas Philips MASTER - LED HID SON-T ofrecen una solución LED fácil y de amortización rápida para sustituir las lámparas de descarga de alta intensidad (HID) y las lámparas de sodio de alta presión (SON). Las soluciones MASTER - LED HID SON-T llevan las ventajas de la eficiencia energética y la larga vida útil de LED a la sustitución de HID y ofrecen ahorro inmediato con una baja inversión inicial. Con la distribución de luz y el tamaño de lámpara correctos, es fácil instalar lámparas MASTER - LED HID SON-T en los sistemas SON y SON-T existentes y mejorar la calidad de la iluminación con LED sin cambiar el balasto (para sustituciones IF) ni el reflector de la luminaria.

Beneficios

- Lámparas con ahorro de costes y tiempo de amortización corto
- Baja inversión inicial
- Forma sencilla de mejorar la calidad de la iluminación

TrueForce LED carreteras – sustitución de sodio

Características

- Alta eficiencia energética
- Larga vida útil de 50.000 horas
- Tamaño de lámpara y distribución de luz adecuados para recambios
- Sustitución directa de LED, sin necesidad de cambiar la luminaria
- Luz blanca agradable con IRC 70
- Protección contra sobretensiones 6 kV

Aplicaciones

- Carreteras y calles
- Túnel
- Garajes

Advertencias y seguridad

- Consulte la guía de instalación o consulte a un representante de Philips Iluminación para ver el diagrama y las instrucciones del cableado.

Versions



Trueforce LED E27

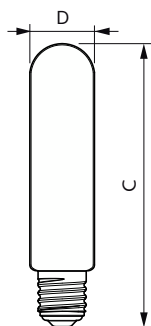


LEDTForce MAS SONT EU1



LEDTForce MAS SONT EU1

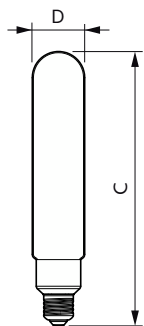
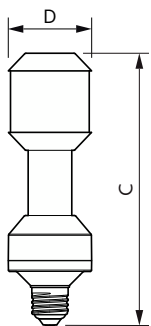
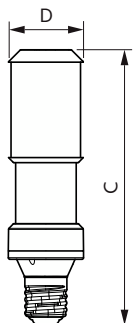
Plano de dimensiones



Product	D	C
MAS LED SON-T UE M 8Klm 42.8W 727 E40	53 mm	236 mm
MAS LED SON-T UE M 9Klm 42.8W 740 E40	53 mm	236 mm

TrueForce LED carreteras – sustitución de sodio

Plano de dimensiones



Product	D	C
MAS LED SON-T EM 10.8Klm 65W 727 E40	71 mm	262 mm
MAS LED SON-T EM 12Klm 65W 740 E40	71 mm	262 mm
MAS LED SON-T EM 8.1Klm 50W 727 E40	71 mm	262 mm
MAS LED SON-T EM 9Klm 50W 740 E40	71 mm	262 mm
MAS LED SON-T IF 10.8Klm 65W 727 E40	71 mm	262 mm
MAS LED SON-T IF 12Klm 65W 740 E40	71 mm	262 mm
MAS LED SON-T IF 8.1Klm 50W 727 E40	71 mm	262 mm
MAS LED SON-T IF 9Klm 50W 740 E40	71 mm	262 mm
TForce LED Road 112-68W E40 730	71 mm	262 mm

Product	D	C
MAS LED SON-T EM 3.6Klm 23W 727 E27	61 mm	200 mm
MAS LED SON-T EM 4Klm 23W 740 E27	61 mm	200 mm
MAS LED SON-T EM 5.4Klm 34W 727 E27	61 mm	200 mm
MAS LED SON-T EM 6Klm 34W 740 E27	61 mm	200 mm
MAS LED SON-T IF 3.6Klm 23W 727 E27	61 mm	200 mm
MAS LED SON-T IF 4Klm 23W 740 E27	61 mm	200 mm
MAS LED SON-T IF 5.4Klm 34W 727 E27	61 mm	200 mm
MAS LED SON-T IF 6Klm 34W 740 E27	61 mm	200 mm
TForce LED Road 25W E27 730 MV	61 mm	200 mm

Product	D	C
MAS LED SON-T UE M 3.6Klm 19W 727 E27	47 mm	237 mm
MAS LED SON-T UE M 4Klm 19W 740 E27	47 mm	237 mm
MAS LED SON-T UE M 5.4Klm 28.5W 727 E27	47 mm	237 mm
MAS LED SON-T UE M 6Klm 28.5W 740 E27	47 mm	237 mm

Información general

Ciclo de encendido/apagado 50.000

Datos técnicos de la luz

Índice de reproducción cromática (IRC) 70

LLMF al fin de vida útil nominal (nom.) 70 %

Operativos y eléctricos

Hora de inicio (nom.) 0,5 s

Controles y regulación

Regulable No

Mecánicos y de carcasa

Acabado de la bombilla Transparente

TrueForce LED carreteras – sustitución de sodio

Información general

Order Code	Full Product Name	Base del casquillo	Vida útil nominal
44887200	MAS LED SON-T IF 3.6Klm 23W 727 E27	E27	70.000 hora(s)
44889600	MAS LED SON-T IF 4Klm 23W 740 E27	E27	70.000 hora(s)
44895700	MAS LED SON-T IF 8.1Klm 50W 727 E40	E40	70.000 hora(s)
44897100	MAS LED SON-T IF 9Klm 50W 740 E40	E40	70.000 hora(s)
44915200	MAS LED SON-T EM 8.1Klm 50W 727 E40	E40	70.000 hora(s)
44917600	MAS LED SON-T EM 9Klm 50W 740 E40	E40	70.000 hora(s)
24033900	MAS LED SON-T UE M 5.4Klm 28.5W 727 E27	E27	50.000 hora(s)
24035300	MAS LED SON-T UE M 6Klm 28.5W 740 E27	E27	50.000 hora(s)
33157000	TrueForce LED Road 25W E27 730 MV	E27	50.000 hora(s)
44891900	MAS LED SON-T IF 5.4Klm 34W 727 E27	E27	70.000 hora(s)
44893300	MAS LED SON-T IF 6Klm 34W 740 E27	E27	70.000 hora(s)
44903900	MAS LED SON-T EM 3.6Klm 23W 727 E27	E27	70.000 hora(s)

Order Code	Full Product Name	Base del casquillo	Vida útil nominal
44905300	MAS LED SON-T EM 4Klm 23W 740 E27	E27	70.000 hora(s)
44909100	MAS LED SON-T EM 5.4Klm 34W 727 E27	E27	70.000 hora(s)
44911400	MAS LED SON-T EM 6Klm 34W 740 E27	E27	70.000 hora(s)
24029200	MAS LED SON-T UE M 3.6Klm 19W 727 E27	E27	50.000 hora(s)
24031500	MAS LED SON-T UE M 4Klm 19W 740 E27	E27	50.000 hora(s)
63908200	TrueForce LED Road 112-68W E40 730	E40	50.000 hora(s)
44899500	MAS LED SON-T IF 10.8Klm 65W 727 E40	E40	70.000 hora(s)
44901500	MAS LED SON-T IF 12Klm 65W 740 E40	E40	70.000 hora(s)
44921300	MAS LED SON-T EM 10.8Klm 65W 727 E40	E40	70.000 hora(s)
44923700	MAS LED SON-T EM 12Klm 65W 740 E40	E40	70.000 hora(s)
24037700	MAS LED SON-T UE M 8Klm 42.8W 727 E40	E40	50.000 hora(s)
24039100	MAS LED SON-T UE M 9Klm 42.8W 740 E40	E40	50.000 hora(s)

Datos técnicos de la luz

Order Code	Full Product Name	Ángulo de haz (nom.)	Temperatura de color		Flujo luminoso
			correlacionada (Nom)	Código de color	
44887200	MAS LED SON-T IF 3.6Klm 23W 727 E27	-	2700 K	727	3.600 lm
44889600	MAS LED SON-T IF 4Klm 23W 740 E27	-	4000 K	740	4.000 lm
44895700	MAS LED SON-T IF 8.1Klm 50W 727 E40	-	2700 K	727	8.100 lm
44897100	MAS LED SON-T IF 9Klm 50W 740 E40	-	4000 K	740	9.000 lm
44915200	MAS LED SON-T EM 8.1Klm 50W 727 E40	-	2700 K	727	8.100 lm
44917600	MAS LED SON-T EM 9Klm 50W 740 E40	-	4000 K	740	9.000 lm
24033900	MAS LED SON-T UE M 5.4Klm 28.5W 727 E27	300 °	2700 K	727	5.400 lm
24035300	MAS LED SON-T UE M 6Klm 28.5W 740 E27	300 °	4000 K	740	6.000 lm
33157000	TrueForce LED Road 25W E27 730 MV	-	3000 K	730	4.000 lm
44891900	MAS LED SON-T IF 5.4Klm 34W 727 E27	-	2700 K	727	5.400 lm
44893300	MAS LED SON-T IF 6Klm 34W 740 E27	-	4000 K	740	6.000 lm
44903900	MAS LED SON-T EM 3.6Klm 23W 727 E27	-	2700 K	727	3.600 lm
44905300	MAS LED SON-T EM 4Klm 23W 740 E27	-	4000 K	740	4.000 lm

Order Code	Full Product Name	Ángulo de haz (nom.)	Temperatura de color		Flujo luminoso
			correlacionada (Nom)	Código de color	
44909100	MAS LED SON-T EM 5.4Klm 34W 727 E27	-	2700 K	727	5.400 lm
44911400	MAS LED SON-T EM 6Klm 34W 740 E27	-	4000 K	740	6.000 lm
24029200	MAS LED SON-T UE M 3.6Klm 19W 727 E27	300 °	2700 K	727	3.600 lm
24031500	MAS LED SON-T UE M 4Klm 19W 740 E27	300 °	4000 K	740	4.000 lm
63908200	TrueForce LED Road 112-68W E40 730	-	3000 K	730	11.200 lm
44899500	MAS LED SON-T IF 10.8Klm 65W 727 E40	-	2700 K	727	10.800 lm
44901500	MAS LED SON-T IF 12Klm 65W 740 E40	-	4000 K	740	12.000 lm
44921300	MAS LED SON-T EM 10.8Klm 65W 727 E40	-	2700 K	727	10.800 lm
44923700	MAS LED SON-T EM 12Klm 65W 740 E40	-	4000 K	740	12.000 lm
24037700	MAS LED SON-T UE M 8Klm 42.8W 727 E40	300 °	2700 K	727	8.000 lm
24039100	MAS LED SON-T UE M 9Klm 42.8W 740 E40	300 °	4000 K	740	9.000 lm

TrueForce LED carreteras – sustitución de sodio

Operativos y eléctricos

Order Code	Full Product Name	Frecuencia de entrada	Line Frequency	Voltaje (nom.)	Consumo de energía
44887200	MAS LED SON-T IF 3.6Klm 23W 727 E27	50 Hz	50 Hz	-	23 W
44889600	MAS LED SON-T IF 4Klm 23W 740 E27	50 Hz	50 Hz	-	23 W
44895700	MAS LED SON-T IF 8.1Klm 50W 727 E40	50 Hz	50 Hz	-	50 W
44897100	MAS LED SON-T IF 9Klm 50W 740 E40	50 Hz	50 Hz	-	50 W
44915200	MAS LED SON-T EM 8.1Klm 50W 727 E40	50 a 60 Hz	50 to 60 Hz	-	50 W
44917600	MAS LED SON-T EM 9Klm 50W 740 E40	50 a 60 Hz	50 to 60 Hz	-	50 W
24033900	MAS LED SON-T UE M 5.4Klm 28.5W 727 E27	50 a 60 Hz	50 to 60 Hz	220 V	28,5 W
24035300	MAS LED SON-T UE M 6Klm 28.5W 740 E27	50 a 60 Hz	50 to 60 Hz	220 V	28,5 W
33157000	TrueForce LED Road 25W E27 730 MV	50 a 60 Hz	50 to 60 Hz	-	25 W
44891900	MAS LED SON-T IF 5.4Klm 34W 727 E27	50 Hz	50 Hz	-	34 W
44893300	MAS LED SON-T IF 6Klm 34W 740 E27	50 Hz	50 Hz	-	34 W
44903900	MAS LED SON-T EM 3.6Klm 23W 727 E27	50 a 60 Hz	50 to 60 Hz	-	23 W
44905300	MAS LED SON-T EM 4Klm 23W 740 E27	50 a 60 Hz	50 to 60 Hz	-	23 W

Order Code	Full Product Name	Frecuencia de entrada	Line Frequency	Voltaje (nom.)	Consumo de energía
44909100	MAS LED SON-T EM 5.4Klm 34W 727 E27	50 a 60 Hz	50 to 60 Hz	-	34 W
44911400	MAS LED SON-T EM 6Klm 34W 740 E27	50 a 60 Hz	50 to 60 Hz	-	34 W
24029200	MAS LED SON-T UE M 3.6Klm 19W 727 E27	50 a 60 Hz	50 to 60 Hz	220 V	19 W
24031500	MAS LED SON-T UE M 4Klm 19W 740 E27	50 a 60 Hz	50 to 60 Hz	220 V	19 W
63908200	TrueForce LED Road 112-68W E40 730	50 Hz	50 Hz	-	68 W
44899500	MAS LED SON-T IF 10.8Klm 65W 727 E40	50 Hz	50 Hz	-	65 W
44901500	MAS LED SON-T IF 12Klm 65W 740 E40	50 Hz	50 Hz	-	65 W
44921300	MAS LED SON-T EM 10.8Klm 65W 727 E40	50 a 60 Hz	50 to 60 Hz	-	65 W
44923700	MAS LED SON-T EM 12Klm 65W 740 E40	50 a 60 Hz	50 to 60 Hz	-	65 W
24037700	MAS LED SON-T UE M 8Klm 42.8W 727 E40	50 a 60 Hz	50 to 60 Hz	220 V	42,8 W
24039100	MAS LED SON-T UE M 9Klm 42.8W 740 E40	50 a 60 Hz	50 to 60 Hz	220 V	42,8 W

Temperatura

Order Code	Full Product Name	Rango de temperatura ambiente	Temperatura máxima (nom.)
44887200	MAS LED SON-T IF 3.6Klm 23W 727 E27	-30 °C a +45 °C	46 °C
44889600	MAS LED SON-T IF 4Klm 23W 740 E27	-30 °C a +45 °C	46 °C
44895700	MAS LED SON-T IF 8.1Klm 50W 727 E40	-30 °C a +45 °C	52 °C
44897100	MAS LED SON-T IF 9Klm 50W 740 E40	-30 °C a +45 °C	52 °C

Order Code	Full Product Name	Rango de temperatura ambiente	Temperatura máxima (nom.)
44915200	MAS LED SON-T EM 8.1Klm 50W 727 E40	-30 °C a +45 °C	52 °C
44917600	MAS LED SON-T EM 9Klm 50W 740 E40	-30 °C a +45 °C	52 °C
24033900	MAS LED SON-T UE M 5.4Klm 28.5W 727 E27	-30 °C a +45 °C	42,03 °C
24035300	MAS LED SON-T UE M 6Klm 28.5W 740 E27	-30 °C a +45 °C	41,51 °C

TrueForce LED carreteras – sustitución de sodio

Order Code	Full Product Name	Rango de temperatura ambiente	Temperatura máxima (nom.)
33157000	TrueForce LED Road 25W E27 730 MV	-	45 °C
44891900	MAS LED SON-T IF 5.4Klm 34W 727 E27	-30 °C a +45 °C	59 °C
44893300	MAS LED SON-T IF 6Klm 34W 740 E27	-30 °C a +45 °C	59 °C
44903900	MAS LED SON-T EM 3.6Klm 23W 727 E27	-30 °C a +45 °C	46 °C
44905300	MAS LED SON-T EM 4Klm 23W 740 E27	-30 °C a +45 °C	46 °C
44909100	MAS LED SON-T EM 5.4Klm 34W 727 E27	-30 °C a +45 °C	59 °C
44911400	MAS LED SON-T EM 6Klm 34W 740 E27	-30 °C a +45 °C	59 °C
24029200	MAS LED SON-T UE M 3.6Klm 19W 727 E27	-30 °C a +45 °C	39,56 °C

Order Code	Full Product Name	Rango de temperatura ambiente	Temperatura máxima (nom.)
24031500	MAS LED SON-T UE M 4Klm 19W 740 E27	-30 °C a +45 °C	39,56 °C
63908200	TrueForce LED Road 112-68W E40 730	-	103 °C
44899500	MAS LED SON-T IF 10.8Klm 65W 727 E40	-30 °C a +45 °C	55 °C
44901500	MAS LED SON-T IF 12Klm 65W 740 E40	-30 °C a +45 °C	55 °C
44921300	MAS LED SON-T EM 10.8Klm 65W 727 E40	-30 °C a +45 °C	55 °C
44923700	MAS LED SON-T EM 12Klm 65W 740 E40	-30 °C a +45 °C	55 °C
24037700	MAS LED SON-T UE M 8Klm 42.8W 727 E40	-30 °C a +45 °C	44,02 °C
24039100	MAS LED SON-T UE M 9Klm 42.8W 740 E40	-30 °C a +45 °C	48,3 °C

Mecánicos y de carcasa

Order Code	Full Product Name	Forma de la bombilla
44887200	MAS LED SON-T IF 3.6Klm 23W 727 E27	T60
44889600	MAS LED SON-T IF 4Klm 23W 740 E27	T60
44895700	MAS LED SON-T IF 8.1Klm 50W 727 E40	T70
44897100	MAS LED SON-T IF 9Klm 50W 740 E40	T70
44915200	MAS LED SON-T EM 8.1Klm 50W 727 E40	T70
44917600	MAS LED SON-T EM 9Klm 50W 740 E40	T70
24033900	MAS LED SON-T UE M 5.4Klm 28.5W 727 E27	T46
24035300	MAS LED SON-T UE M 6Klm 28.5W 740 E27	T46
33157000	TrueForce LED Road 25W E27 730 MV	Forma de T
44891900	MAS LED SON-T IF 5.4Klm 34W 727 E27	T60
44893300	MAS LED SON-T IF 6Klm 34W 740 E27	T60
44903900	MAS LED SON-T EM 3.6Klm 23W 727 E27	T60

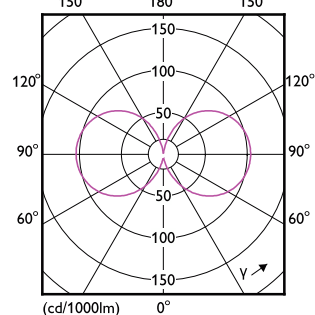
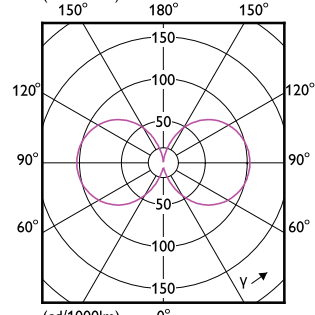
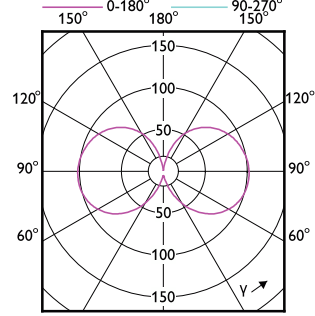
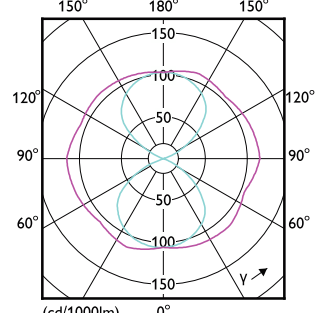
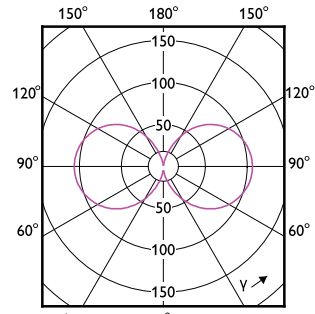
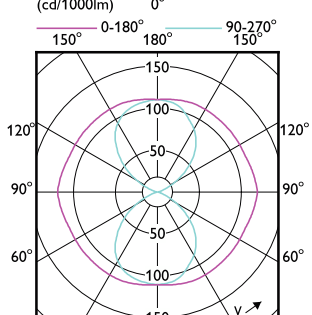
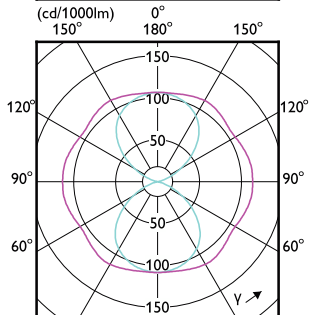
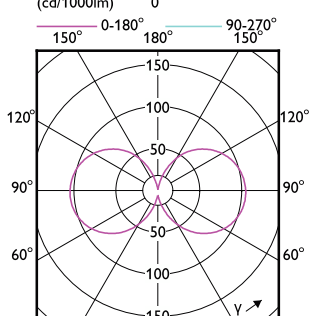
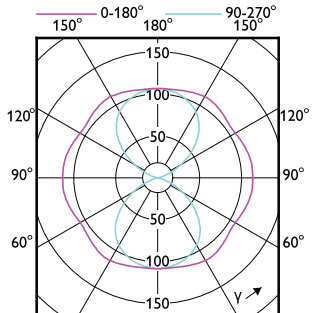
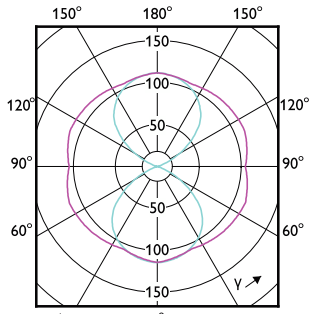
Order Code	Full Product Name	Forma de la bombilla
44905300	MAS LED SON-T EM 4Klm 23W 740 E27	T60
44909100	MAS LED SON-T EM 5.4Klm 34W 727 E27	T60
44911400	MAS LED SON-T EM 6Klm 34W 740 E27	T60
24029200	MAS LED SON-T UE M 3.6Klm 19W 727 E27	T46
24031500	MAS LED SON-T UE M 4Klm 19W 740 E27	T46
63908200	TrueForce LED Road 112-68W E40 730	Otros
44899500	MAS LED SON-T IF 10.8Klm 65W 727 E40	T70
44901500	MAS LED SON-T IF 12Klm 65W 740 E40	T70
44921300	MAS LED SON-T EM 10.8Klm 65W 727 E40	T70
44923700	MAS LED SON-T EM 12Klm 65W 740 E40	T70
24037700	MAS LED SON-T UE M 8Klm 42.8W 727 E40	T52
24039100	MAS LED SON-T UE M 9Klm 42.8W 740 E40	T52

Aprobación y aplicación

Order Code	Full Product Name	Consumo energético kWh/1000 h
44887200	MAS LED SON-T IF 3.6Klm 23W 727 E27	23 kWh
44889600	MAS LED SON-T IF 4Klm 23W 740 E27	23 kWh
44895700	MAS LED SON-T IF 8.1Klm 50W 727 E40	50 kWh
44897100	MAS LED SON-T IF 9Klm 50W 740 E40	50 kWh
44915200	MAS LED SON-T EM 8.1Klm 50W 727 E40	50 kWh
44917600	MAS LED SON-T EM 9Klm 50W 740 E40	50 kWh
24033900	MAS LED SON-T UE M 5.4Klm 28.5W 727 E27	29 kWh
24035300	MAS LED SON-T UE M 6Klm 28.5W 740 E27	29 kWh
33157000	TrueForce LED Road 25W E27 730 MV	25 kWh
44891900	MAS LED SON-T IF 5.4Klm 34W 727 E27	34 kWh
44893300	MAS LED SON-T IF 6Klm 34W 740 E27	34 kWh
44903900	MAS LED SON-T EM 3.6Klm 23W 727 E27	23 kWh
44905300	MAS LED SON-T EM 4Klm 23W 740 E27	23 kWh

Order Code	Full Product Name	Consumo energético kWh/1000 h
44909100	MAS LED SON-T EM 5.4Klm 34W 727 E27	34 kWh
44911400	MAS LED SON-T EM 6Klm 34W 740 E27	34 kWh
24029200	MAS LED SON-T UE M 3.6Klm 19W 727 E27	19 kWh
24031500	MAS LED SON-T UE M 4Klm 19W 740 E27	19 kWh
63908200	TrueForce LED Road 112-68W E40 730	68 kWh
44899500	MAS LED SON-T IF 10.8Klm 65W 727 E40	65 kWh
44901500	MAS LED SON-T IF 12Klm 65W 740 E40	65 kWh
44921300	MAS LED SON-T EM 10.8Klm 65W 727 E40	65 kWh
44923700	MAS LED SON-T EM 12Klm 65W 740 E40	65 kWh
24037700	MAS LED SON-T UE M 8Klm 42.8W 727 E40	43 kWh
24039100	MAS LED SON-T UE M 9Klm 42.8W 740 E40	43 kWh

TrueForce LED carreteras – sustitución de sodio



TrueForce LED carreteras – sustitución de sodio

